Was bedeutet „verstrahlt“? DER SPIEGEL hat sich geäußert

geschrieben von WebAdmin | 25. August 2016

Was bedeutet „verstrahlt“? DER SPIEGEL hat sich geäußert

Dr. Lutz Niemann

Strahlung, Radioaktivität, Kernenergie, das sind die Schreckenswörter in Deutschland. Die Angst davor hat Deutschland bewogen, auf seine gesicherte Stromversorgung zu verzichten. Jetzt hat der SPIEGEL dazu einen beachtenswerten Bericht mit der Überschrift „Schön verstrahlt“ geschrieben (DER SPIEGEL, 17/2016, S. 106 ff, . In diesem Bericht wurden viele wichtige Dinge angeschnitten, aber obwohl der SPIEGEL als Leitmedium gilt, ist es in der weiteren deutschen Medienlandschaft dazu bisher still geblieben.

Das wichtigste zuerst

Bei dem Unfall von Fukushima wurde ein technisches Gerät zerstört, aber *„an der Strahlung des havarierten Atomkraftwerks starb, nach menschlichem Ermessen, bisher kein einziger“.* Das ist richtig, und so sagt es auch UNSCEAR, das von der UN eingesetzte wissenschaftliche Gremium in Sachen Strahlung. Durch den Fukushima-Unfall sind auch in Zukunft keine gesundheitlichen Schäden durch Strahlung zu befürchten. Aber es hat dennoch

Todesopfer gegeben, der SPIEGEL schreibt: *„Viele Menschen starben dagegen an den Folgen der weiträumigen Evakuierung. … Kranke wurden aus Intensivstationen abtransportiert, Alte aus ihrem Pflegeheim geholt, … Die vorsichtigste Berechnung geht von mindestens 150 Todesfällen aus. Eine Studie der Standford University kommt auf 600 Evakuierungsopfer … War die vollständige Evakuierung also ein Fehler?“*

Offenbar ist in Japan die Strahlenangst schon so groß, daß man Intensivpatienten von den lebenserhaltenden Geräten getrennt hat und so deren Tod billigend in Kauf genommen hat. In den deutschen Fachmedien „StrahlenschutzPRAXIS“ und dem fachlich sehr ausführlichem Bericht der GRS wurde darüber geschrieben, weiterhin aber nur auf privaten Internetseiten, nicht

jedoch in anderen großen Print- und elektronischen Medien. Da bleibt die Meldung des SPIEGELs allein als Vorbild.

Die Zahl der StrahlenSCHUTZopfer liegt nach SPIEGEL zwischen 150 und 600. Da in Tschernobyl doppelt so viele Menschen wie in Fukushima evakuiert wurden, kann geschlossen werden, daß es in Tschernobyl etwa doppelt so viele StrahlenSCHUTZopfer wie in Japan gegeben haben kann, also zwischen 300 und 1200. Die Summe von Tschernobyl und Fukushima liegt dann bei 450 bis 1800 Opfer des Strahlenschutzes bei zwei Reaktorunfällen.

Laut UNSCEAR hat die Kerntechnik seit Beginn von 1945 bis 2007 durch Strahlenunfälle insgesamt 147 Todesopfer gekostet, da sind Tschernobyl und Unfälle in der Medizin mit eingeschlossen (z.B.

versehentliche Bestrahlungen mit tödlicher Dosis bei der Krebsbehandlung), auch der militärische Bereich in den Anfängen. Die Zahl der IAEA liegt um etwa 20 höher.

Wir kommen damit zu der eigenartigen Erkenntnis, daß der Strahlenschutz viel mehr Todesopfer gefordert hat als die Strahlung. Es ist SCHUTZ vor Strahlenschutzmaßnahmen erforderlich, also ein Strahlenschutz-SCHUTZ.

Es wäre interessant zu wissen, inwieweit in Japan diesen sinnlosen StrahlenSCHUTZopfern gedacht wird, so wie es heutzutage in Deutschland bei tragischen Opfern durch Gewalt üblich geworden ist: Andachten mit Niederlegen von Blumen, Kerzen anzünden, Menschenketten, beten…

Die Dosis macht

das Gift, so sagte Paracelsus

Eine hohe Strahlendosis in kurzer Zeit ist schädlich, das ist sicher. Nun macht man bei Strahlung die Annahme, dass auch jede noch so kleine

Strahlendosis unabhängig von der Zeit des Einwirkens schädlich sei (LNT-Hypothese, Linear-No-Threshold). Die Unsinnigkeit dieser Annahme ist am Beispiel Alkohol klar

erkenntlich: eine Flasche Schnaps in einer halben Stunde hinunter gekippt ist schädlich. Aber die gleiche Alkoholmenge auf lange Zeit verteilt ist nicht schädlich, kleine Alkoholmengen sind

anregend für den Kreislauf, machen Lebensfreude, ist eher nützlich als schädlich. So verhält es sich auch bei Strahlung, eine kleine Strahlendosis regt das Immunsystem des Organismus an

und hat so verschiedenste biopositive Wirkungen.

Um die hypothetische Gefahr kleinster Strahlendosen glaubhaft zu machen, werden hypothetische Tote

berechnet. Je nach dem angenommenen Risikokoeffizienten und je nach Anzahl der Menschen lassen sich so beliebige Zahlen von theoretischen Toten berechnen. Im SPIEGEL wird die Rechenmethode

ausführlich erläutert. Solche Rechnungen sind Demagogie, aber sie wirken, denn sie sind einfach und erscheinen plausibel.

Wie ist das zu verstehen?

Zur

Begründung der Hypothese, daß jede noch so kleine

Strahlendosis schädlich sei, (LNT = Linear-No-

Threshold) hat man sich eine Modellvorstellung gemacht:

Jedes Strahlenteilchen kann einen Doppelstr

angbruch der Erbsubstanz machen und daraus

kann sich Krebs entwickeln. Somit ist das Krebsrisi

ko
proportio
nal zur
Strahlend
osis, und
zwar

unabhängig von der Zeit.

Heute weiß man,

daß Krebs durch eine Fehlsteuerung in Zellzyklu

s verursacht werden kann, der von den Reparatur

mechanismen der Zelle nicht mehr korrigier

t werden kann. Strahlung führt in einer Zelle zu

einer Vielzahl von Verlageru ngen von Bindungse

lektronen in den Molekülen, die eine Änderung

der Chemie bedeuten und die vom Immunsyst

em wieder zu korrigier en sind. Vermehrte Strahlung

gibt einen Anstoß zu zusätzlicher Aktivieru

ng der Reparatur mechanismen, dann können entstande

ne Fehler vermehrt repariert werden, das ist ein

biopositiver Effekt. Die biopositive

Wirkung von Strahlung im Niedrigdosisbereic

h ist nachgewiesen: z.B. durch die Radonheilbäder,

der kontaminierten Umgebung von Tschernob

yl und Orten mit höherer Bodenstrahlung.

Allerdings ist das Wort StrahlenSCHUTZ gut etabliert

im Wortschatz der Menschen Die Erfindung

dieses Wortes bedeutet schon Demagogie, denn

man muß sich nicht grundsätzlich vor Strahlung

schützen, sondern nur vor übermäßig hoher Dosis.

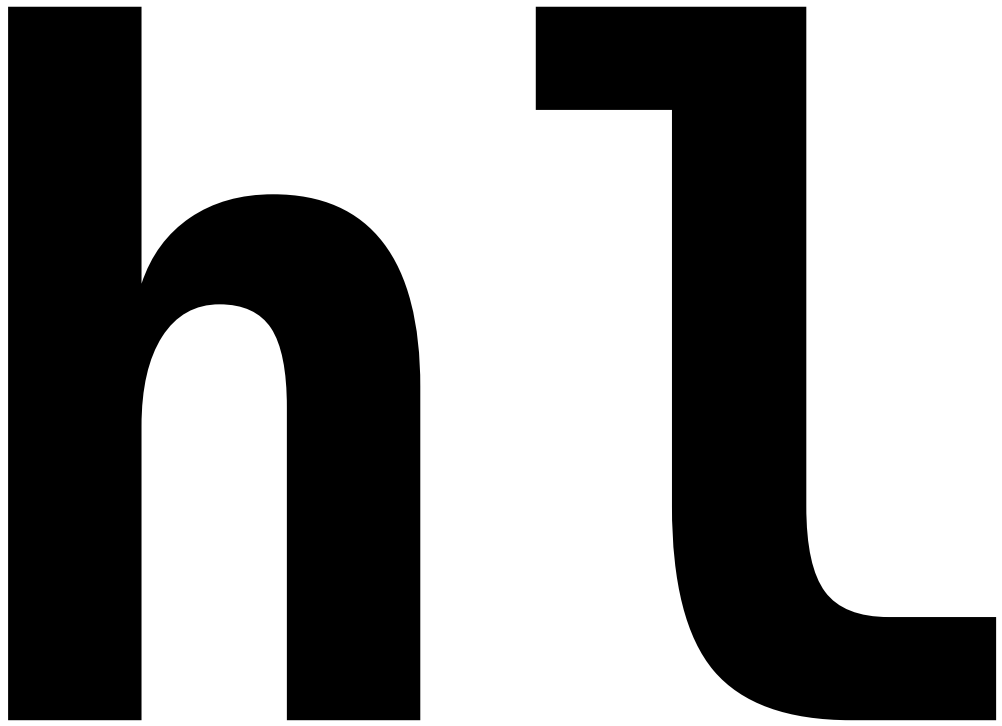
Ebenso ist das Wort StrahlenBELASTUNG irreführe

nd, denn Strahlung kann gut oder auch schlecht sein, es

hängt von der Dosis ab.

st

ra



en

SC

hü

tz

er

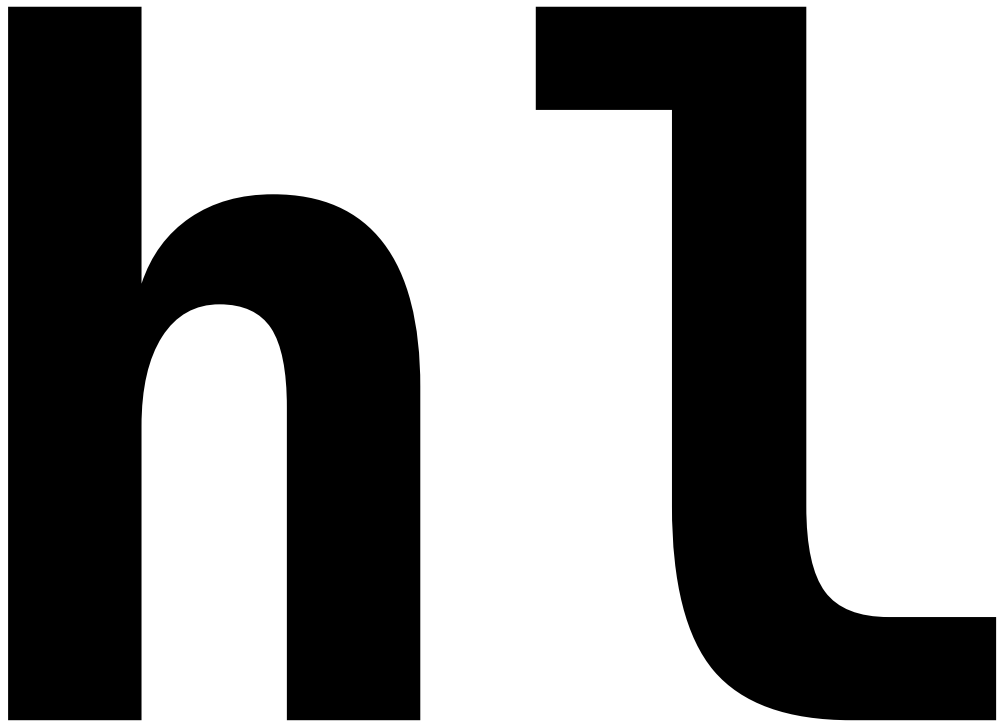
CO

nt

ra

st

ra



en

bi

ol

og

en

Es

gi

bt

st

re

ng

e

Ge

se

tz

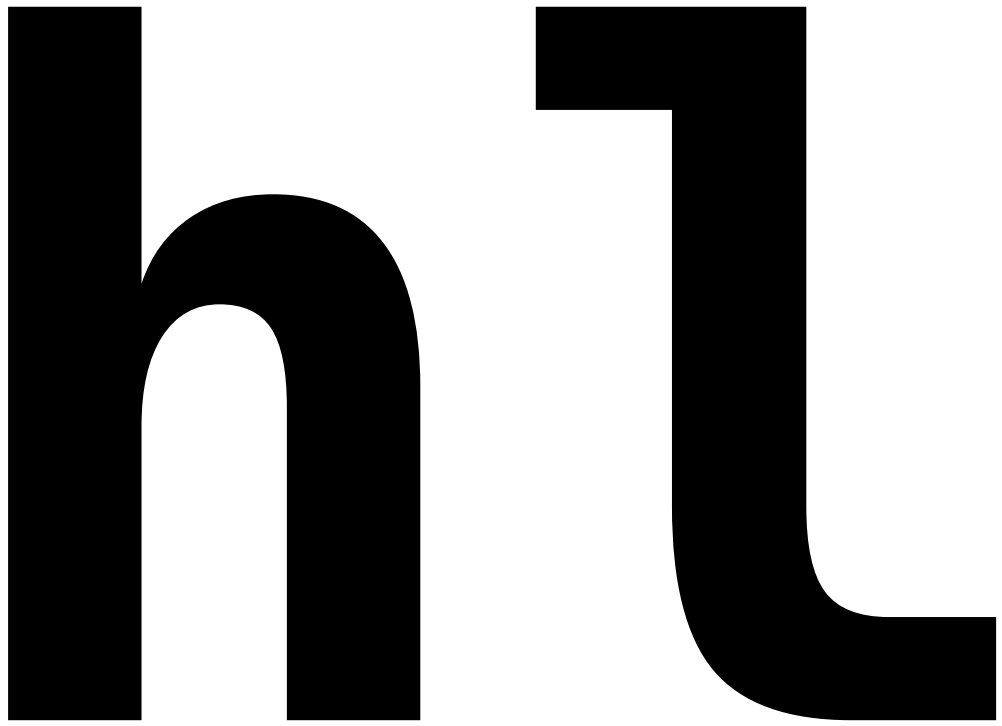
e

zu

m

st

ra

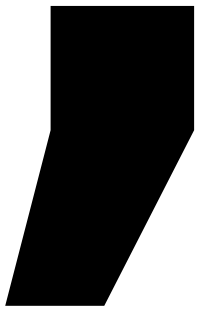


en

SC

hu

tz



un

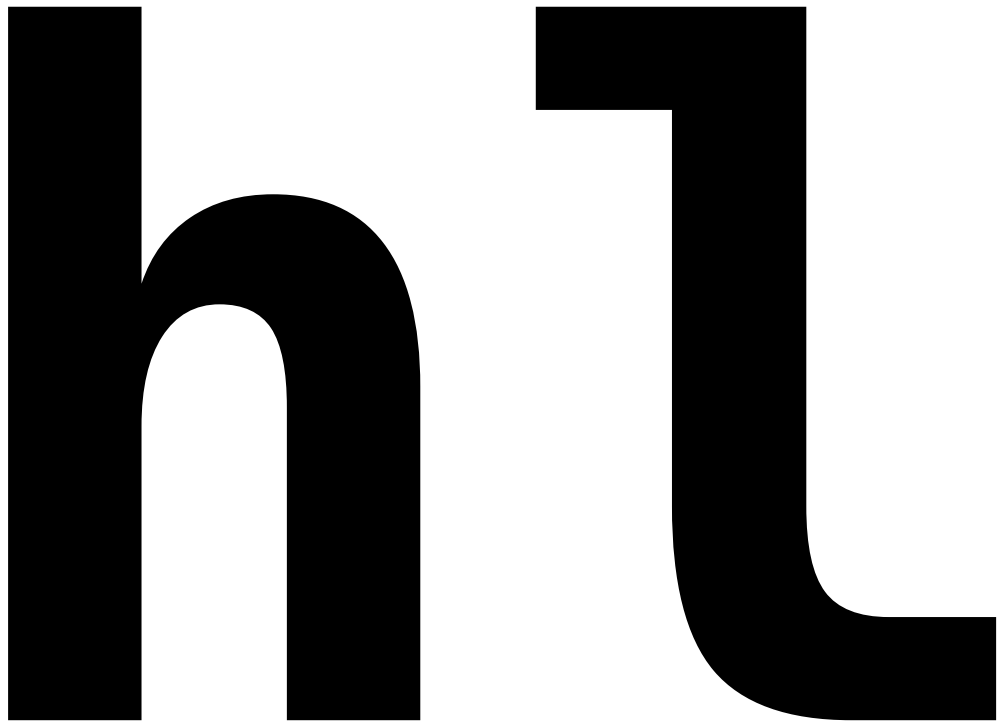
d

di

e

st

ra



en

SC

hü

tz

er

SO

rg

en

da

fü

da

di

es

e

Ge

se

tz

e

ei

ng

eh

al

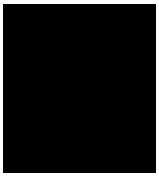
te

n

we

rd

en



Da

S

is

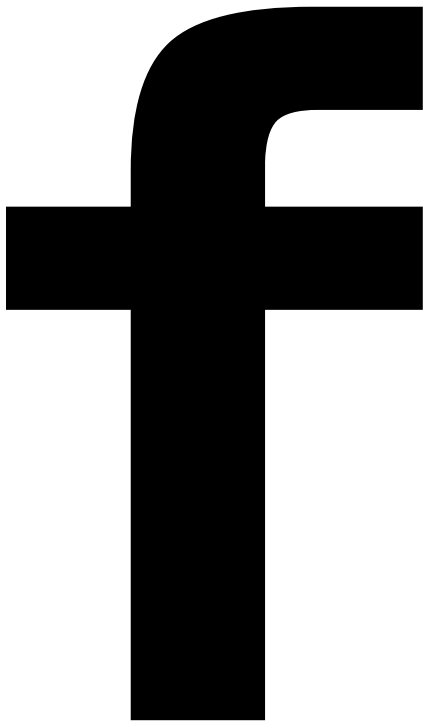
t

de

r

Be

ru

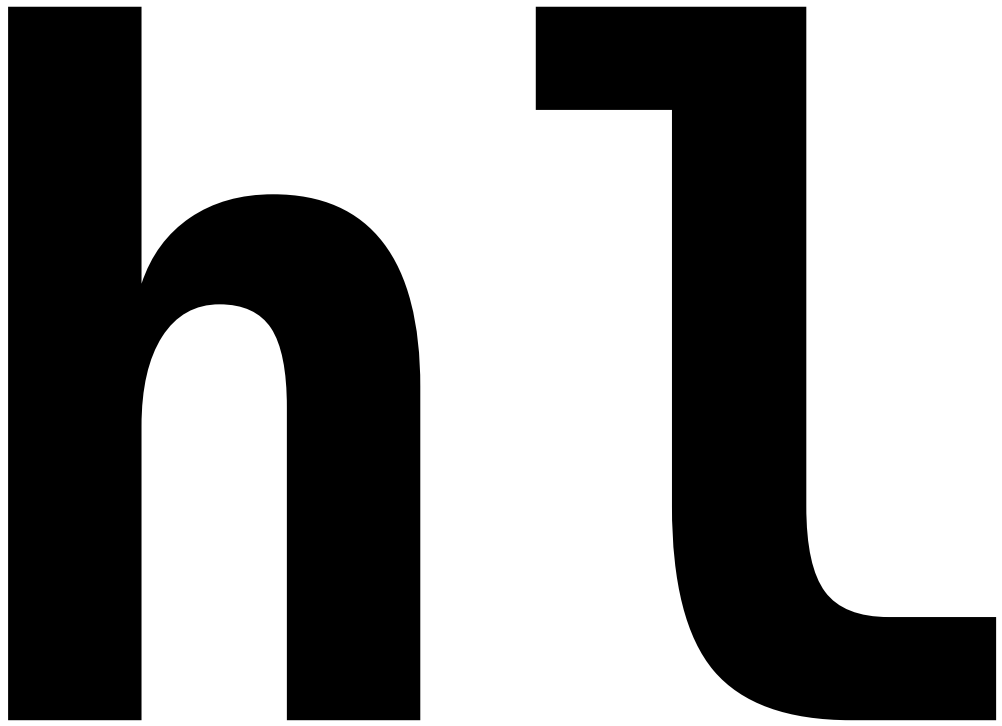


de

r

st

ra



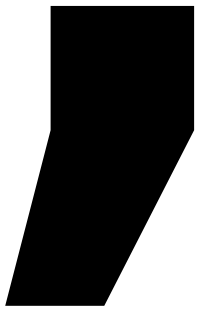
en

SC

hü

tz

er



da

fü

r

we

rd

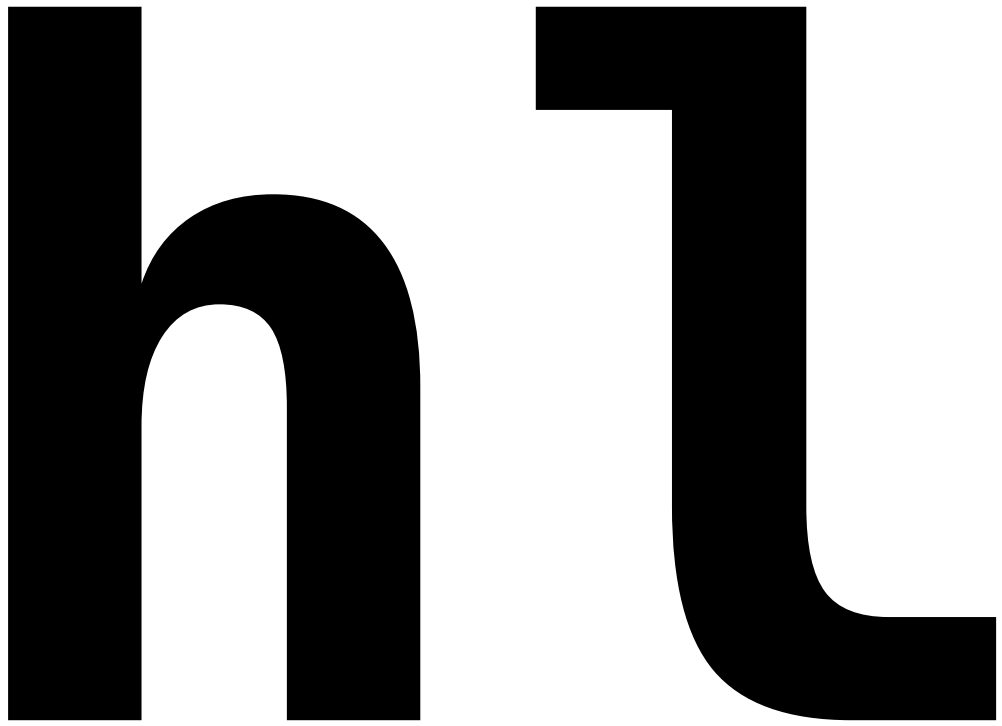
en

sí

e

be

za



t.

Vị

el

ht

GL

AU

BE

N

vi

el

e

di

es

er

Me

ns

ch

en

an

di

e

Ge

fa

hr

je

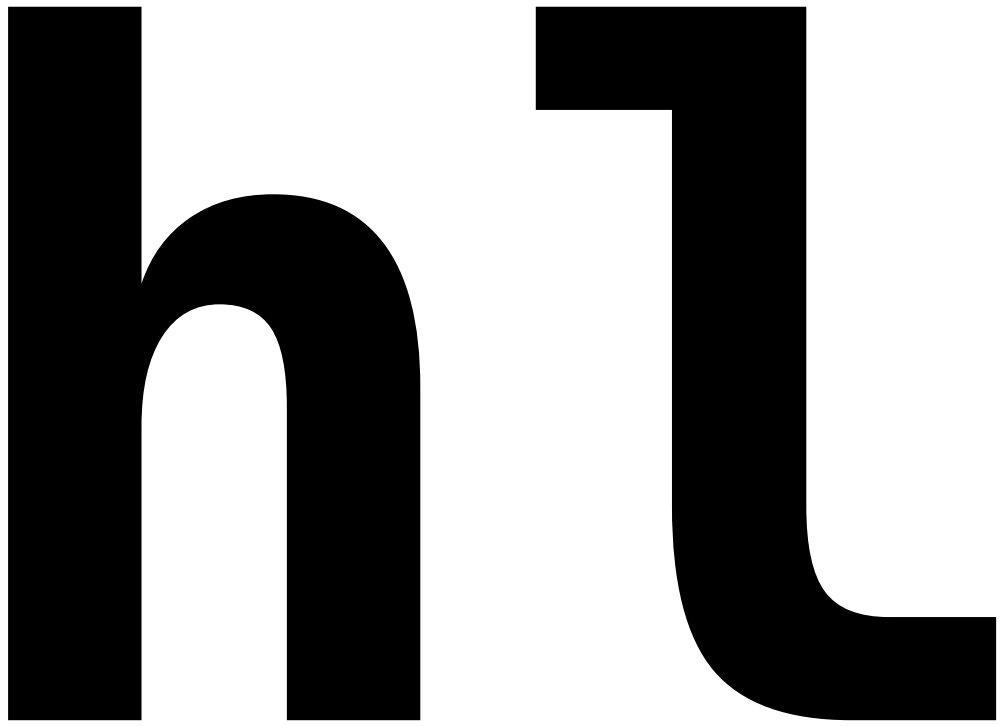
gl

he

r

st

ra



un

g,

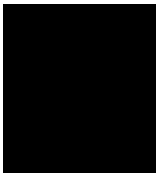
da

S

ka

n n

se

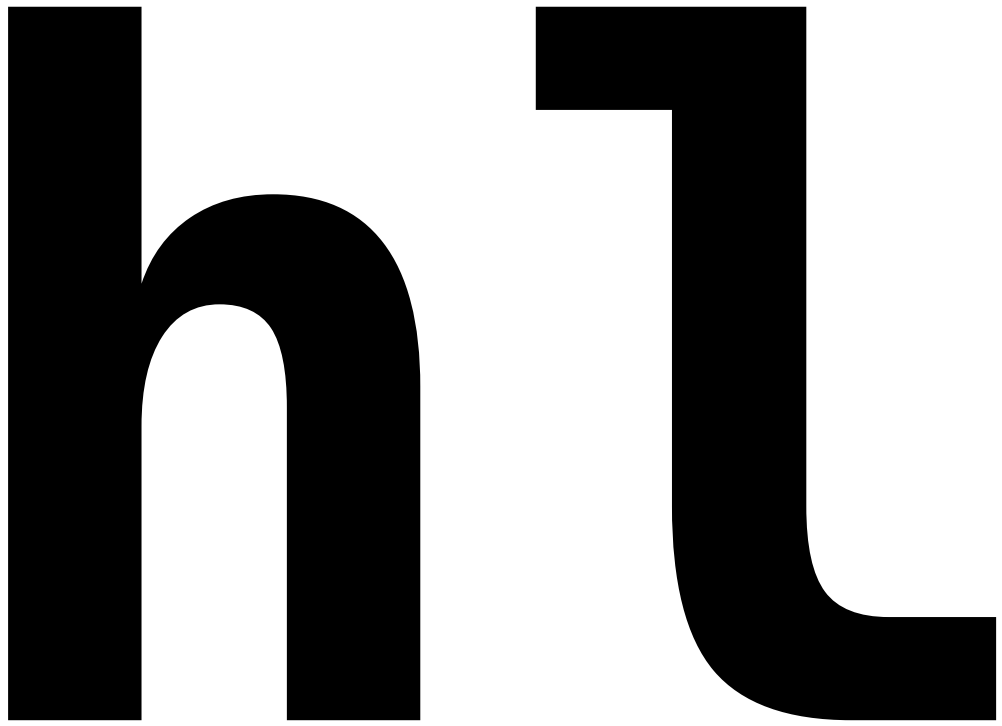


Di

e

st

ra



en

bi

ol

og

en

un

te

rs

uc

he

n

di

e

rk

un

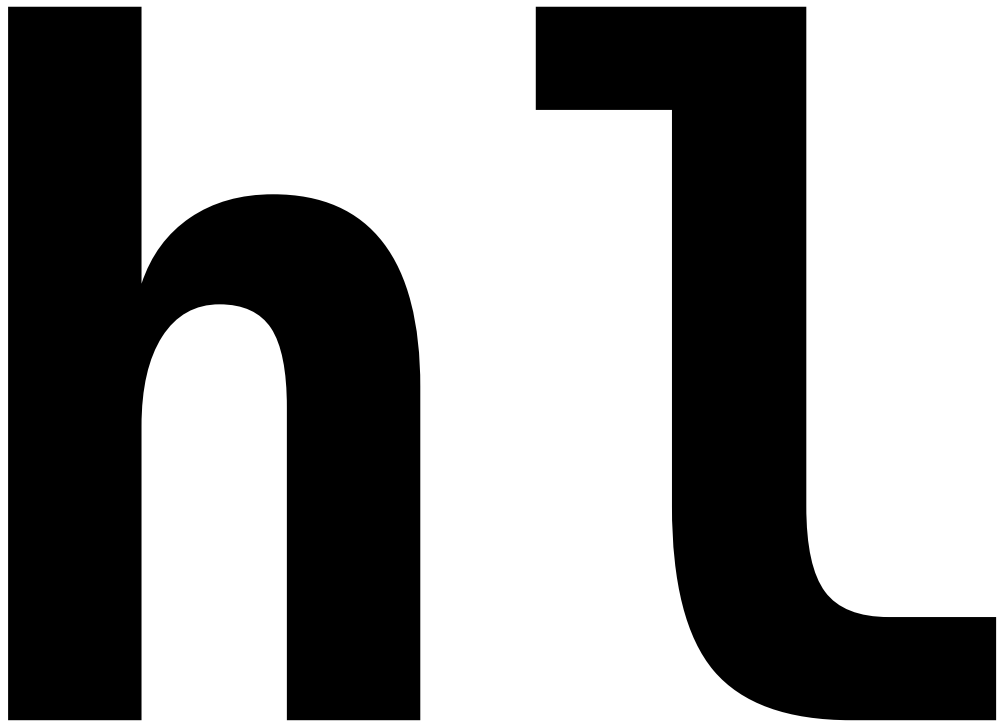
g

VO

n

st

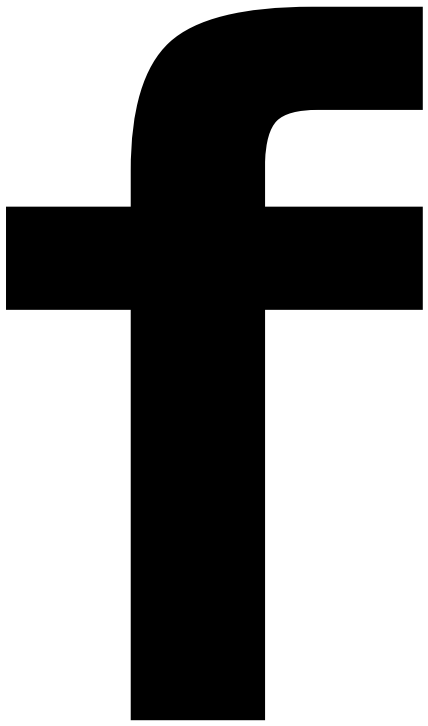
ra



un

g

au



Le

be

we

se

n

un

d

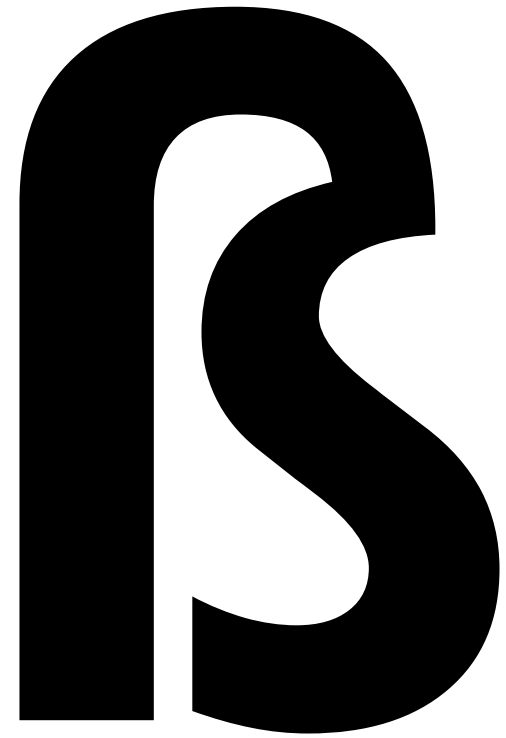
wi

en

da

he

da



Be

re

h

ed

ge

r

Do

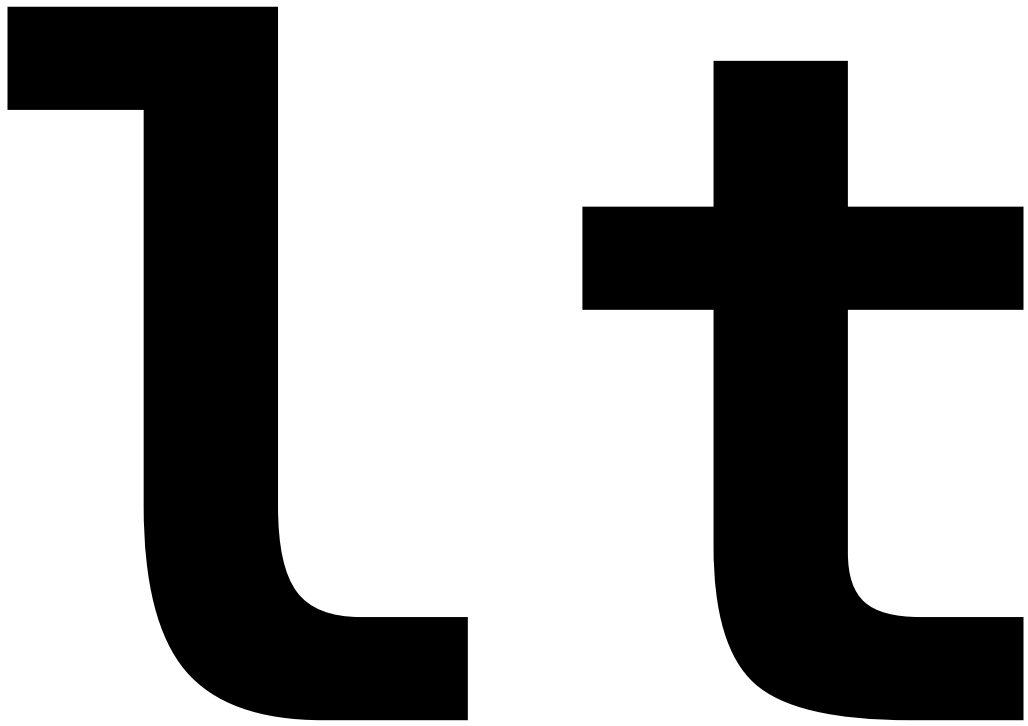
sí

S

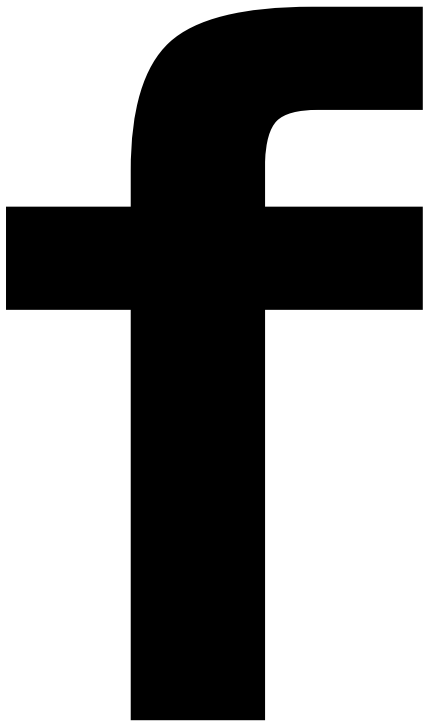
ve

rt

ei



au



la

ng

e

ze

it

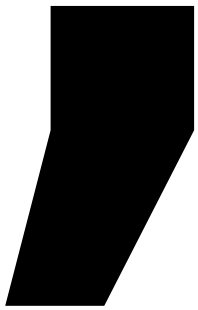
ke

e

SC

hä

he



SO

nd

er

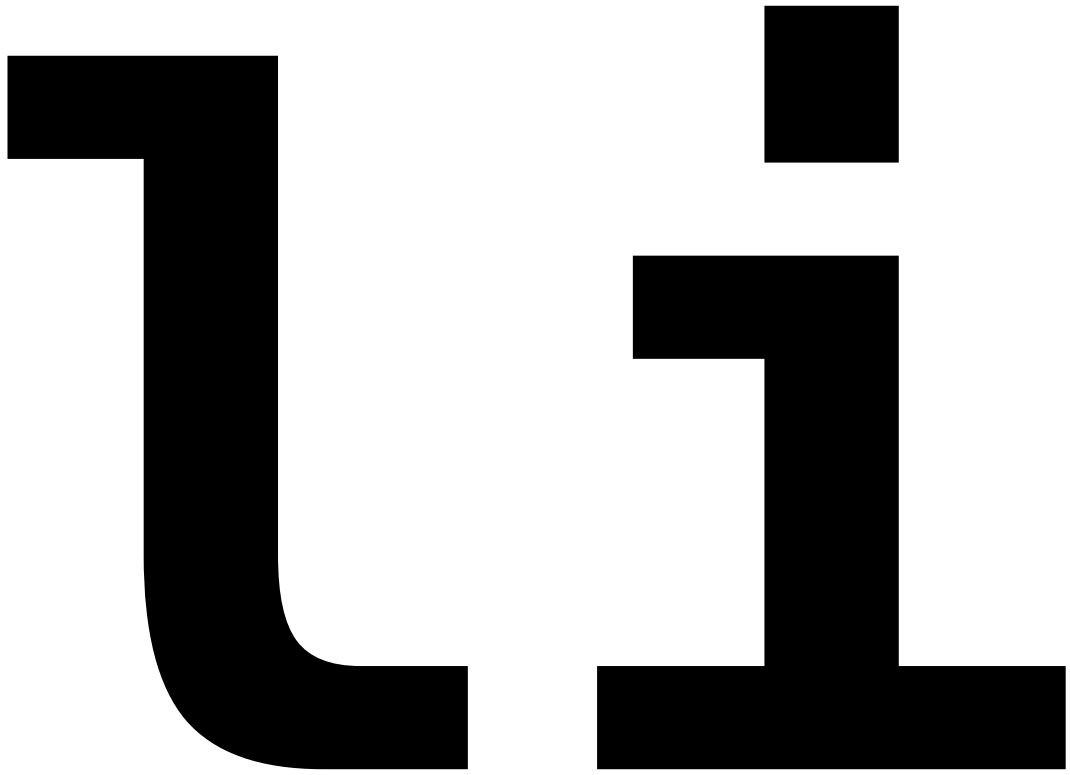
n

ei

ne

nü

tz



ch

e

rk

un

g

be

ob

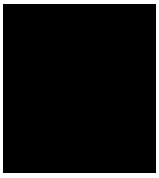
ac

ht

et

wi

rd

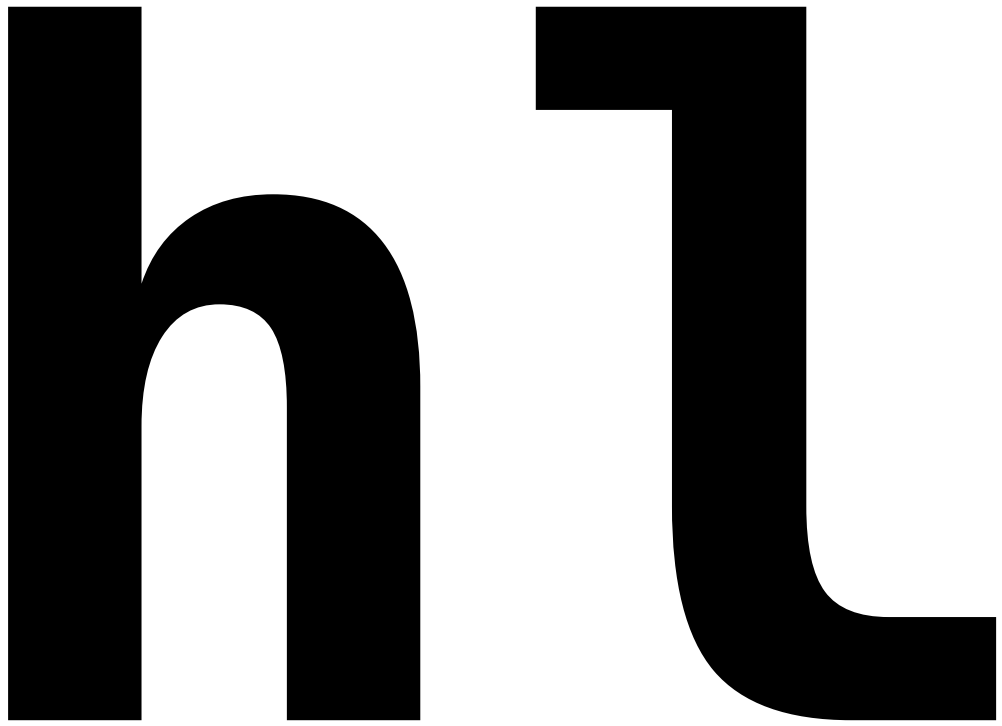


Di

e

st

ra



en

SC

hü

tz

er

ig

no

er

en

di

e

Er

ke

n n

tn

is

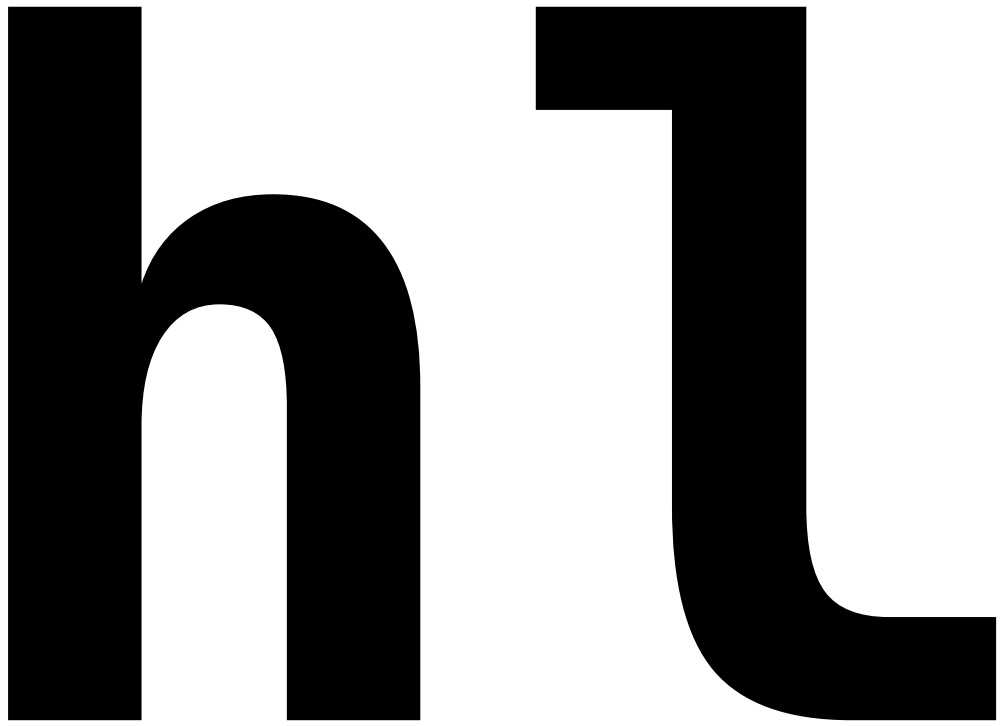
se

de

r

st

ra



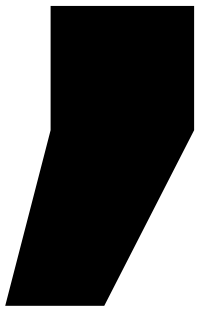
en

bi

ol

og

en



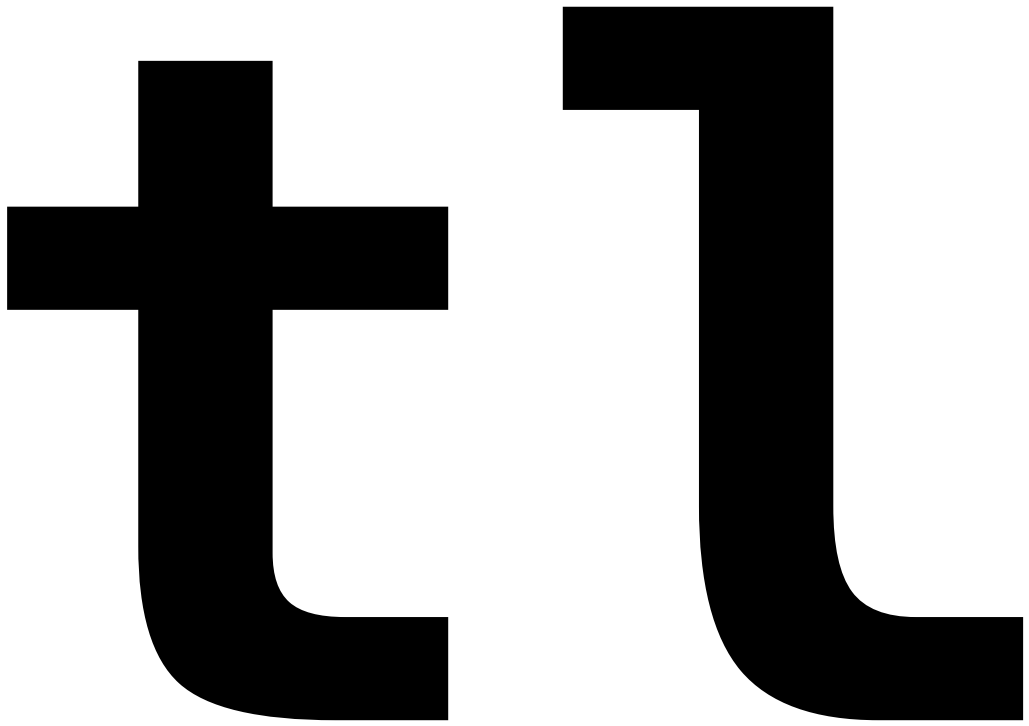
re

n

Ve

rö

en



hu

ng

en

we

rd

en

de

re

n

Ar

be

it

en

ch

t

er

wä

t.

Di

e

In

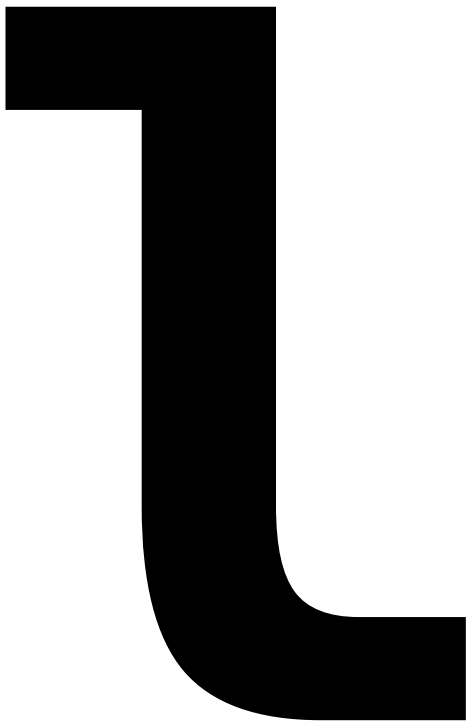
te

rn

at

io

na



Co

mm

is

sí

on

on

Ra

di

ol

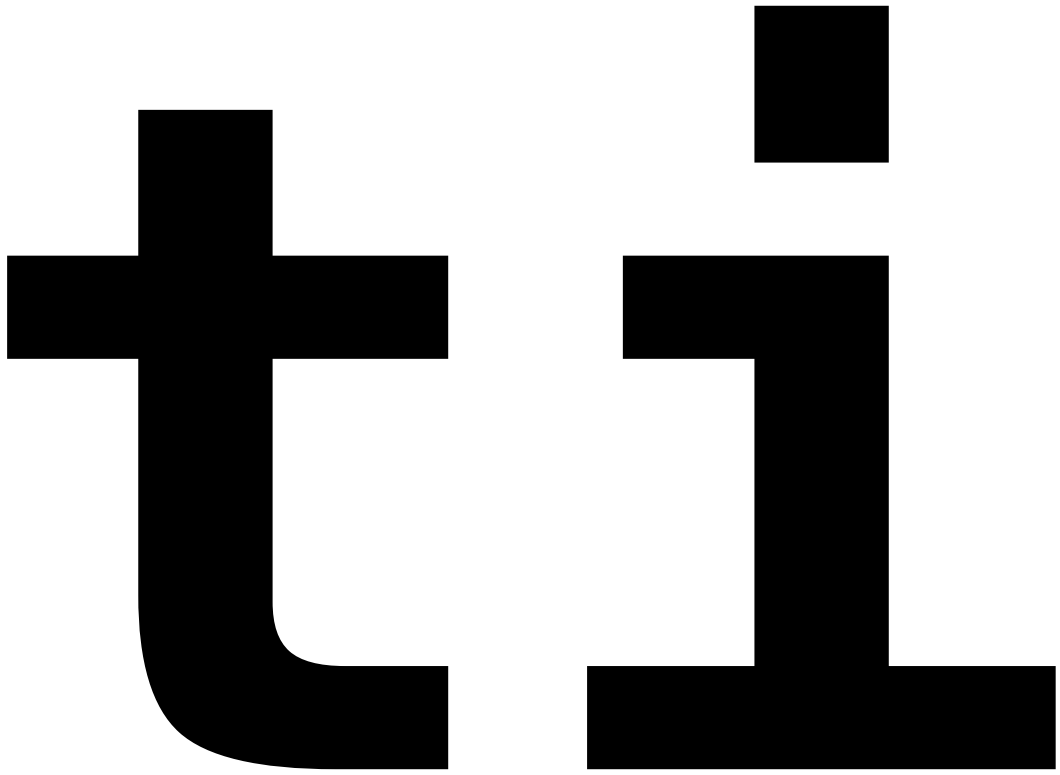
og

al

Pr

ot

ec



on

un

d

au

ch

da

S

de

ut

SC

he

Bu

nd

es

am

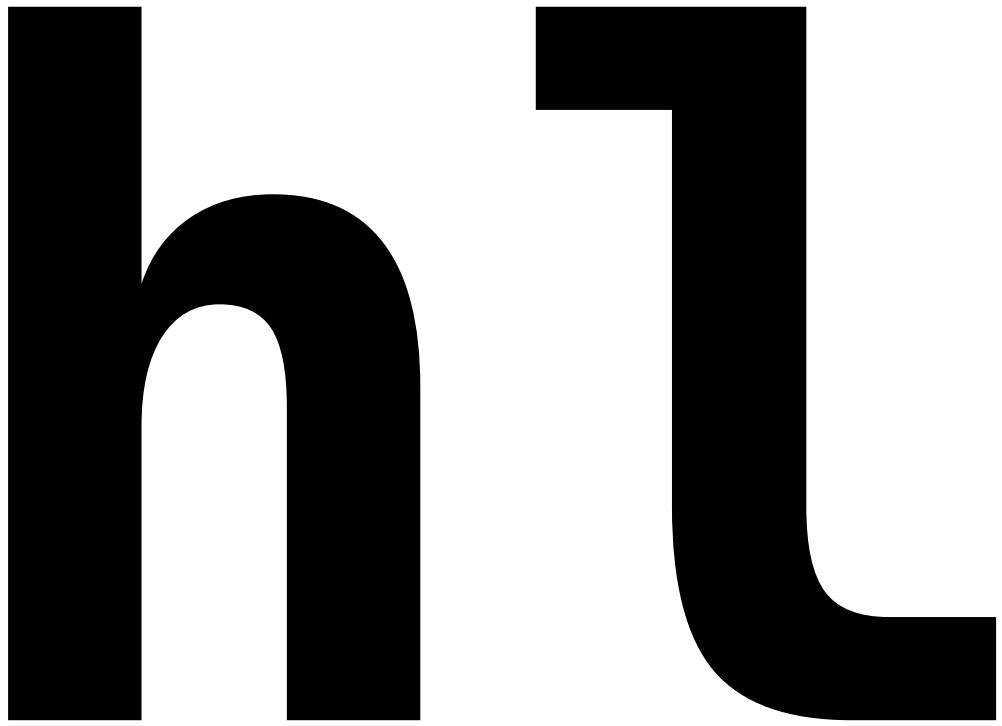
t

fü

r

st

ra



en

SC

hu

tz

ne

en

di

e

bi

op

os

it

iv

e

rk

un

g

VO

n

ed

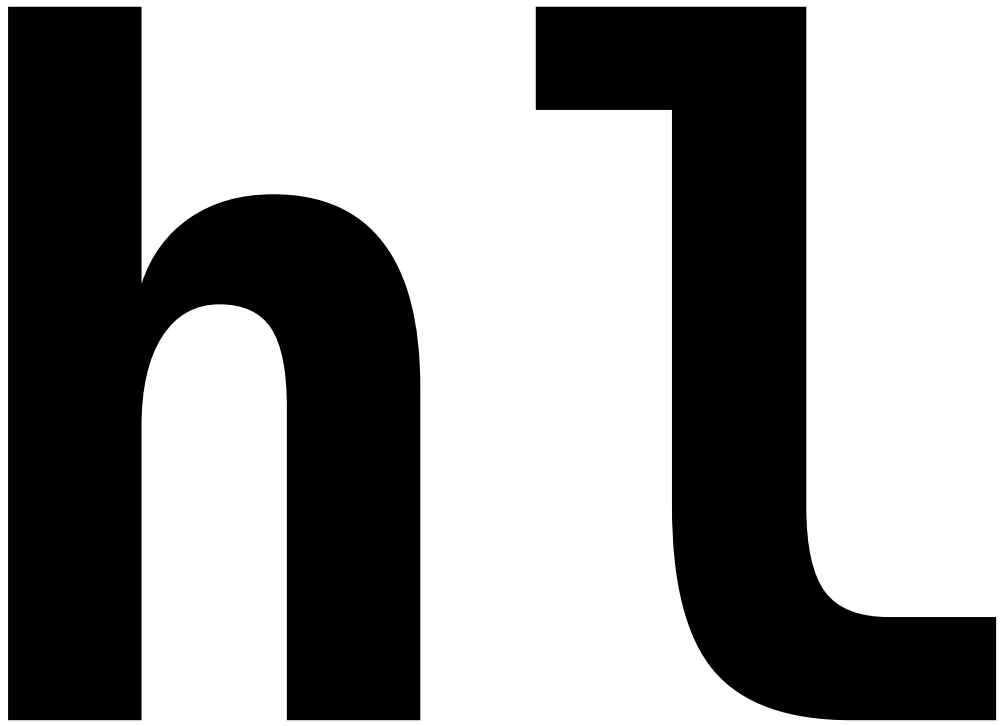
gd

os

is

st

ra



un

g

ch

t

zu

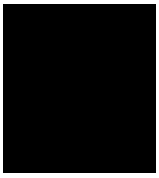
r

Ke

n n

tn

is



Un

d

da

du

rc

h

di

e

Me

di

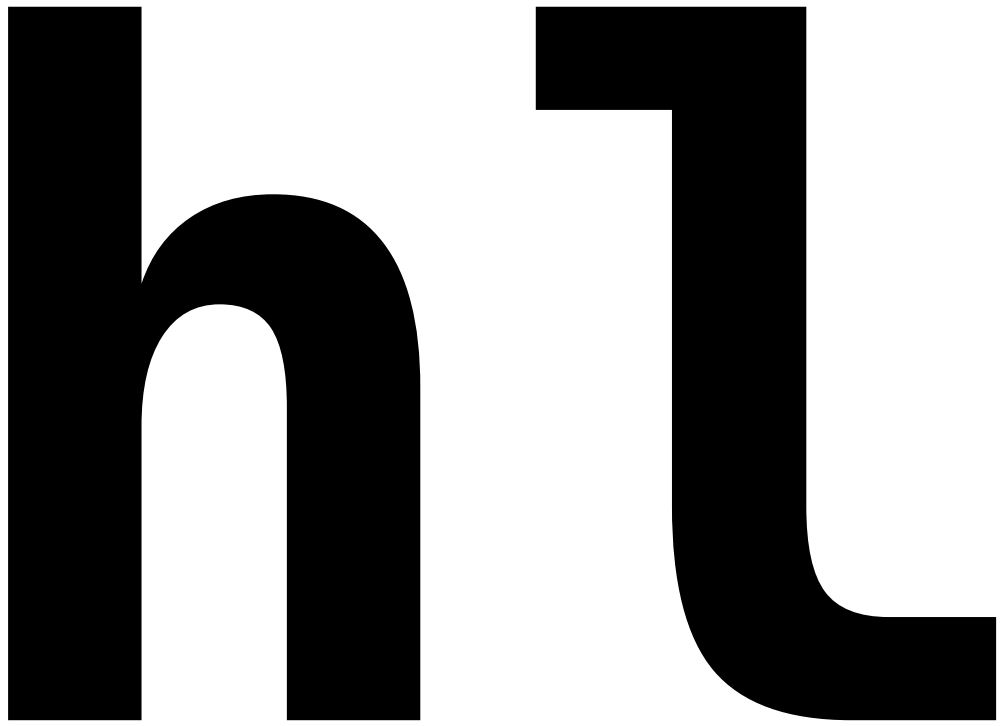
en

di

e

st

ra



en

fu

rc

ht

üb

er

Ja

hr

ze

te

de

n

Ge

hi

rn

en

de

r

Me

ns

ch

en

ei

ng

eb

ra

n n

t

wu

rd

e,

ha

be

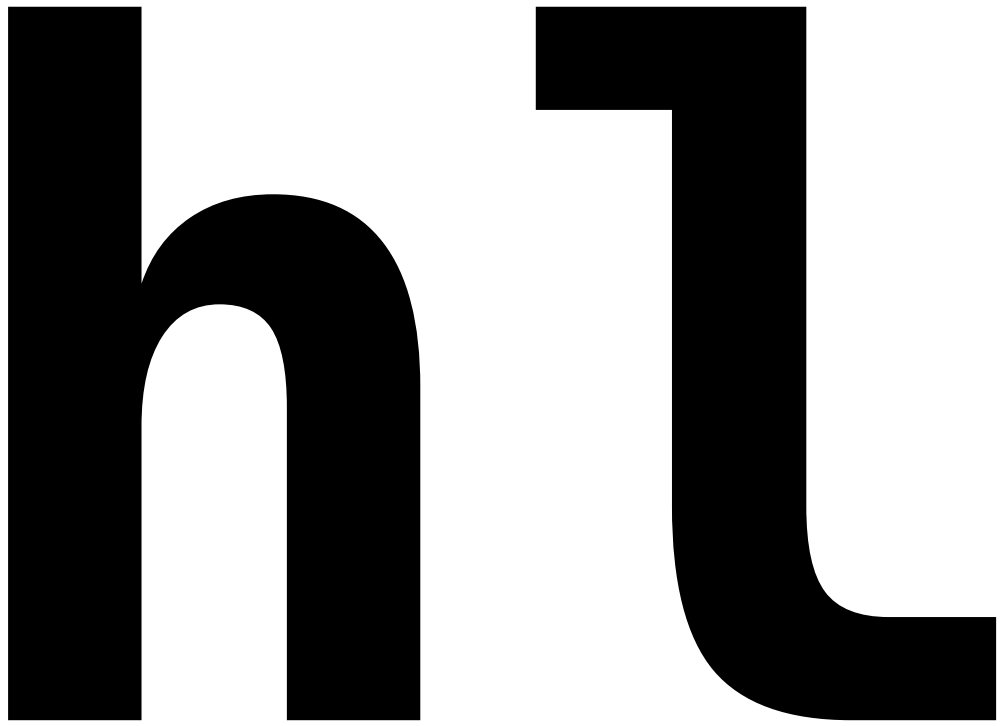
n

di

e

st

ra



en

SC

hü

tz

er

de

m

we

tt

st

re

it

ge

sí

eg

ţ,

zu

m

Na

ch

te

de

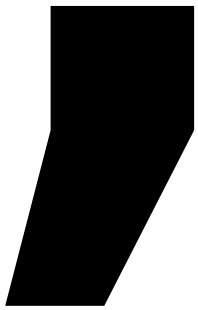
r

Me

ns

ch

en

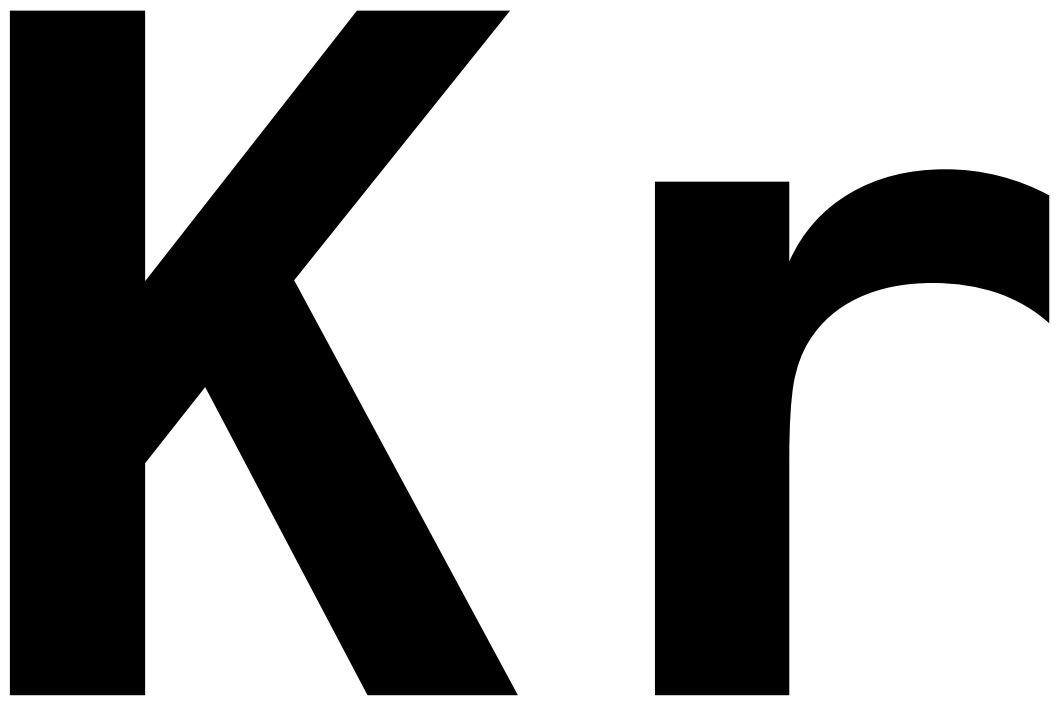


da

vi

el

e


Kr

an

kh

ei

te

n

du

rc

h

ei

n

st

ar

ke

S

mu

ns

ys

te

m

de

S

Kö

rp

er

S

ge

he

t

we

rd

en

kö

n n

te

n

od

er

SC

ho

n

ga

r

ch

t

zu

m

Au

sb

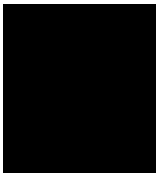
ru

ch

ko

mm

en



De

r

de

rs

tr

ei

t

ZW

is

ch

en

be

id

en

La

ge

rn

ko

mm

t

de

m

Be

ch

t

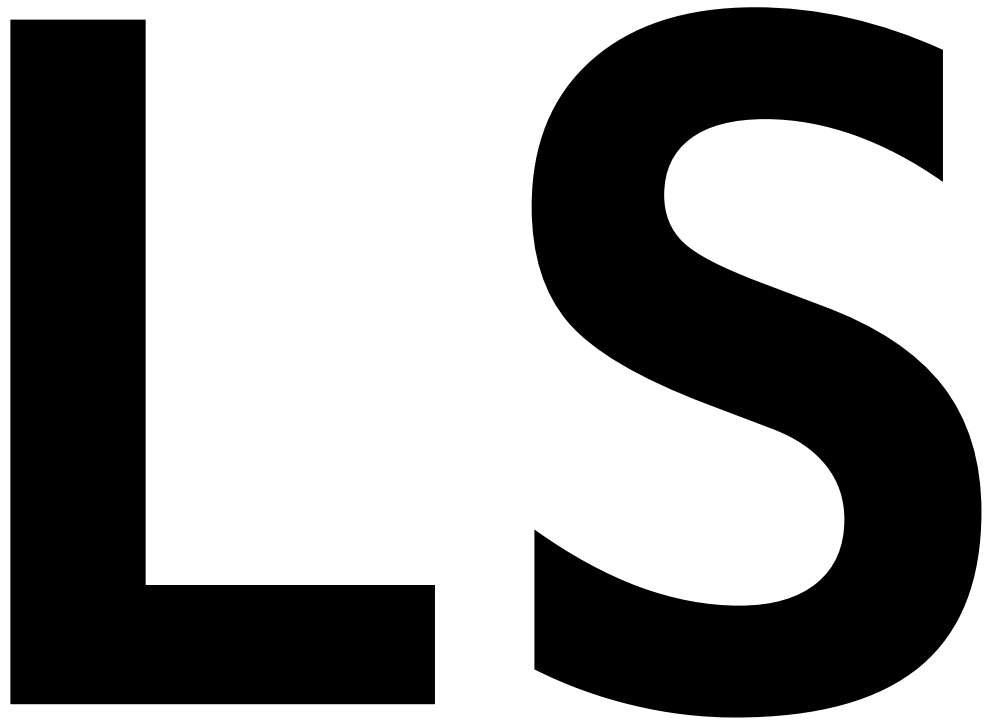
de

S

SP

IE

GE


LS

zu

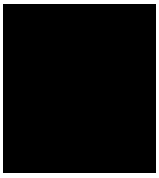
m

Au

sd

ru

ck



Es

bl

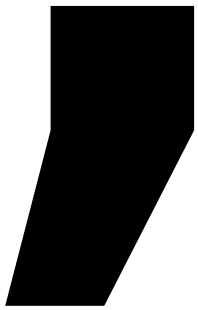
ei

bt

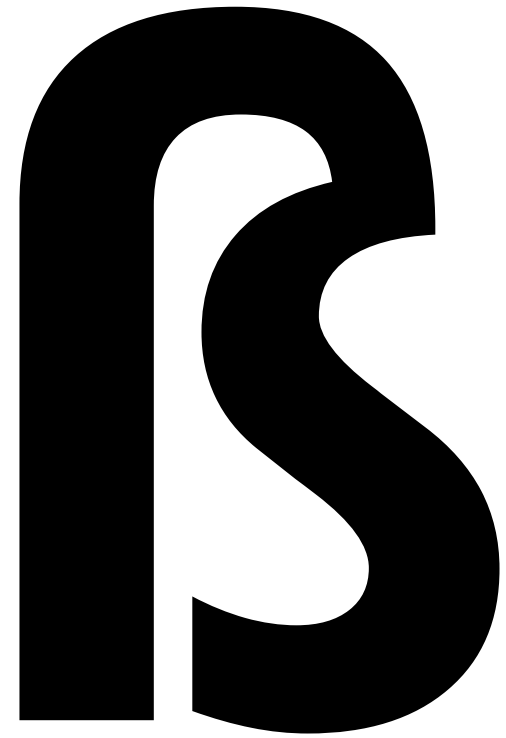
zu

ho

en



da



we

it

er

e

Me

di

en

sí

ch

de

S

Th

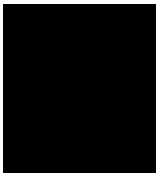
em

as

an

ne

en



Di

e

fü

hr

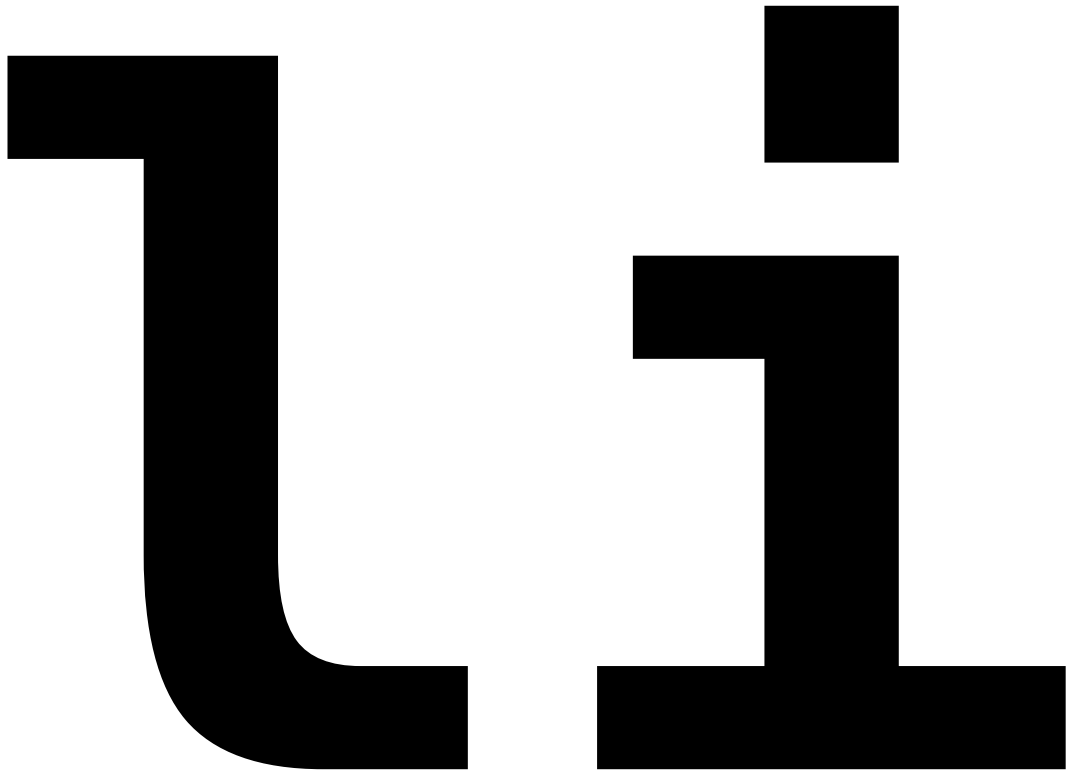
en

de

n

Pe

rs



ch

ke

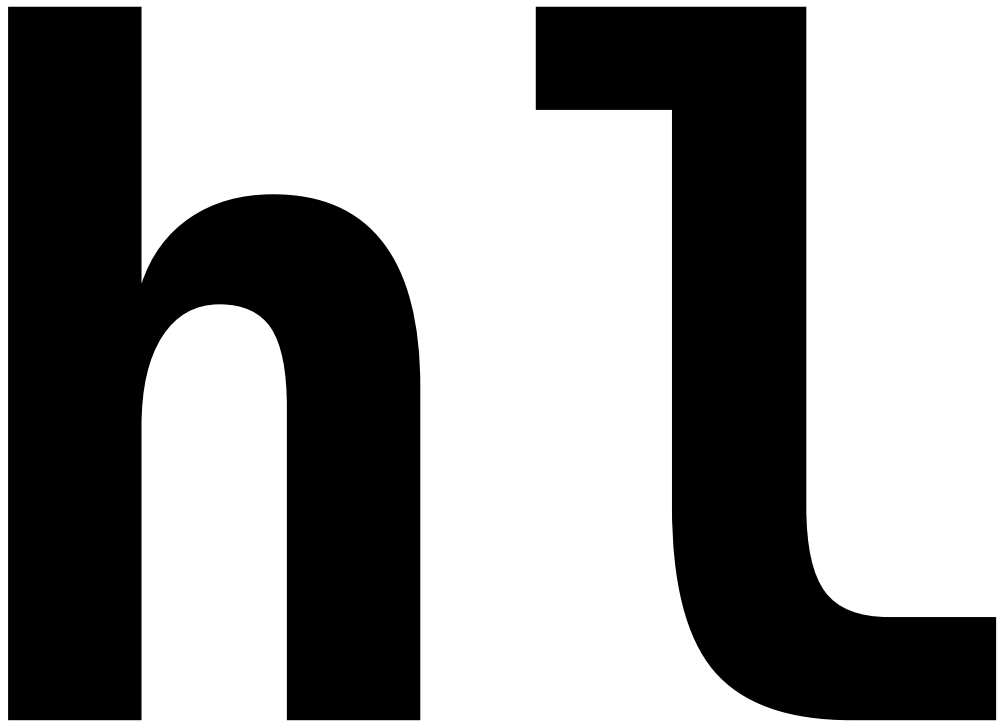
it

en

be

st

ra



en

SC

hu

tz

ke

n n

en

sí

ch

au

S,

wi

e

au

S

en

ts

pr

ec

he

nd

en

Be

it

ge

n

de

r

ze

it

SC

hr

if

t

tr

ah

ns

ch

ut

zP

RA

XI

de

S

Fa

ch

ve

rb

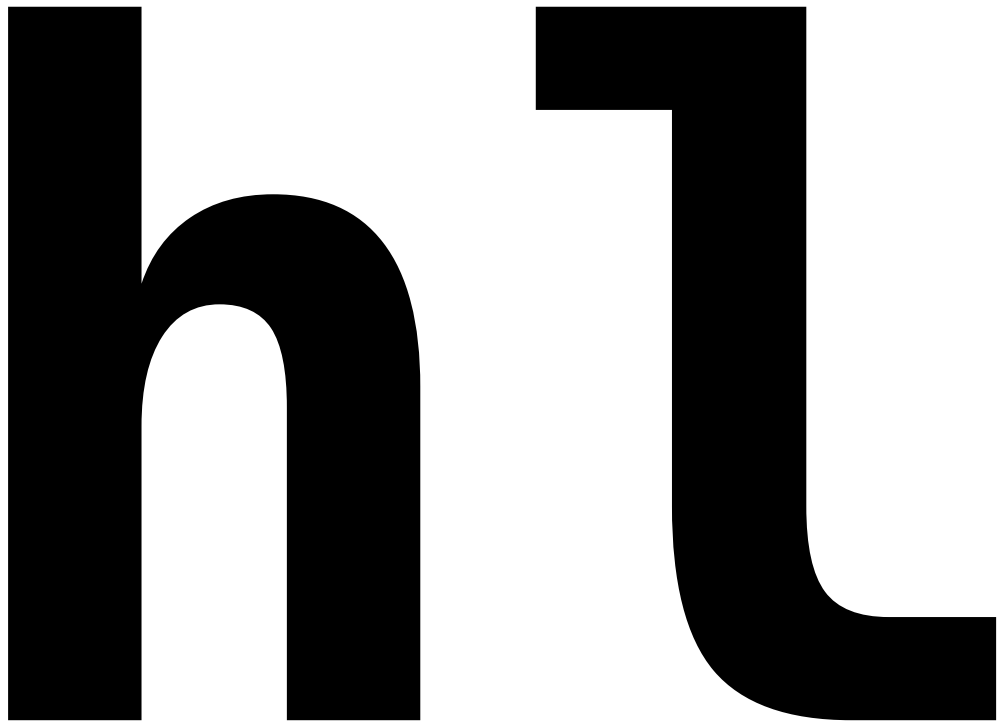
an

de

S

st

ra



en

SC

hu

tz

zu

se

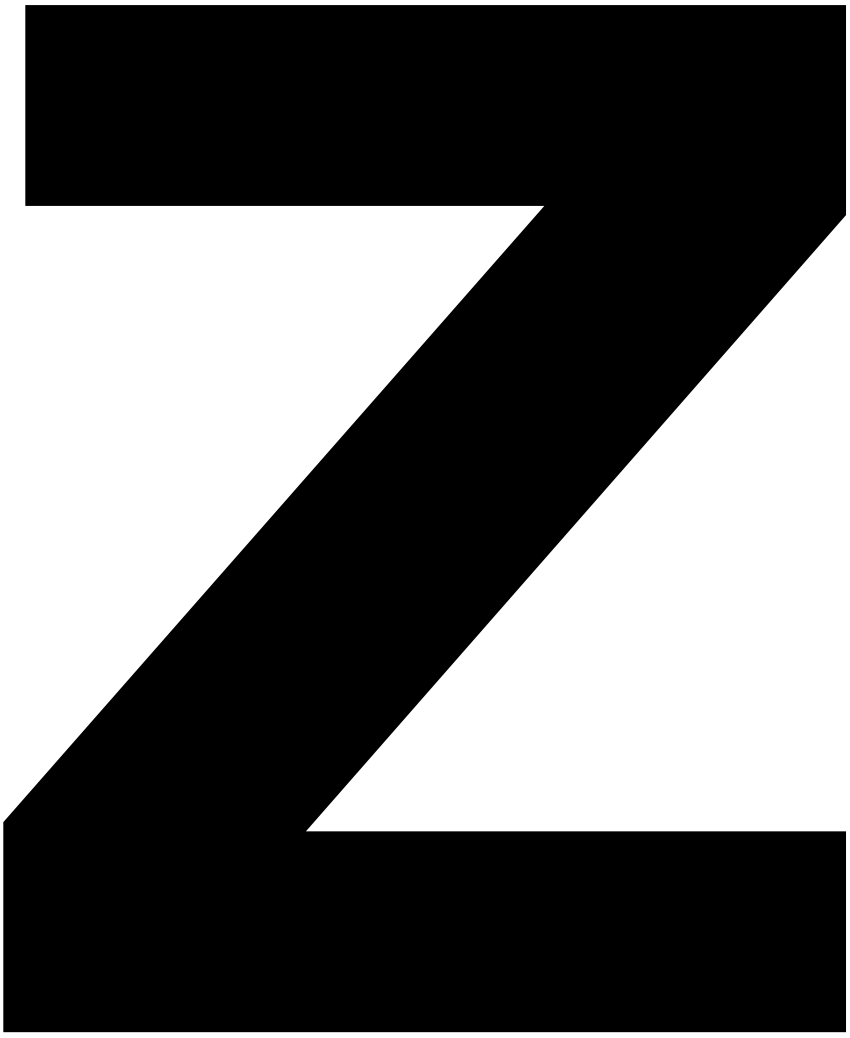
he

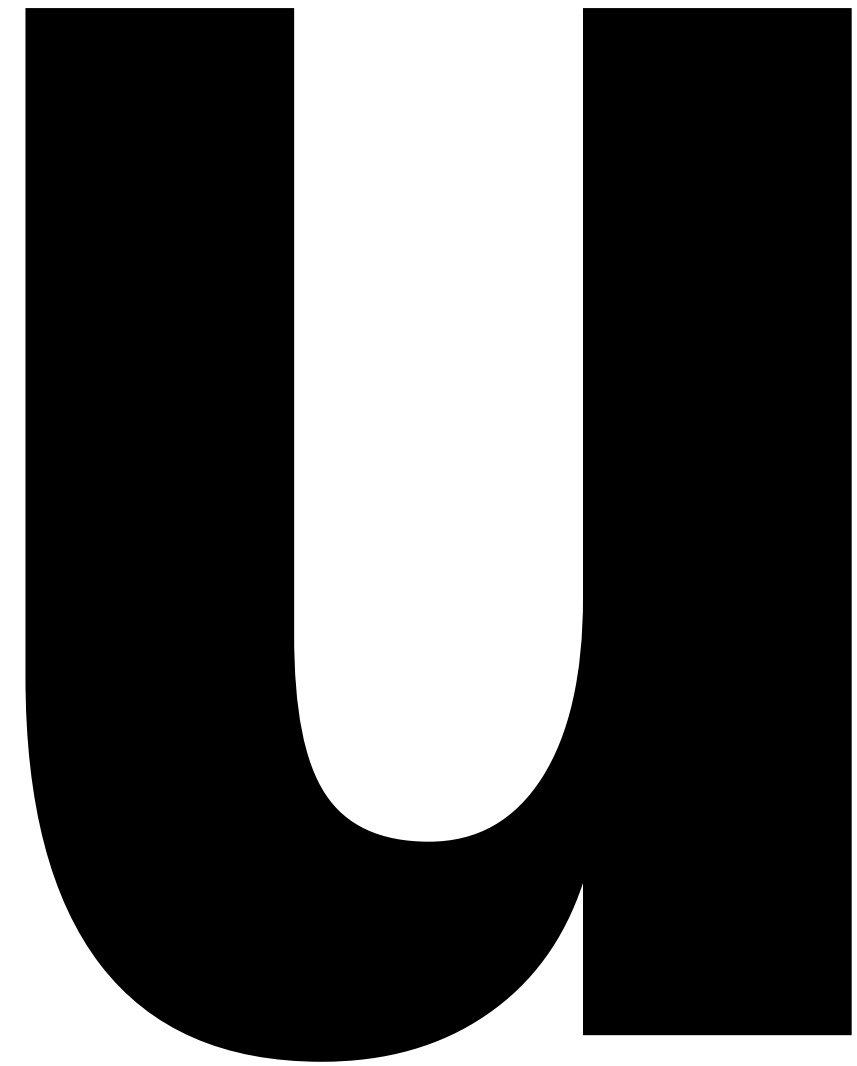
n

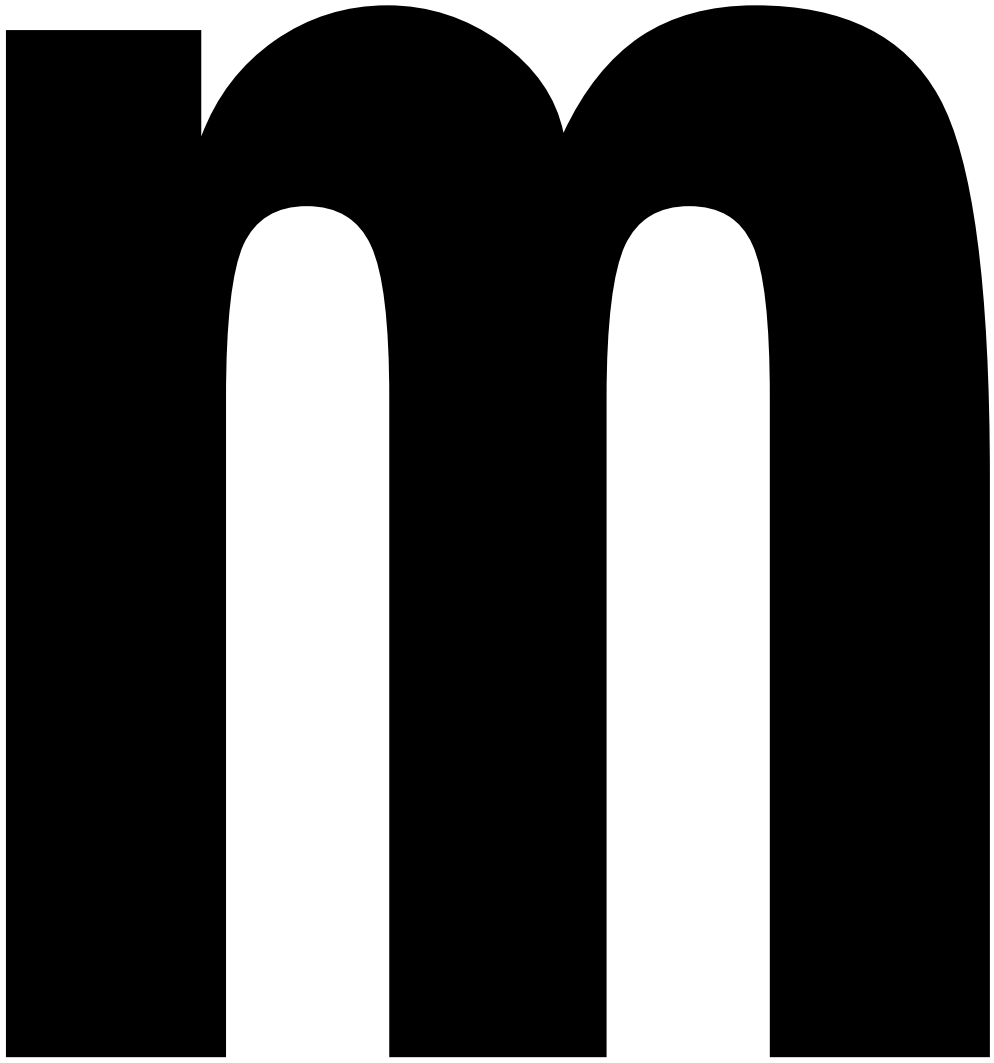
is

t

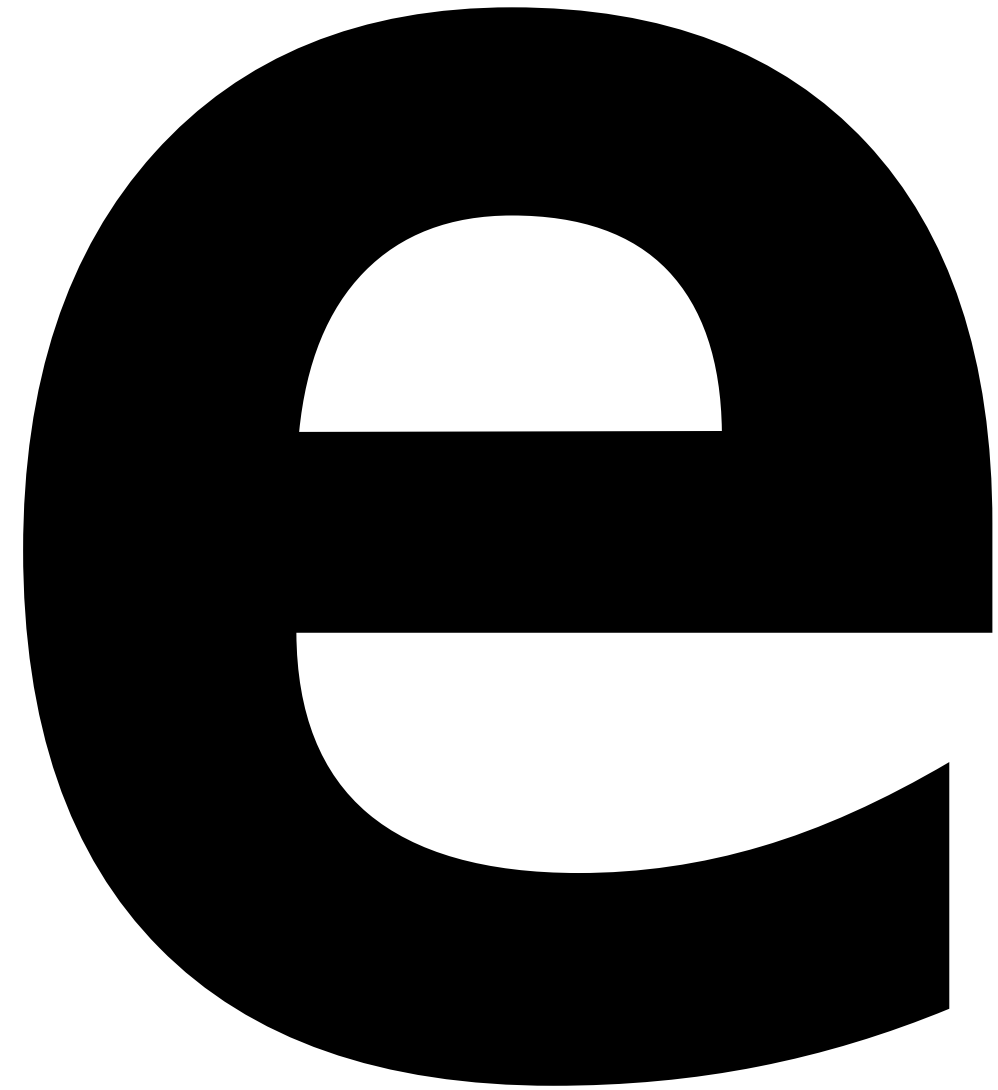
S

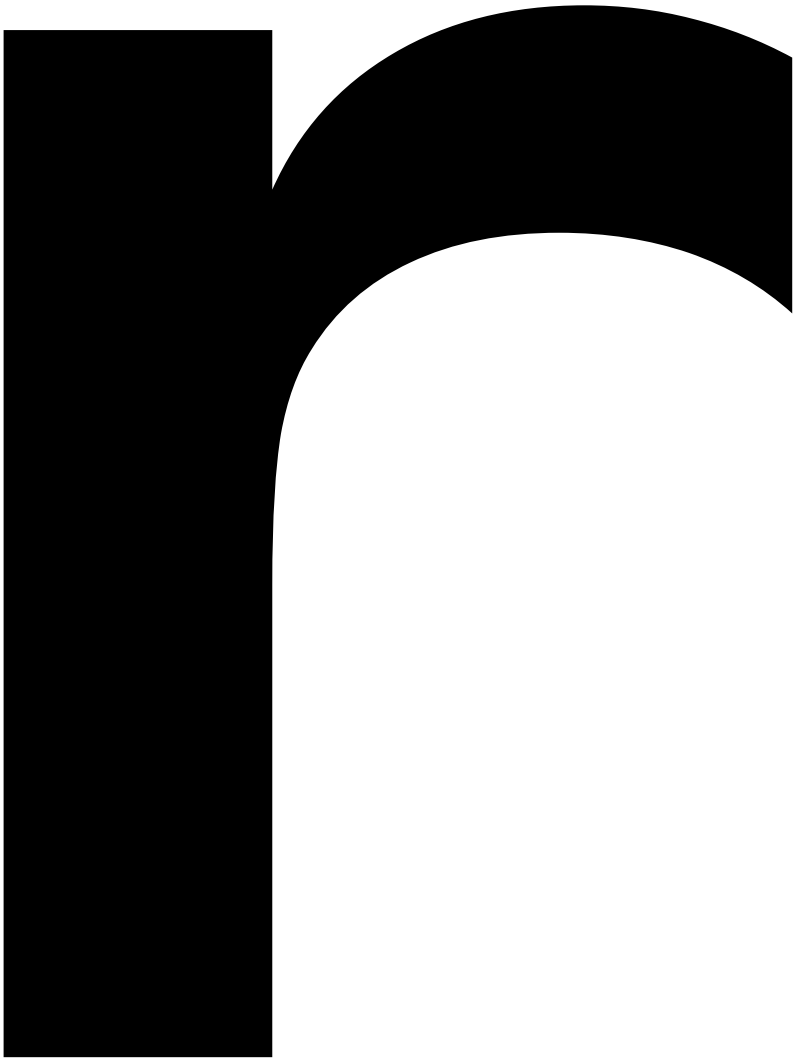


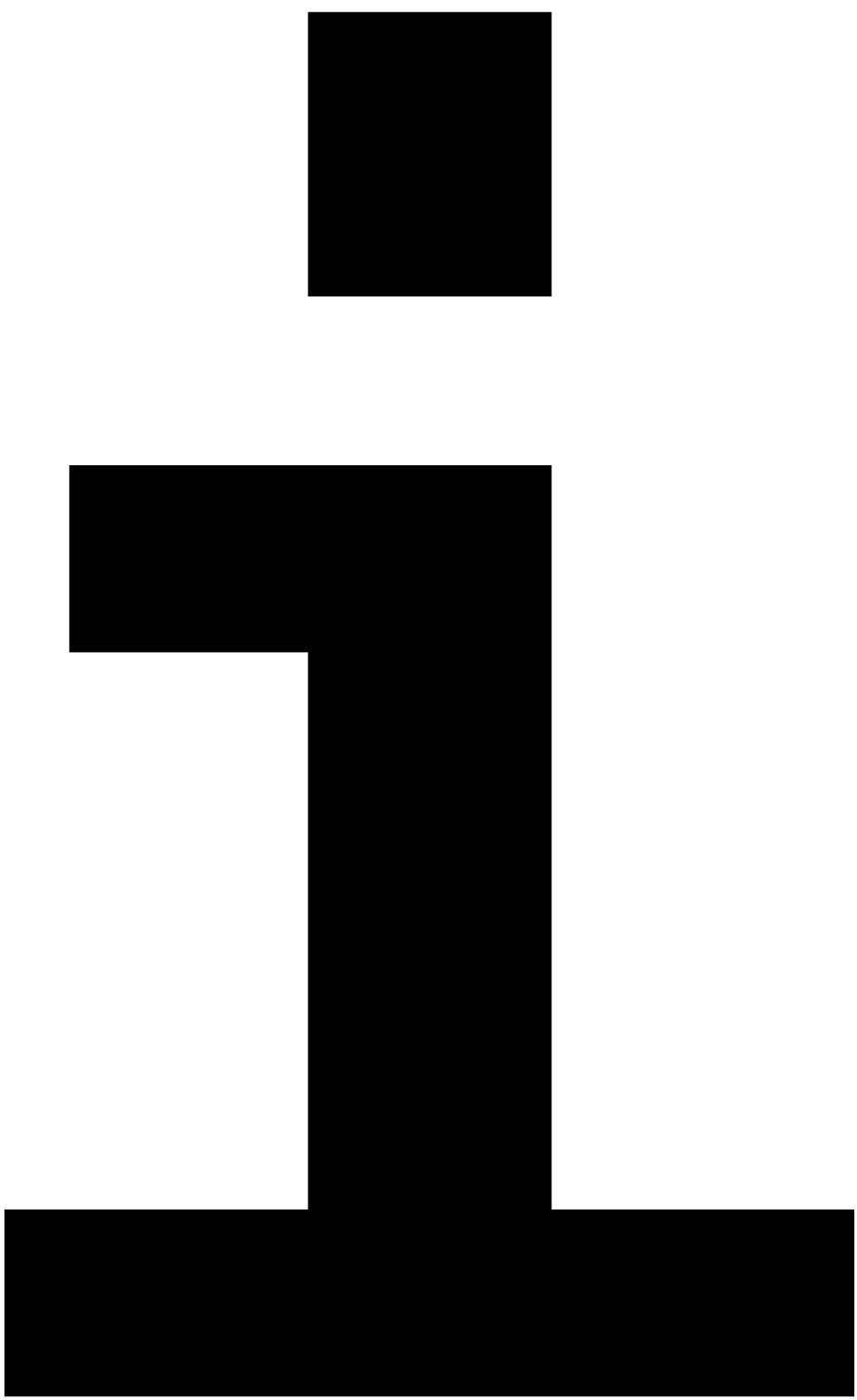


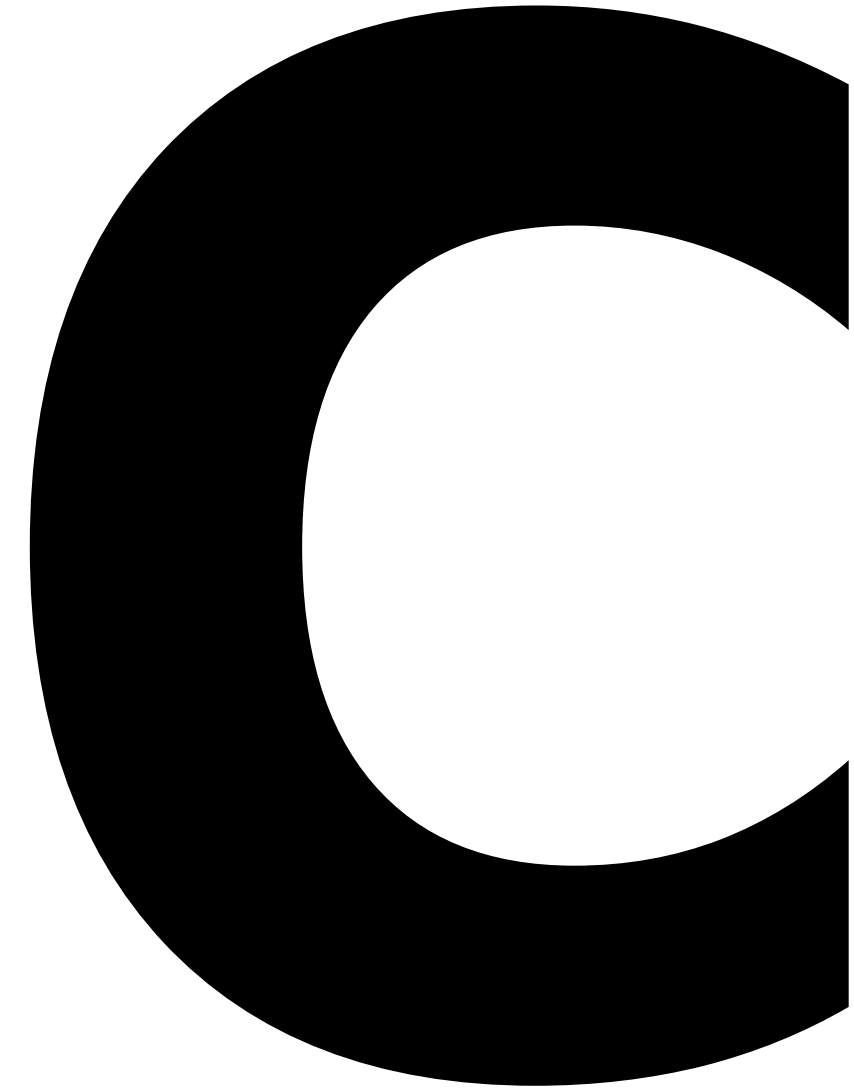


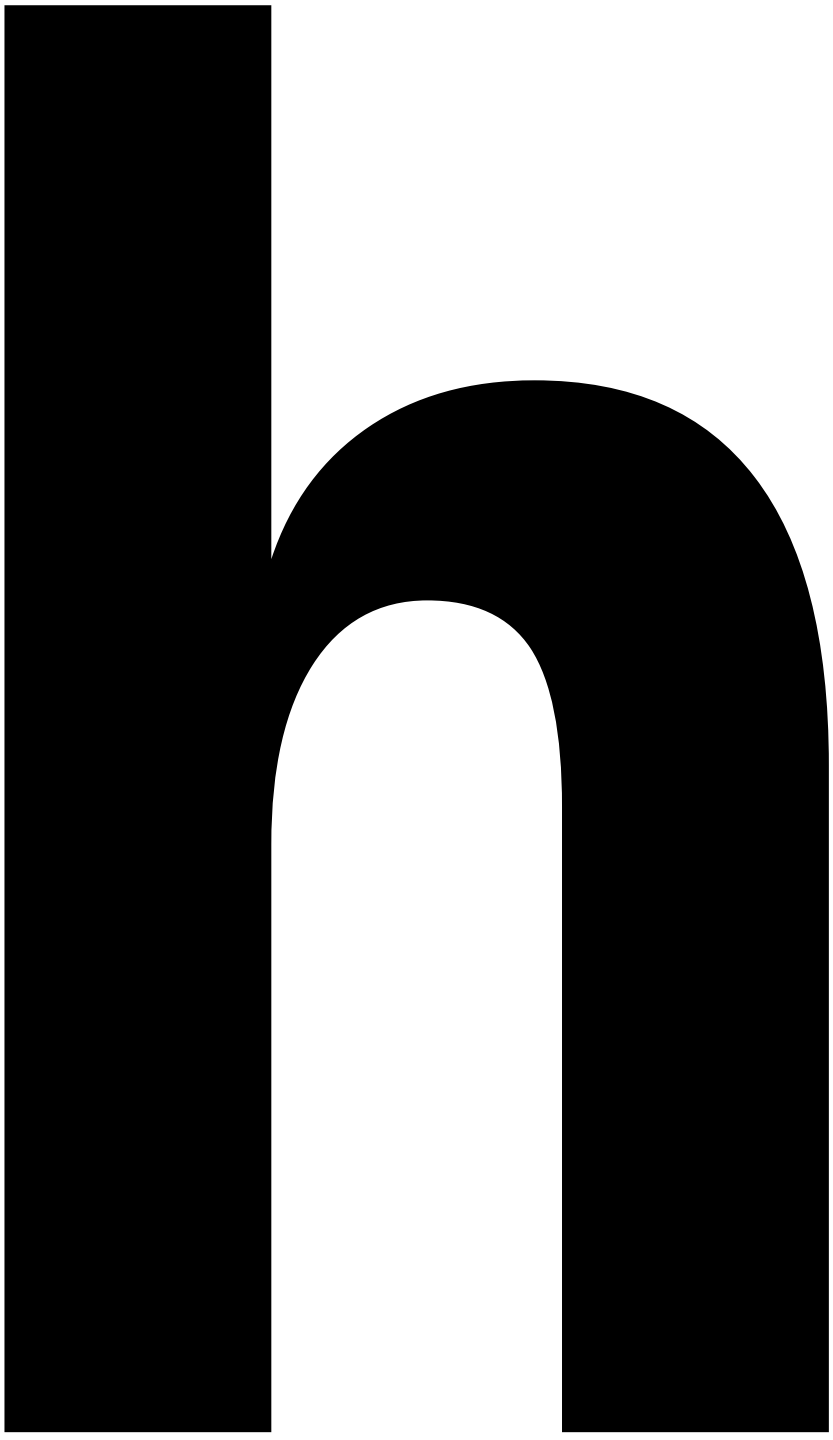
B

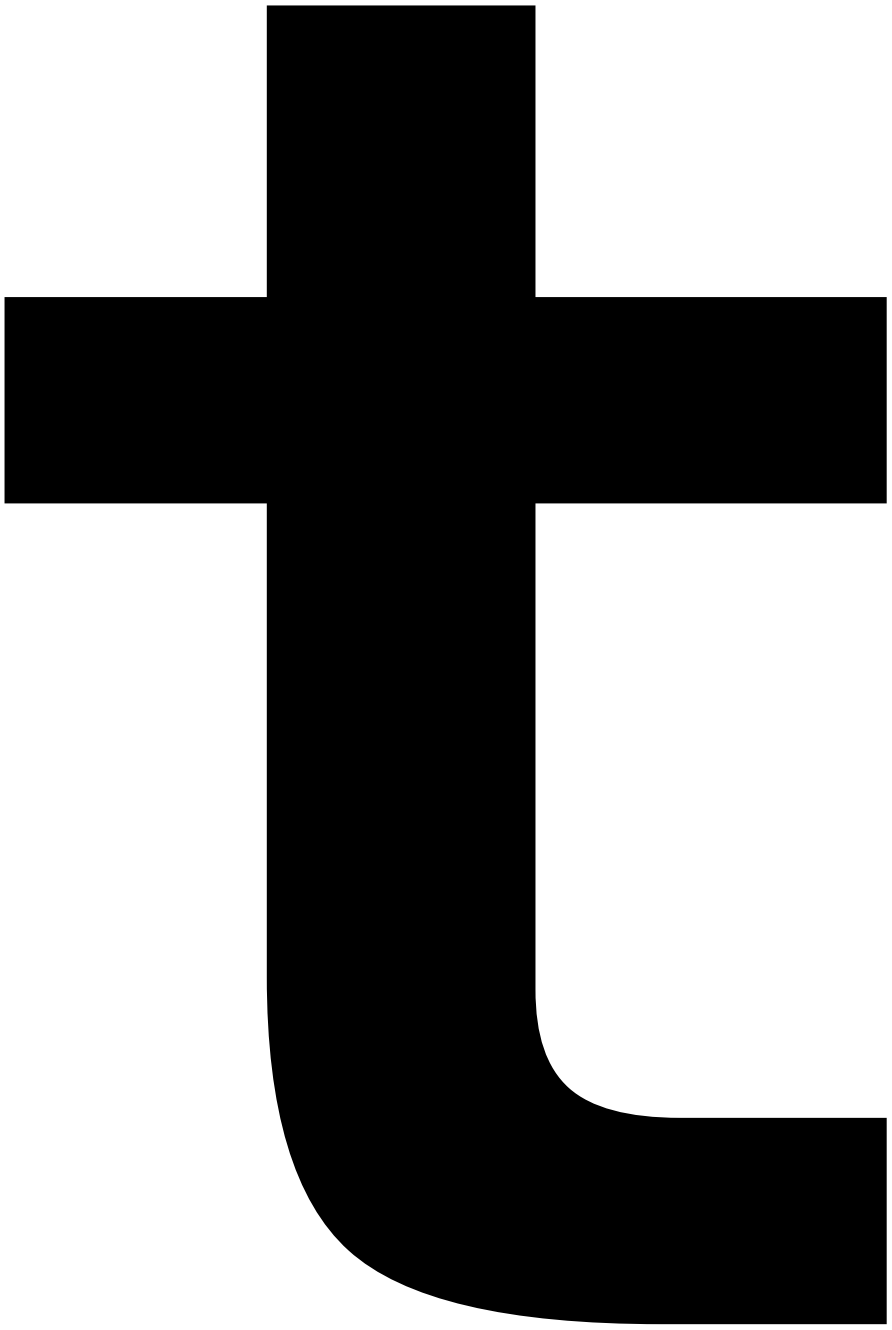




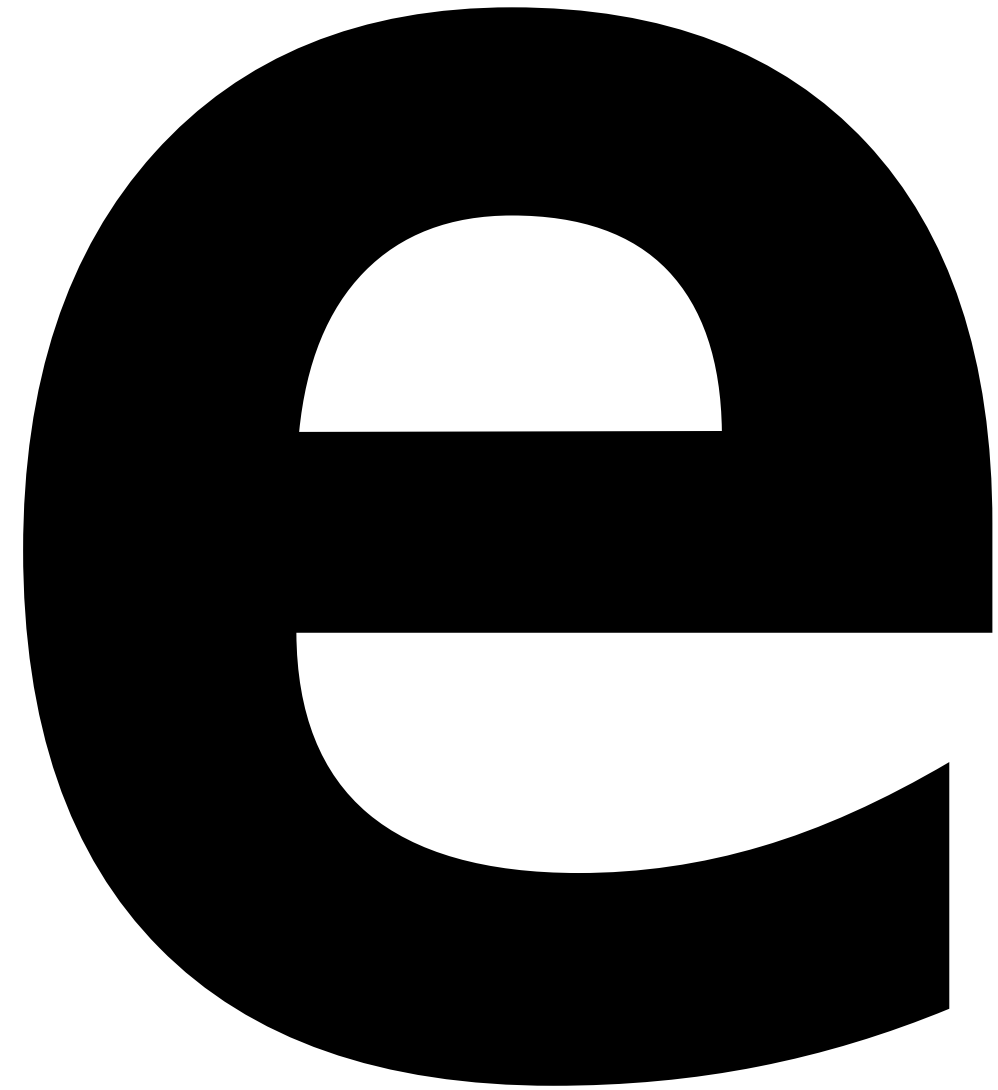






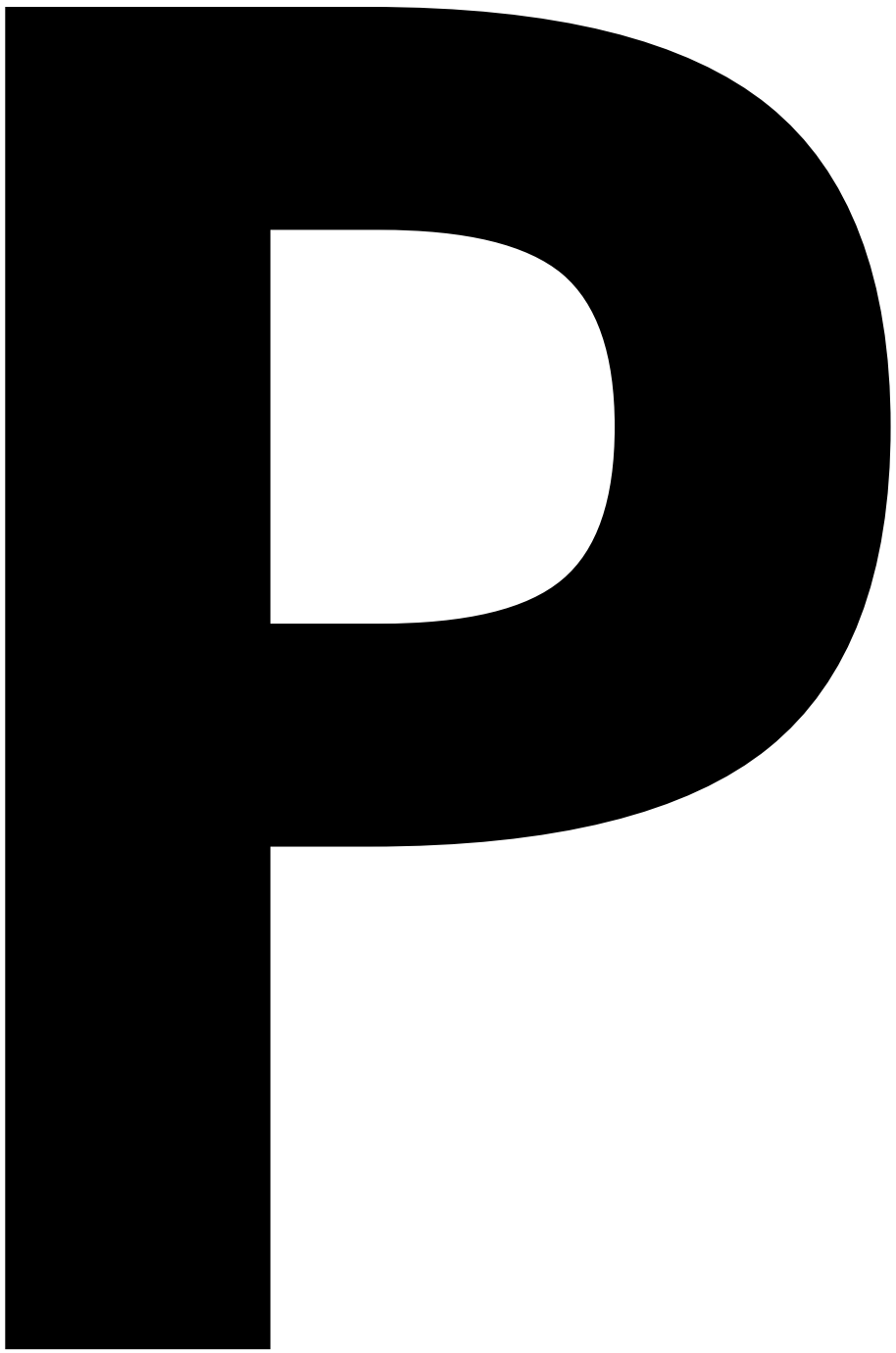


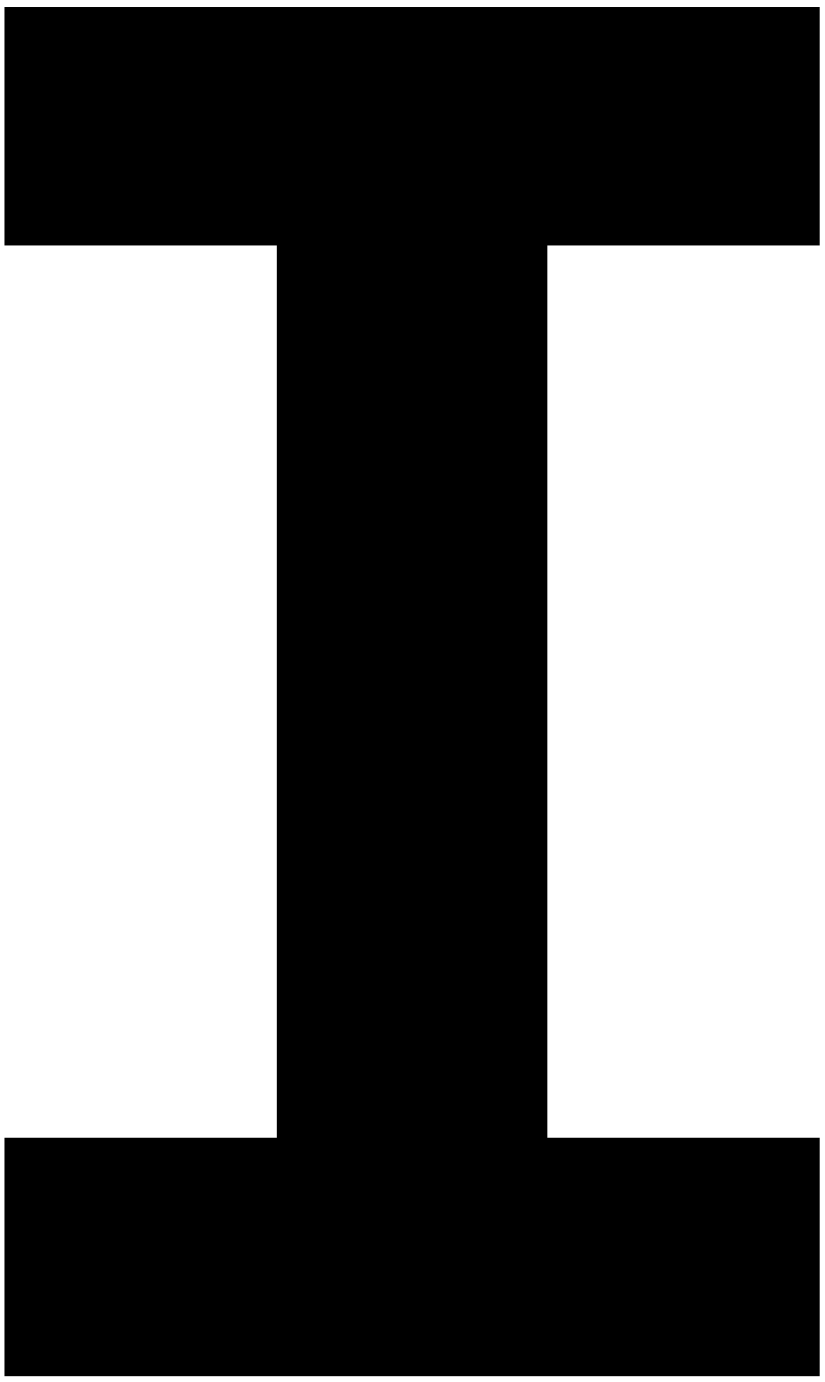
d

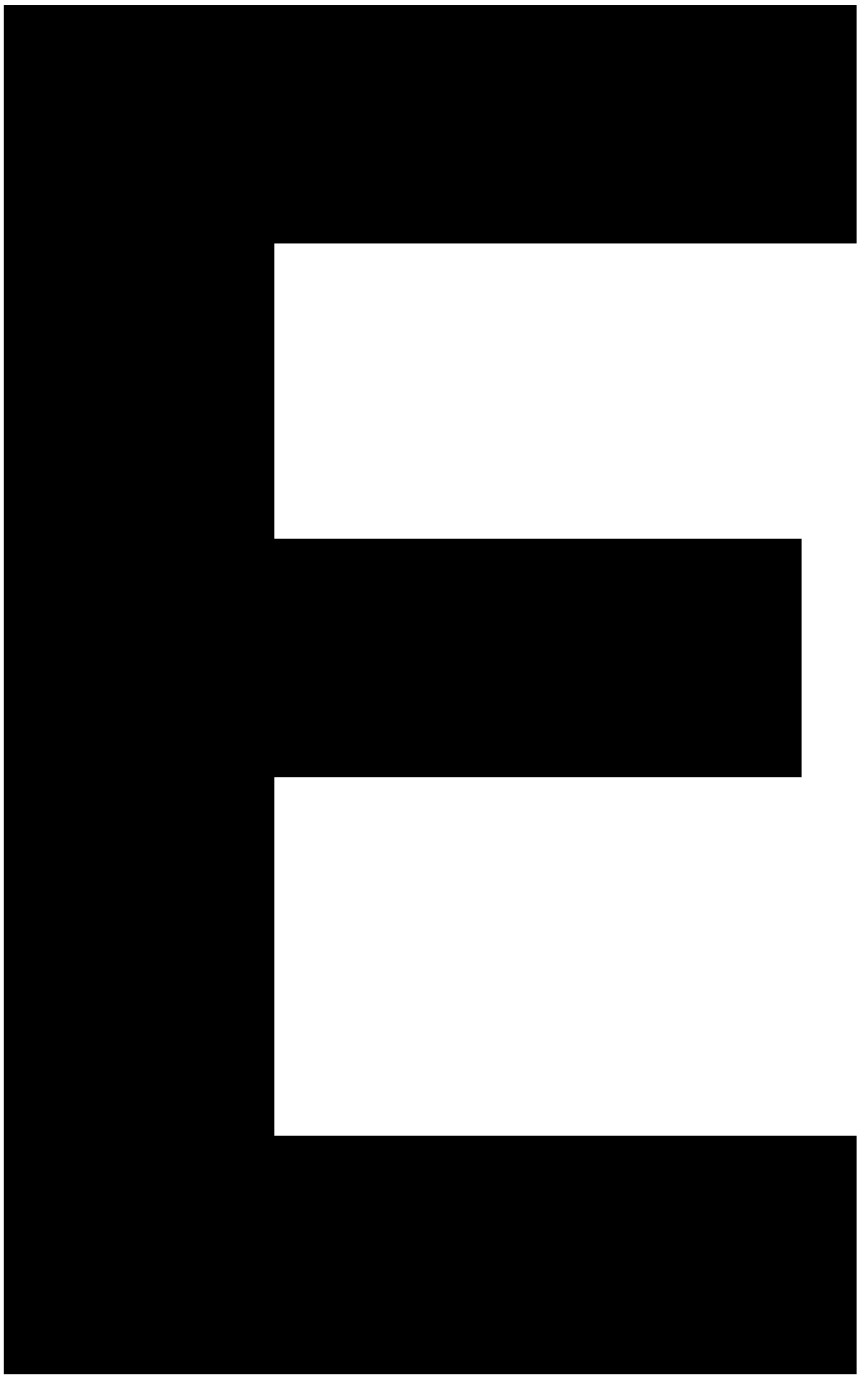


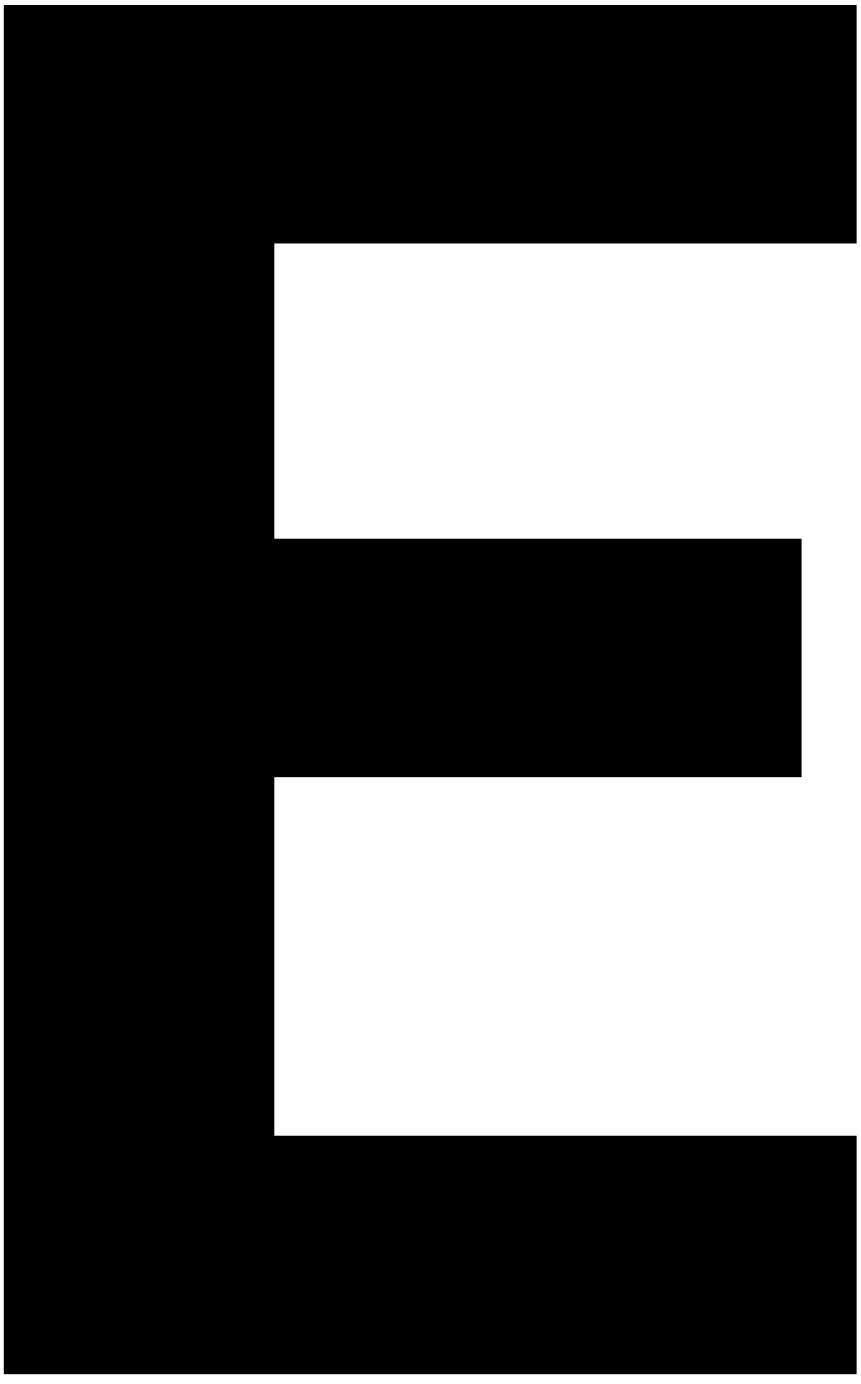
S

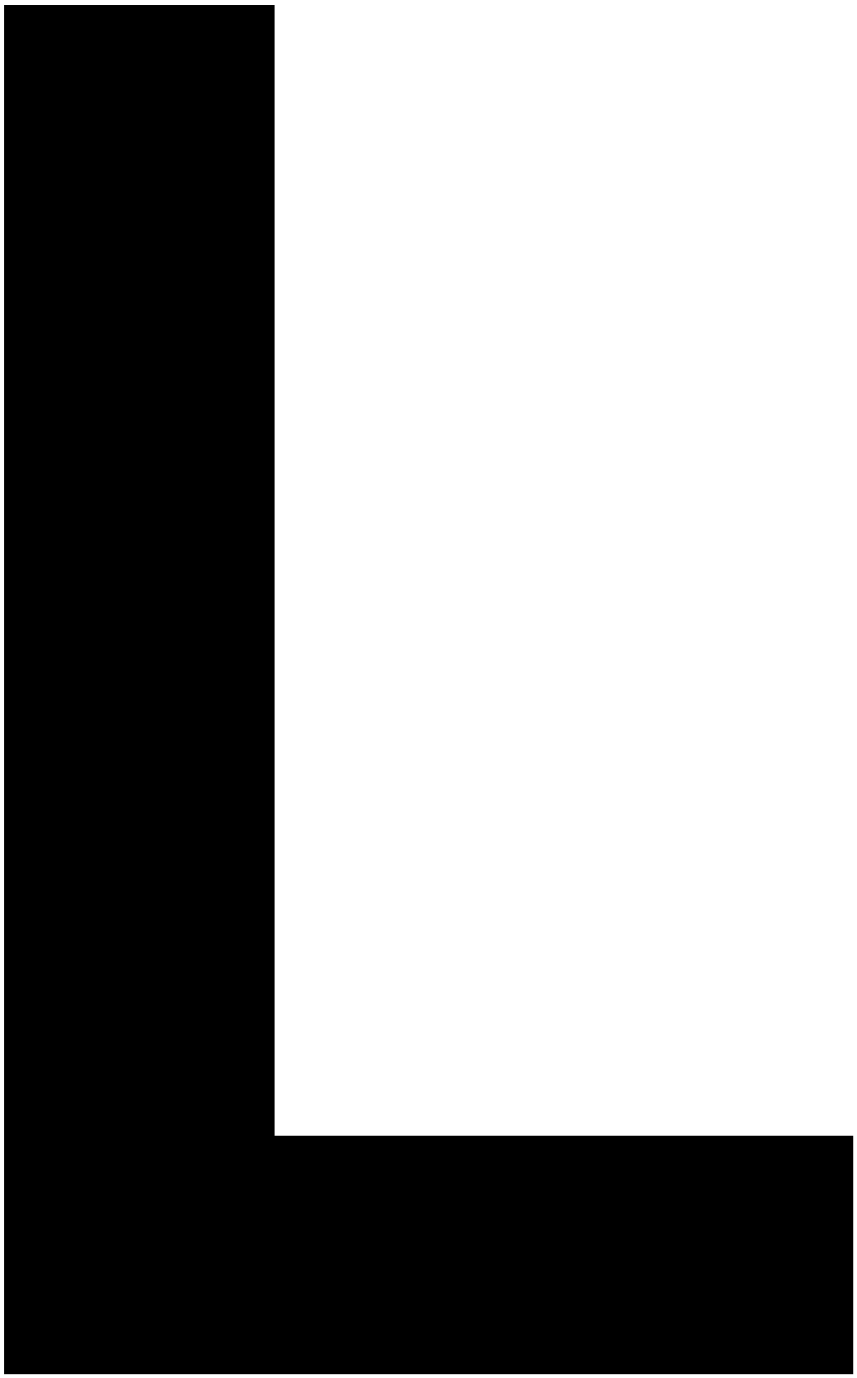
s





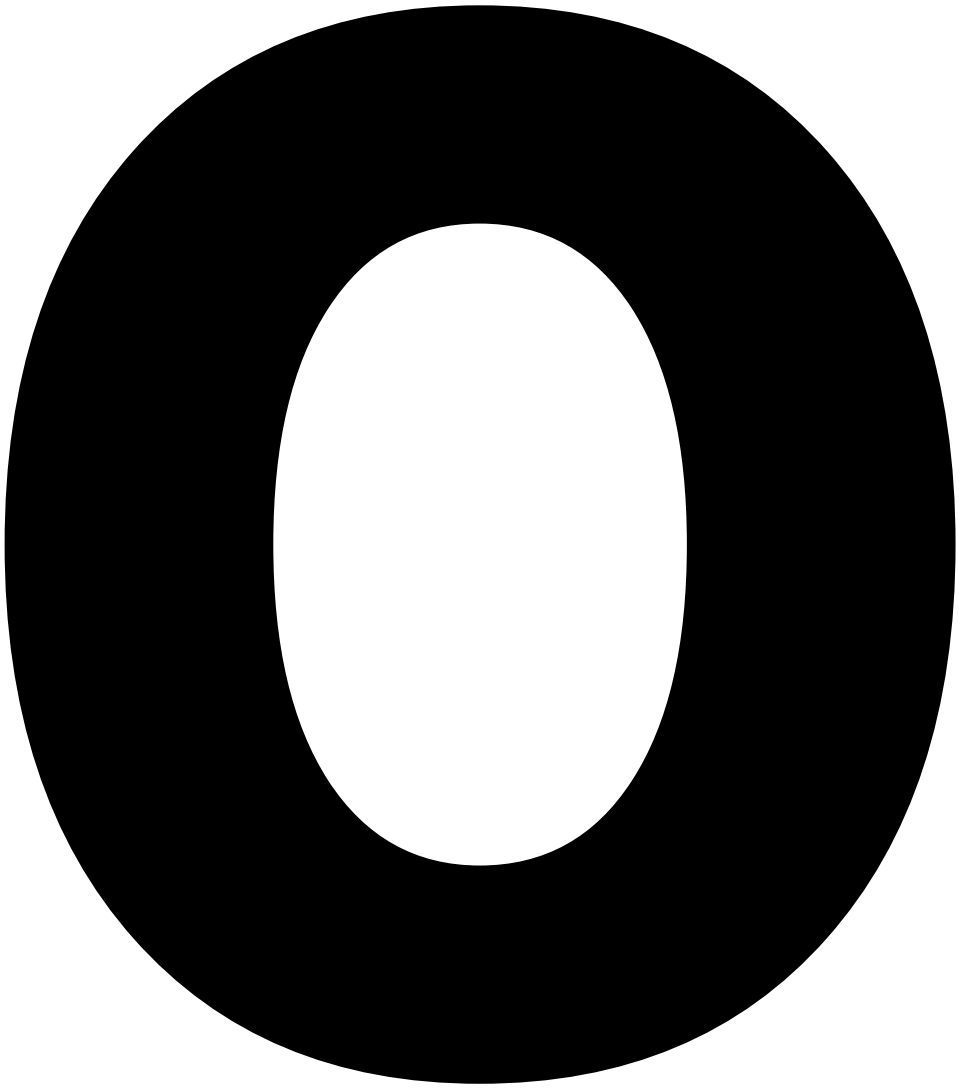


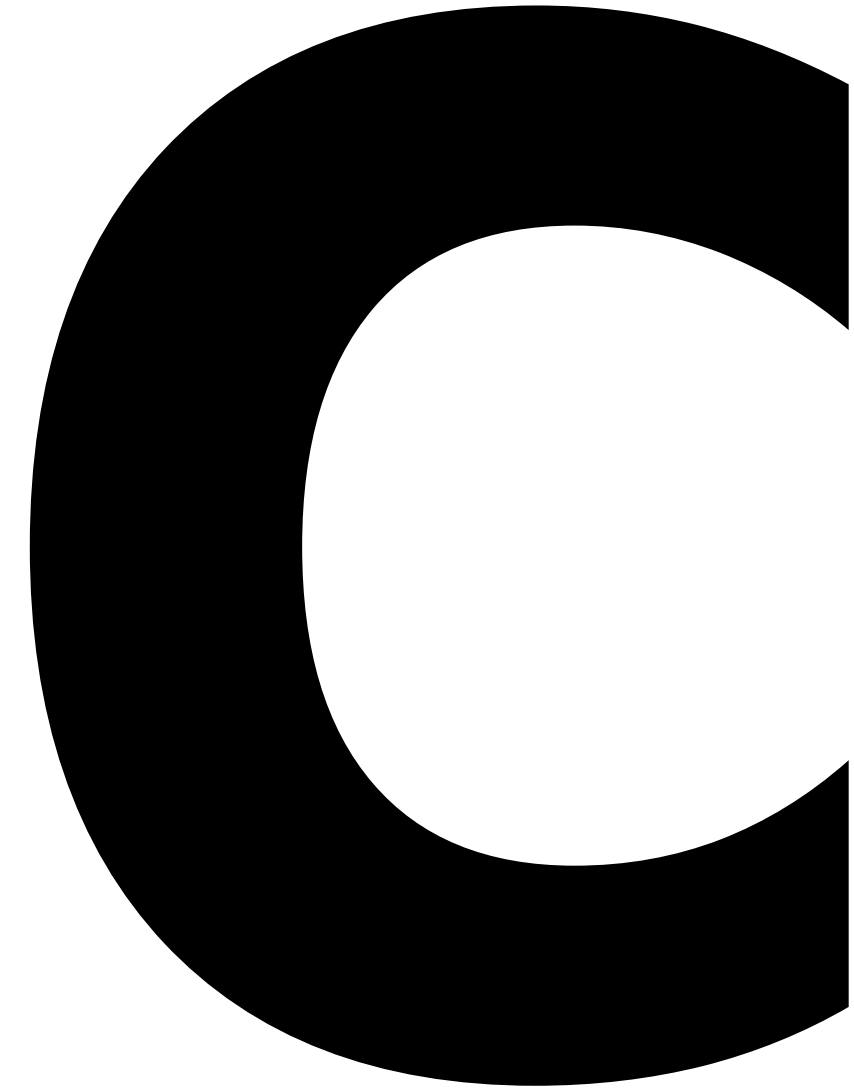


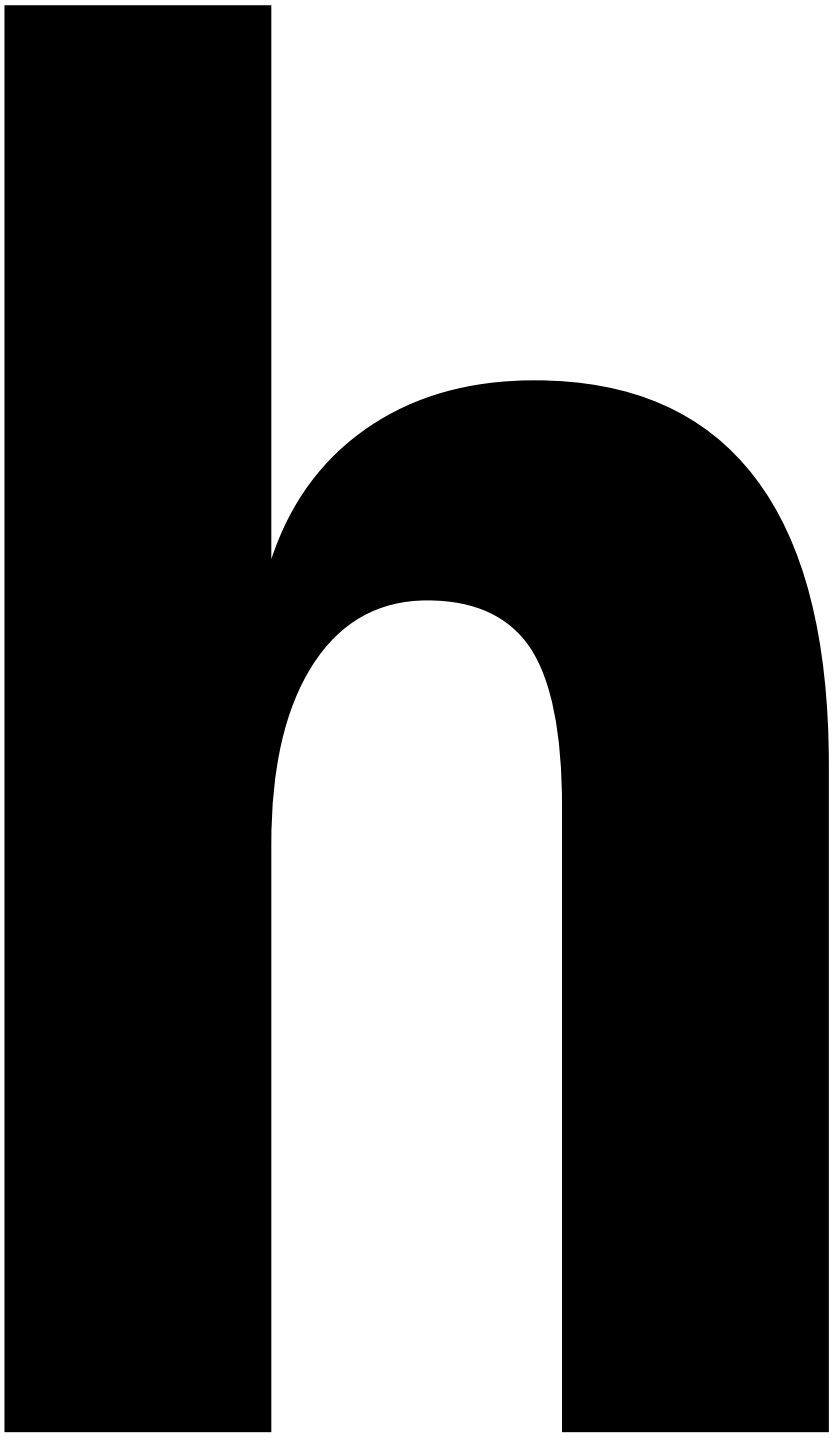


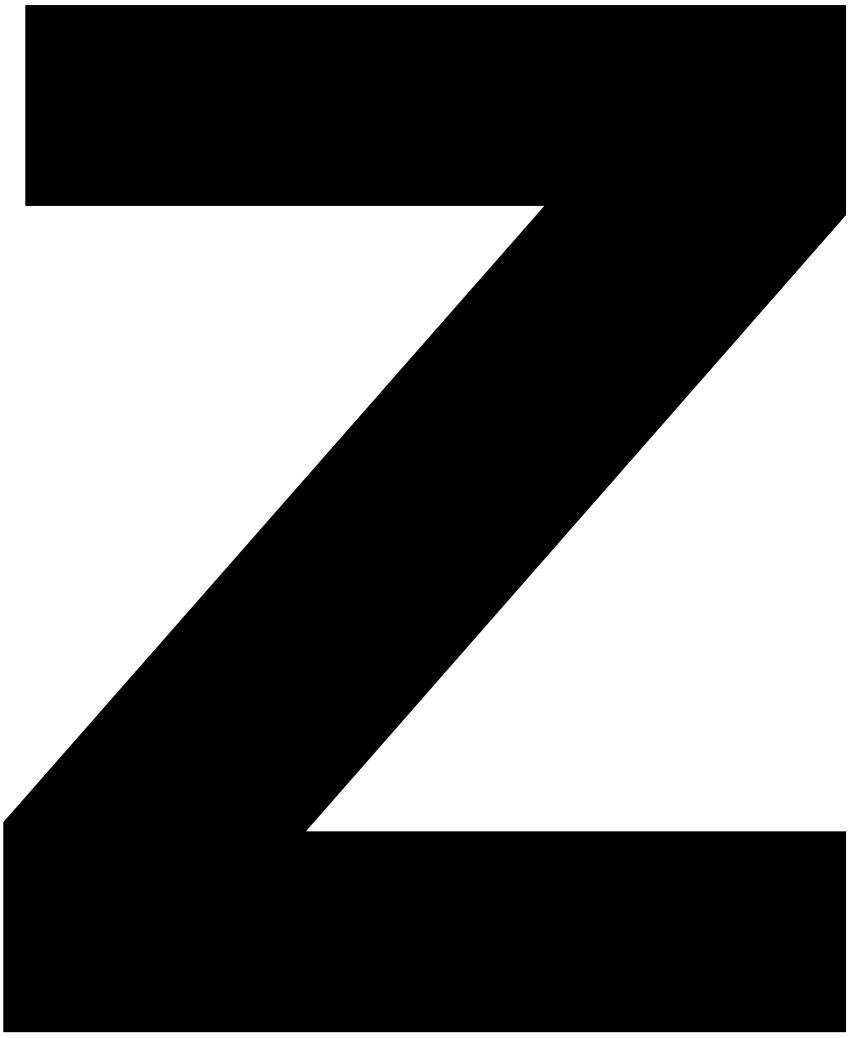
S

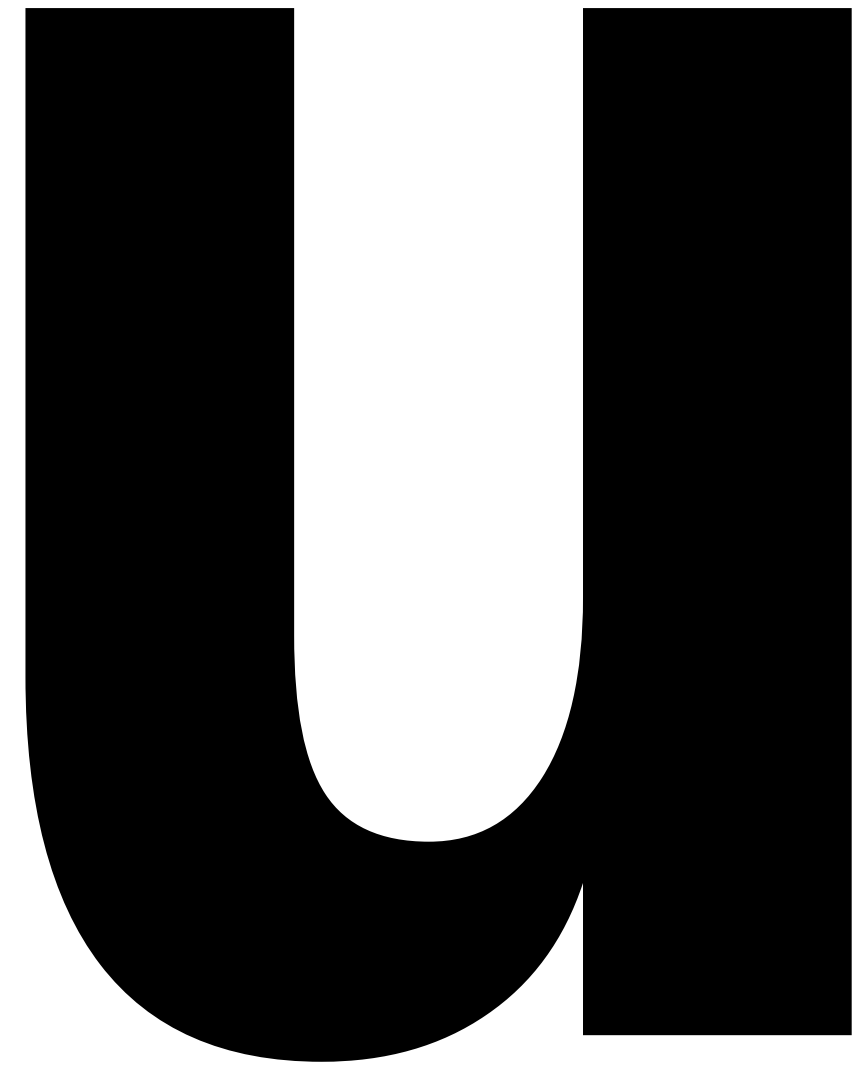
n

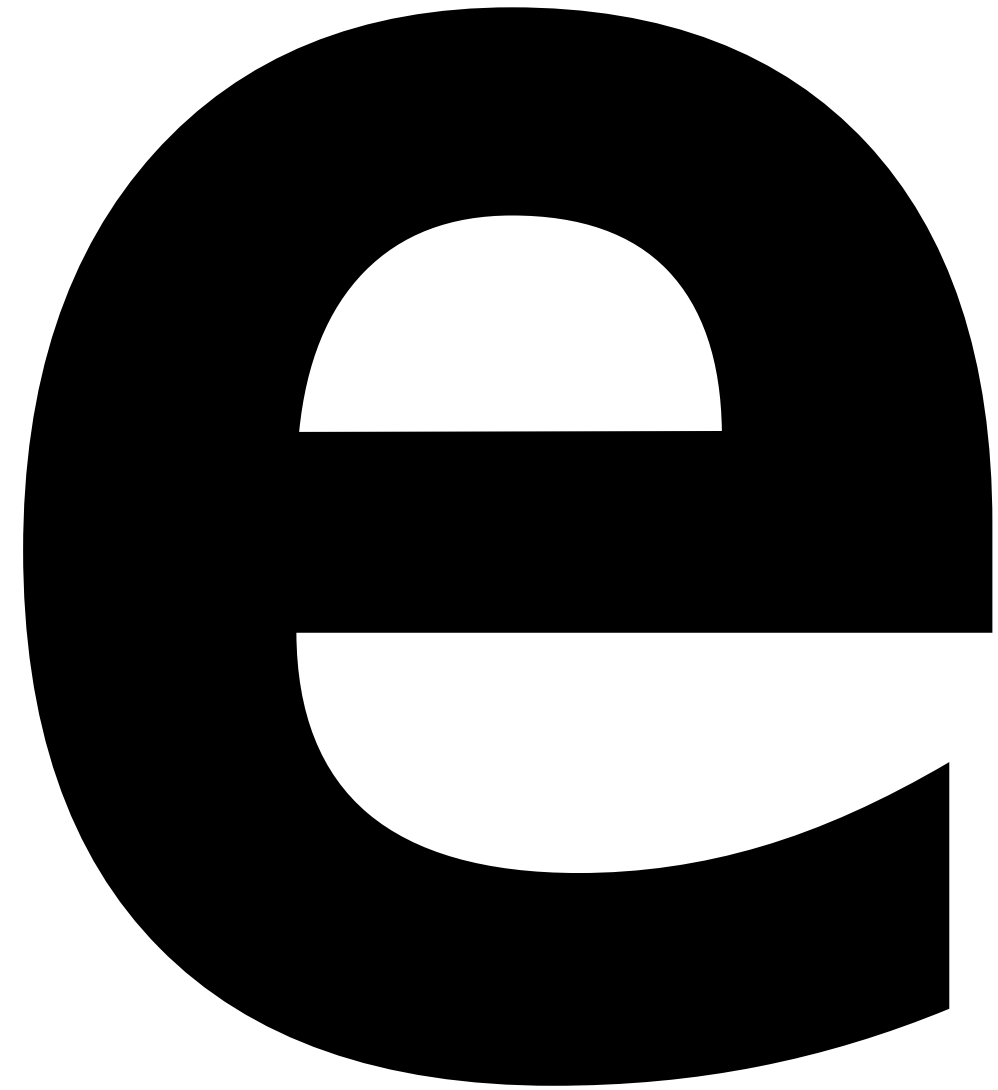


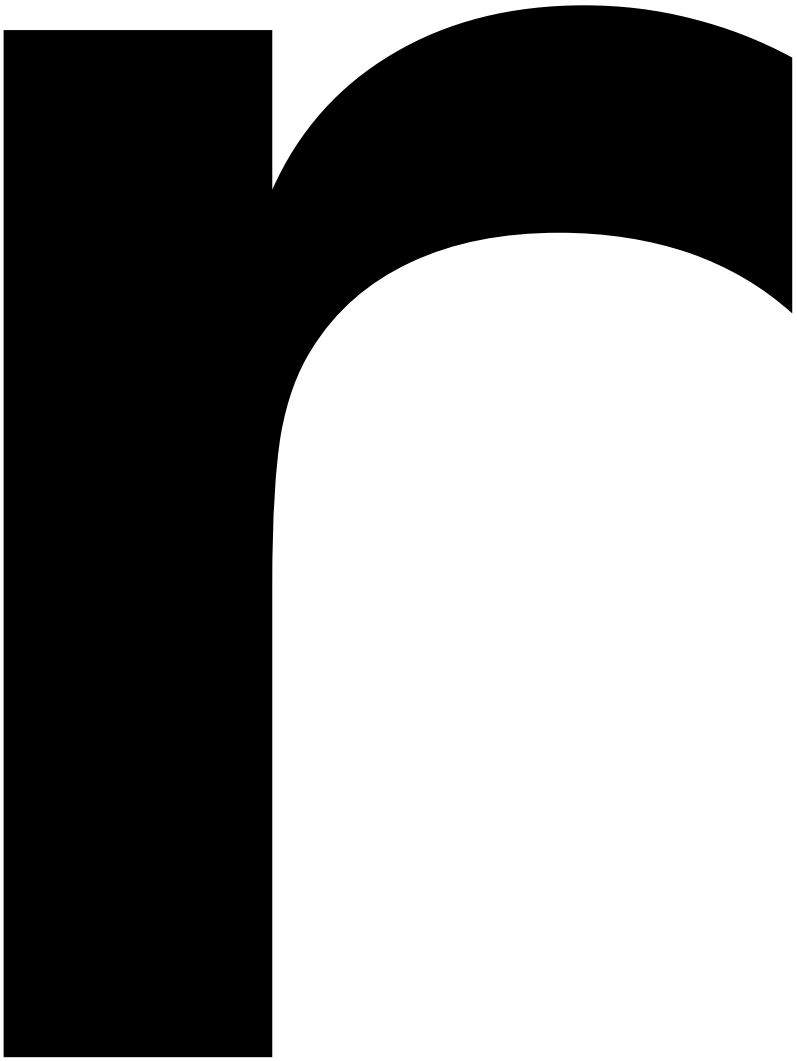


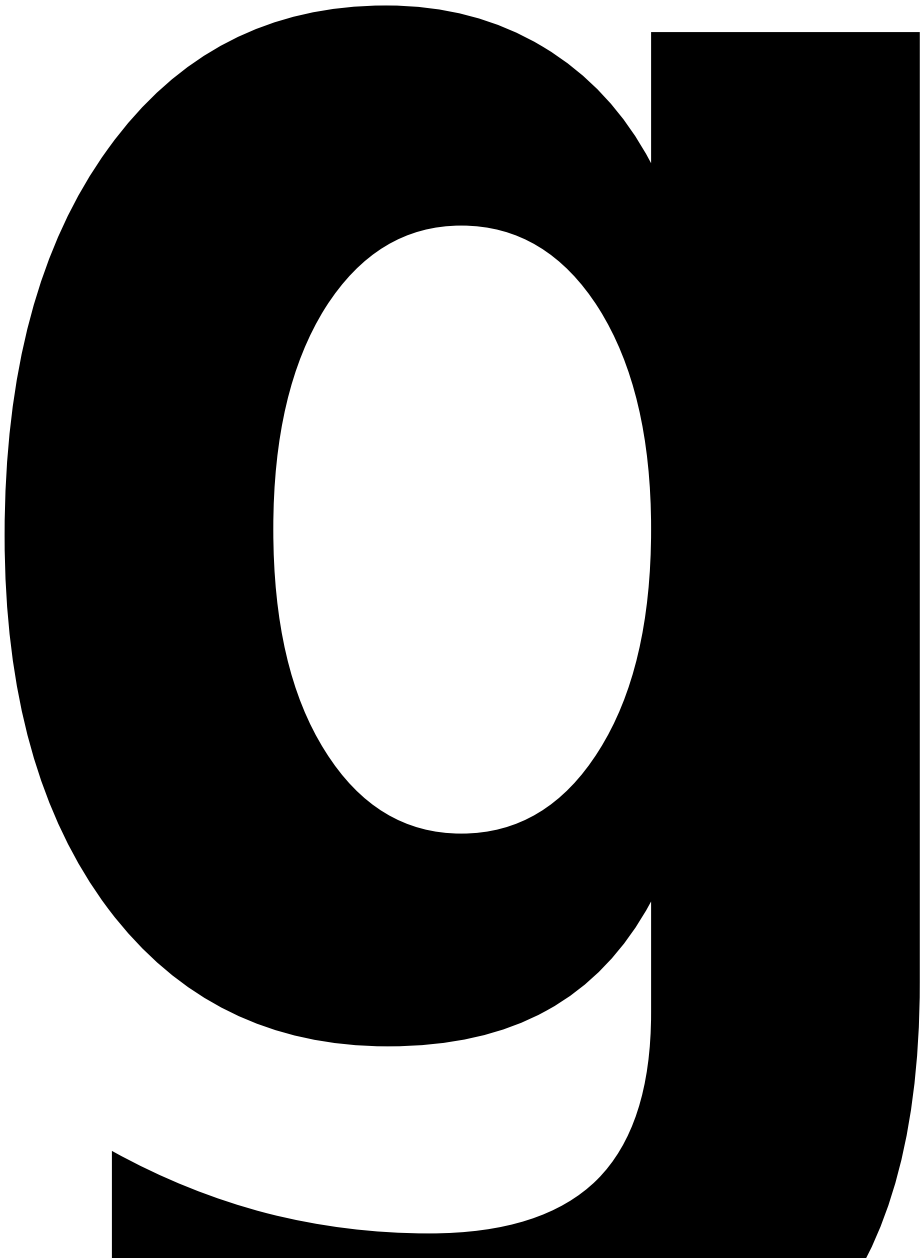




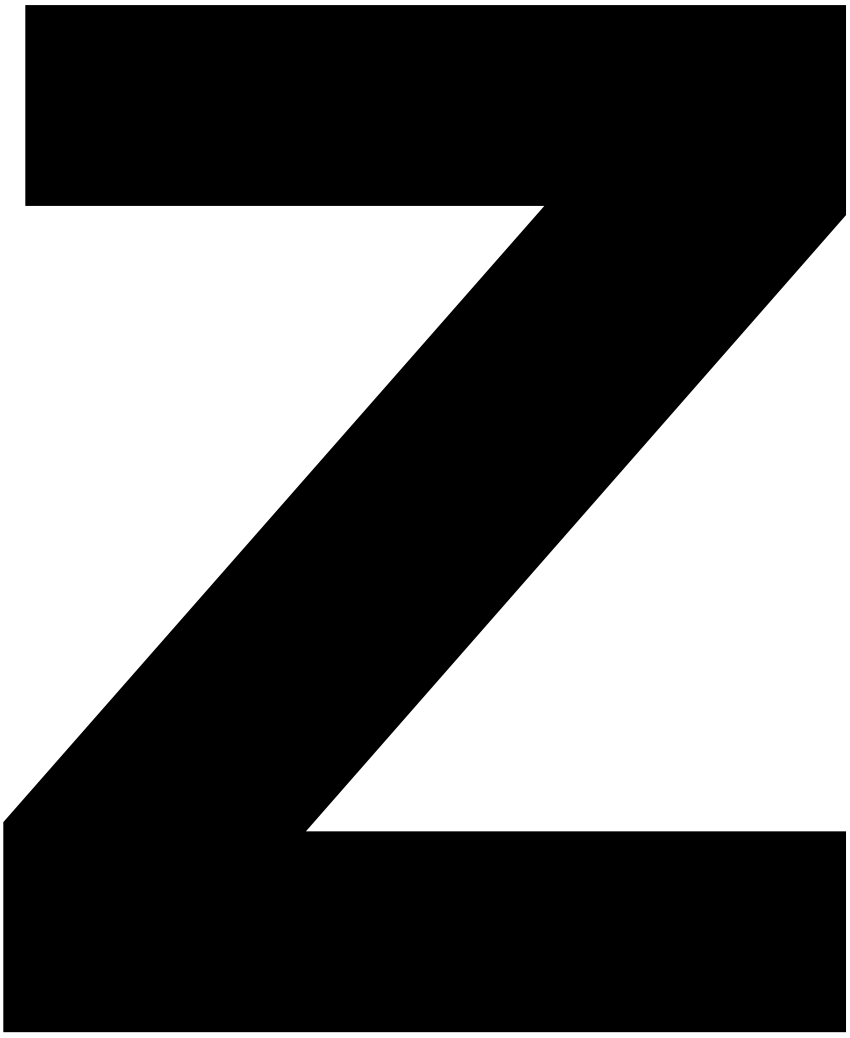


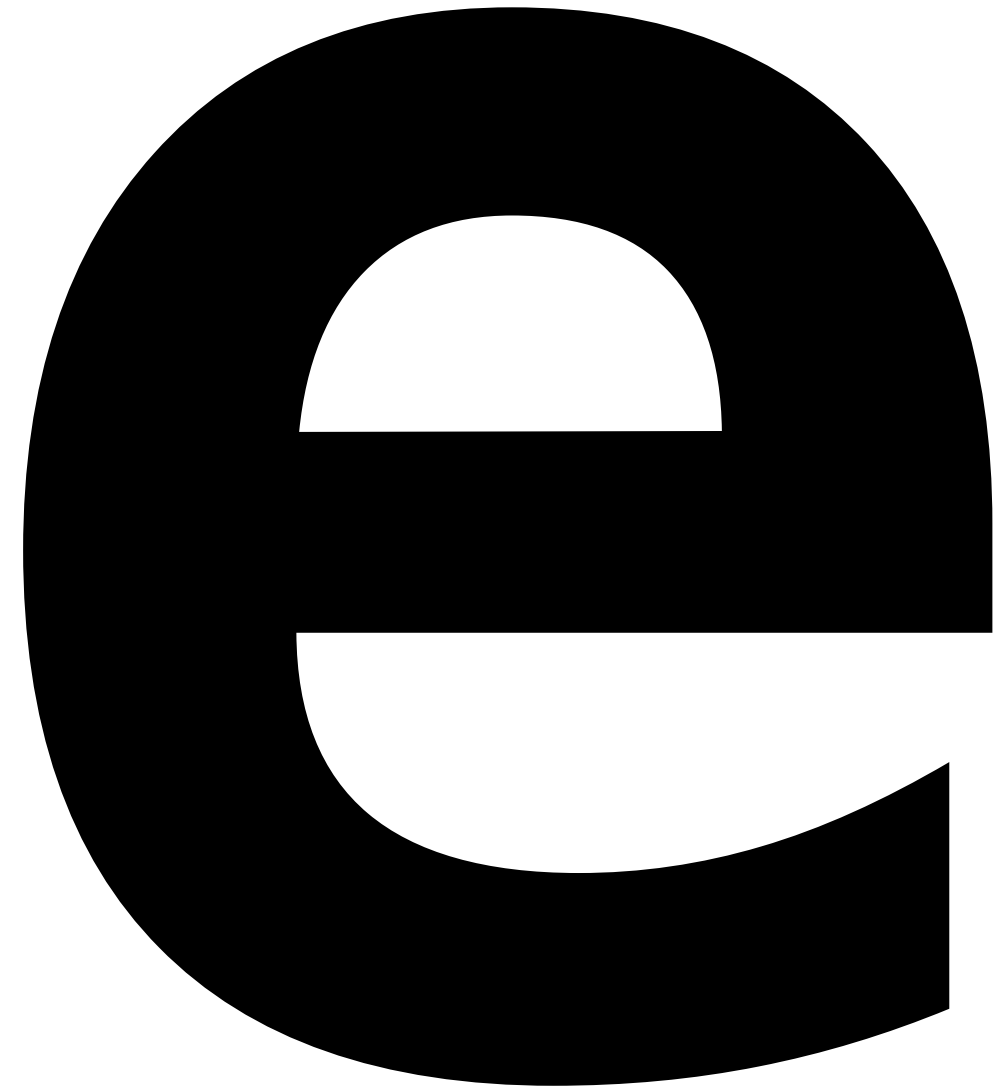




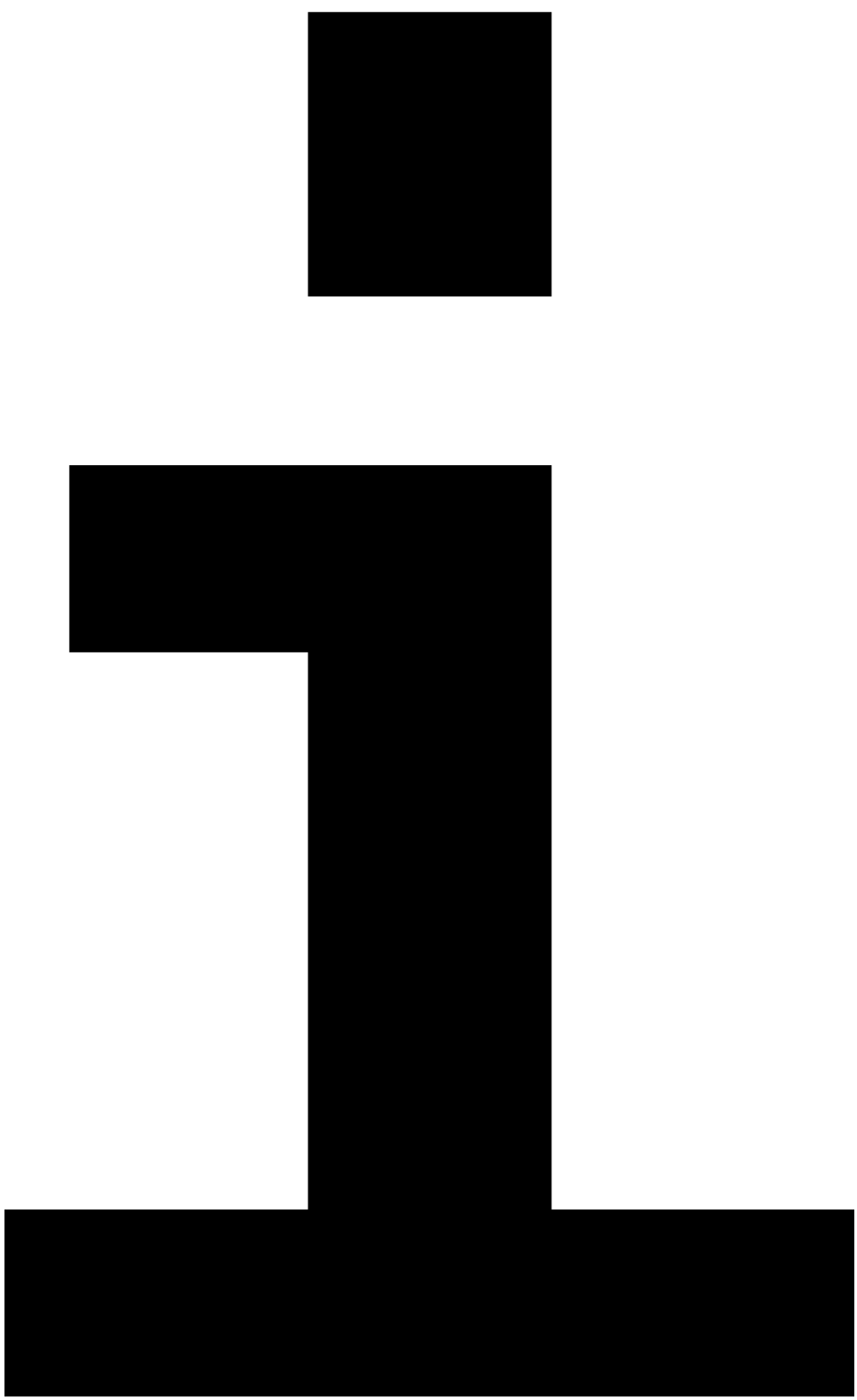


n

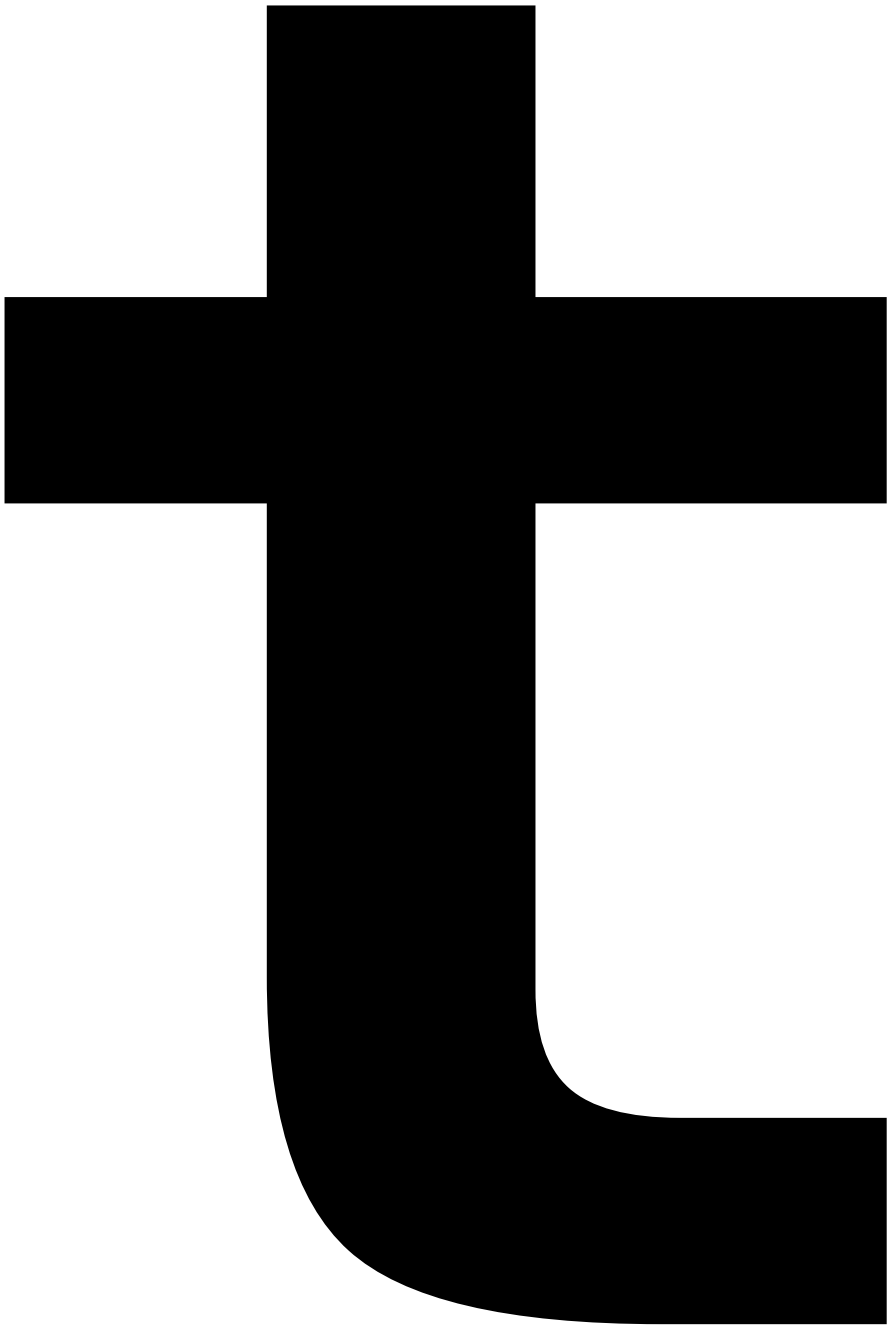


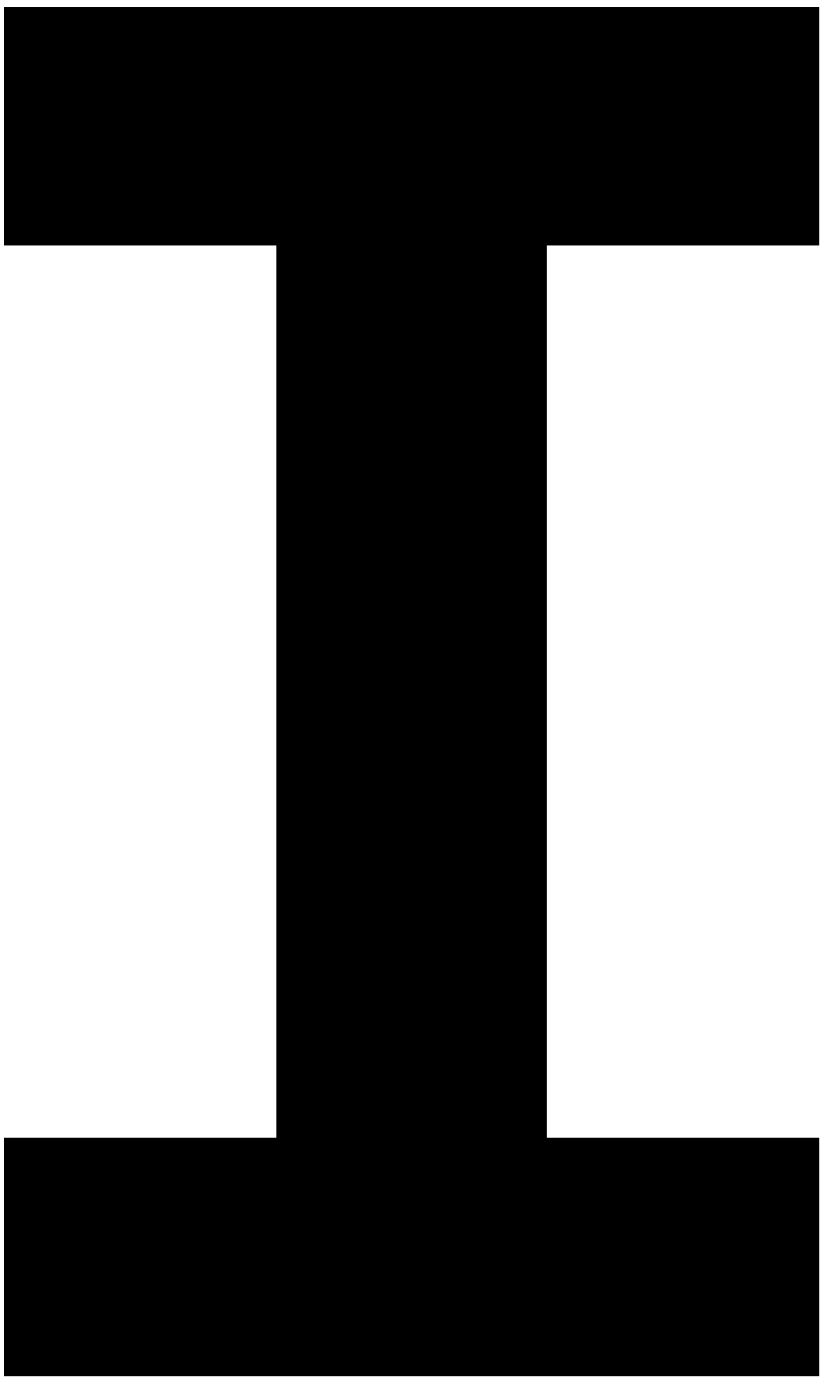


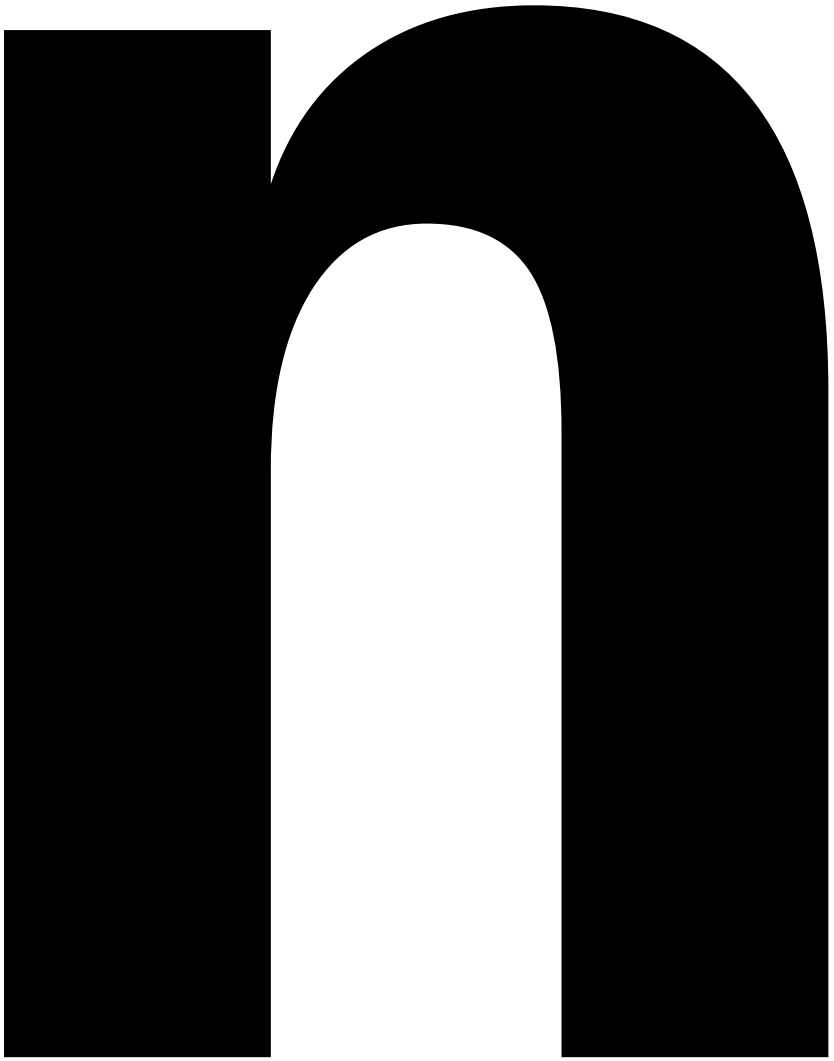
n

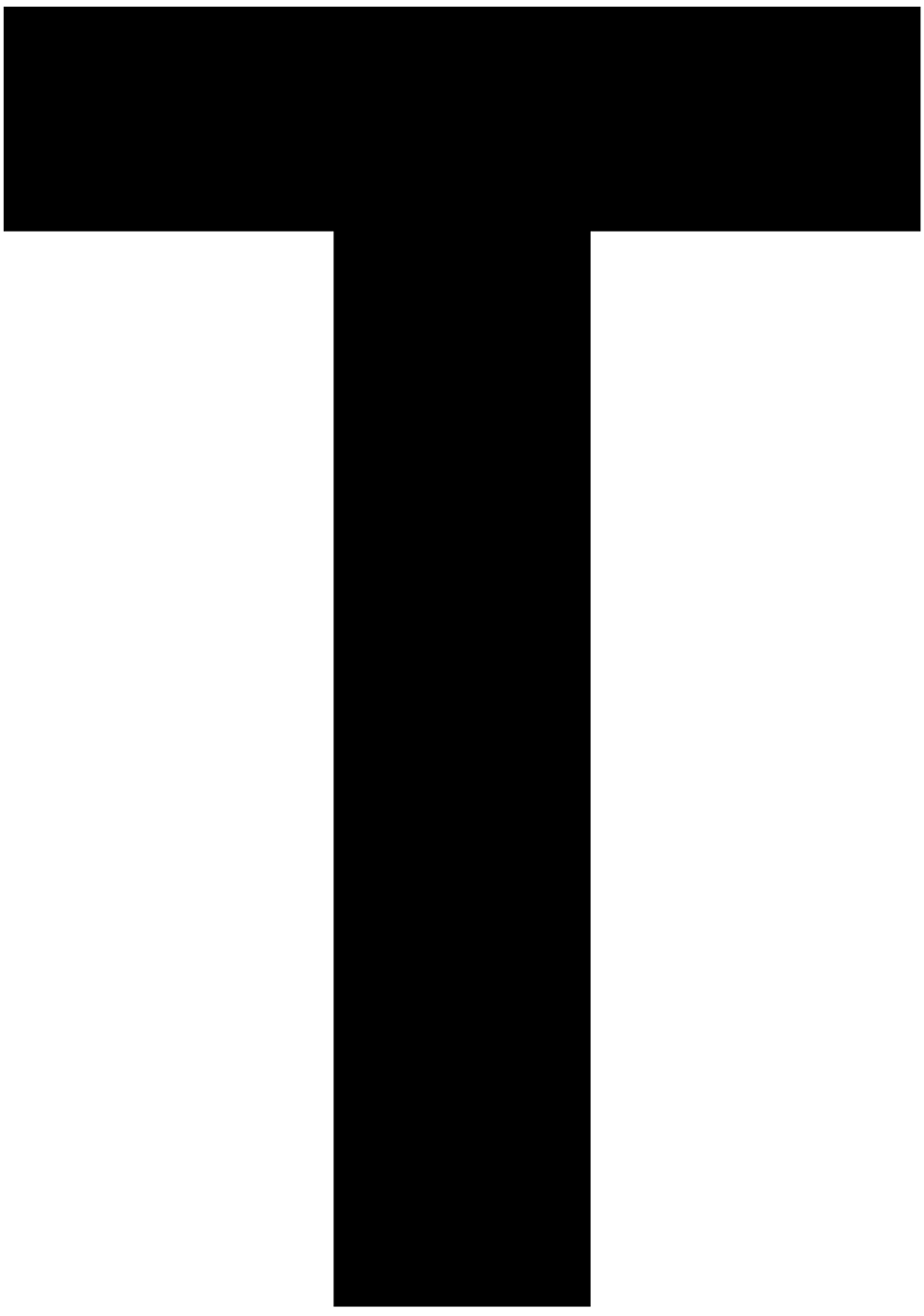


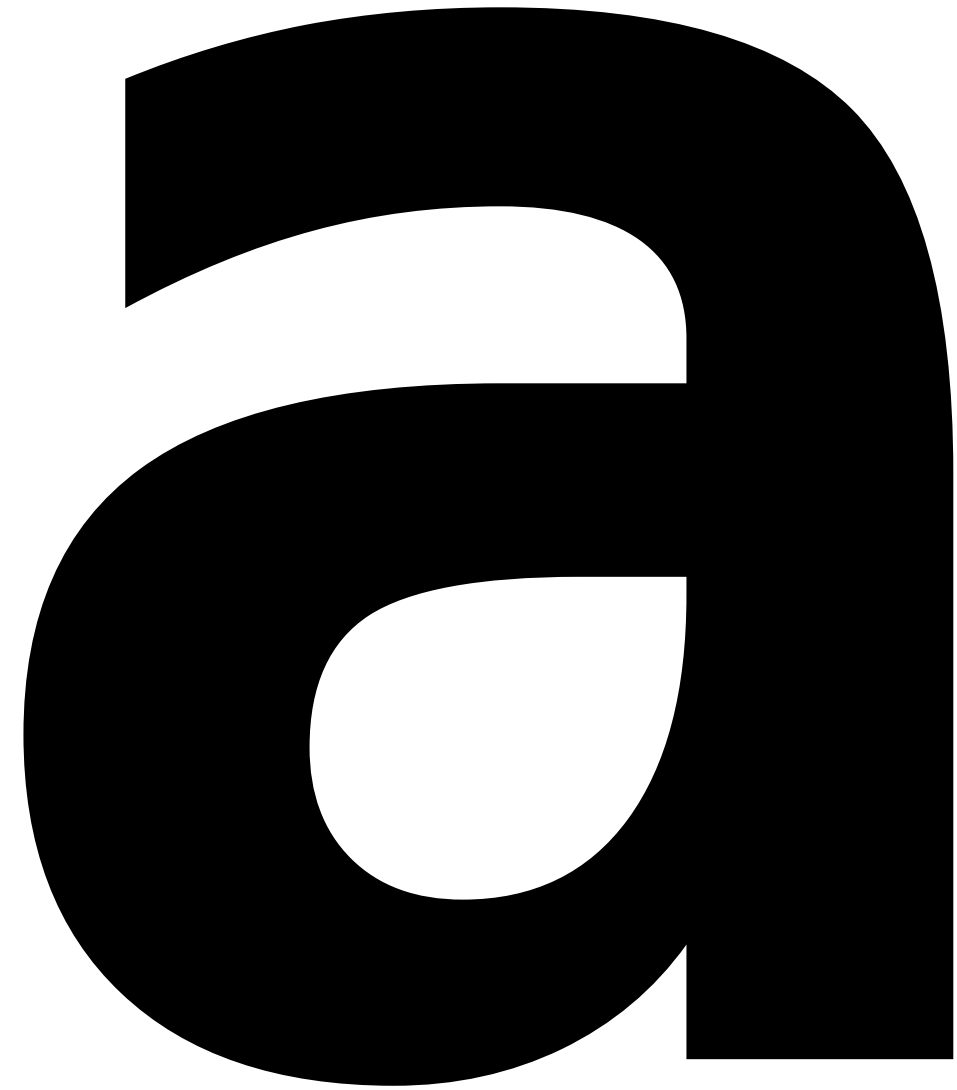
S

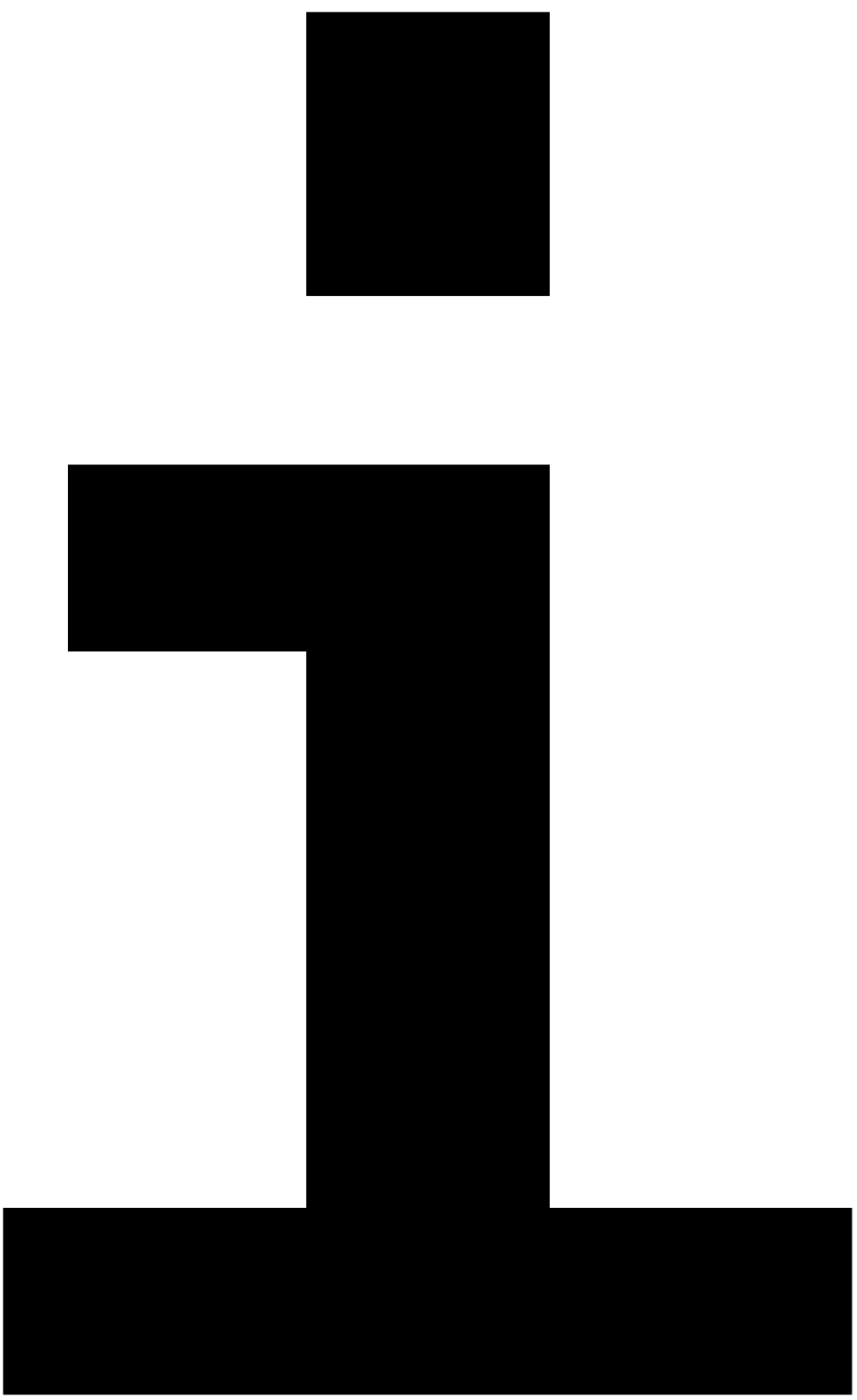


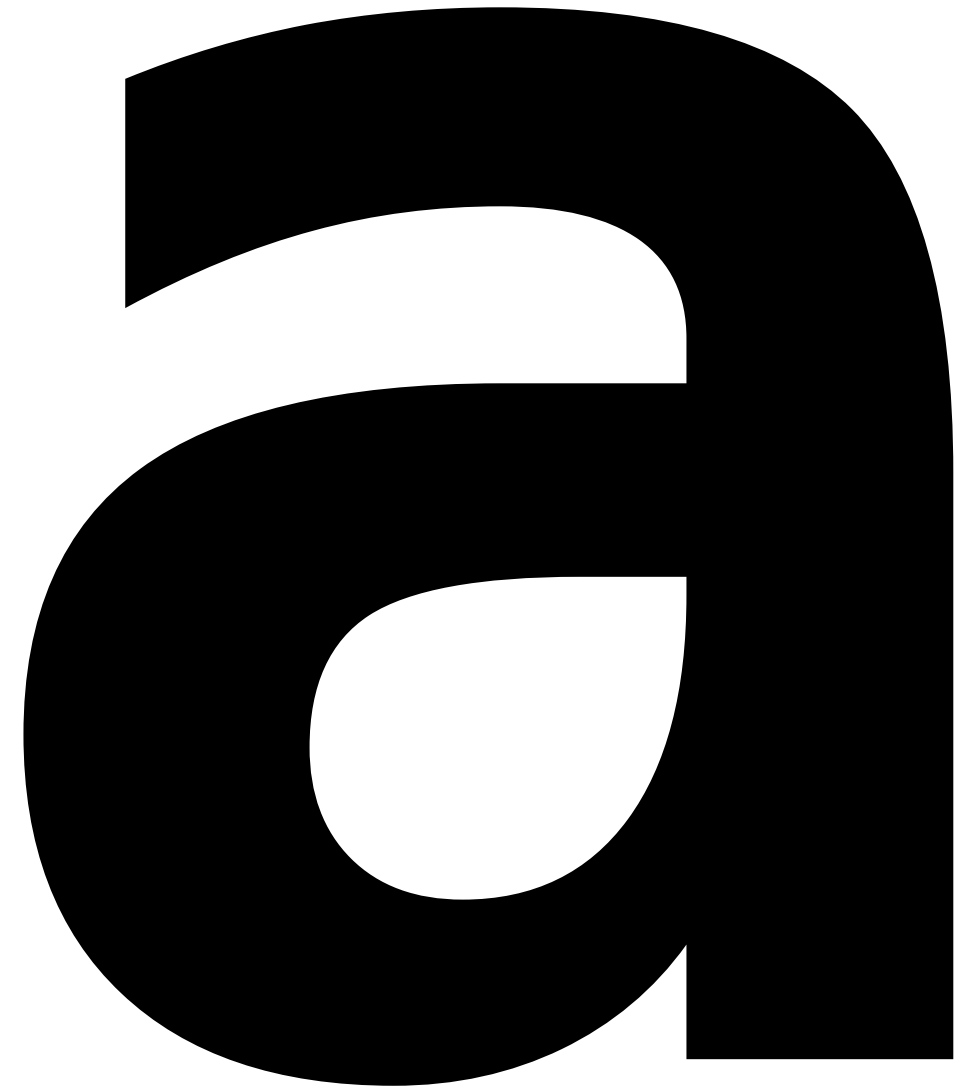


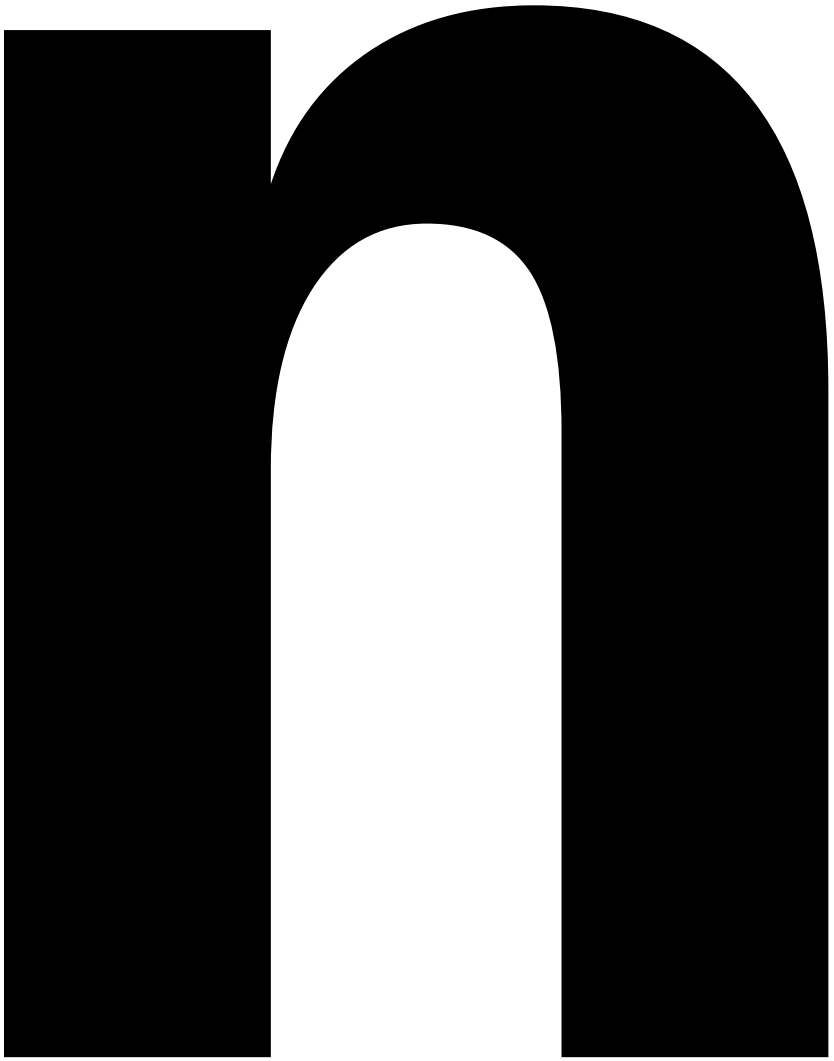




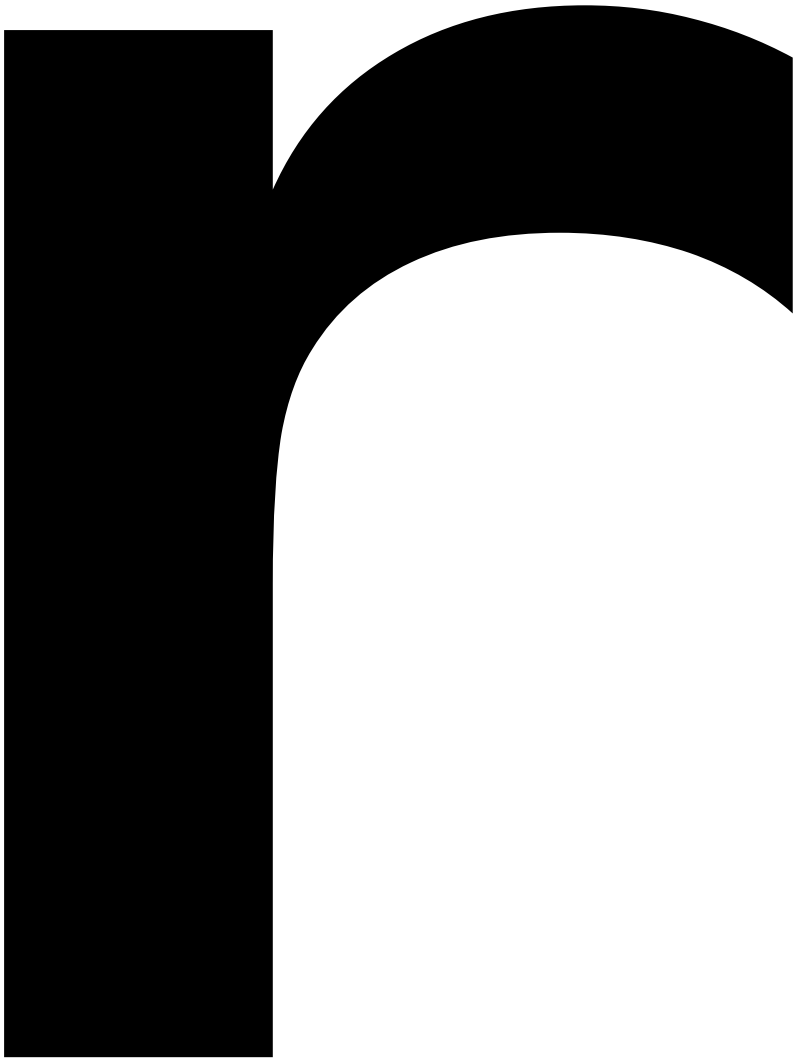




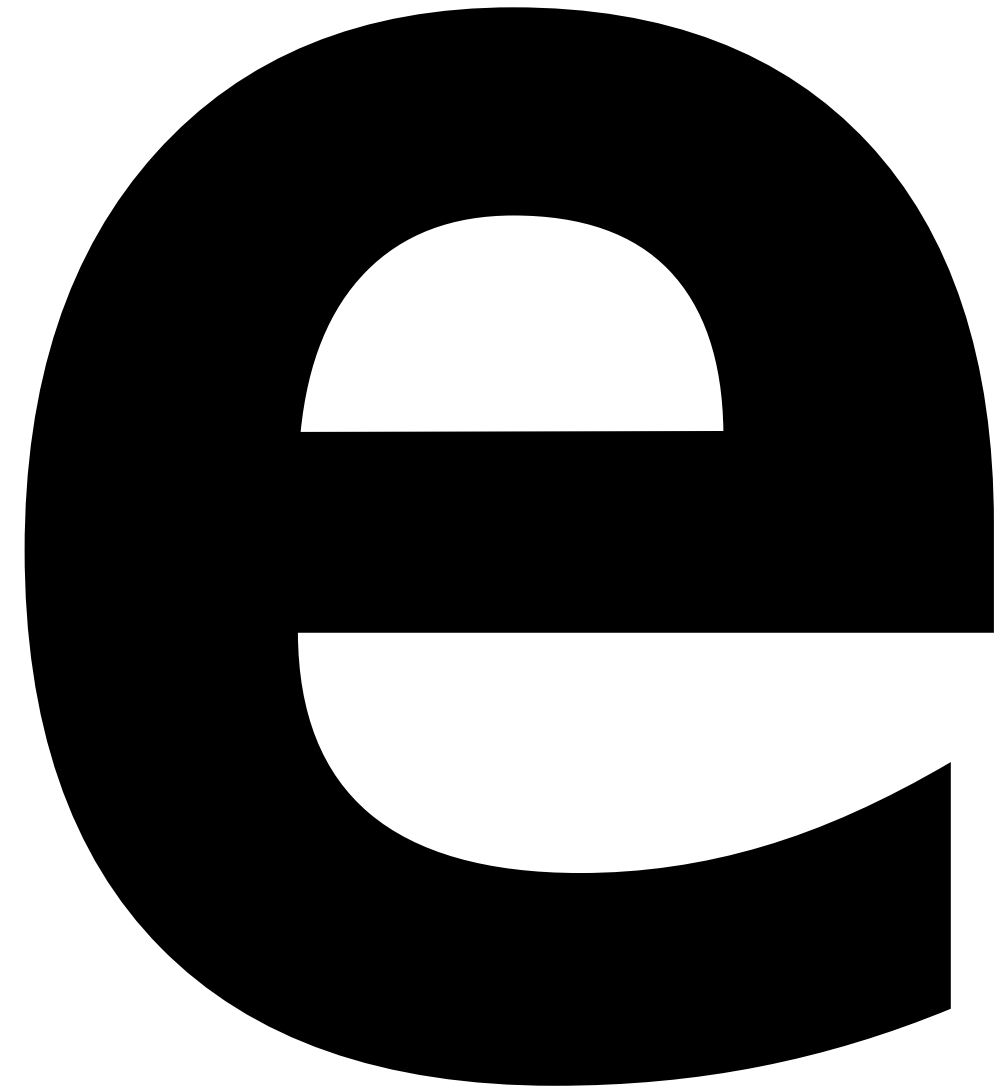


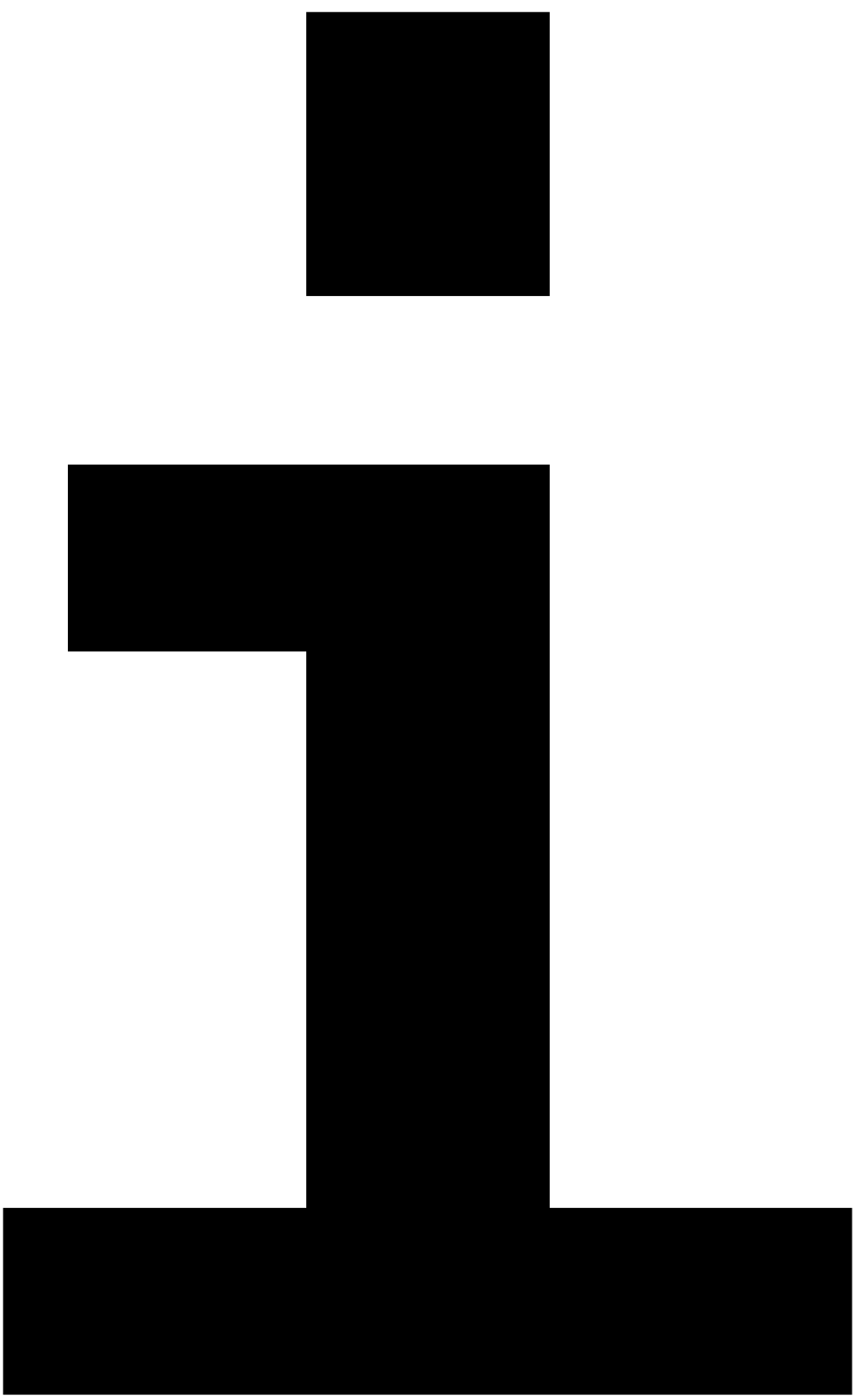


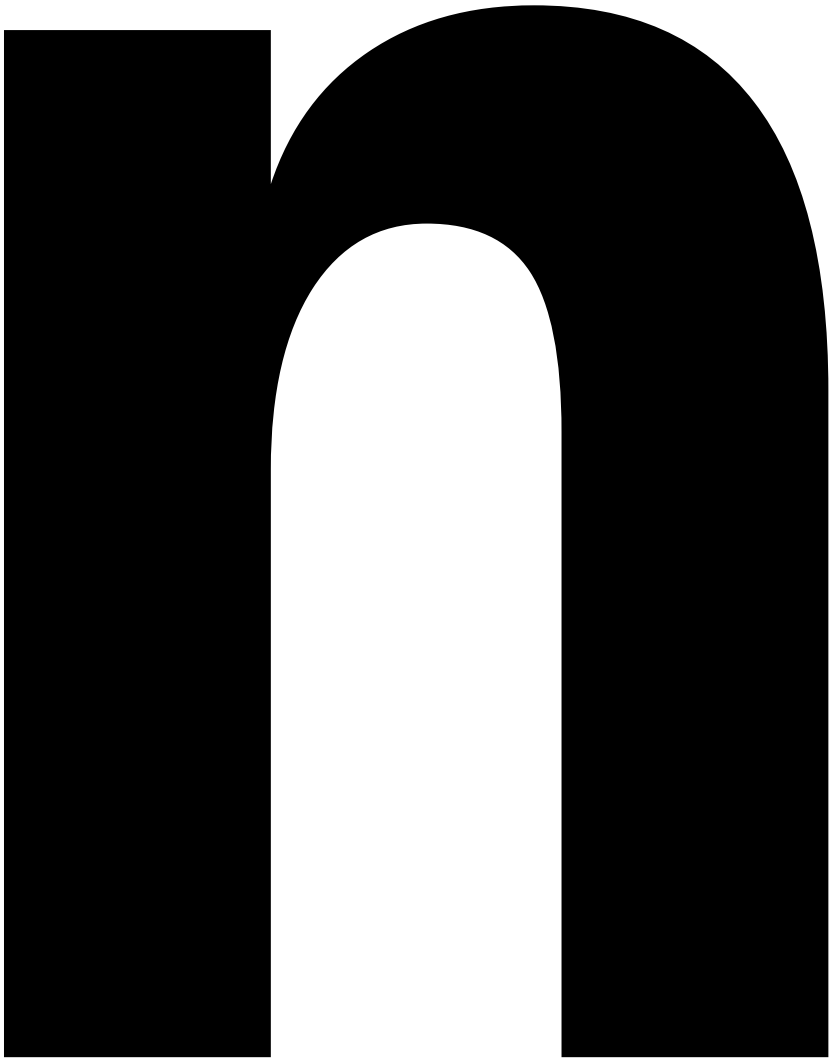
u

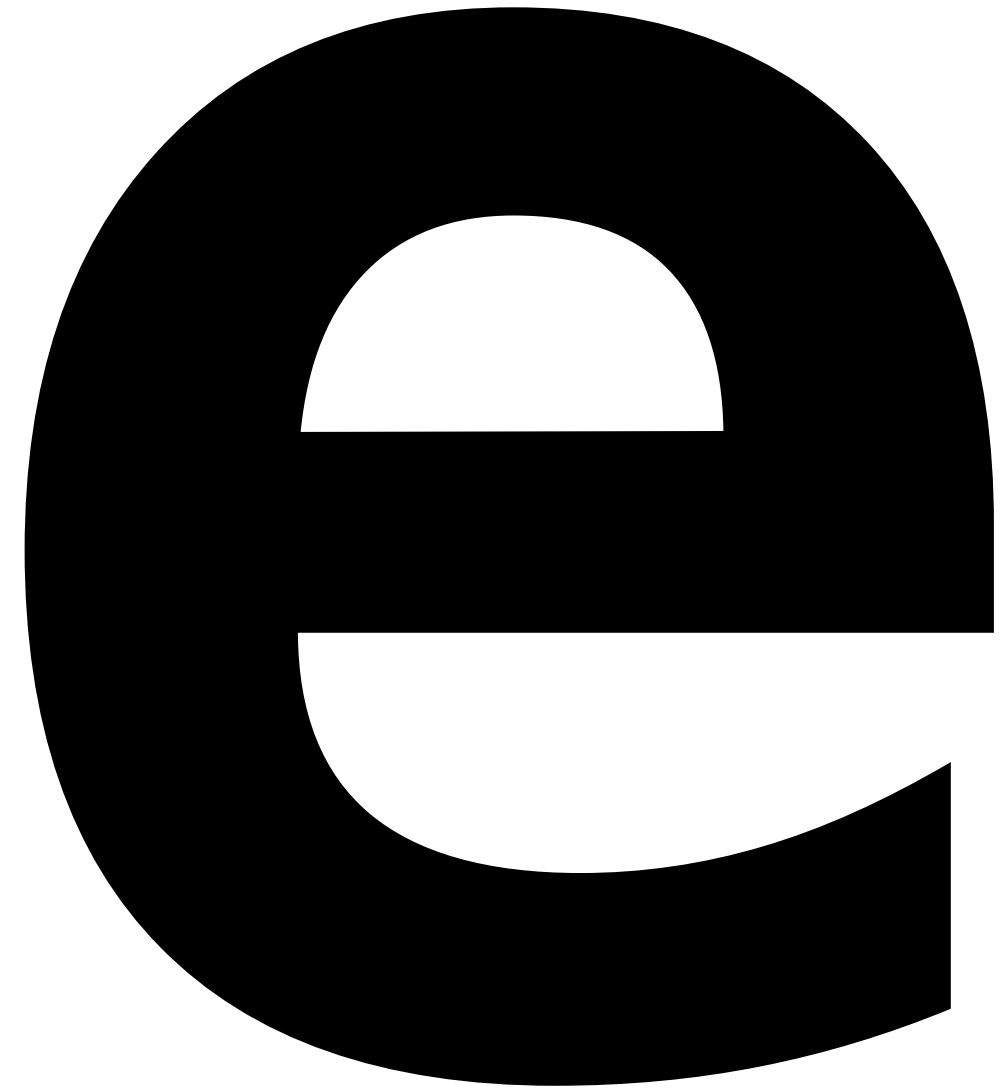


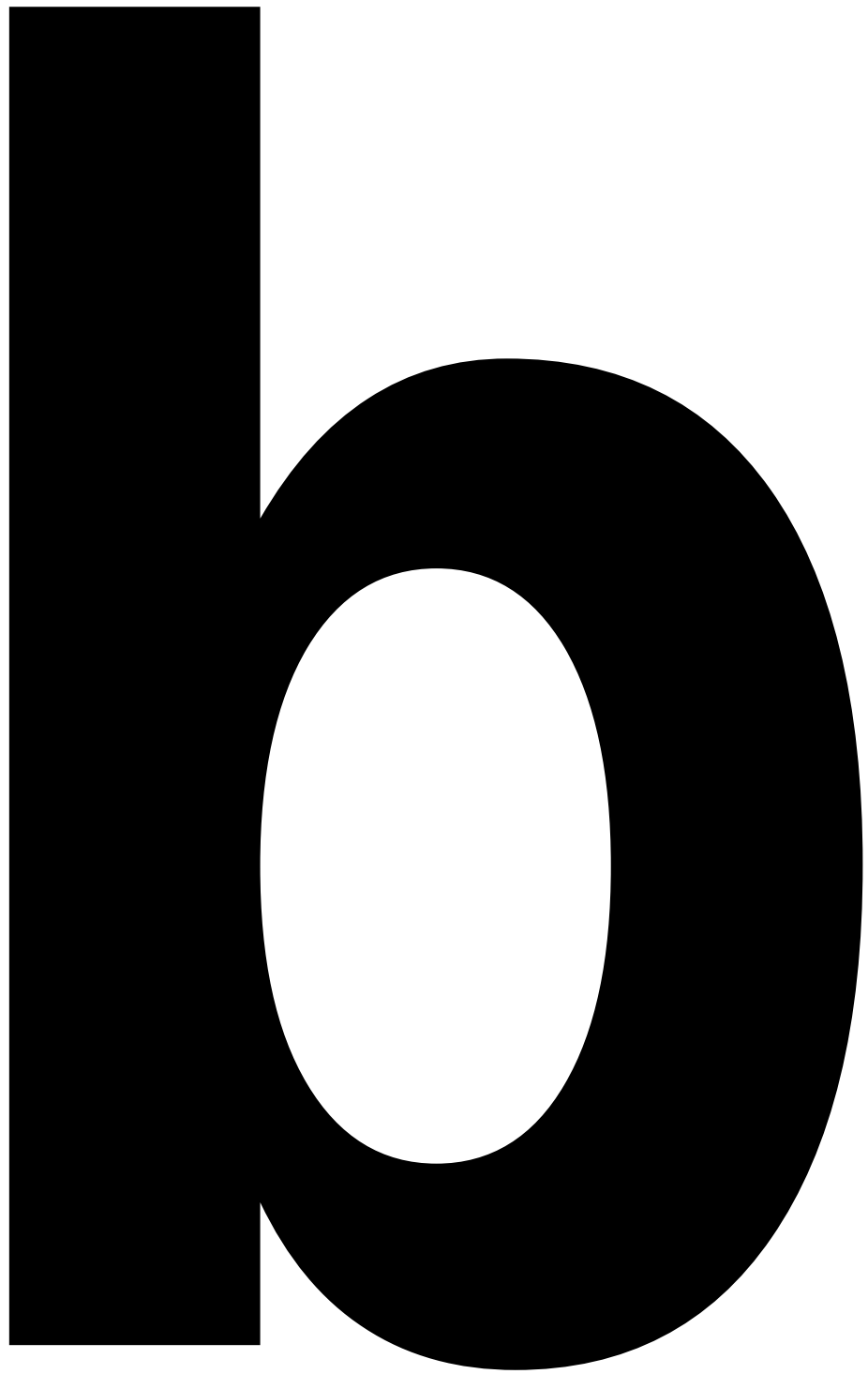
d

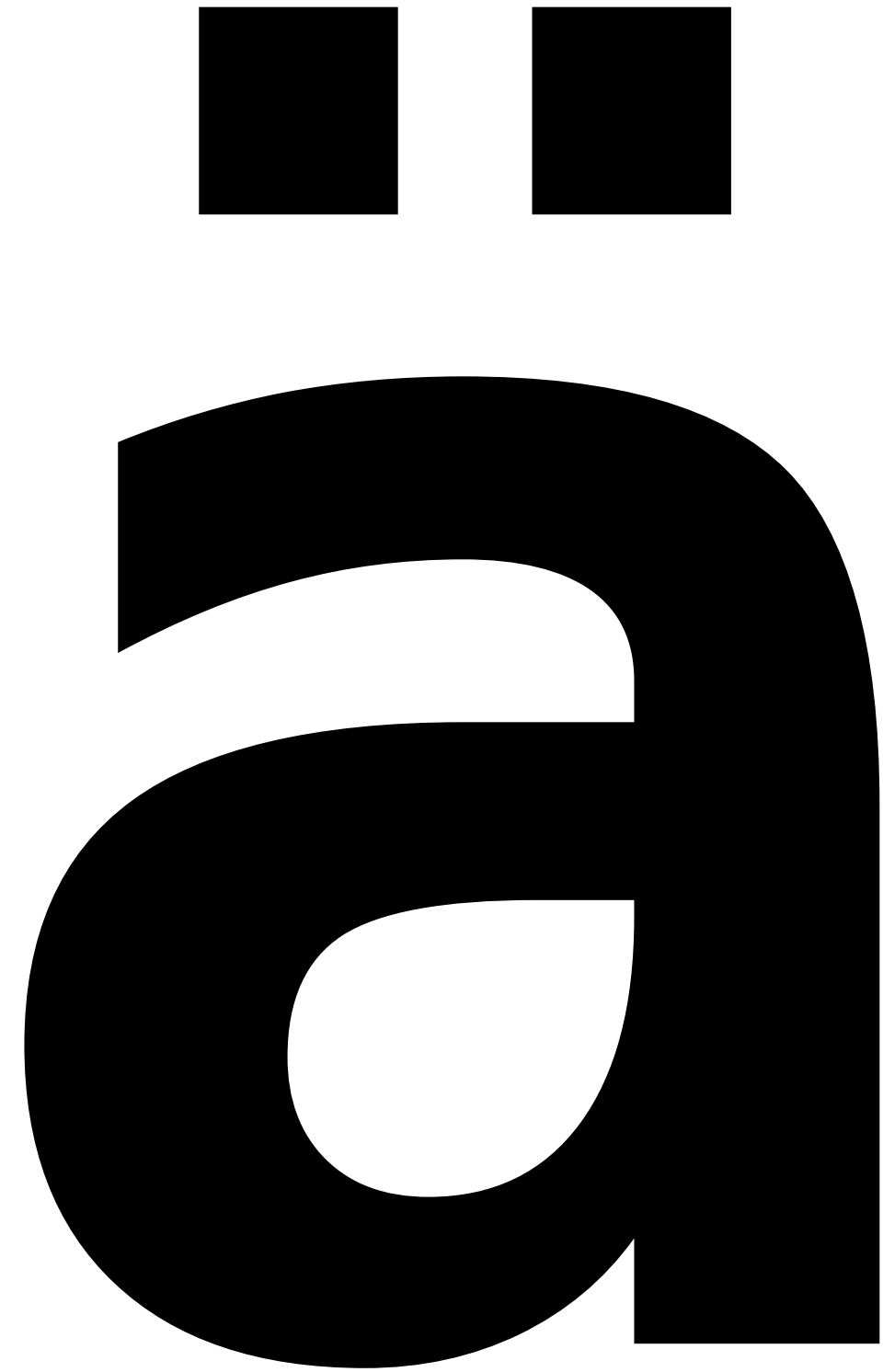






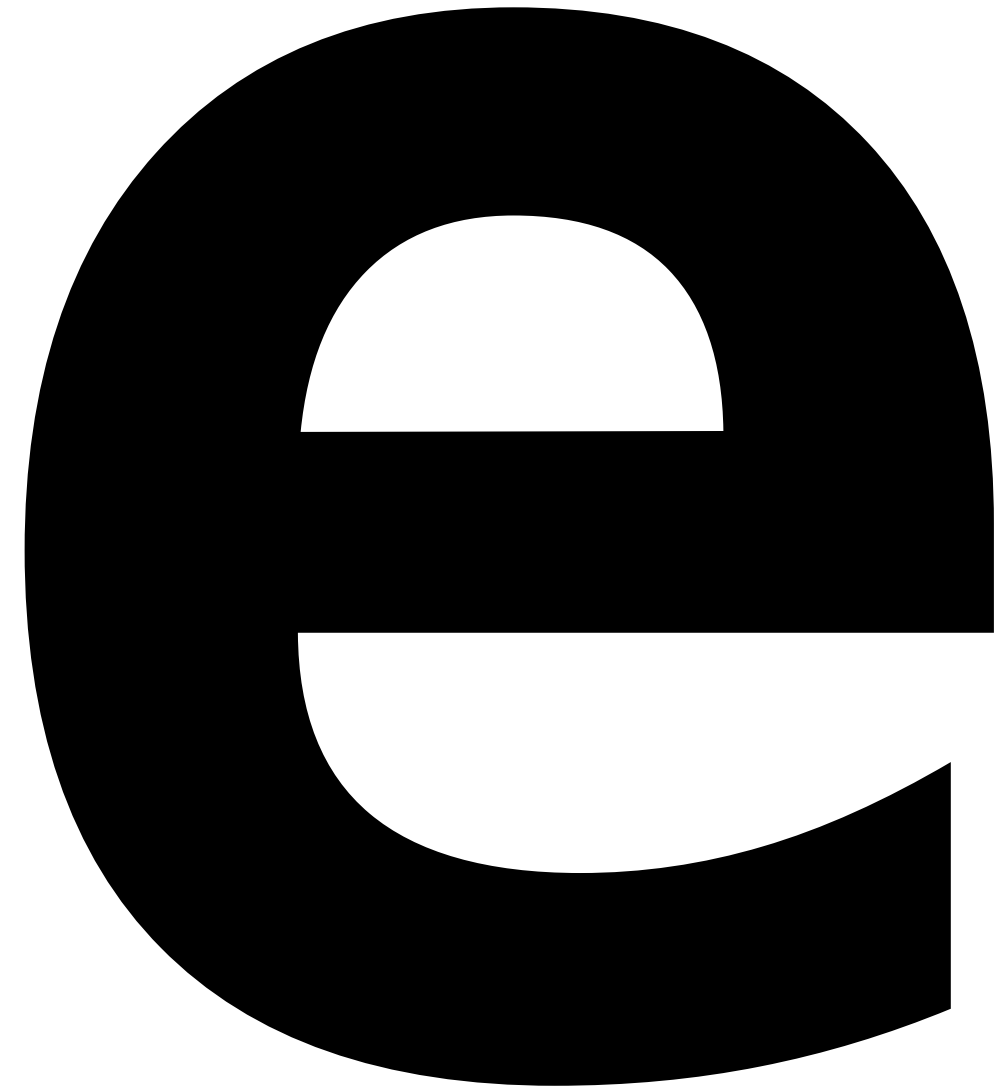


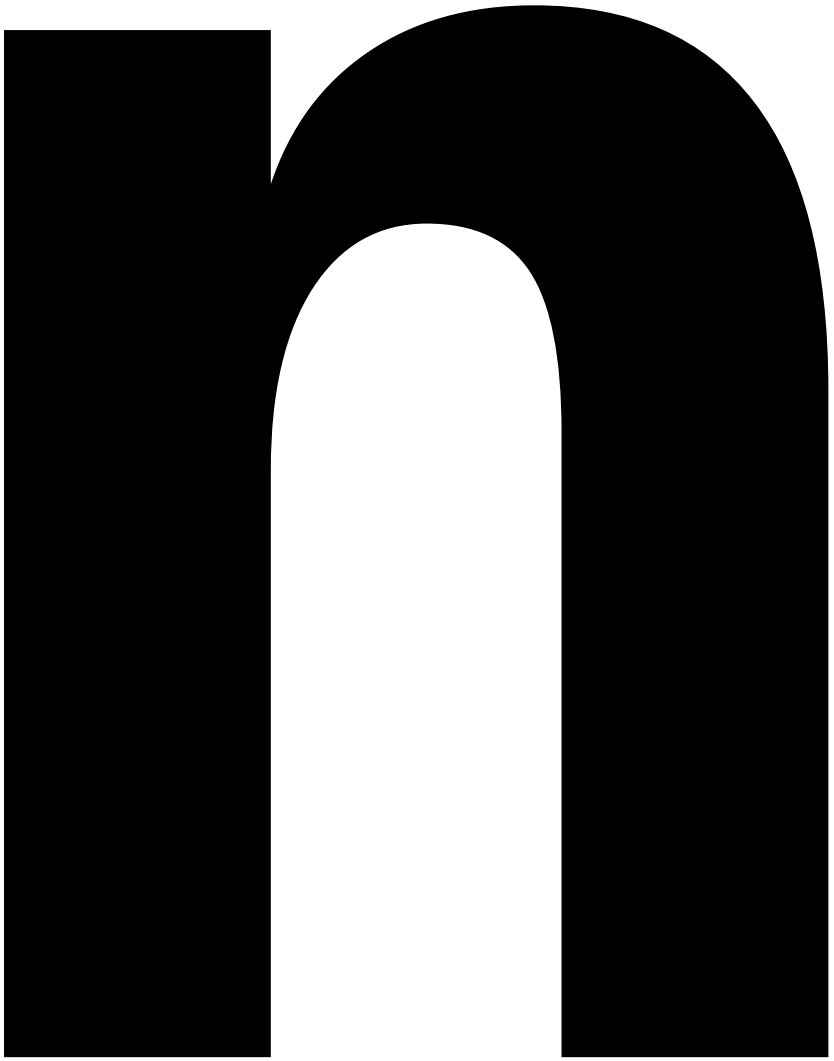


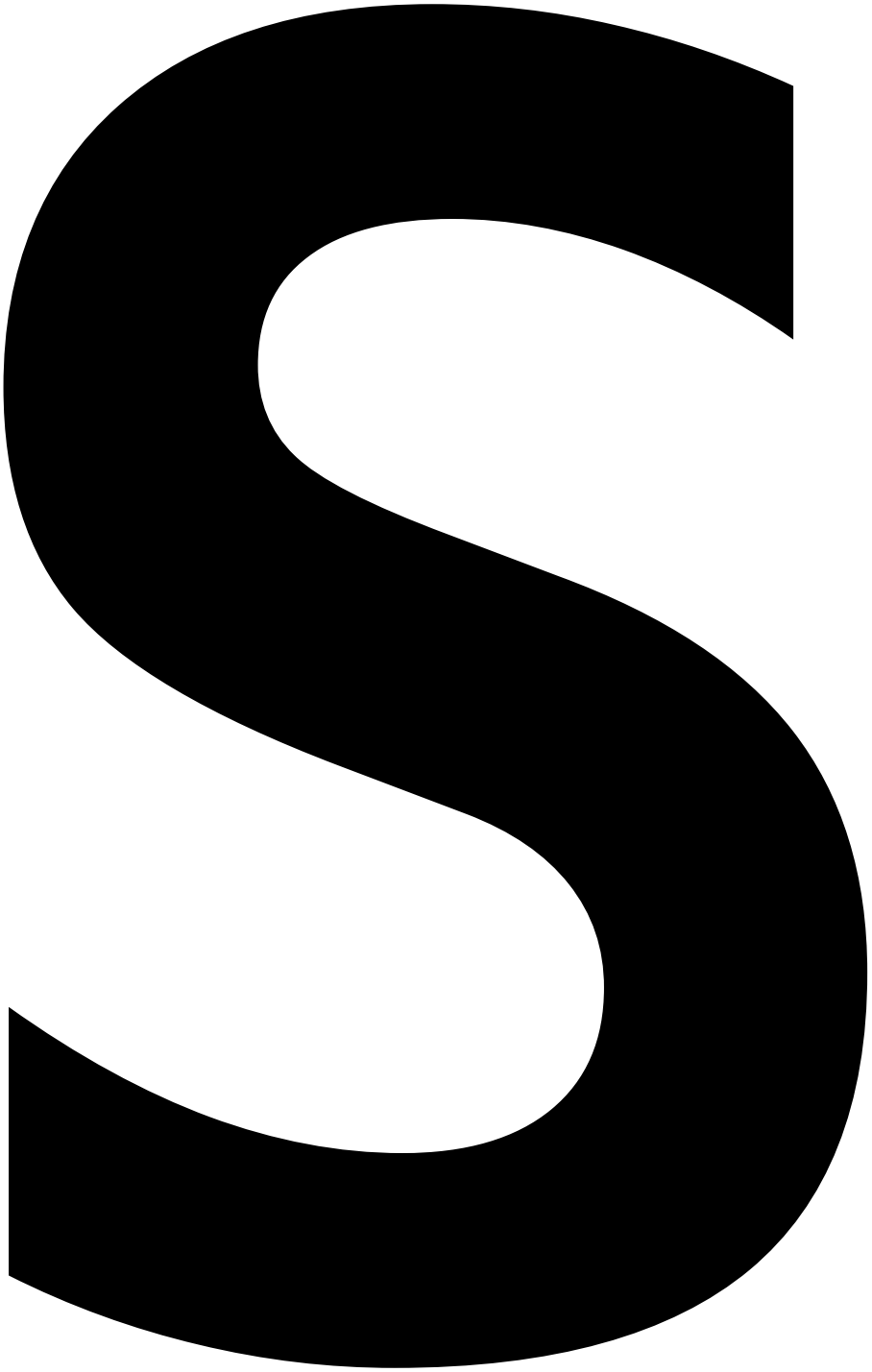


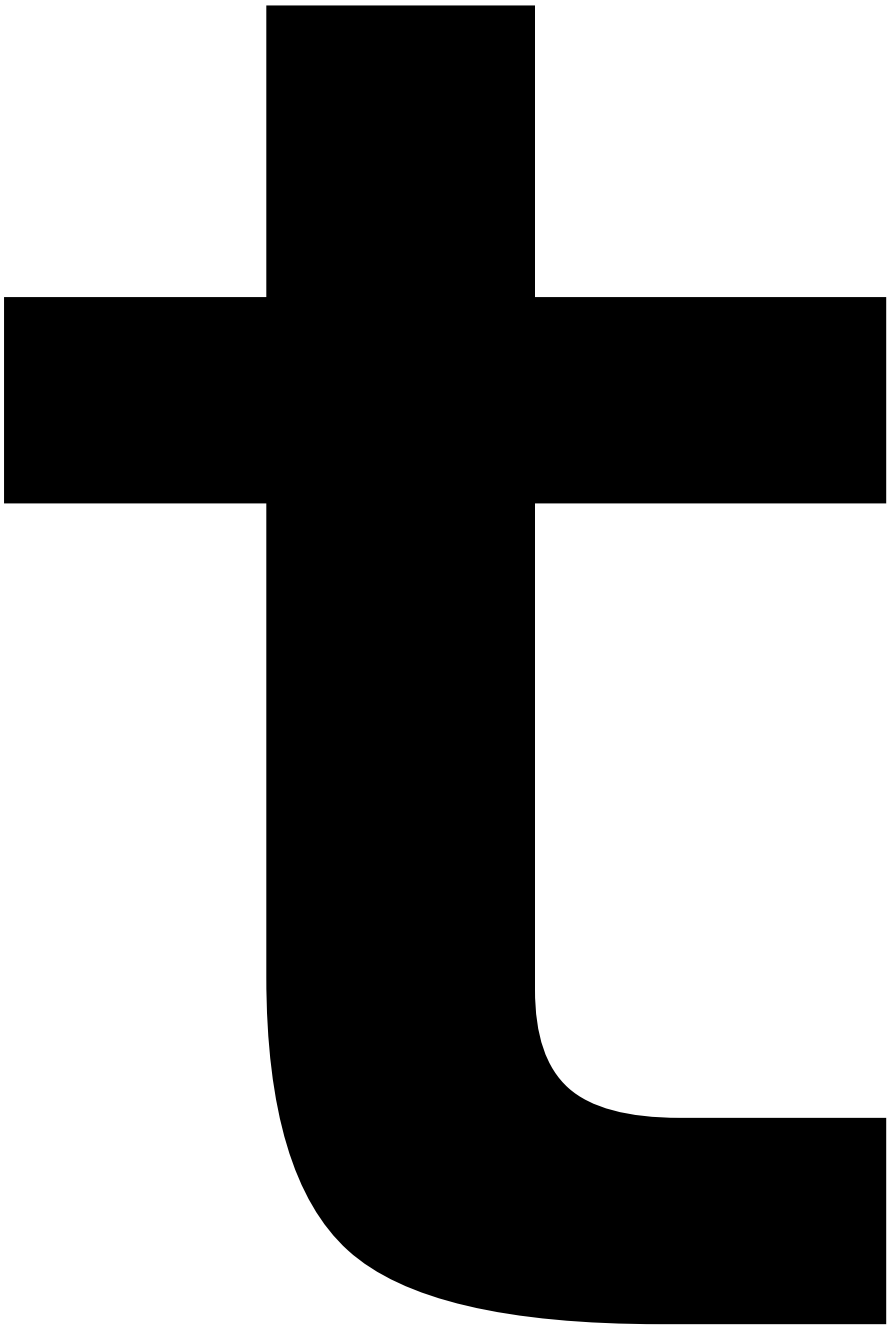
u

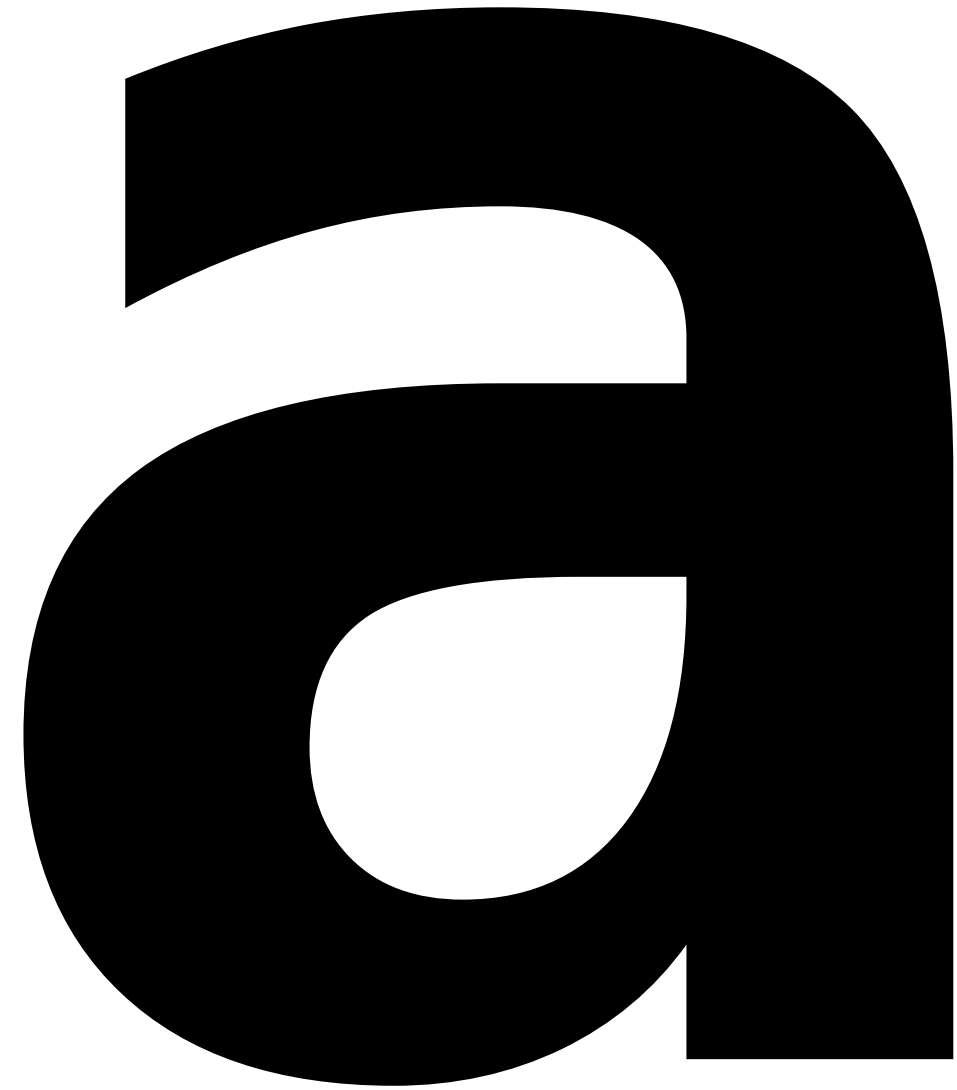
d

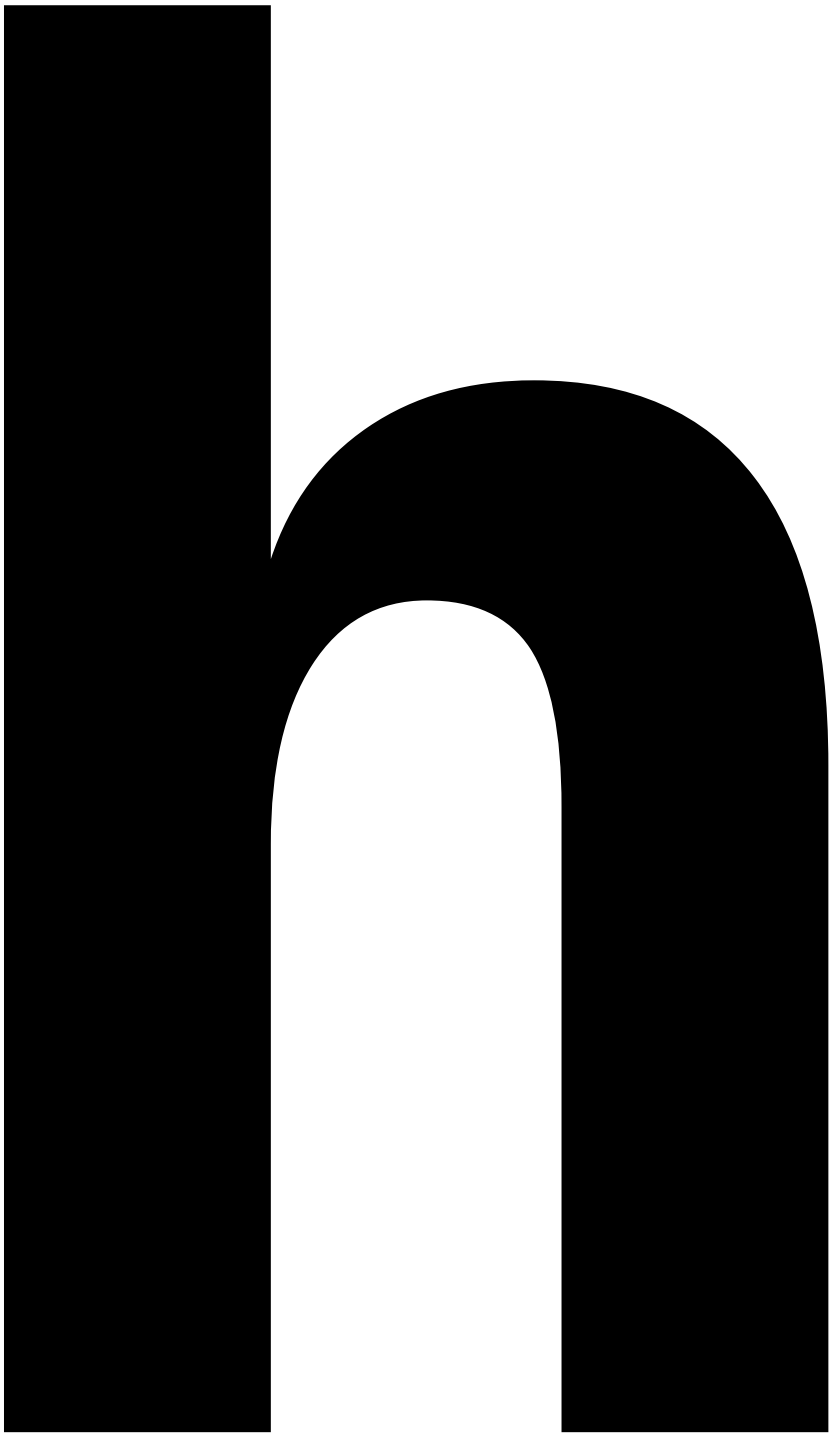


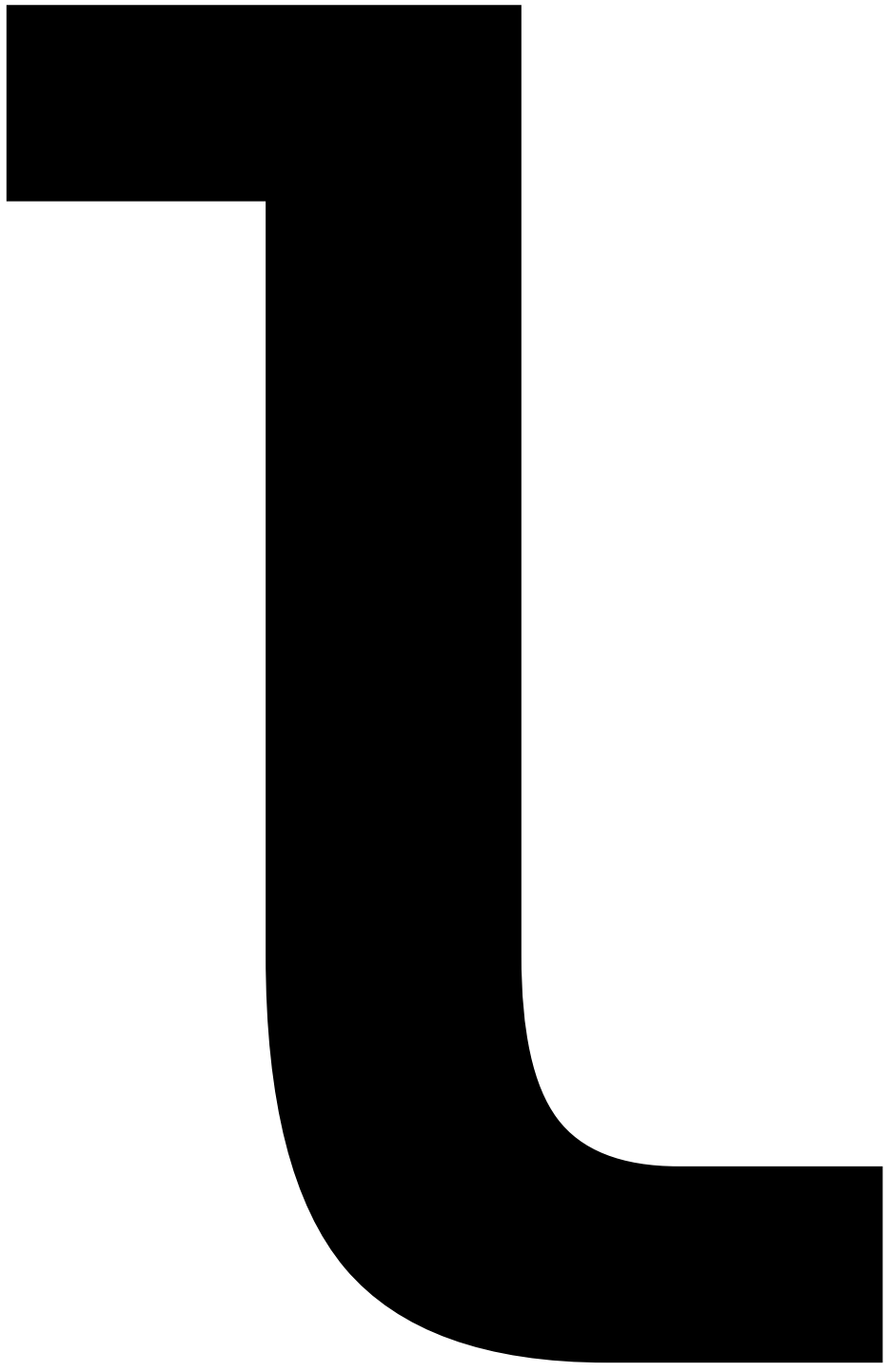


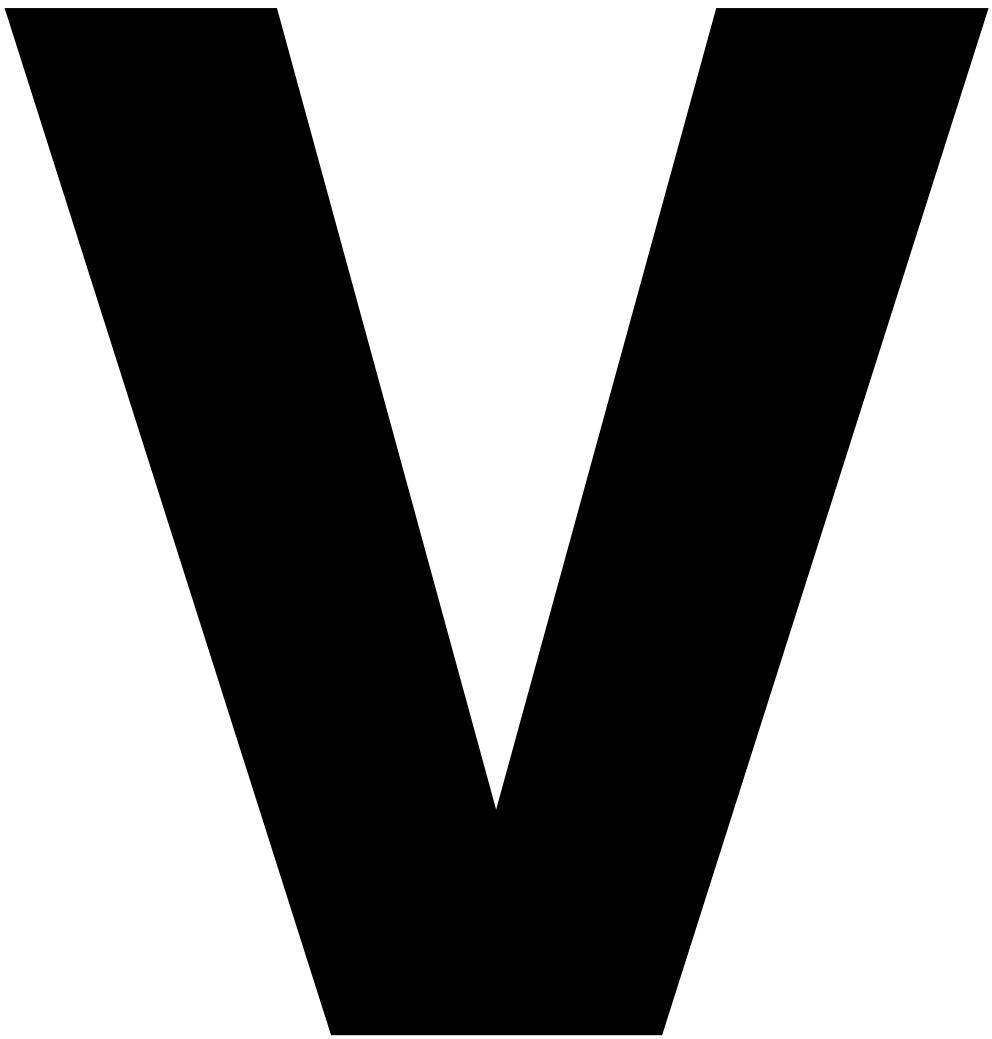


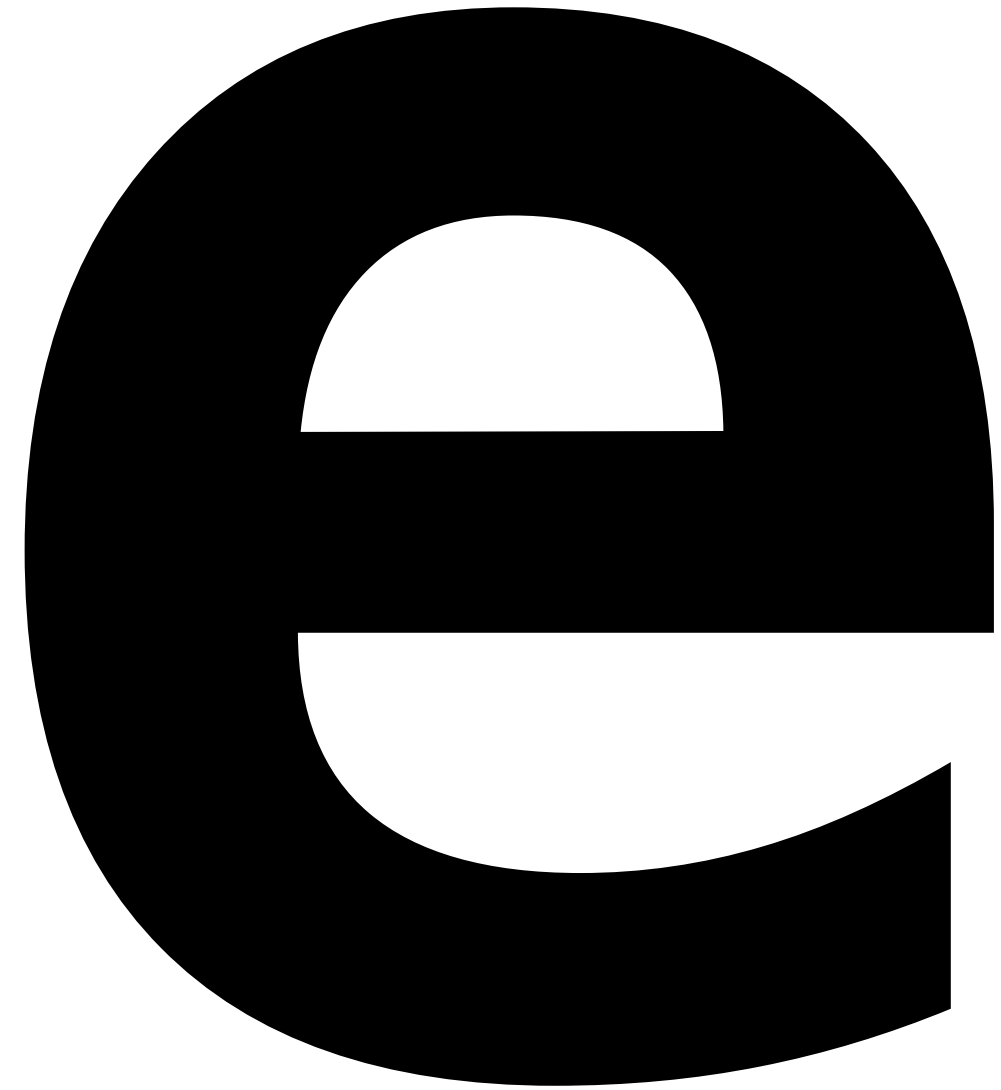


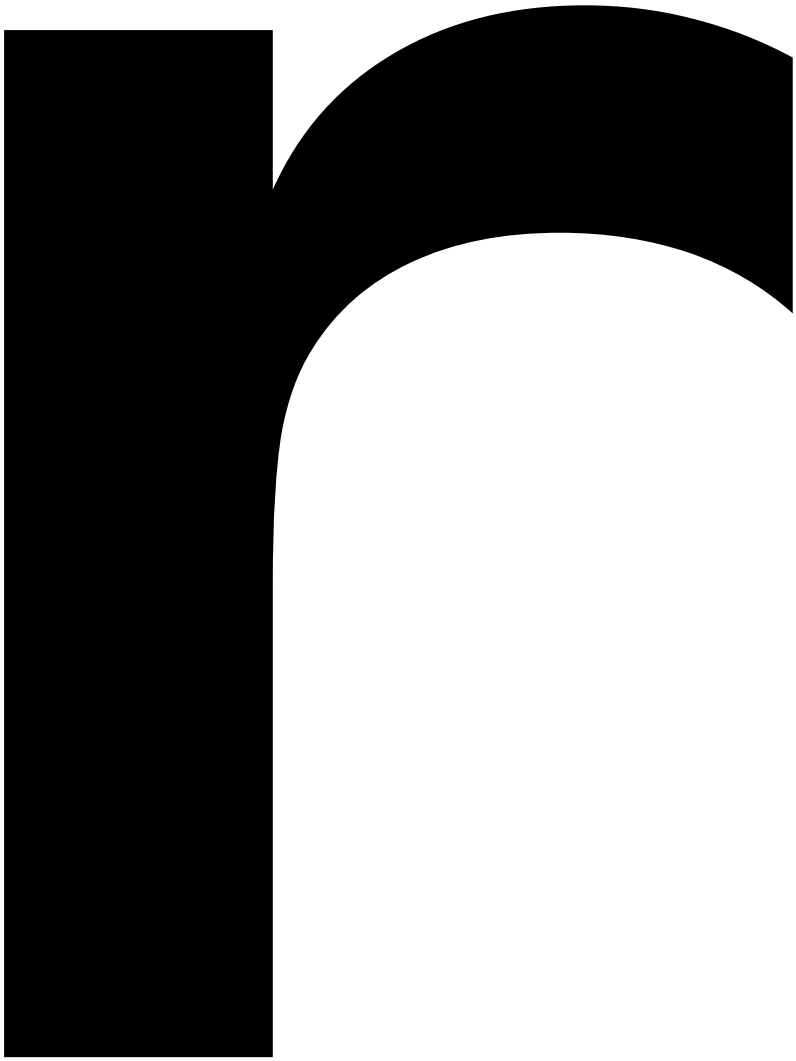


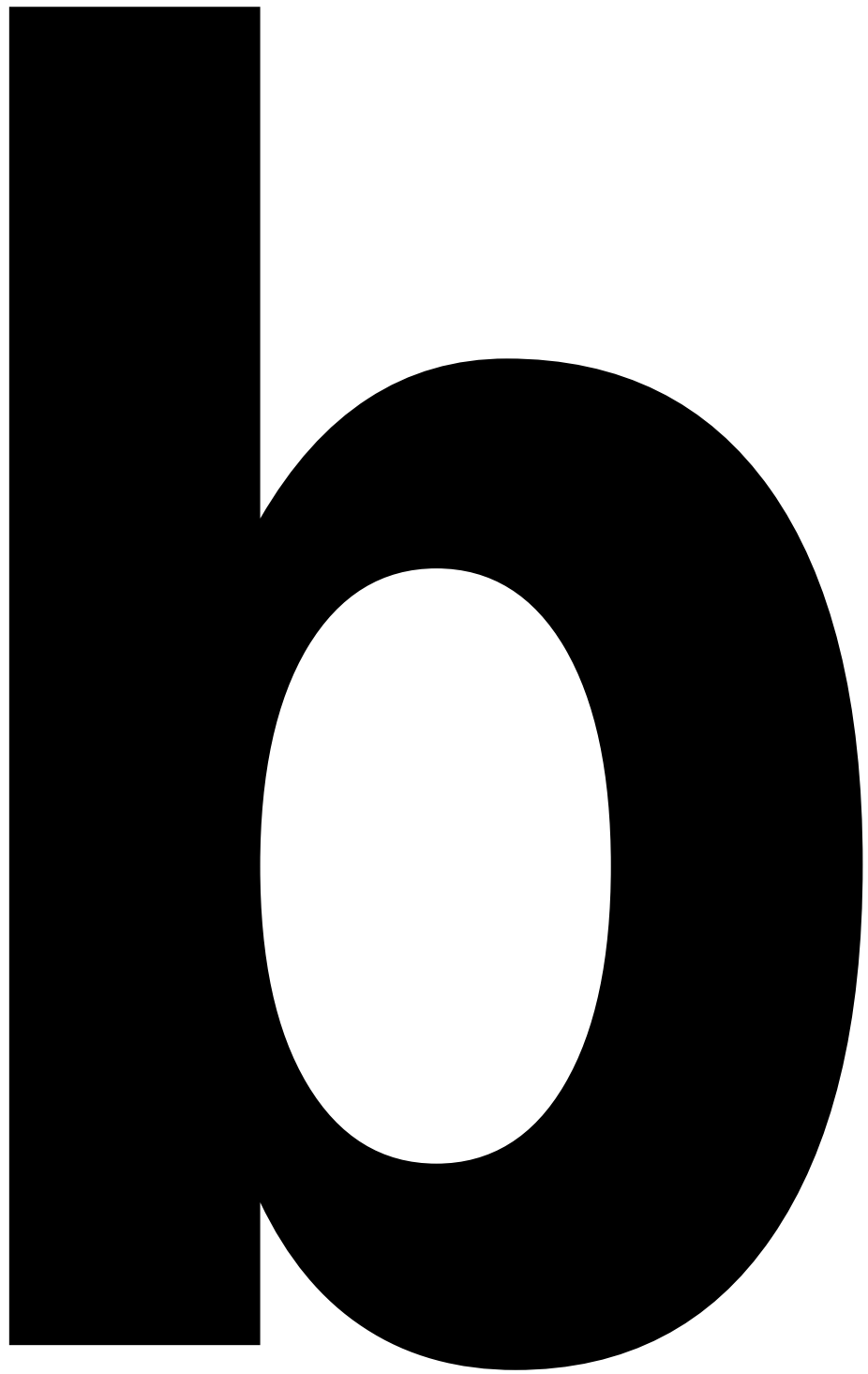


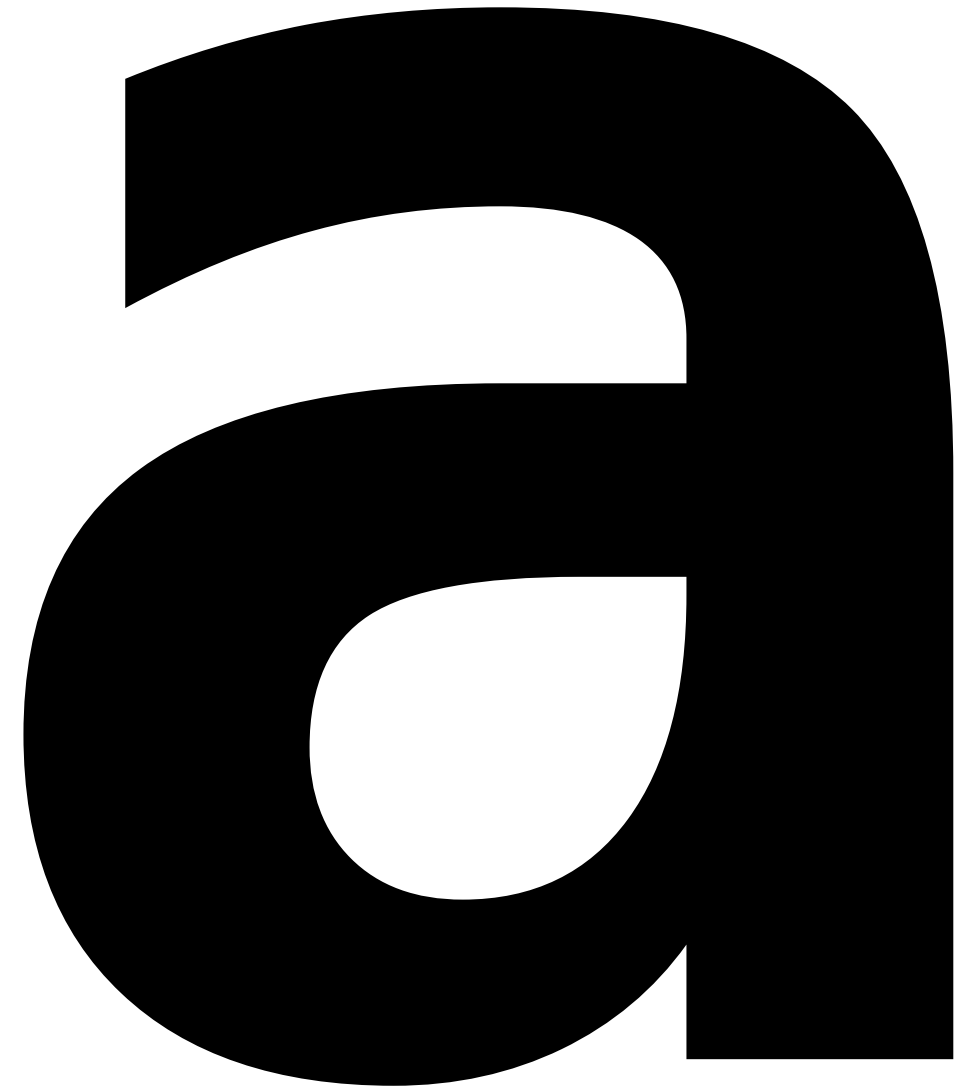




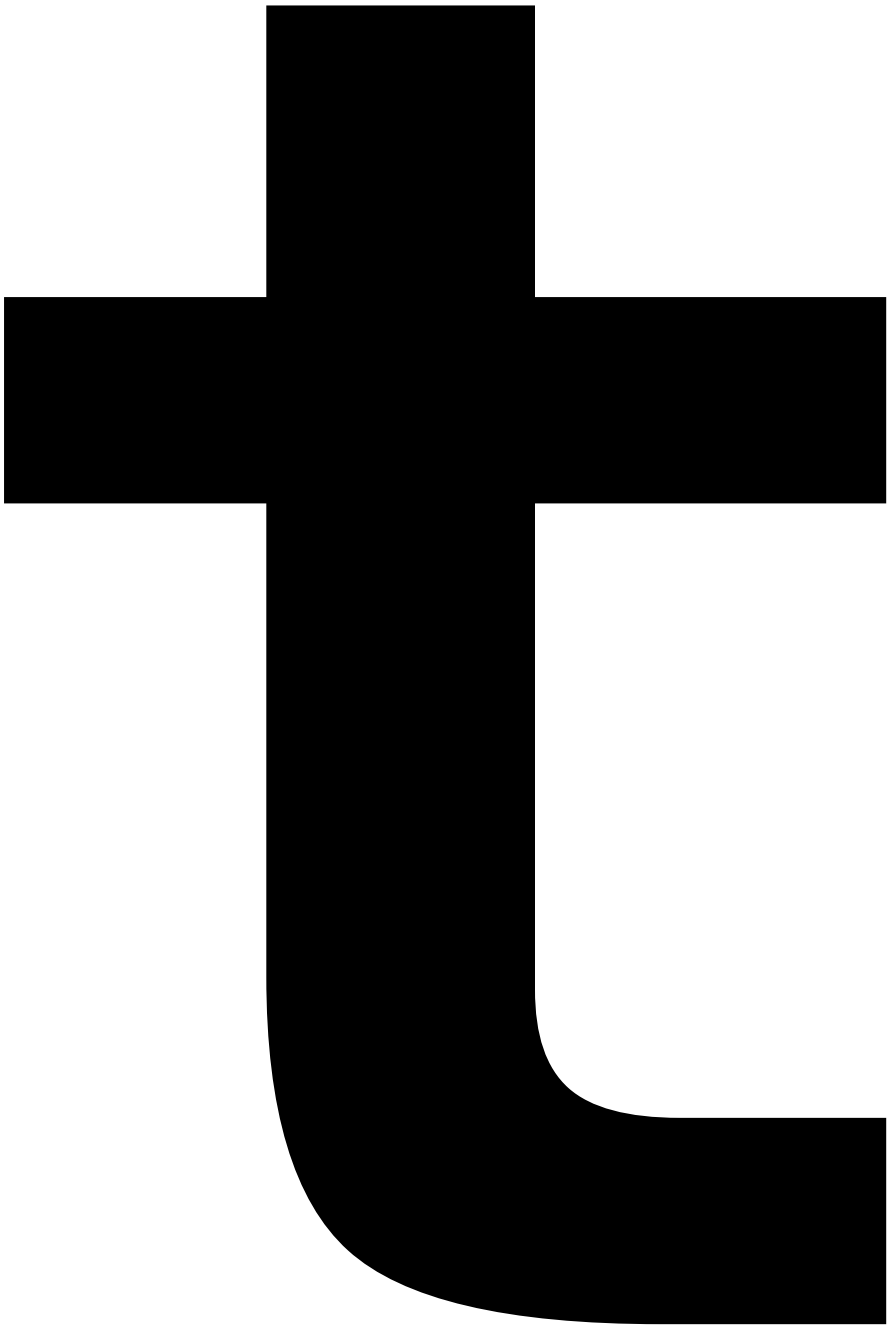


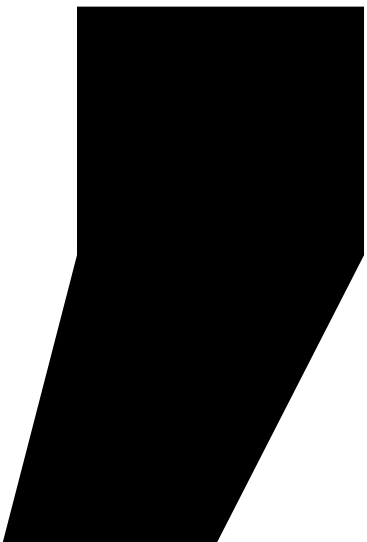




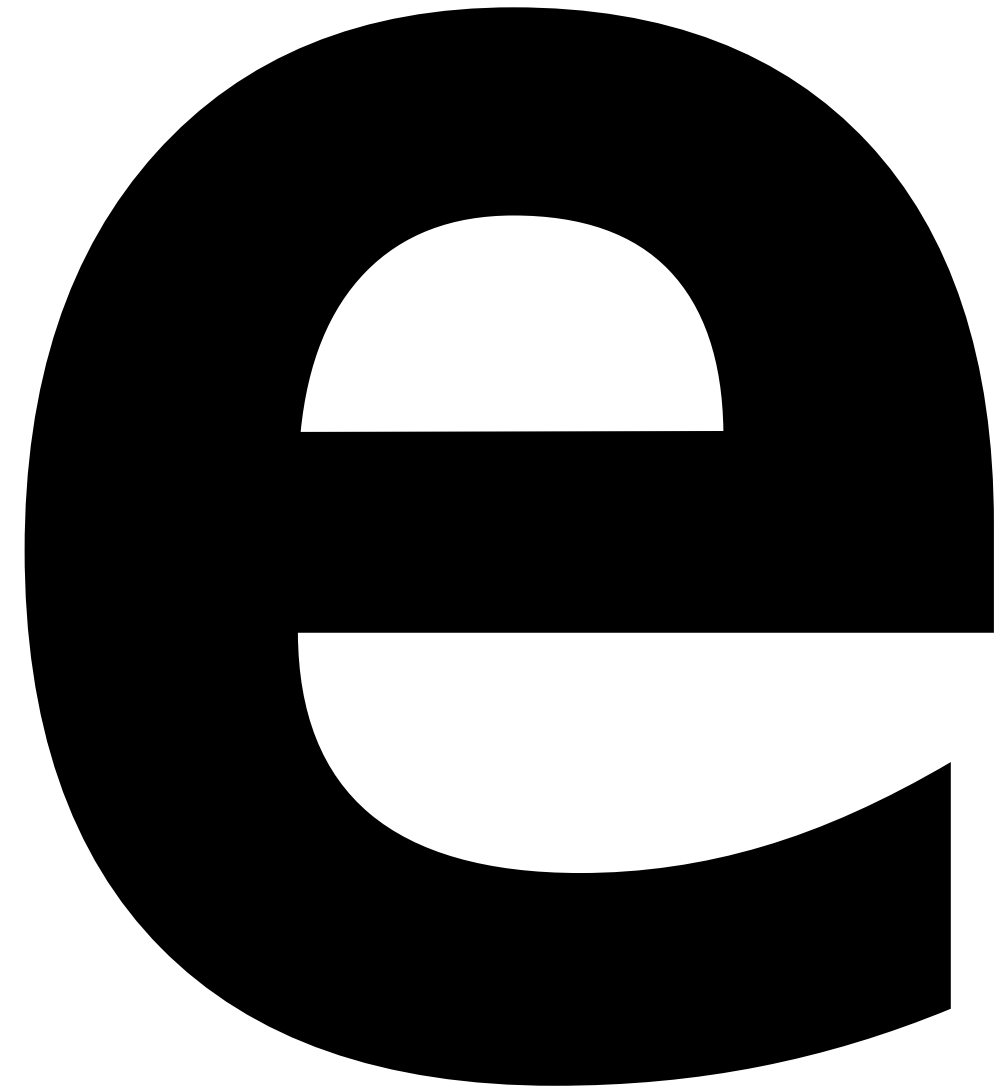


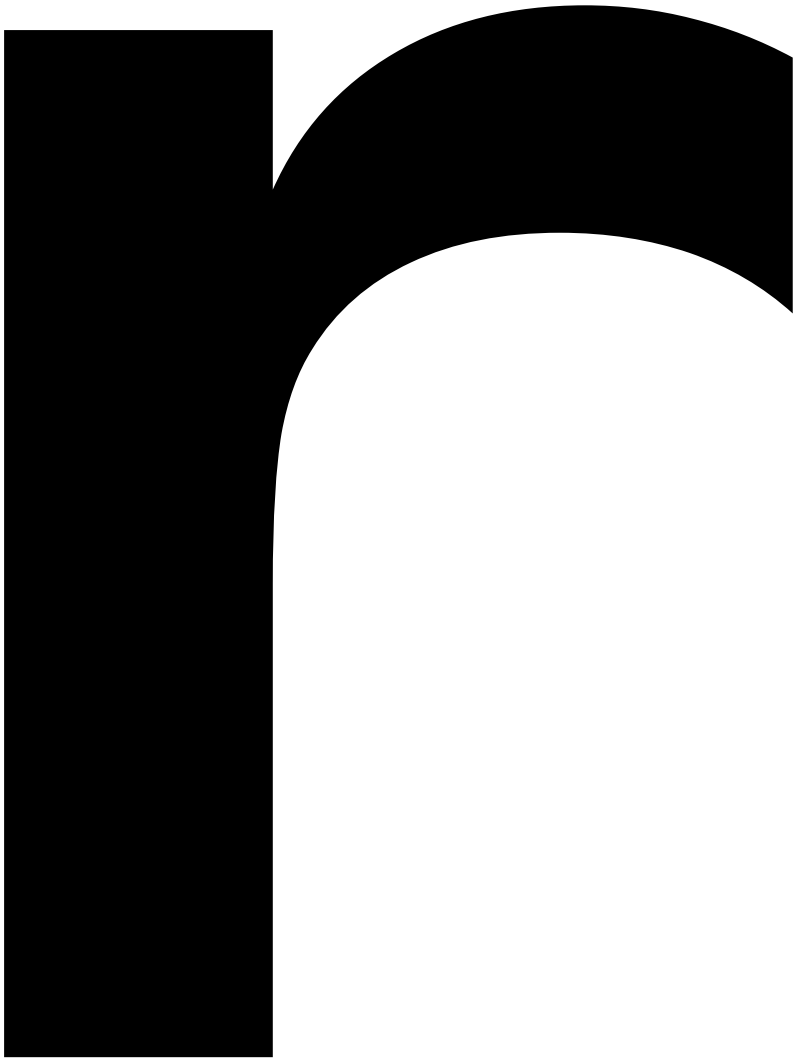
u

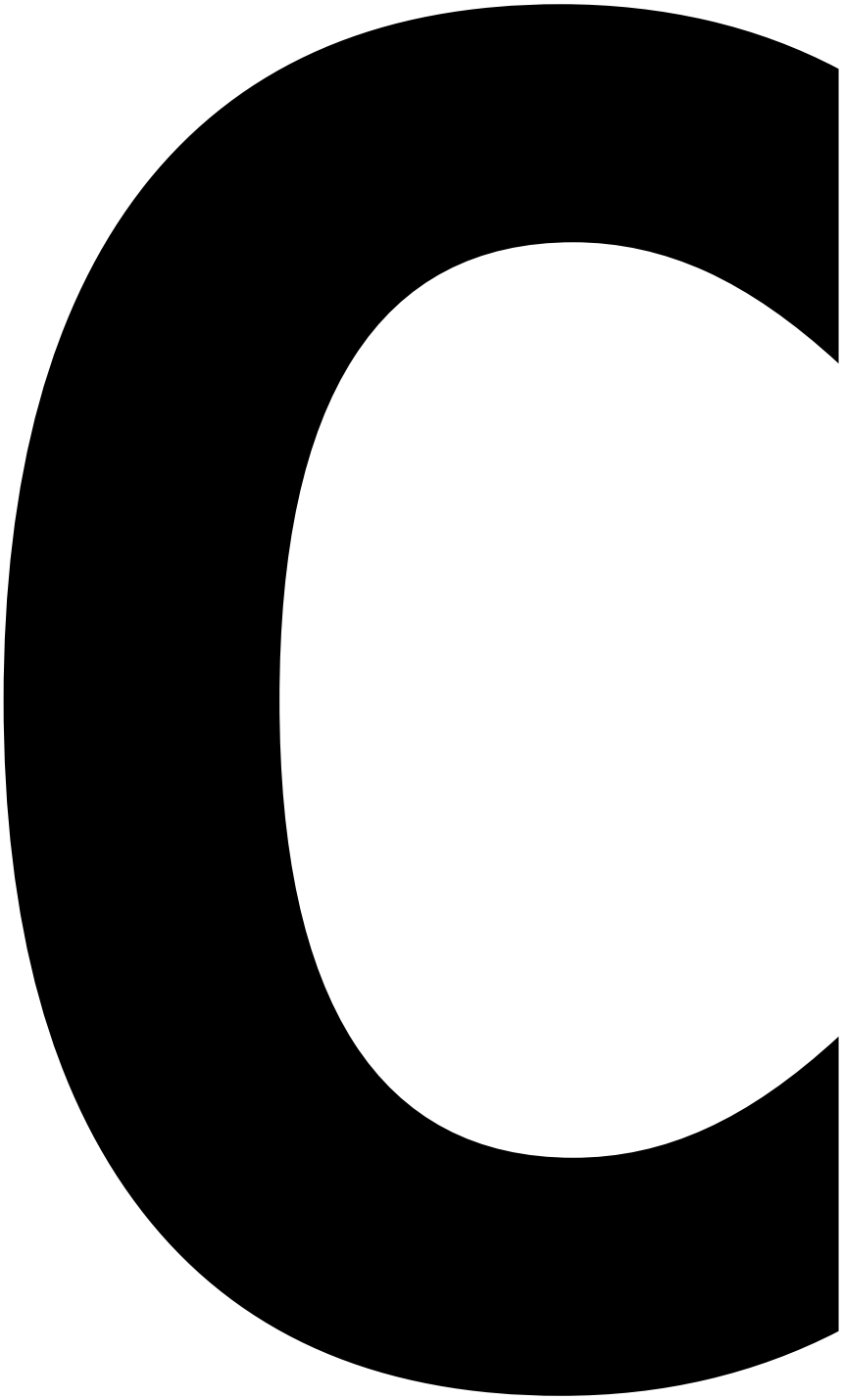


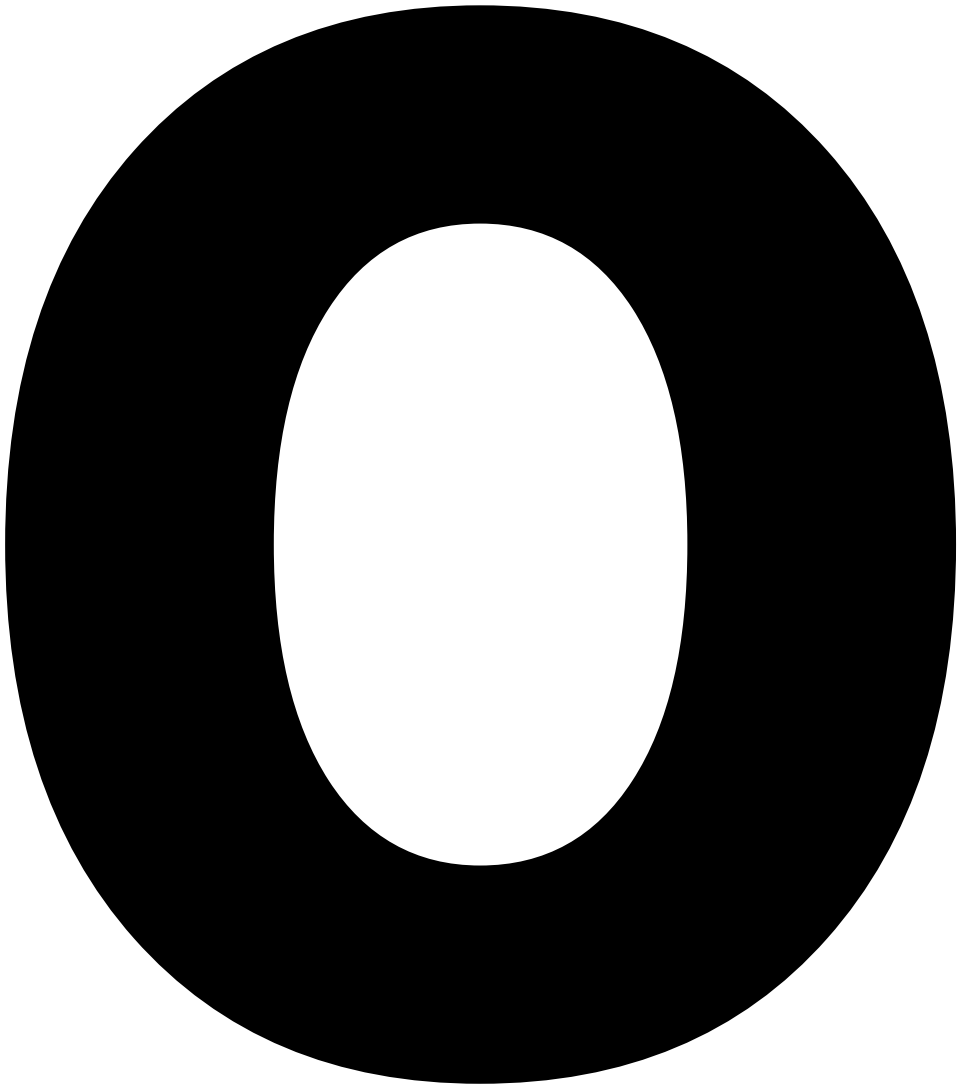


d

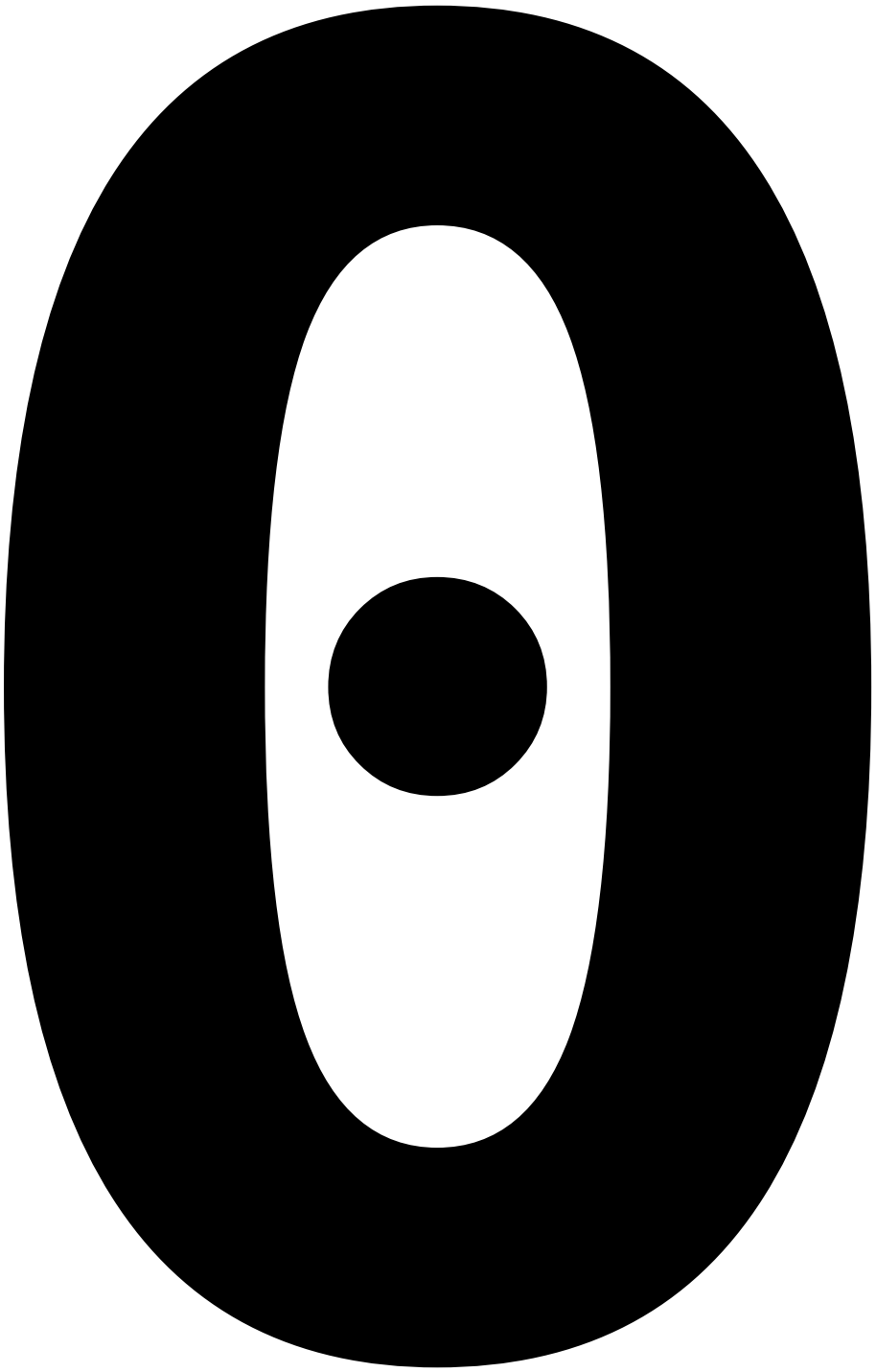


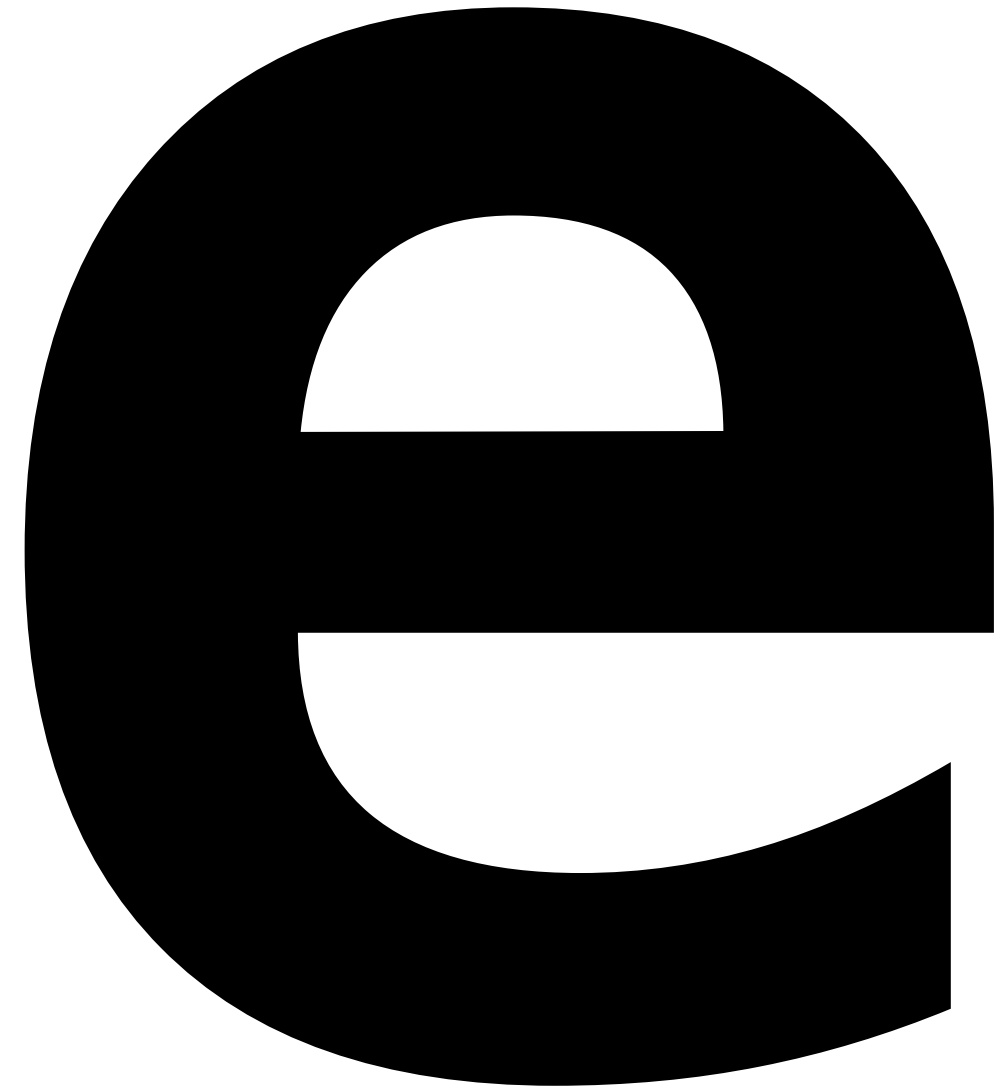


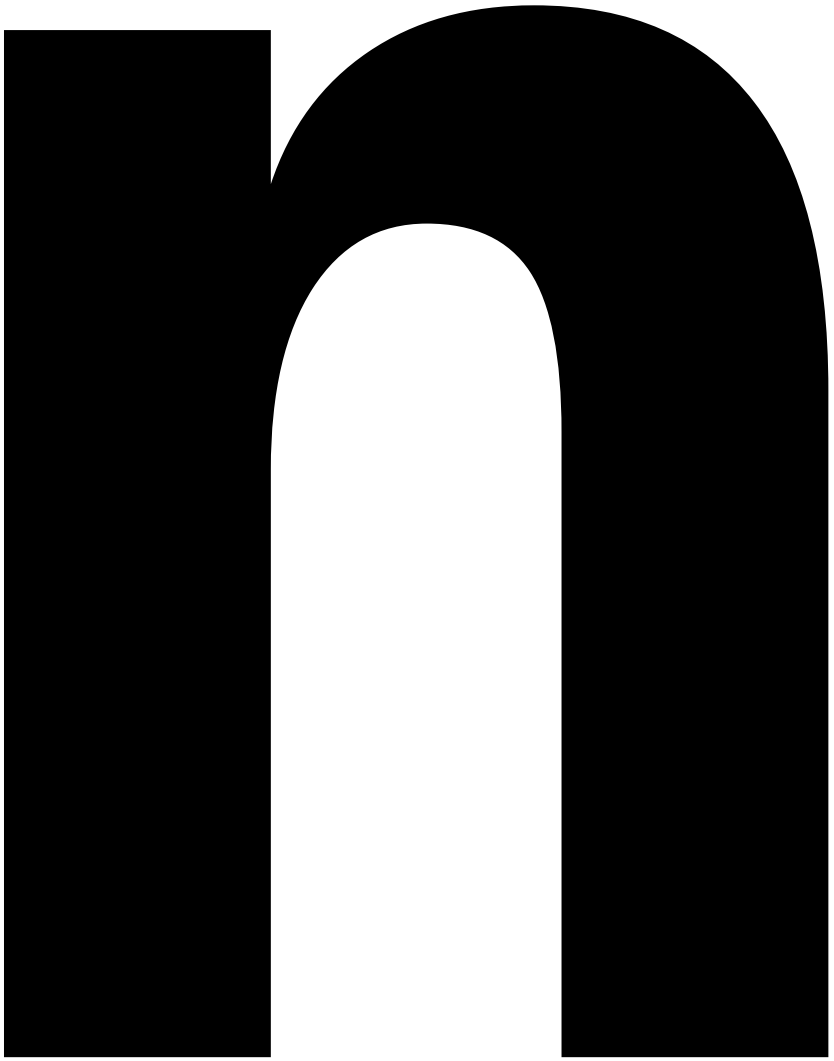


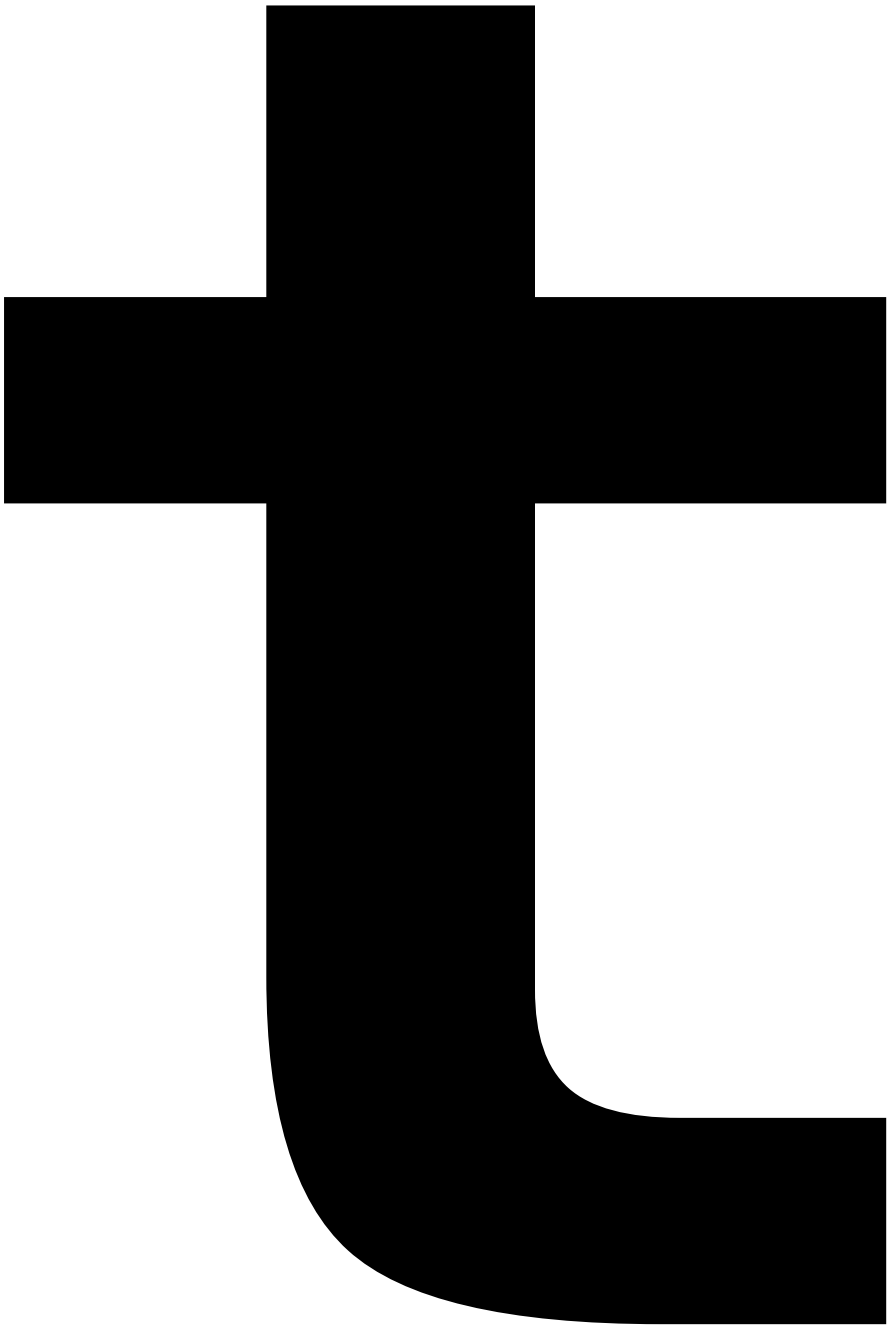


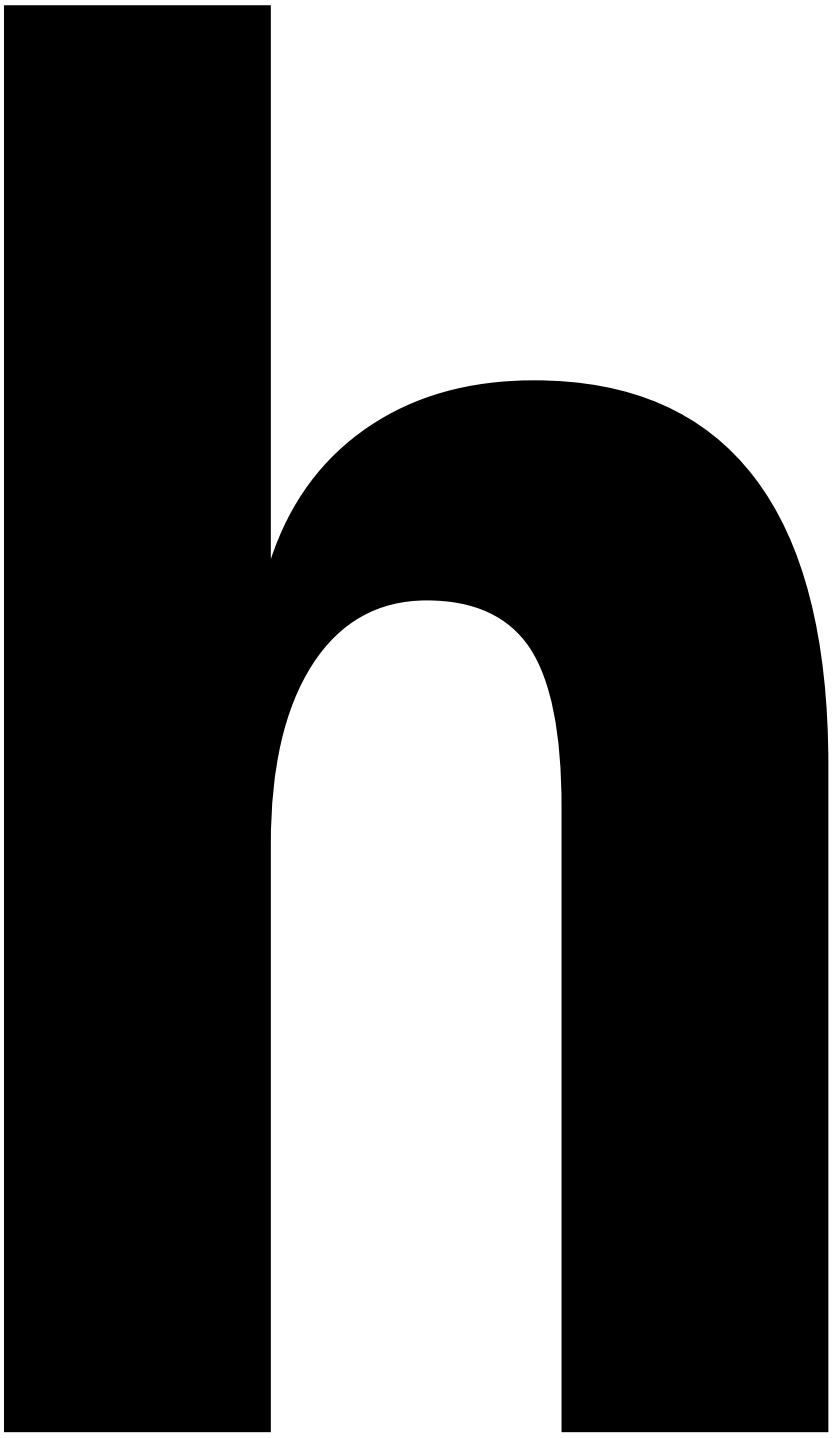
6

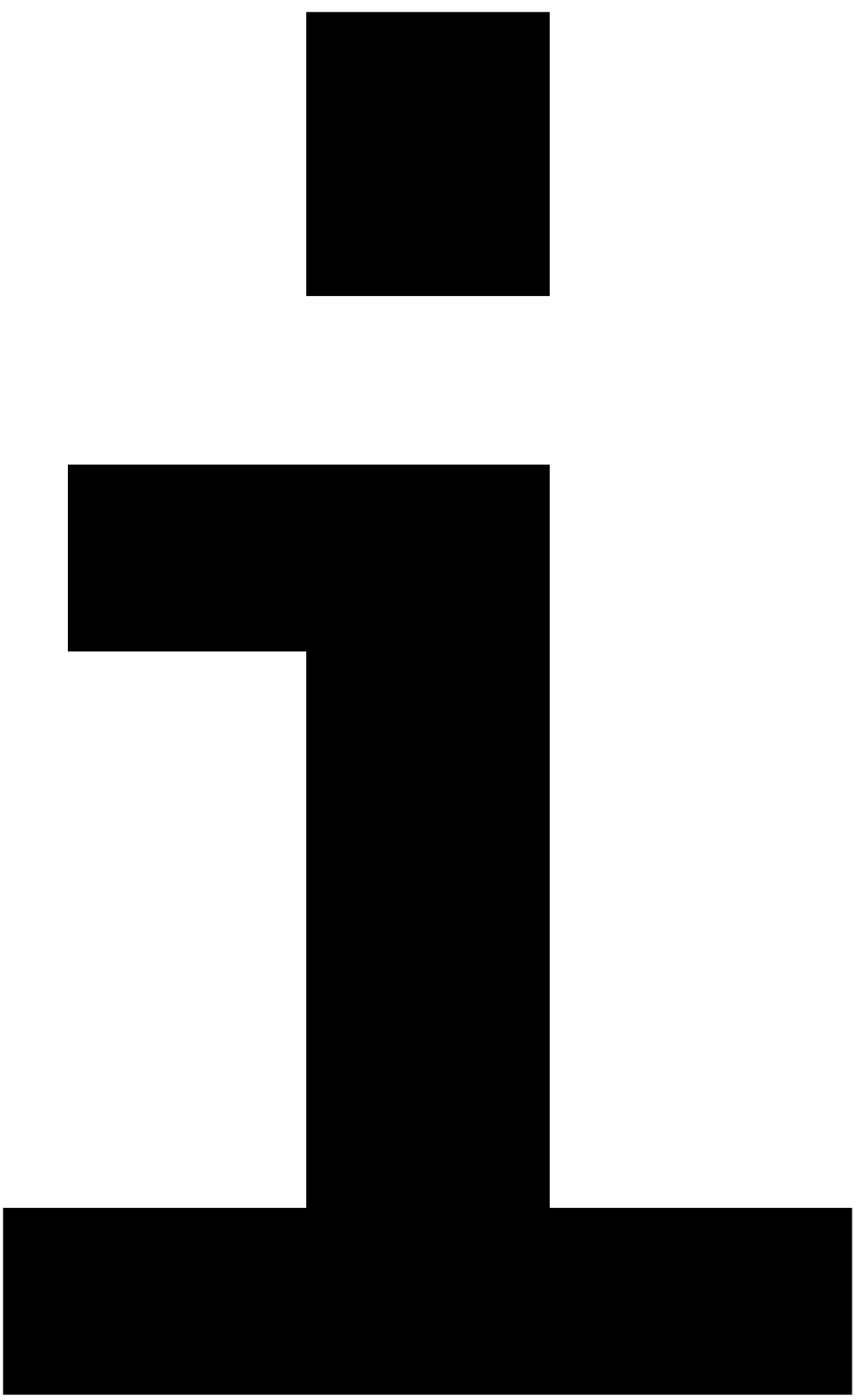


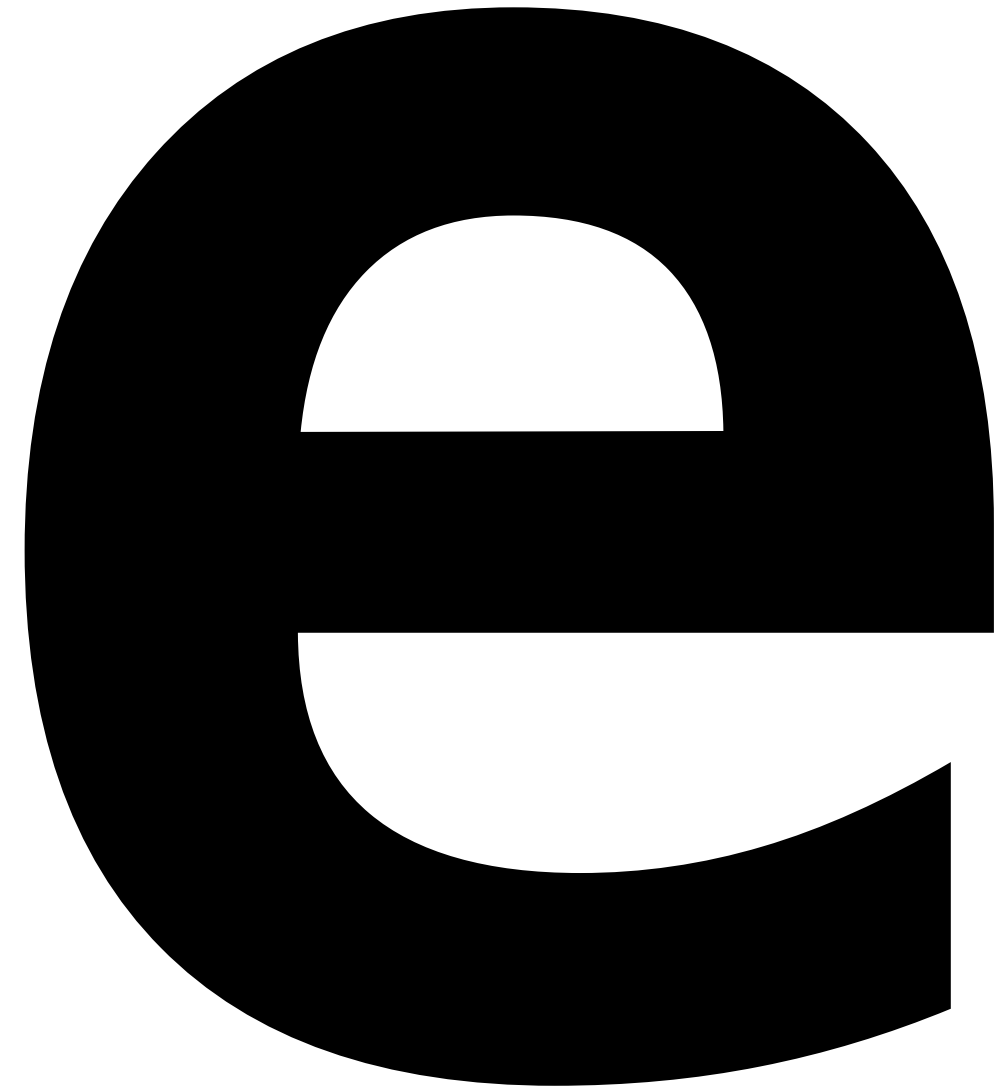


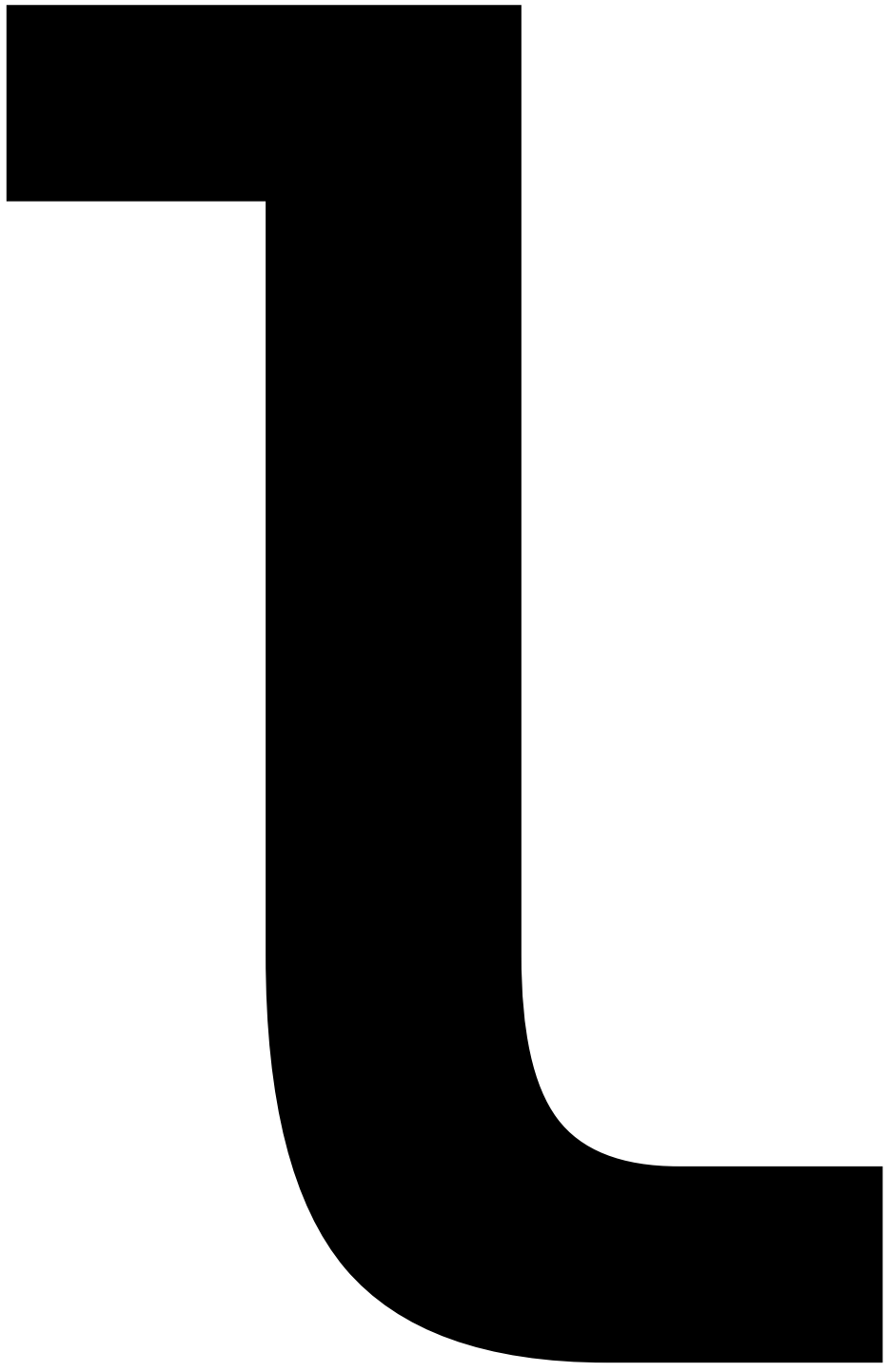


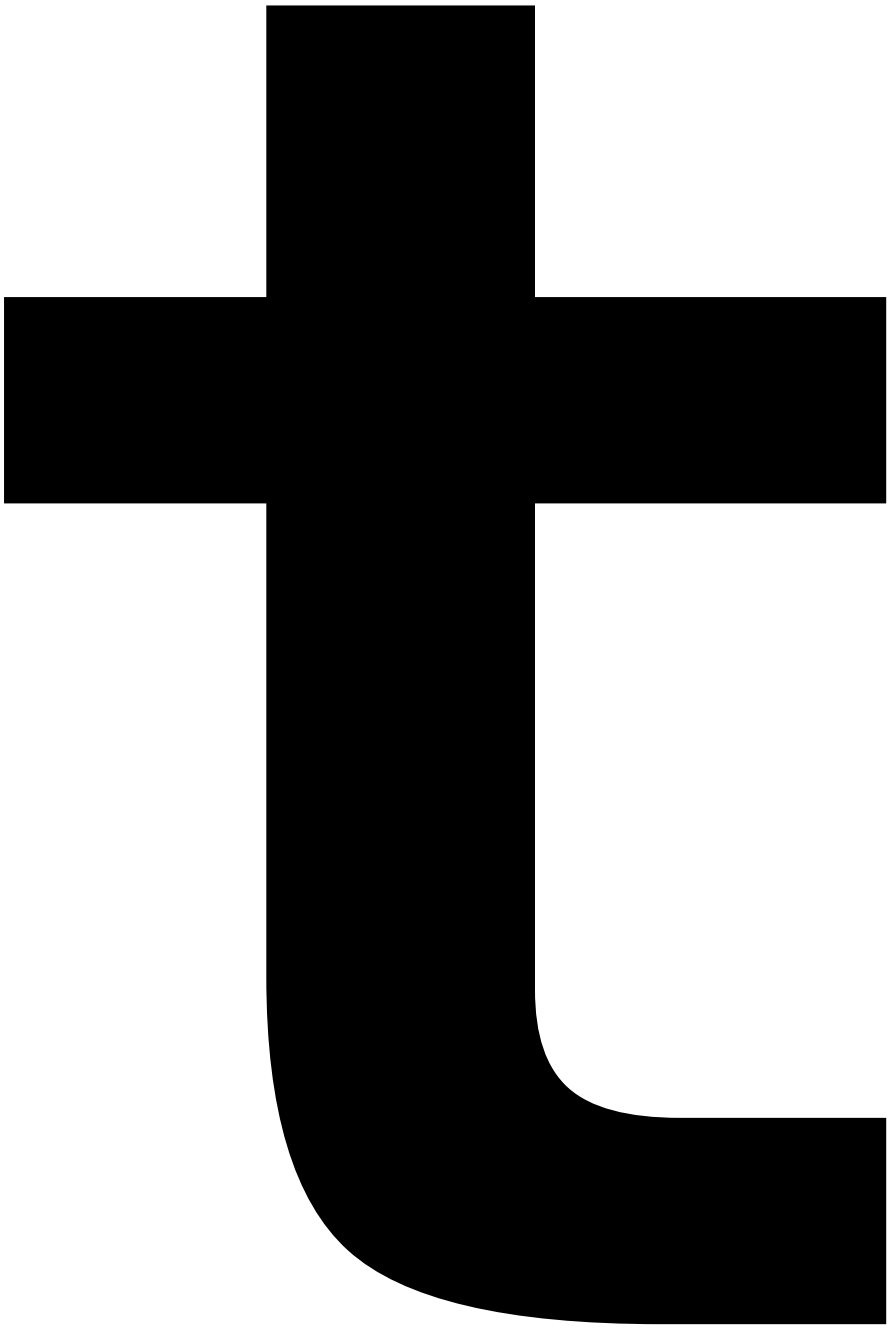


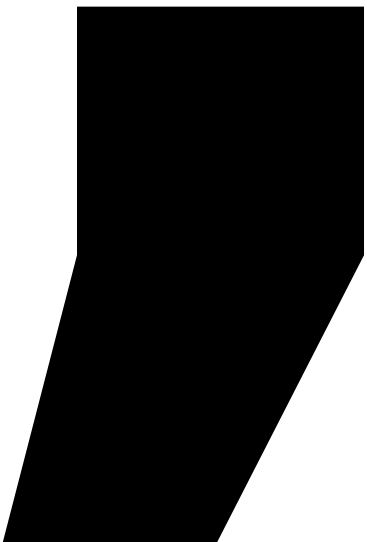


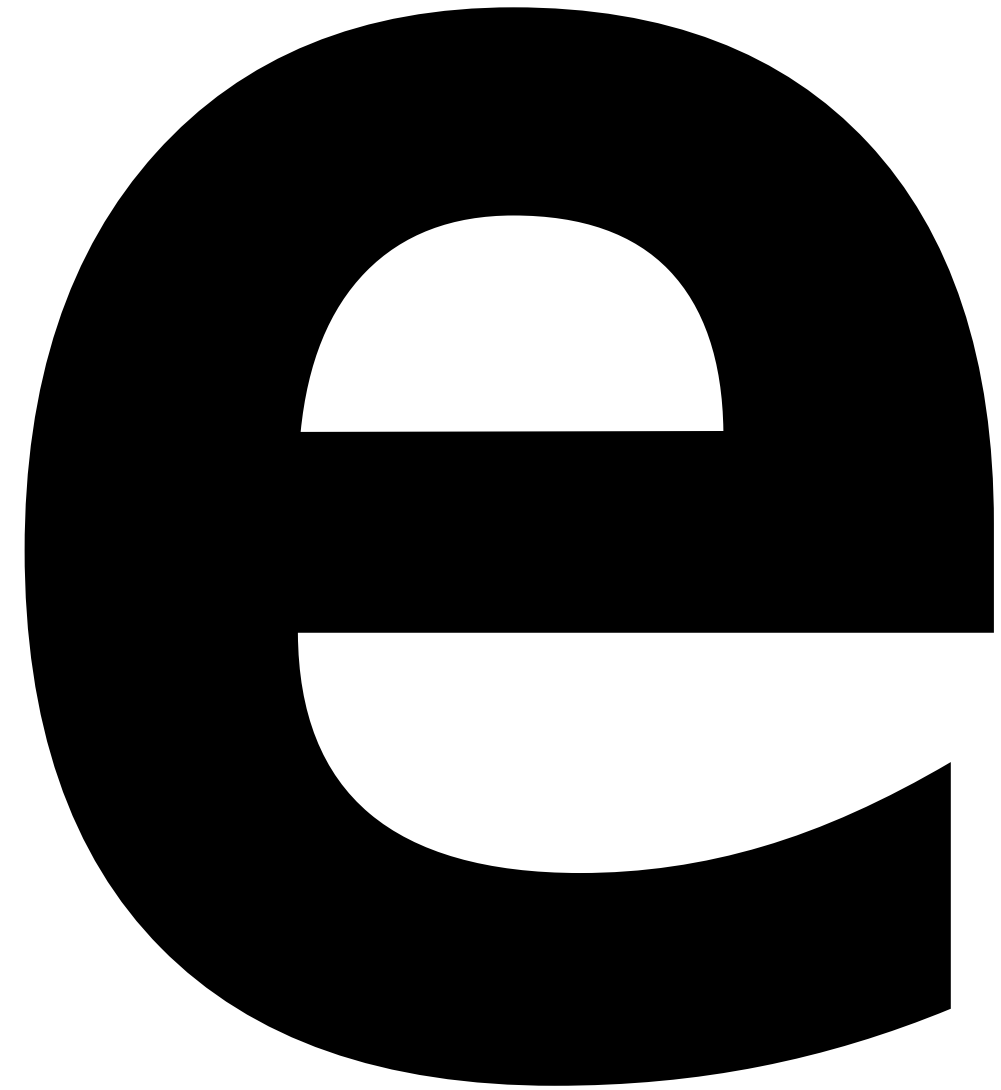


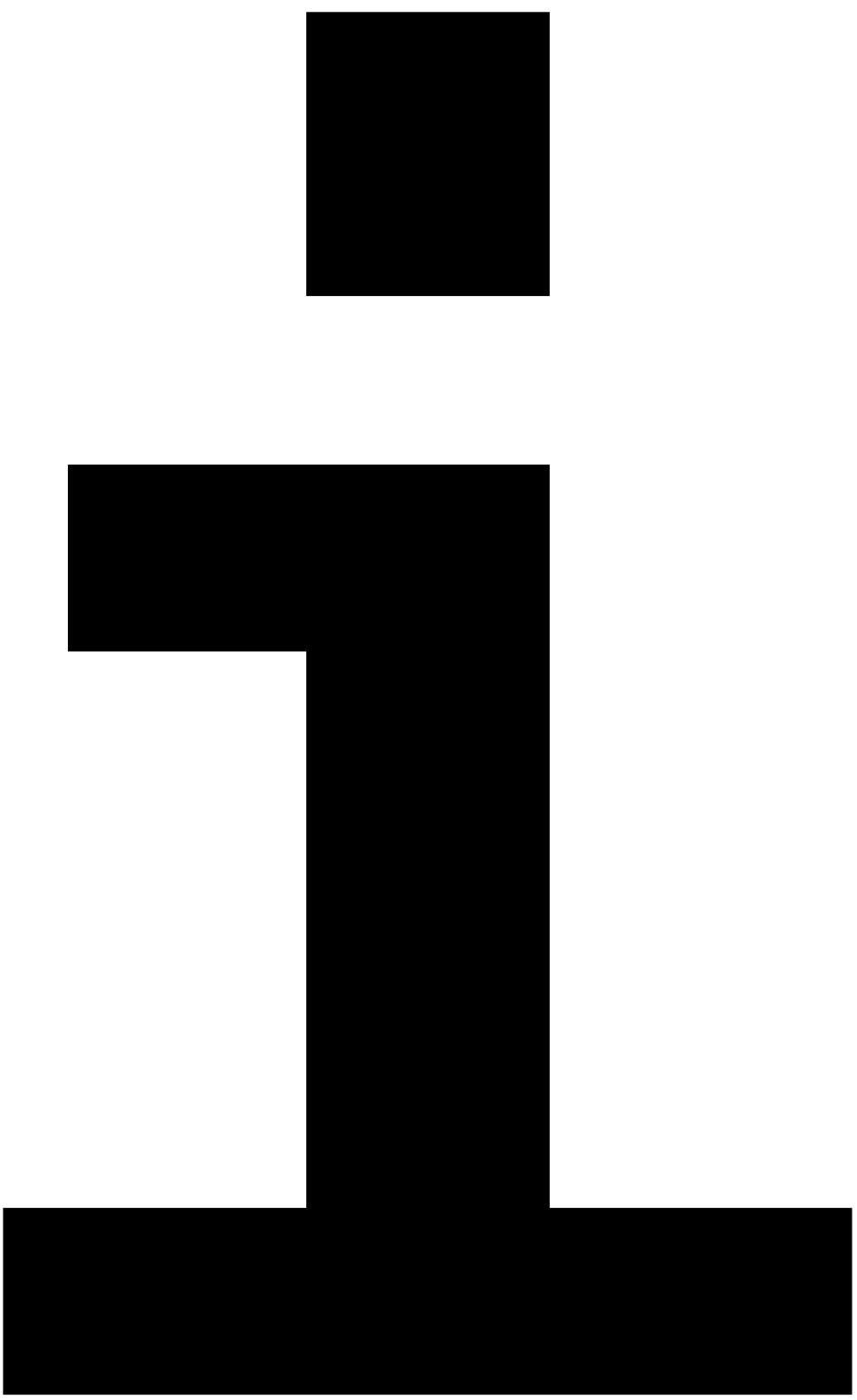


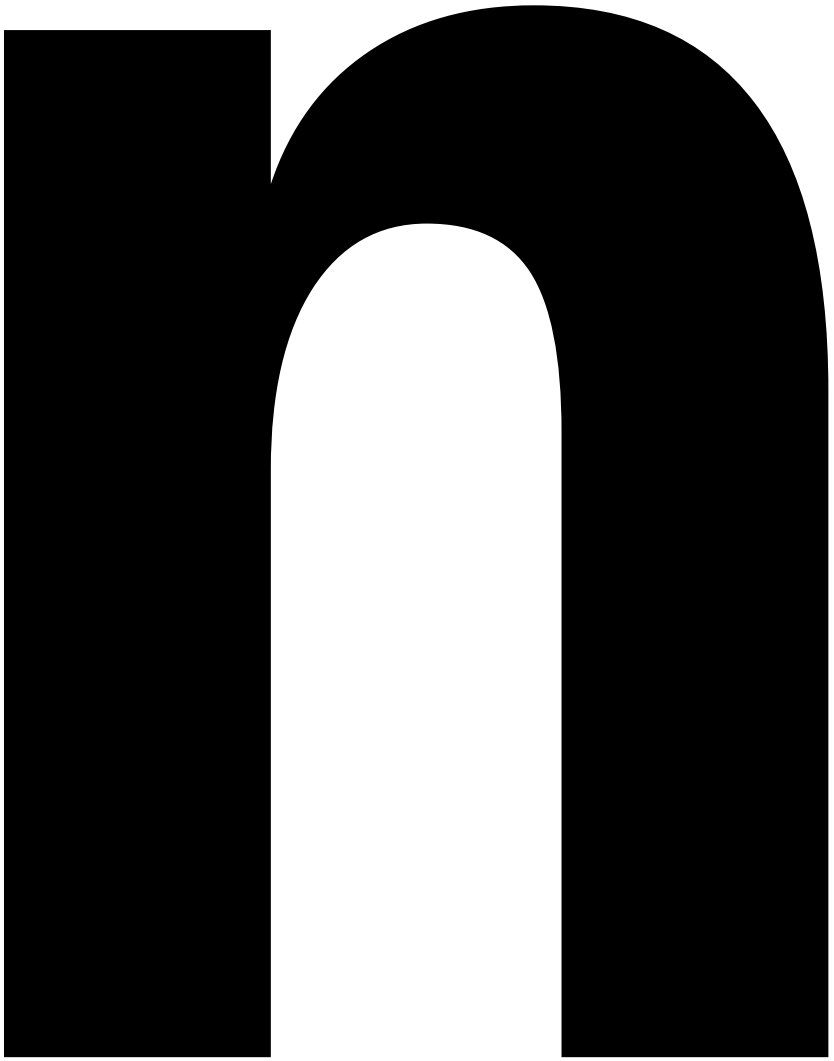


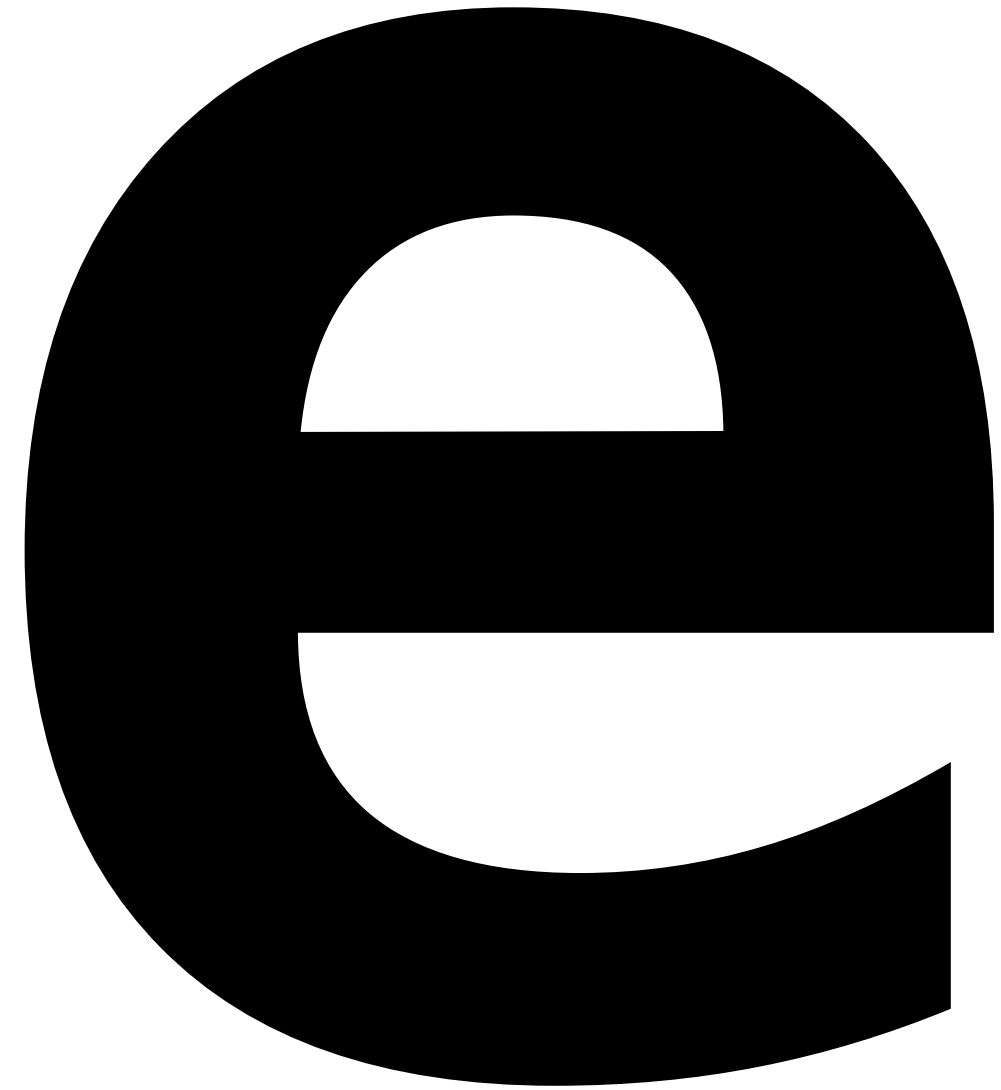


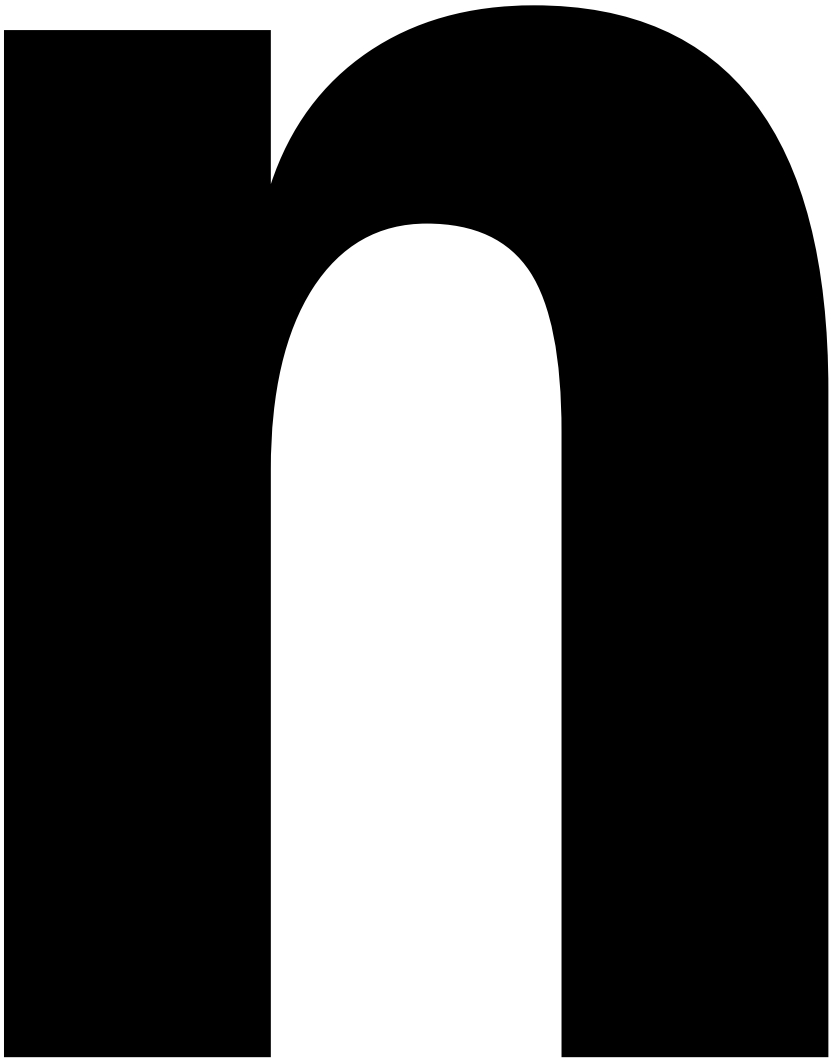


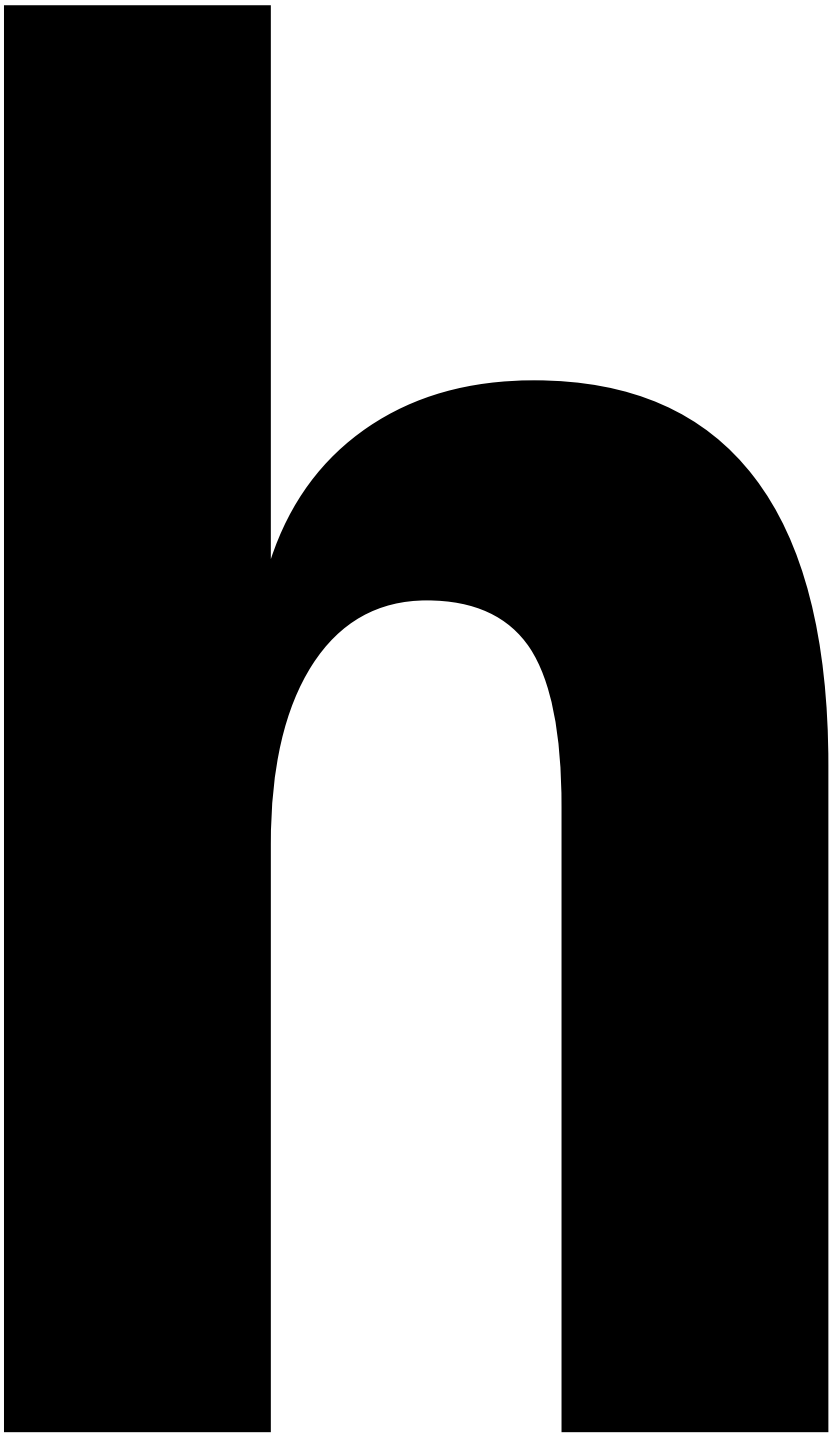


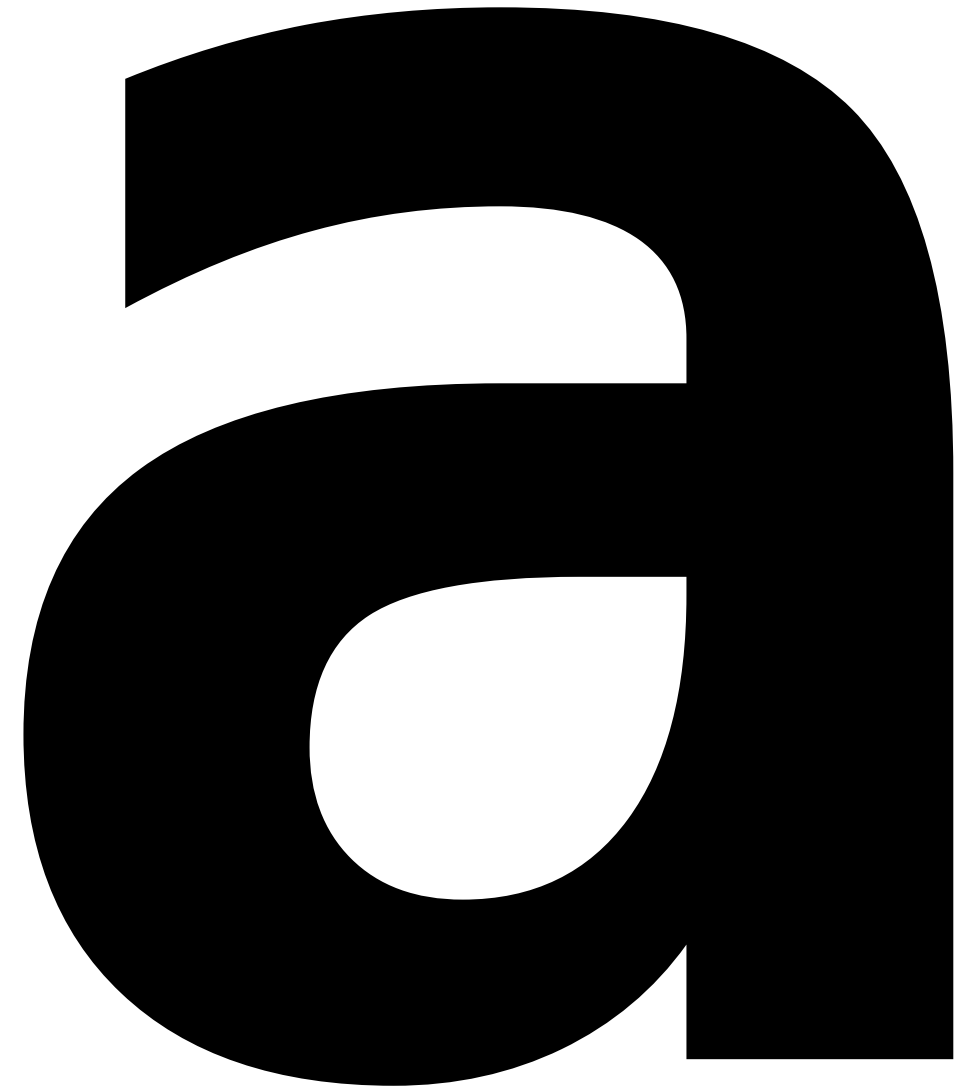


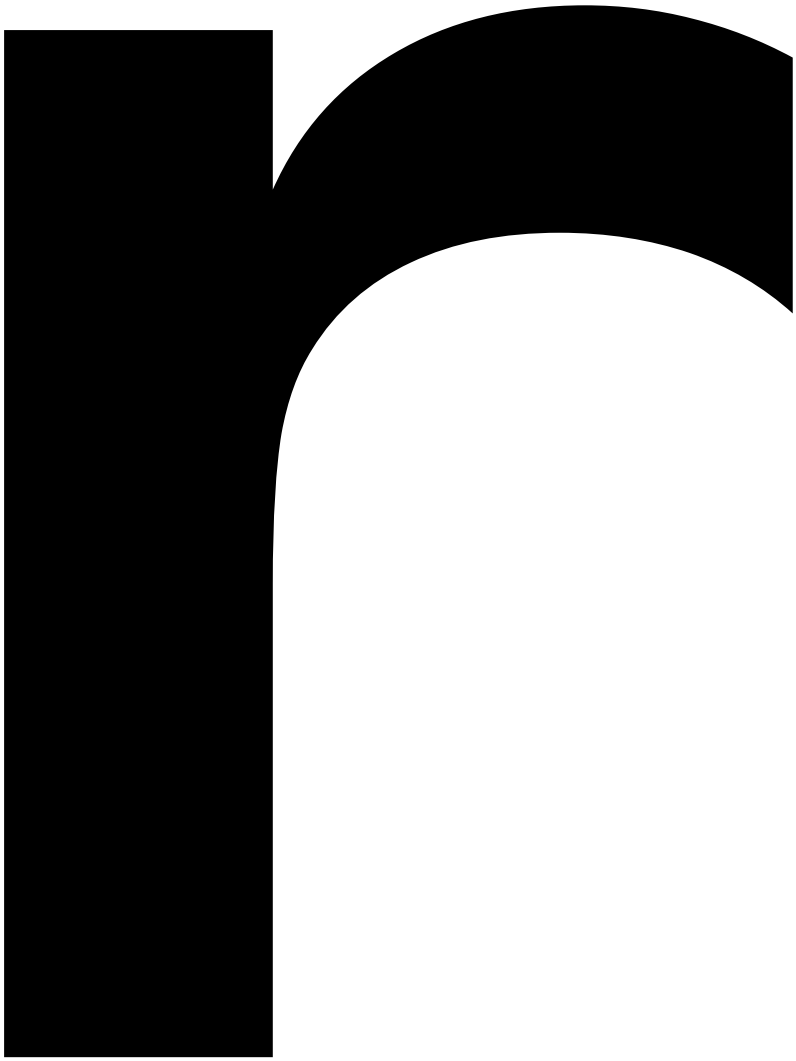


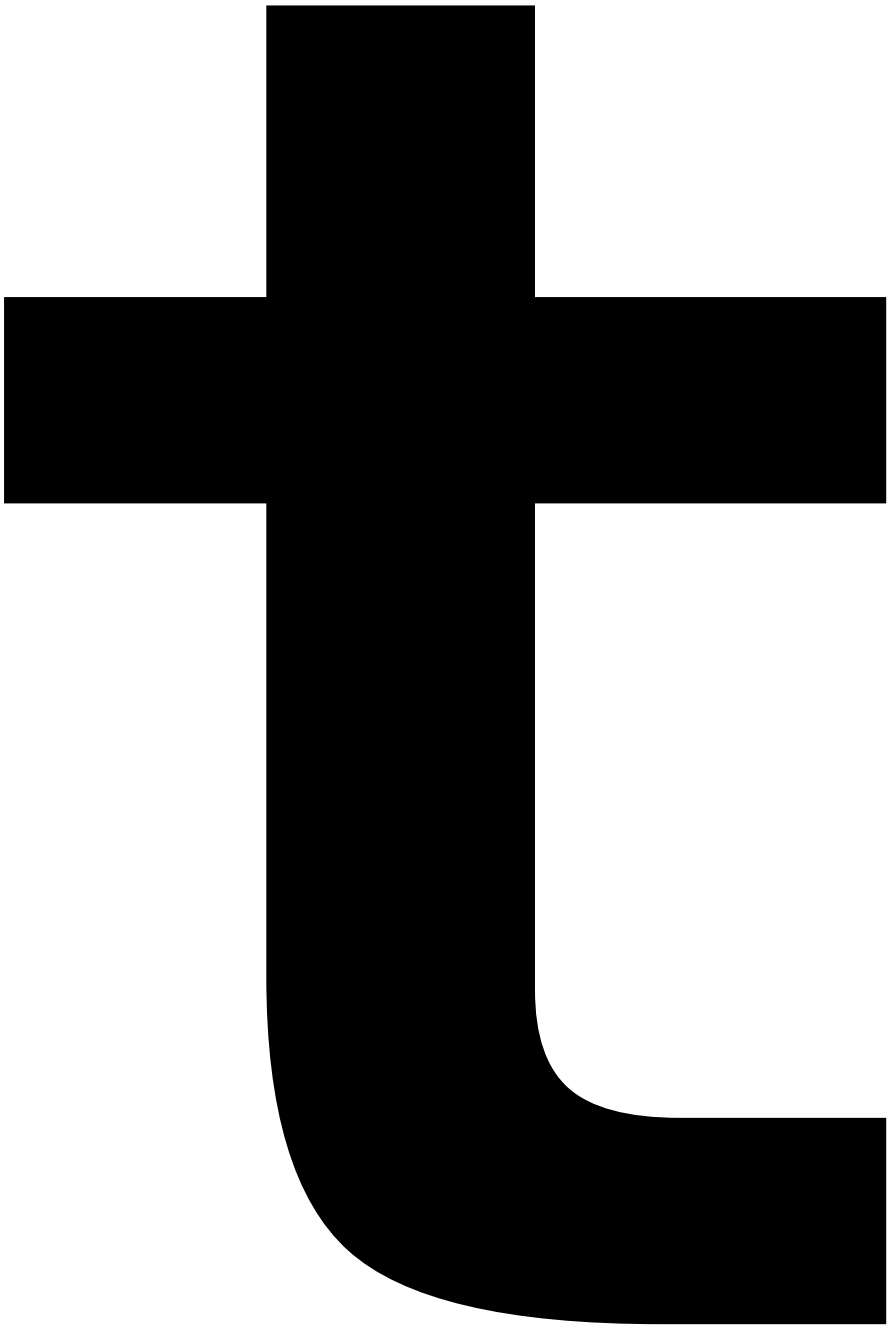


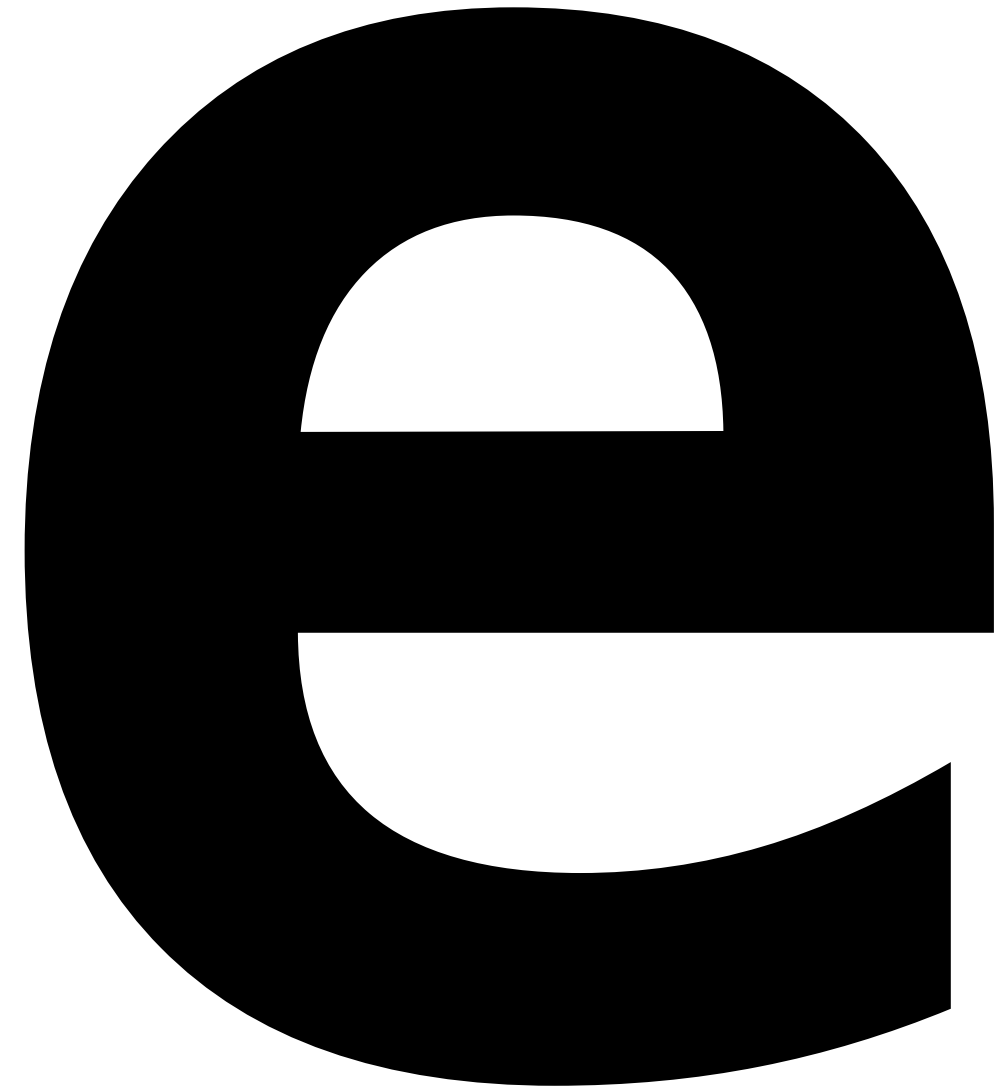


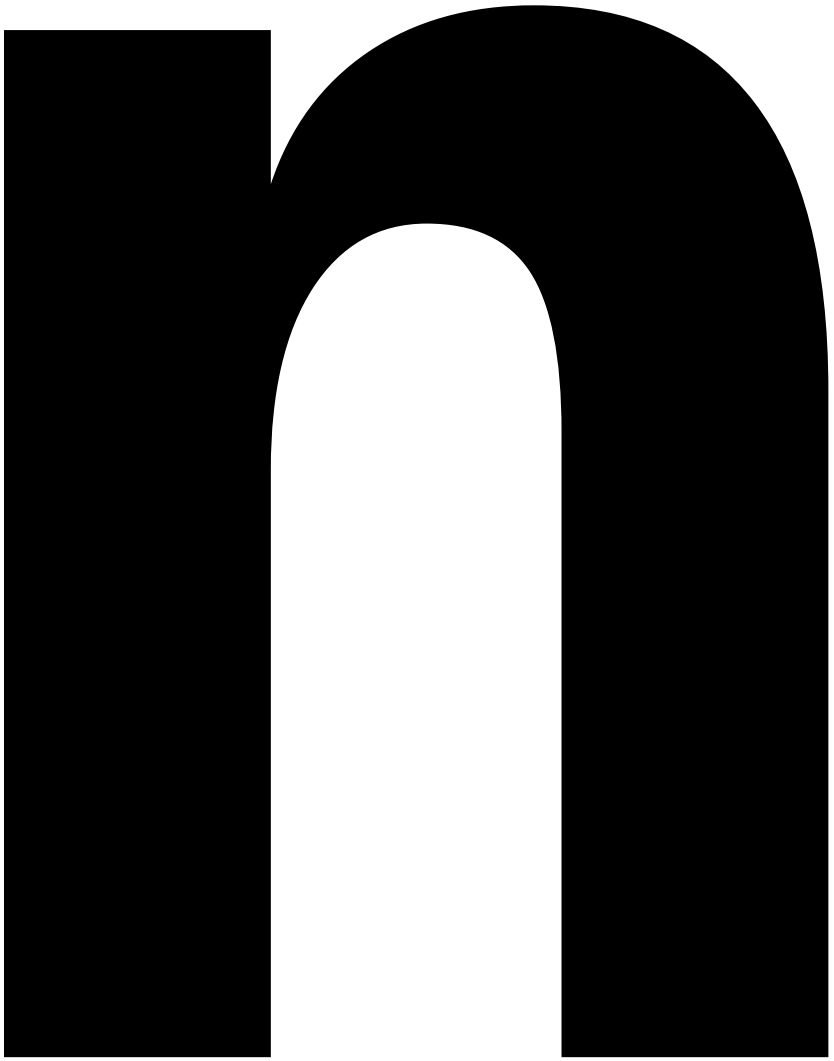


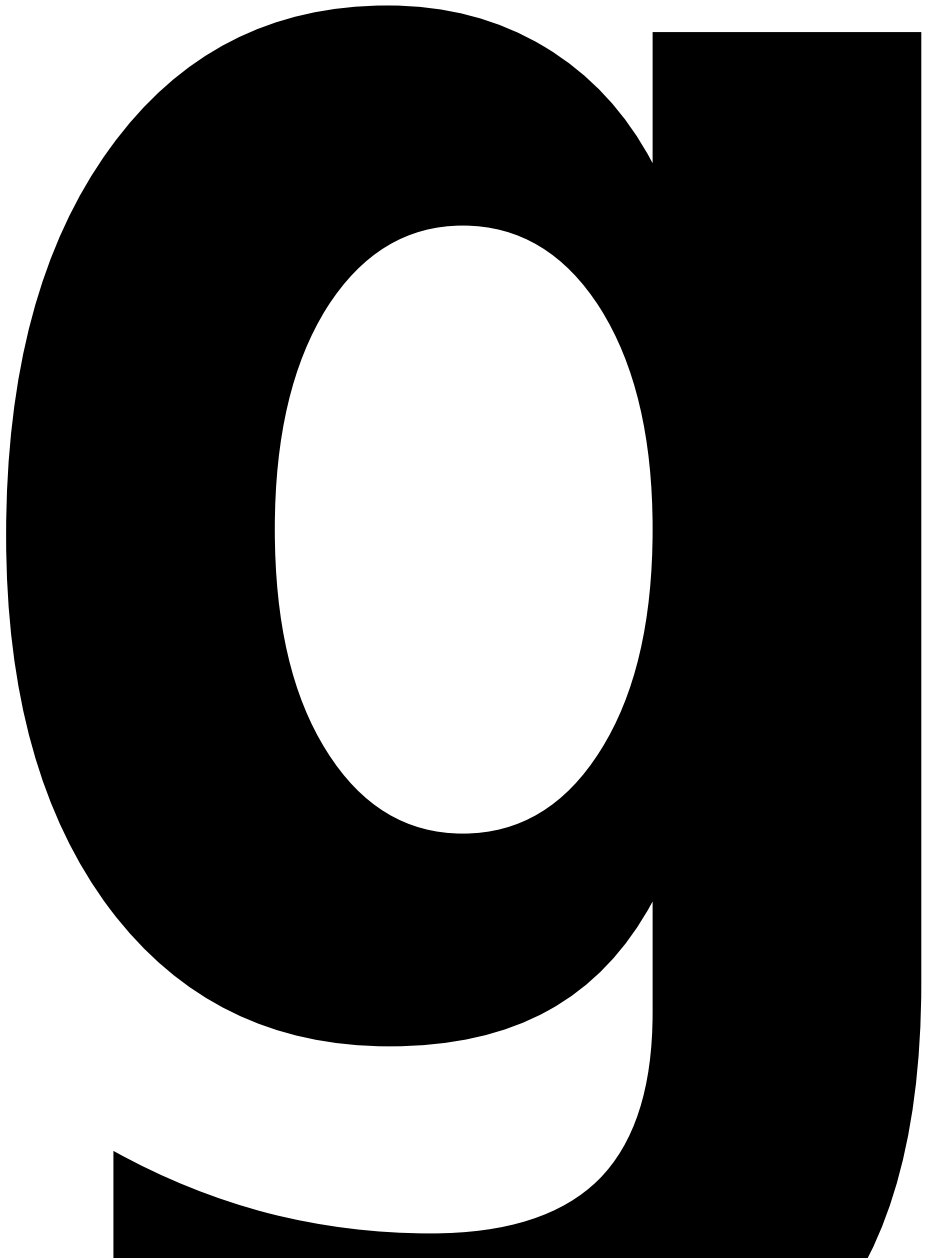


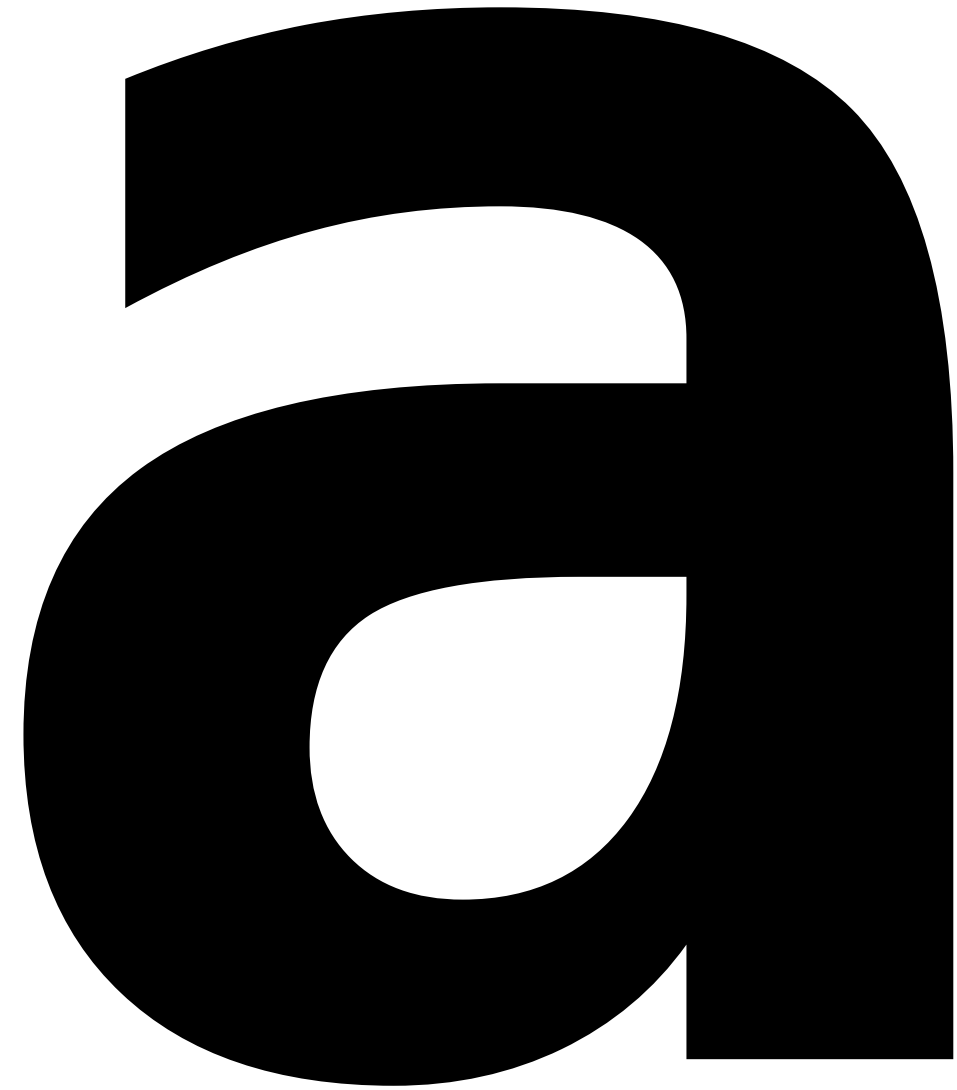


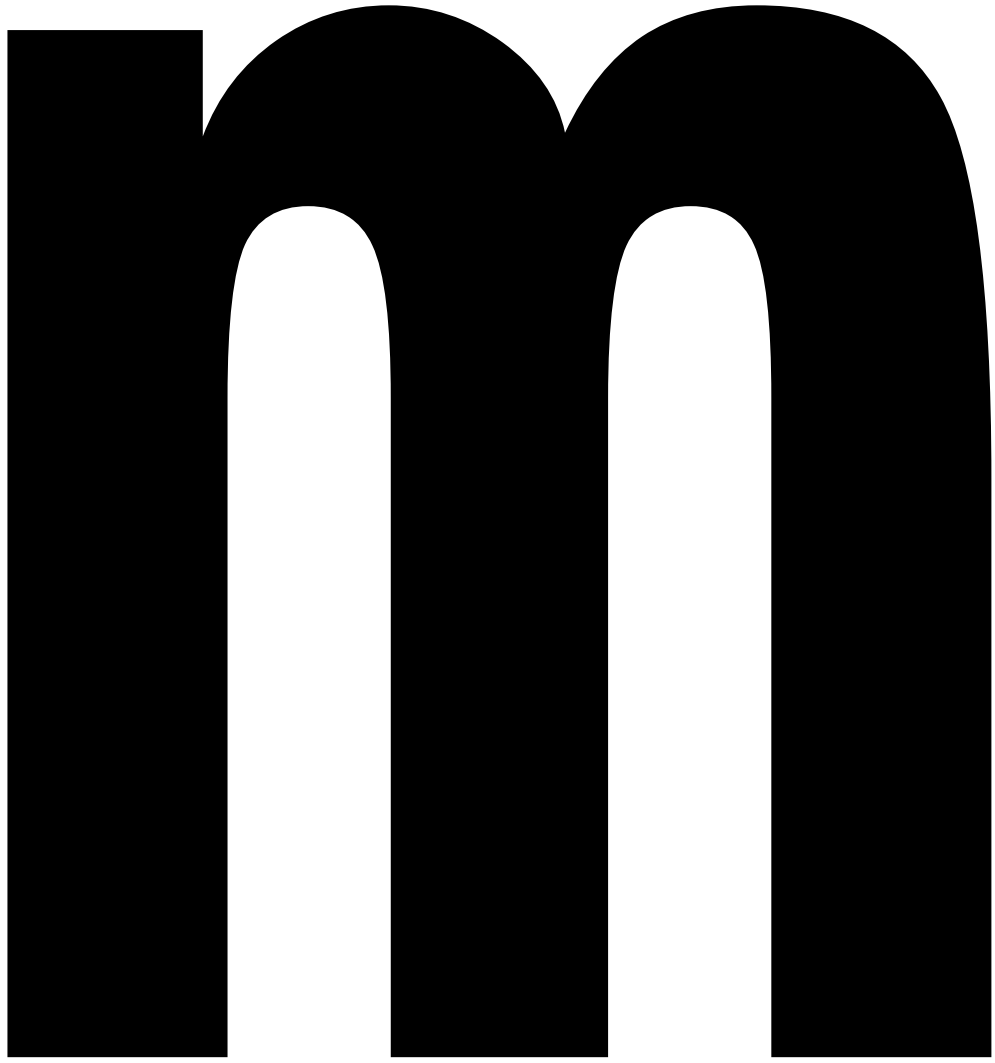


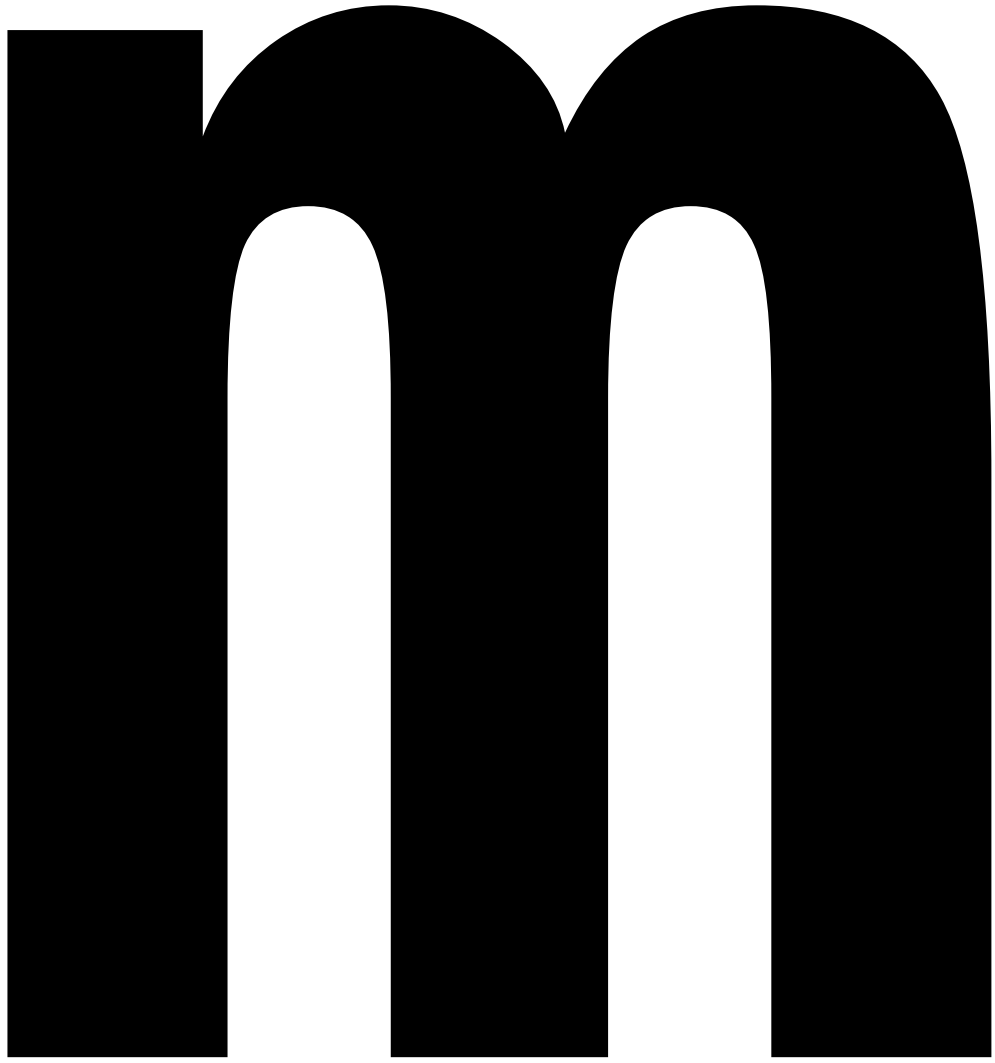


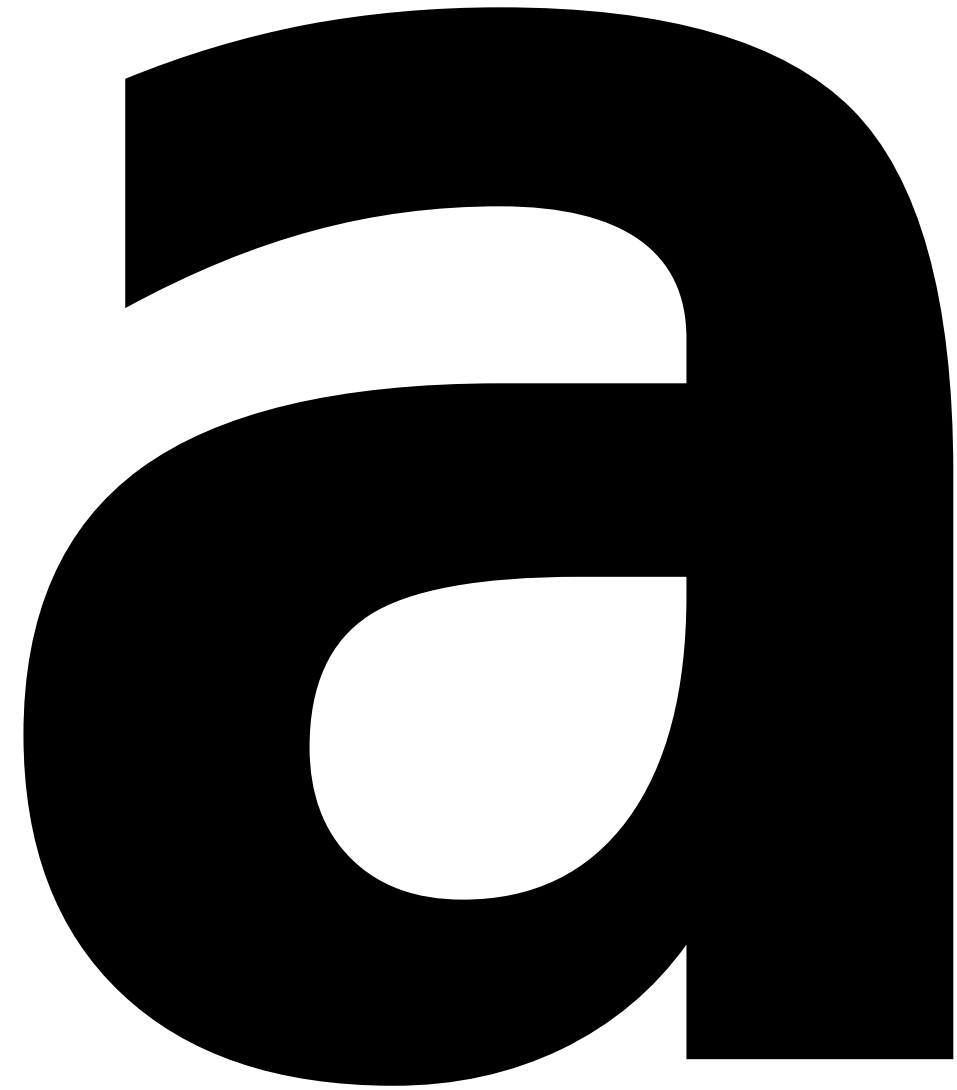


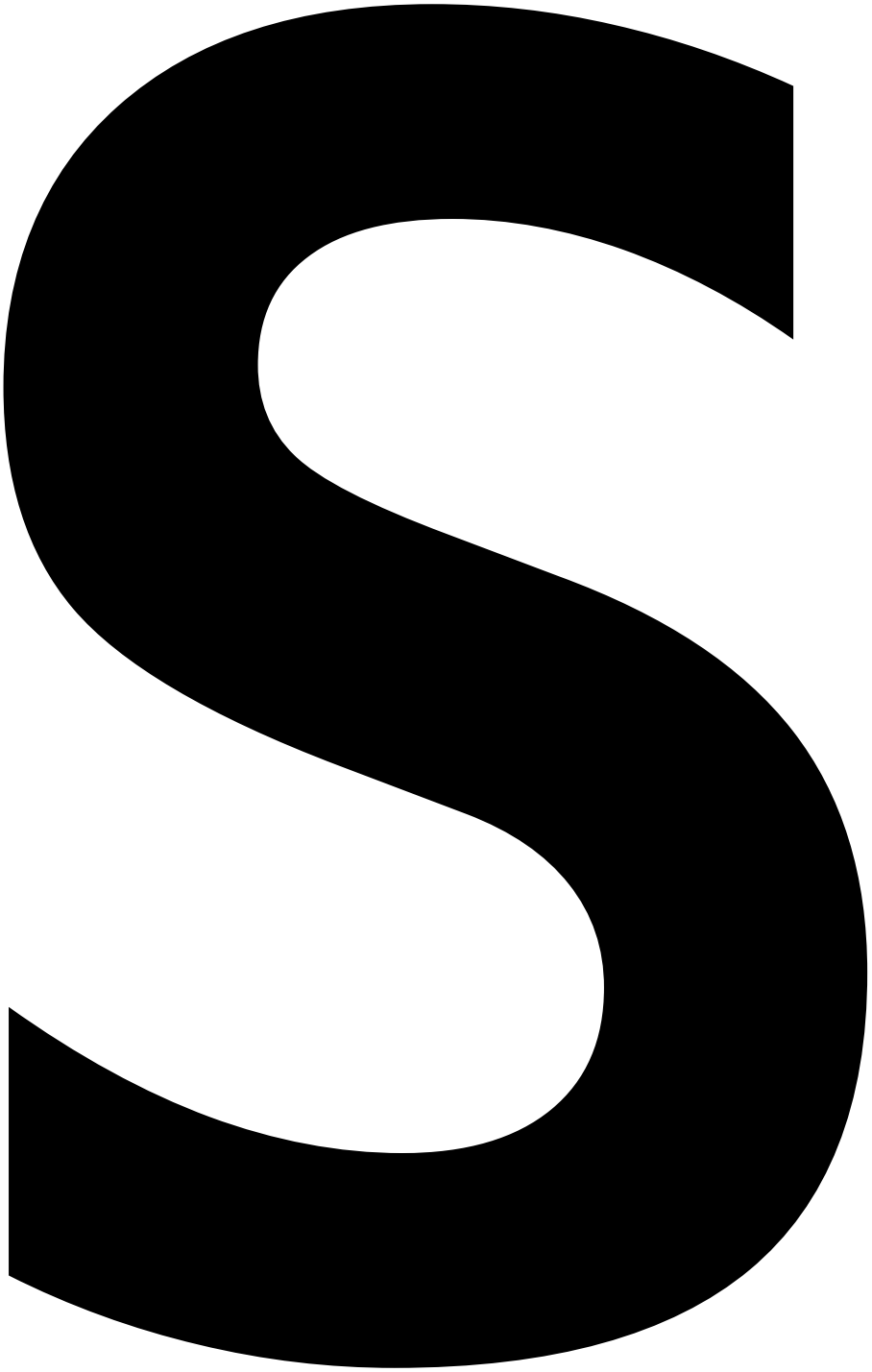


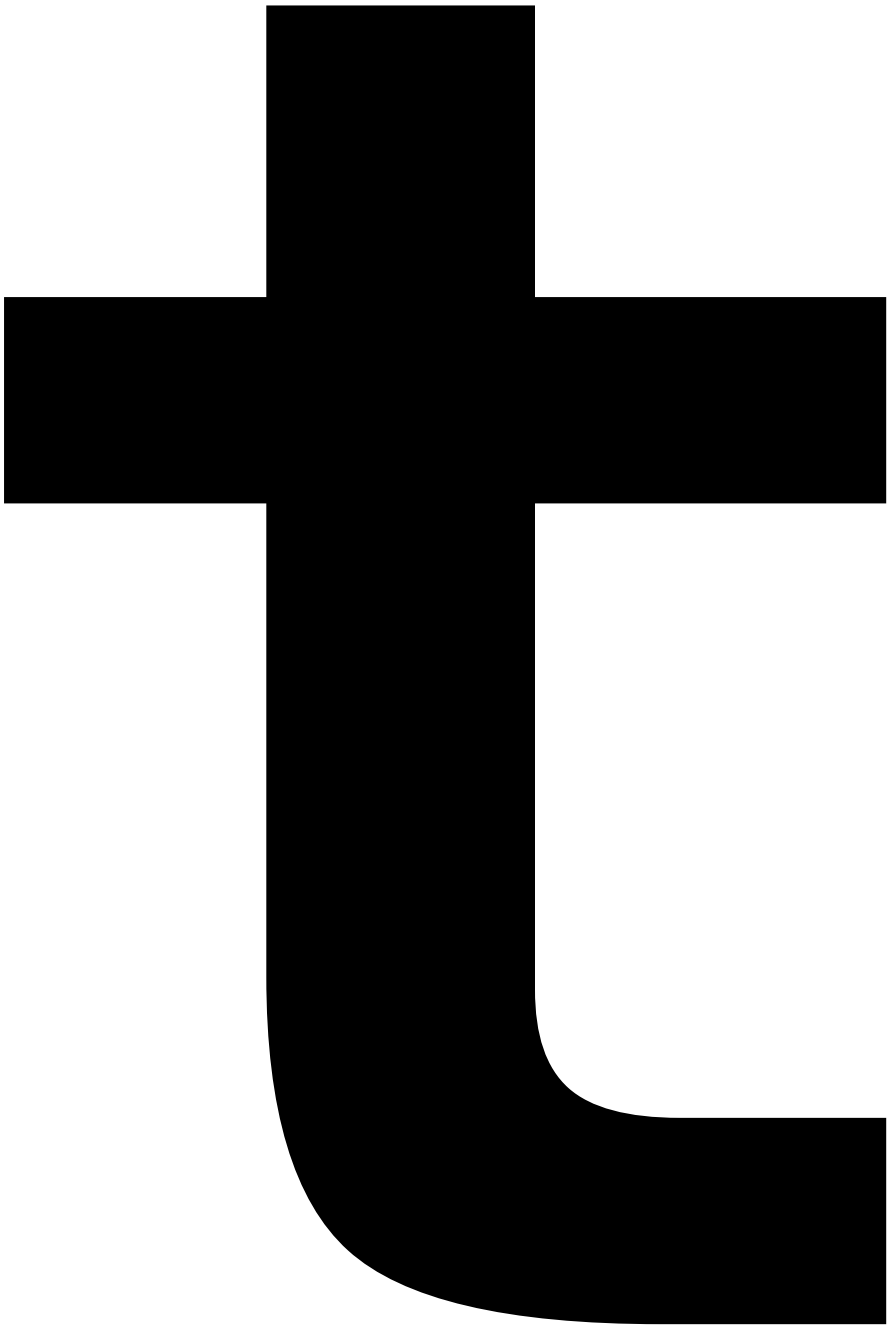


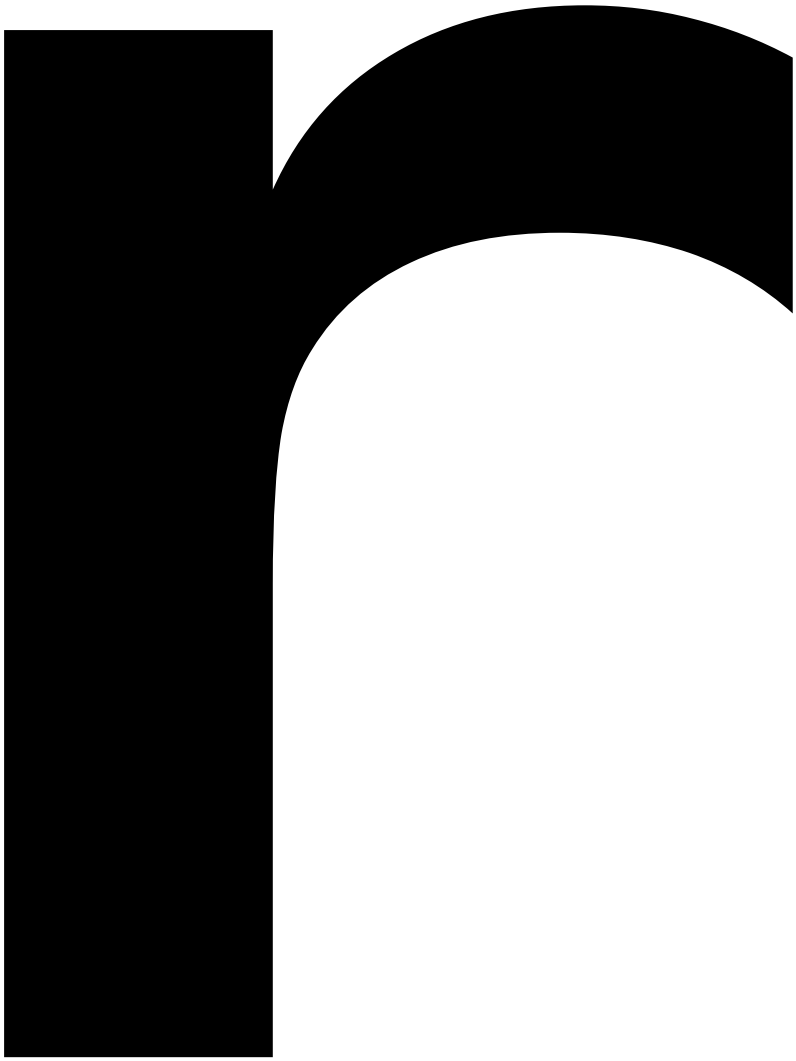


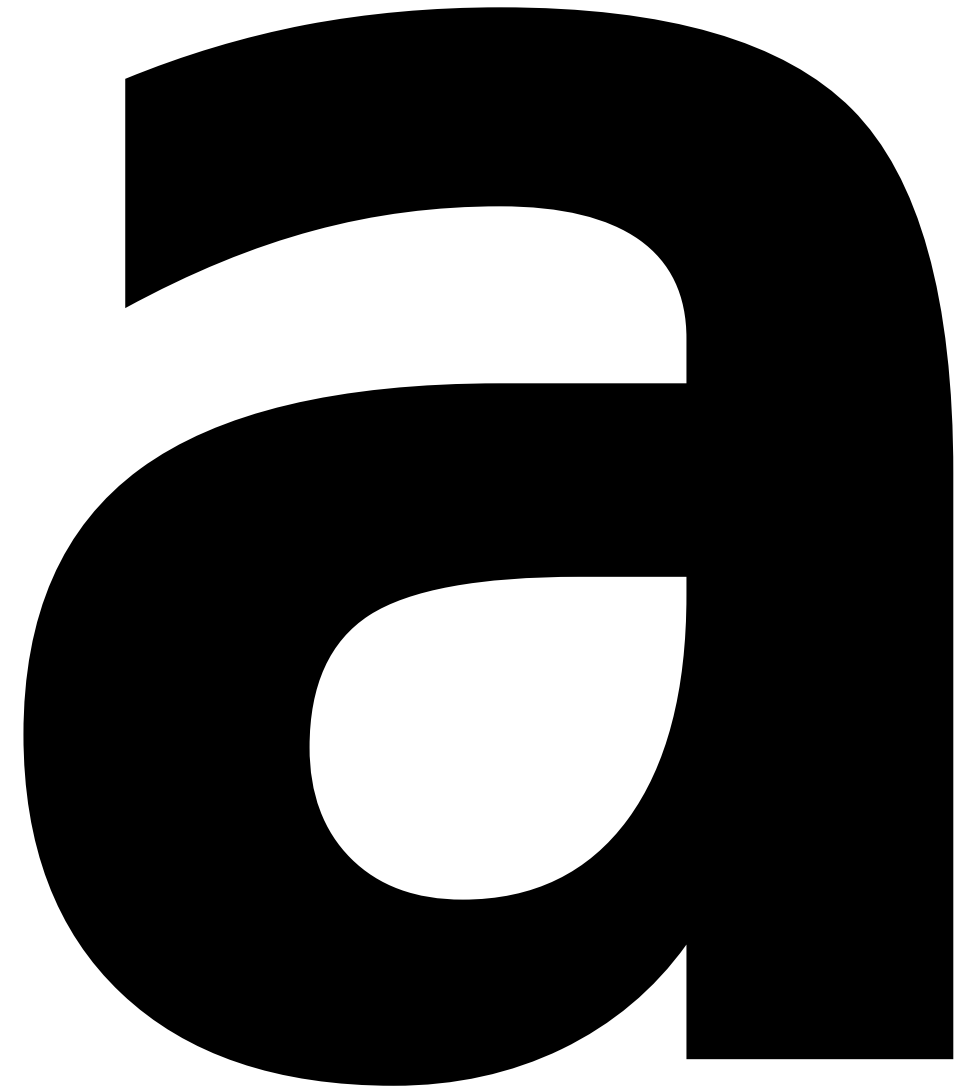


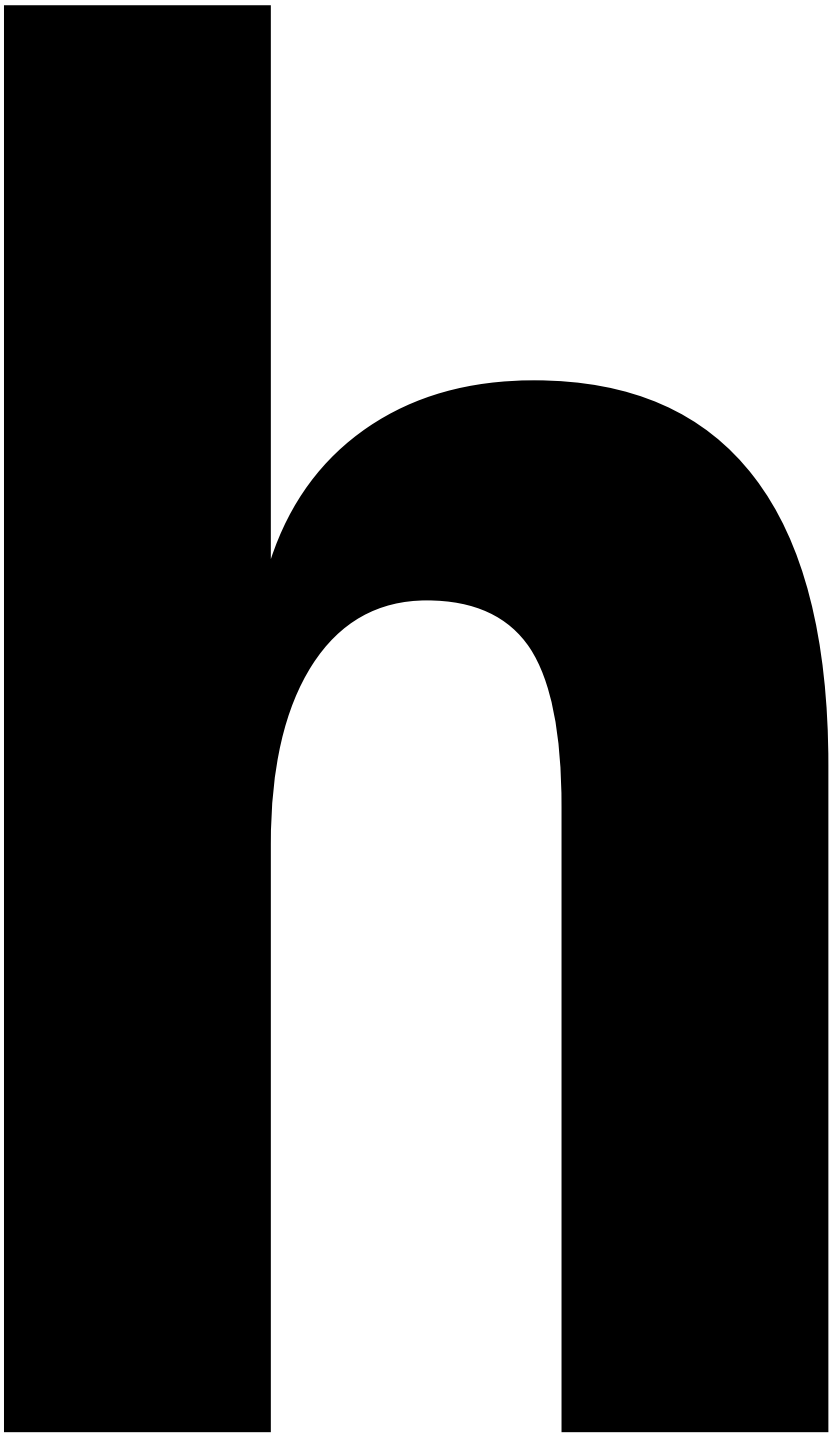


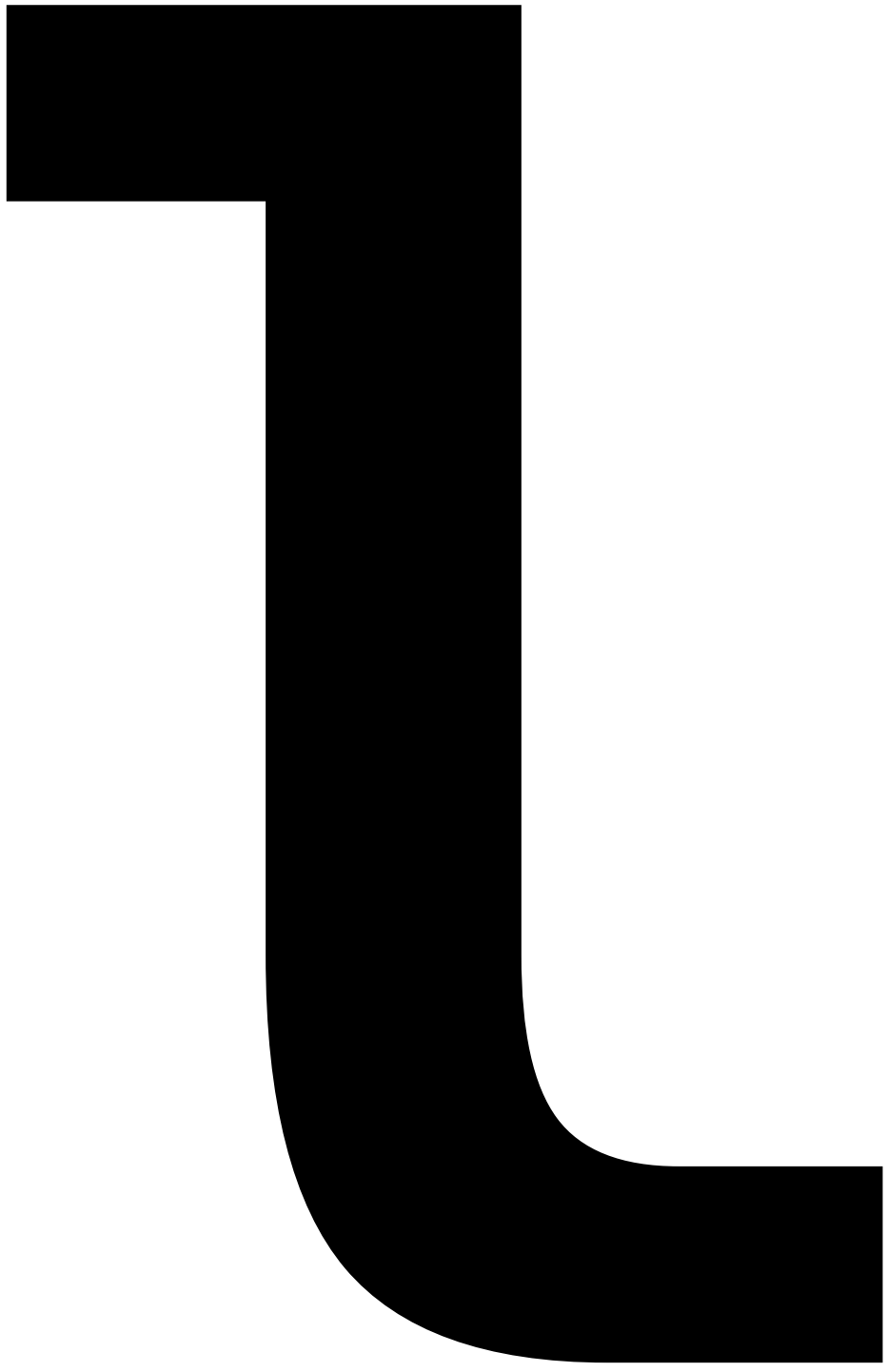


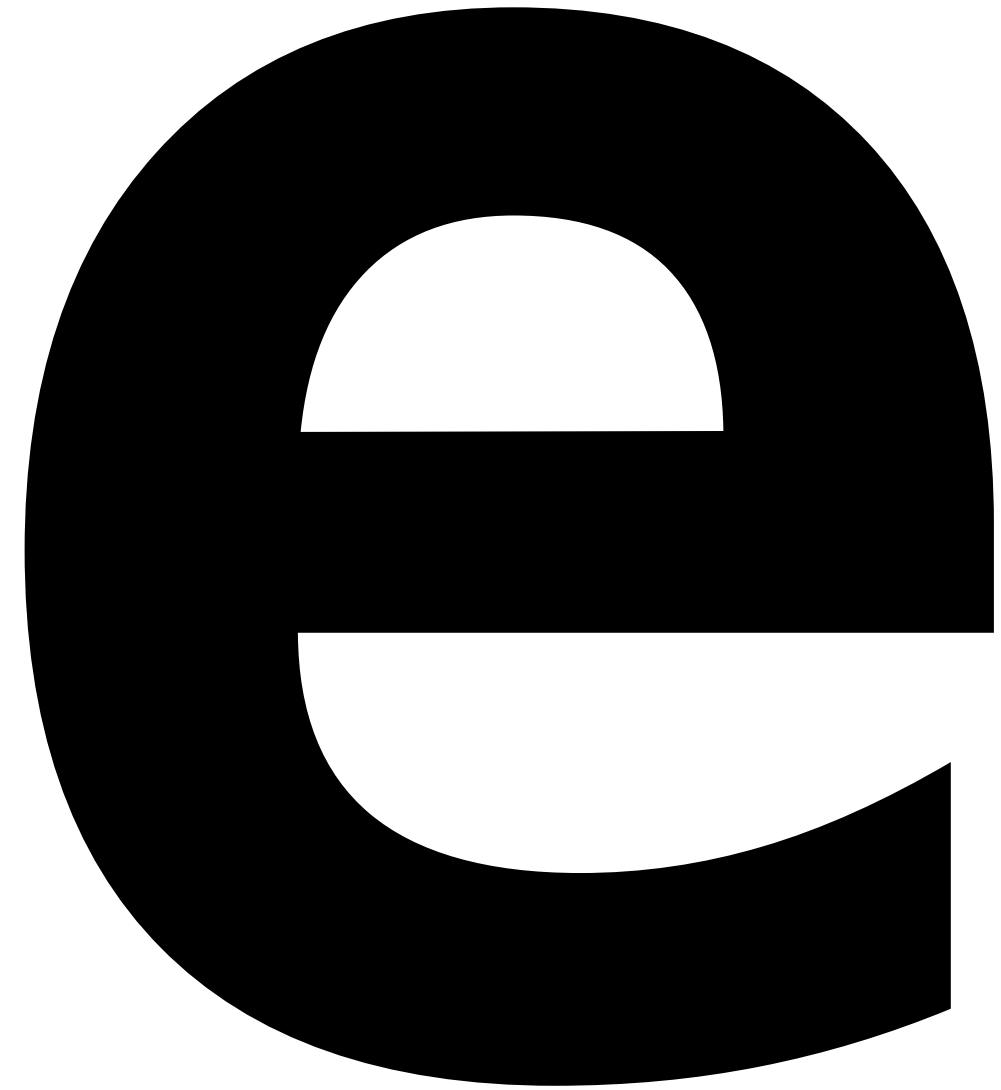


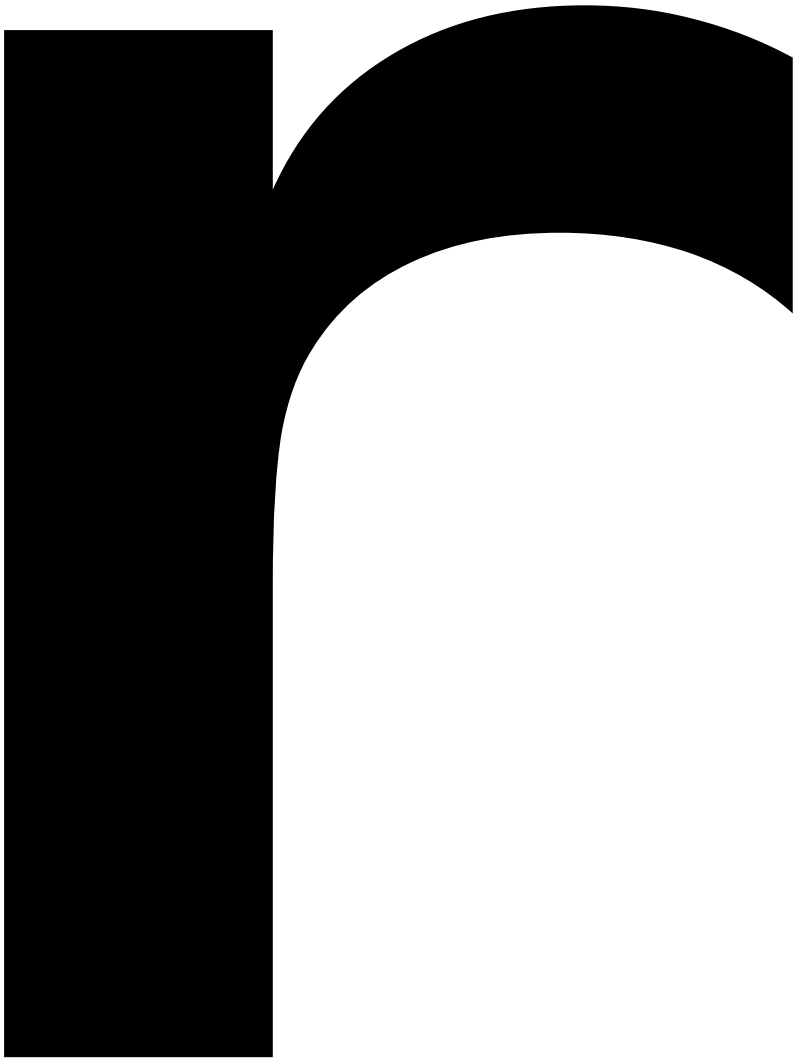


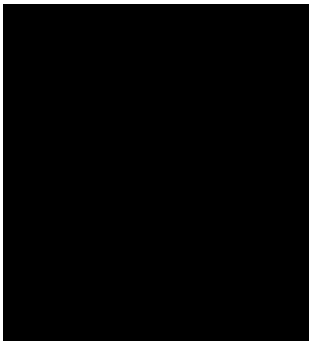




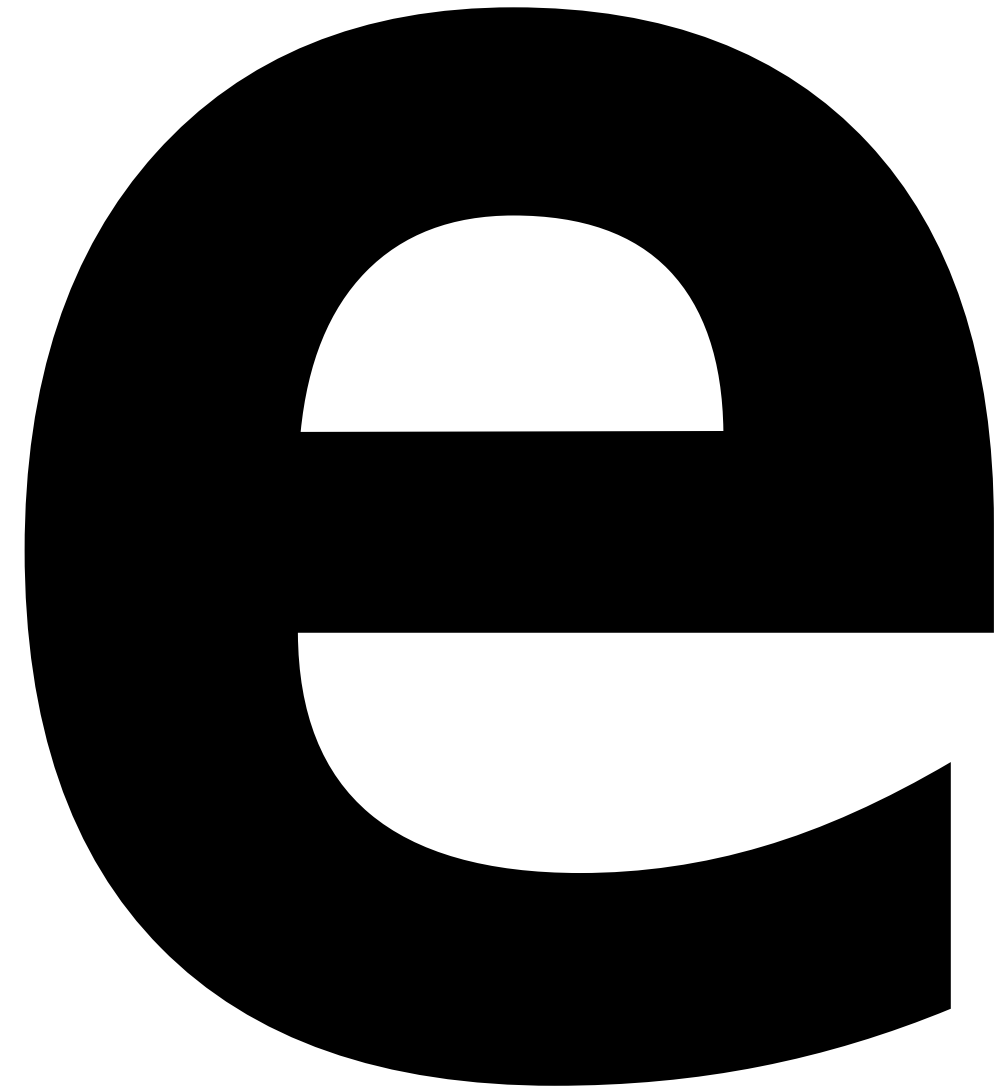


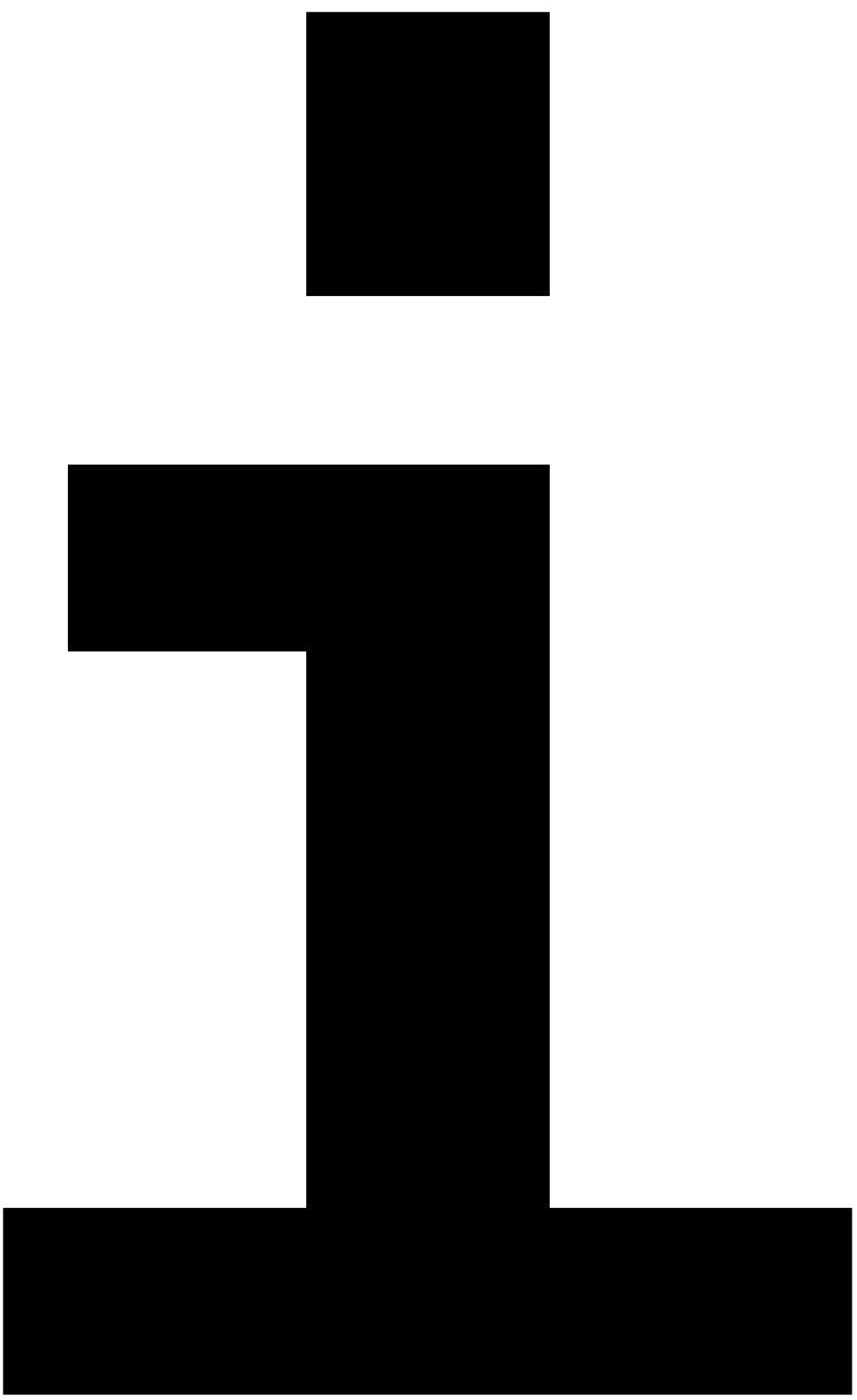




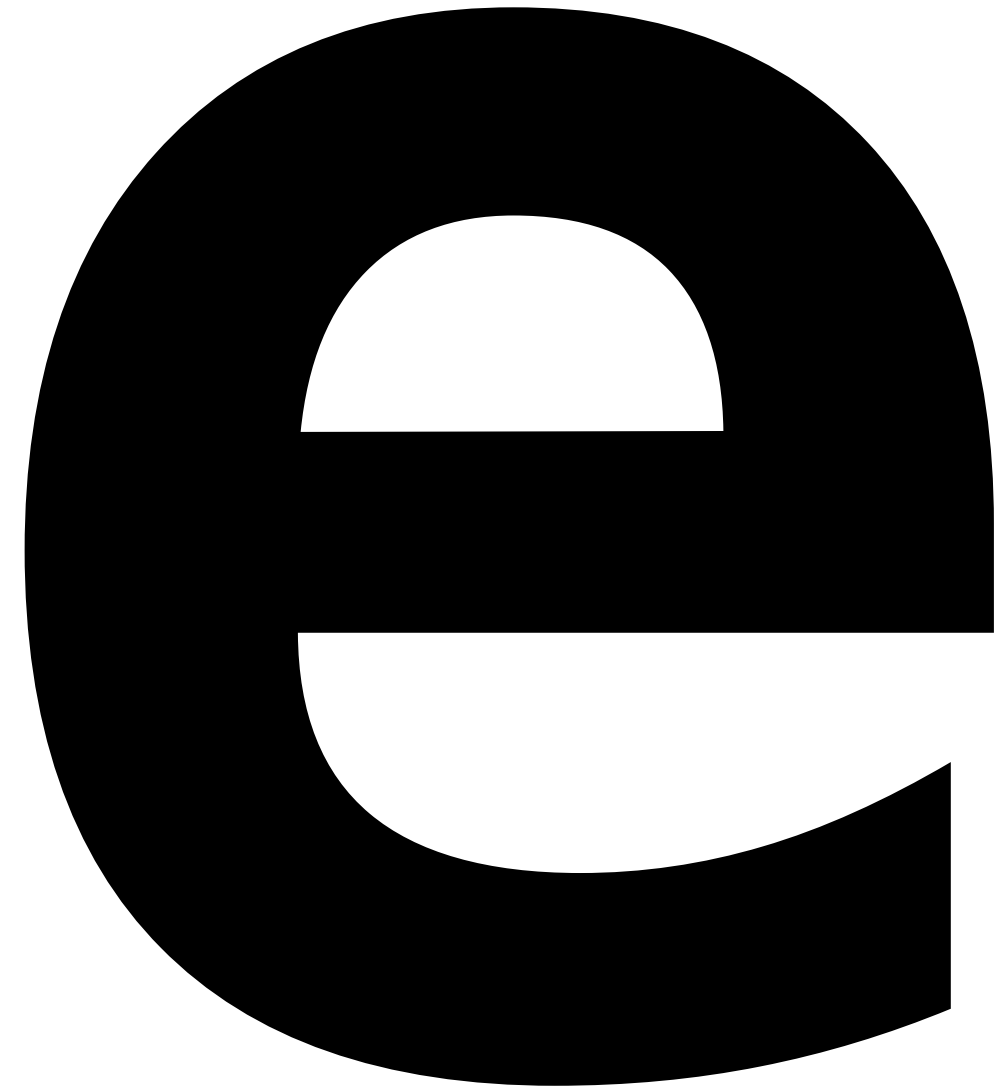


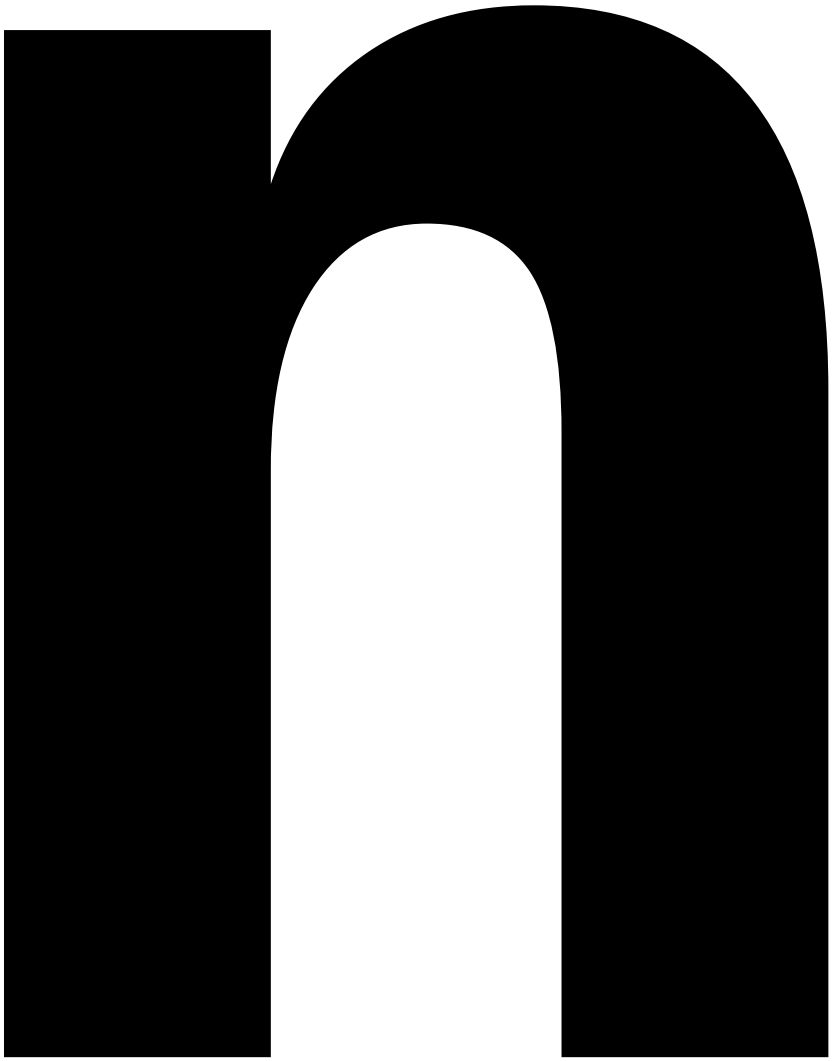
B



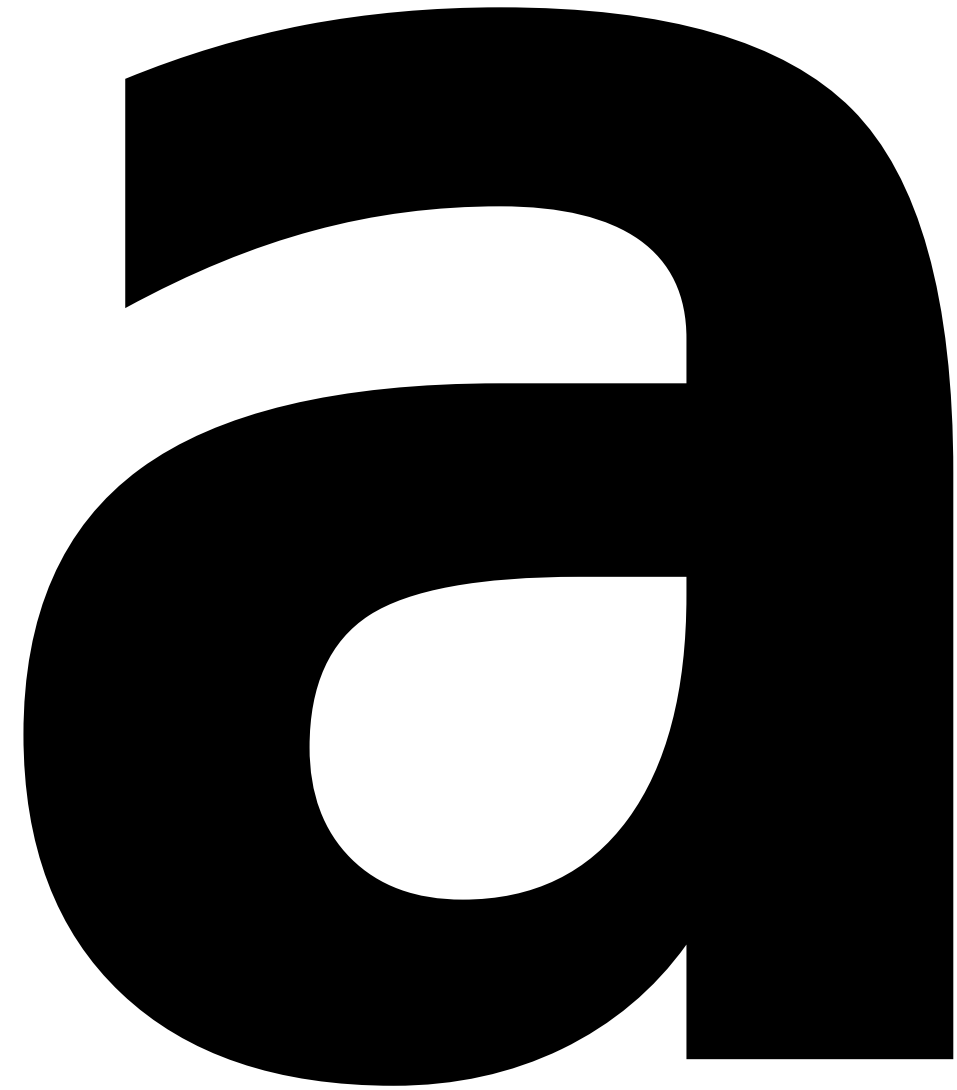


d



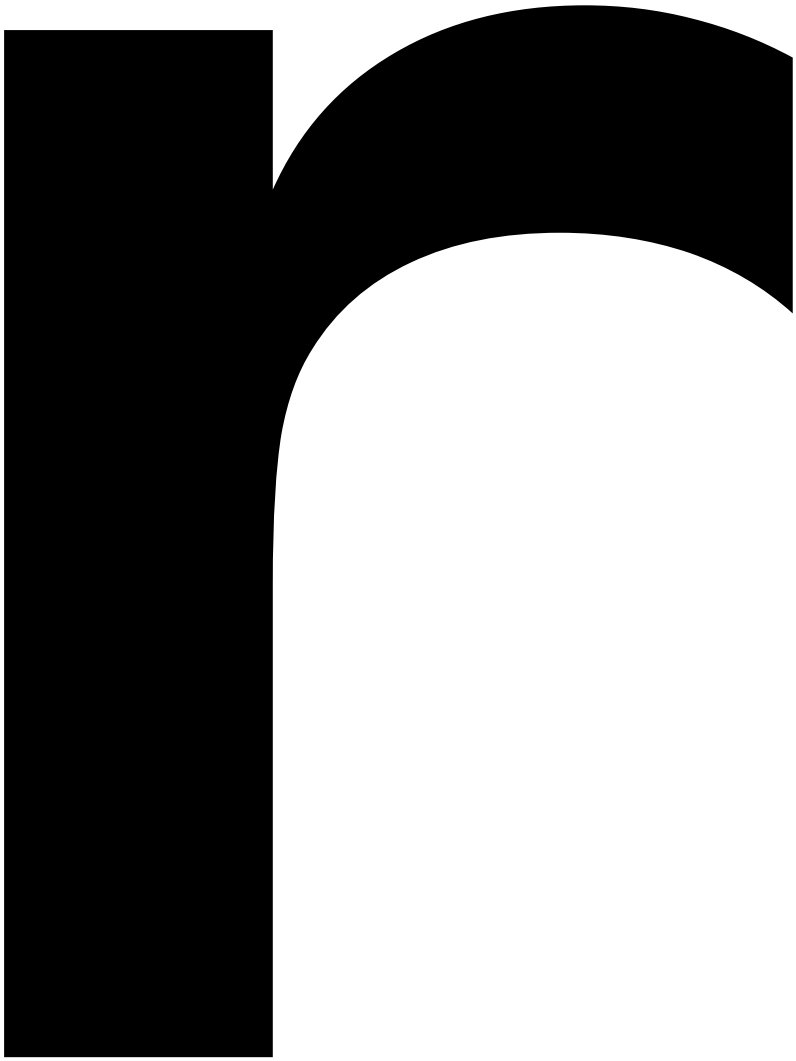


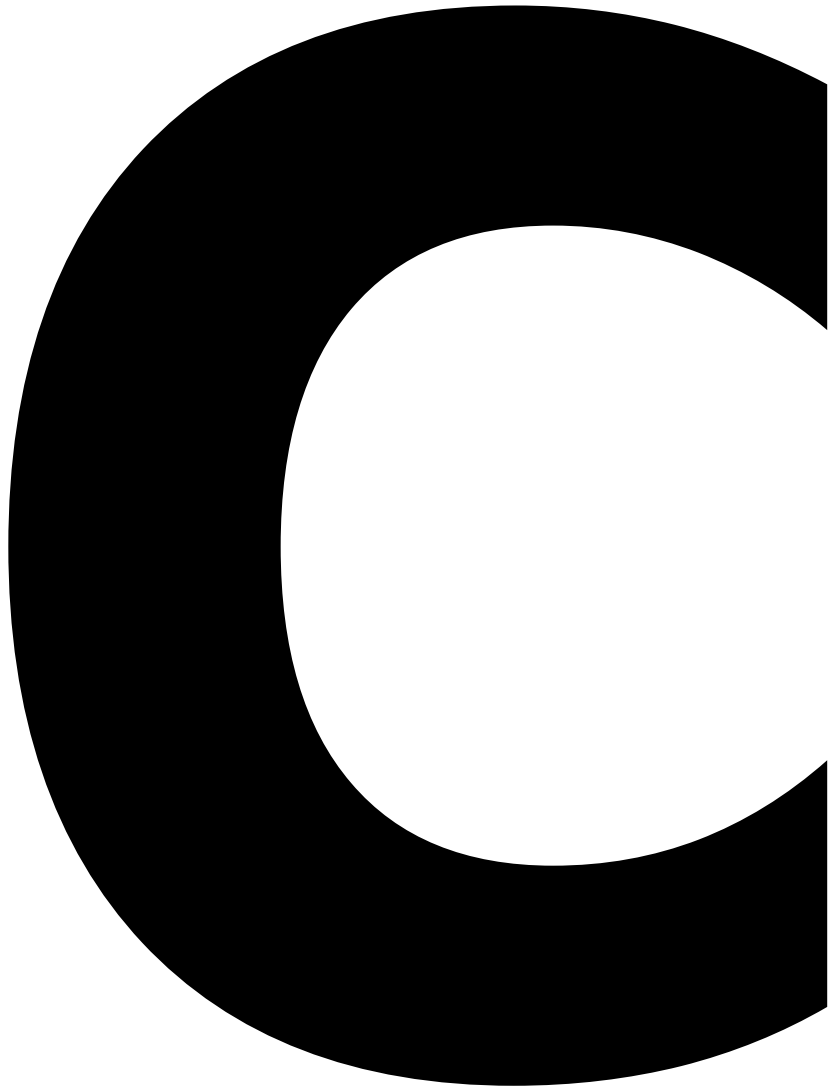
d

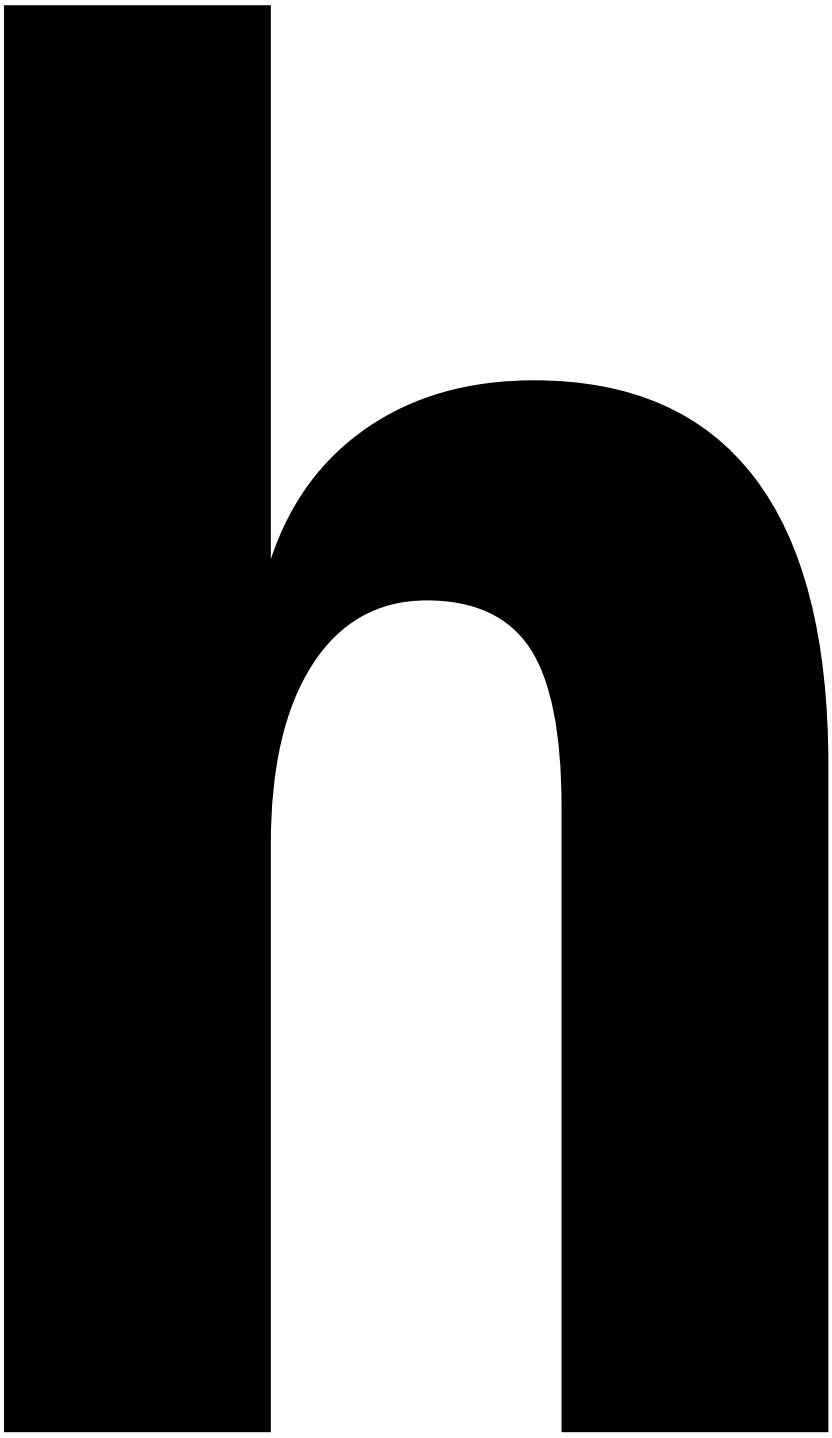


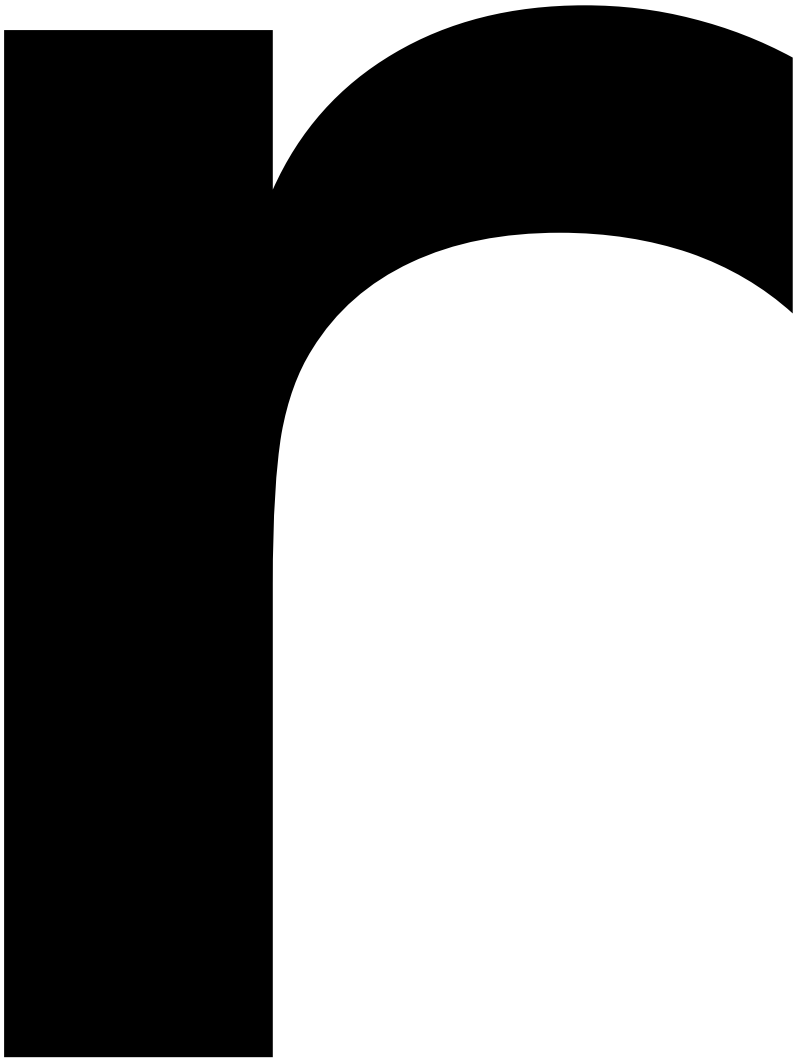
d

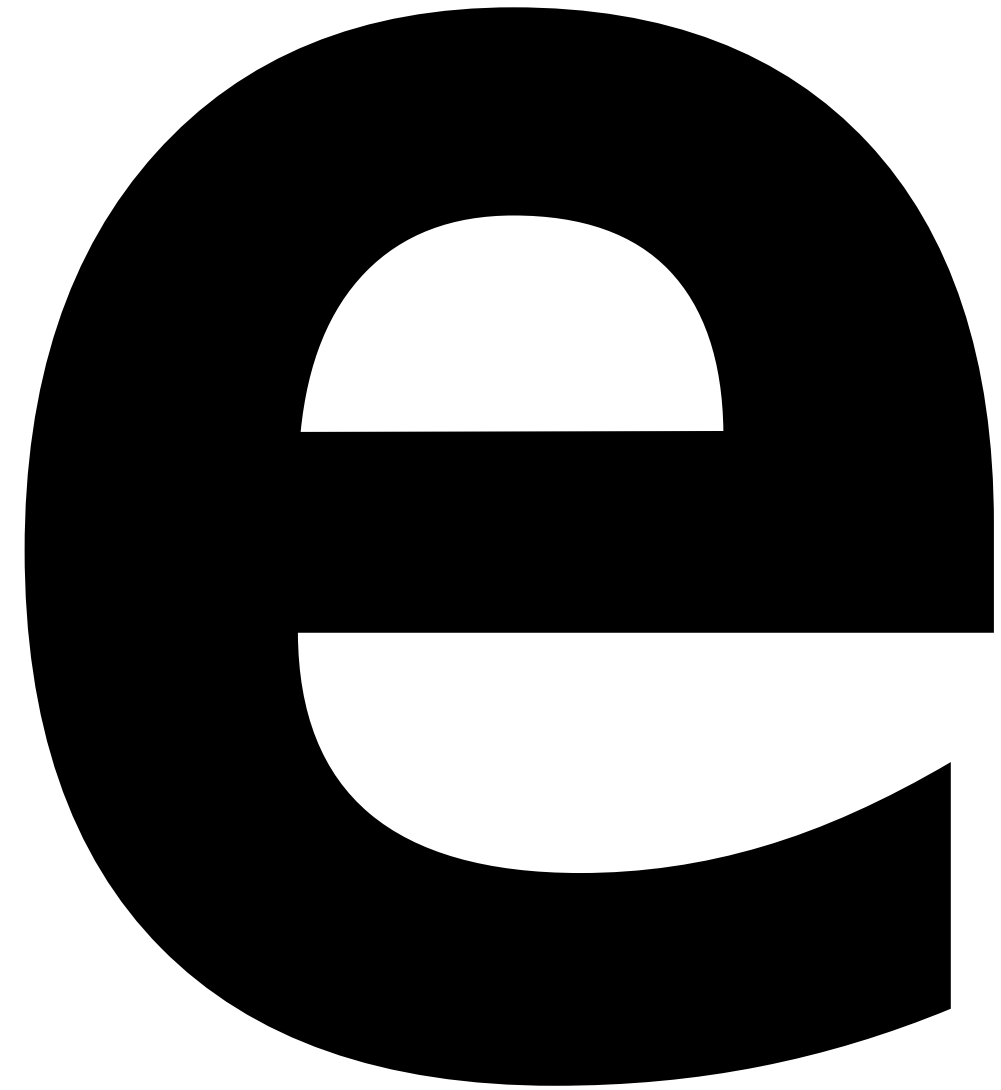
u

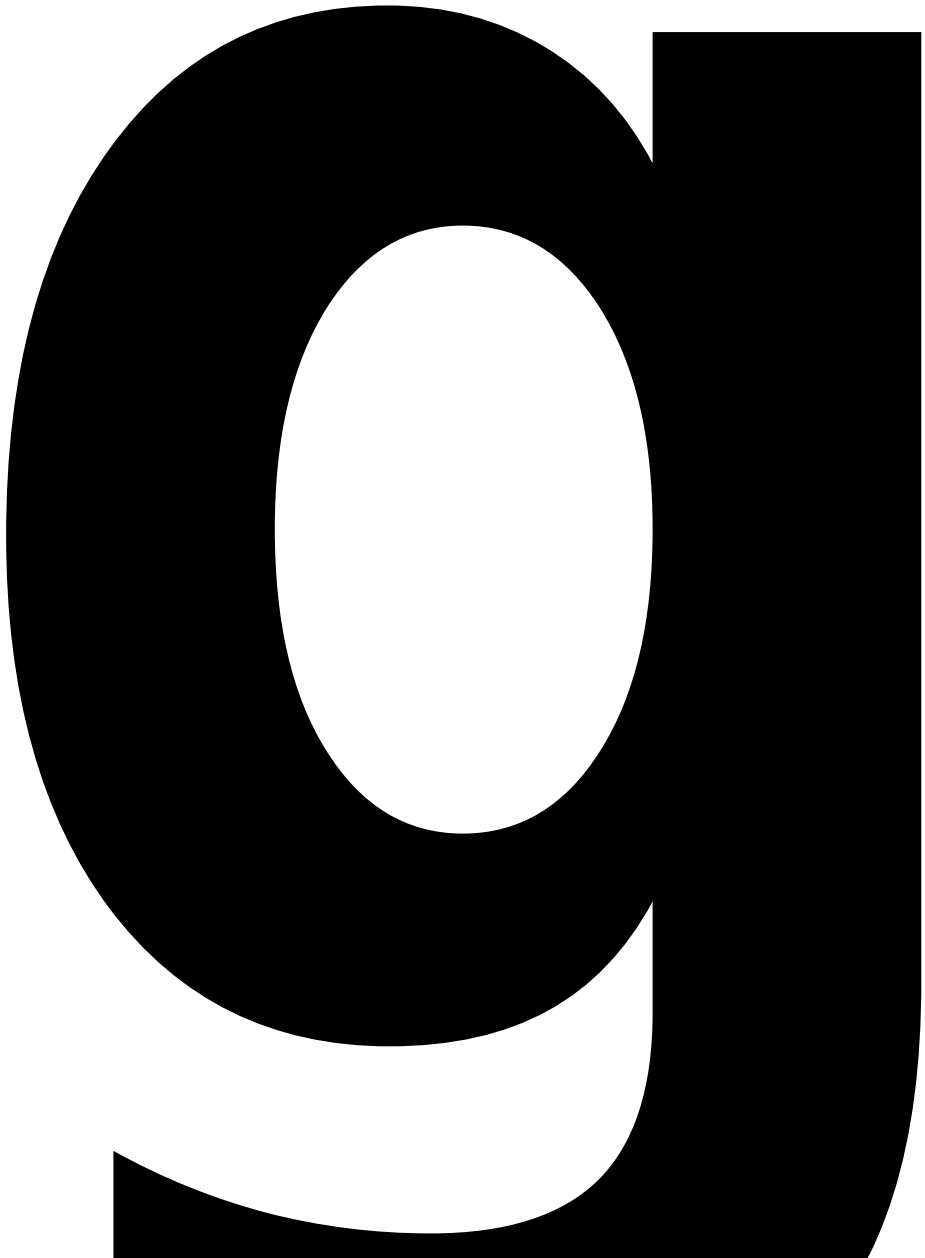


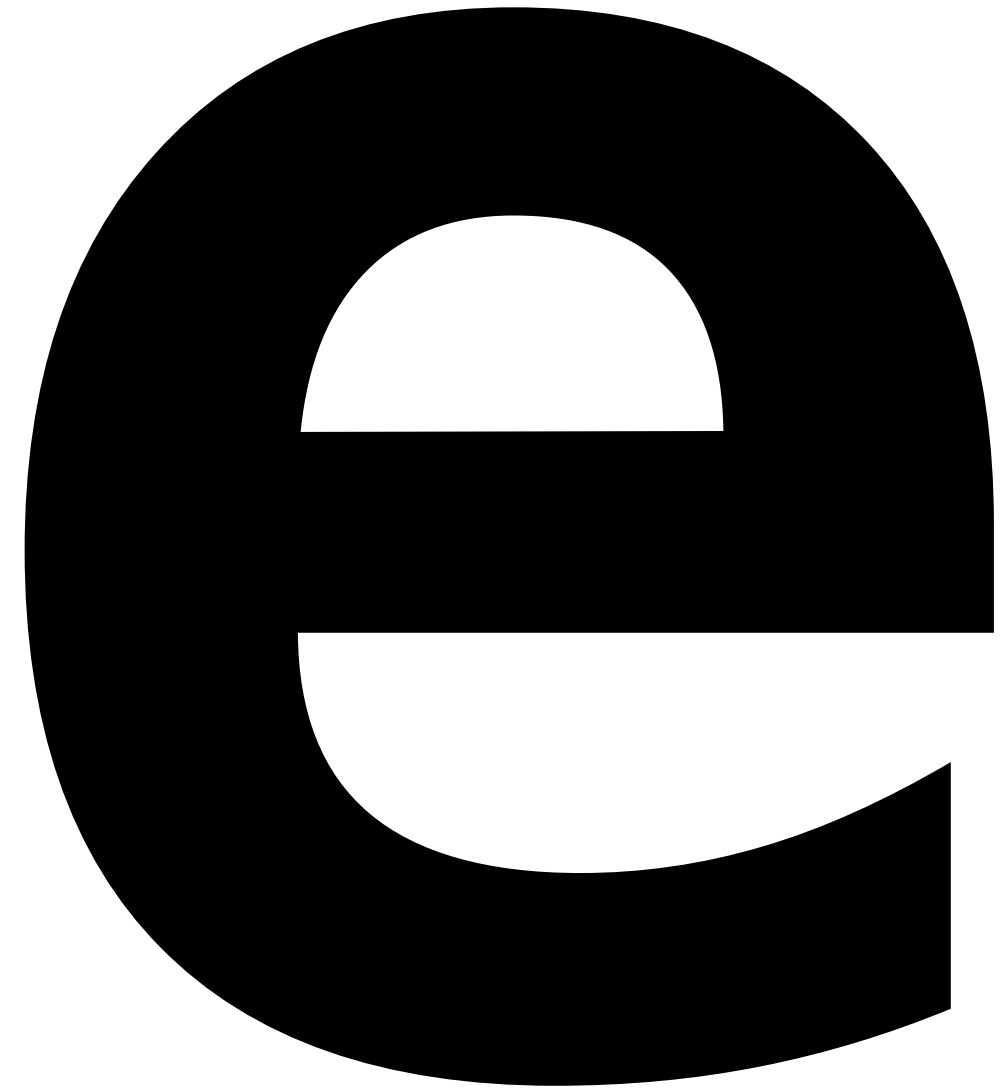


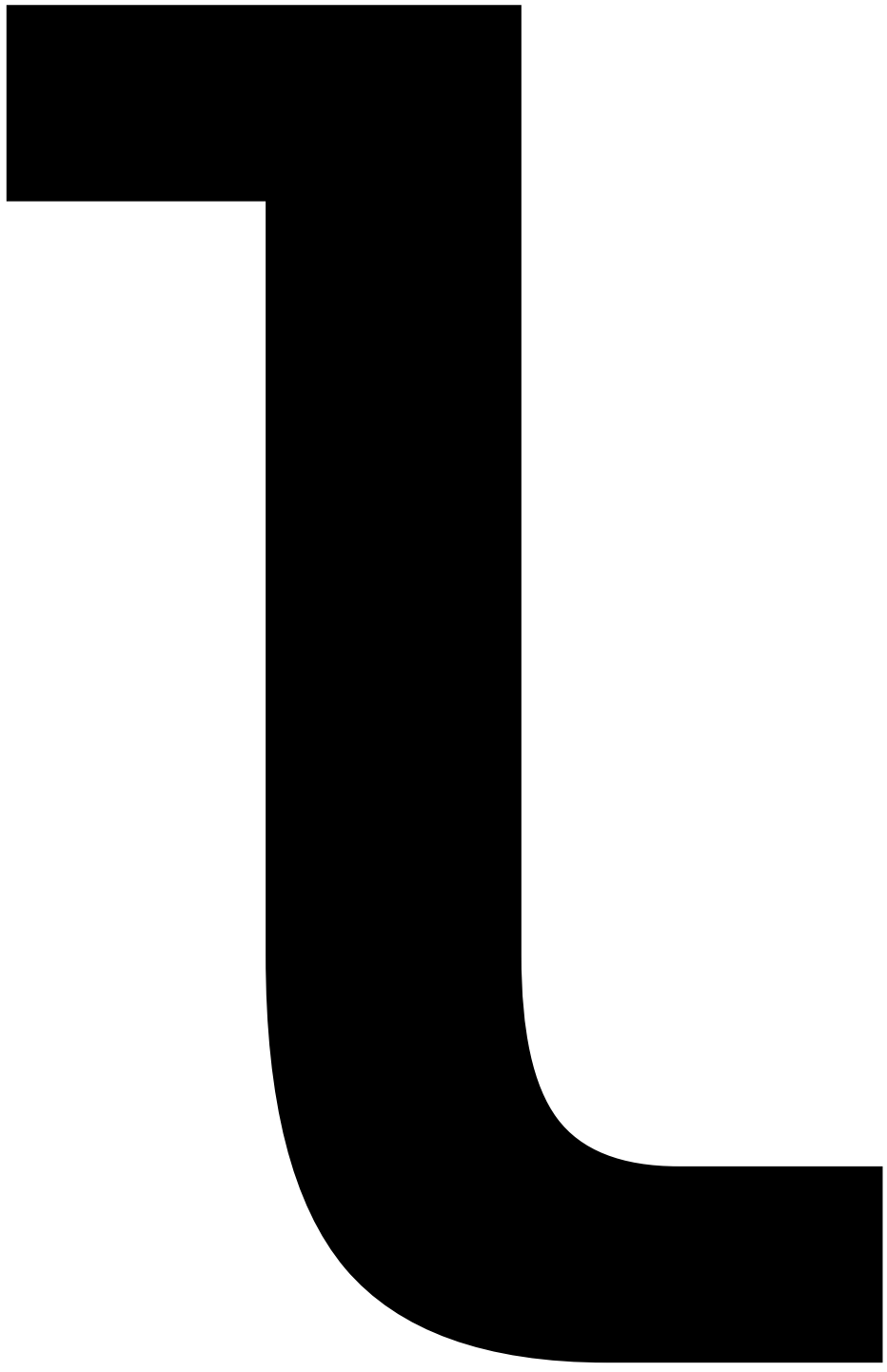


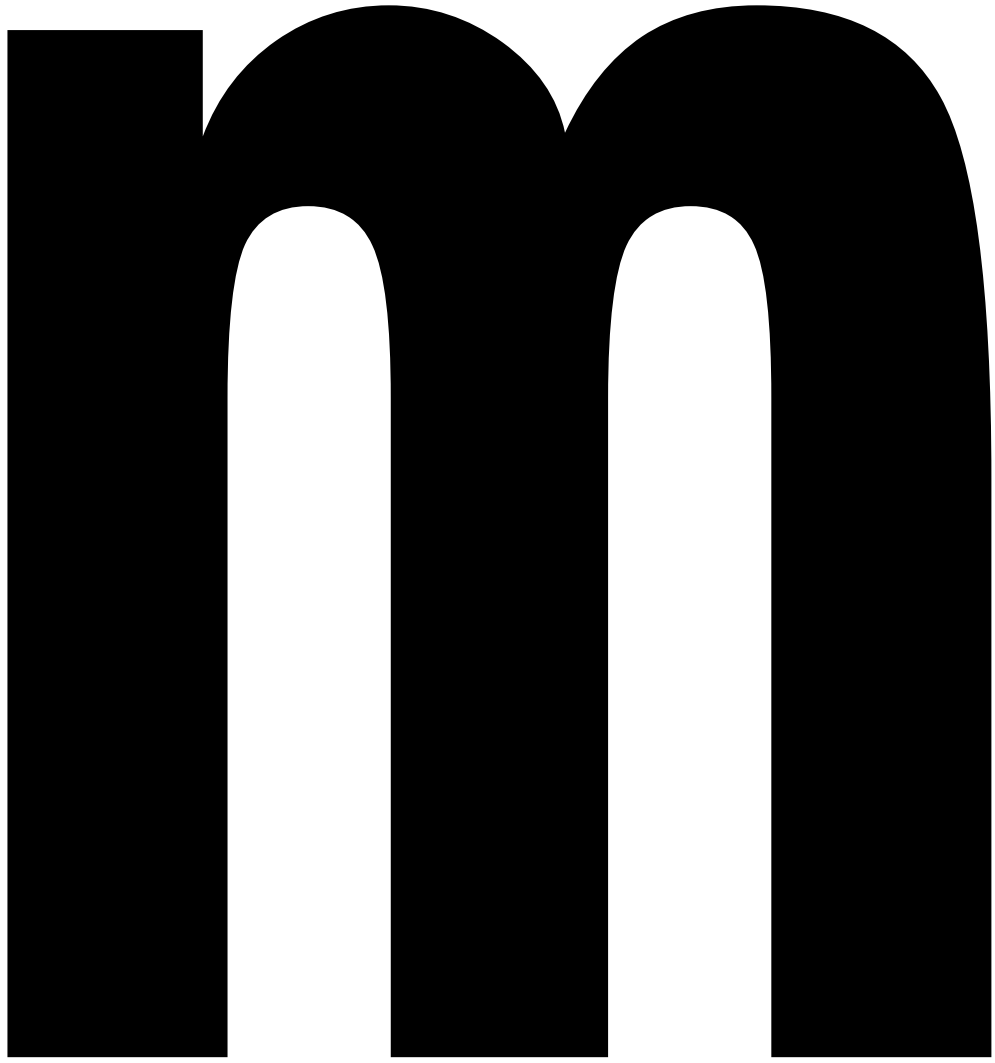


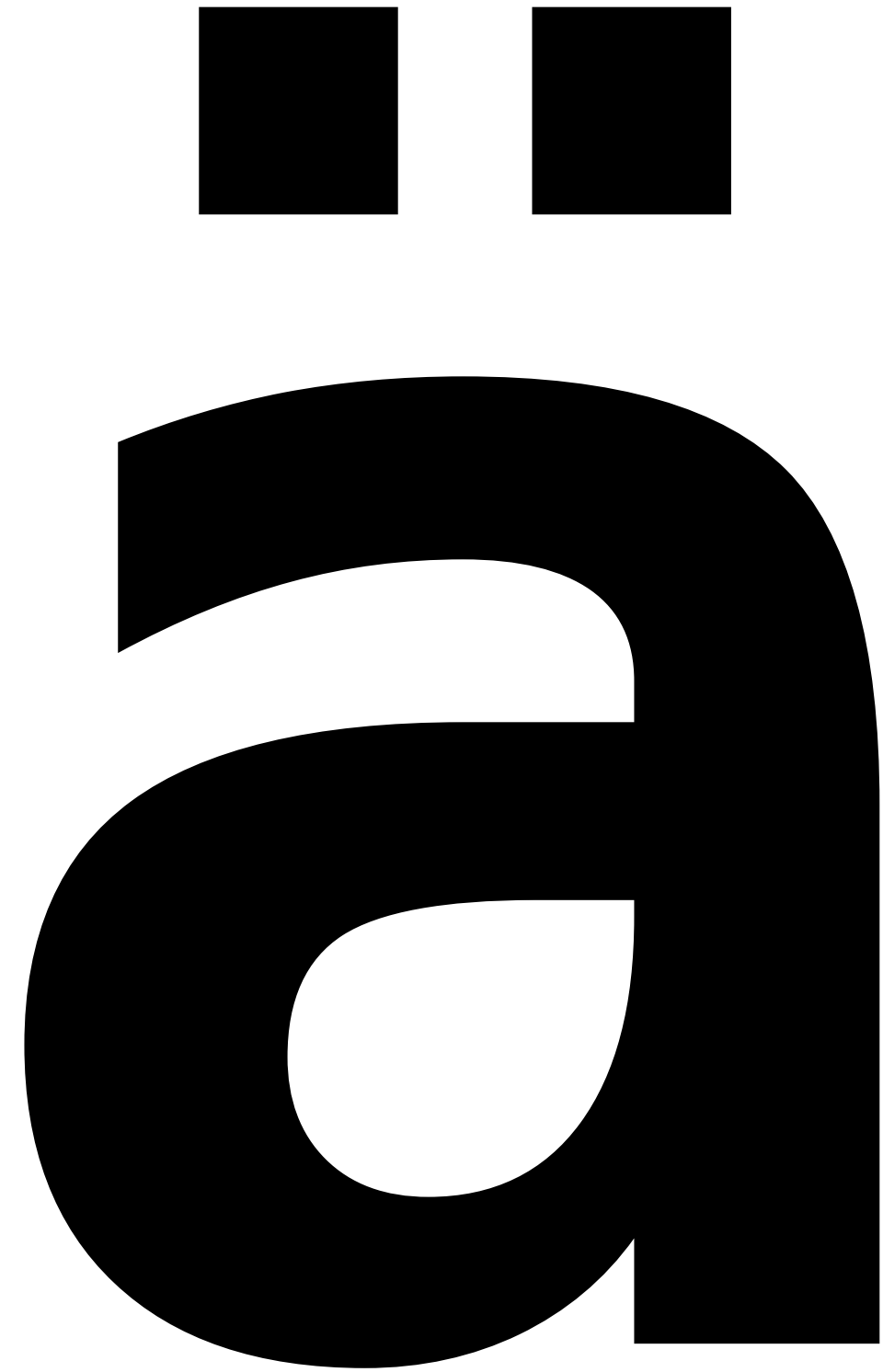


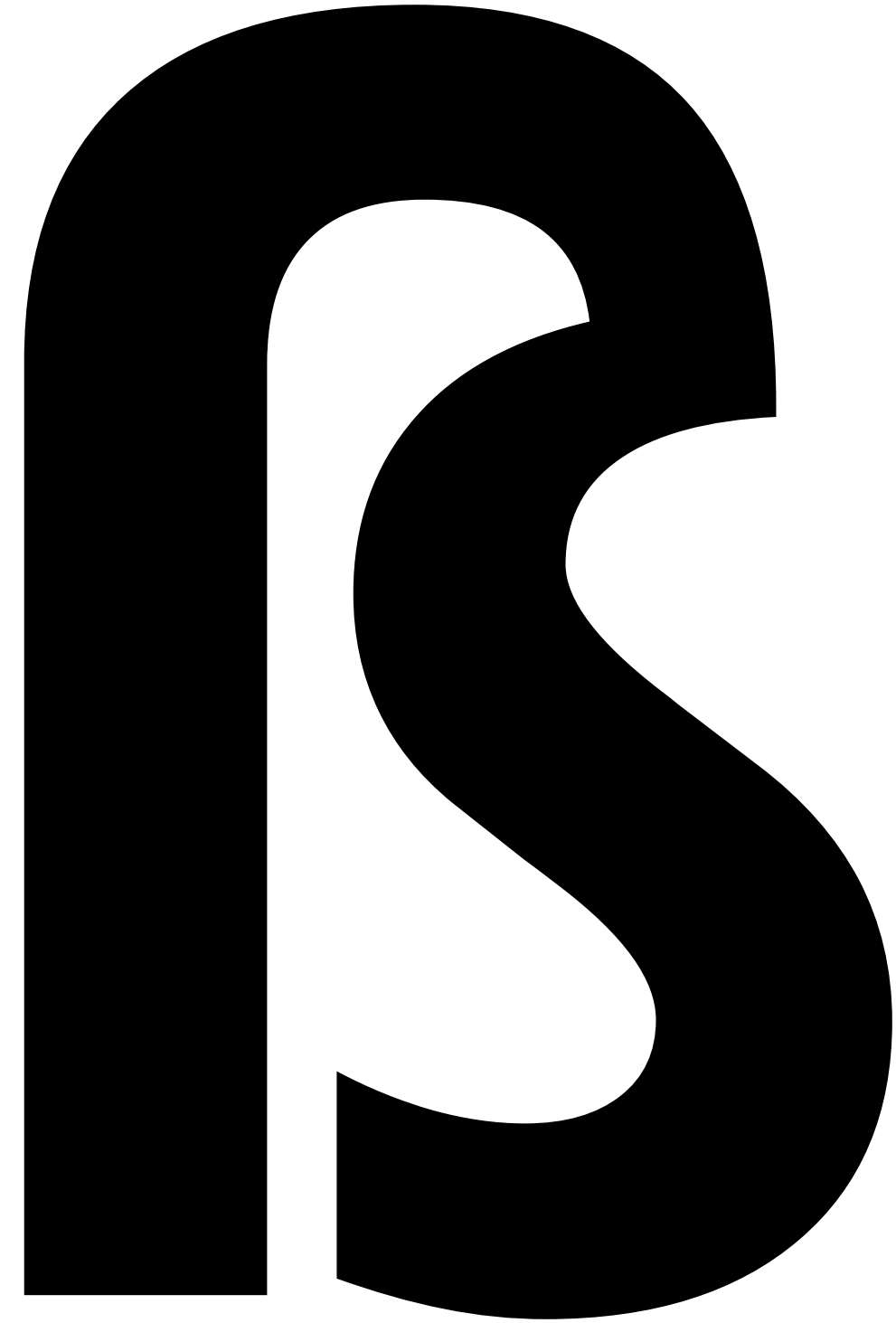


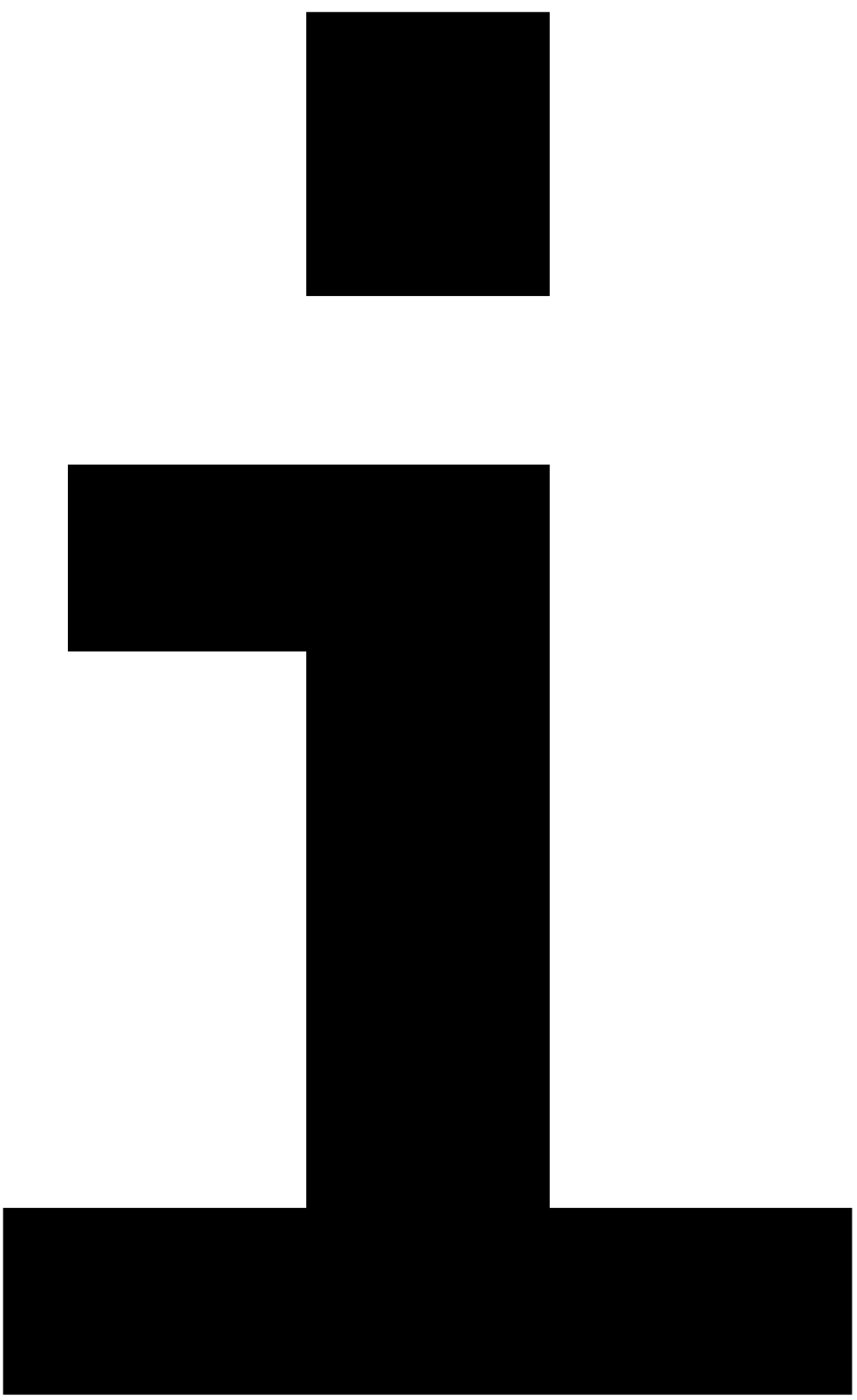


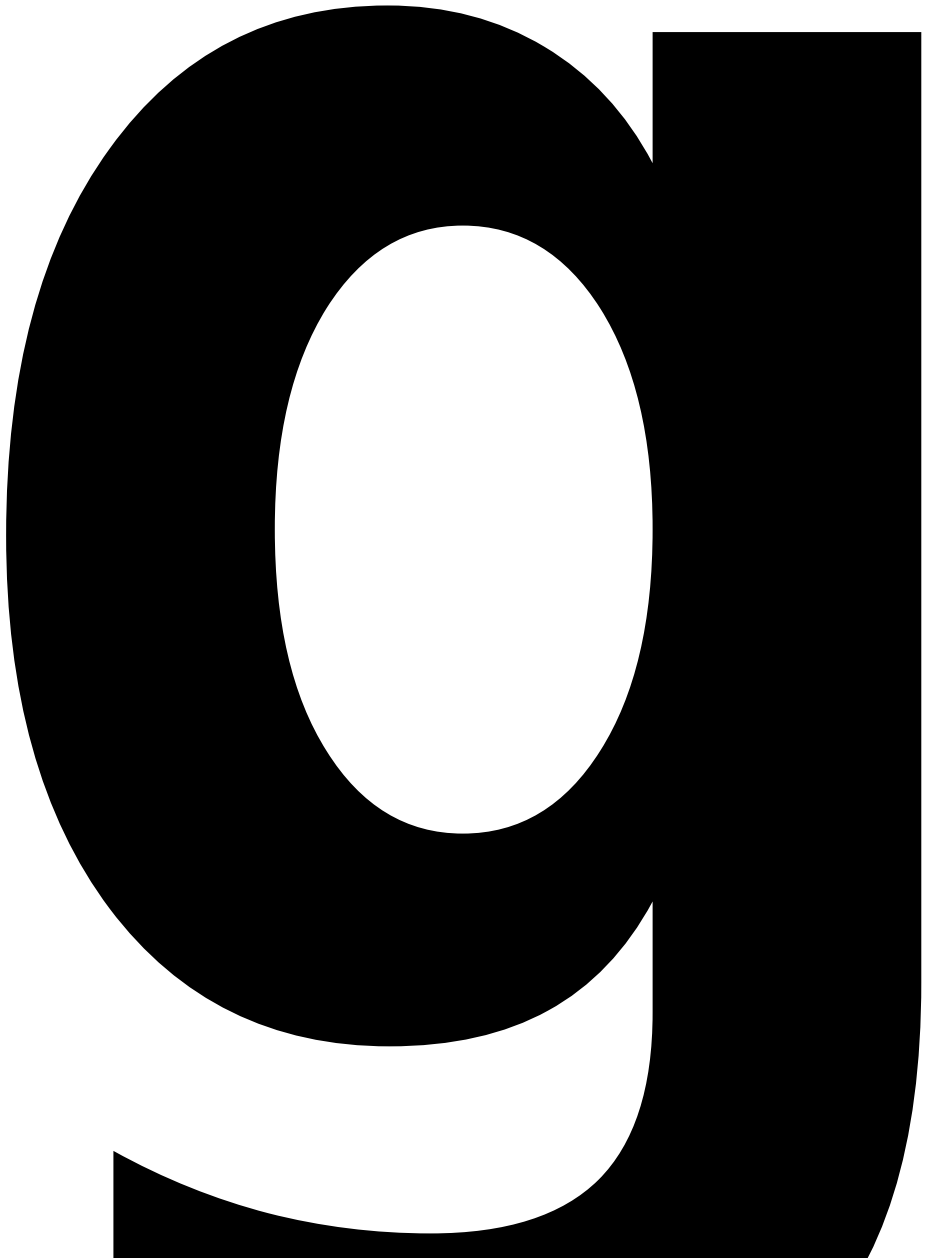


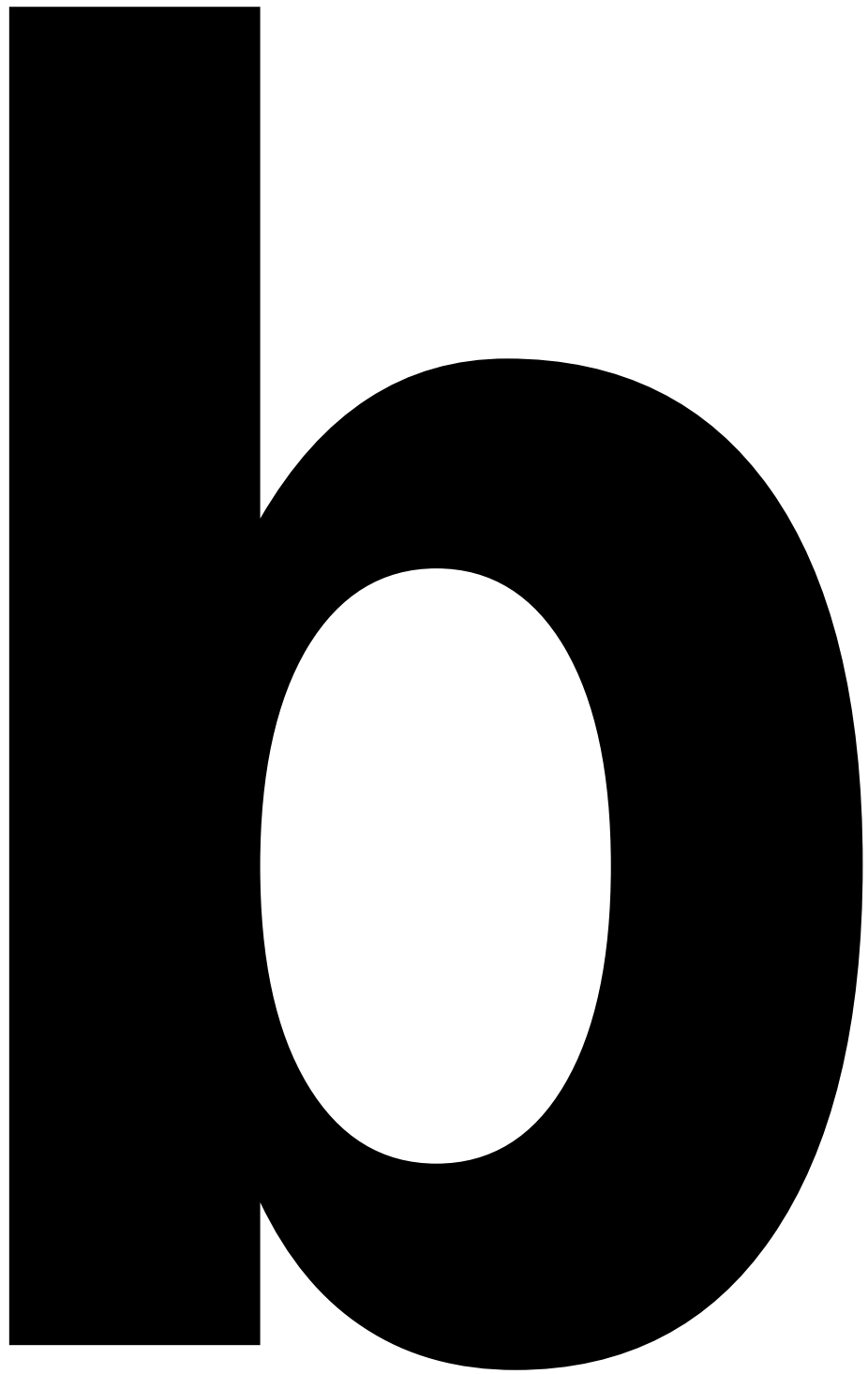


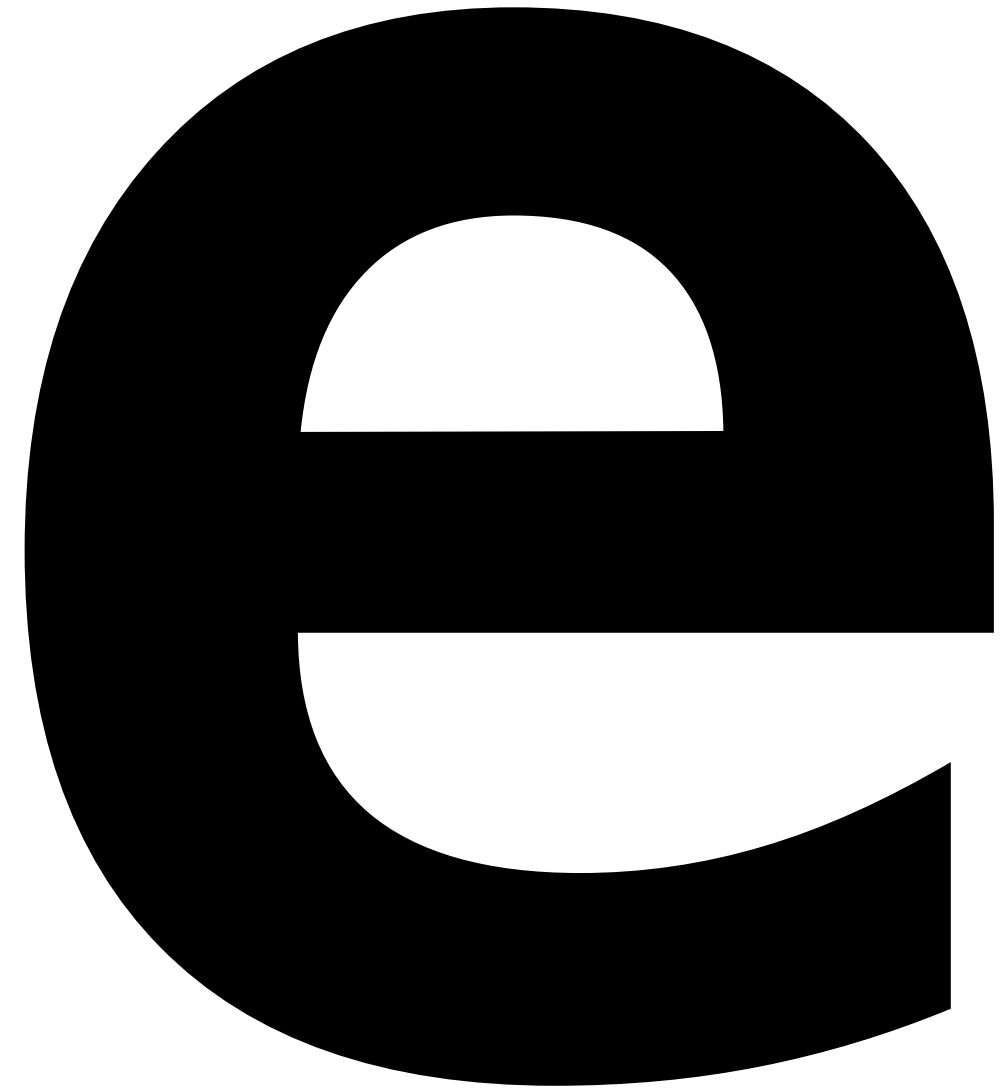




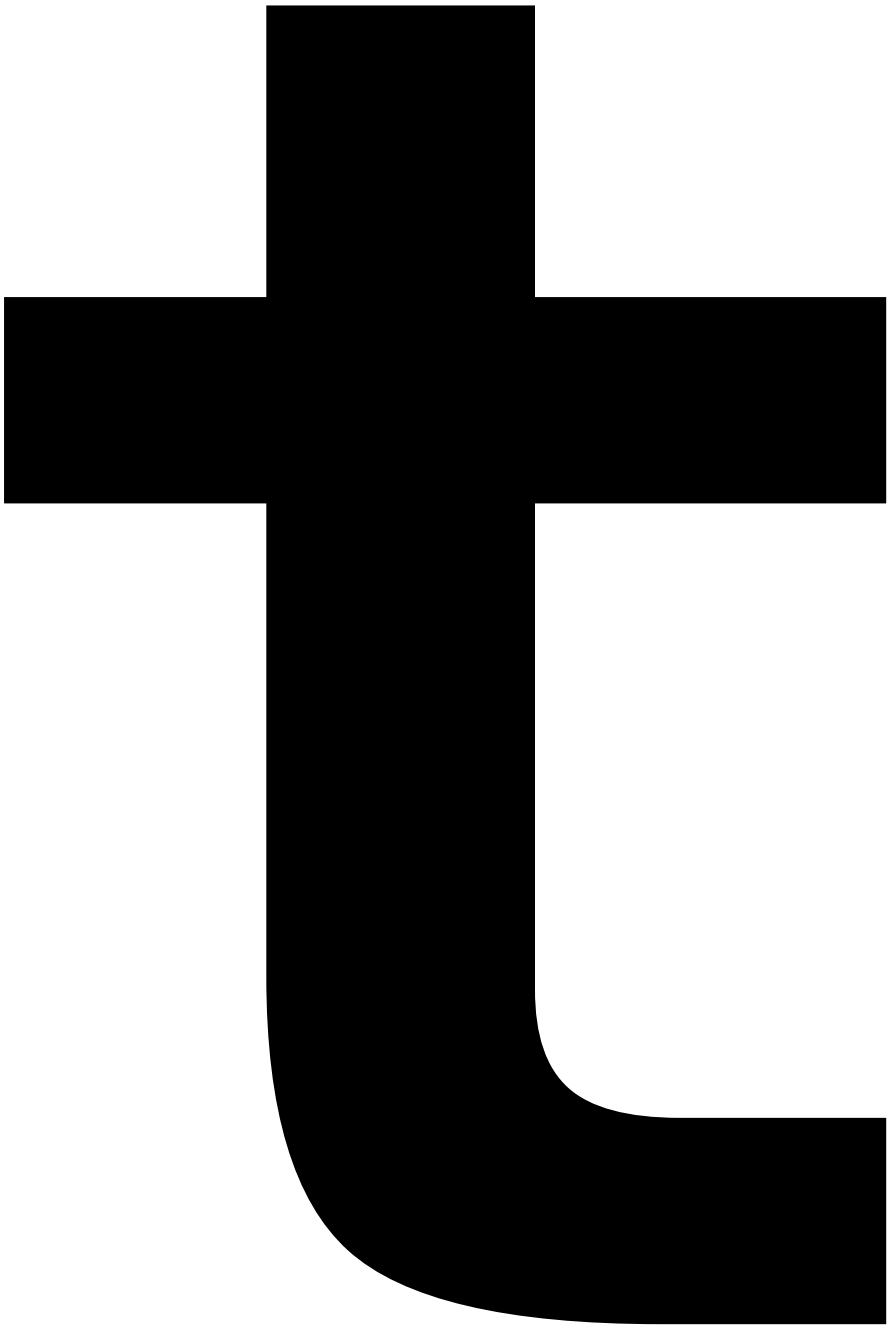


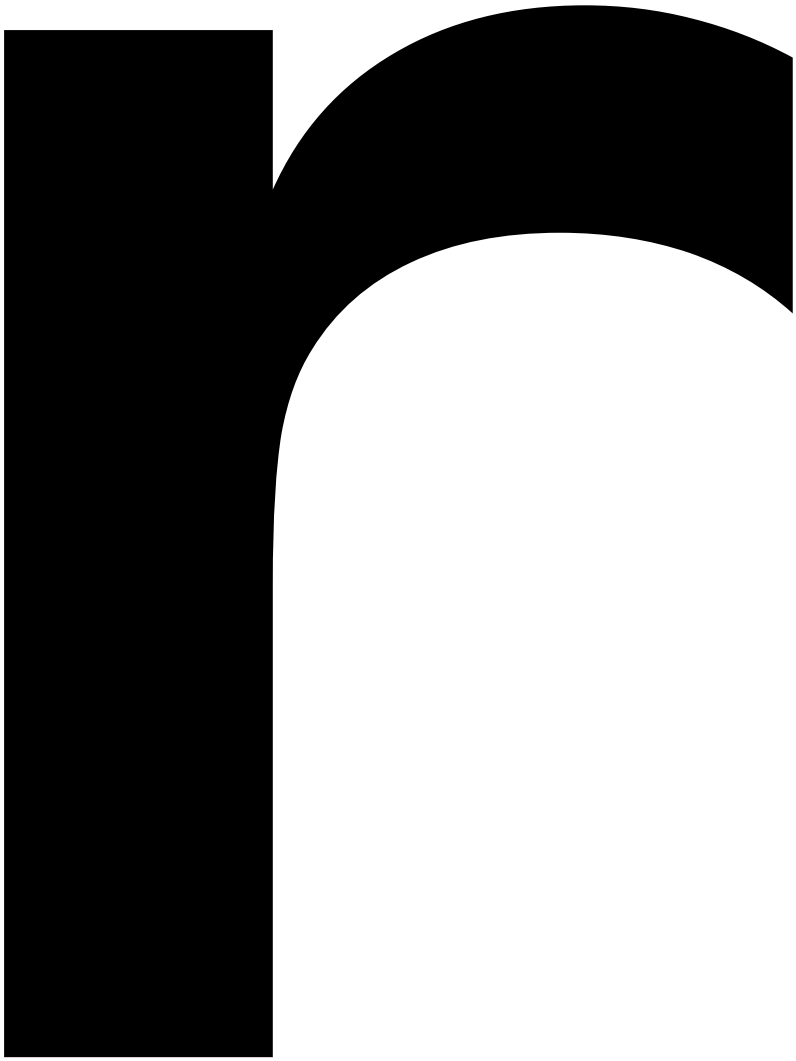


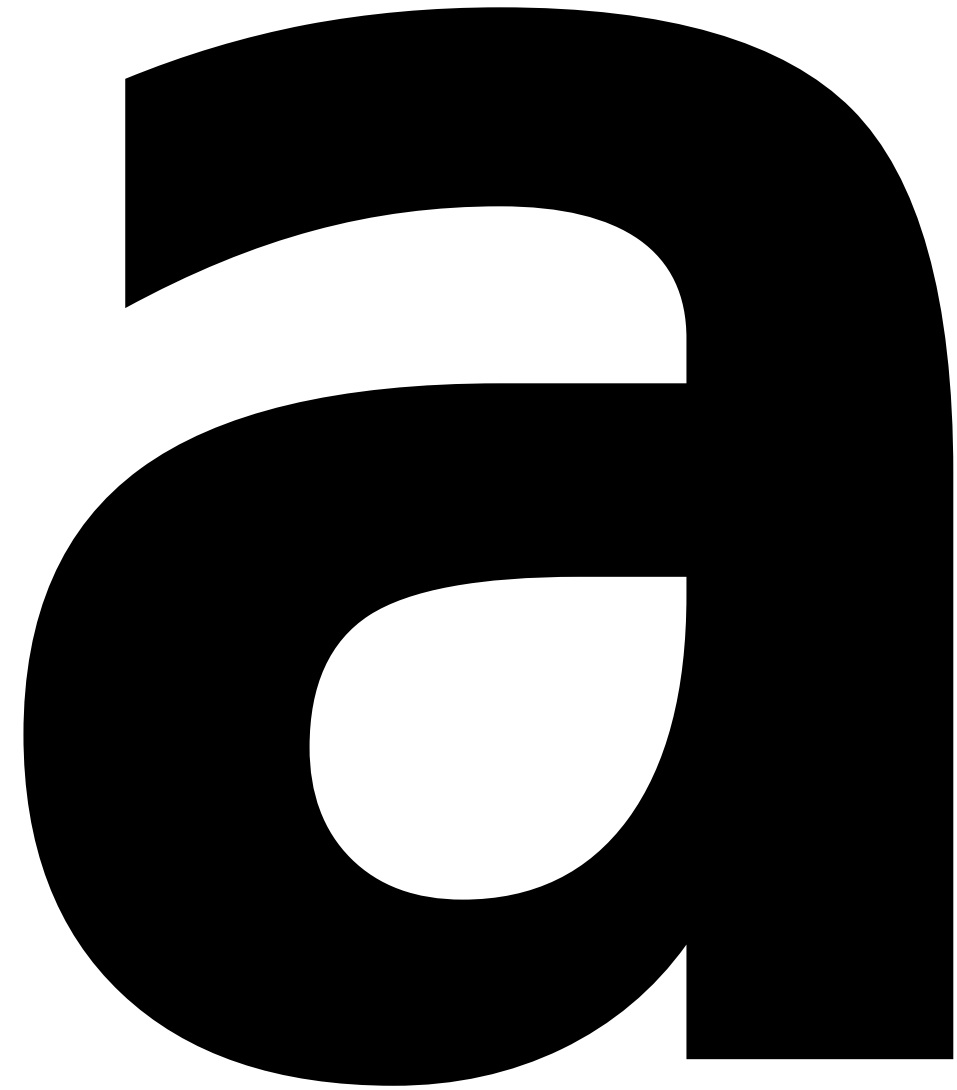


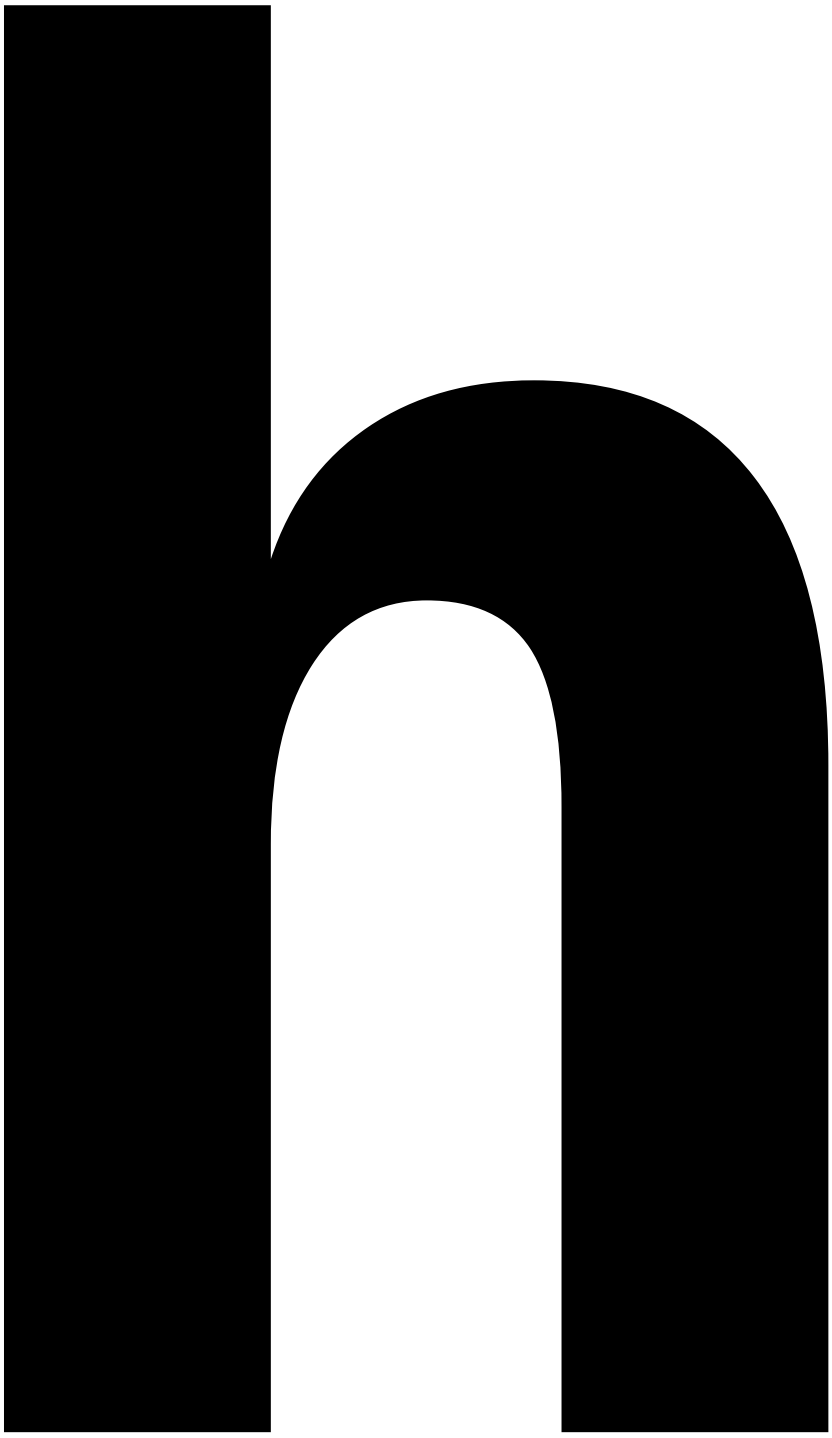


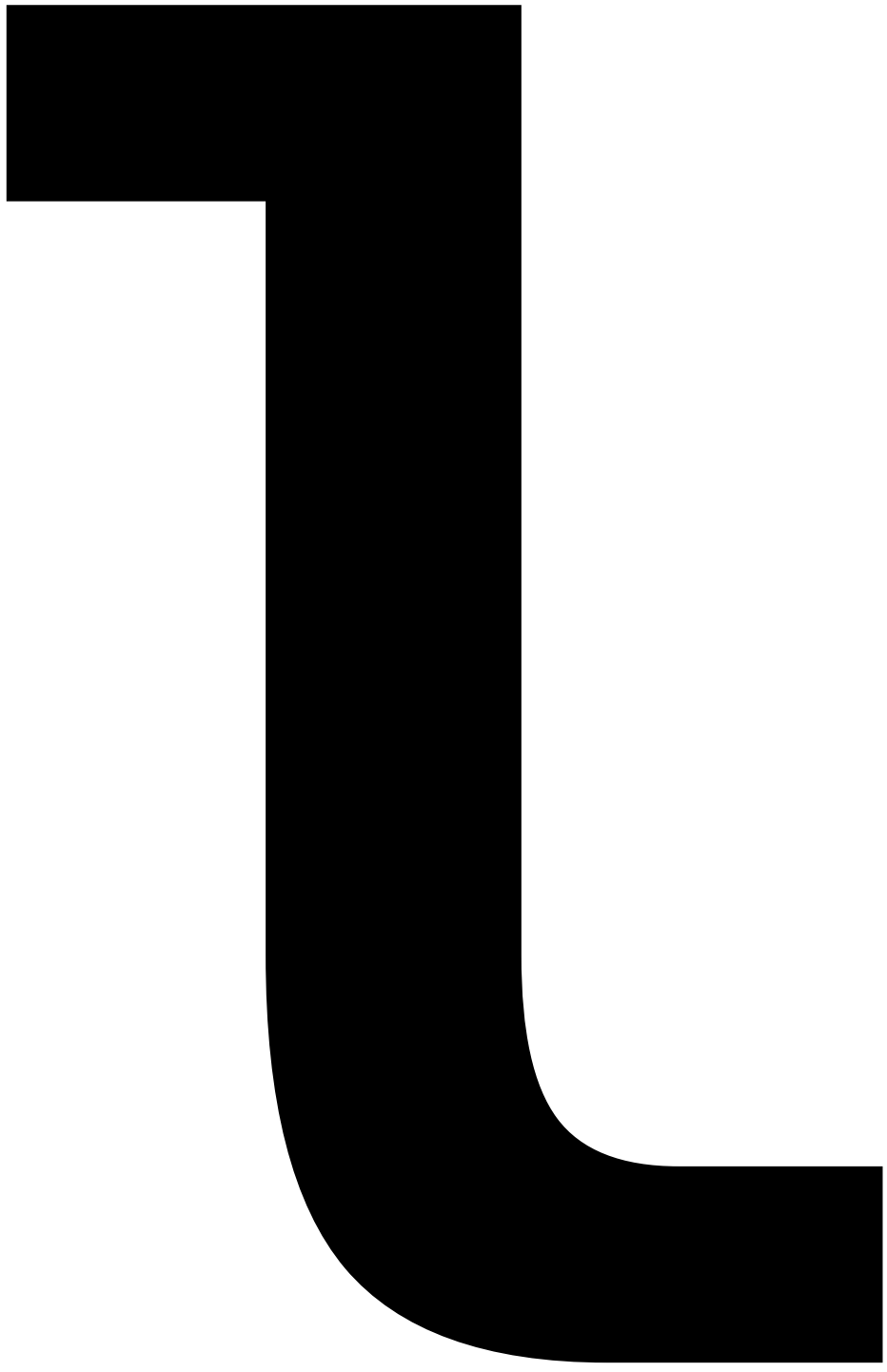
S

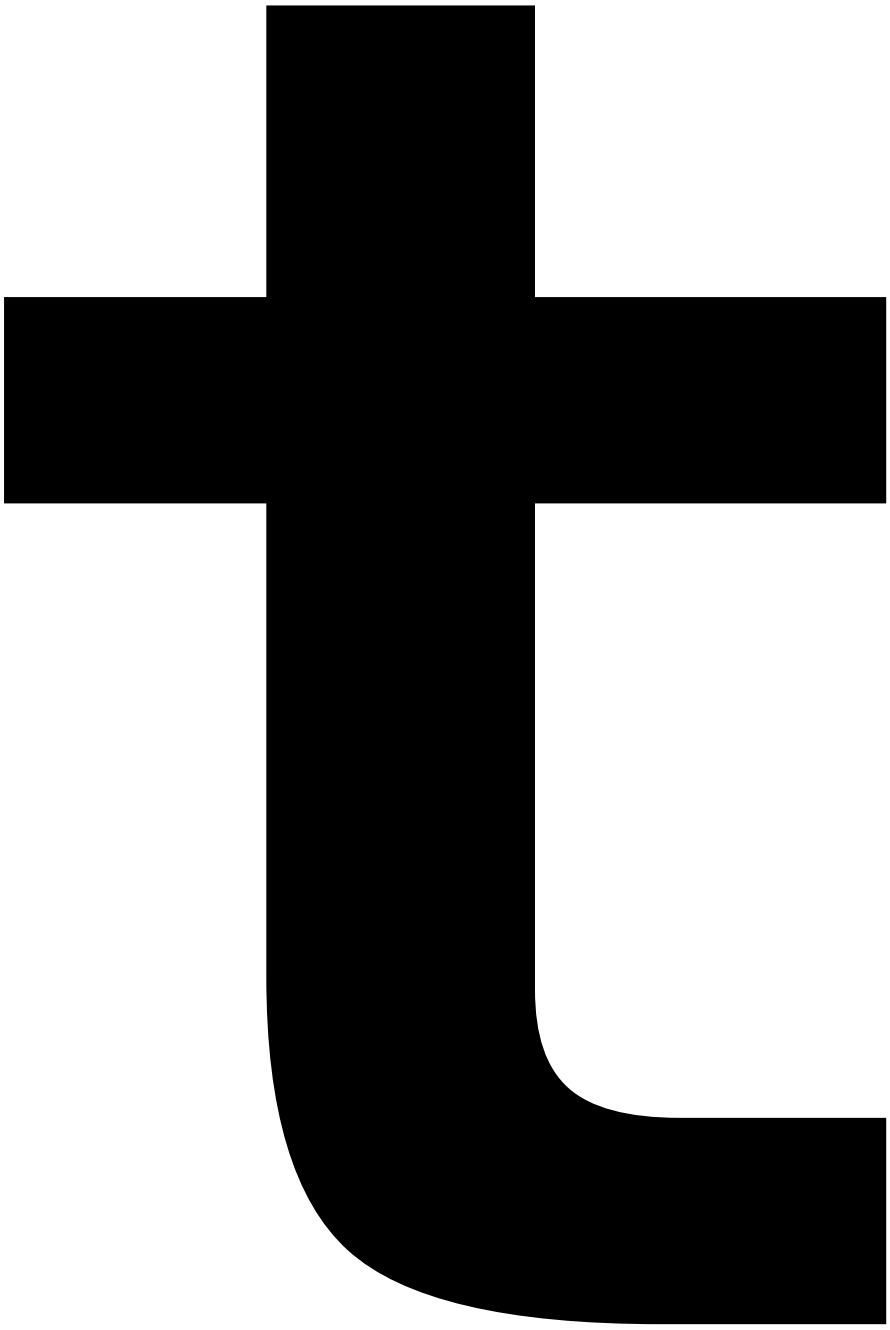


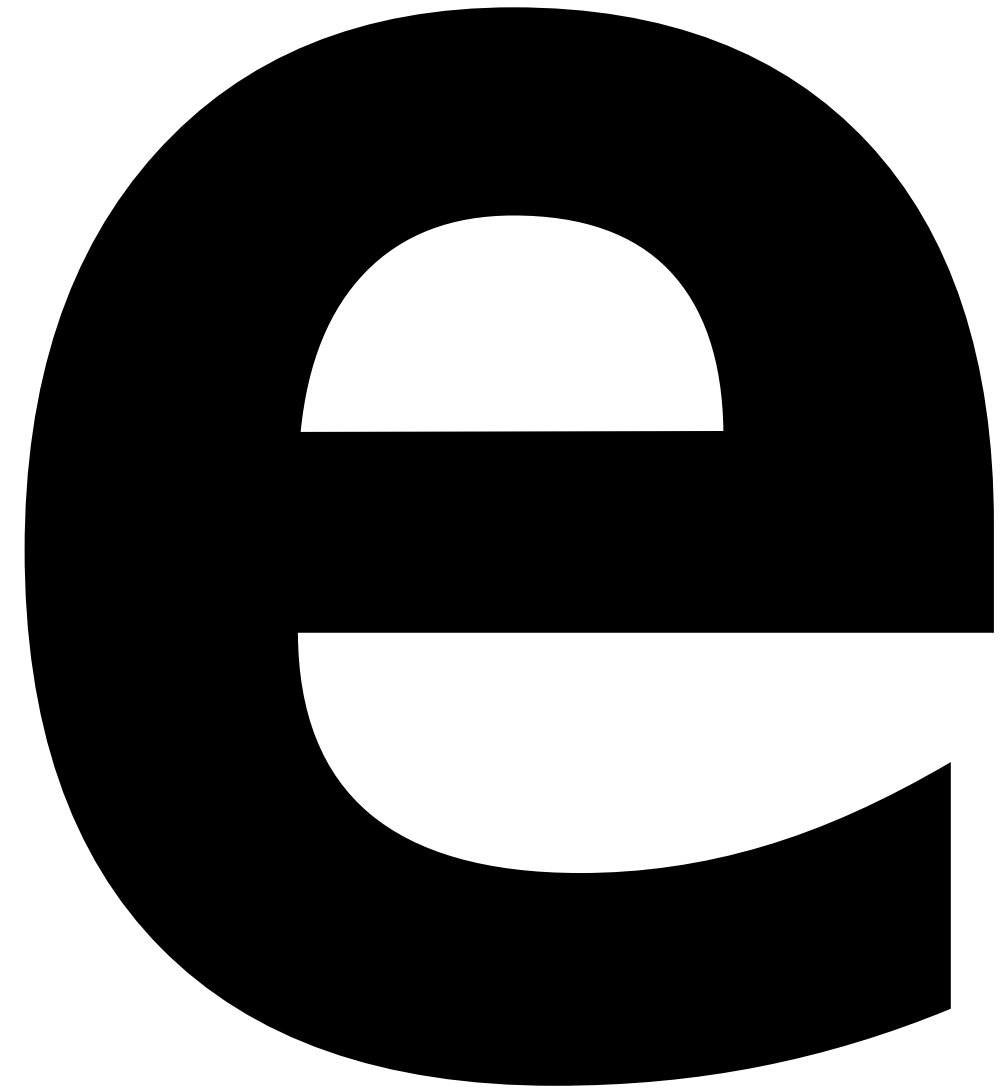


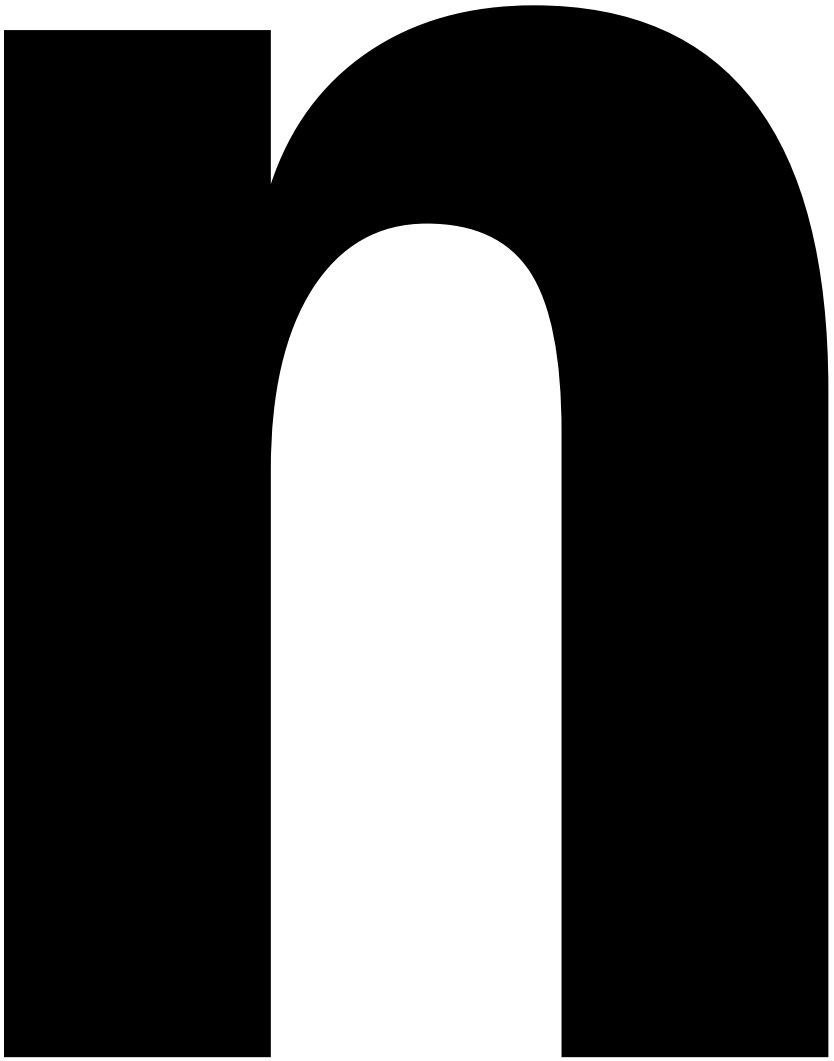




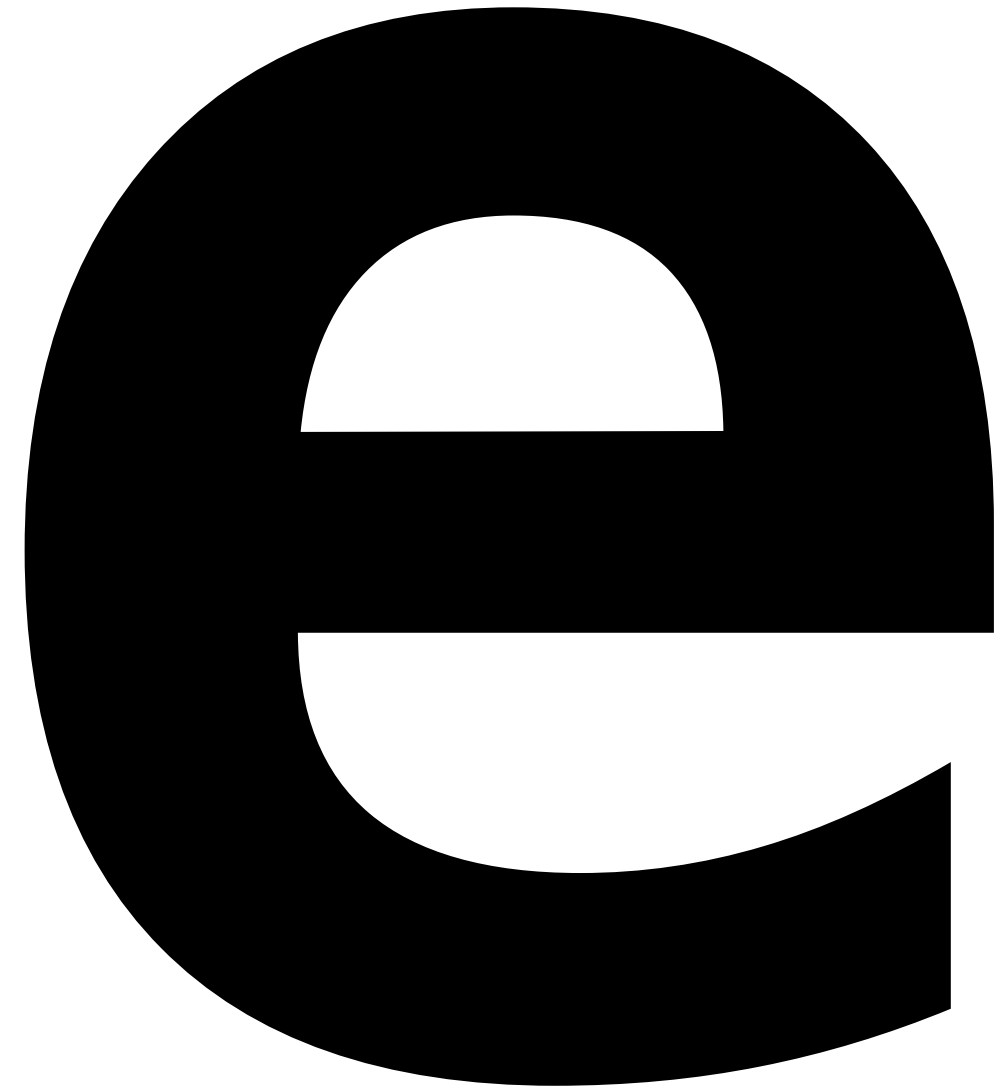


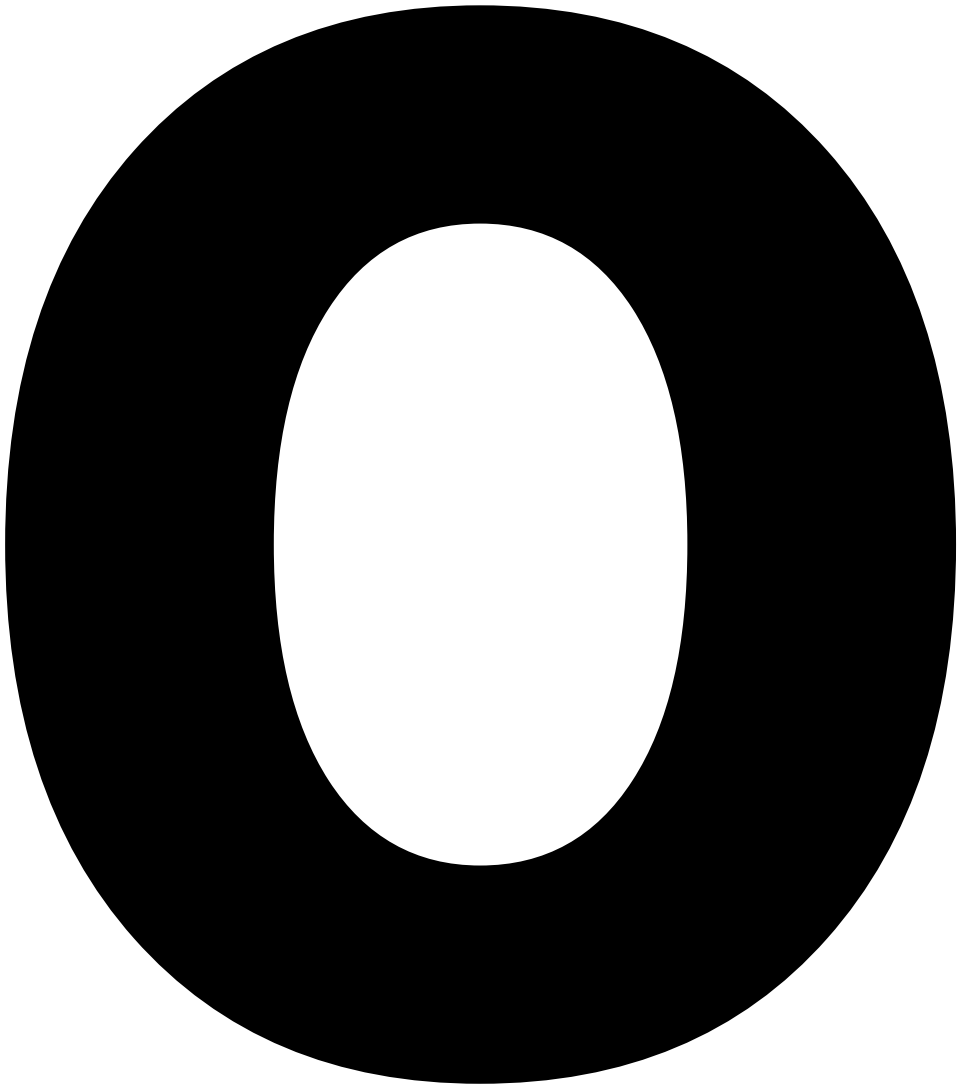


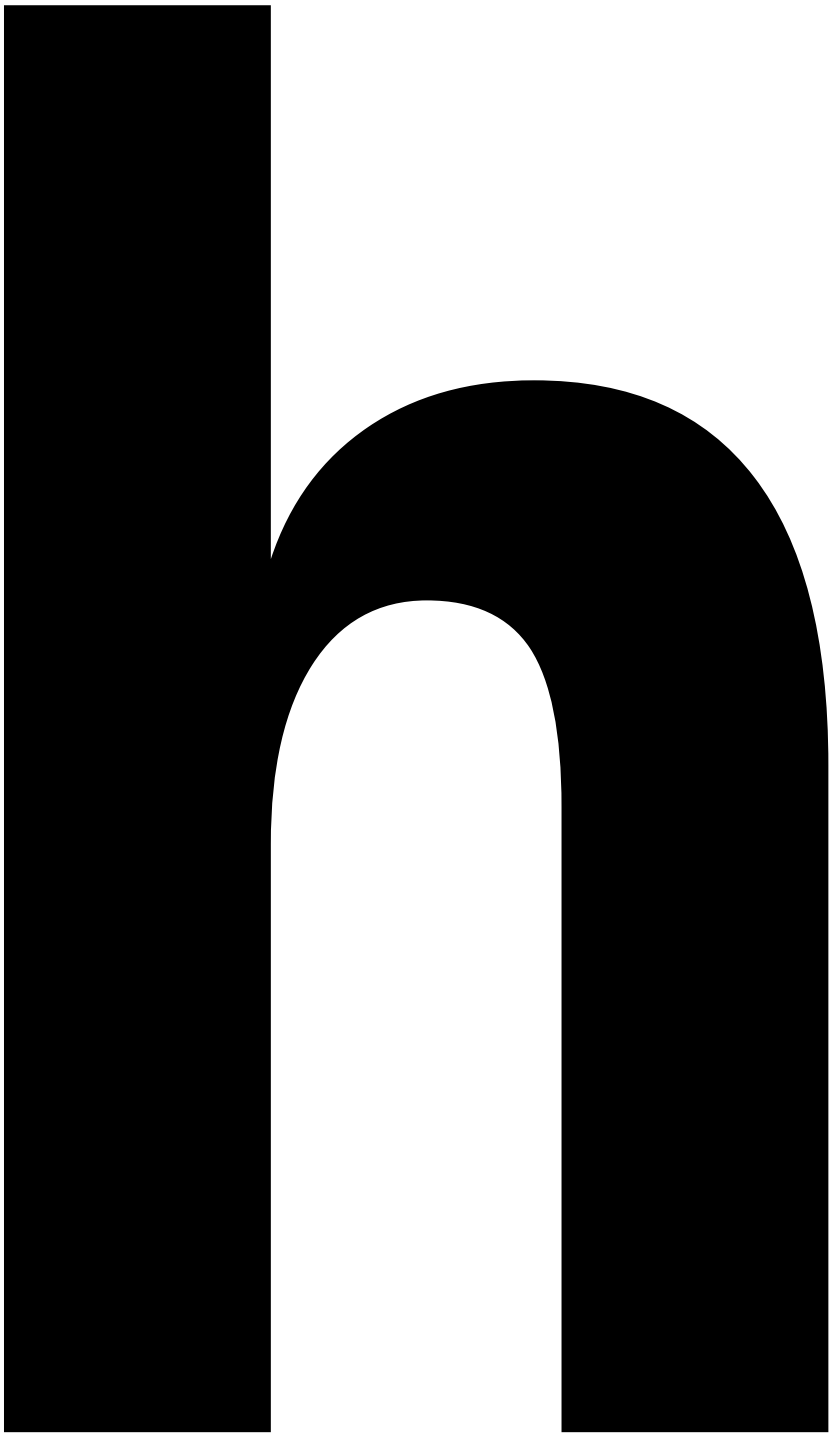


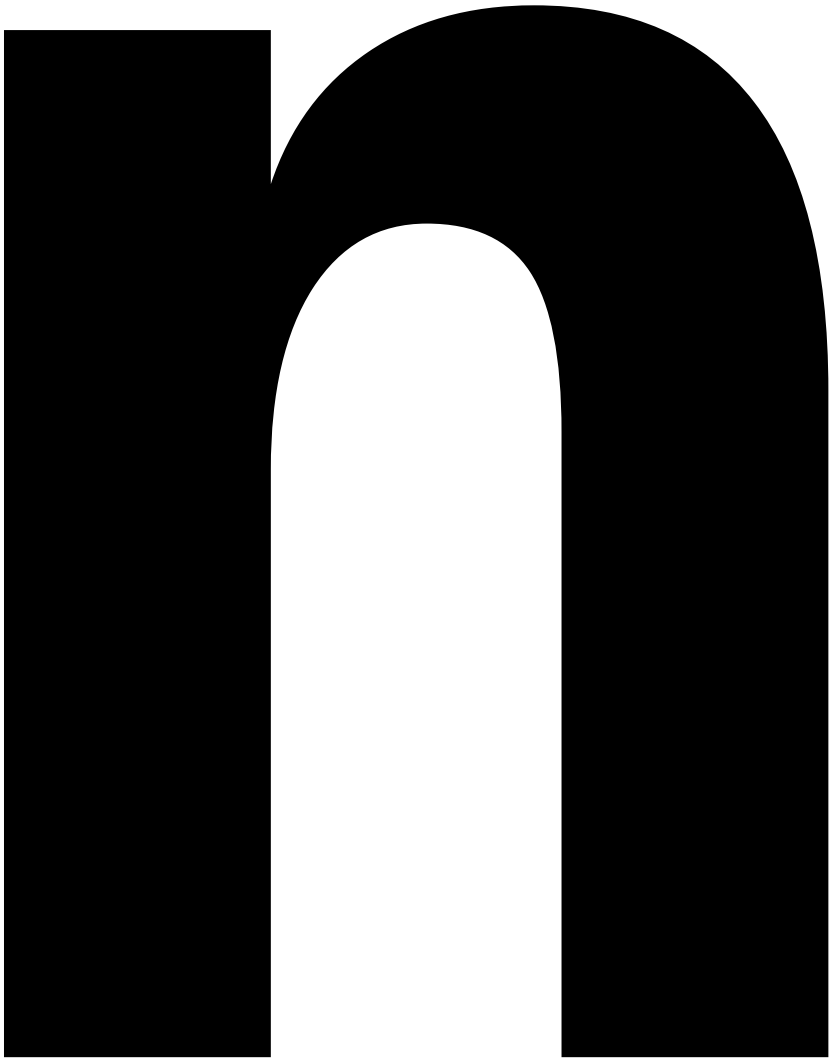


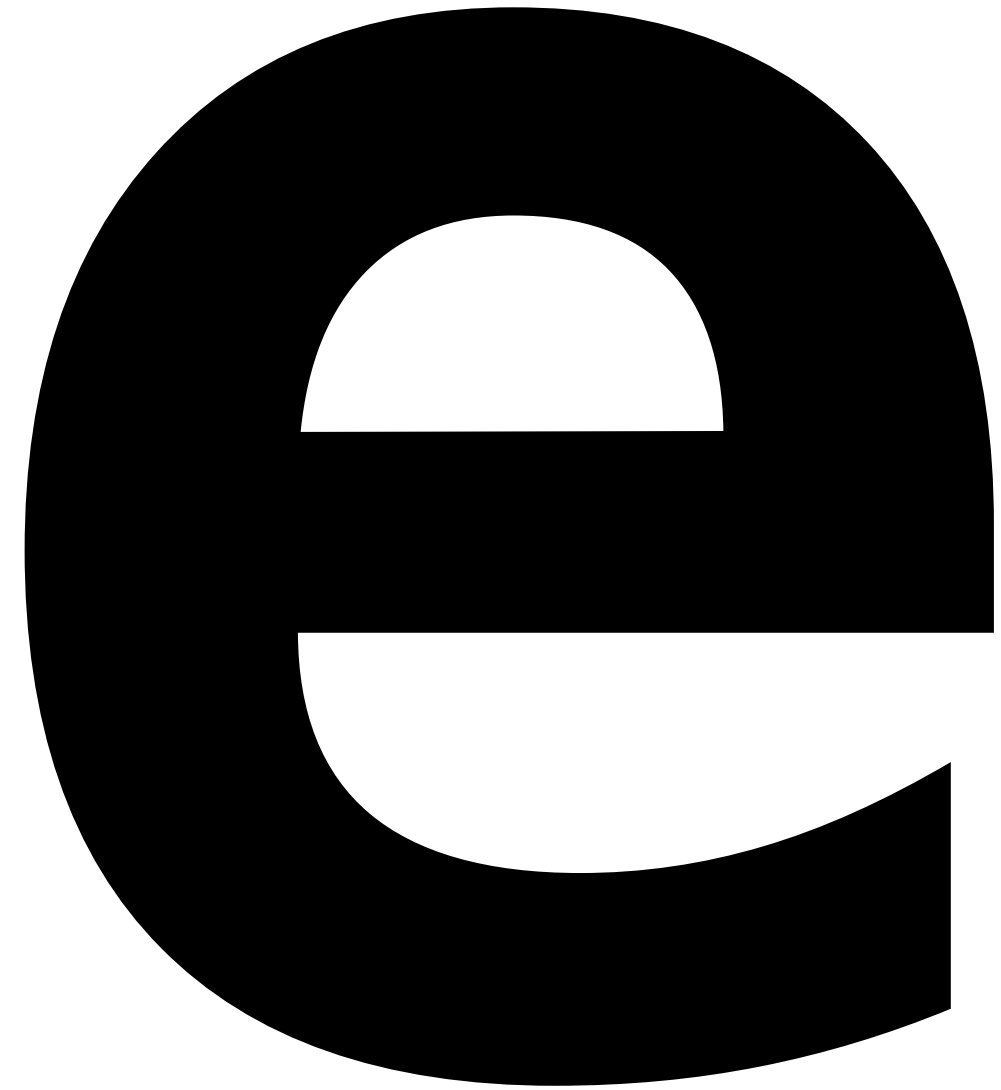
B

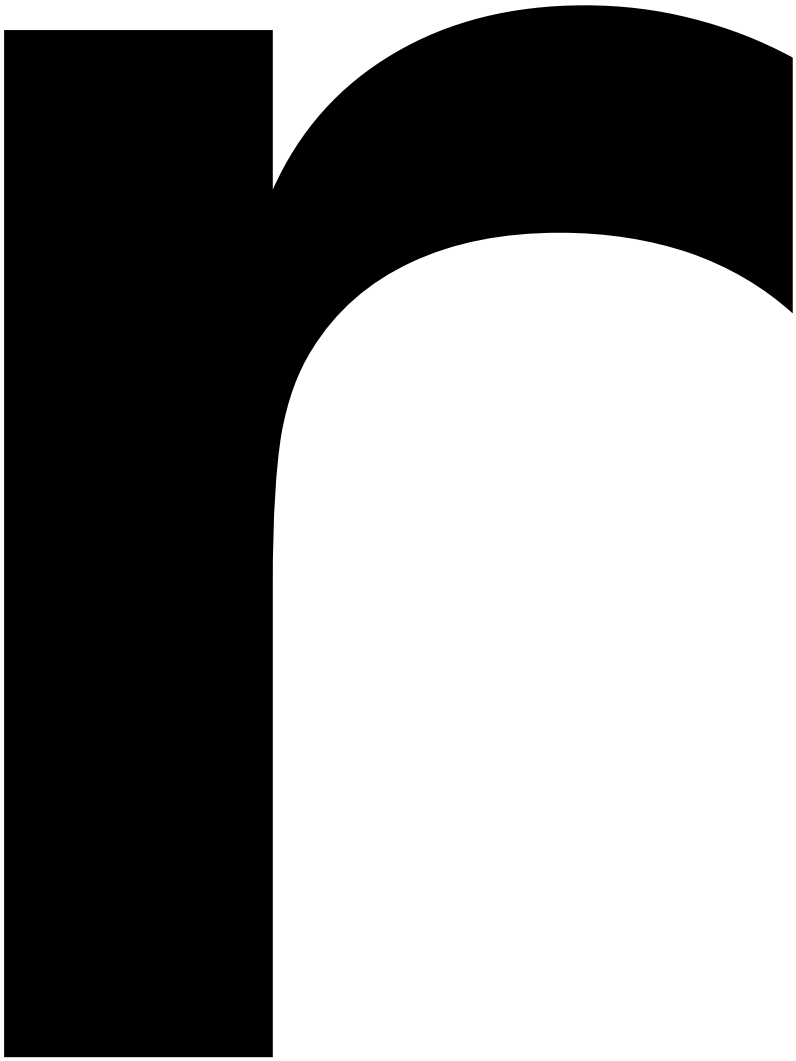


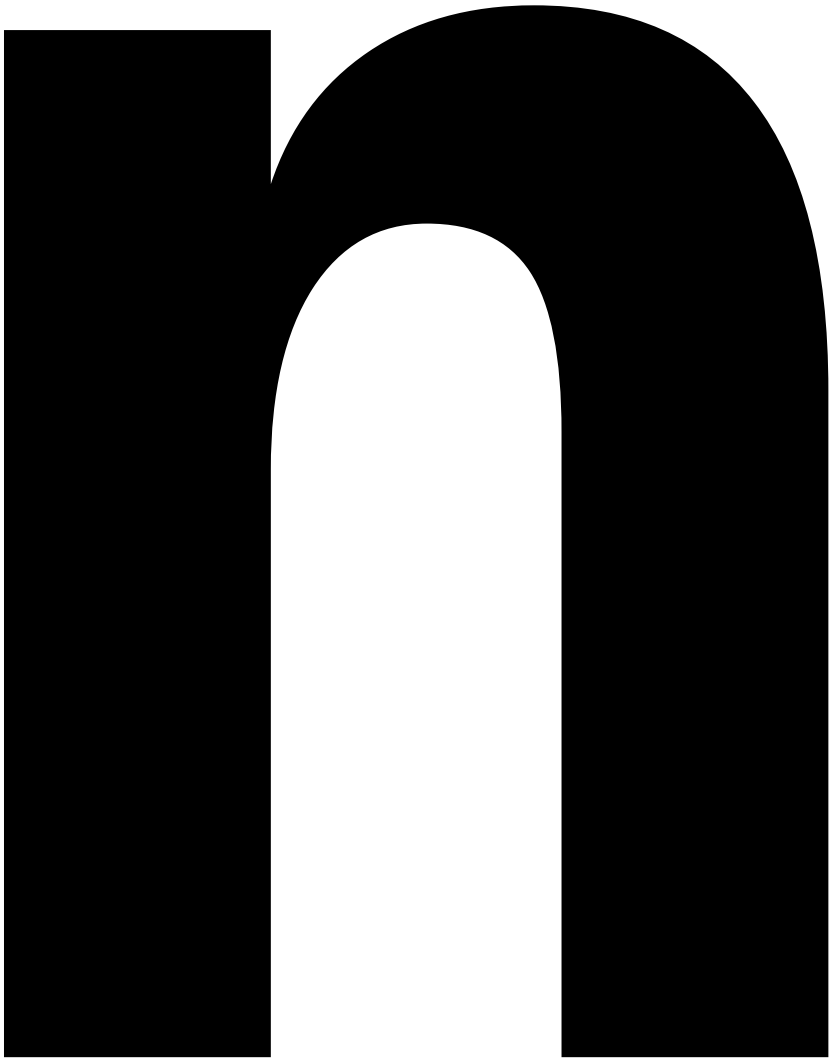




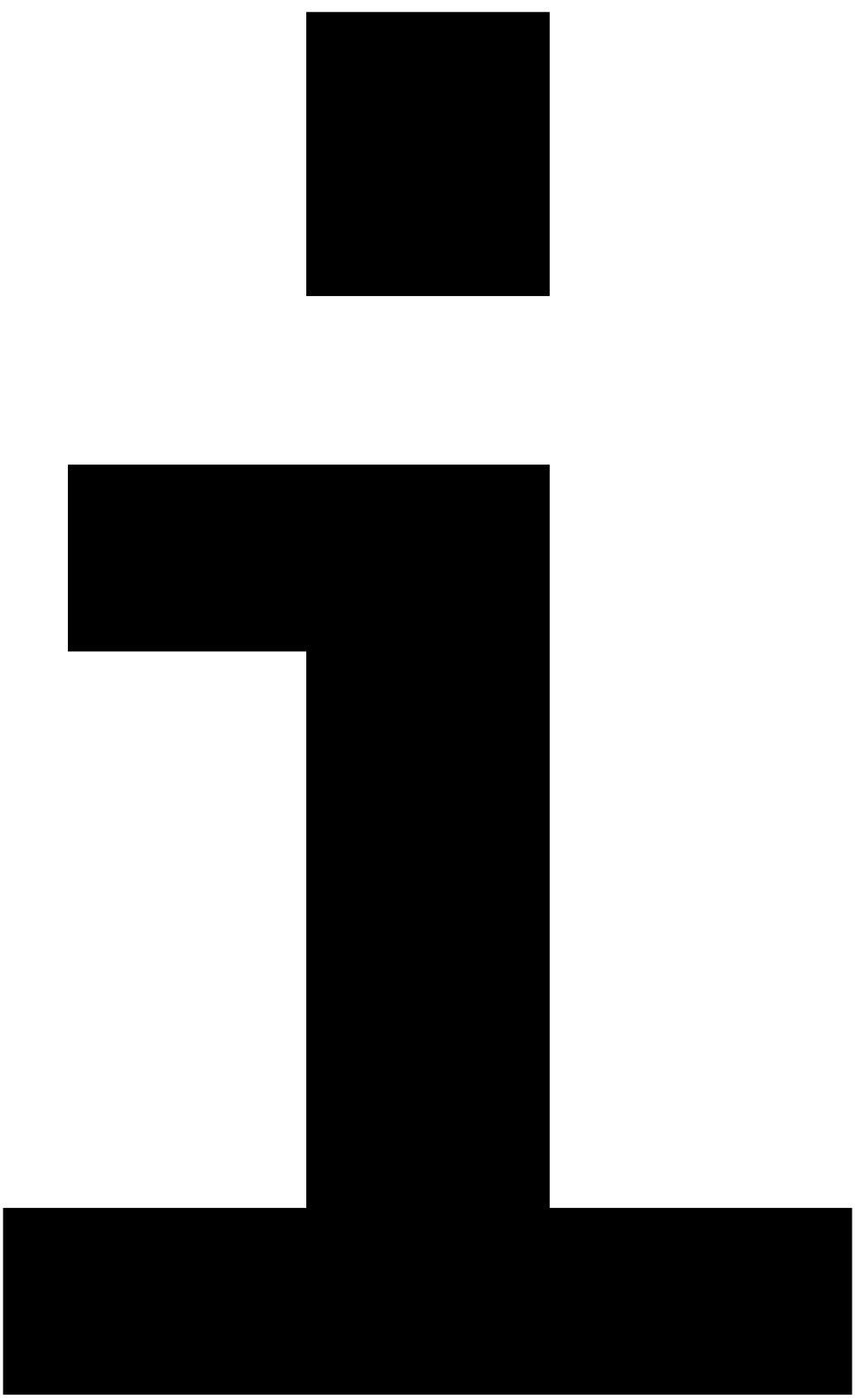


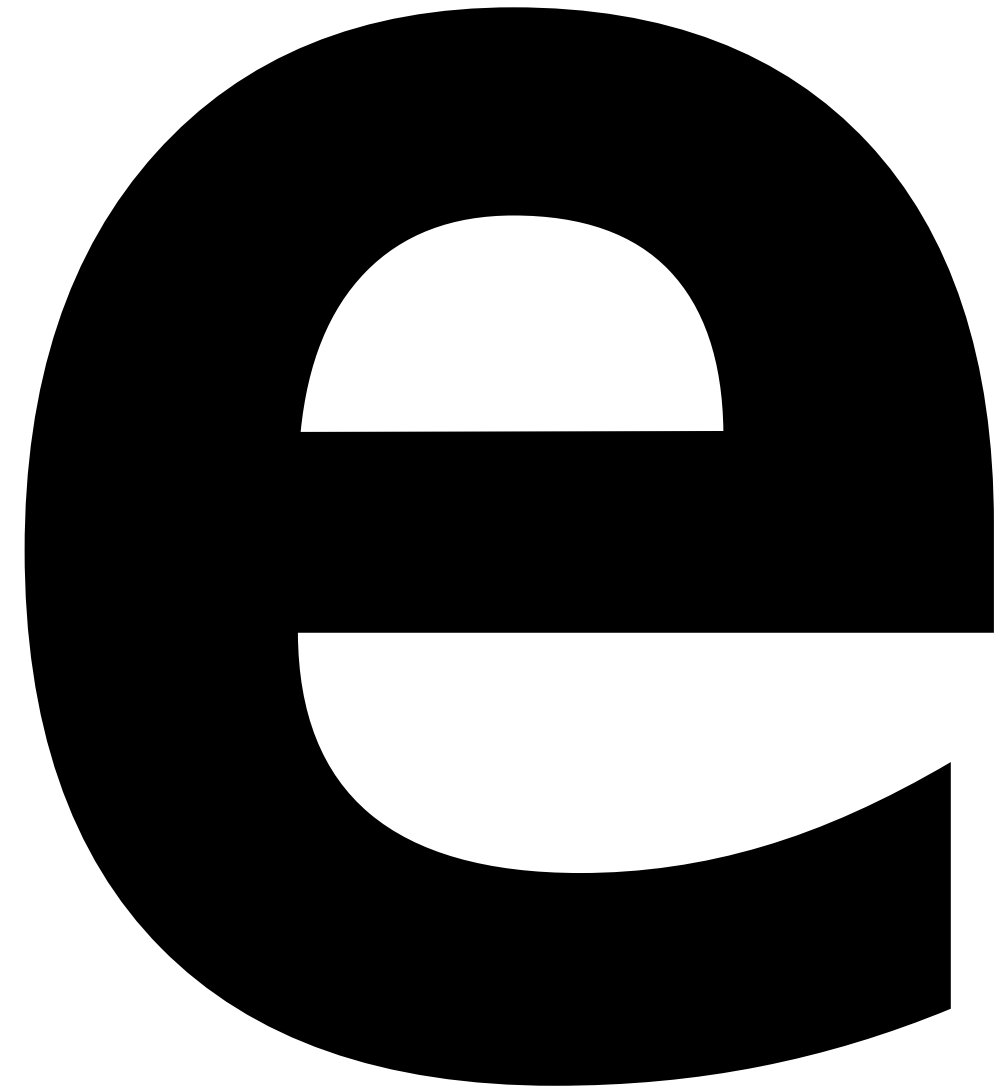




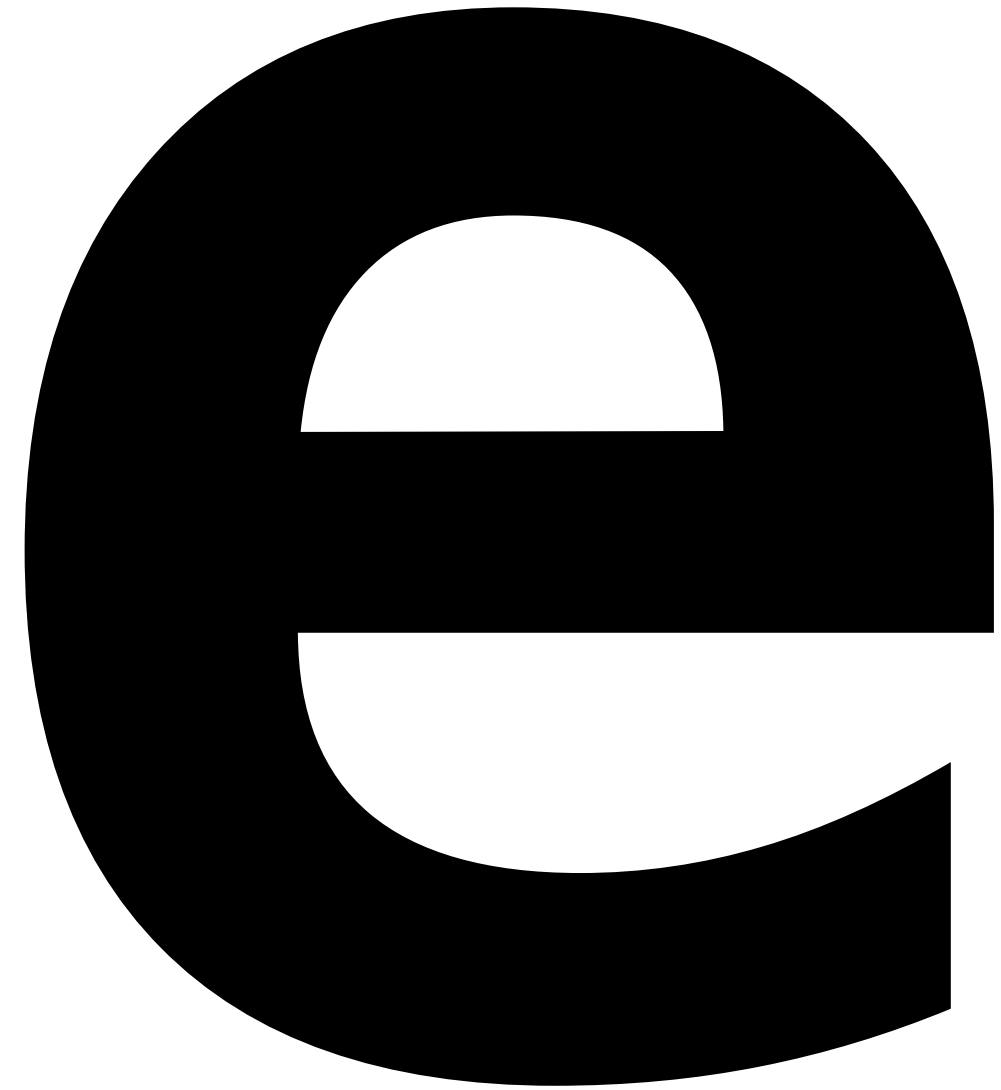


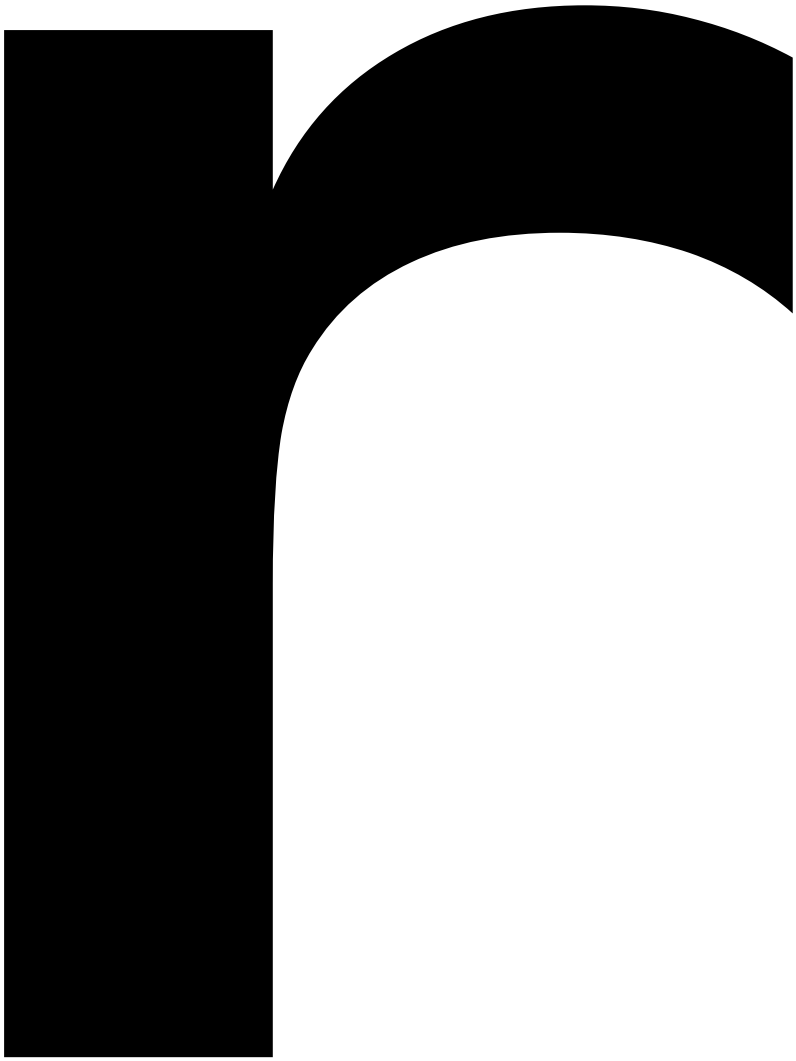
d

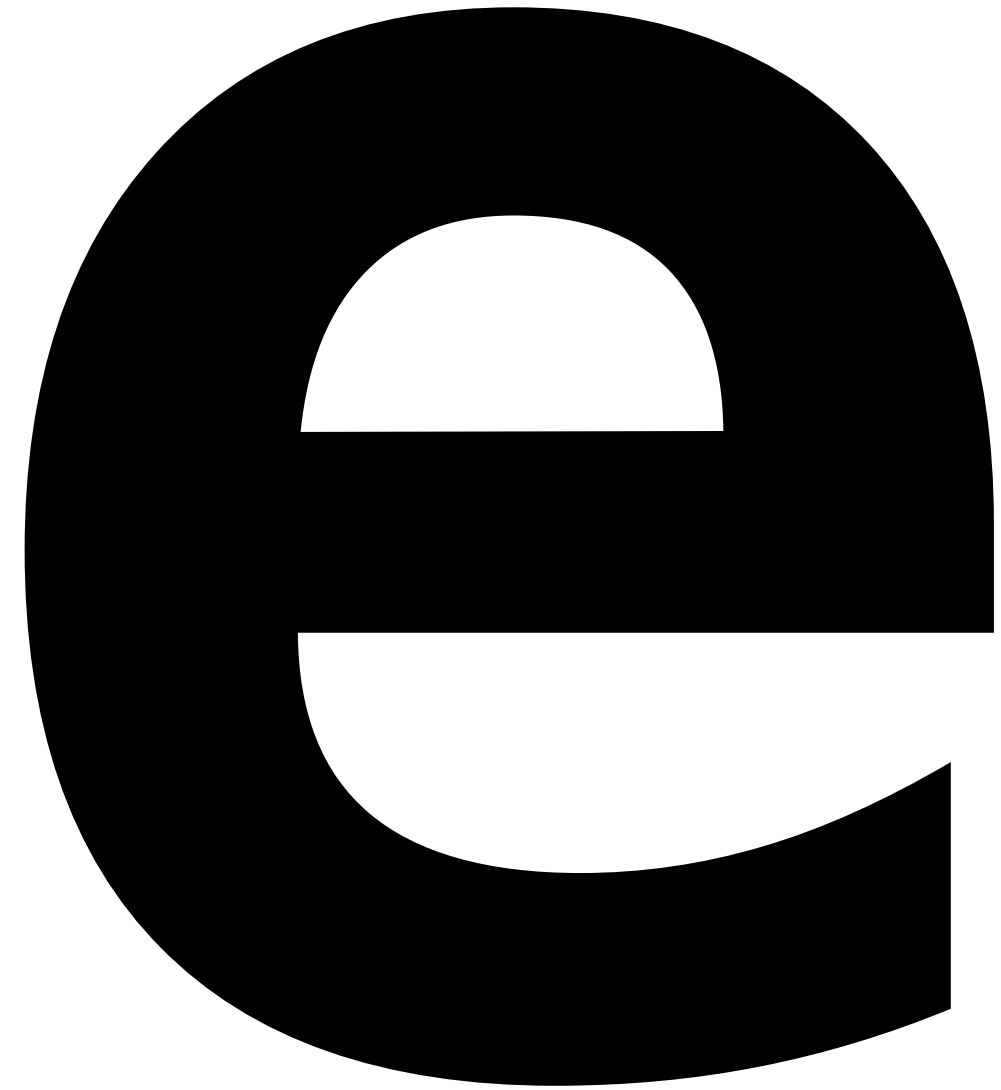


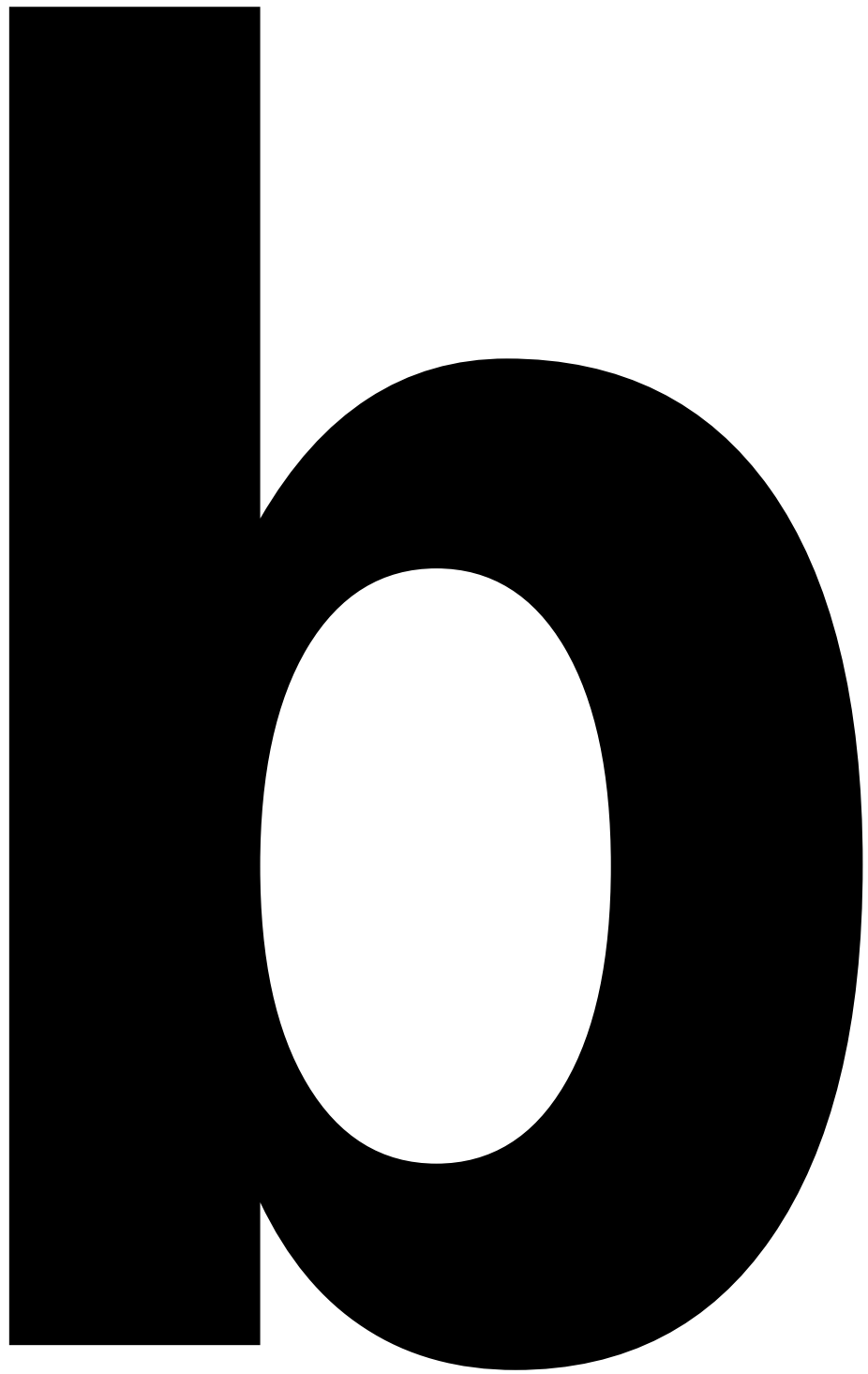


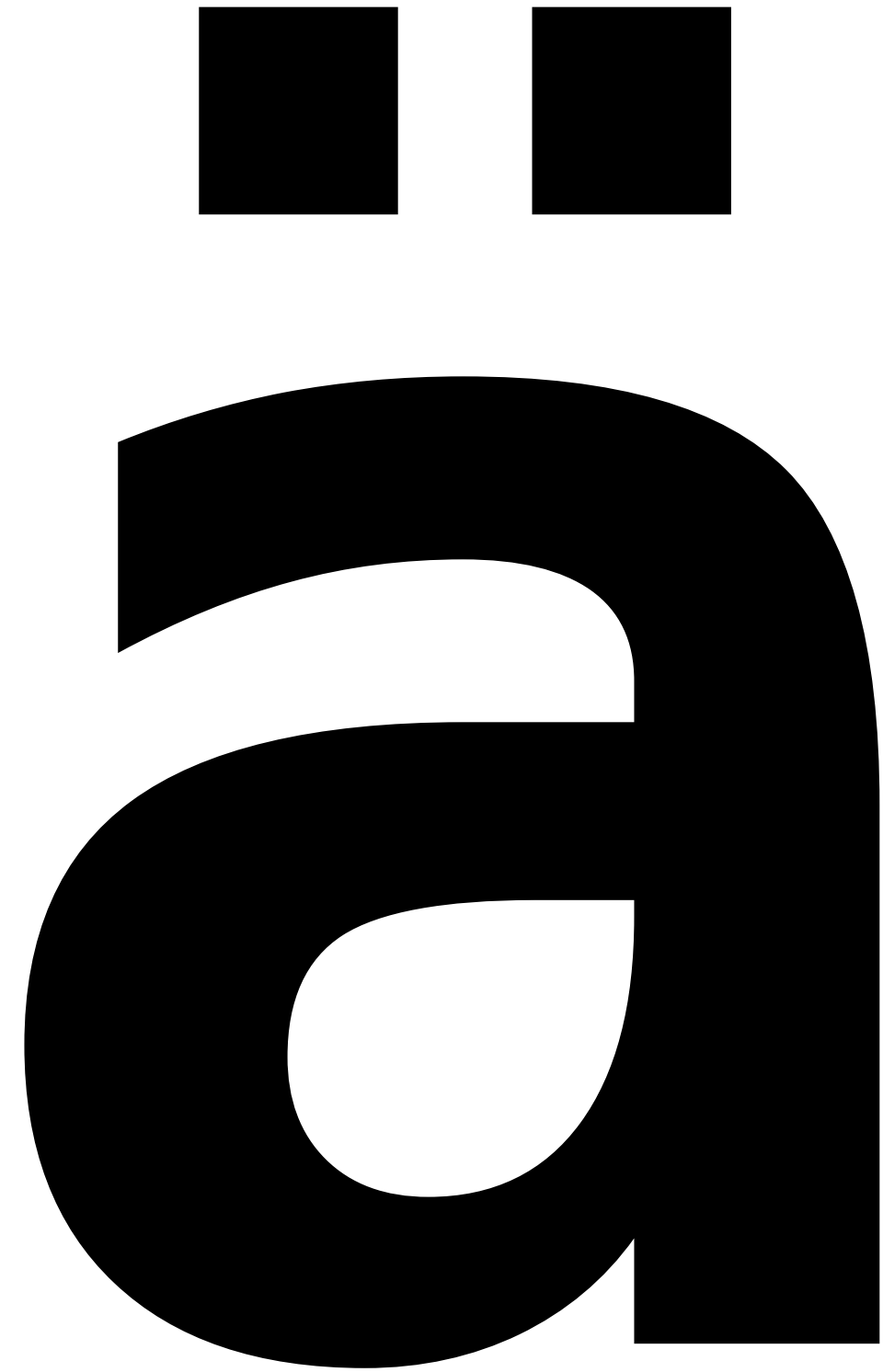
S





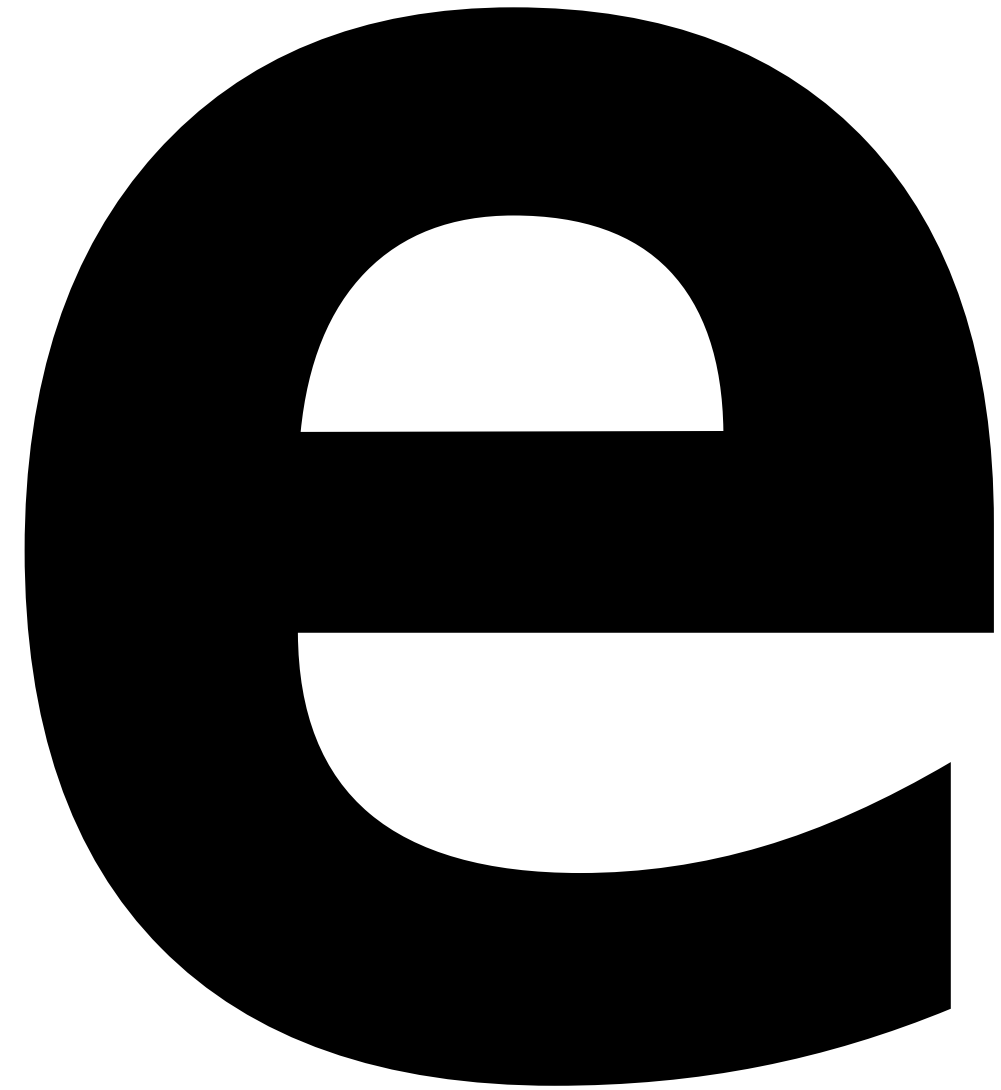




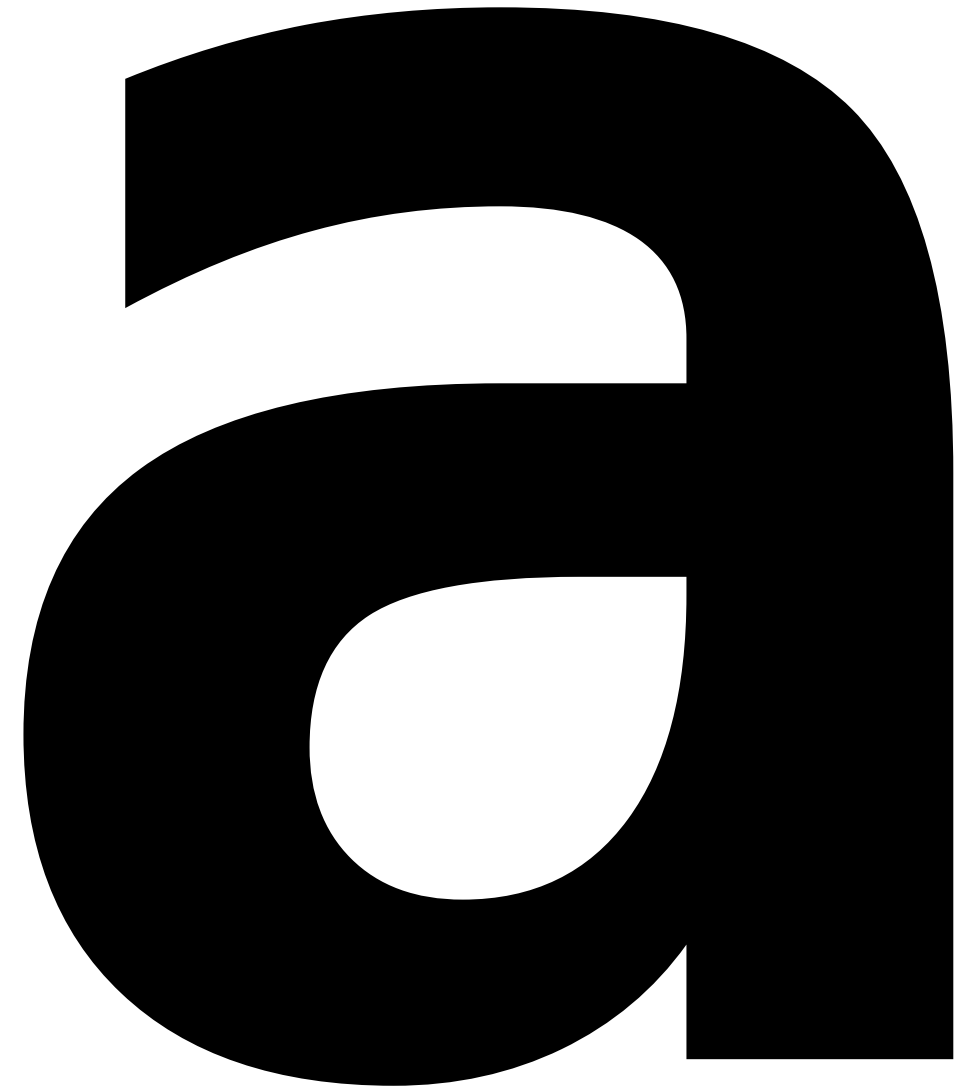


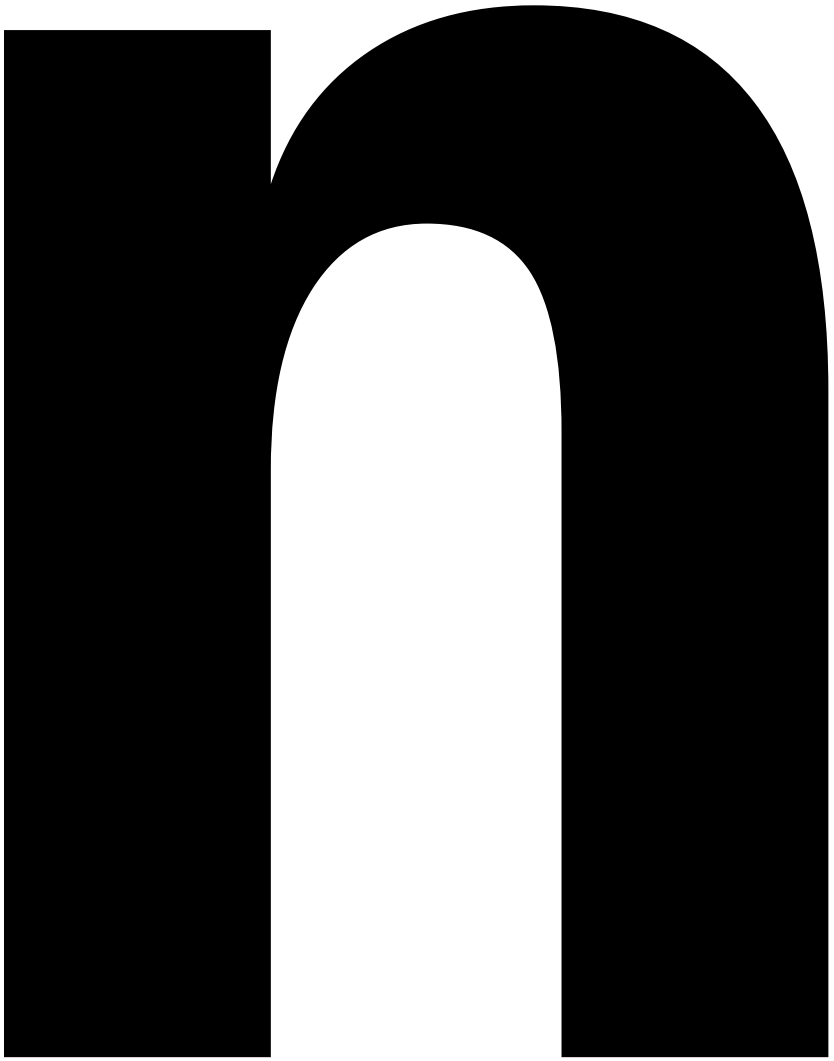
u

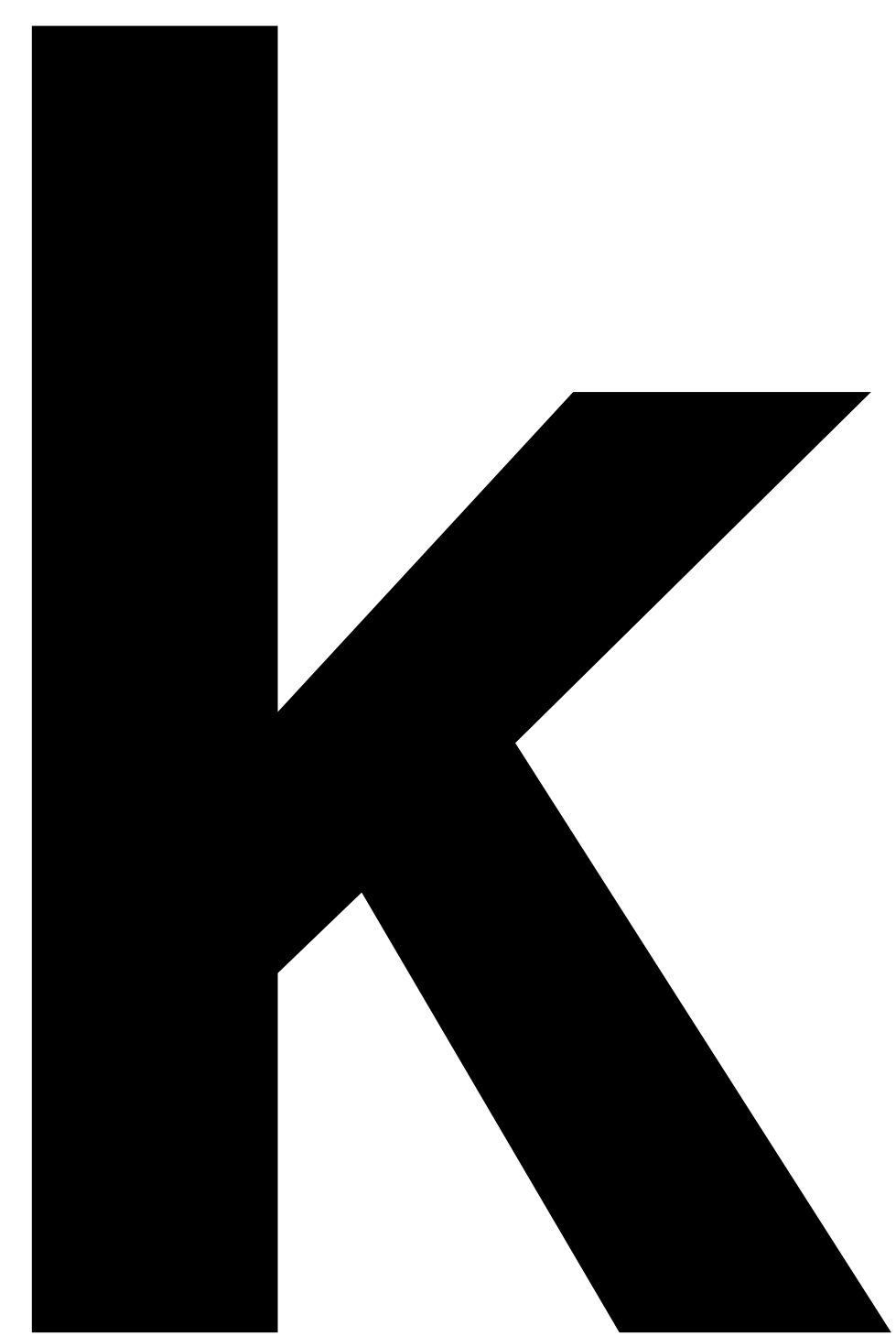
d



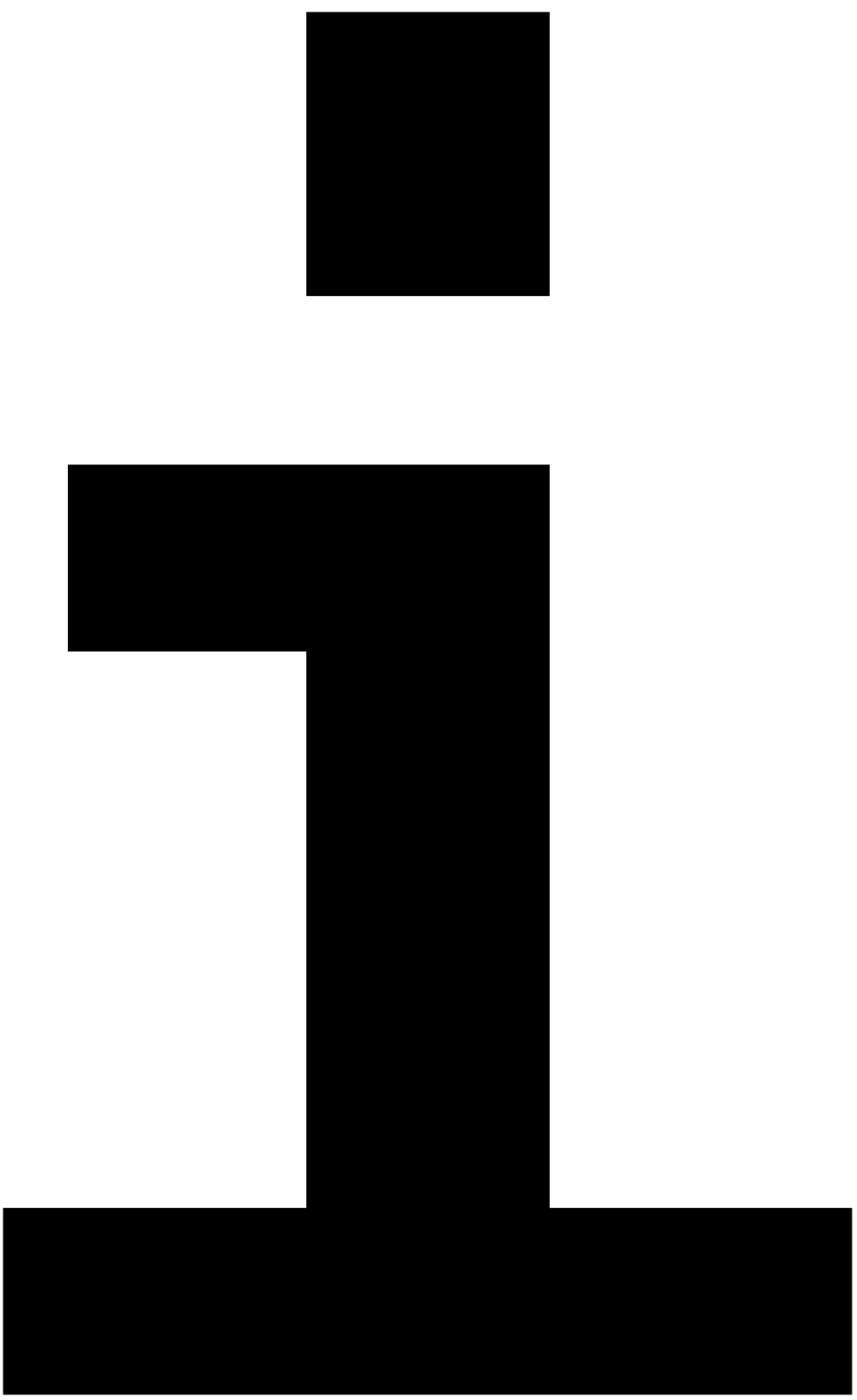
S

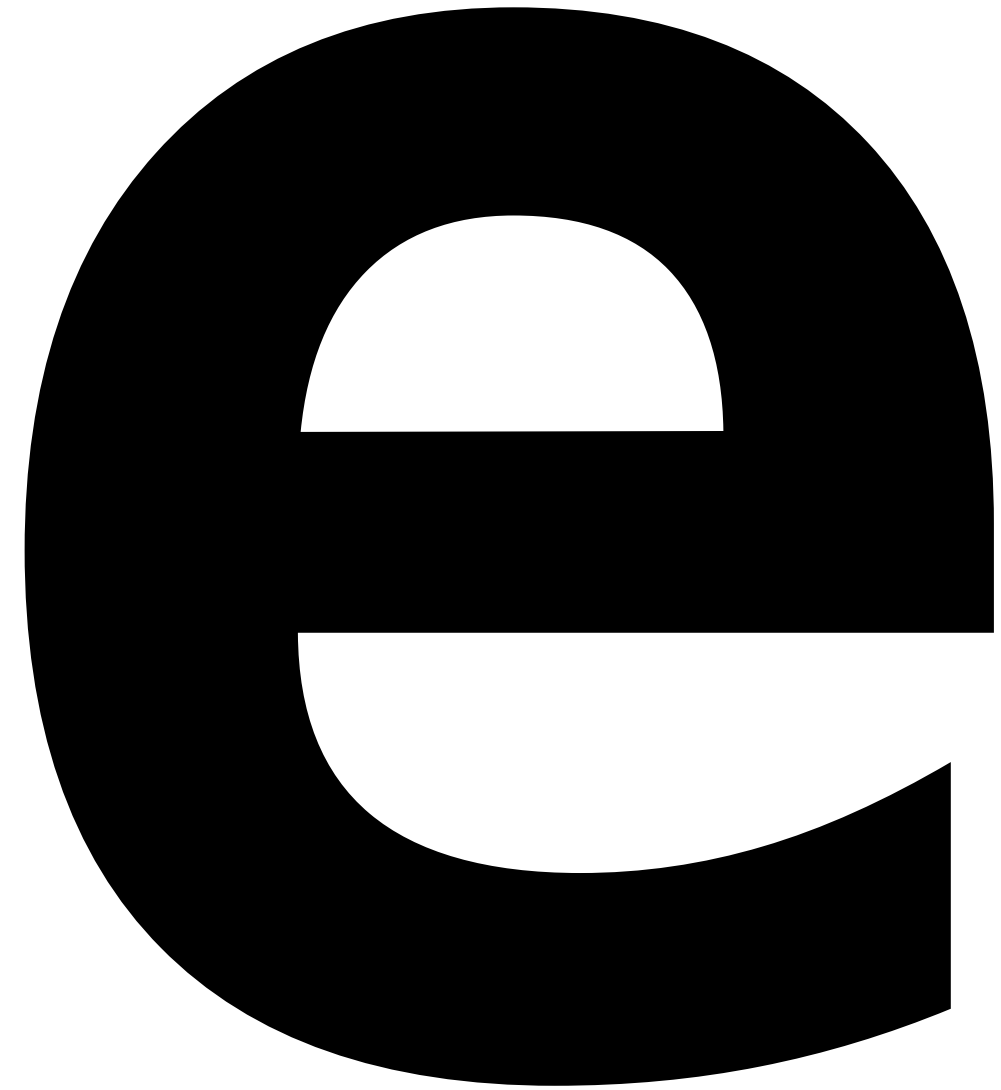


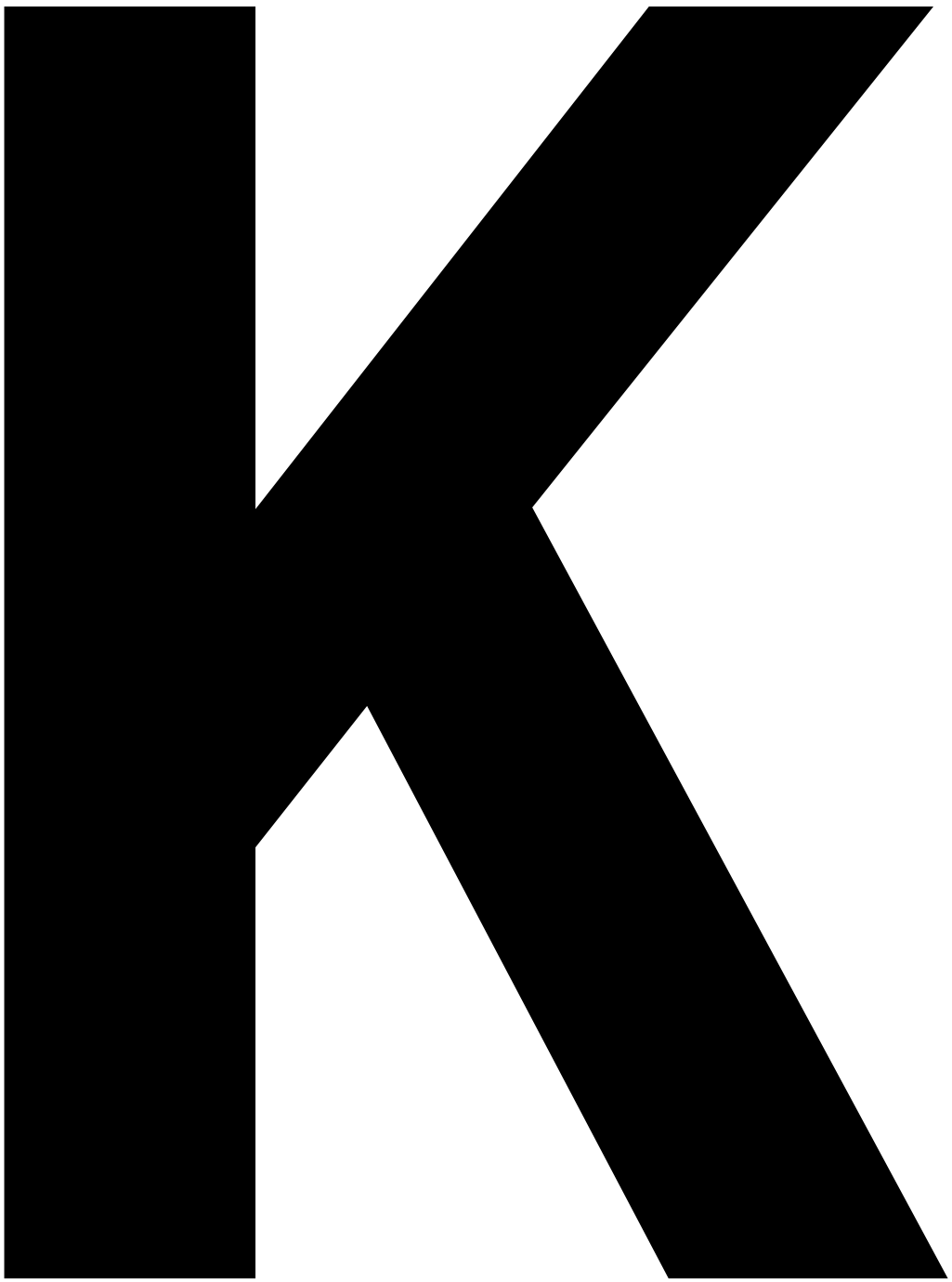


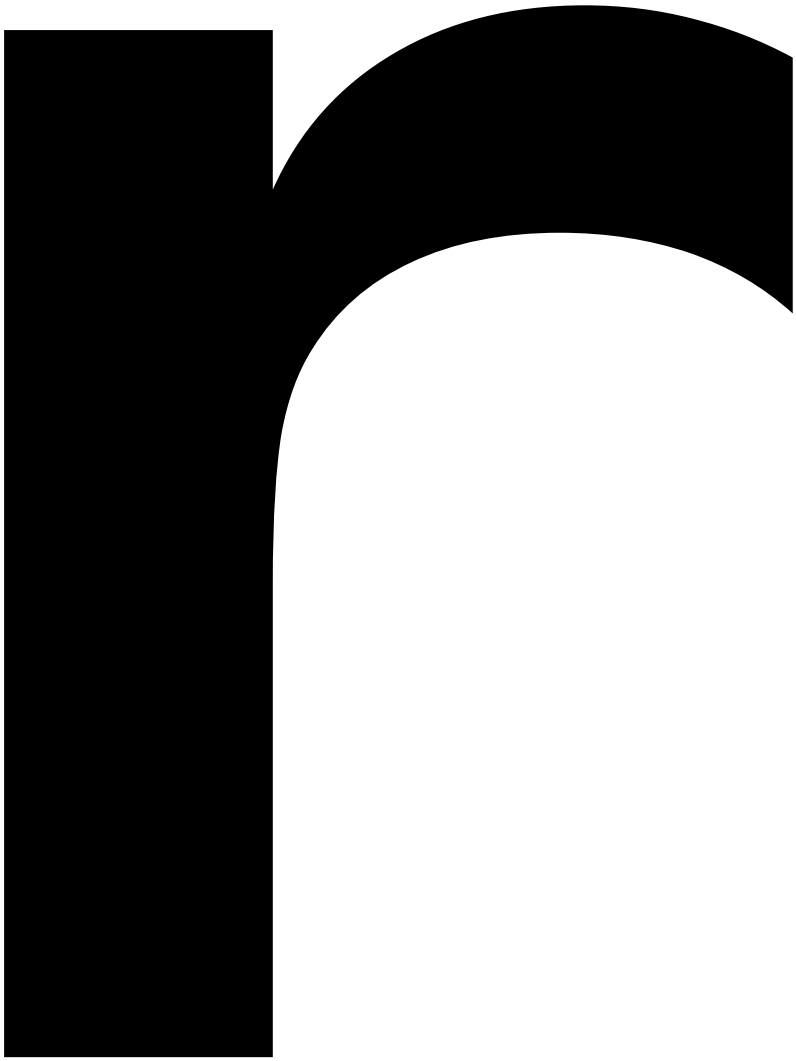


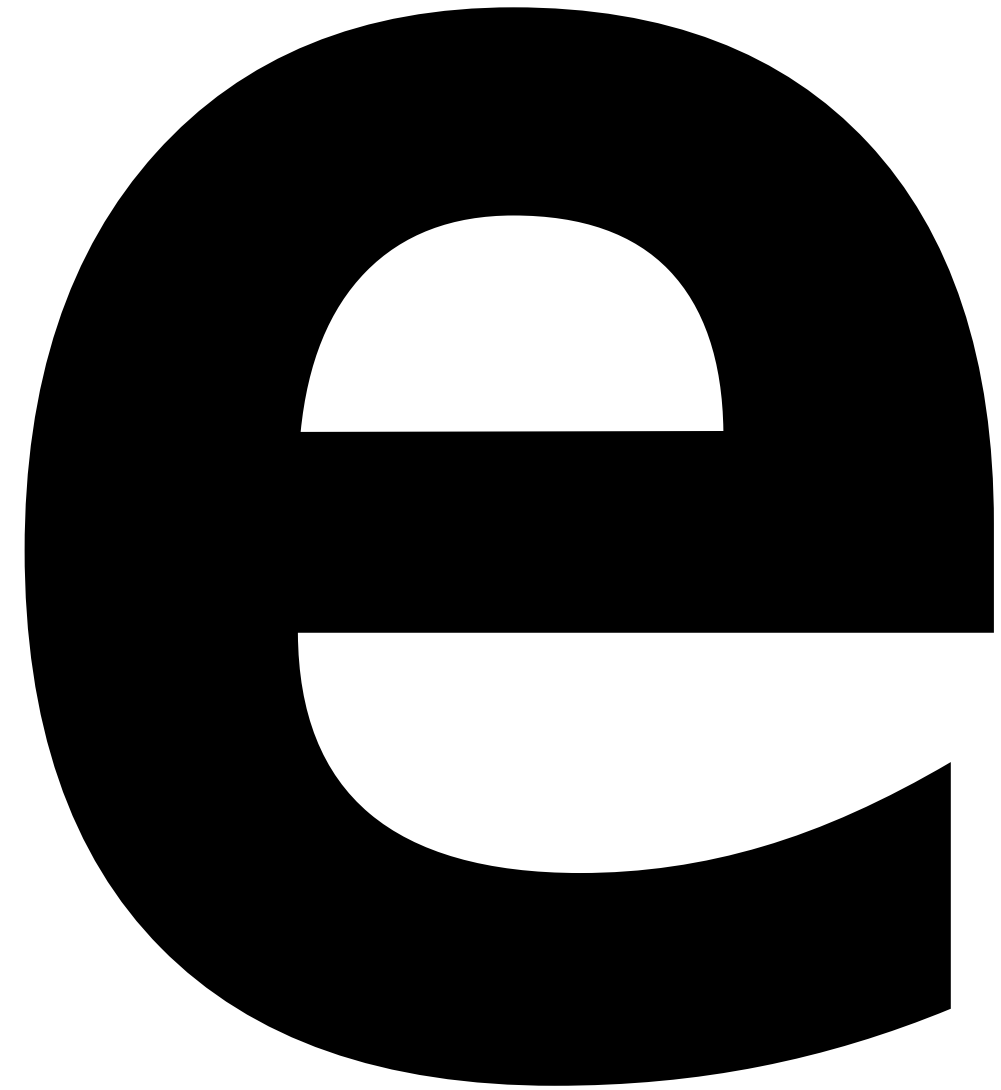
d

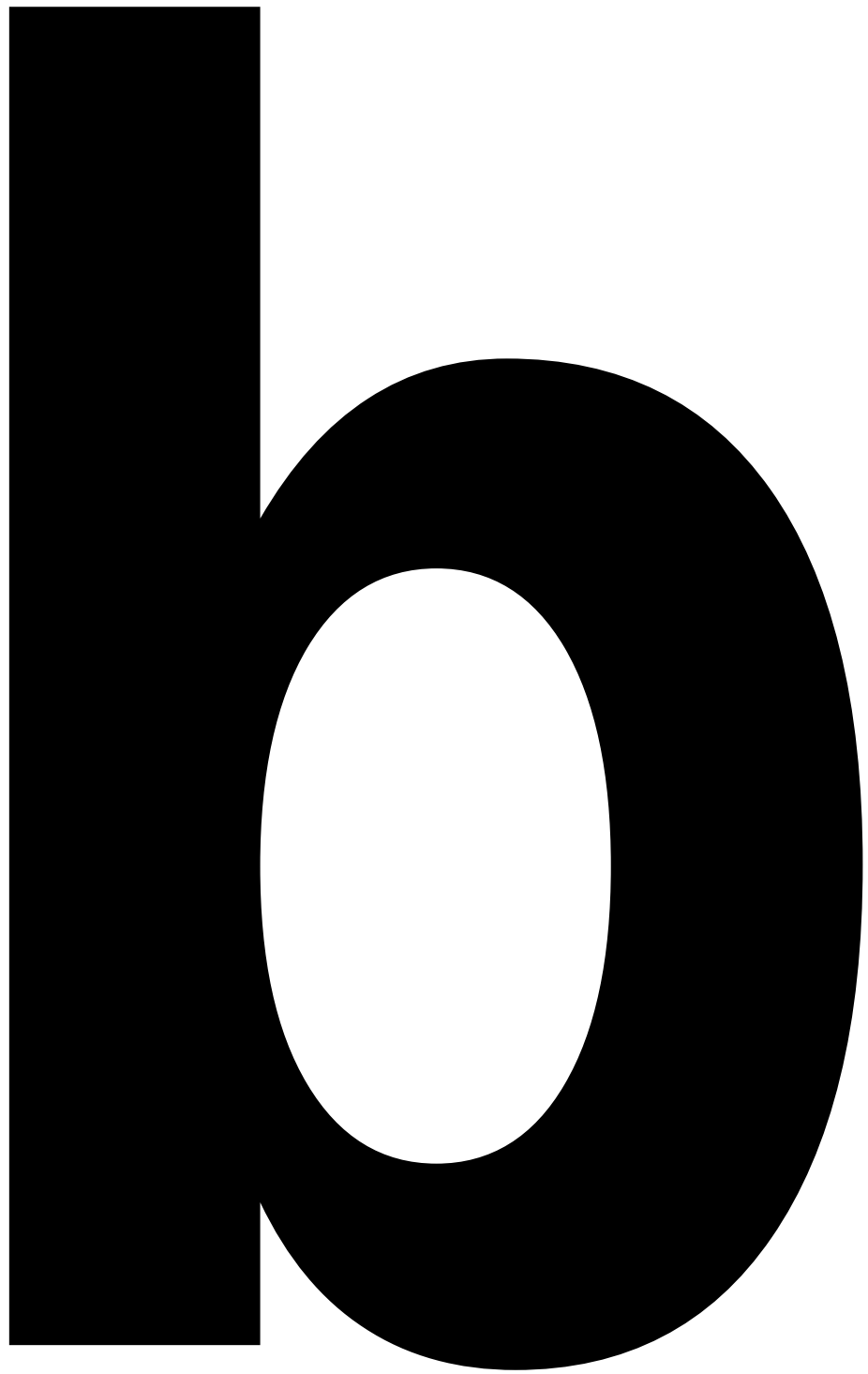




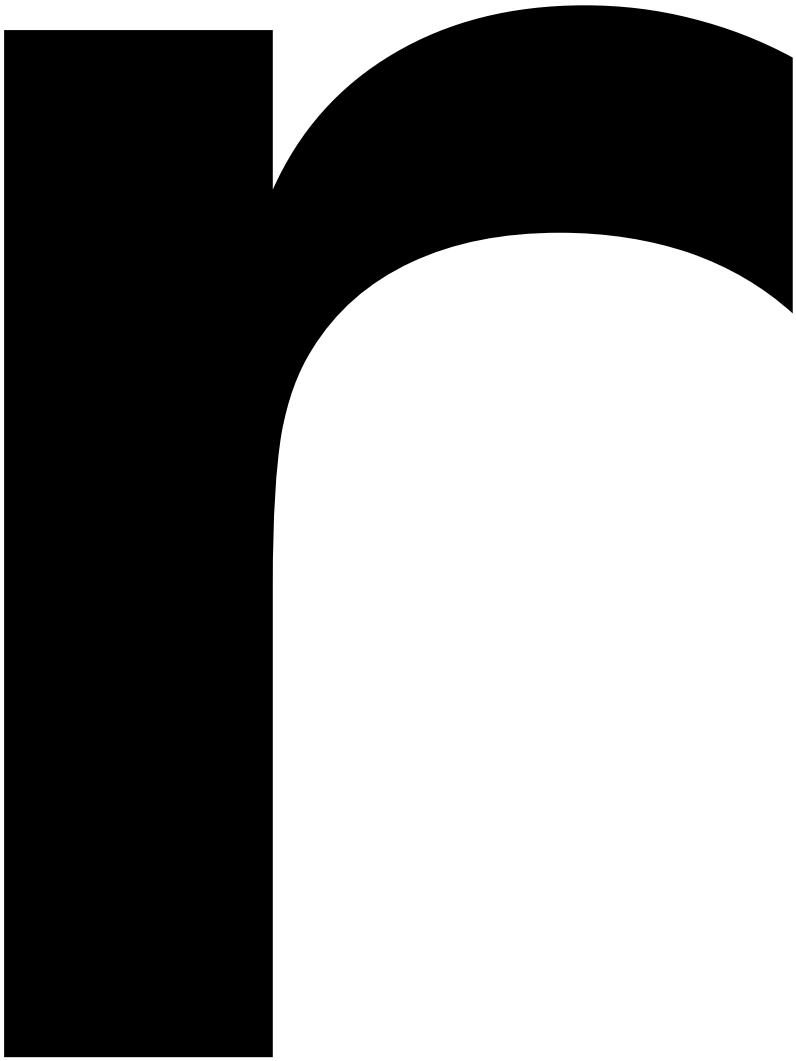


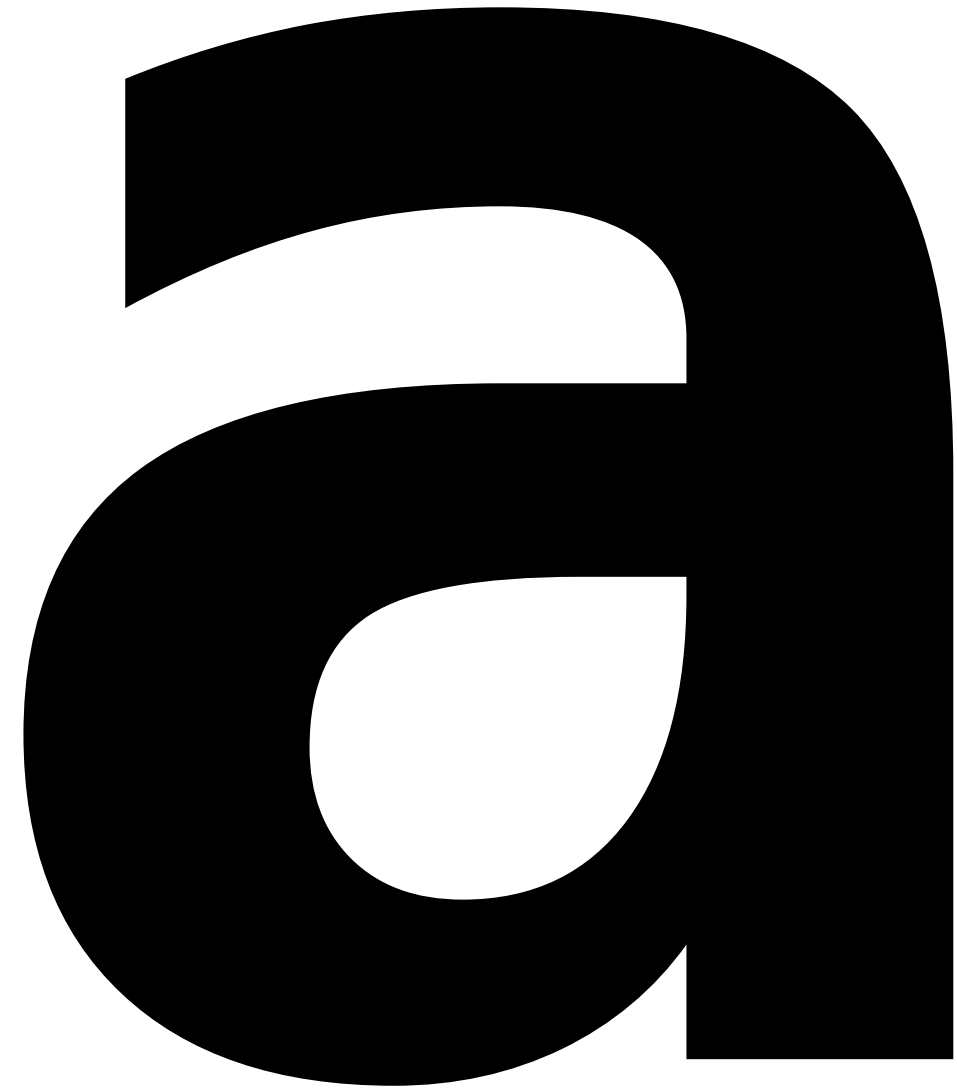


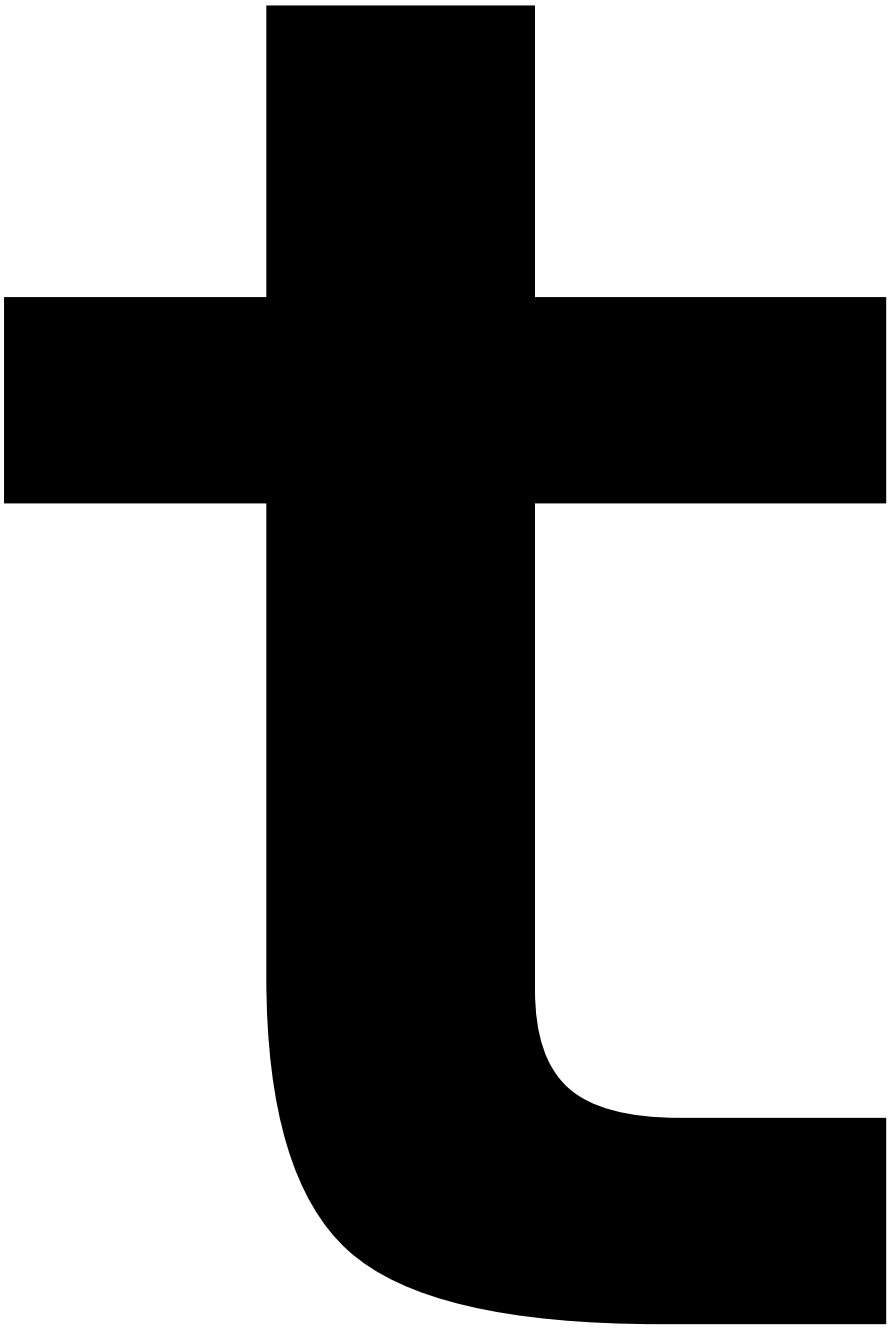


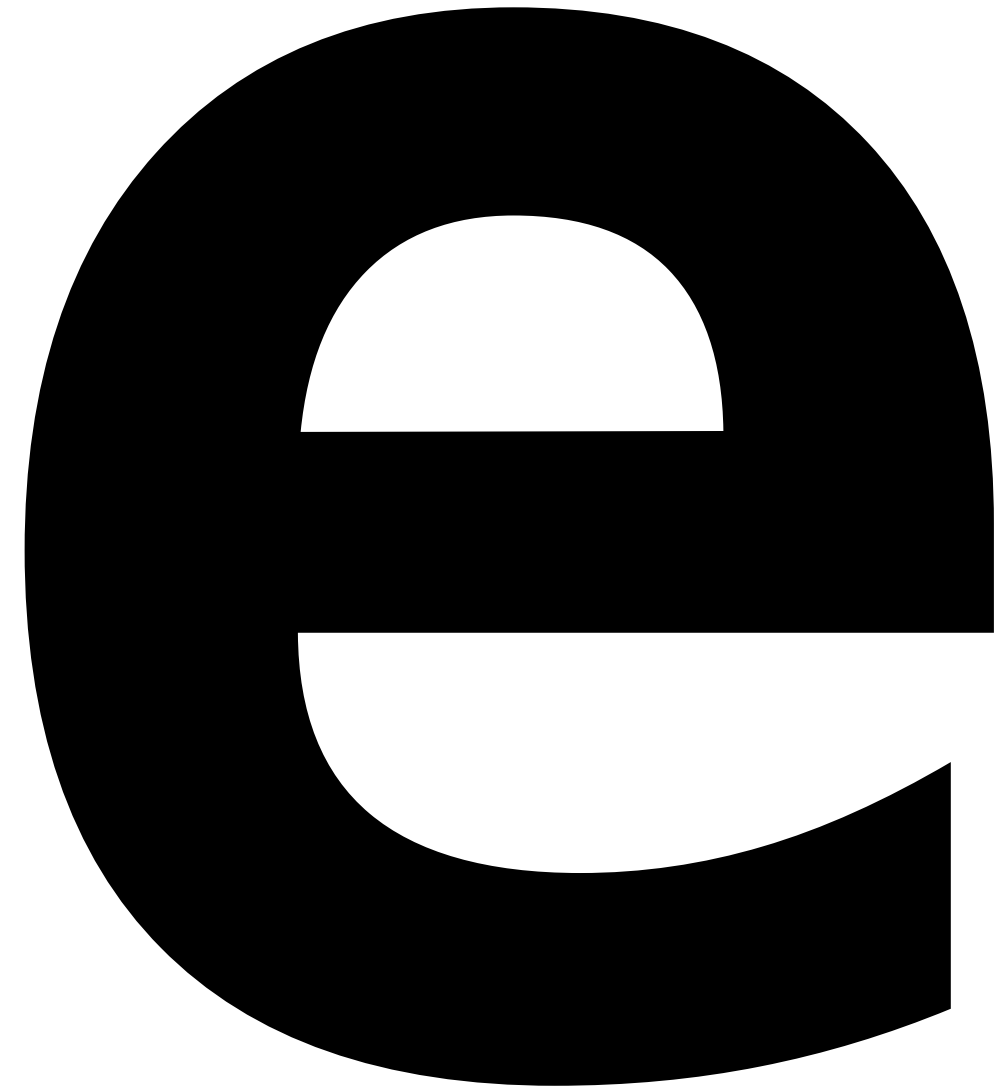


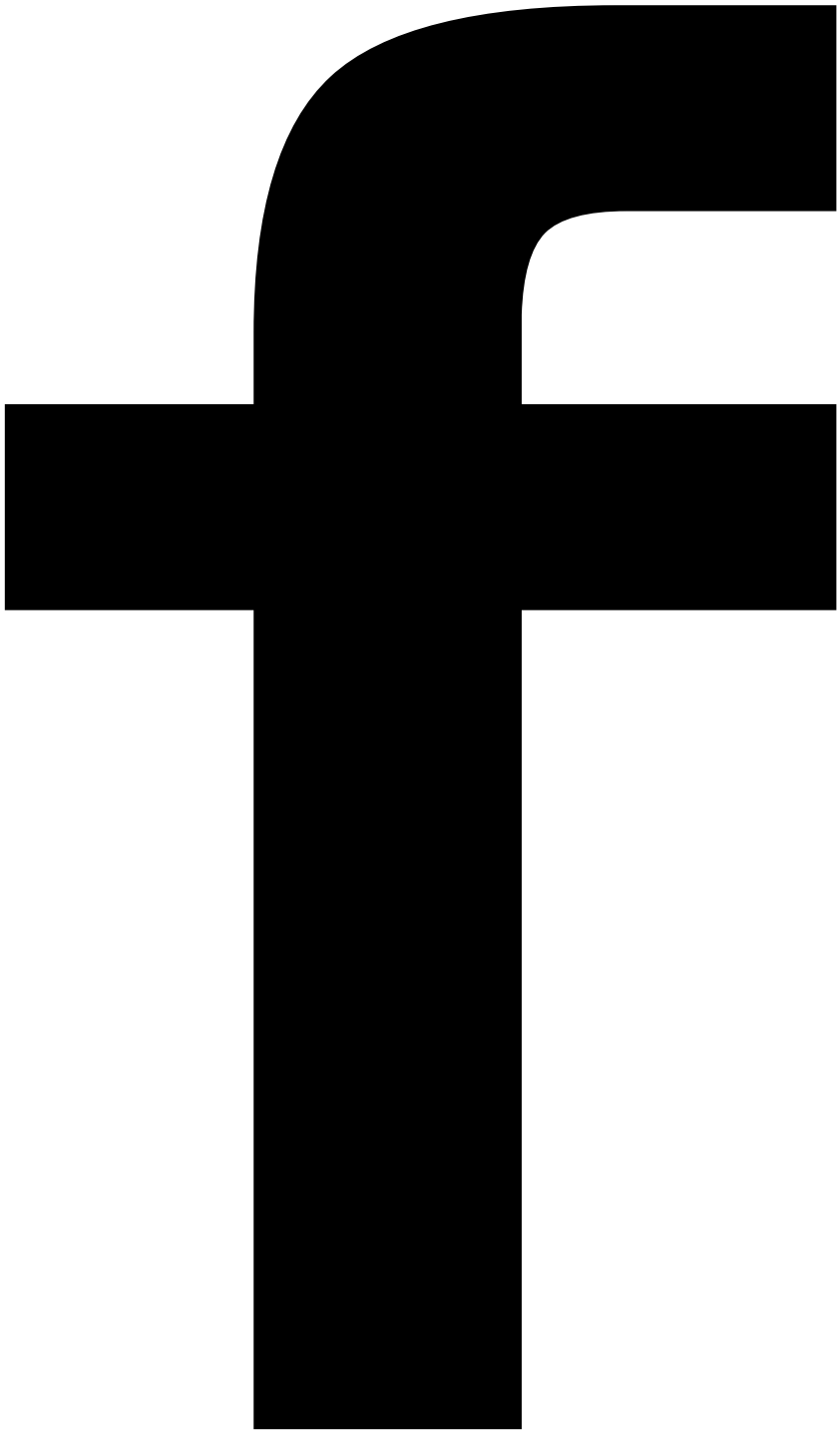
S

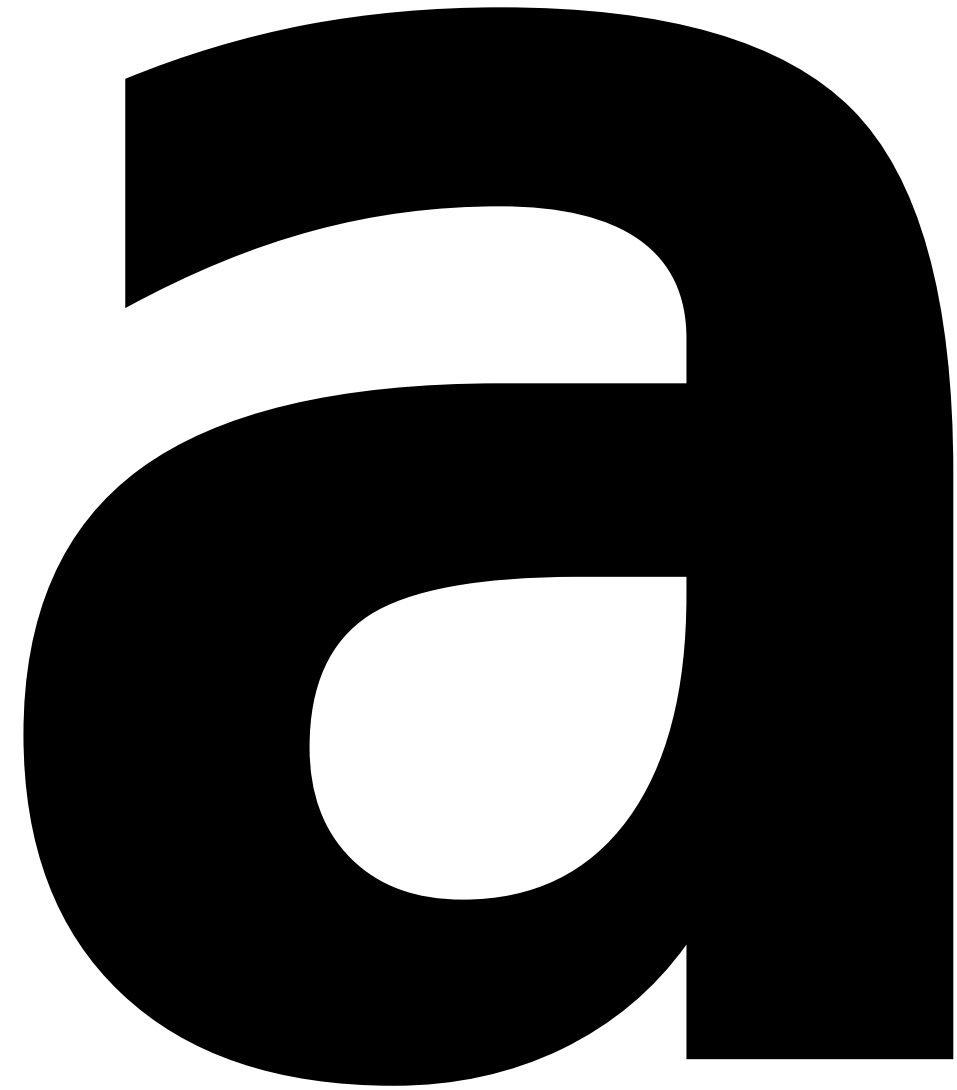




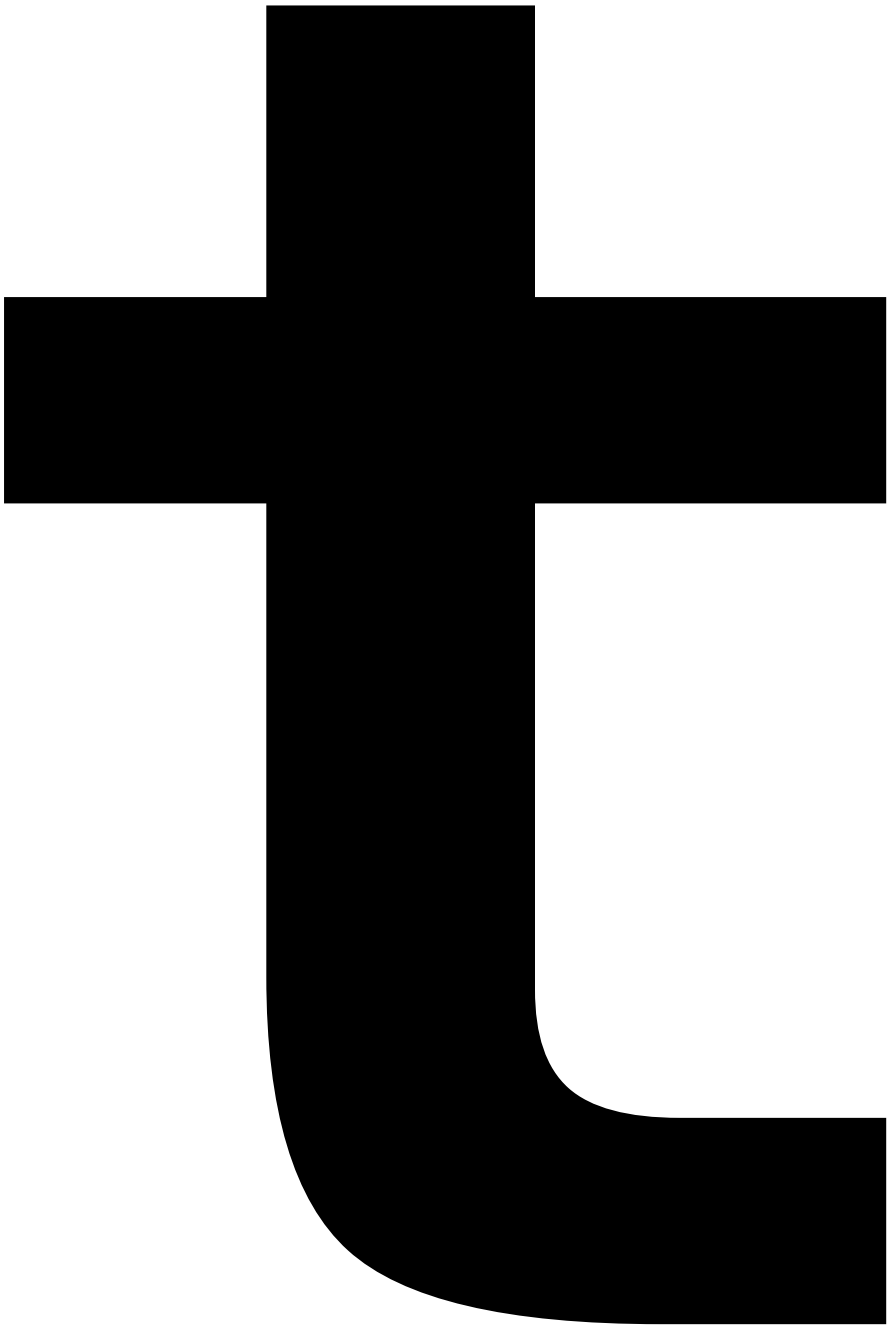


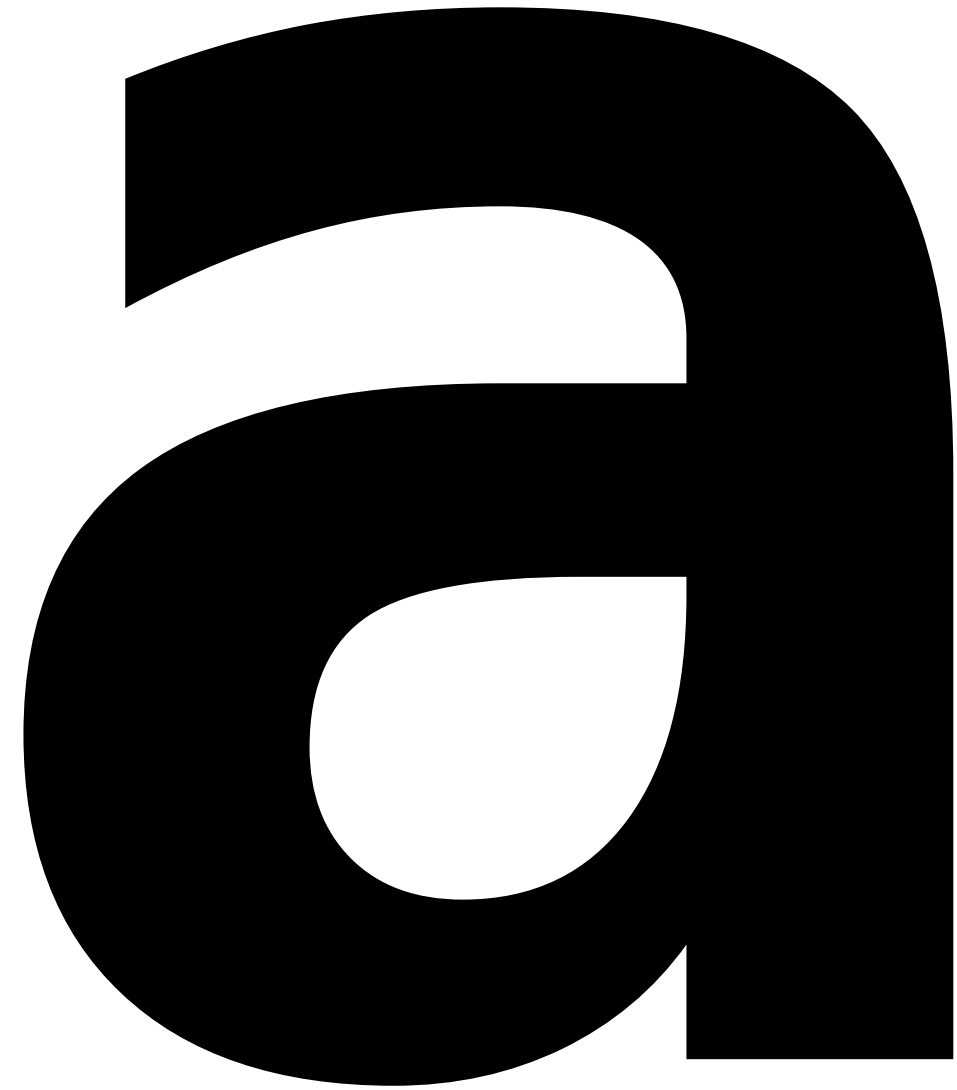




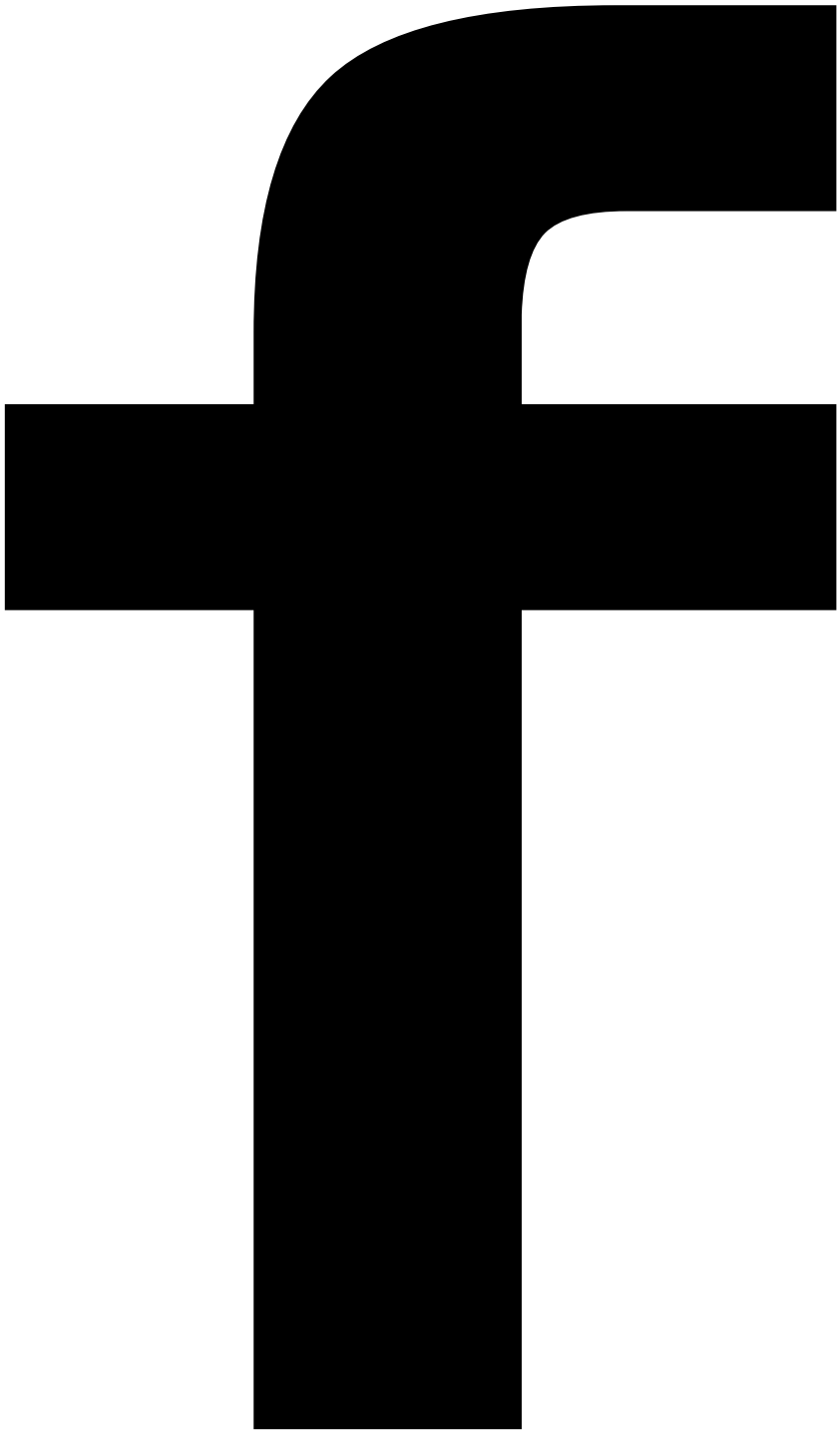


S

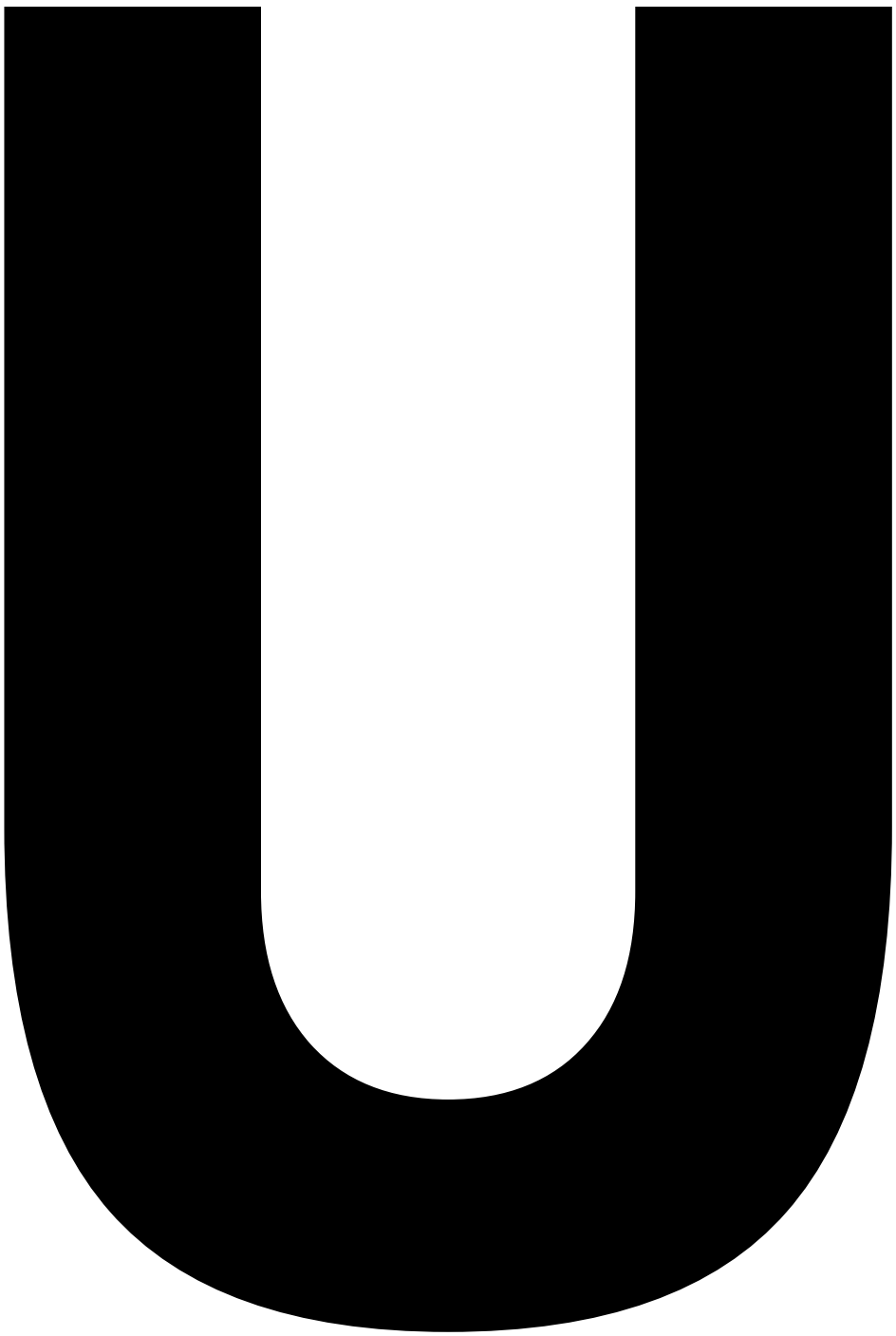


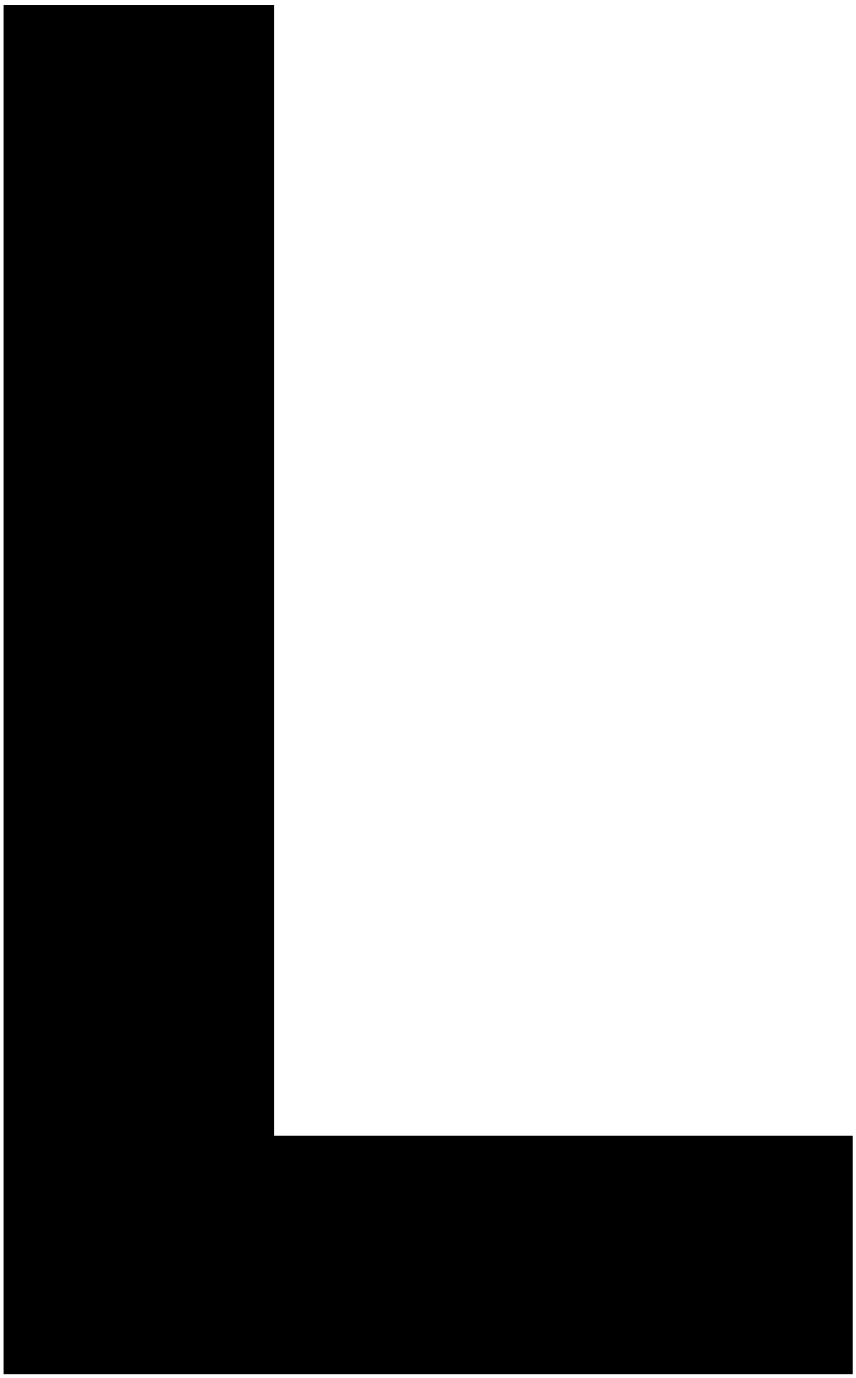


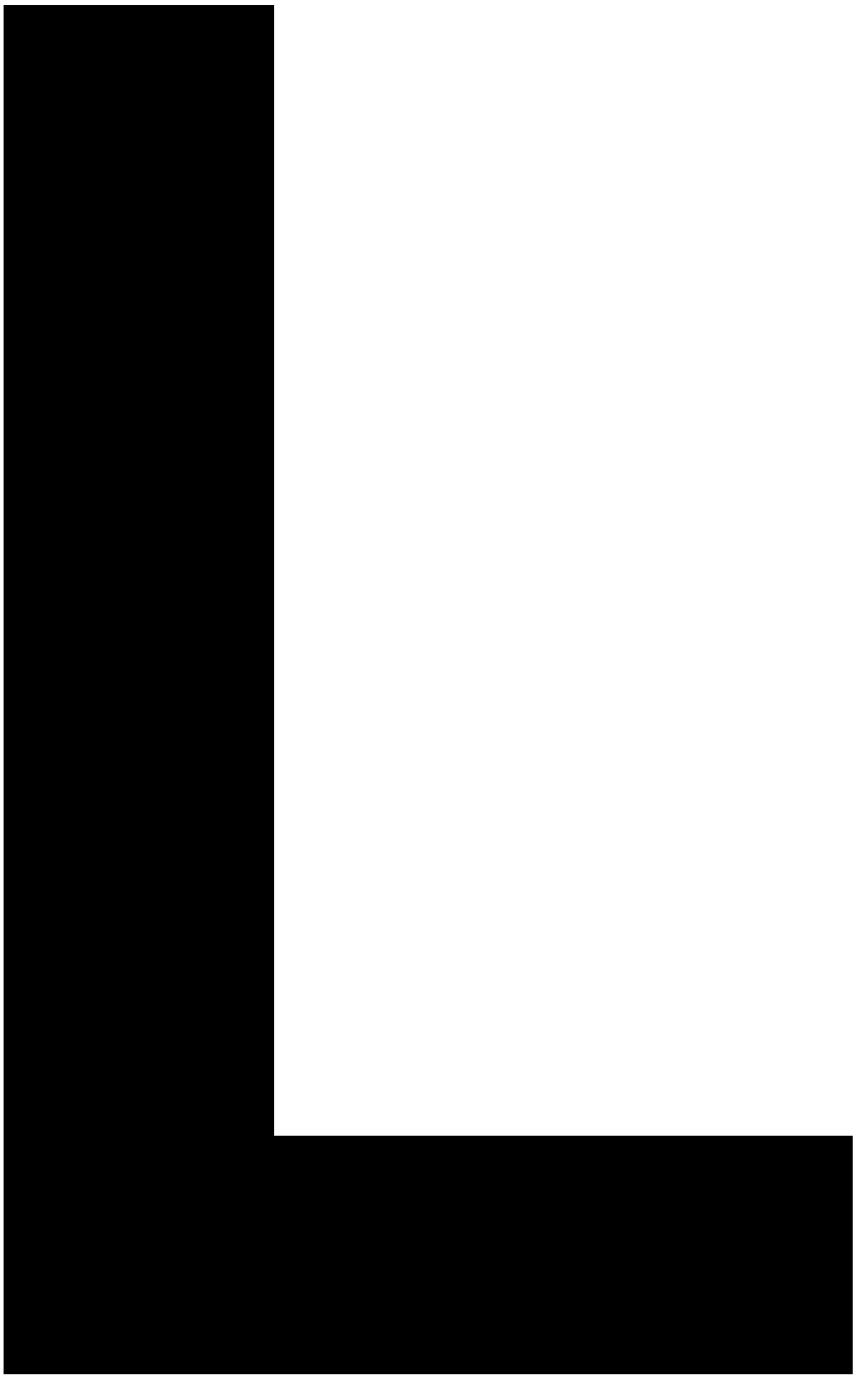
u

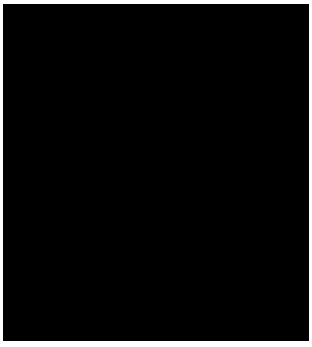


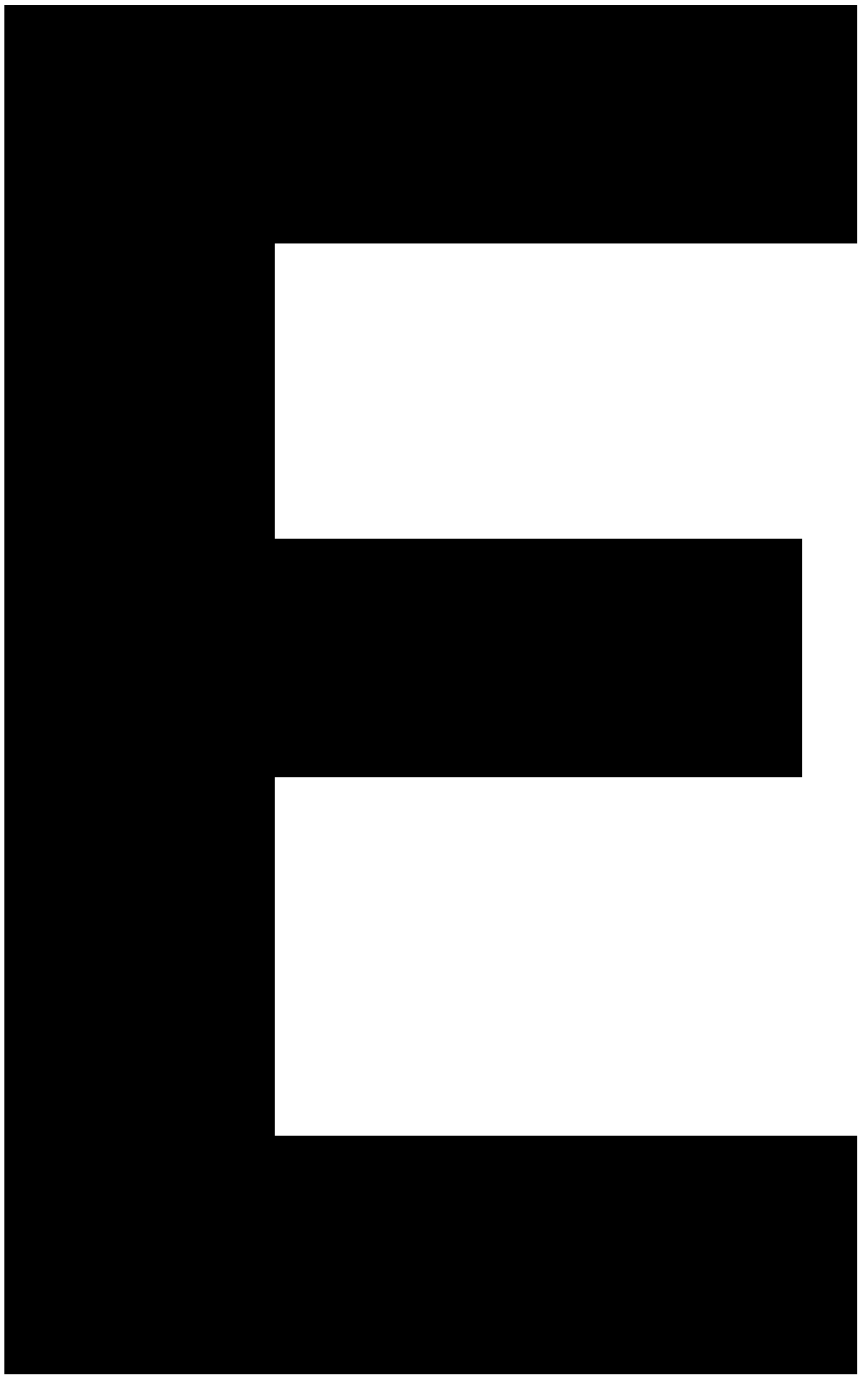
N



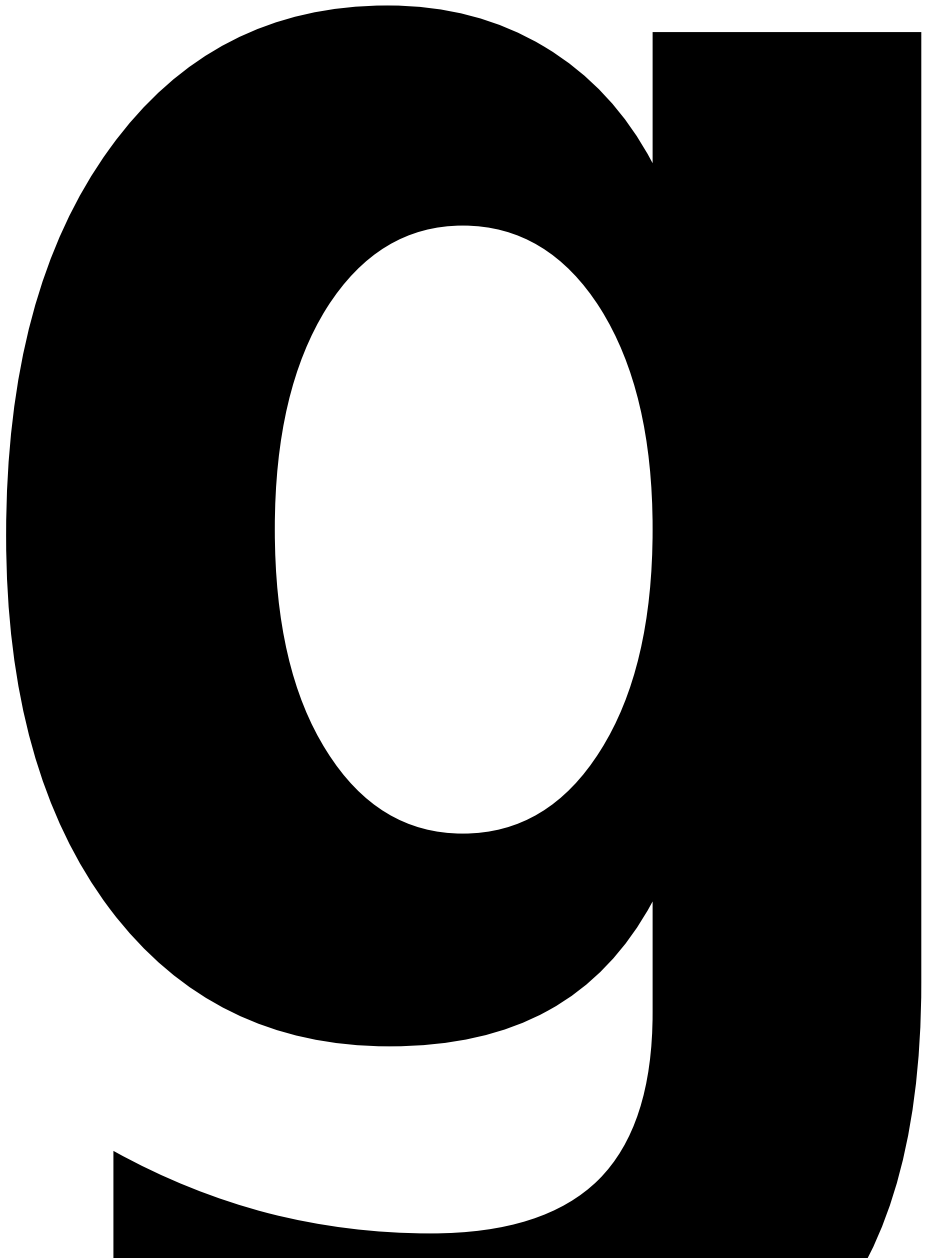


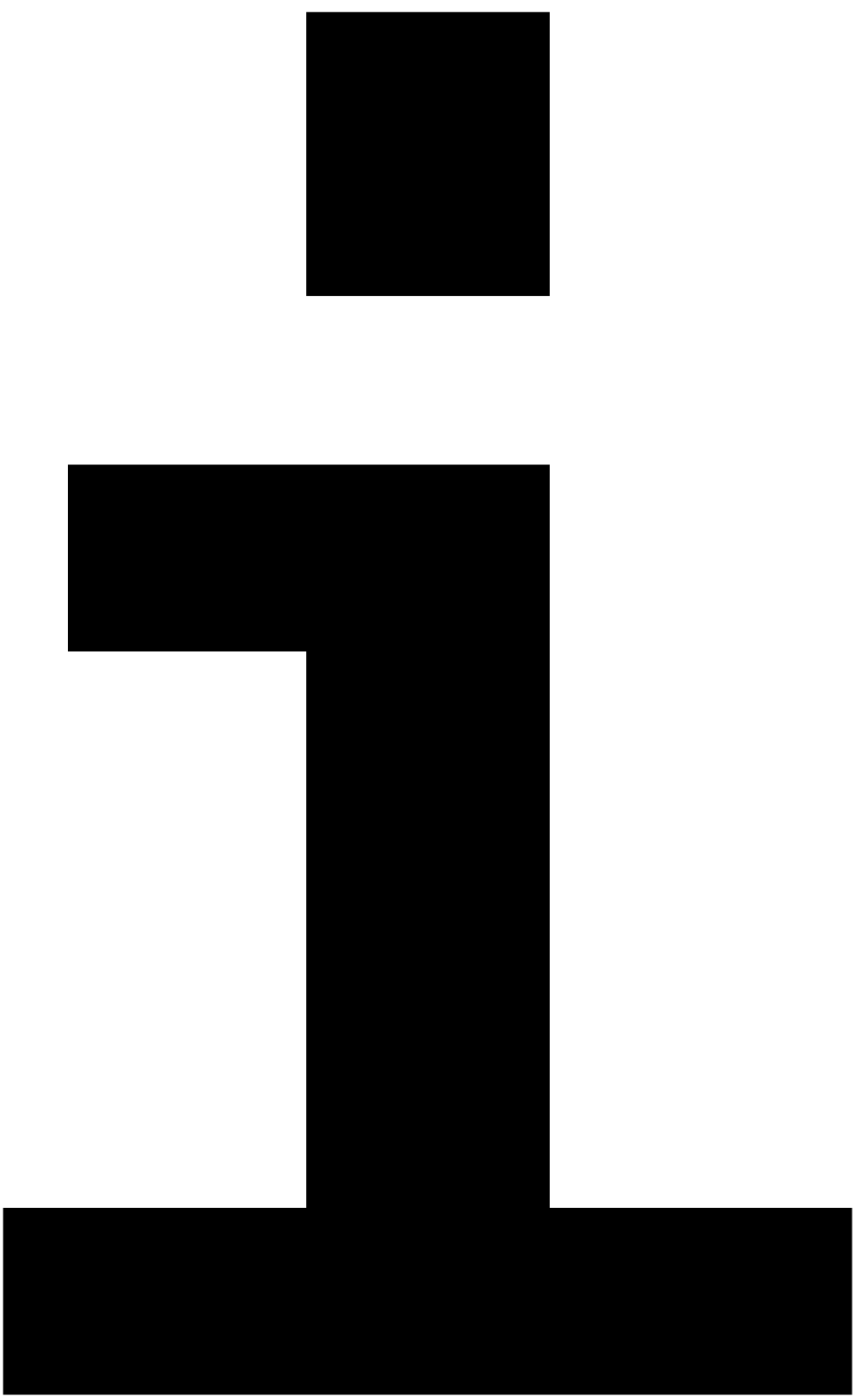


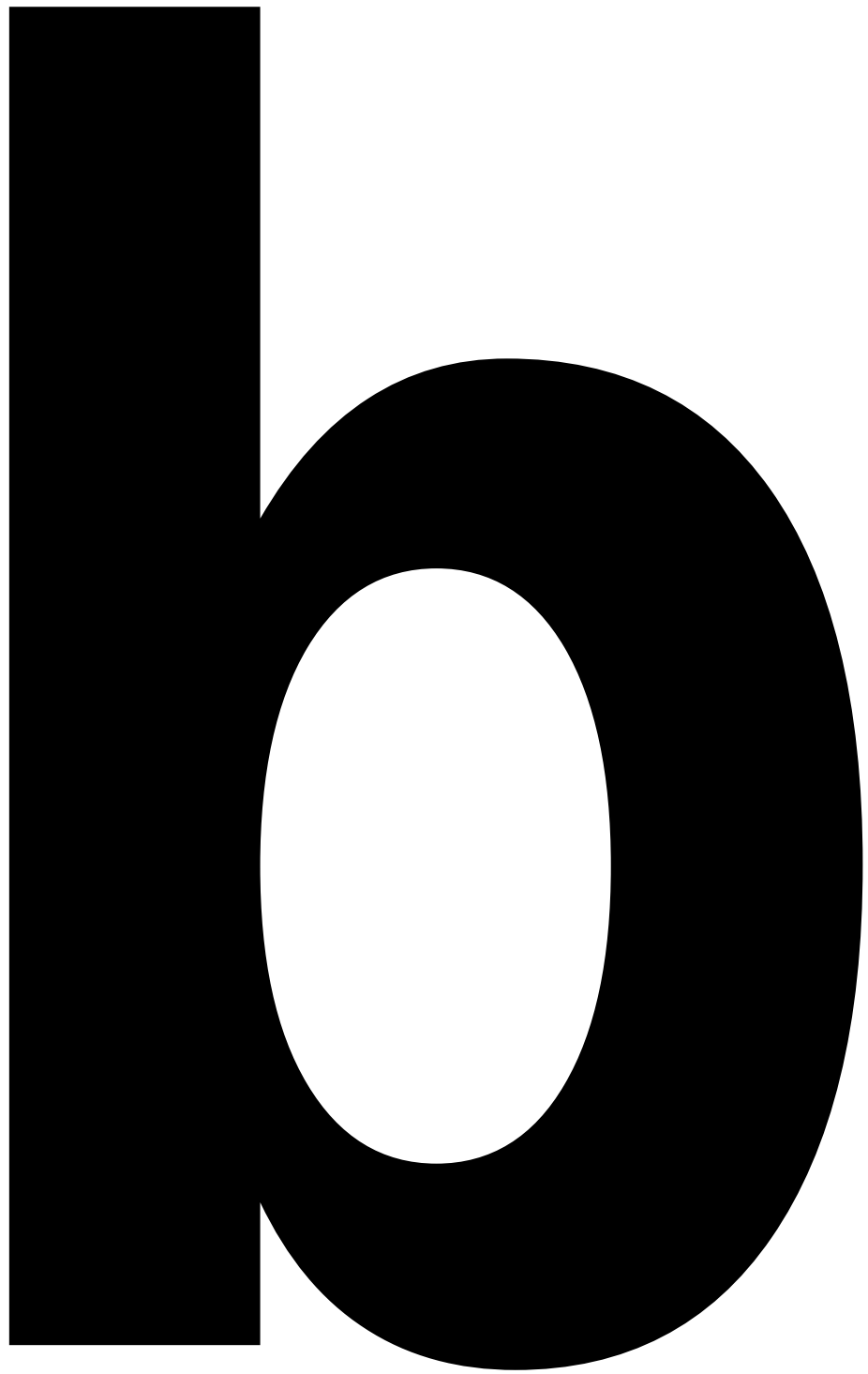


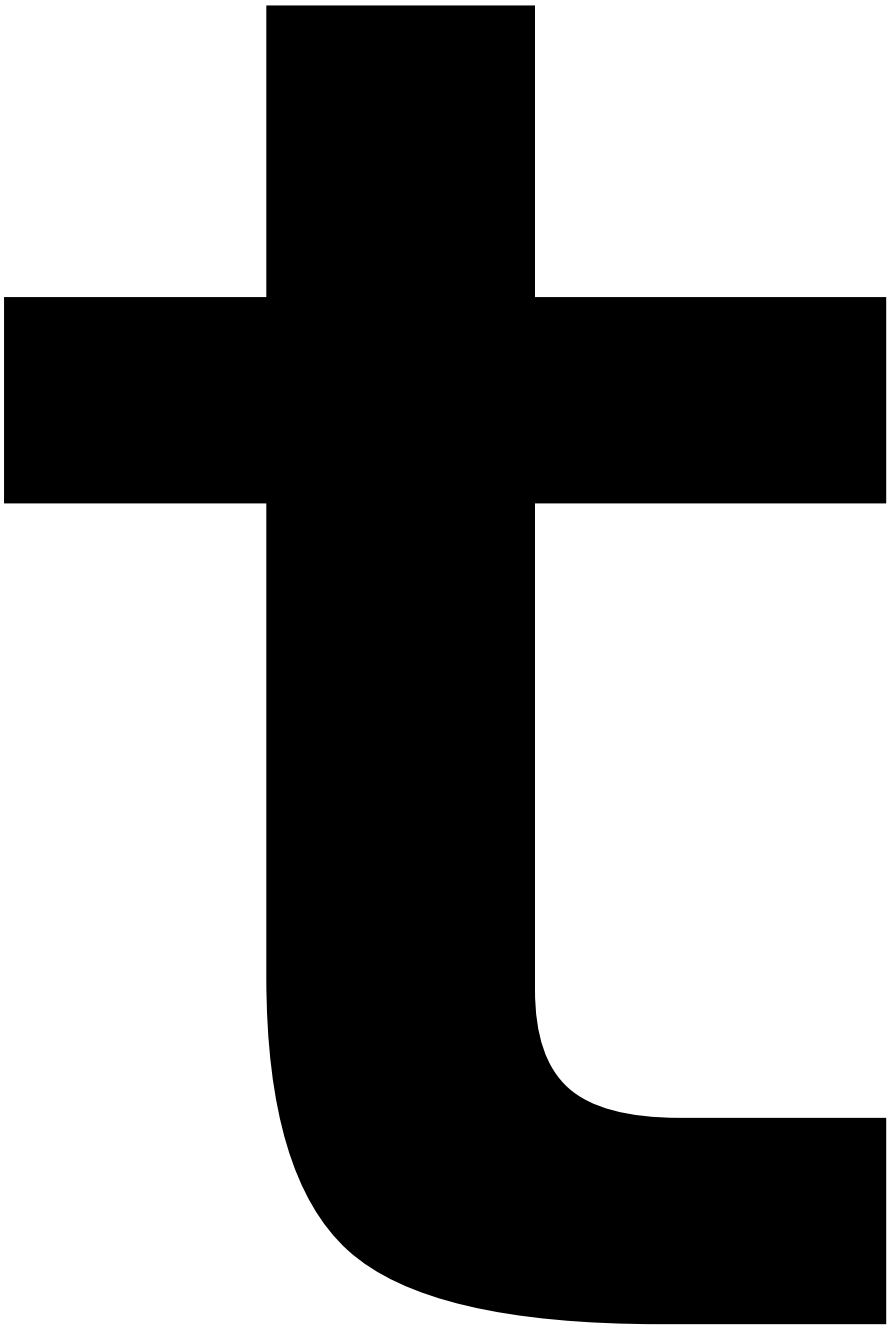


S

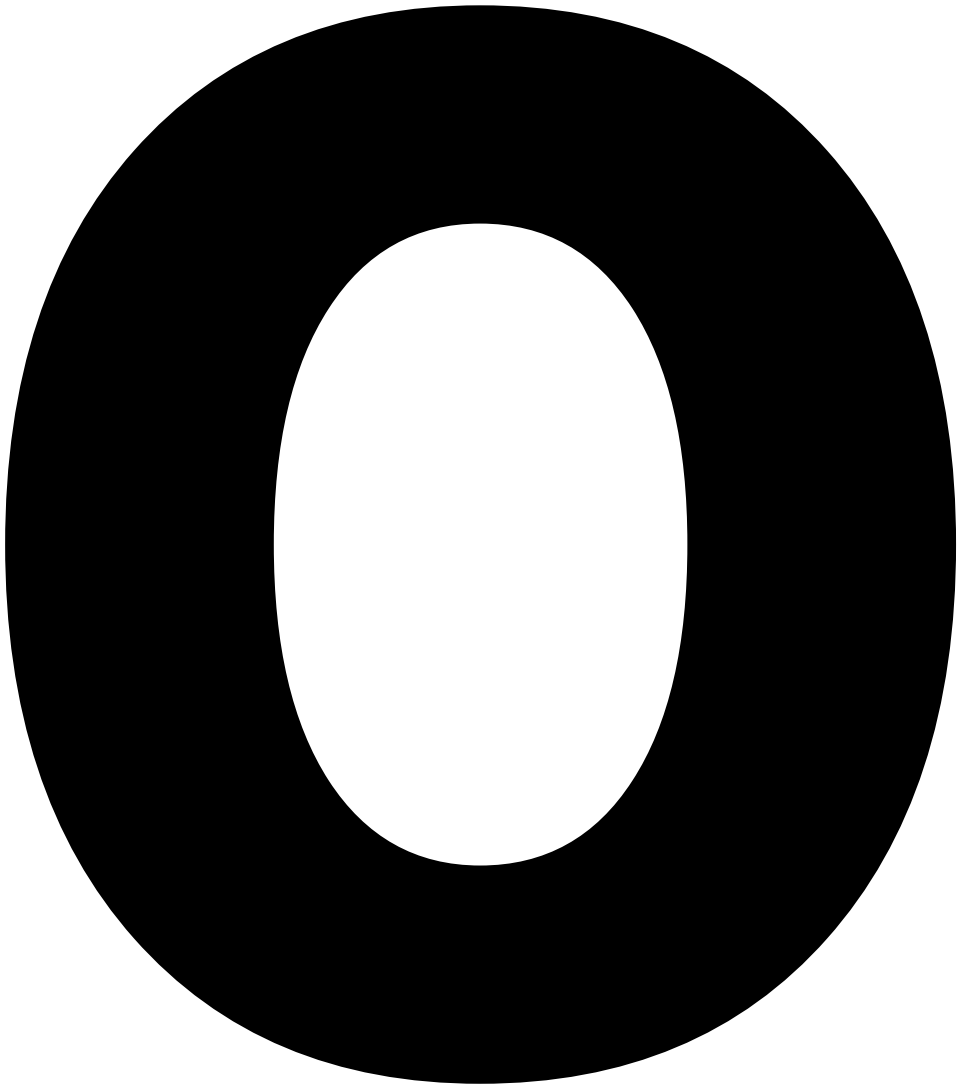


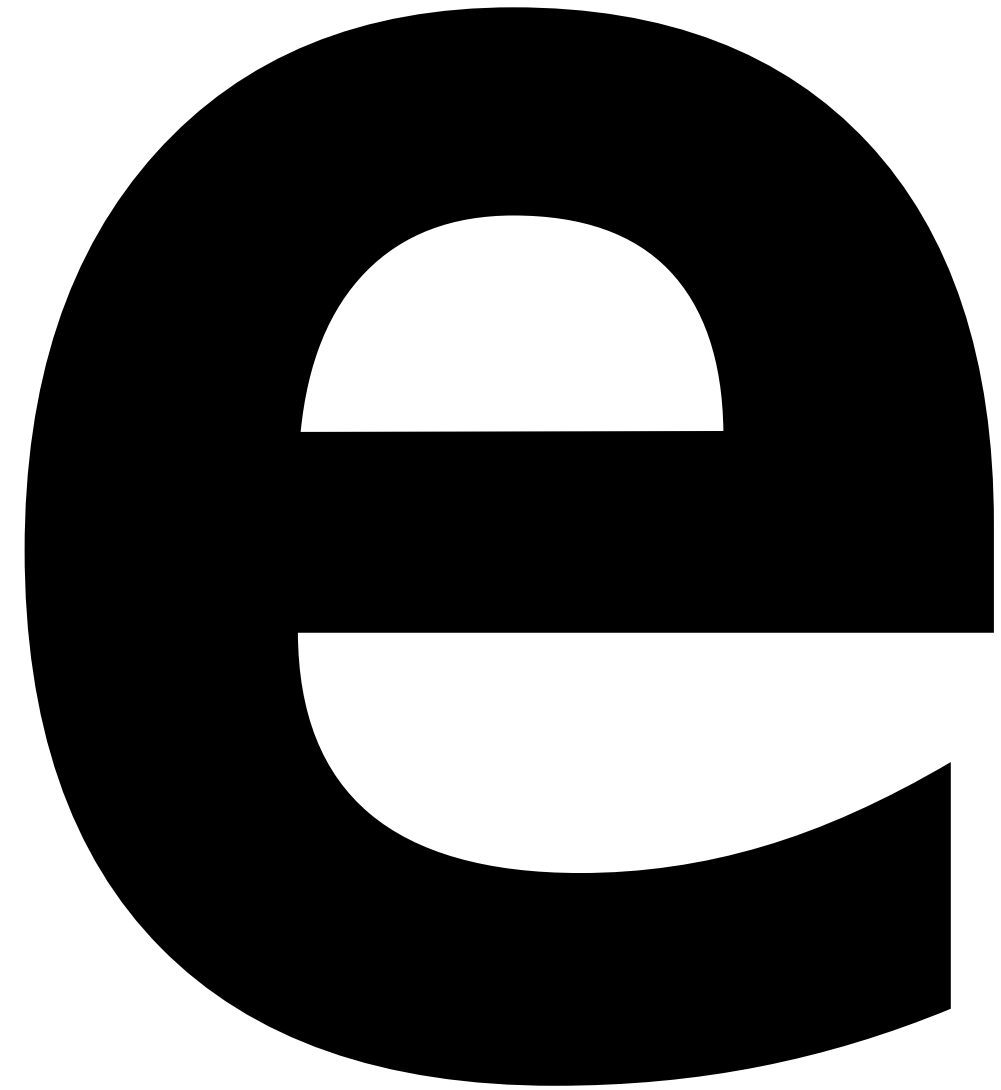


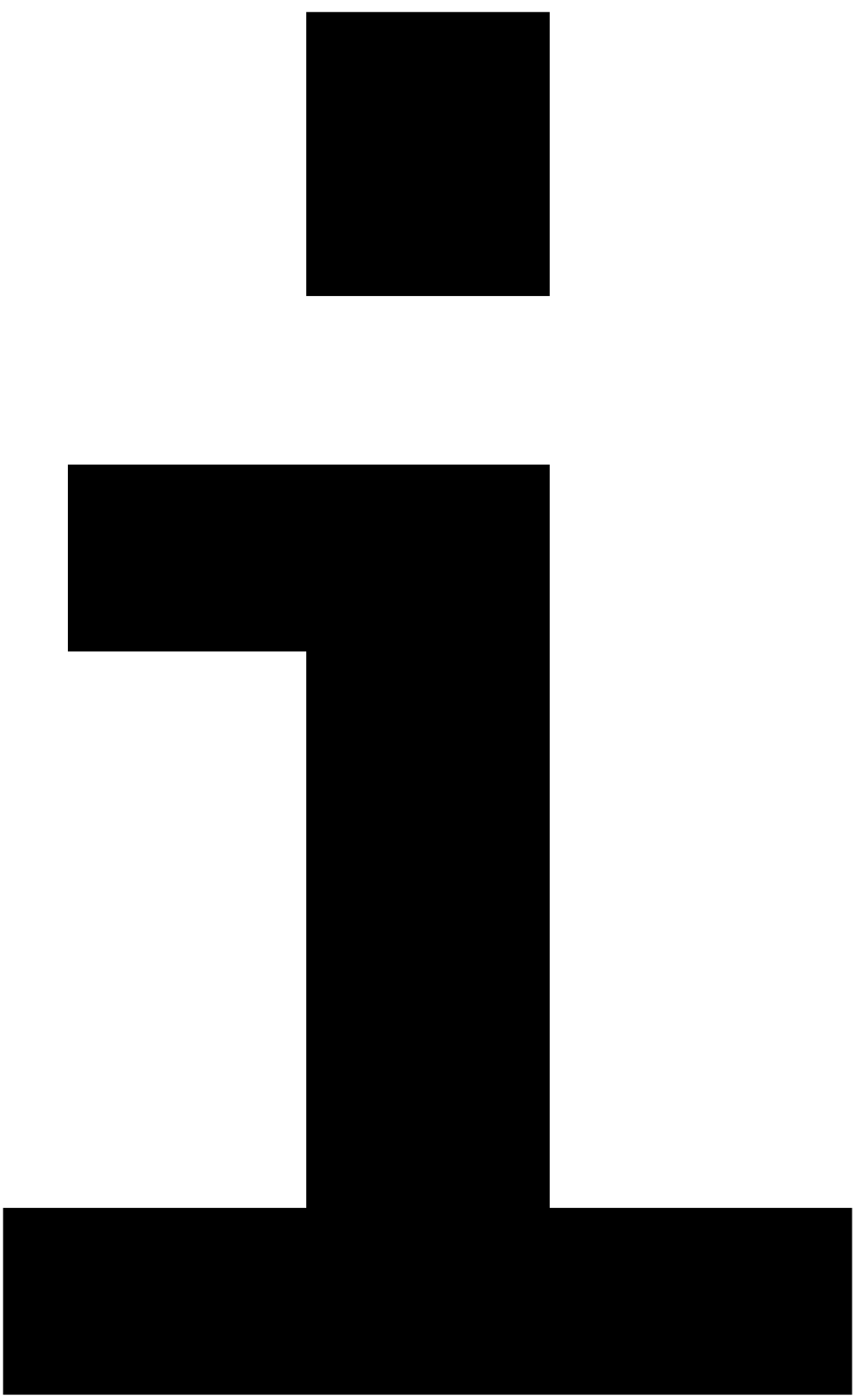


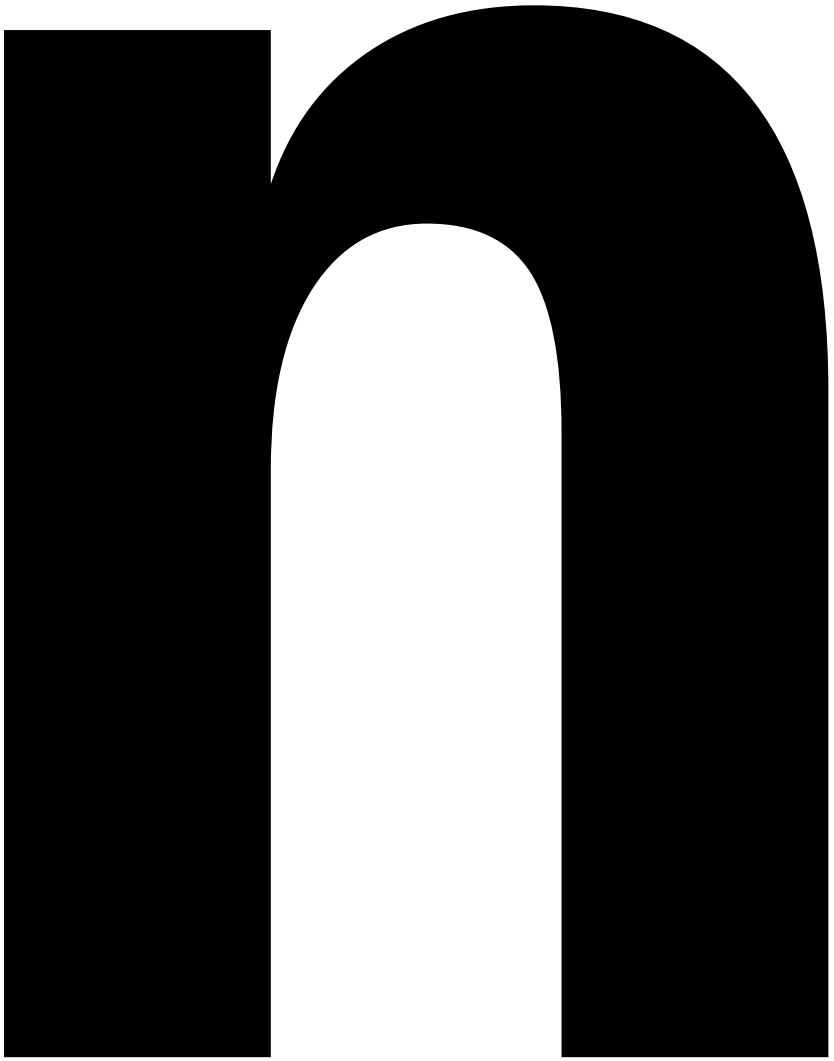


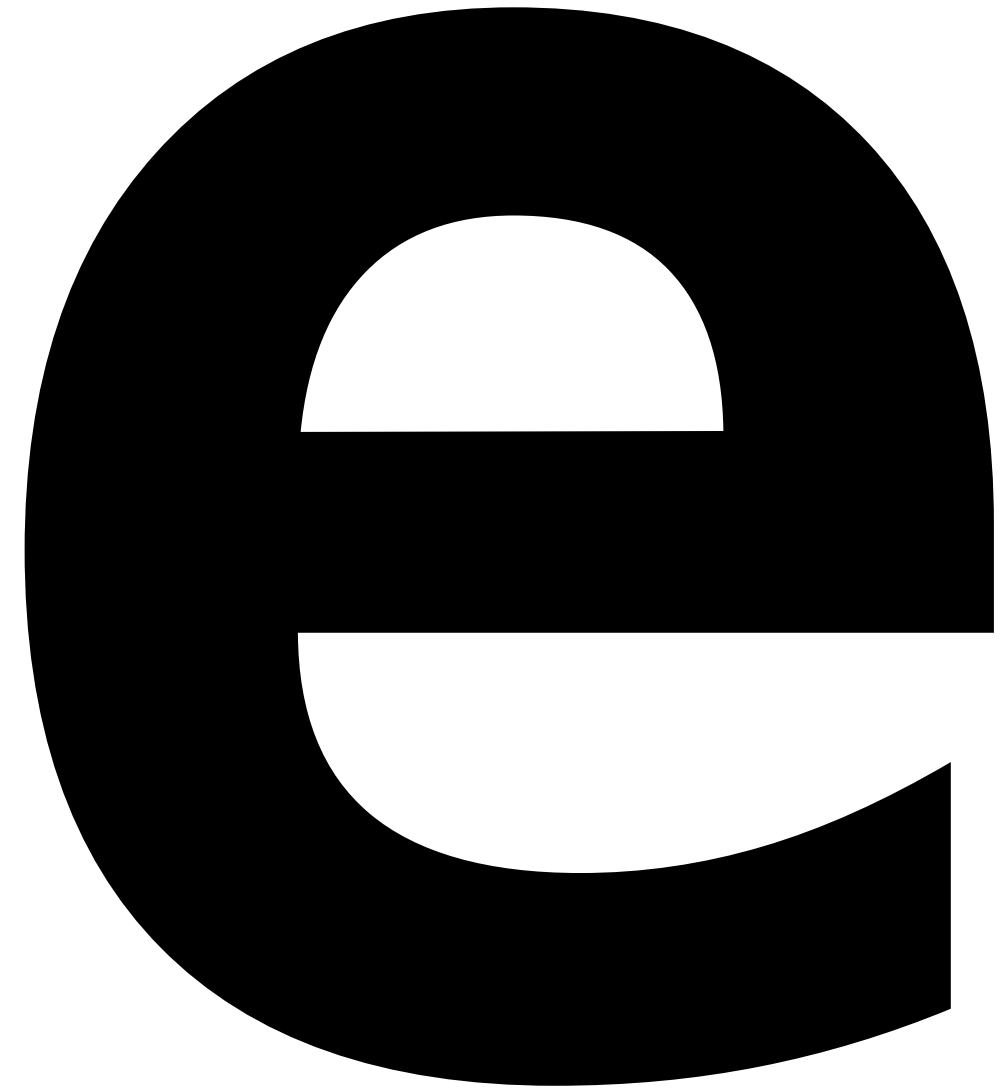
S

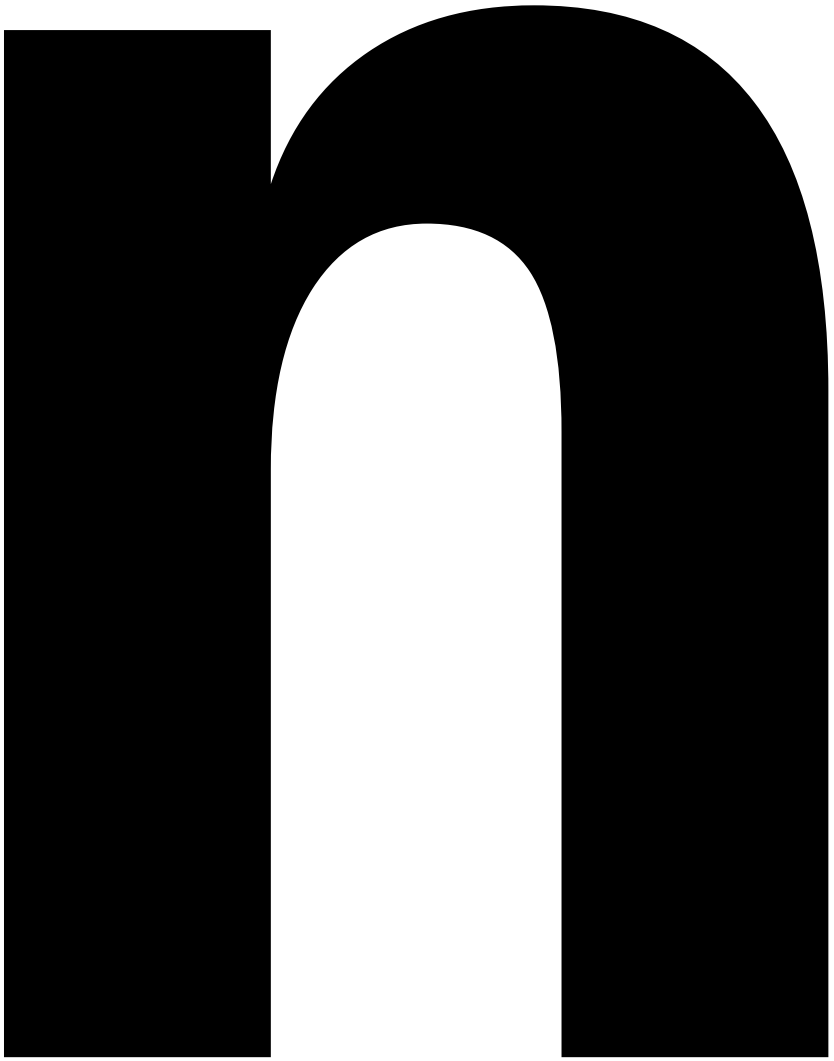


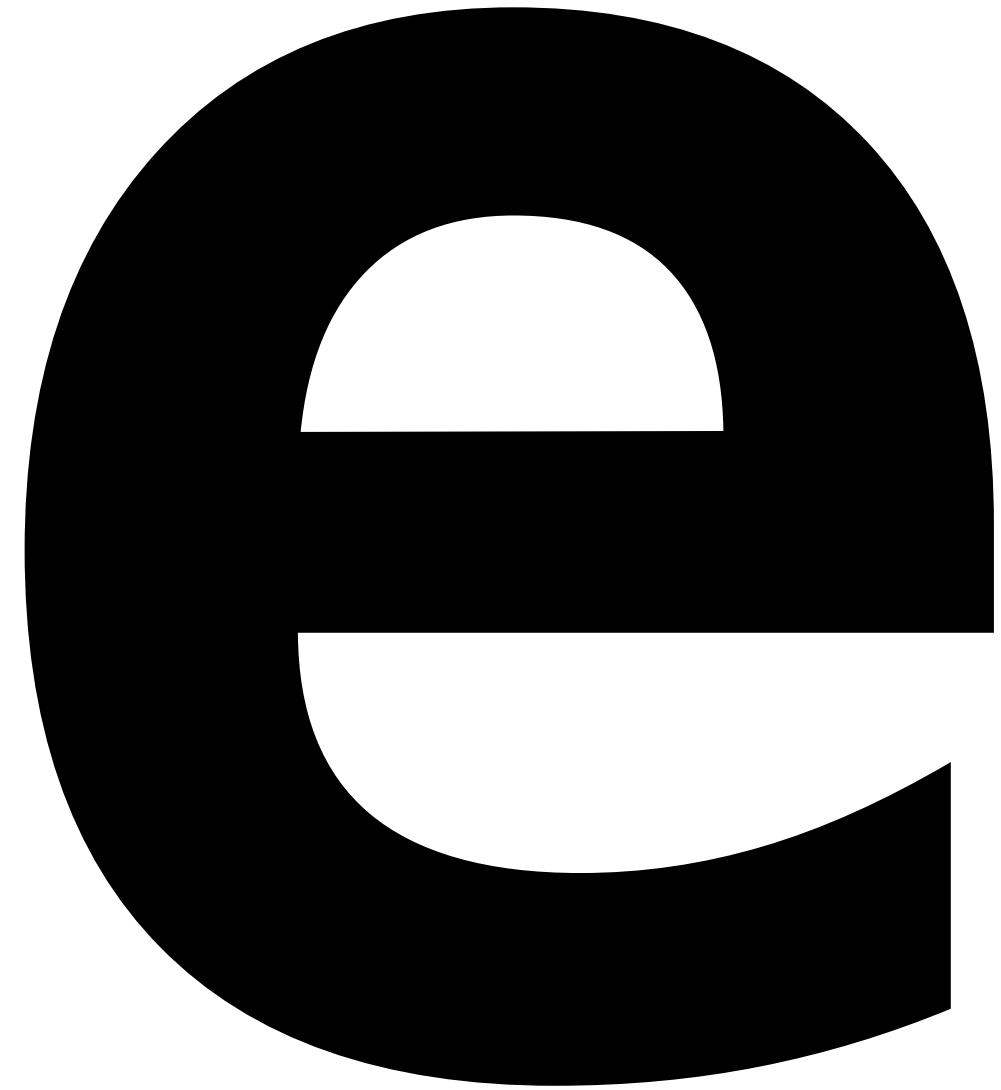


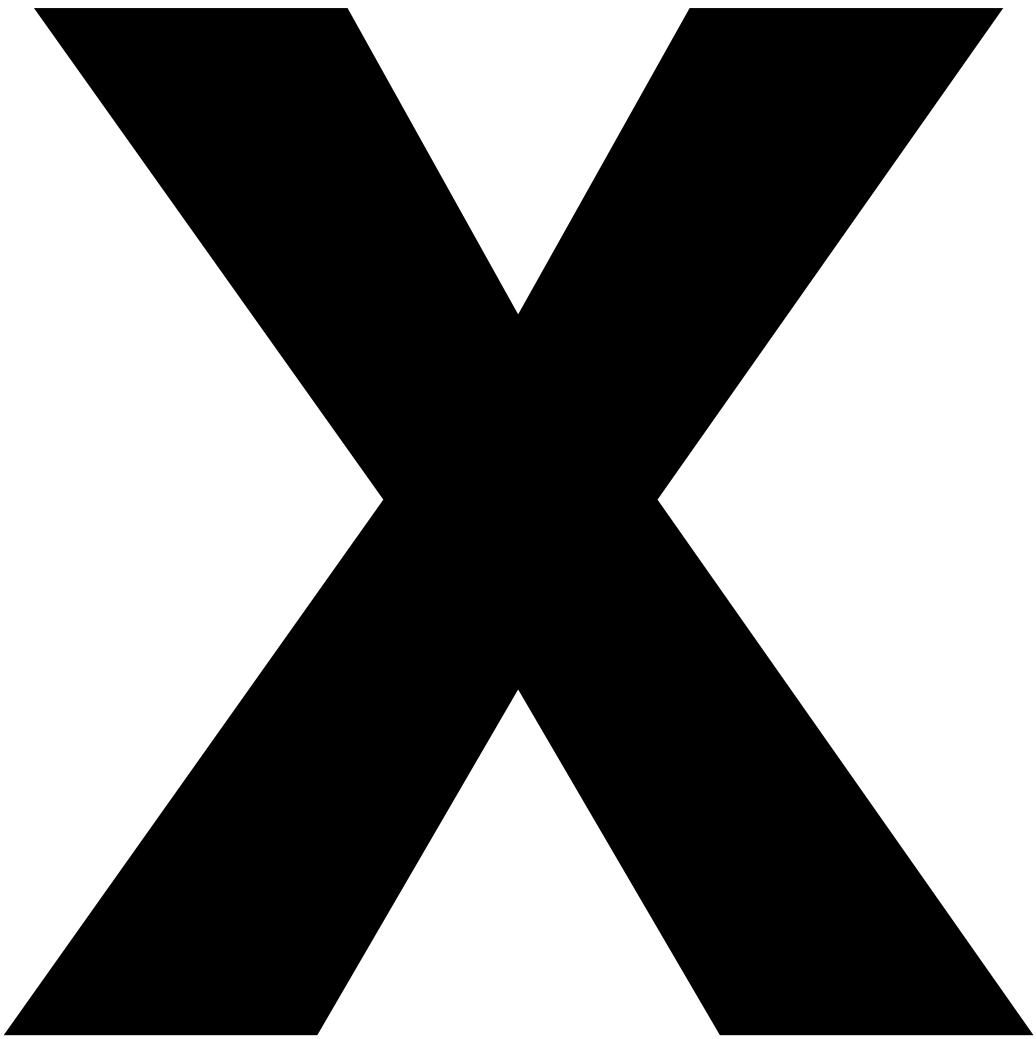


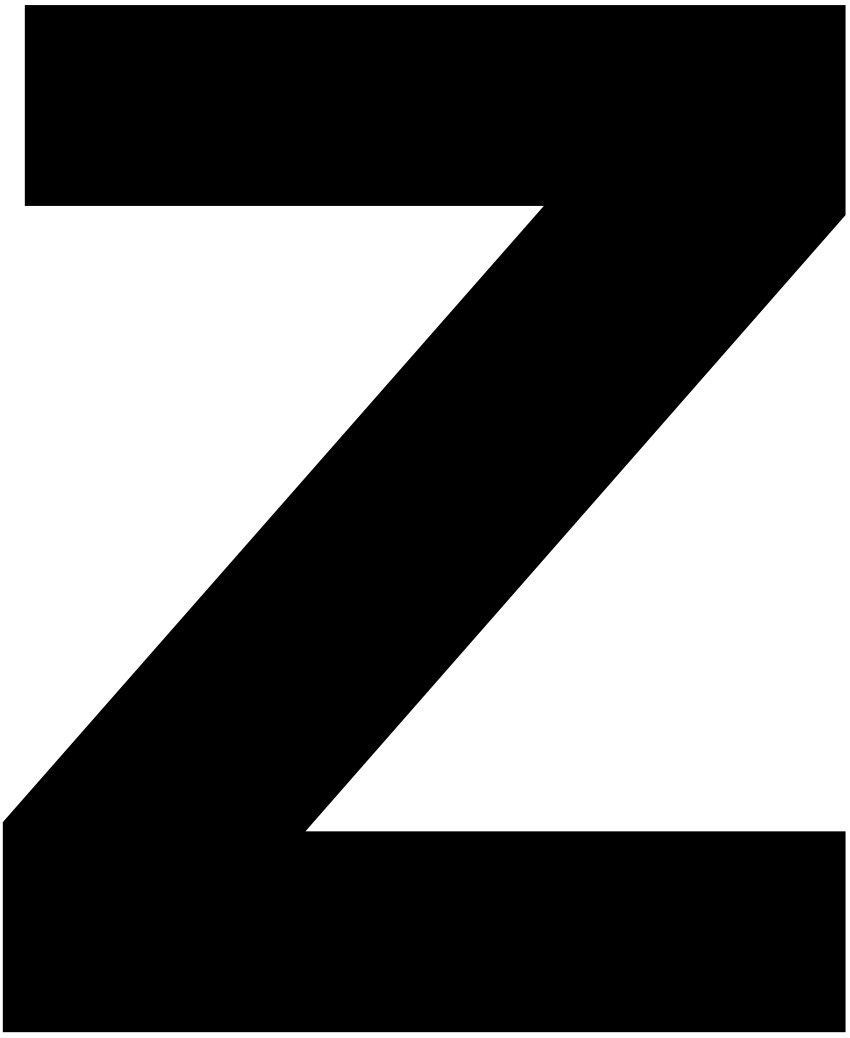


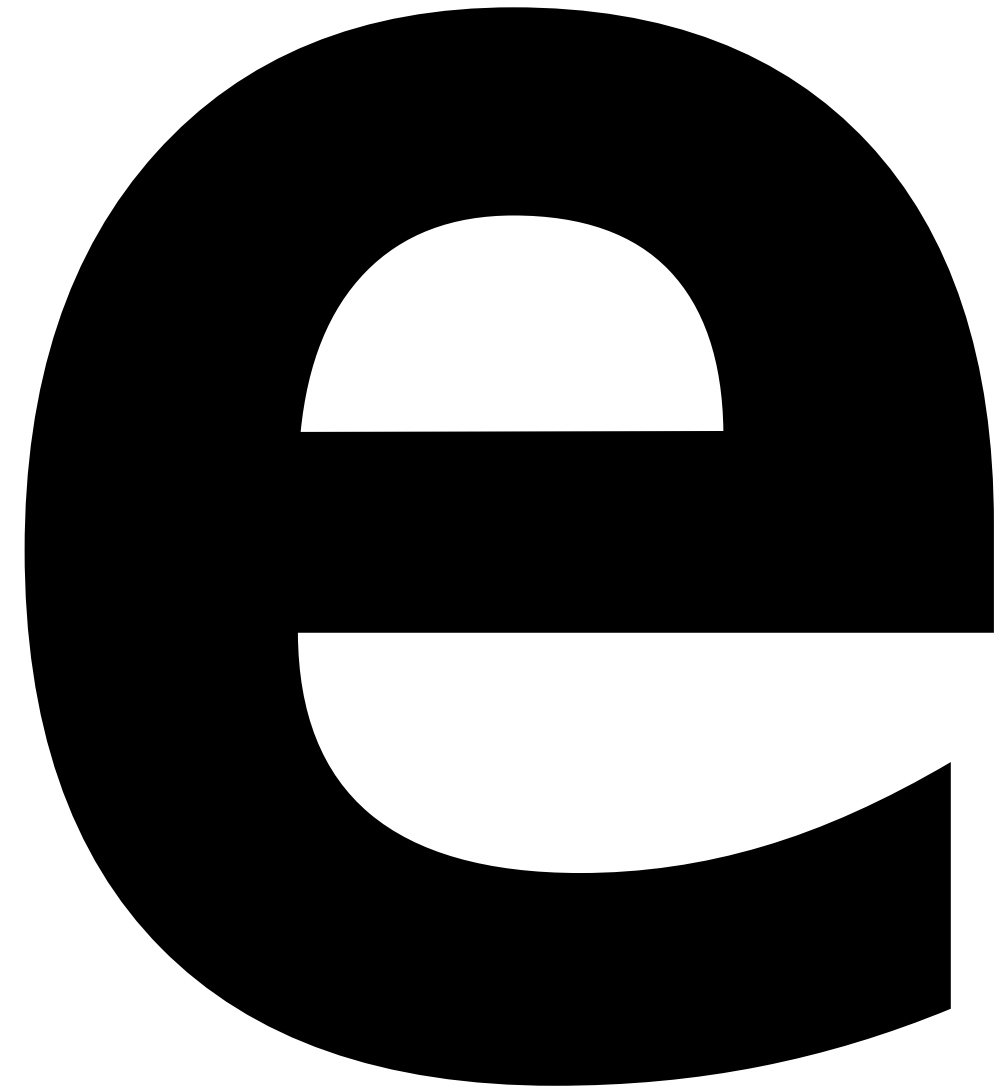


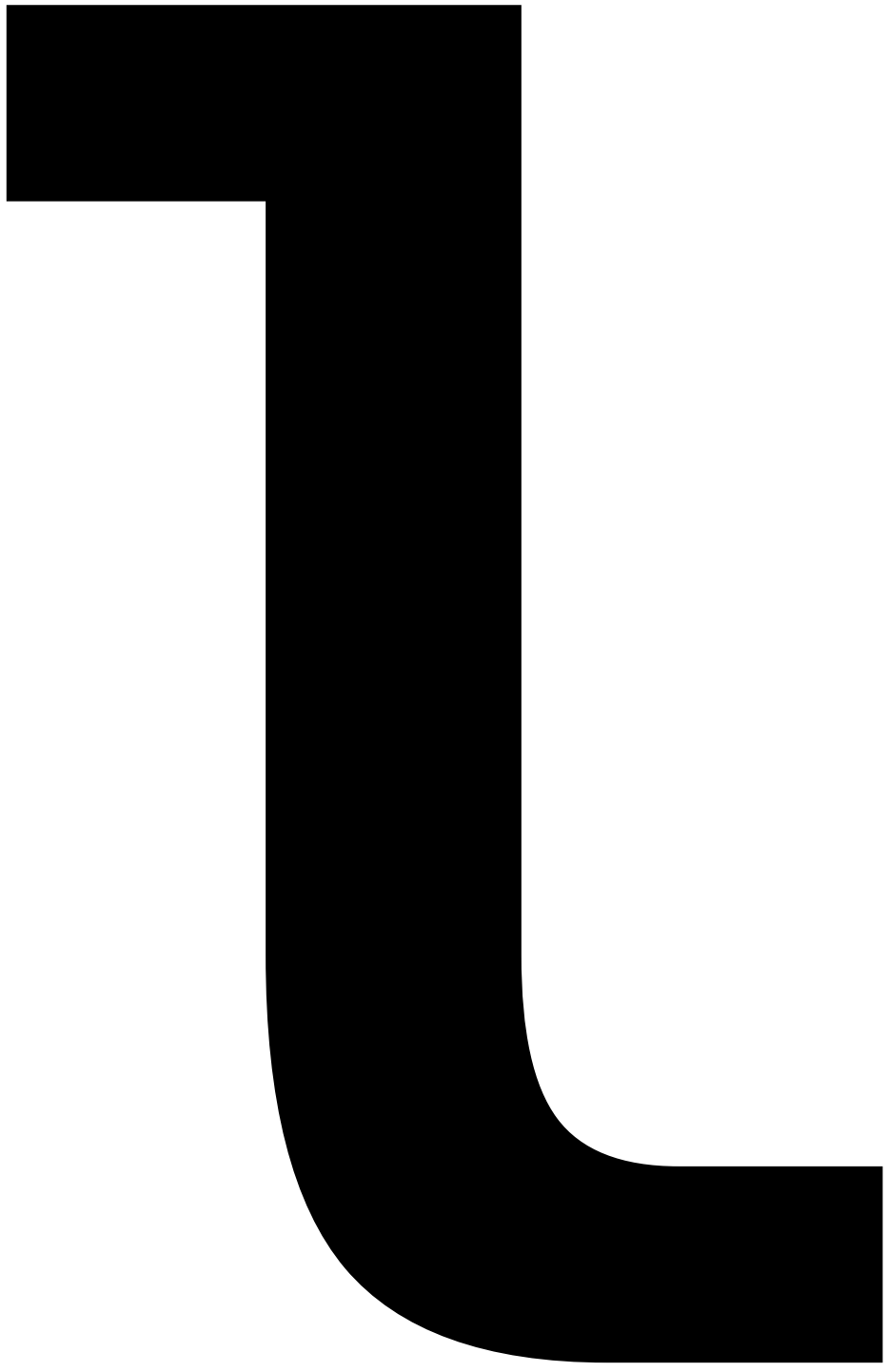


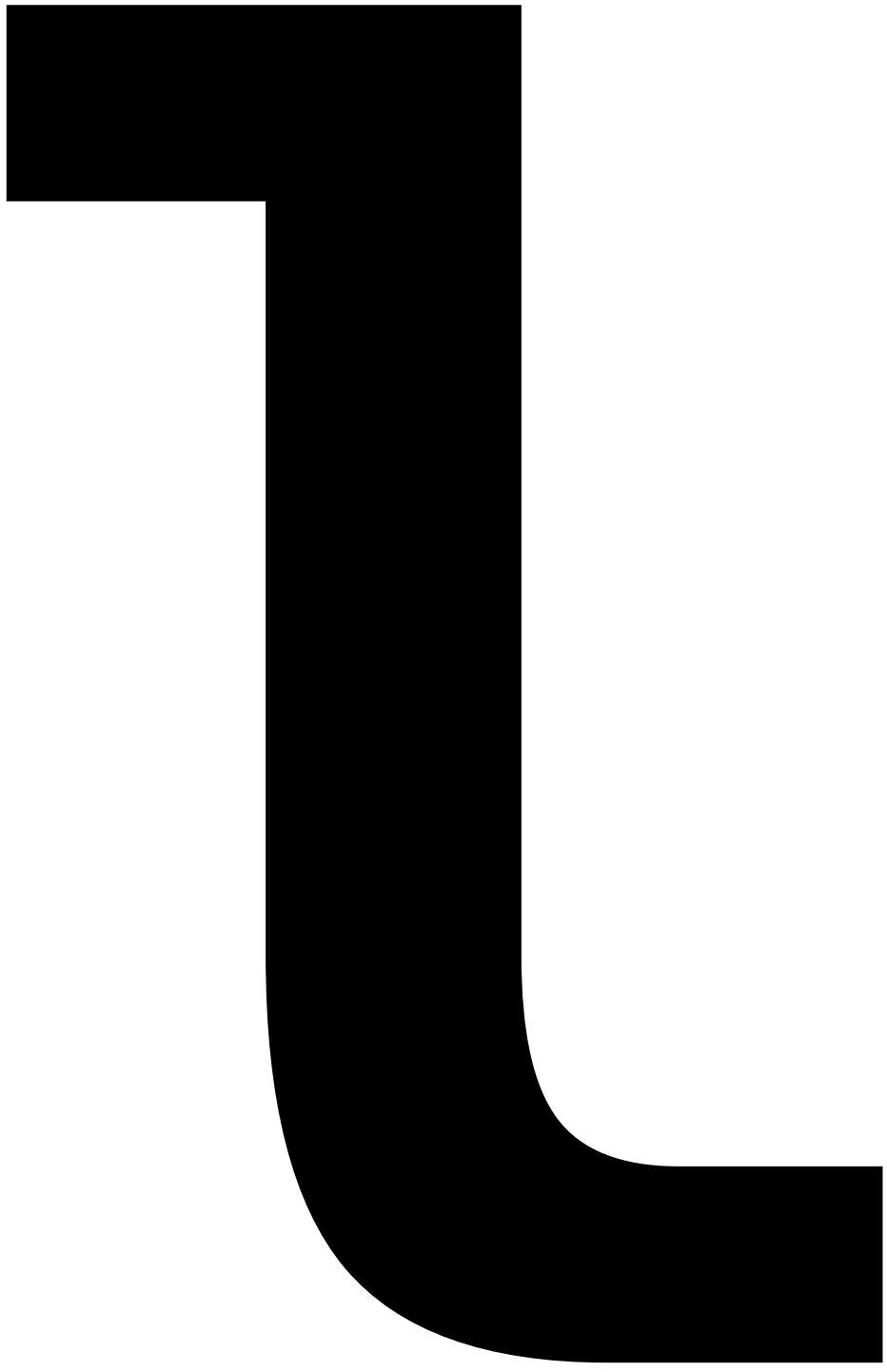


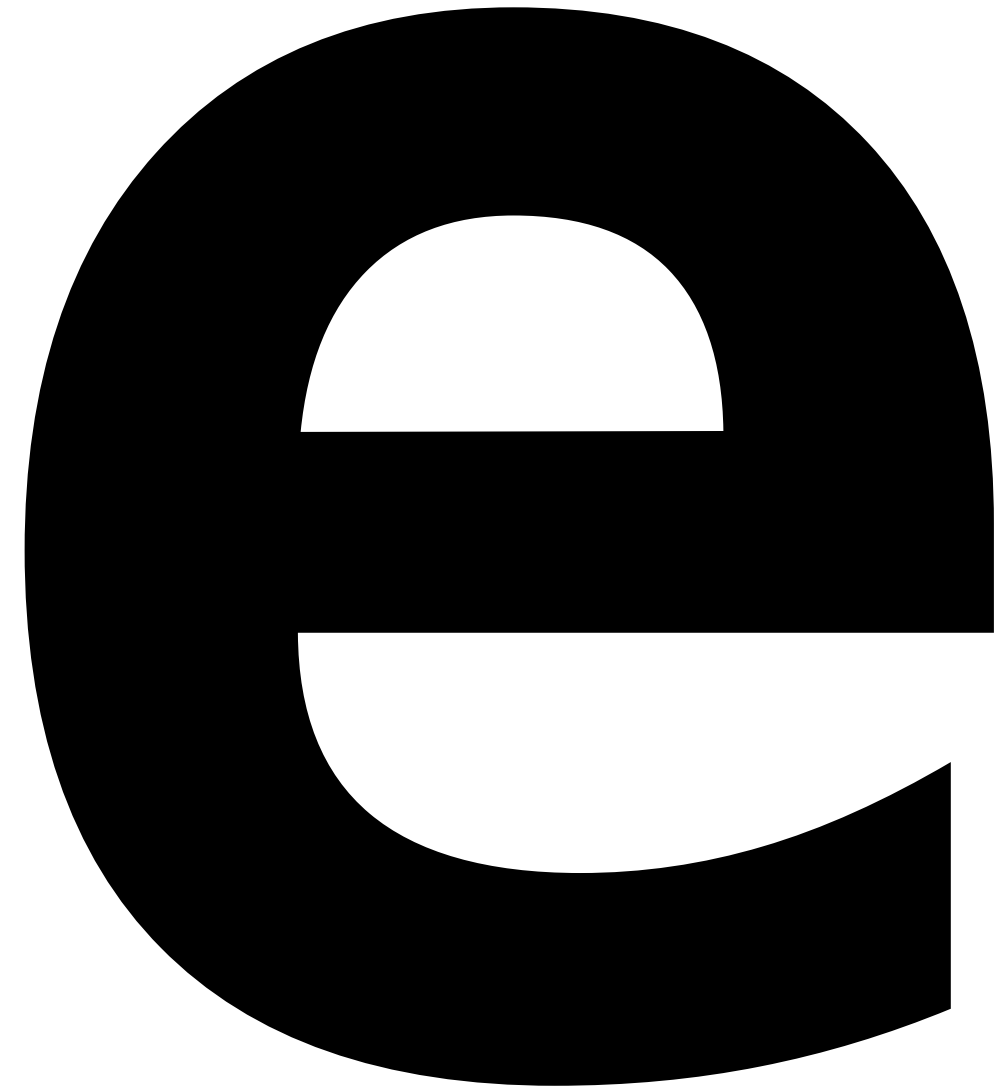


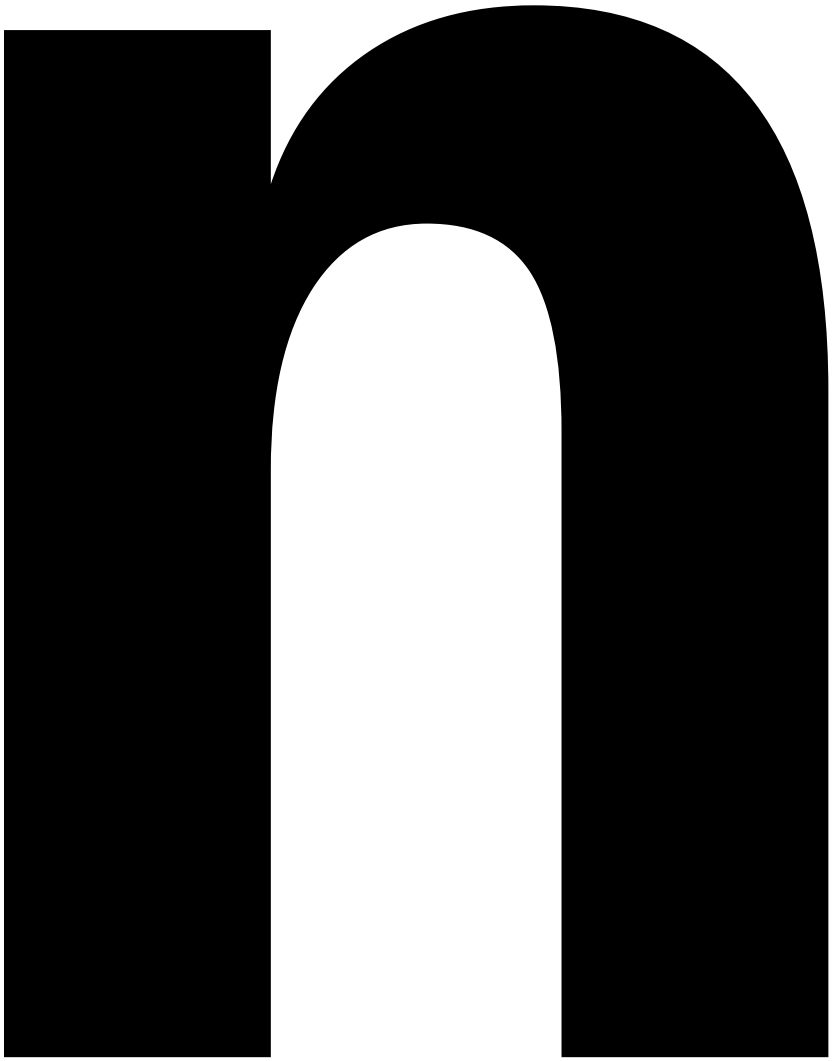


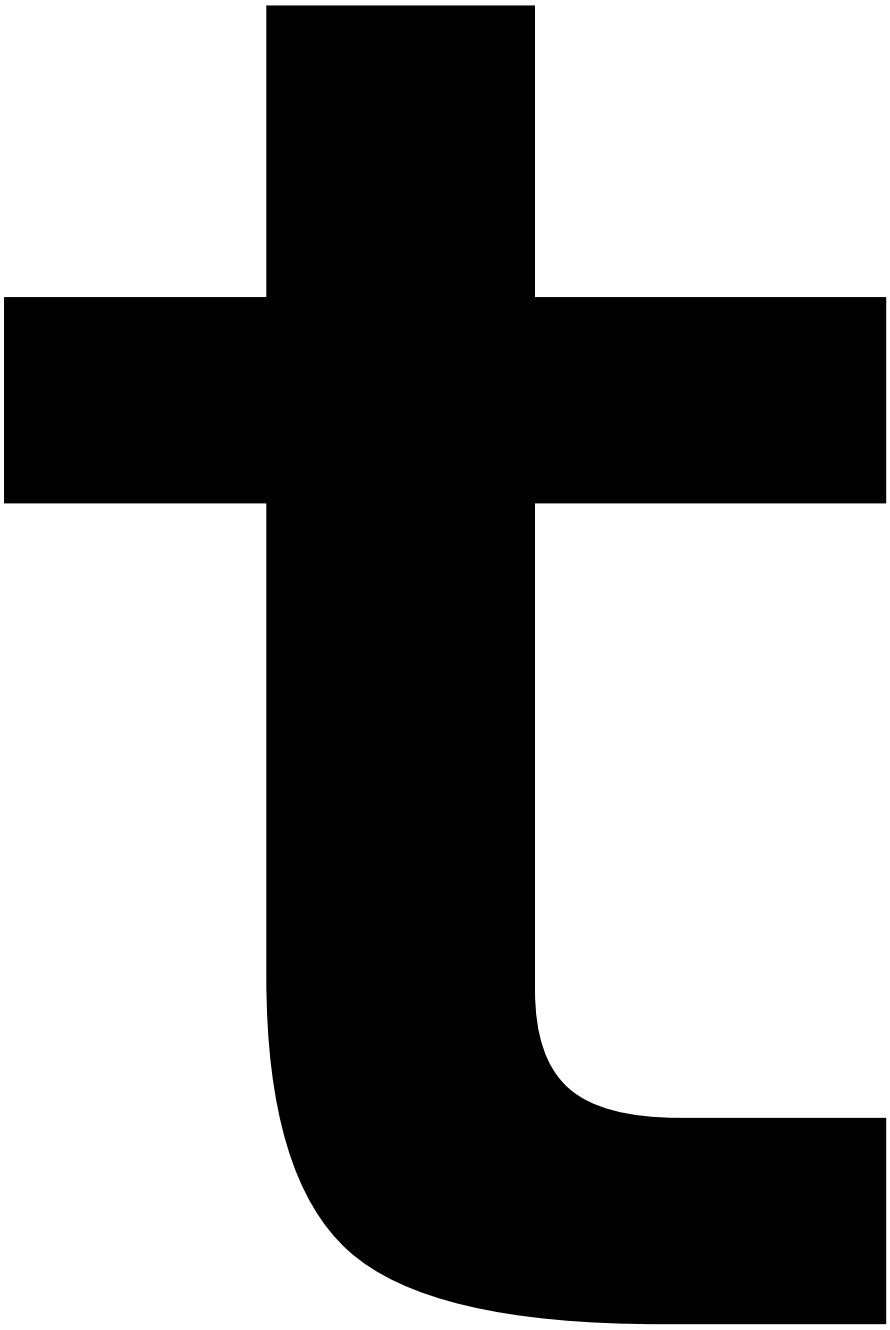


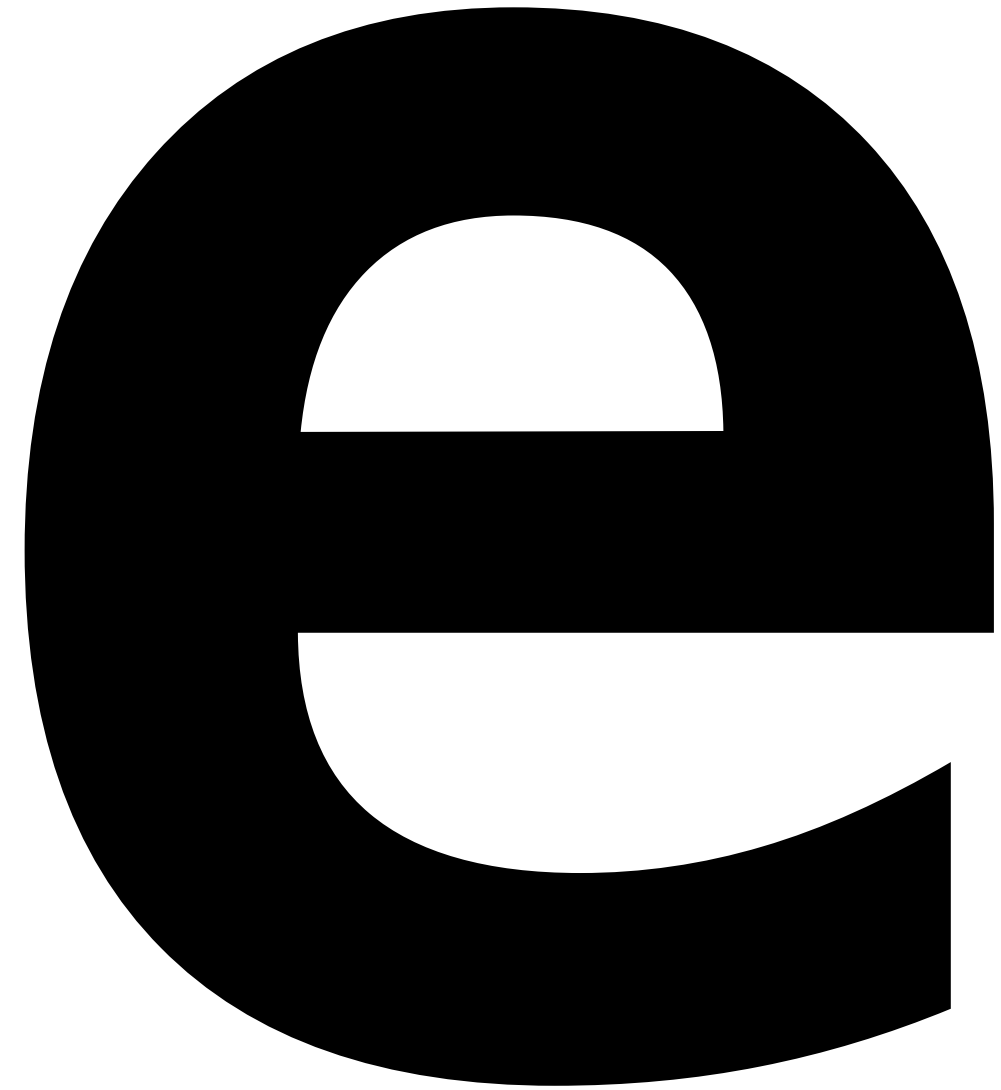


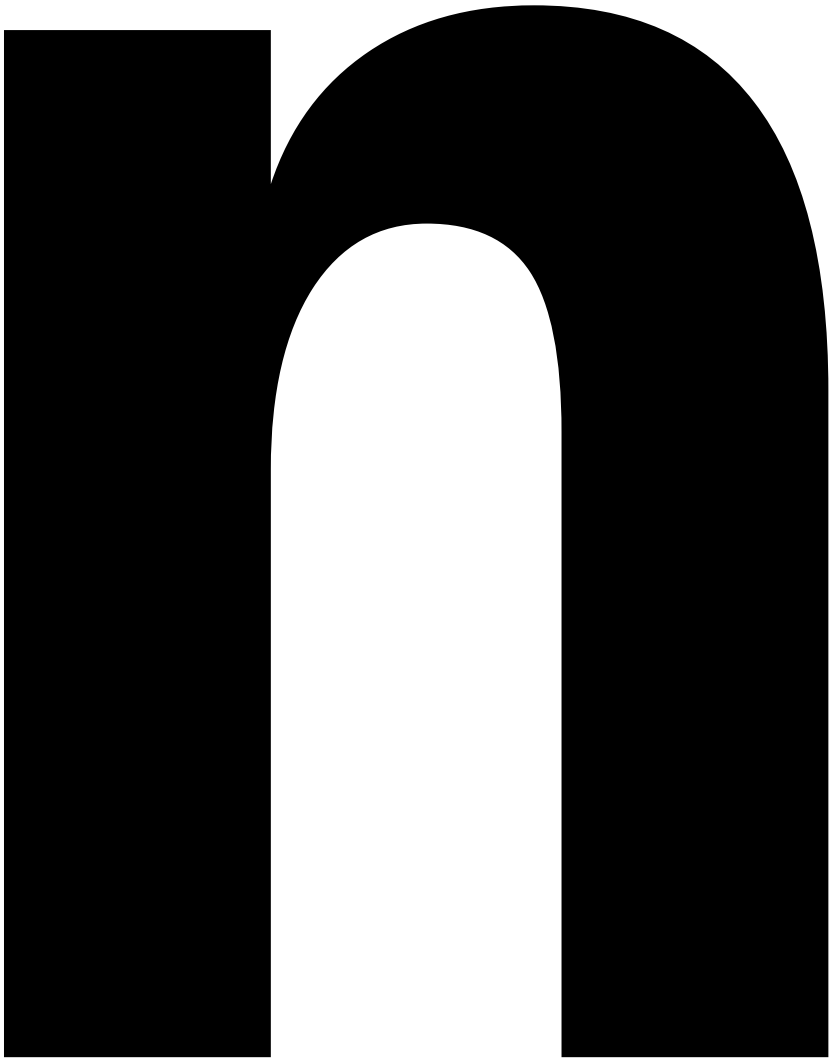




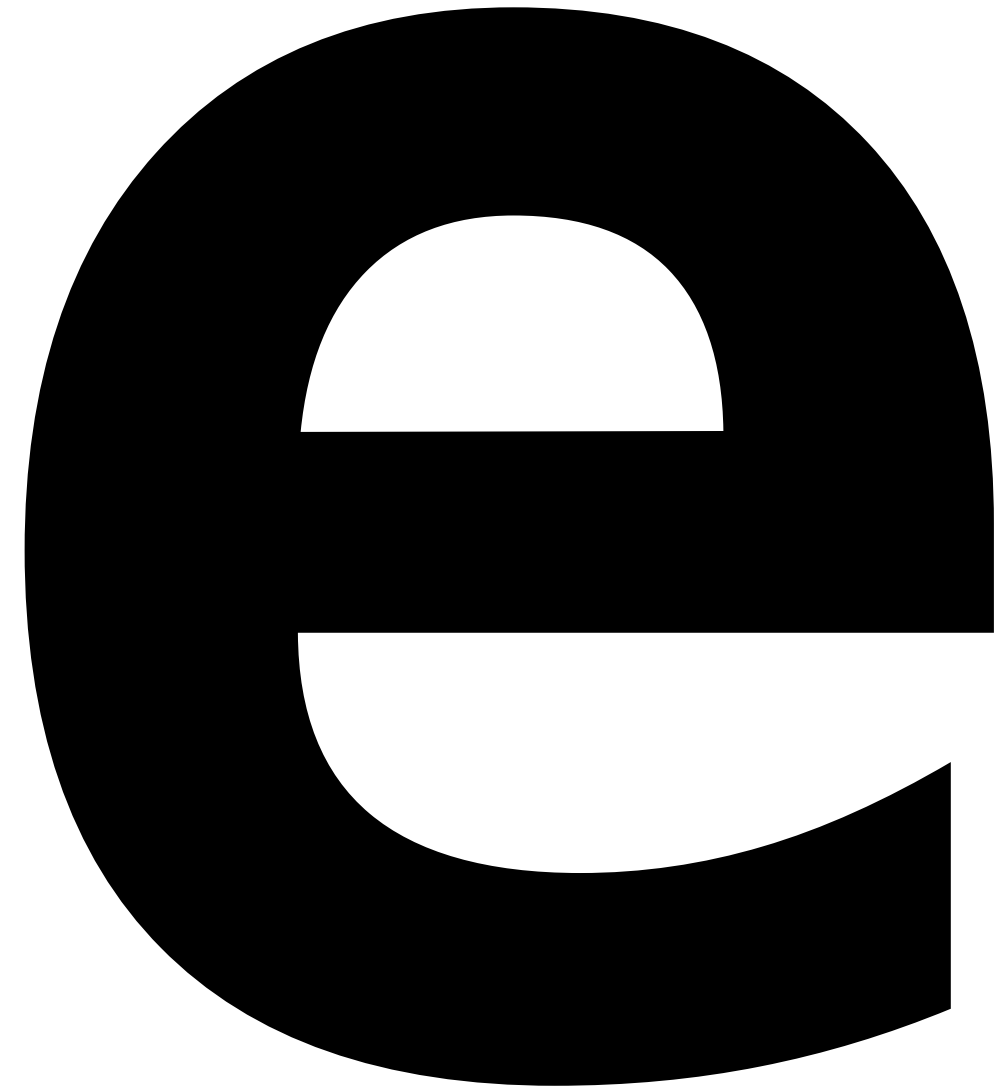


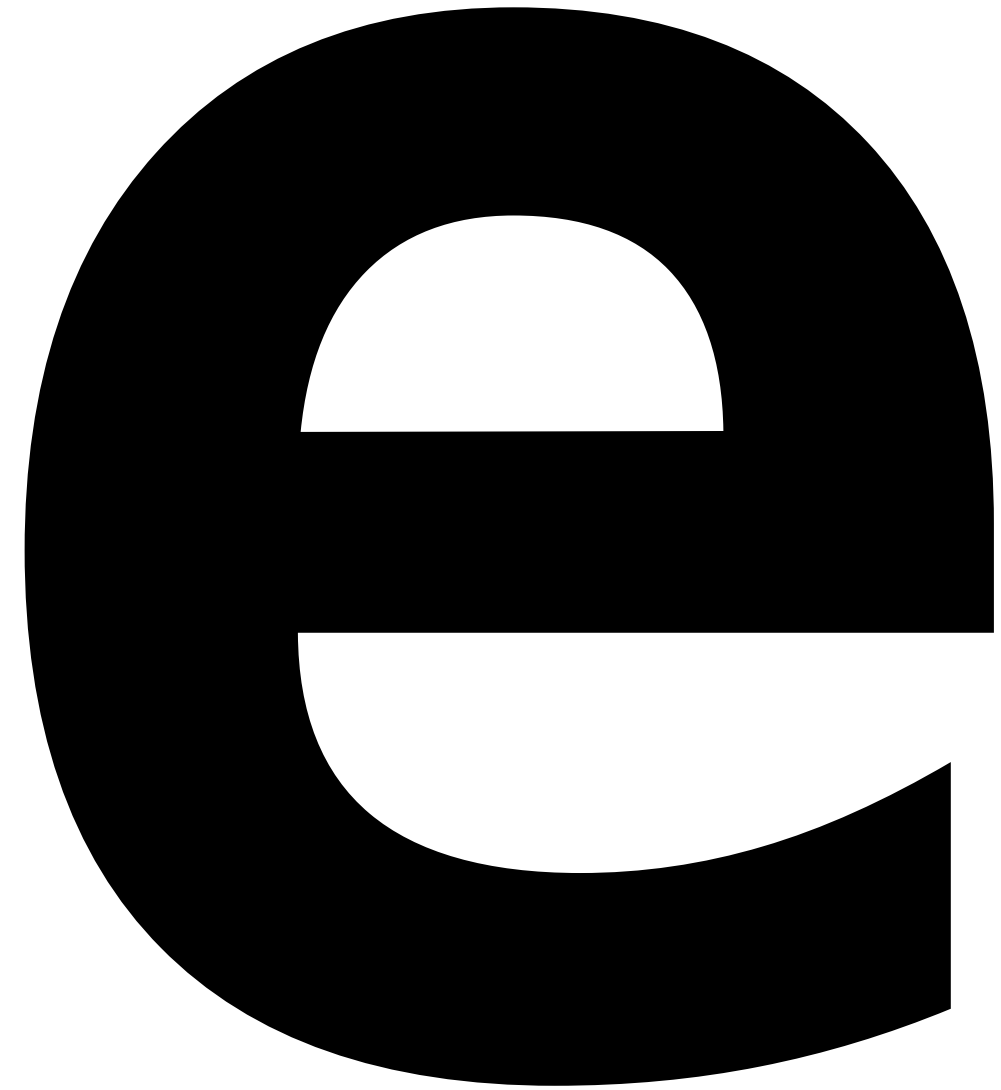


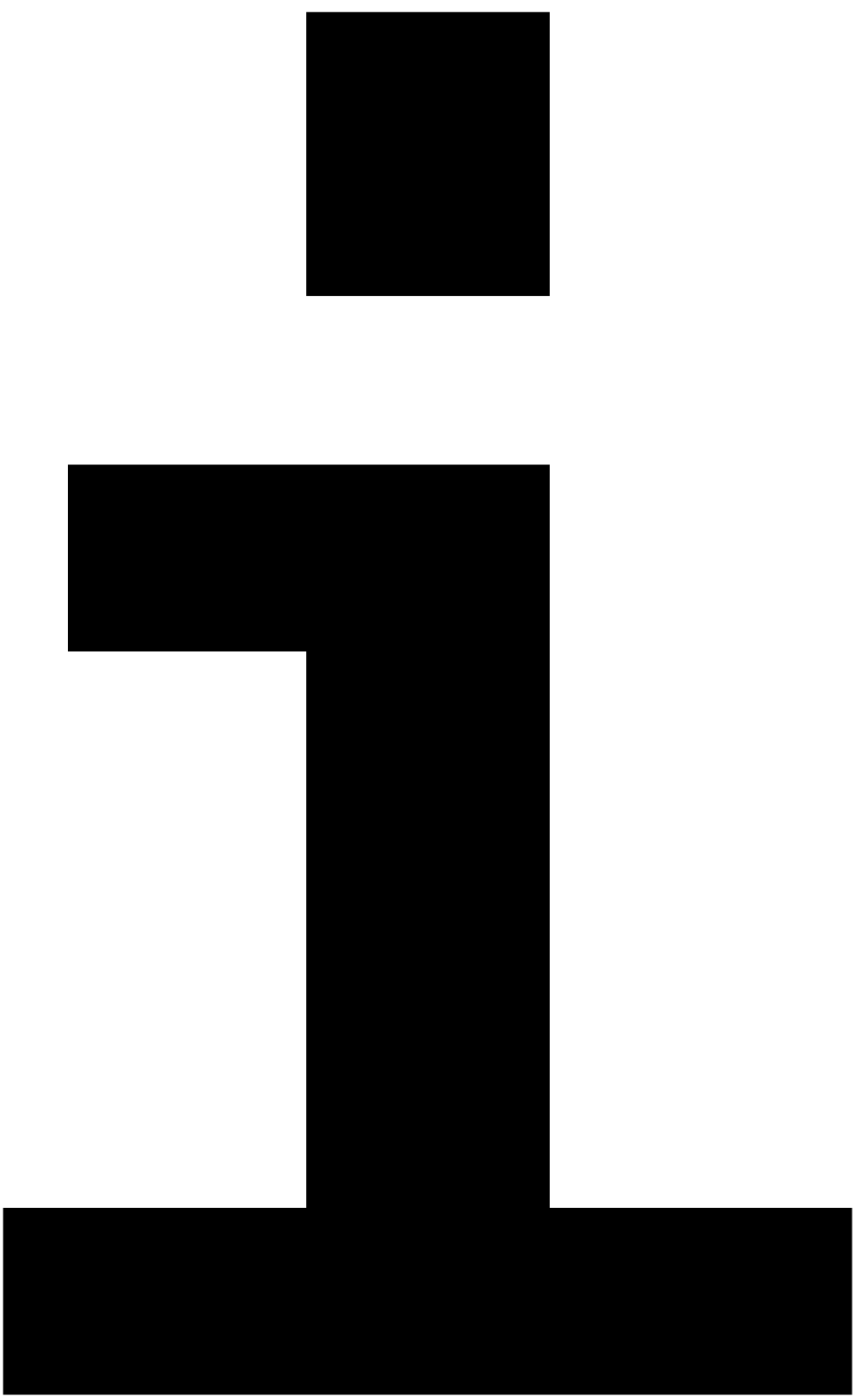




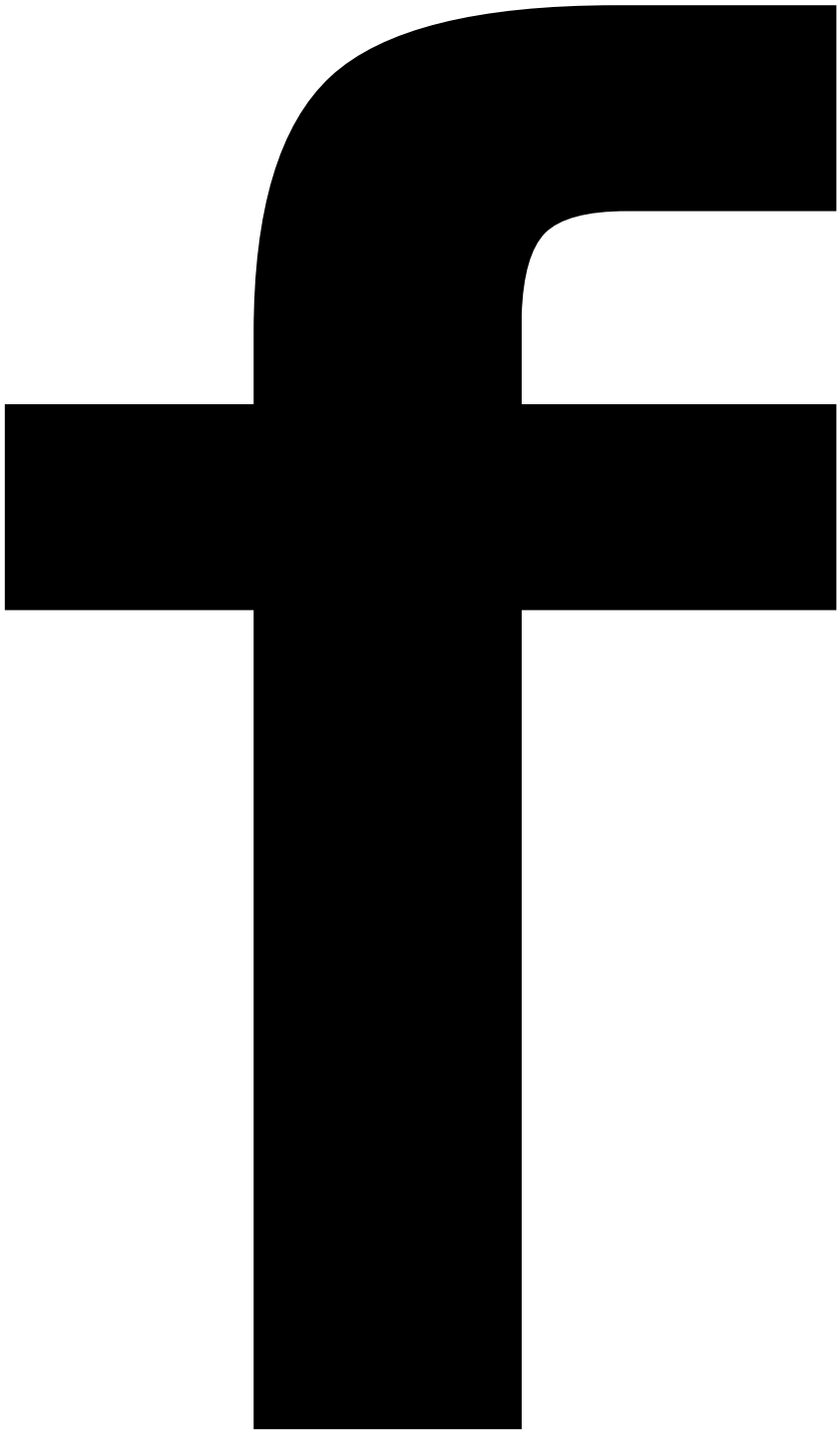
B

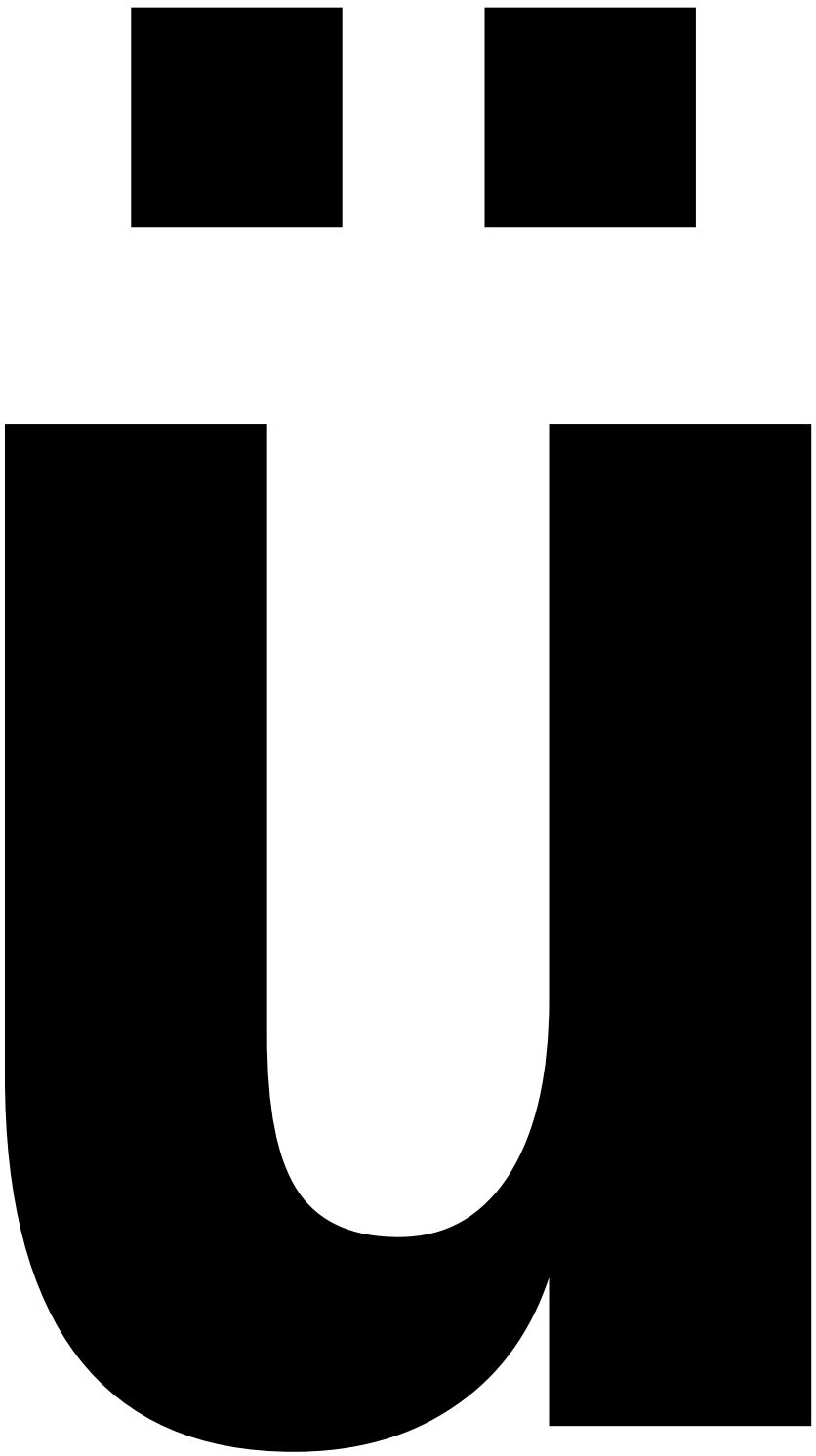


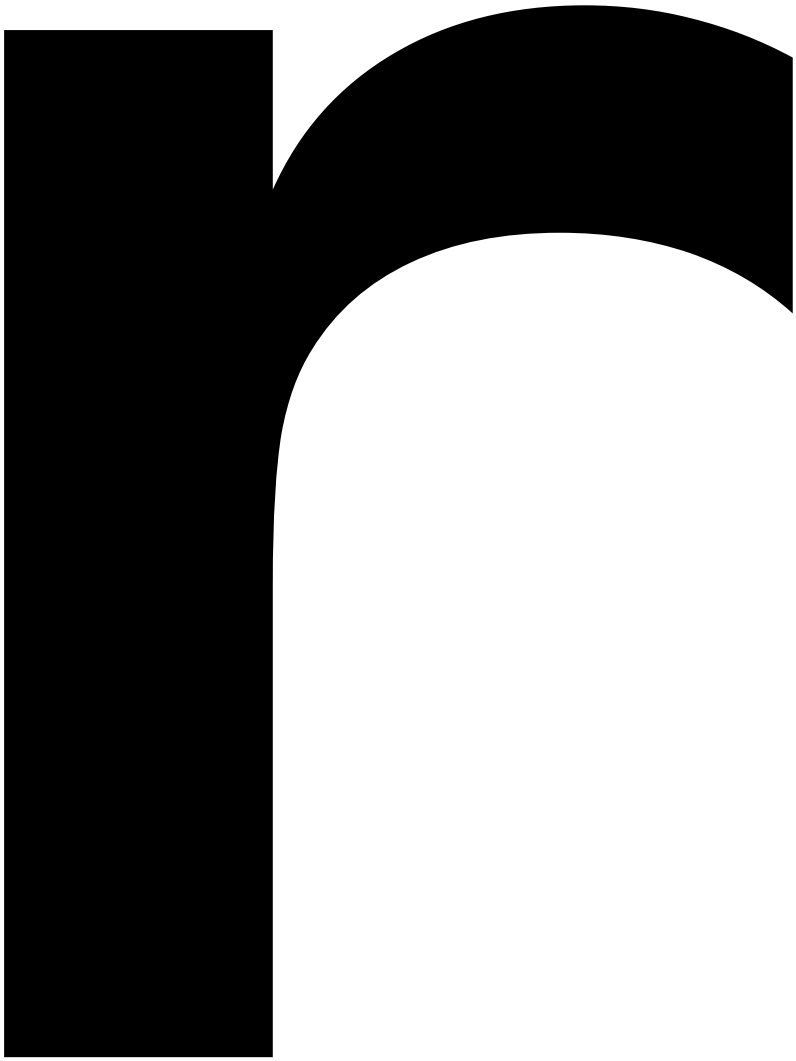




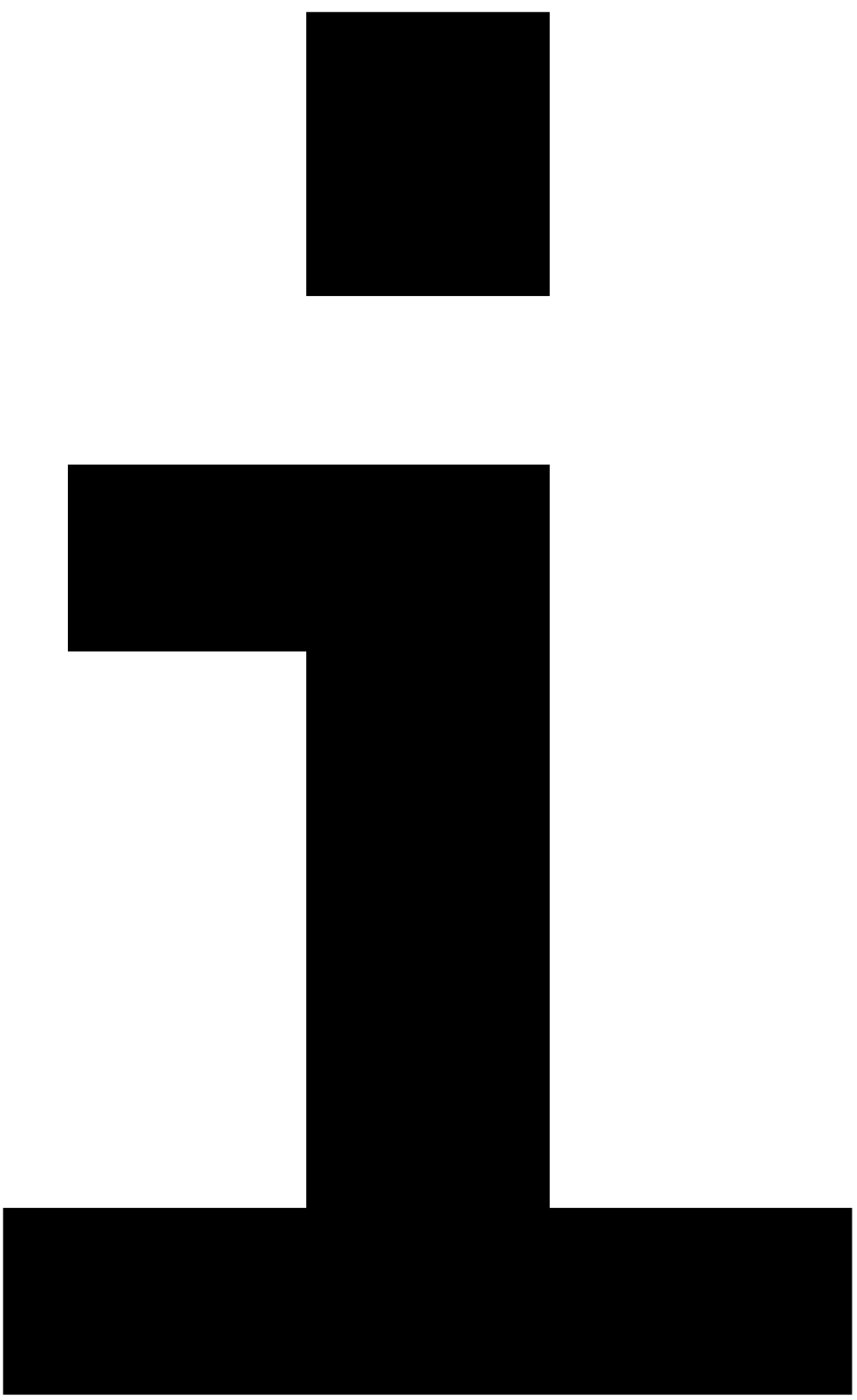
S

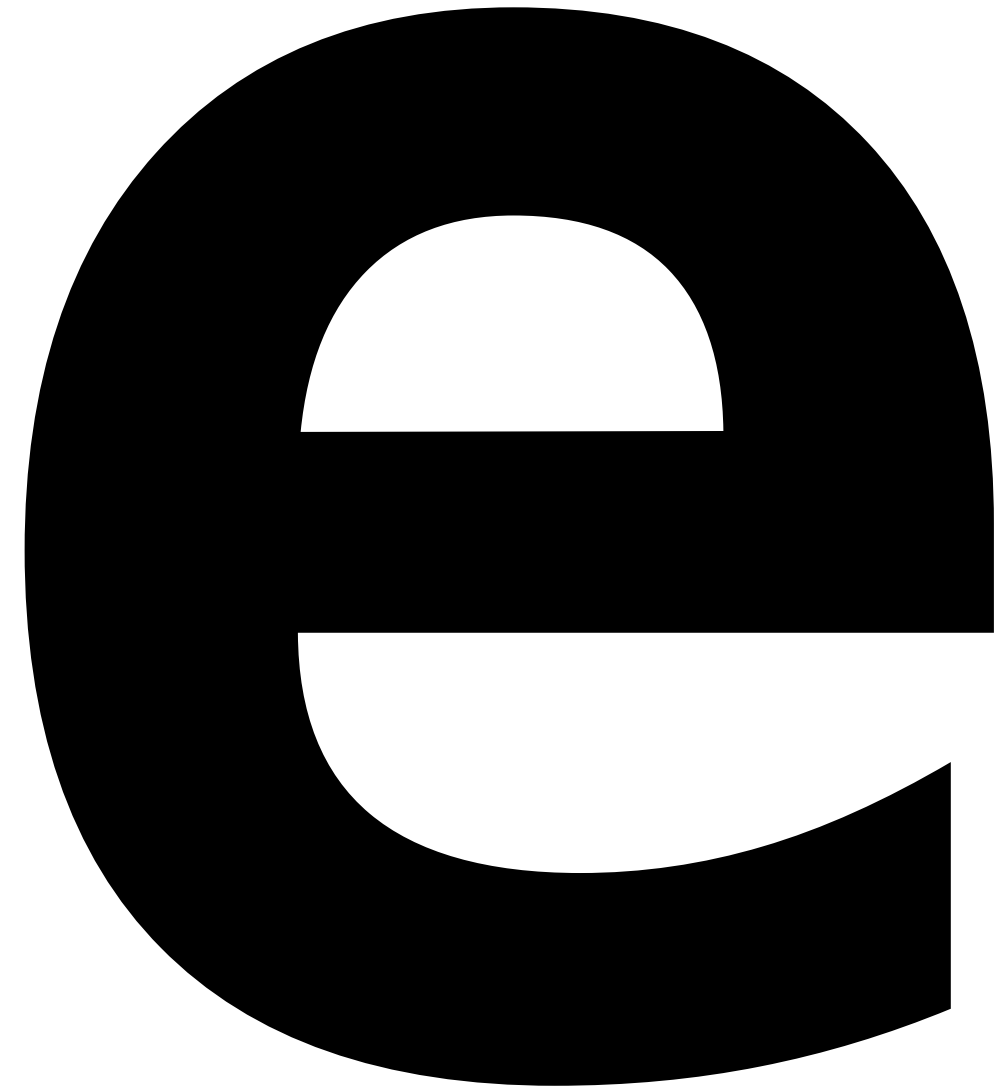


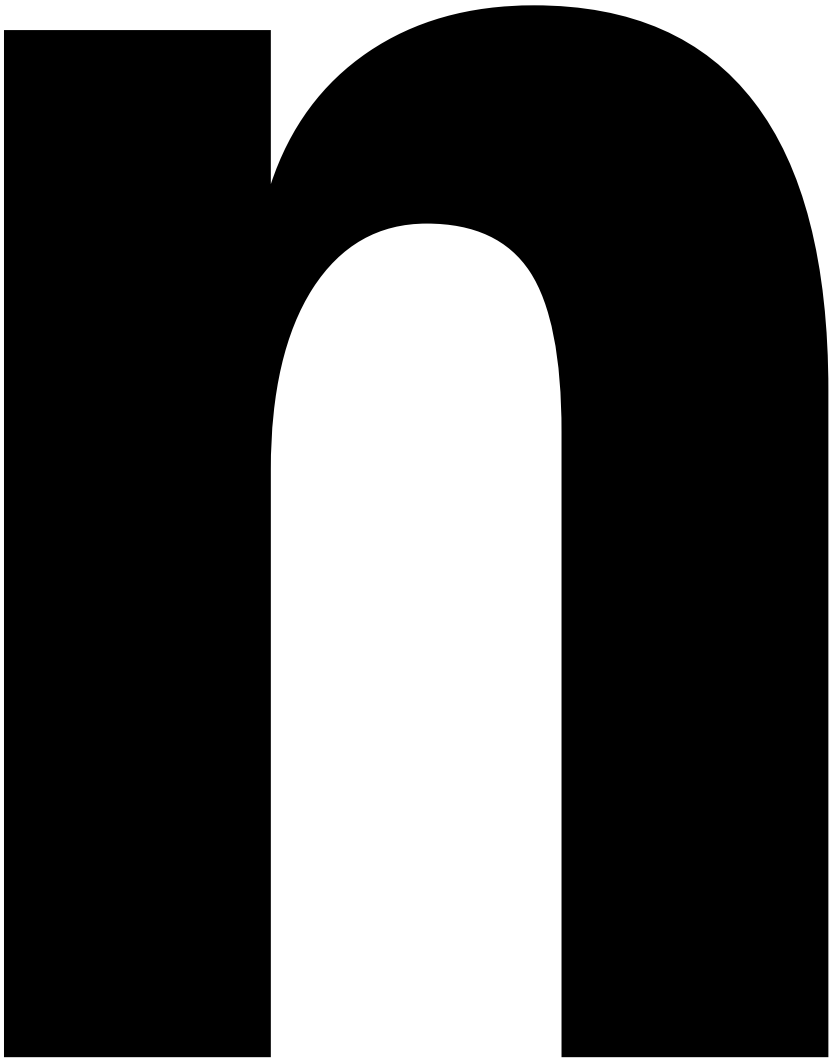


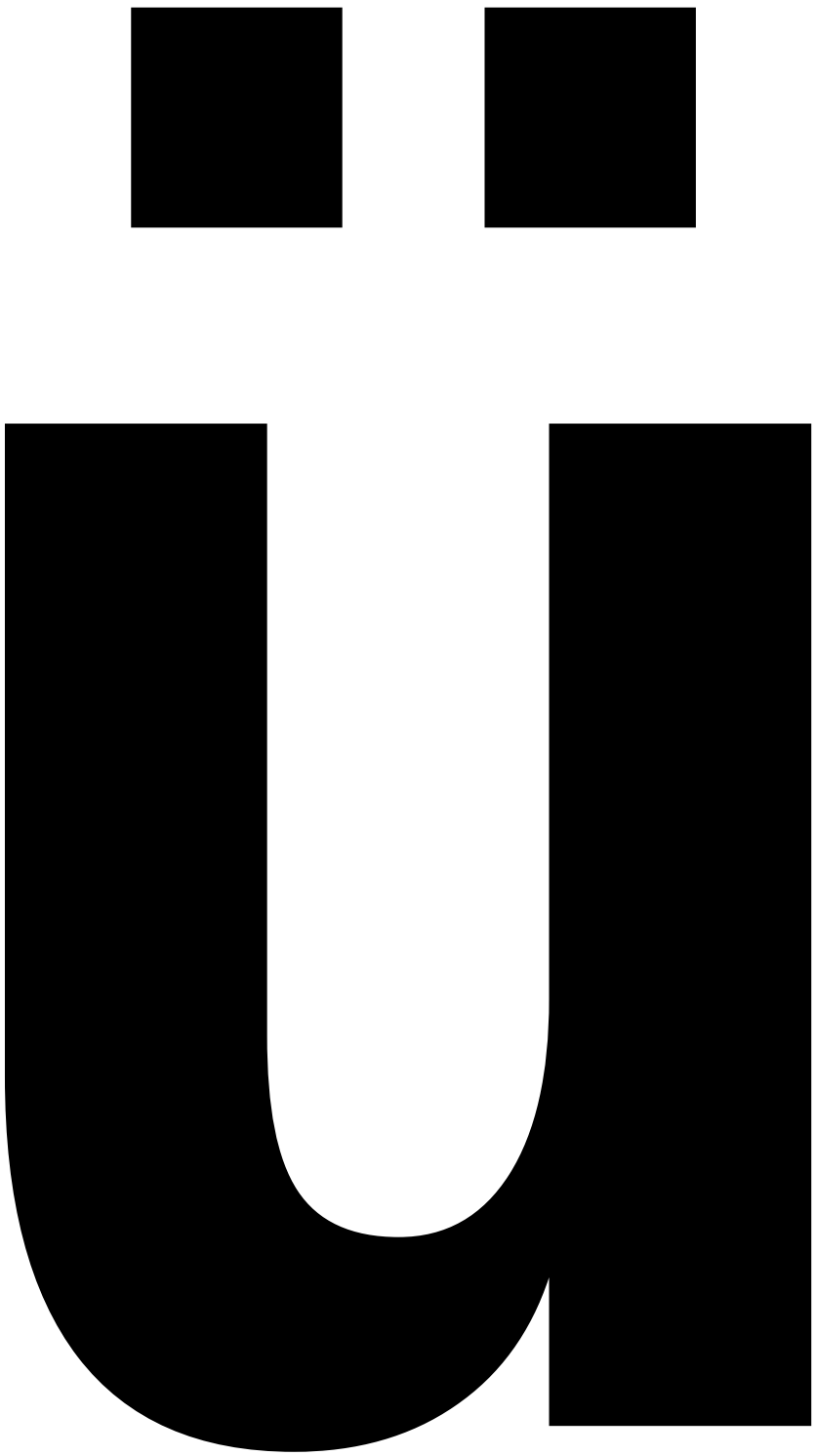


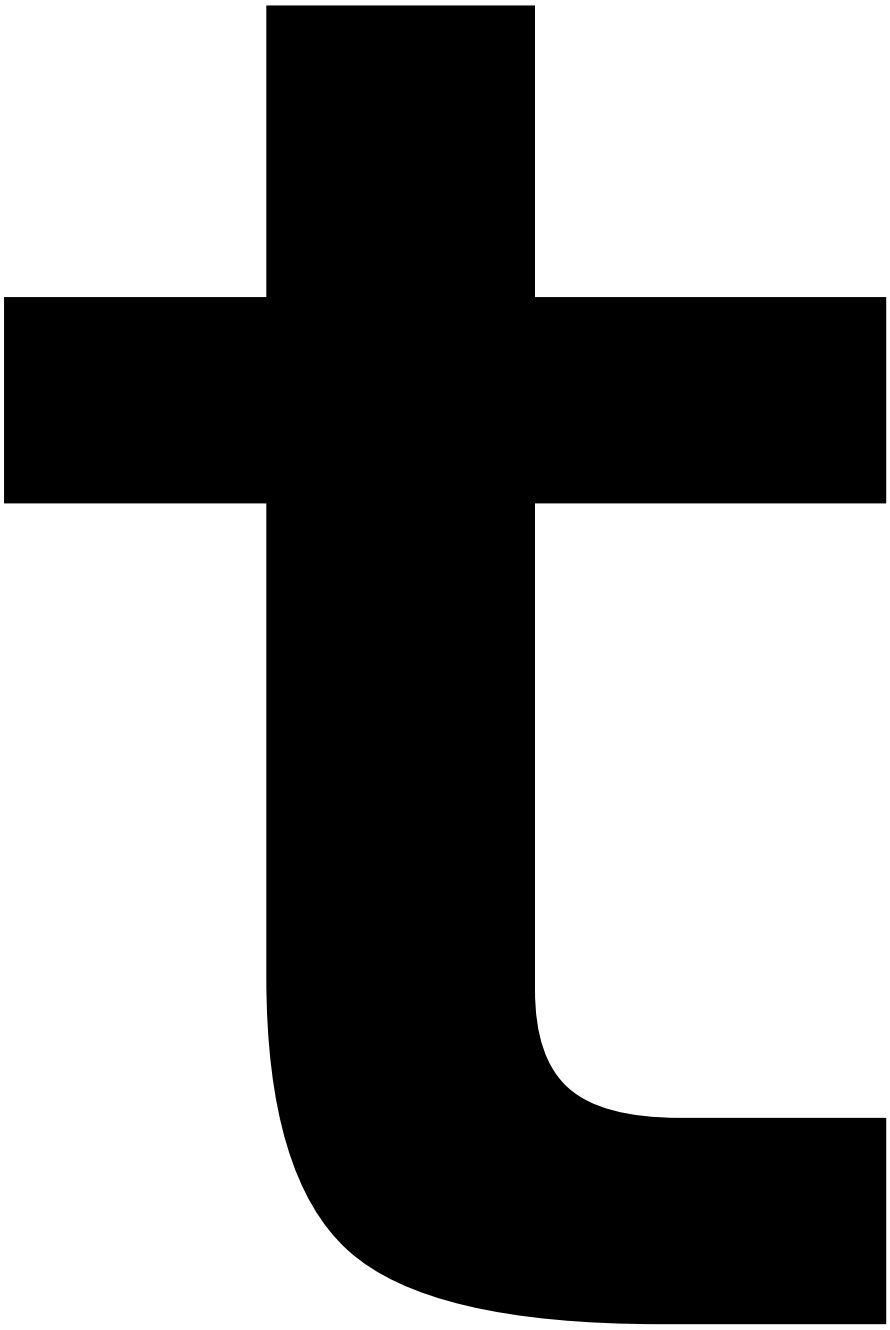
d

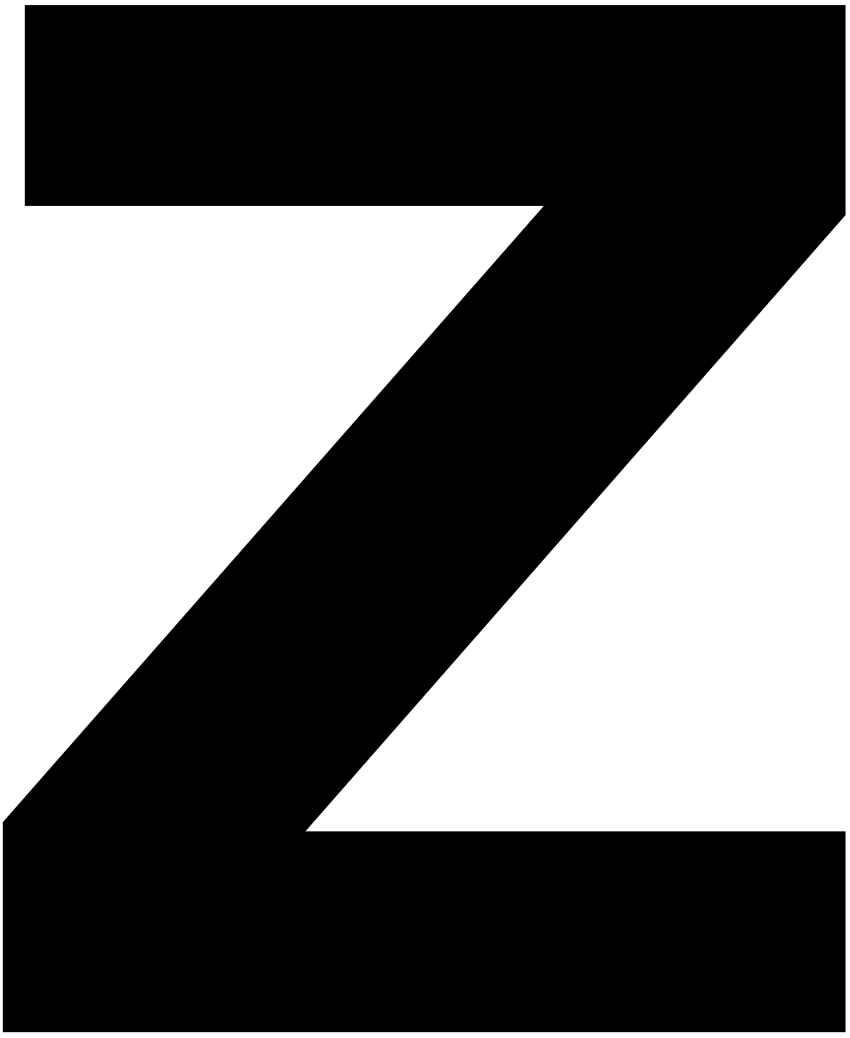


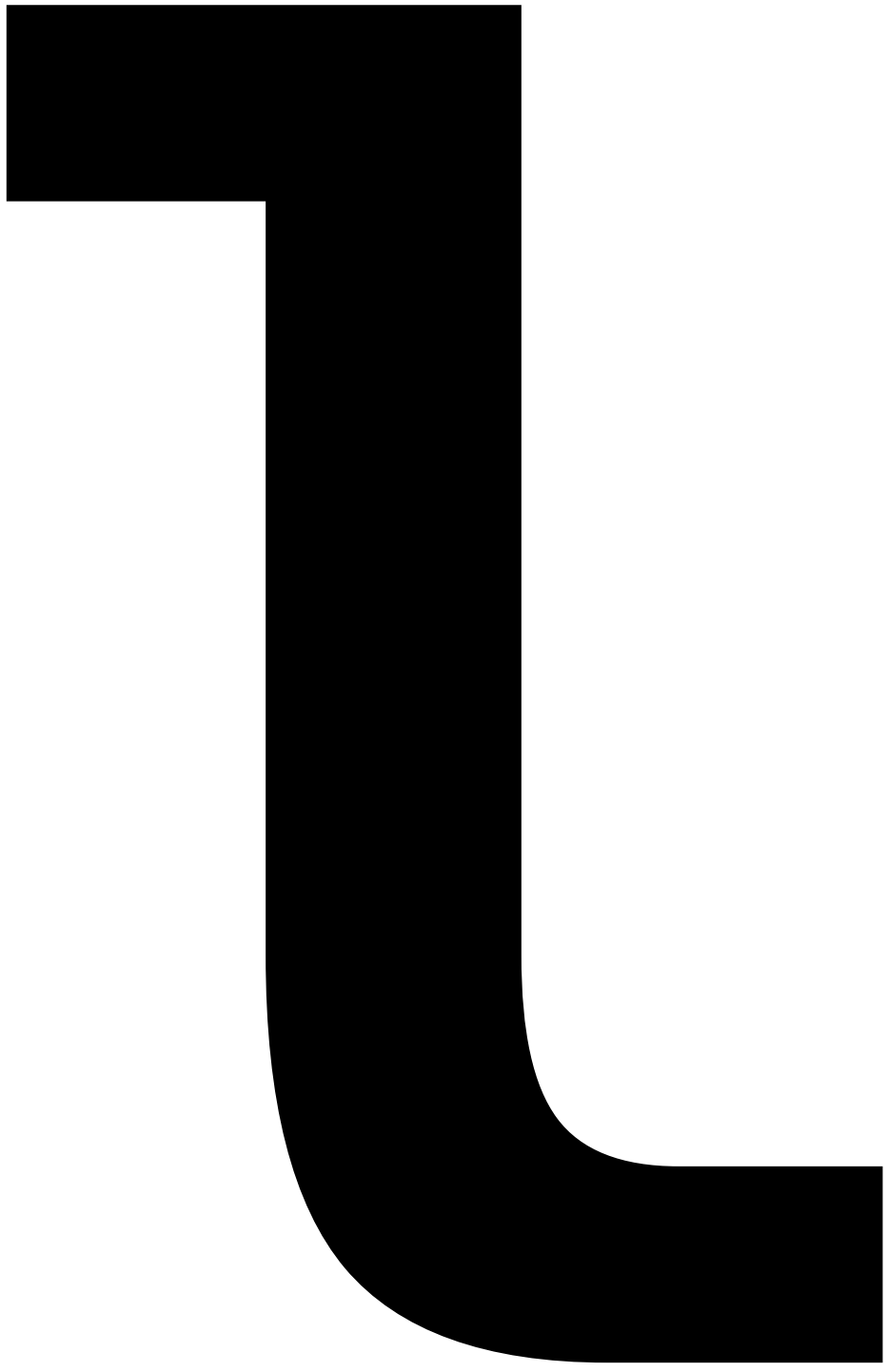


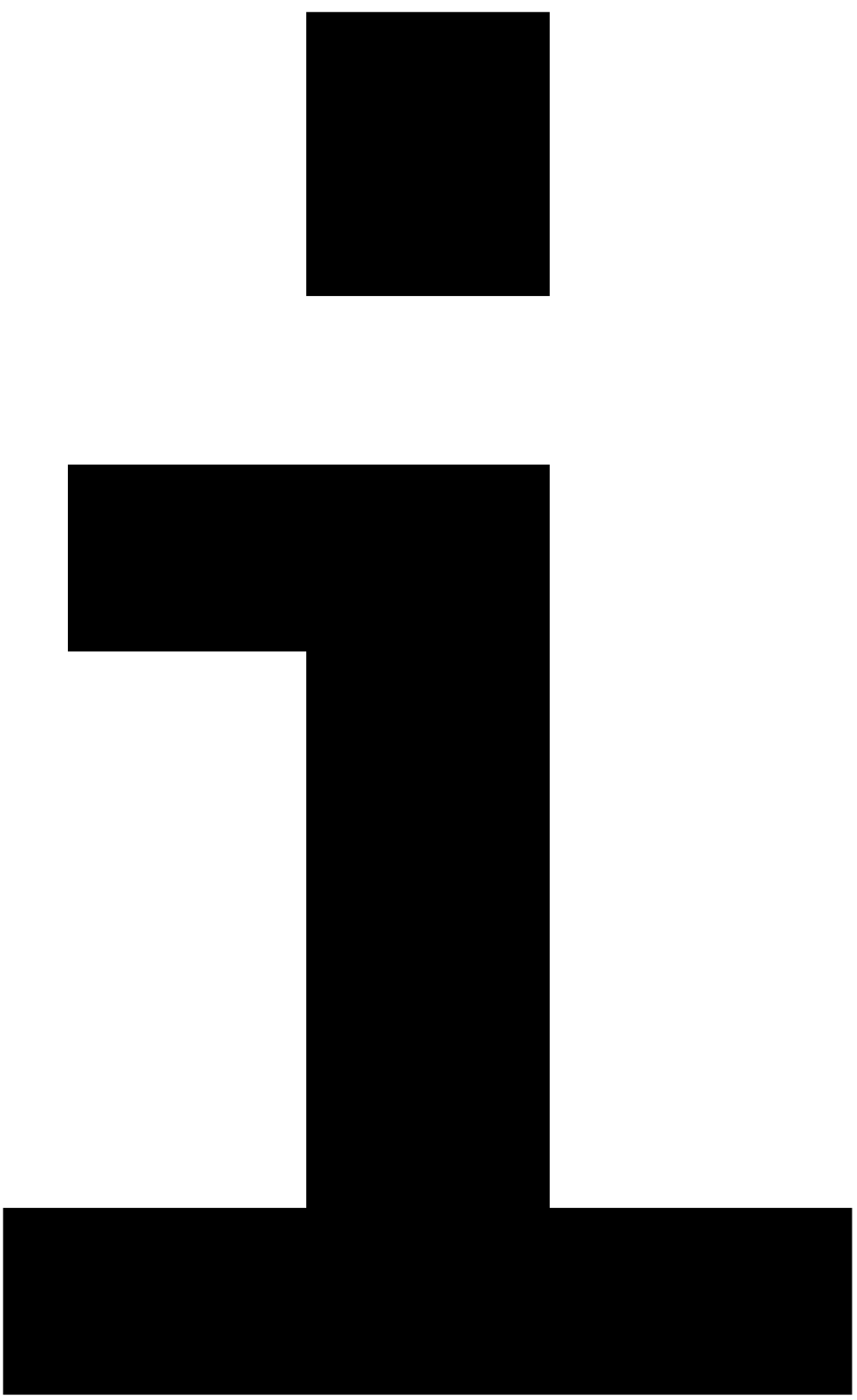


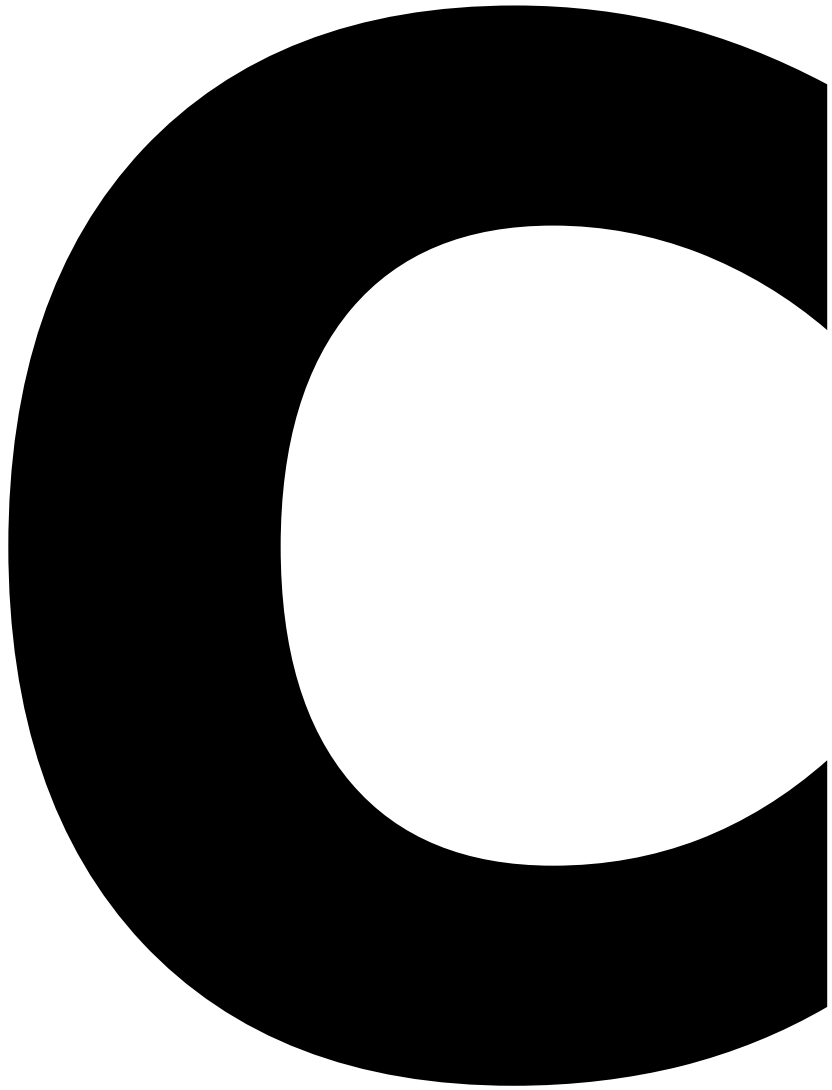


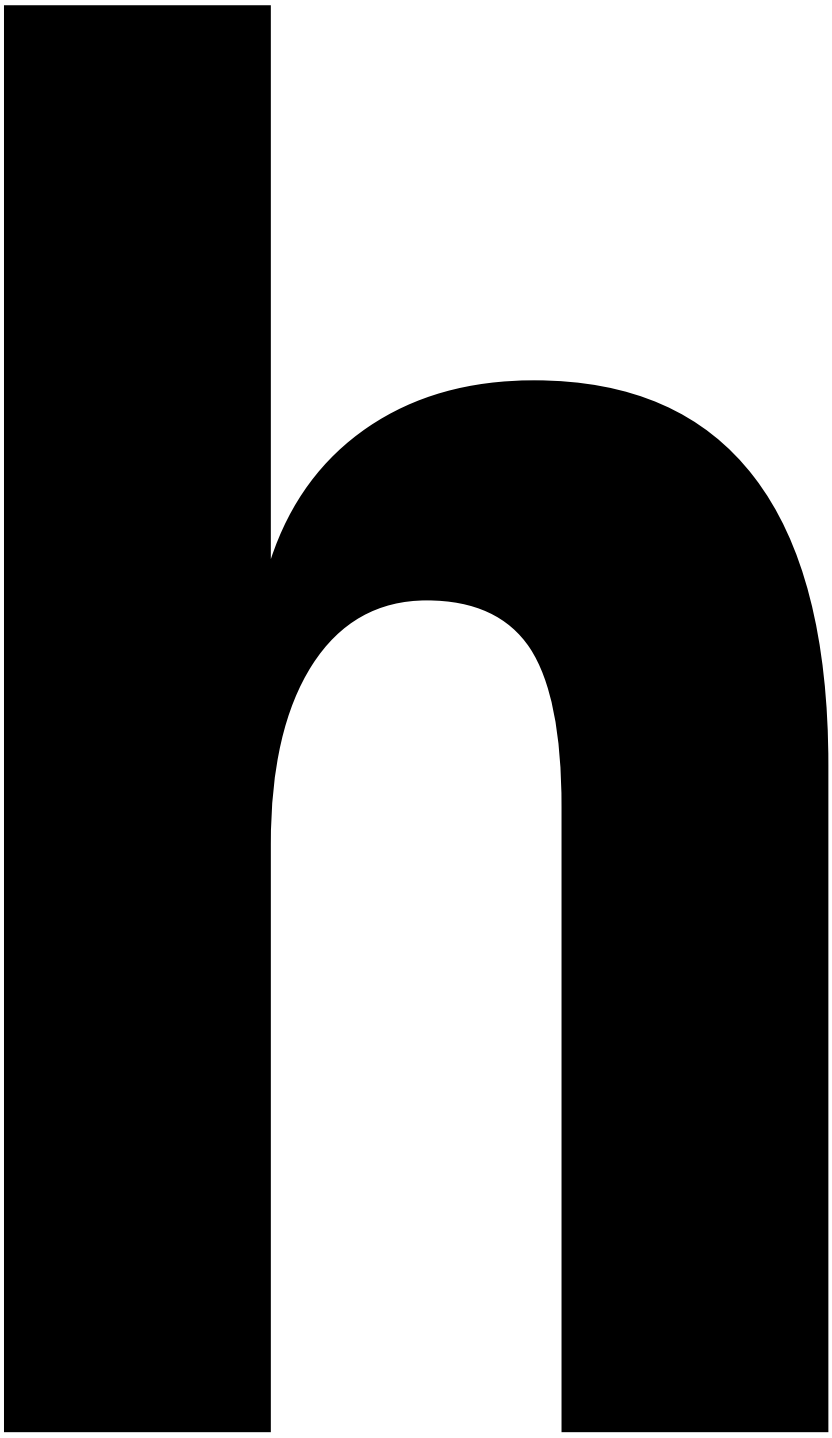


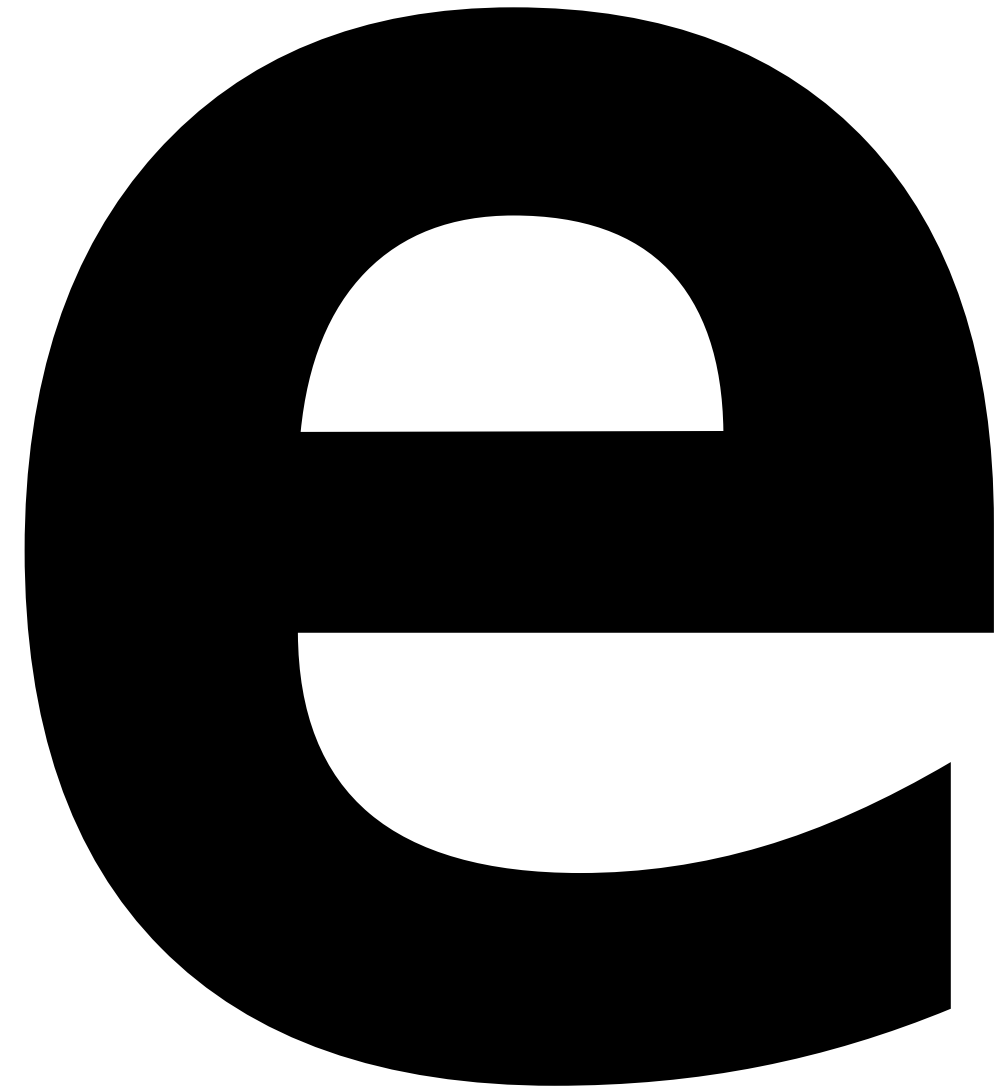


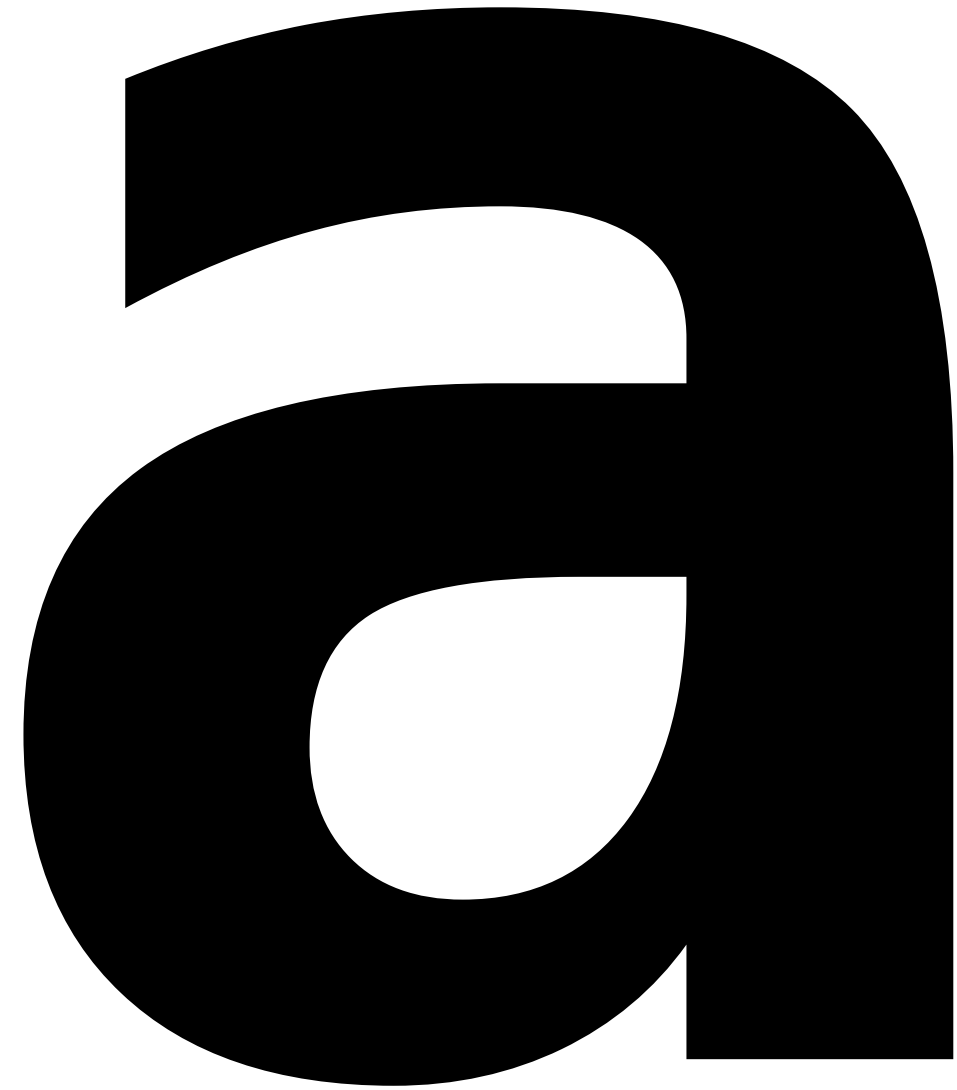


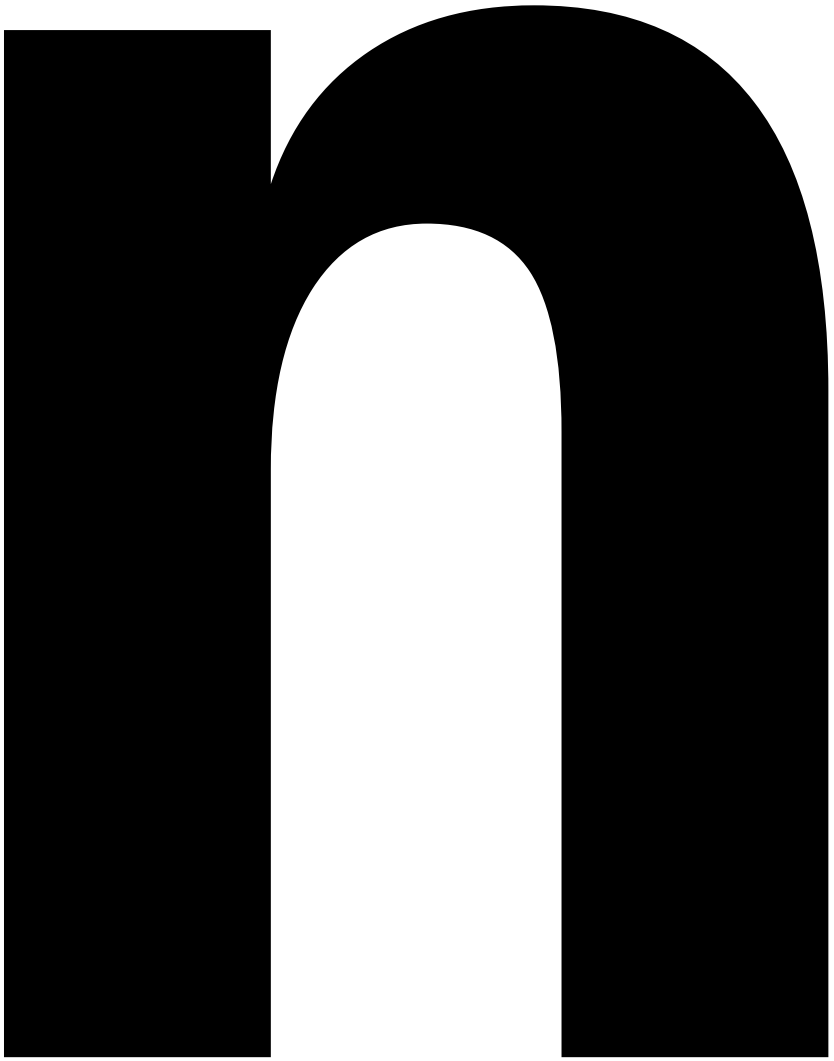


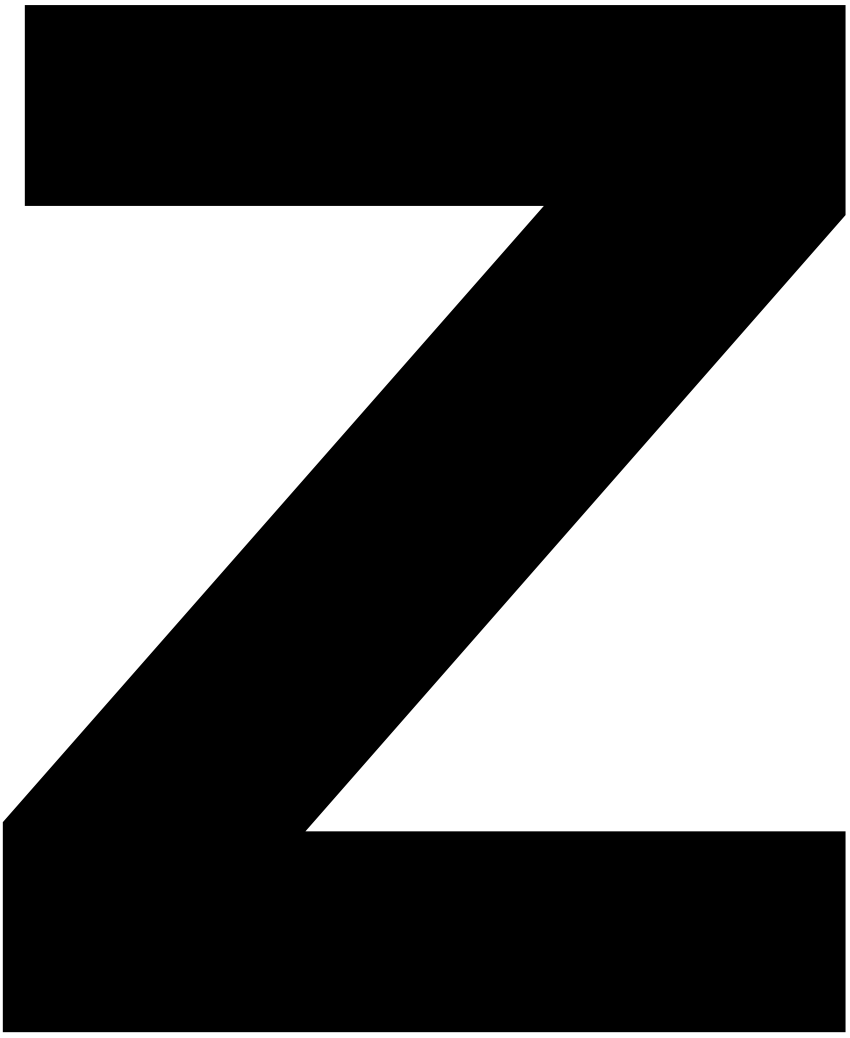


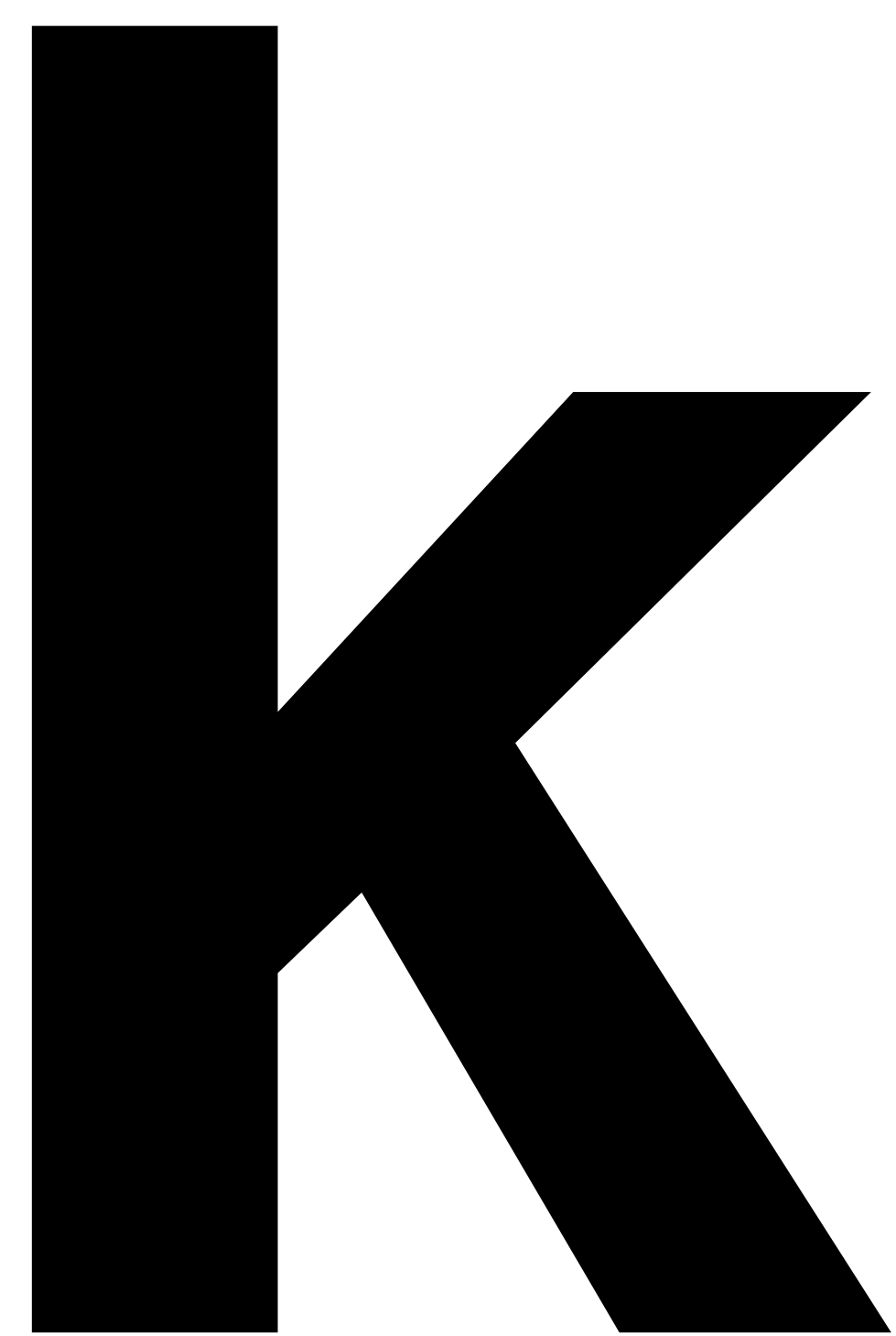


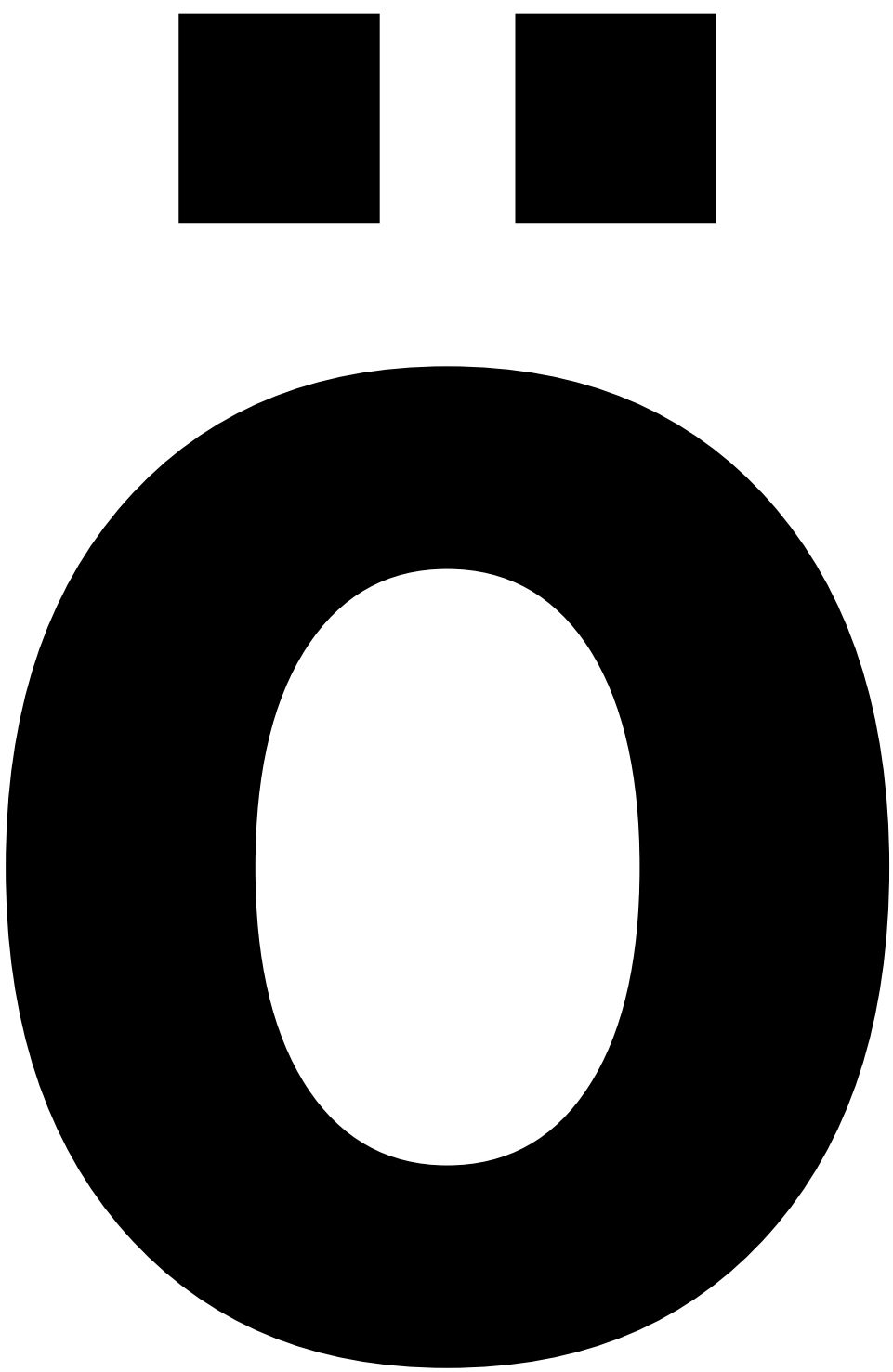


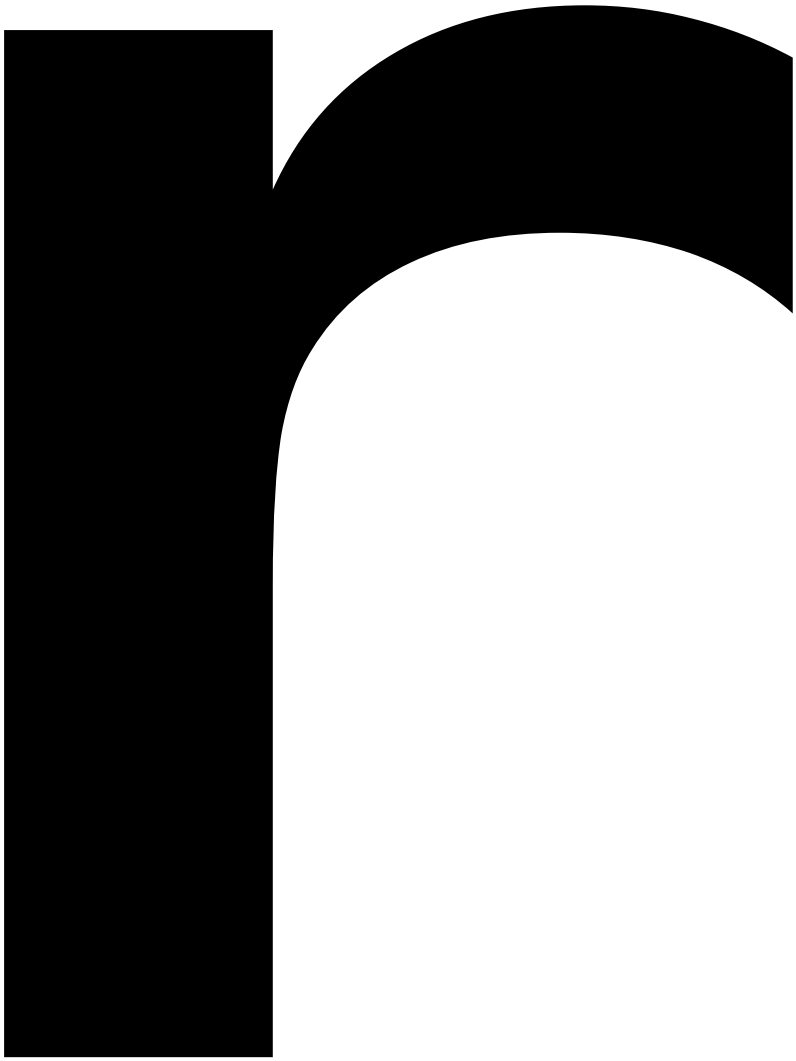


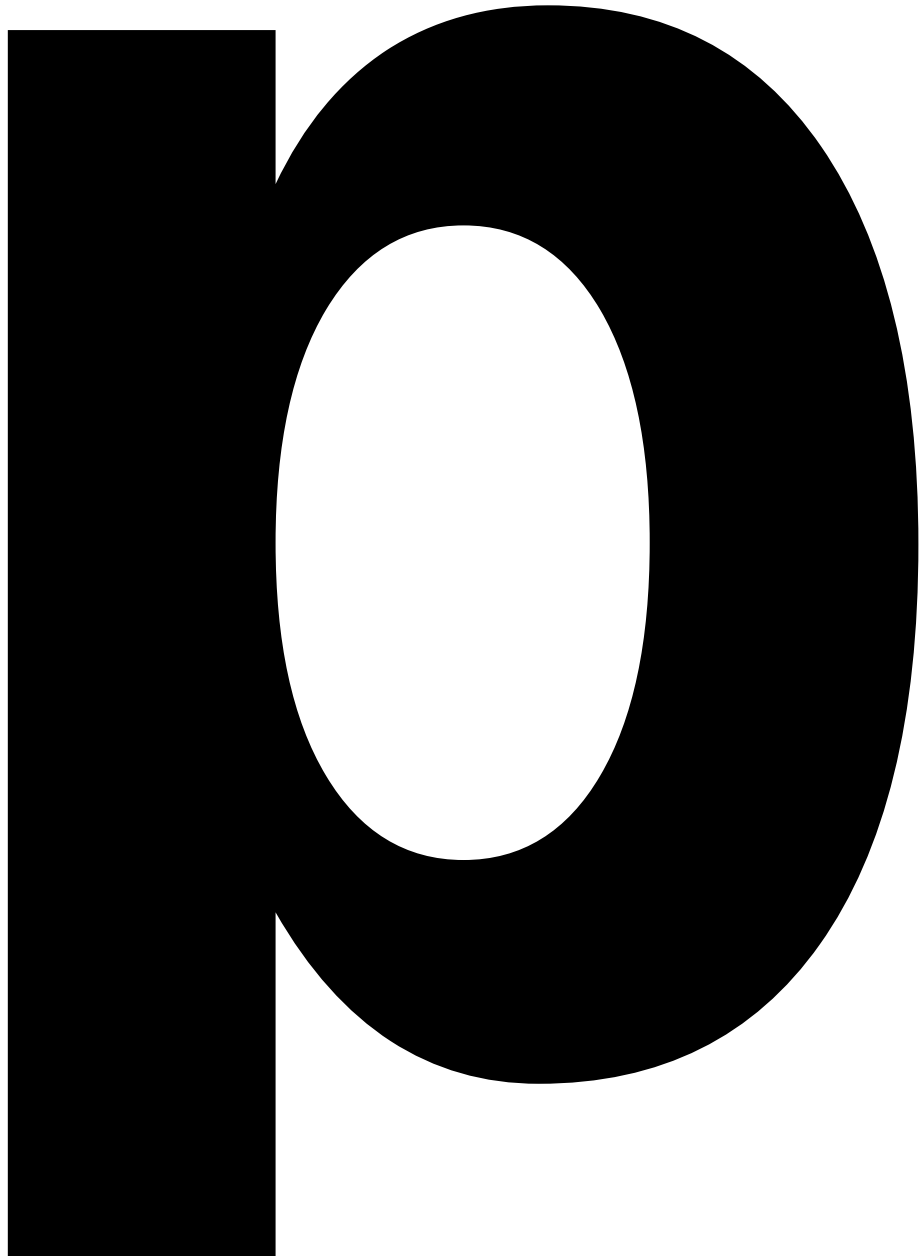


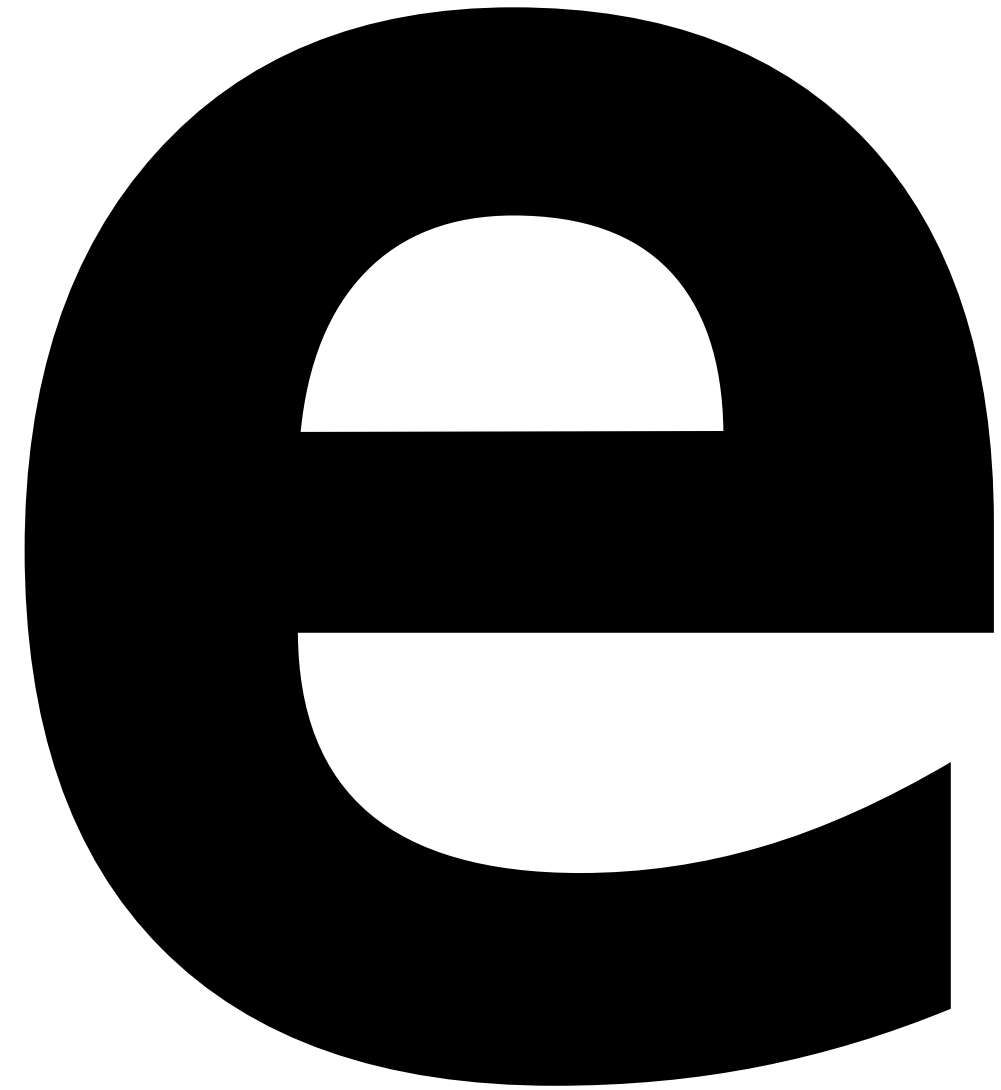


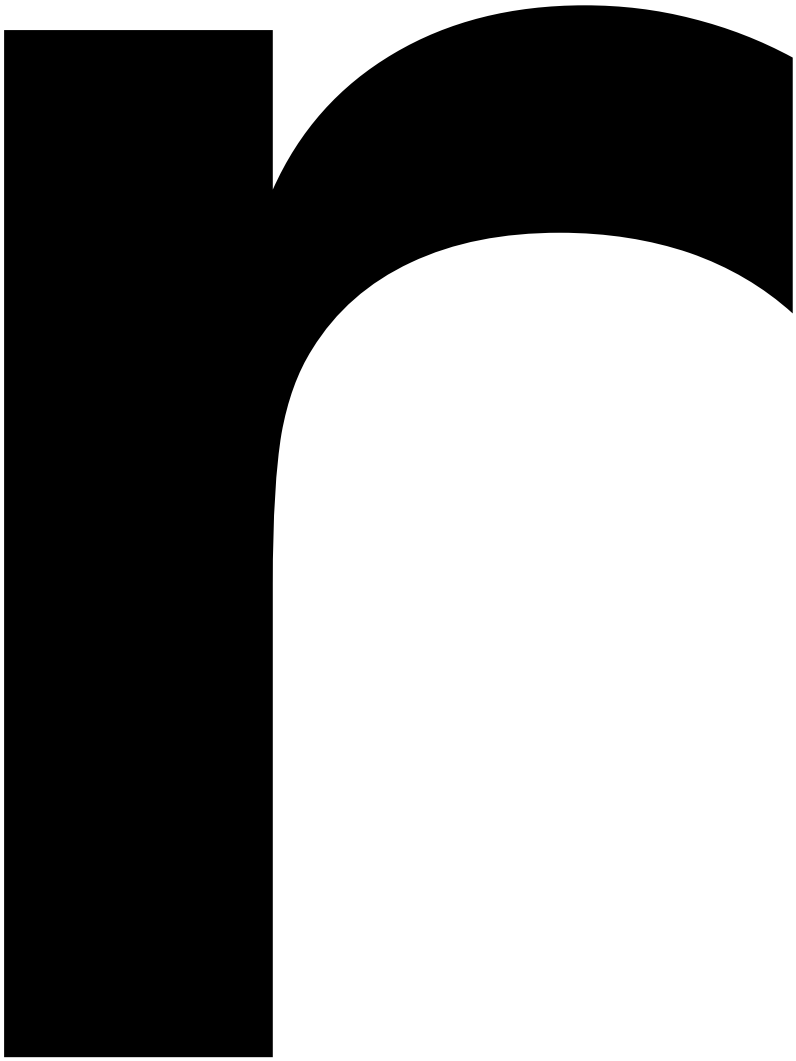


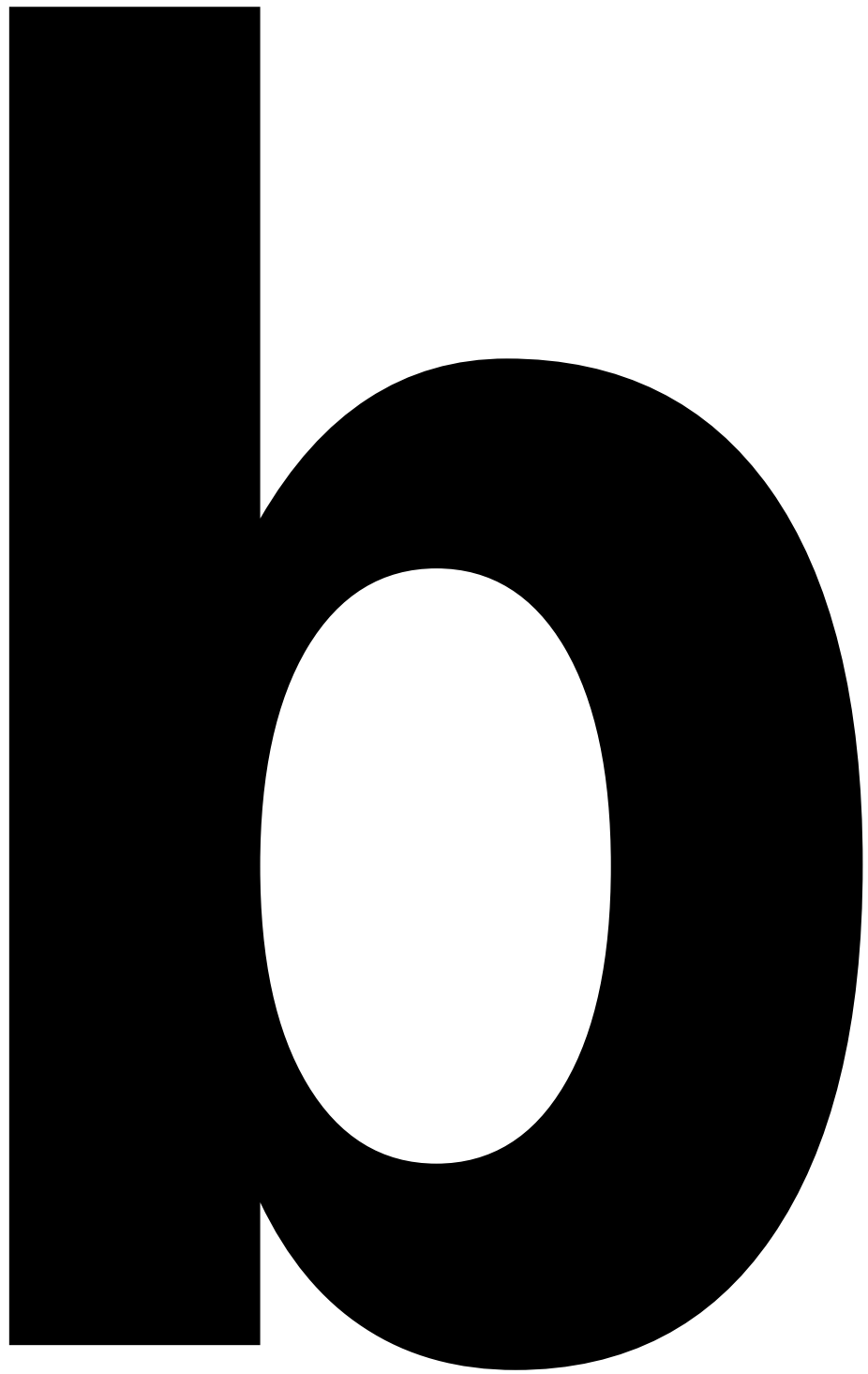


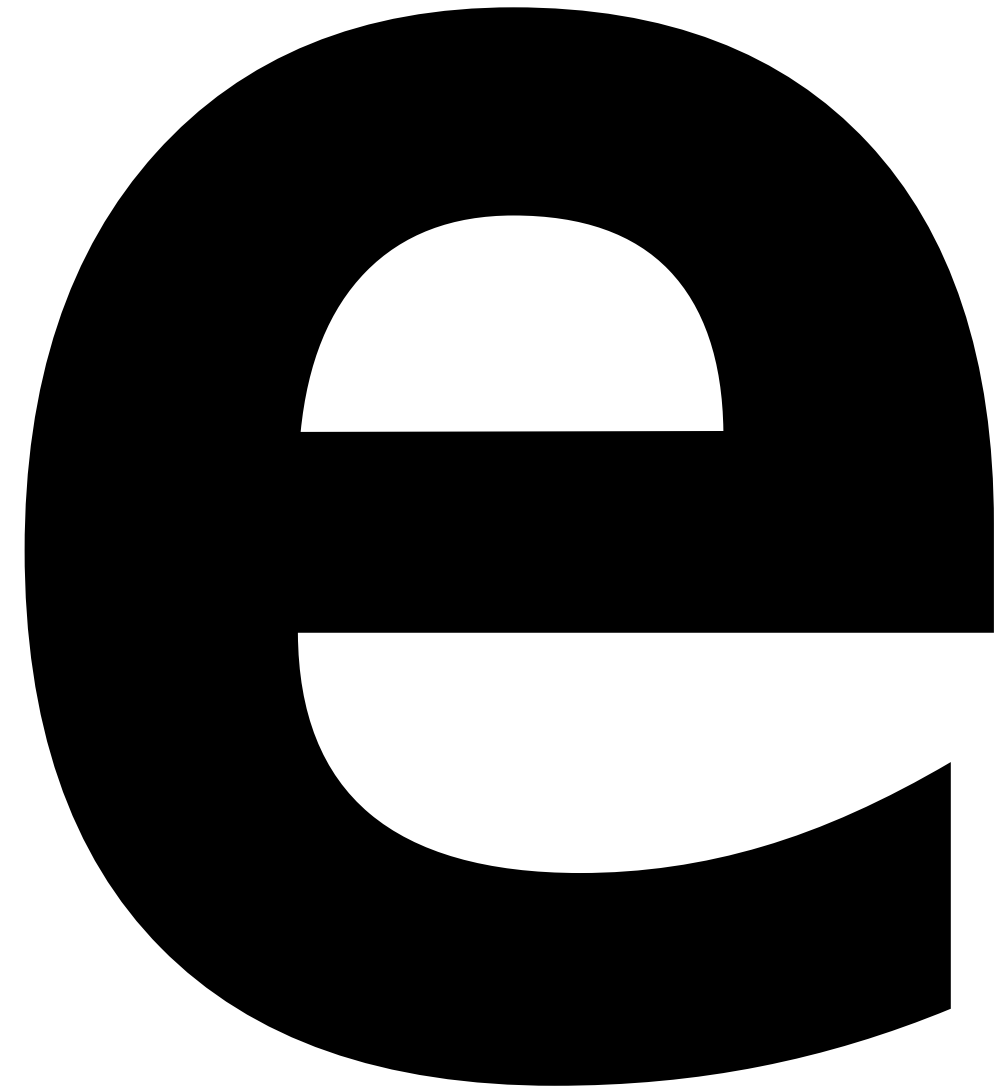




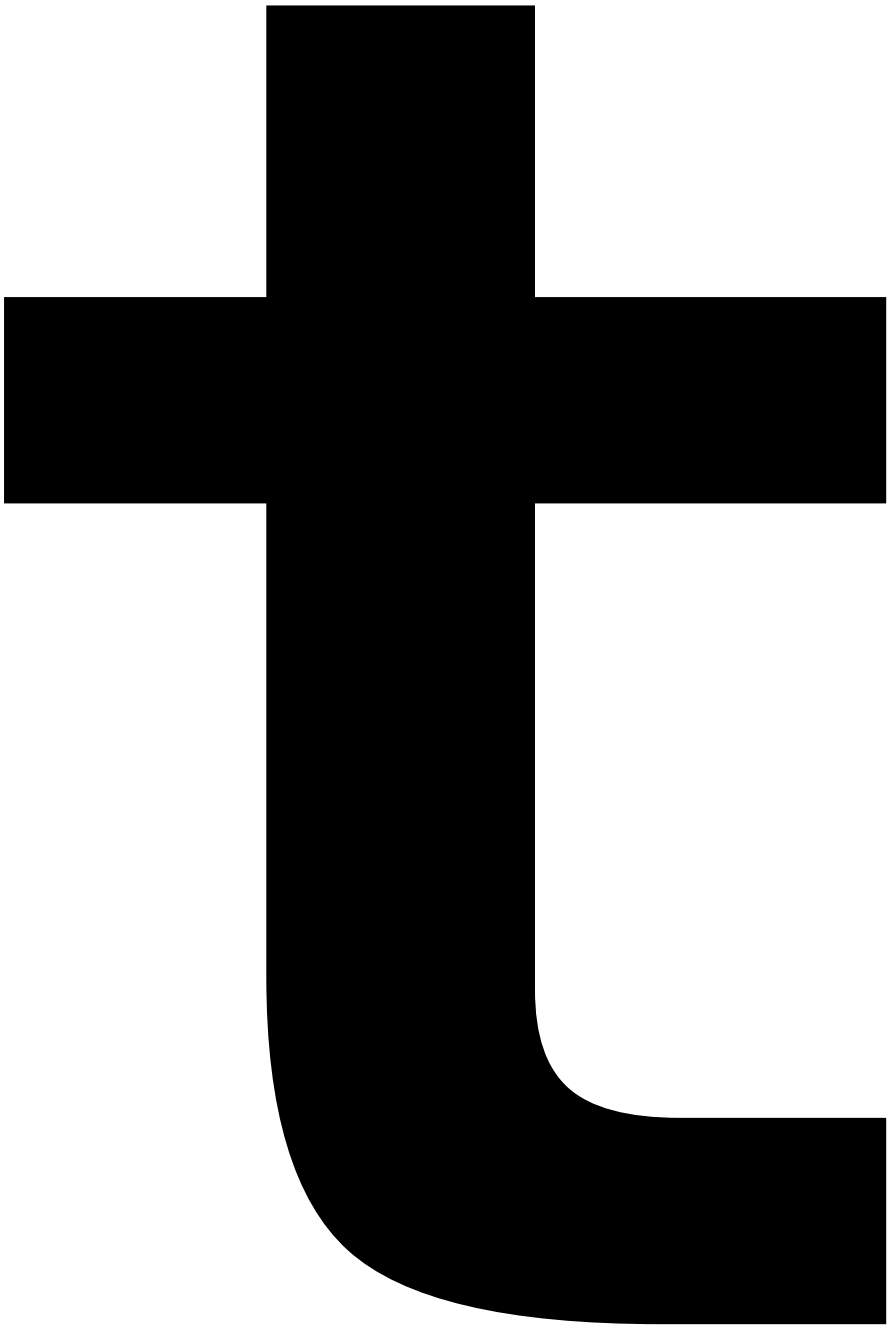


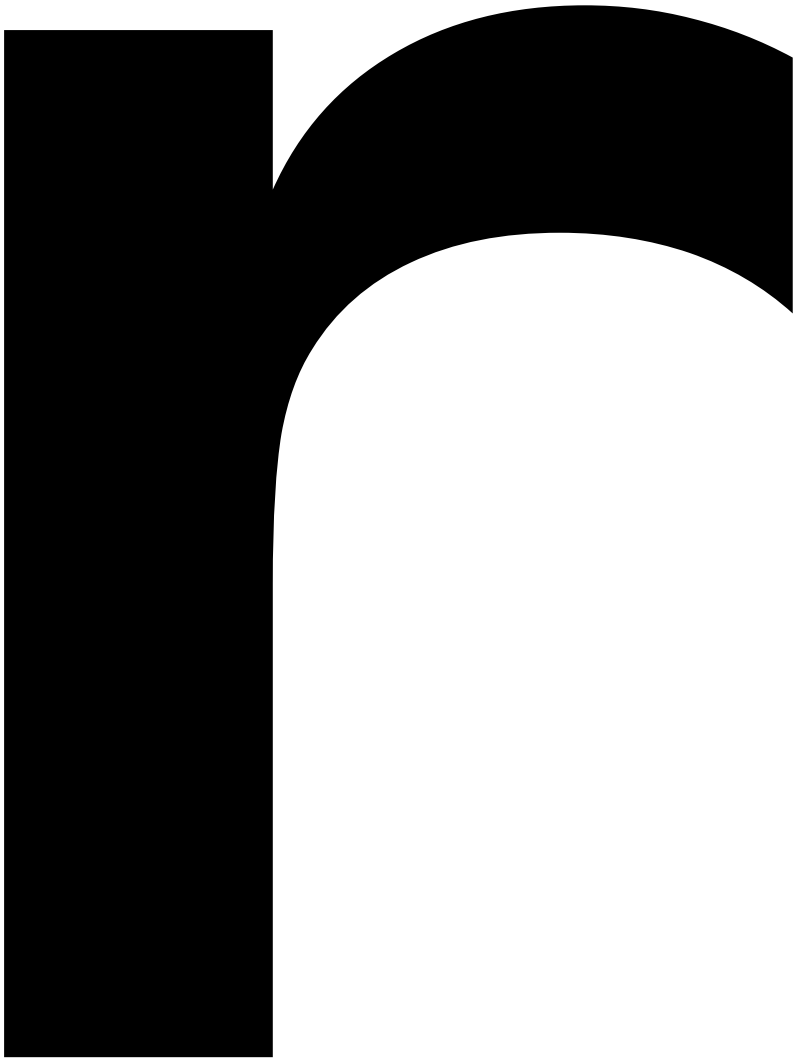


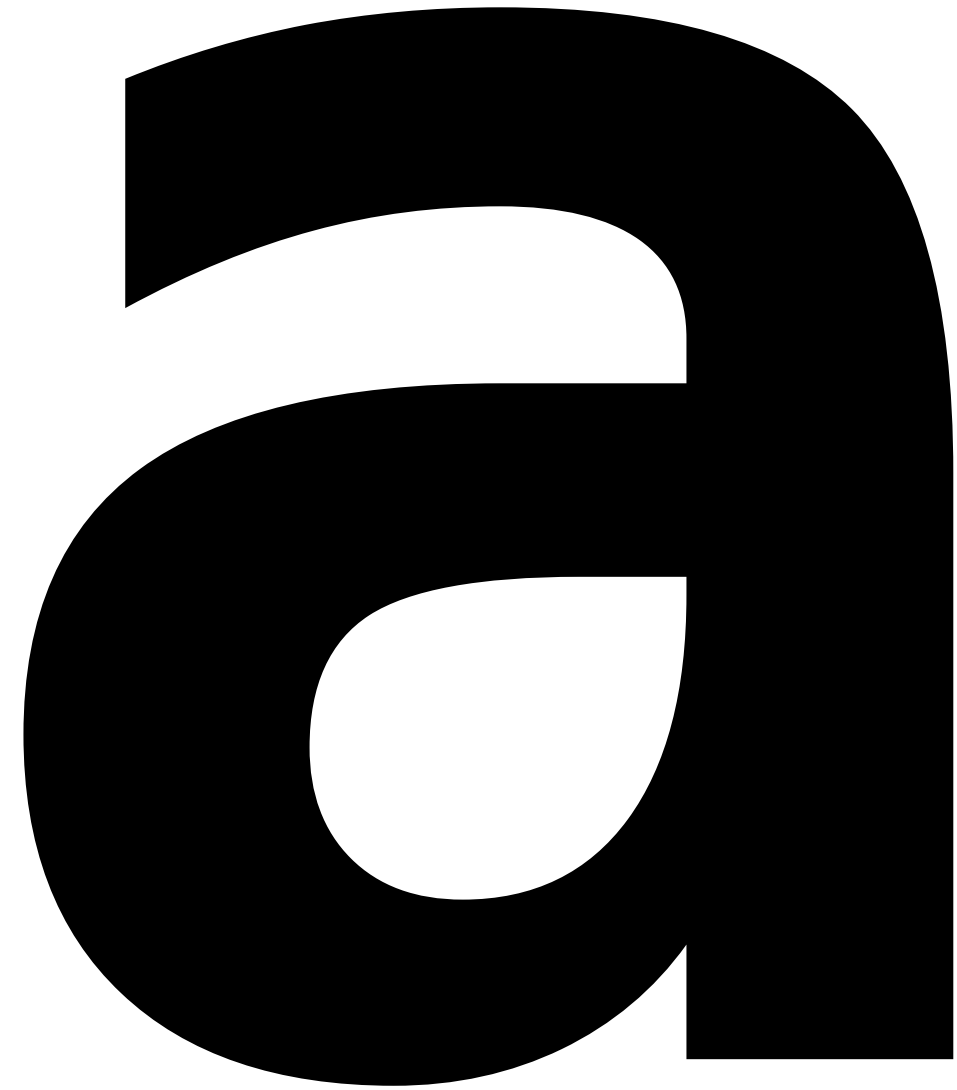


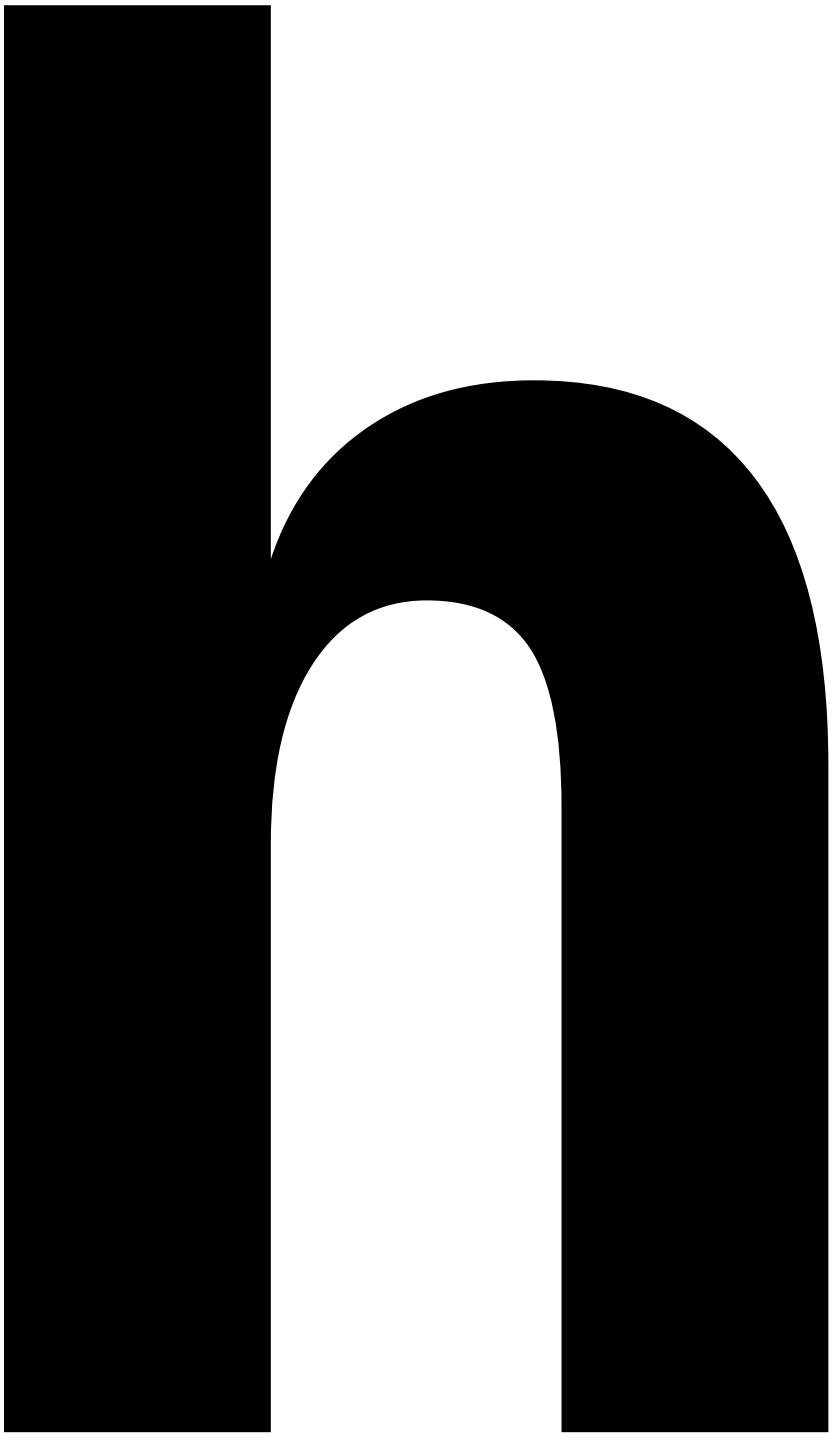


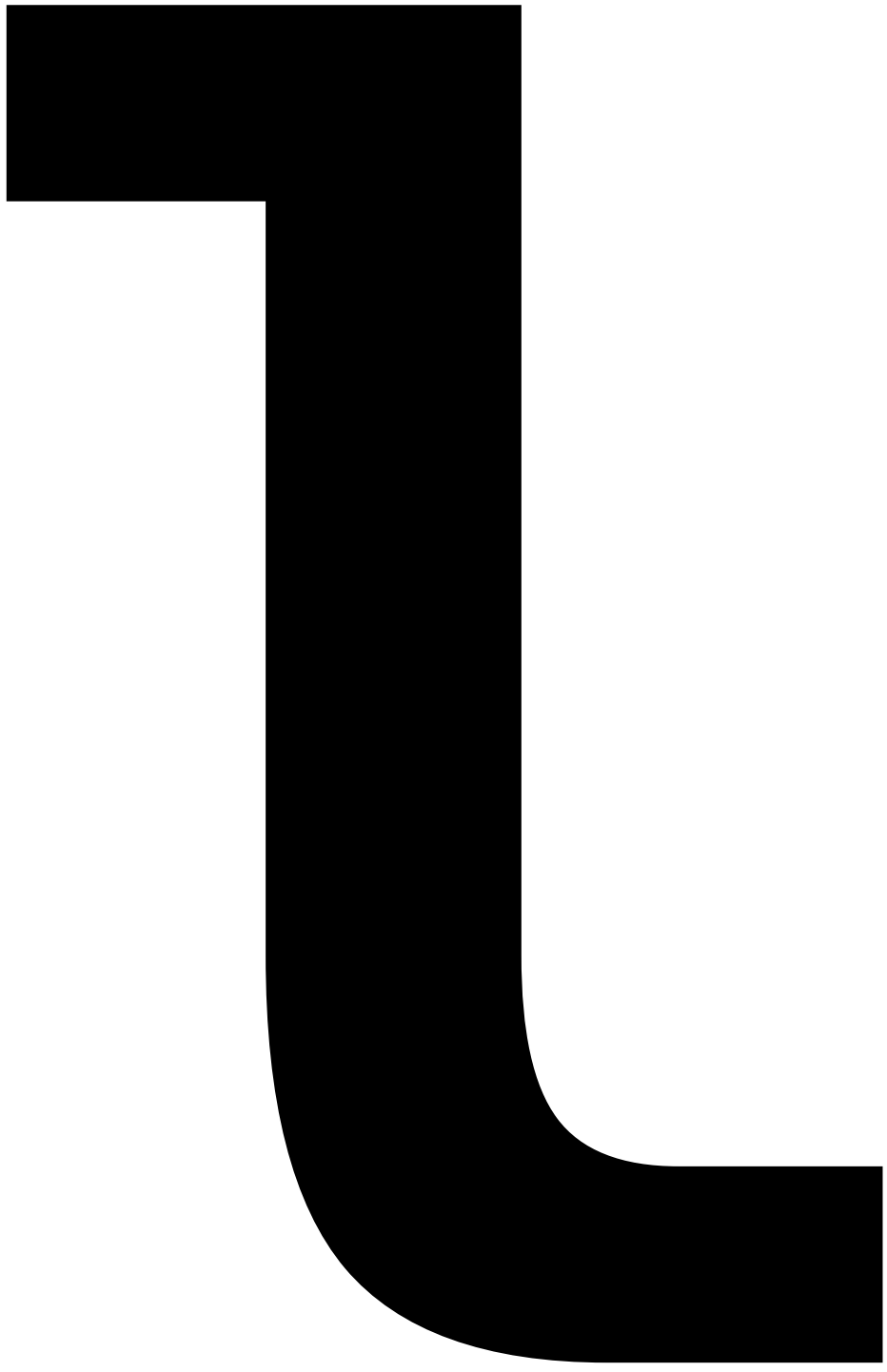
S



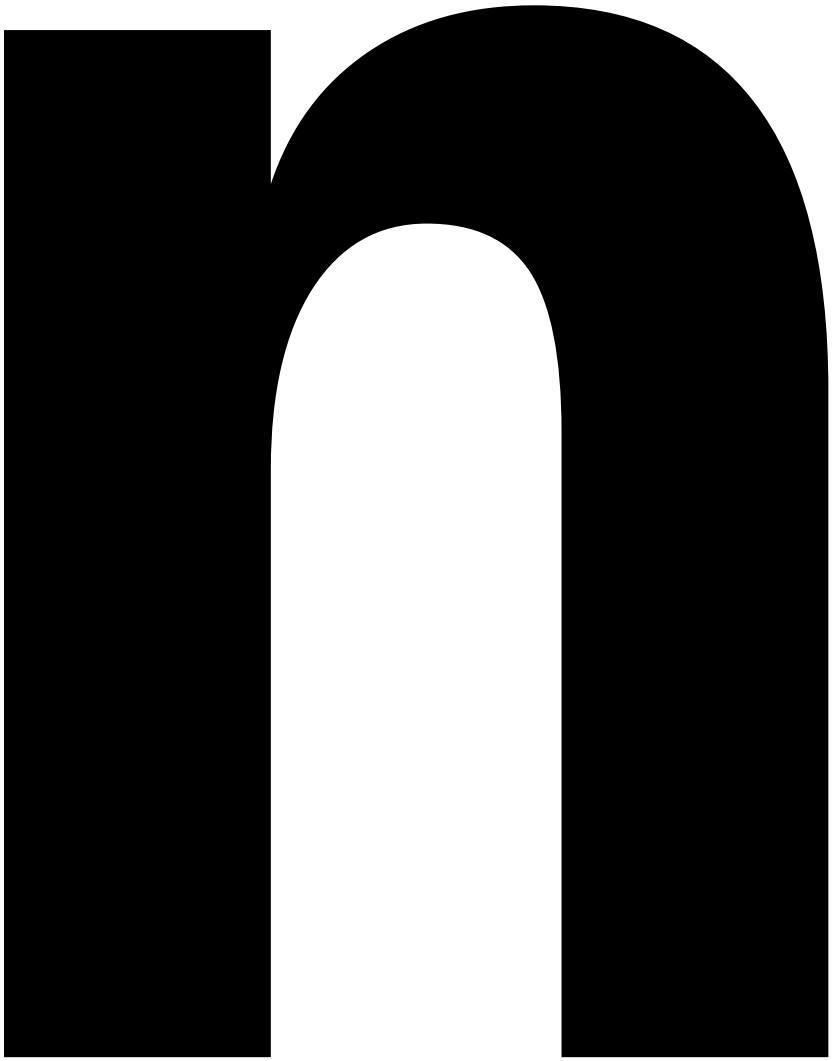


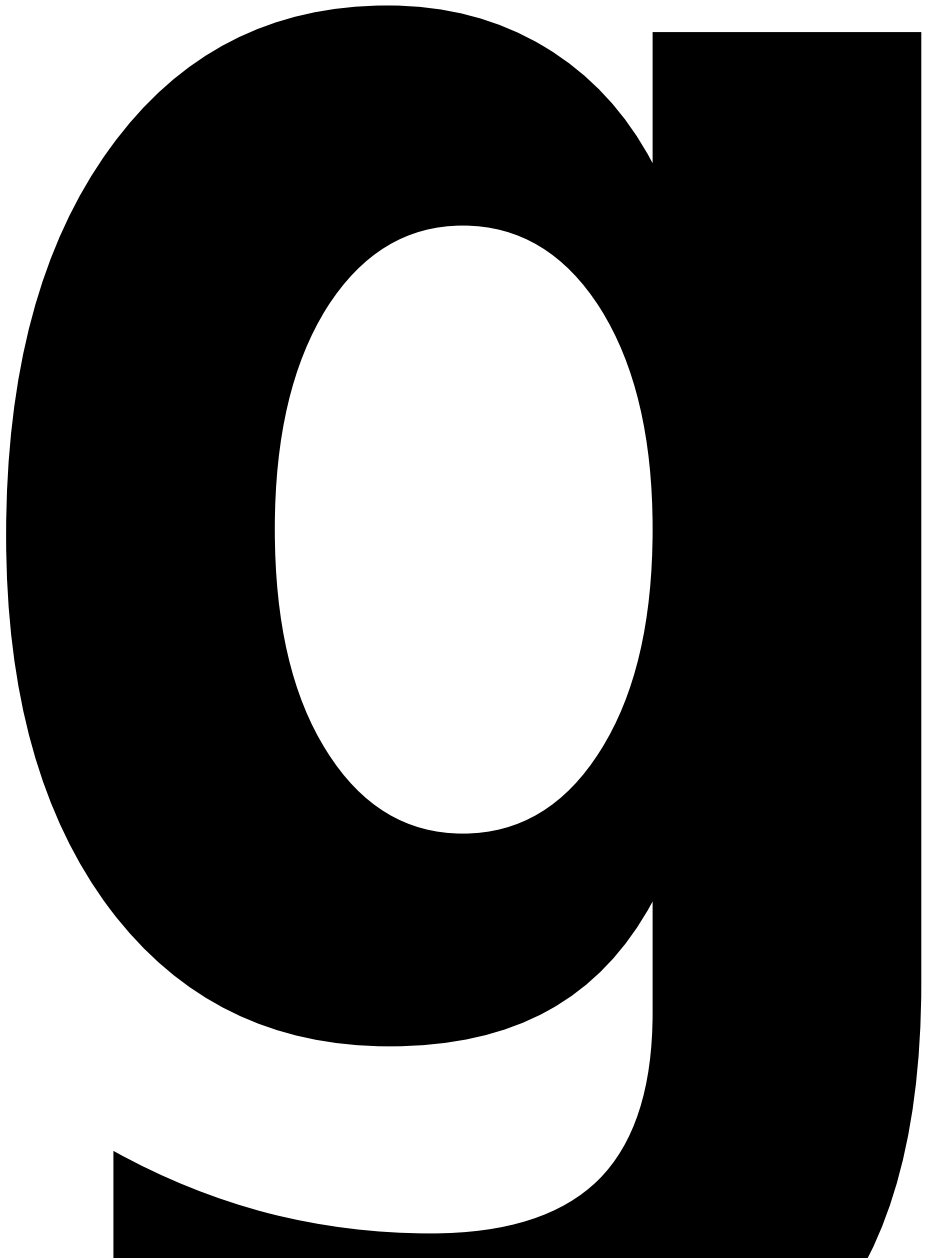


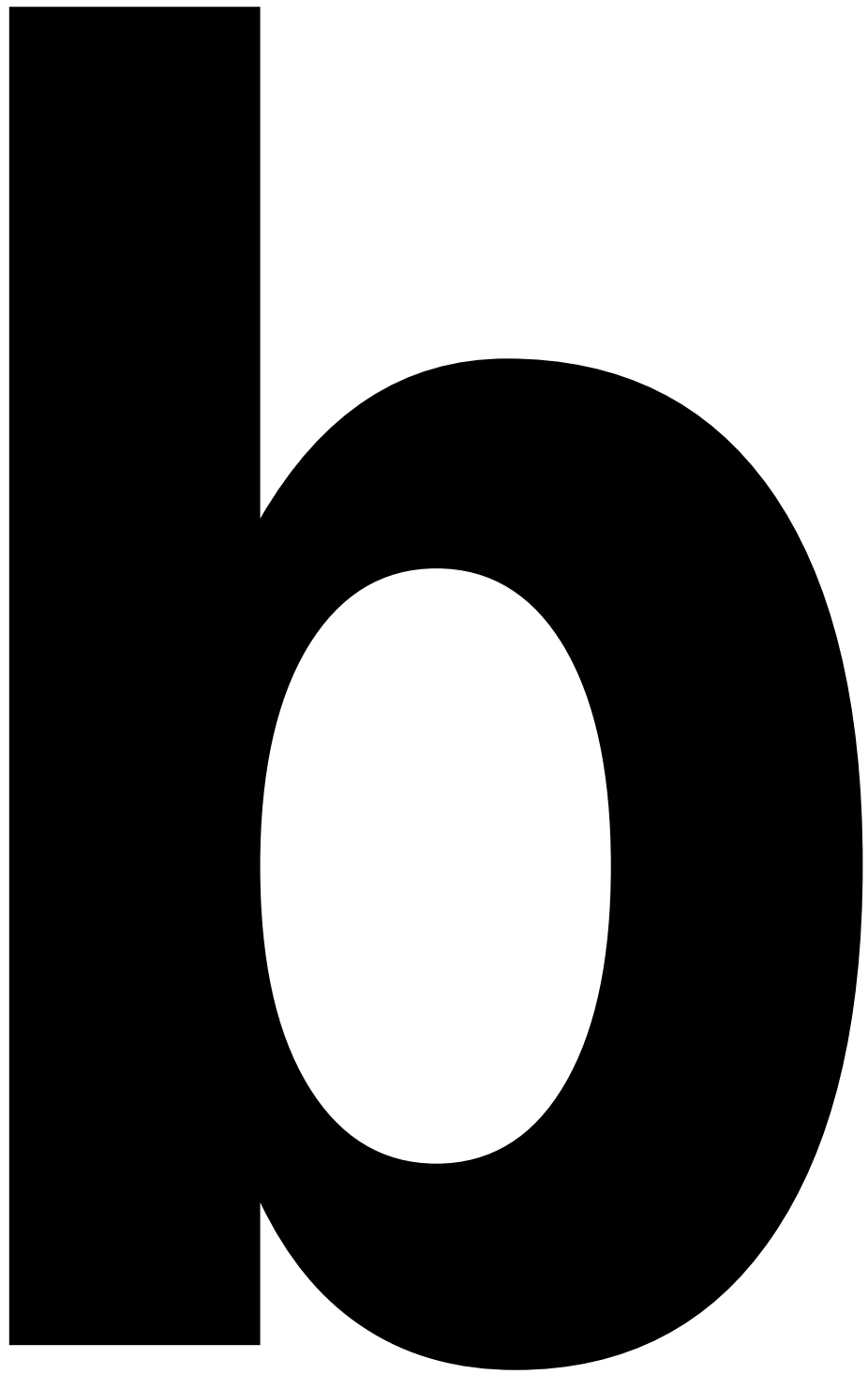


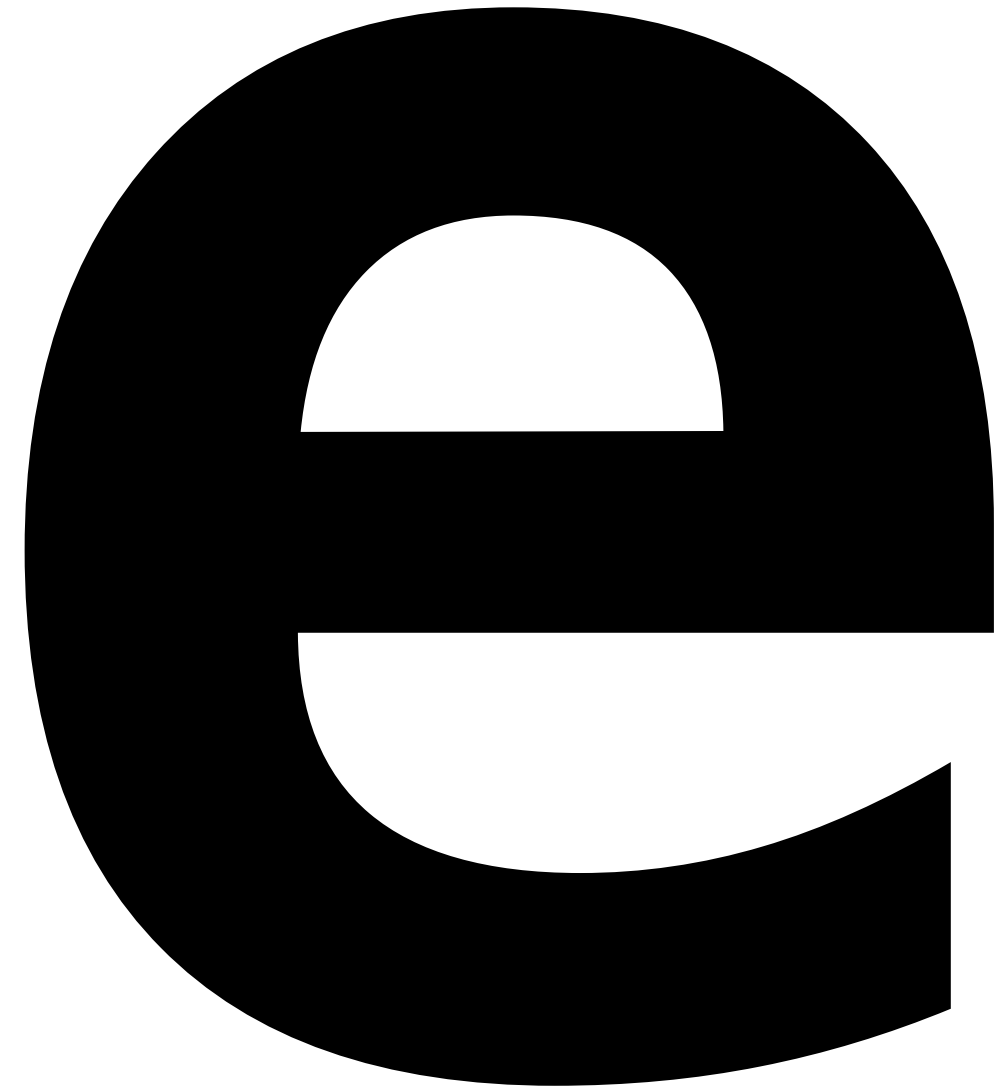


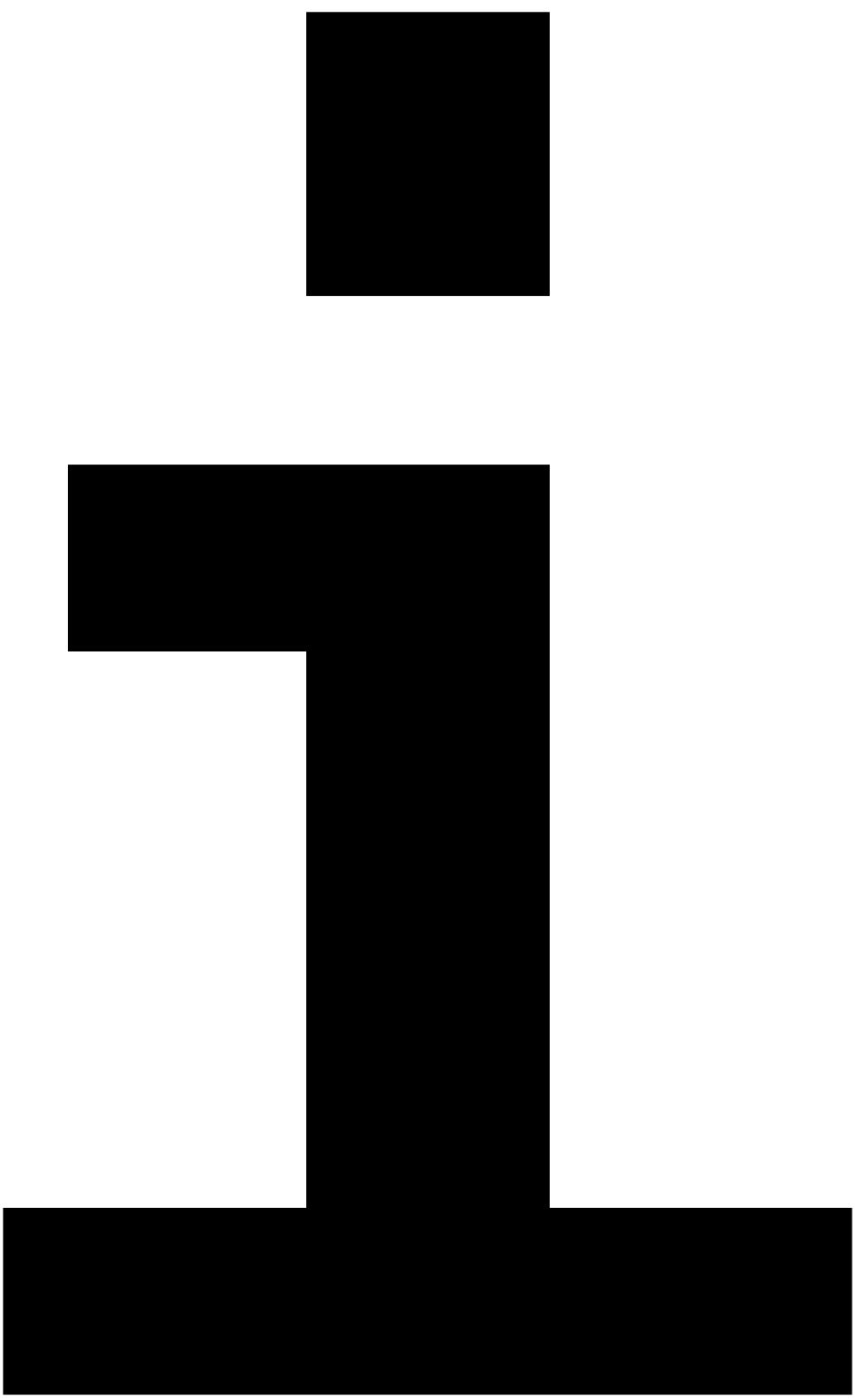
u

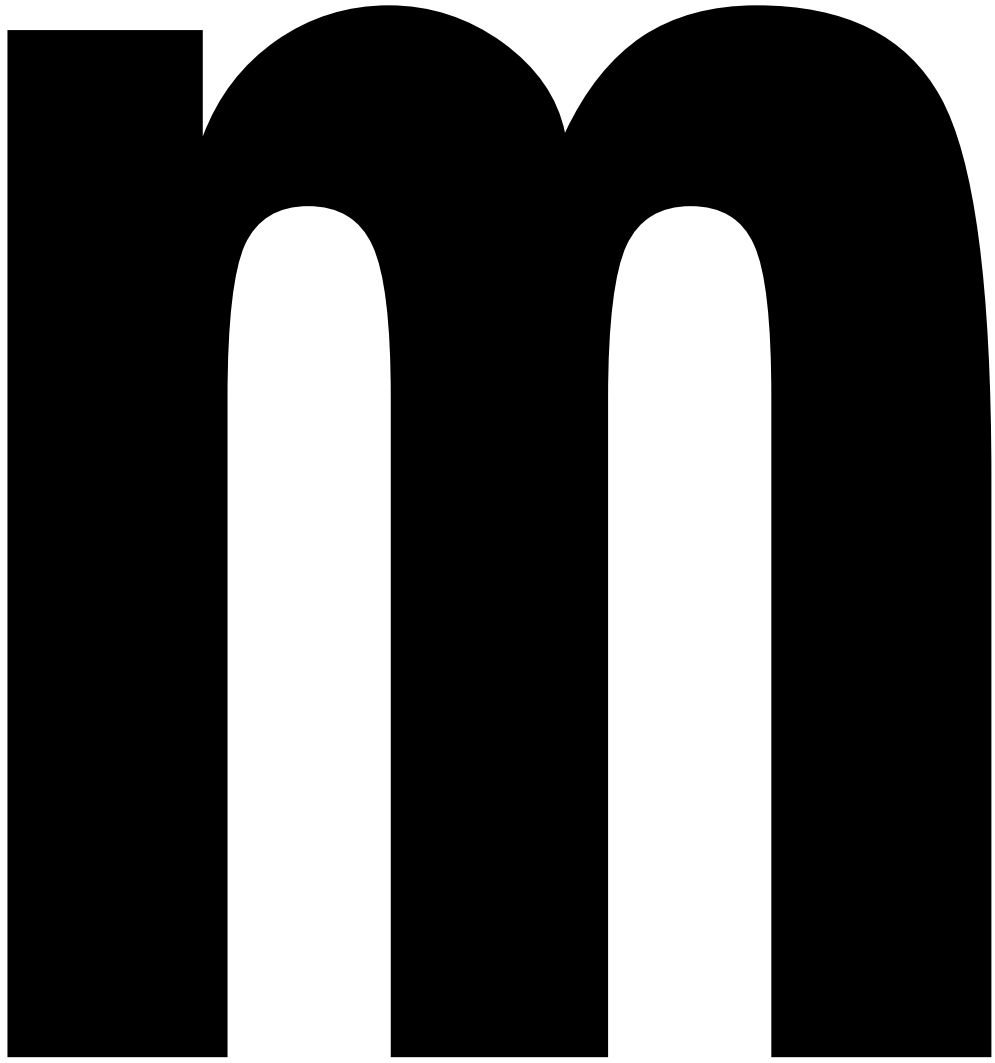


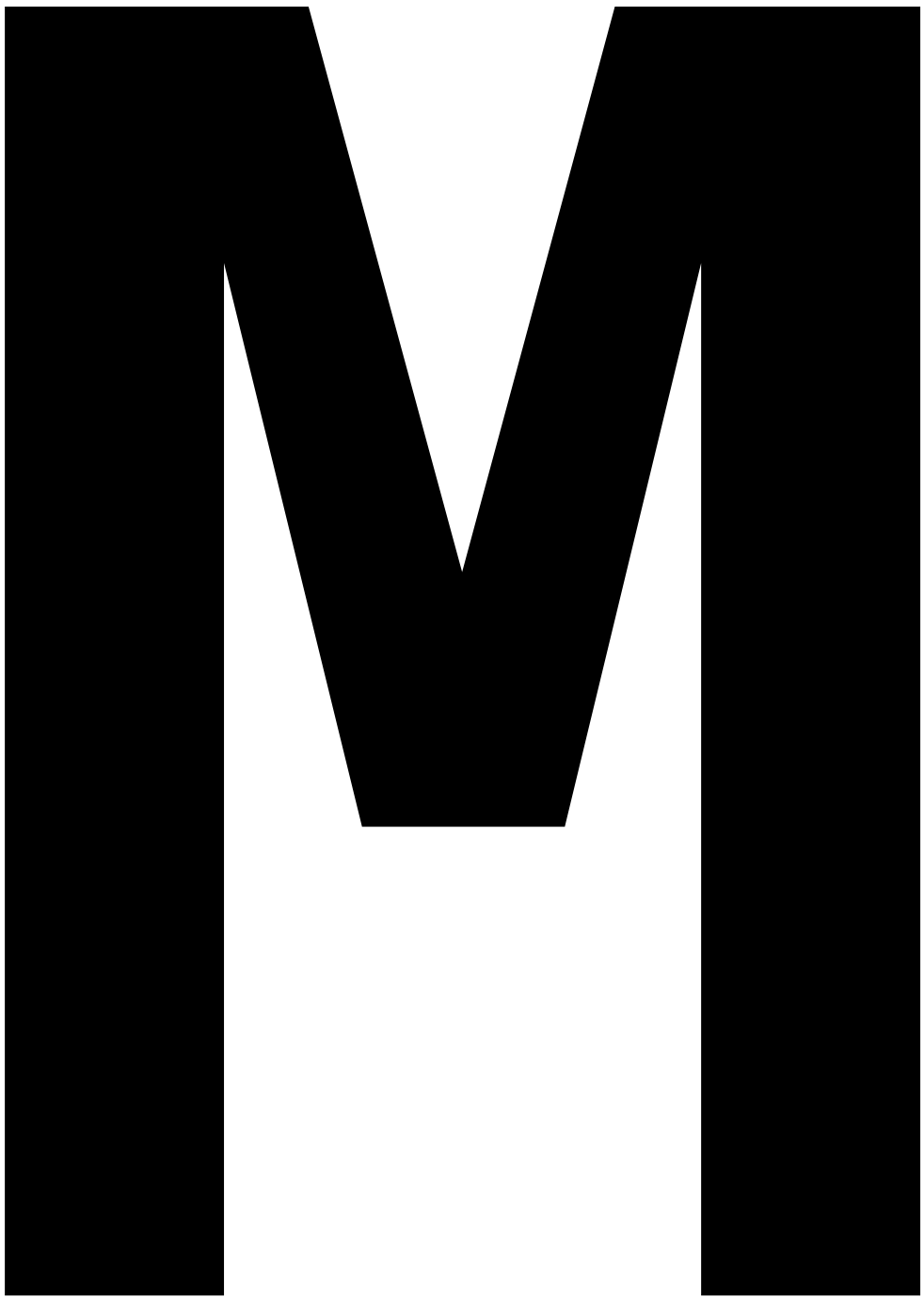


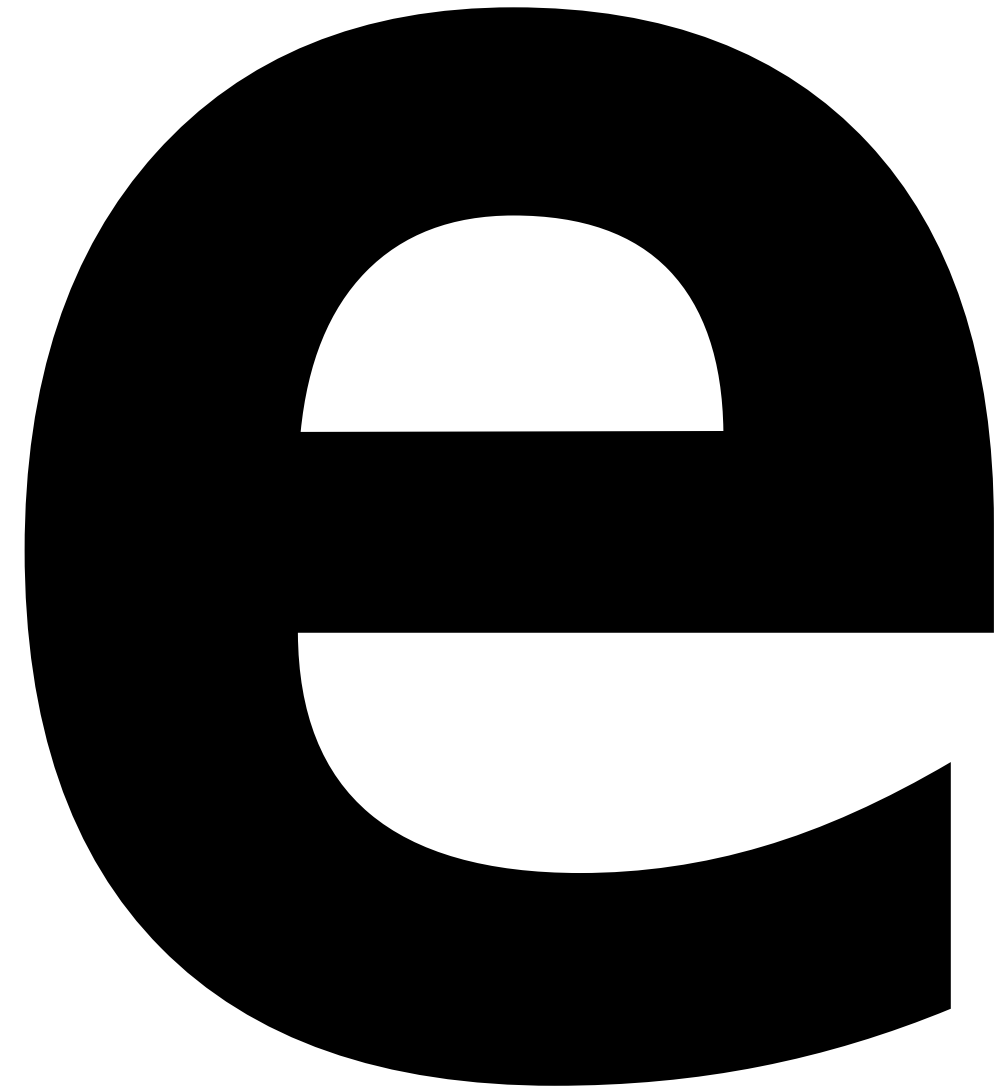


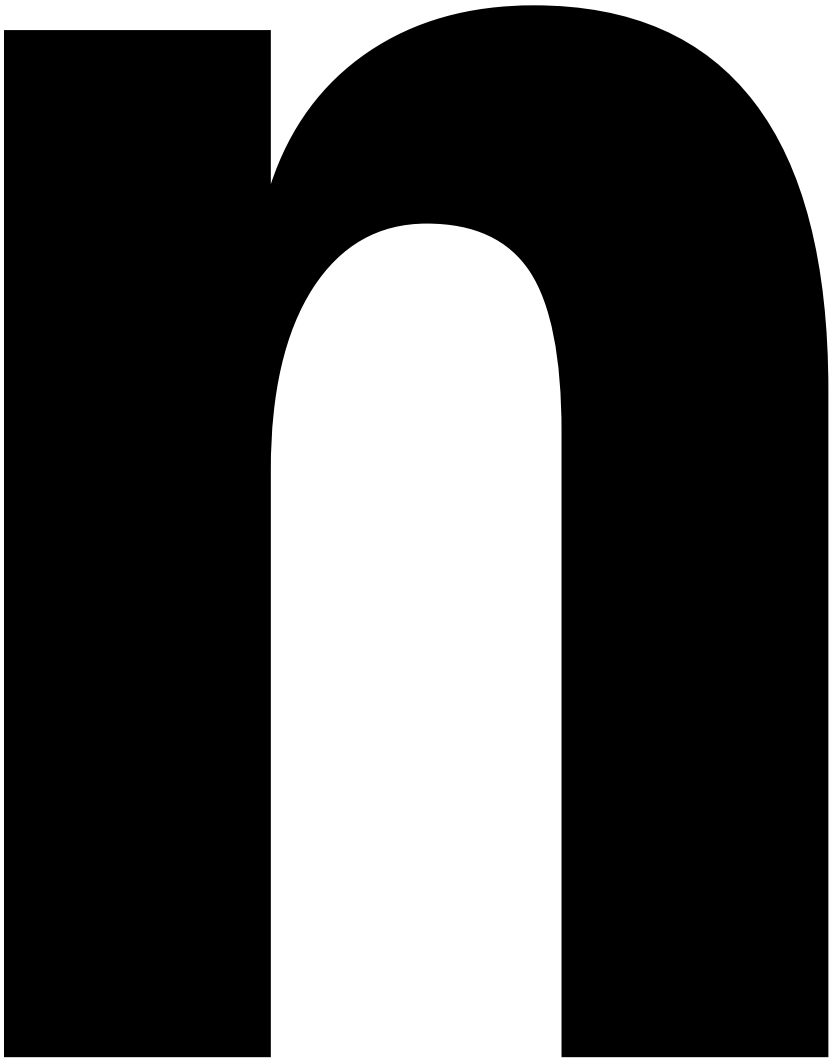




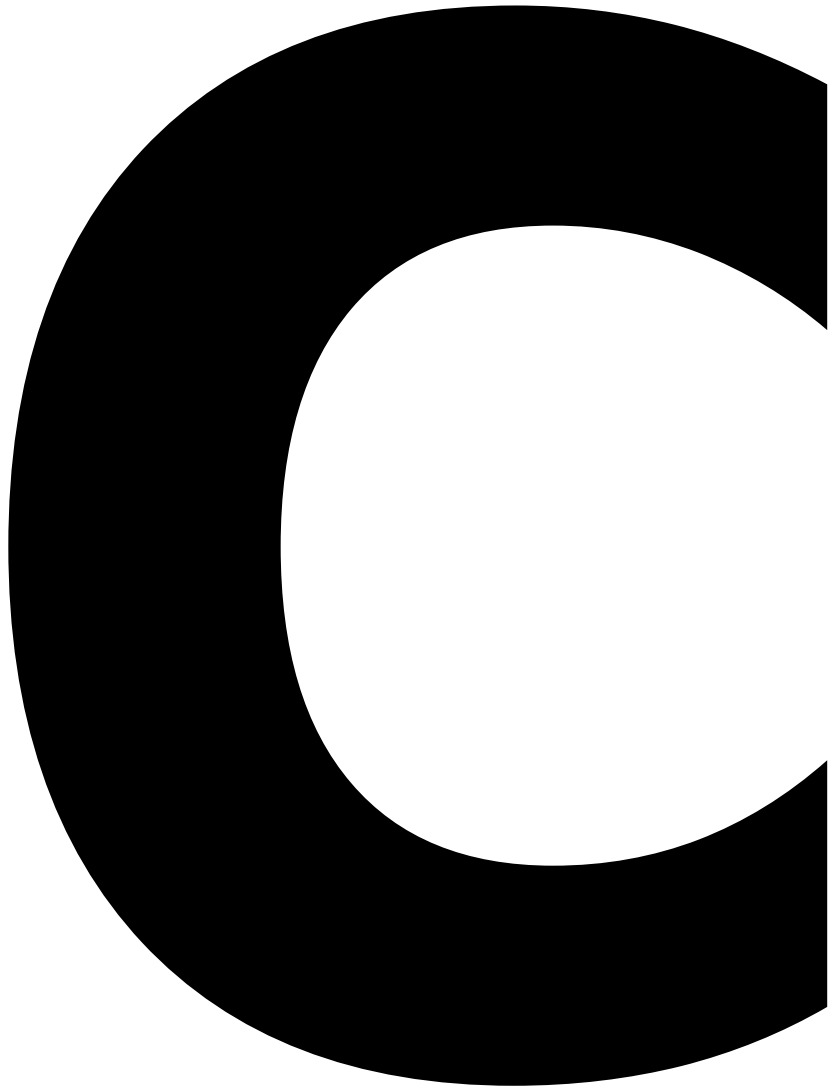


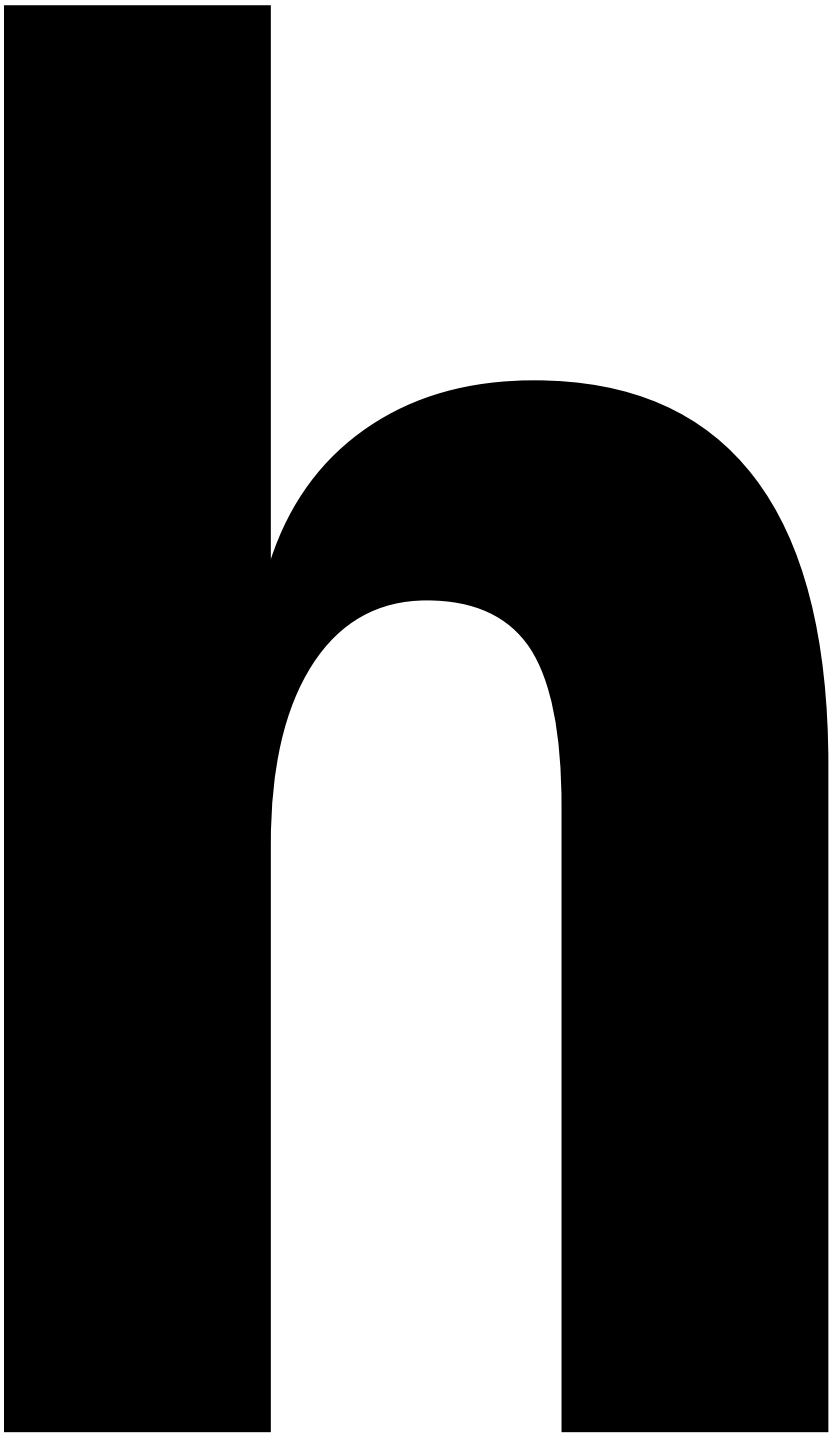


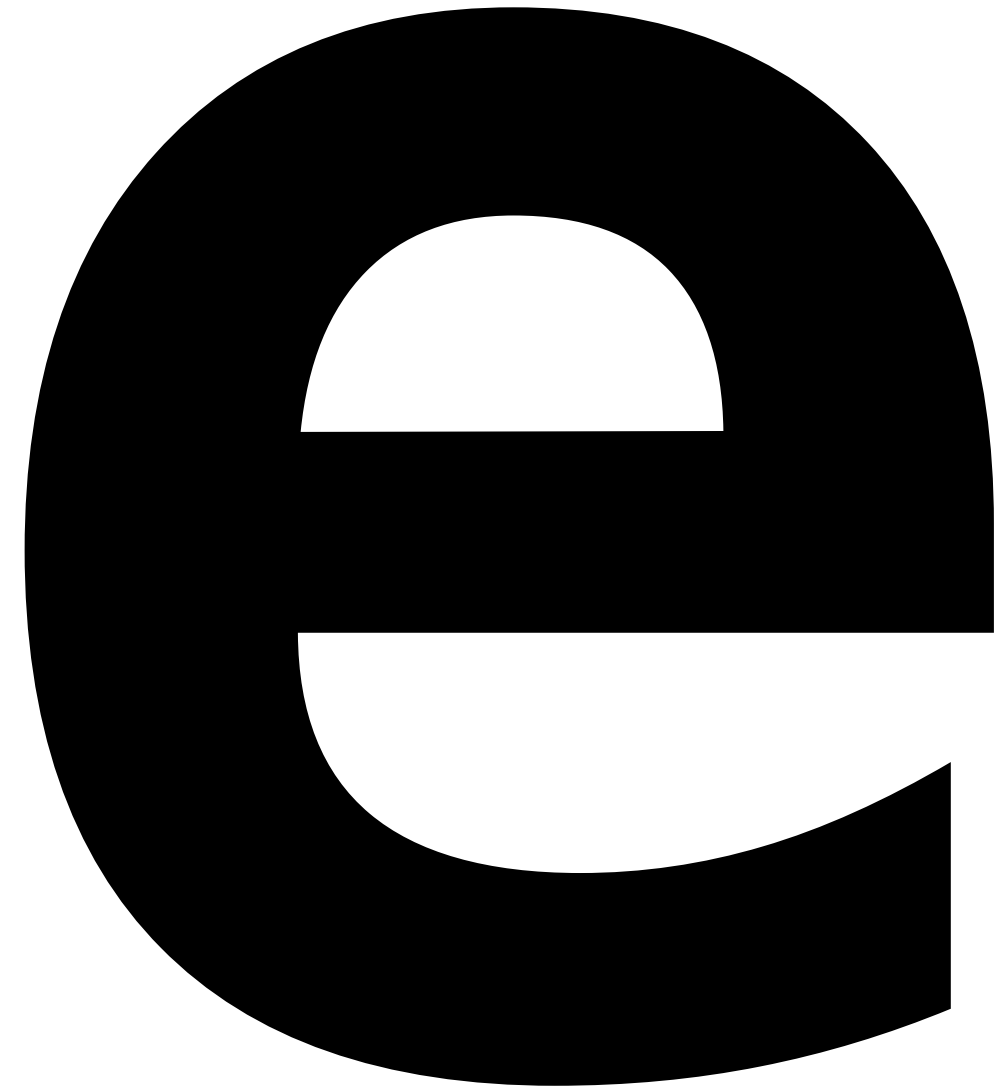


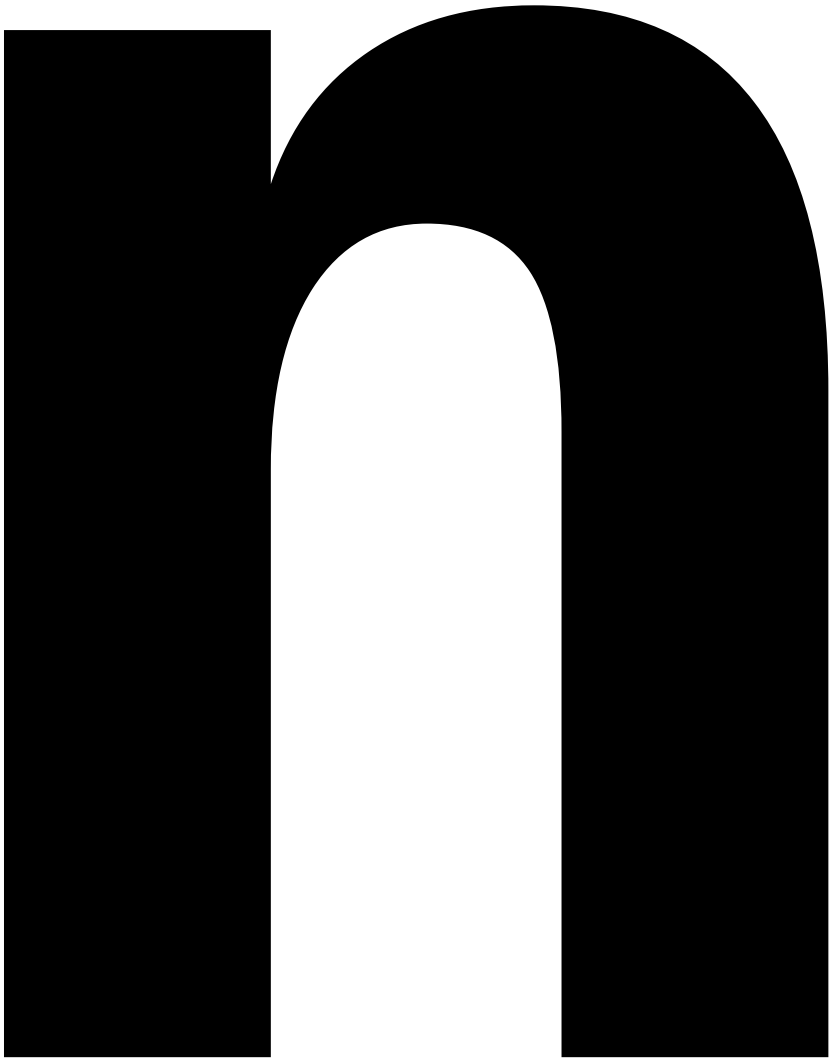


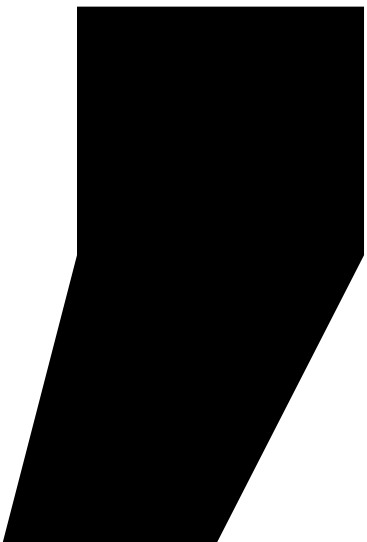
S

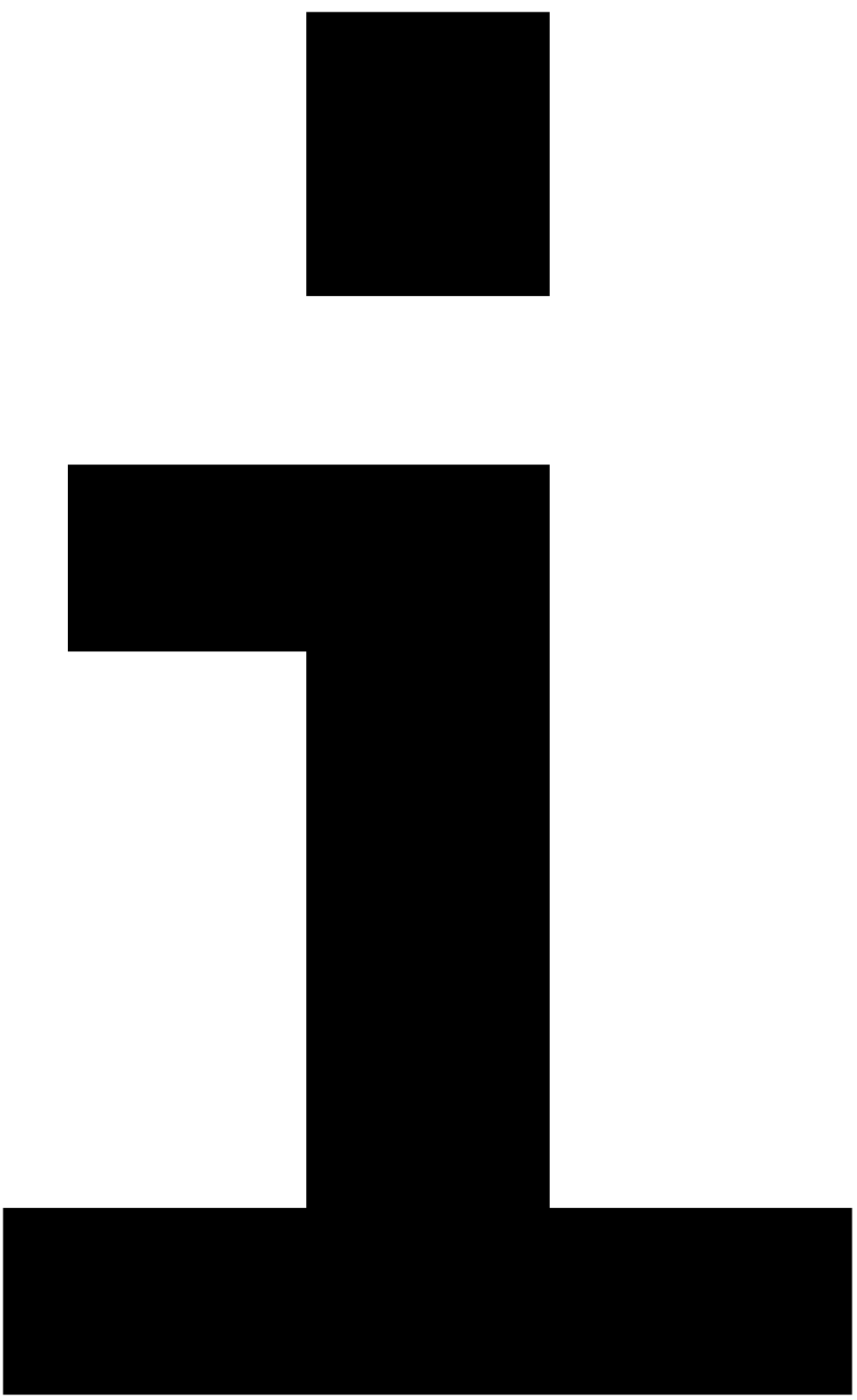


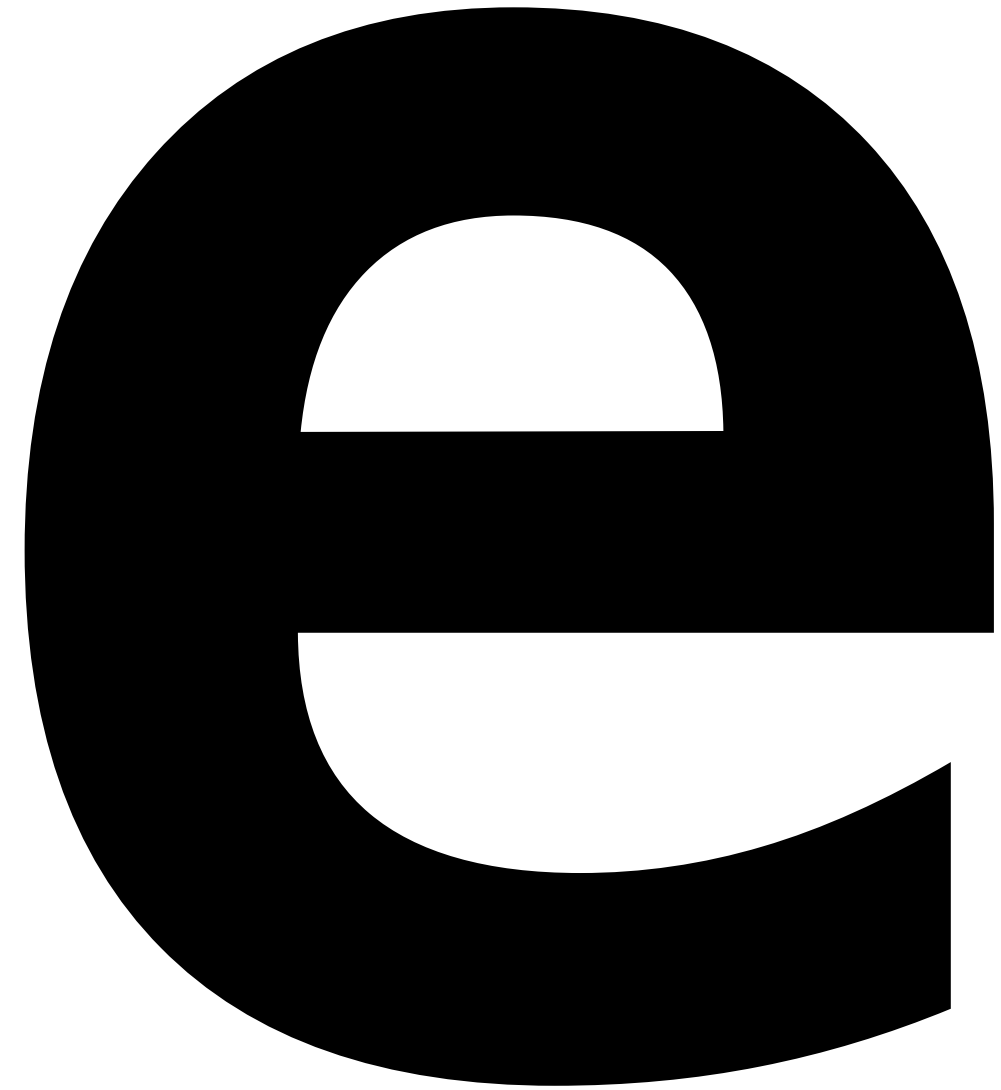


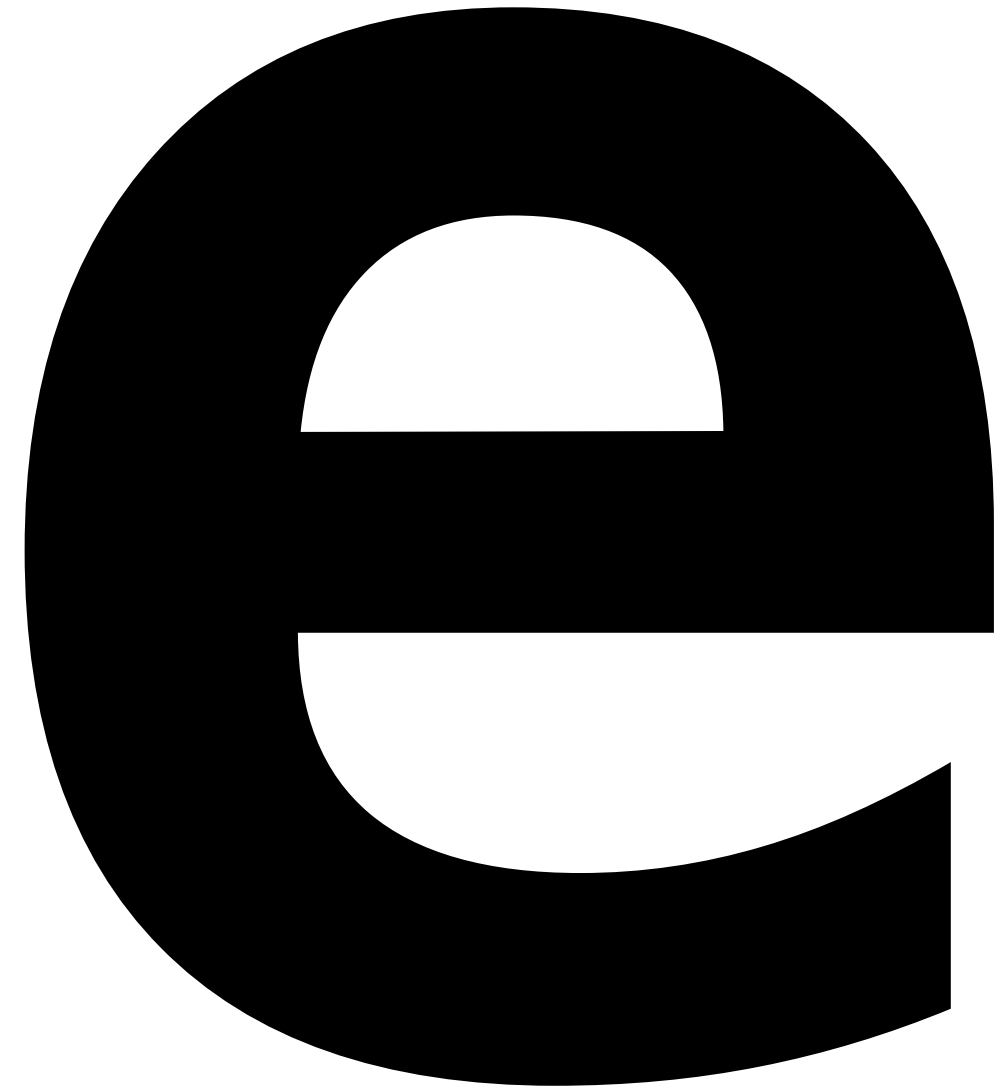


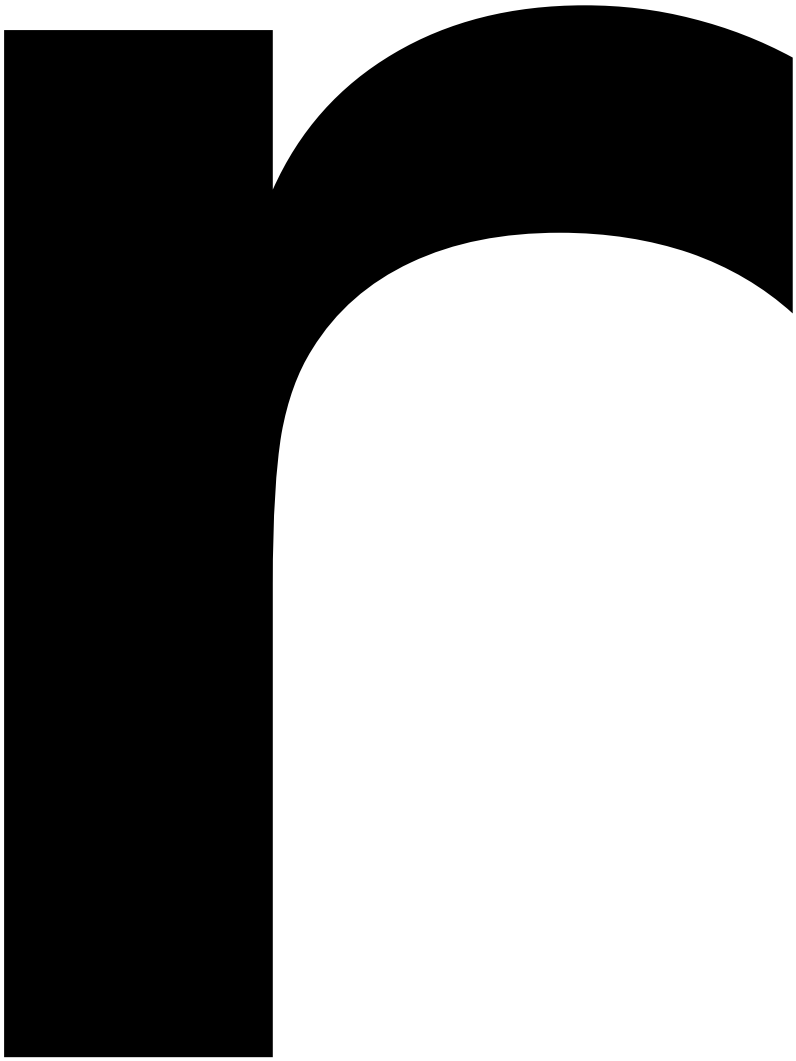






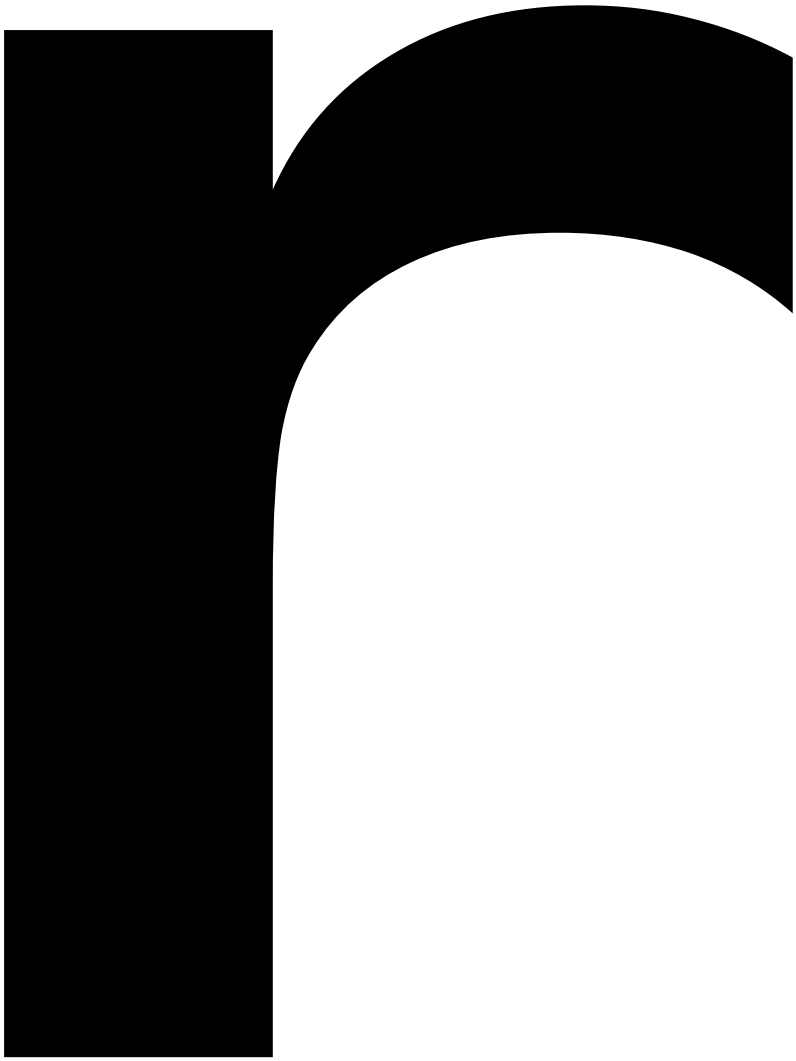


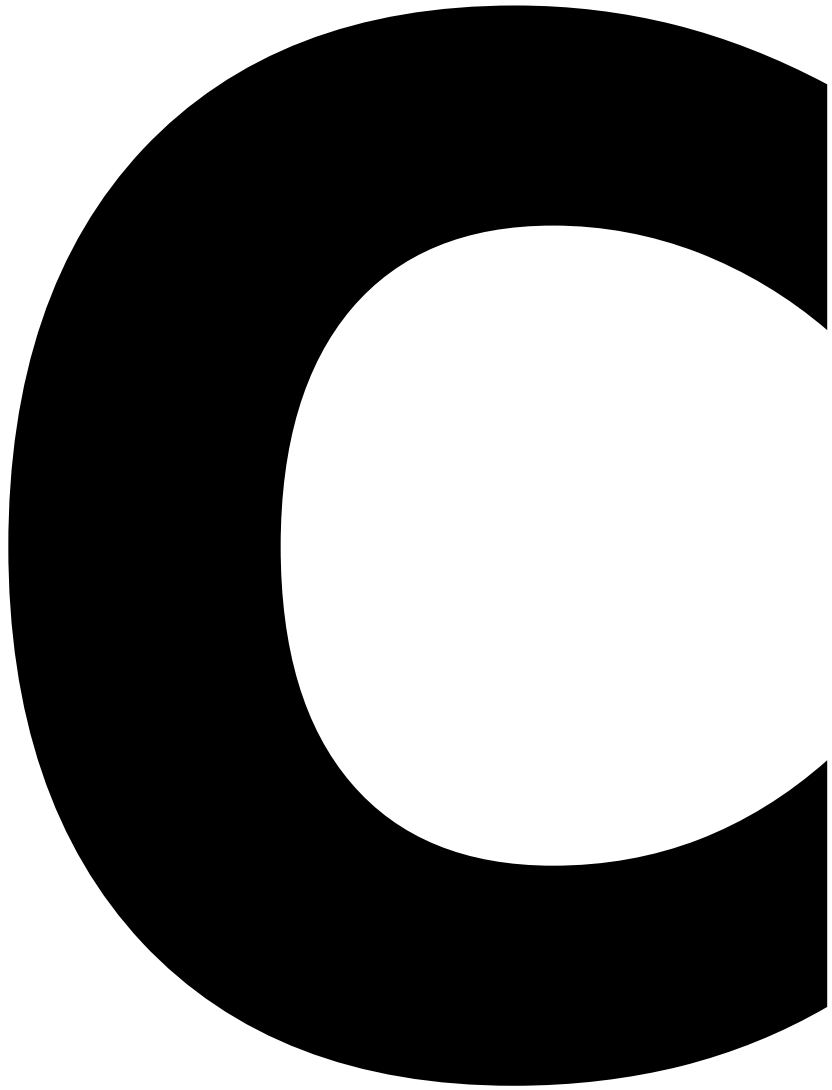


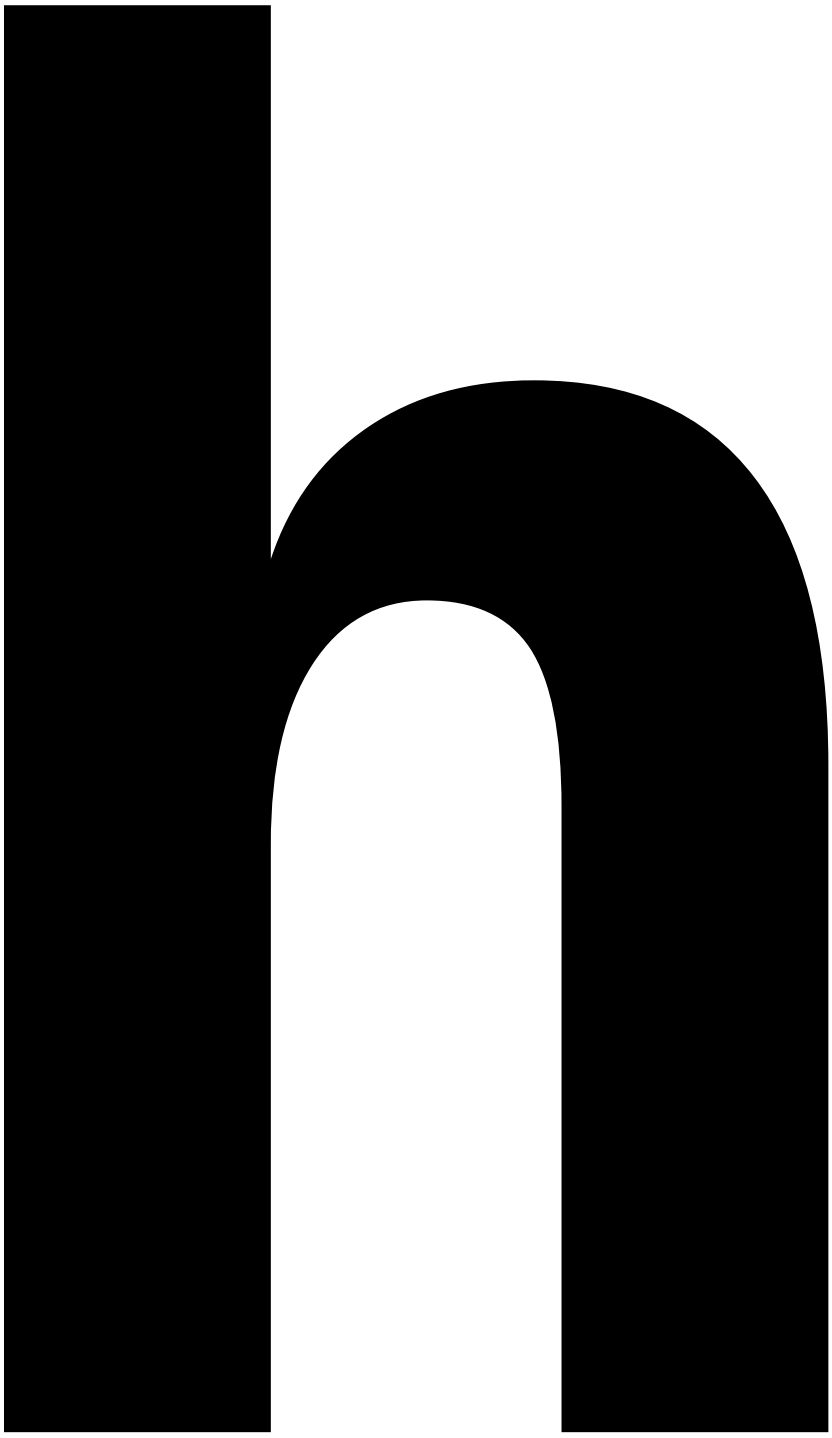


d

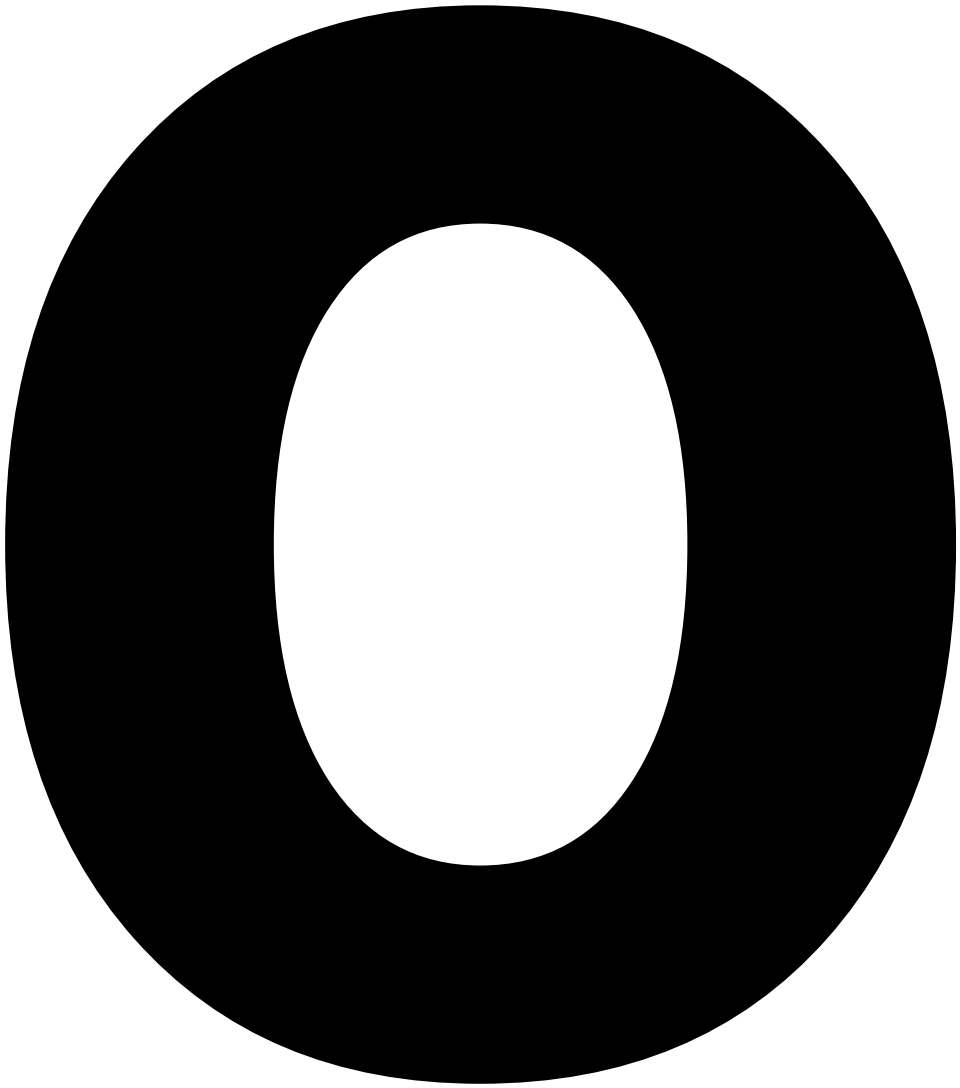
u



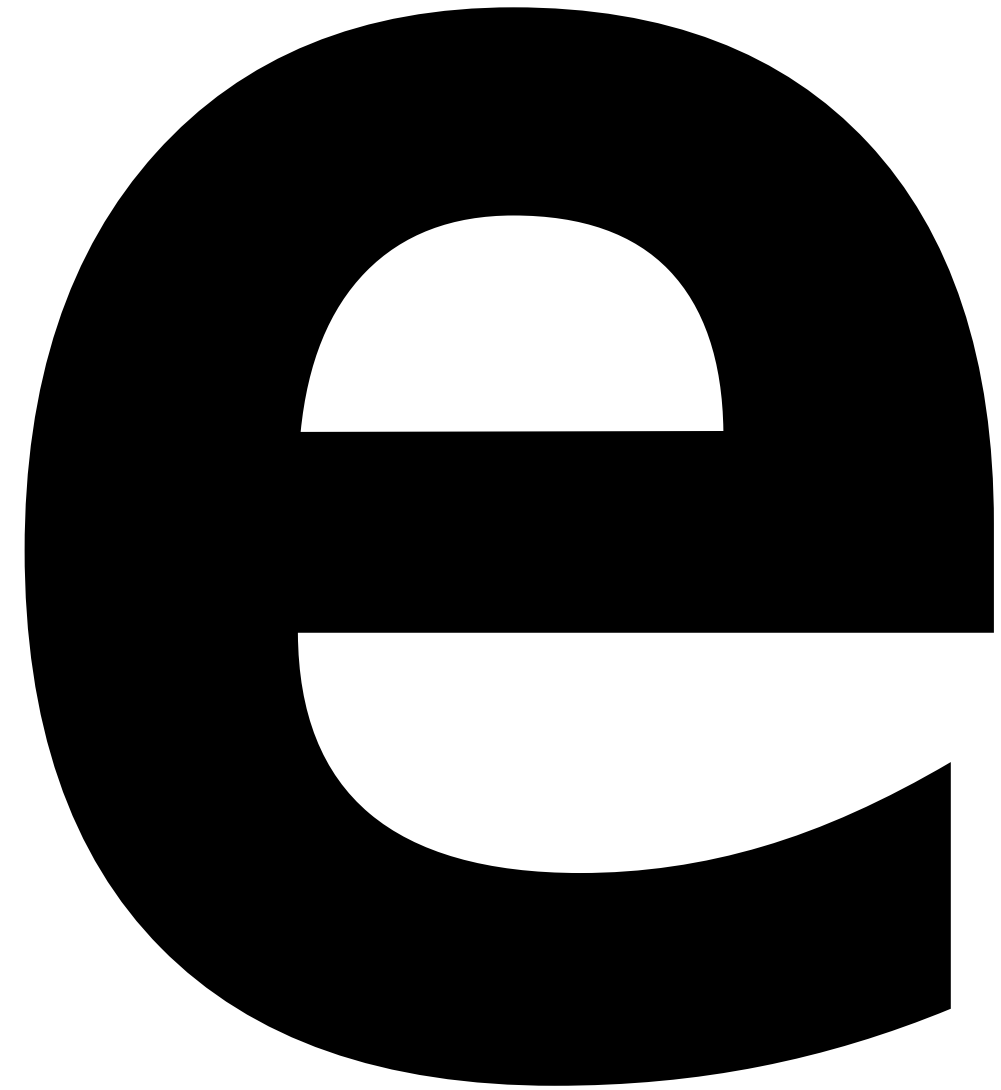


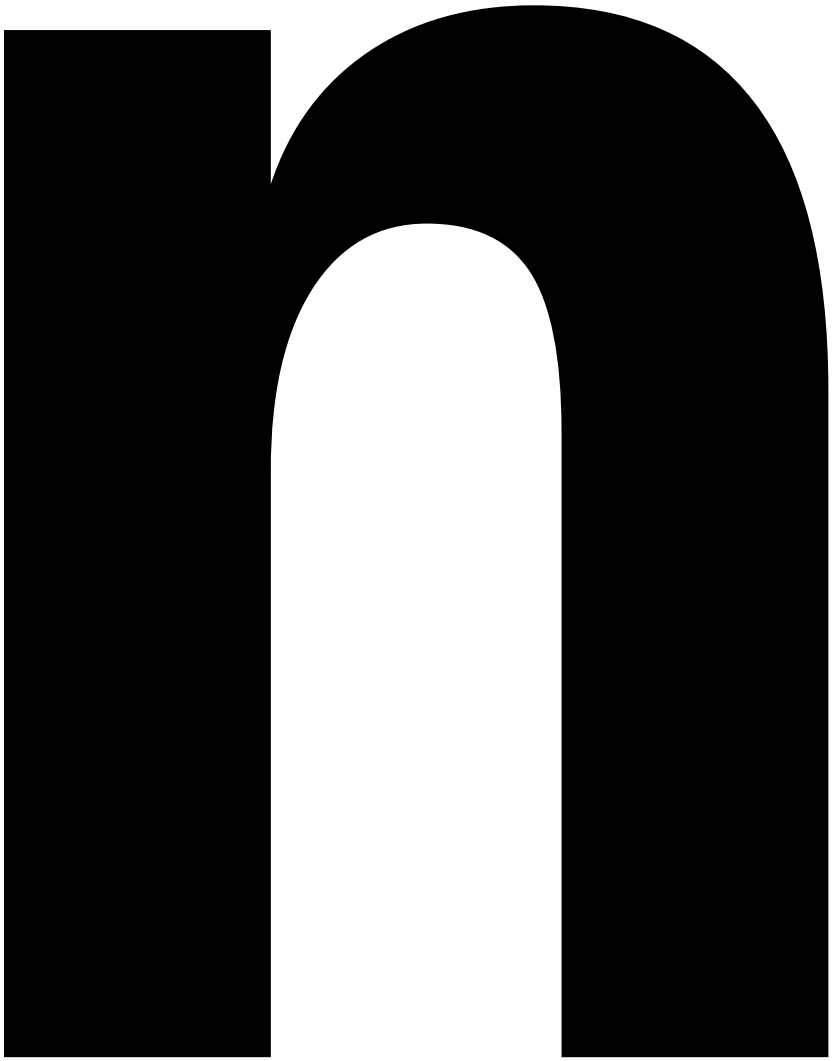


B

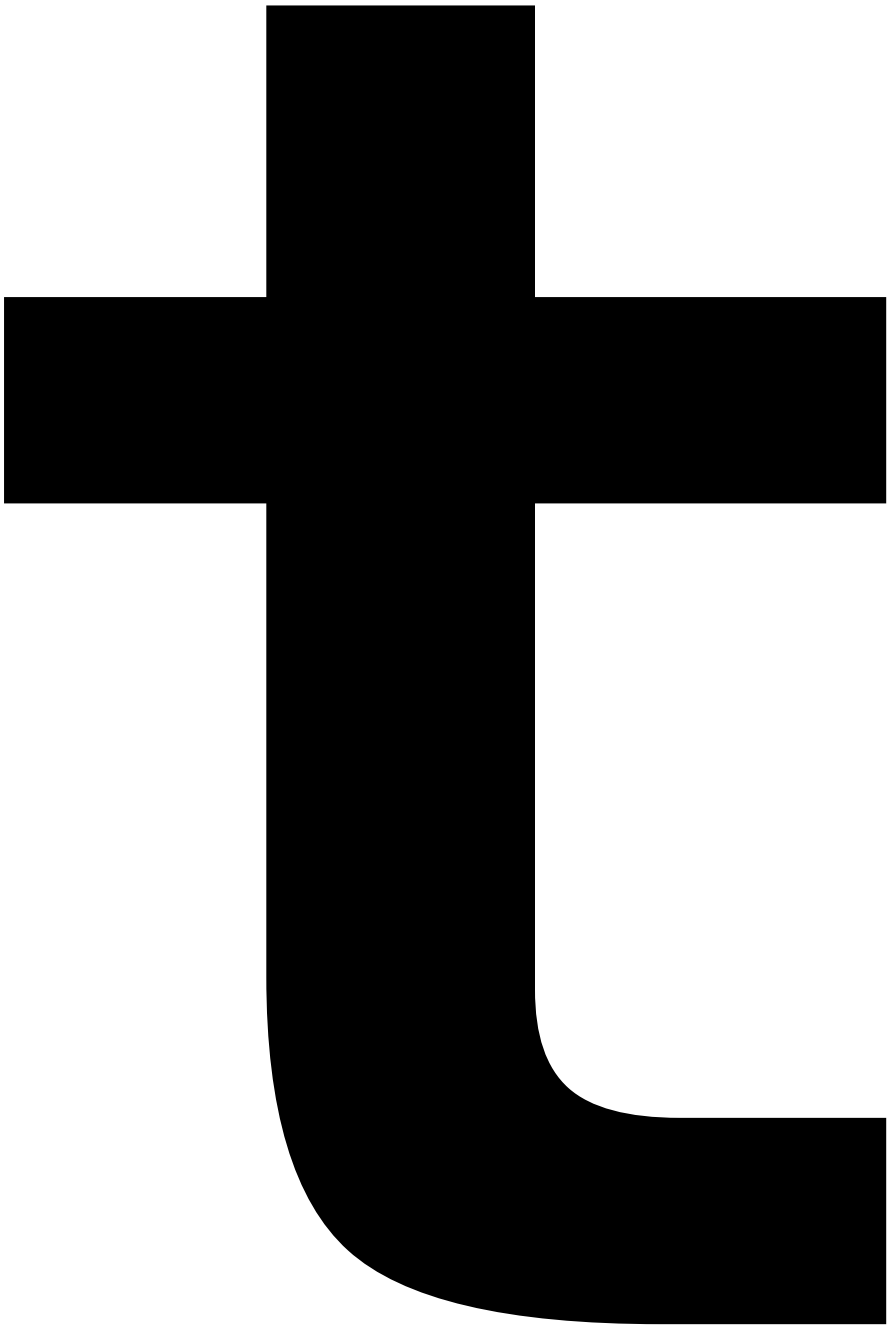


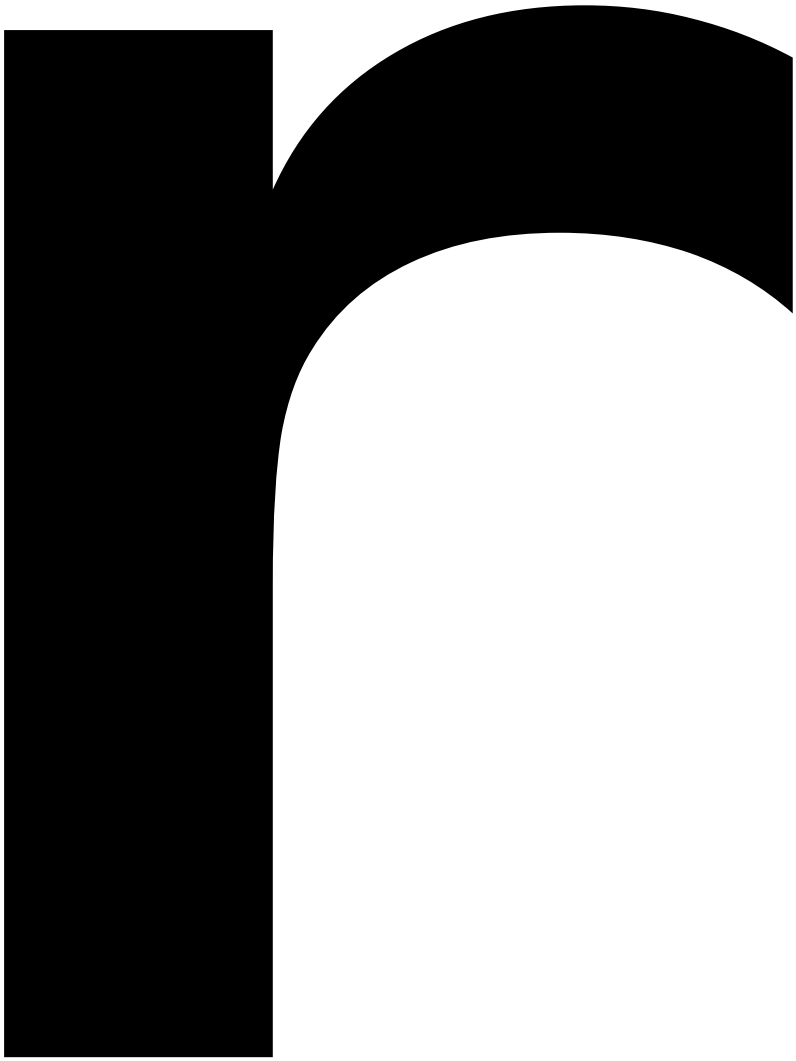
d

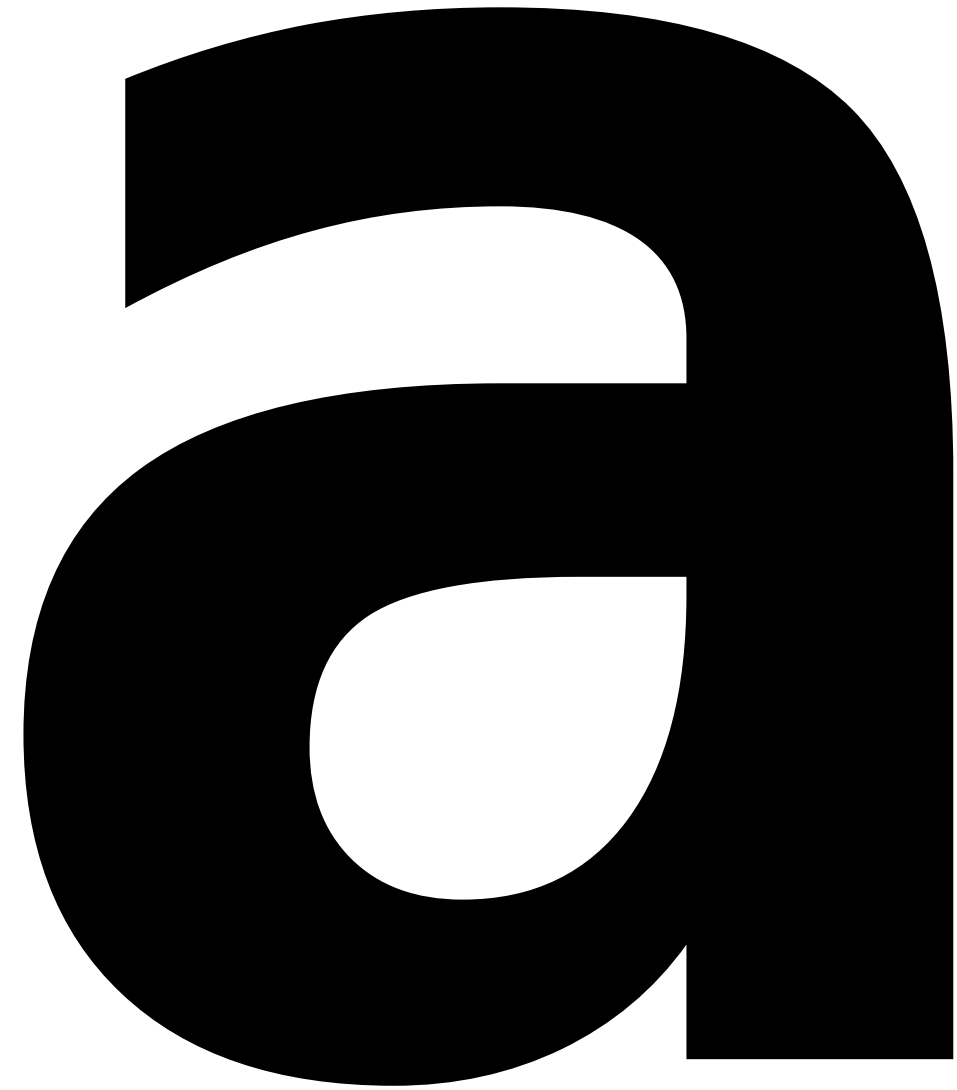


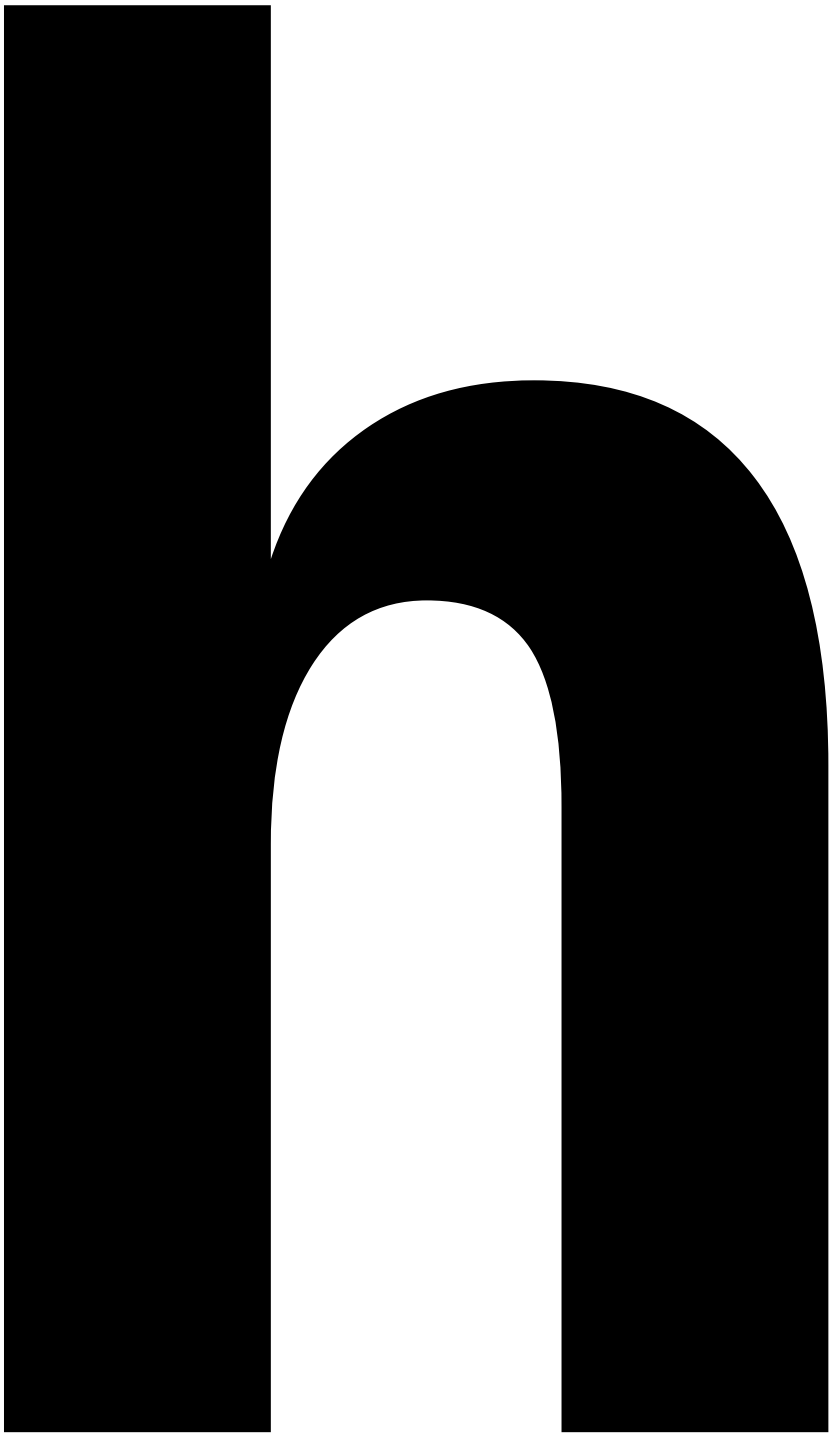


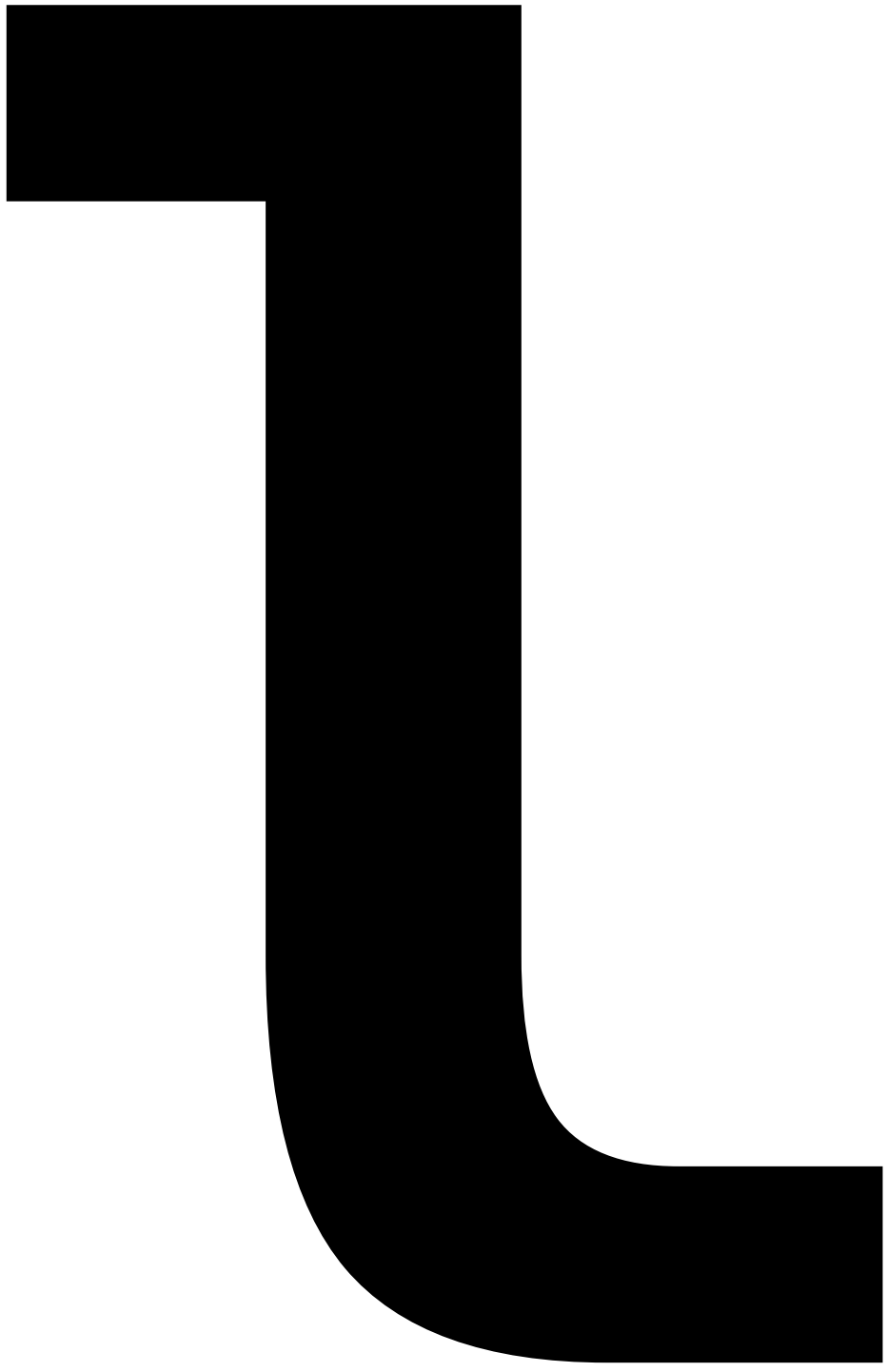
S



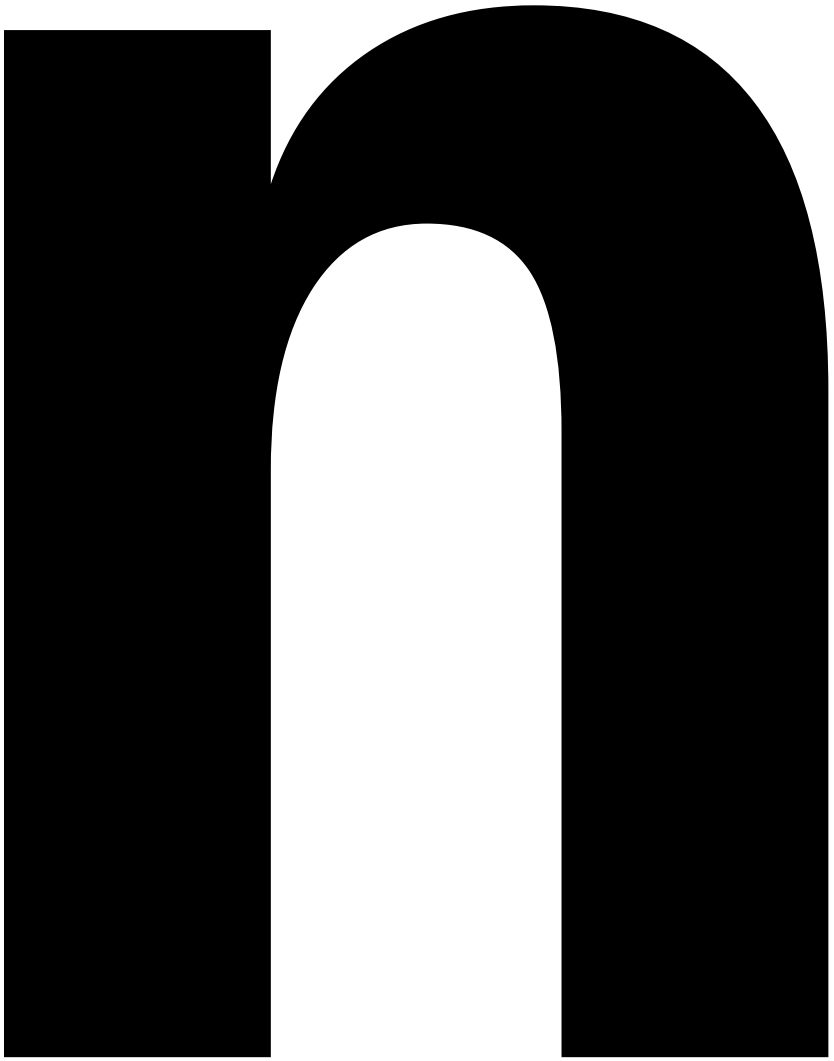


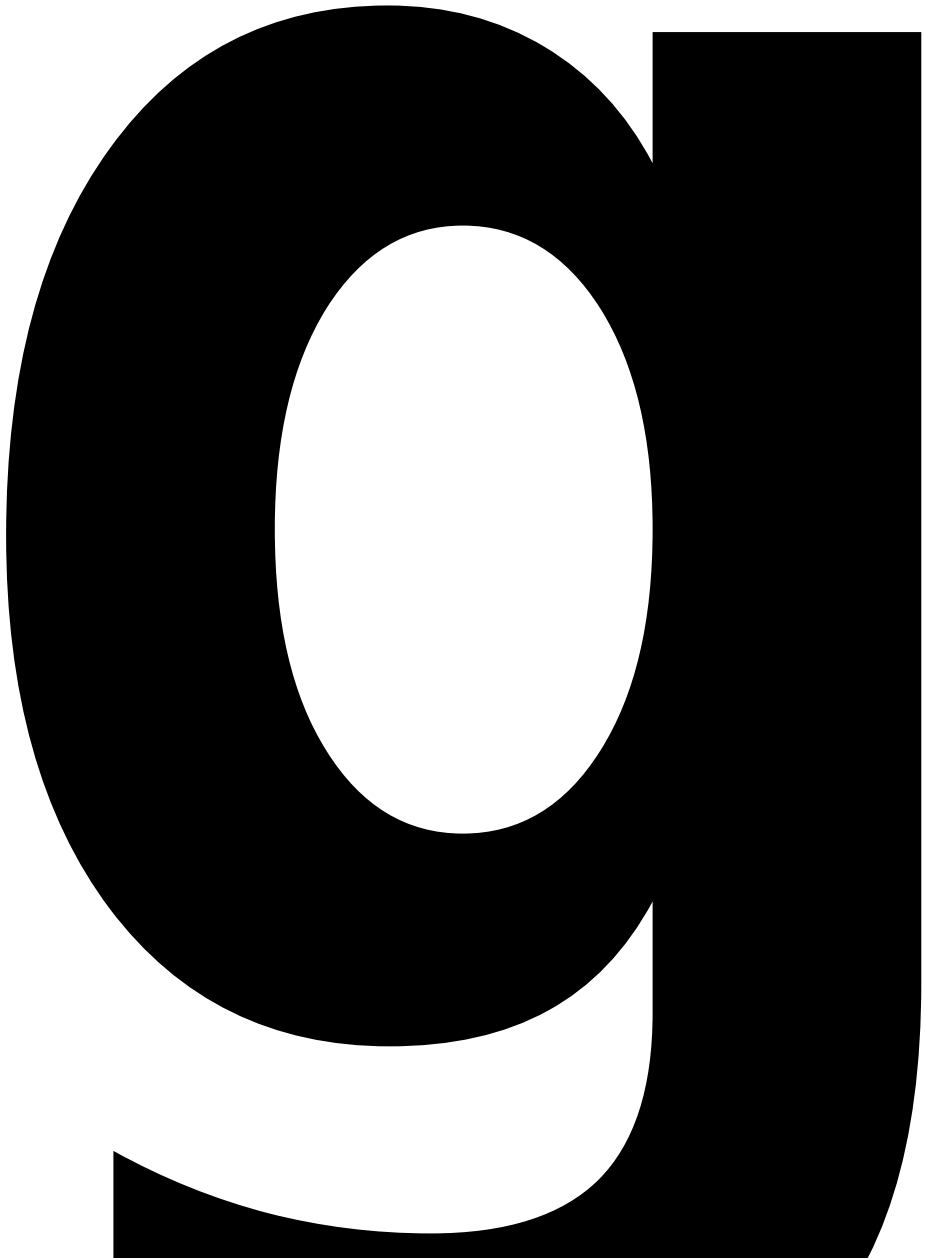


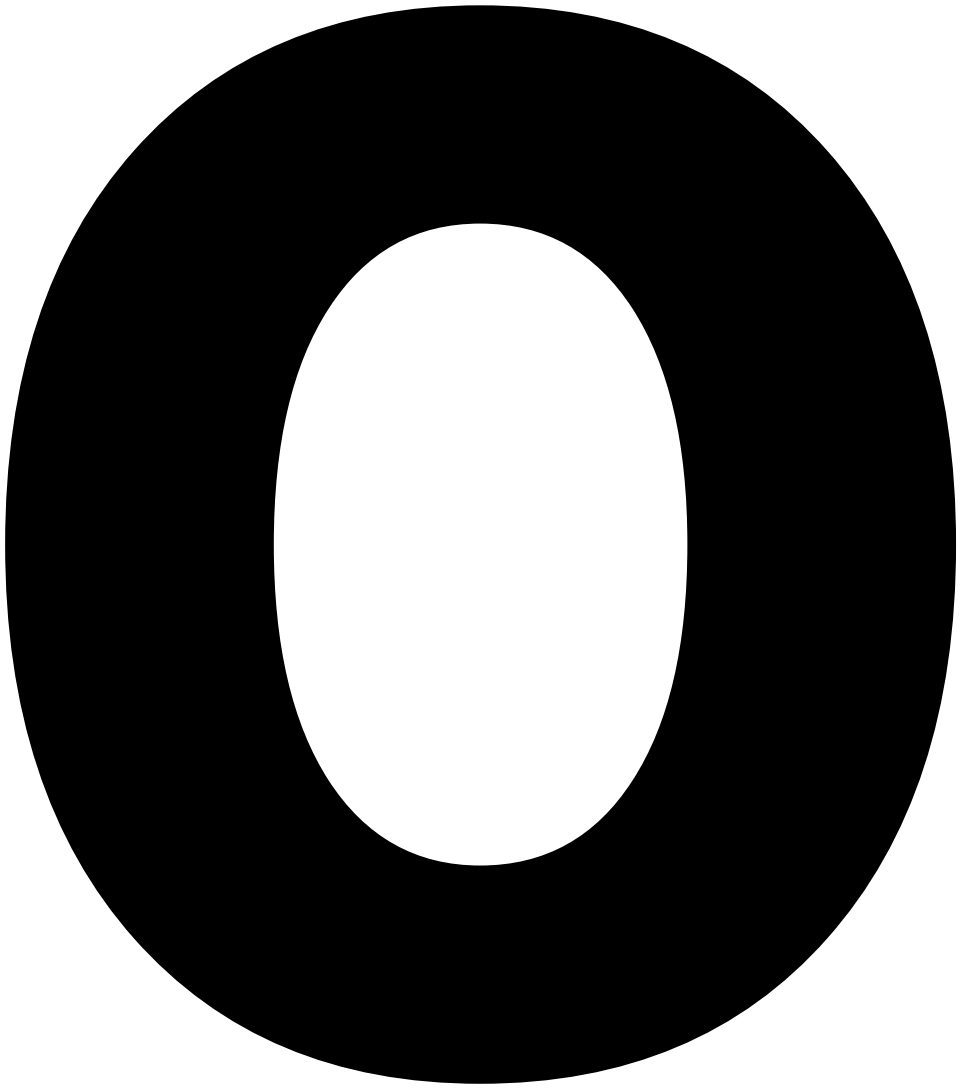




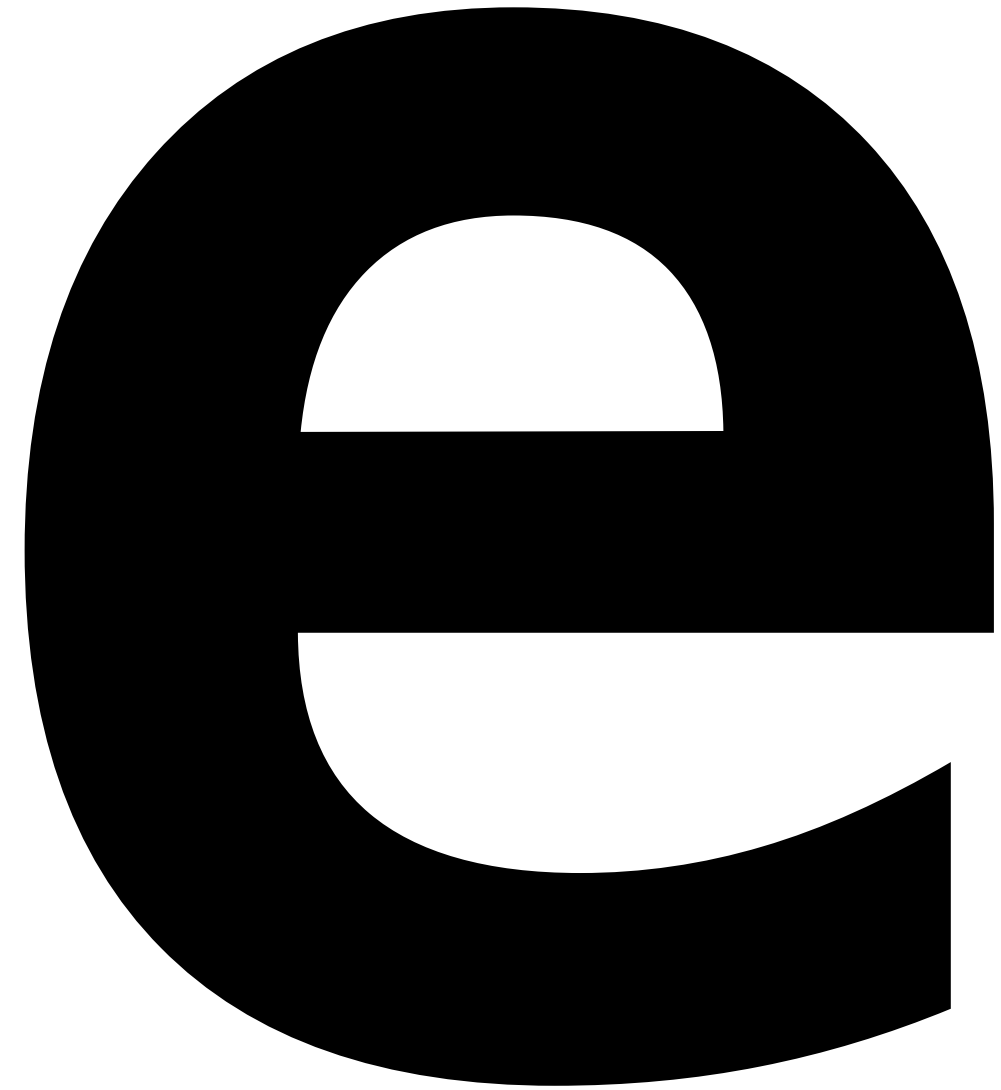
u

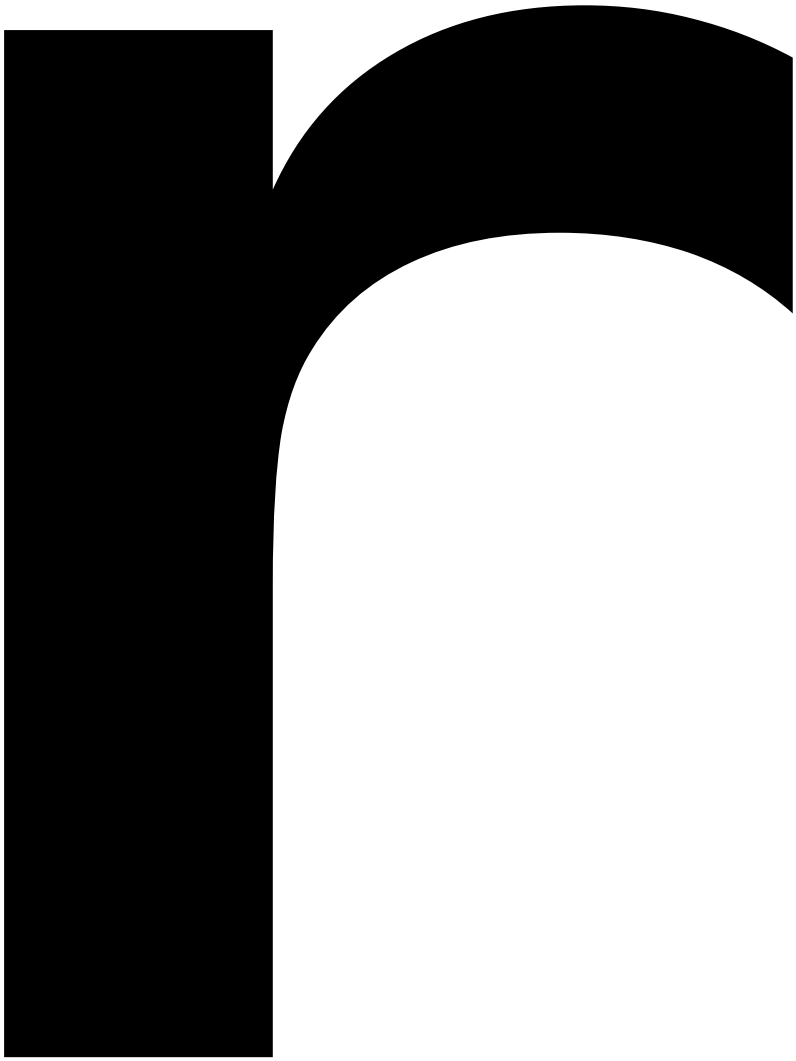


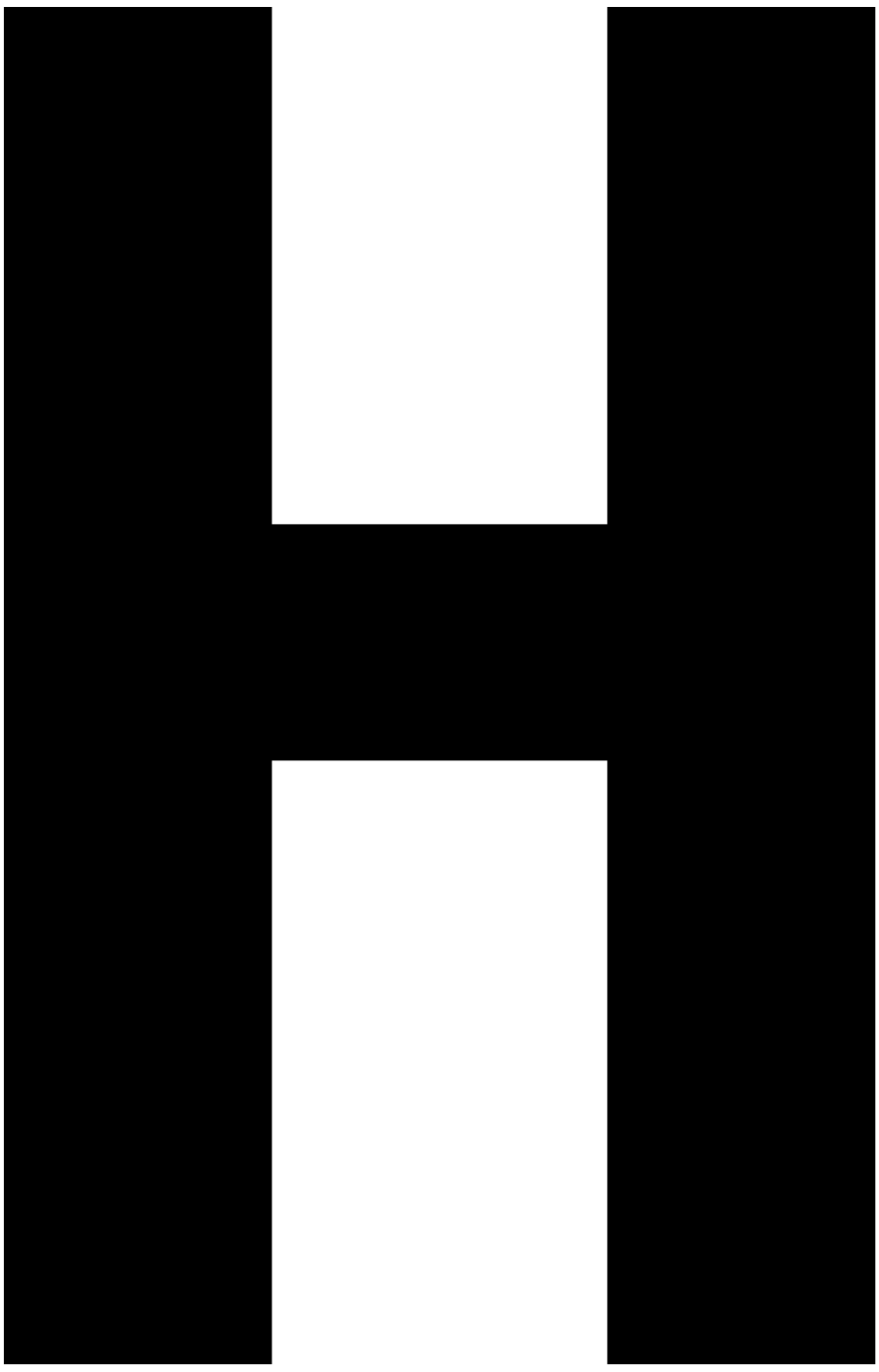


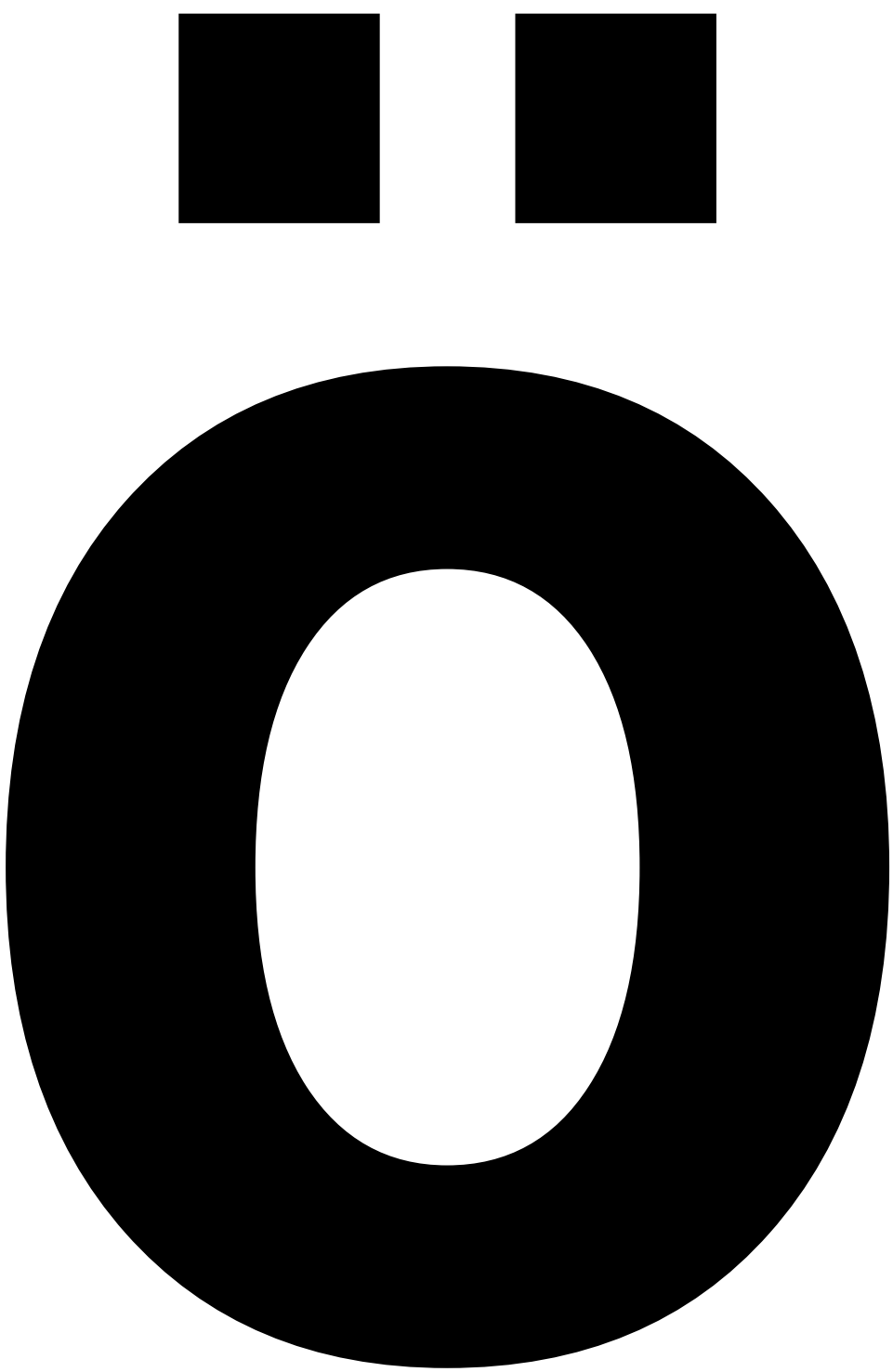


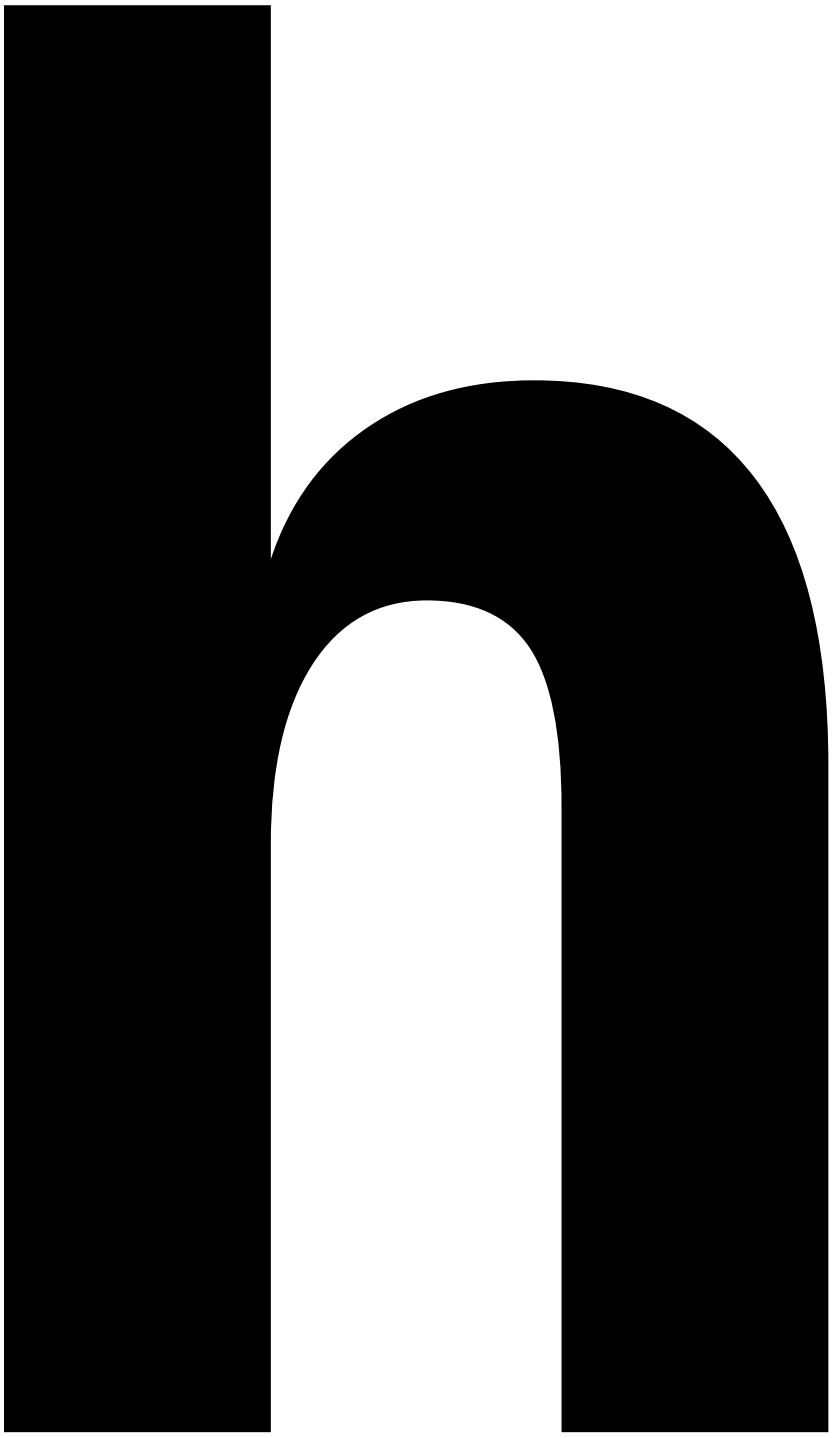
d

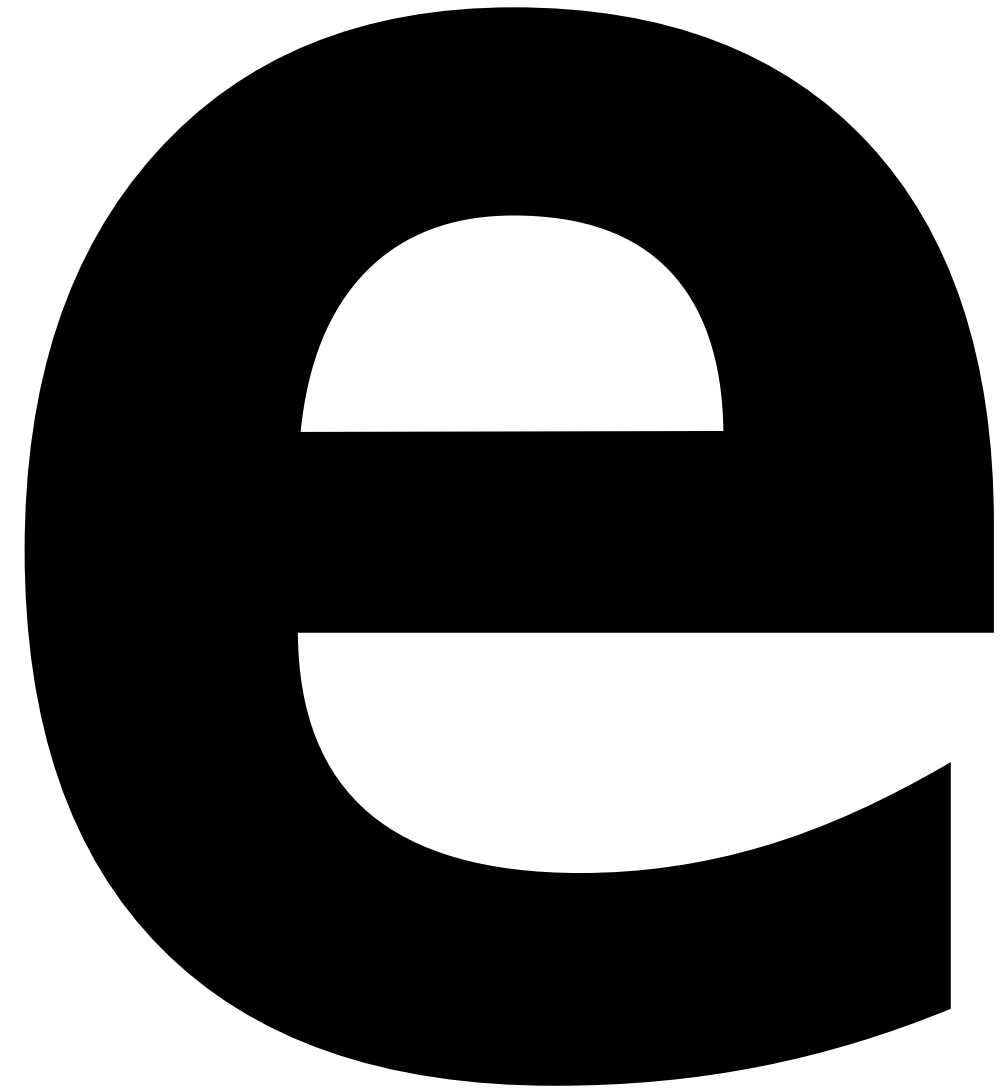


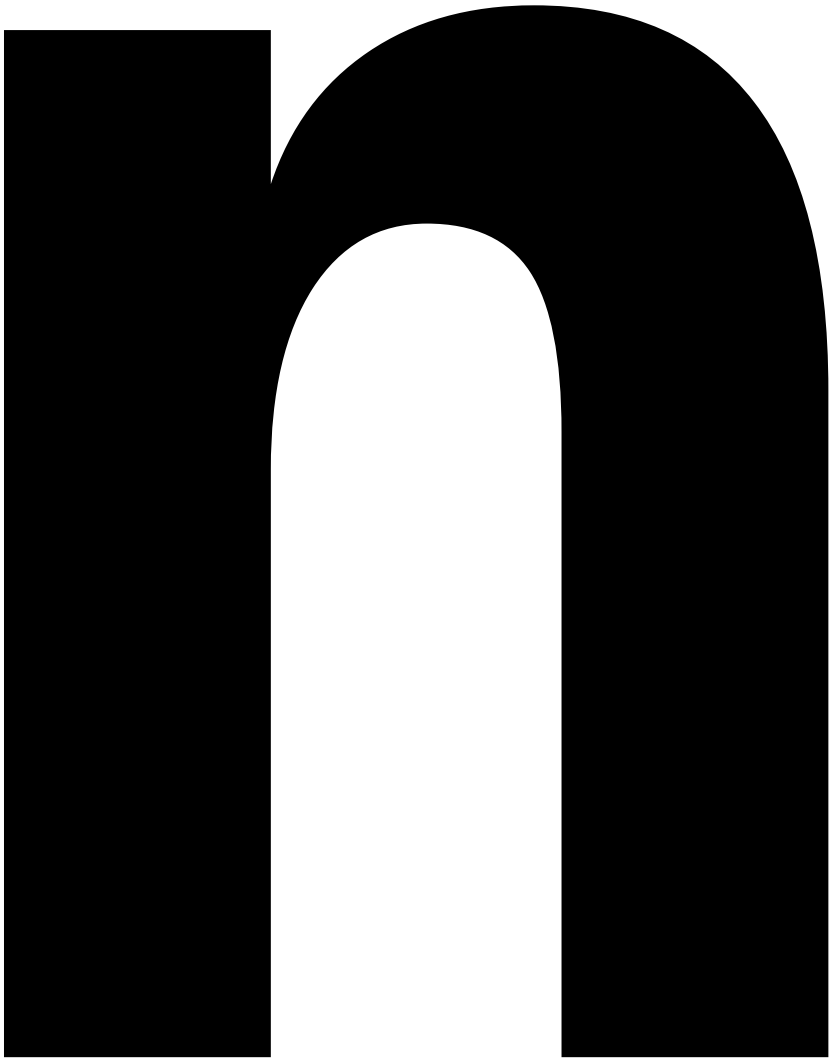




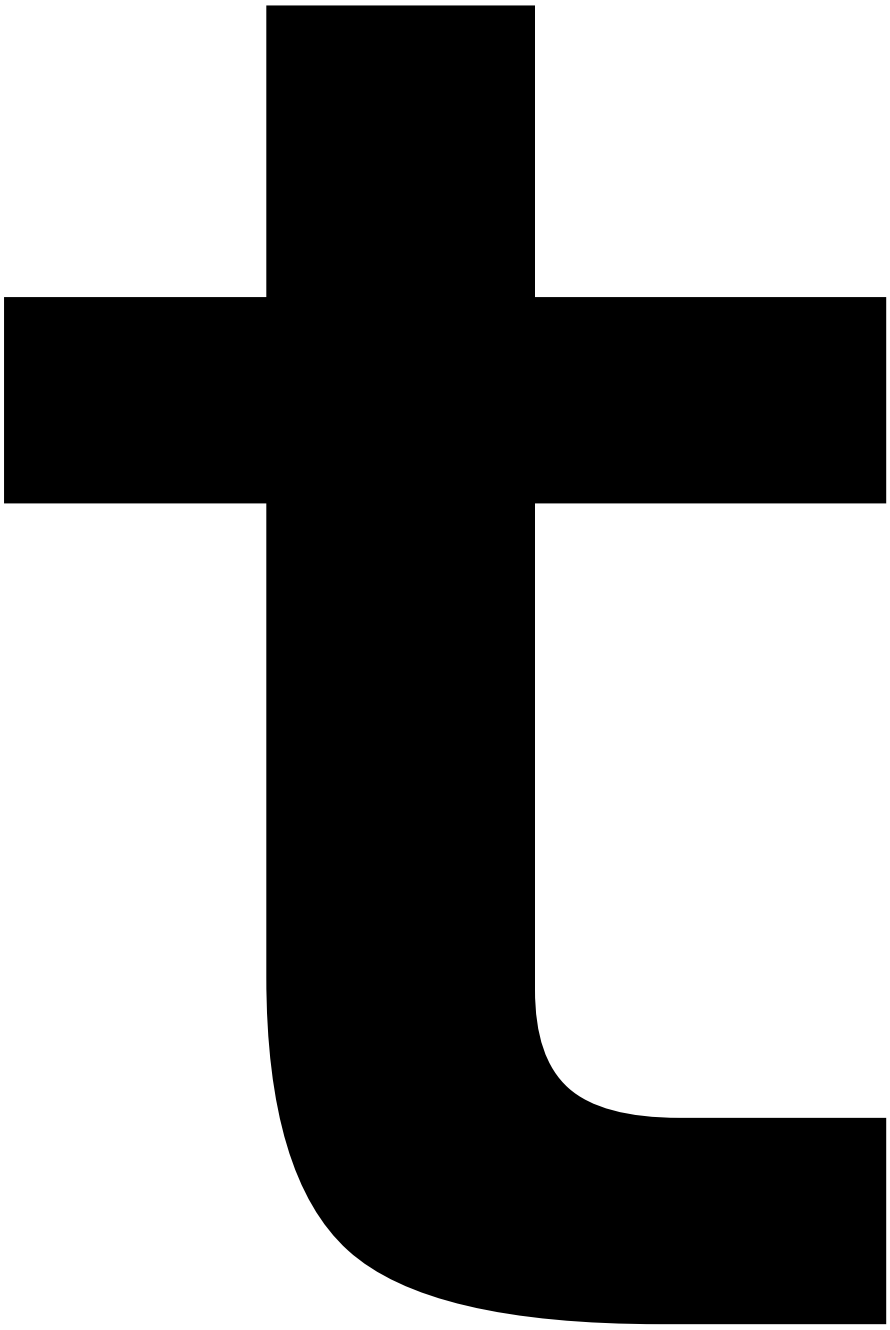


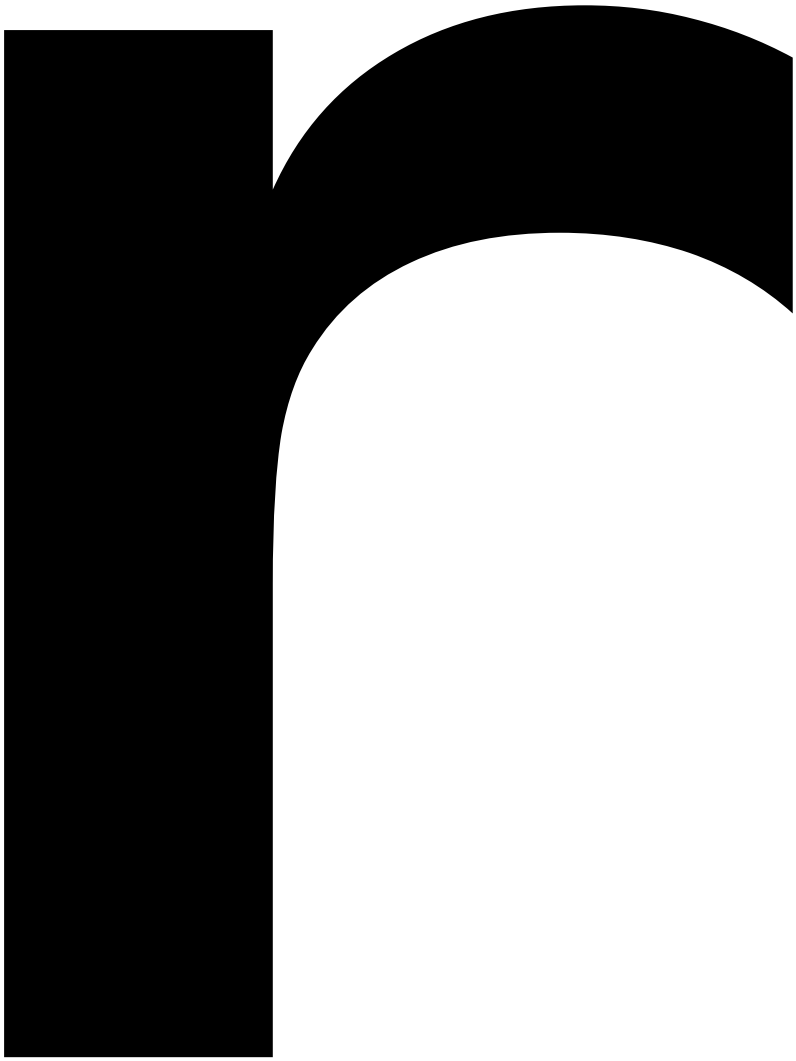


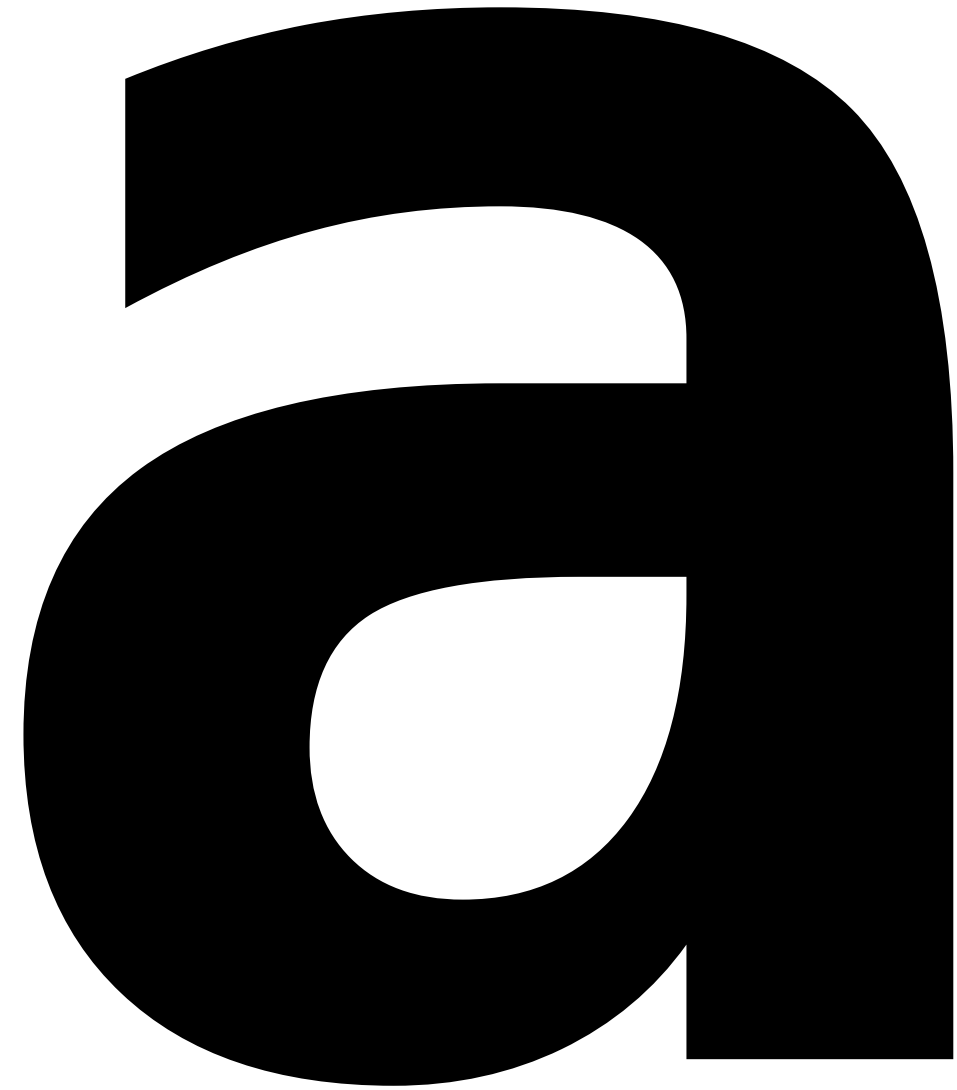


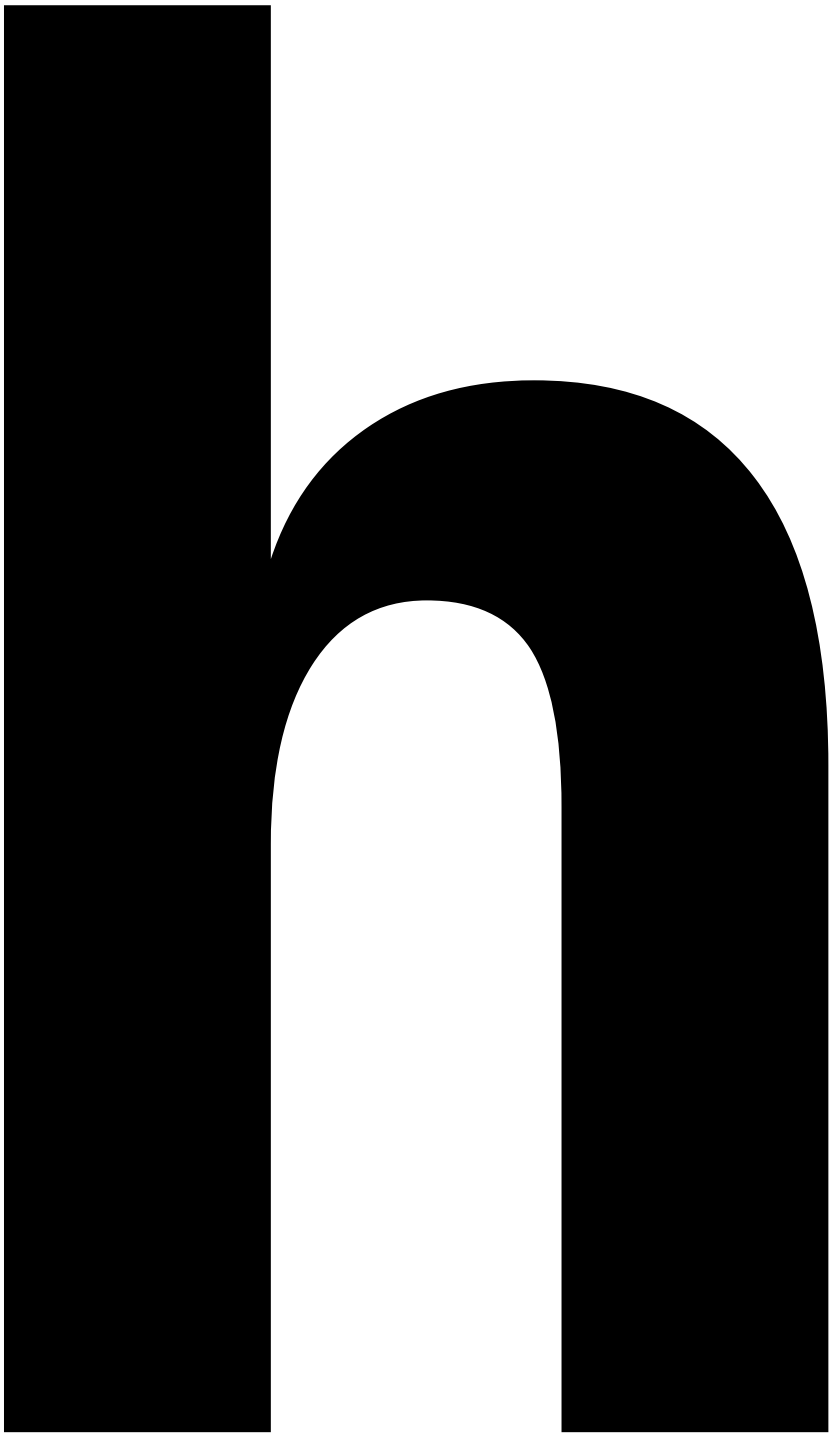


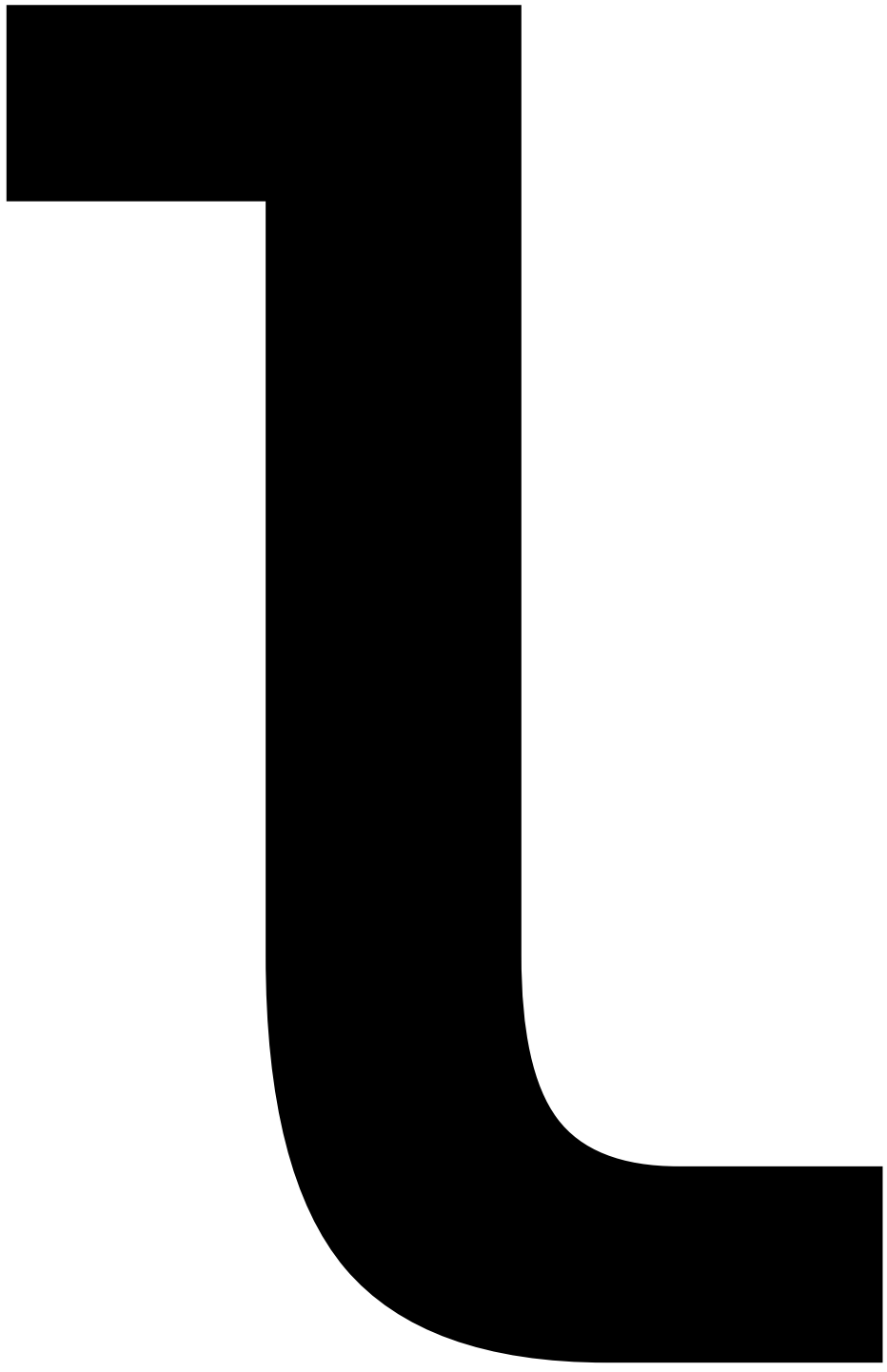
S



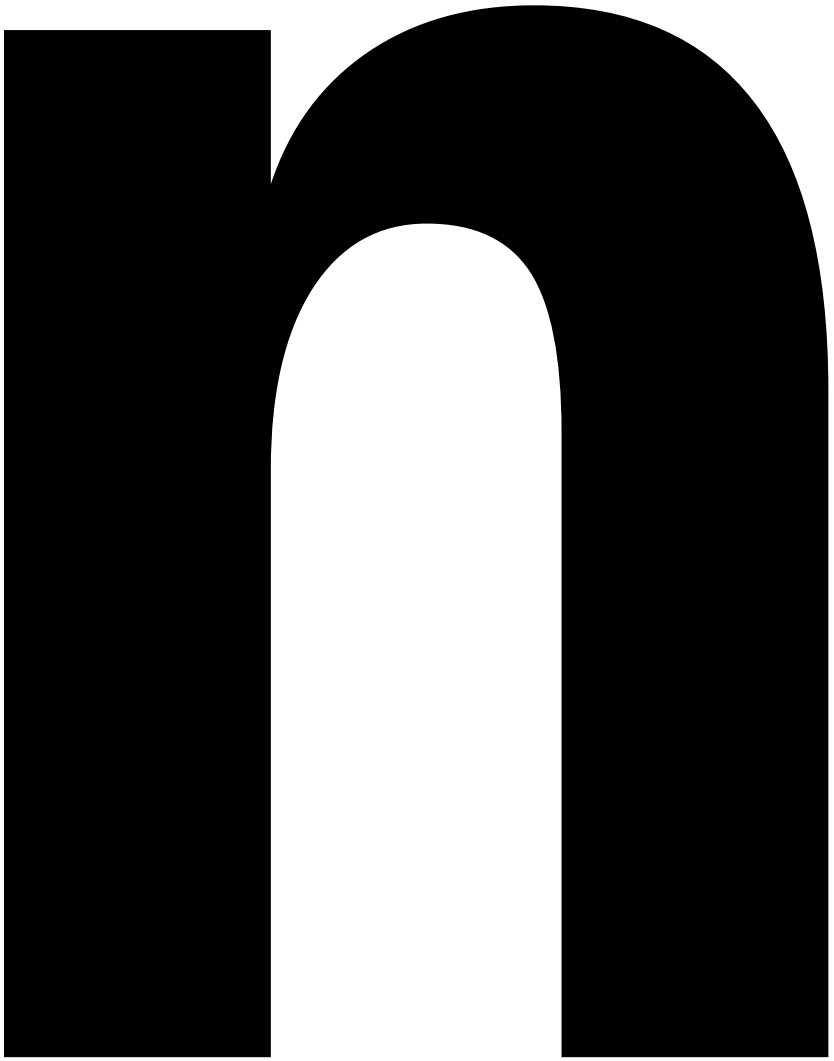


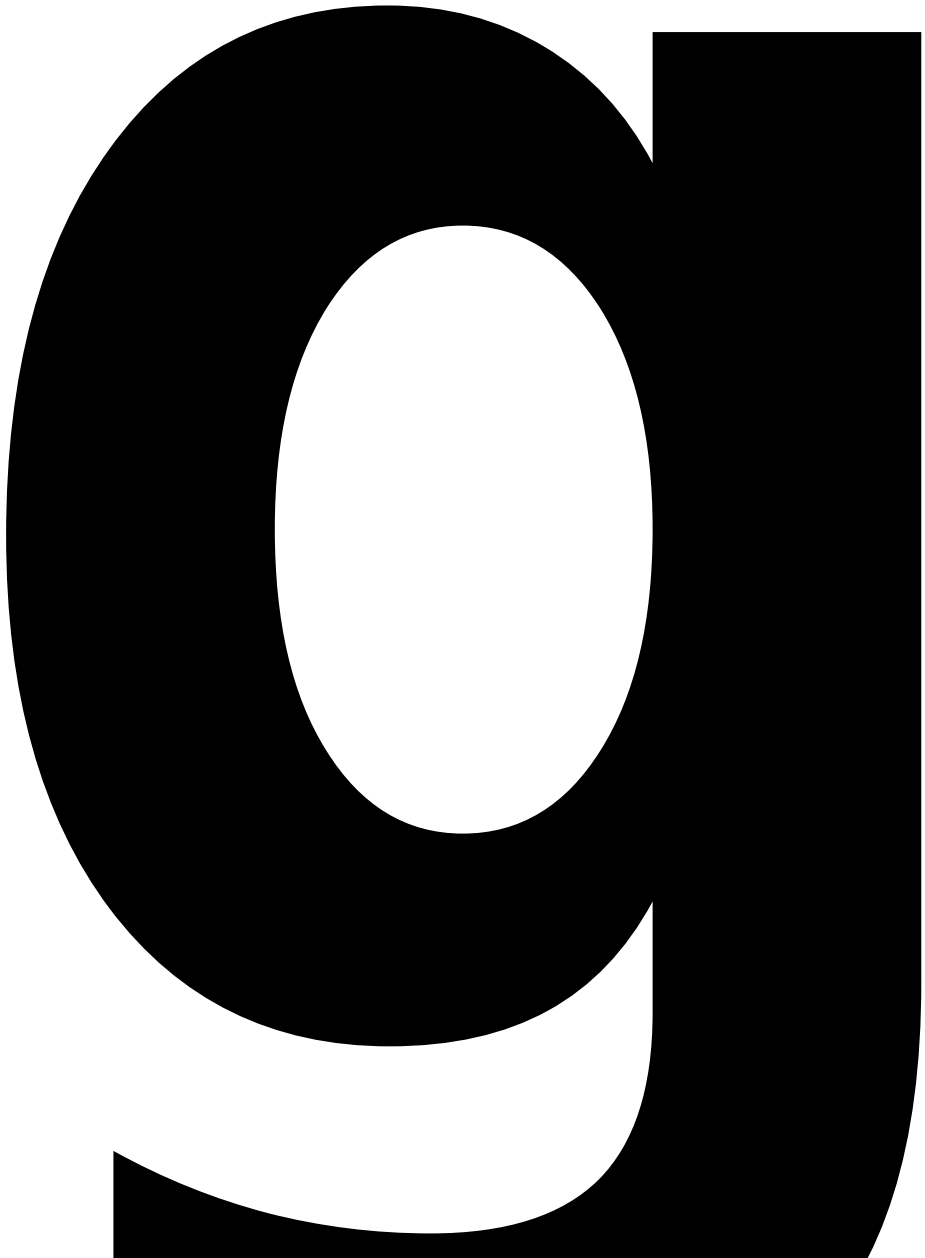




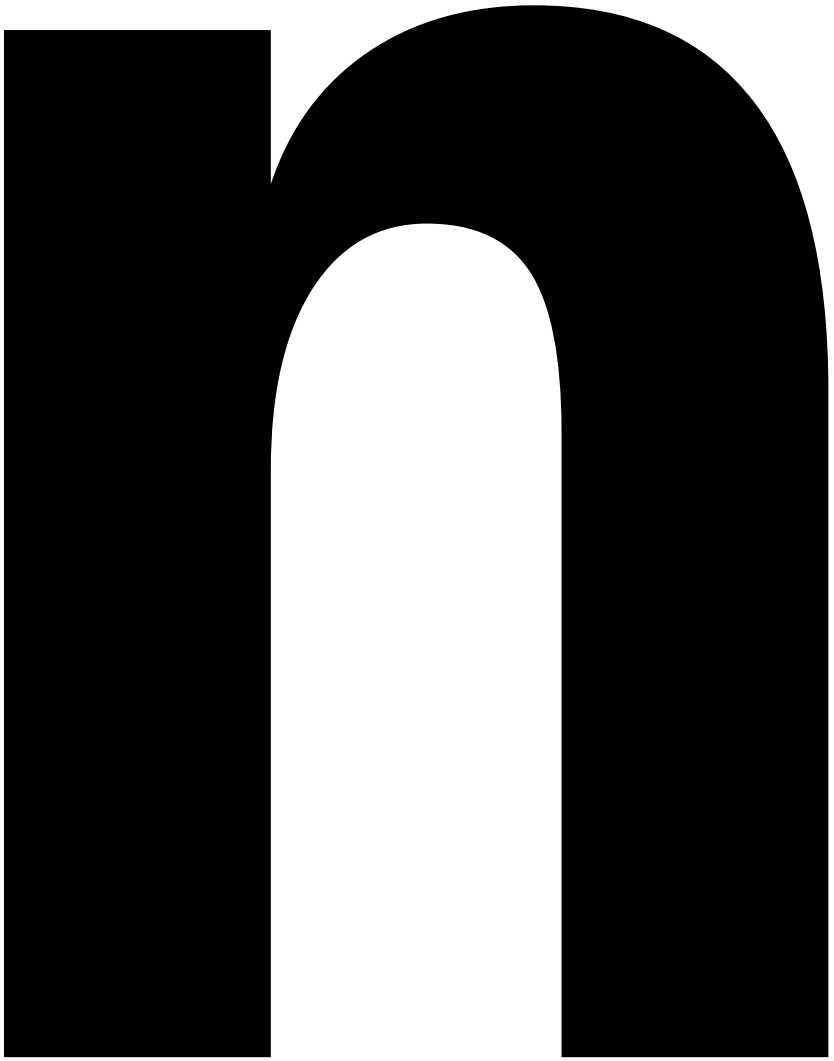


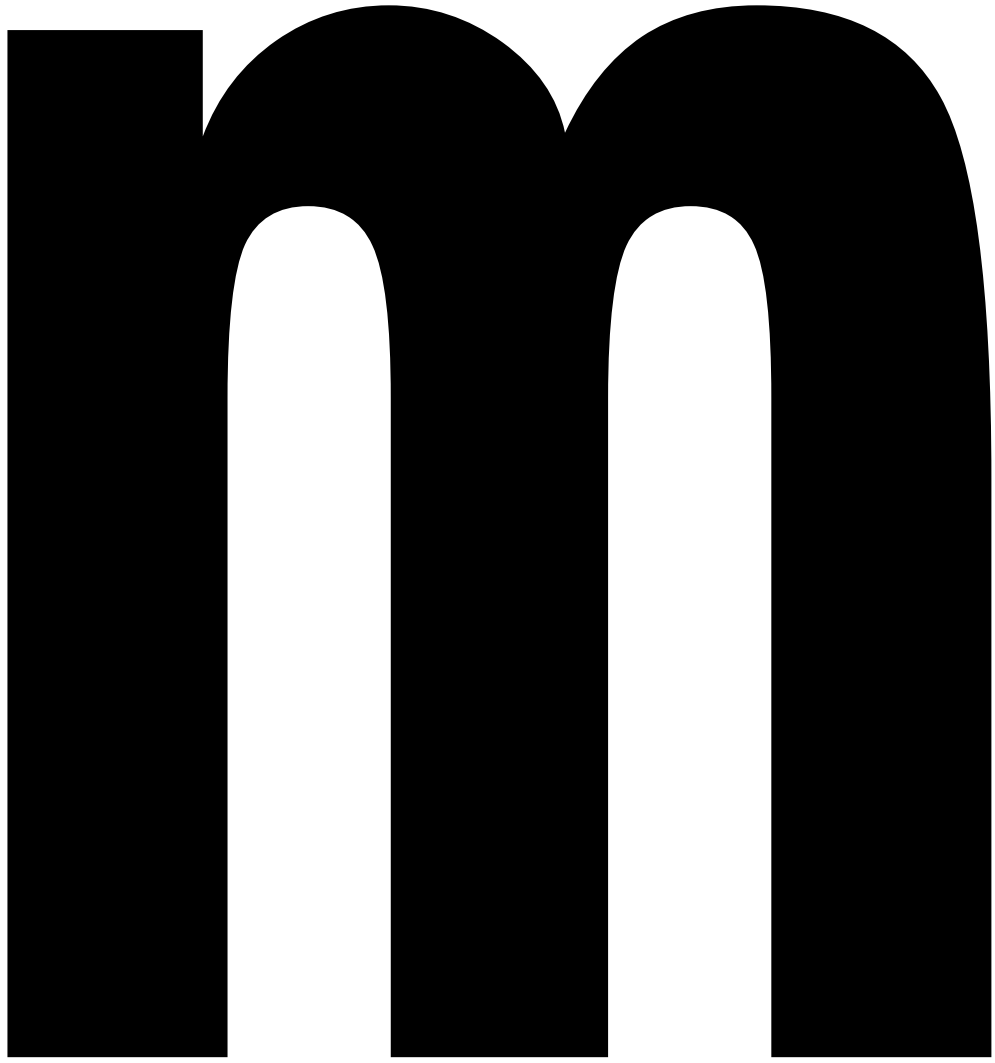
u

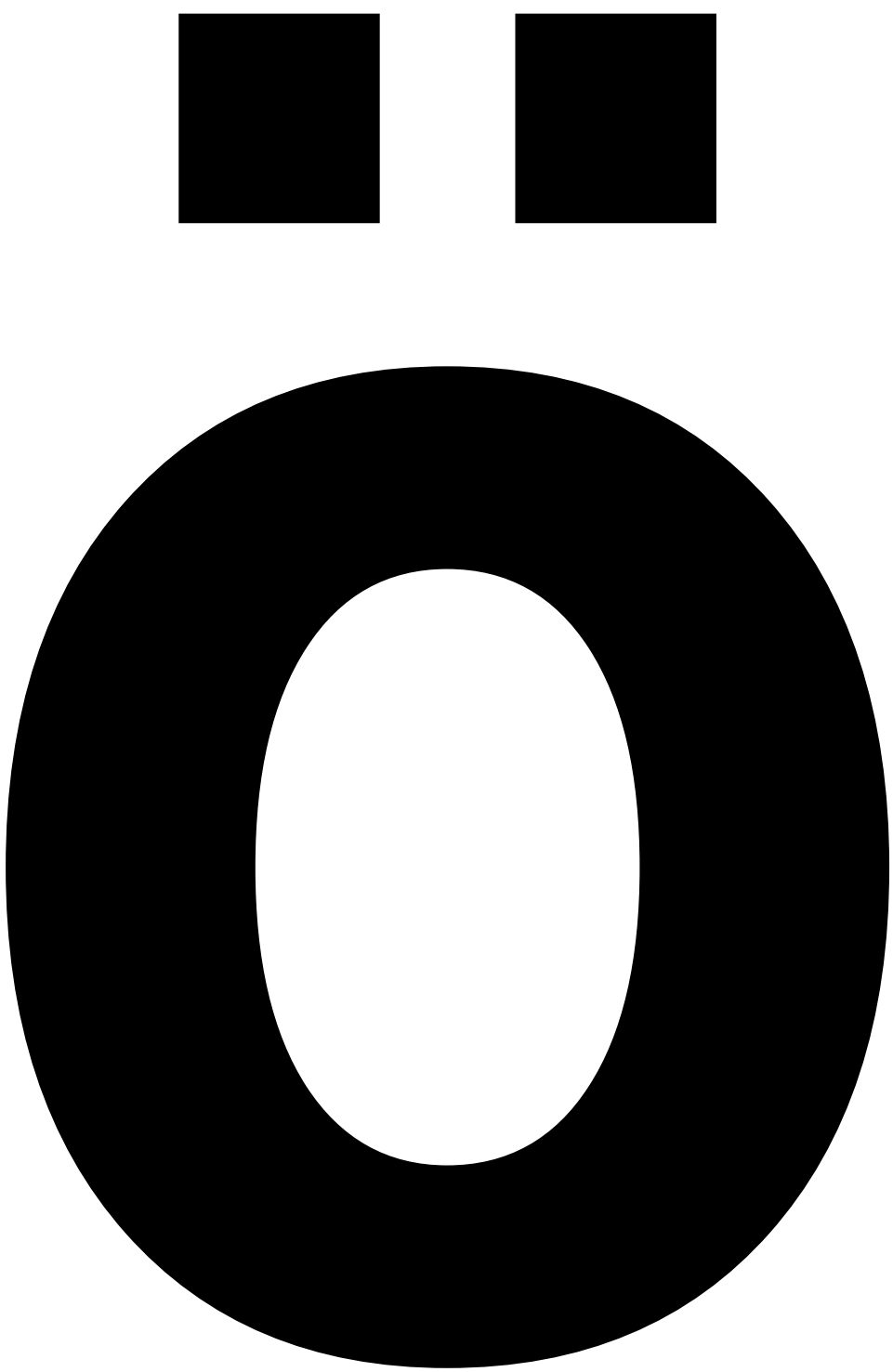


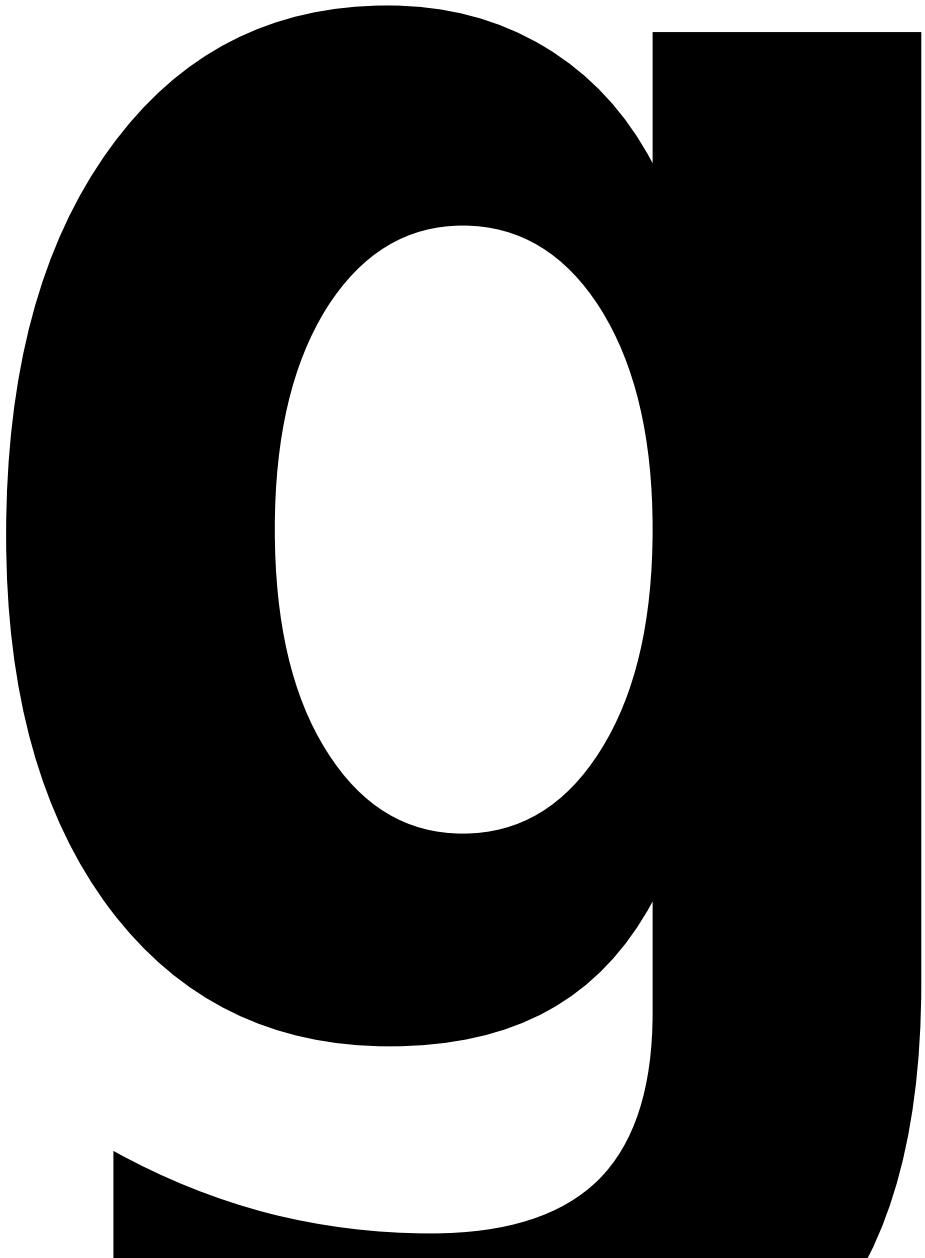


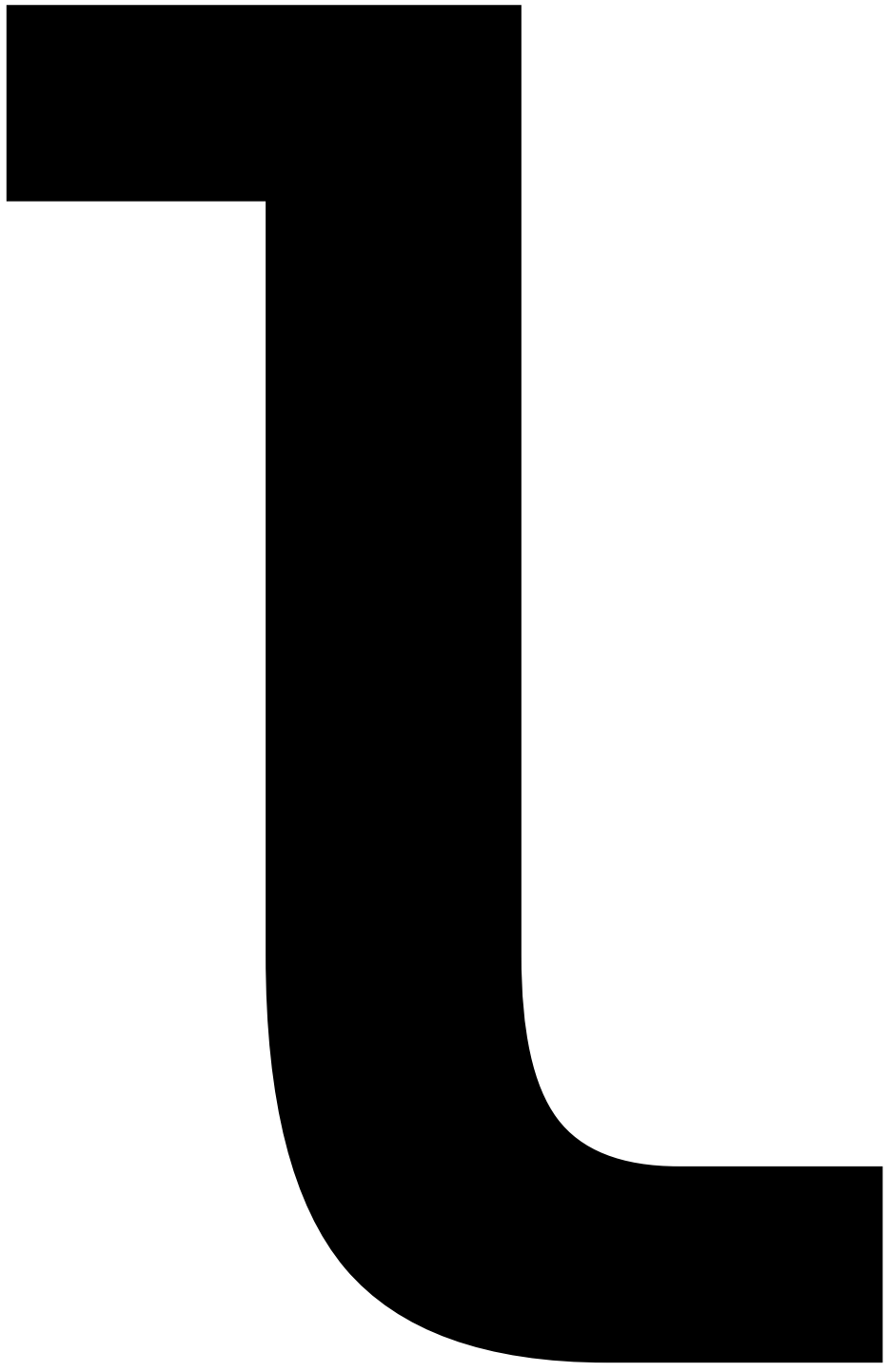
u

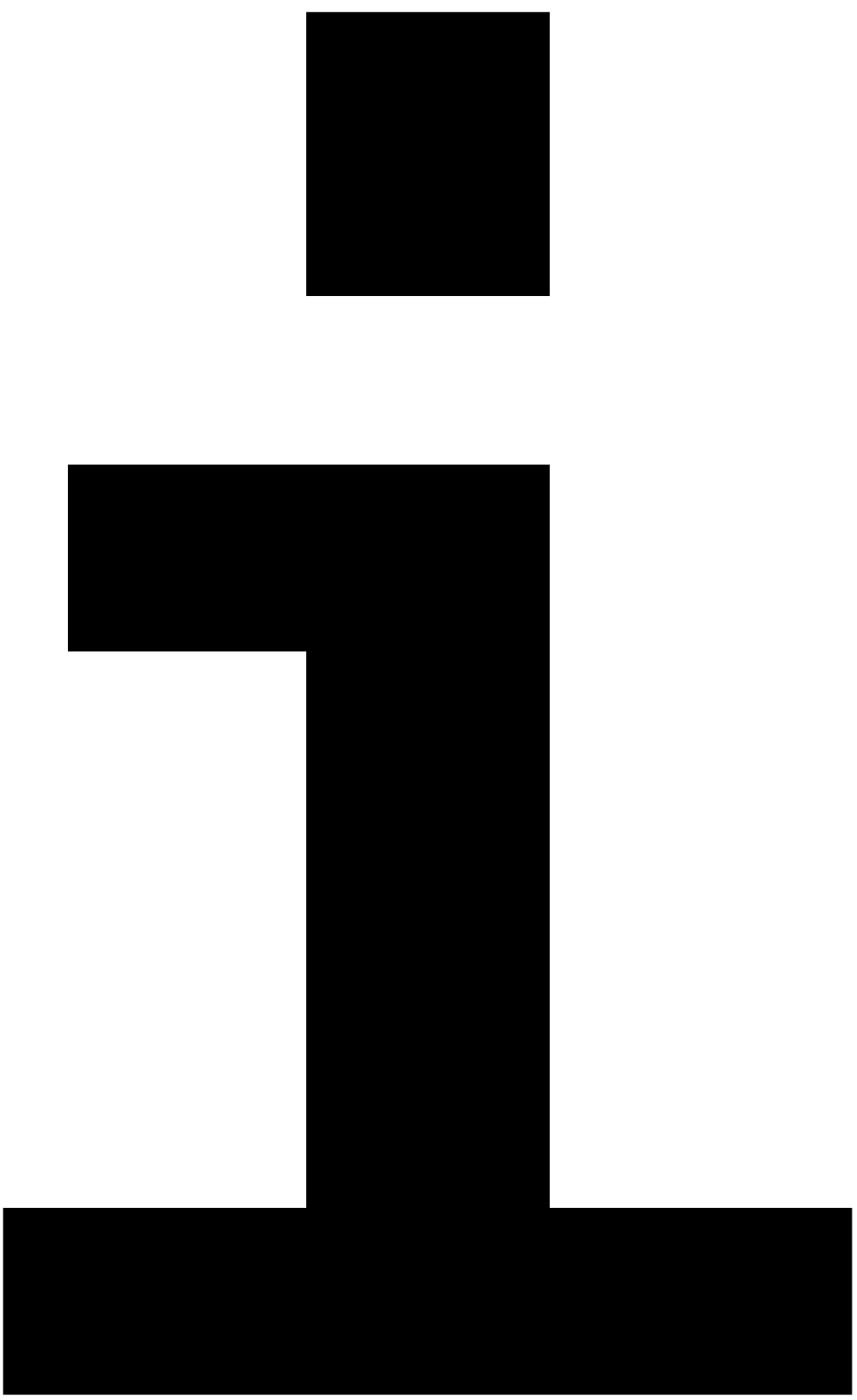


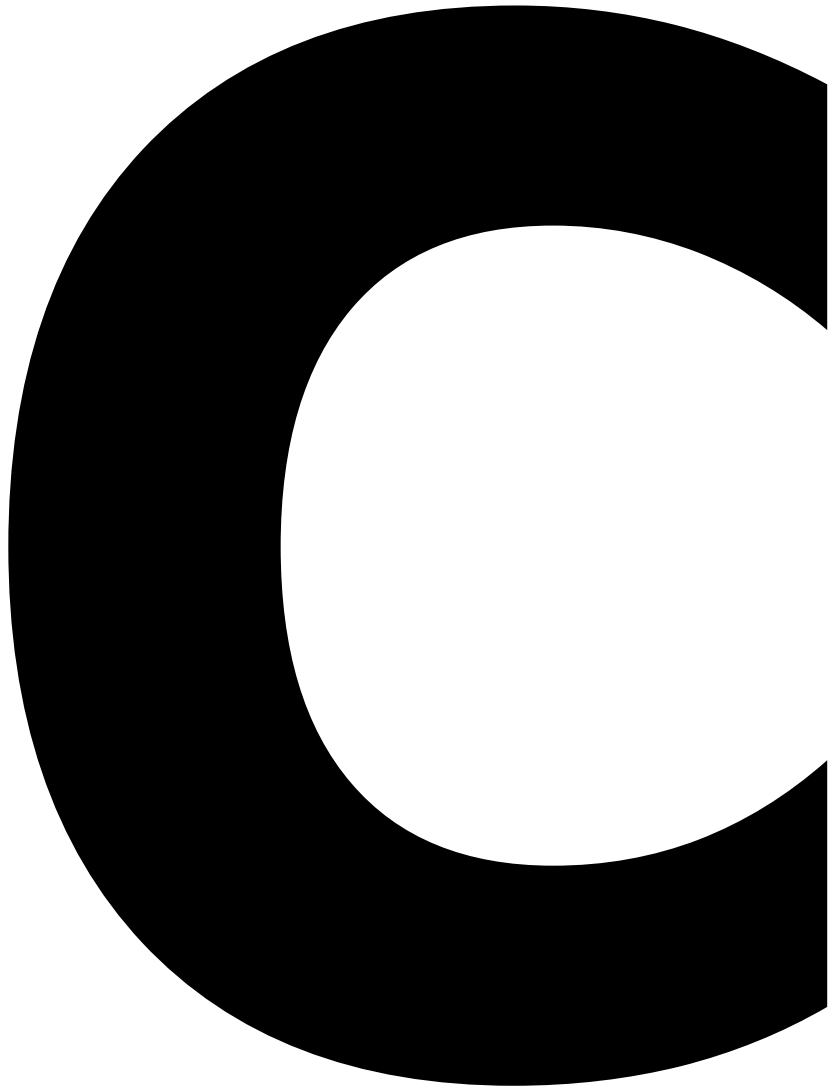


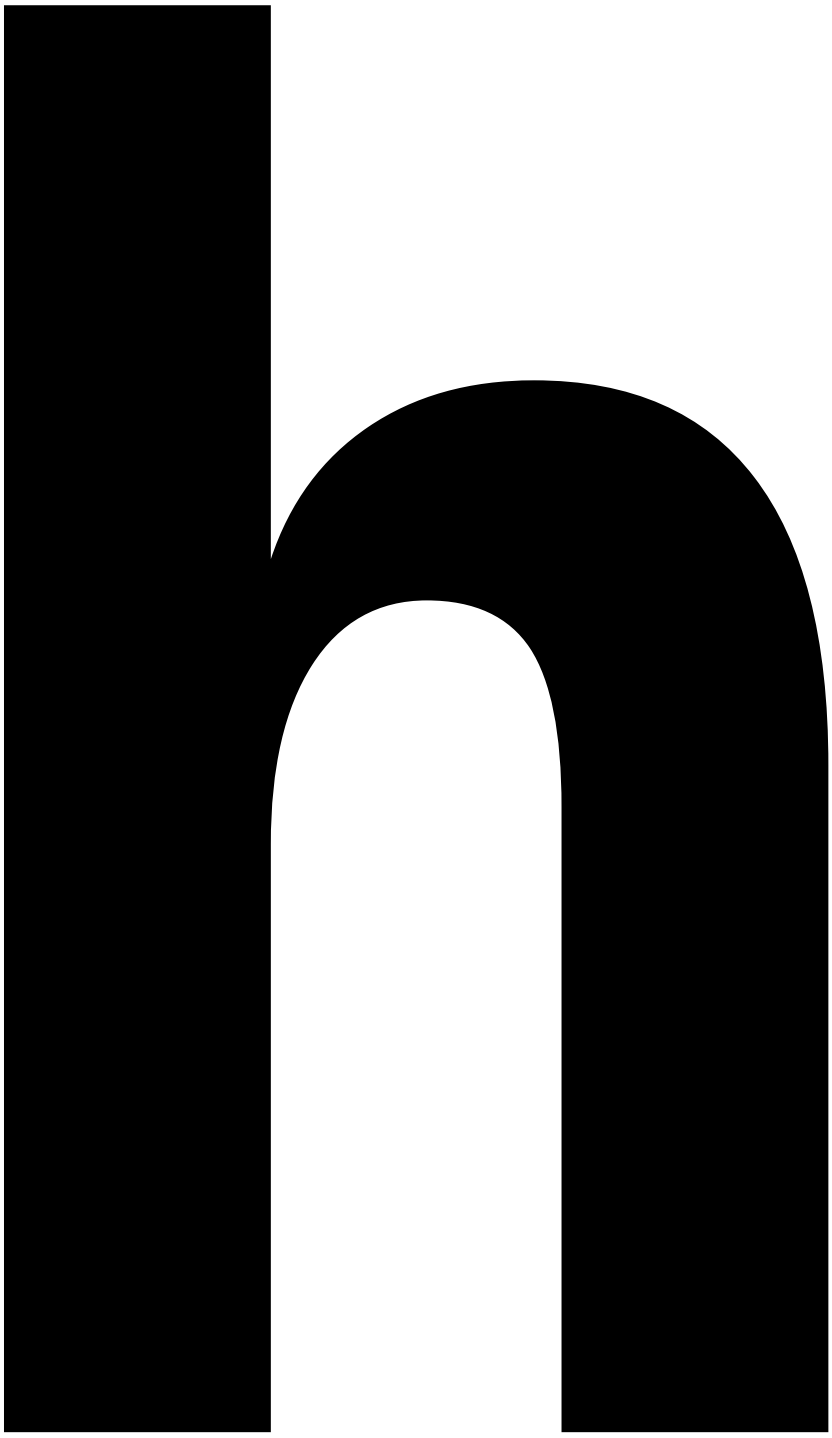


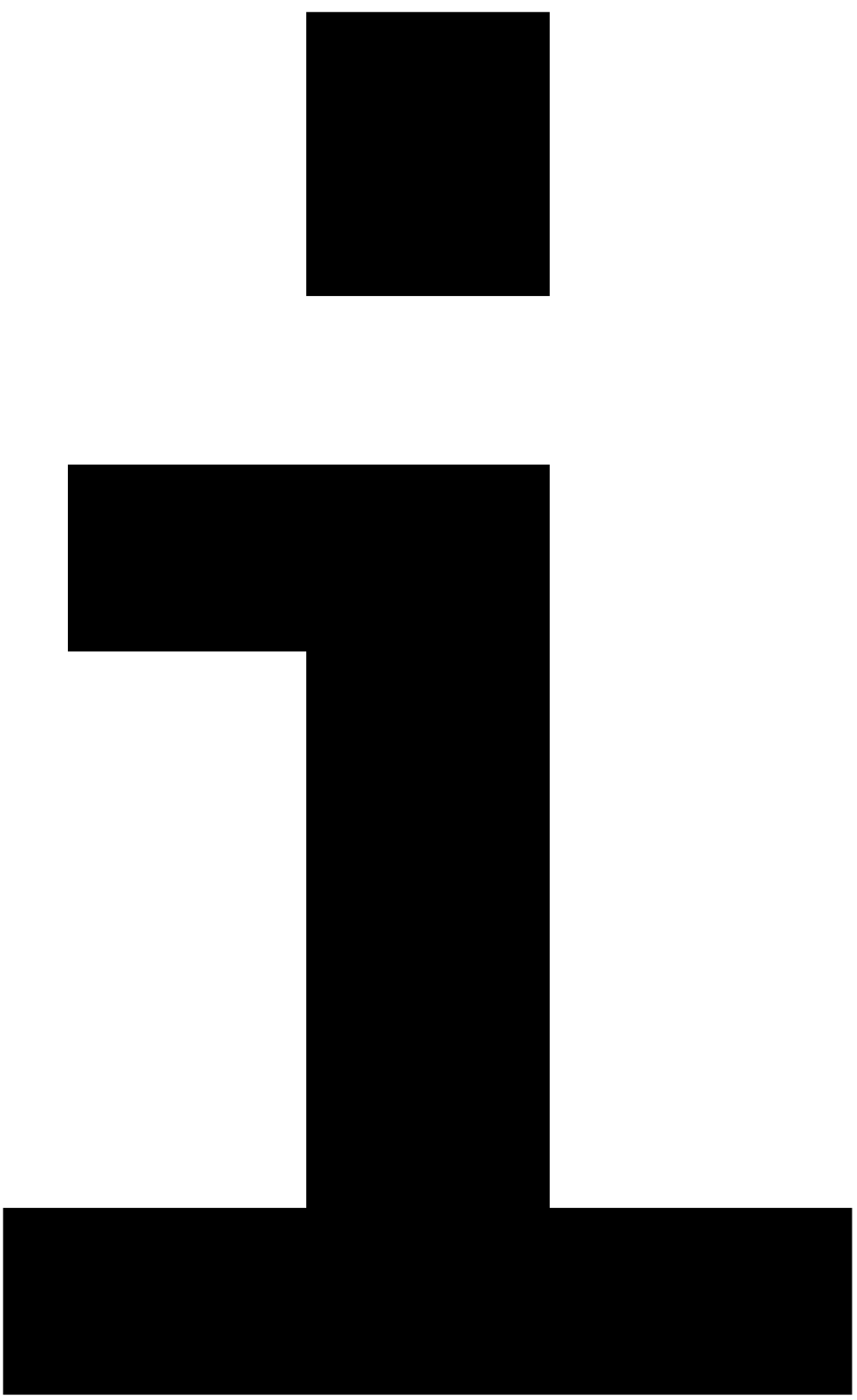




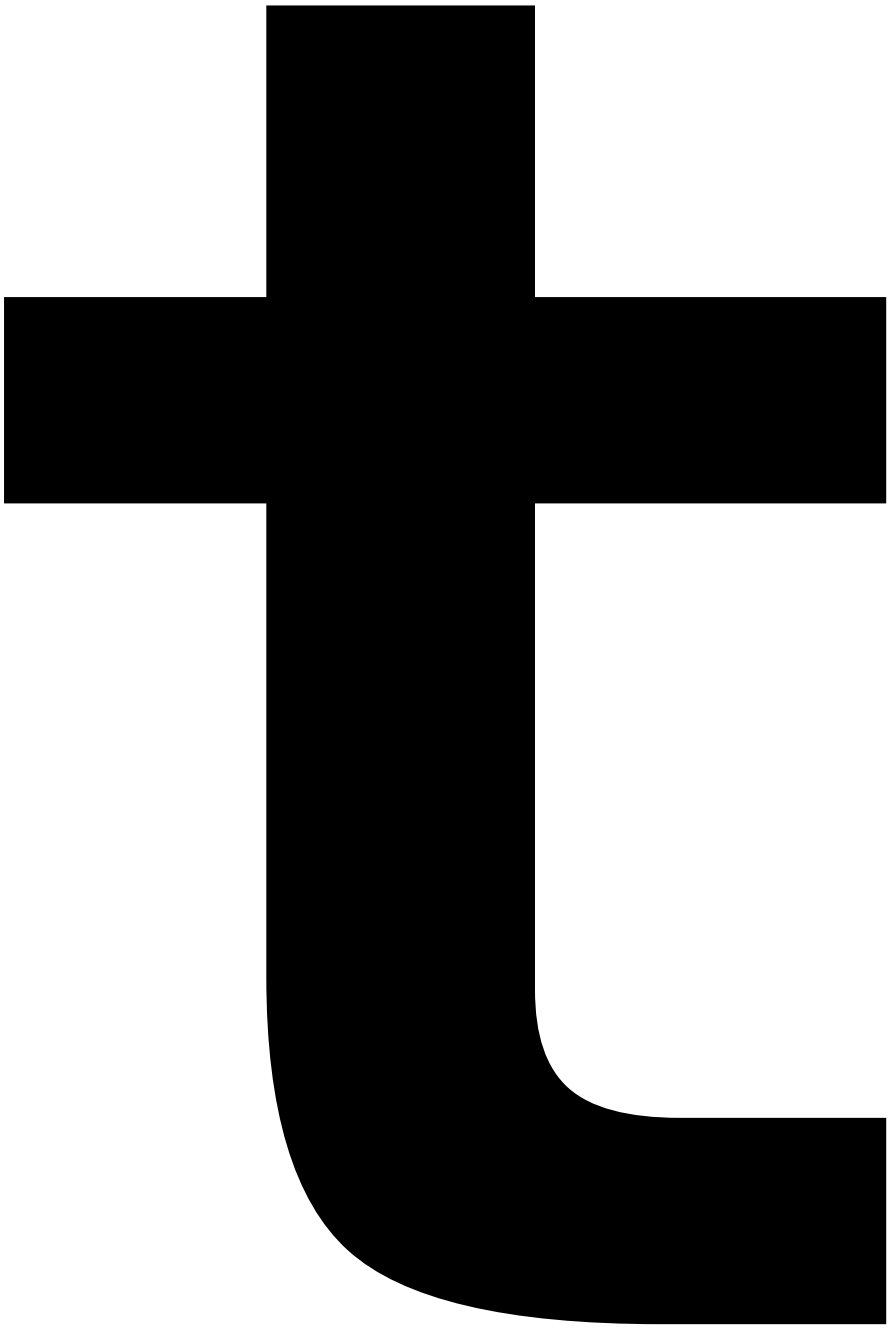


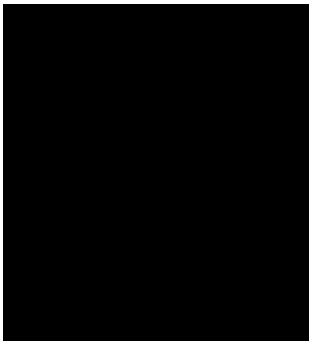


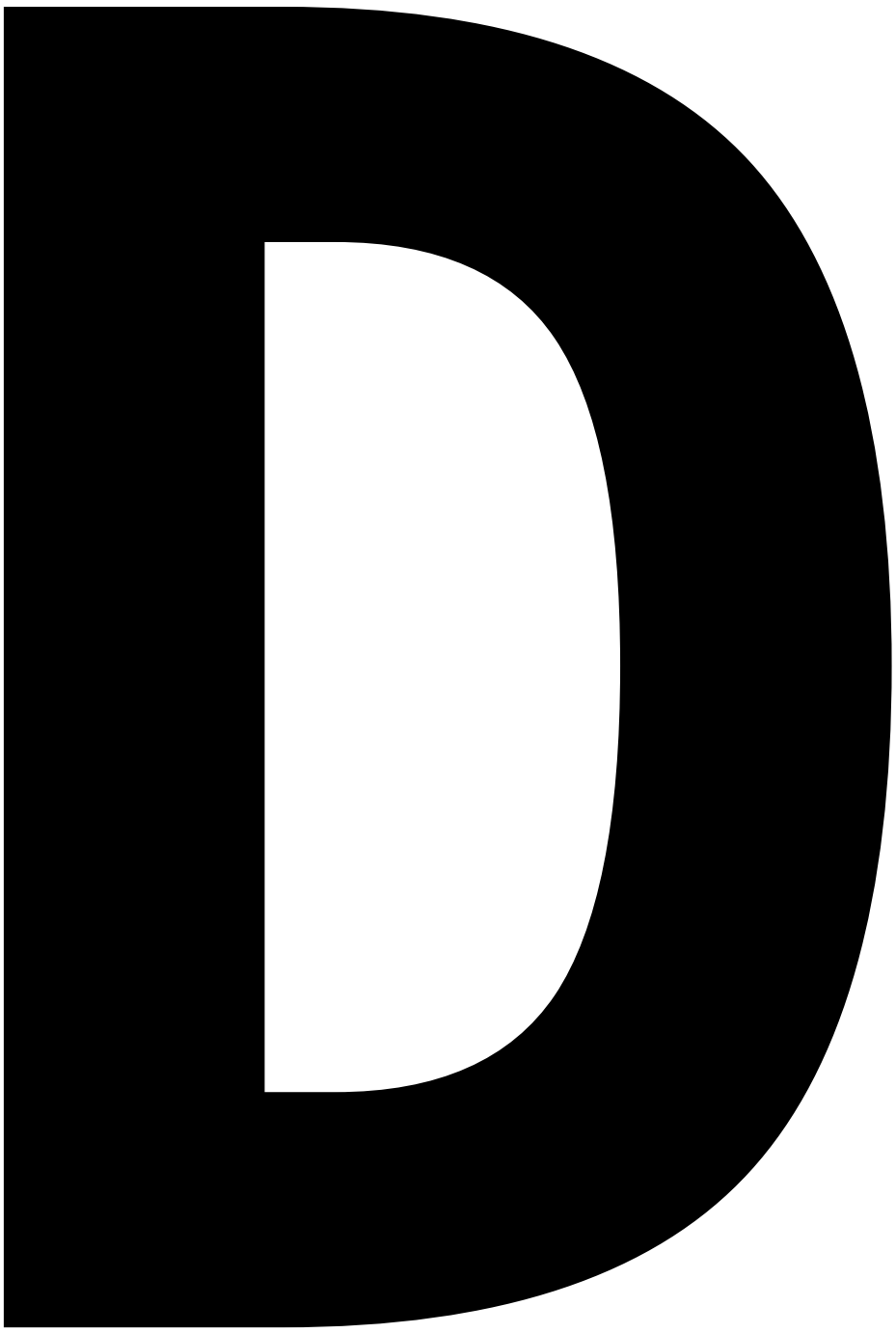


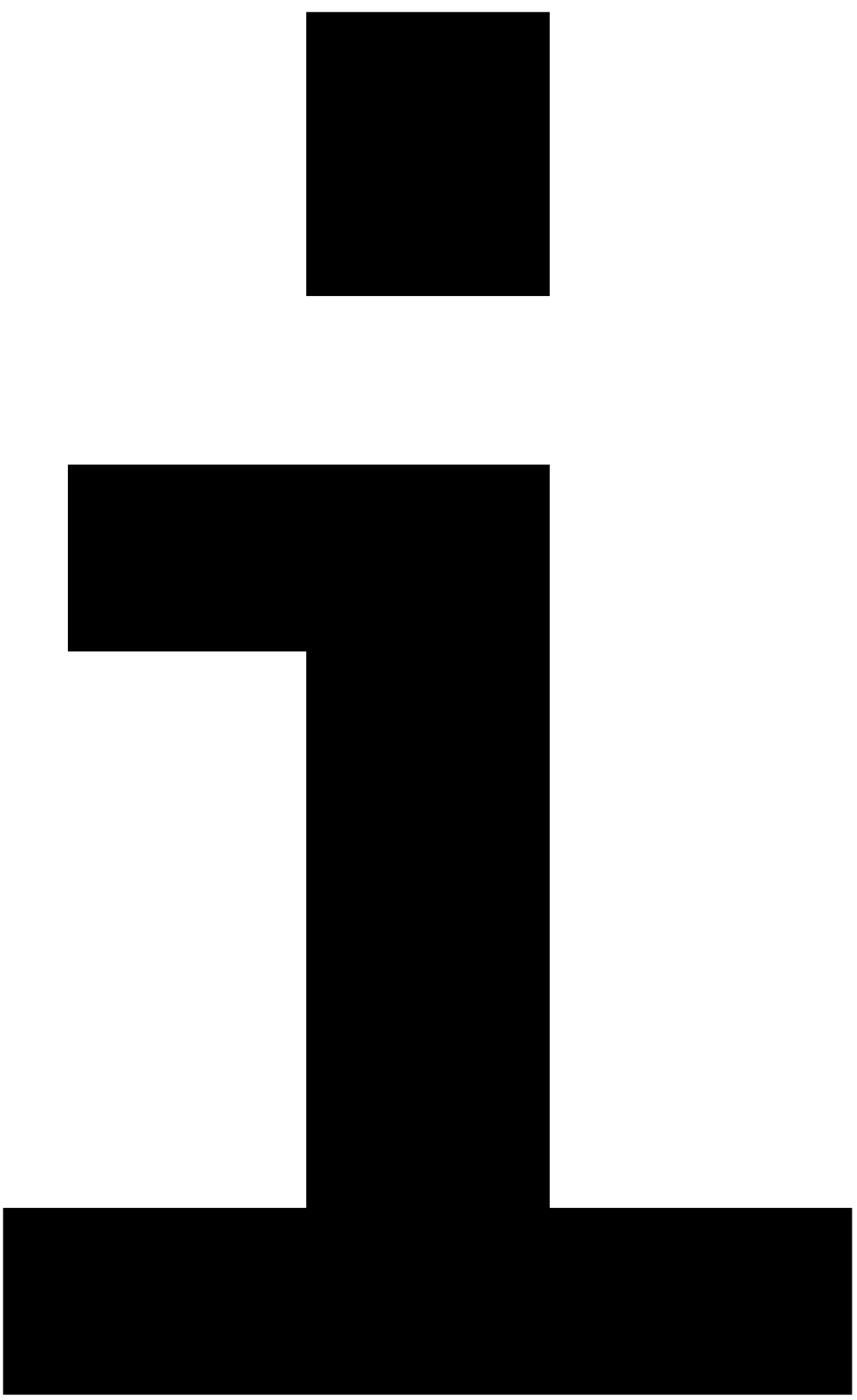


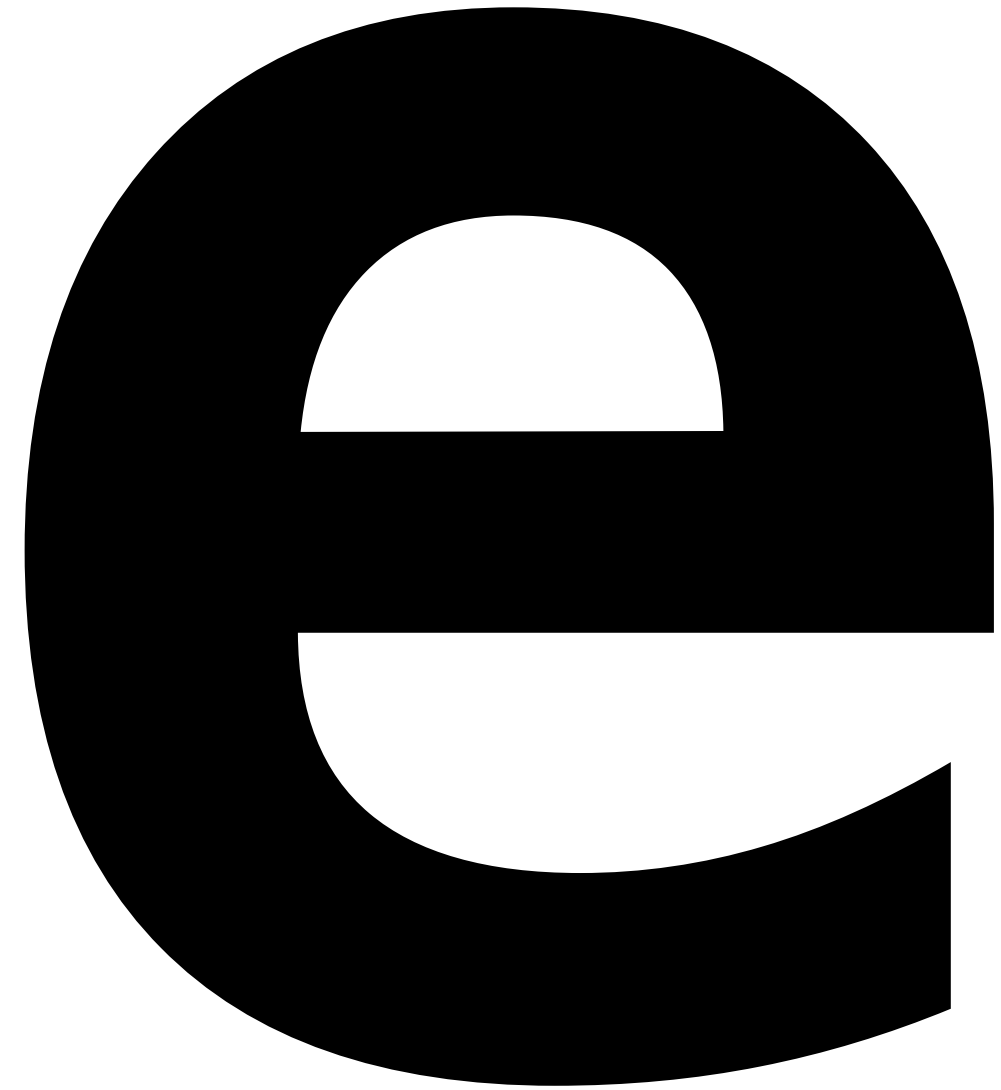
S



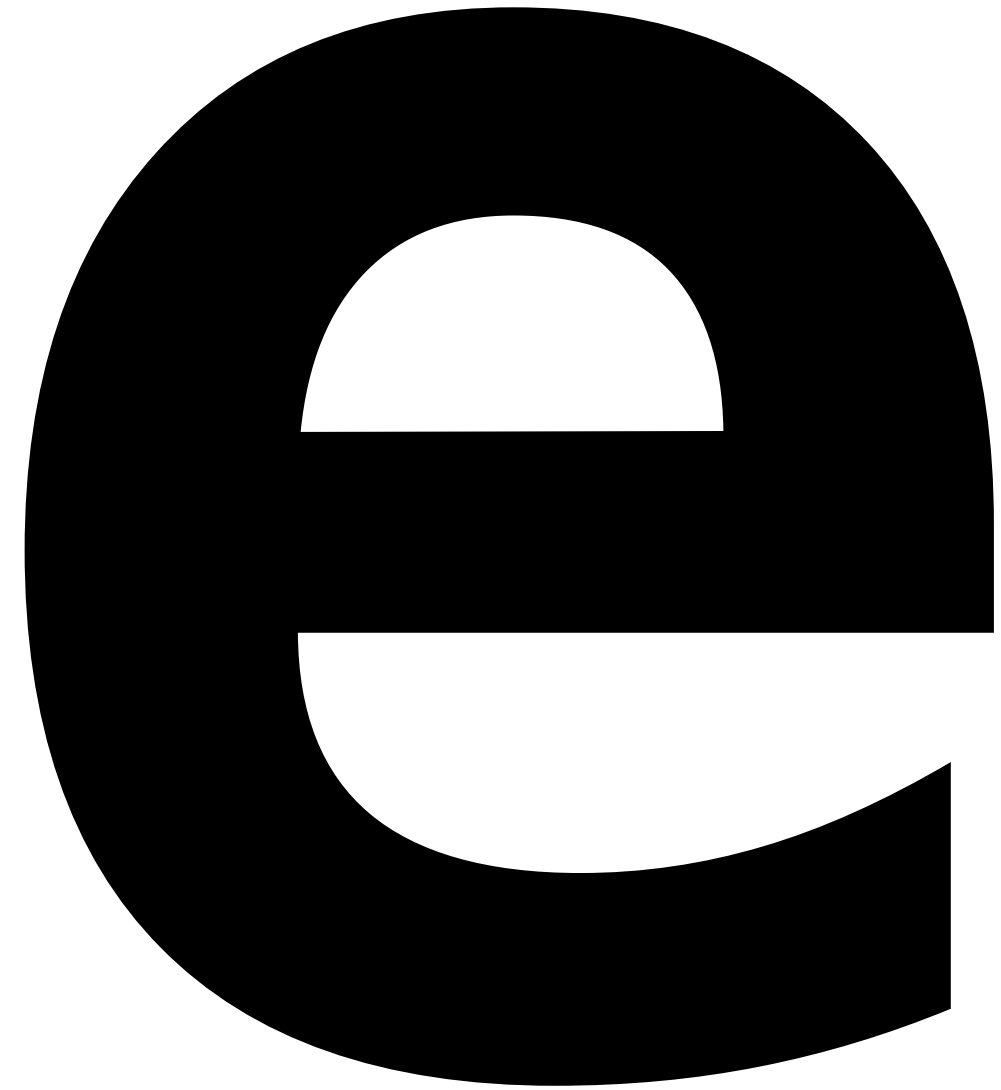




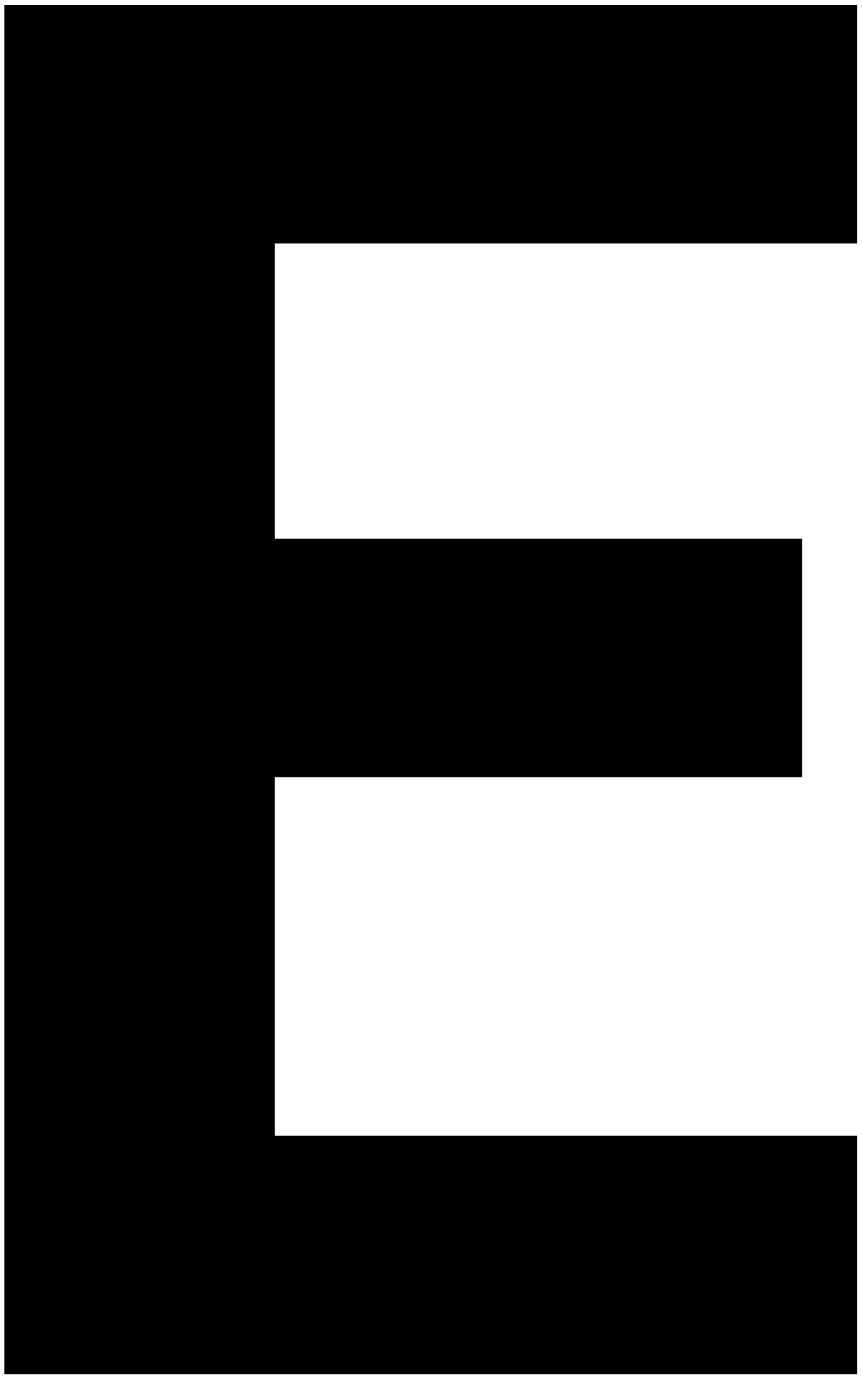


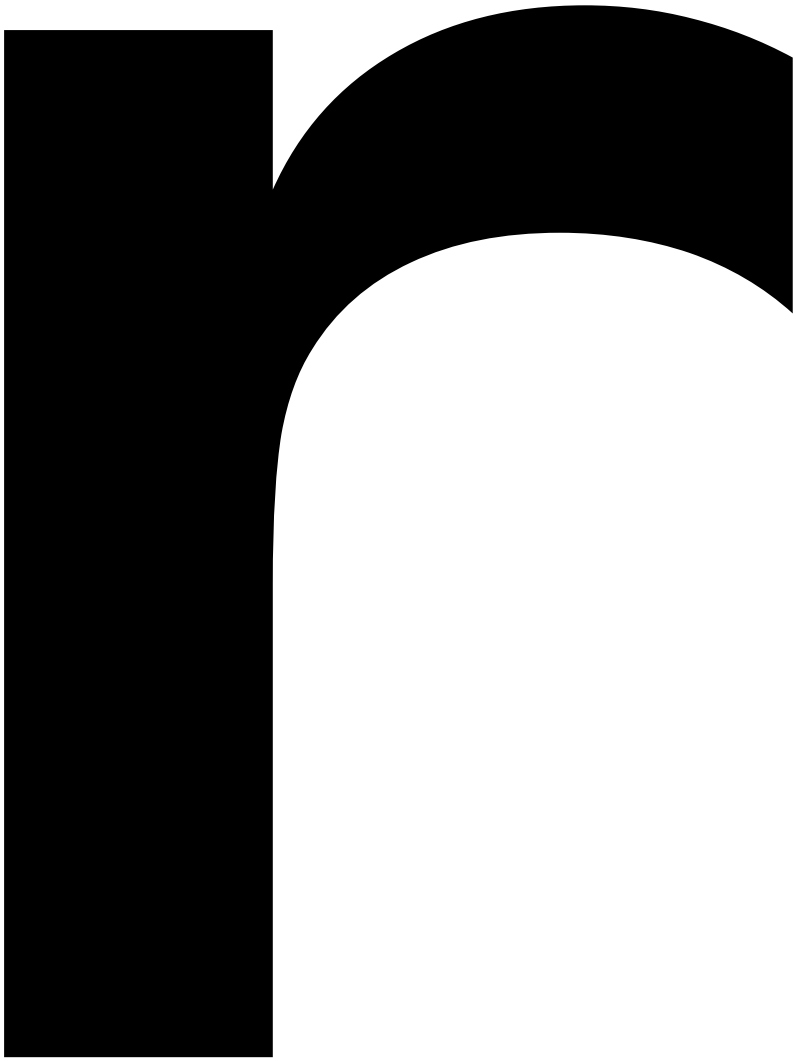


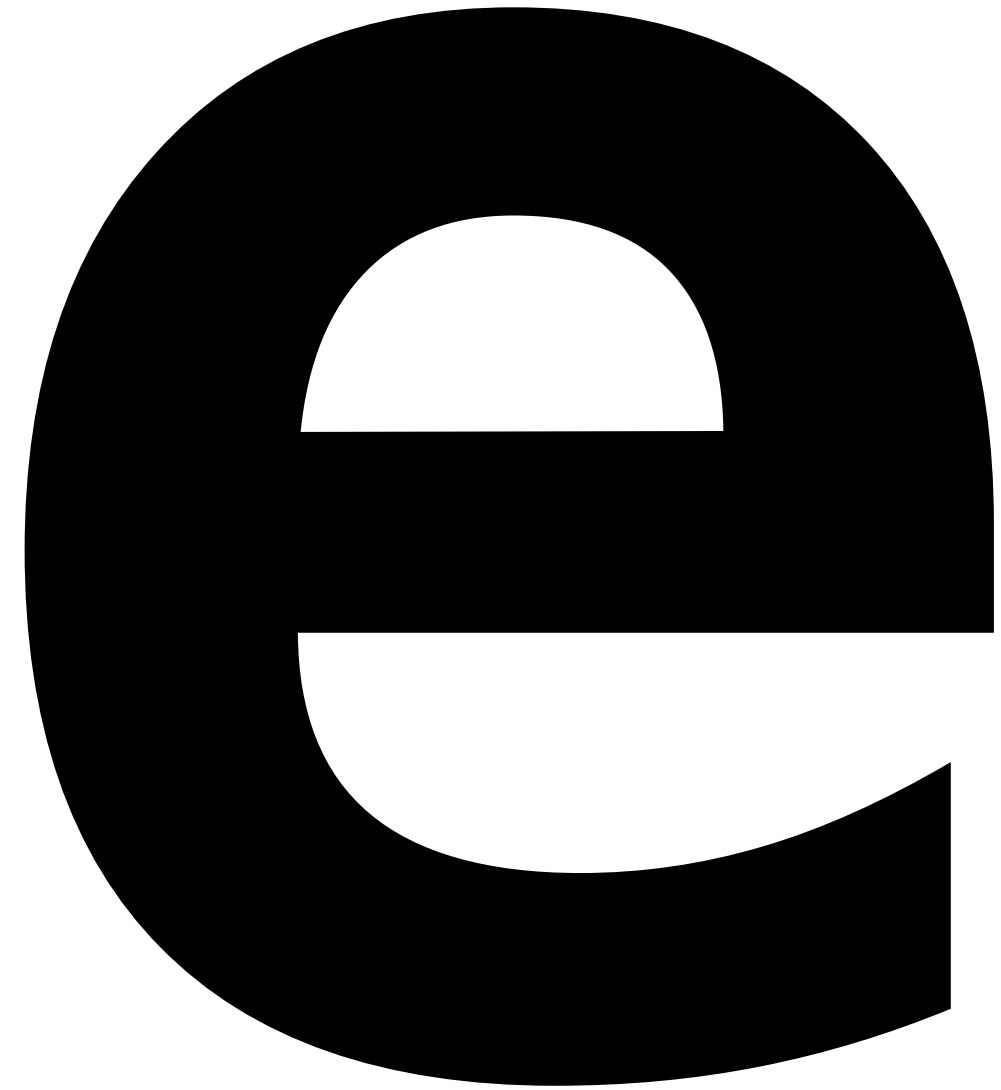
S

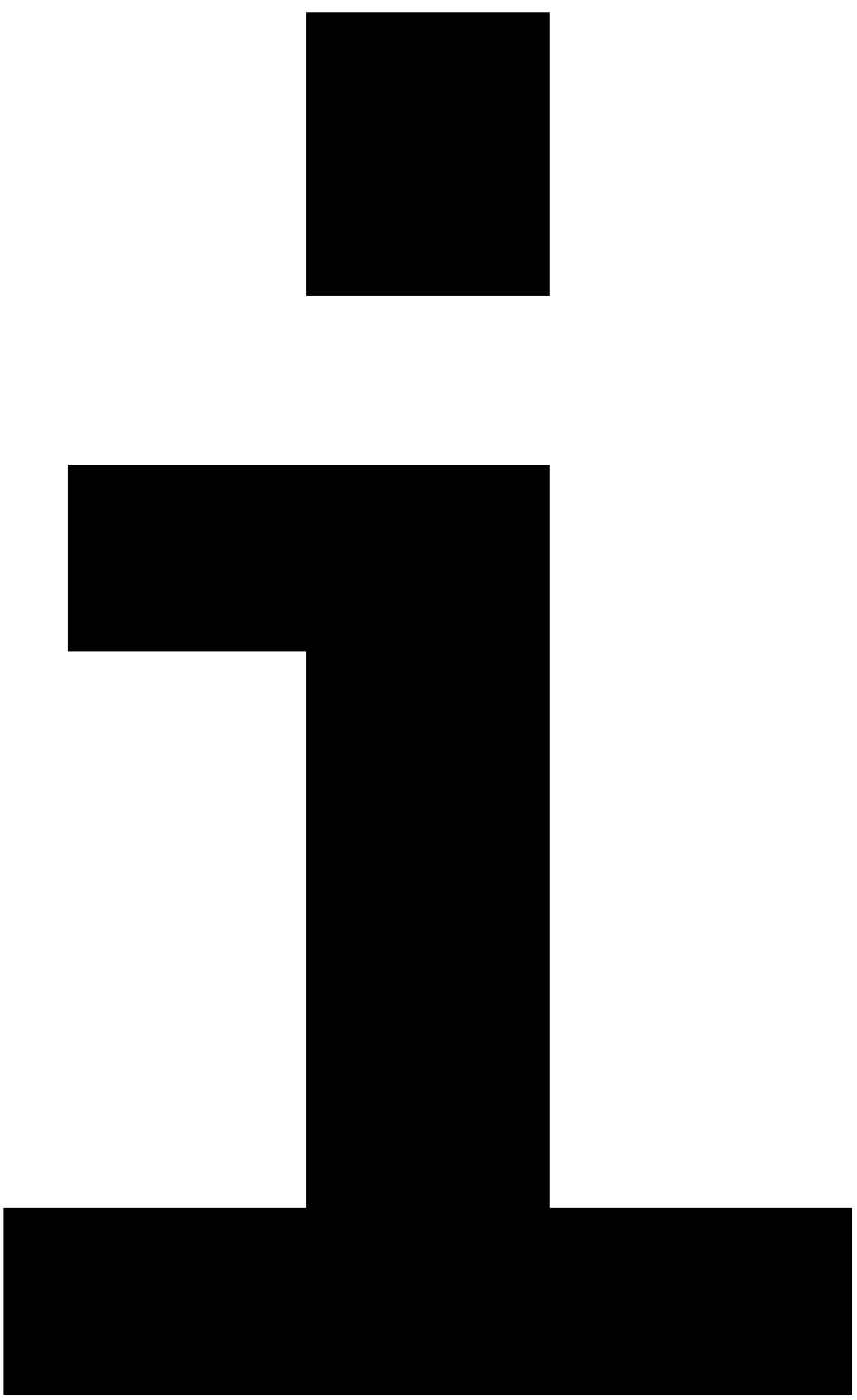


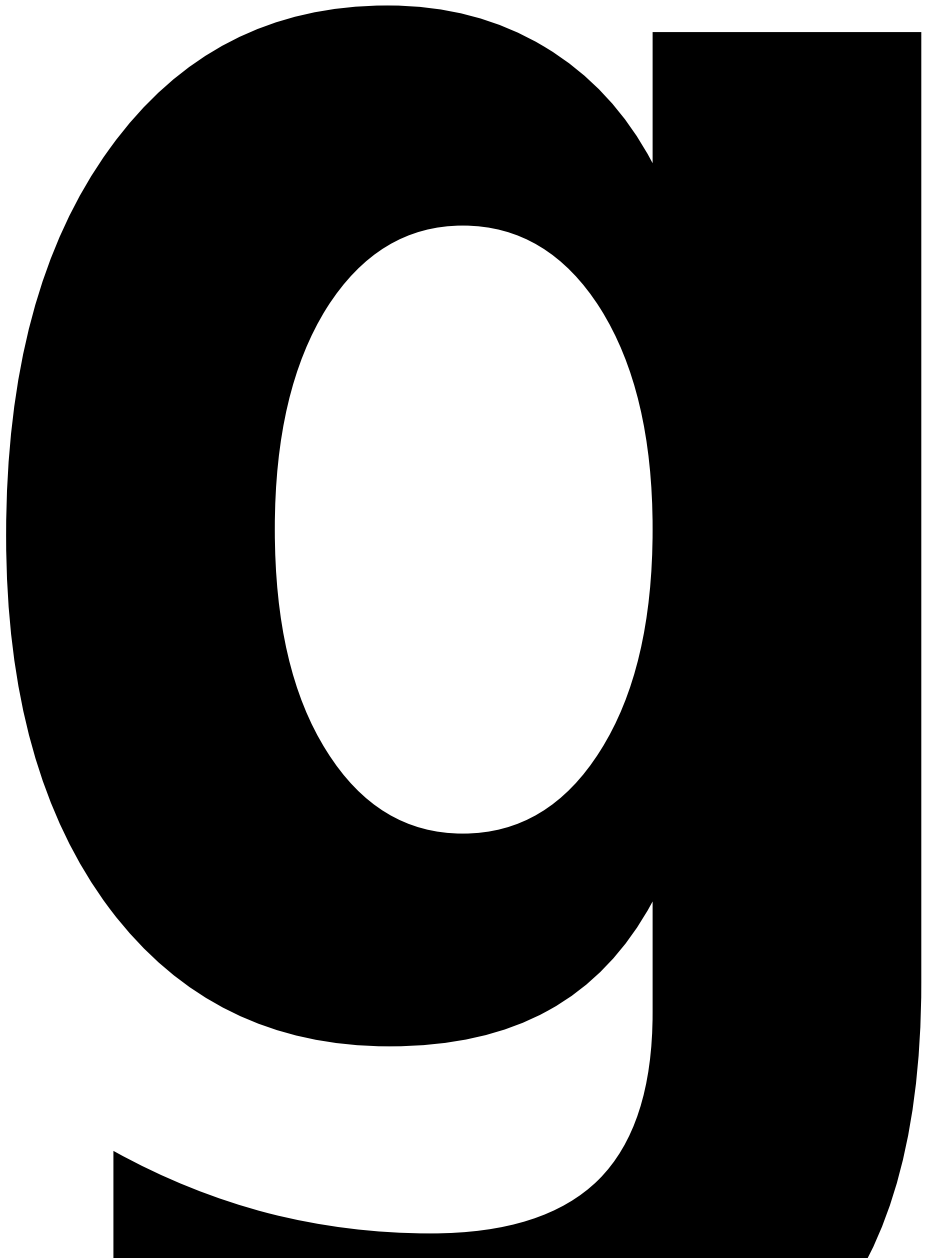
S

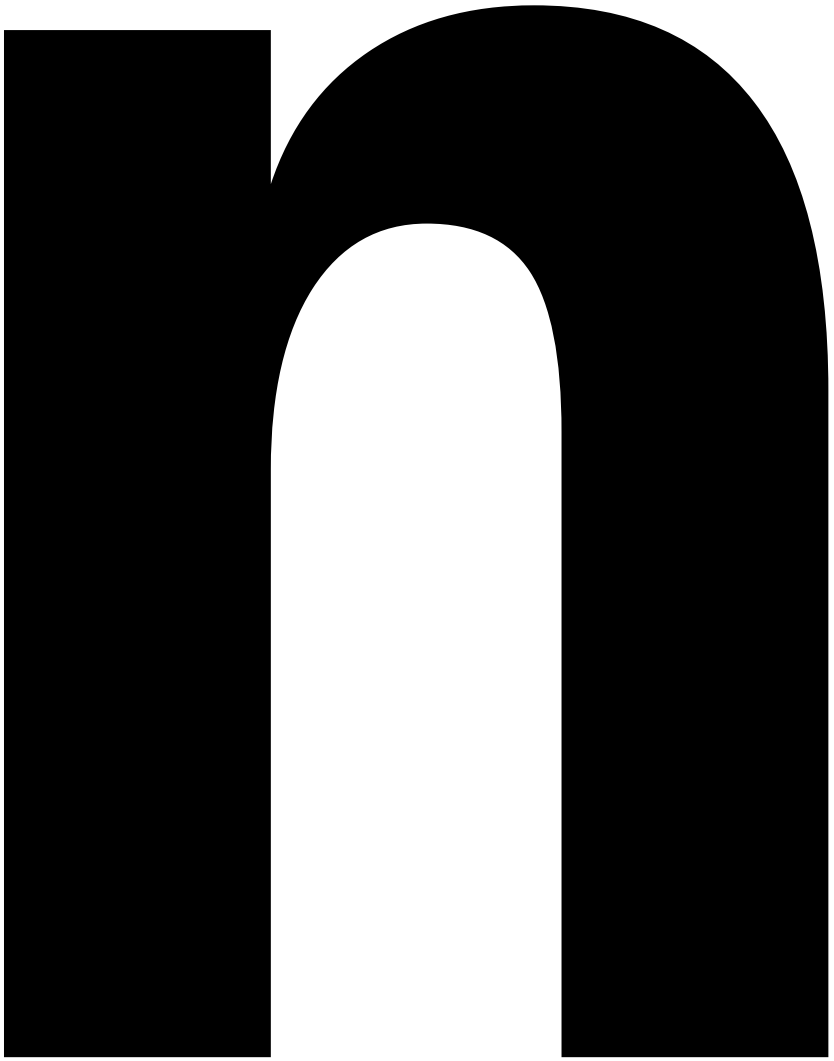


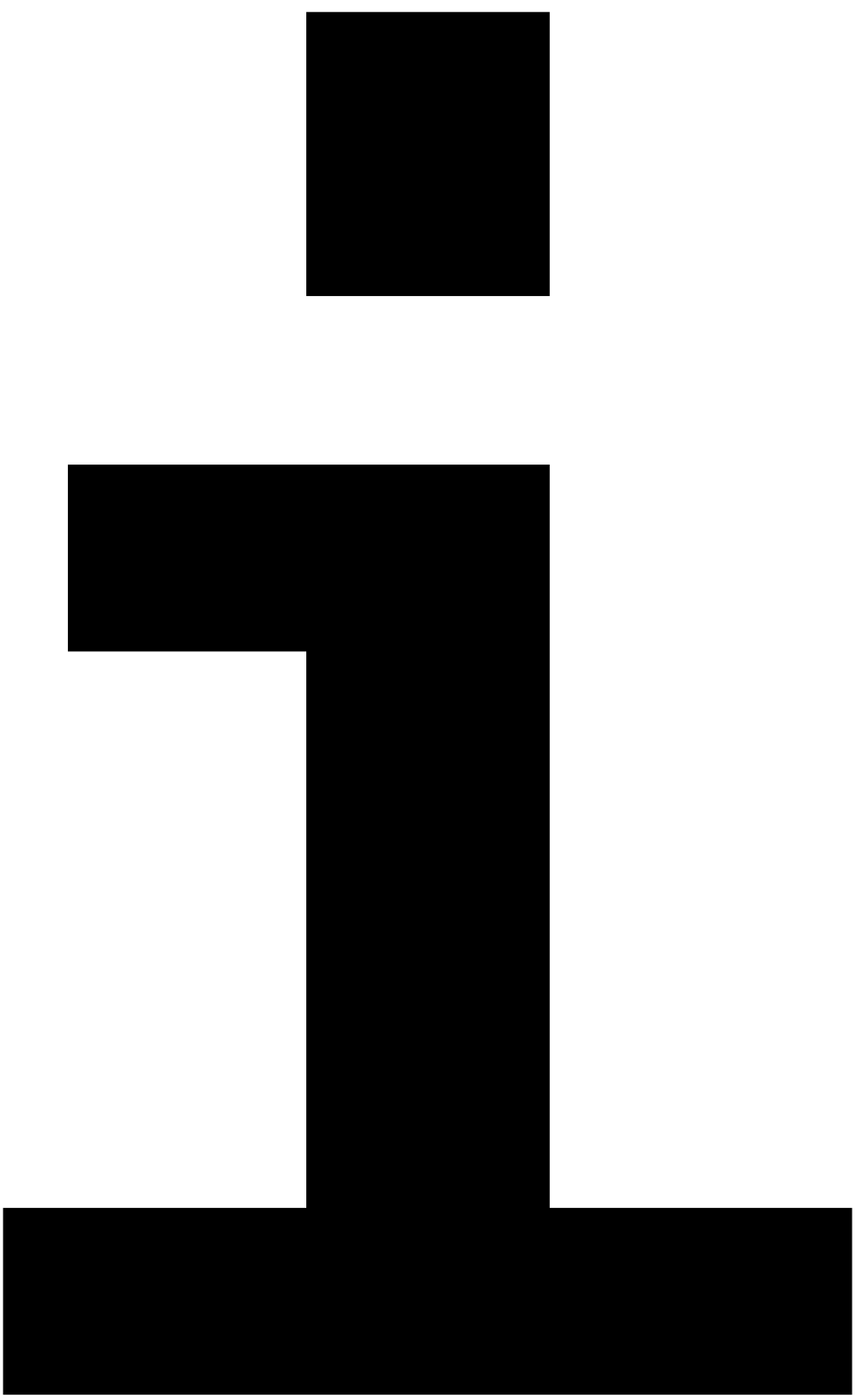




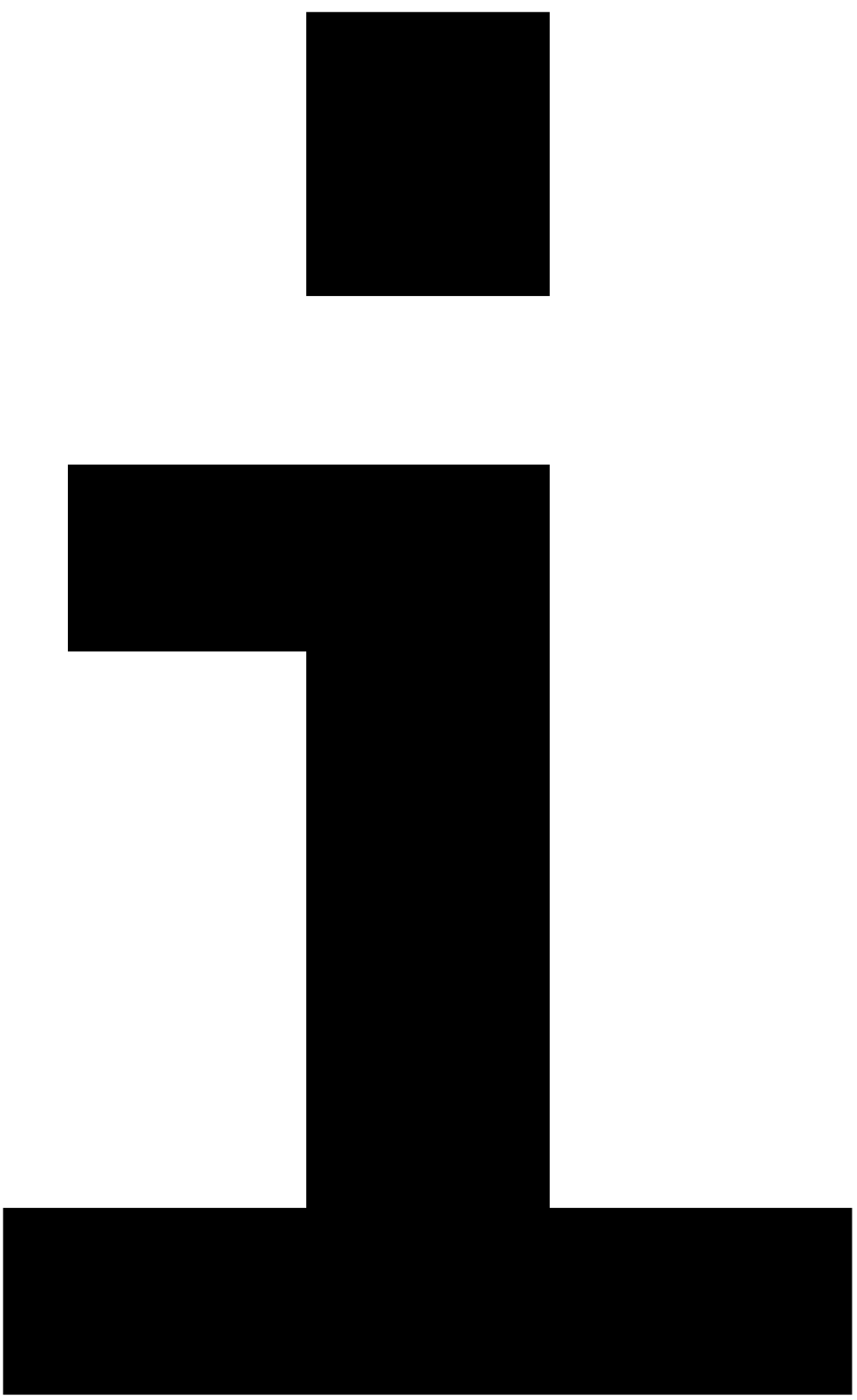




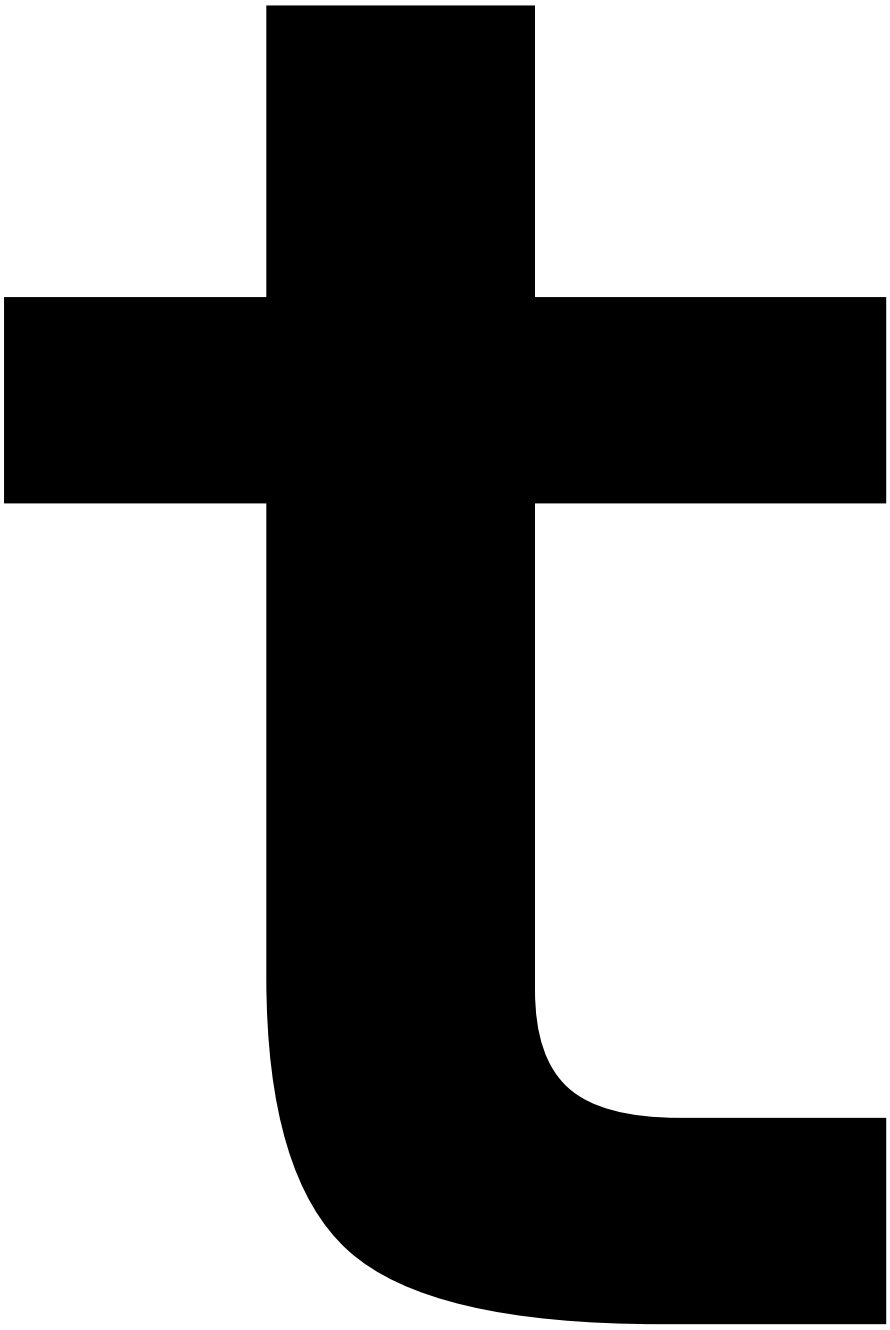


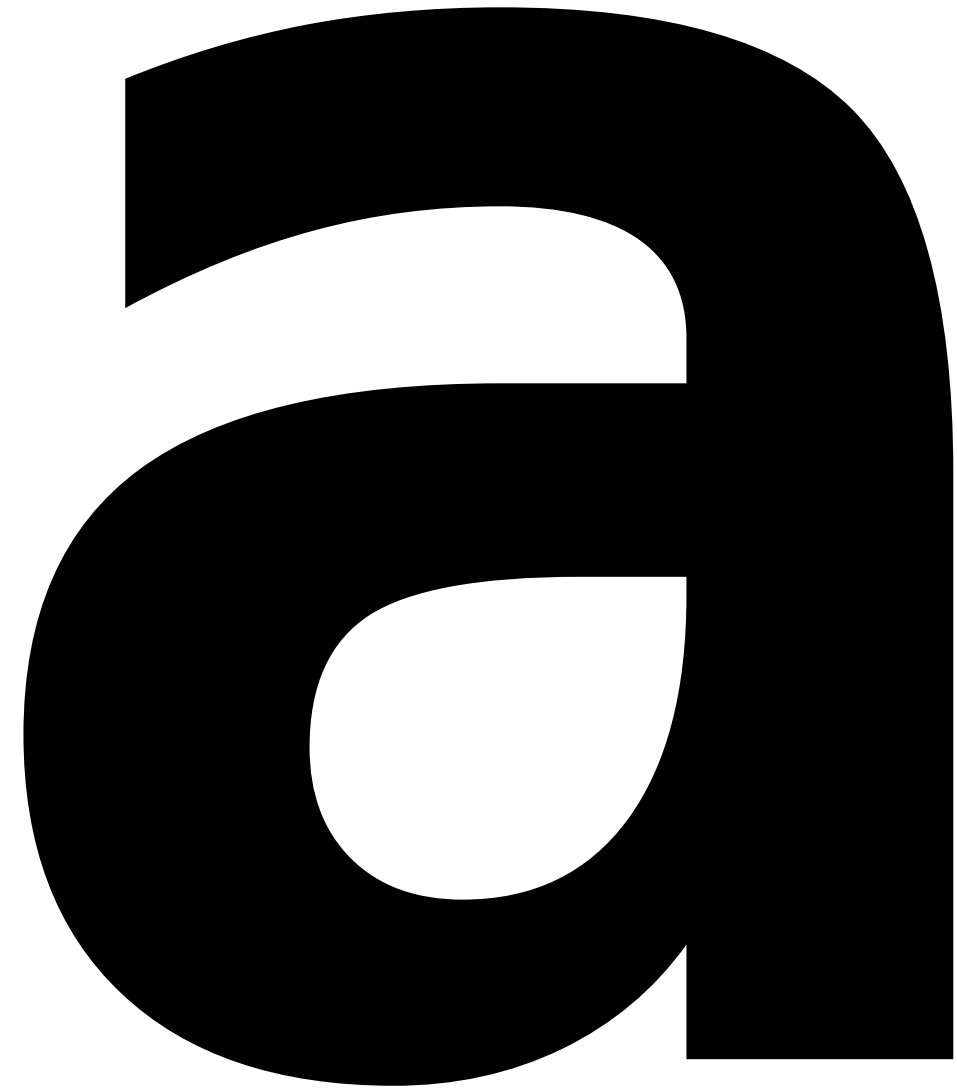


S



S

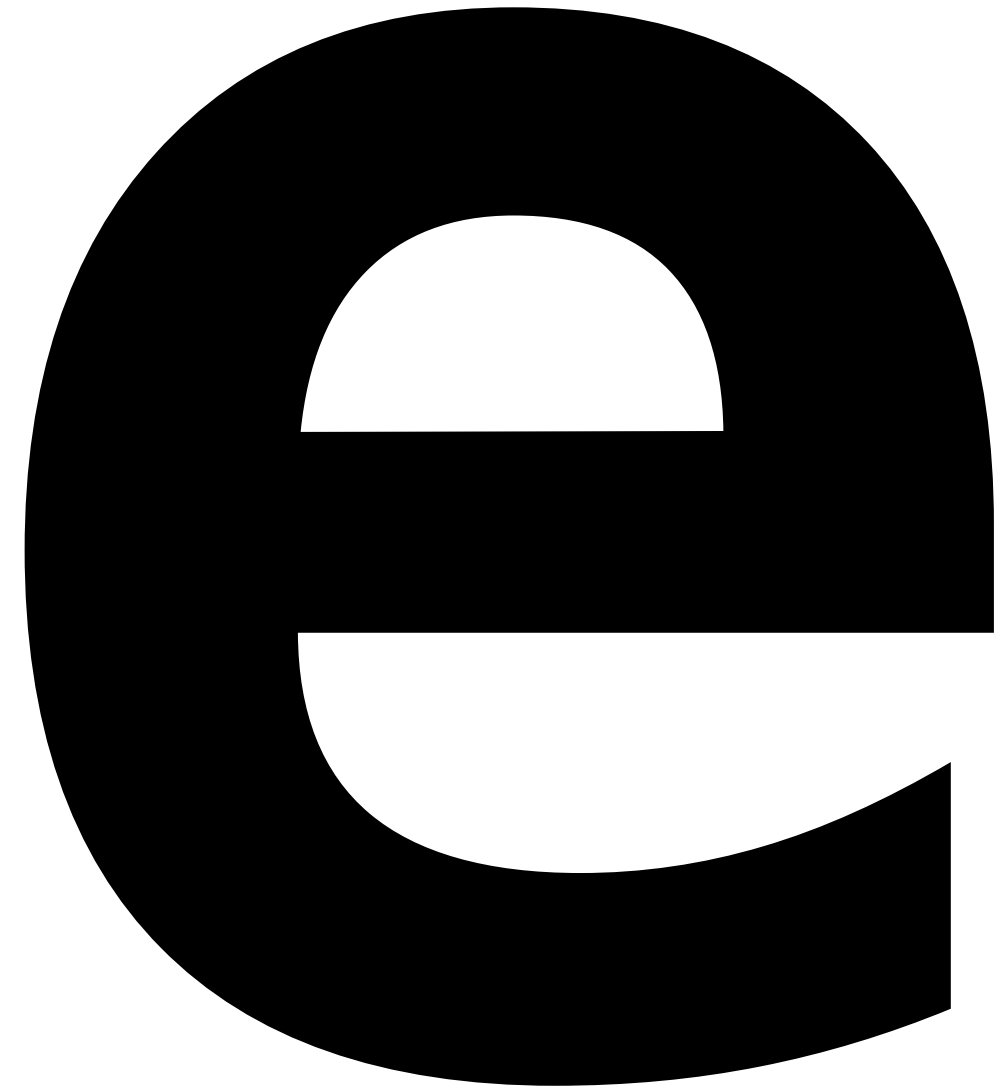


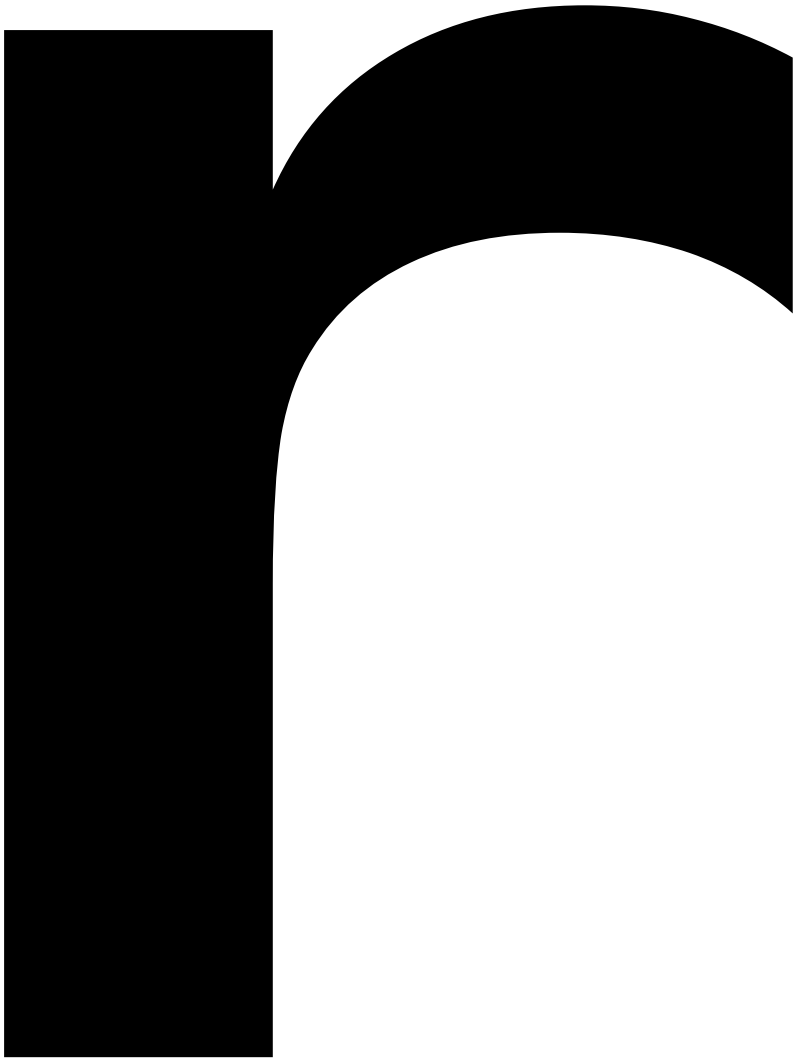


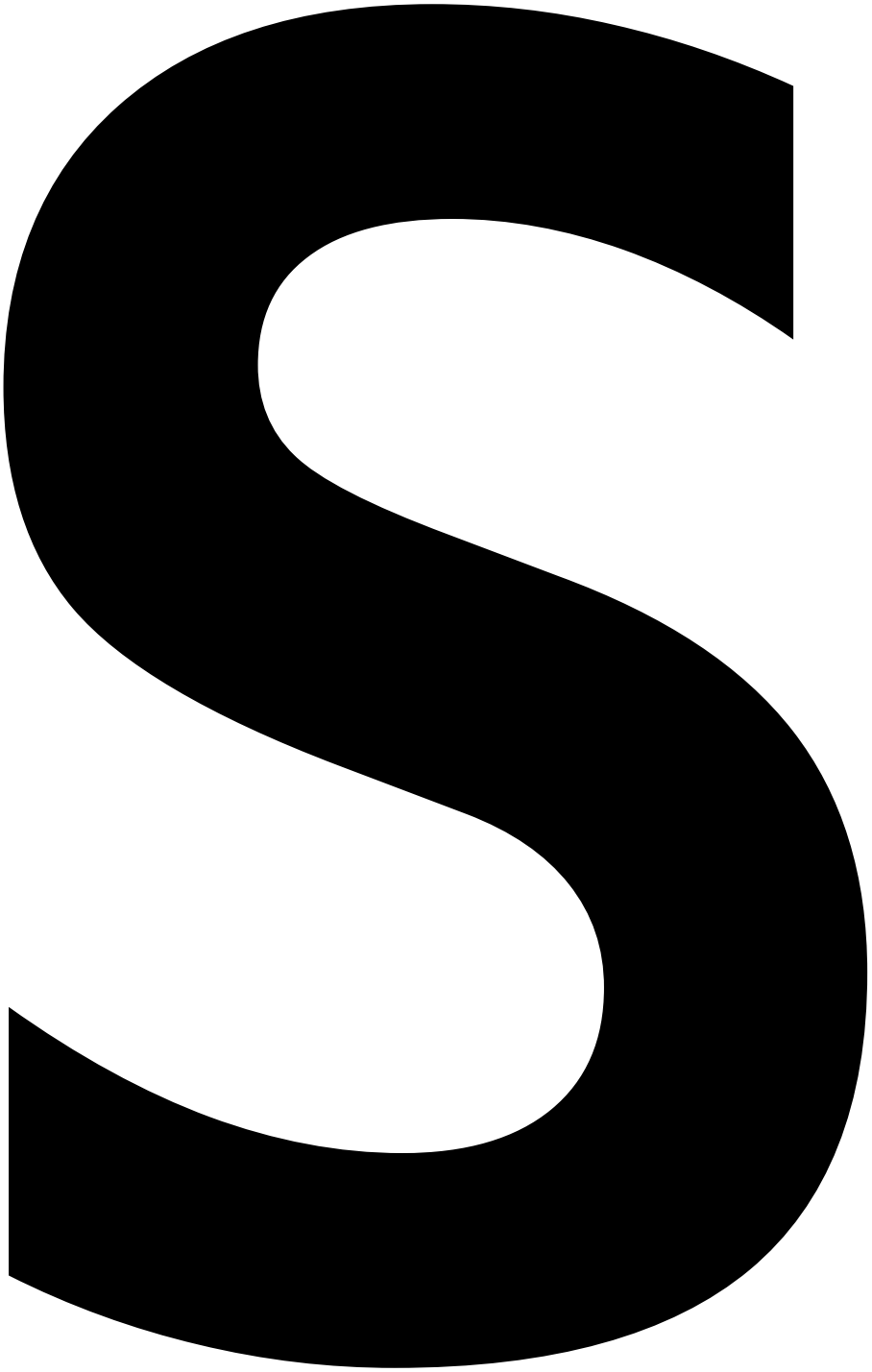
u

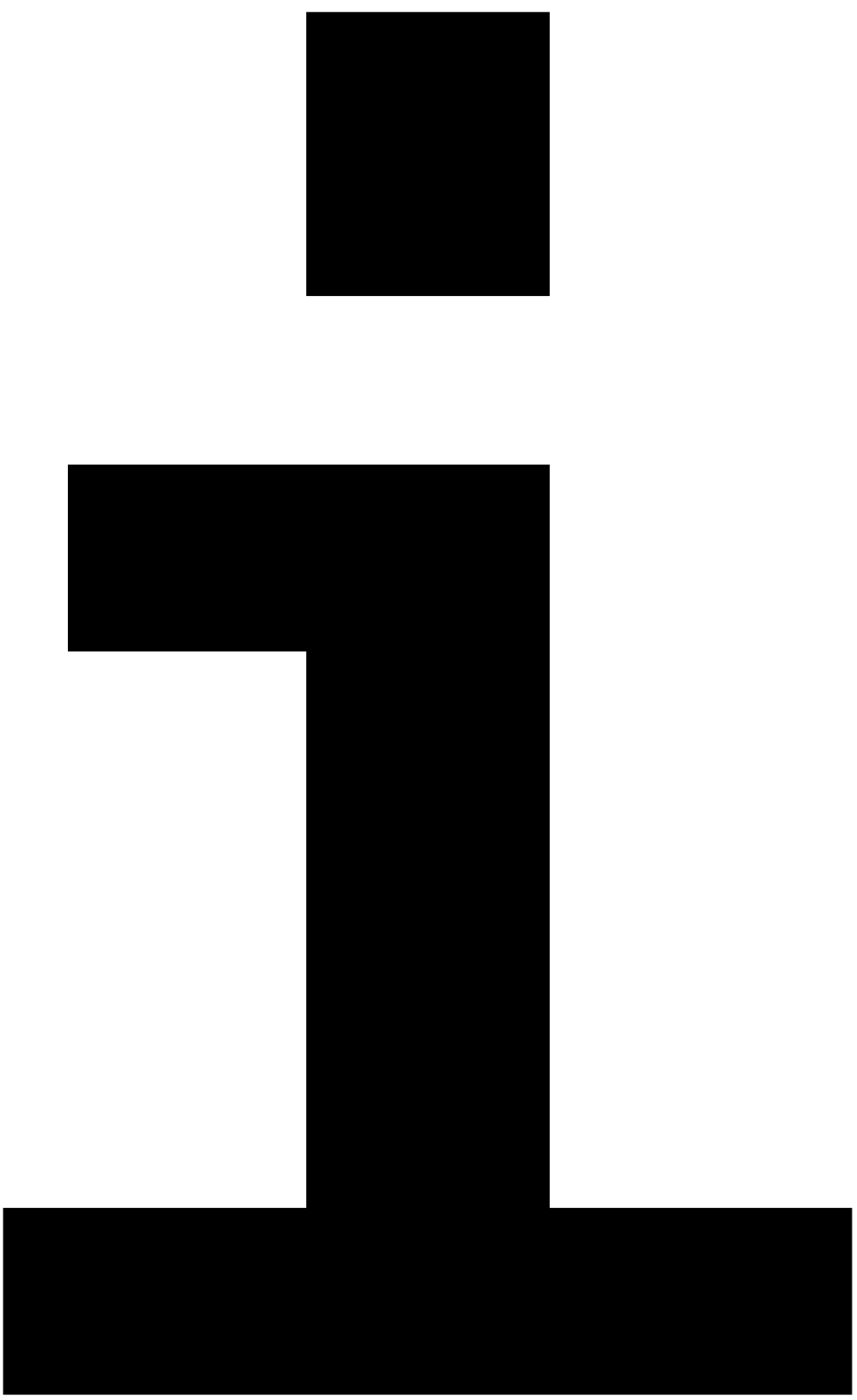
S

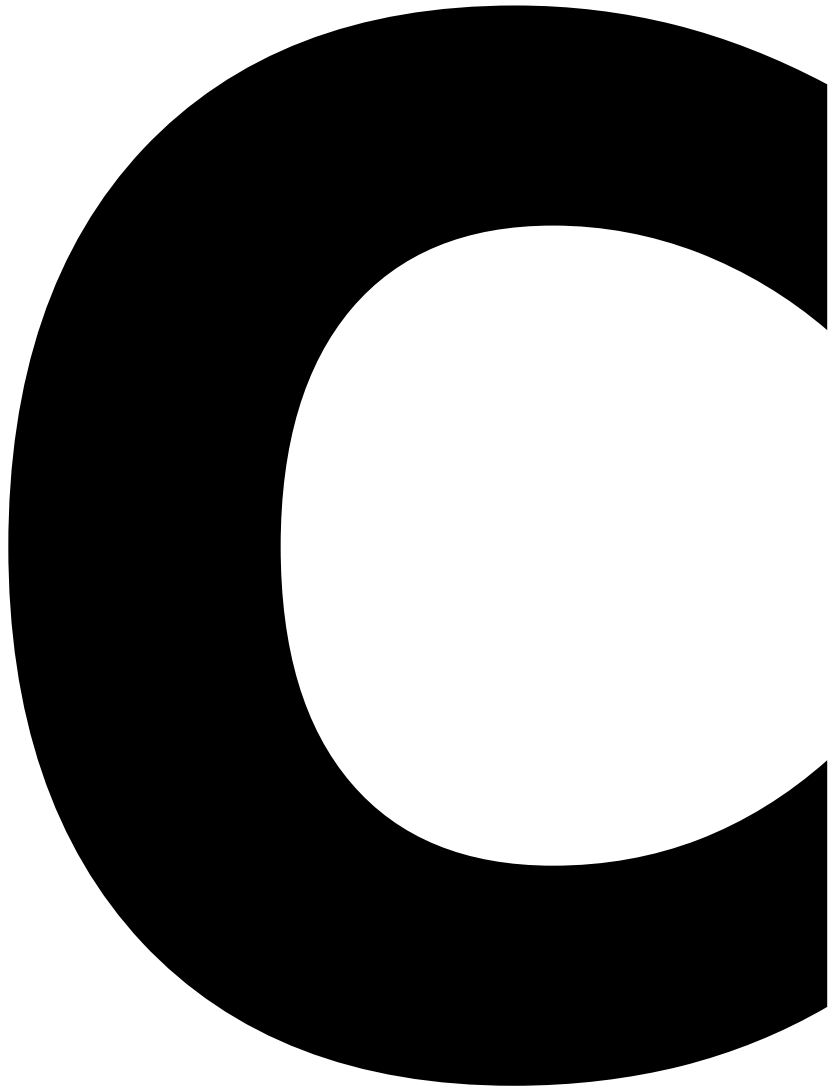
d

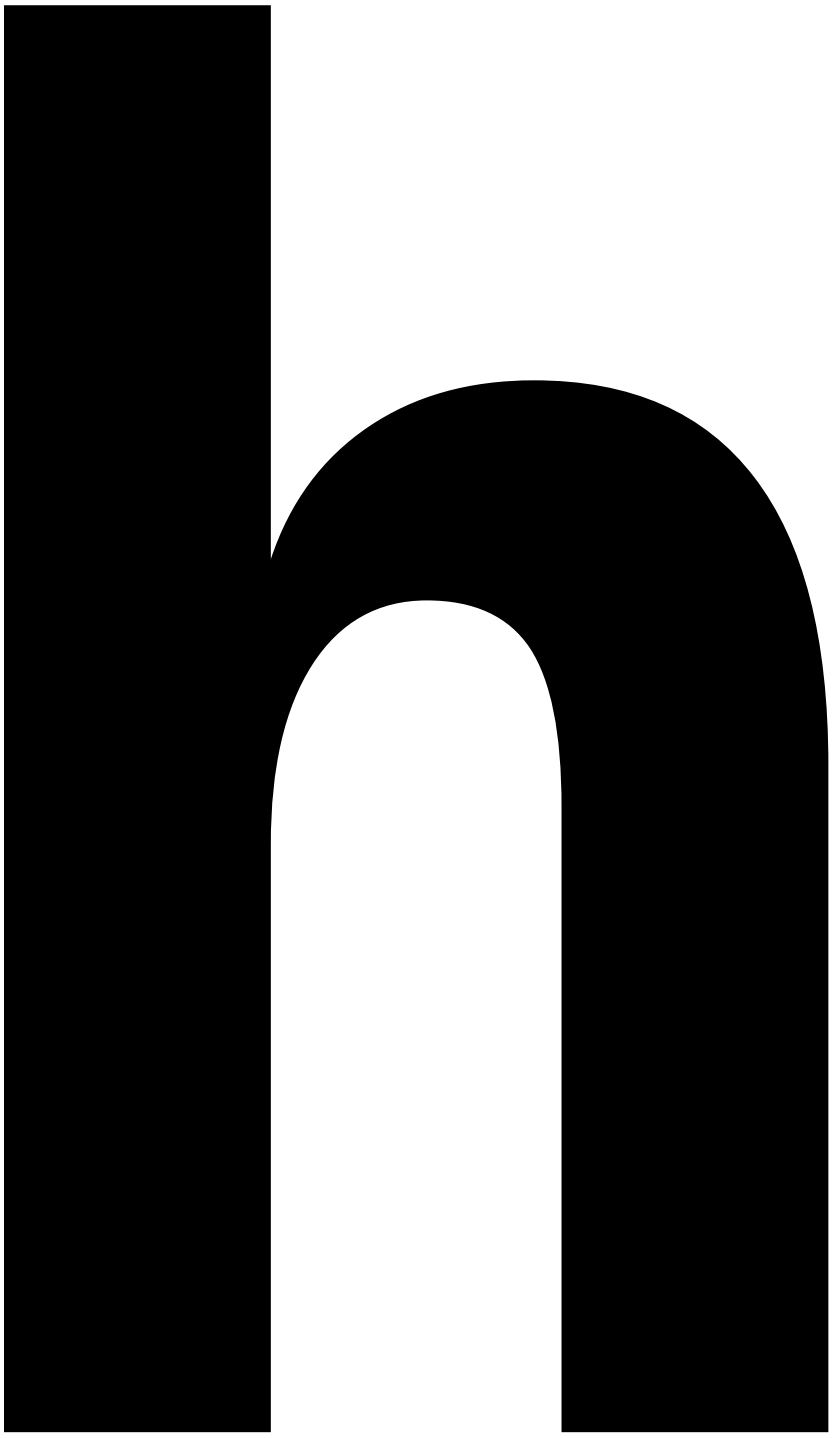


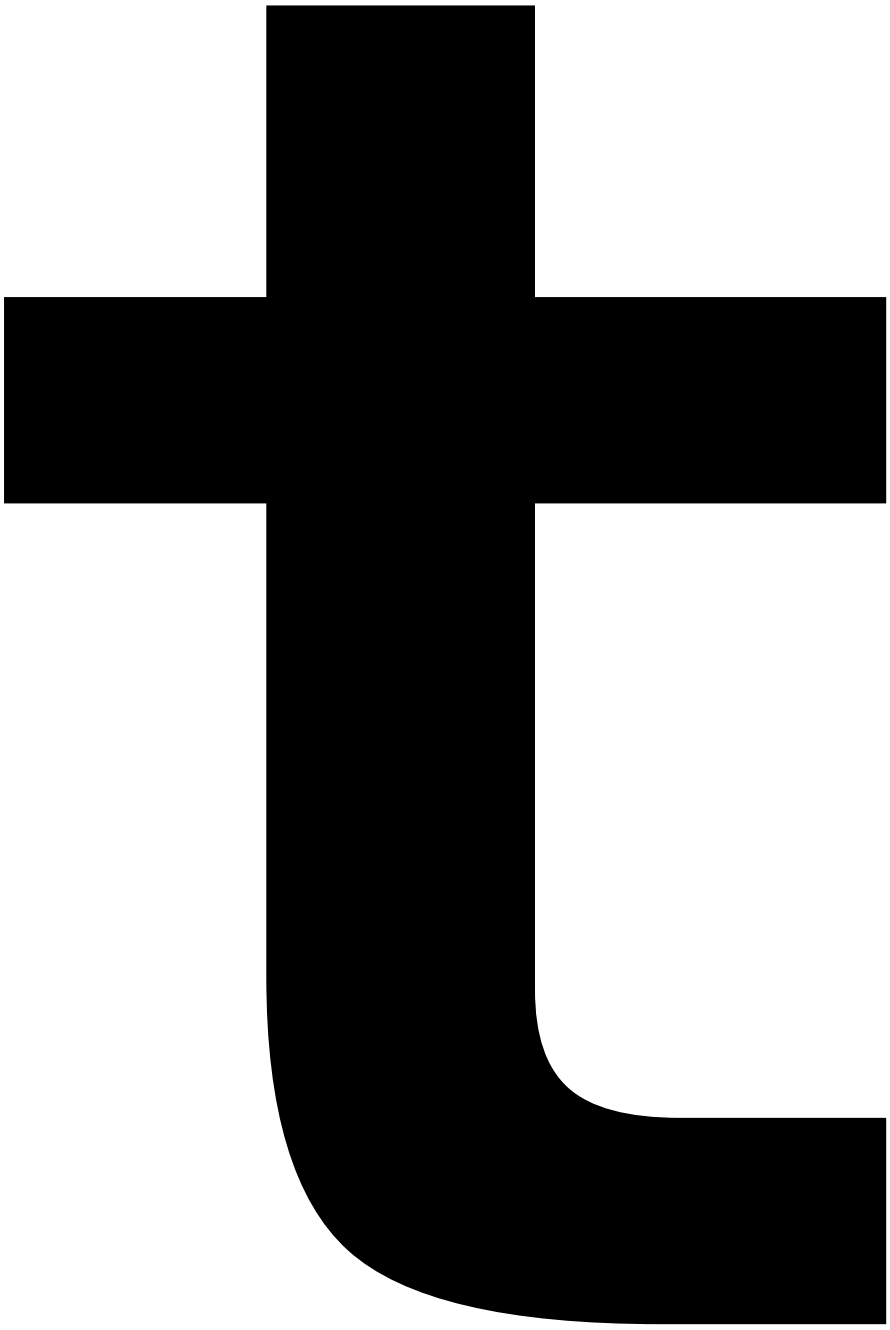




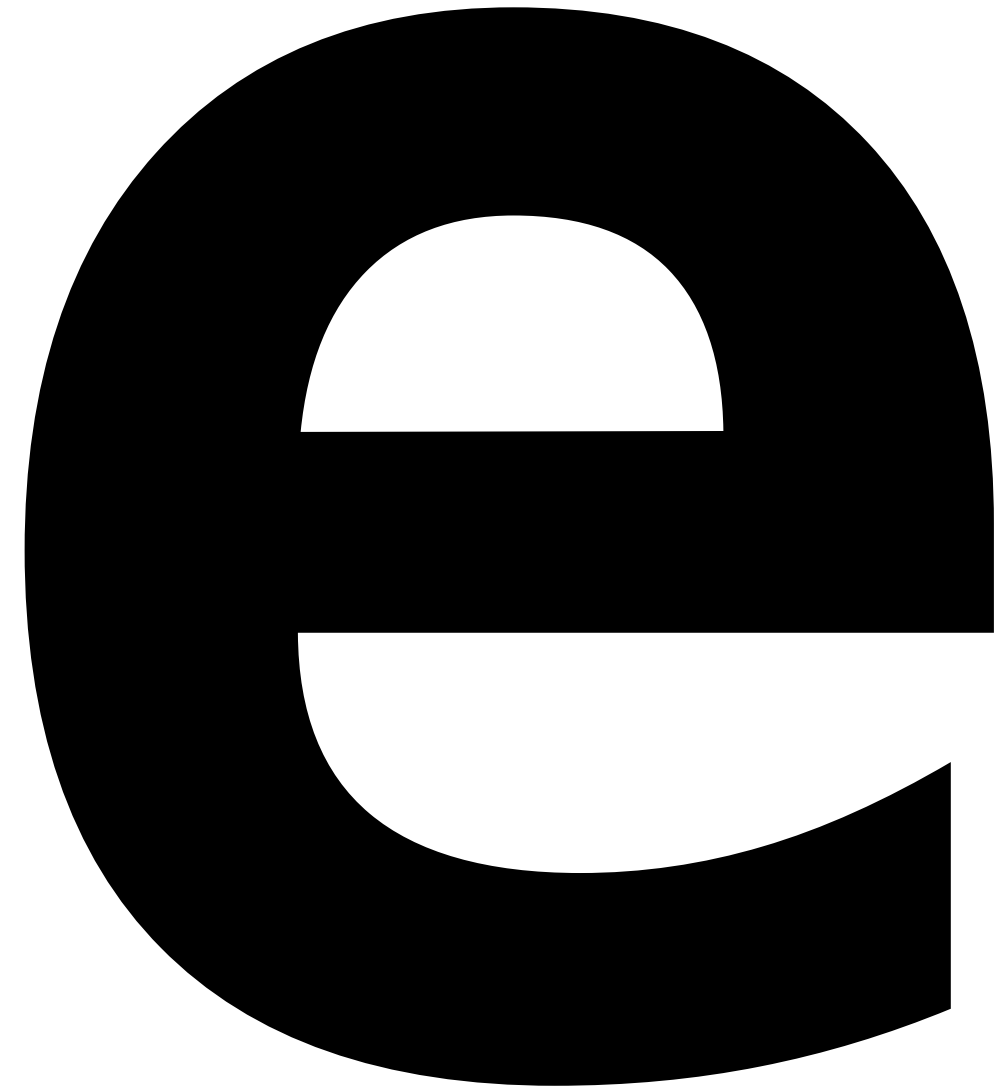


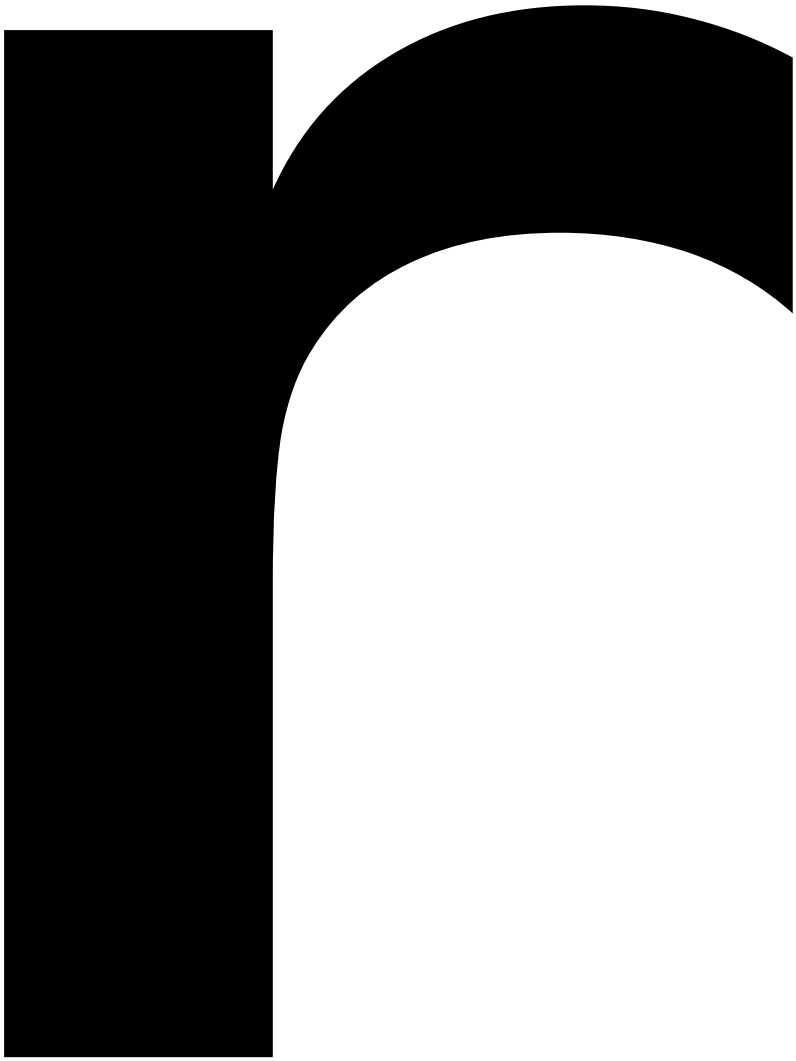


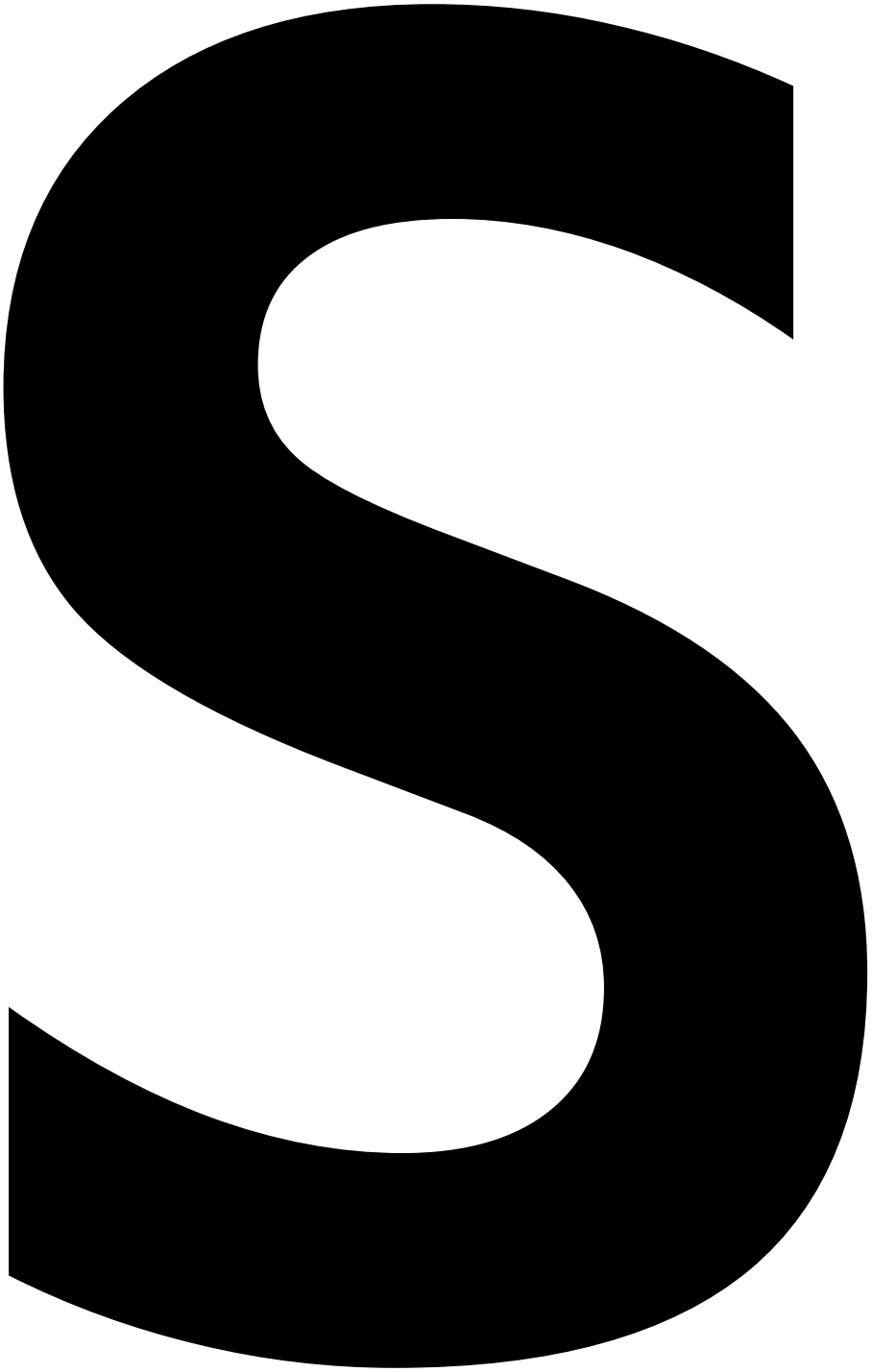


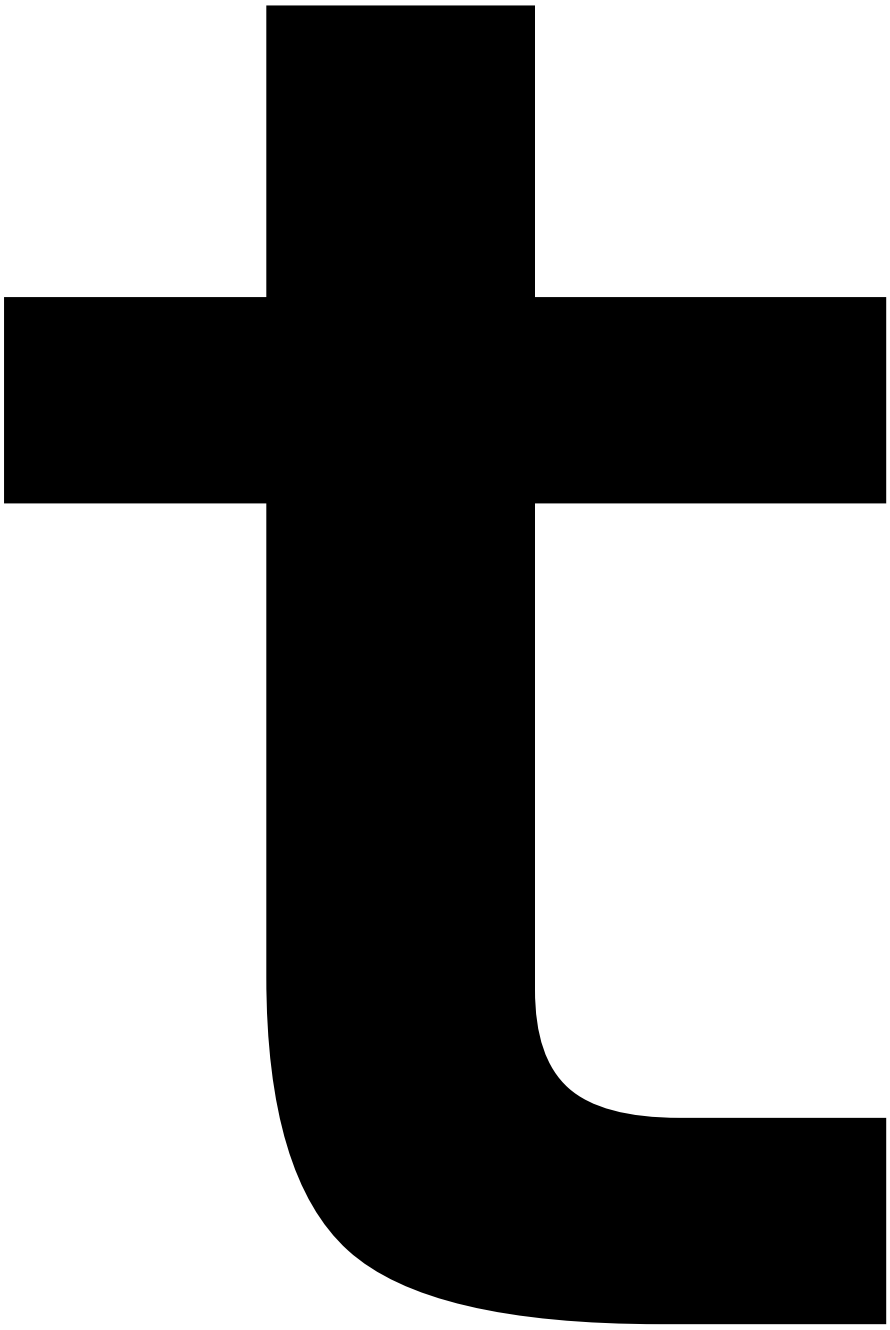


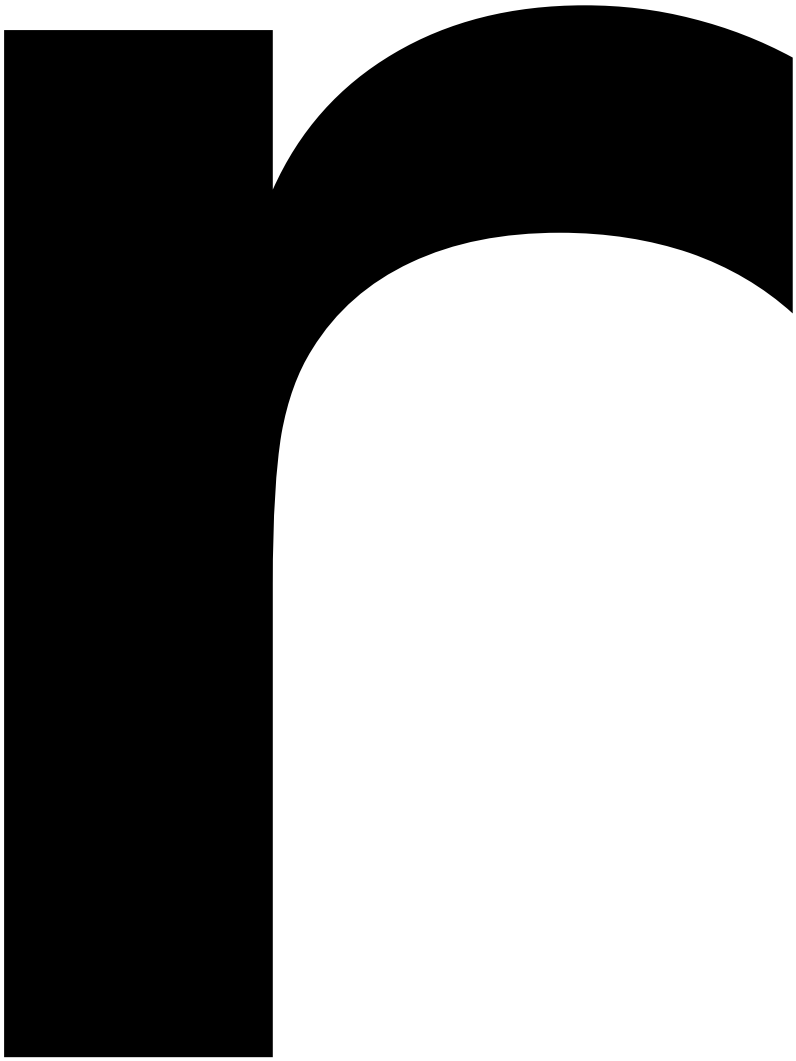
d

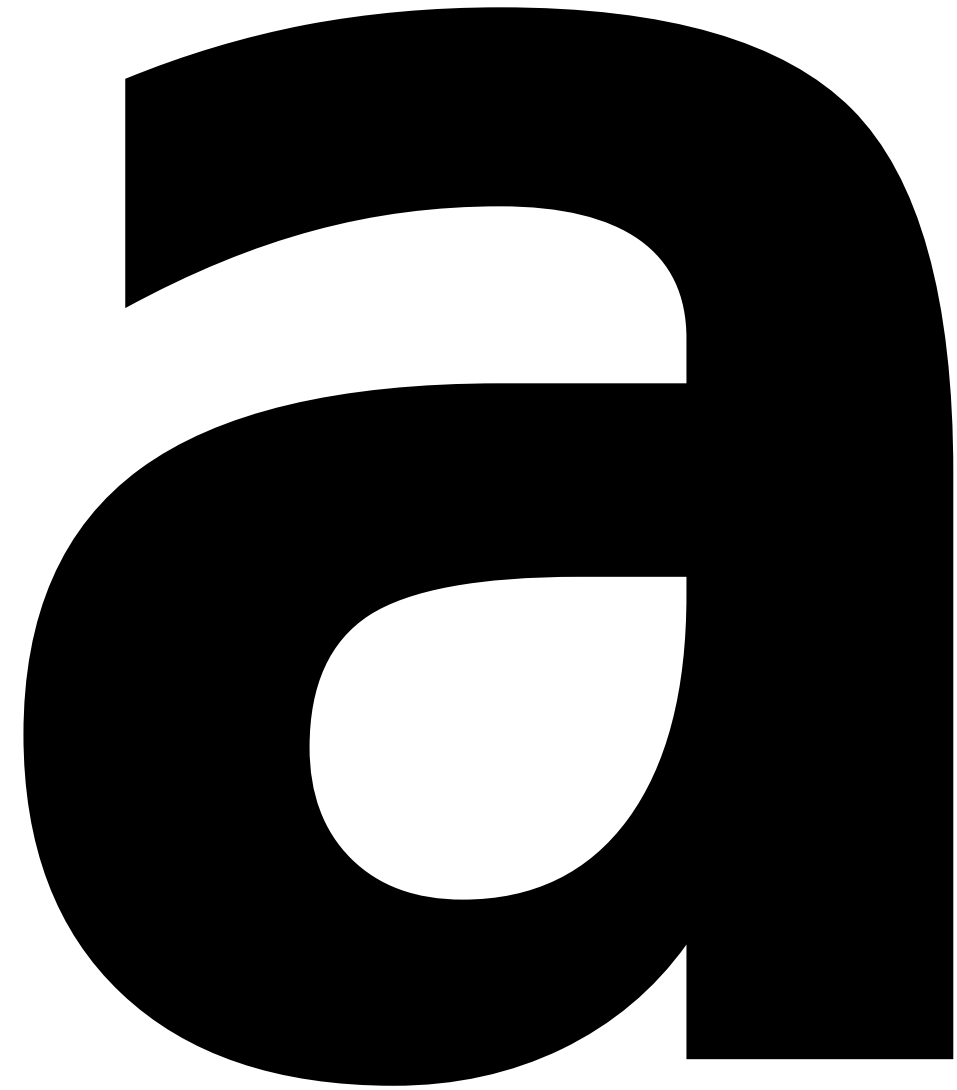


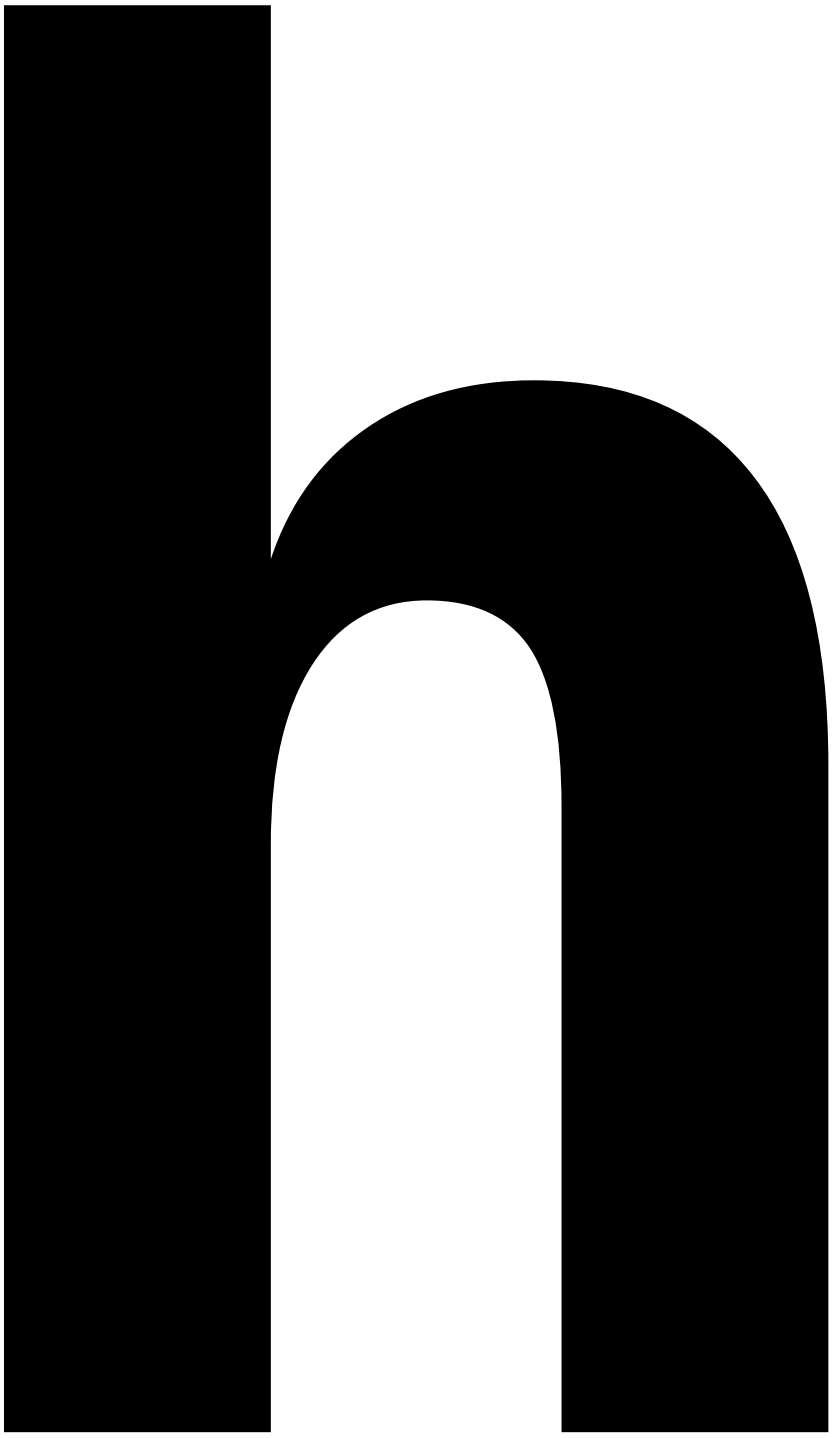


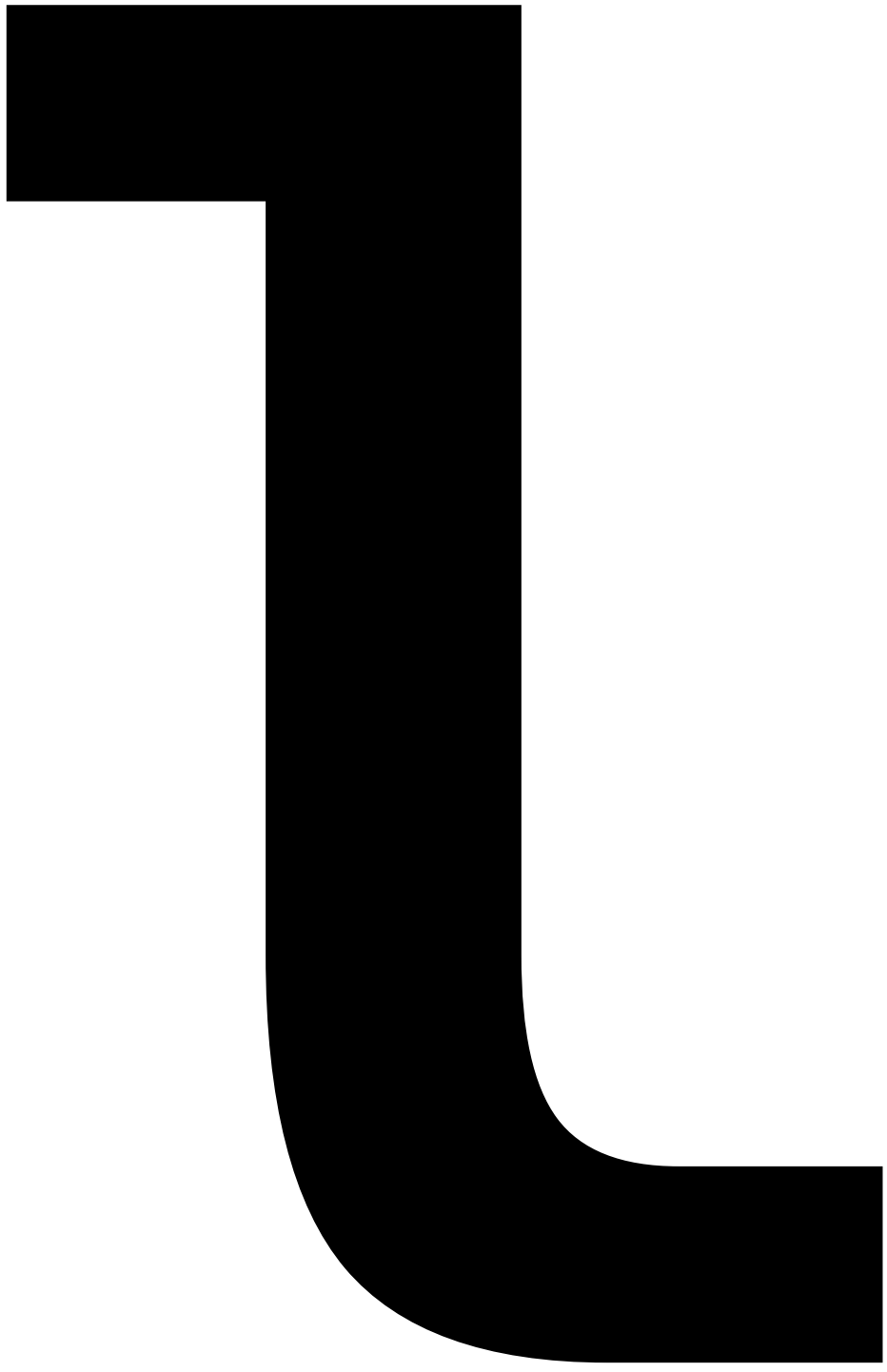


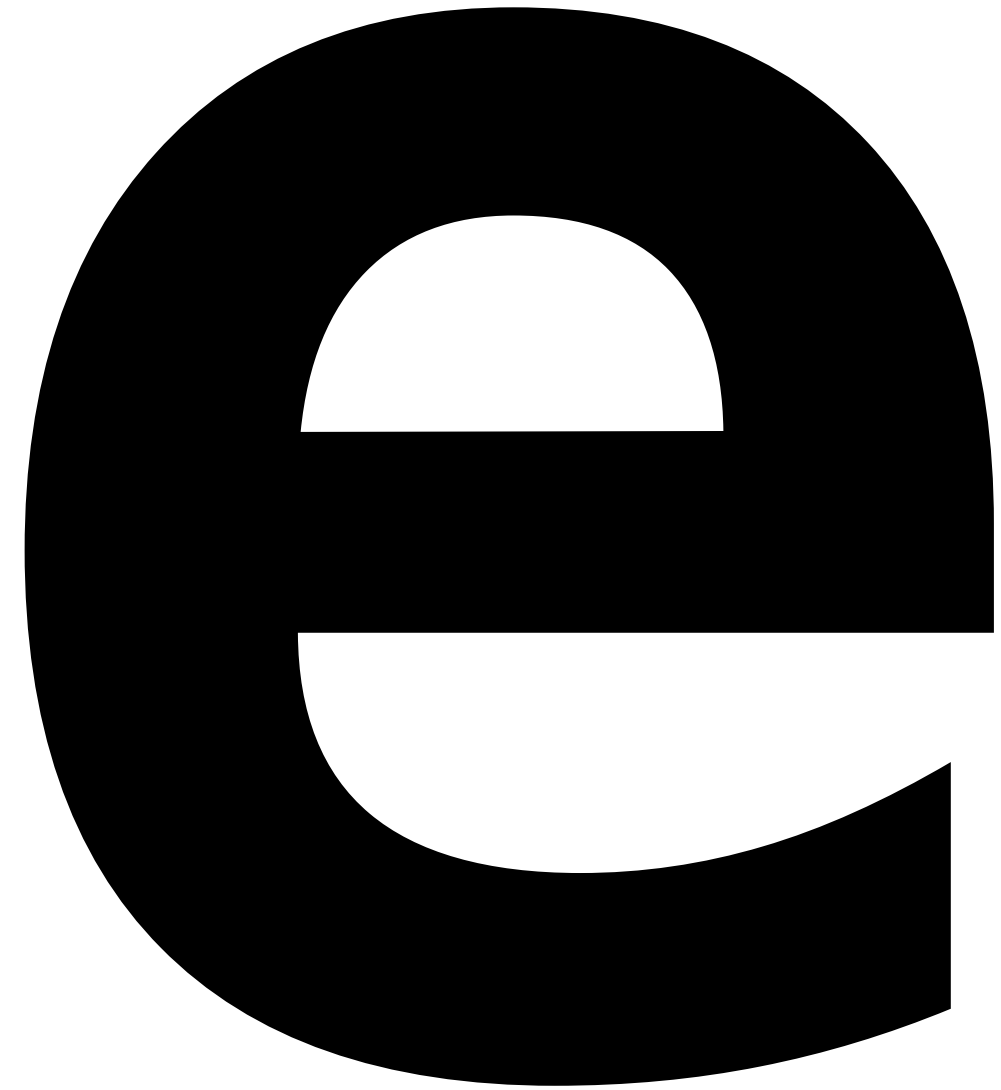


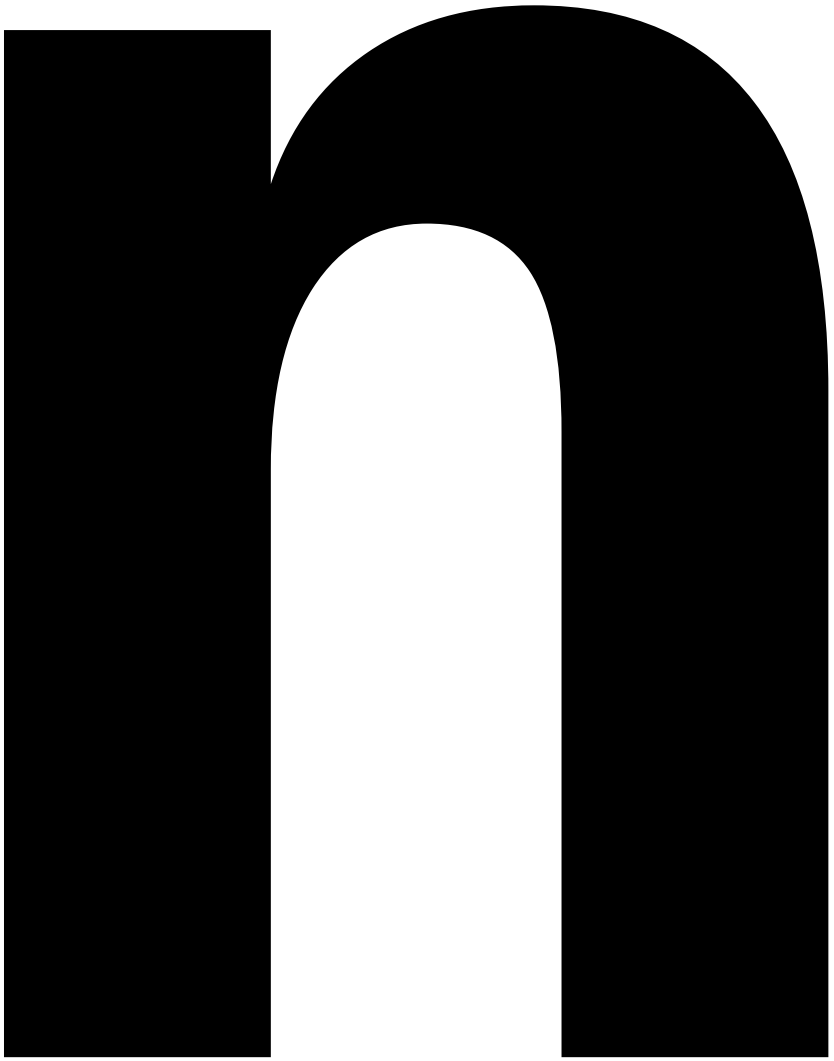




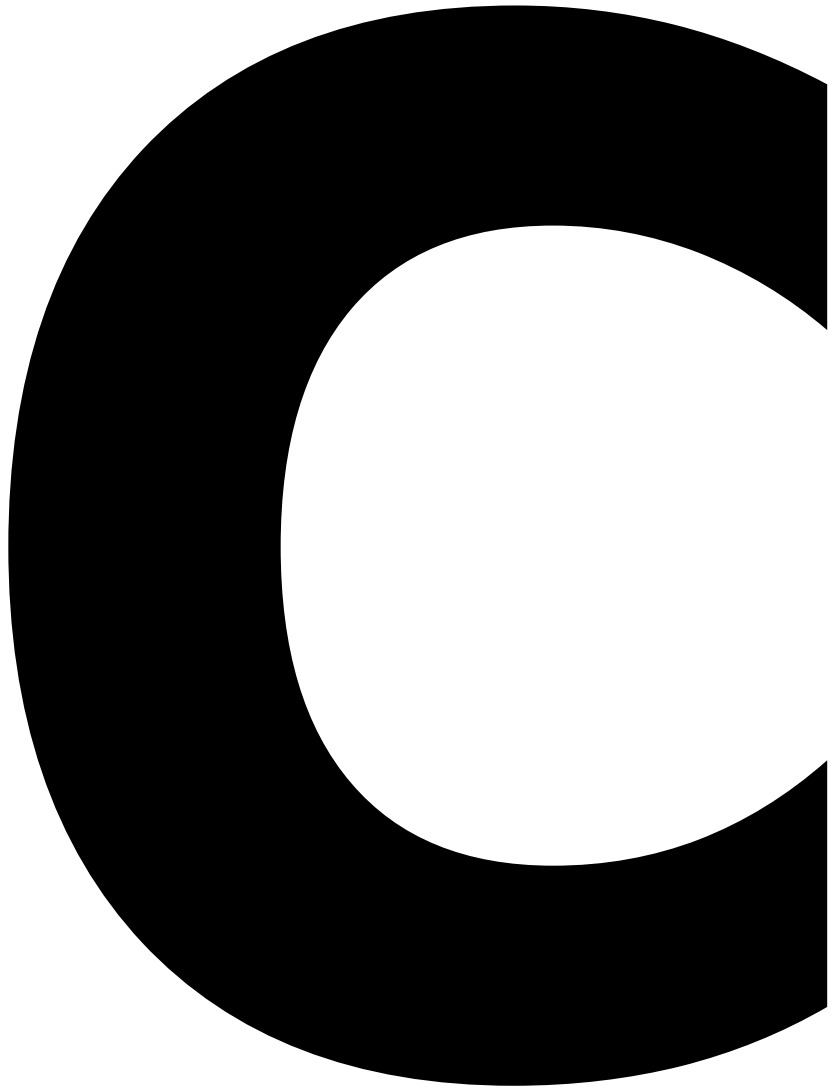


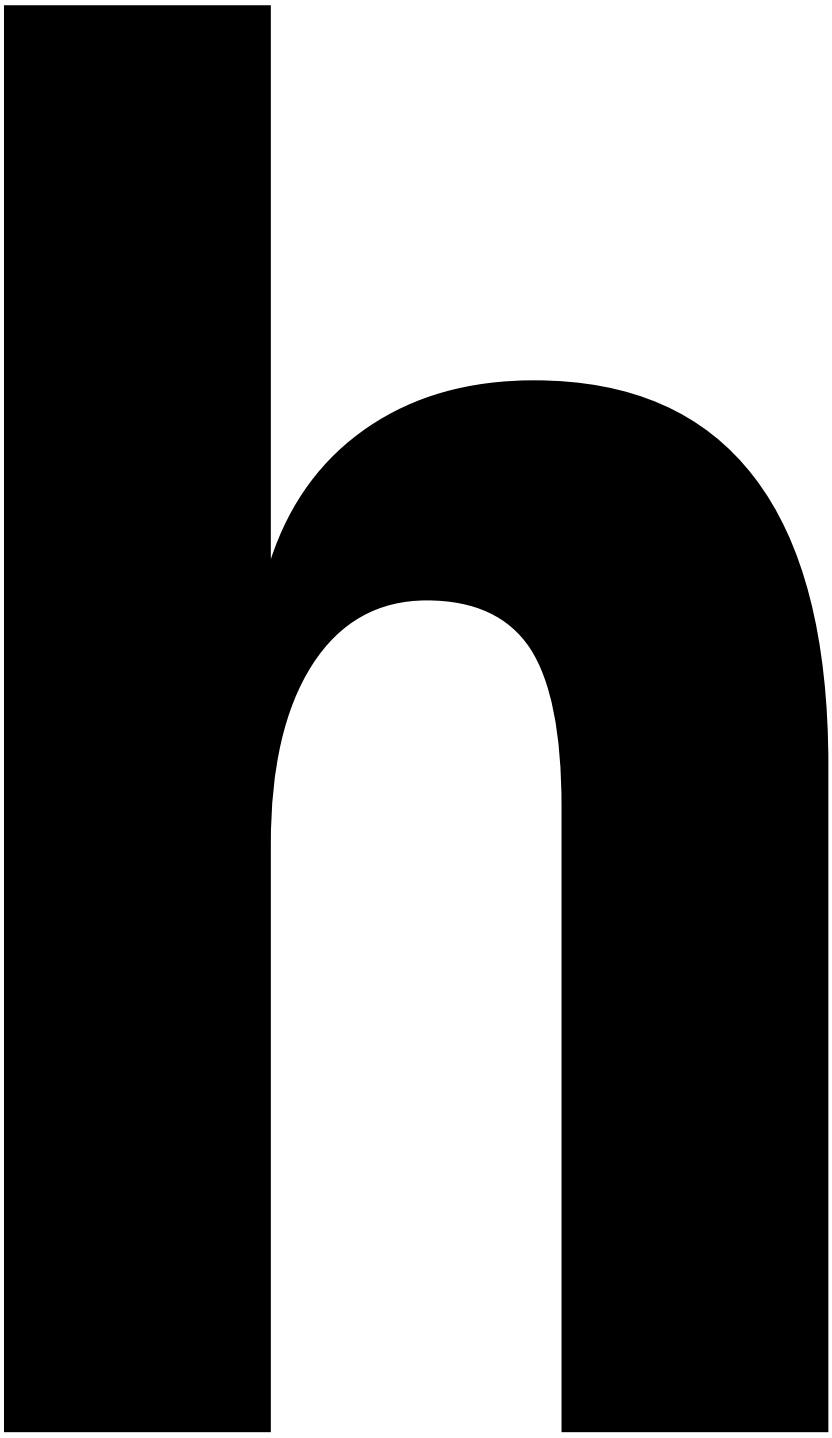


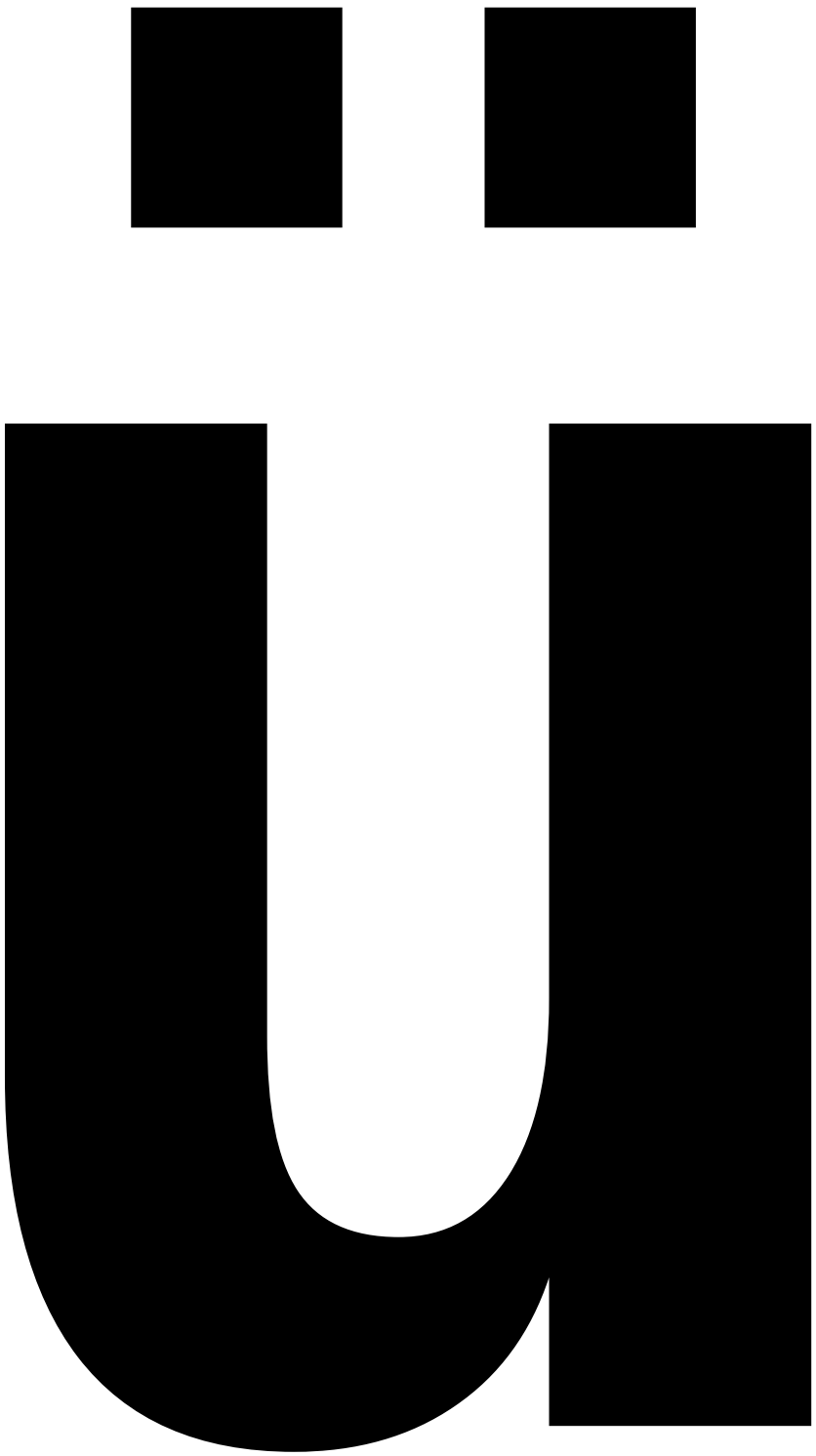


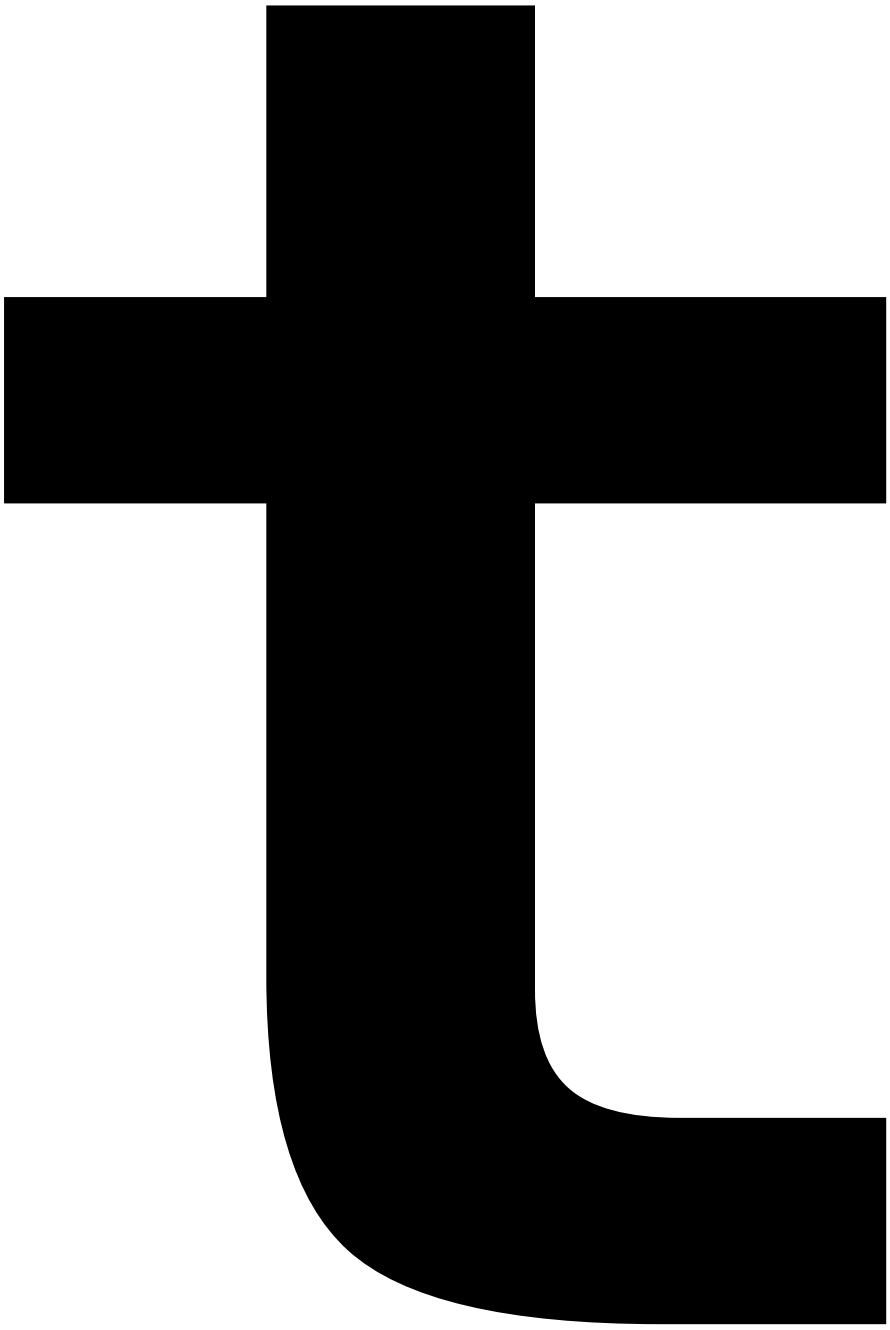


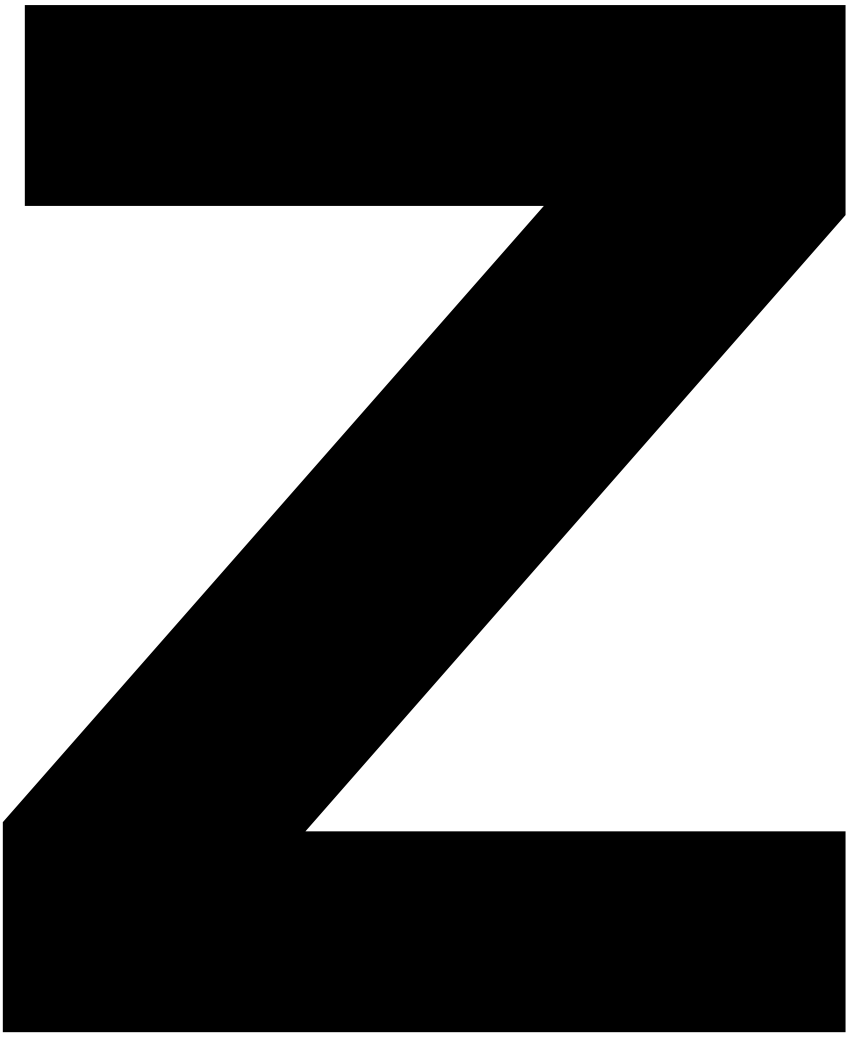
S

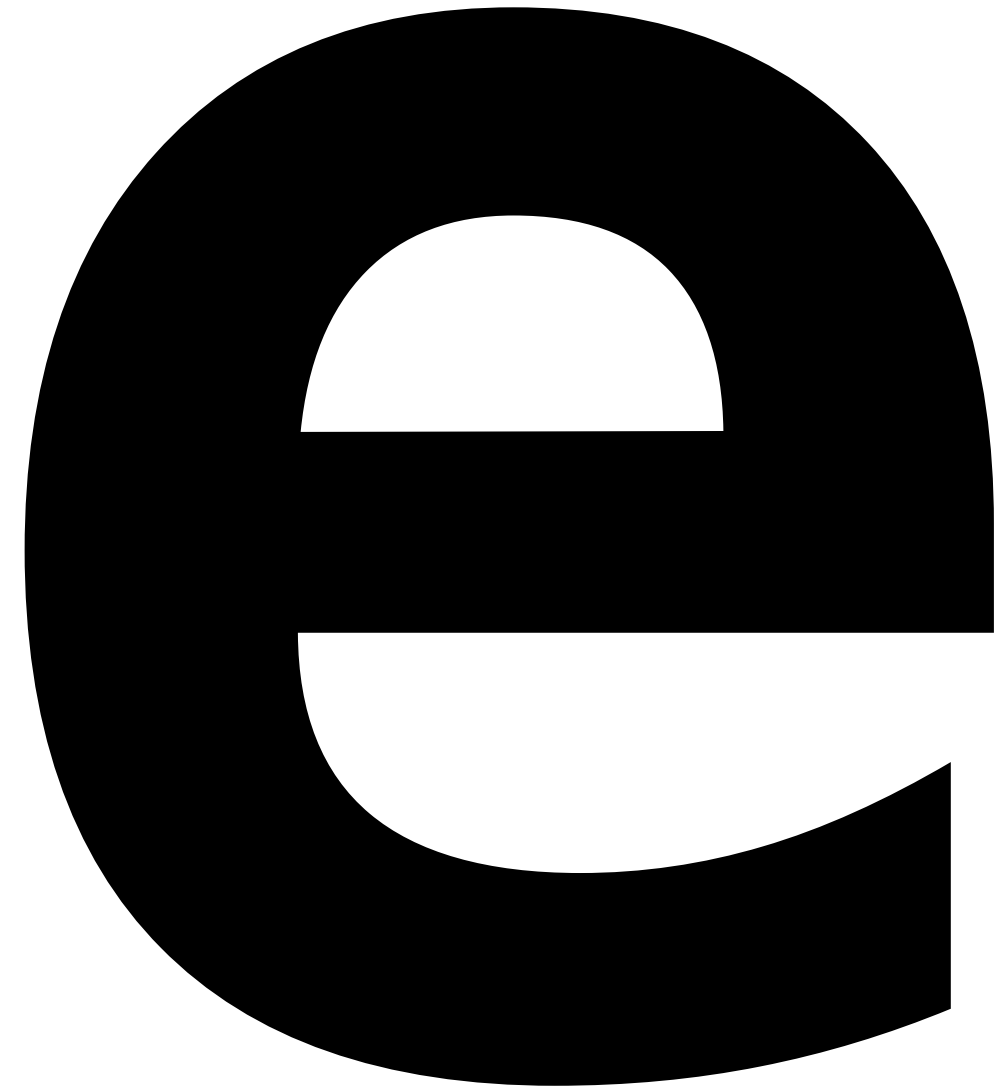


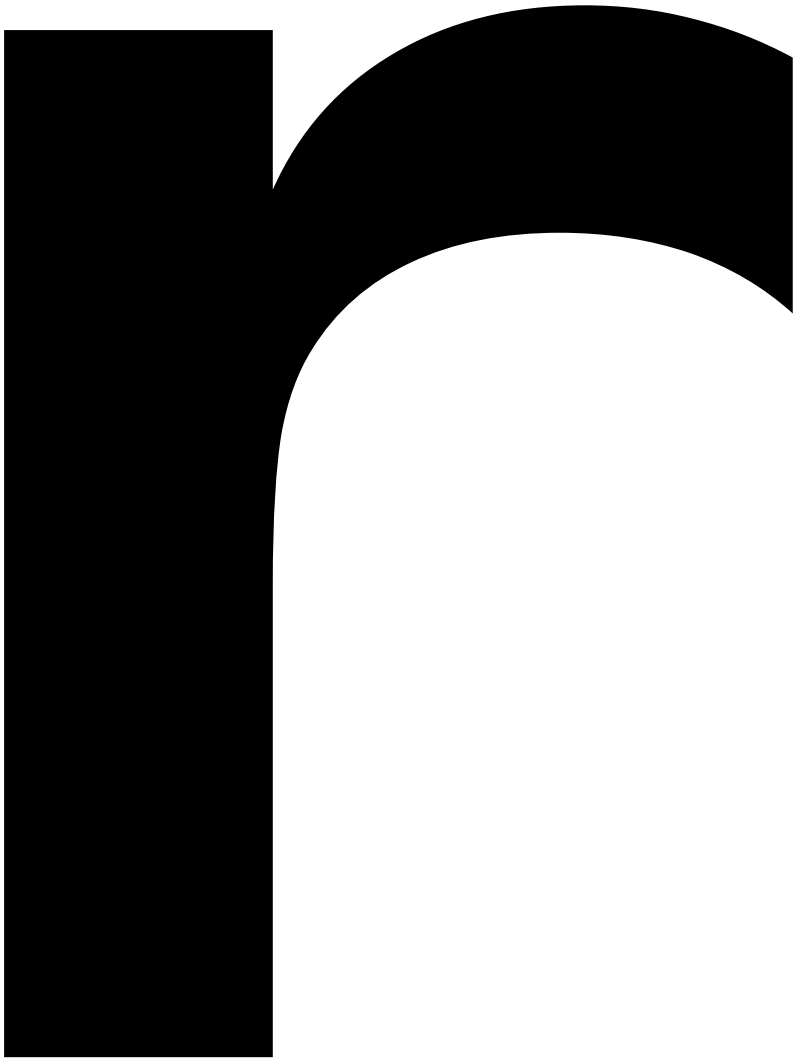


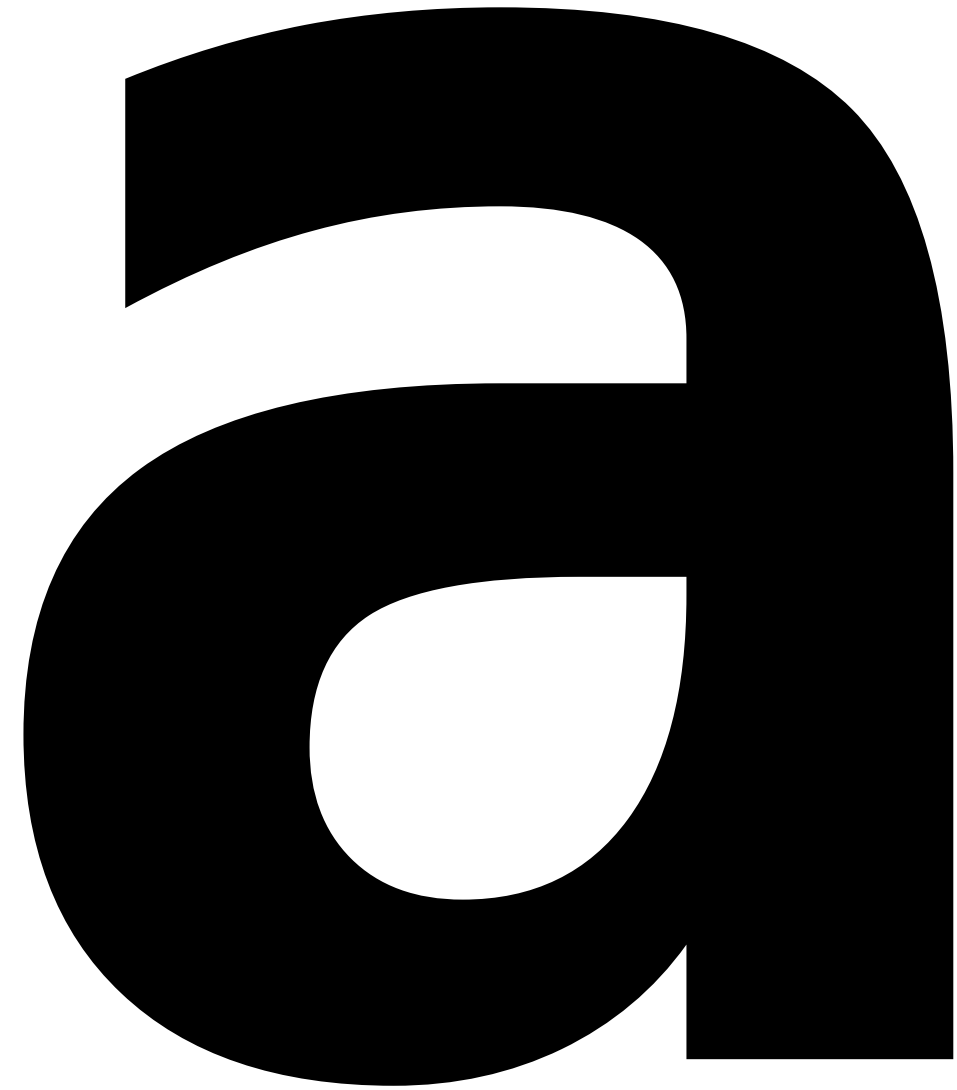


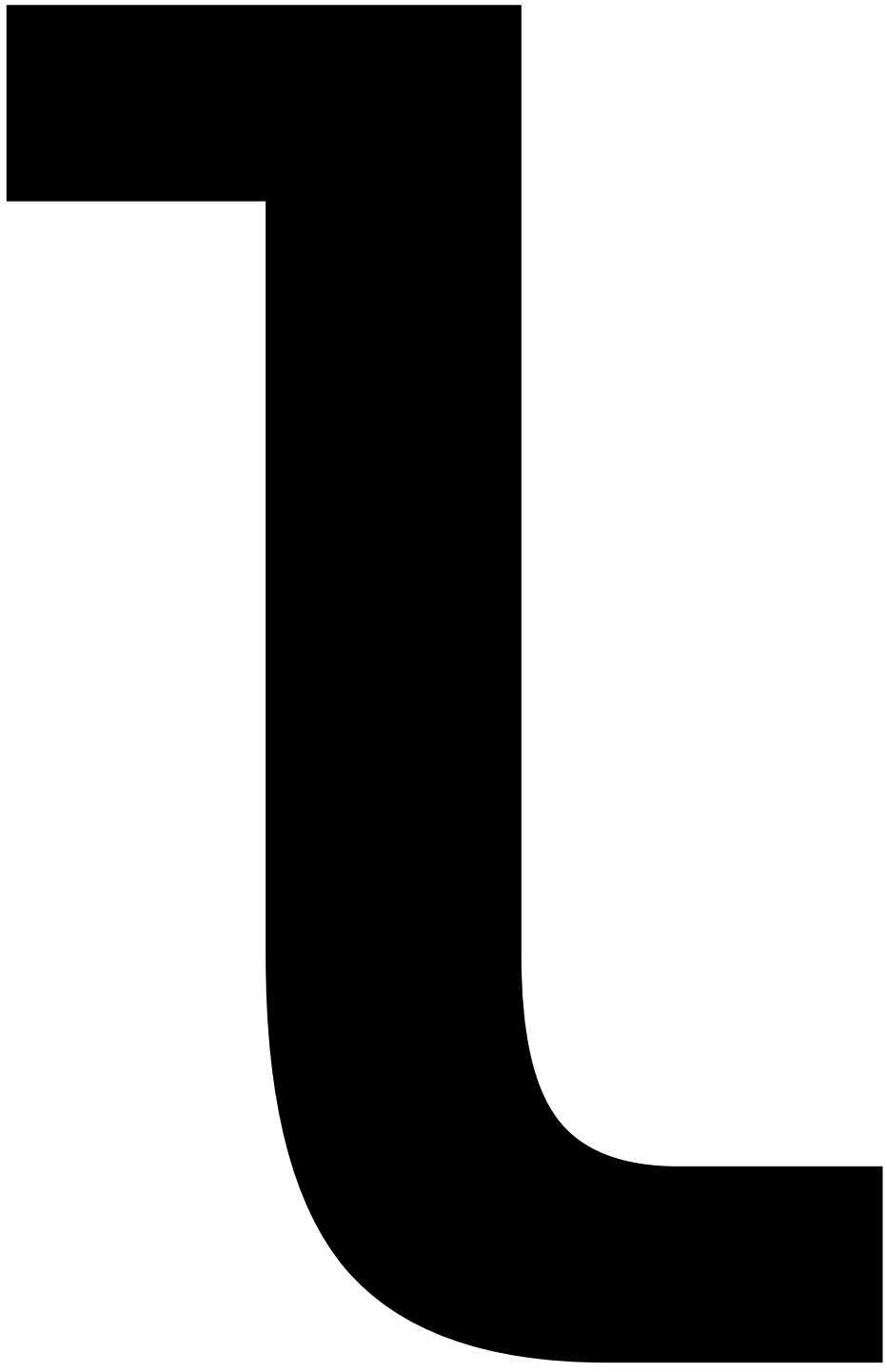




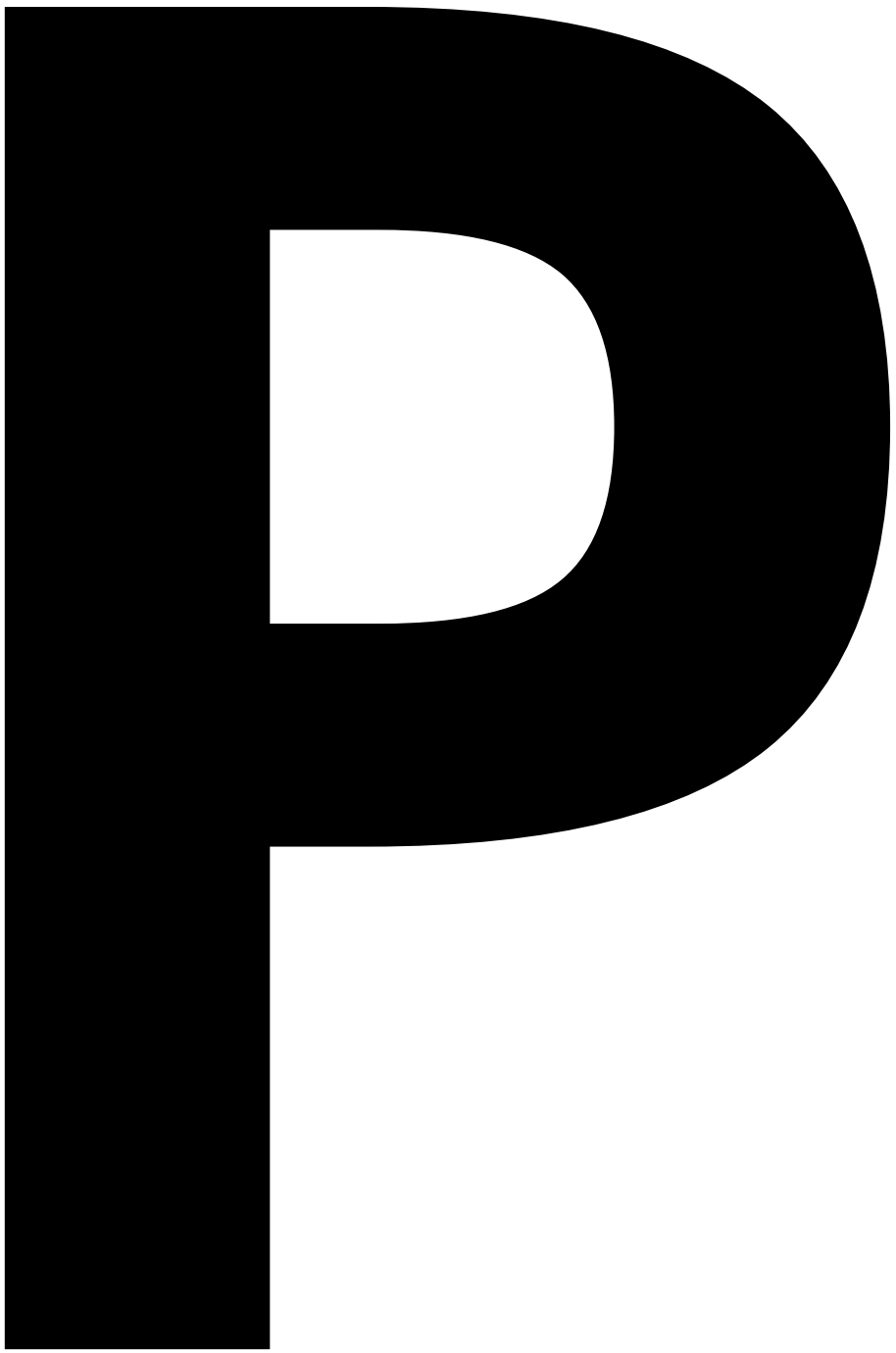


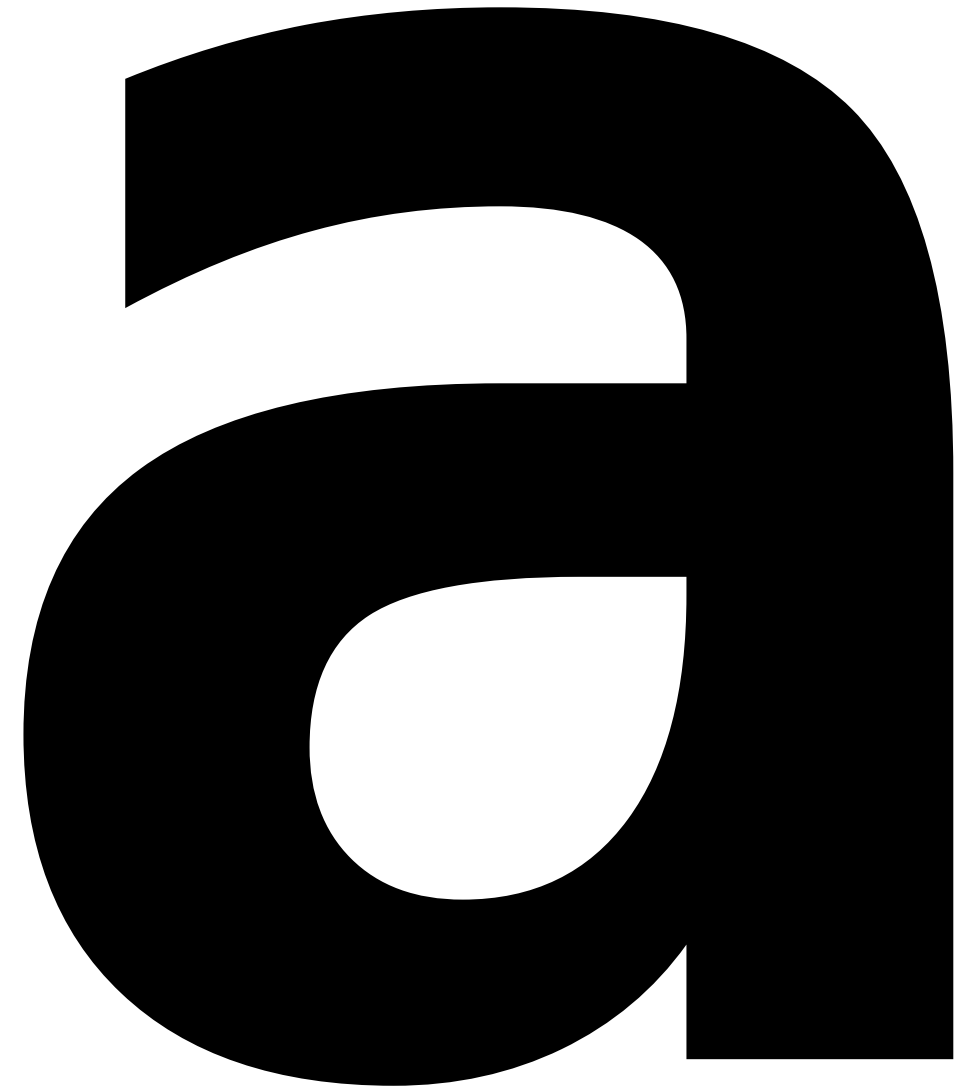


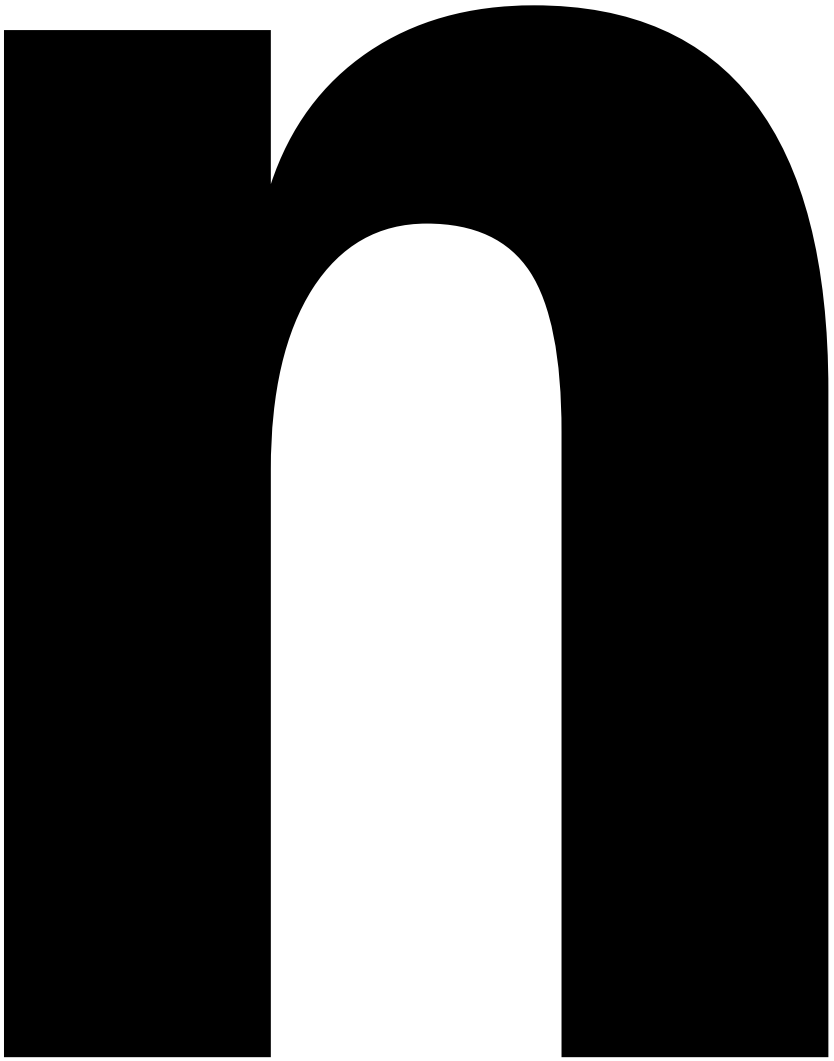


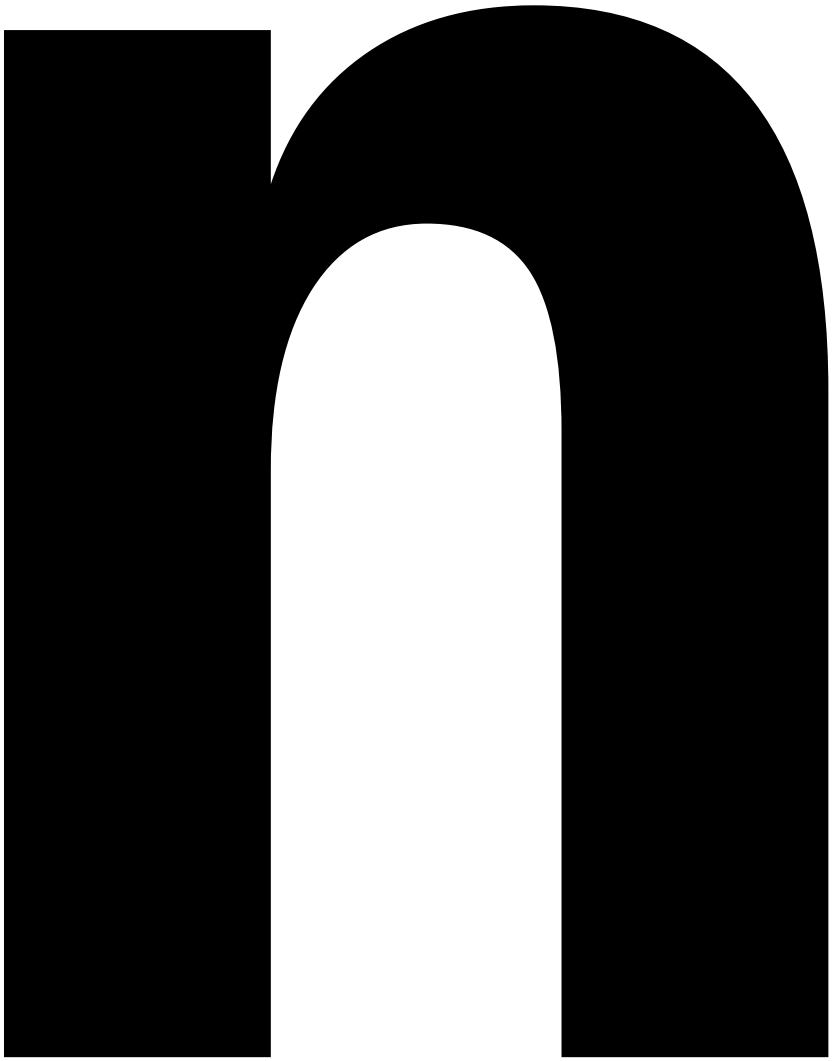


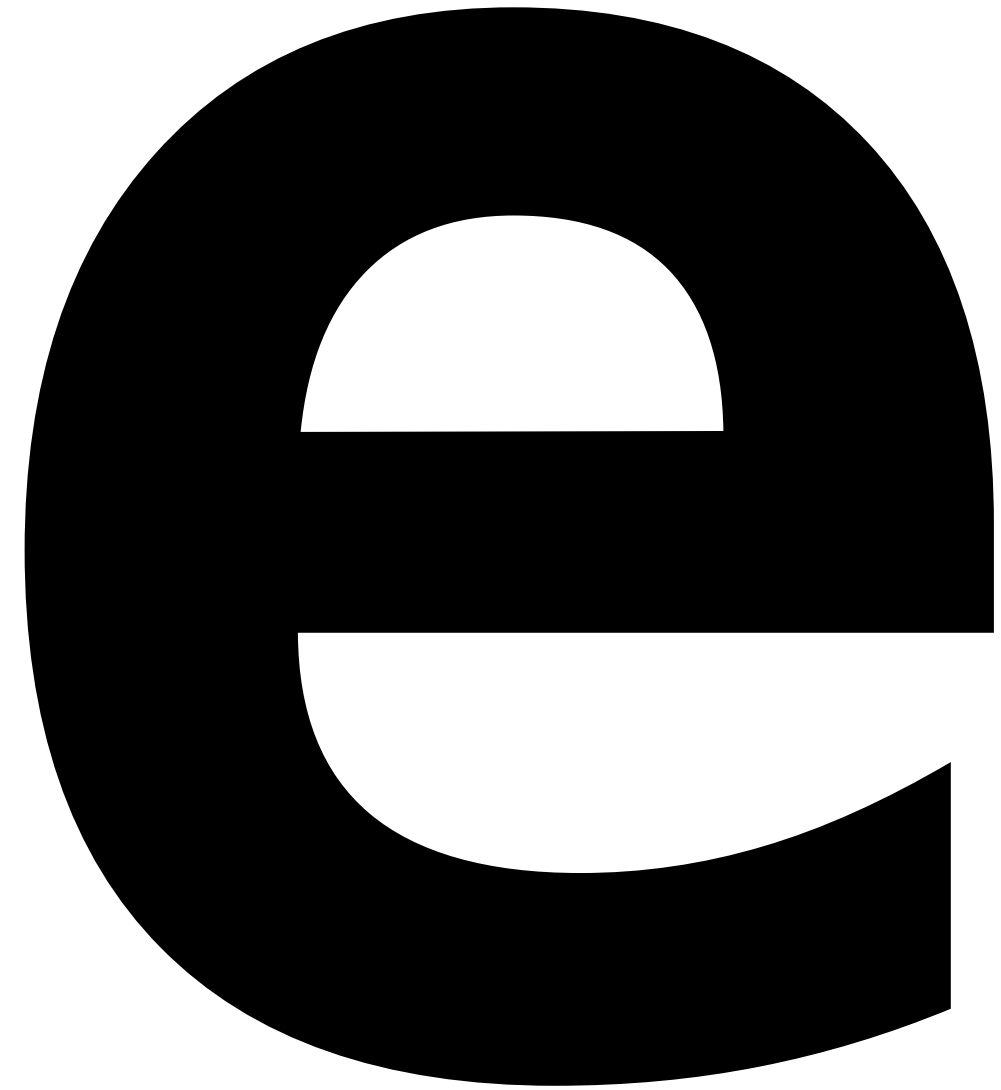
S

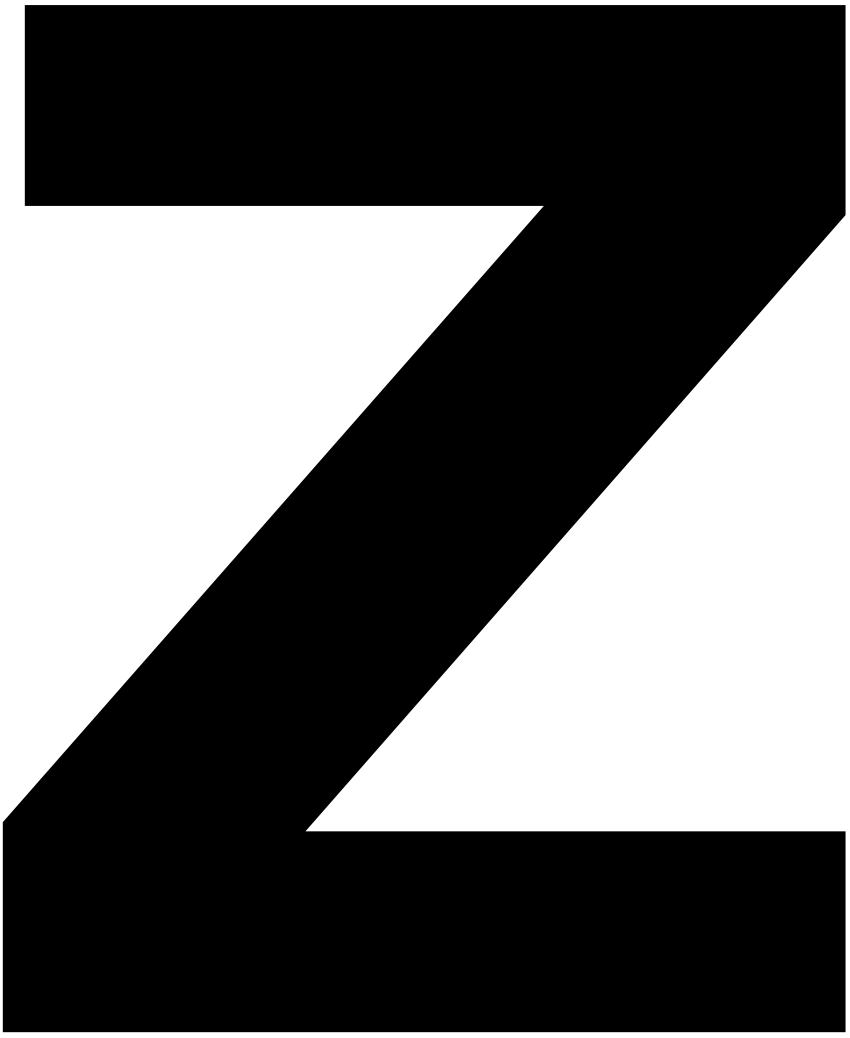






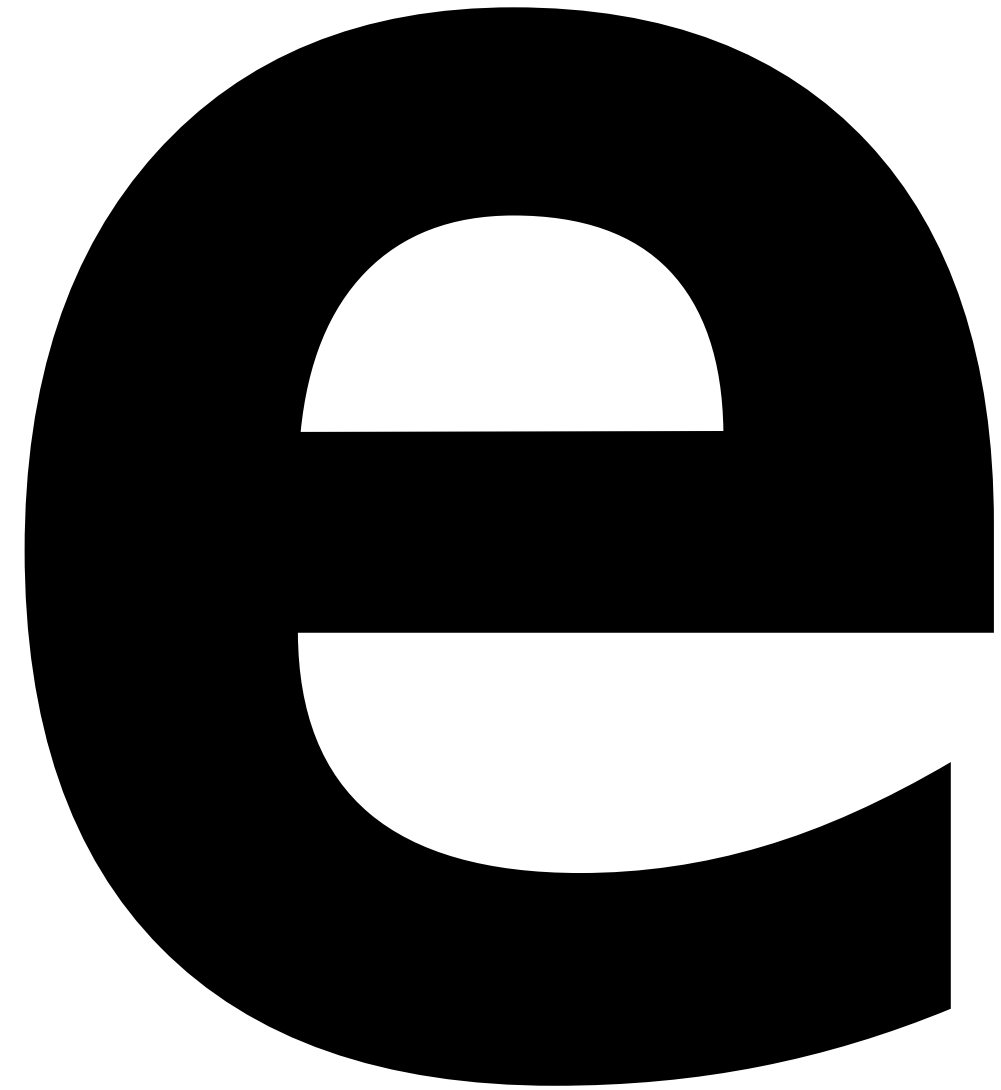


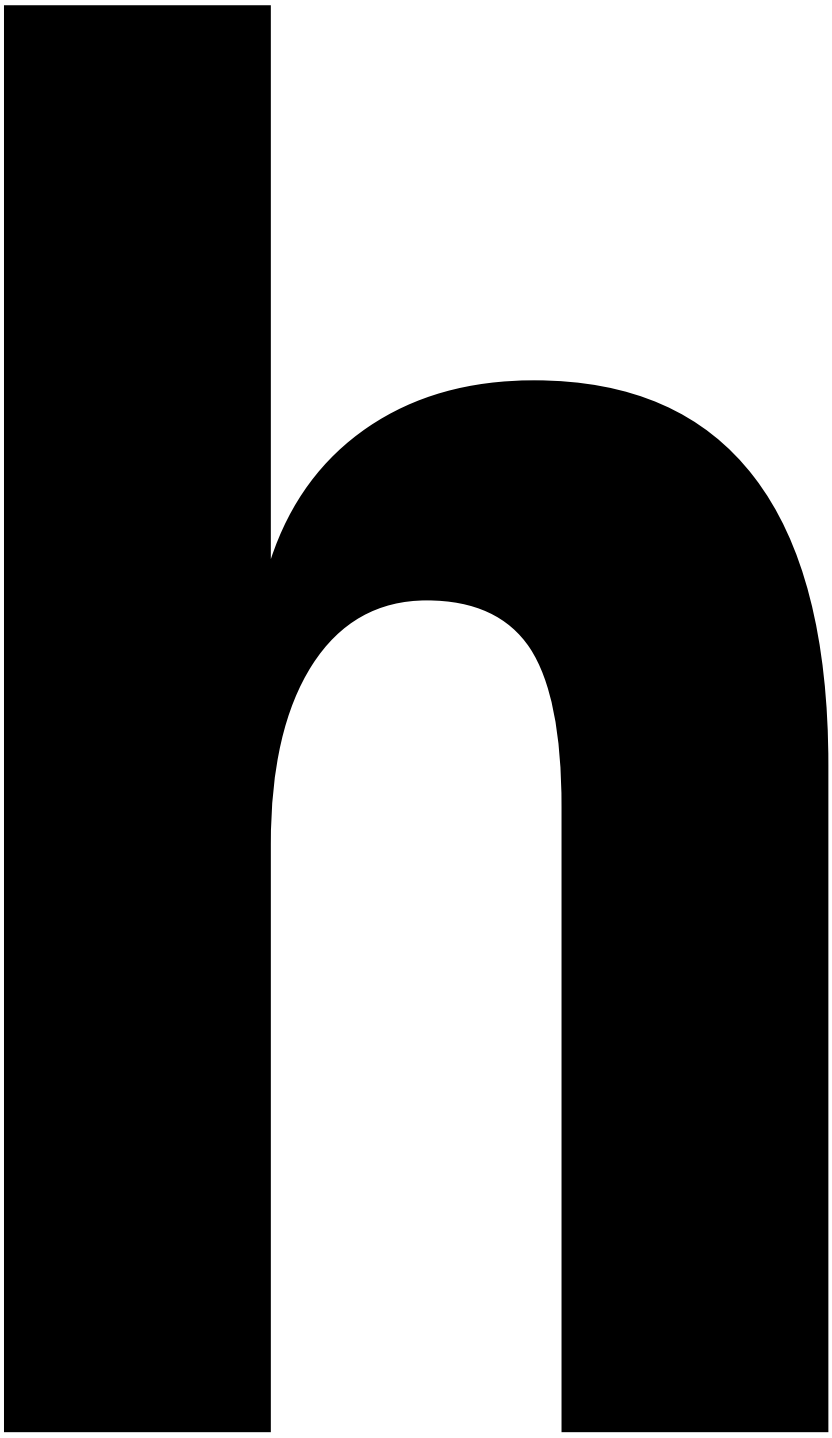


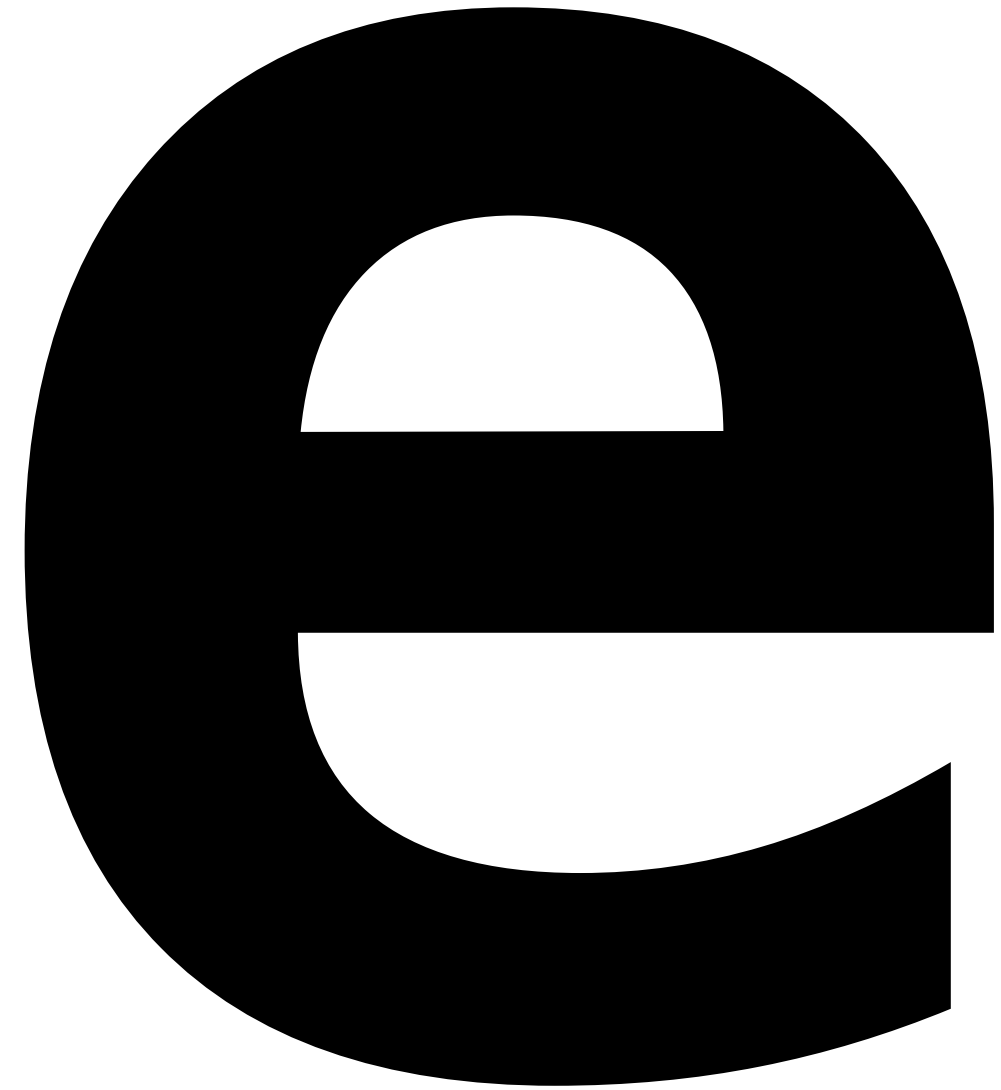


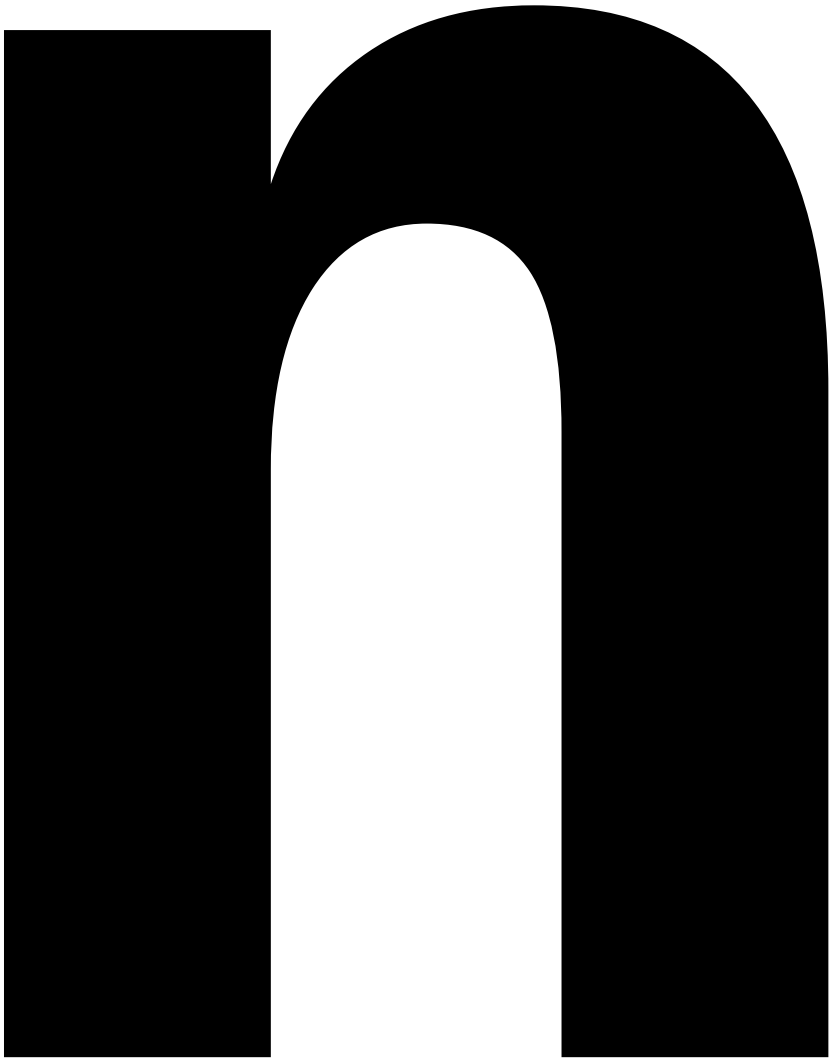
u

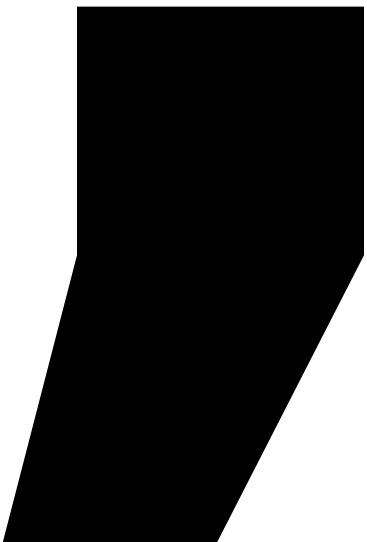
S

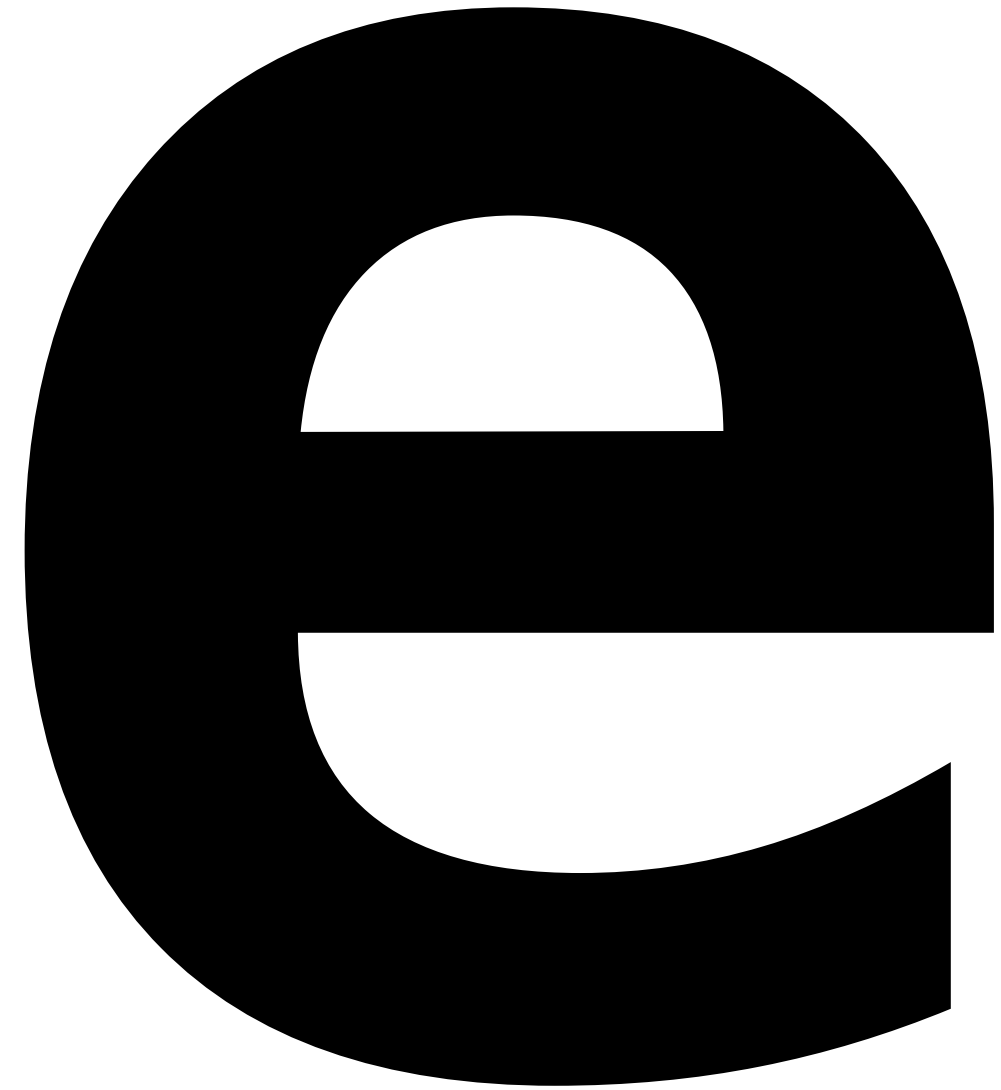


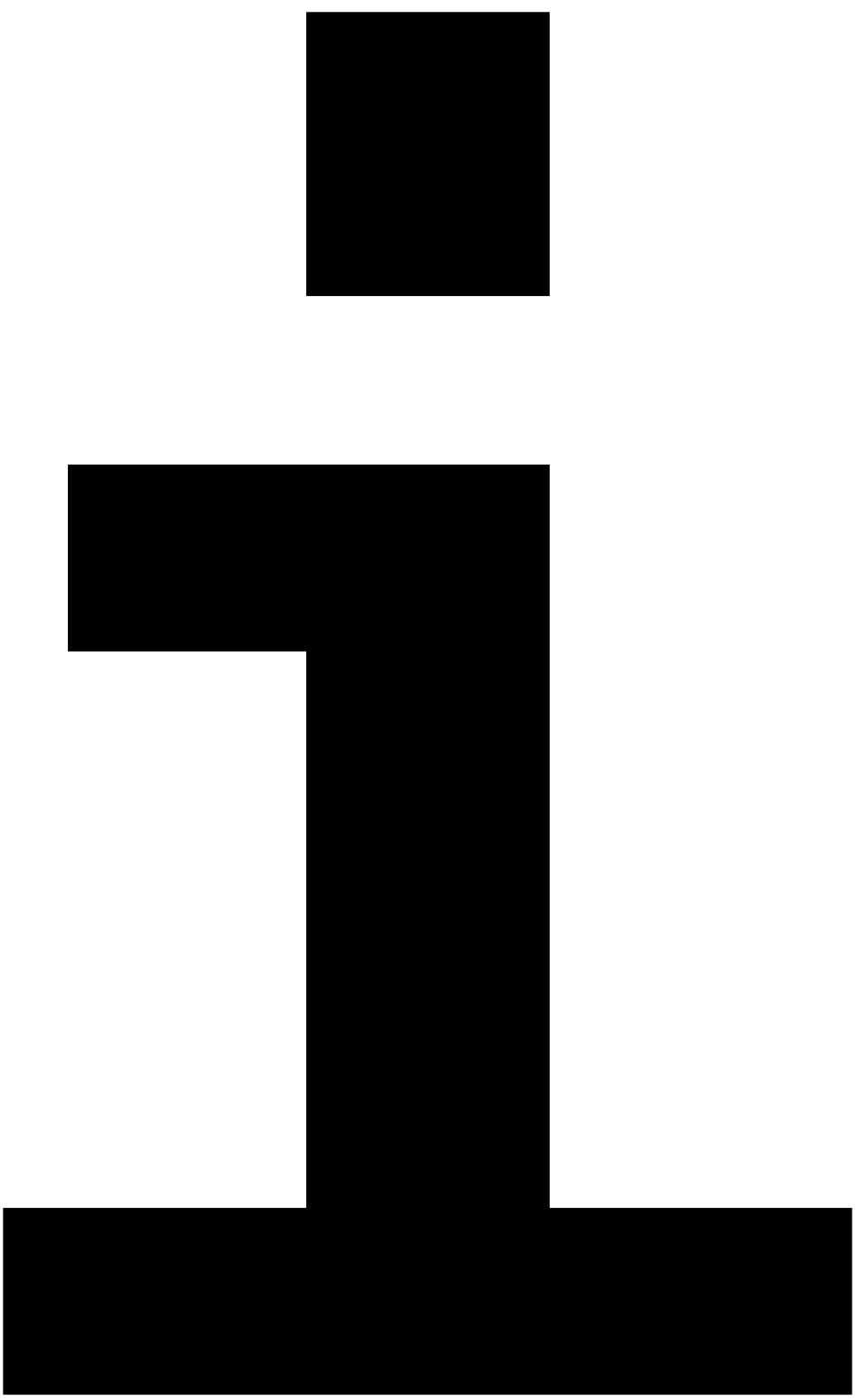


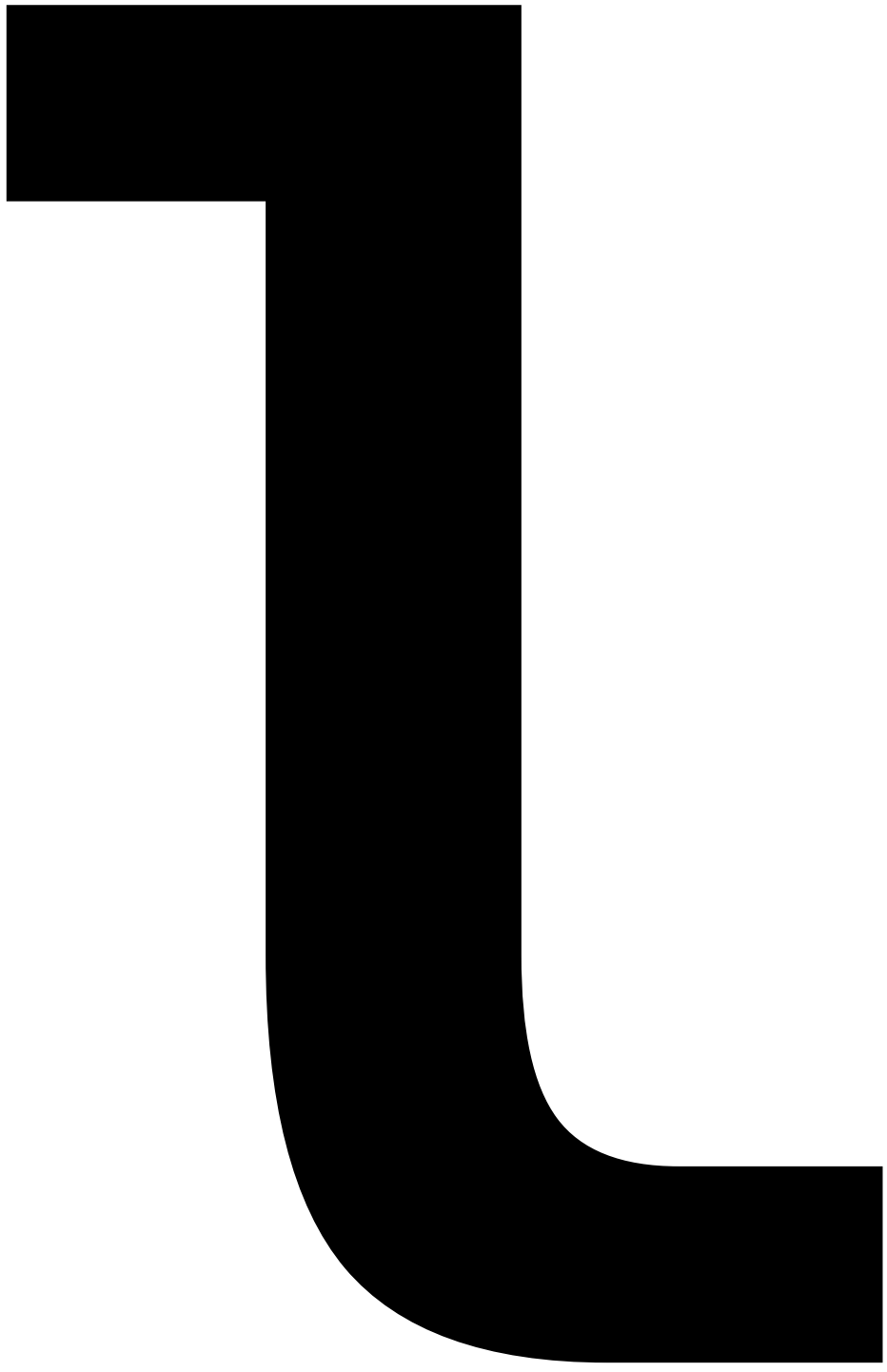


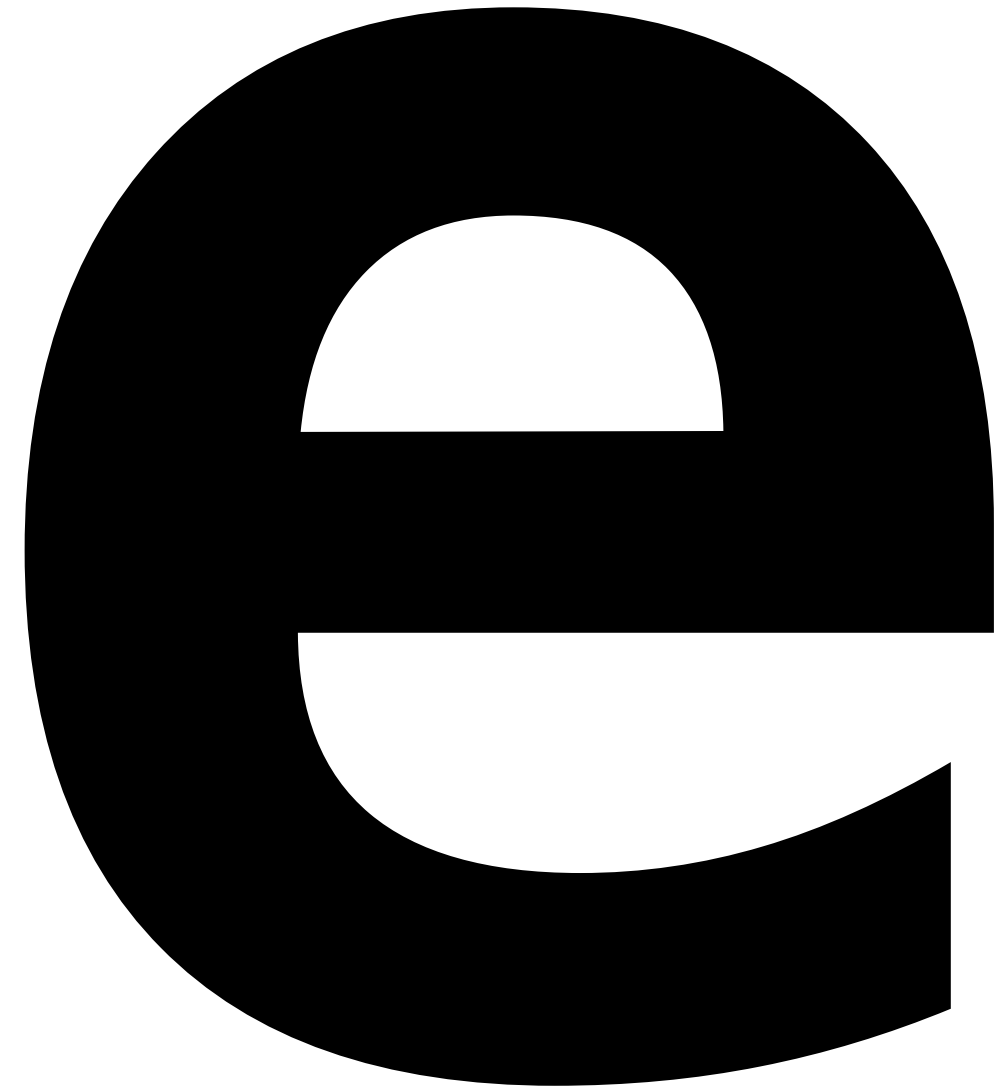




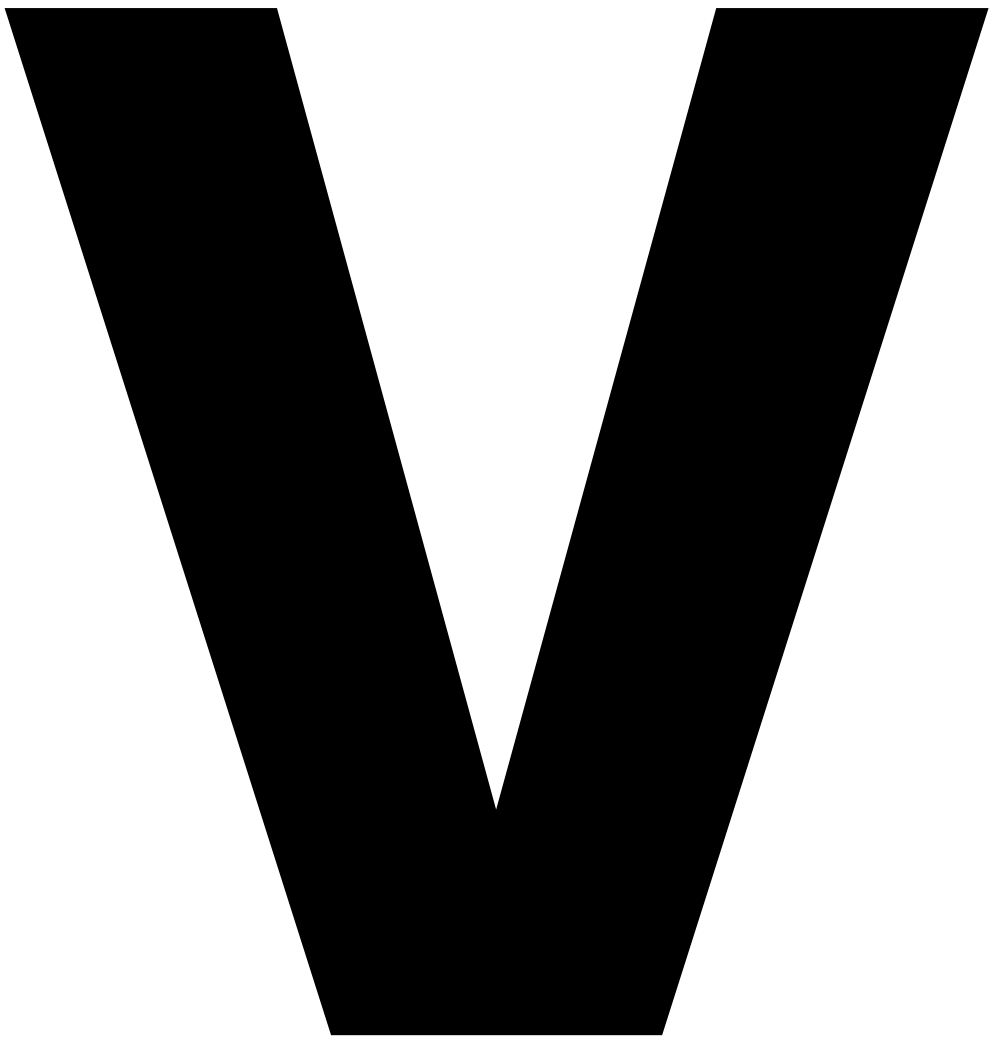


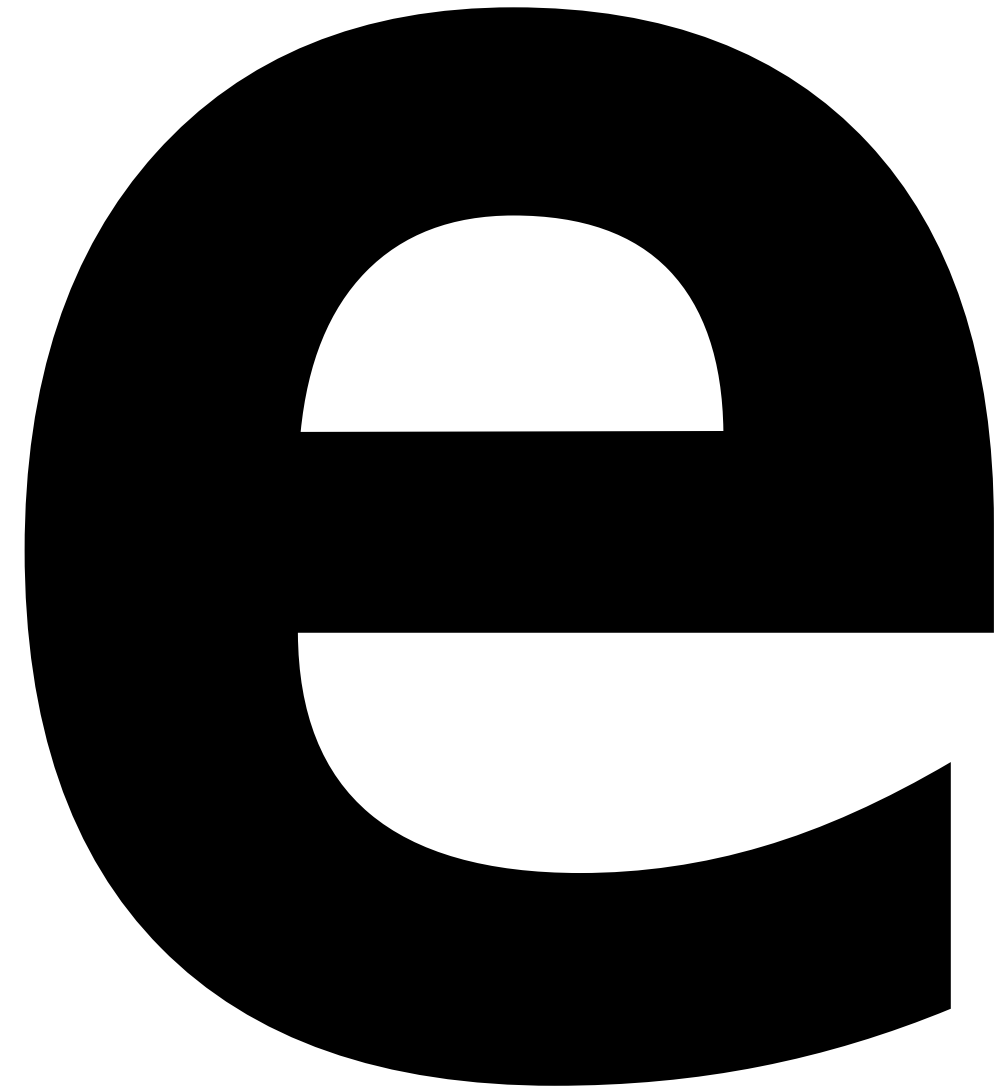


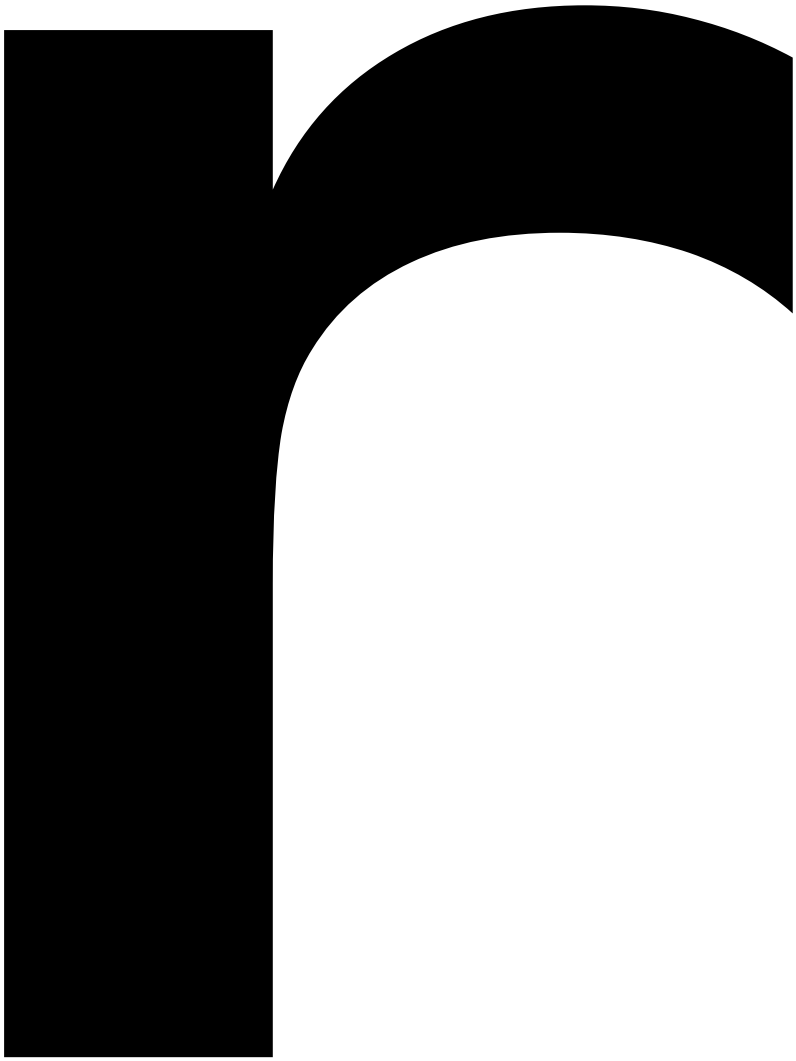


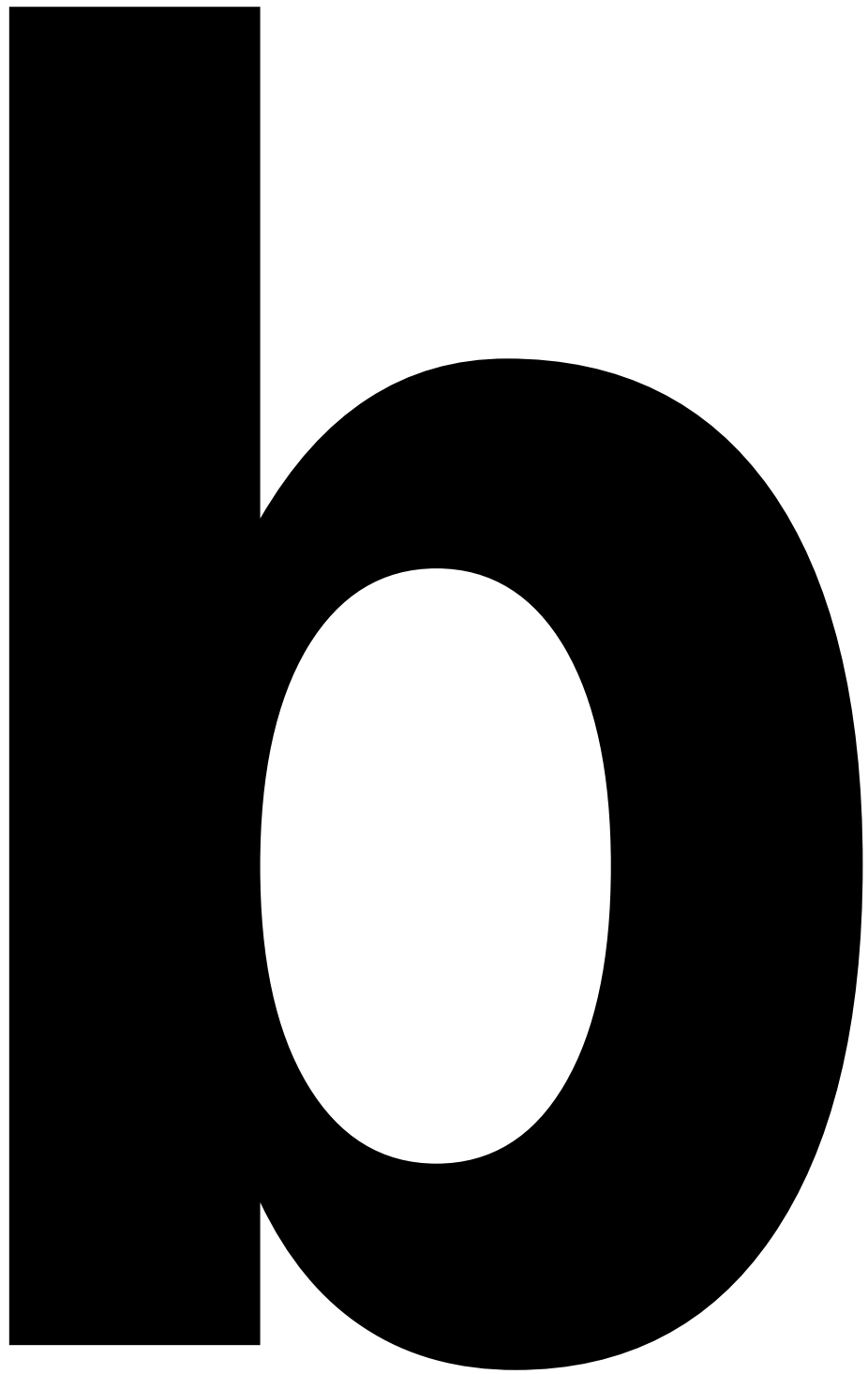


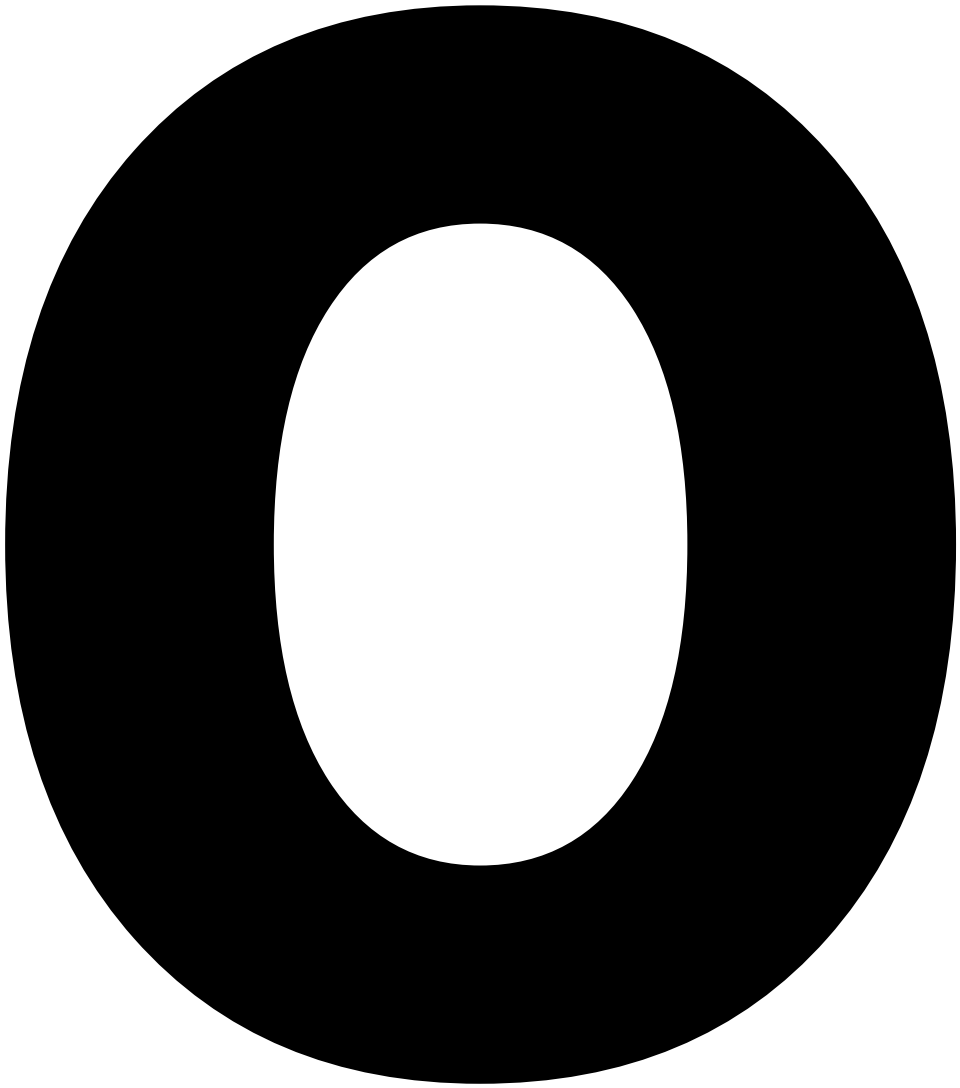
S

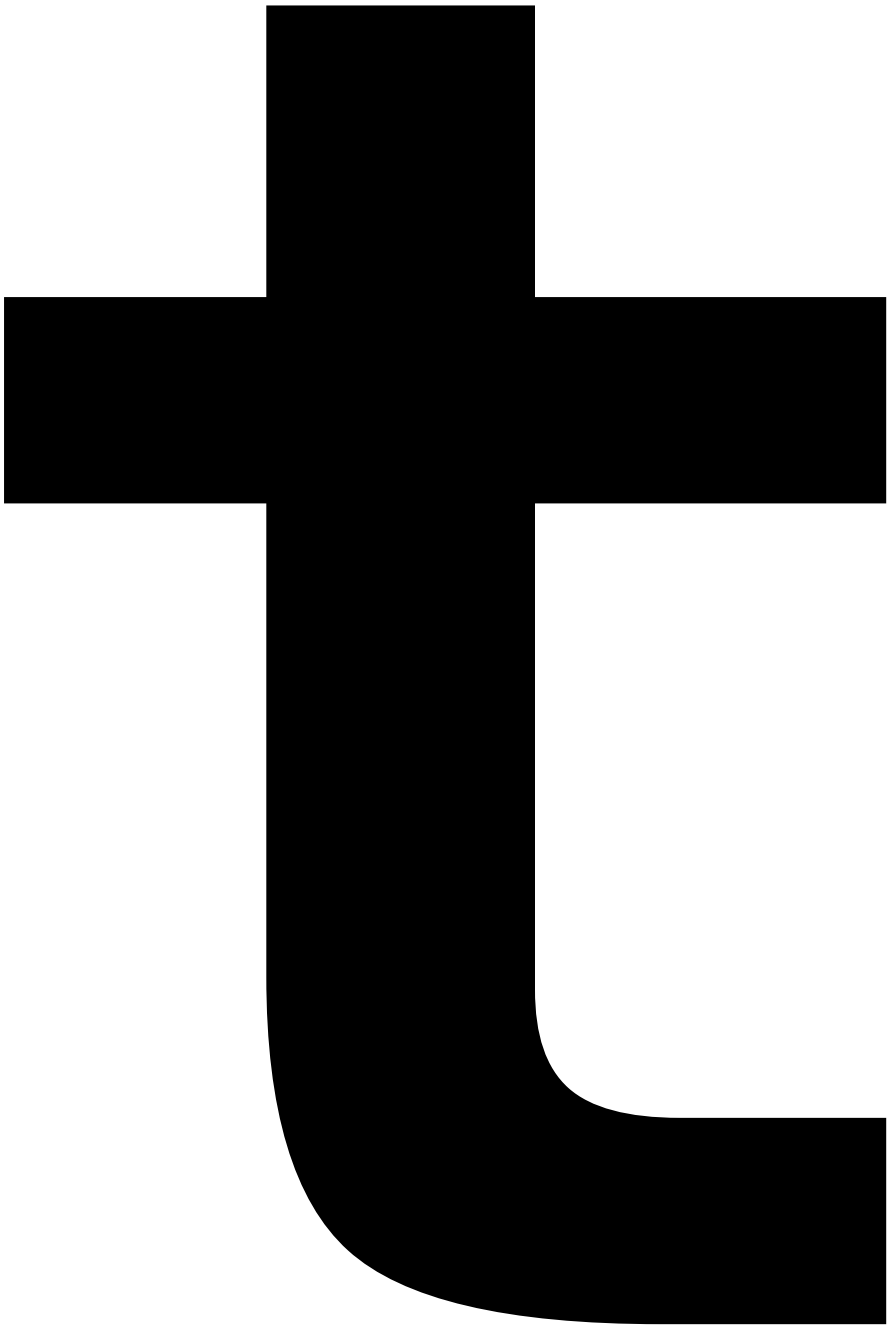


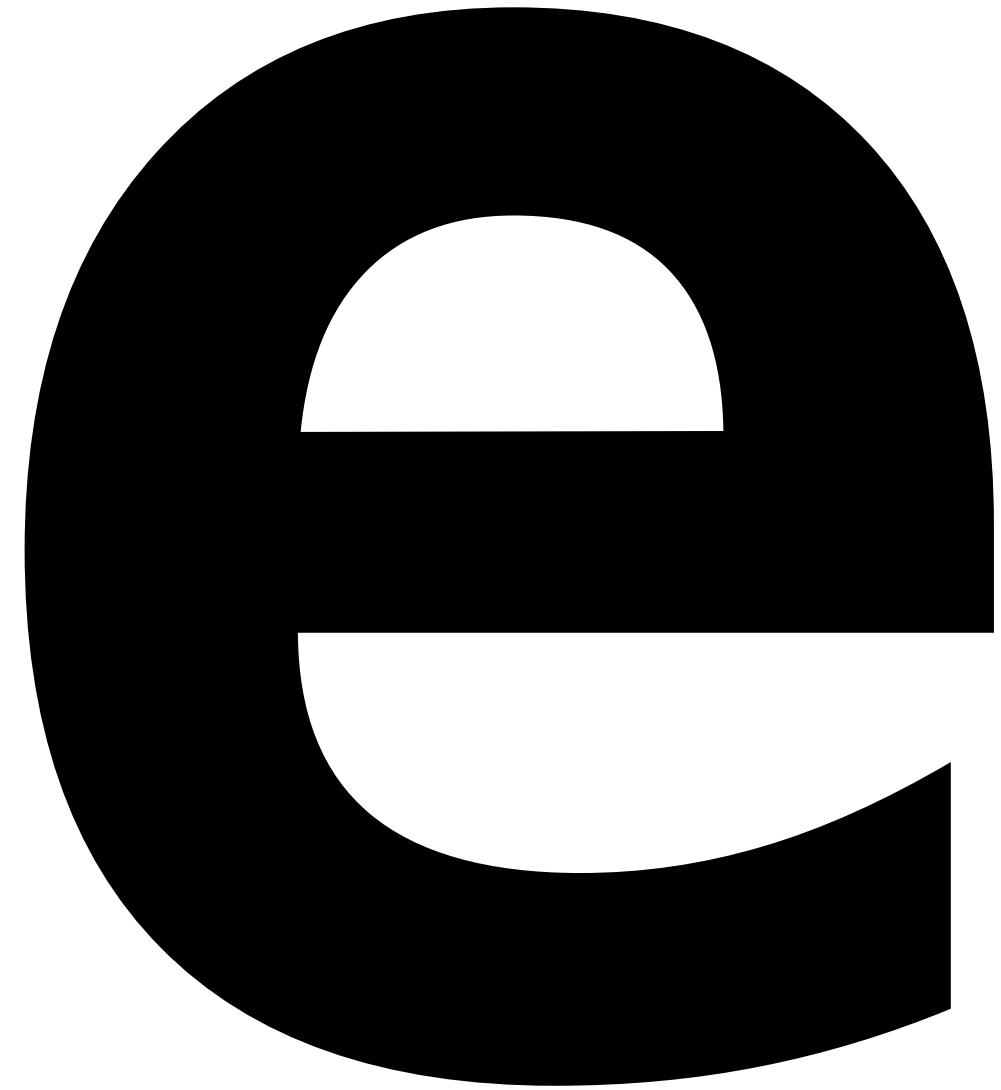


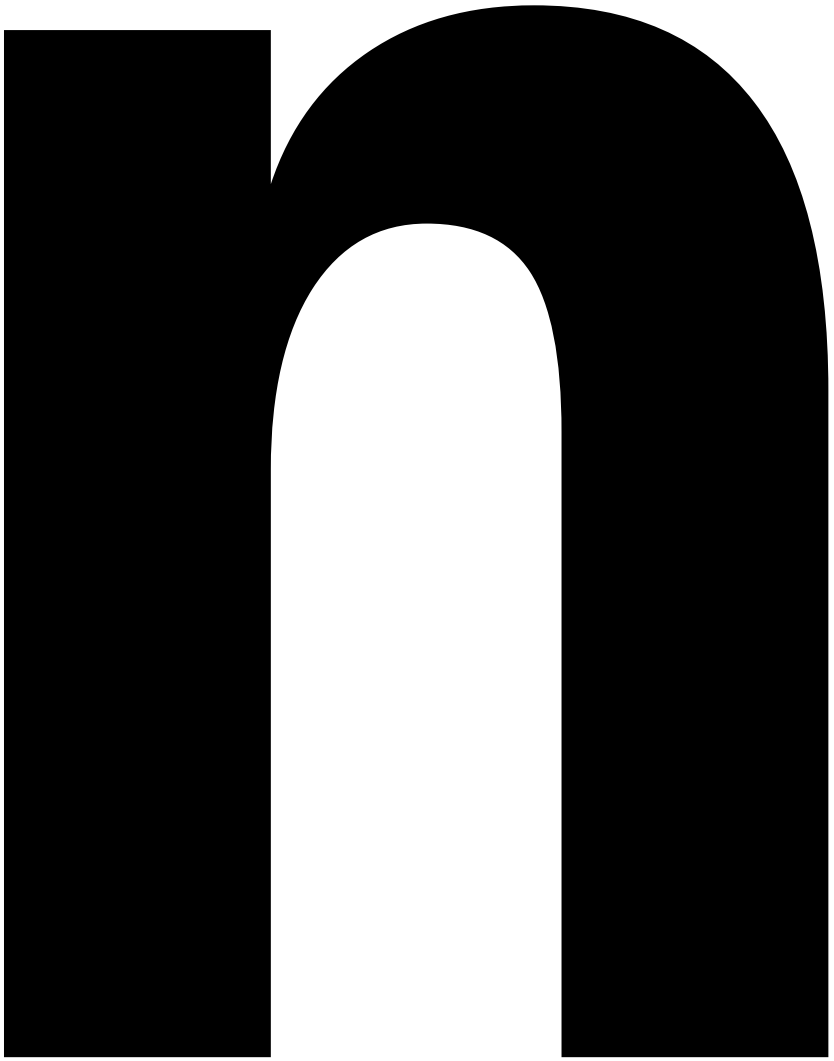


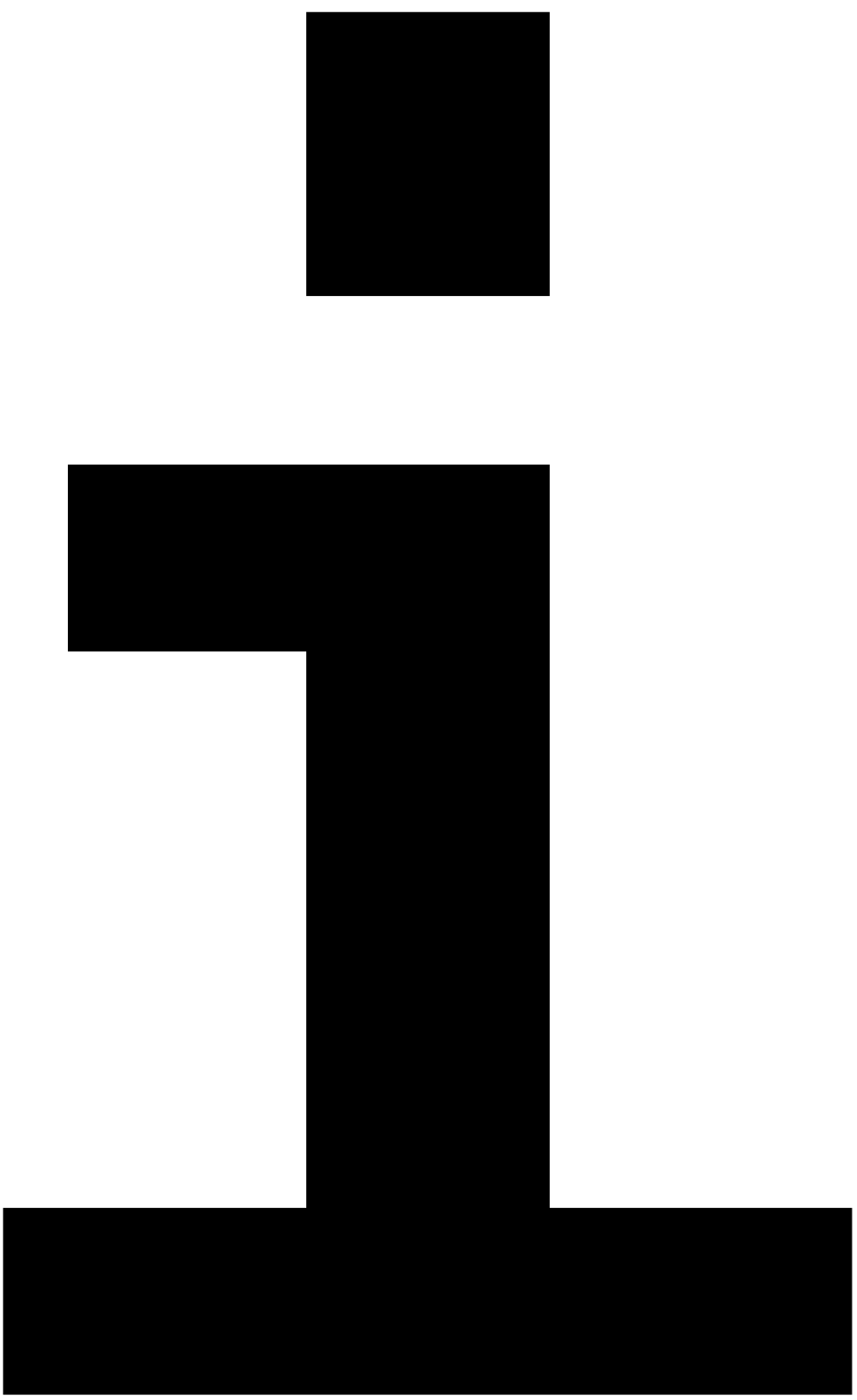




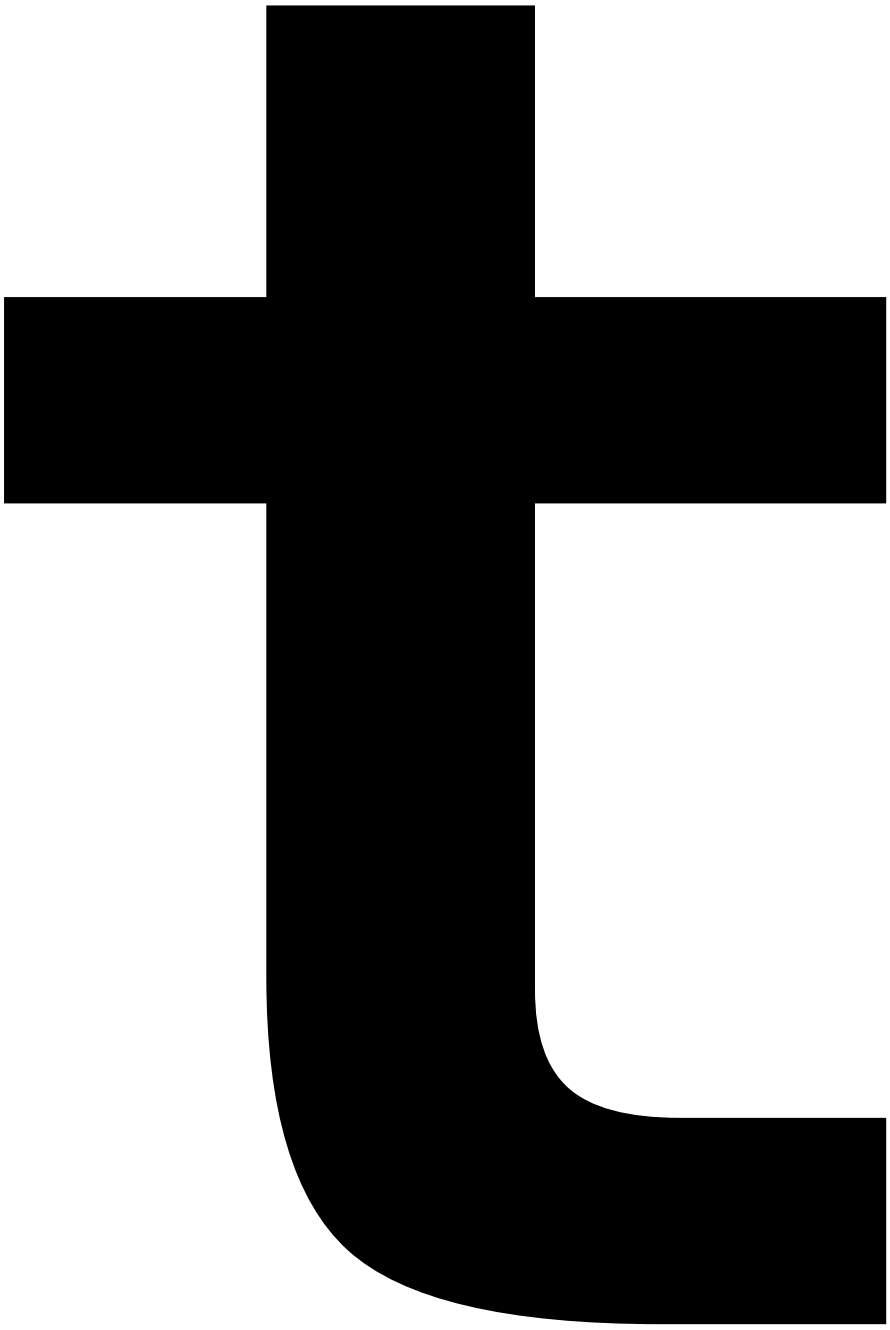


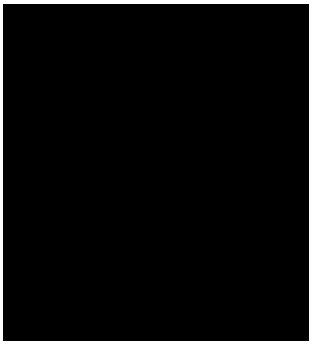


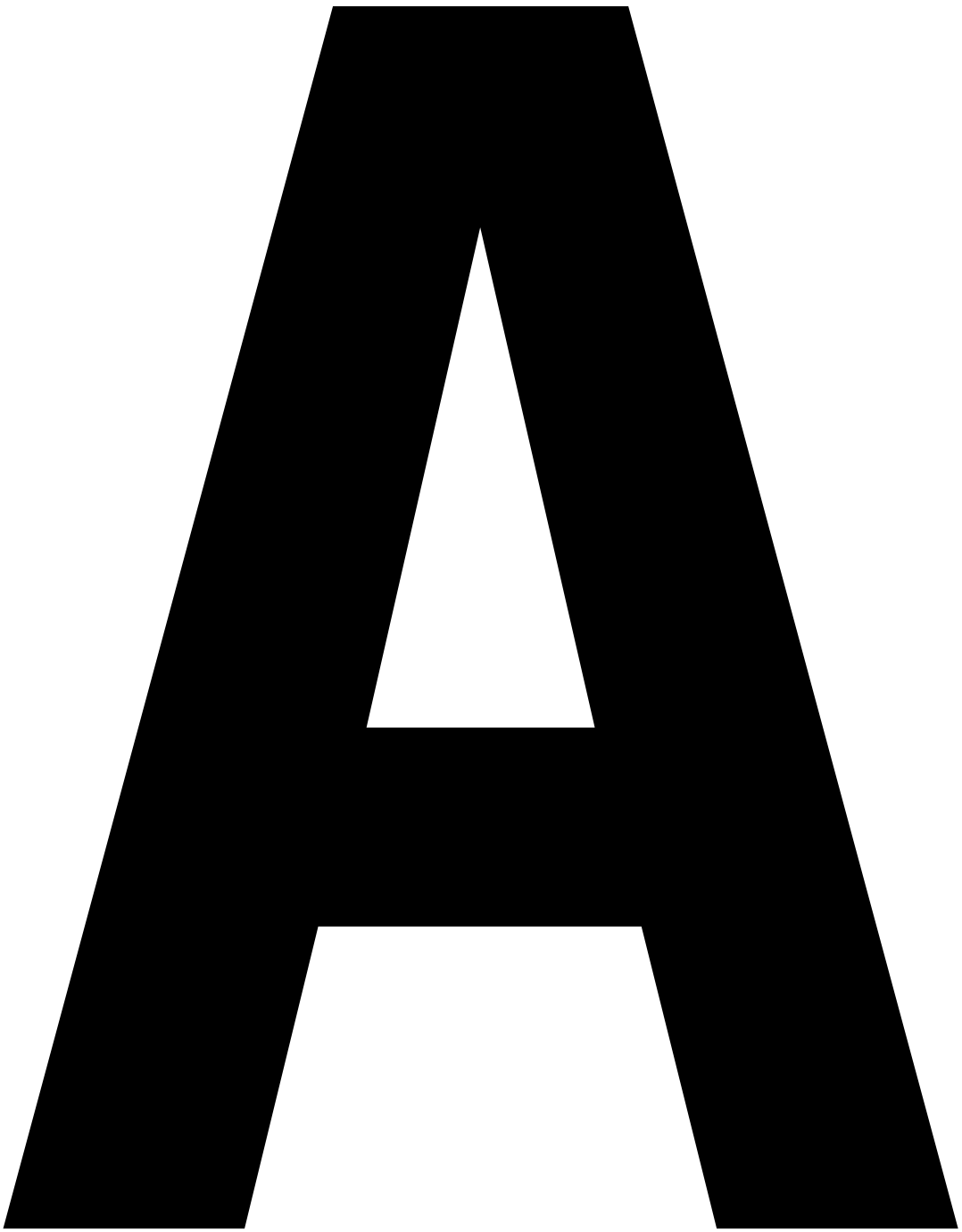


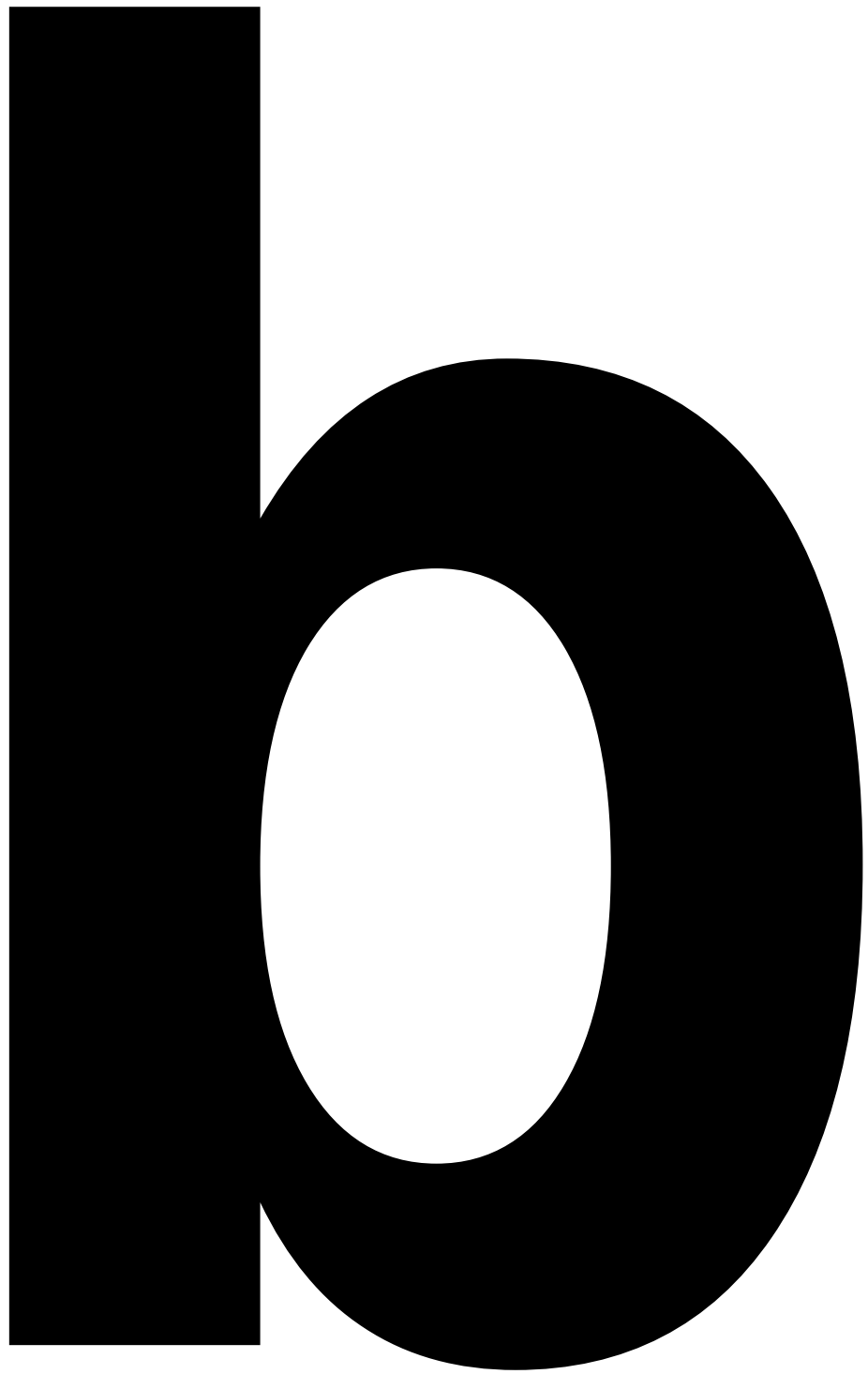


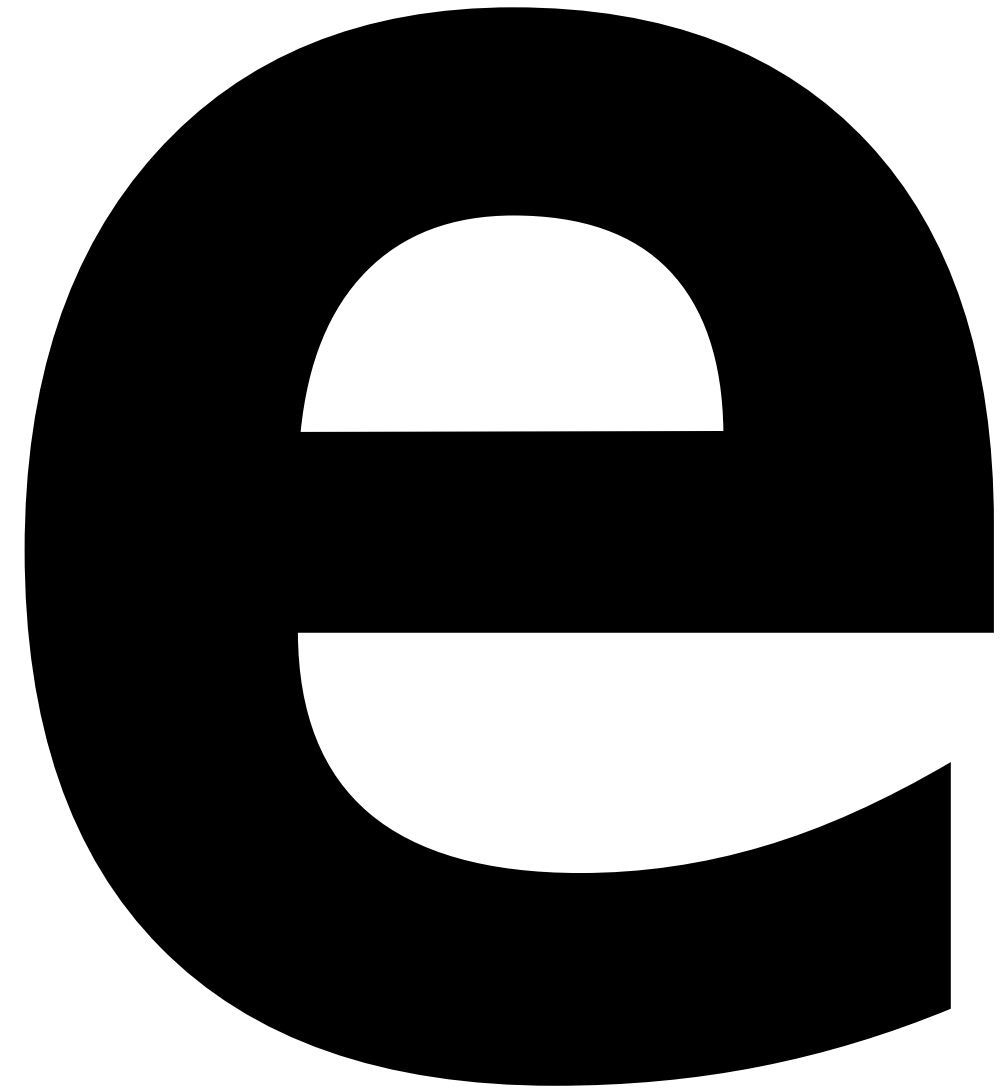
S

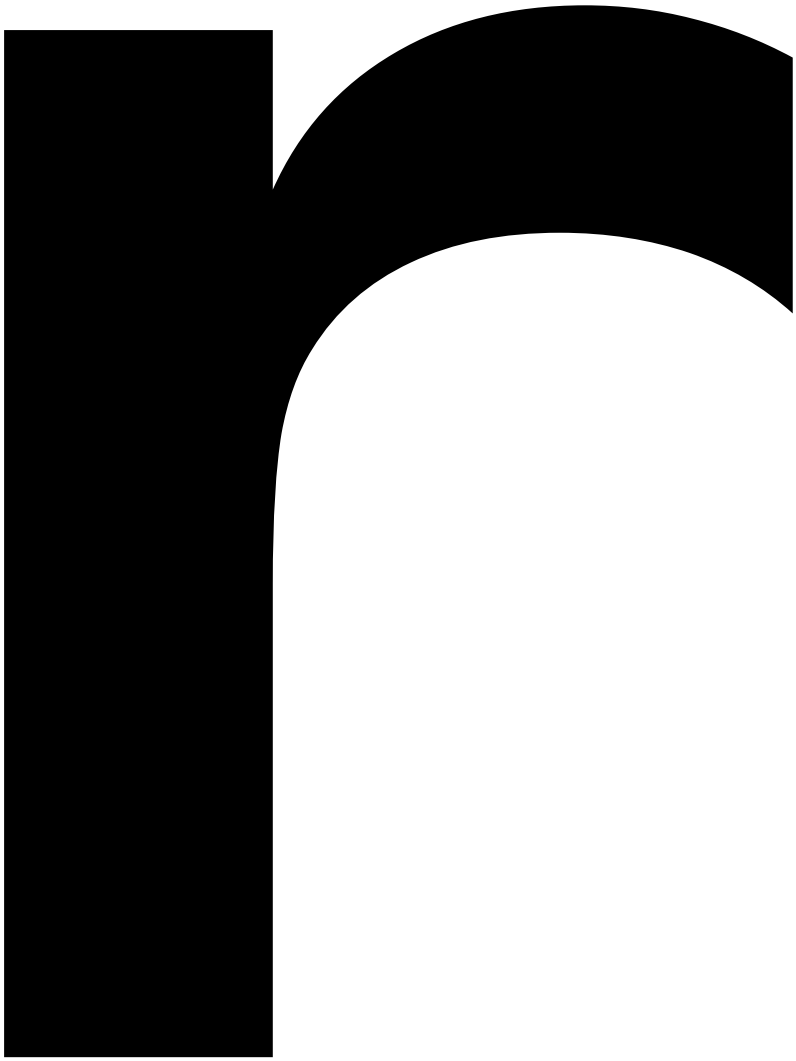


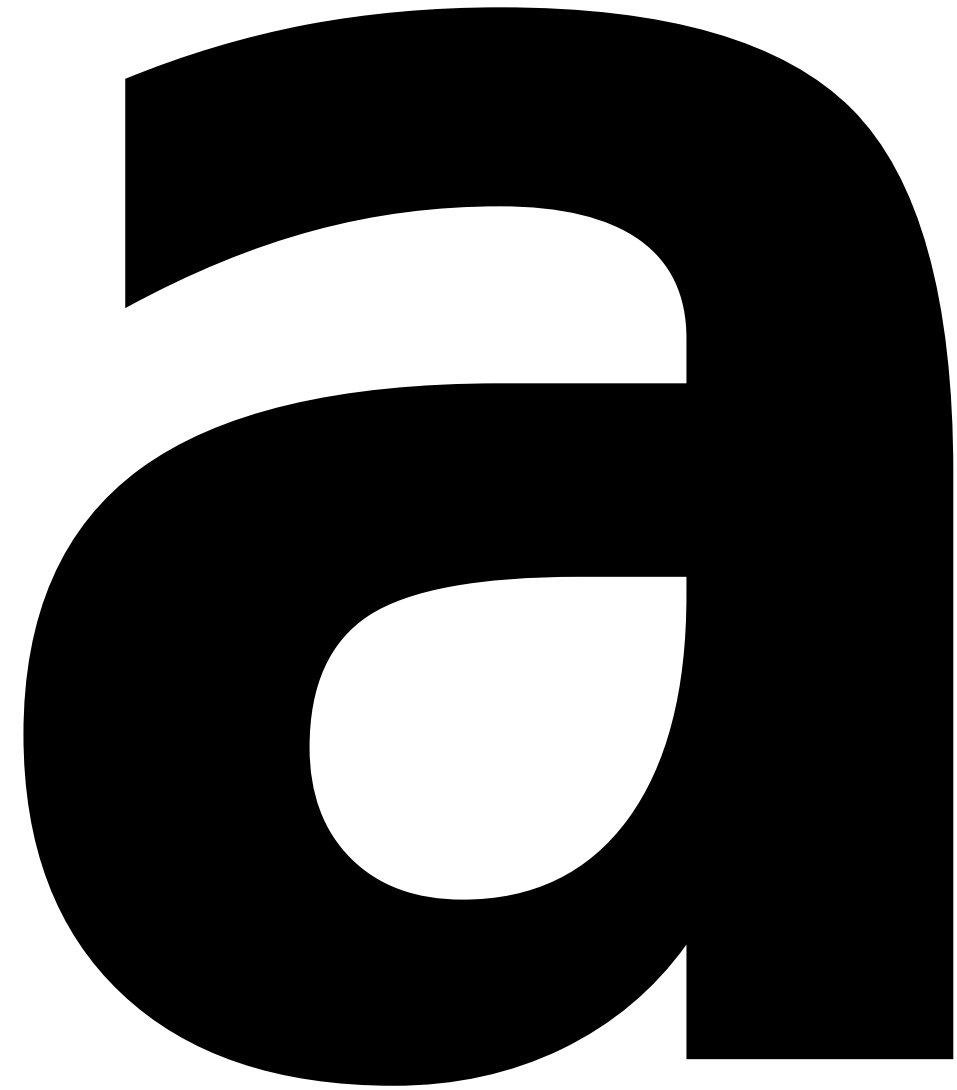








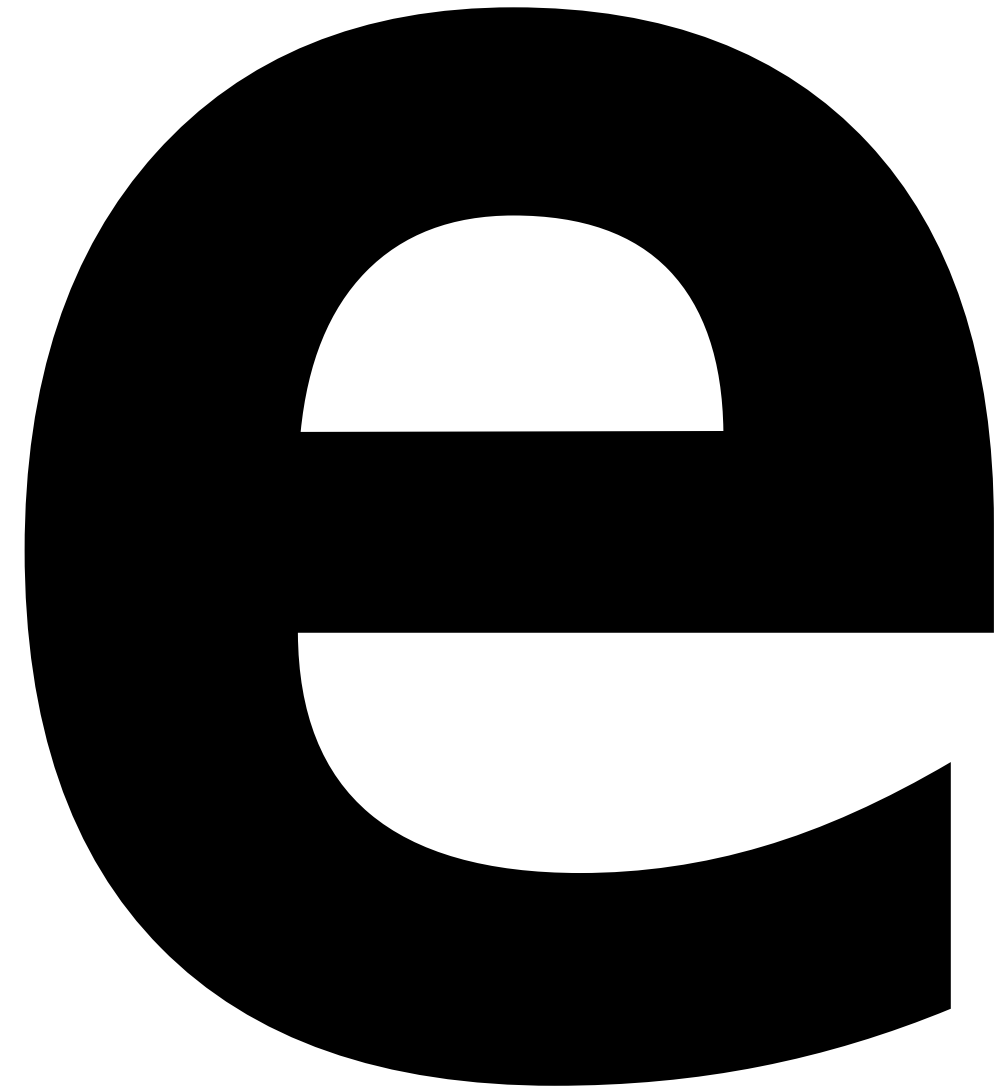


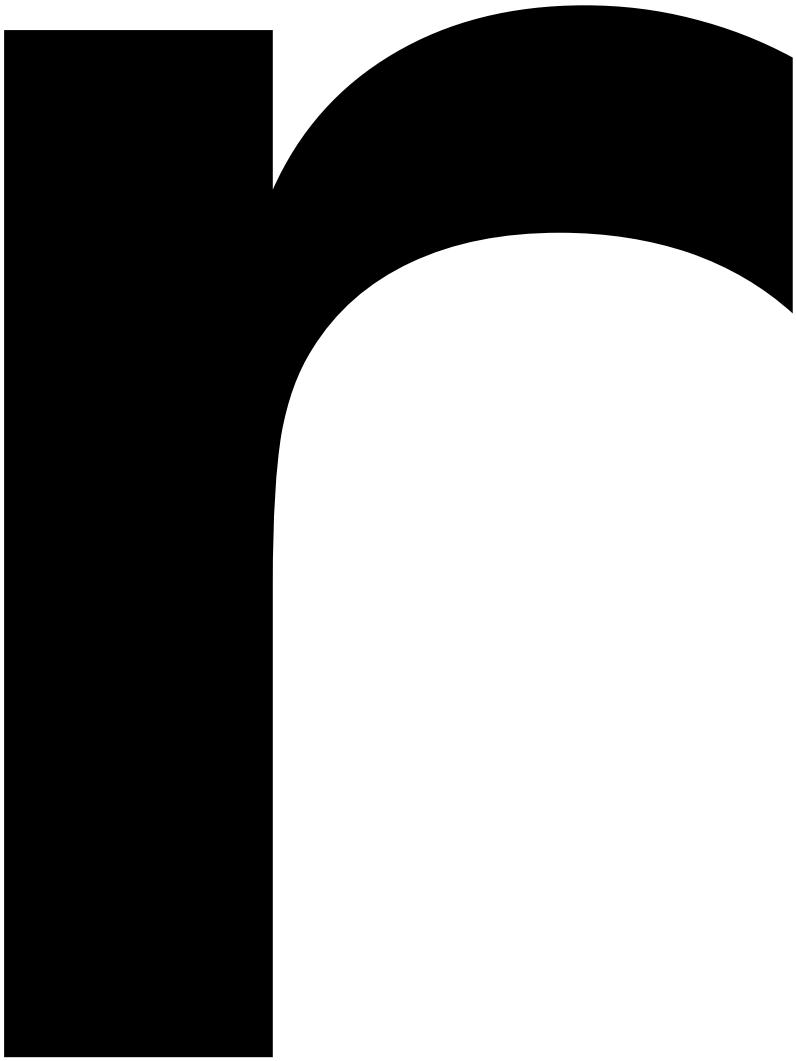


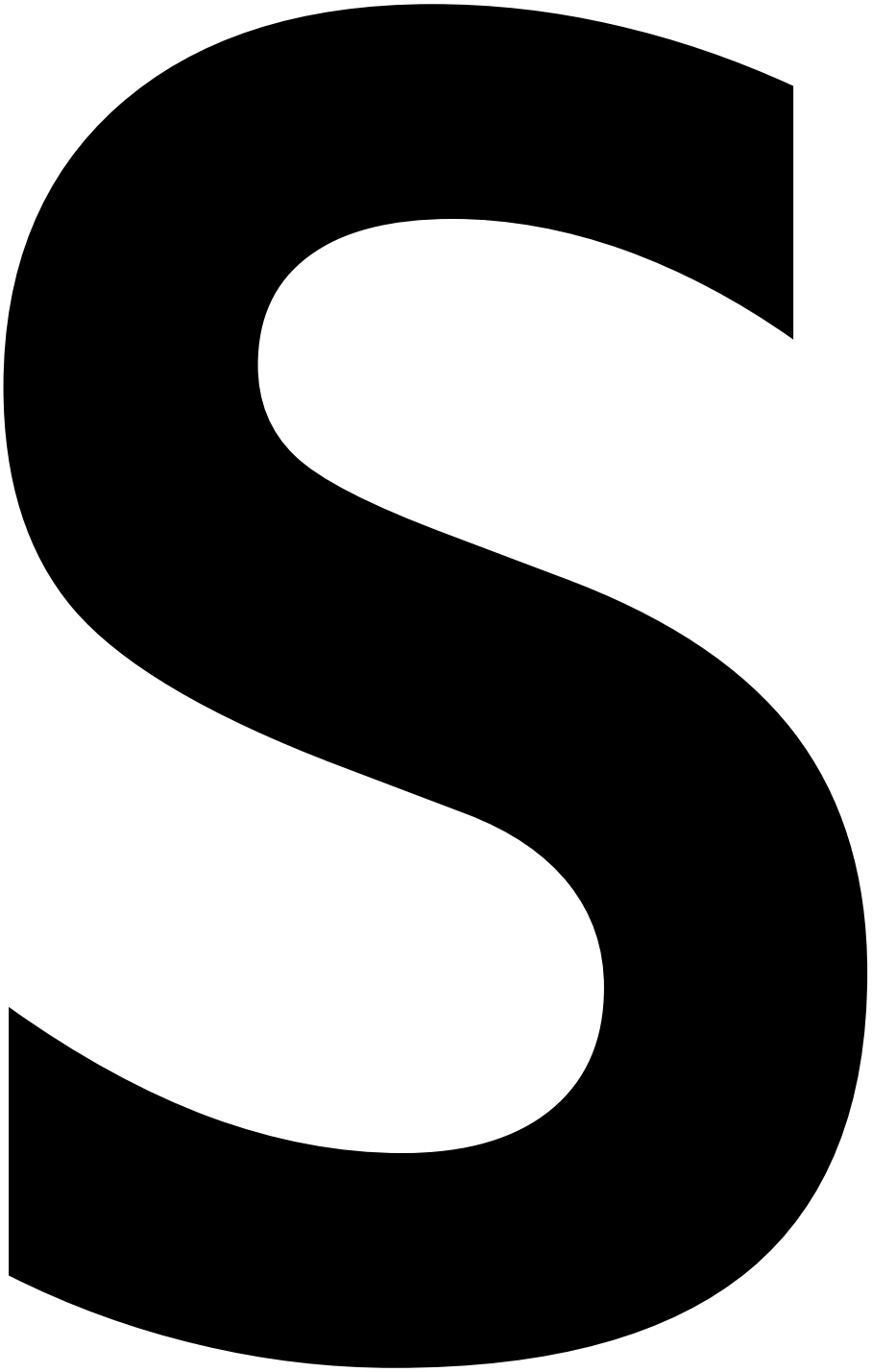
u

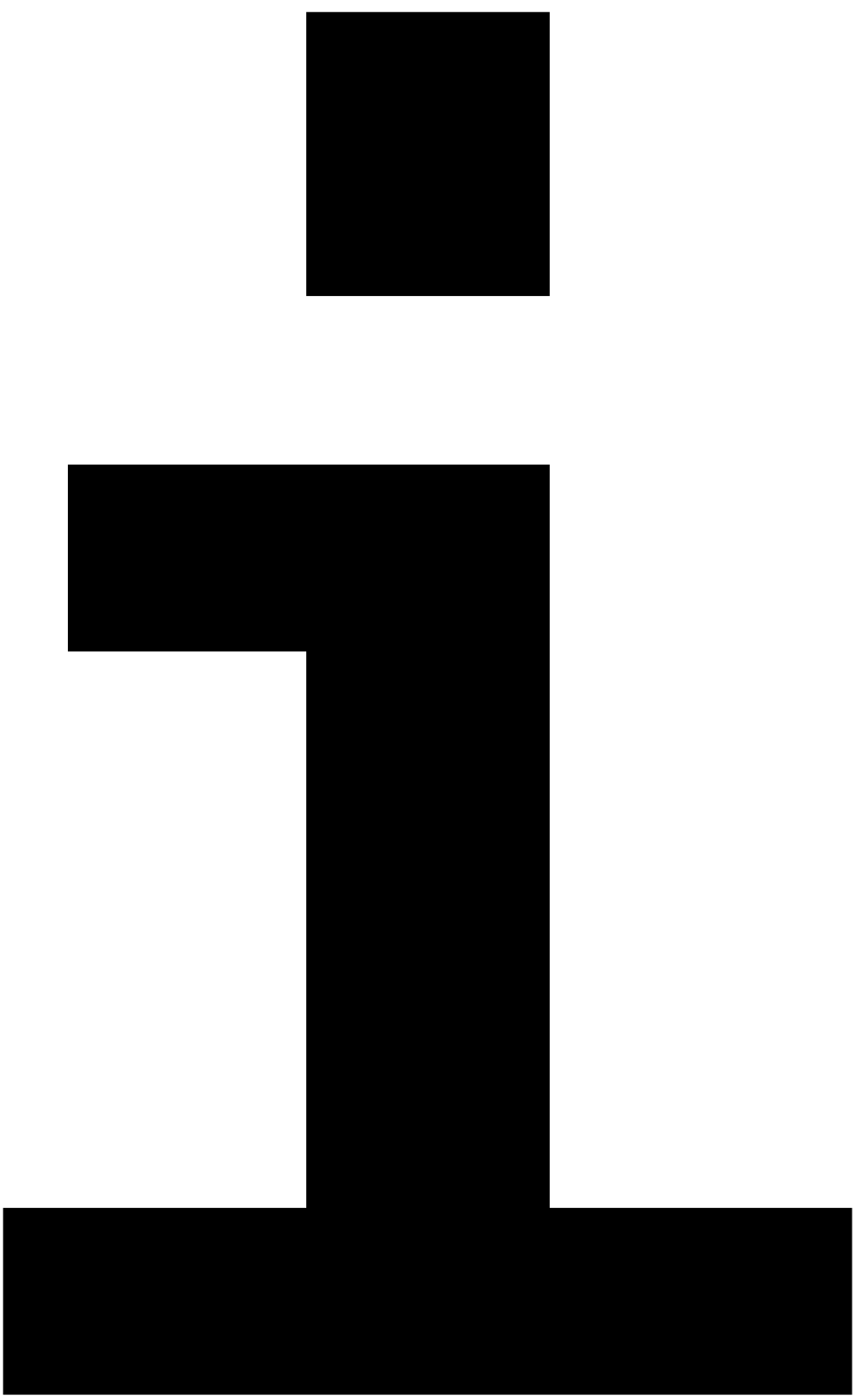
S

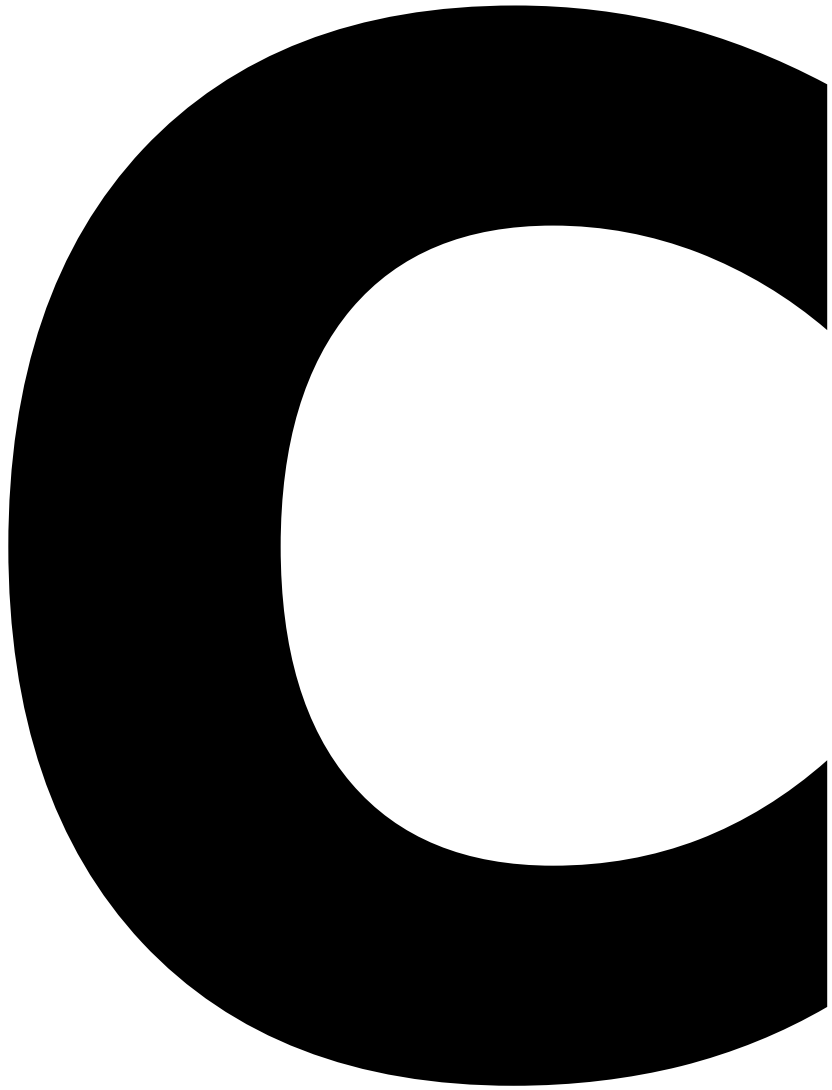
d

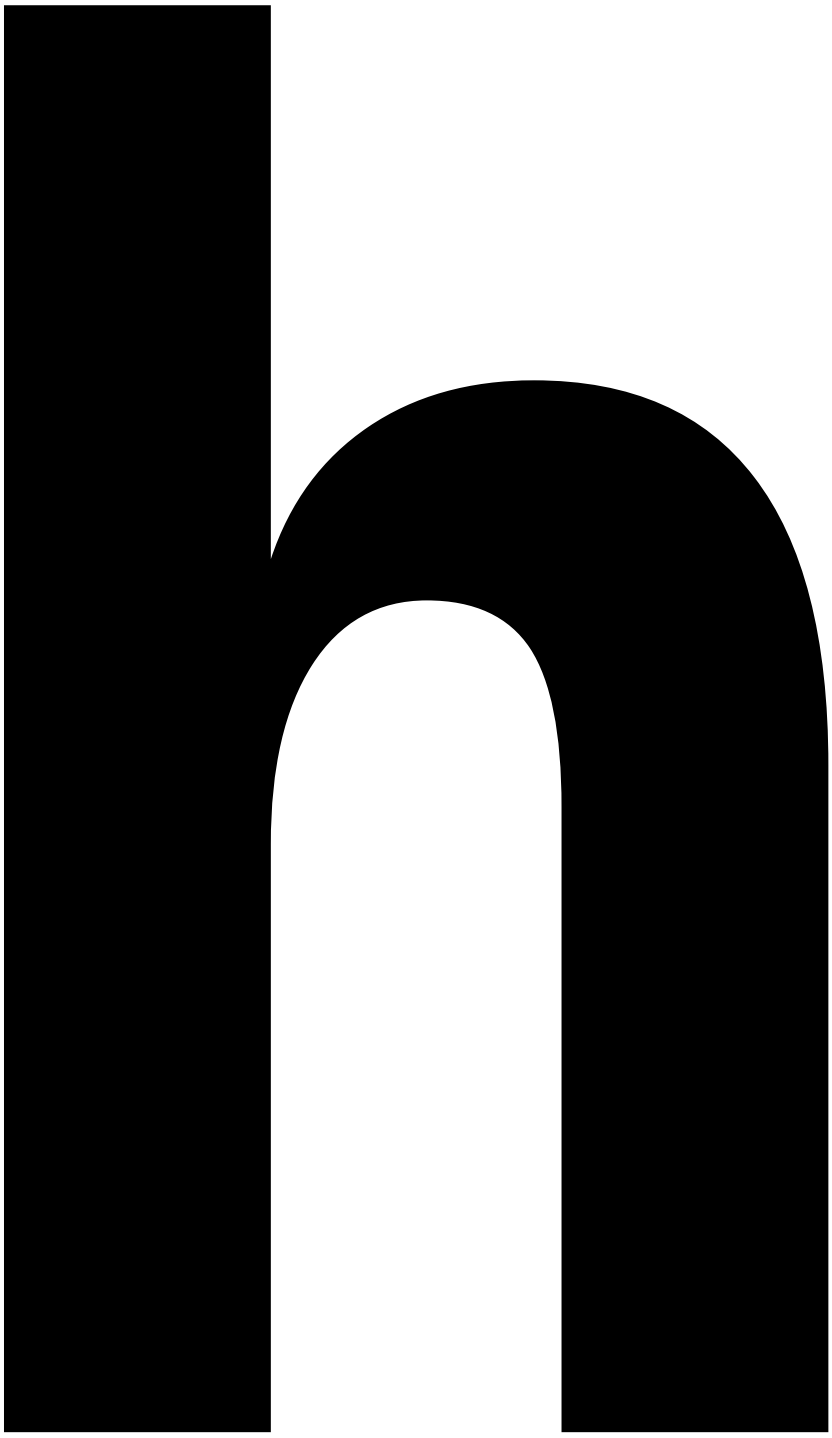


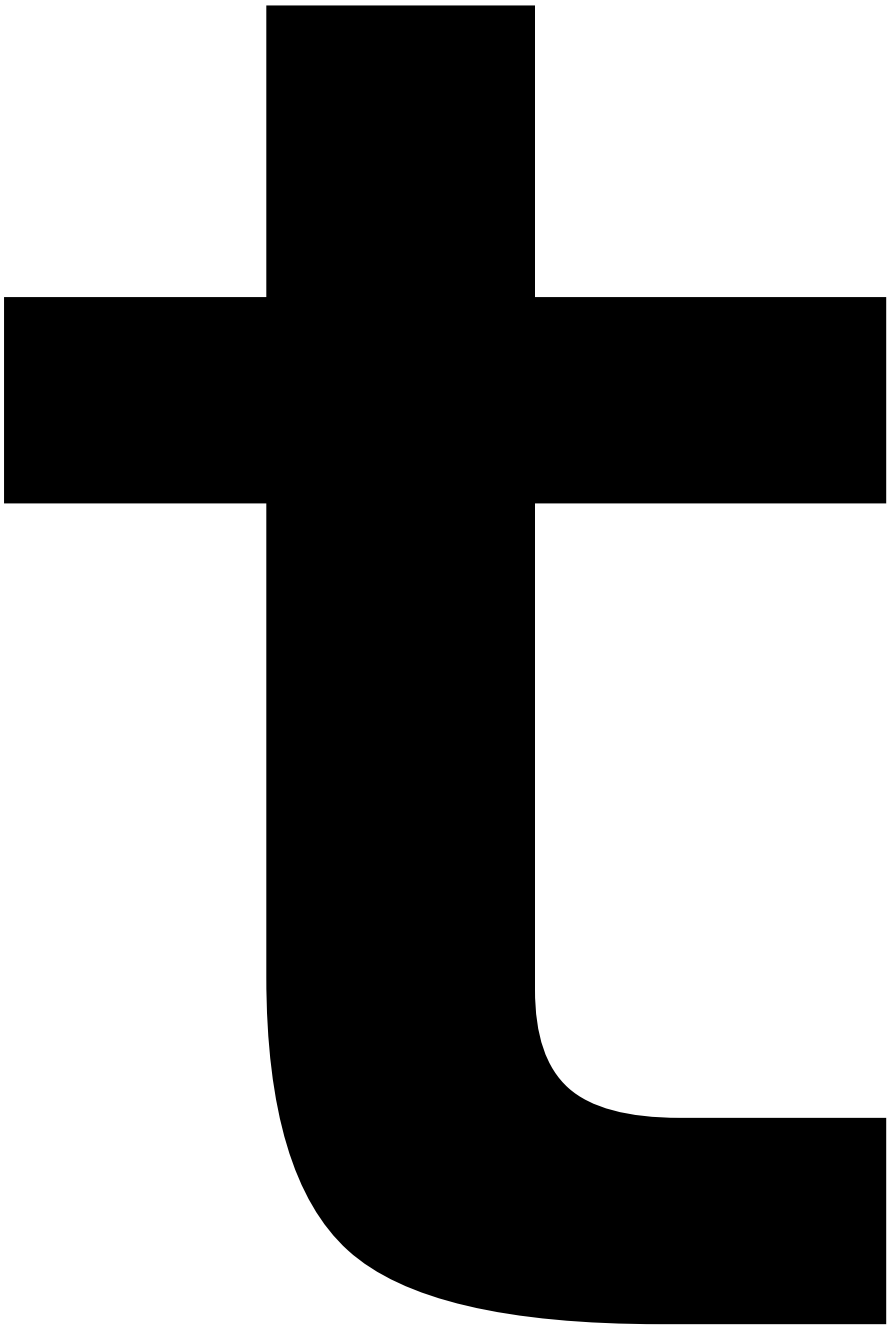




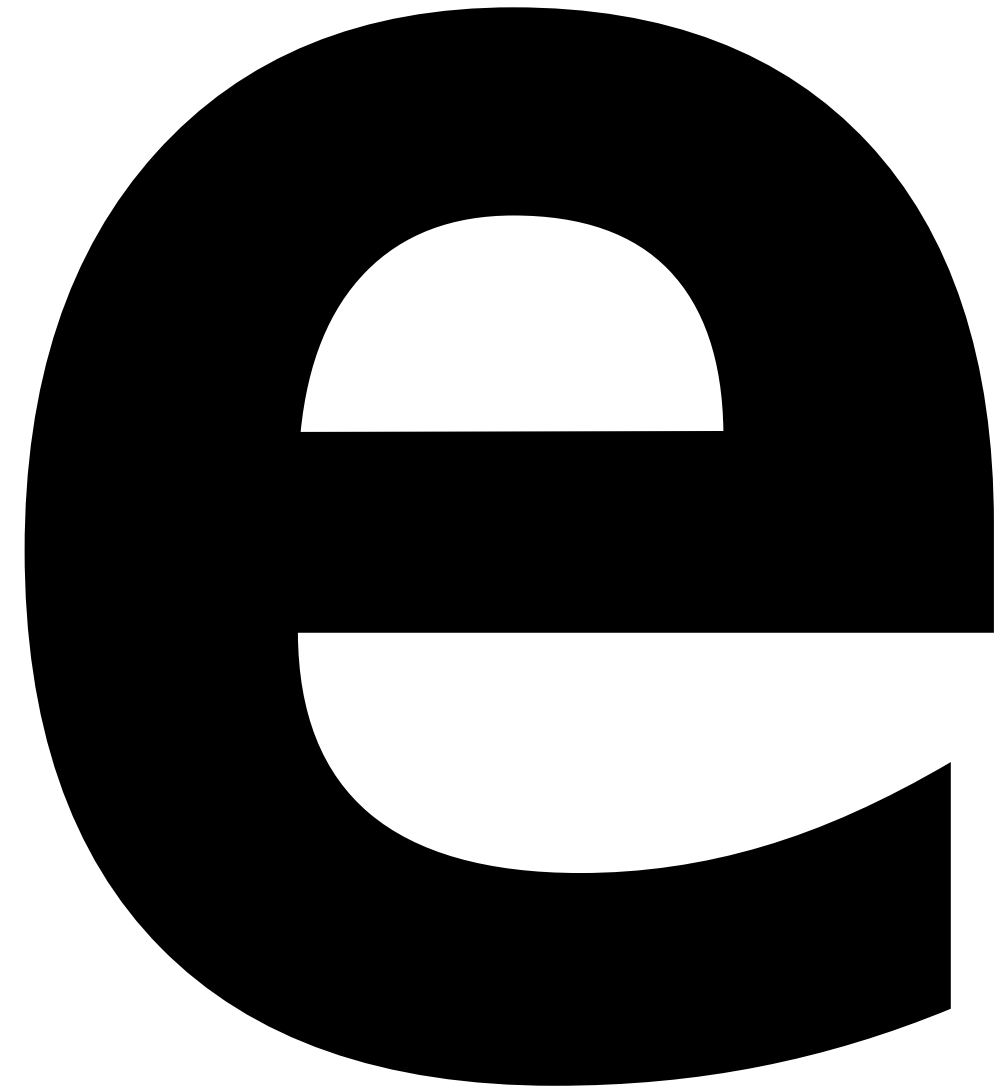


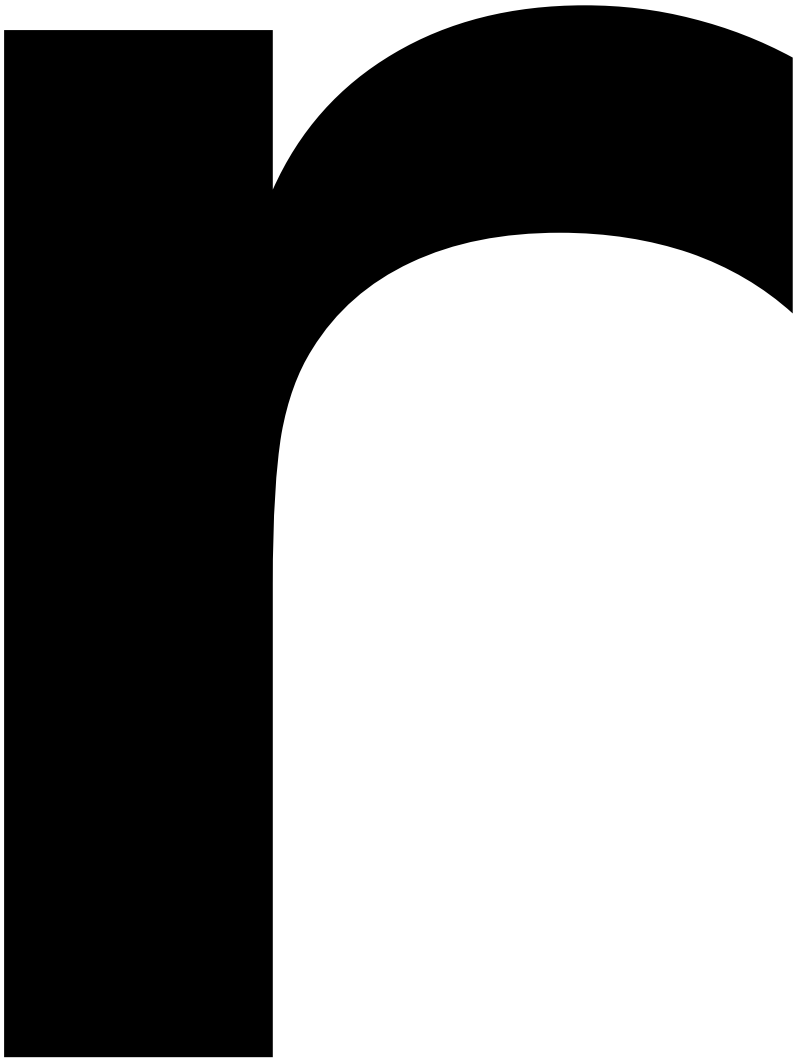


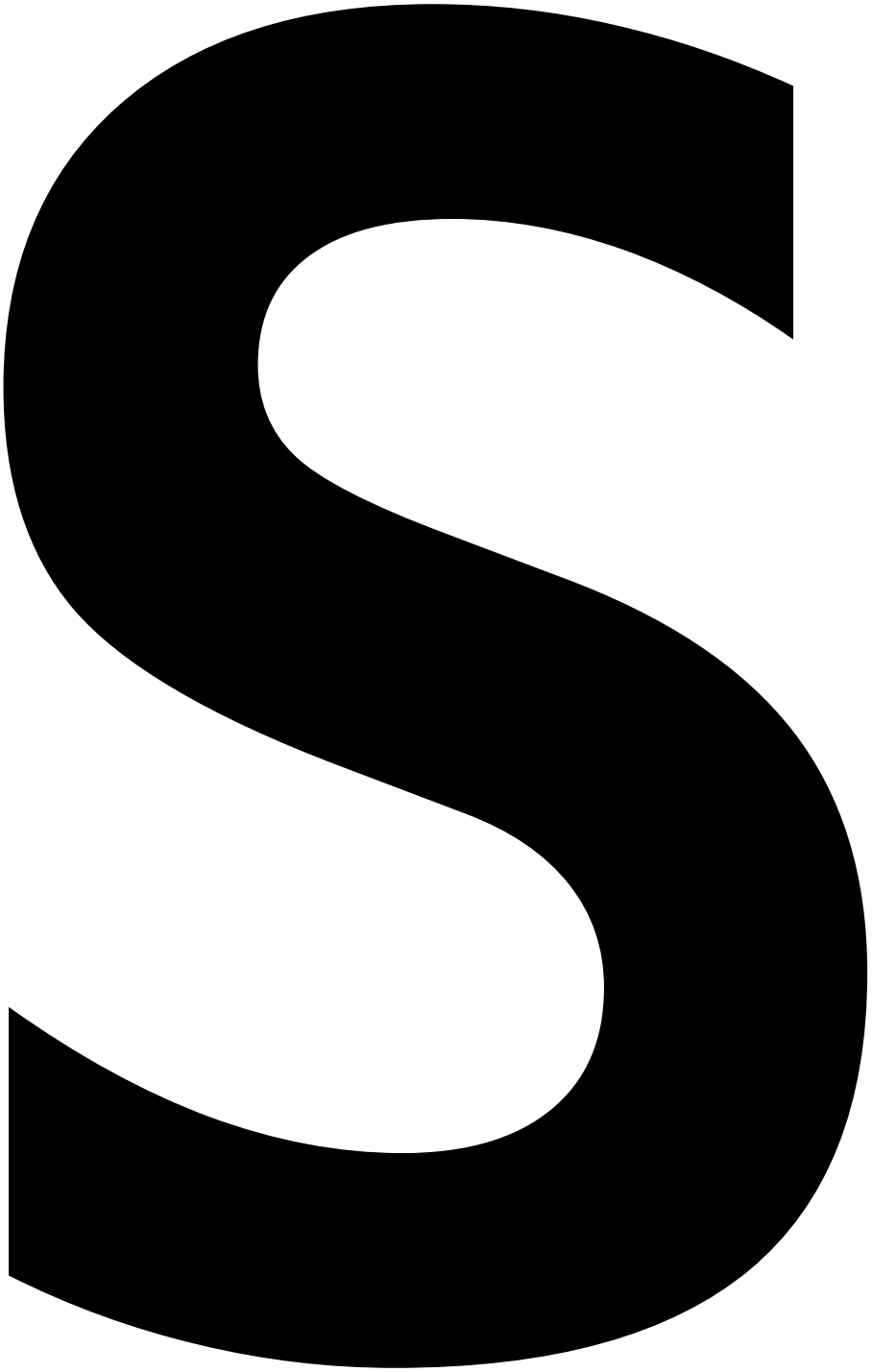


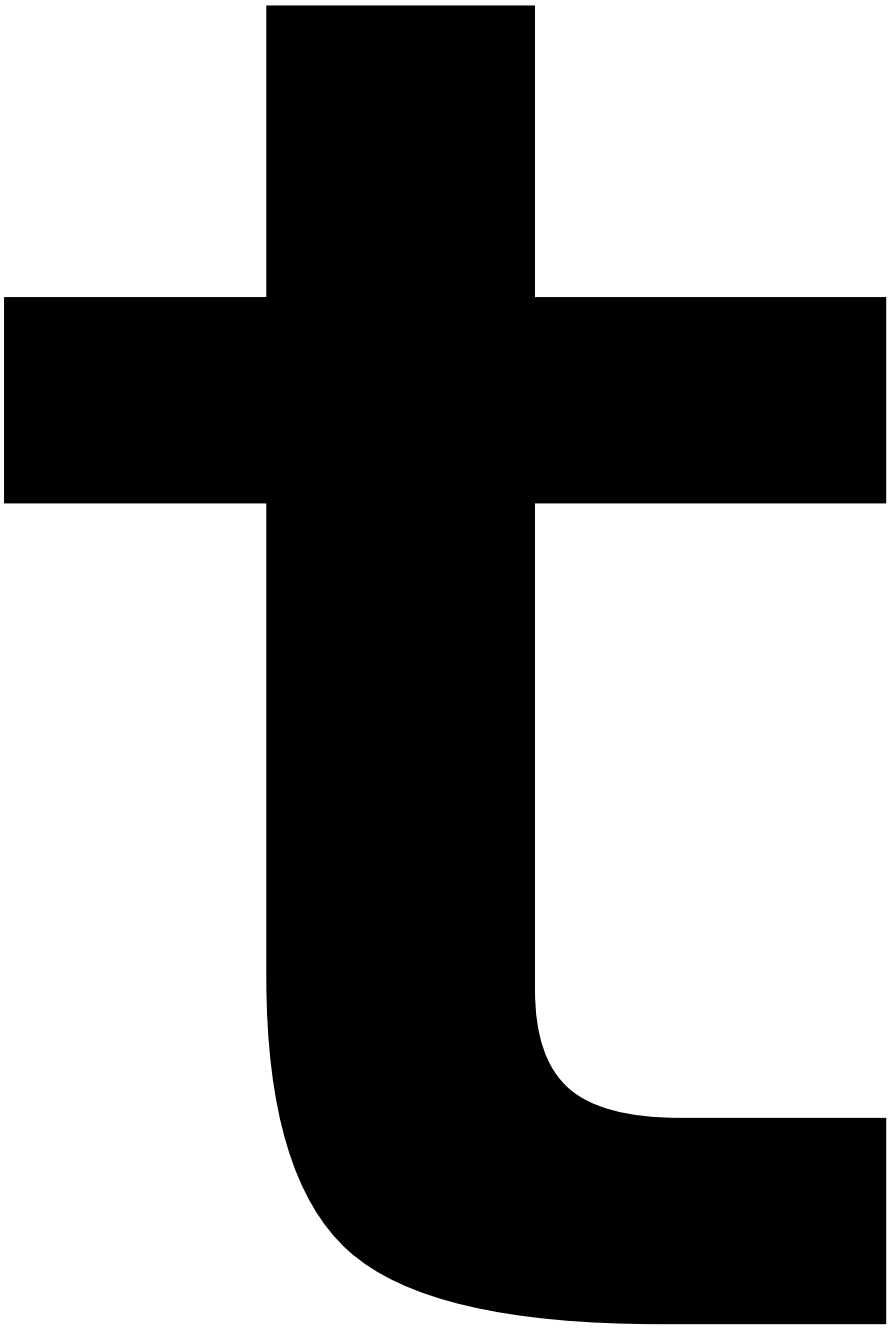


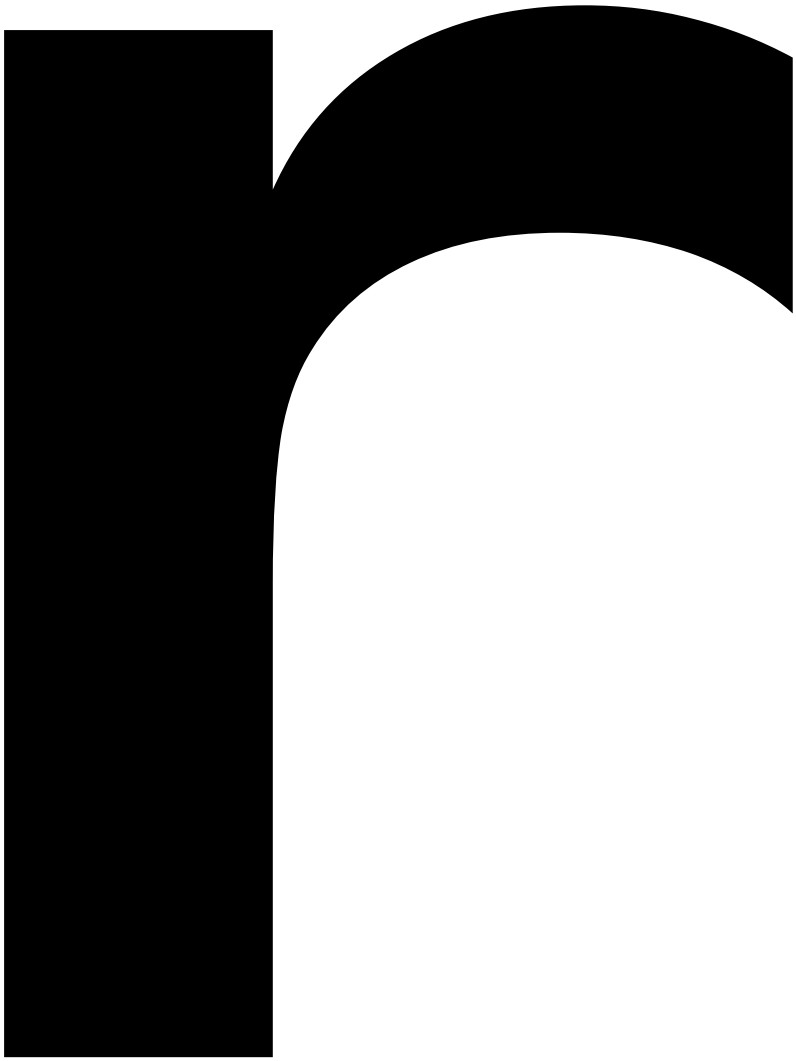
d

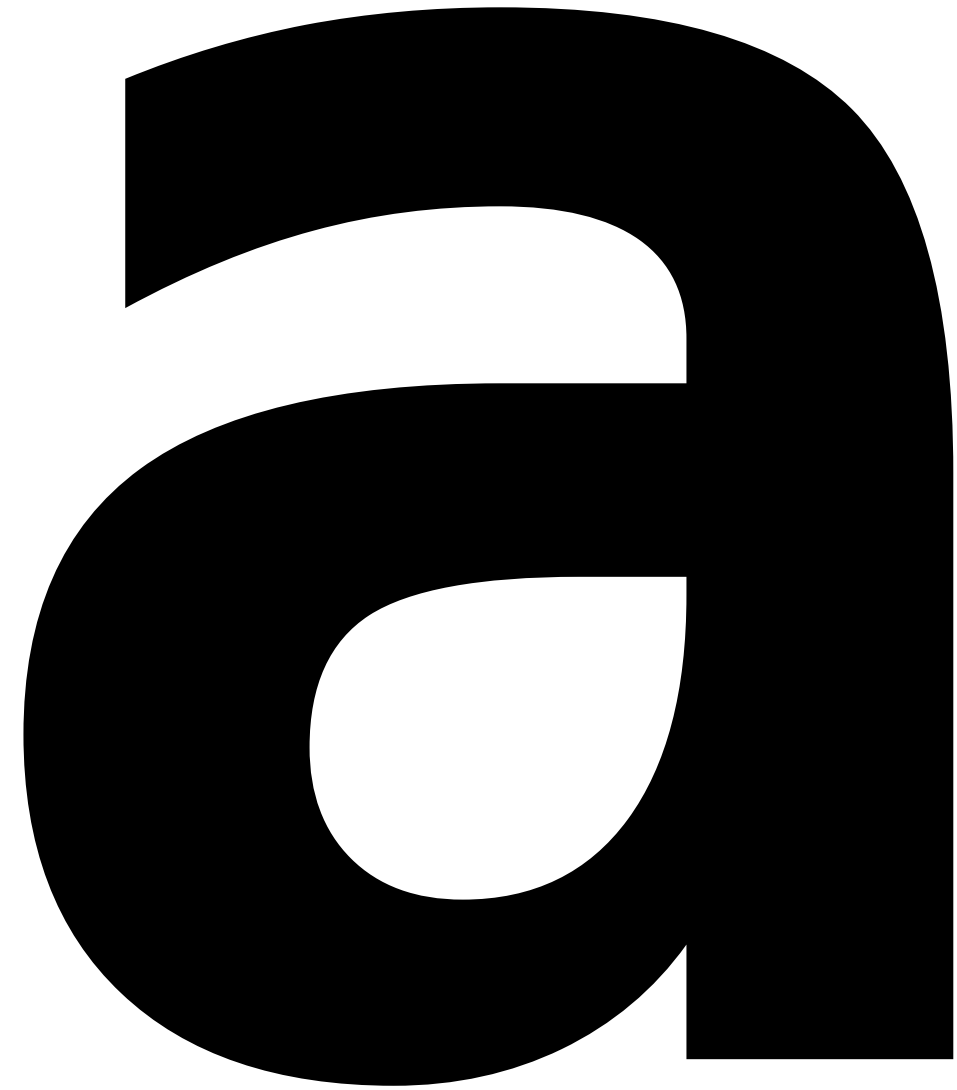


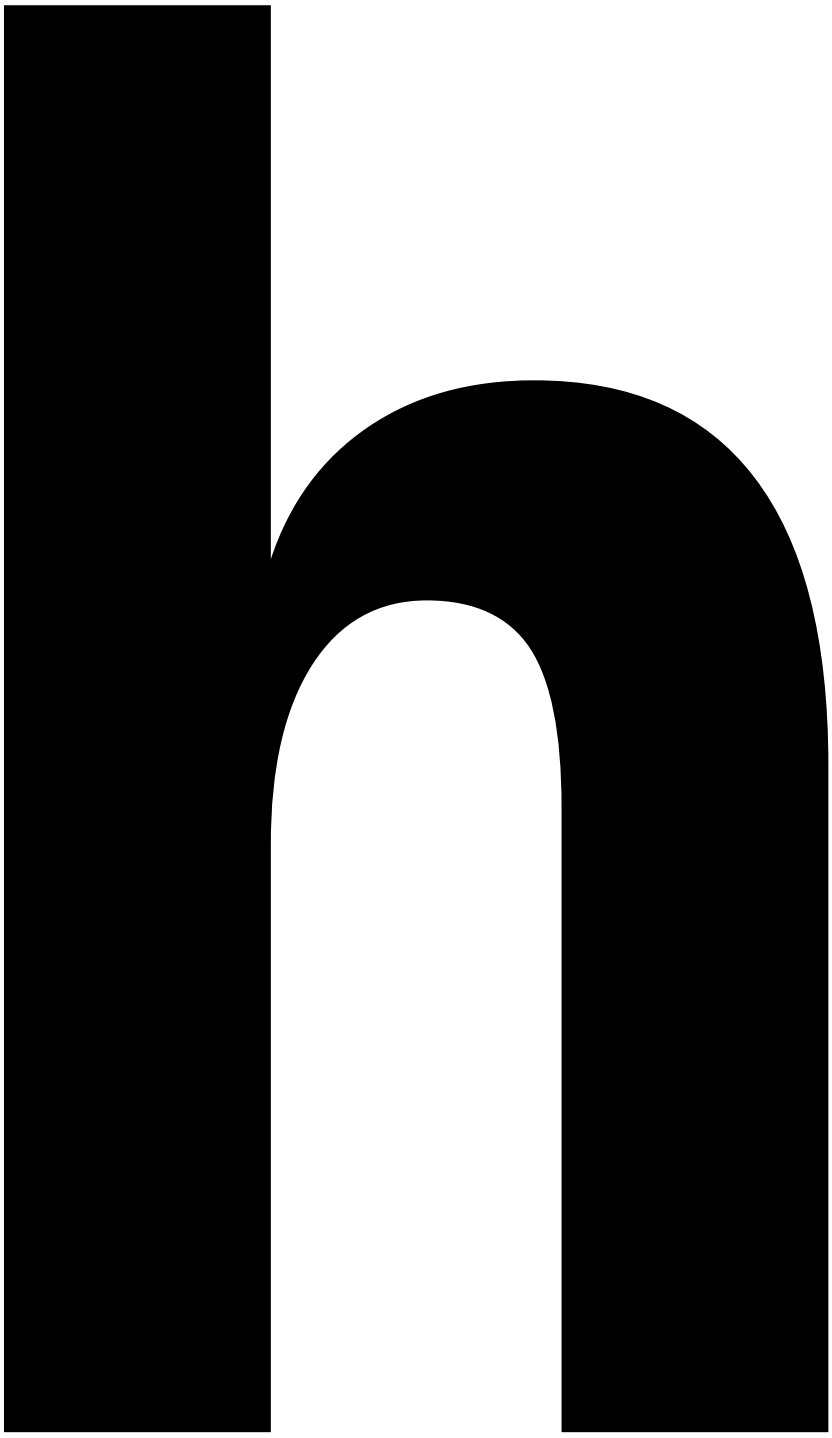


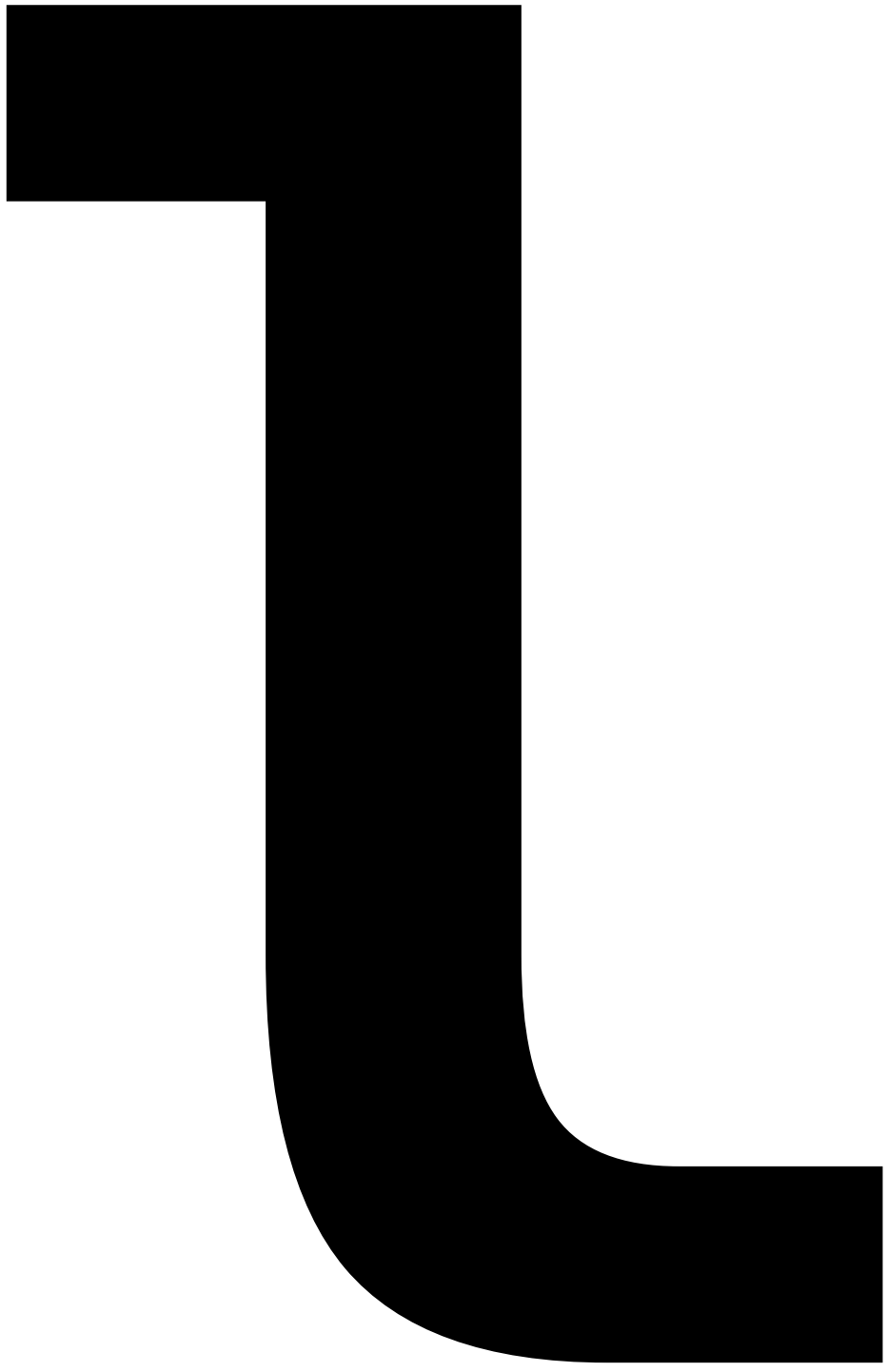


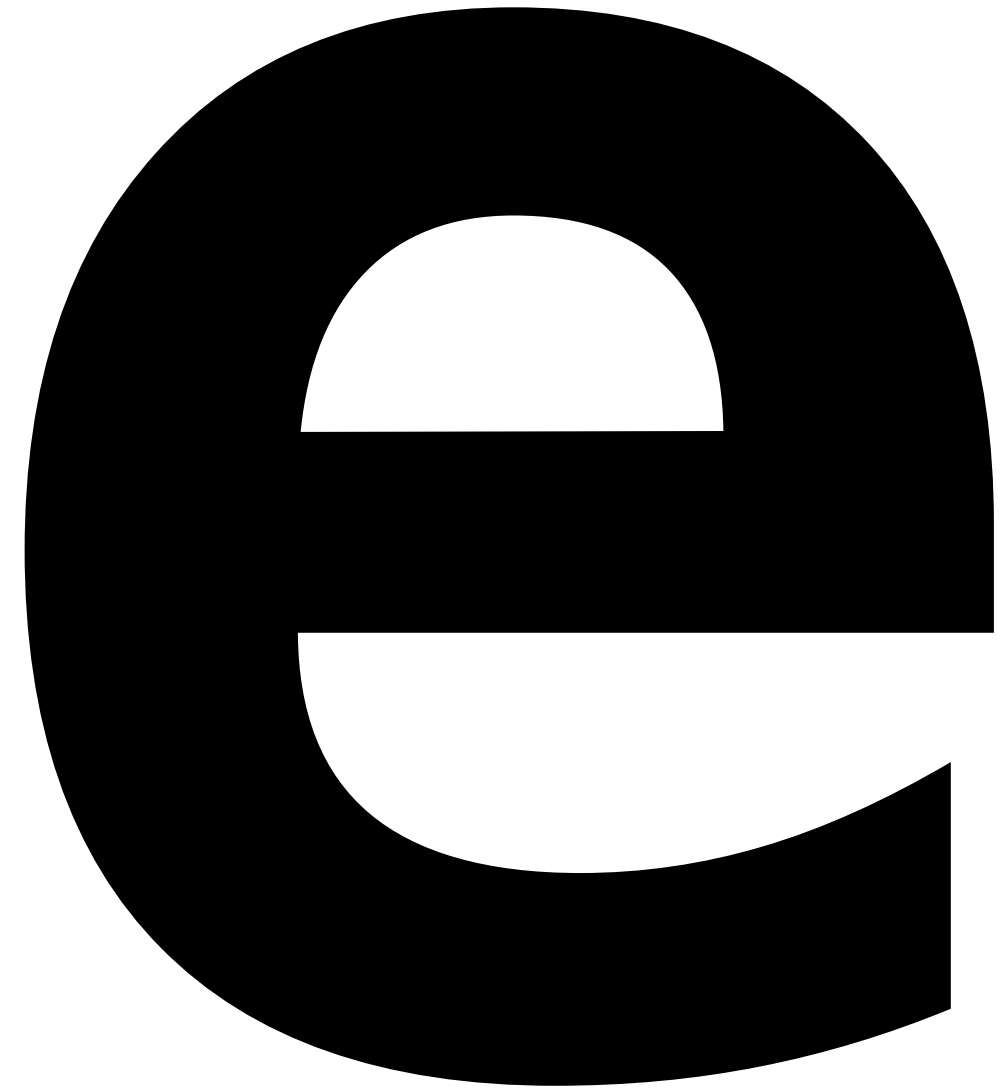


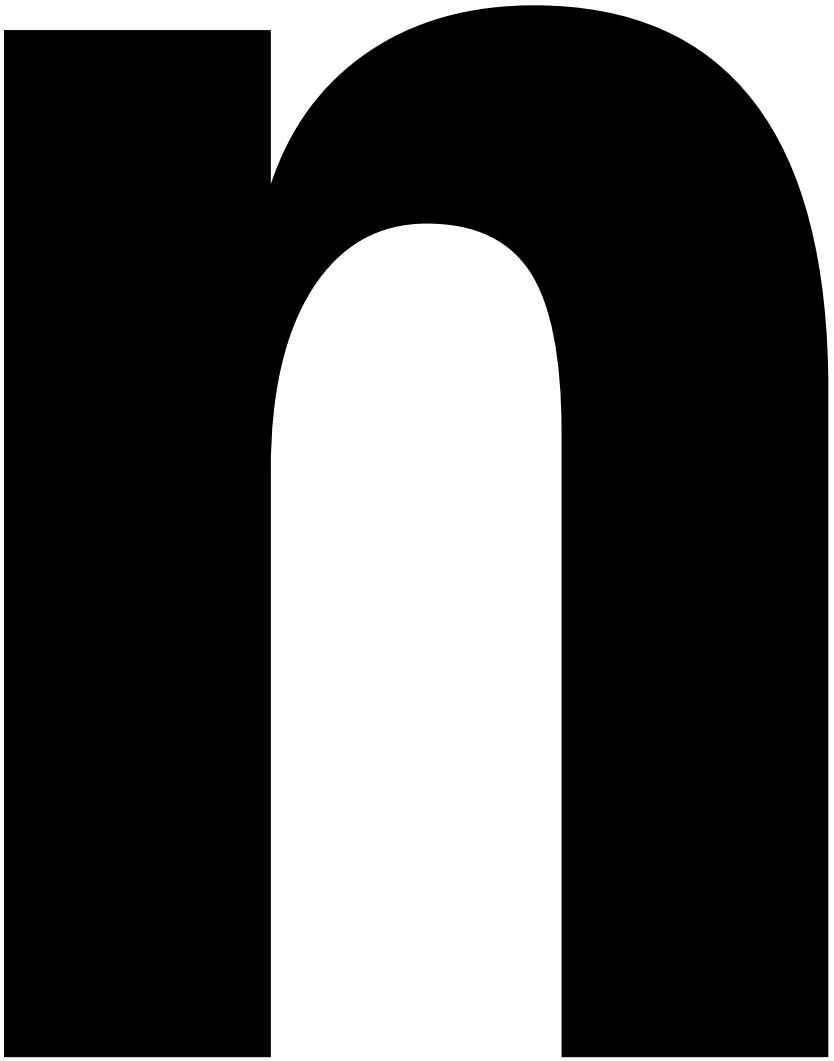


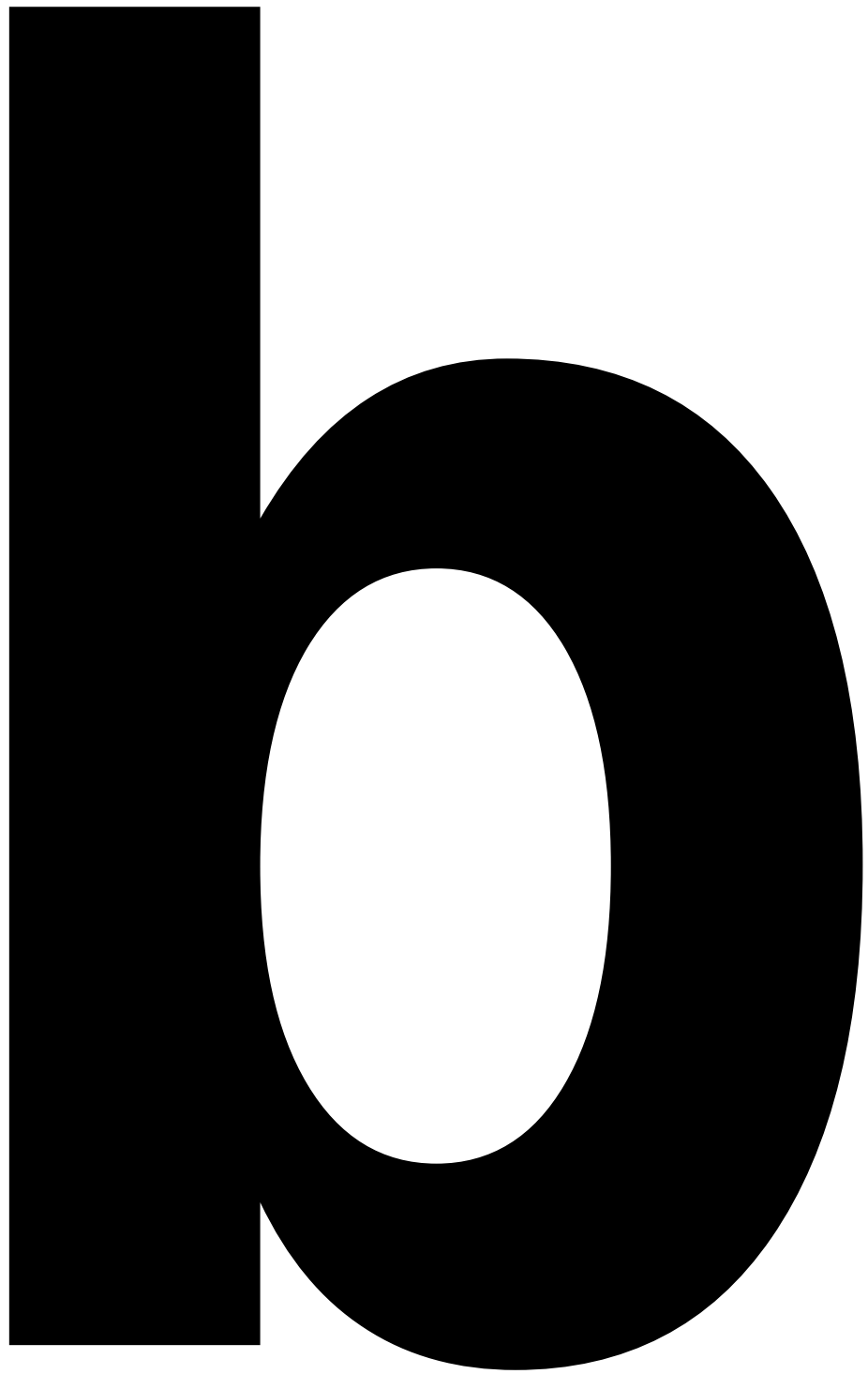


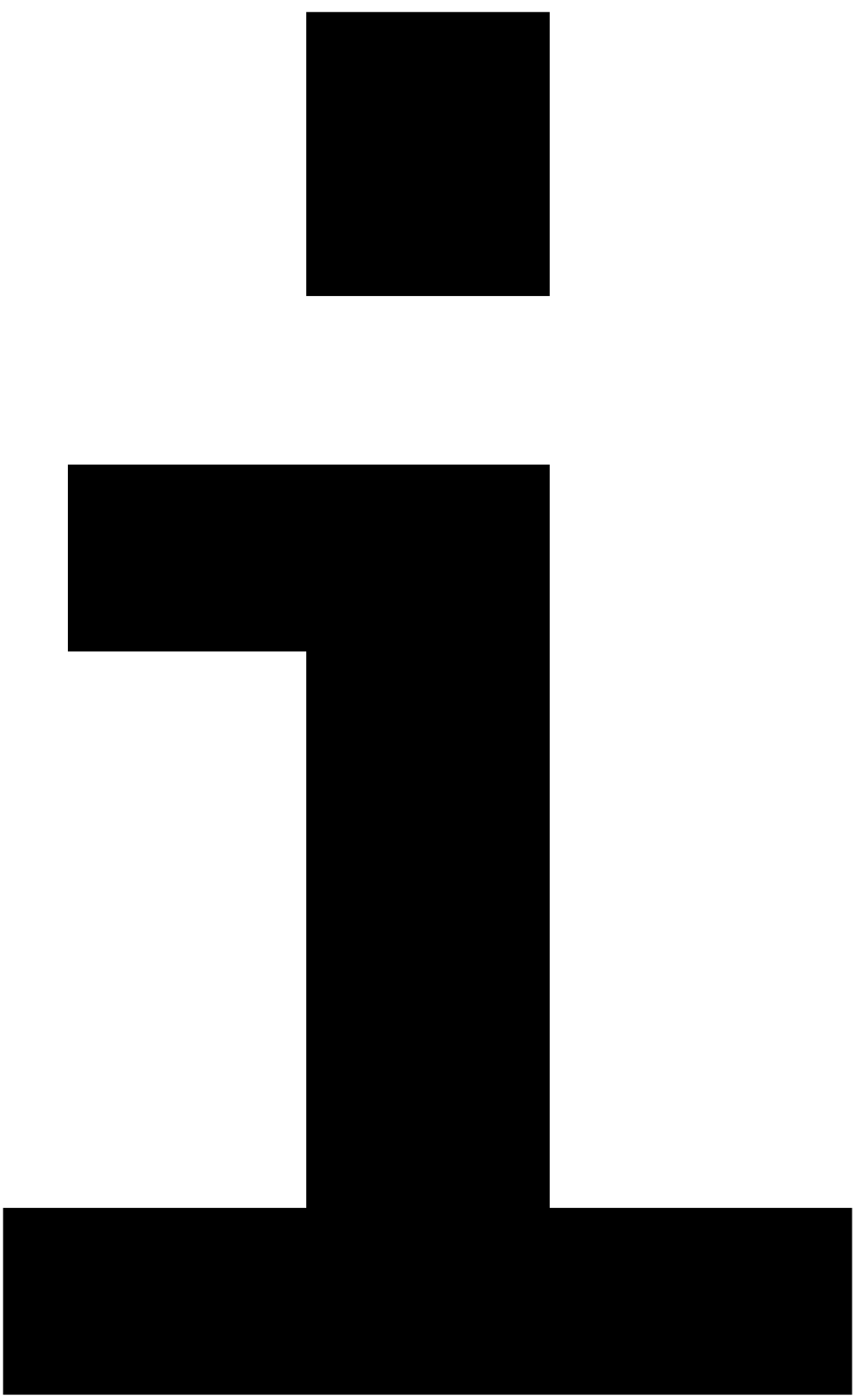


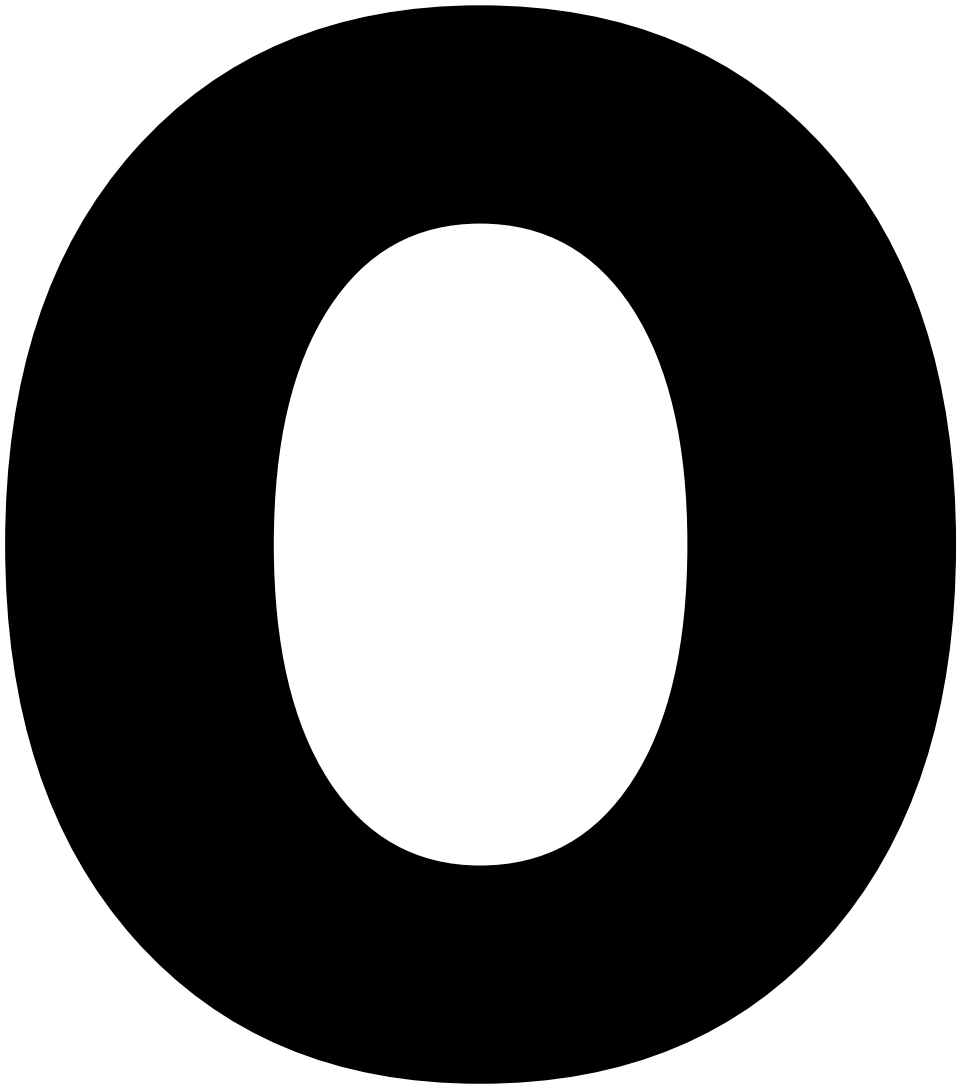


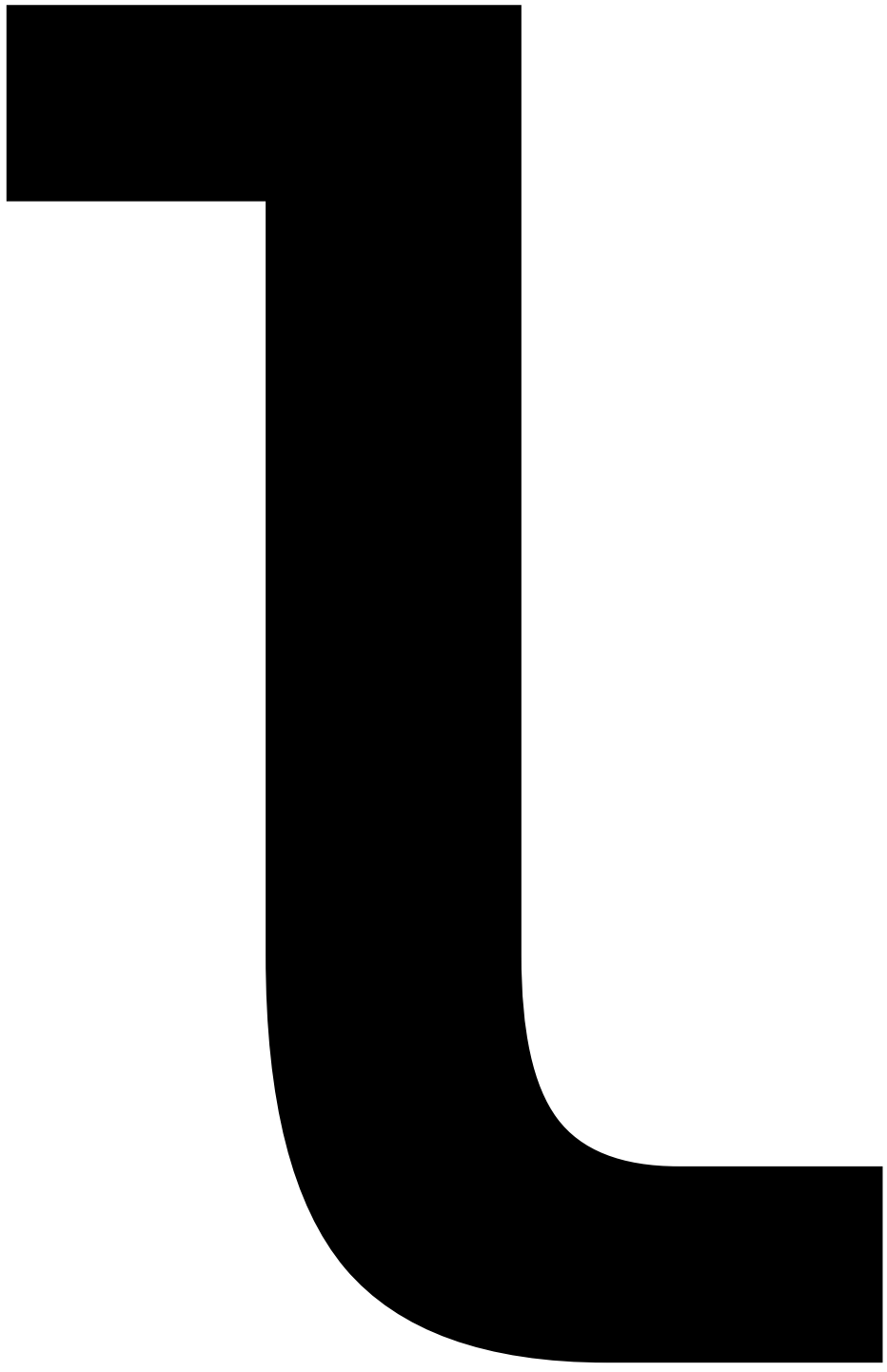


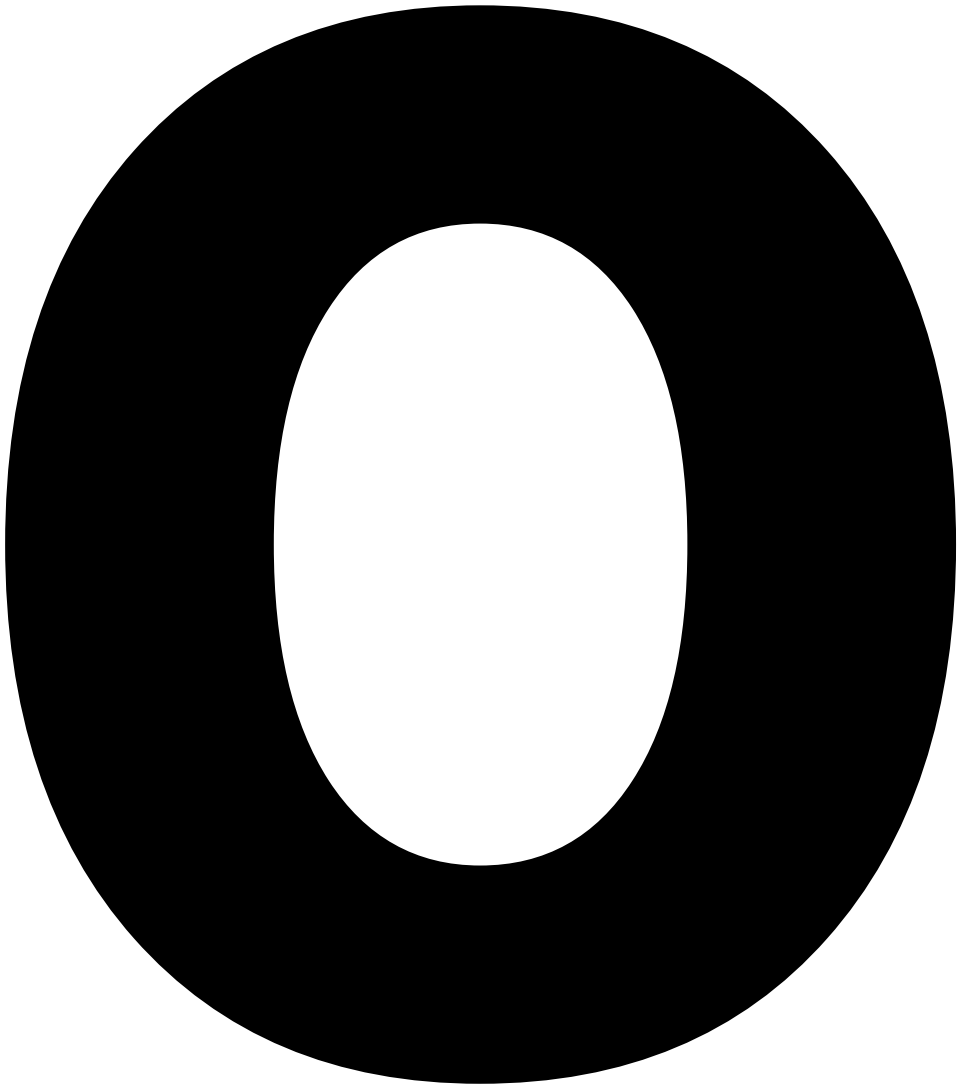


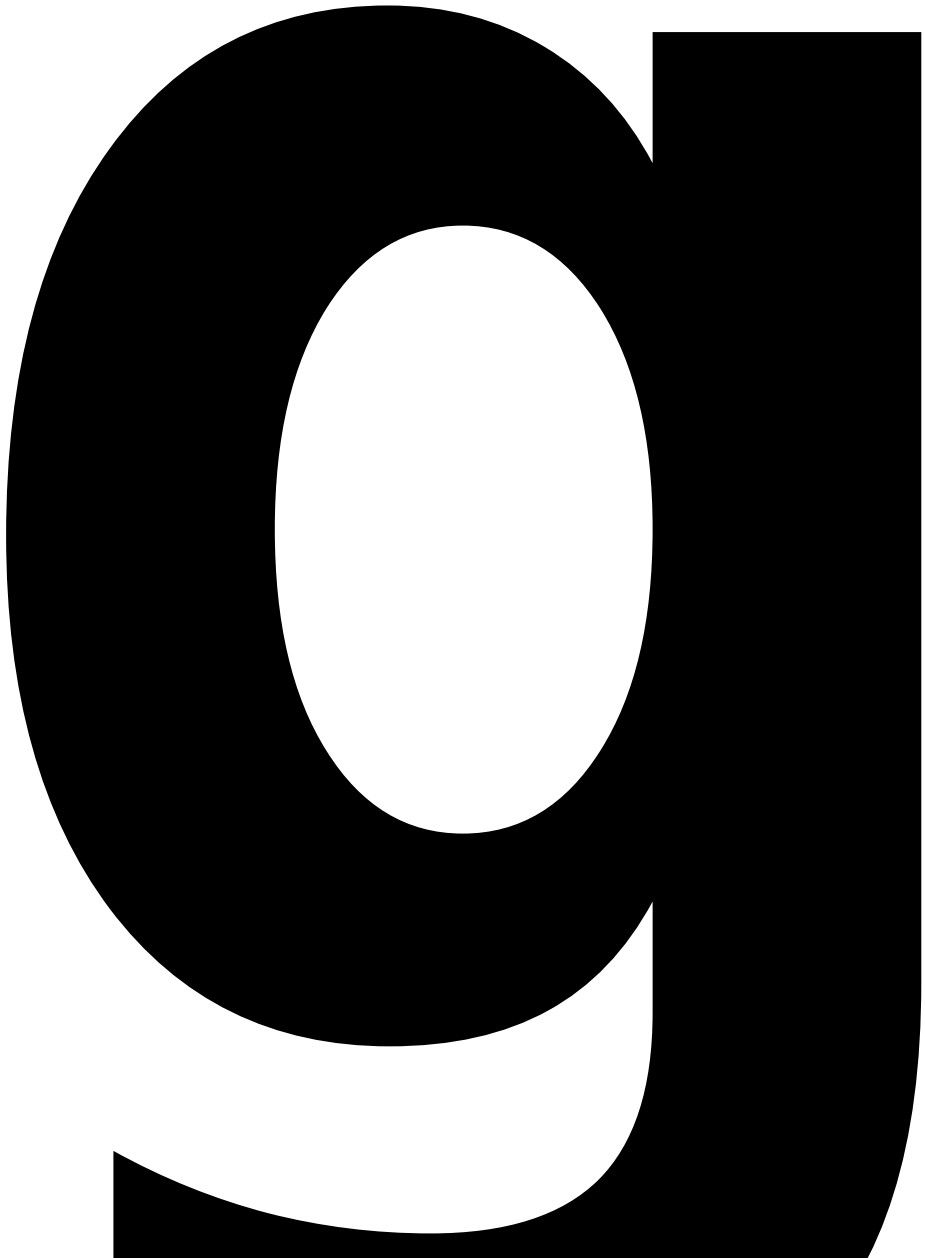


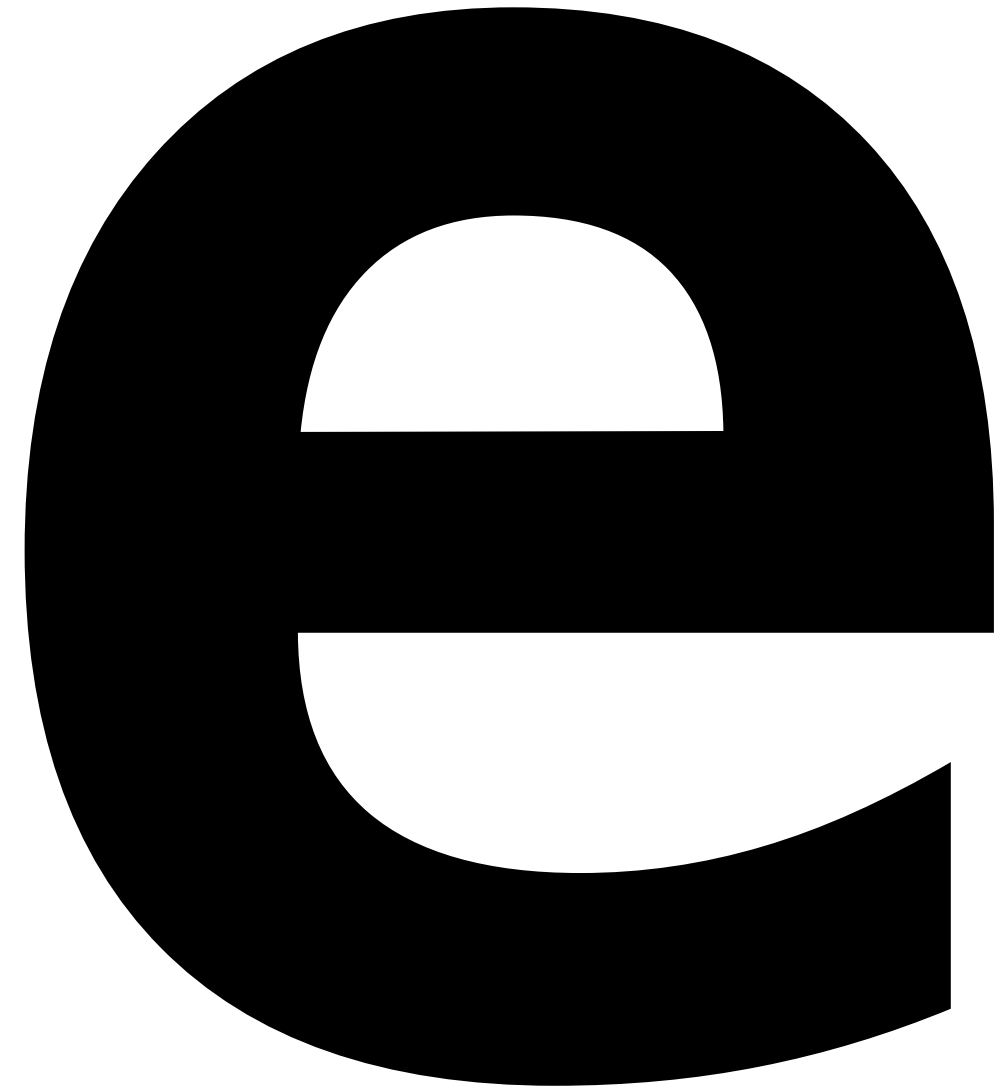


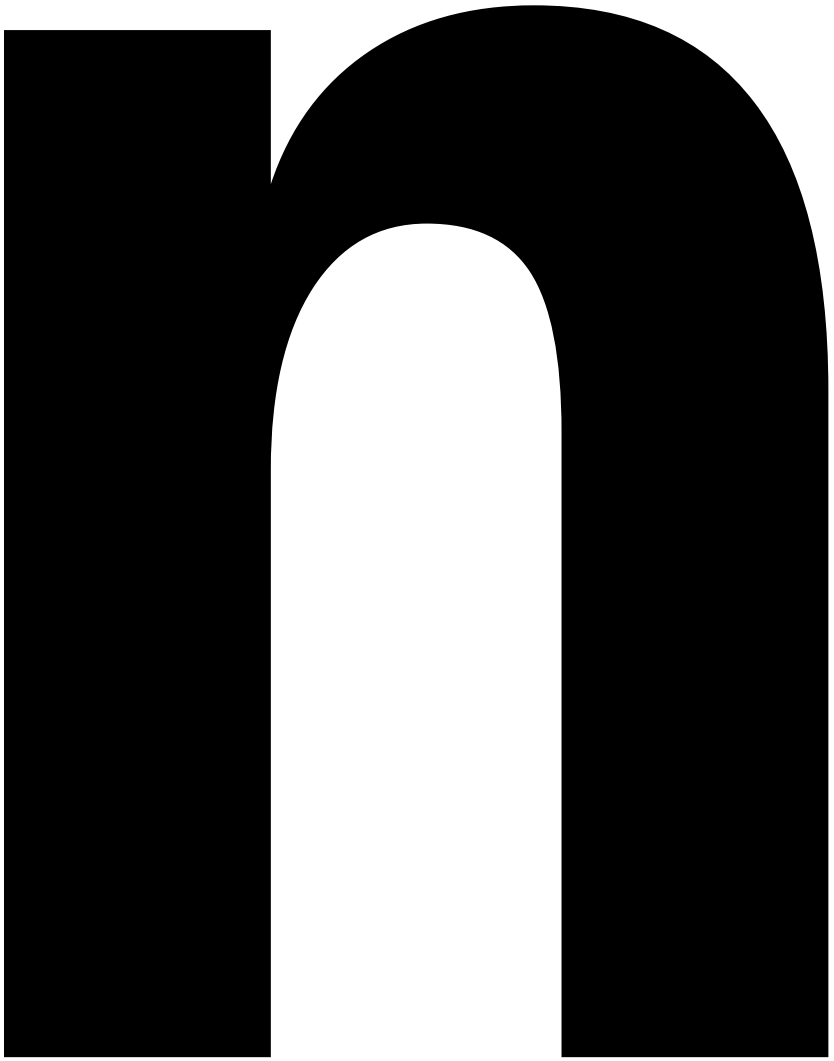


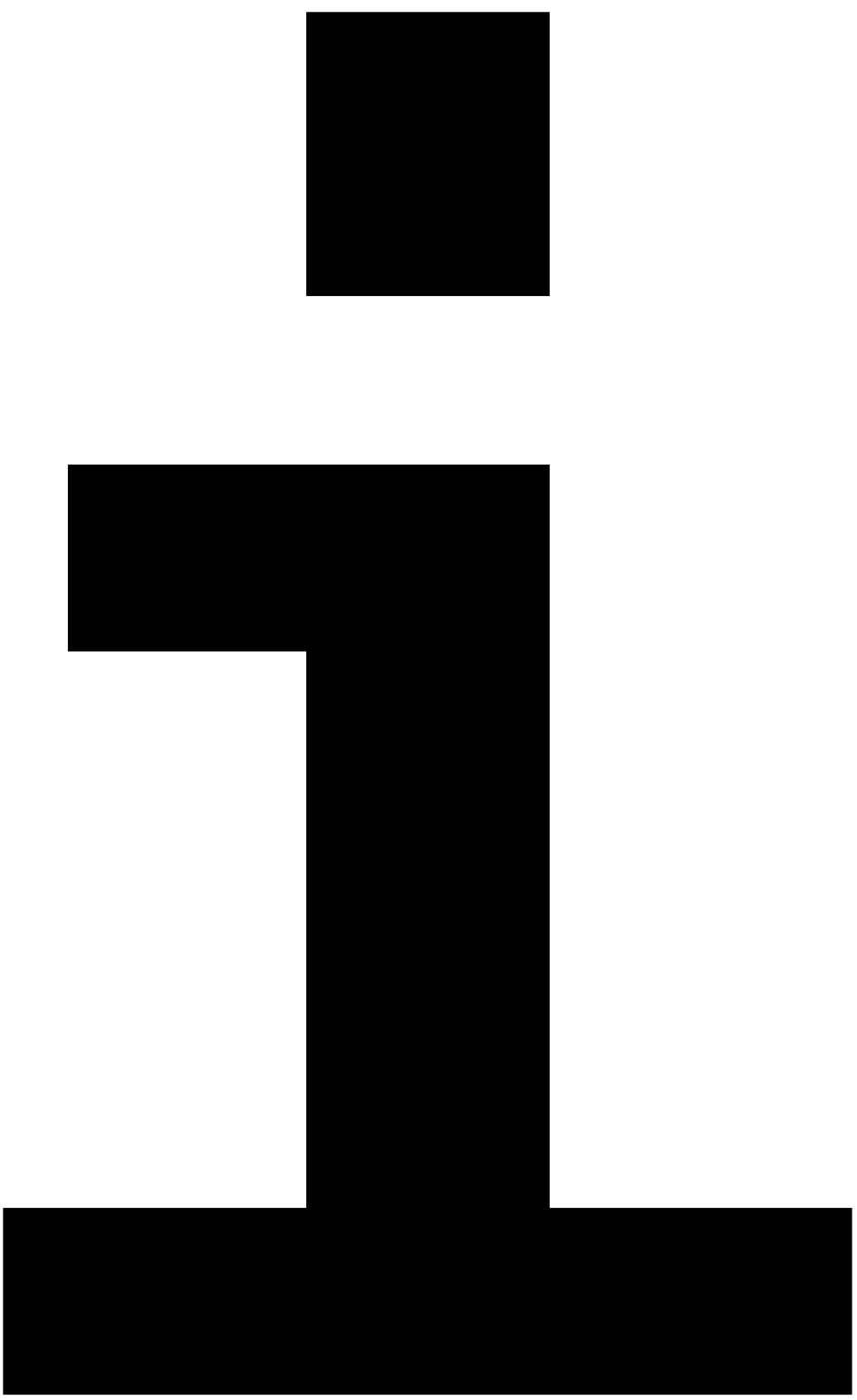




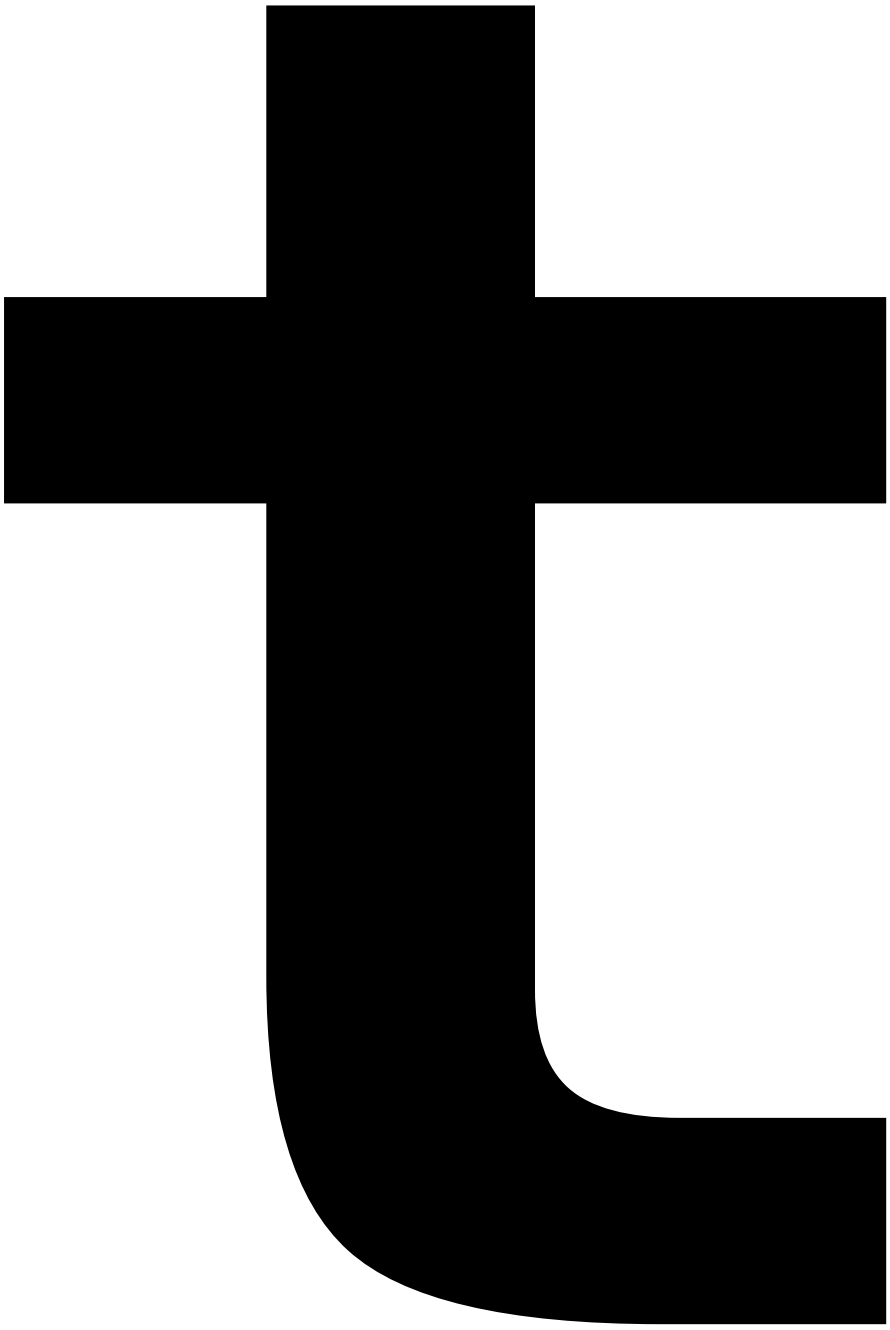


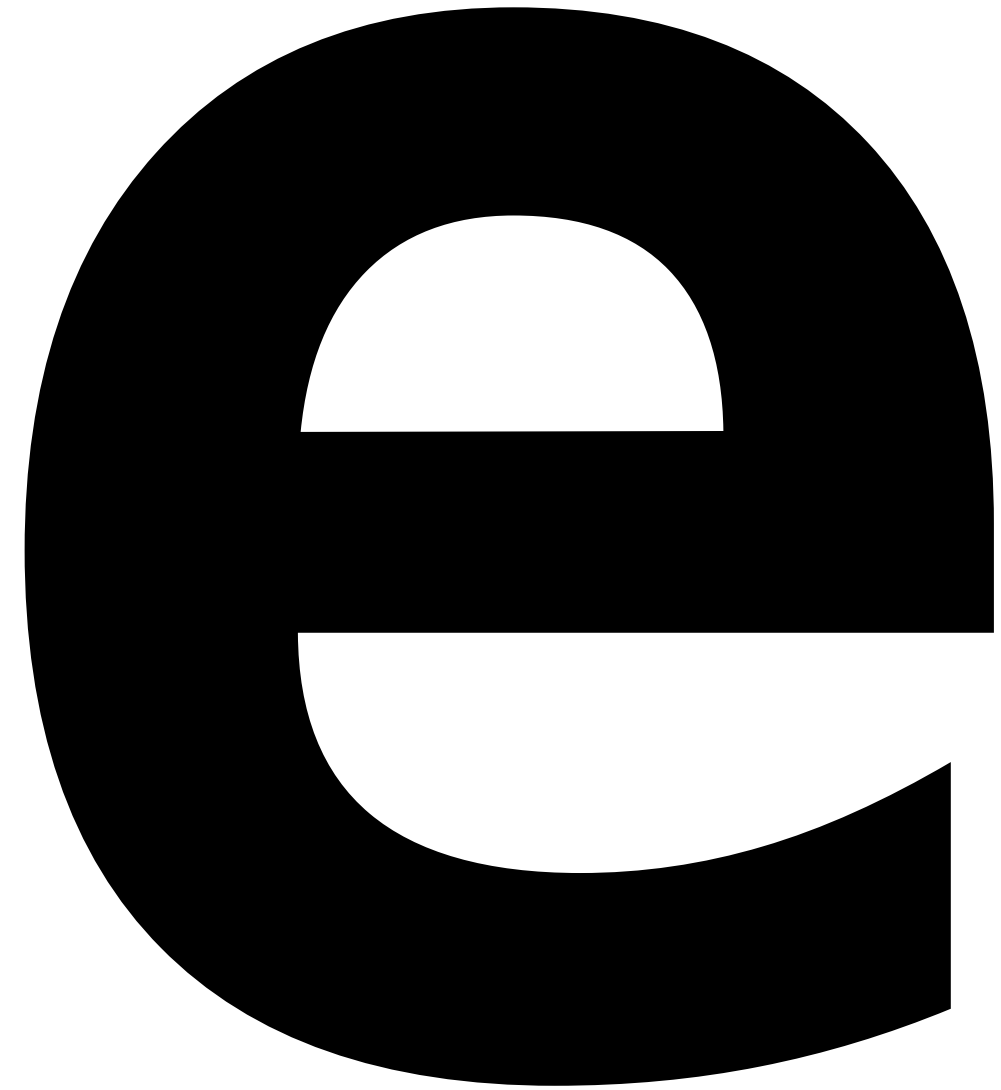




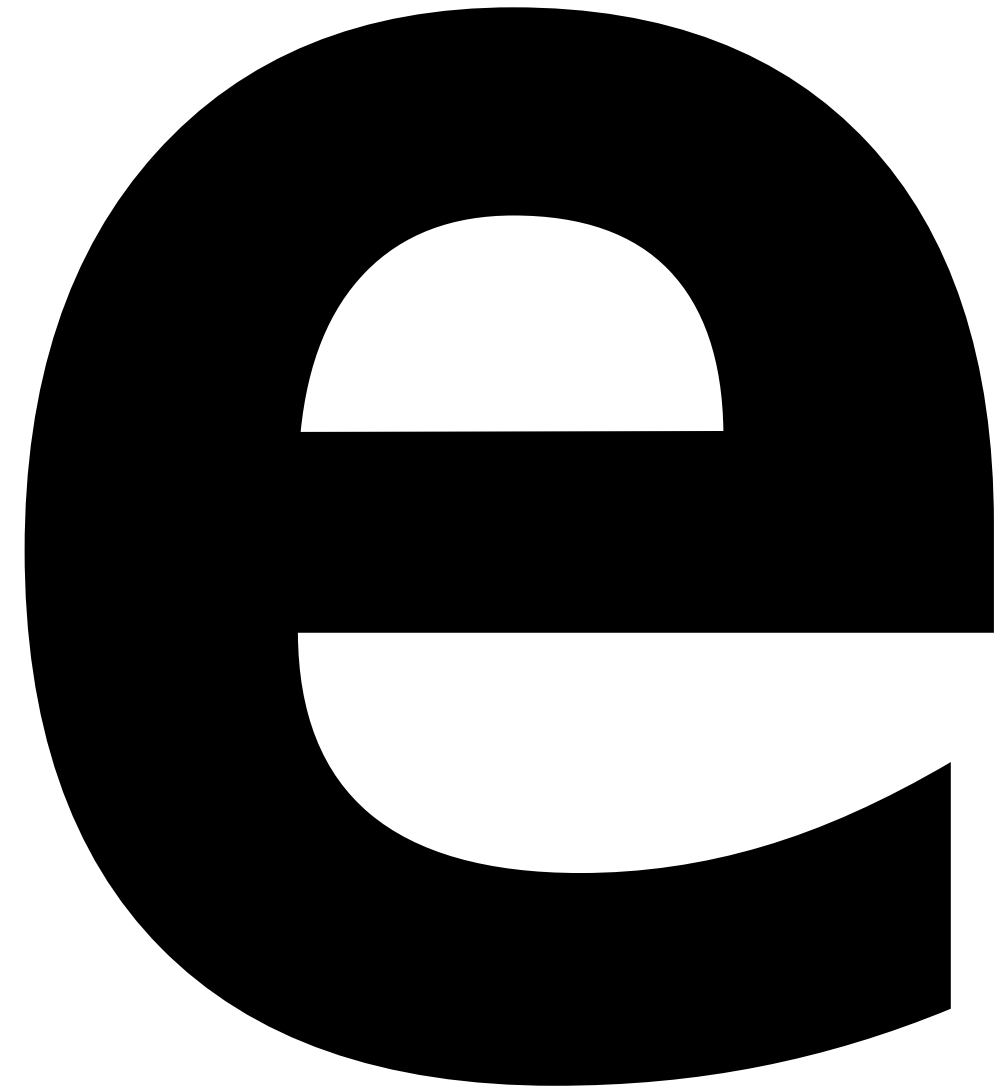


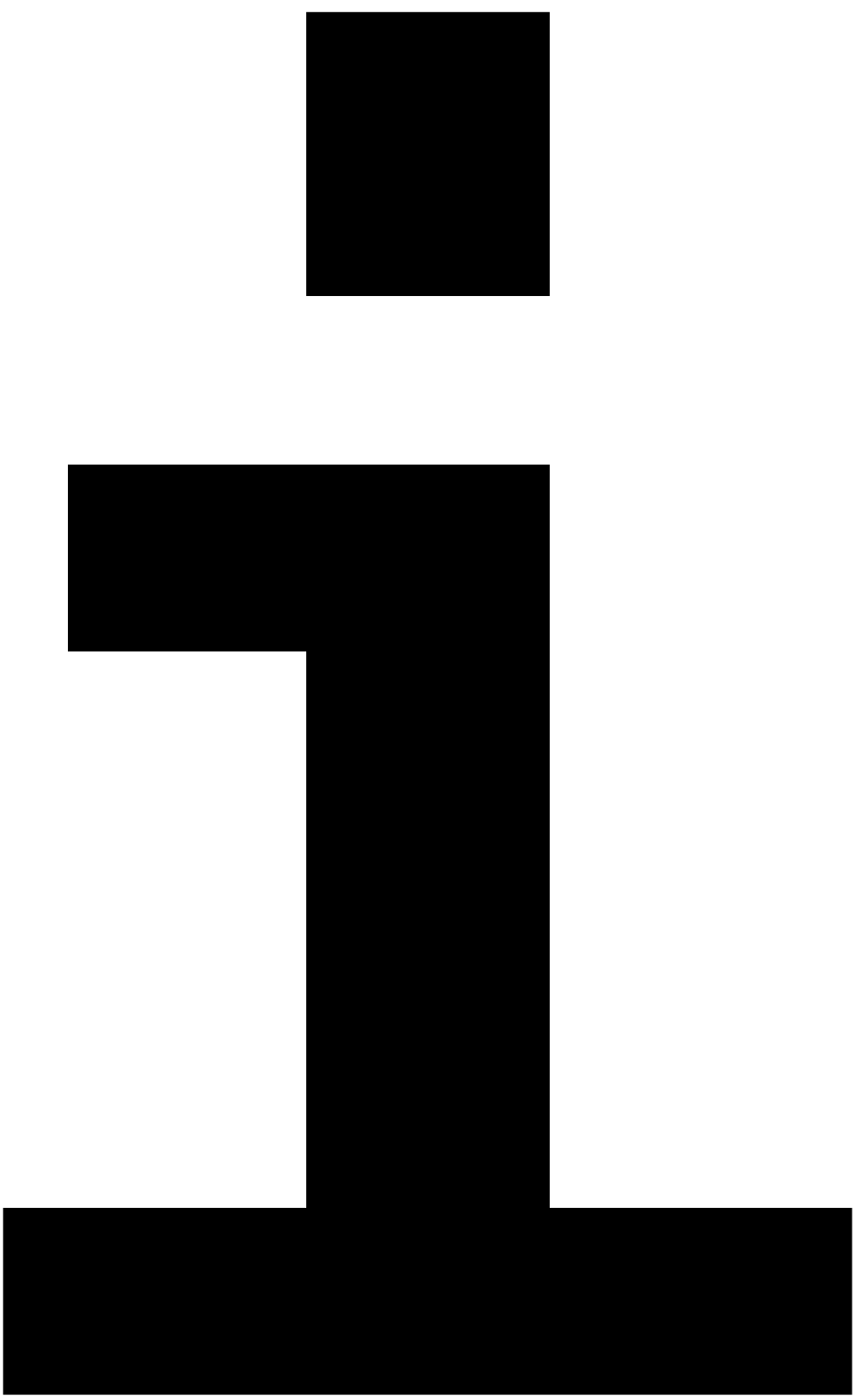
S

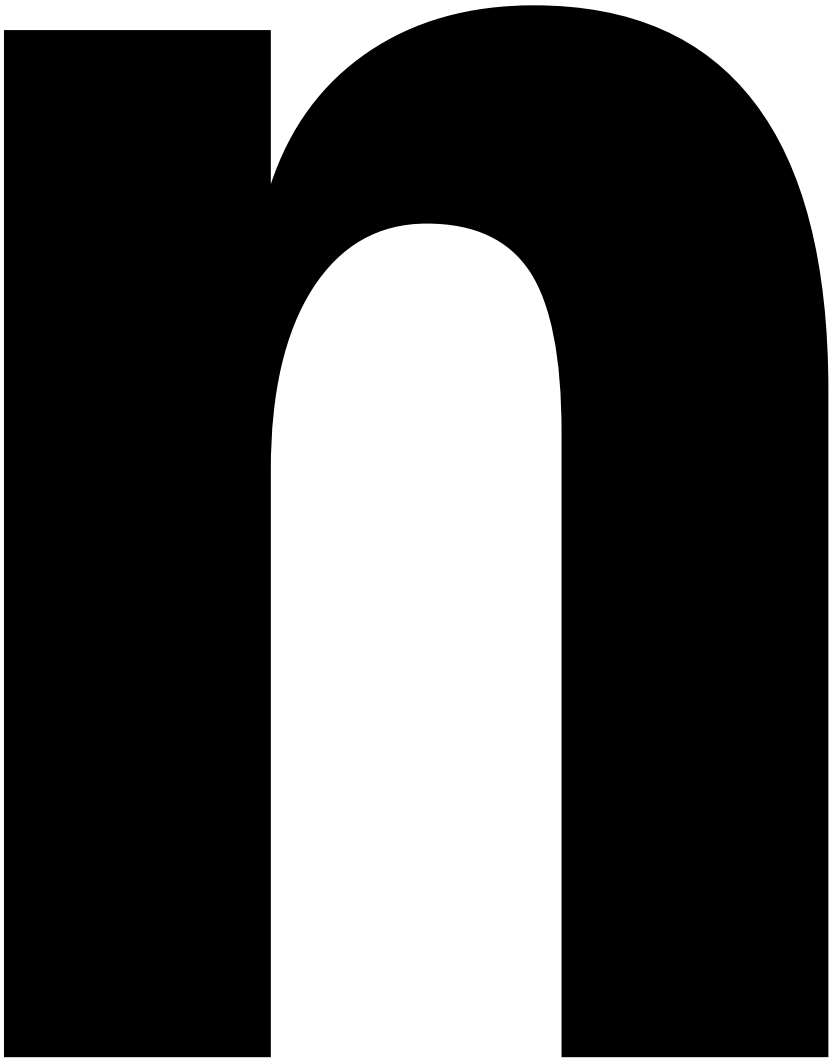




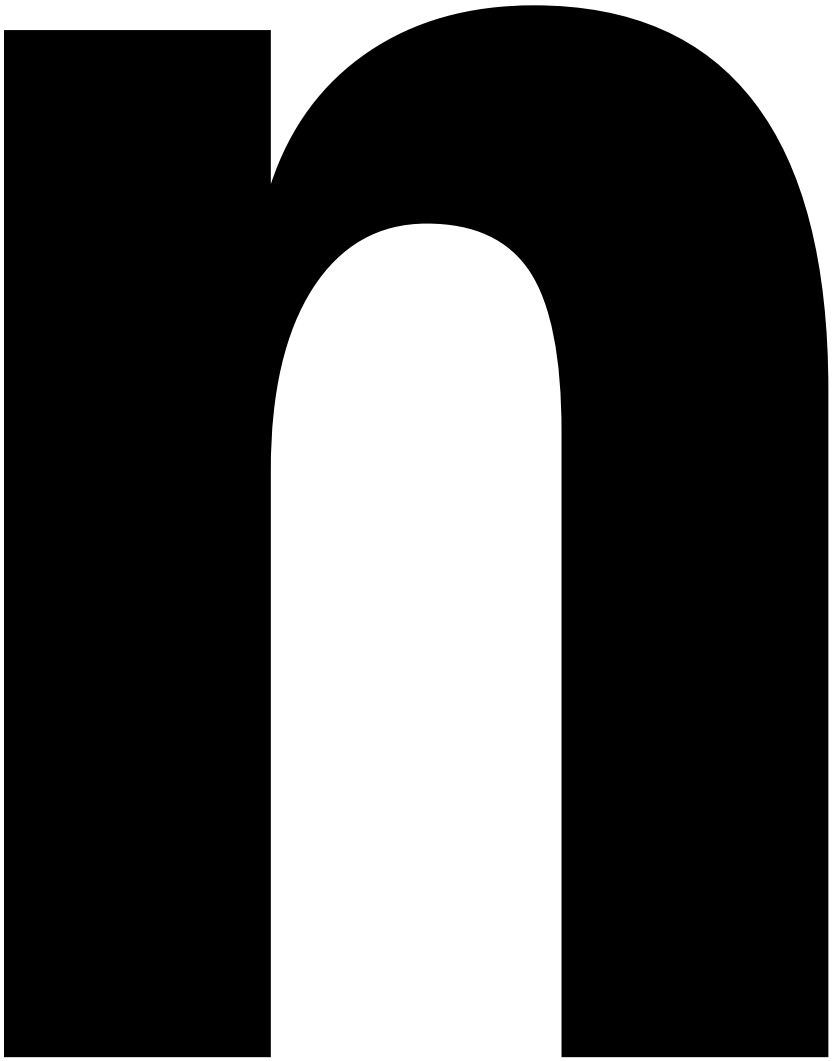
S



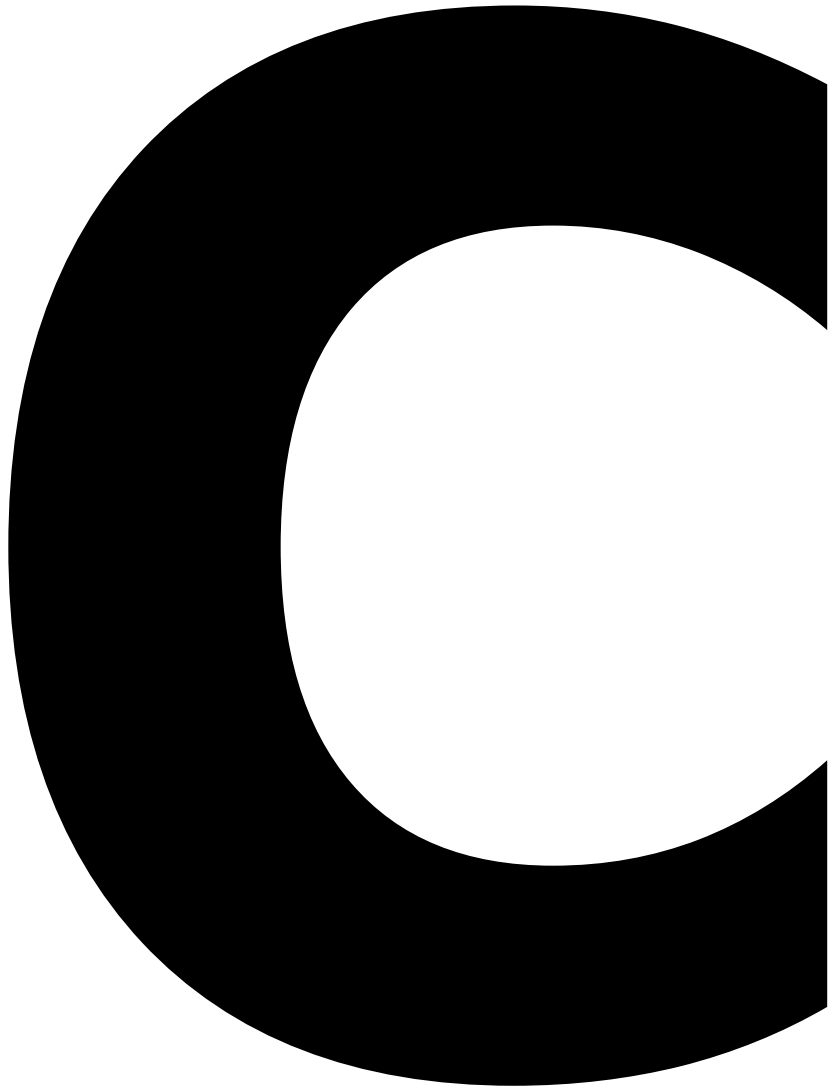


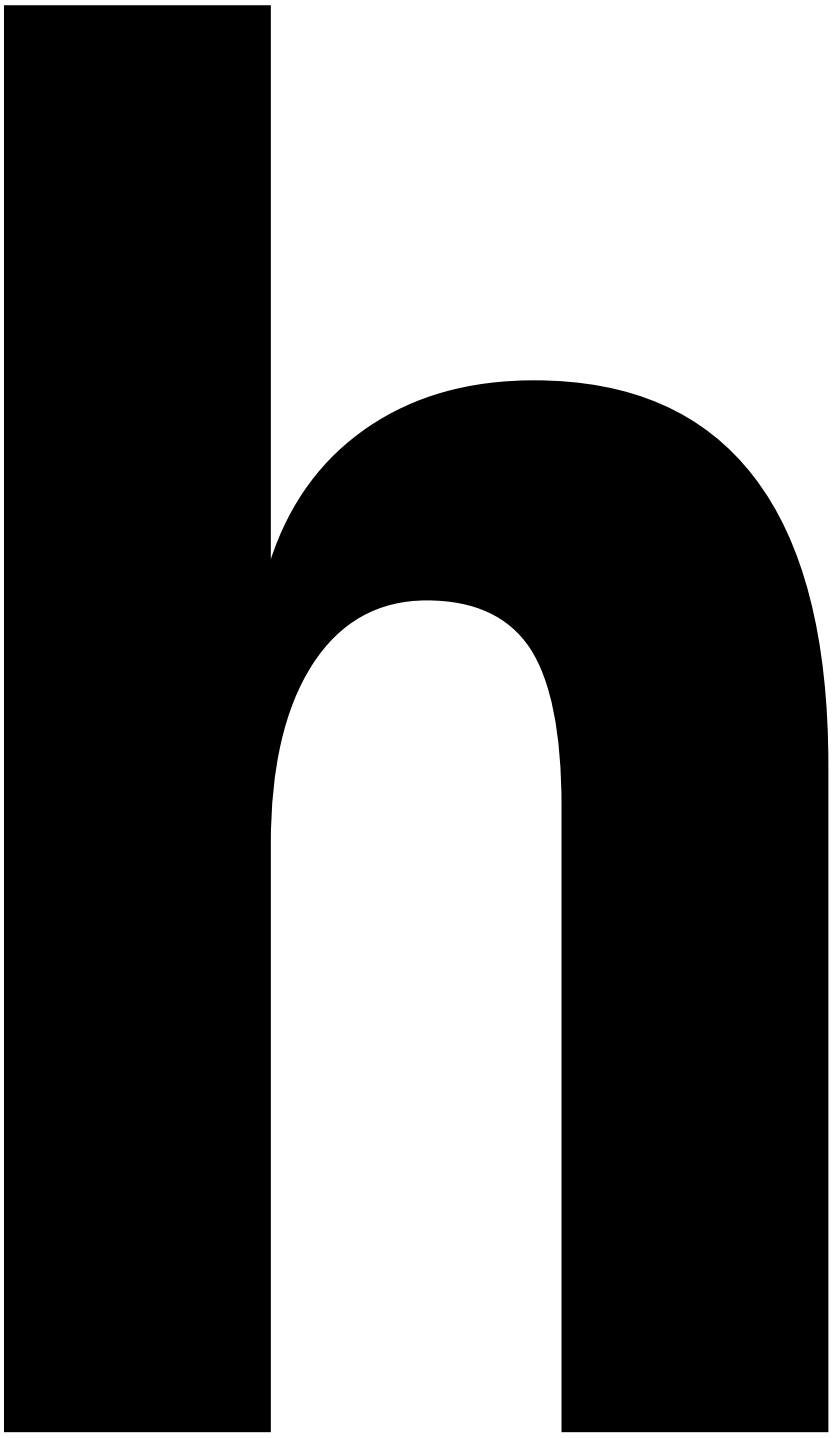


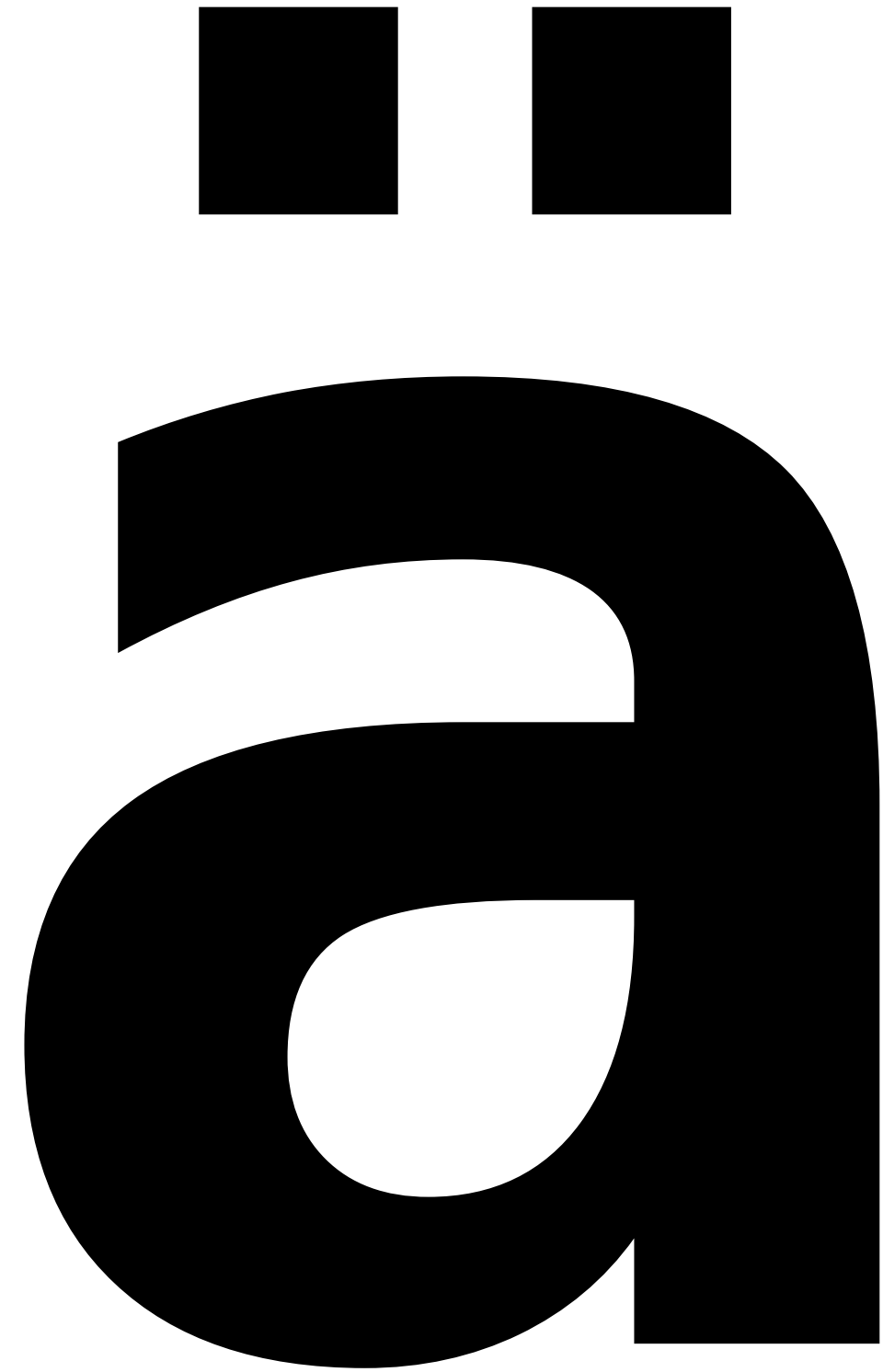
u

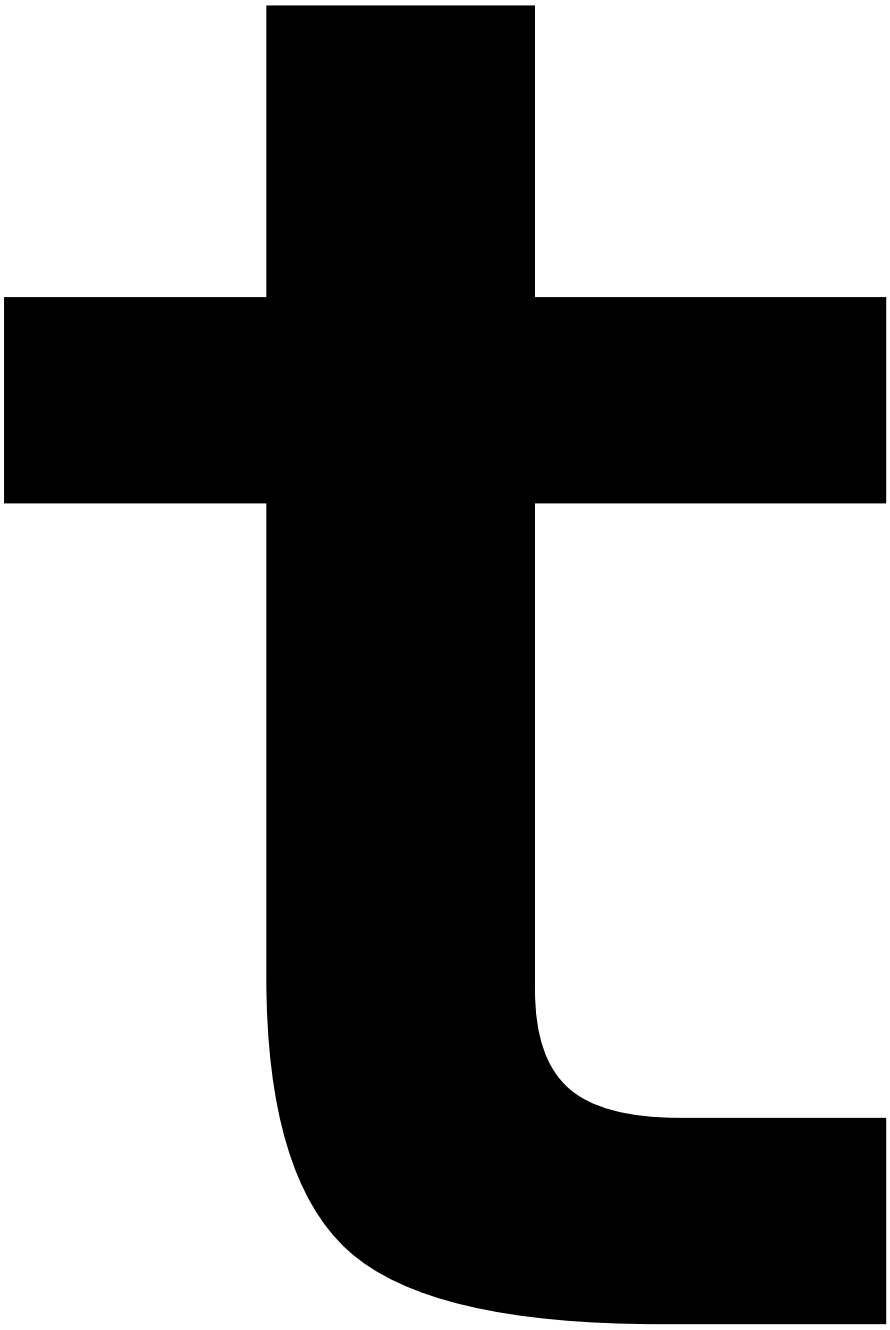


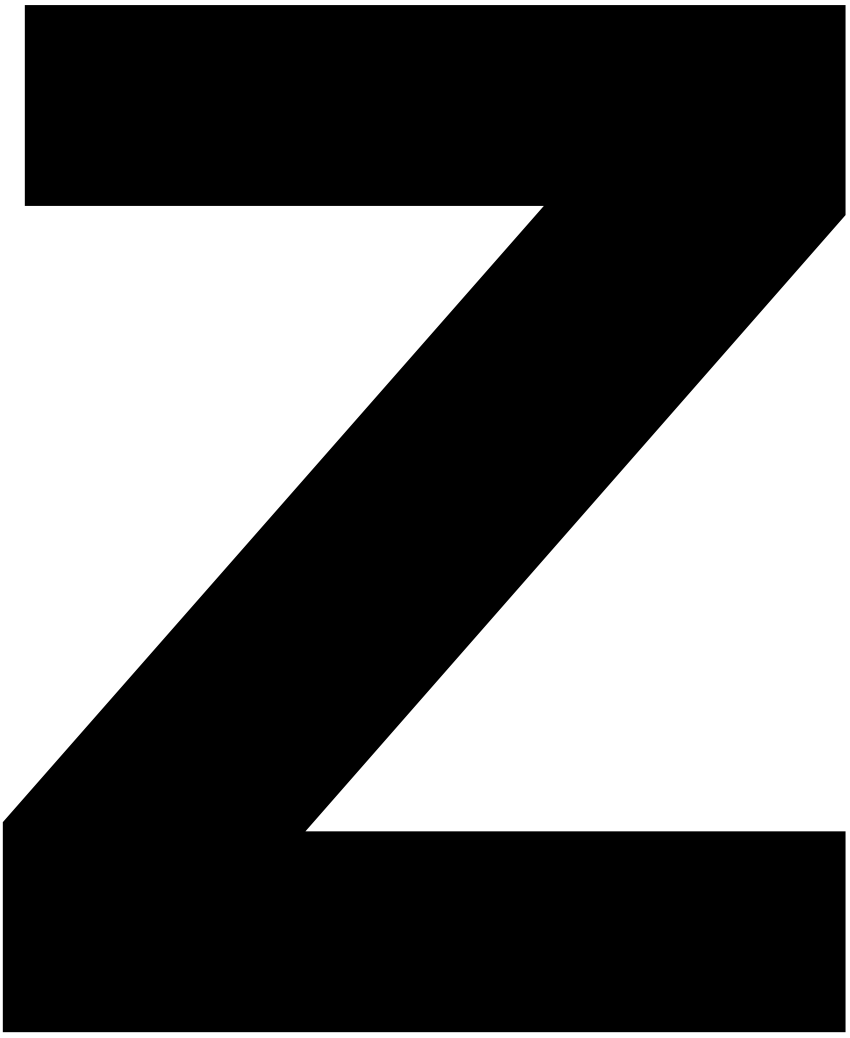
S

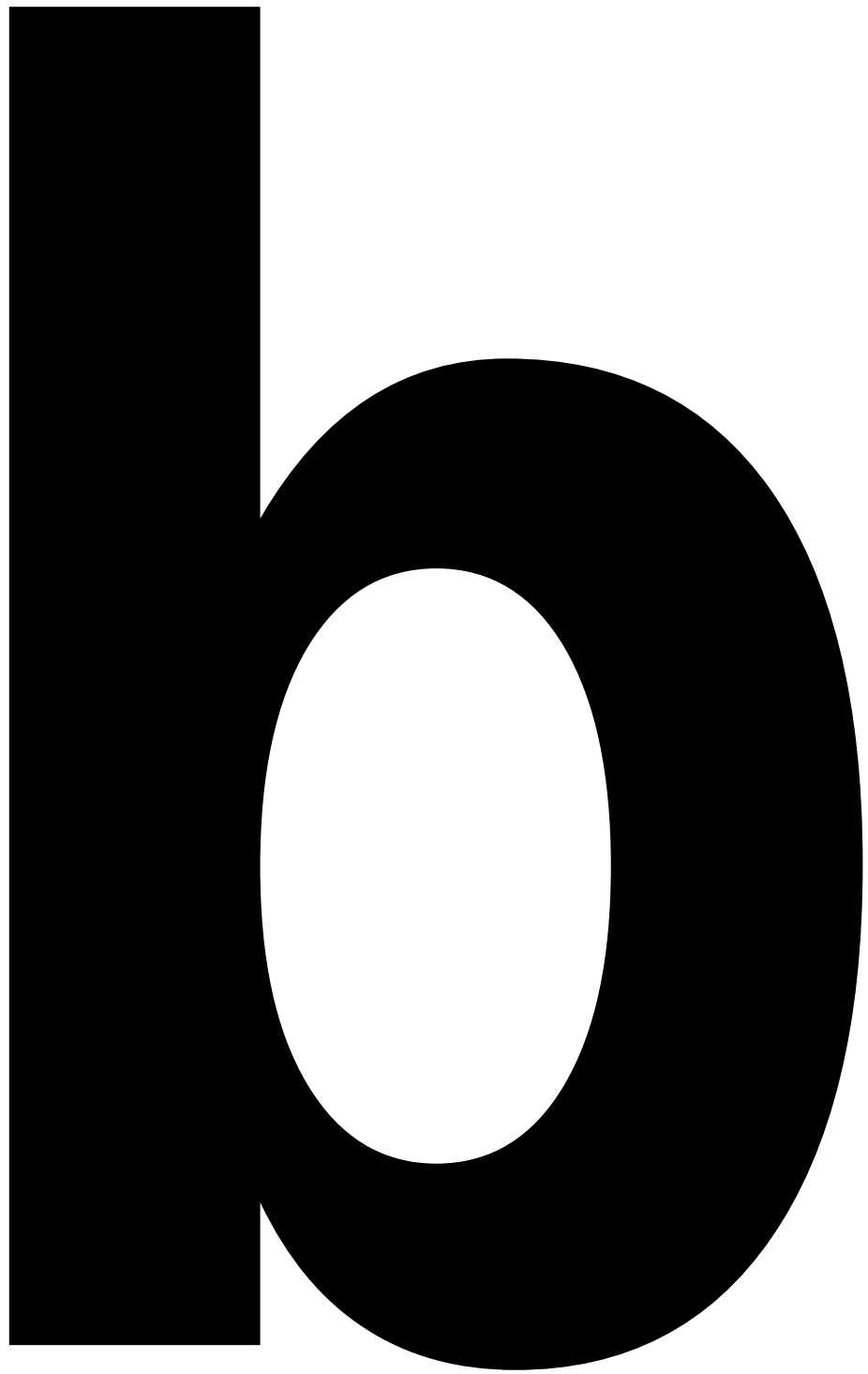


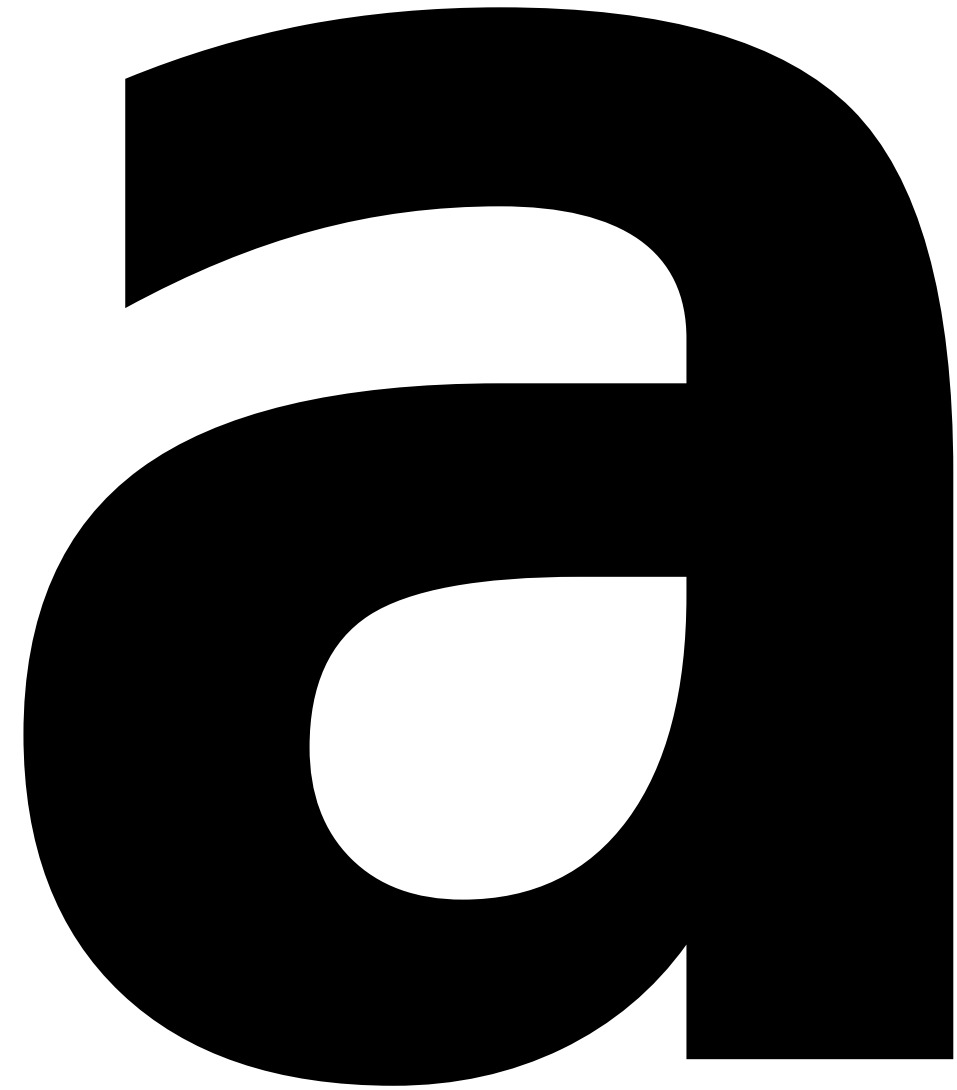


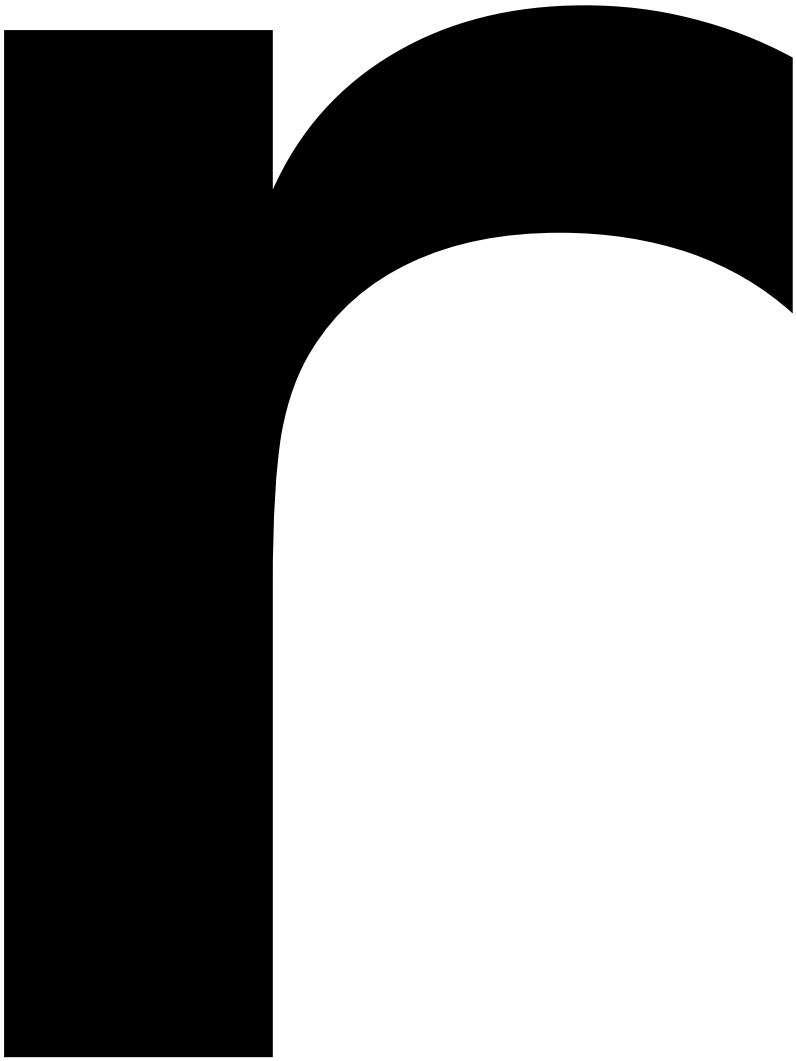


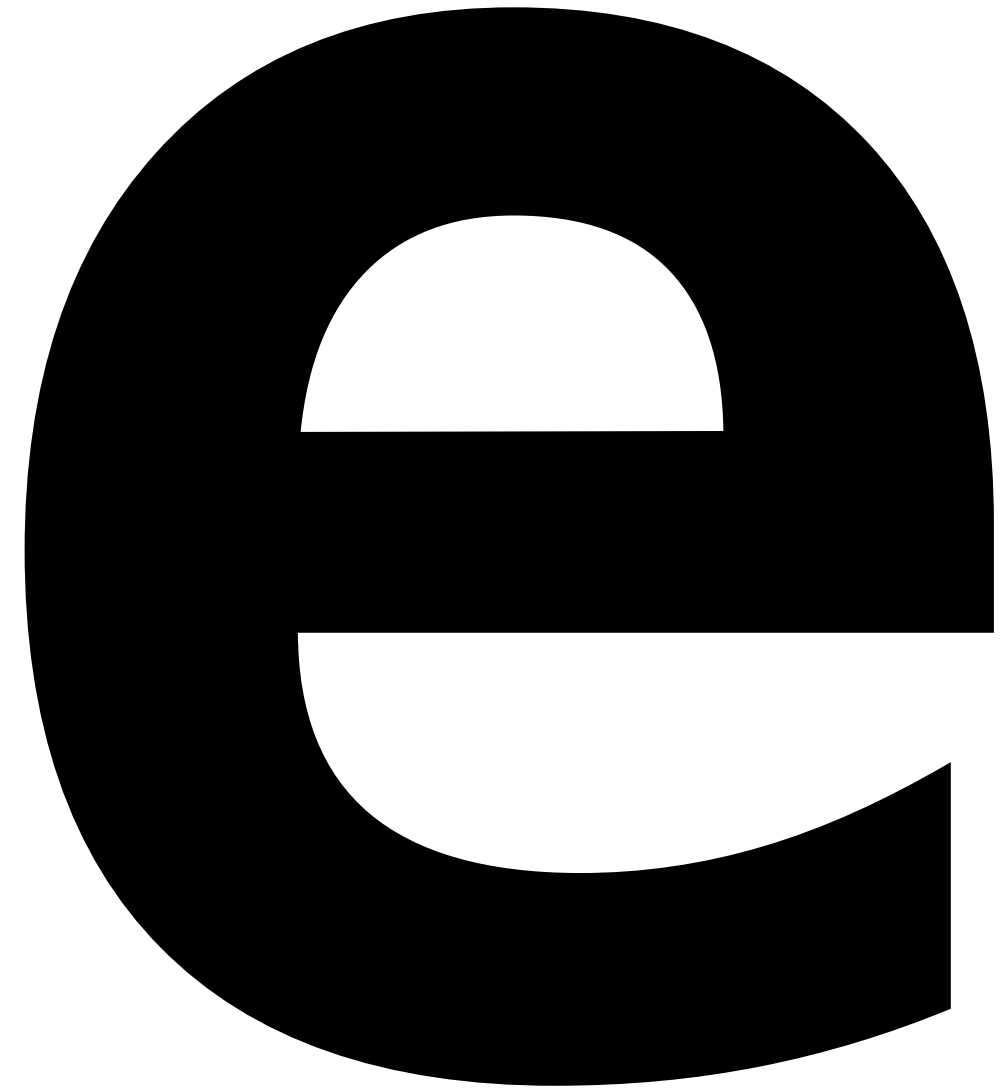




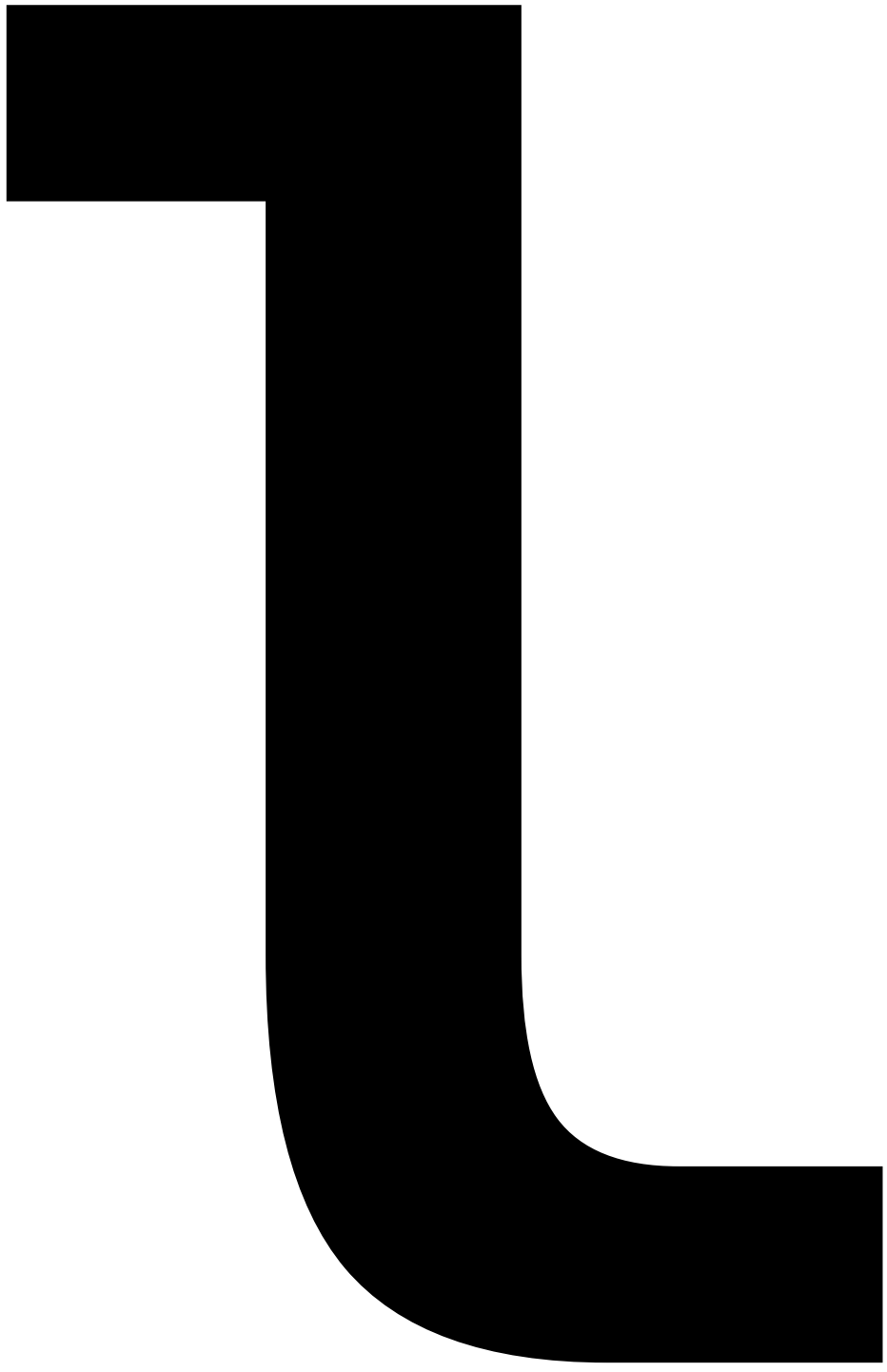


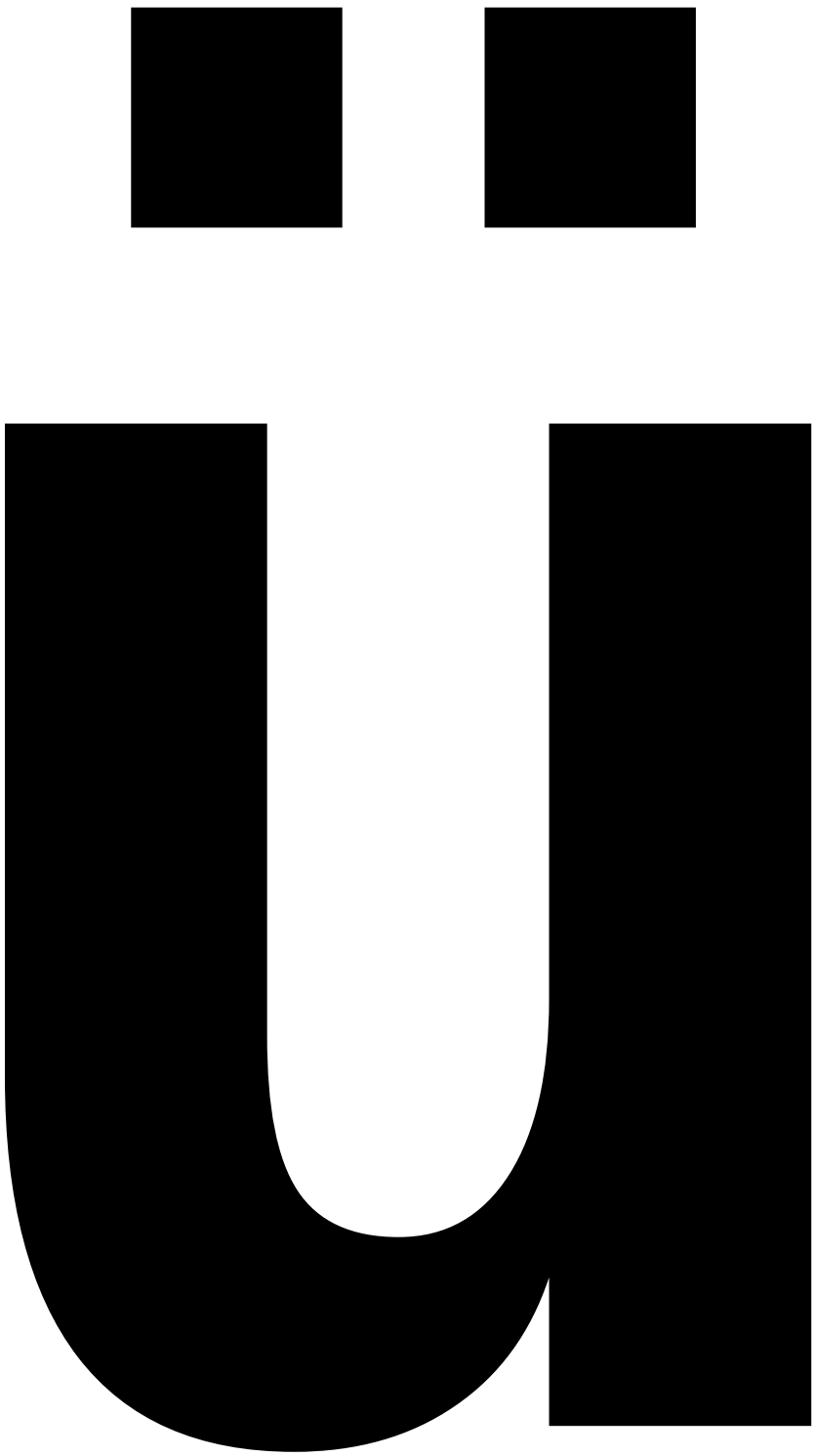


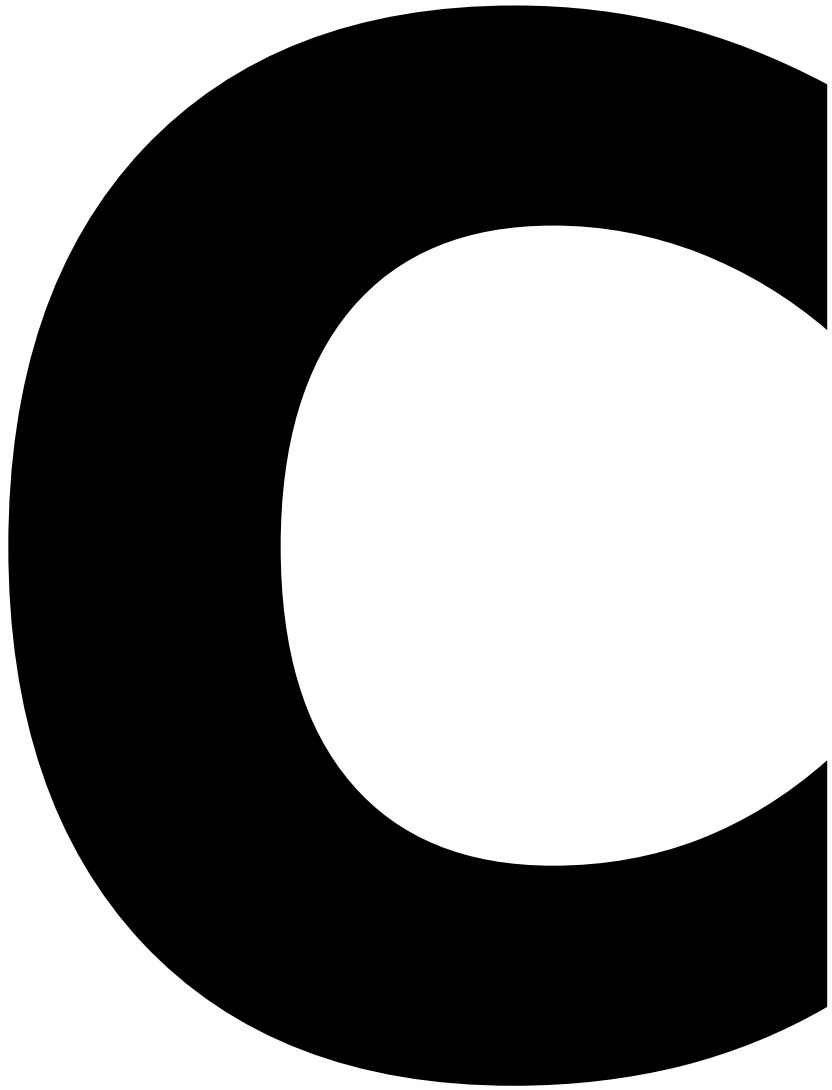


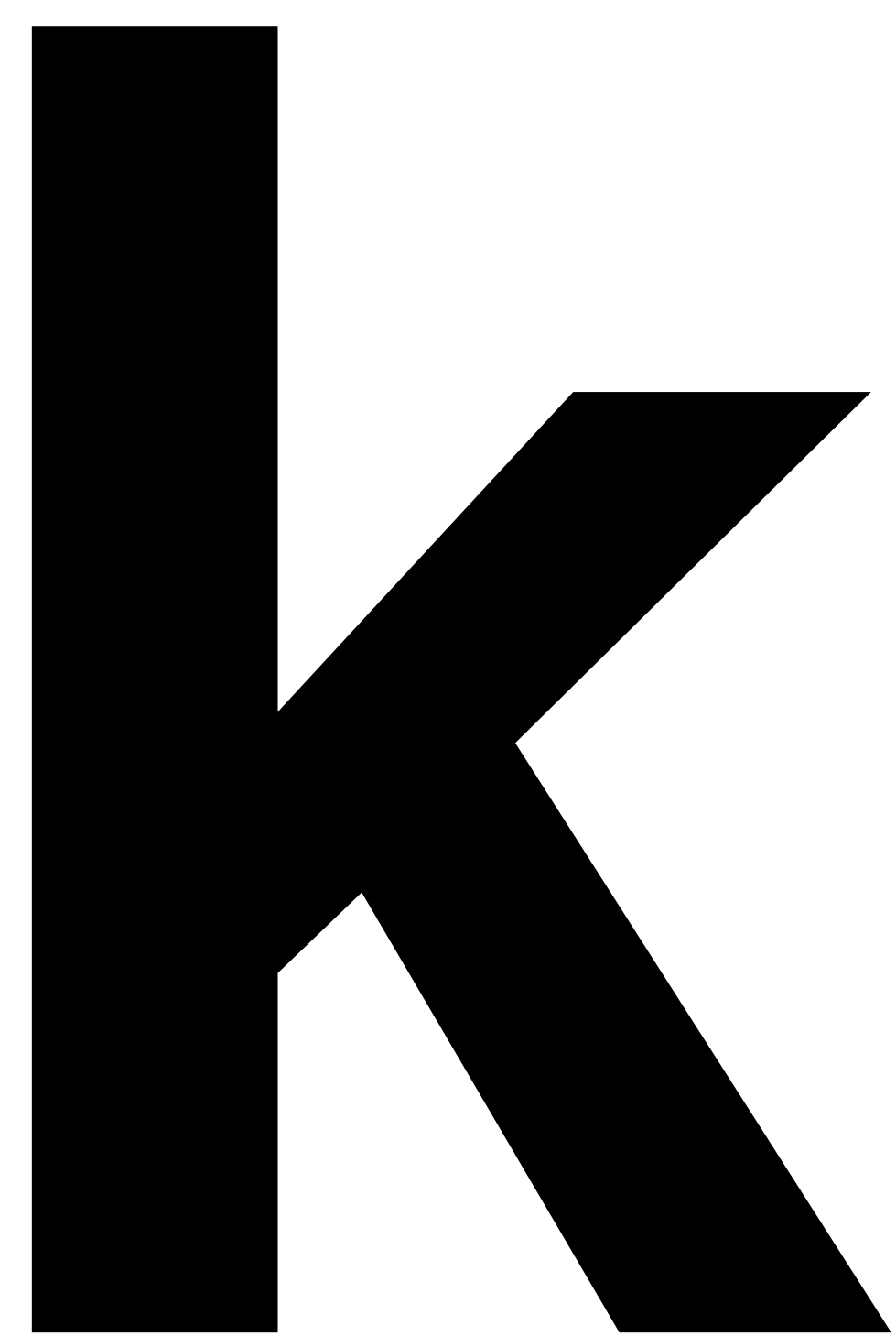


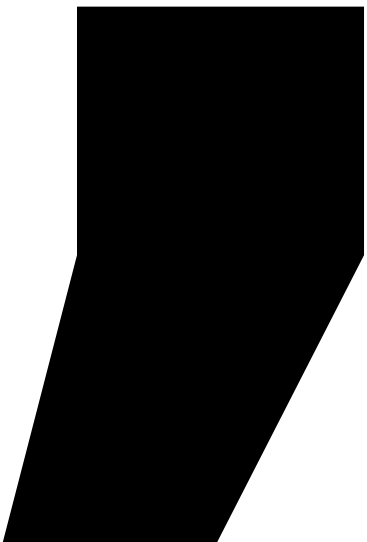
S



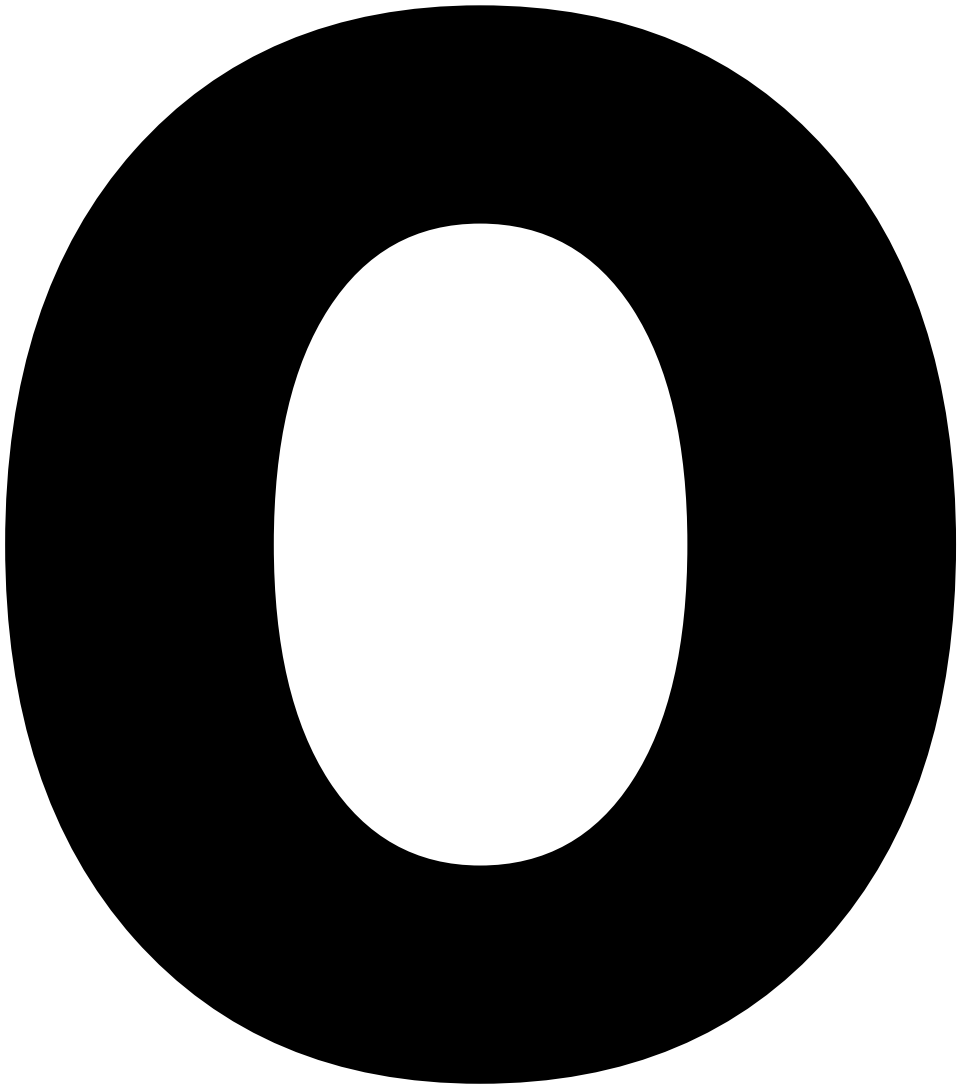


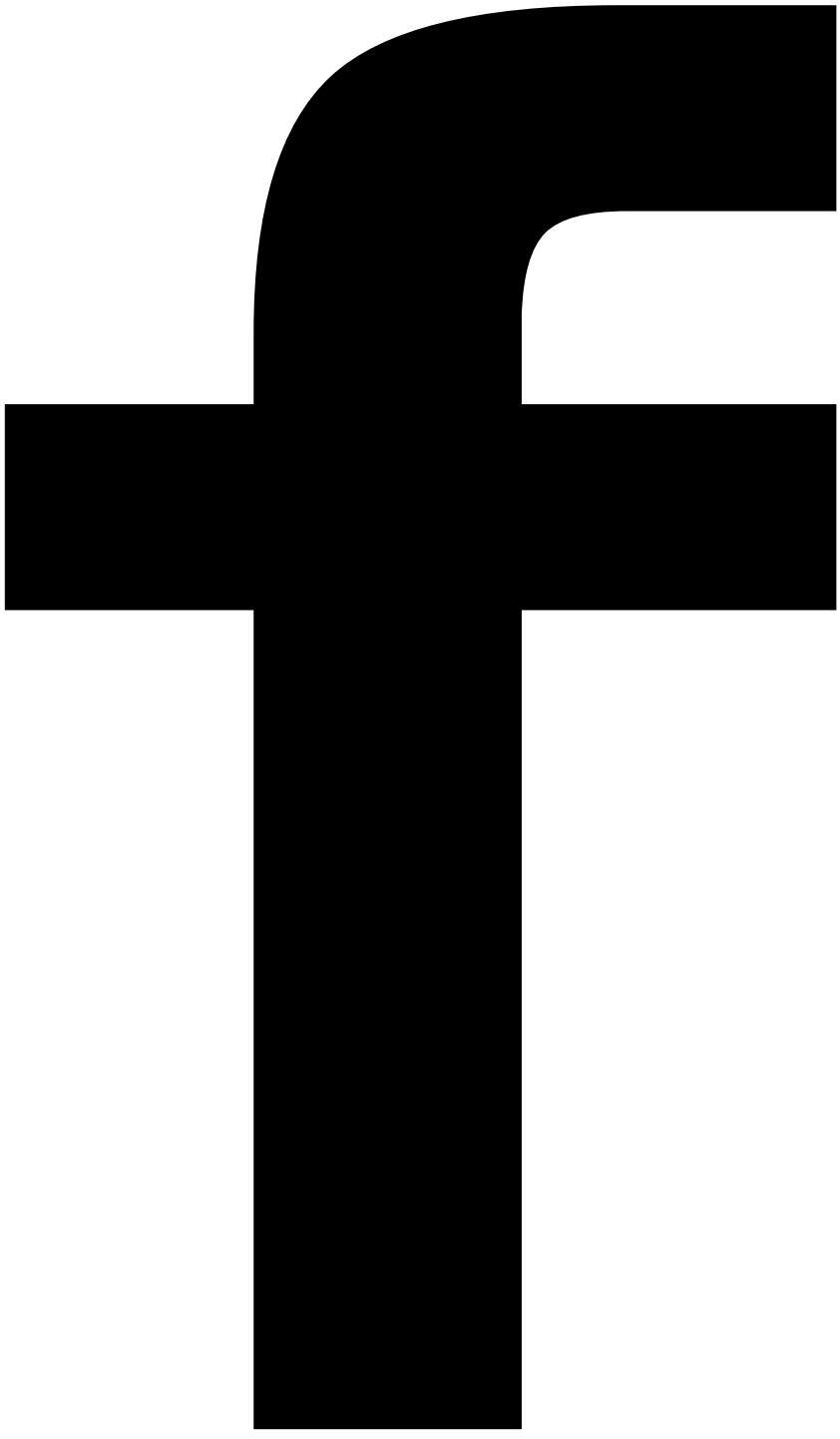


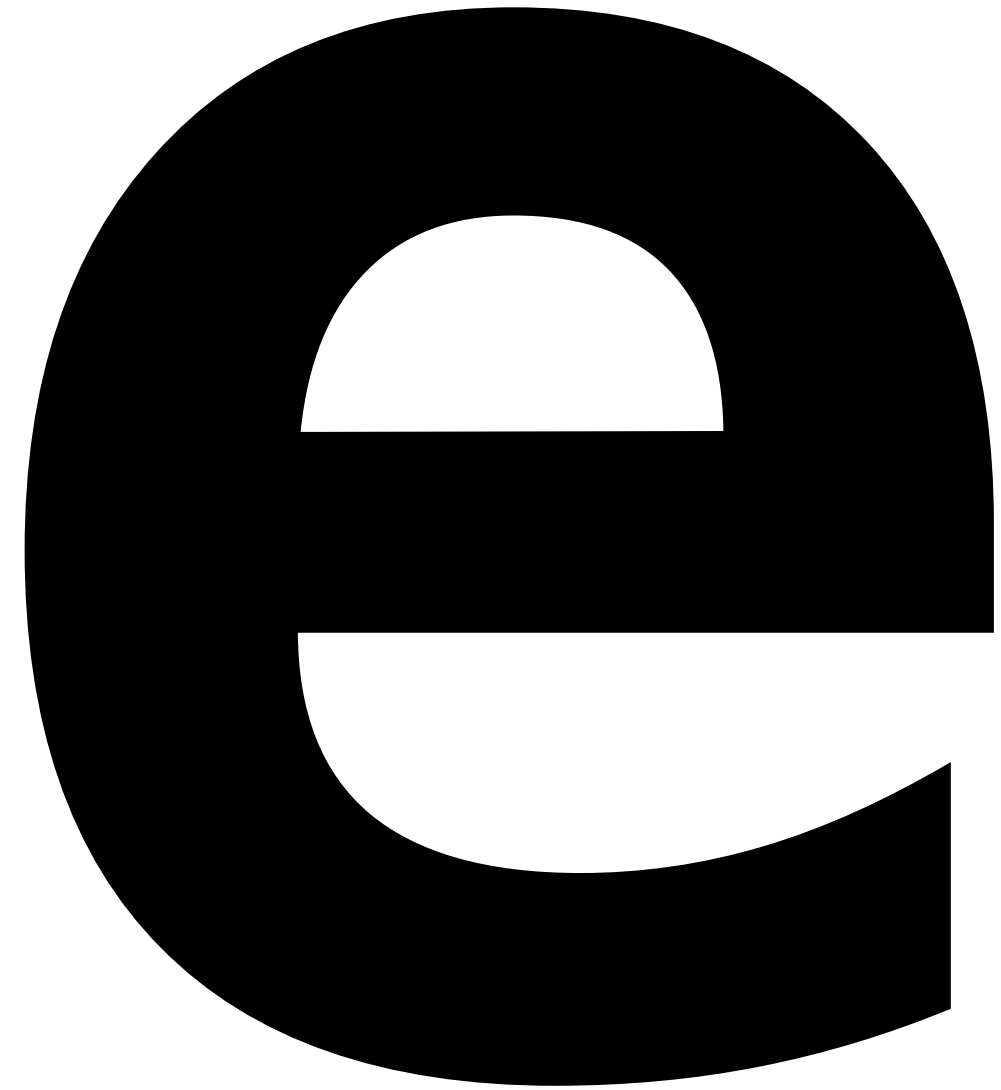


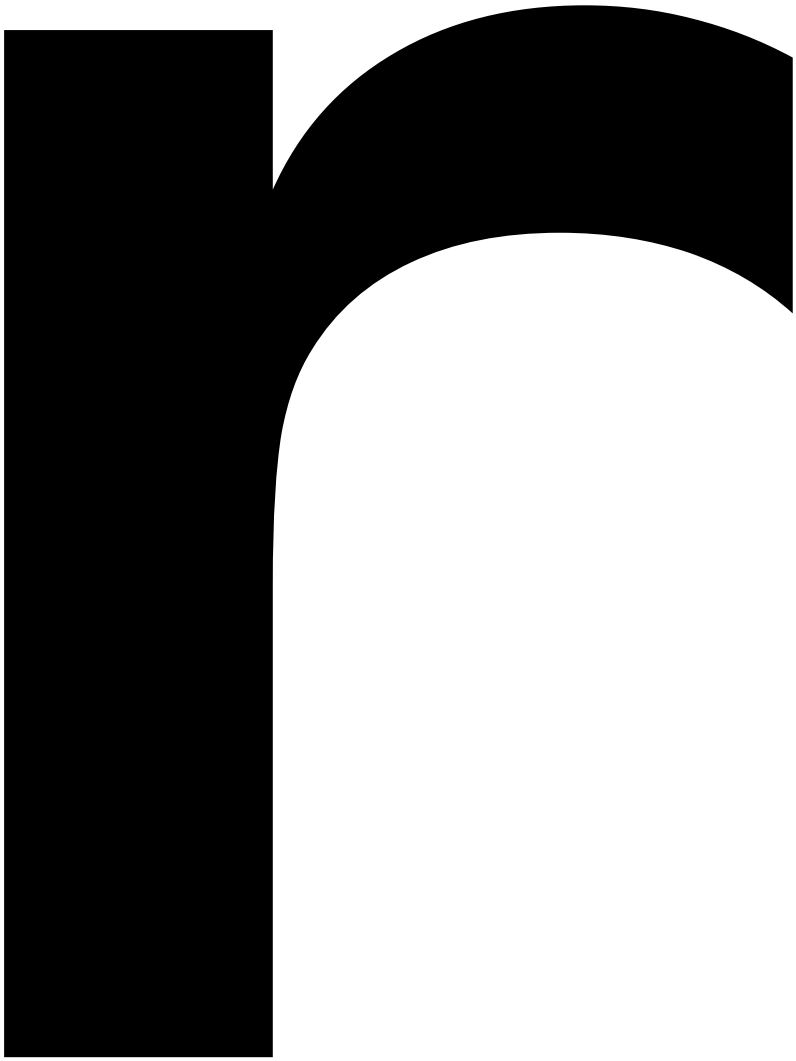


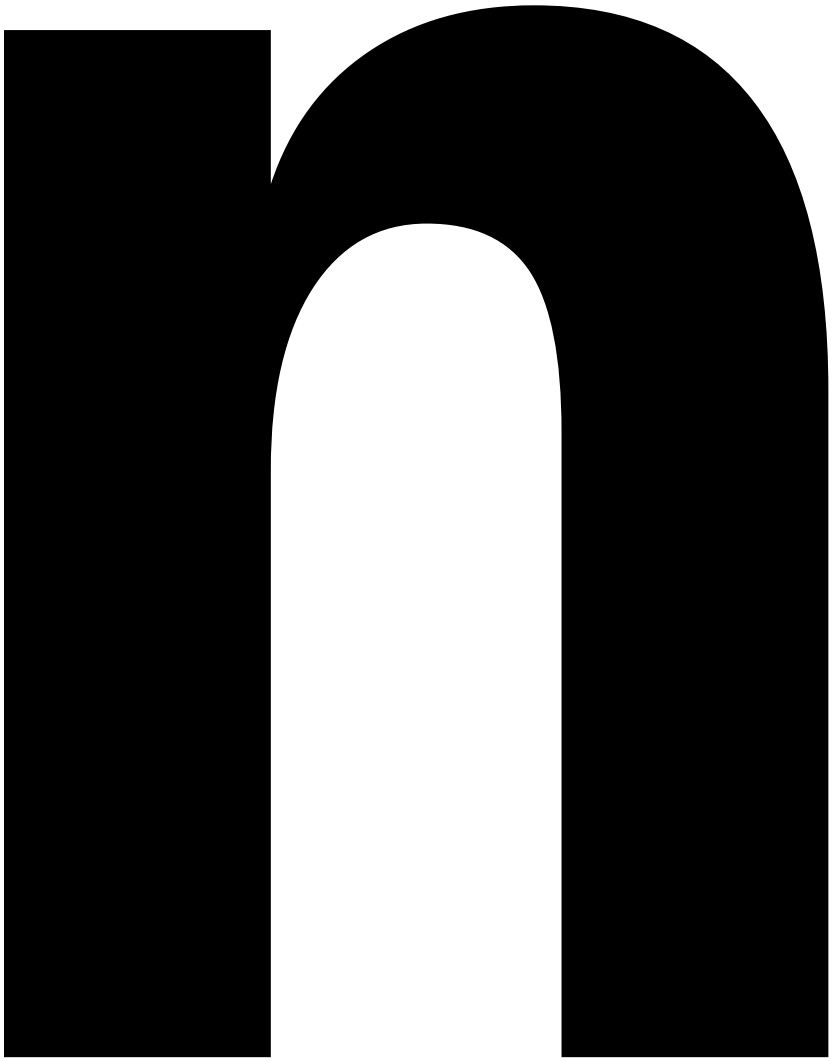
S



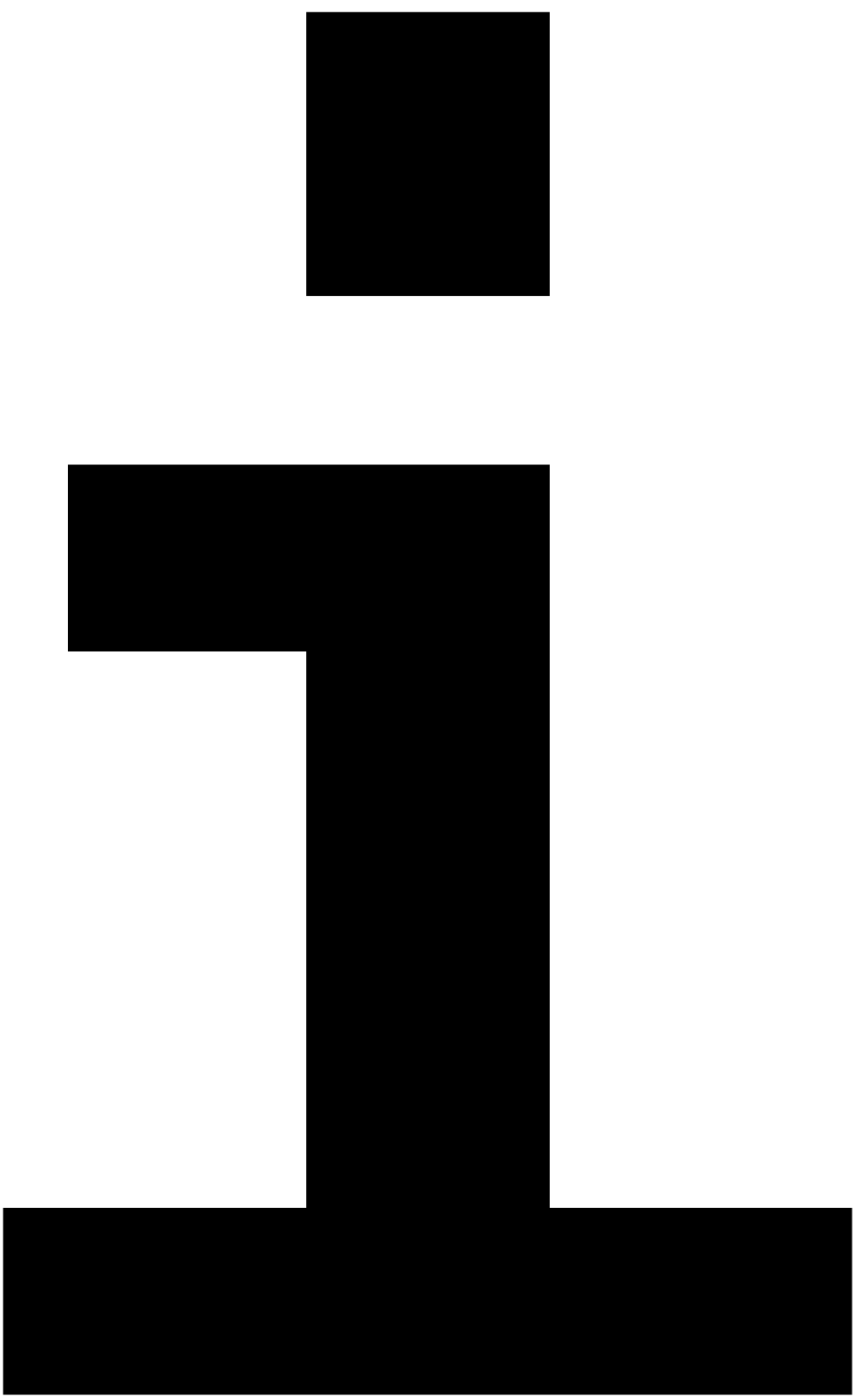


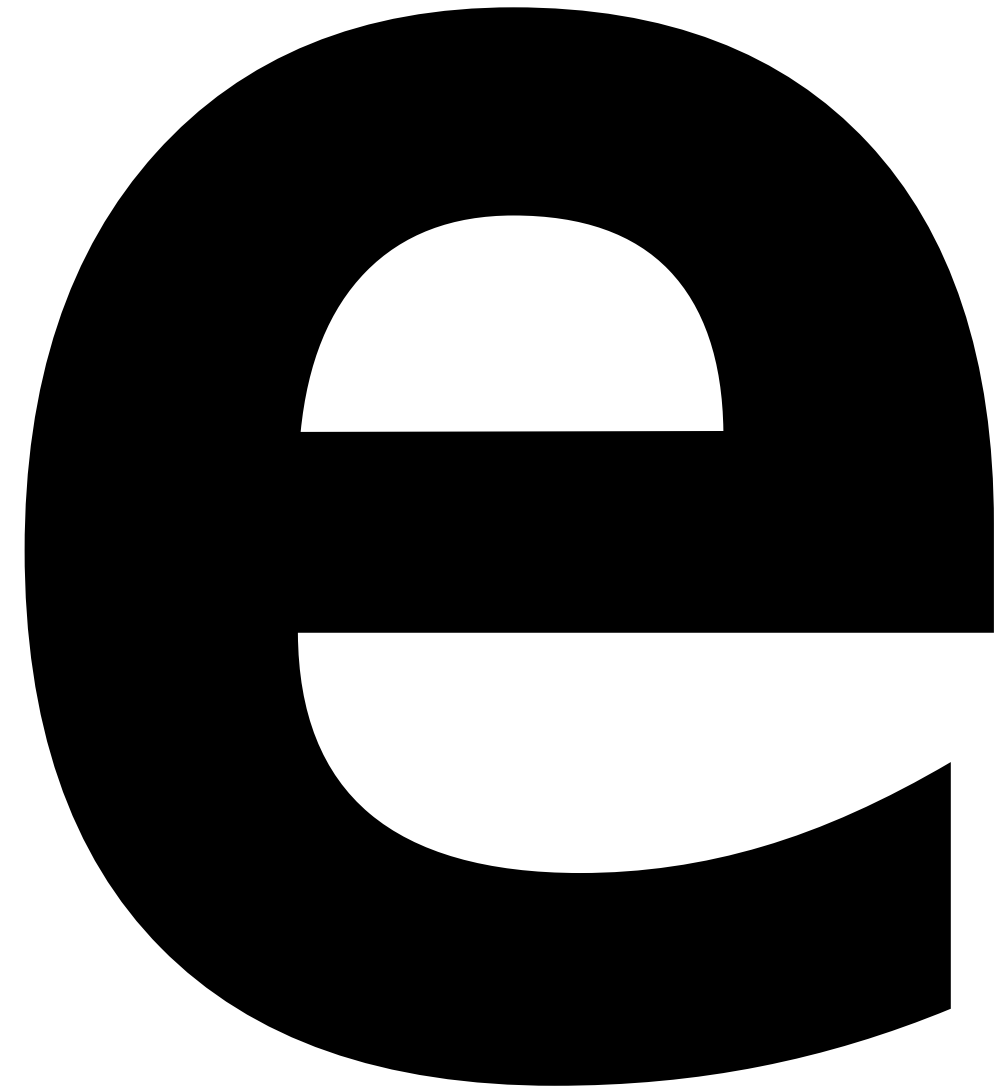


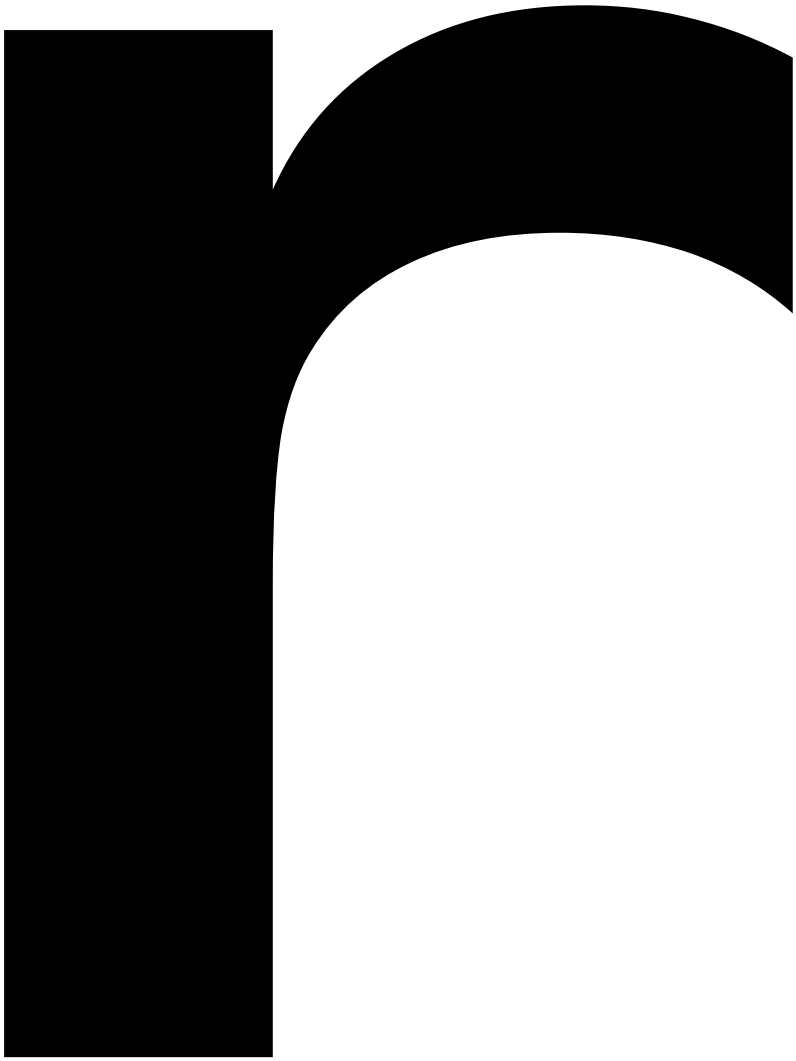


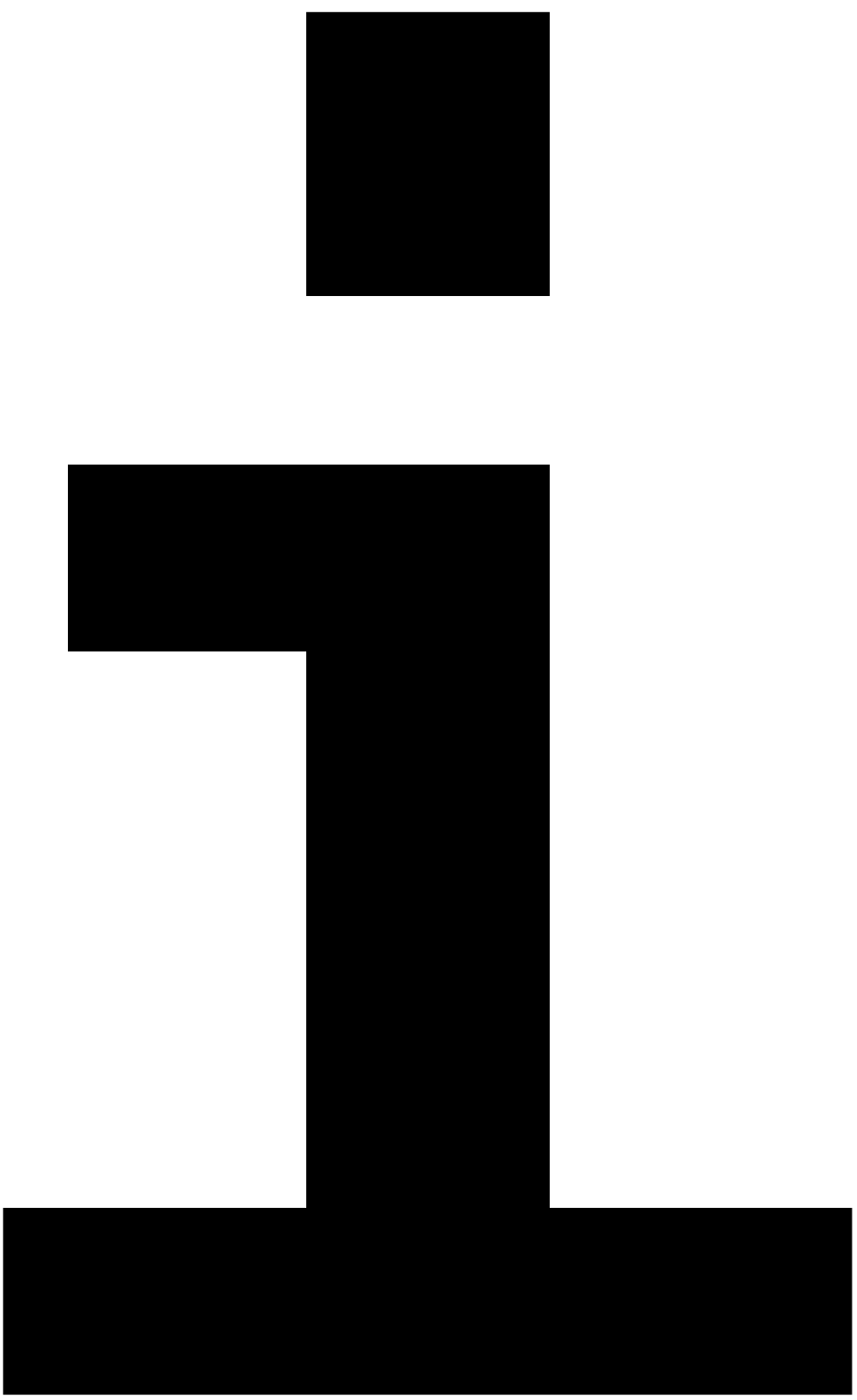


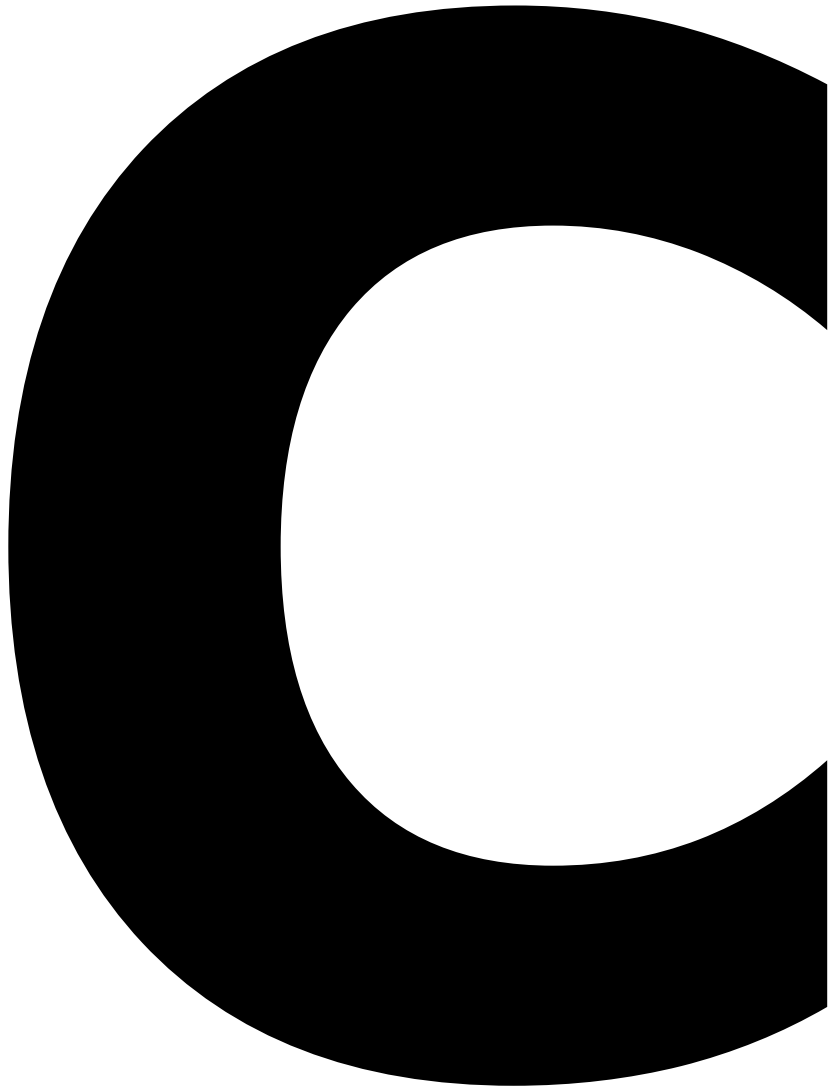
d

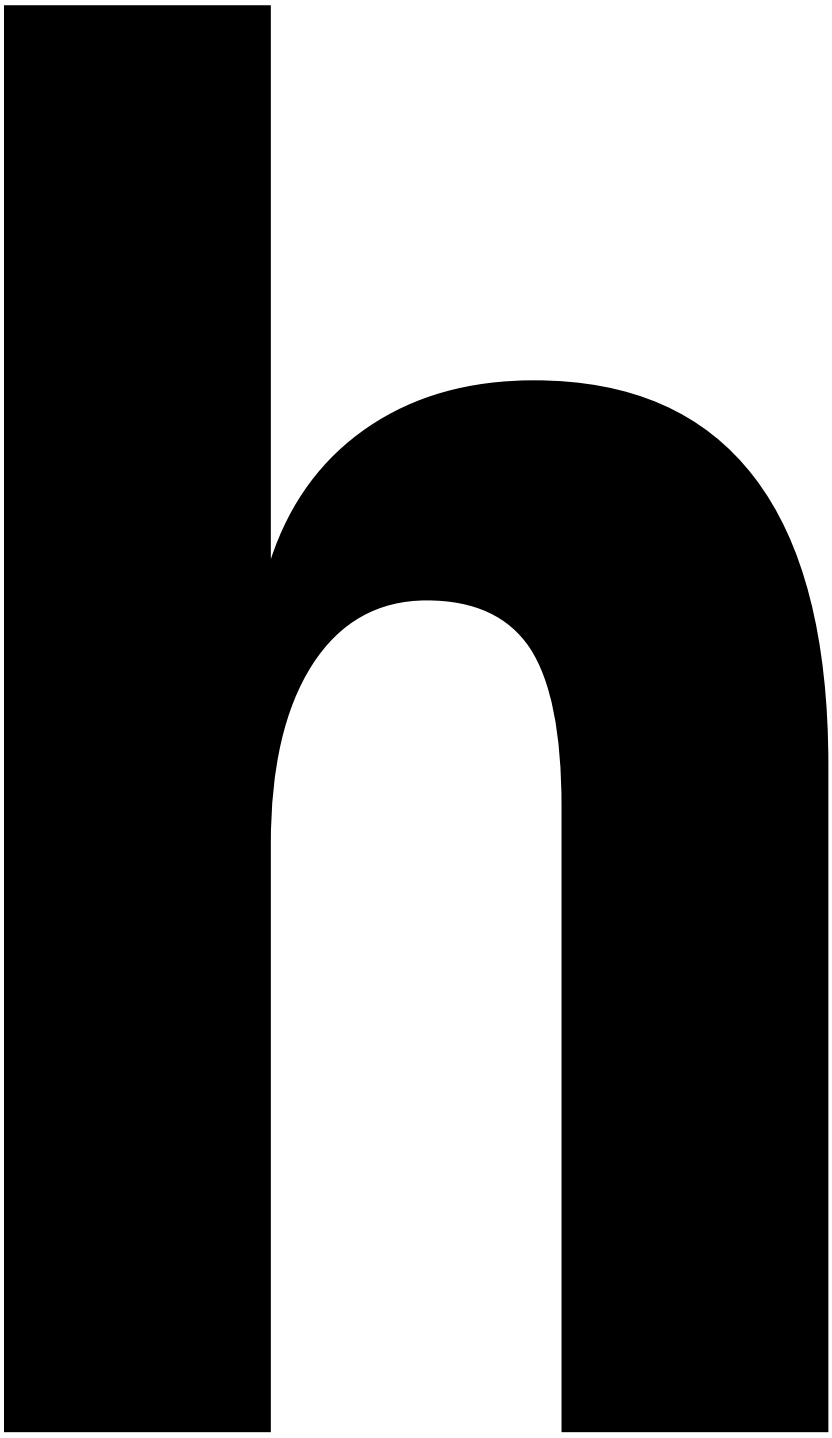


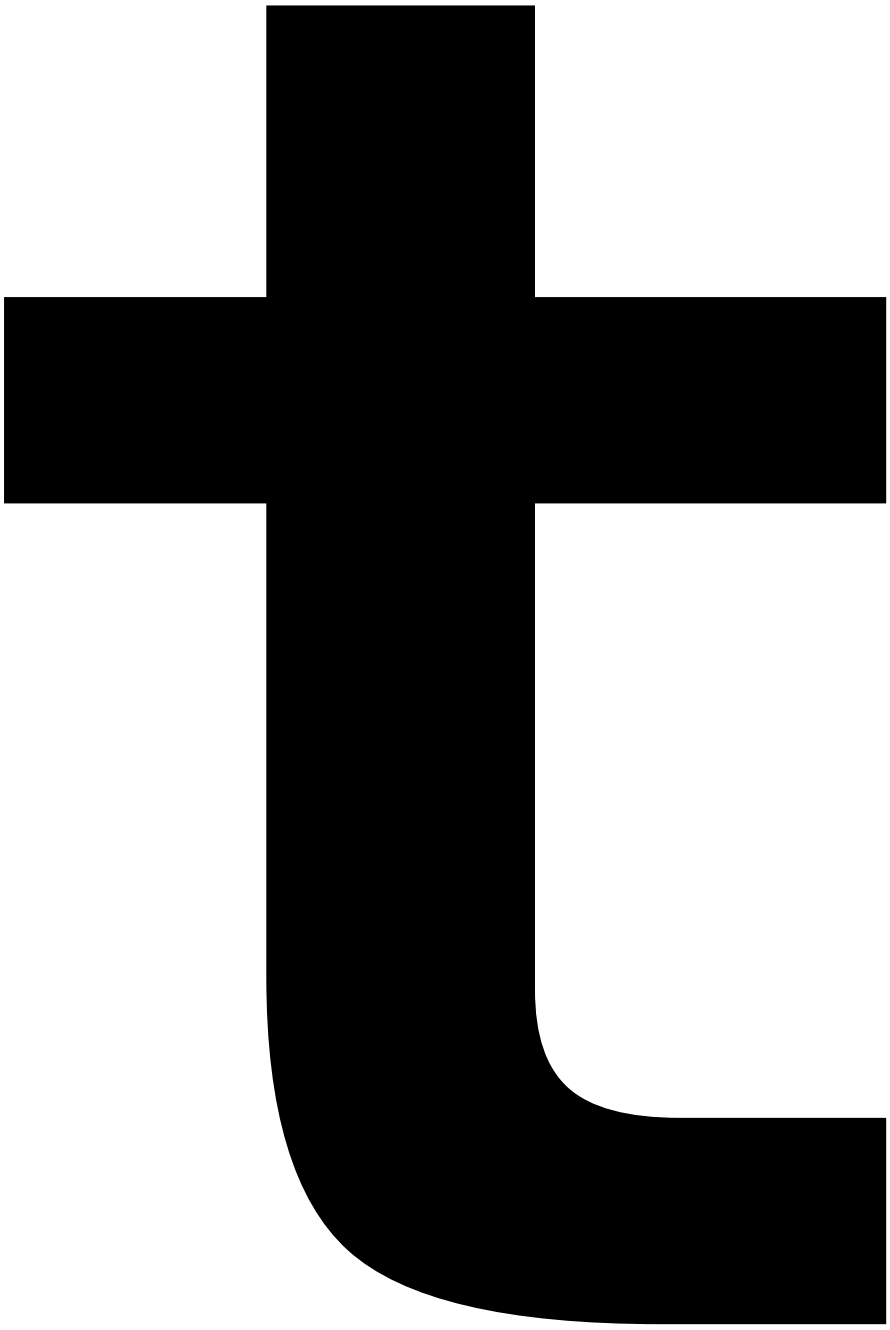


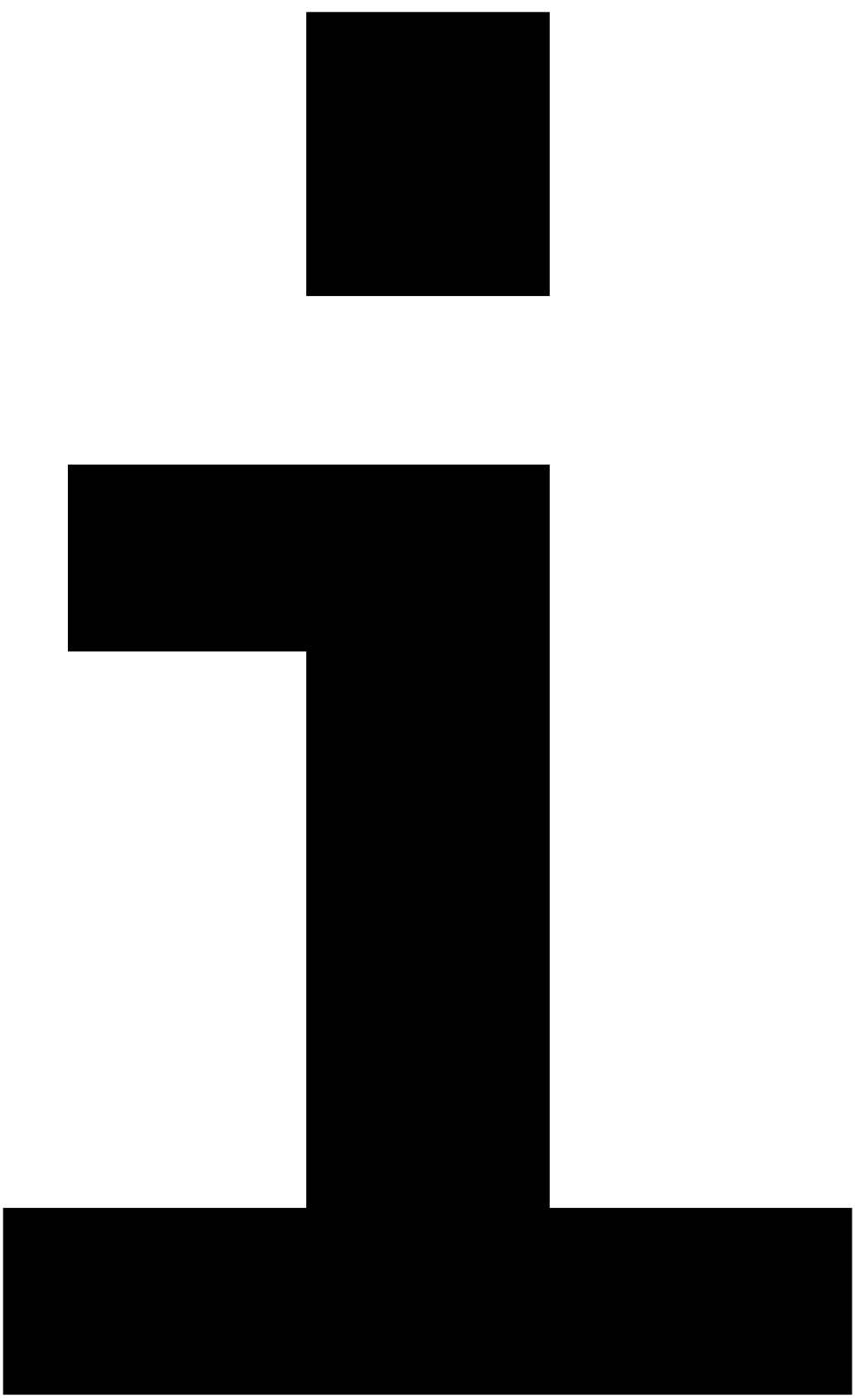


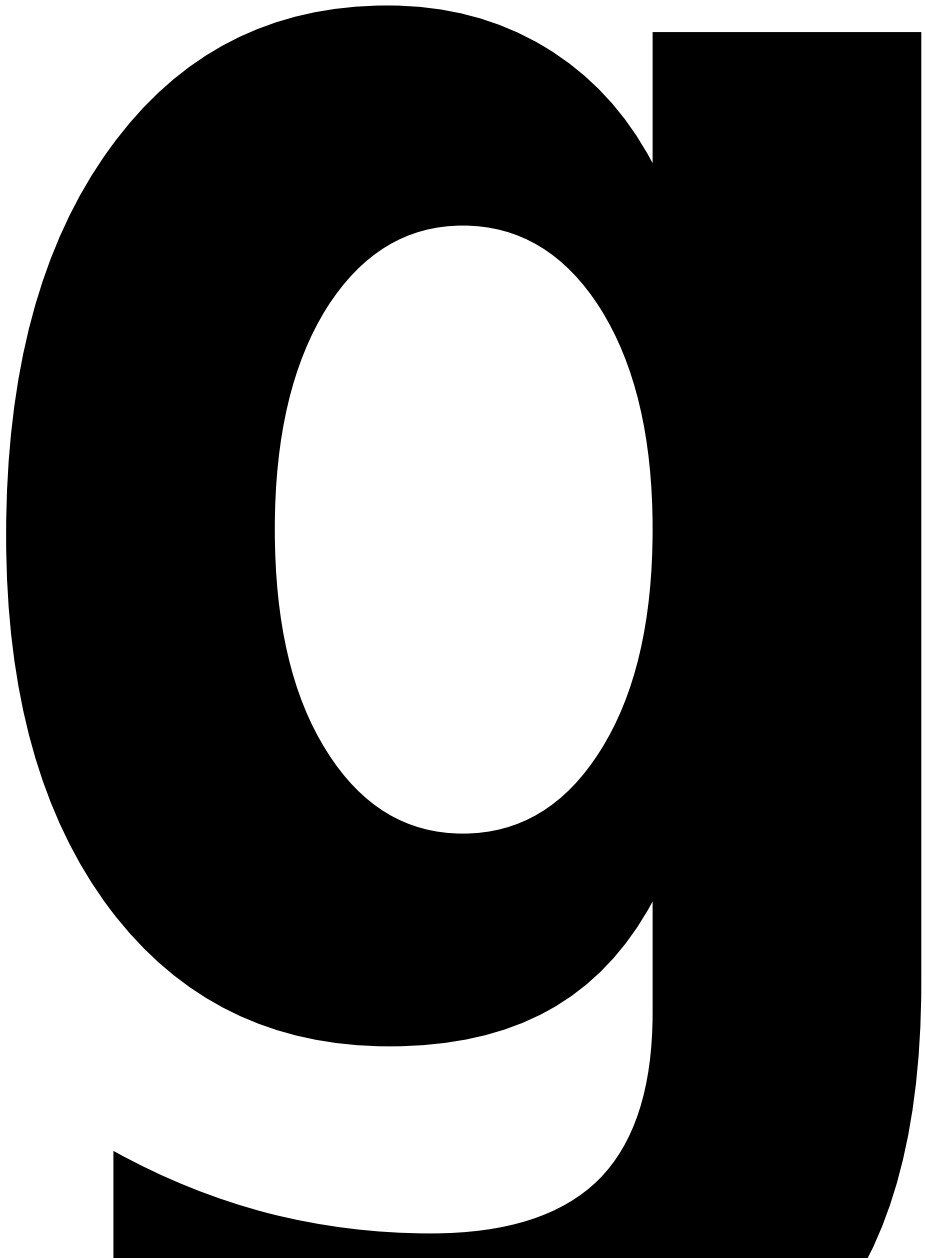


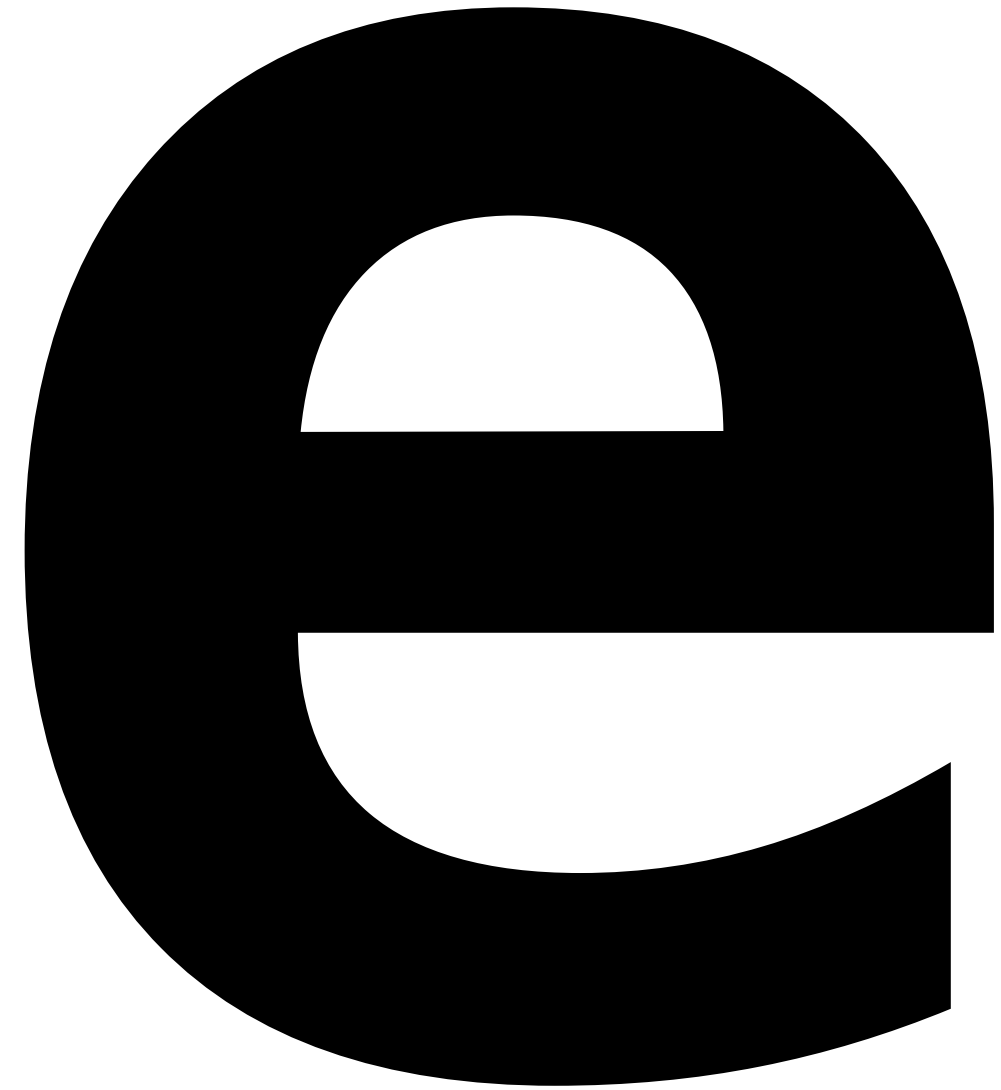


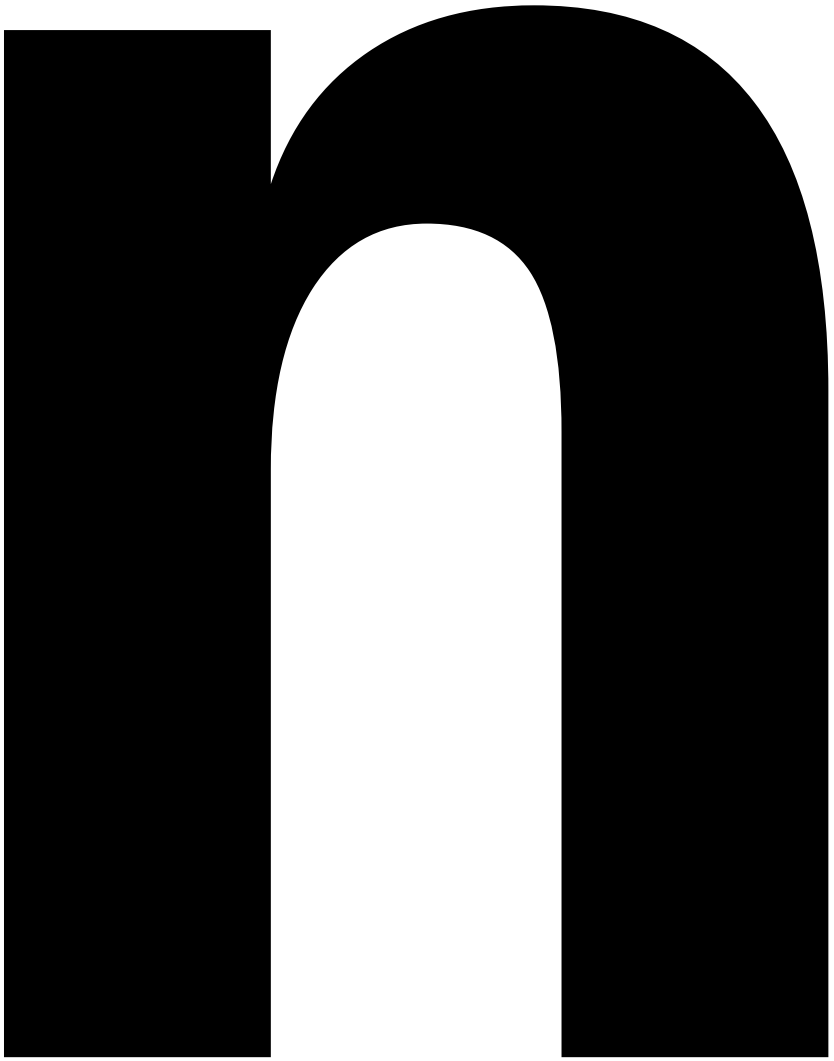


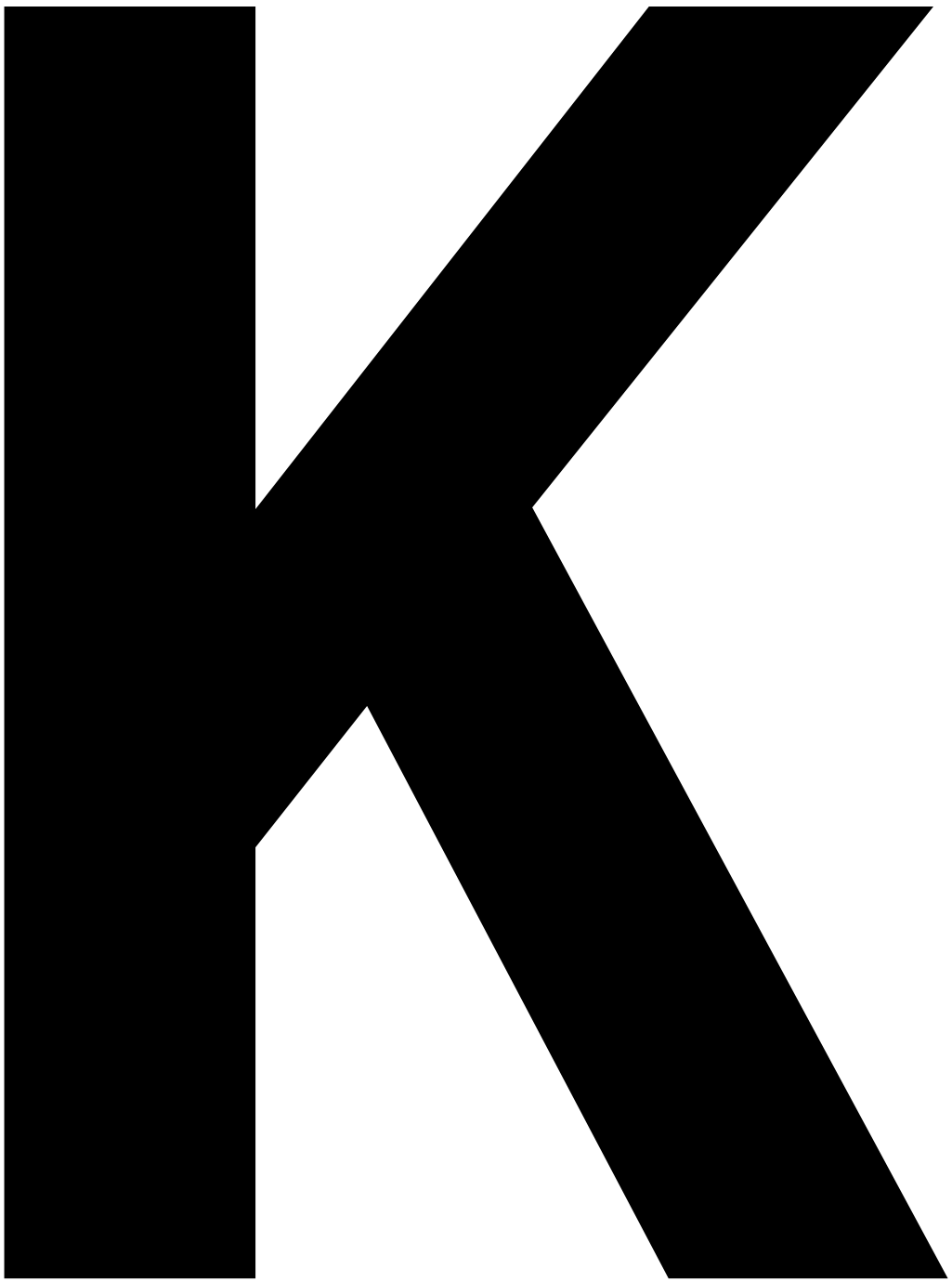


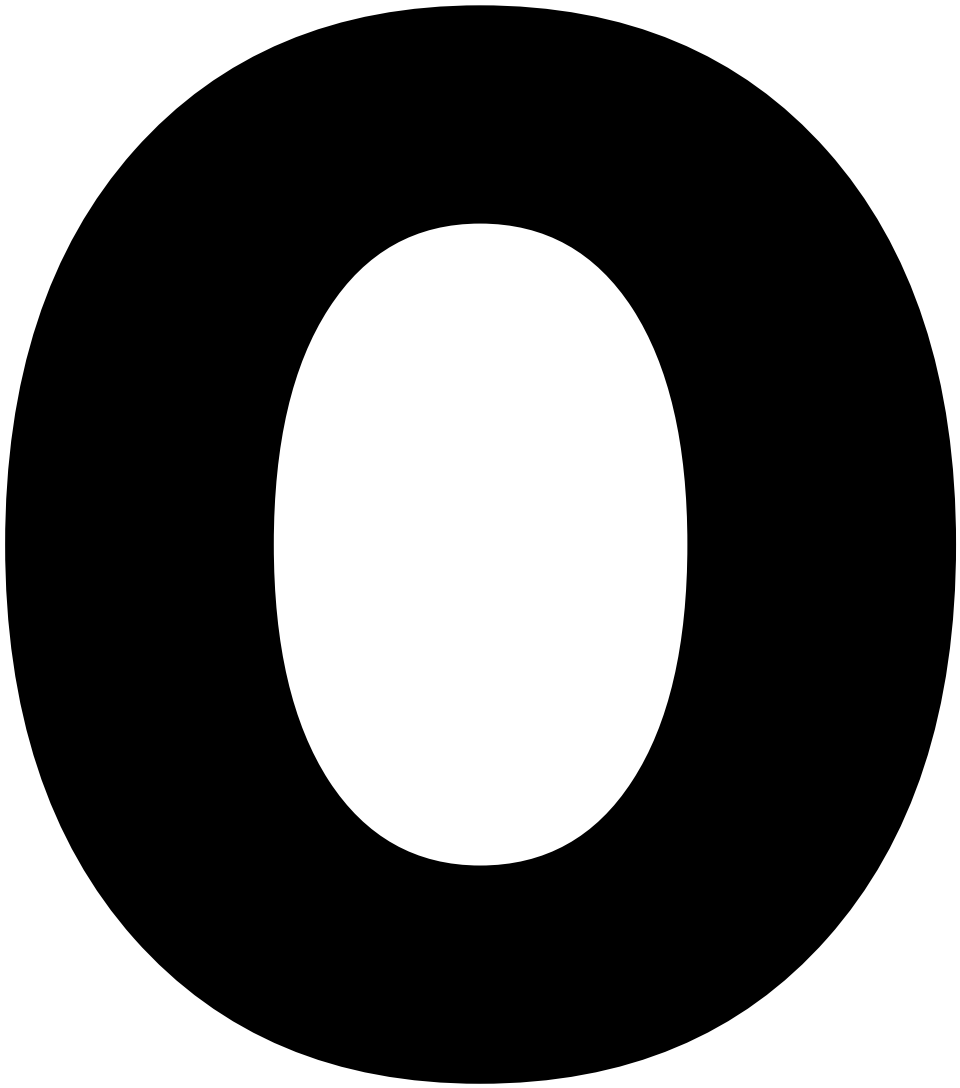


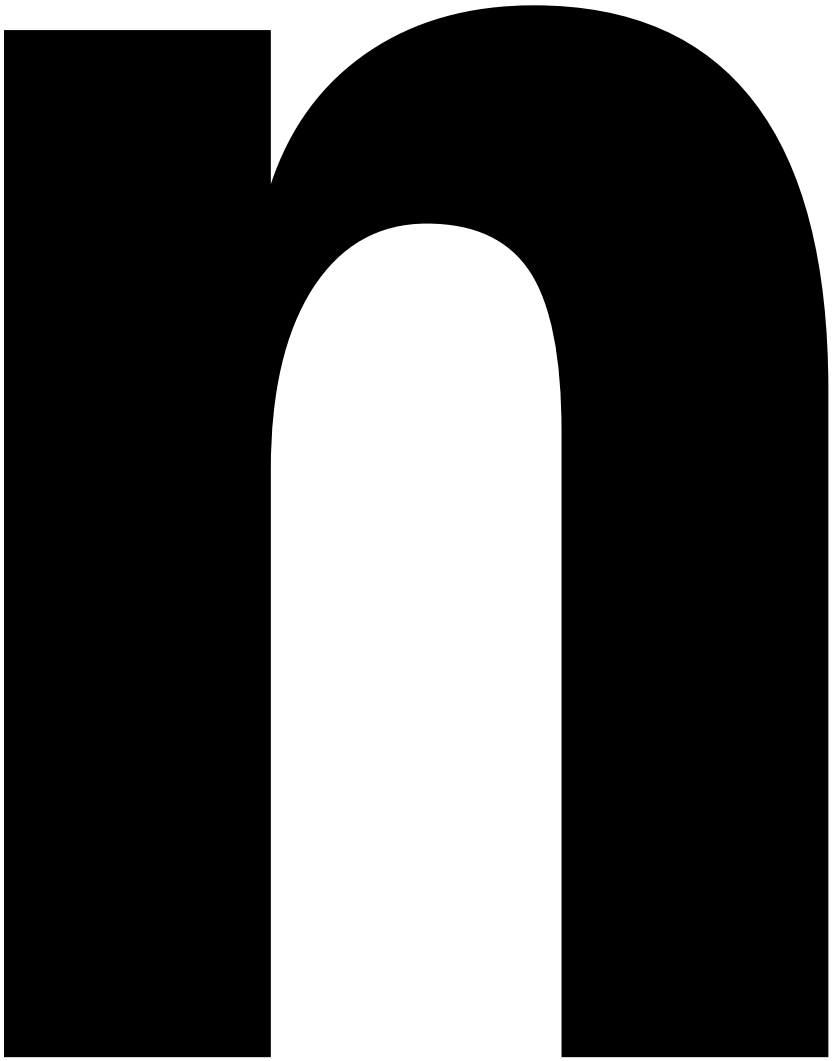




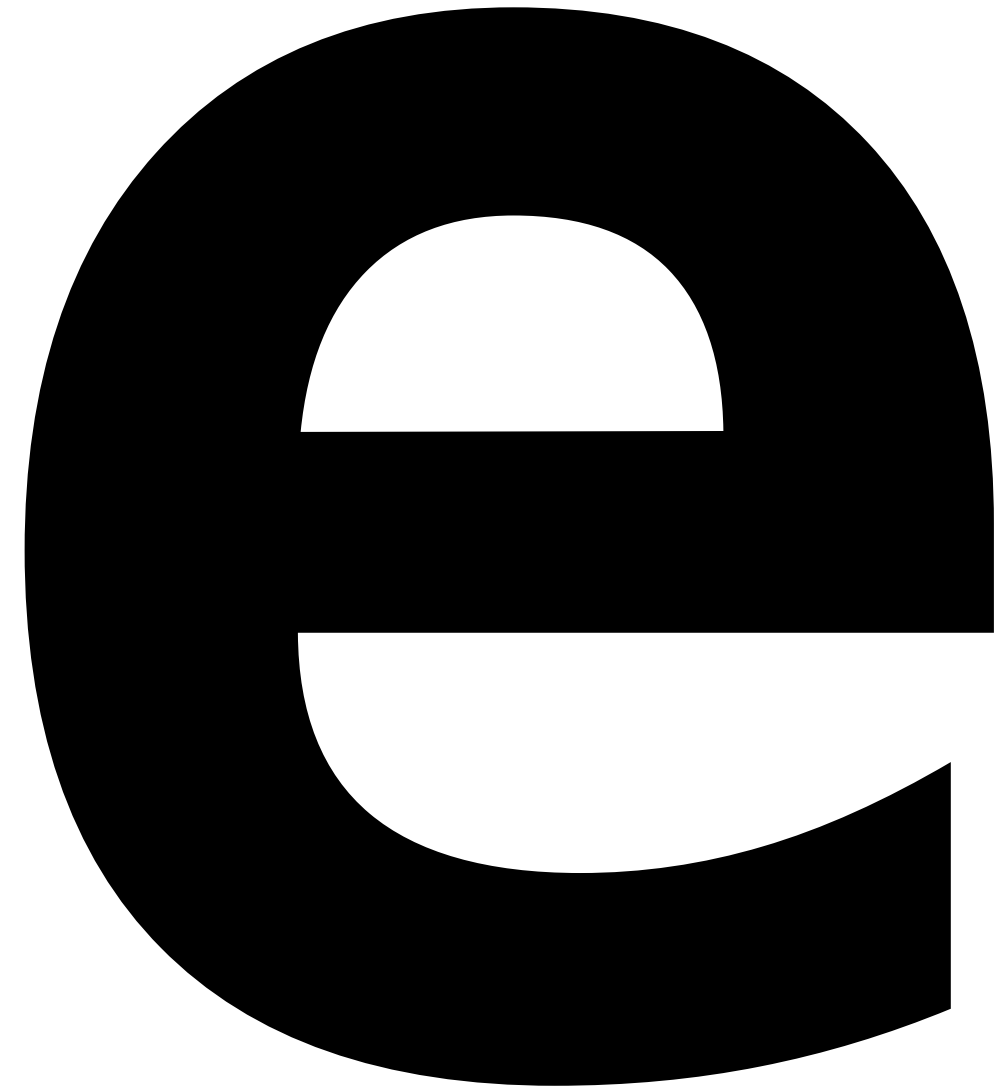


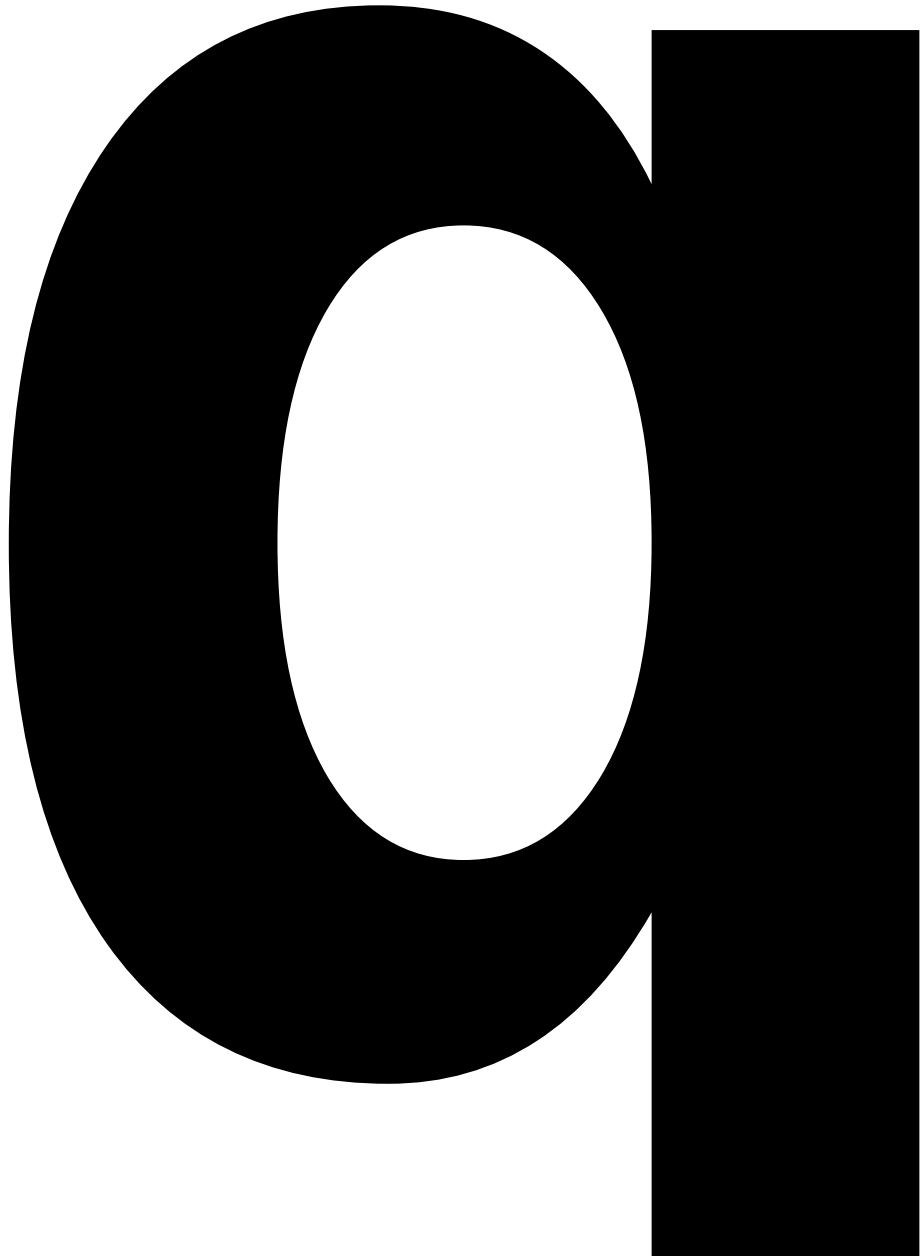




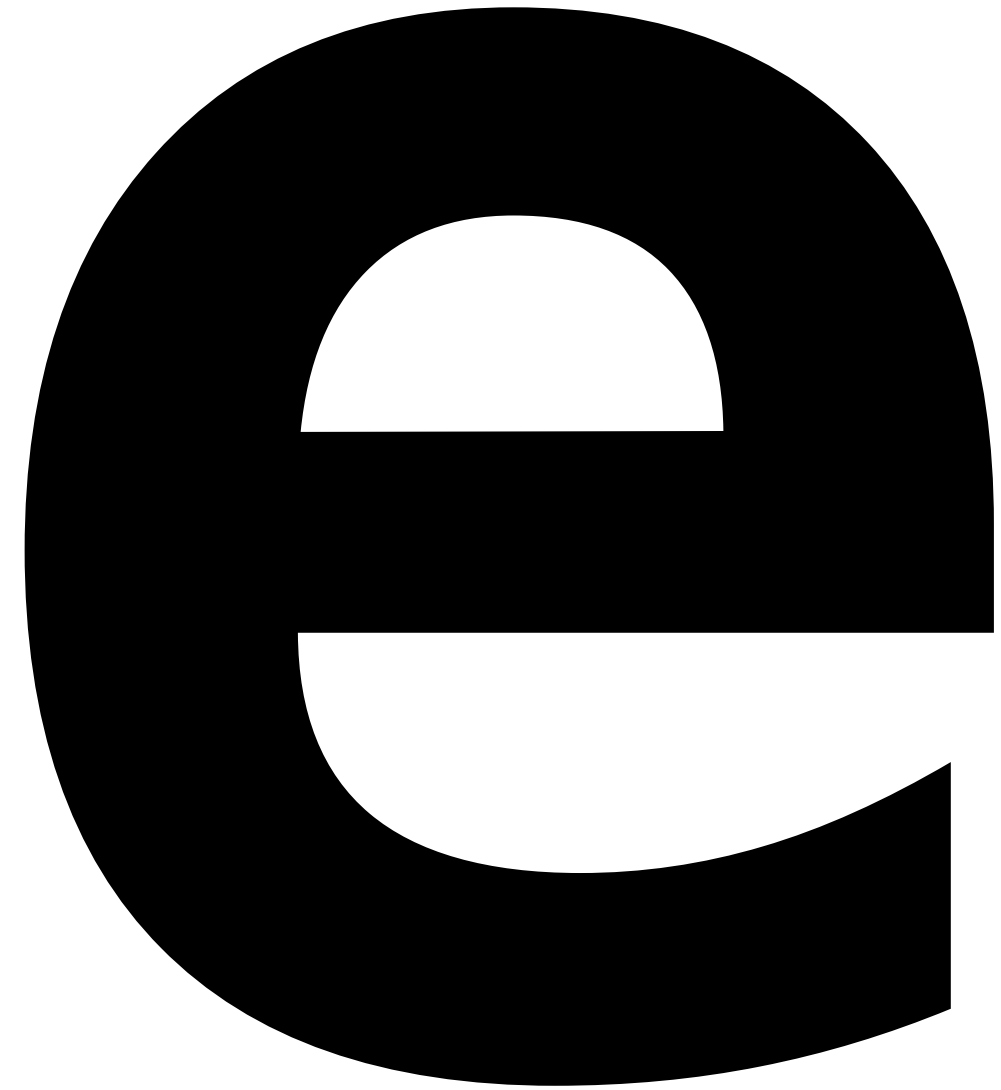


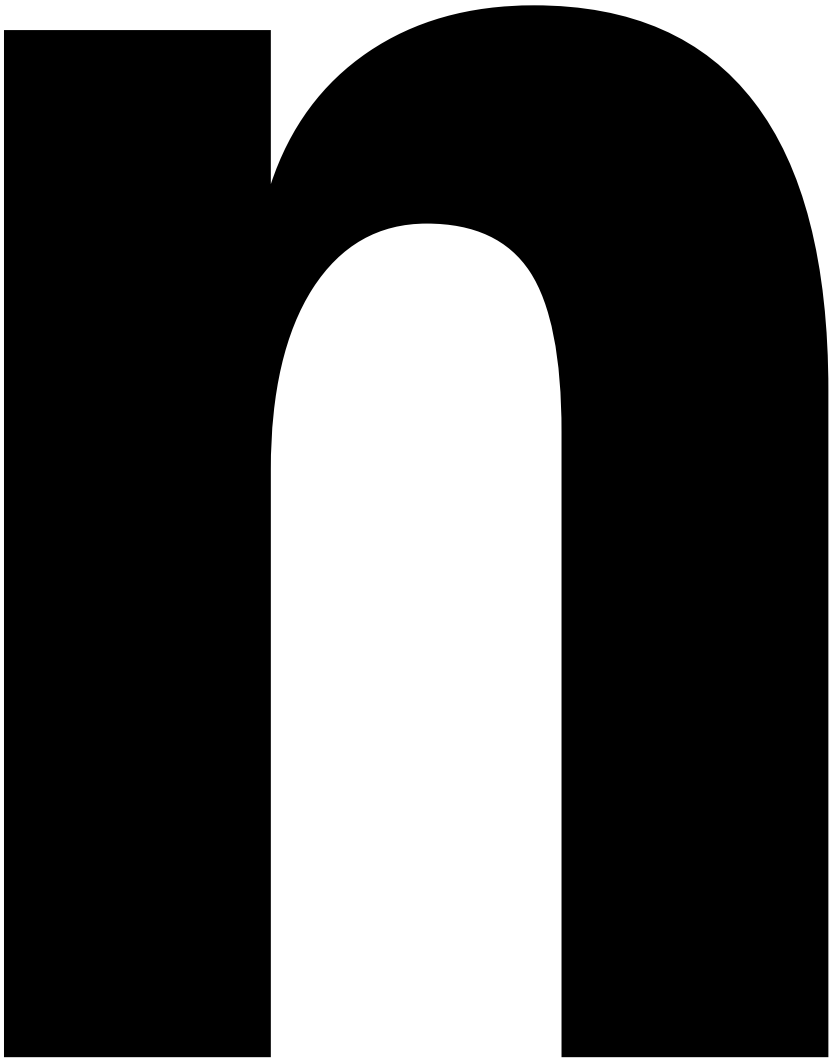
S

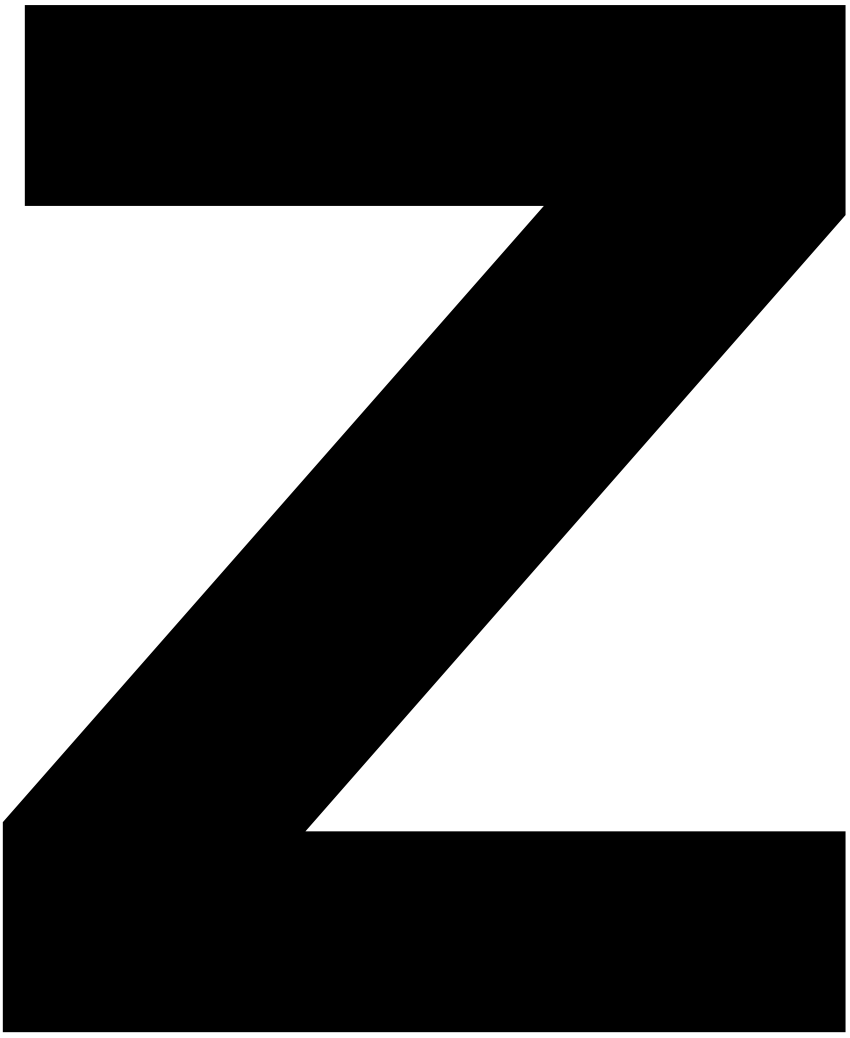


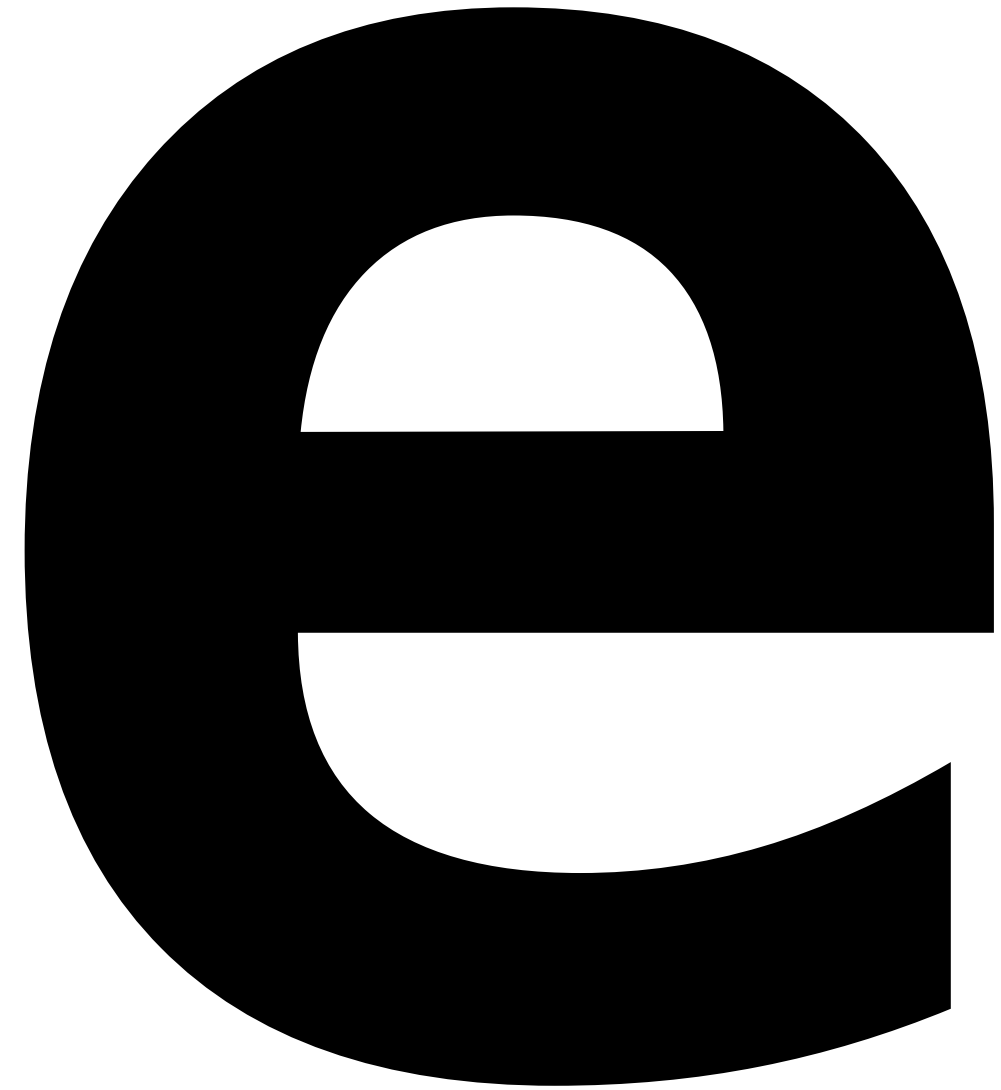


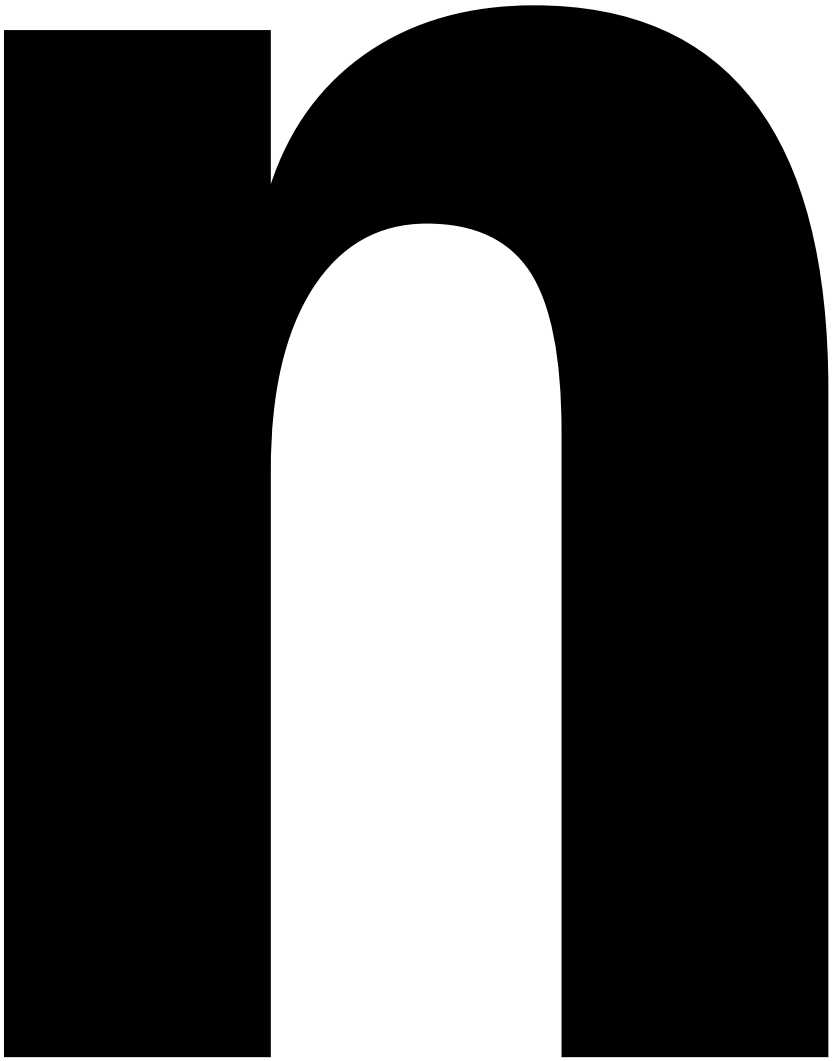
u



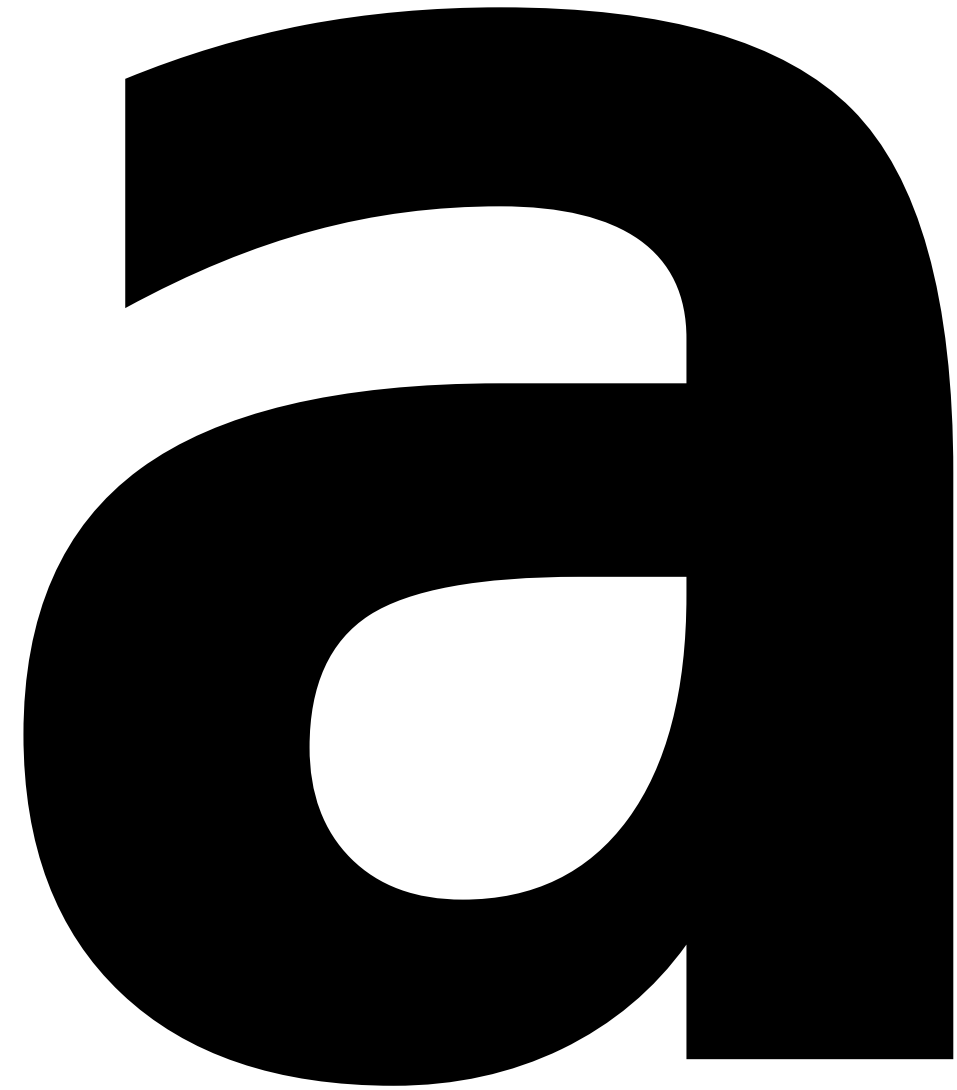


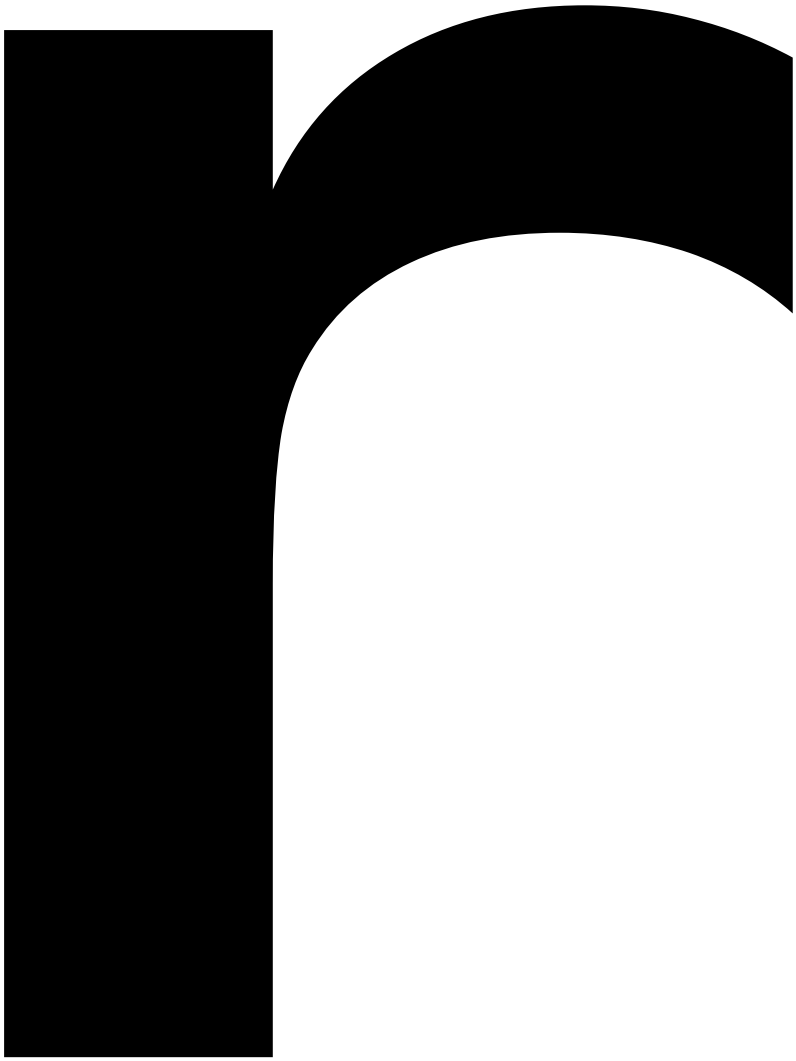


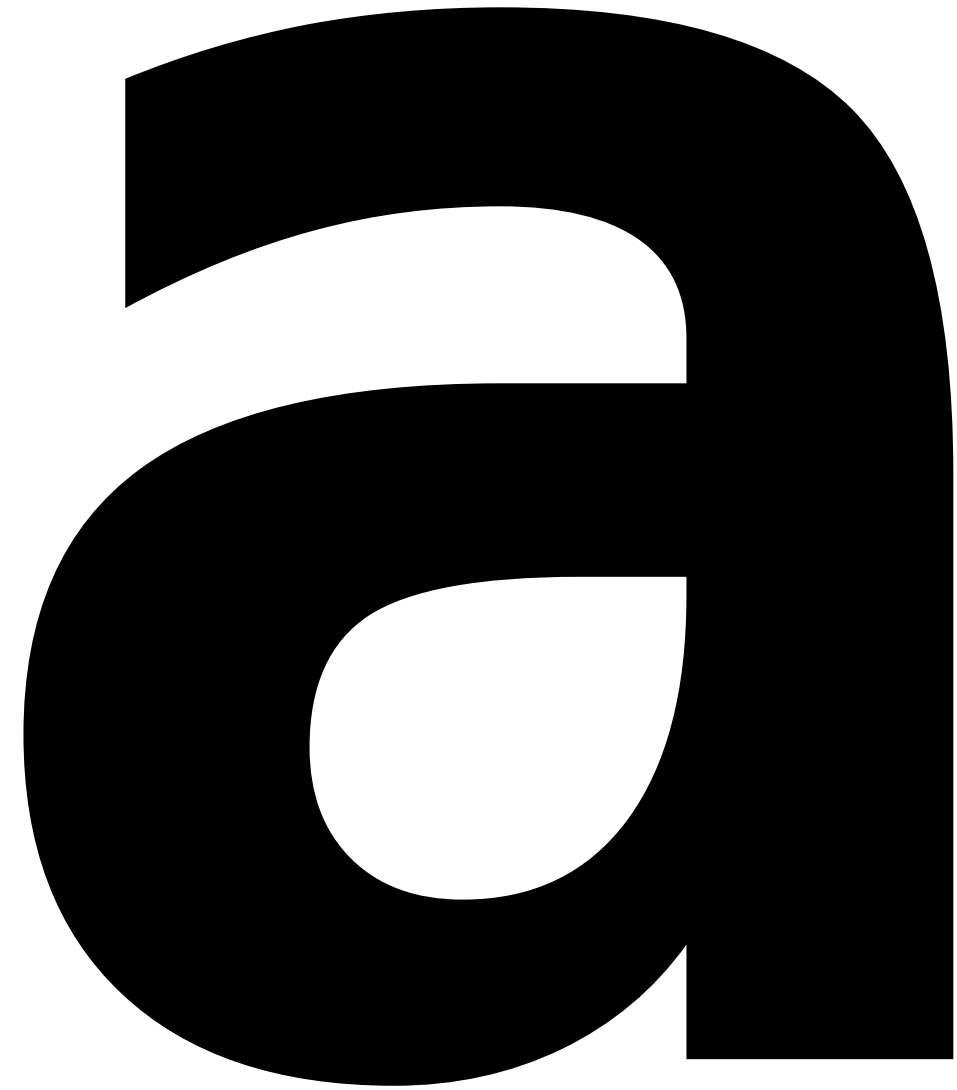




d

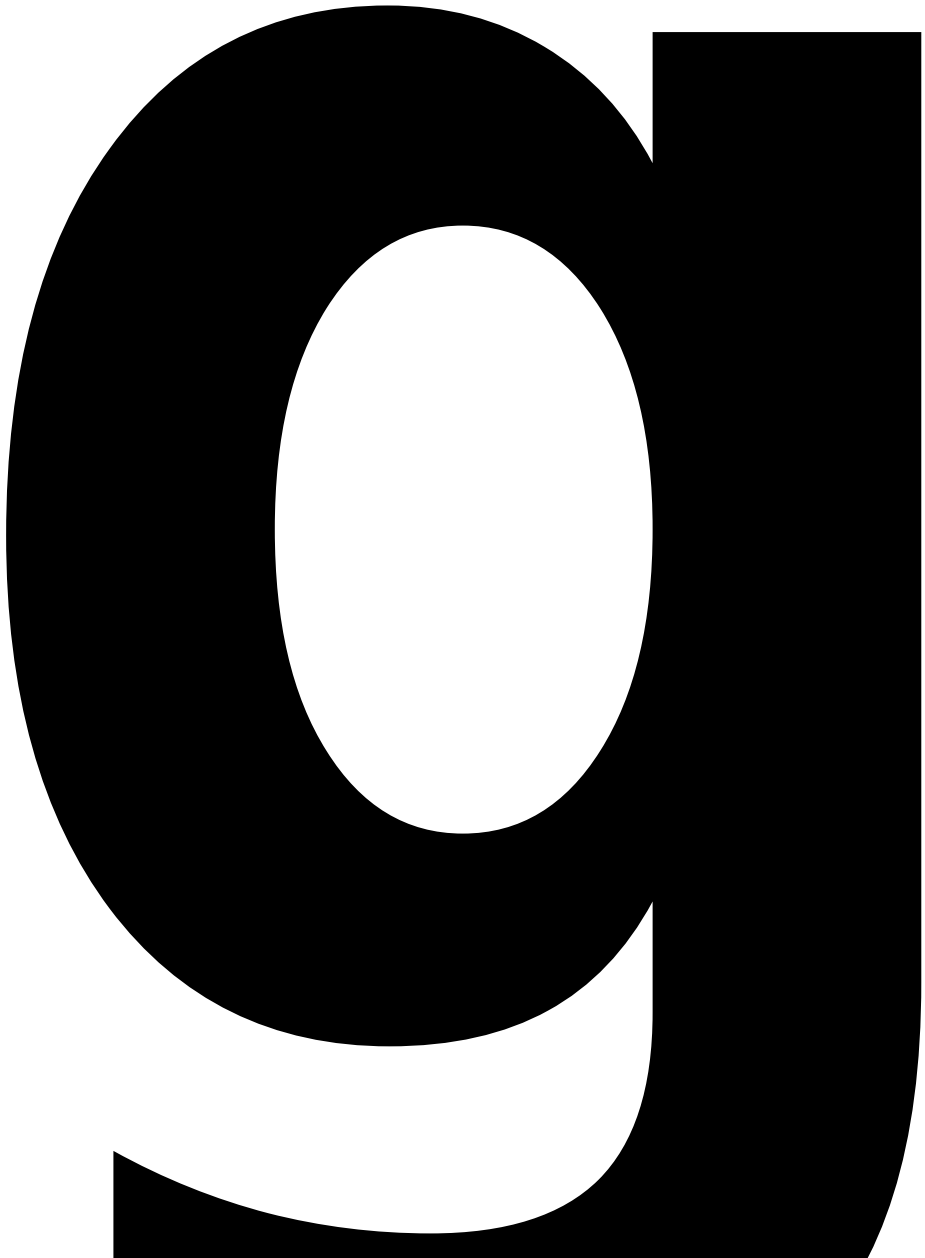


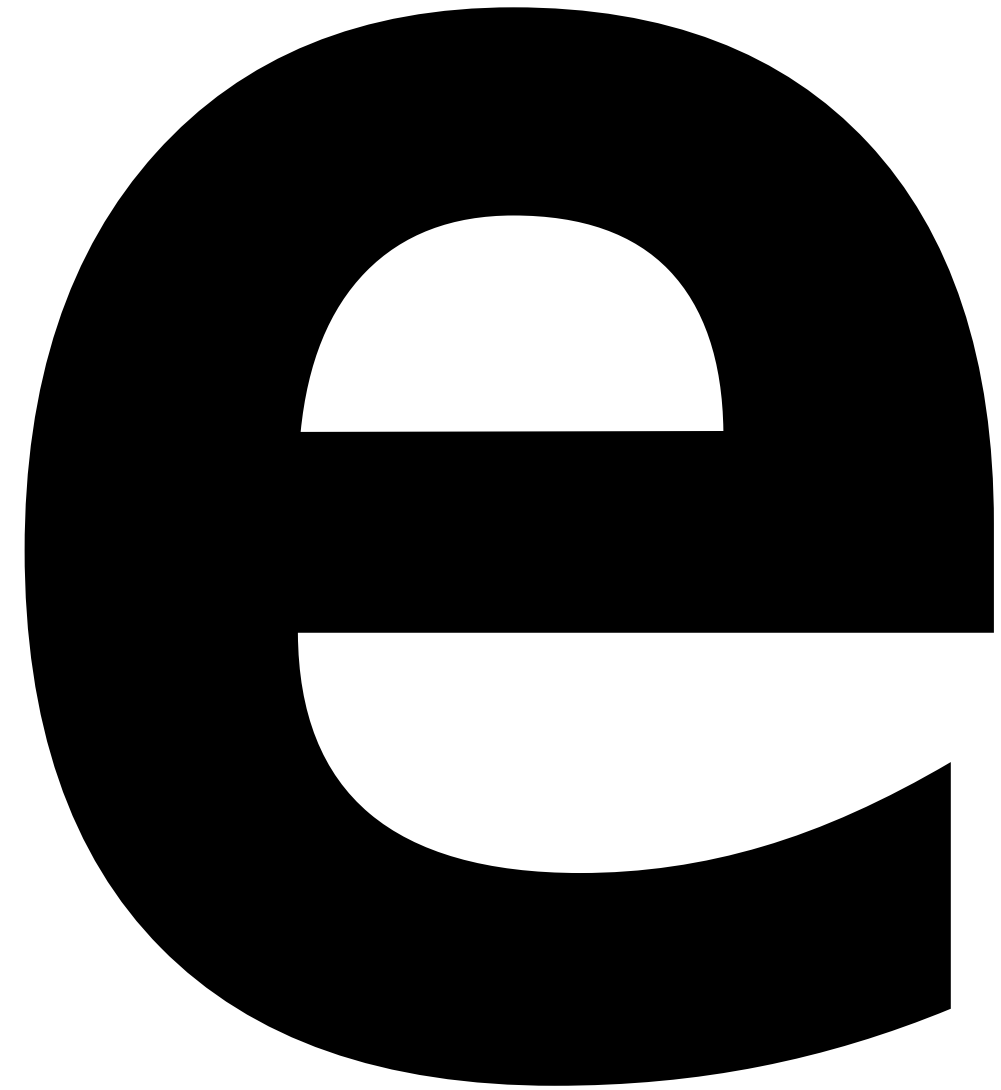


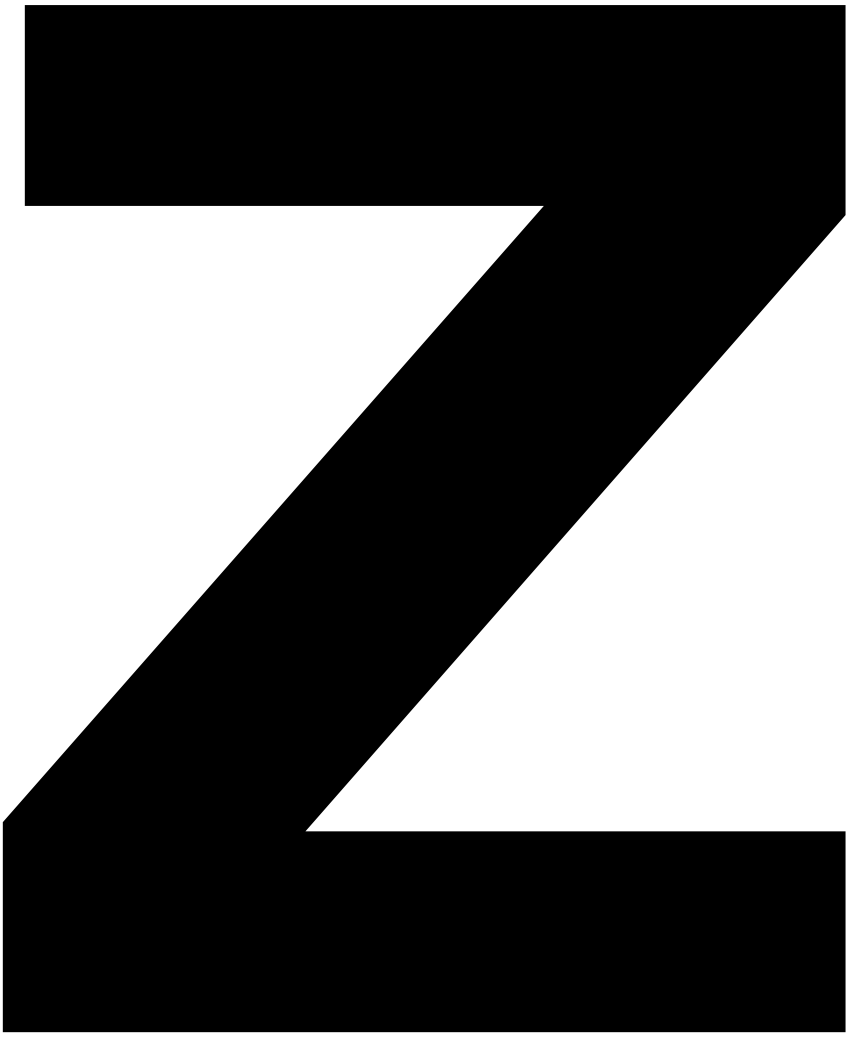


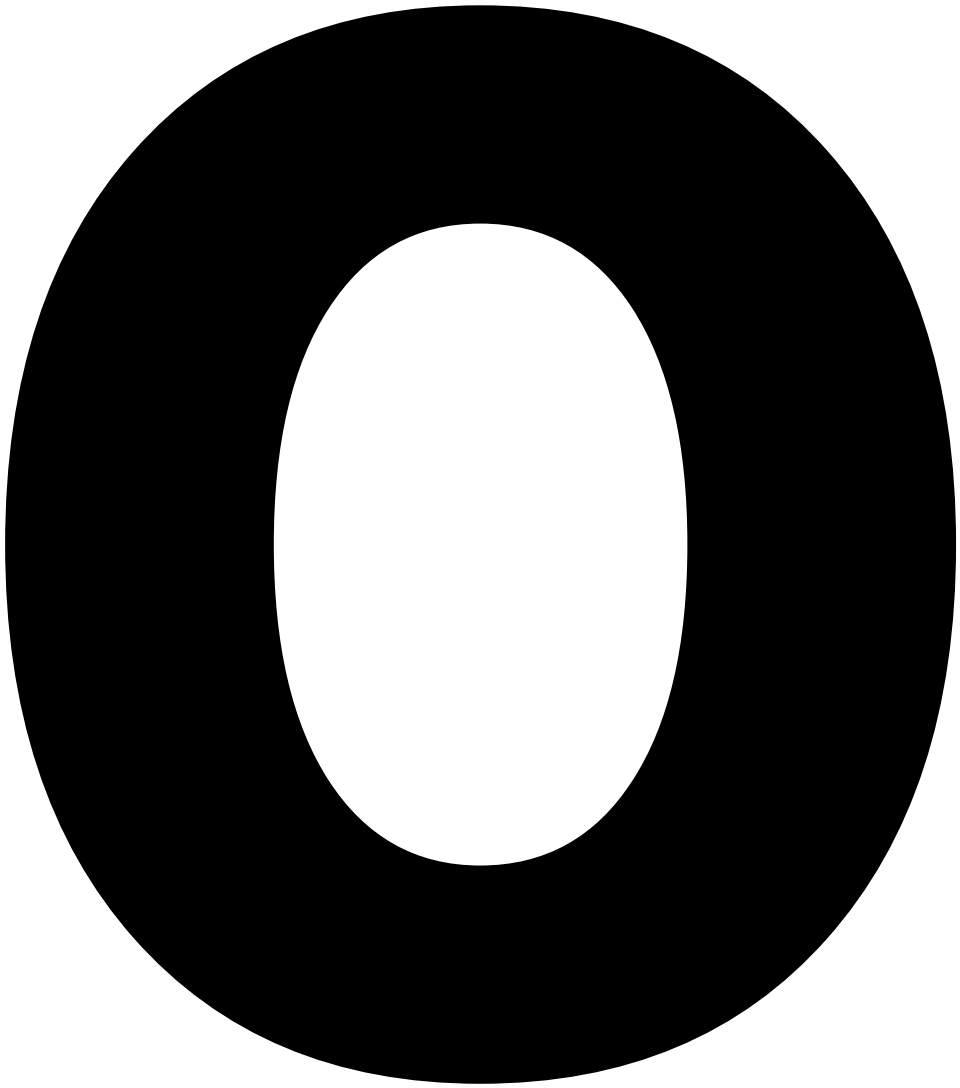
u

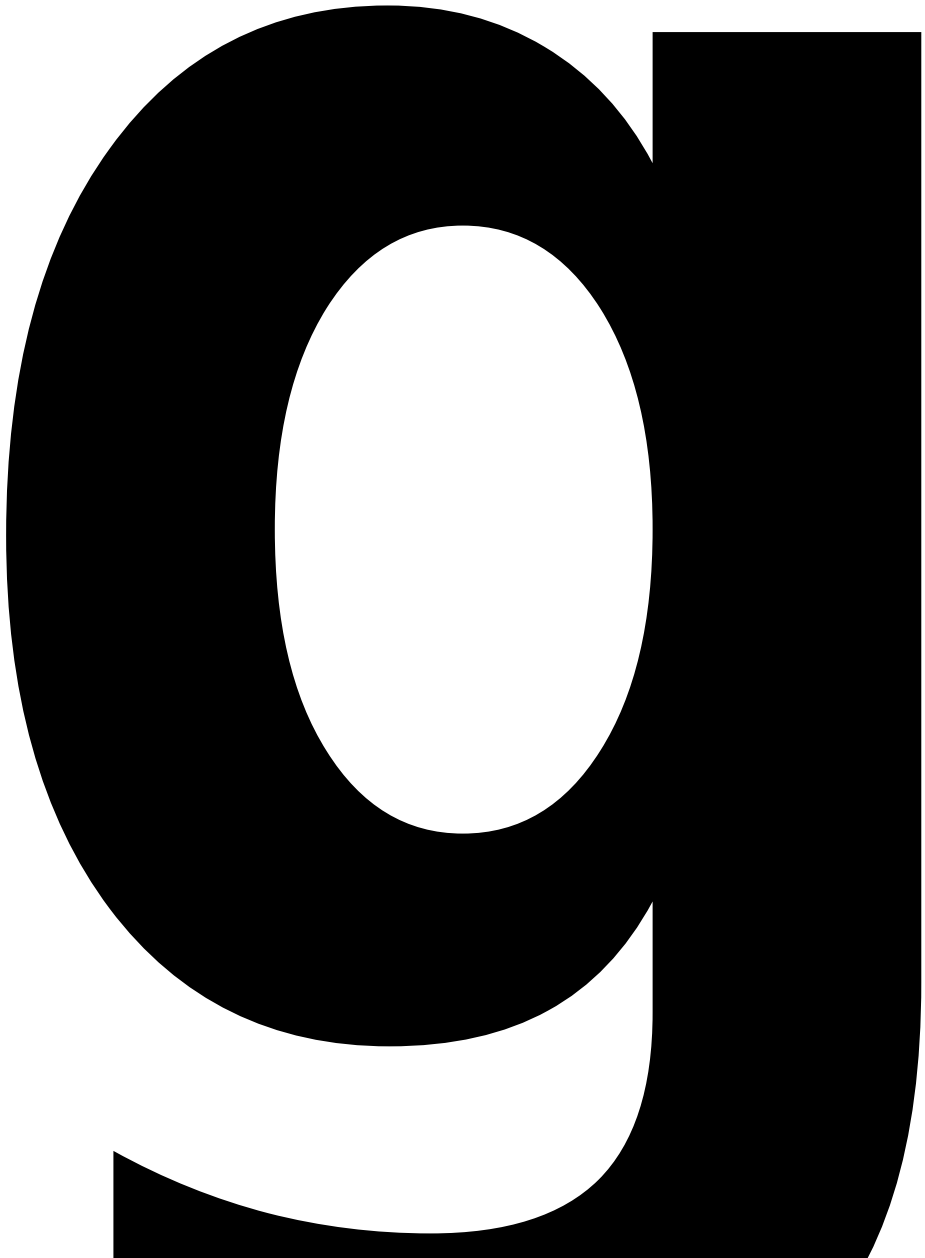
S

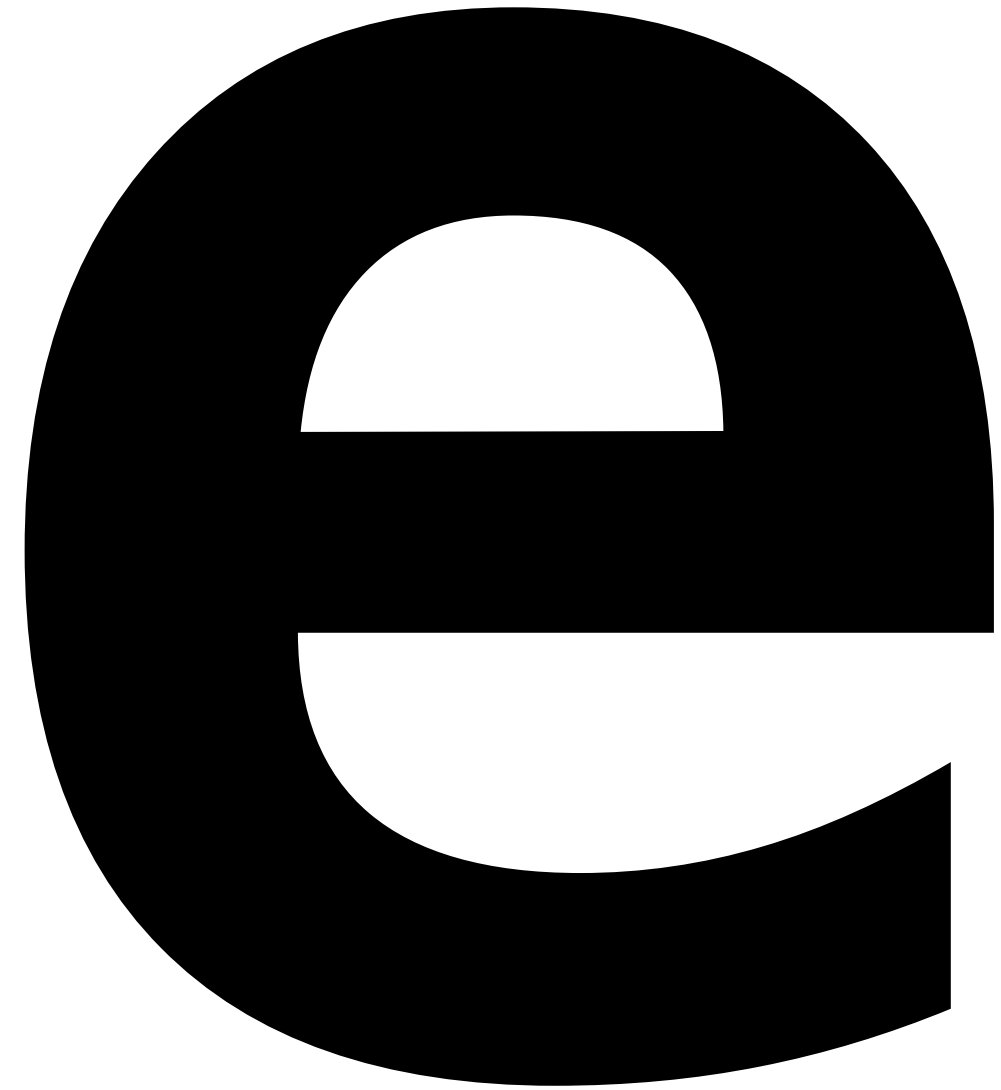


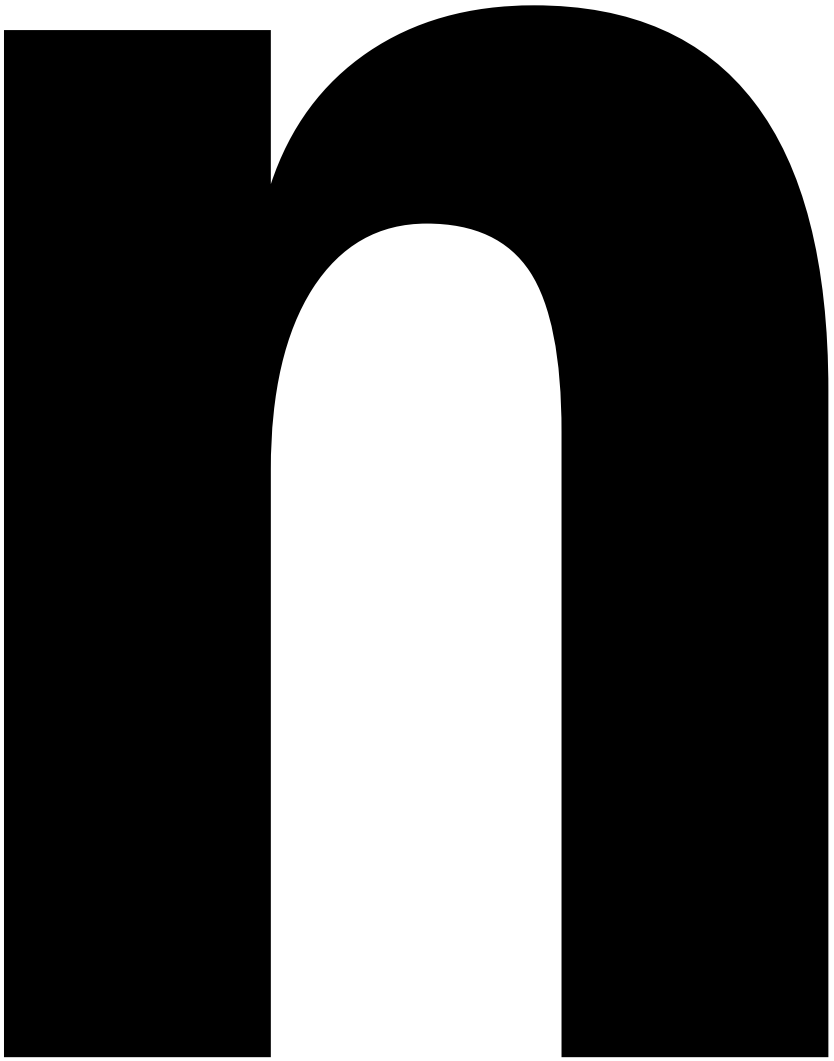


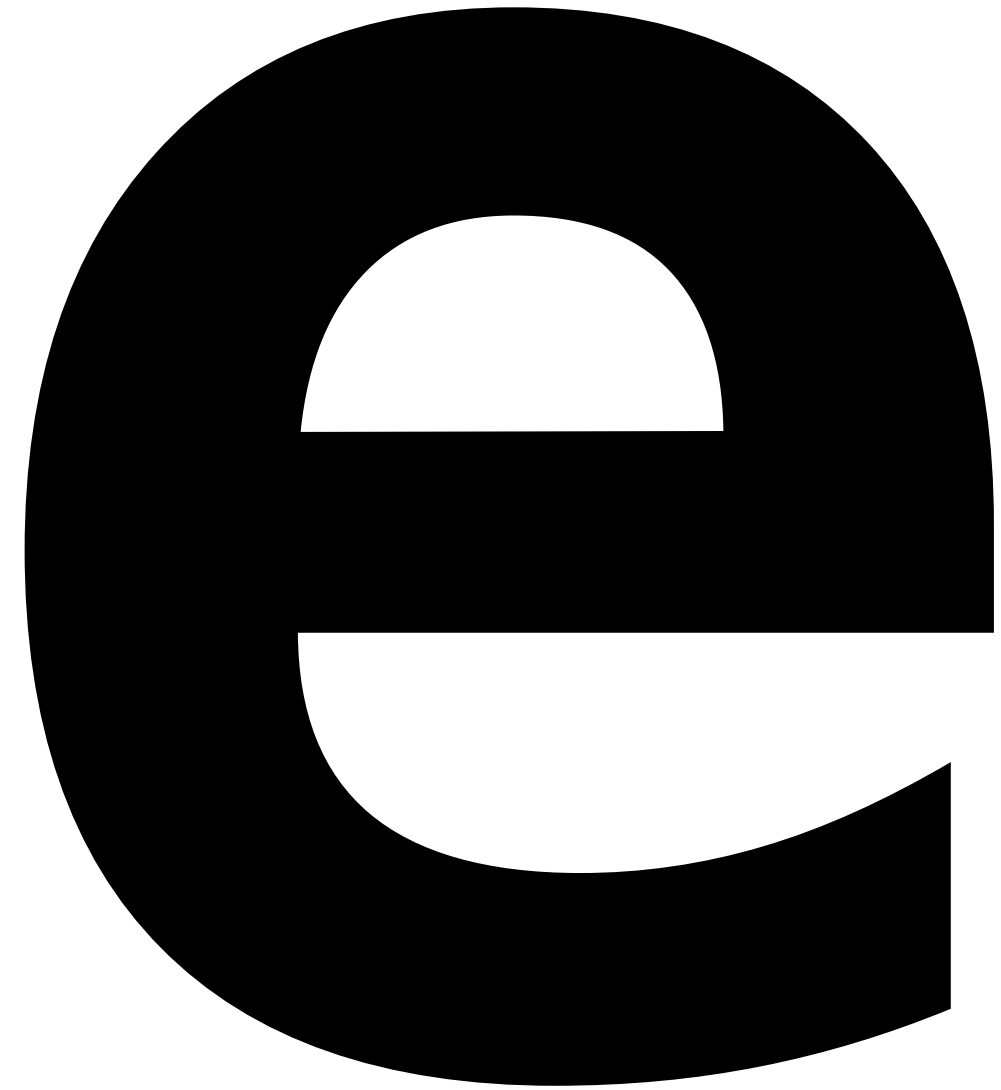


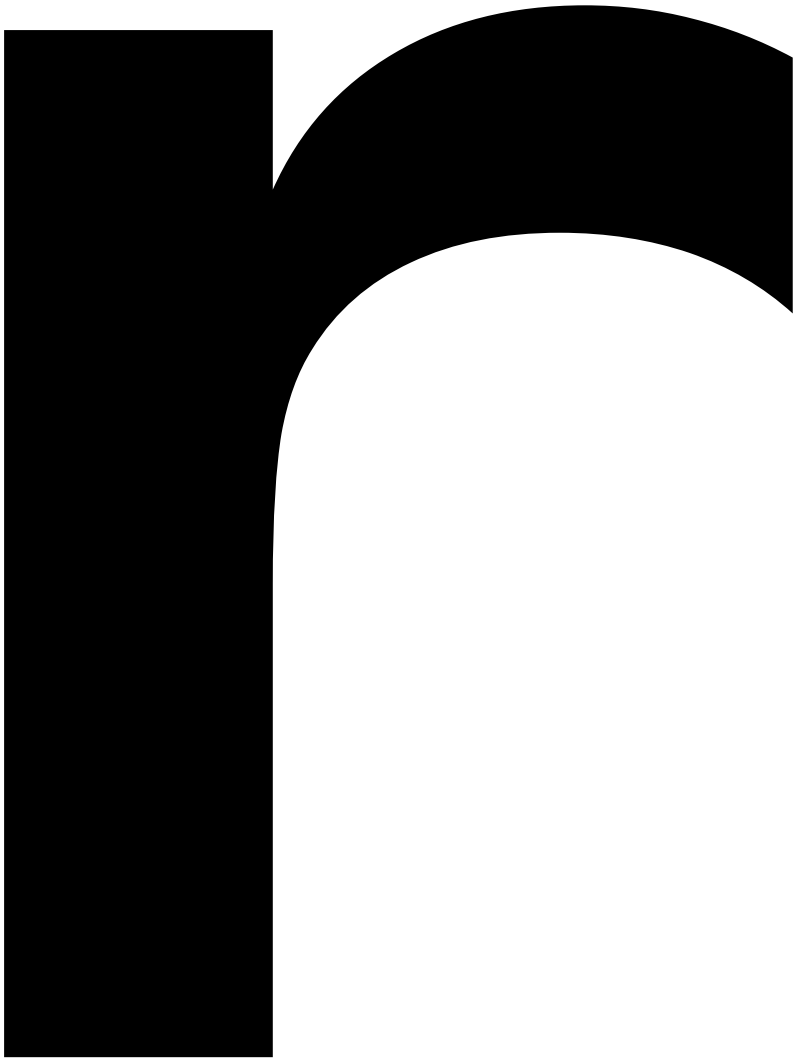




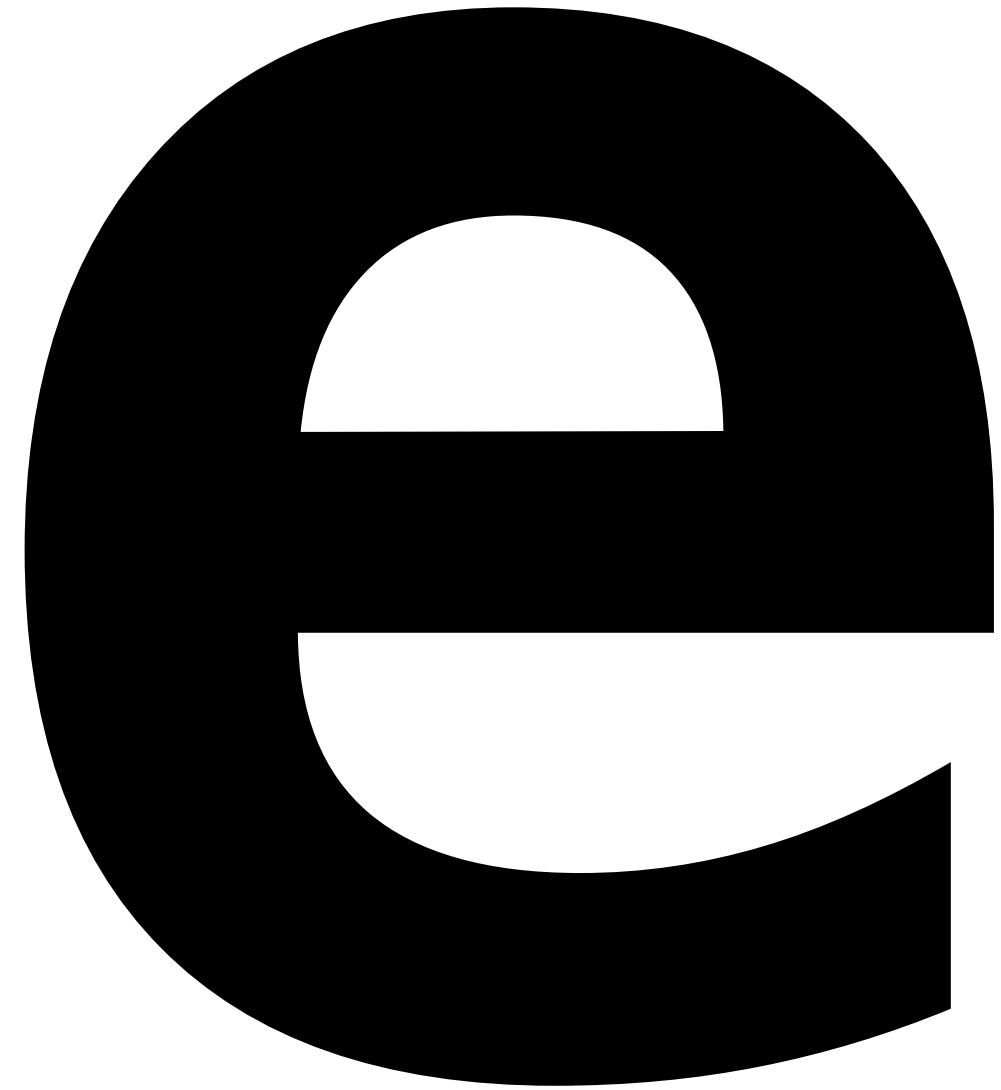


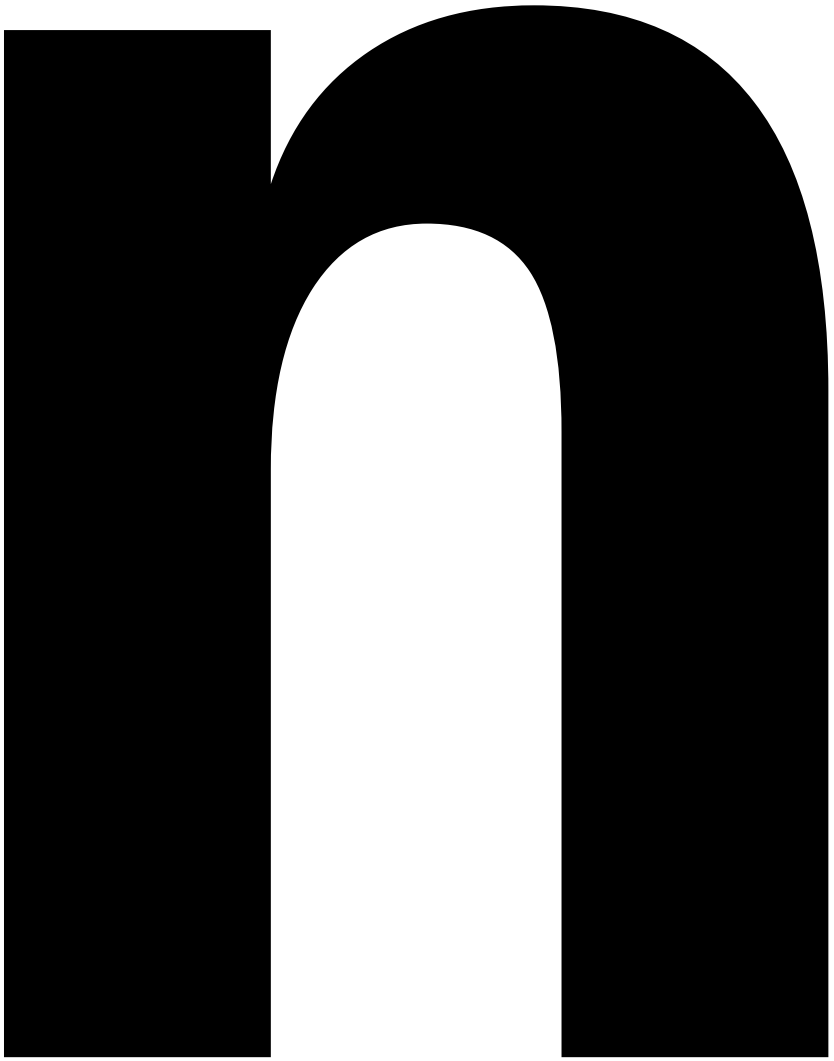


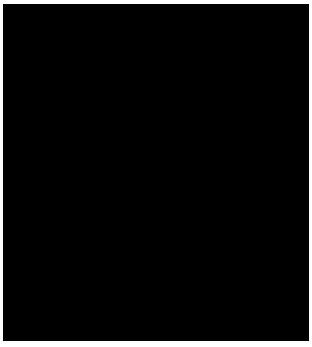


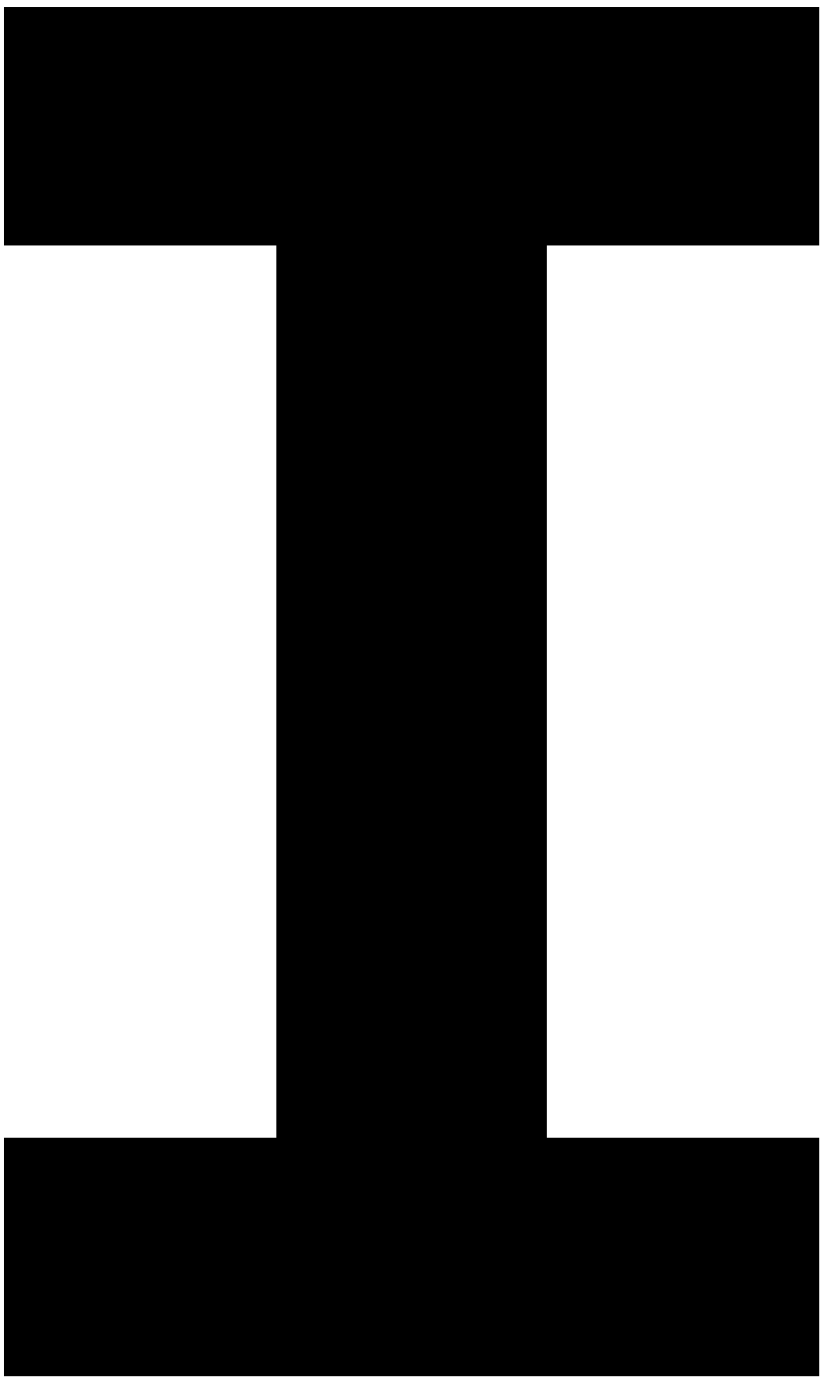


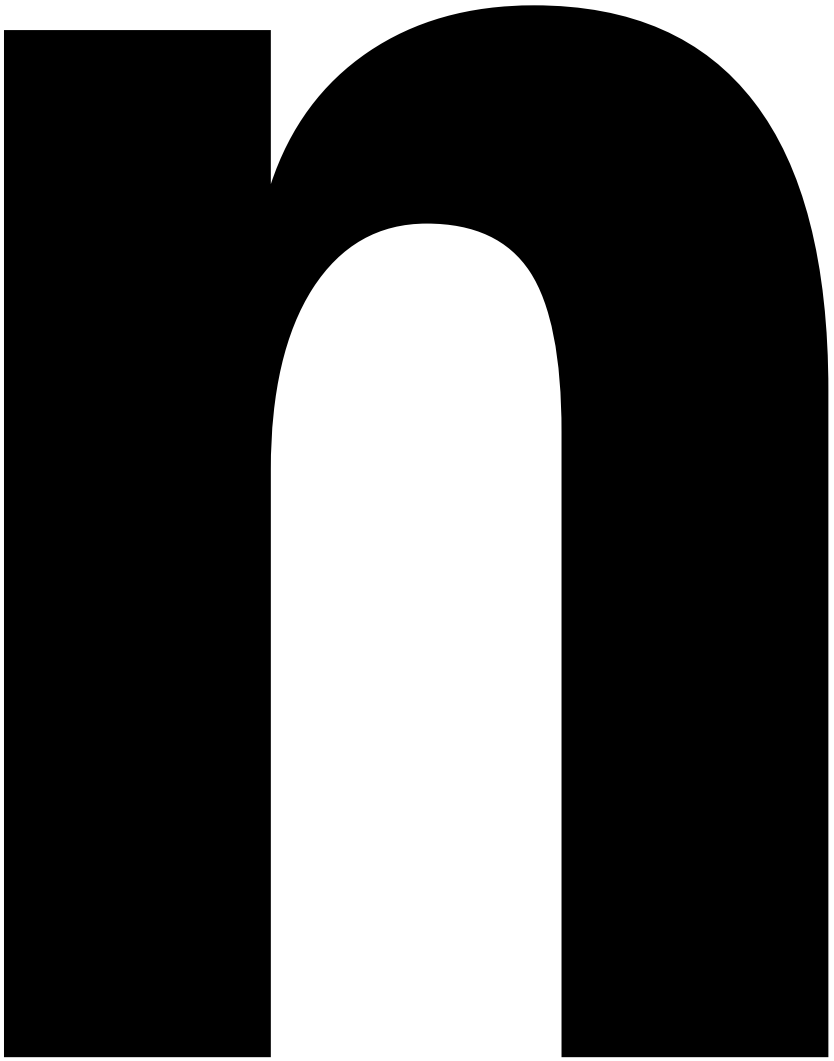
d

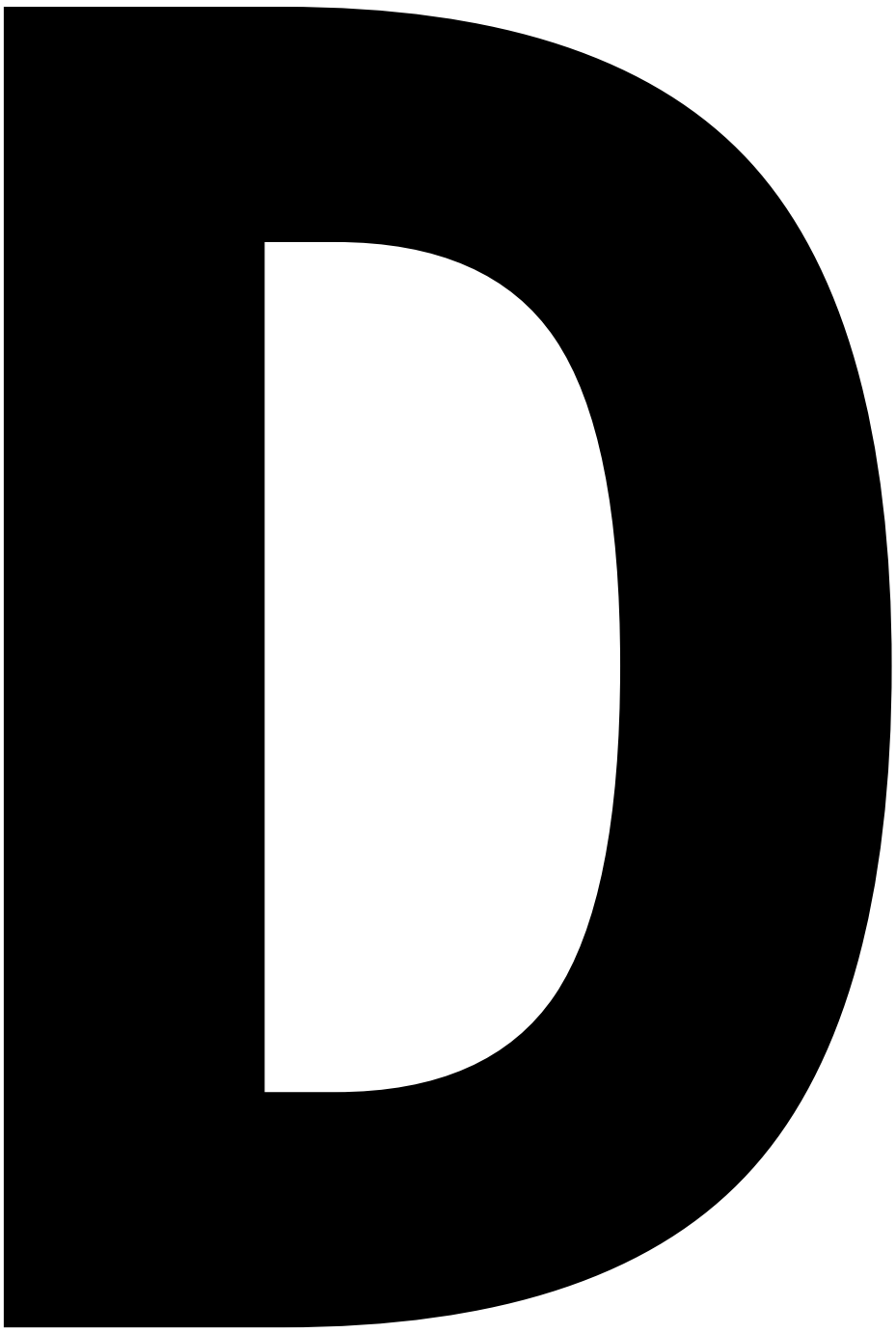


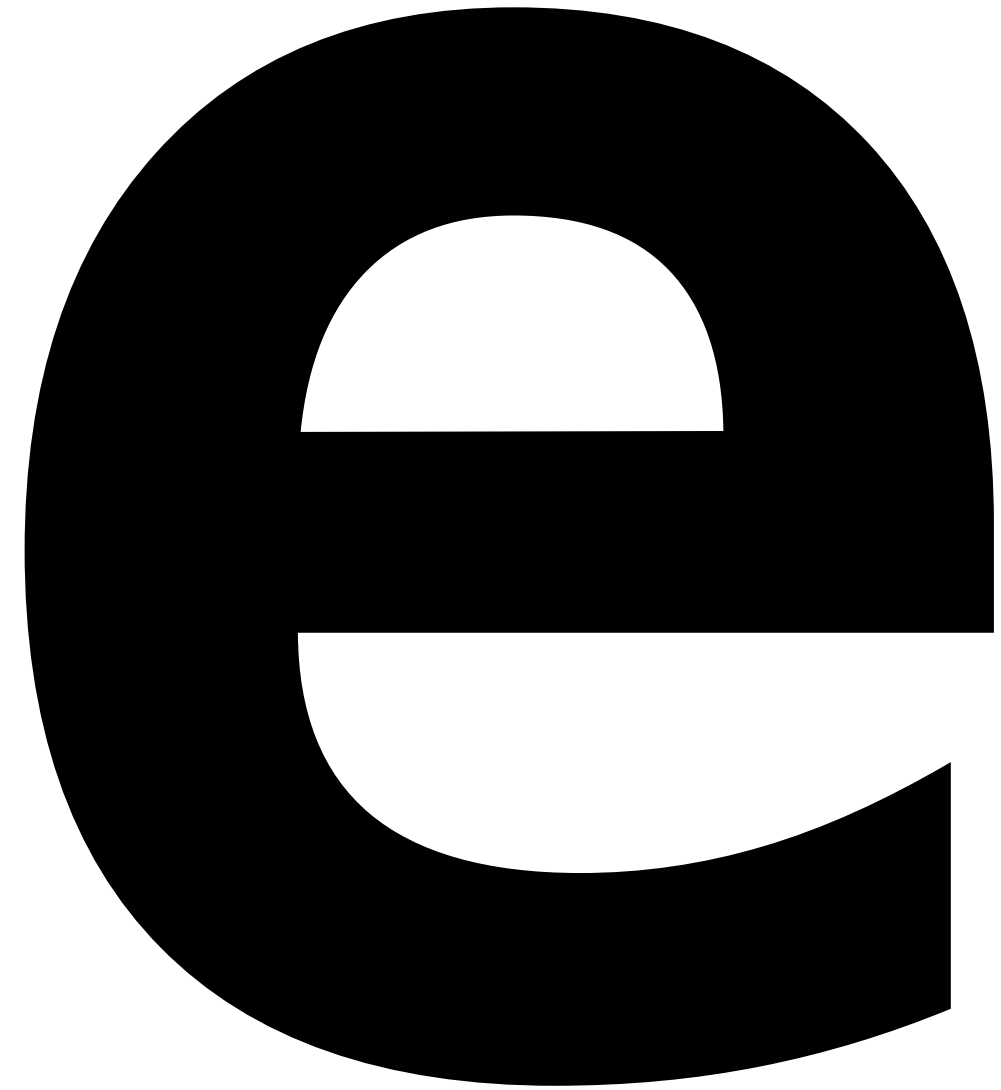




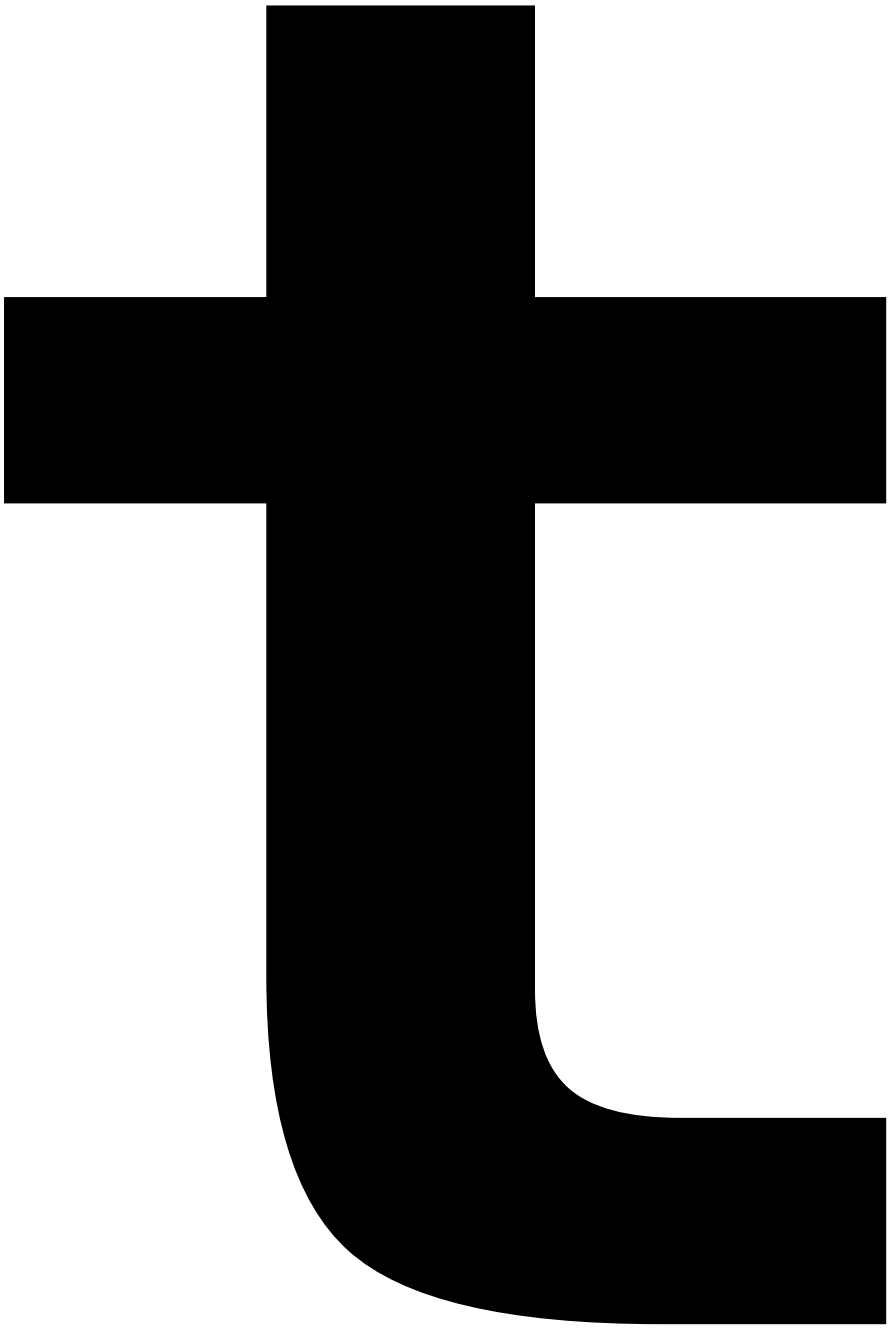




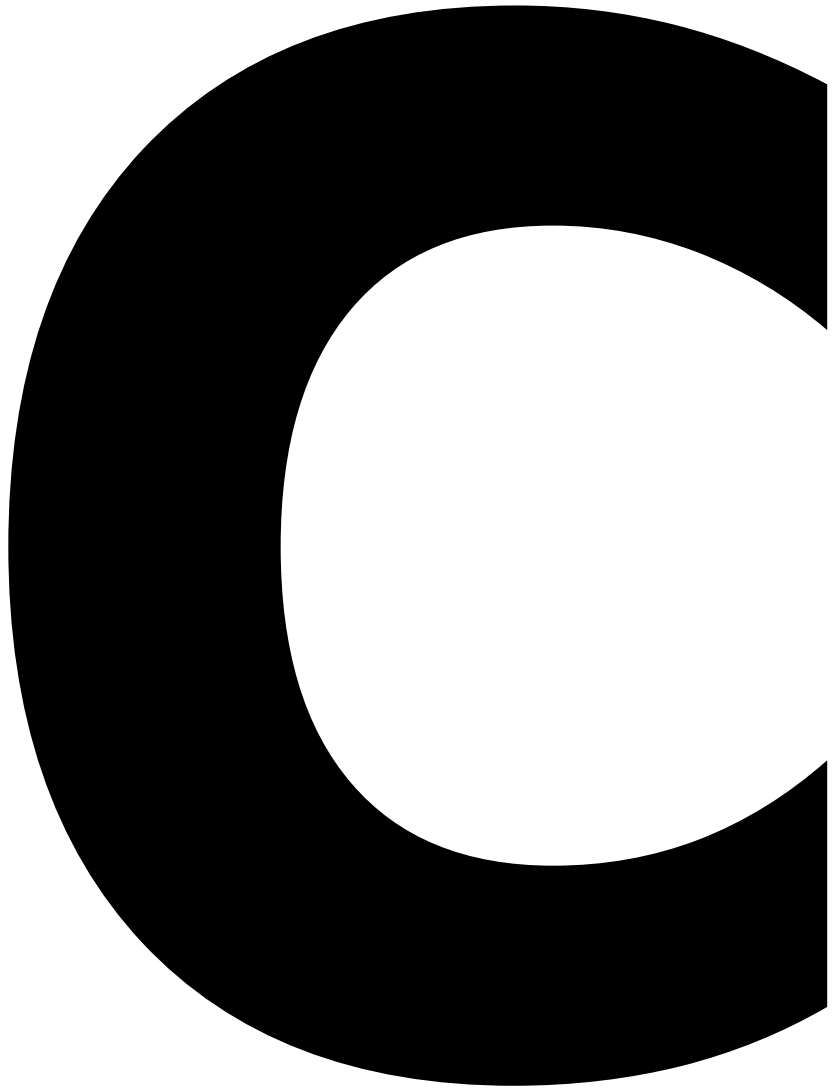


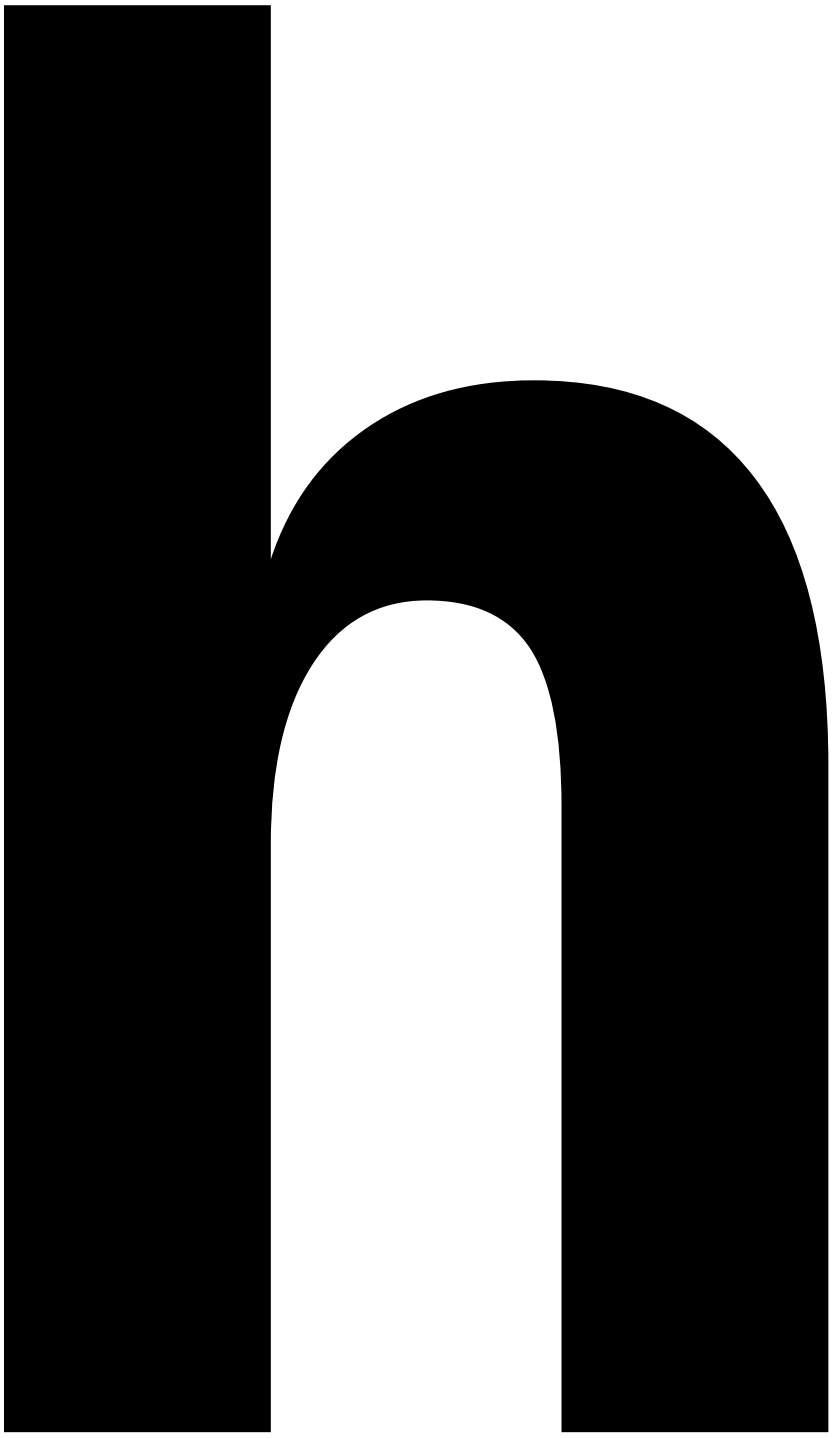


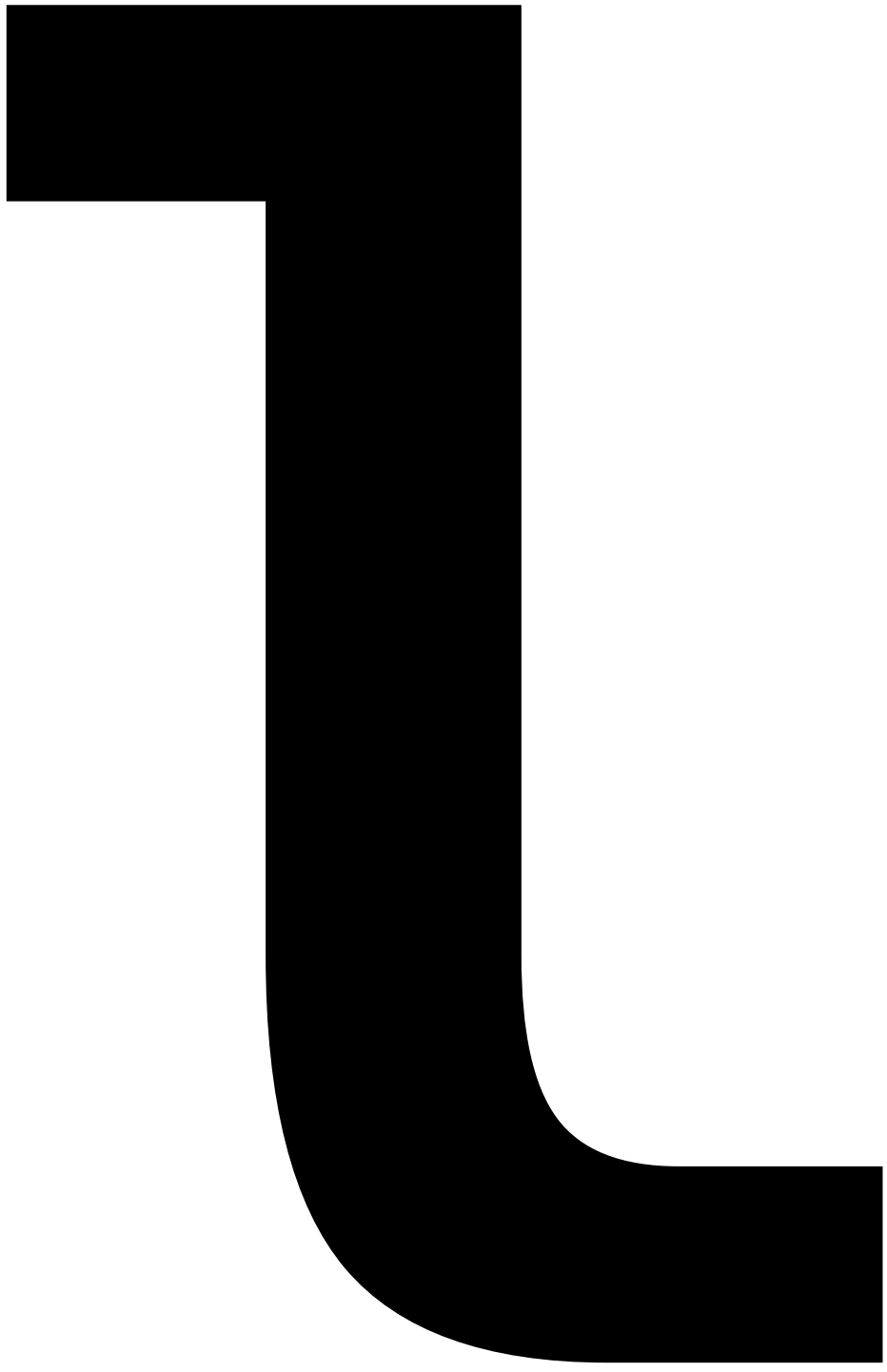
u

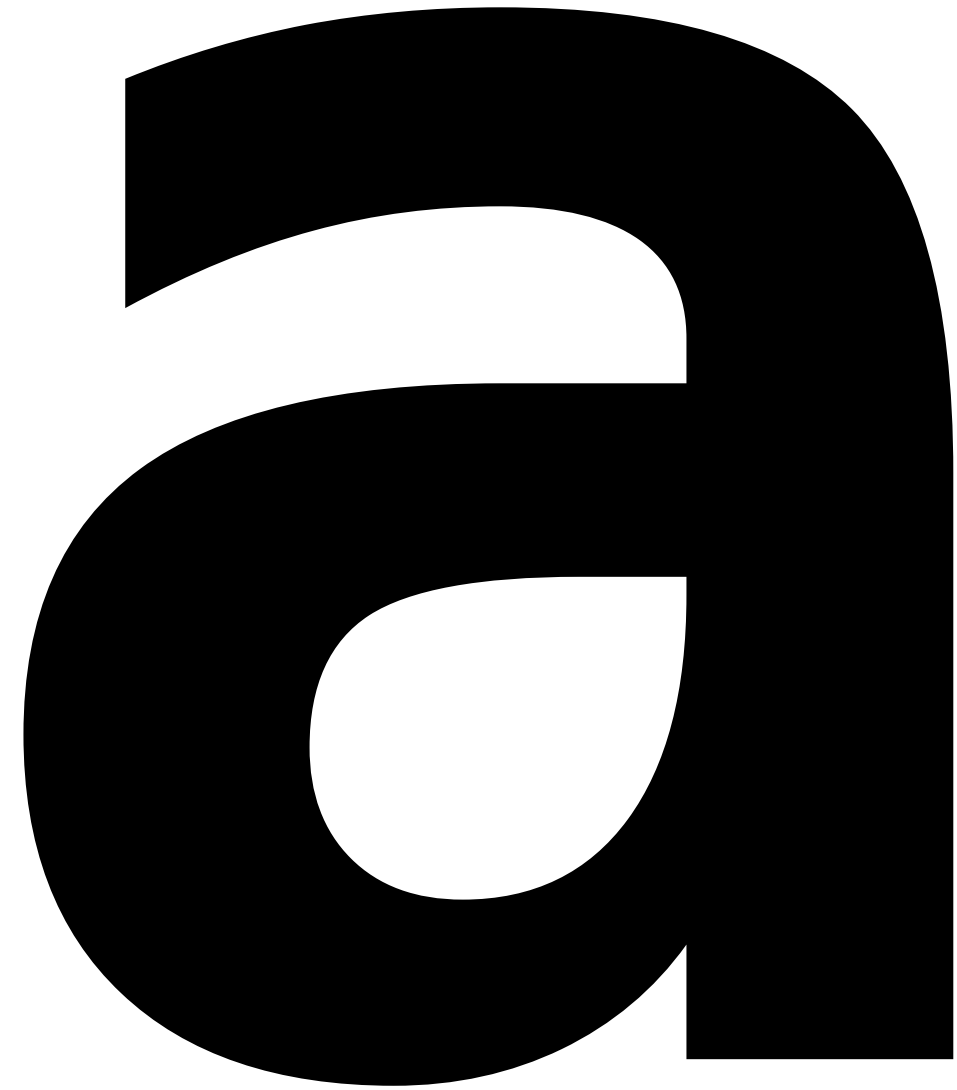


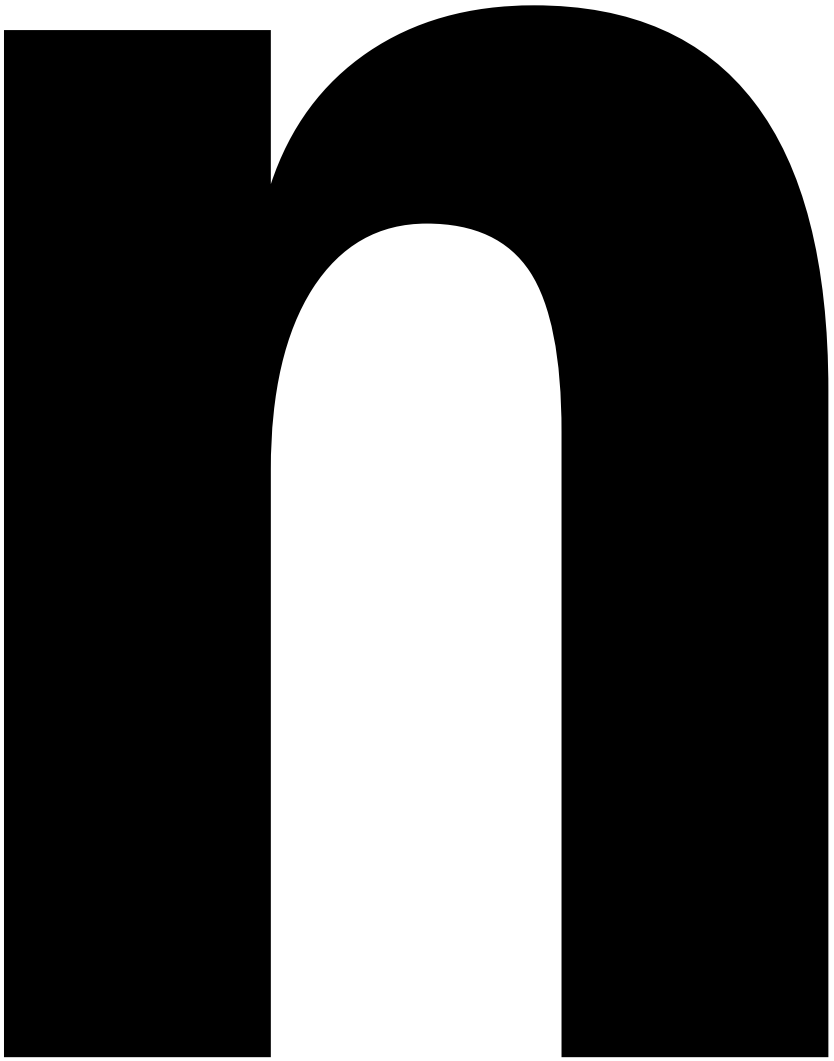
S



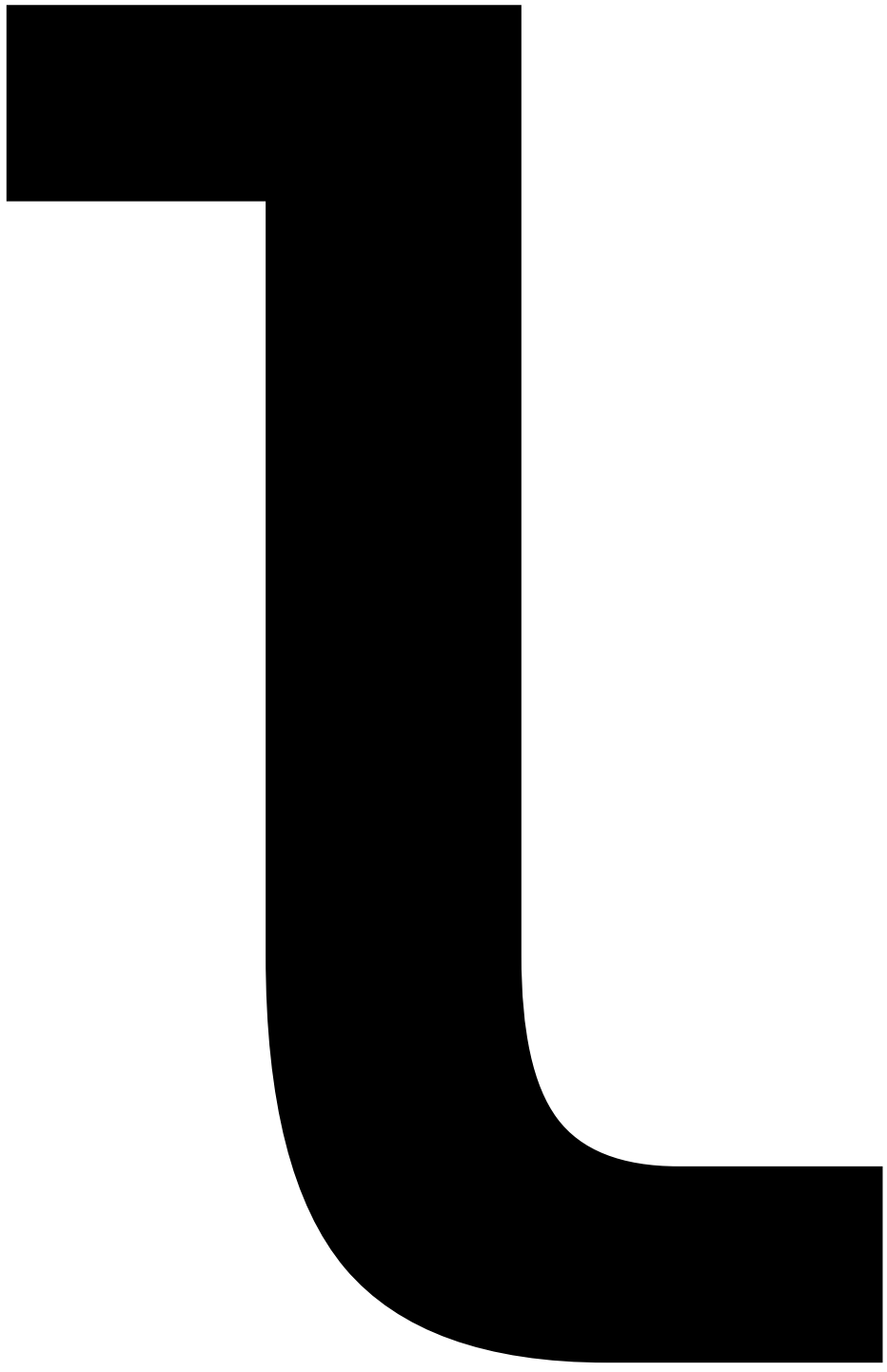


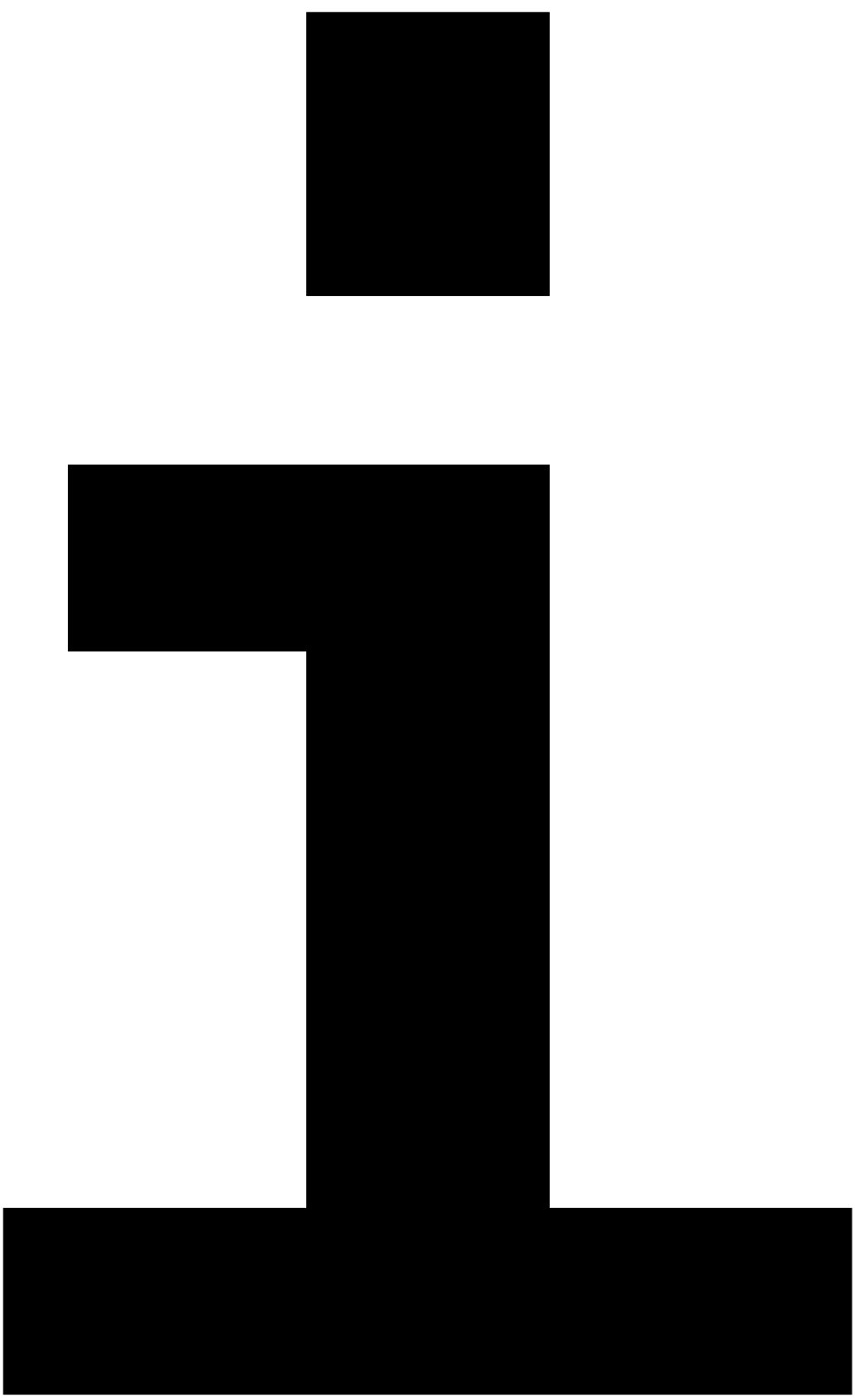


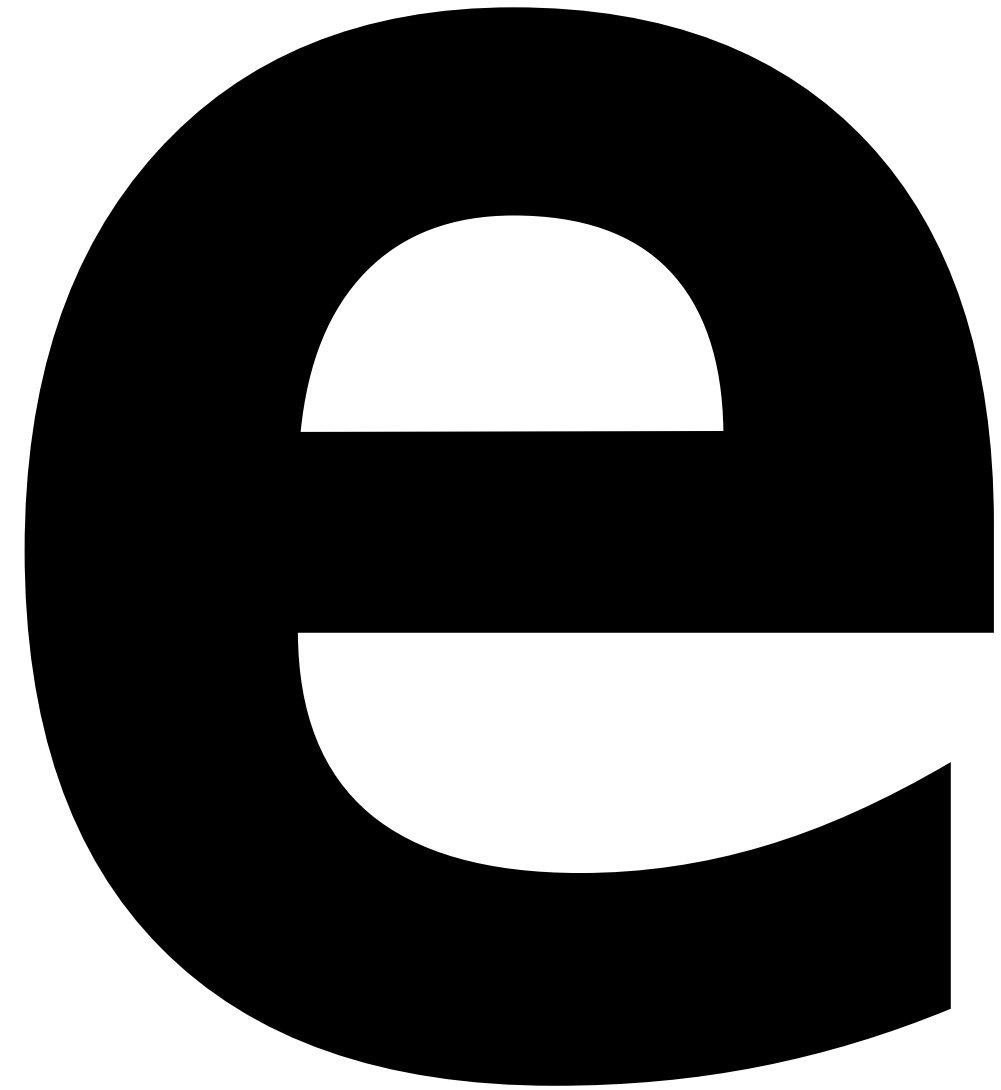


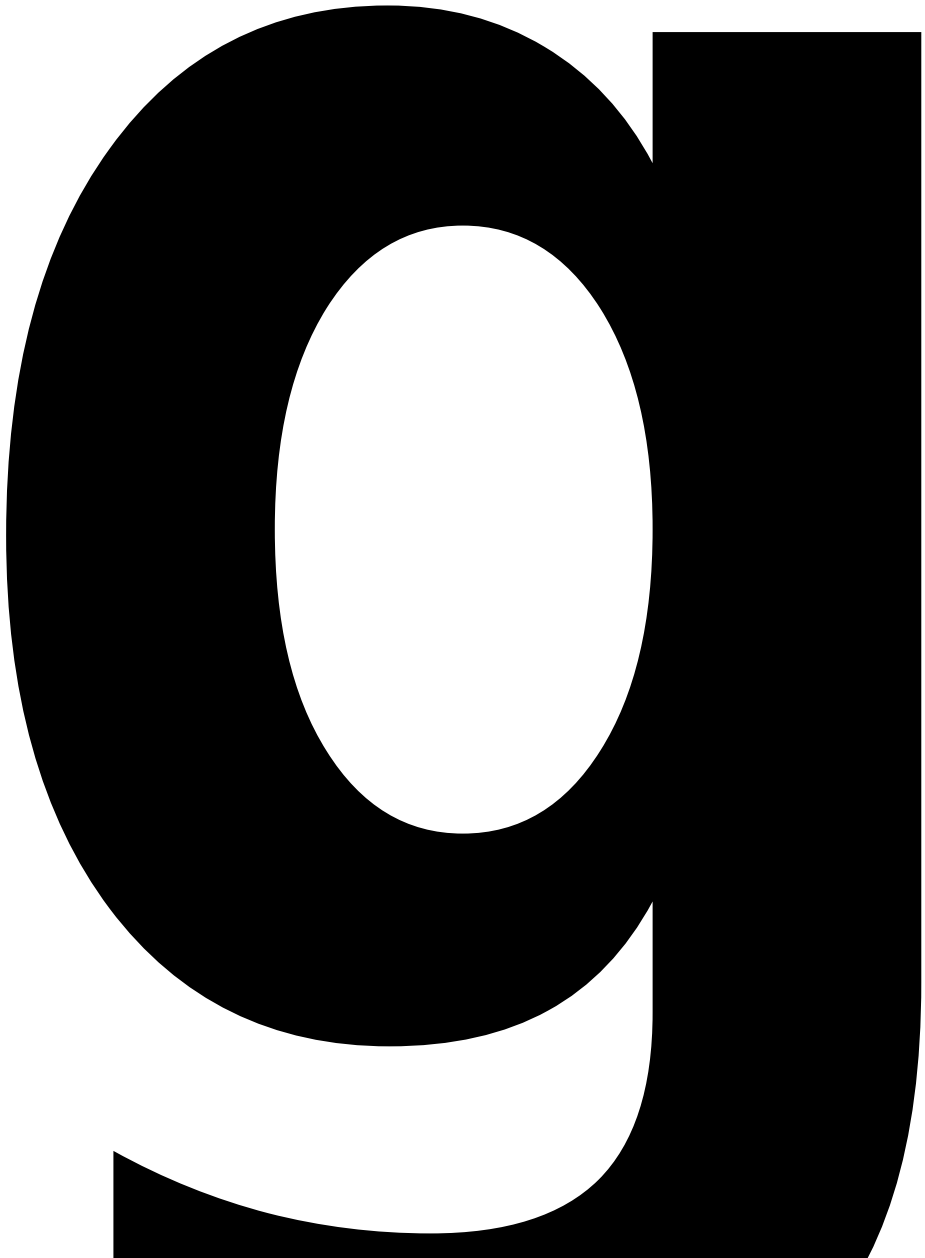


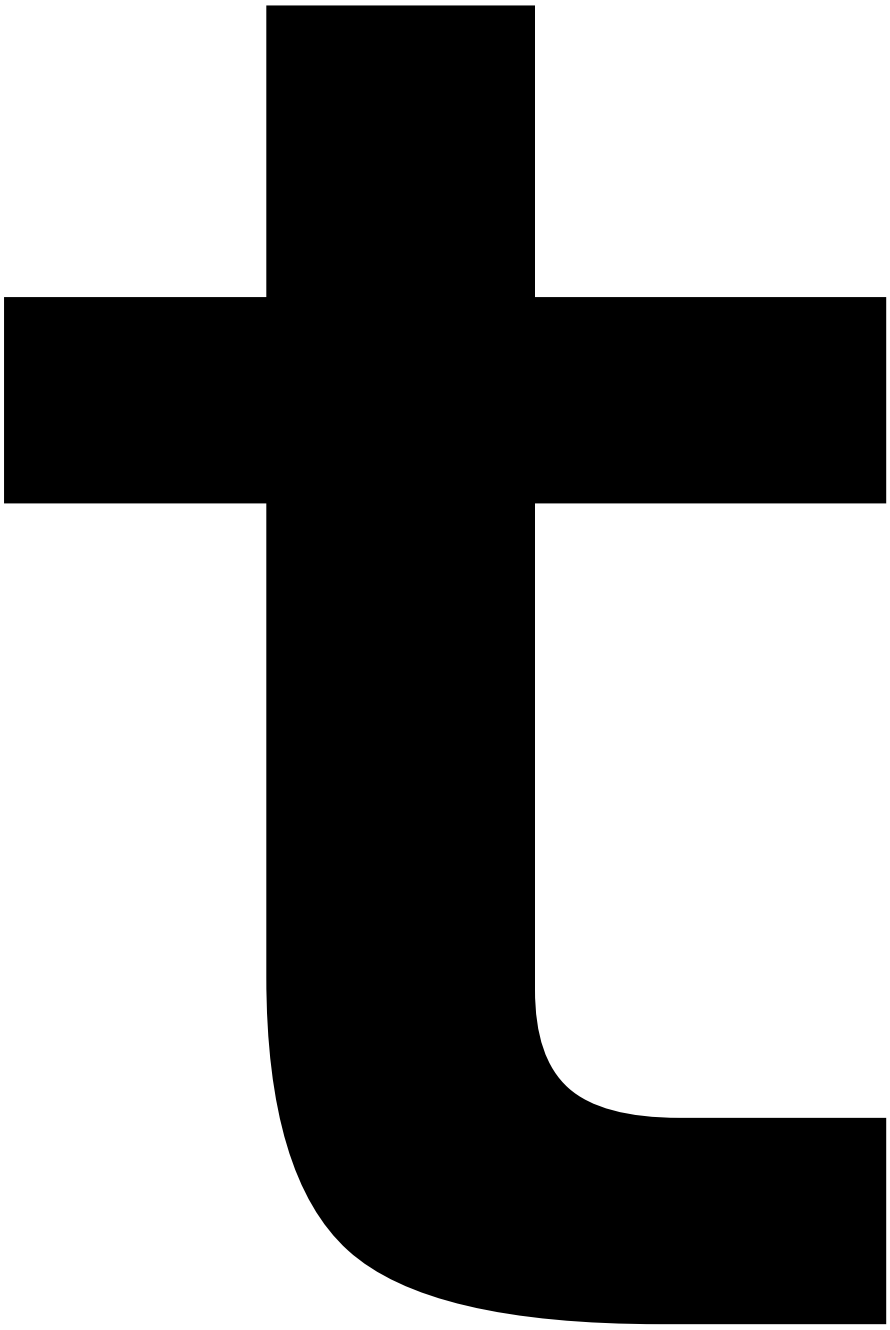
d



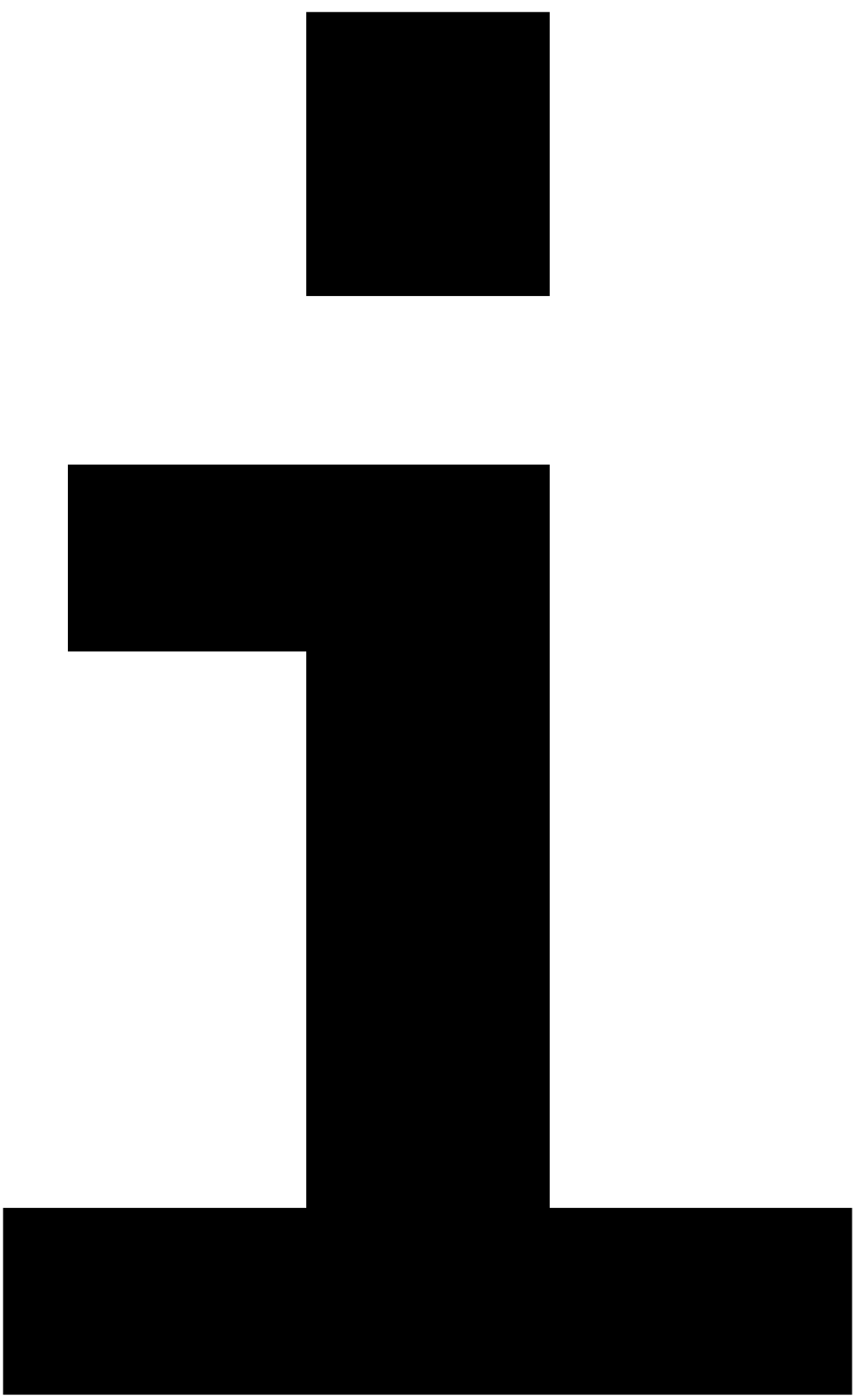


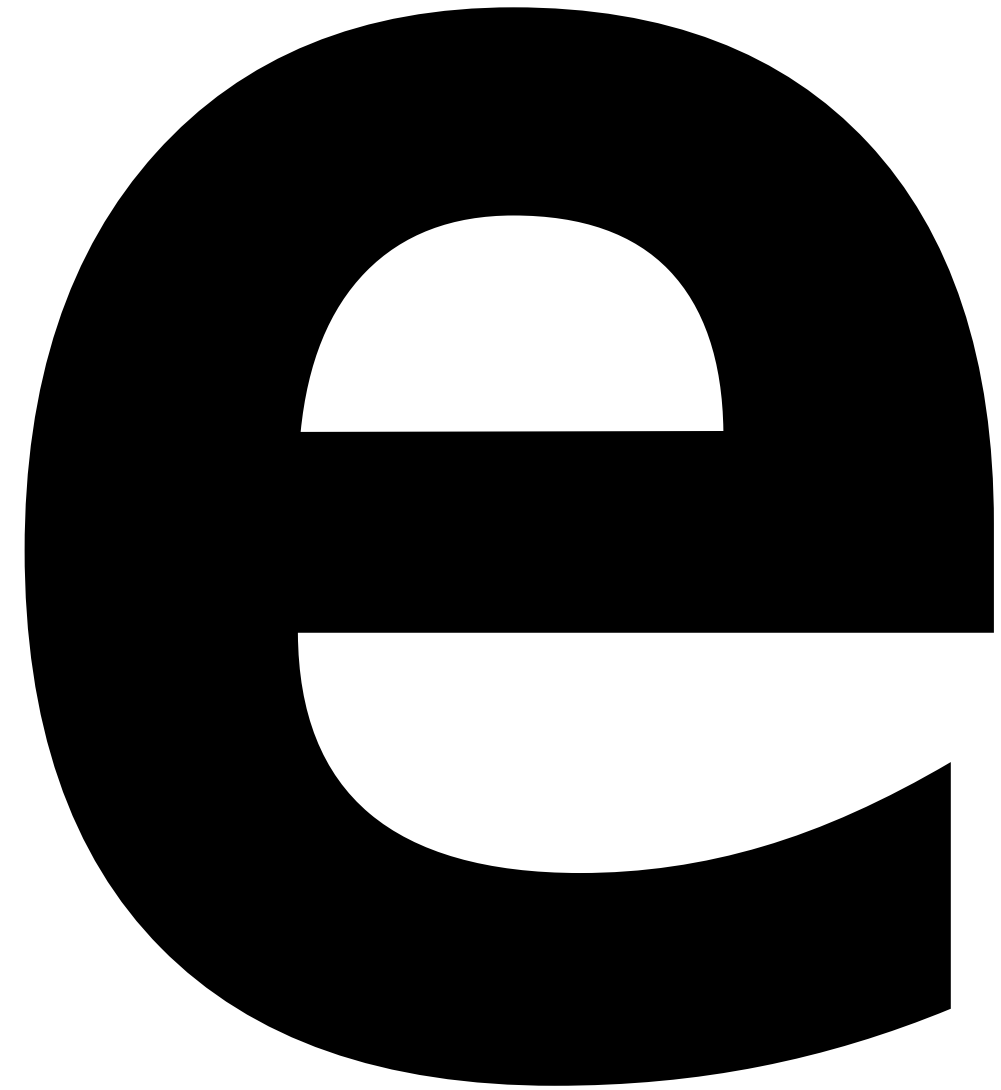


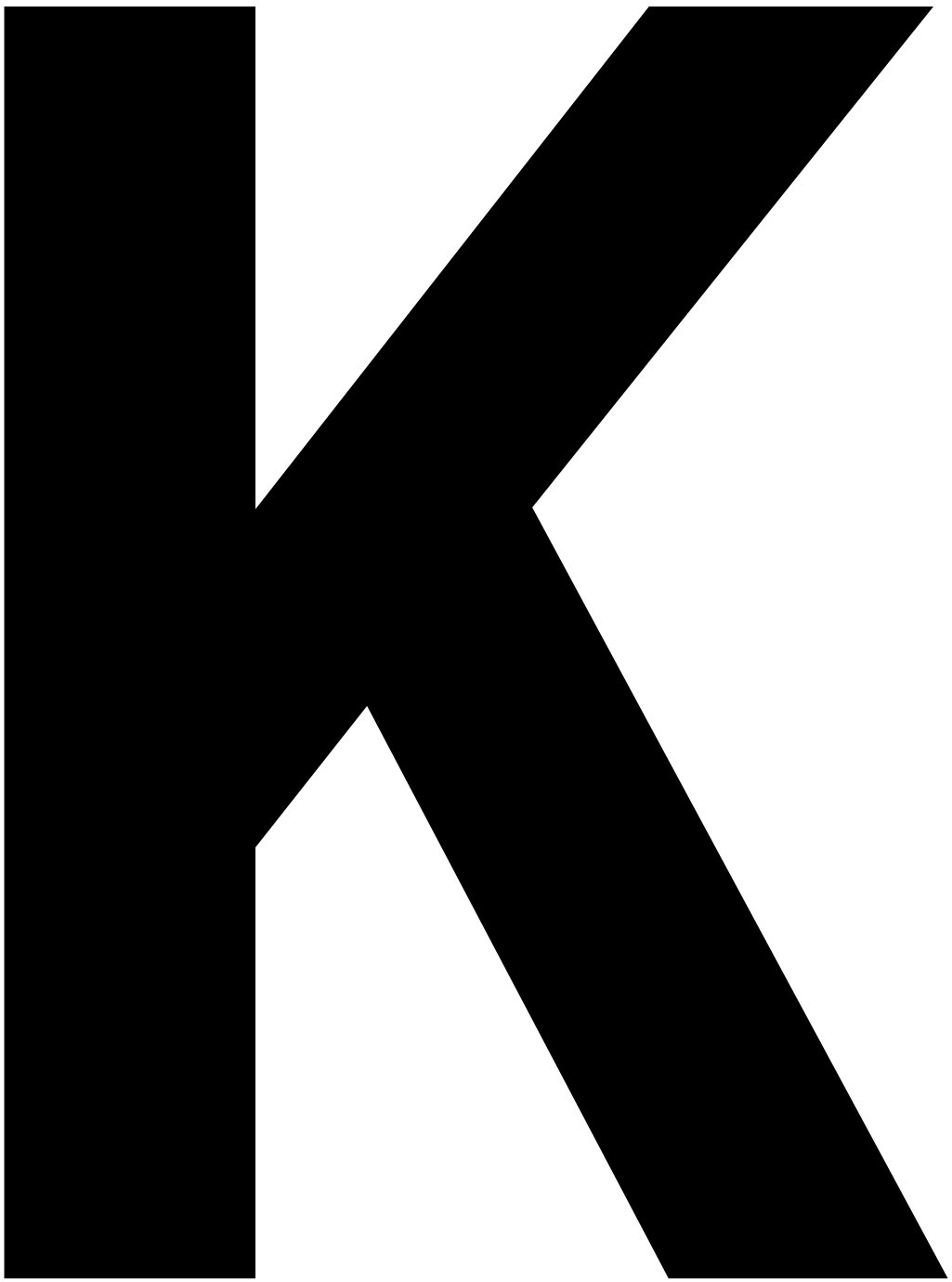


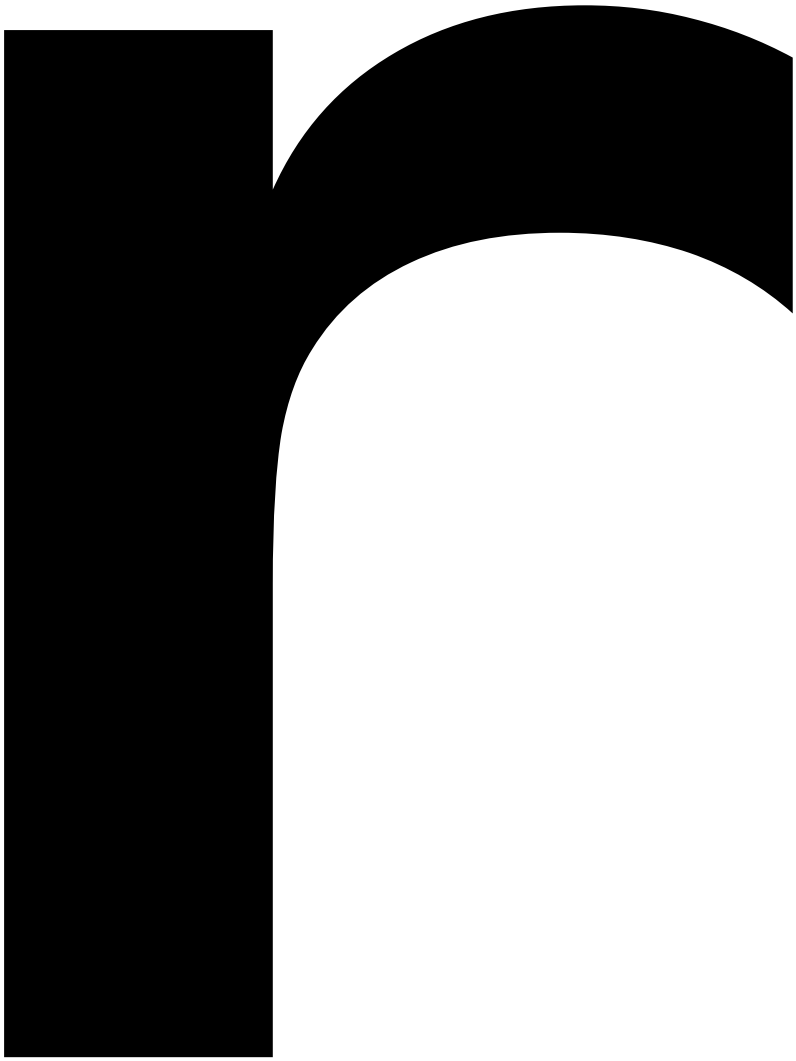


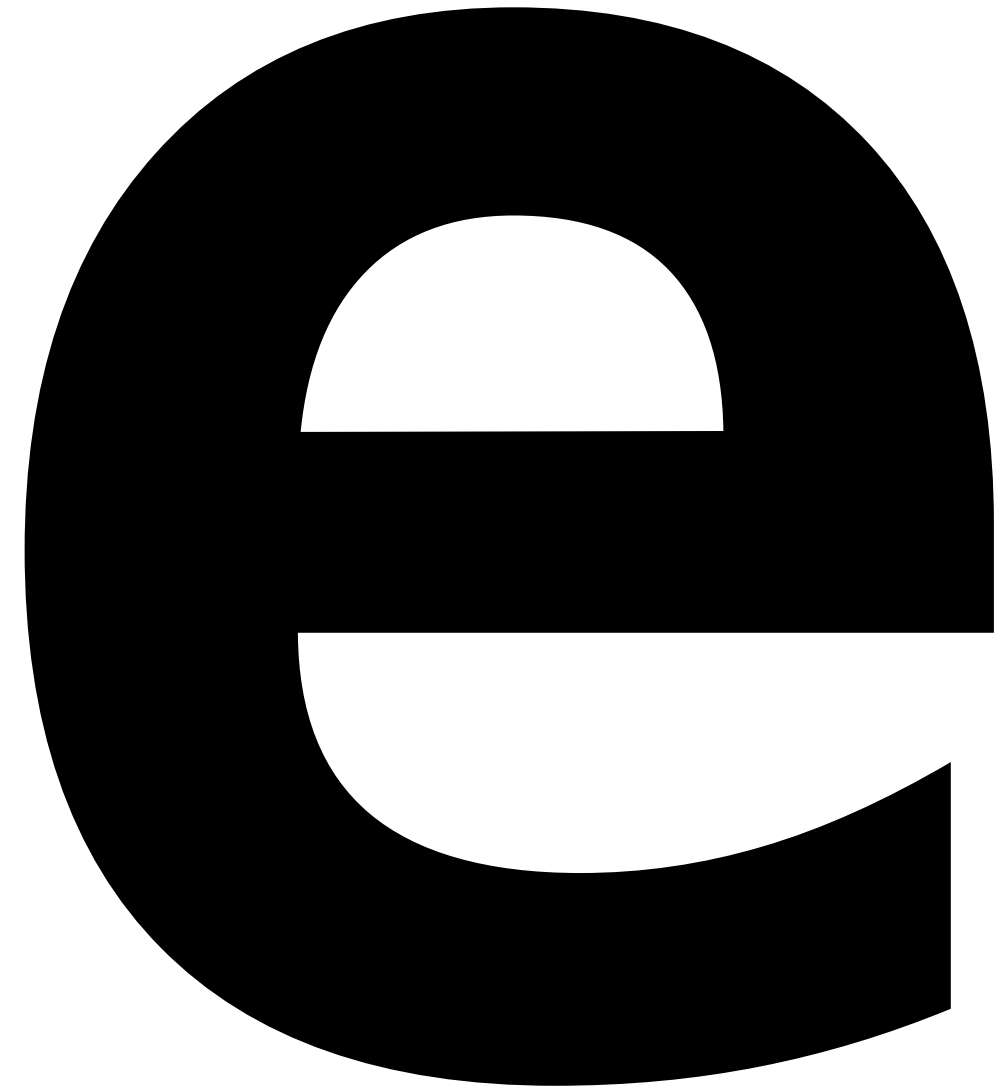
d

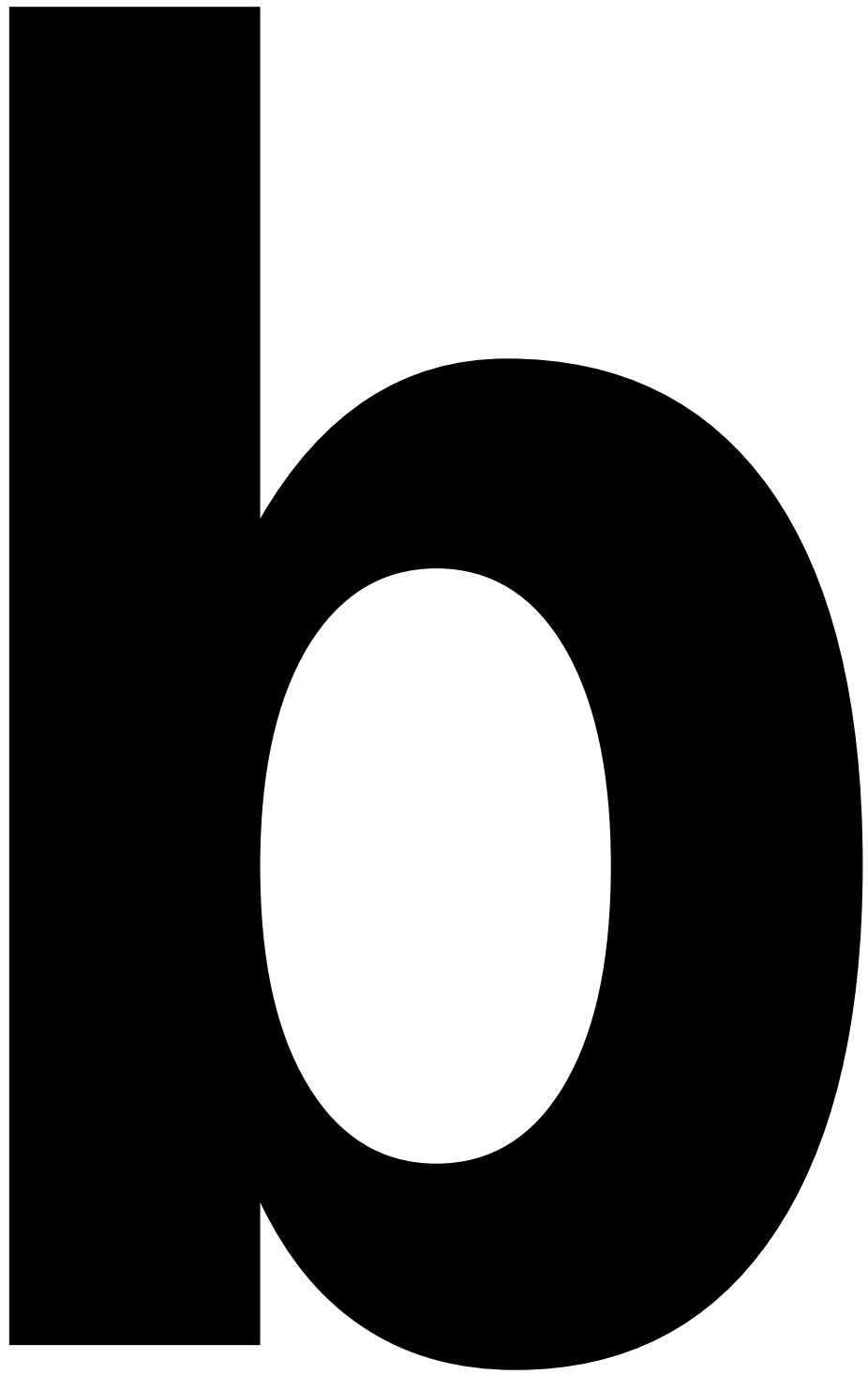




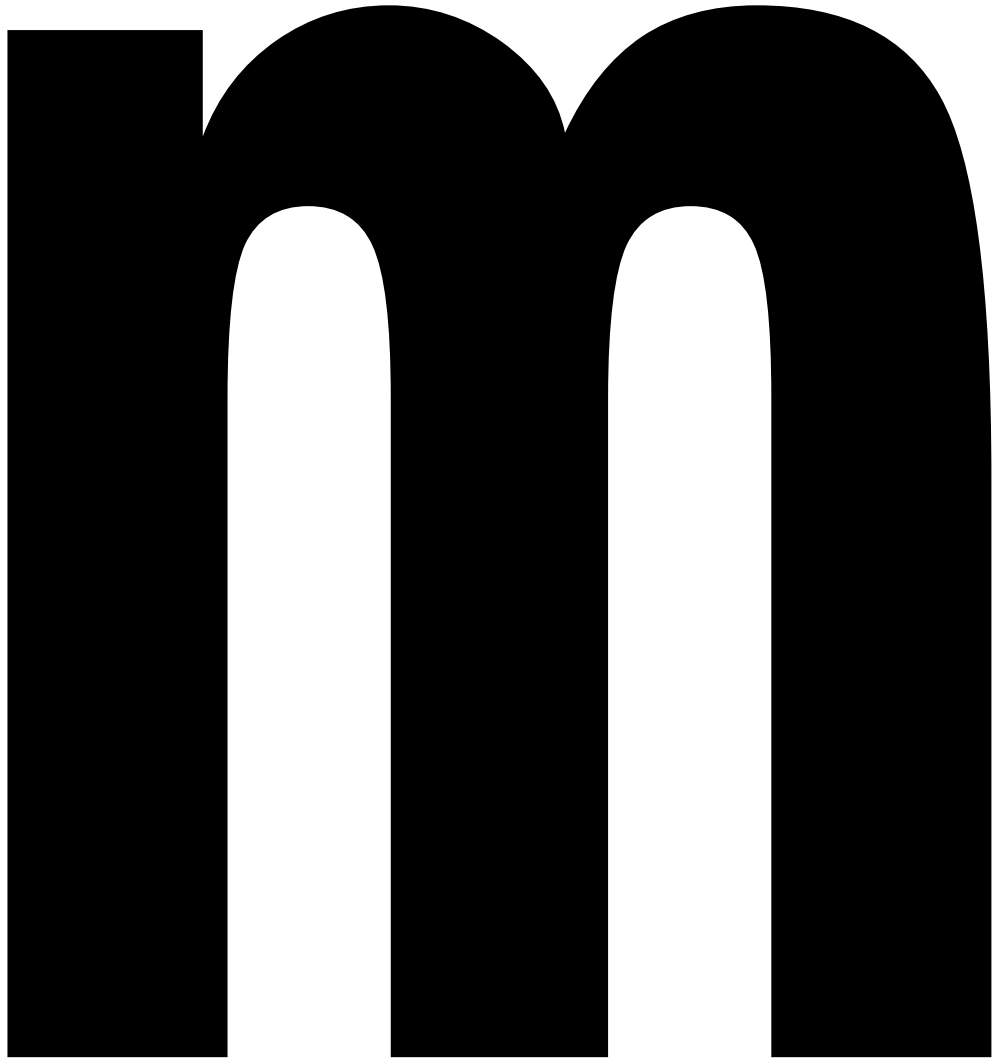


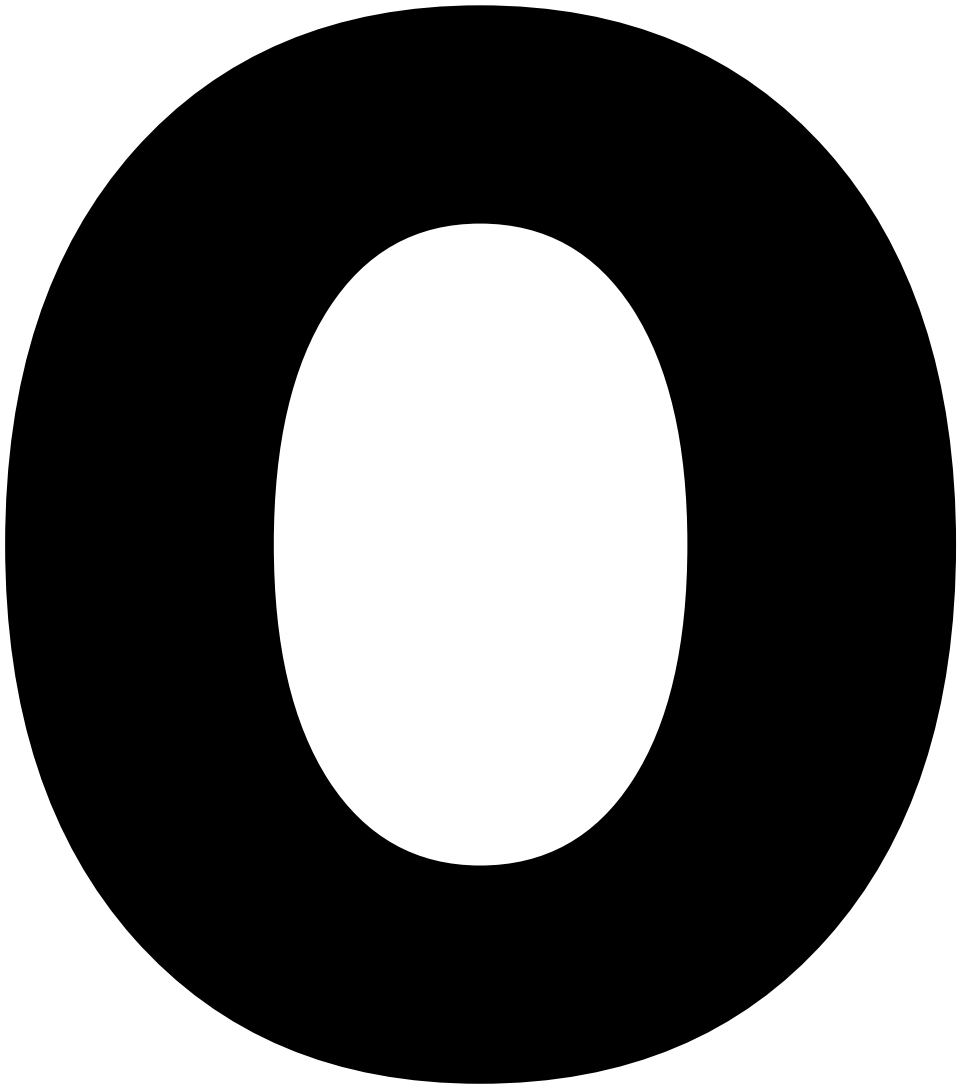


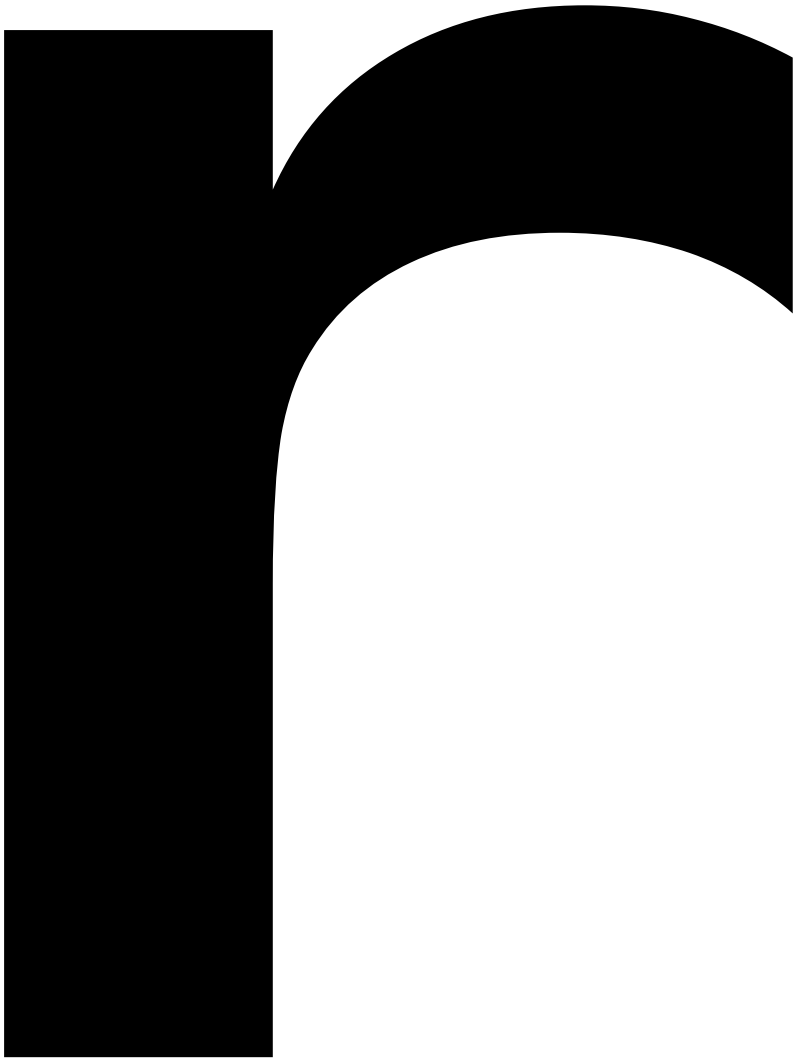


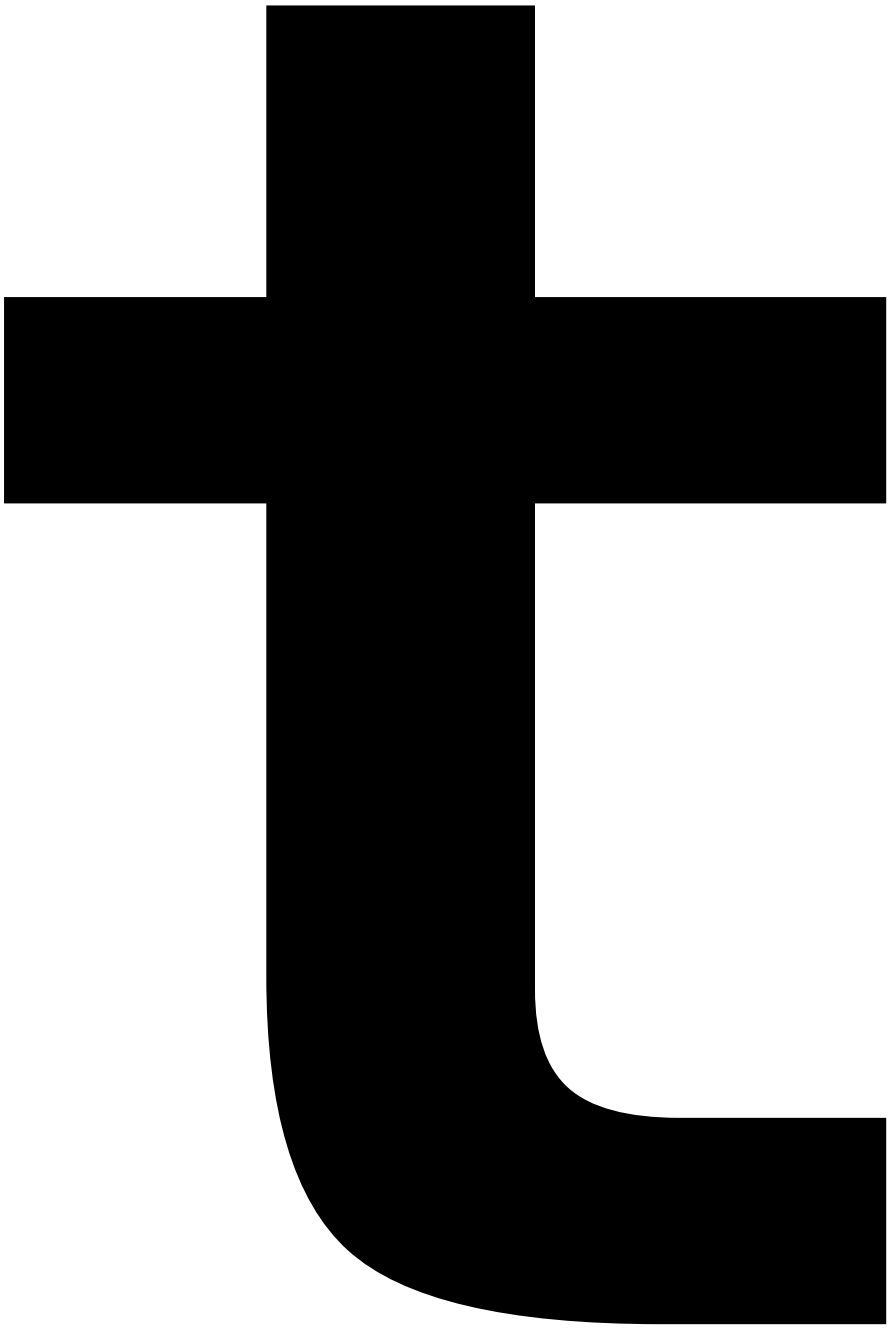


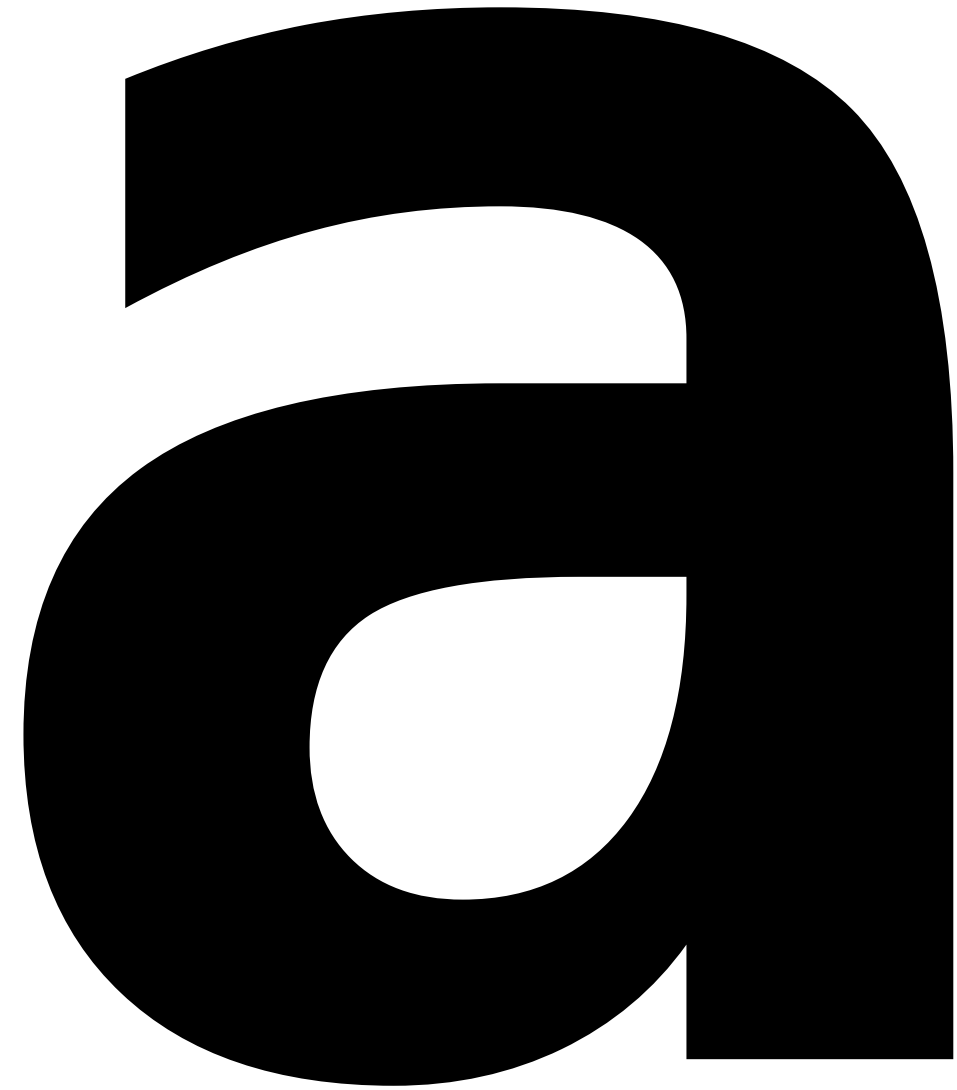
S

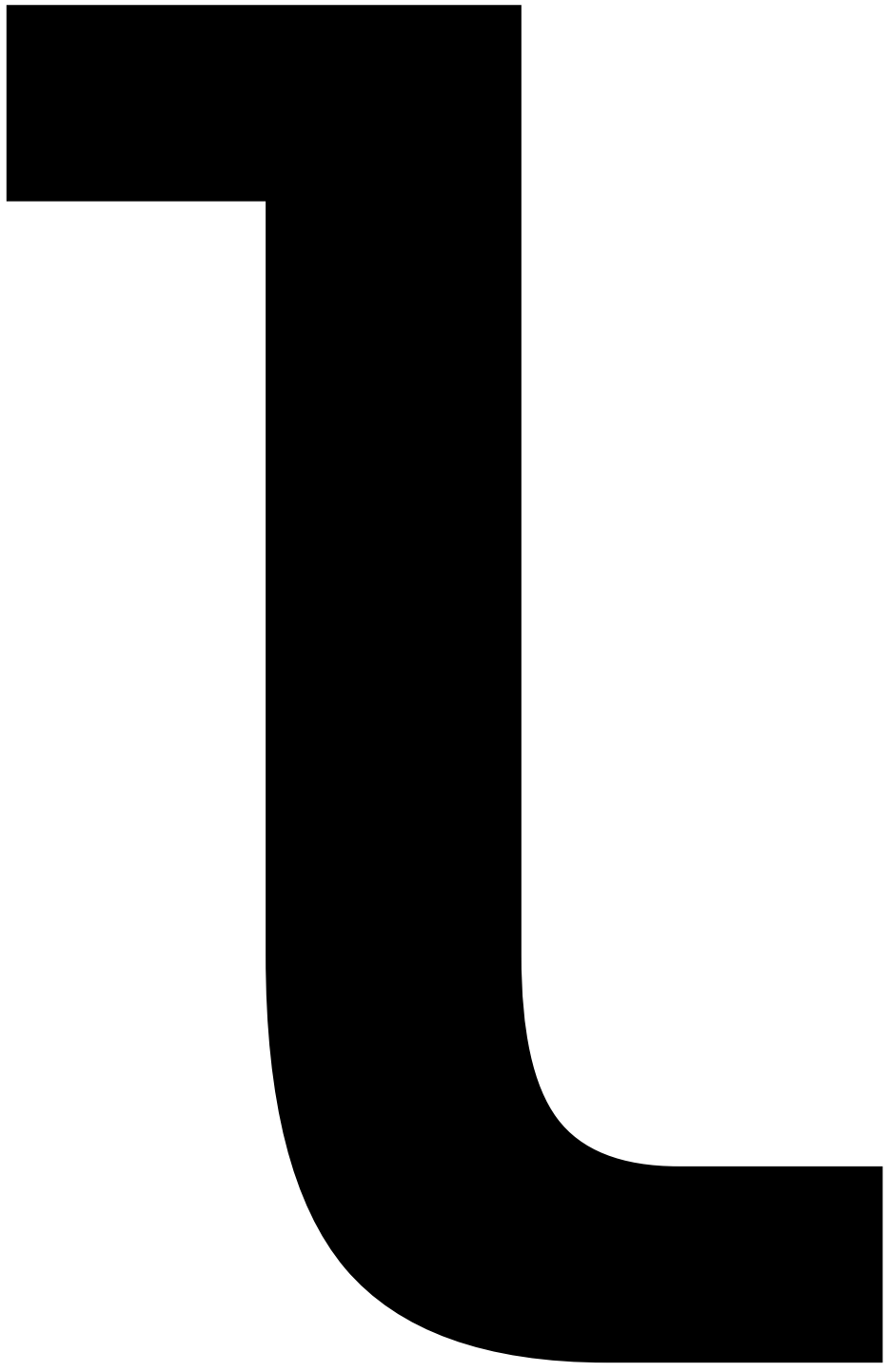


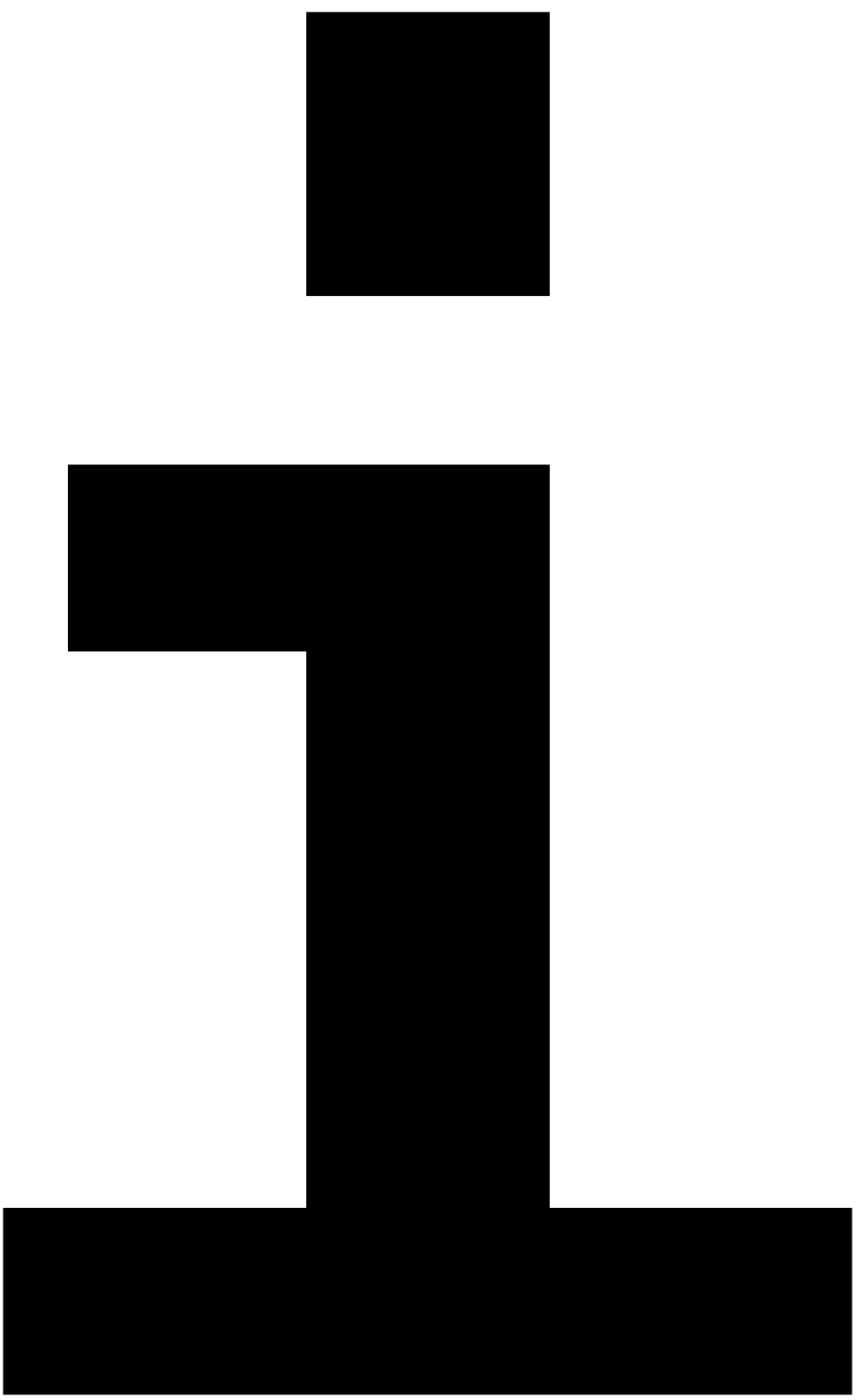


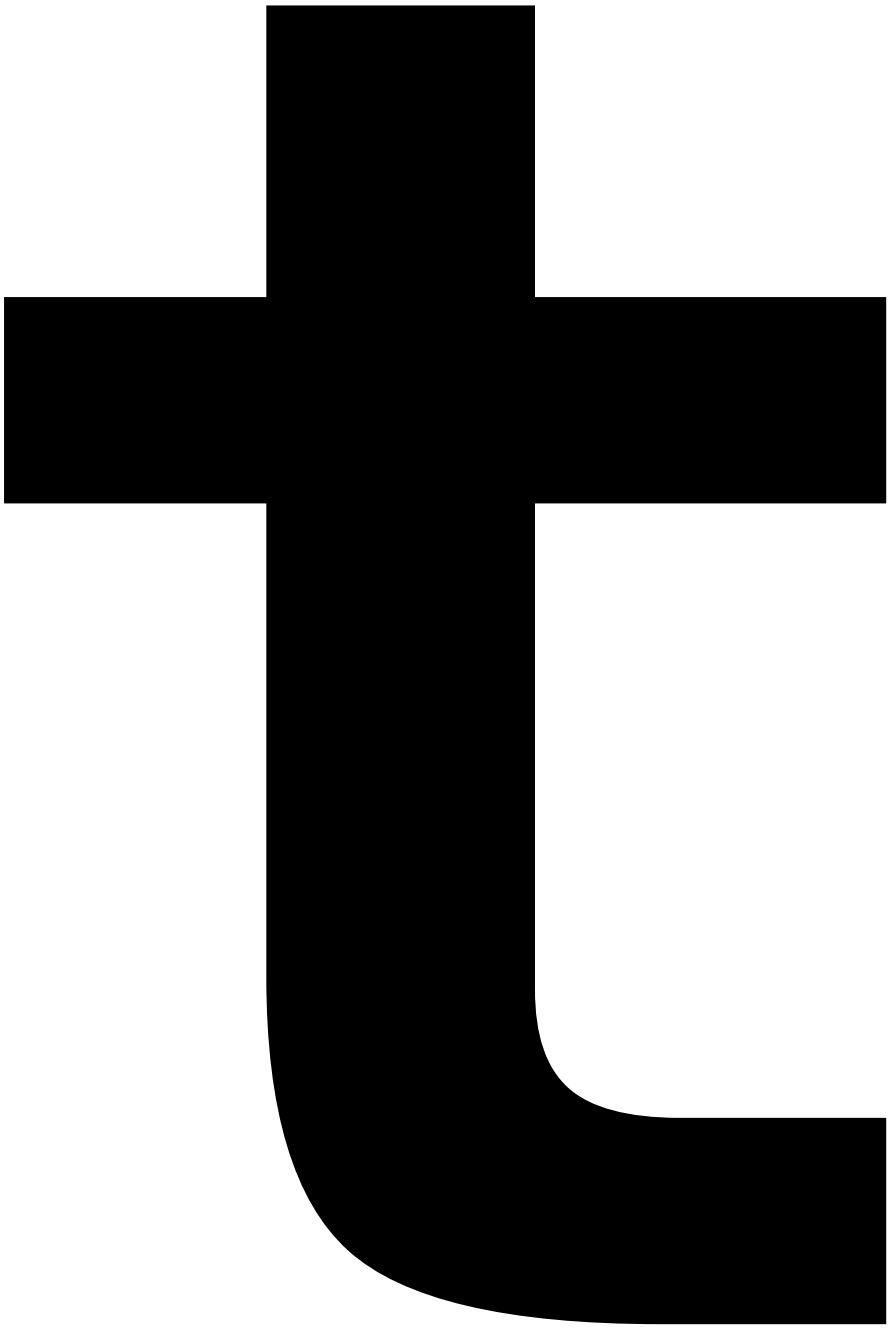


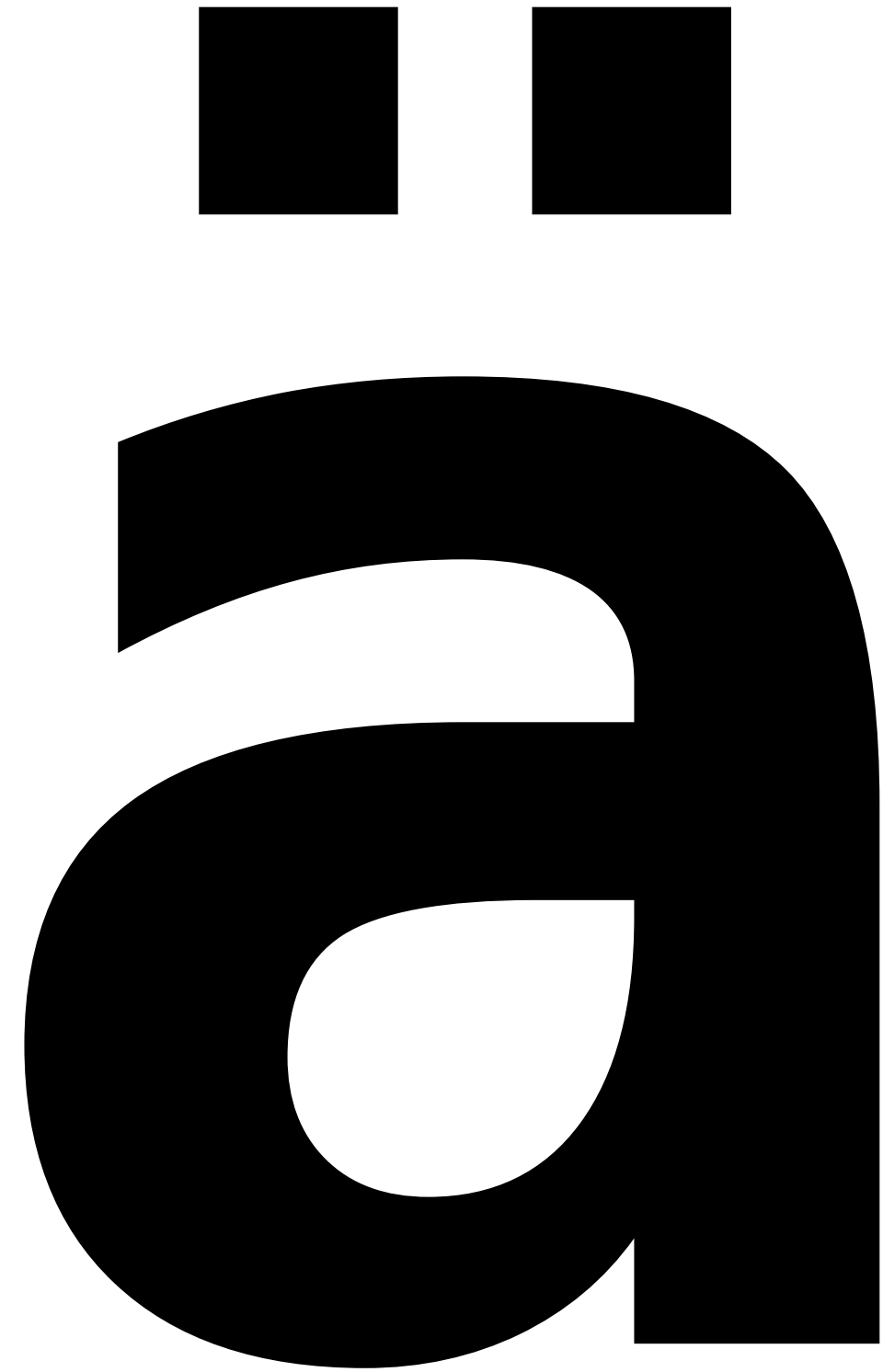


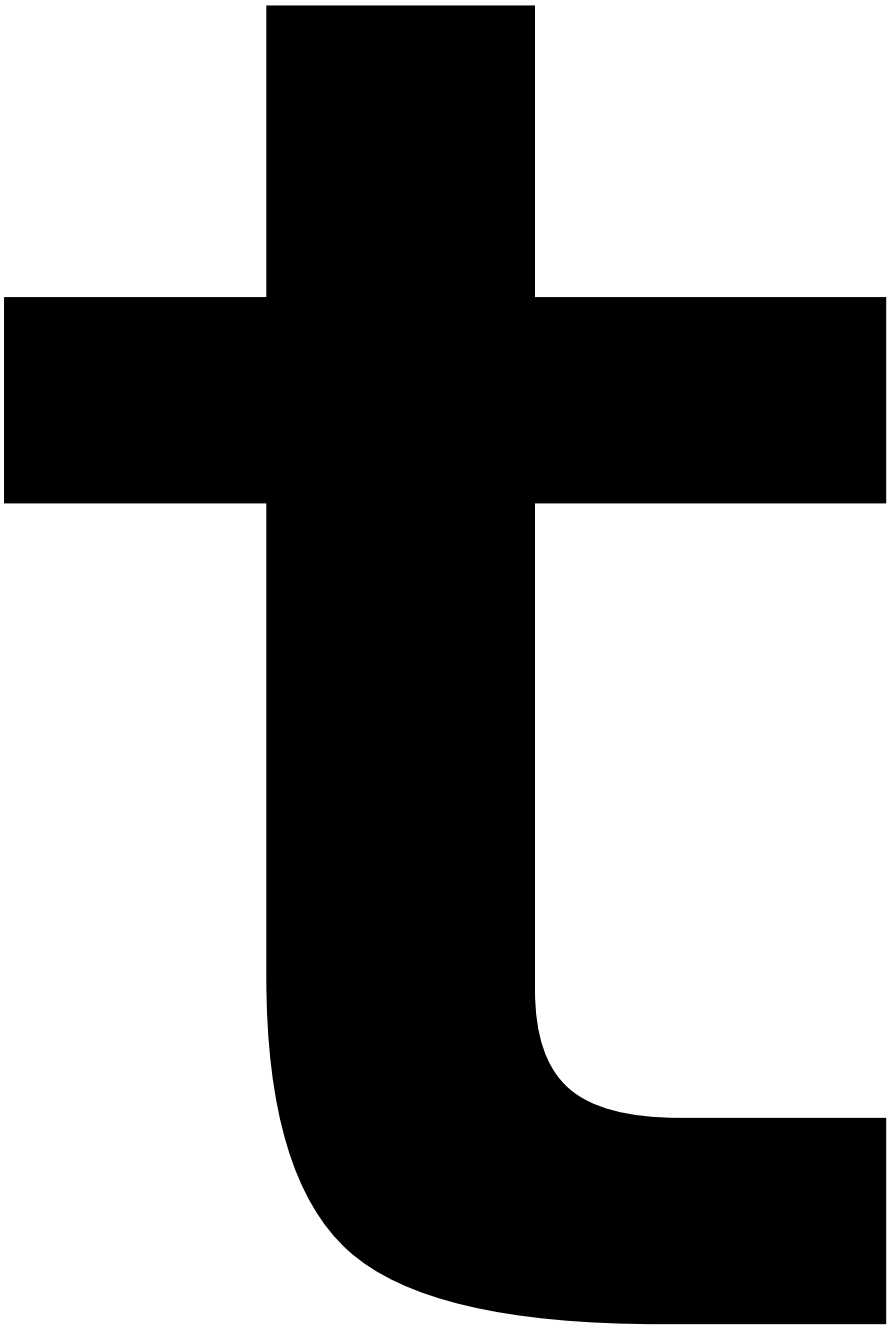


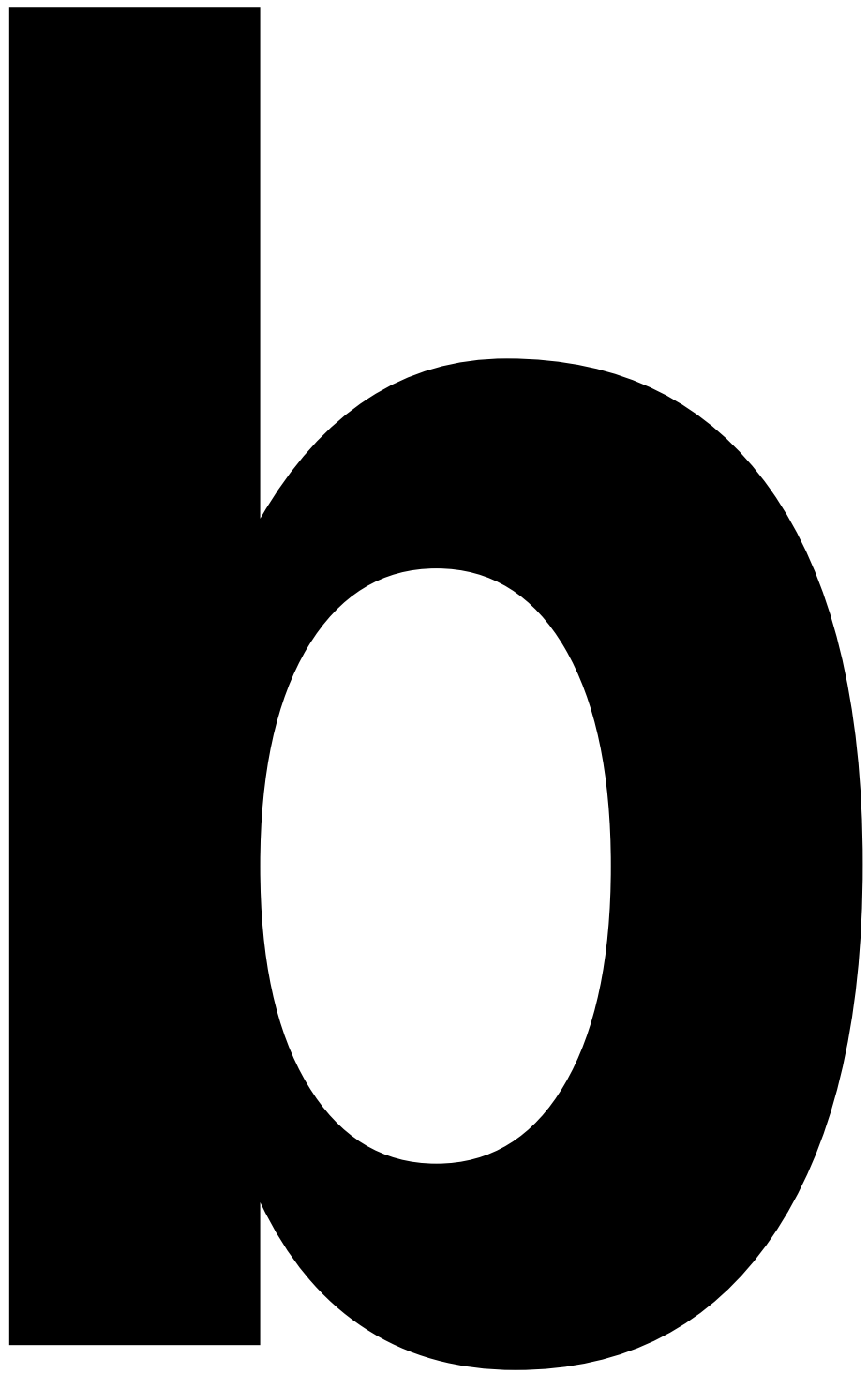


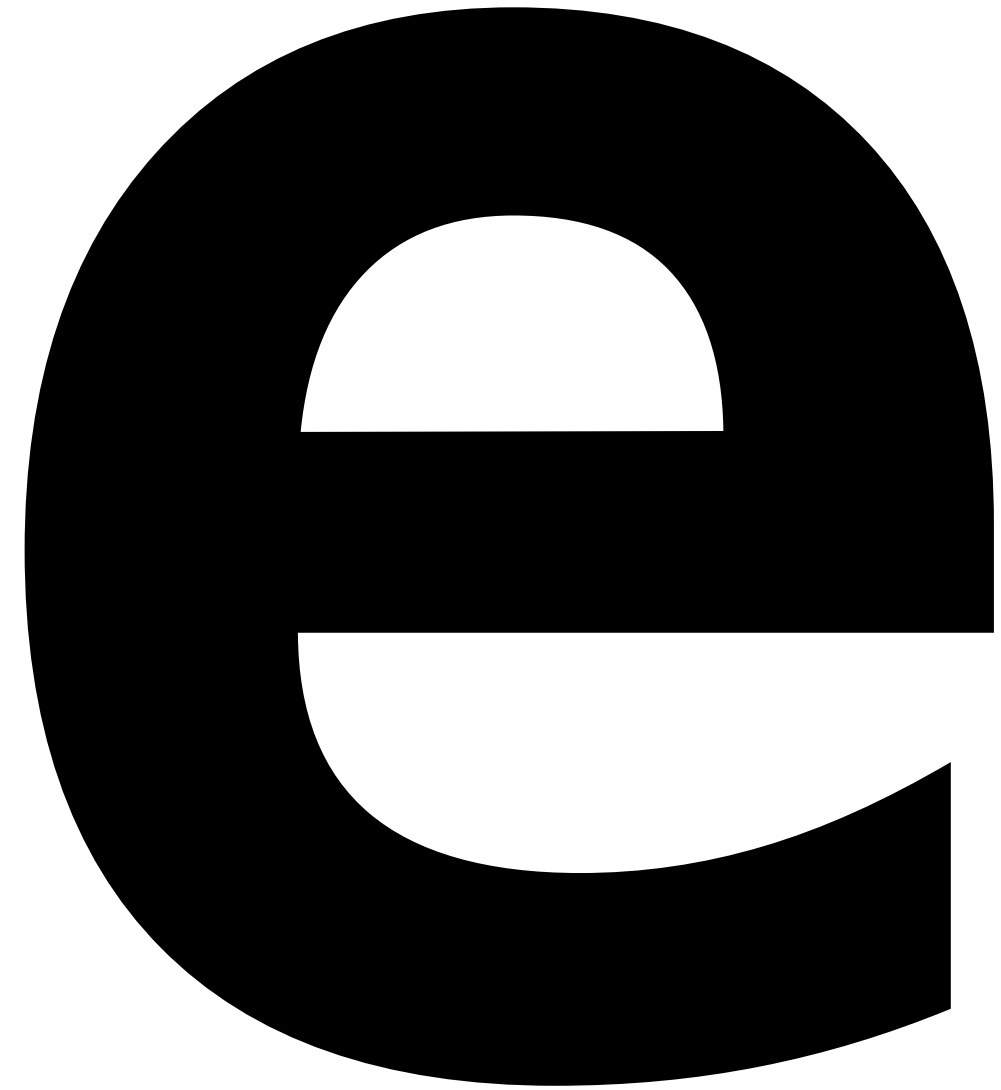


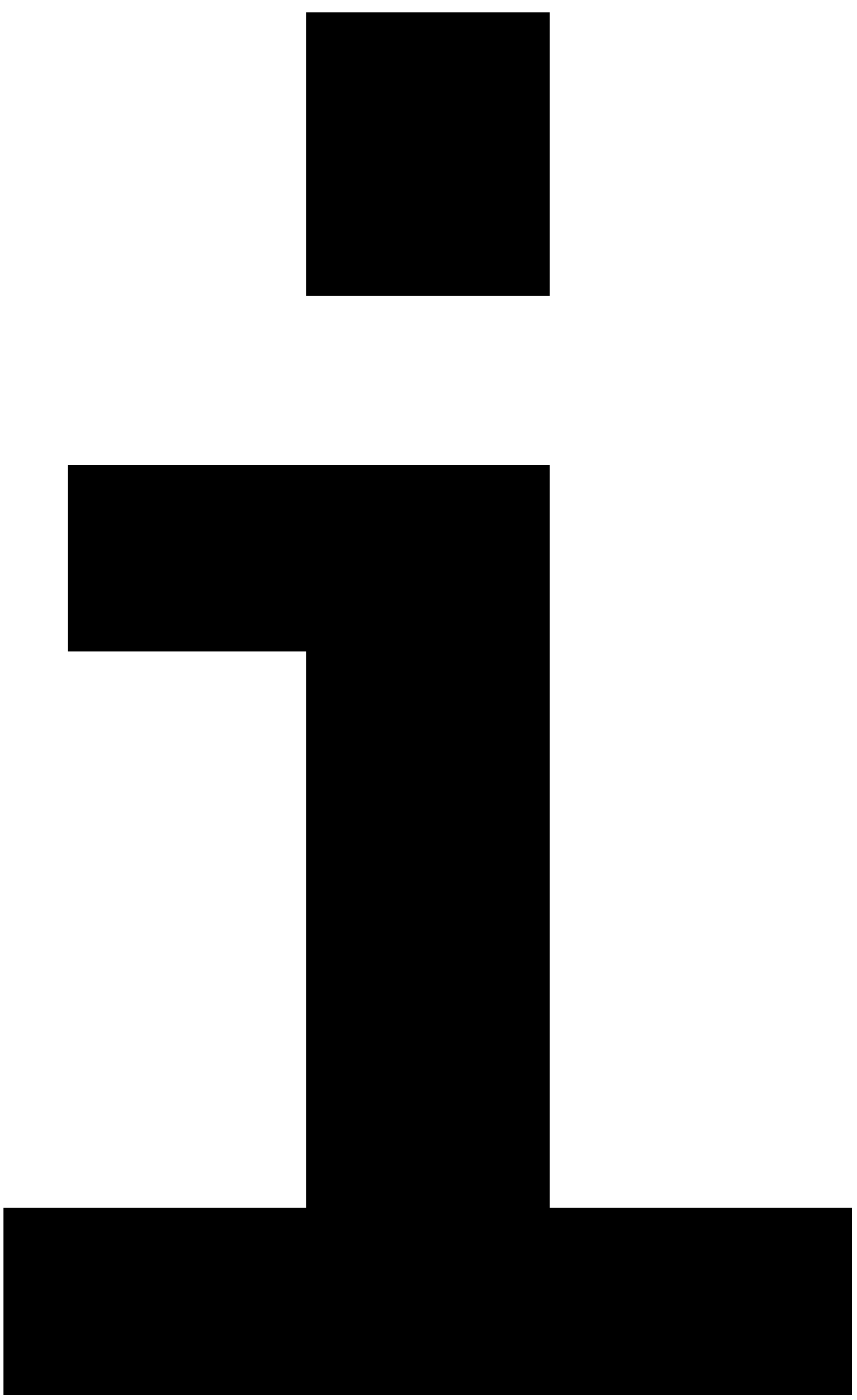


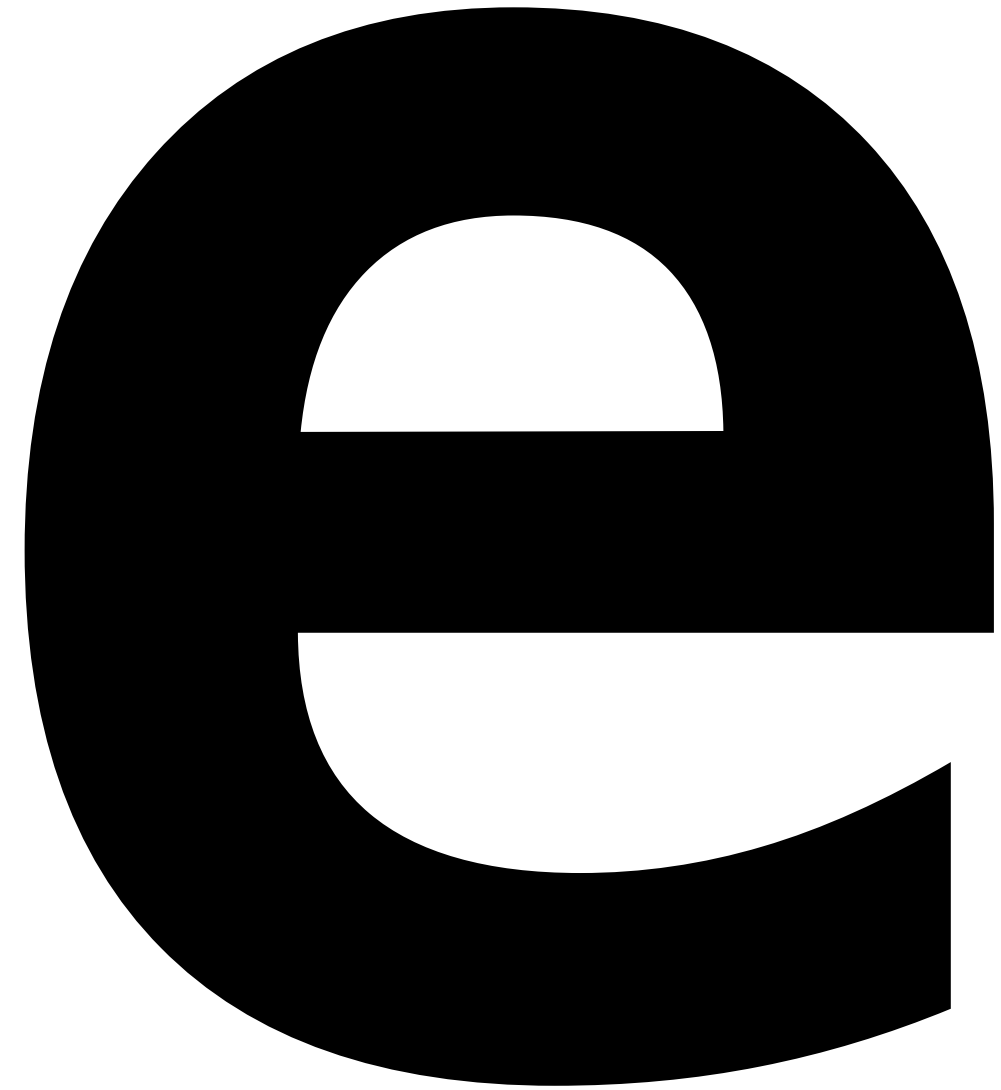


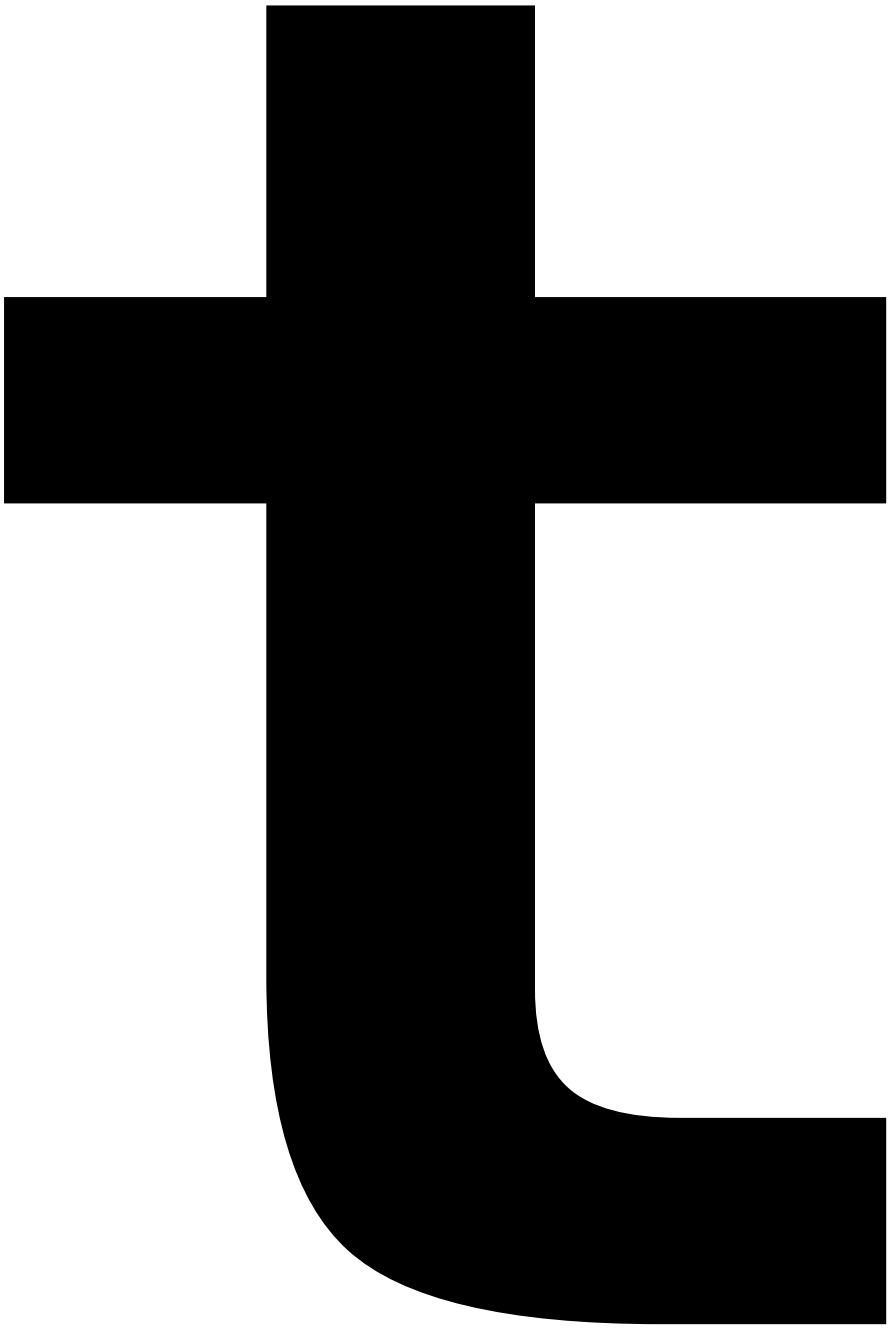


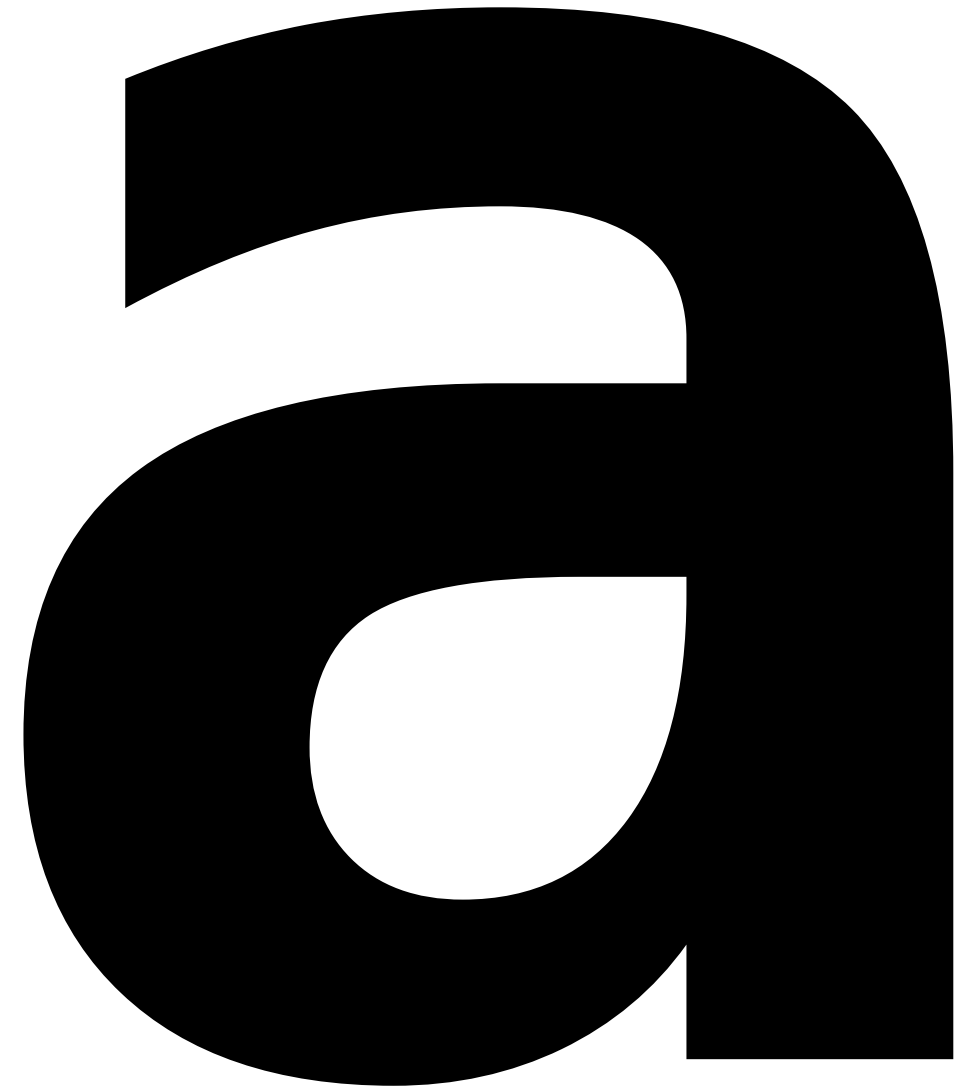




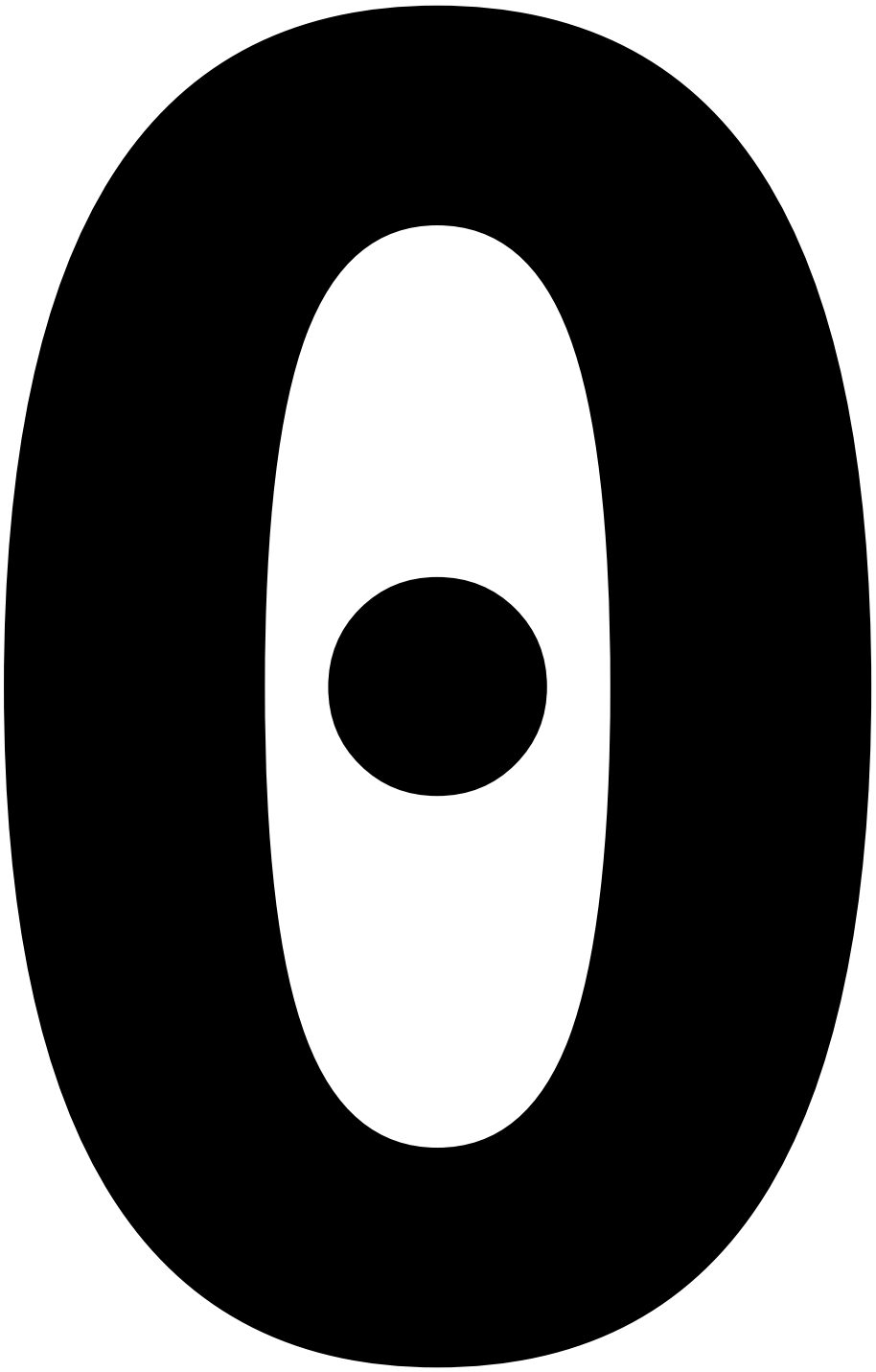


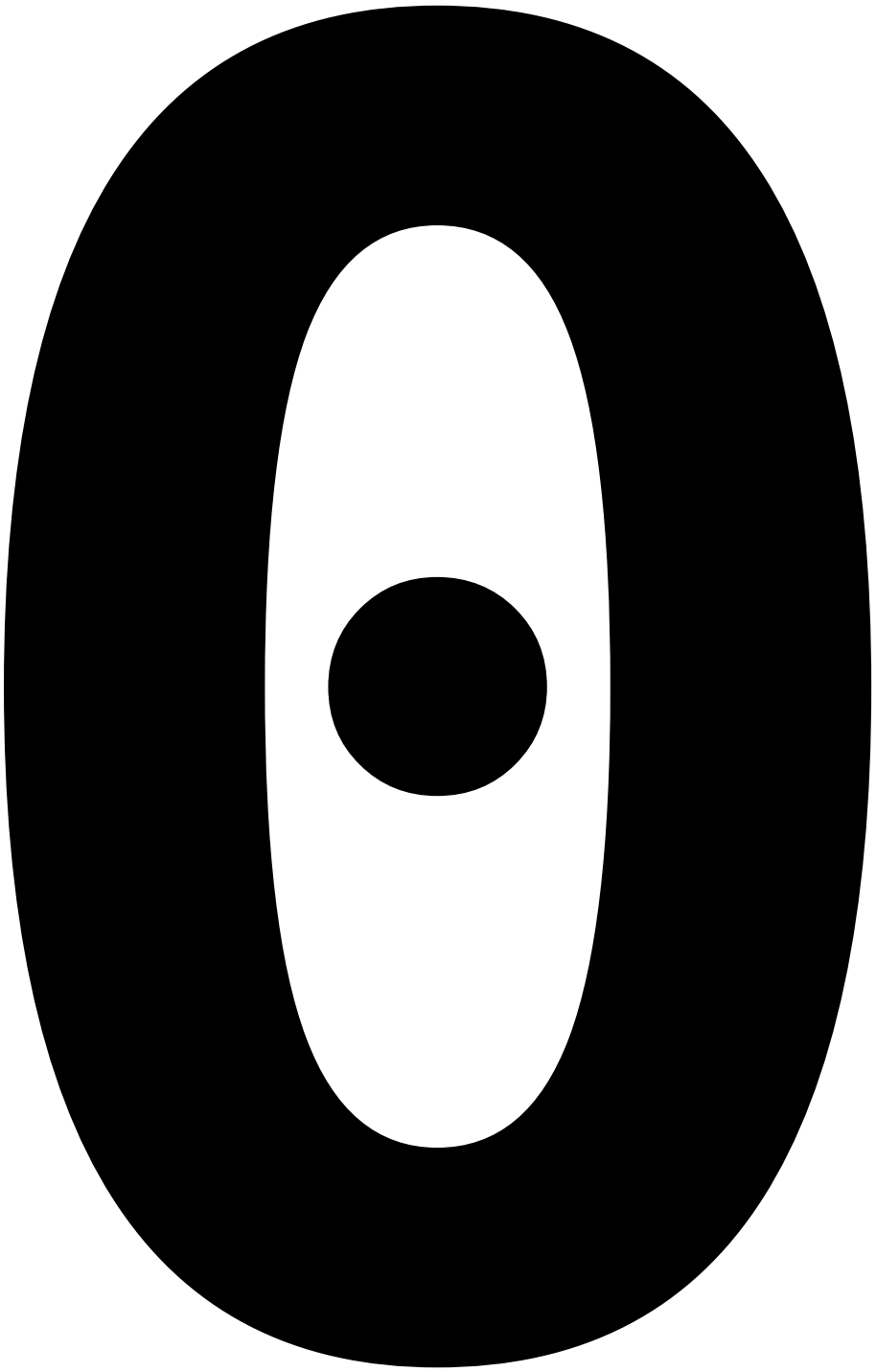


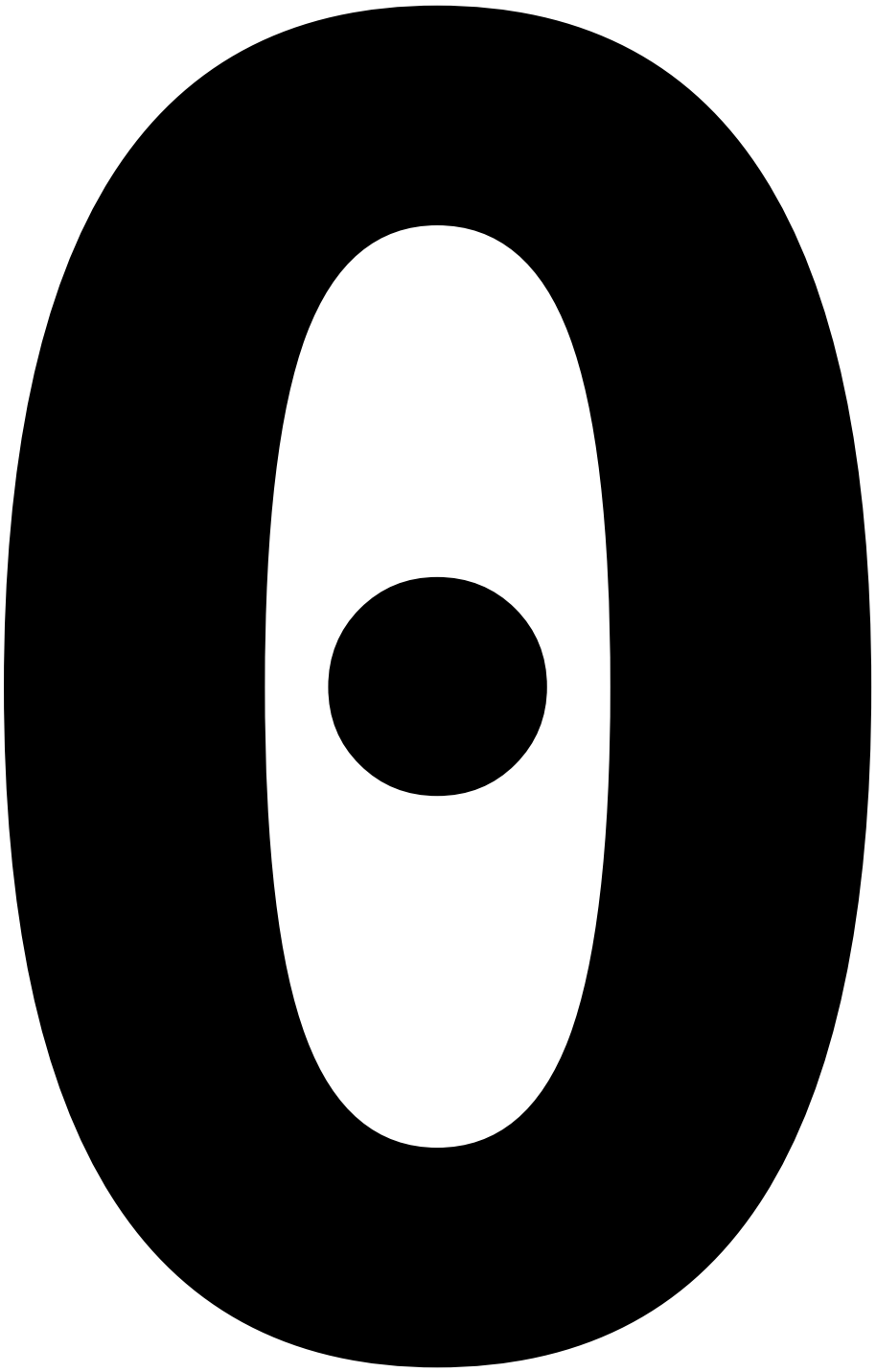


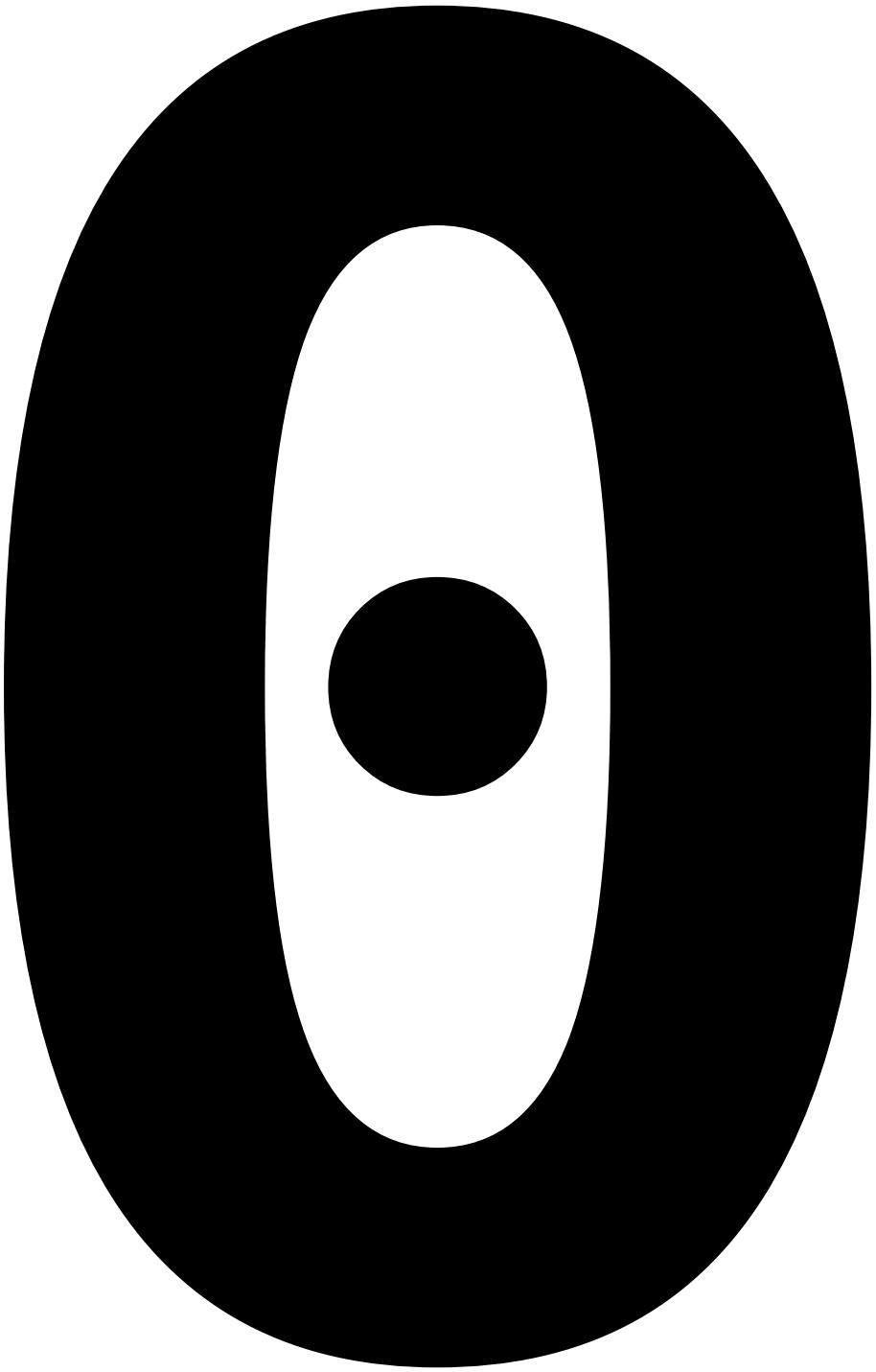


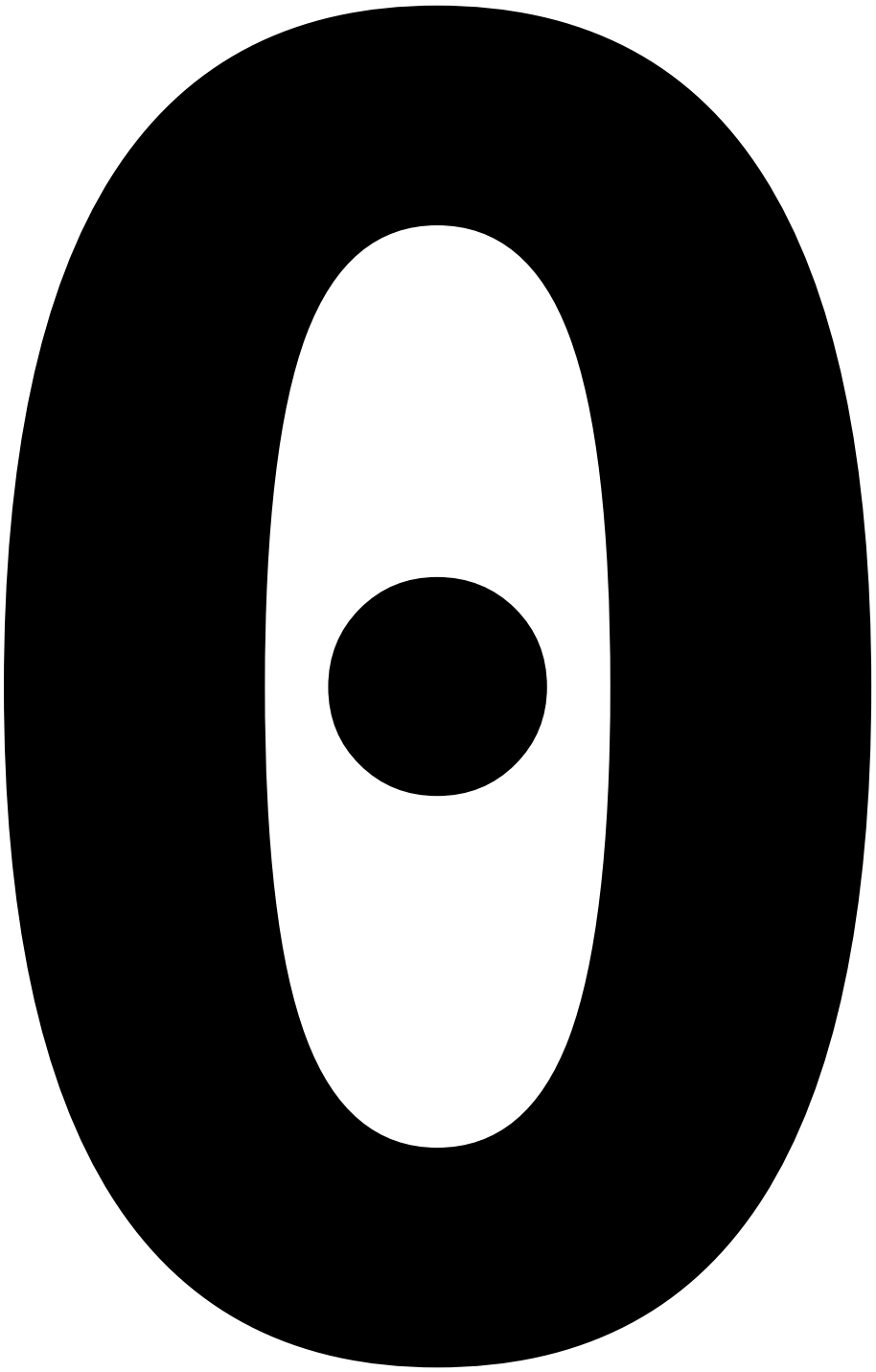
2



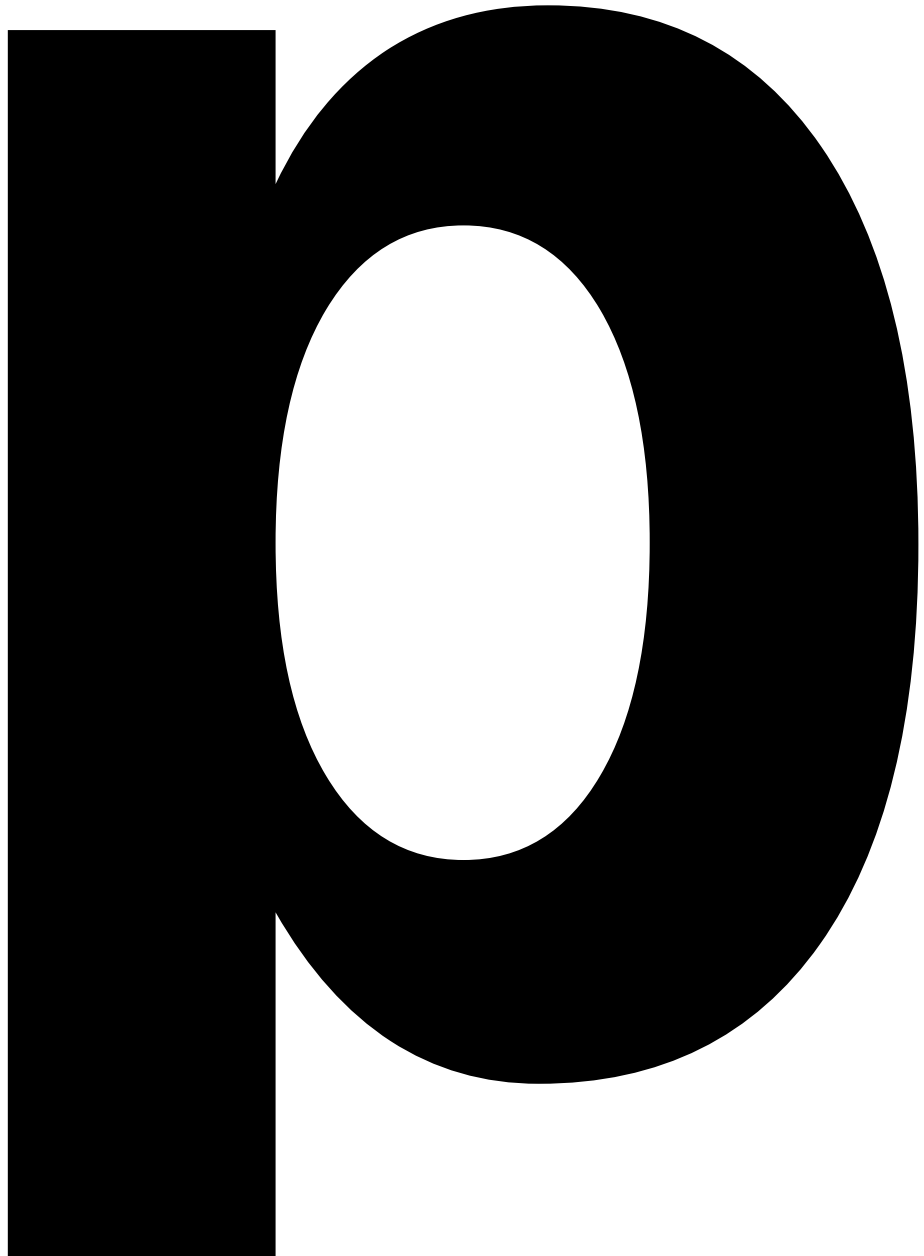


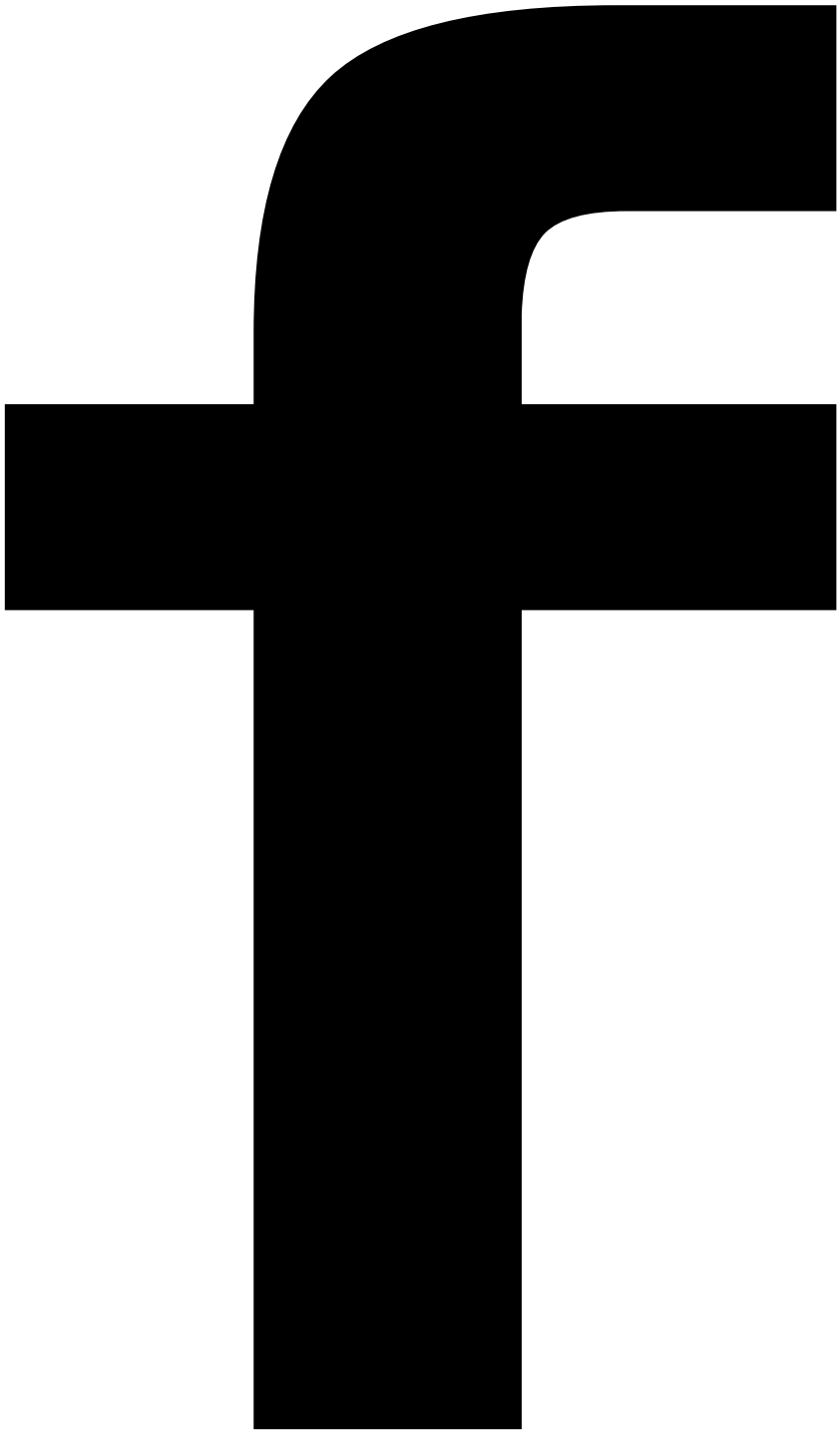


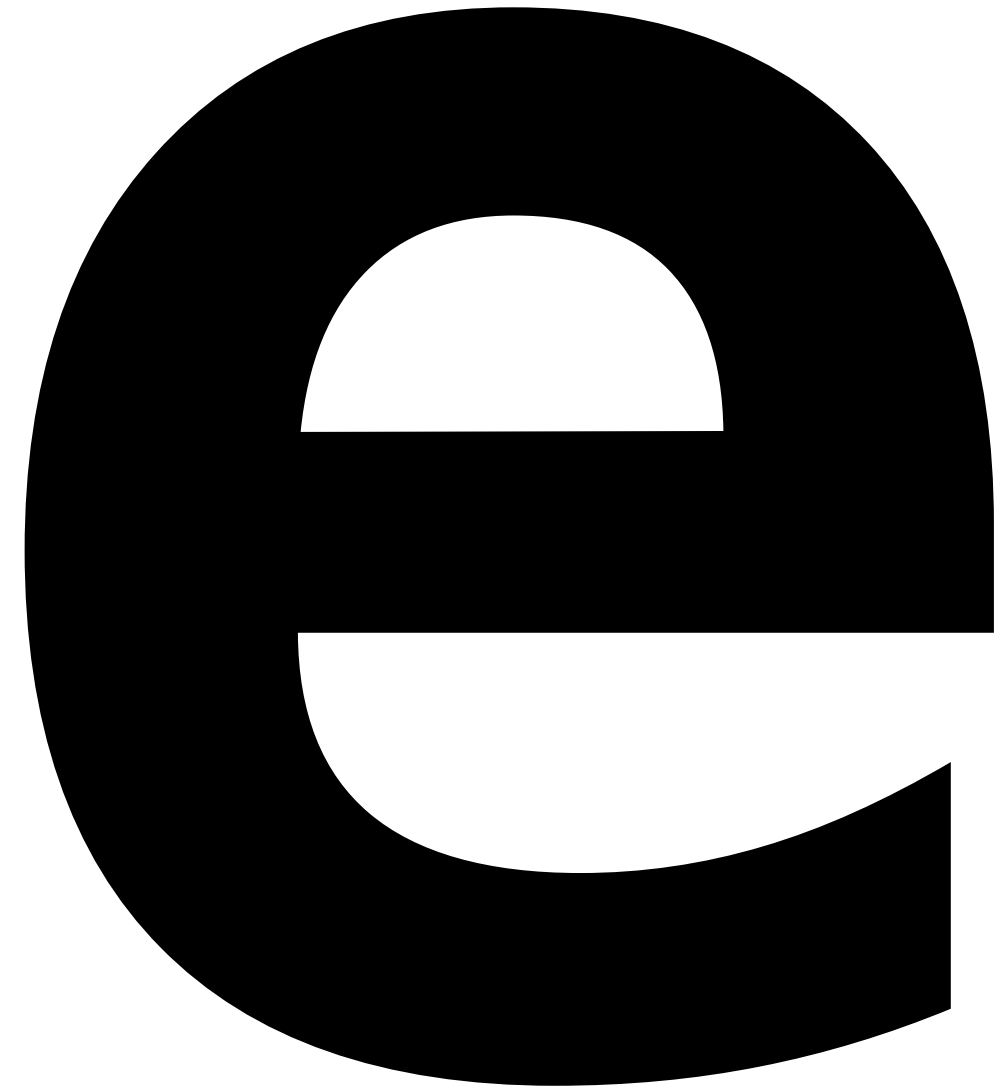


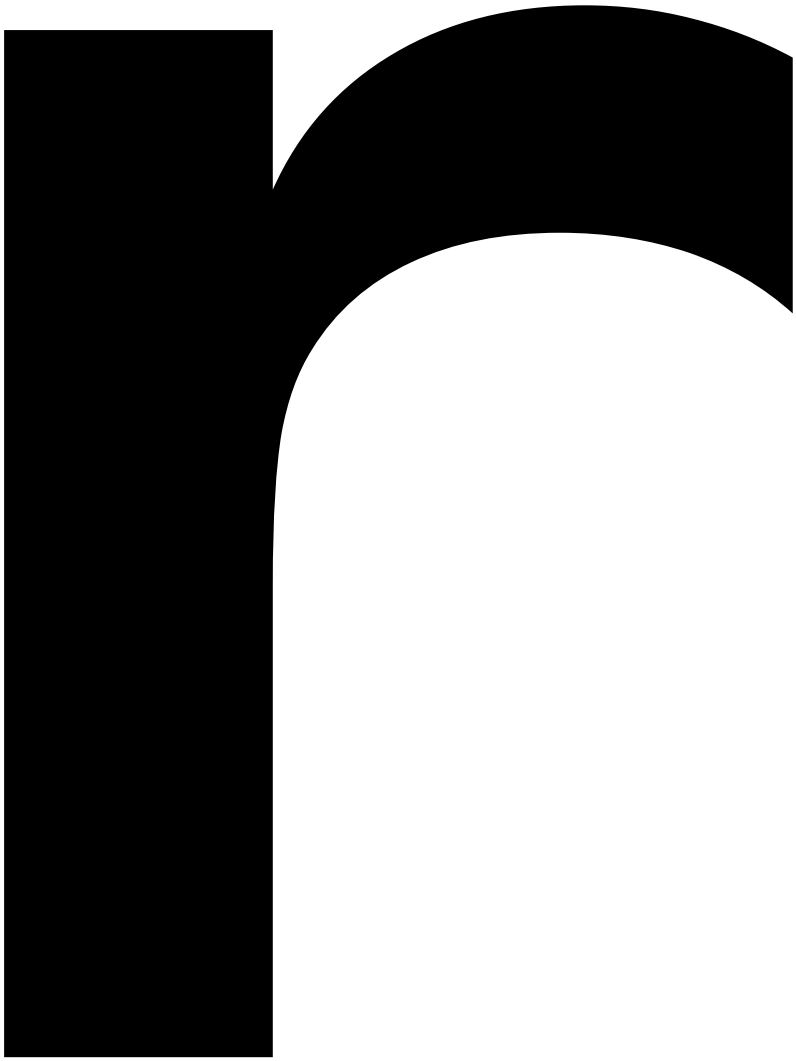


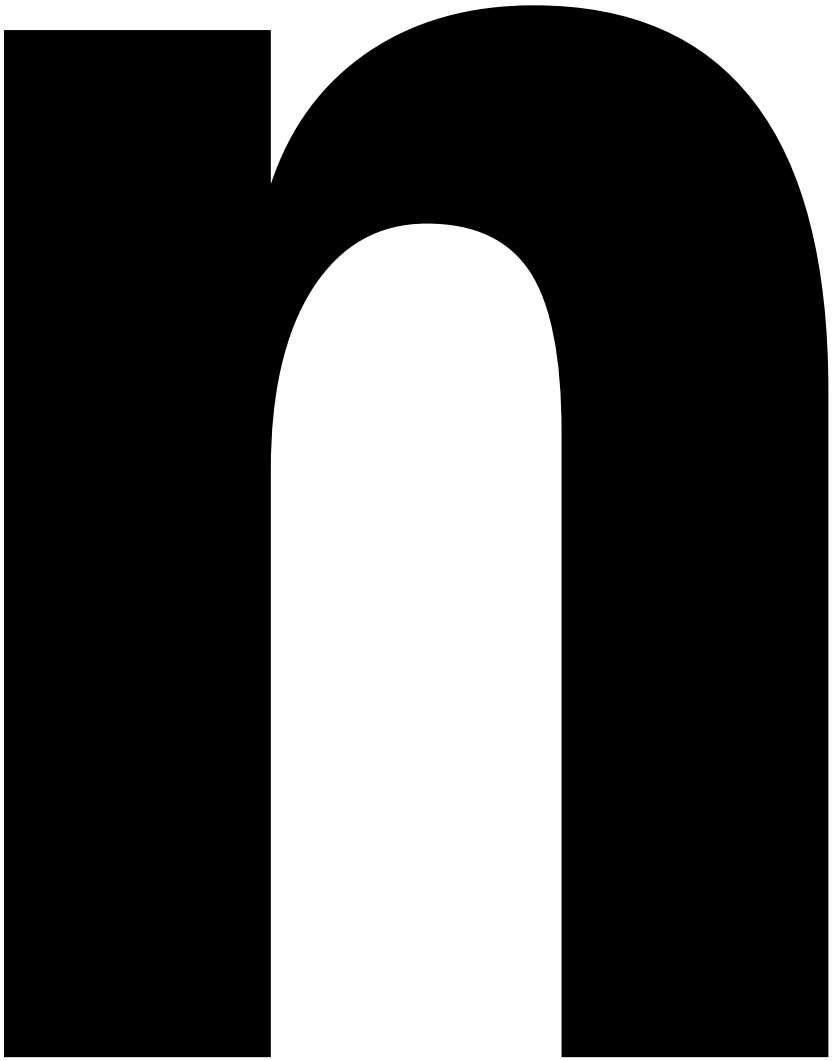
0

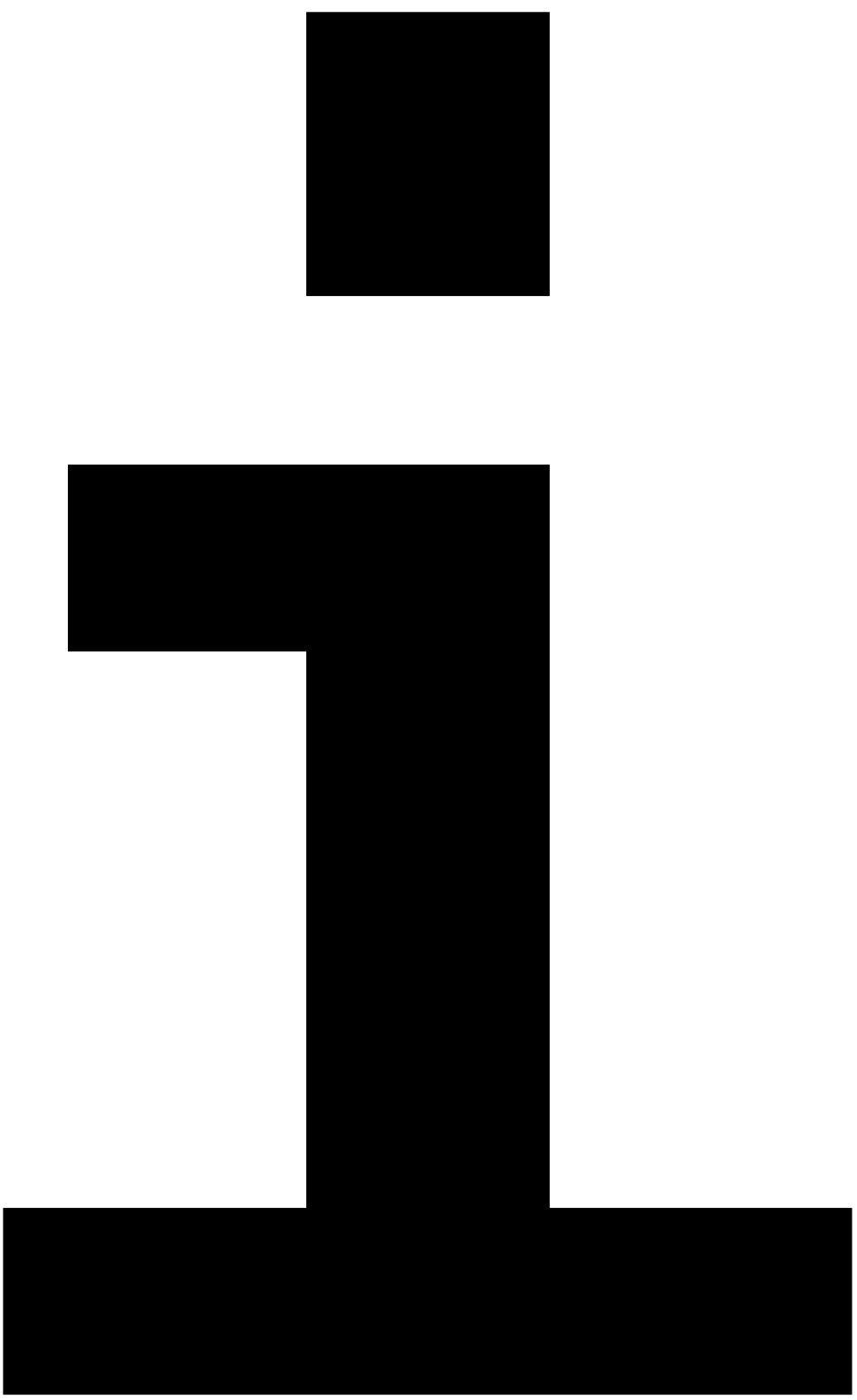


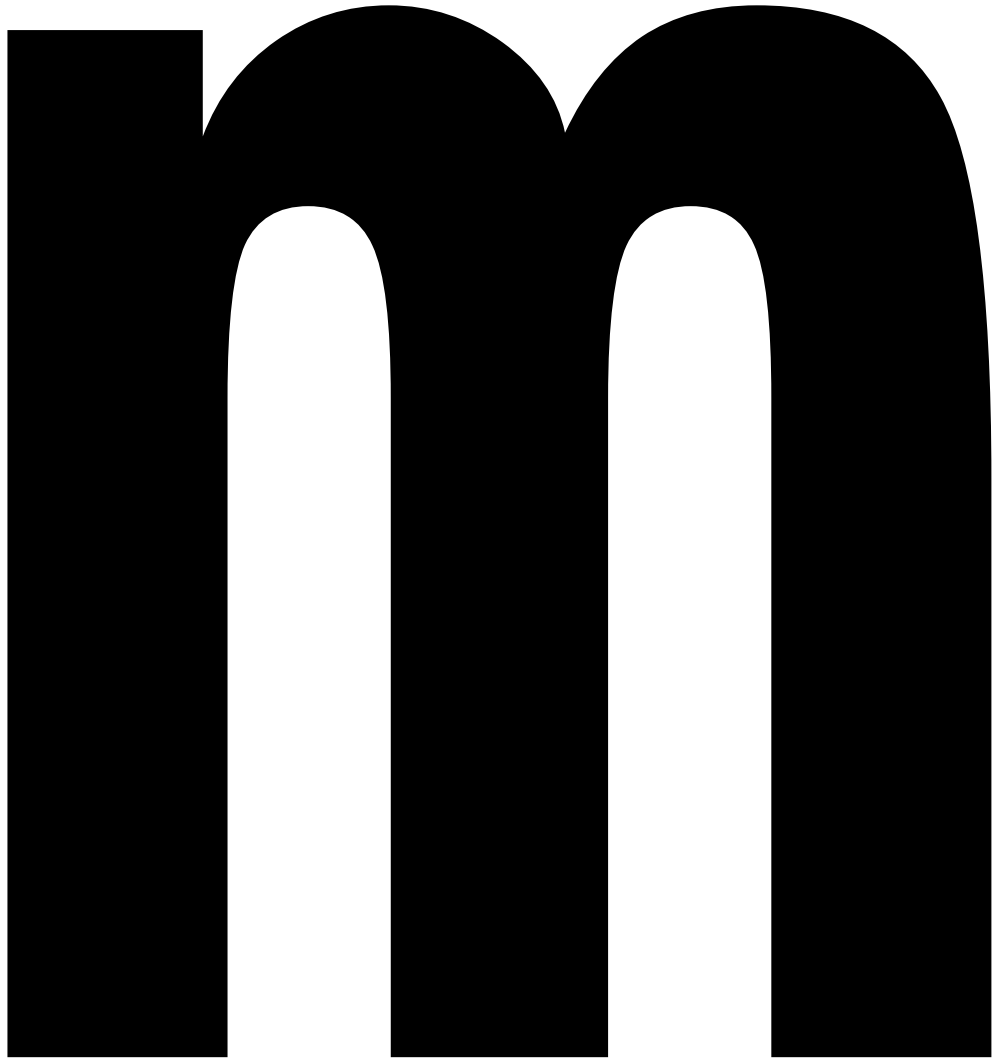


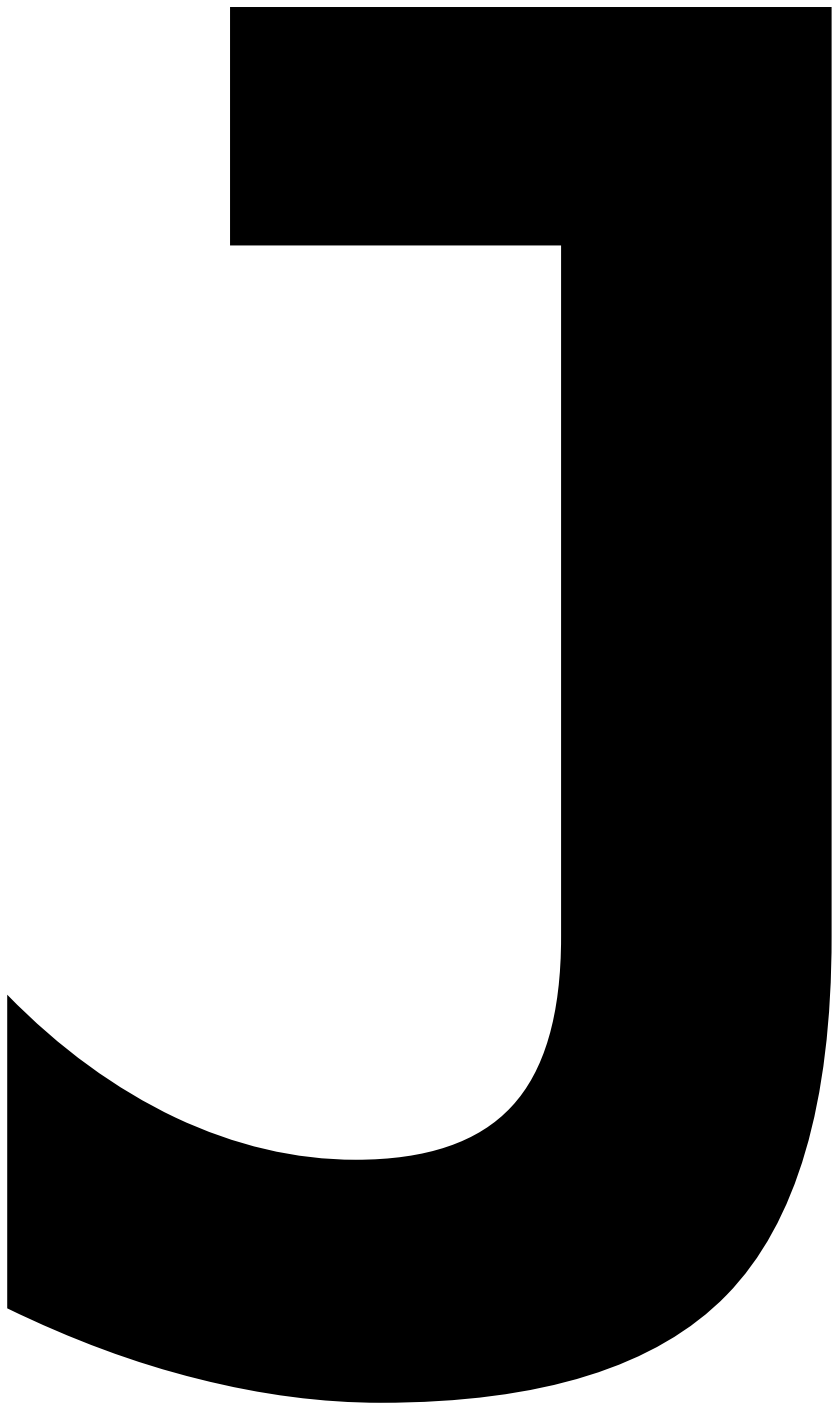


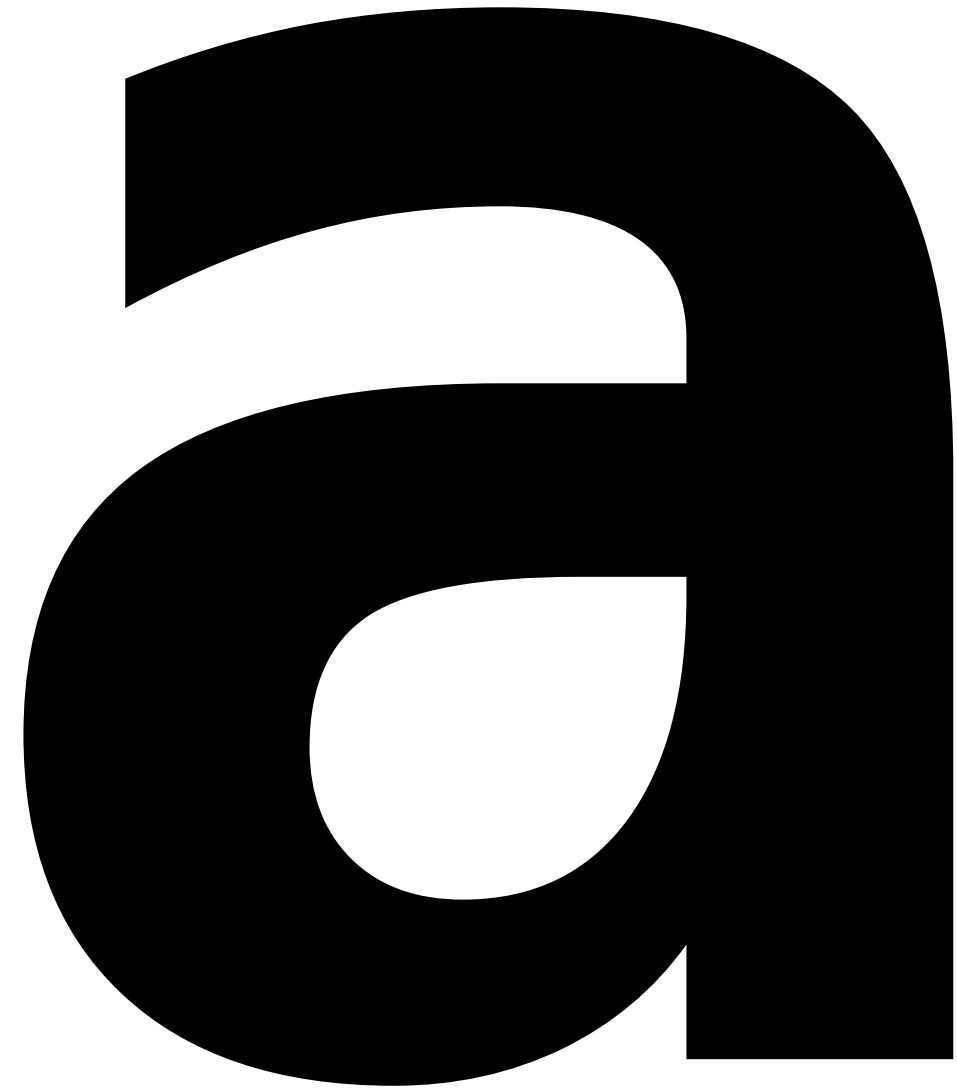


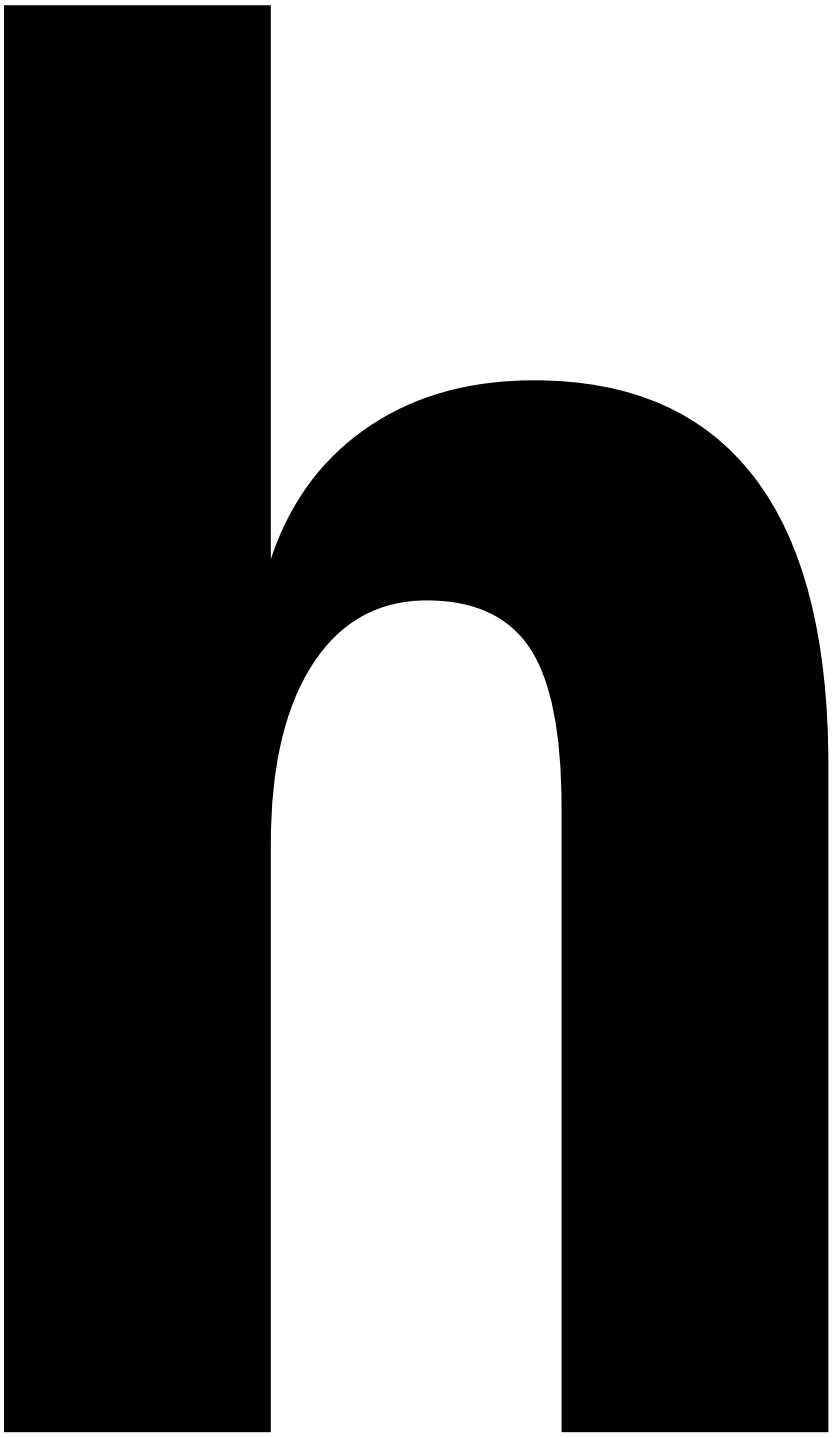


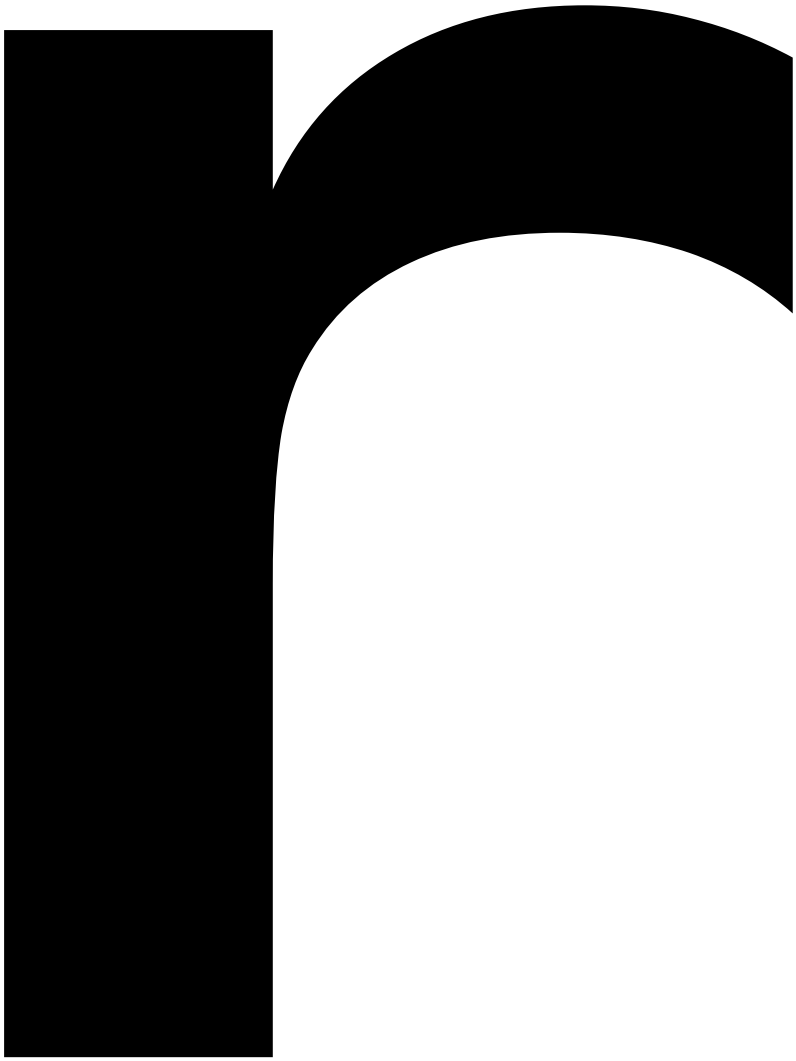


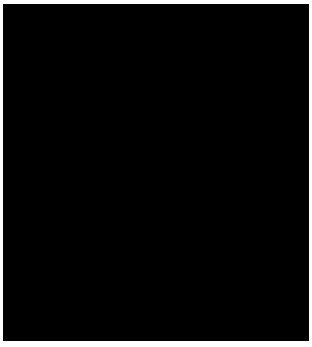


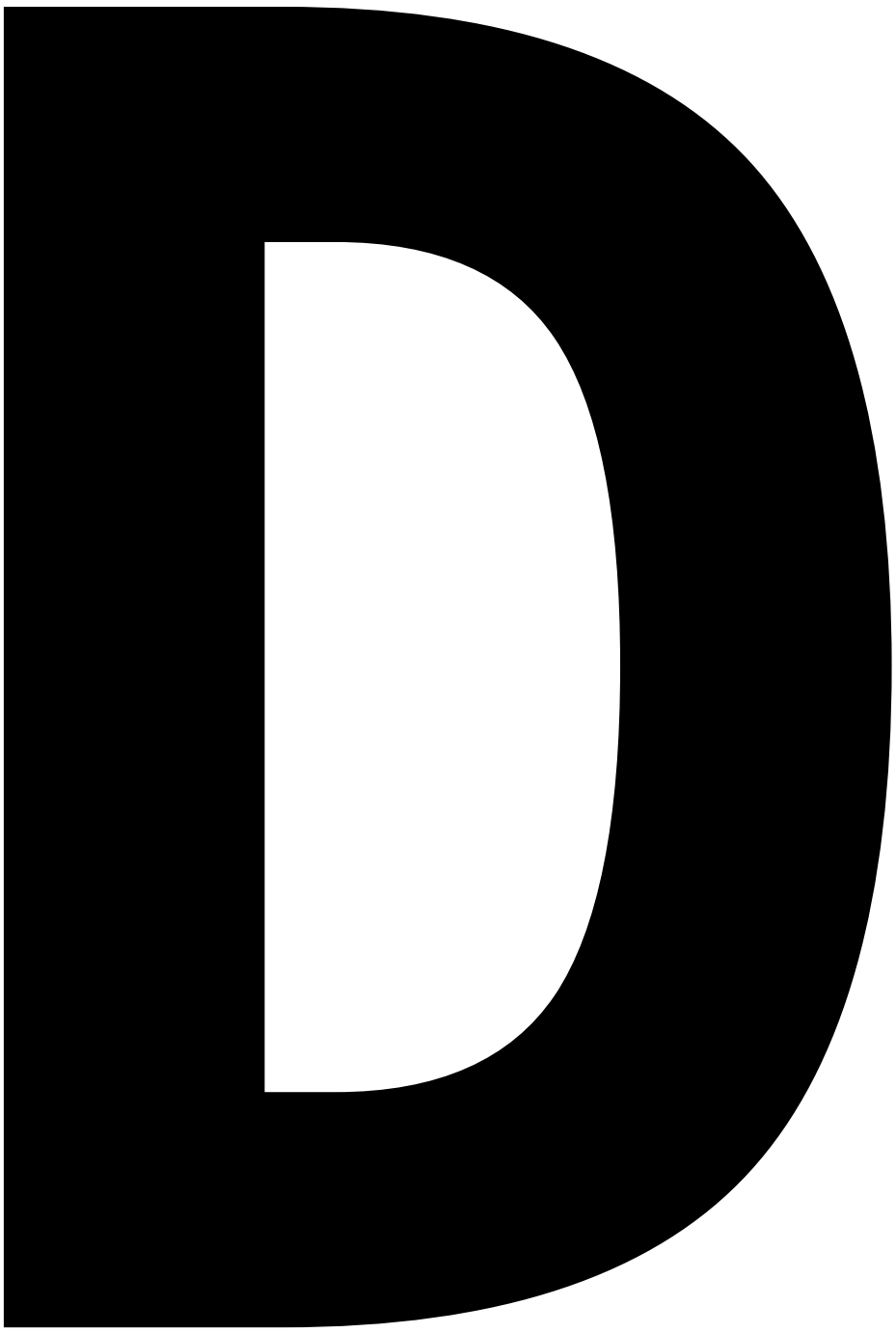


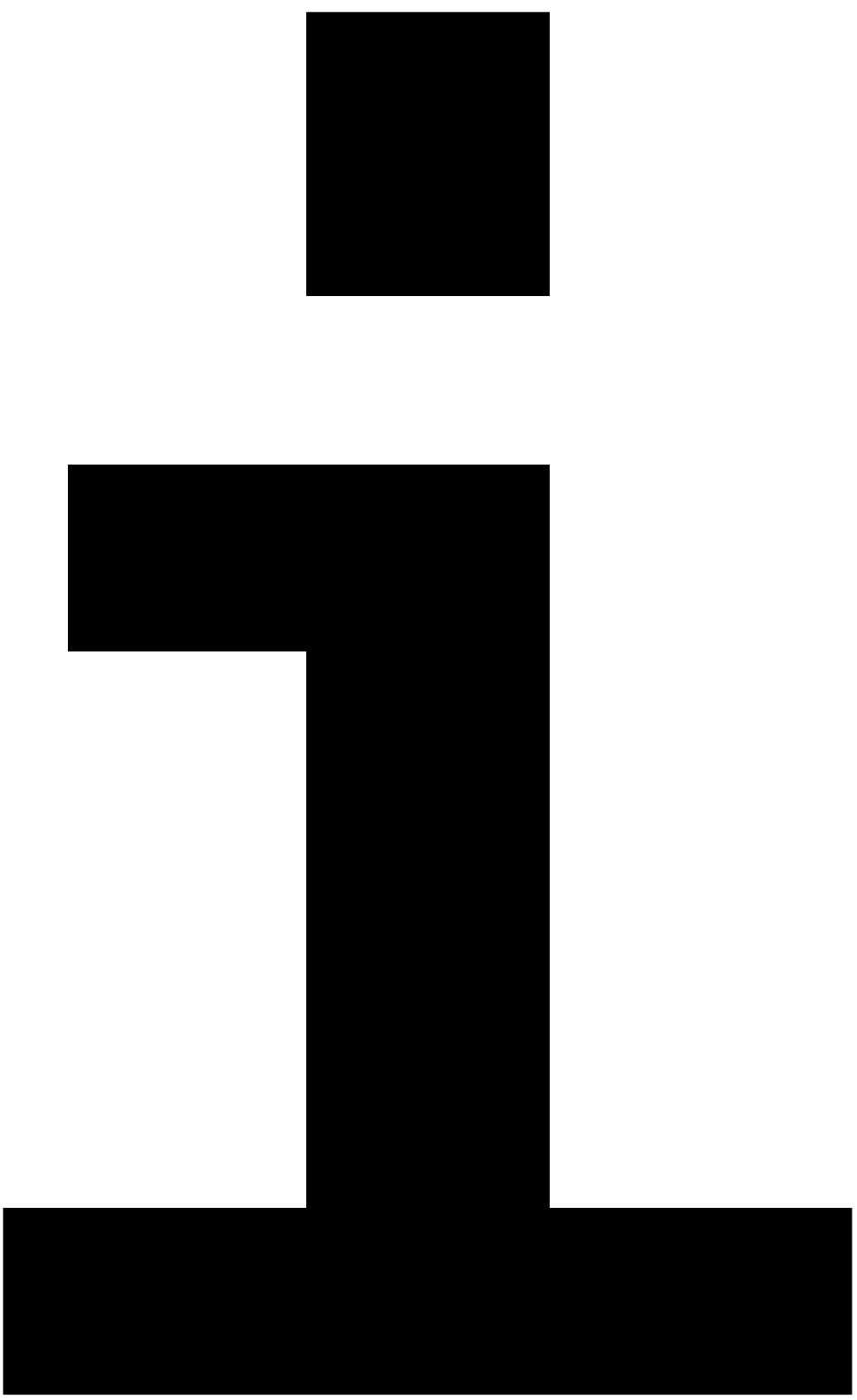


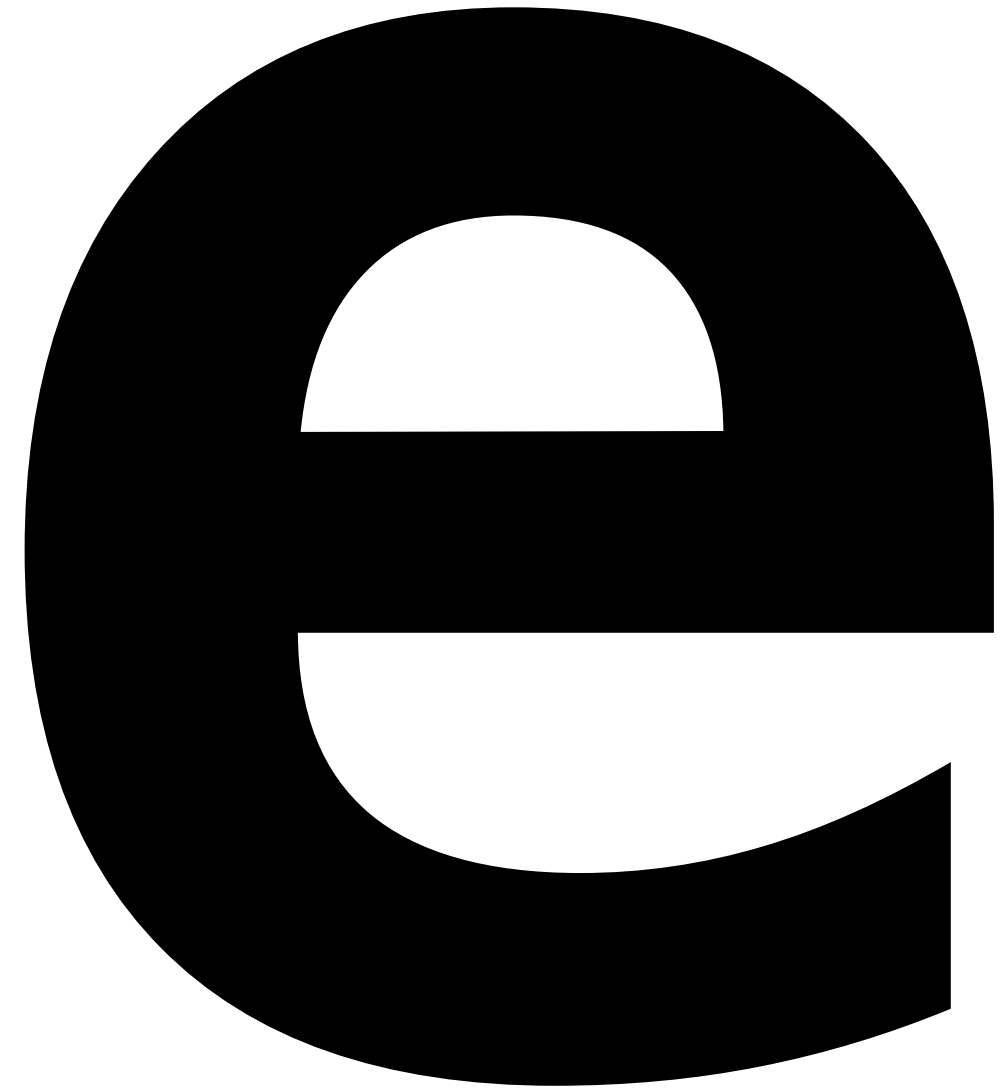


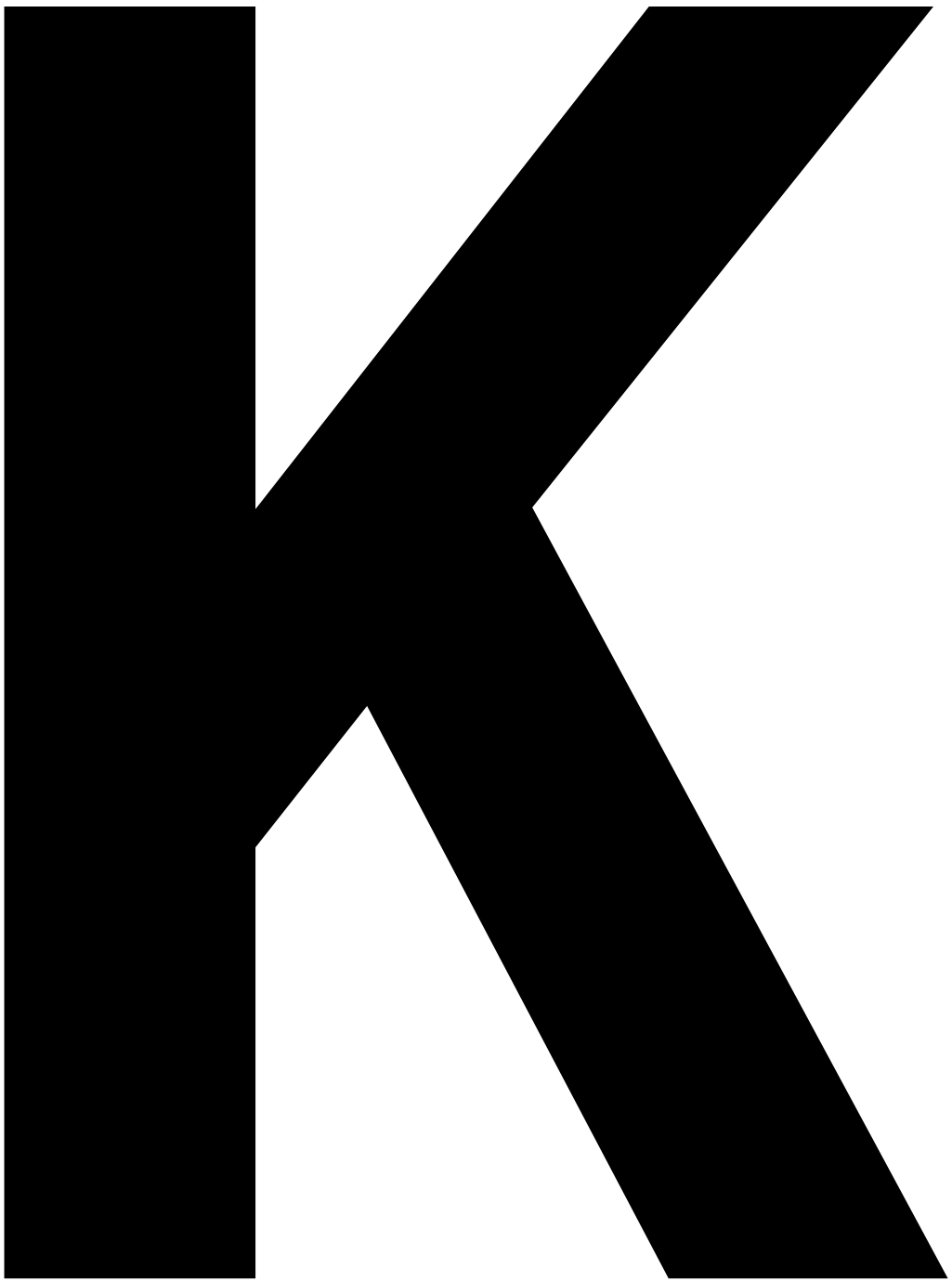


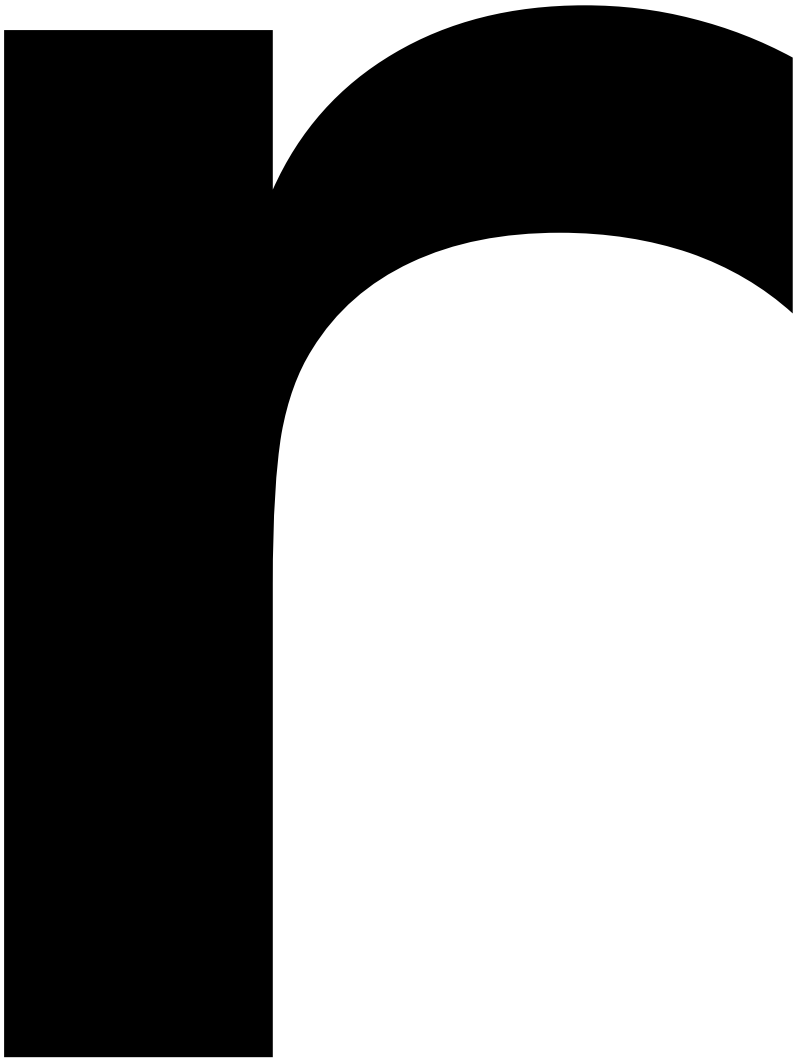


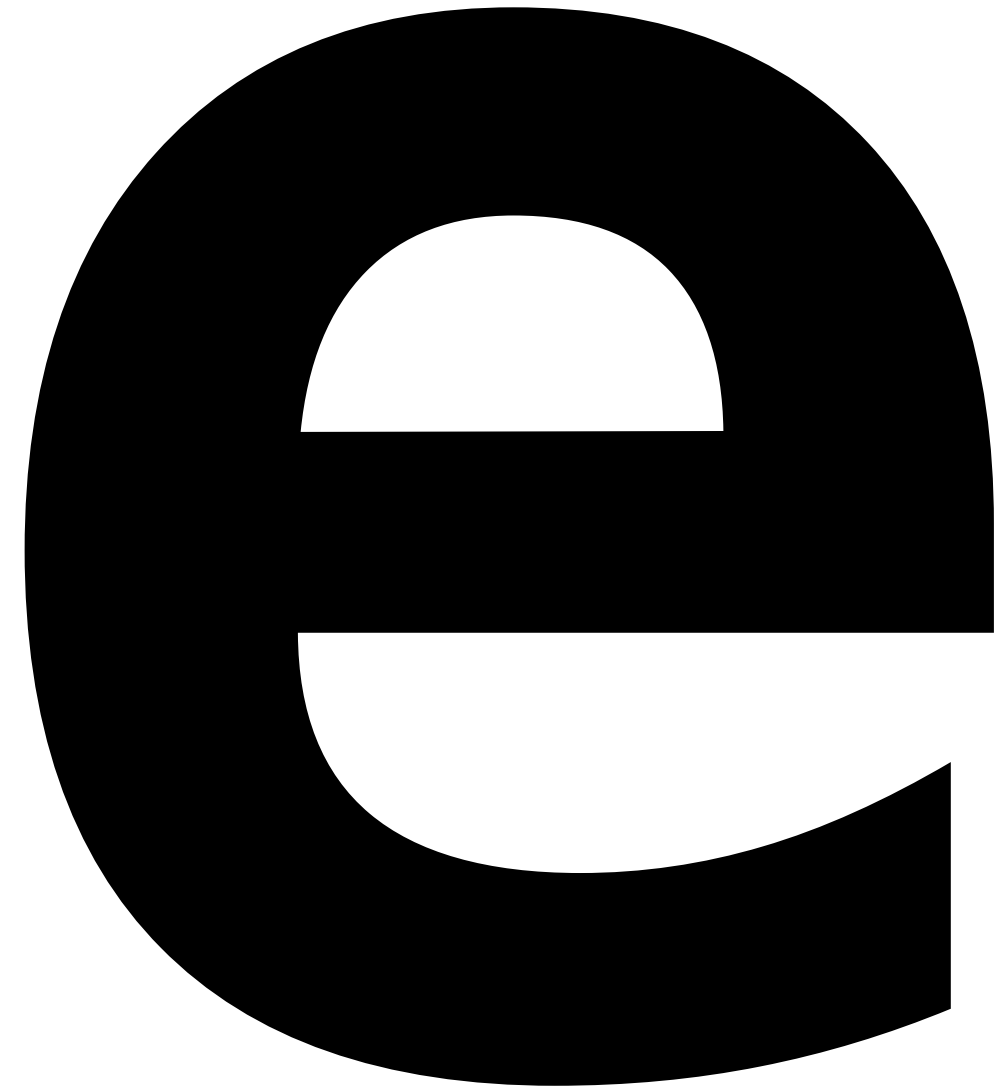


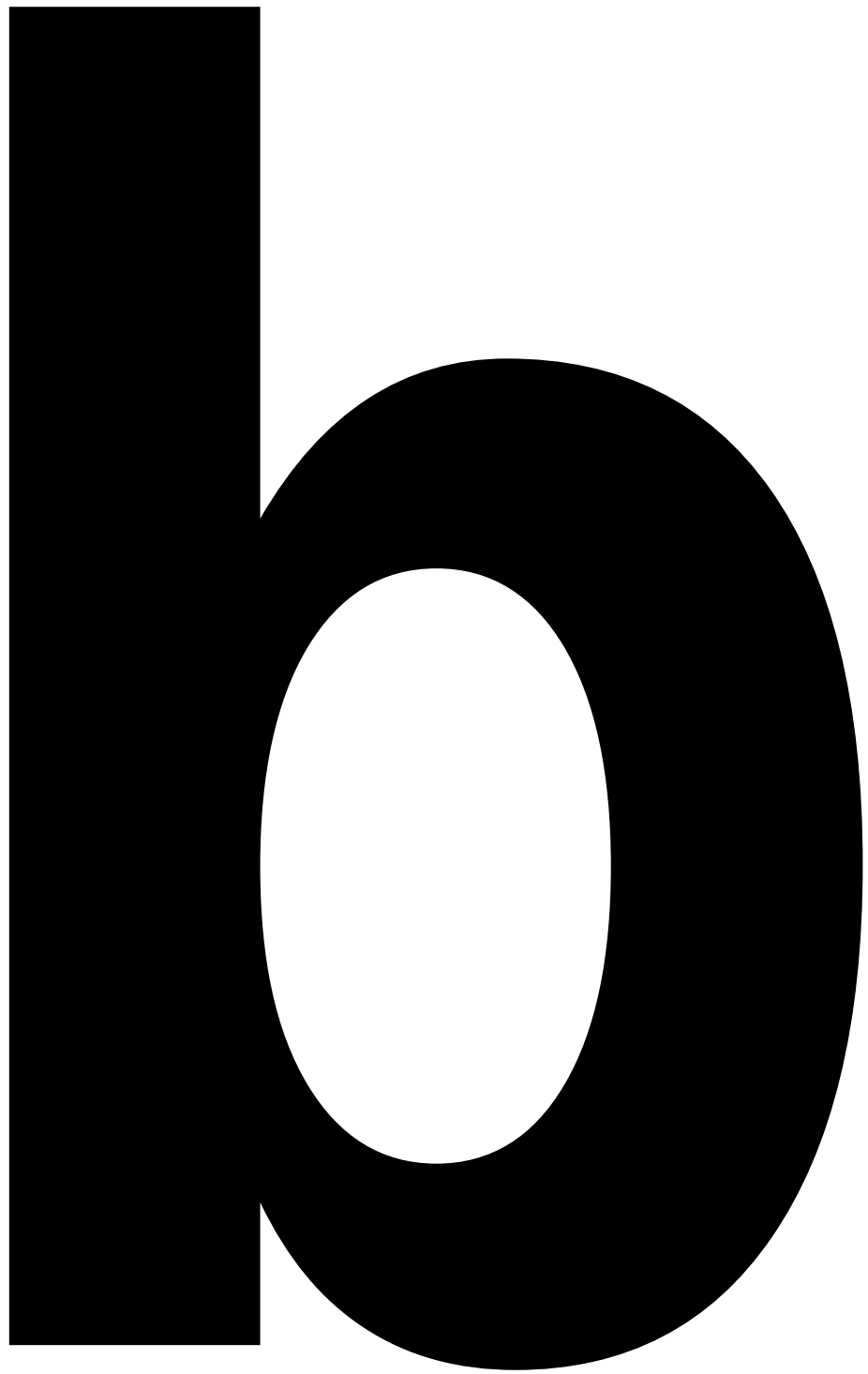




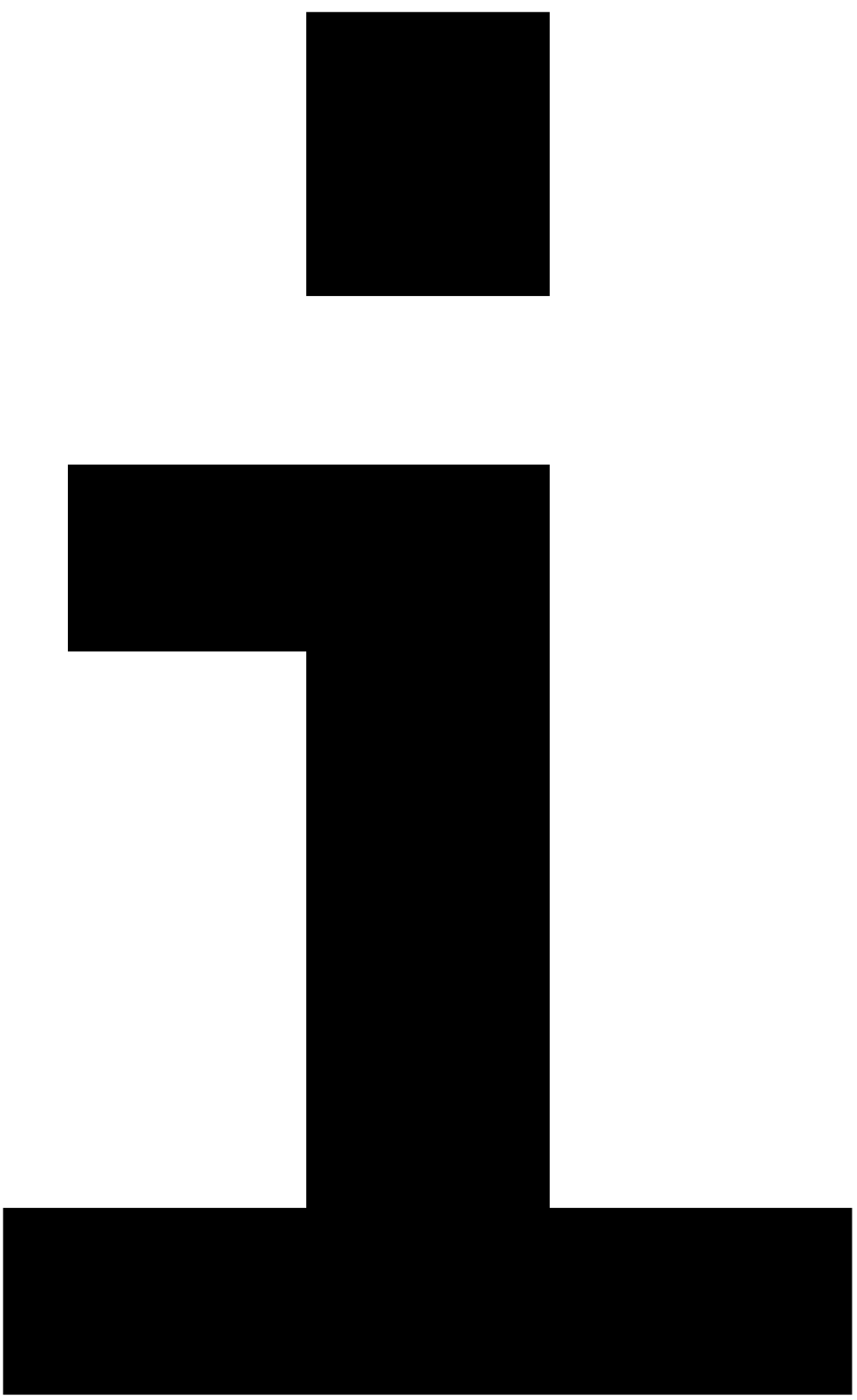


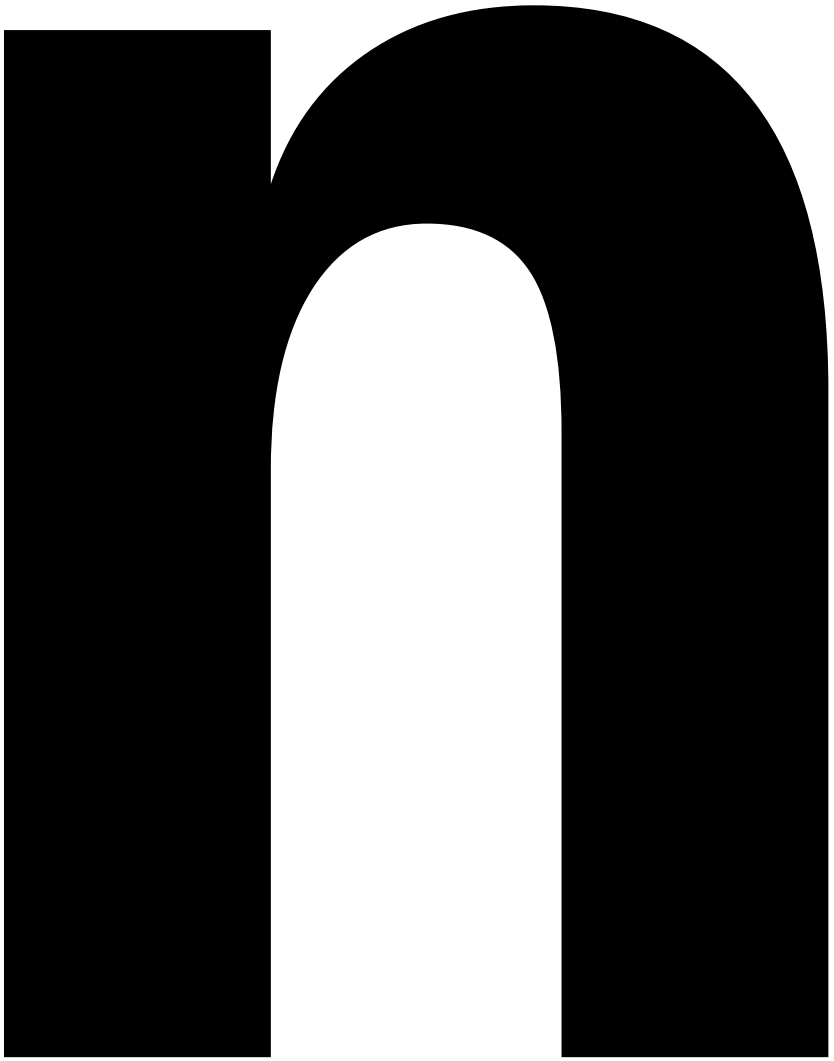


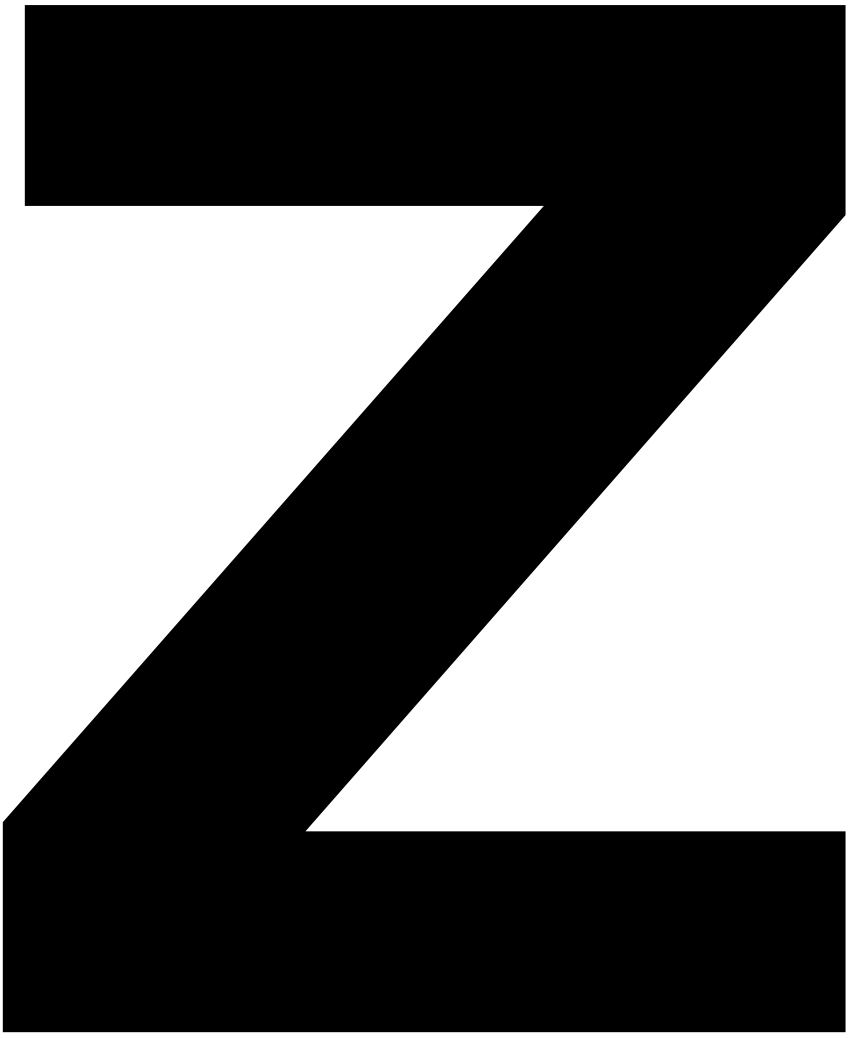


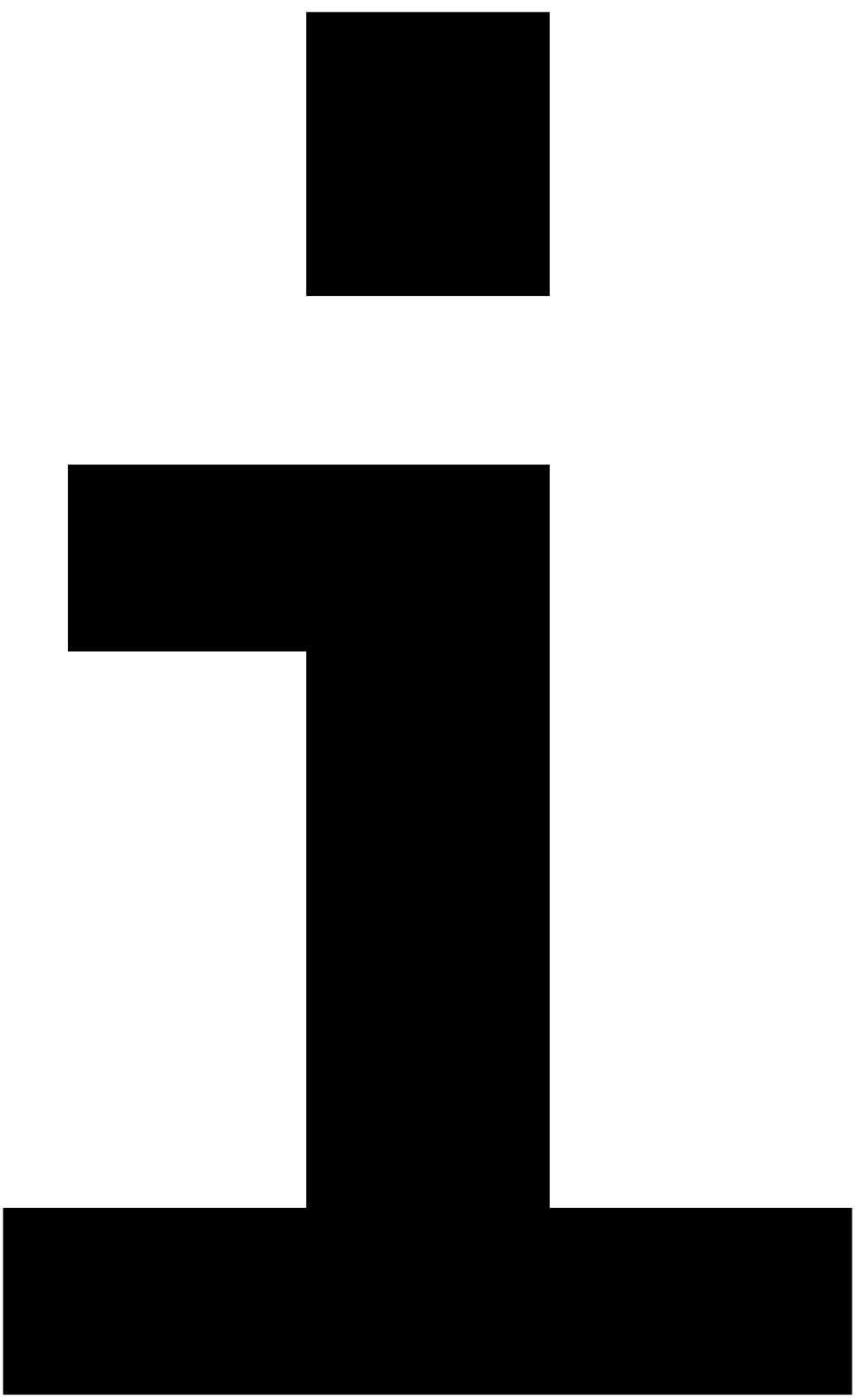


S

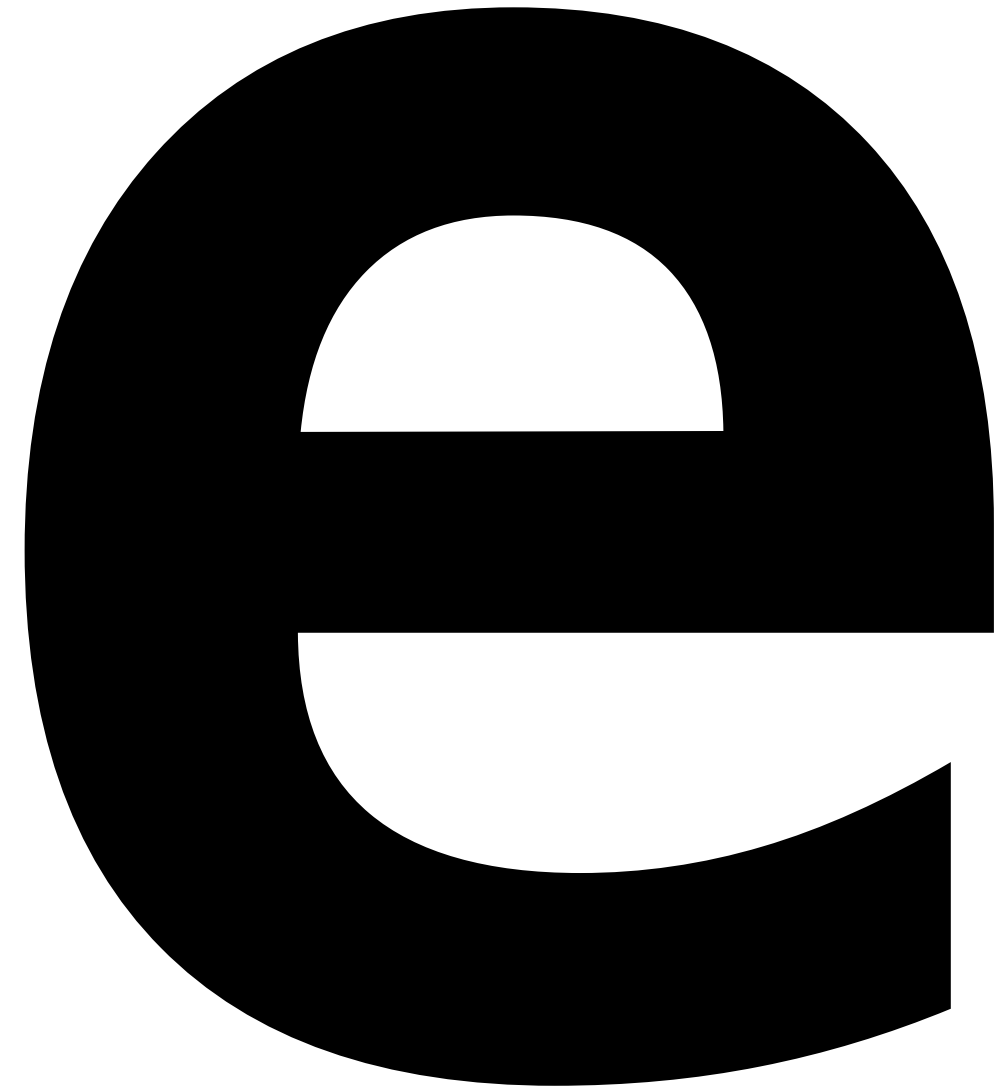


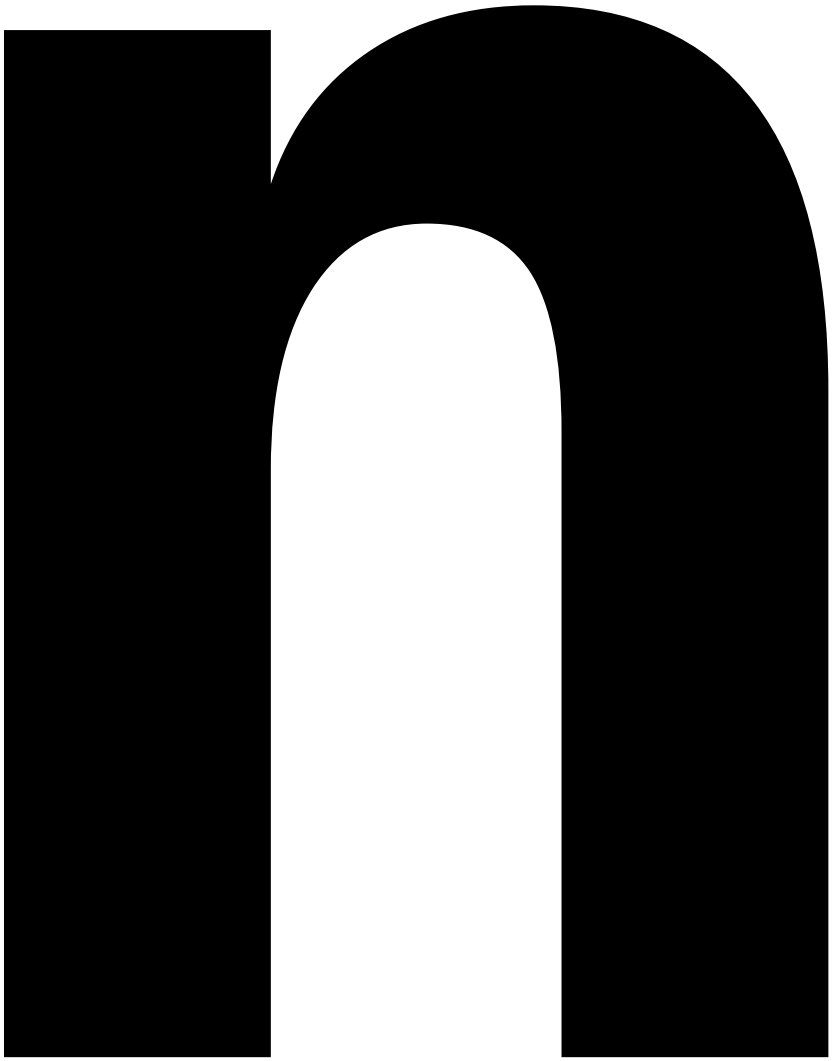


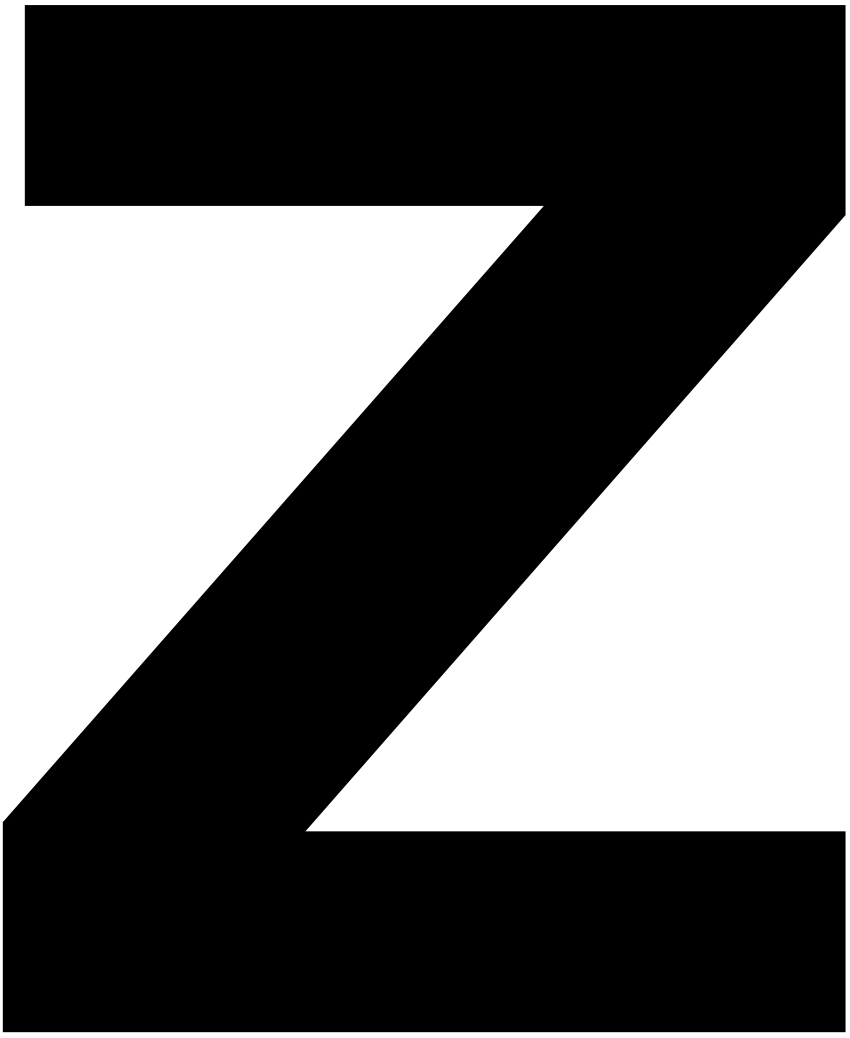


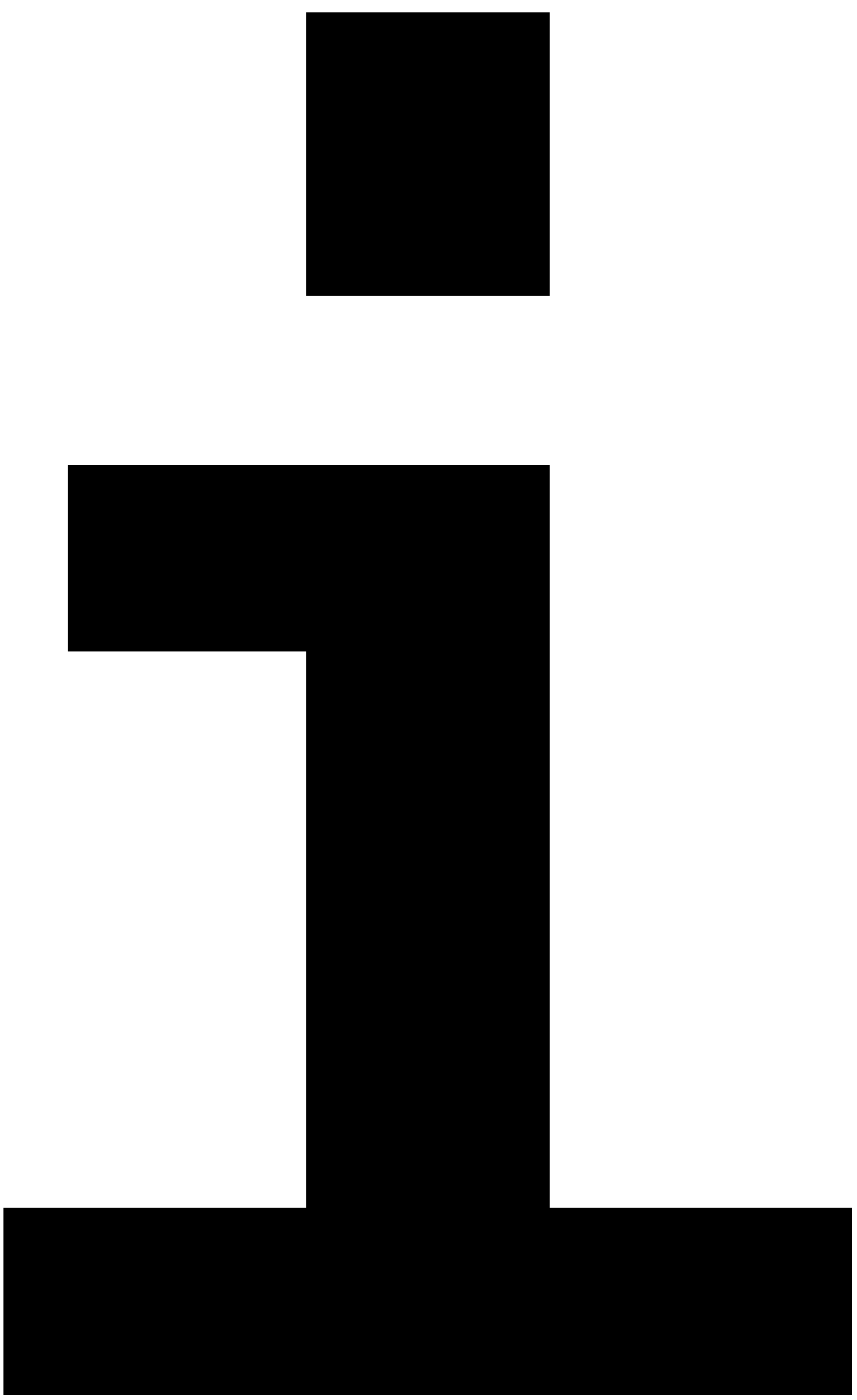


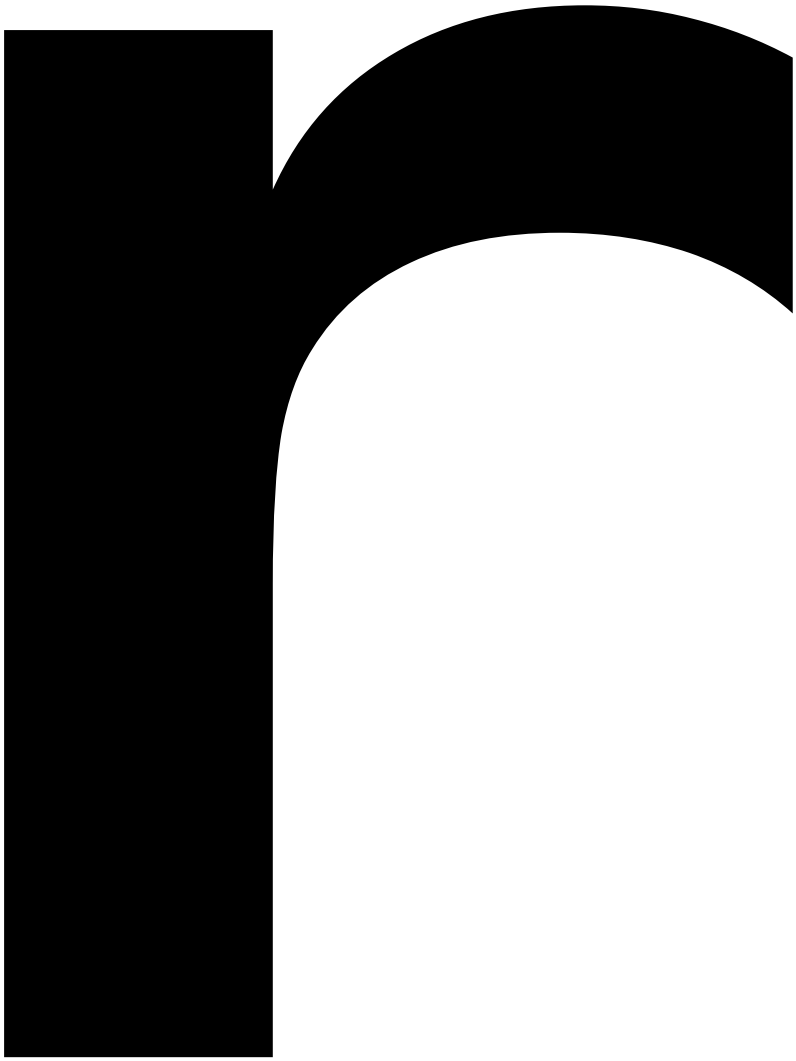
d



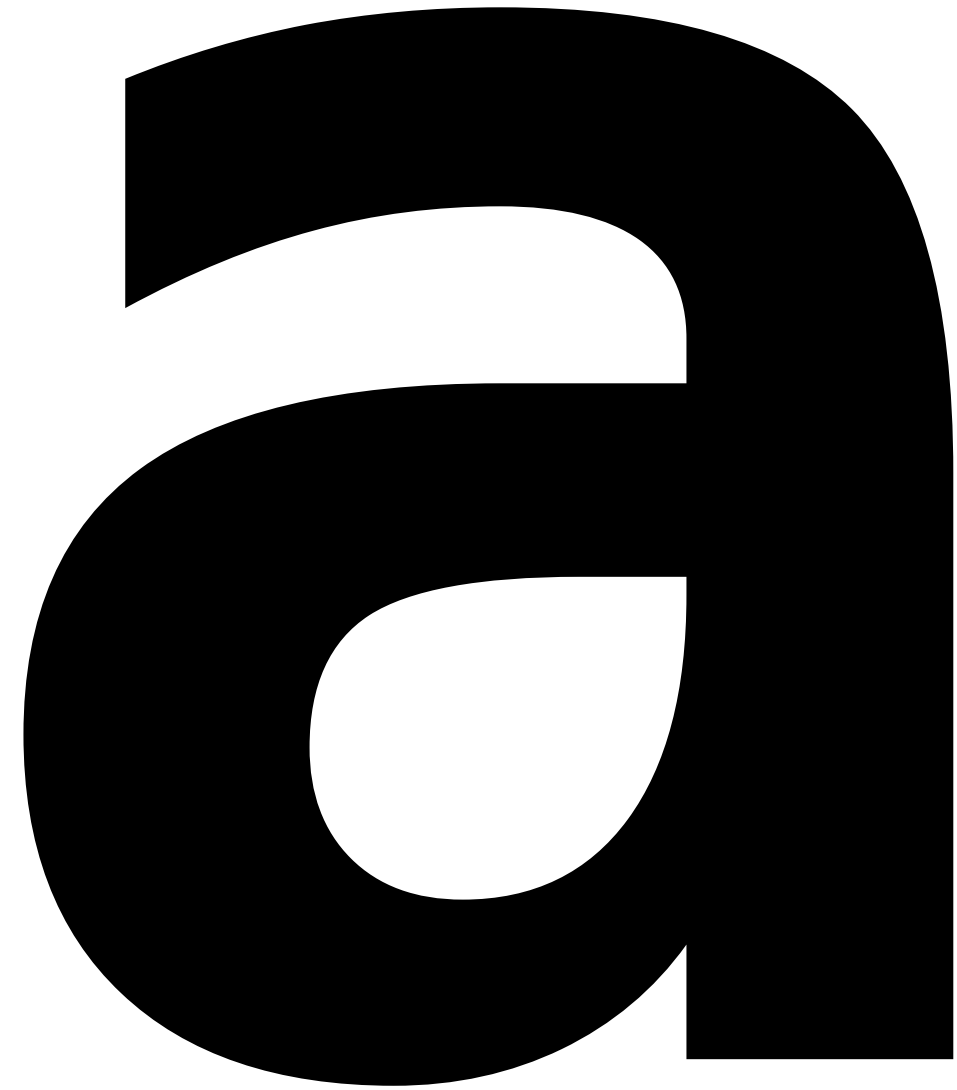




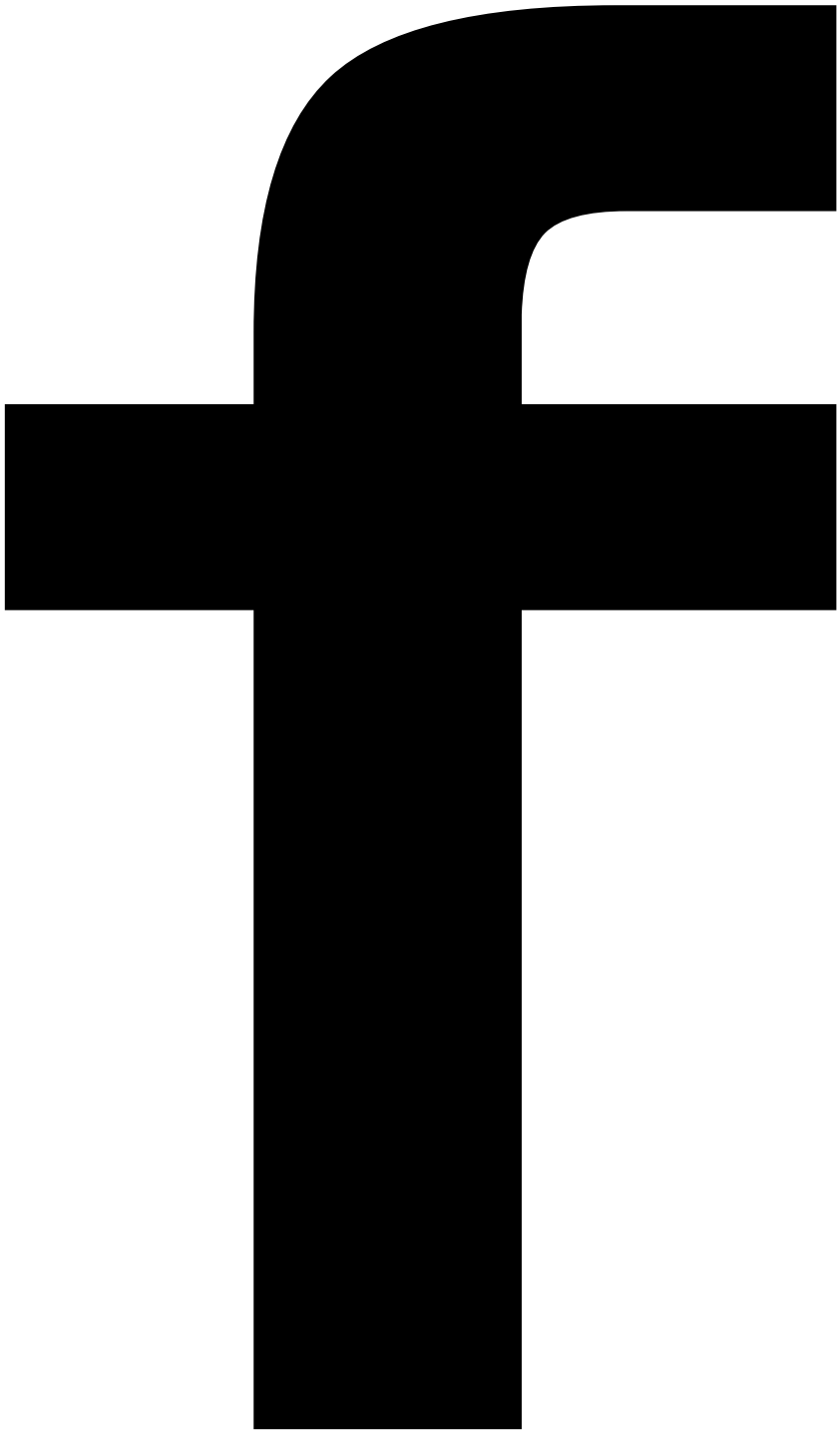




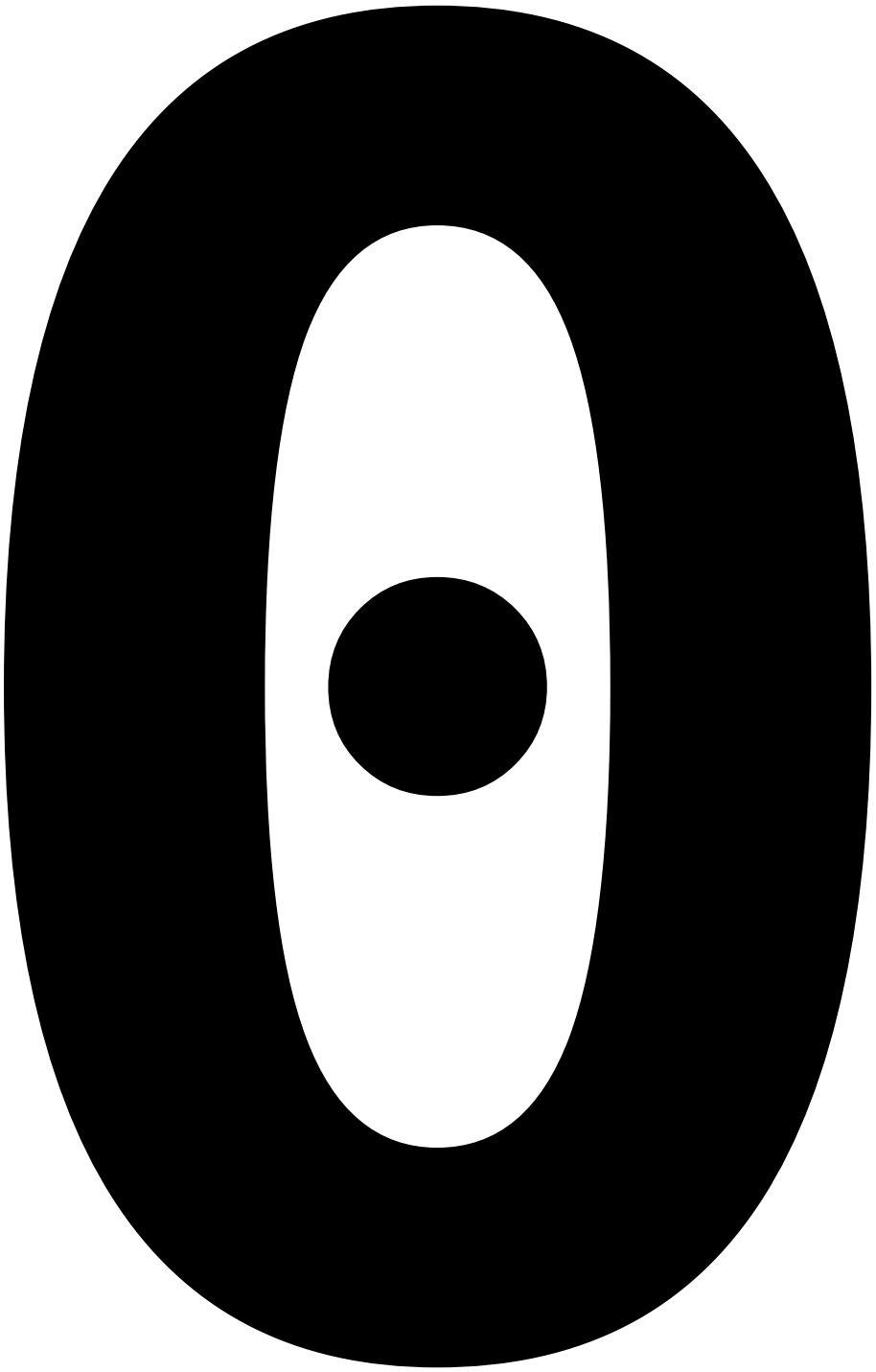
d

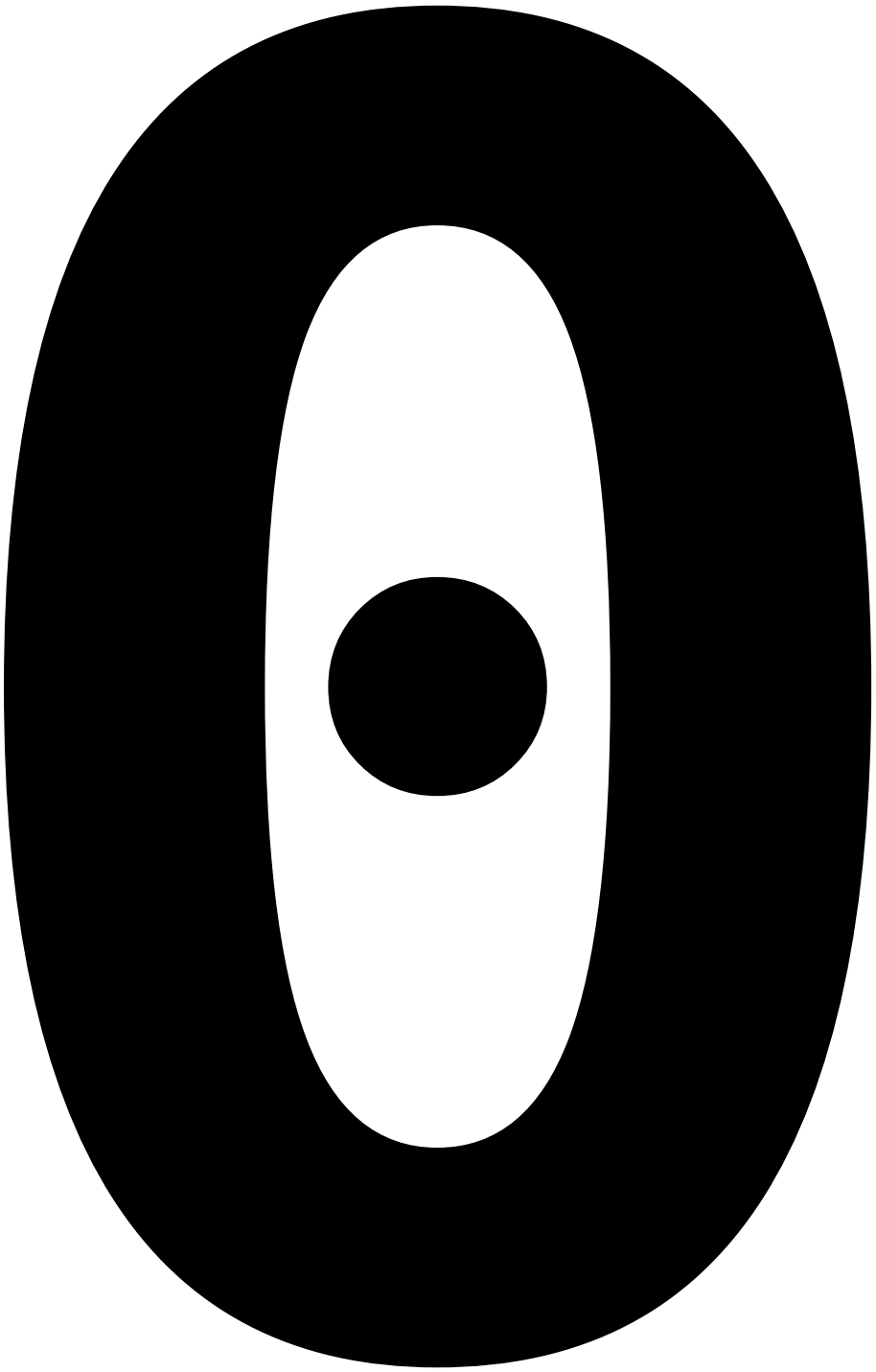


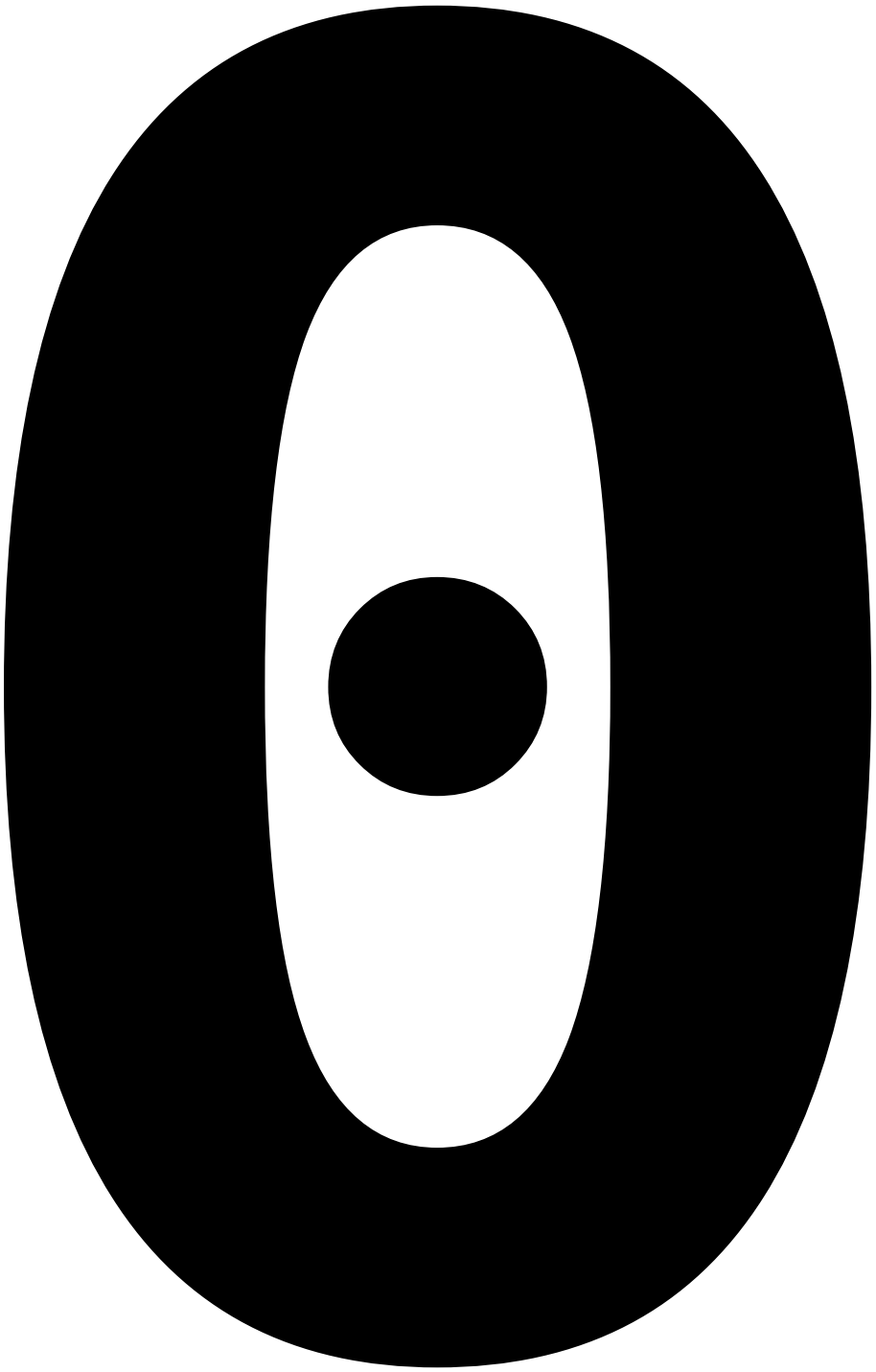
u

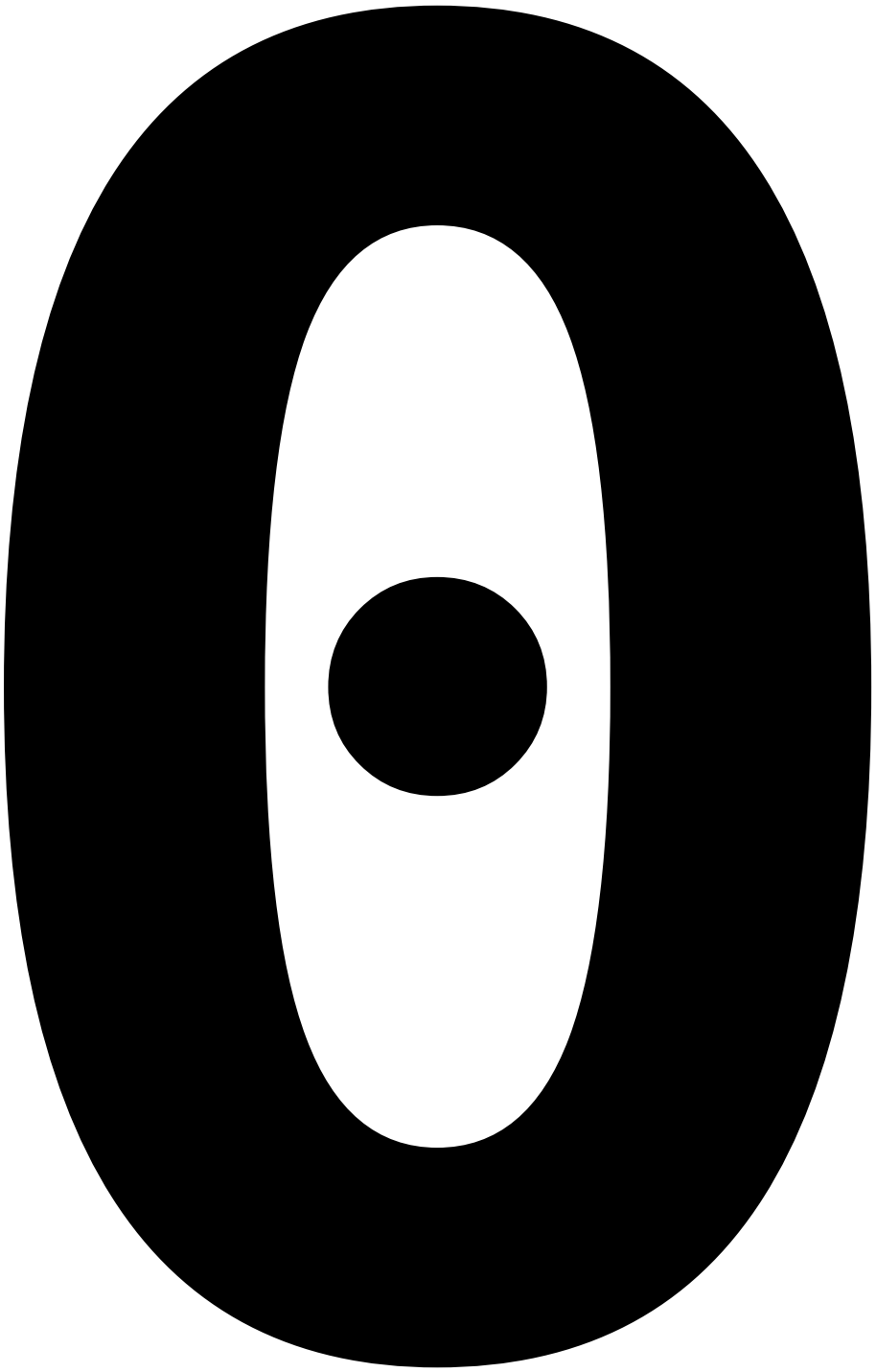


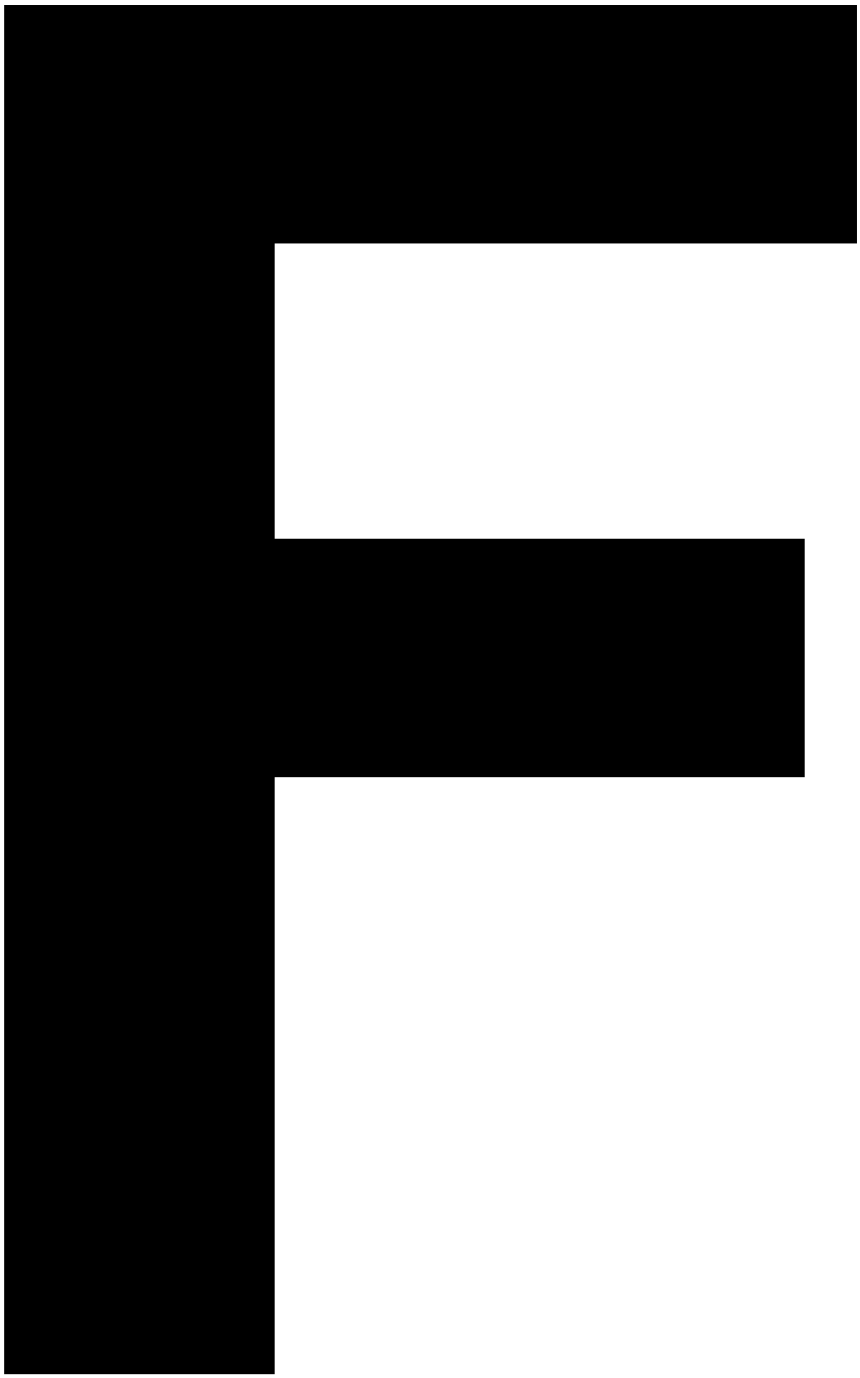
6

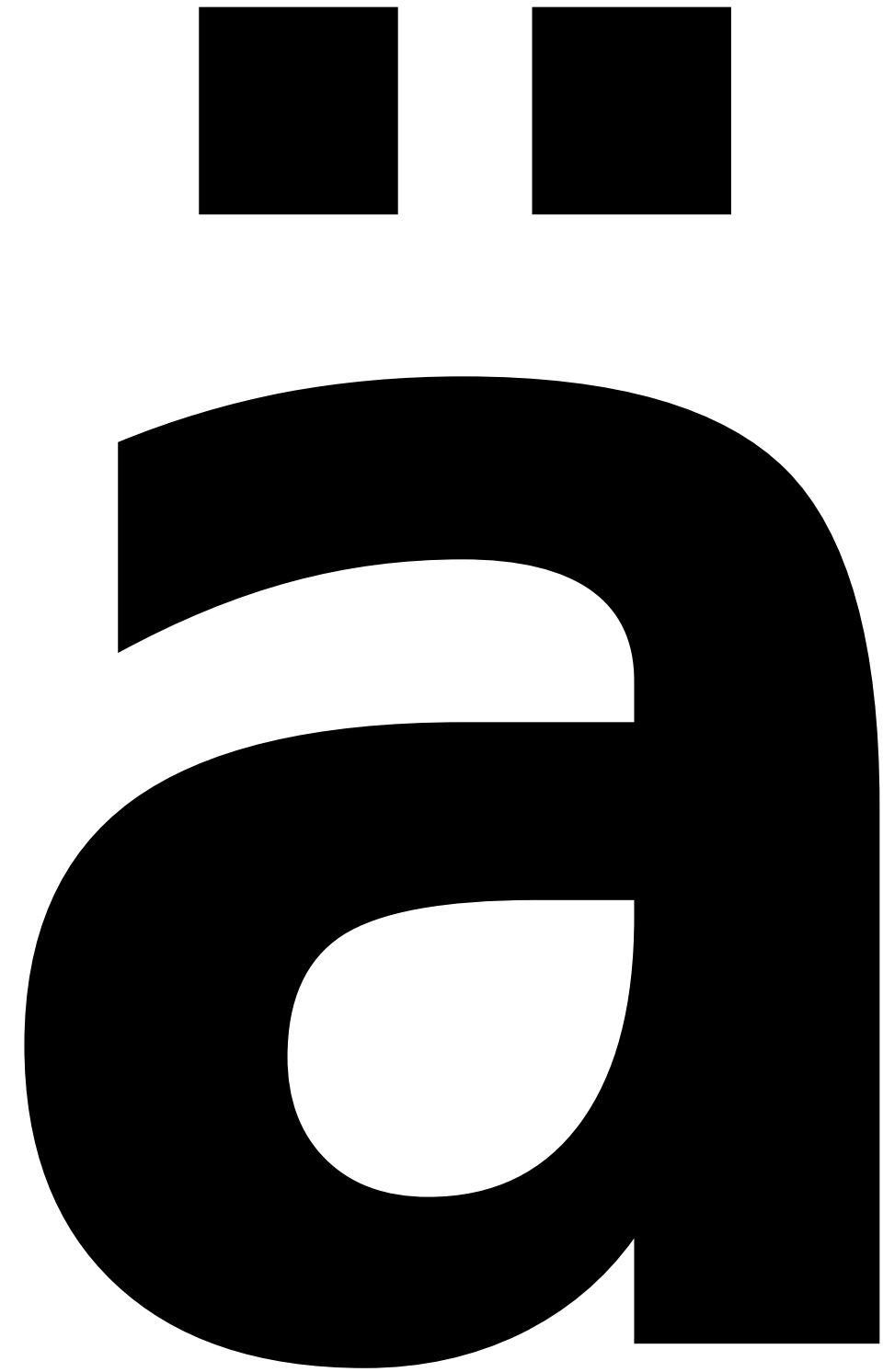


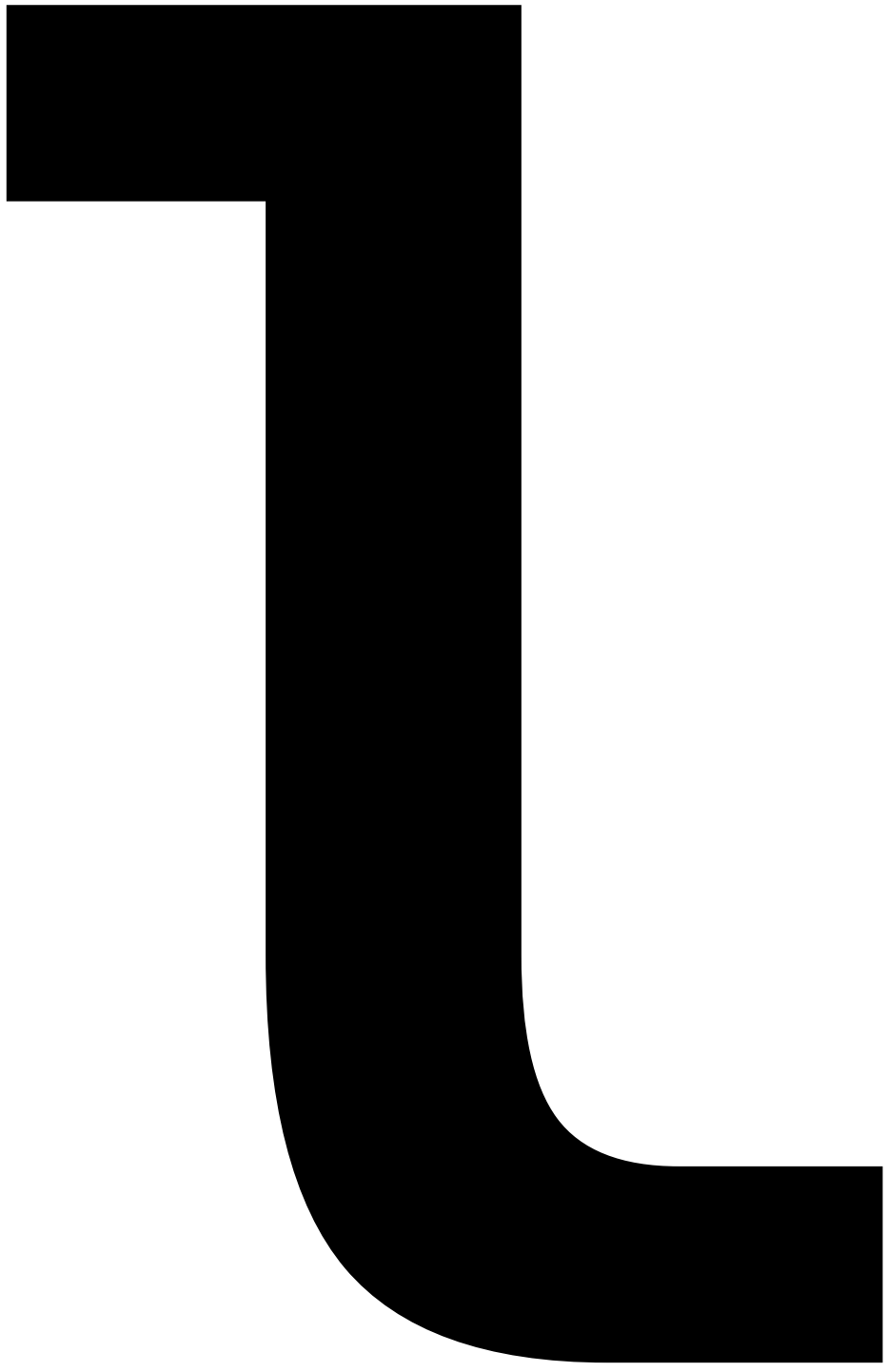


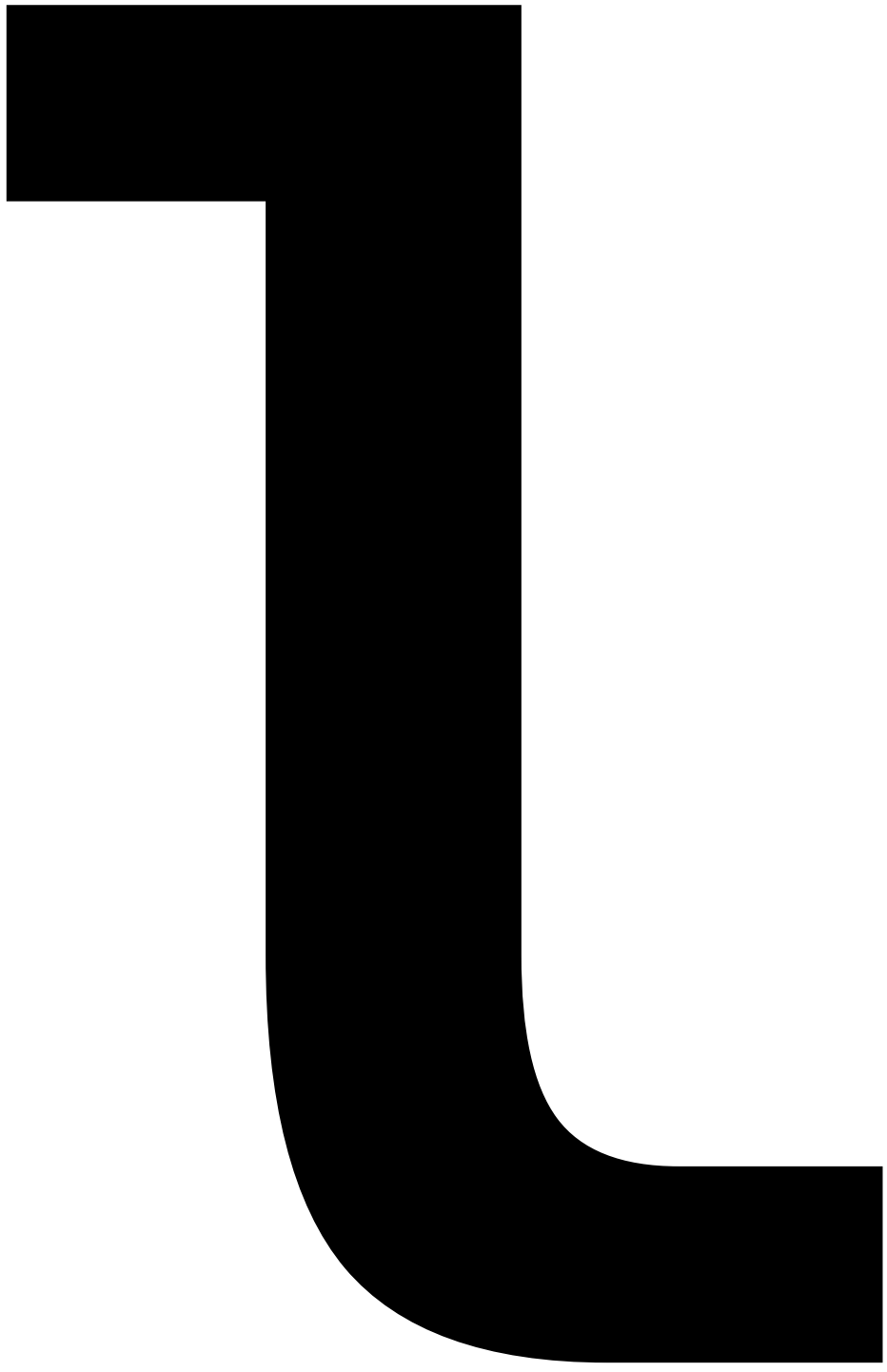


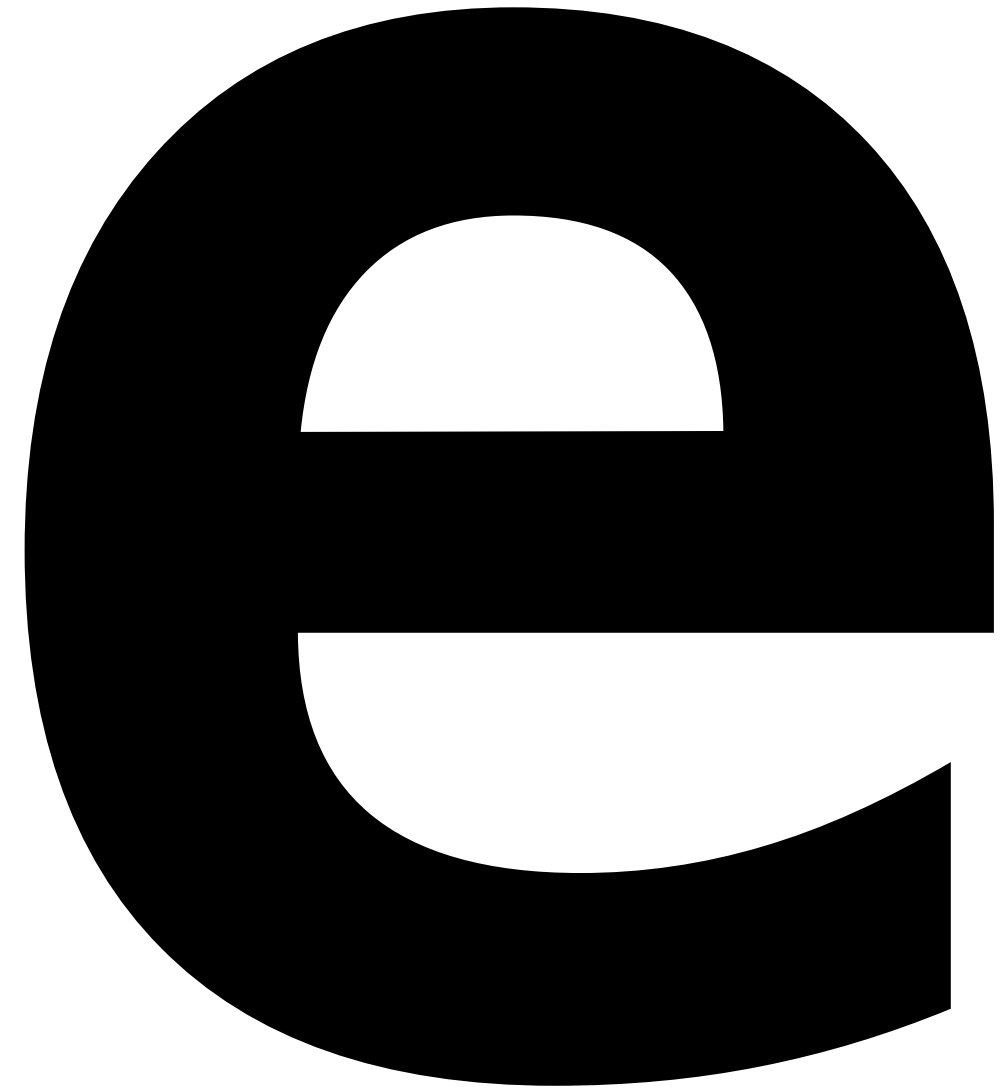


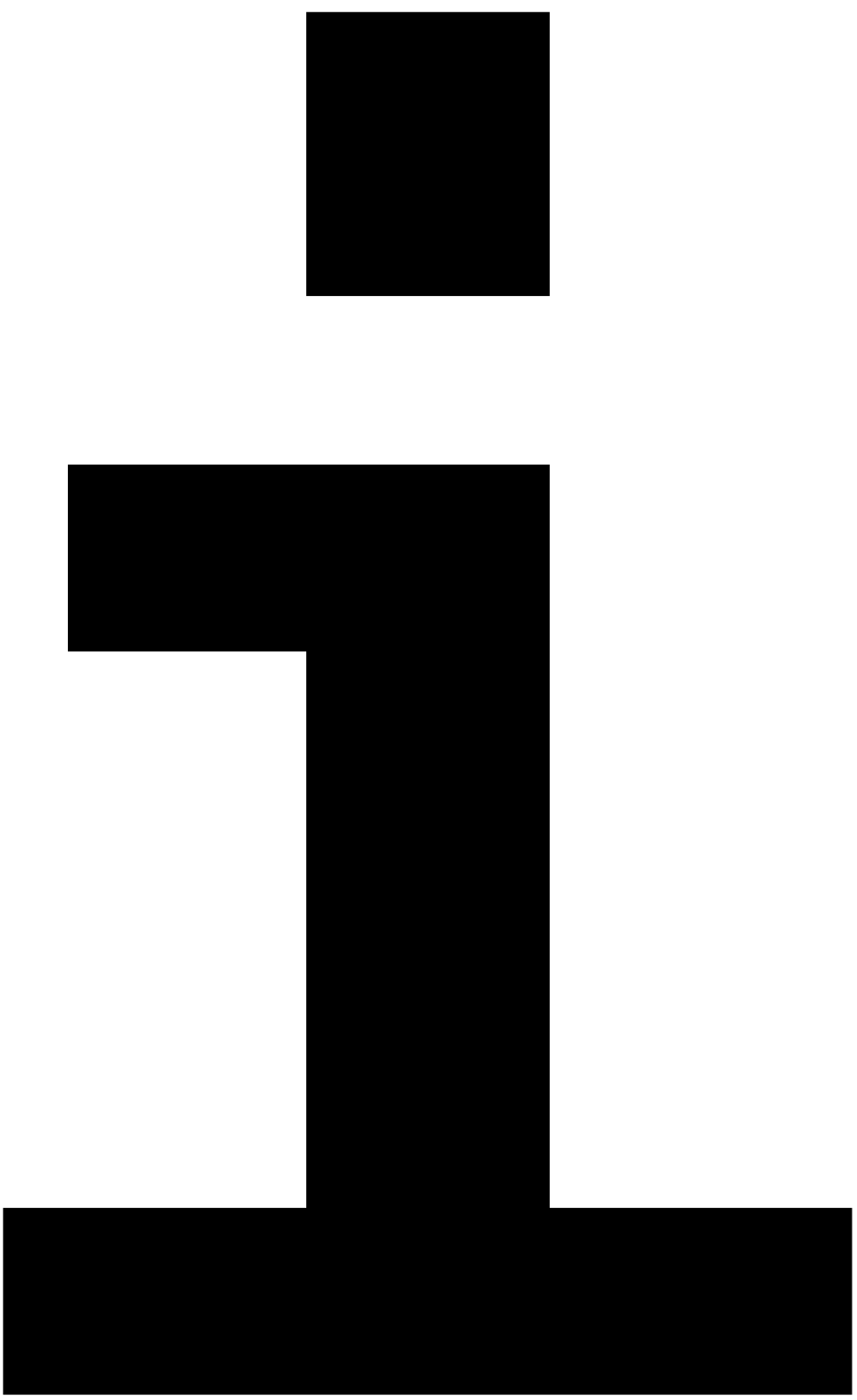


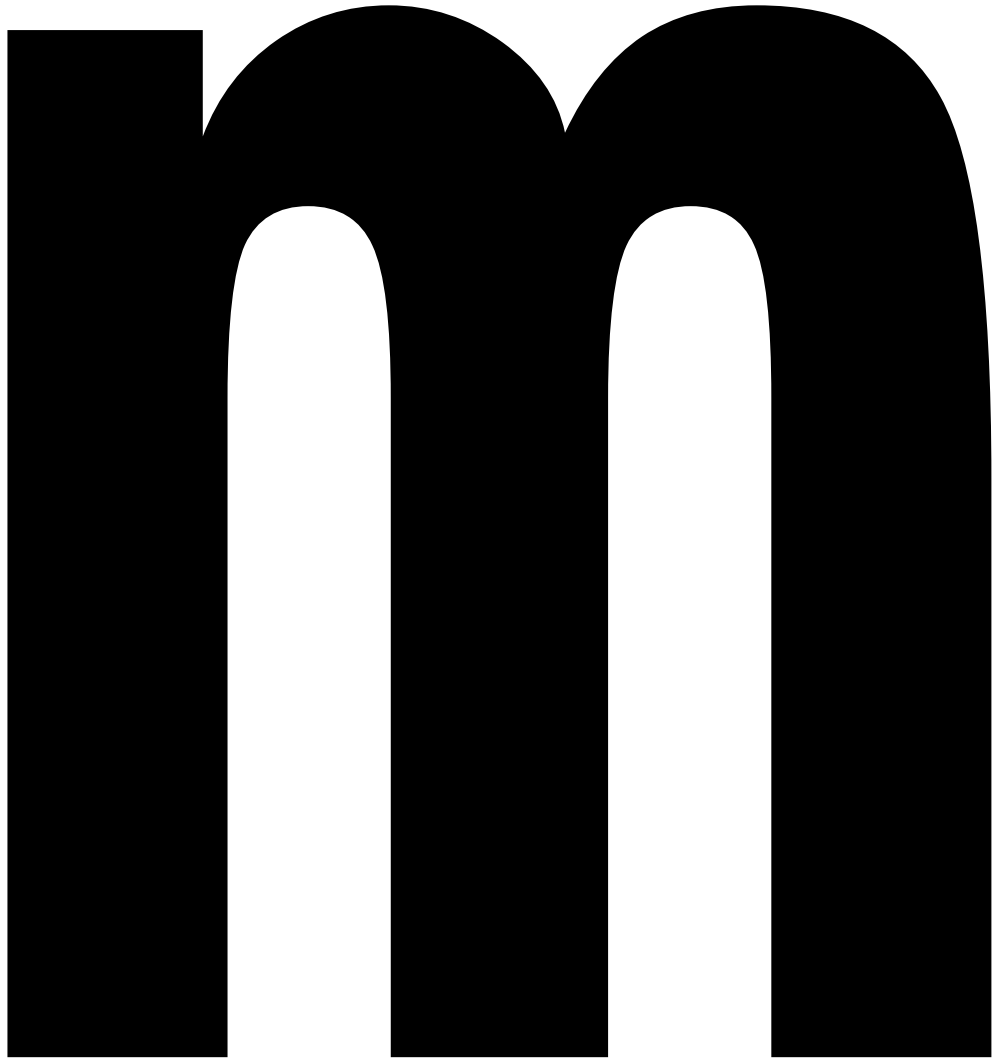


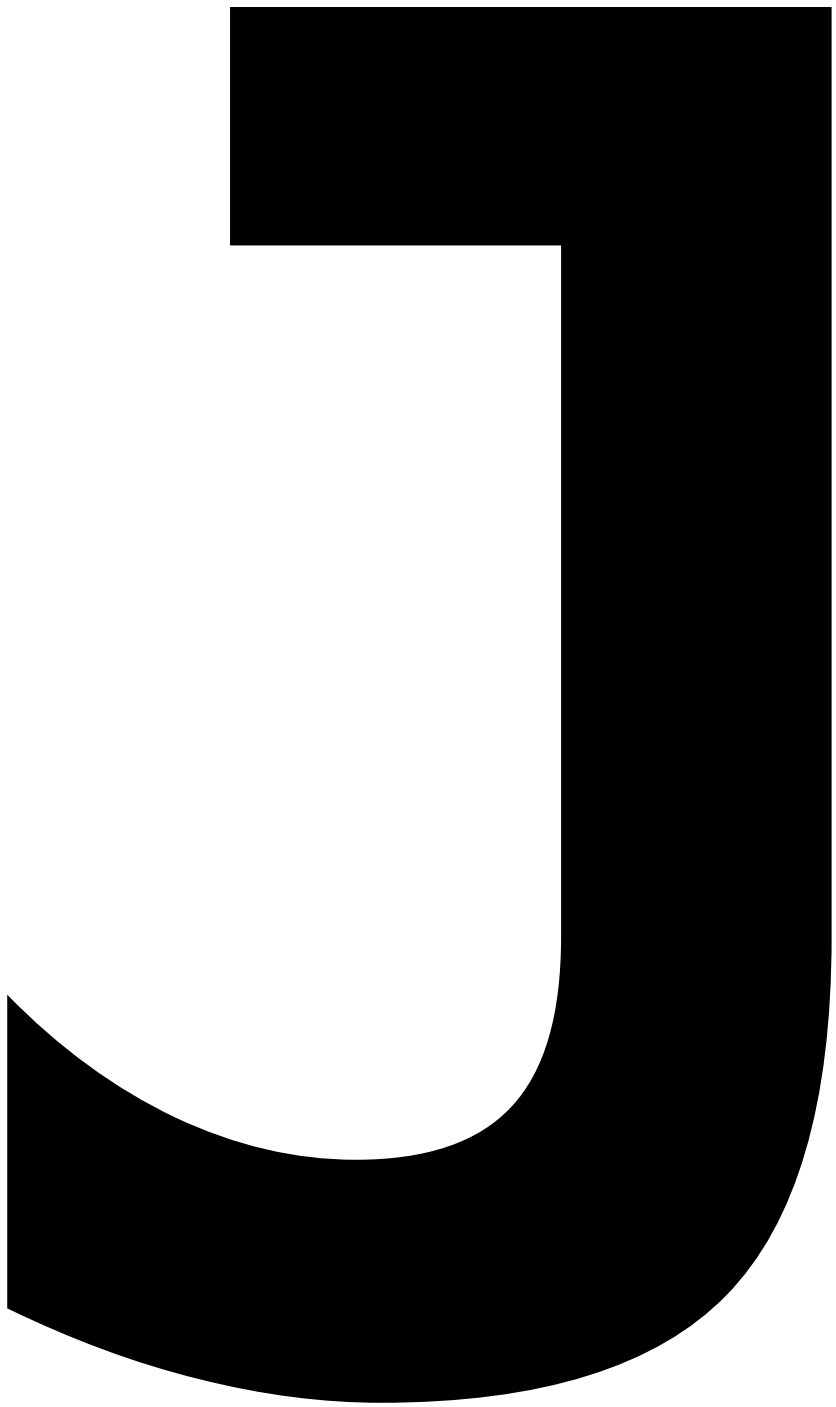


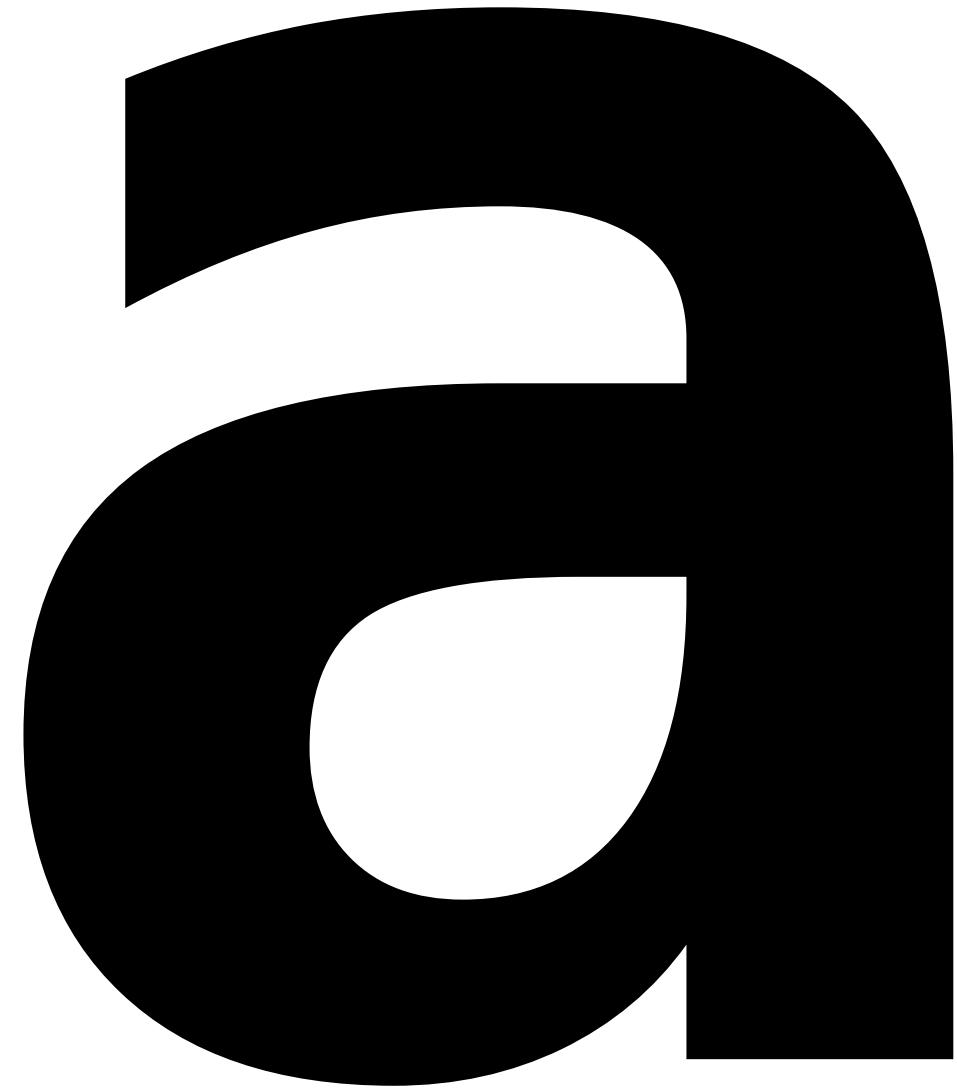


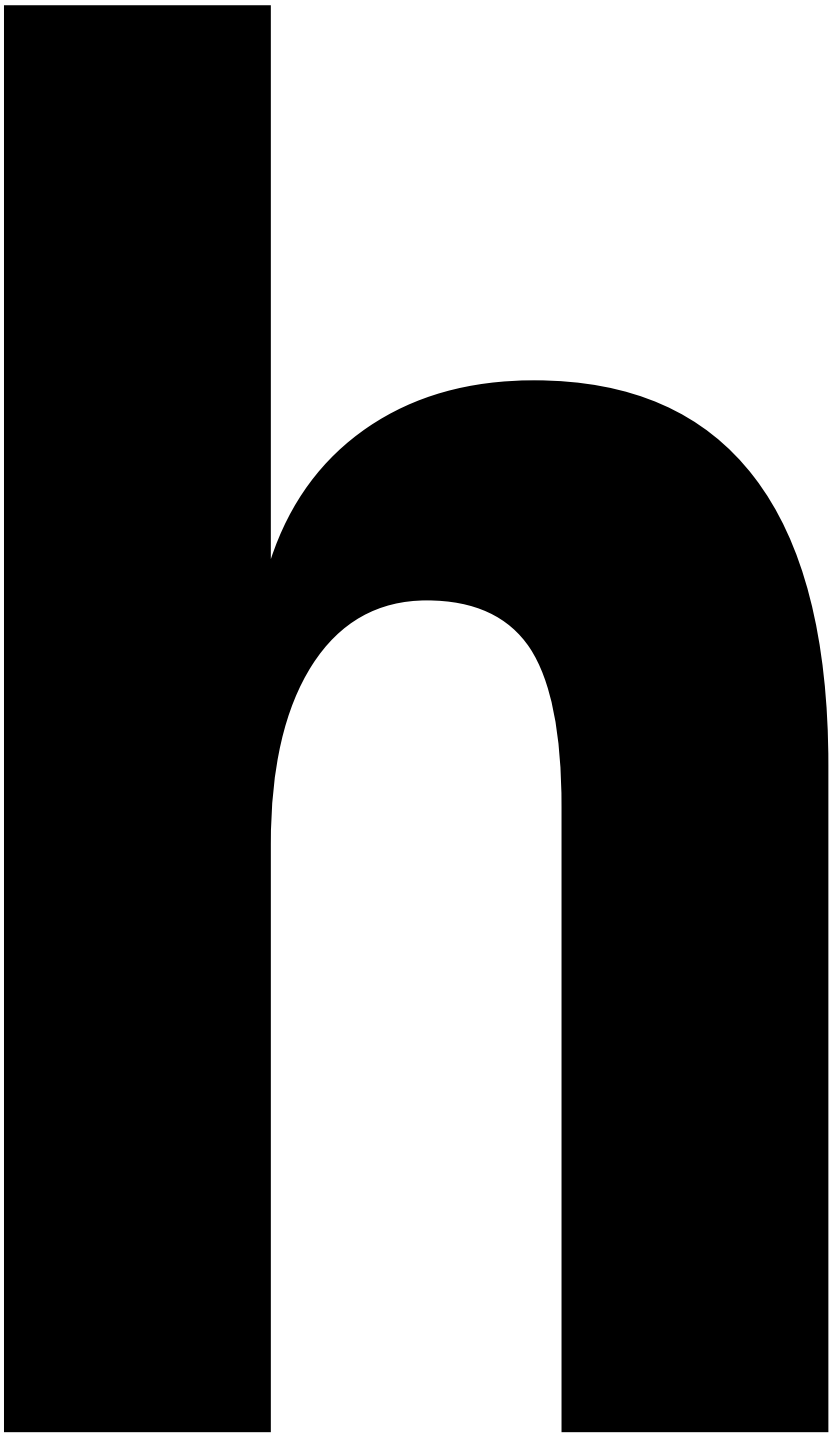


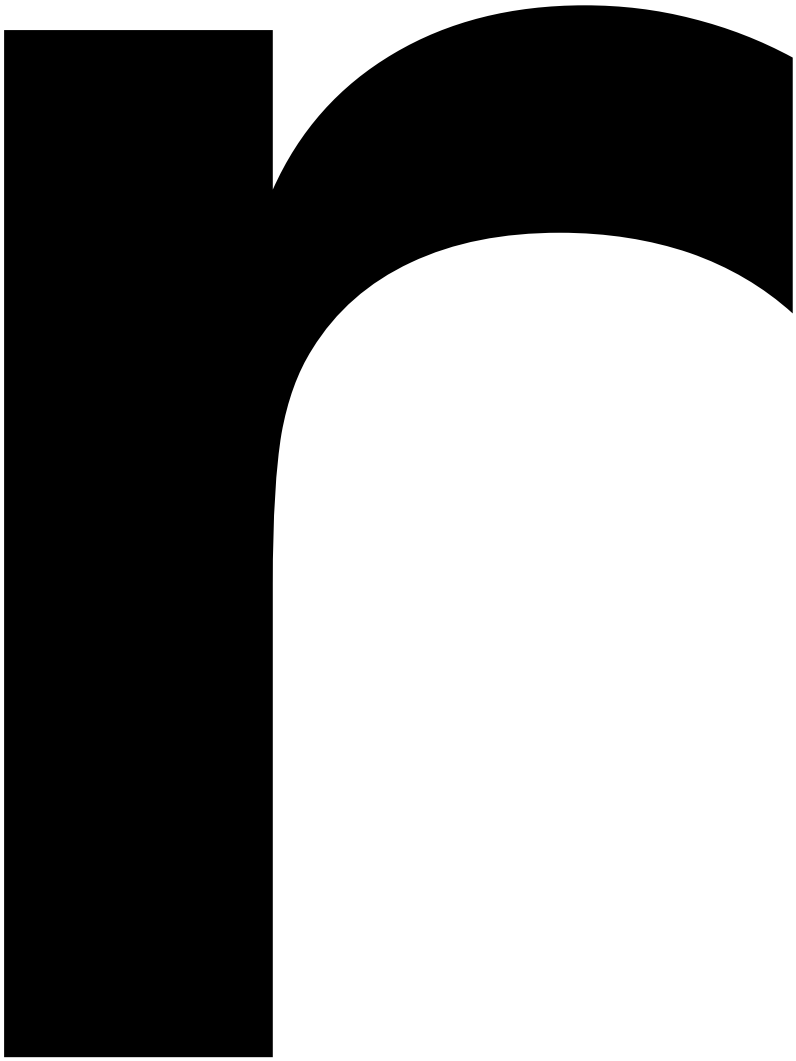


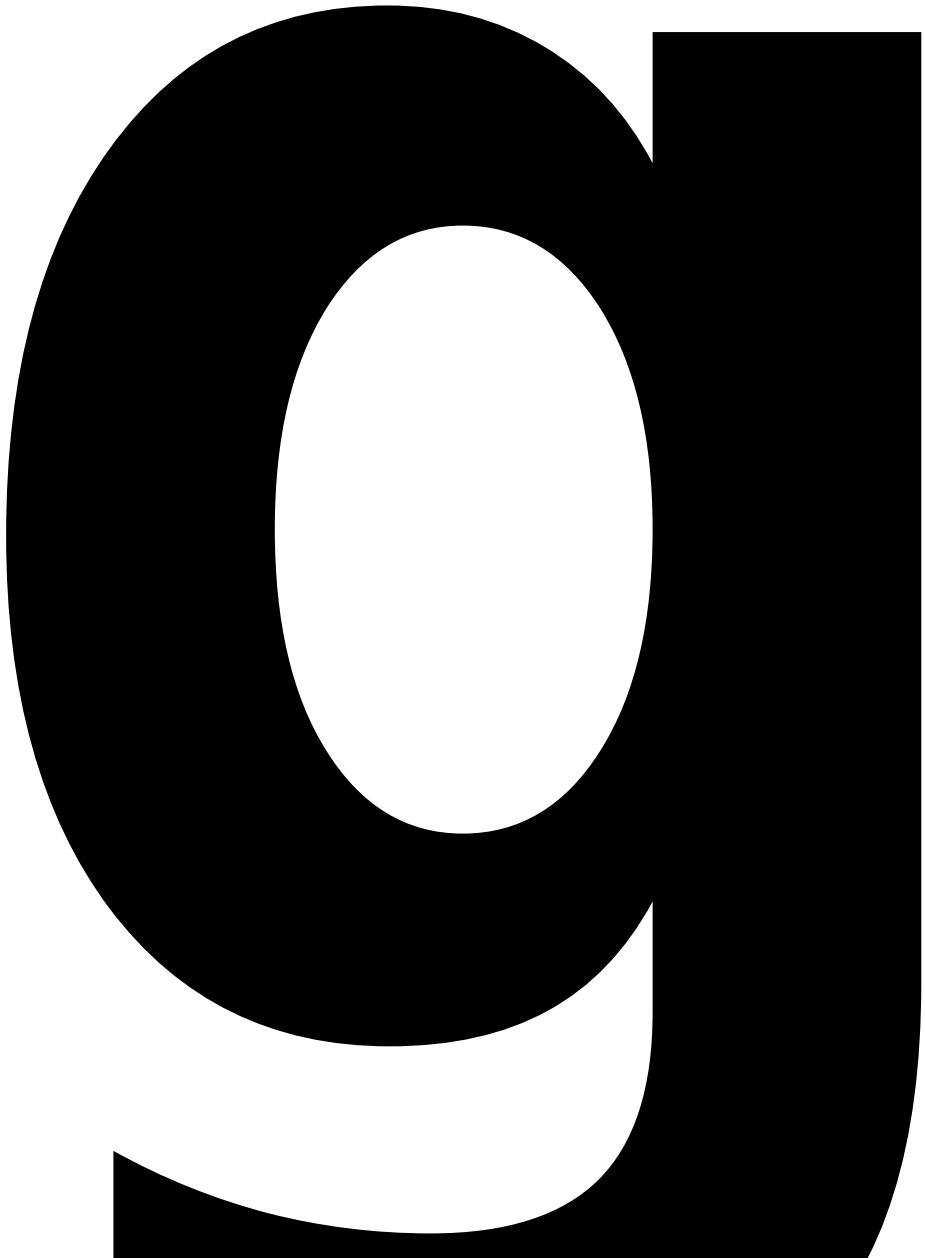


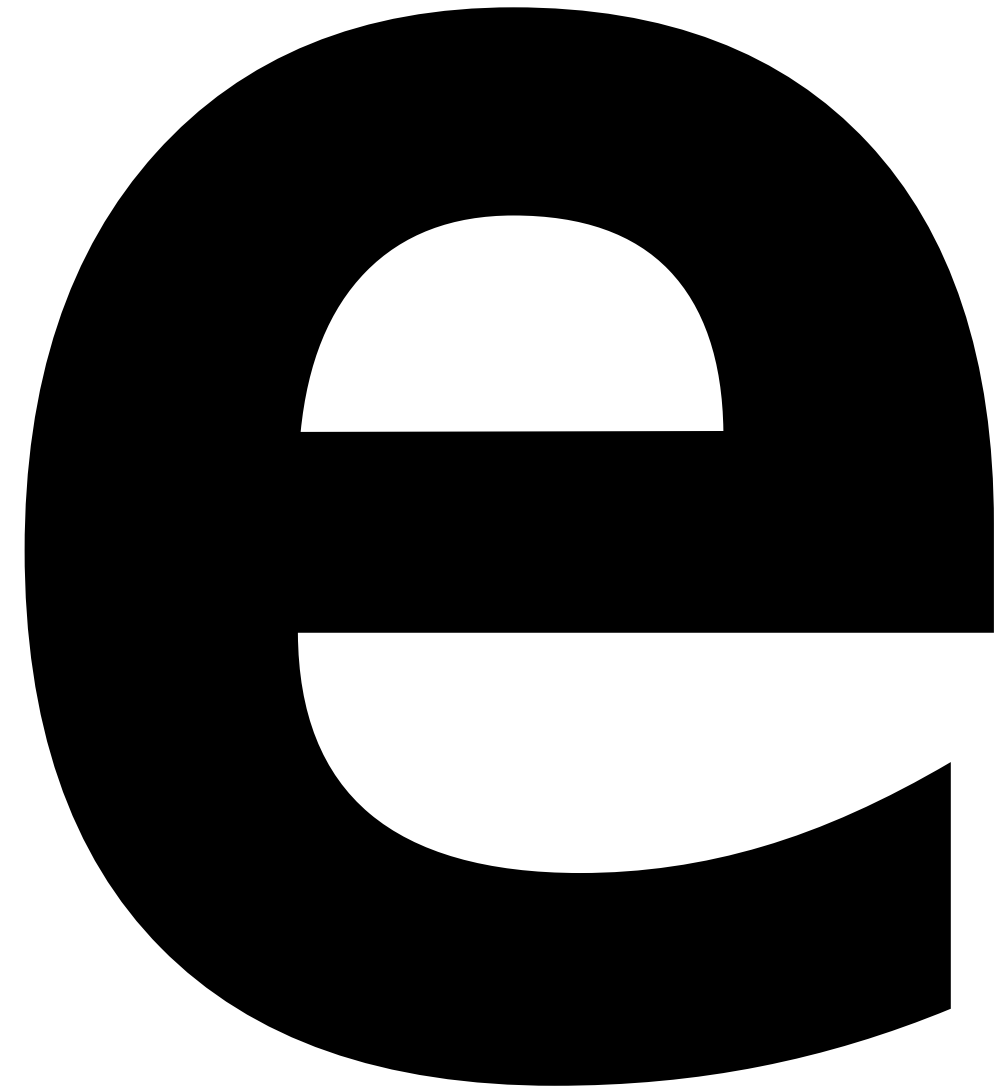




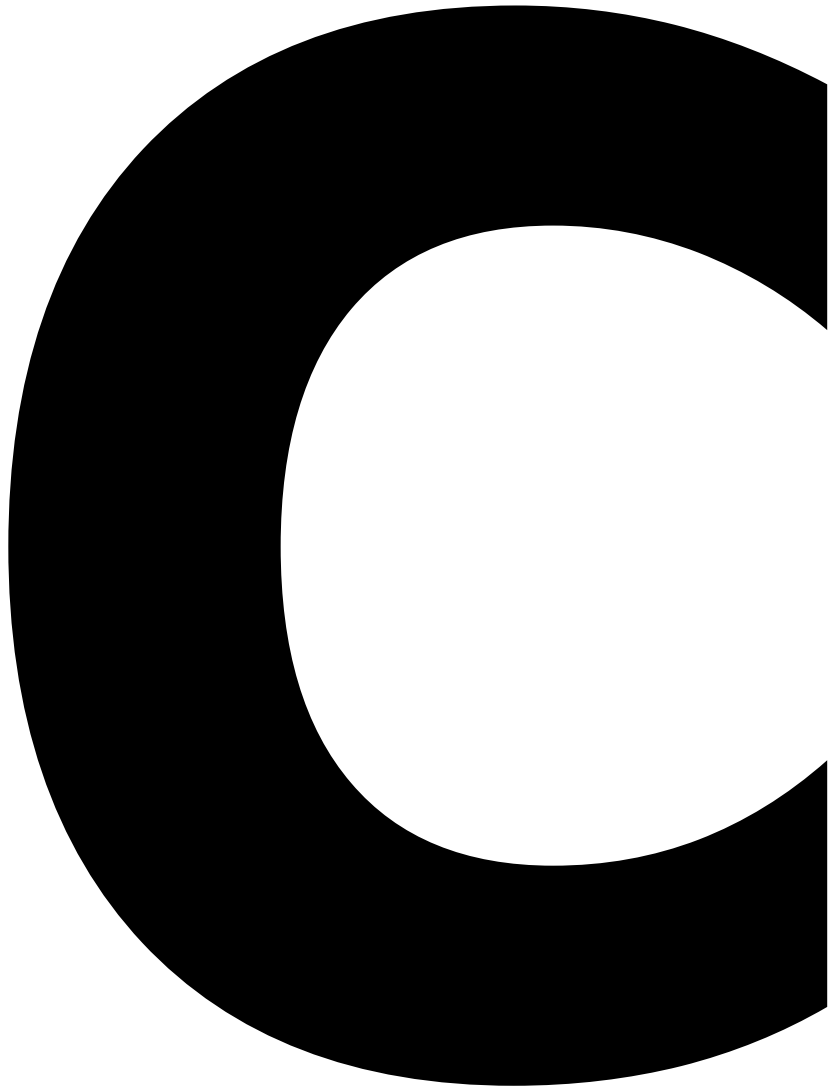


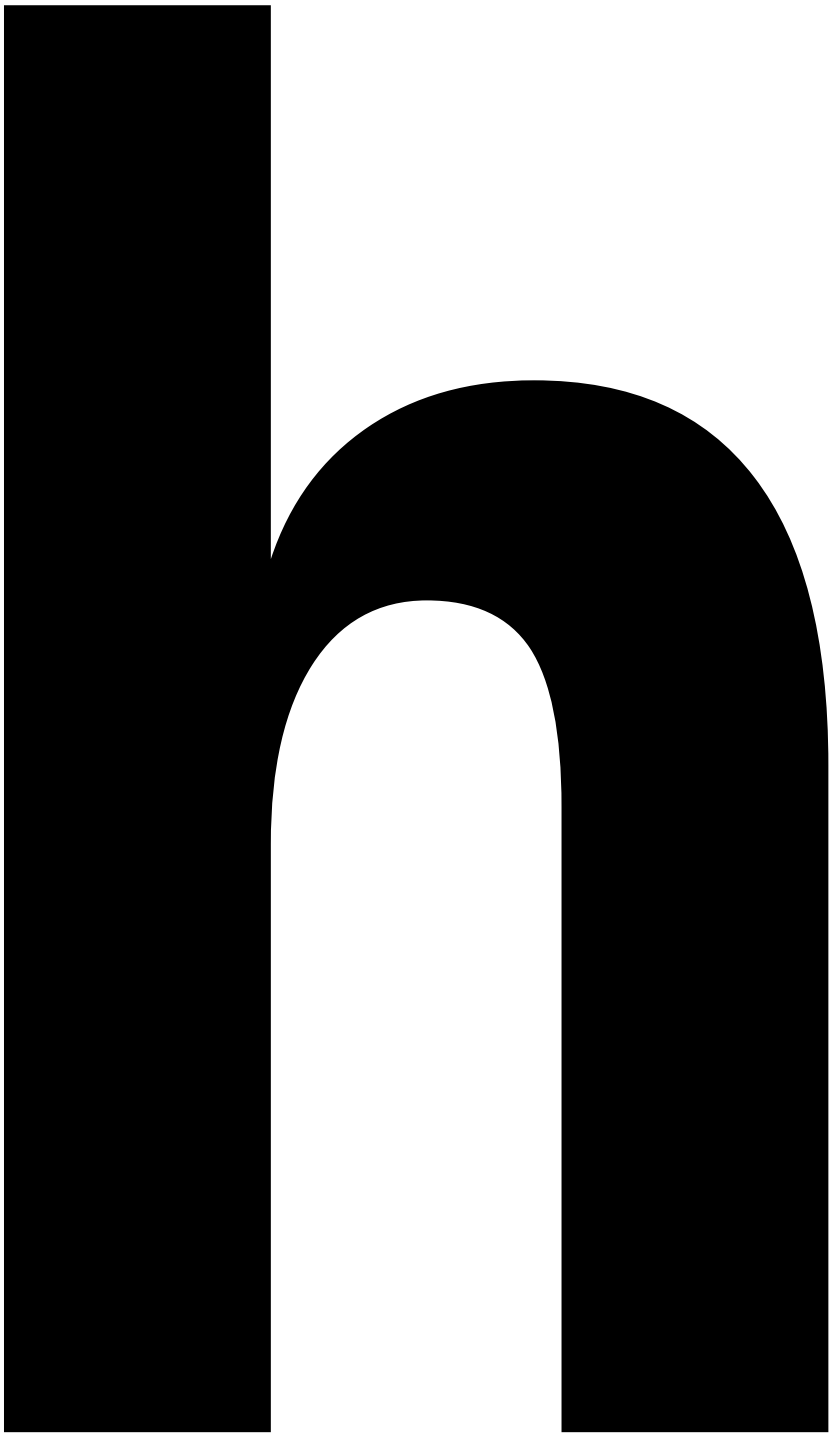


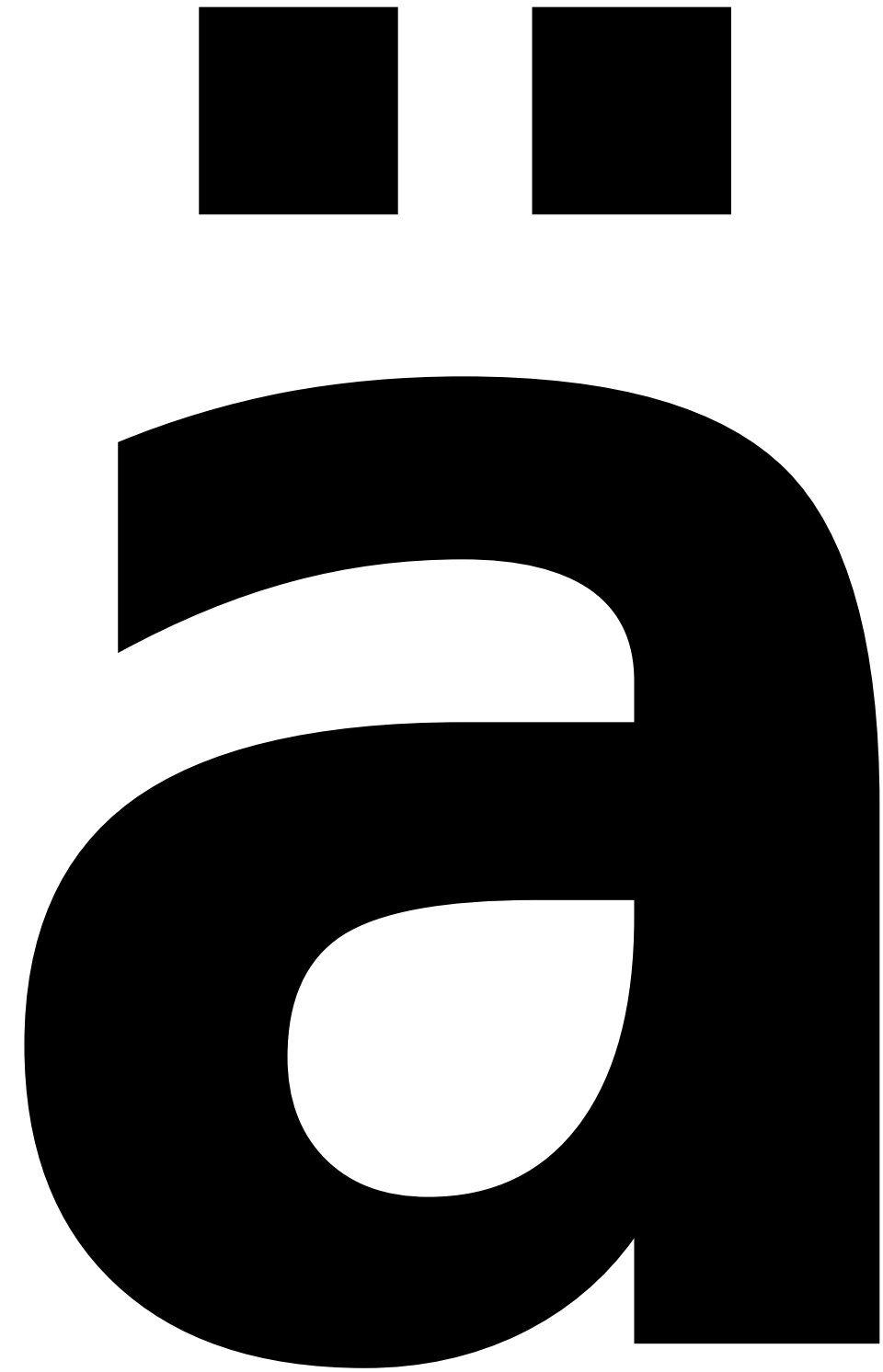


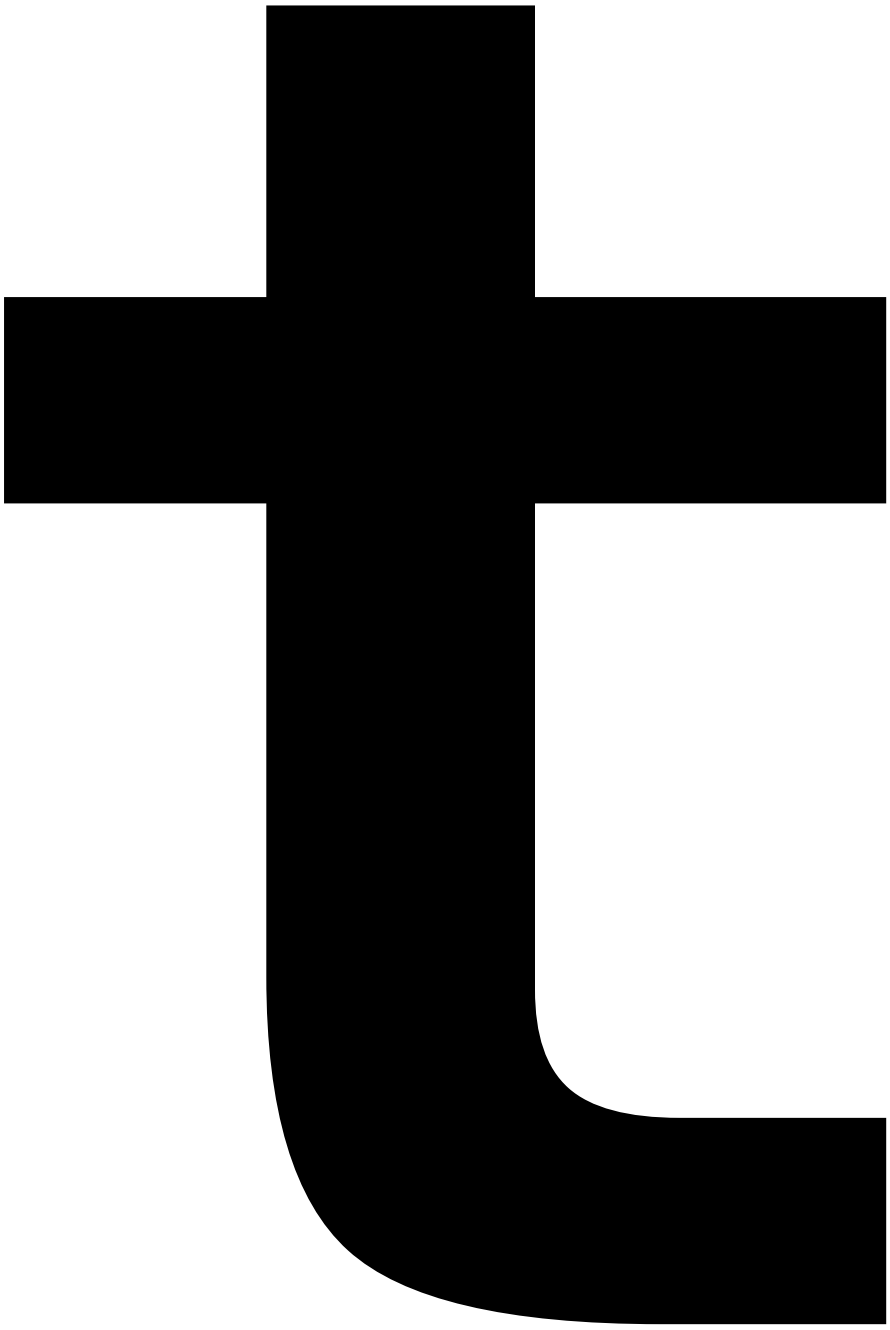


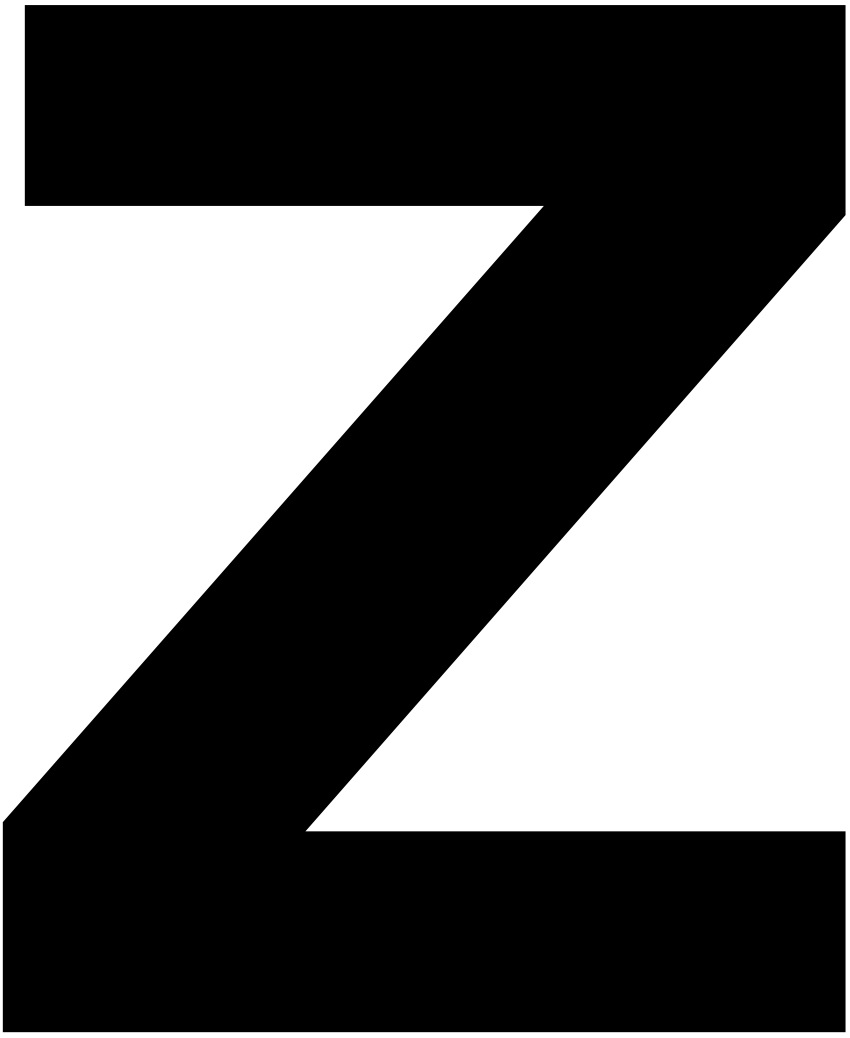
S

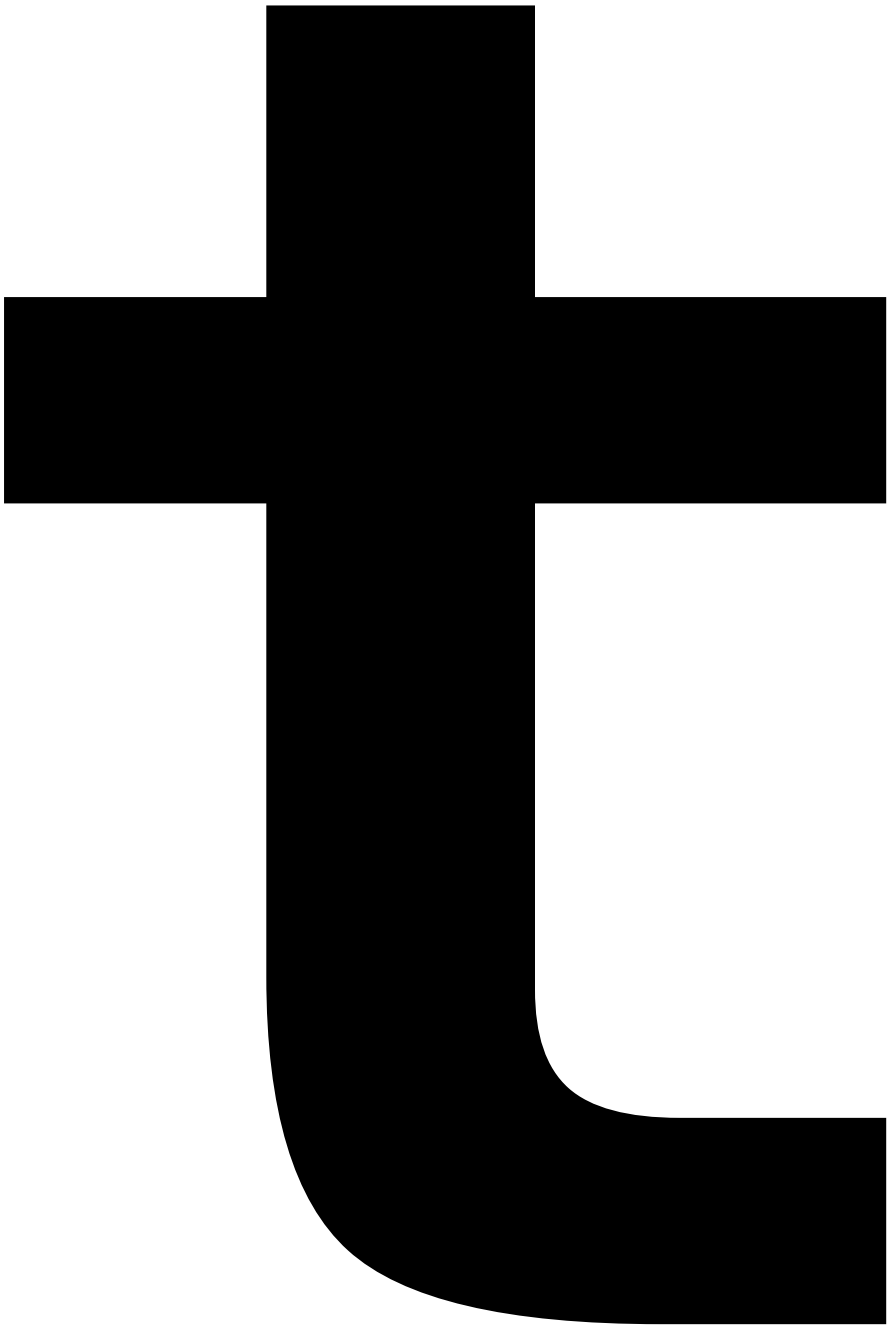


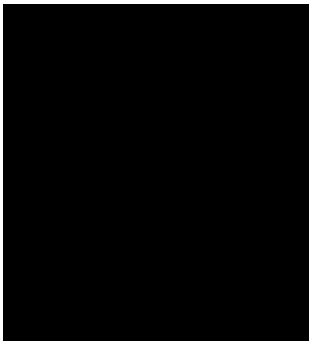


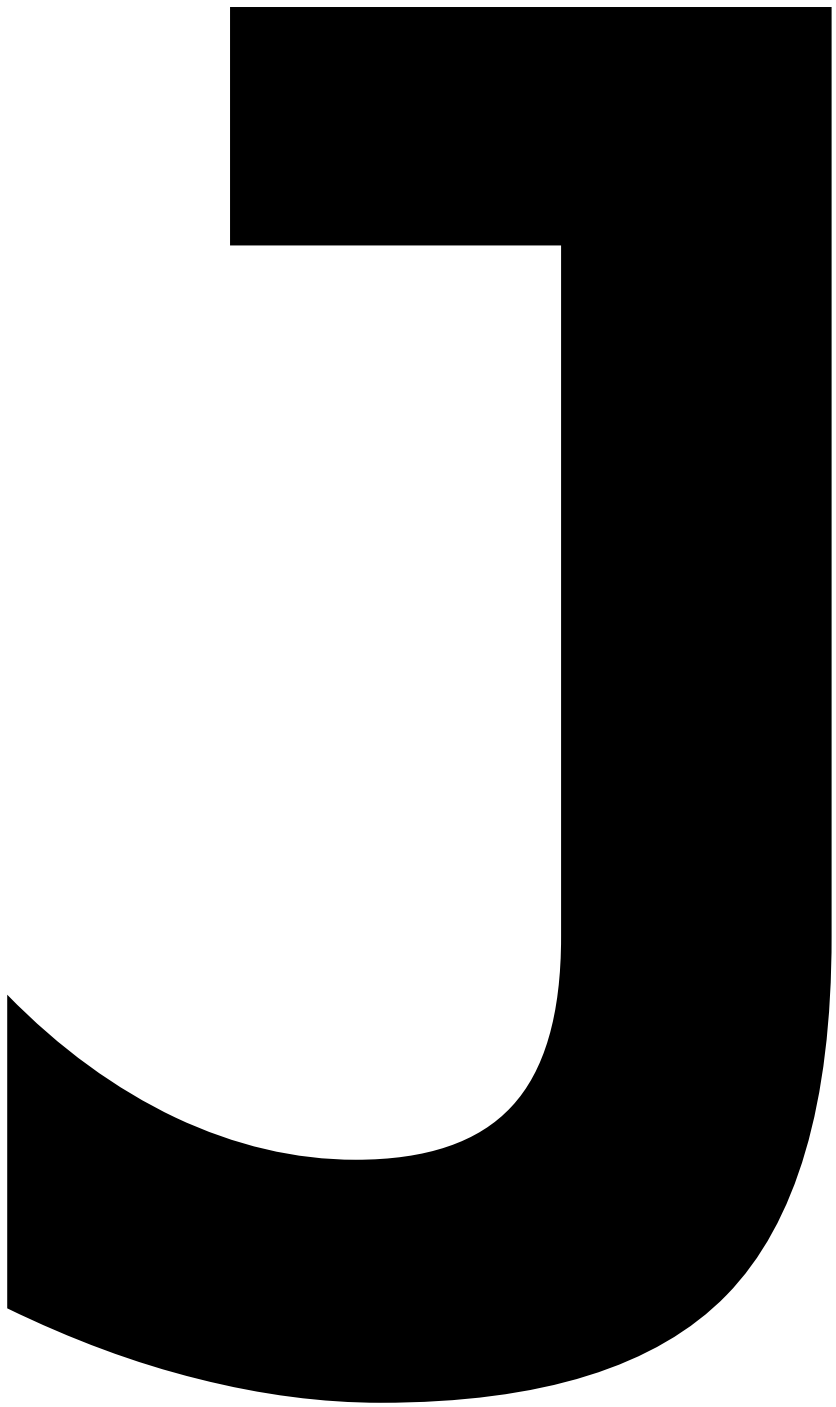


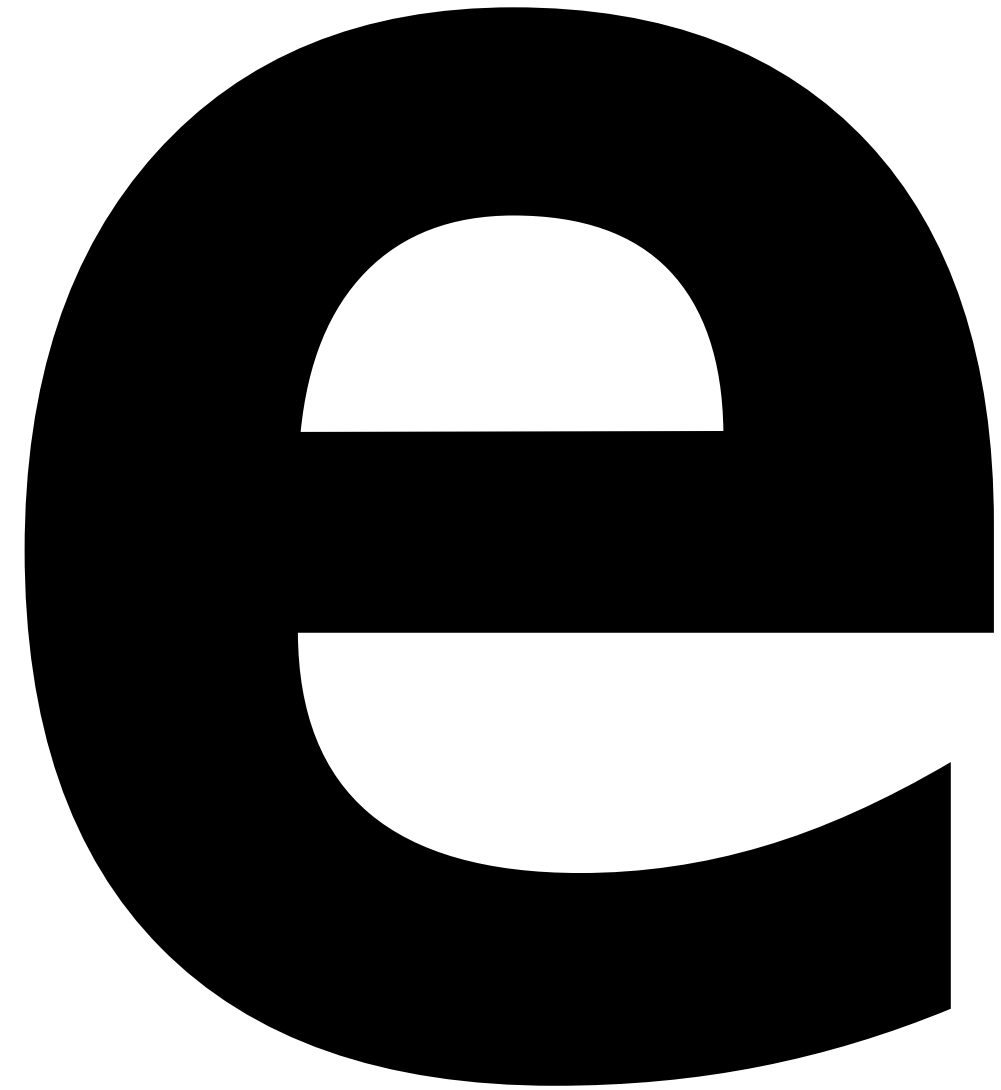




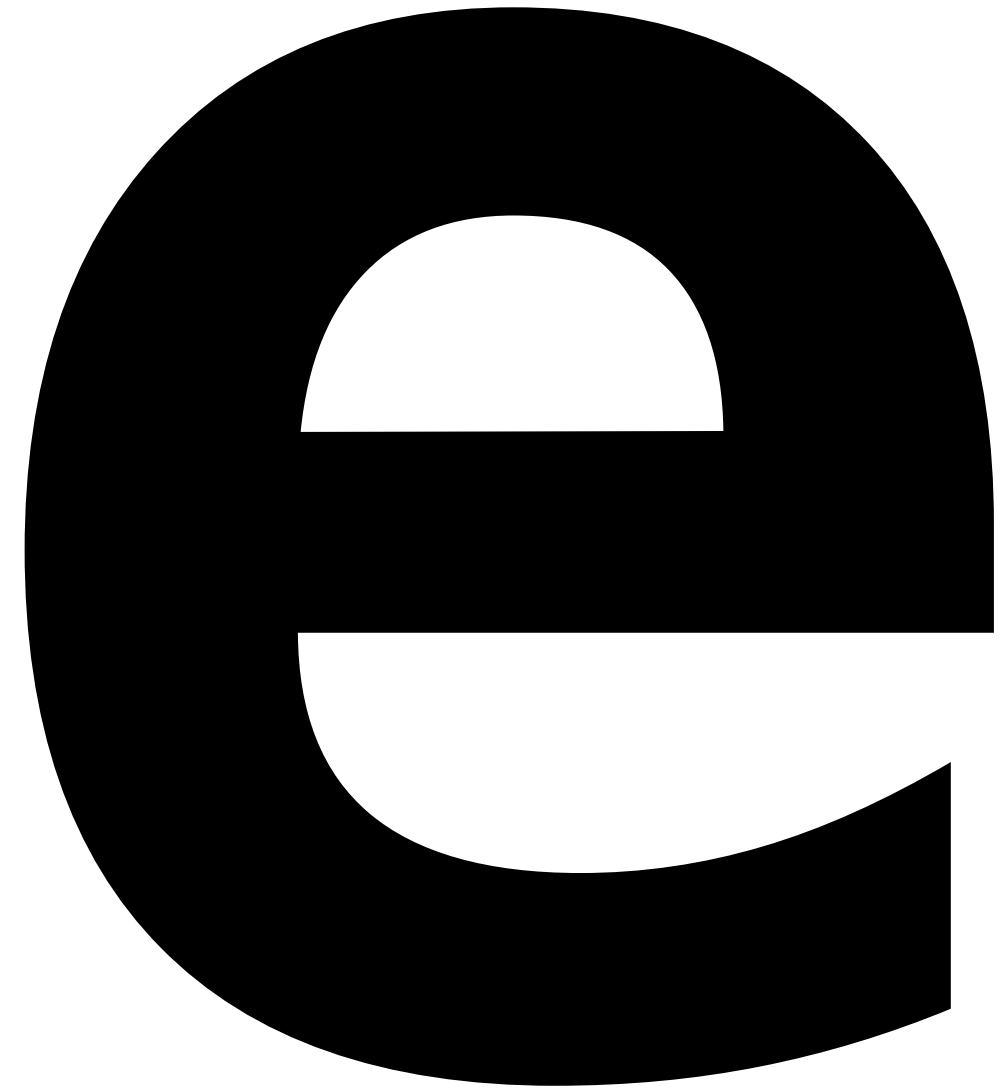


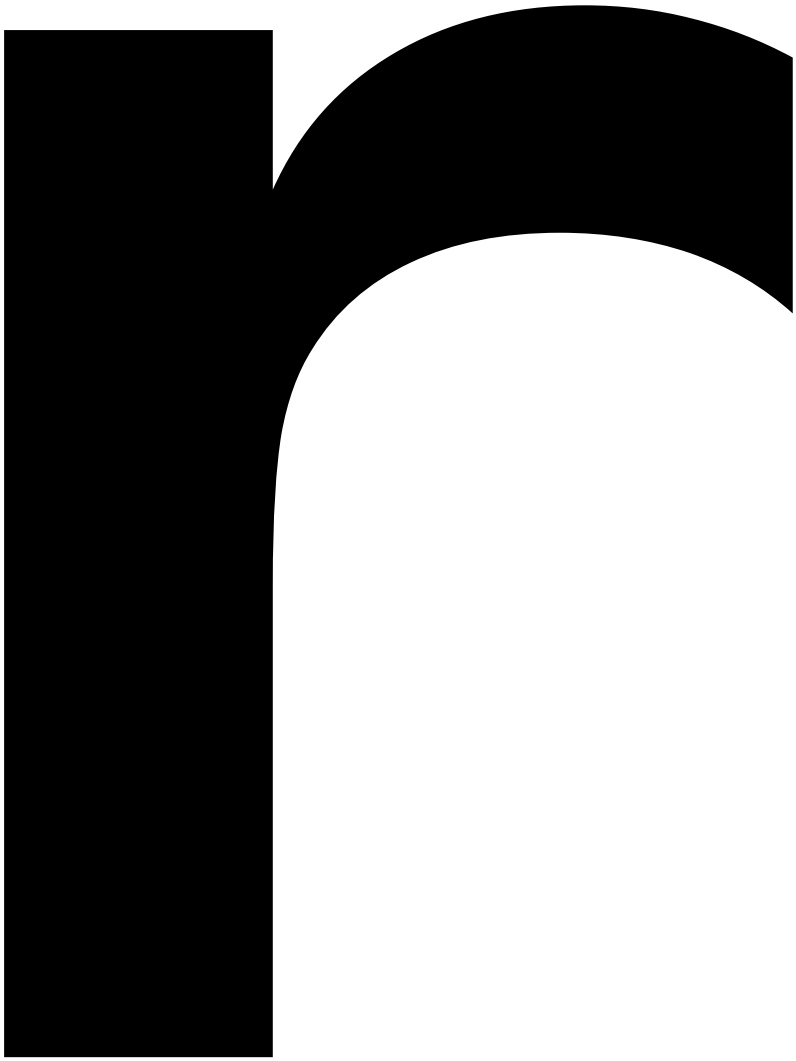


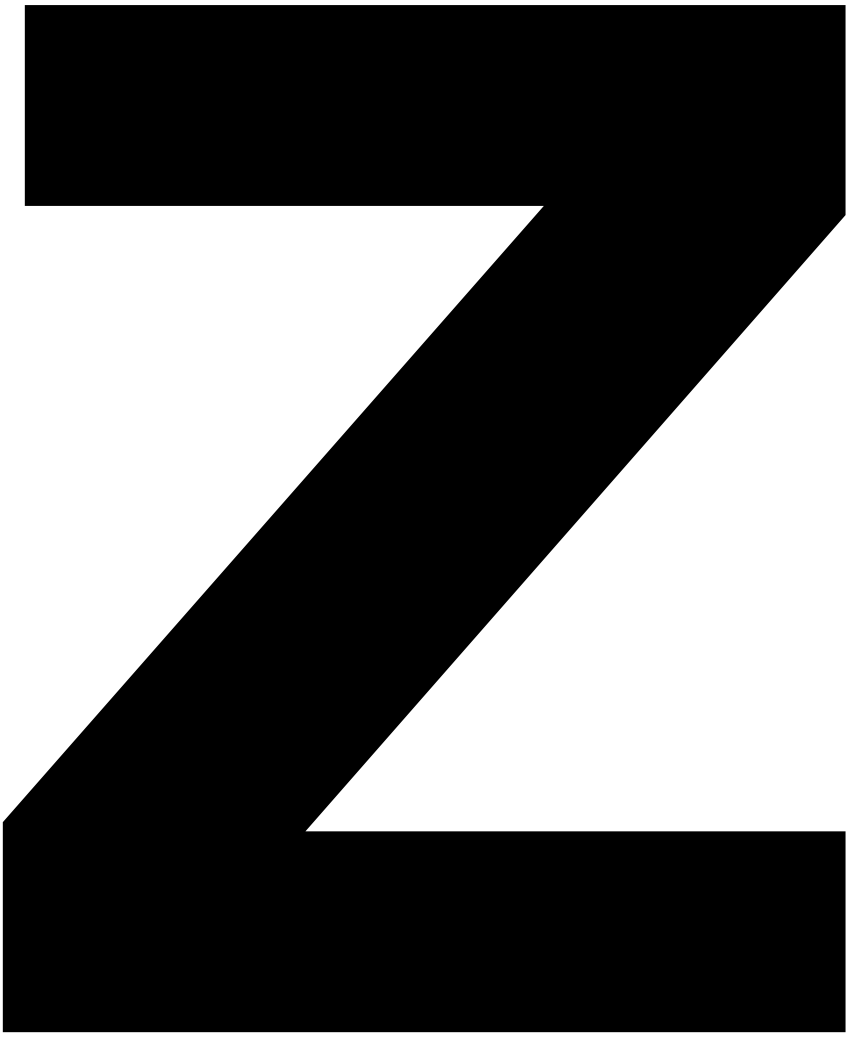


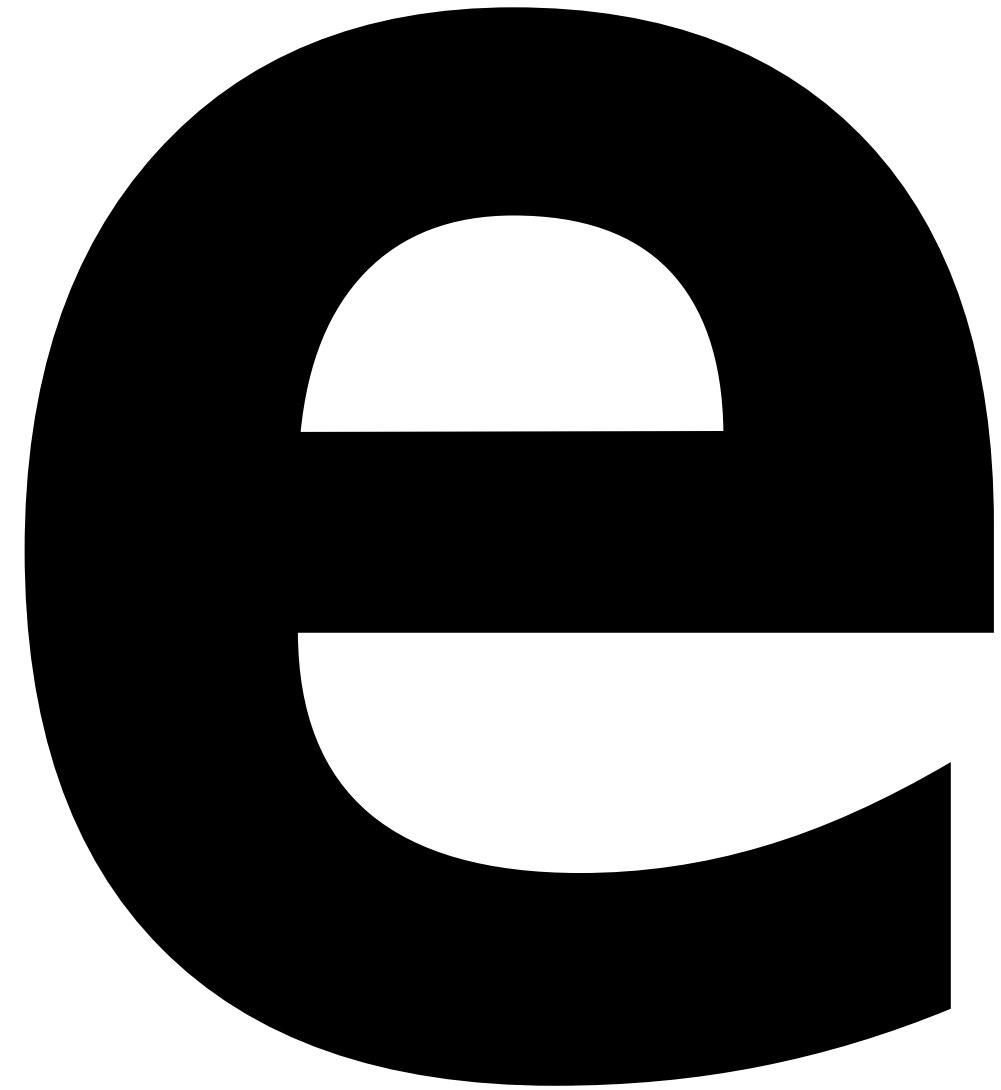


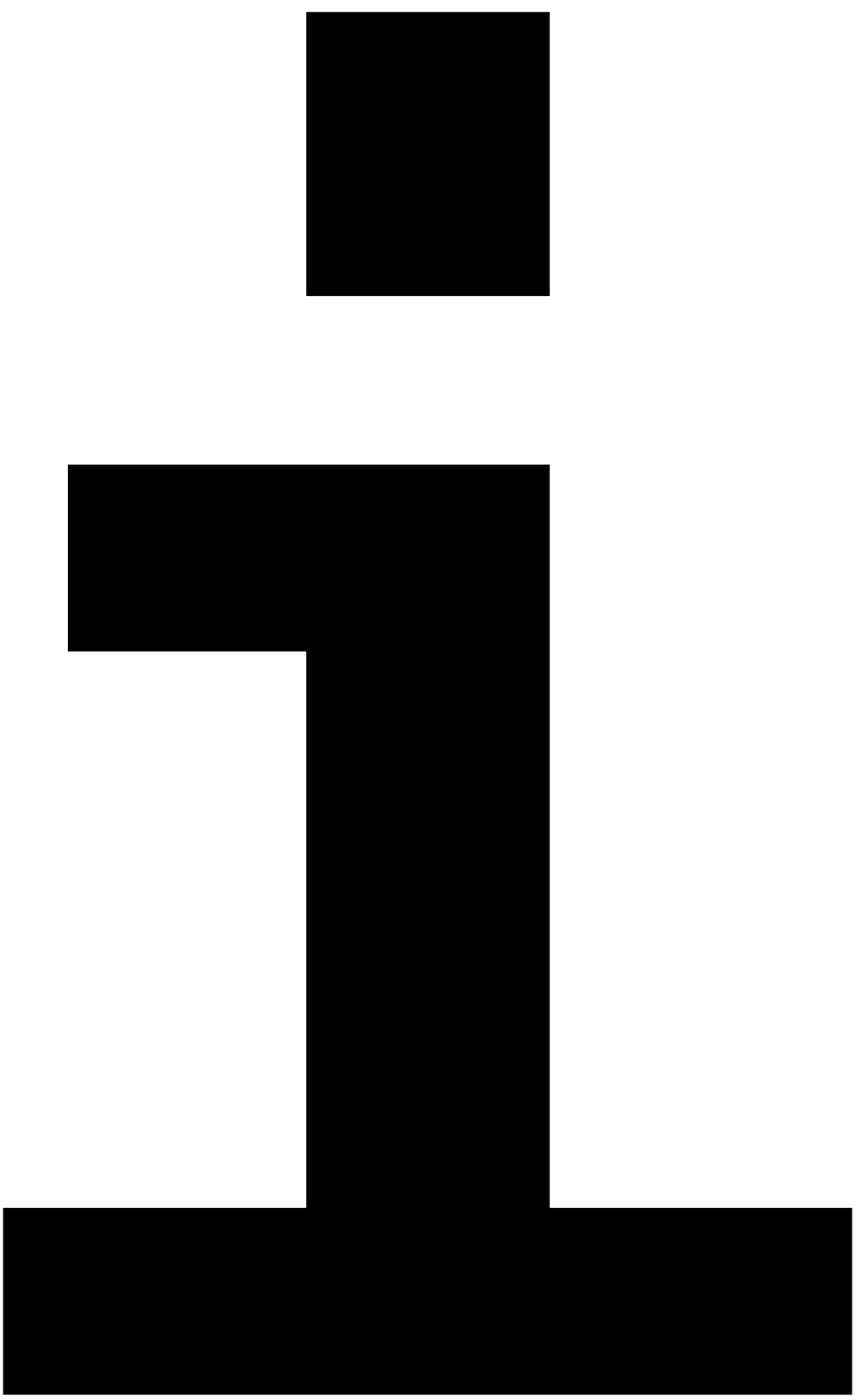
d

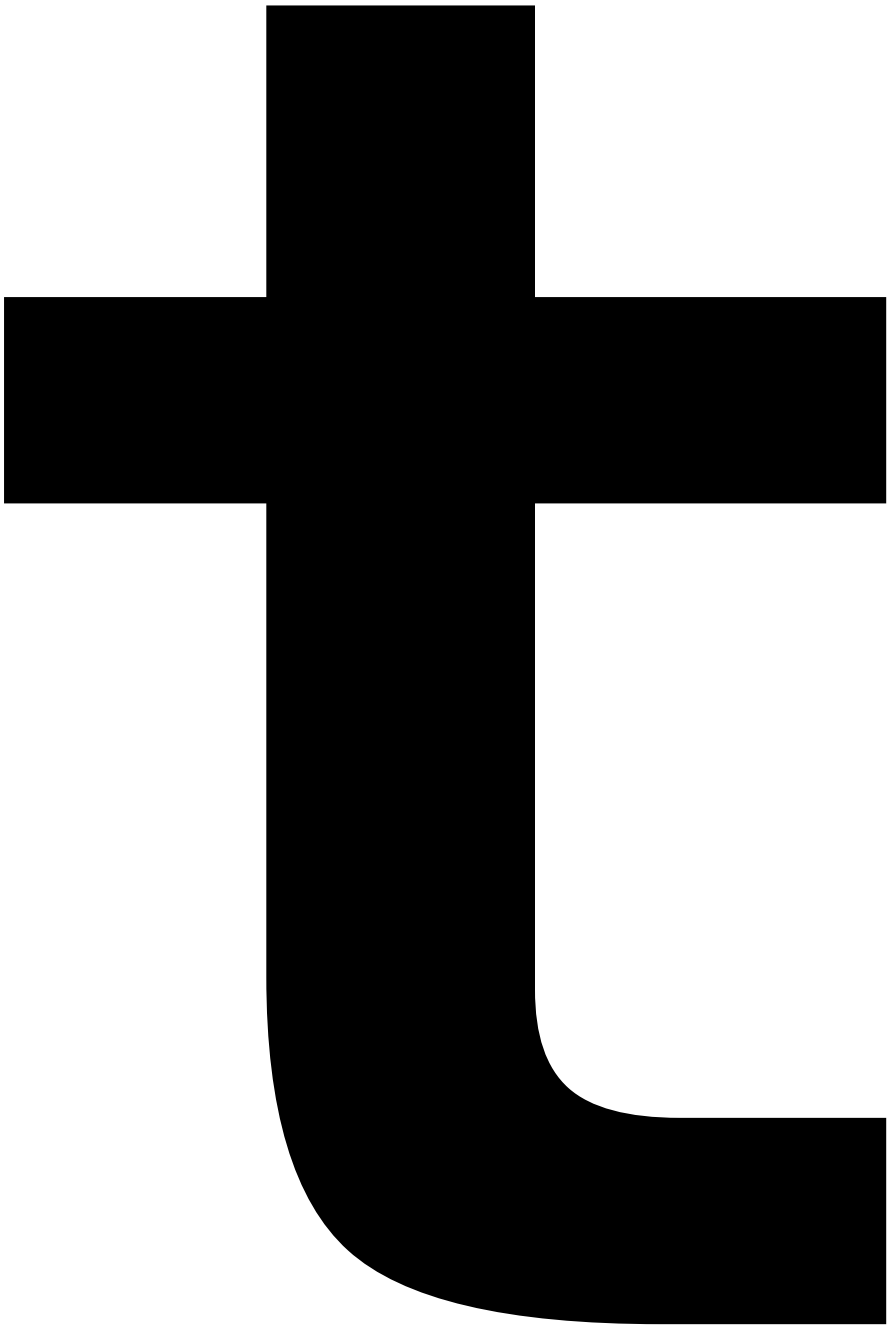


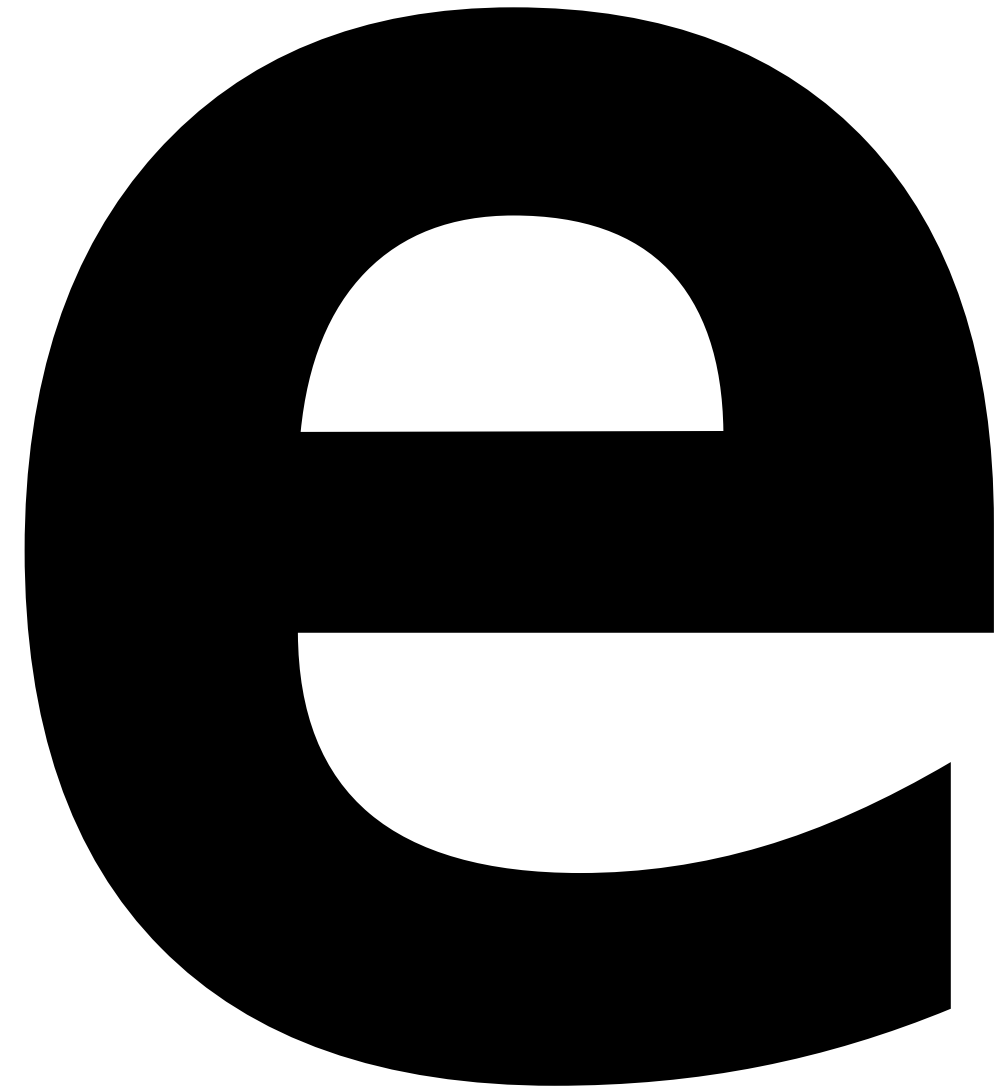


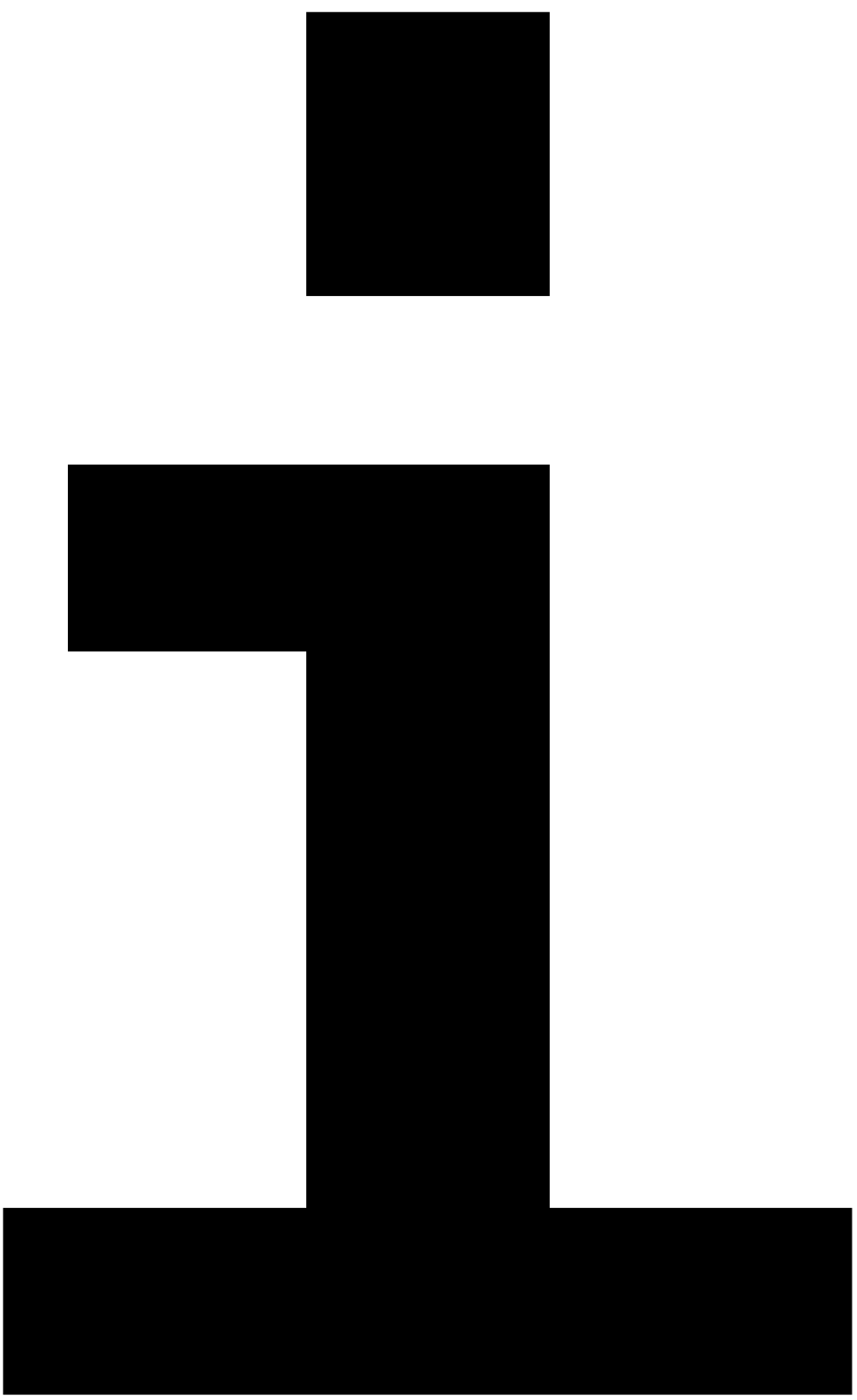


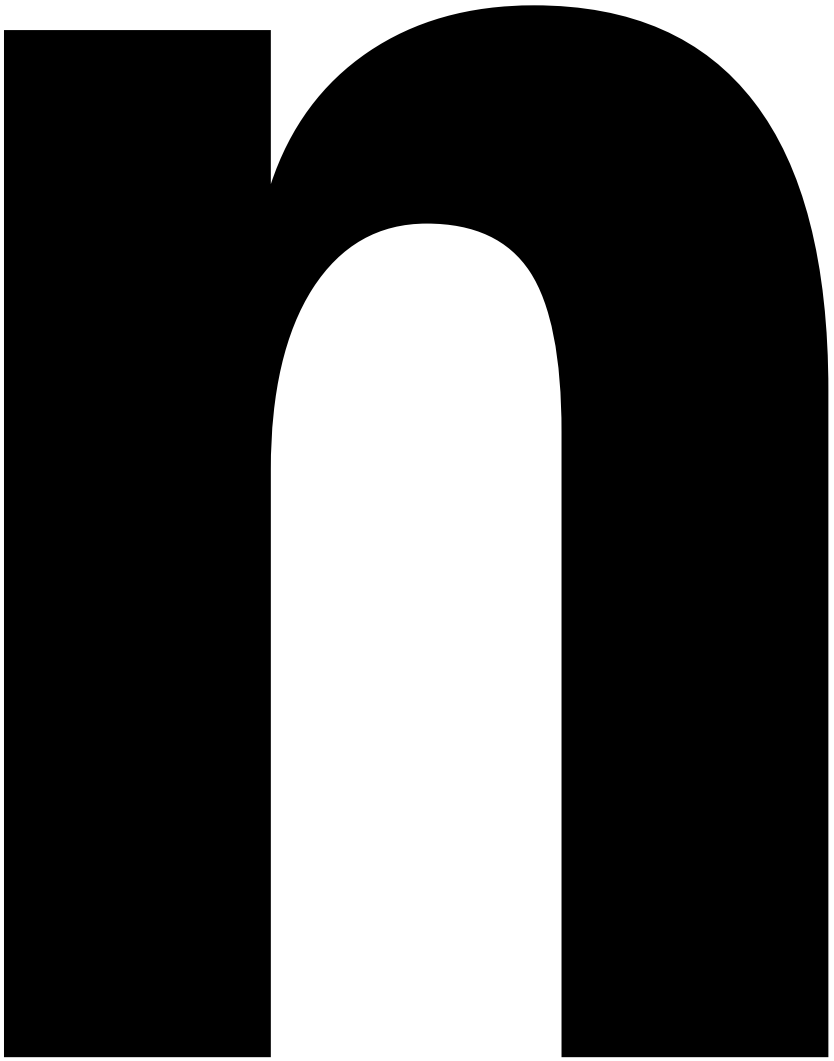


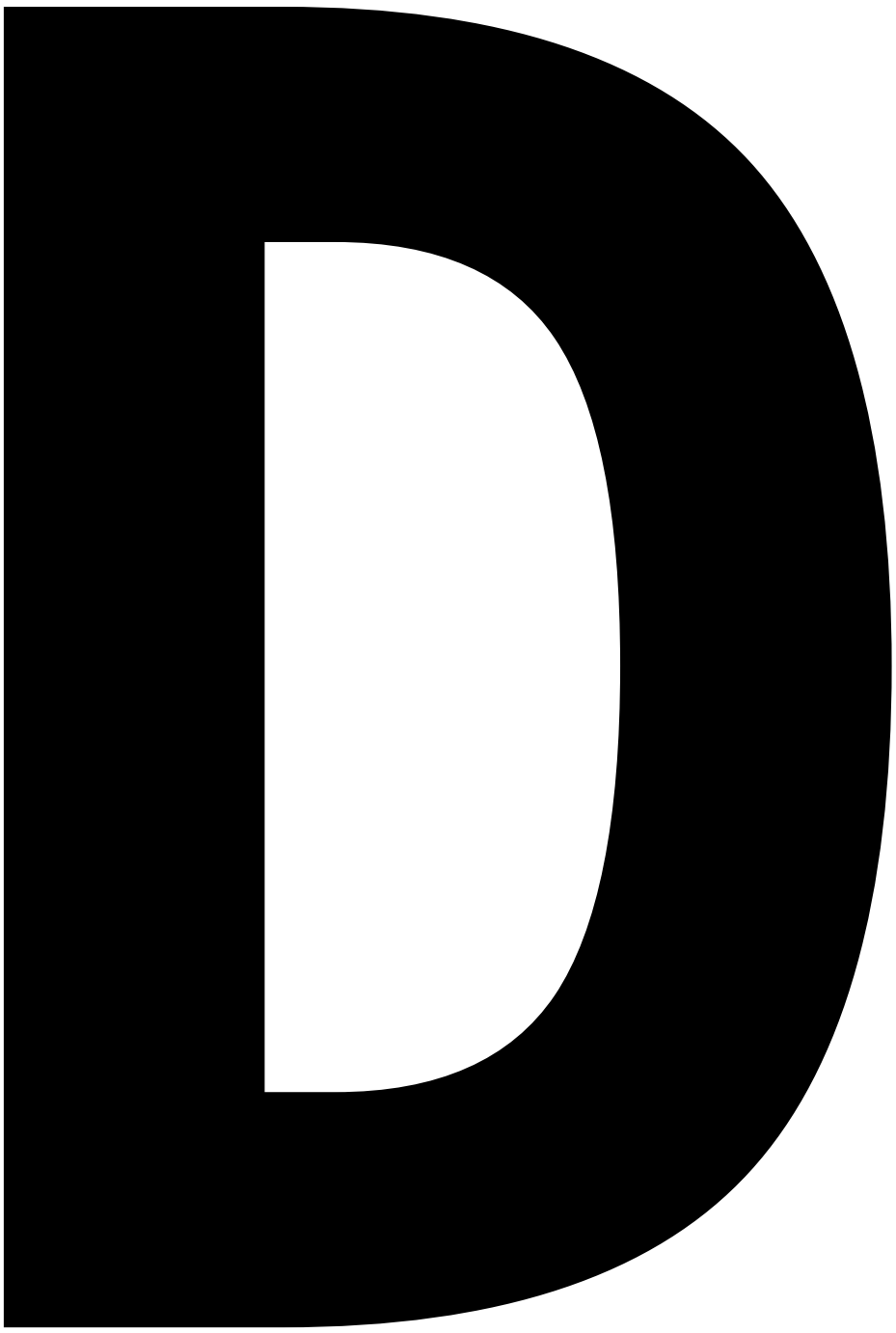


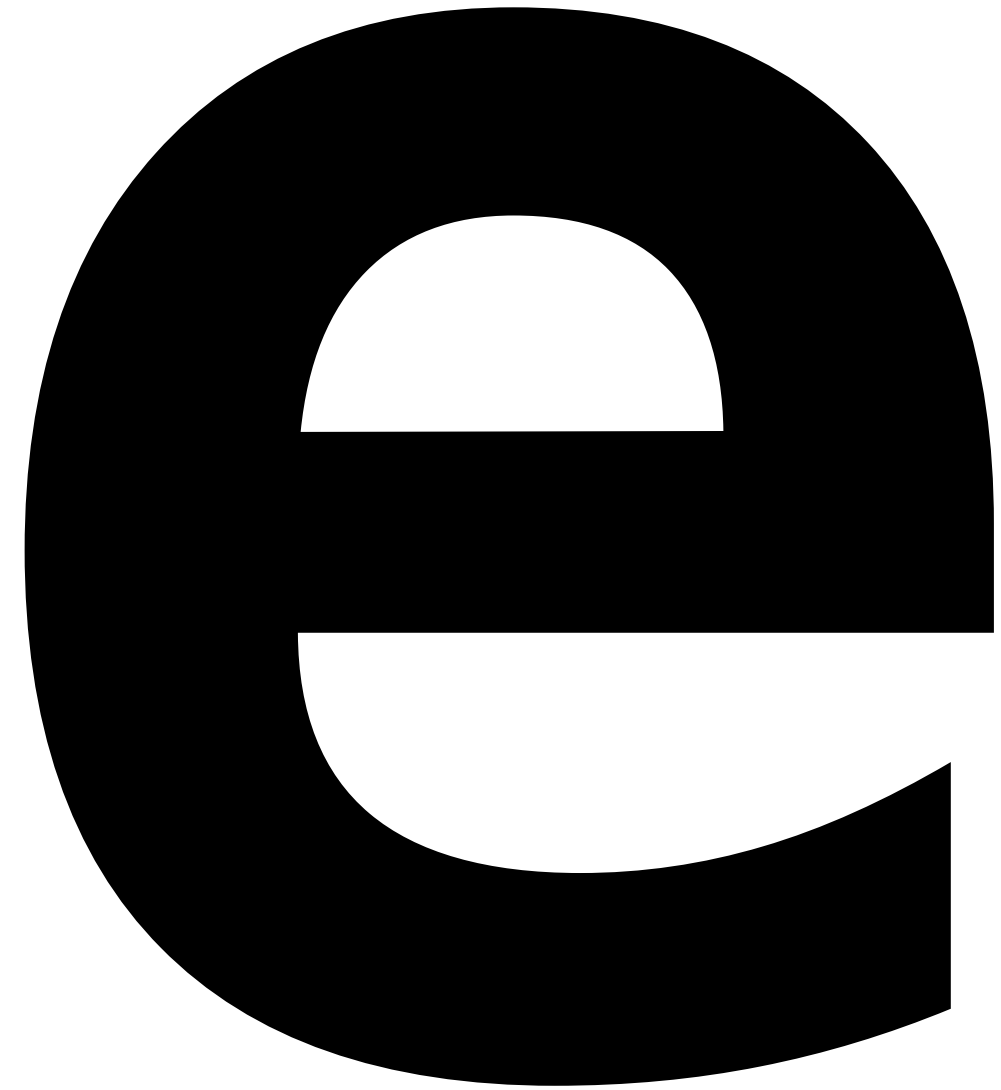




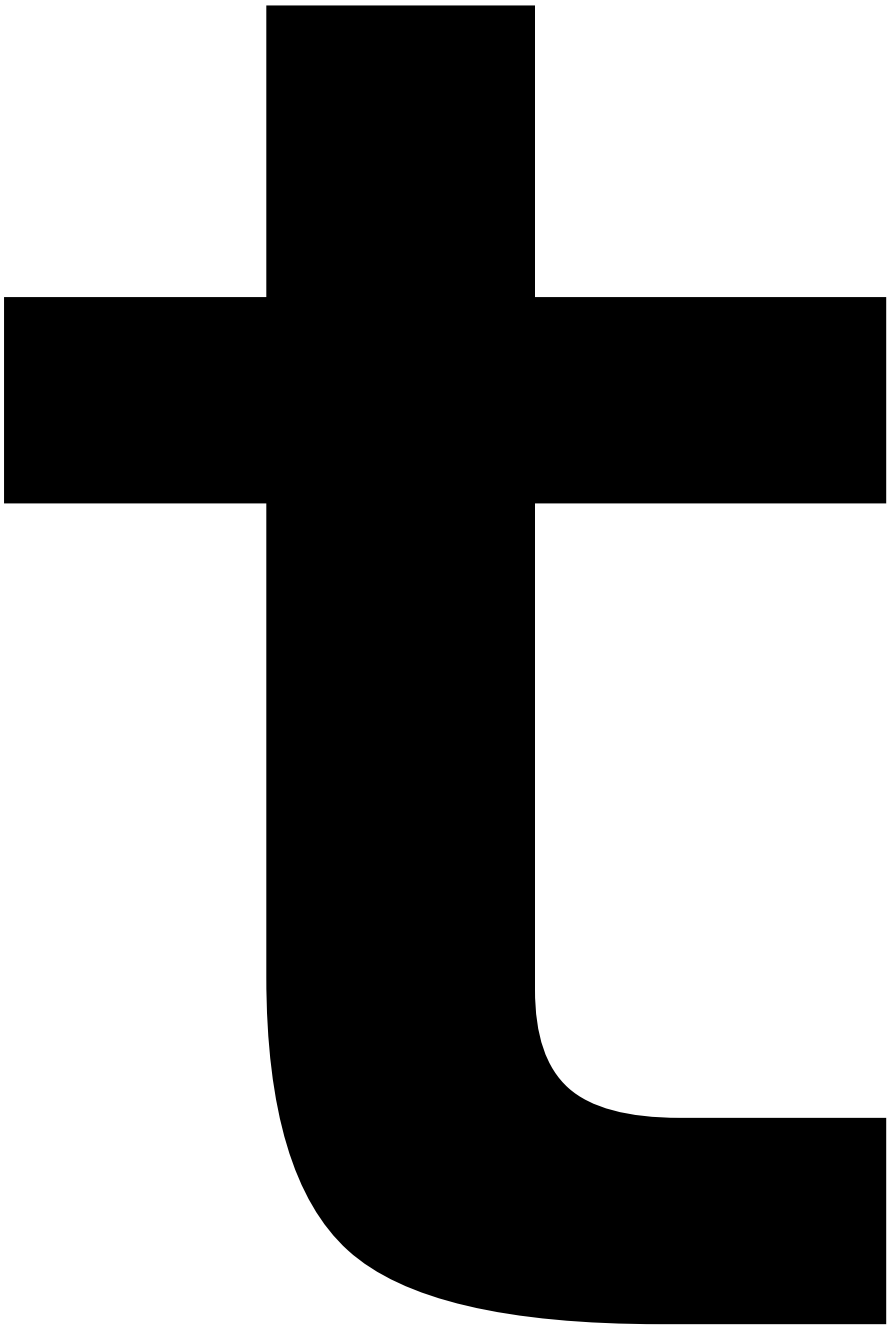




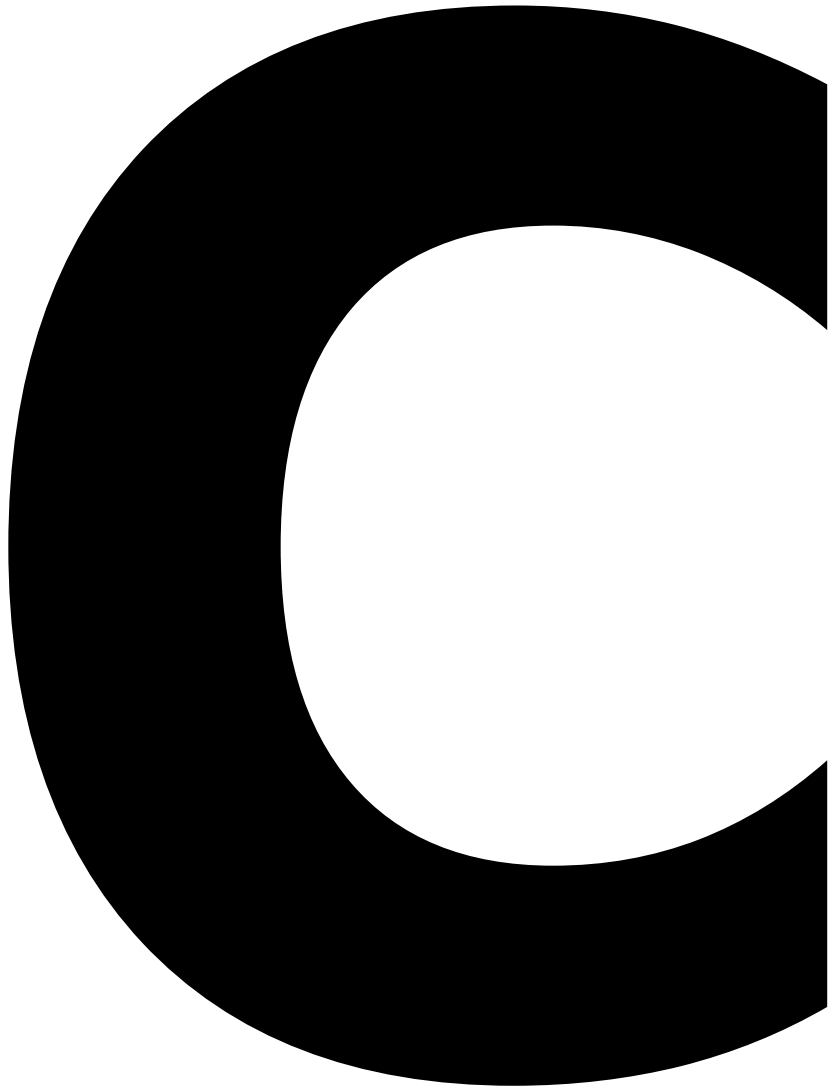


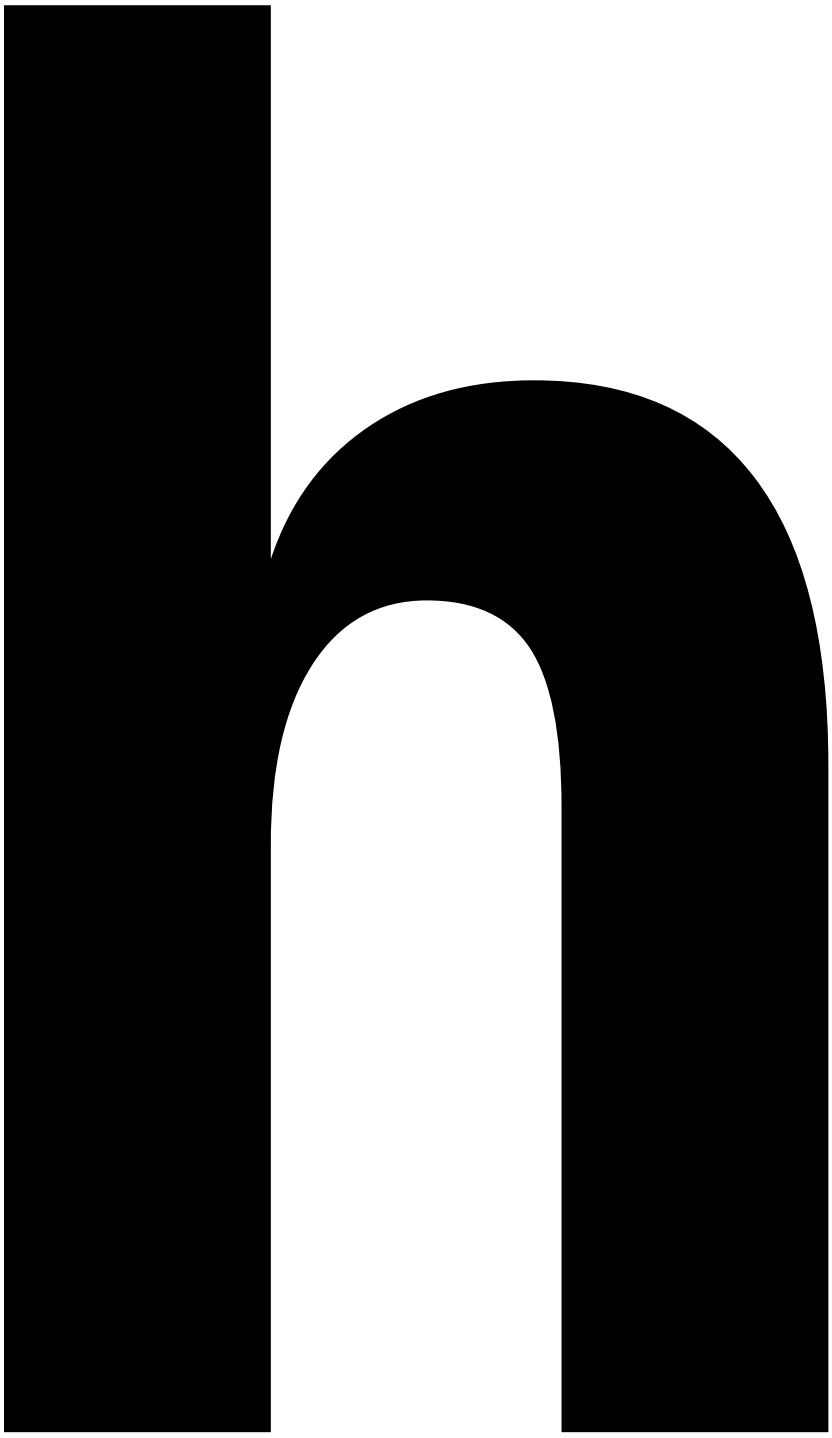


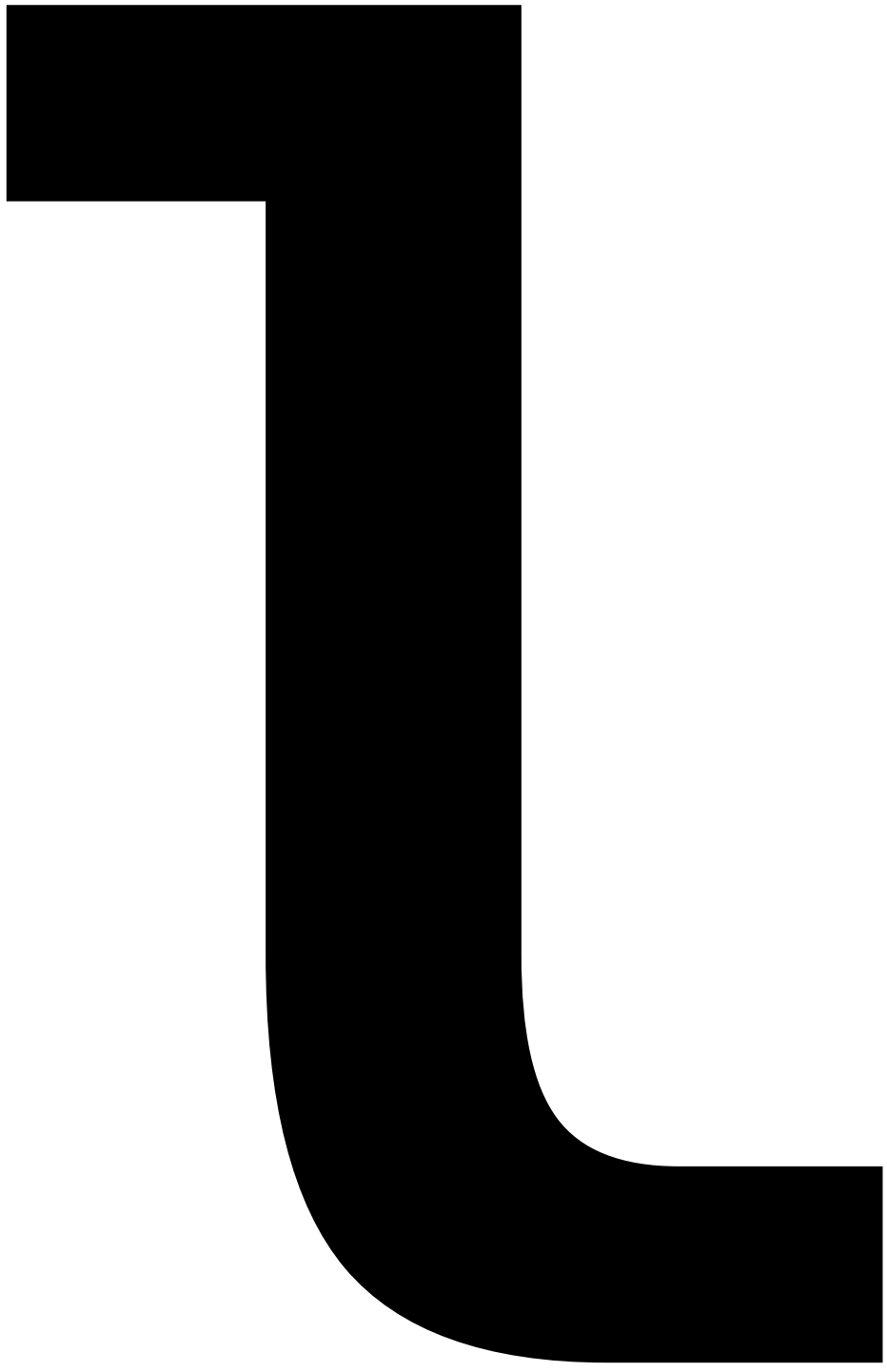
u

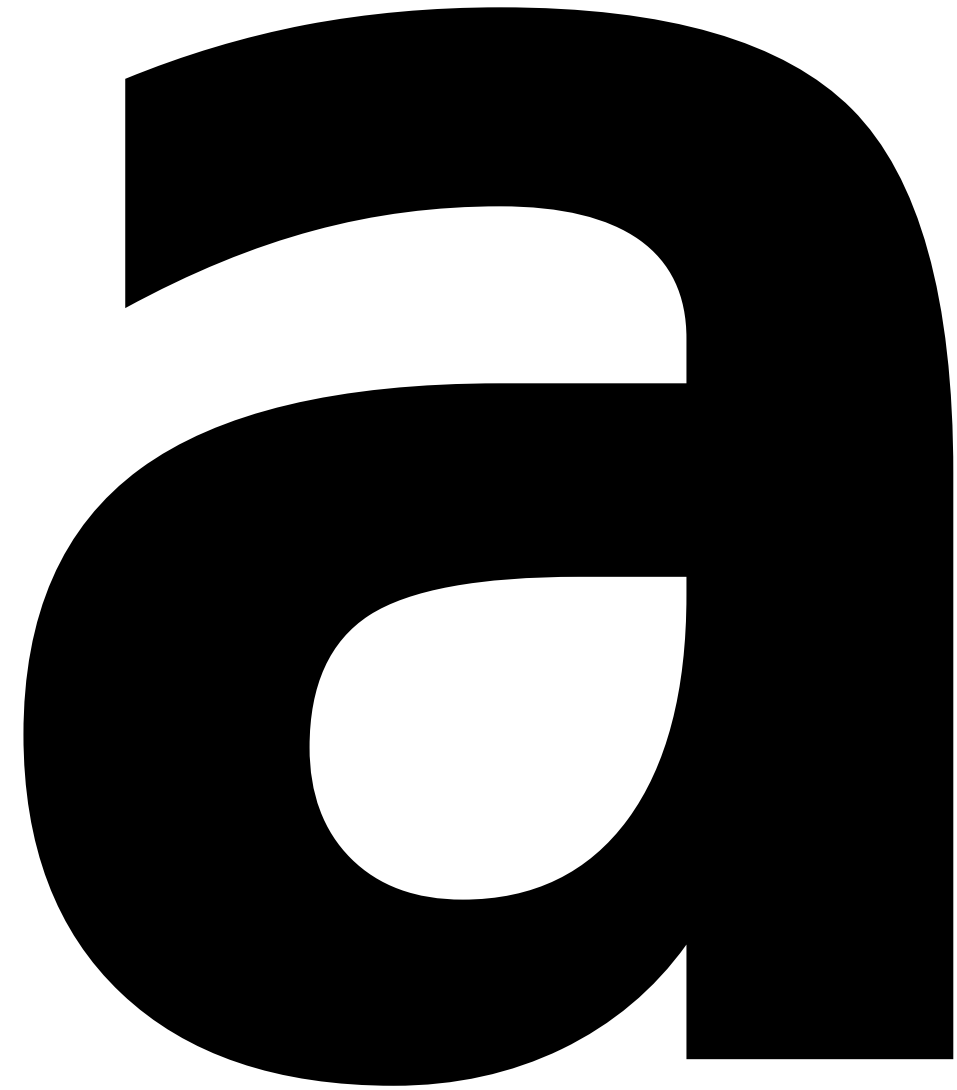


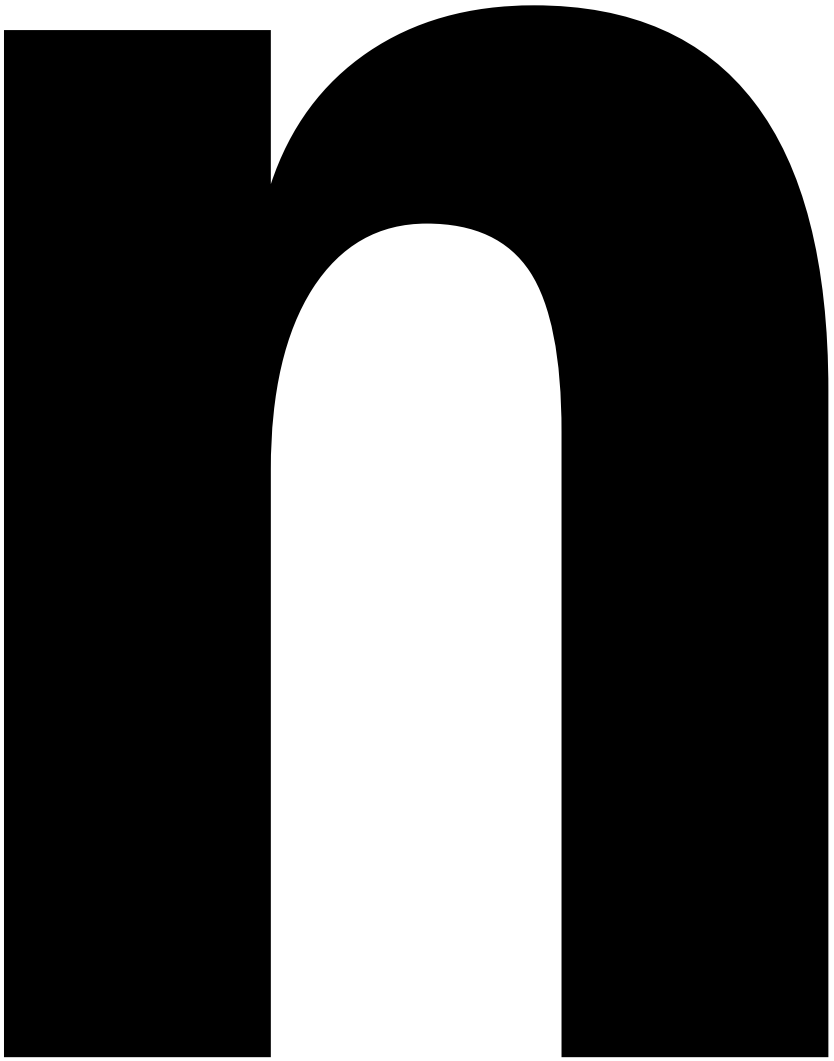
S



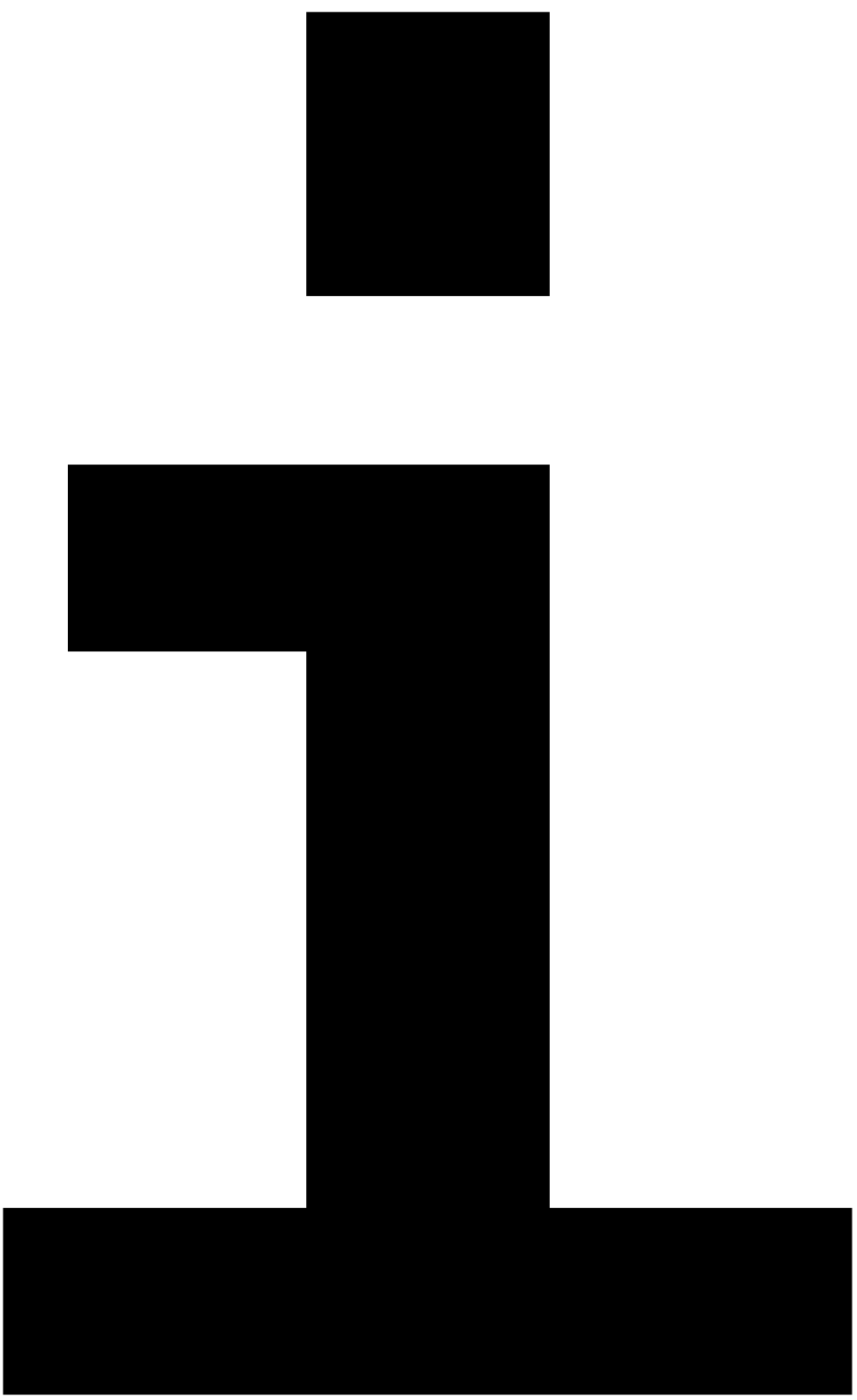


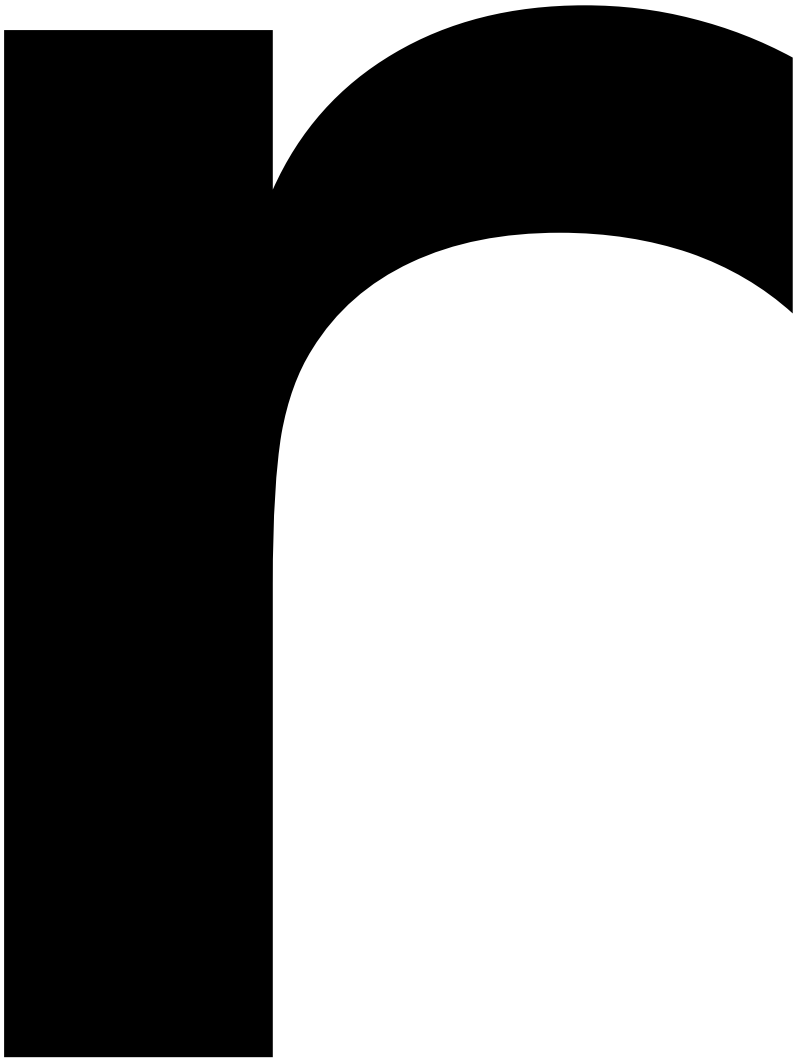




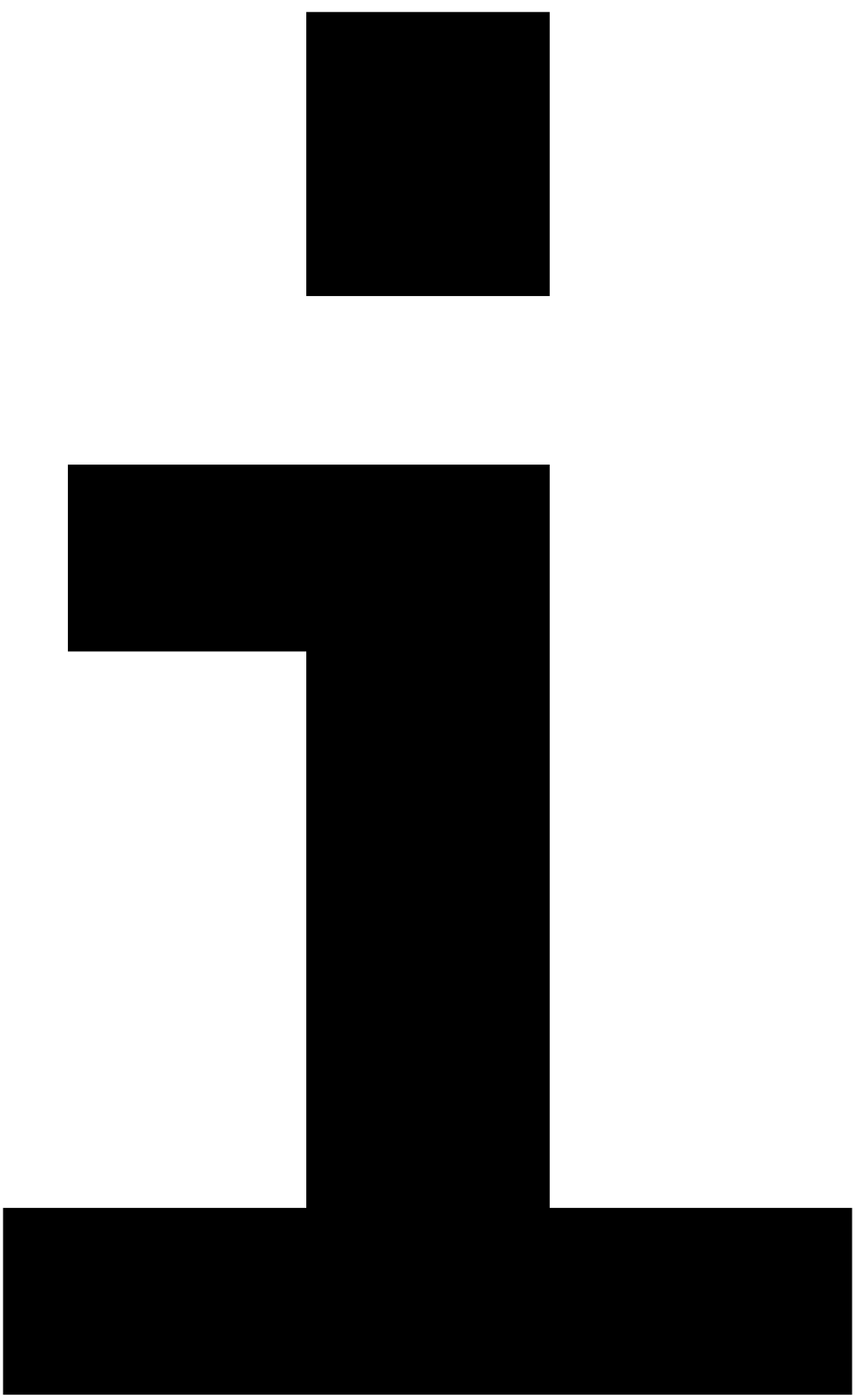


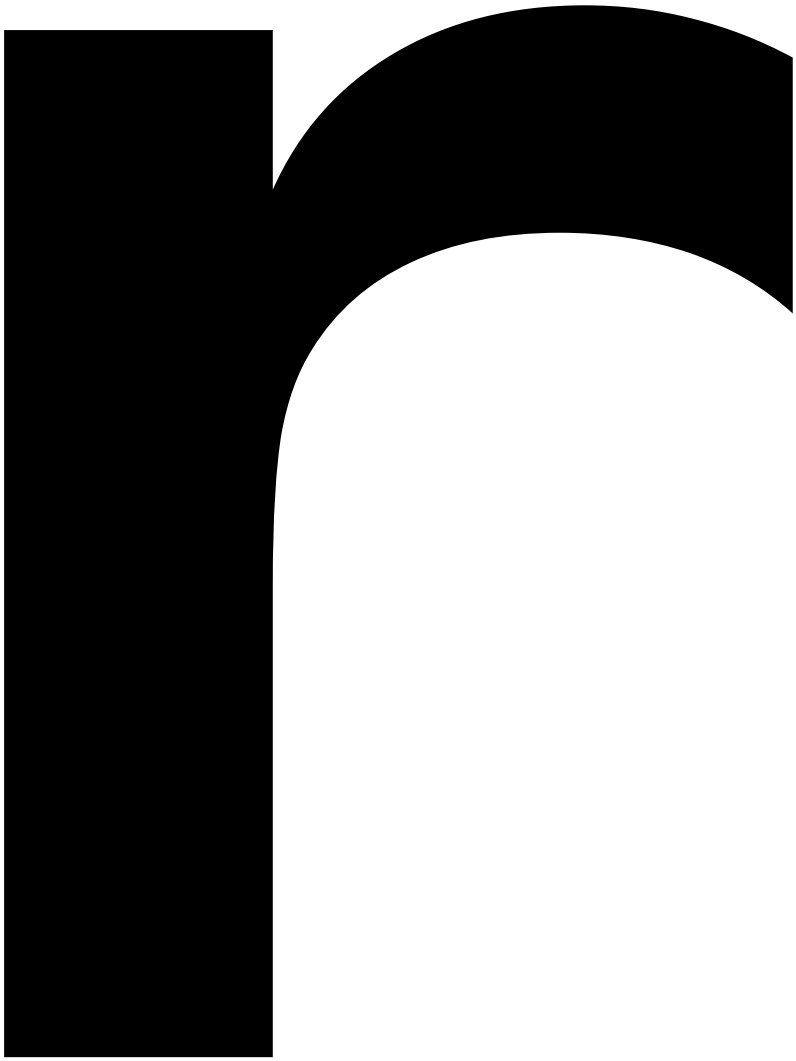
d

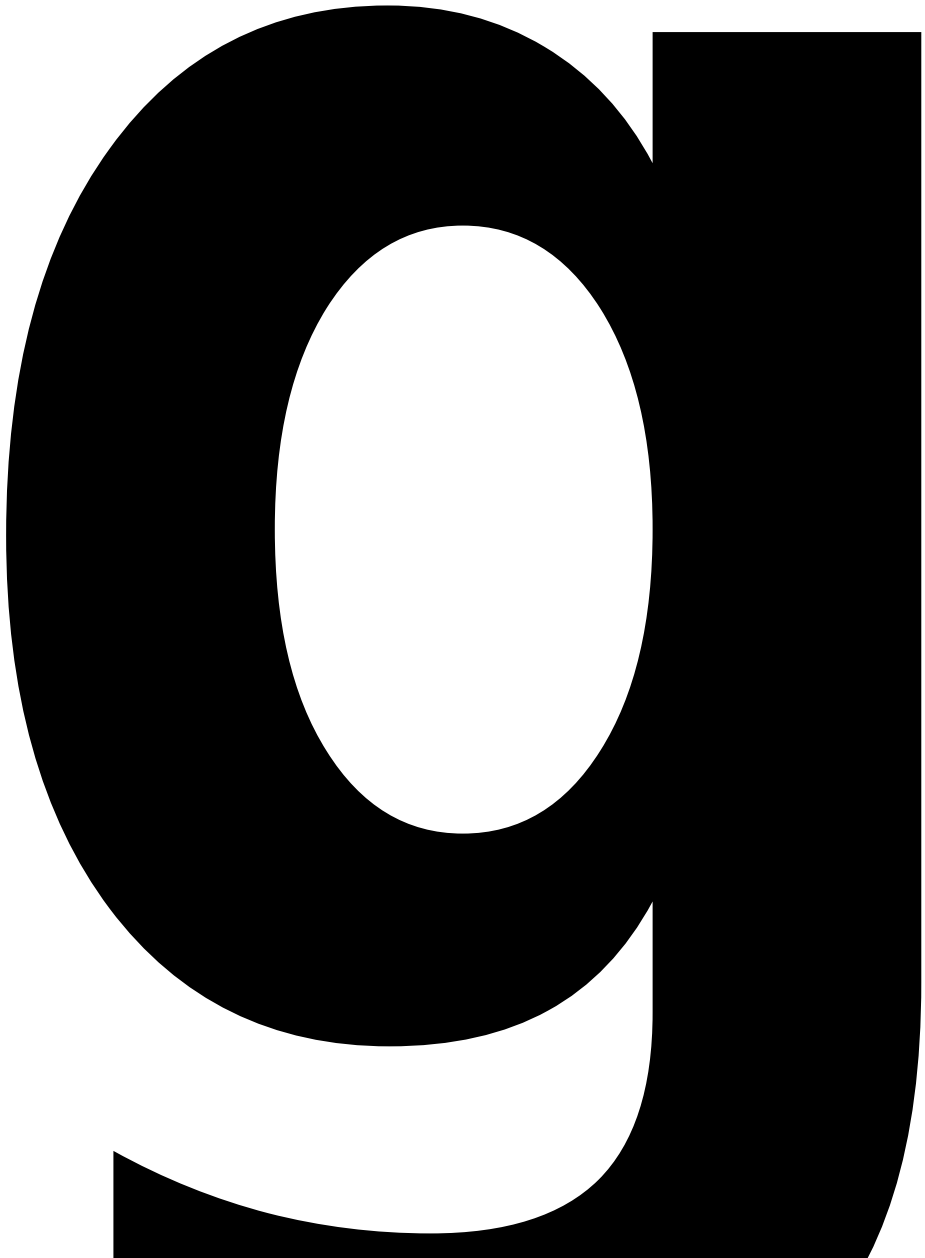


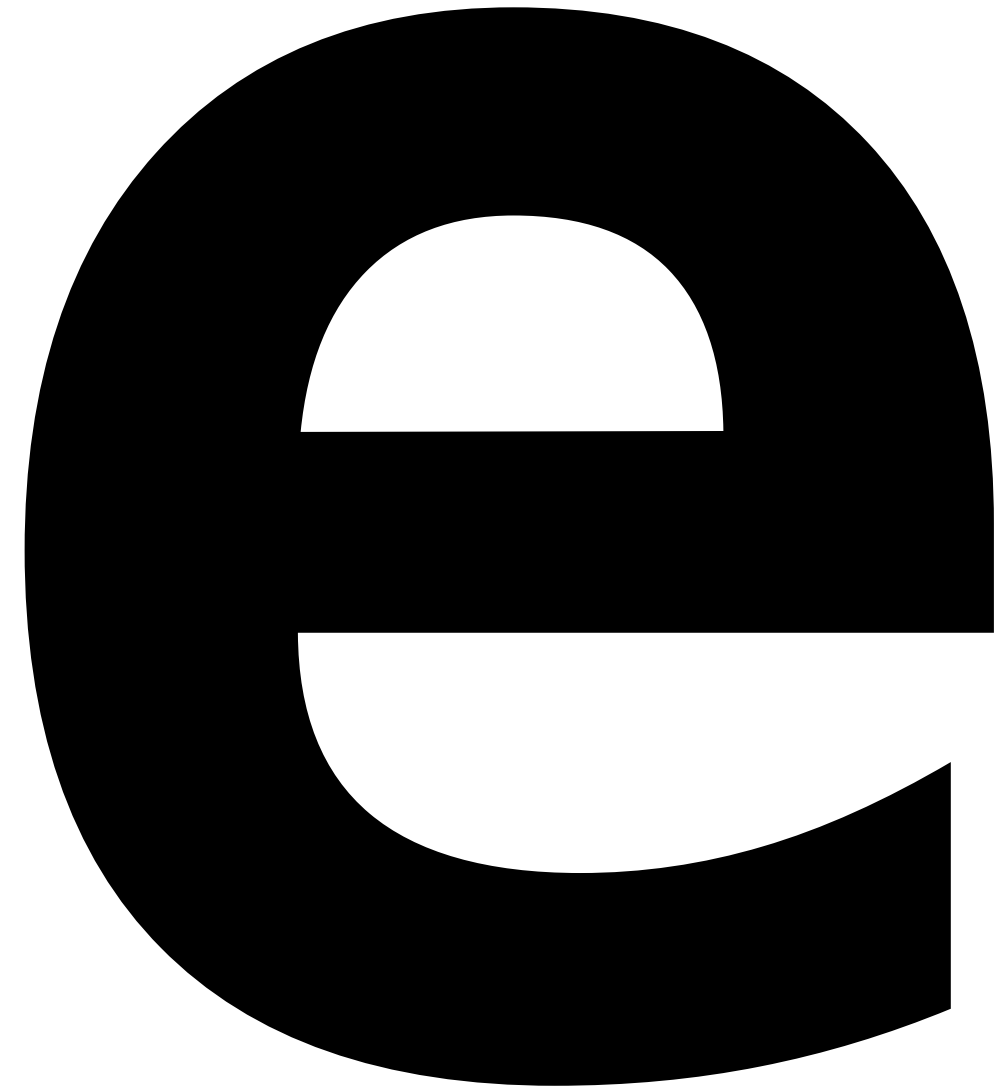


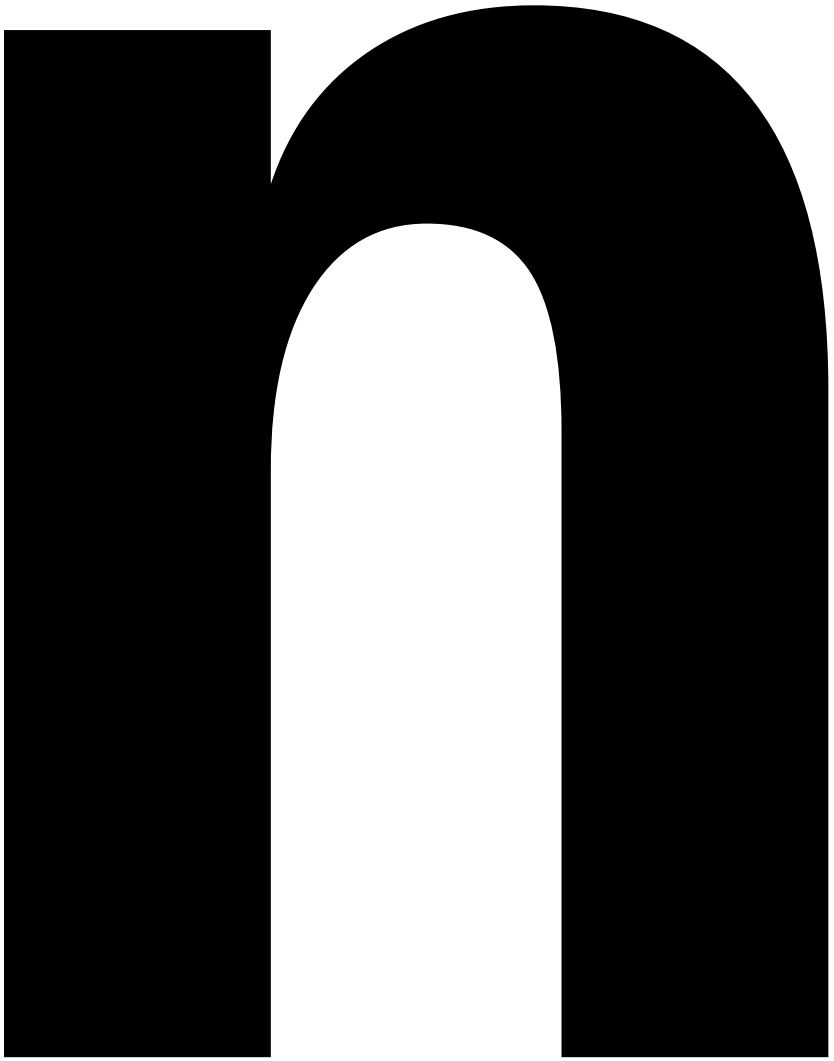
d



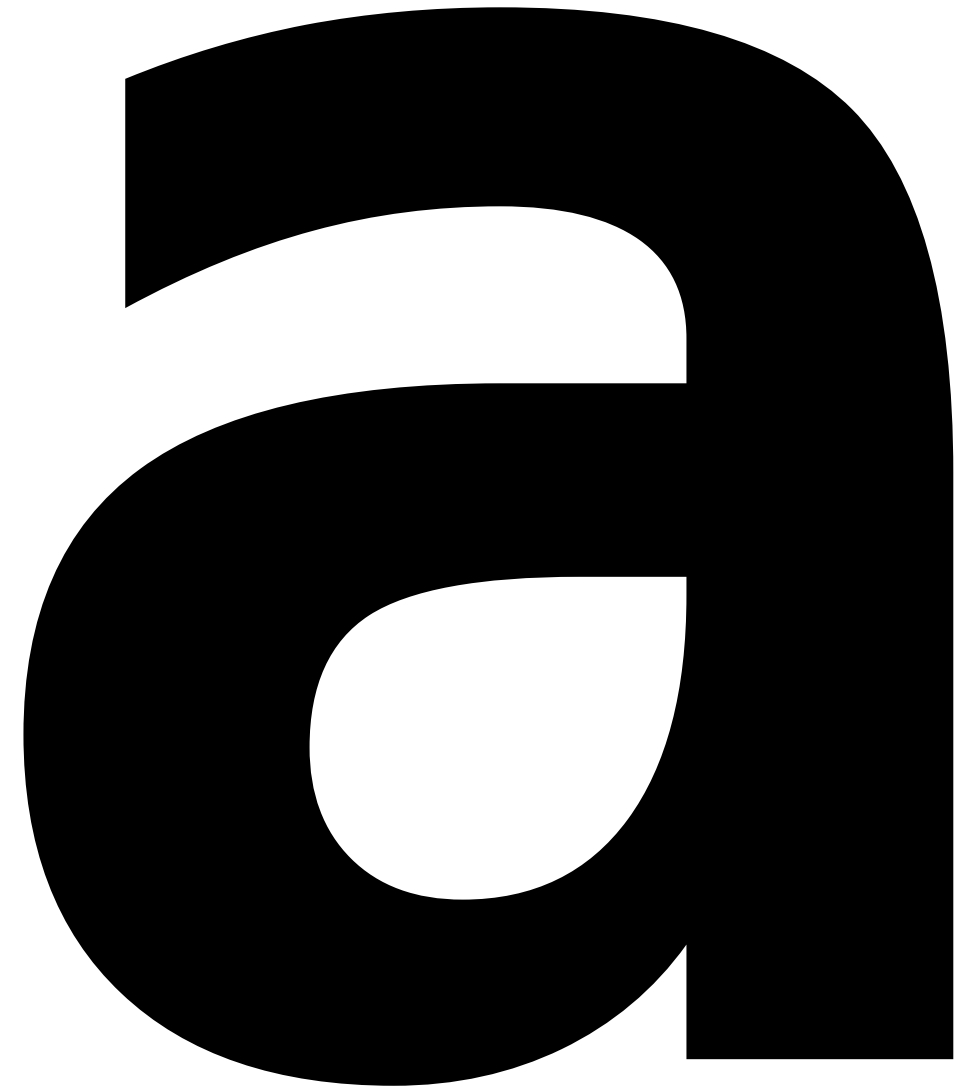


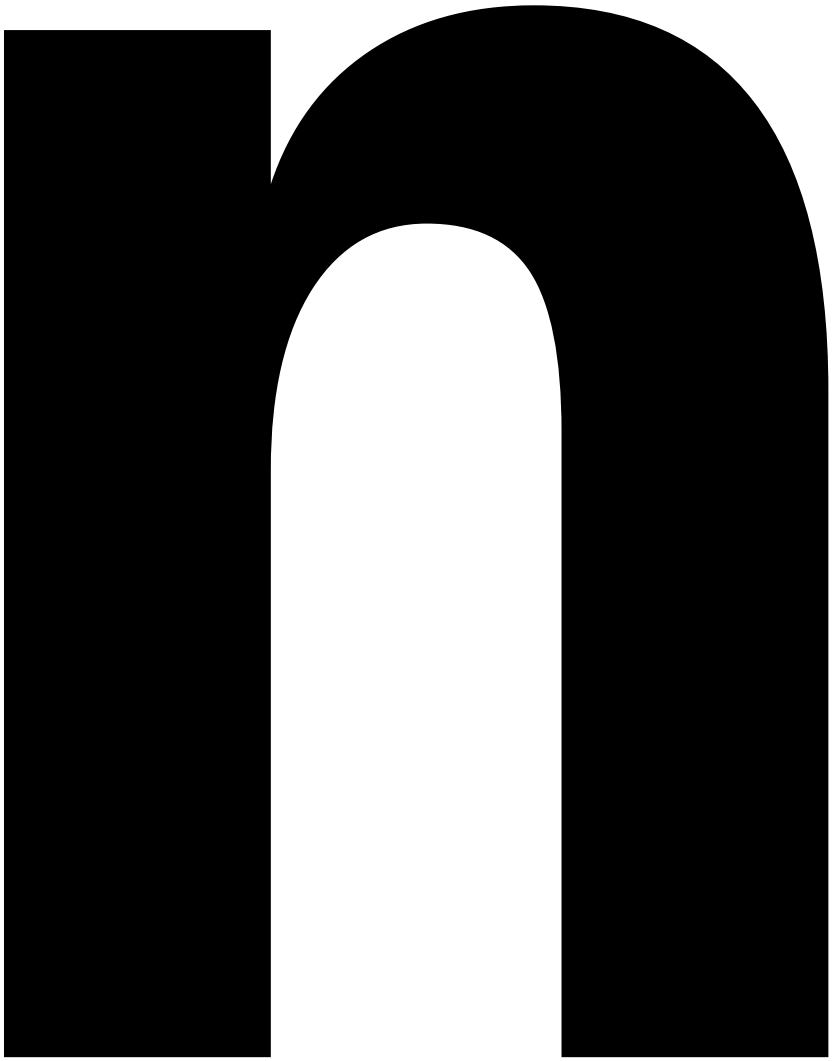


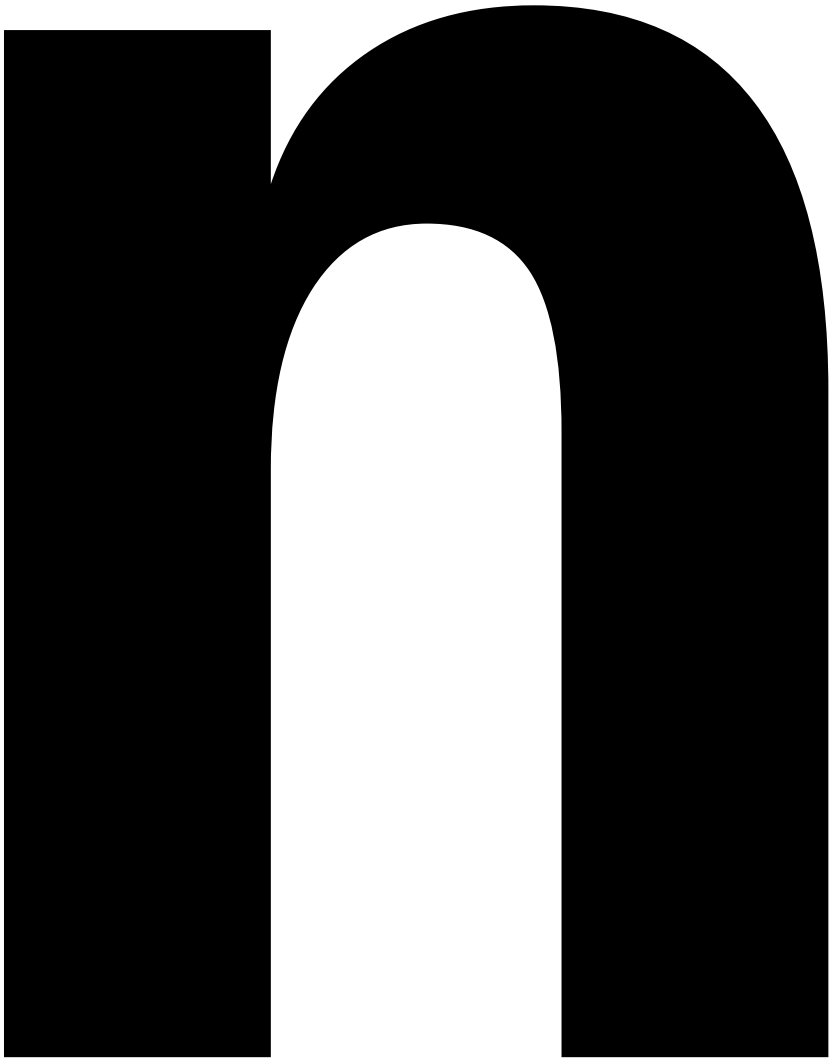




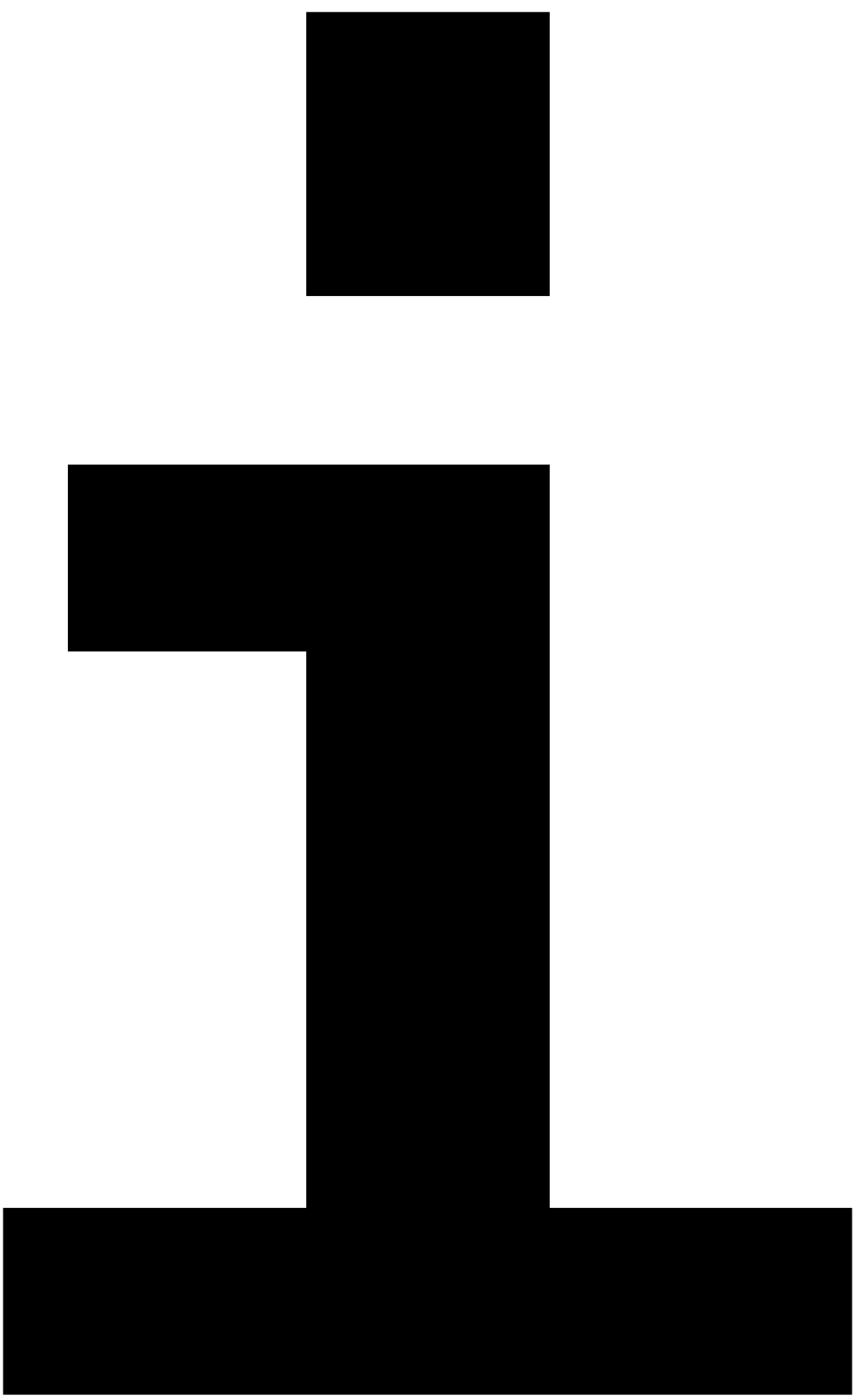
d

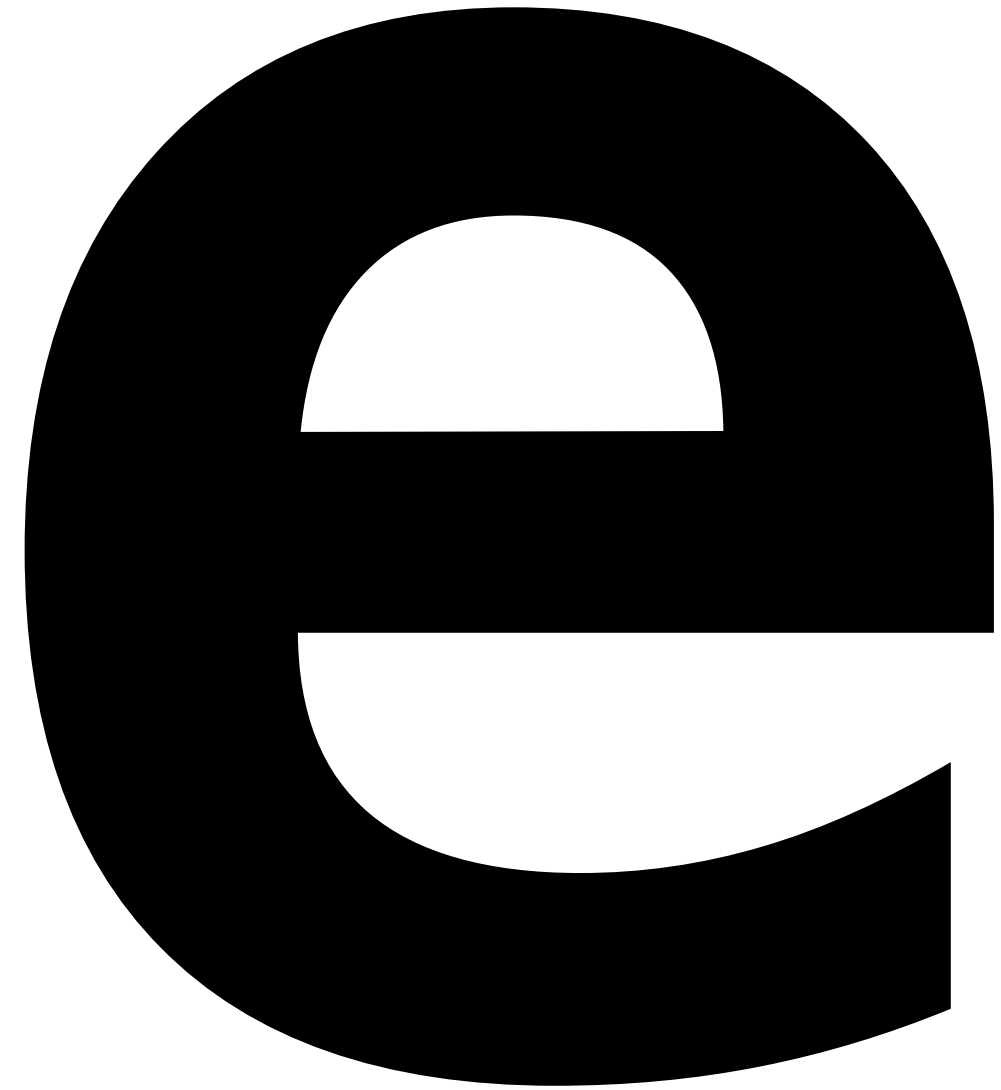


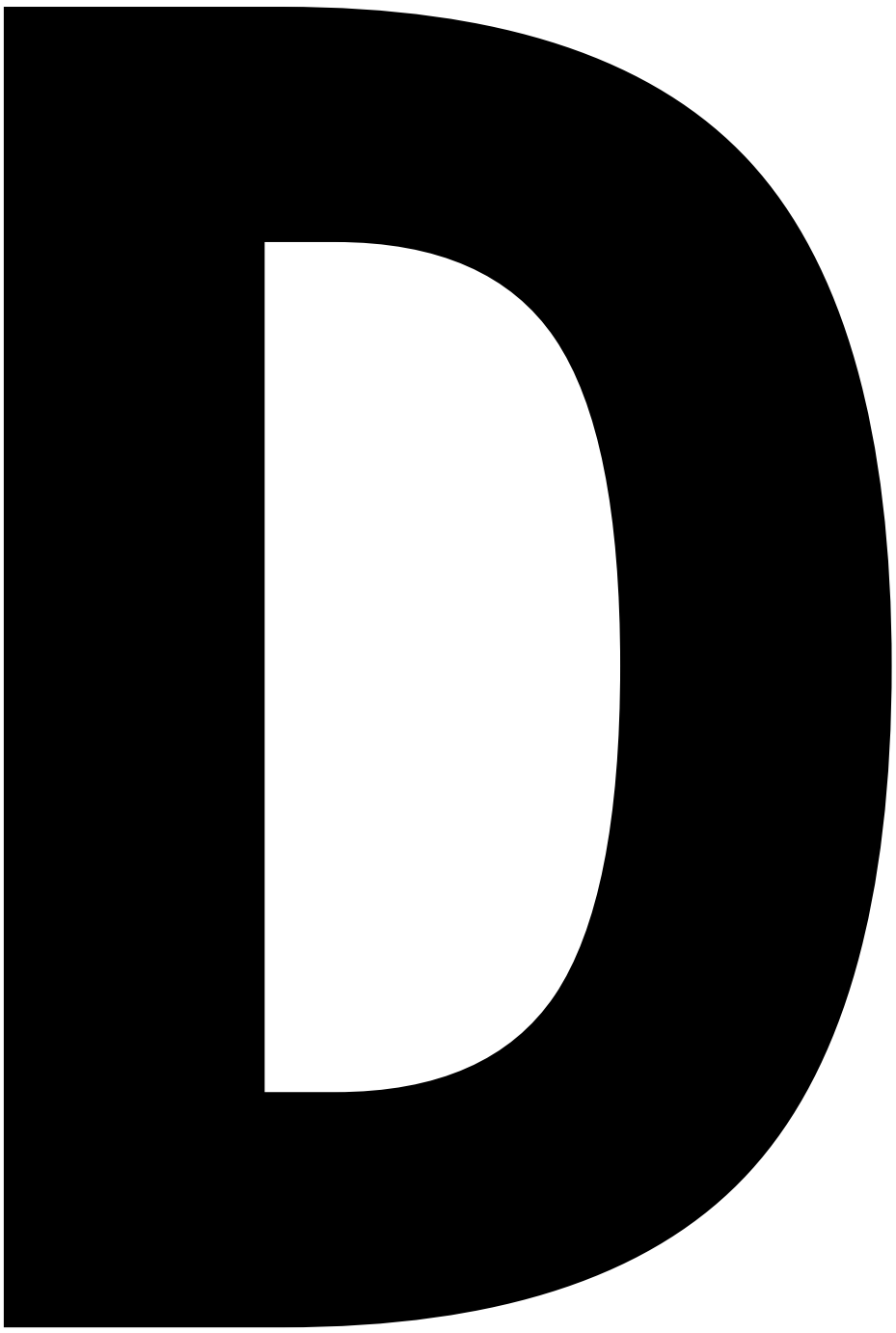


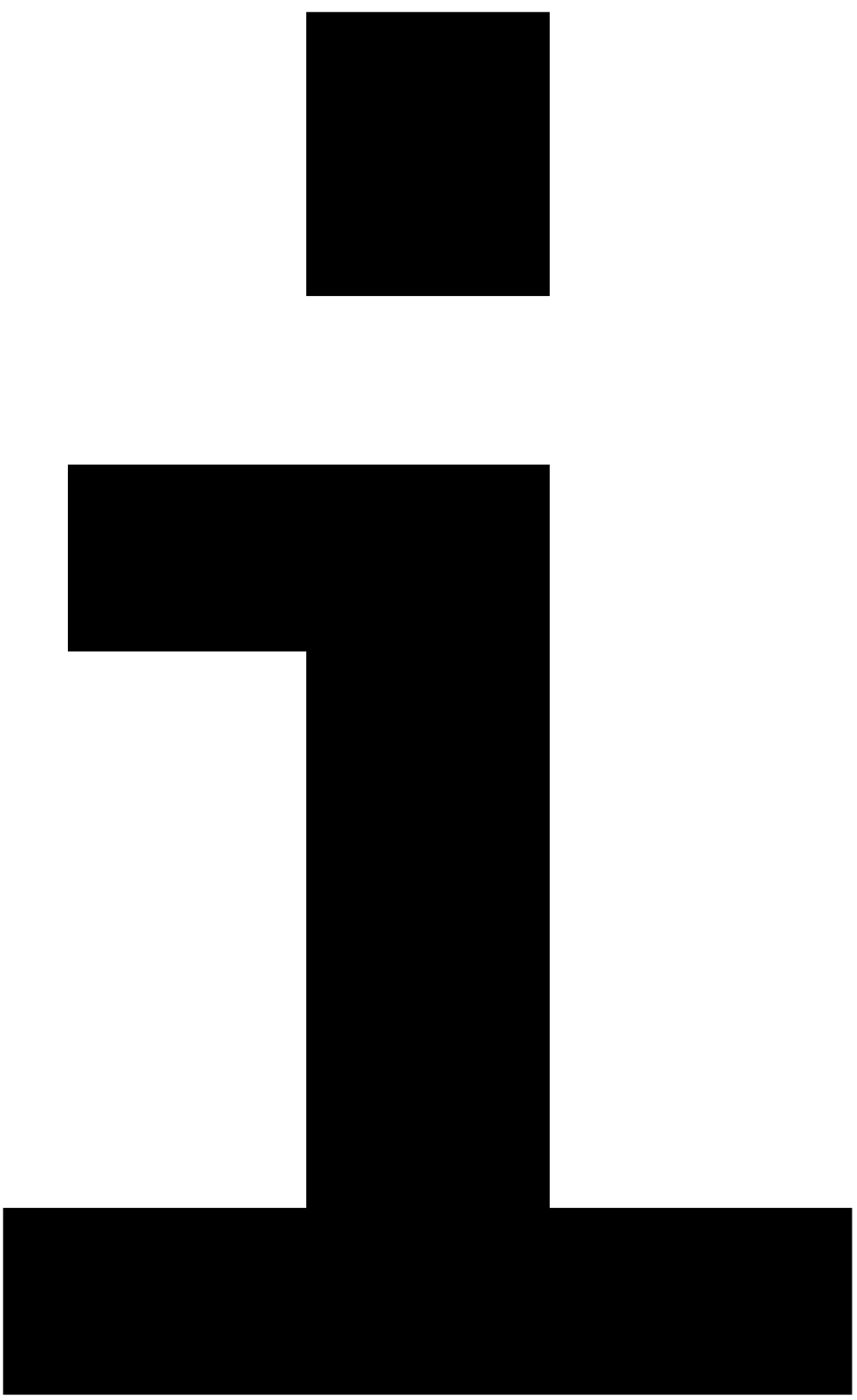


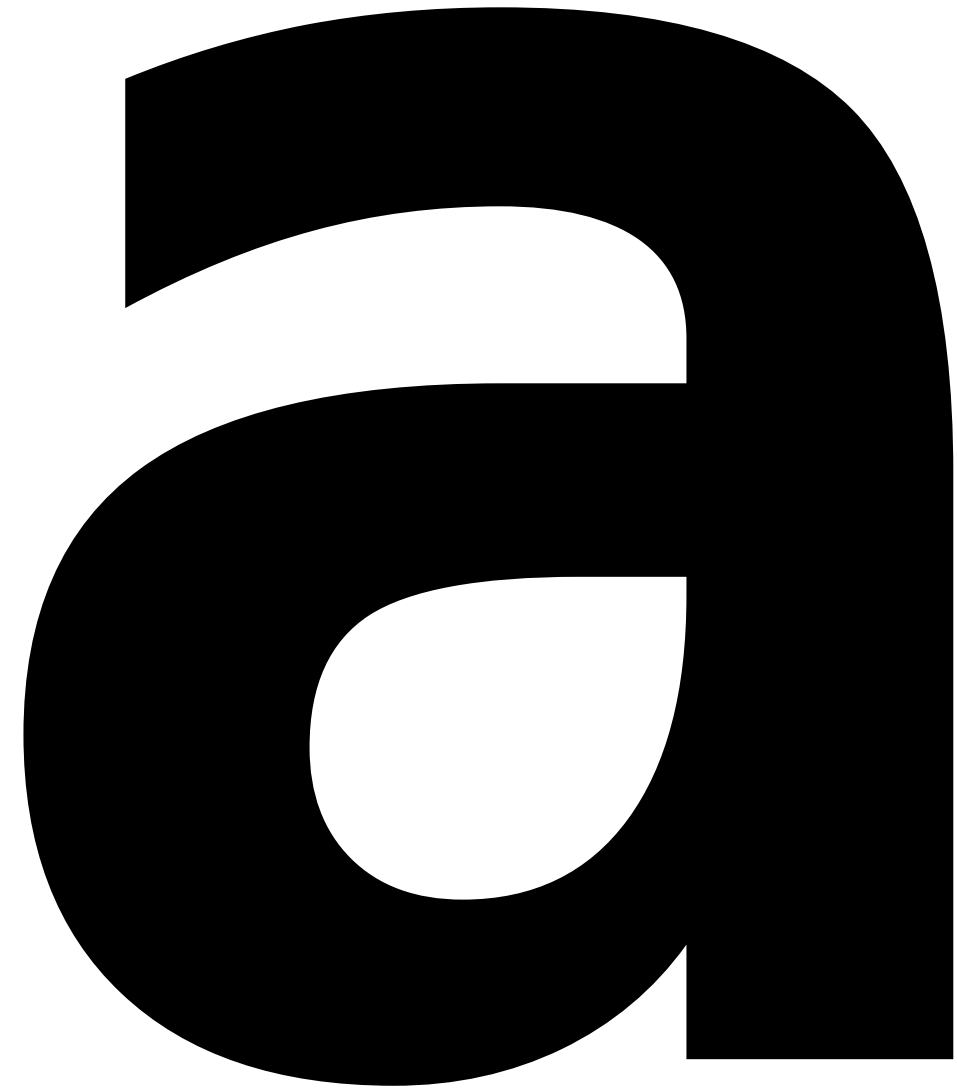
d

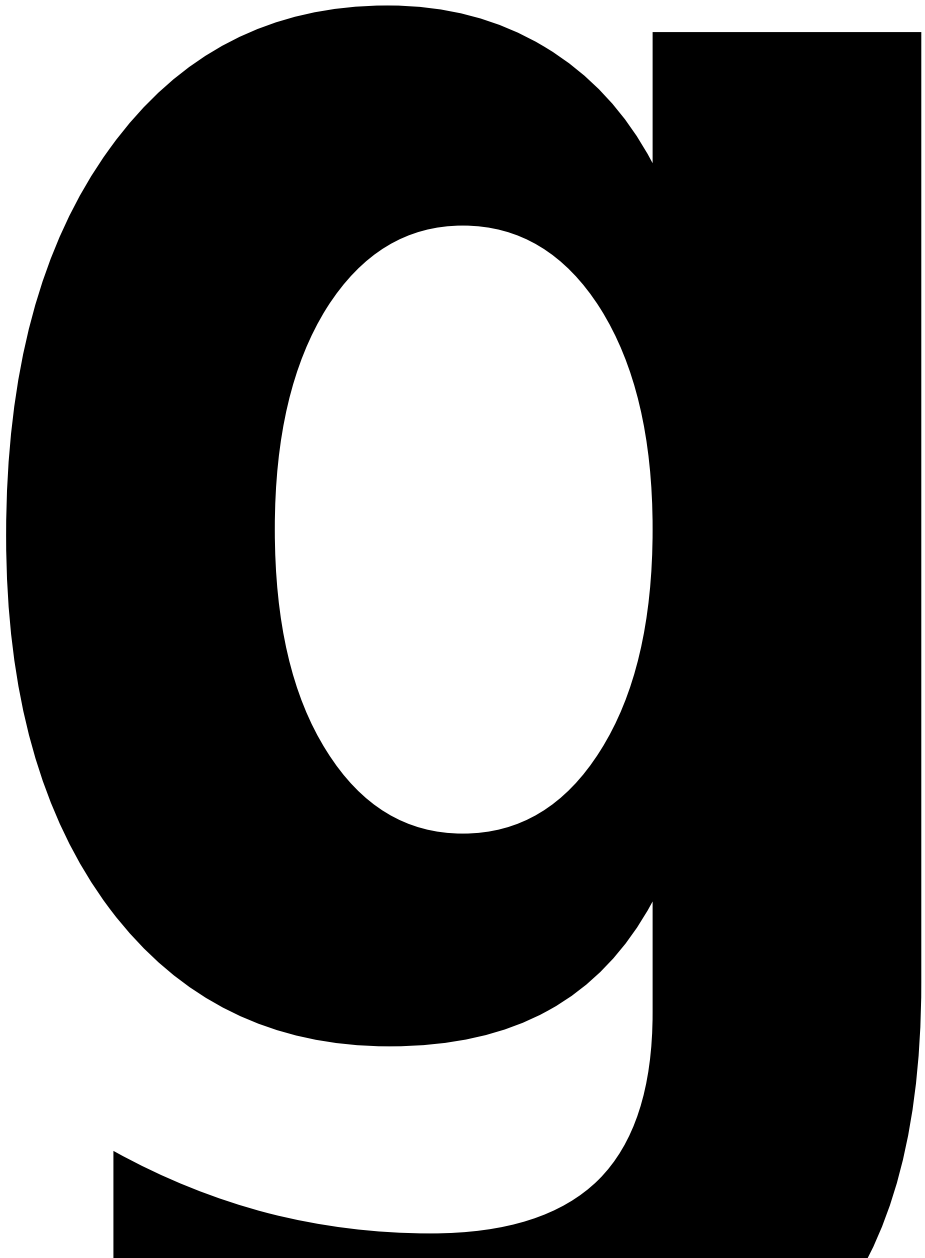


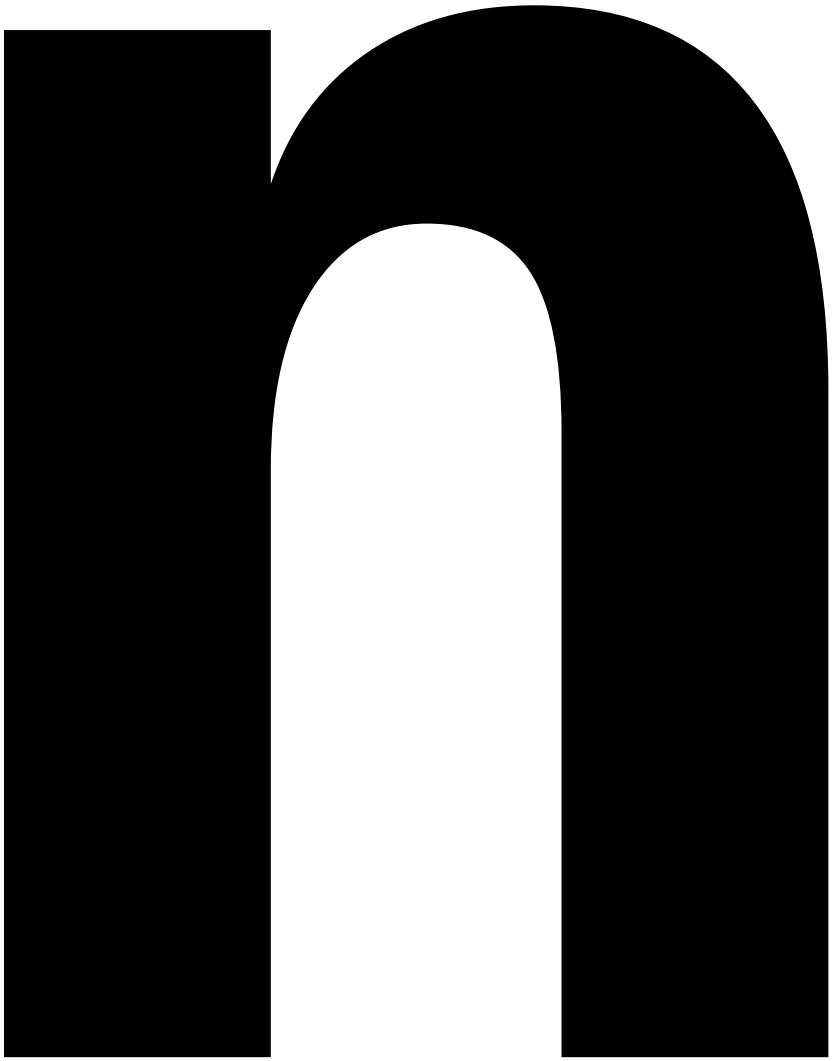


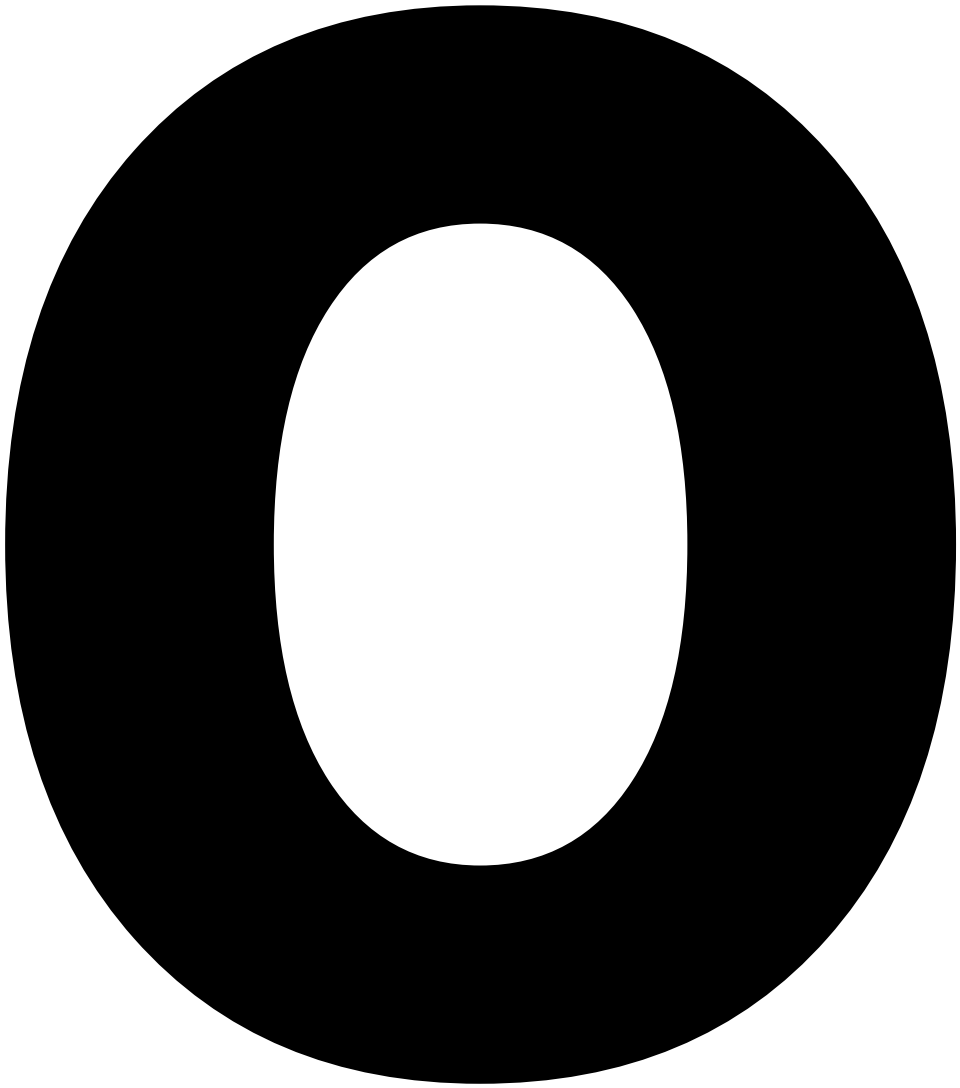




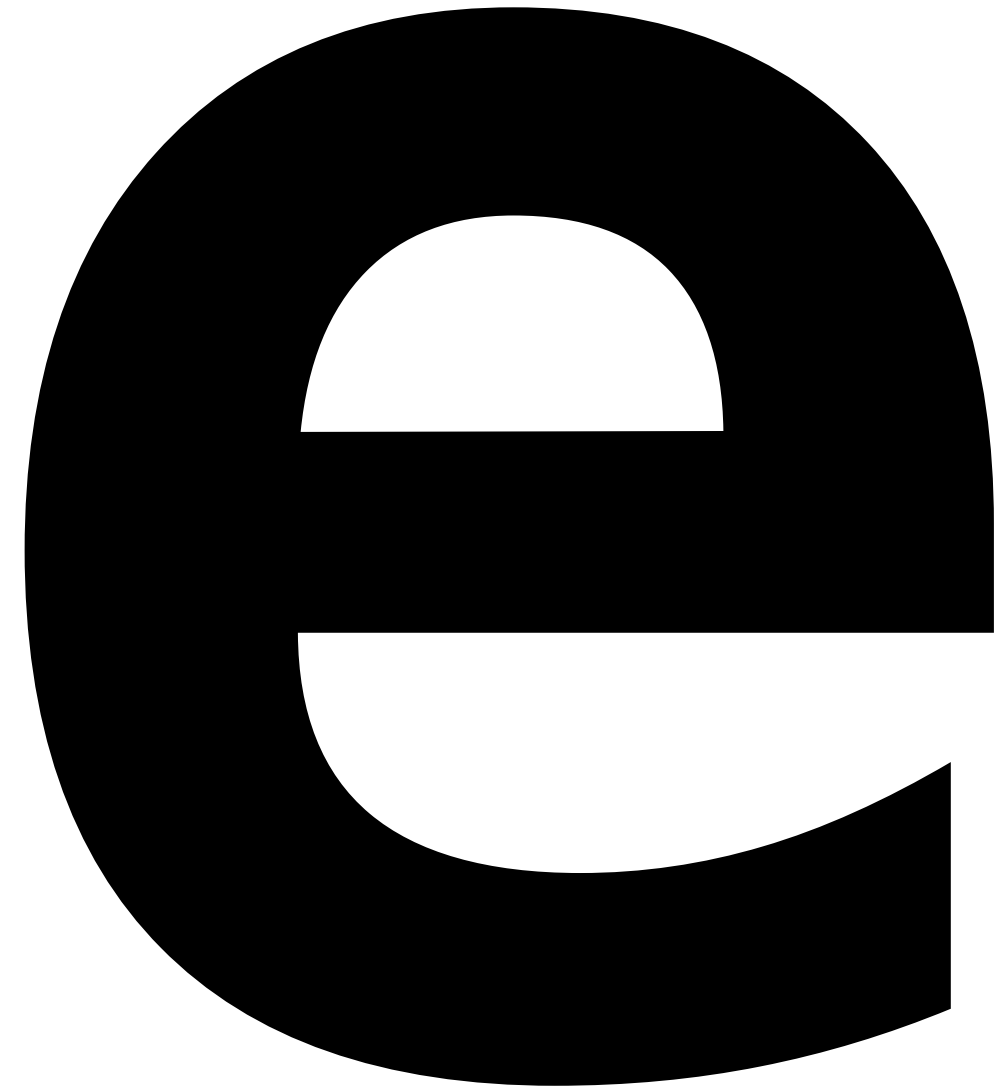


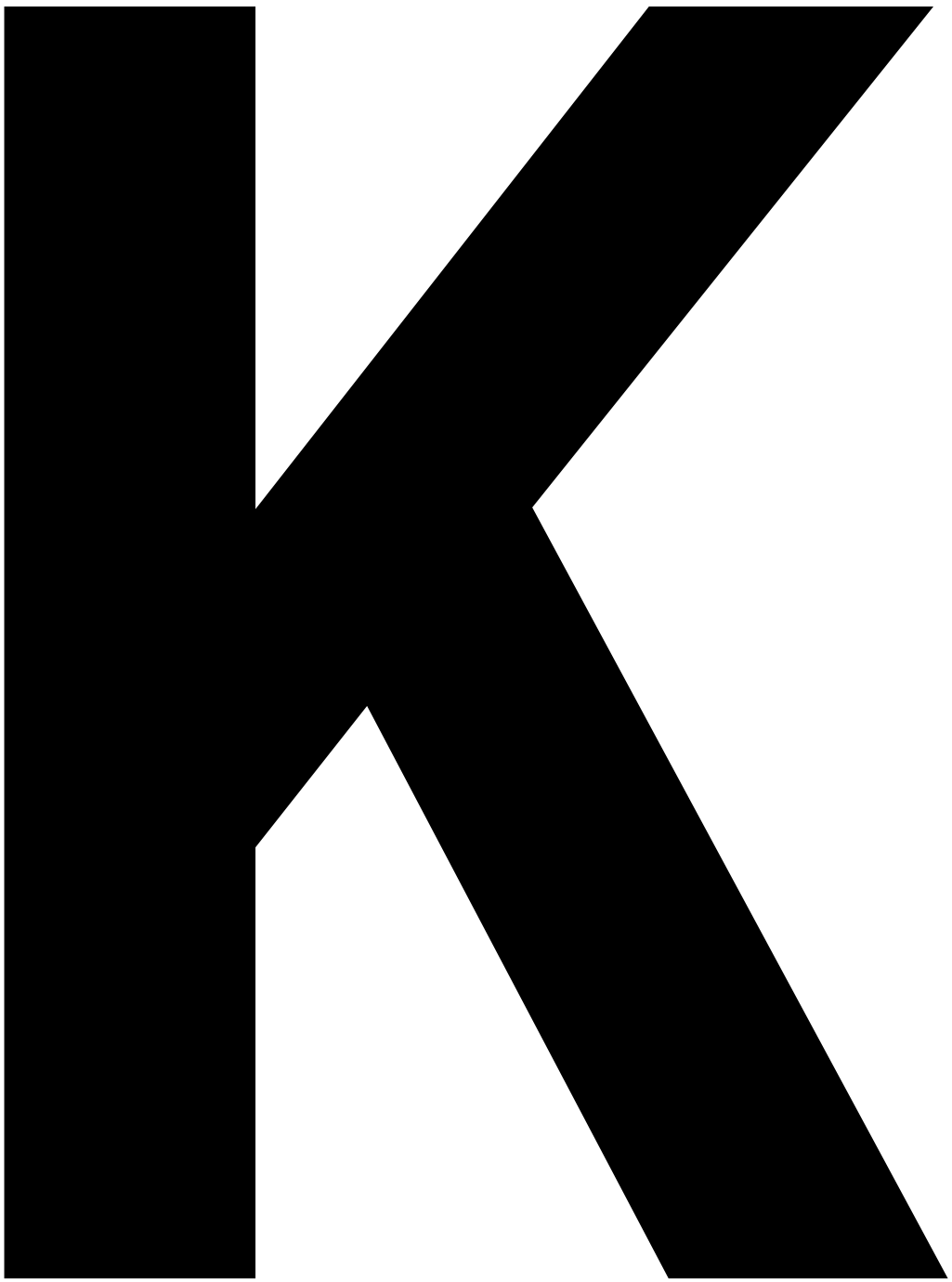


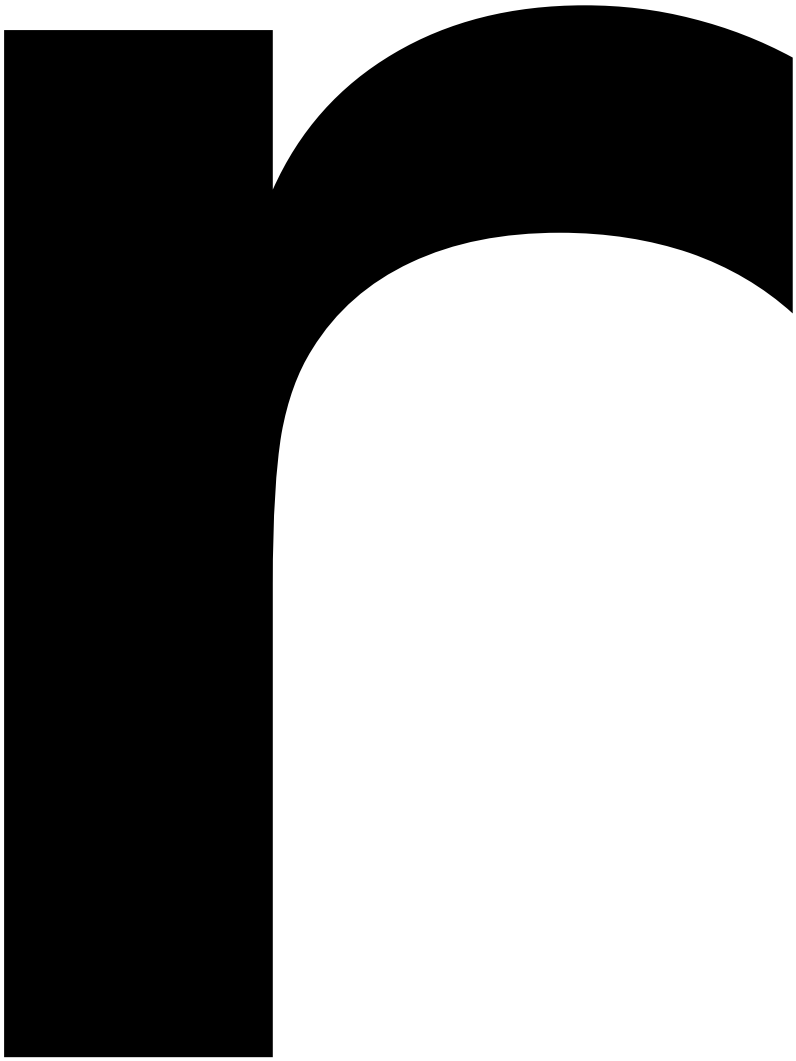


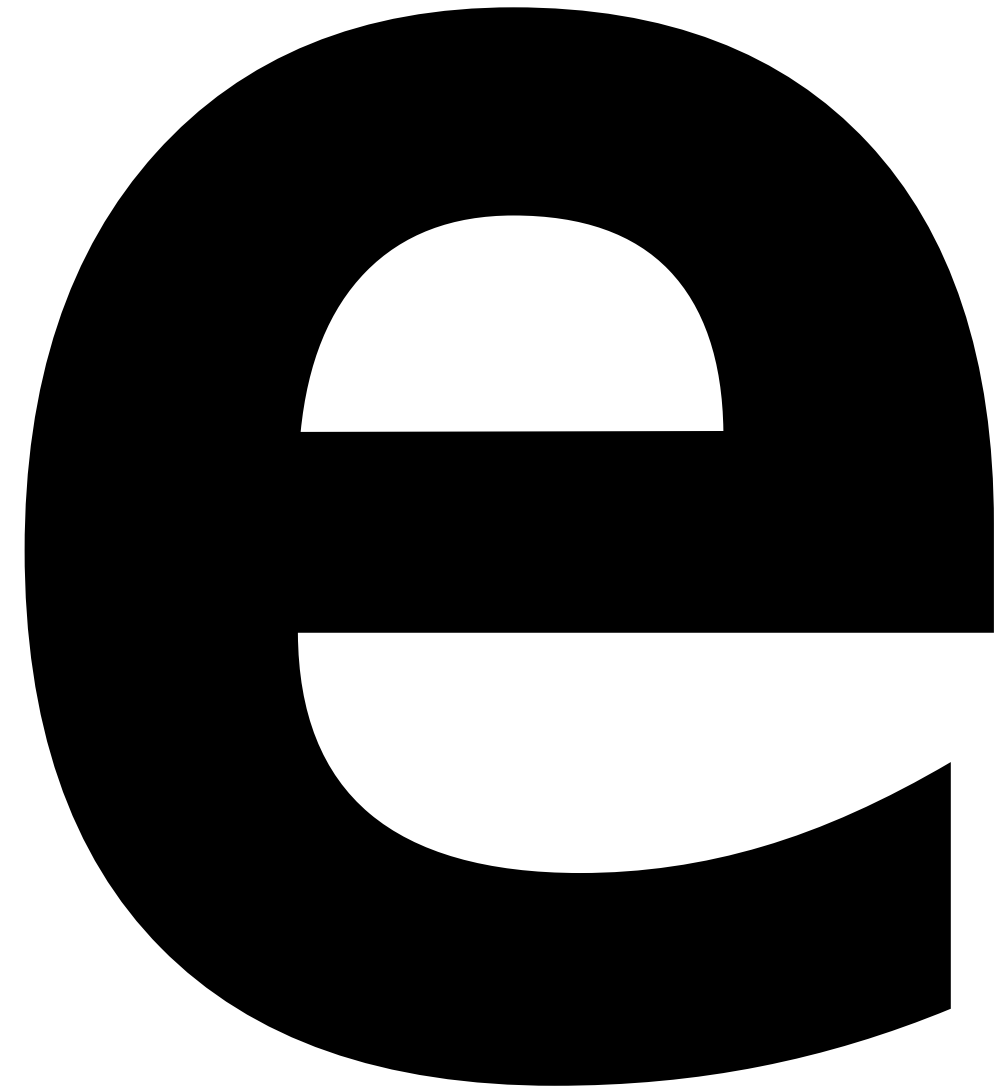


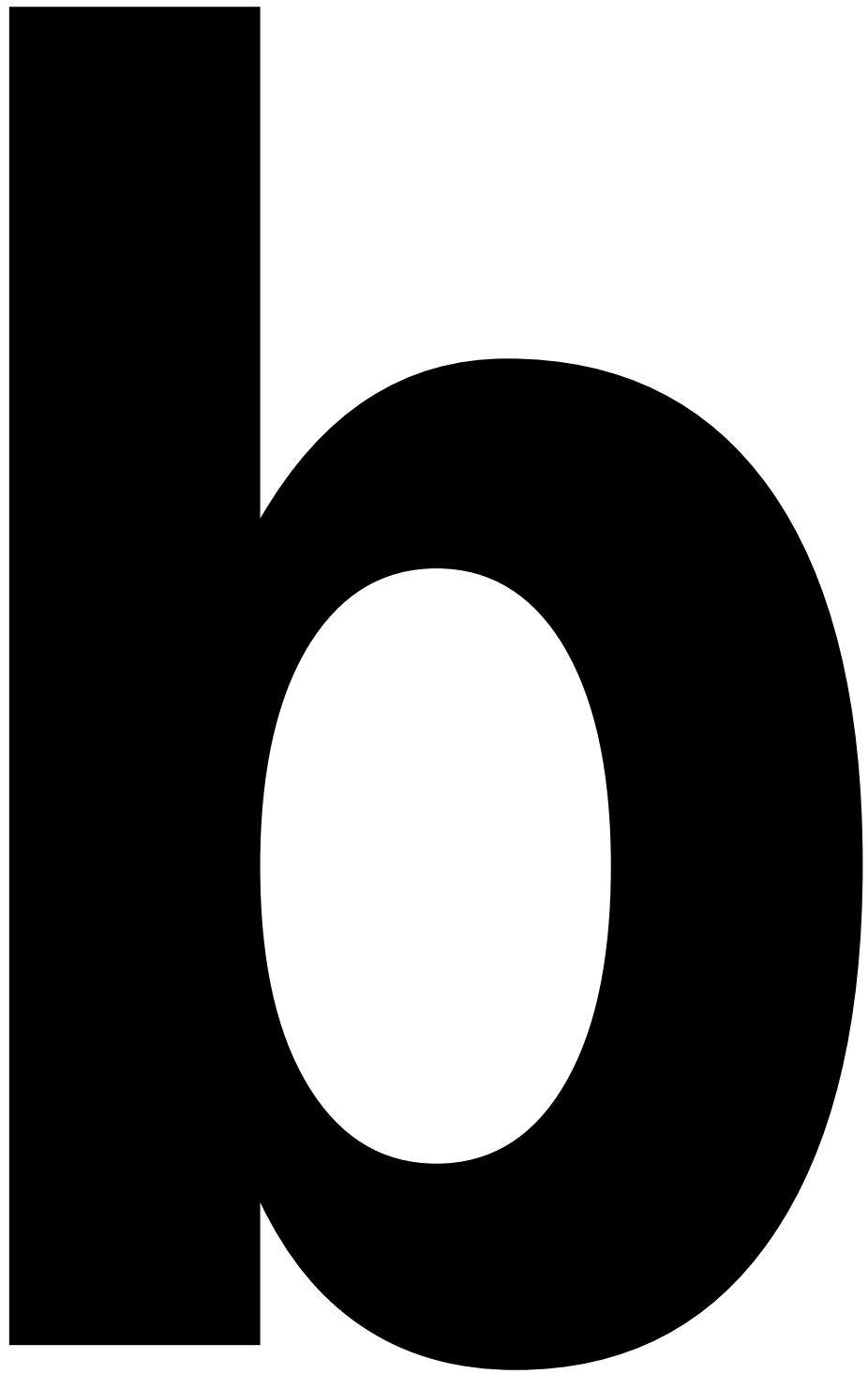
S



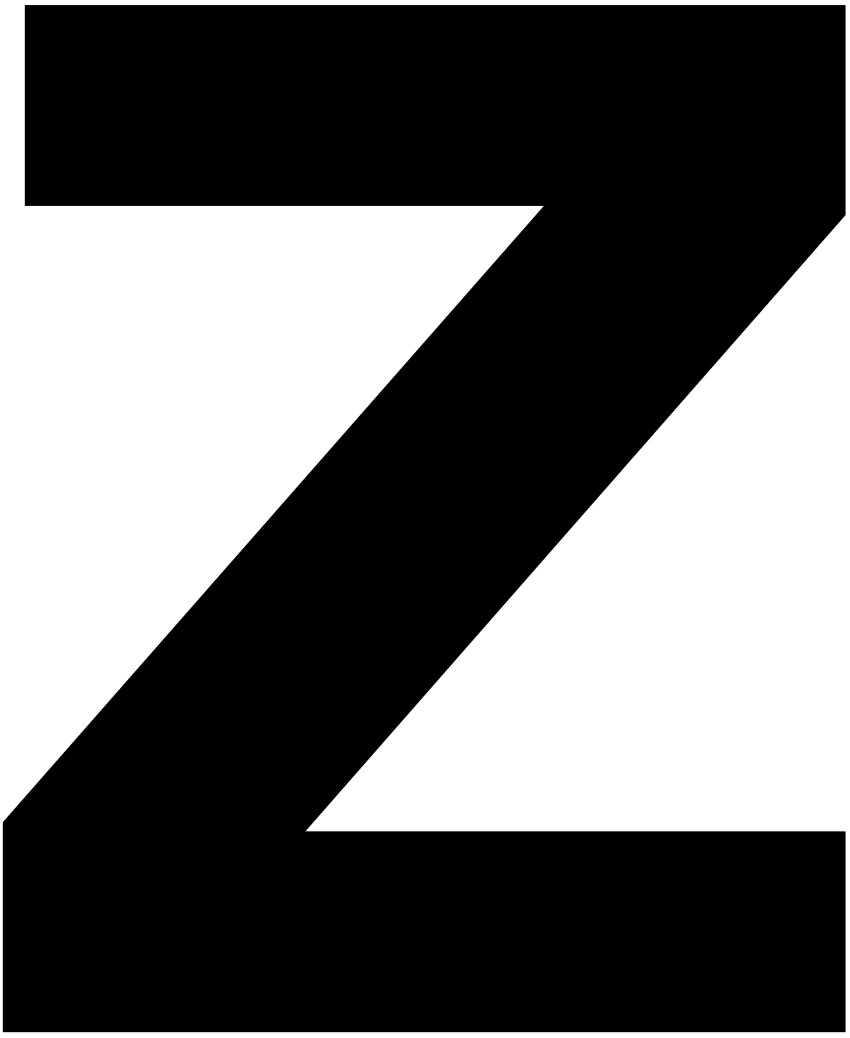




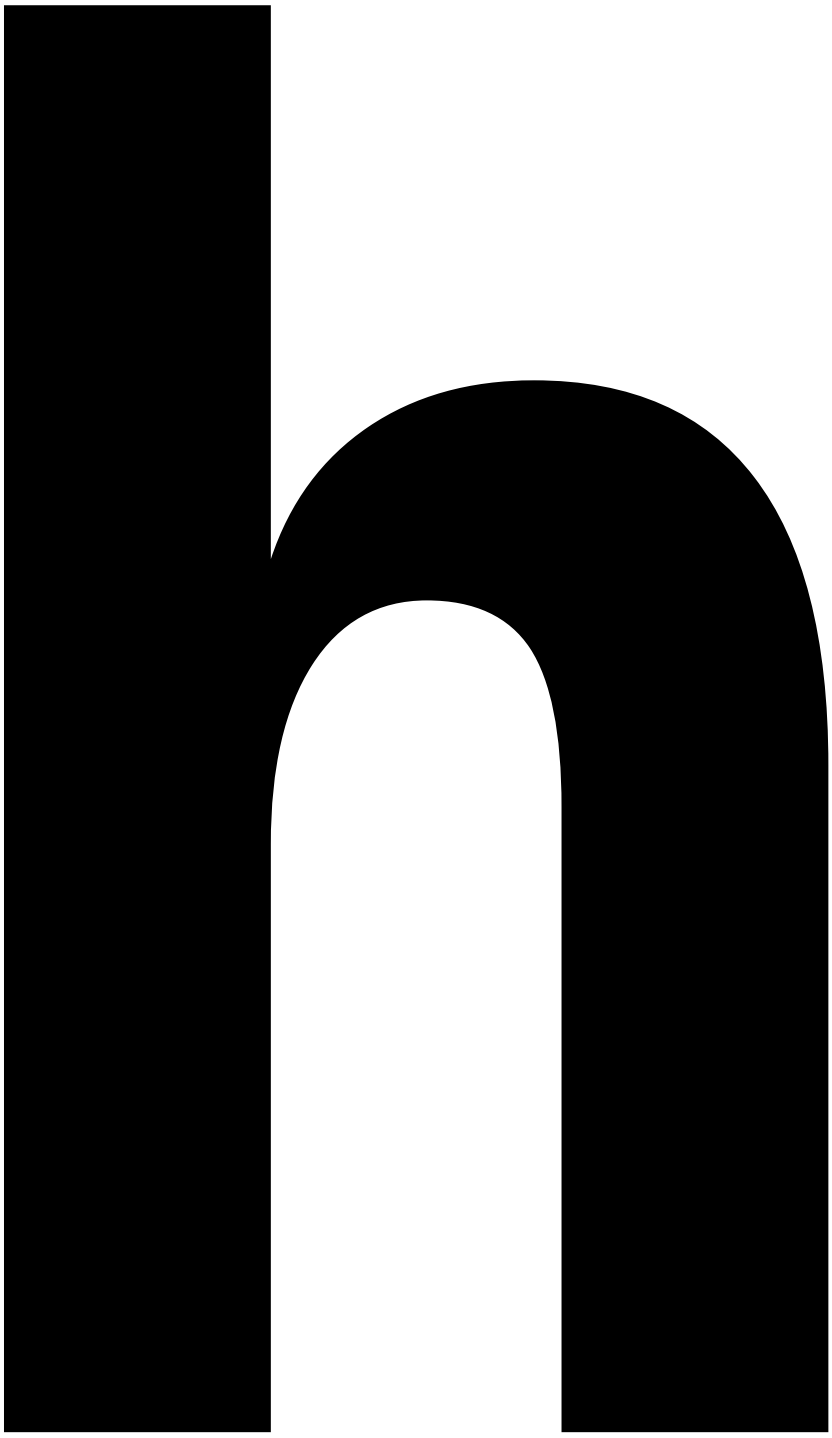


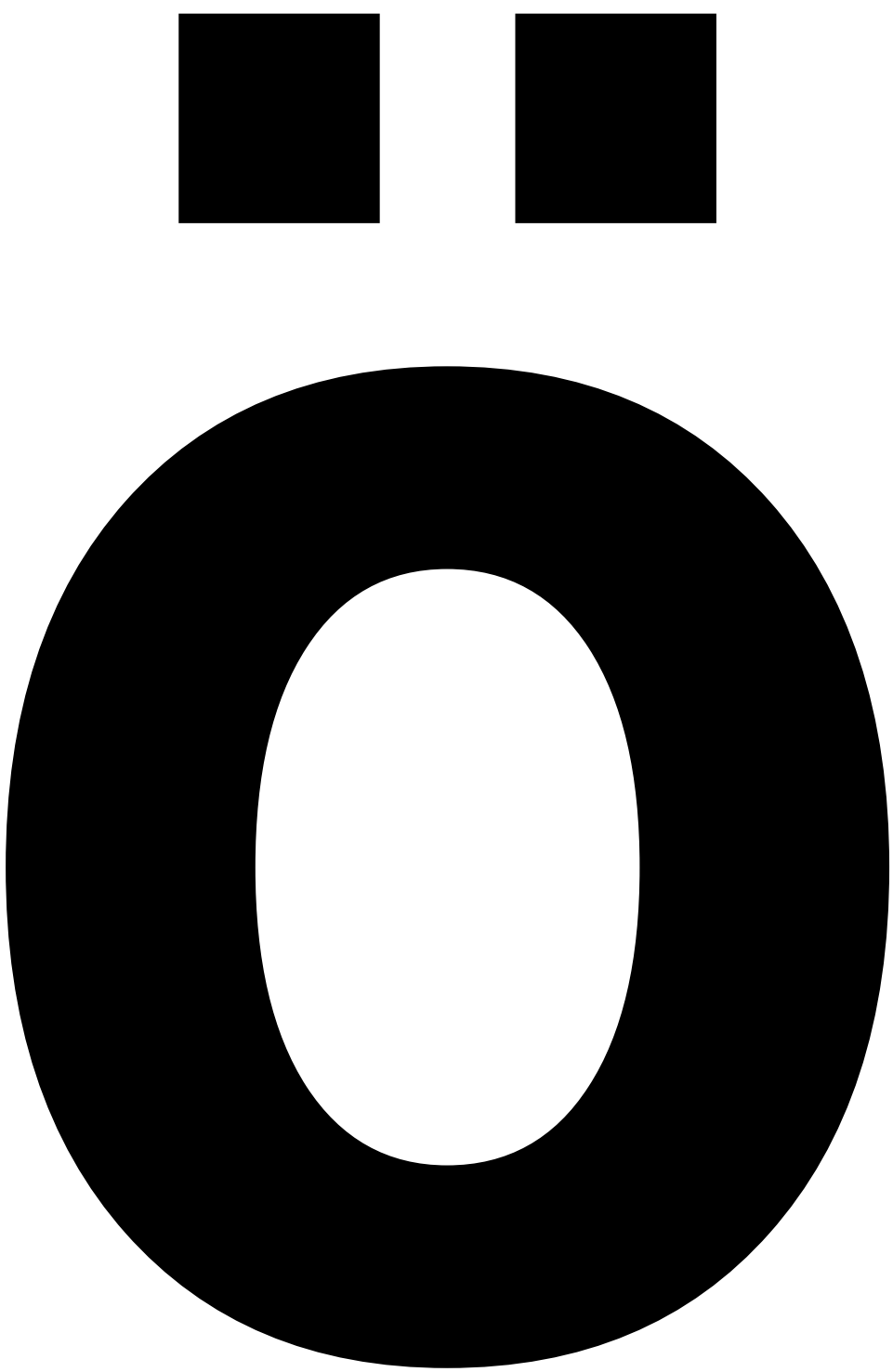


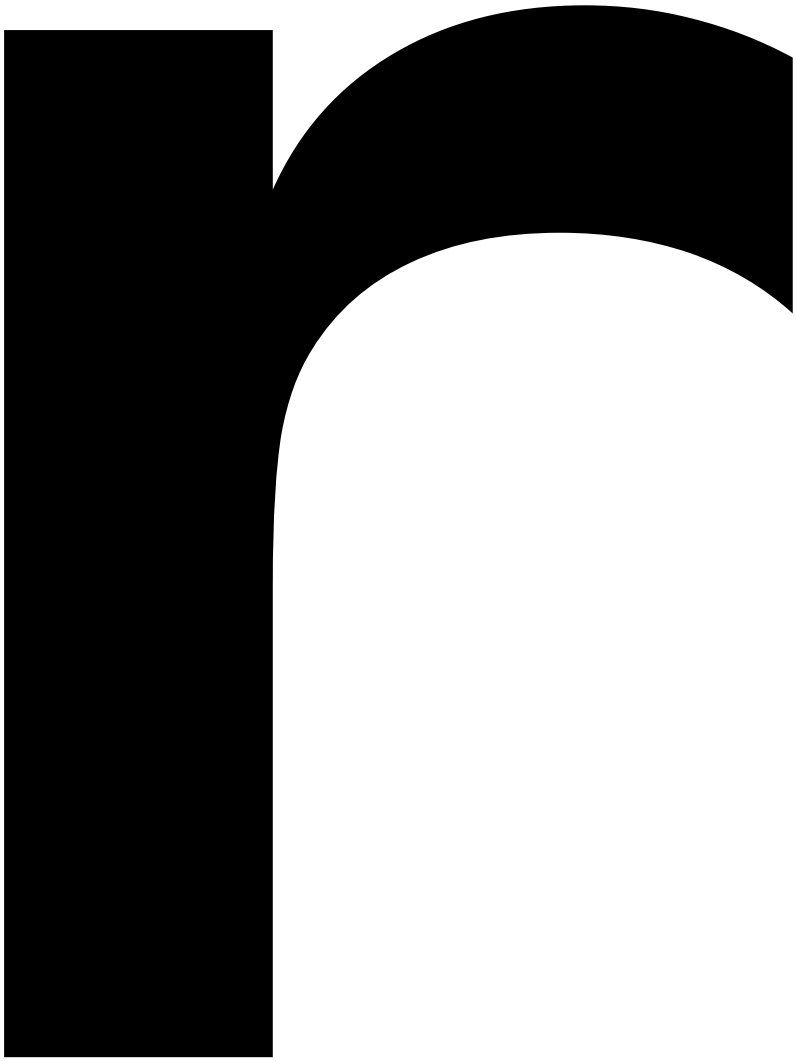
S

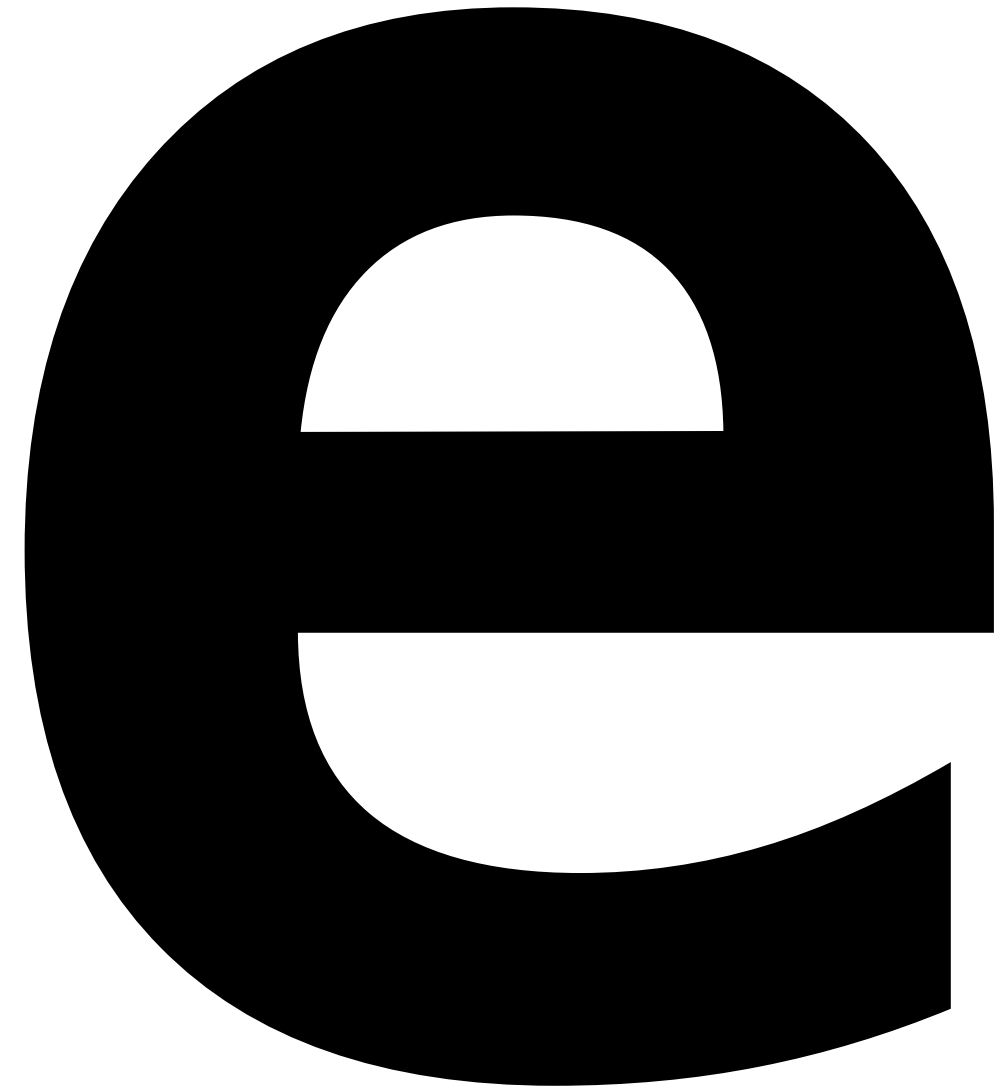


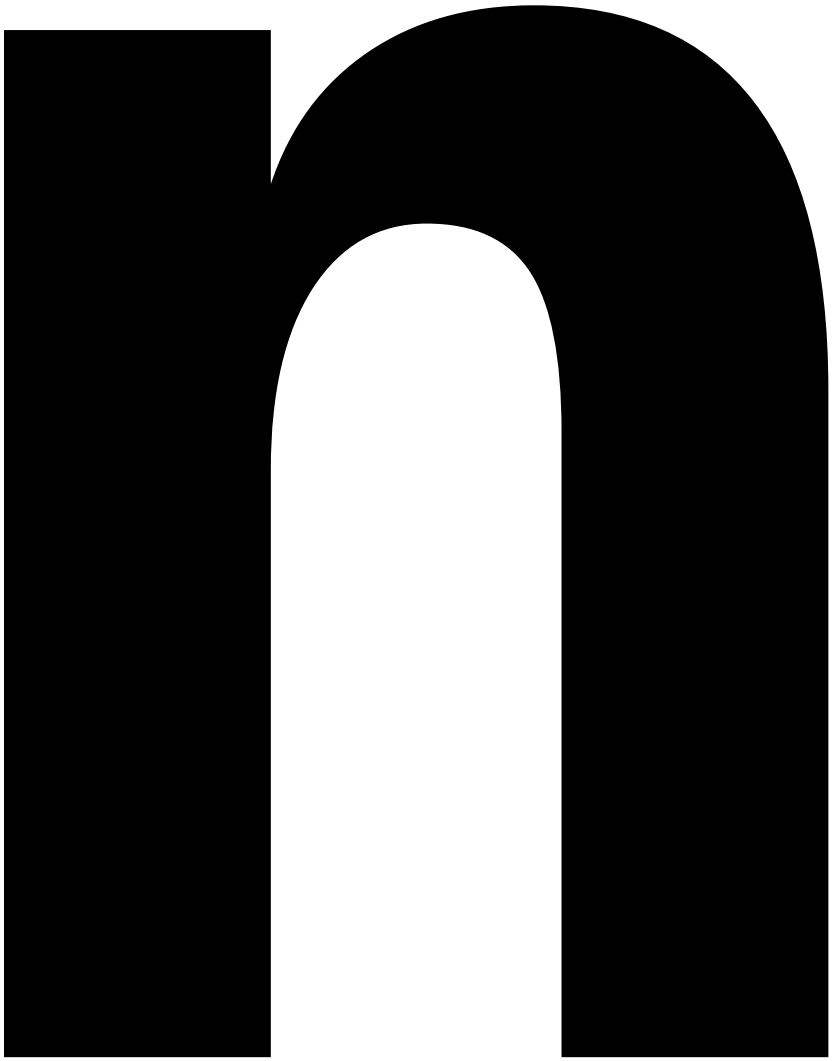
u

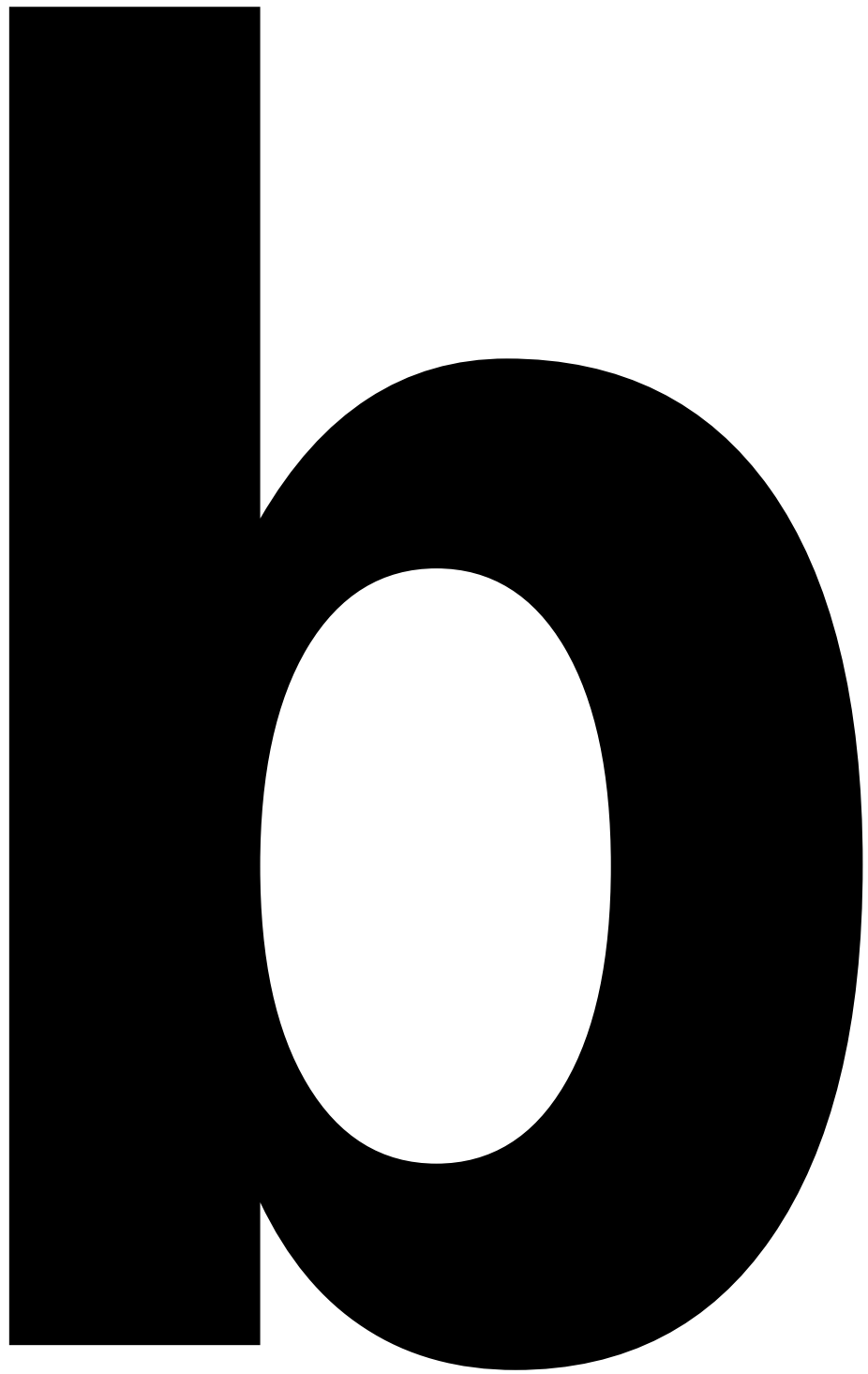


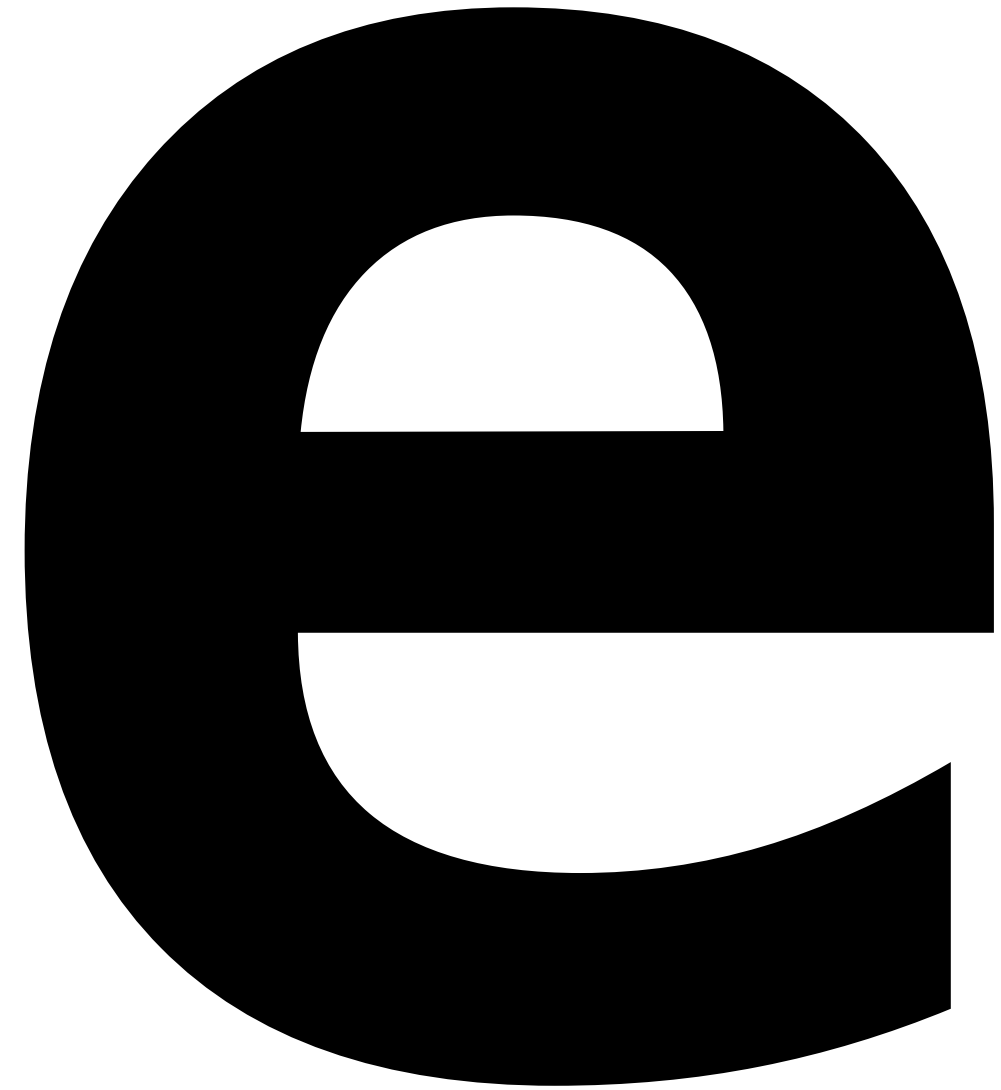


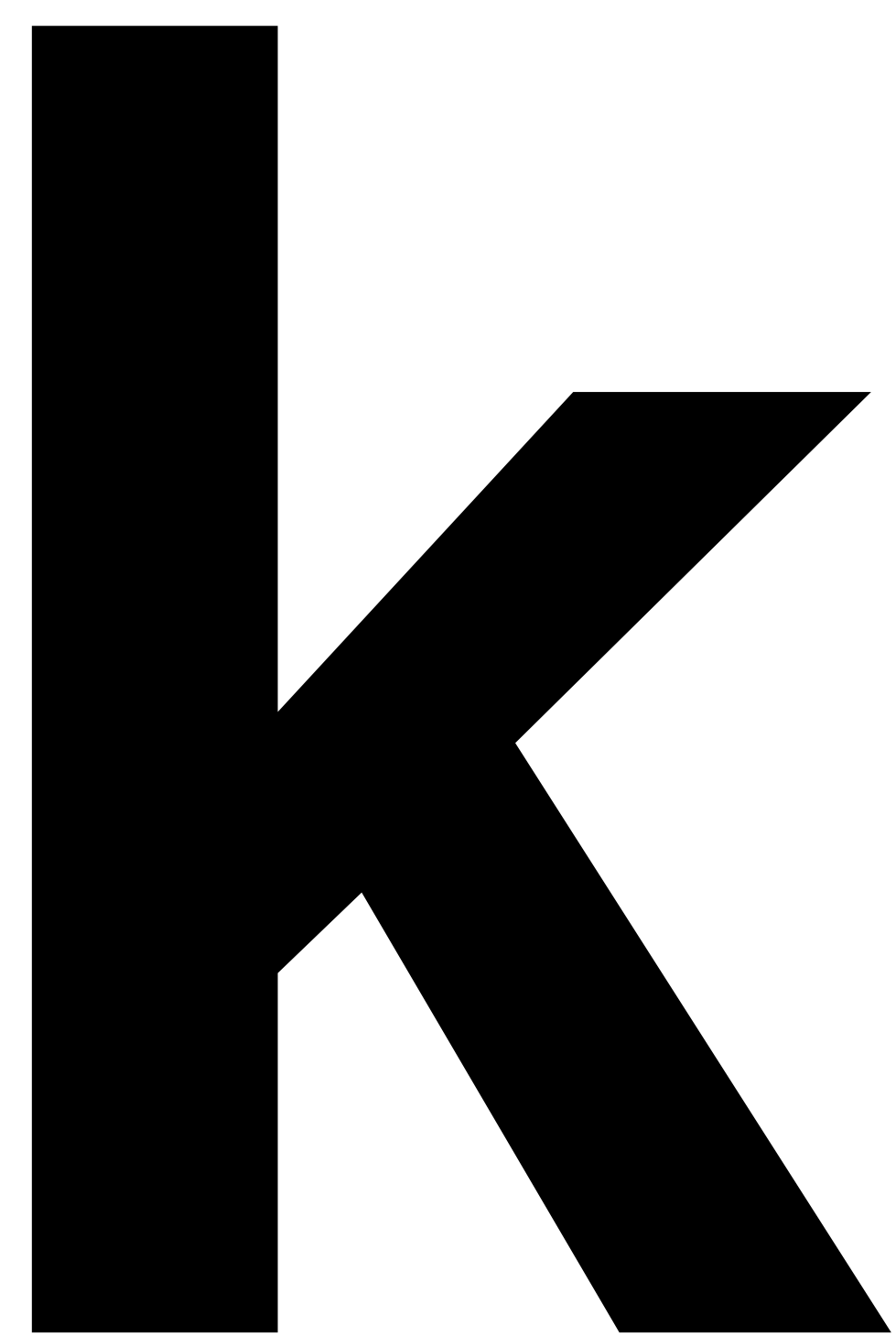


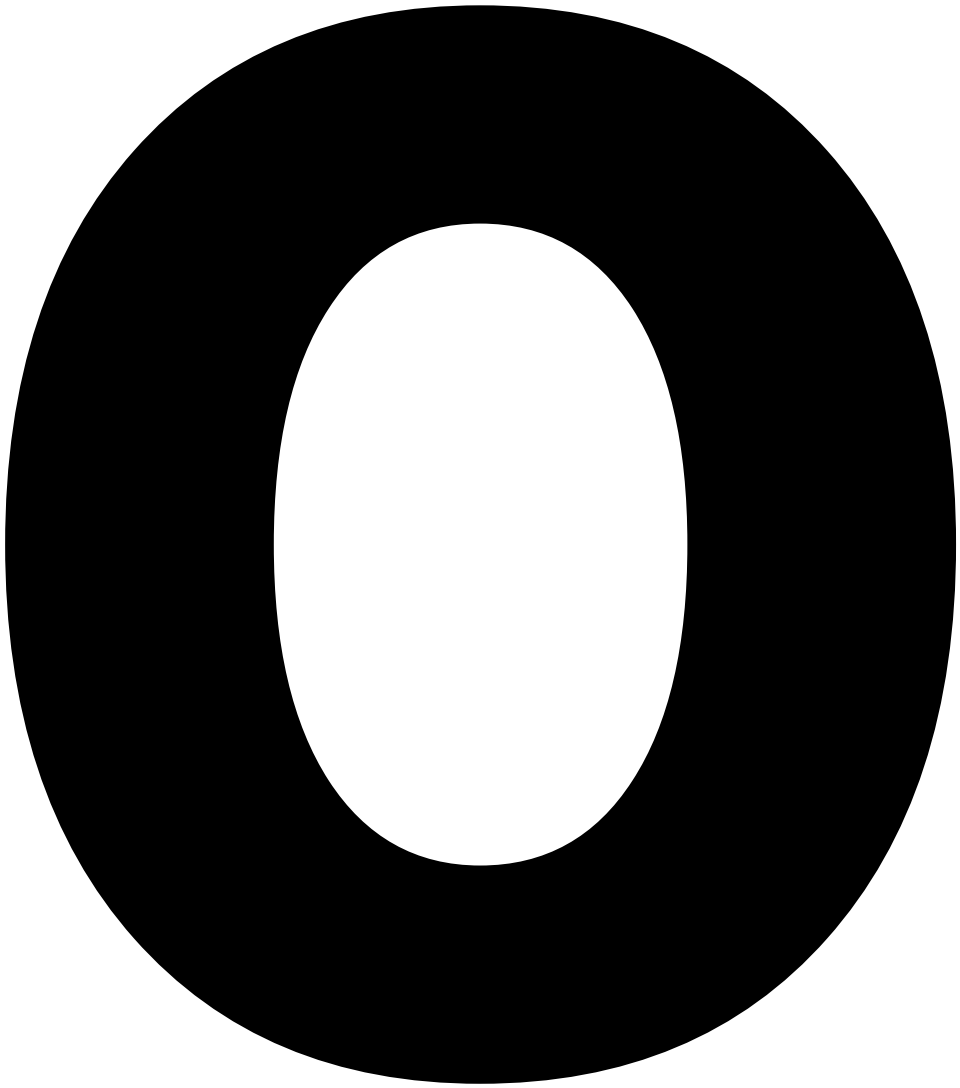


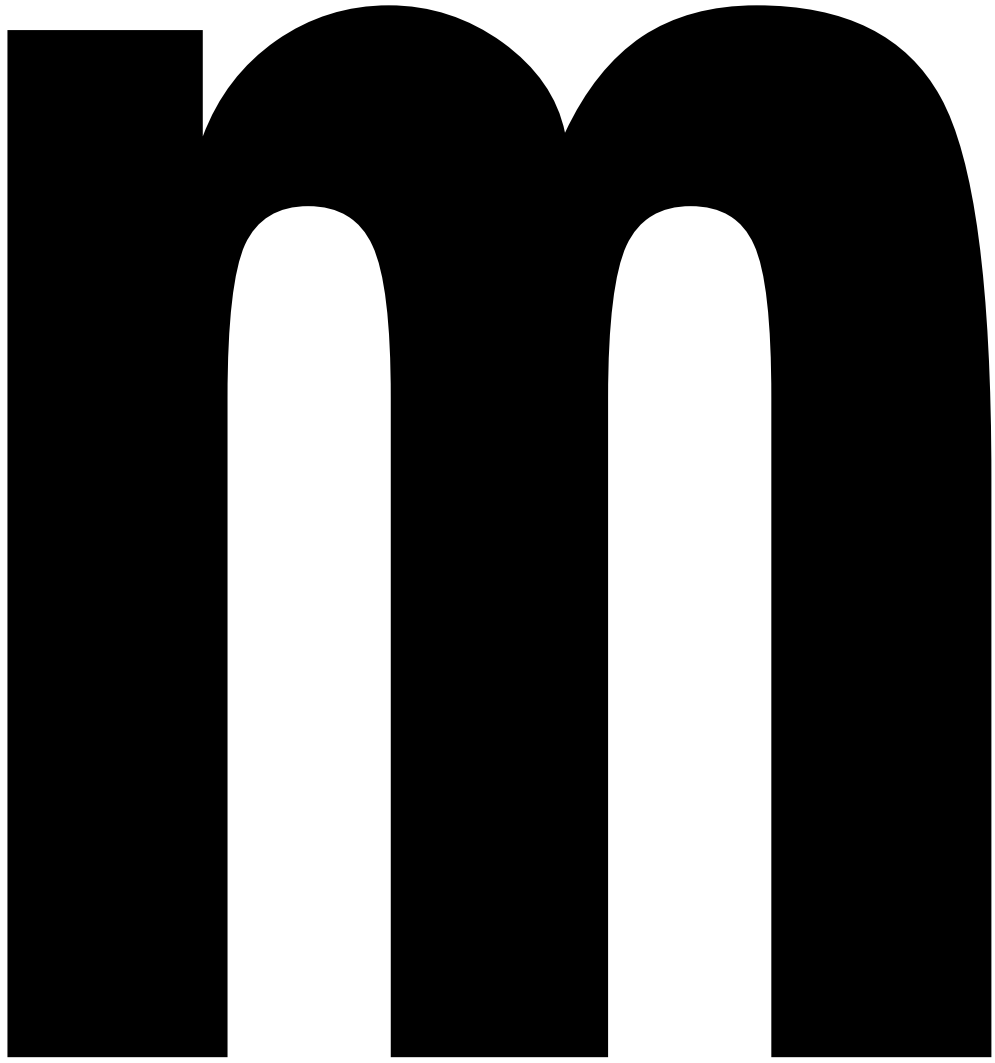


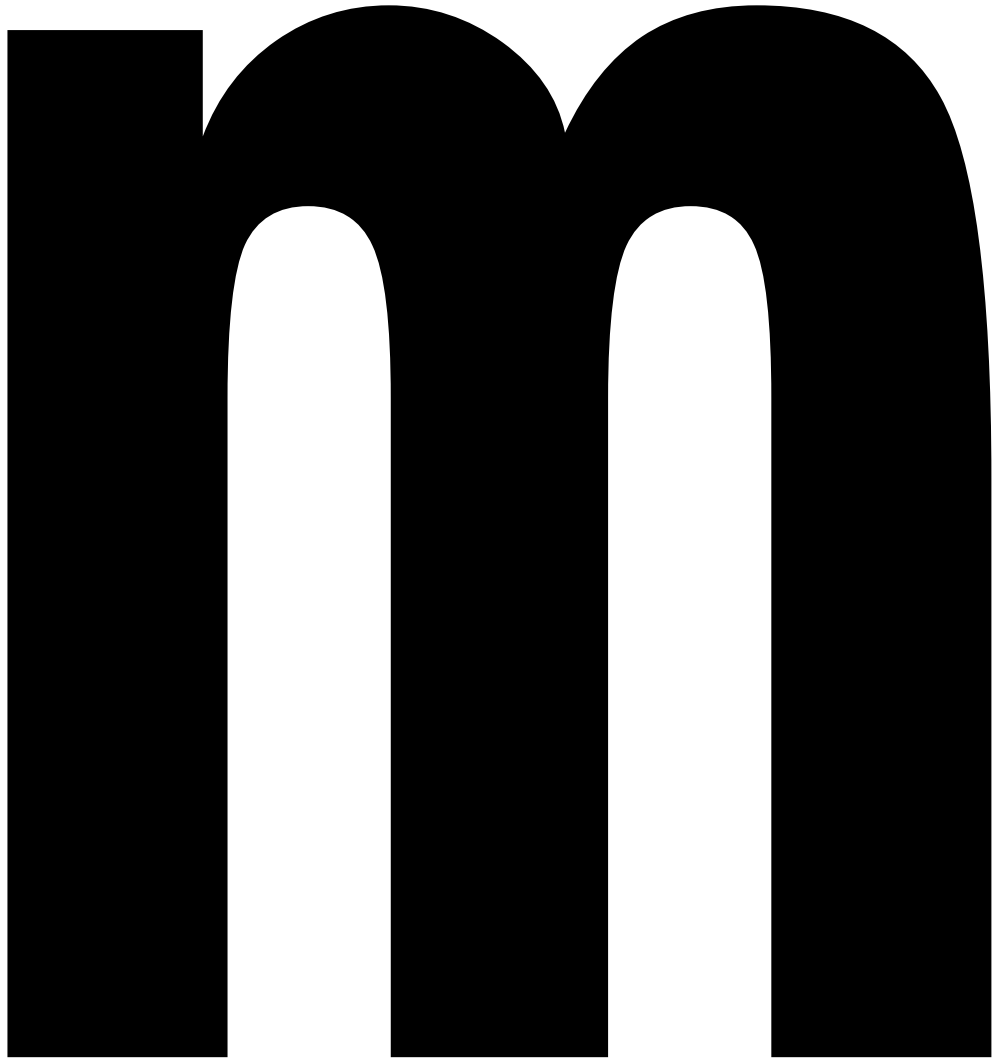


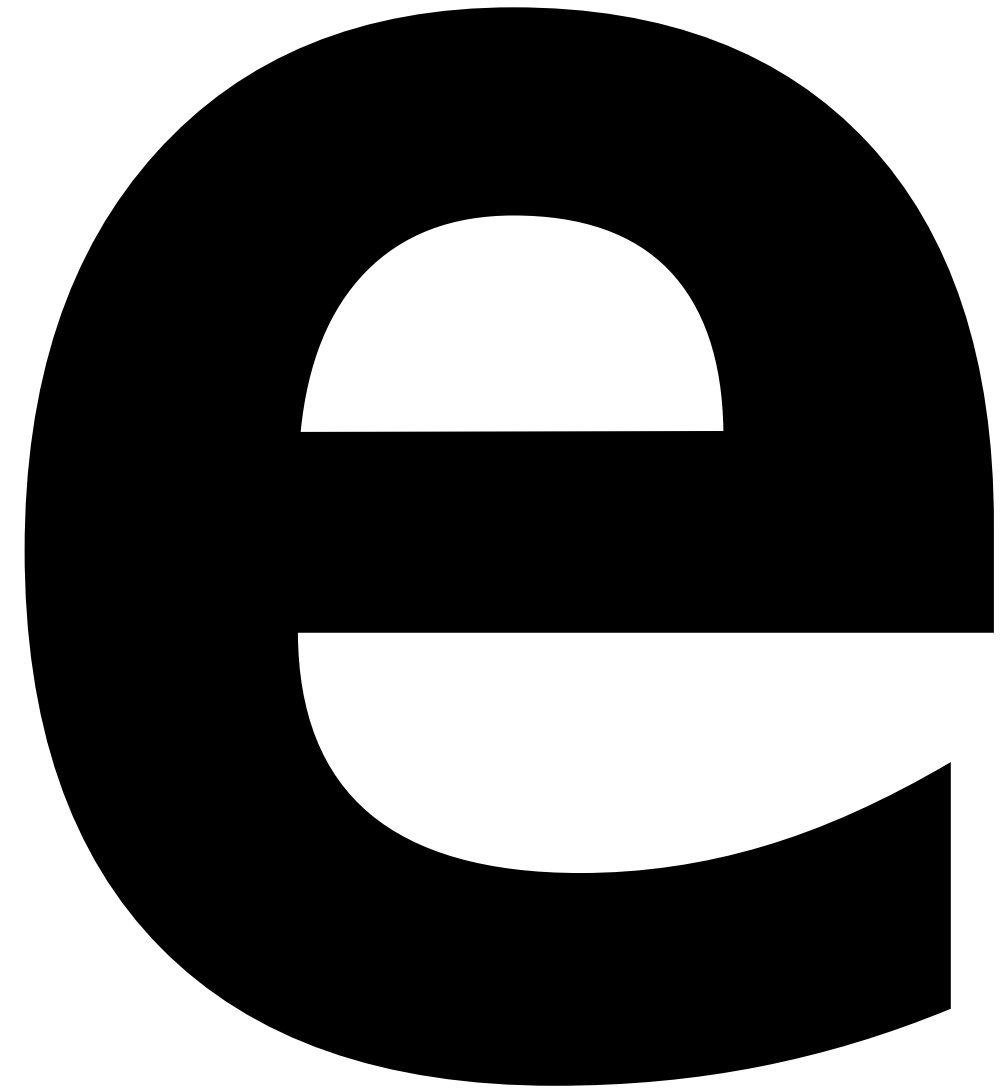


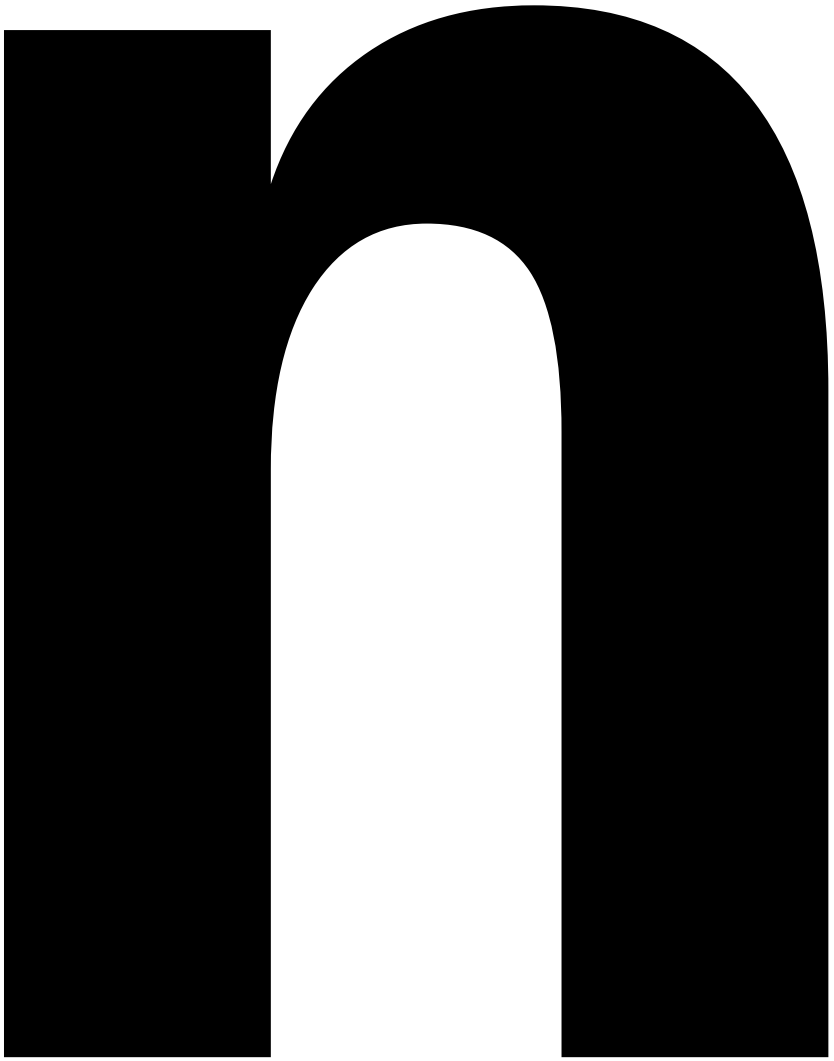


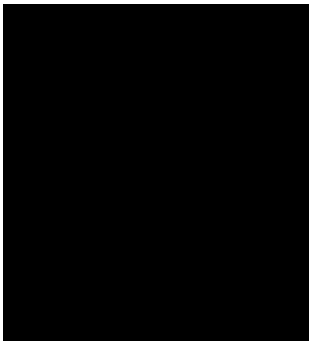






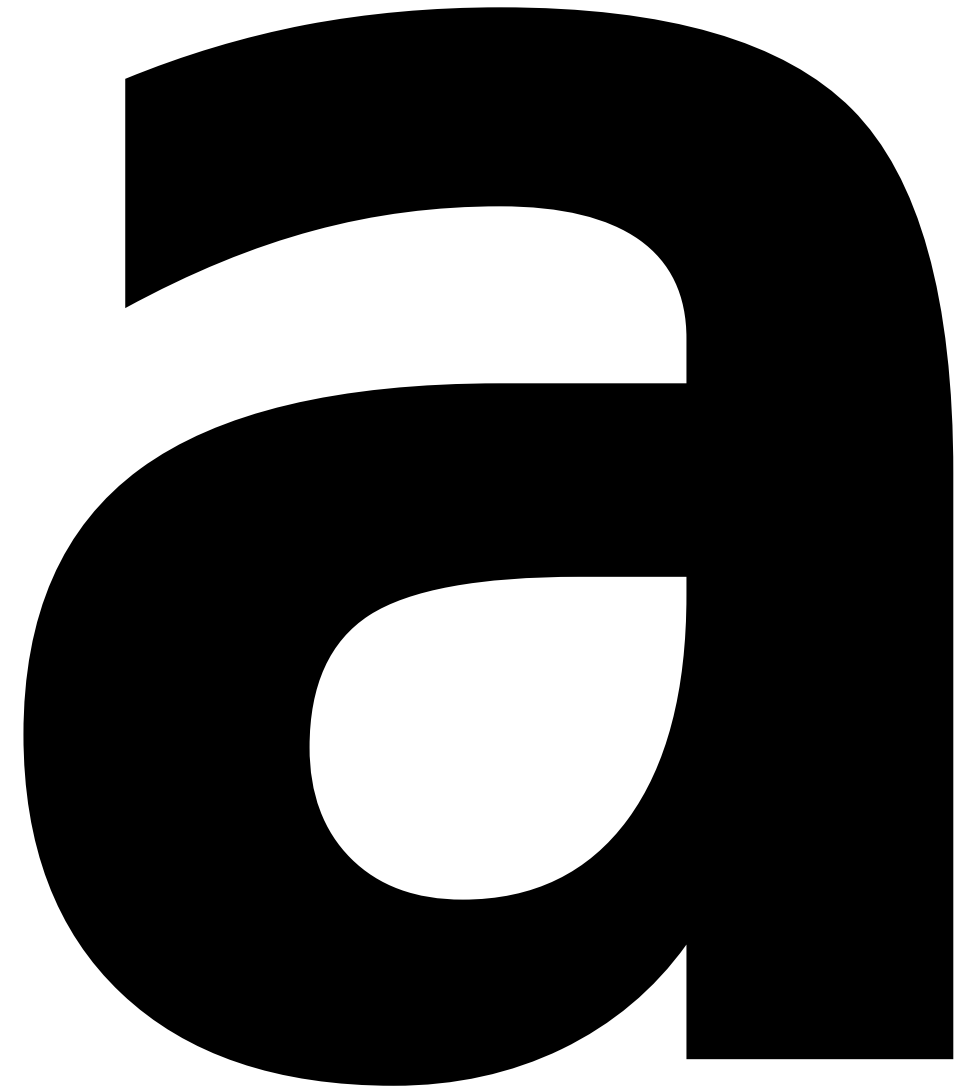


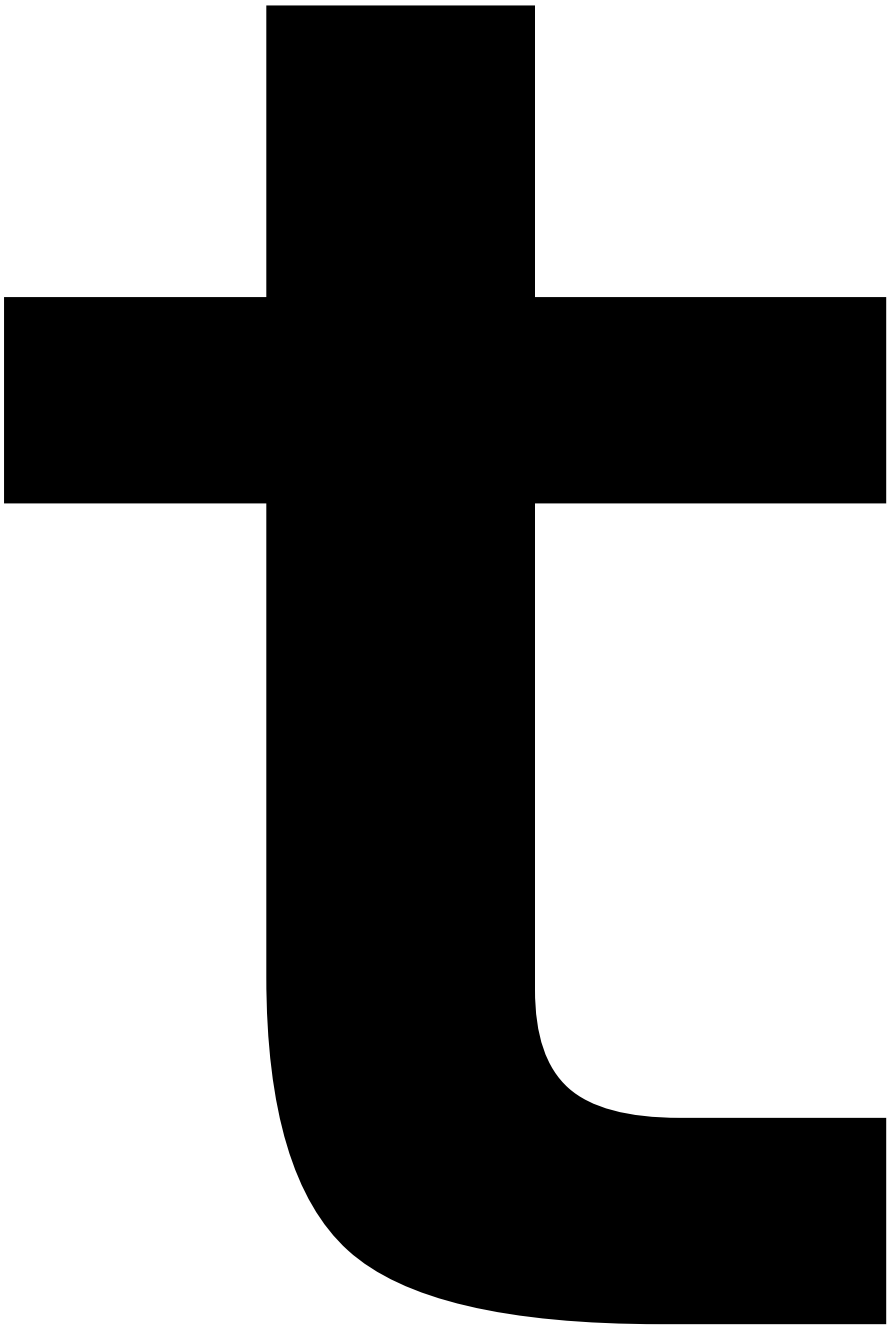


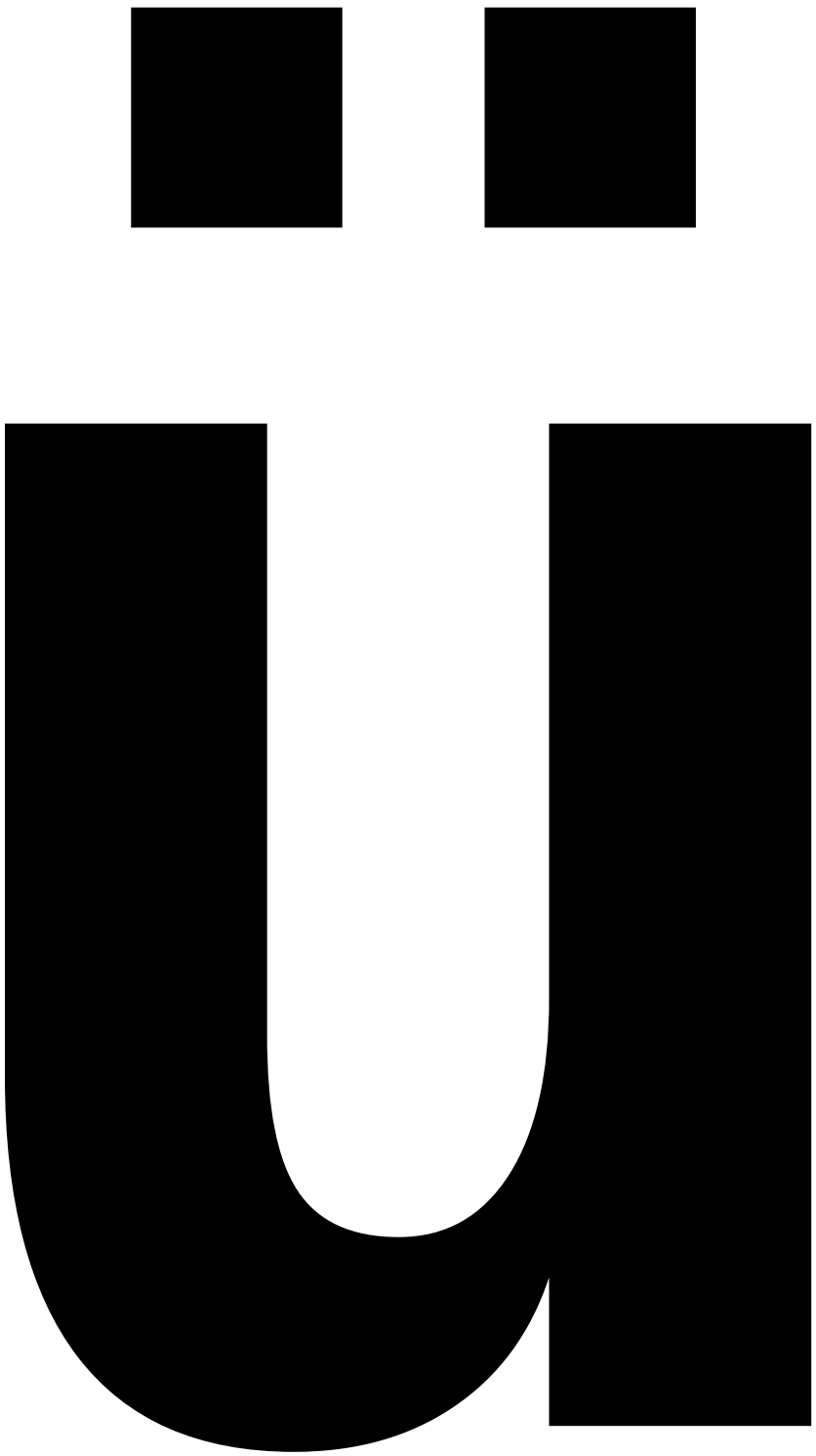


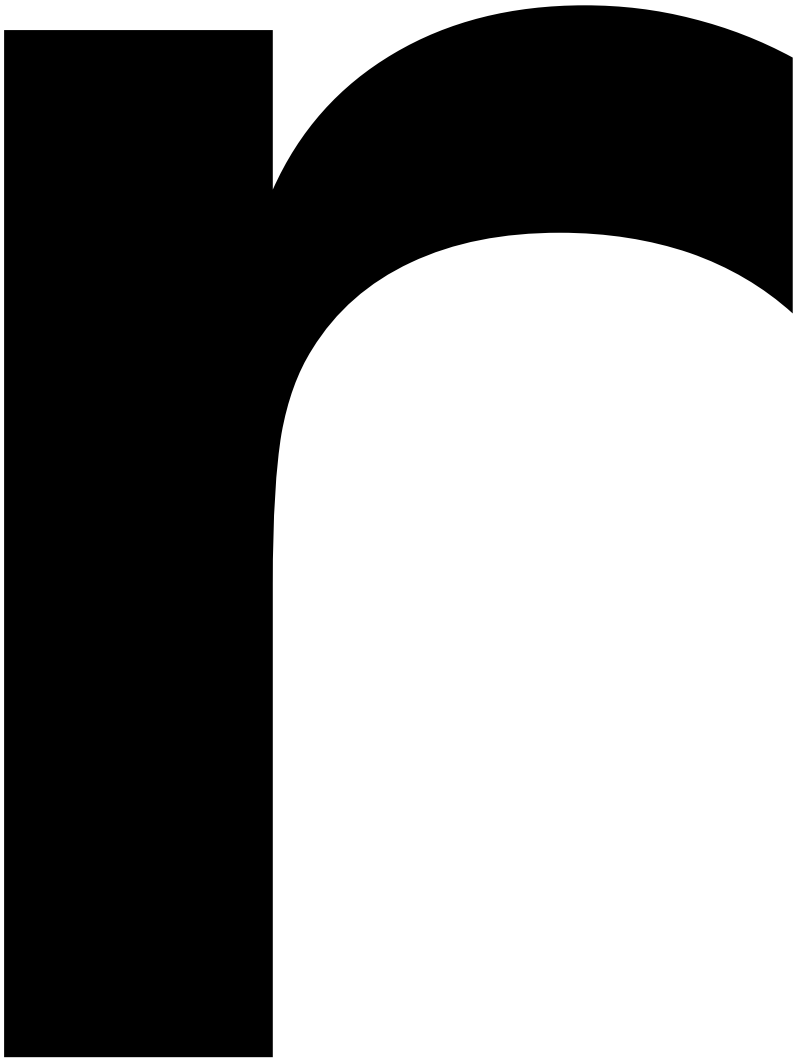
Das Co-60-Ereignis von Taiwan lässt hoffen, daß allein in Deutschland mindestens 200 000 Personen im Jahr der Schrecken der Diagnose „KREBS“ erspart werden könnte, wenn die Gesetze es erlauben würden, die Menschen einer regelmäßigen Bestrahlung durch harte Gammas auszusetzen. Sehr viele Menschen könnten profitieren, es ist lohnend, sich dafür einzusetzen.

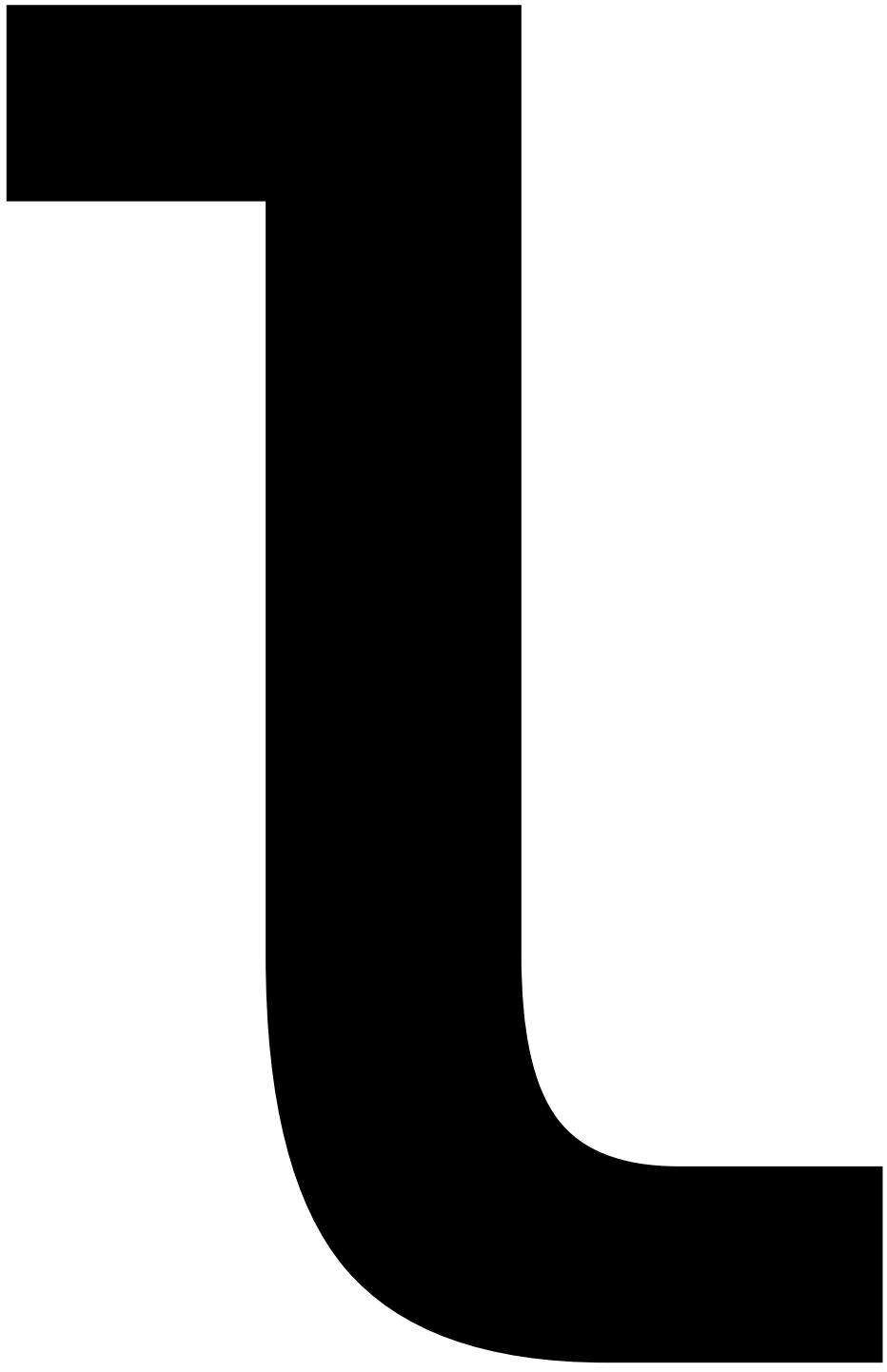
N

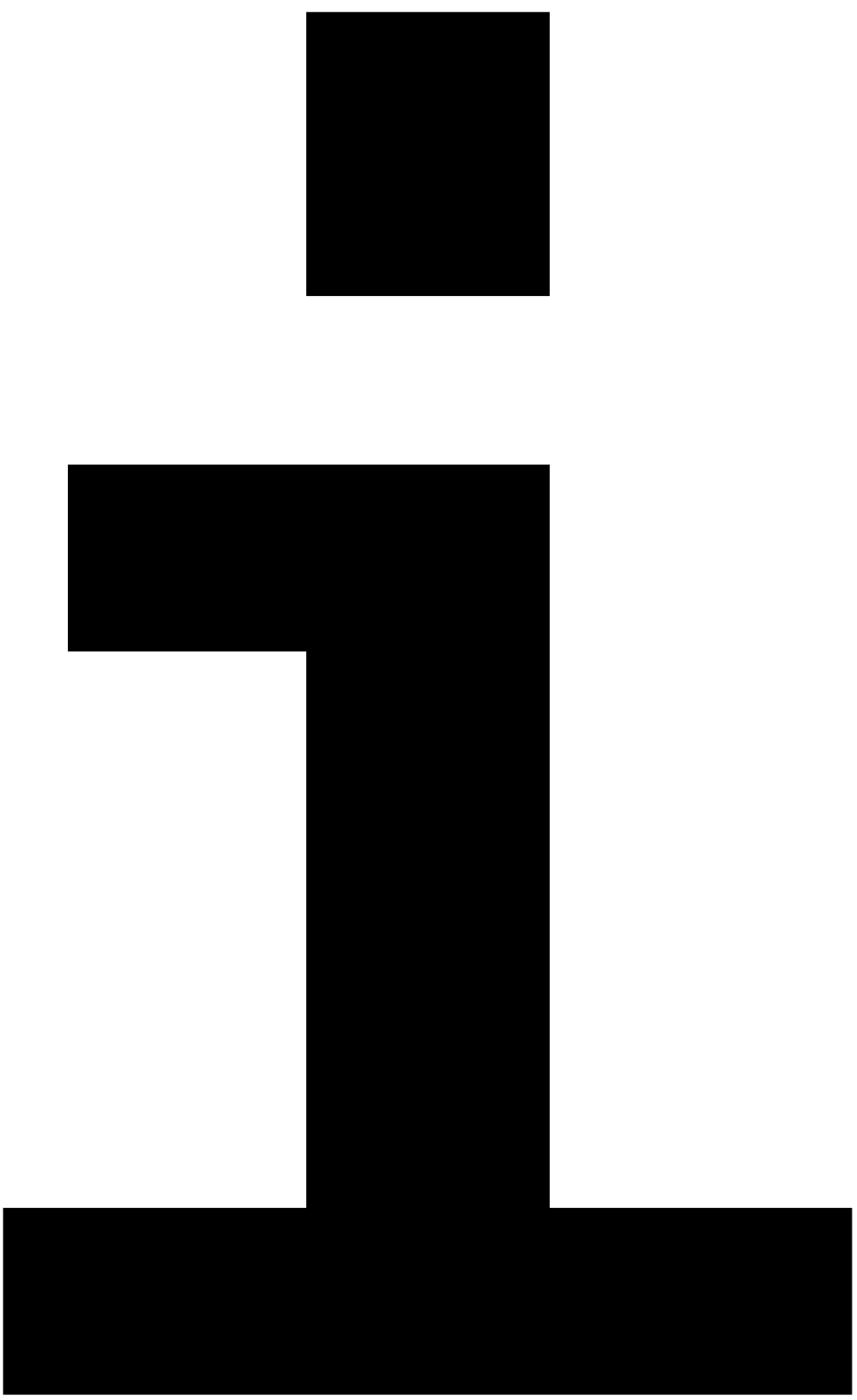


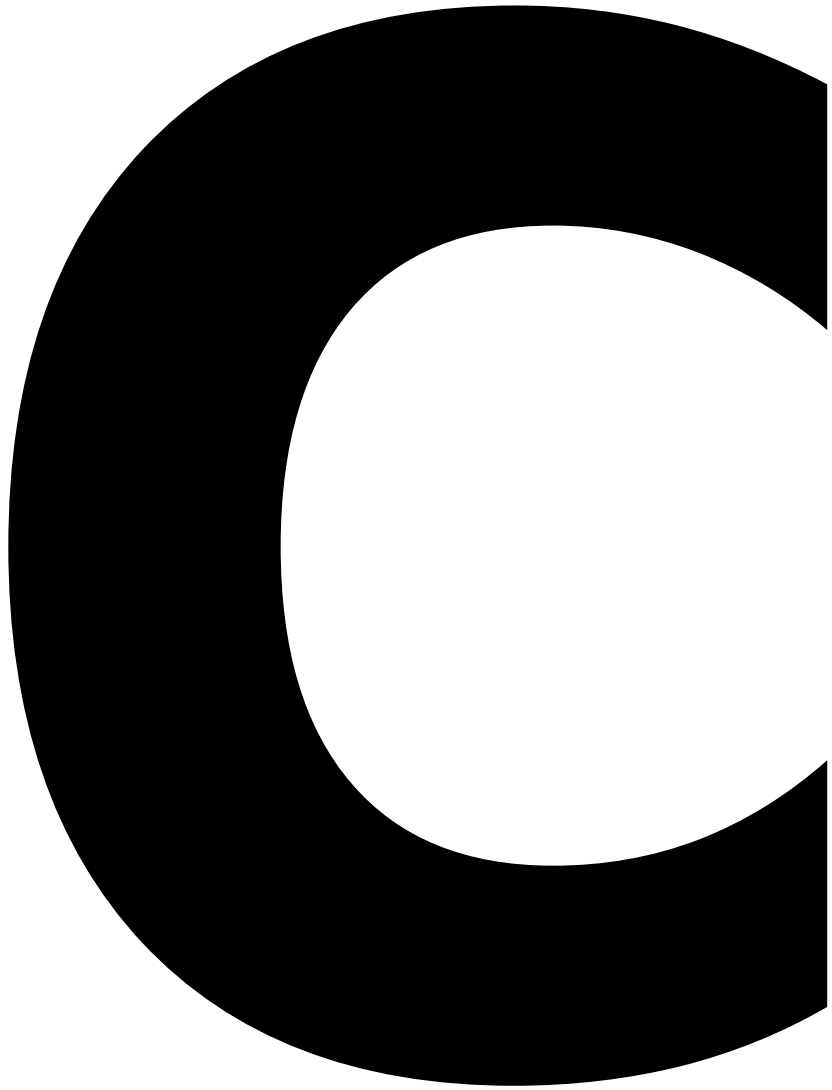


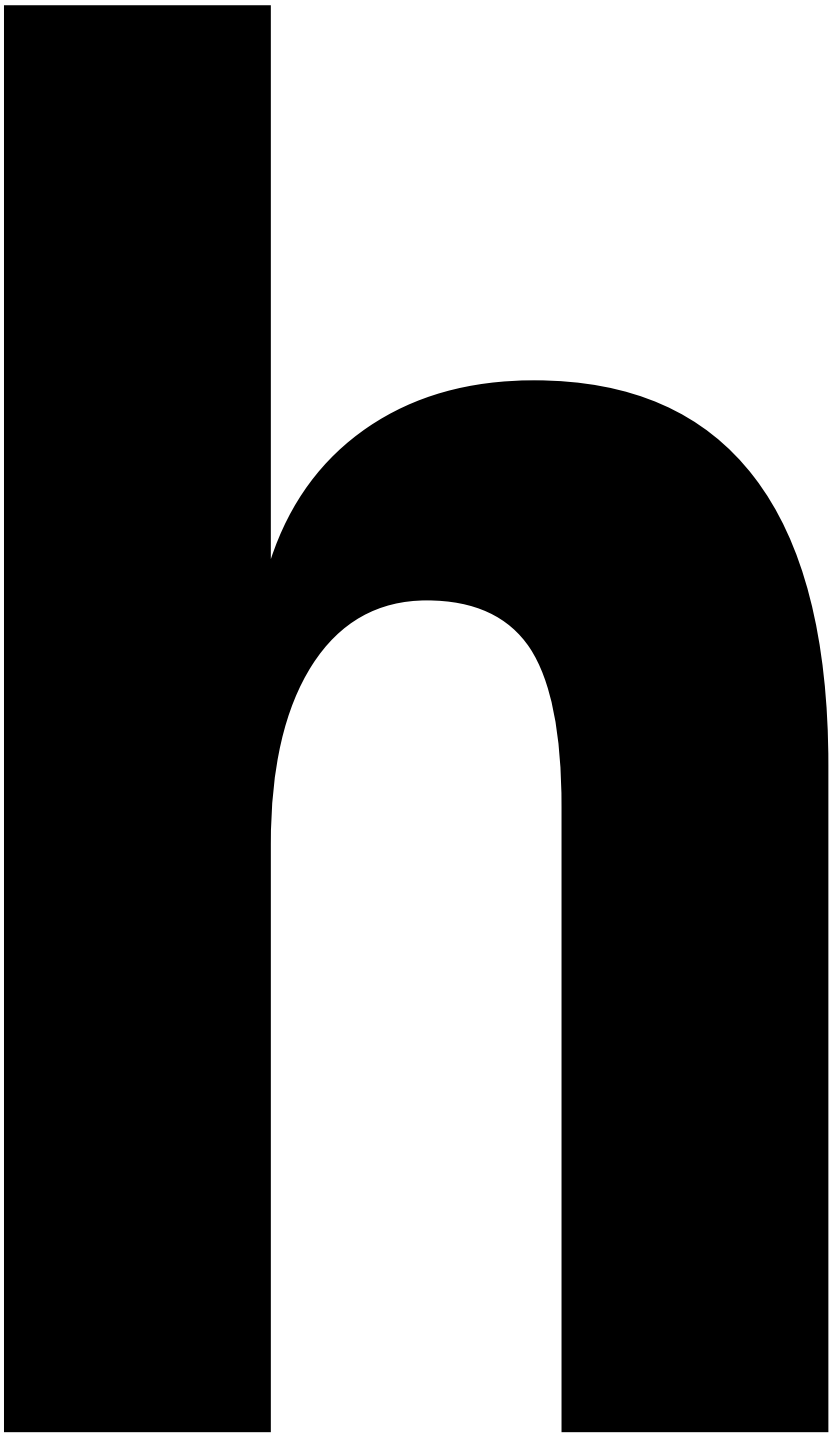


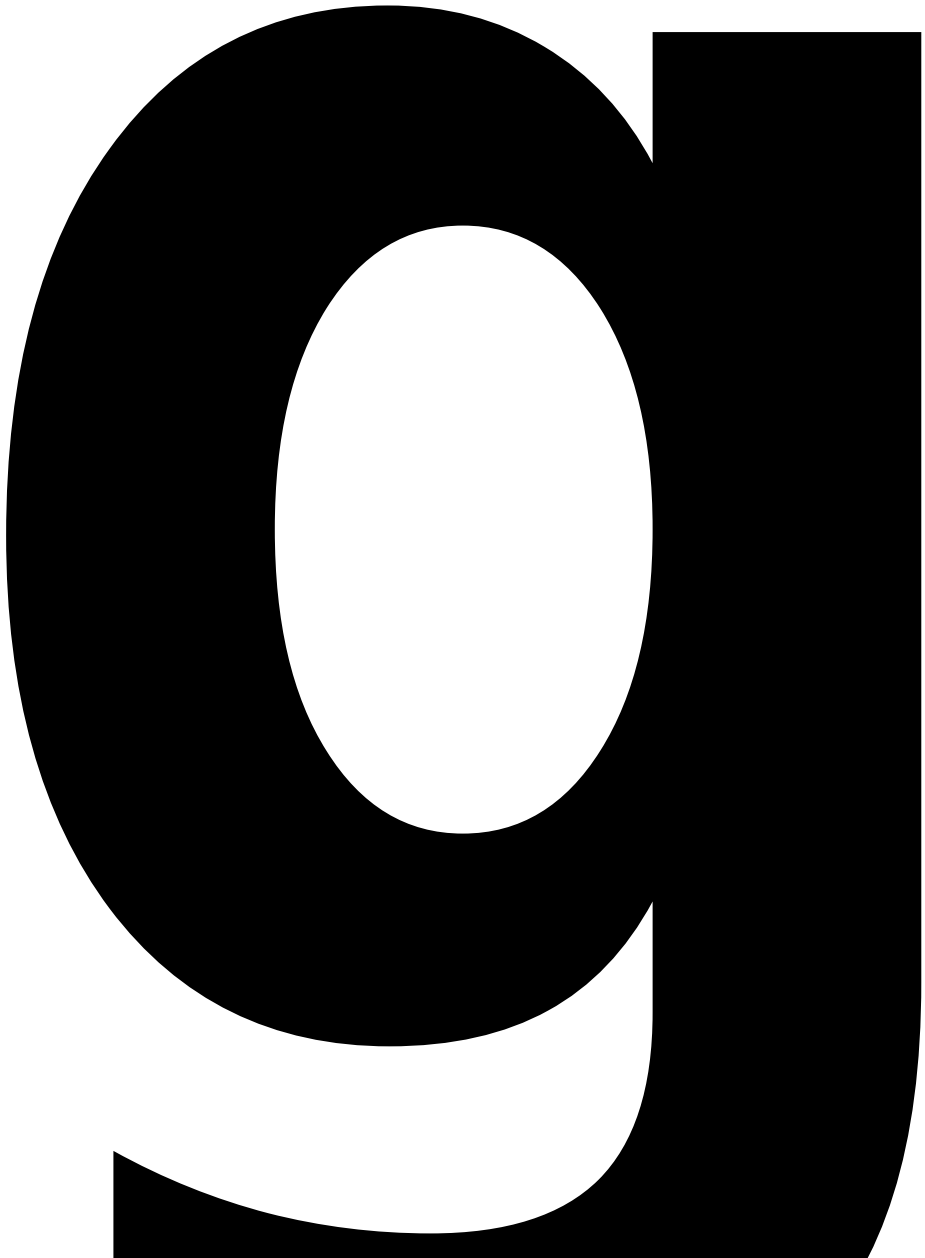


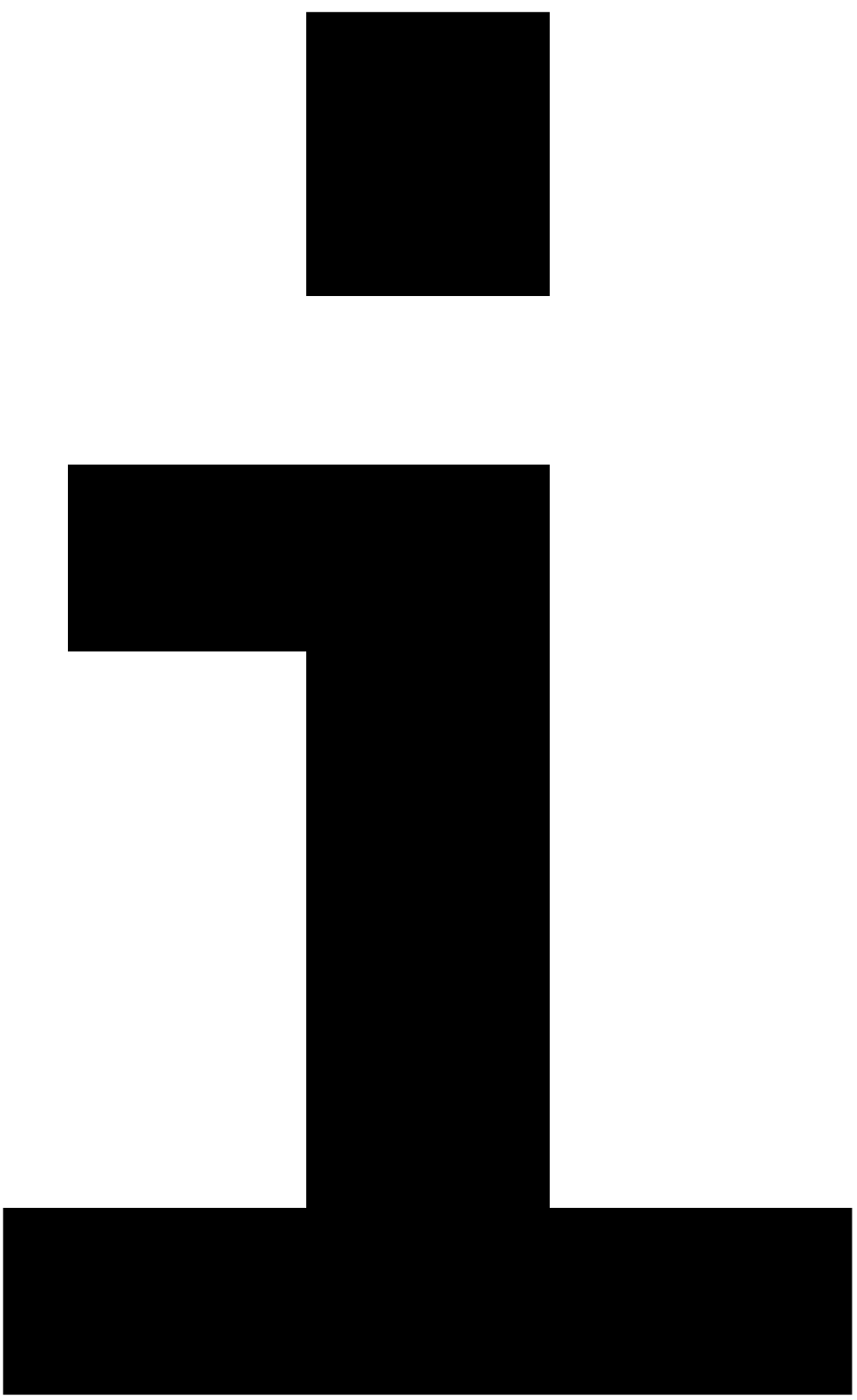


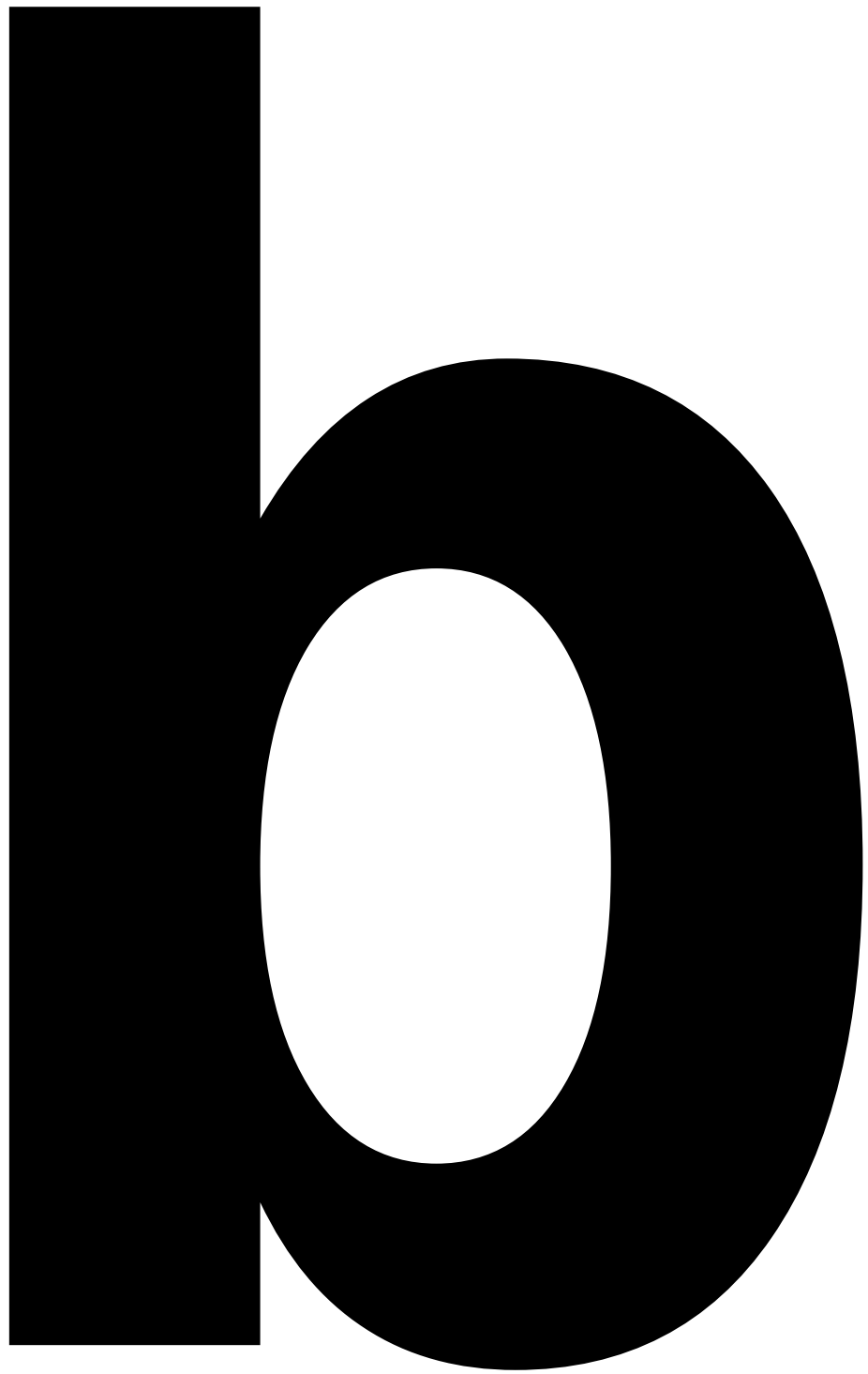


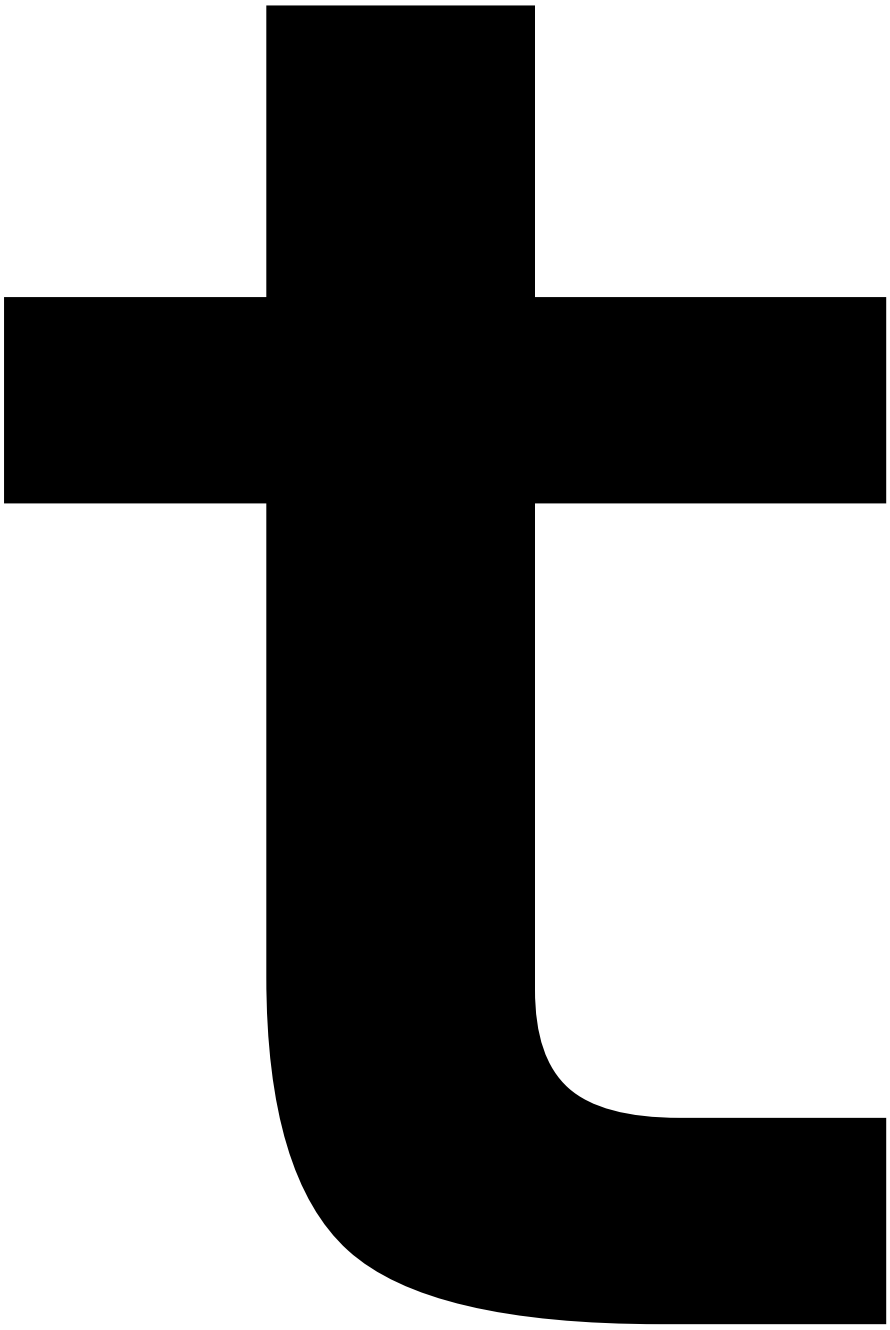


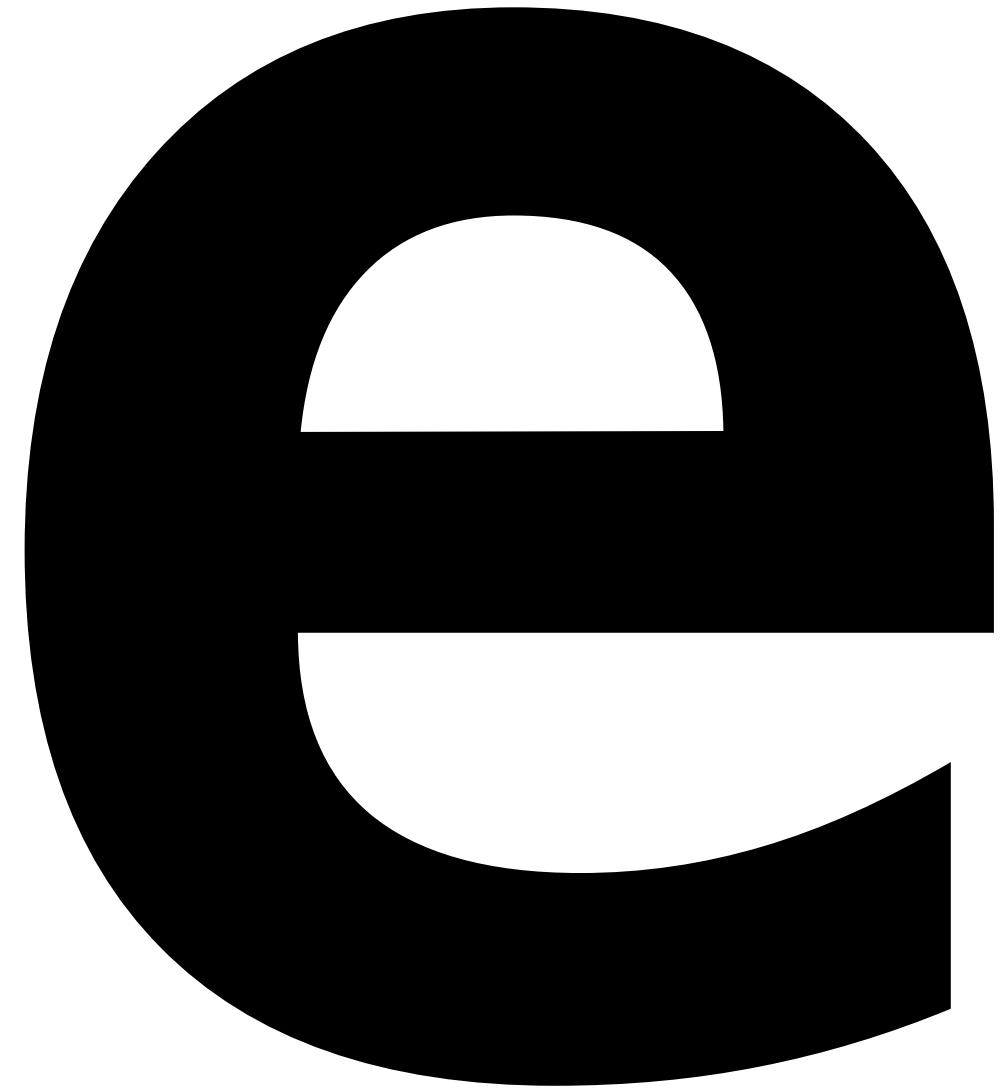




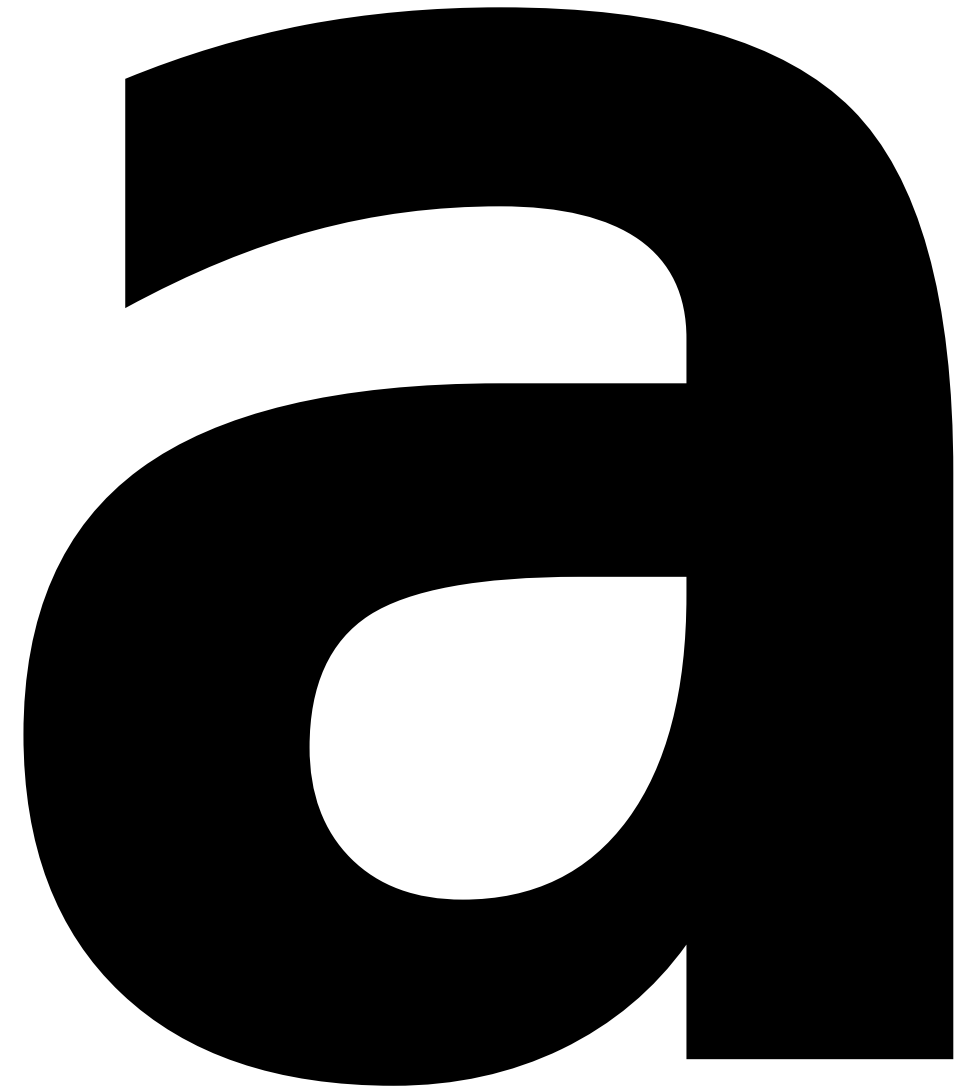




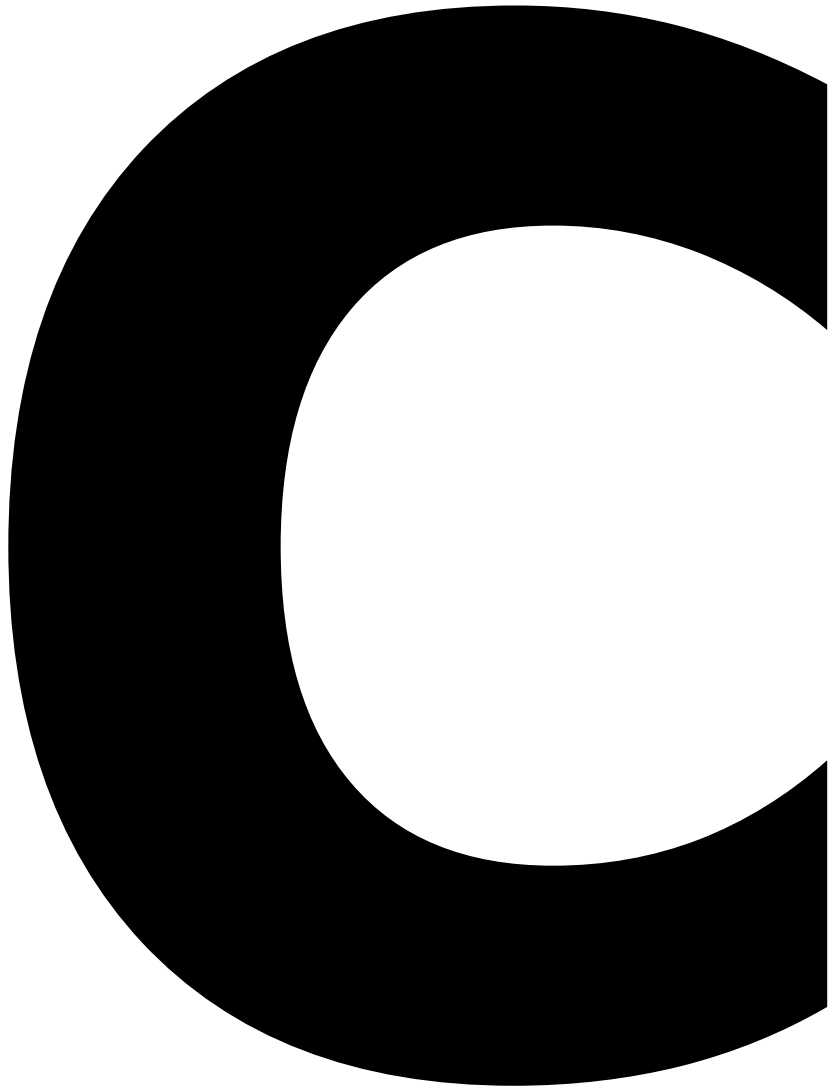


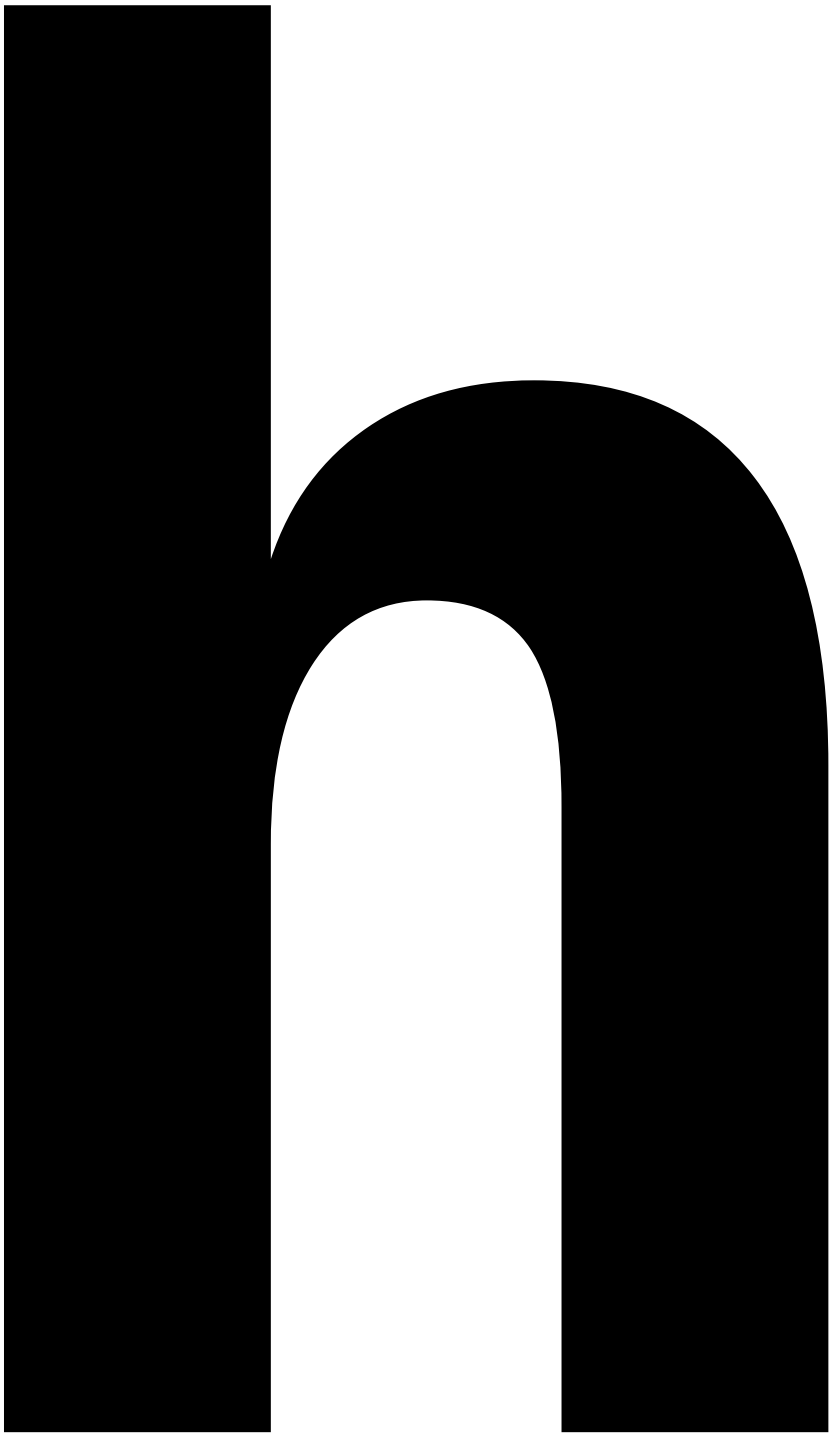


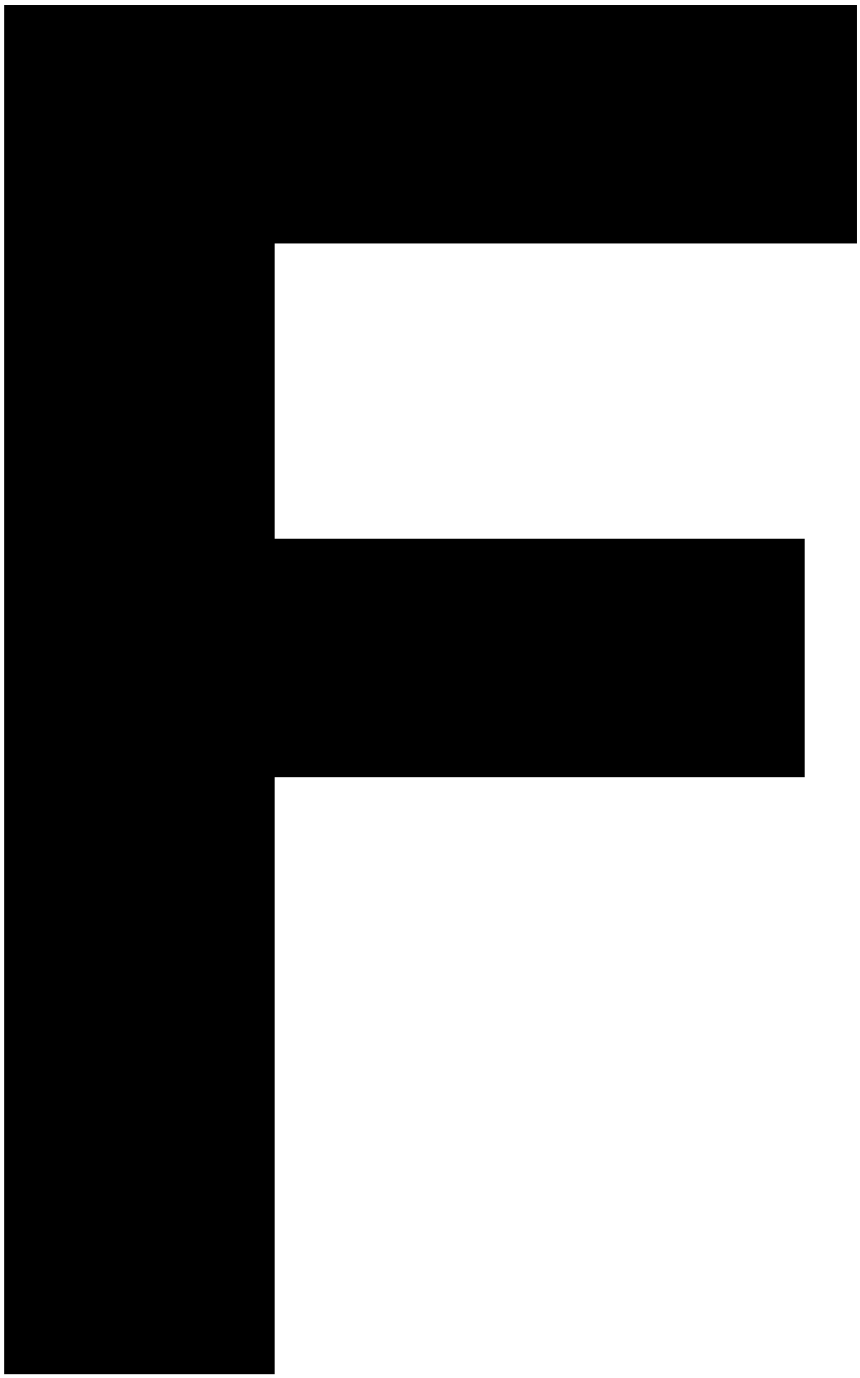
S

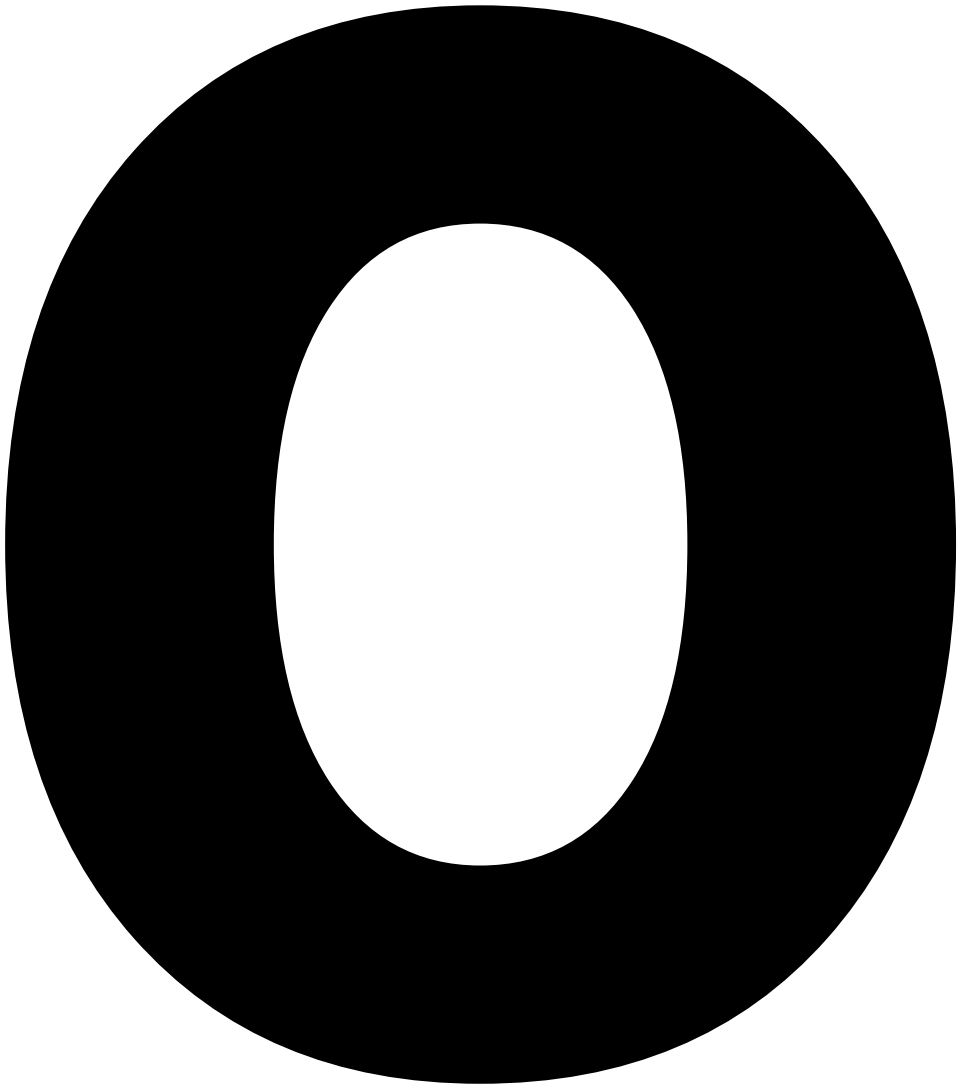


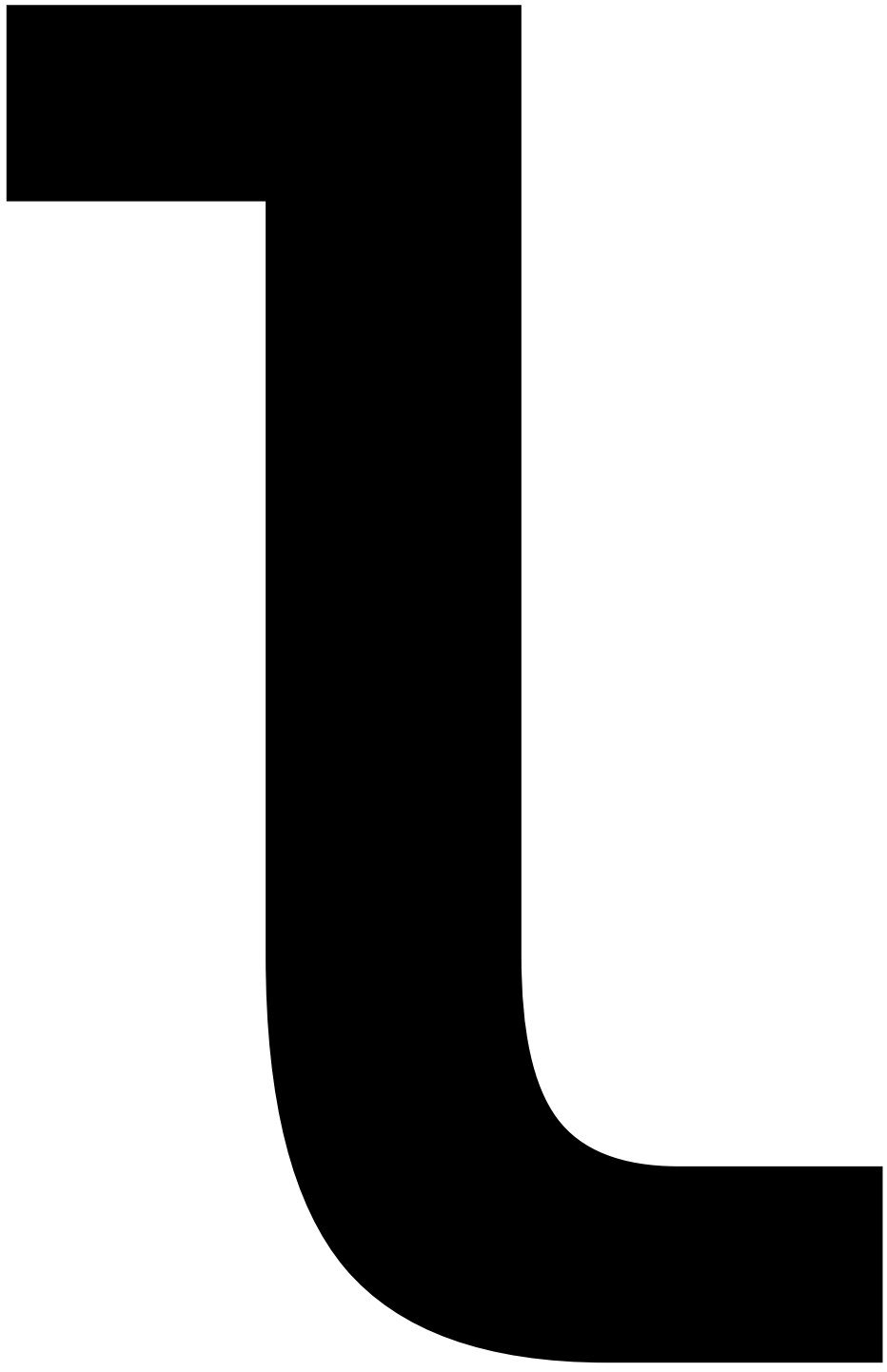
u

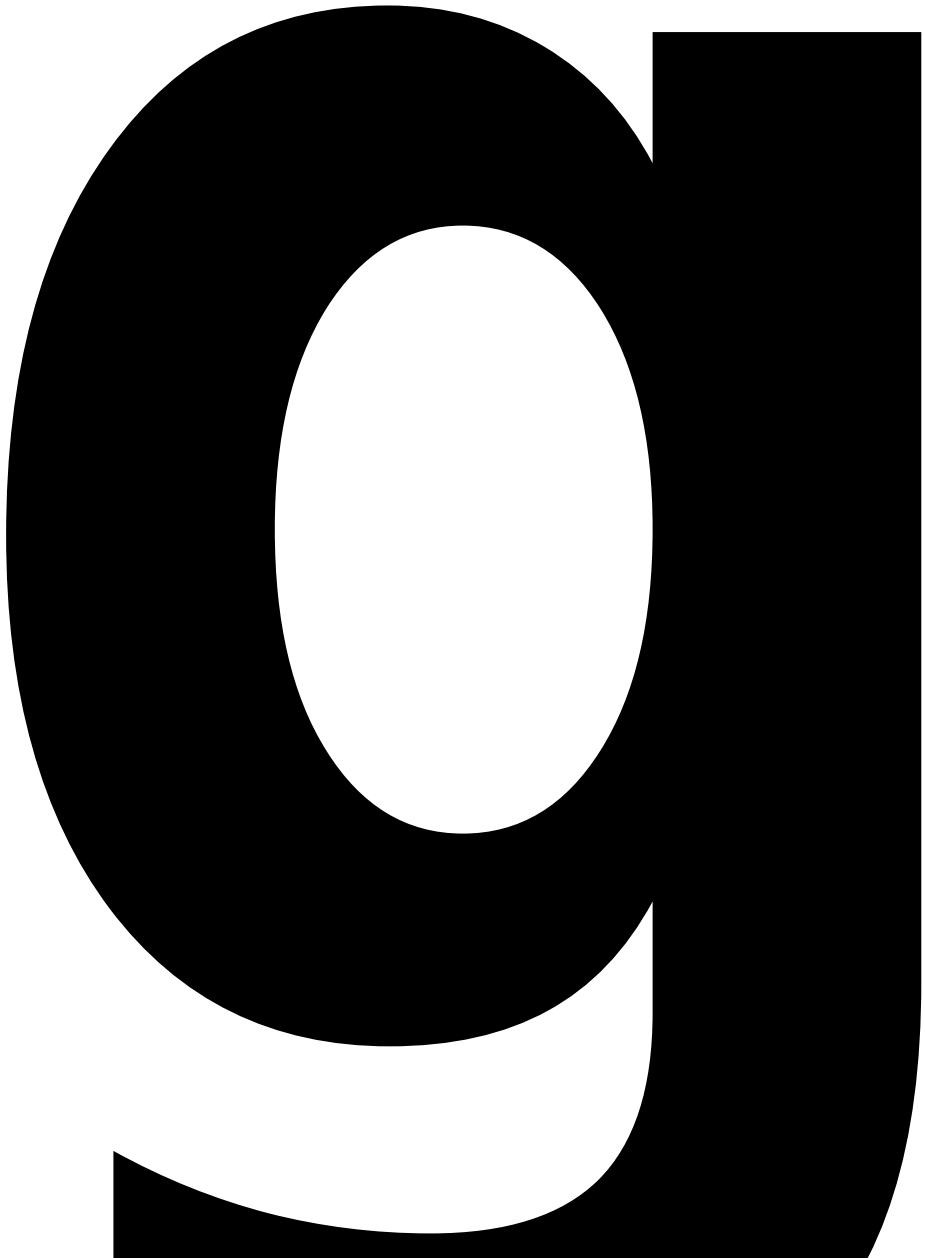


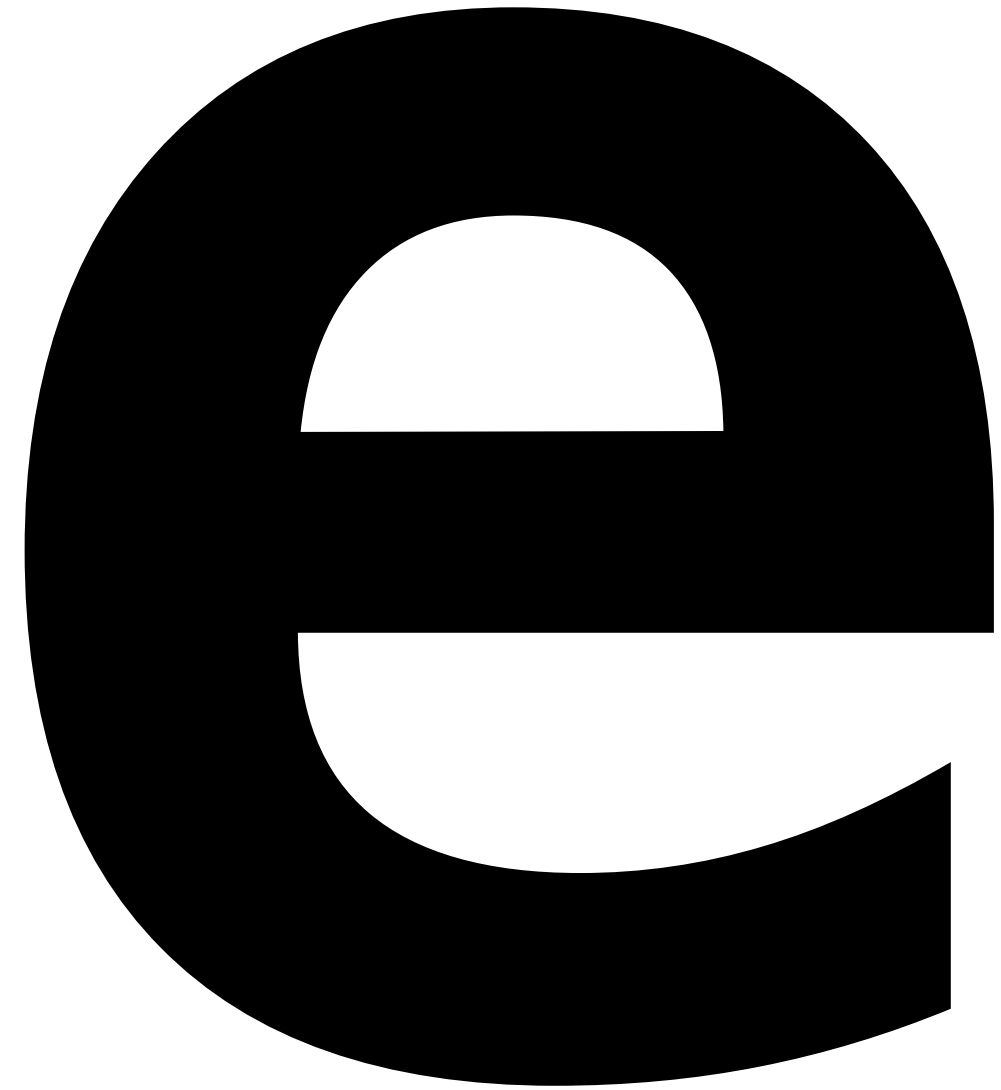


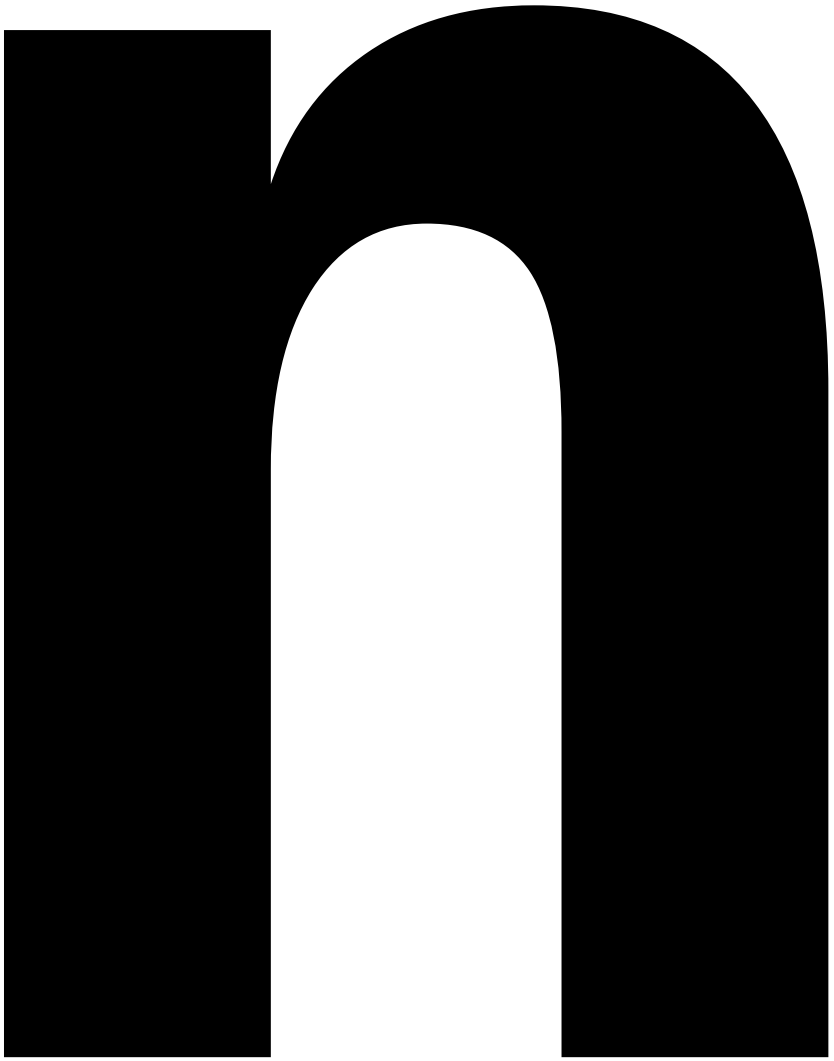


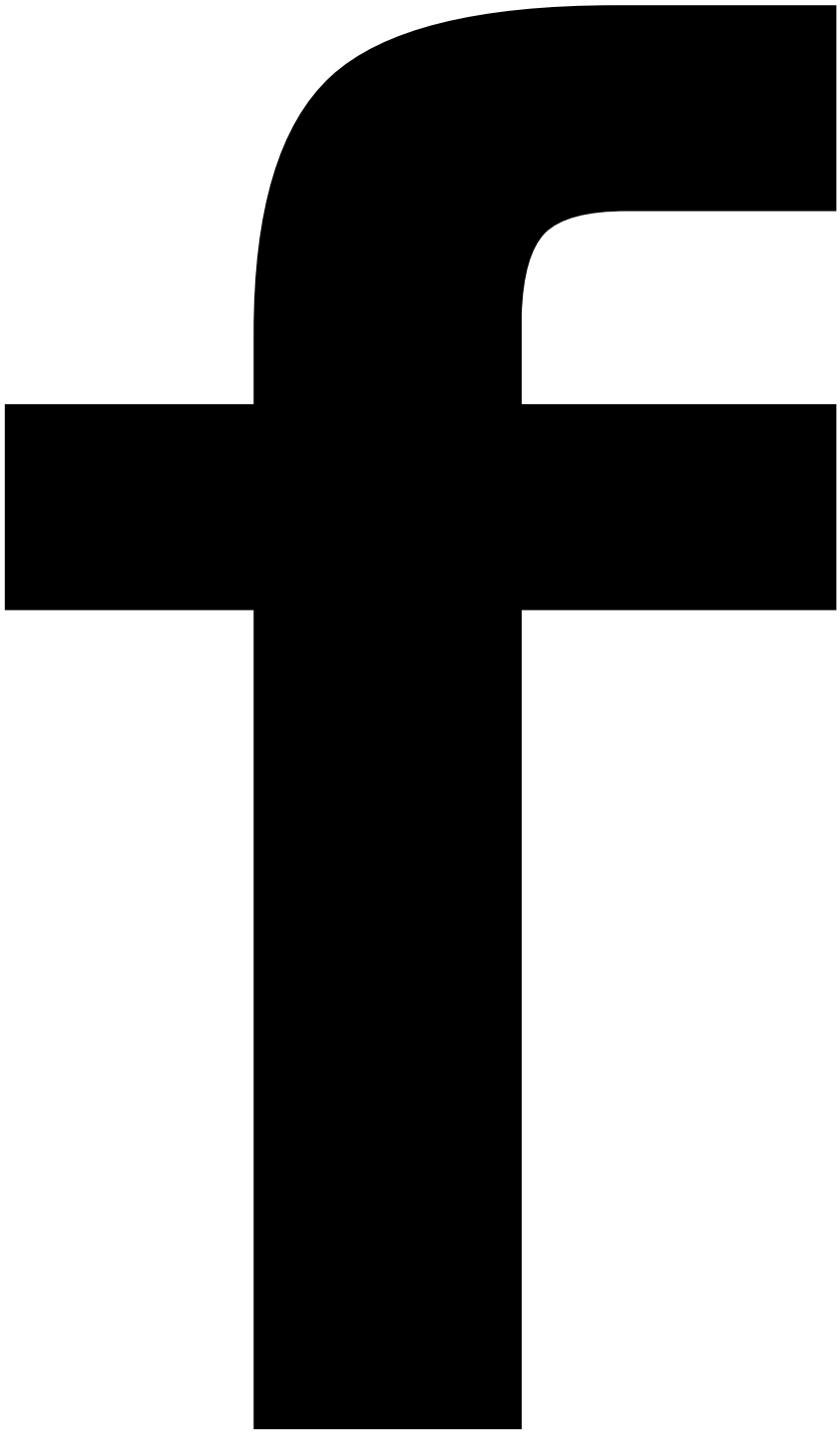


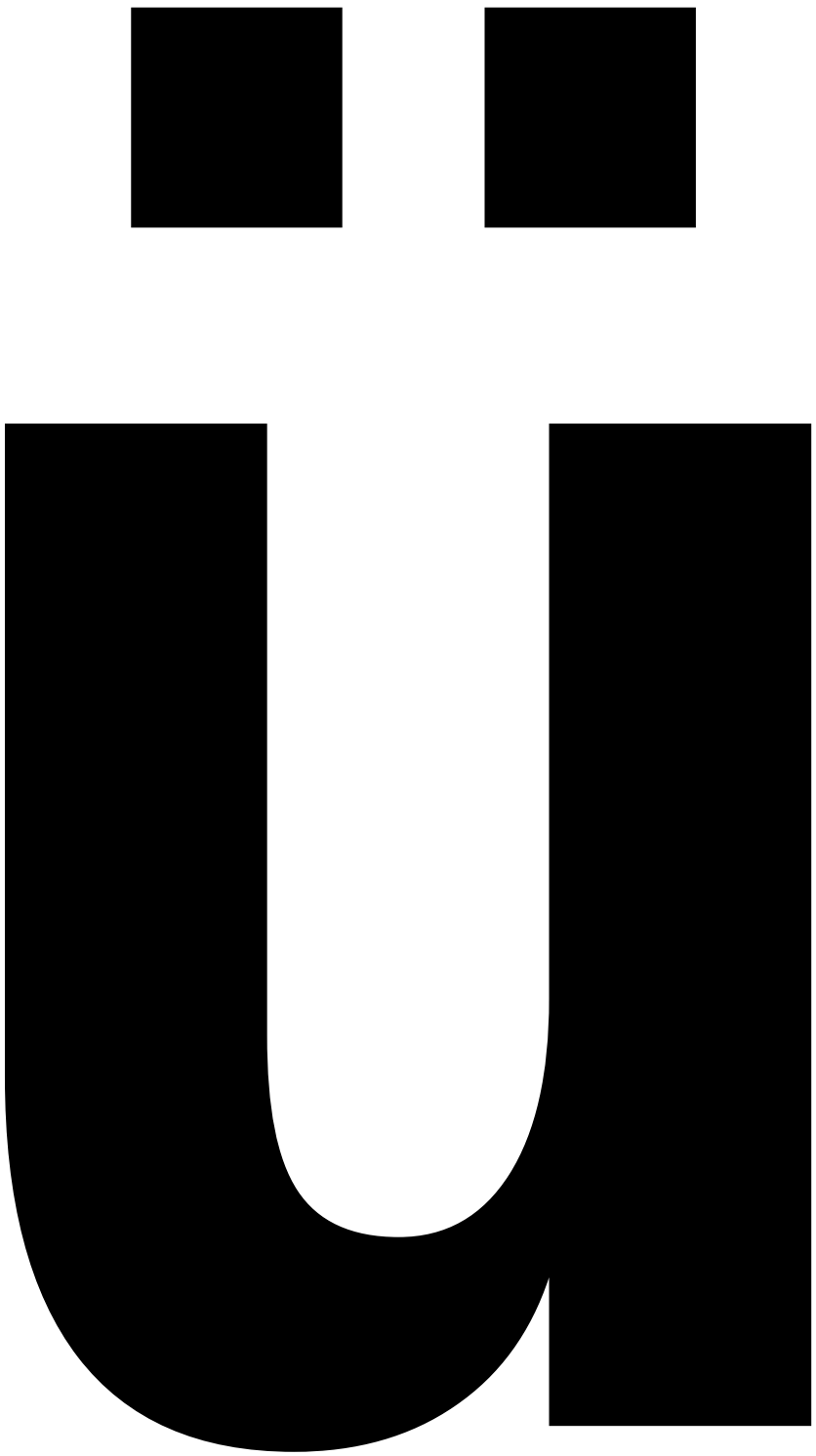


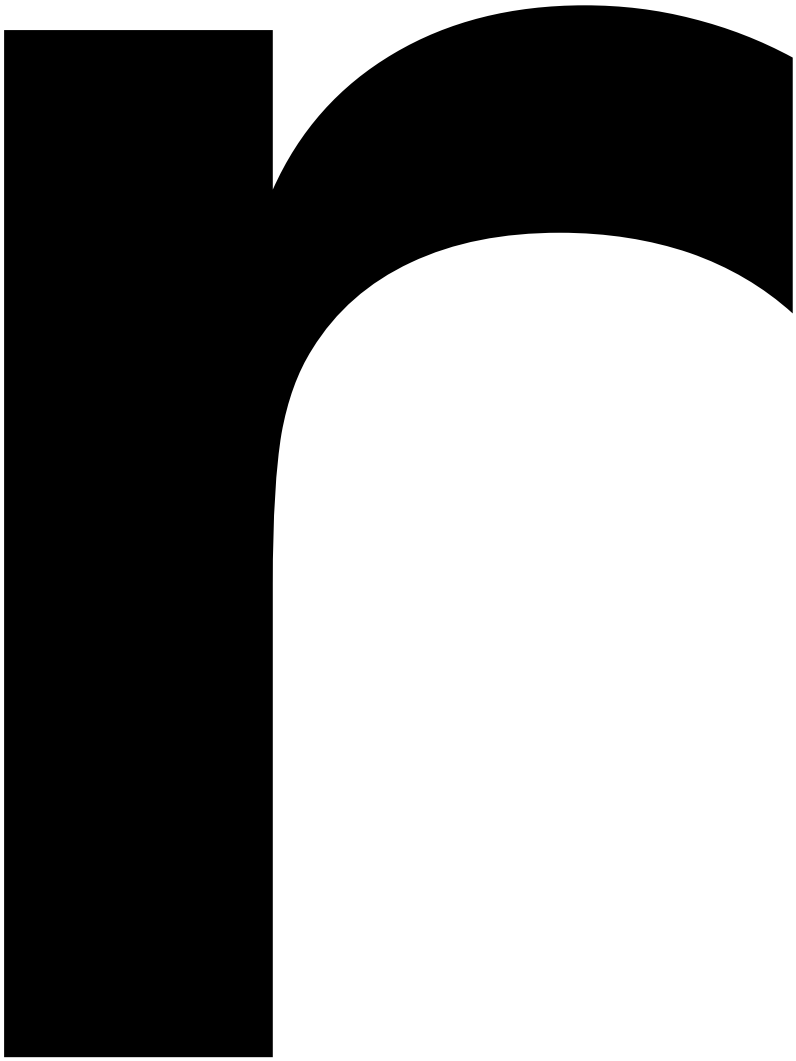




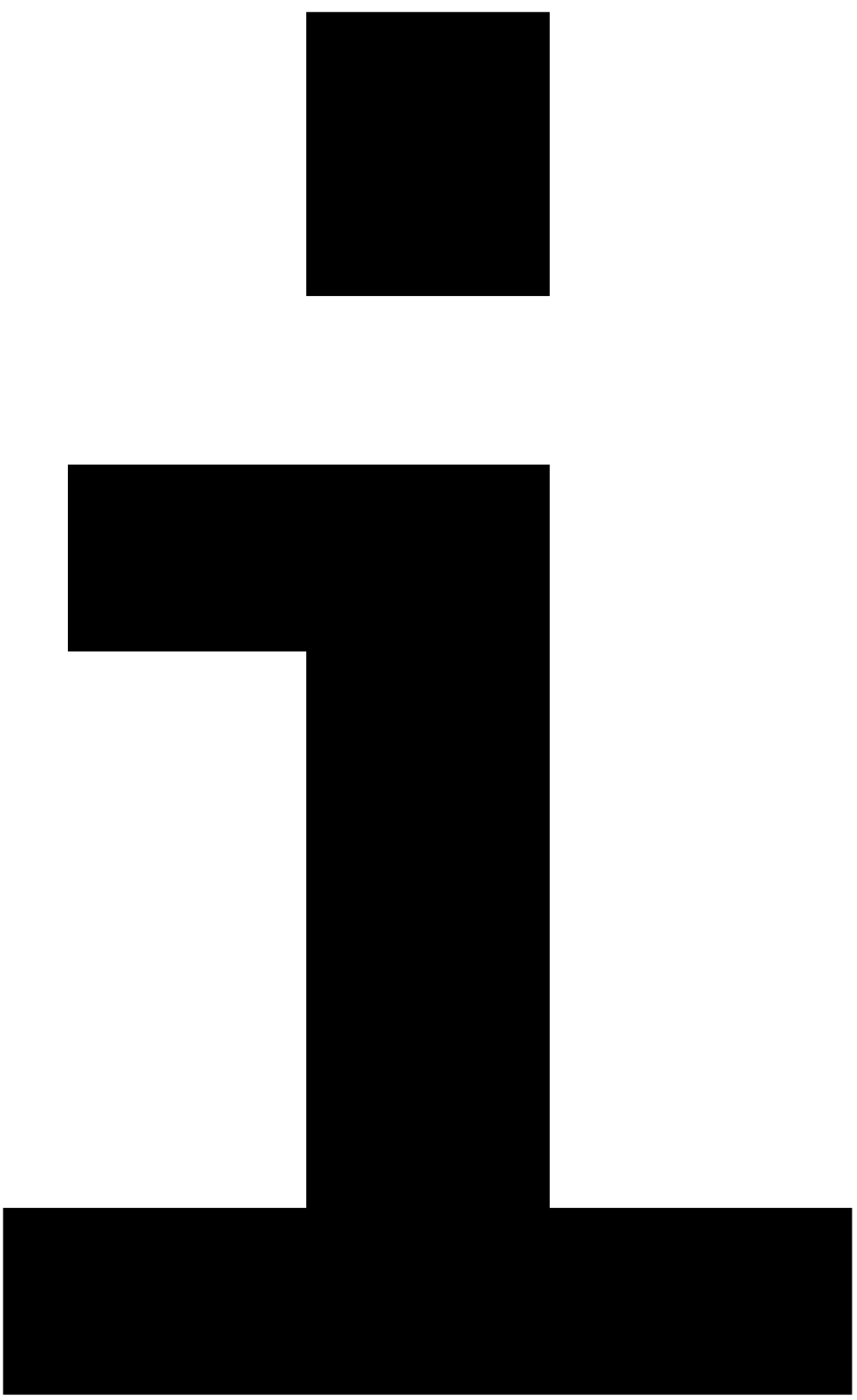


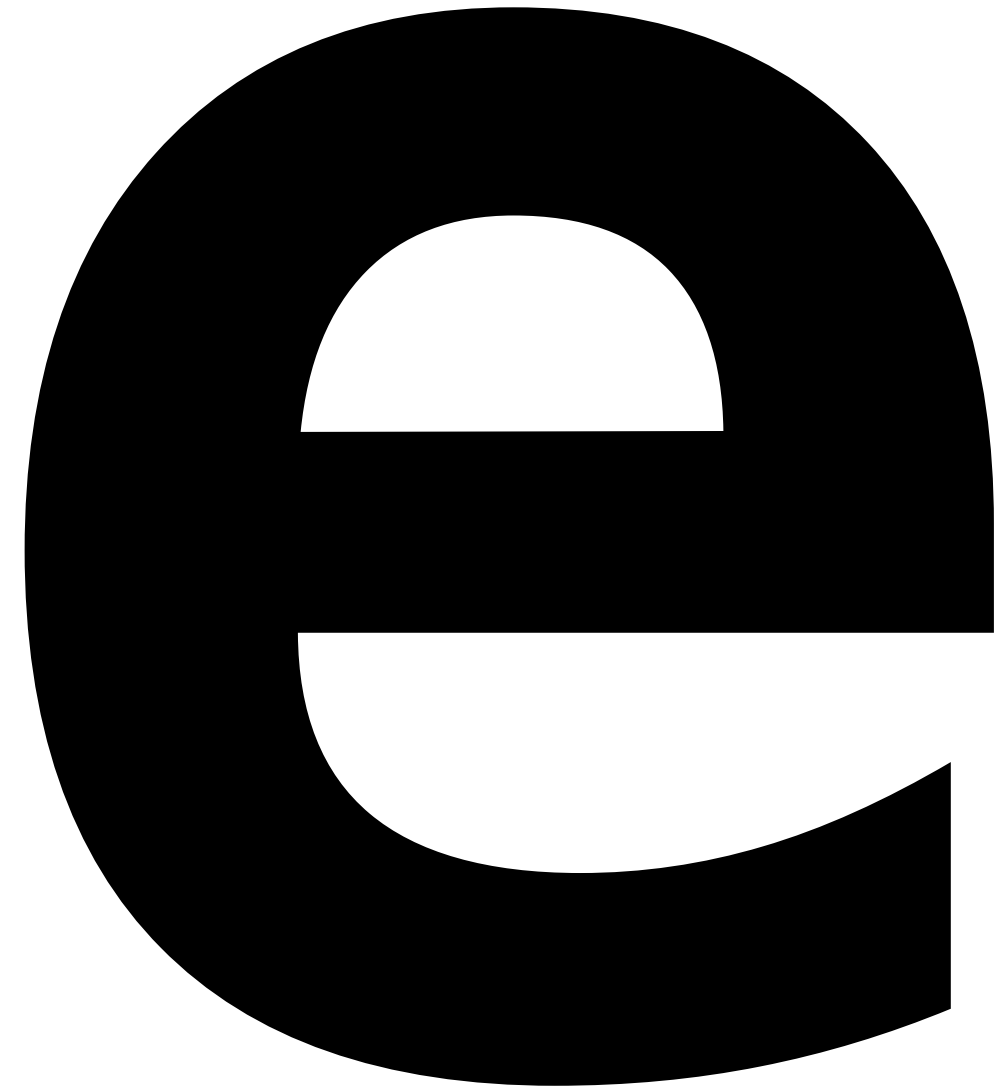


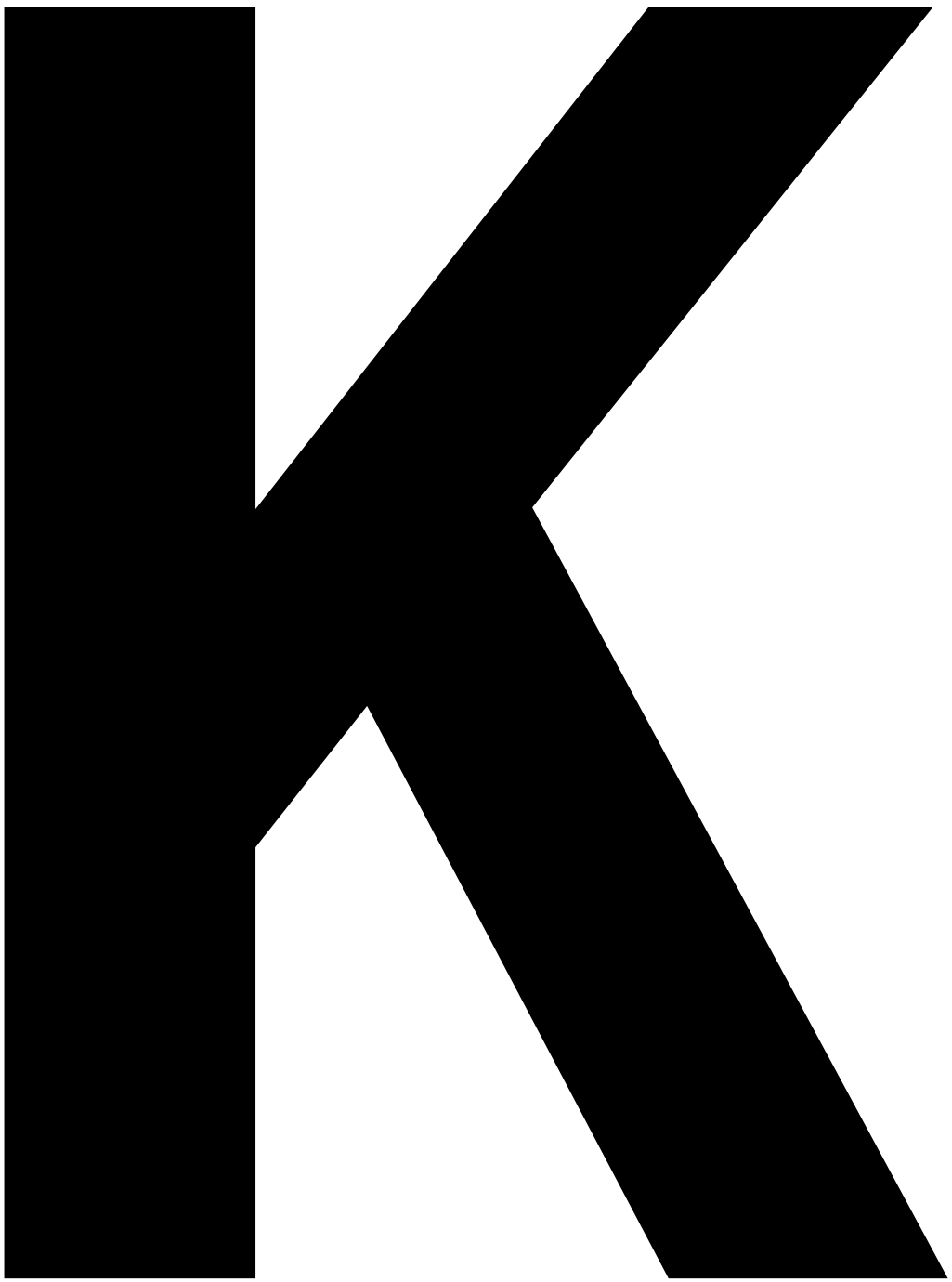


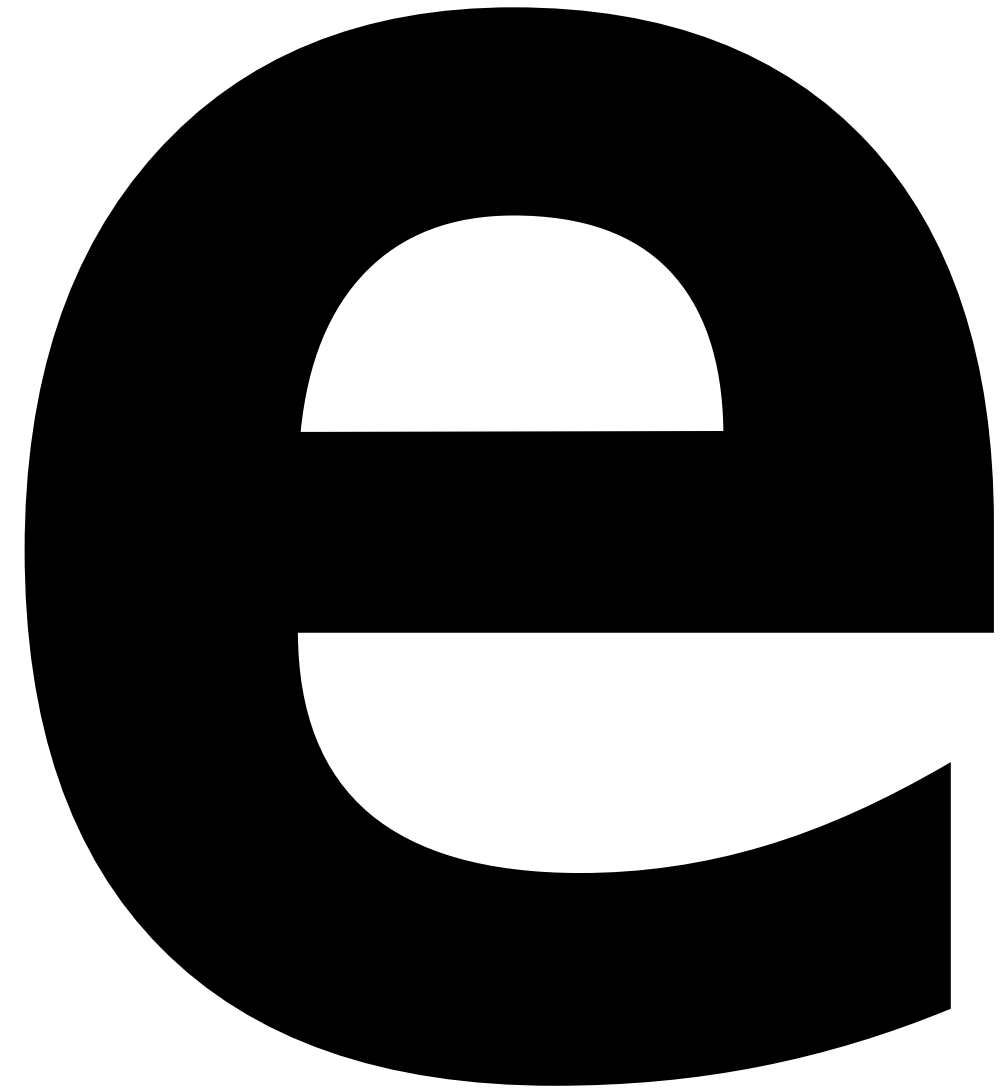


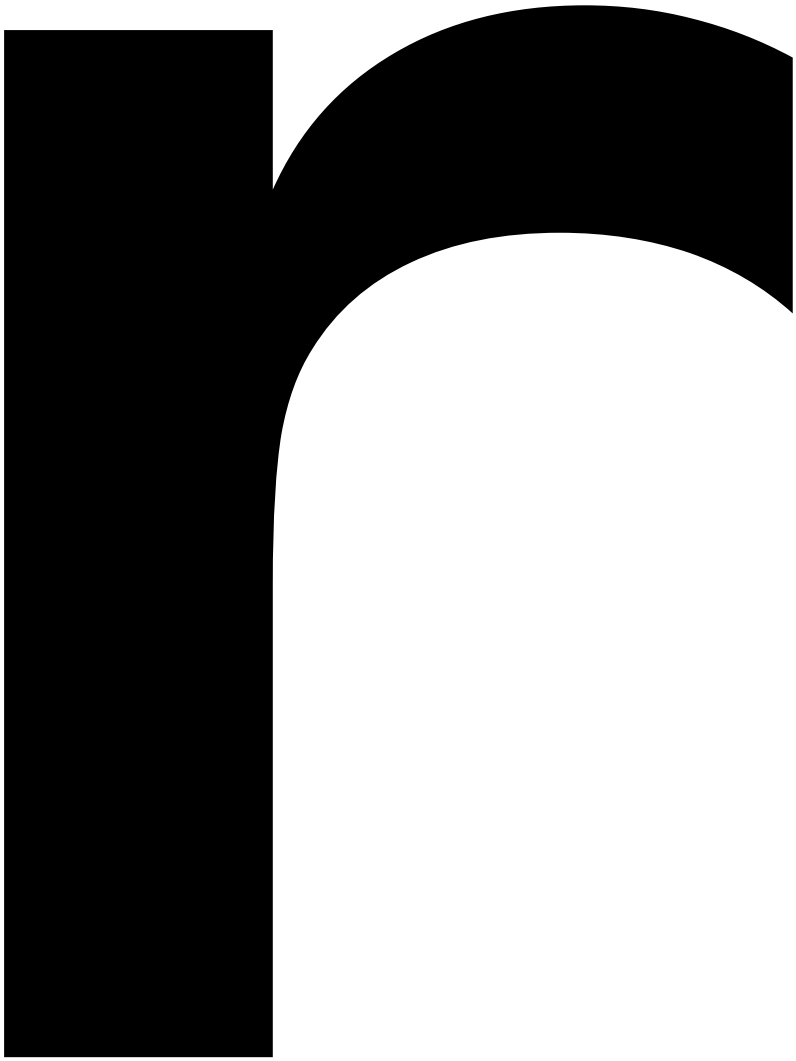
d

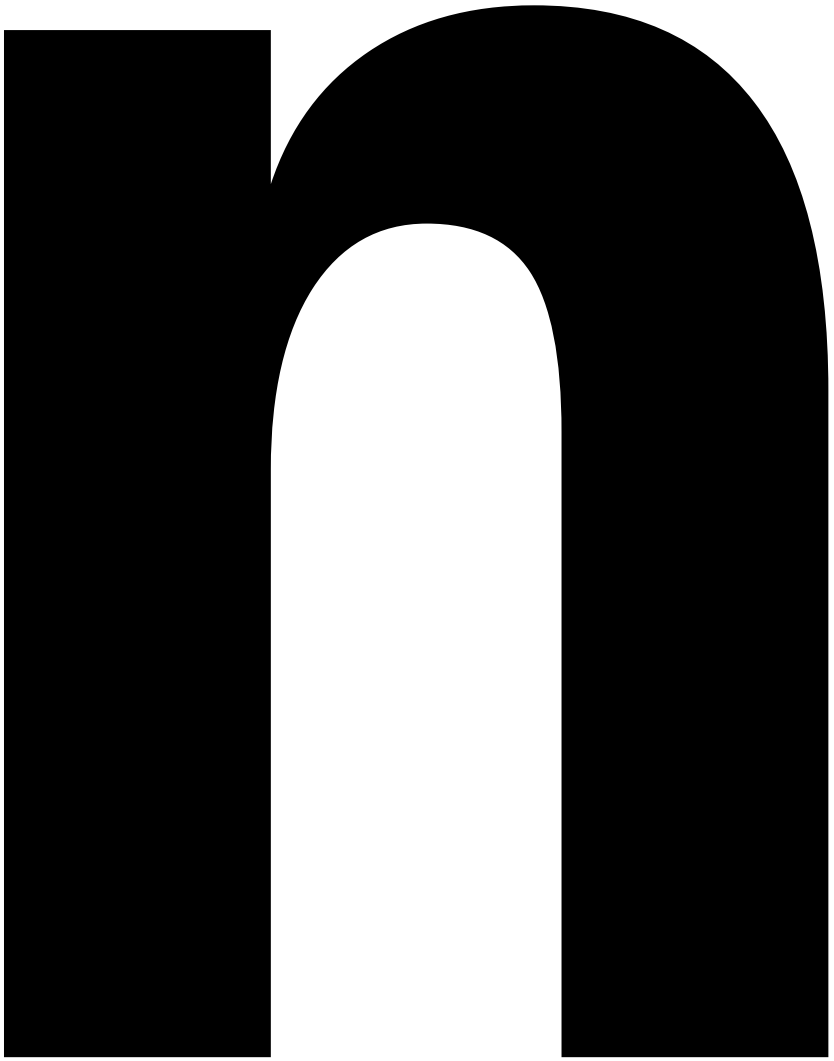


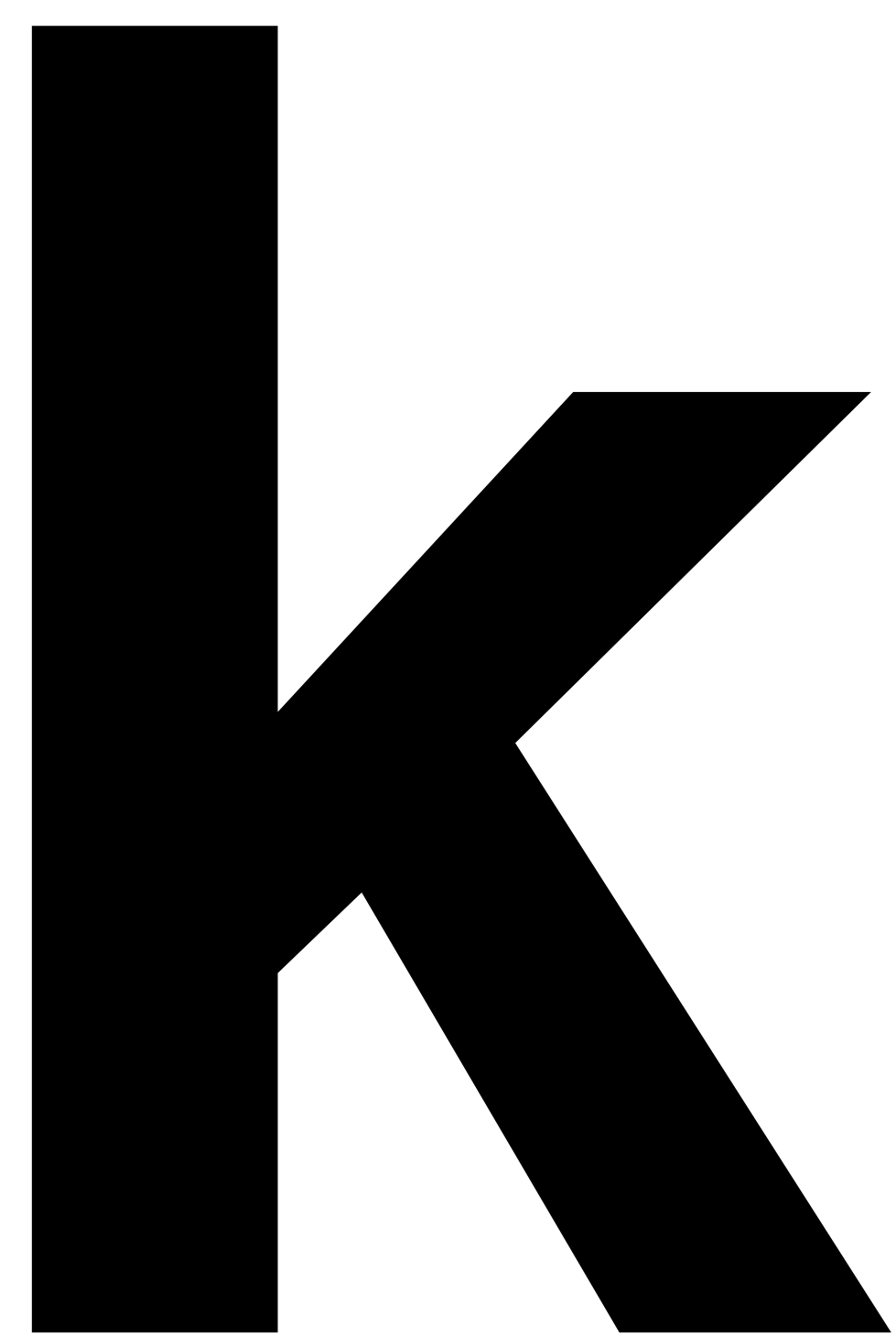


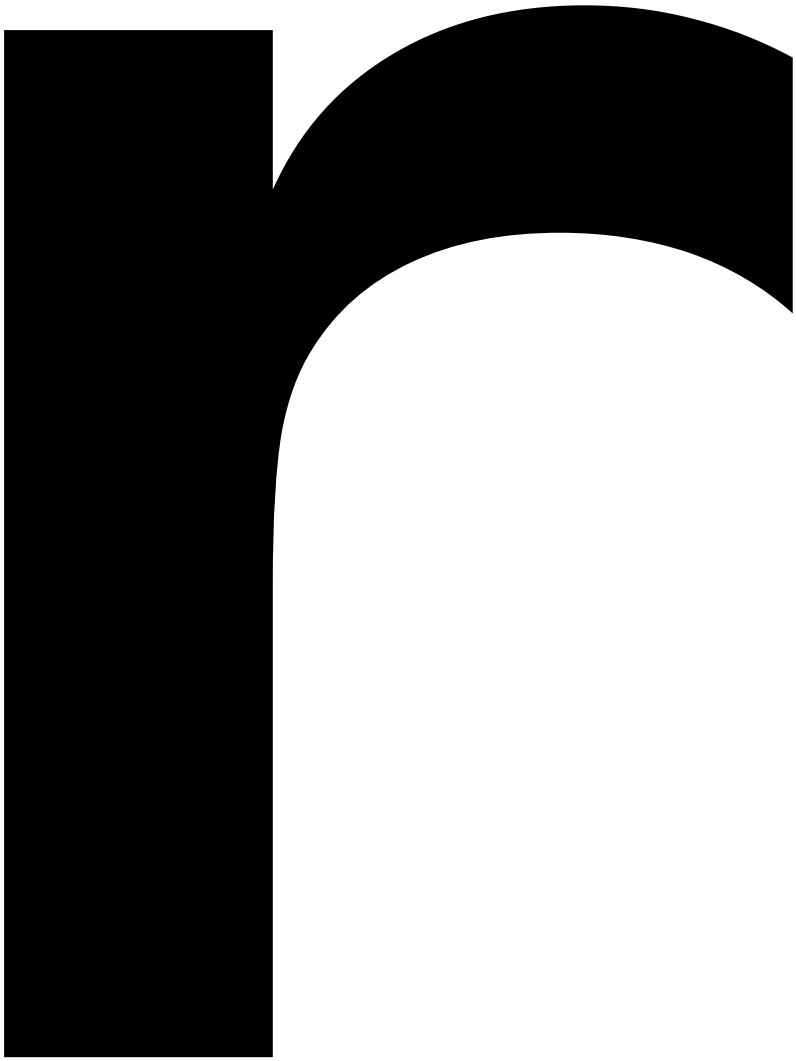


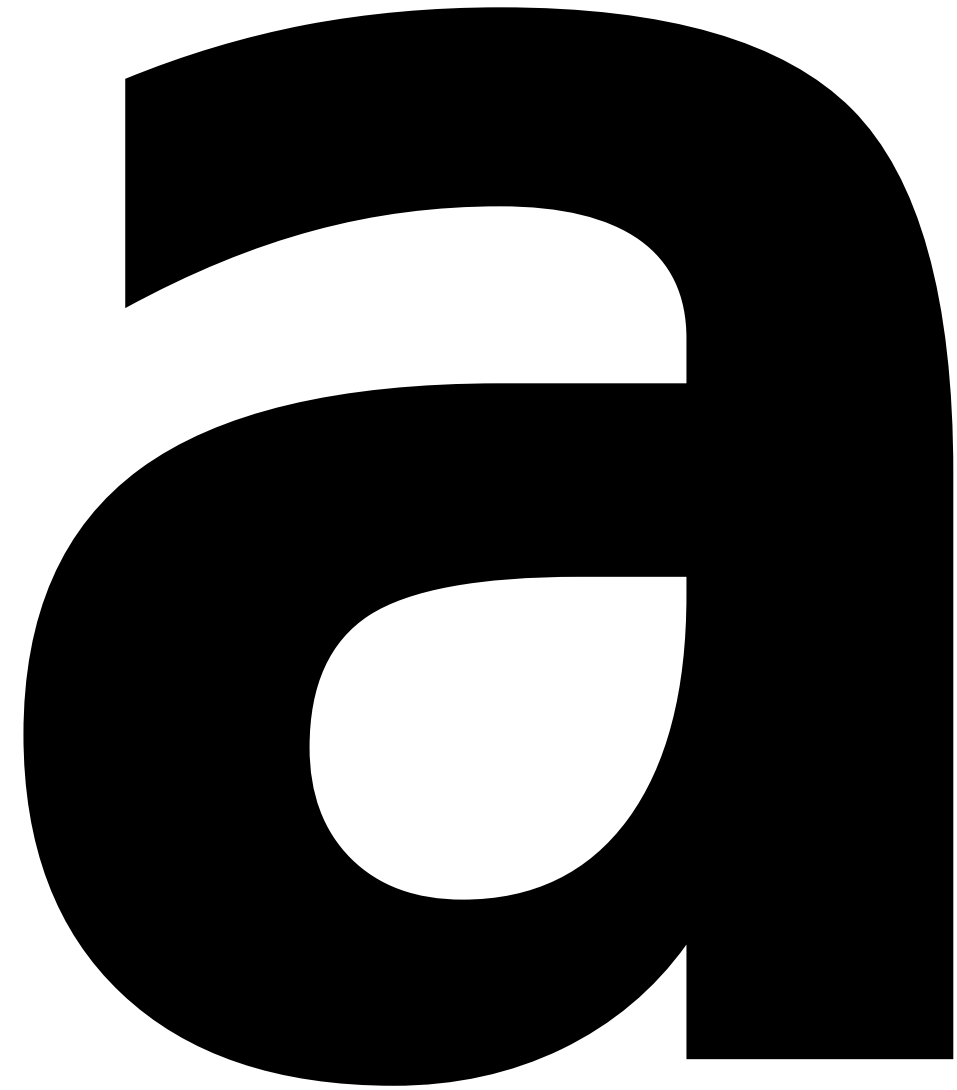


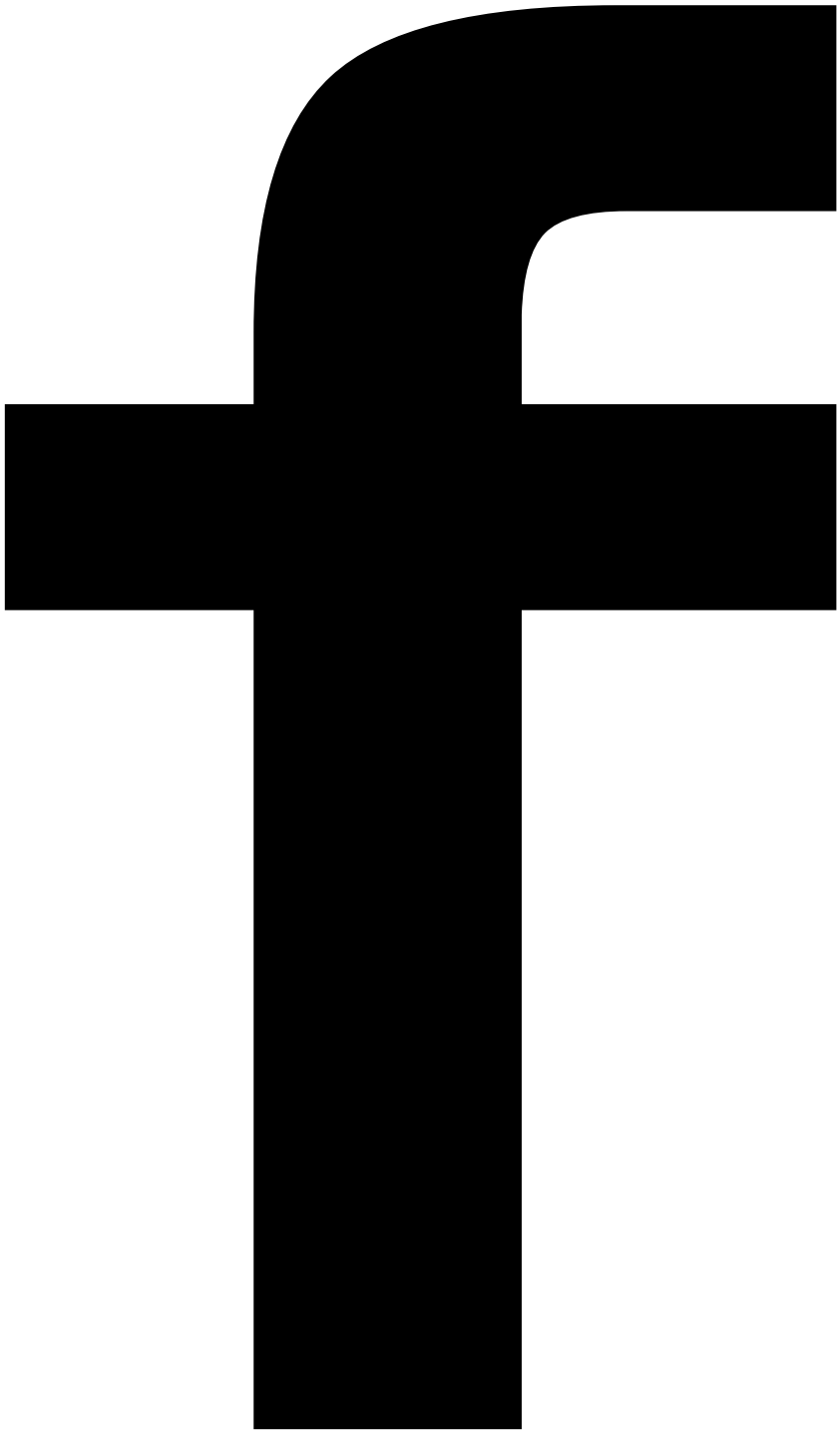


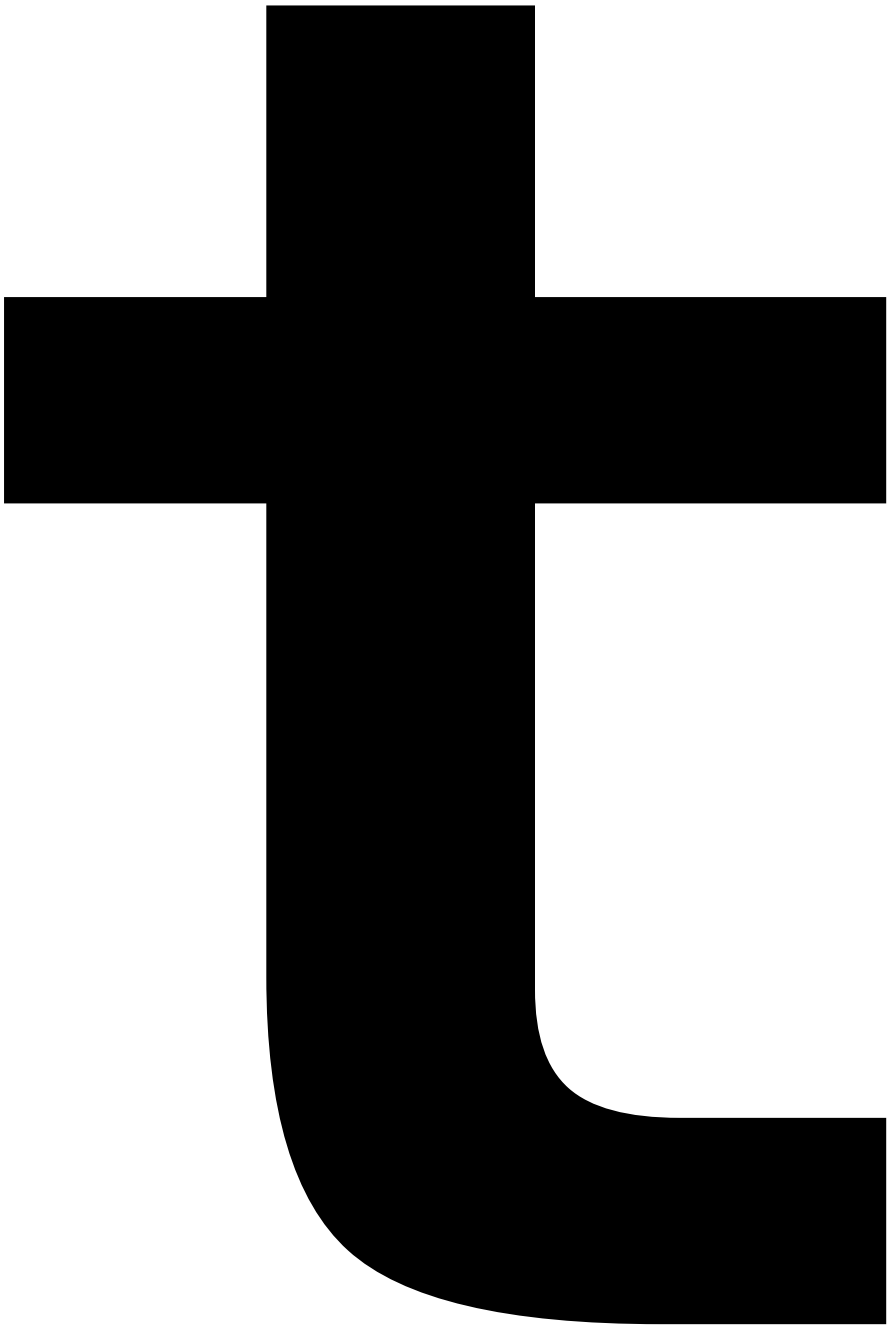


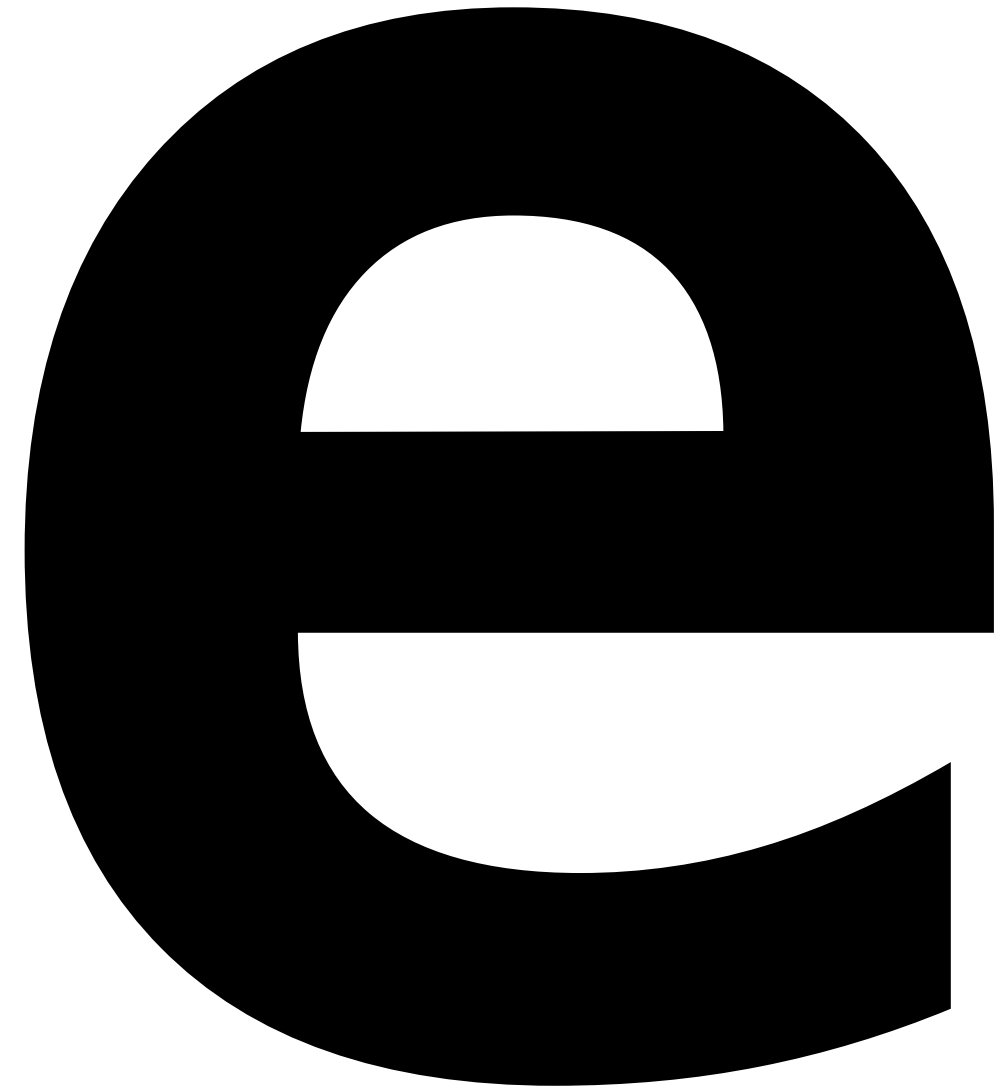


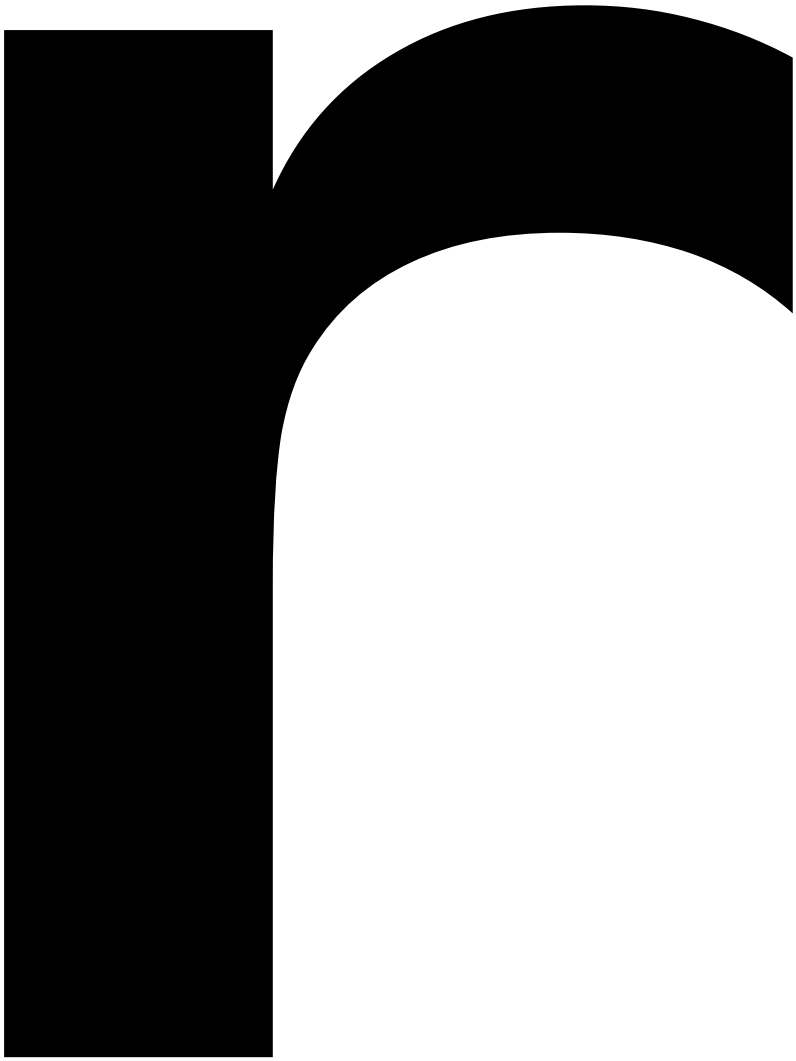


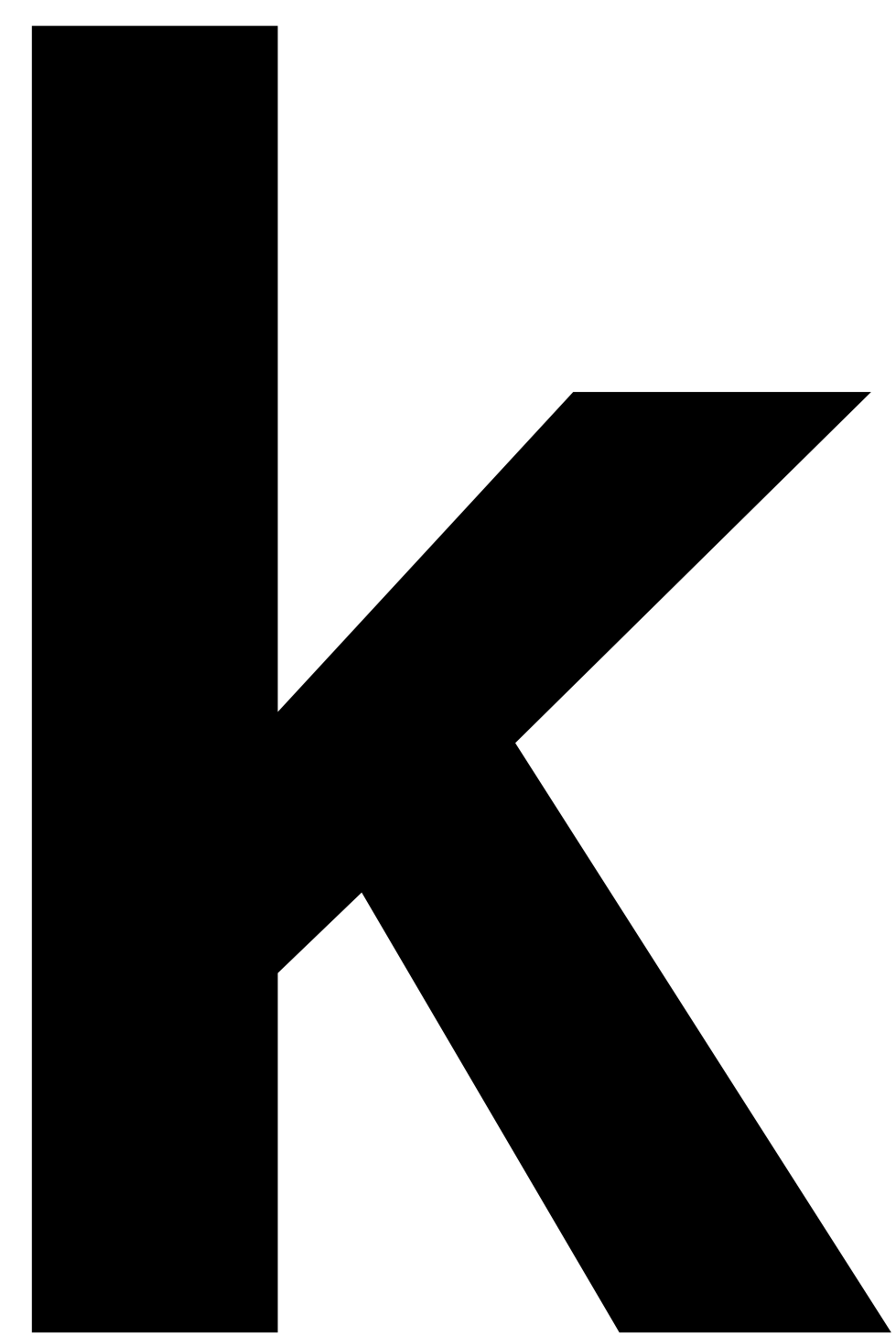


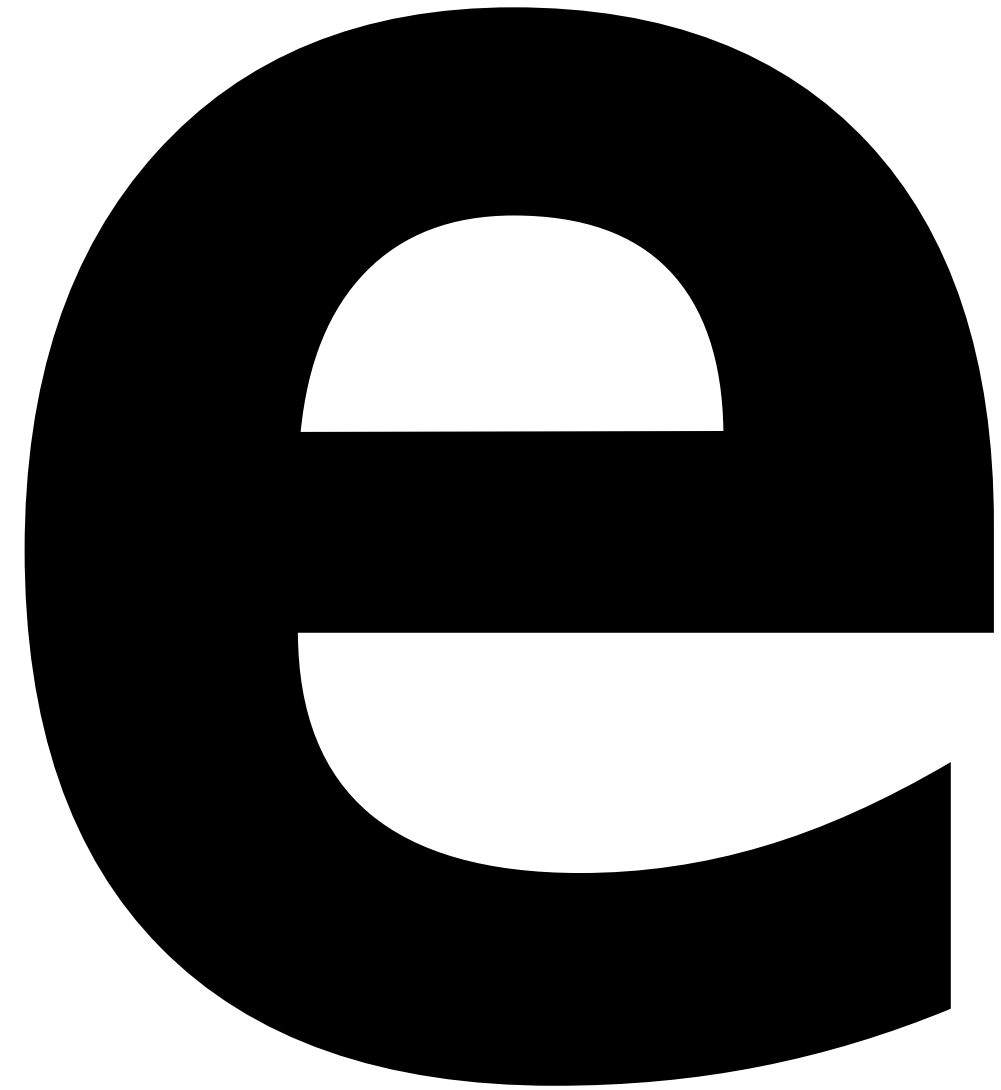


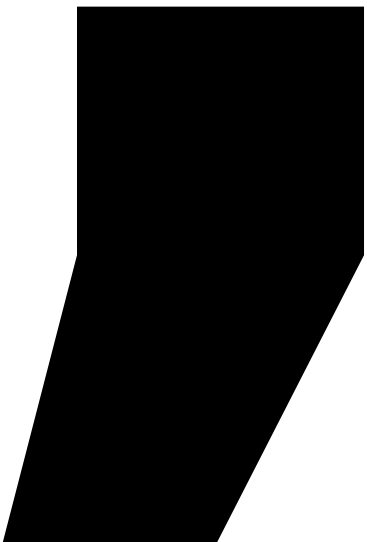


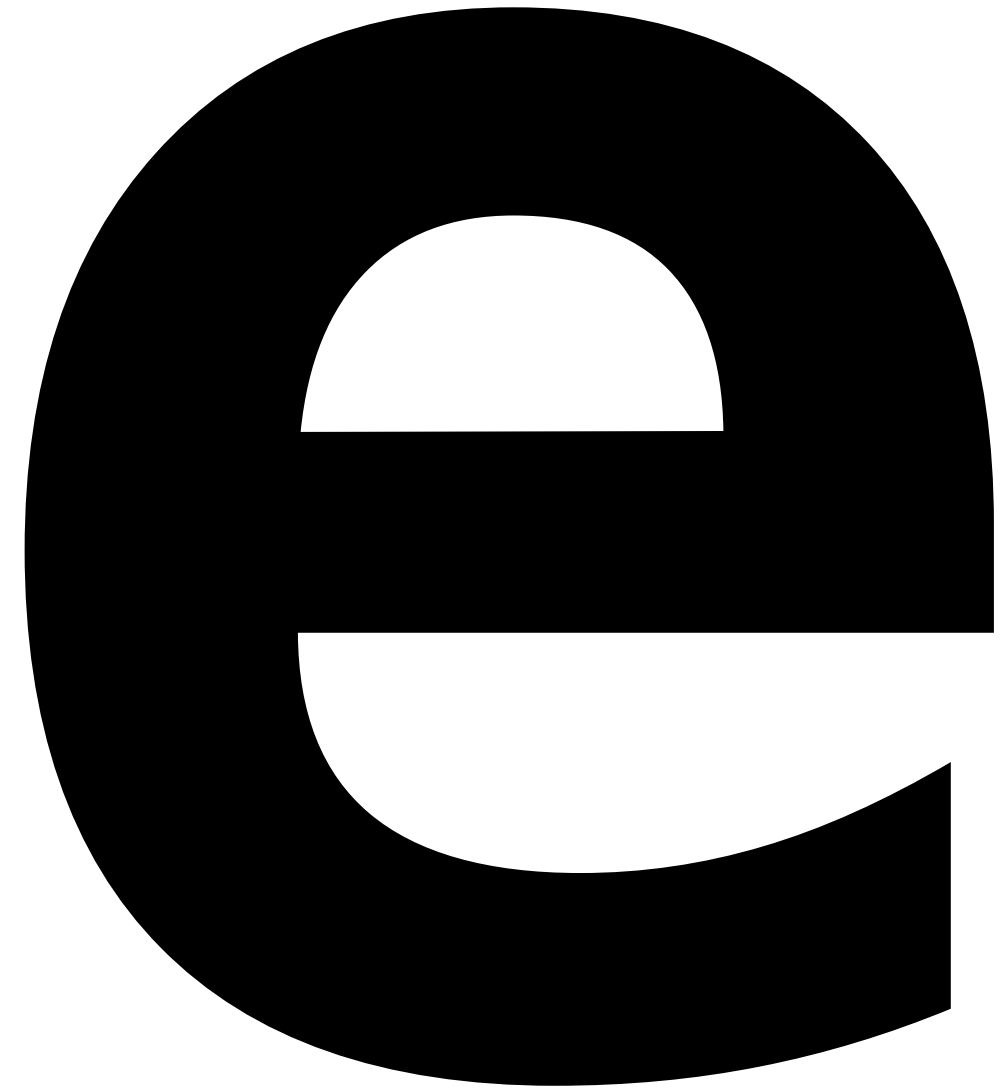


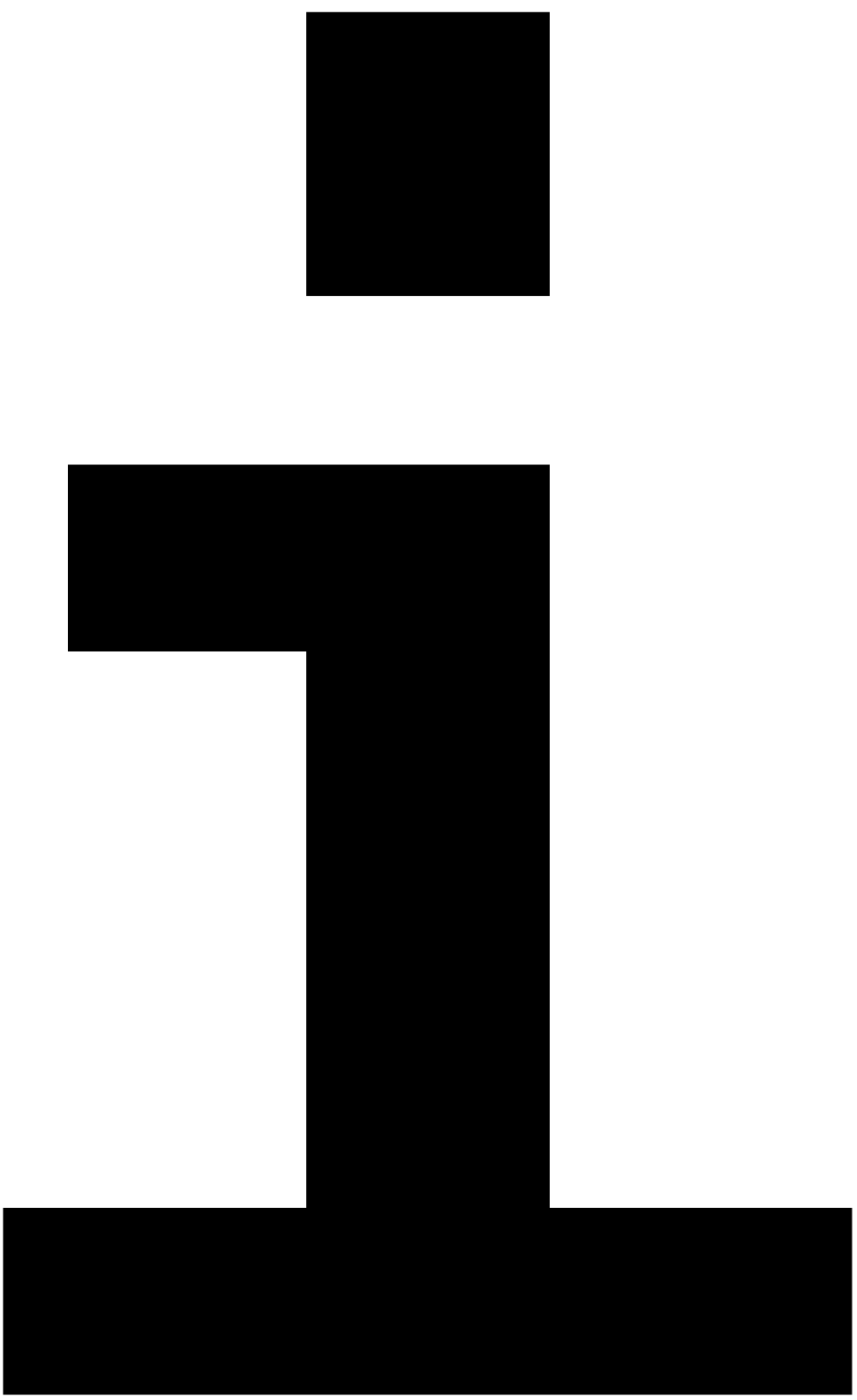


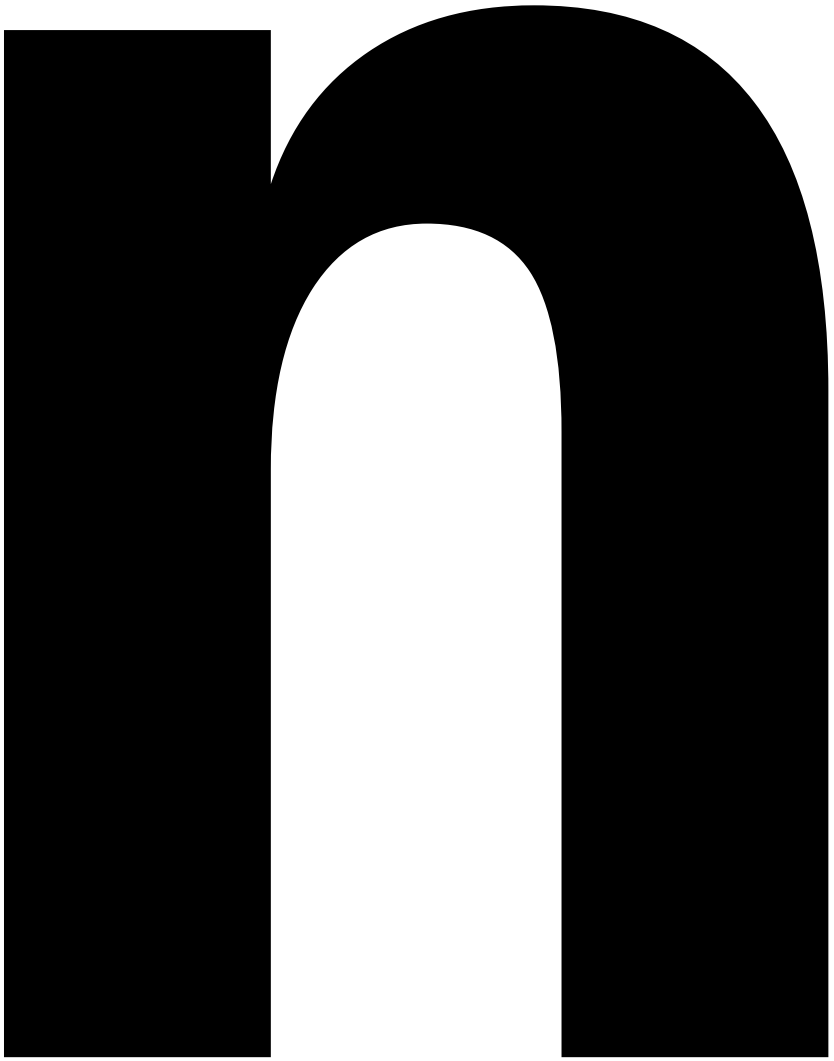


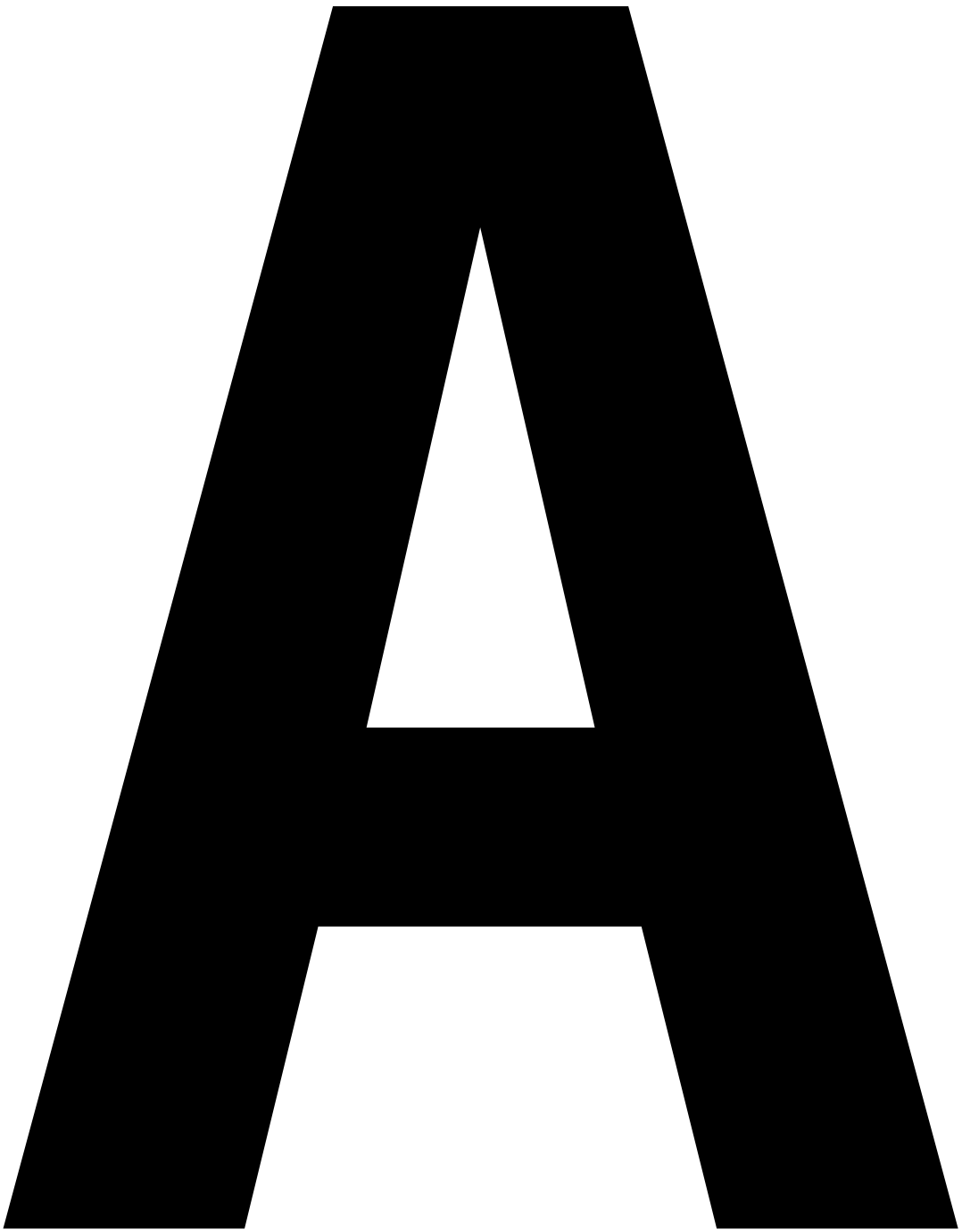








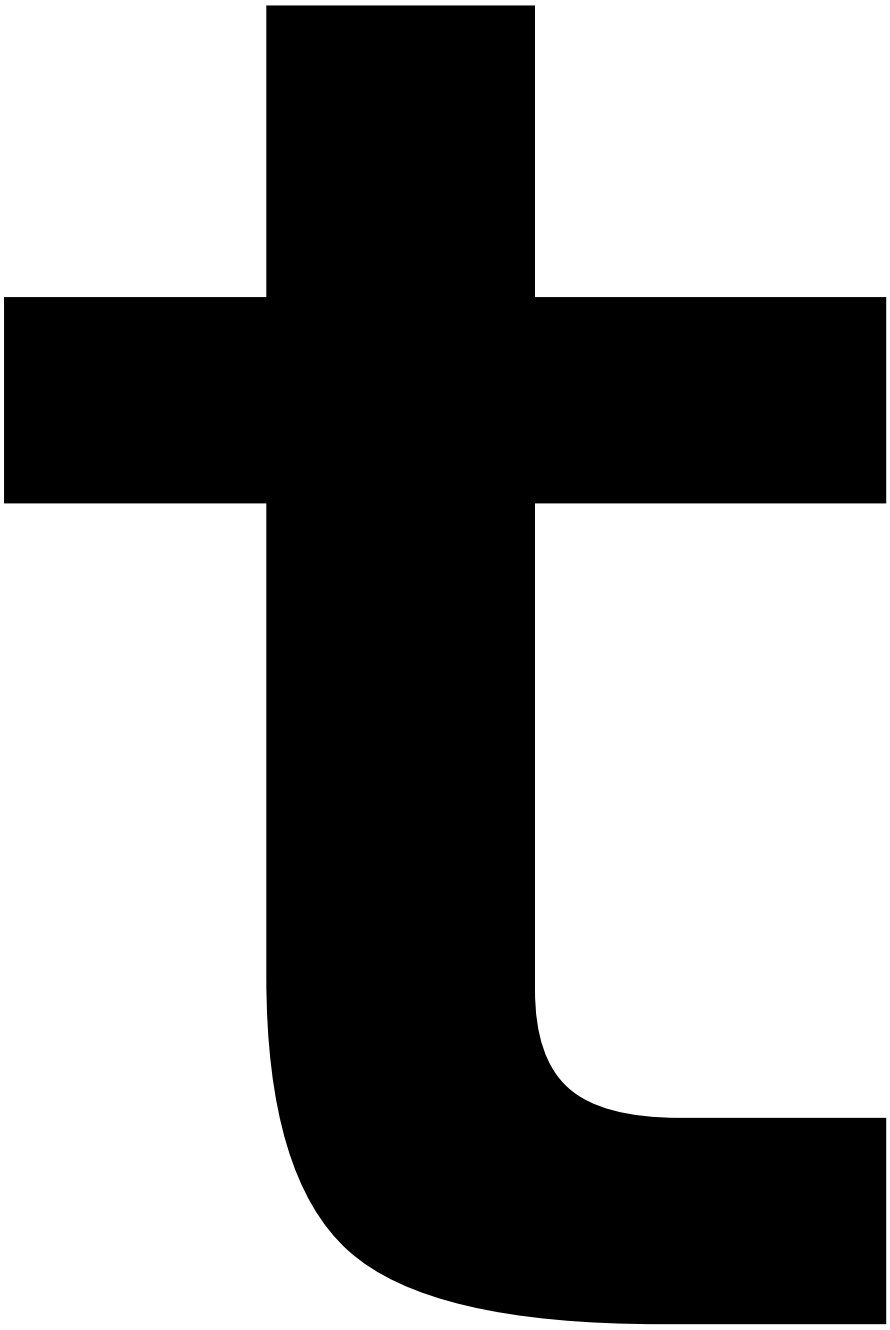


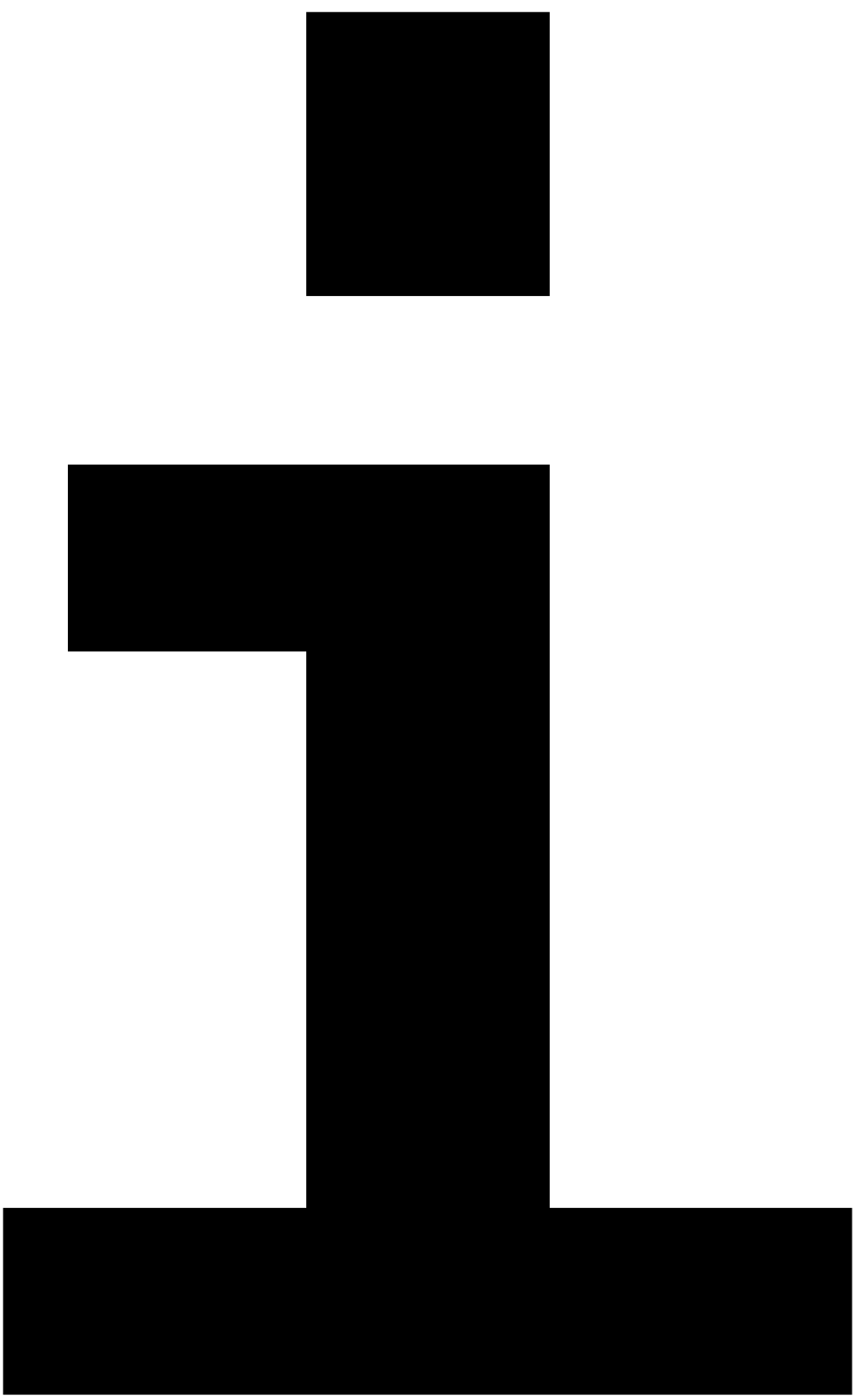


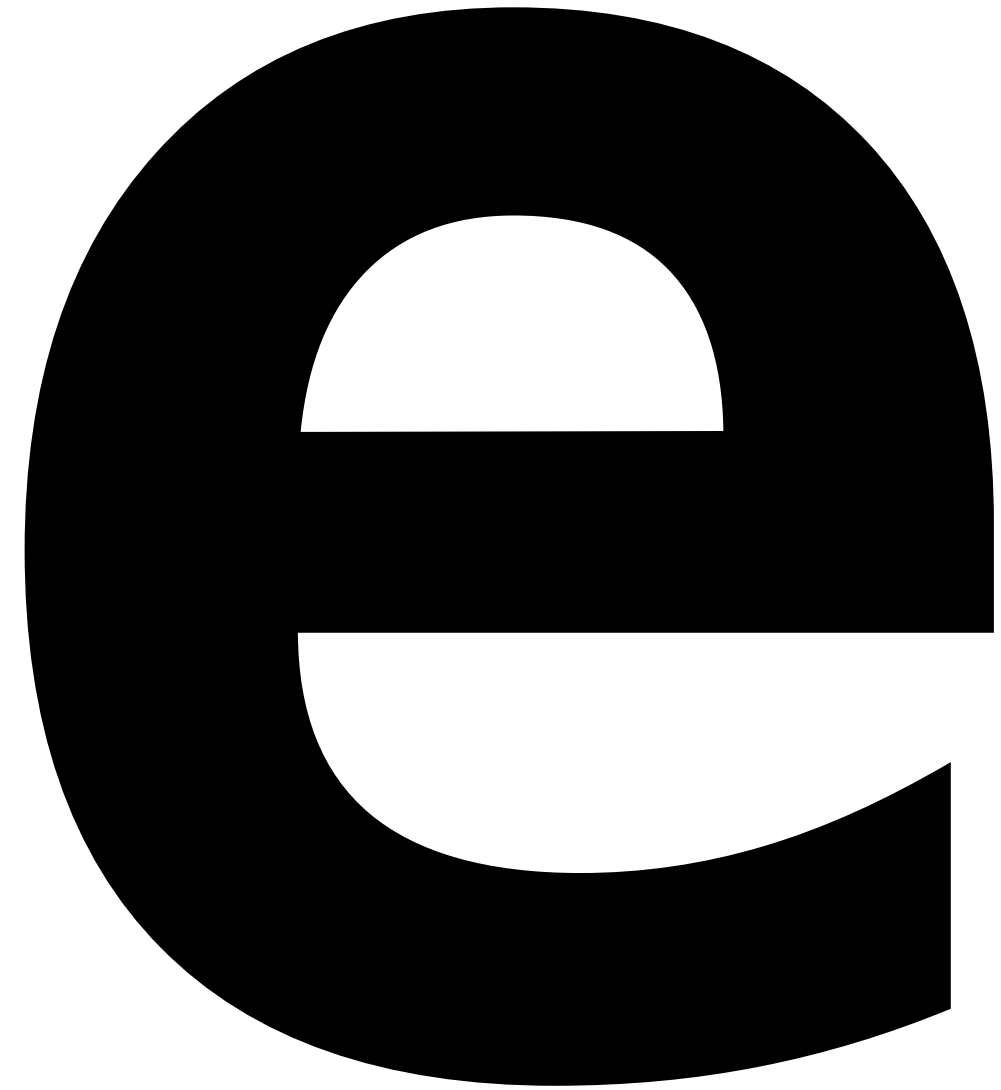
u

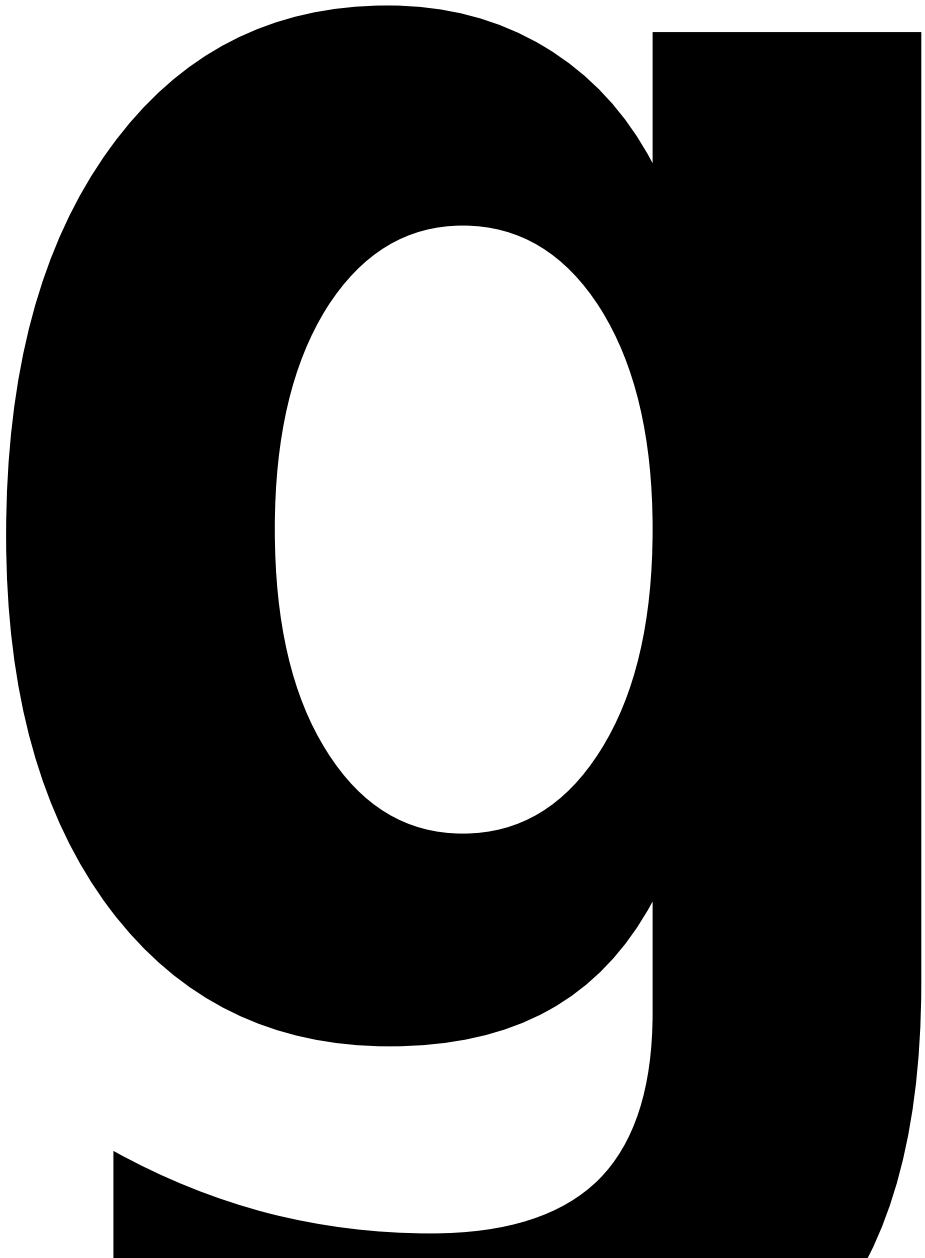
S

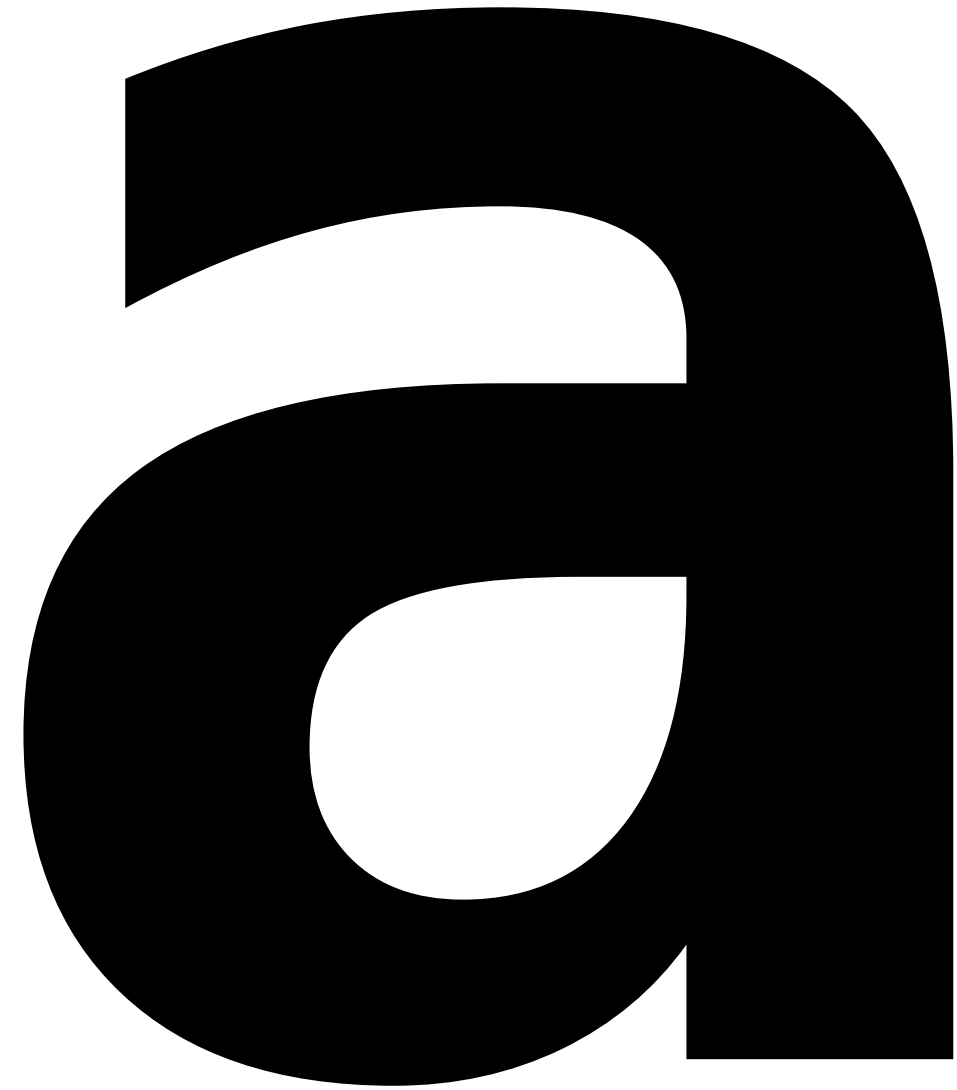
S







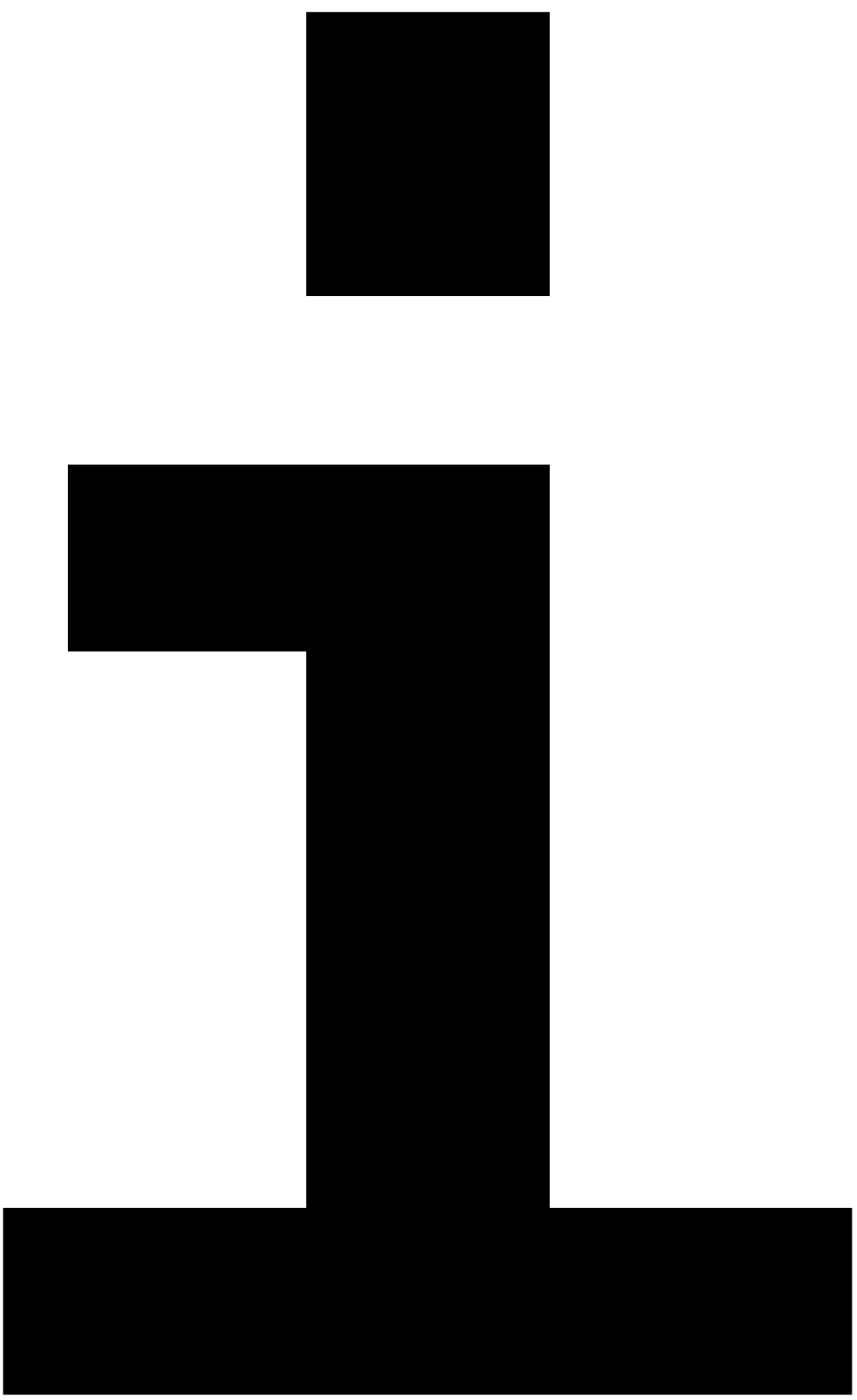


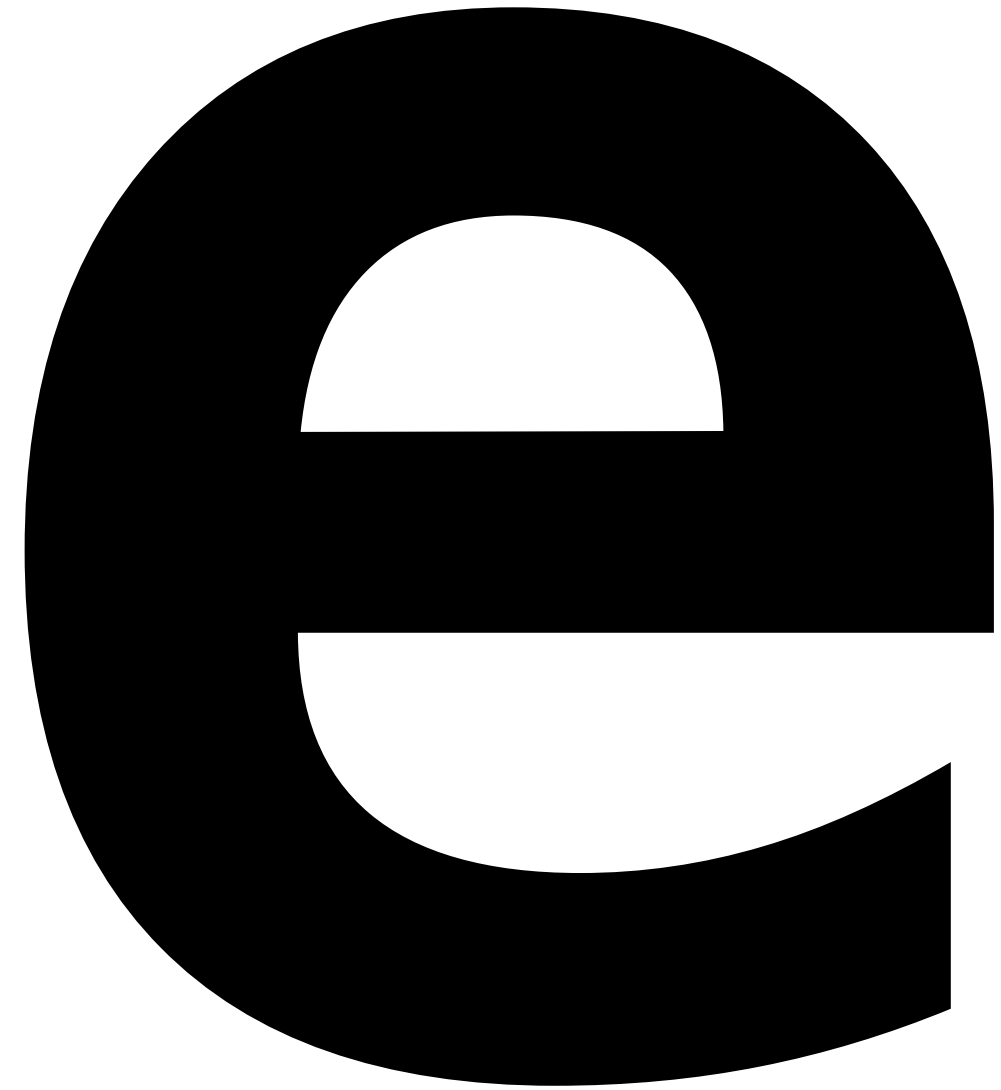


u

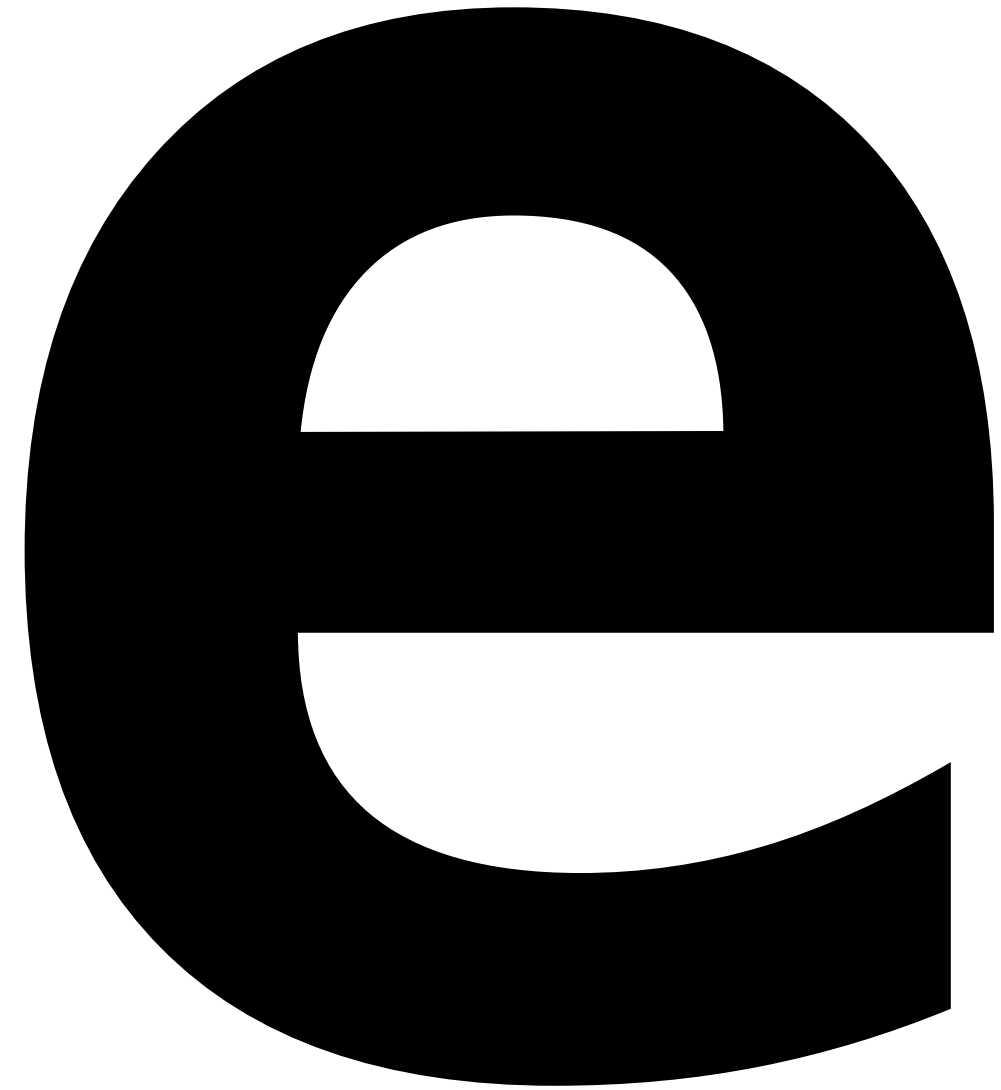
S

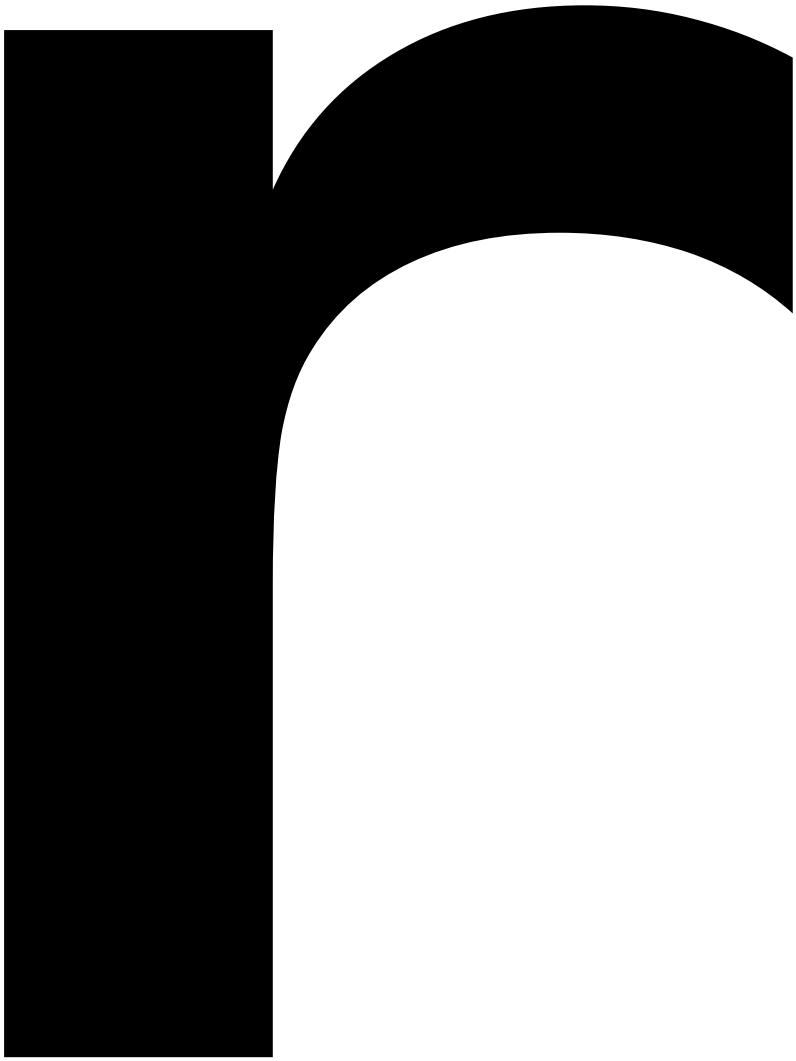
d

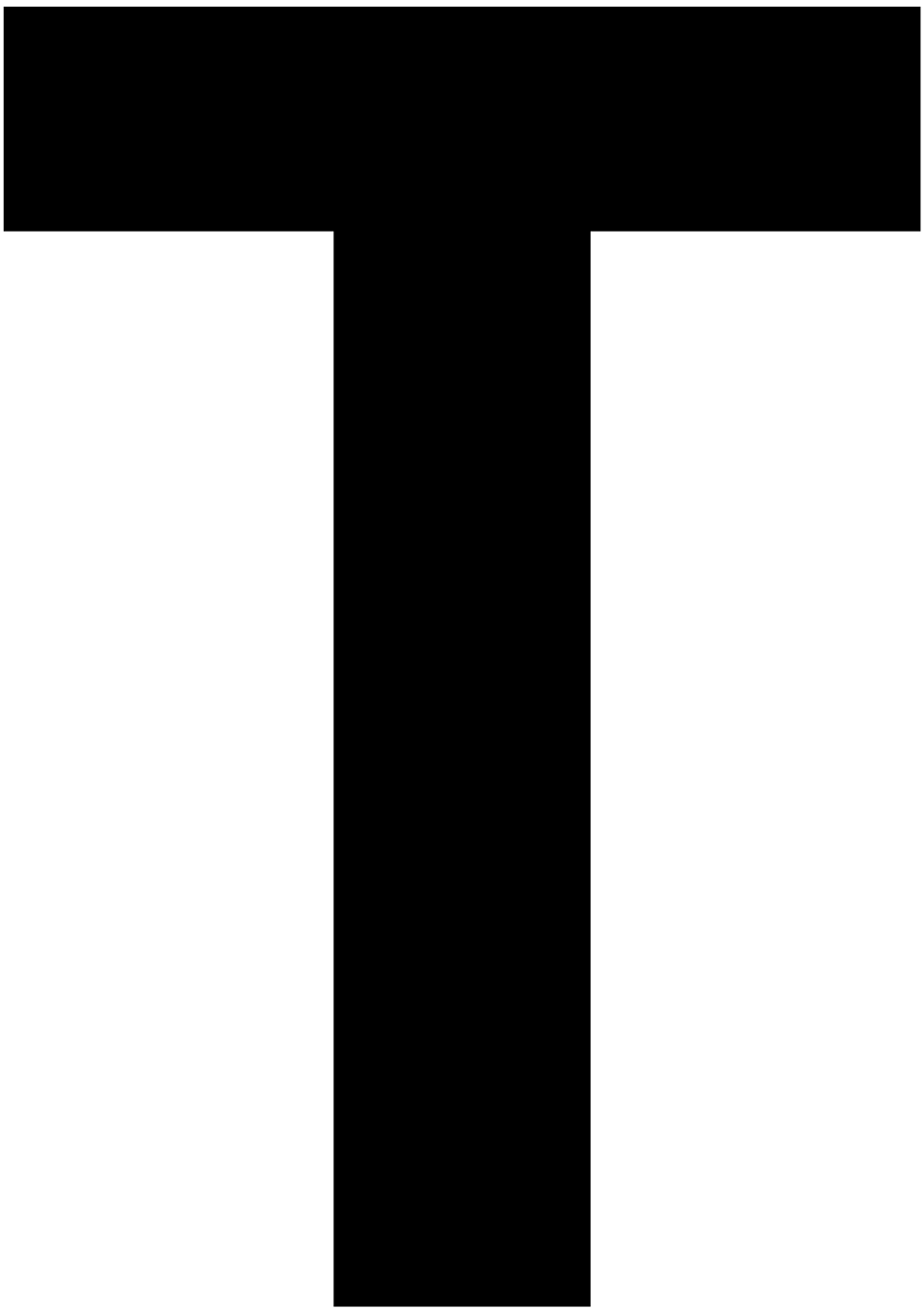


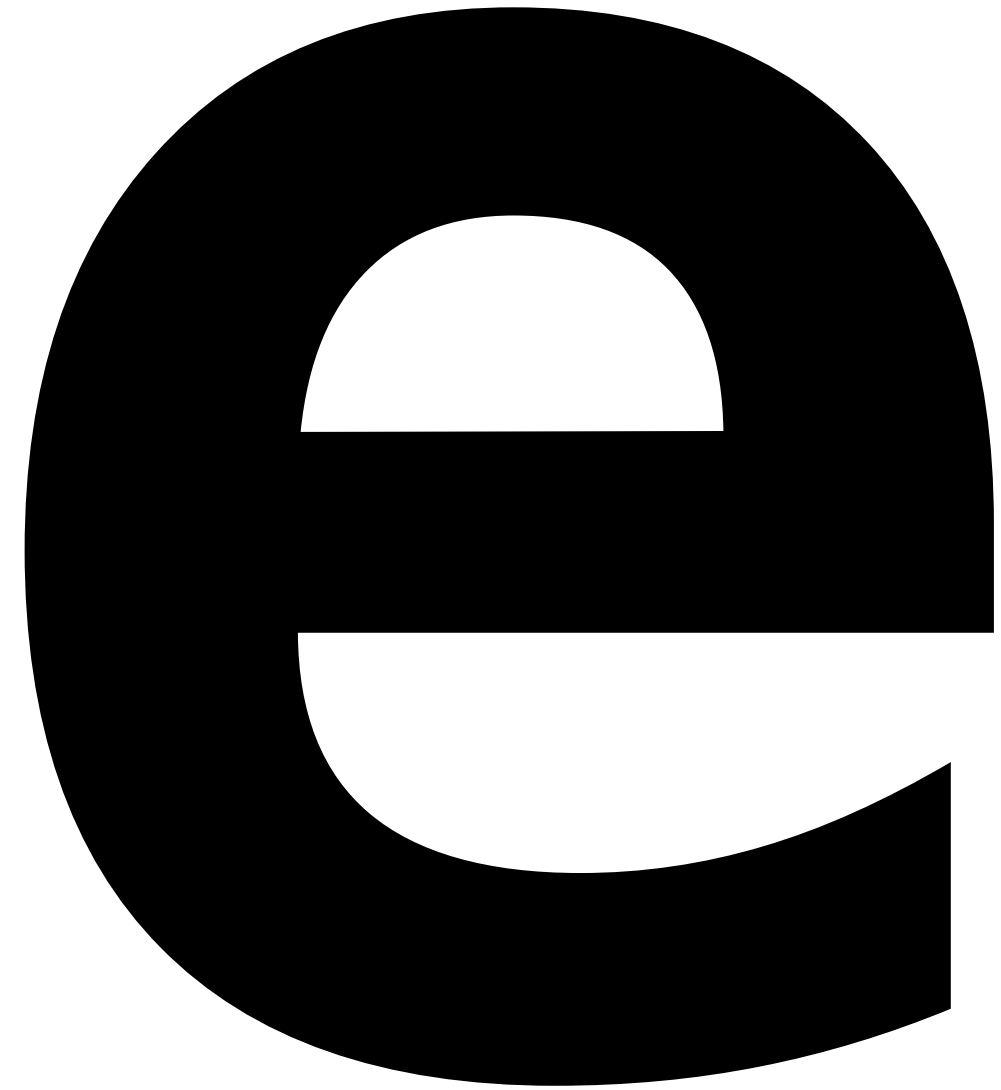


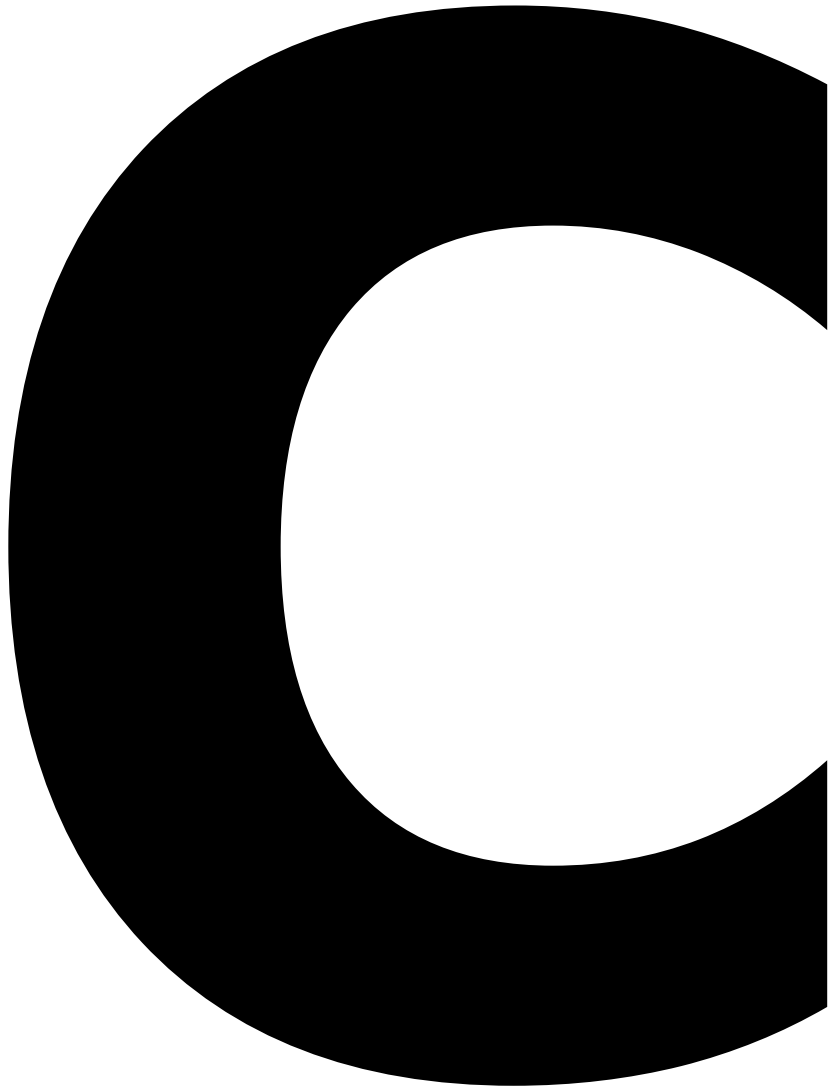
S

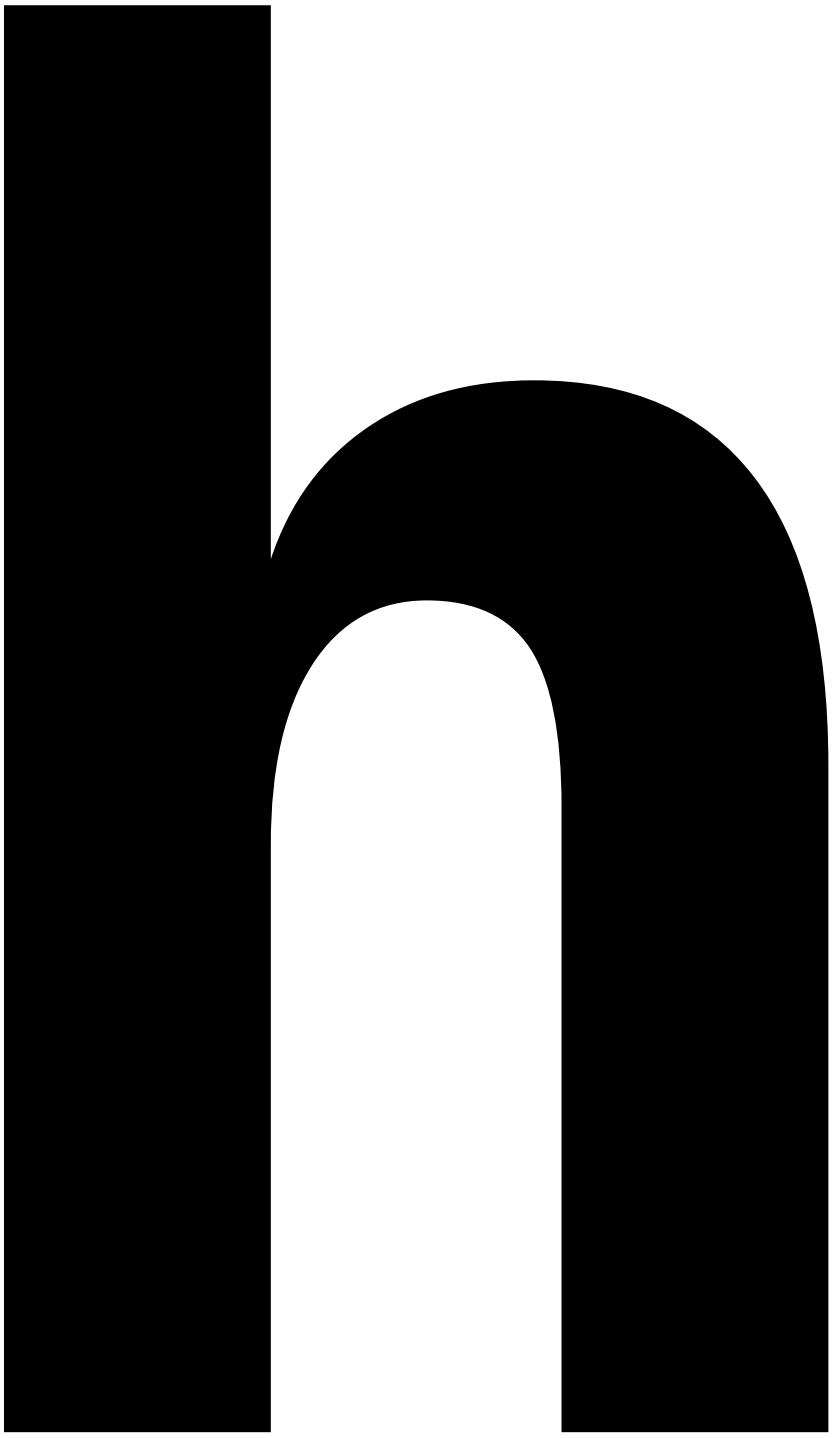


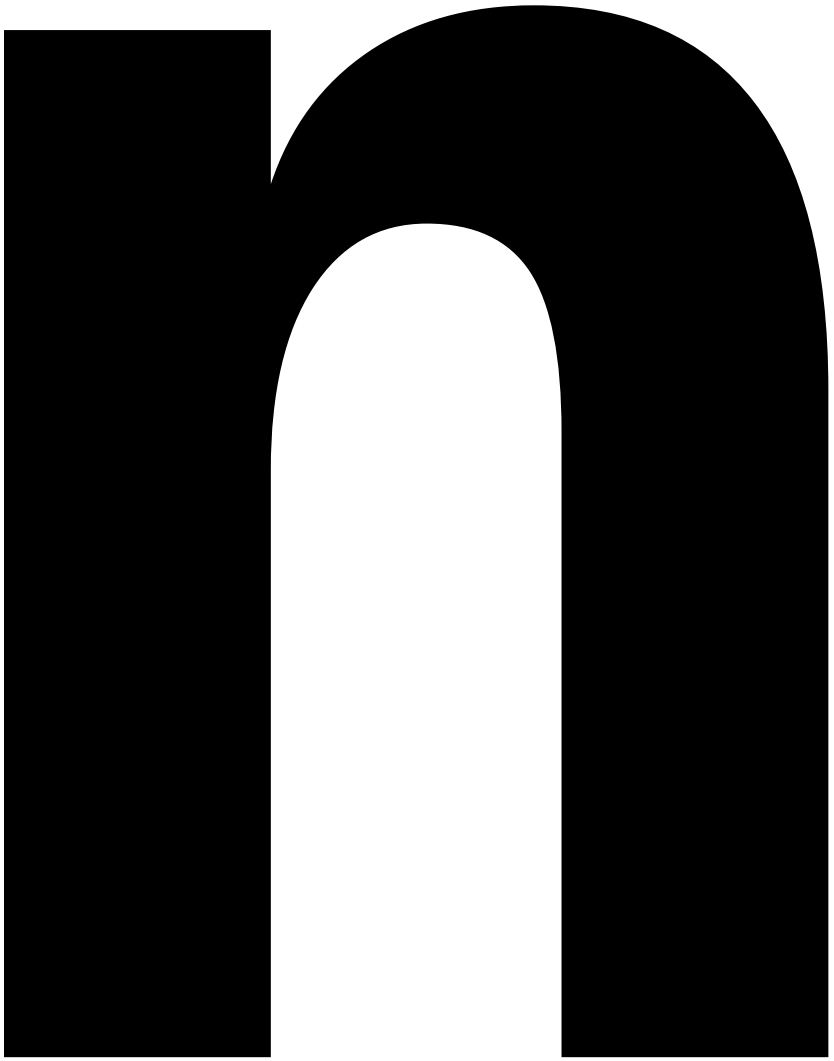


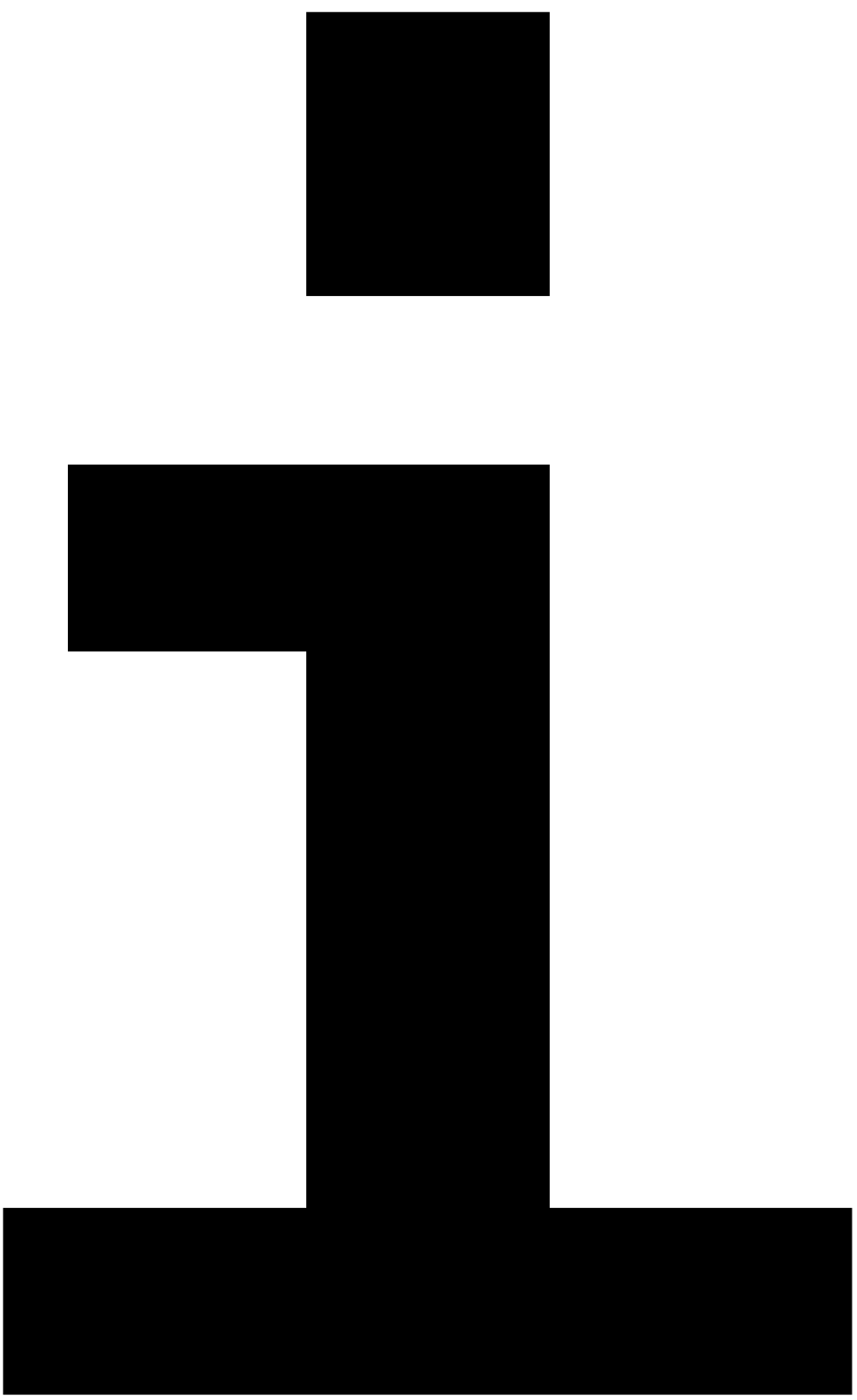


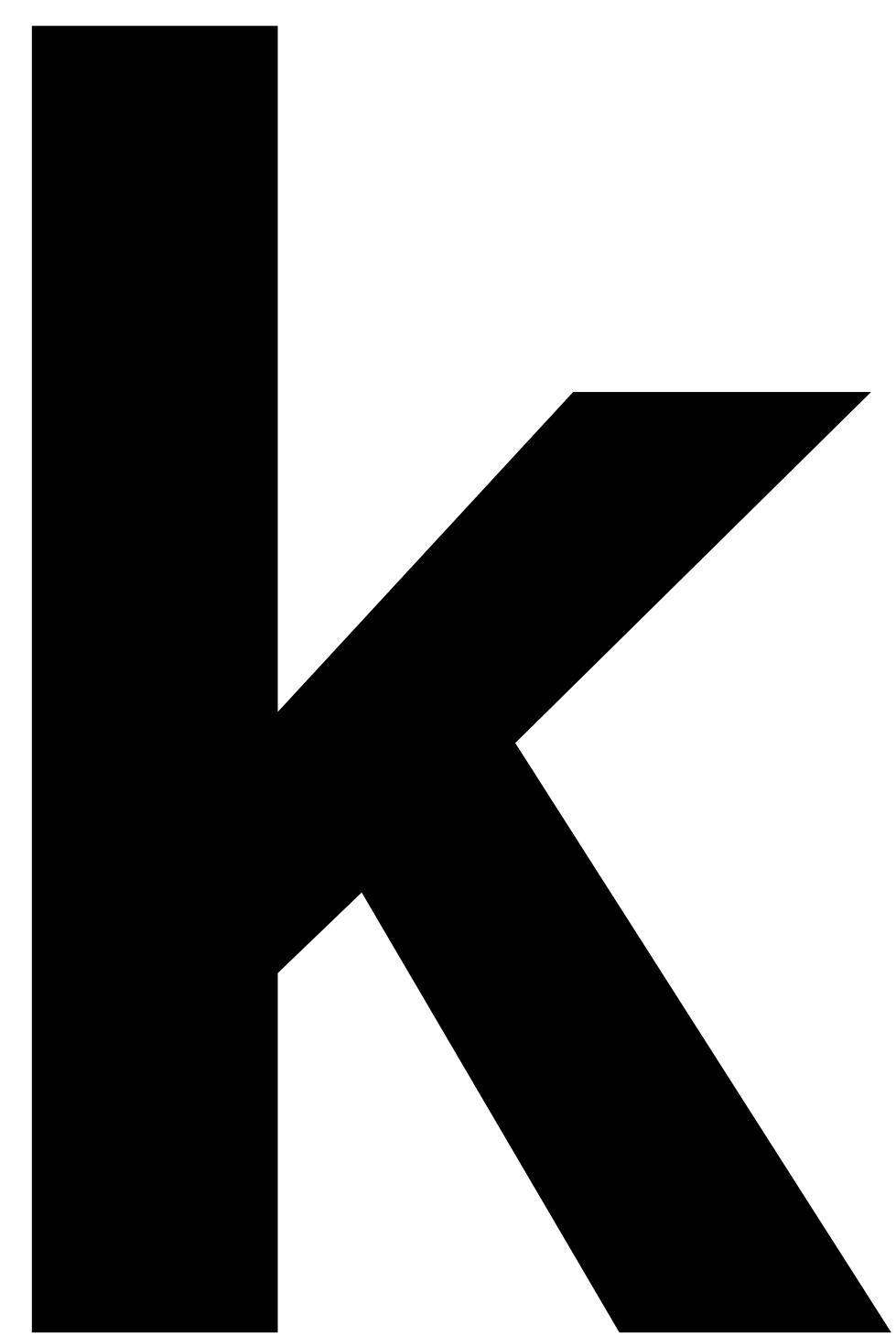


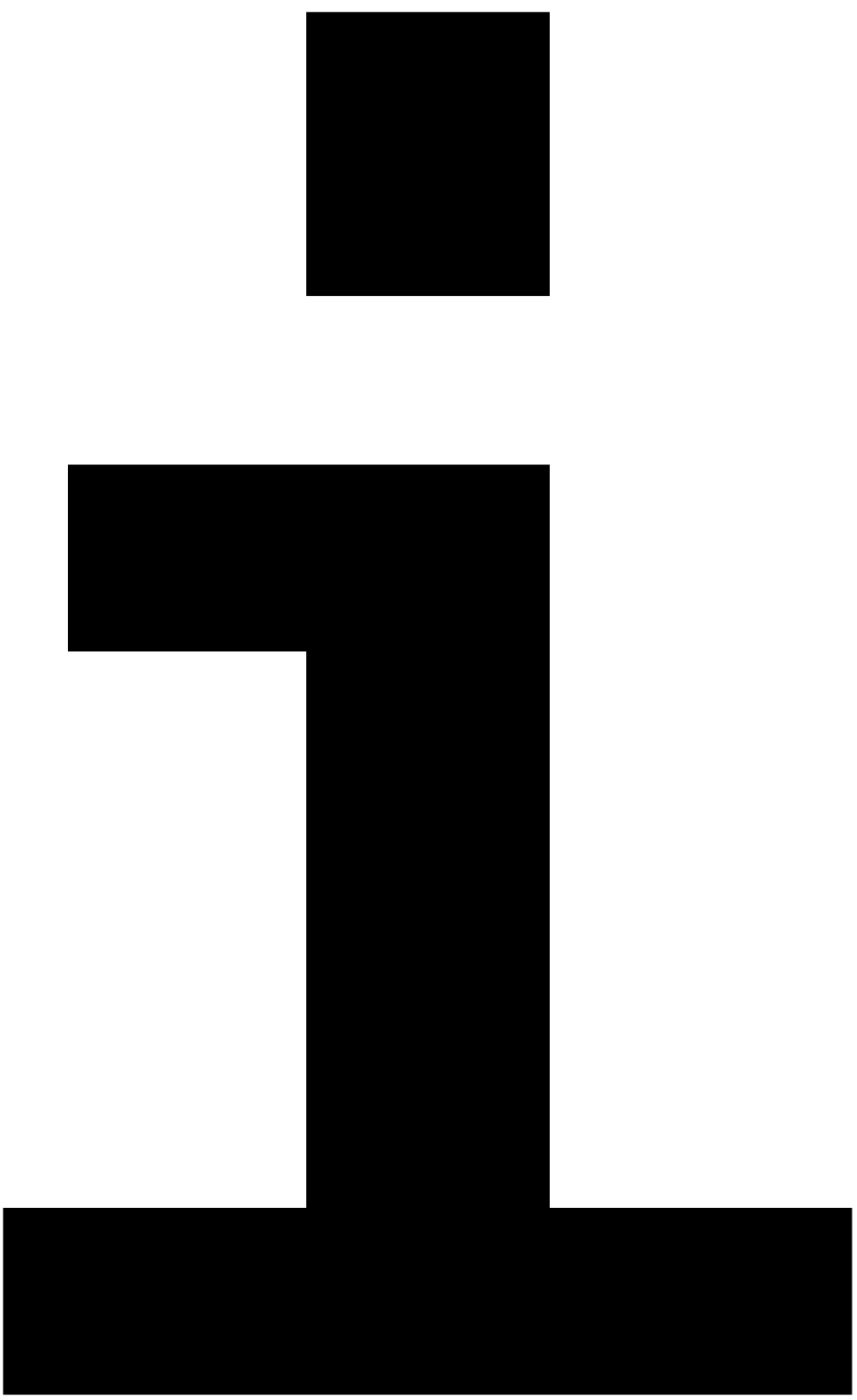




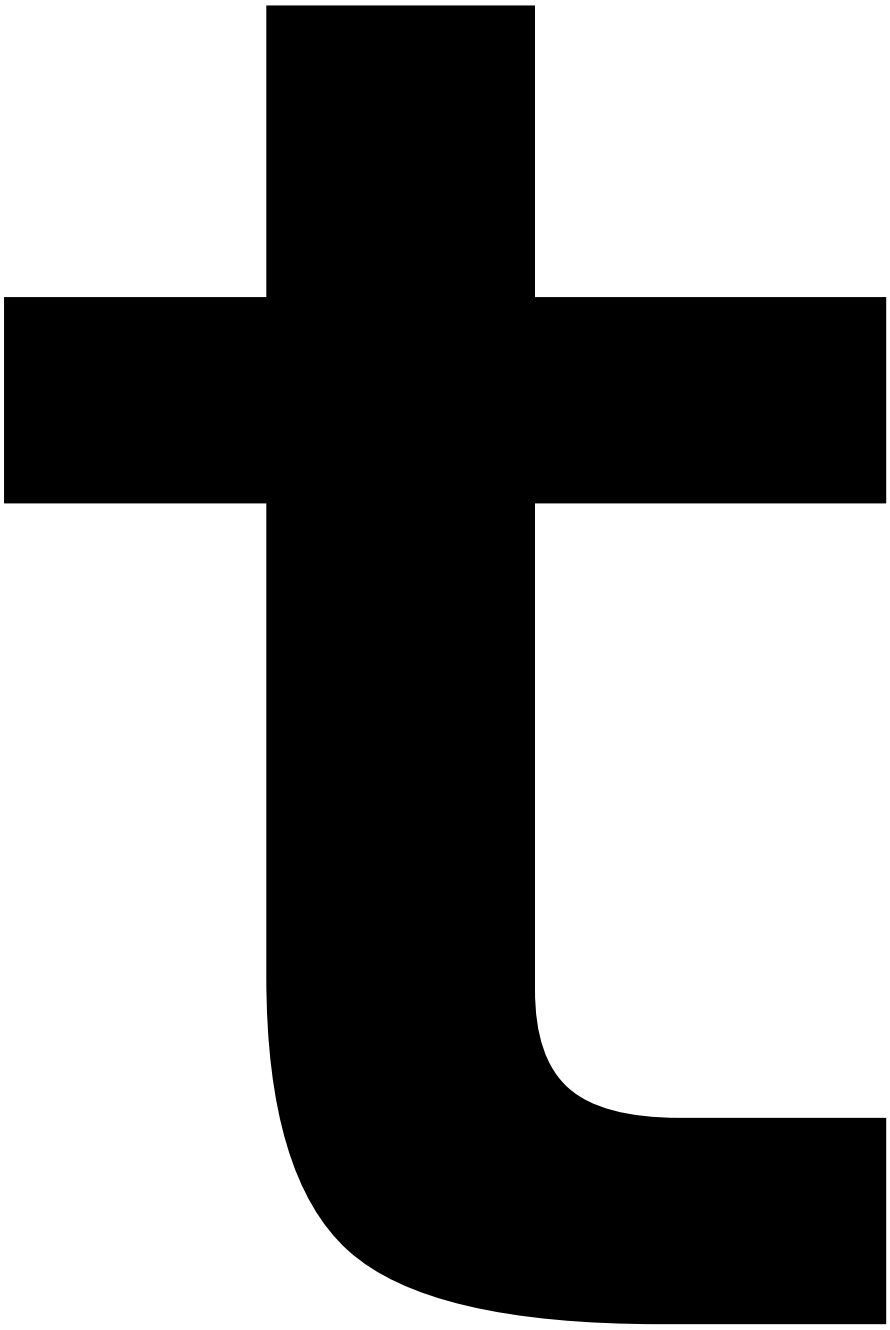


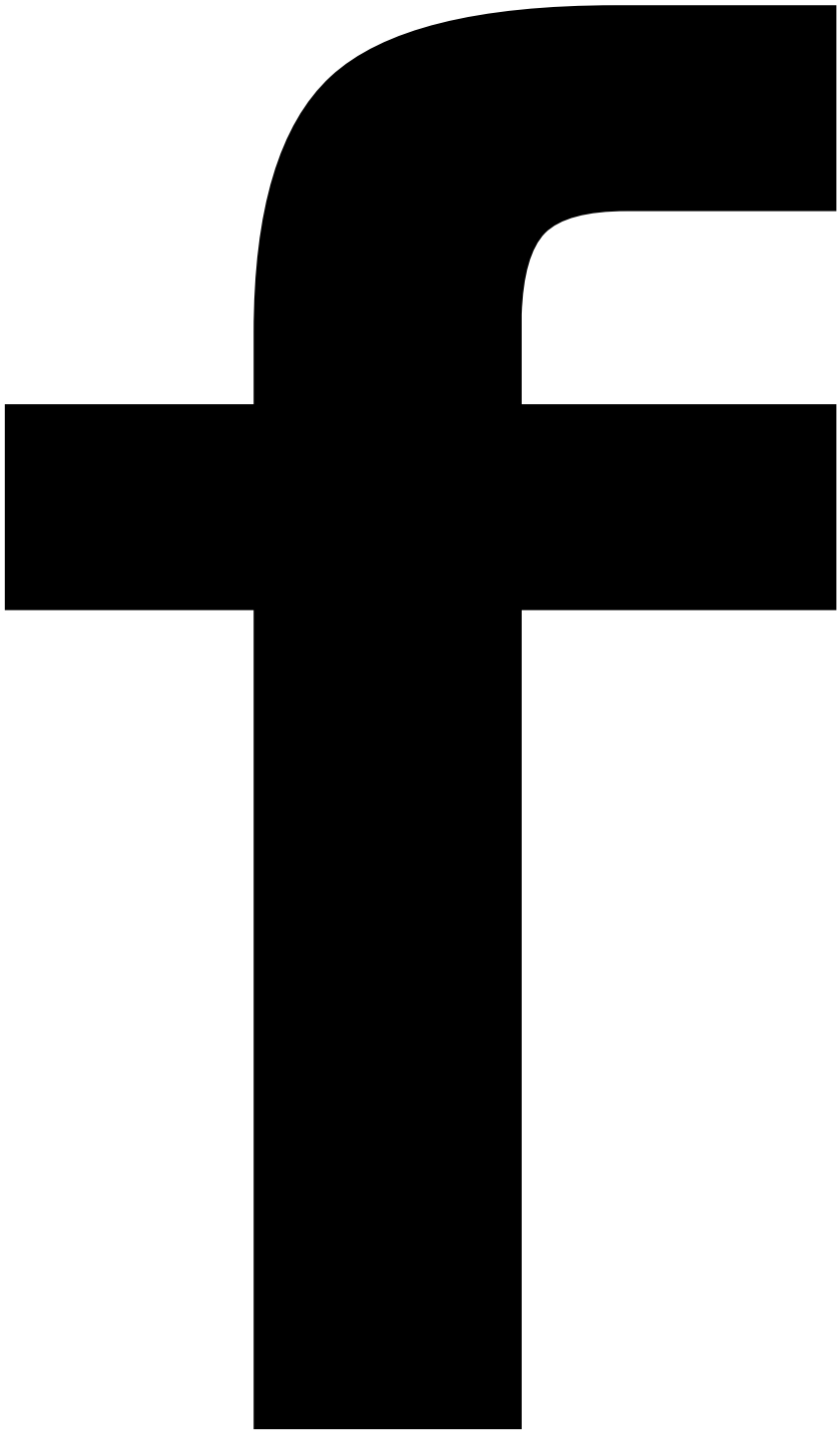


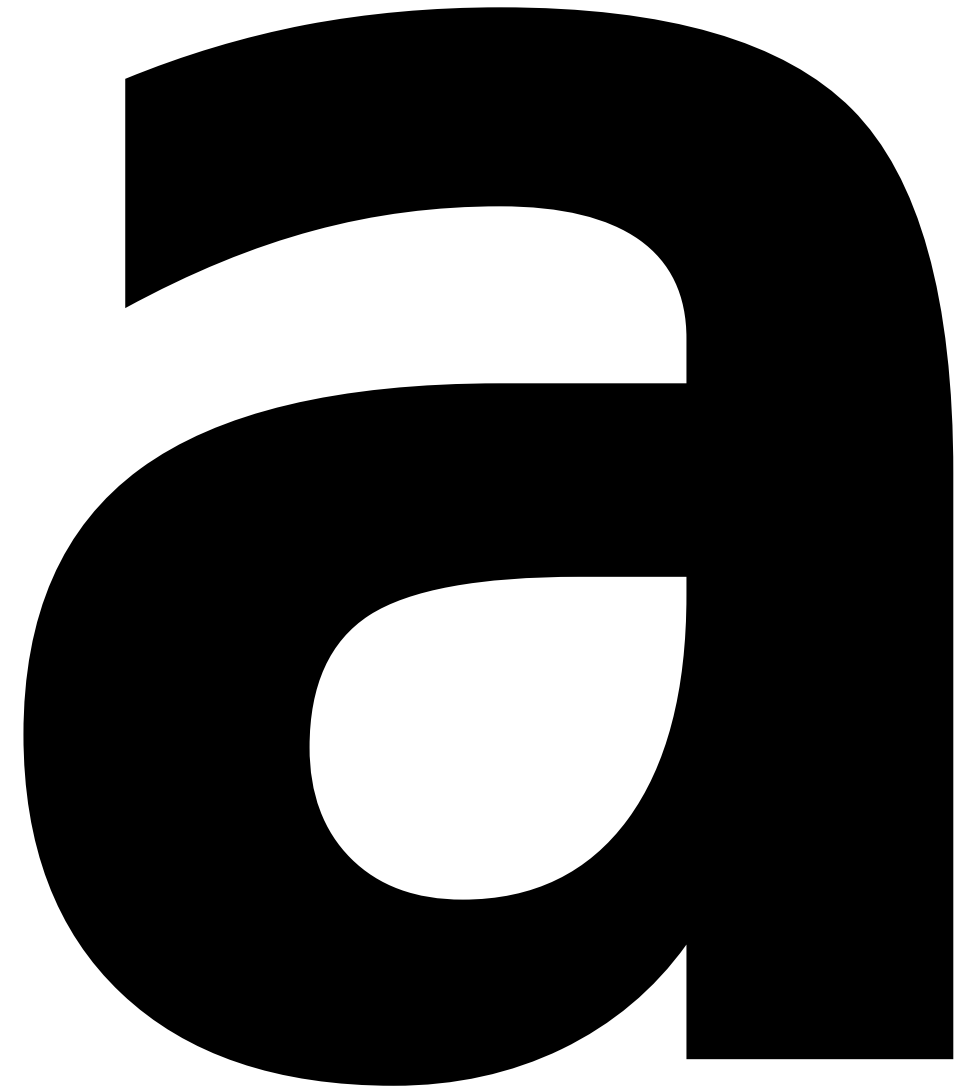


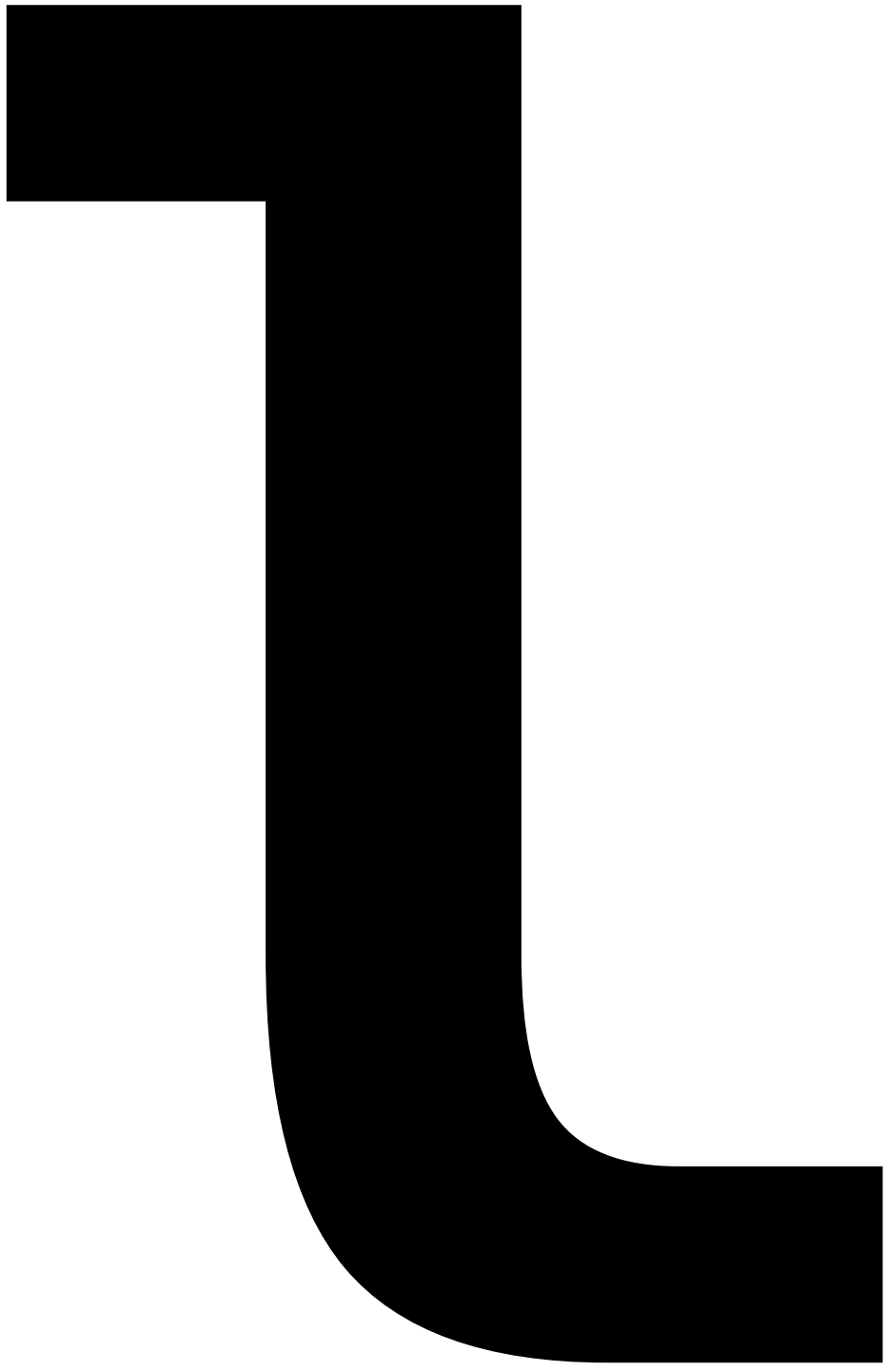


S

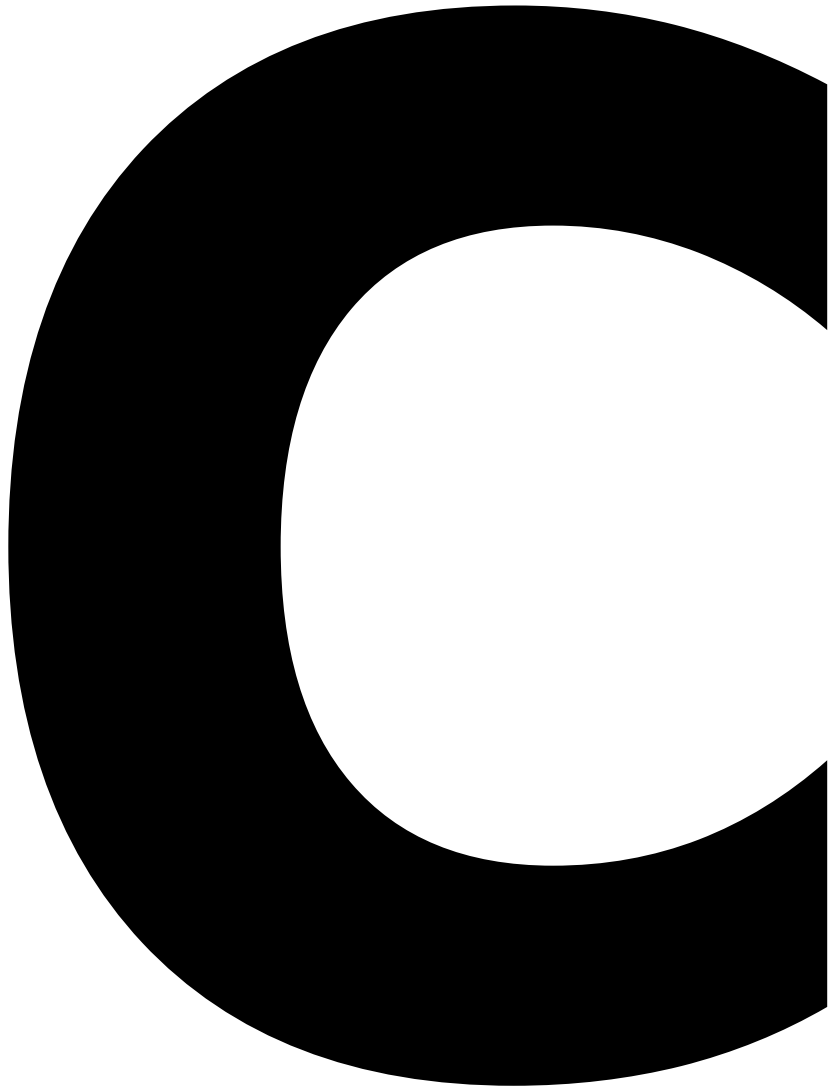


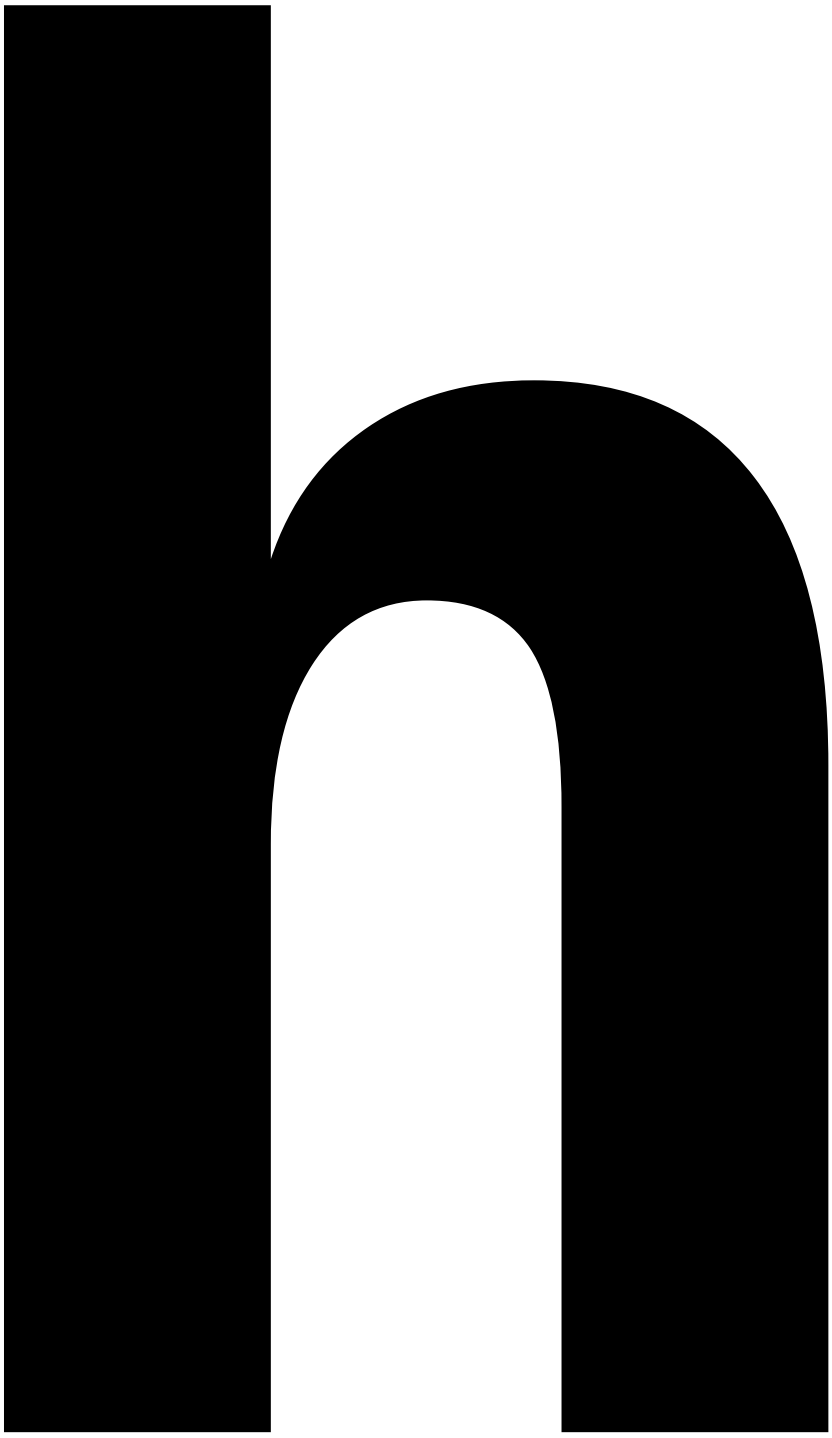


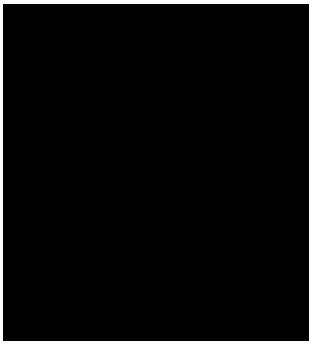


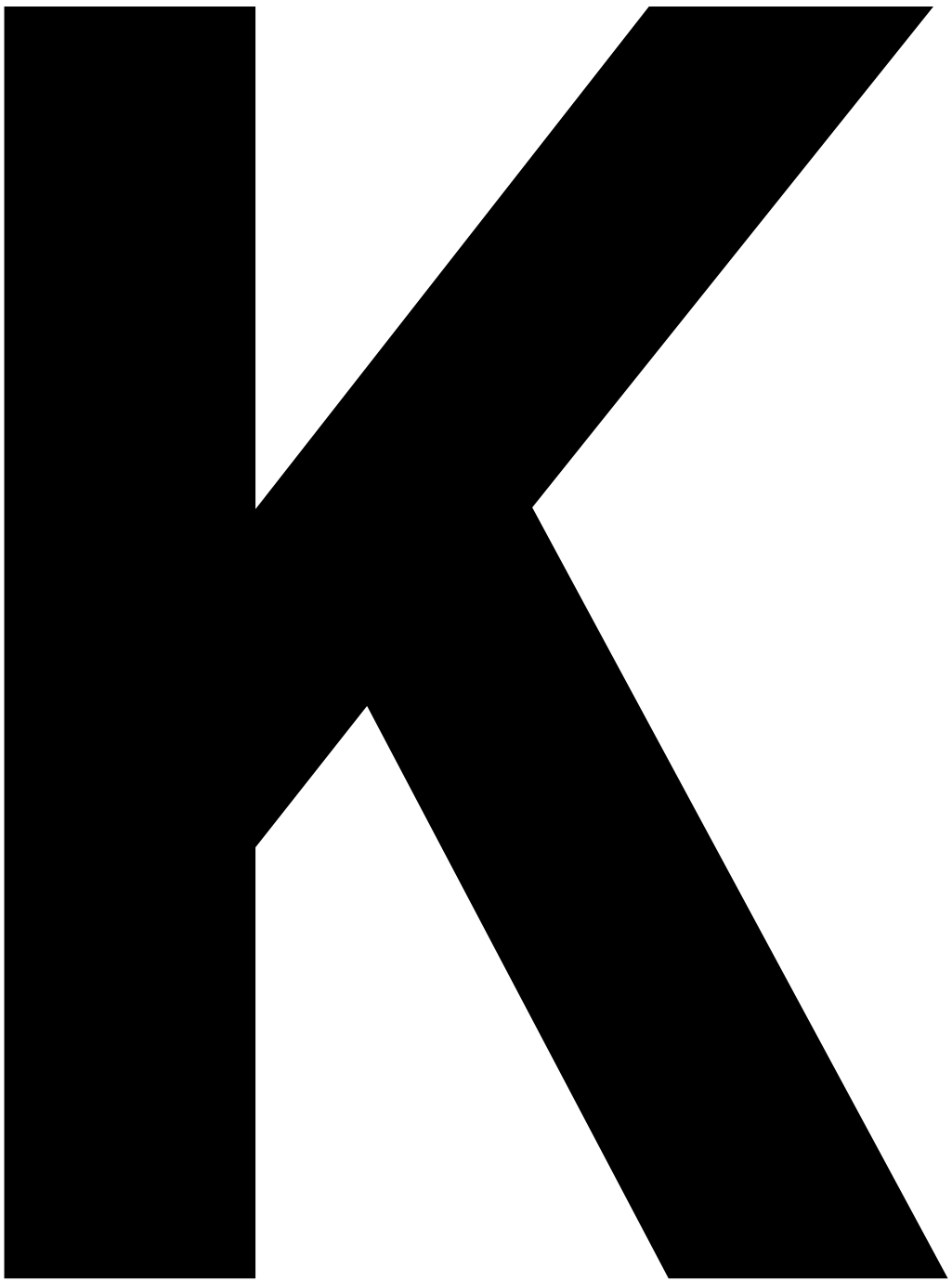


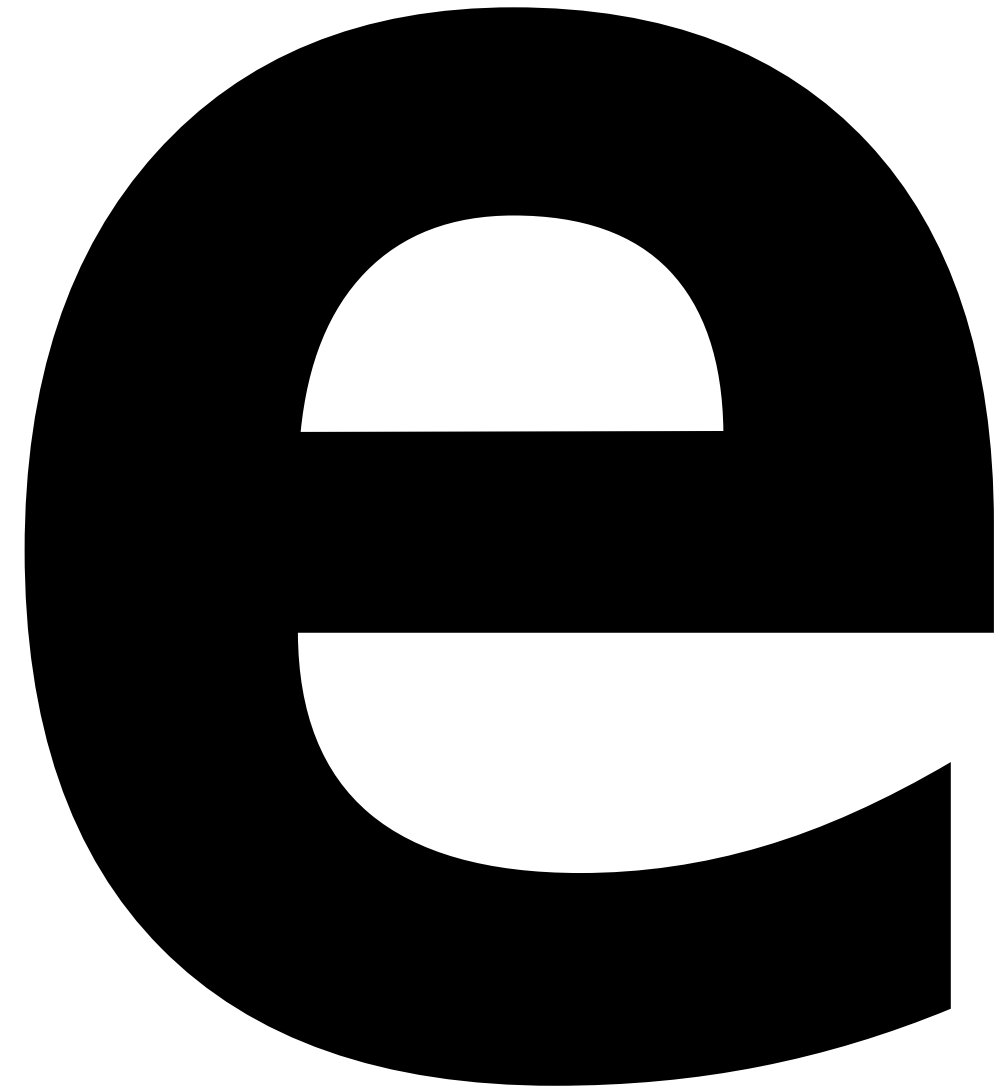
S

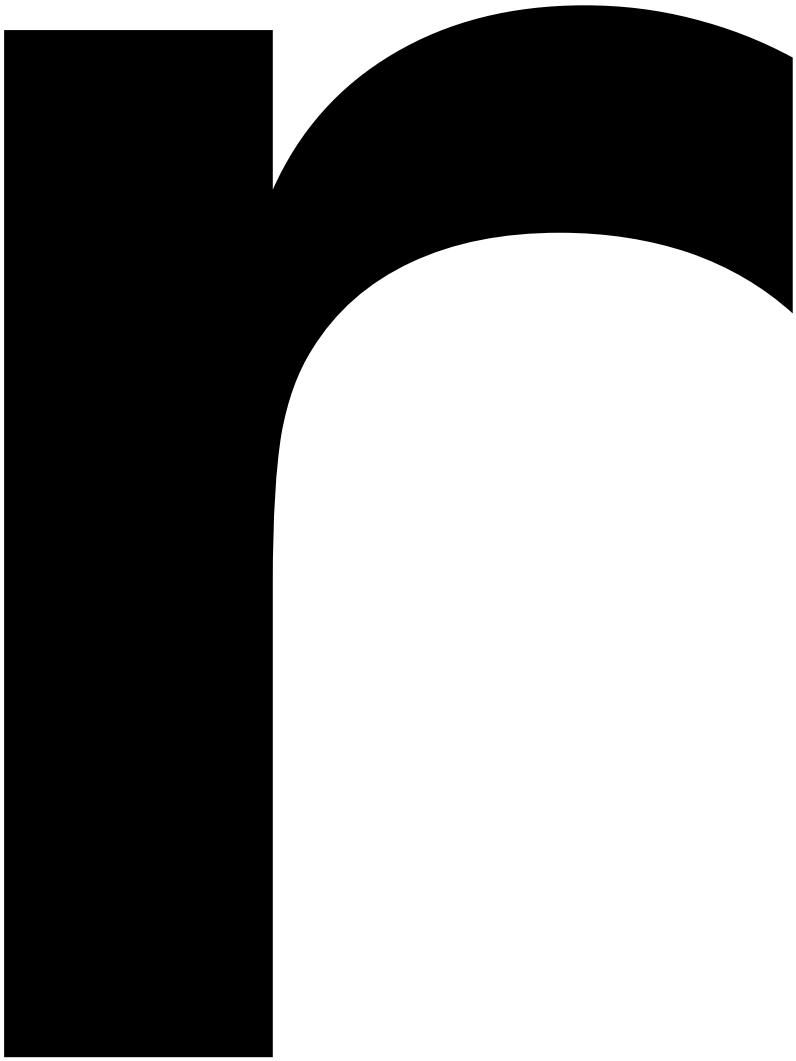


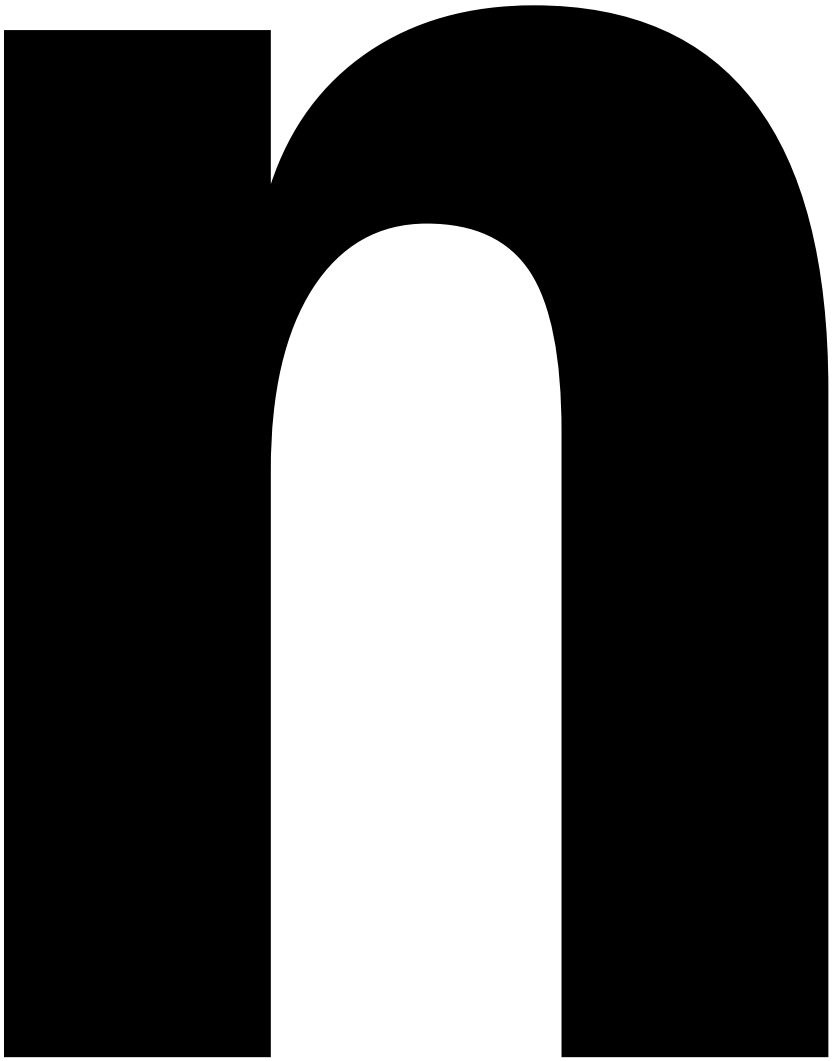


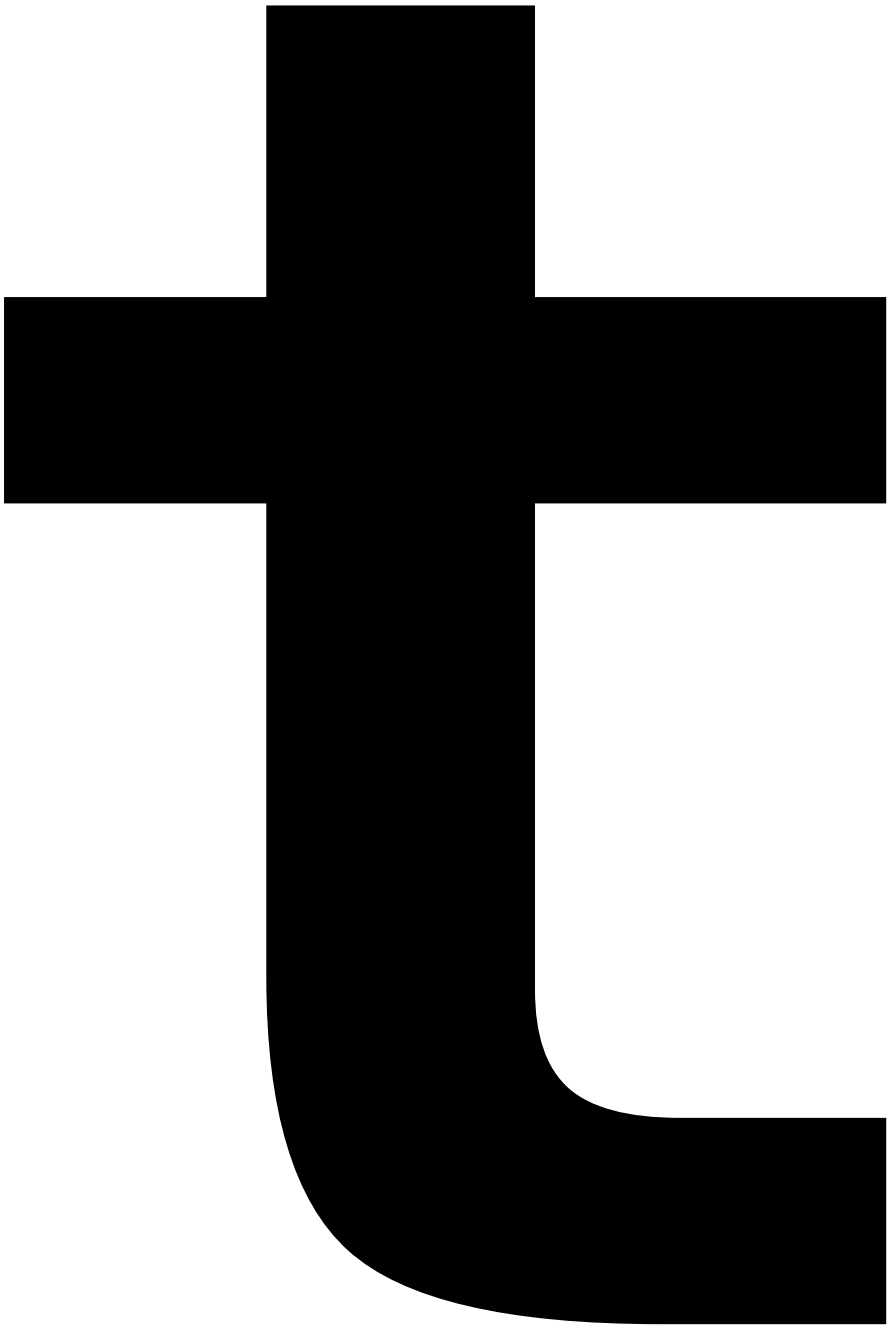


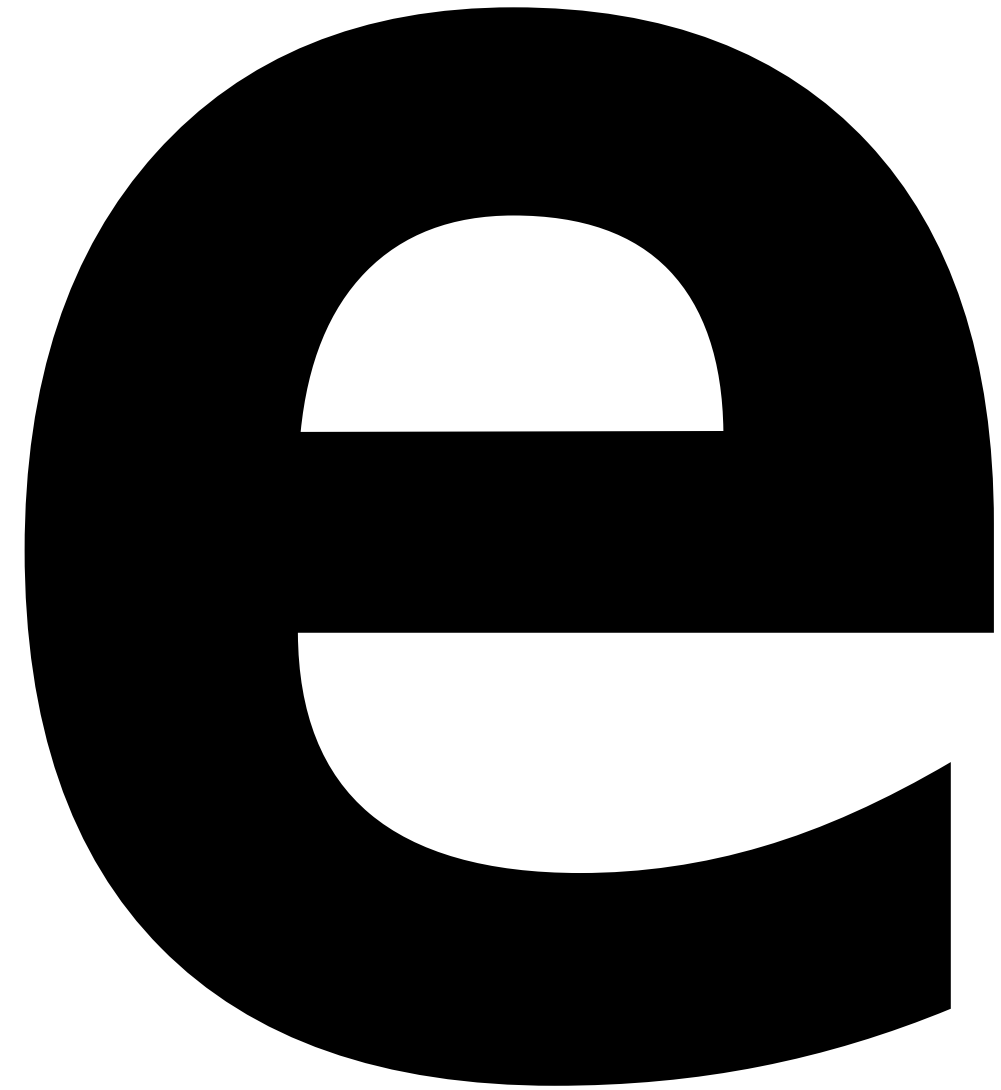


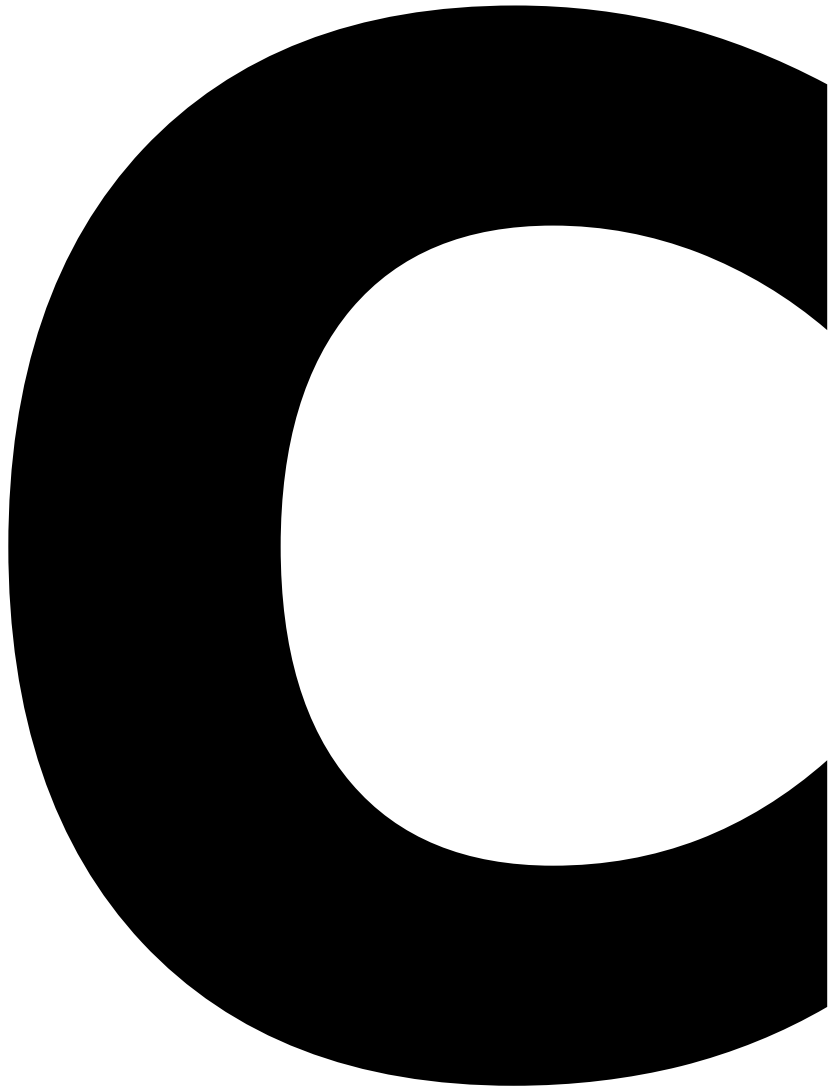


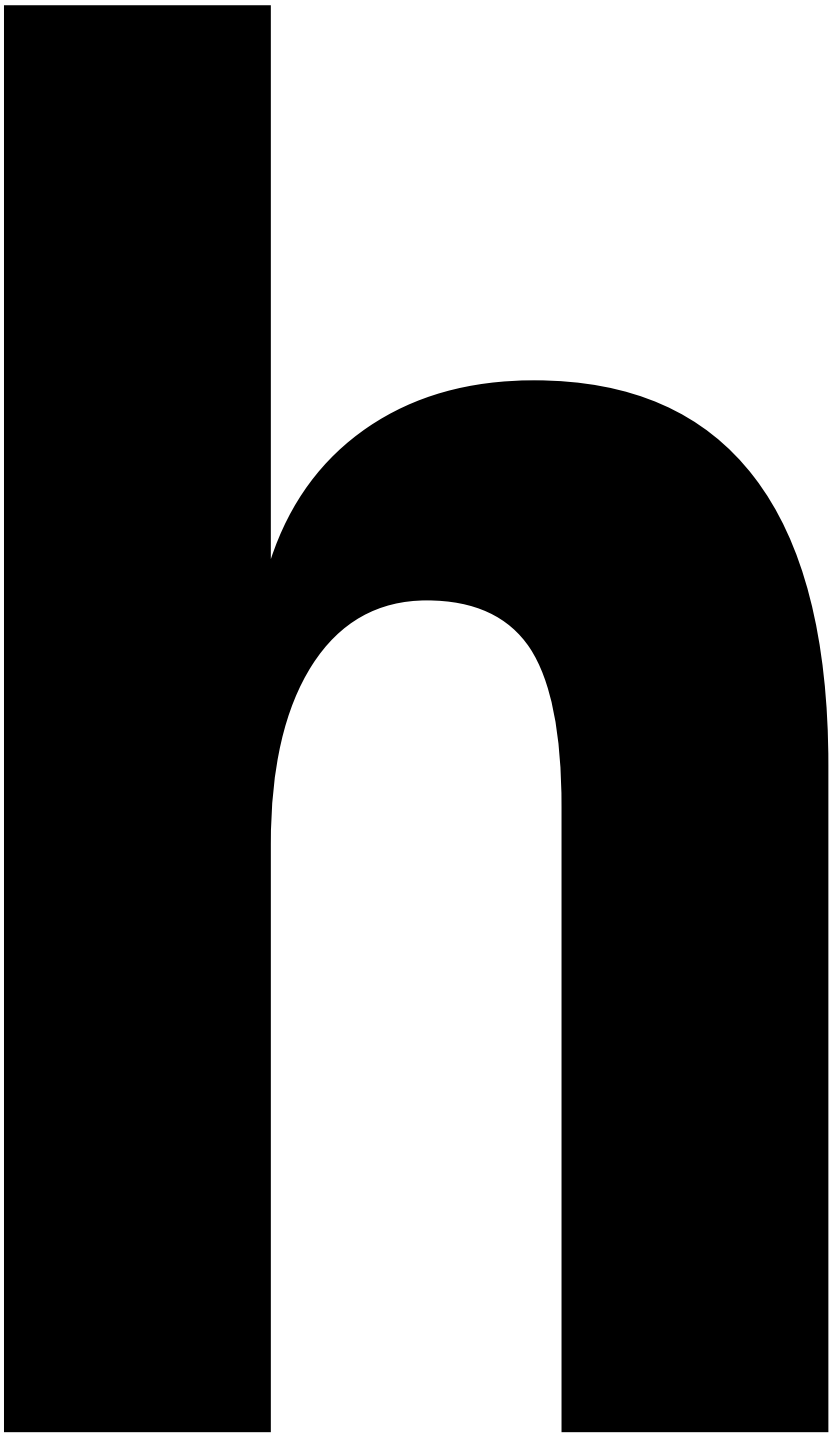


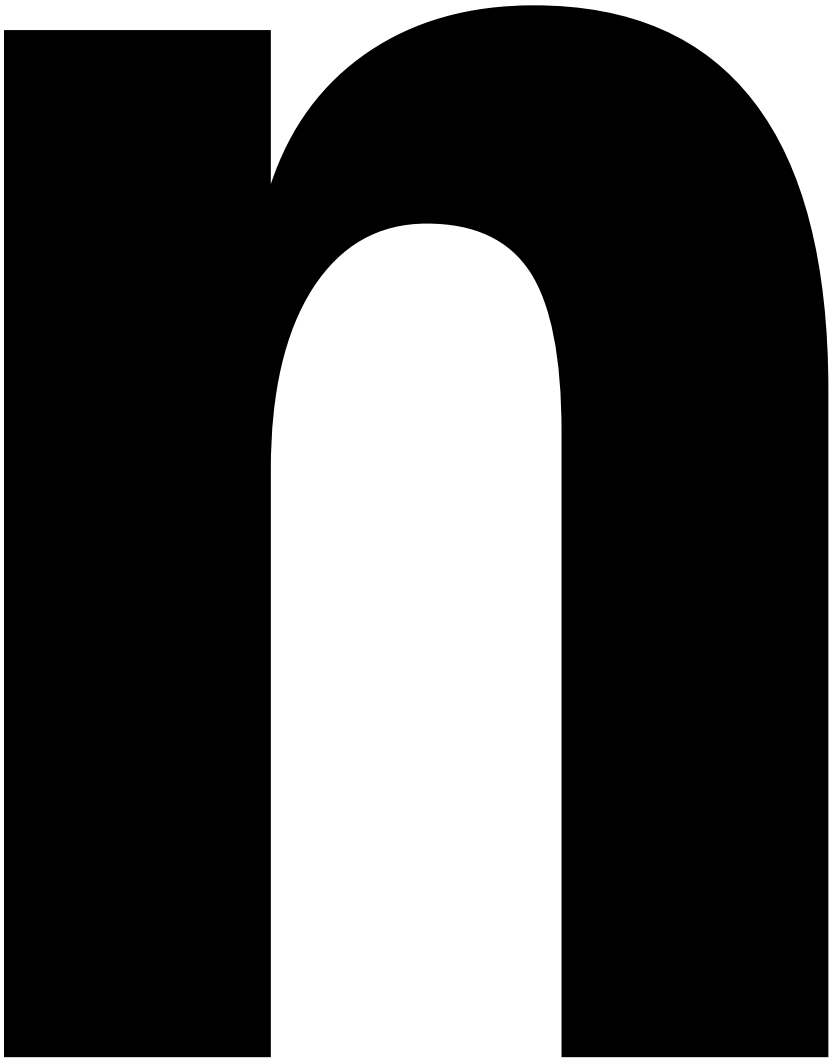


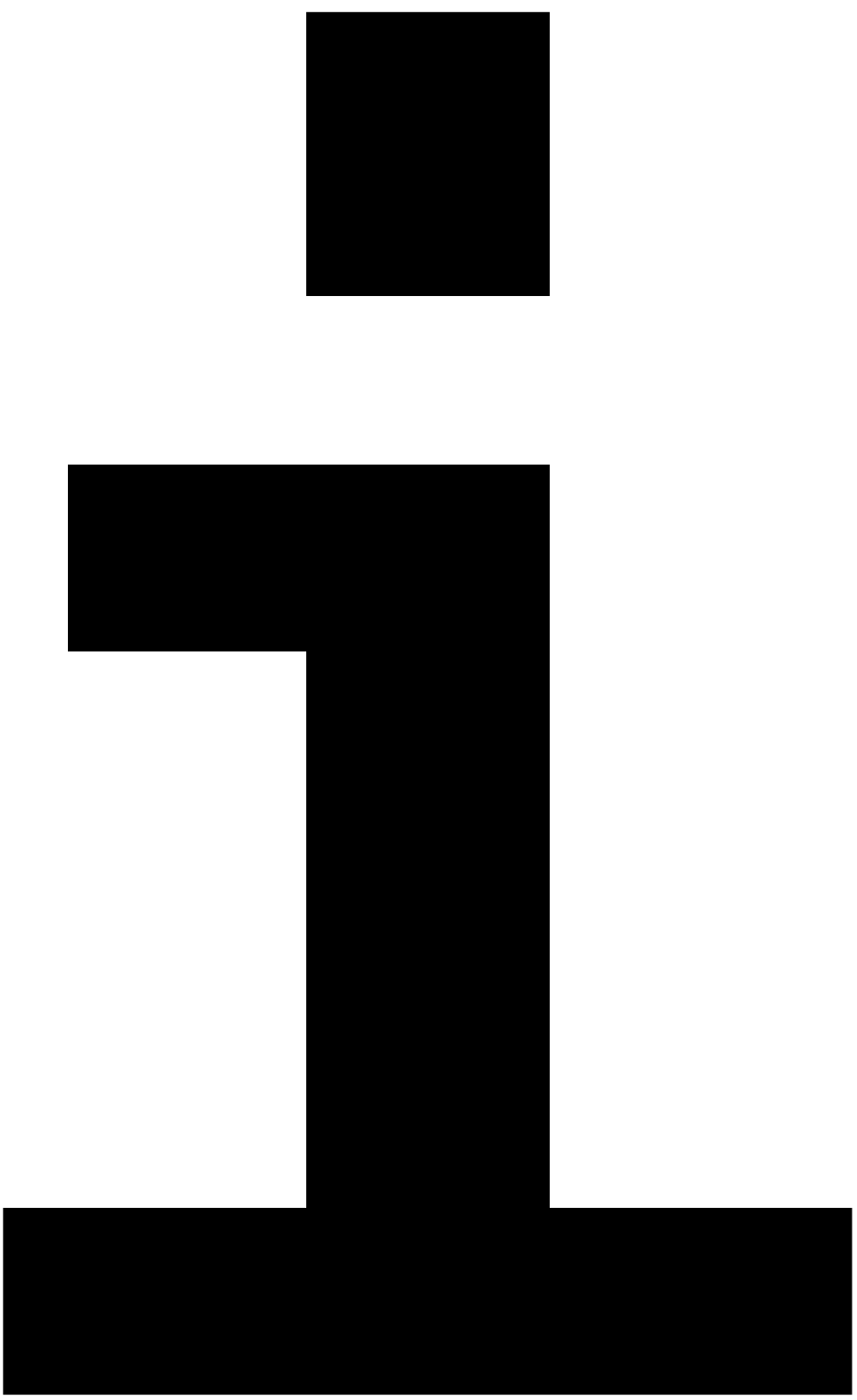


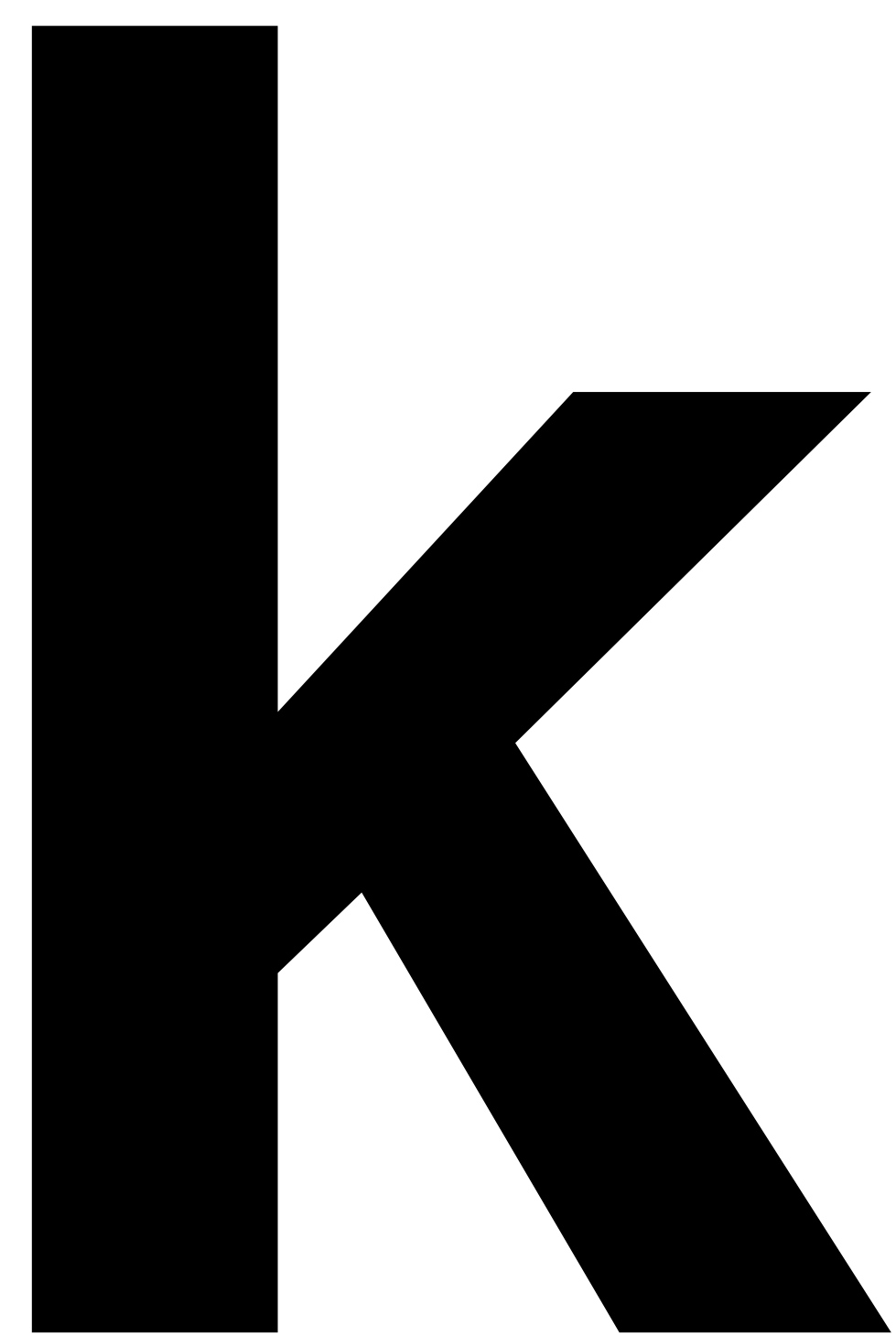


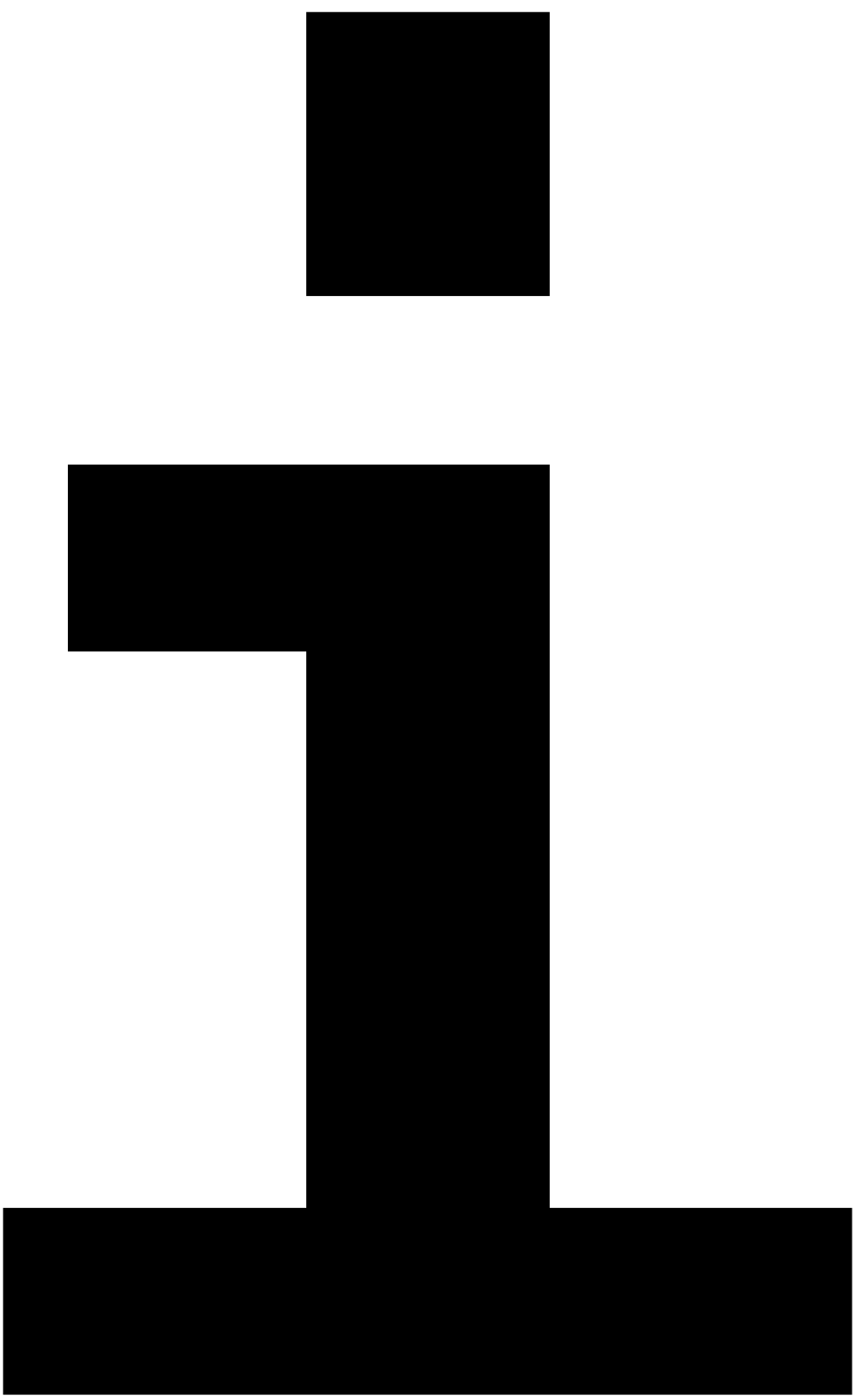




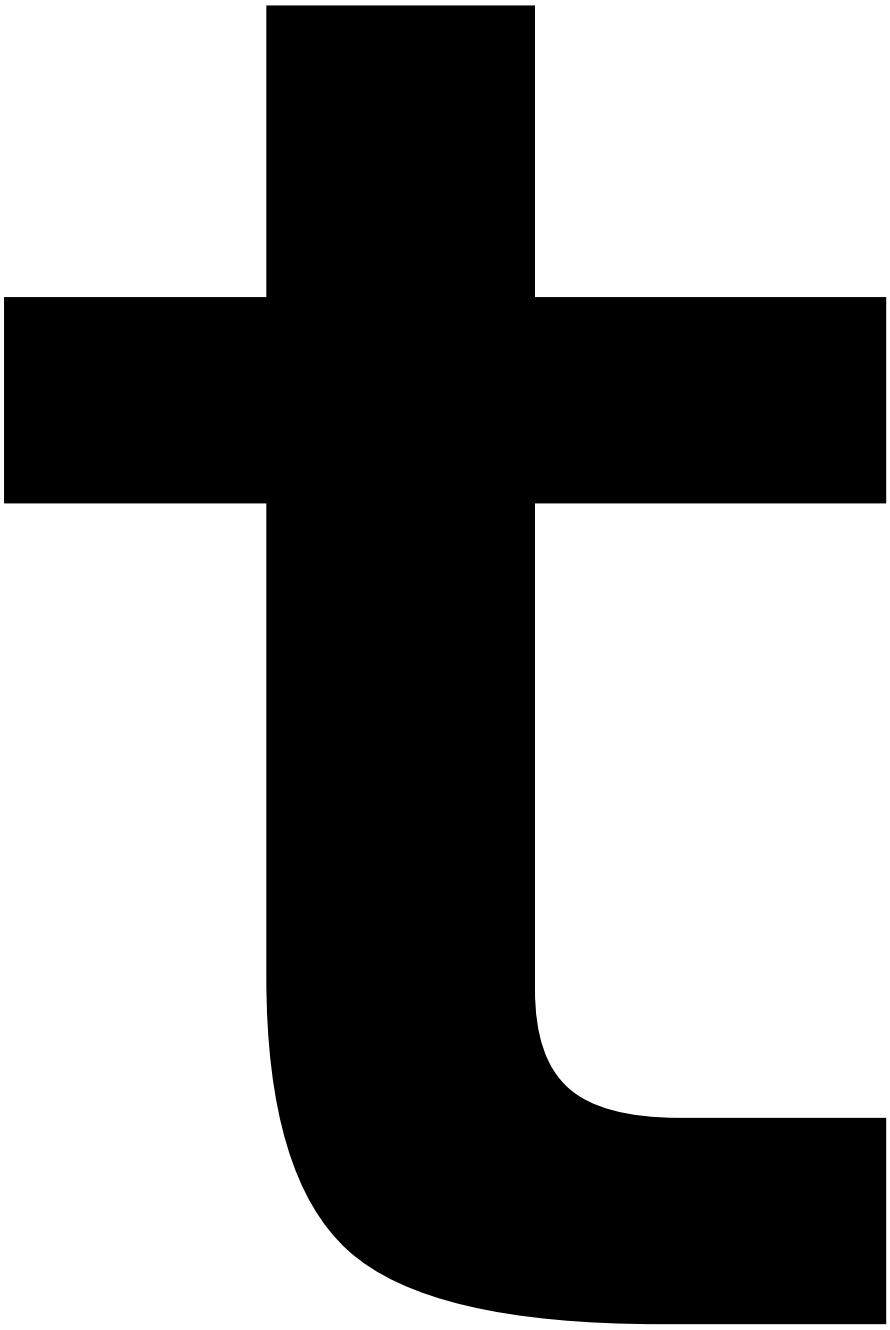


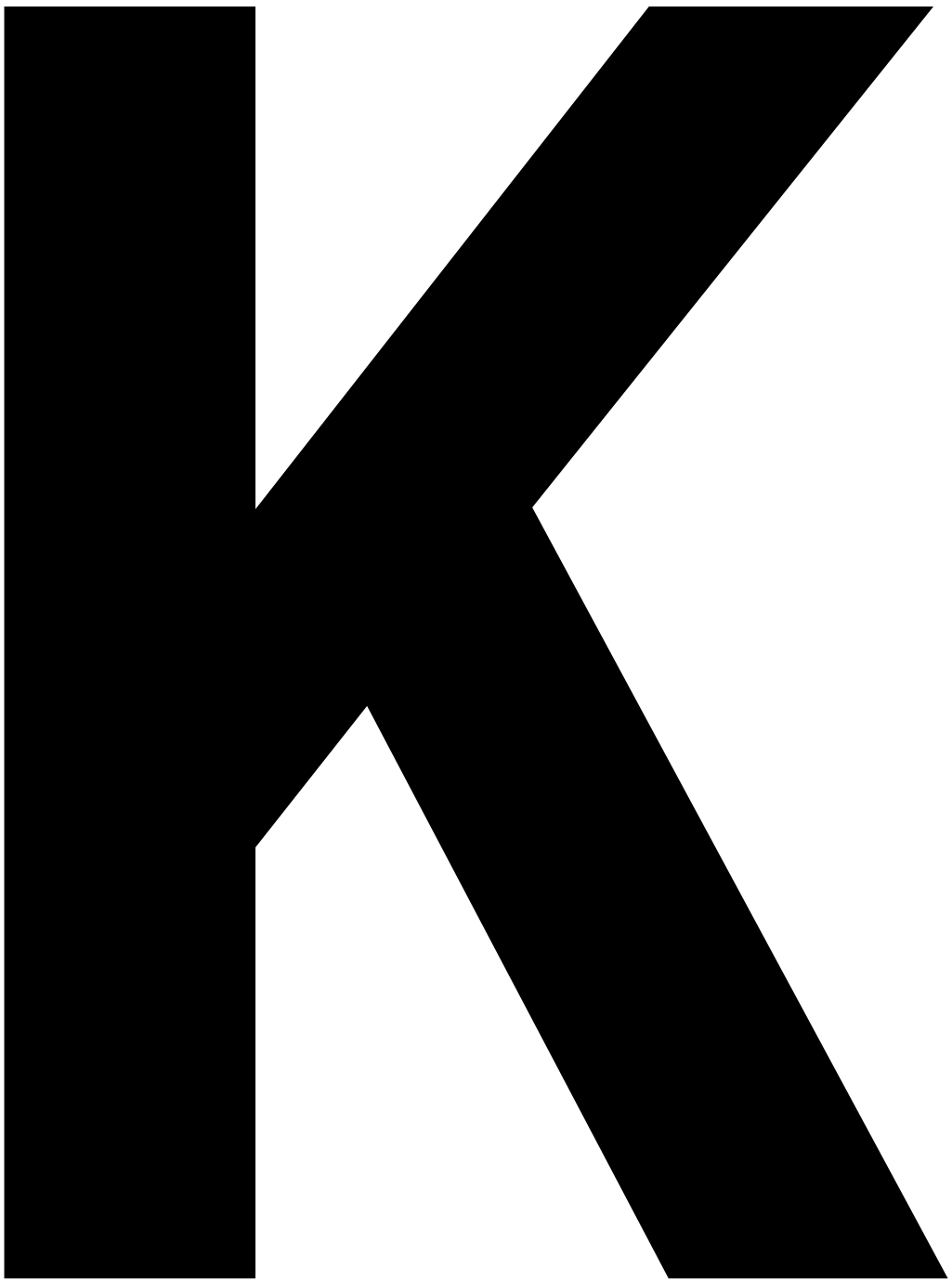


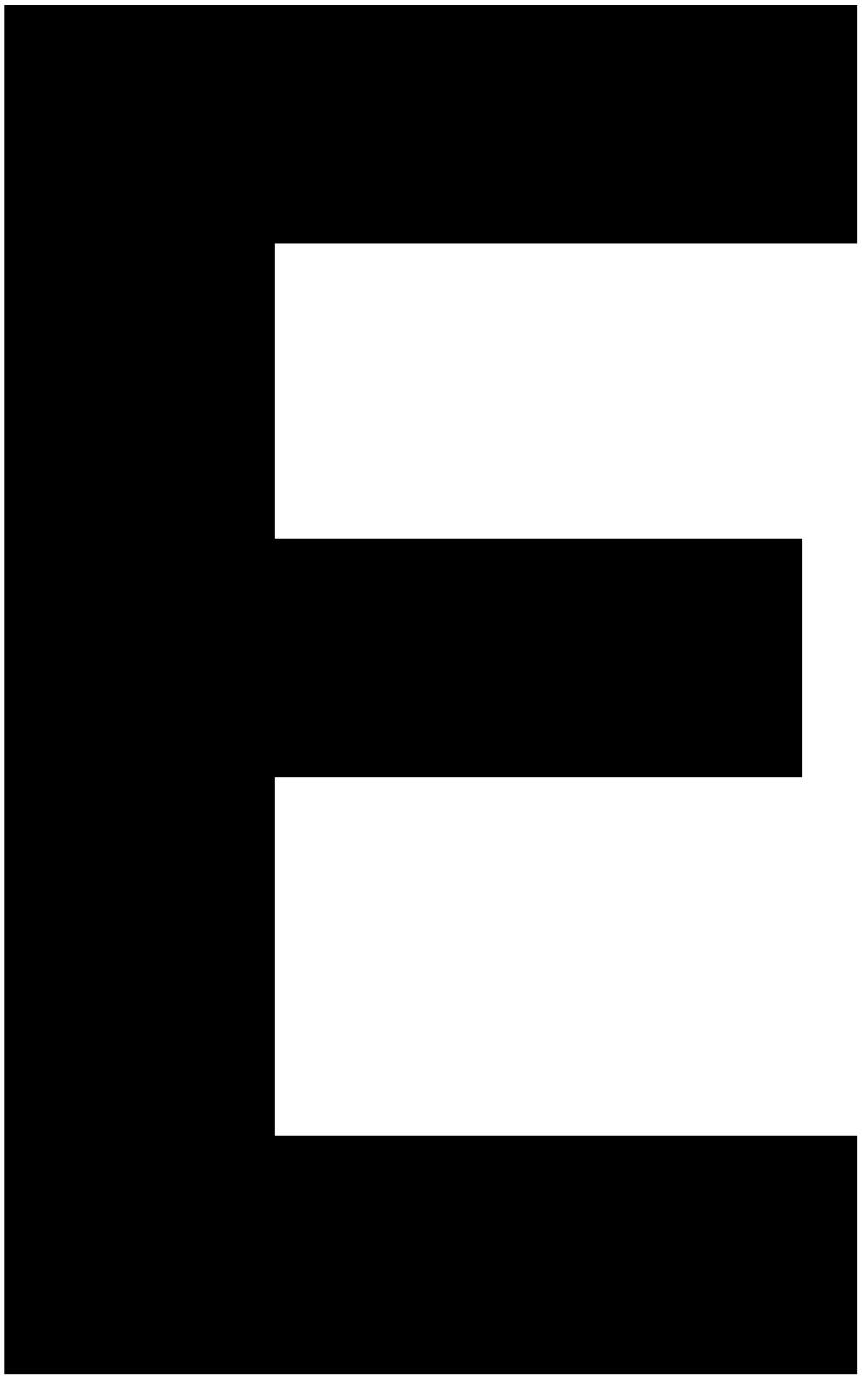


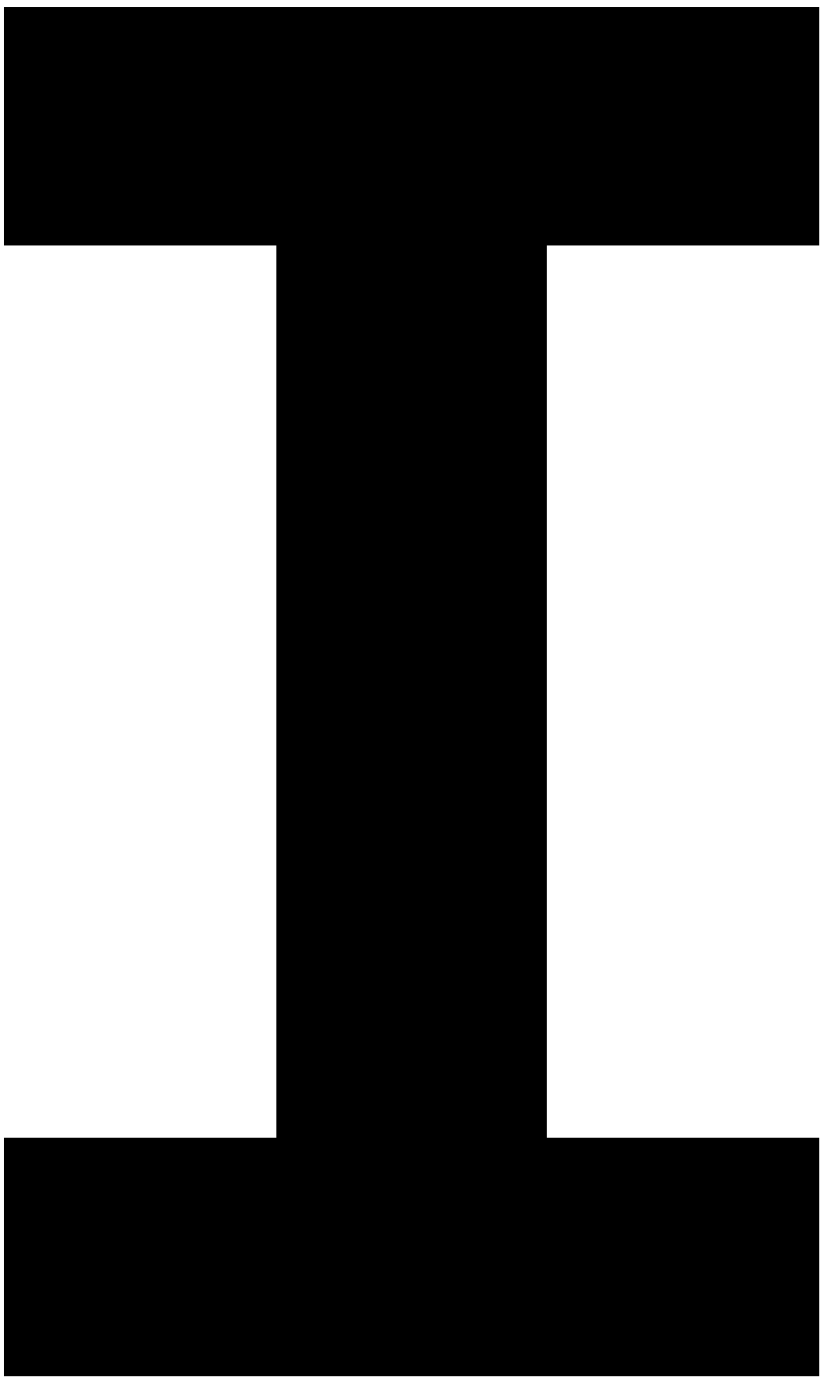


S

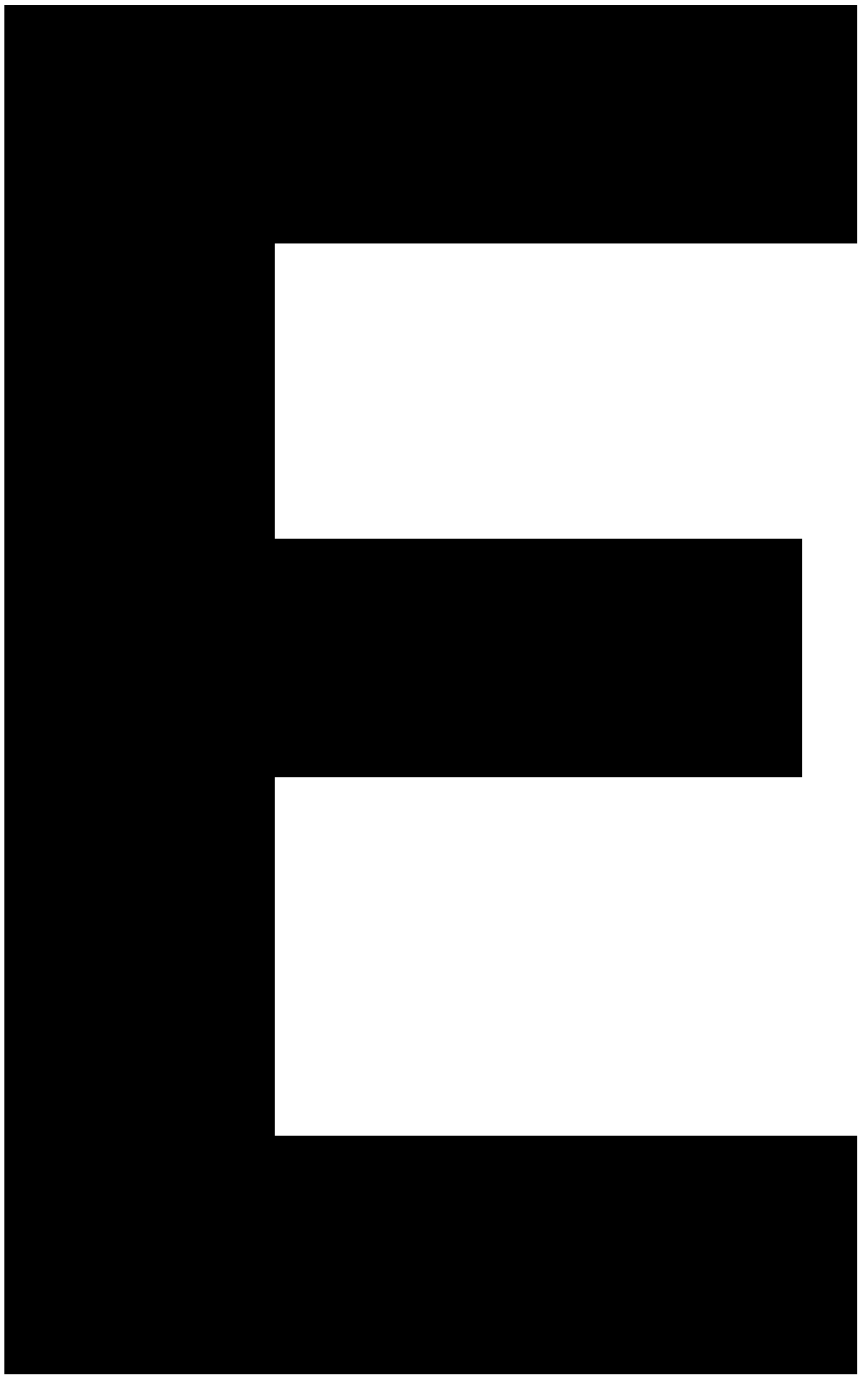


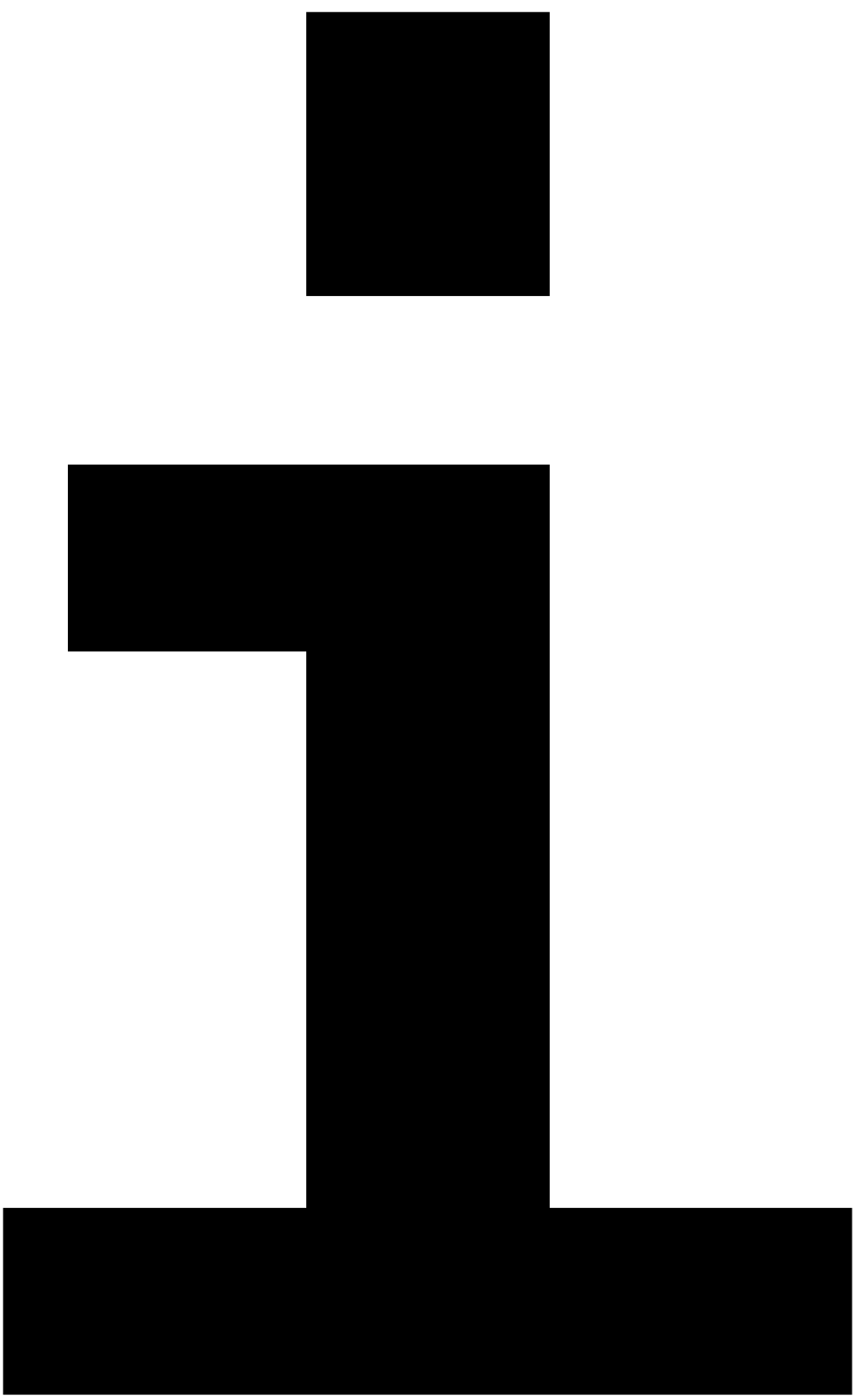




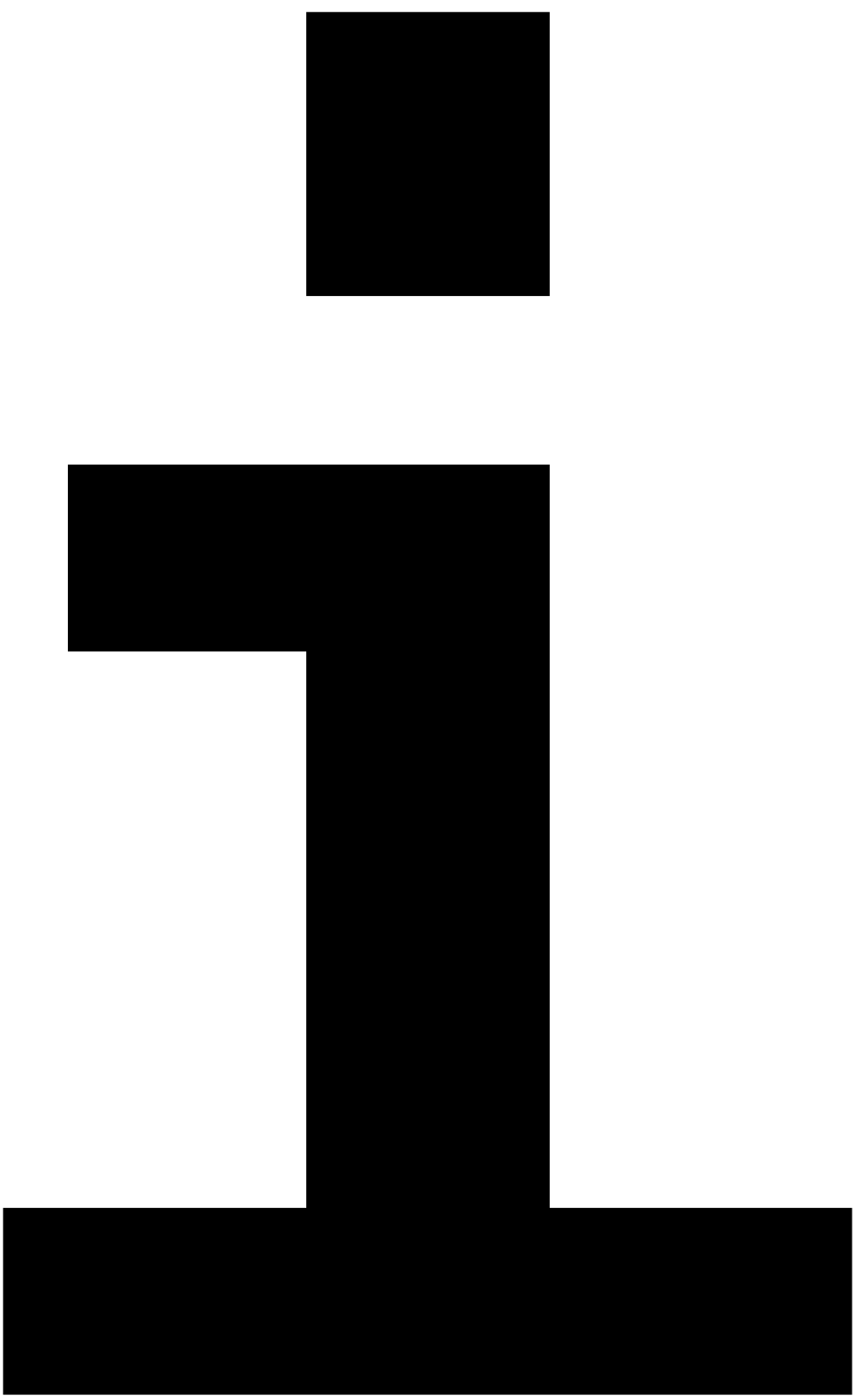


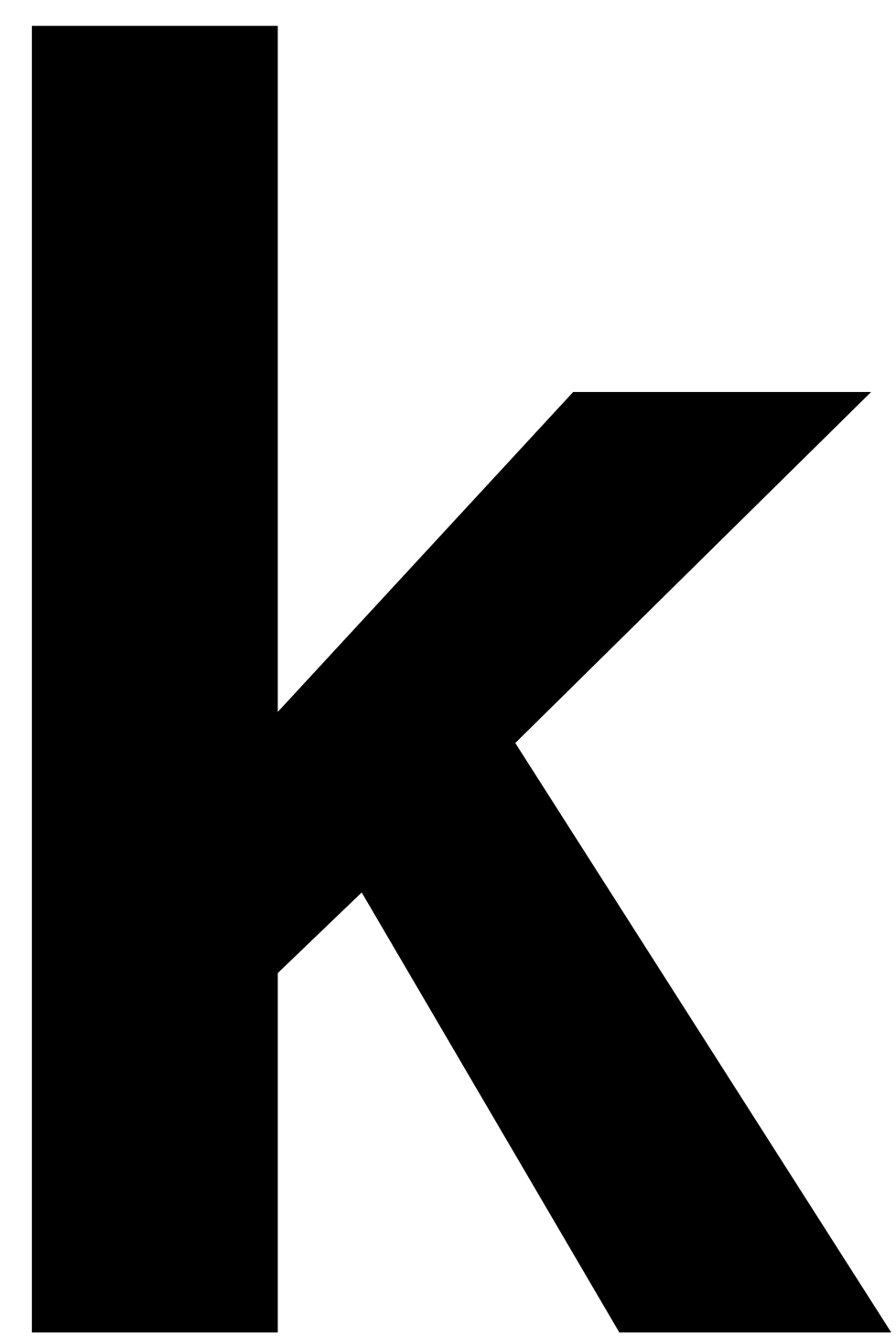
N

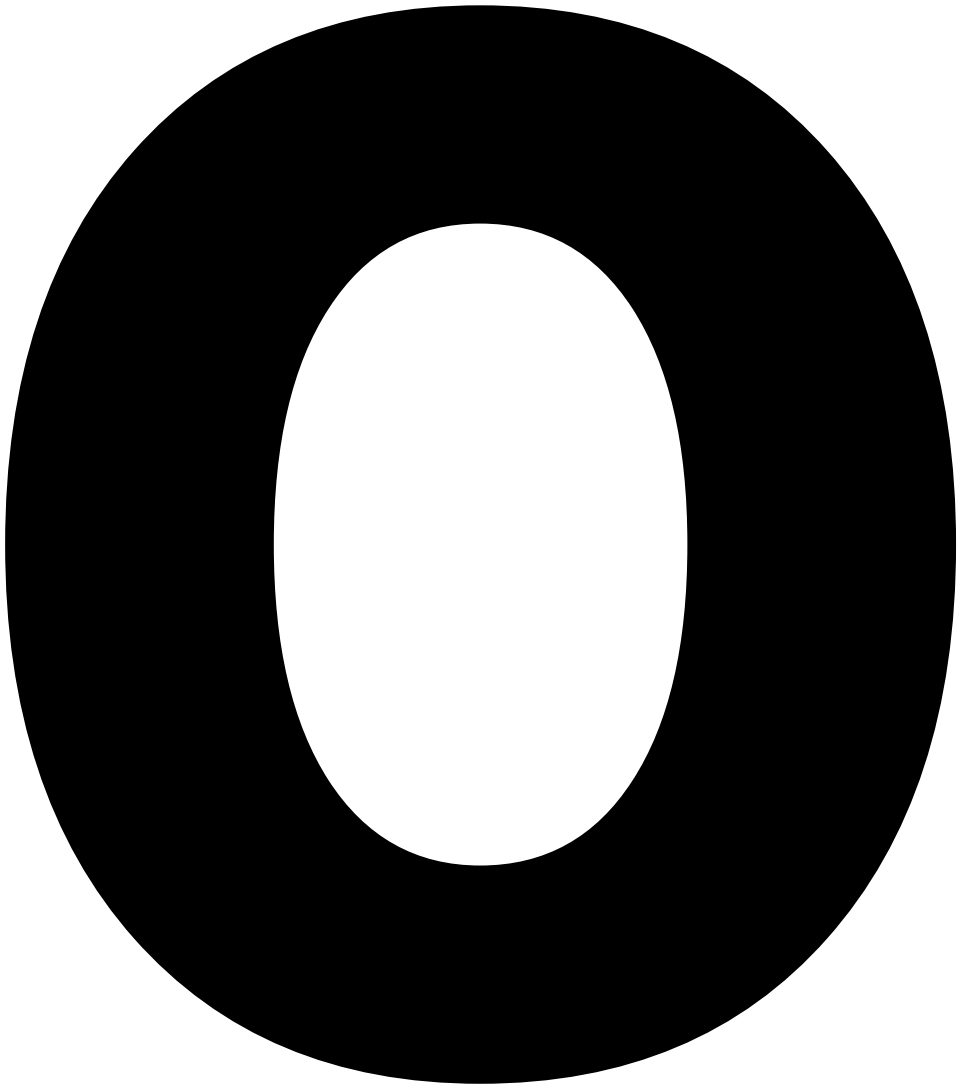


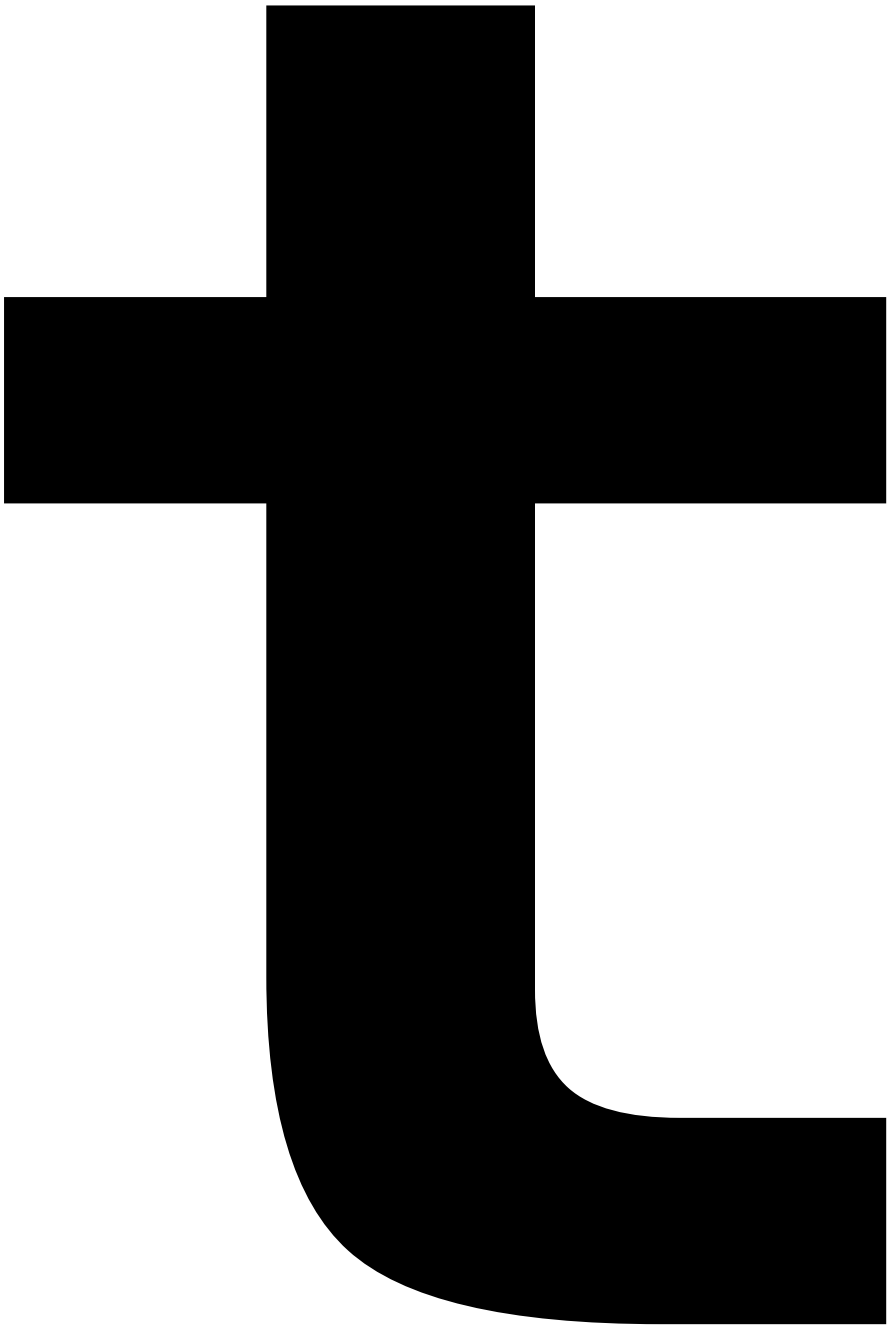


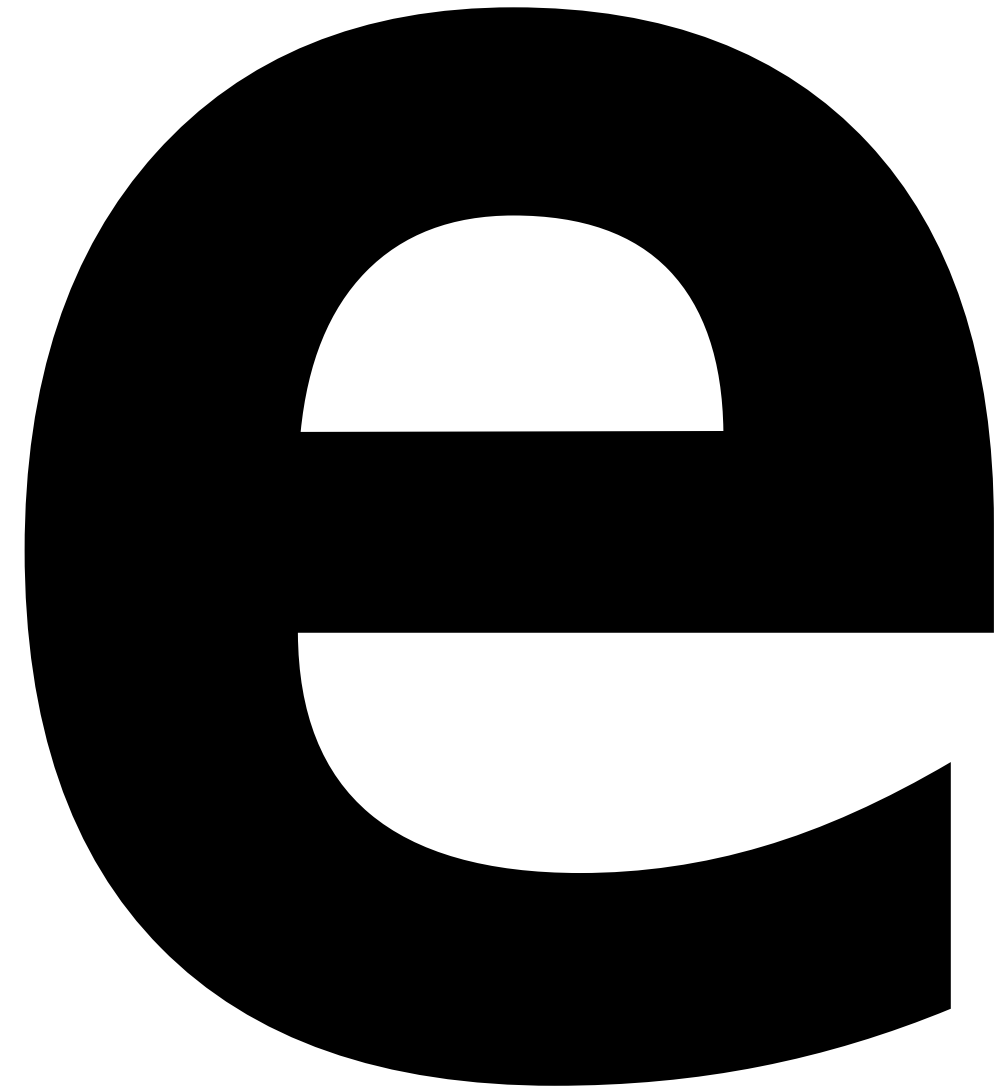
S

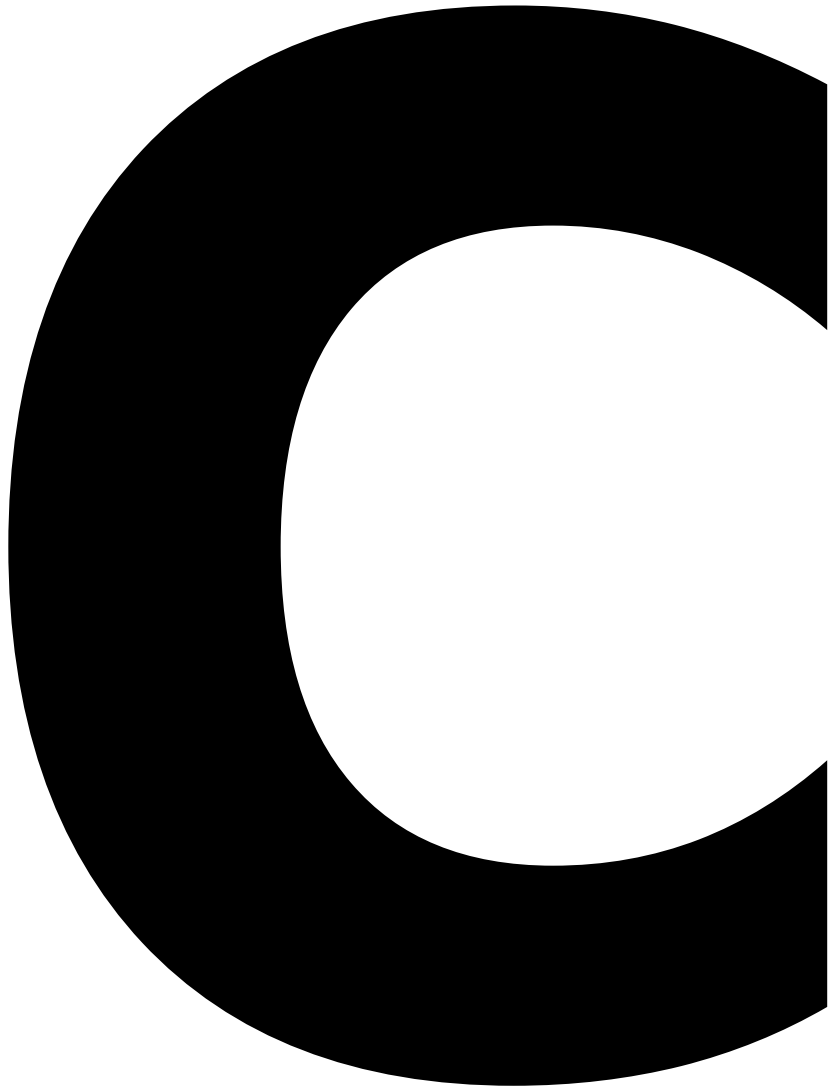


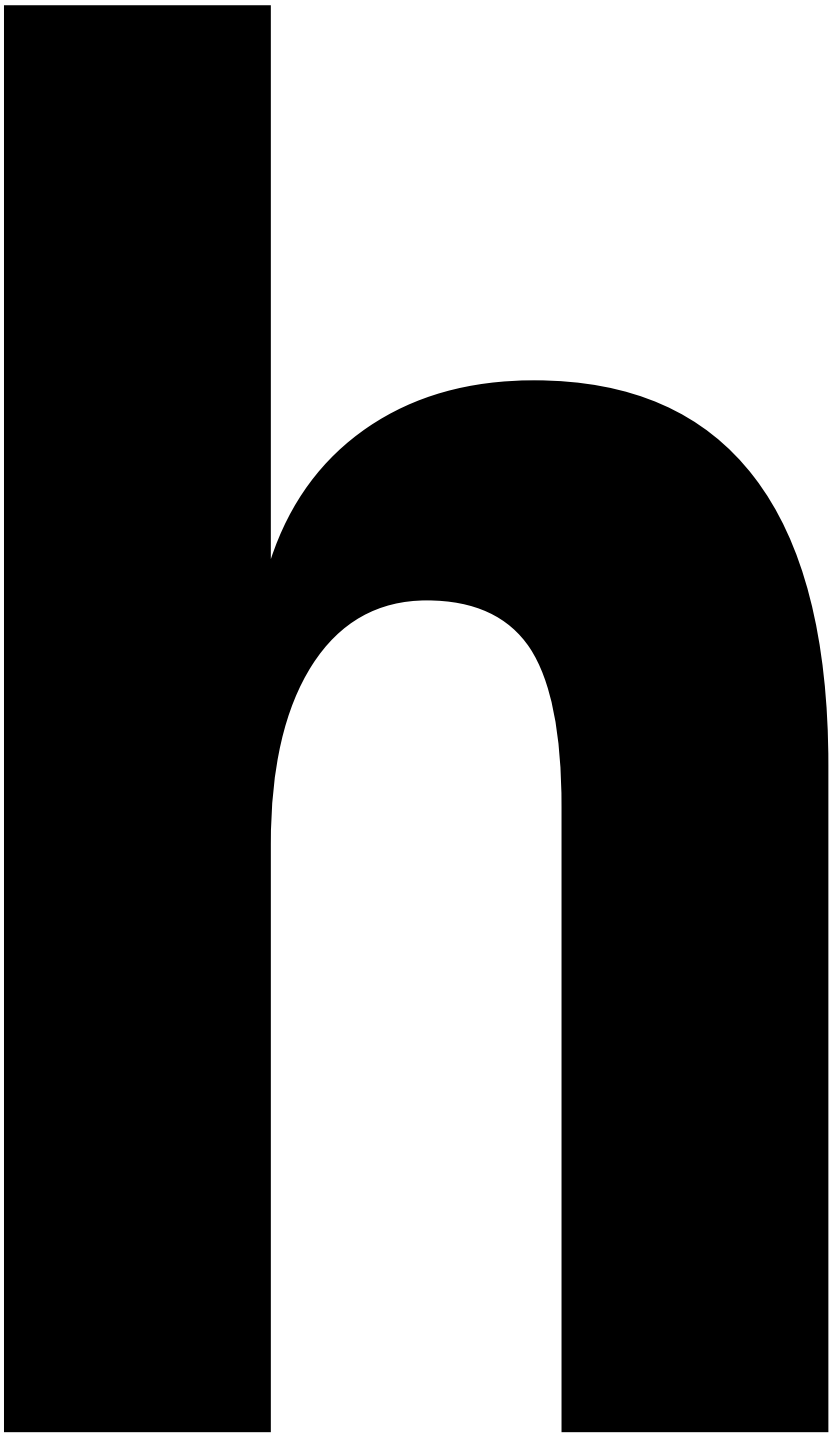


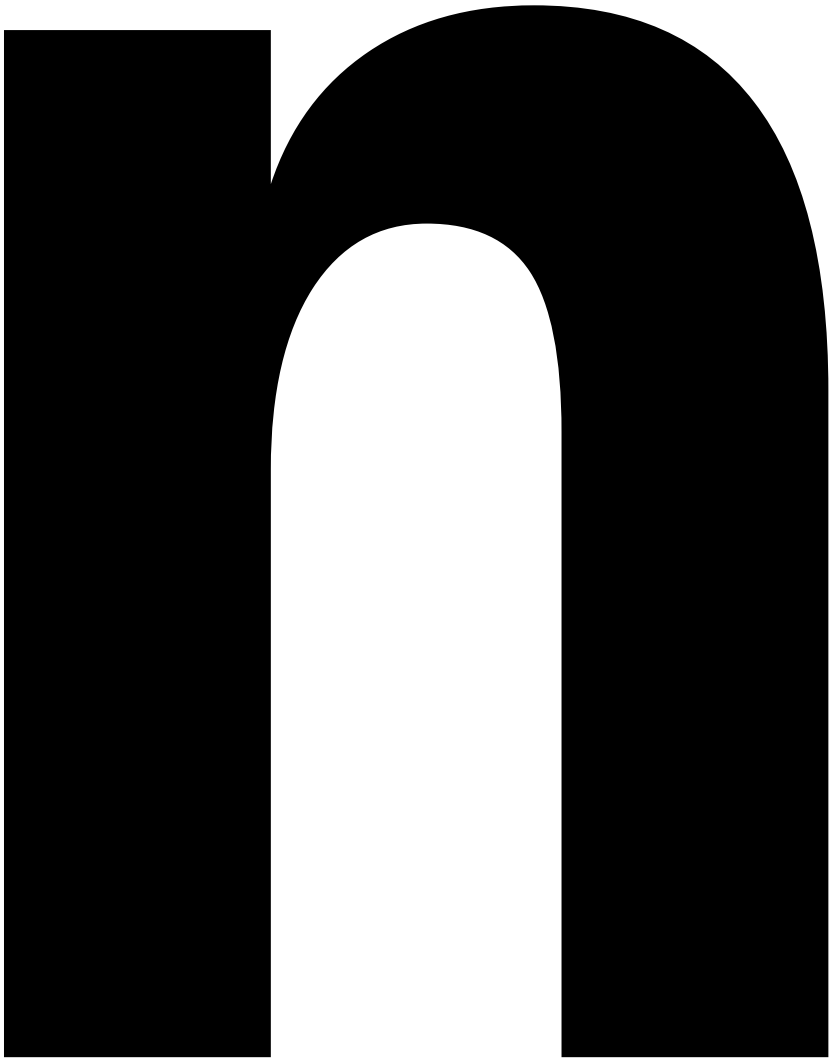


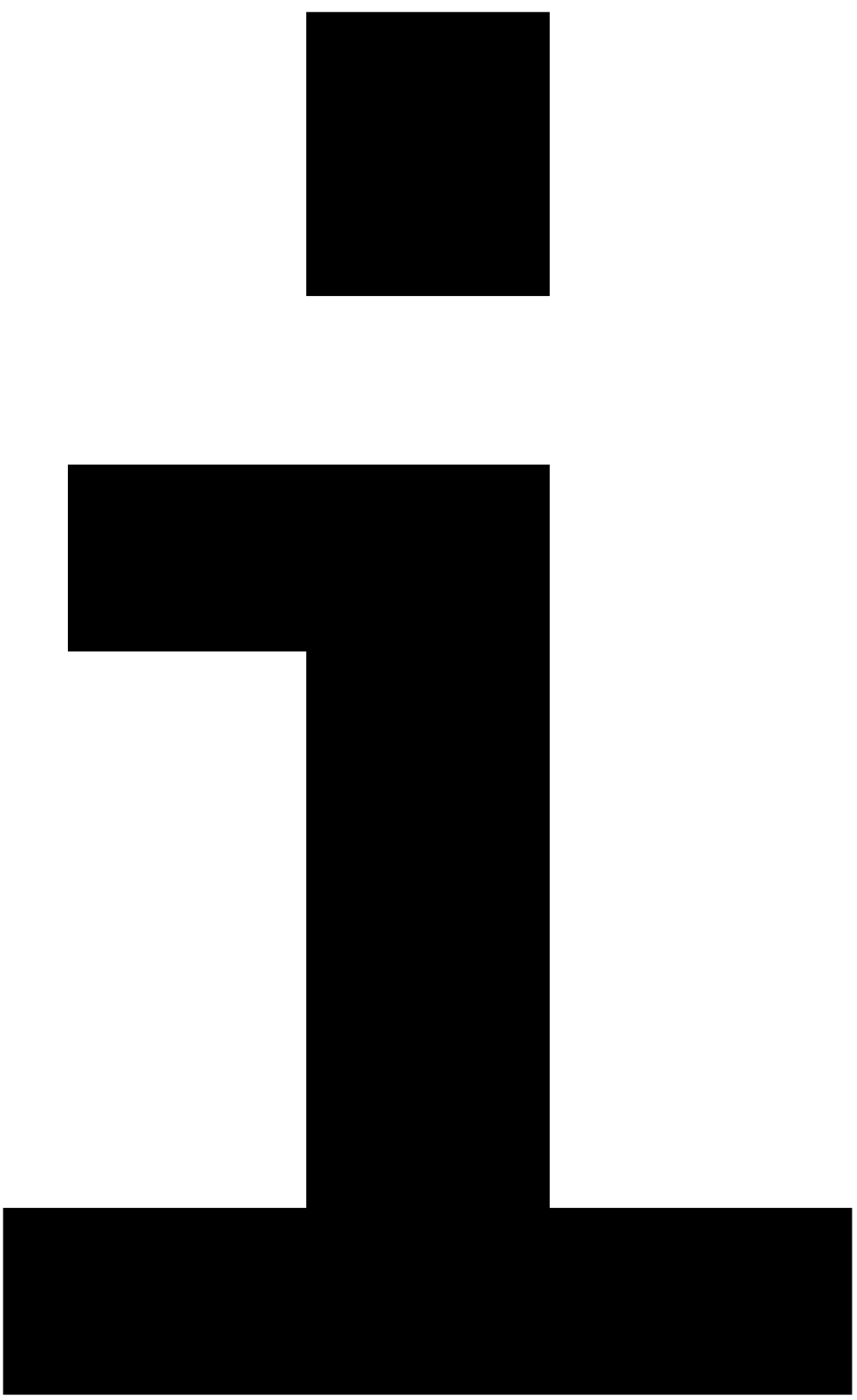


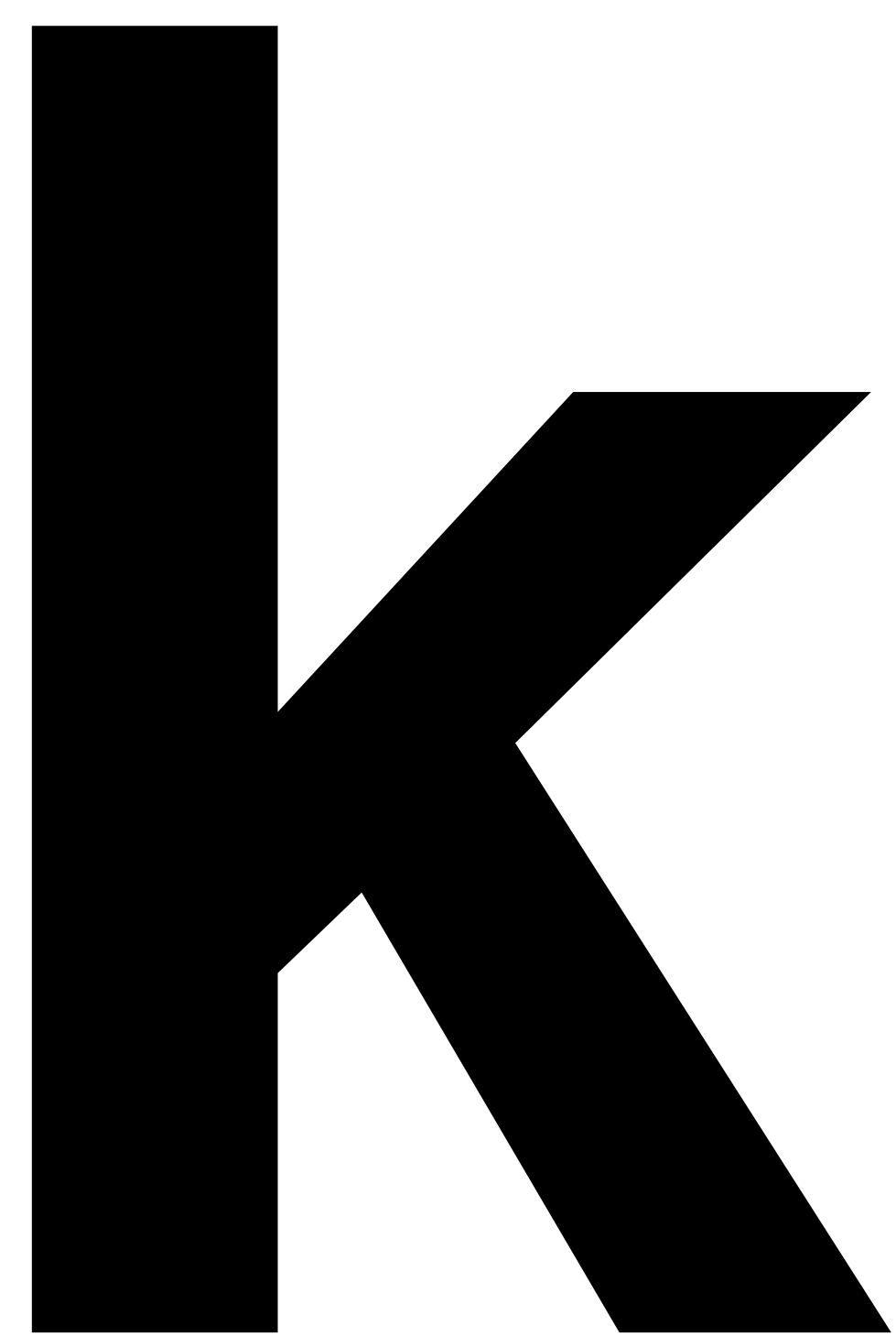


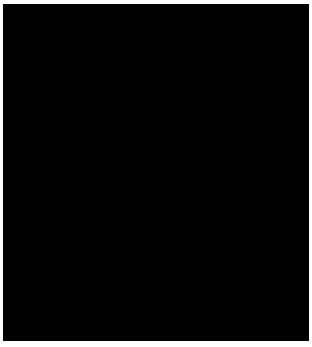


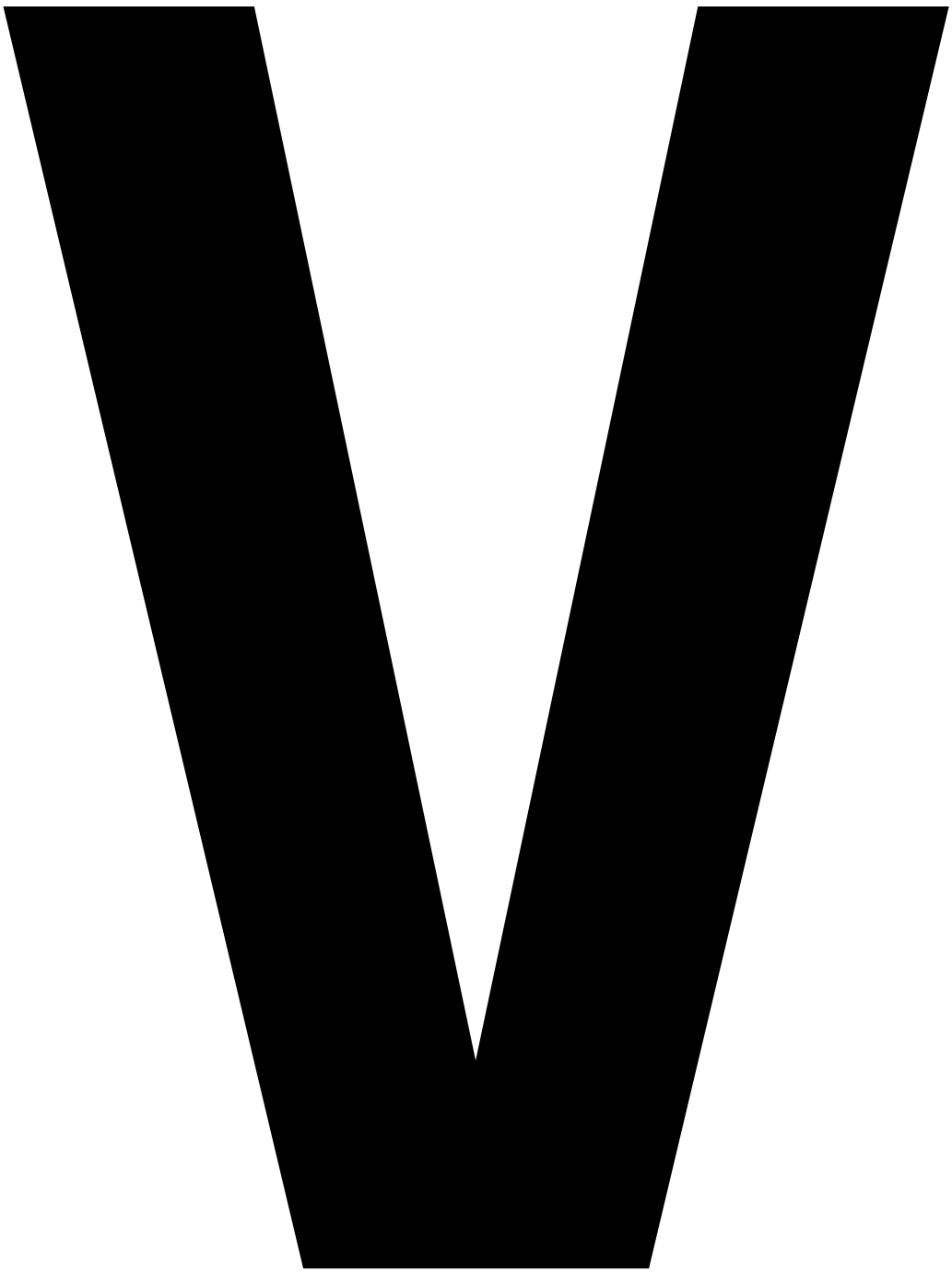


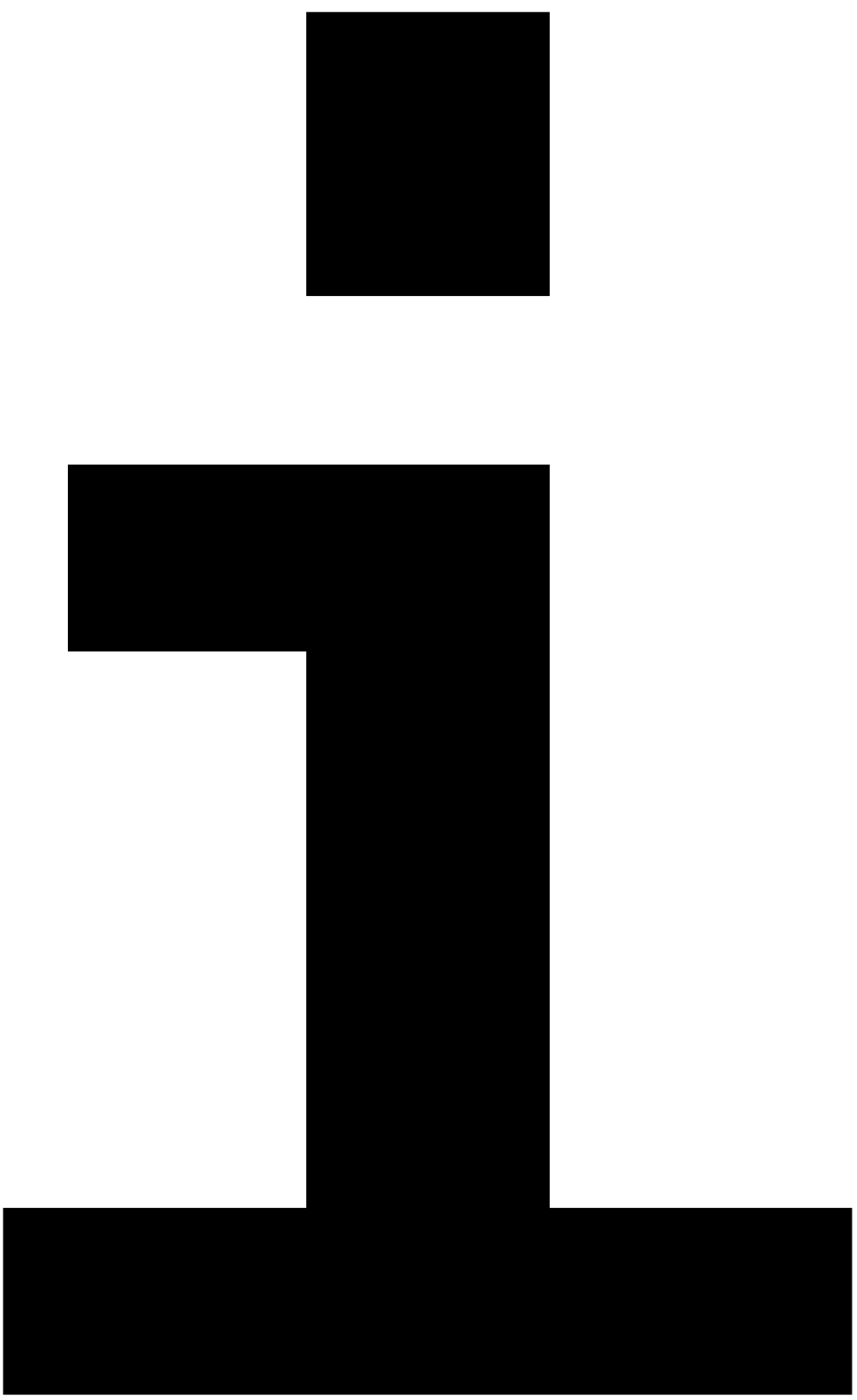


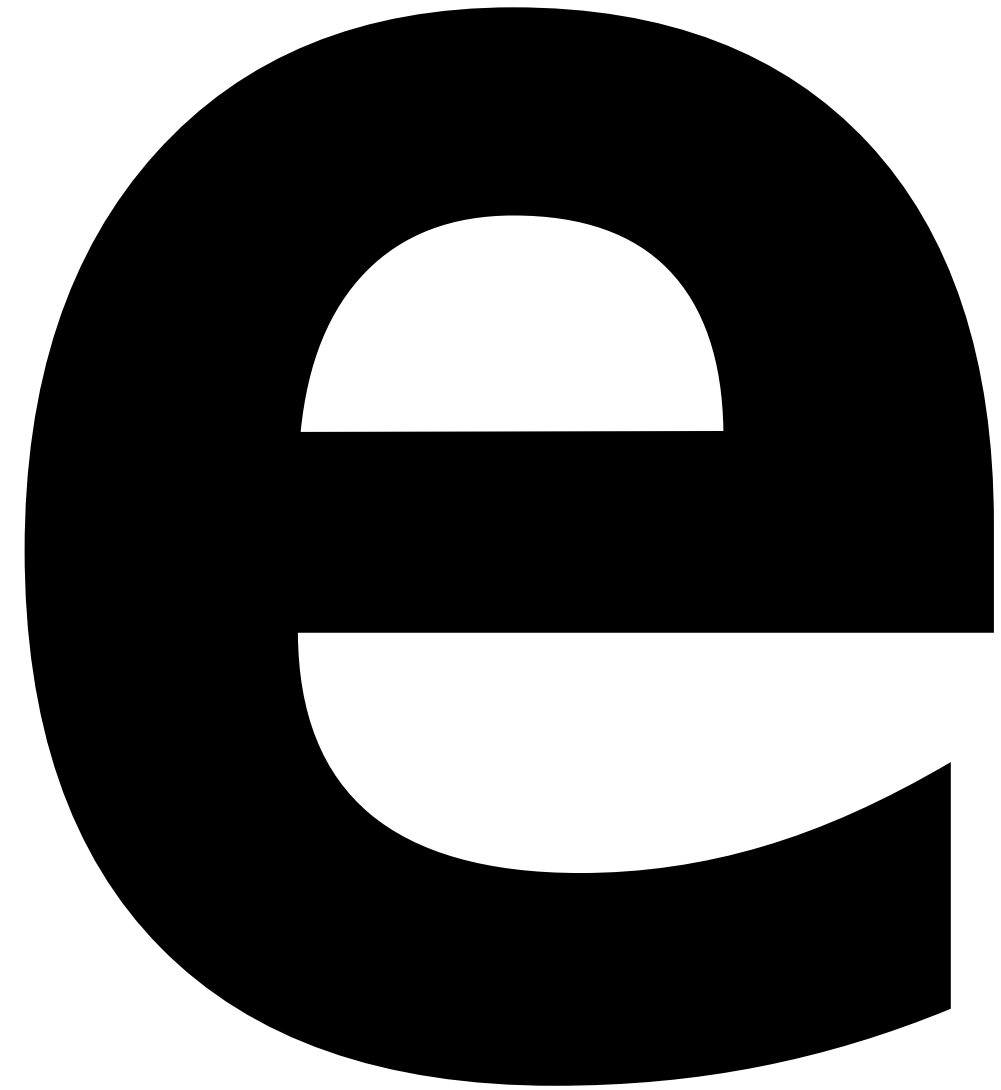


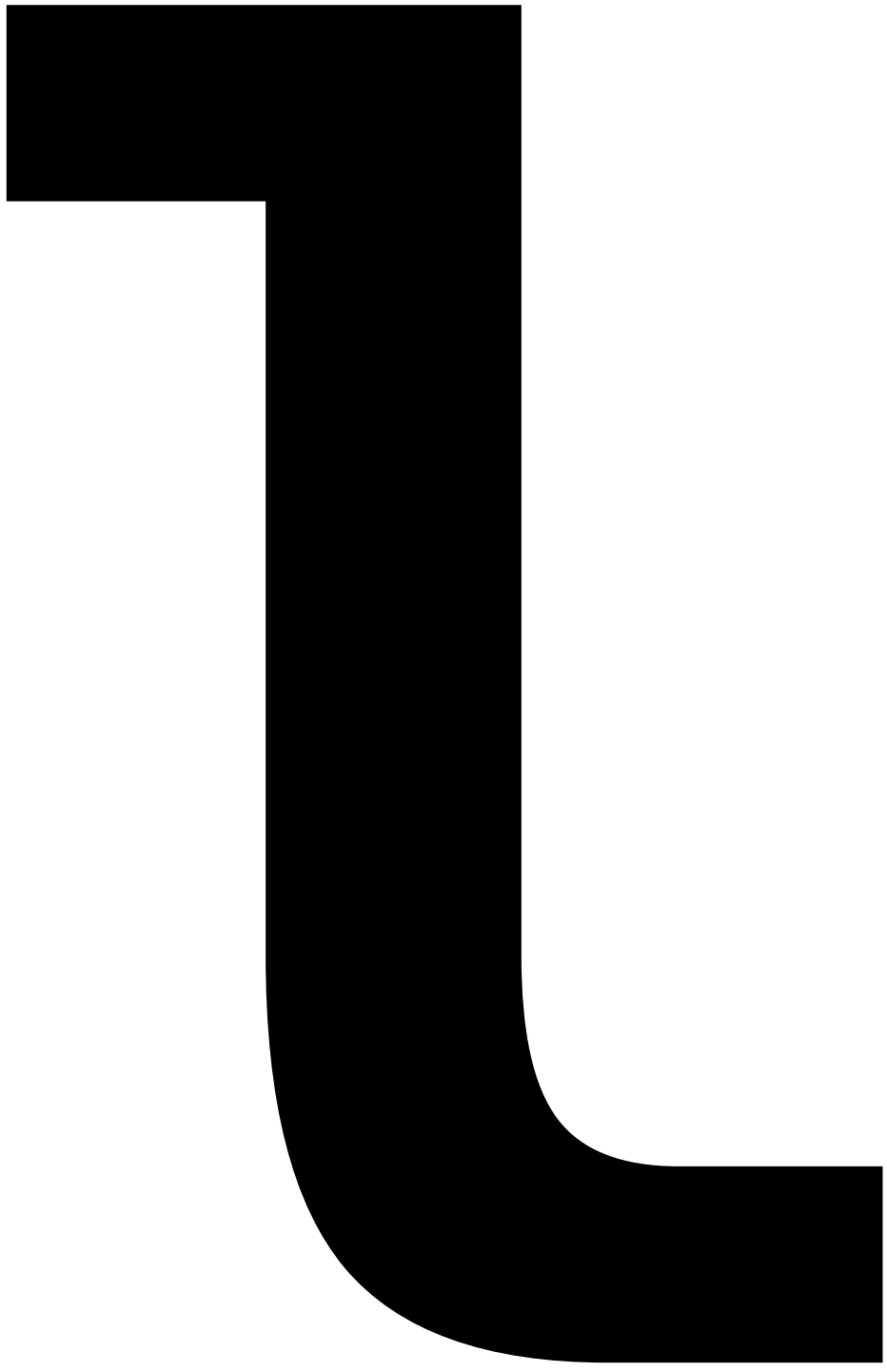


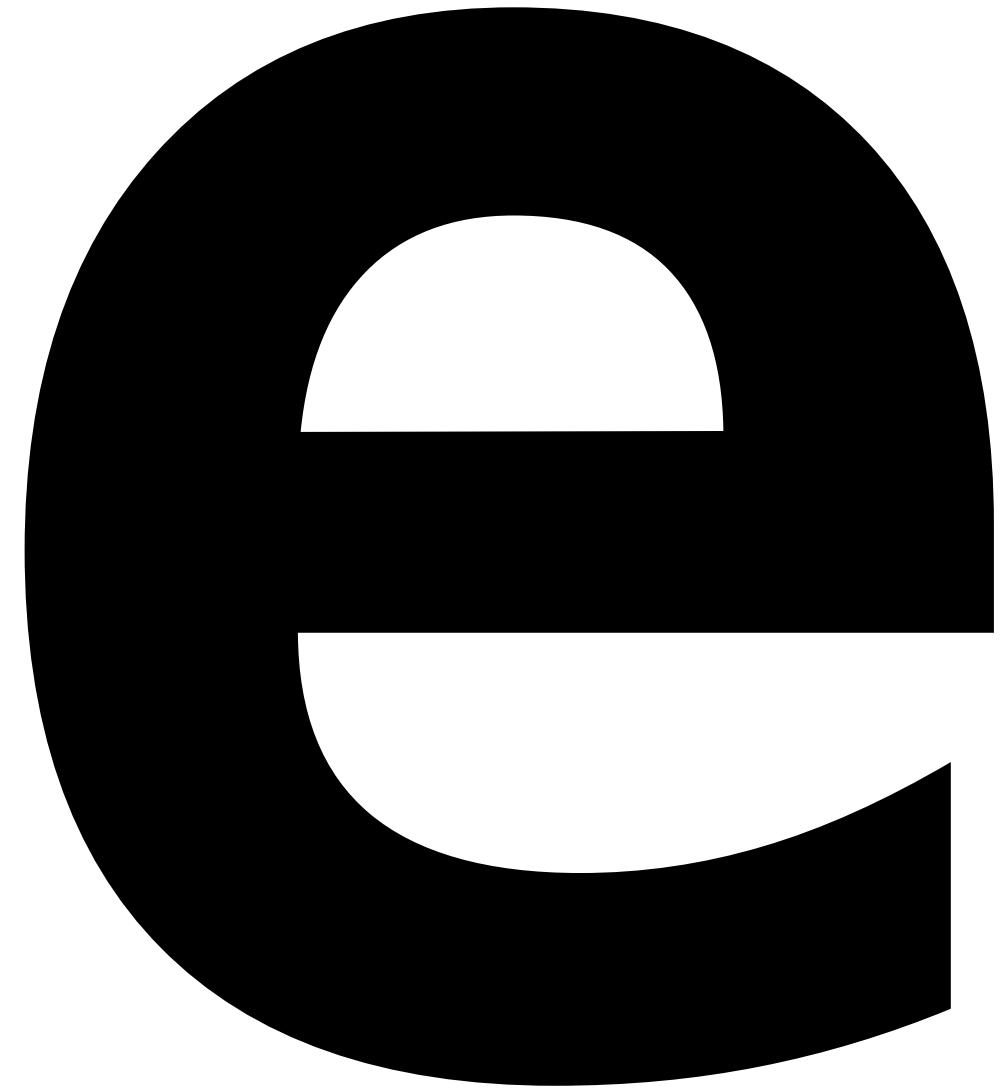




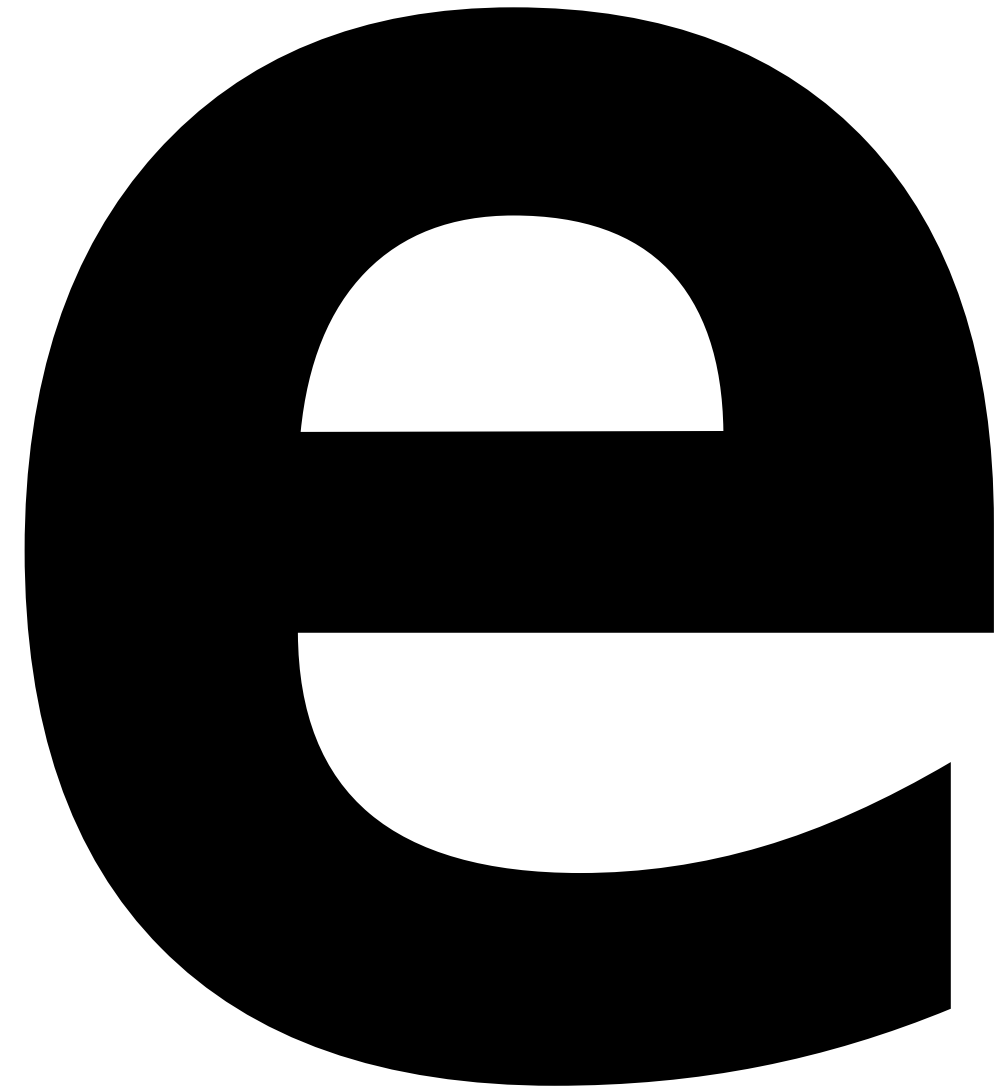


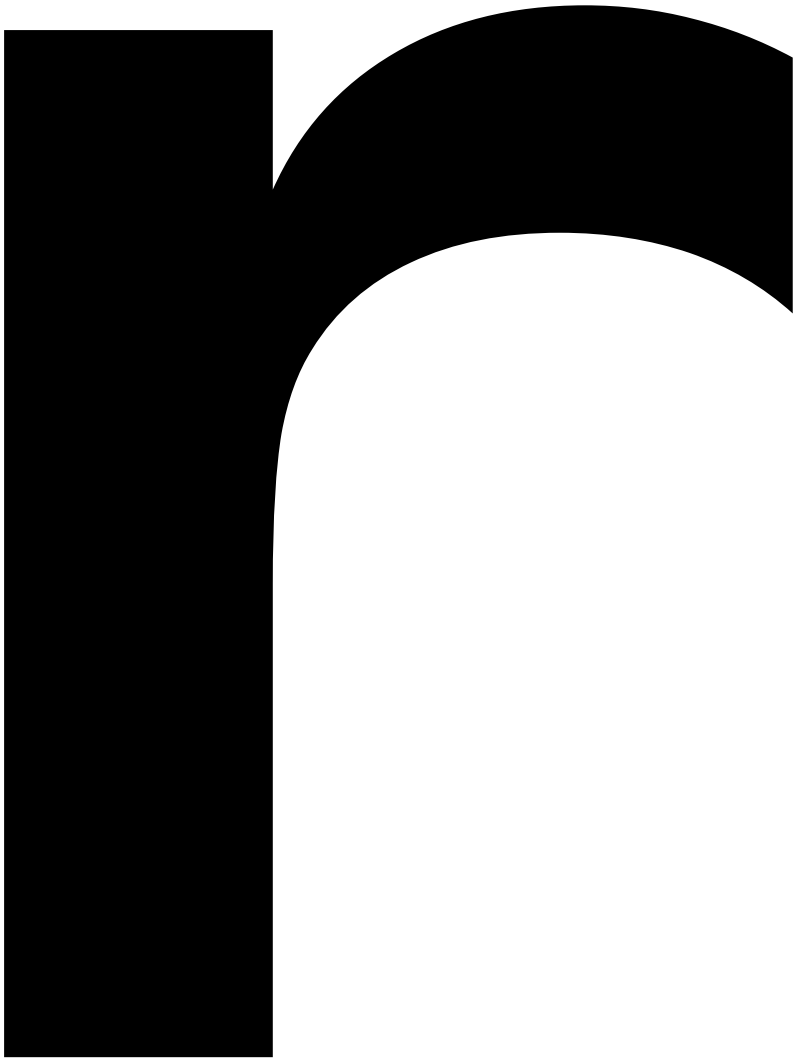


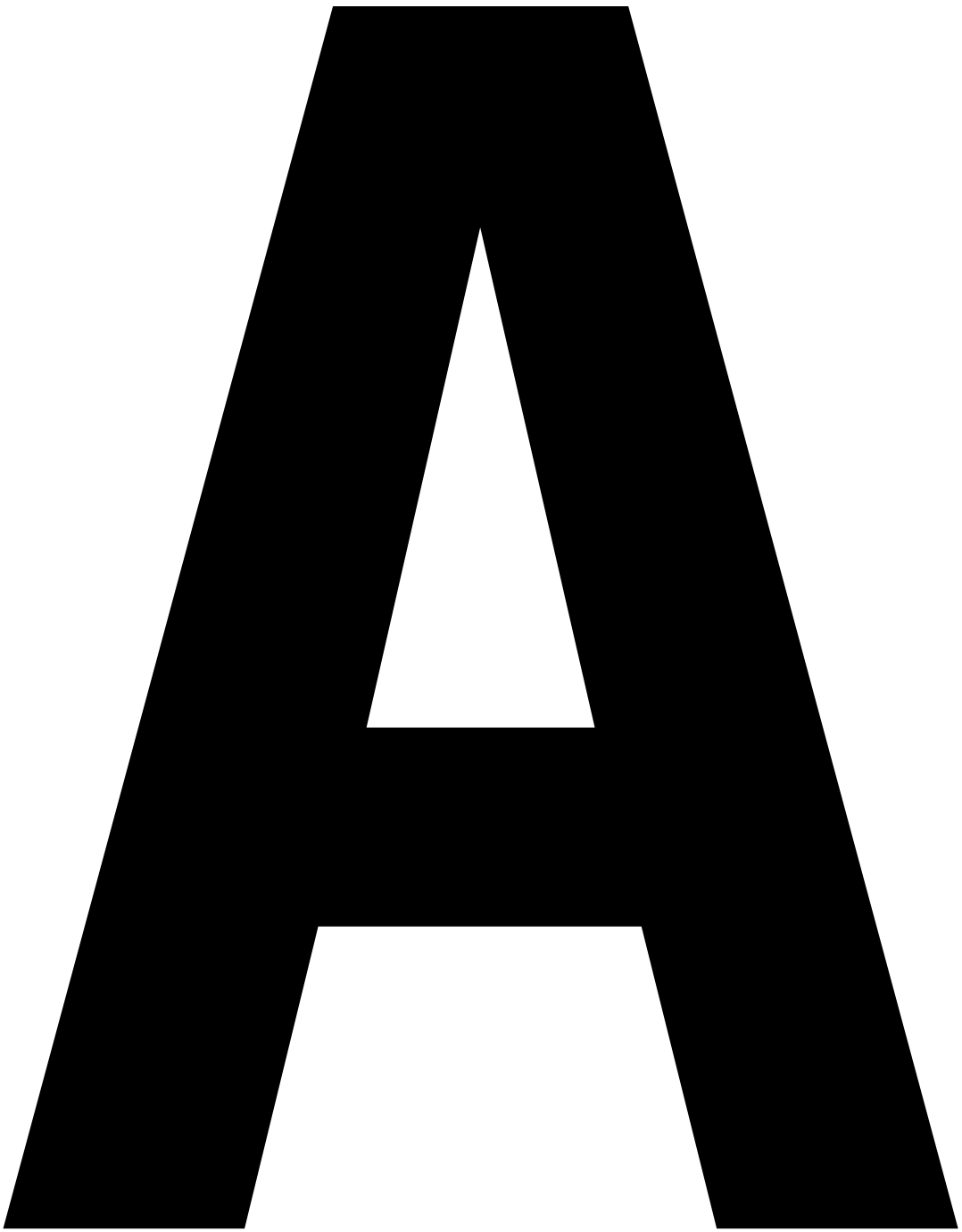


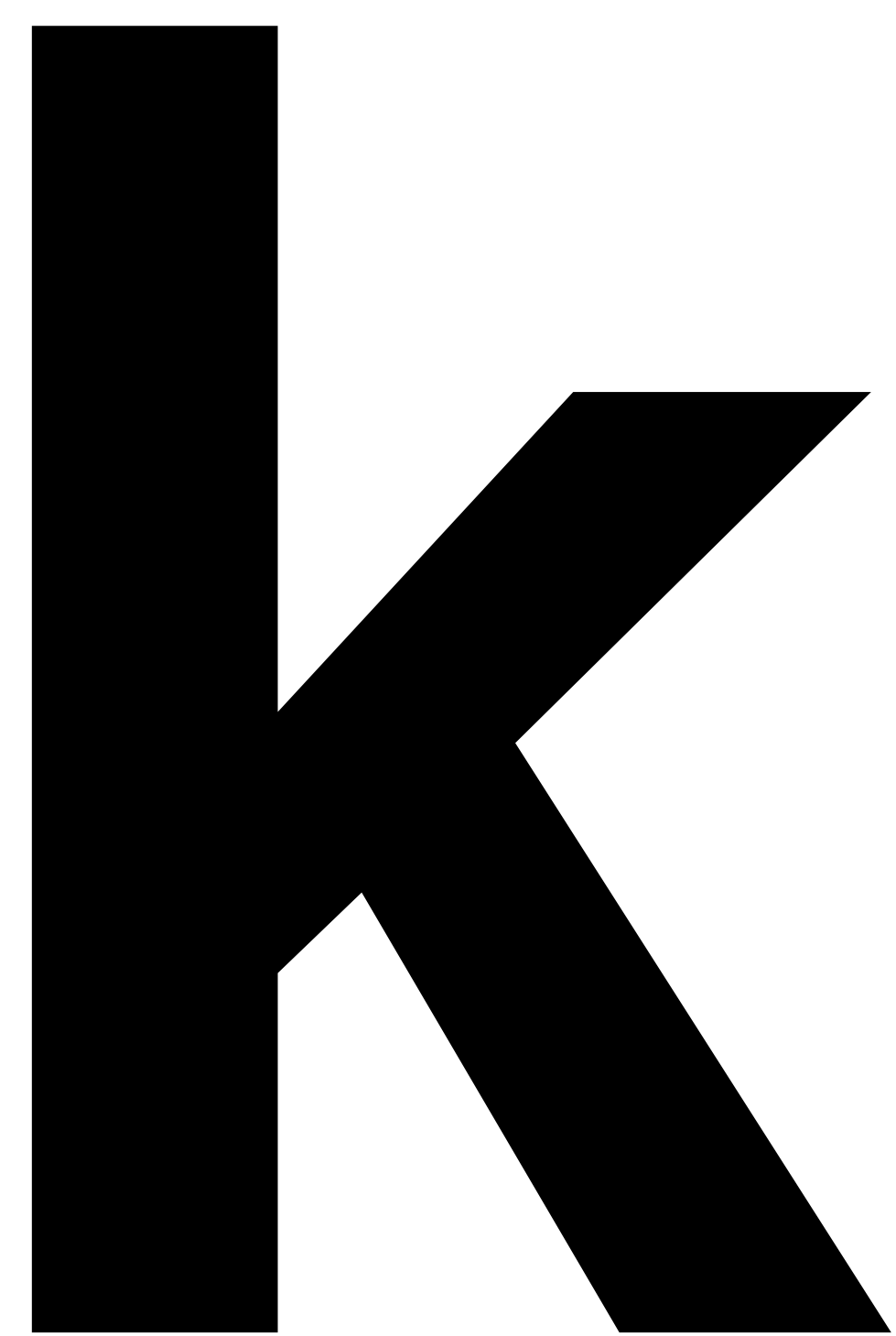


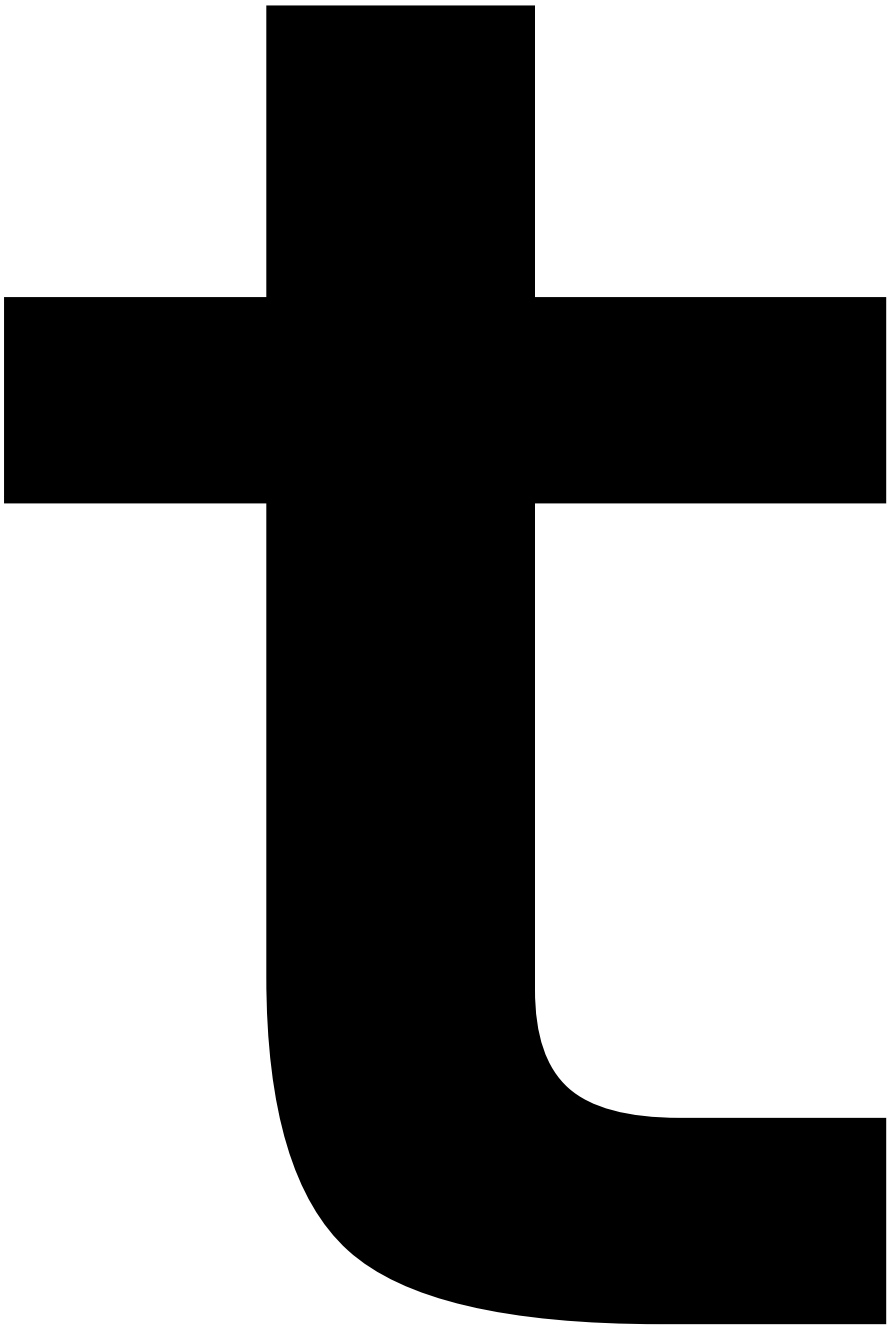
d

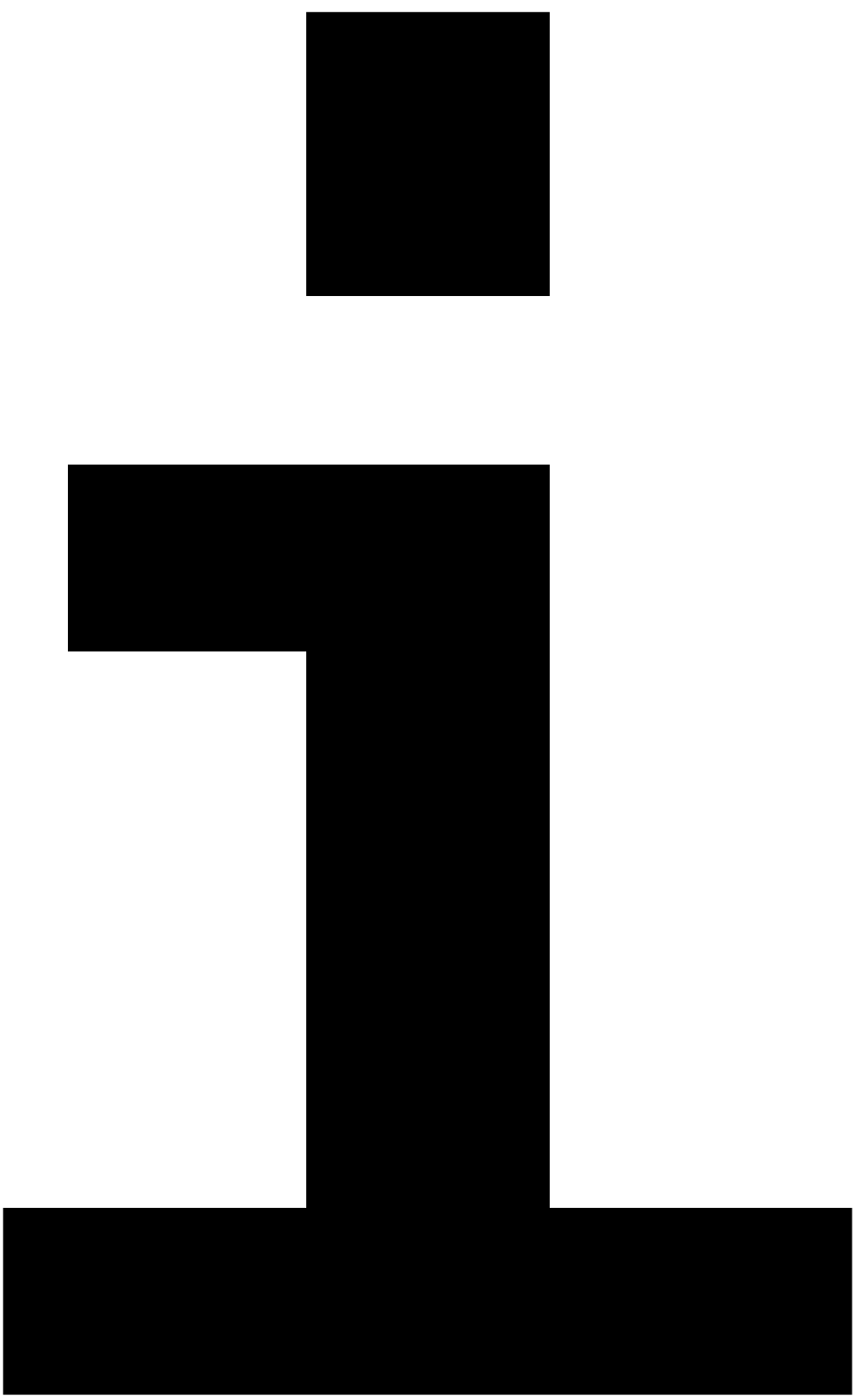


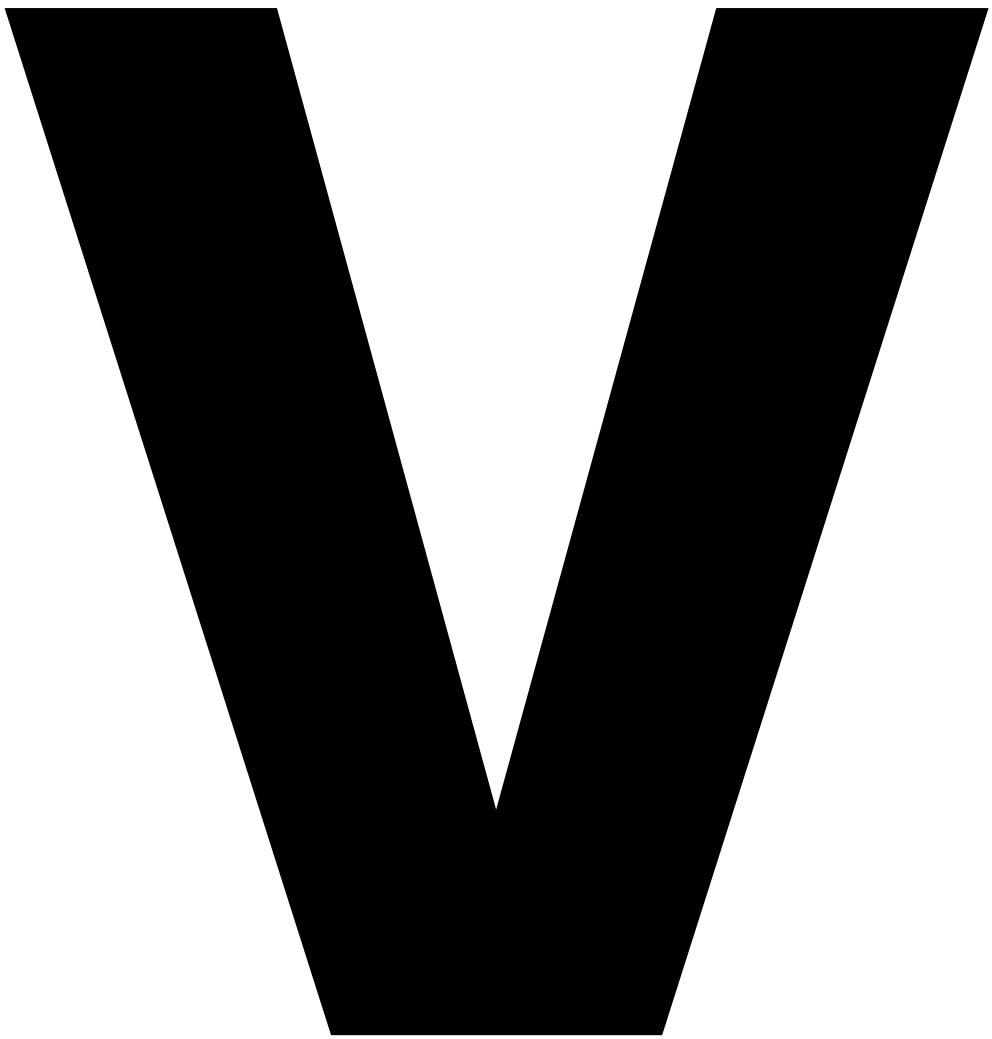


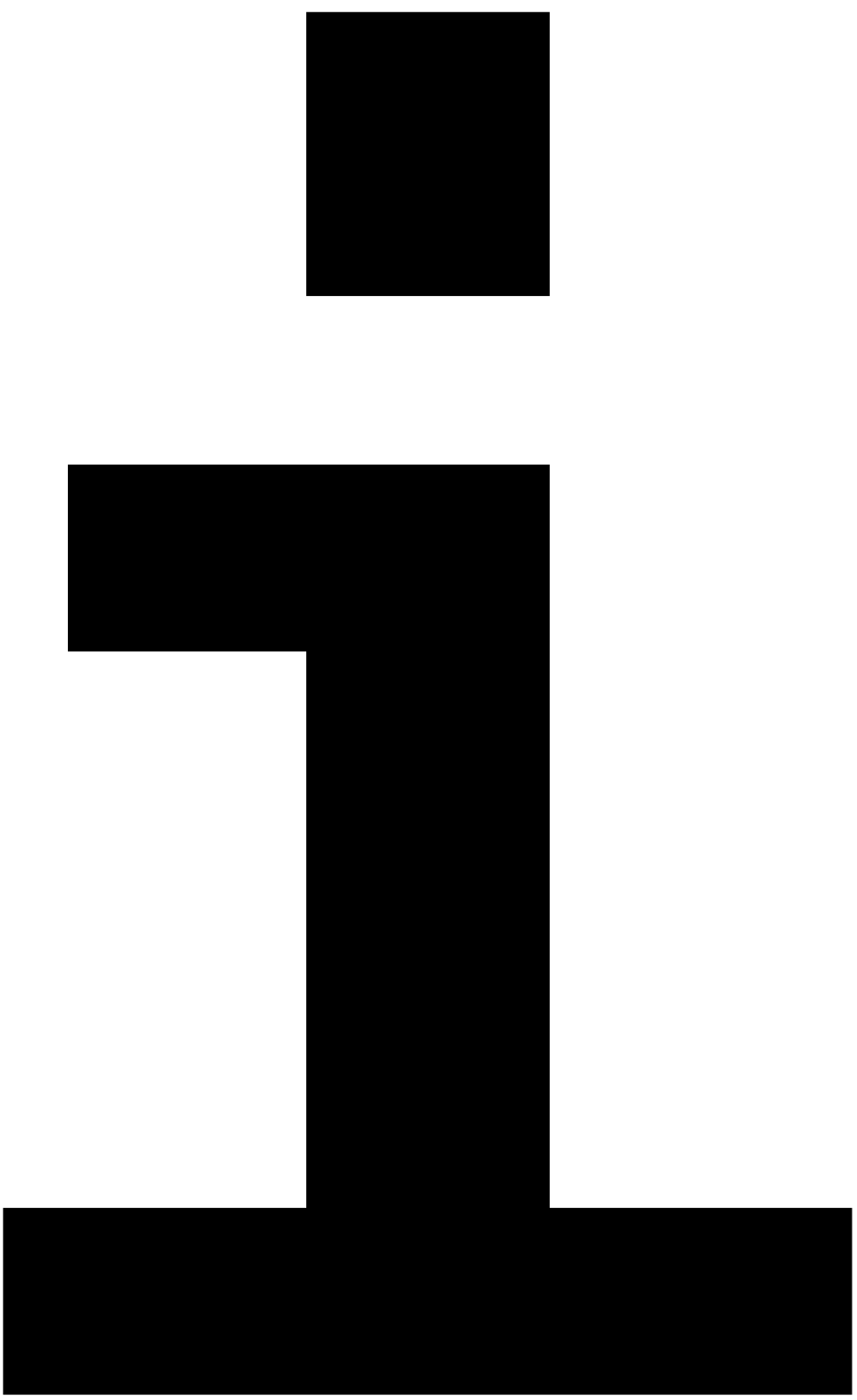


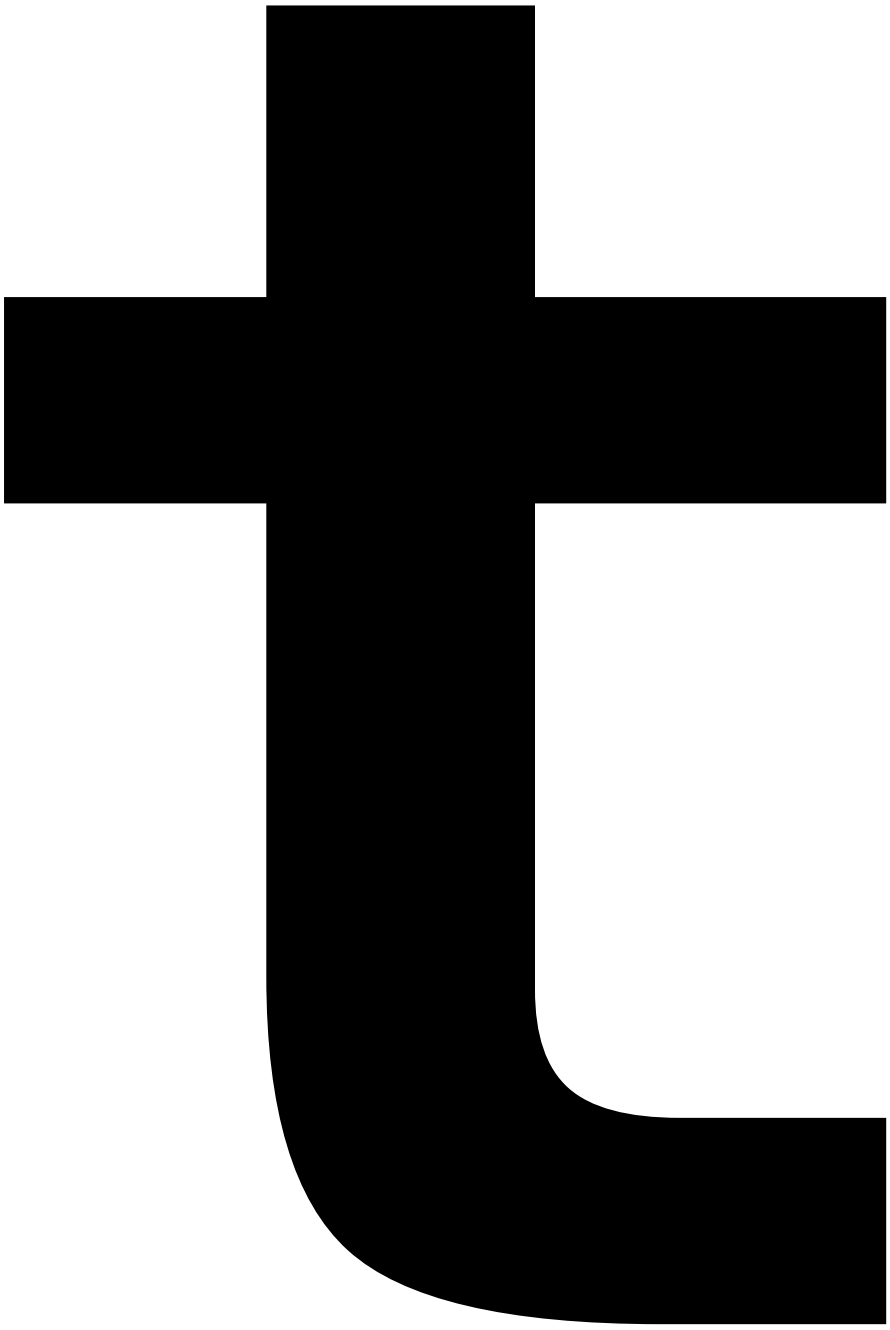


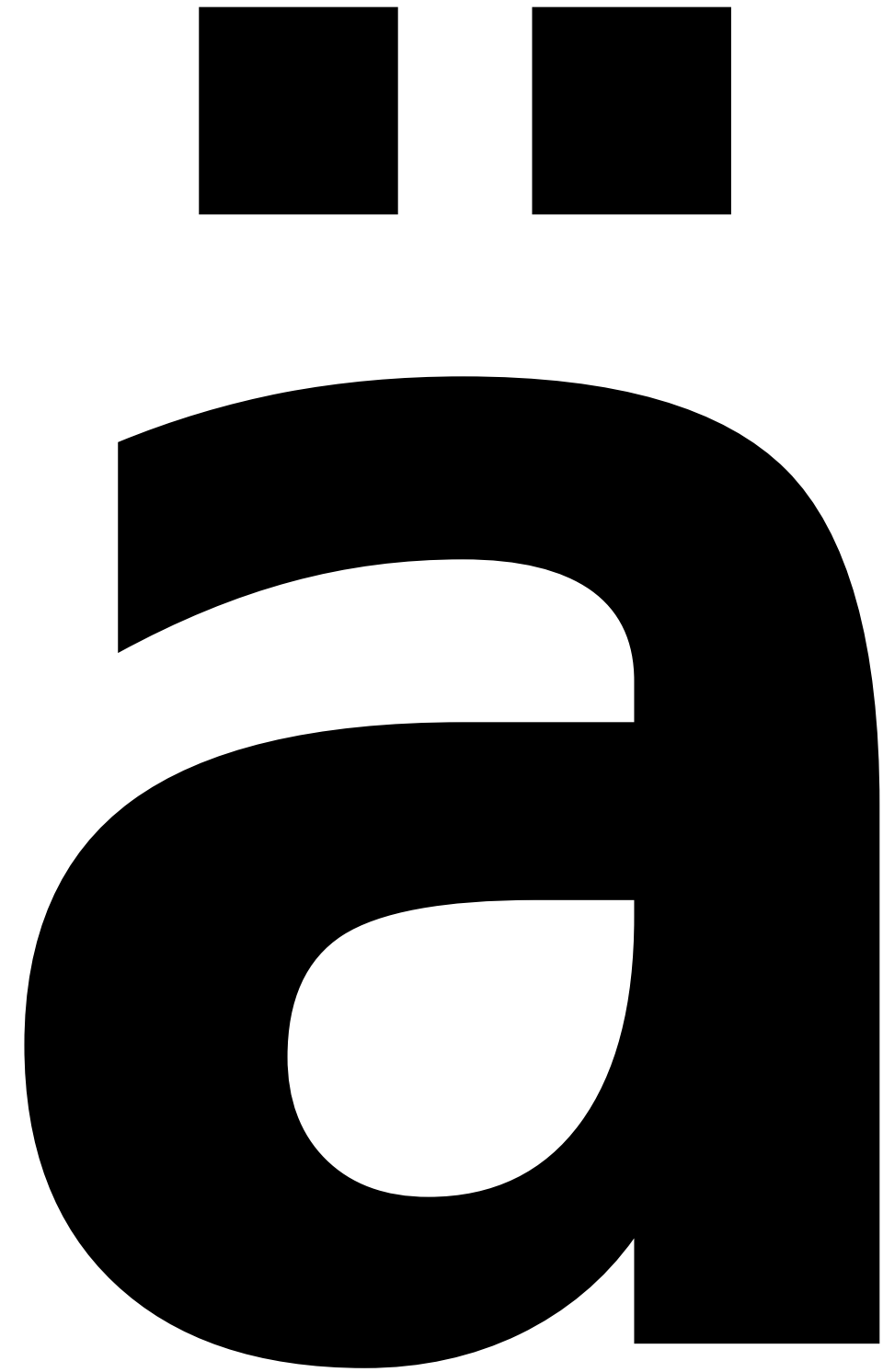


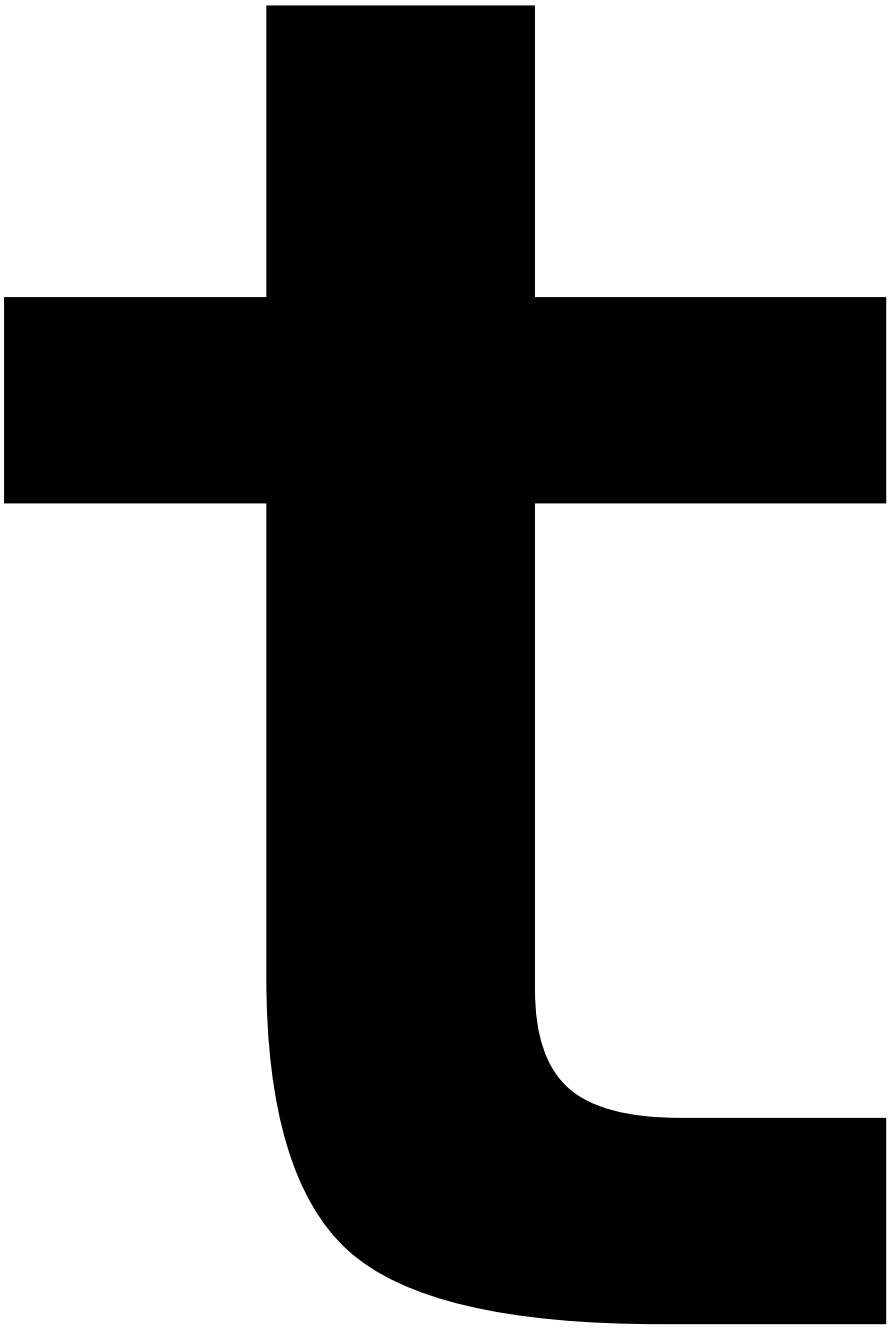


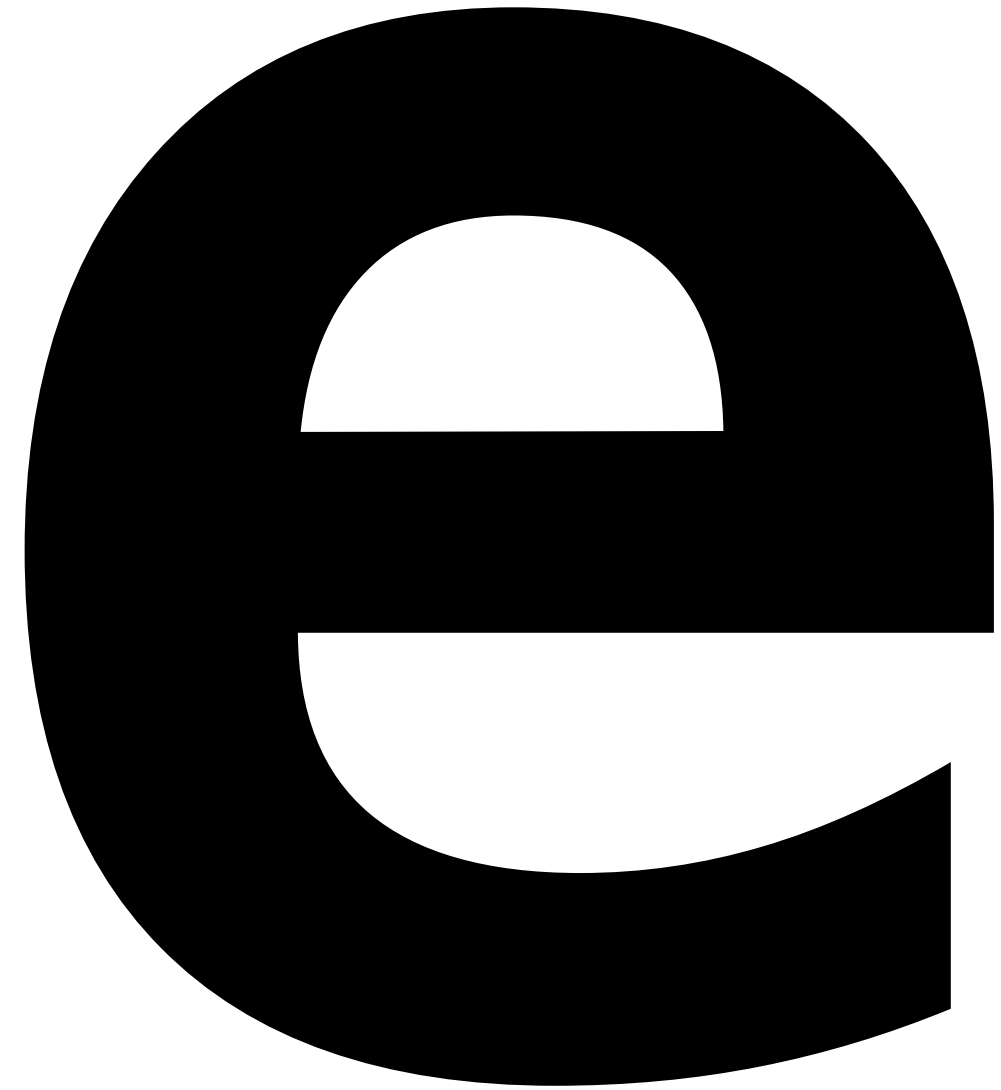


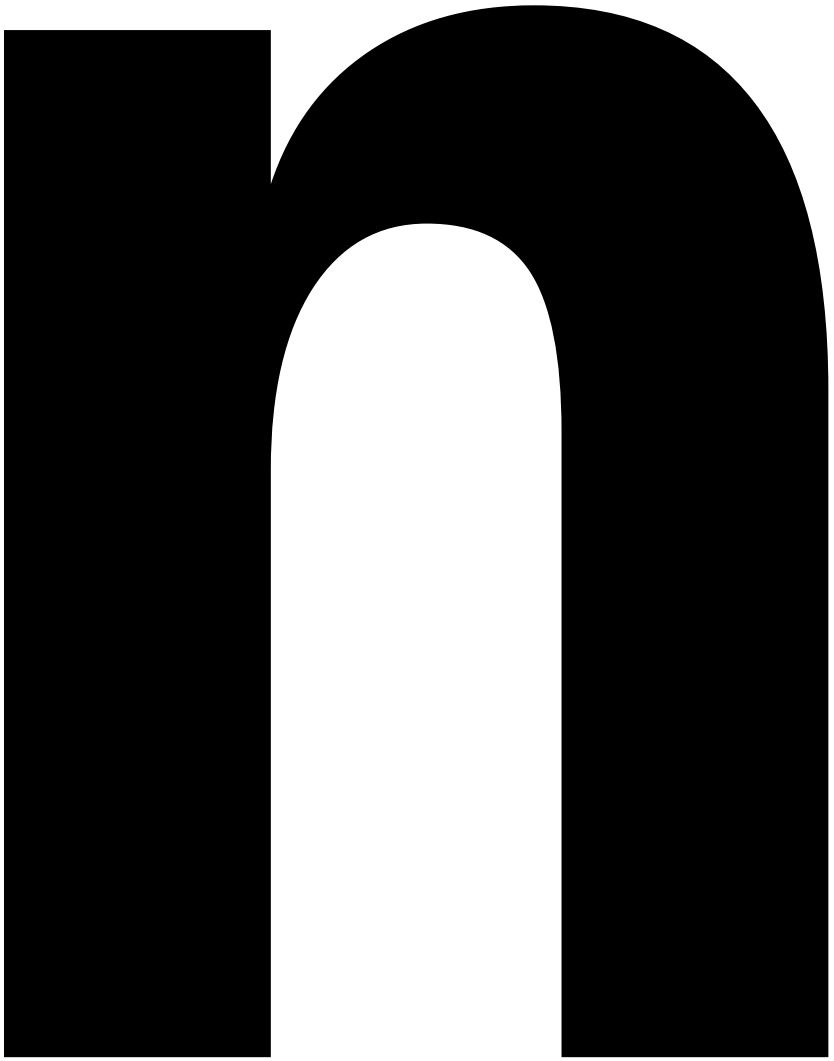


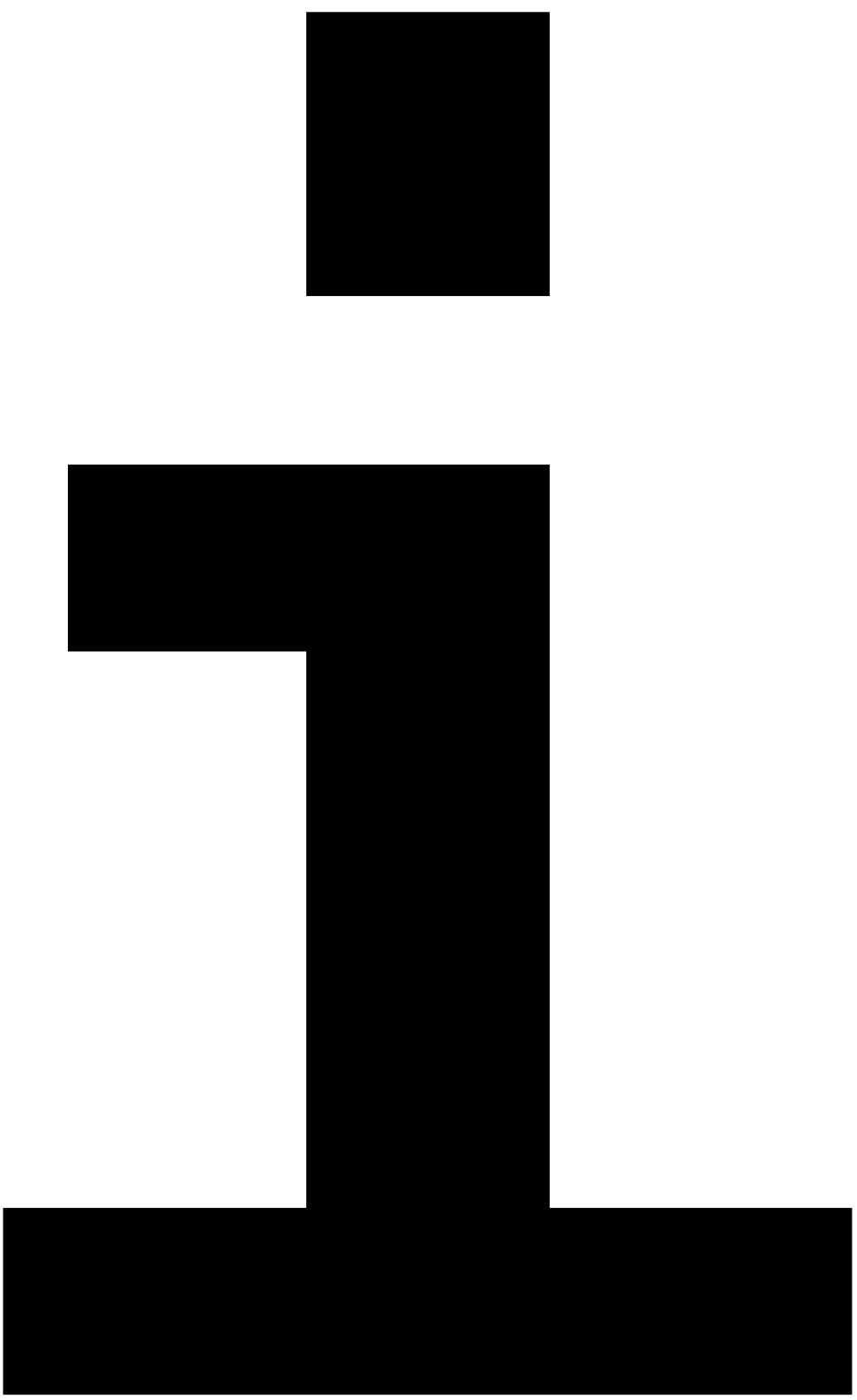


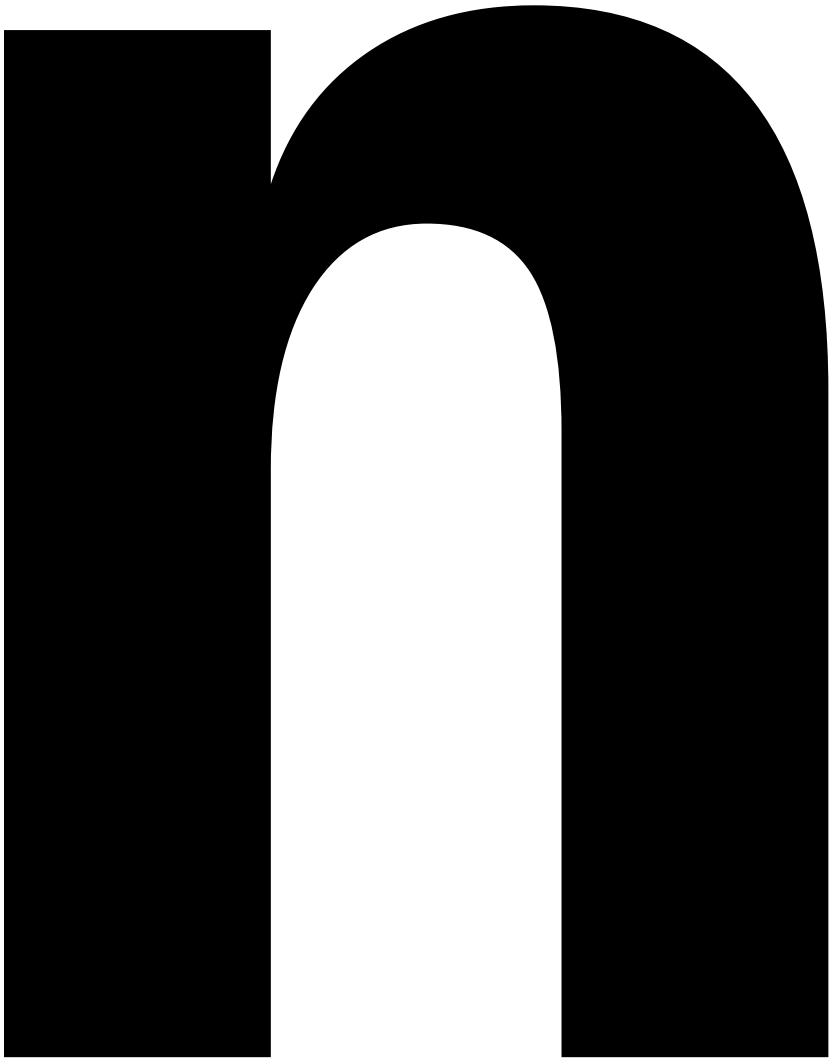




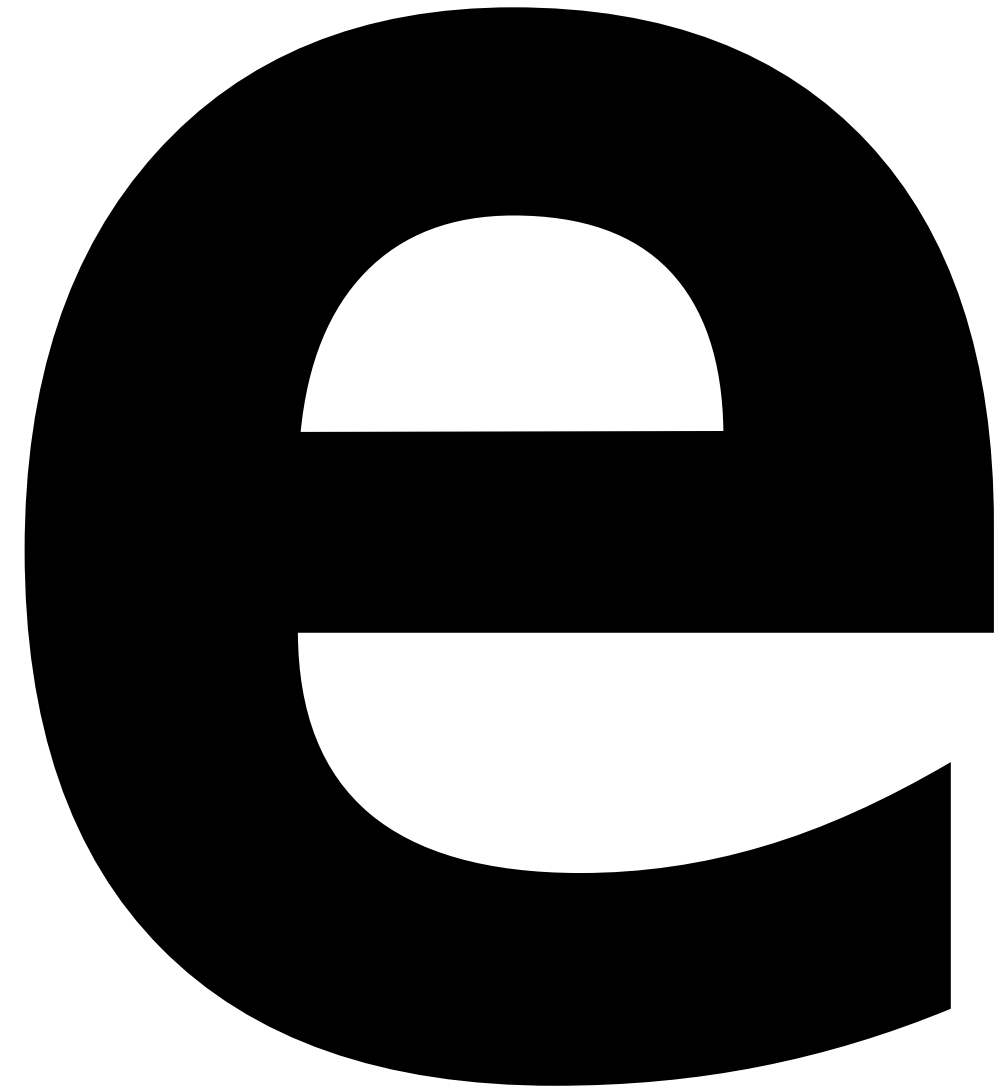


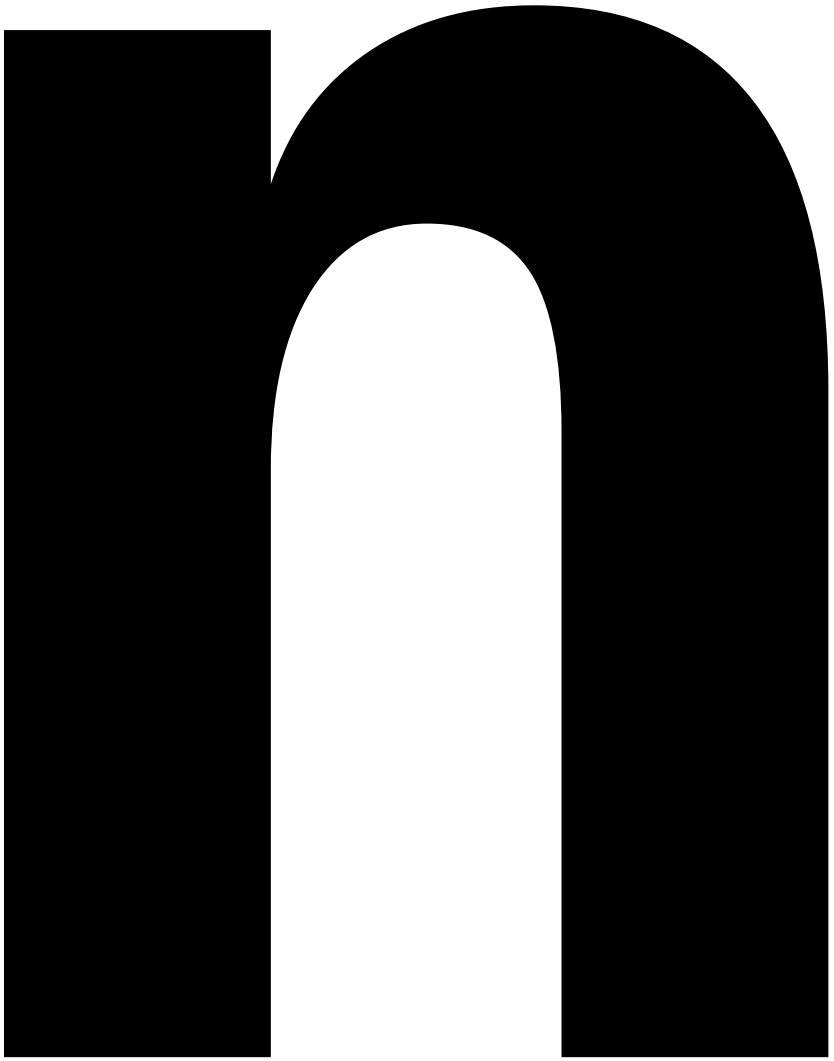


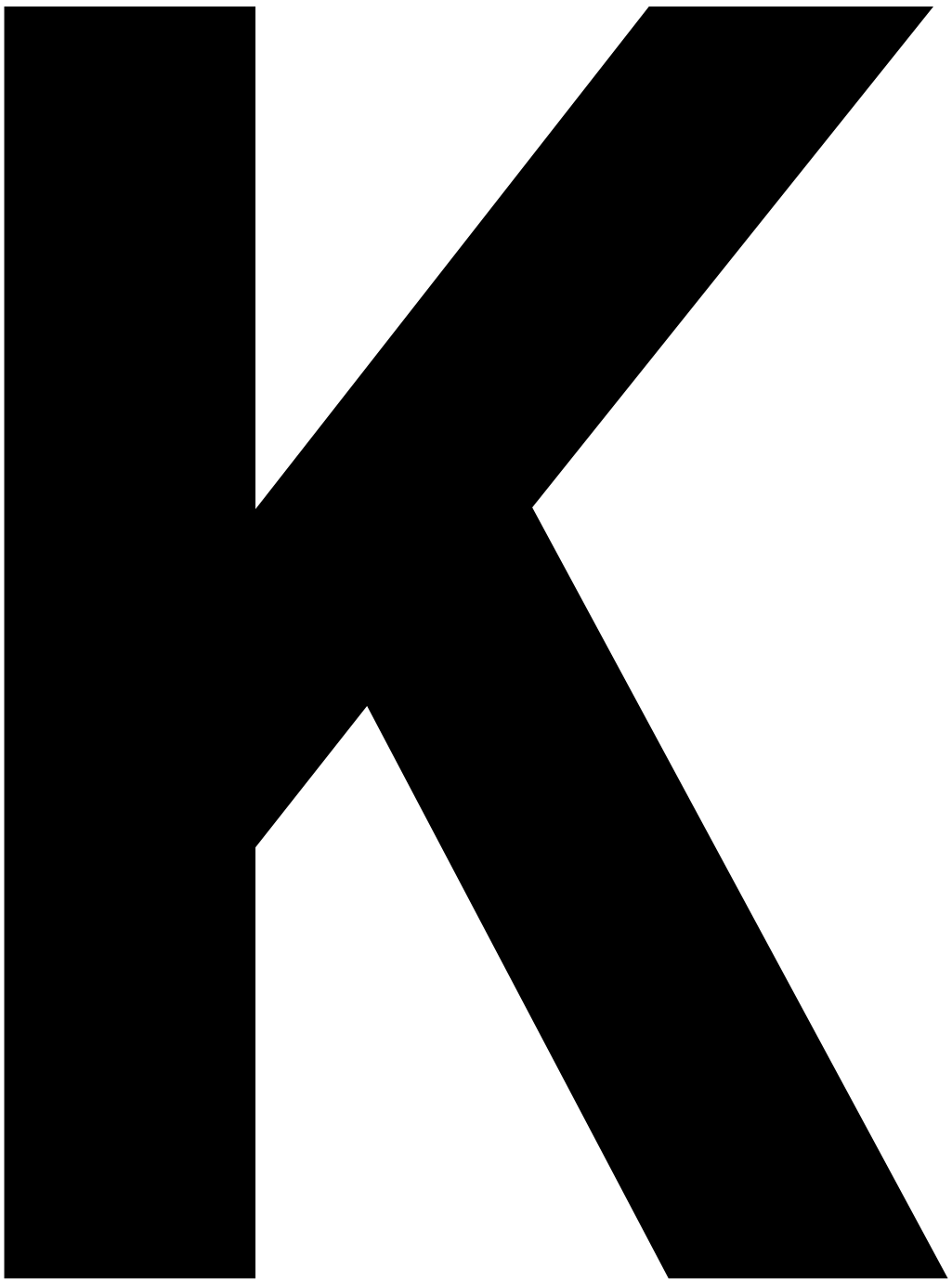


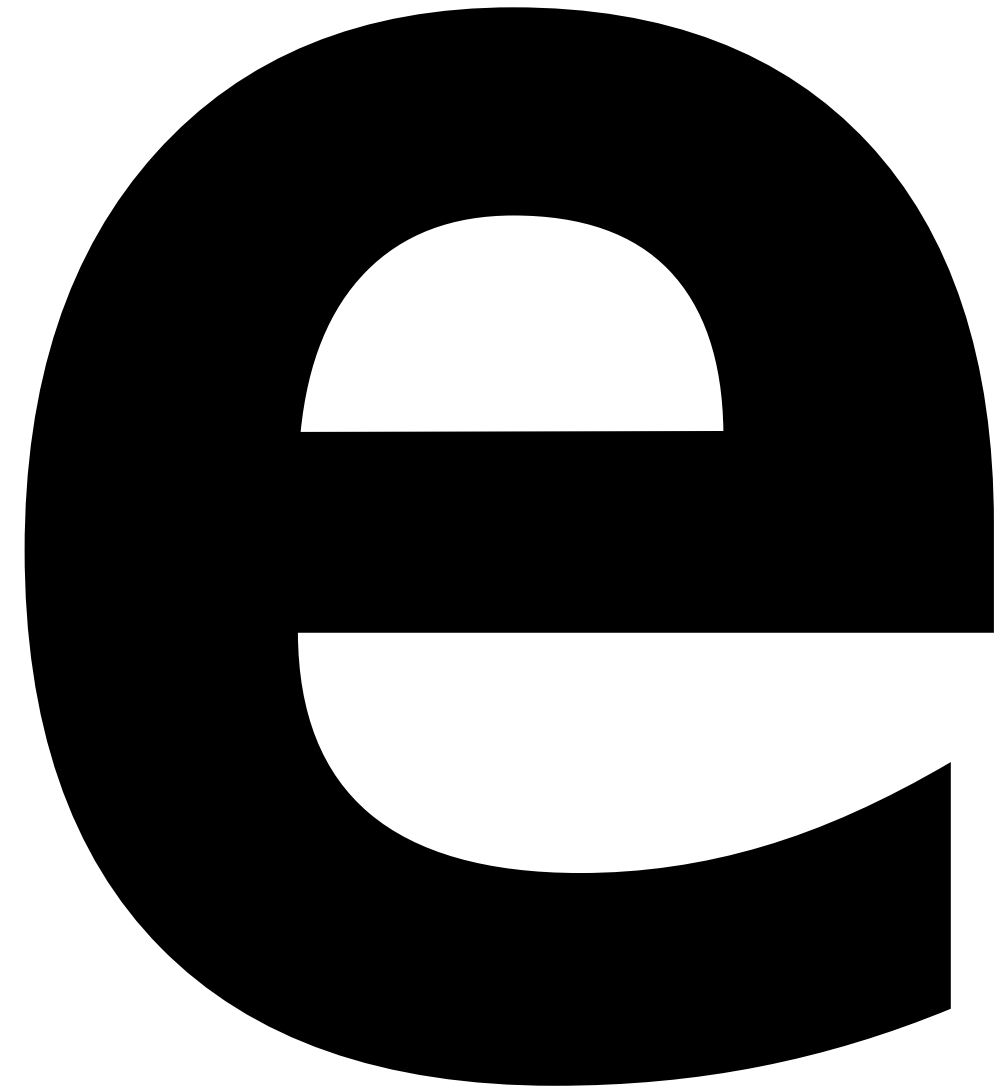


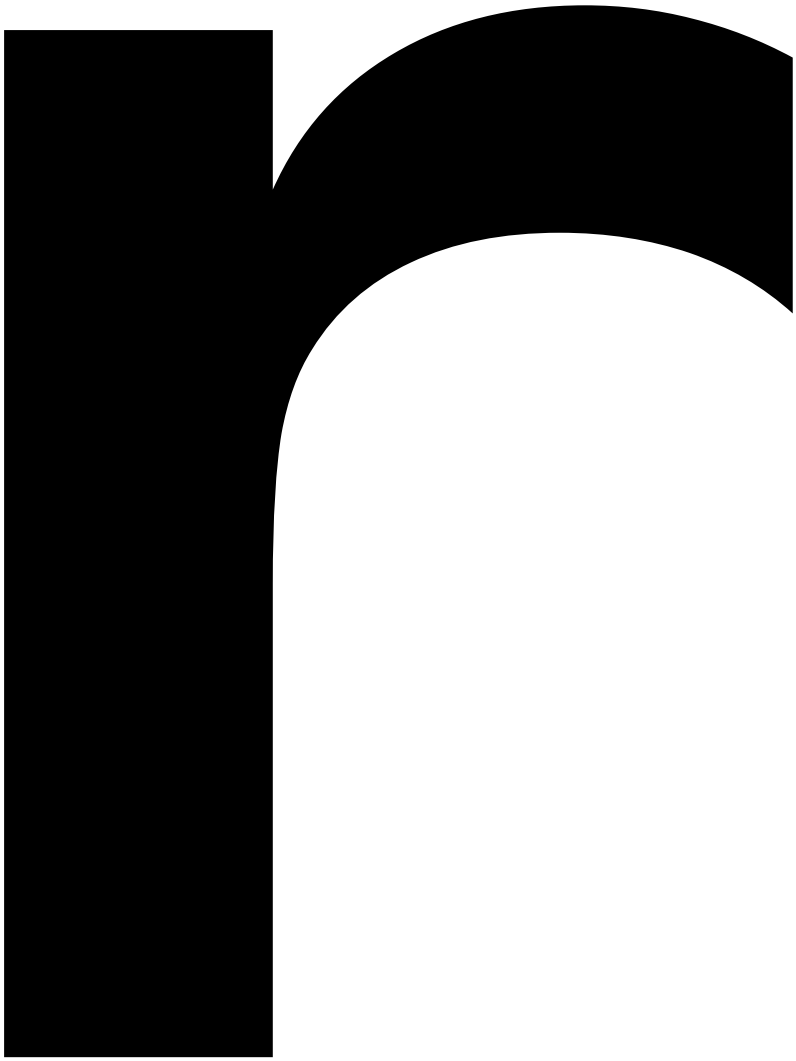
d

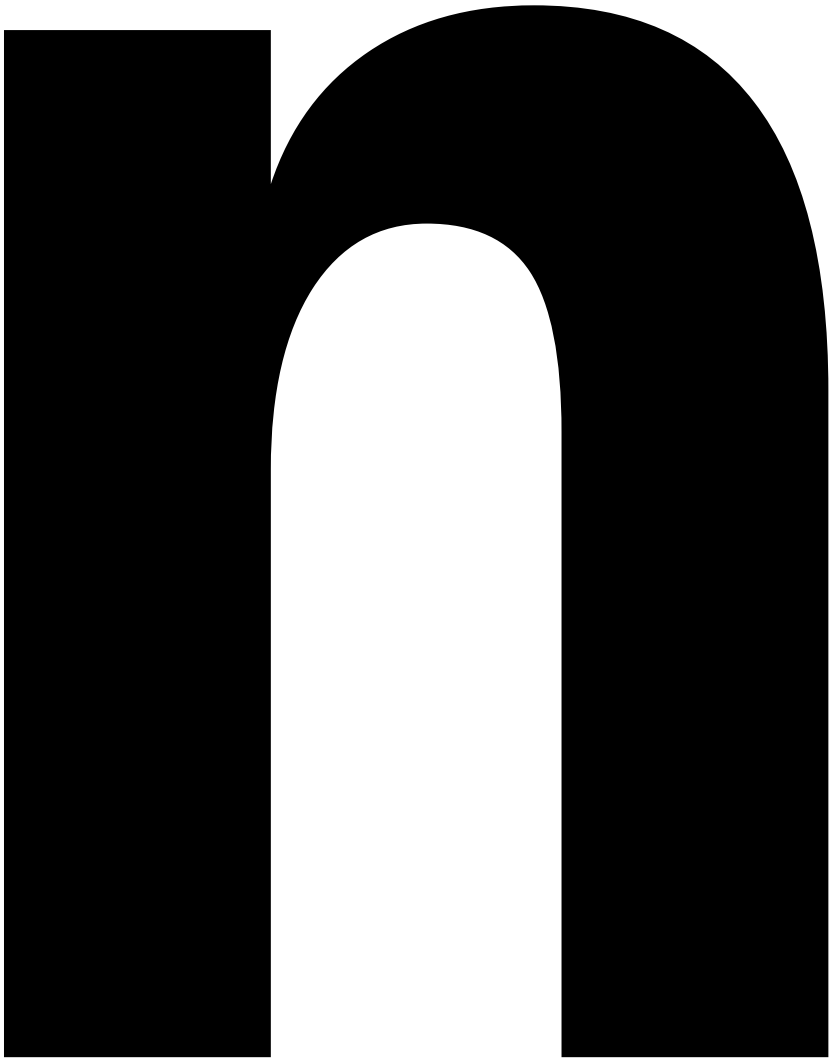


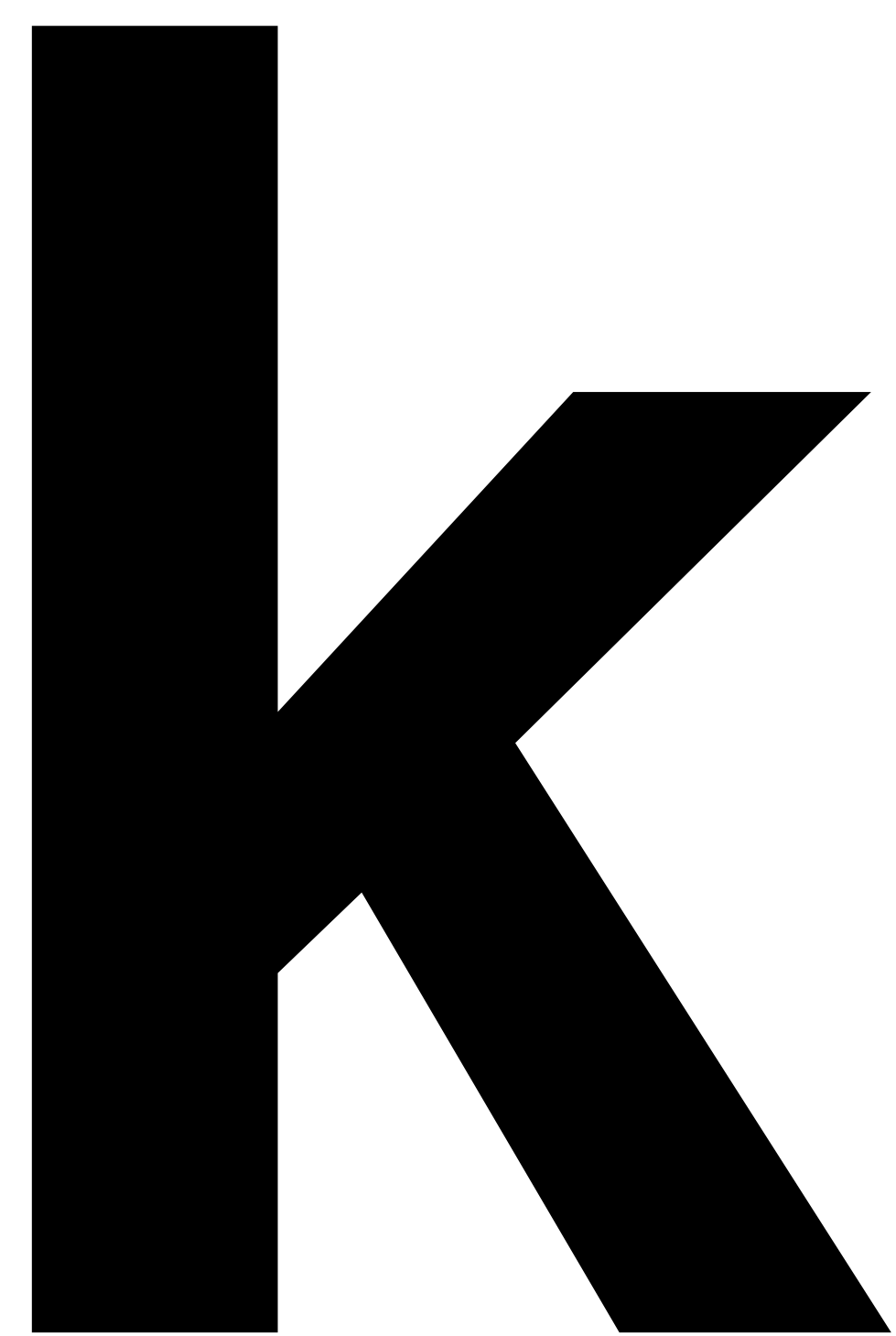


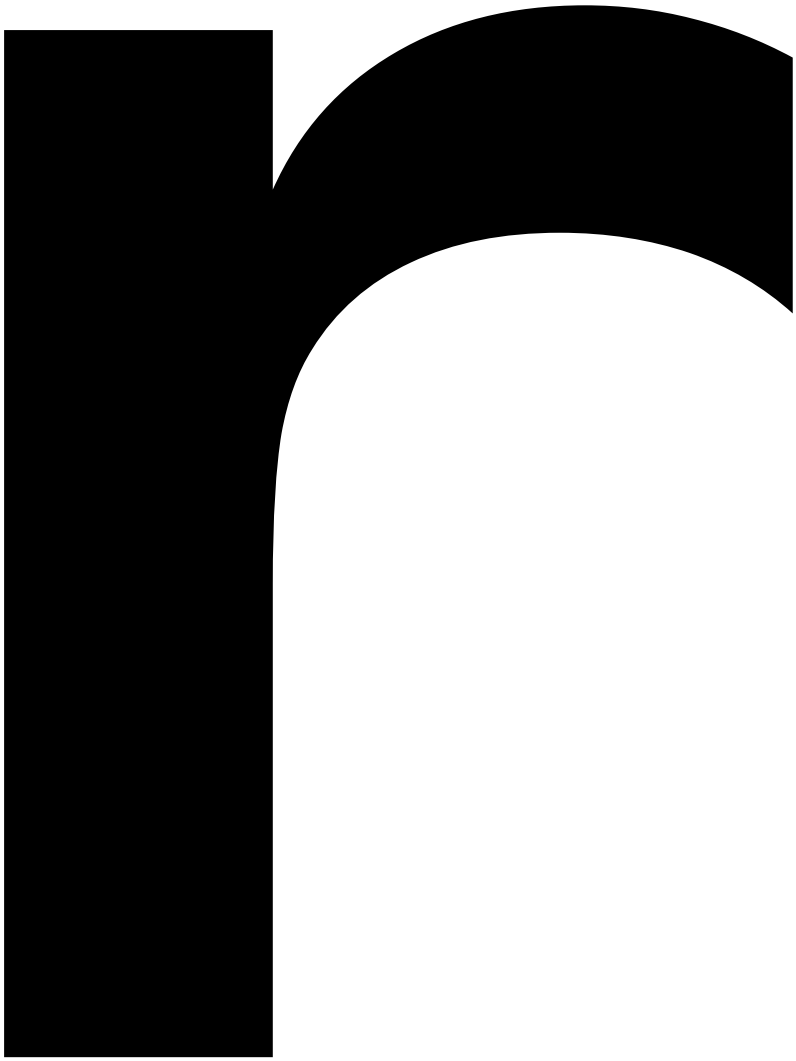


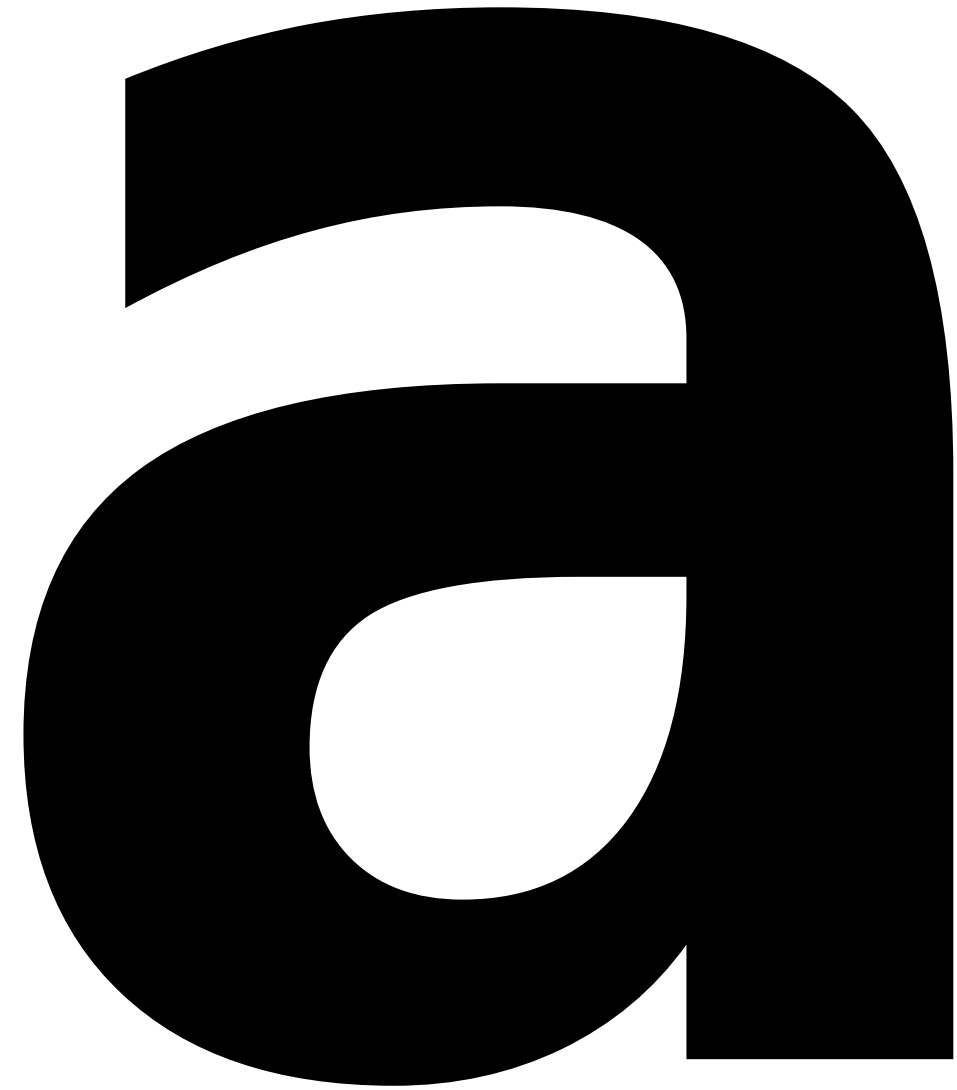


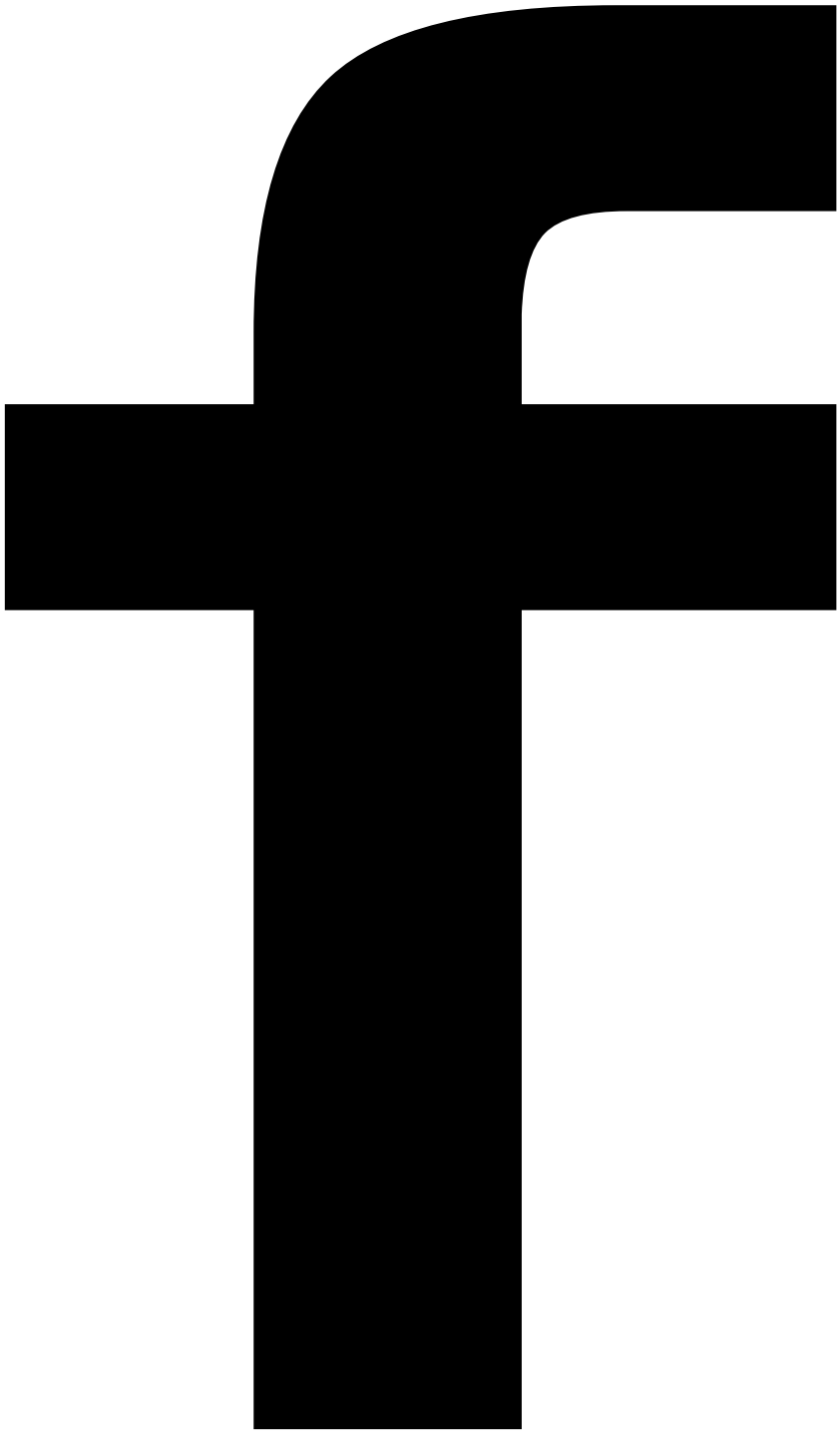


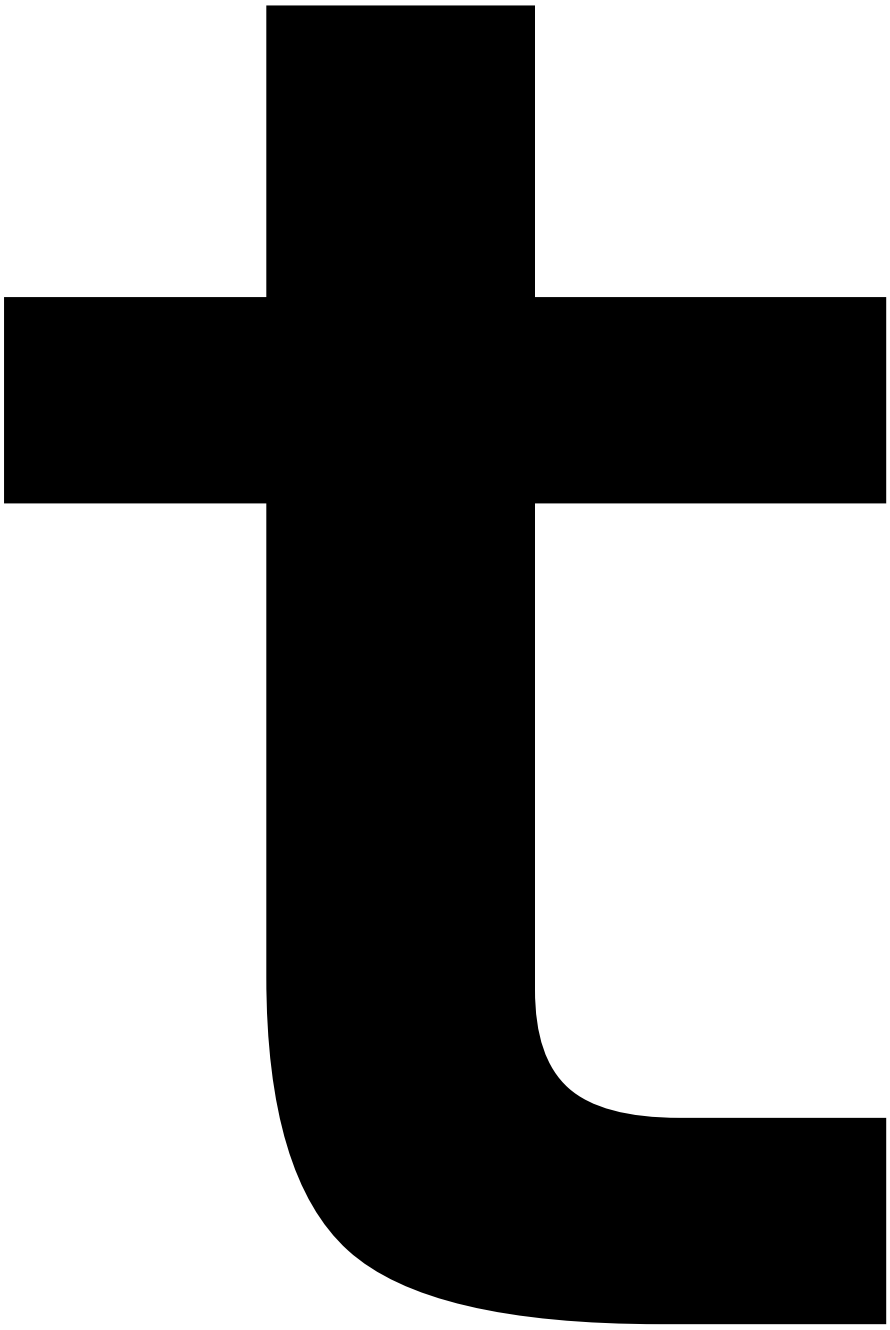


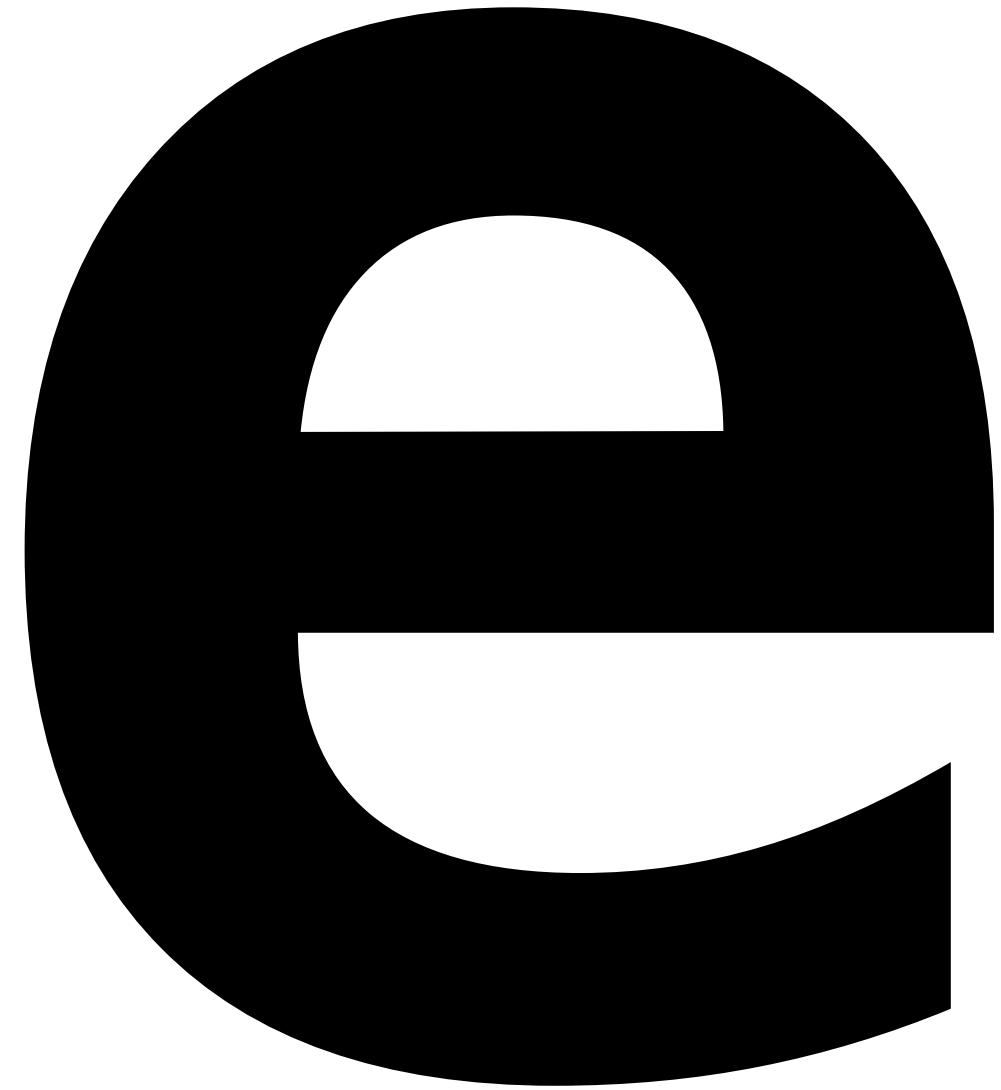


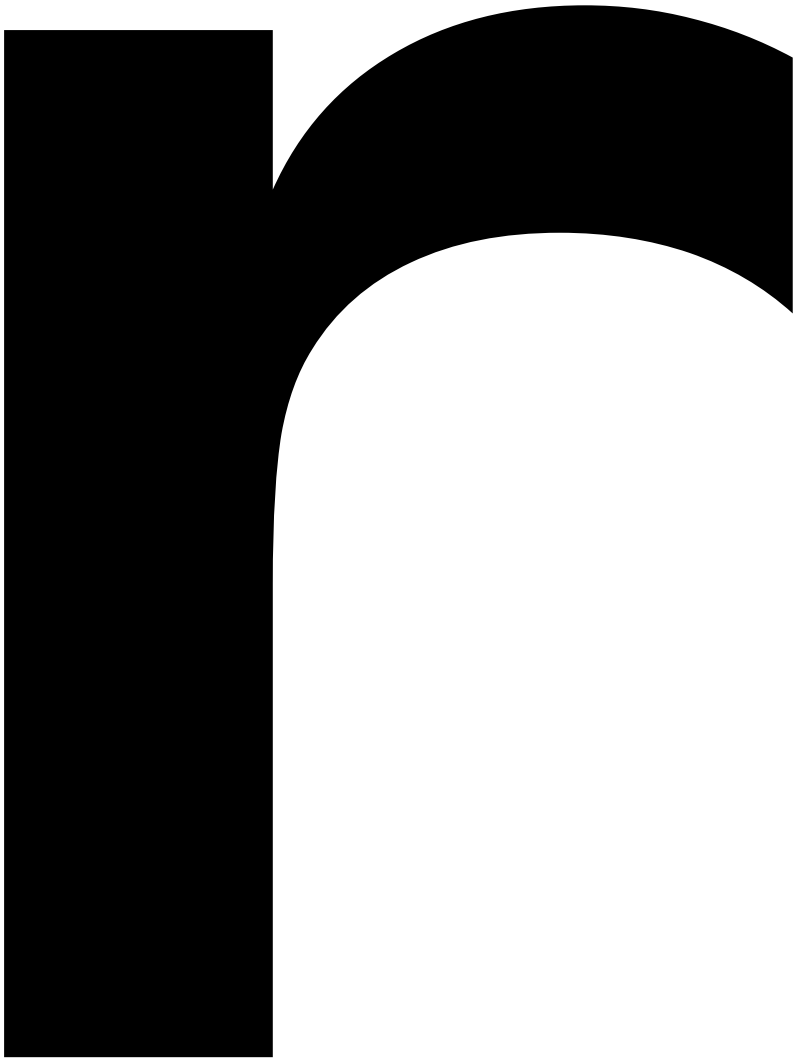


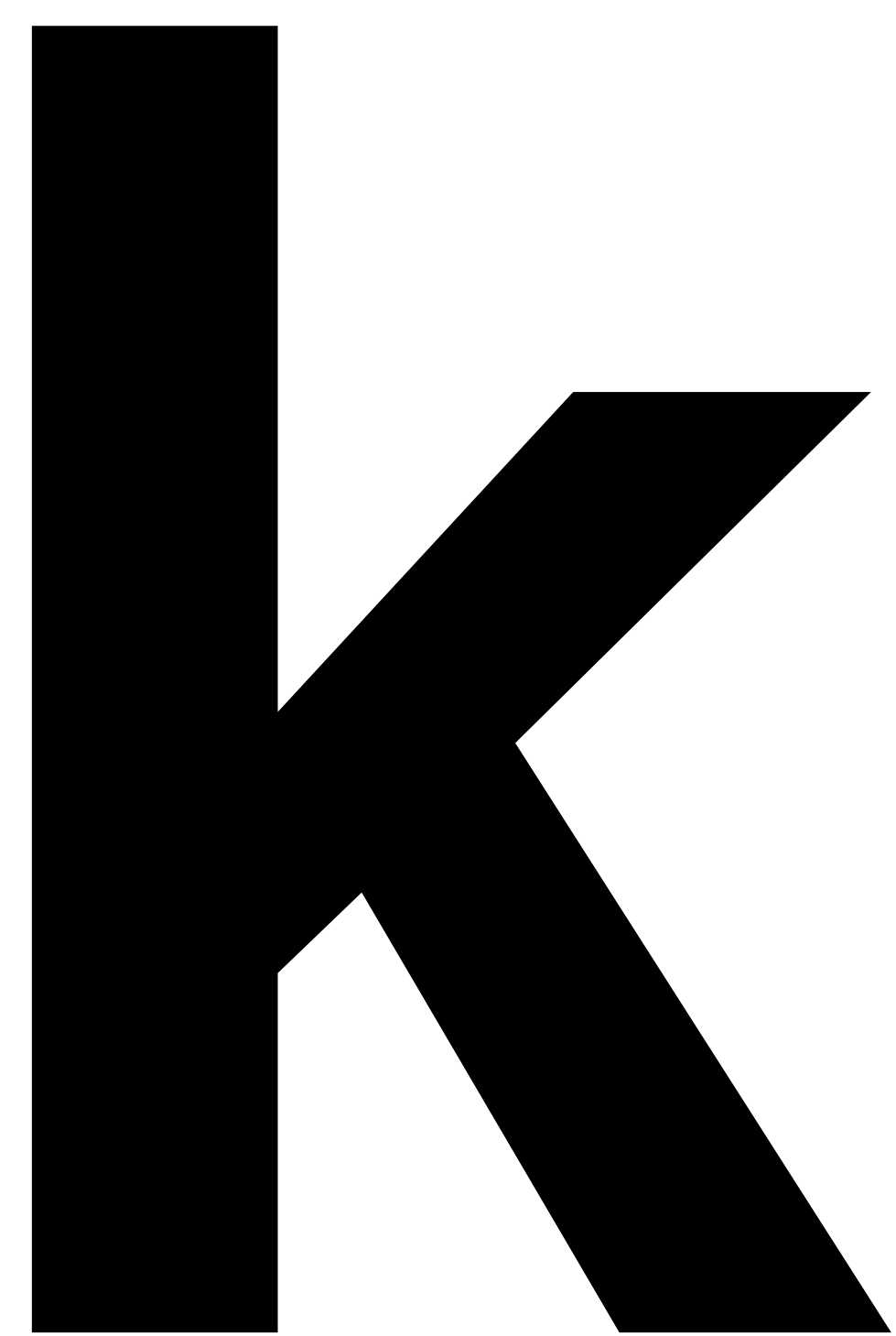


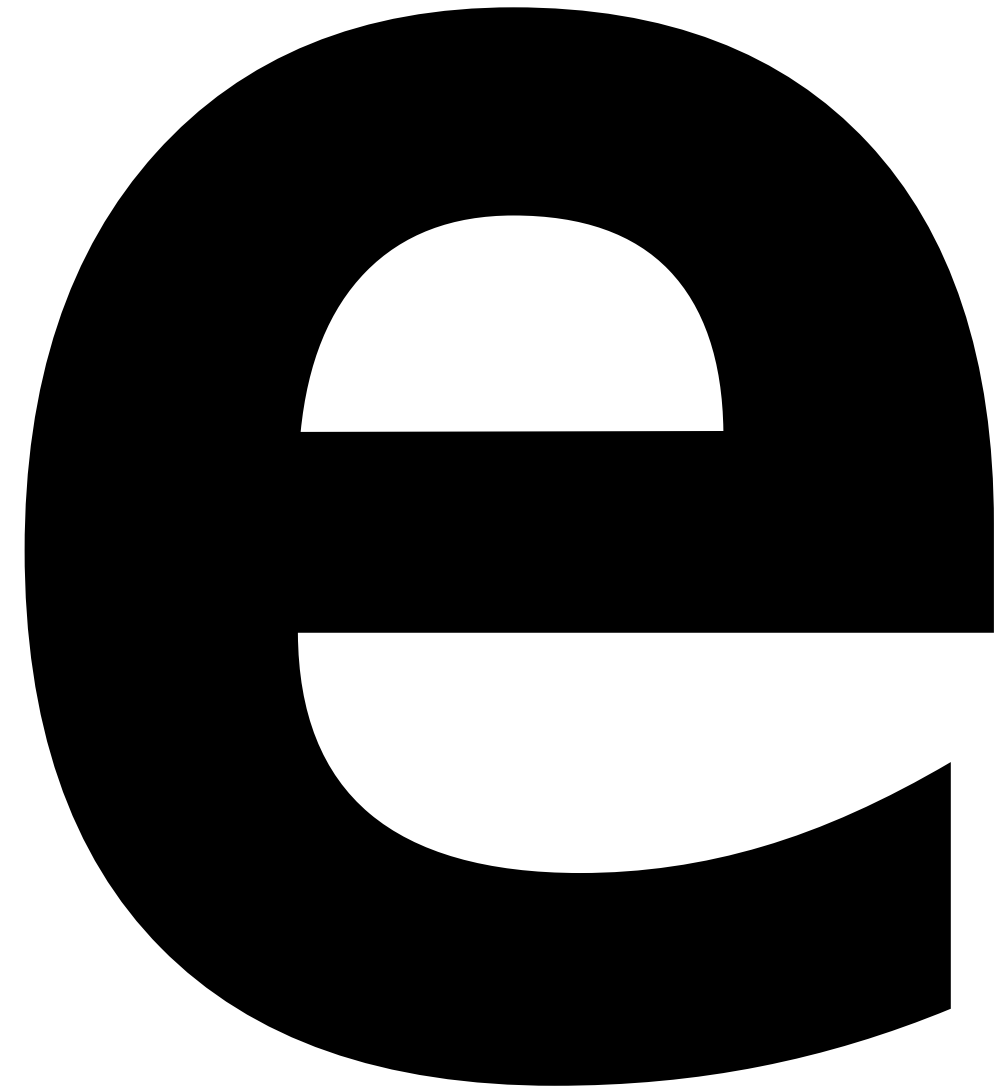


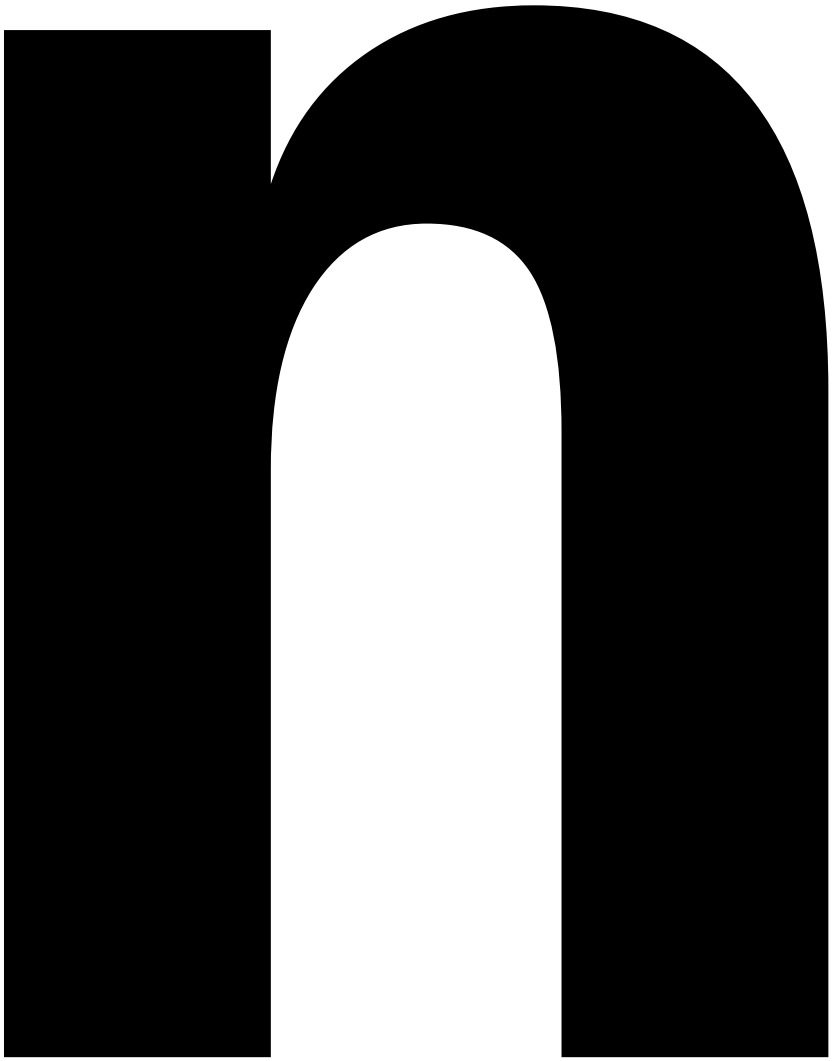




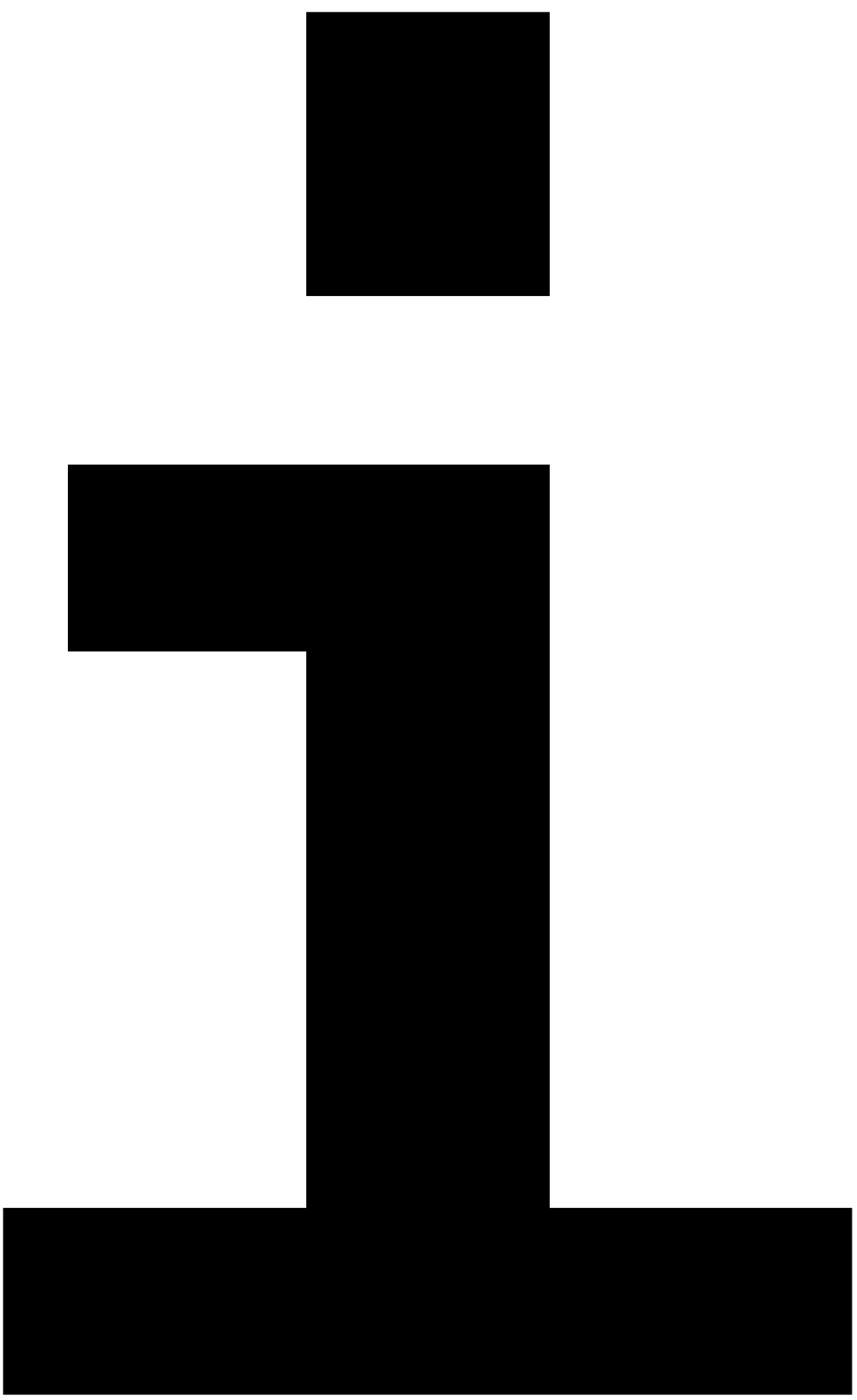


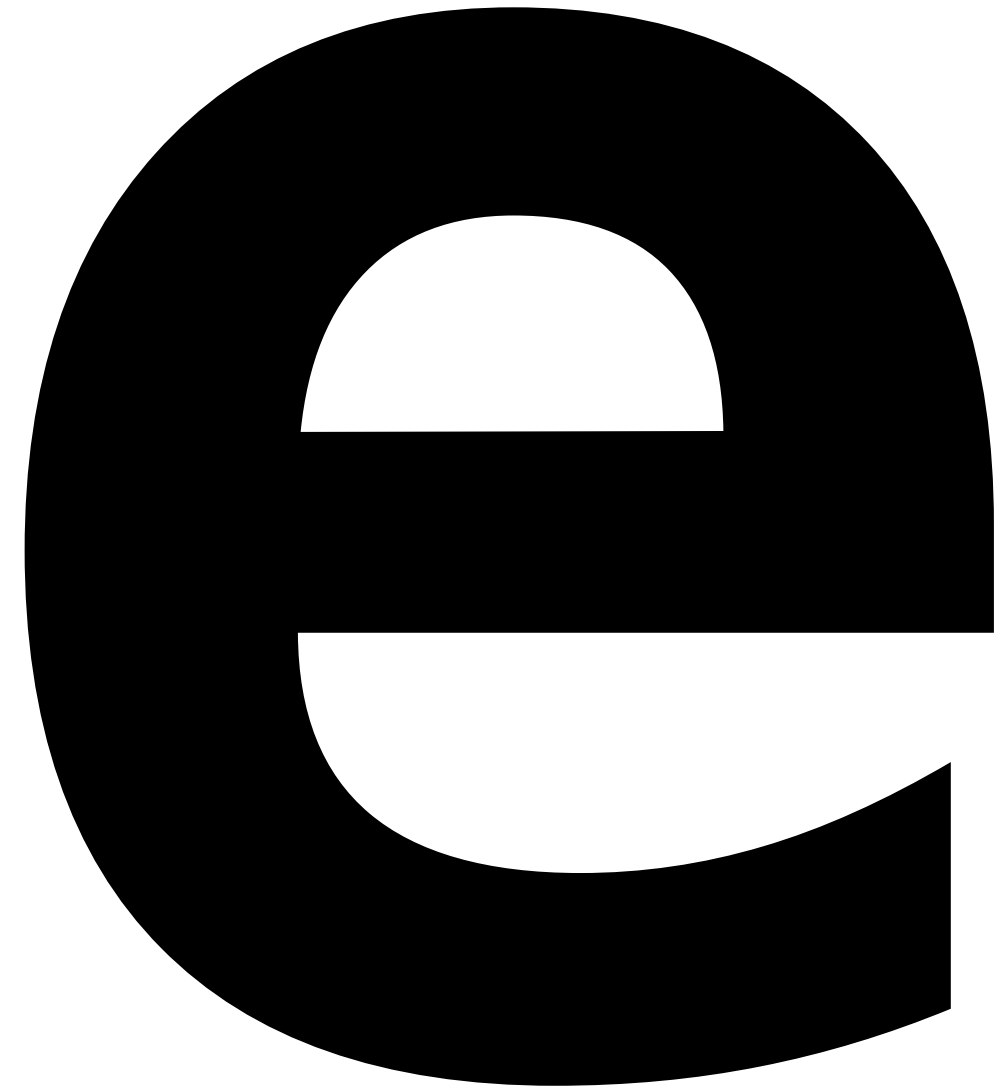


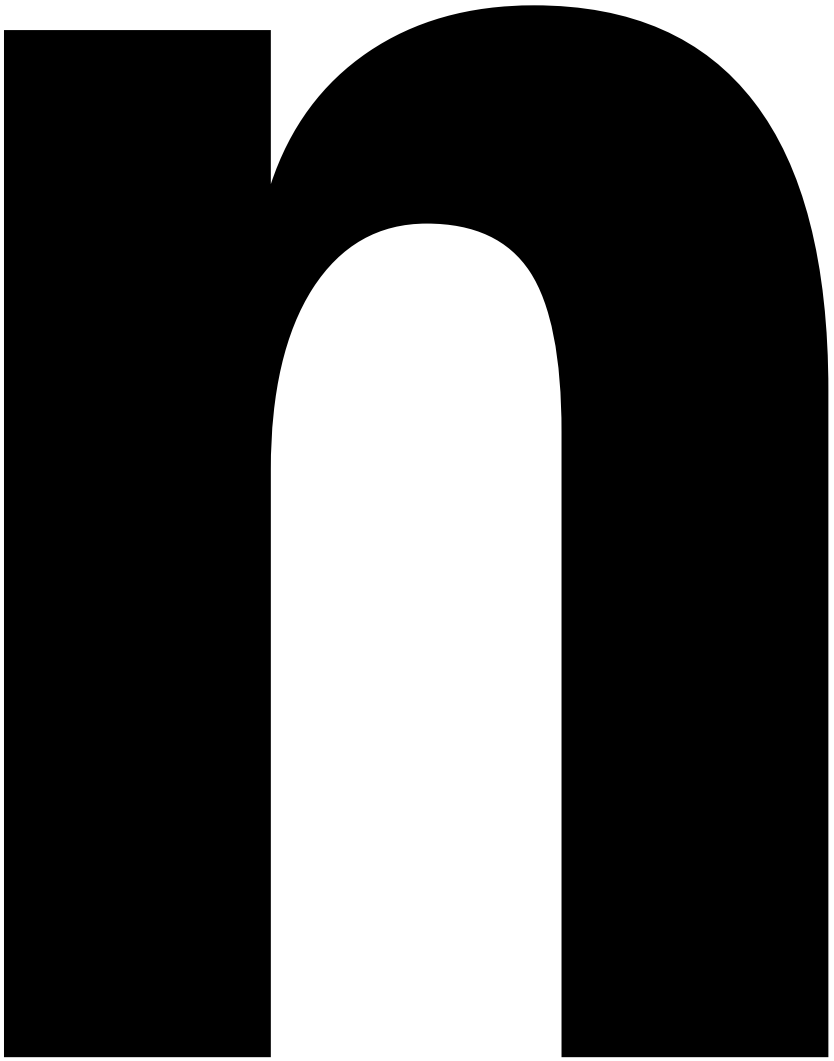


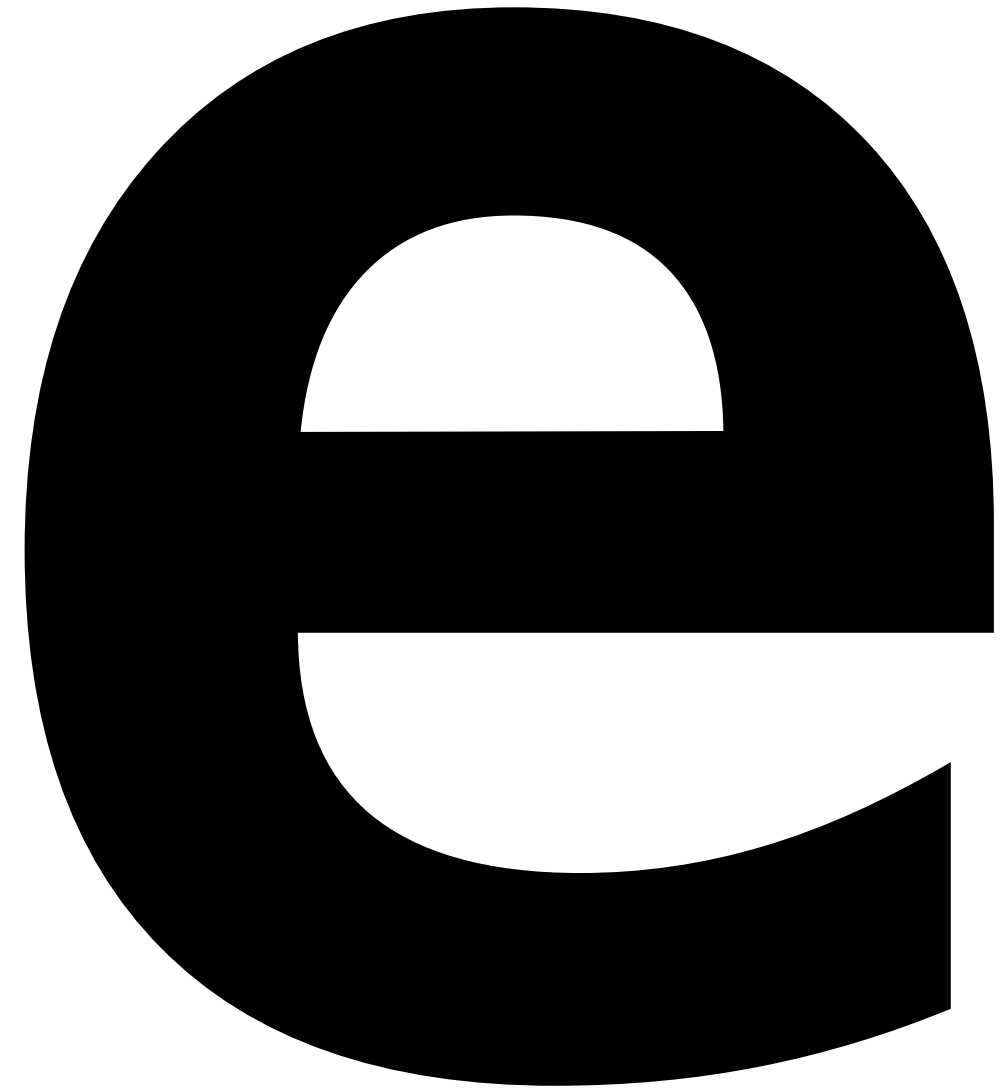


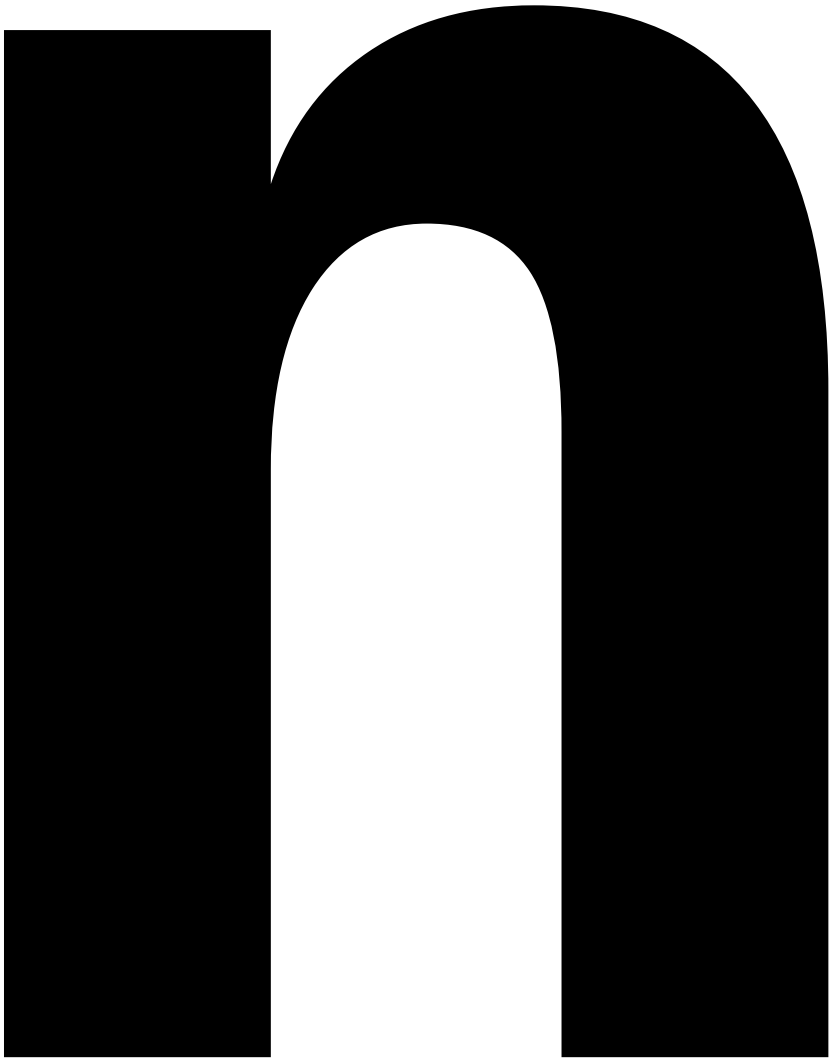
d



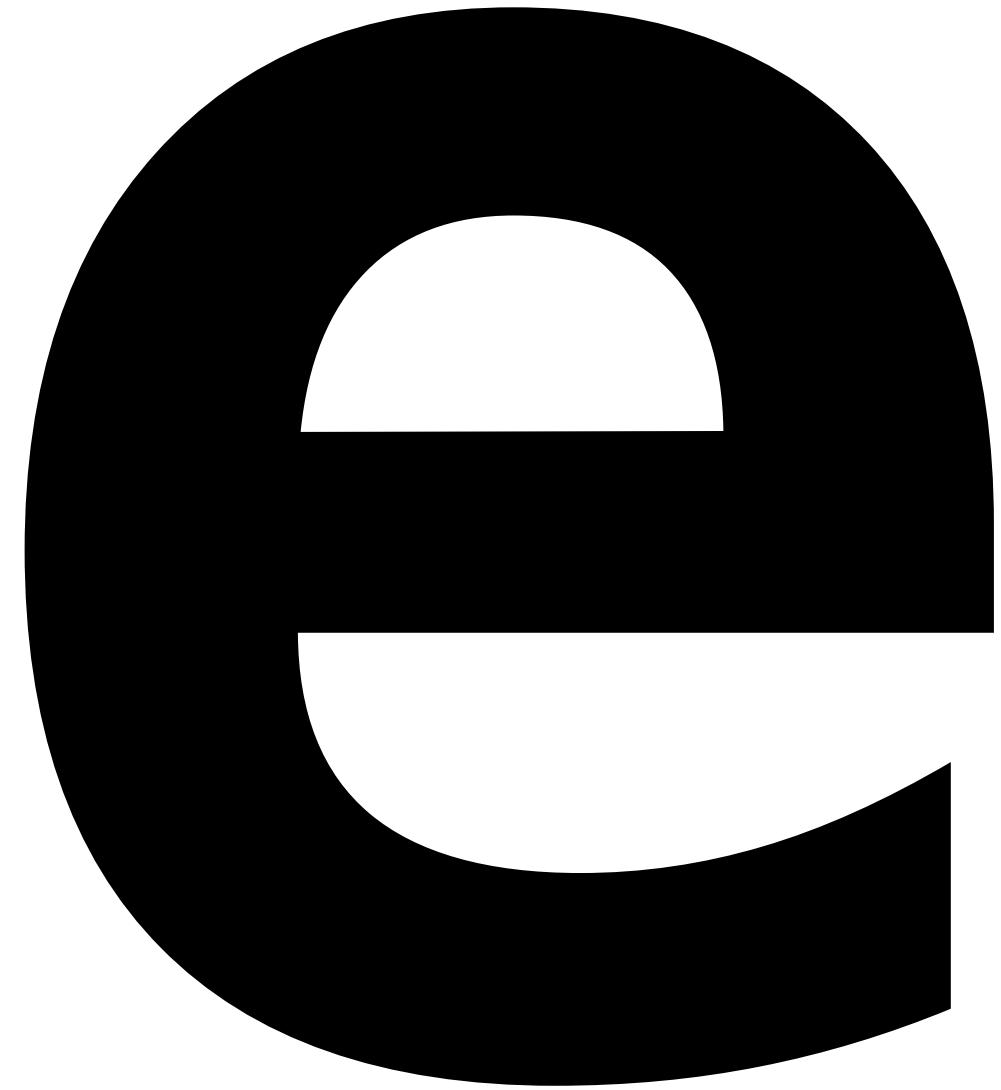


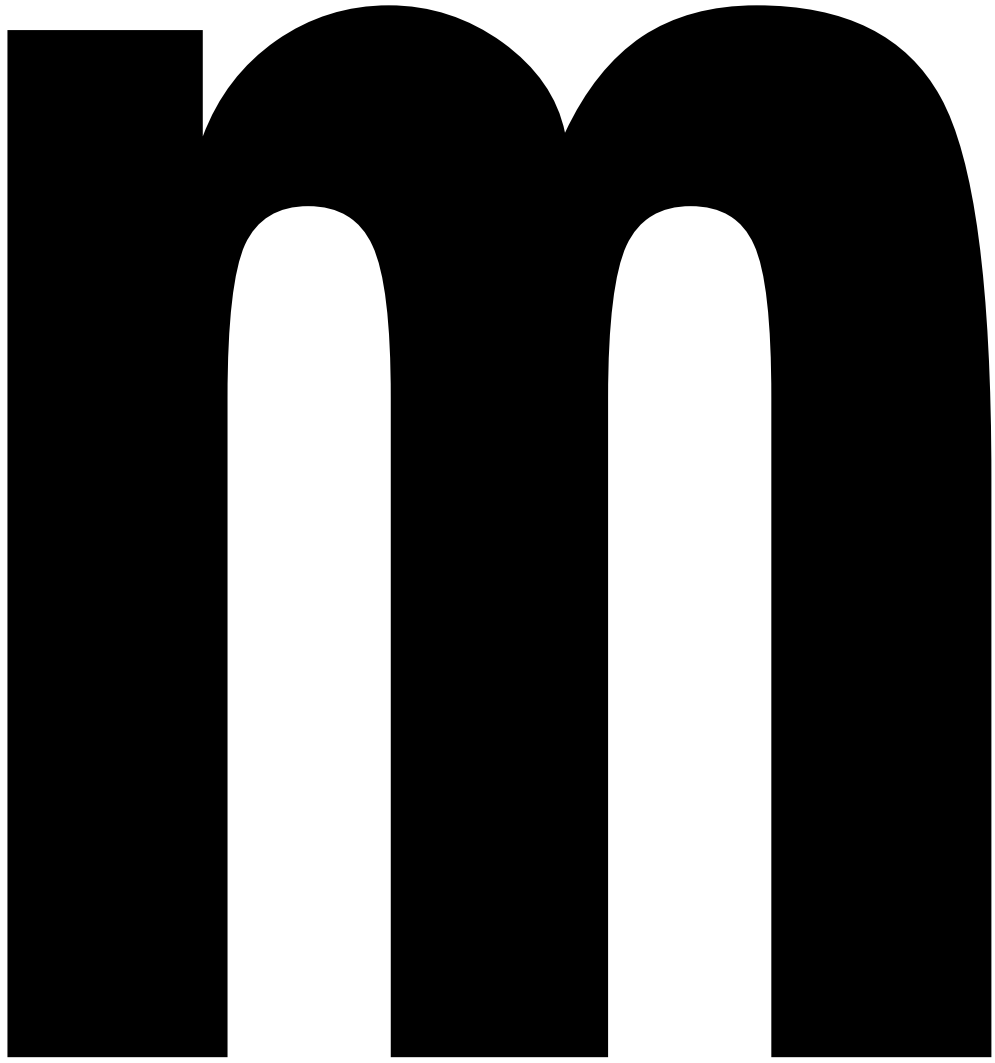


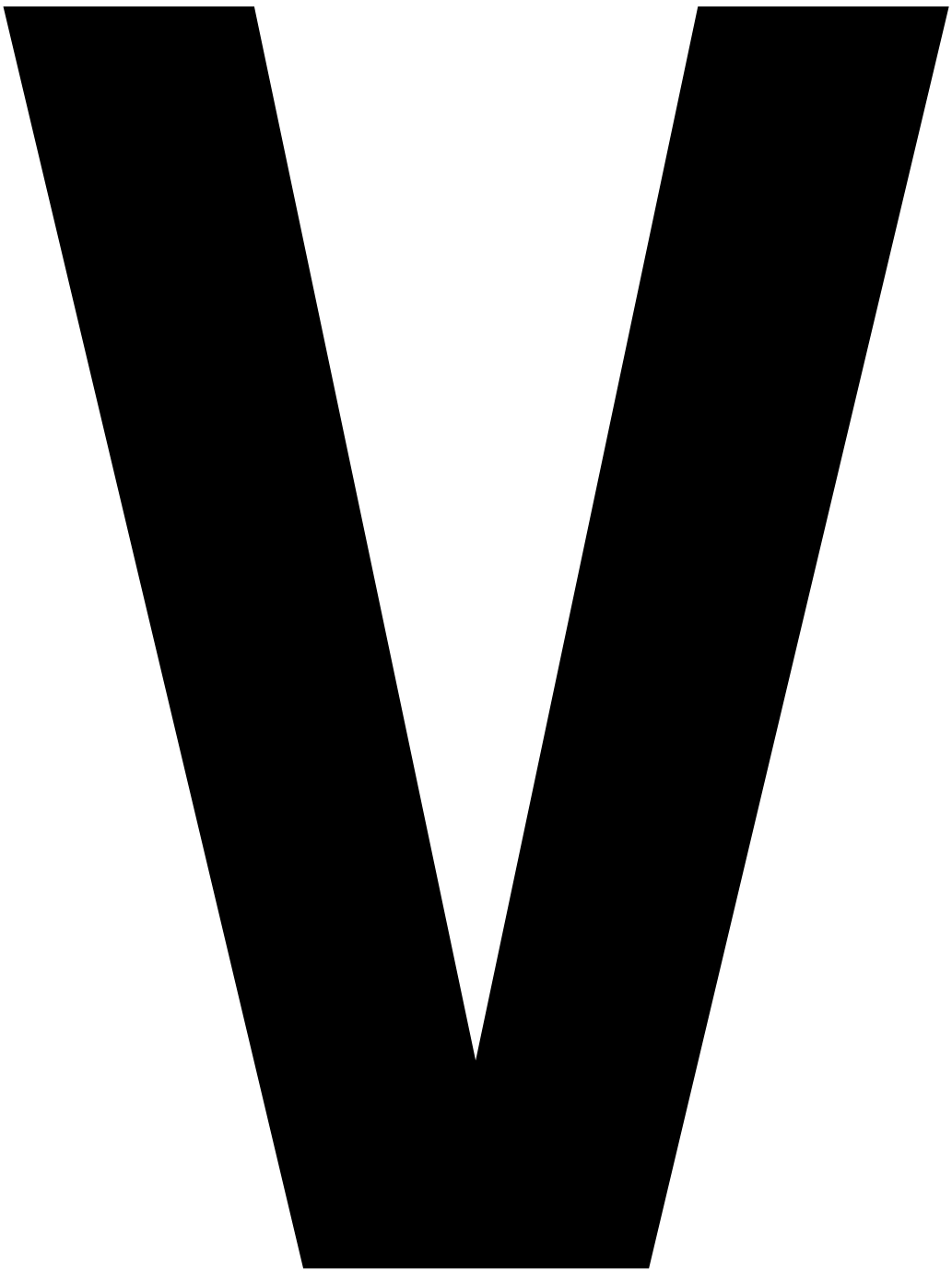


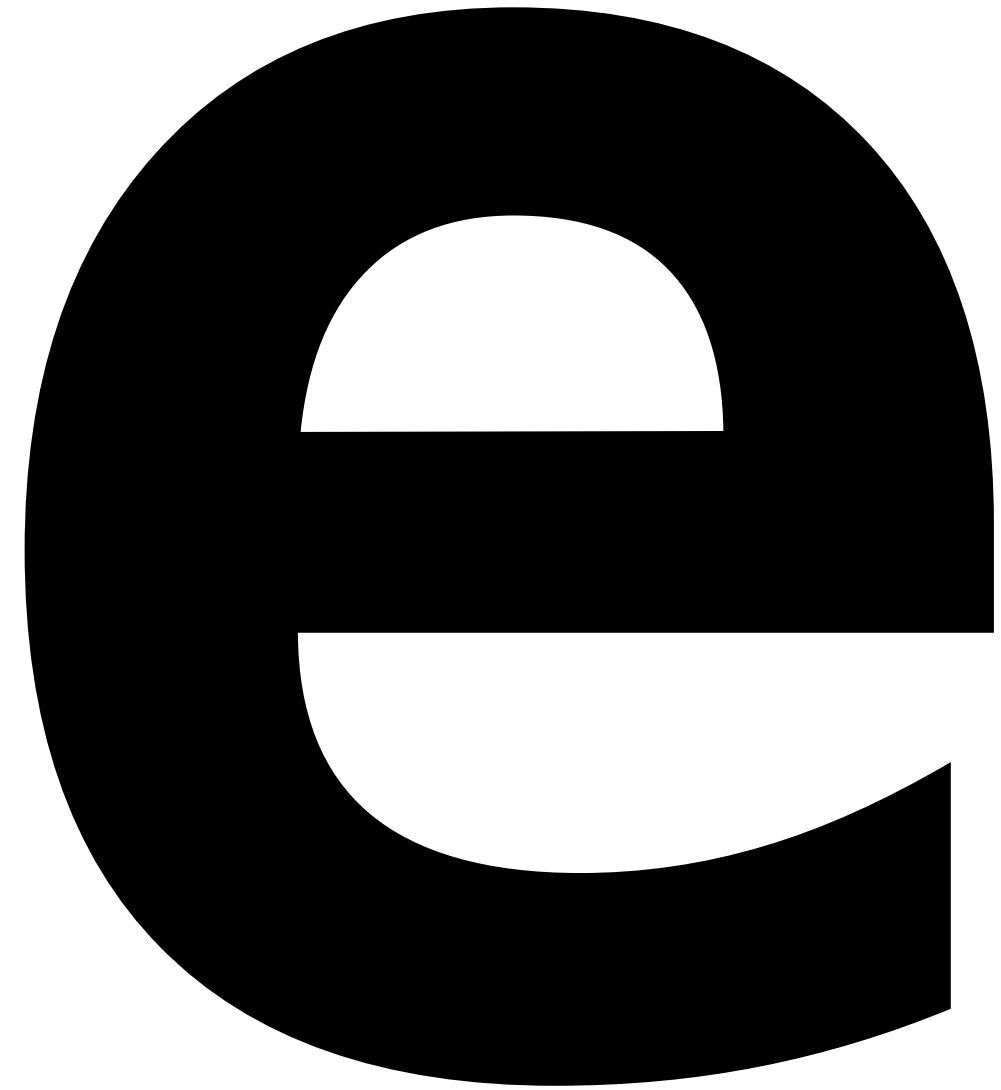


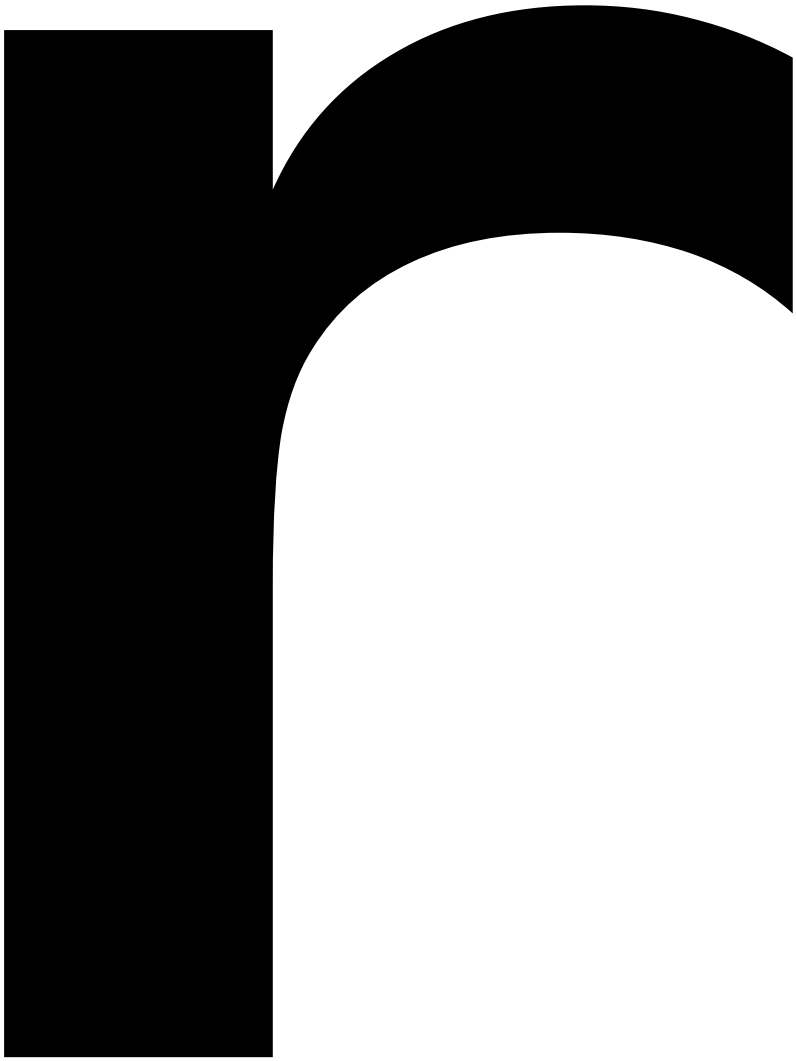
d

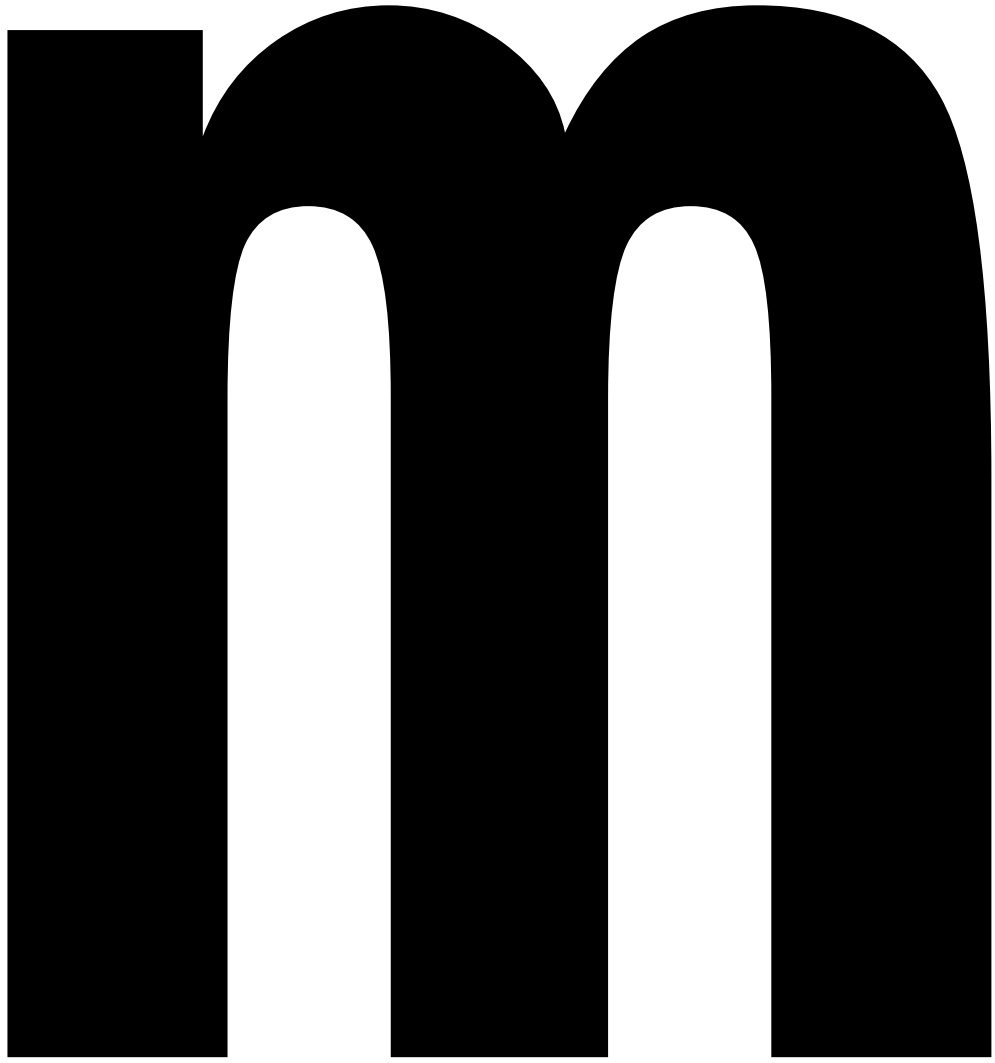


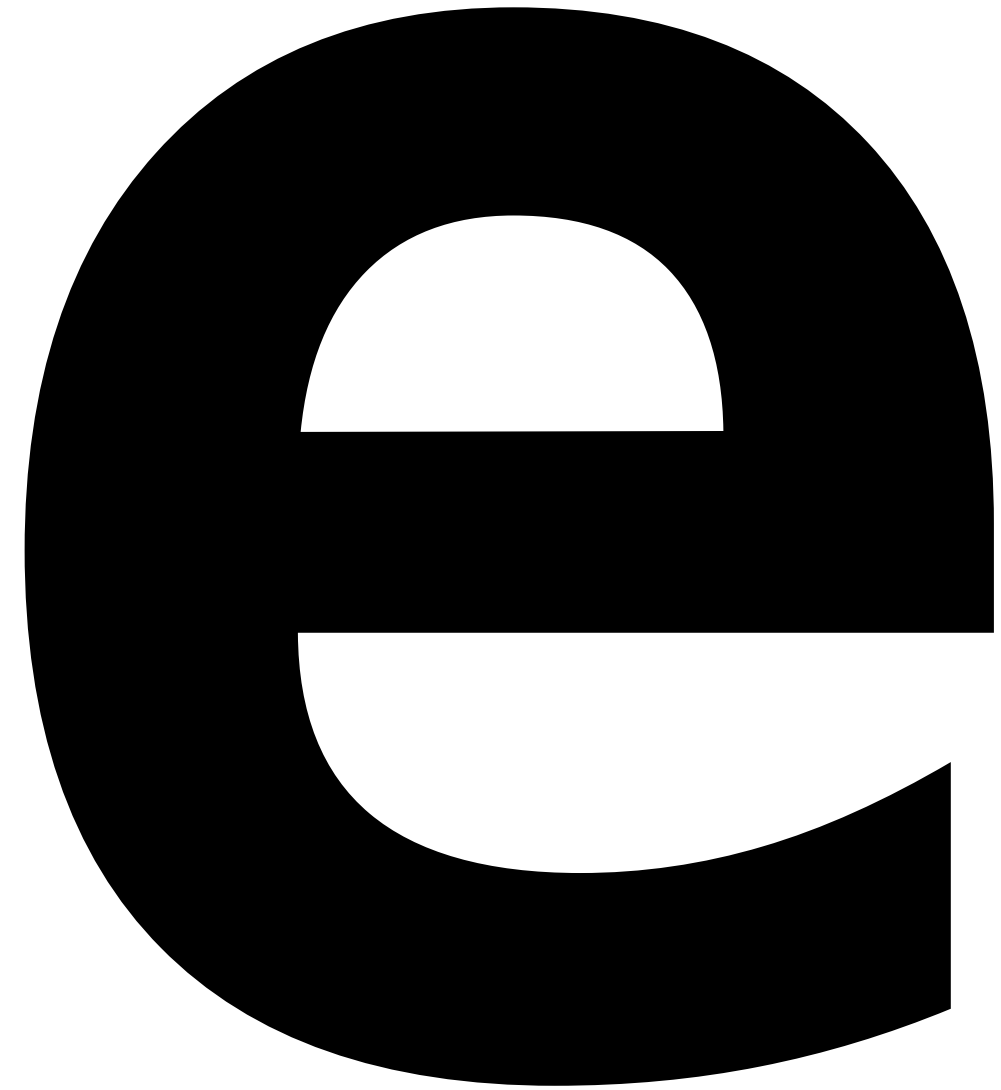


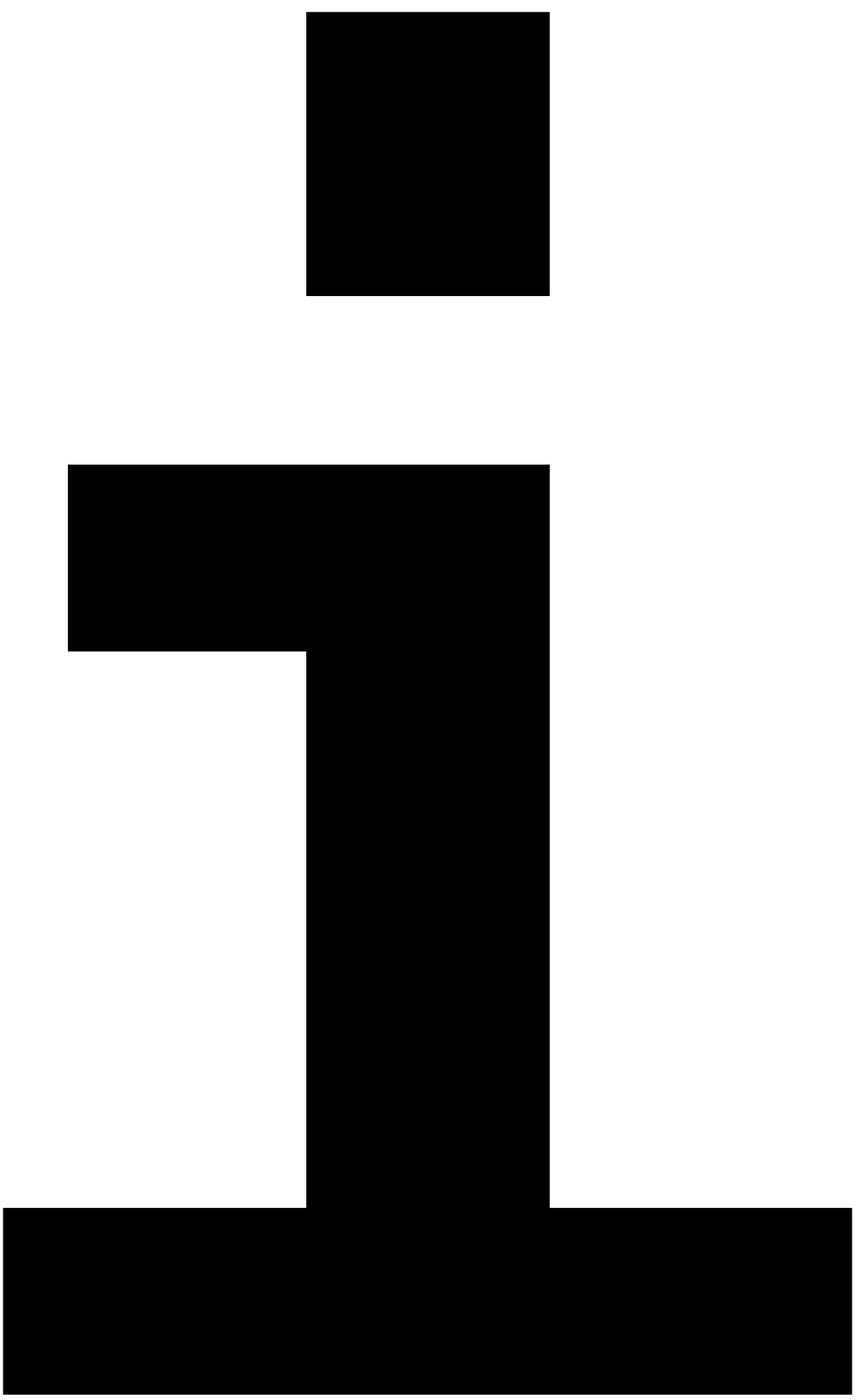




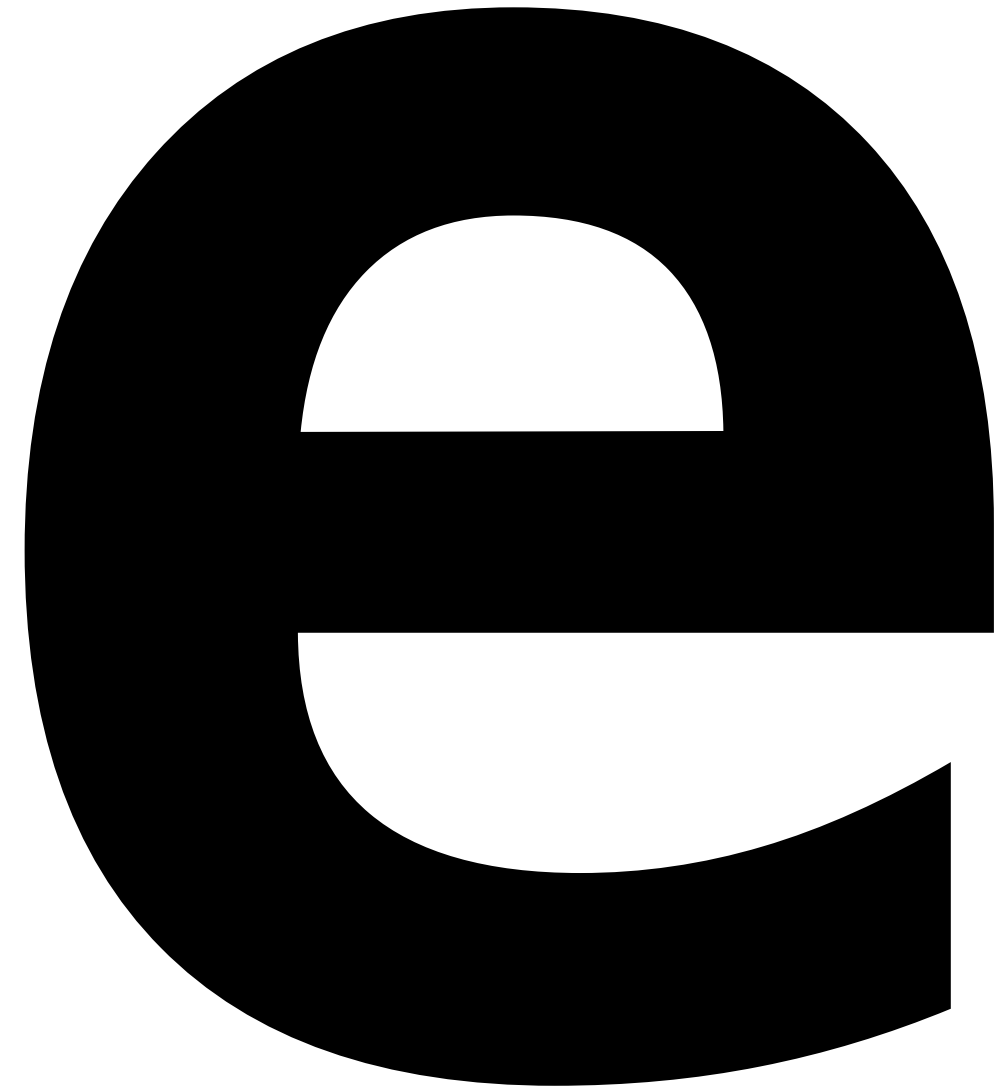


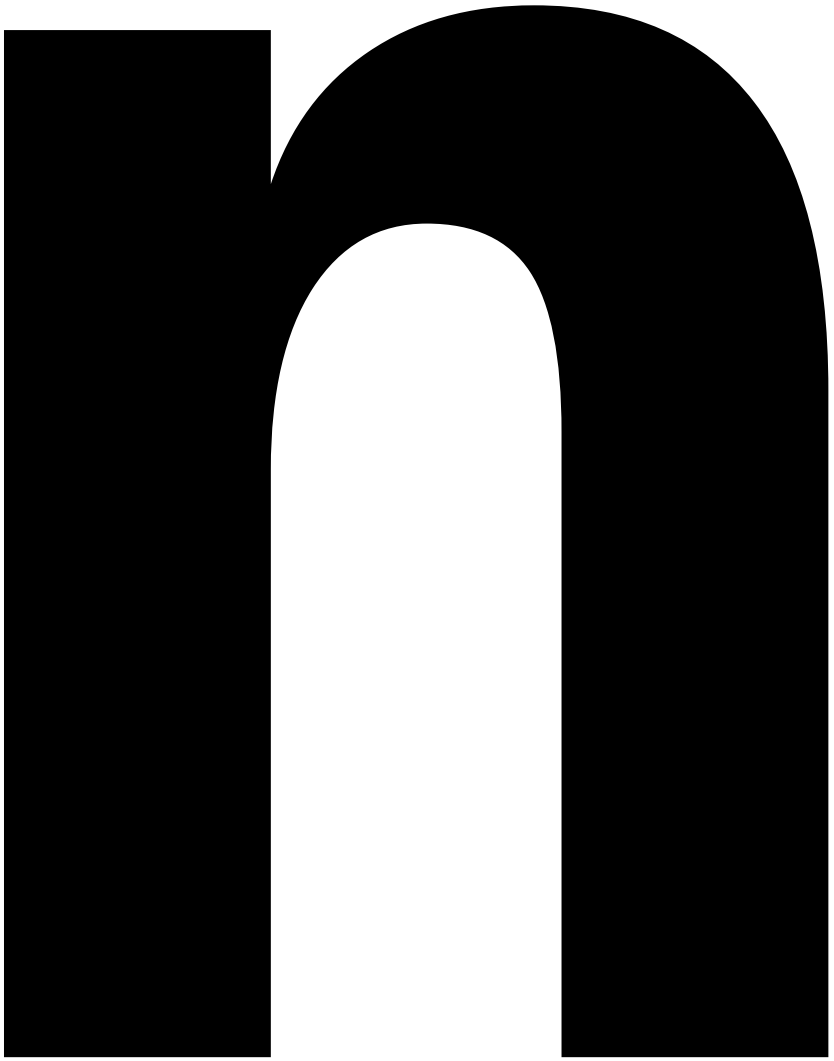


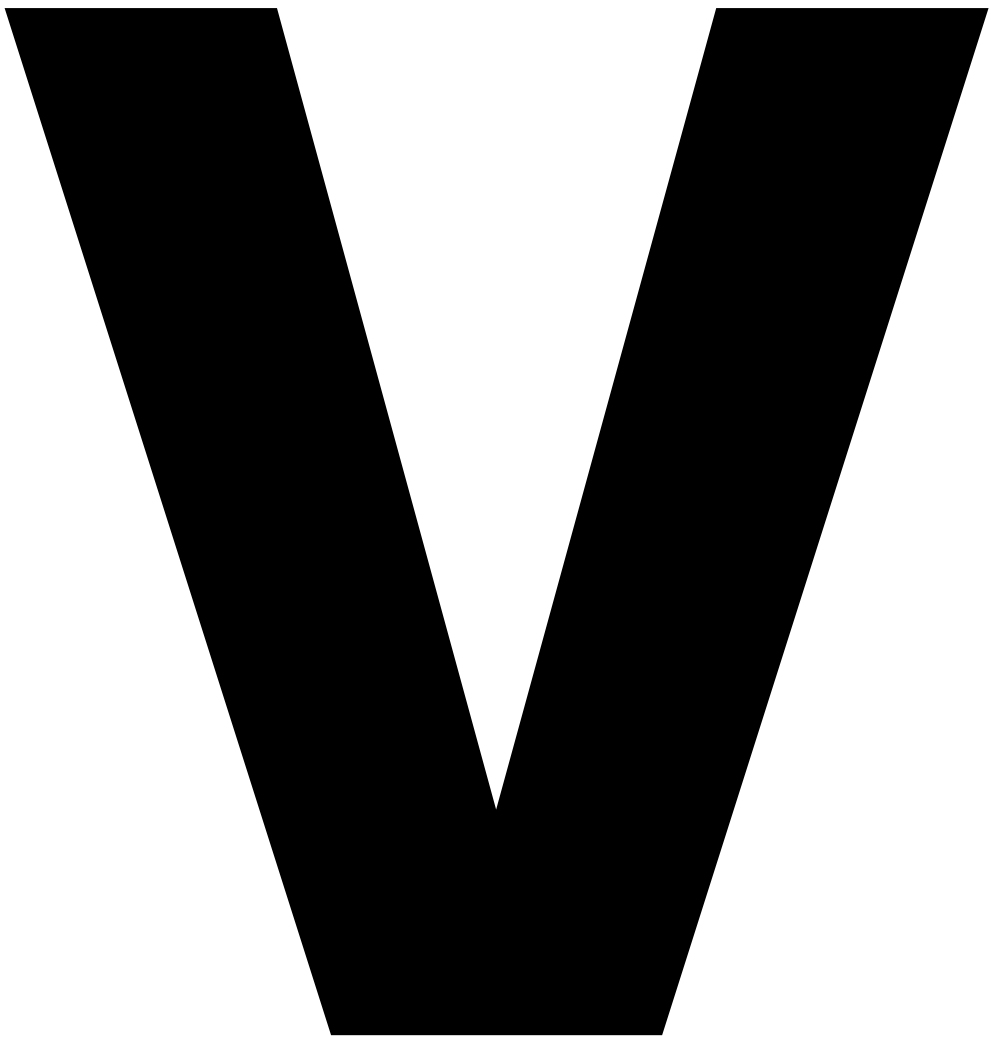


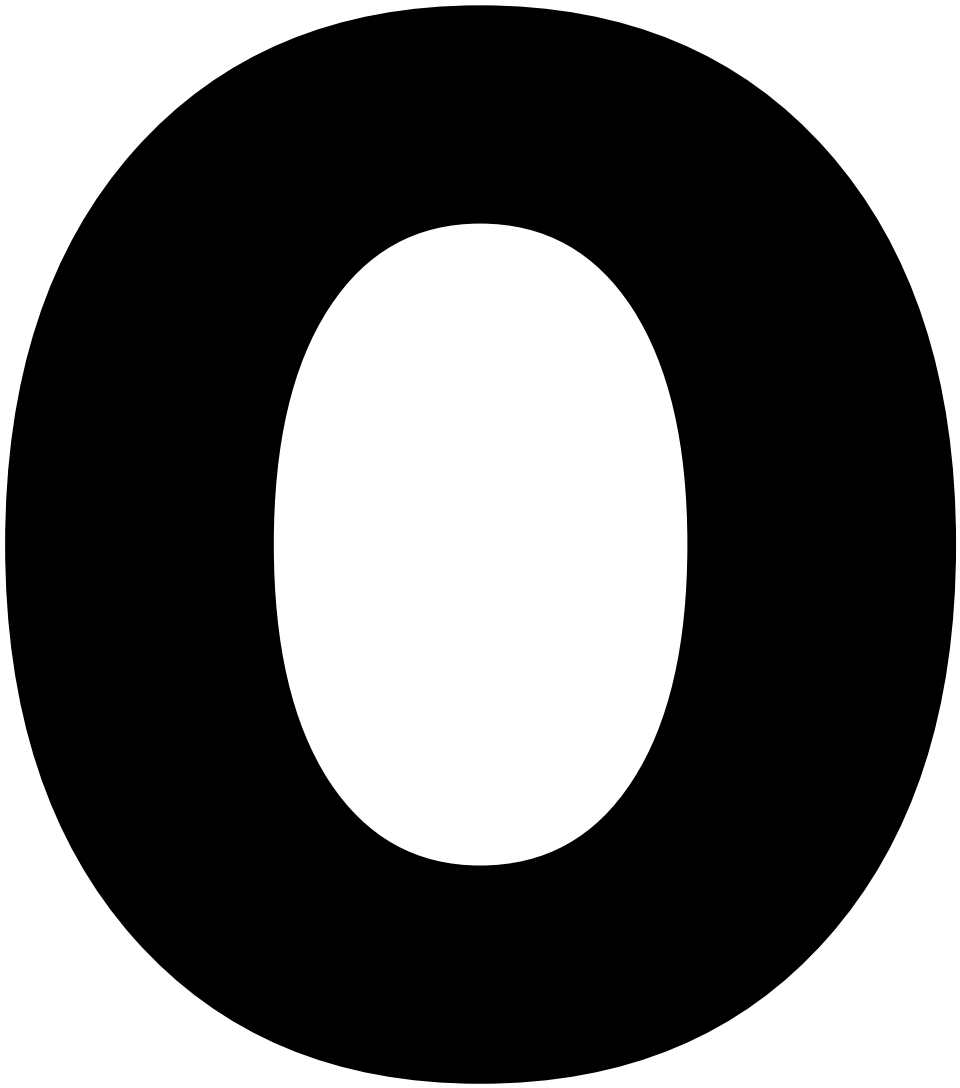


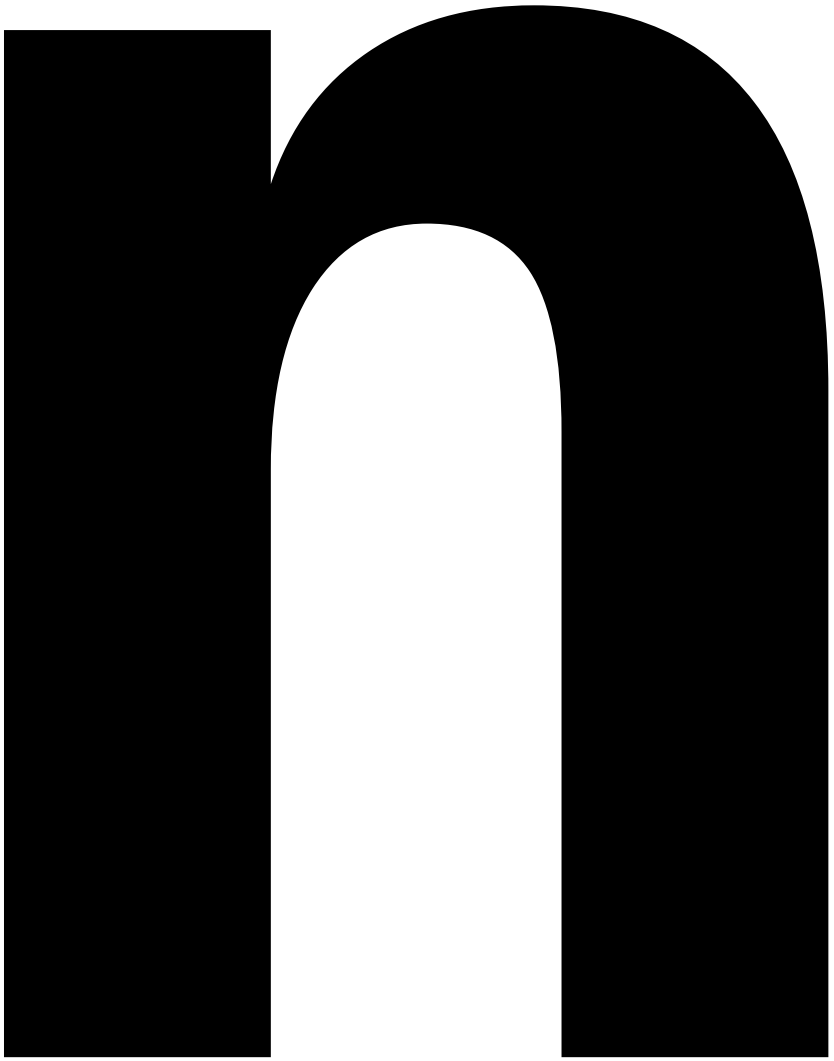
d

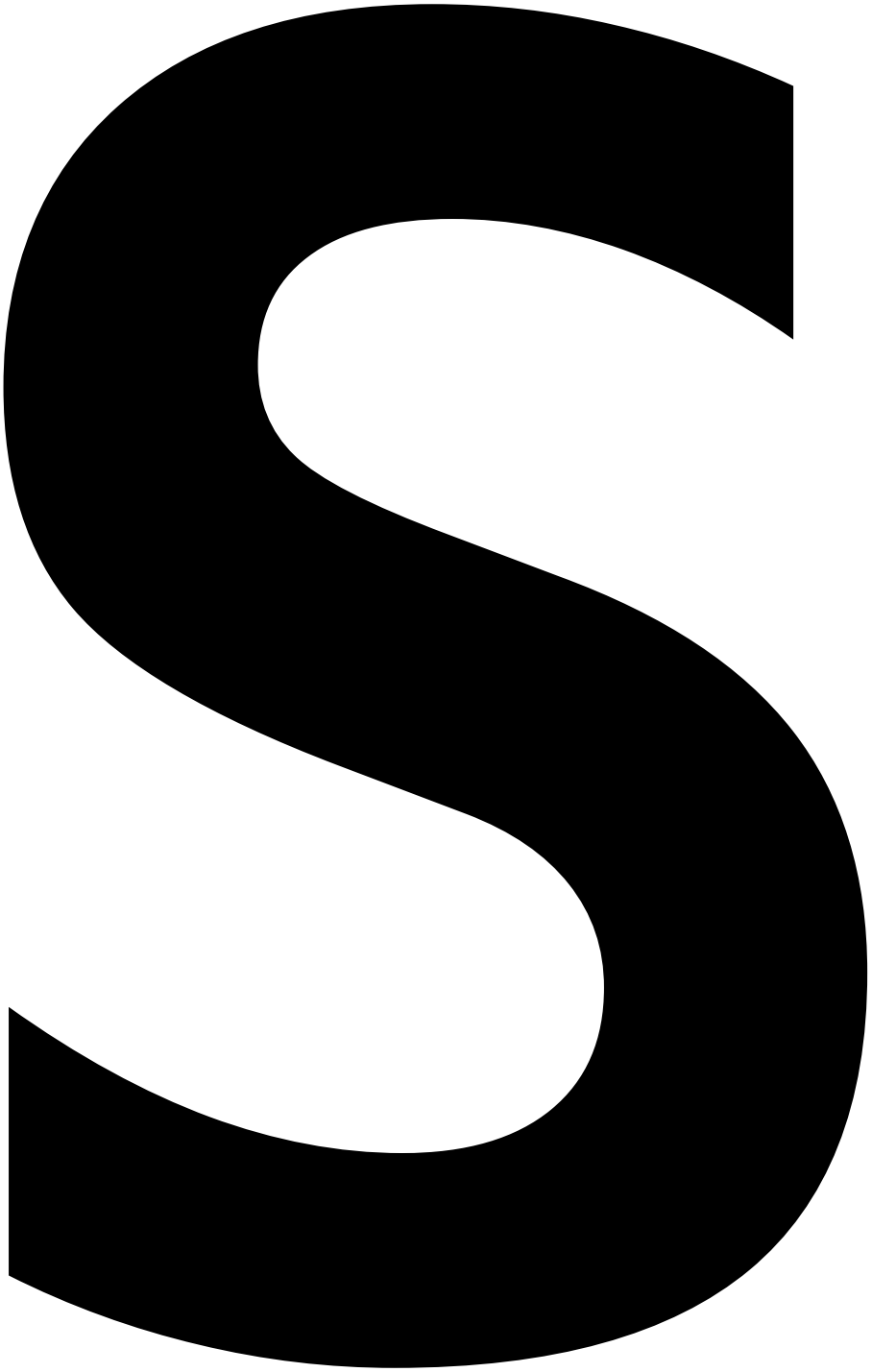


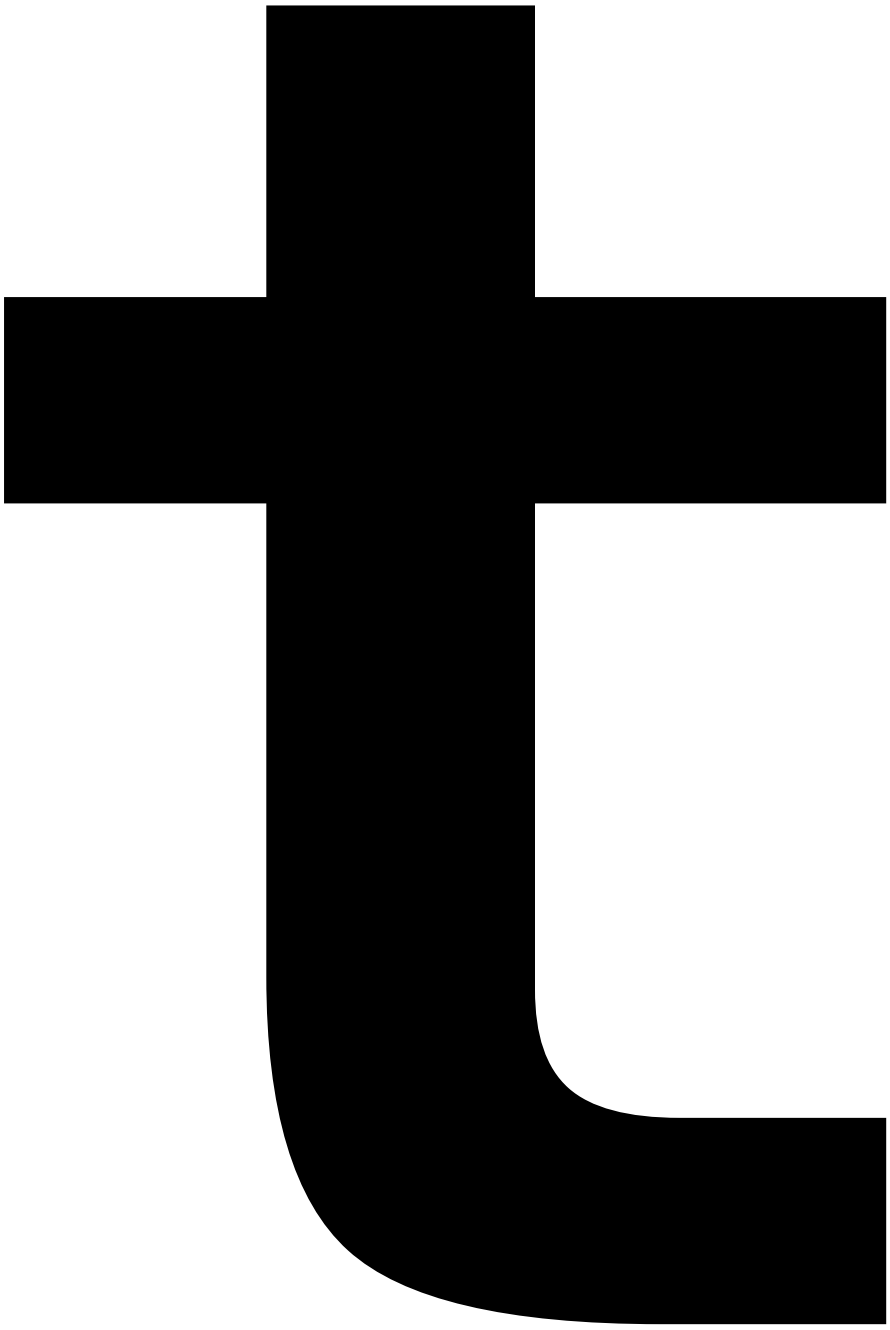


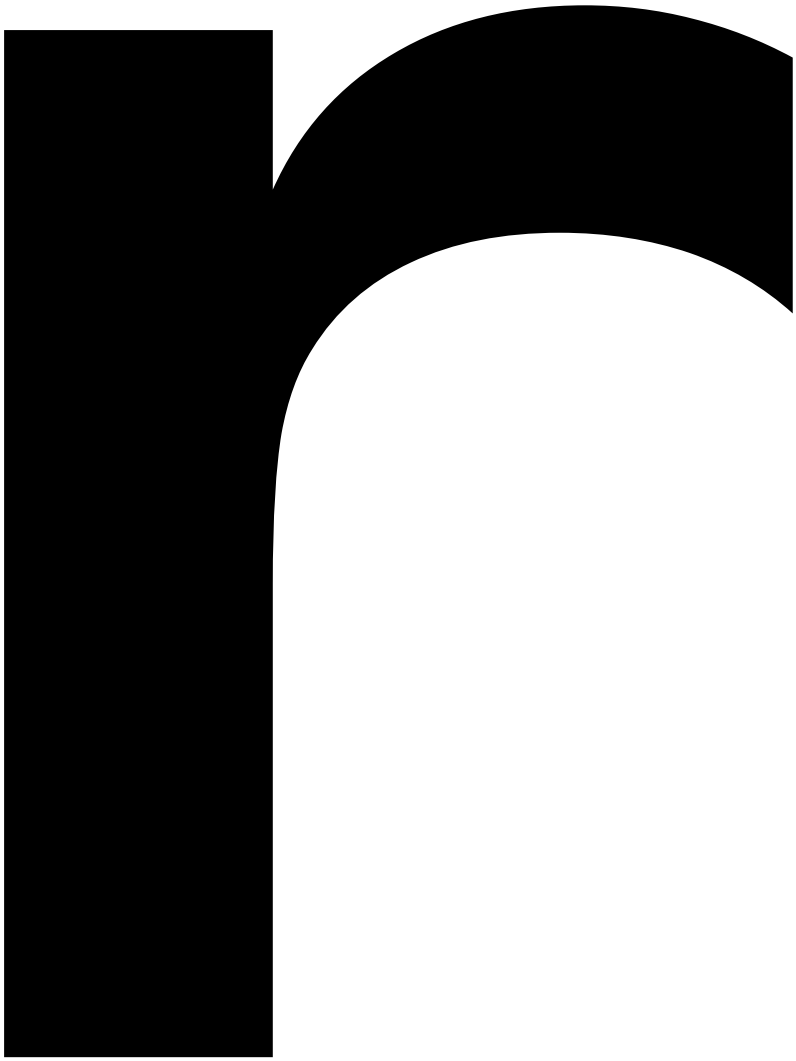


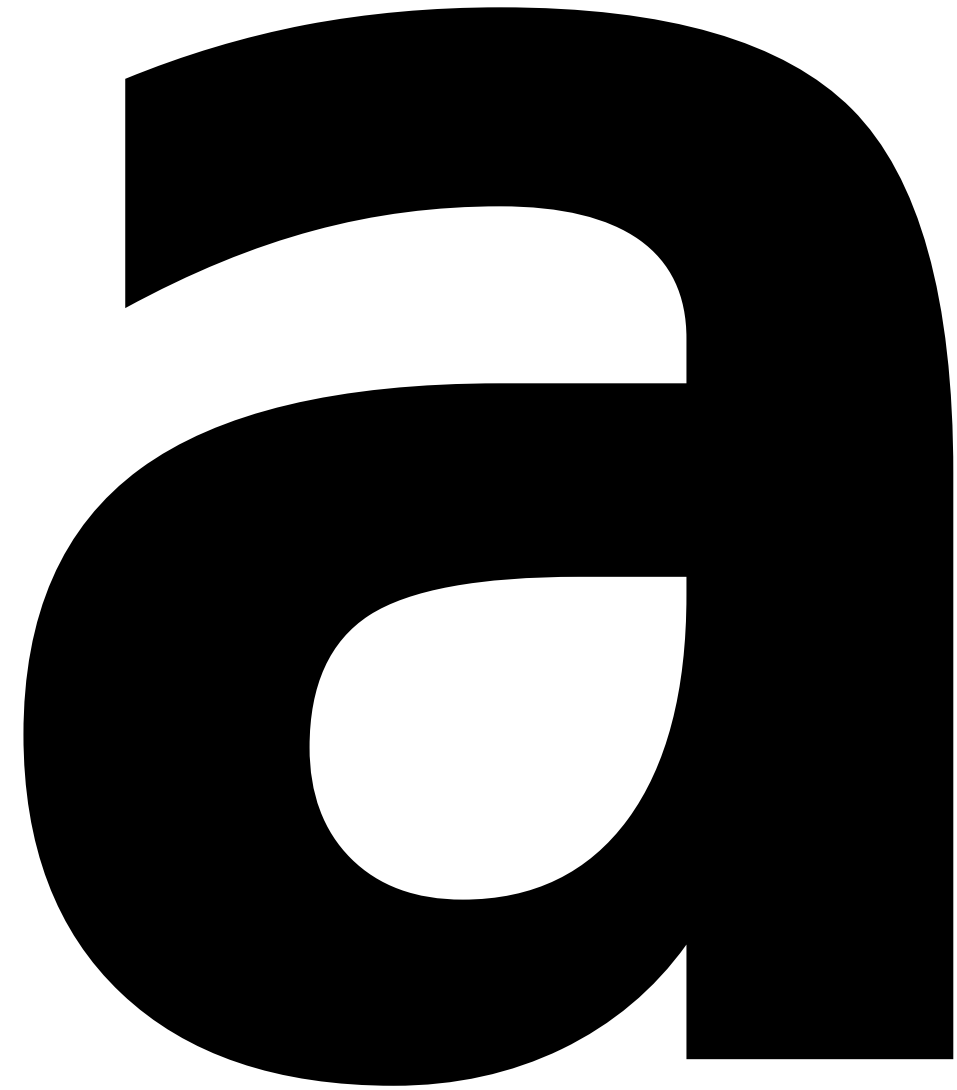


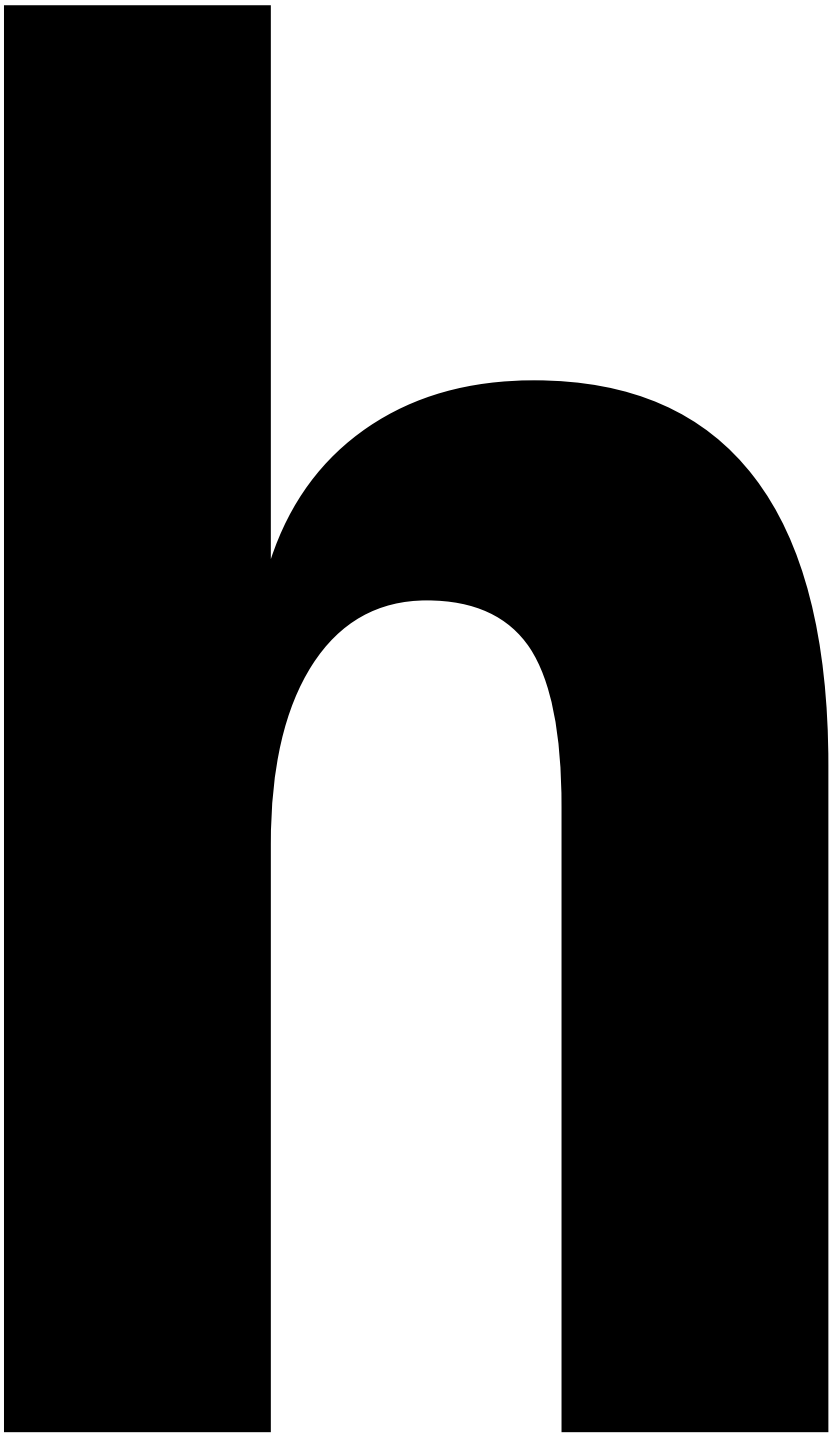


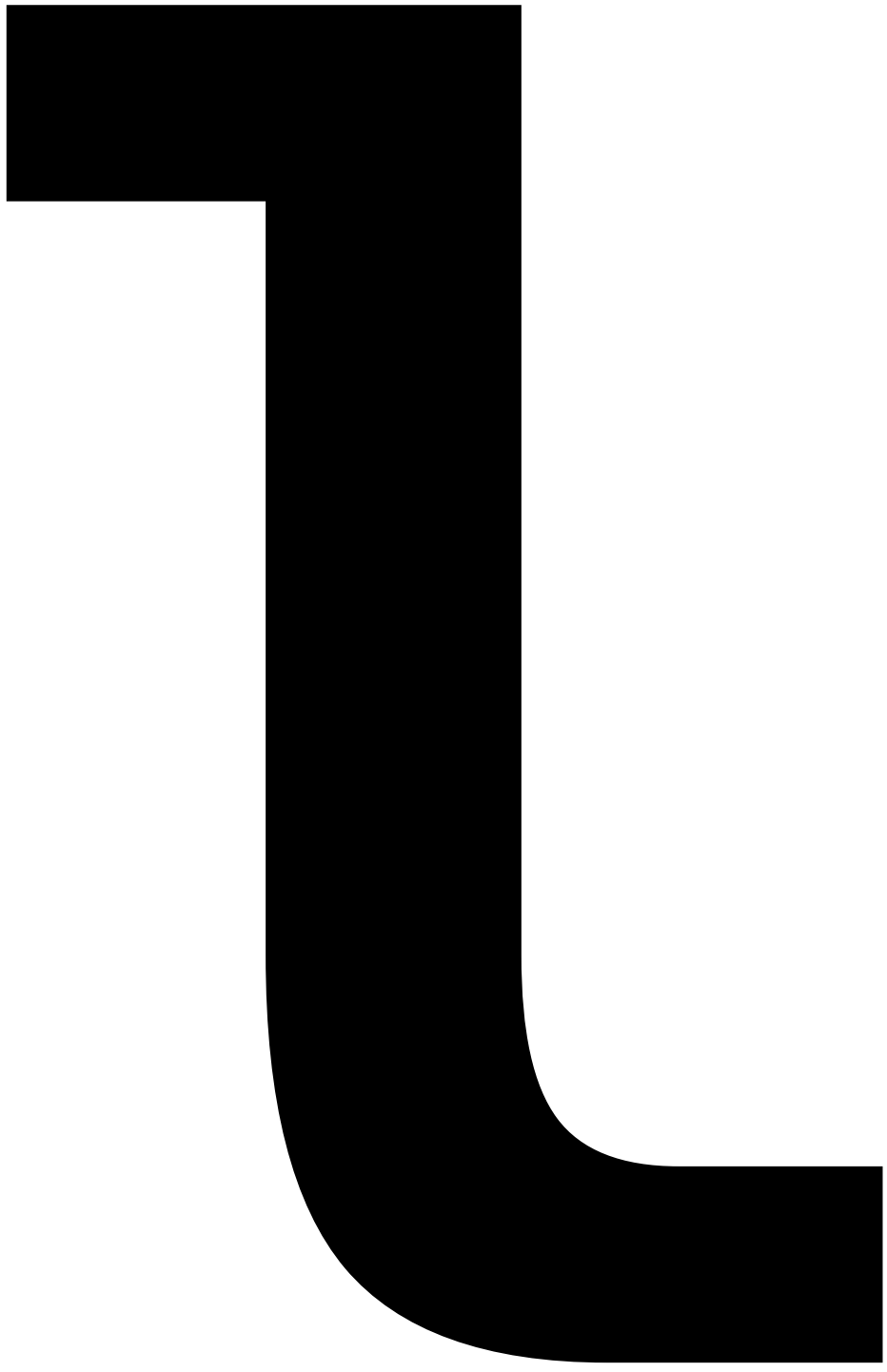


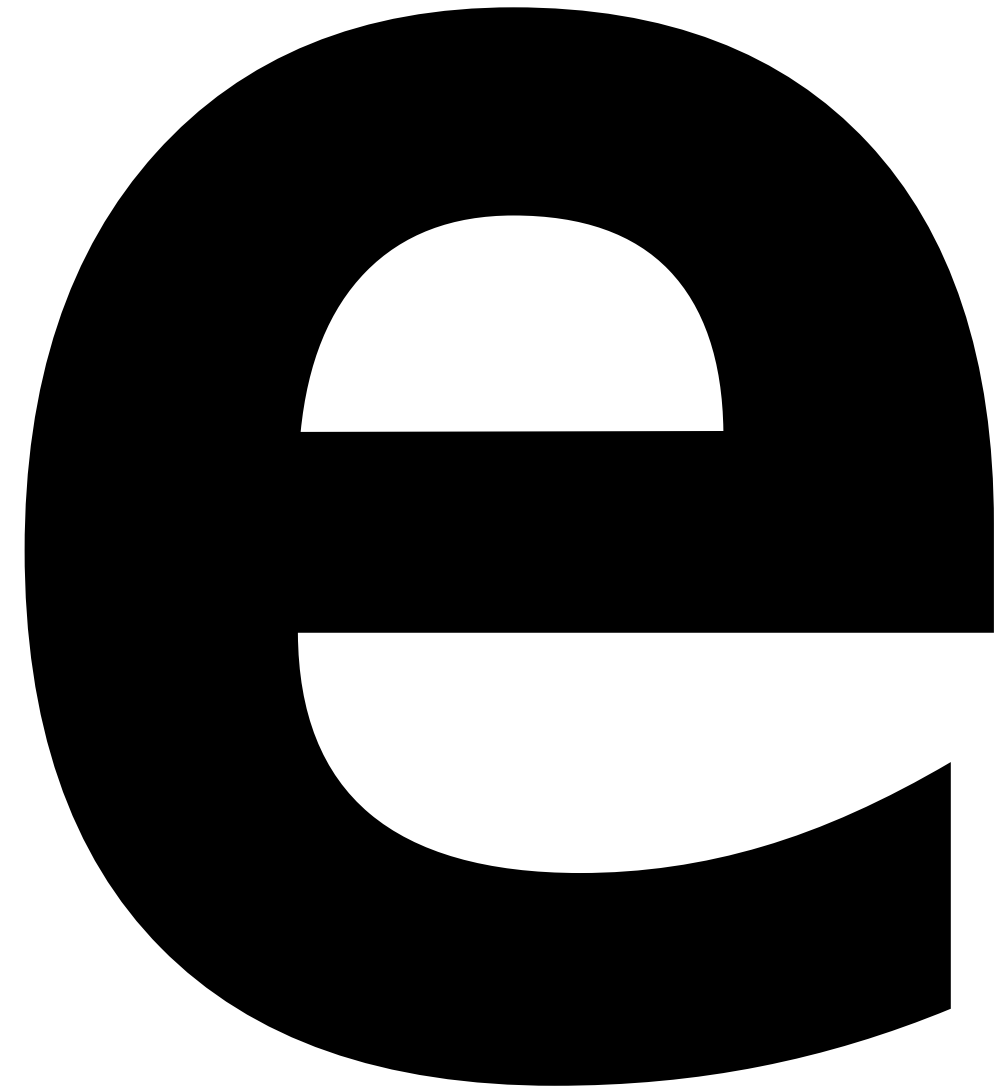


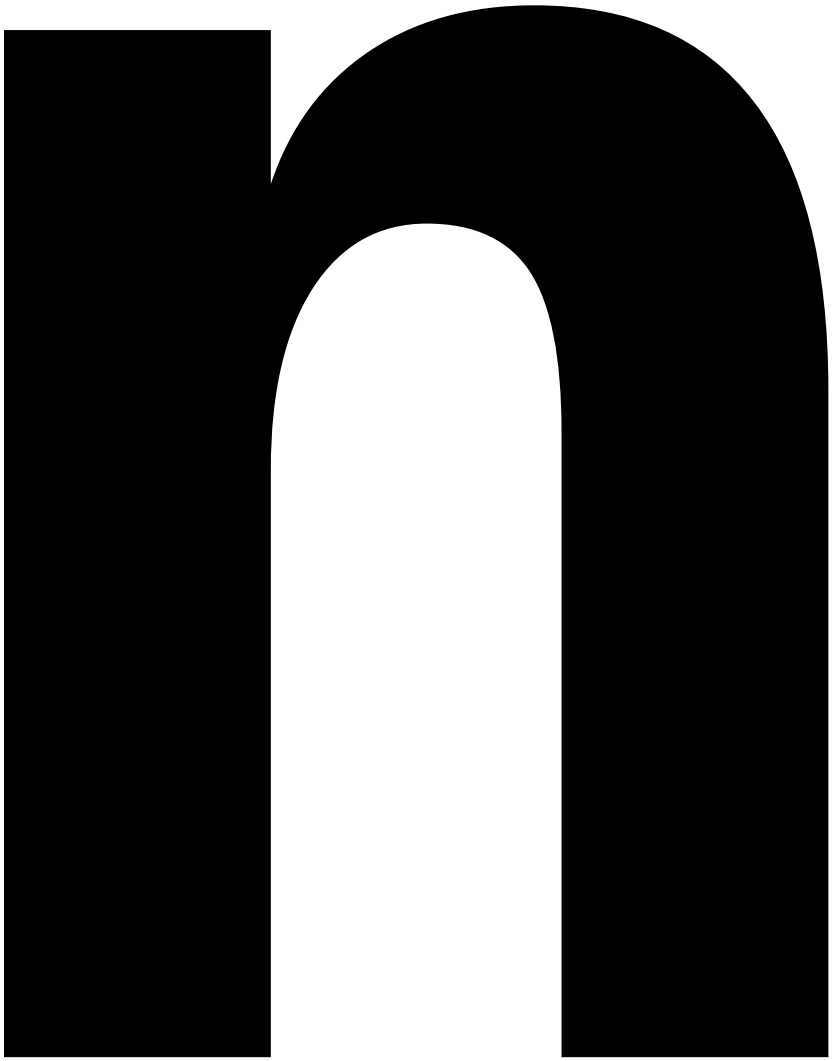


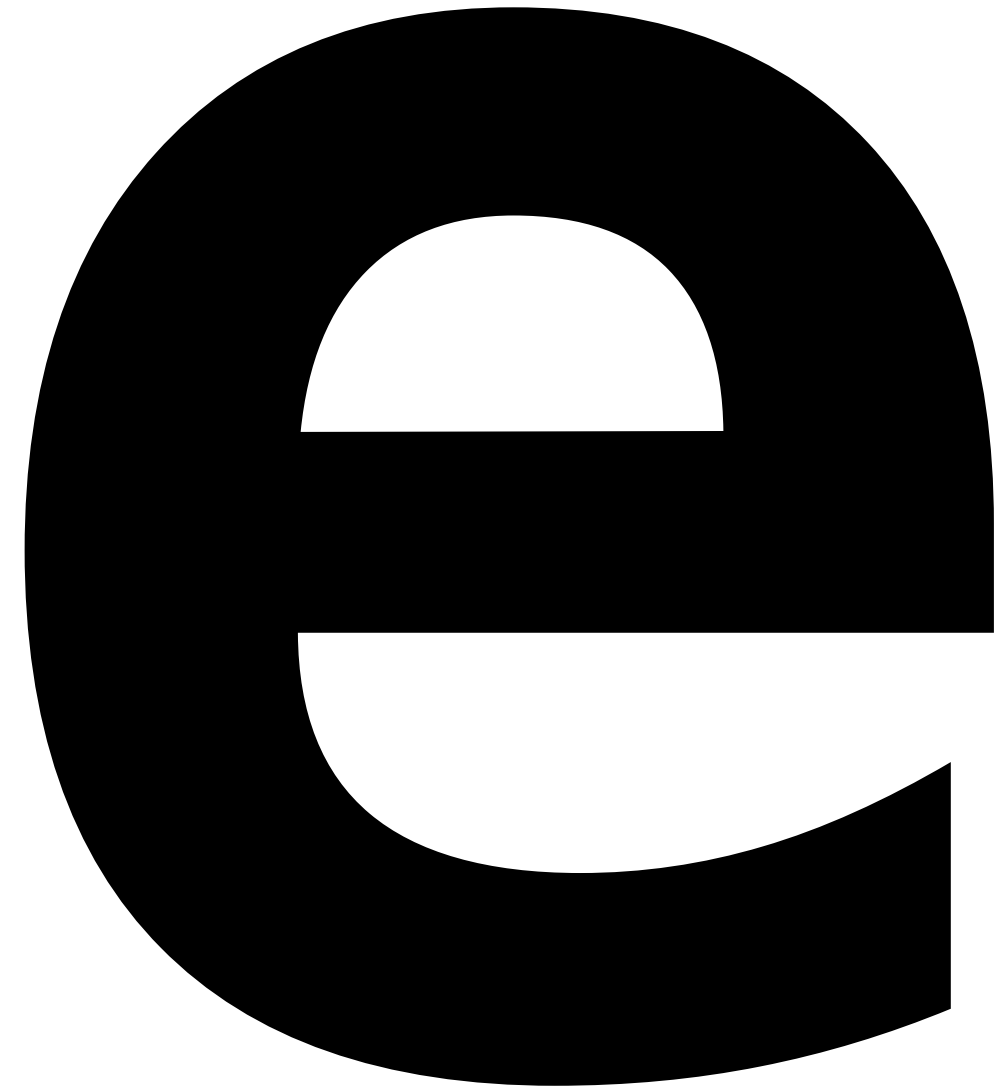


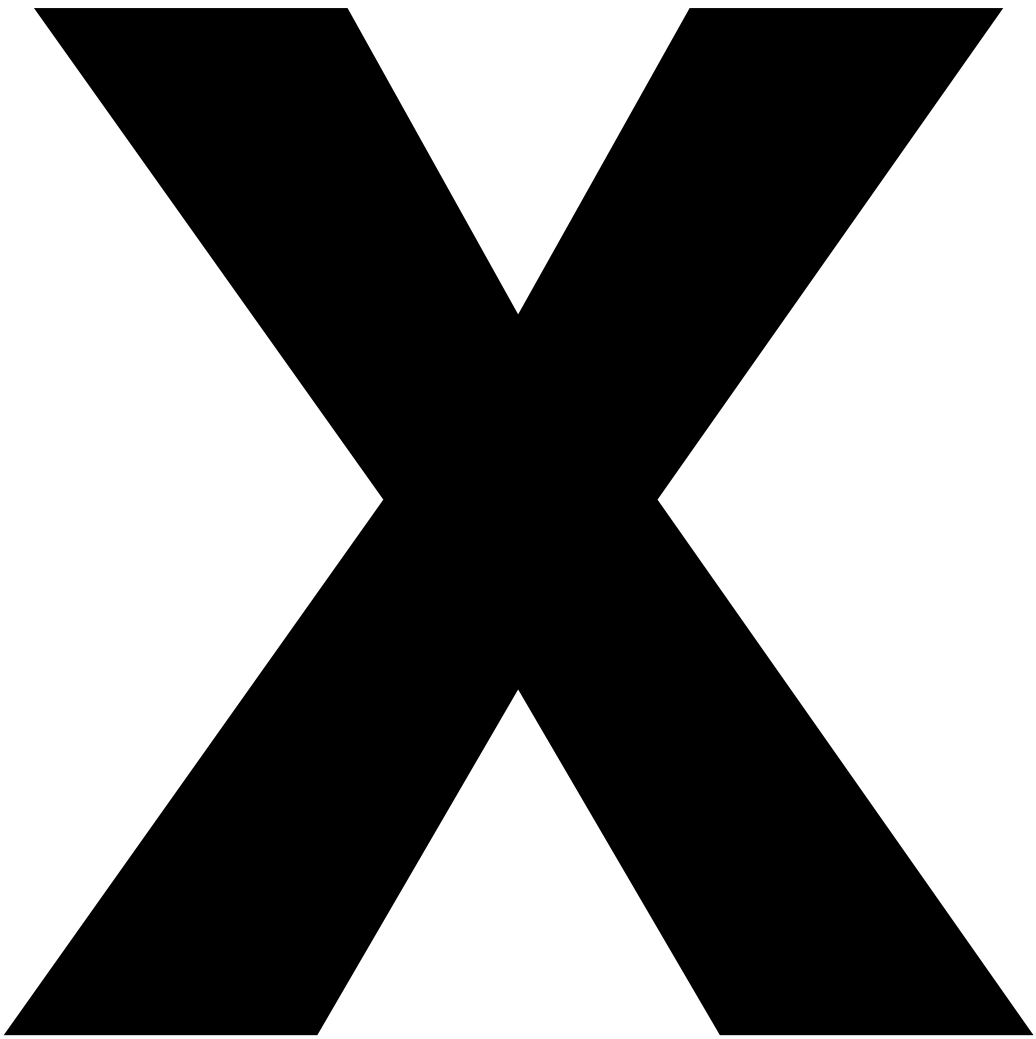


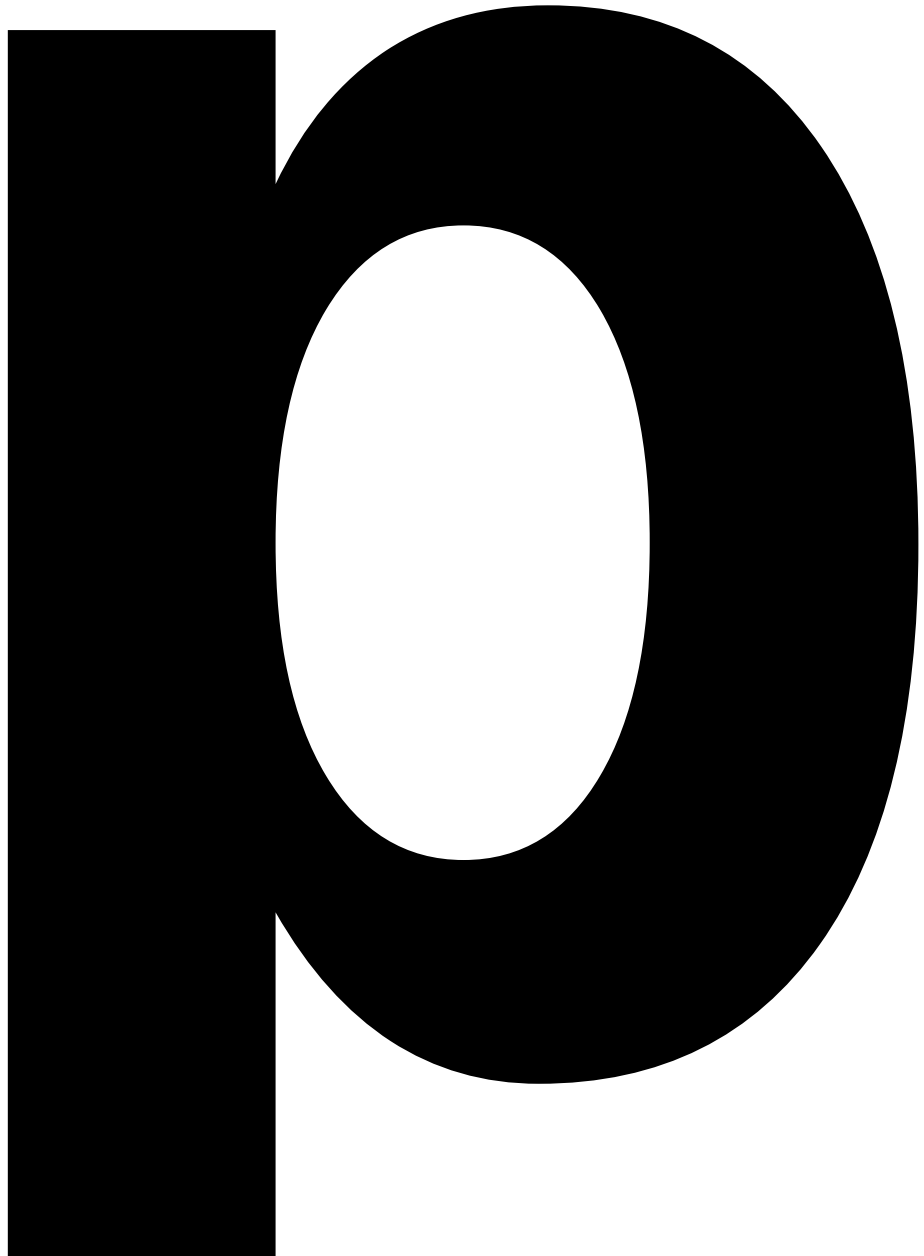


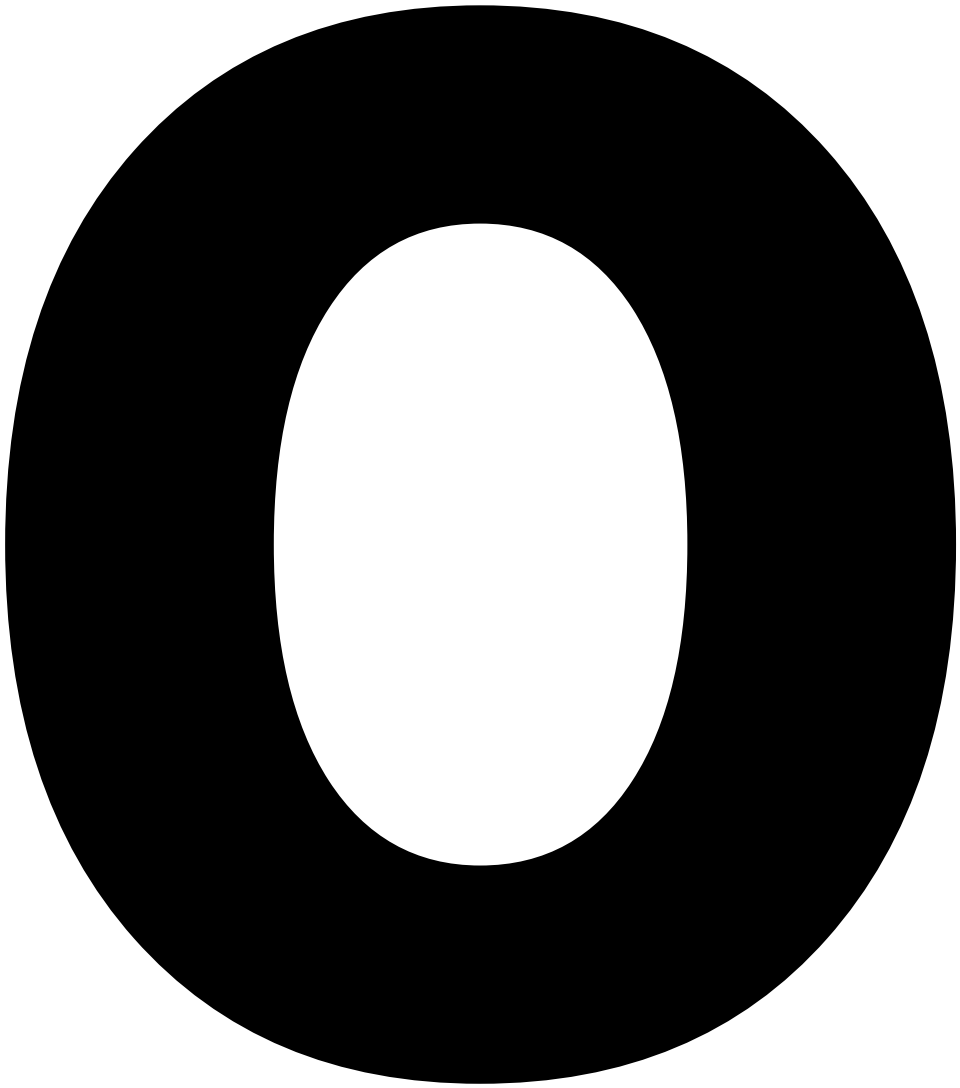




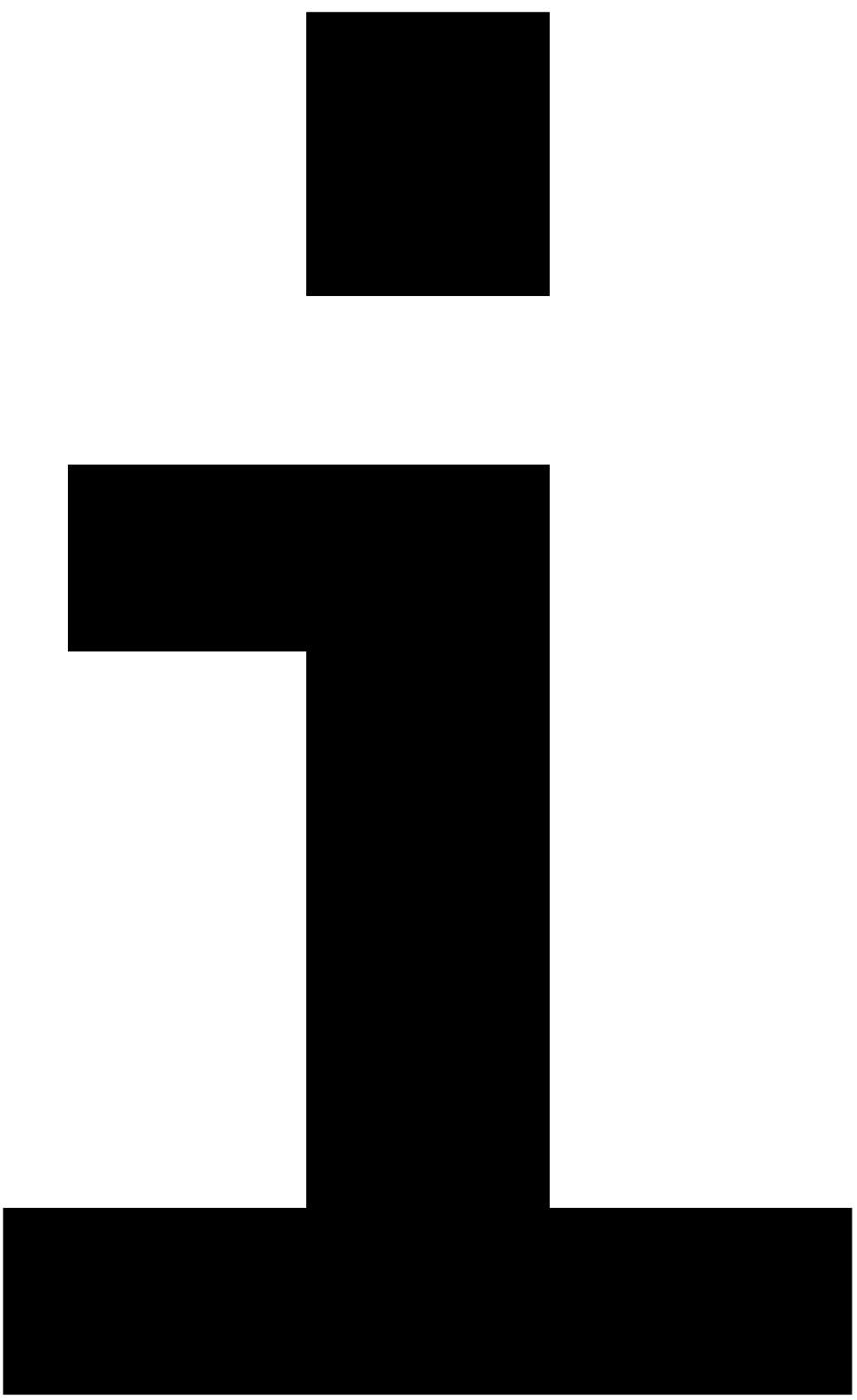


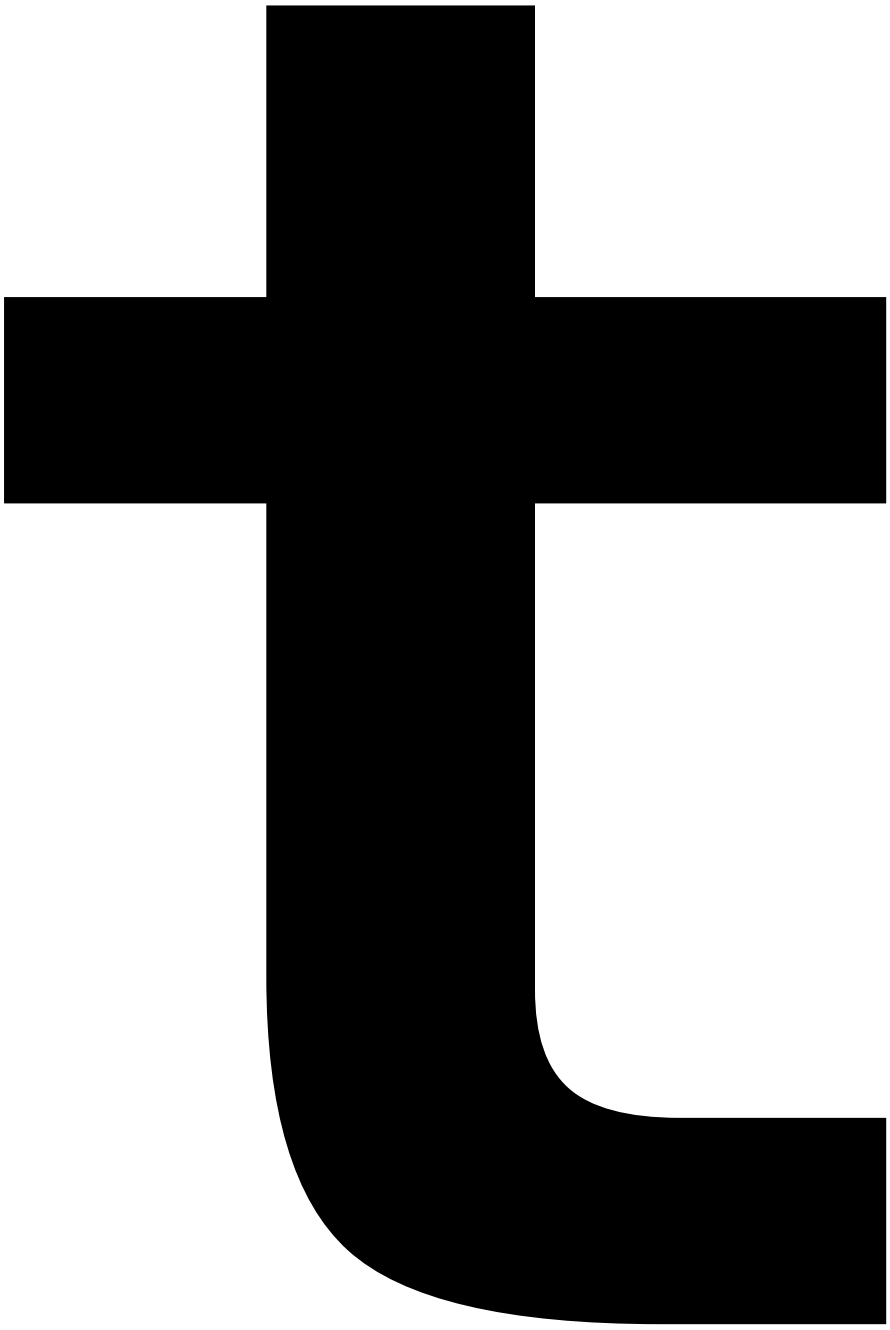


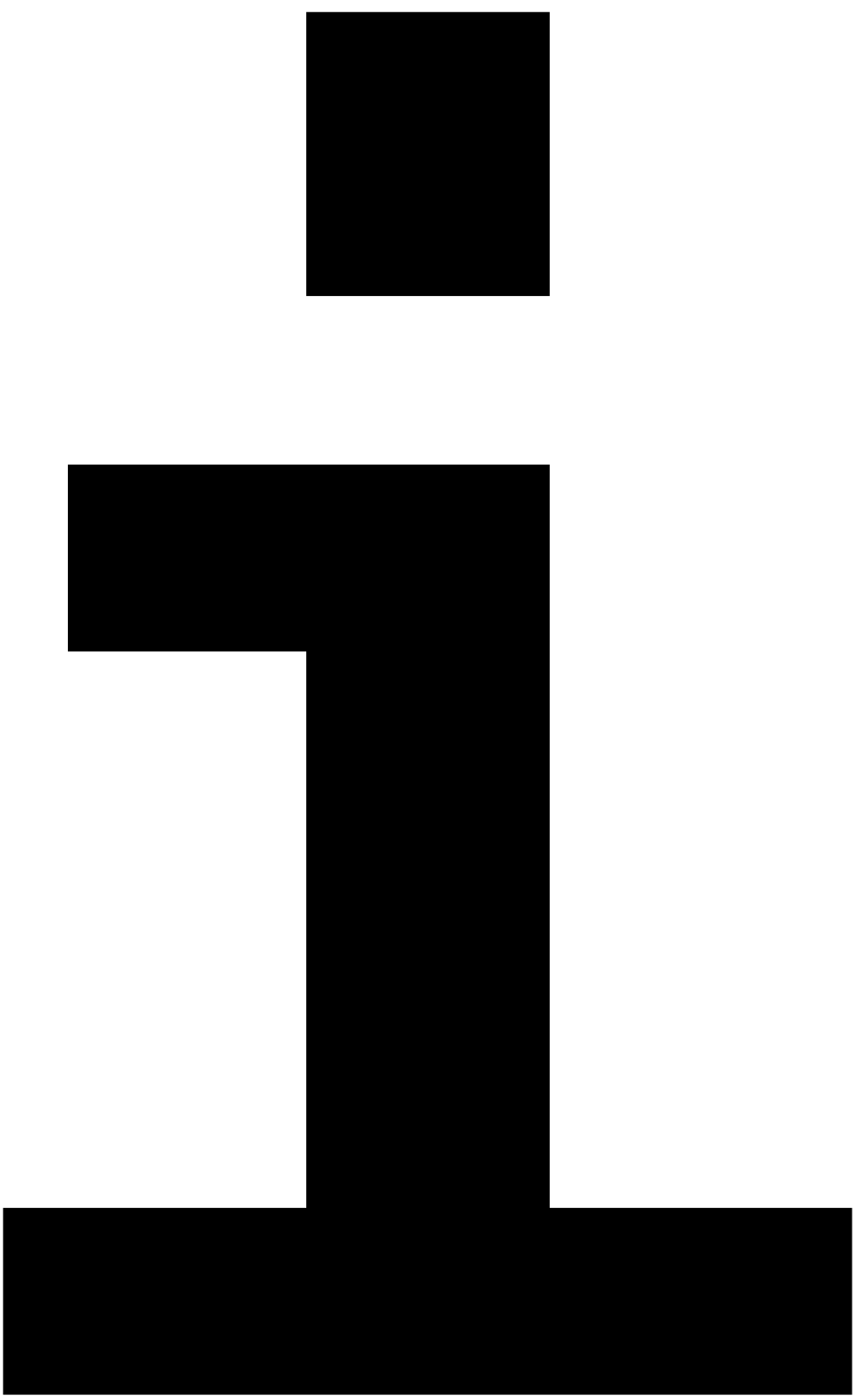


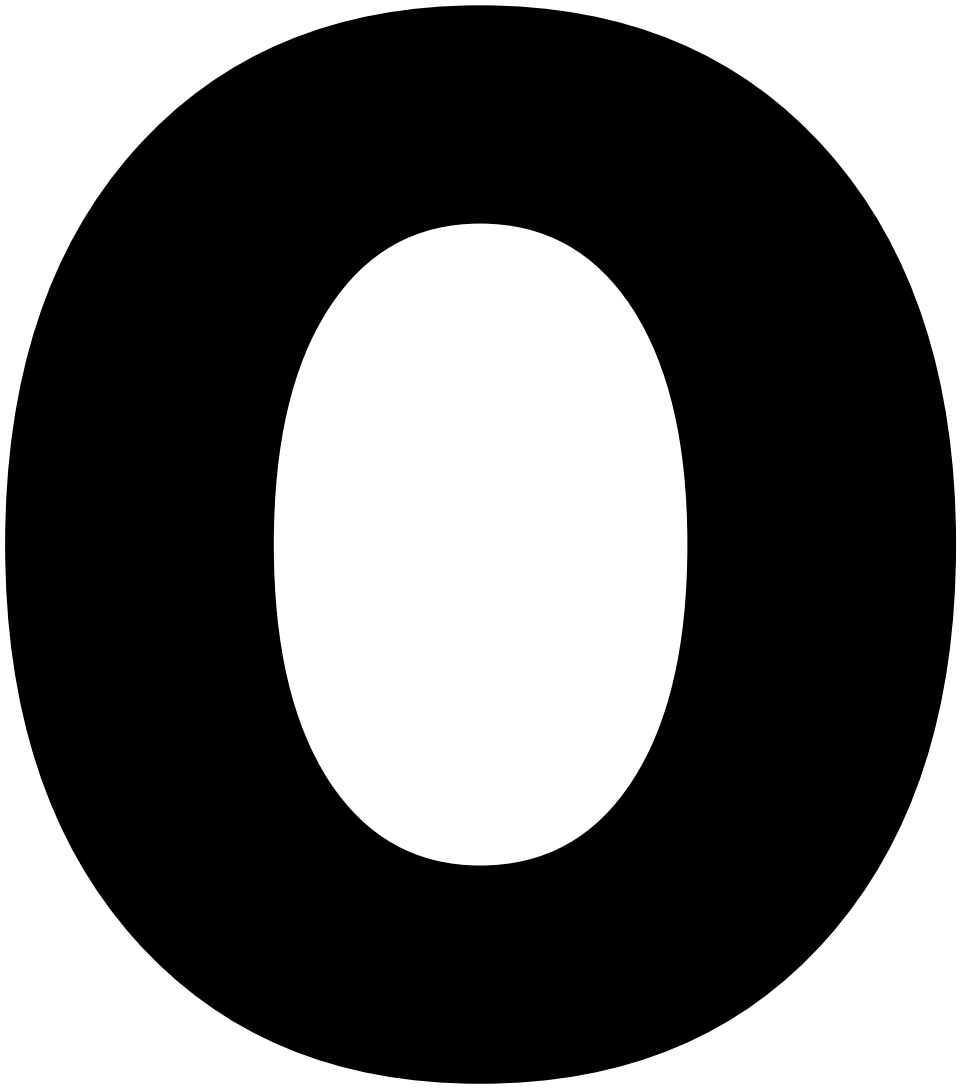


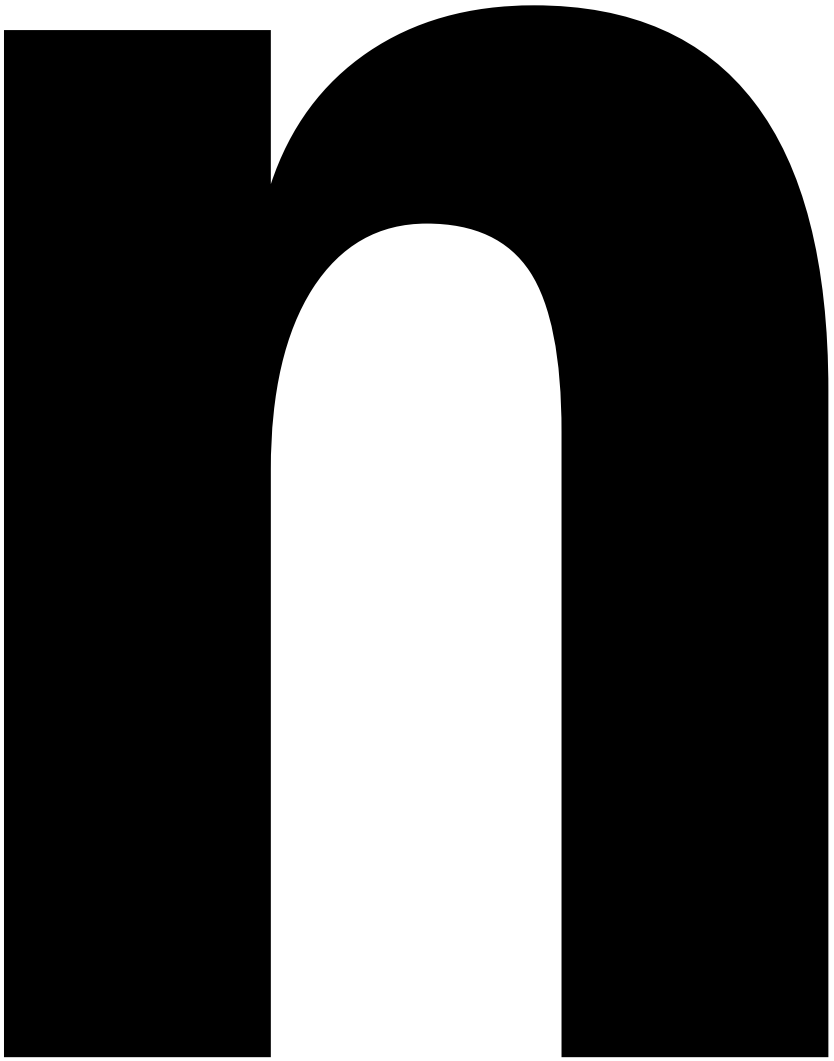
S

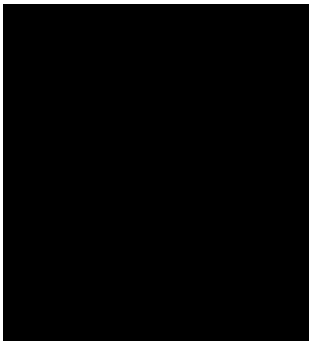


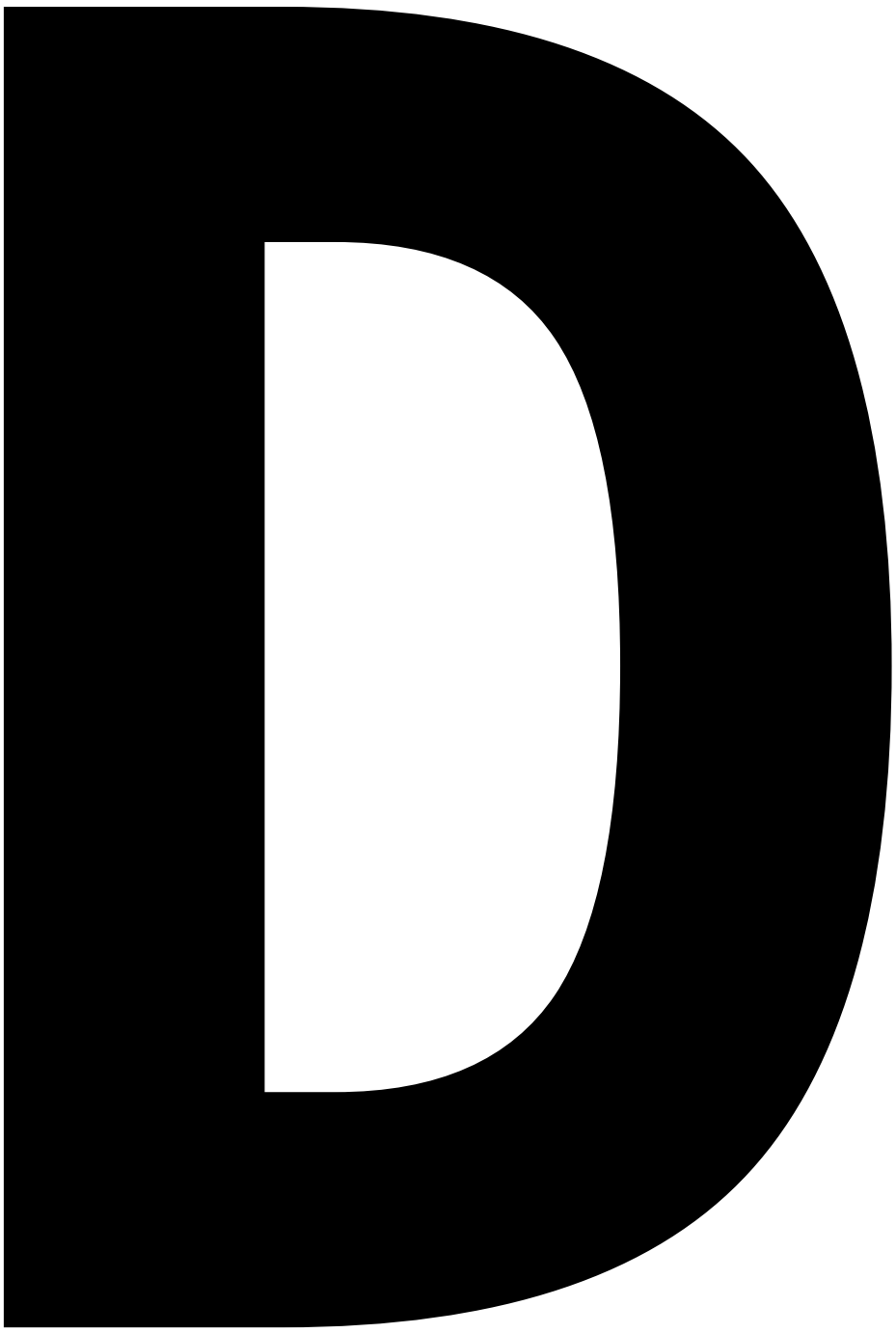


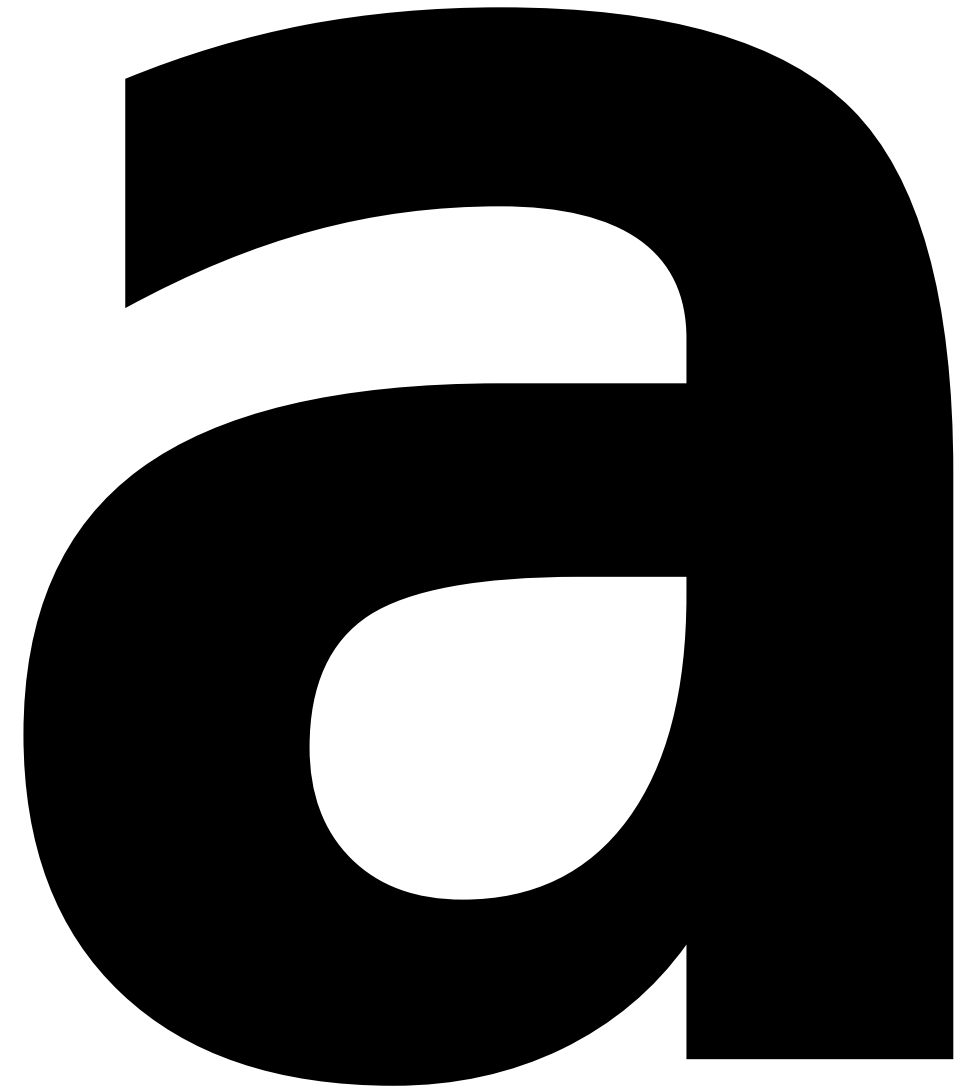




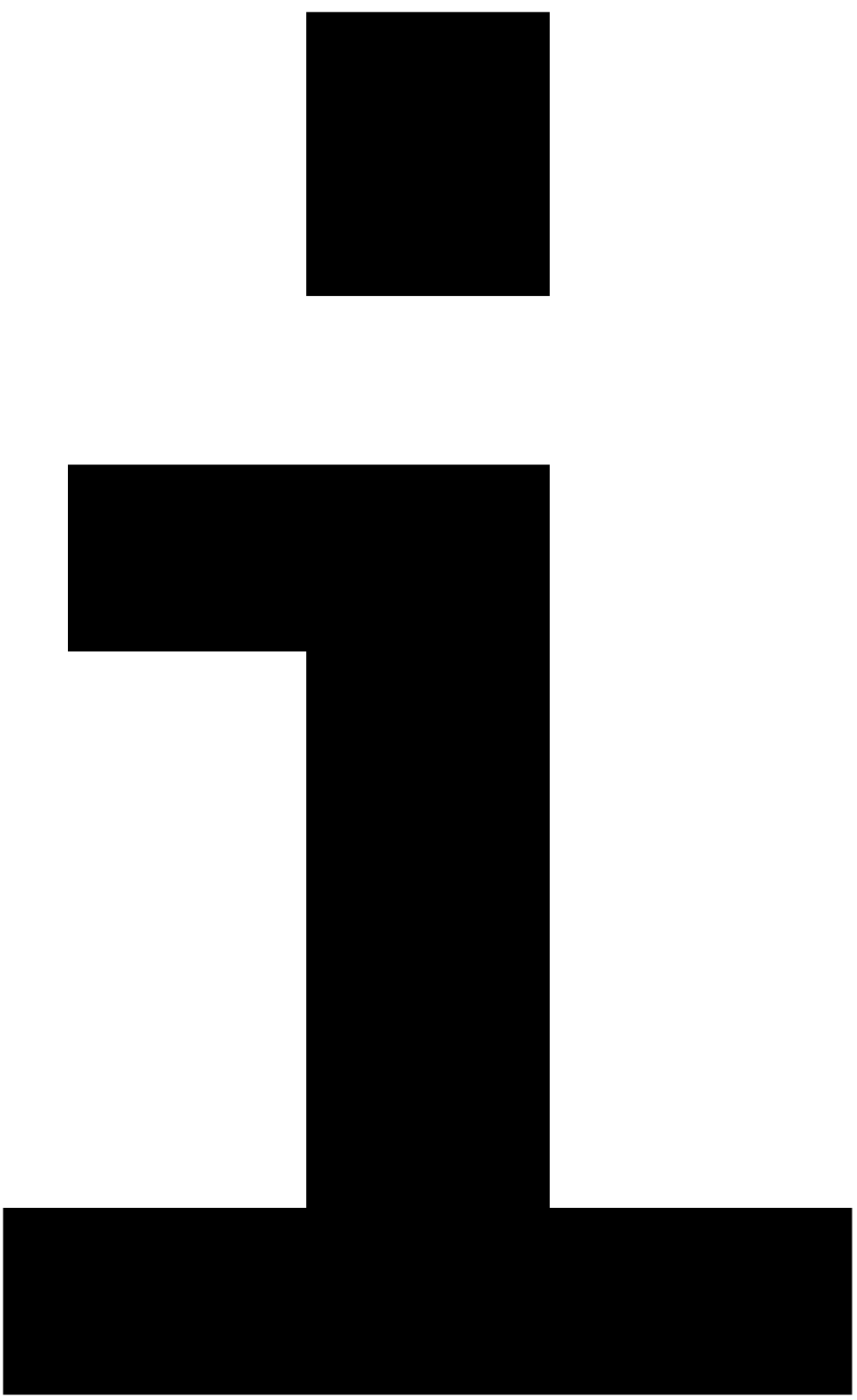




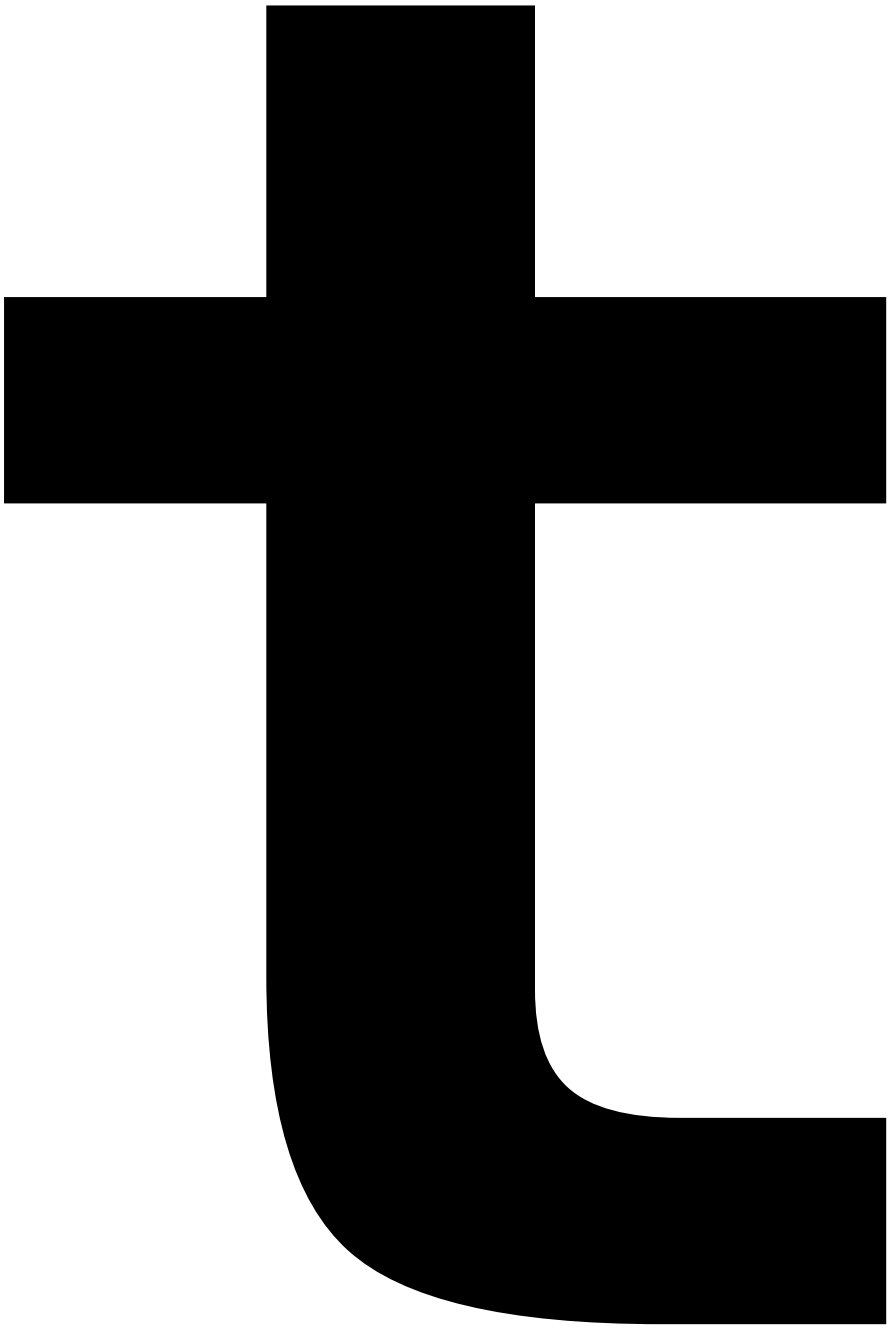


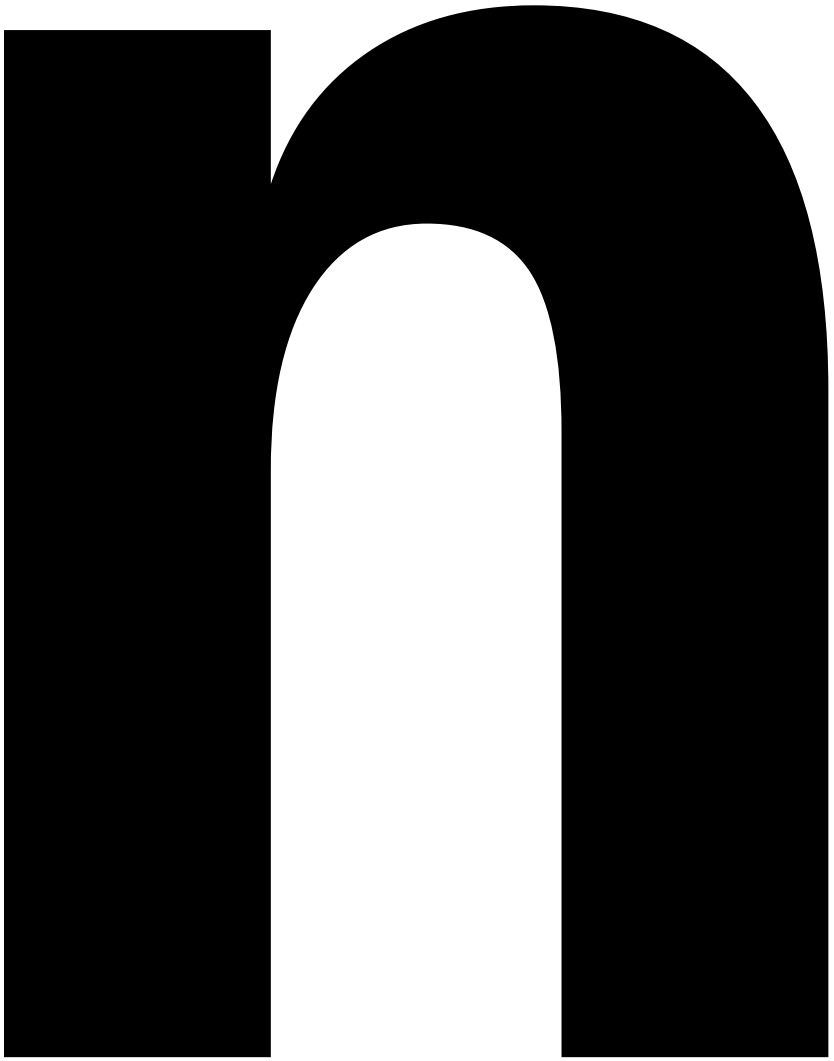


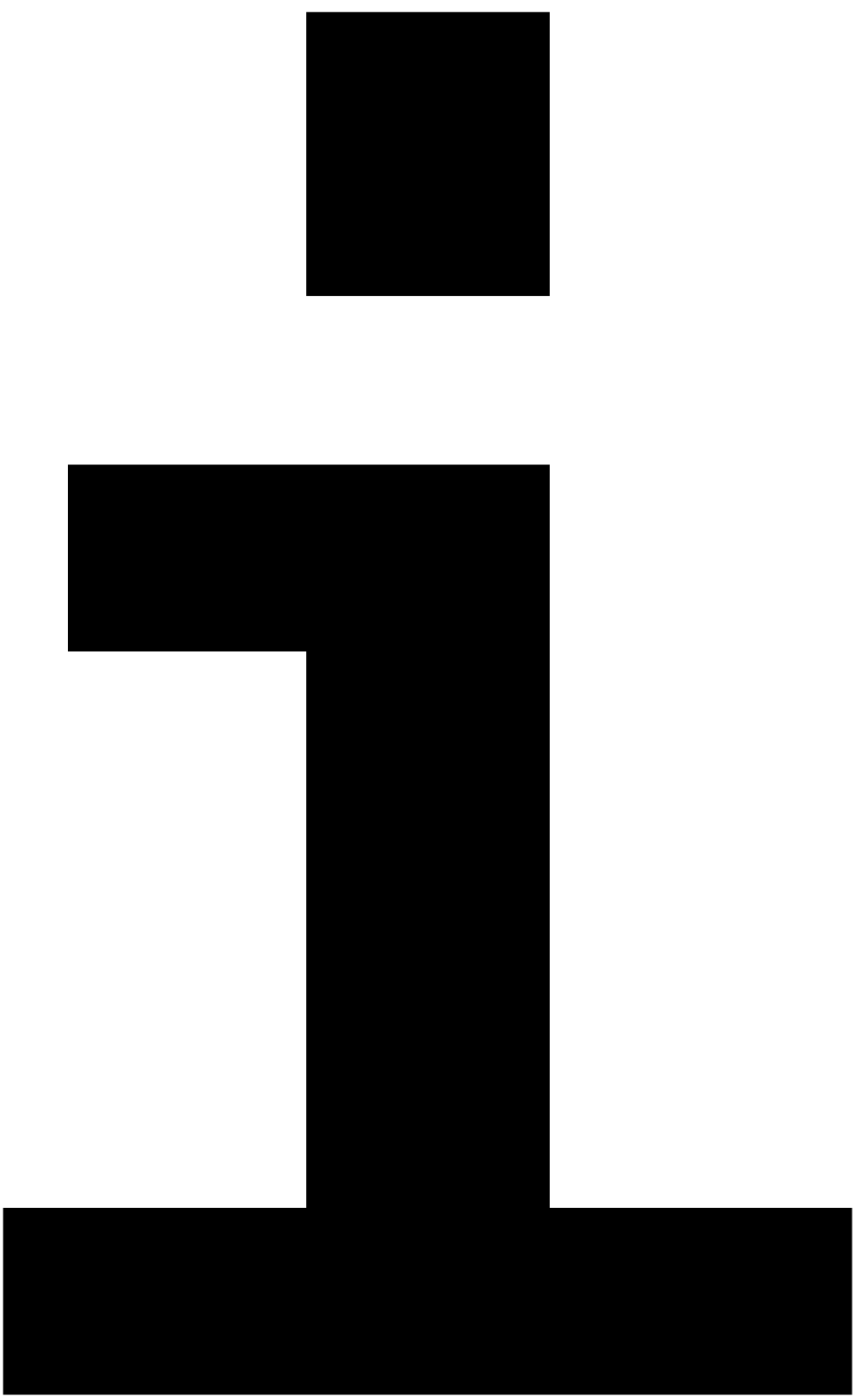
S

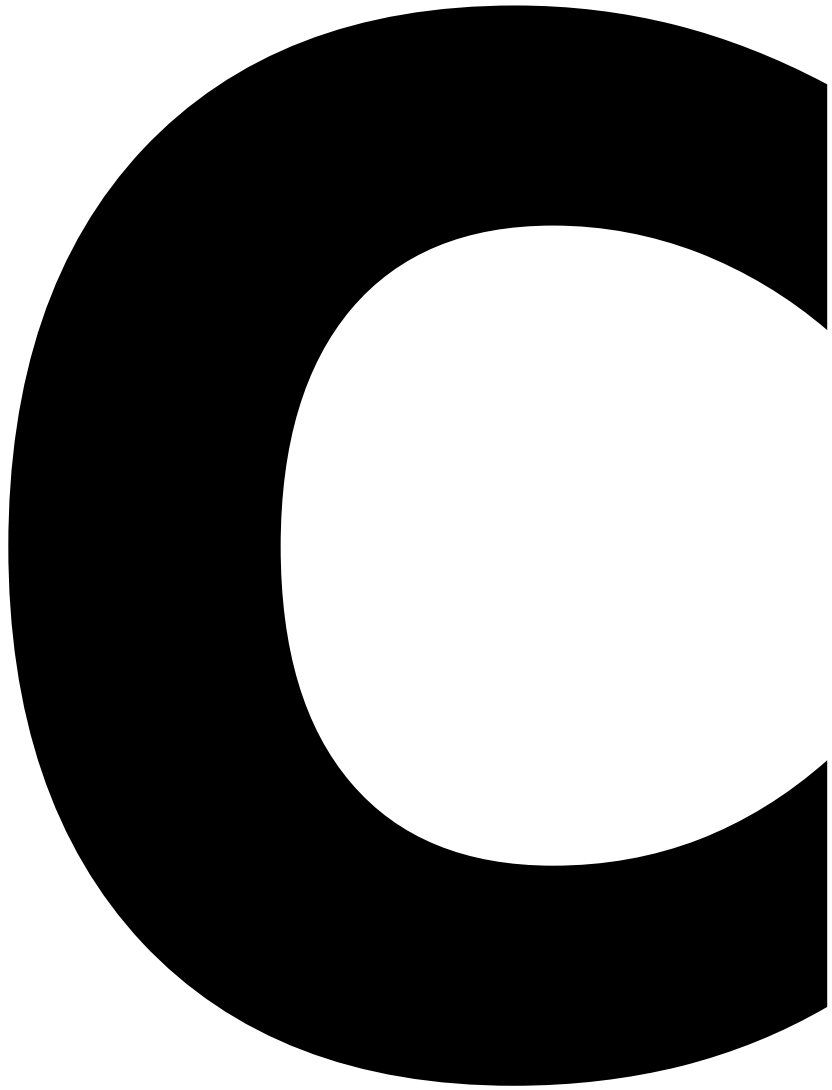


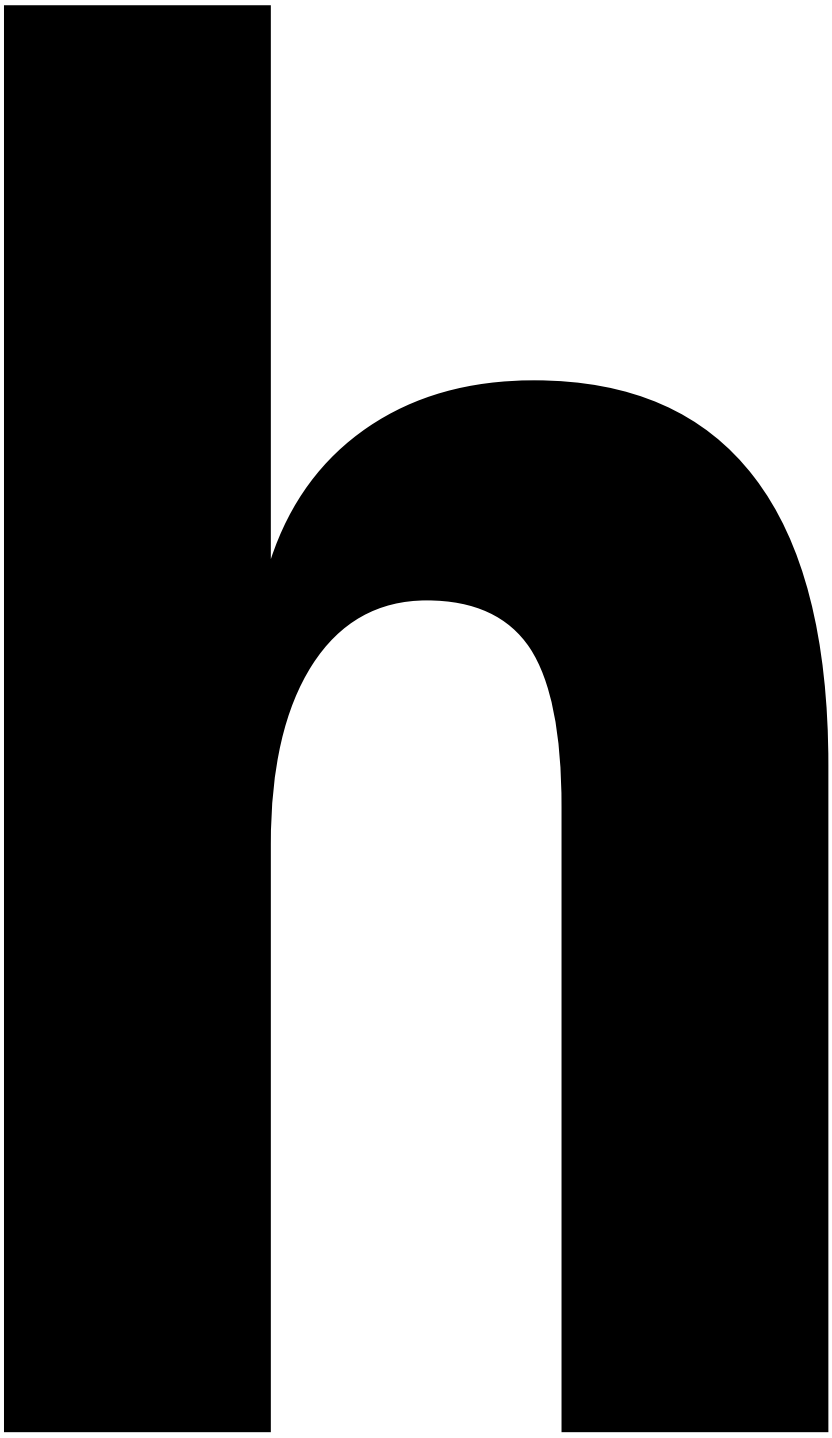
S

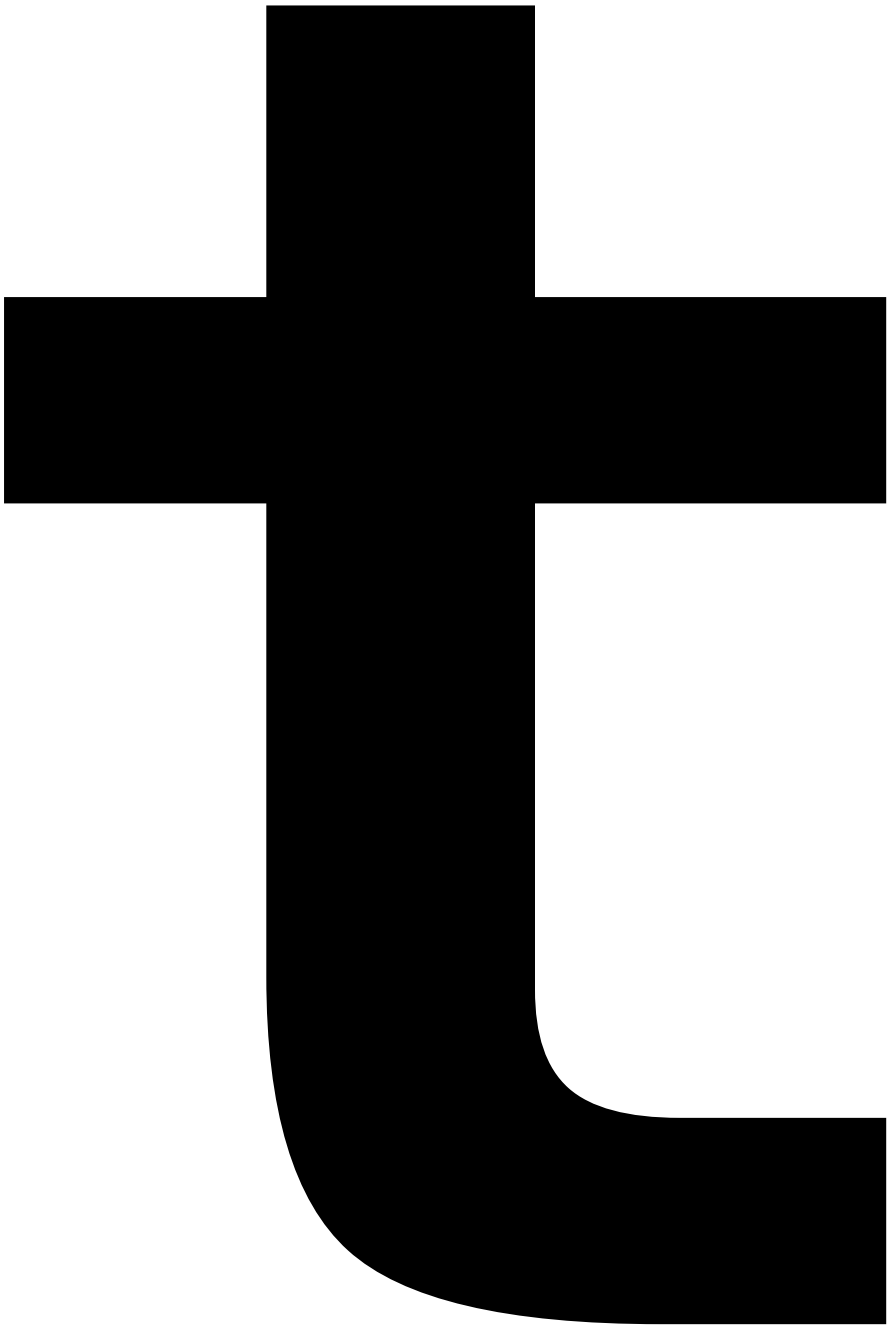


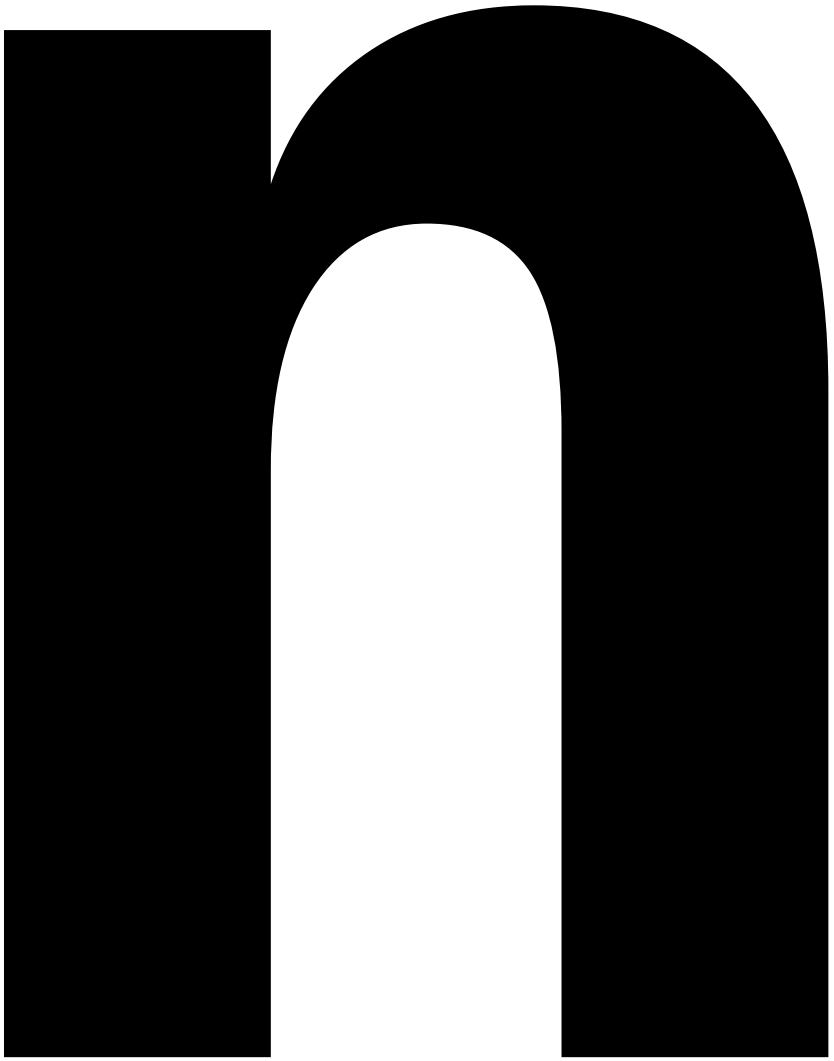




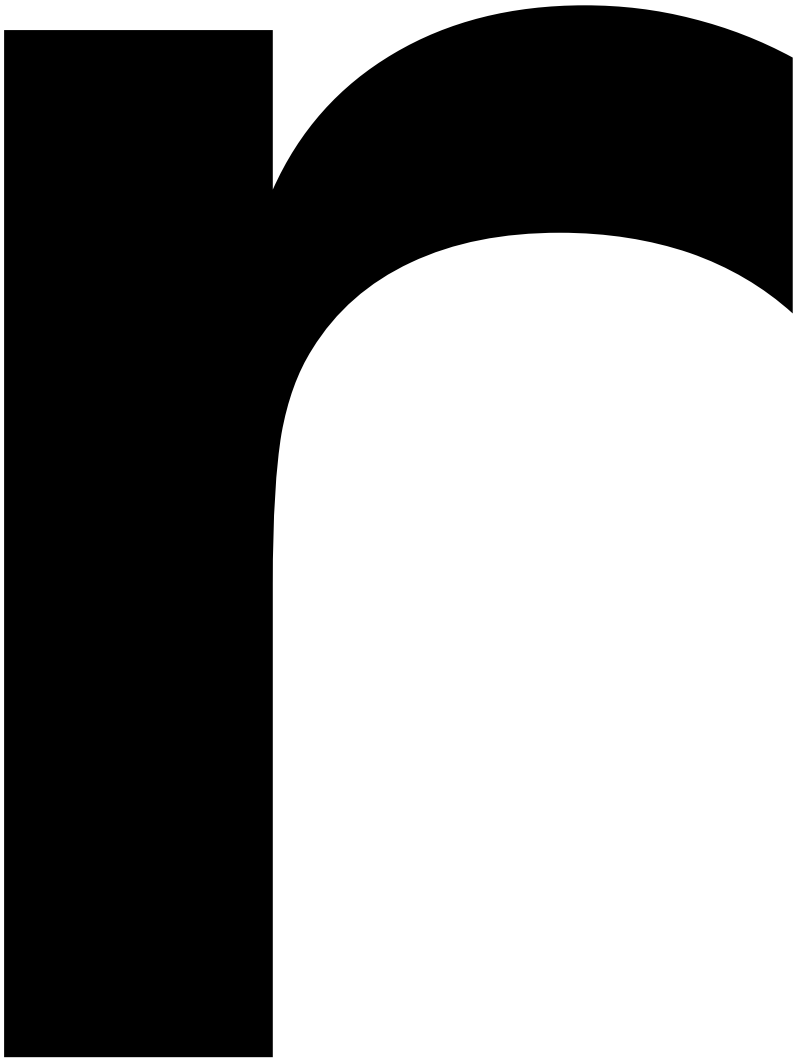


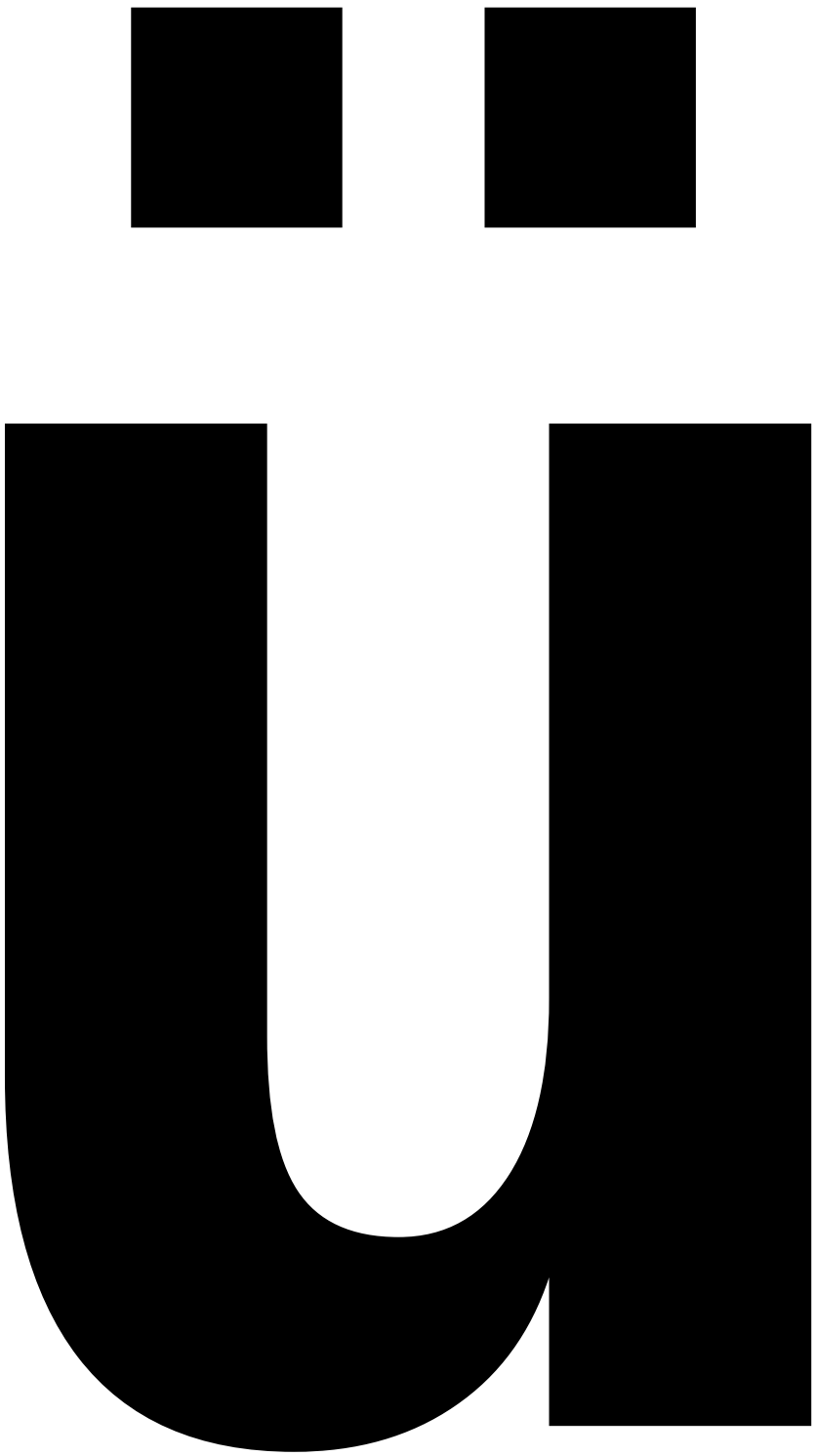


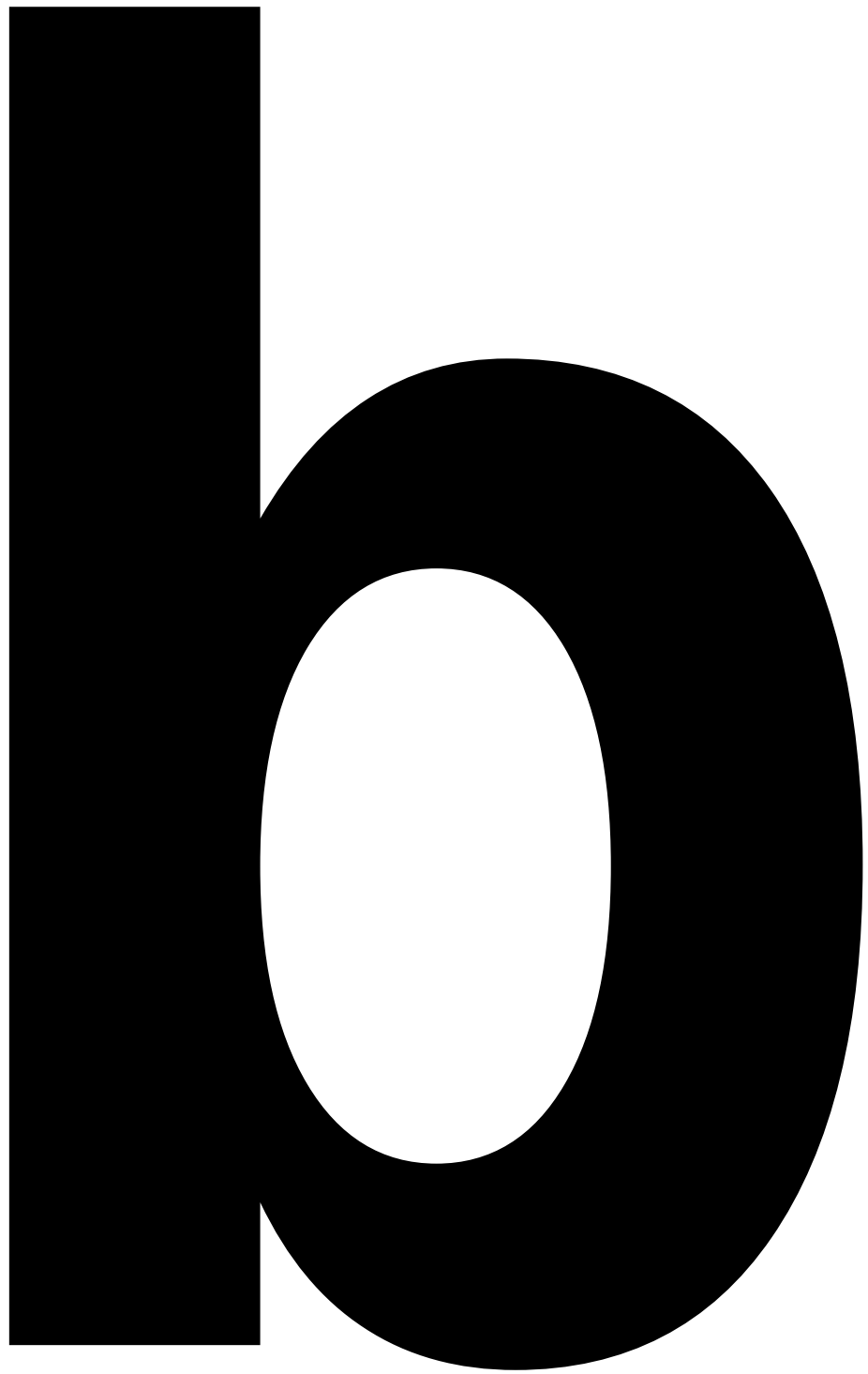


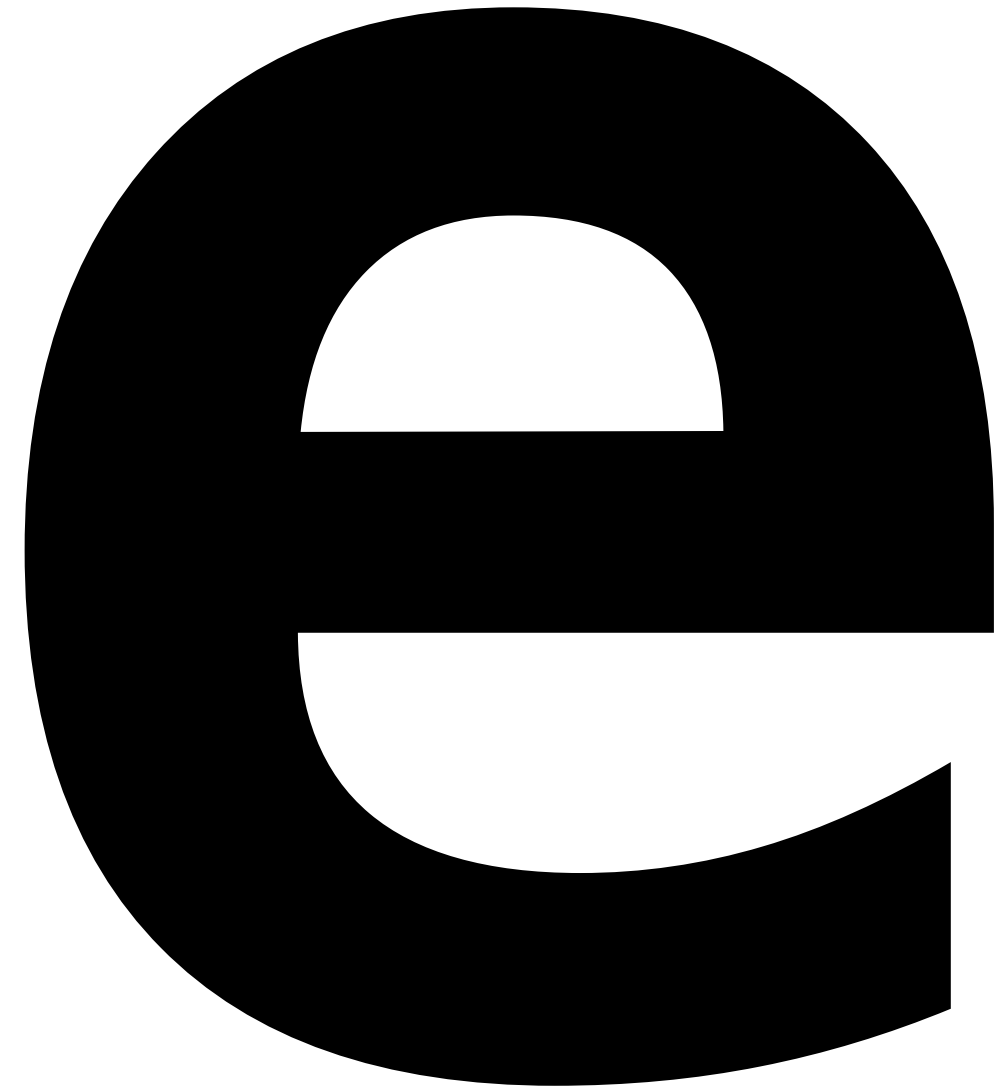


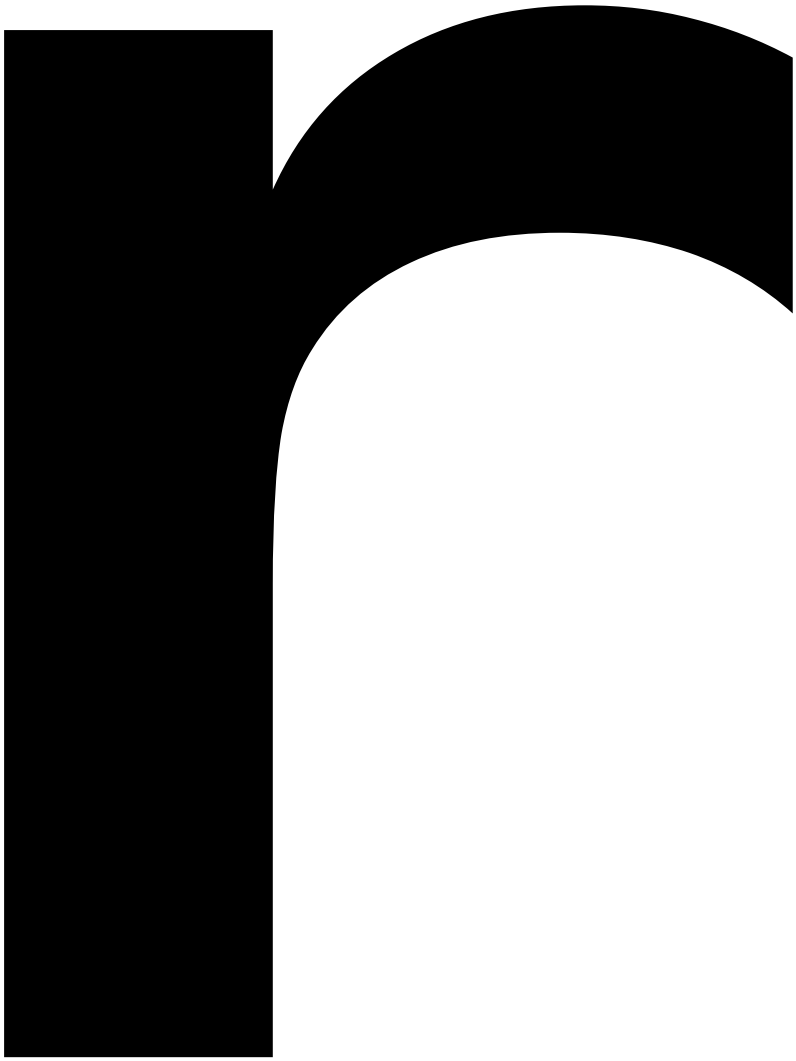
u

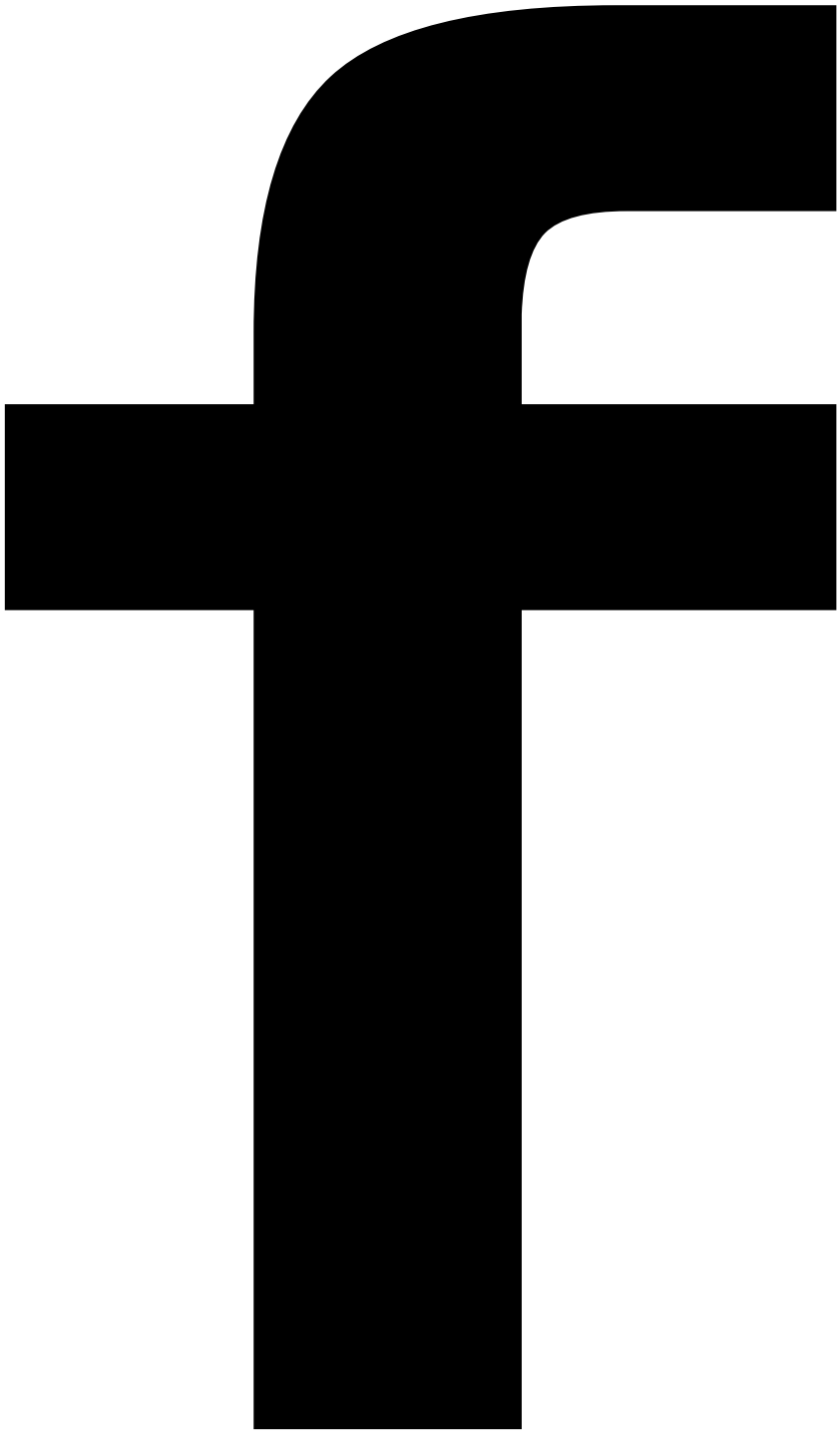


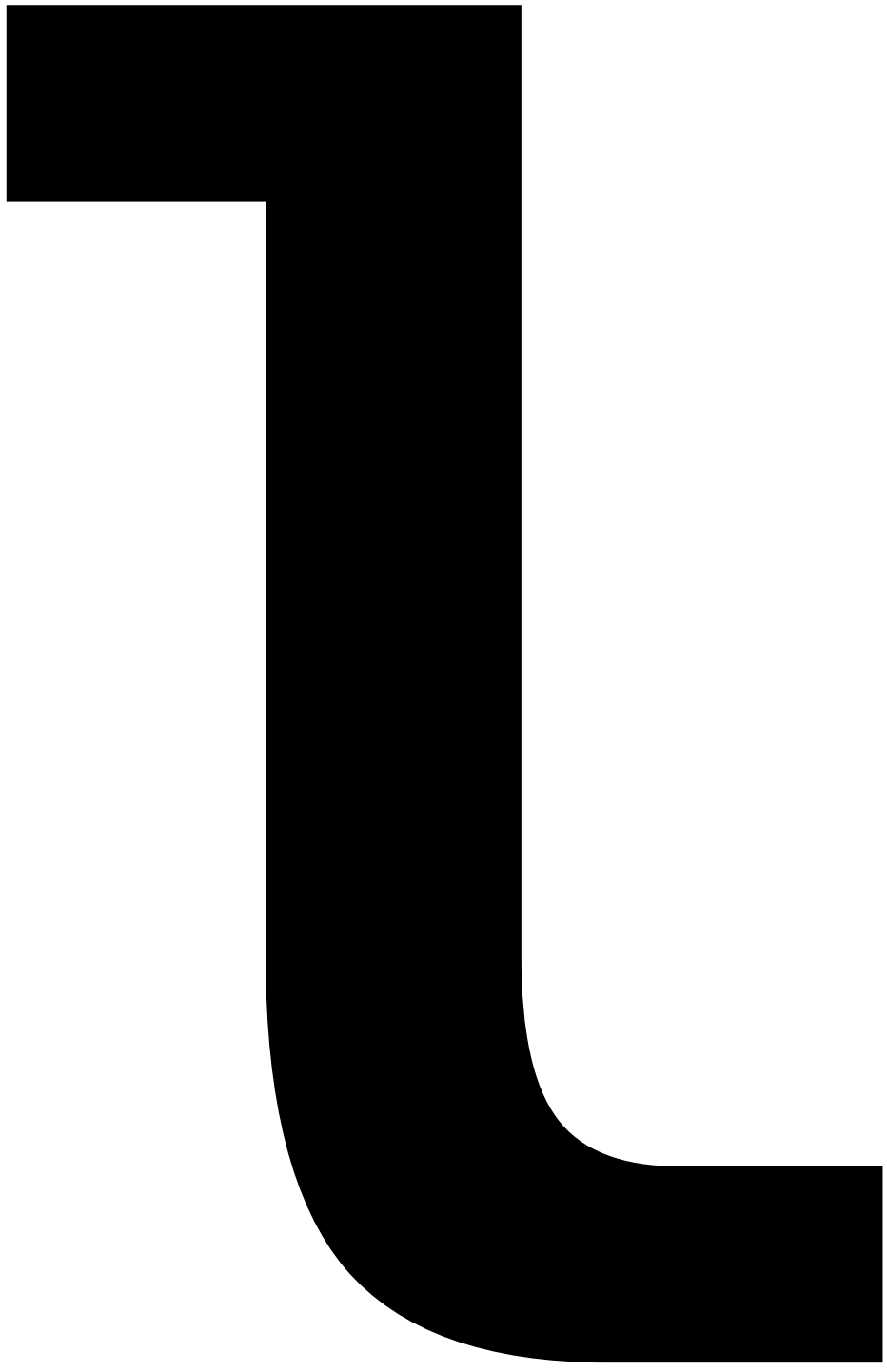


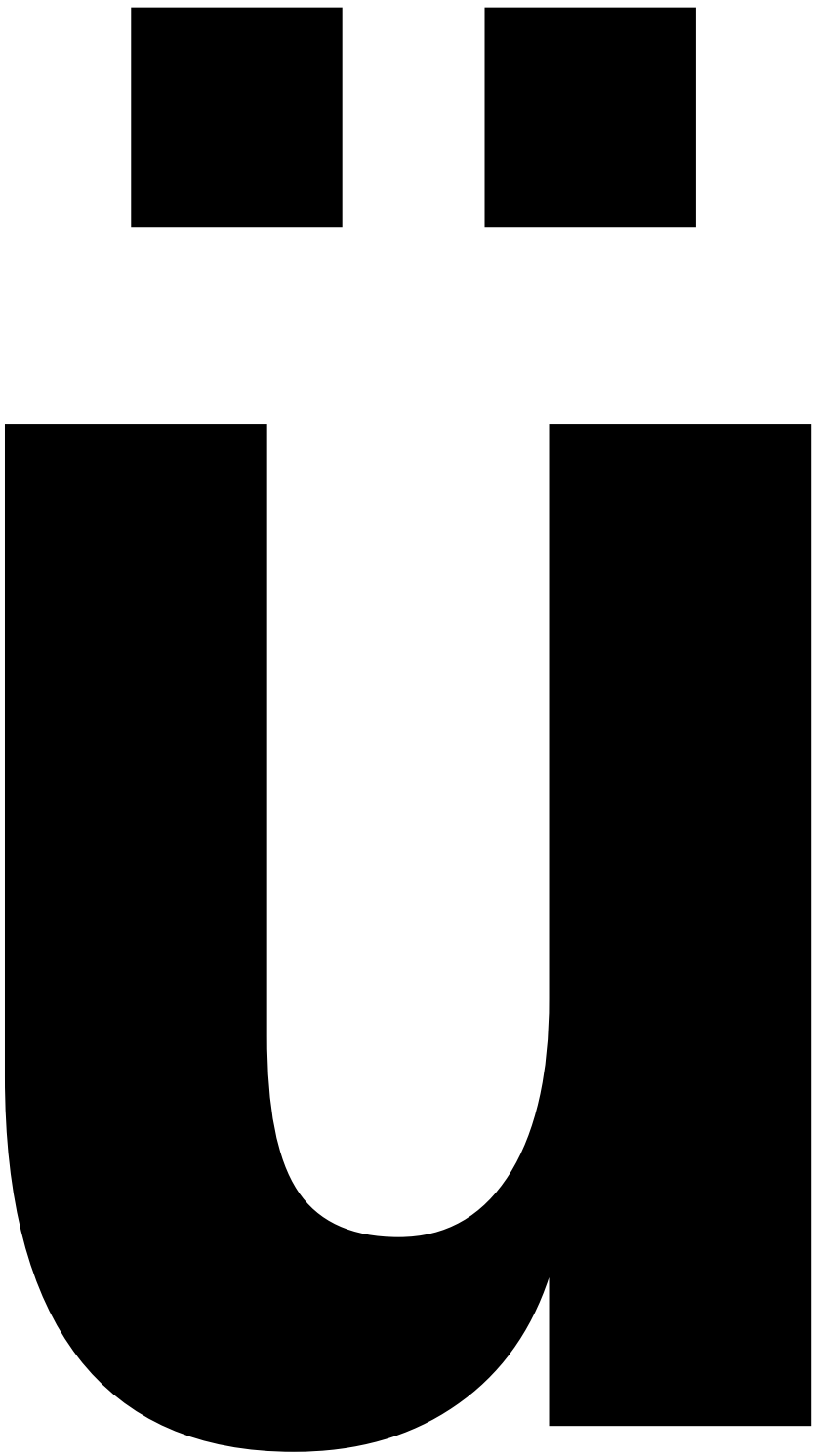






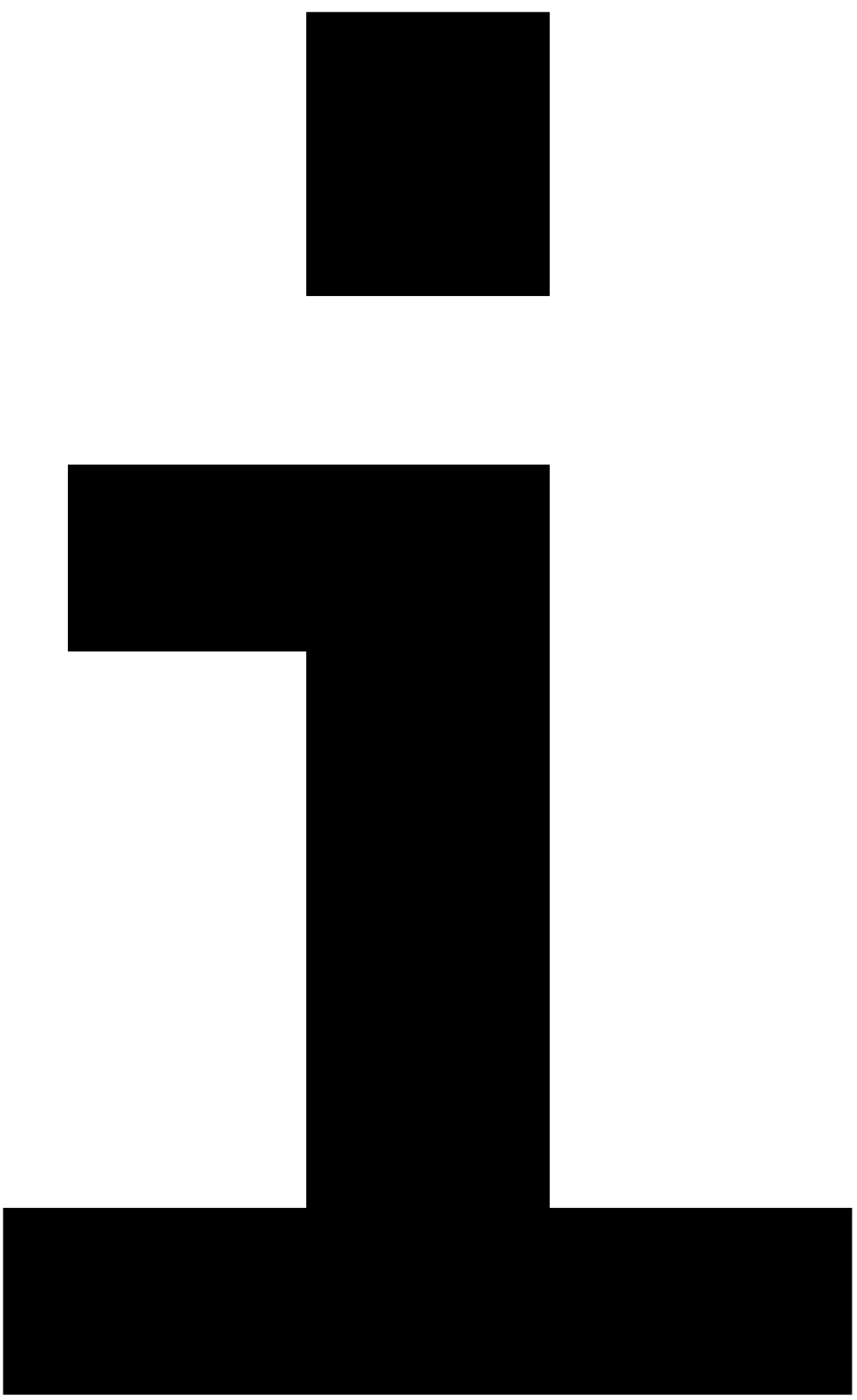


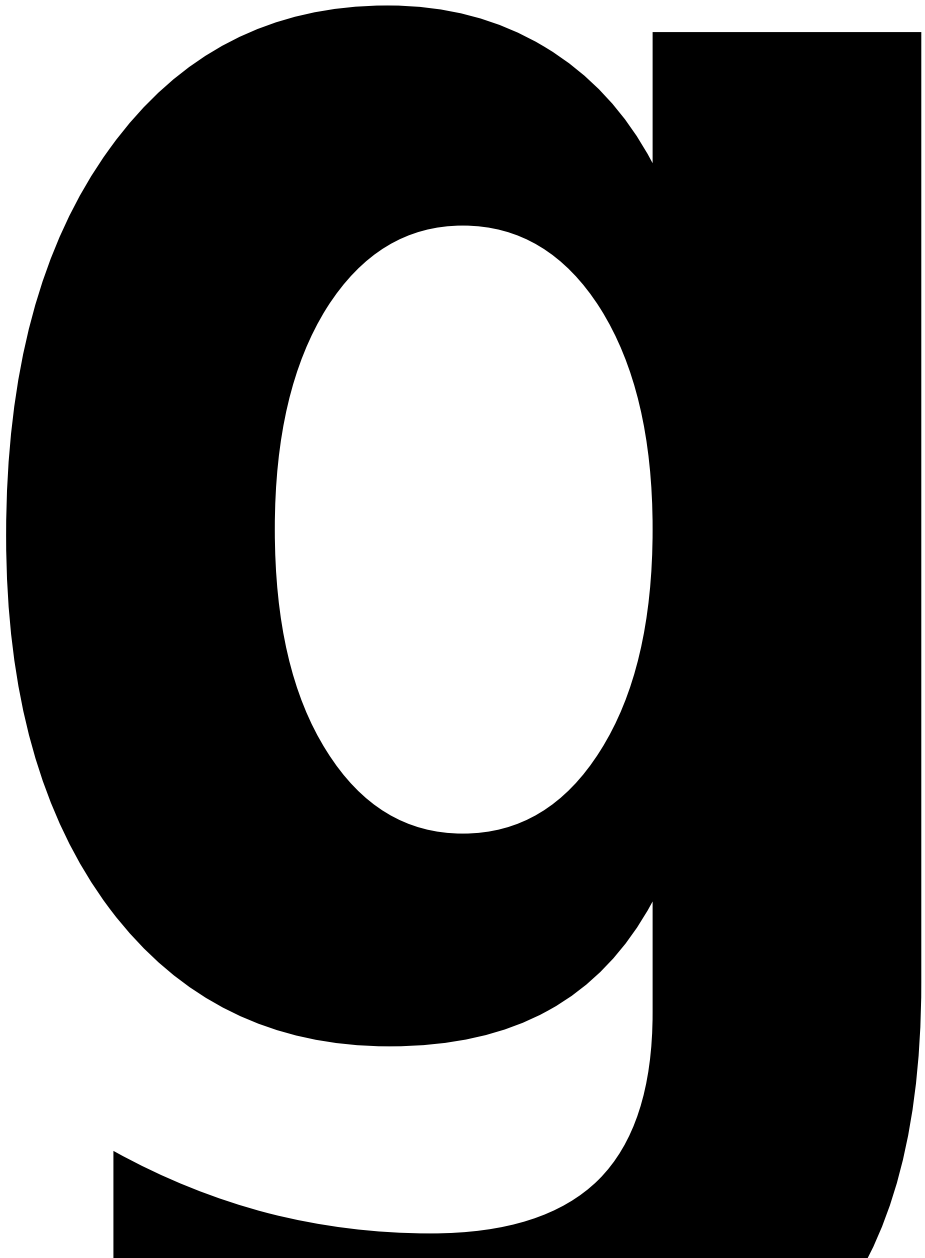


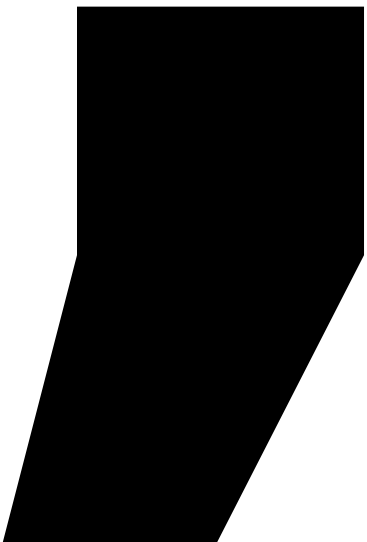


S

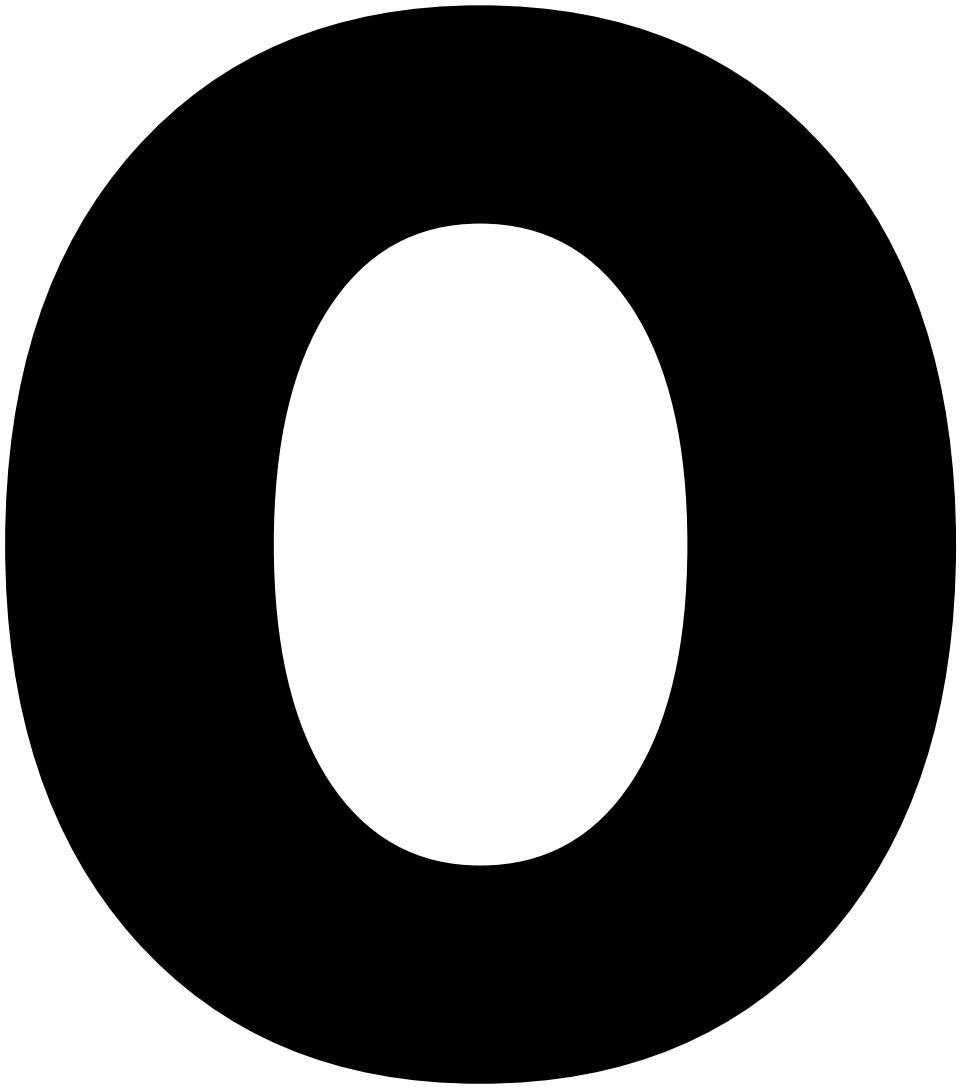
S

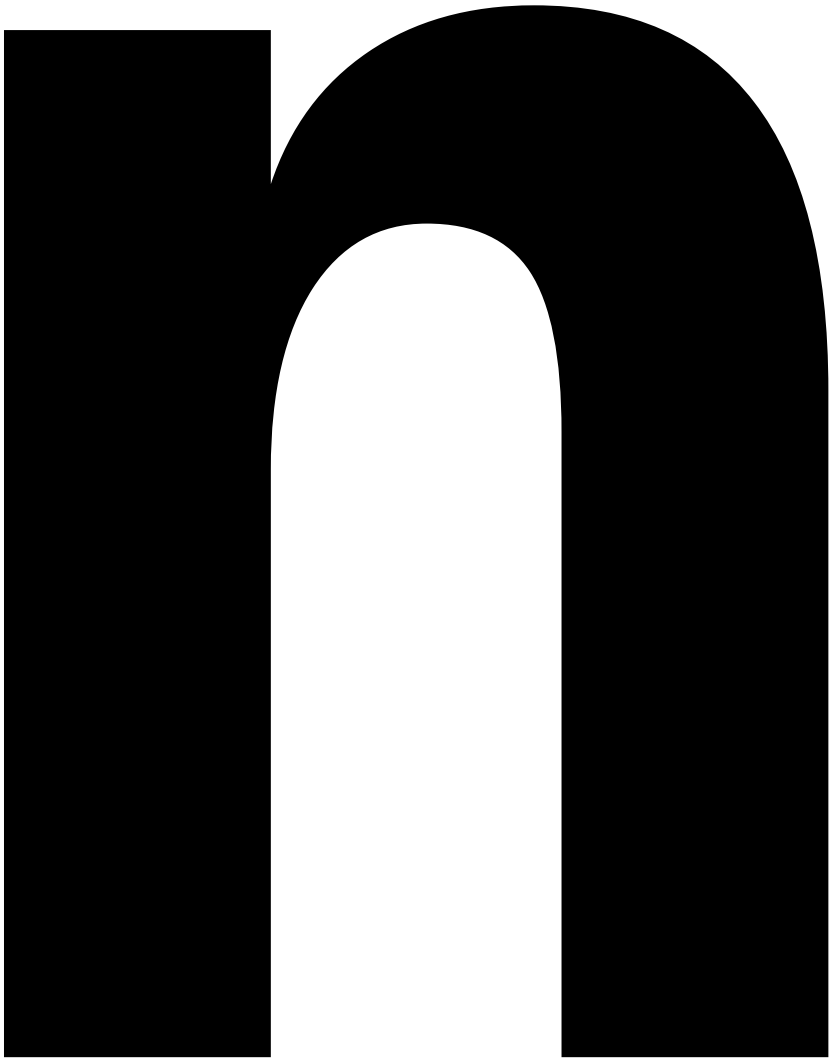




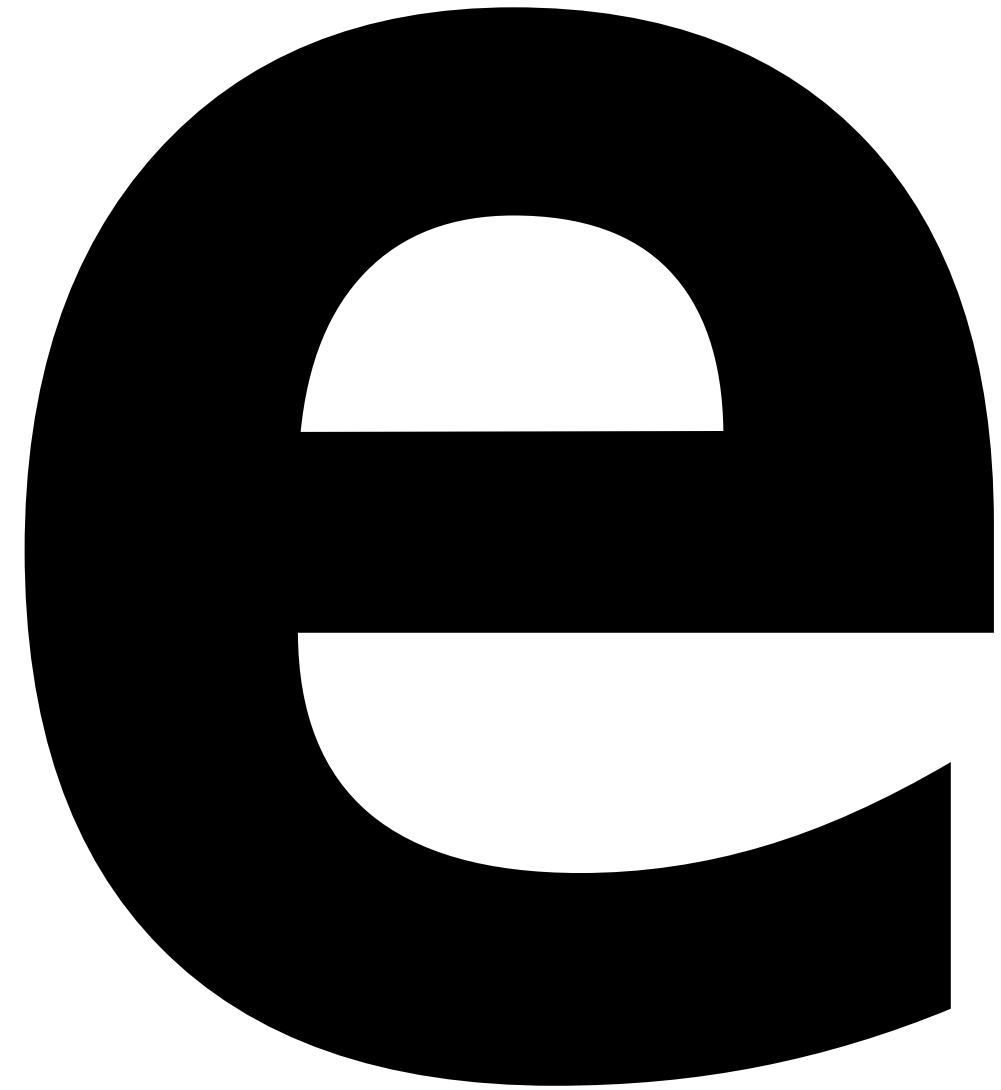


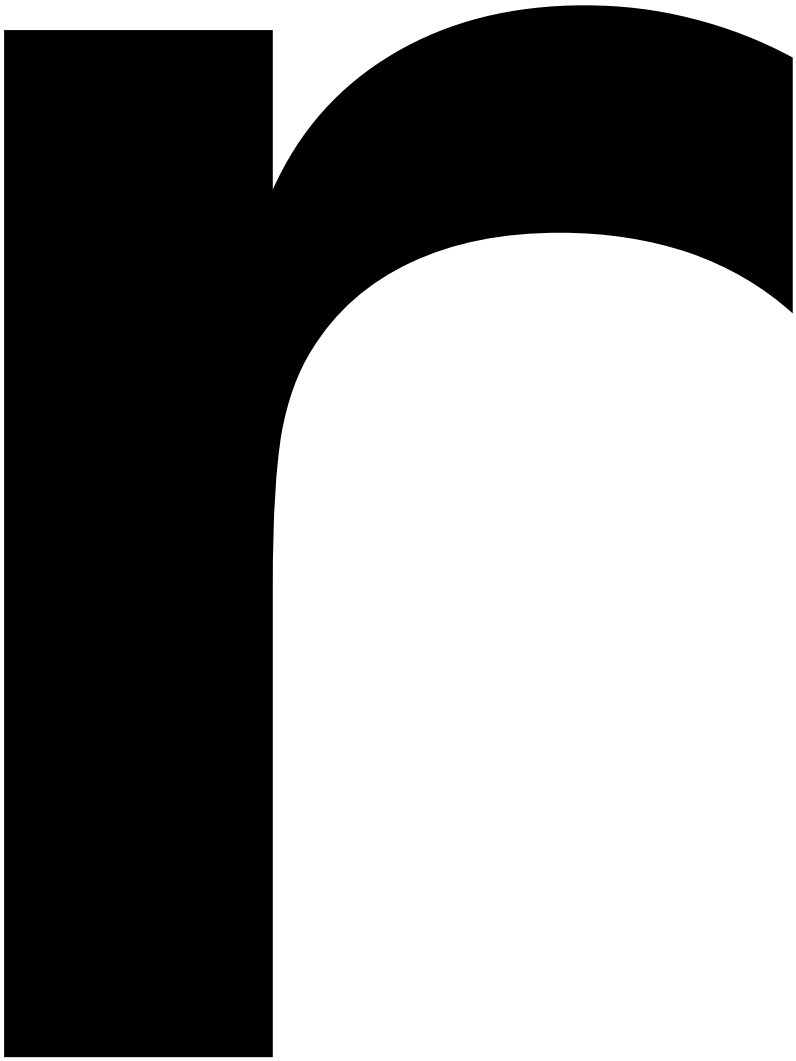
S

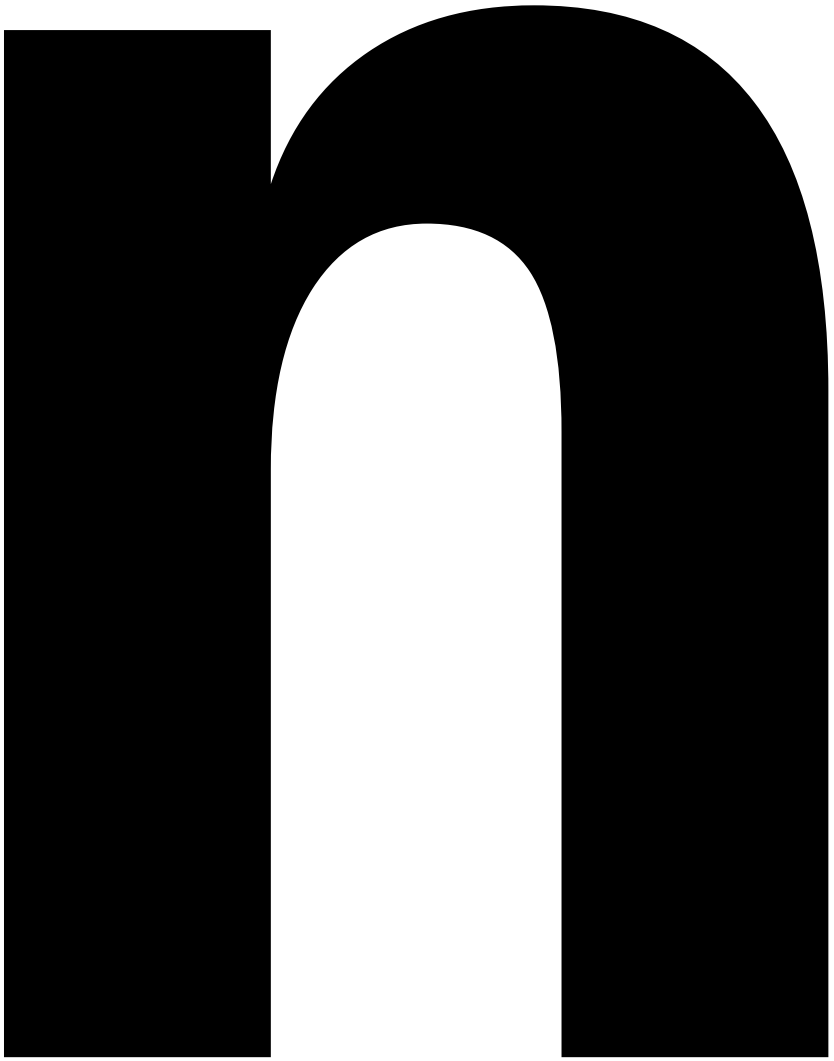




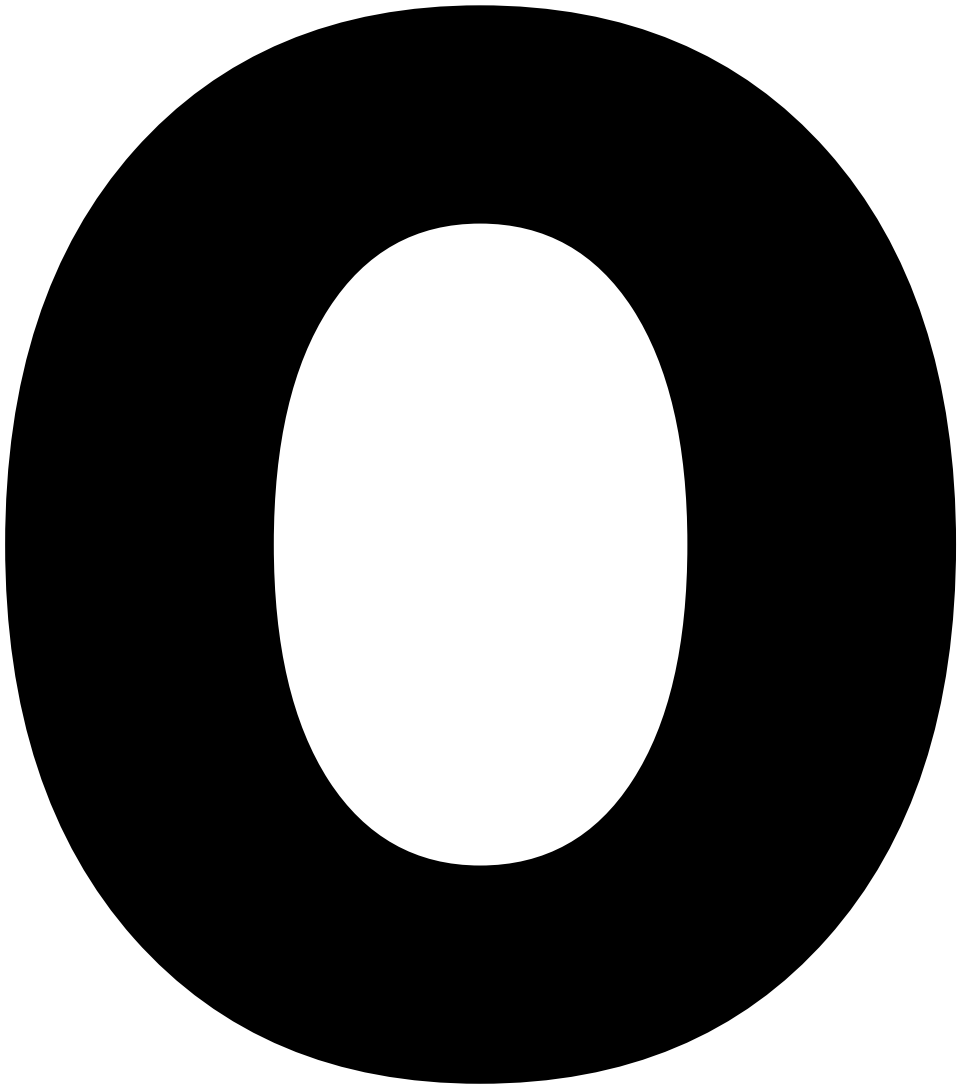
d

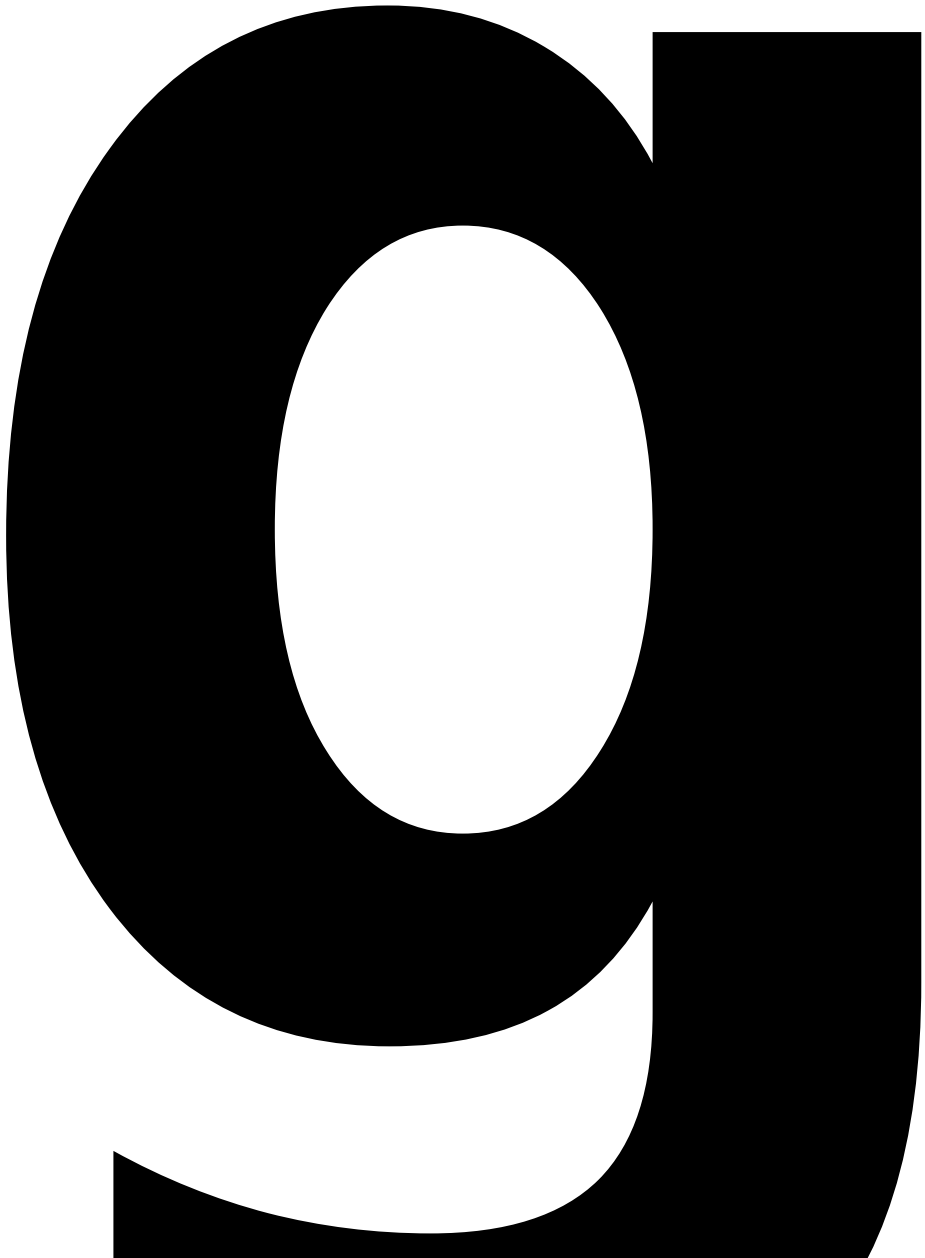


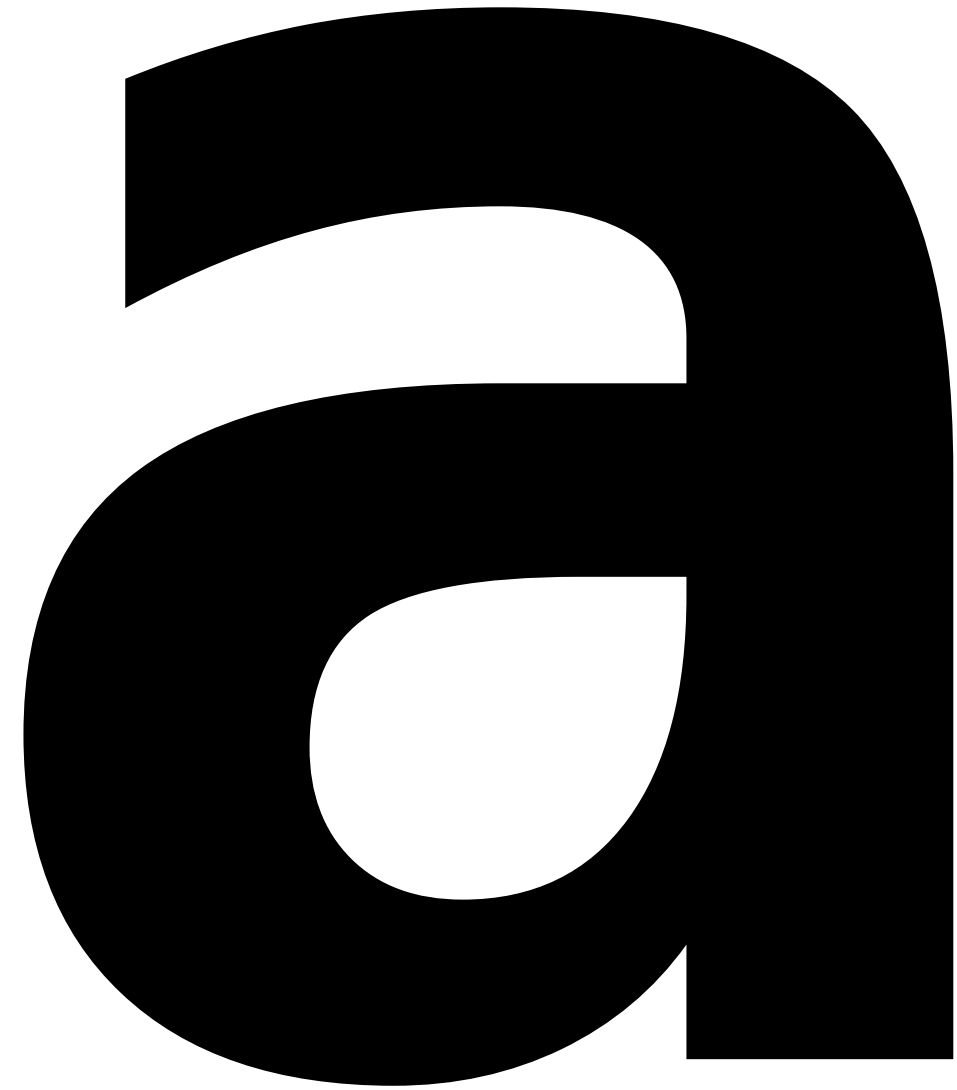


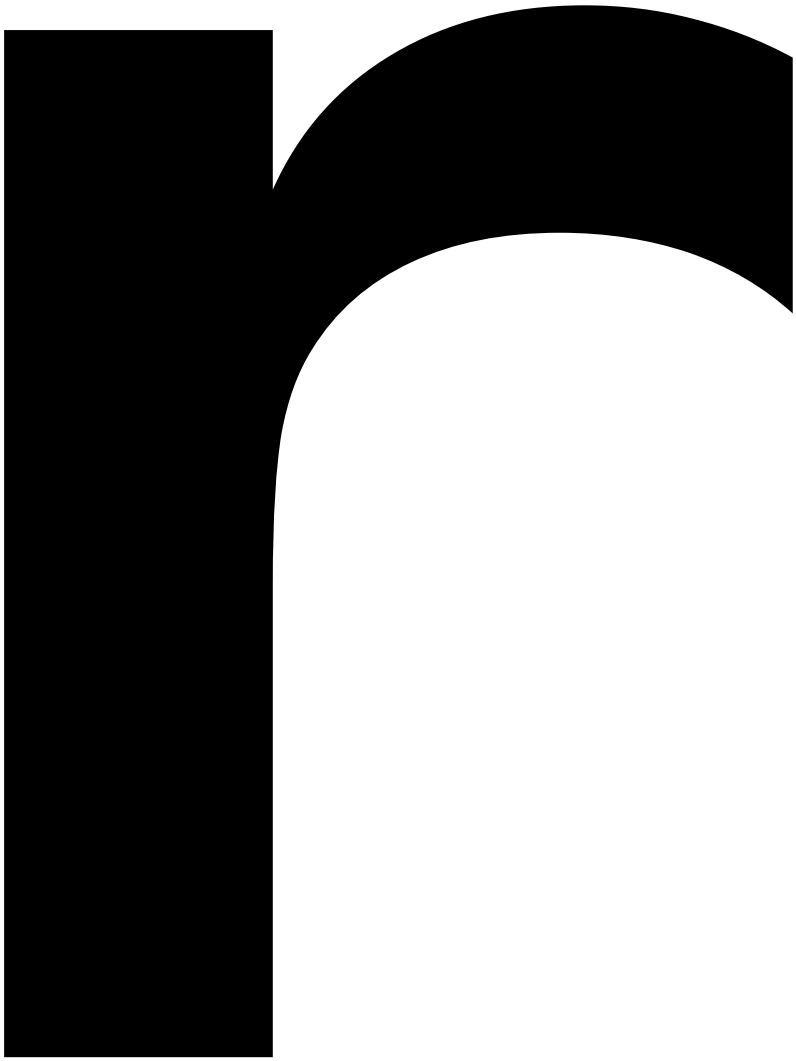


S

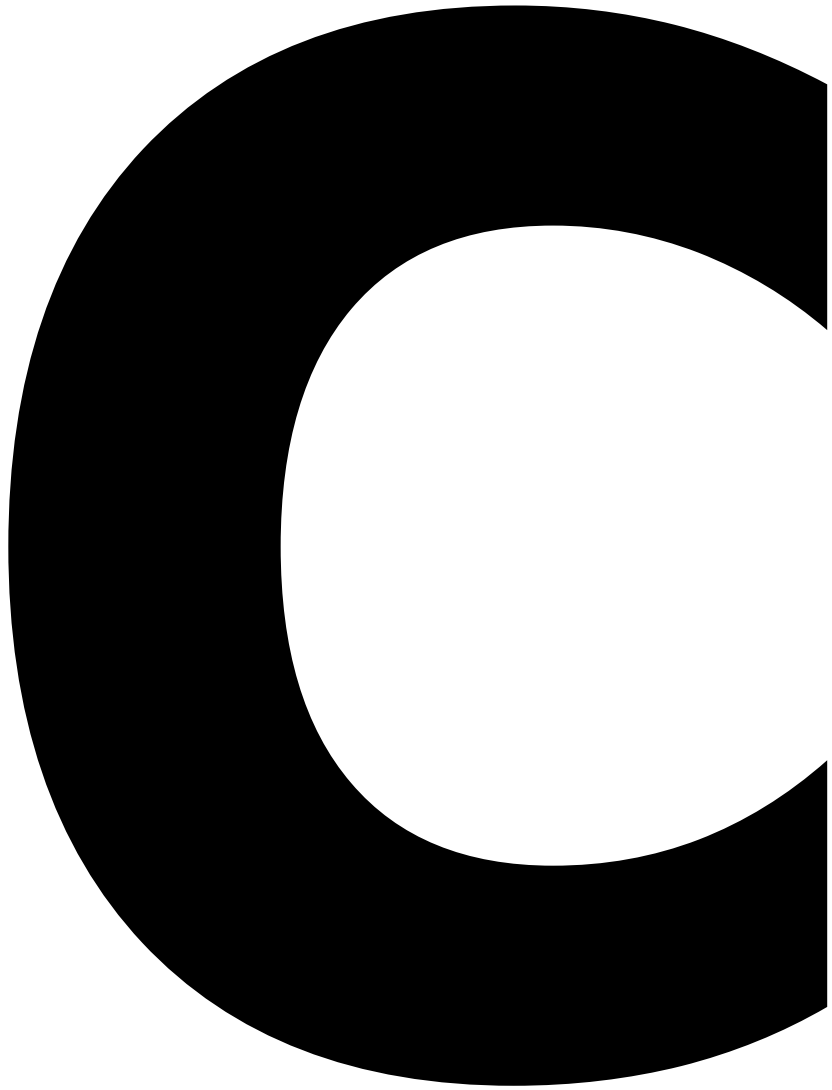


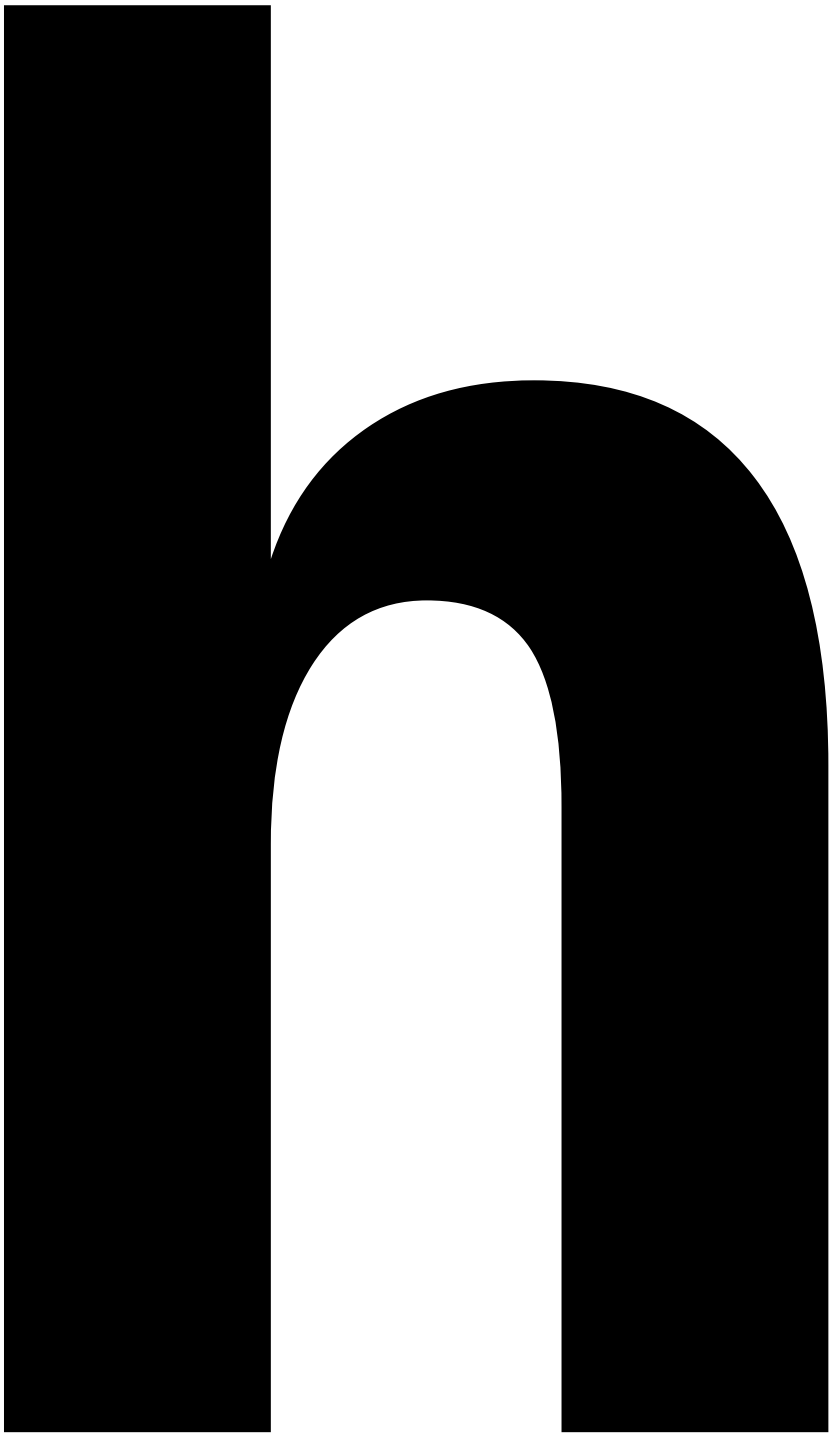


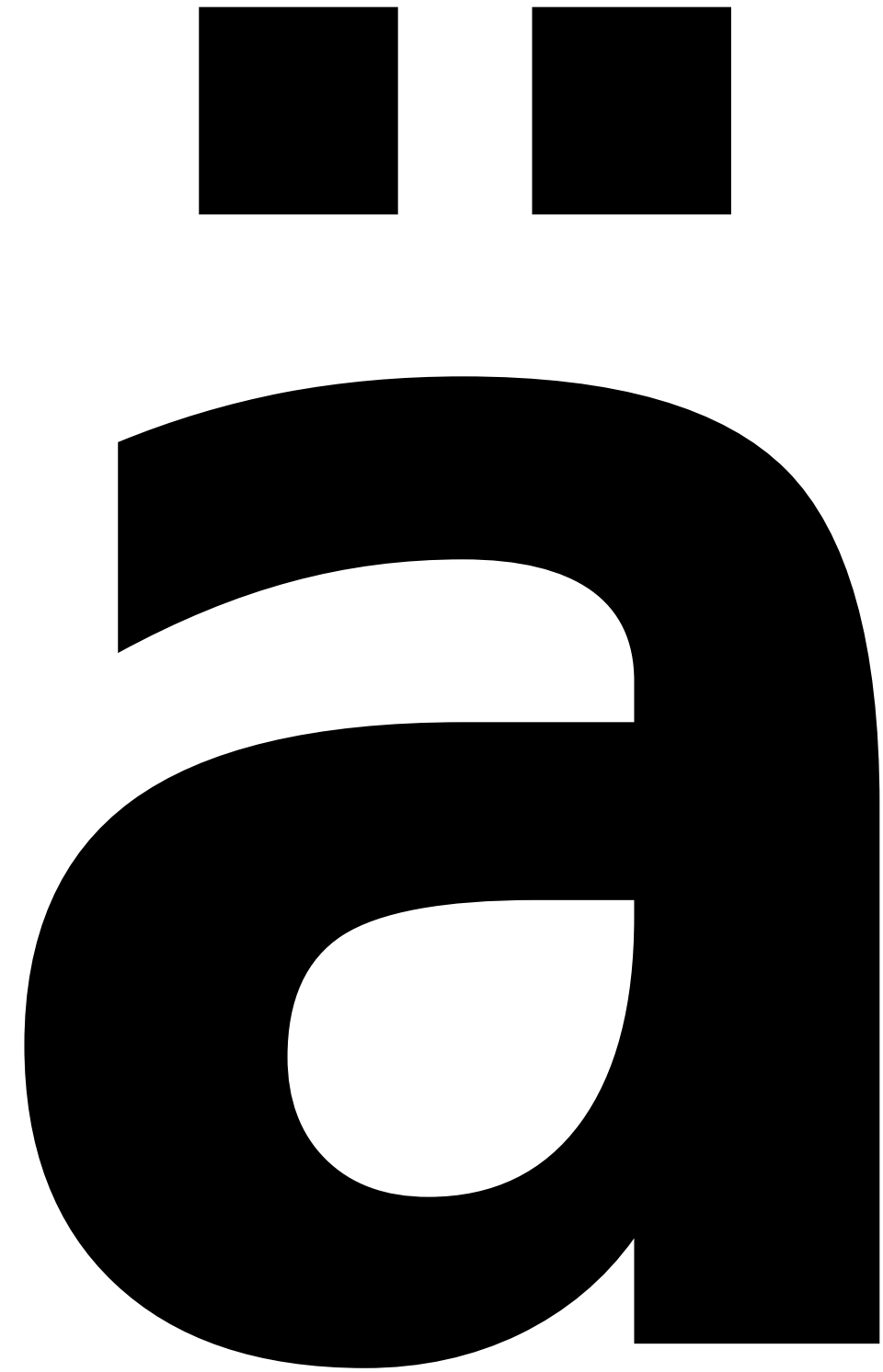




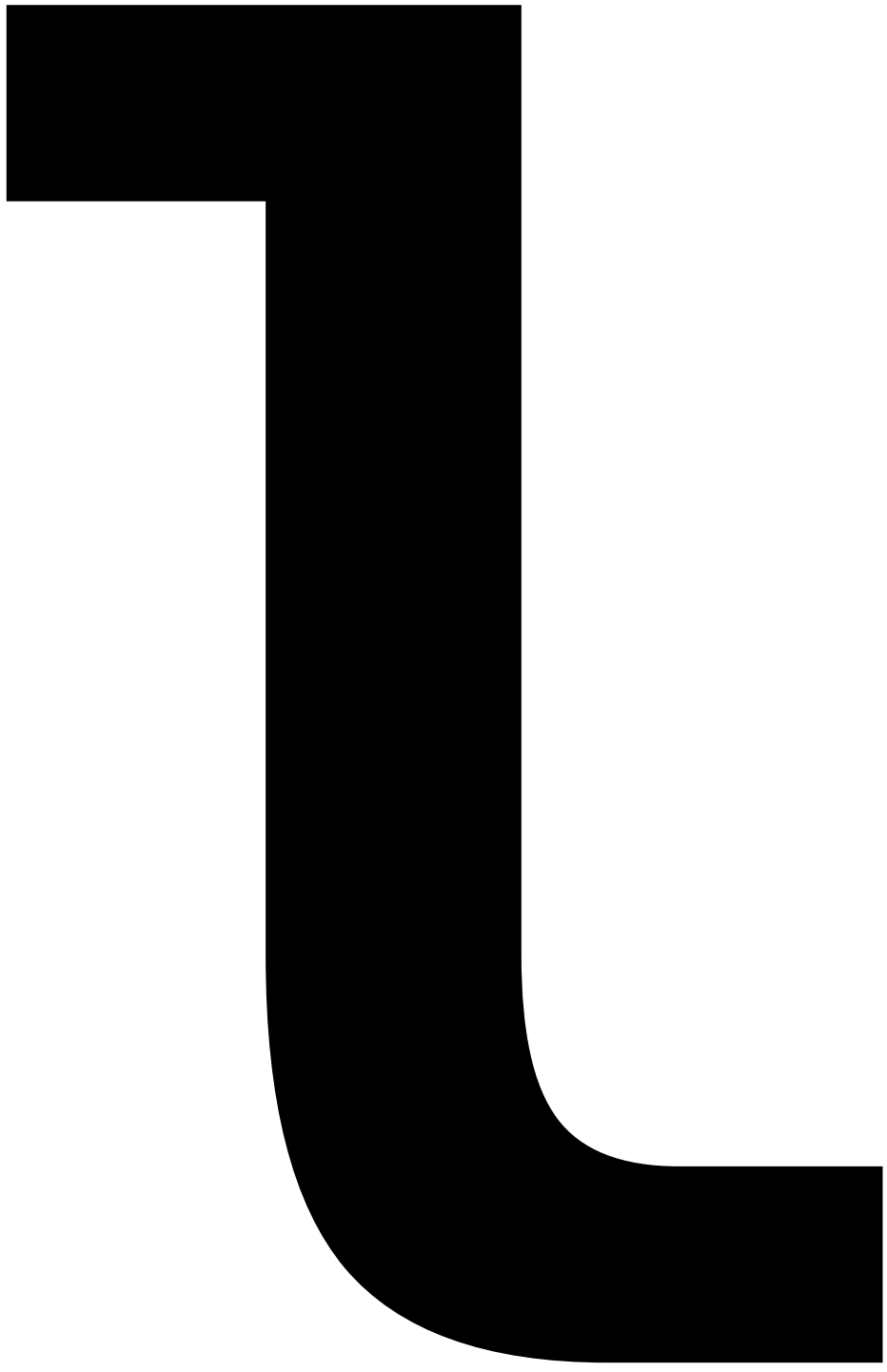
S

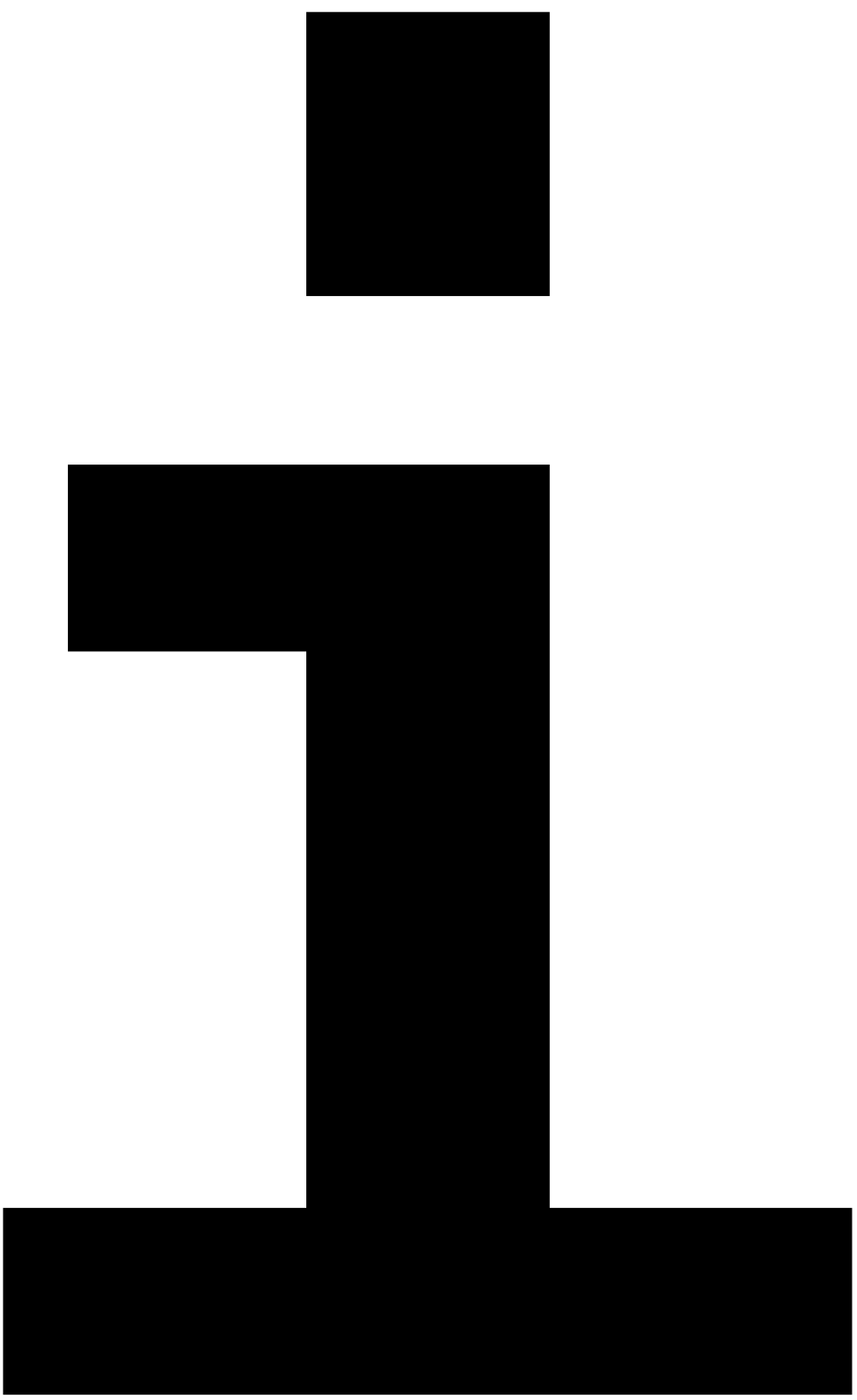


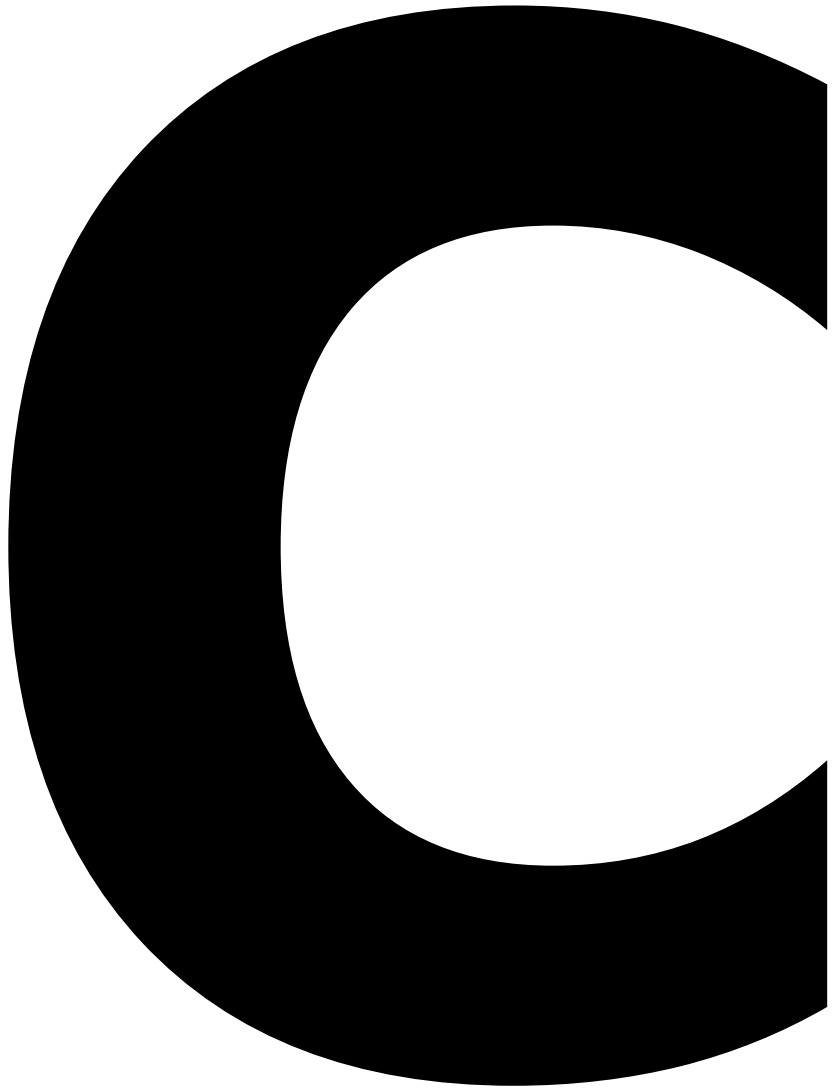


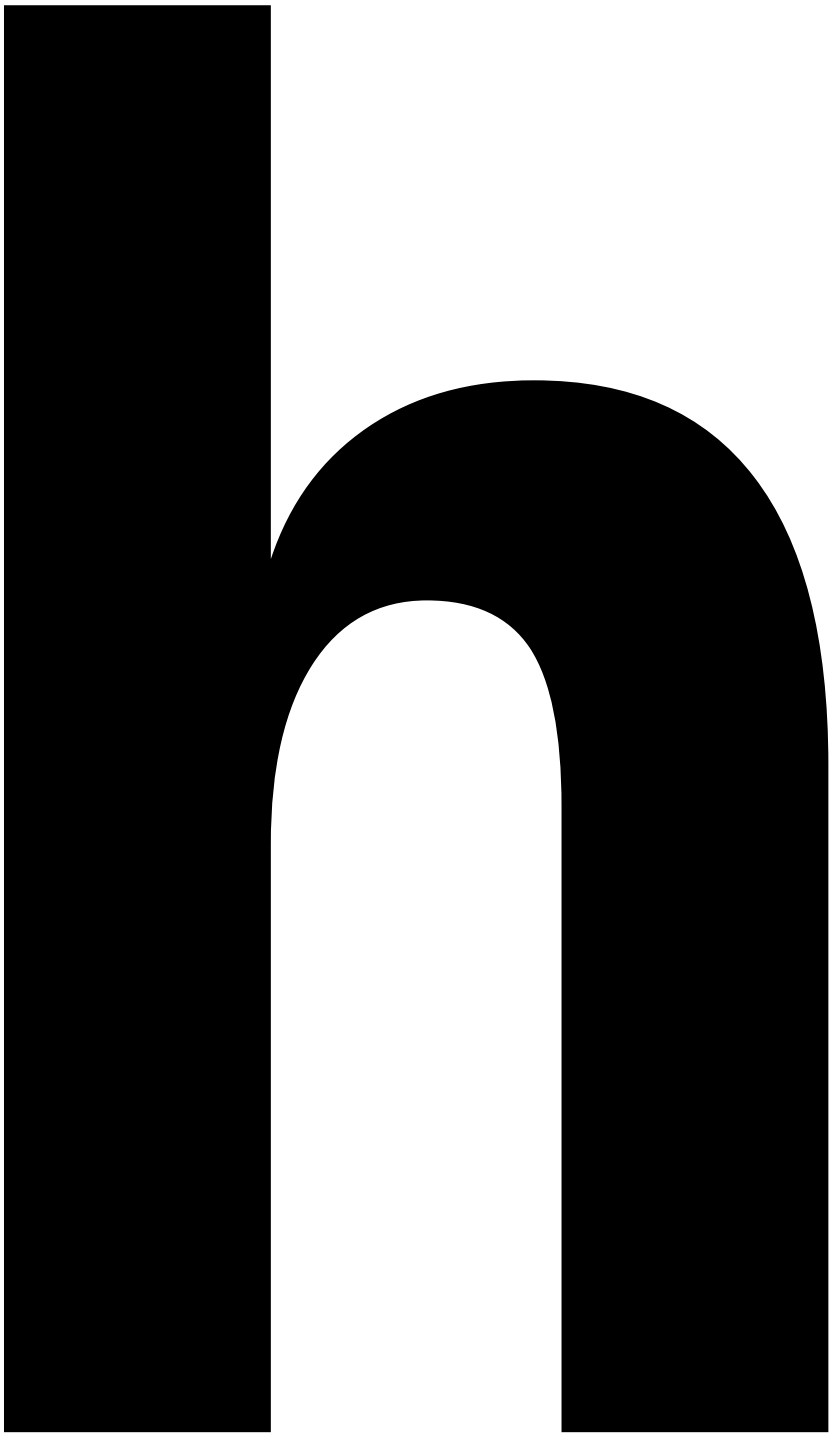


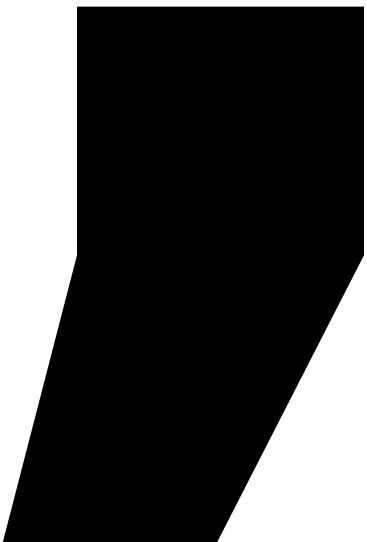
d

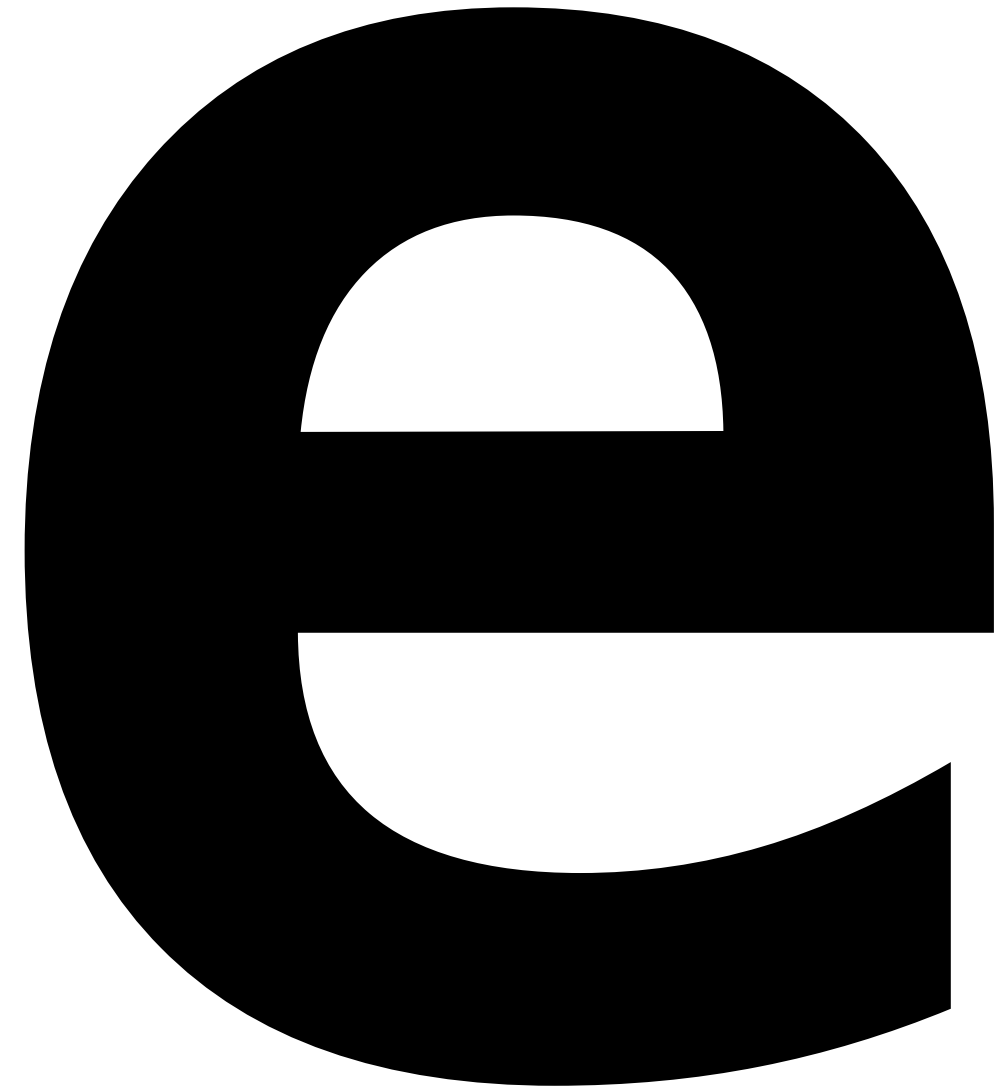


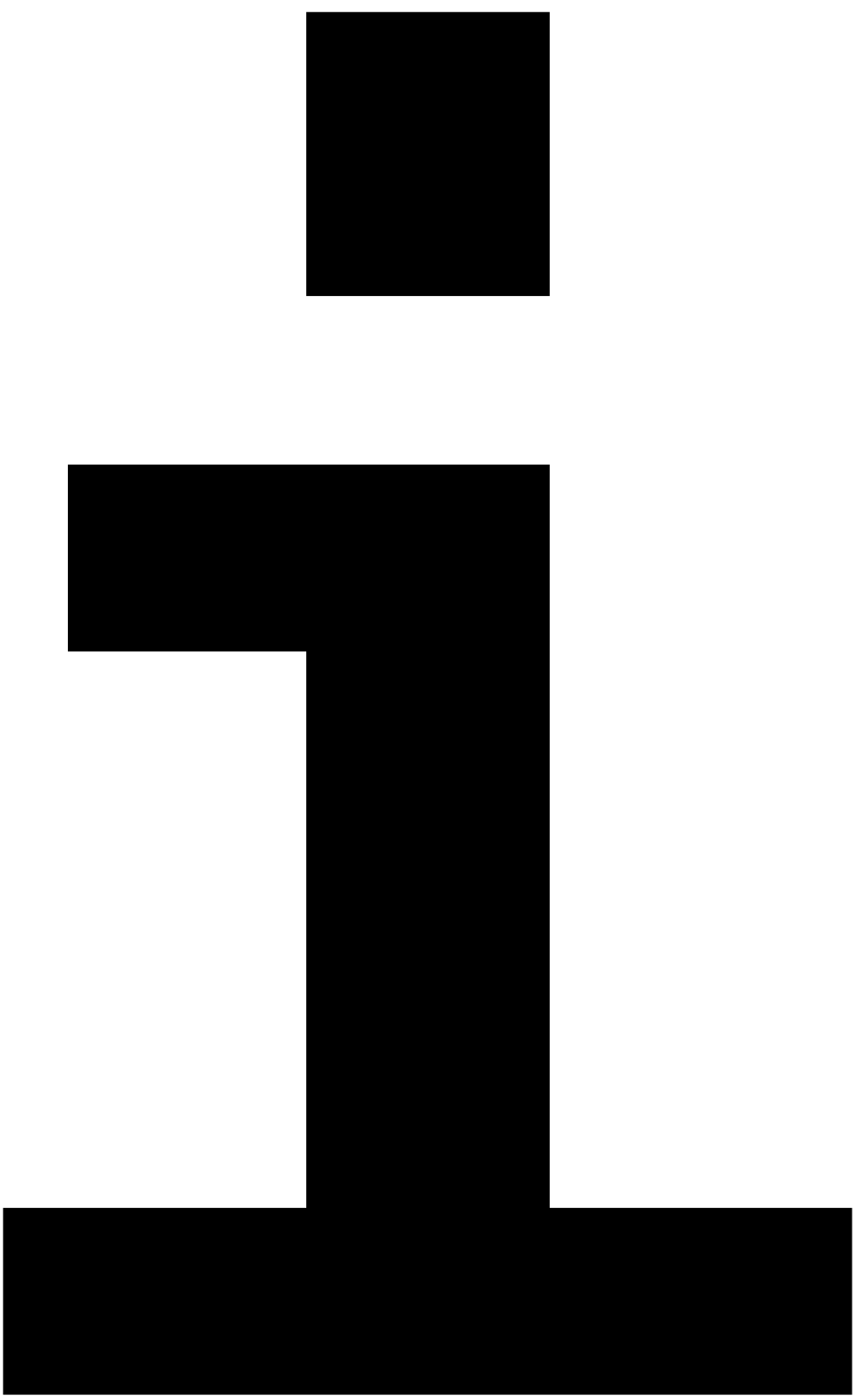


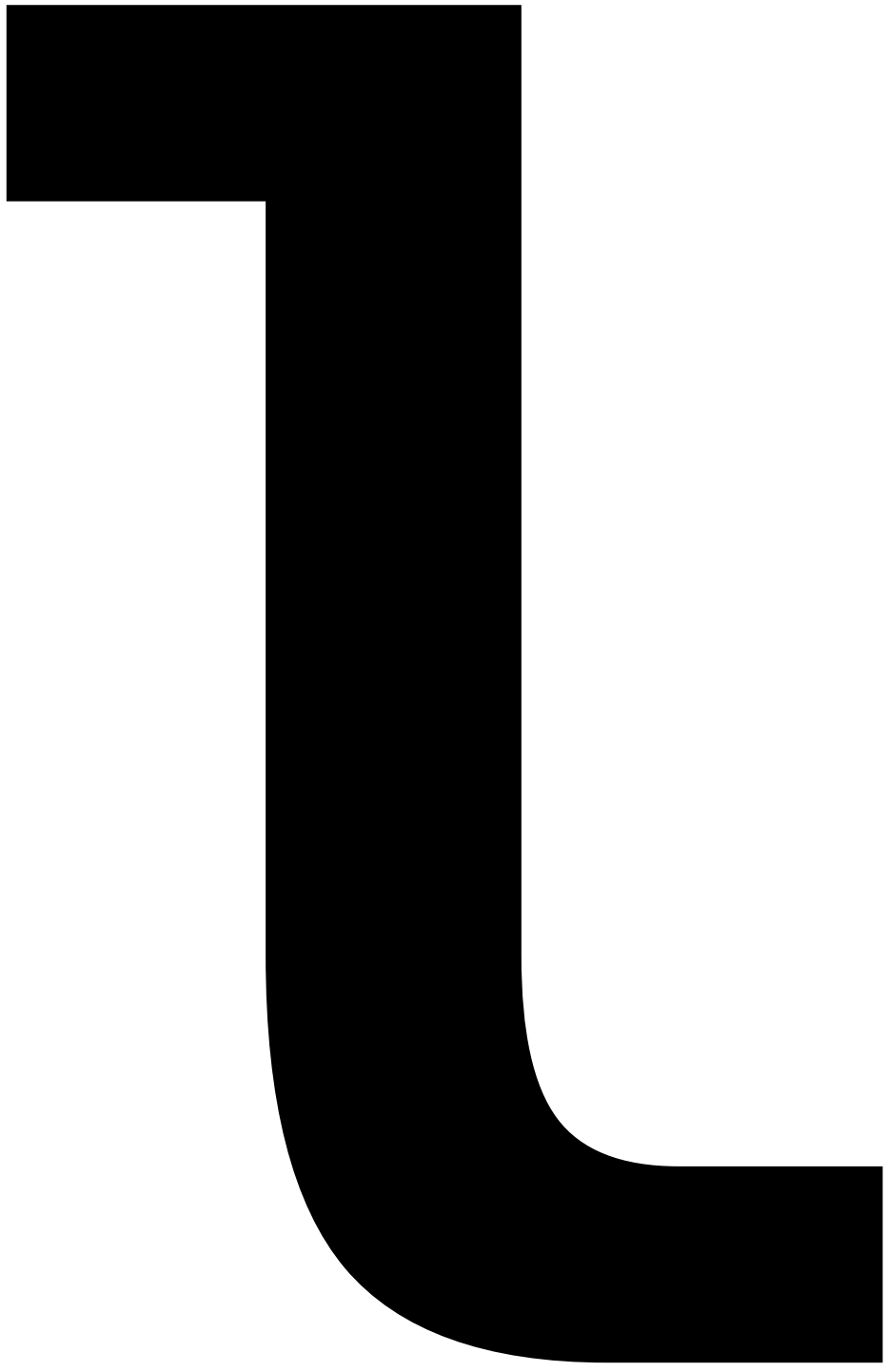




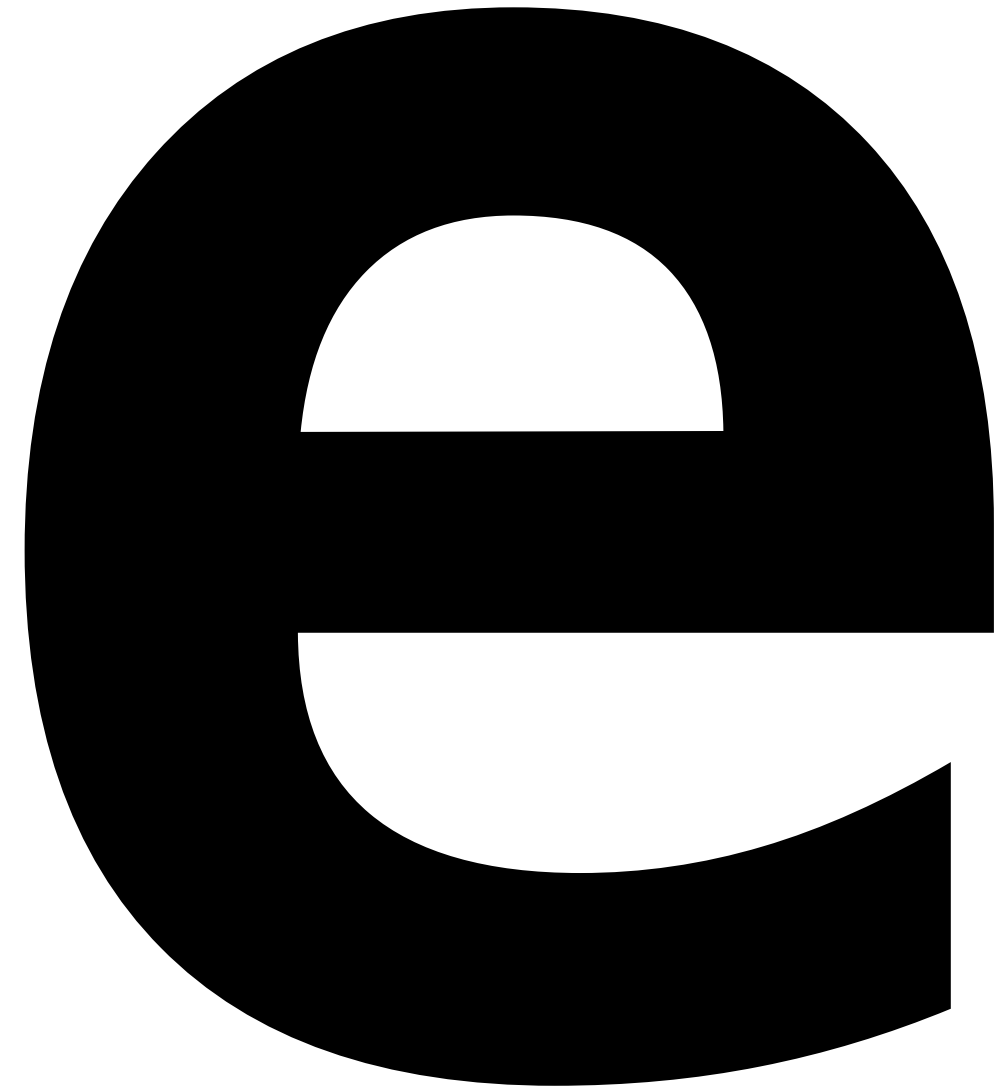


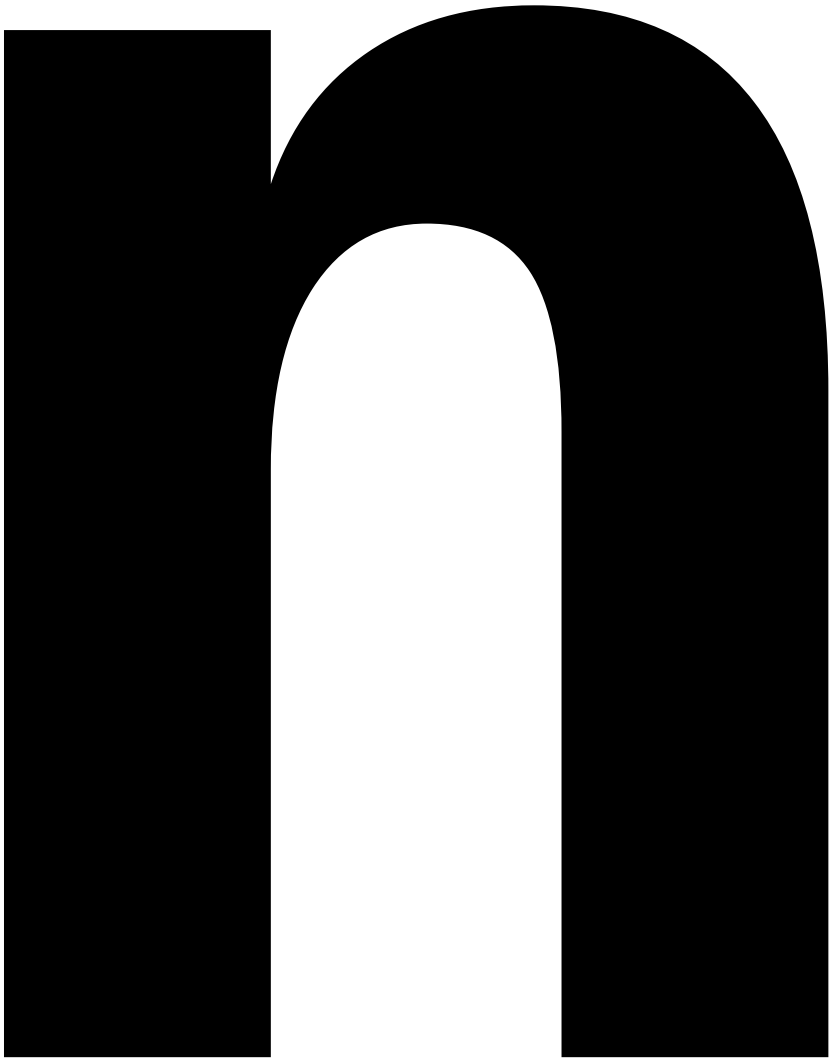


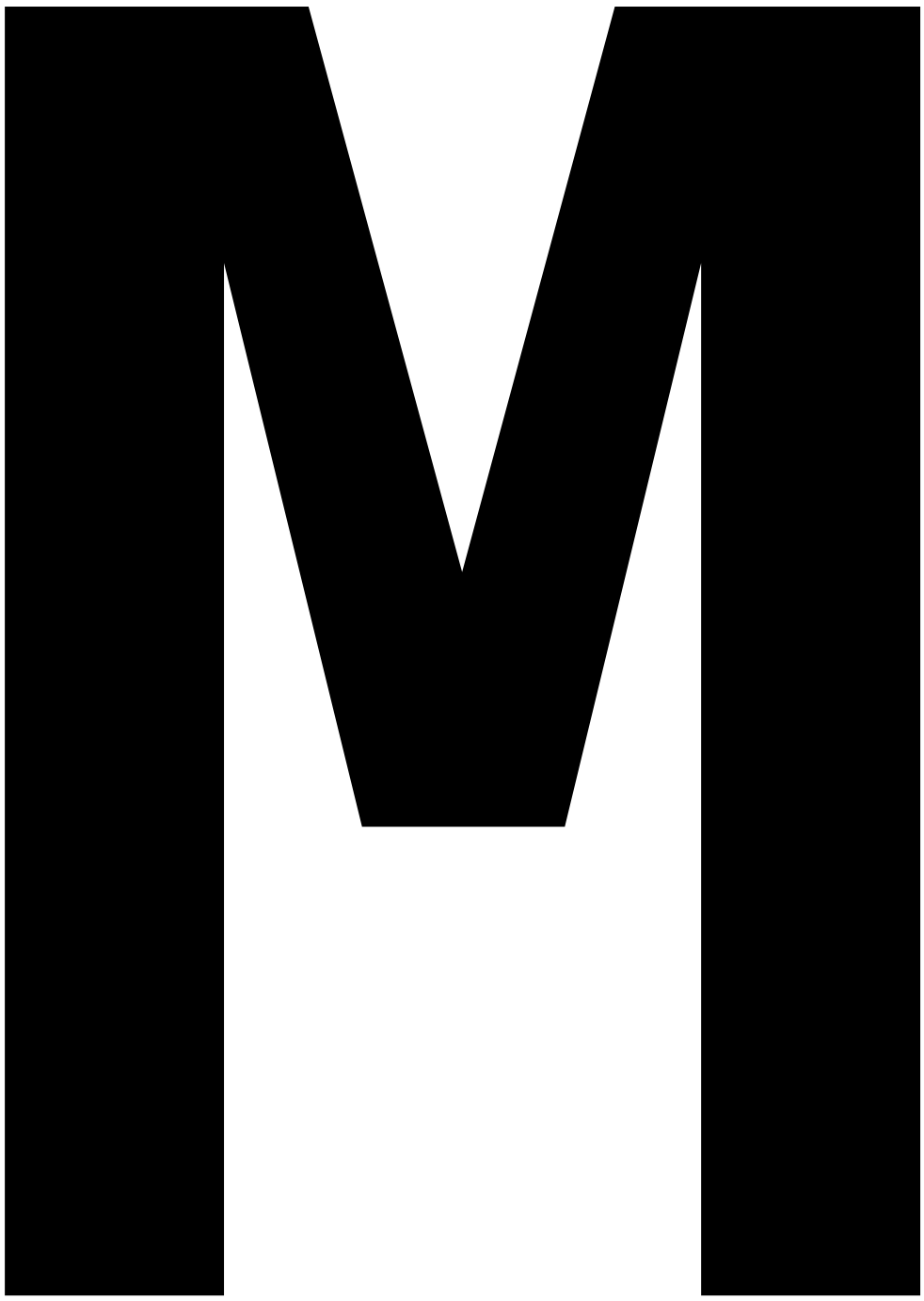


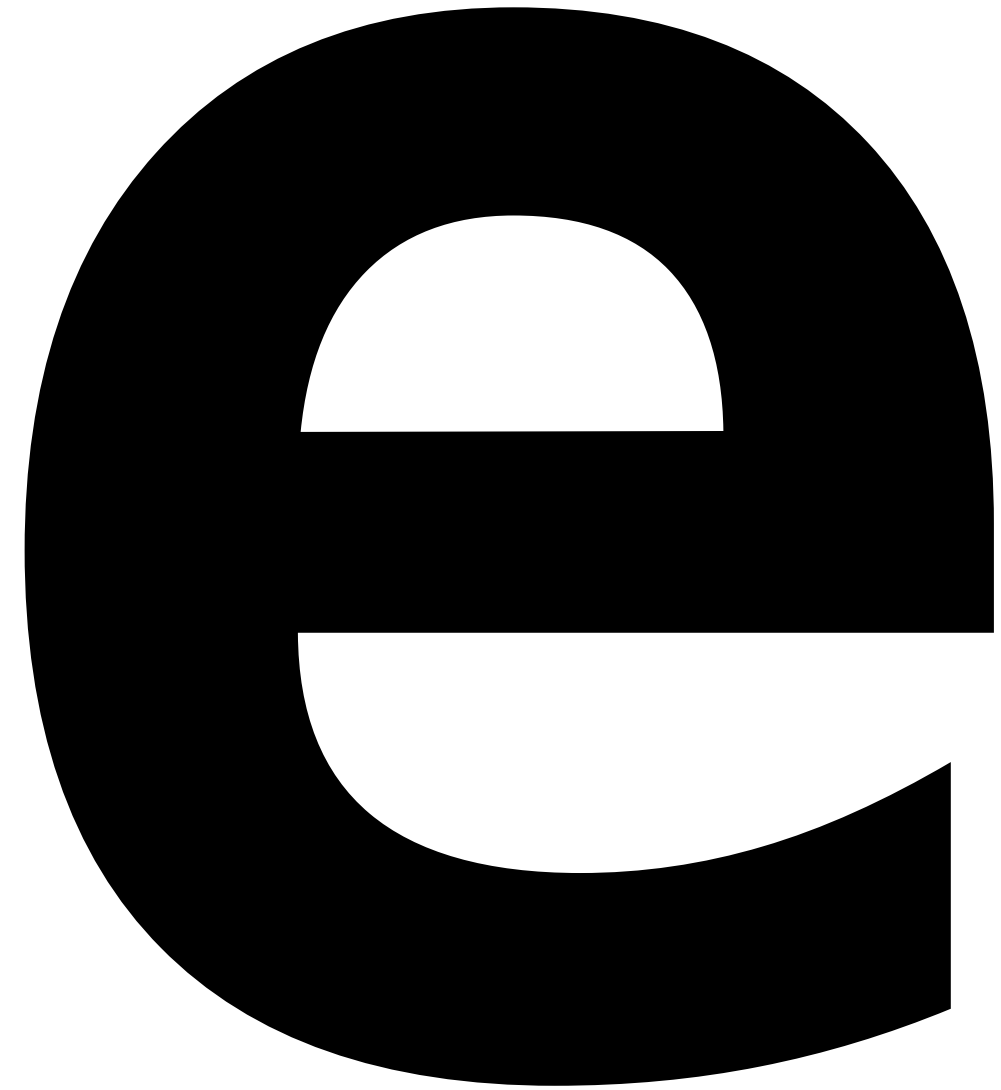


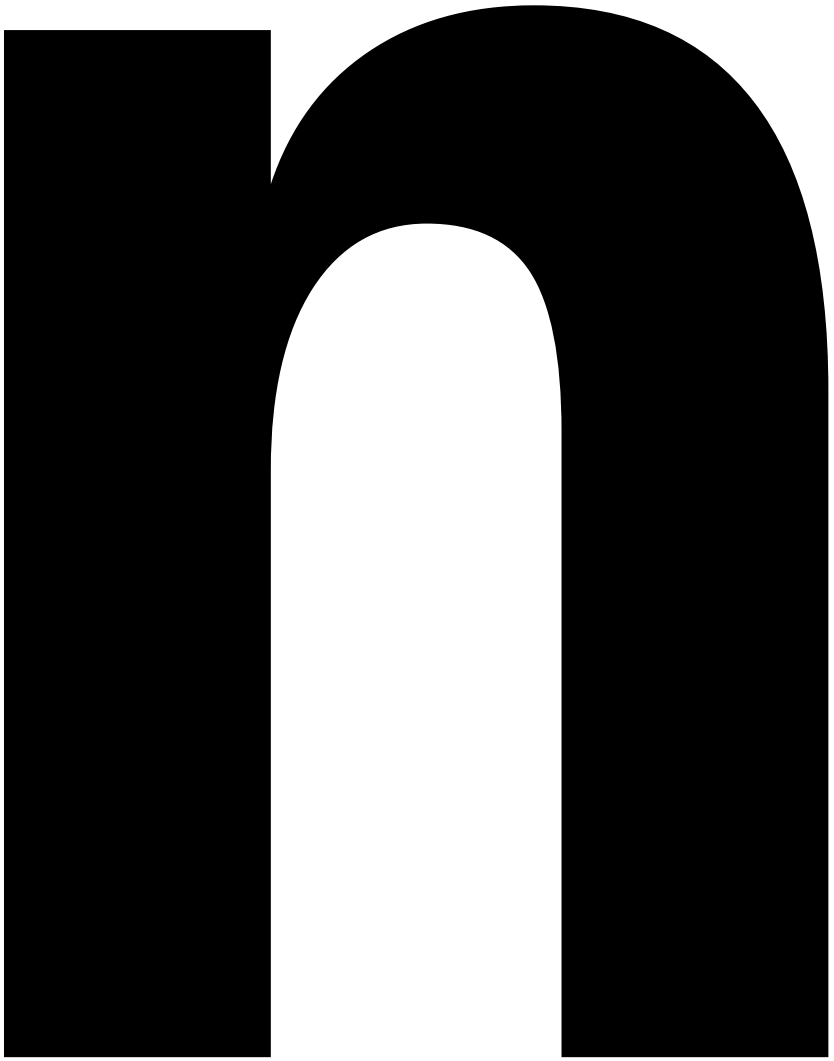
d



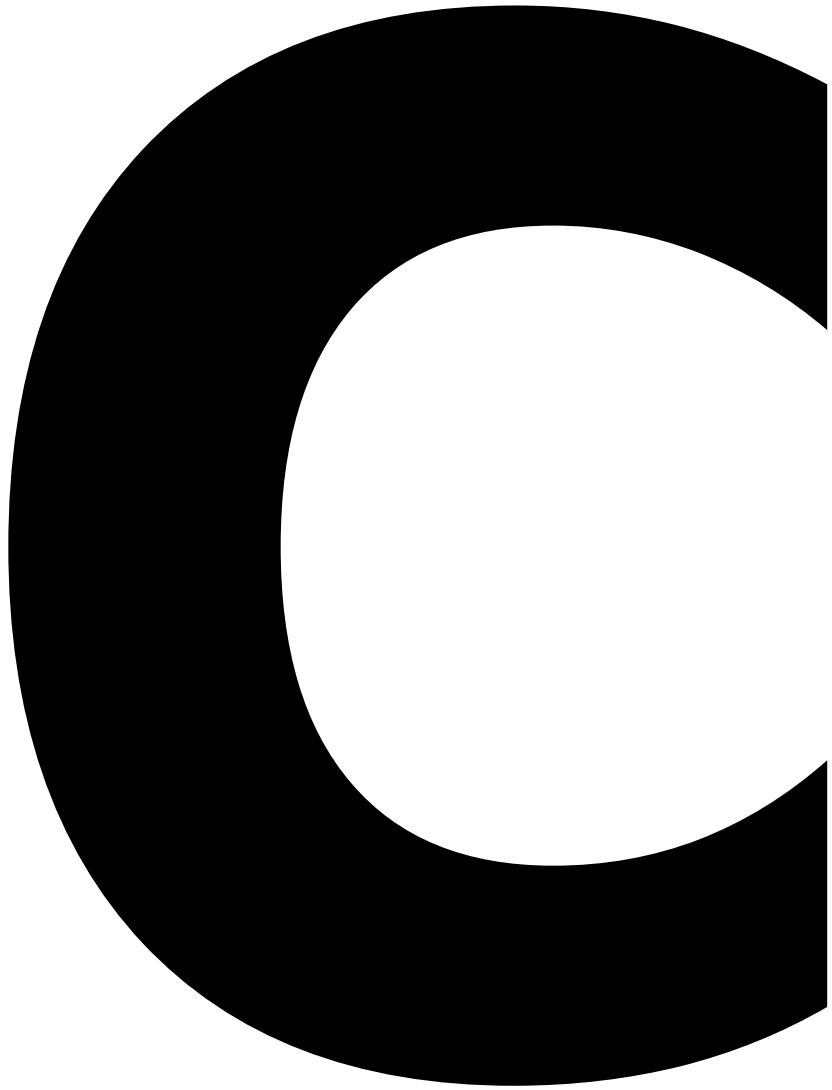


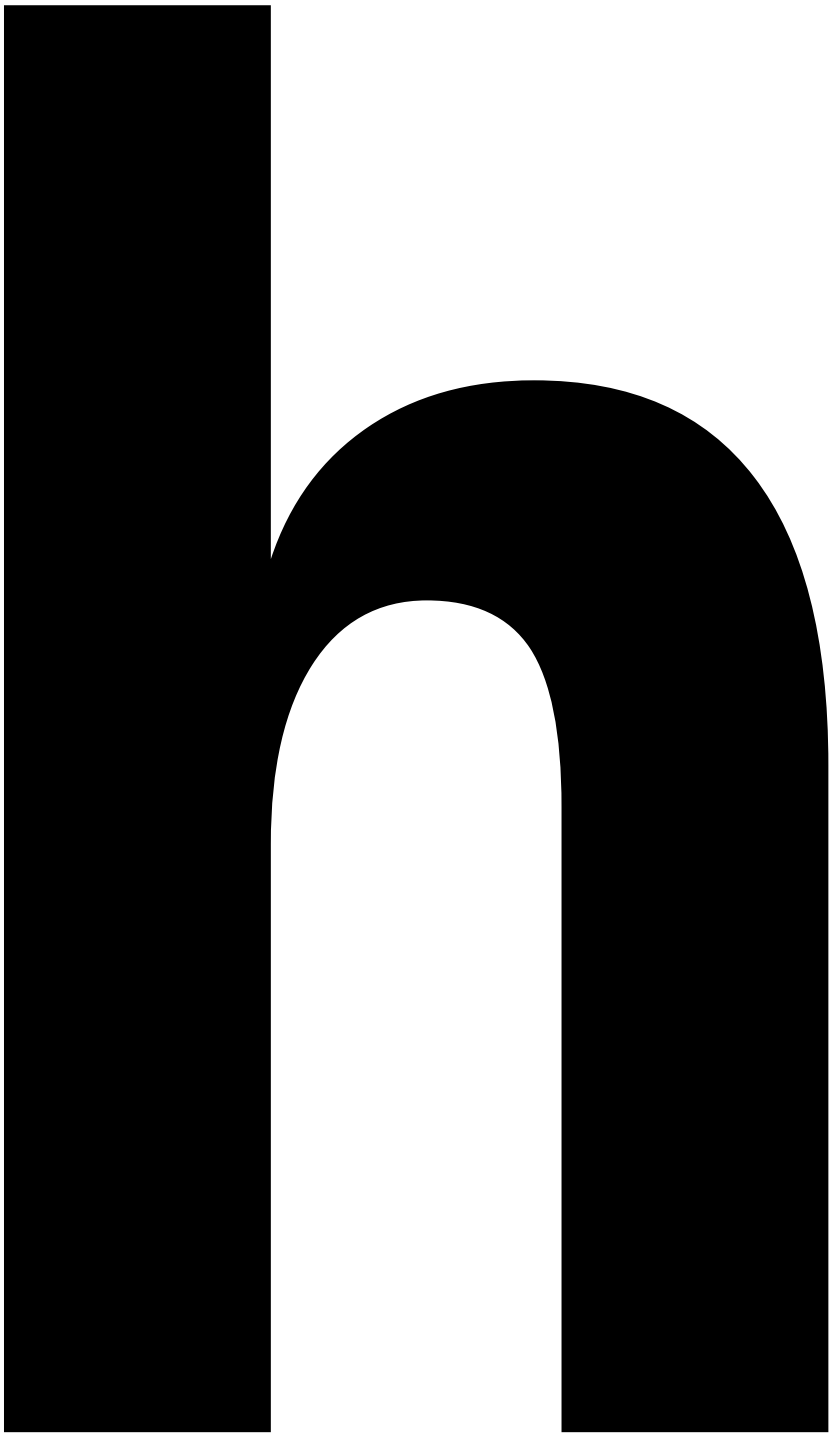


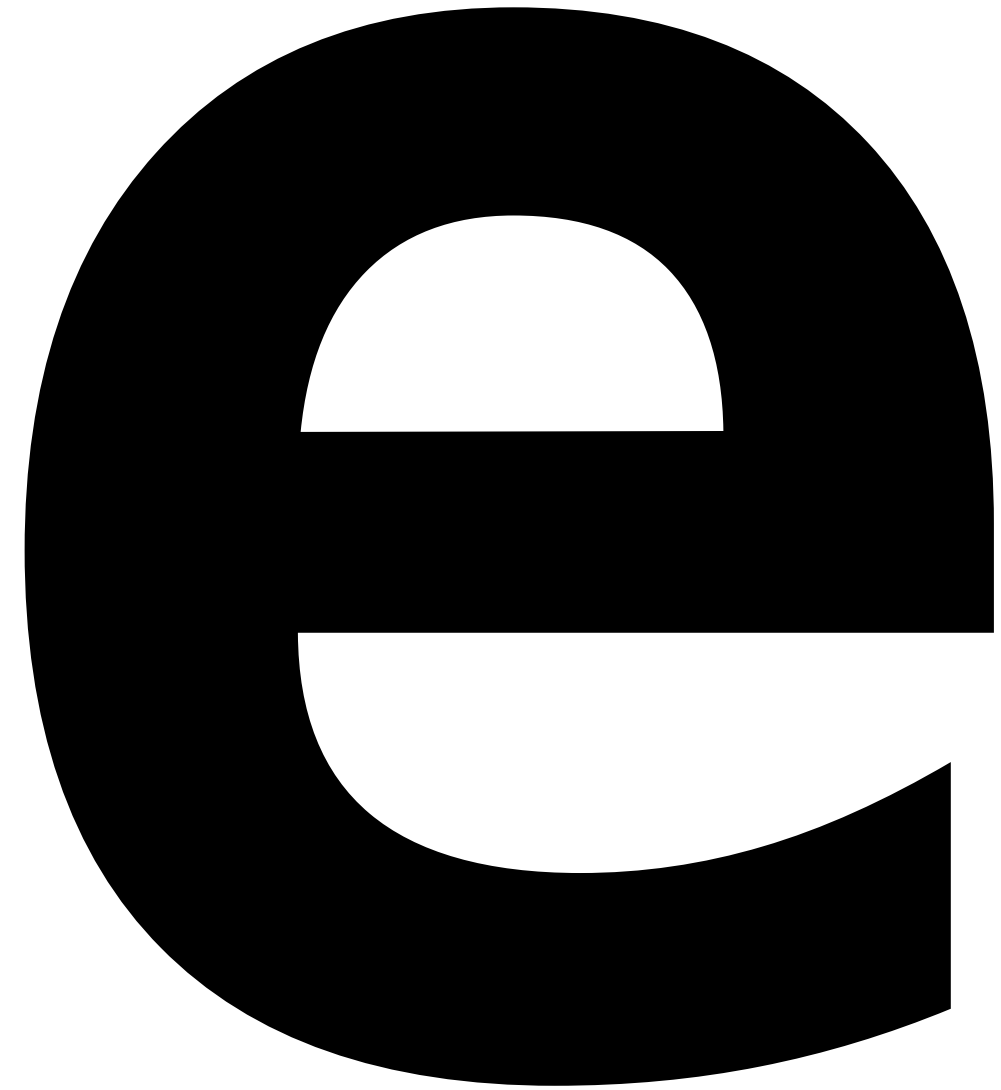


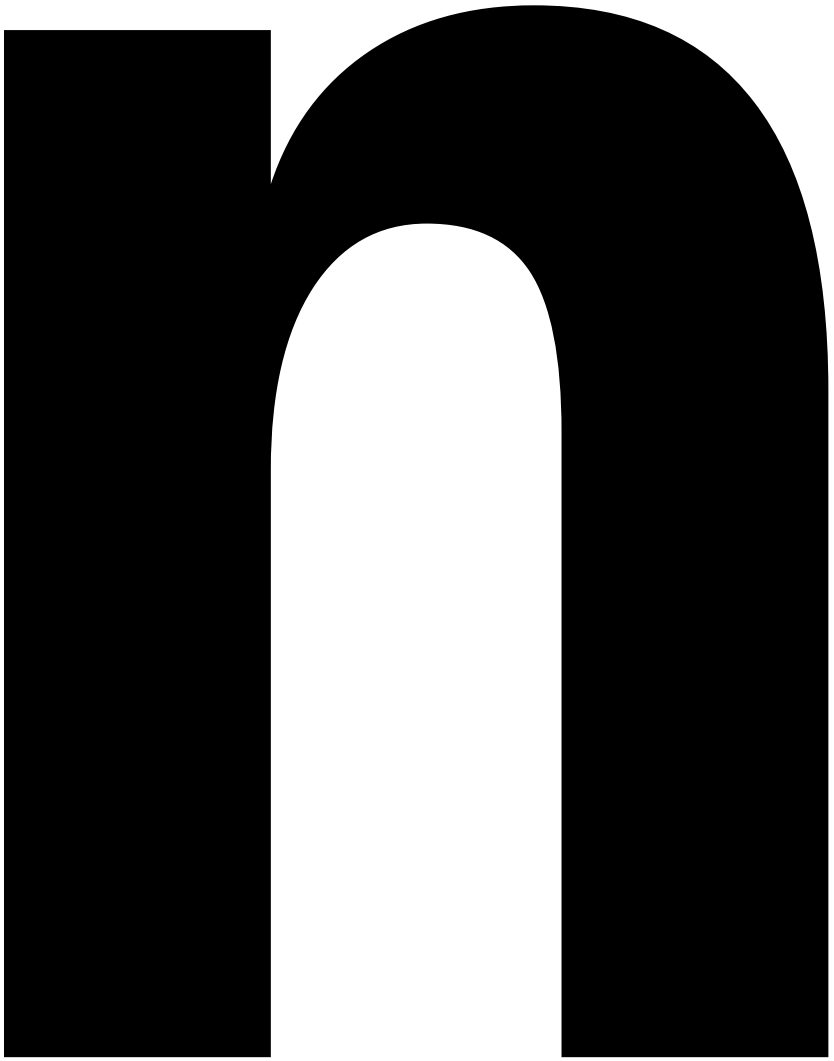


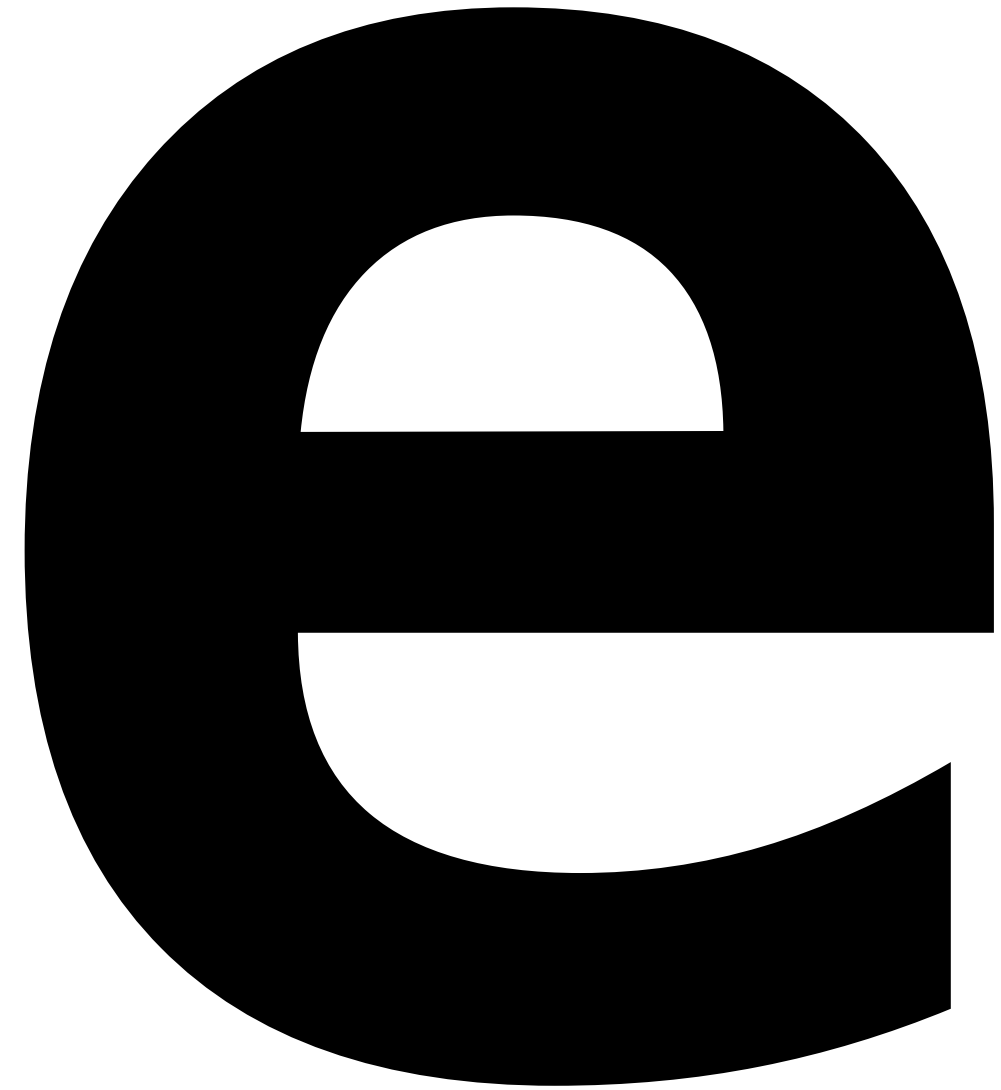
S

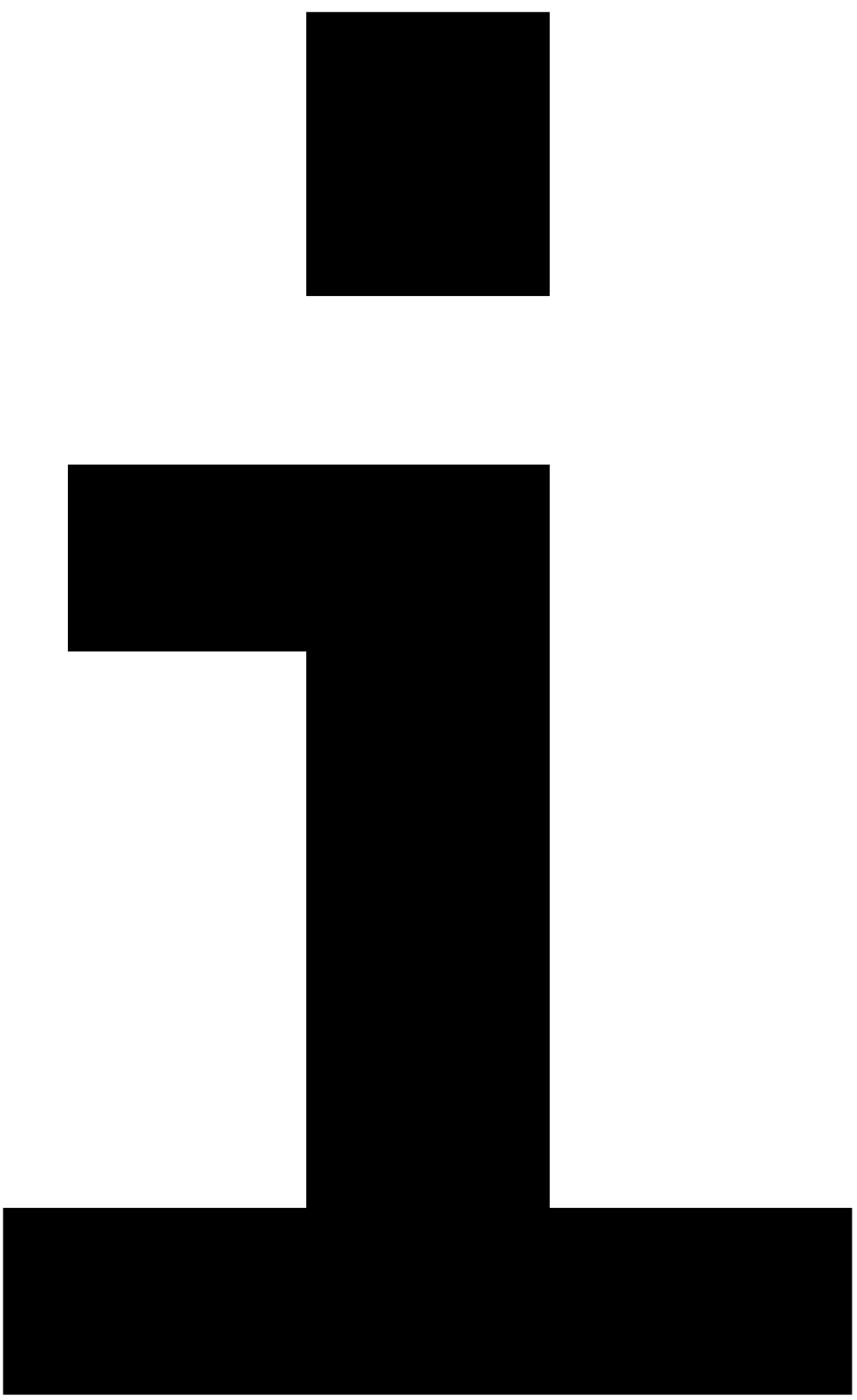


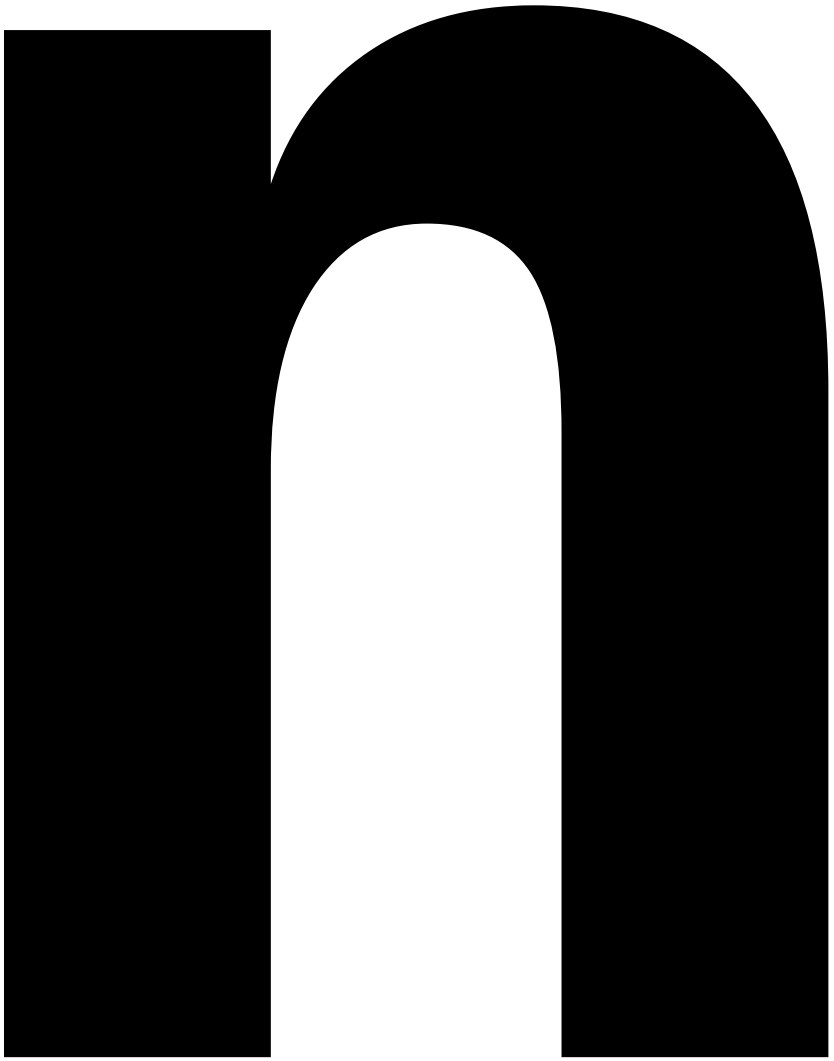


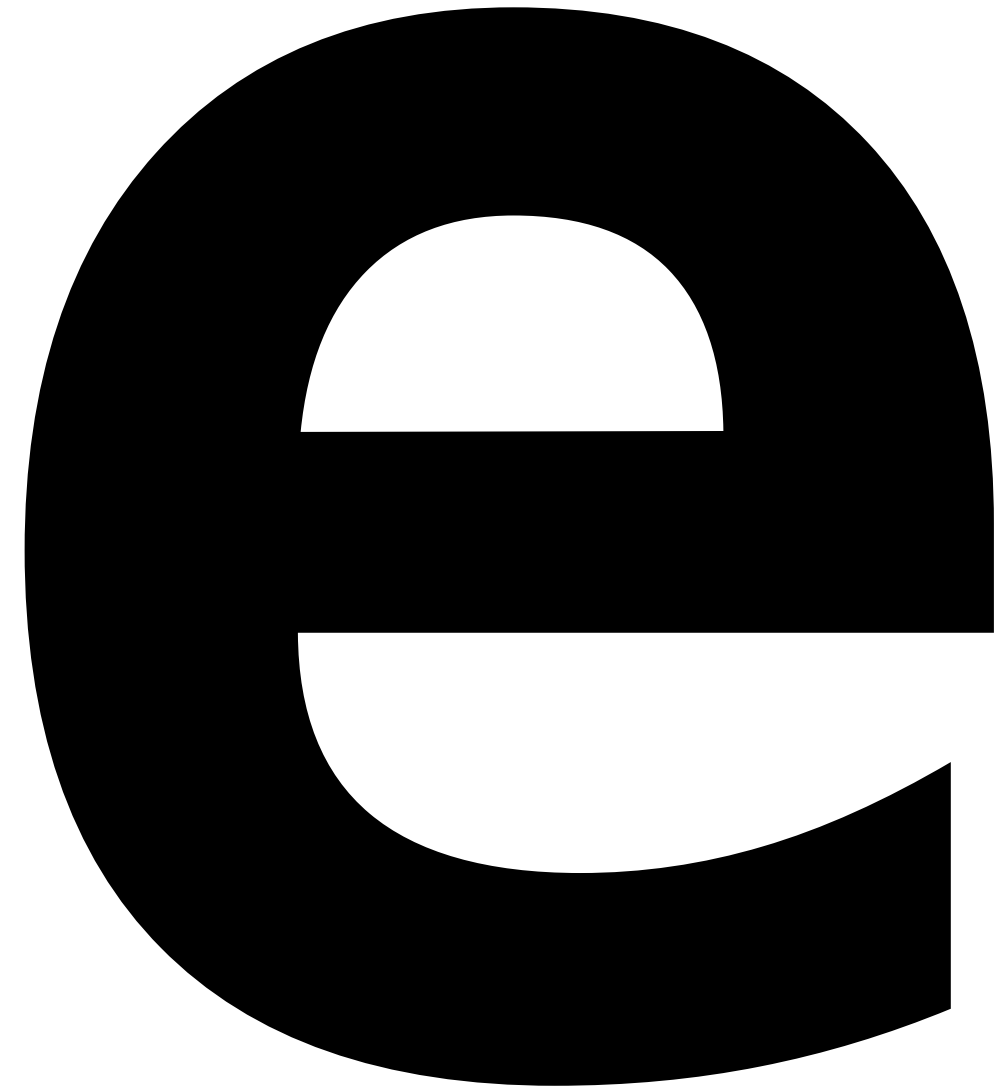


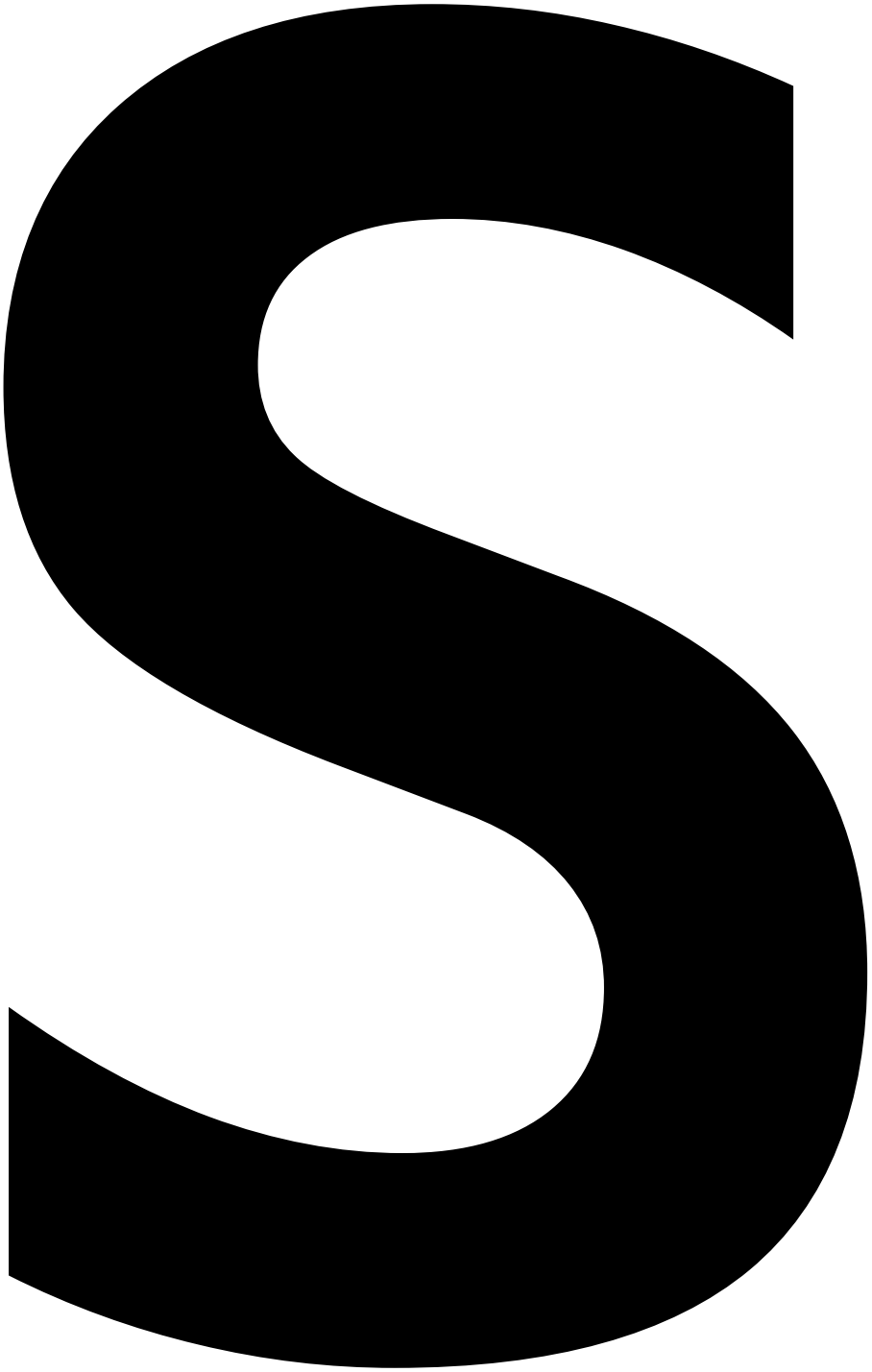


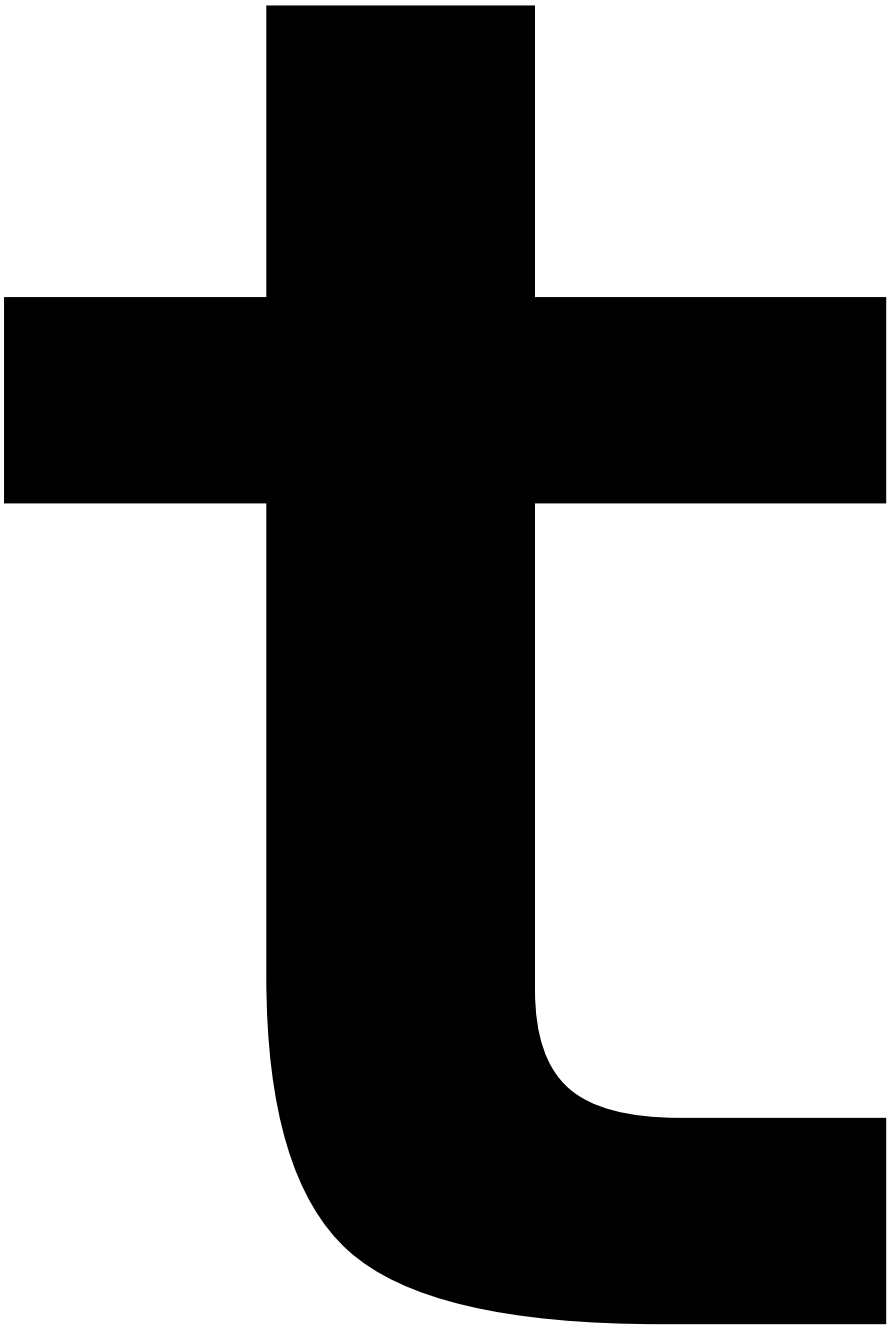


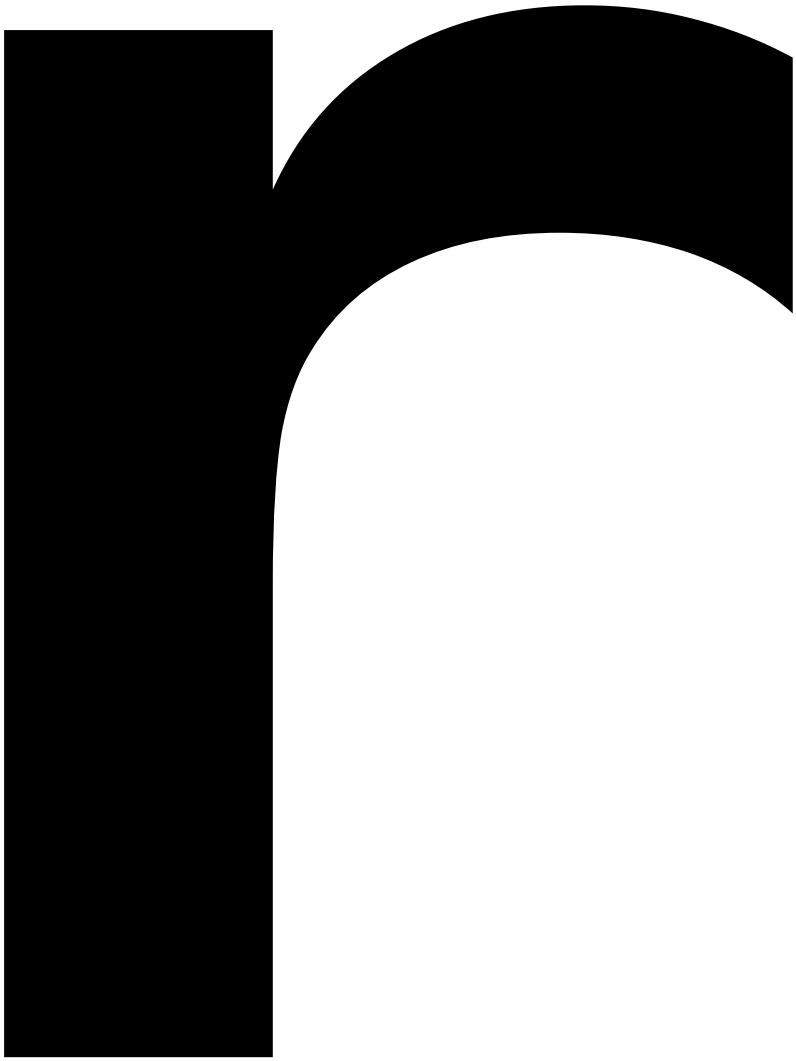


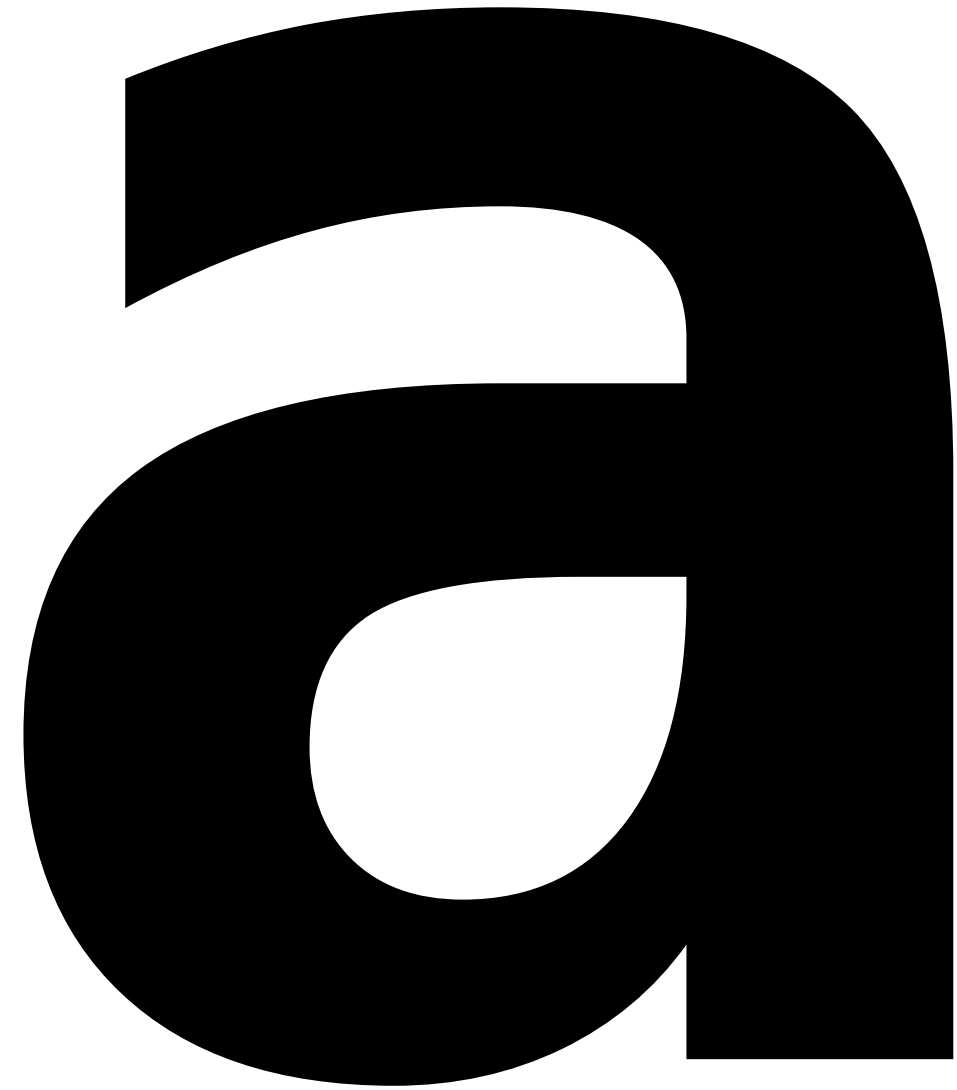


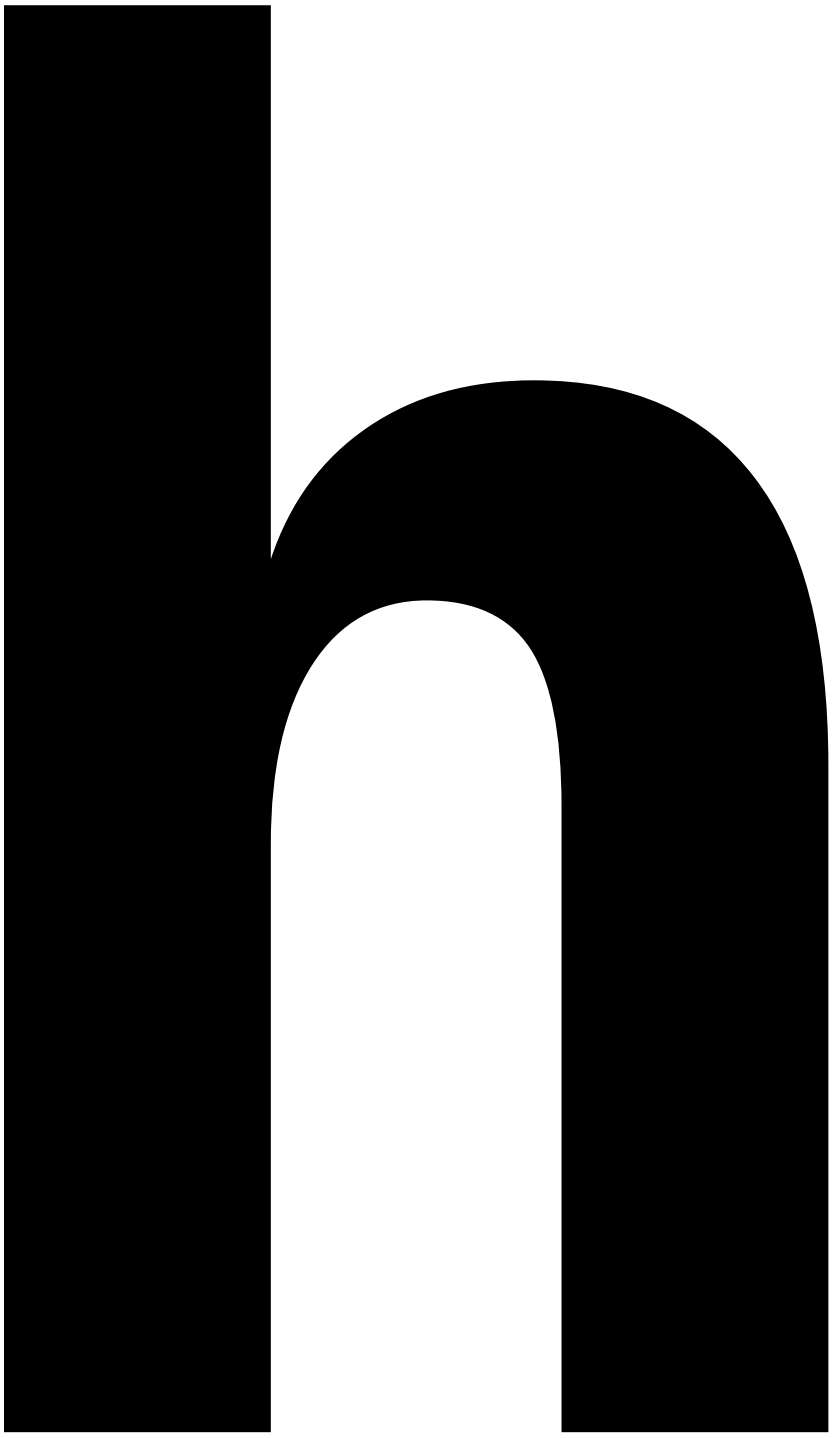


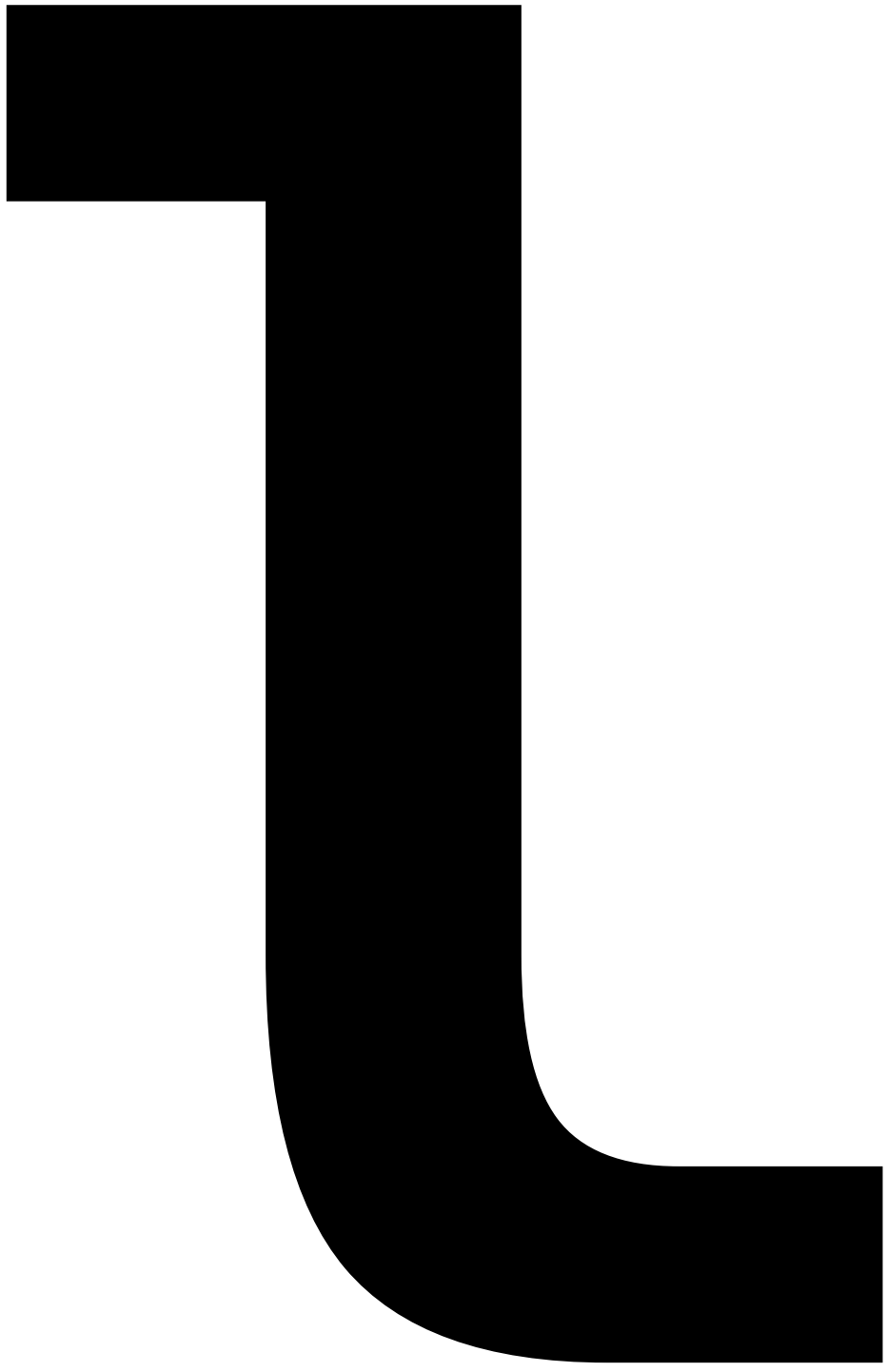


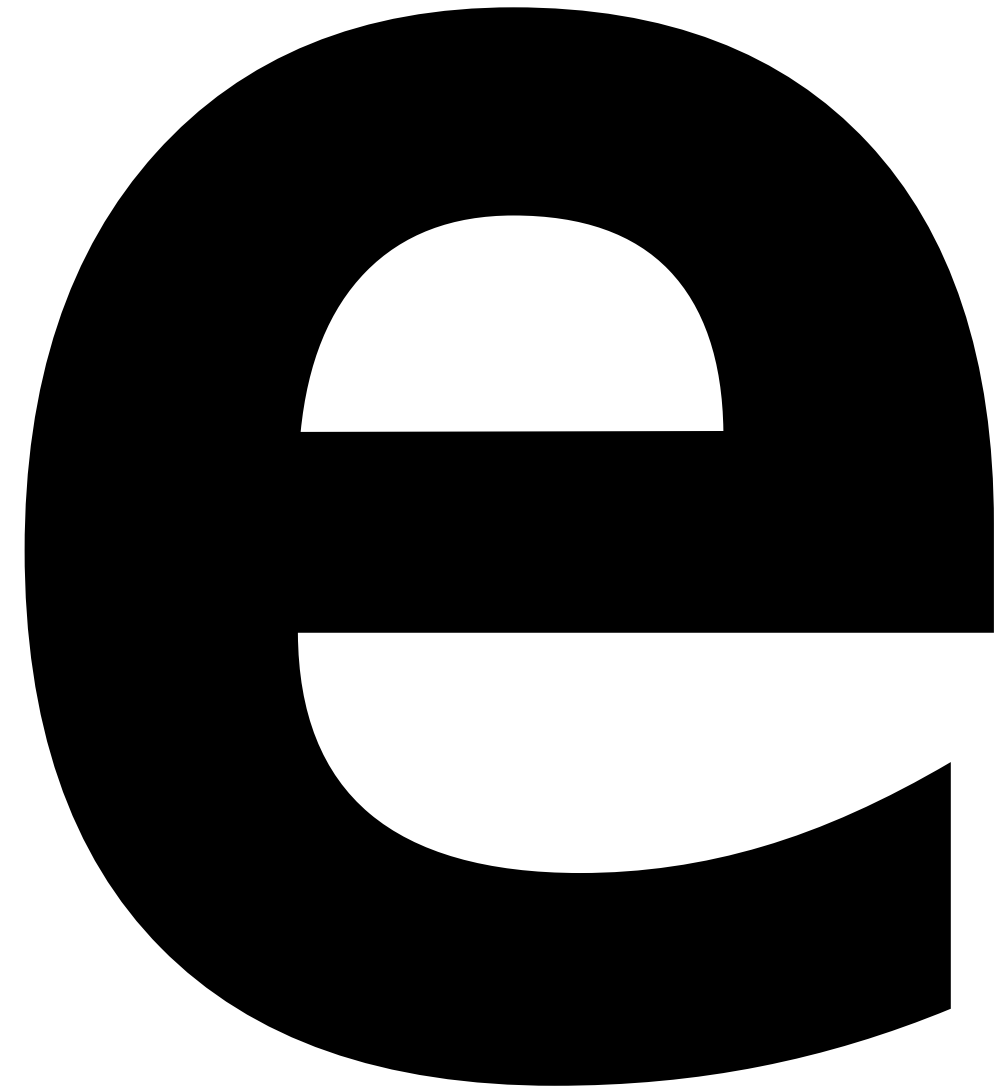


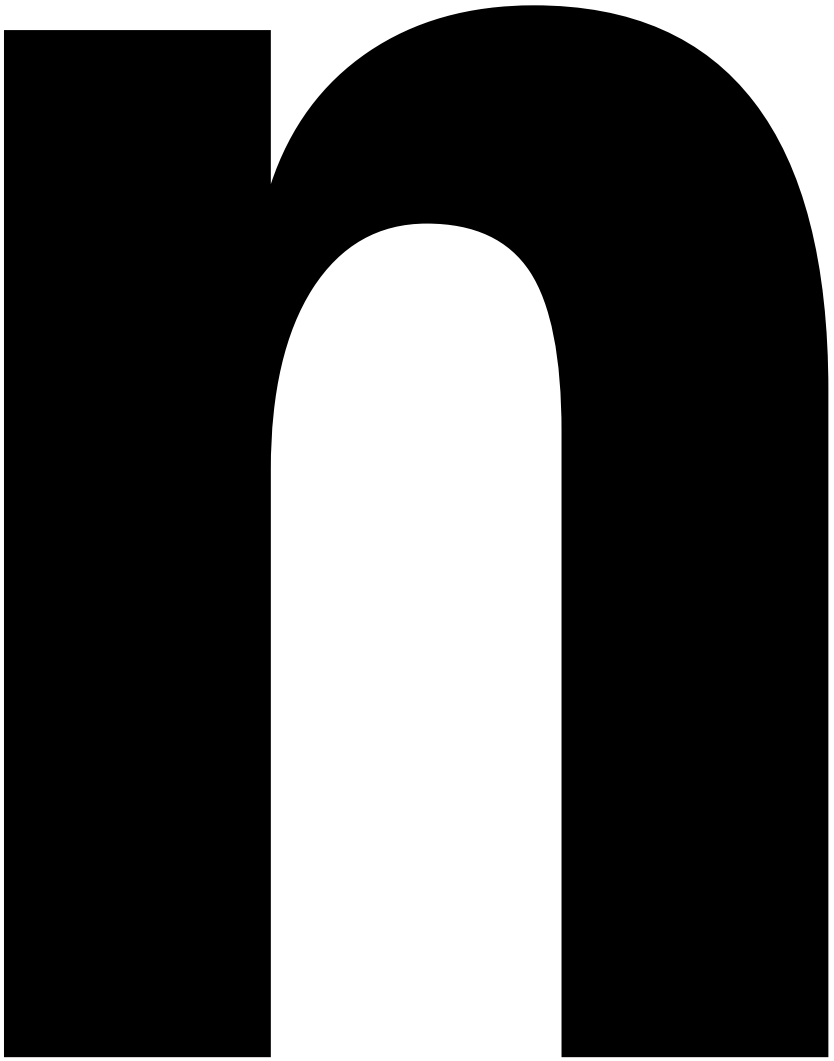




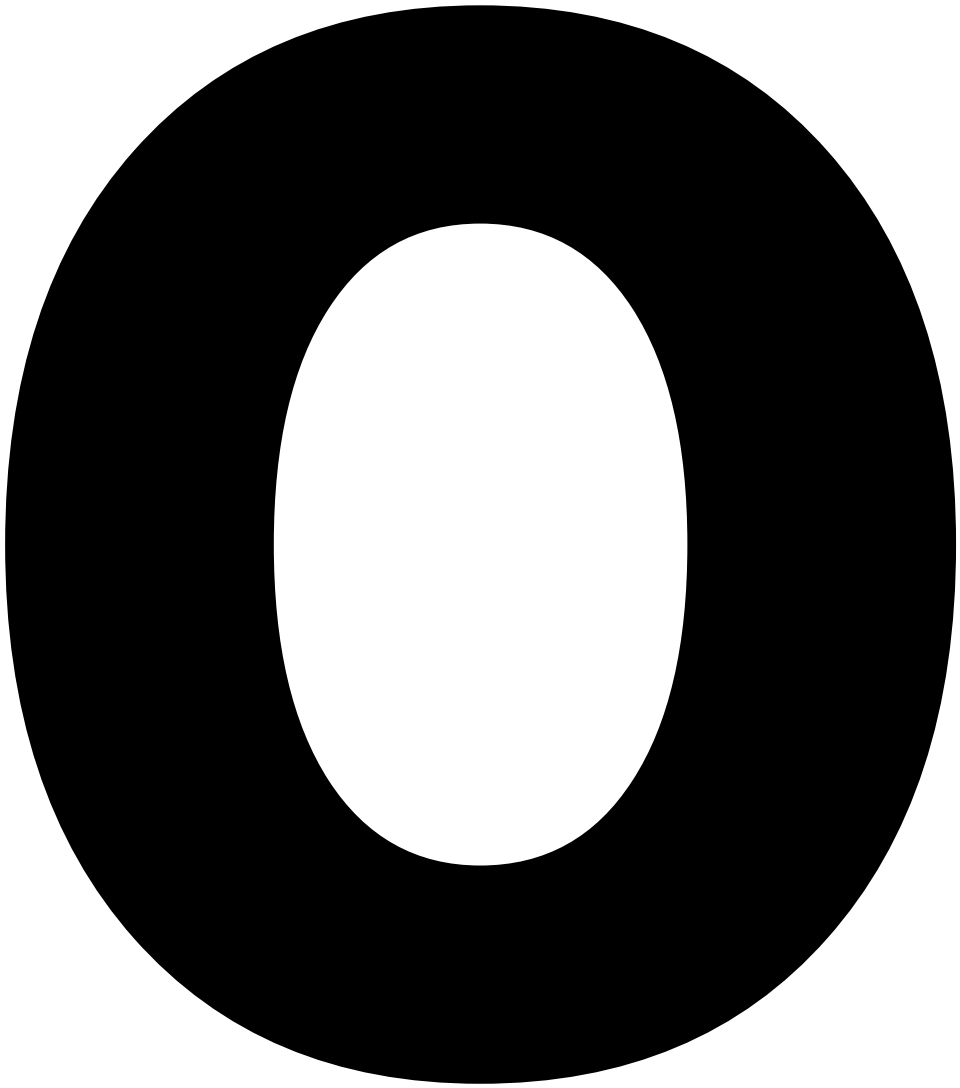




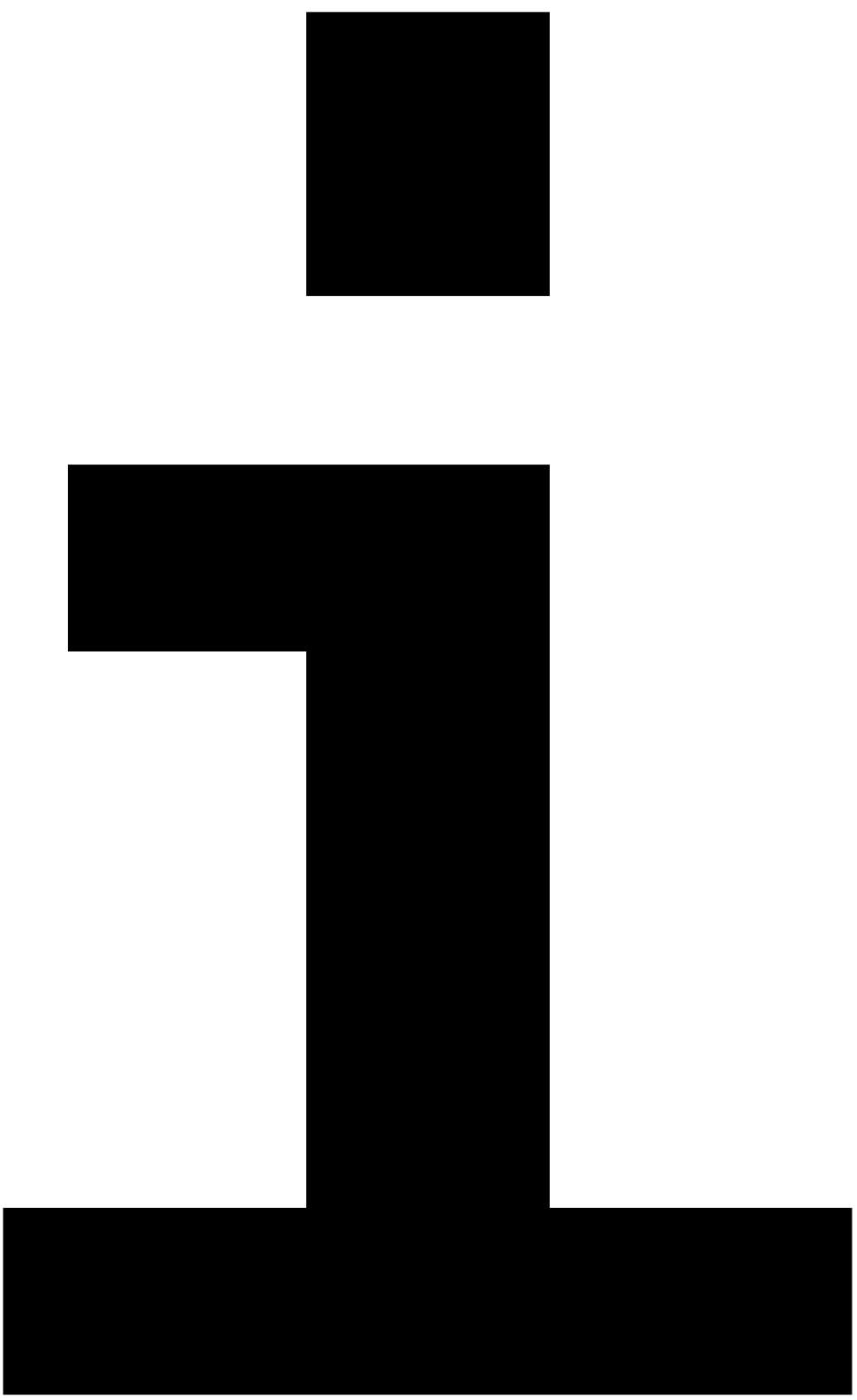




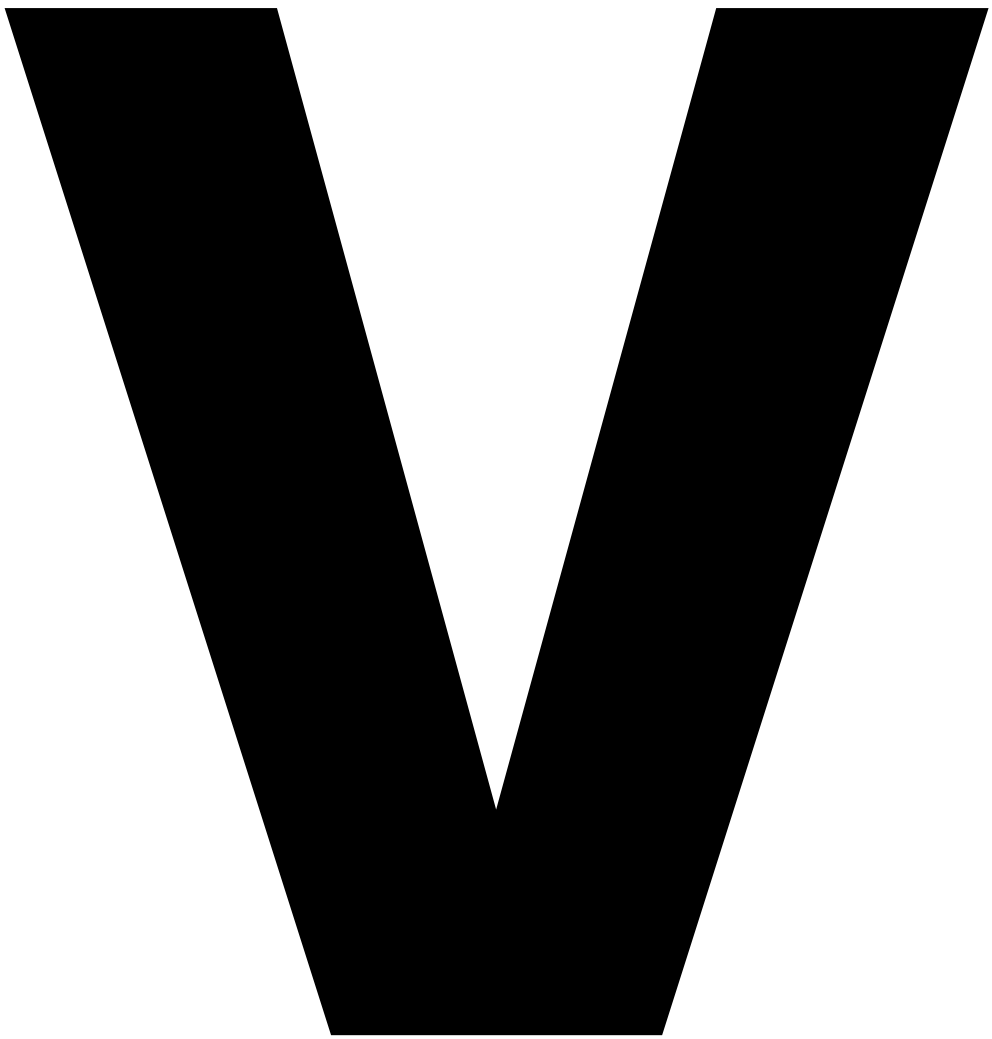
d

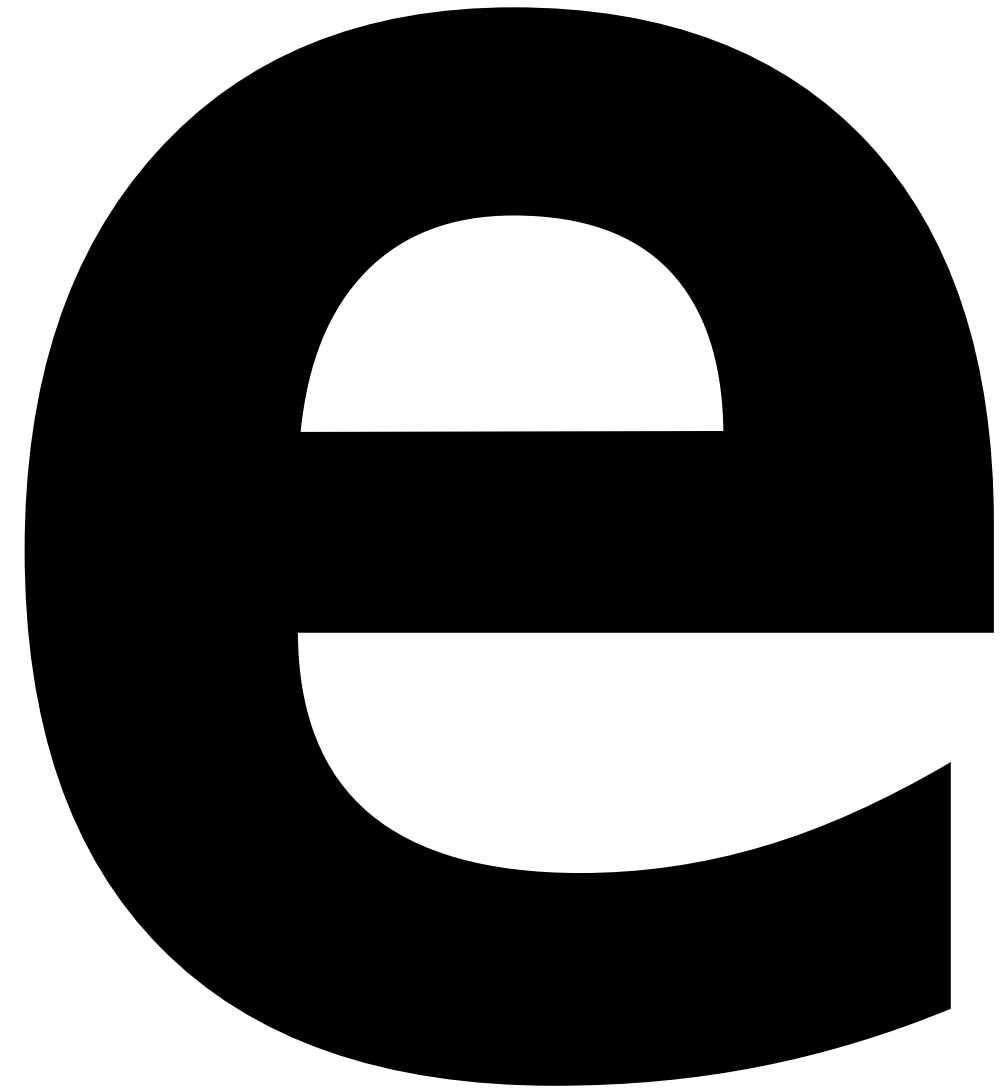


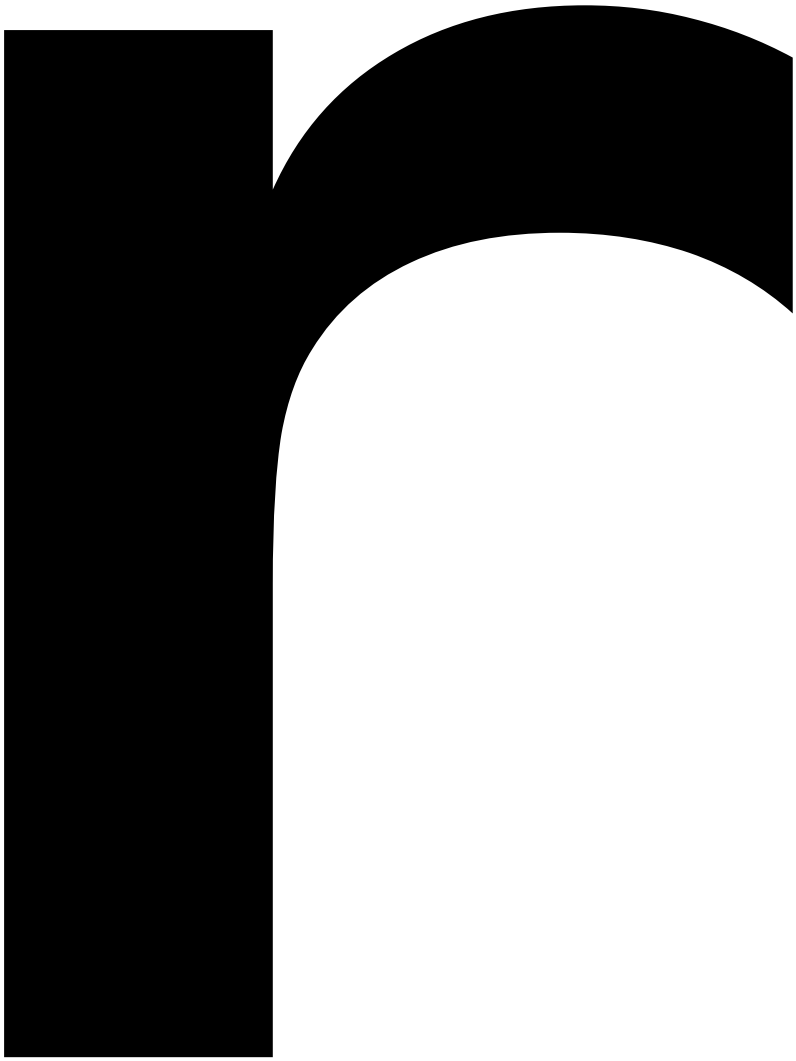
S

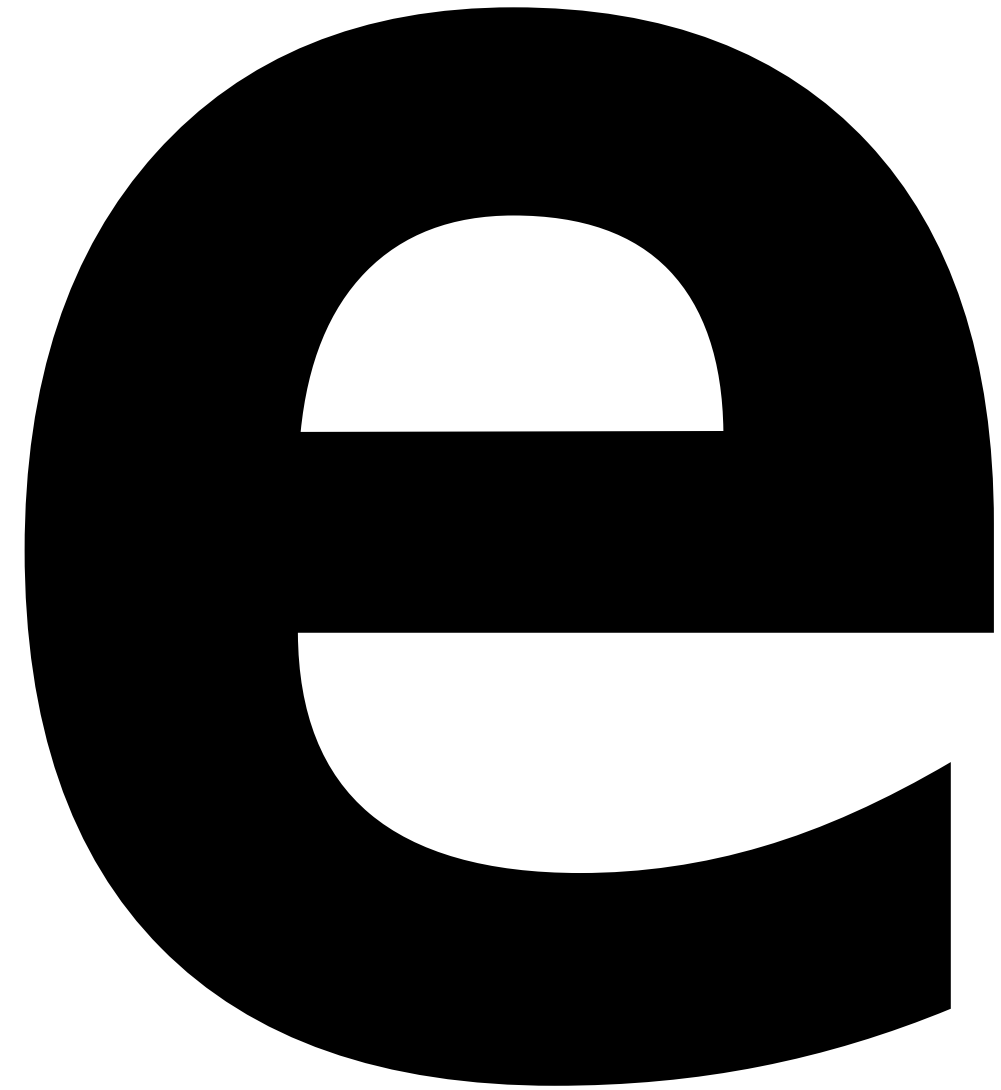


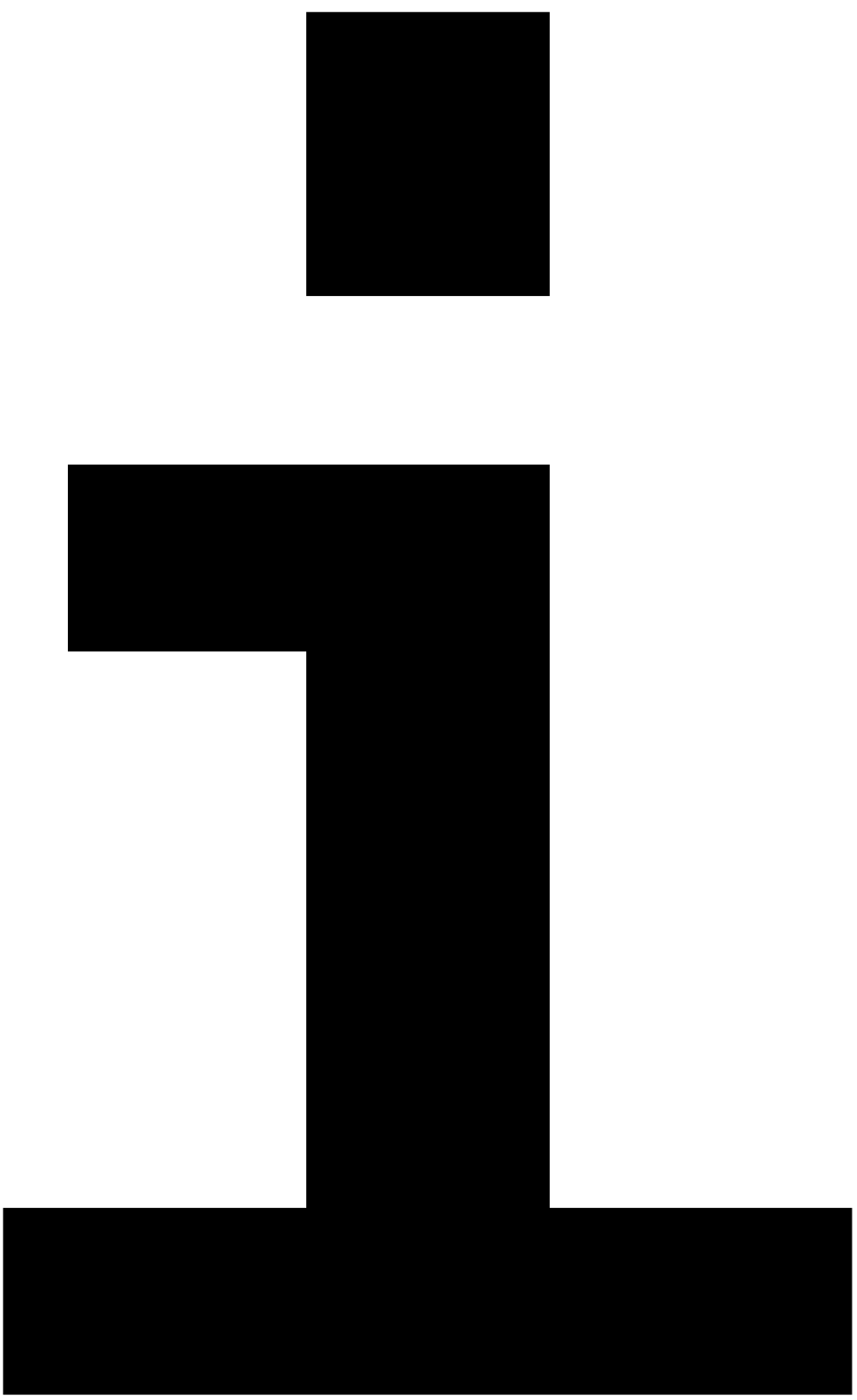
S

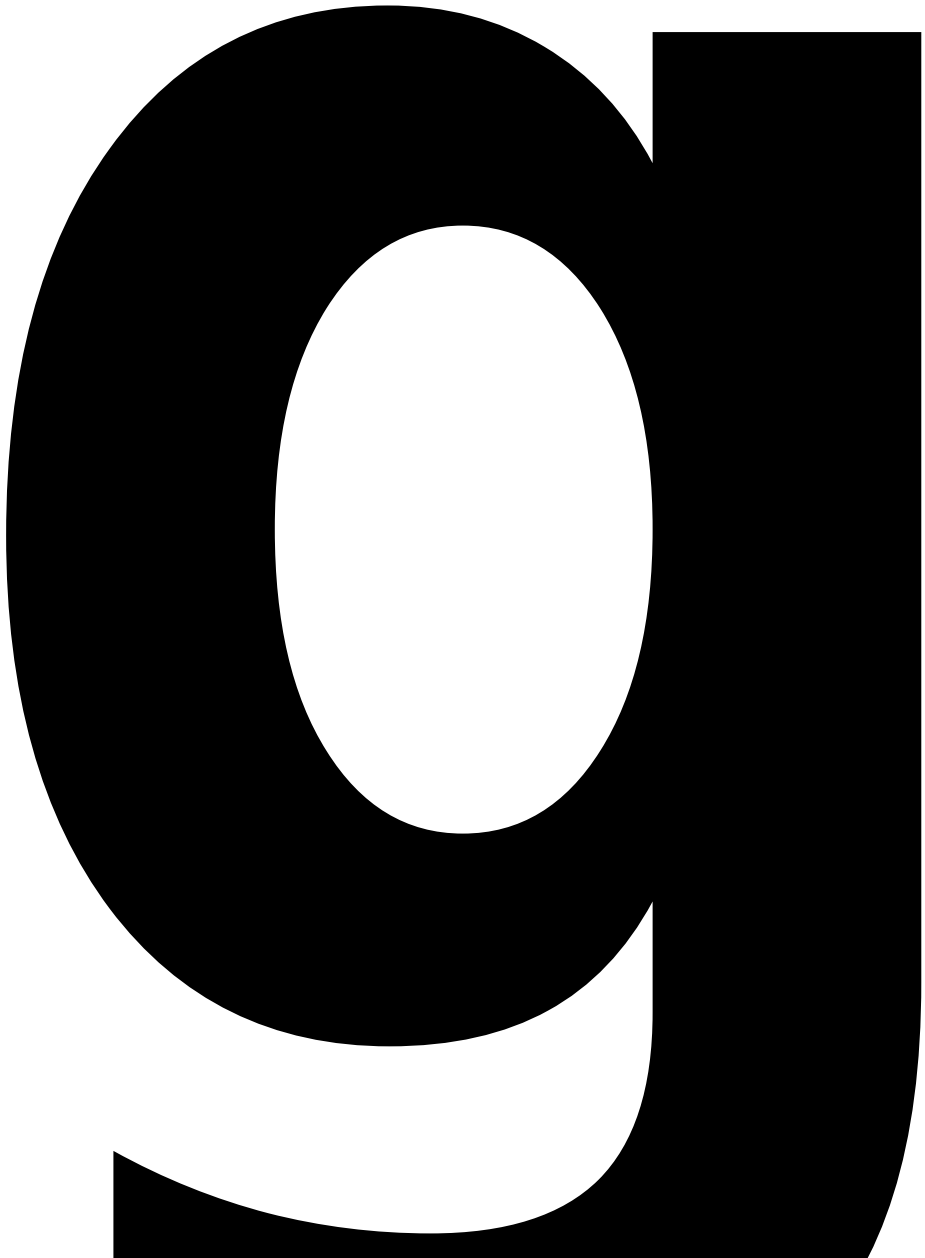


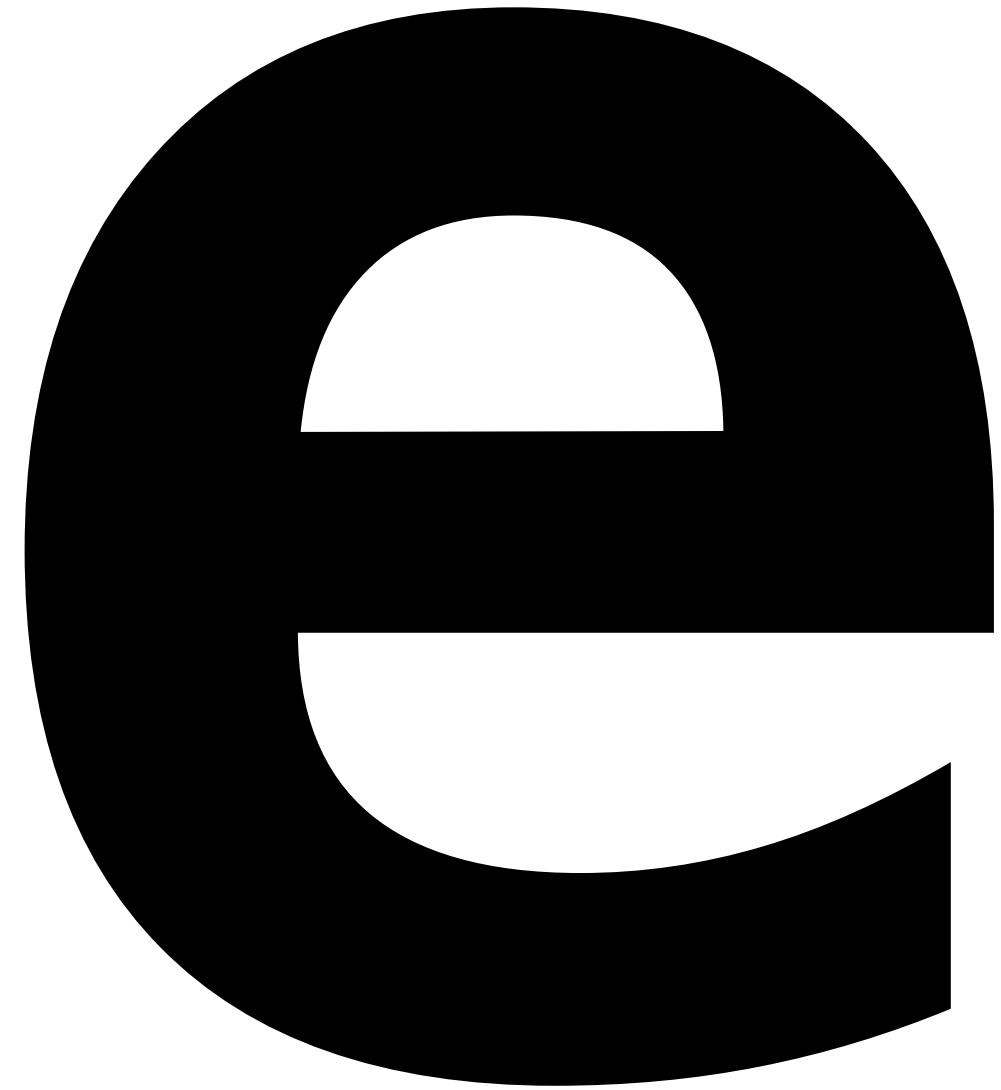


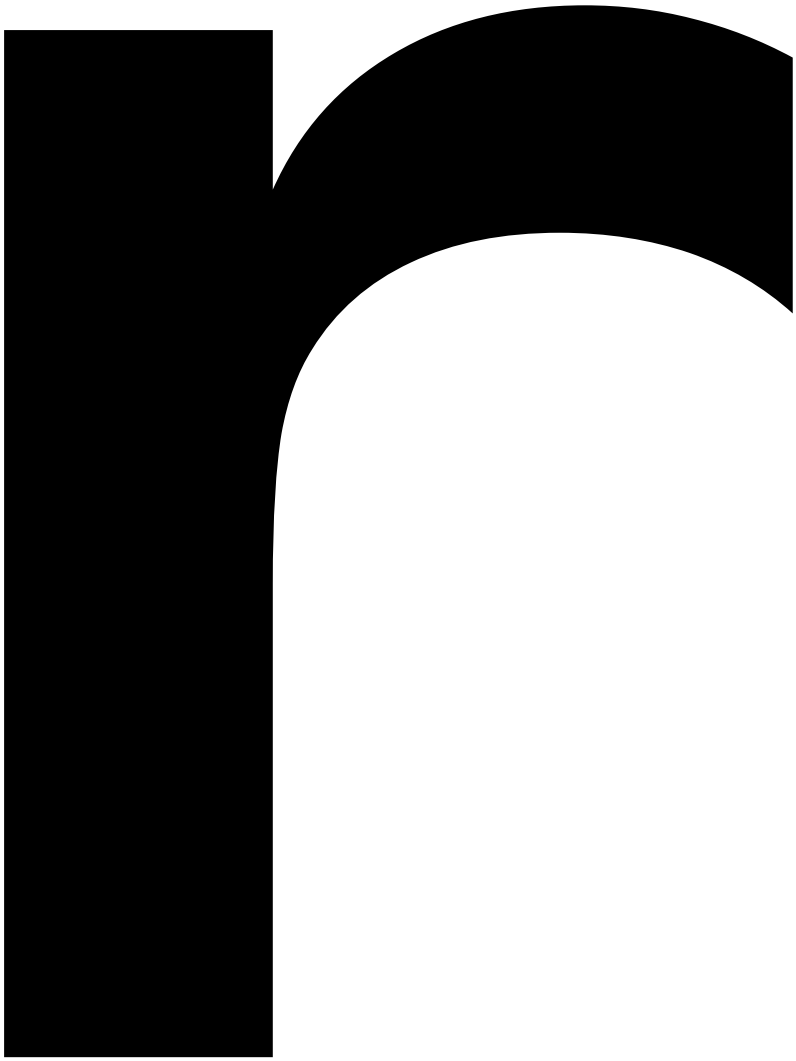


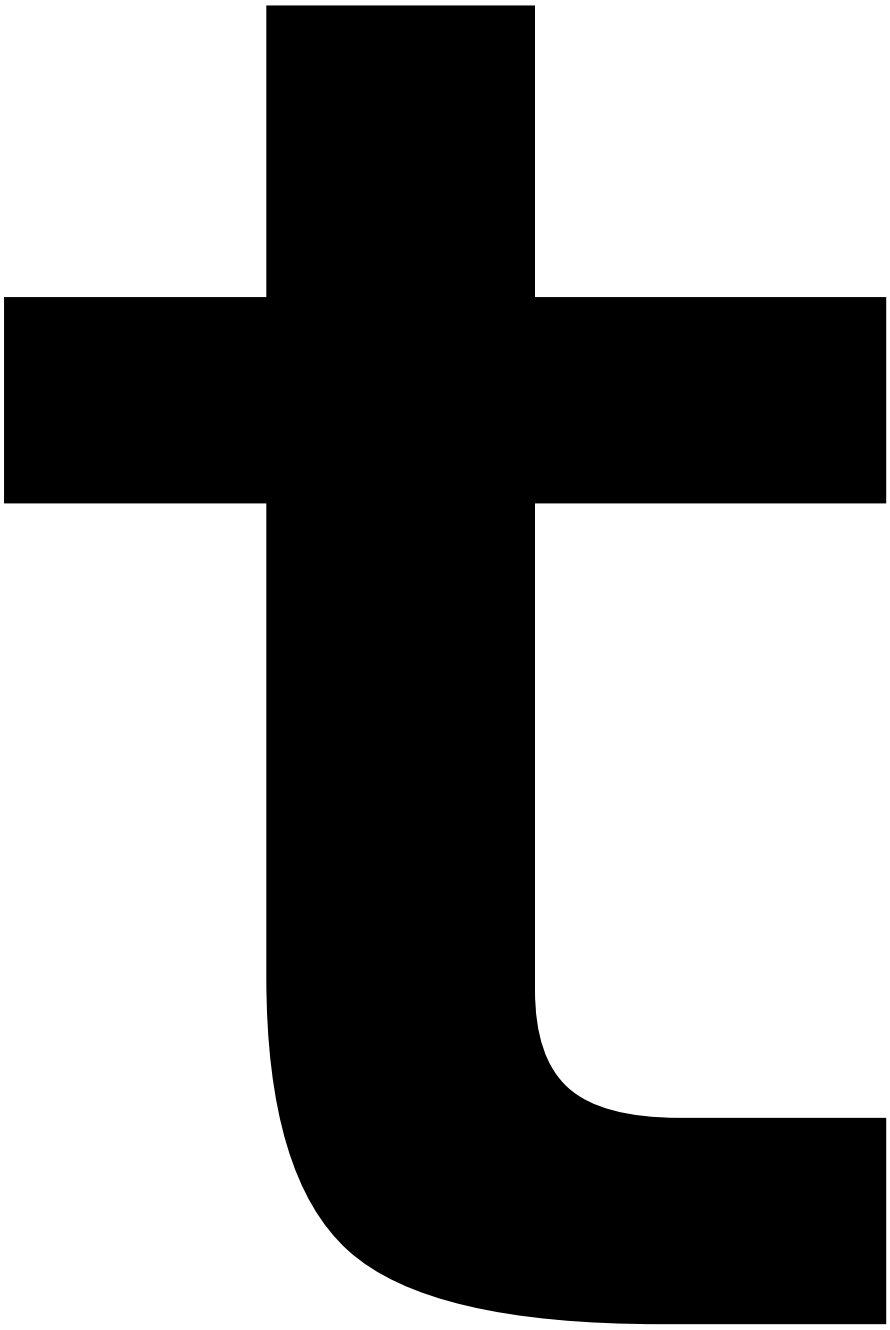


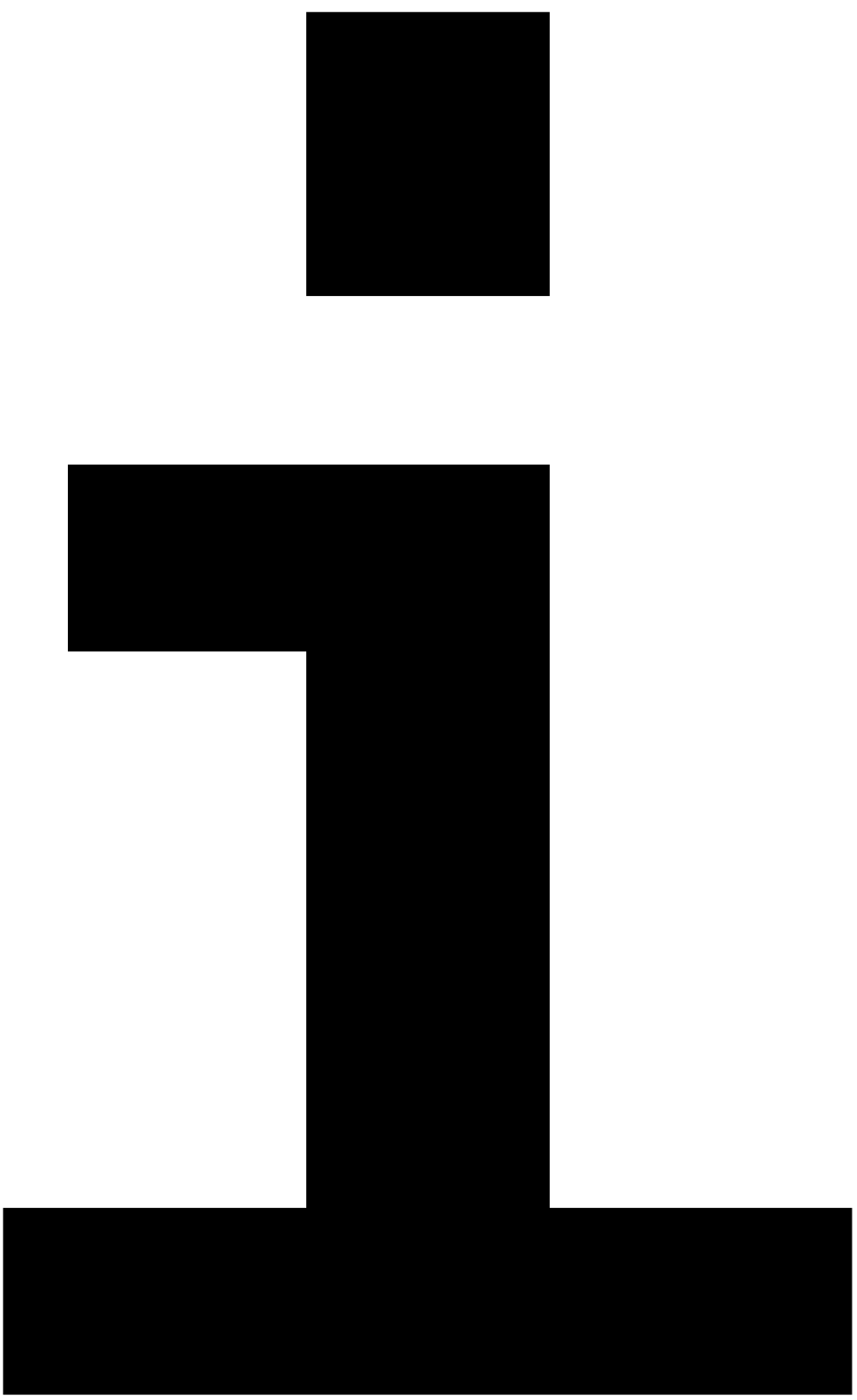


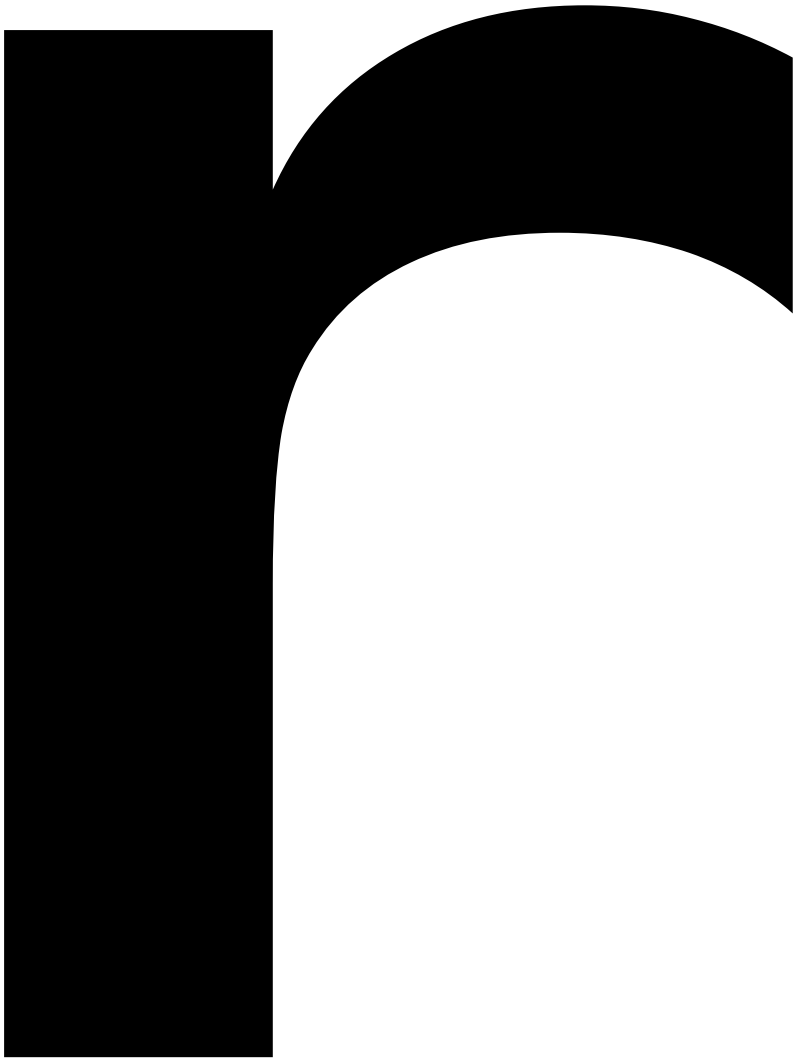




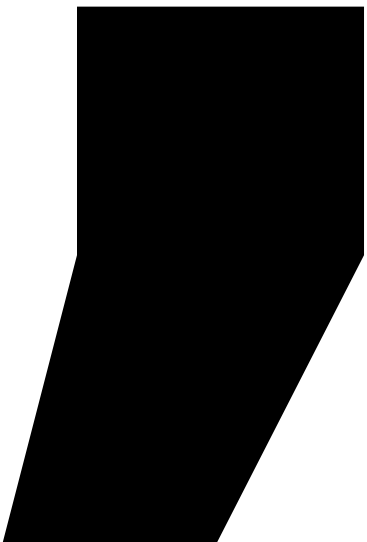




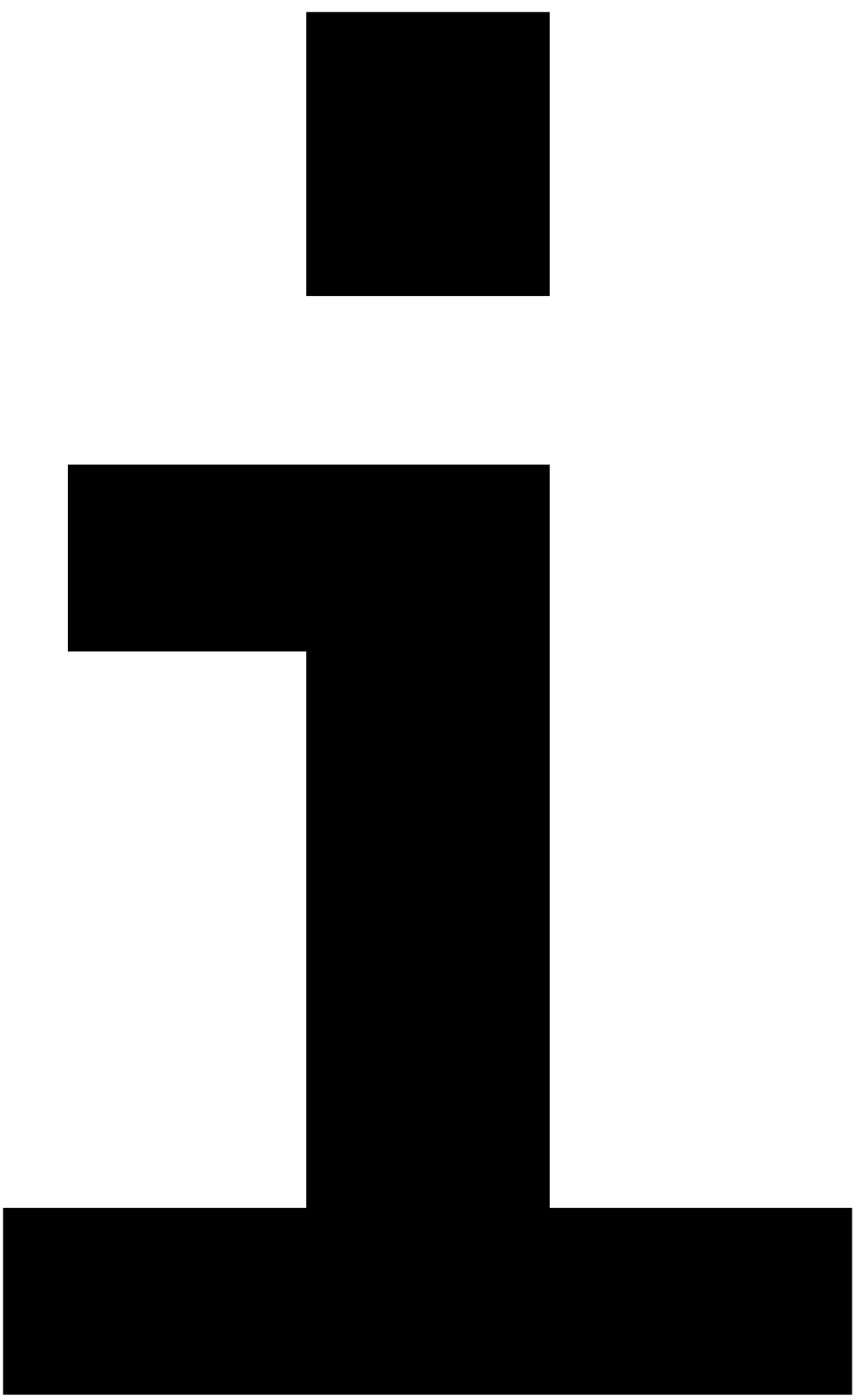


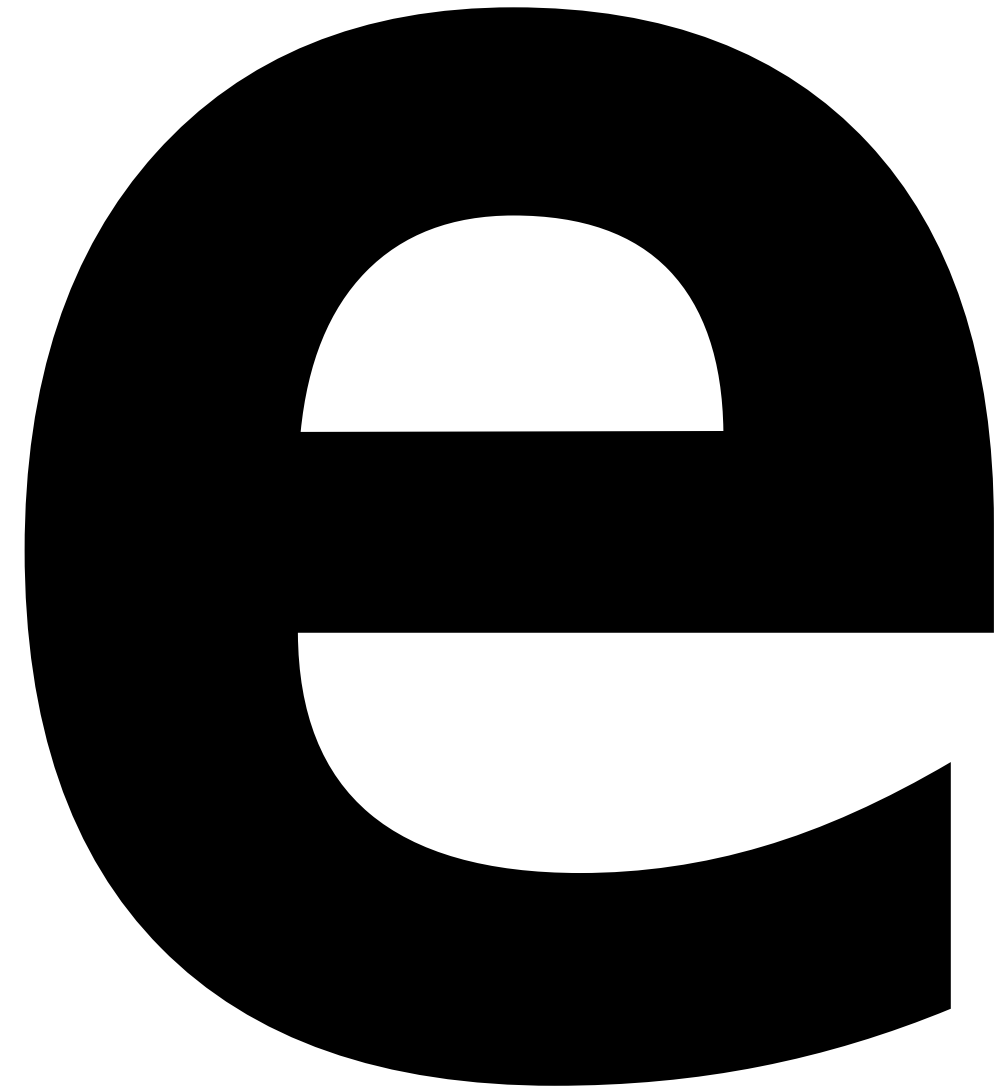


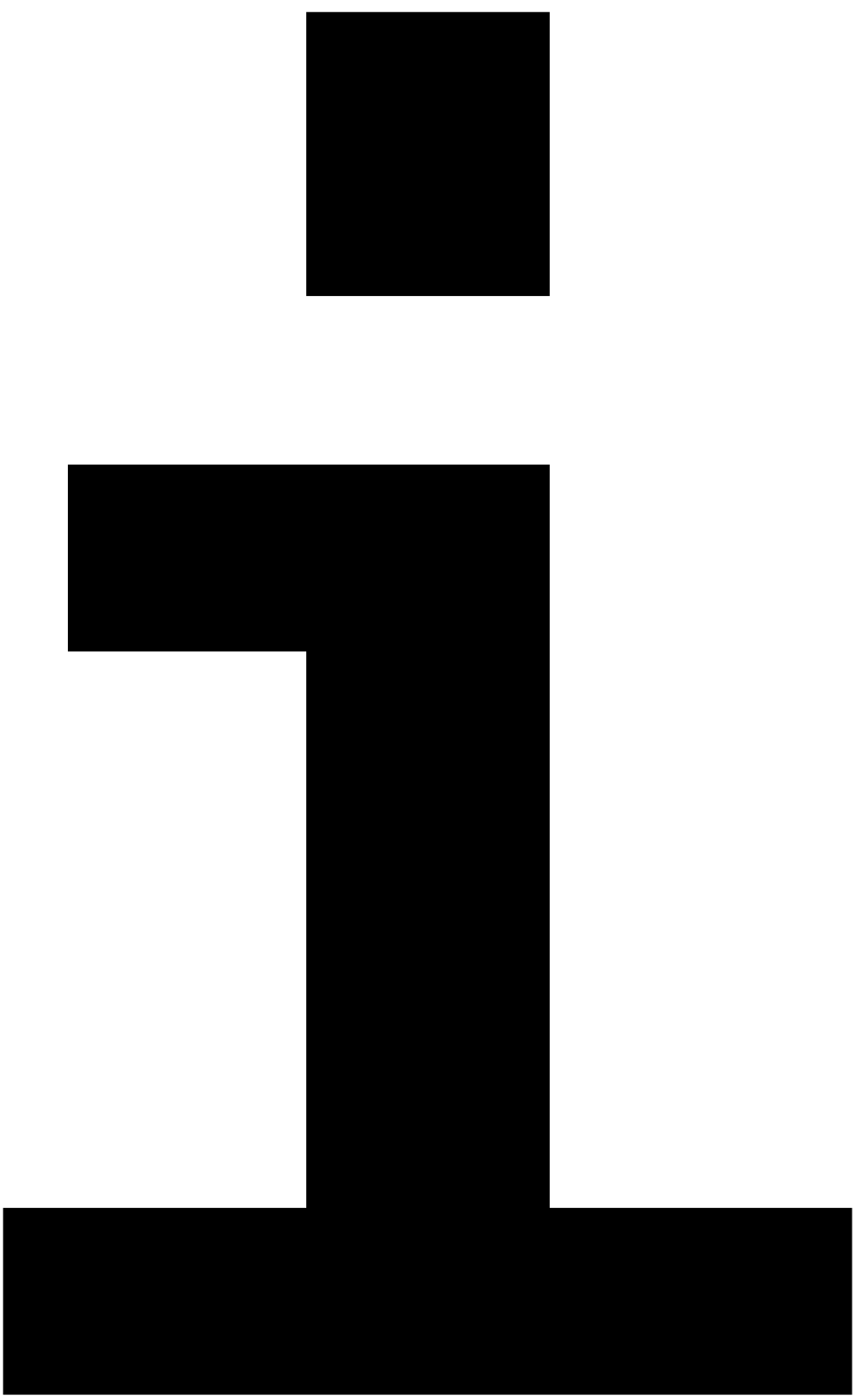
d

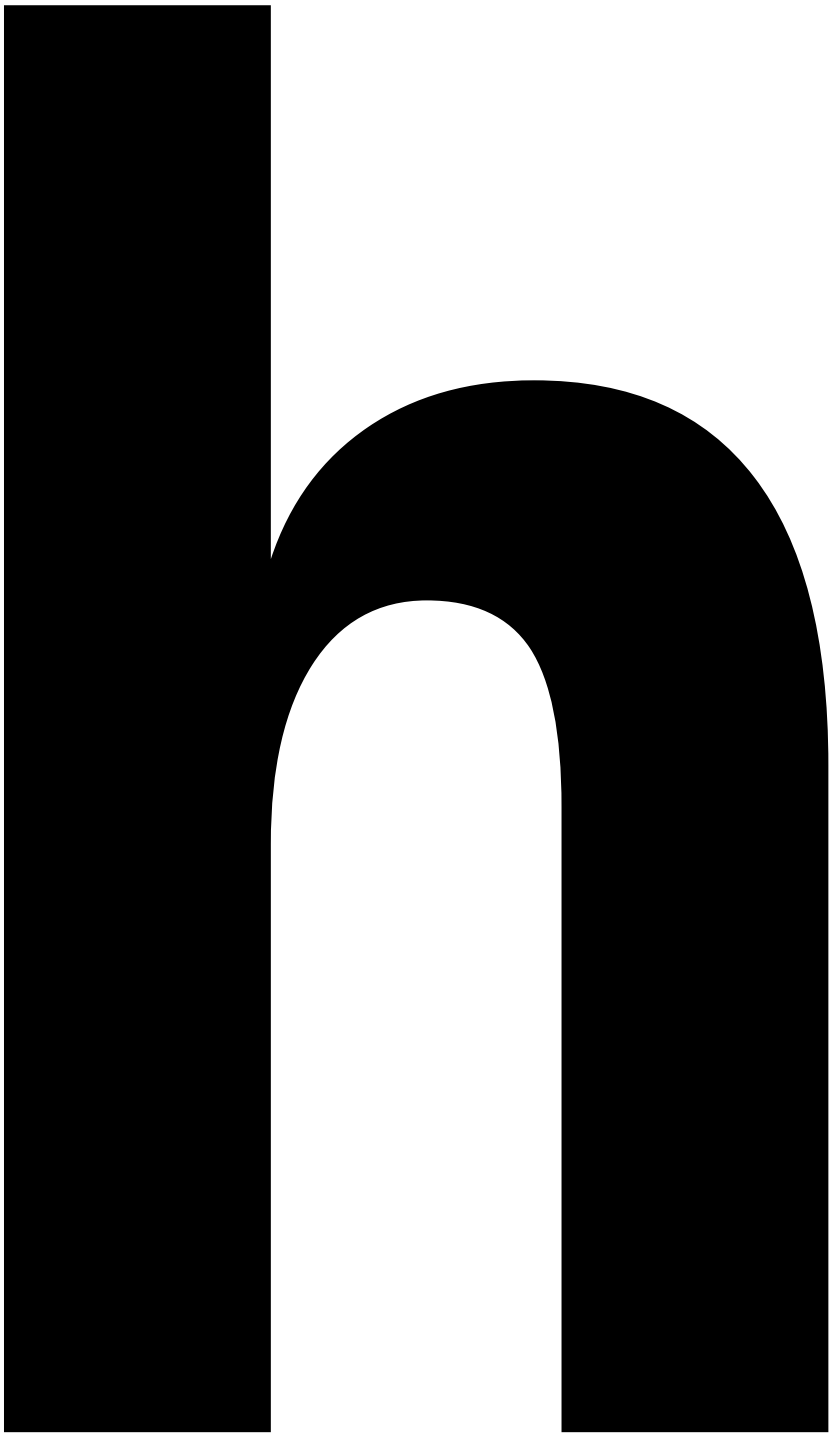


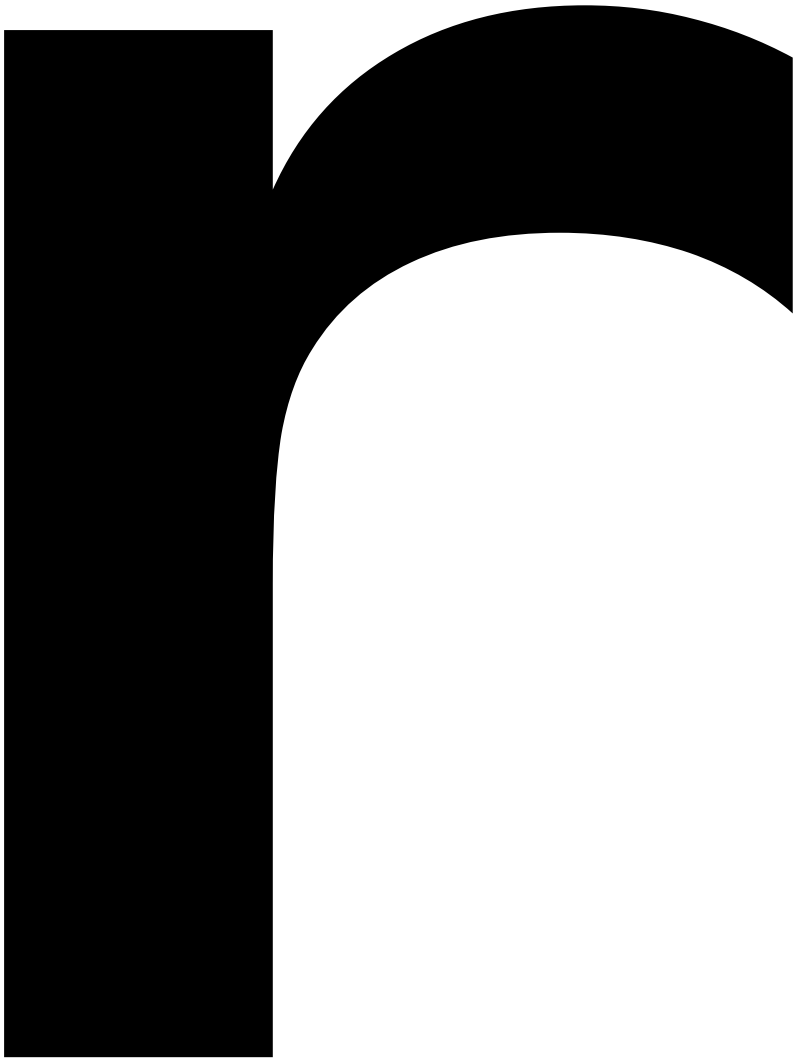
d

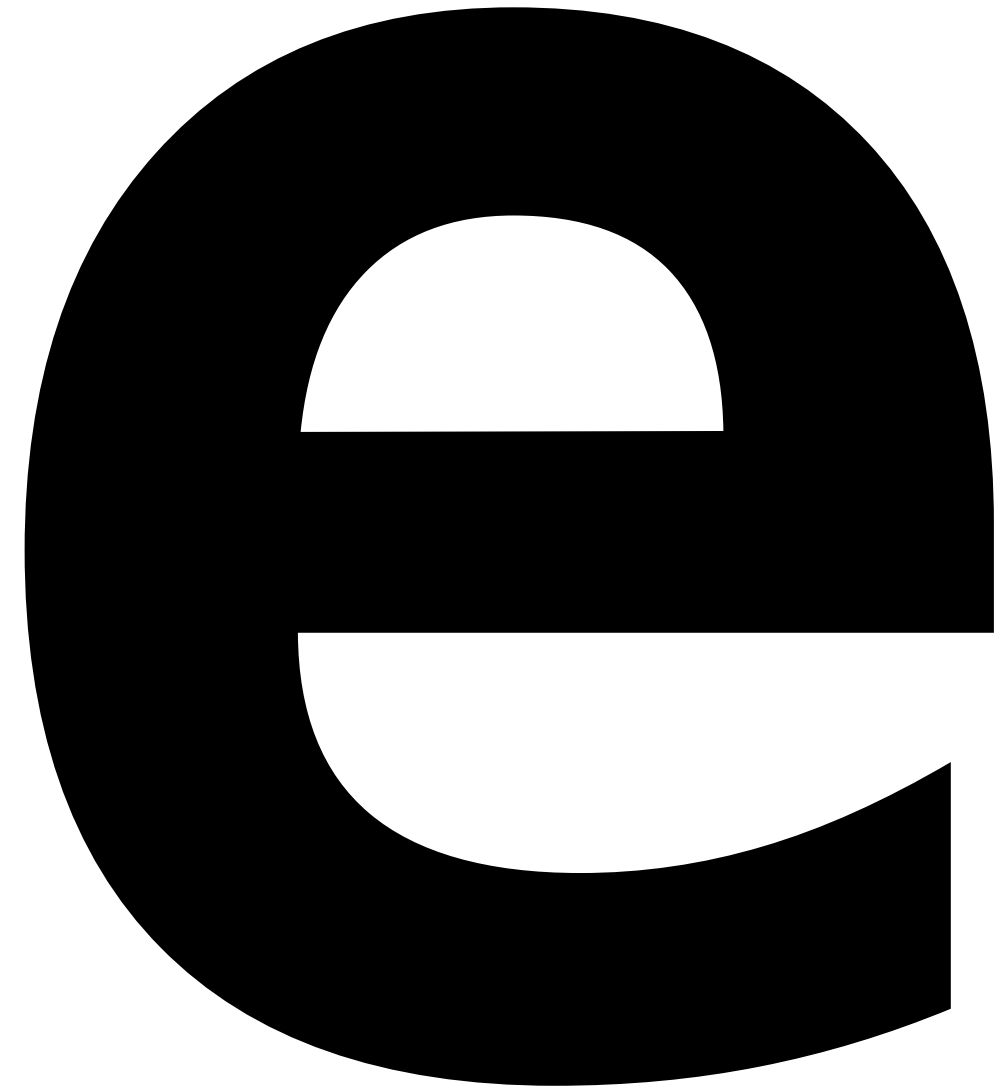


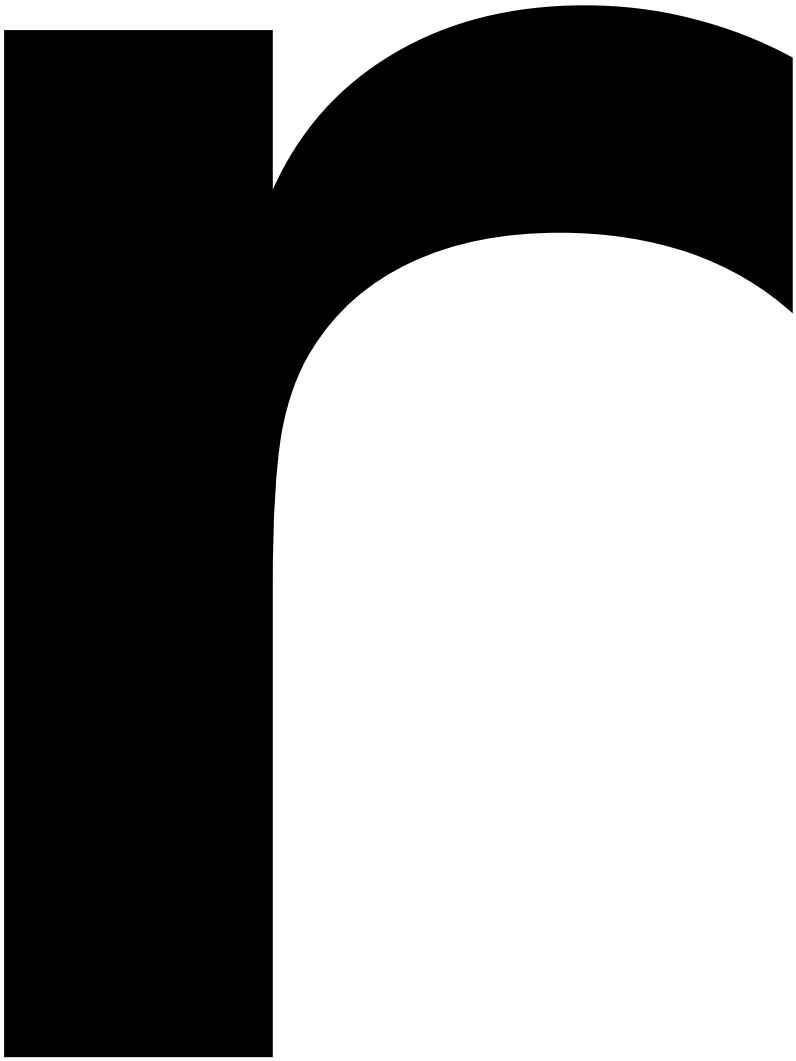


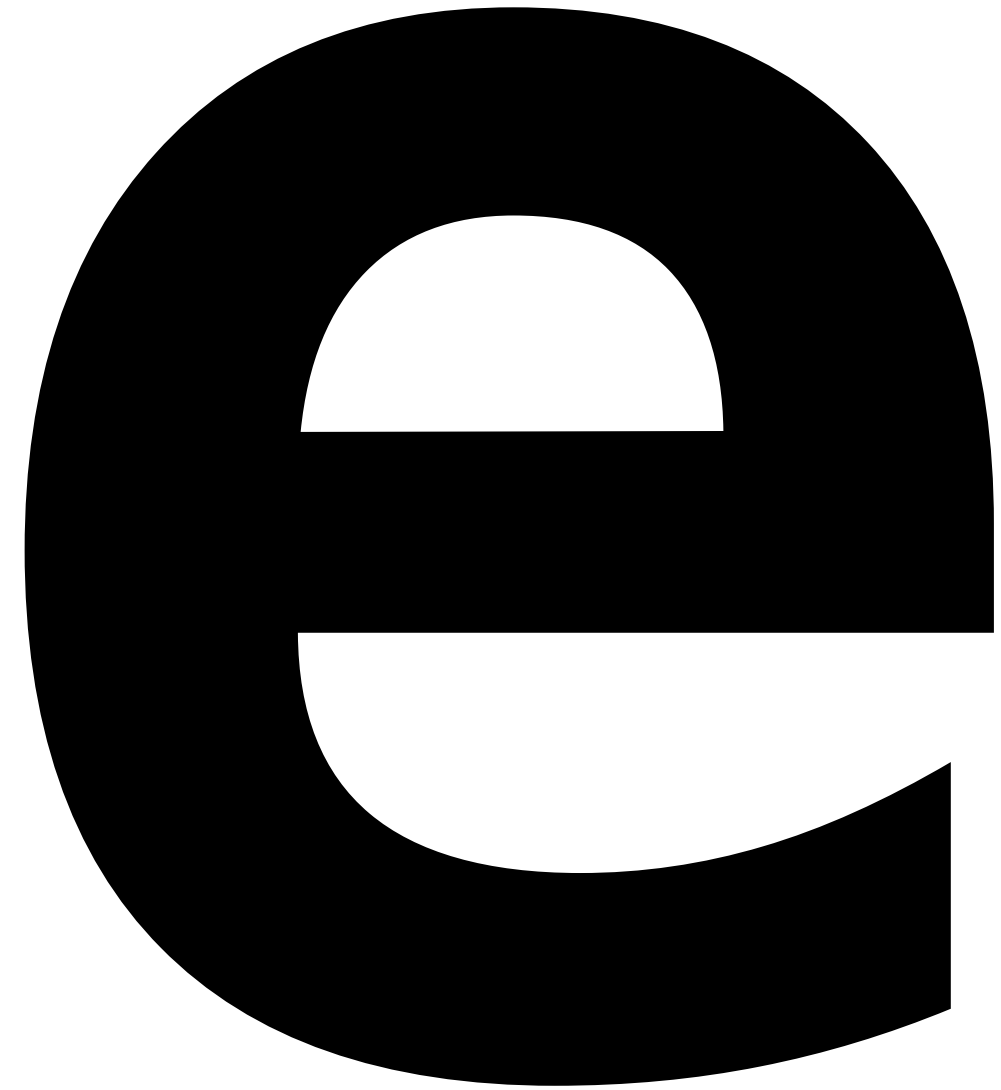






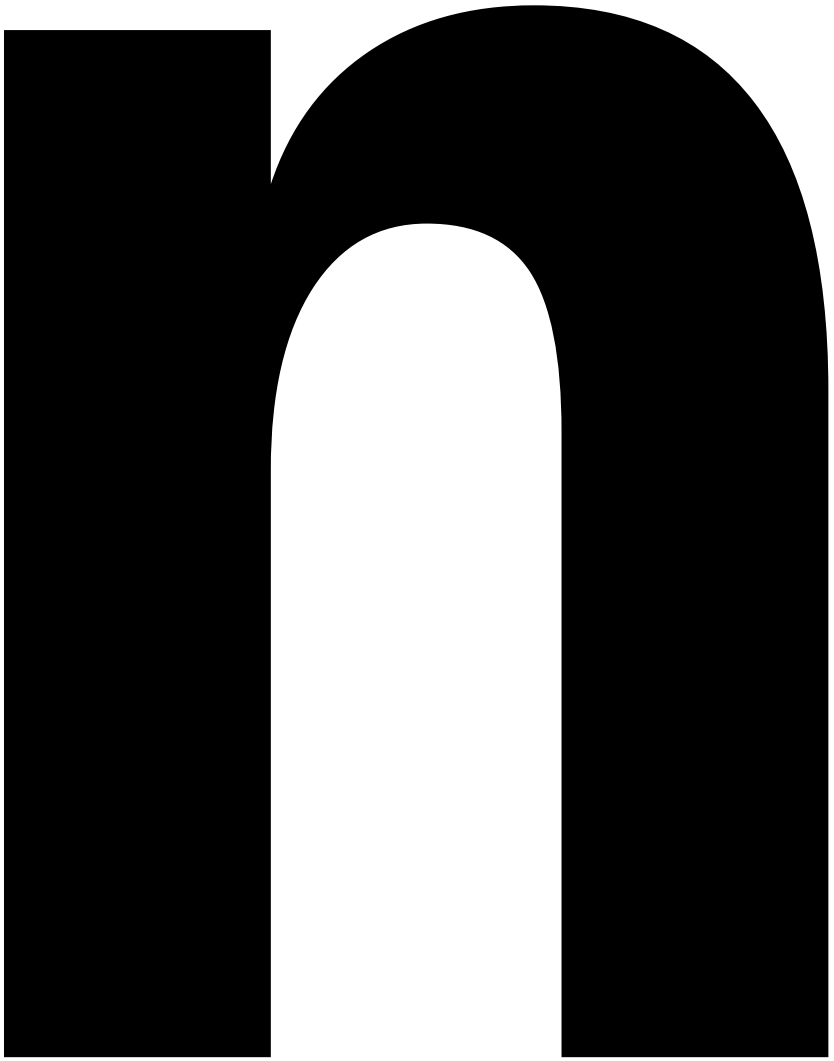




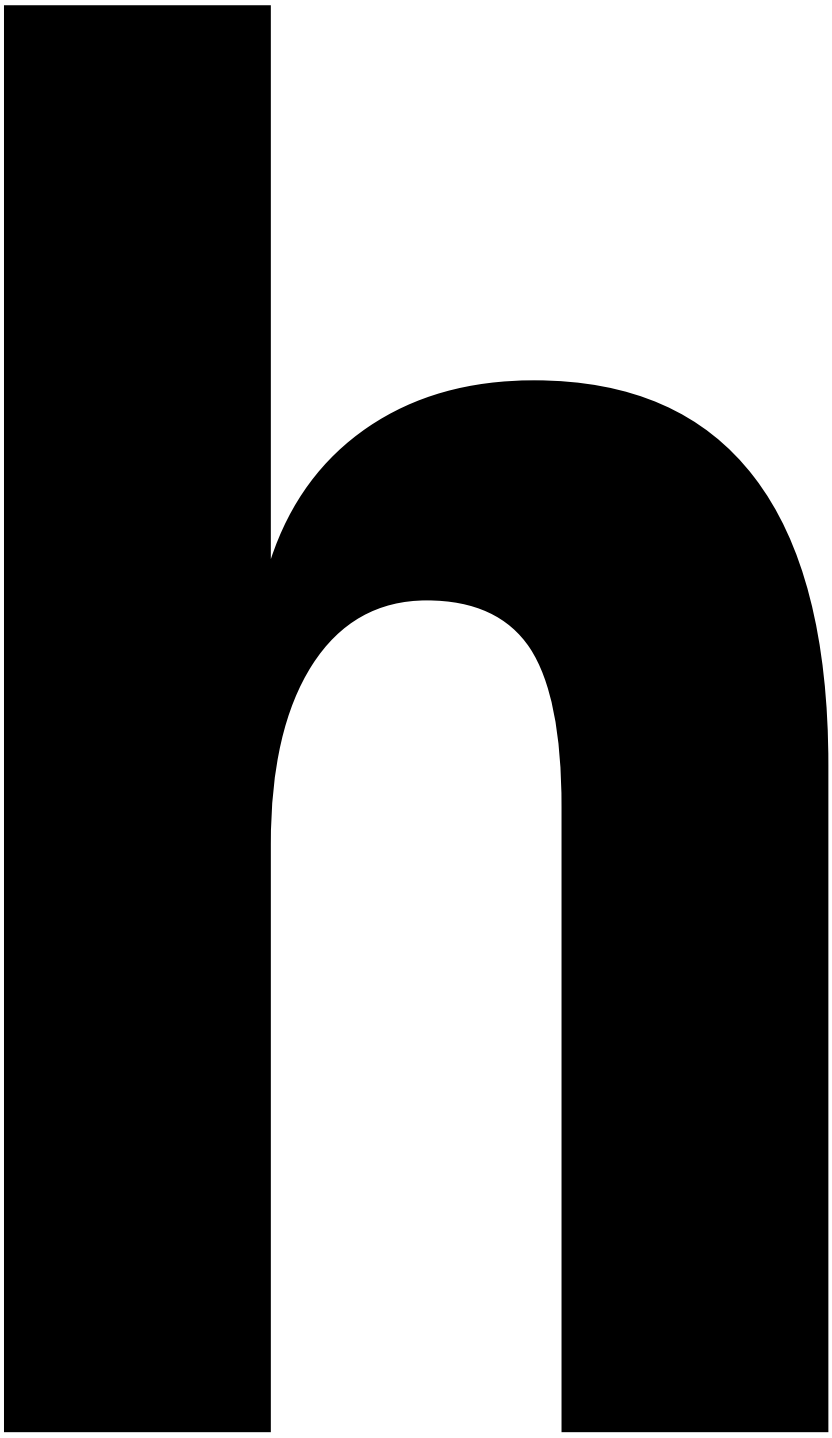


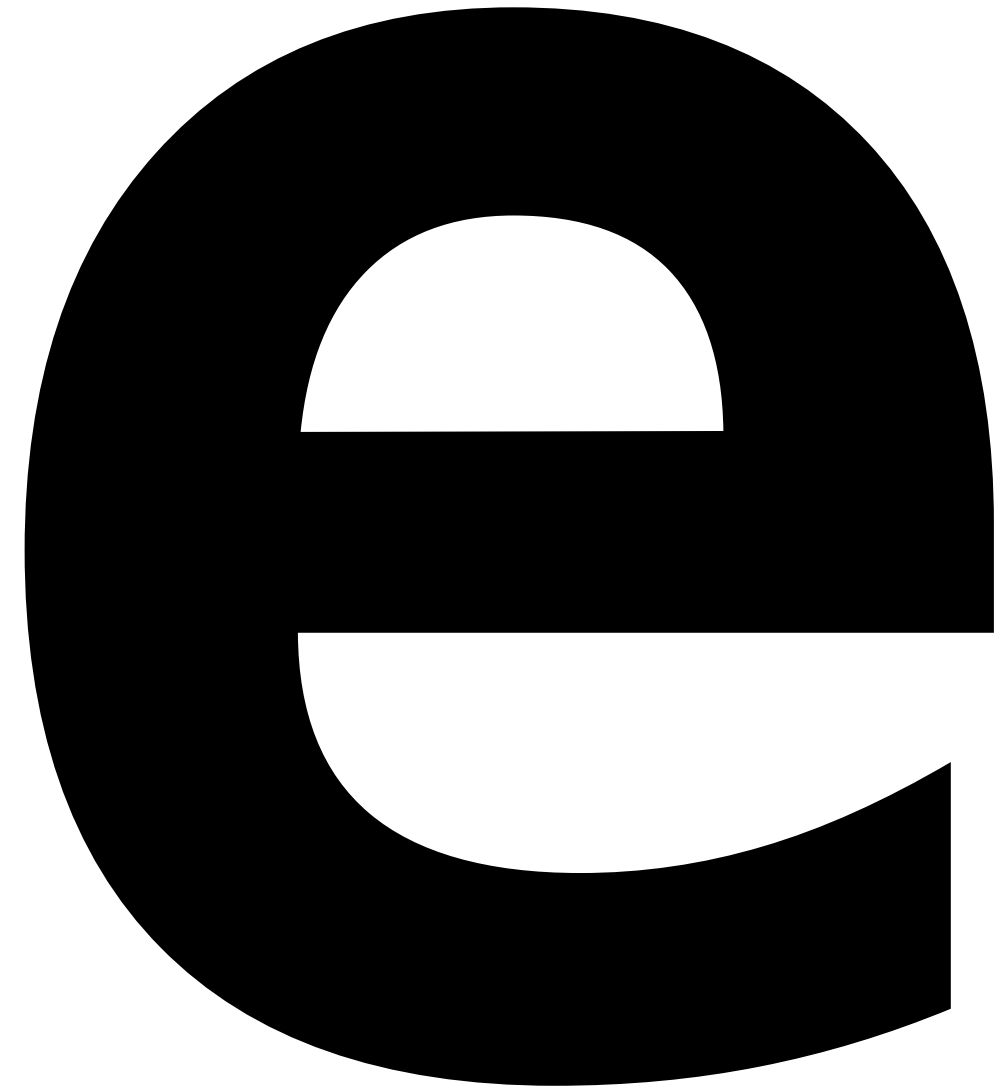
S

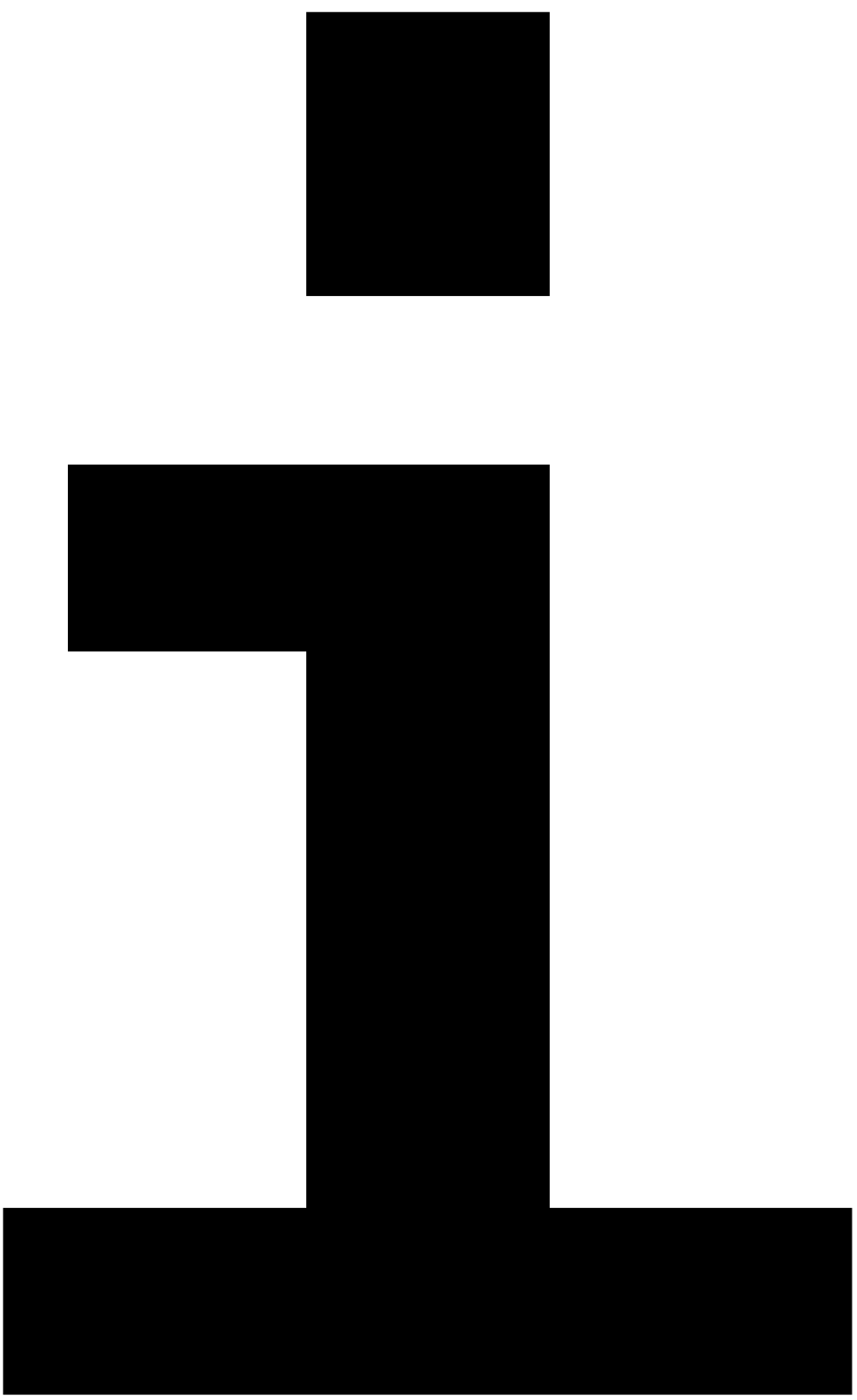
u

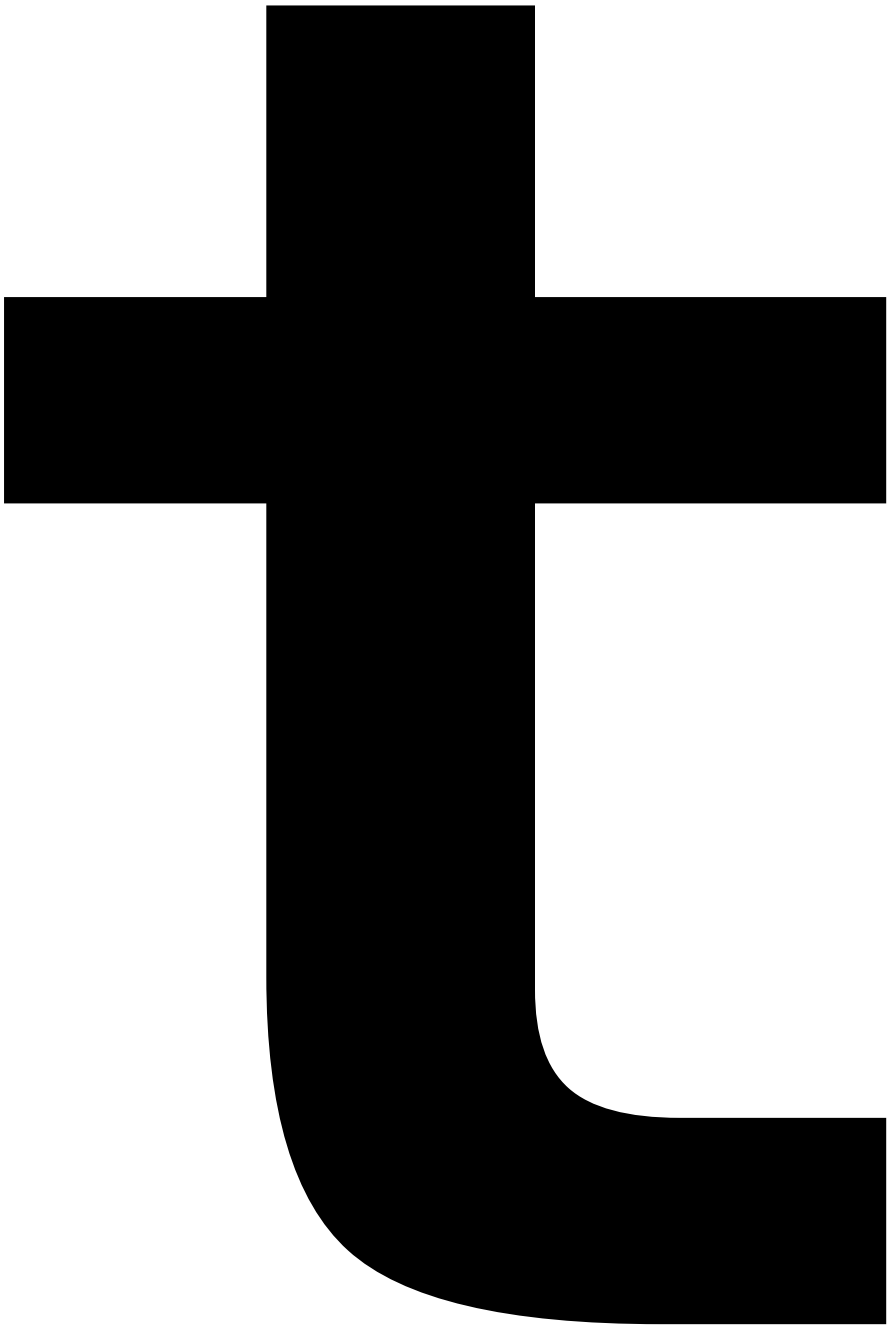


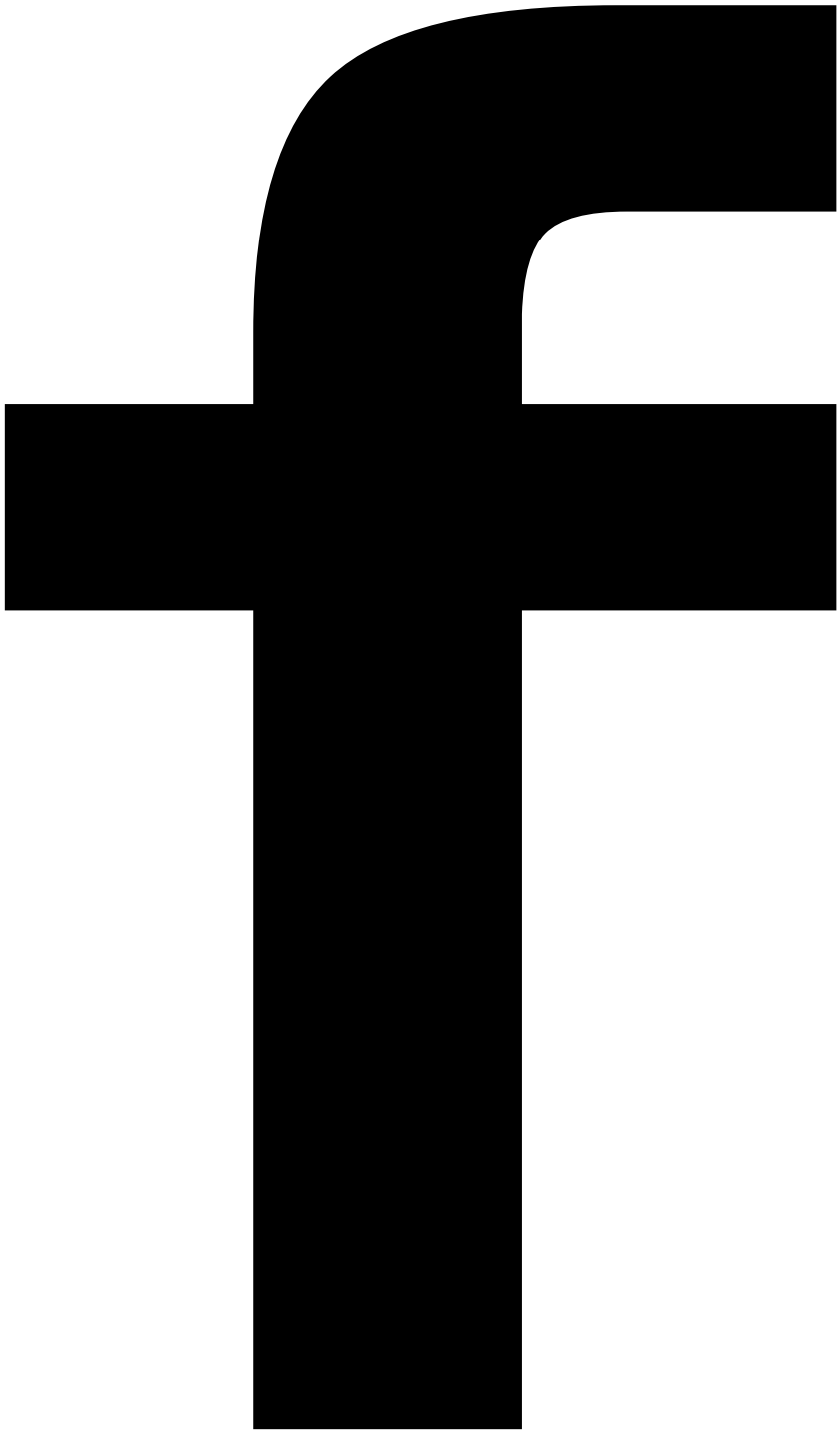
d

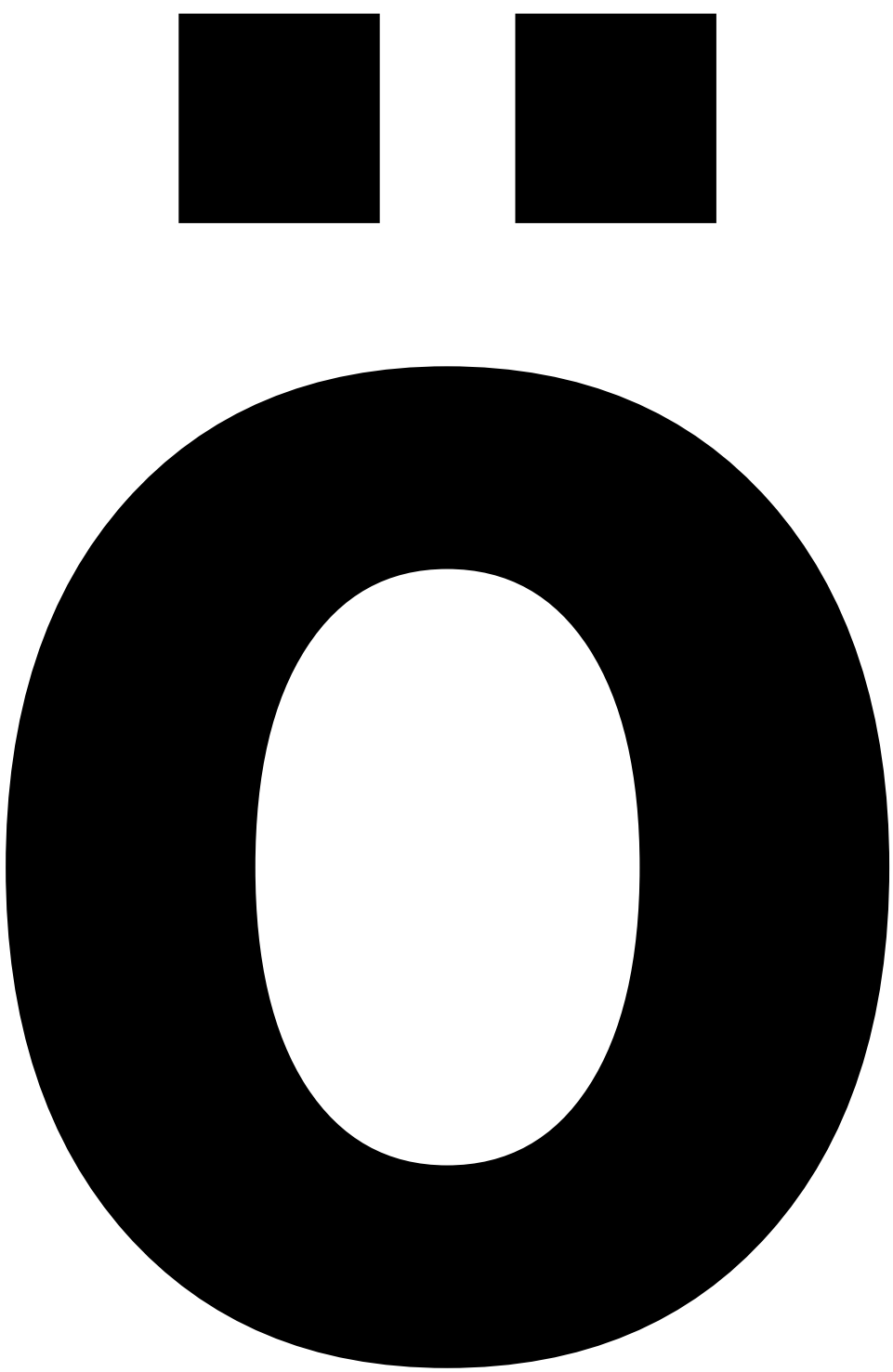


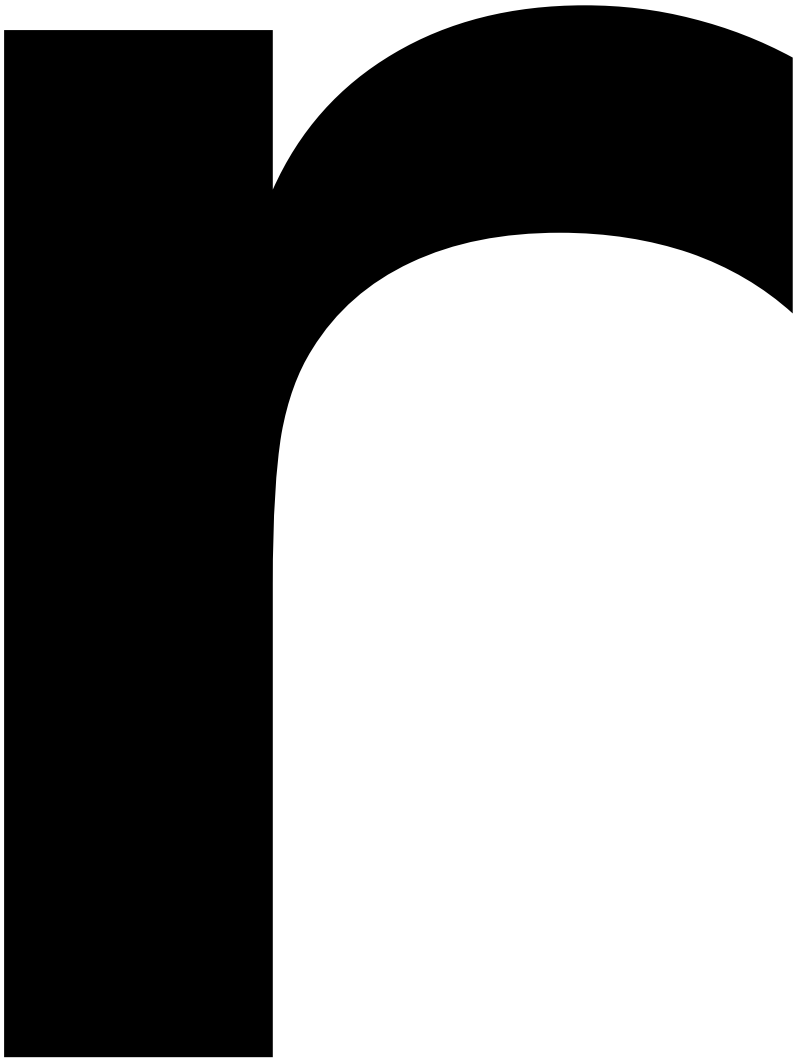




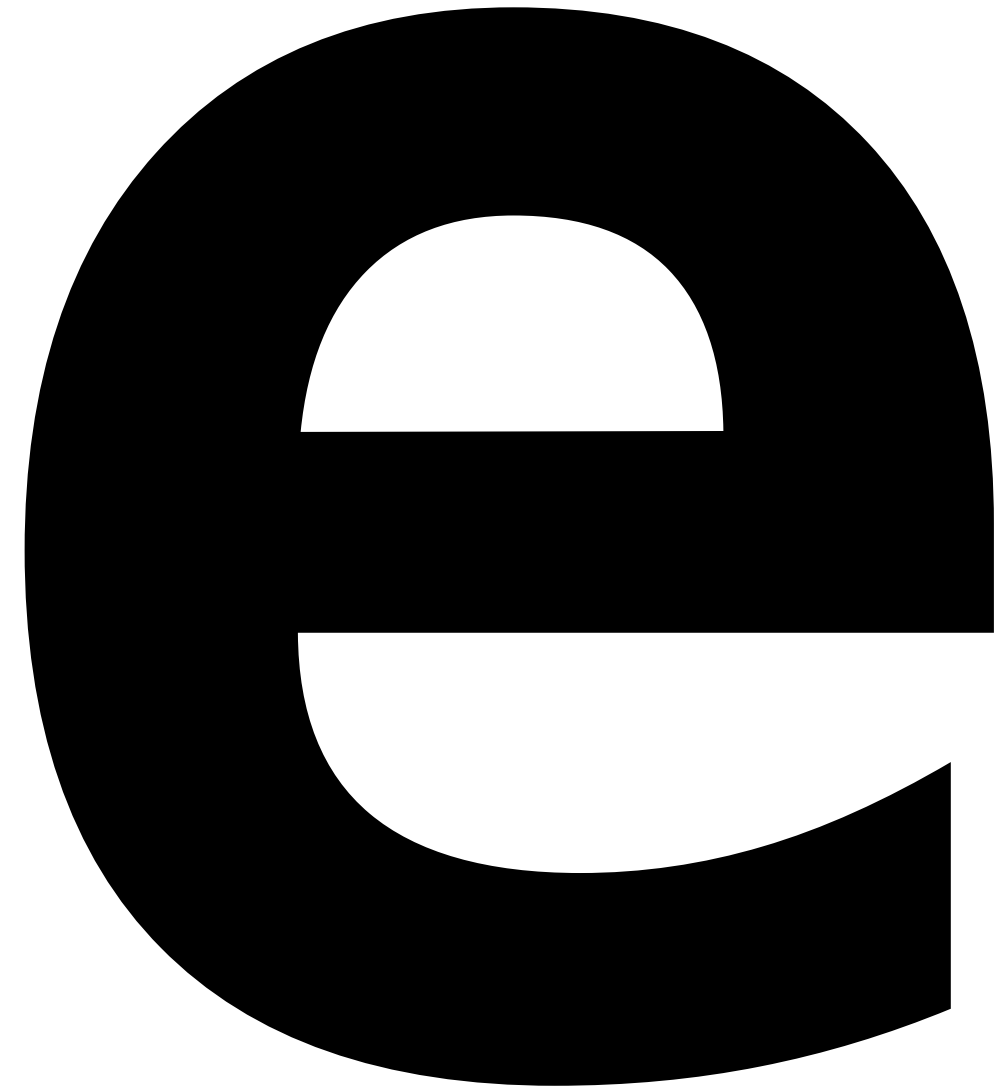


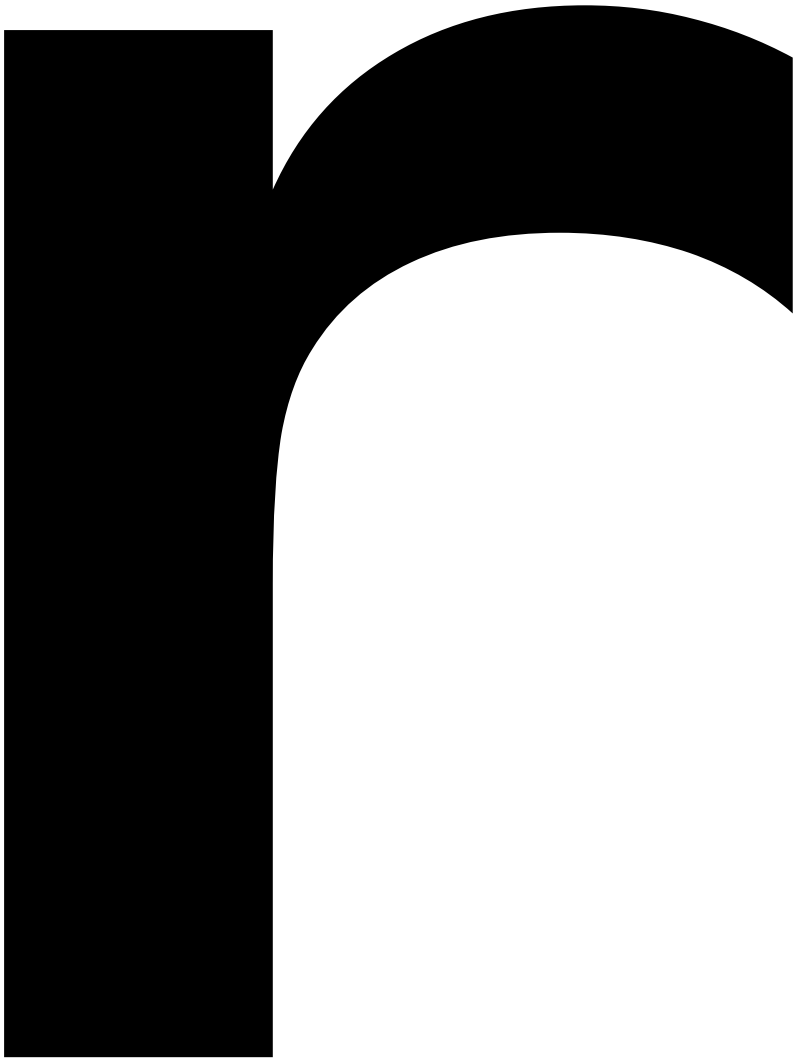


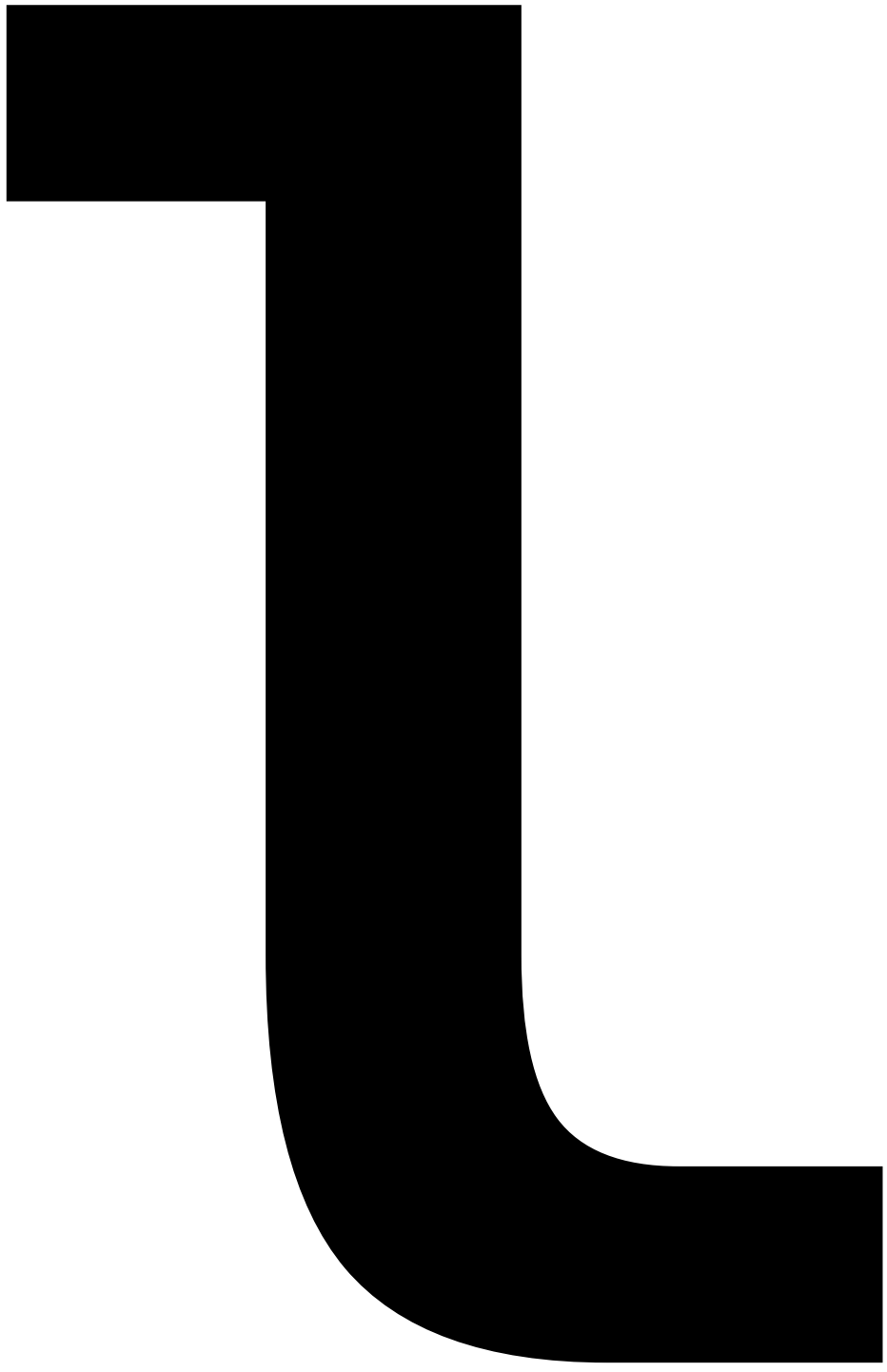


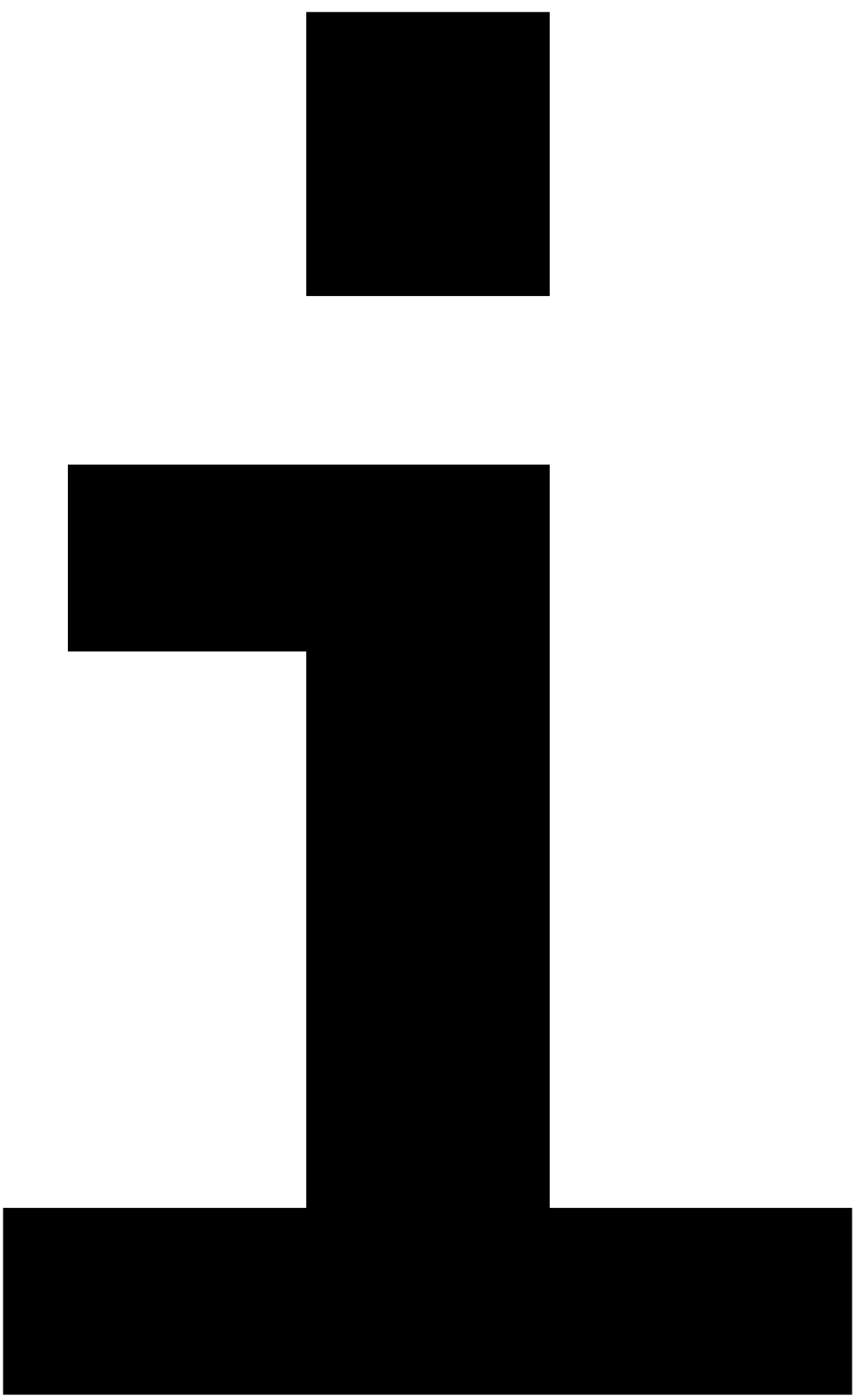


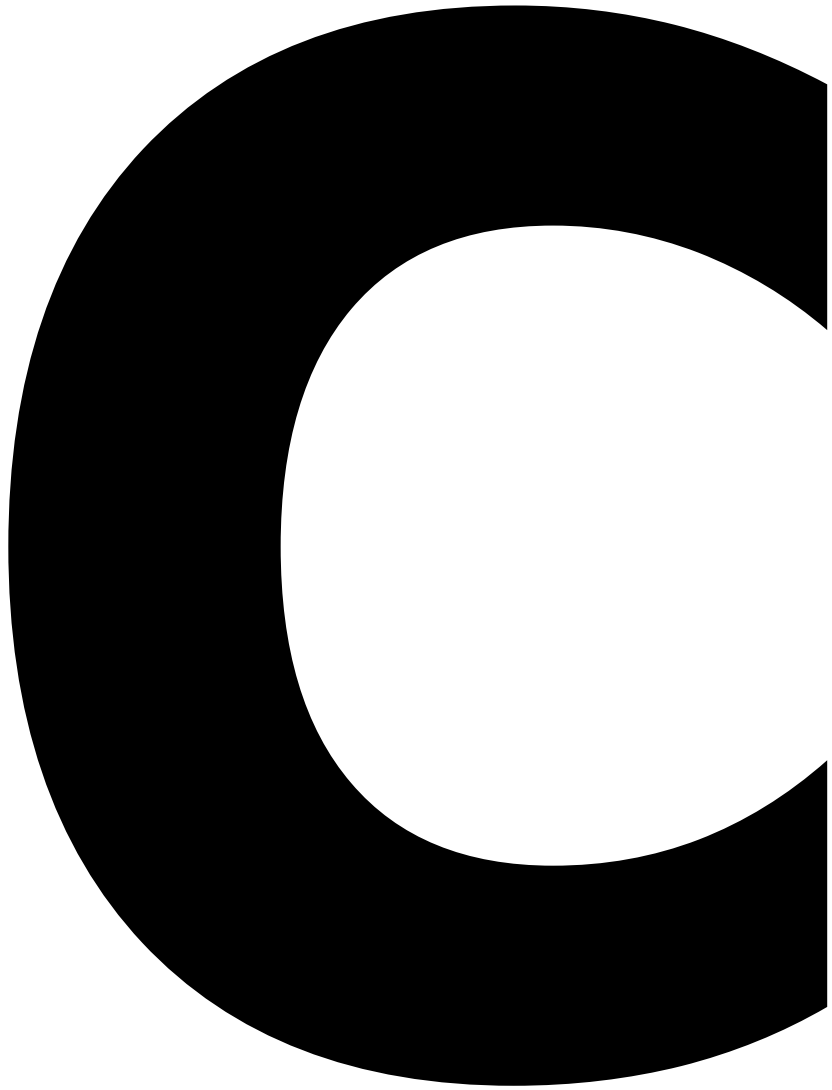
d

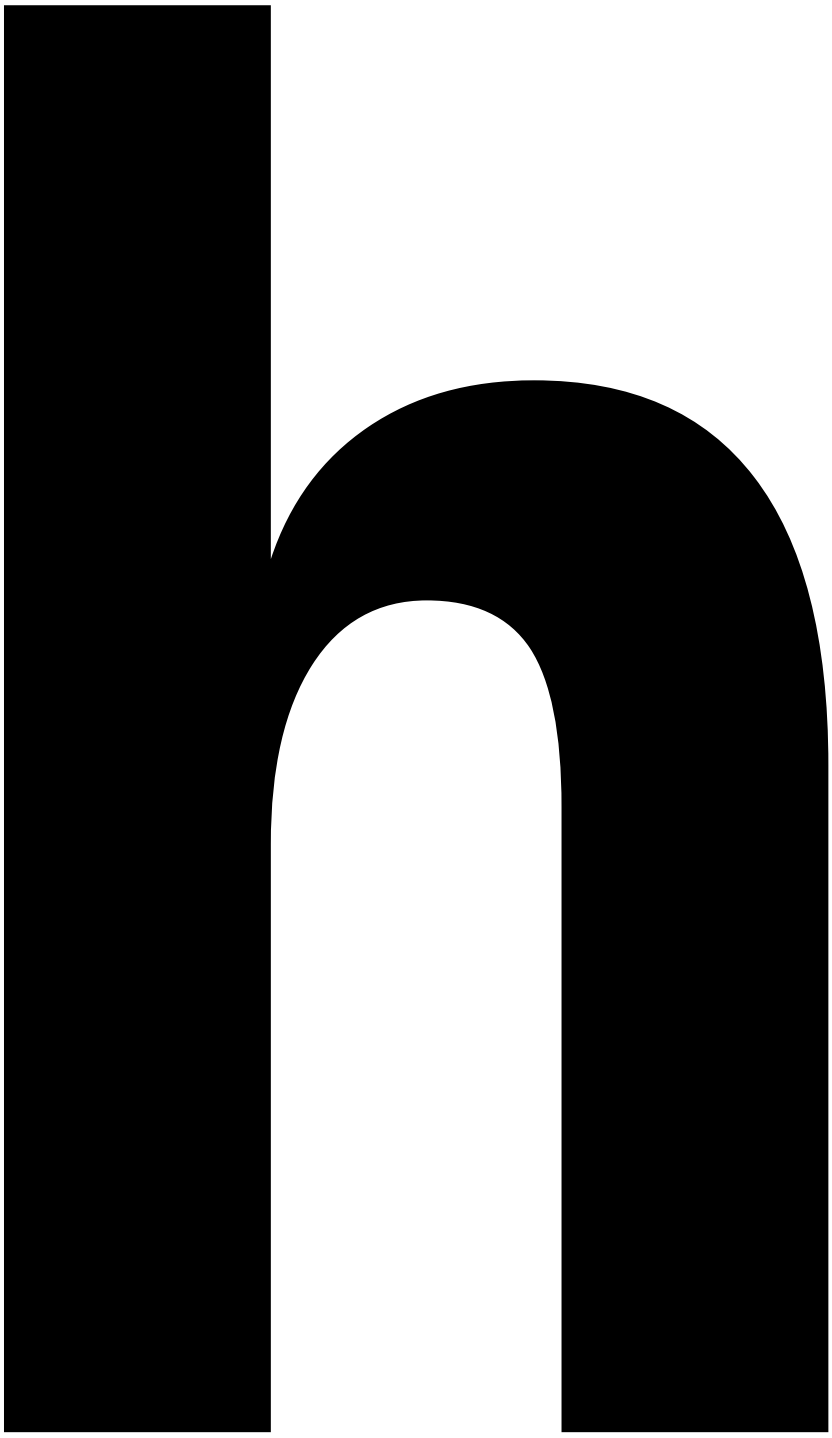


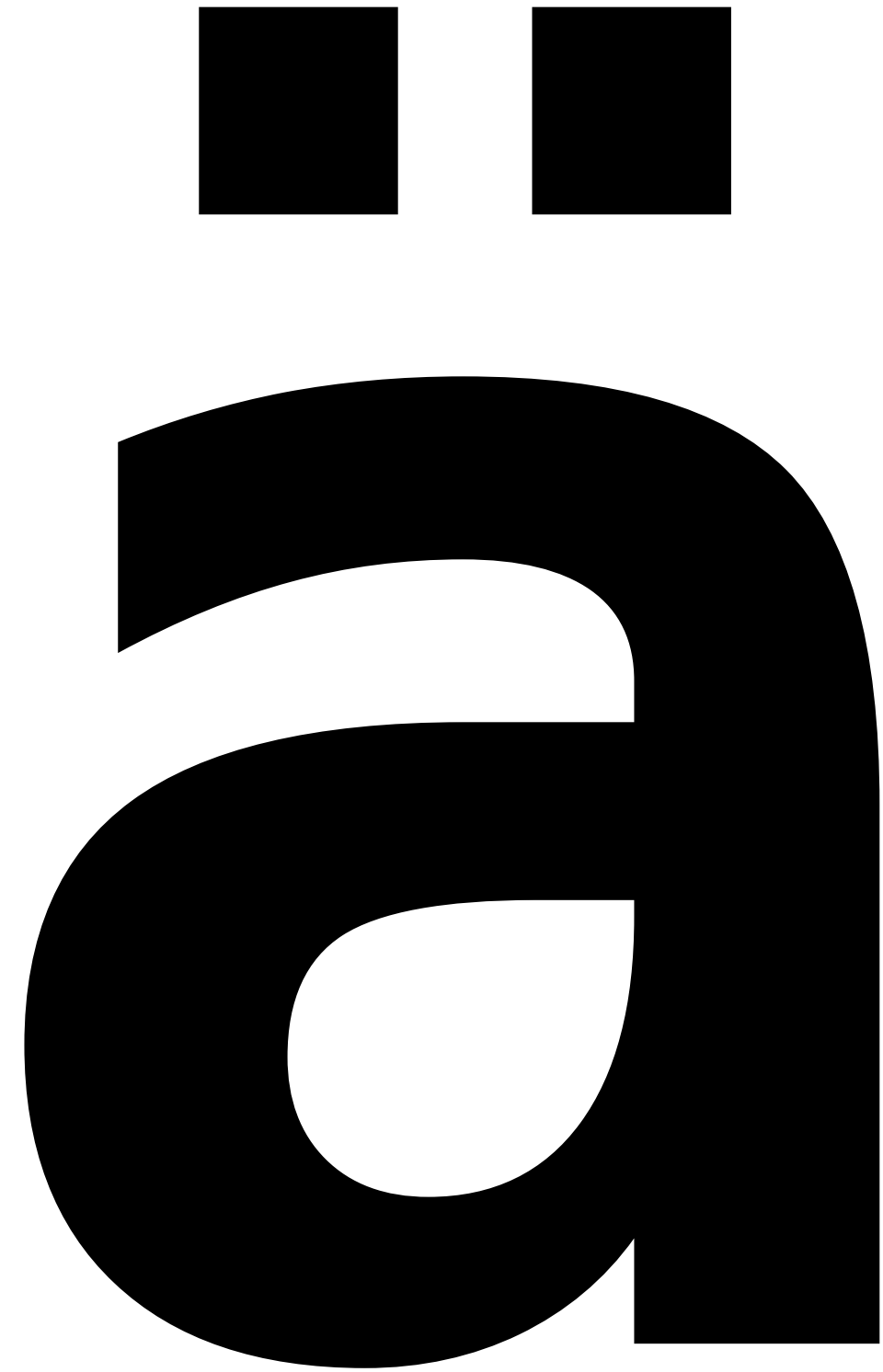


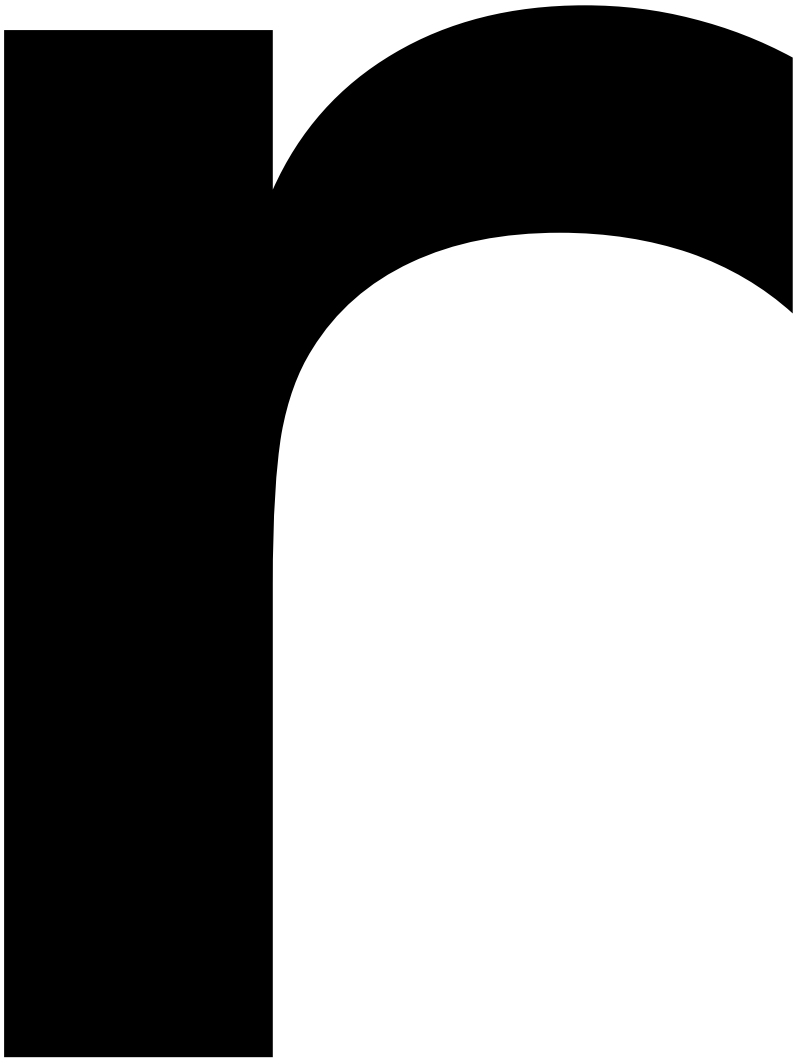


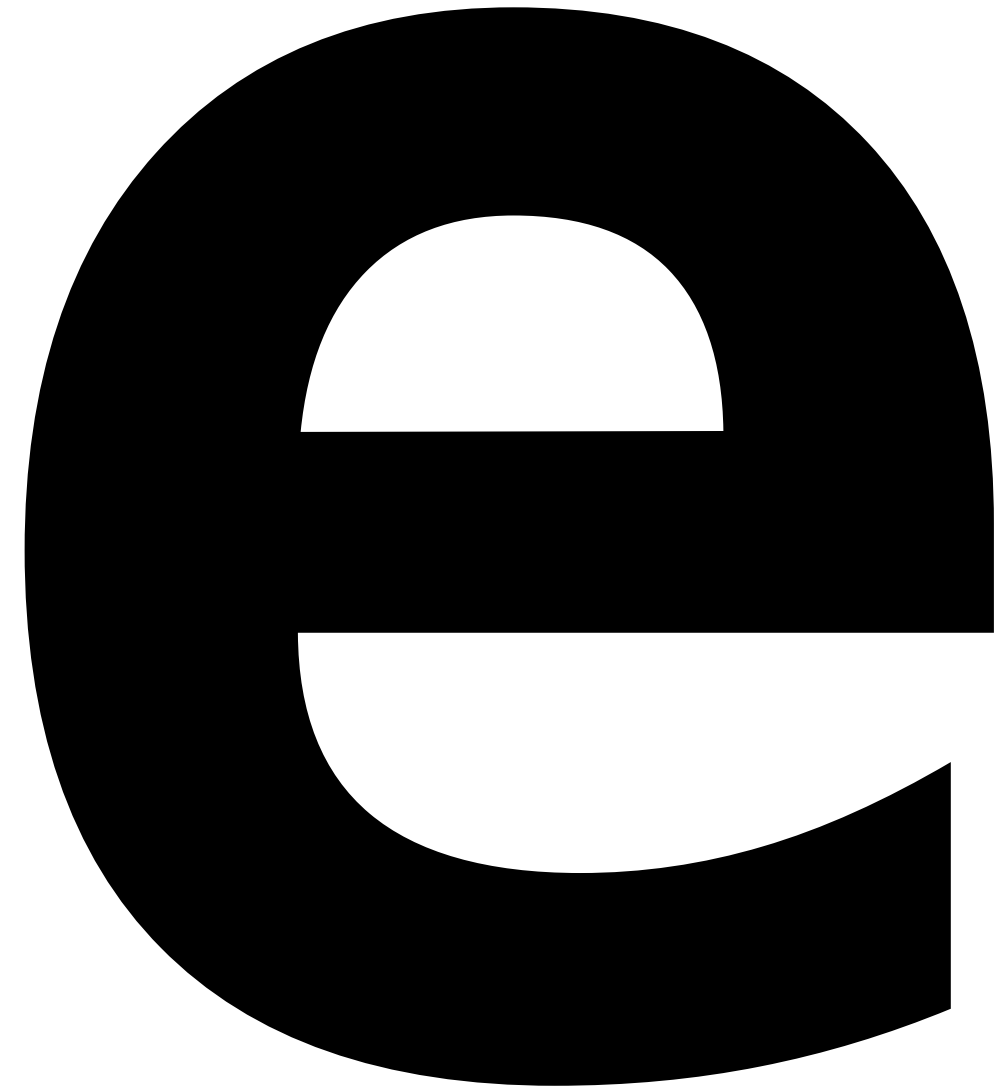


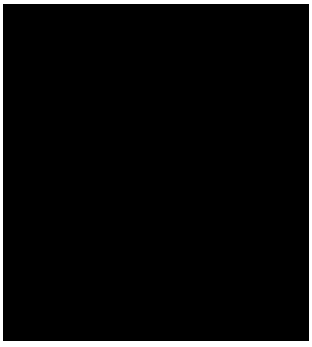


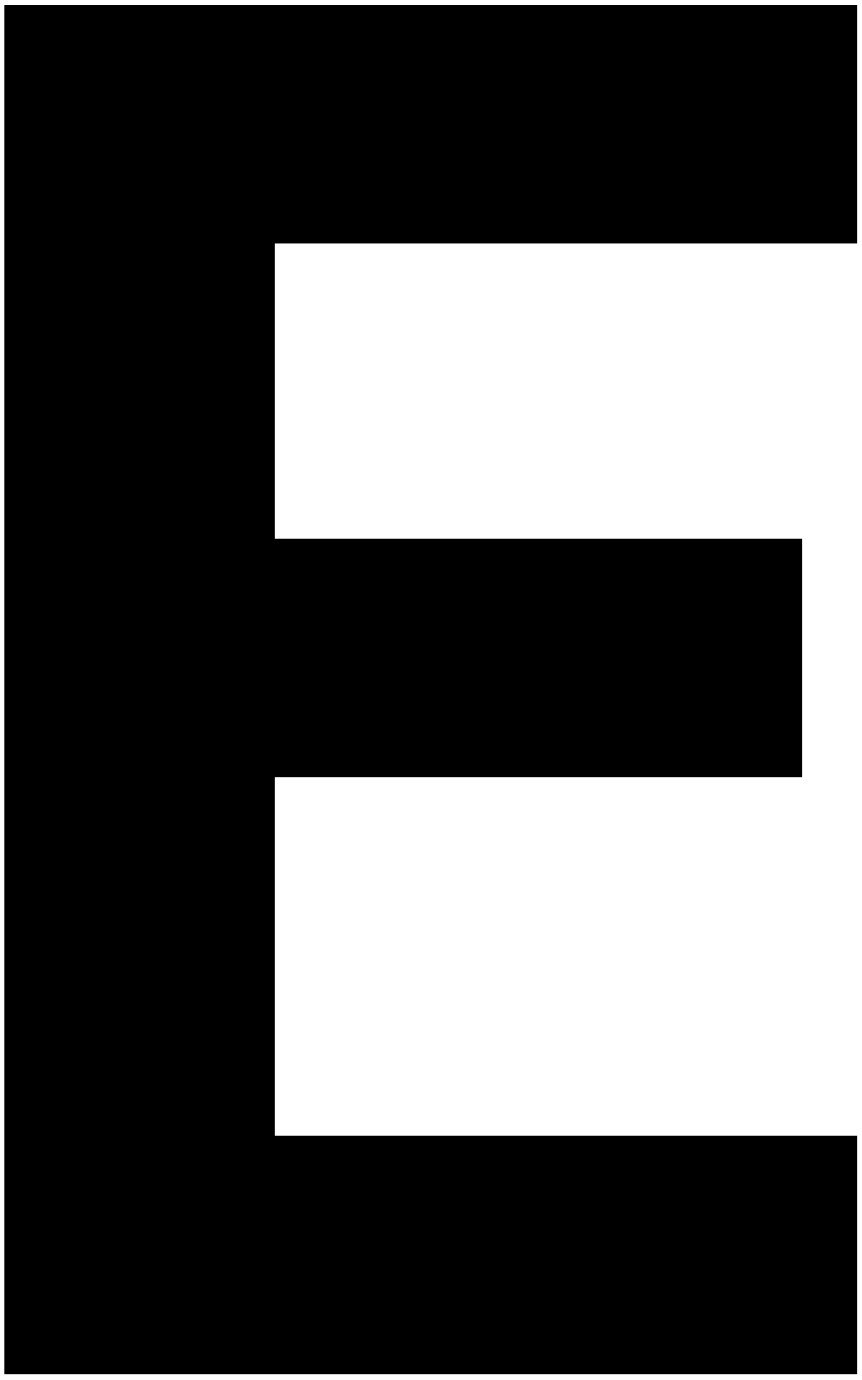




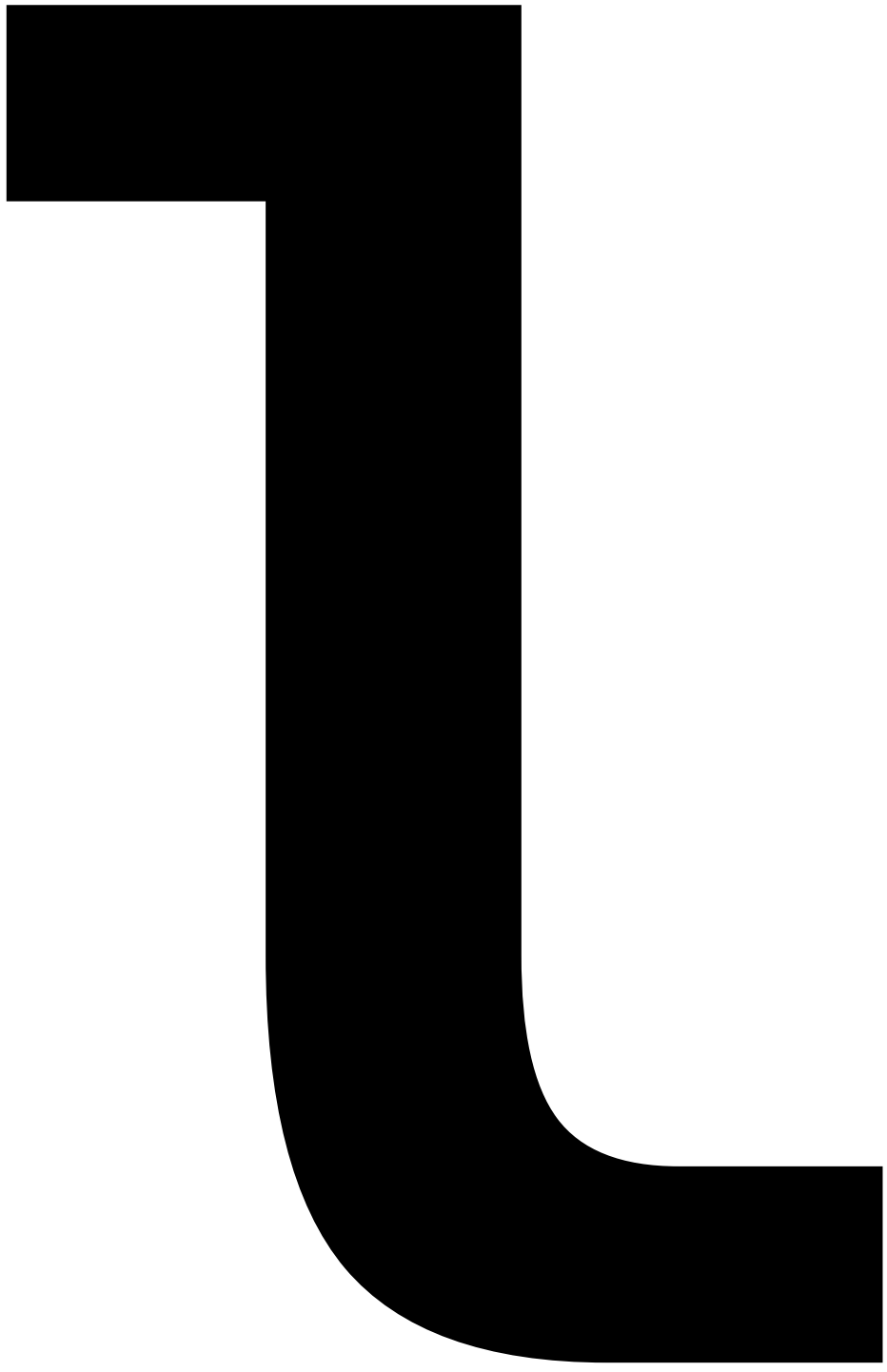


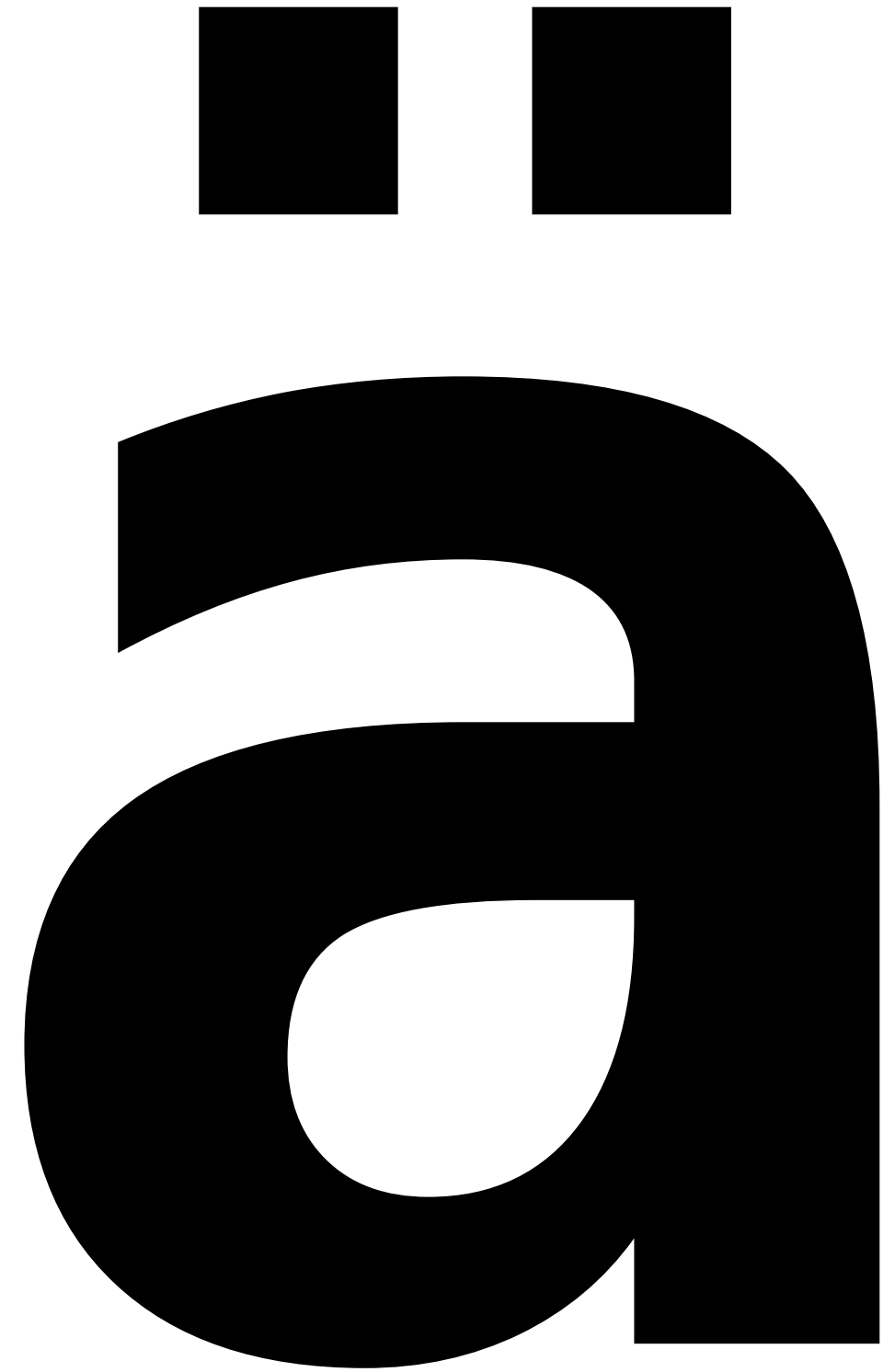






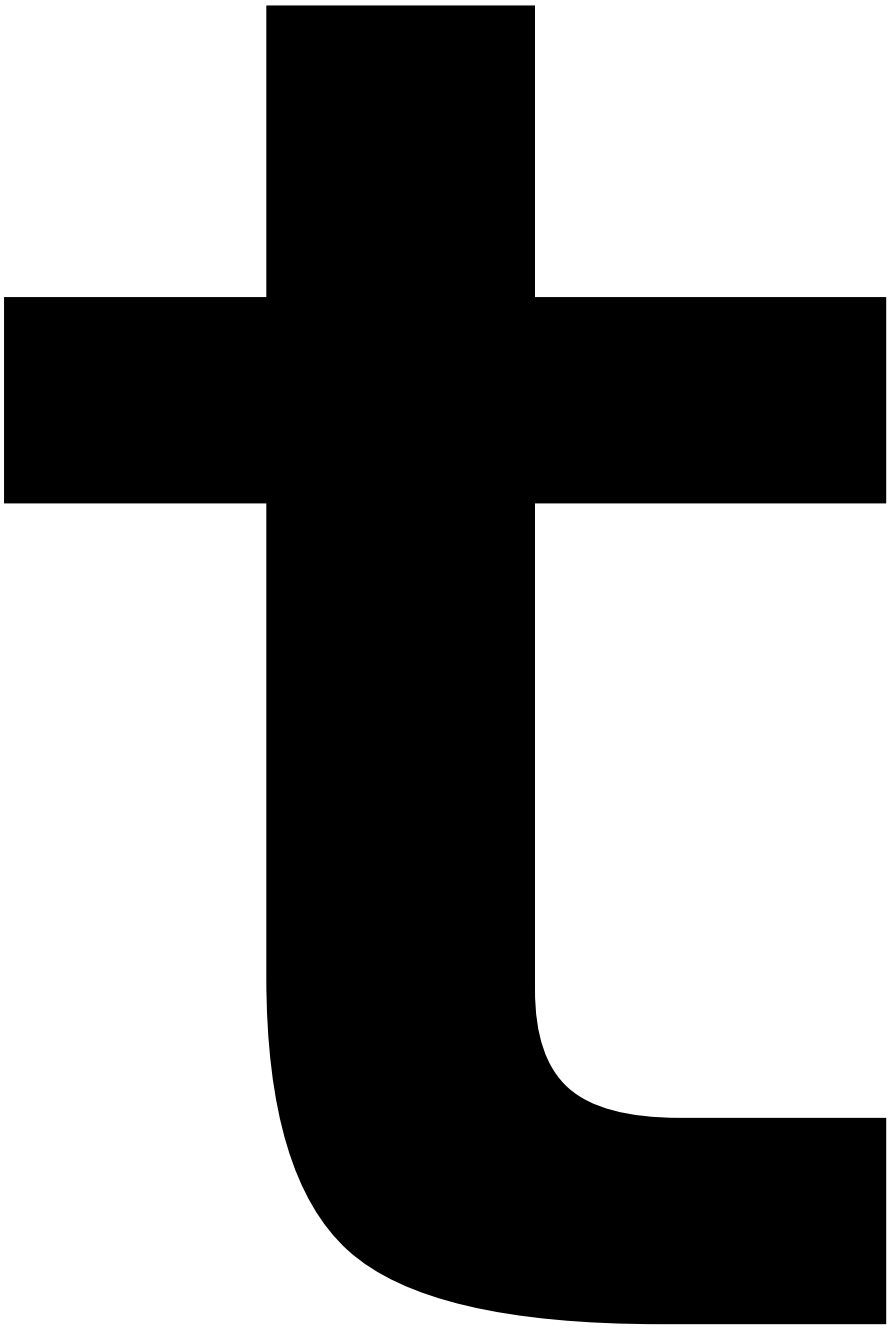
S



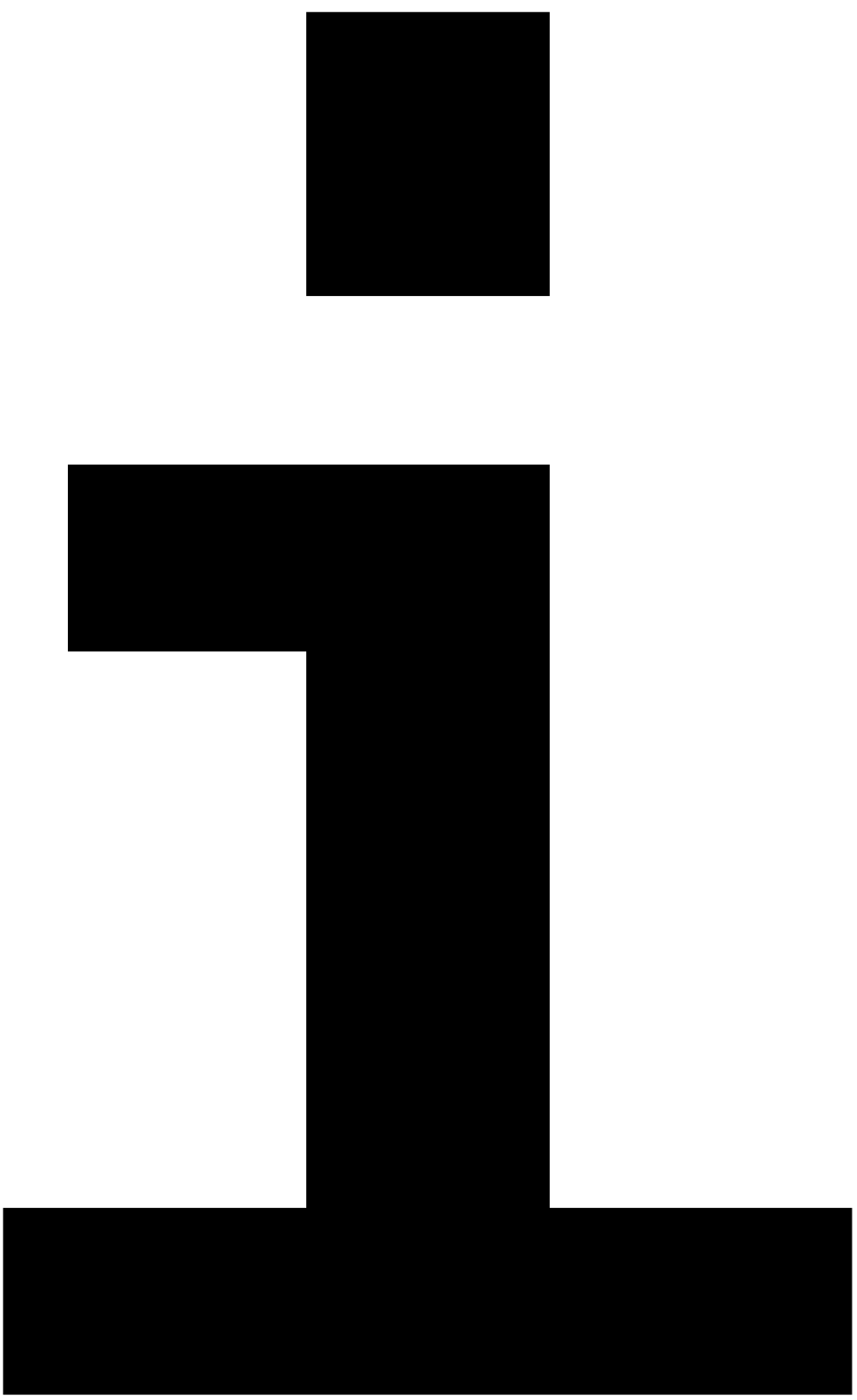


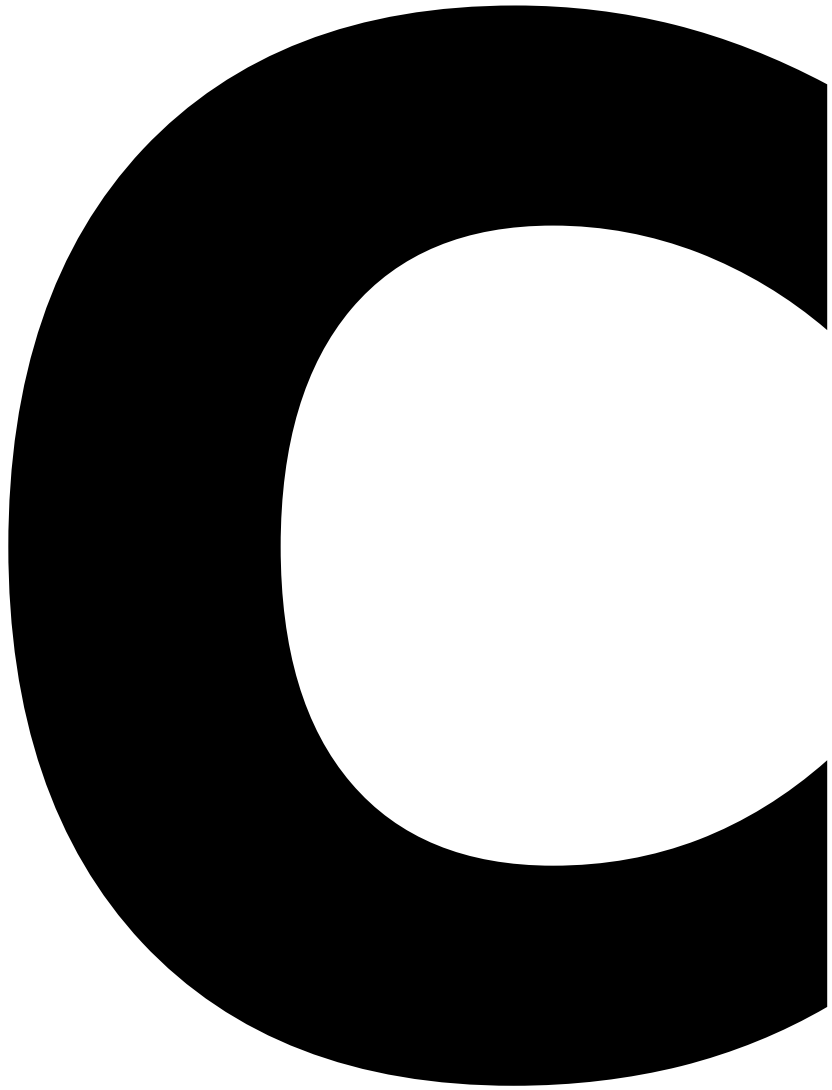
S

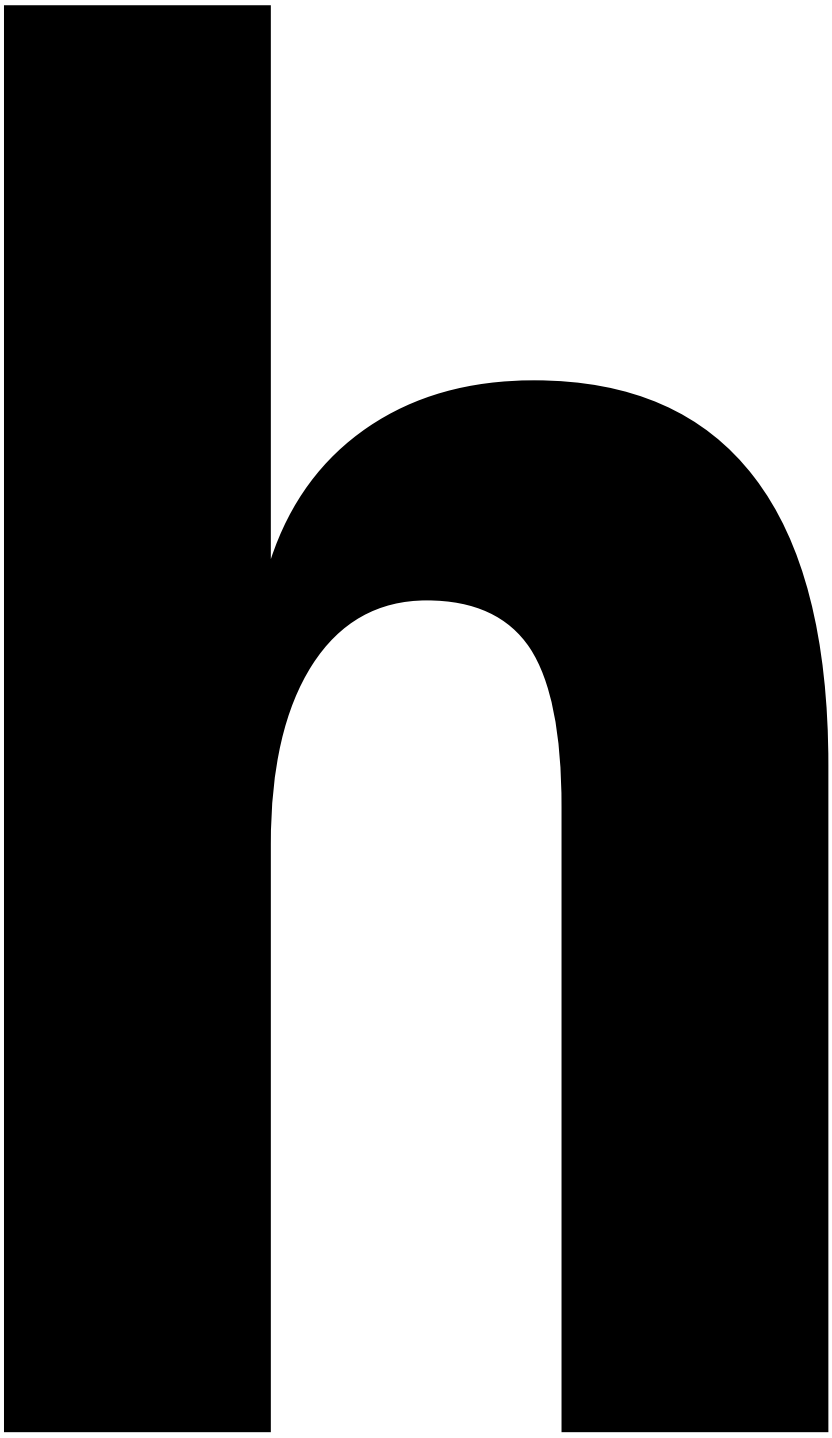
S

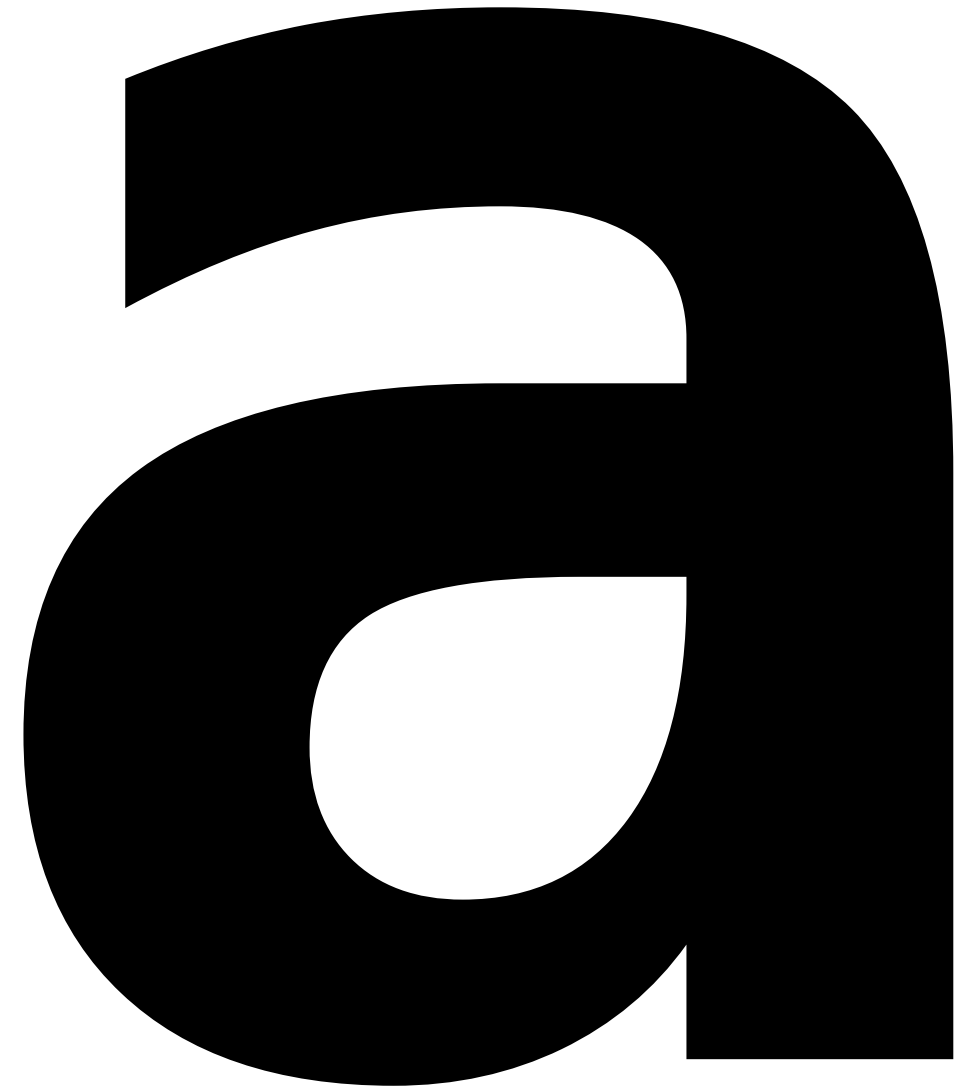


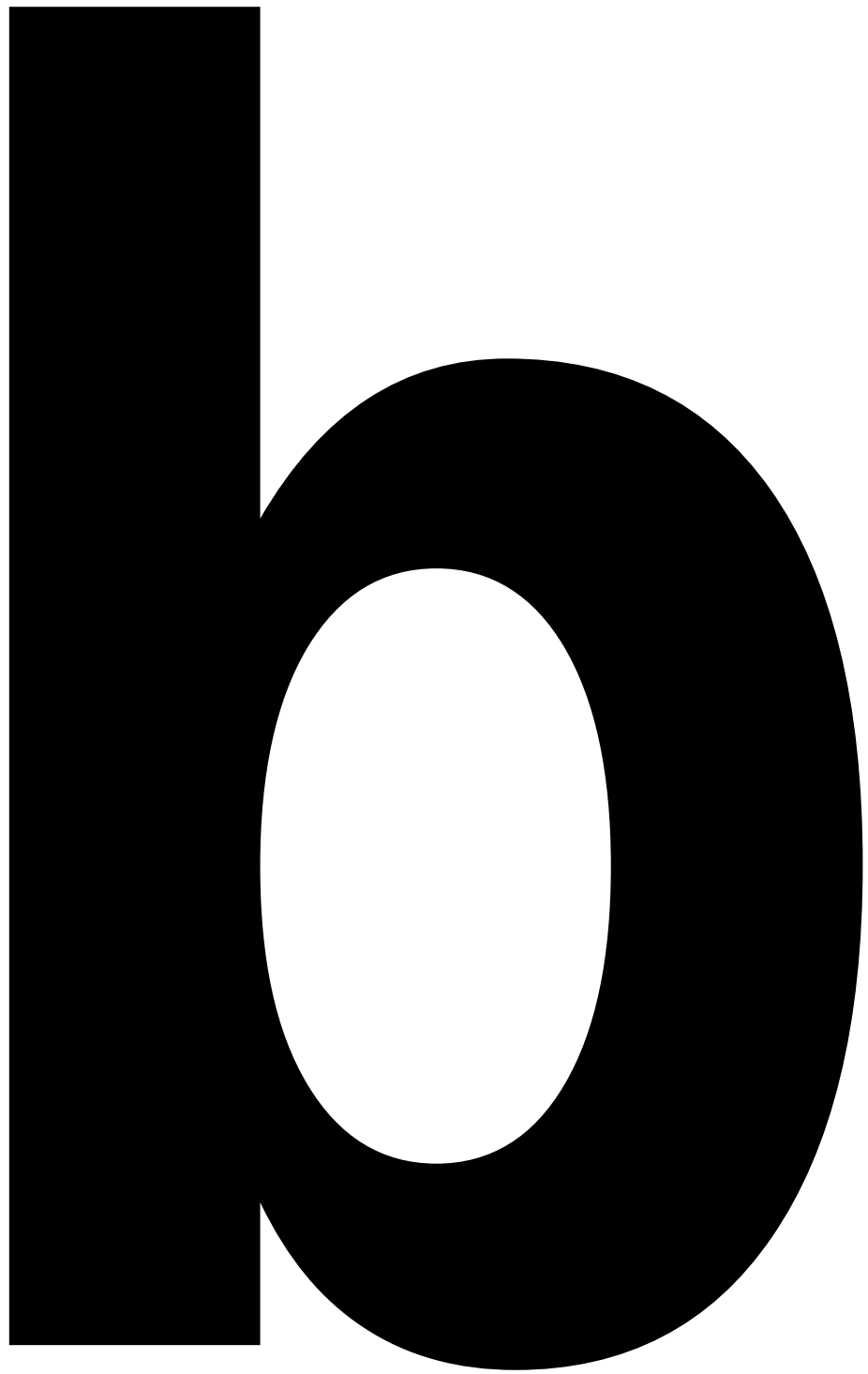
S



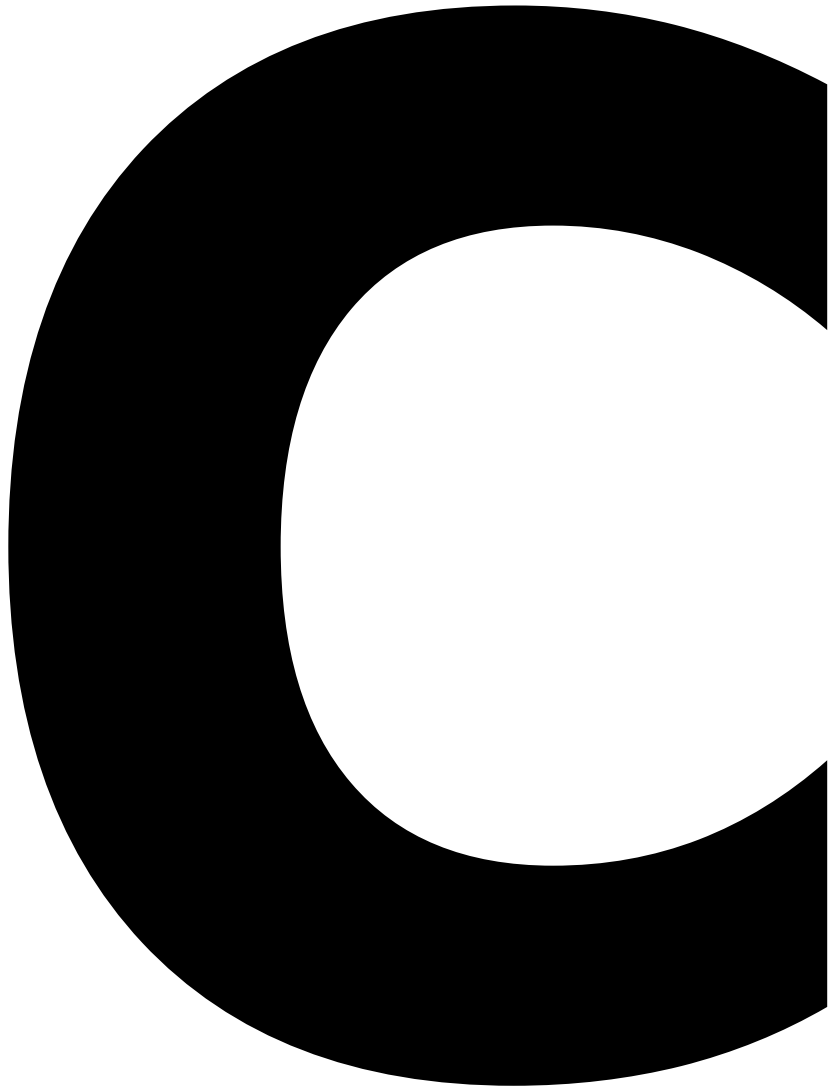


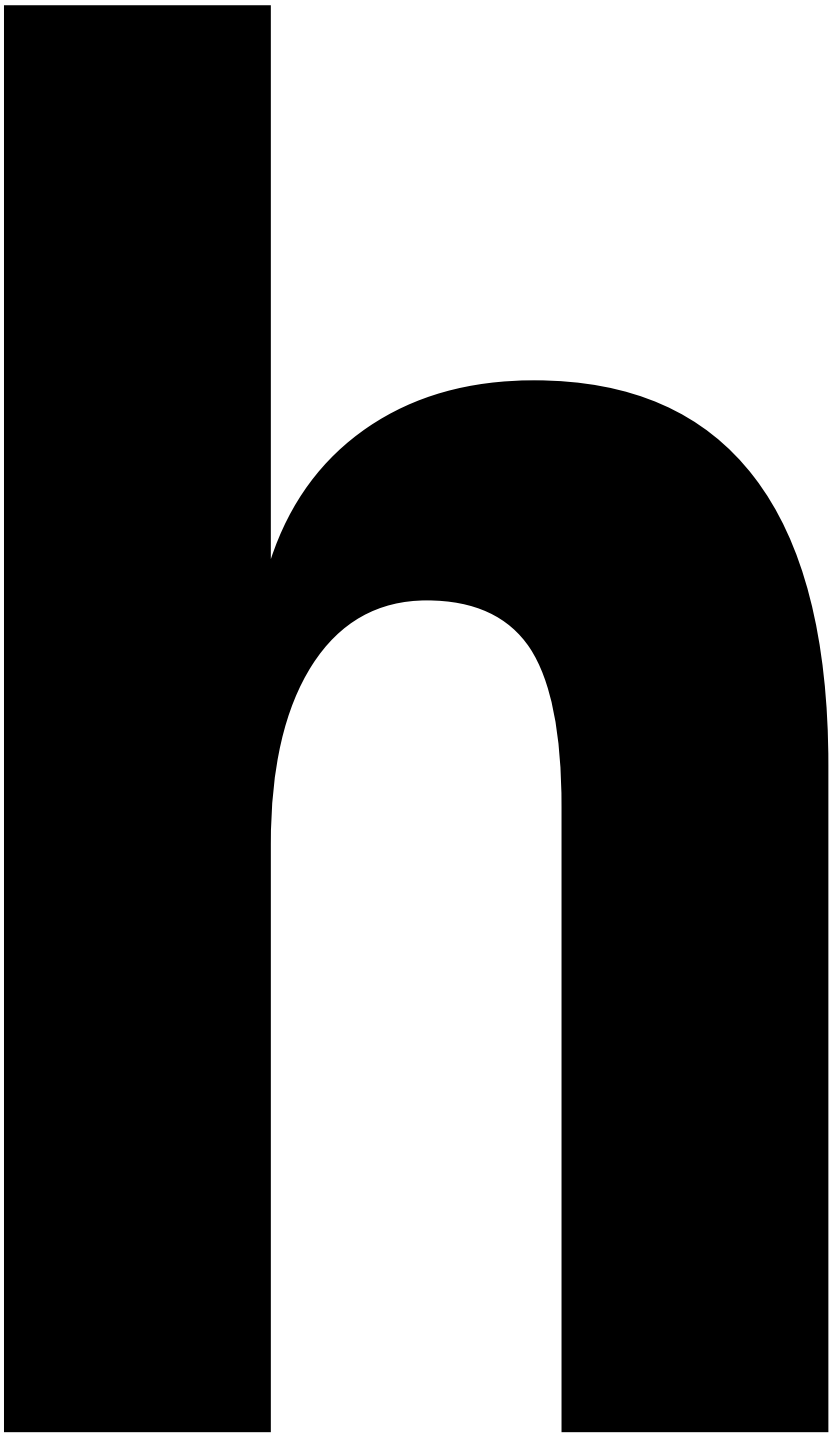


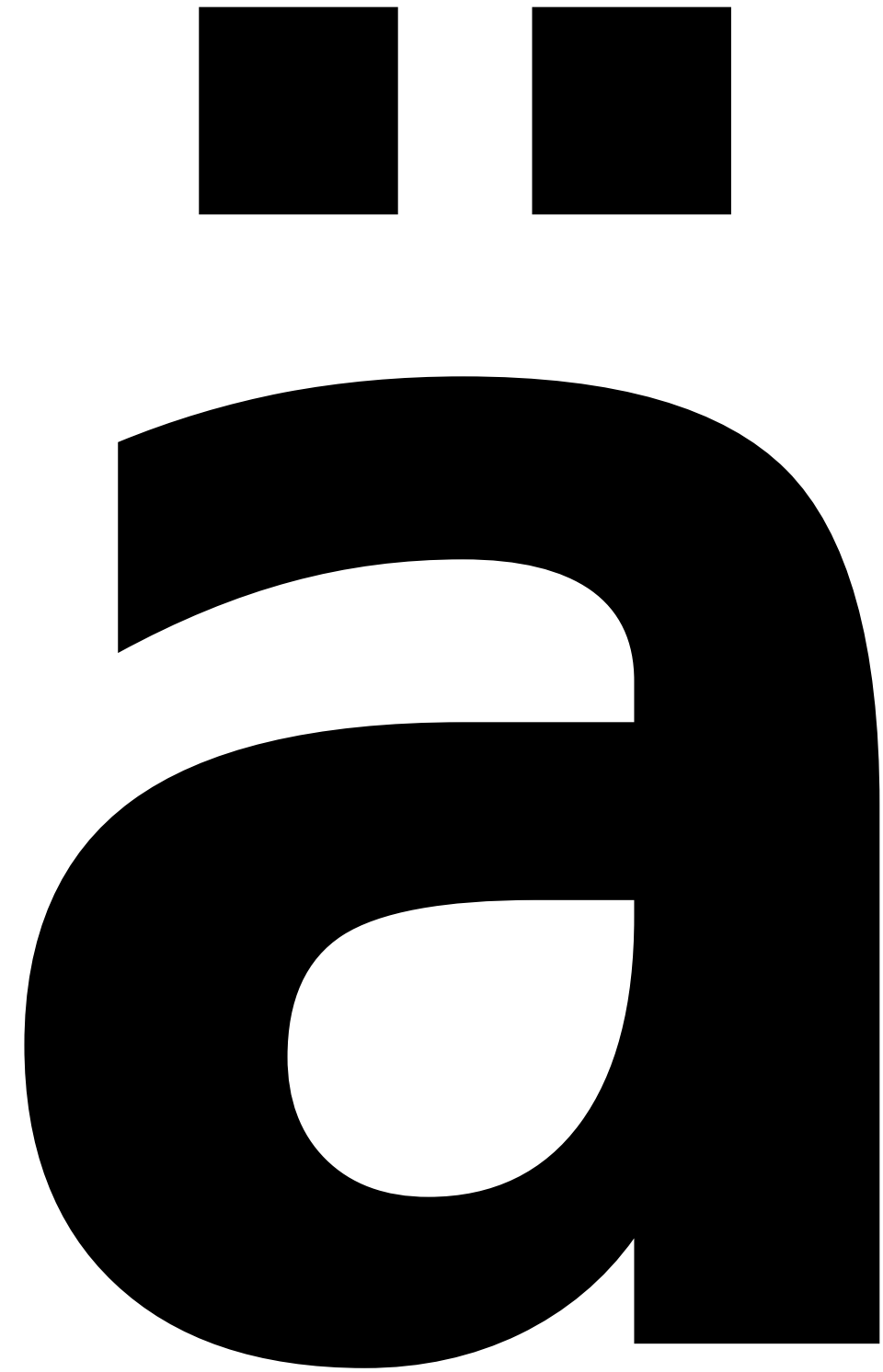


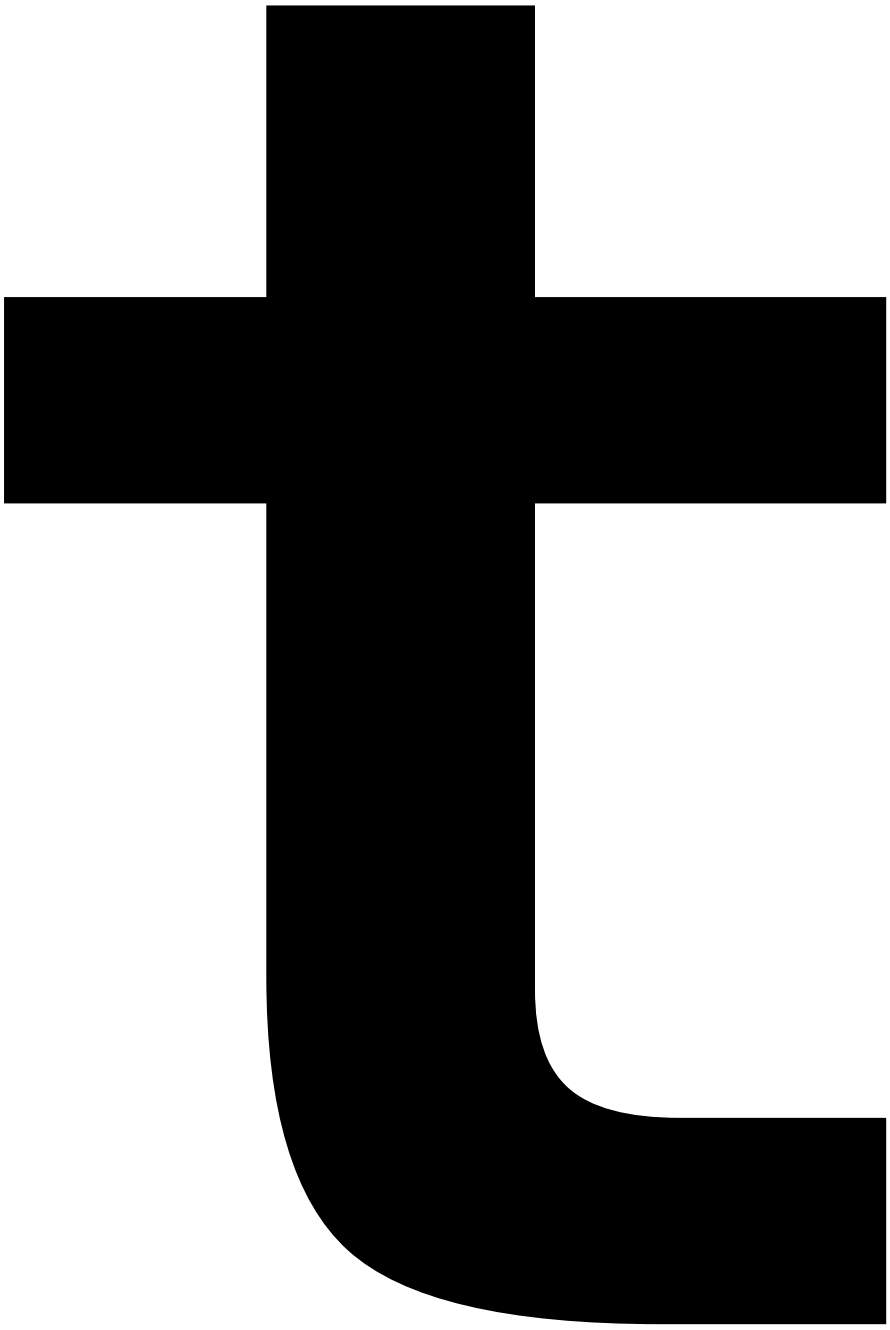


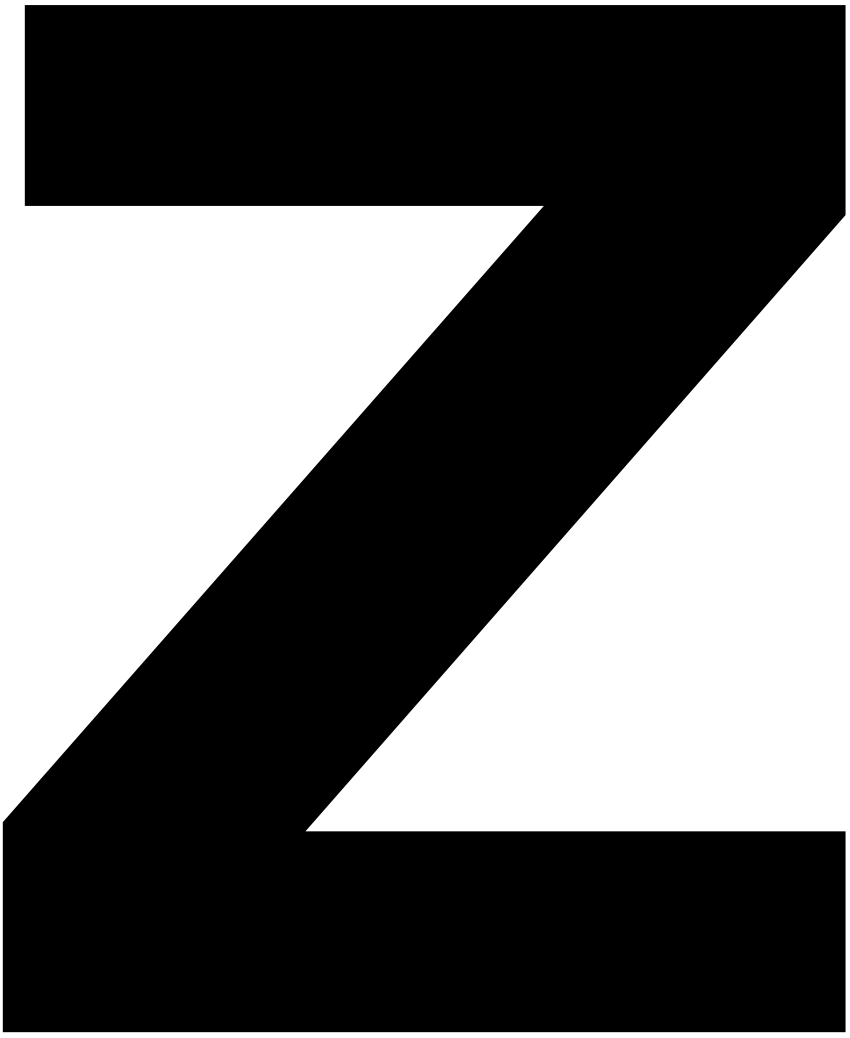
S

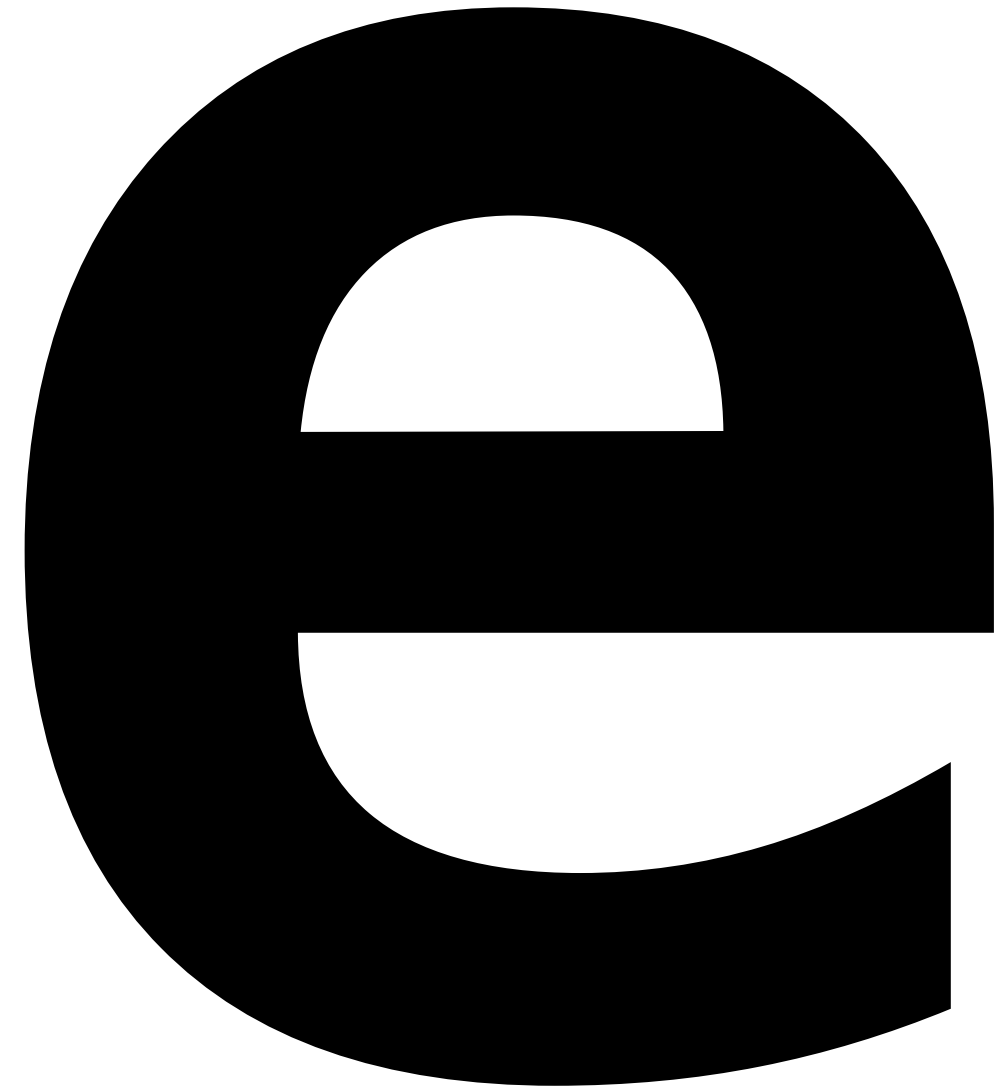


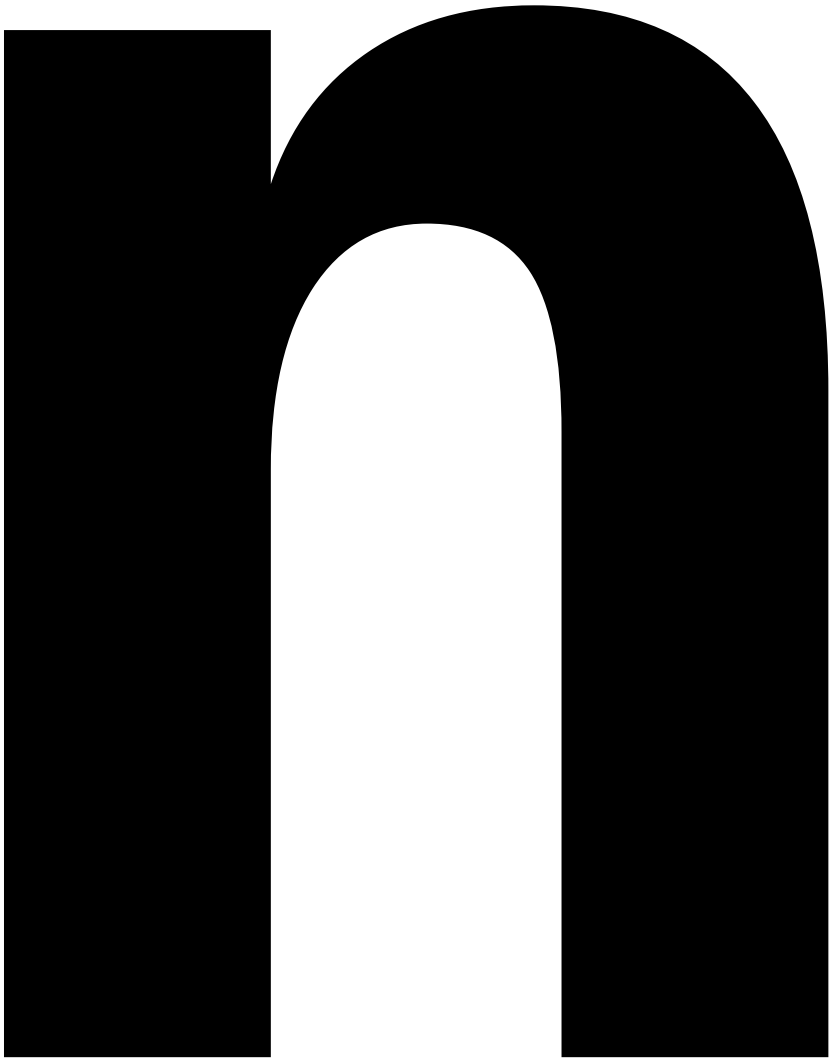


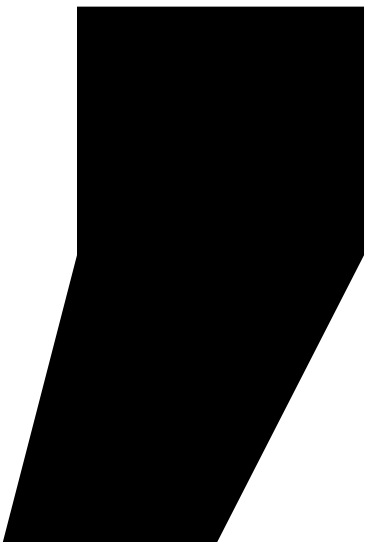




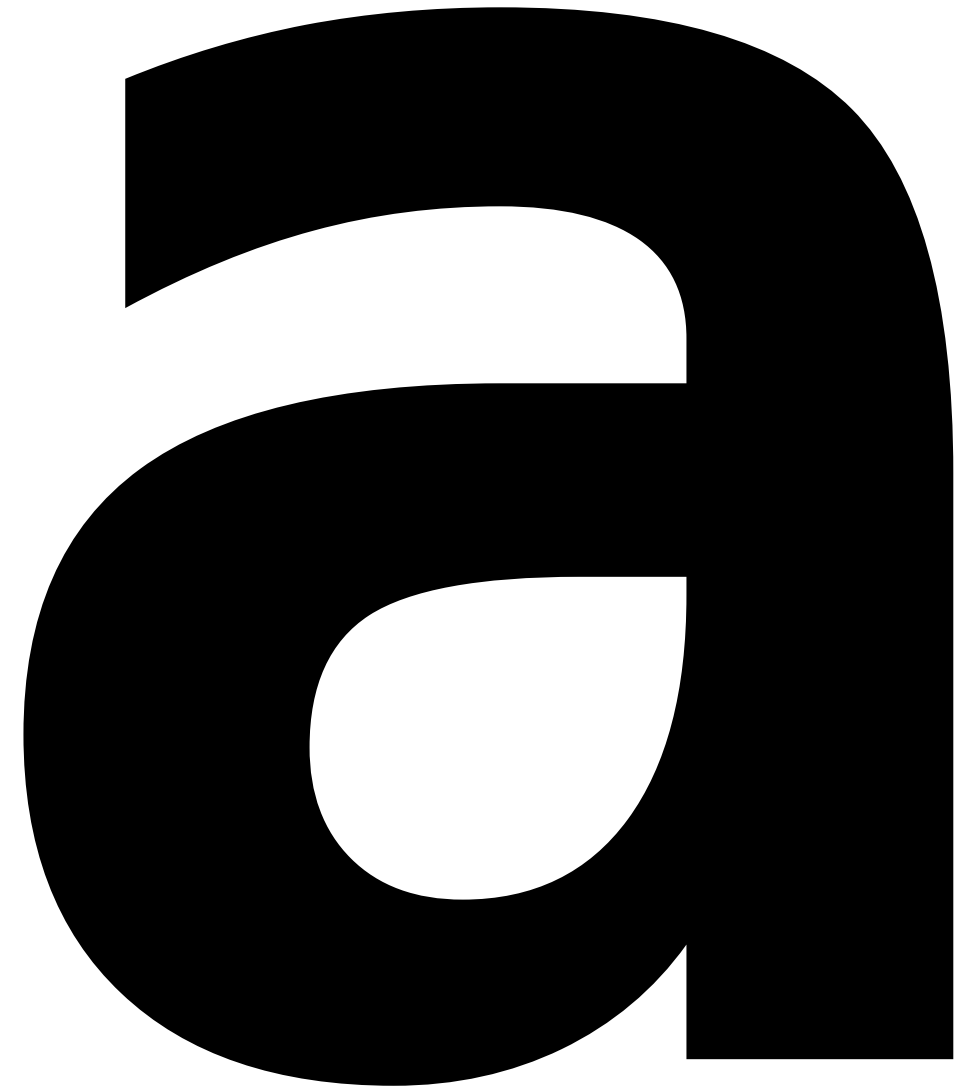


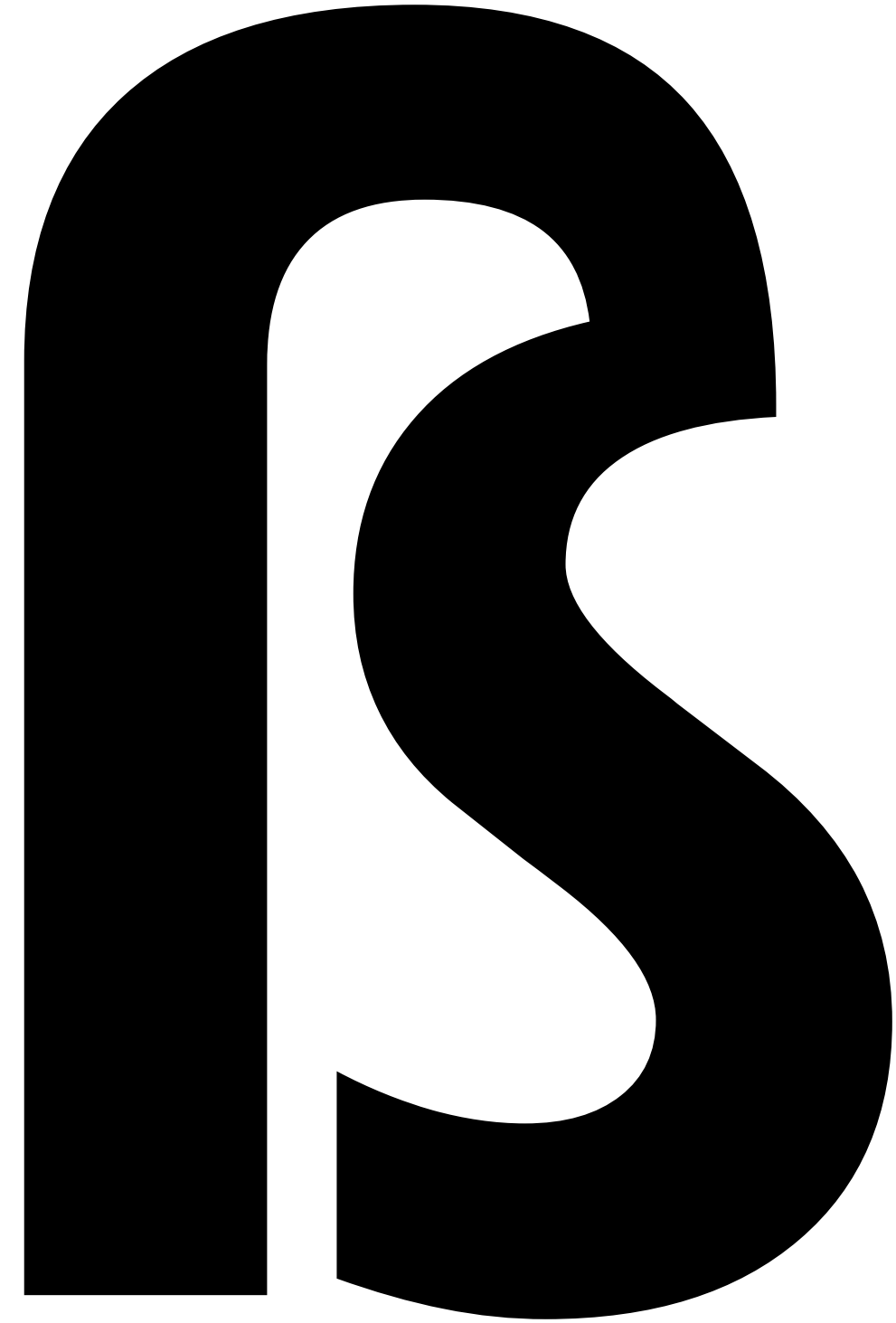






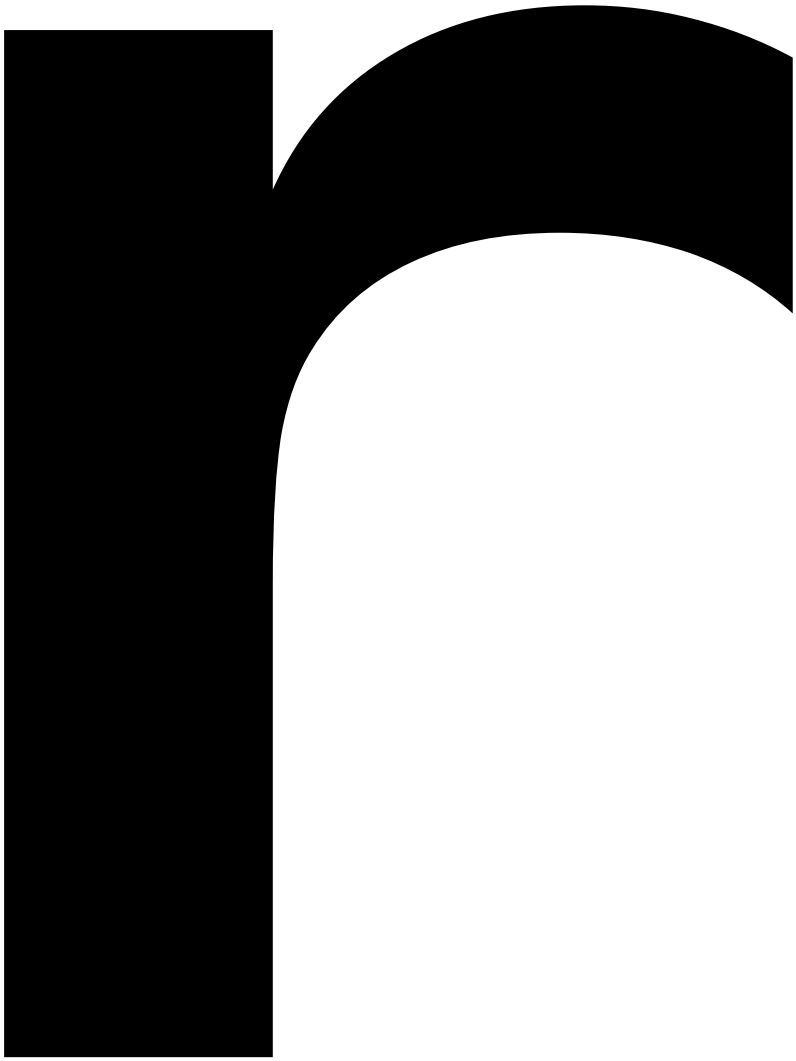
d

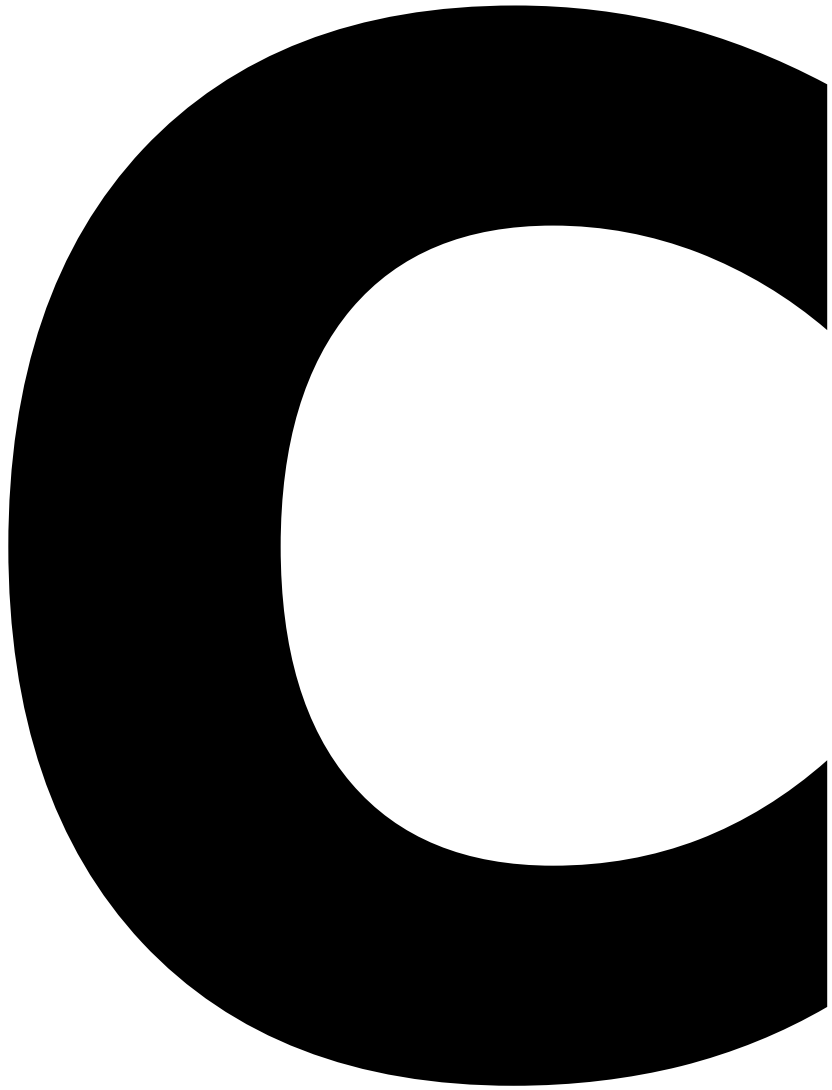


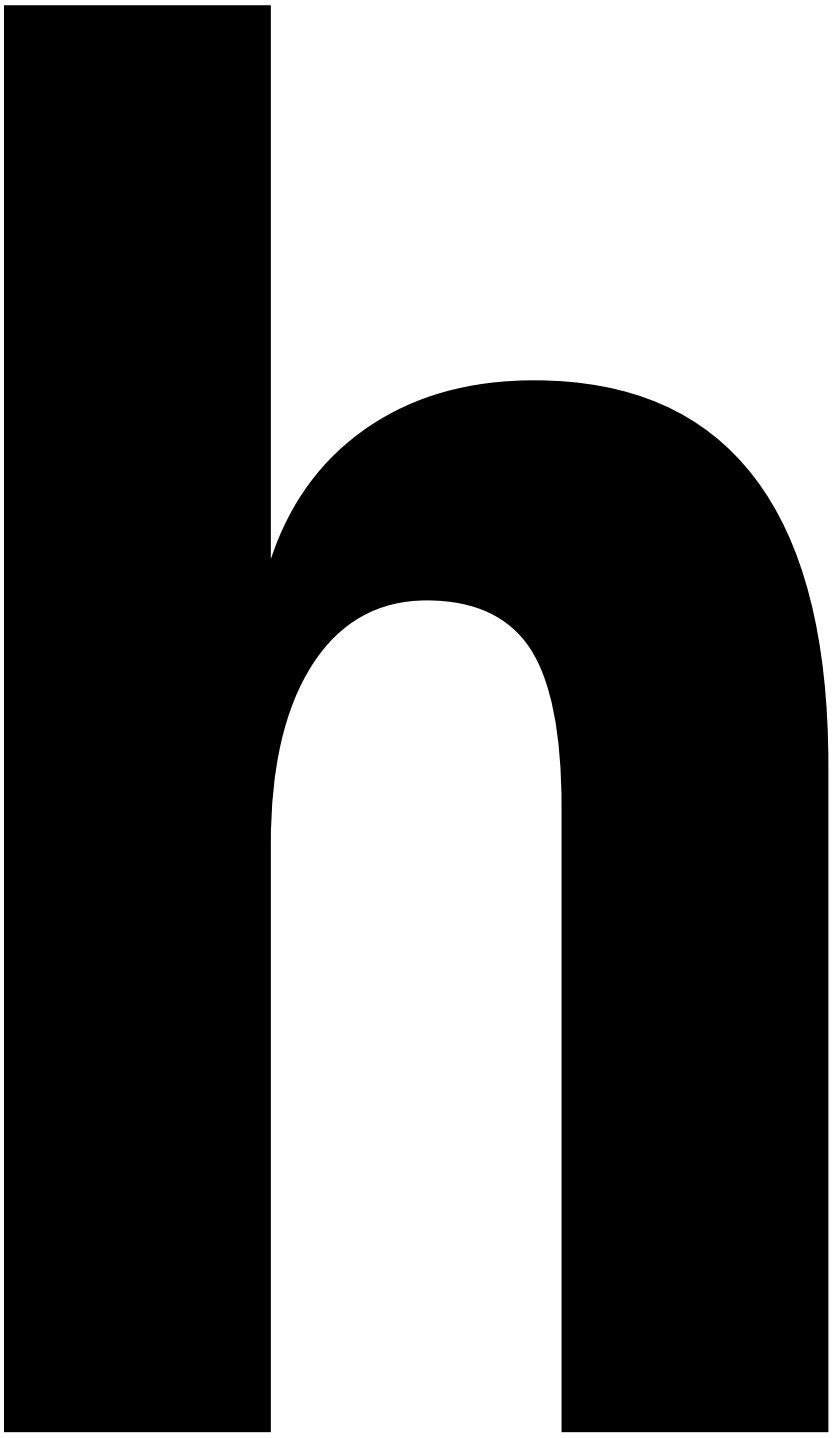


d

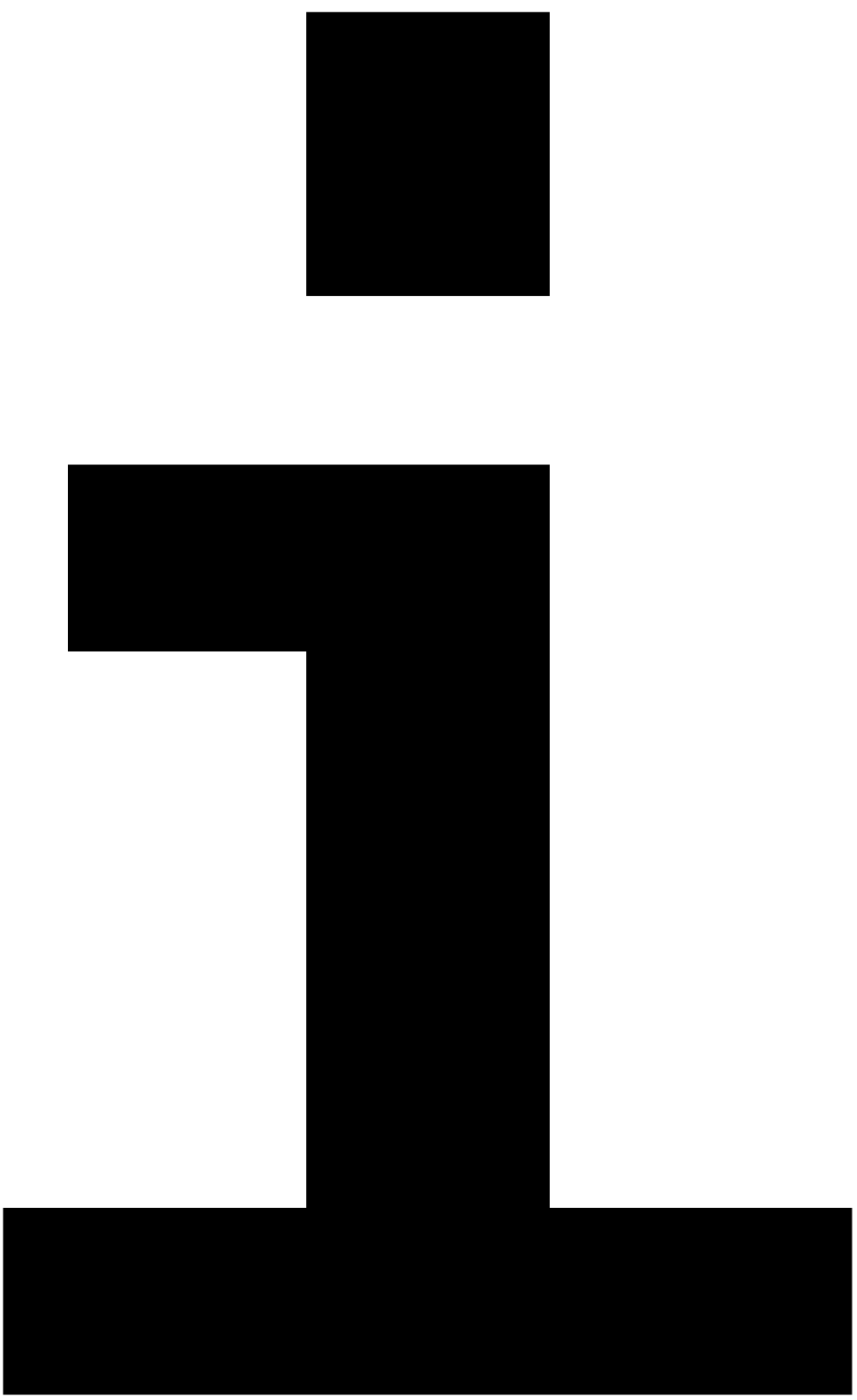
u

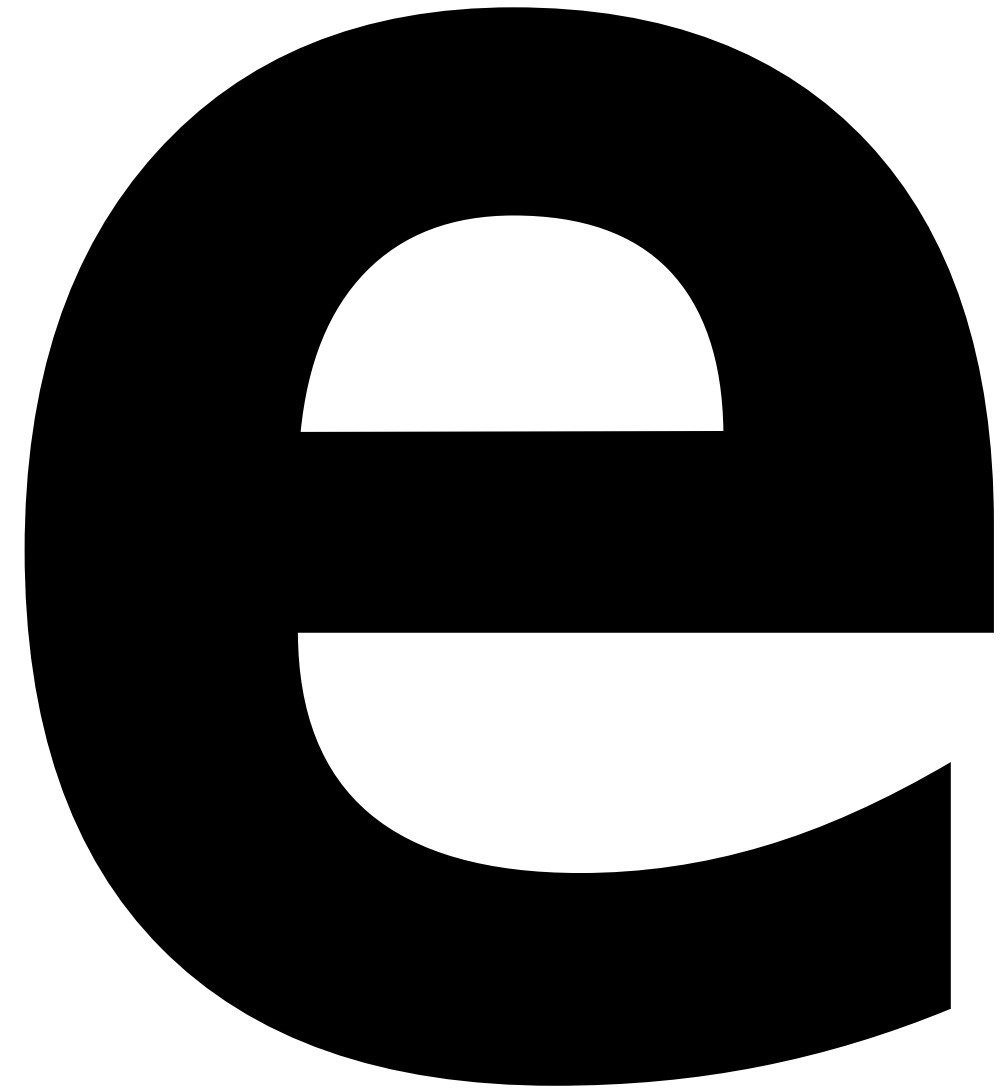


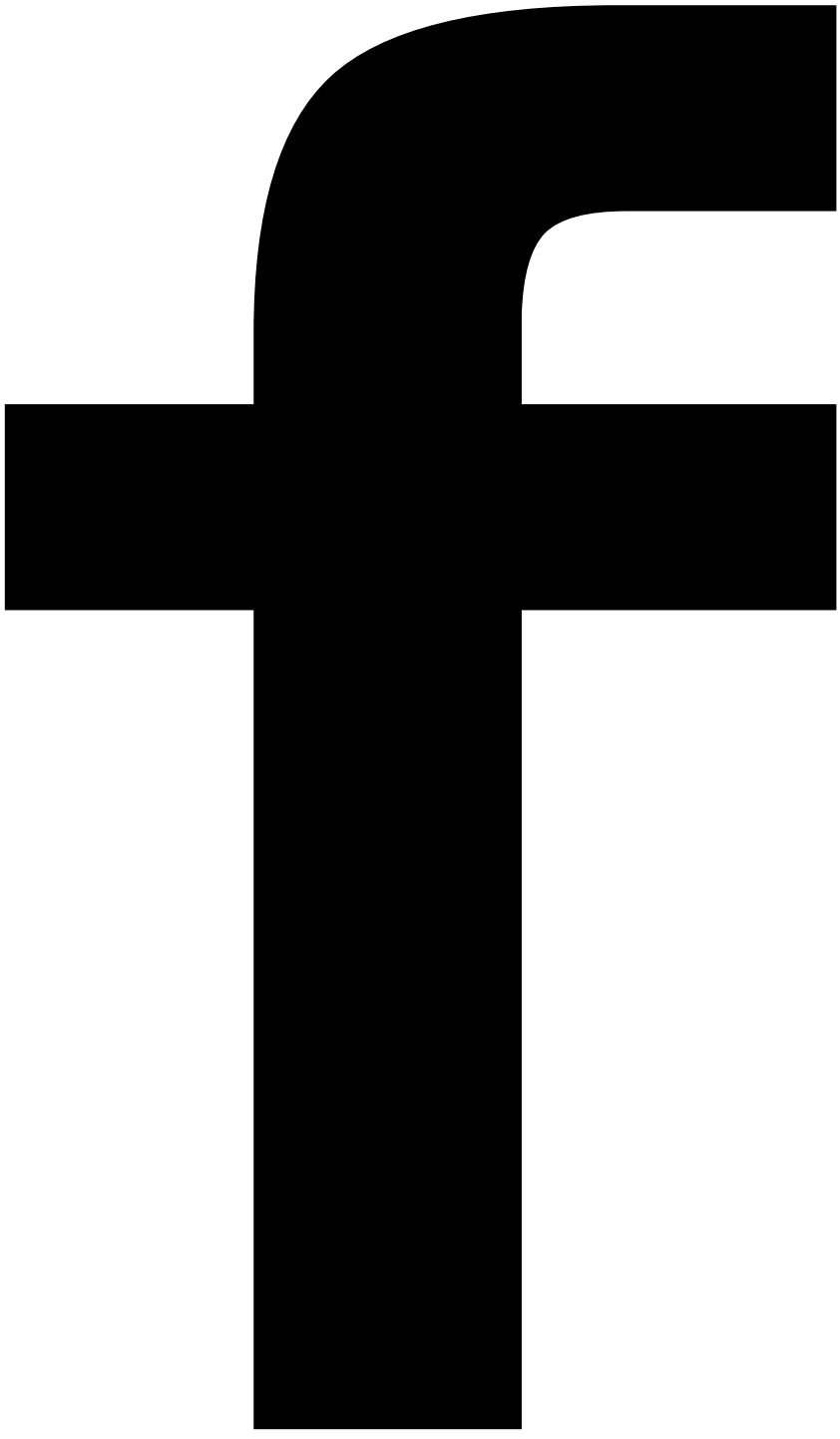


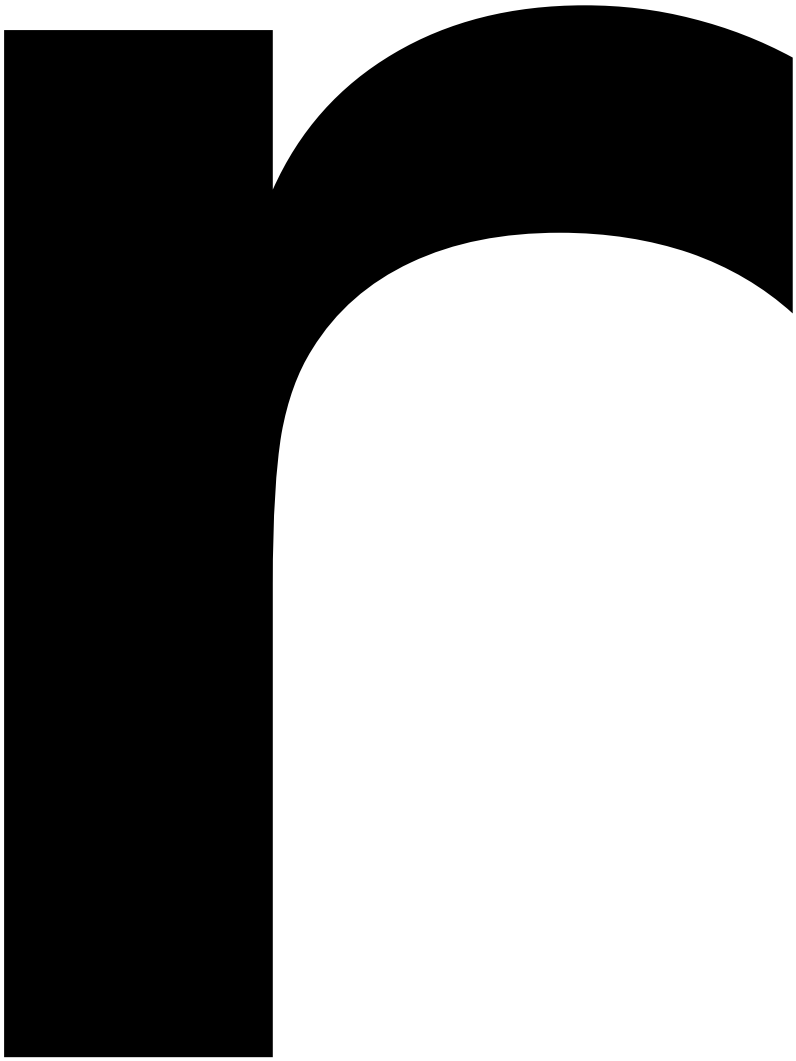


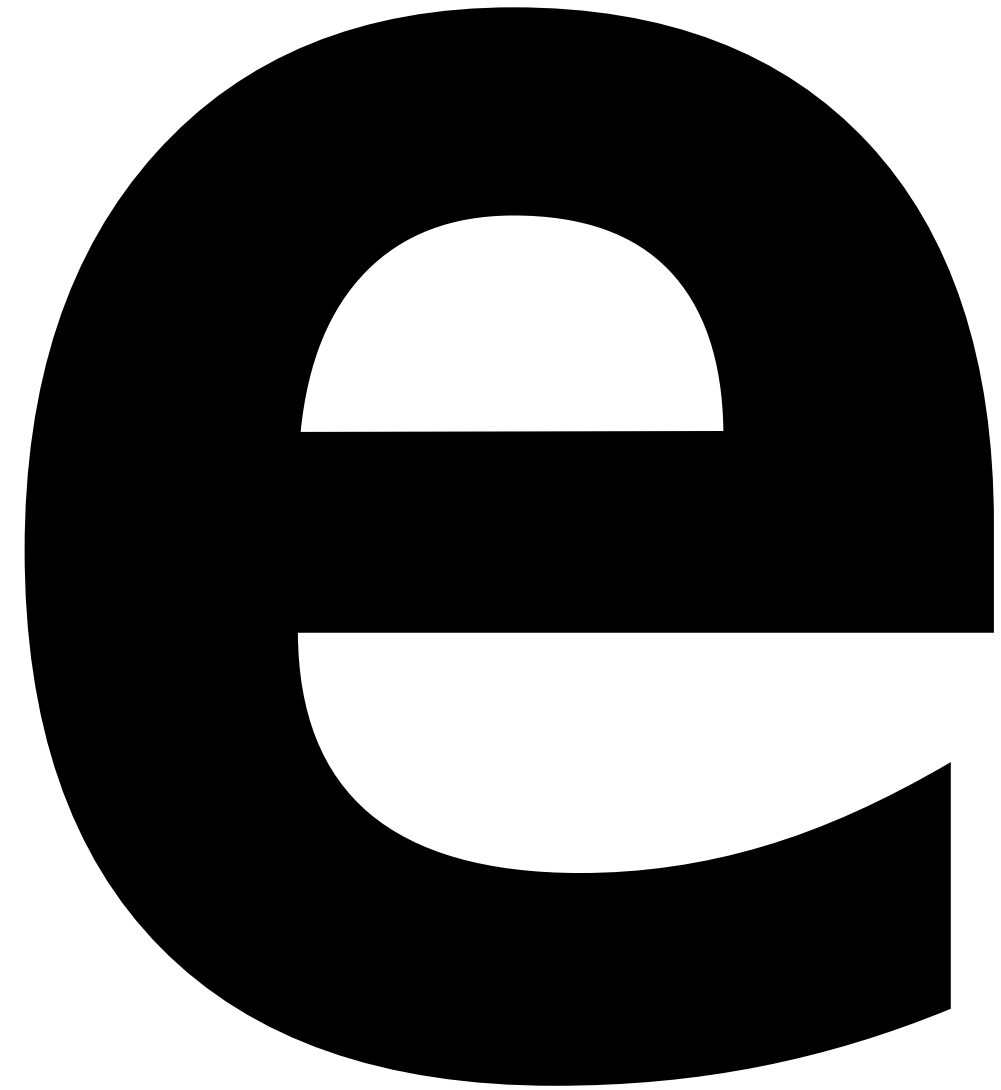
d

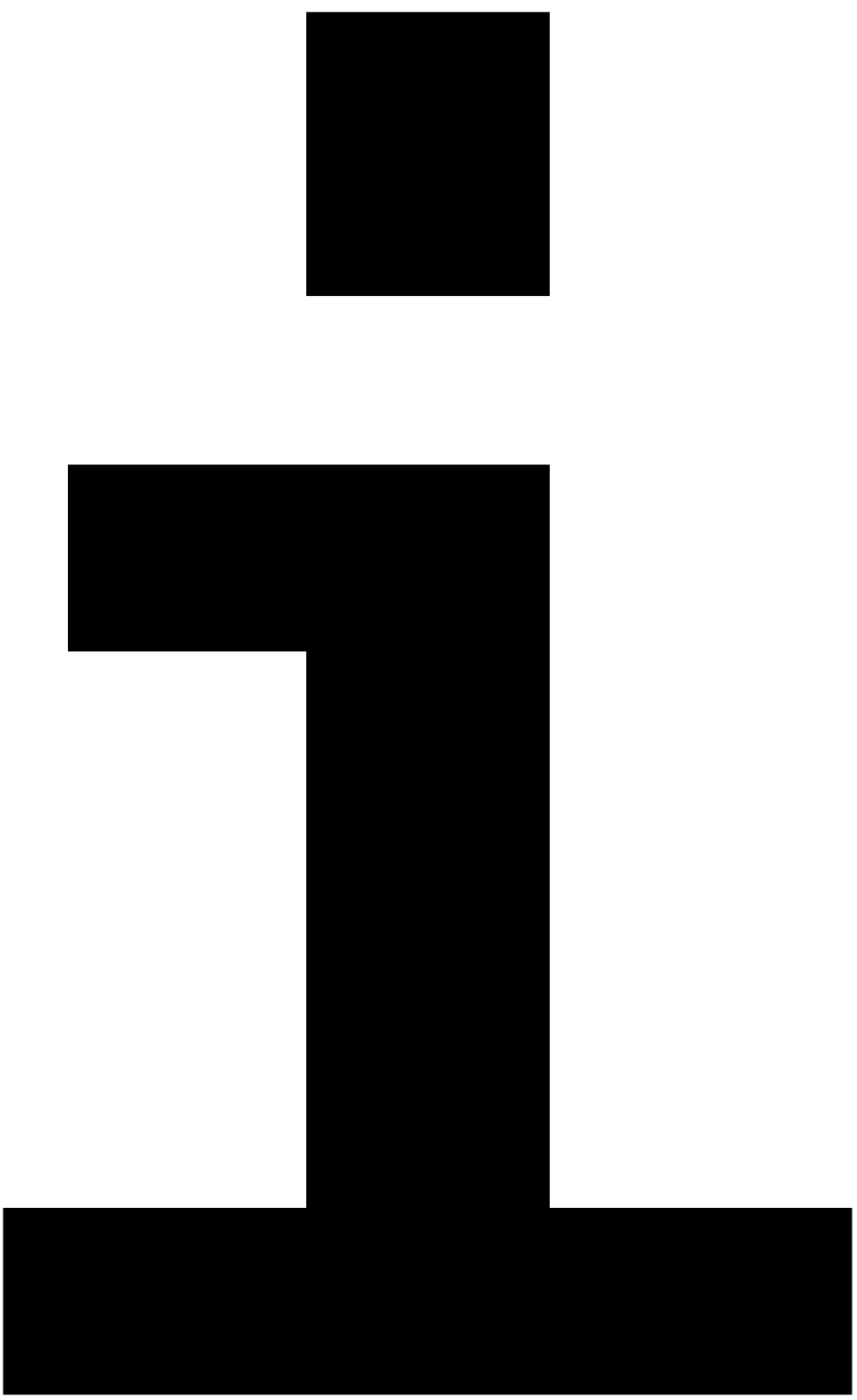


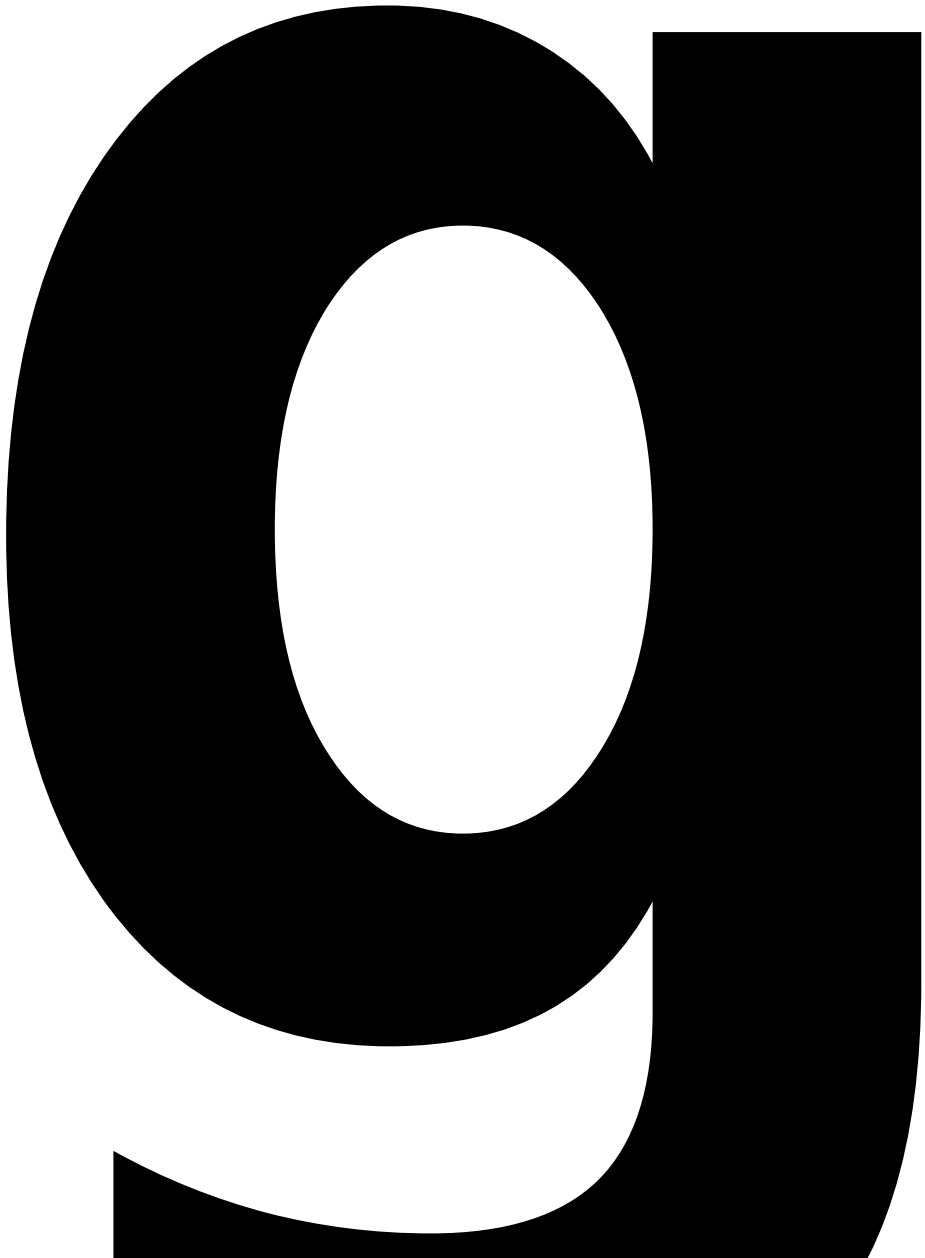


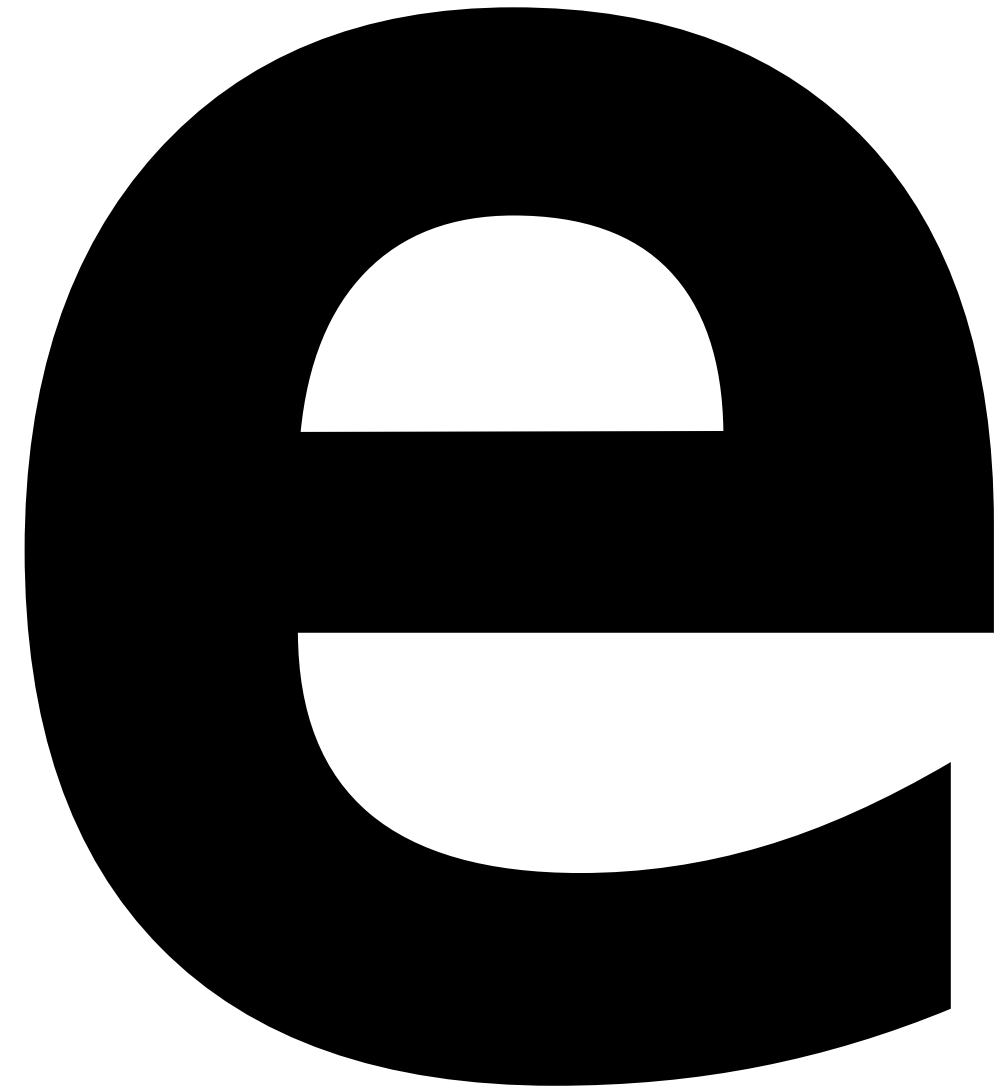




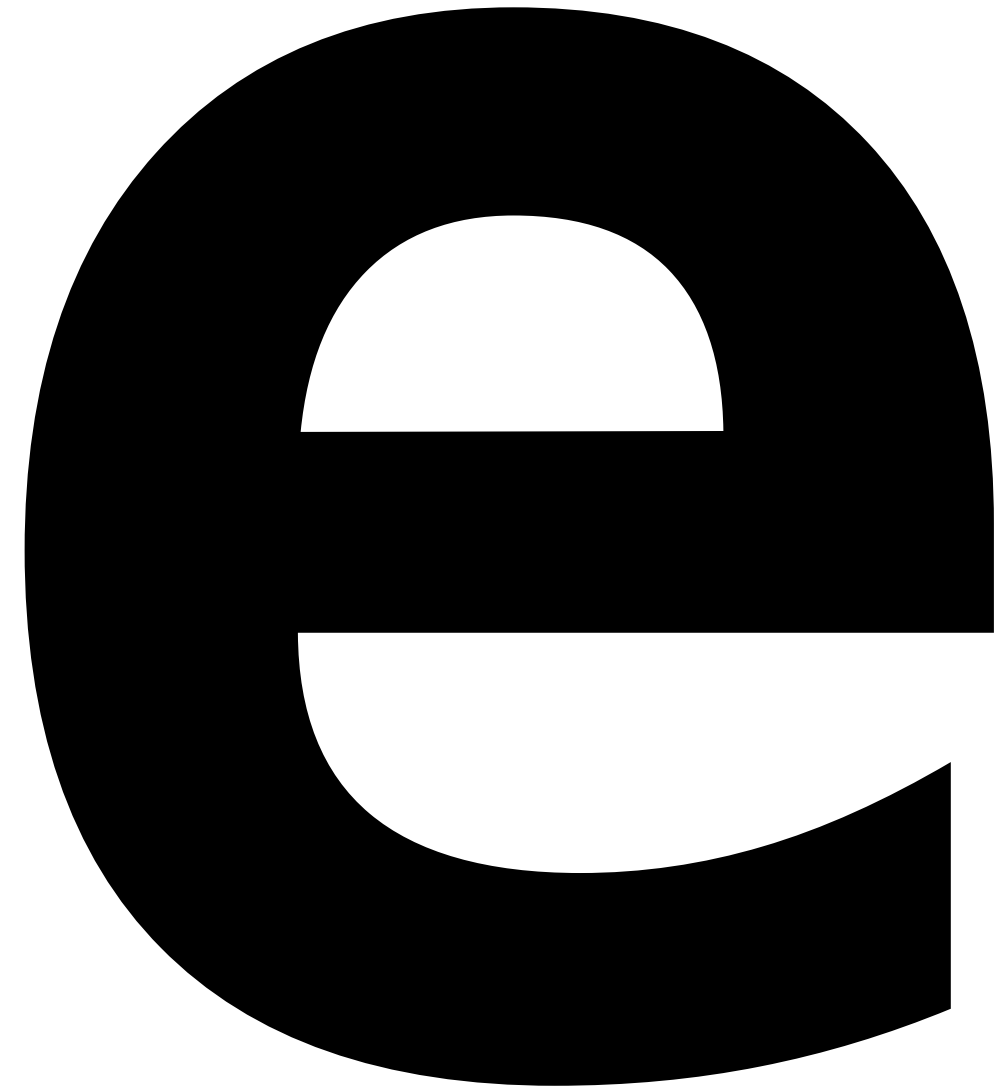


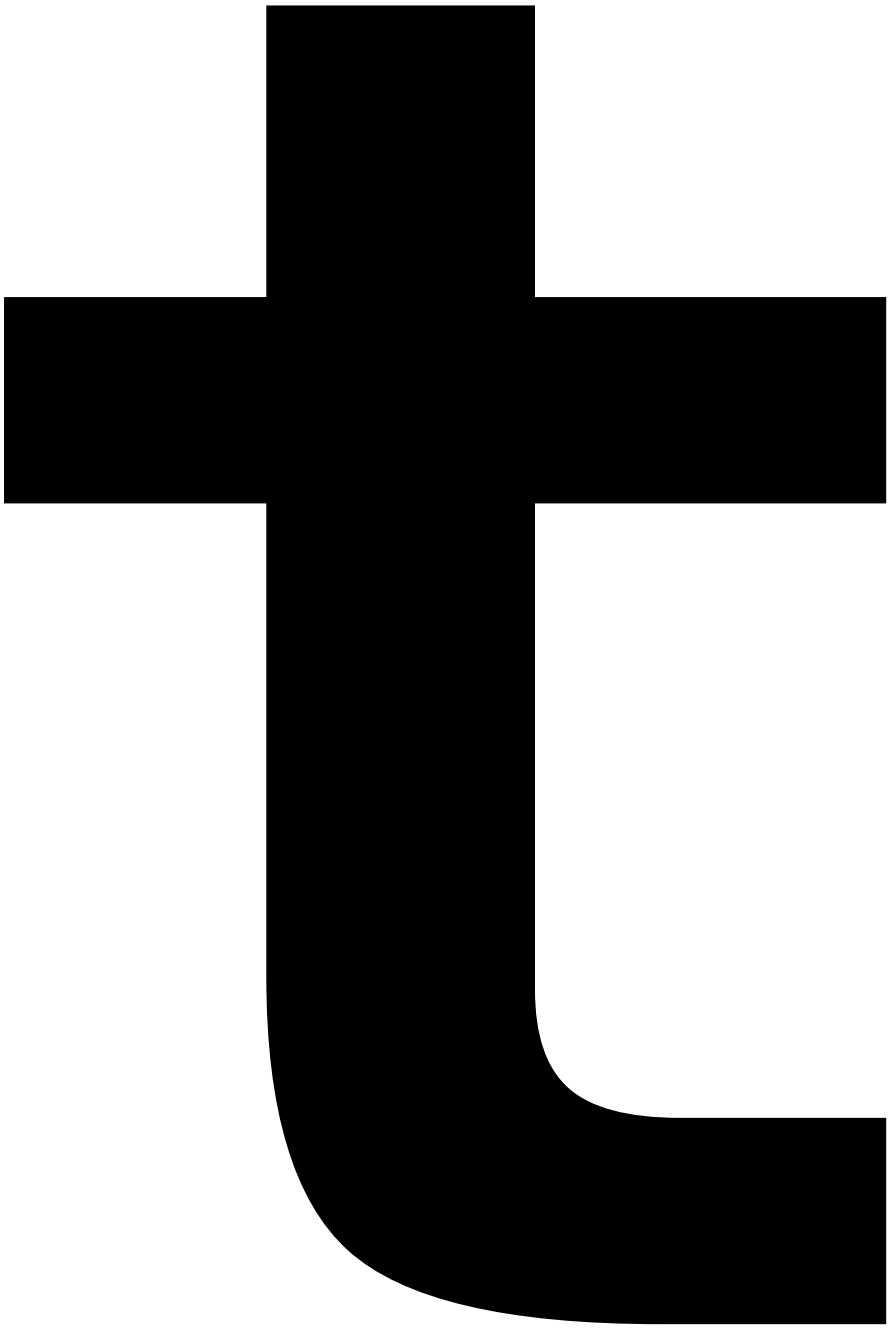


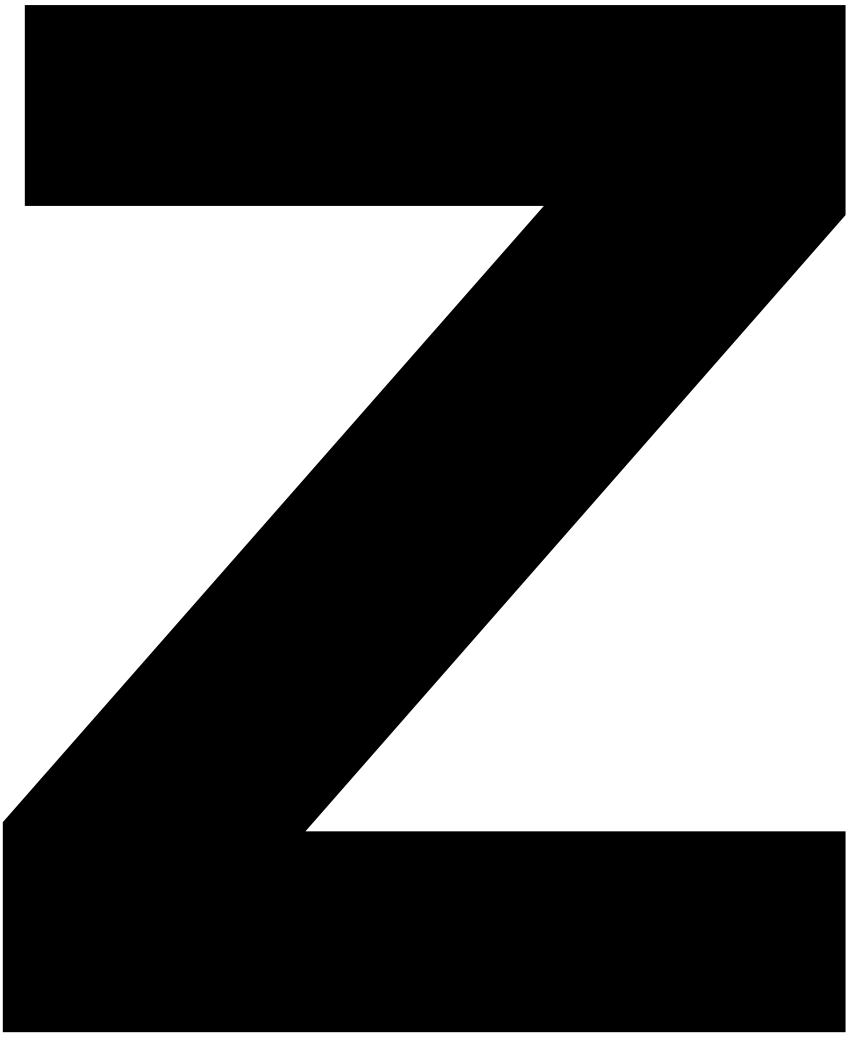


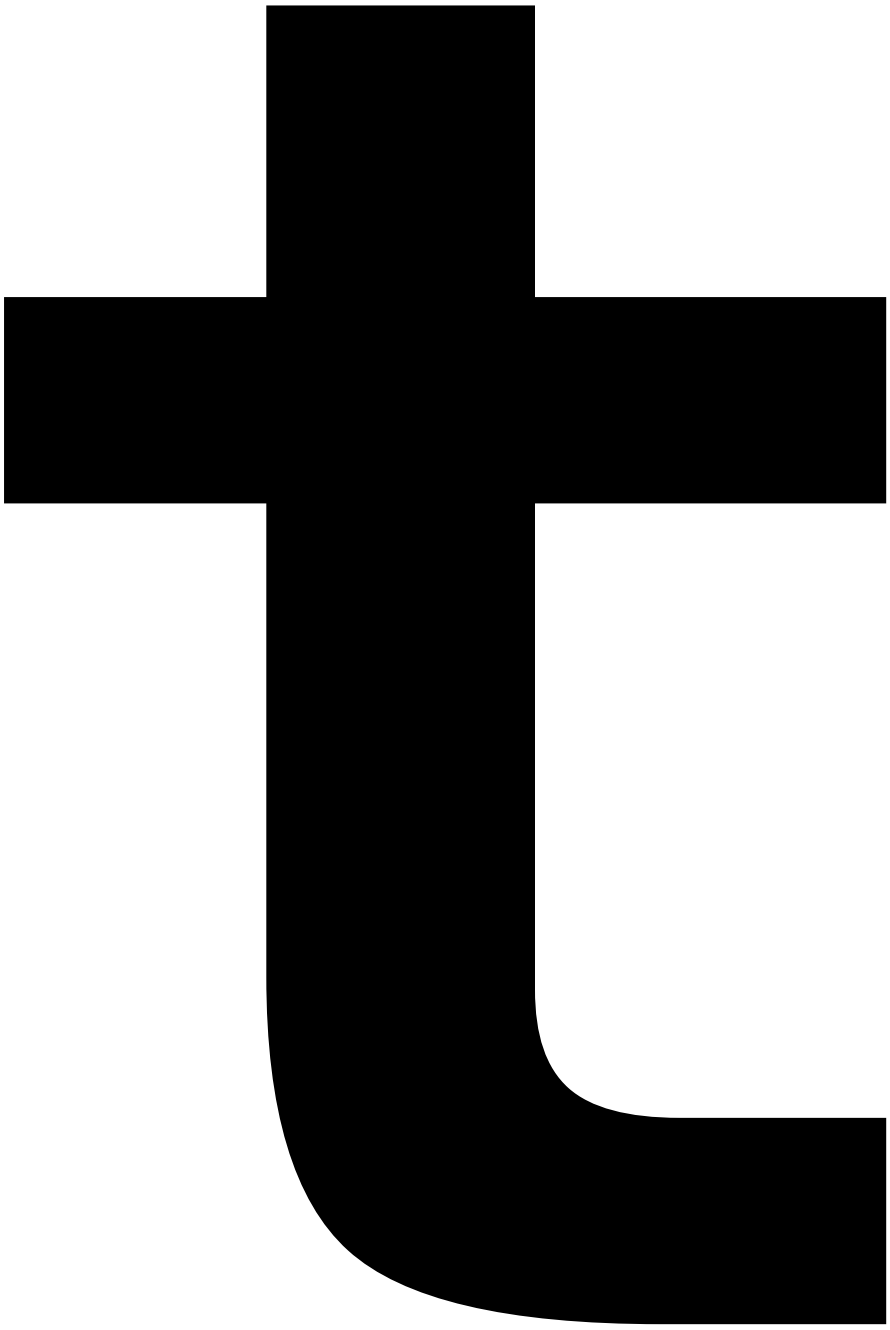


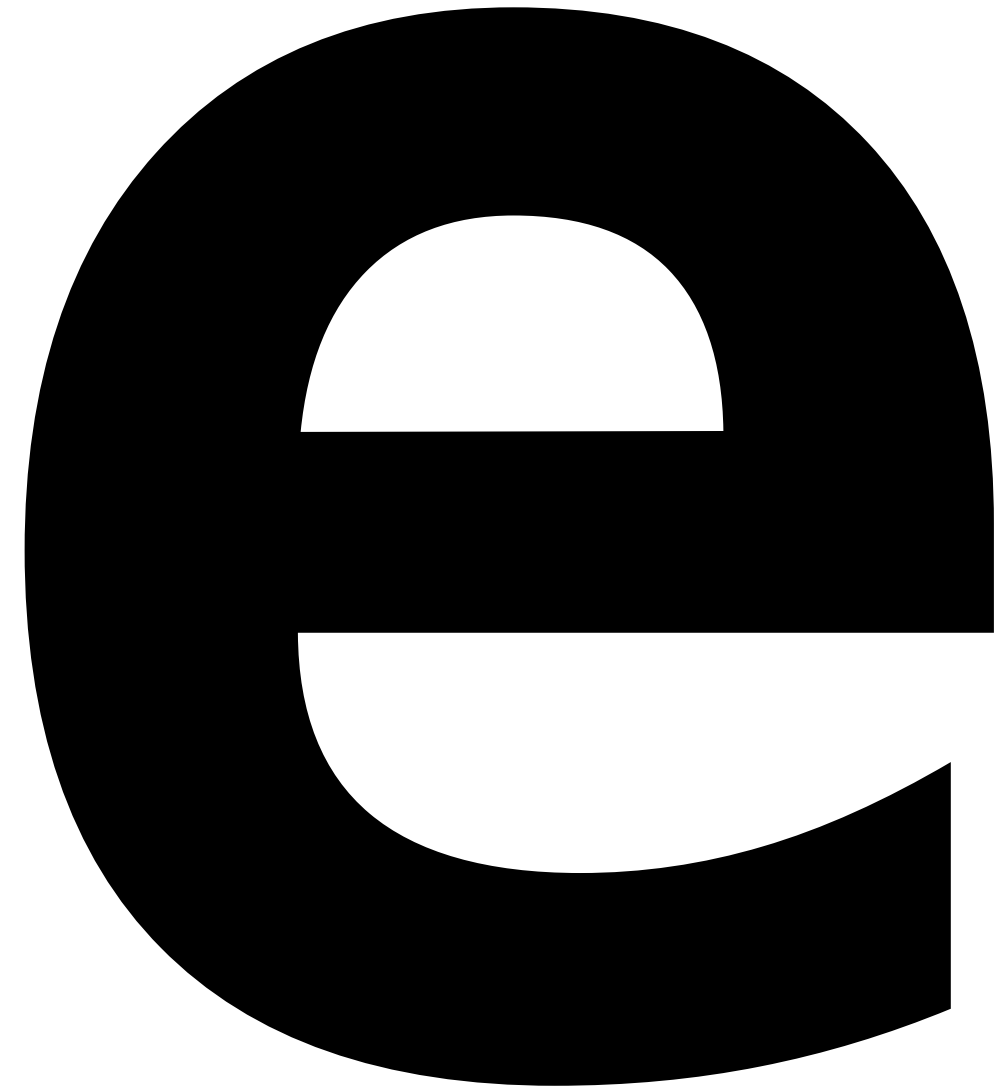
S

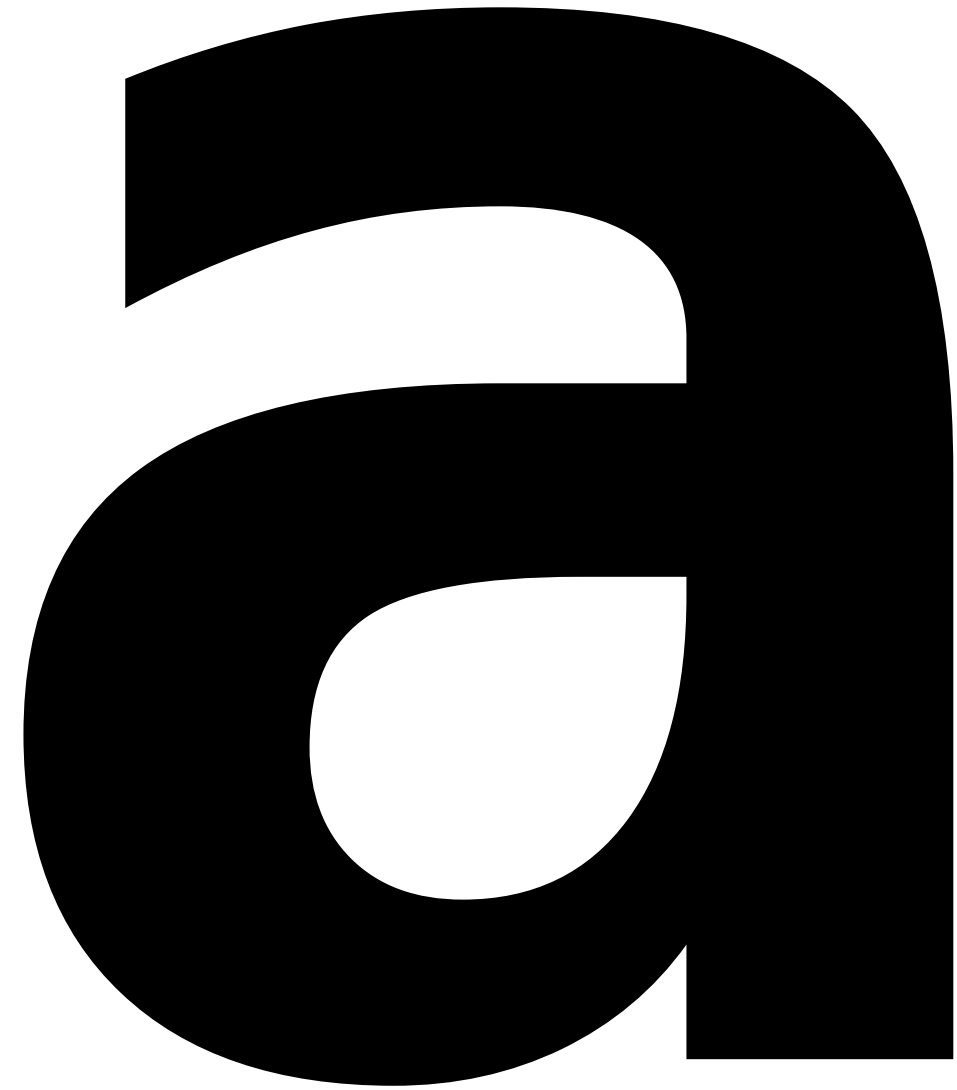




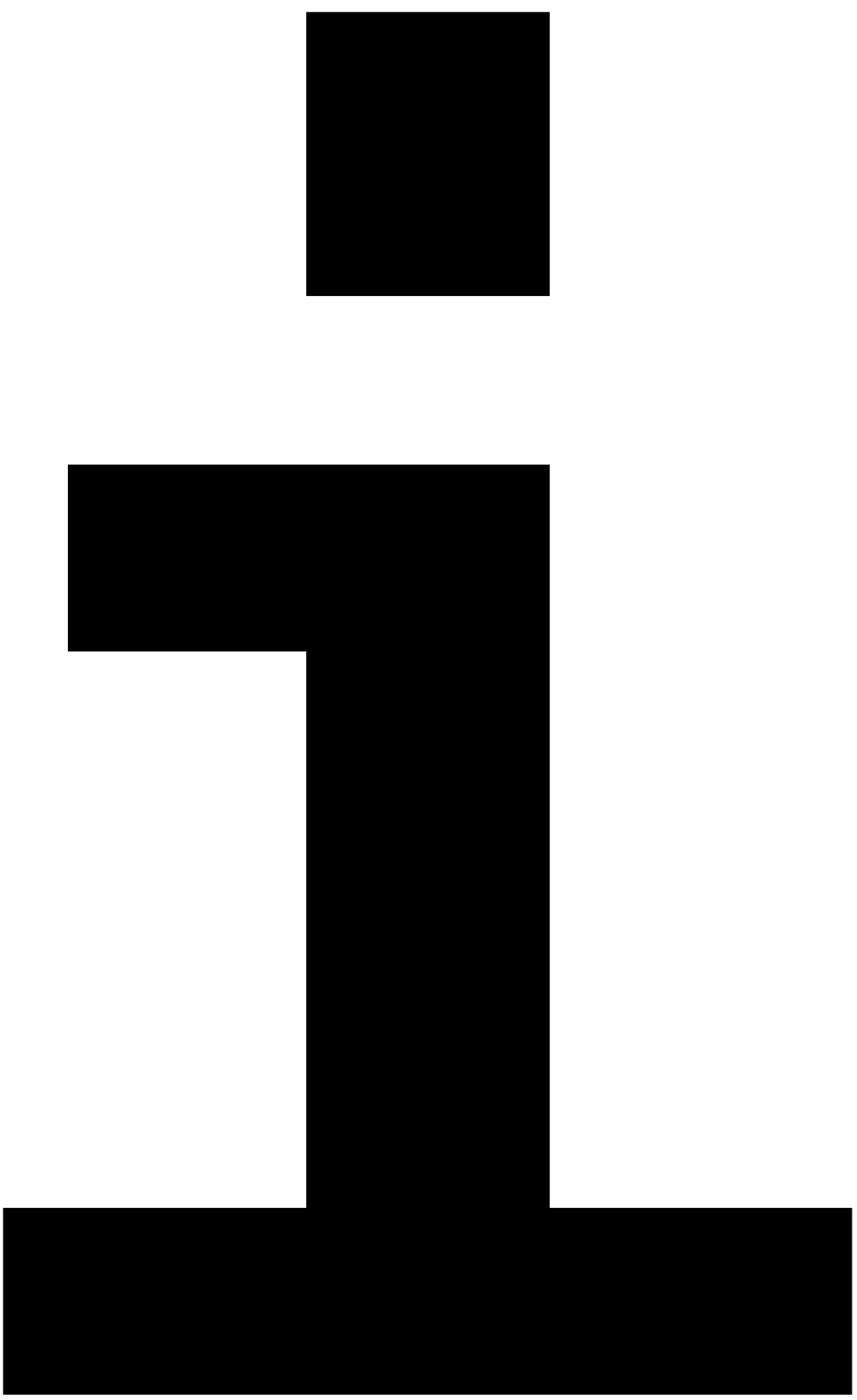


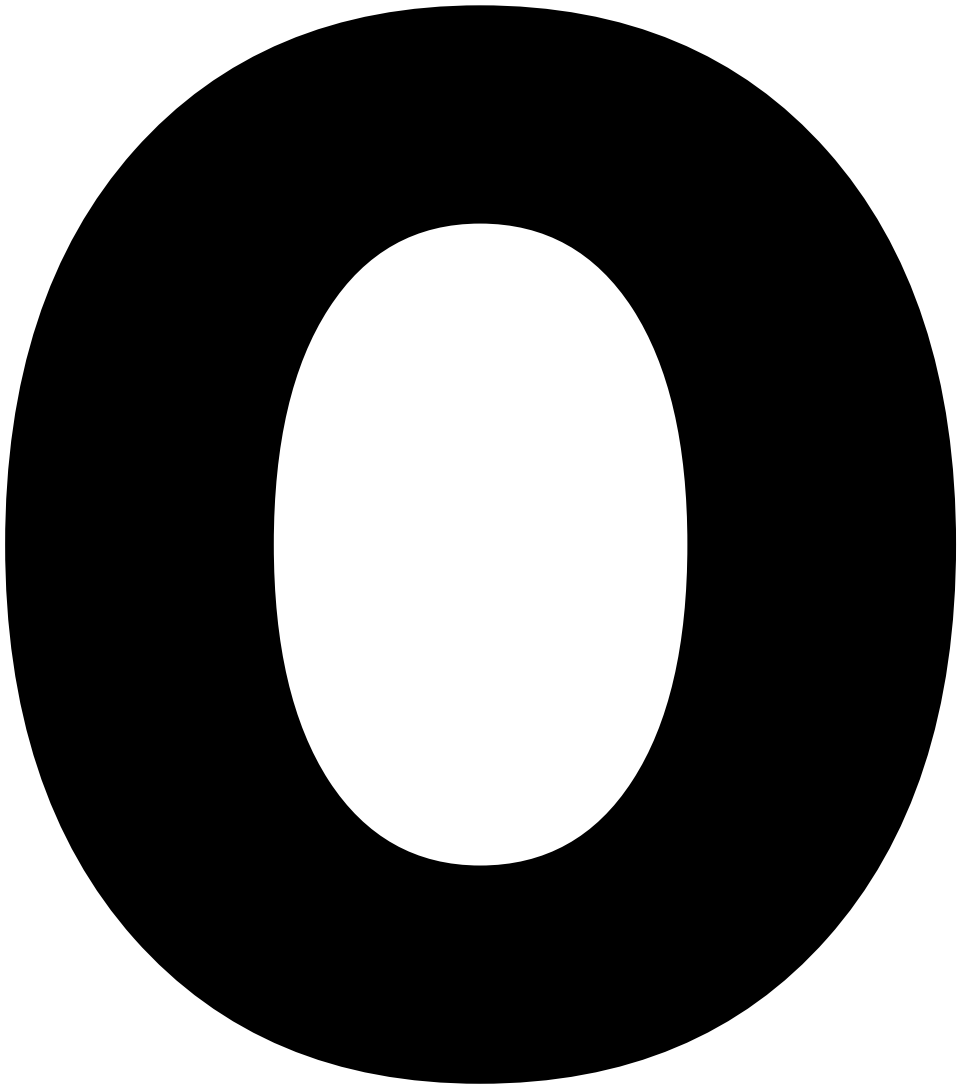


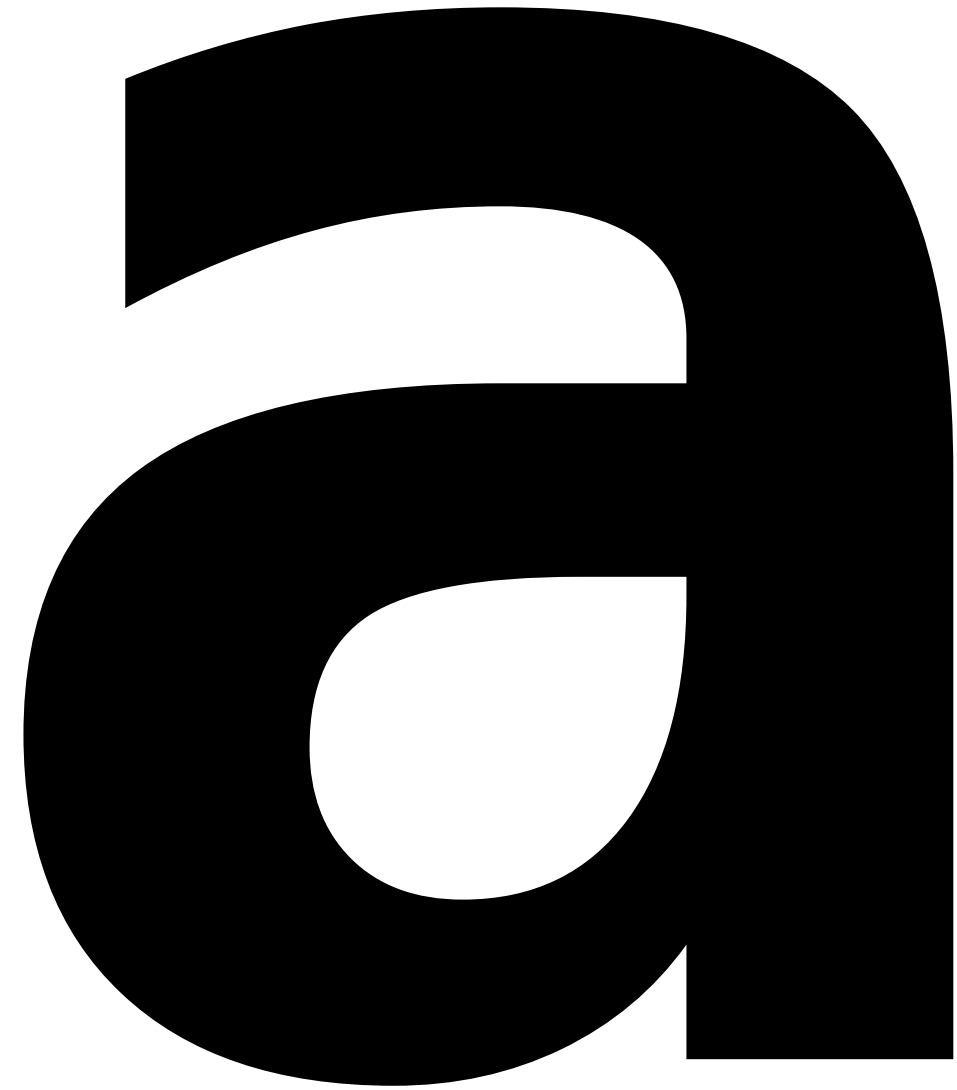


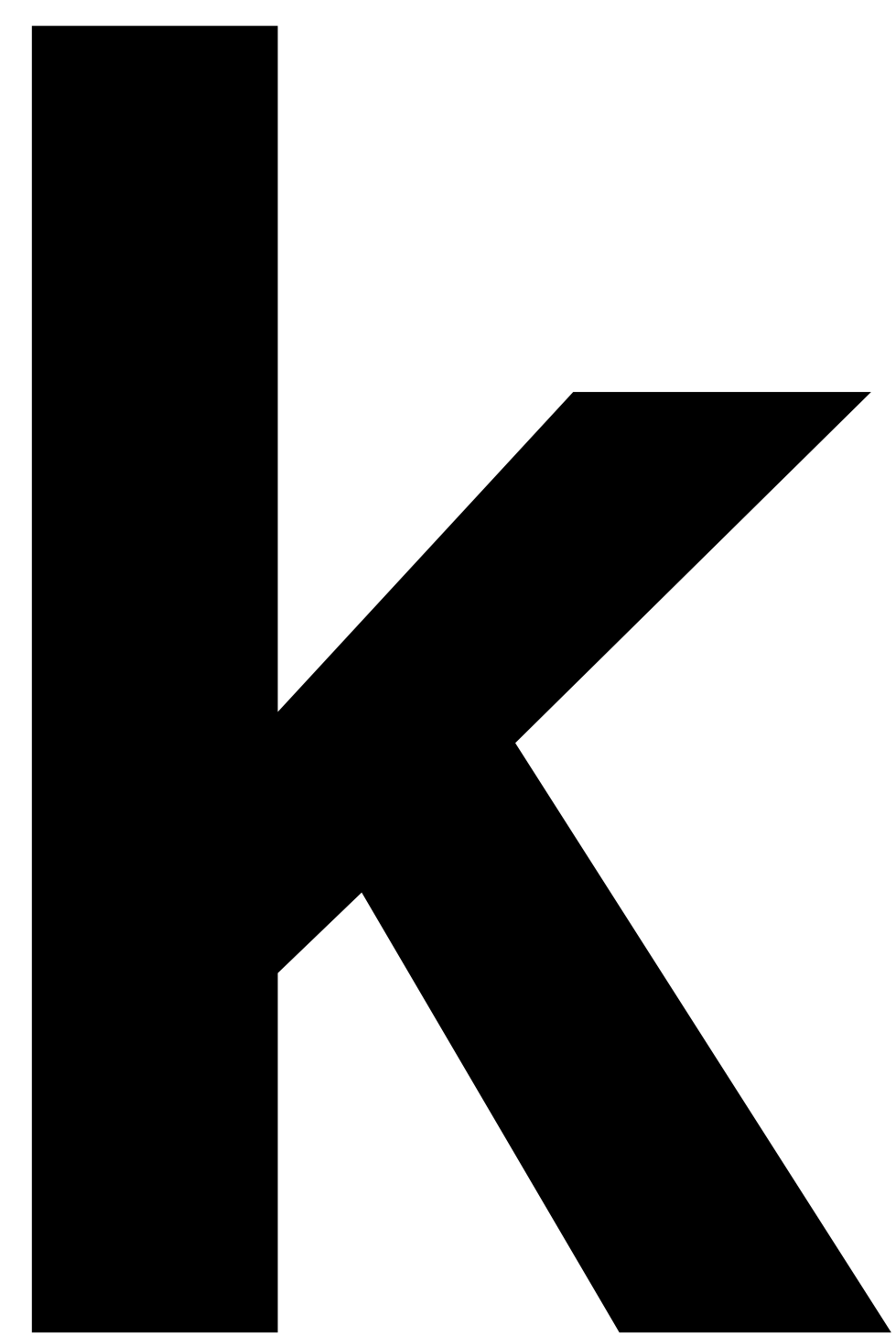


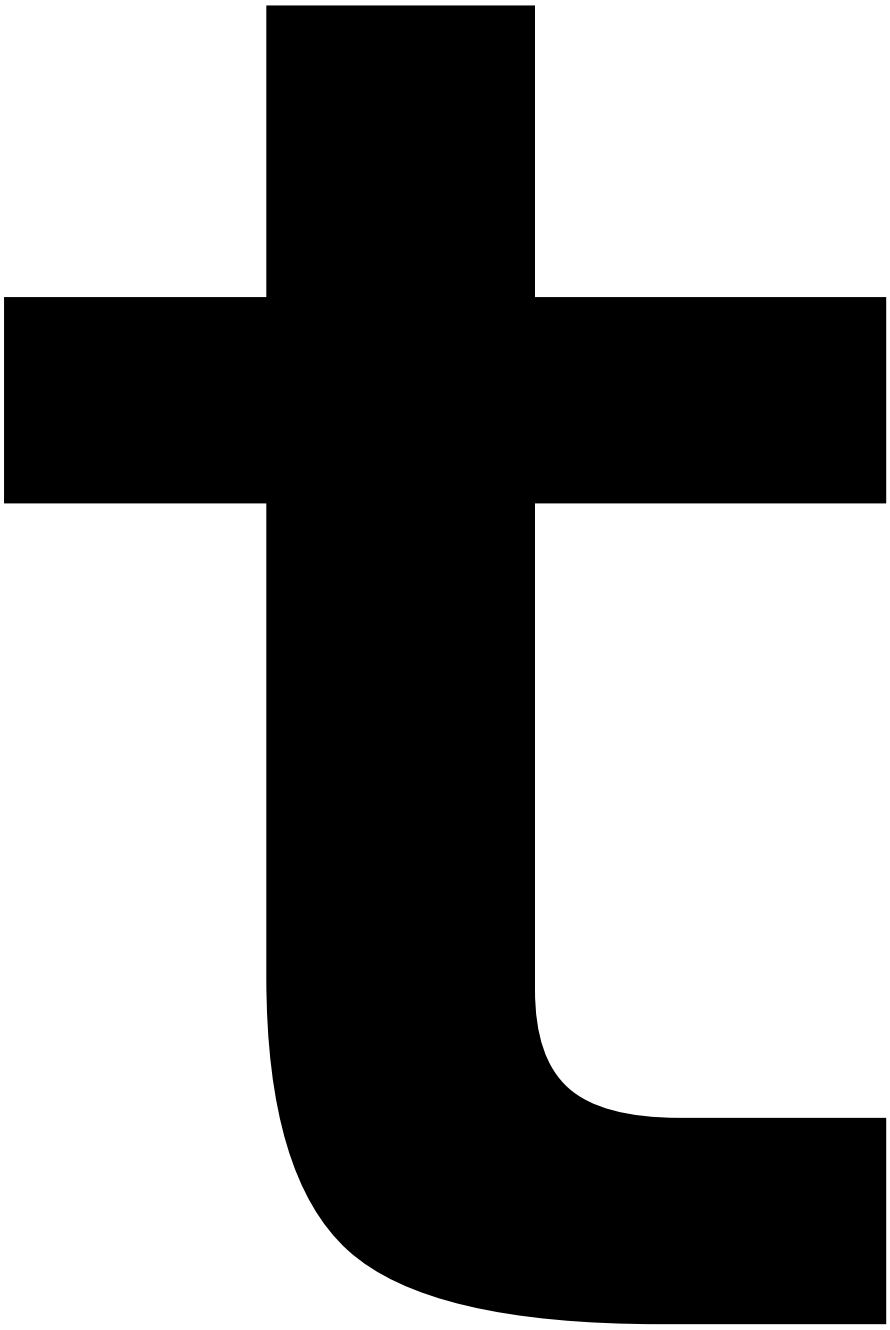
d

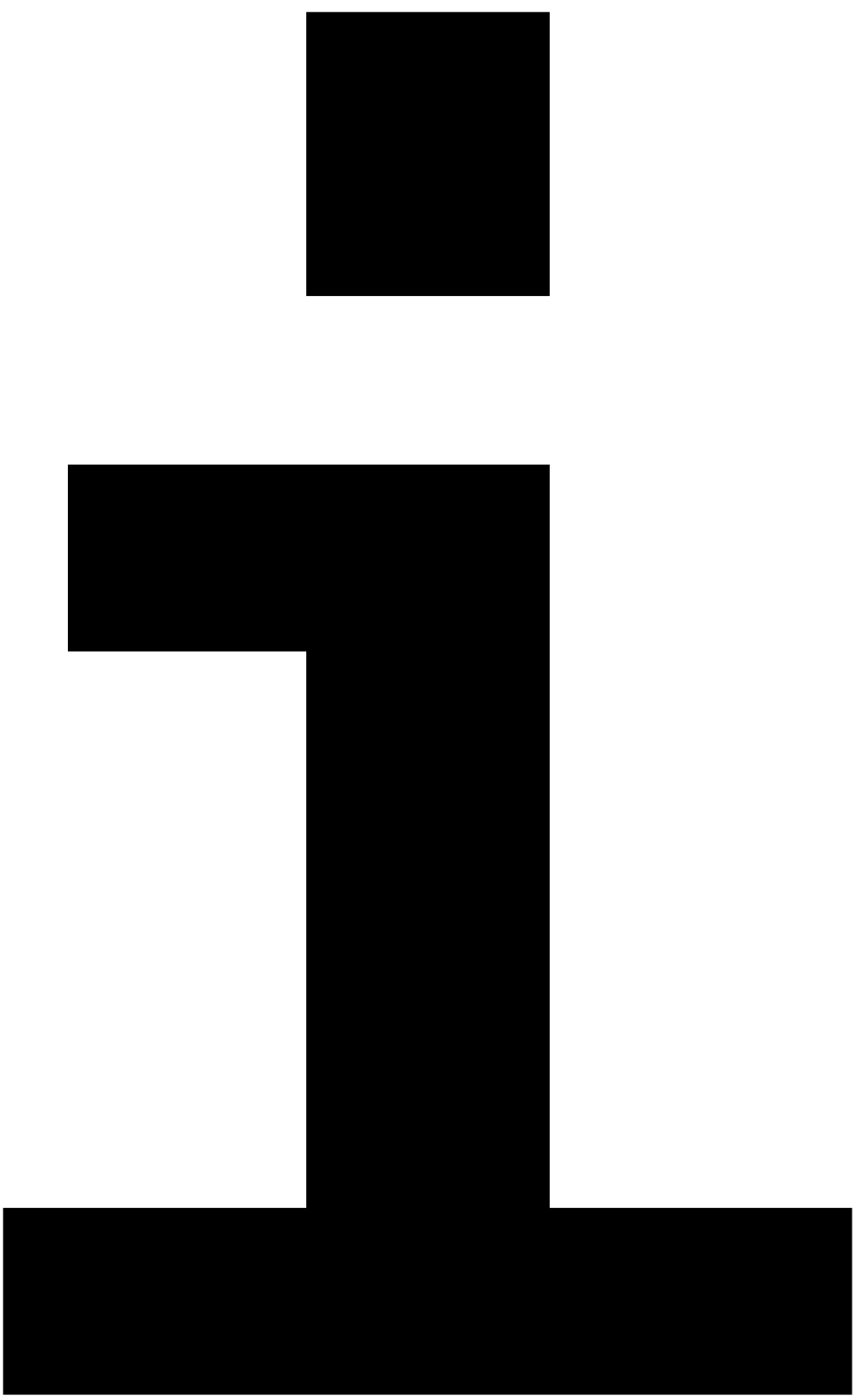


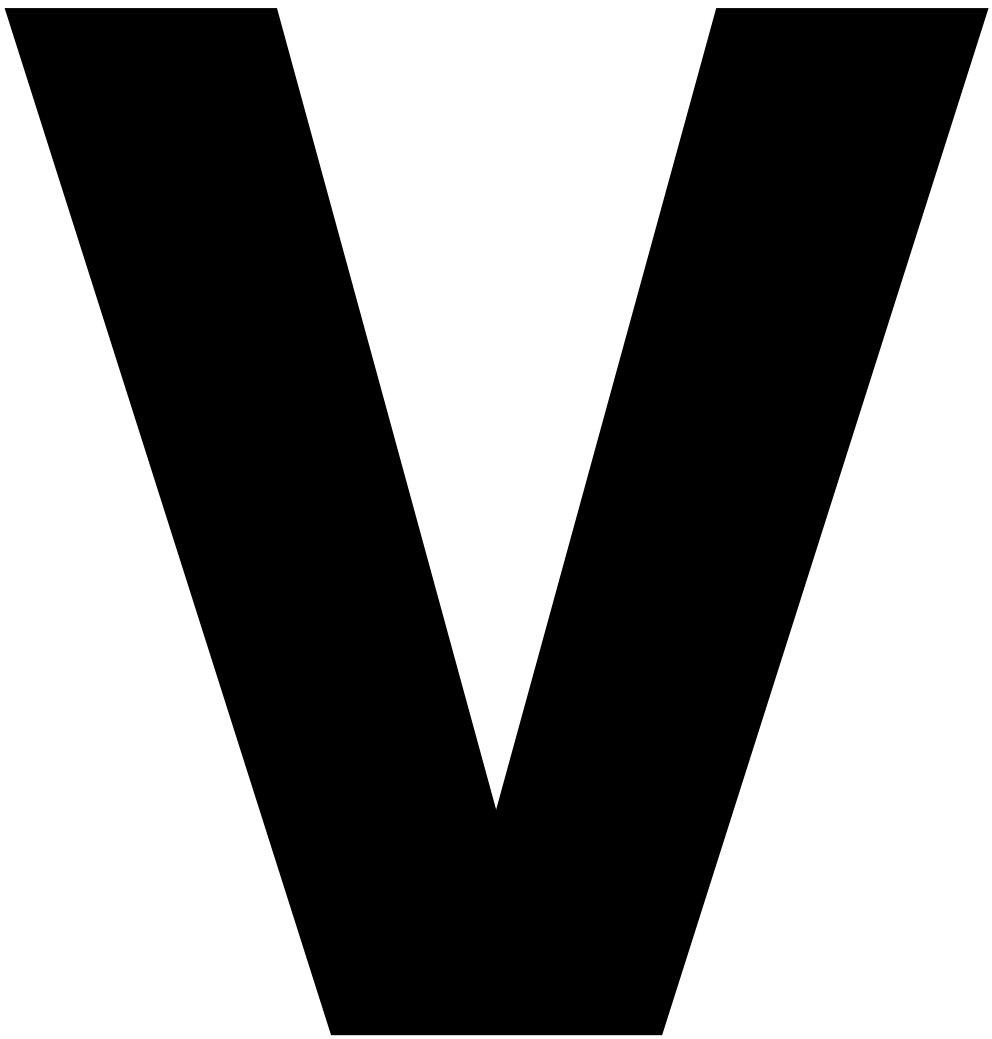


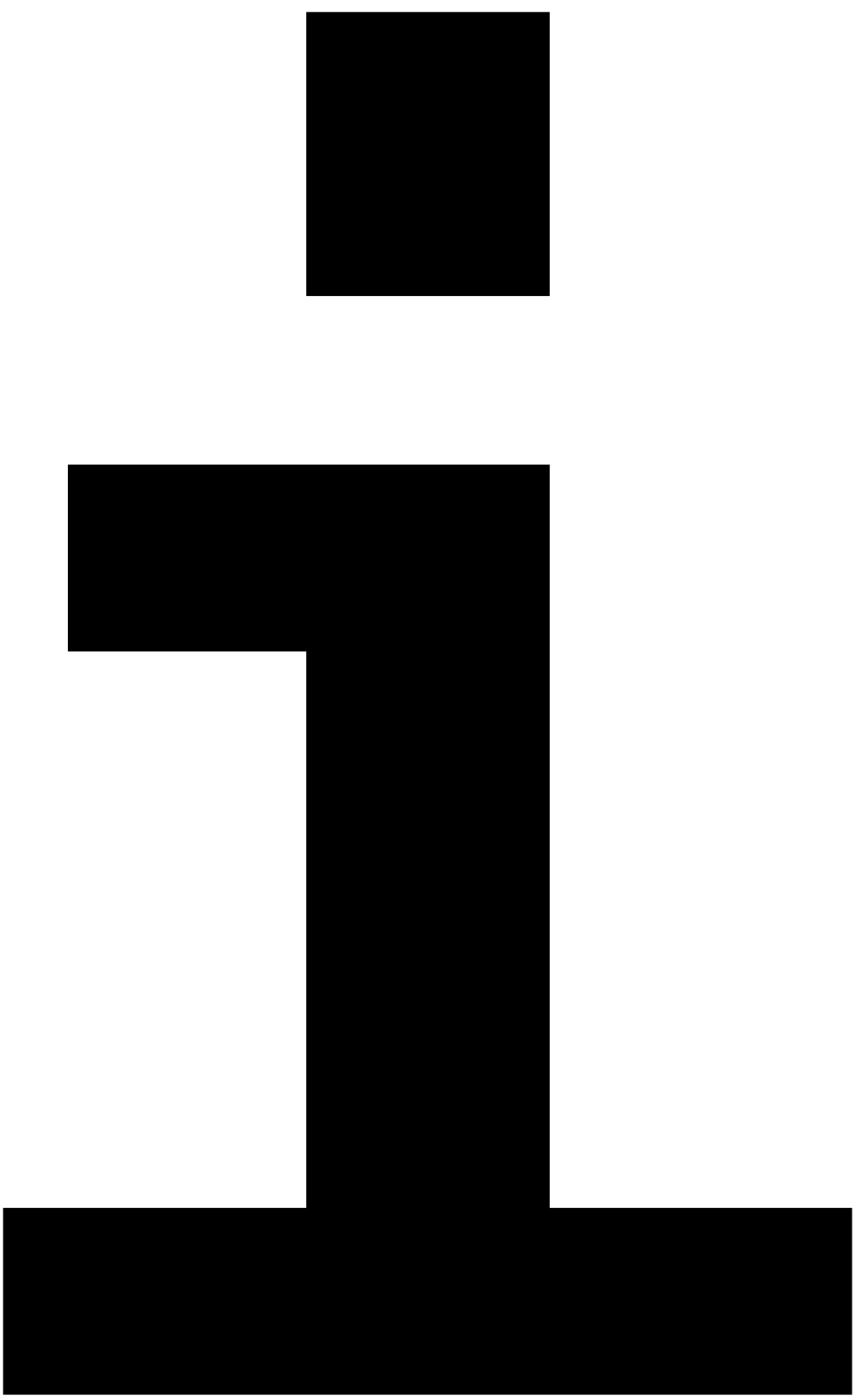


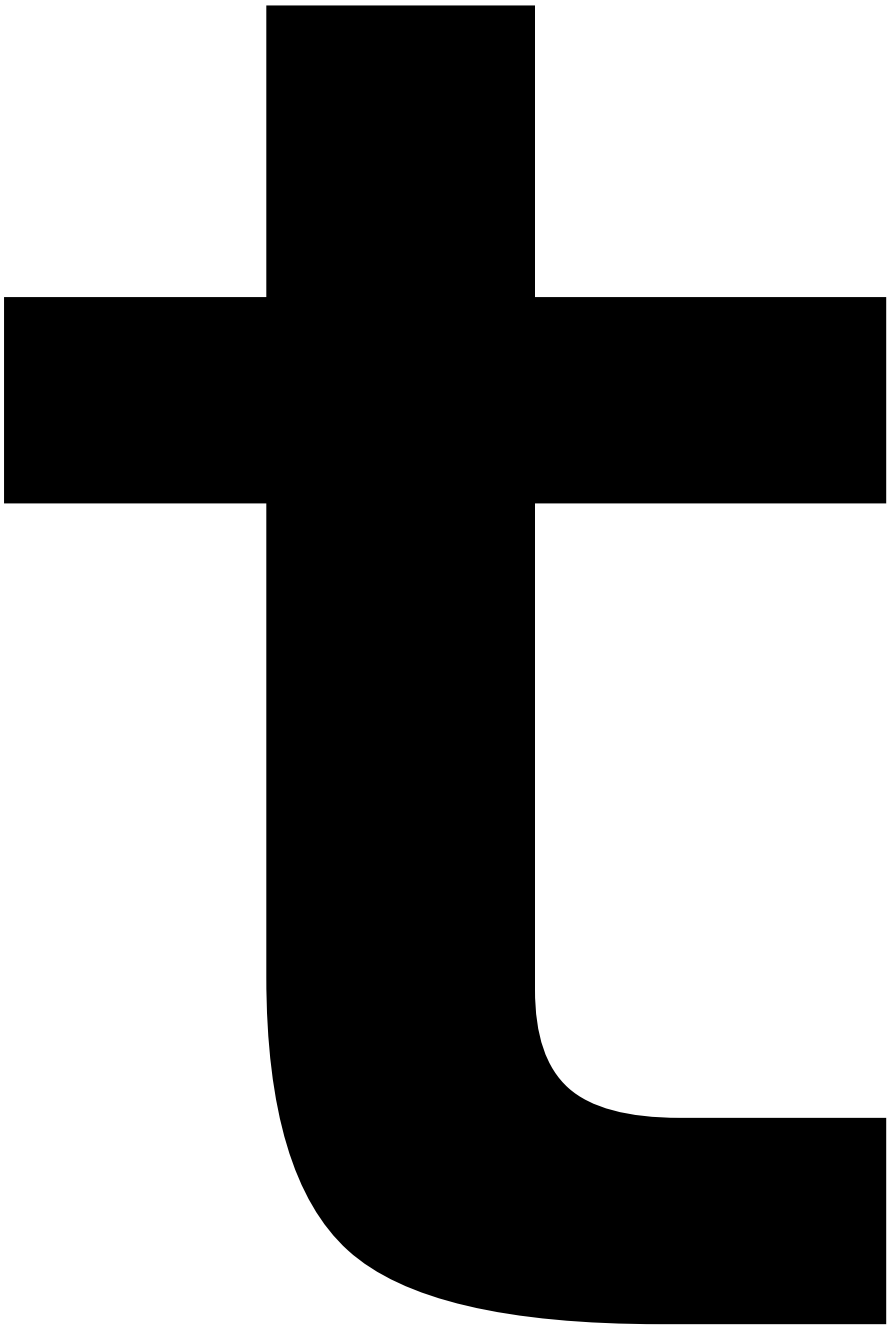


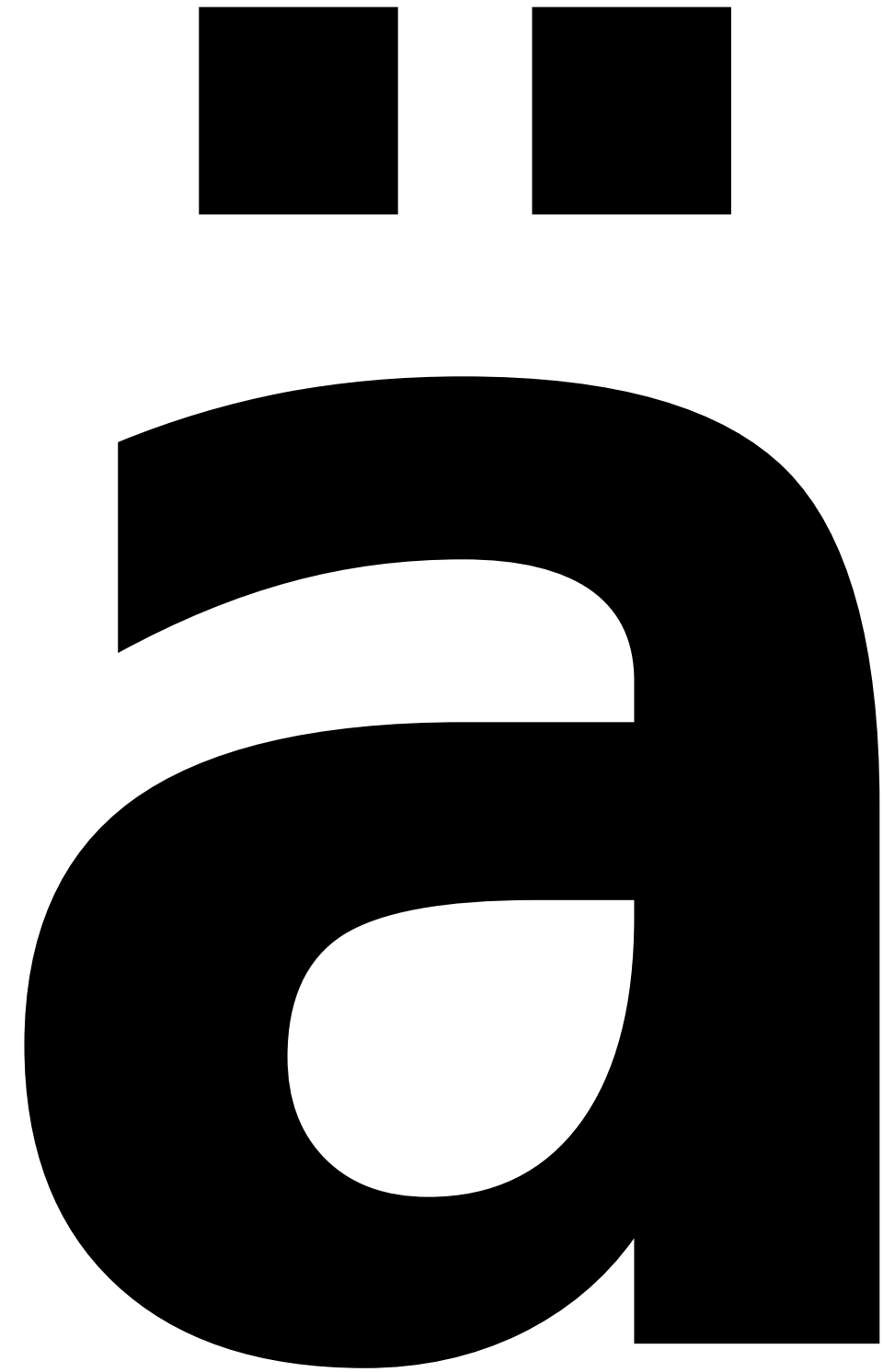


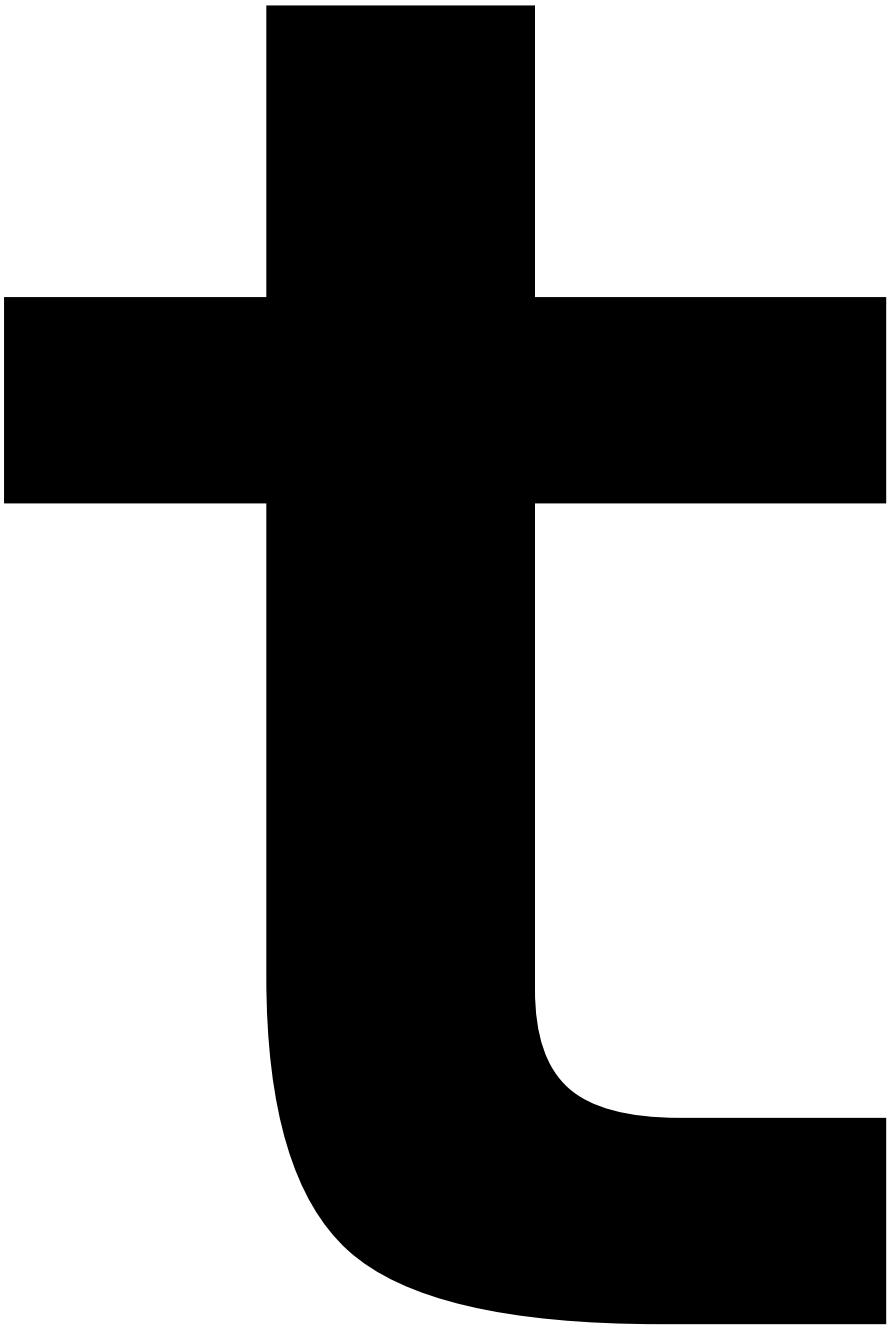


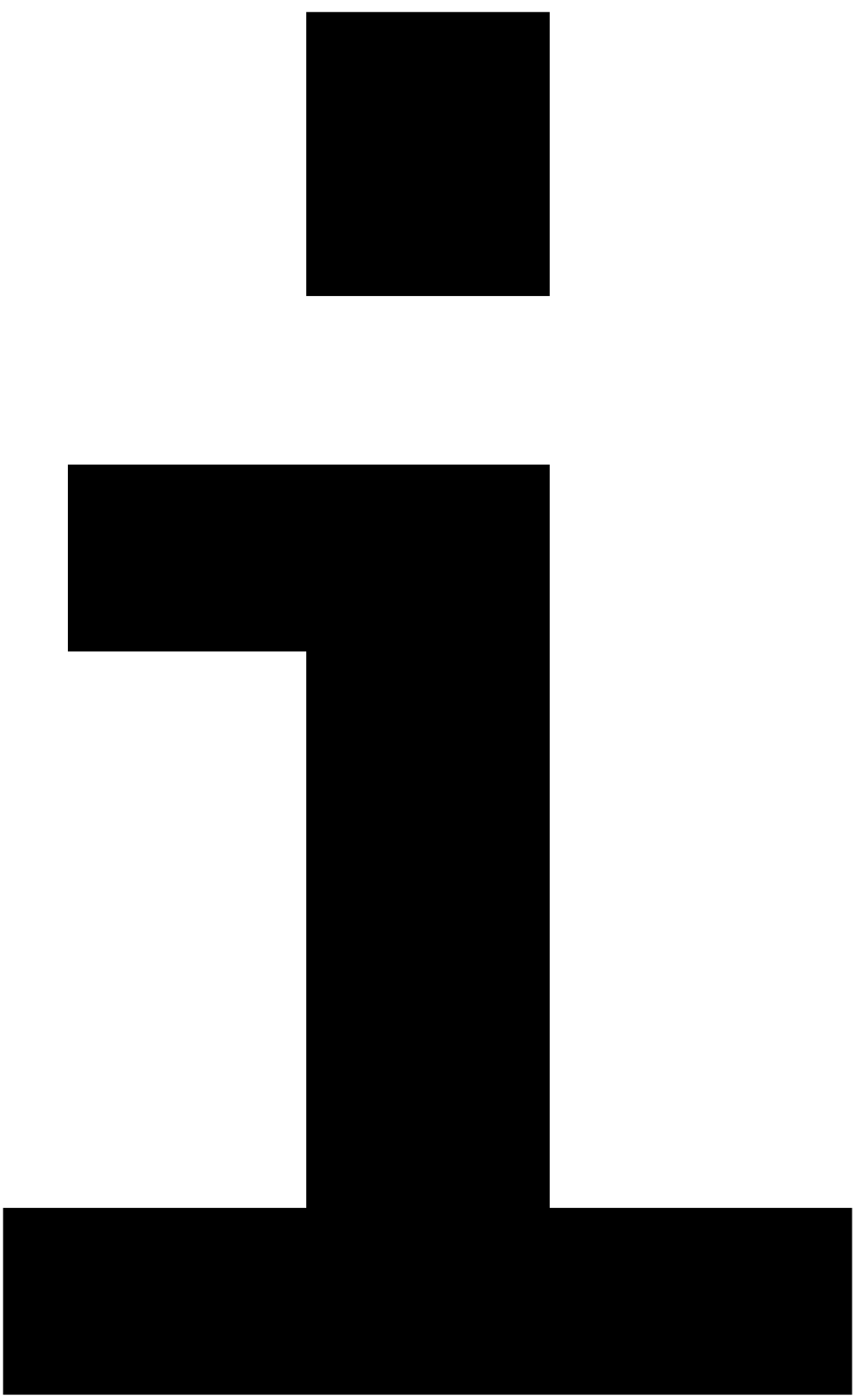


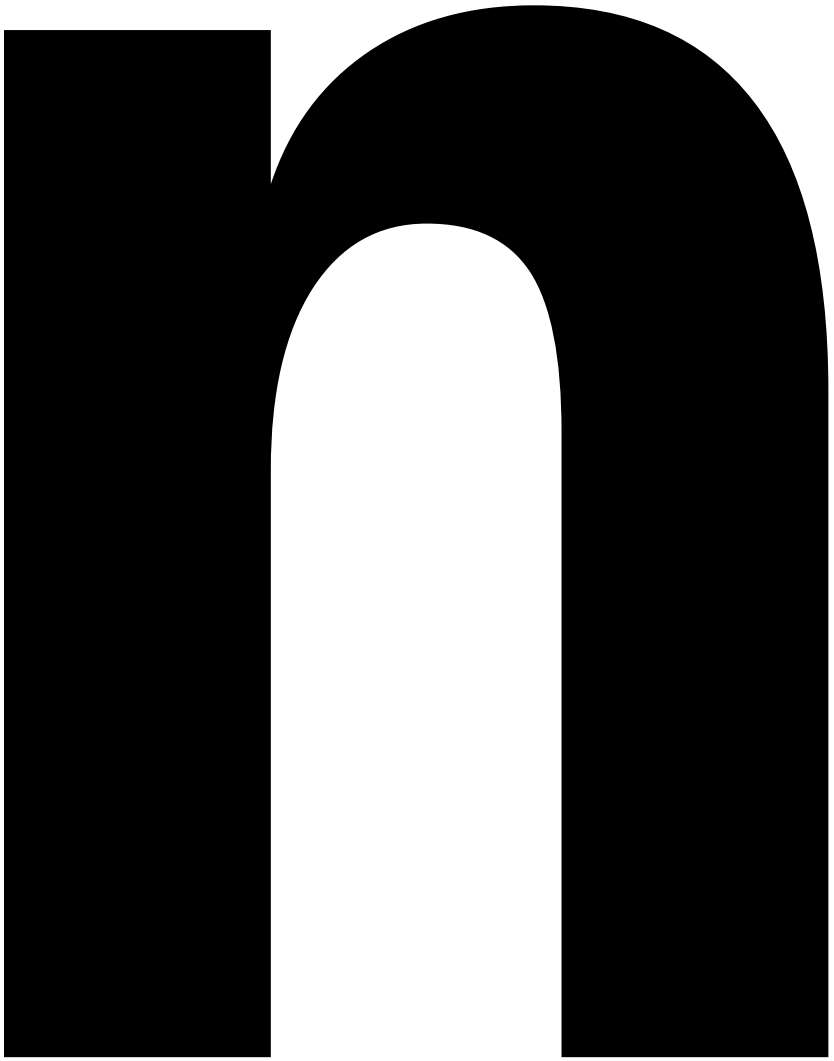


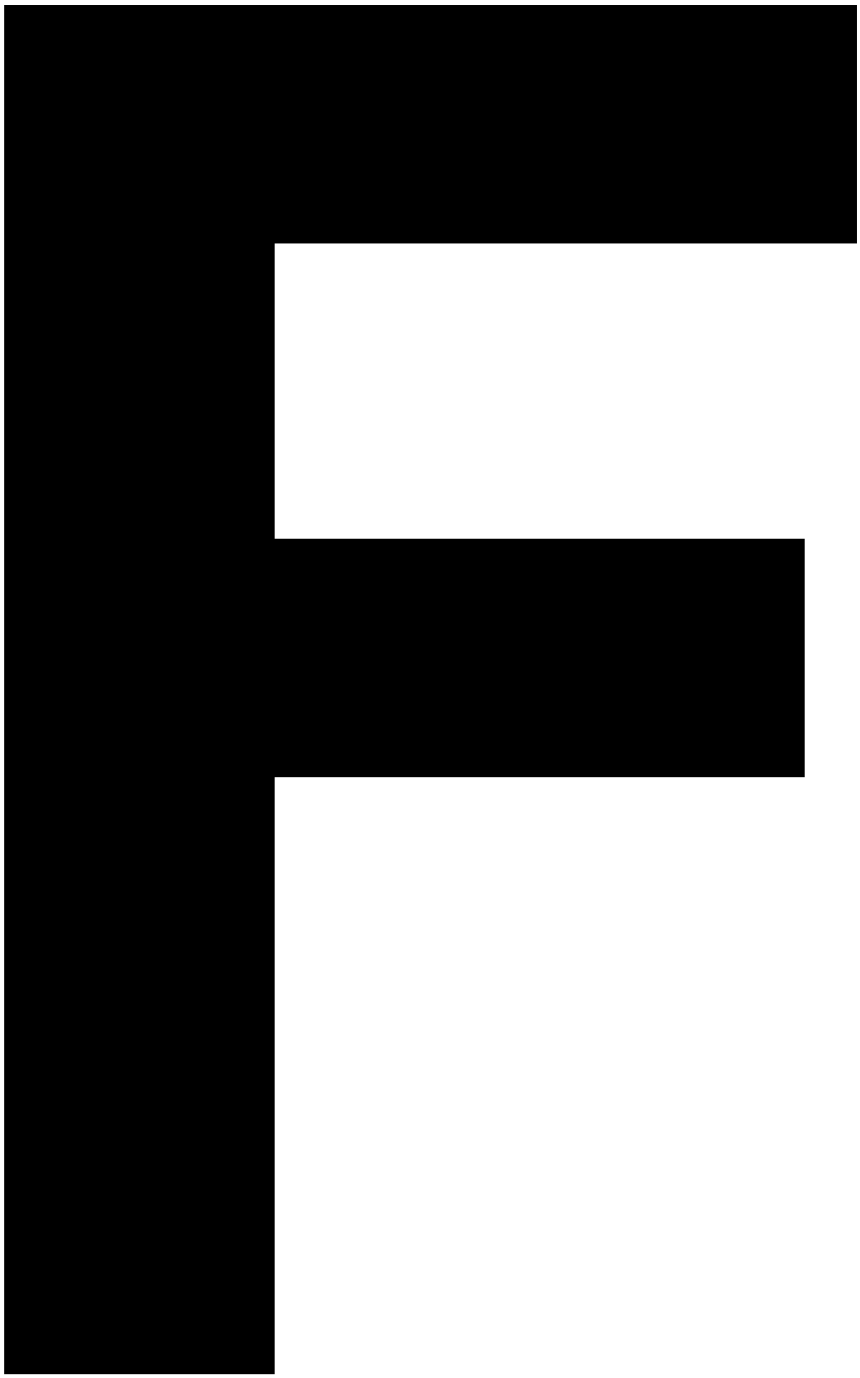




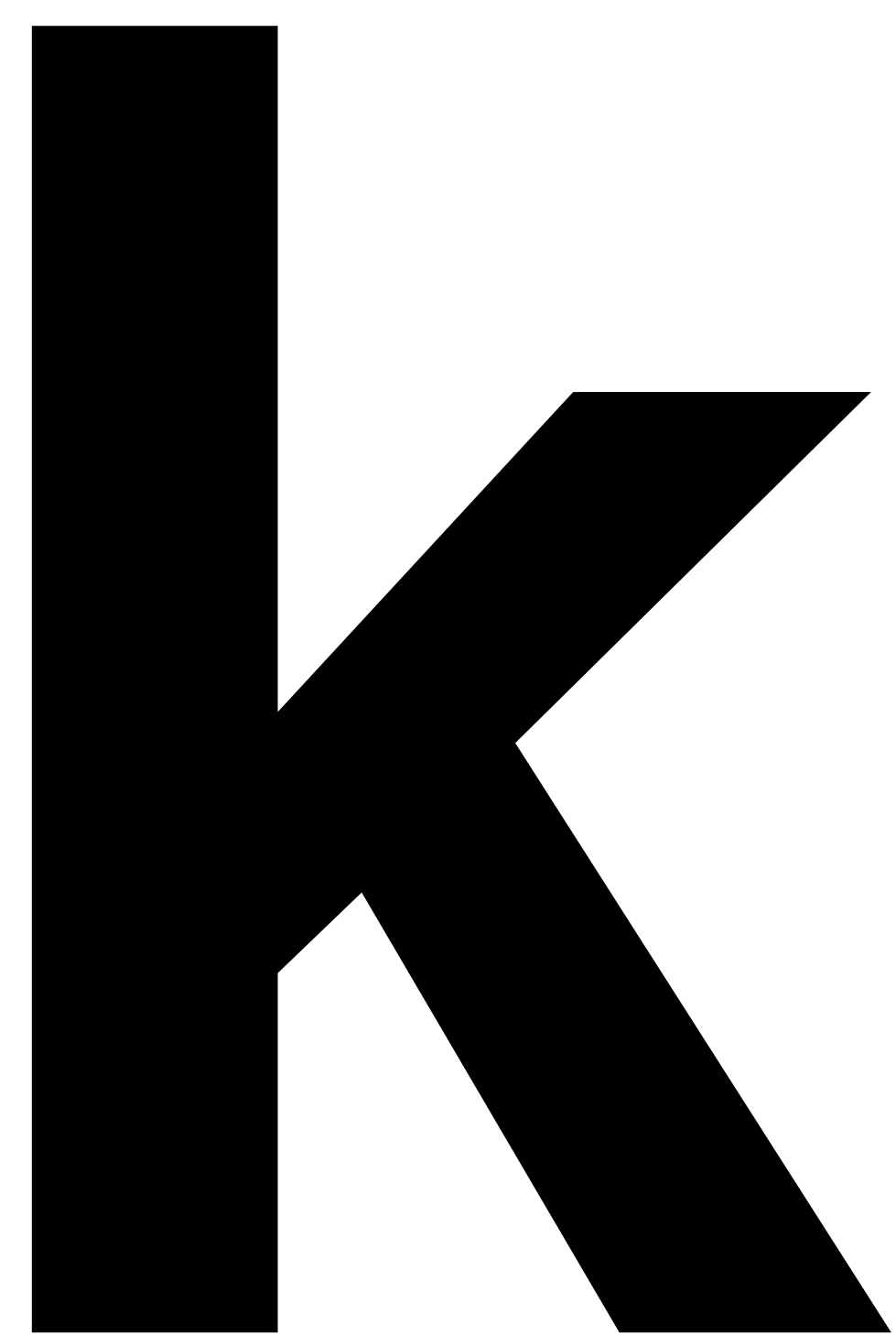






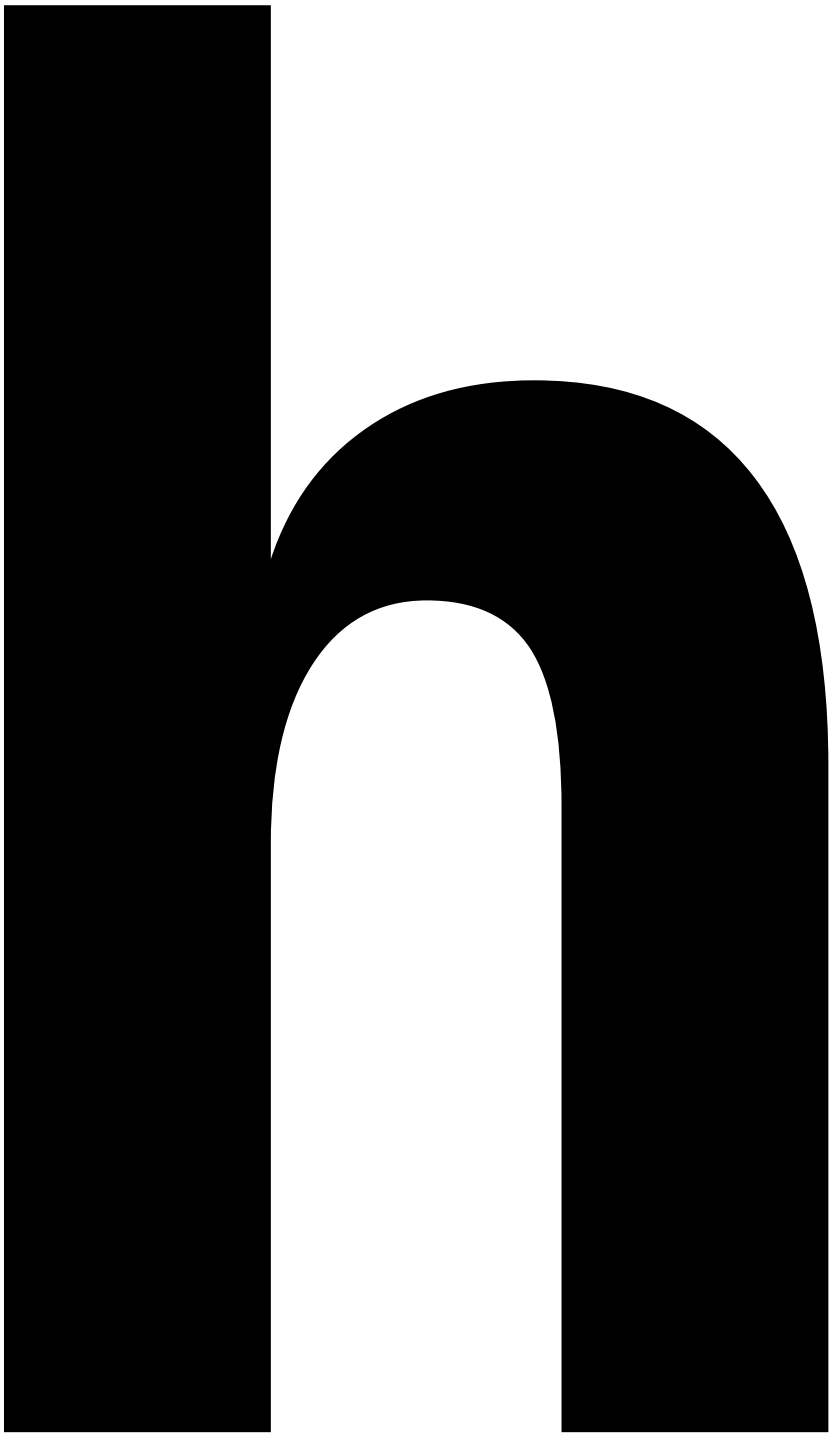


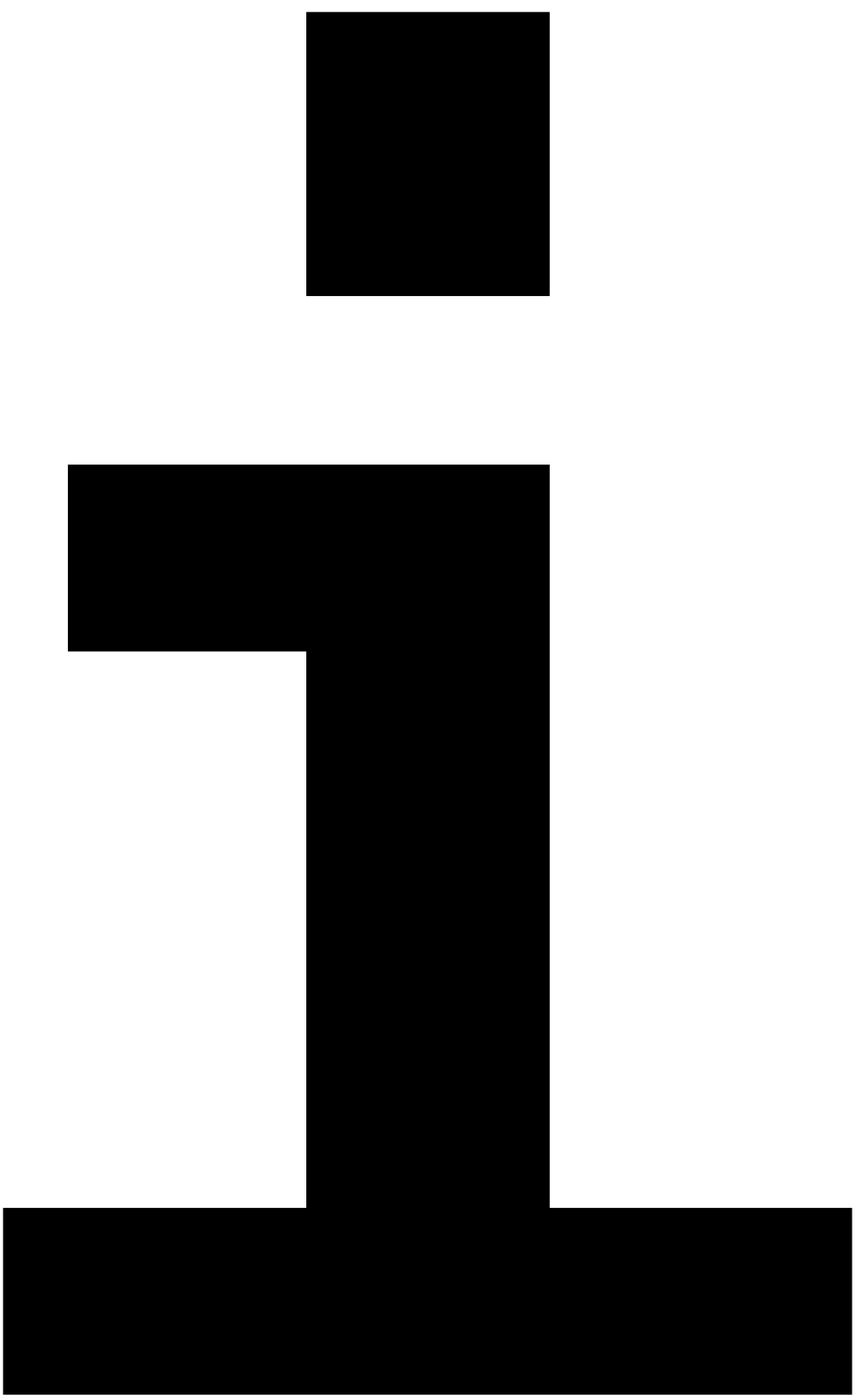
u

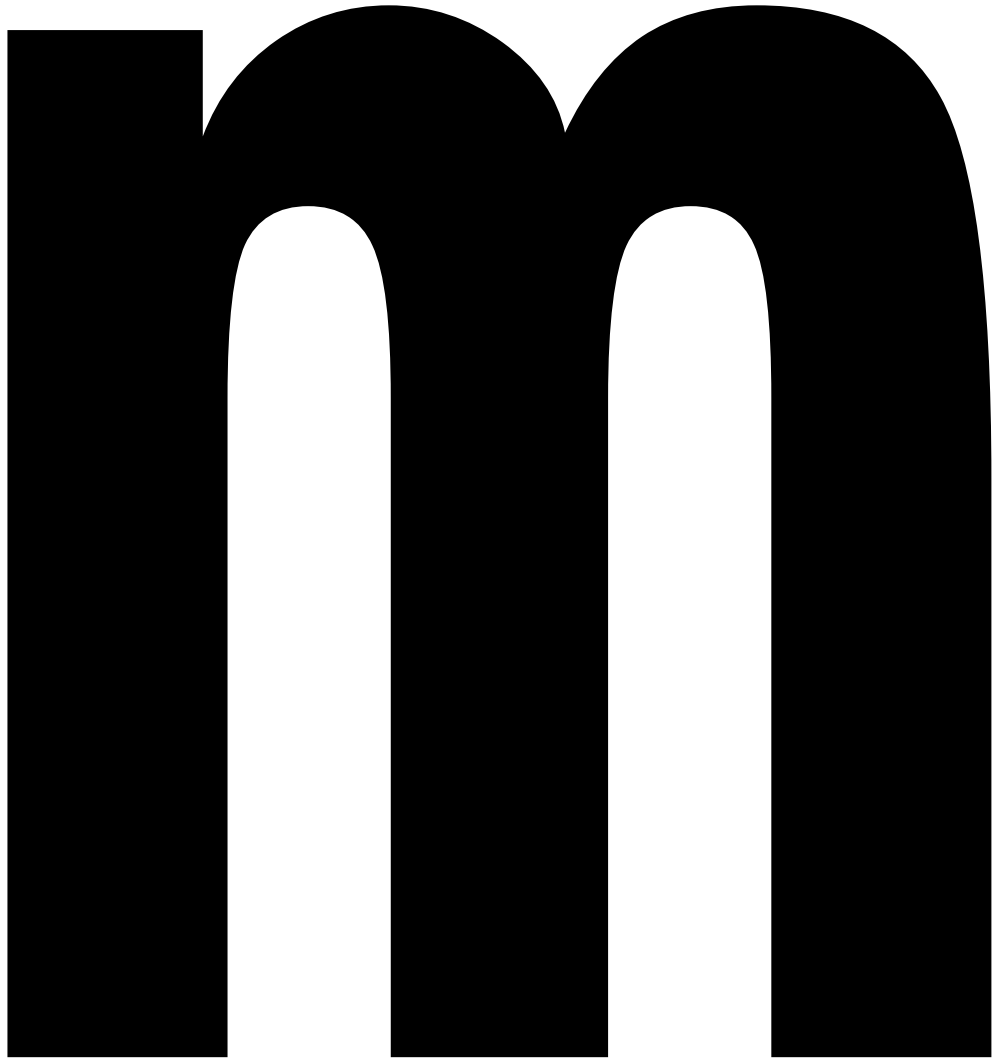


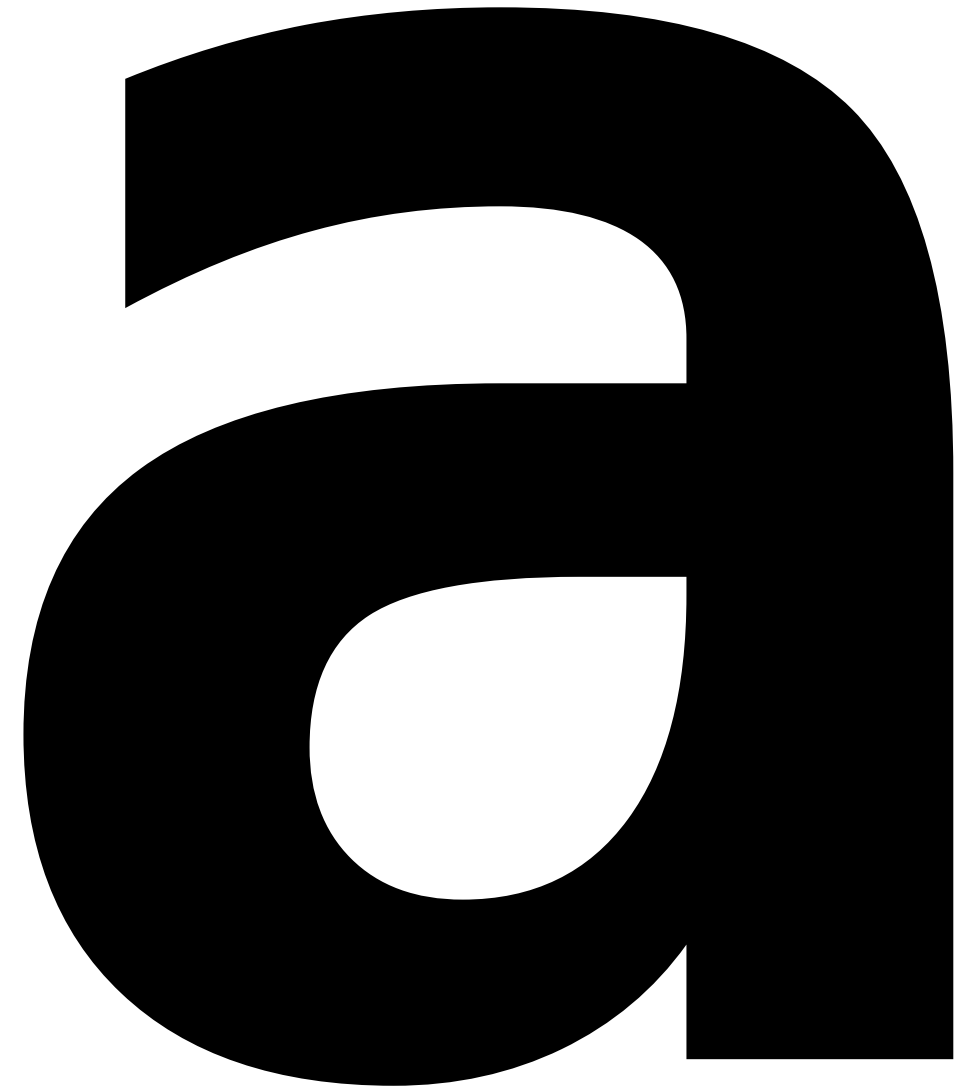
u

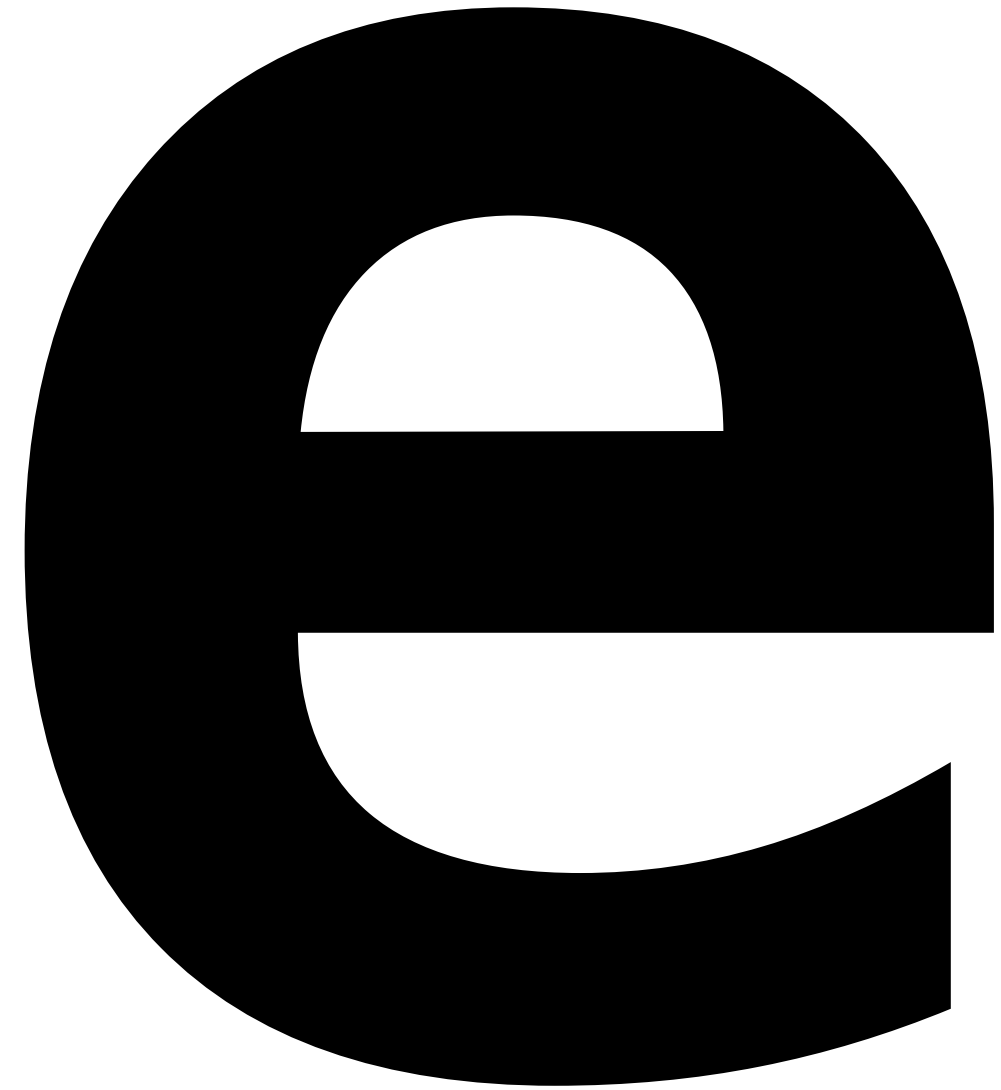
S

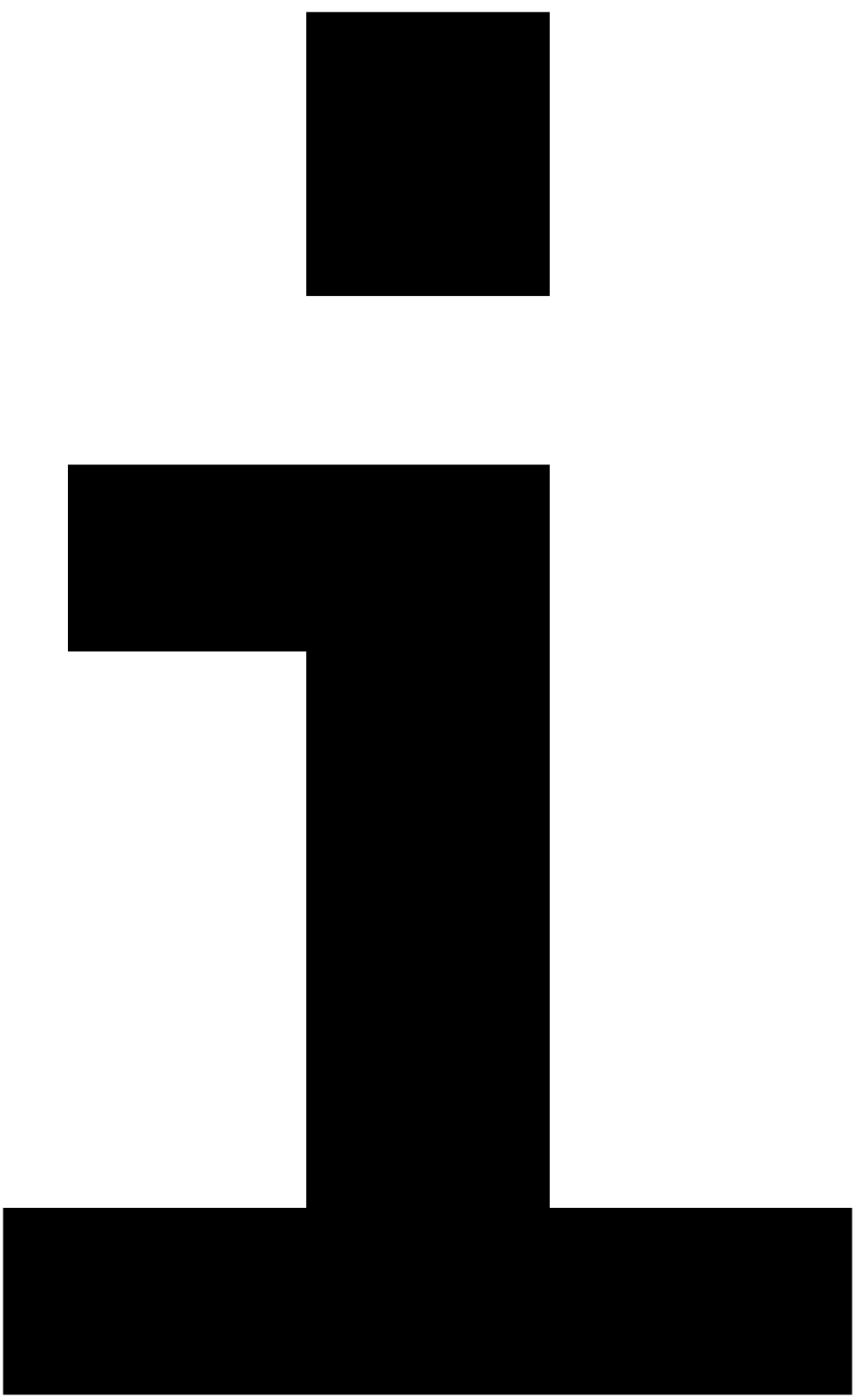


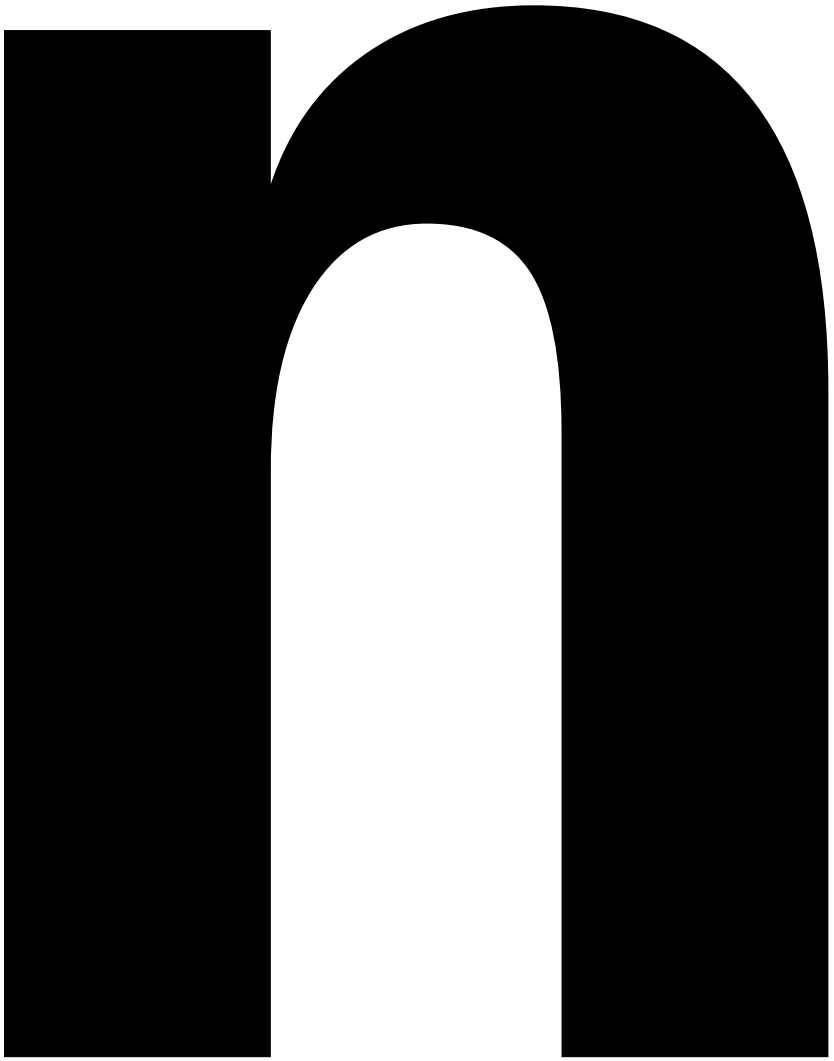


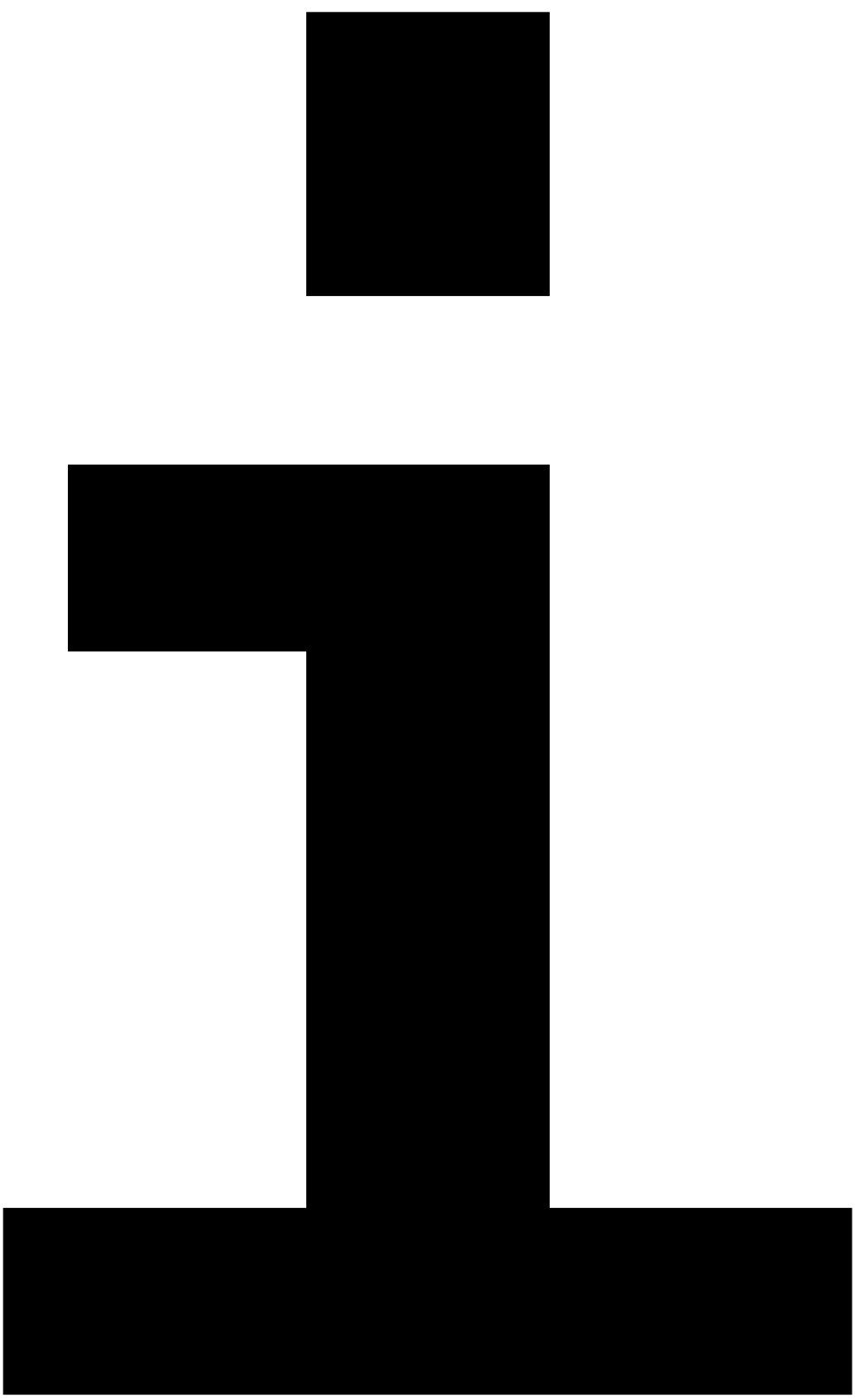


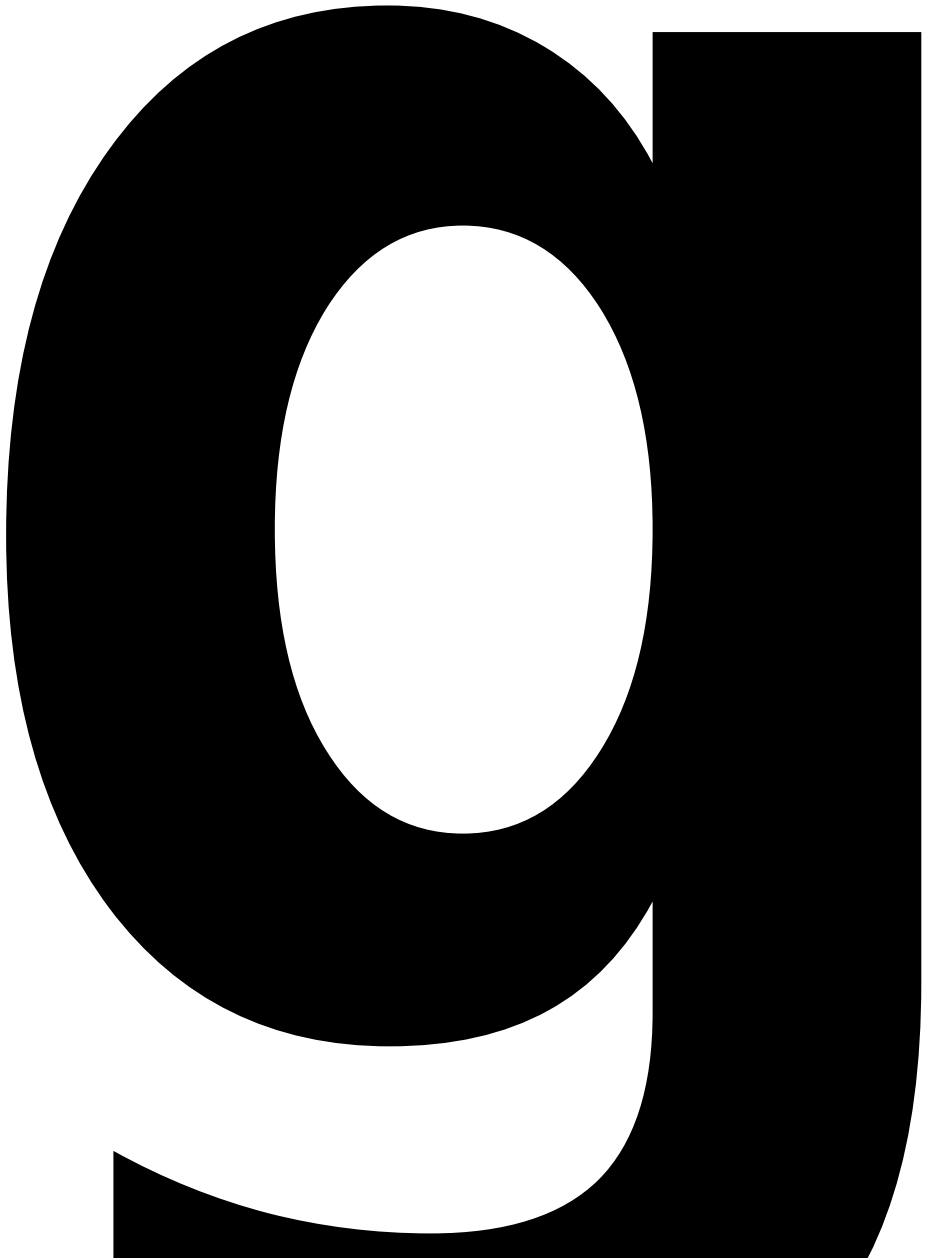


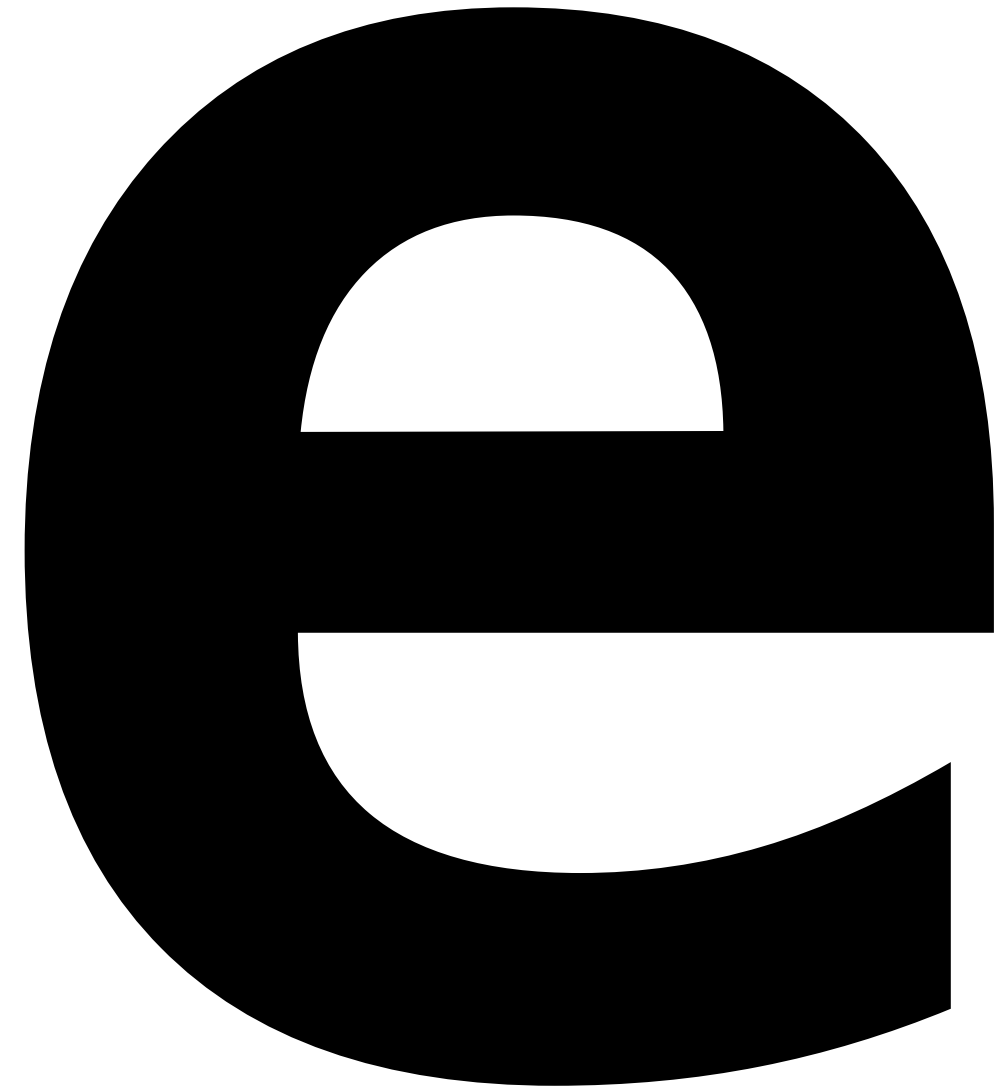


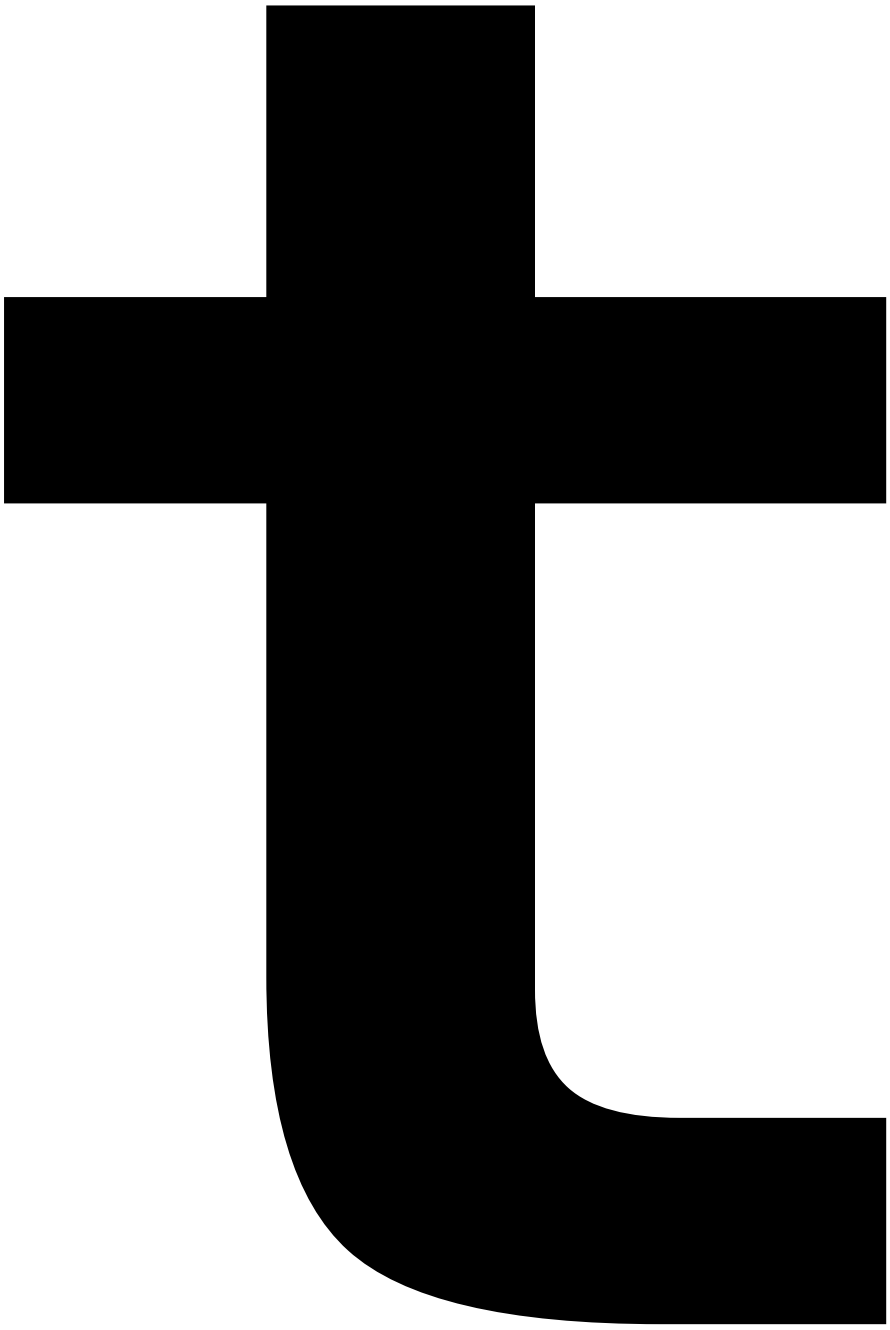


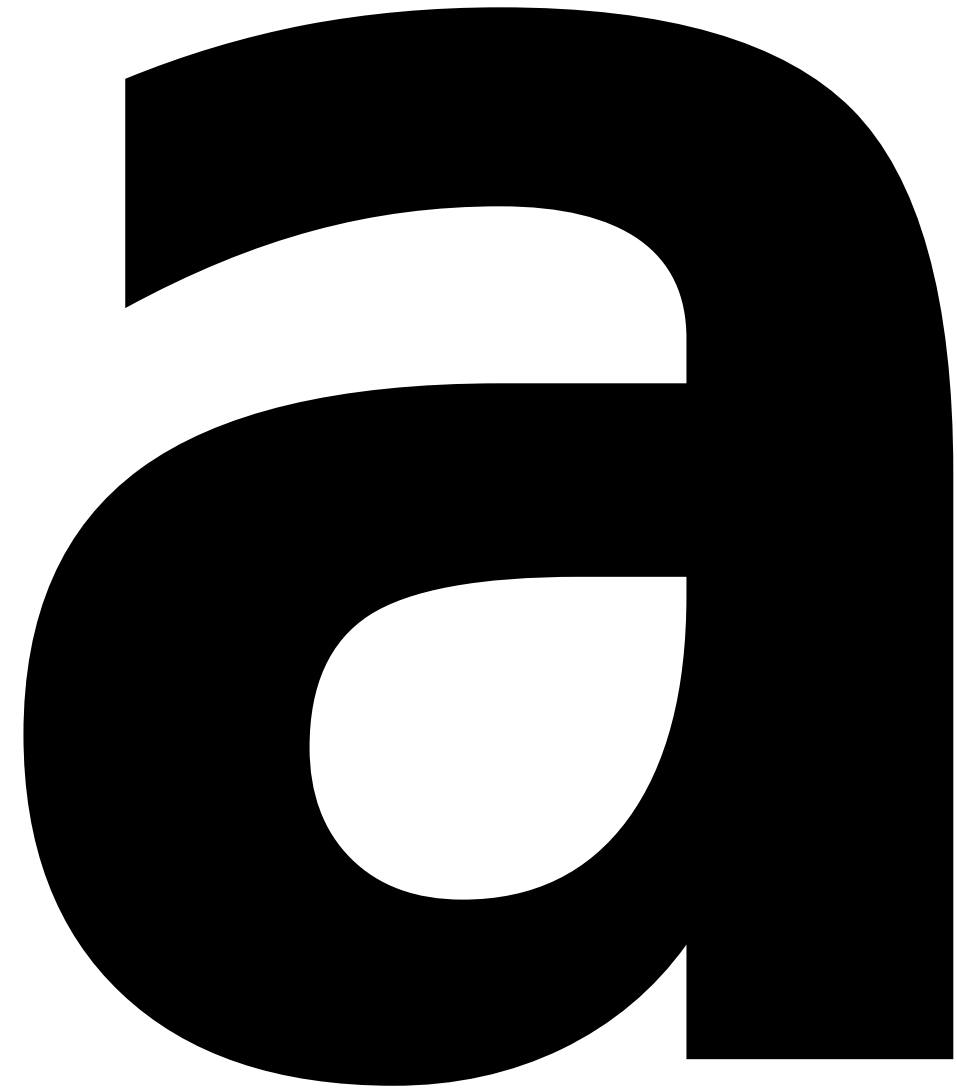






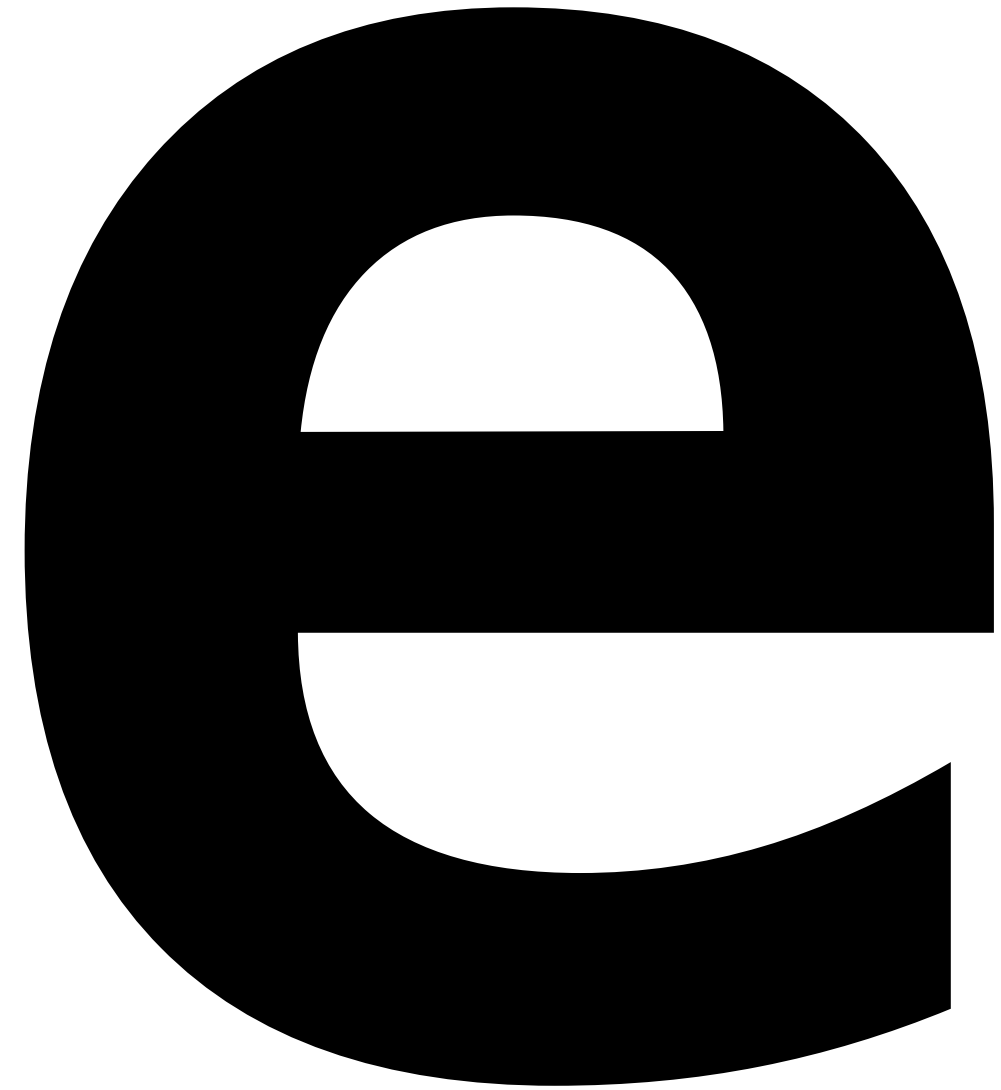


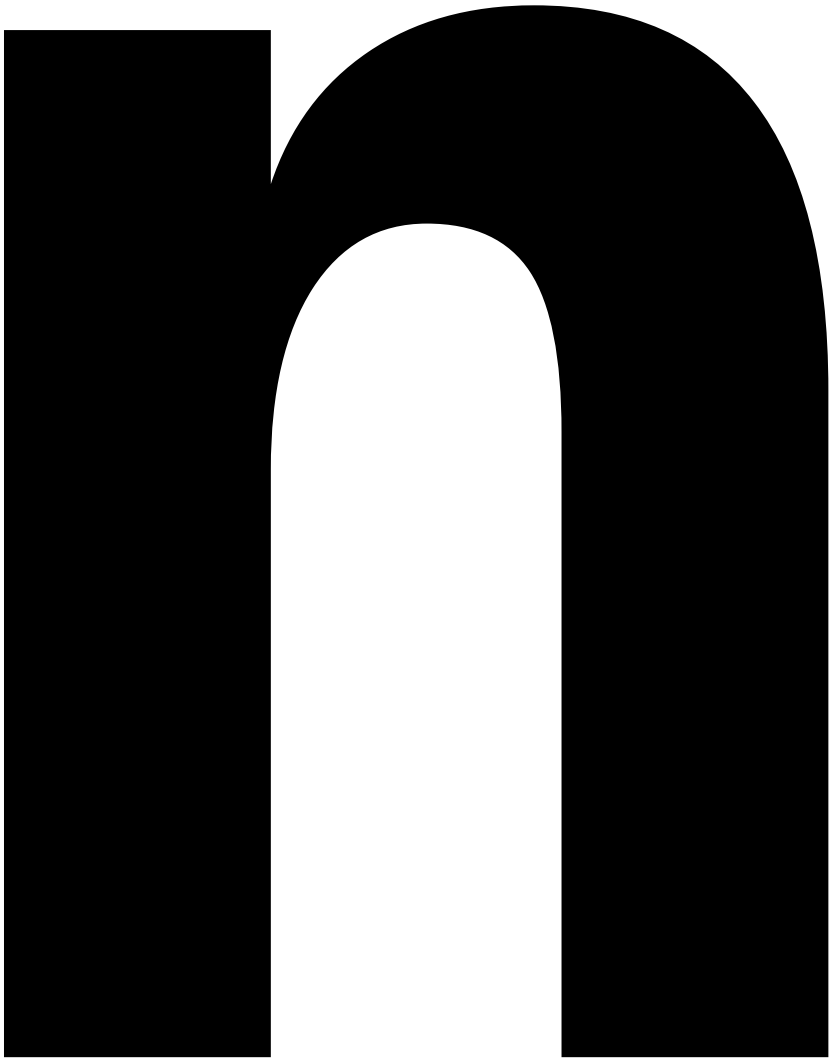




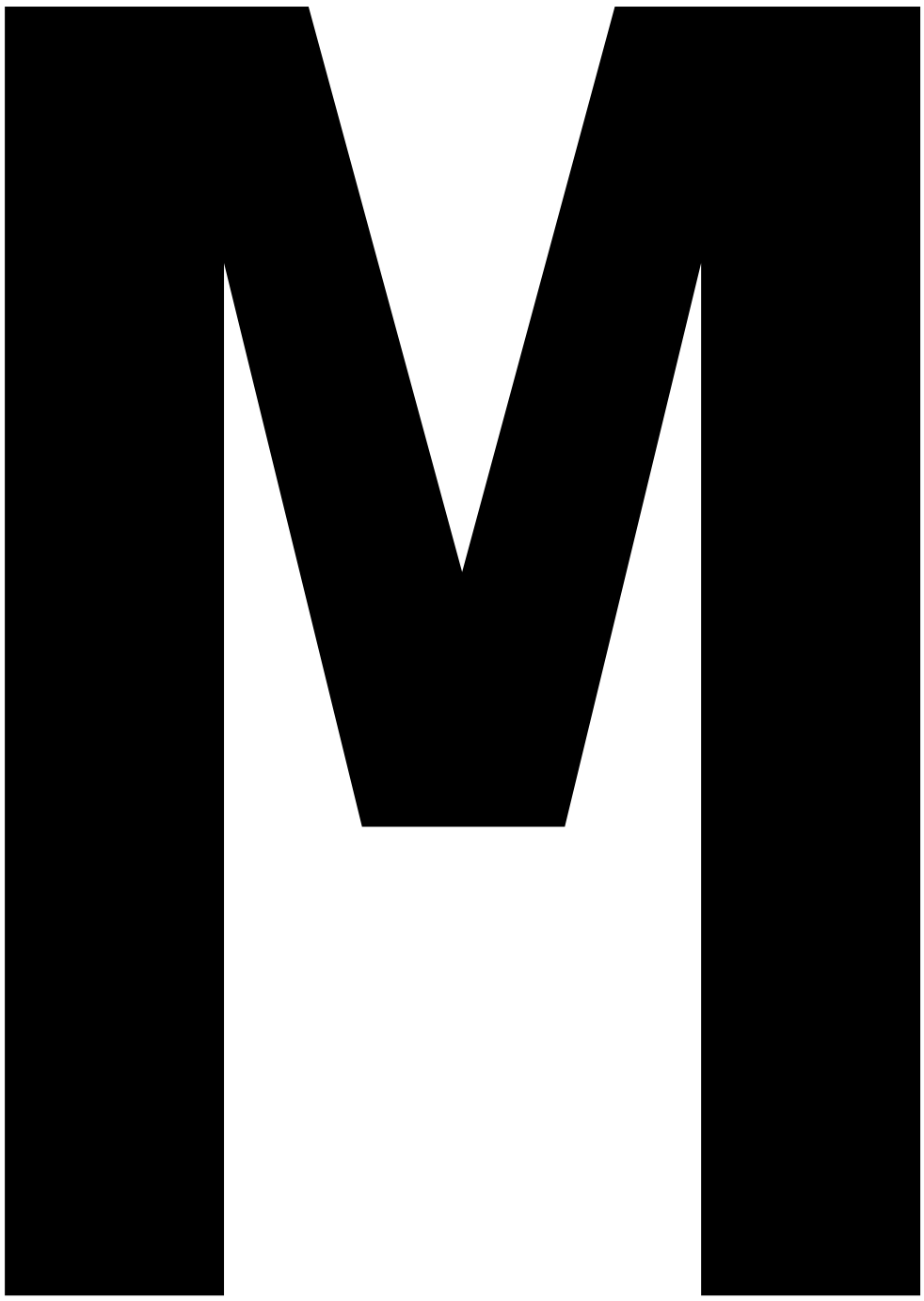
u

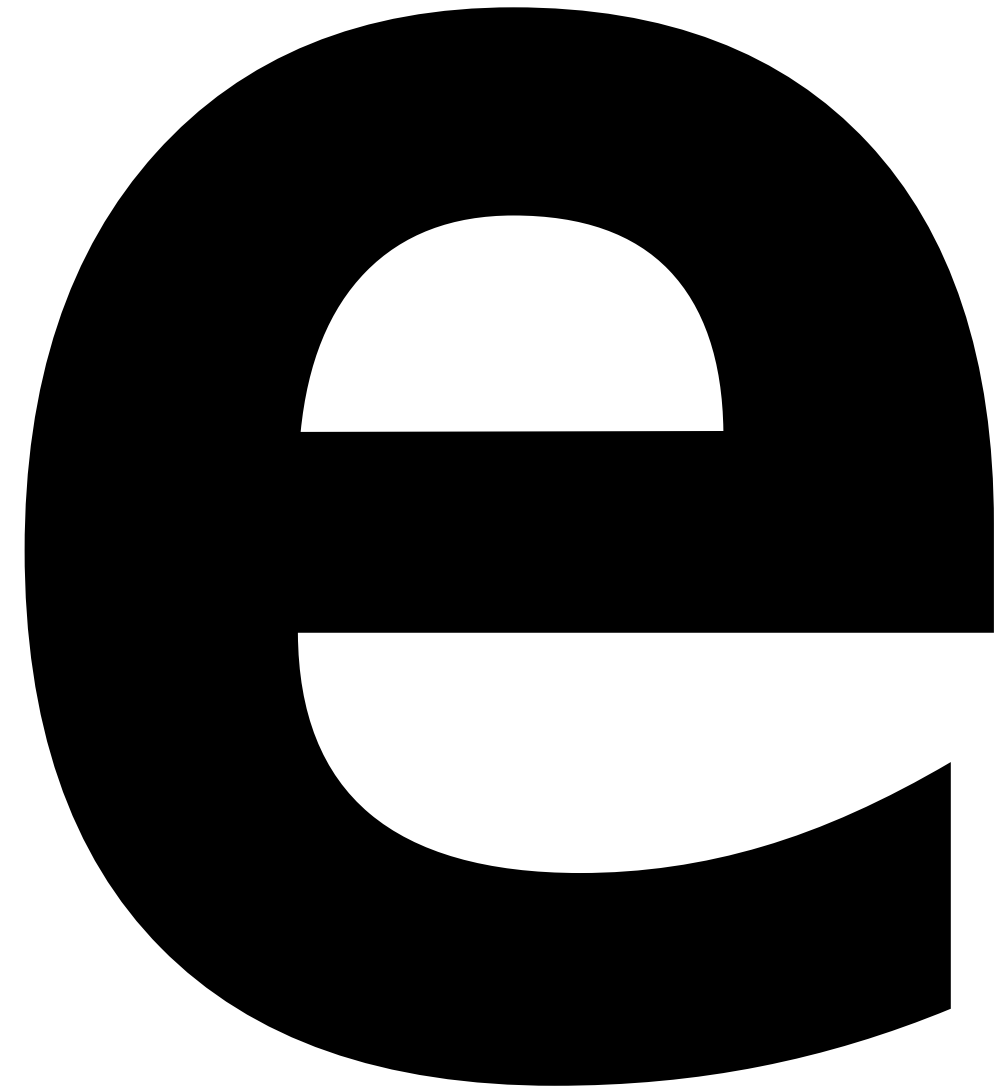
S

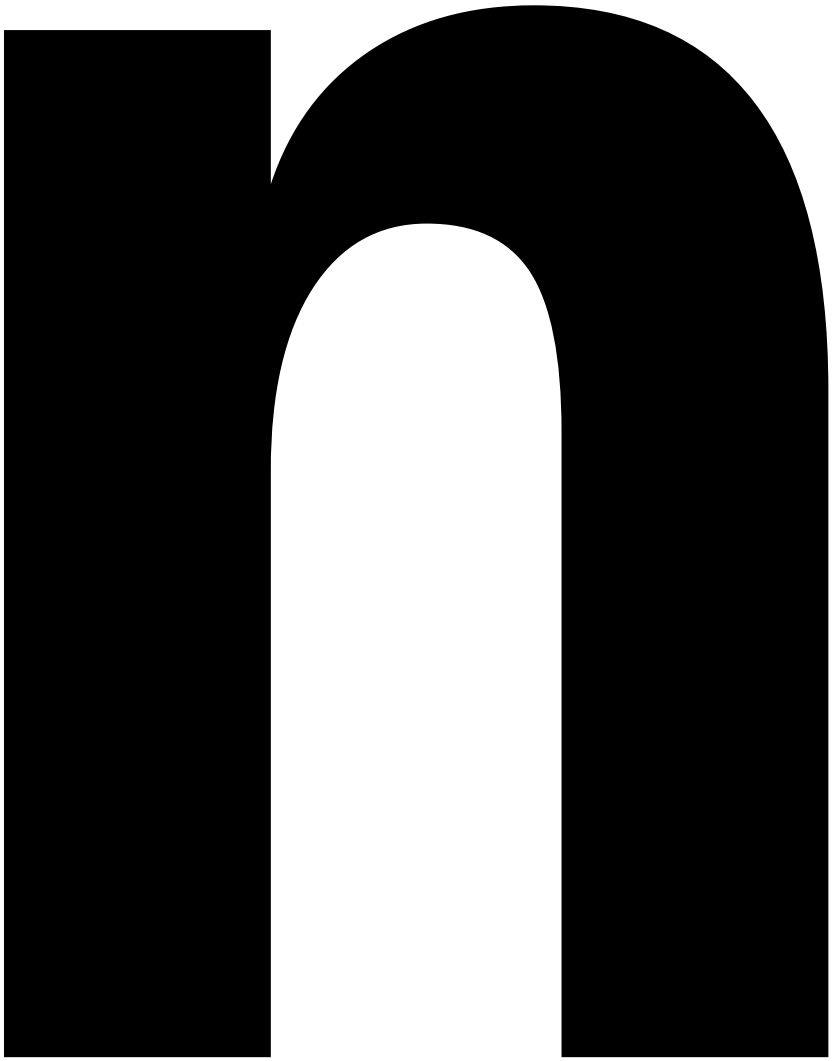




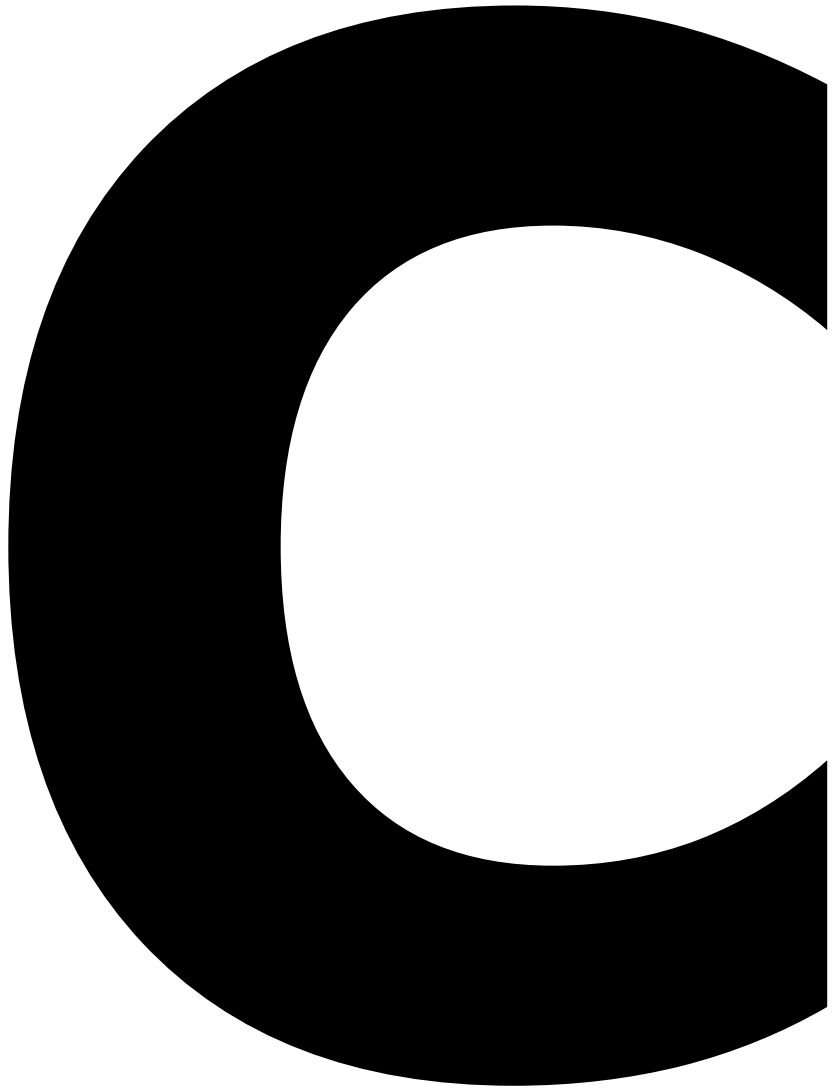
d

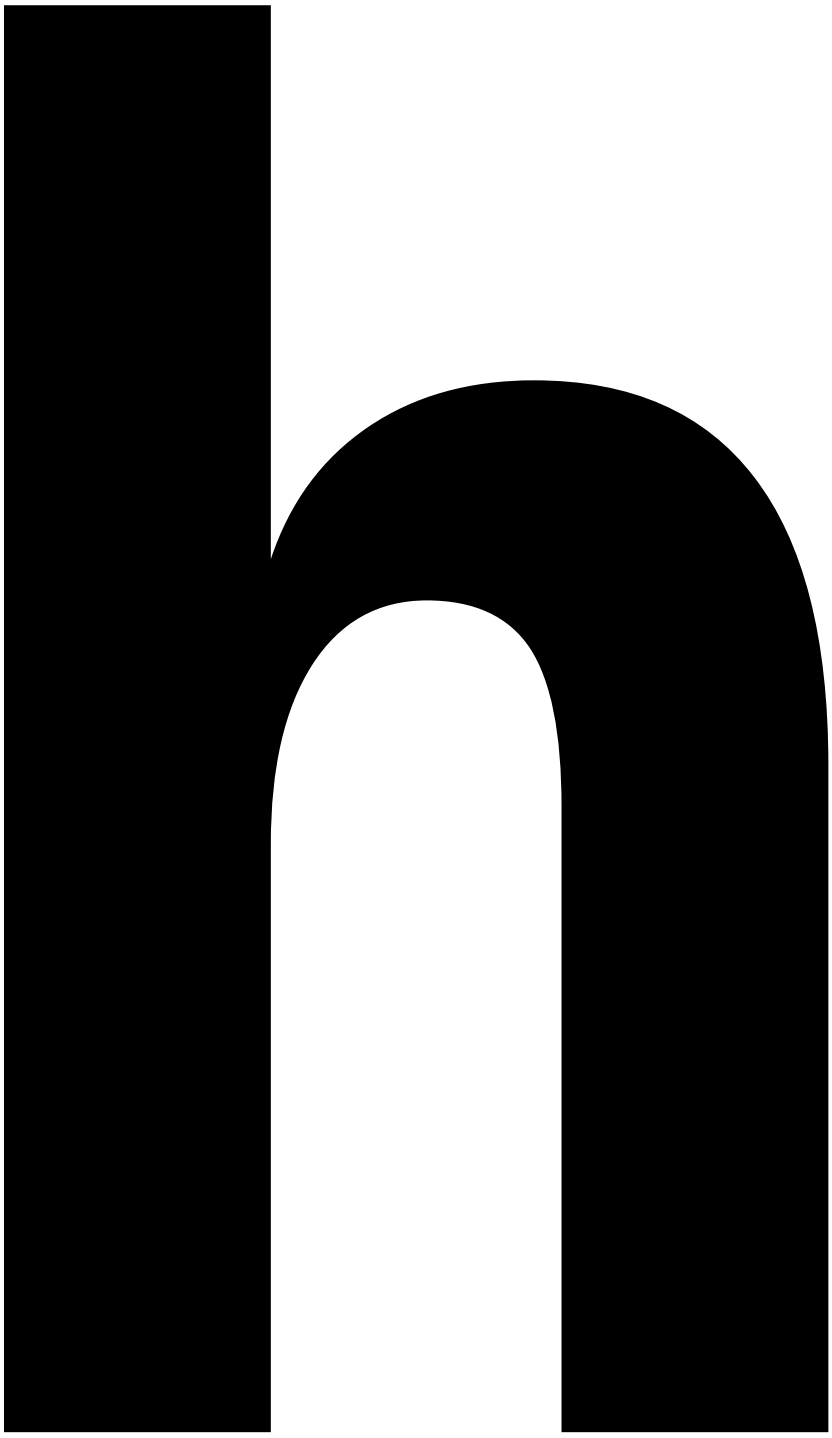


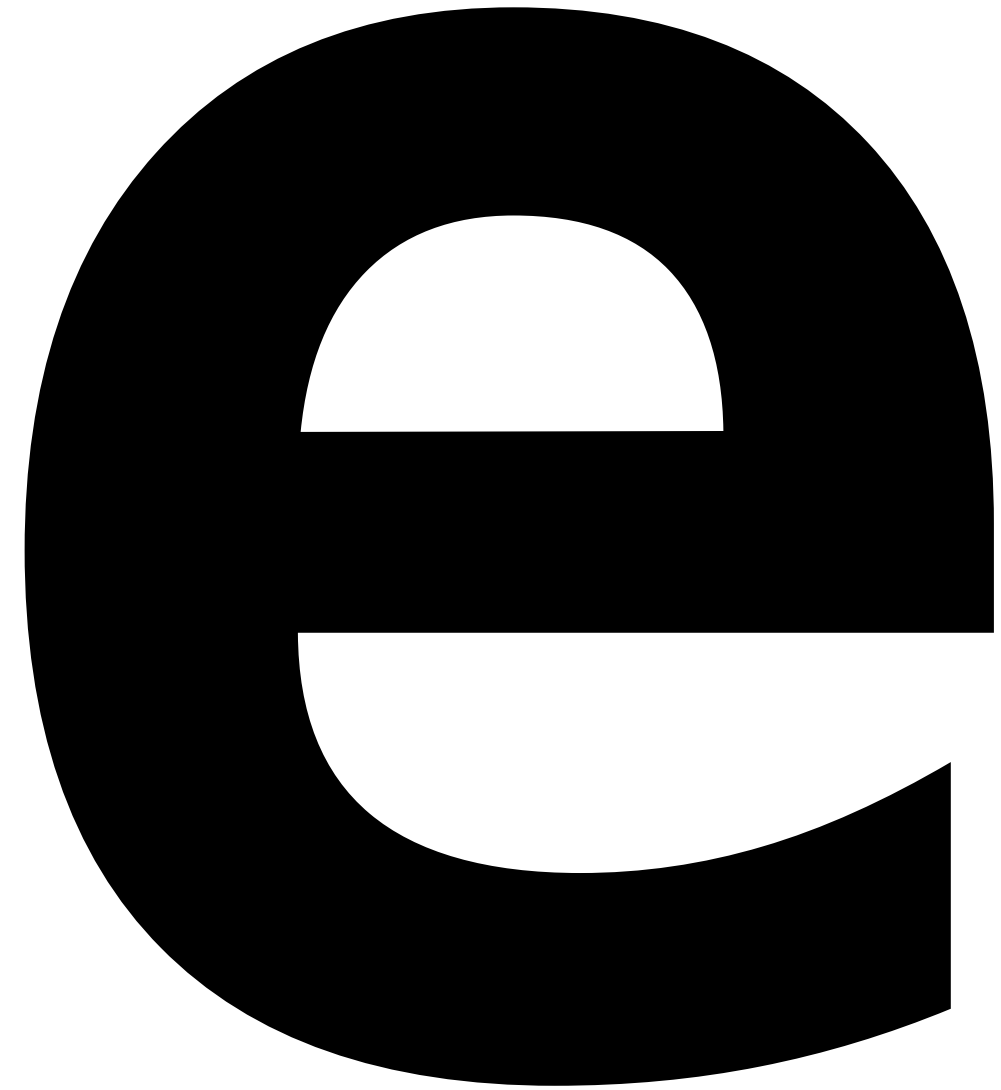


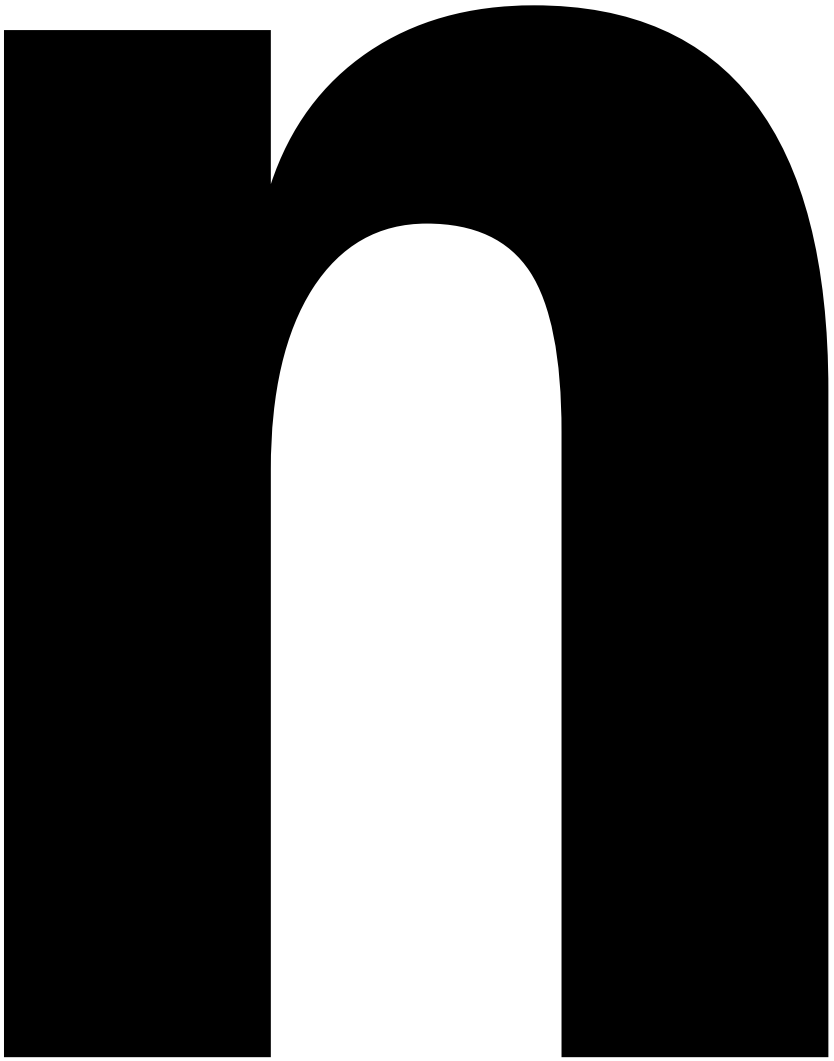


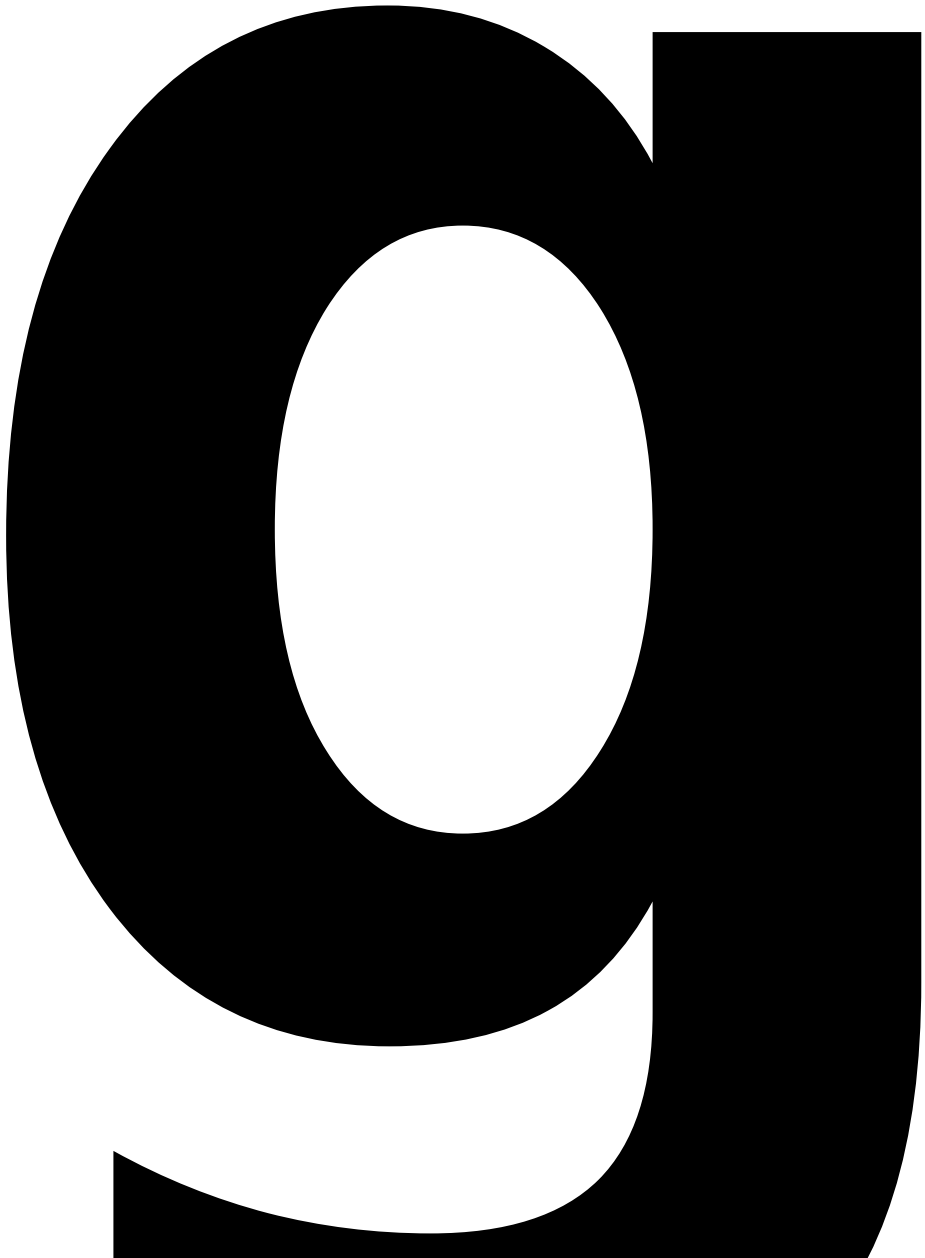
S

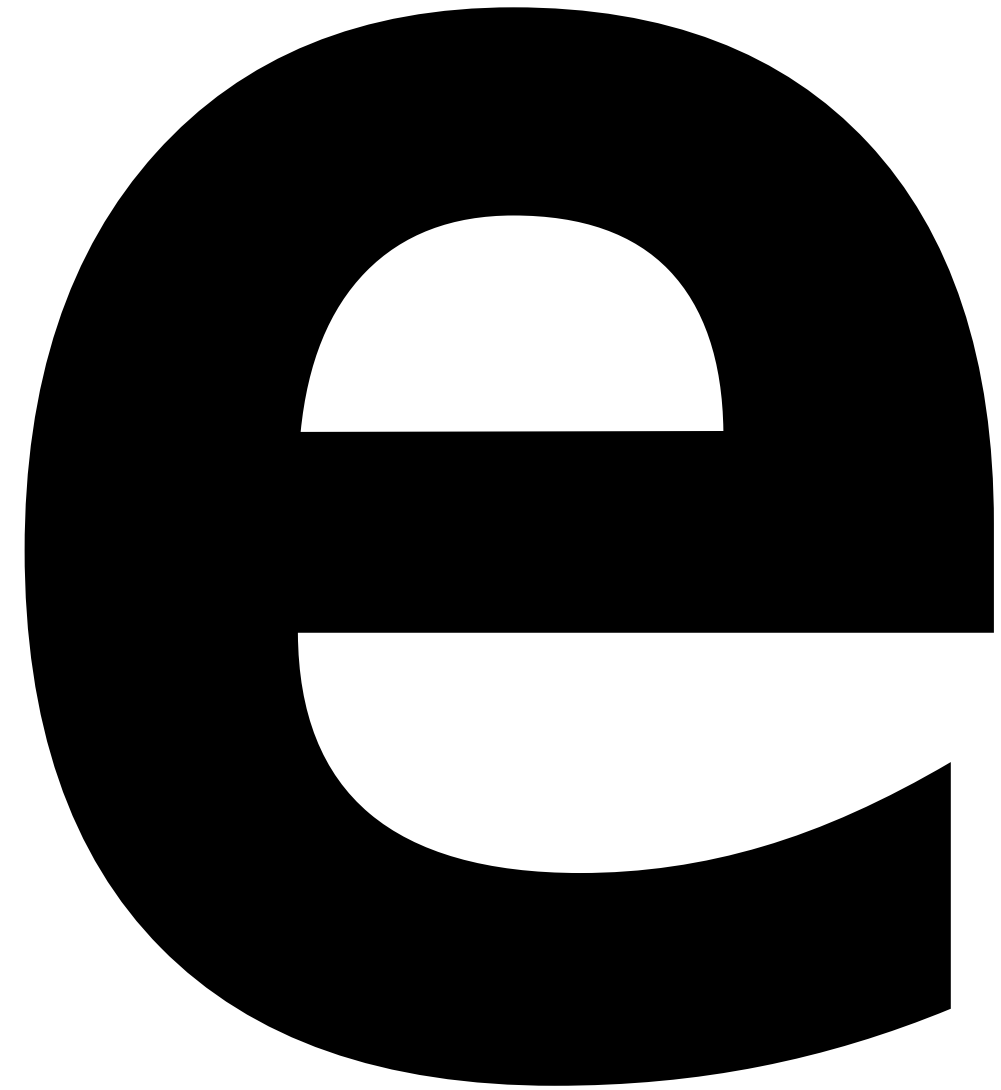






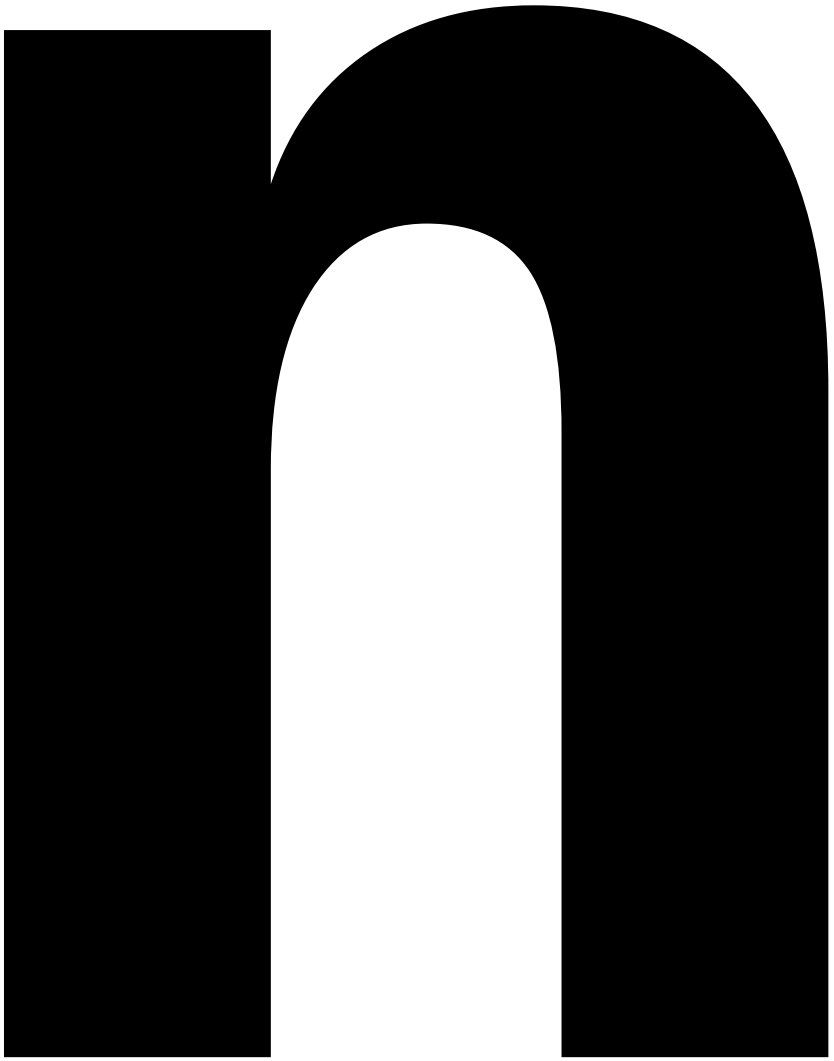




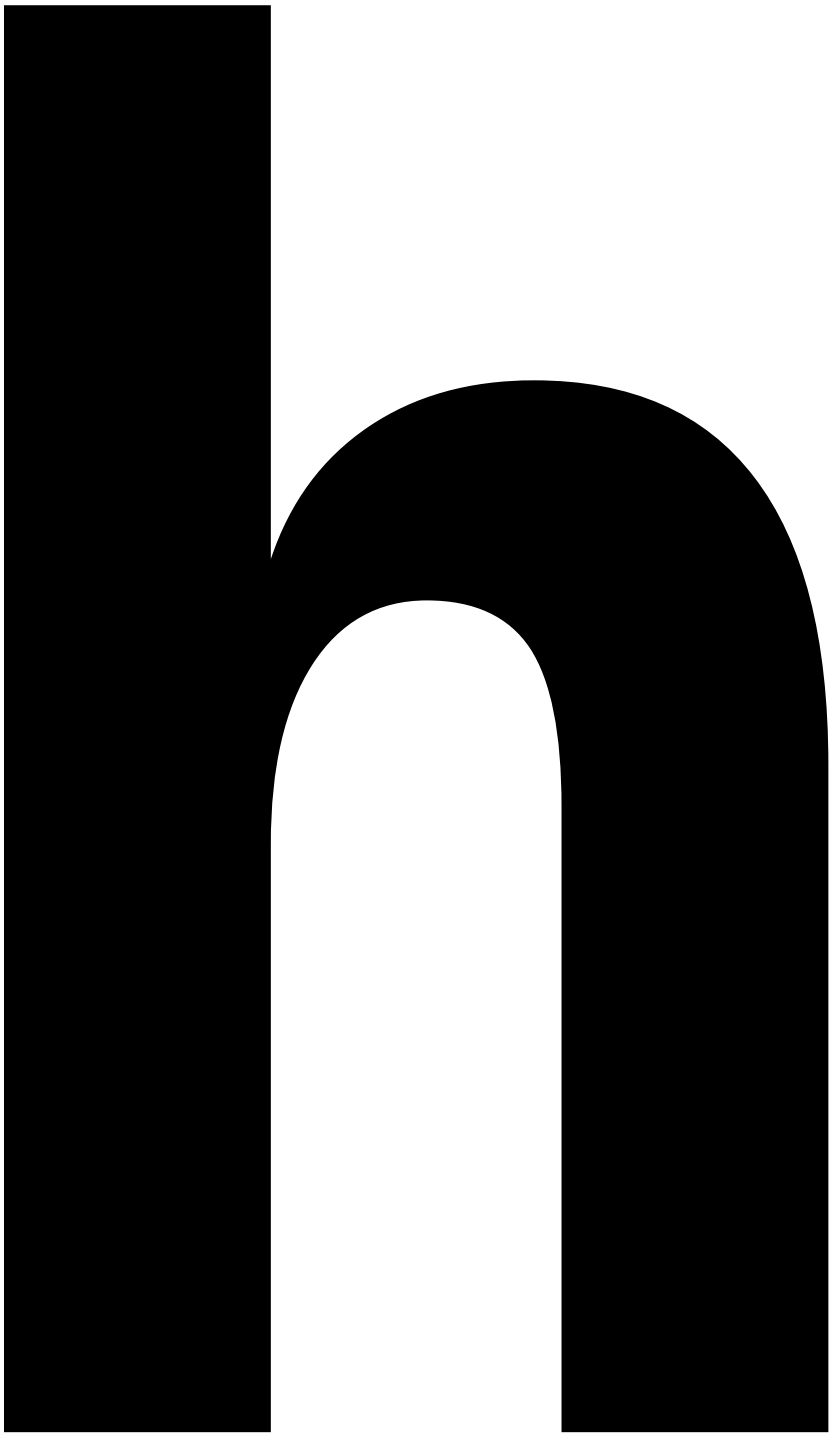


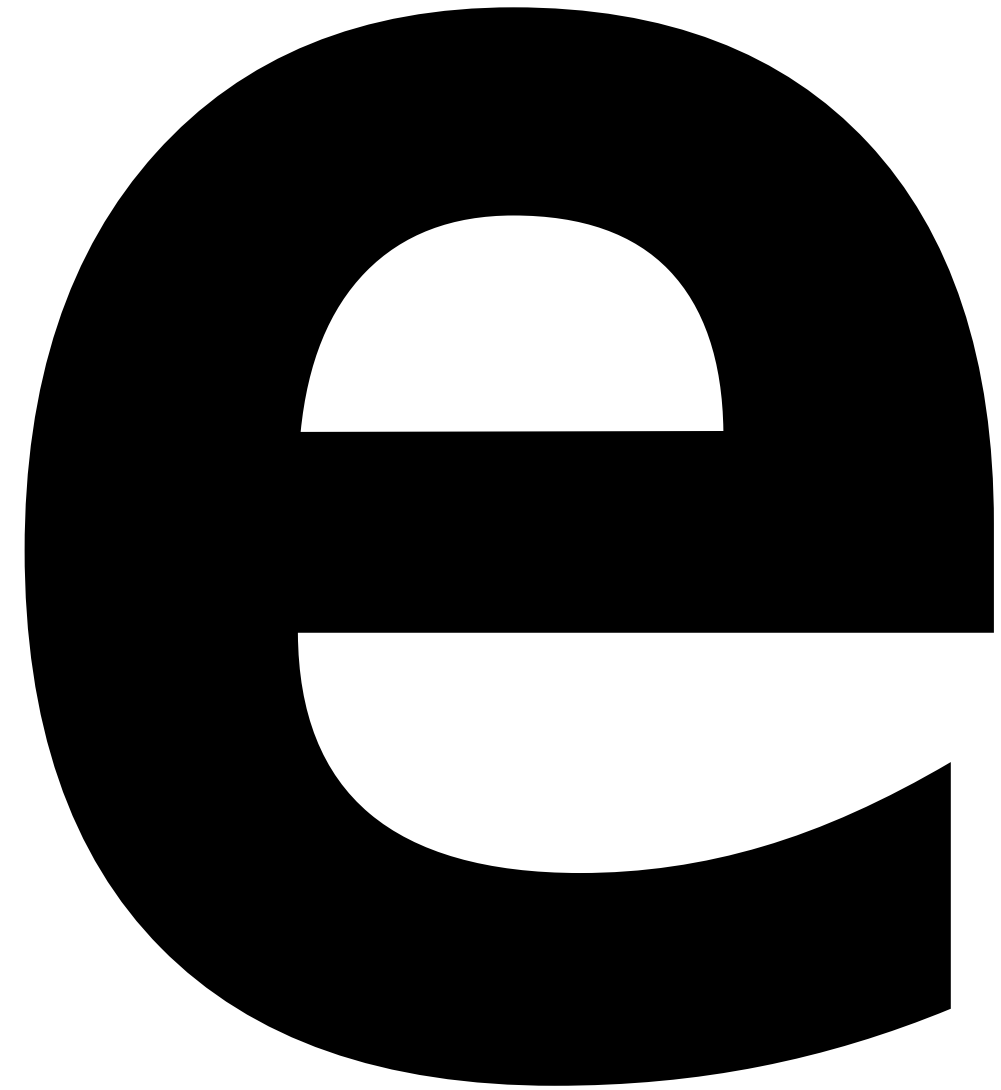
S

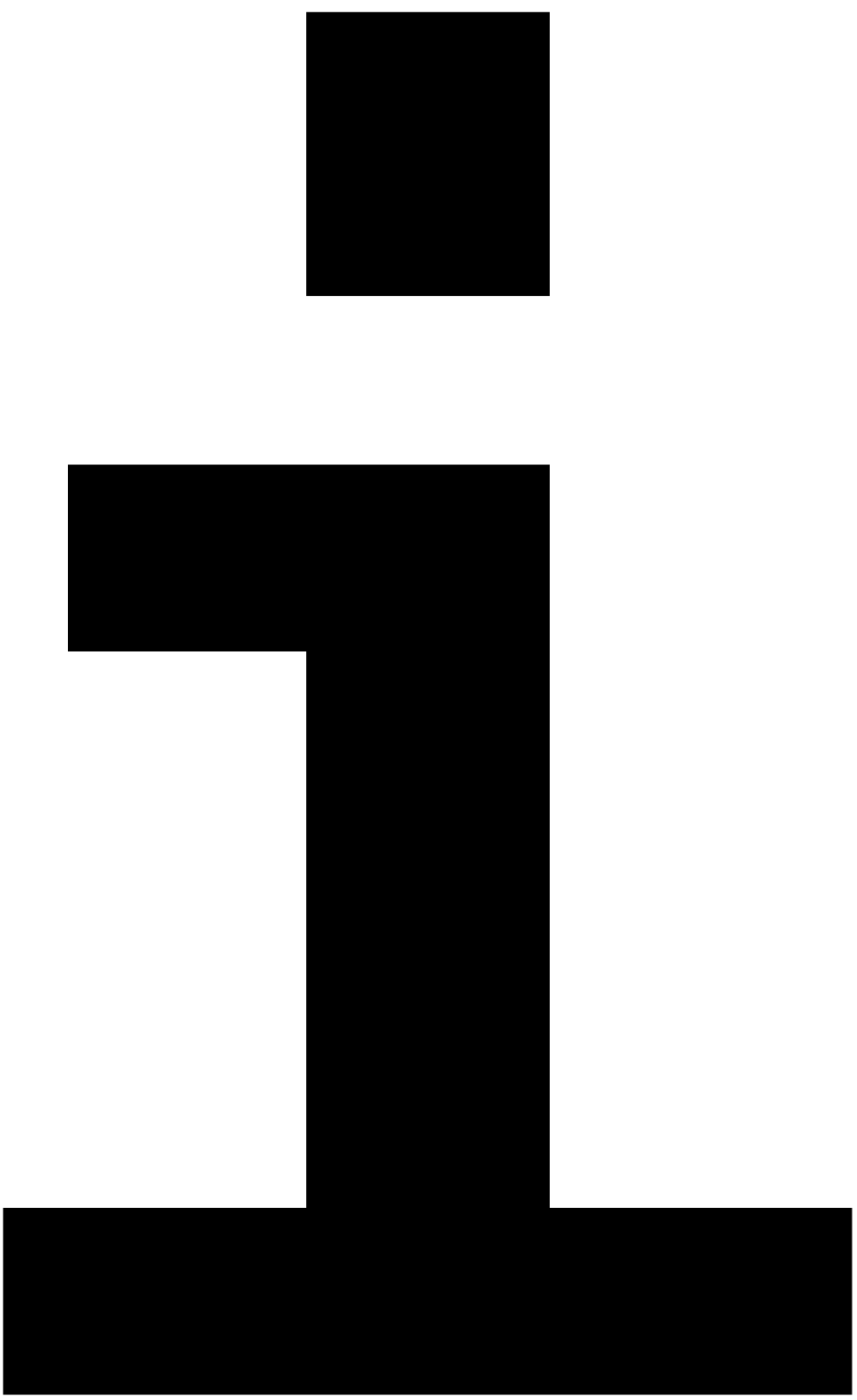
u

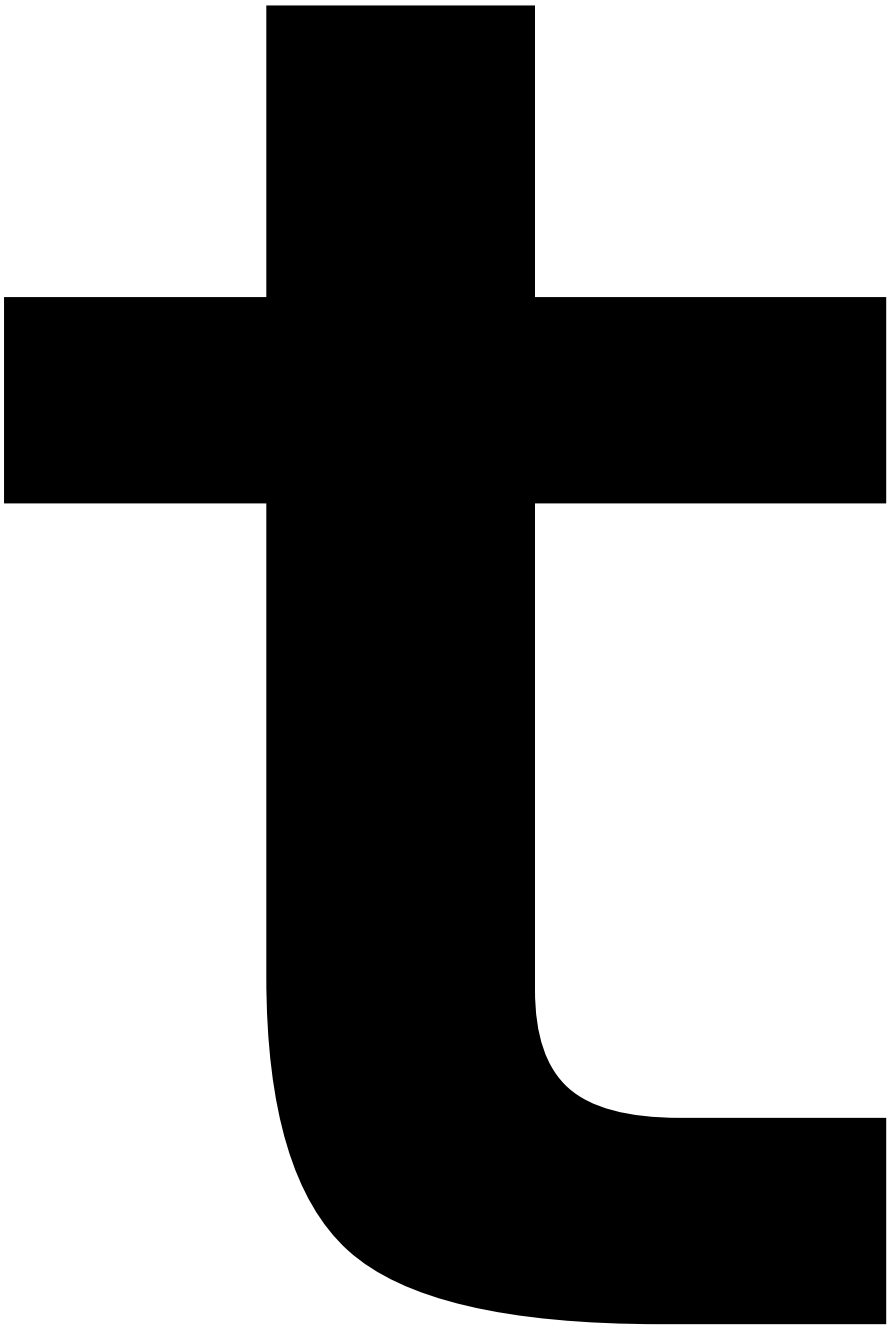


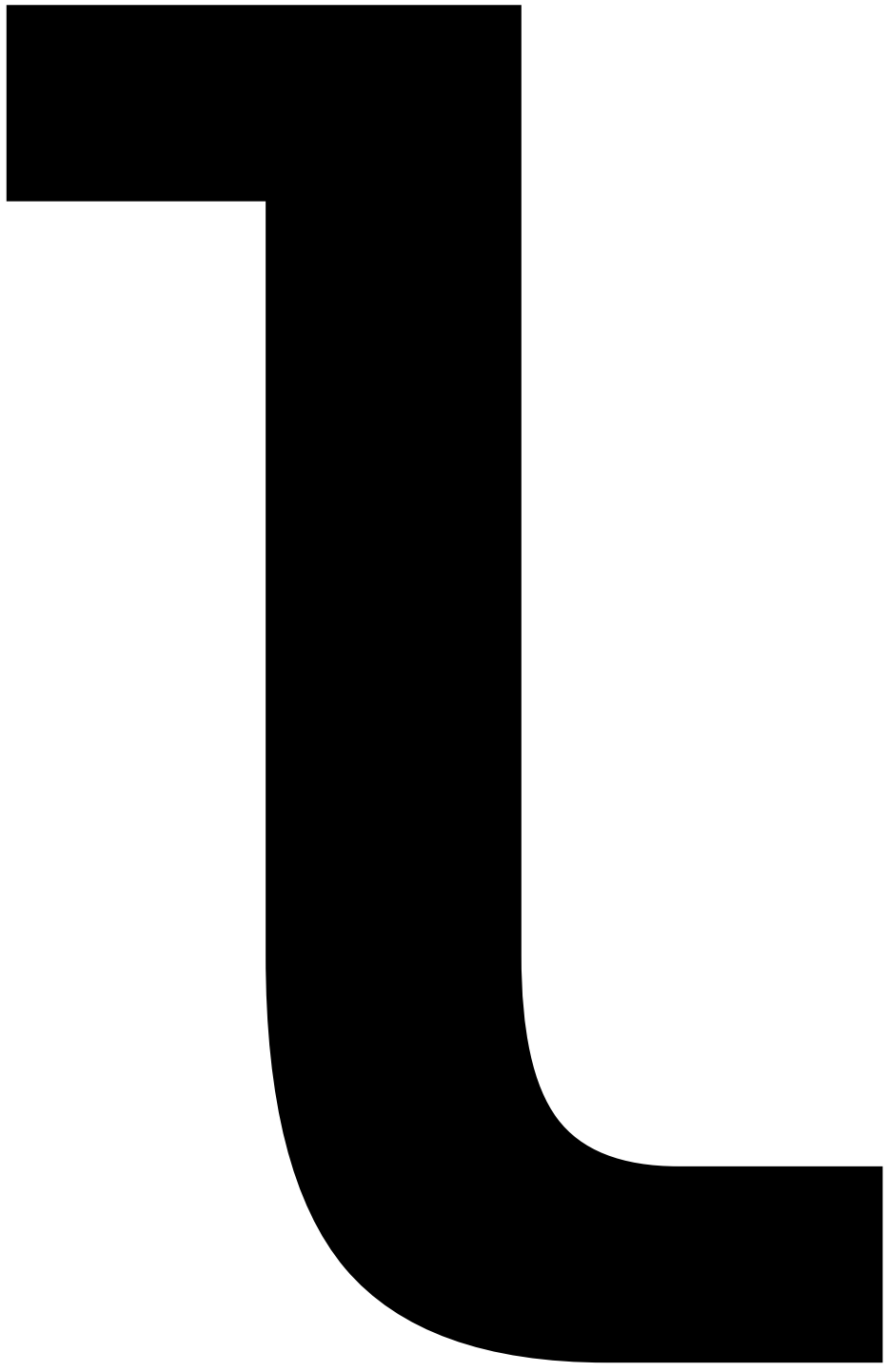
d

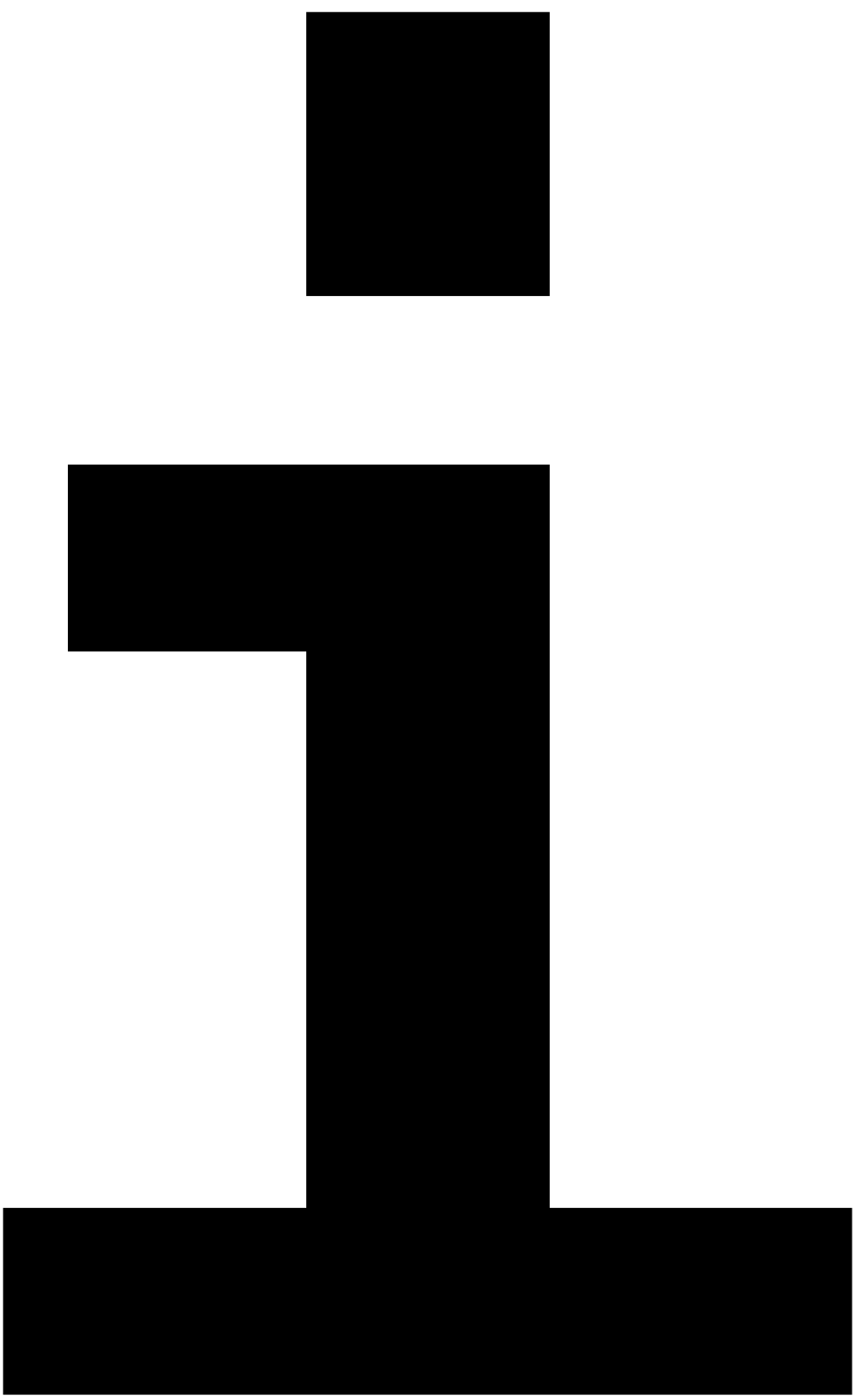


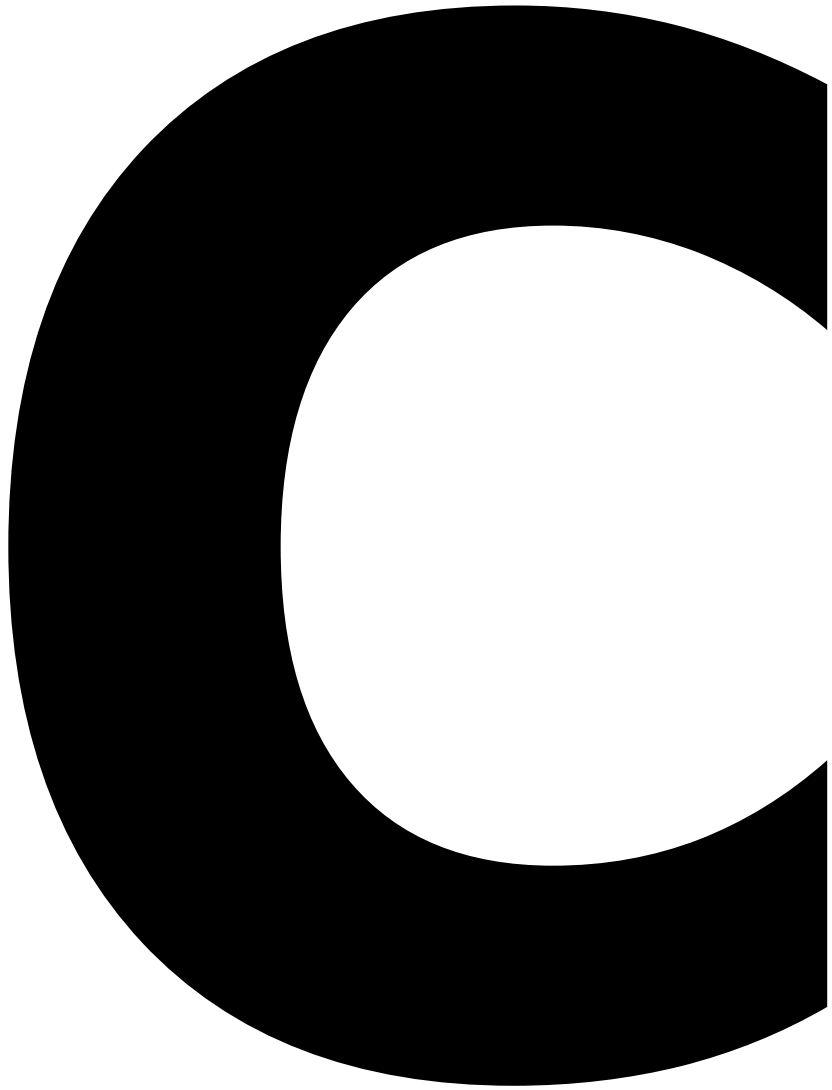


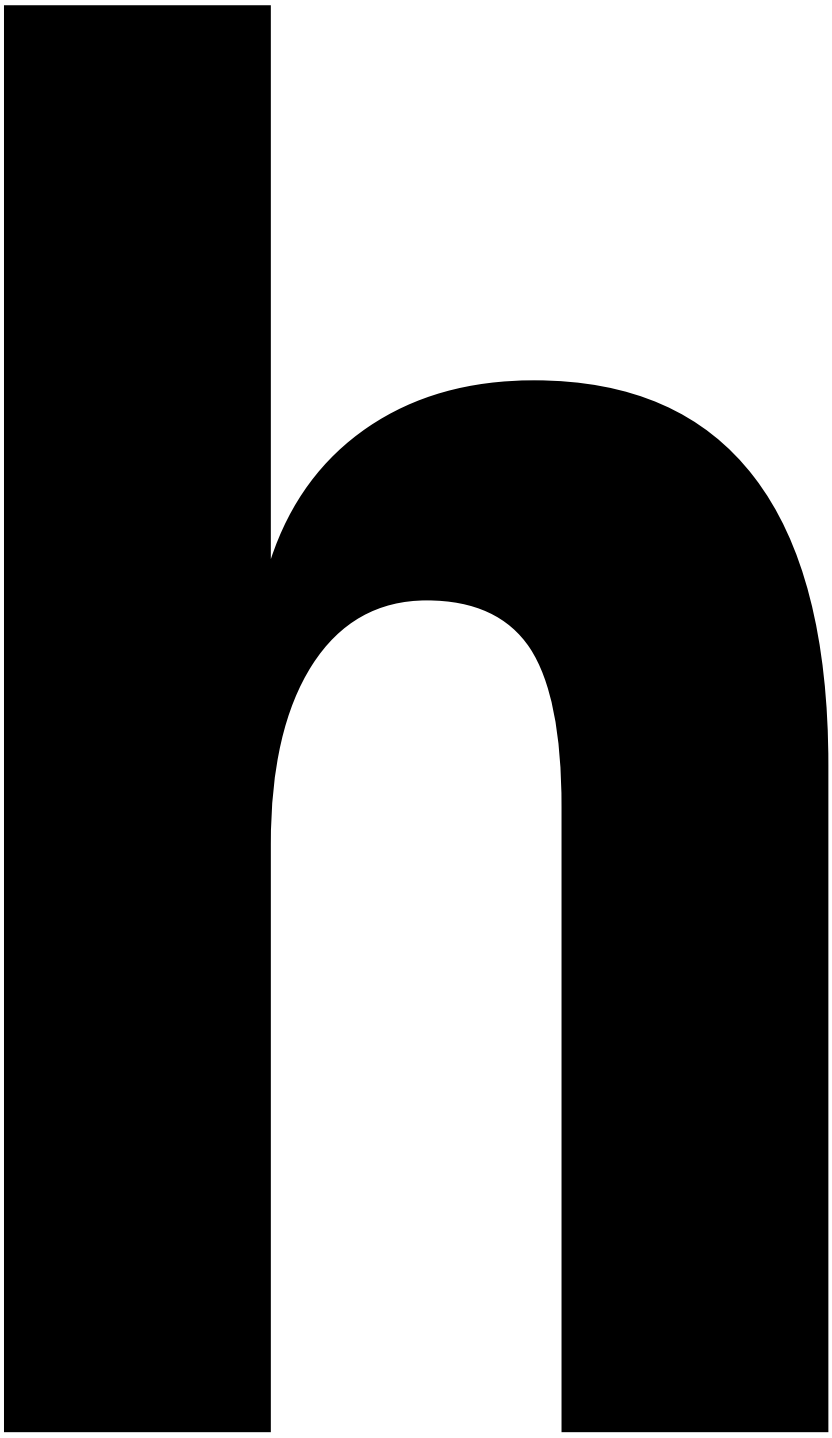


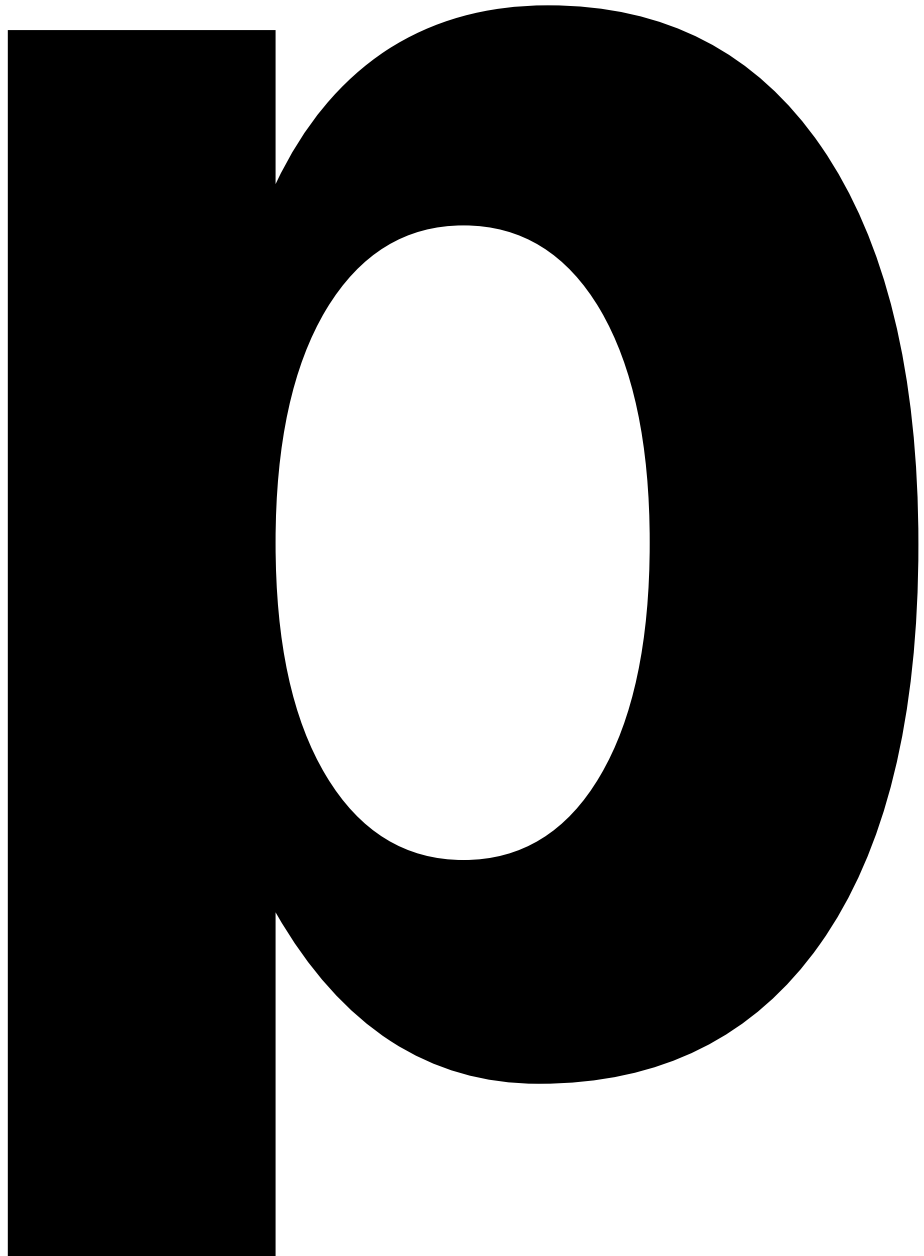


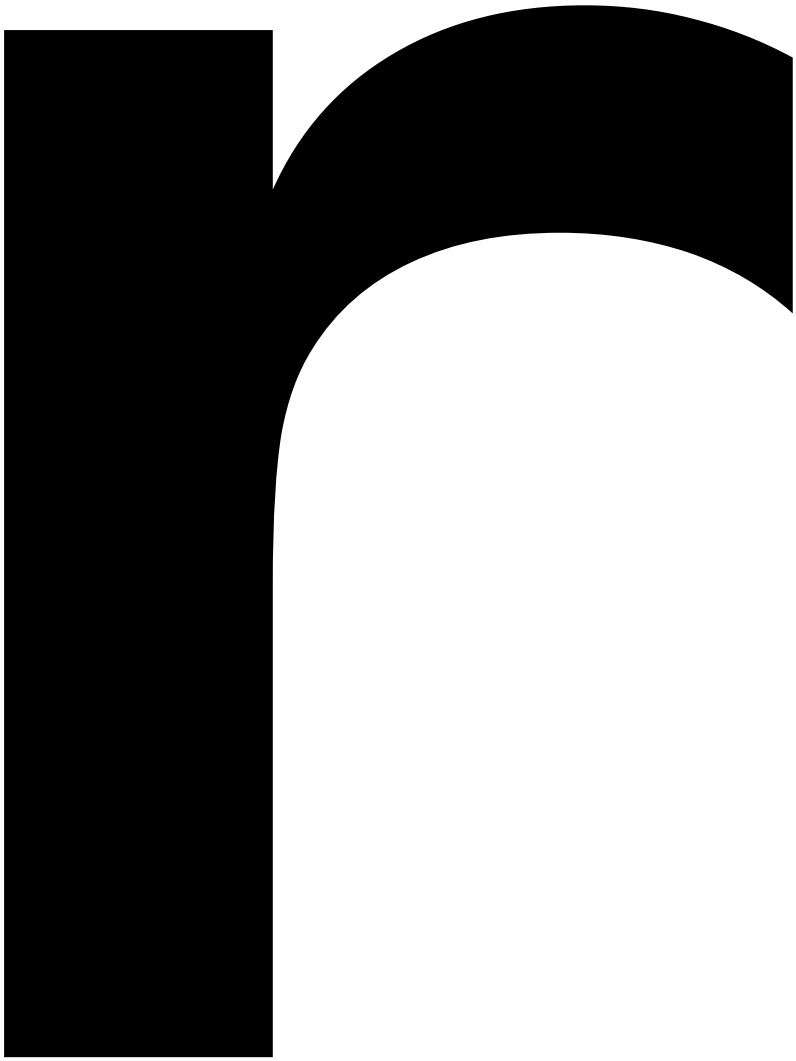


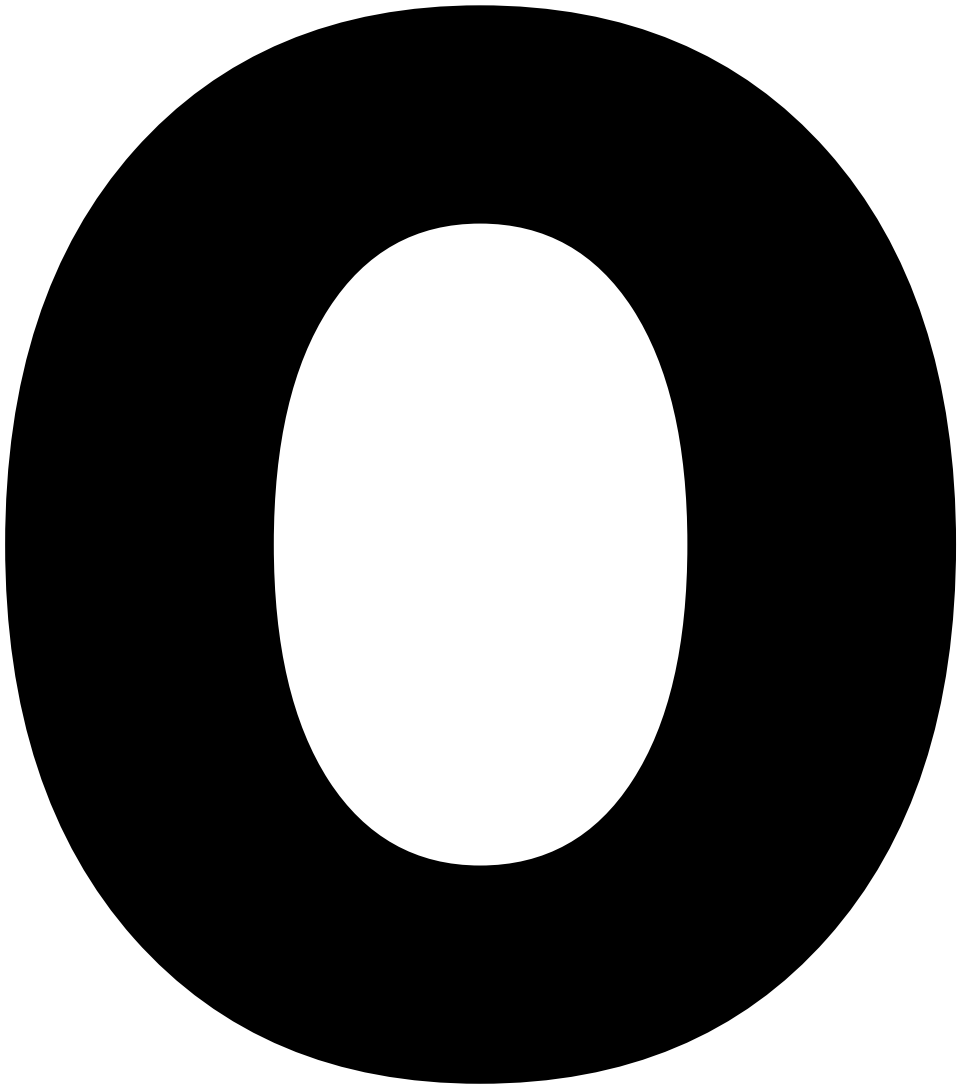


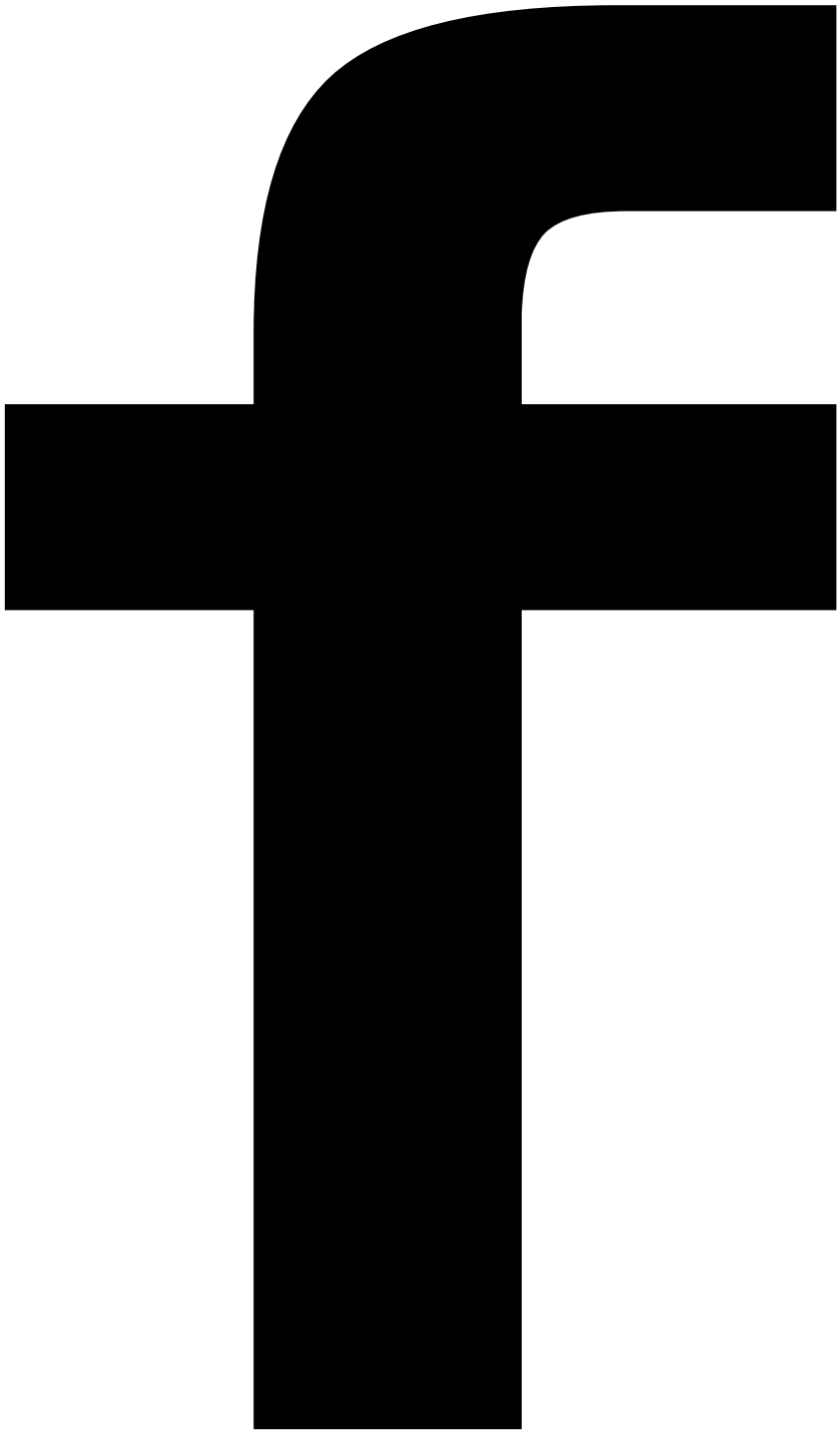


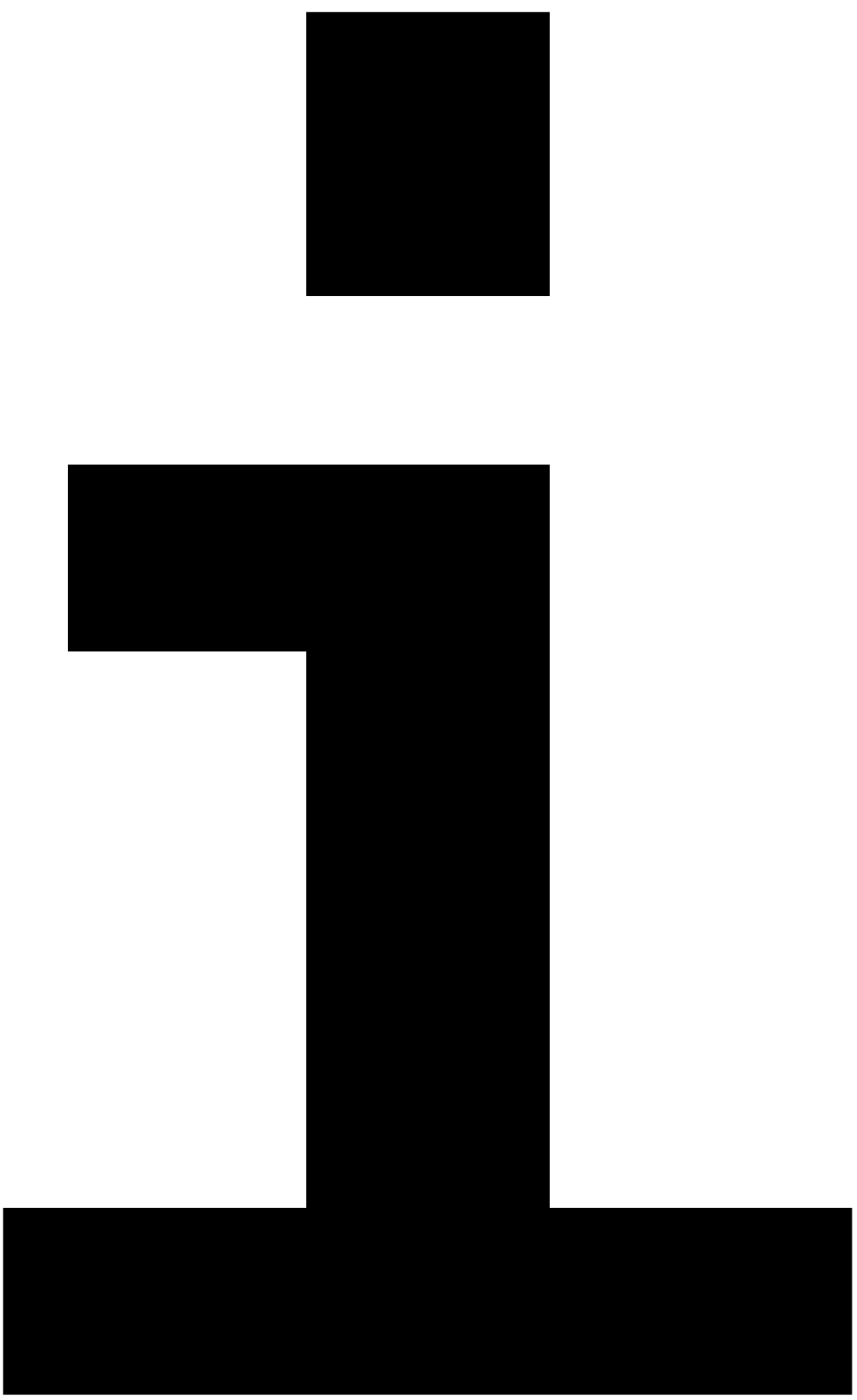


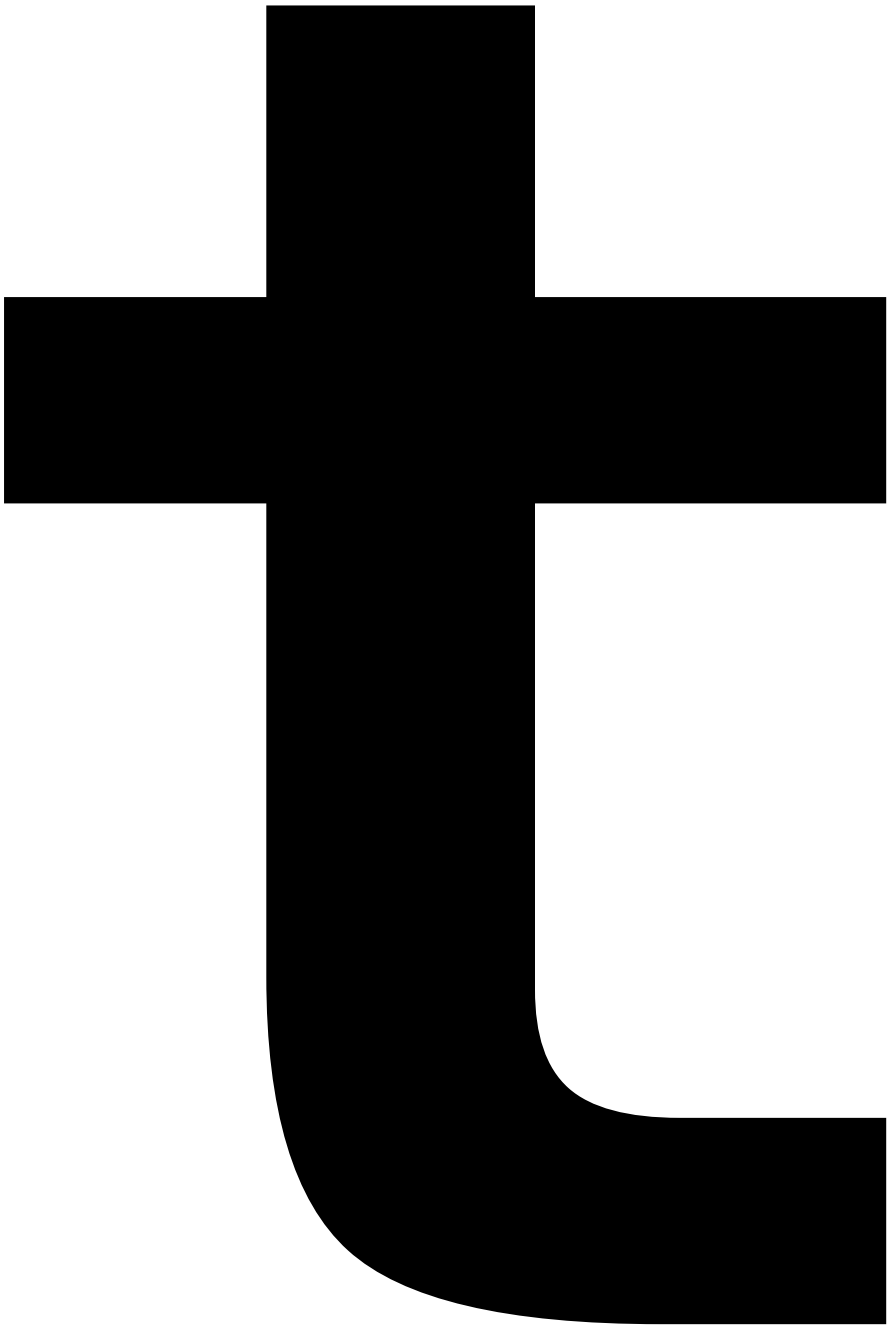


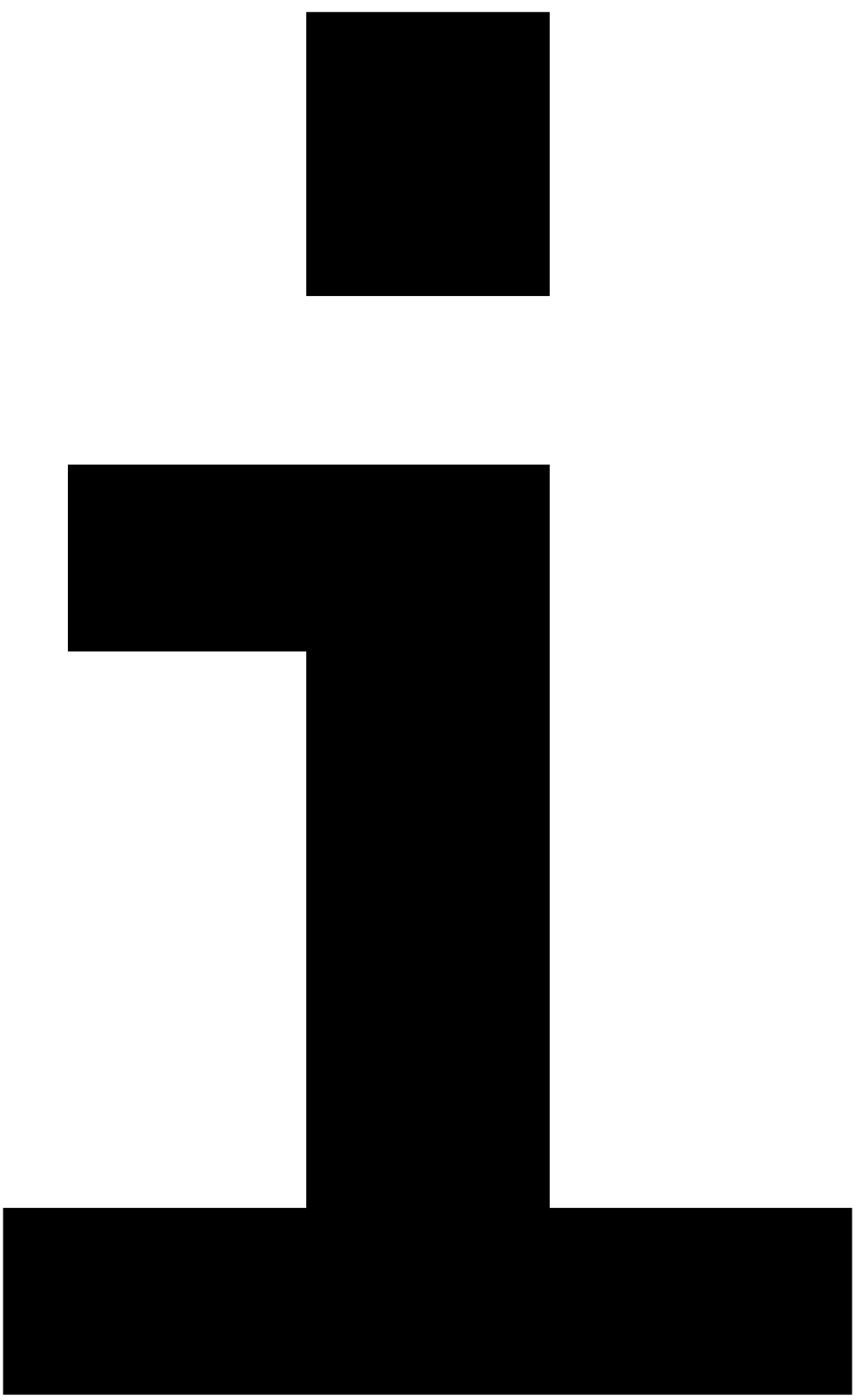


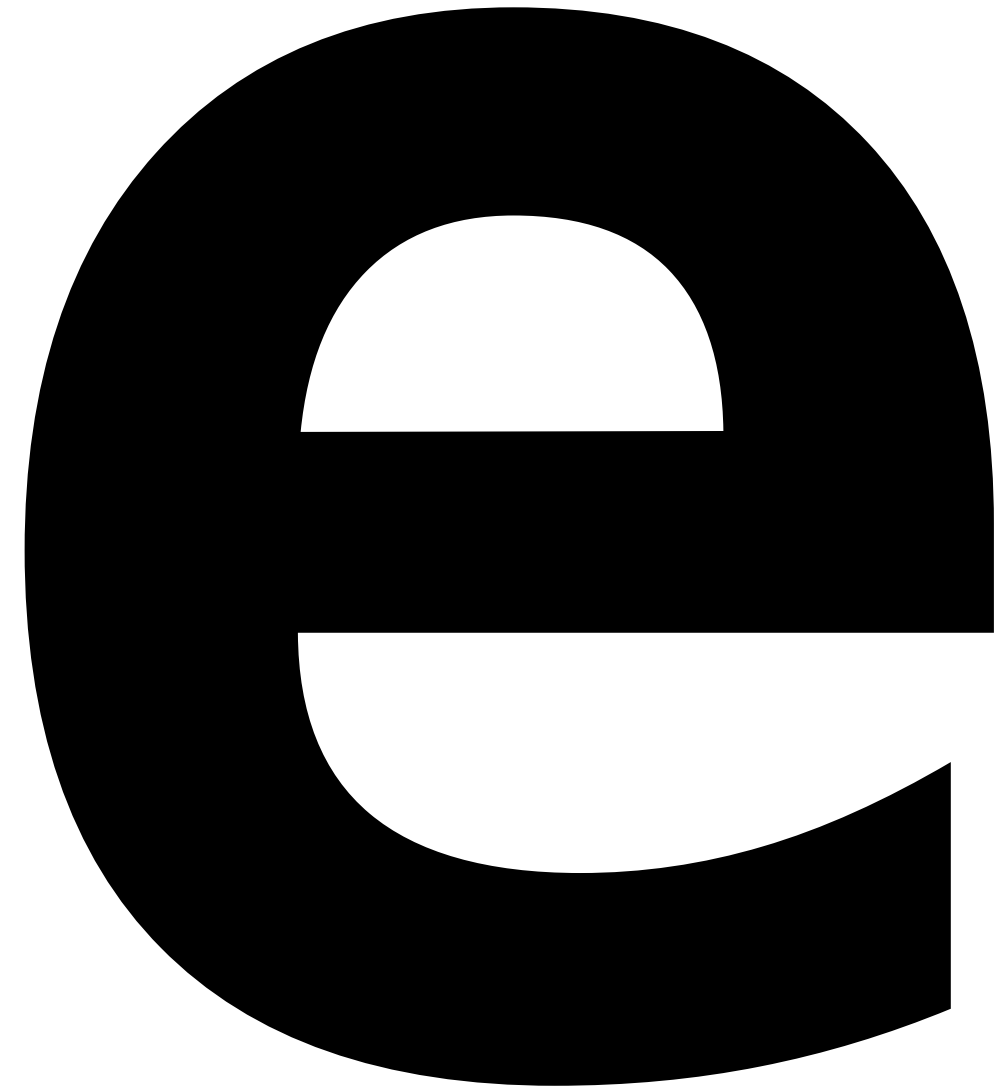


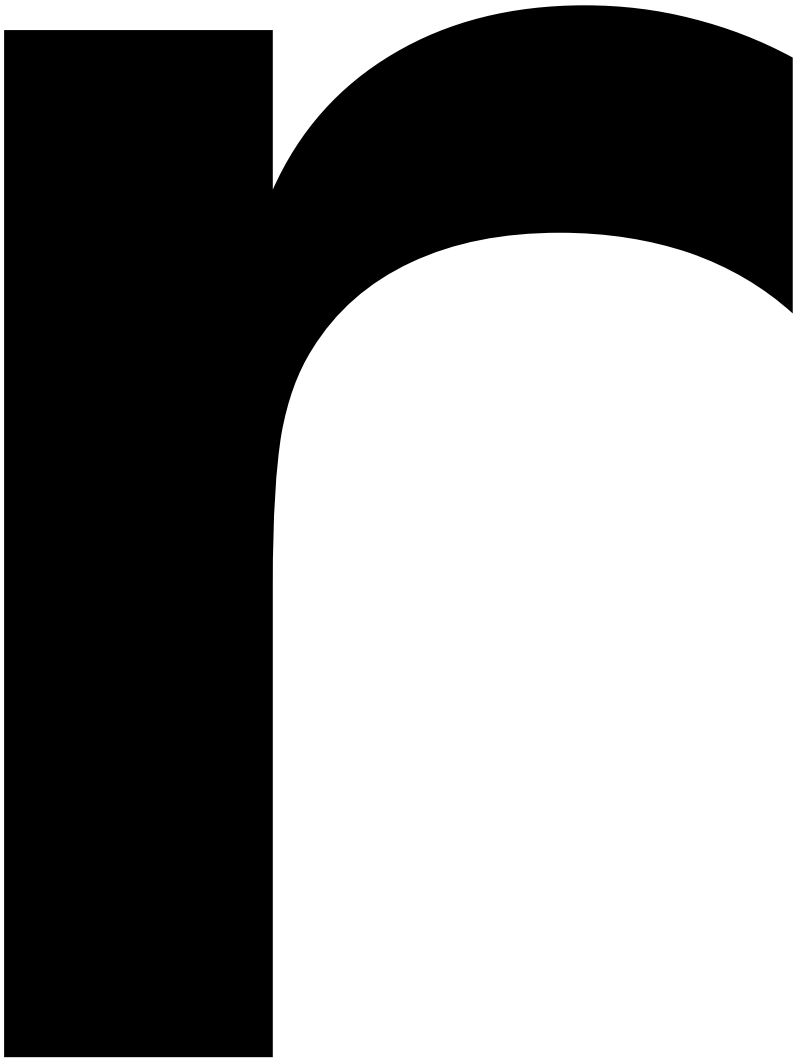


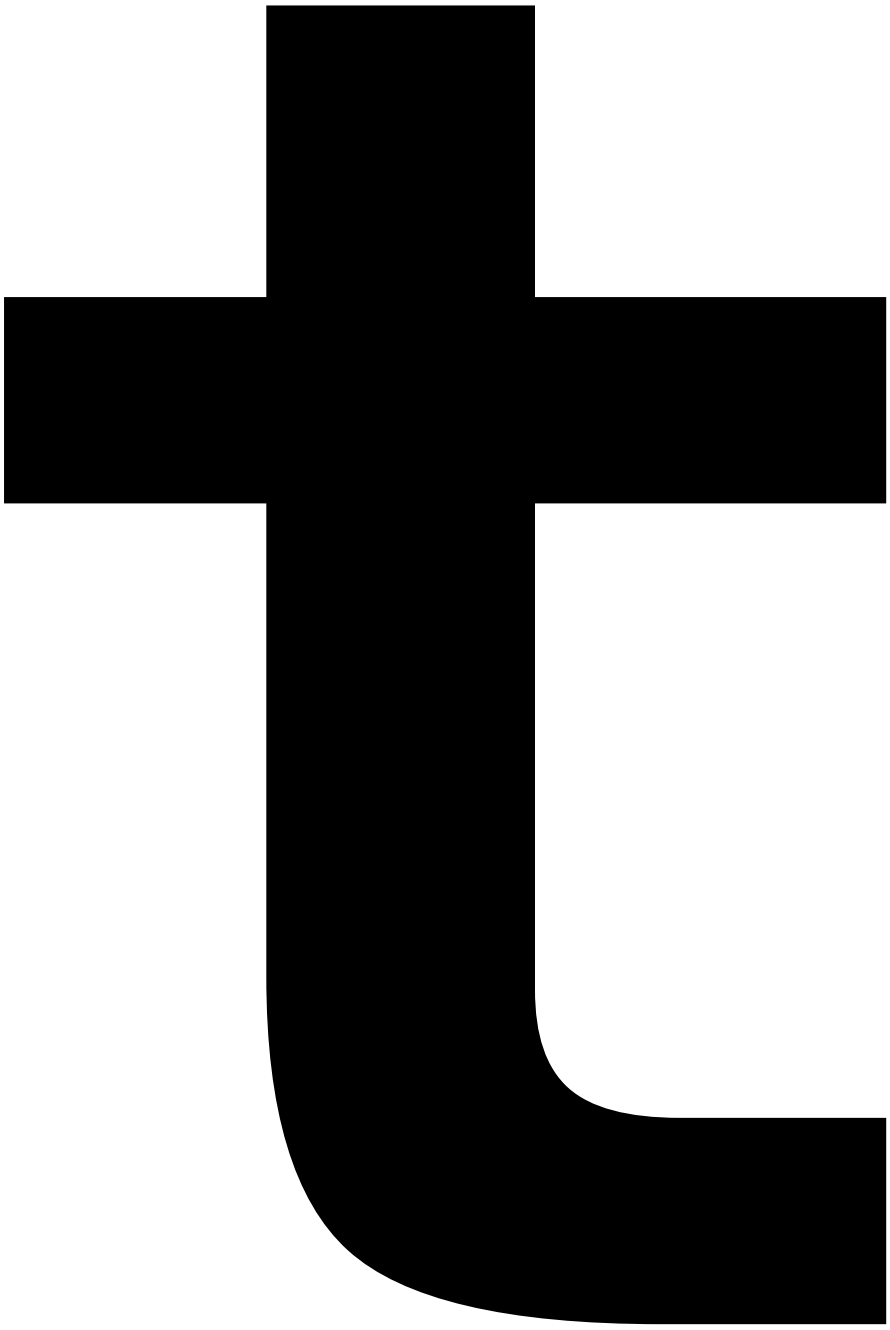


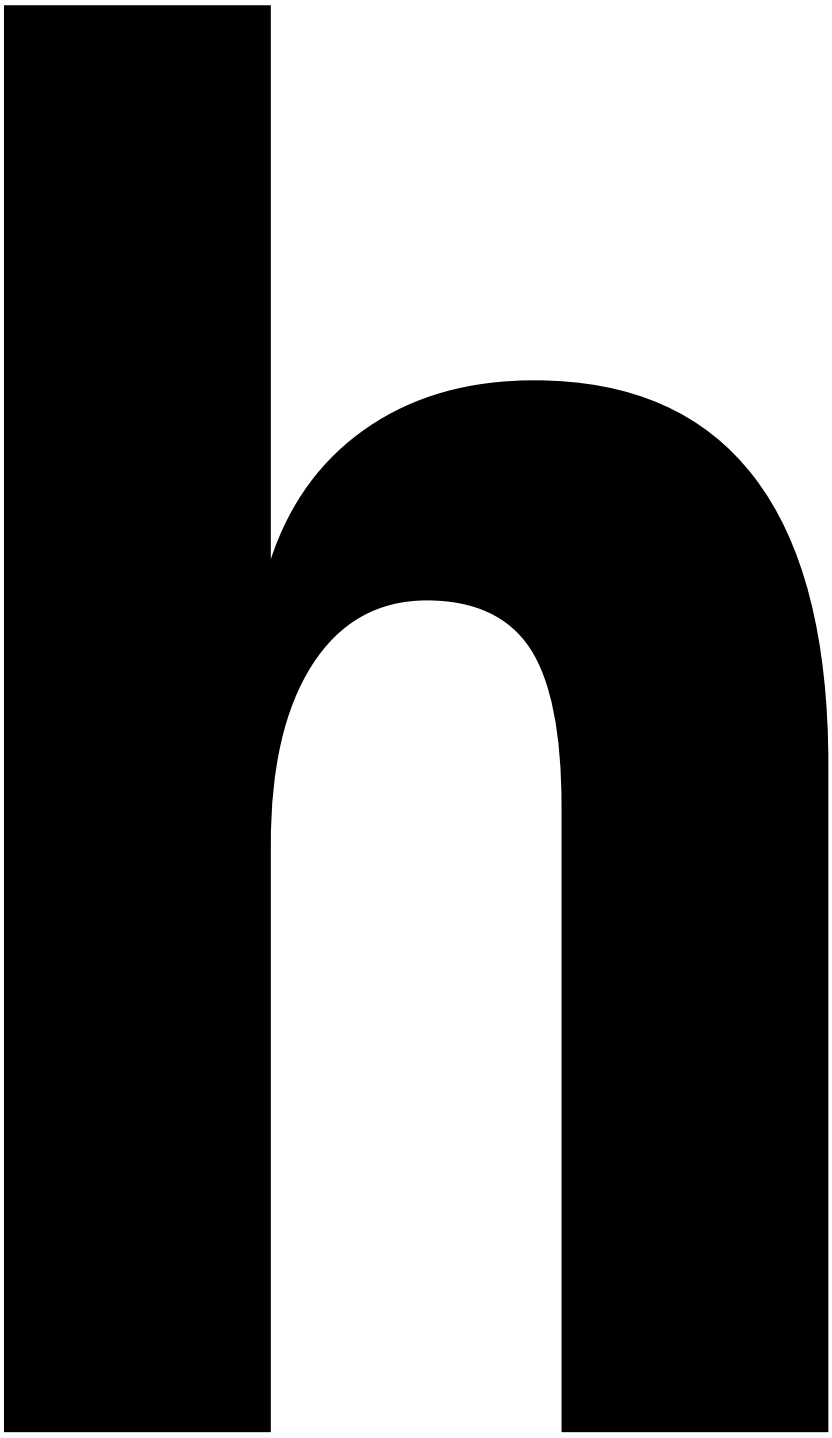


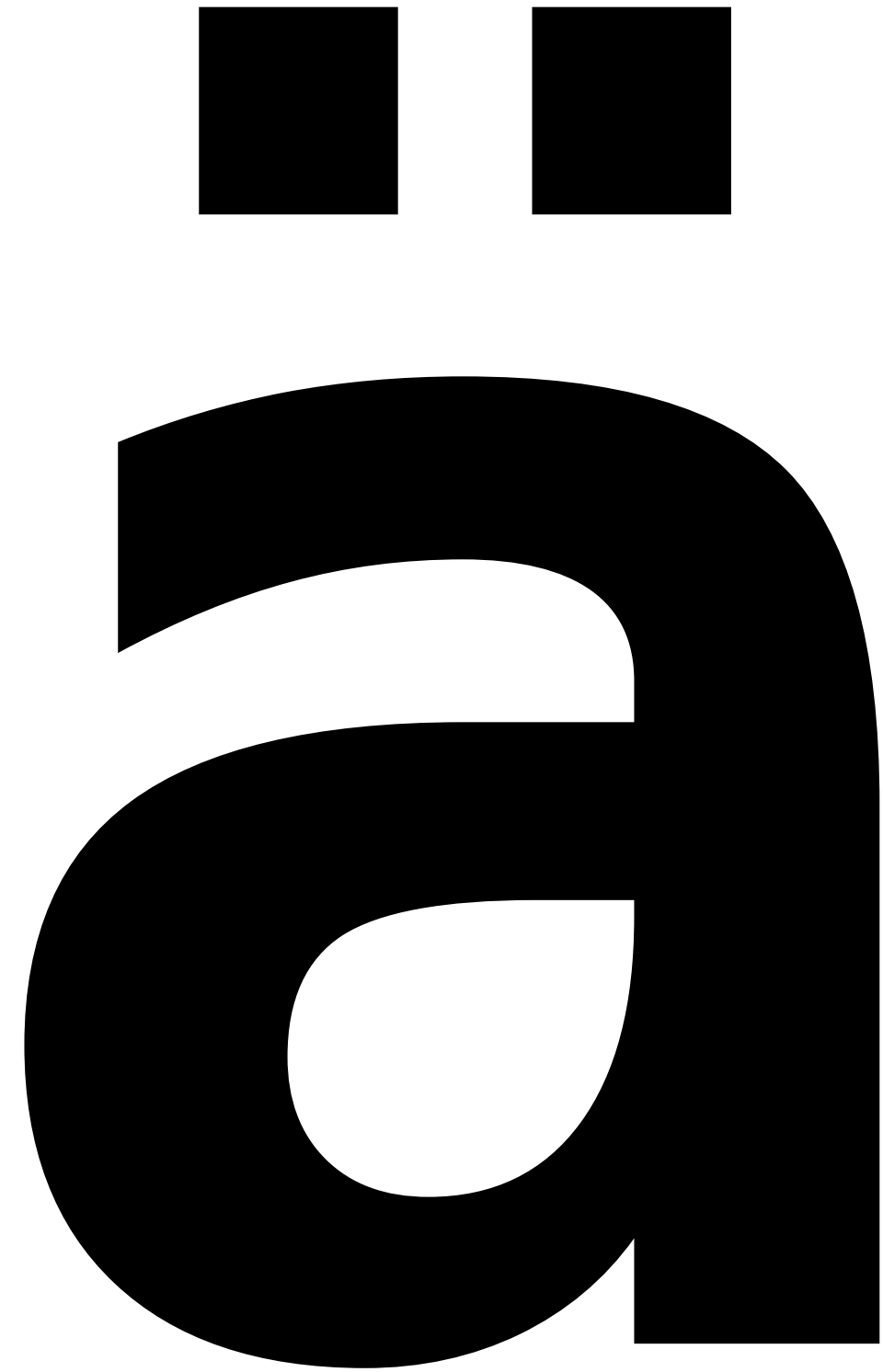


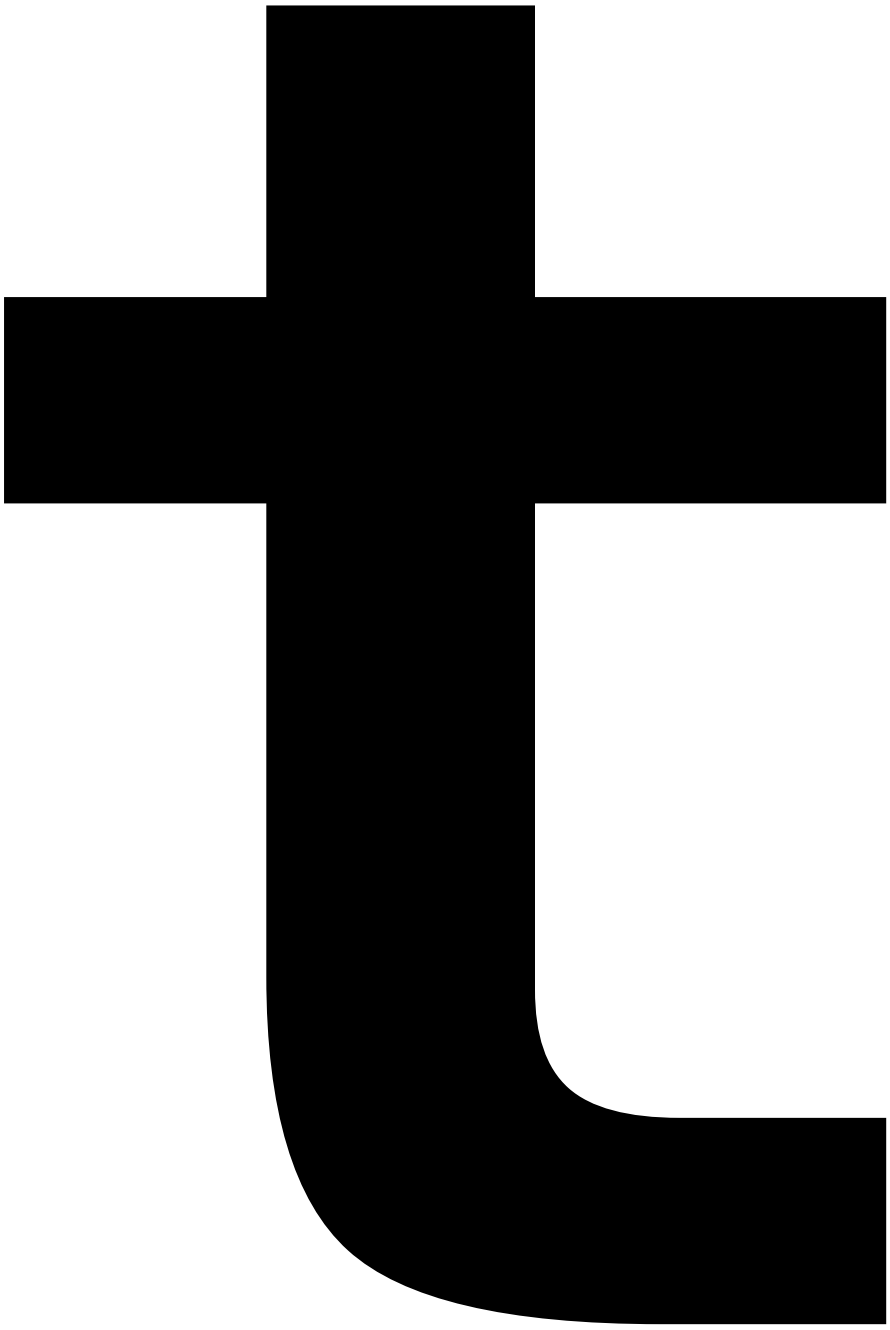


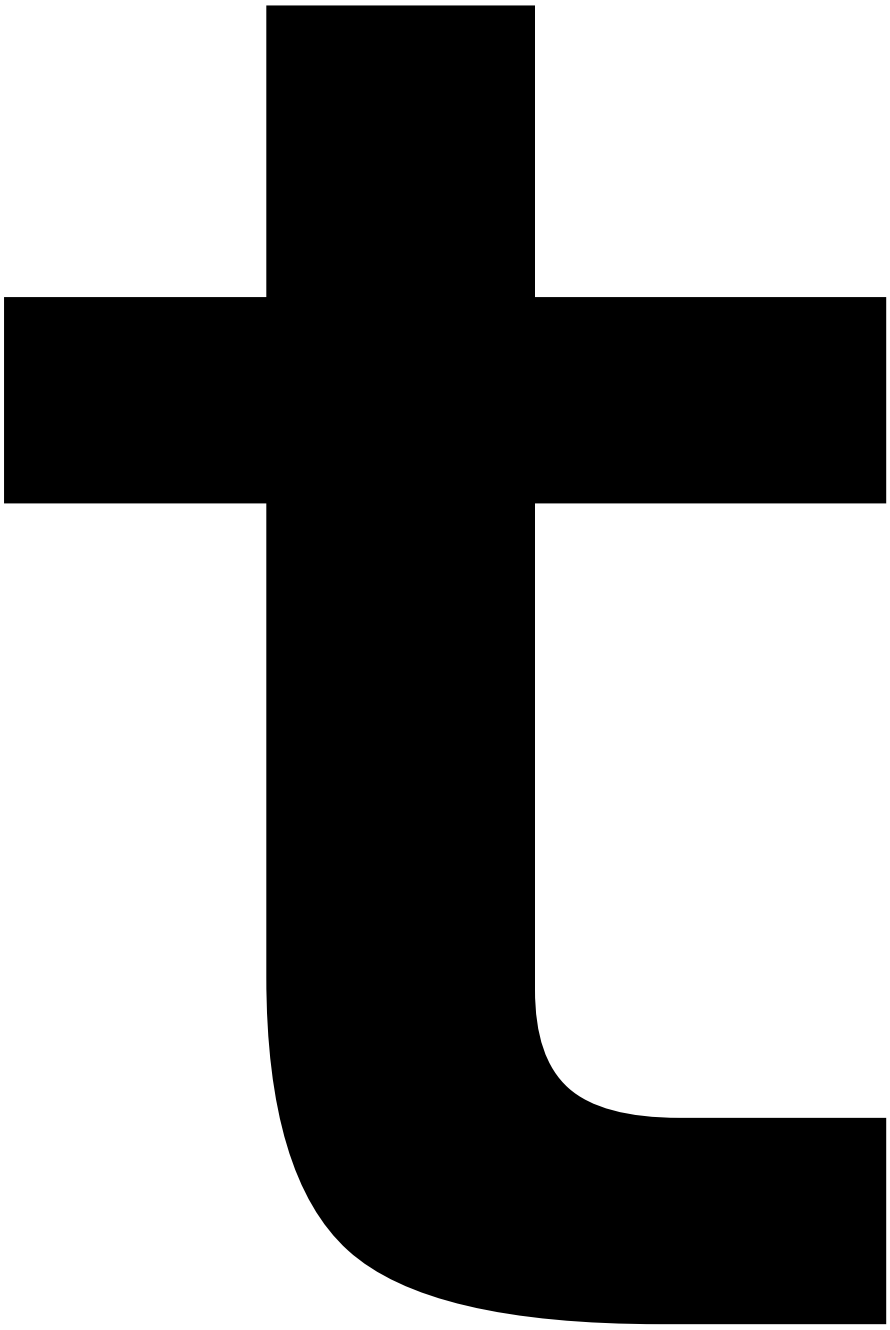


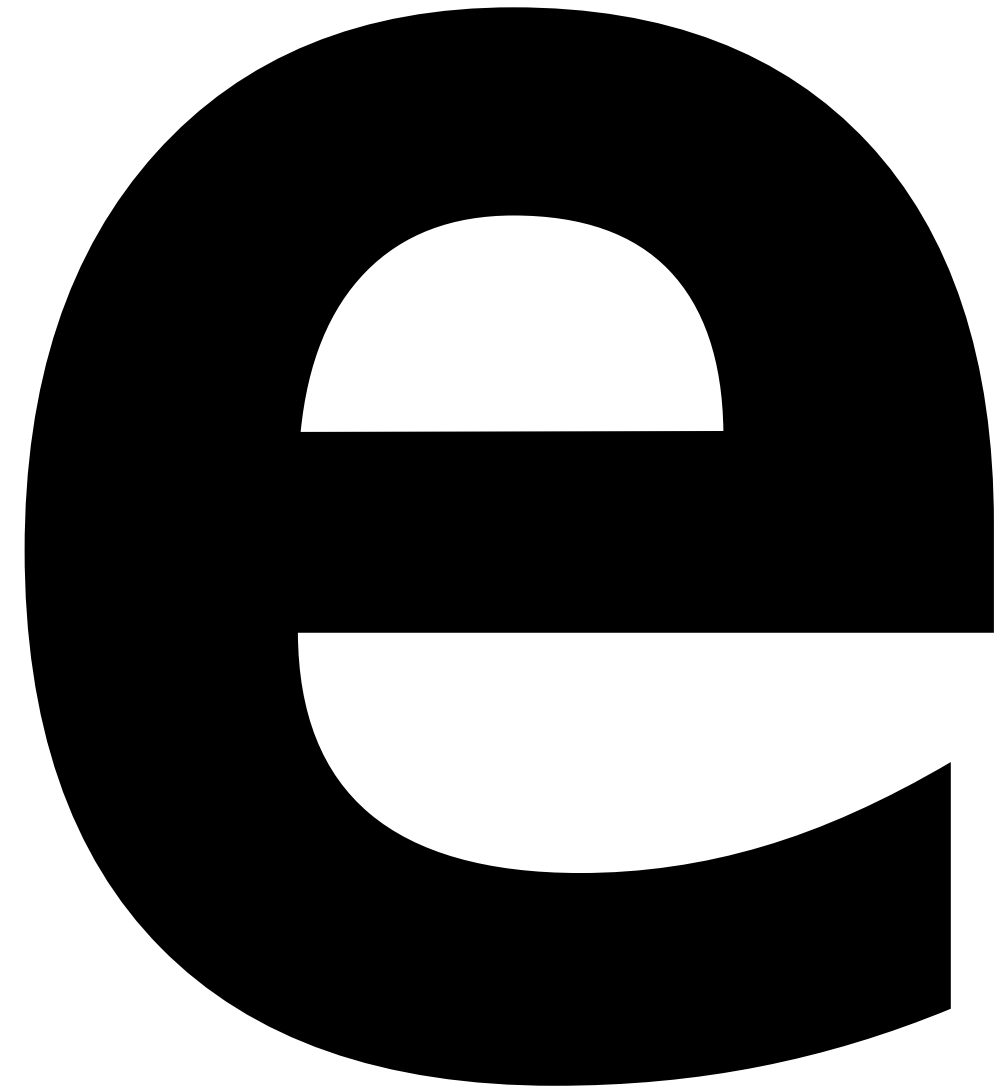


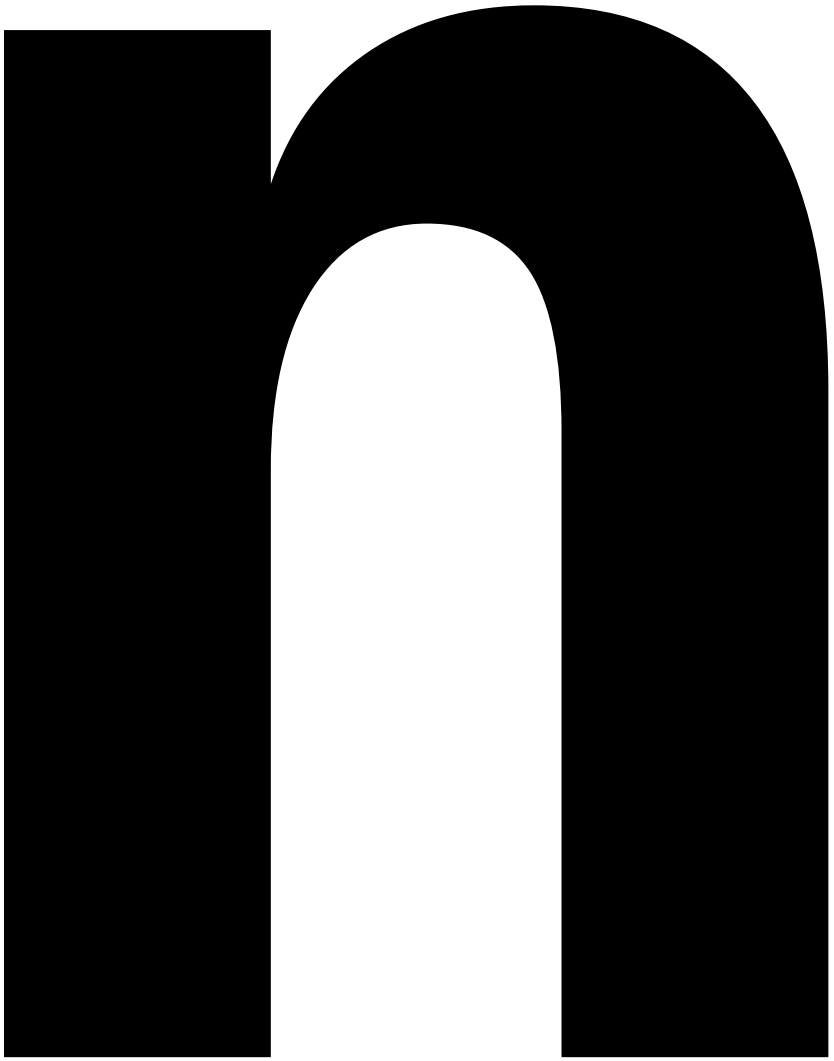


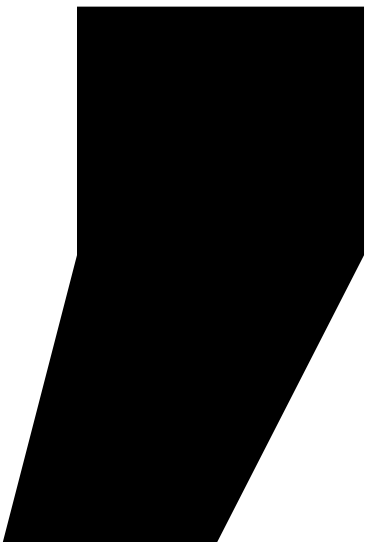


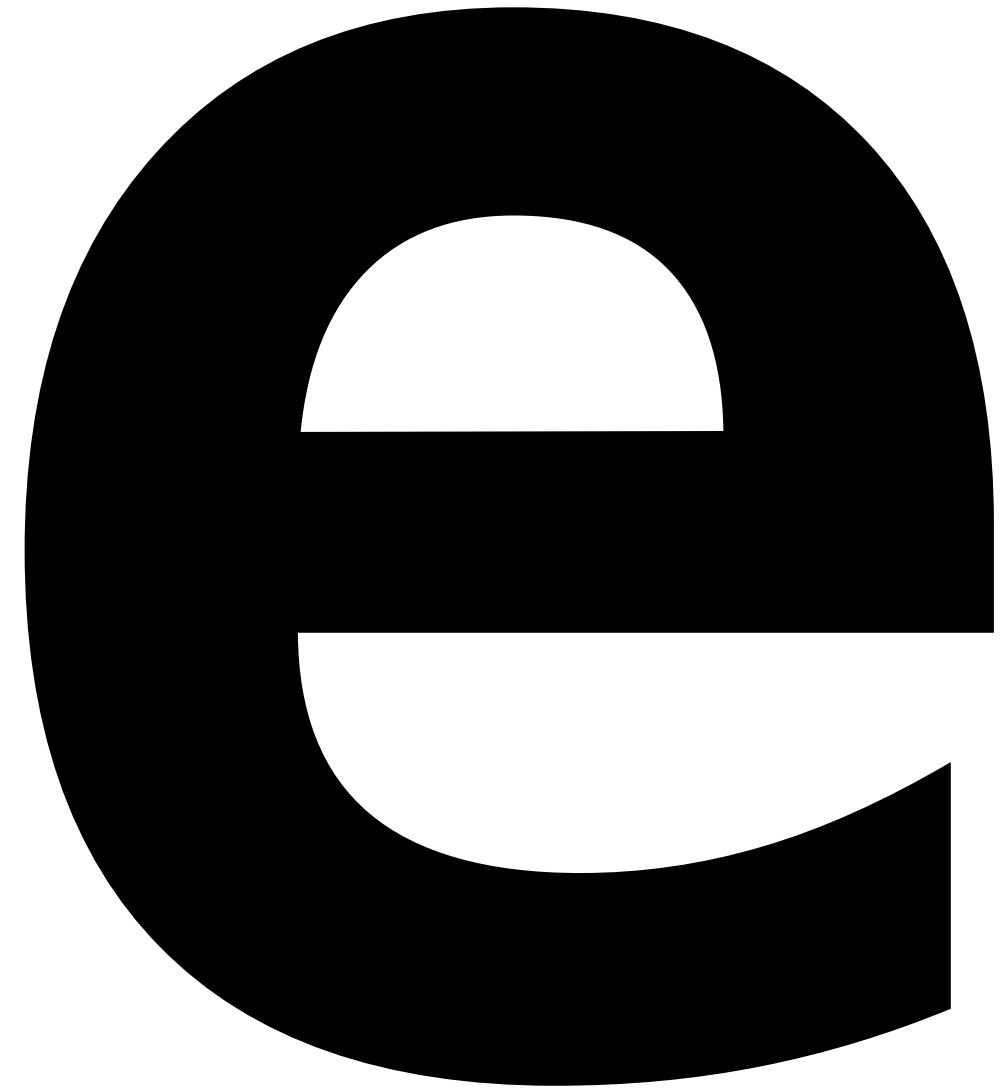


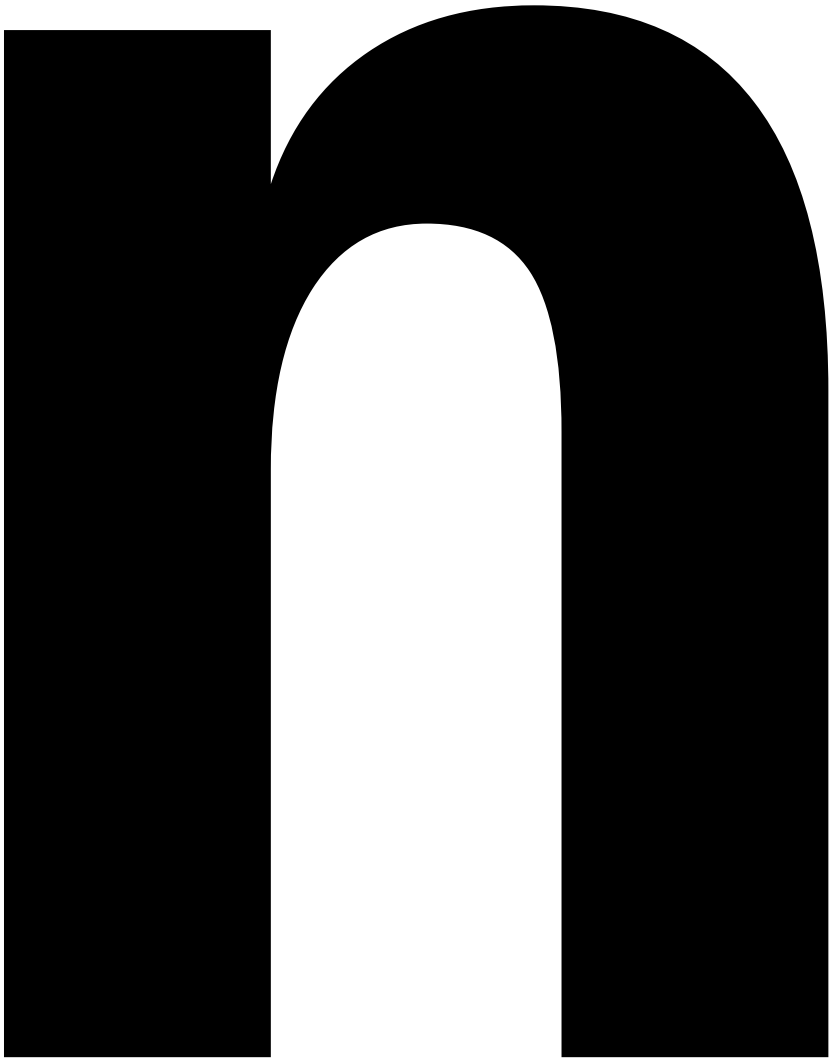


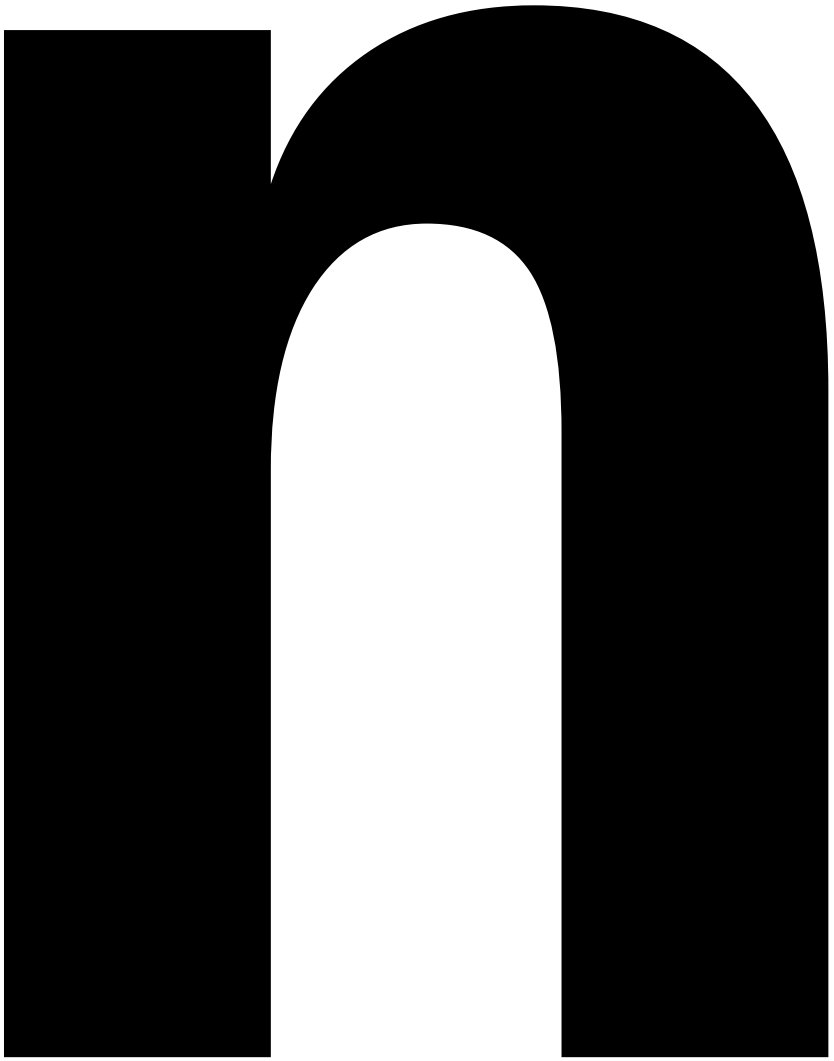


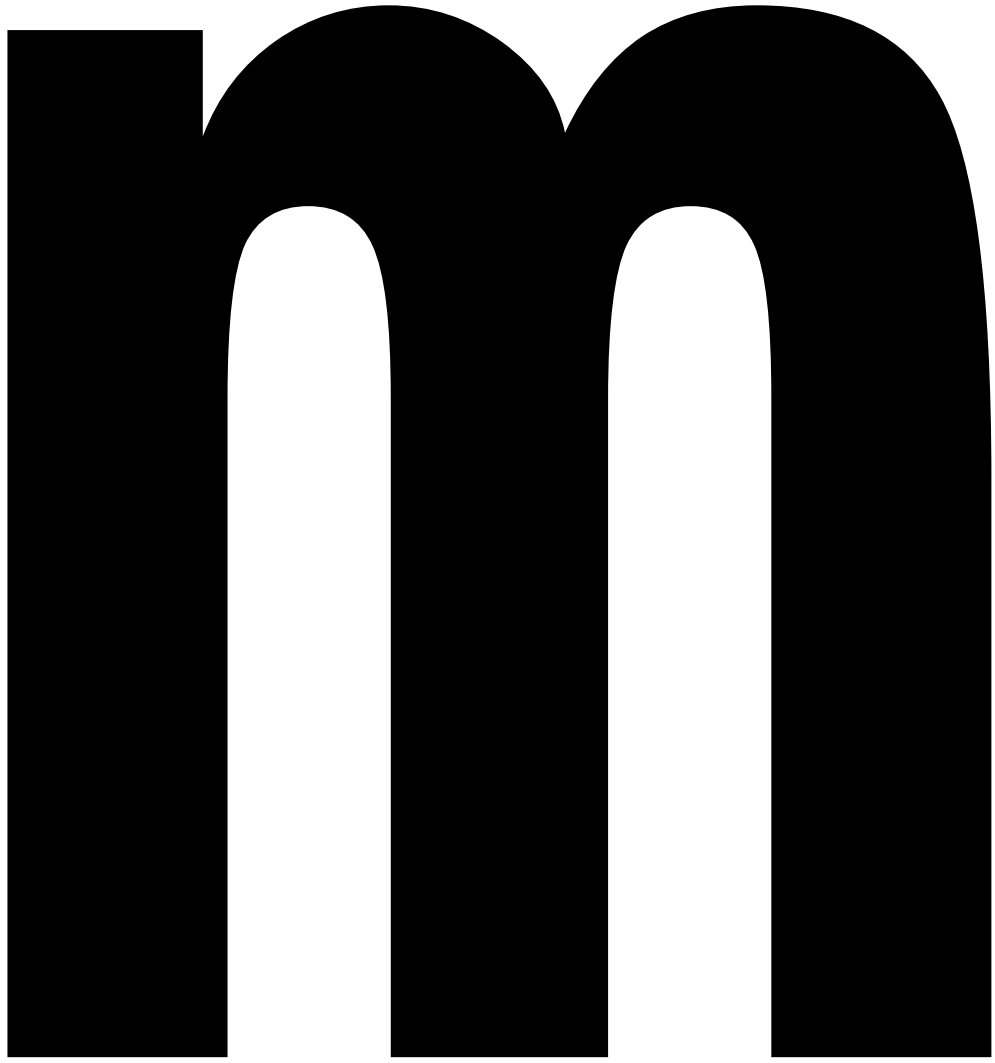


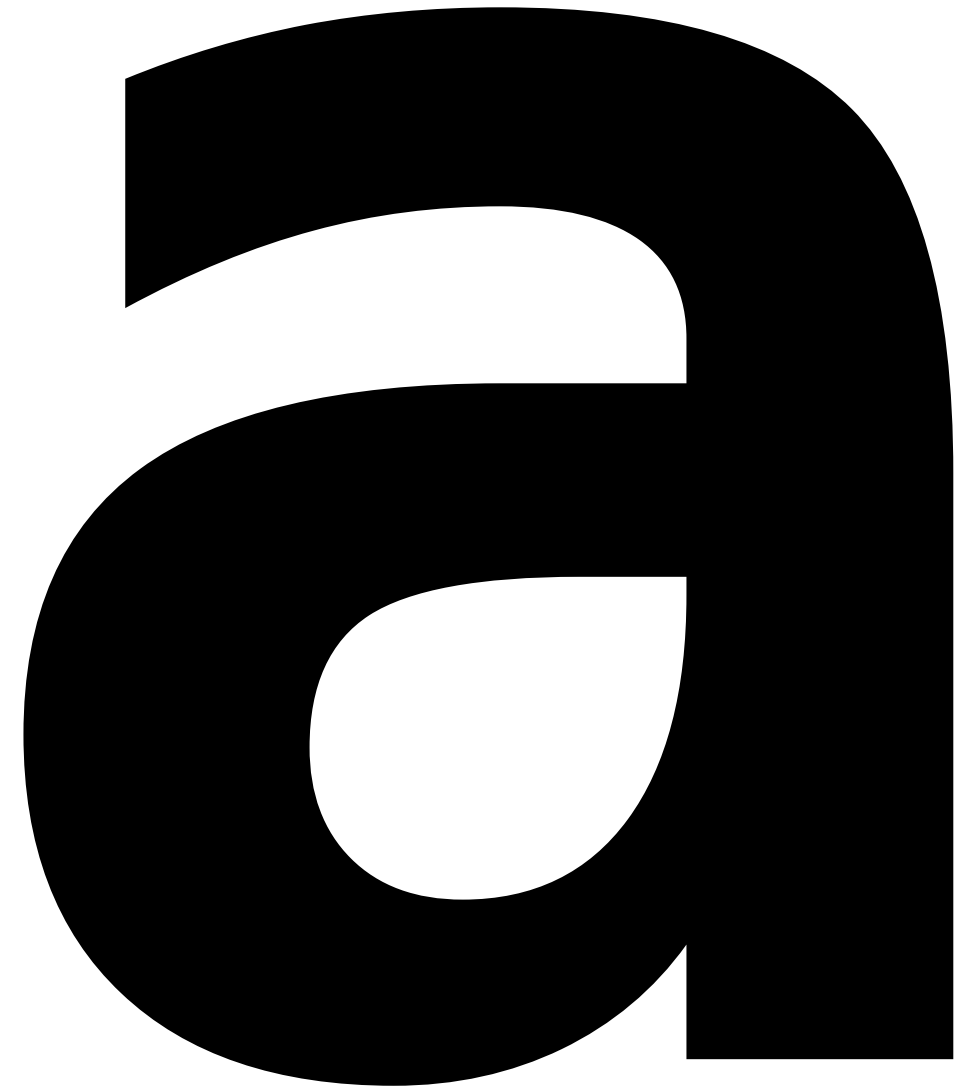


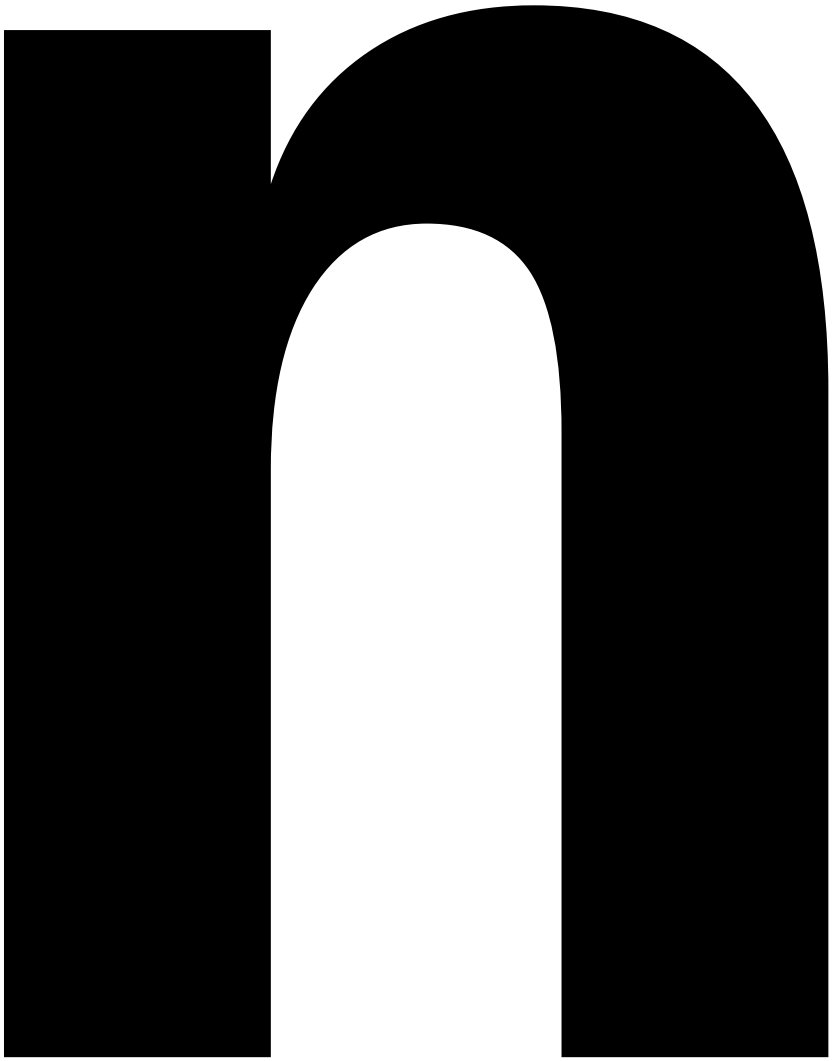




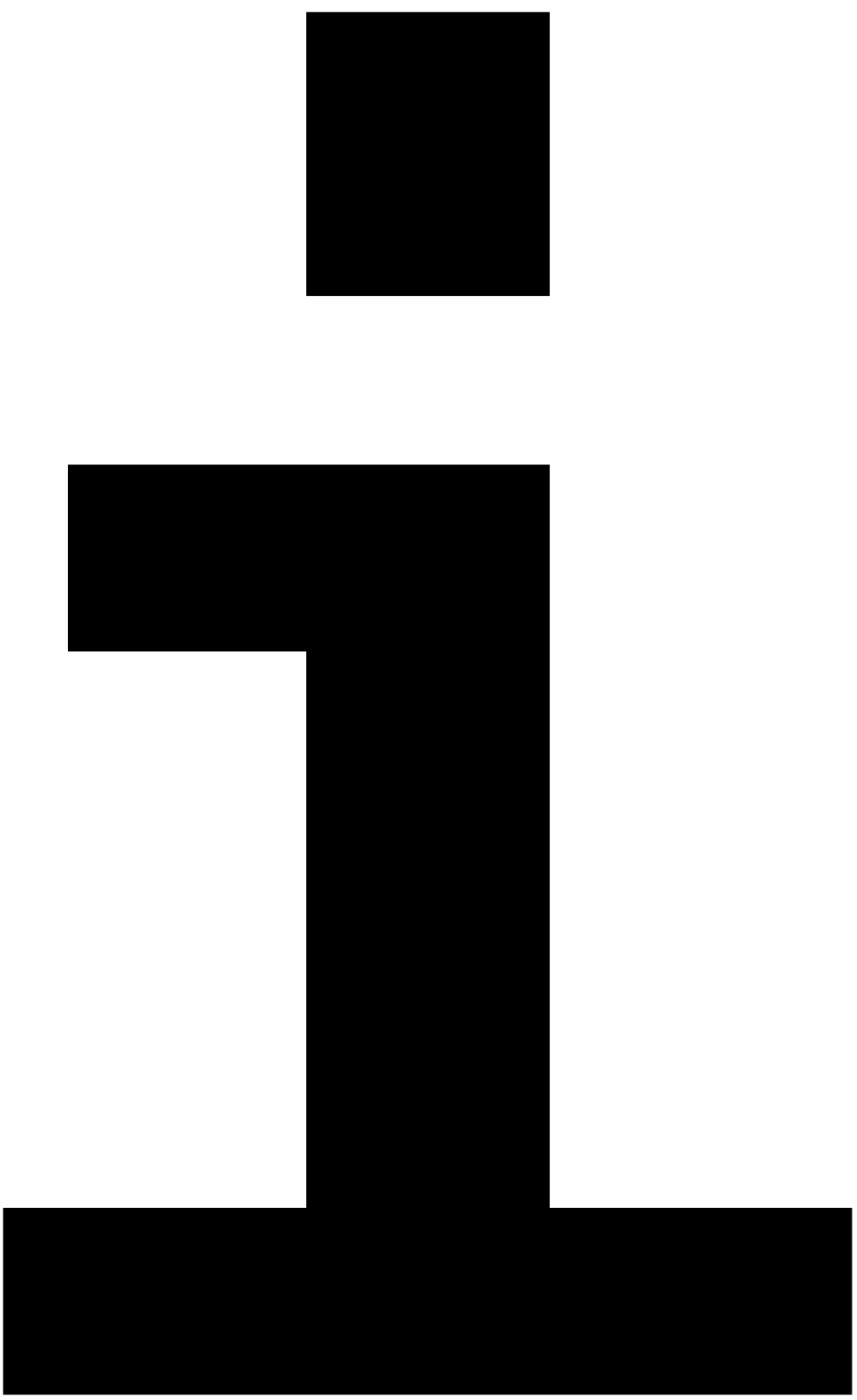


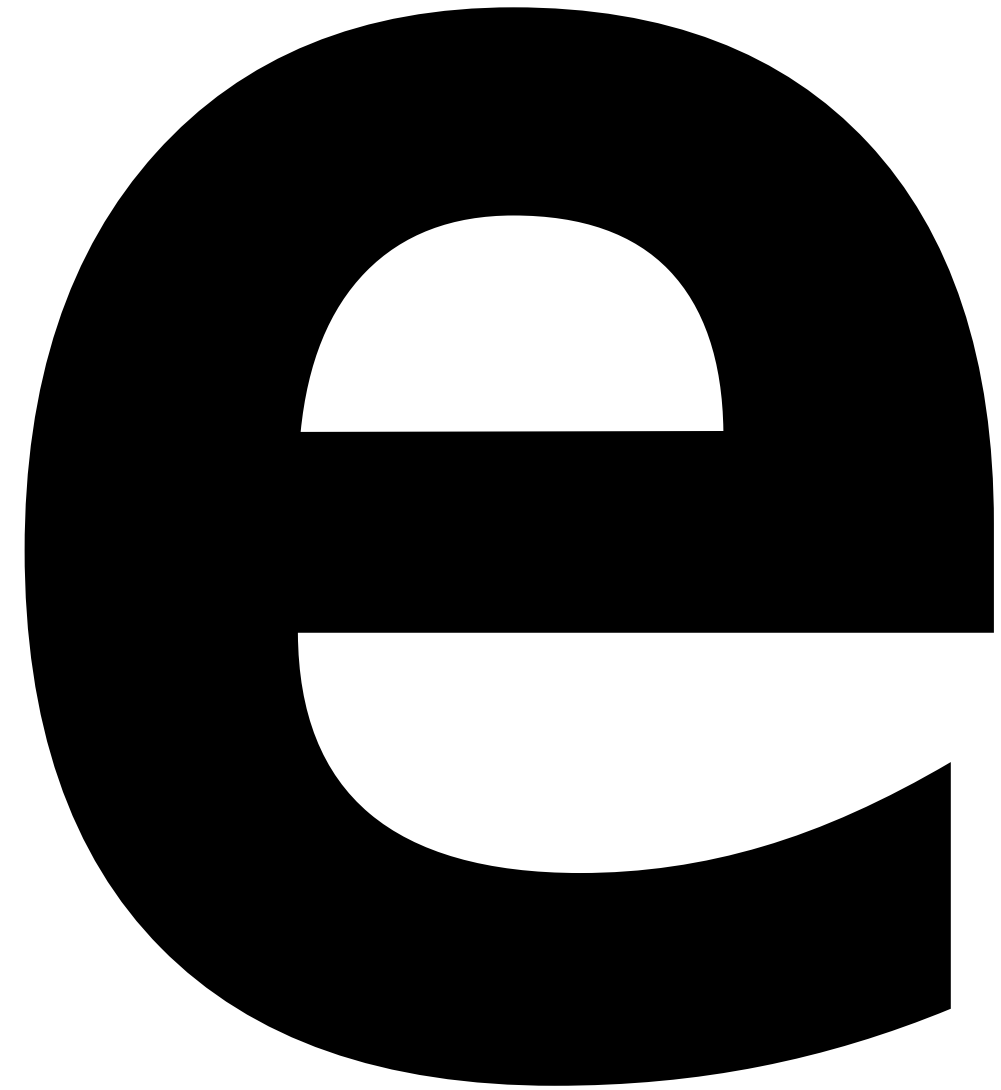




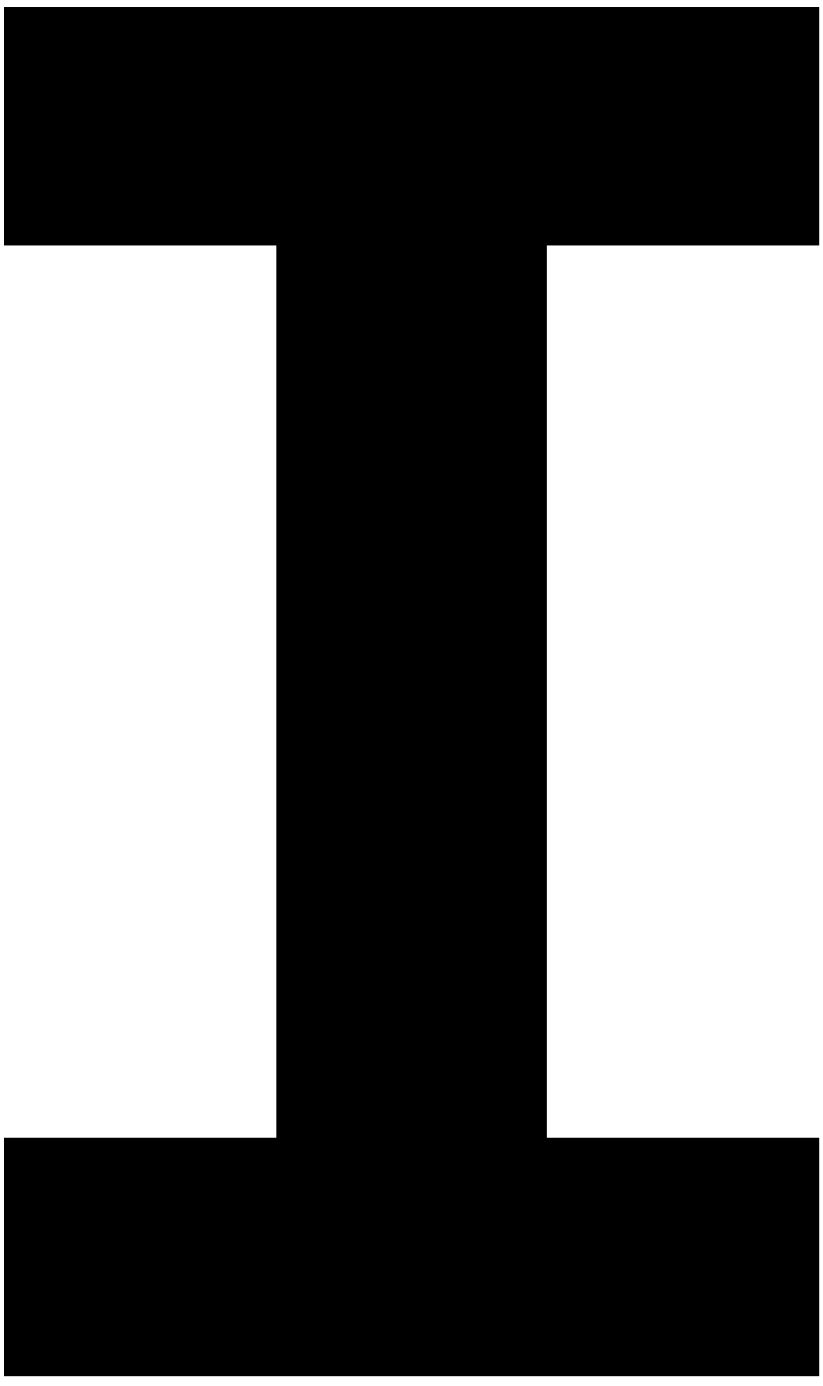


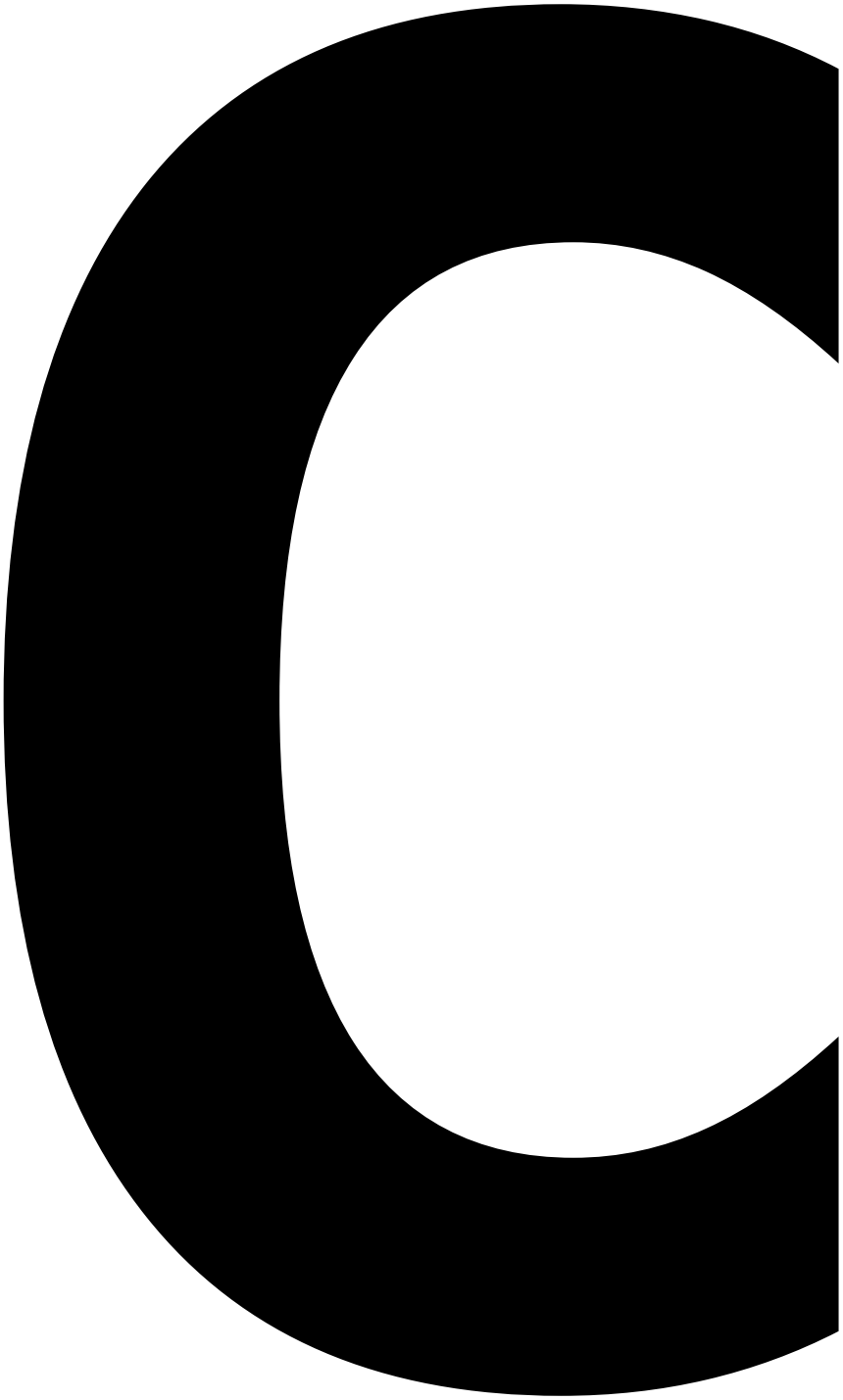
S

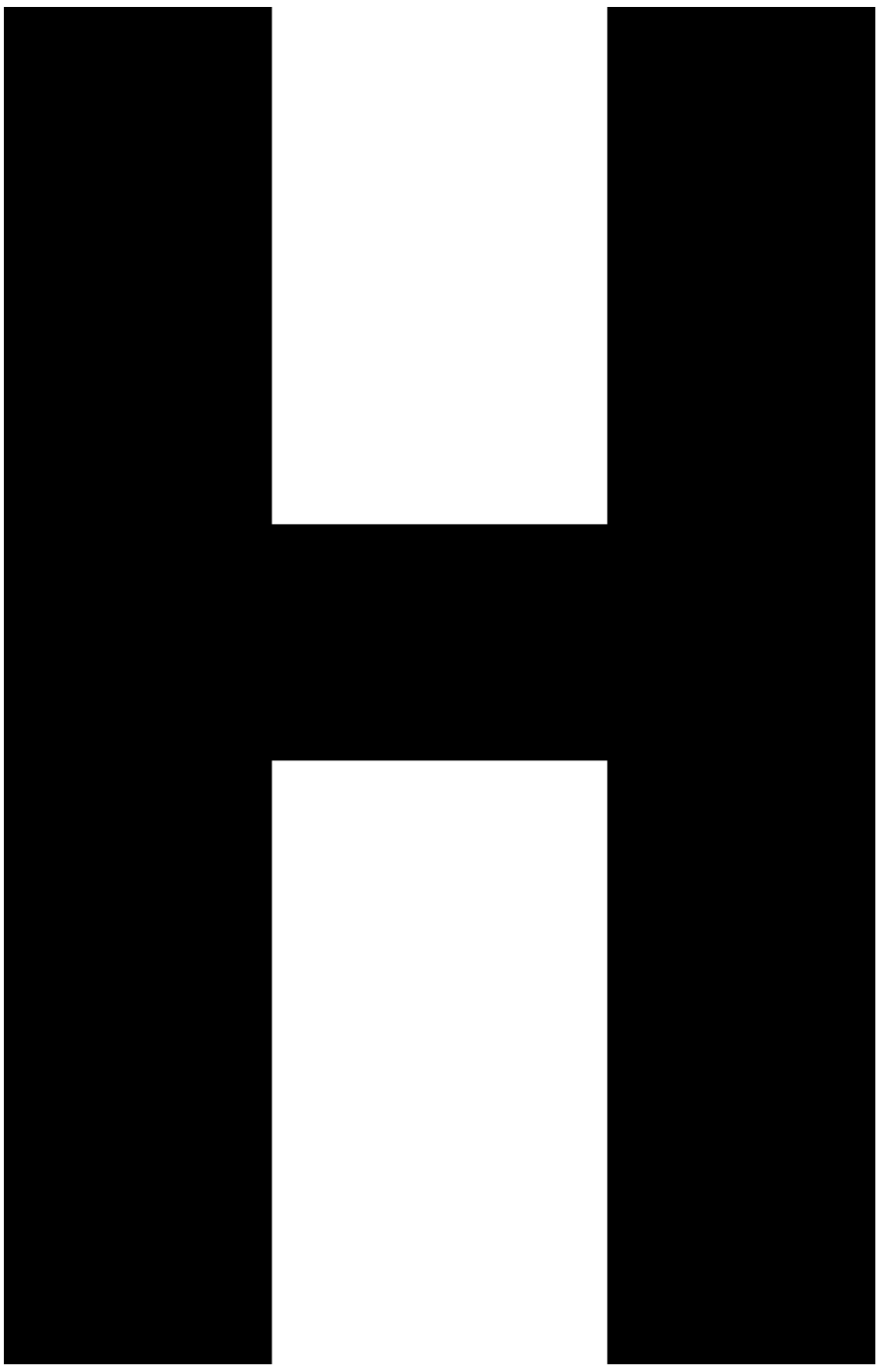


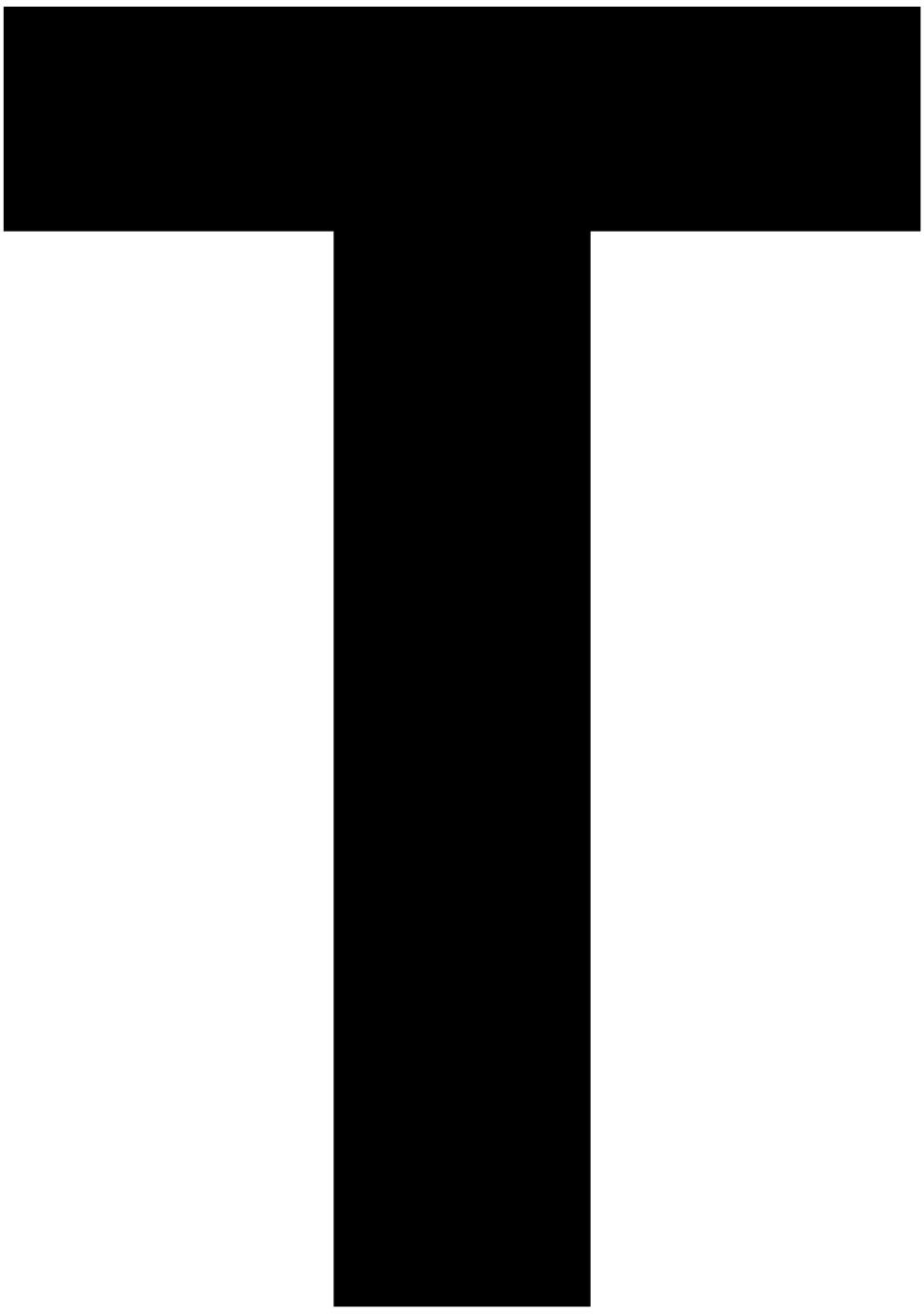


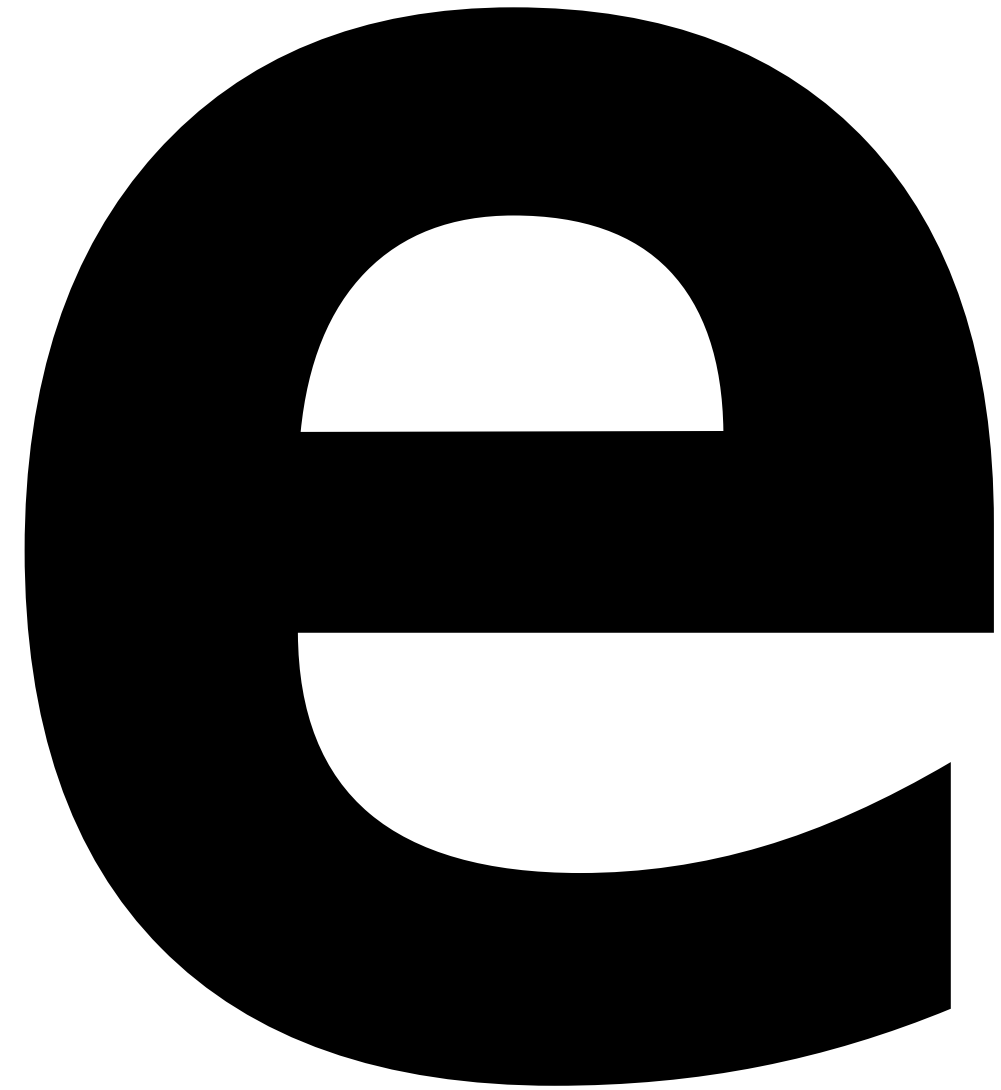
N

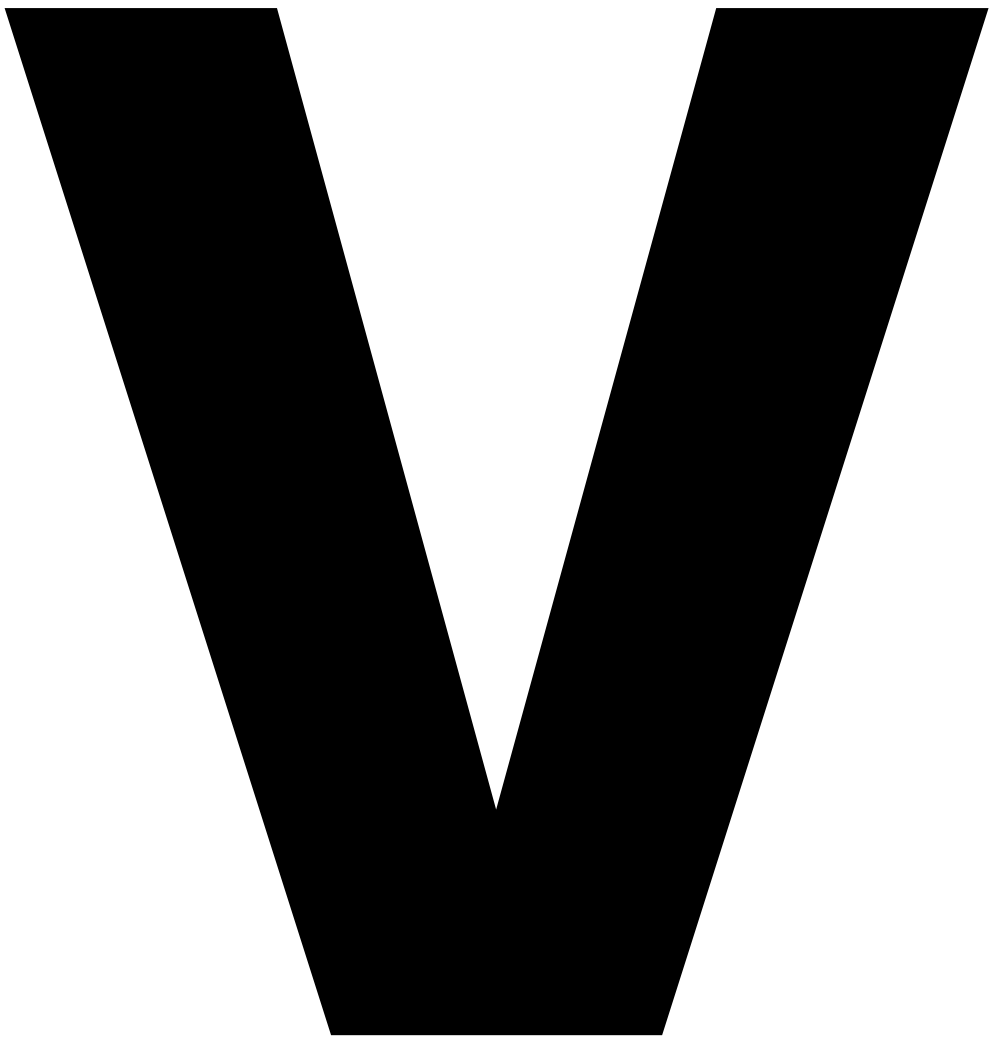


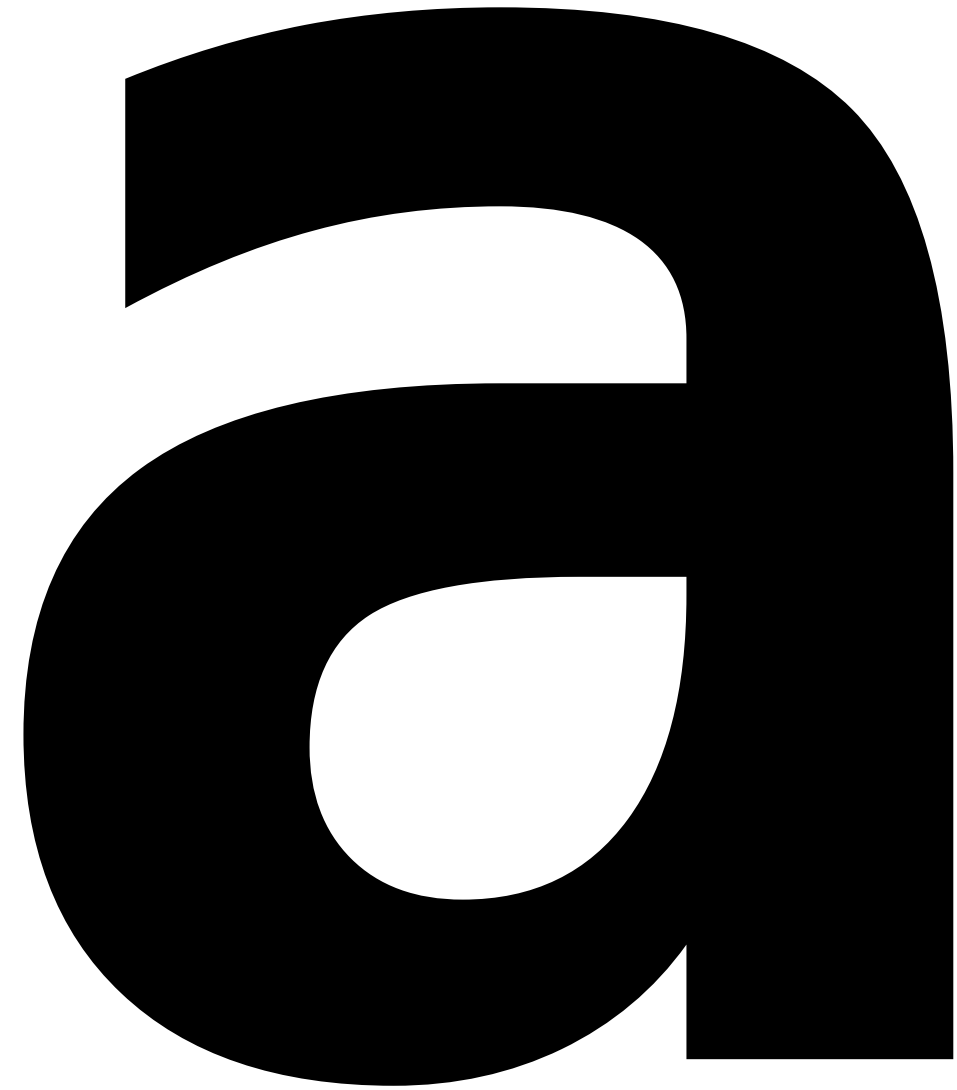


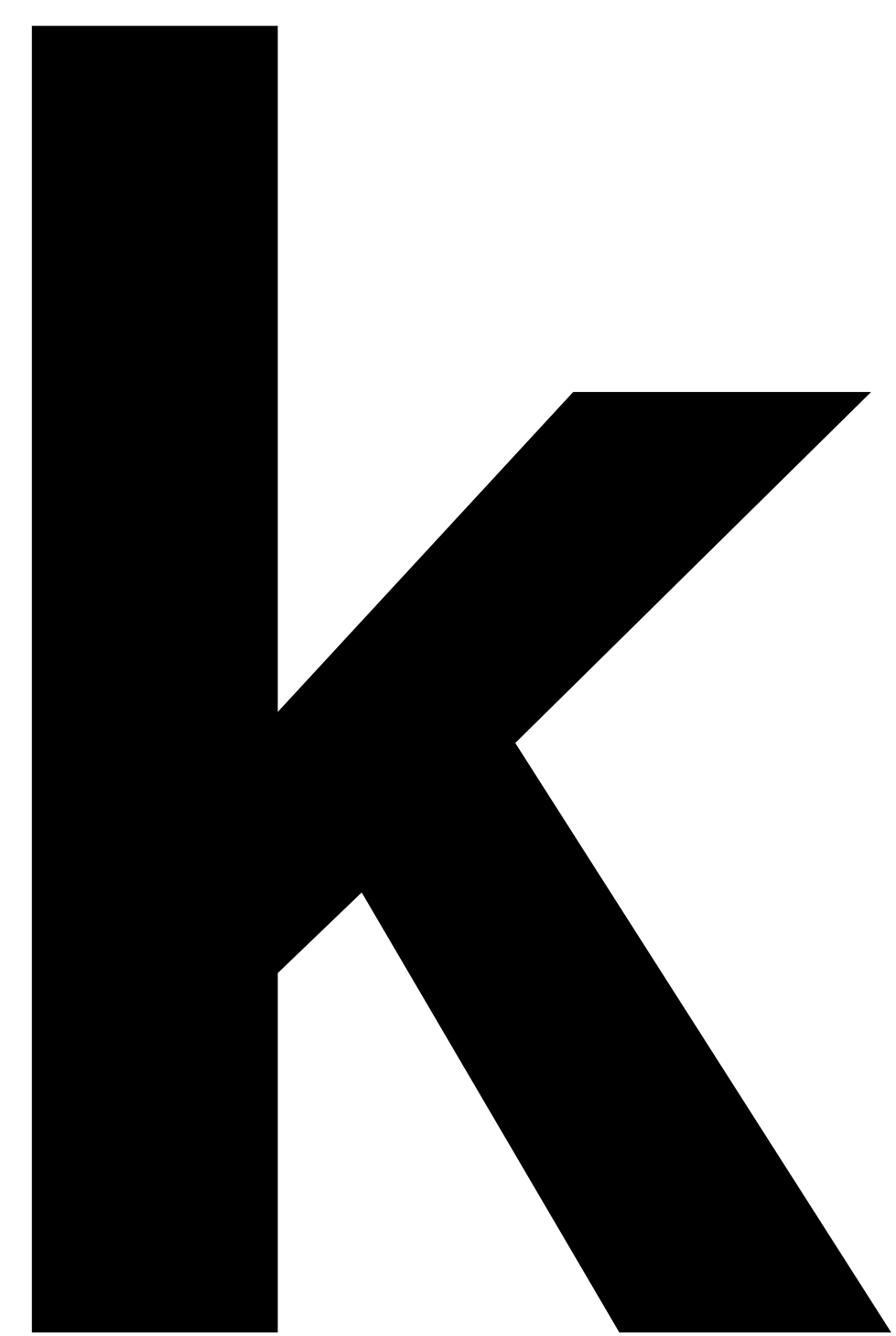




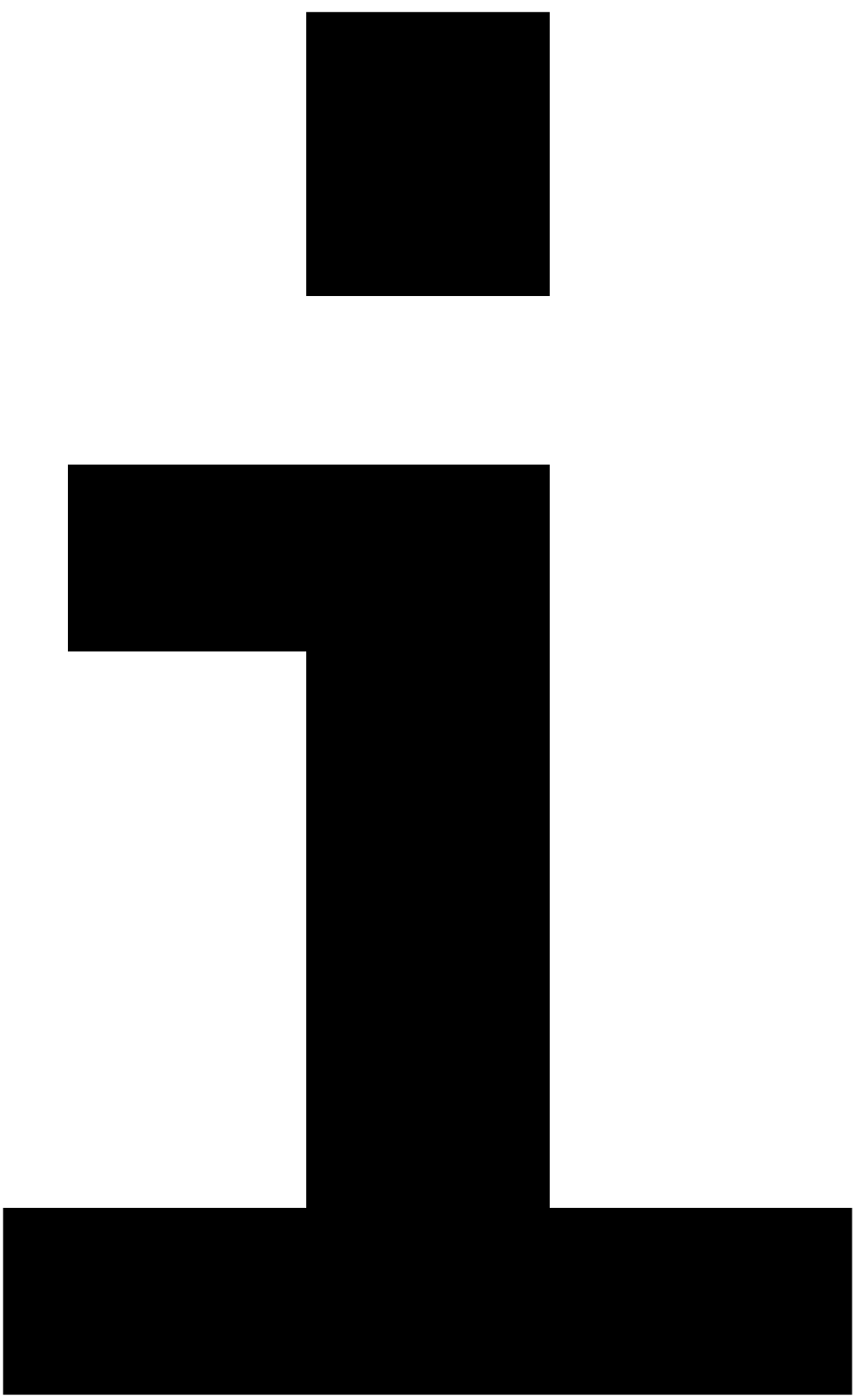


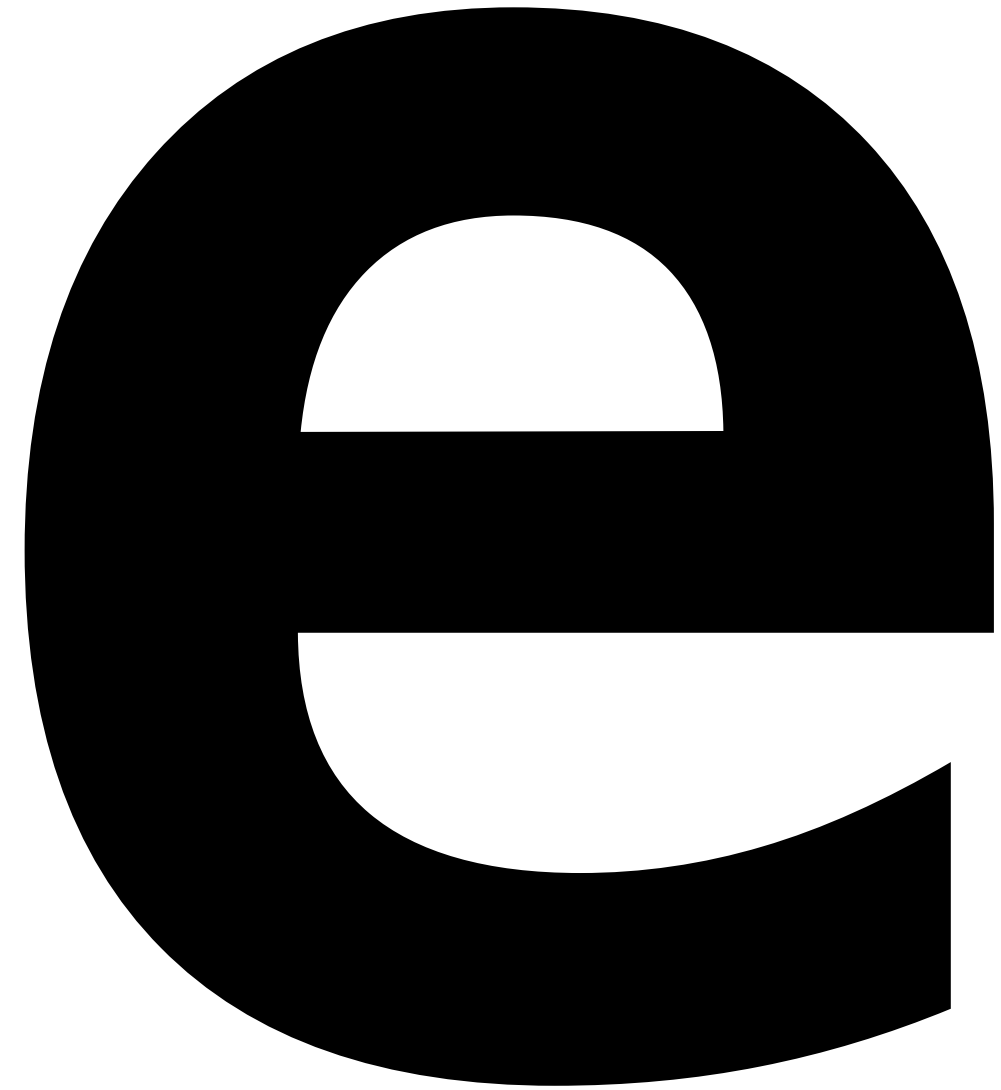


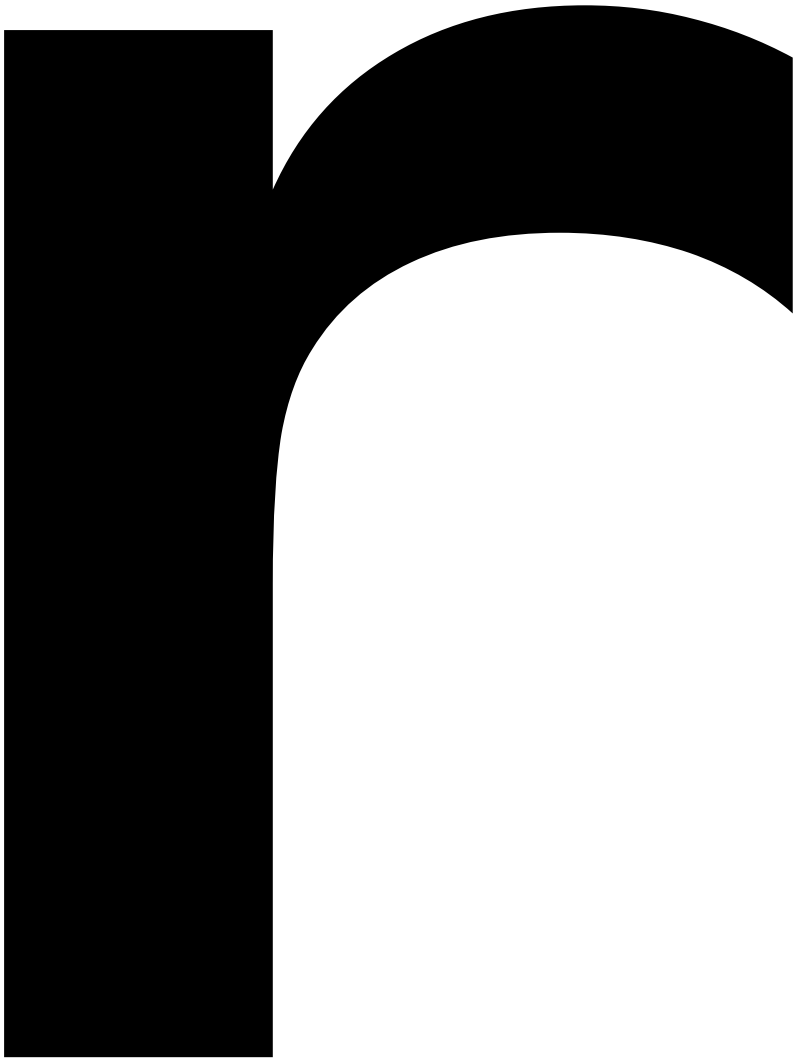


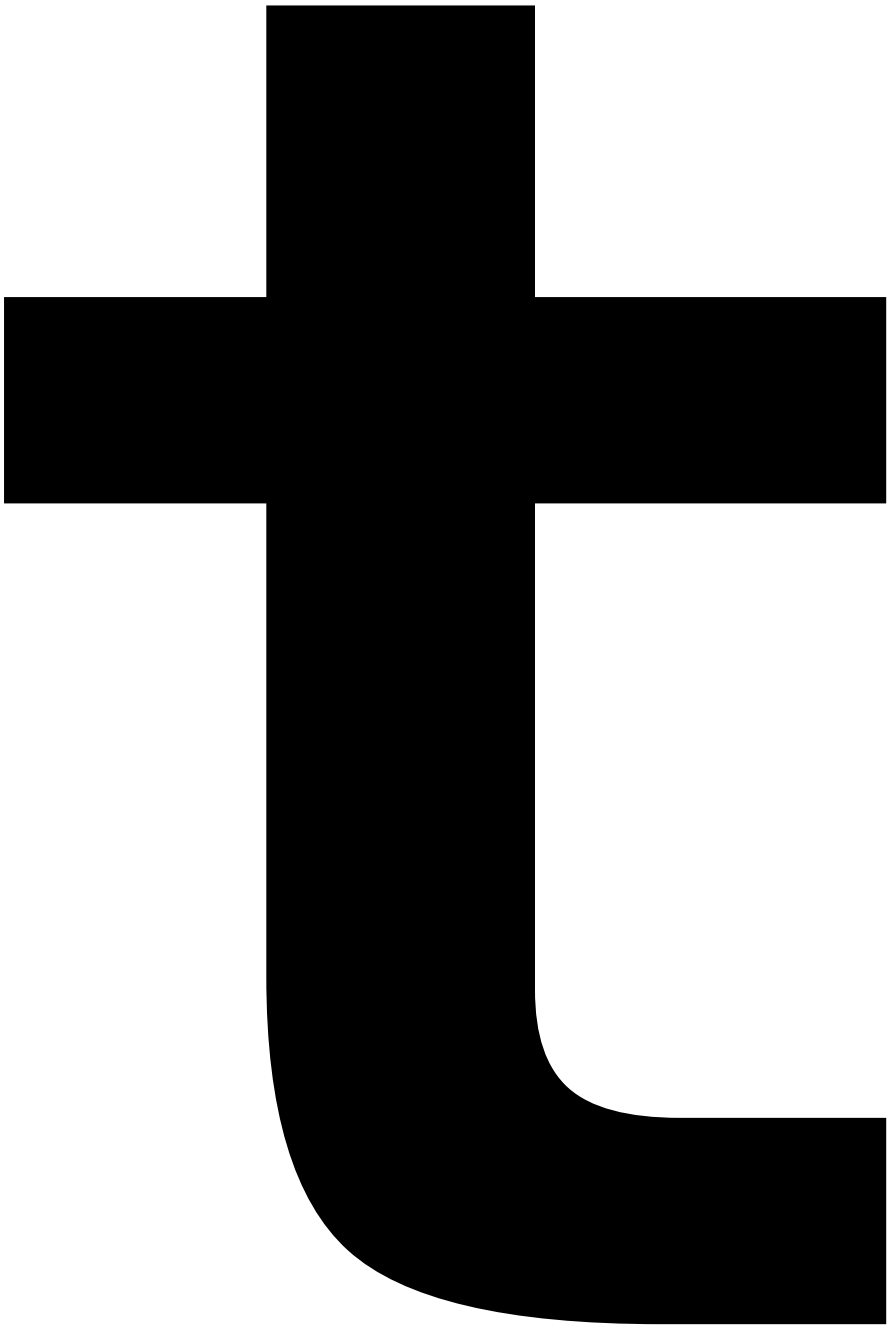


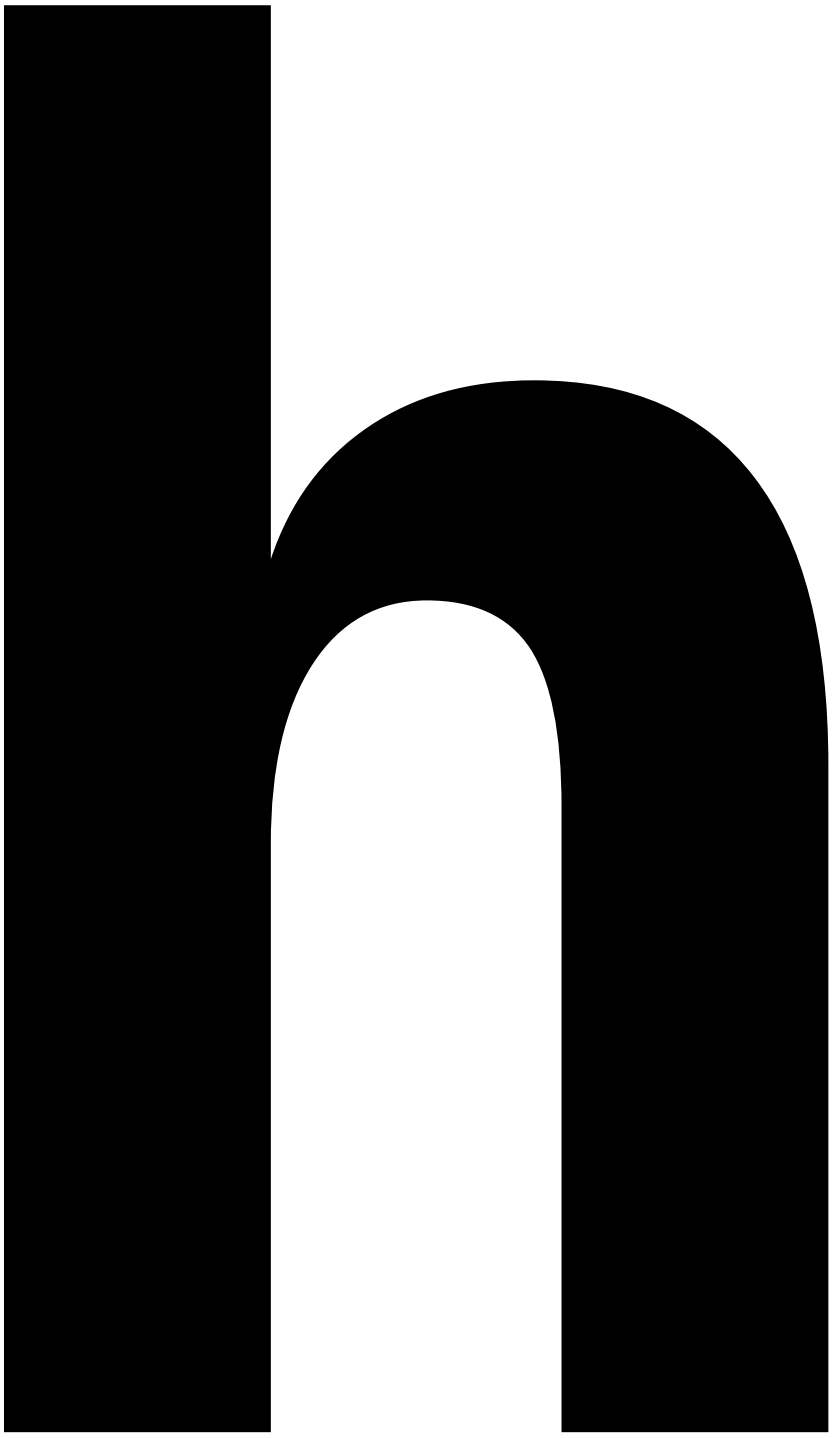
u

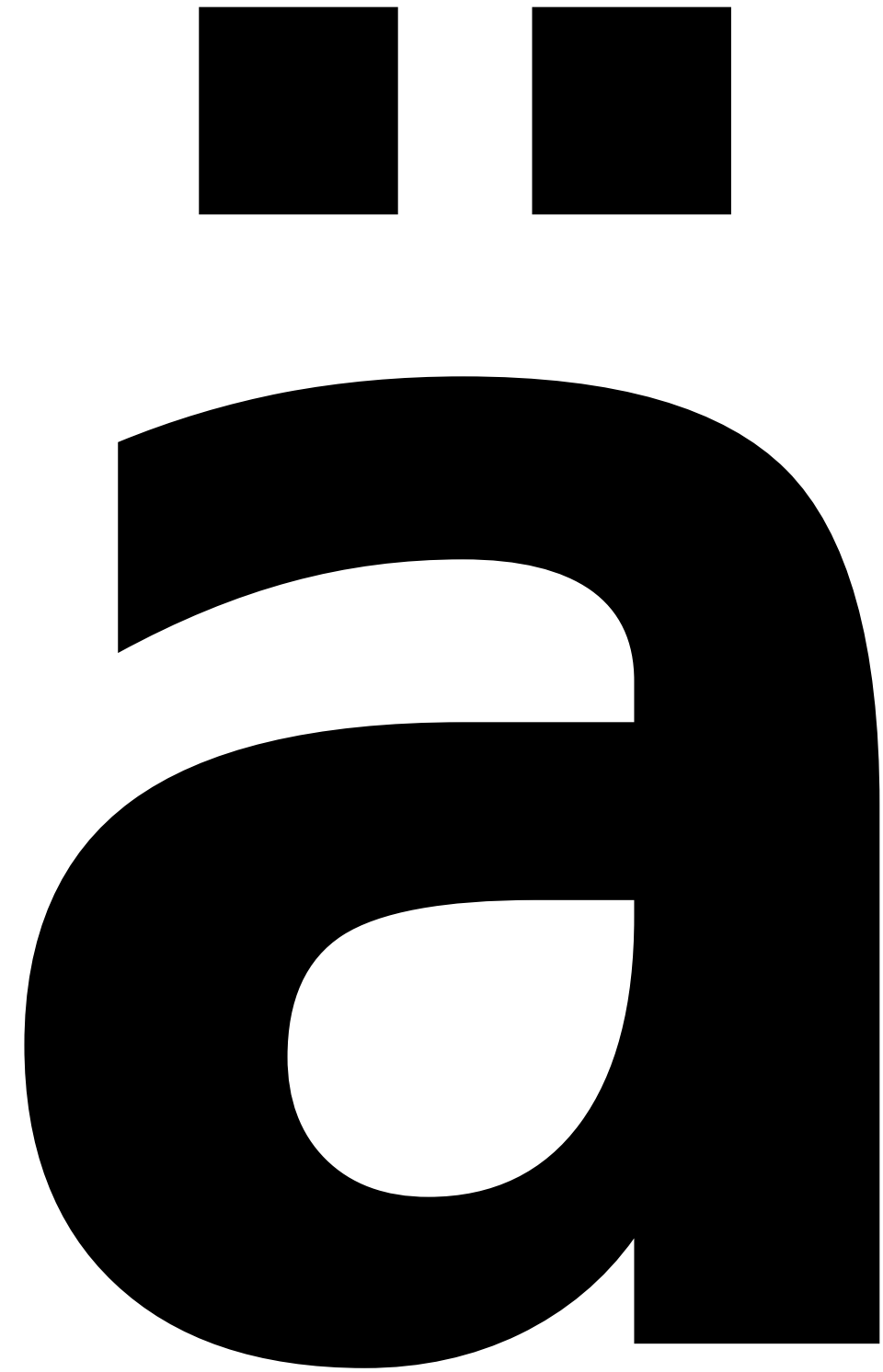


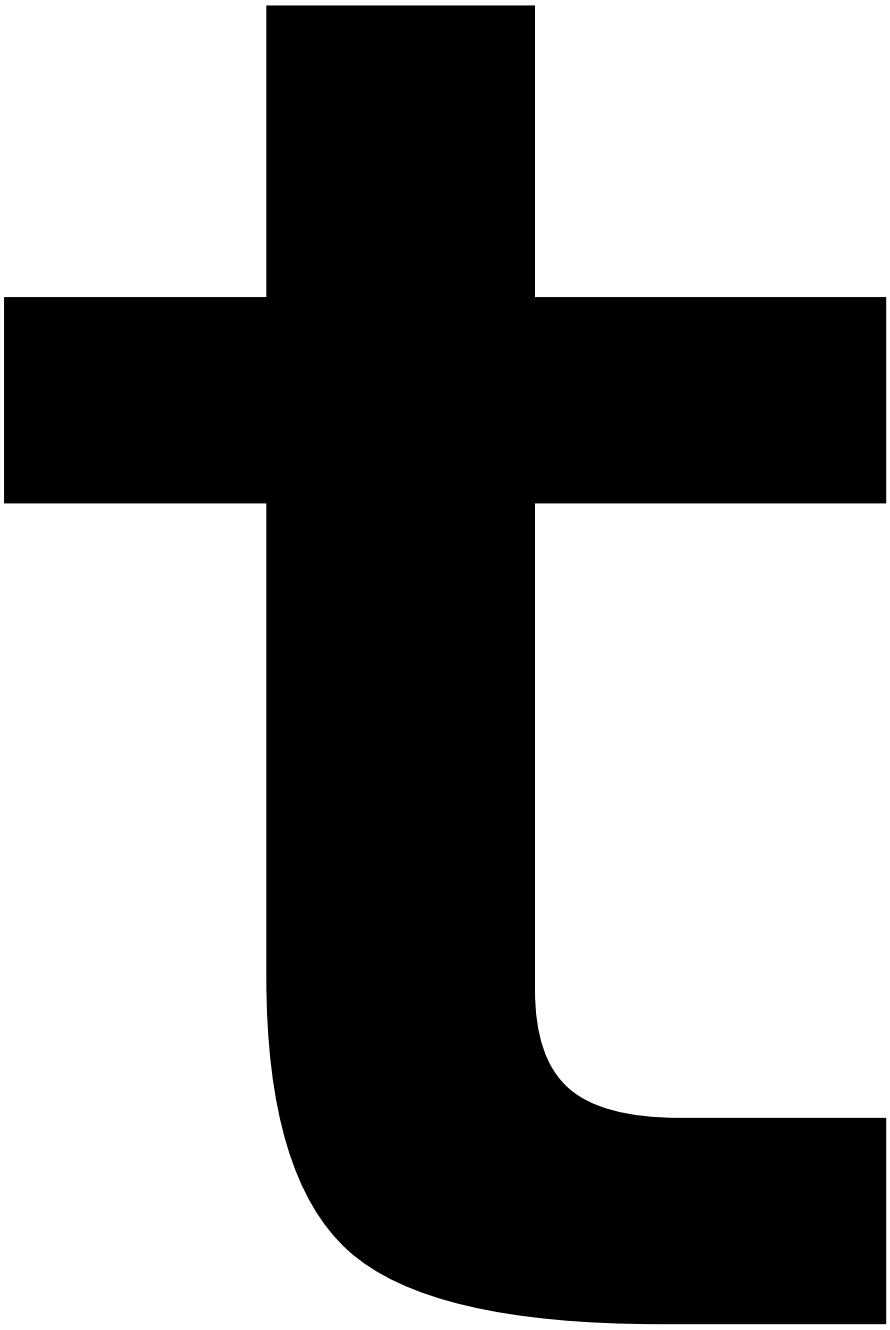


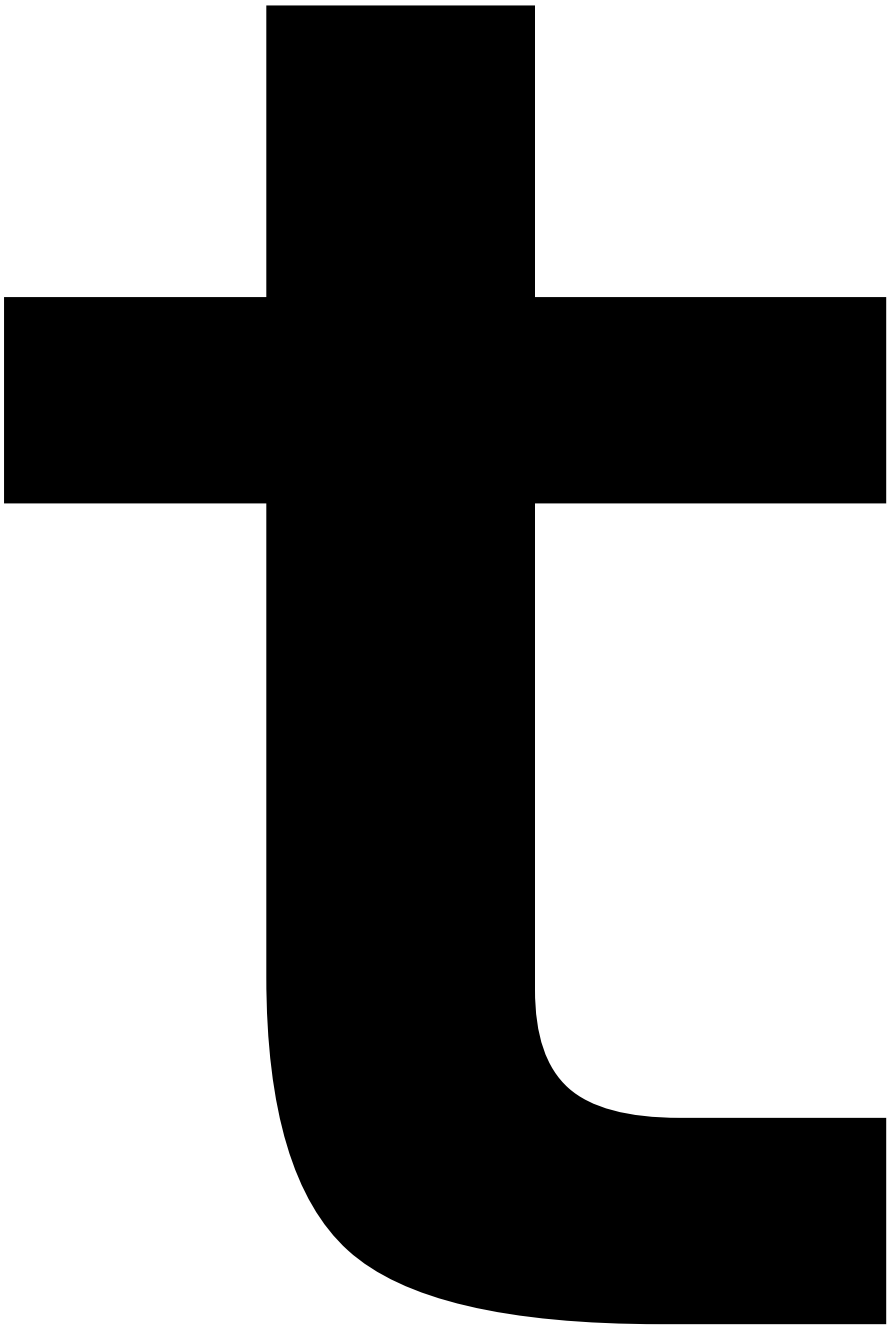


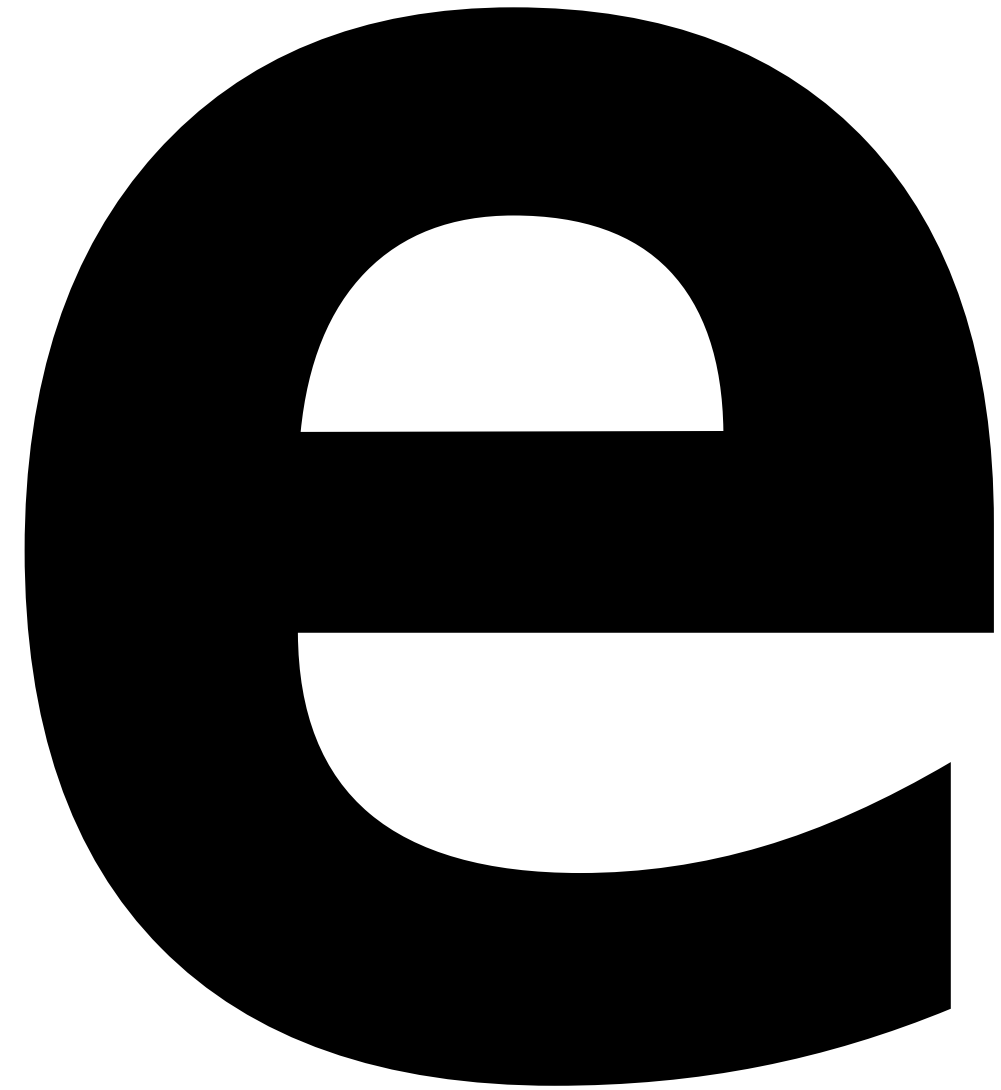


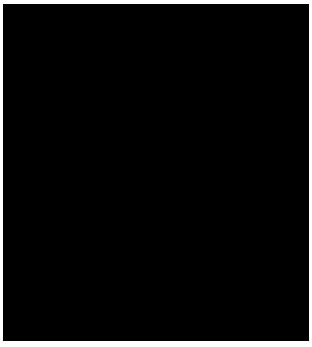


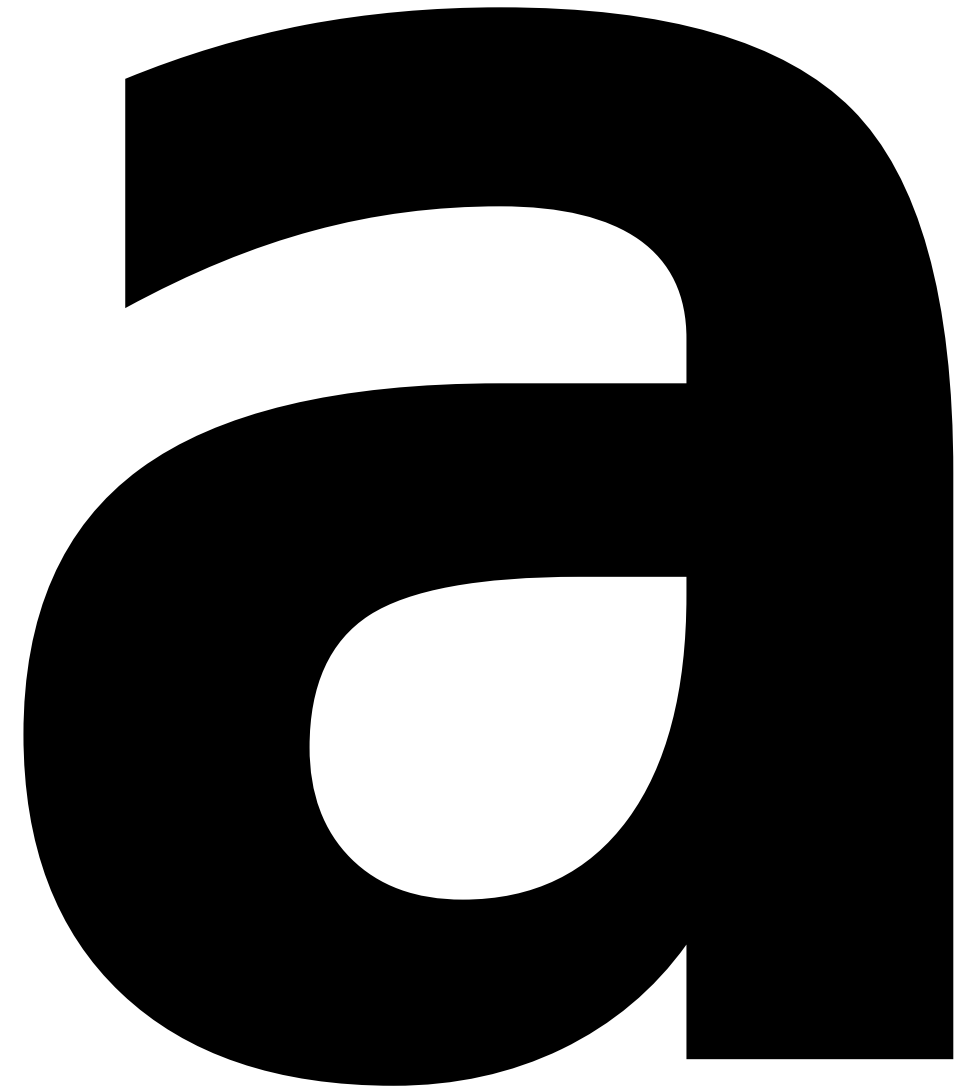




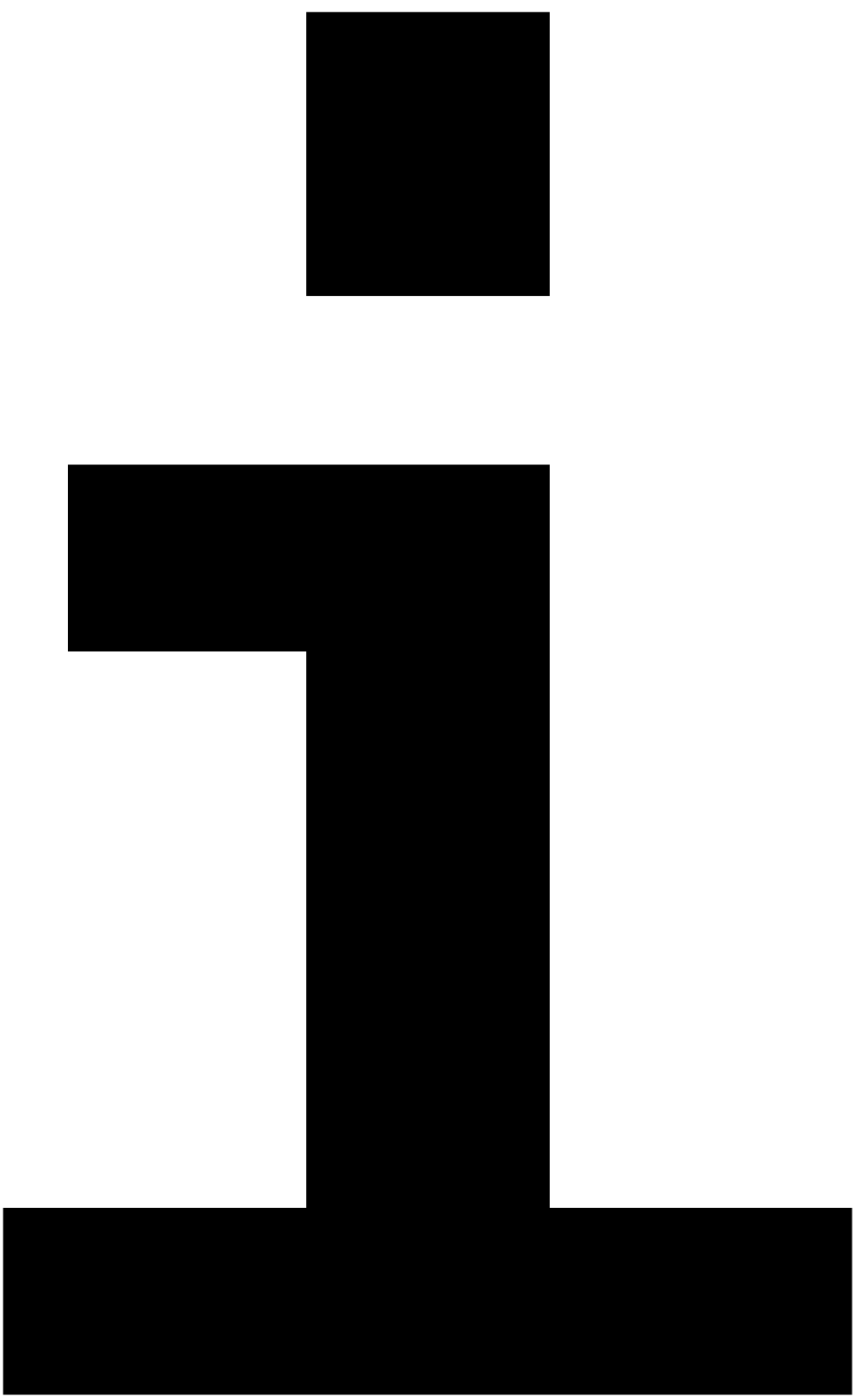




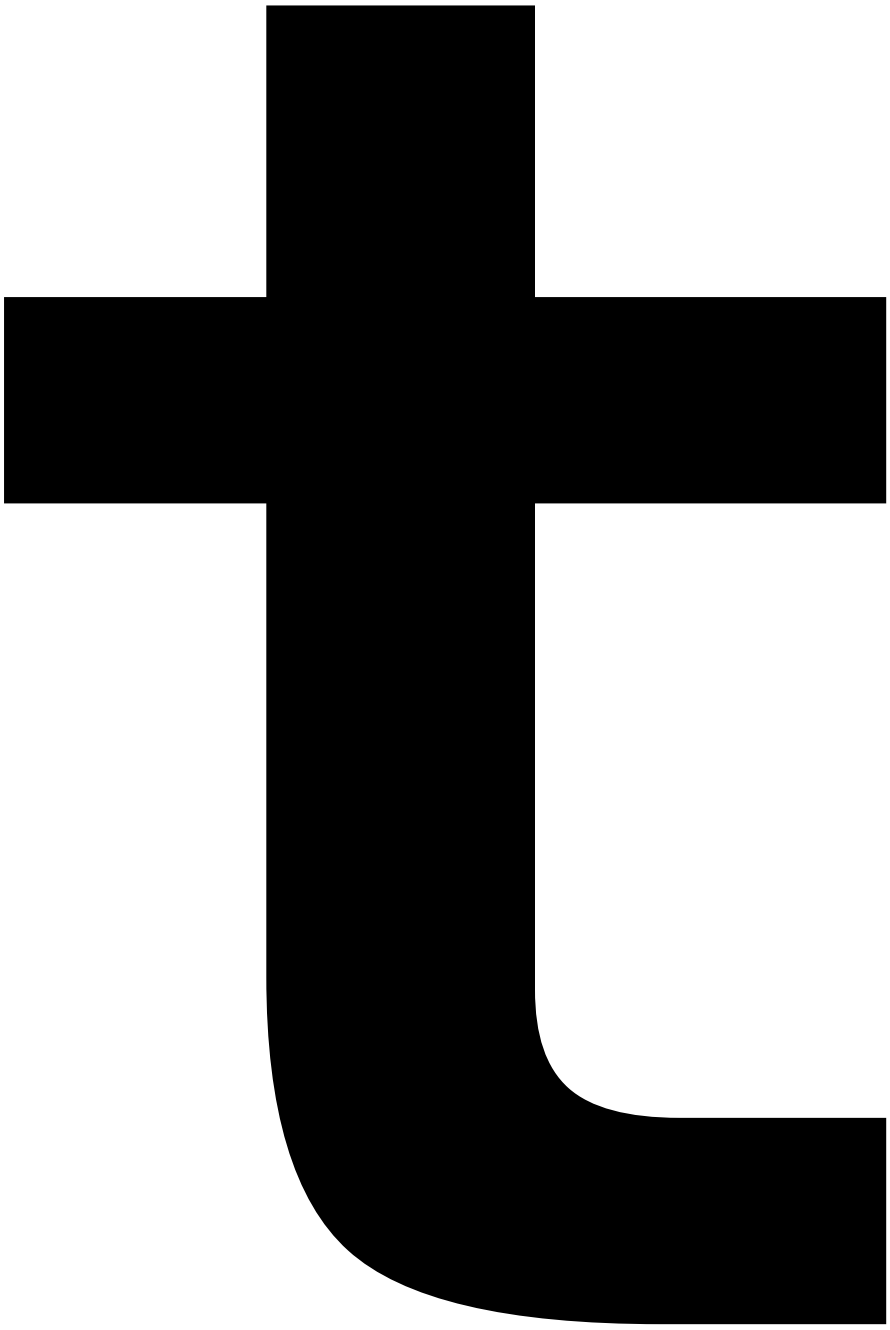


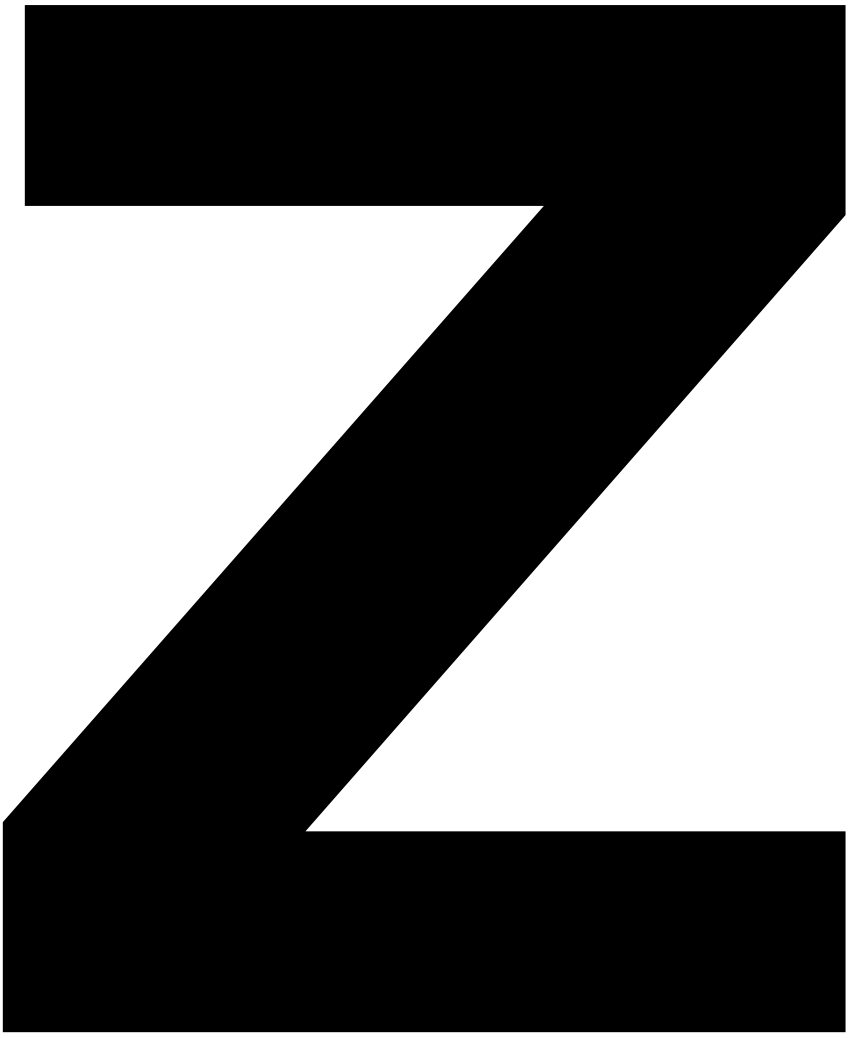


S

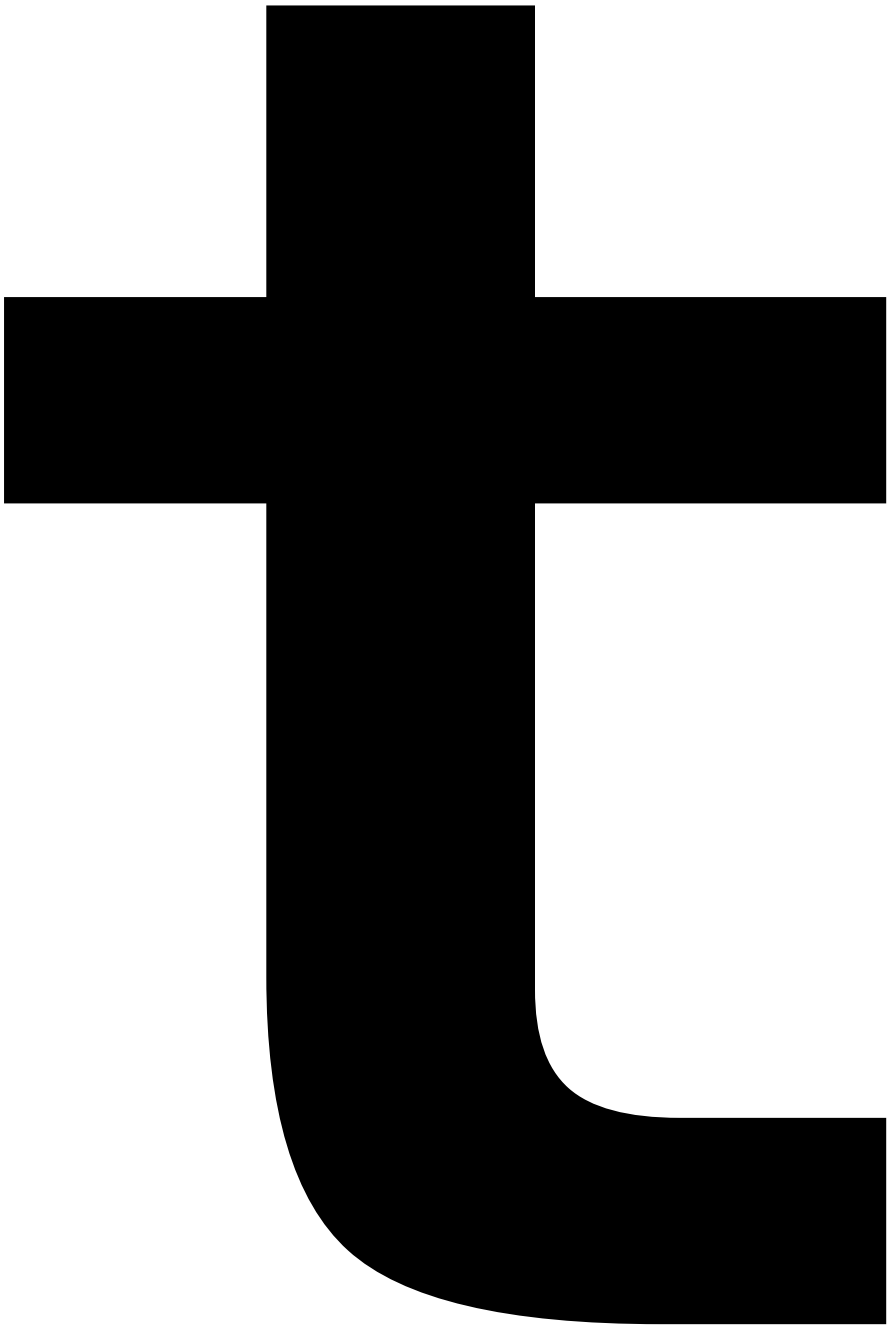


S

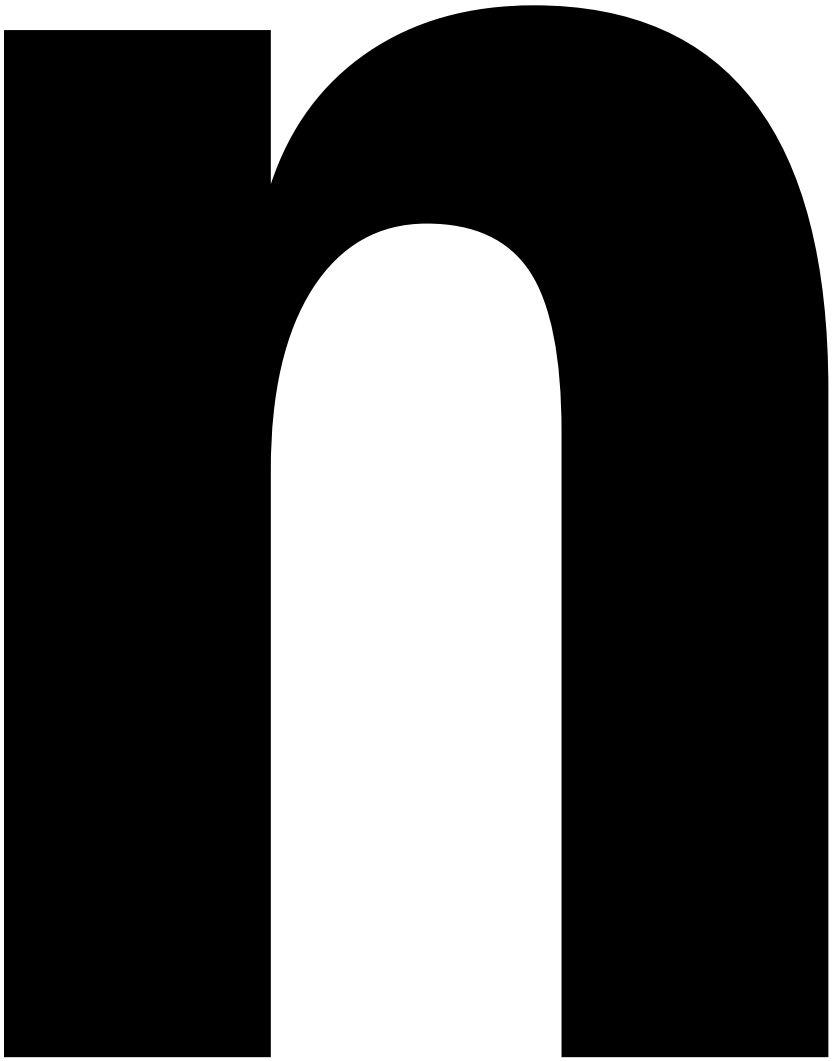


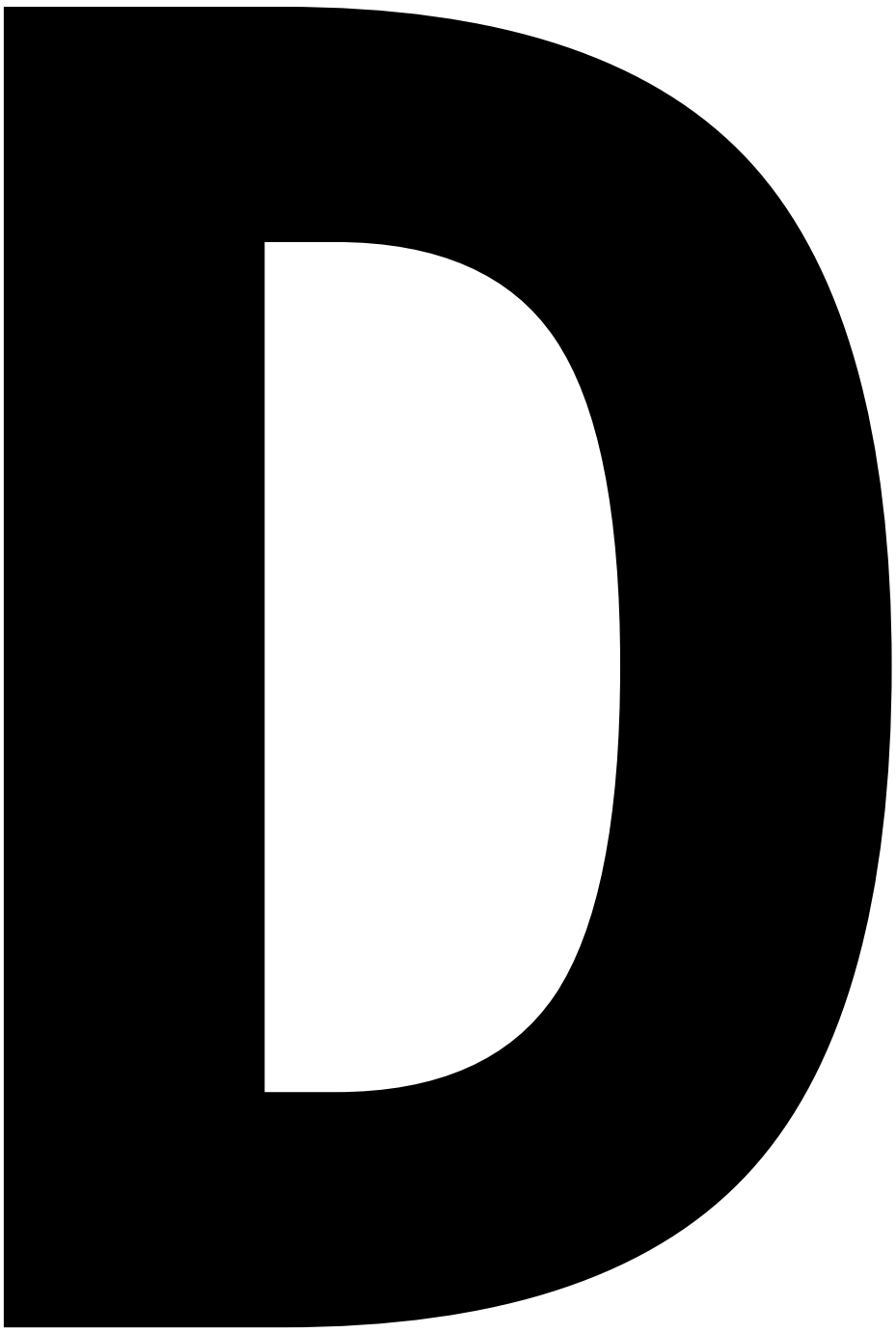


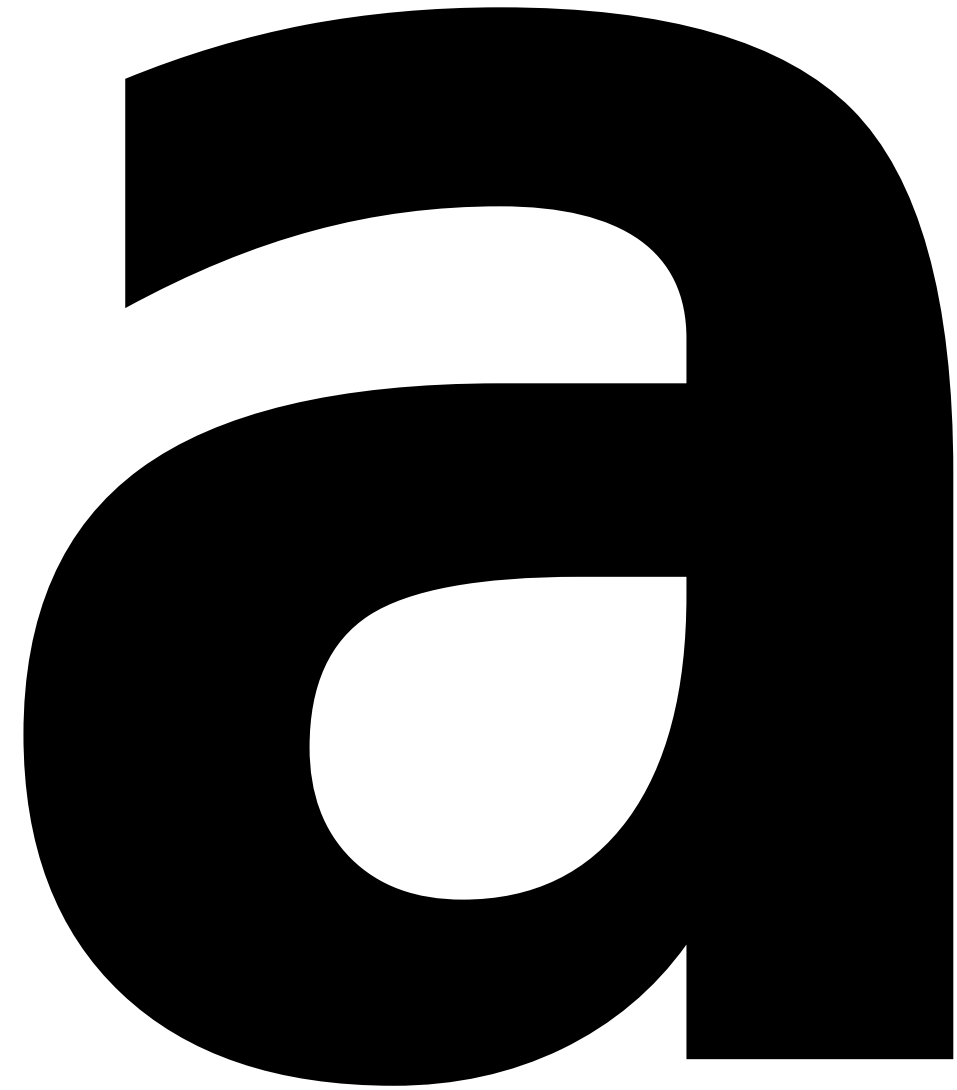
u



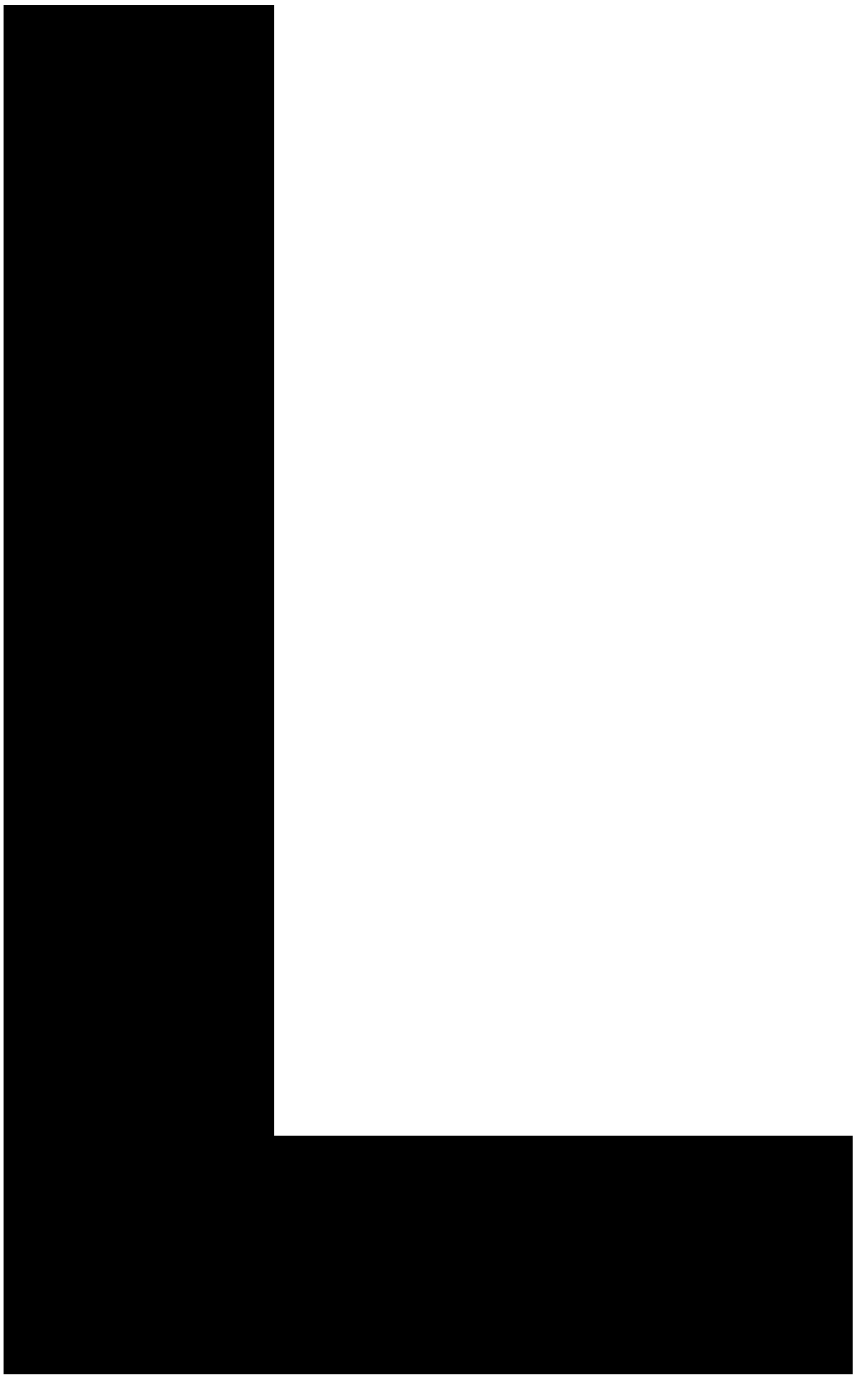
u



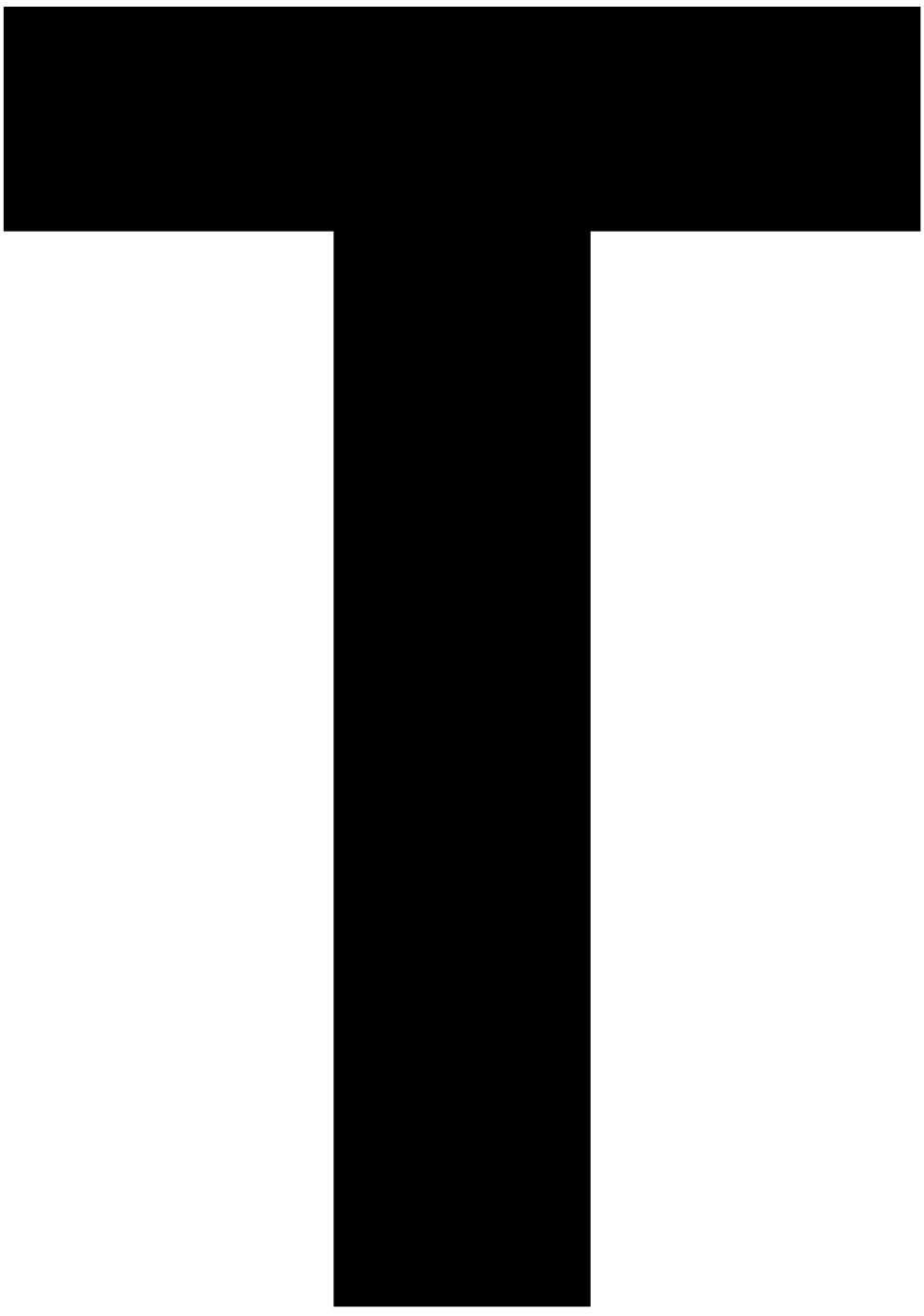


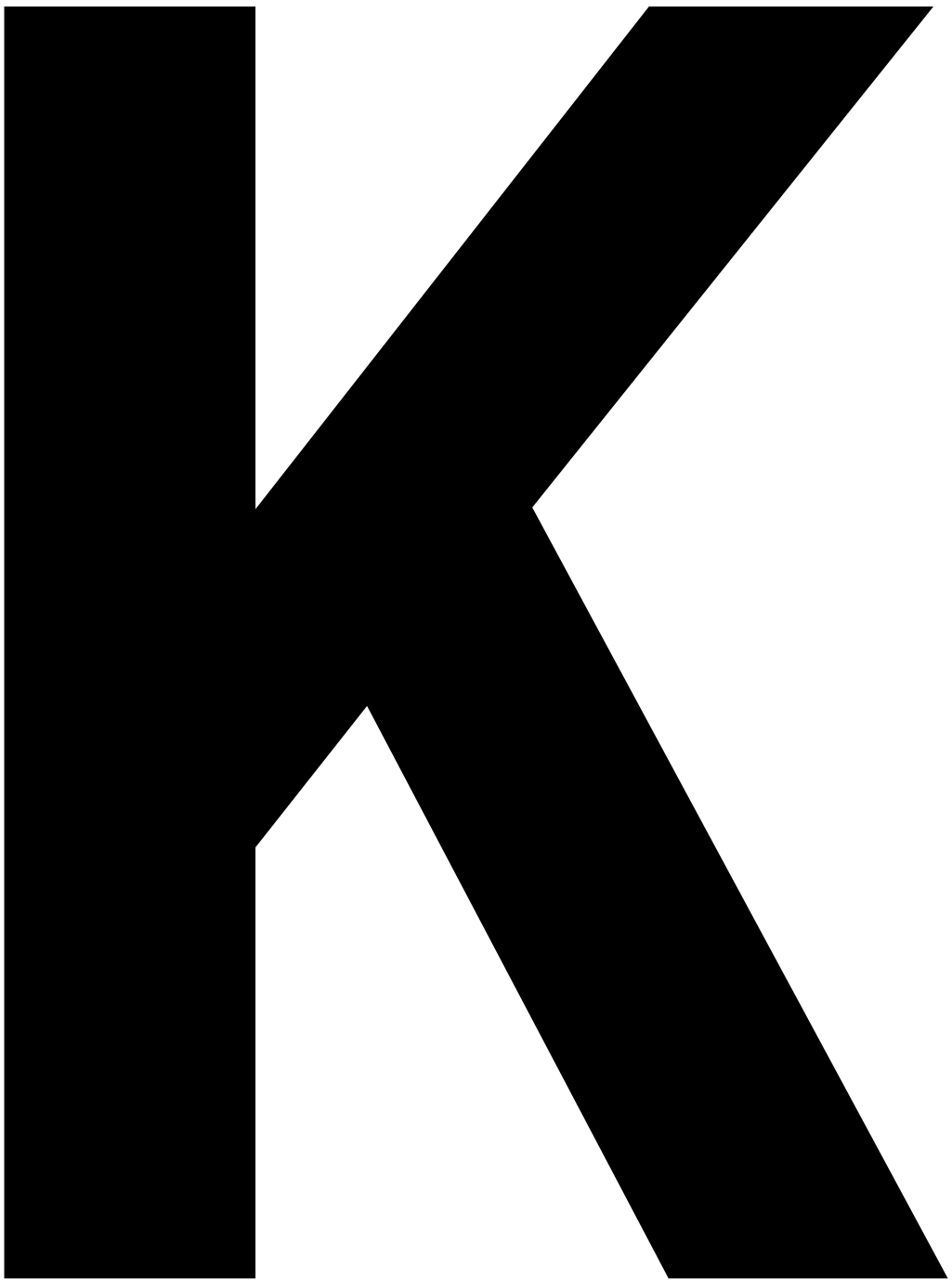


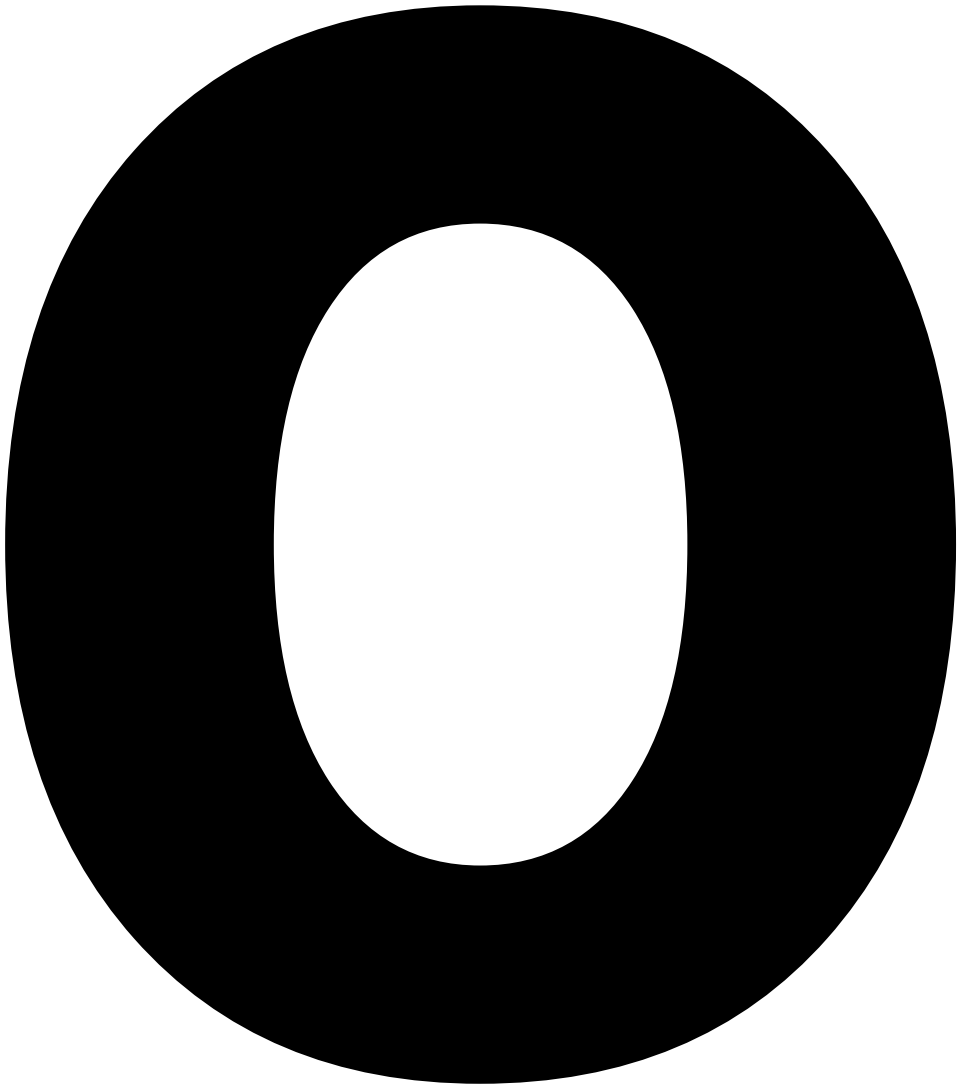
S

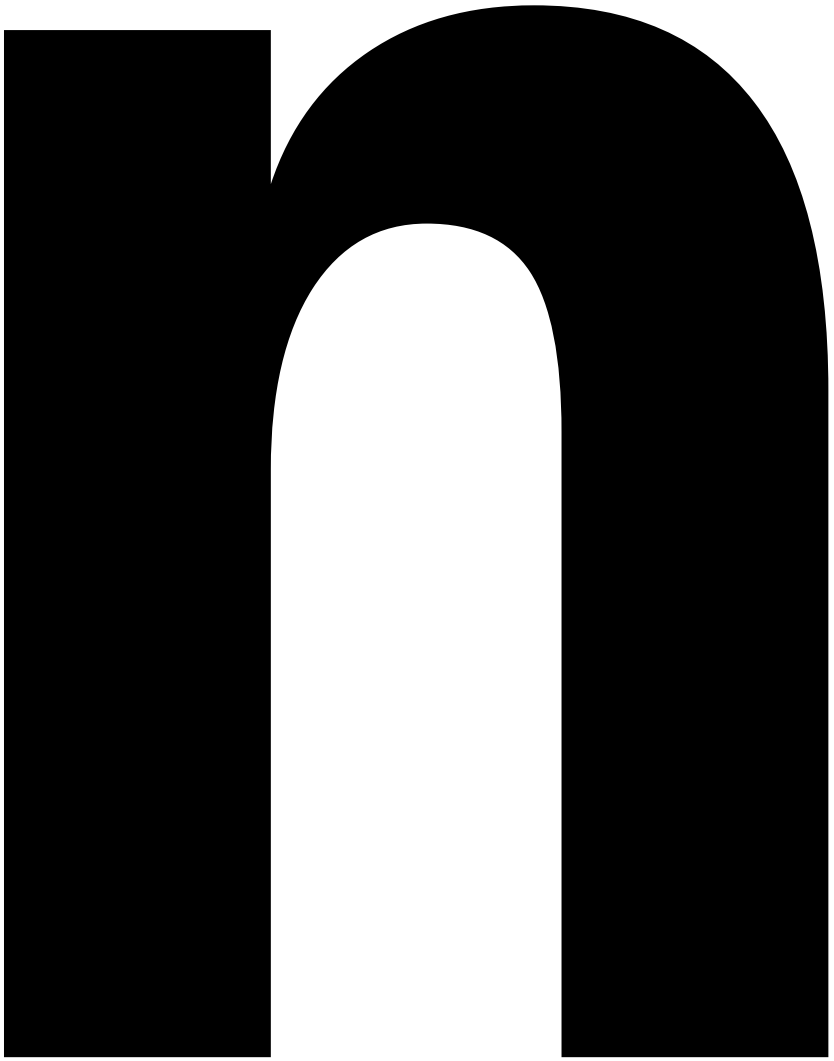


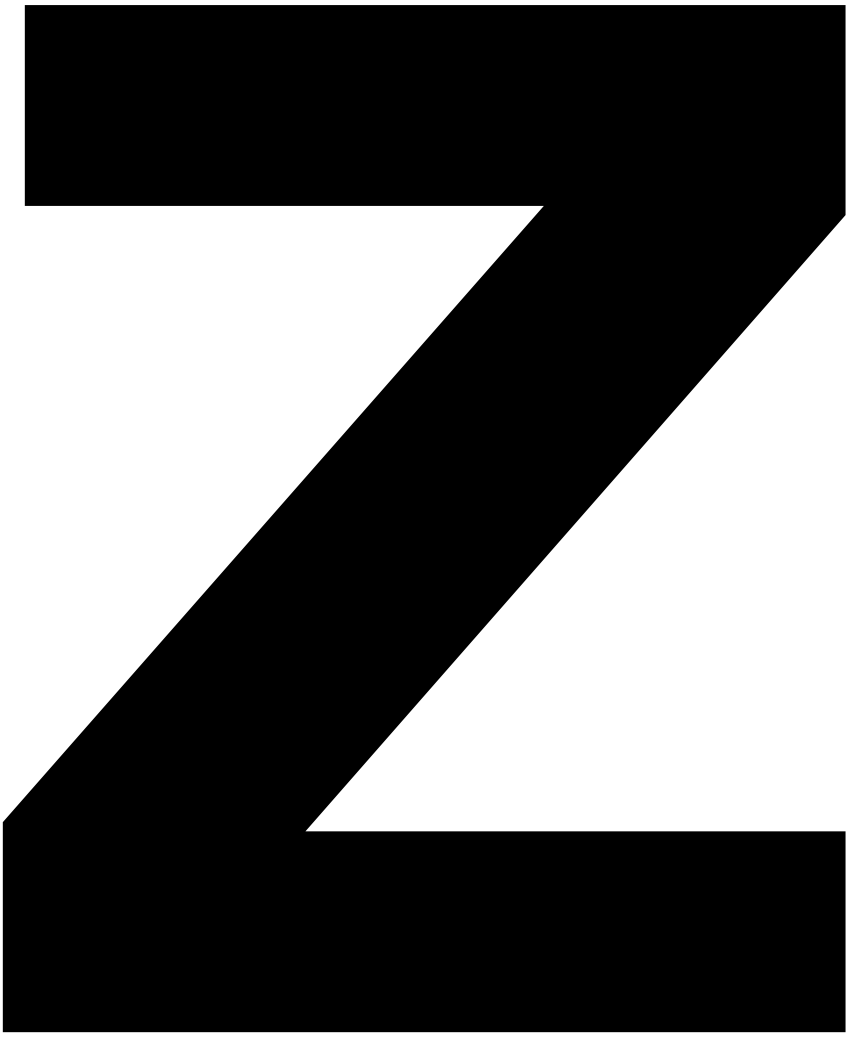
N

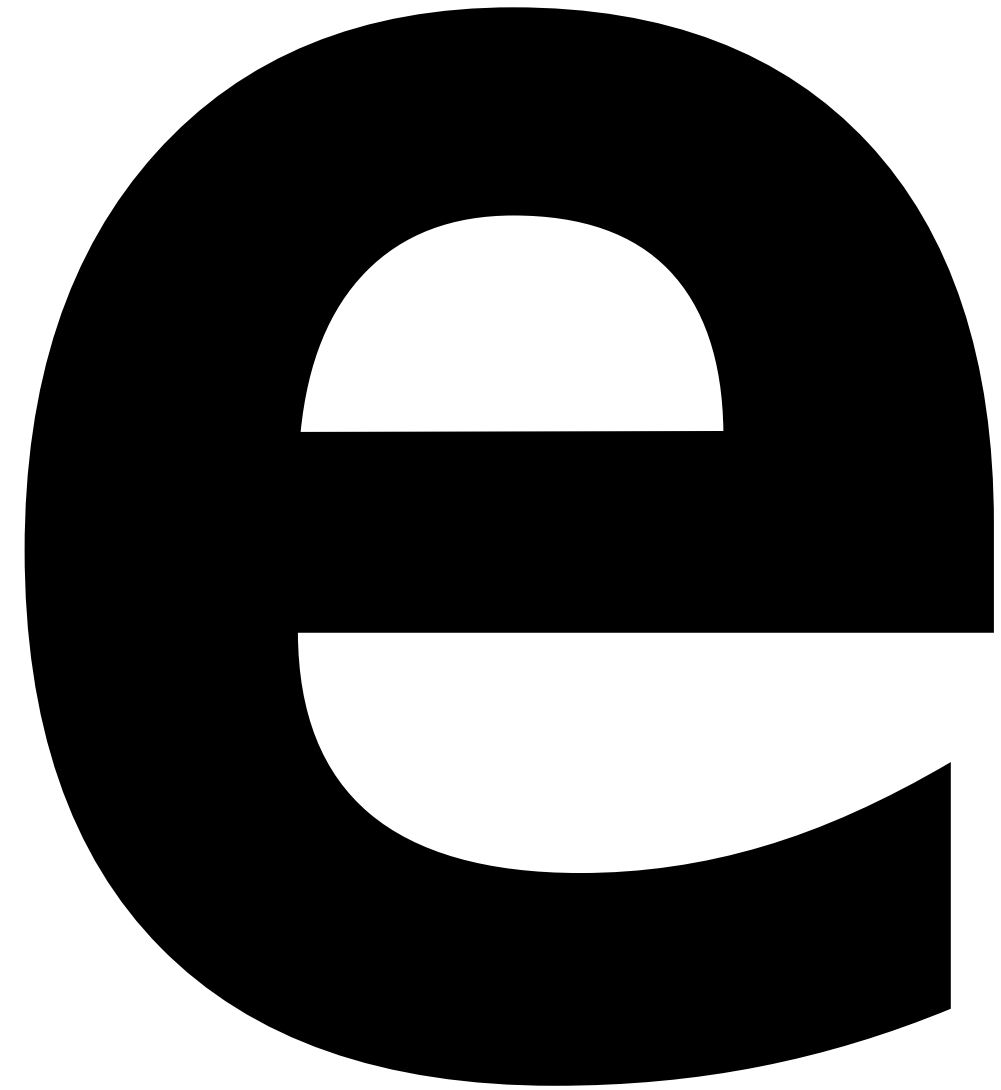


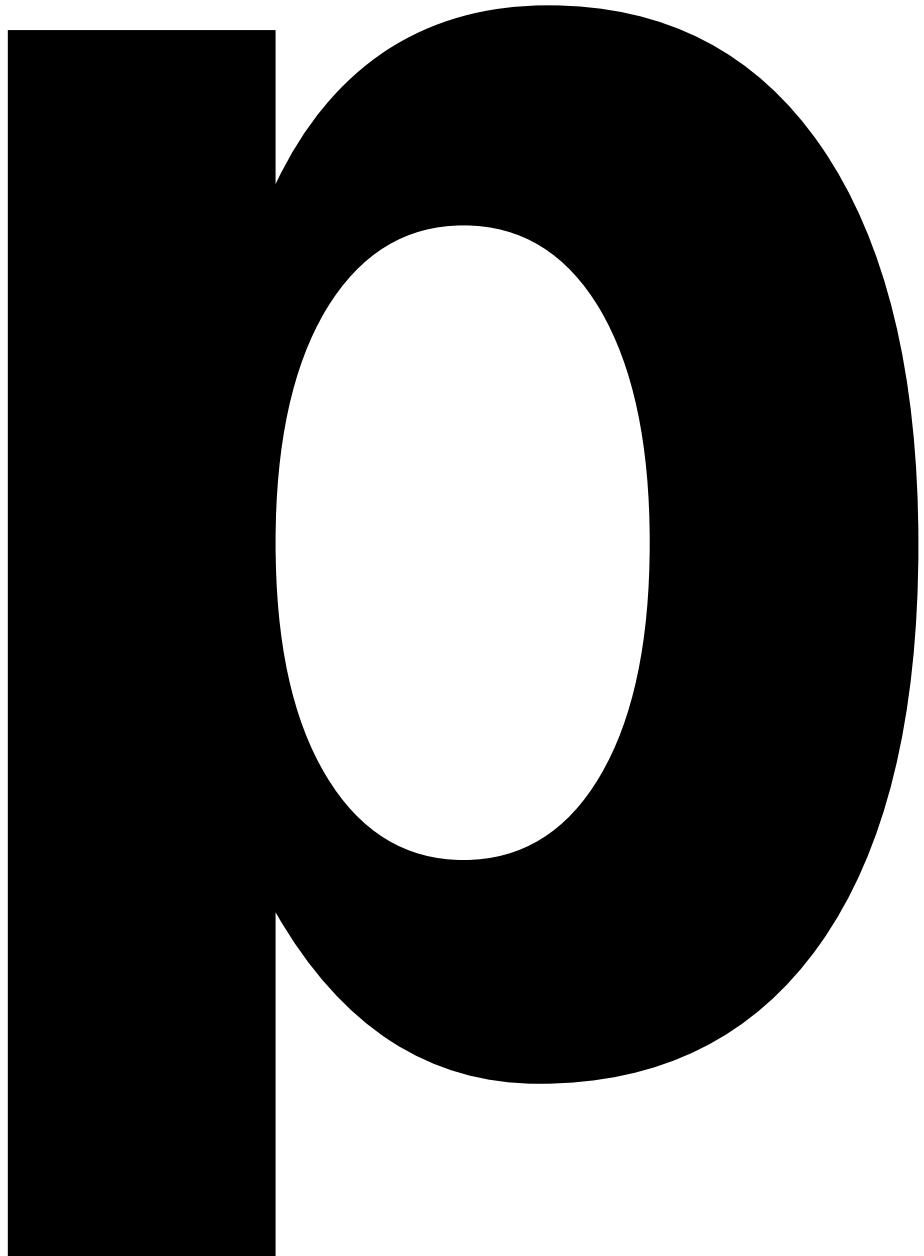


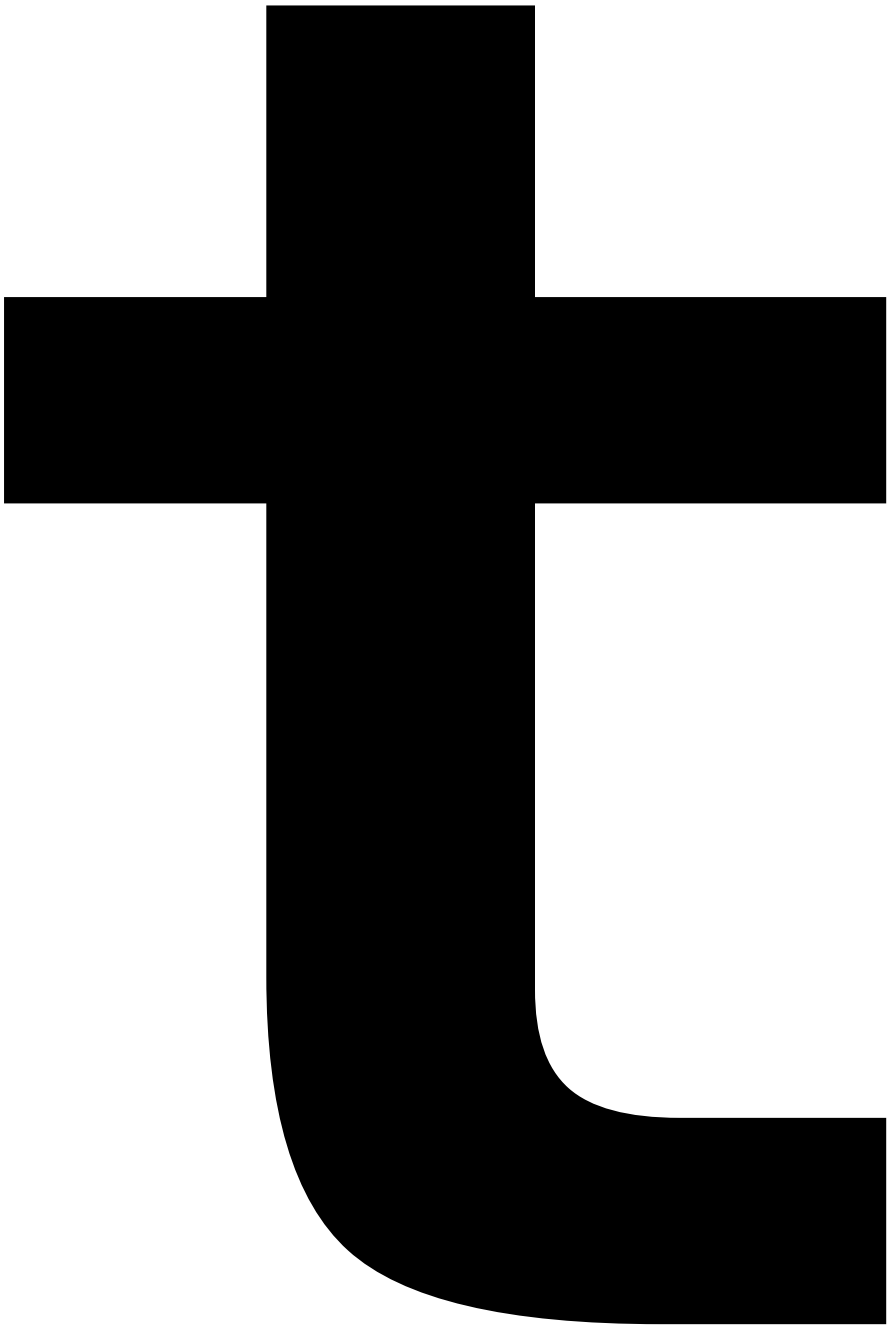




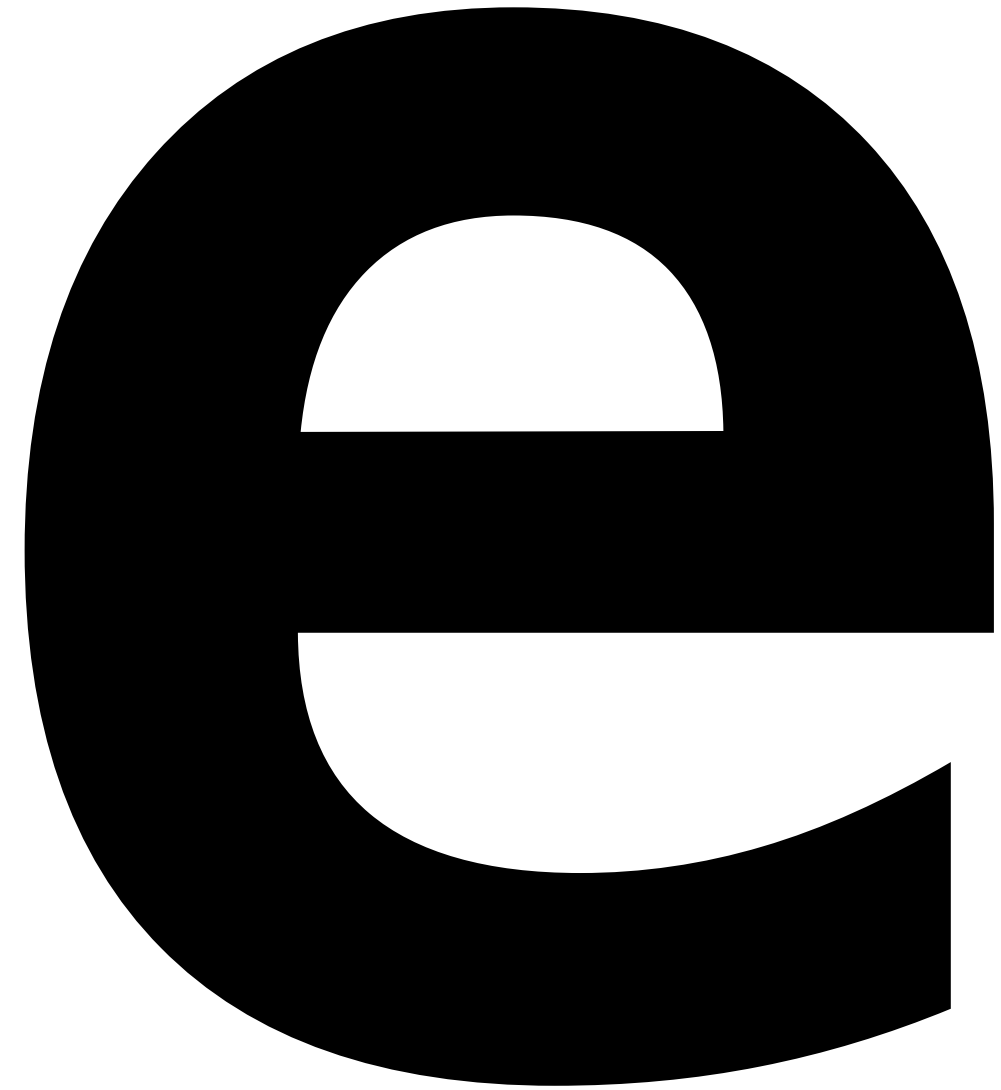




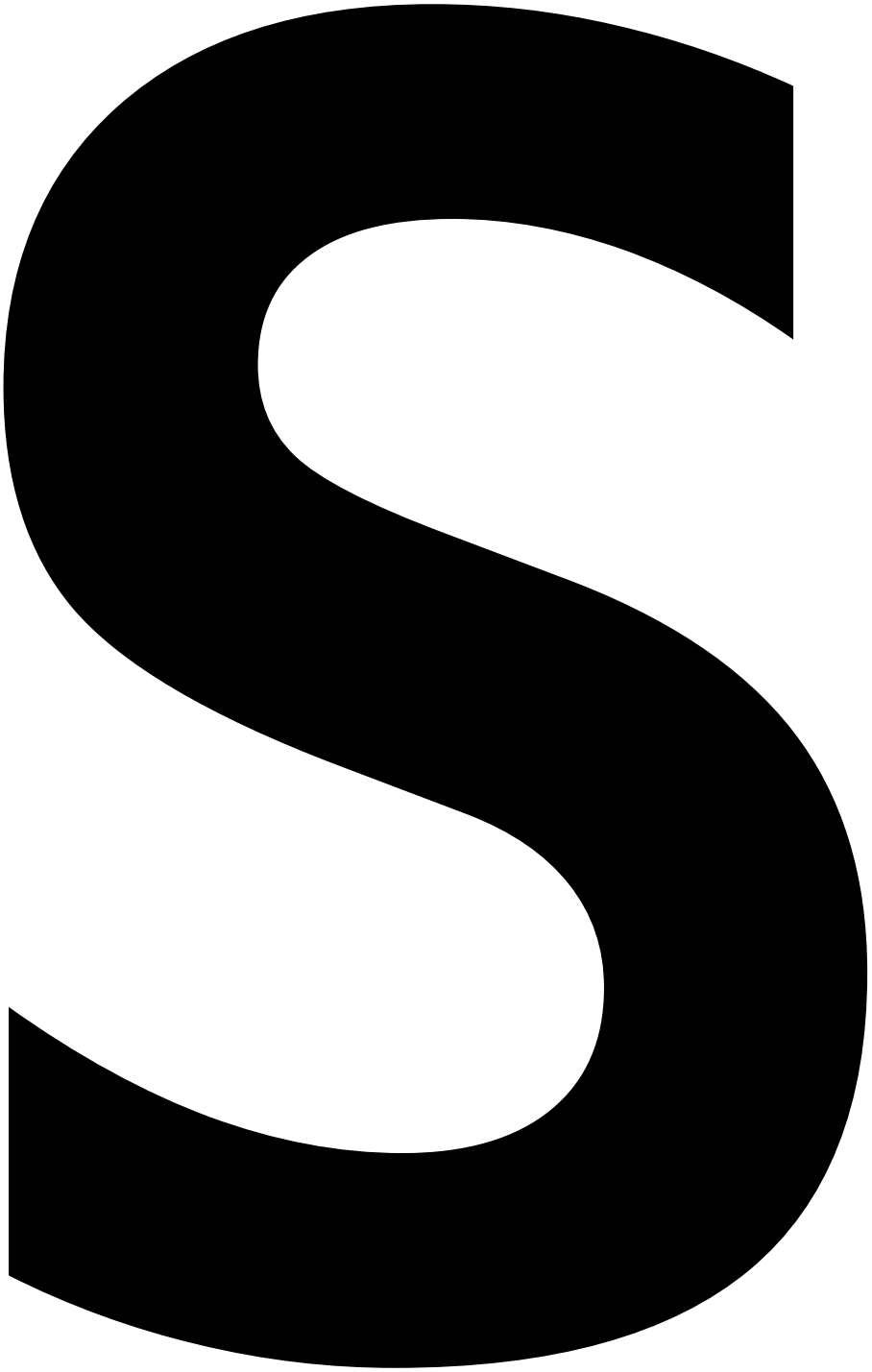


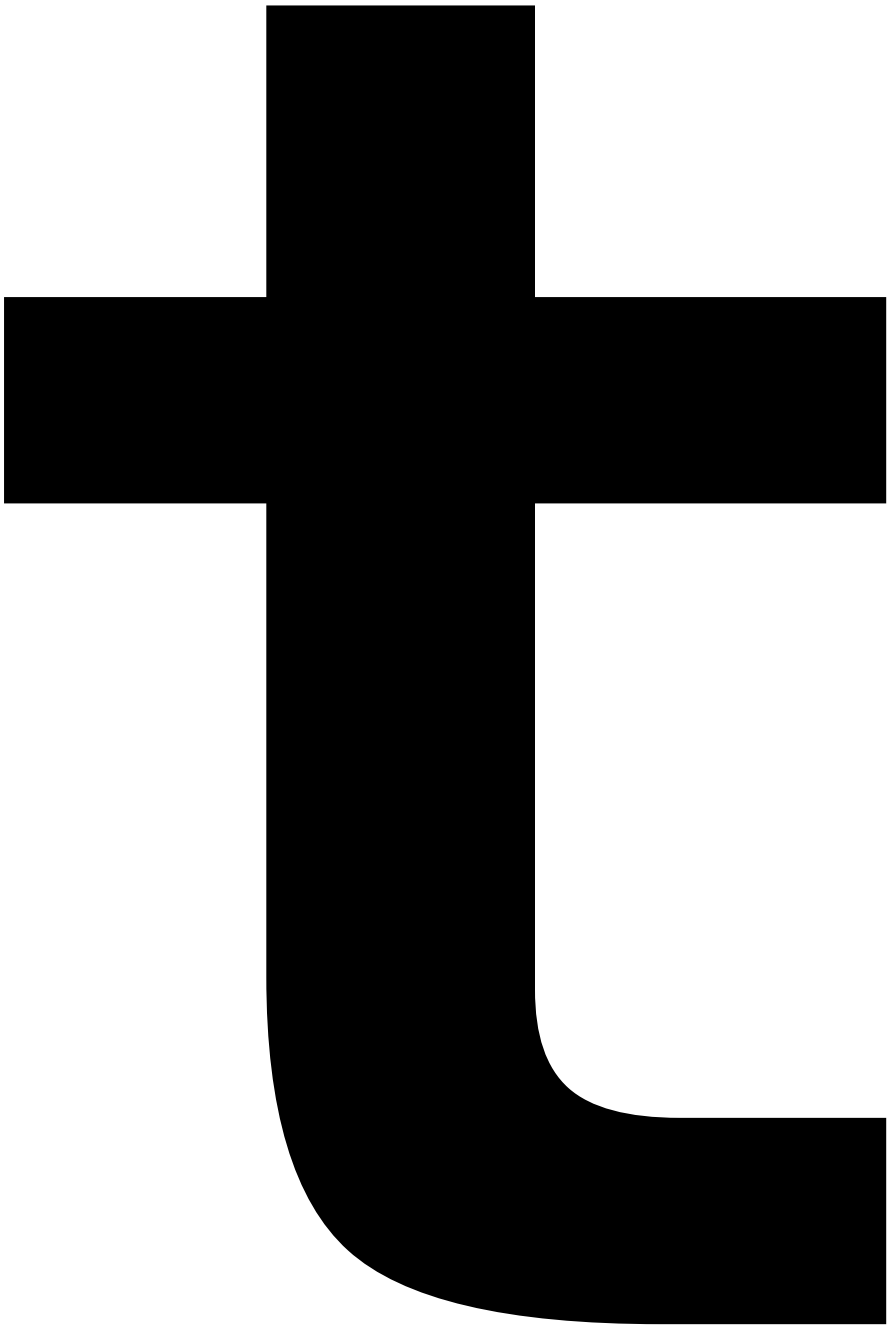


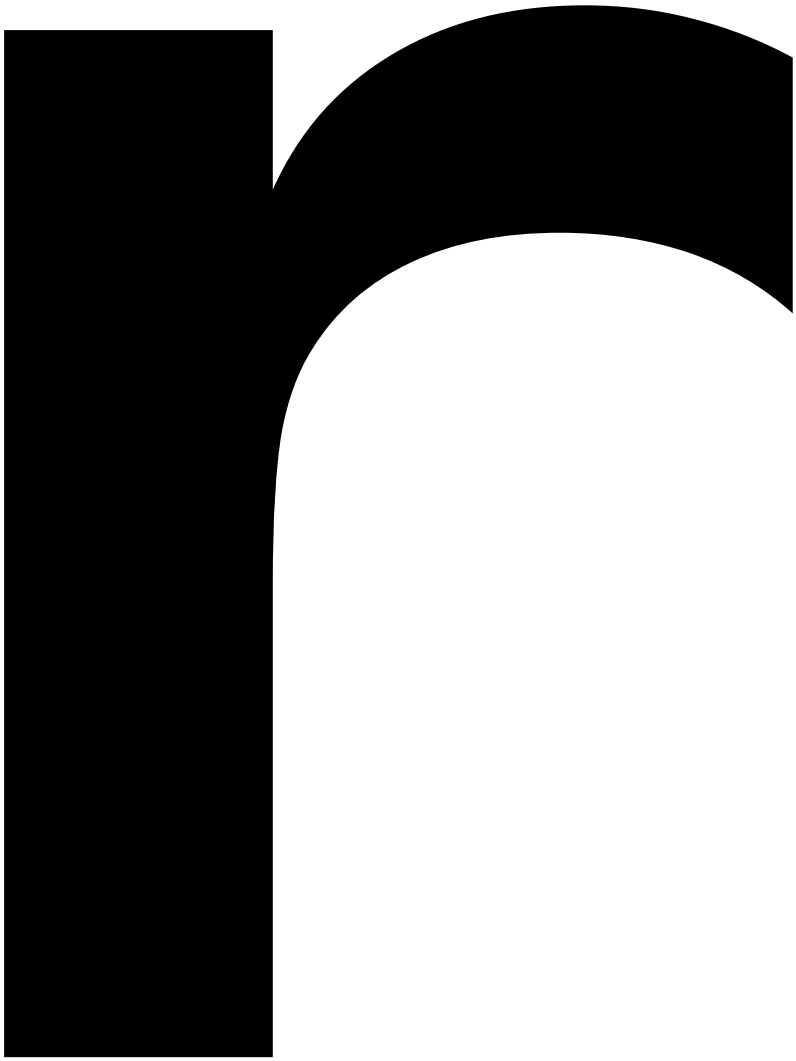
d

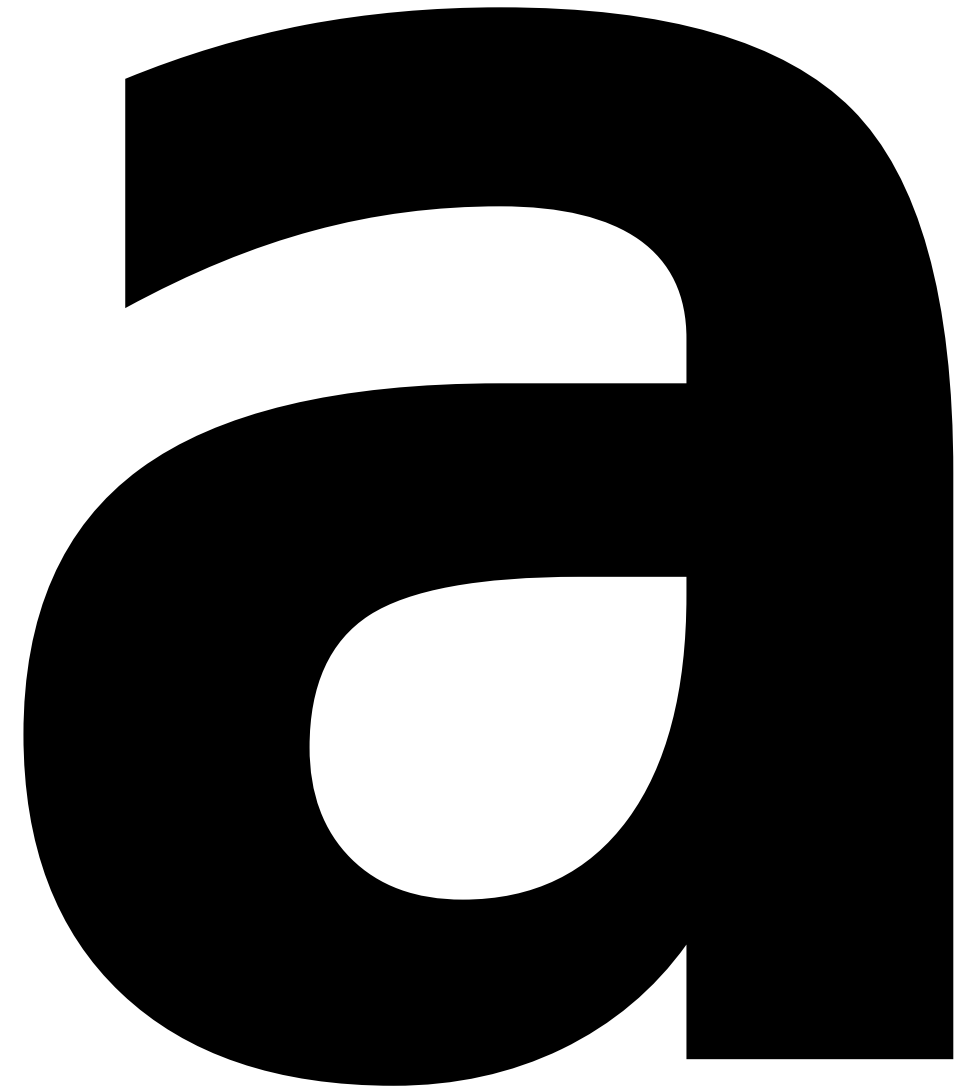


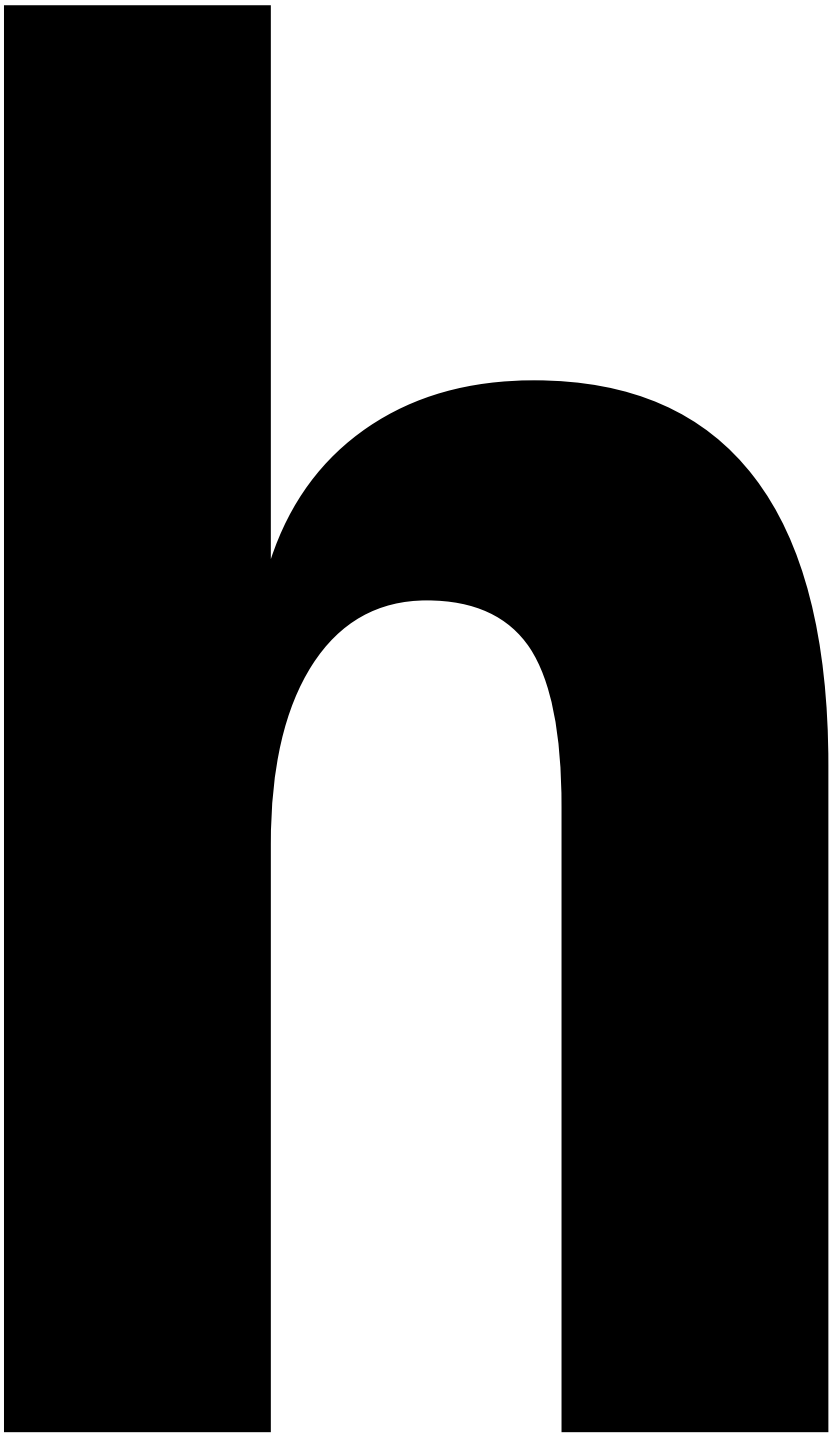
S

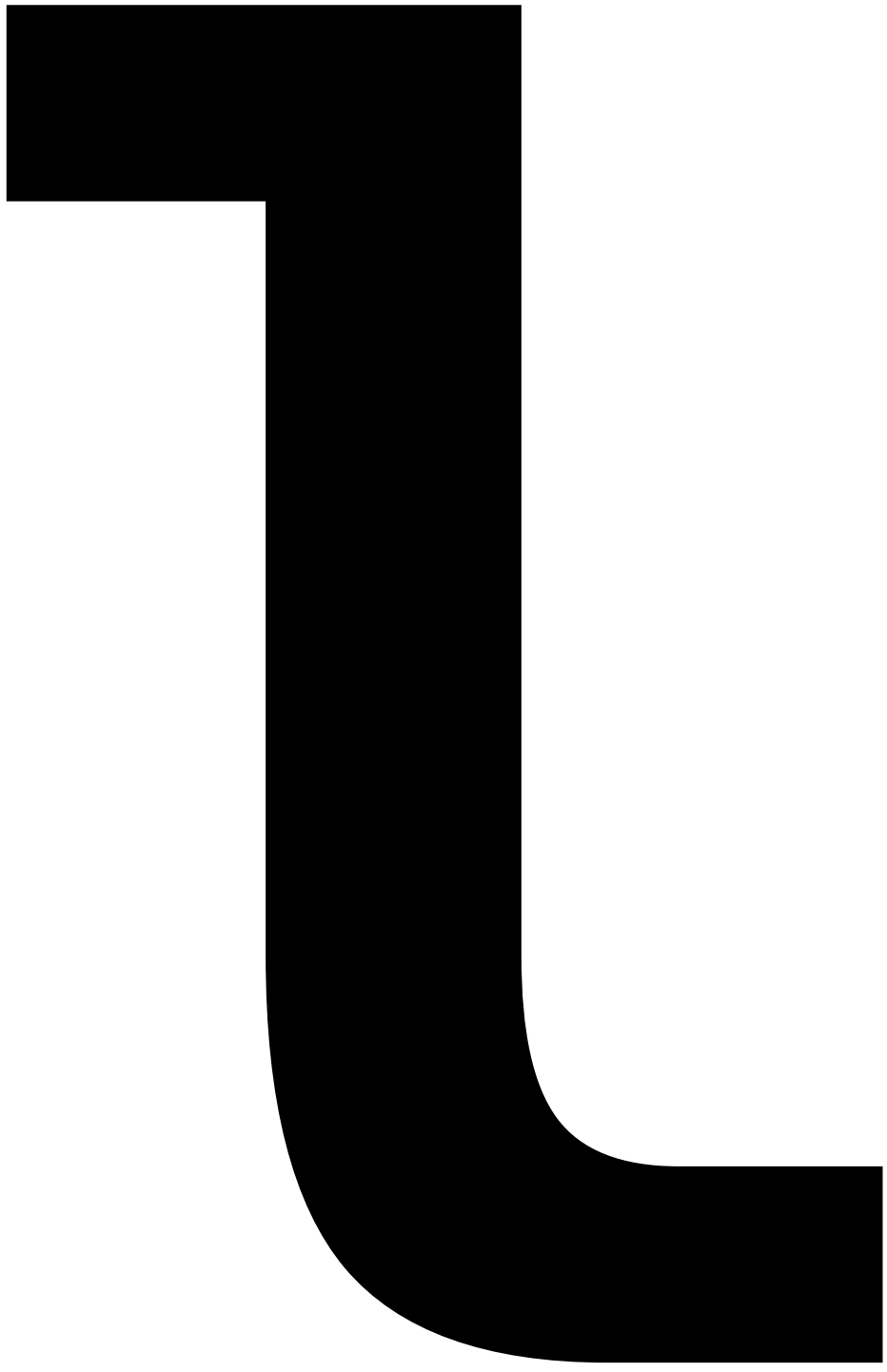


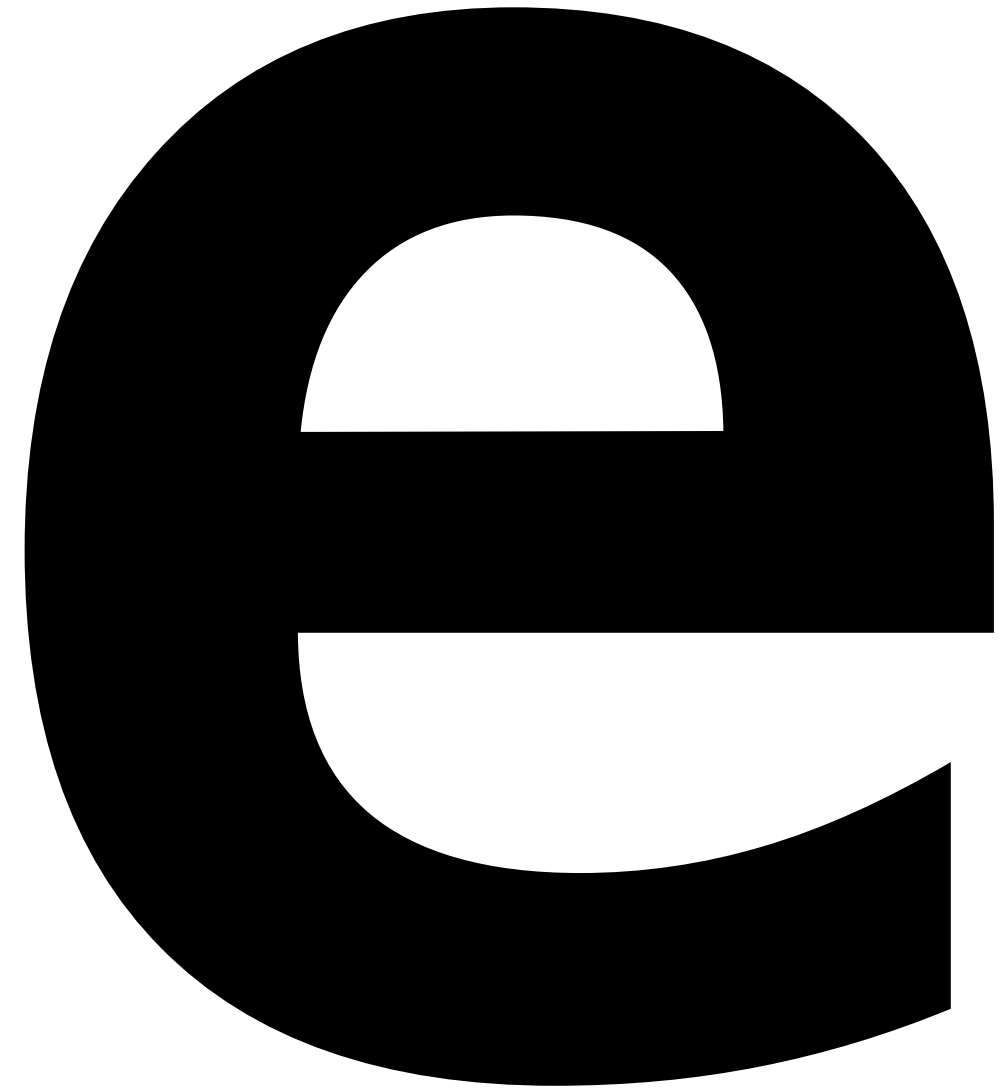


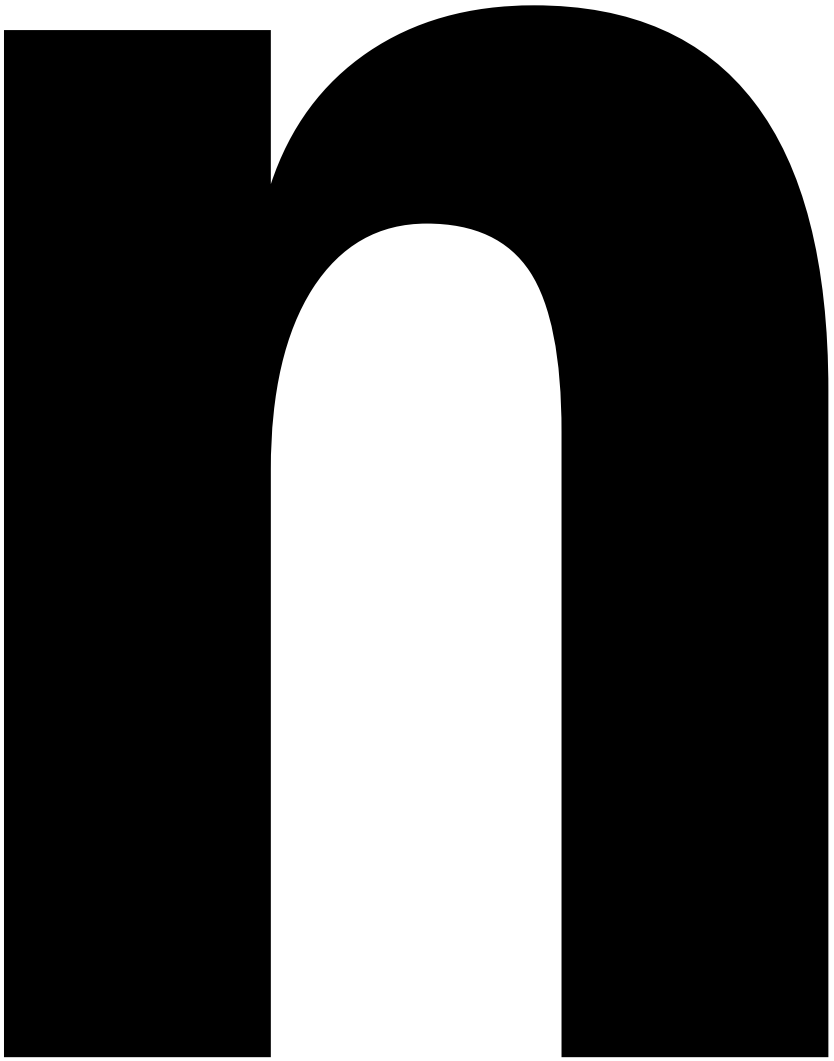




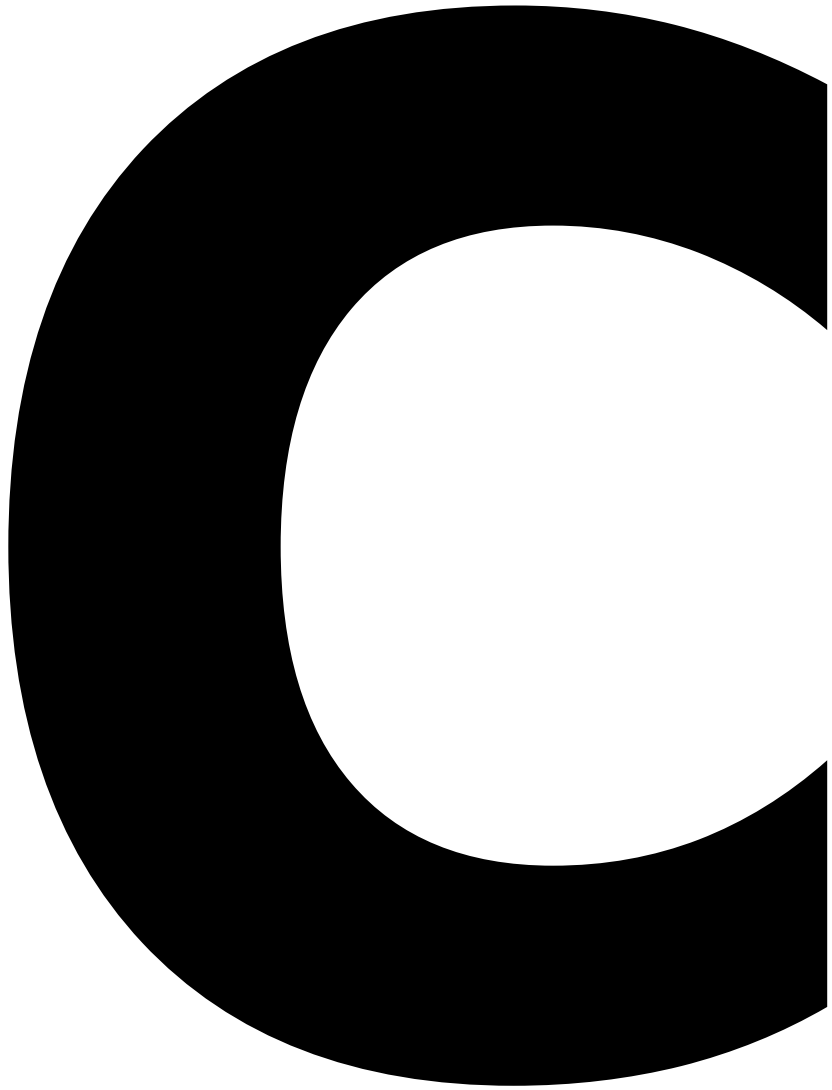


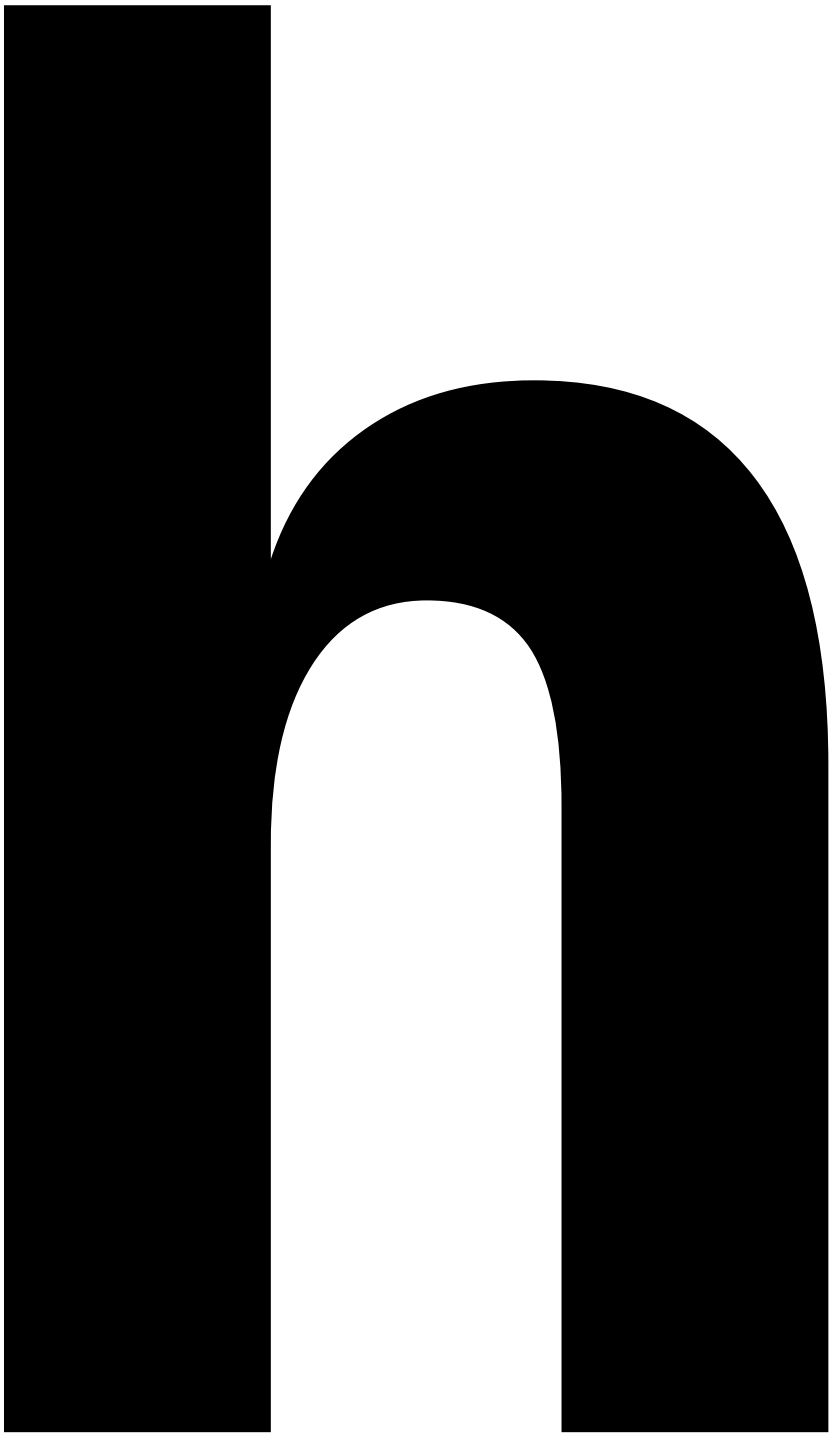




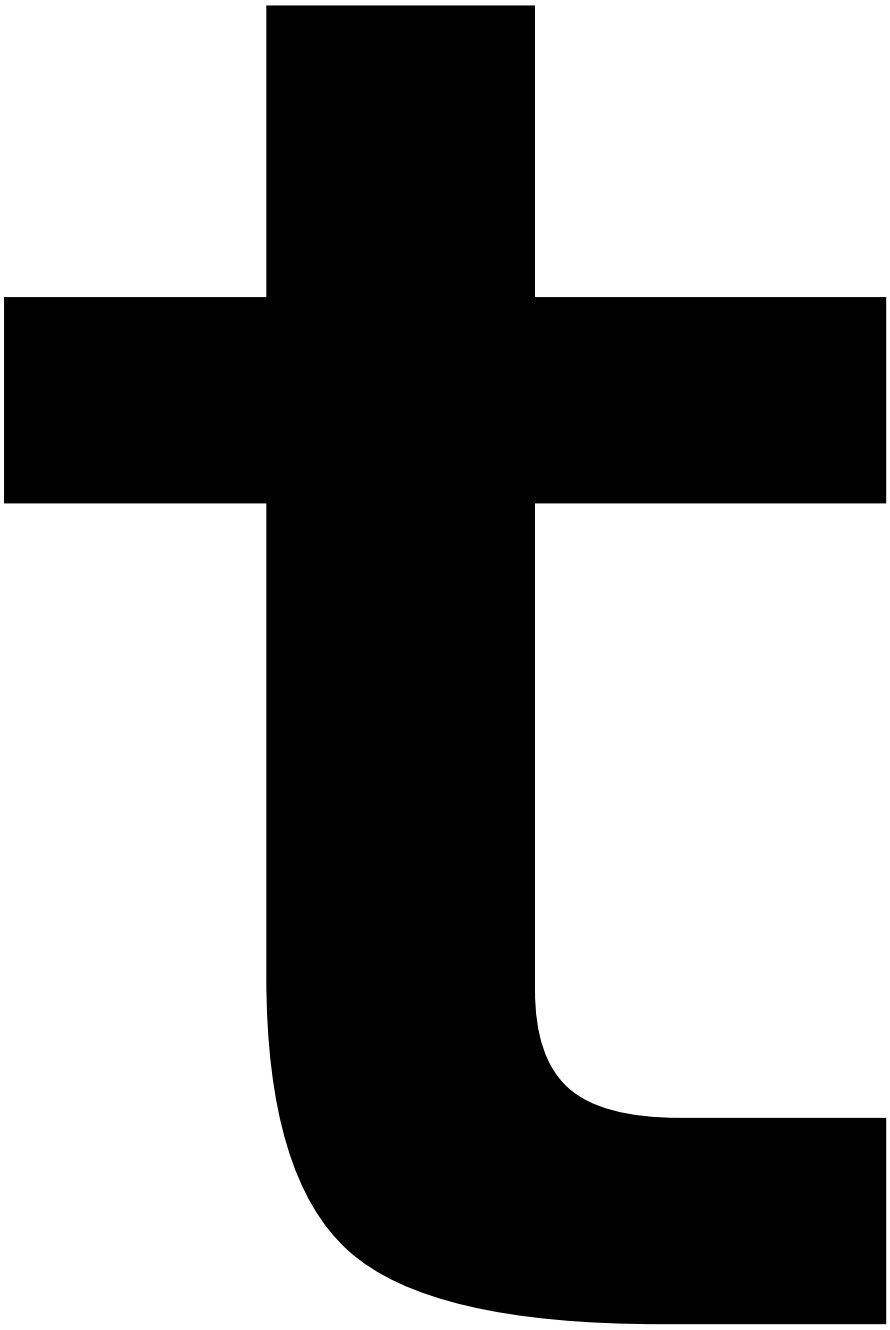


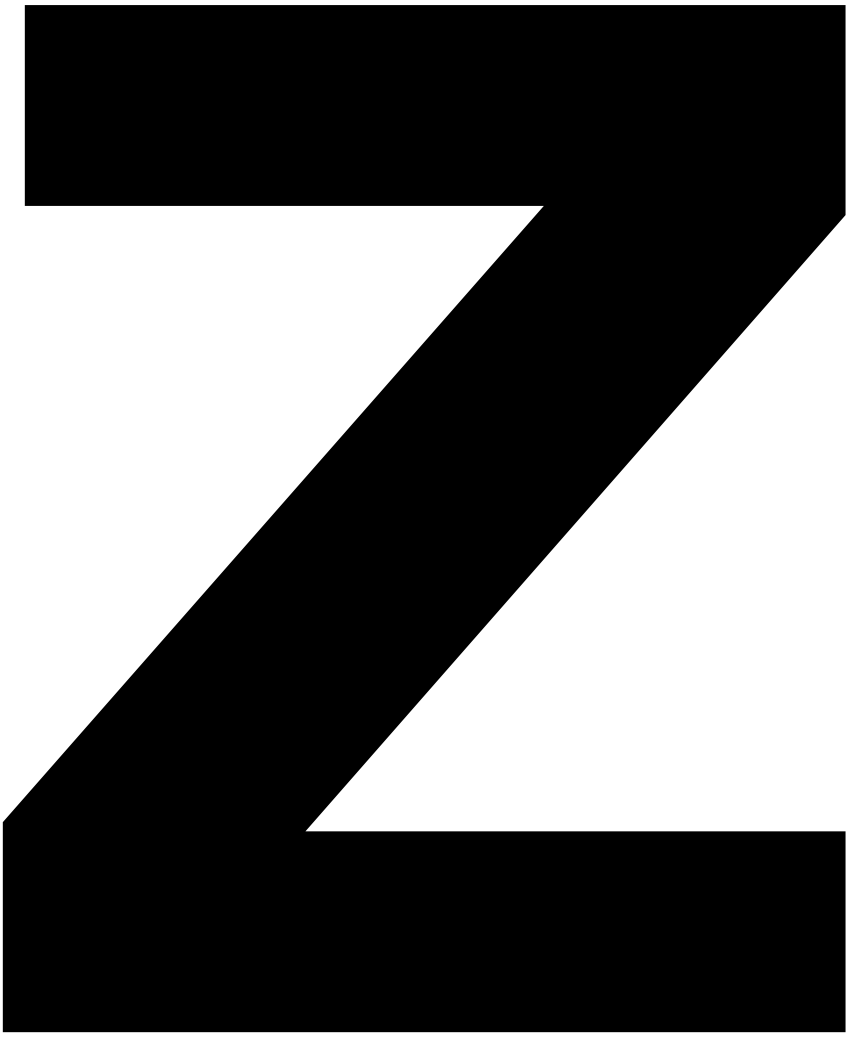
S

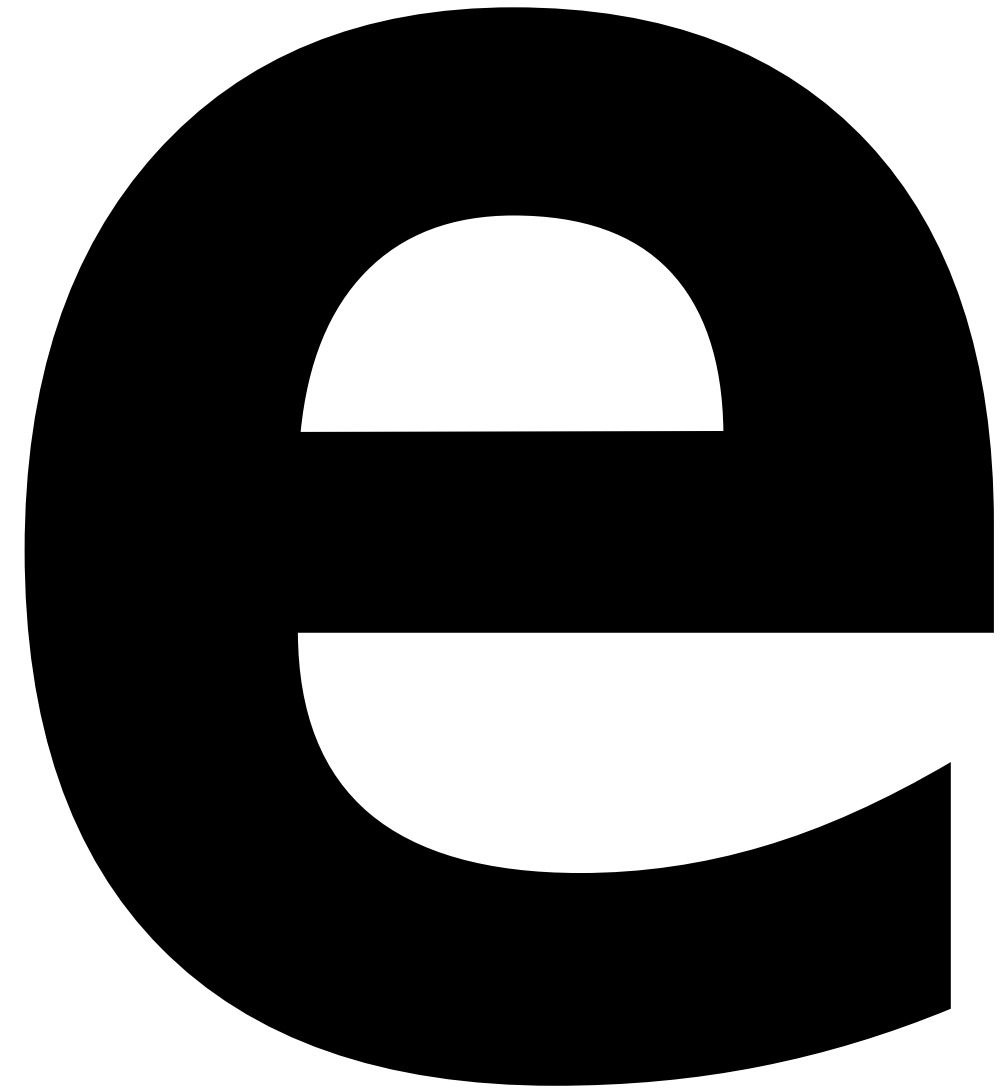




u

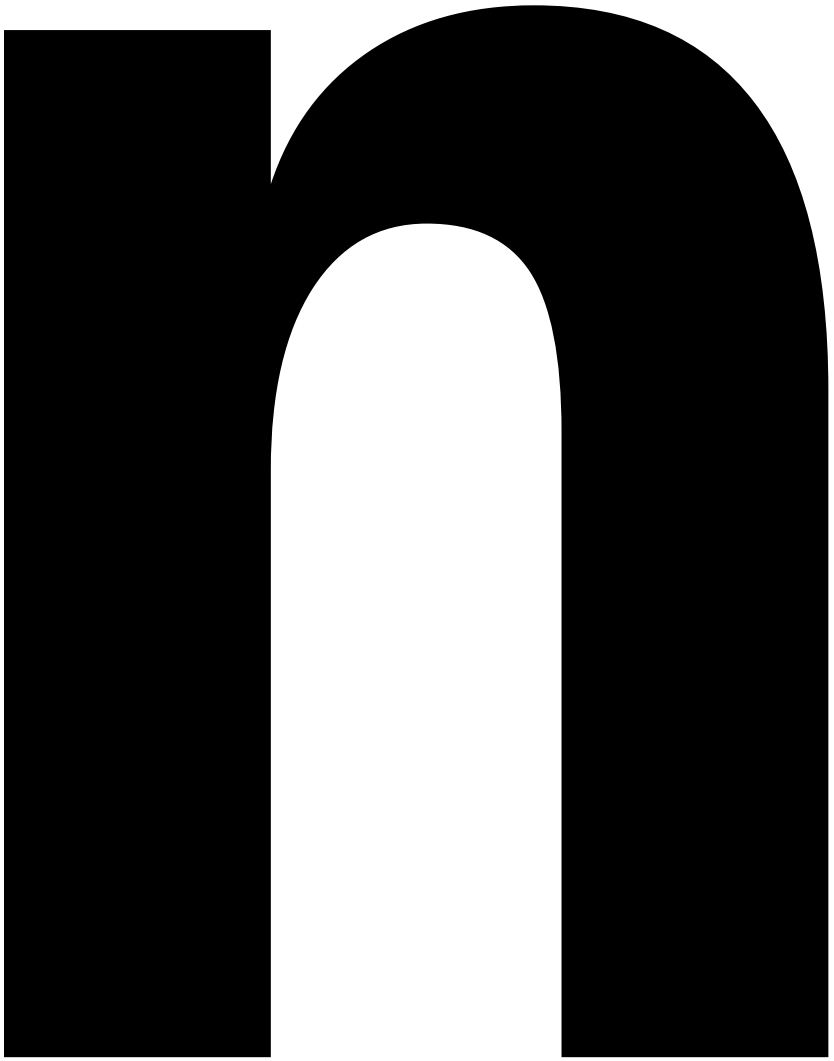






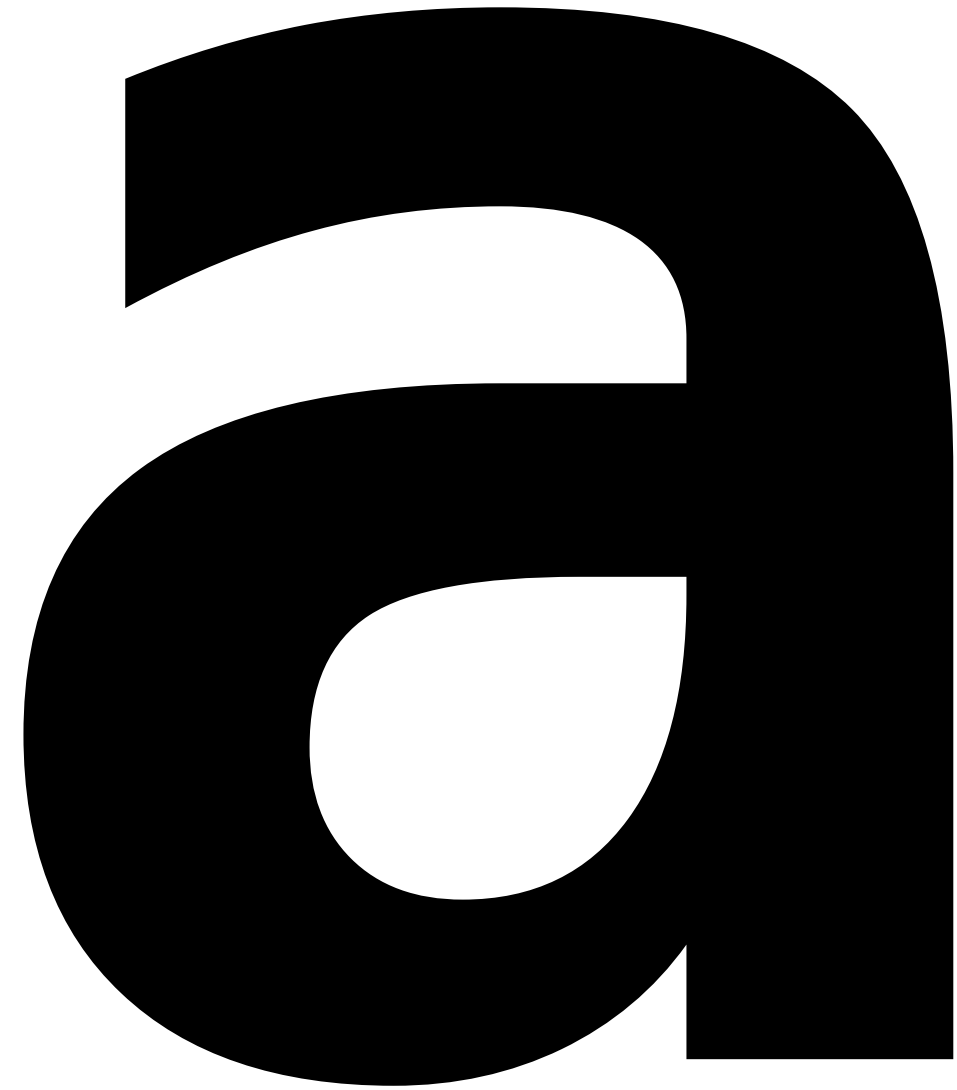
S

u



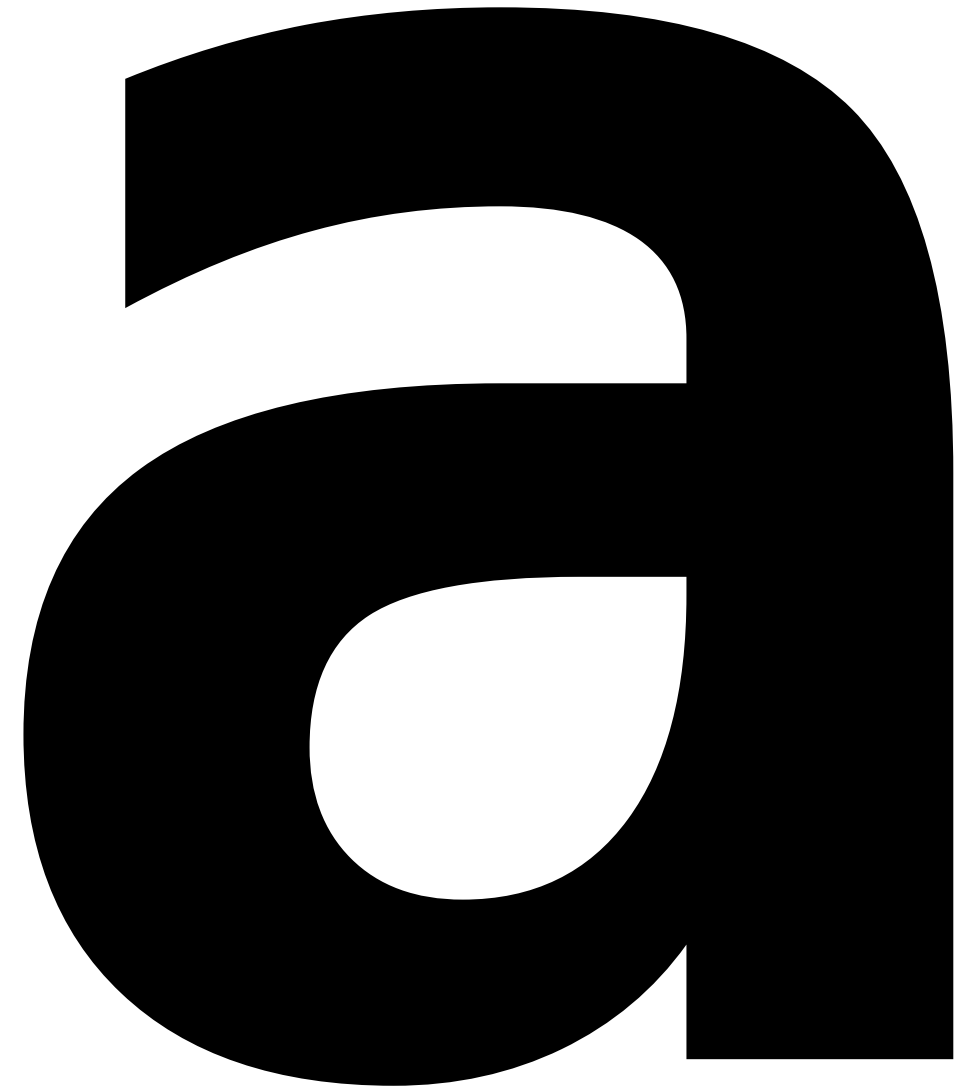
d

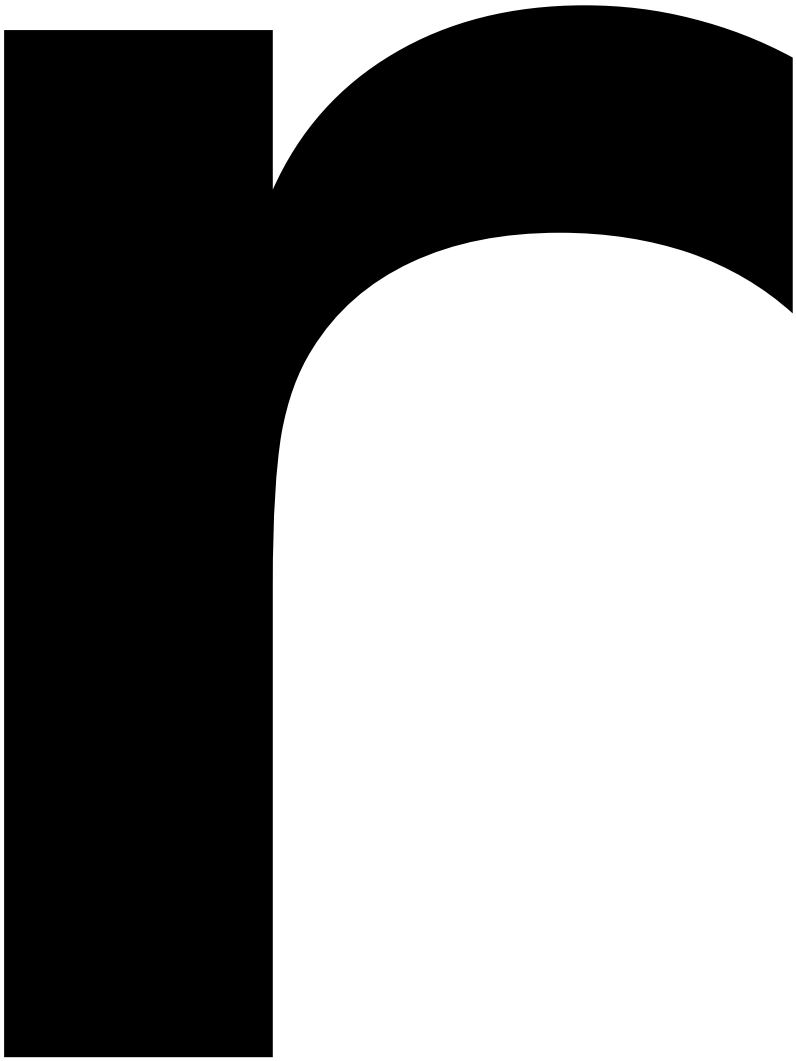
d

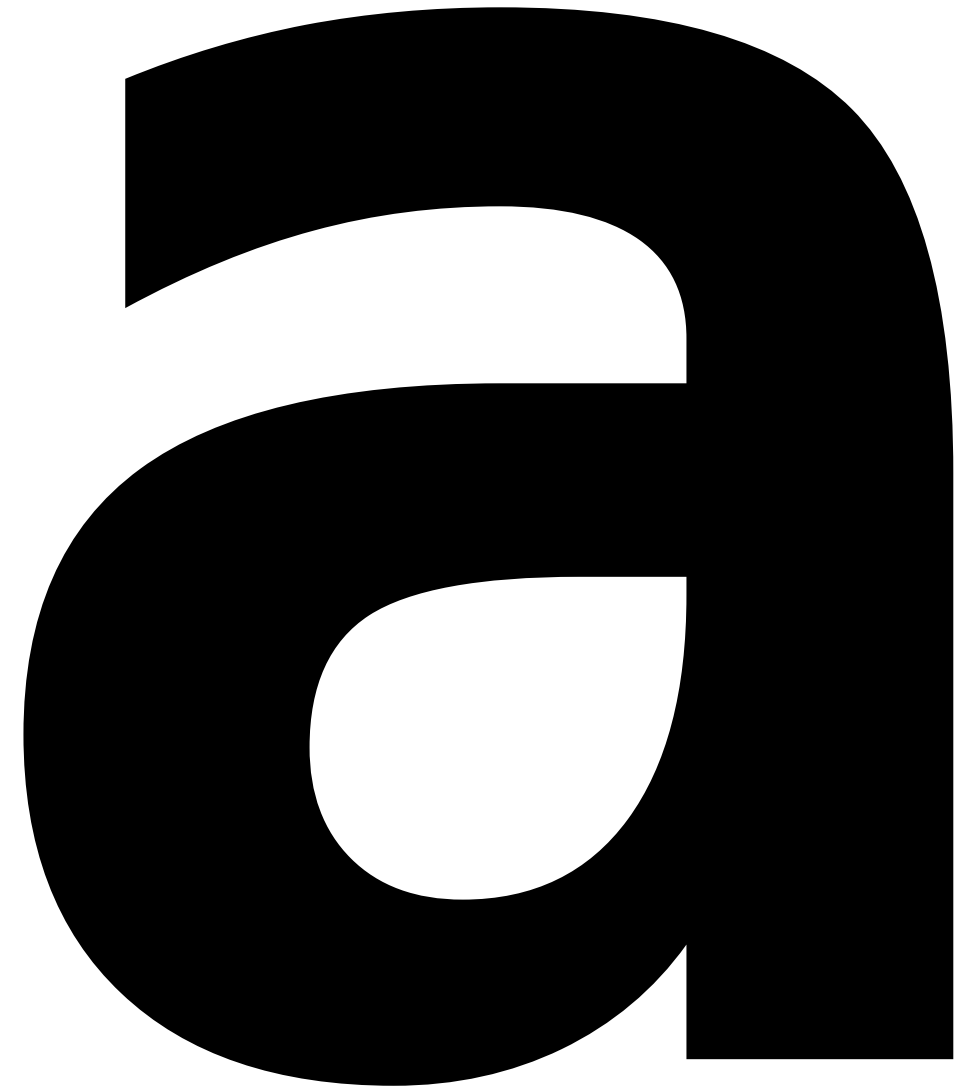


S

d

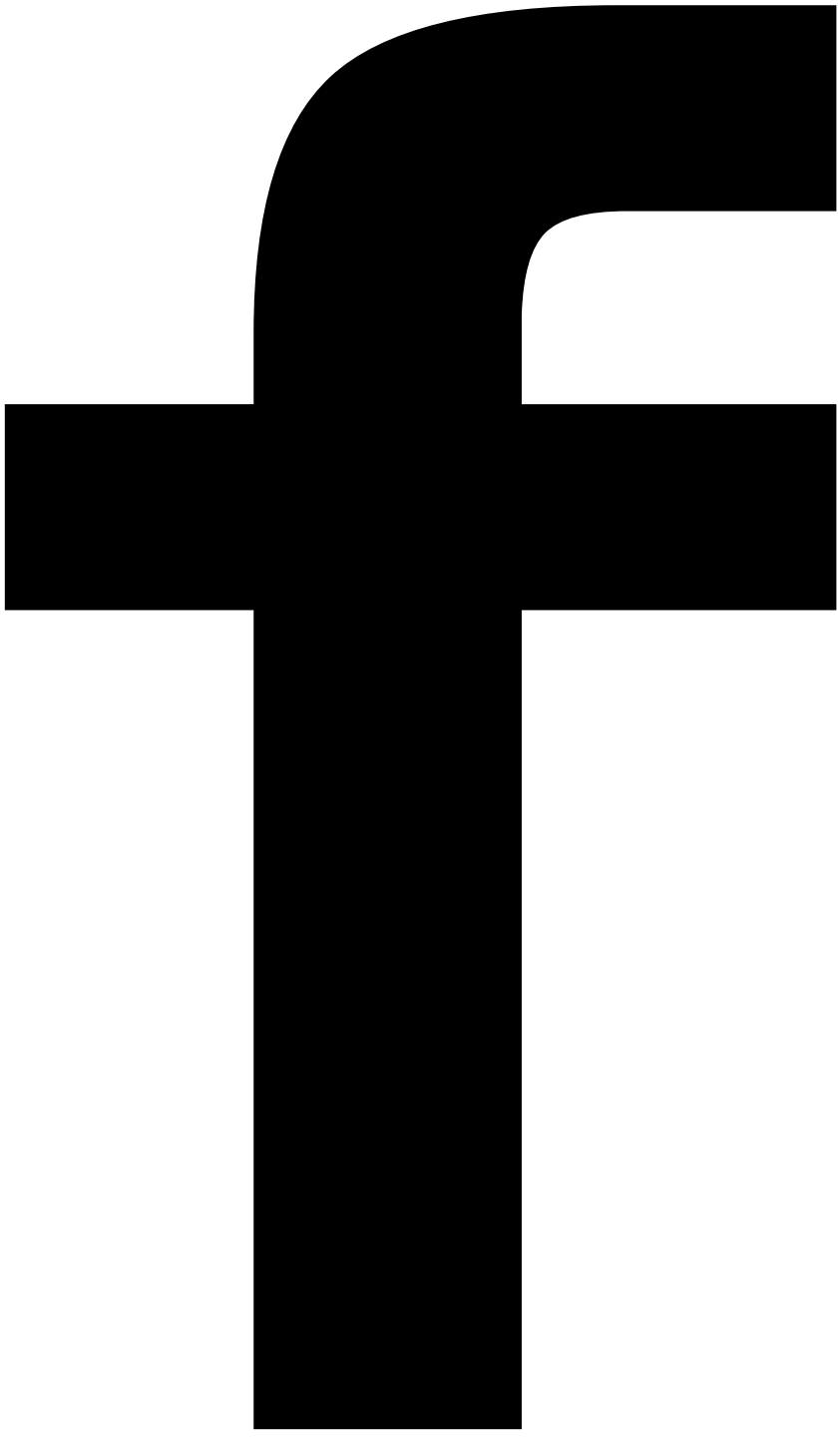


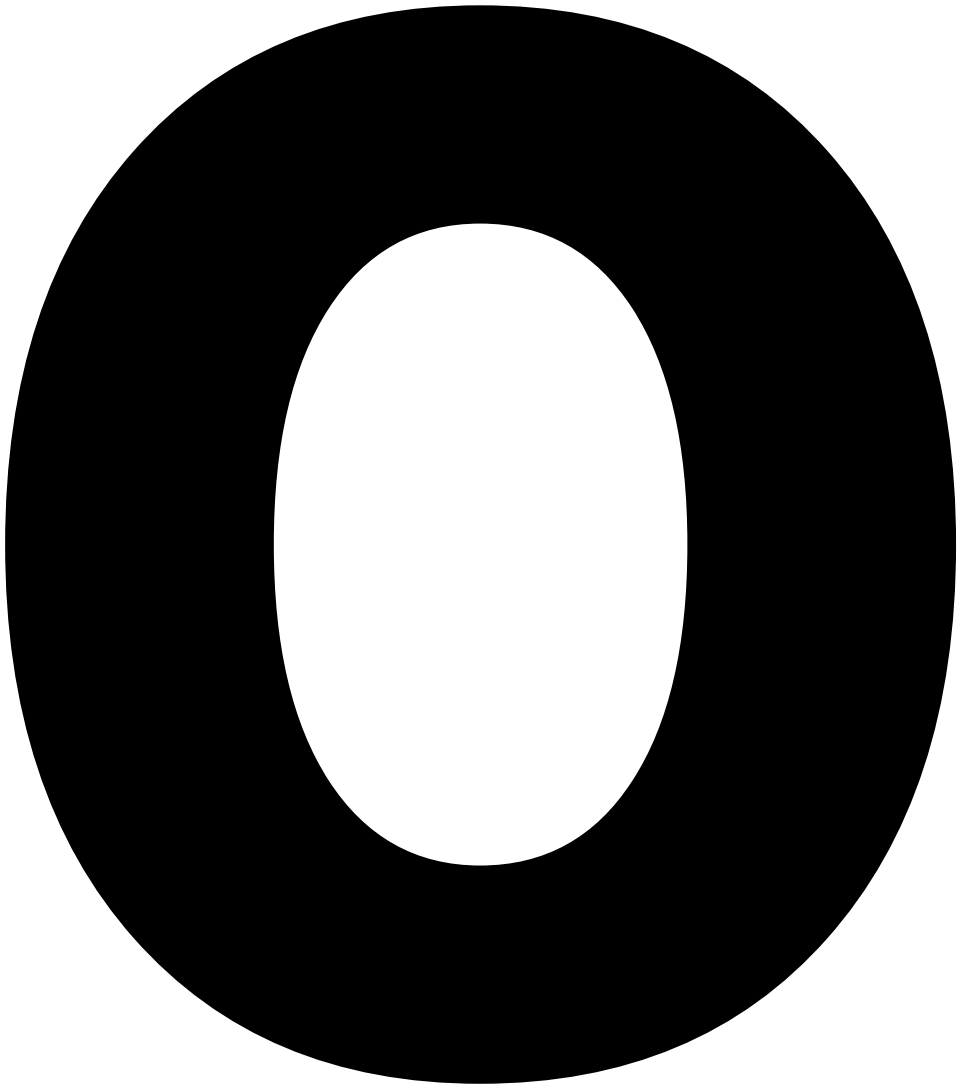


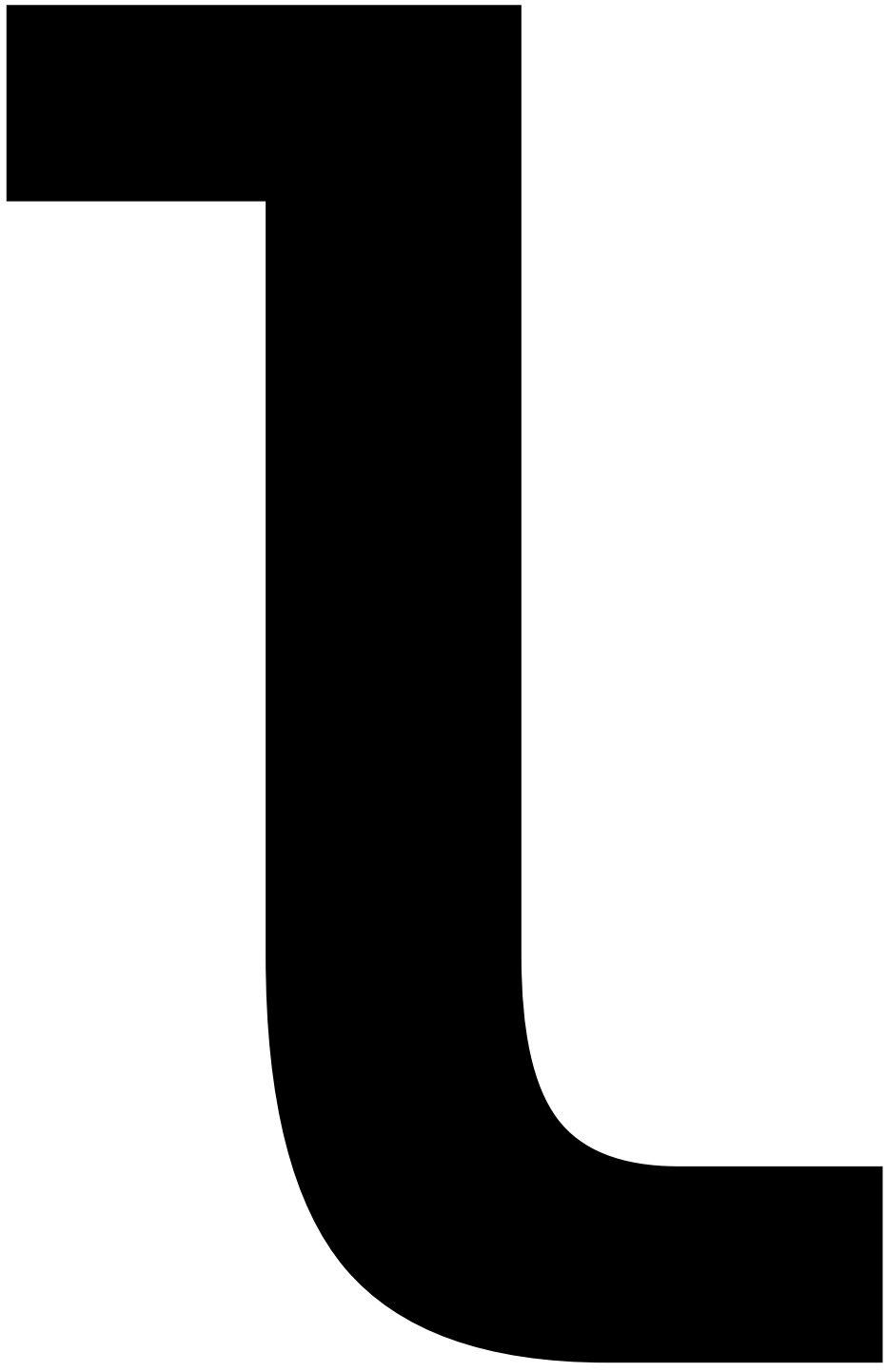


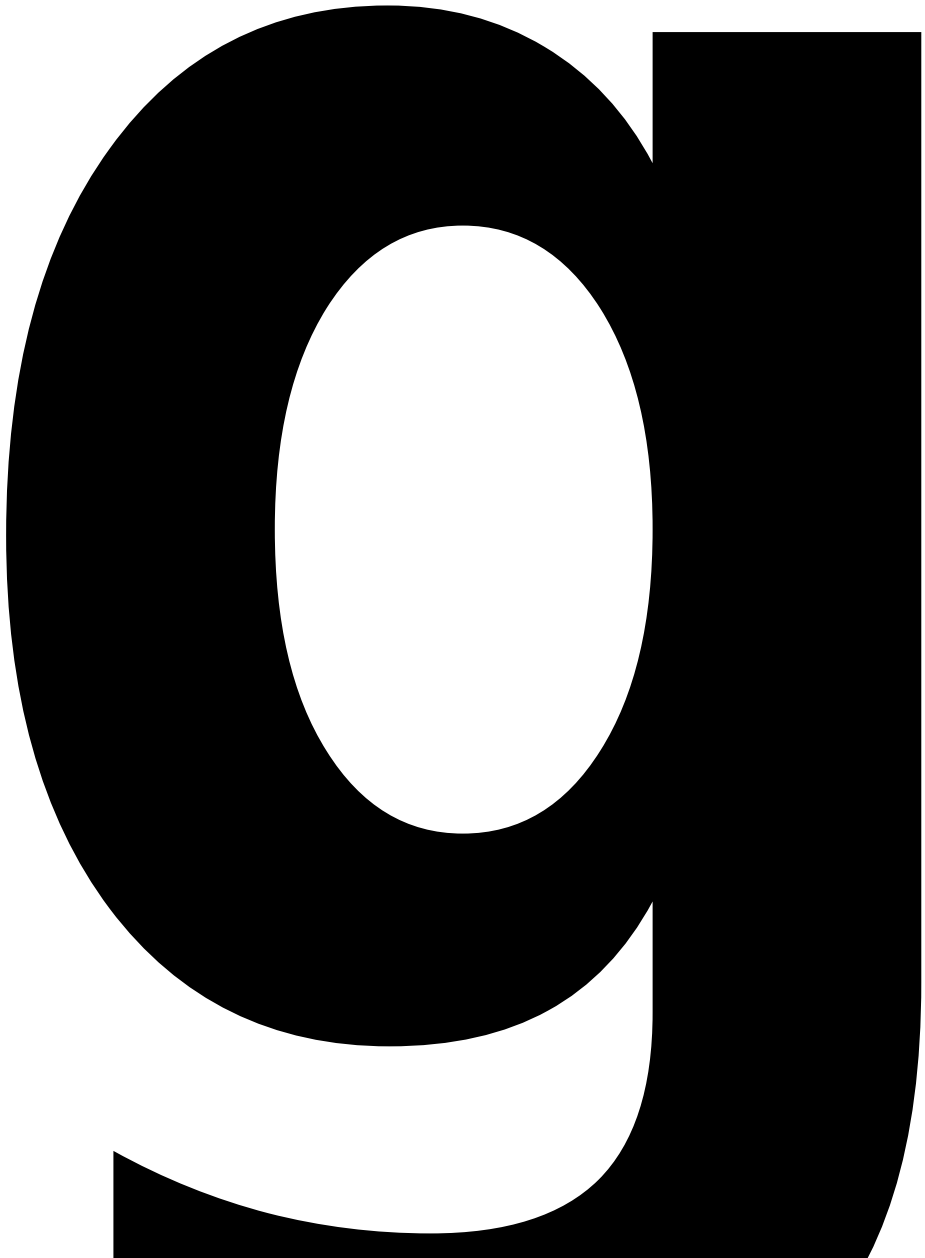
u

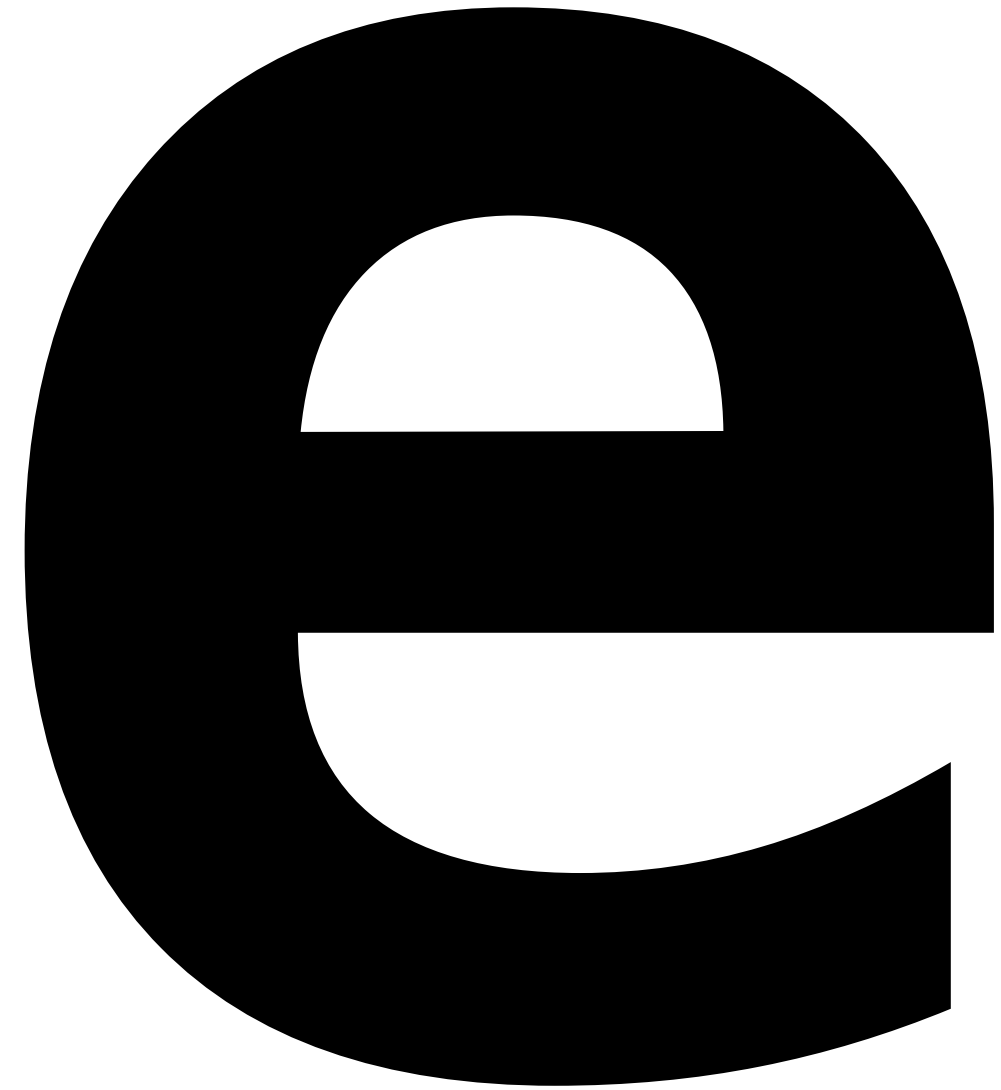
S

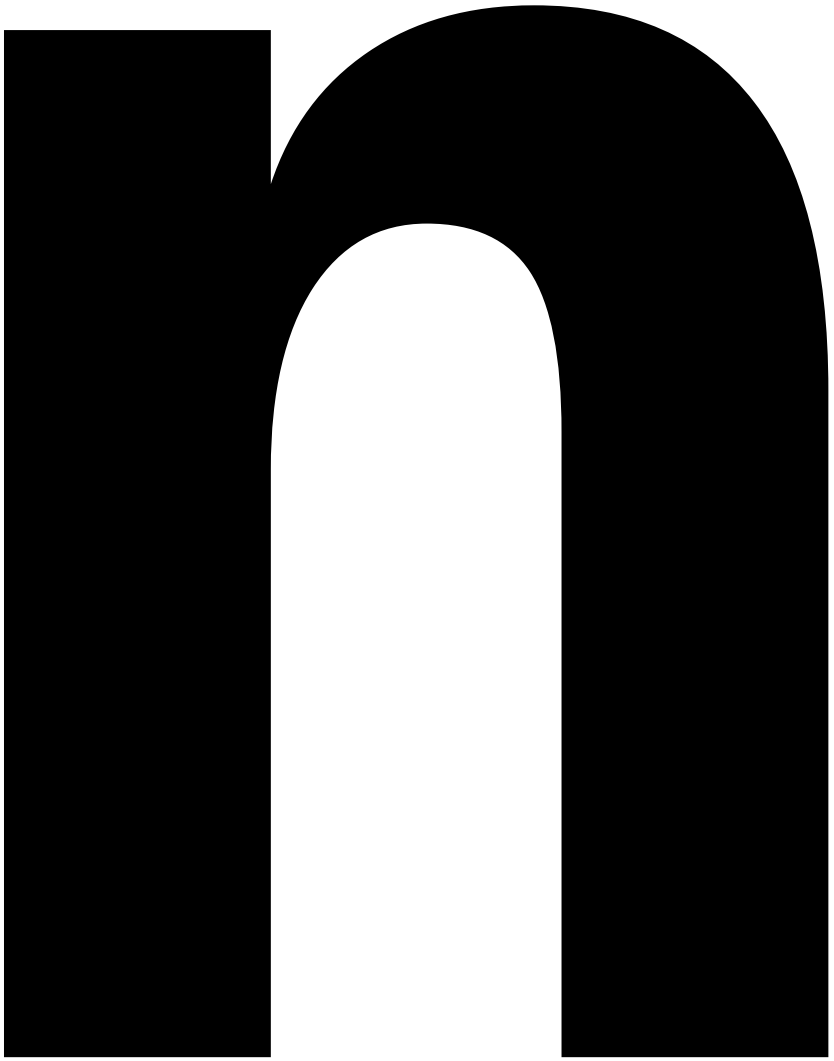




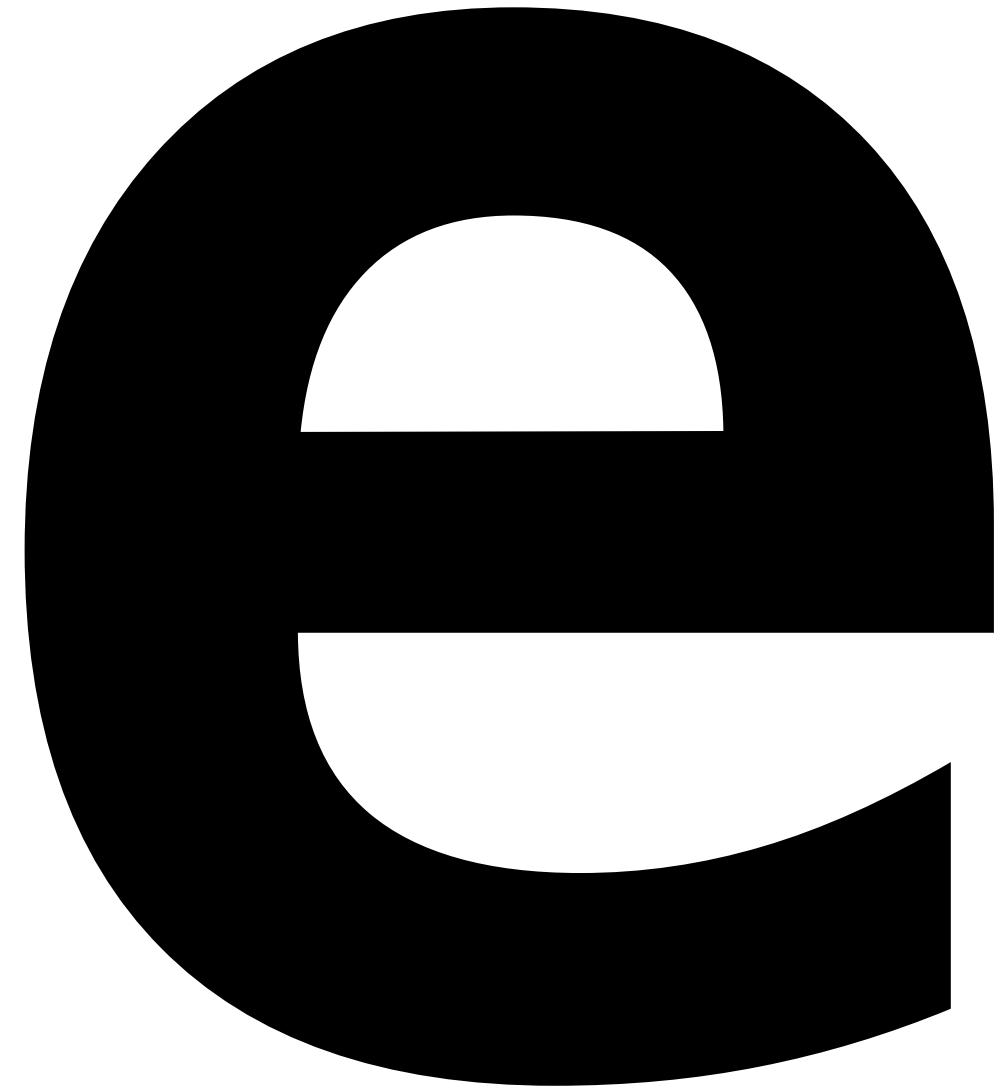


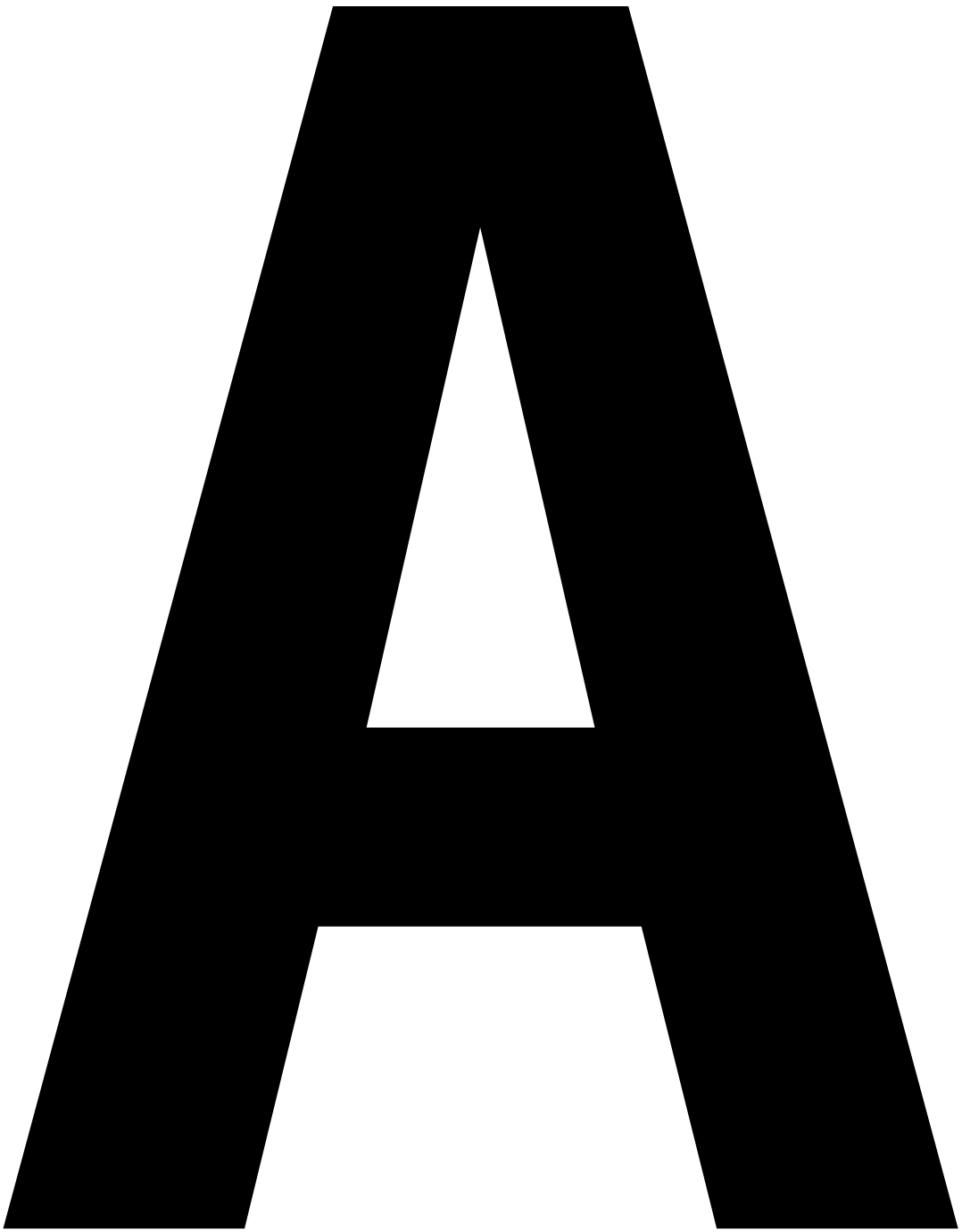


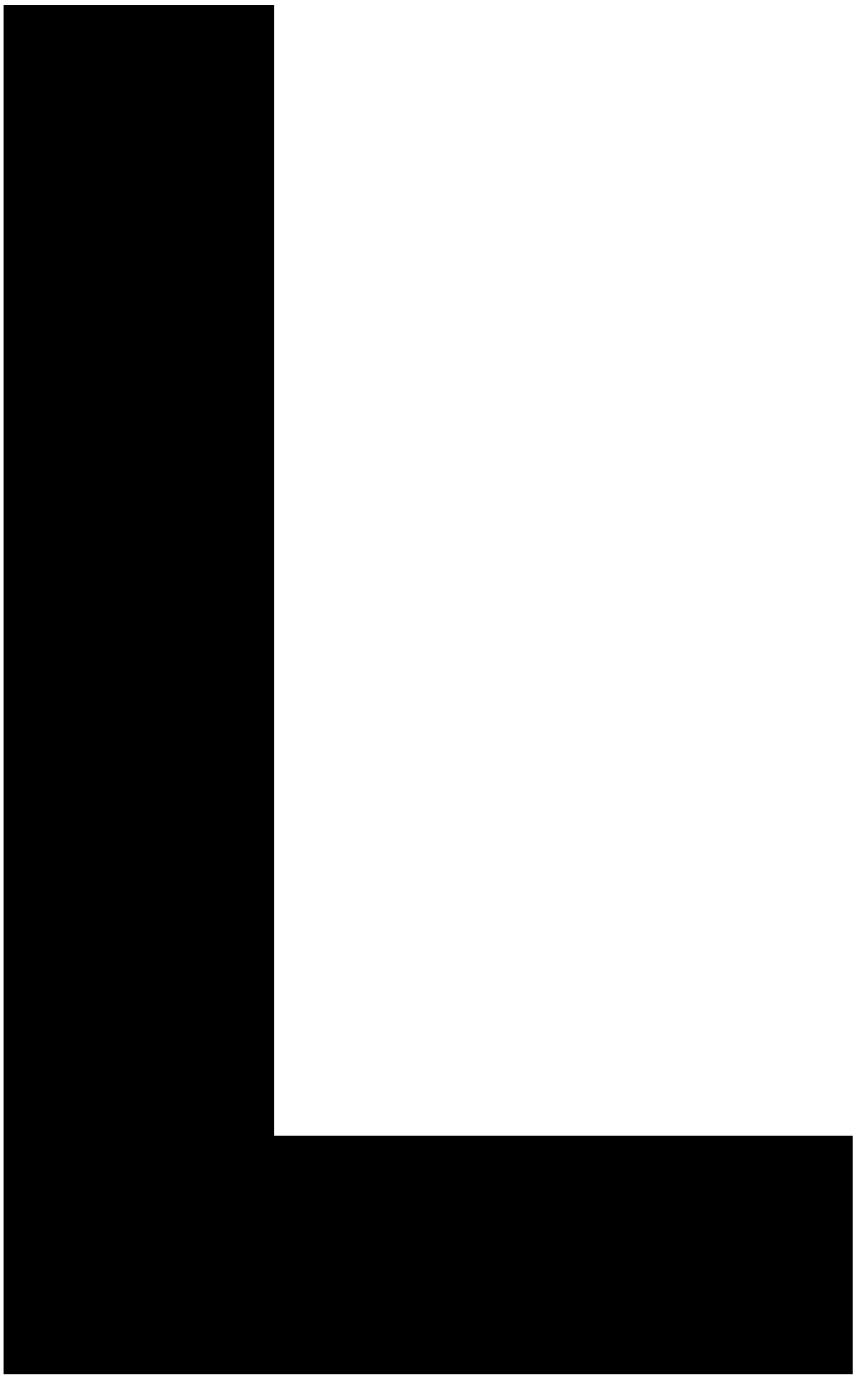


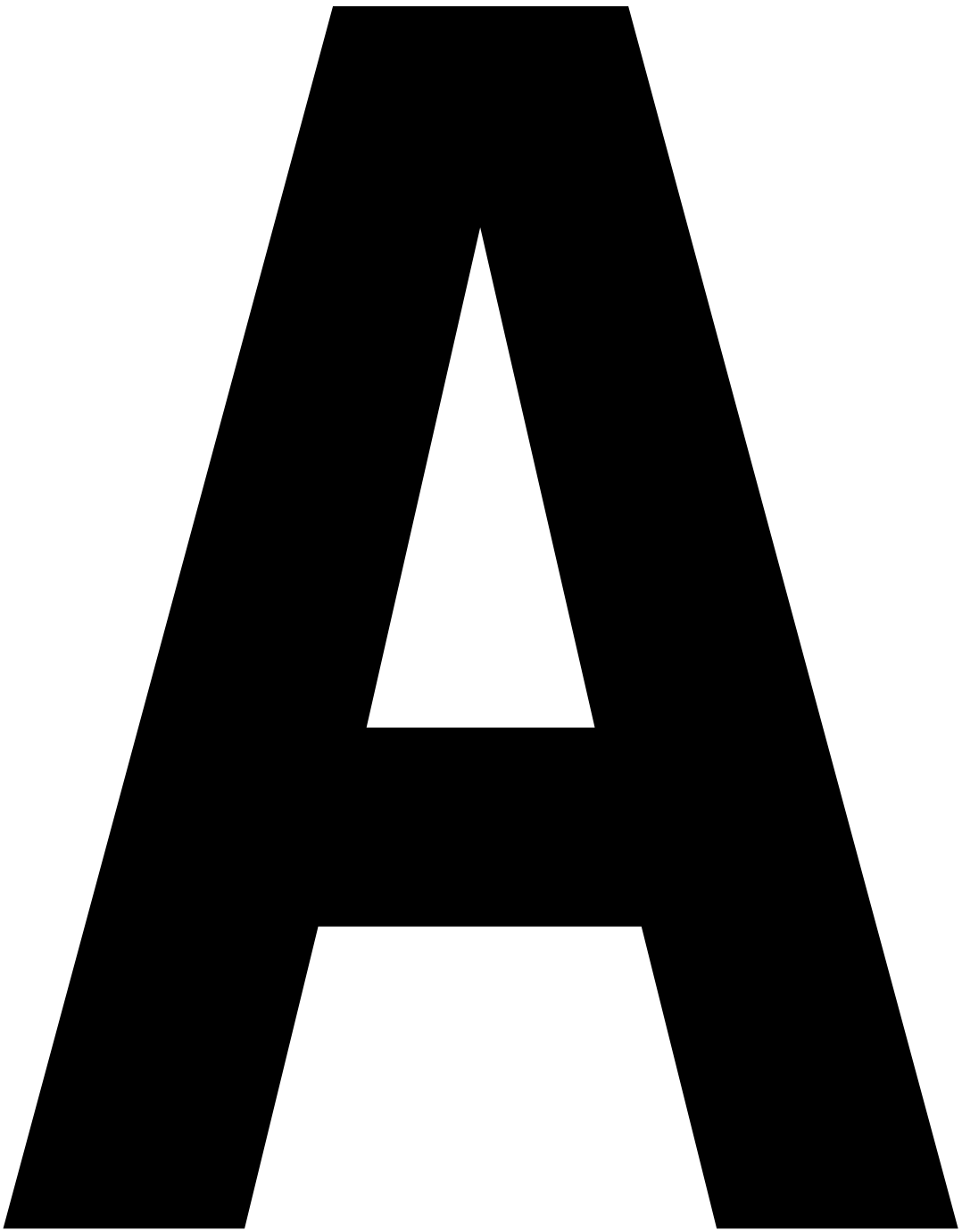


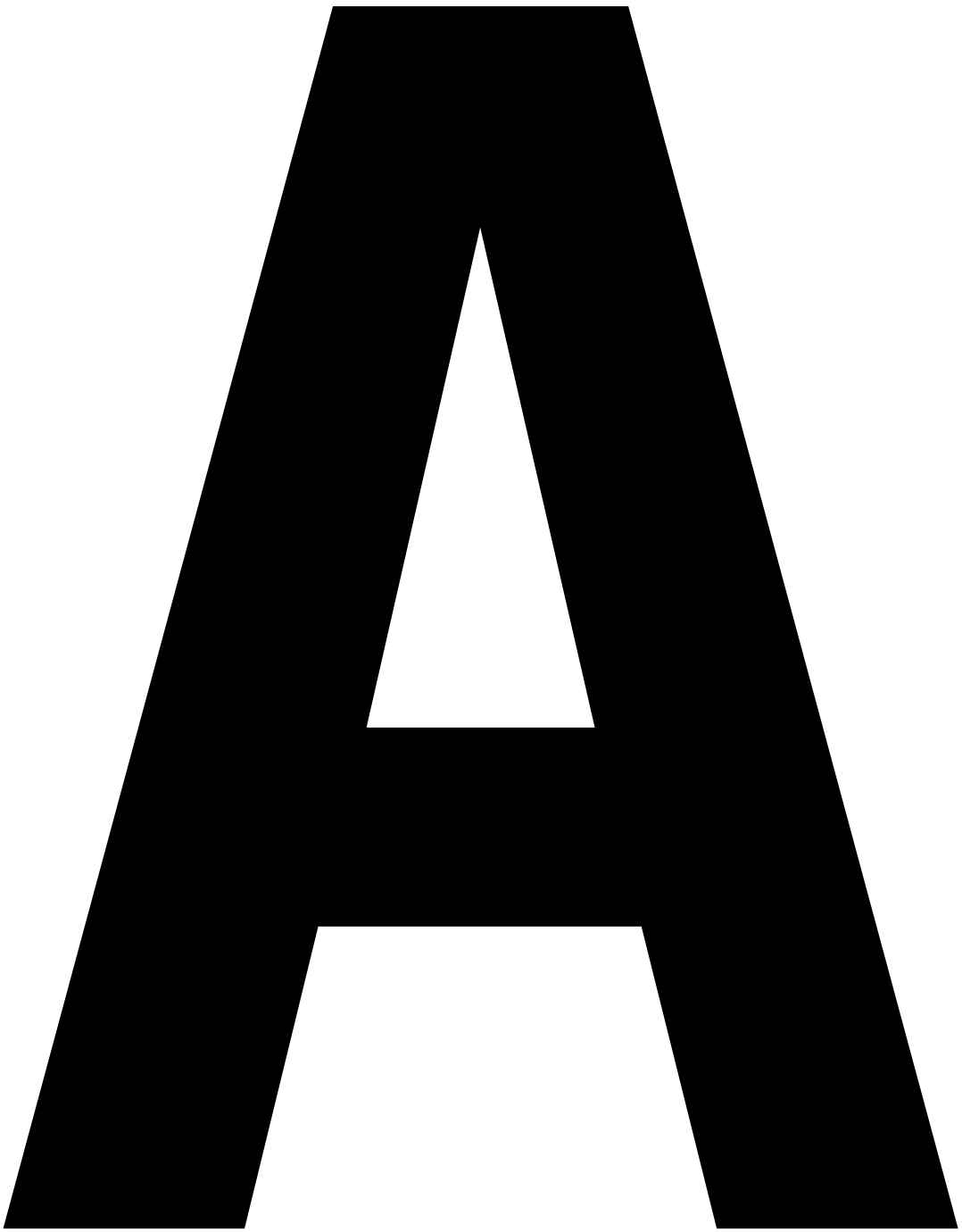
d

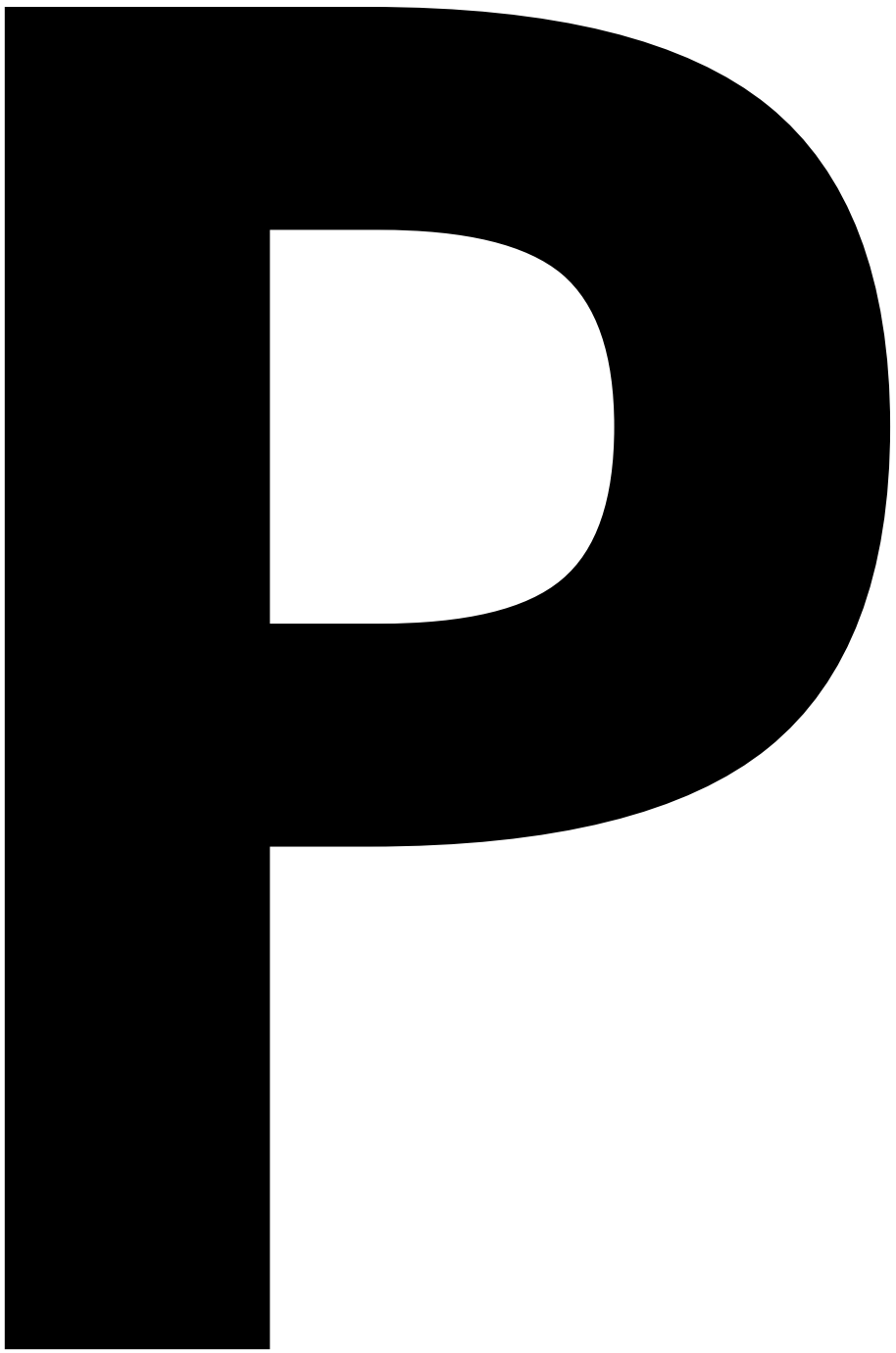


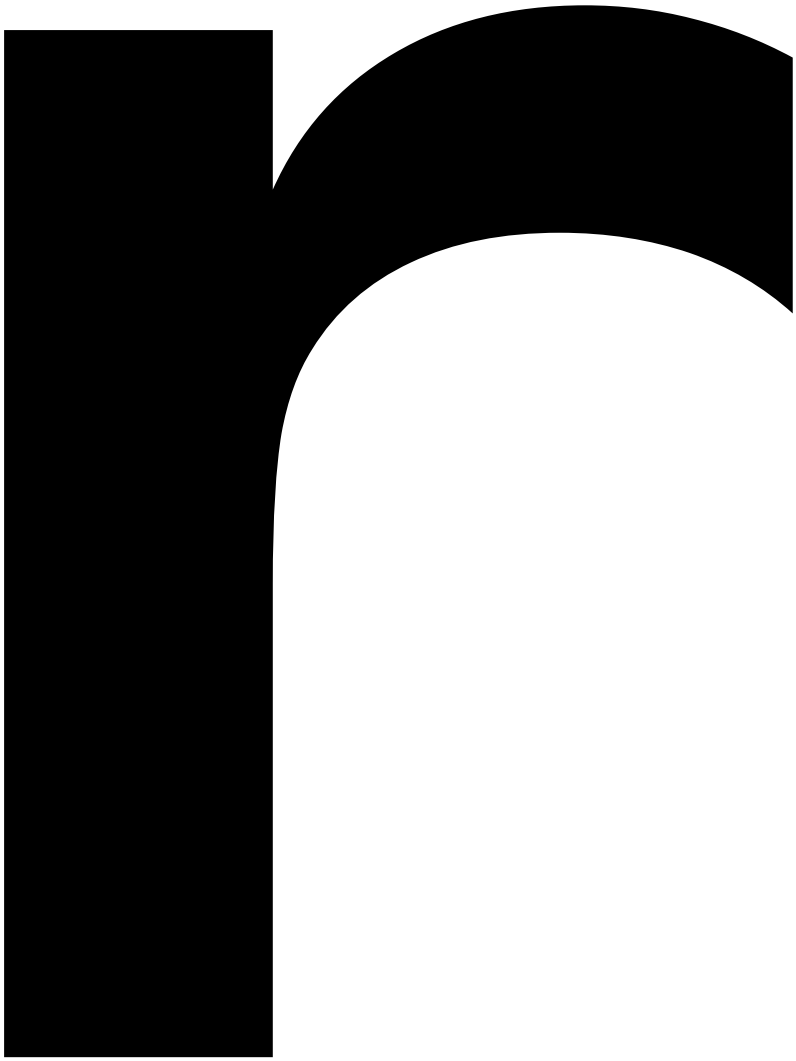


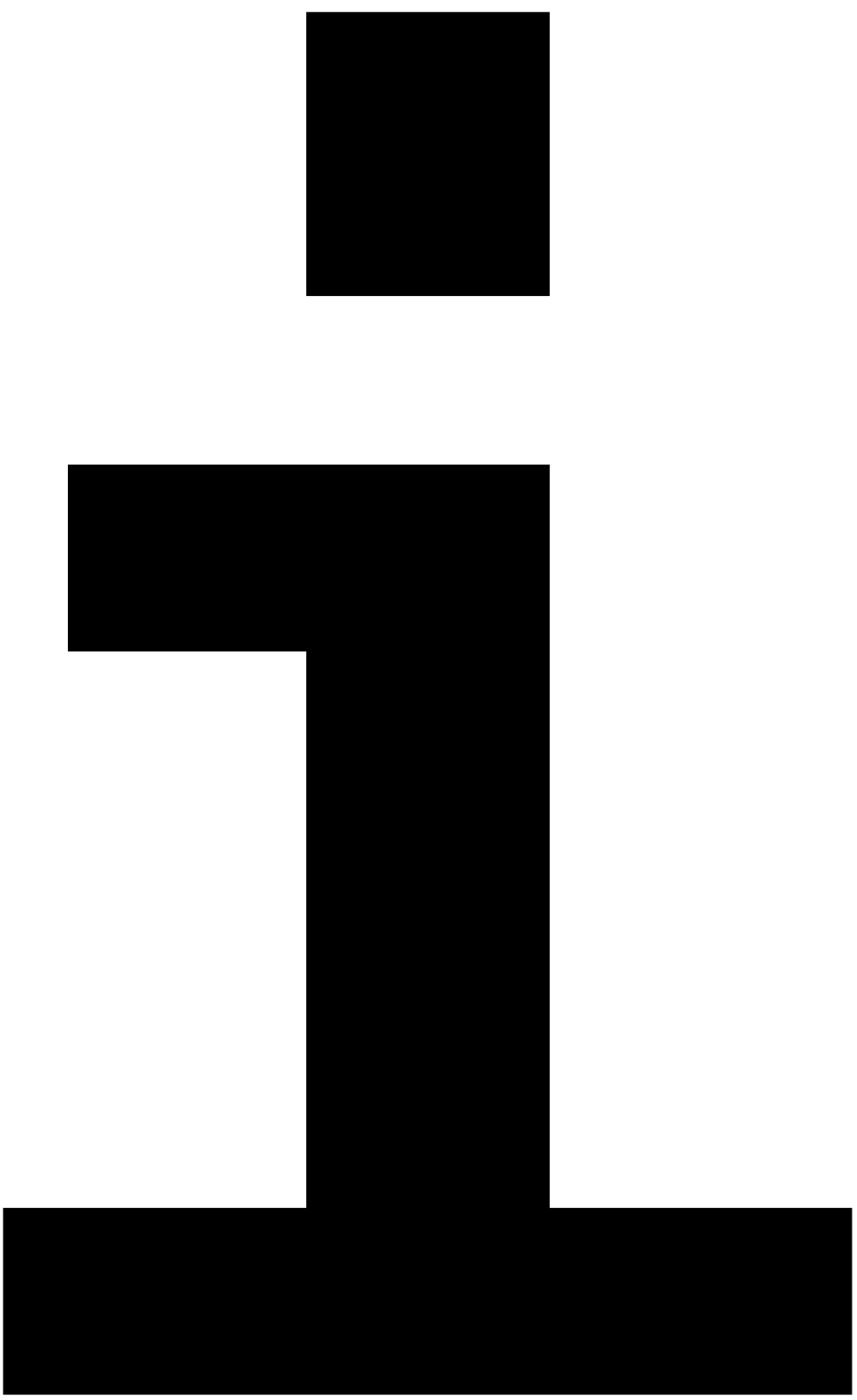


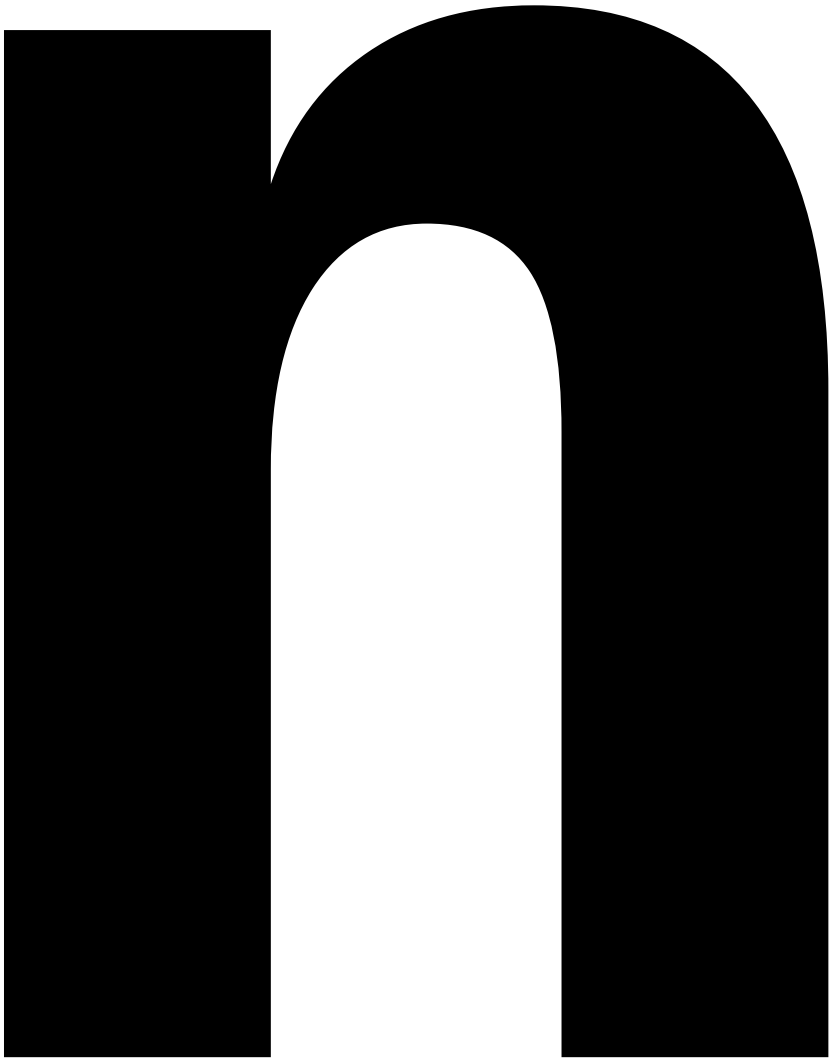


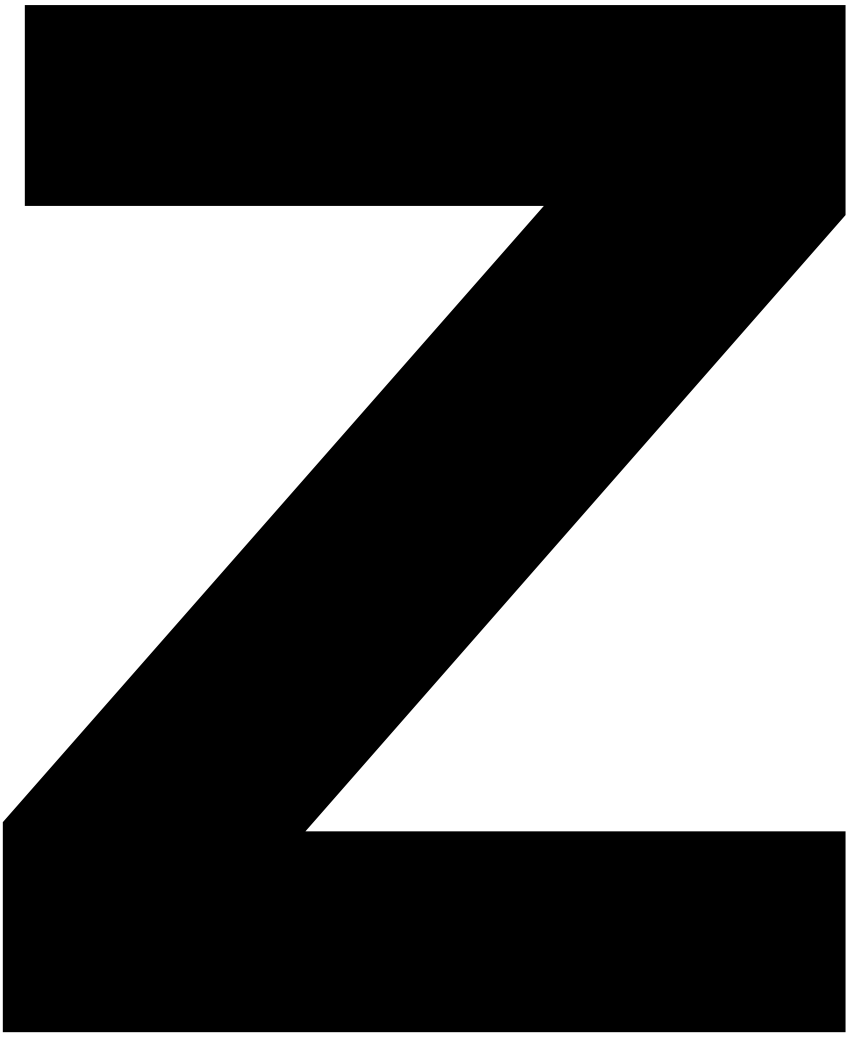


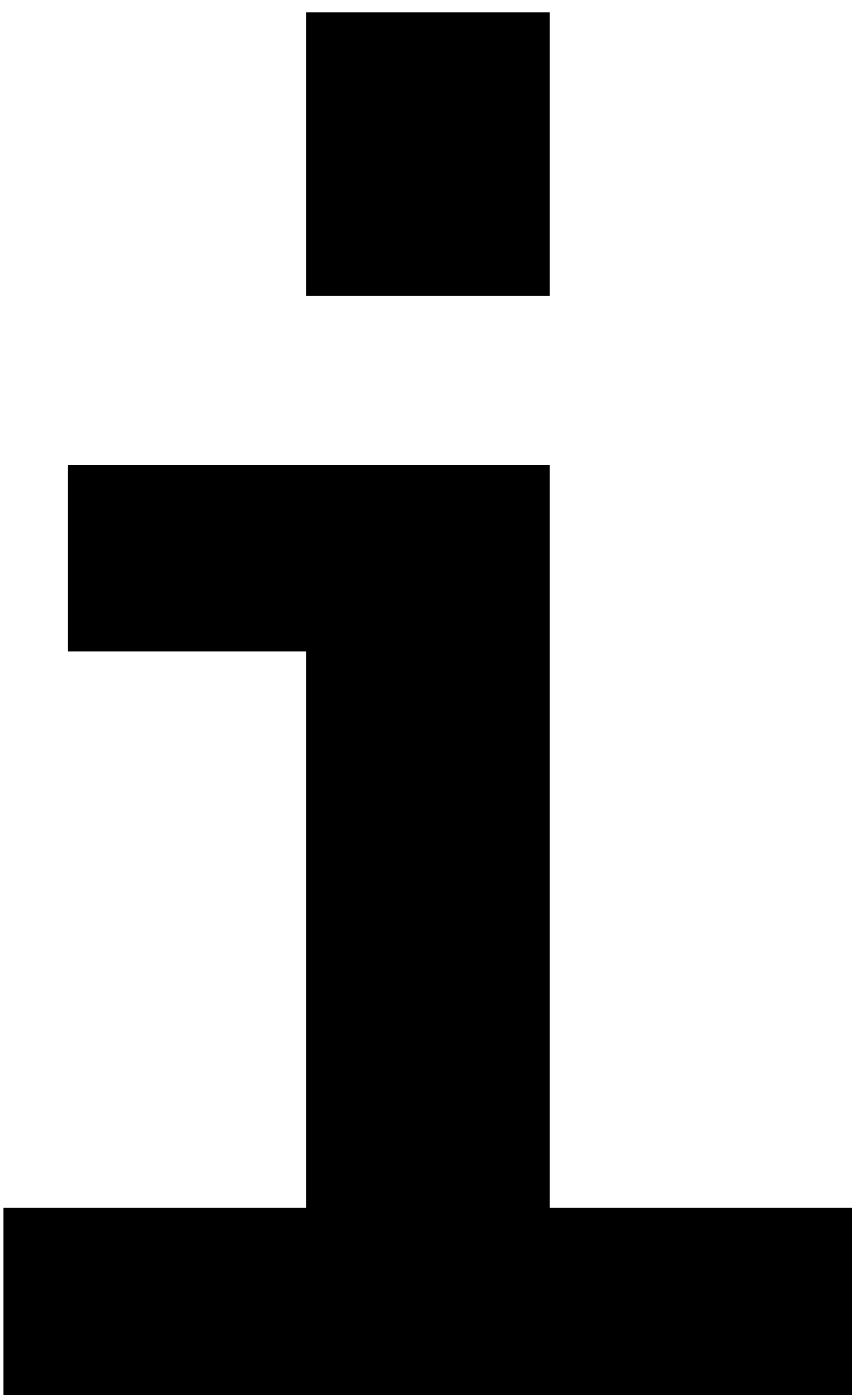


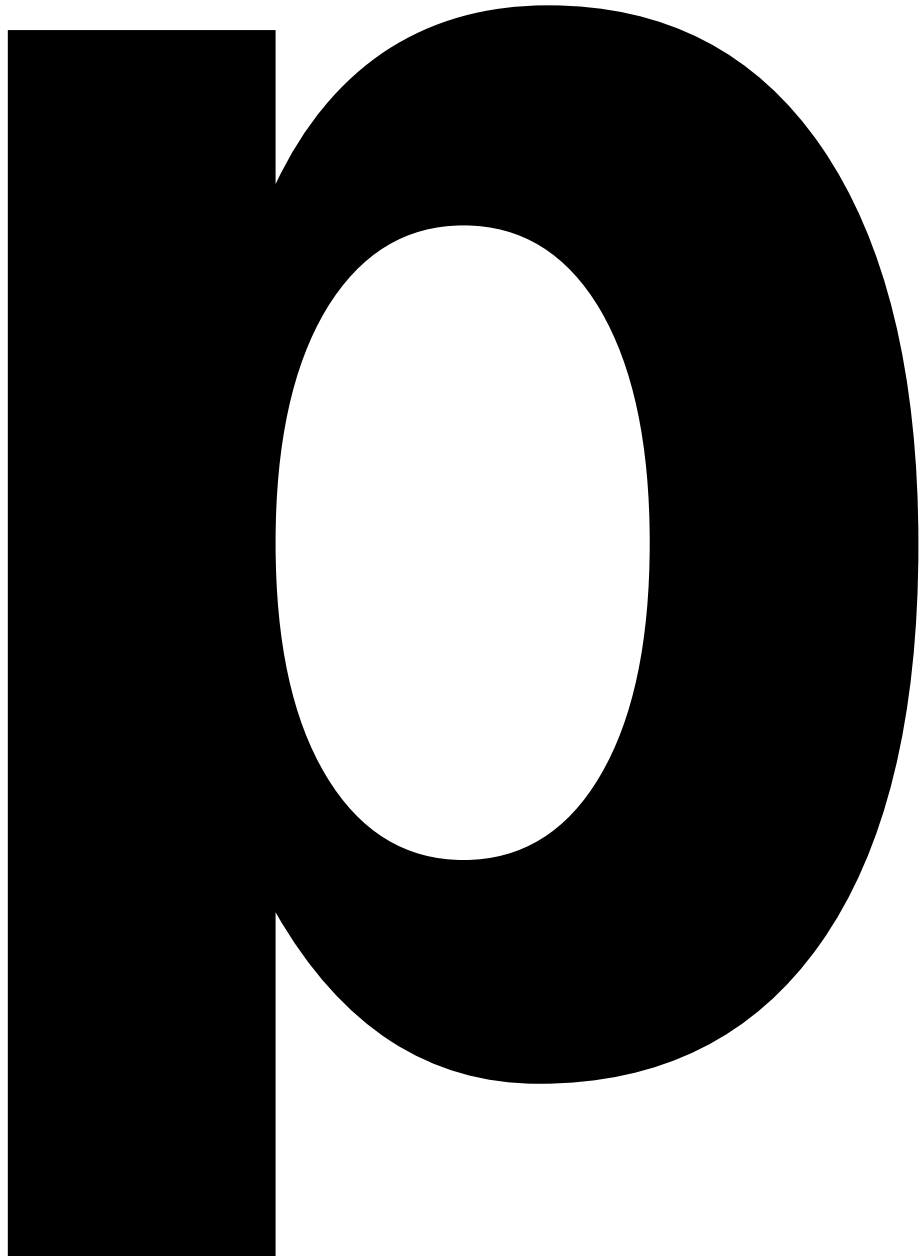


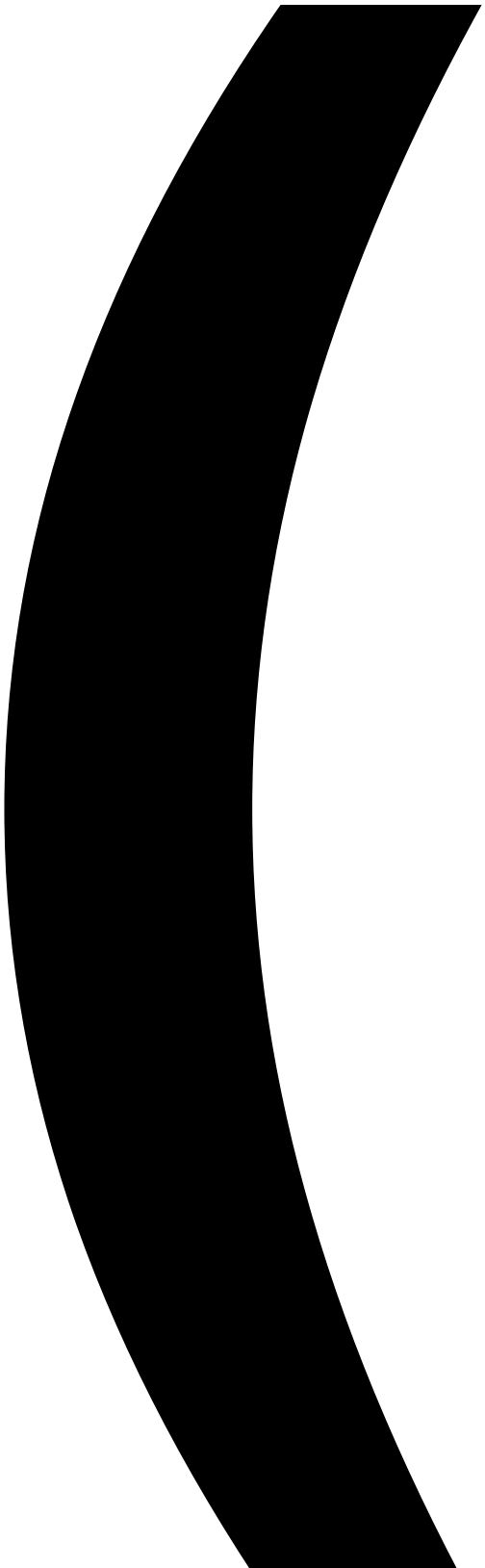


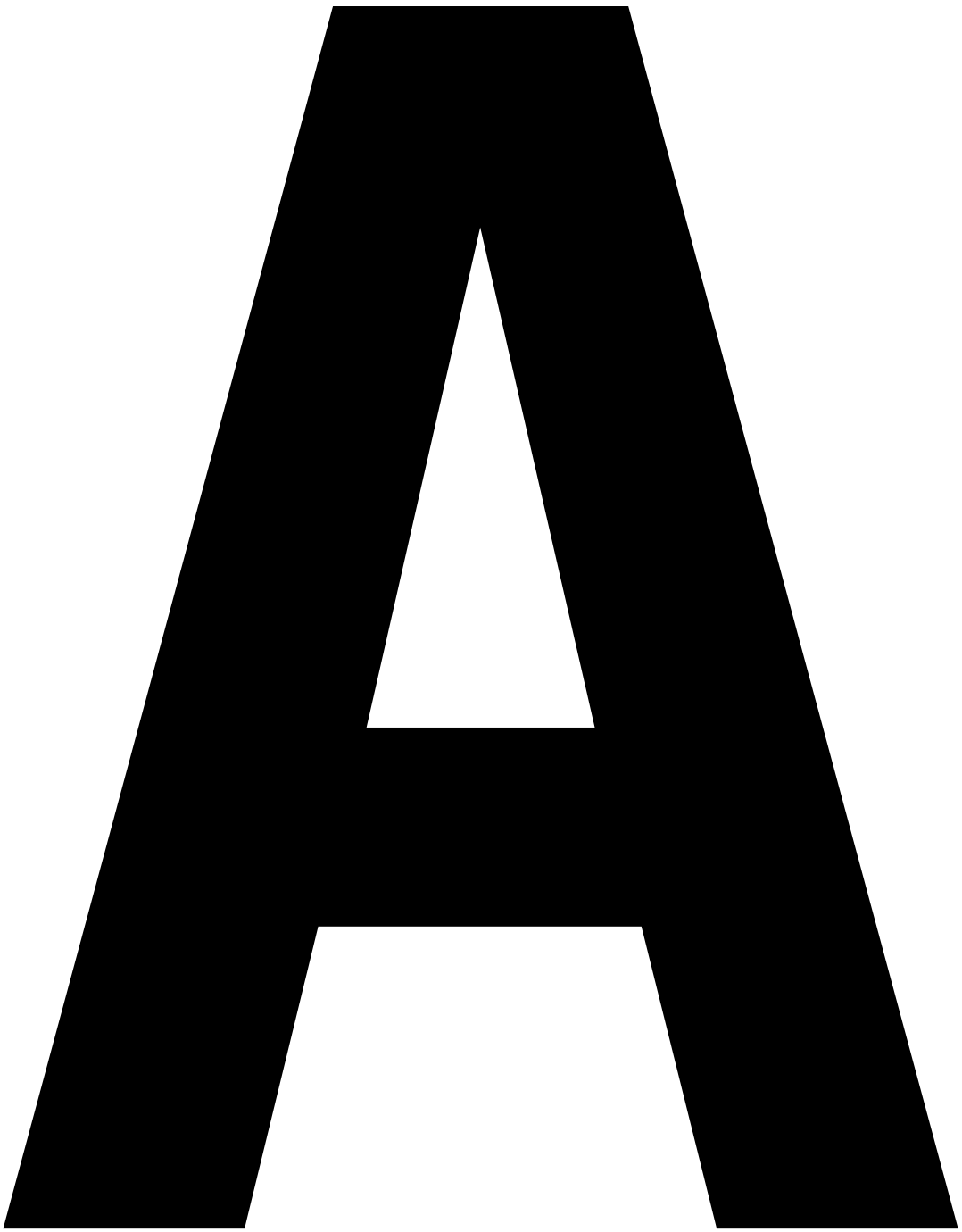




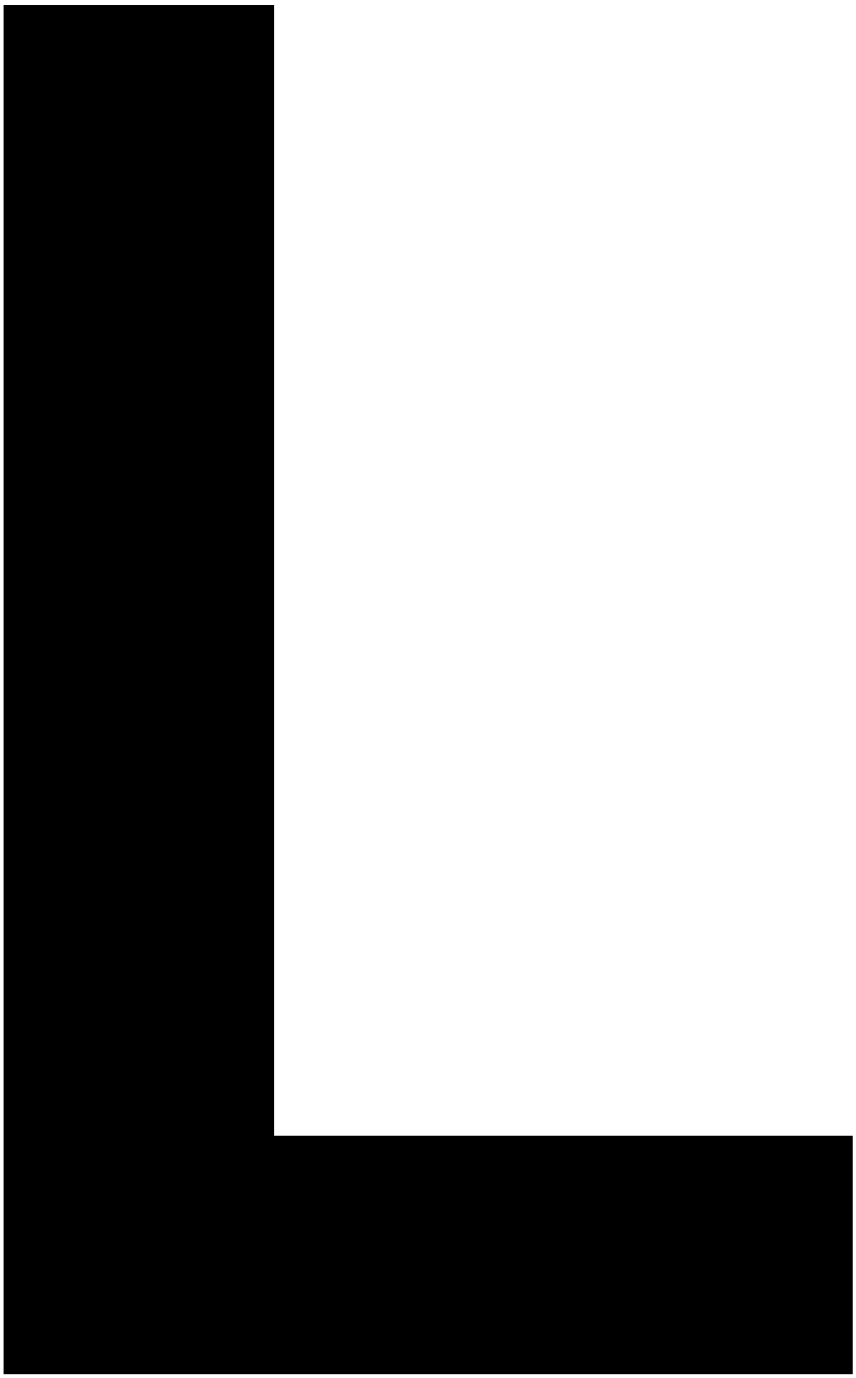


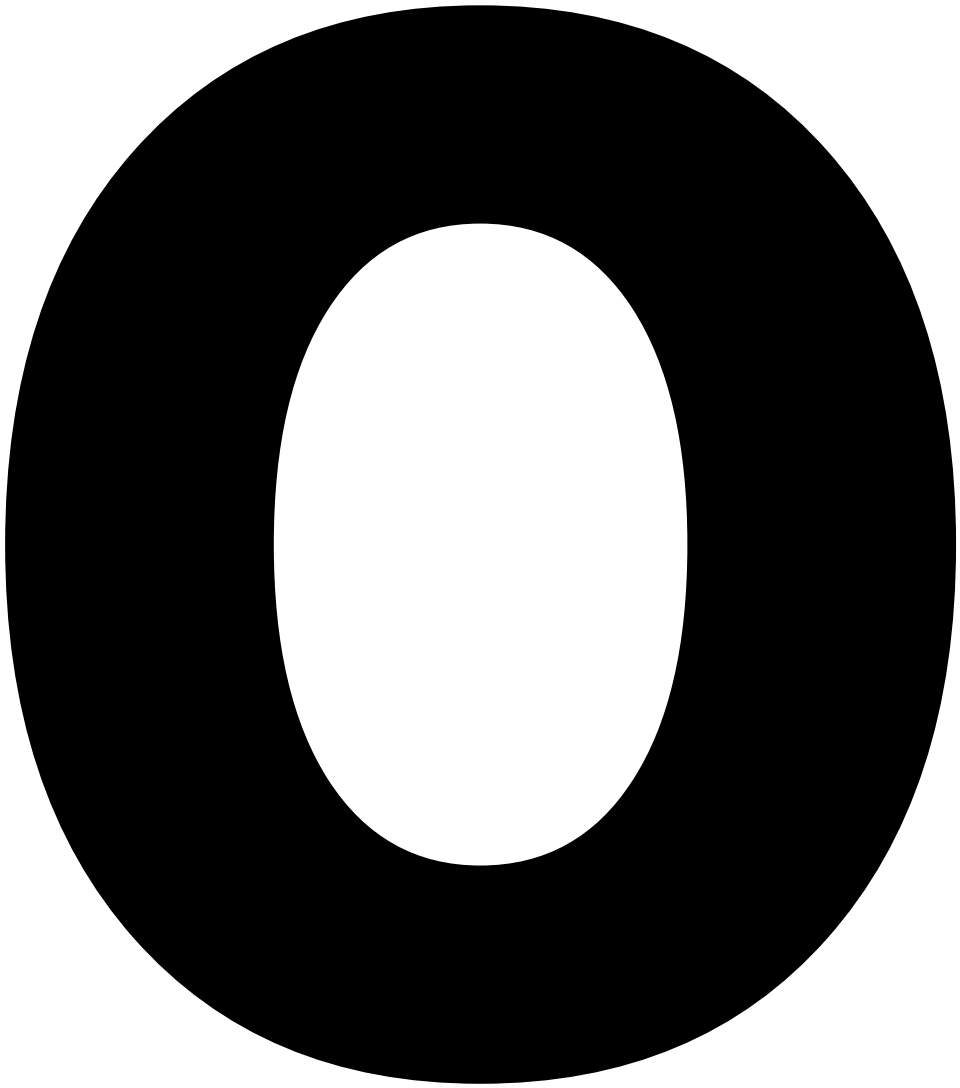


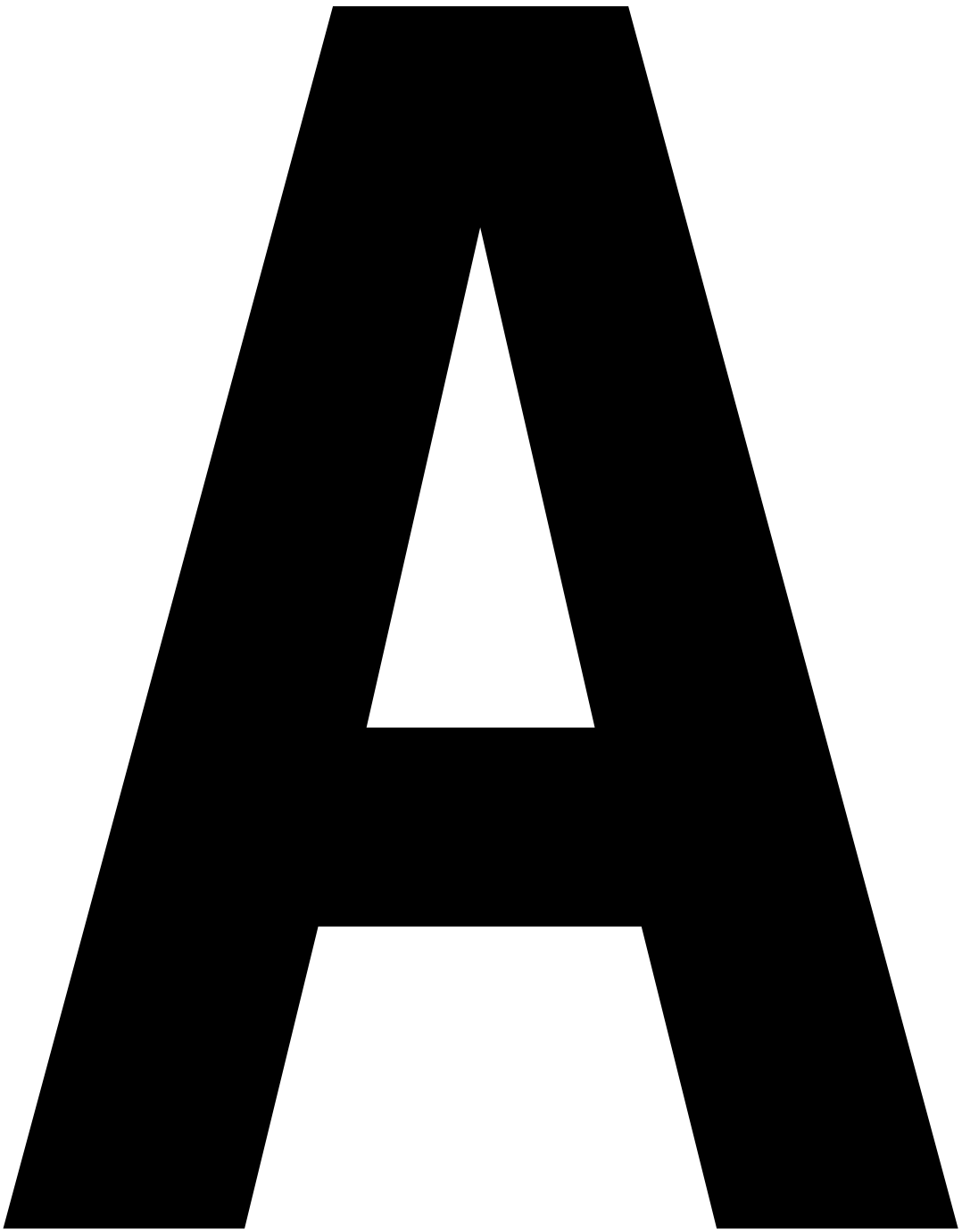




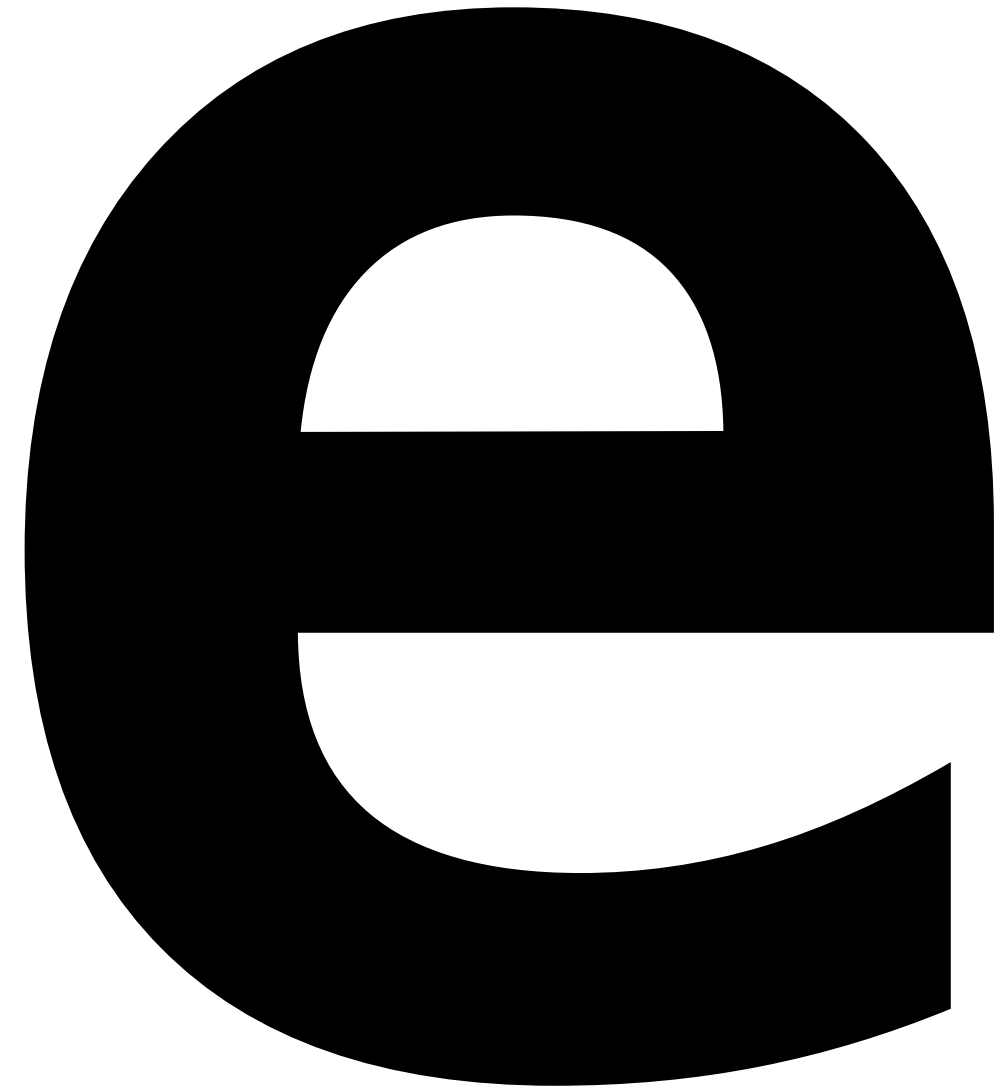
S

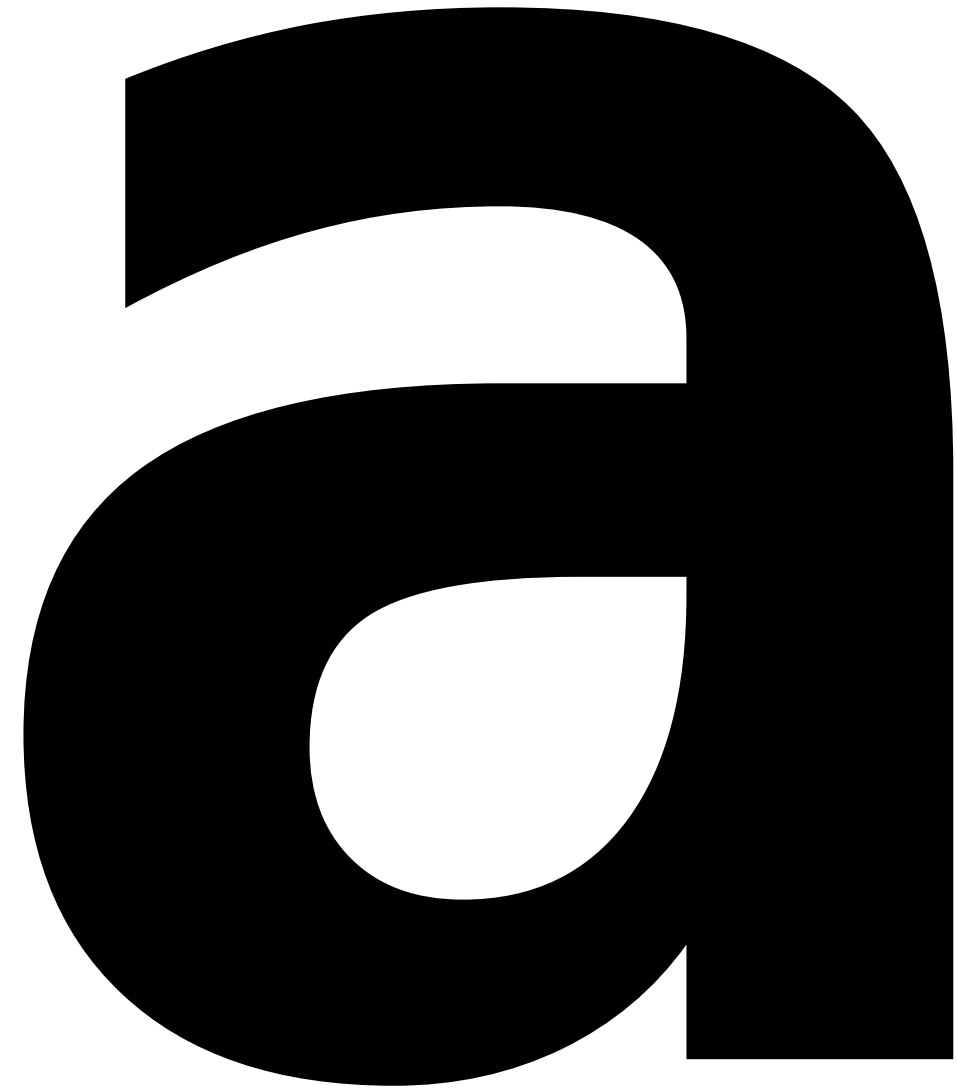




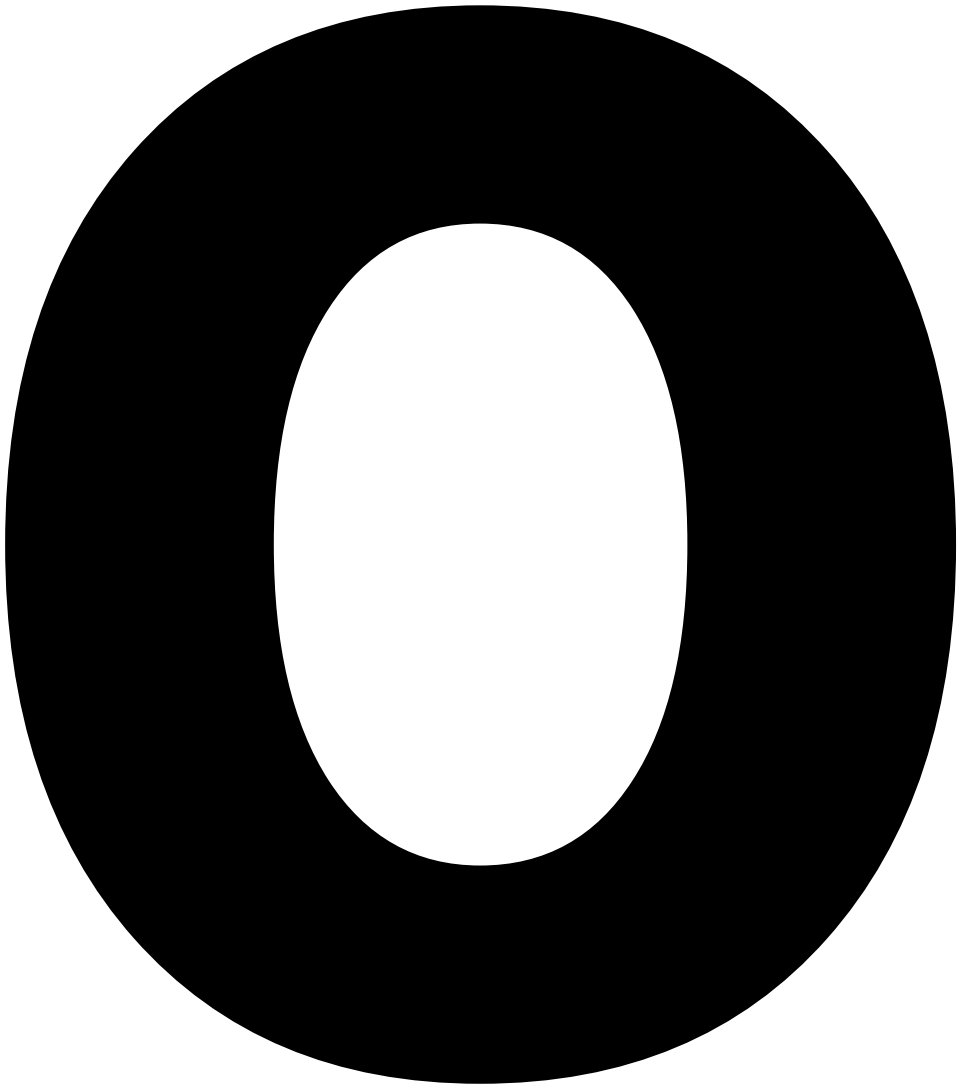


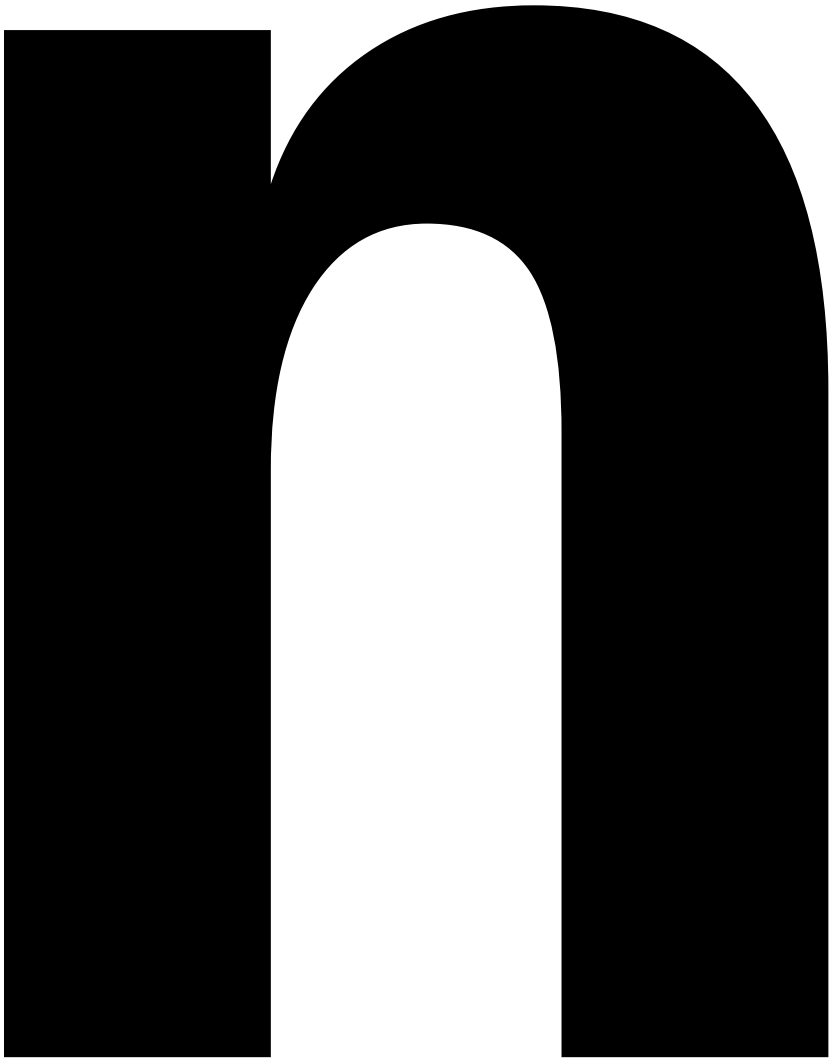
S

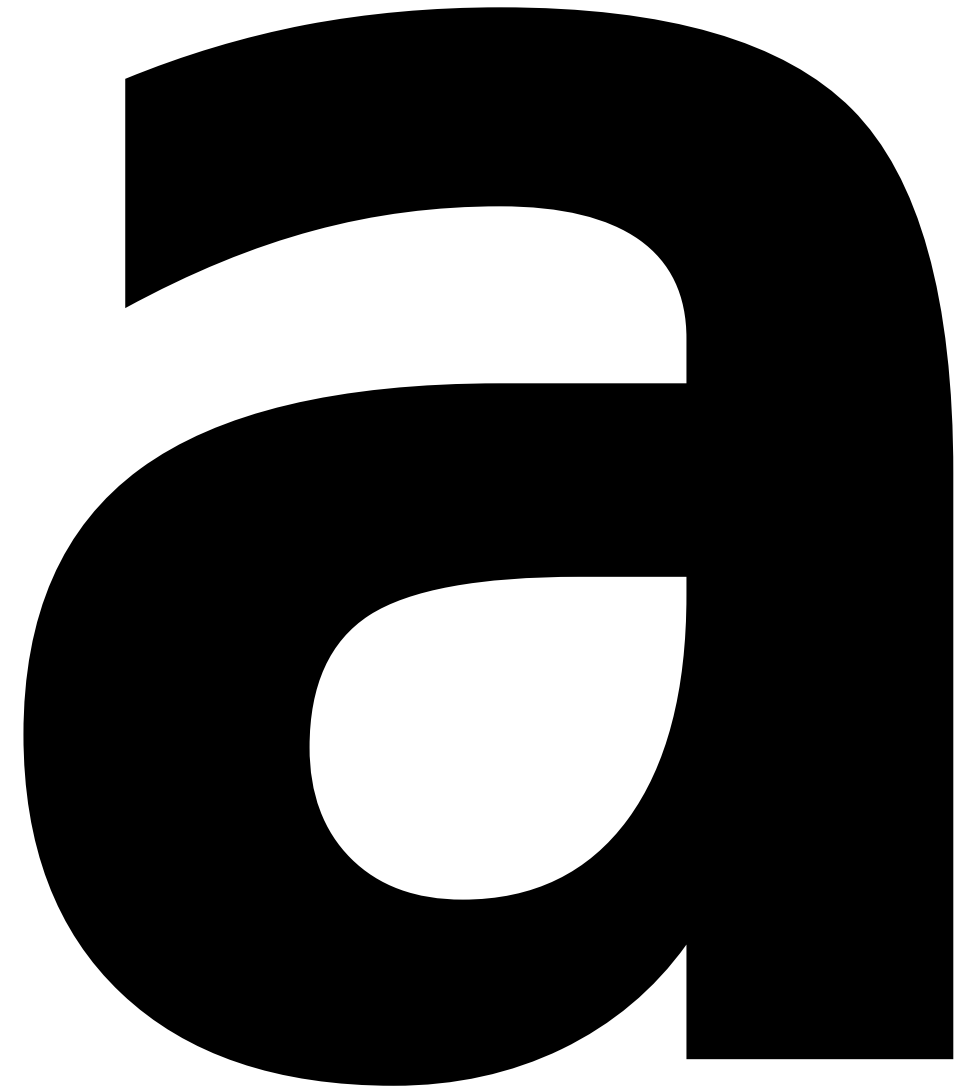


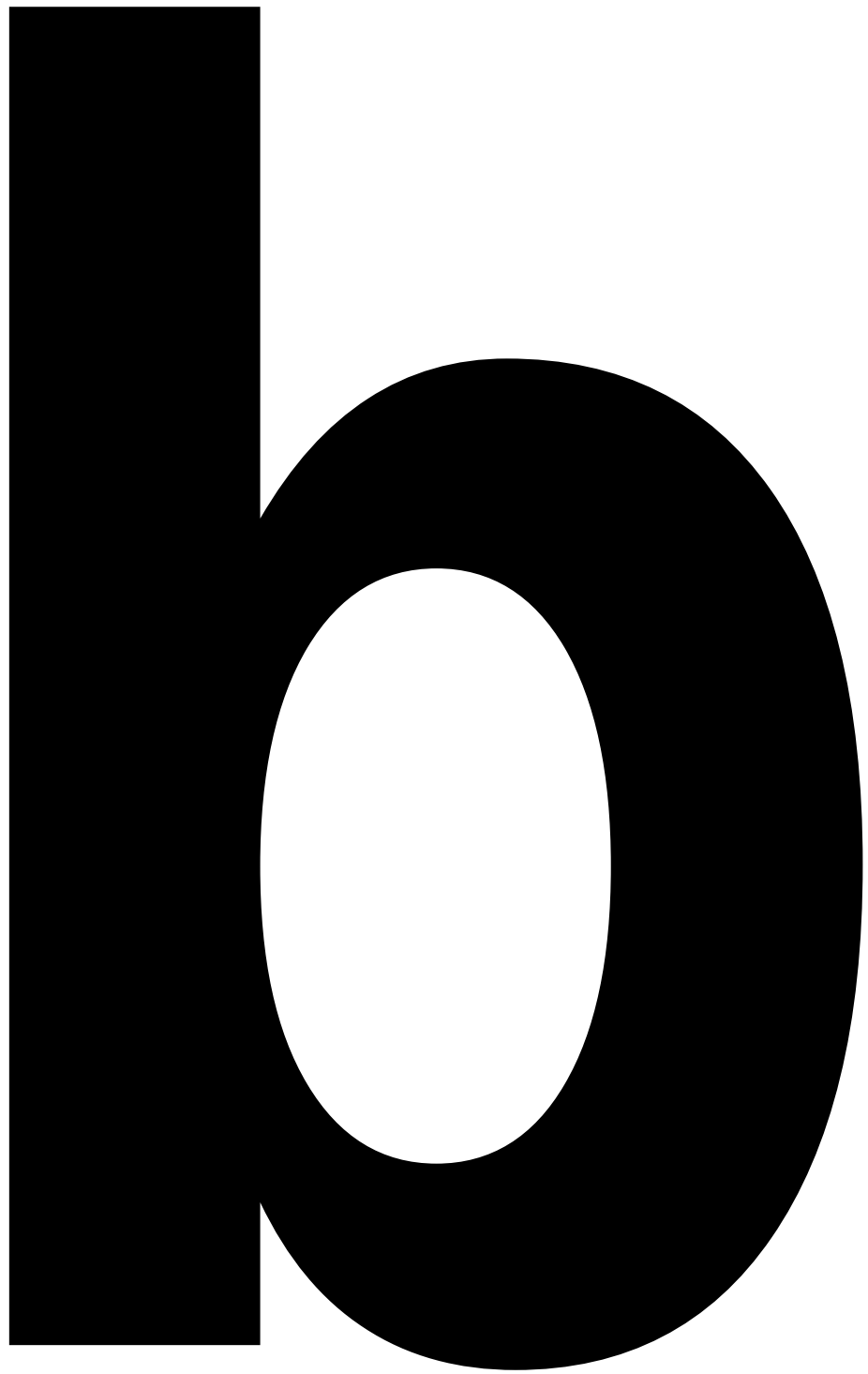


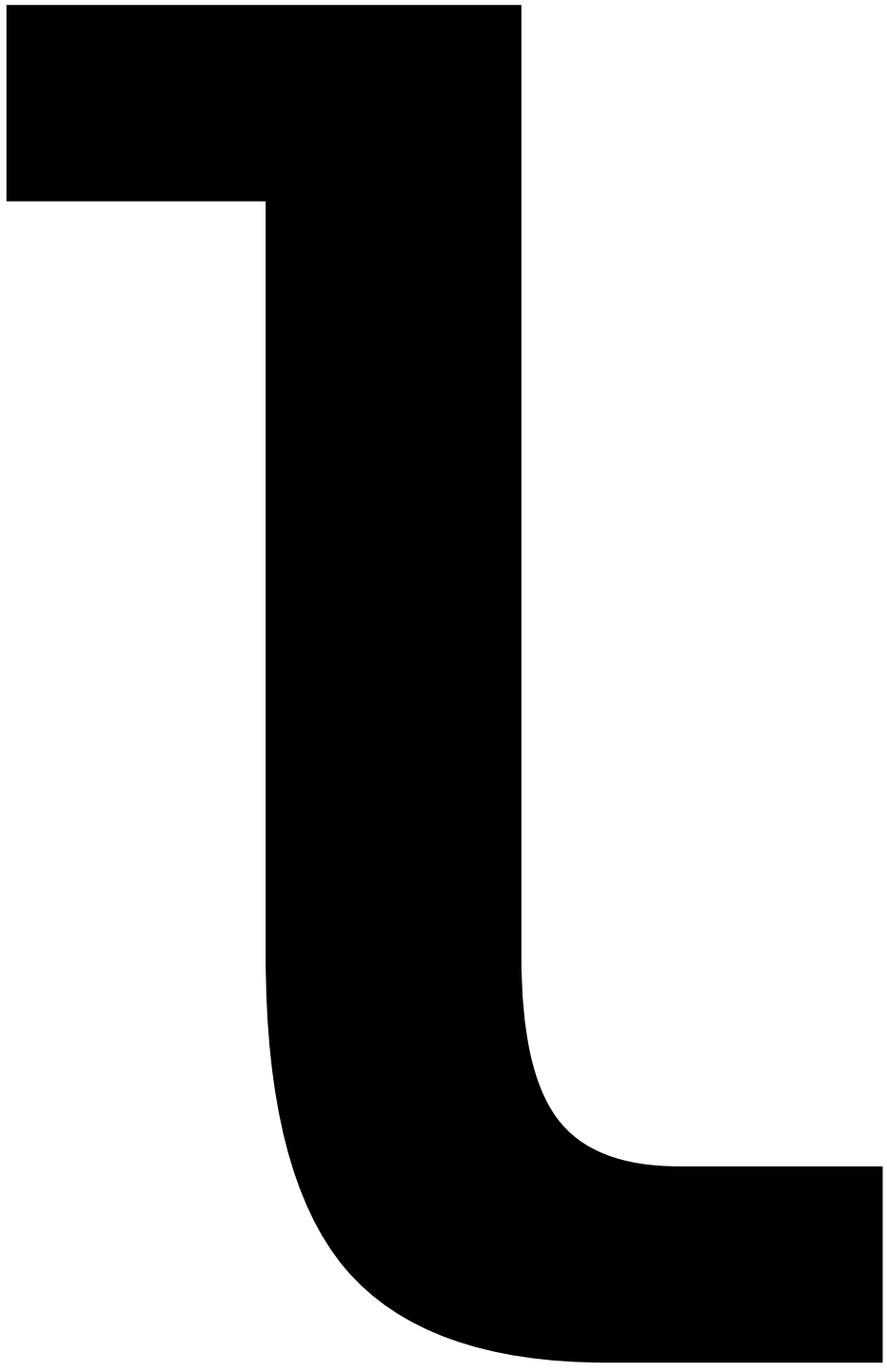
S

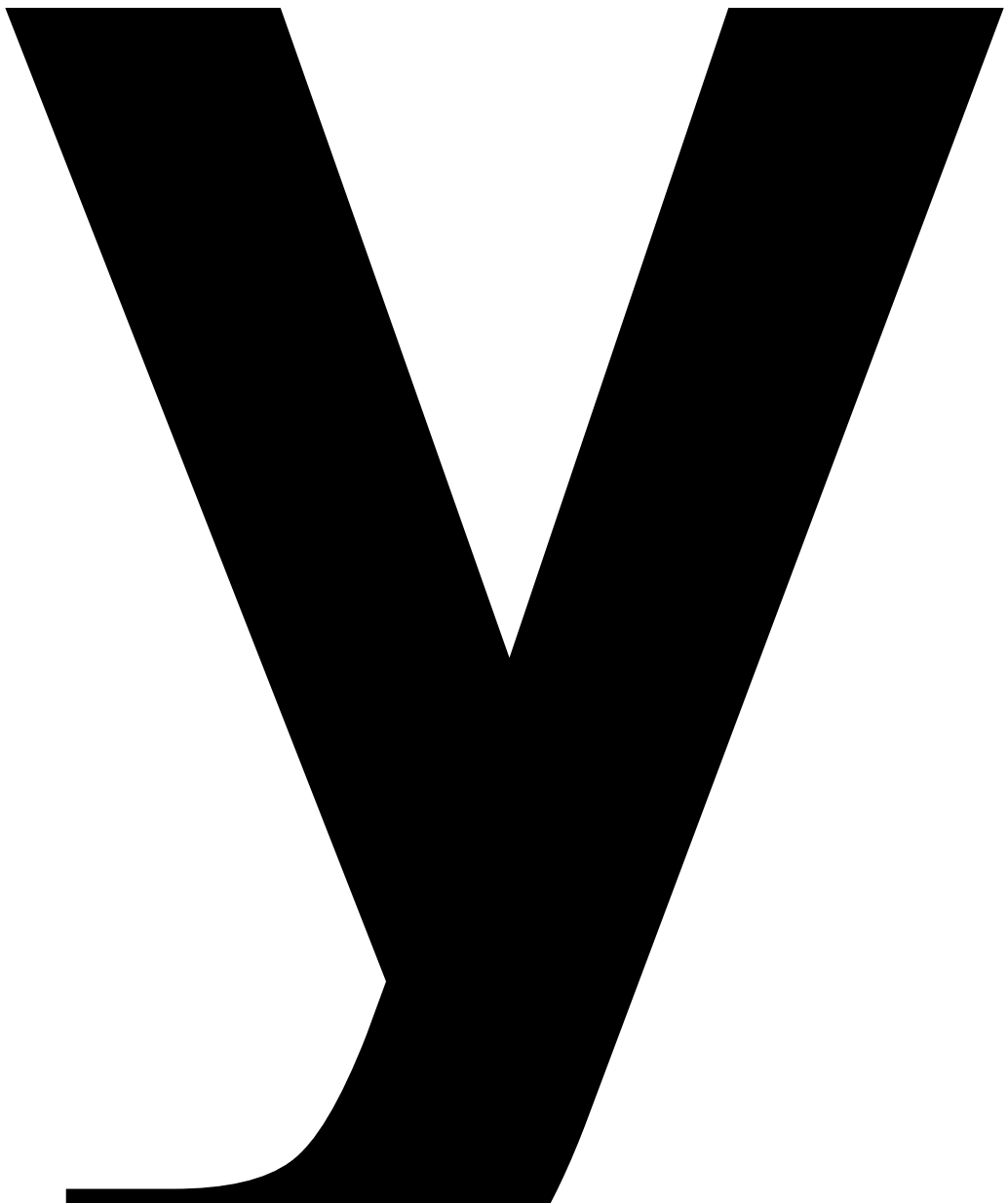


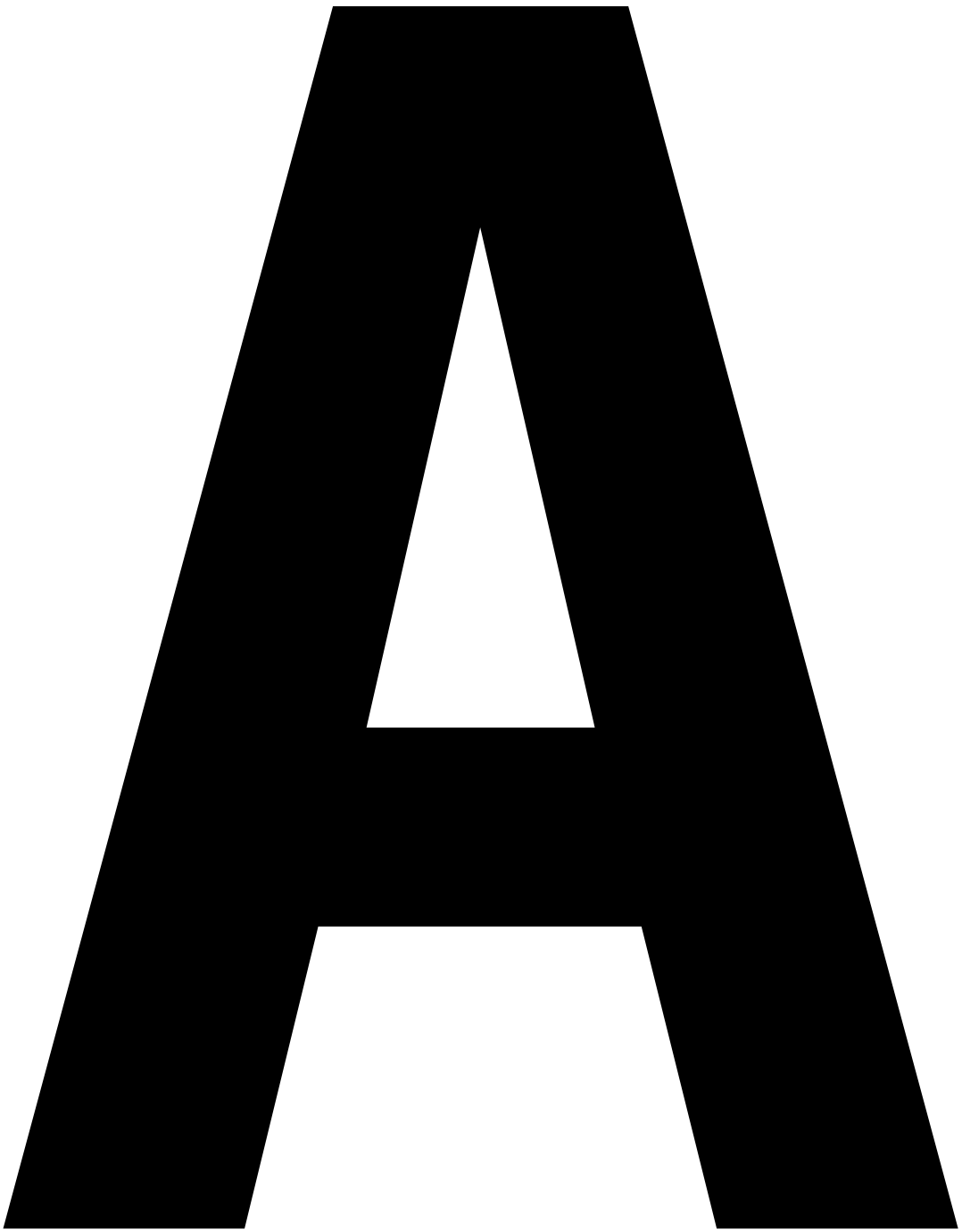


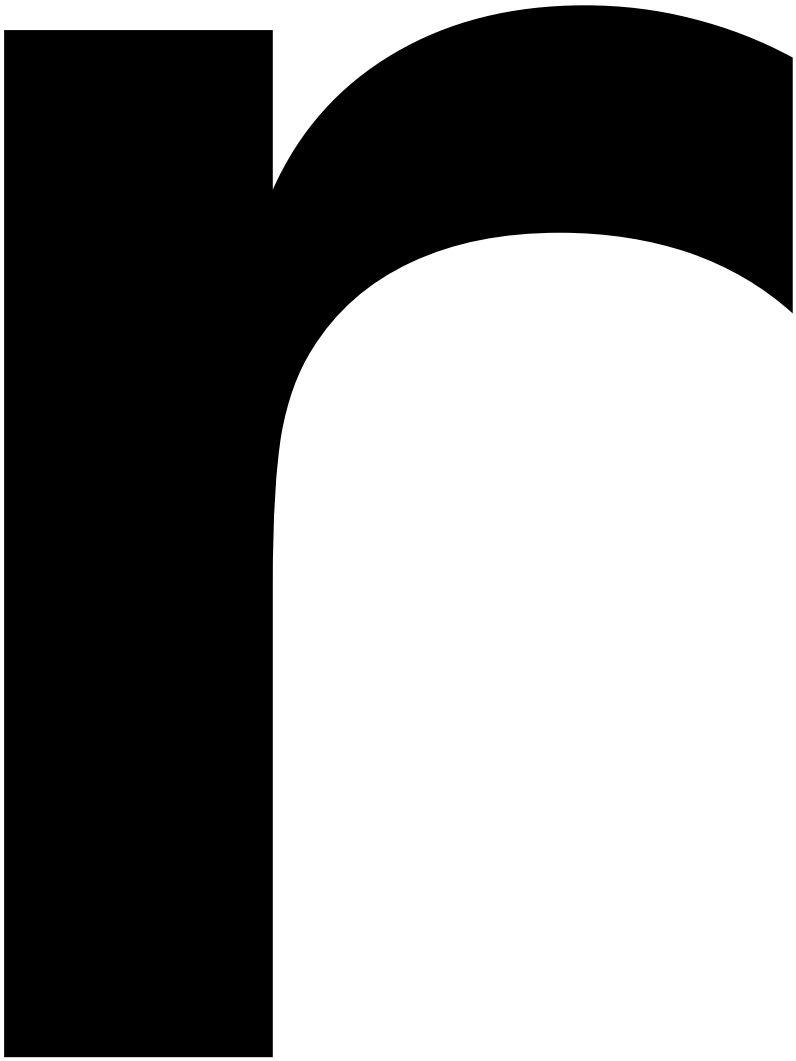


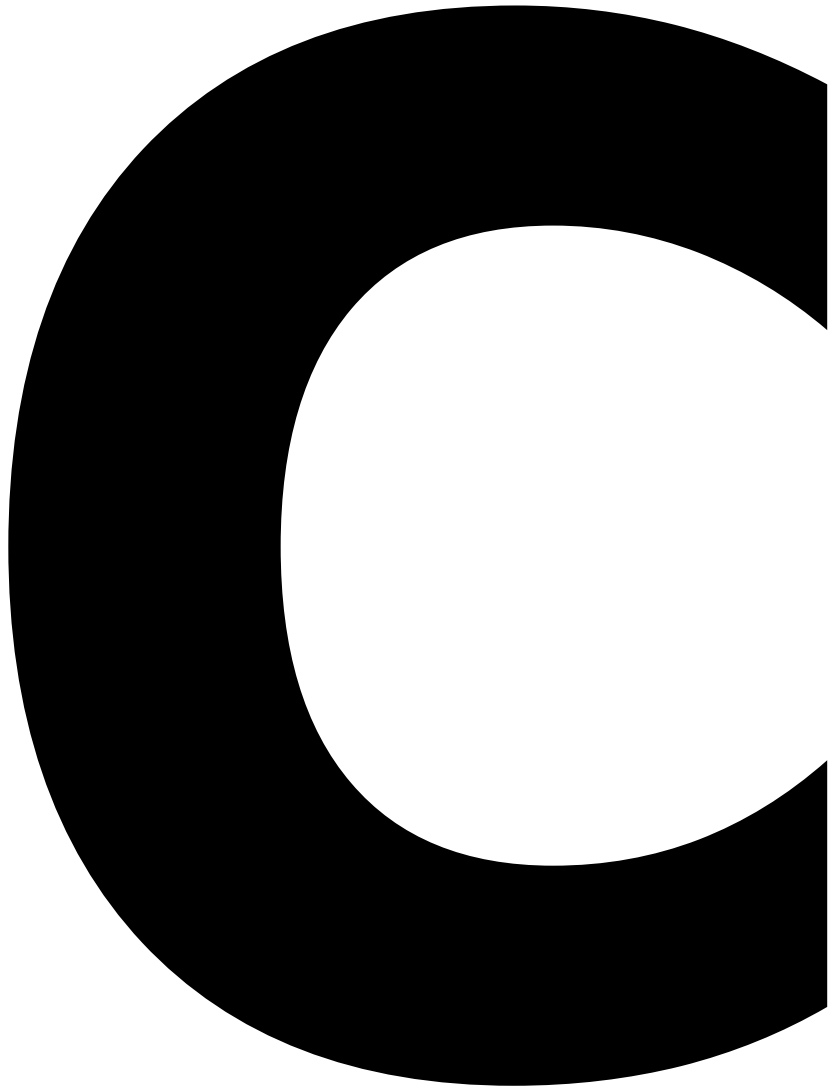


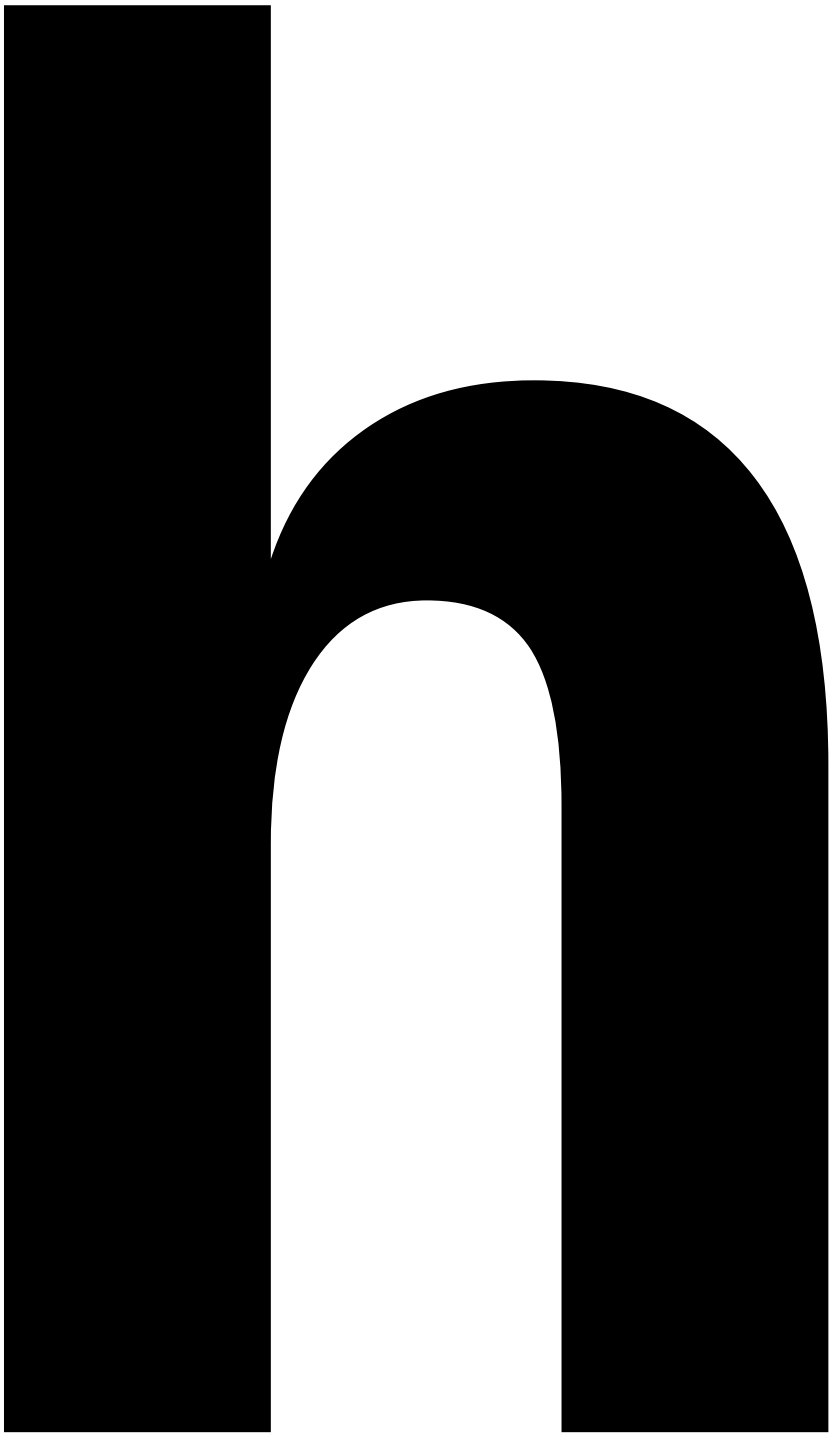


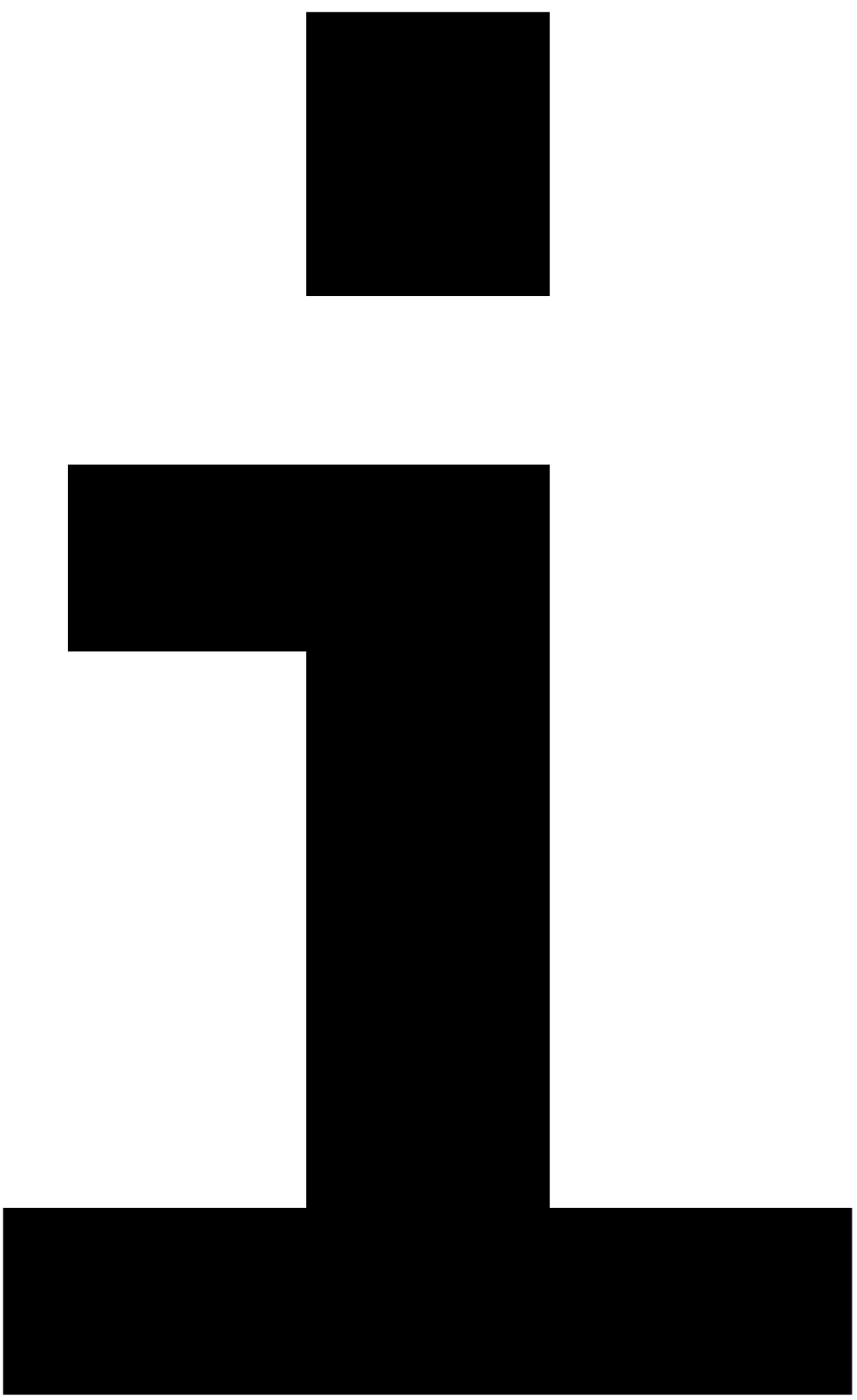


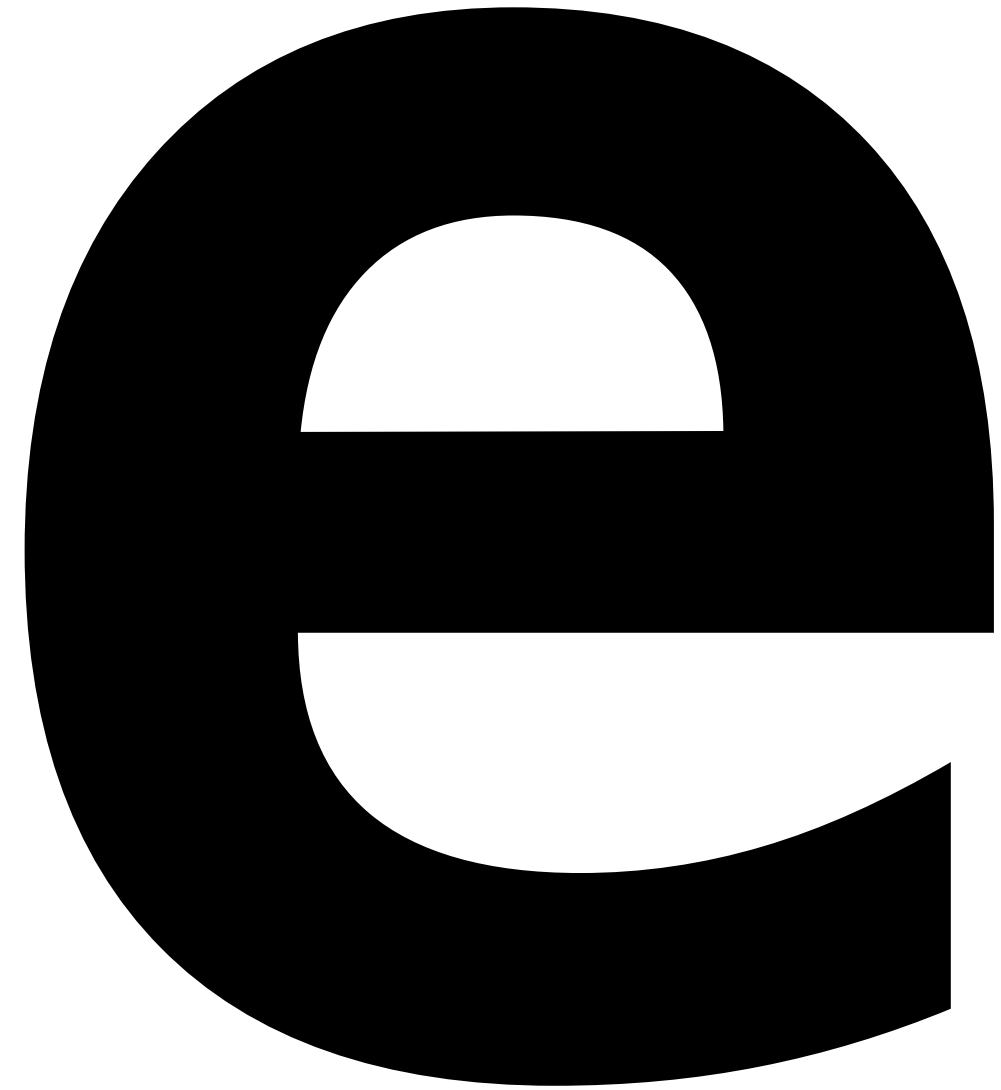


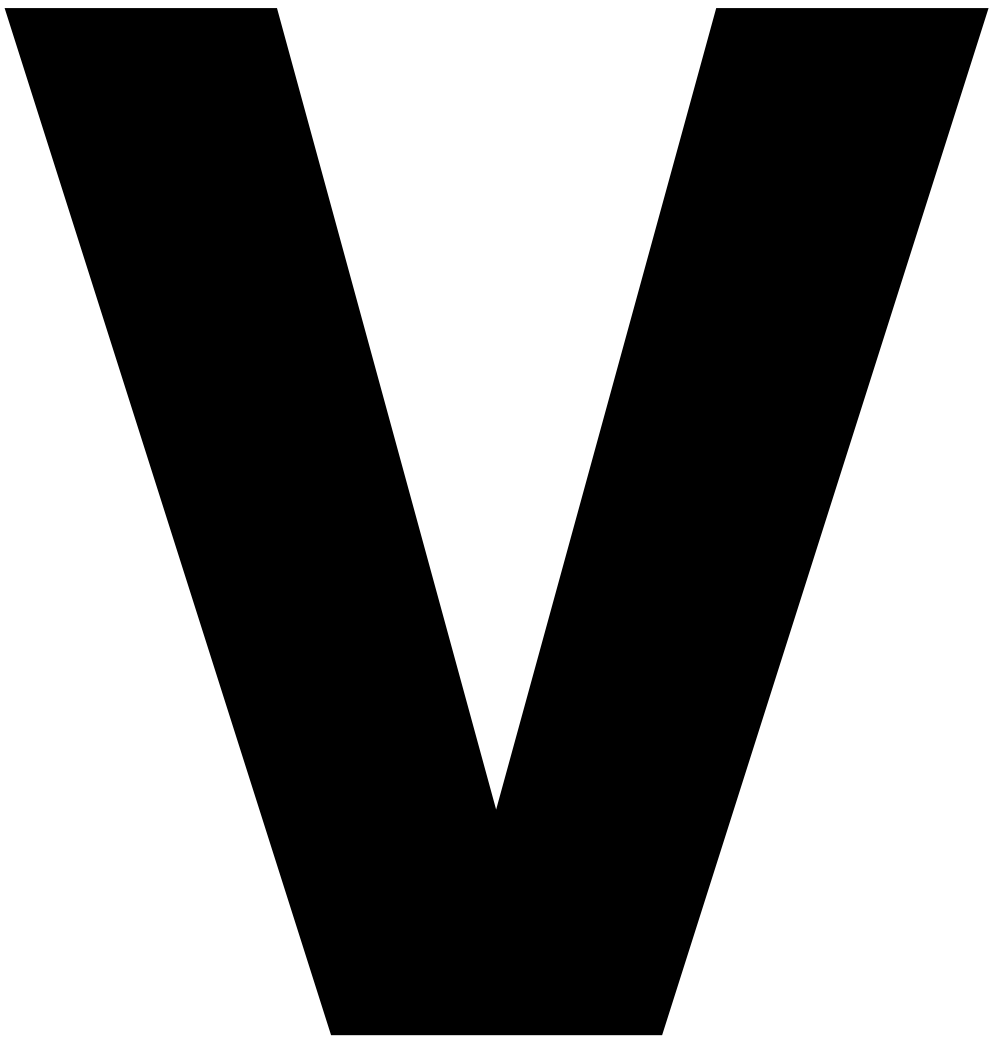


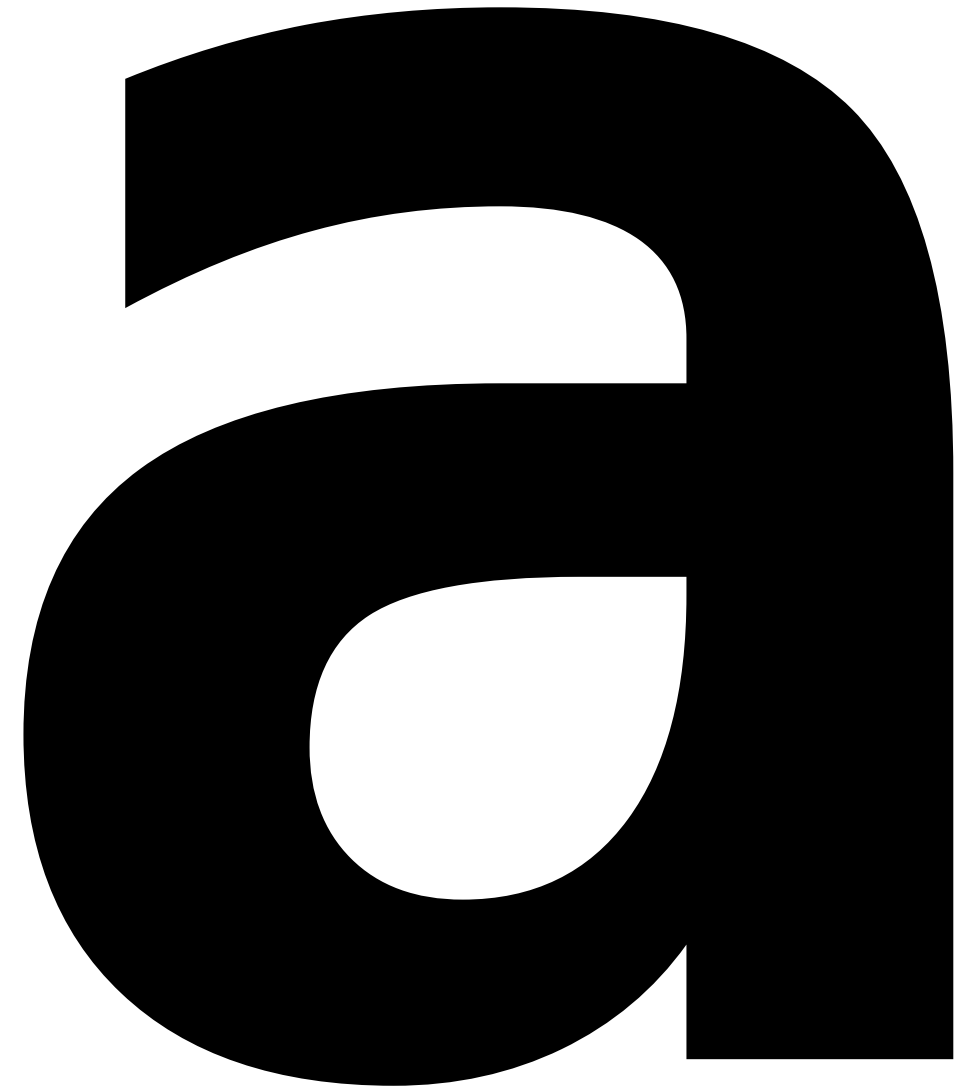


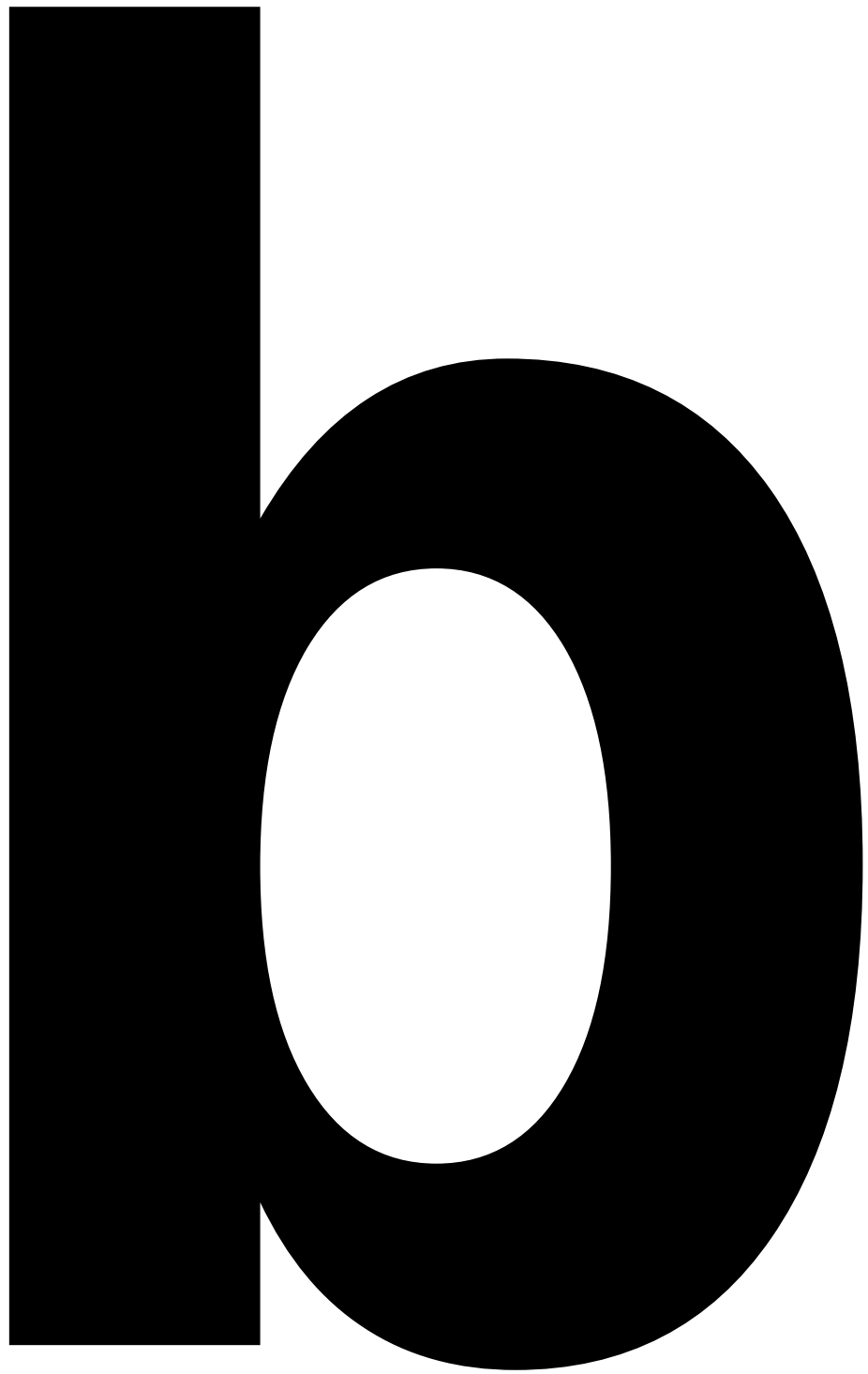


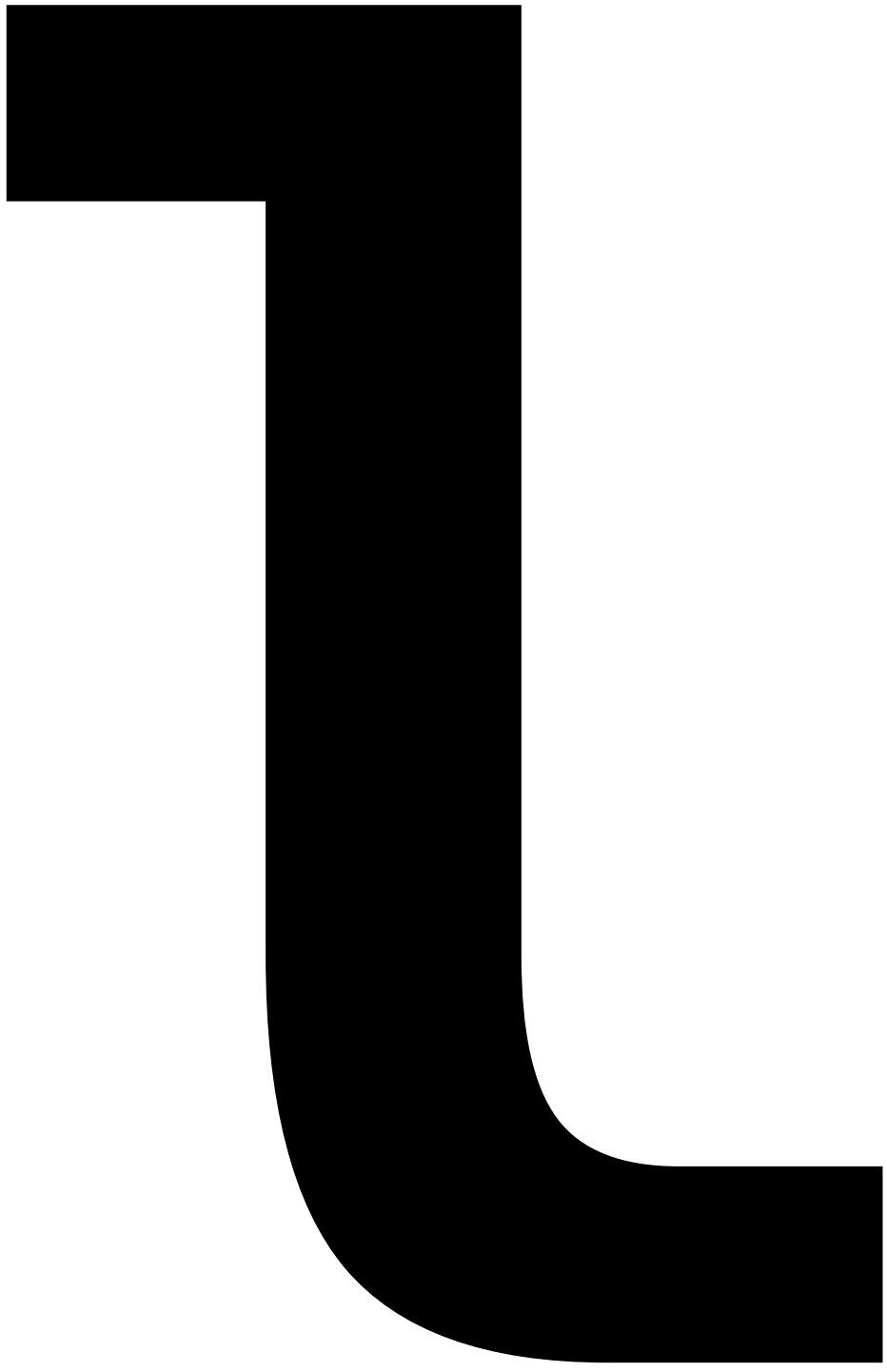


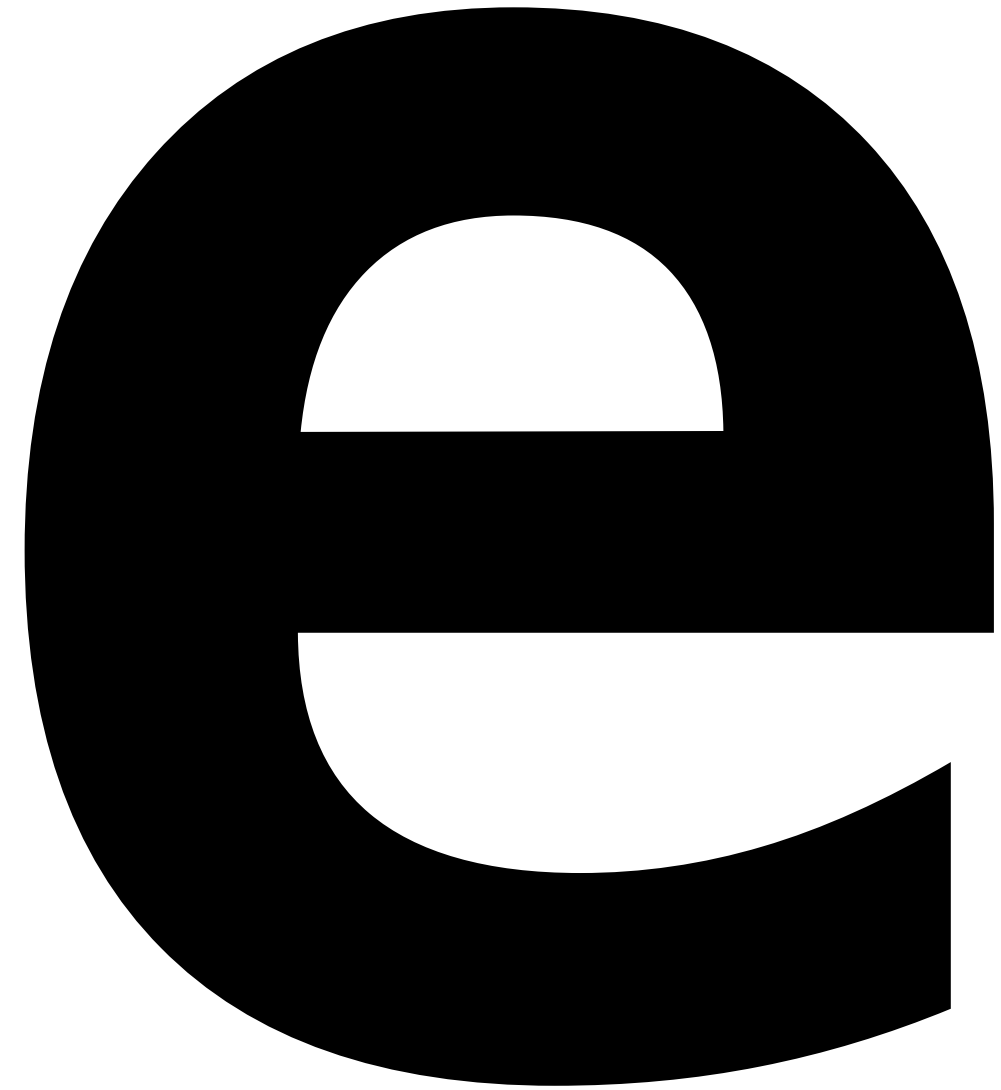


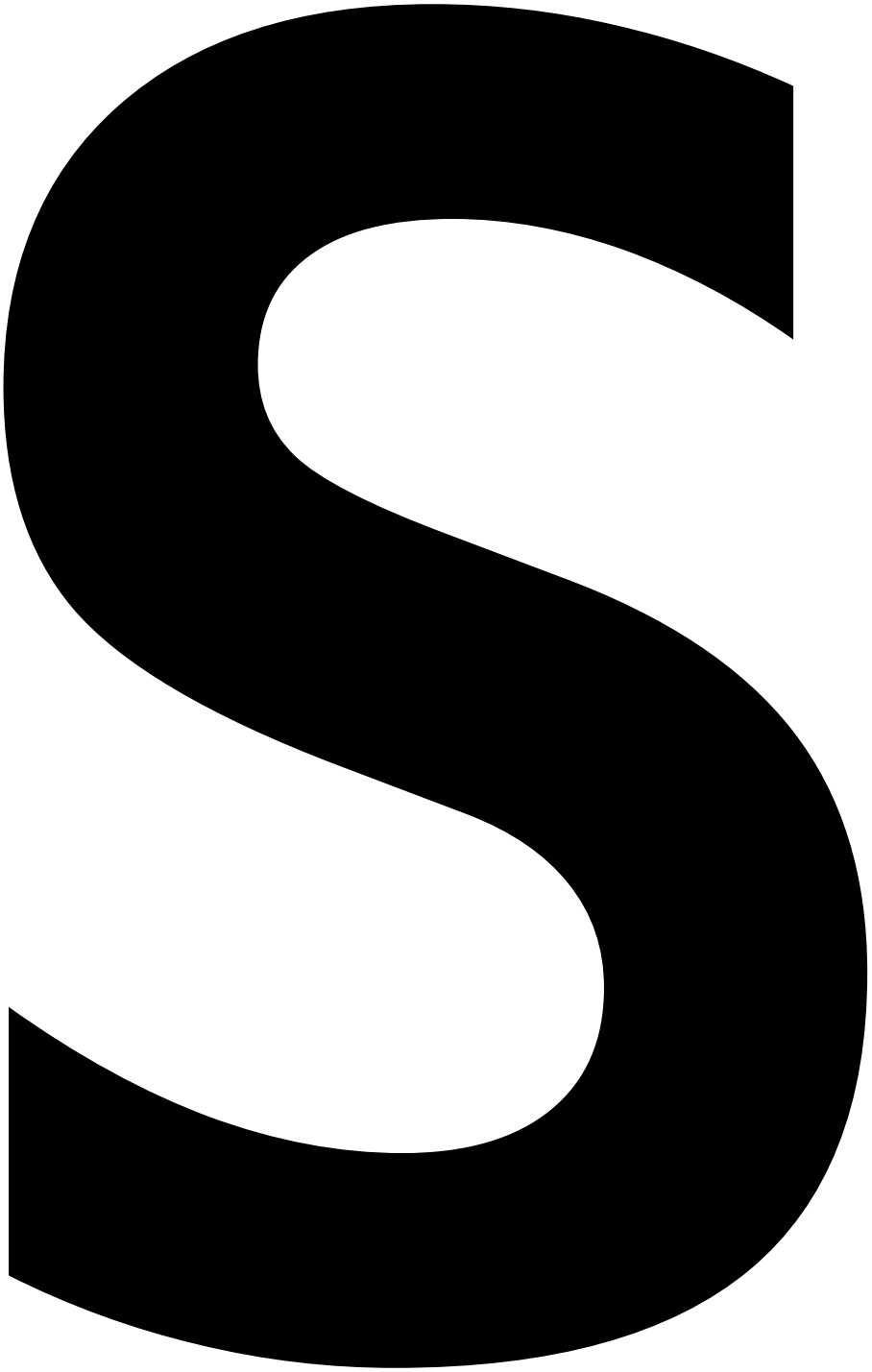


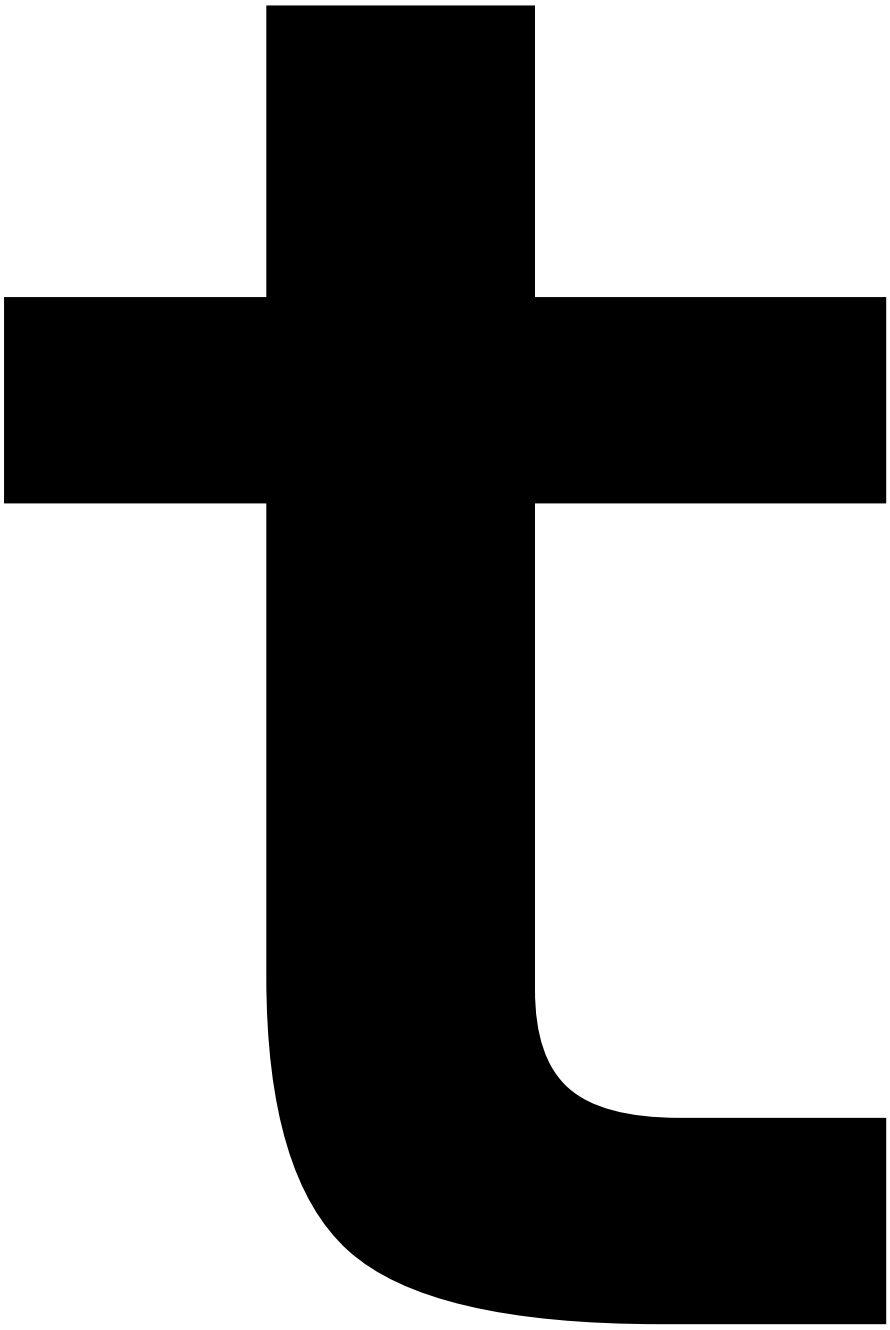


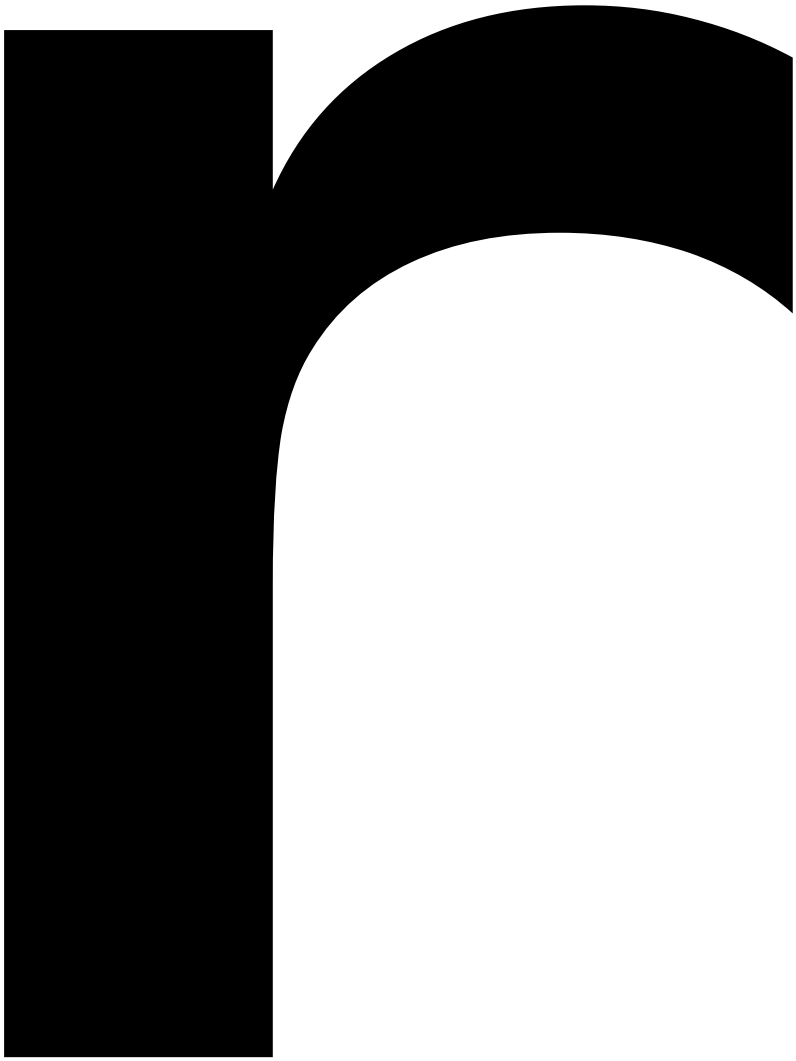


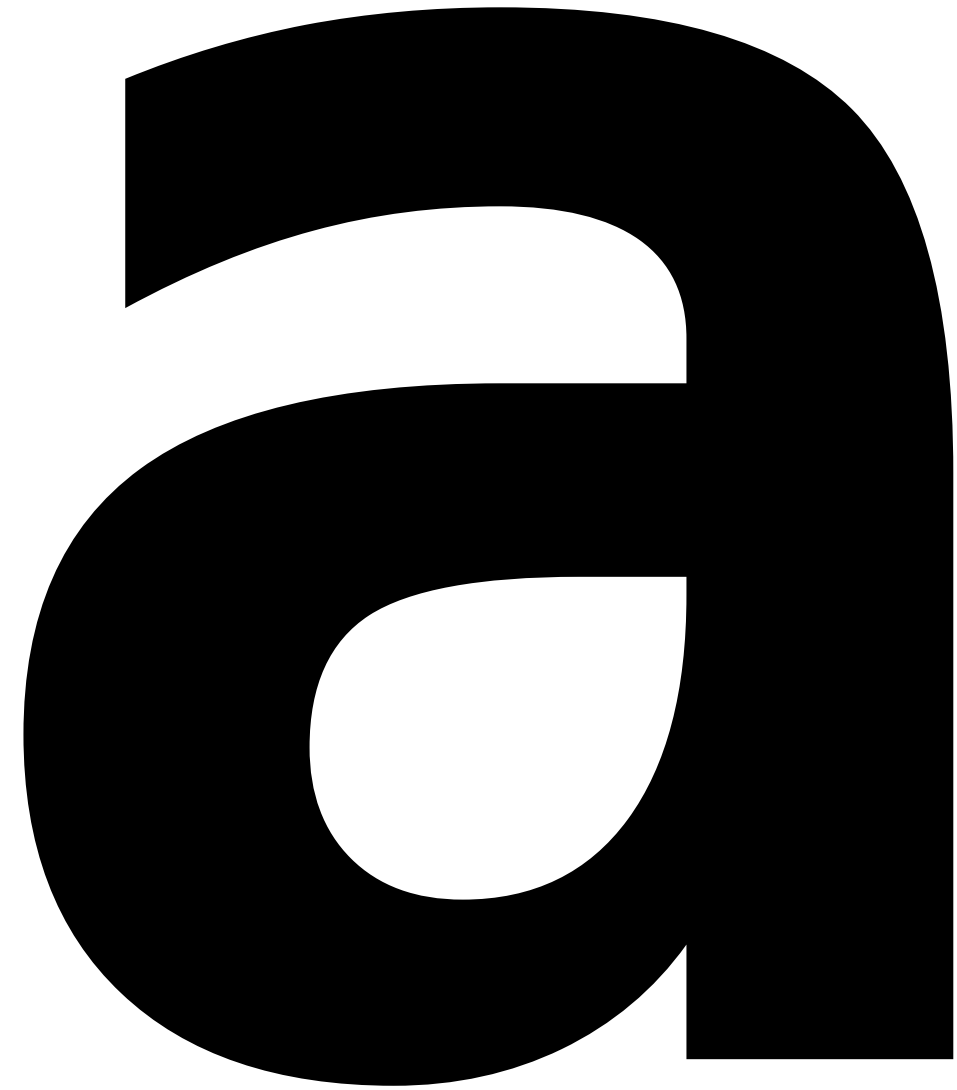


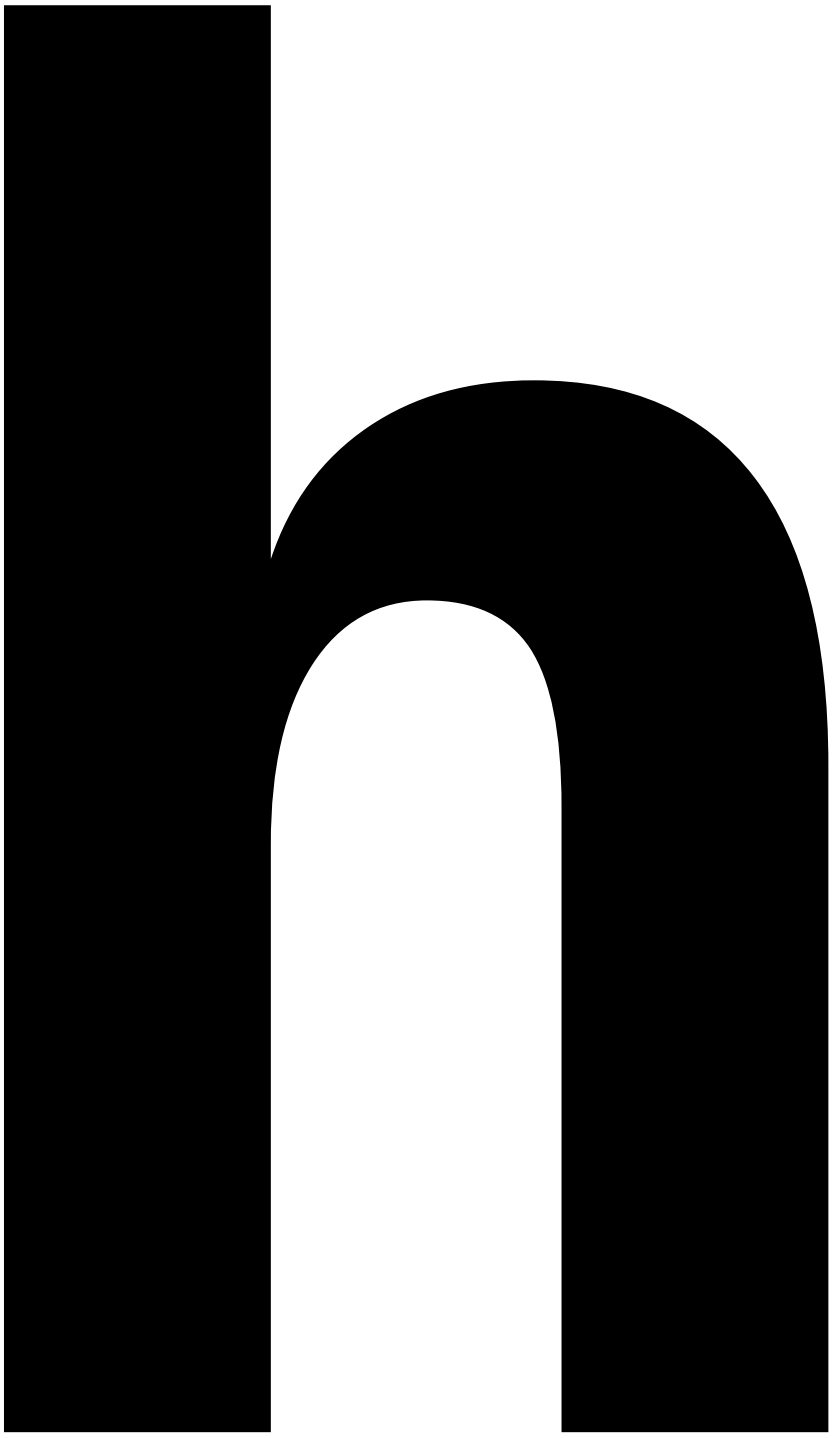


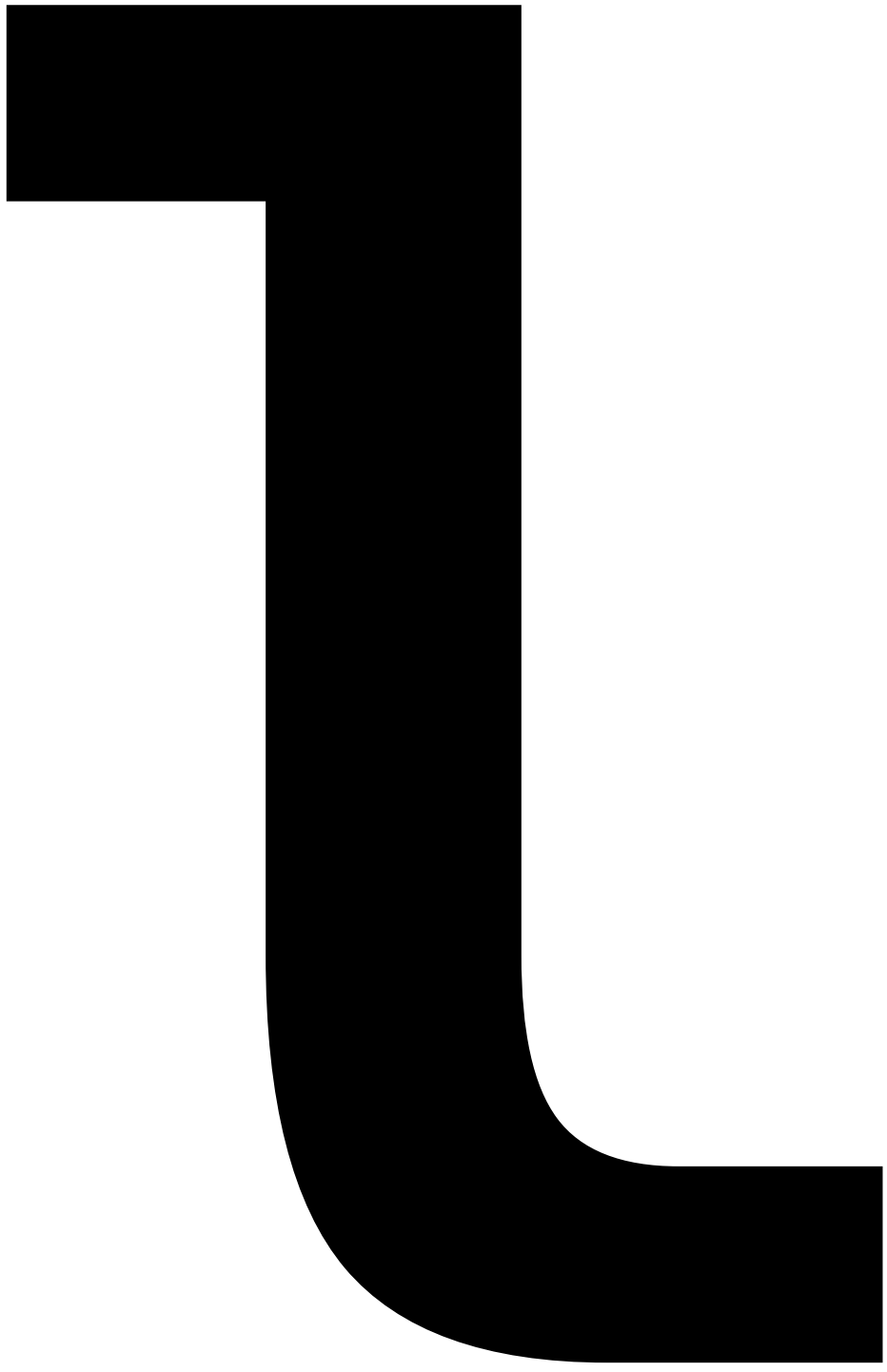




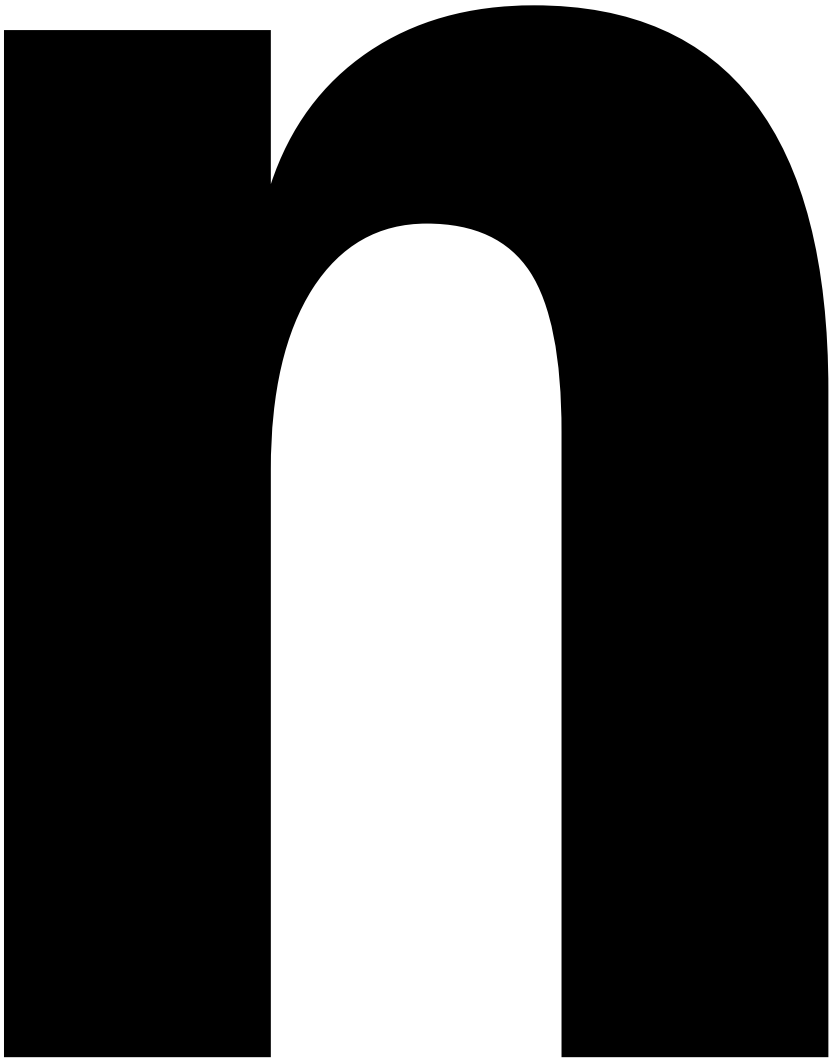


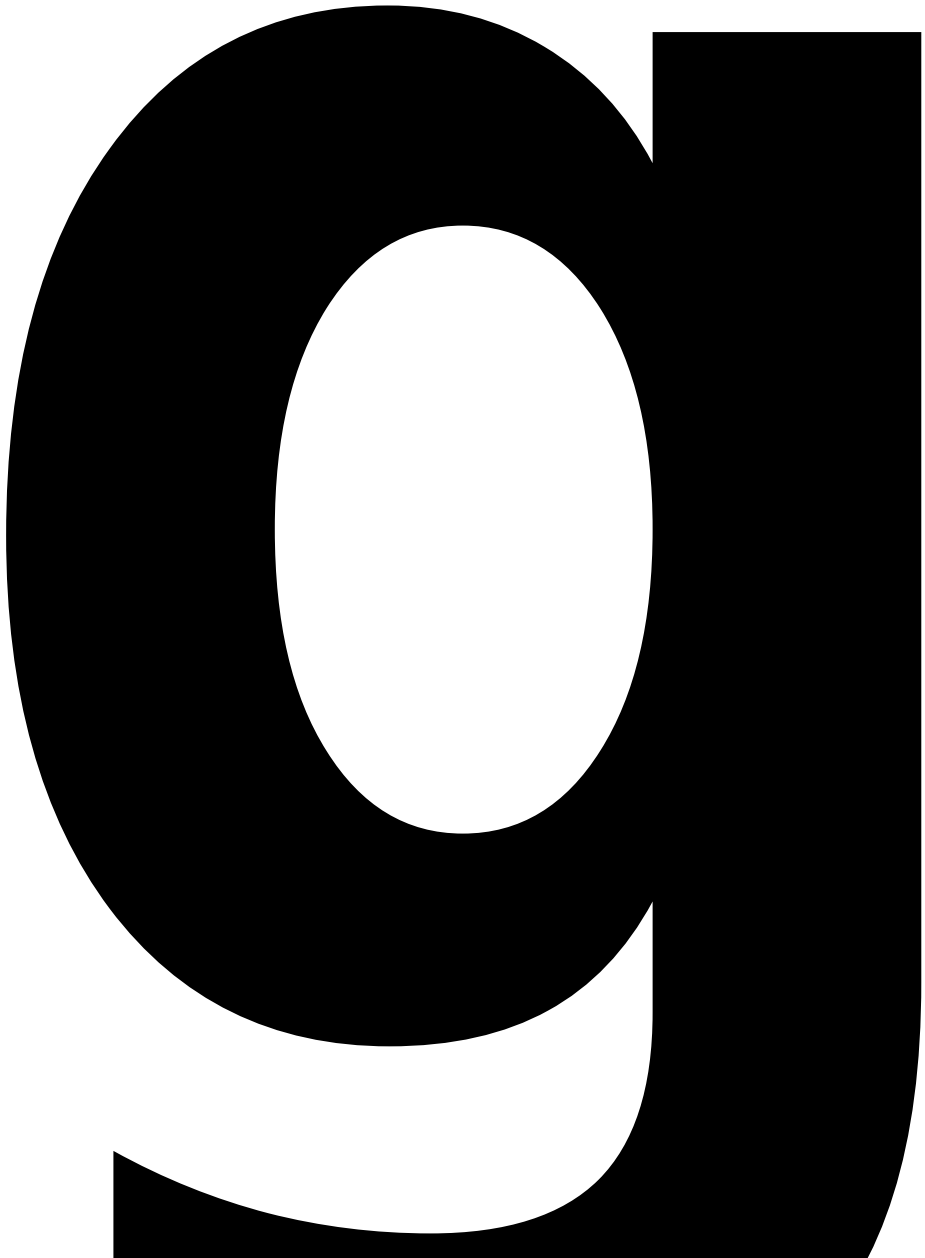


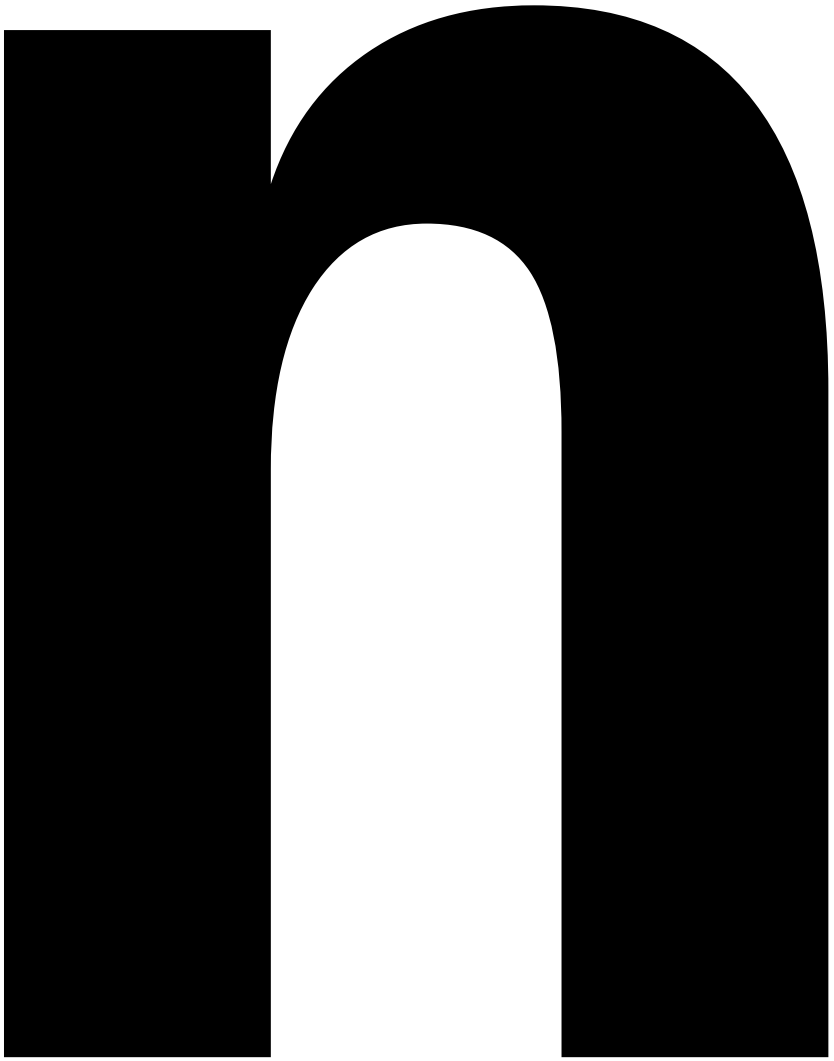


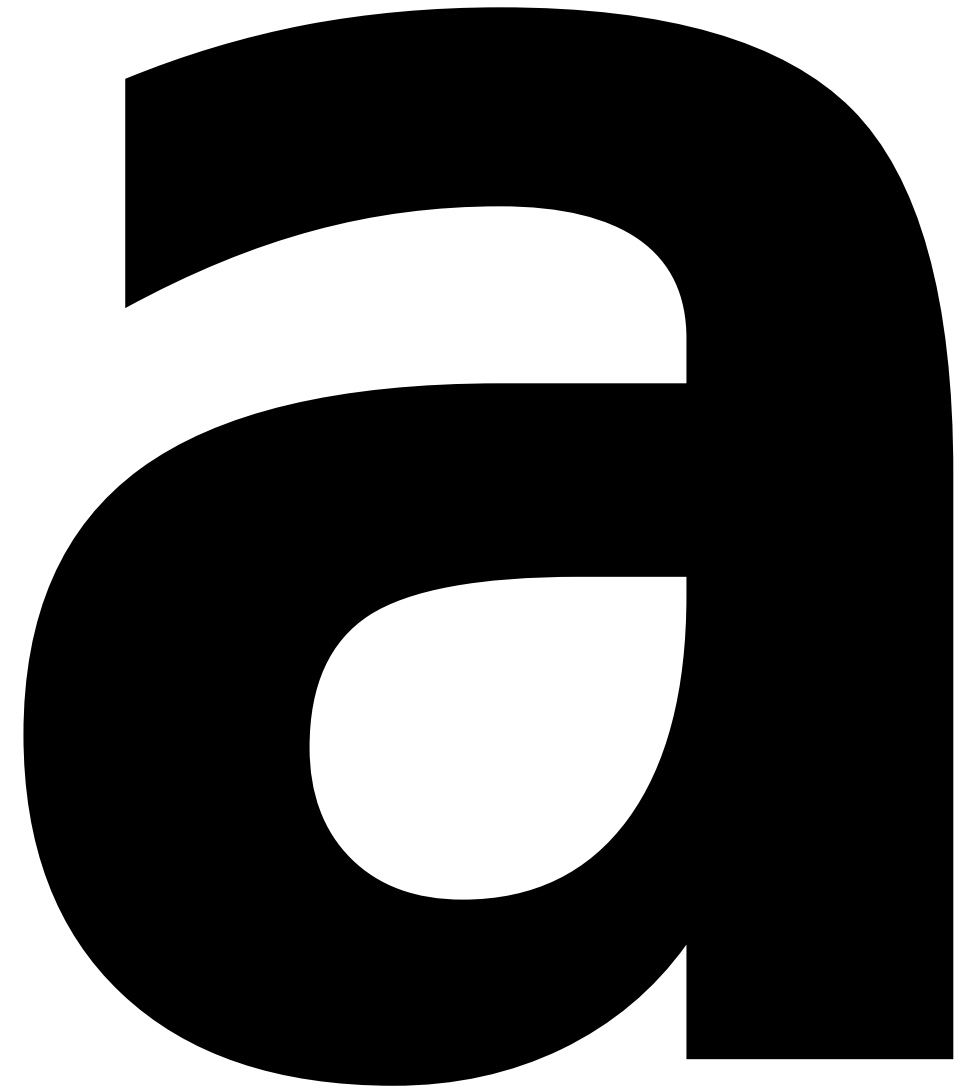


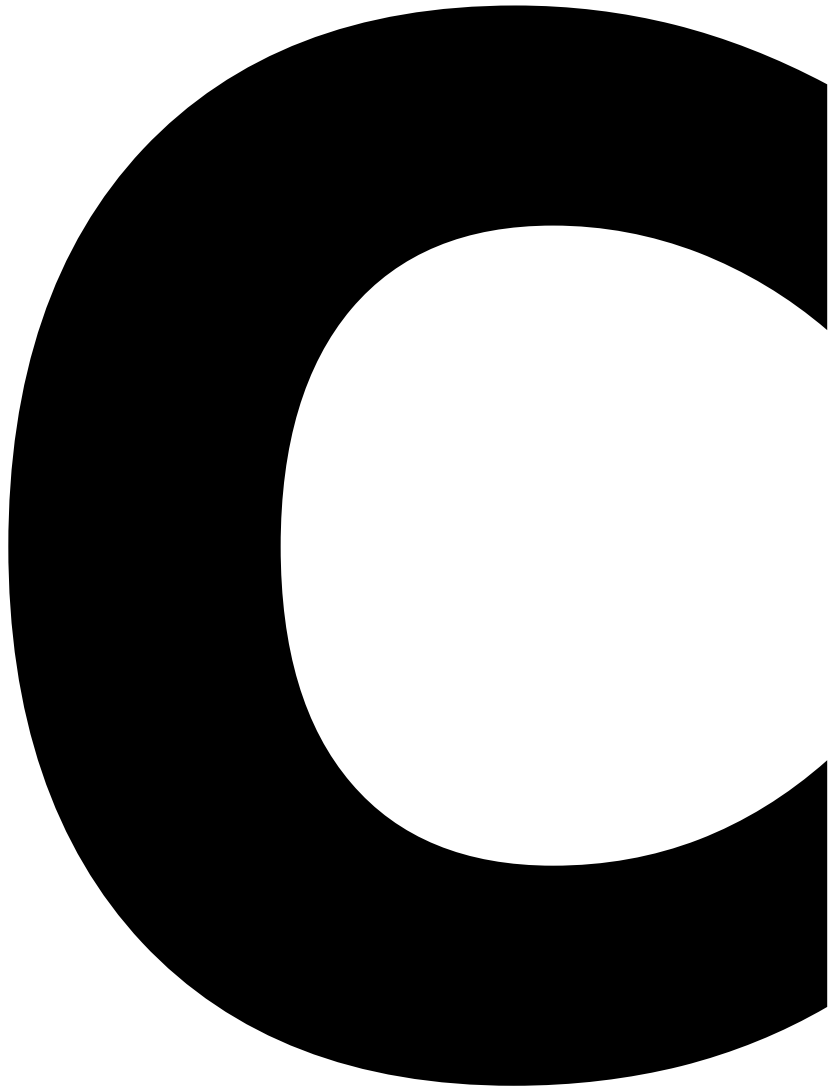
u

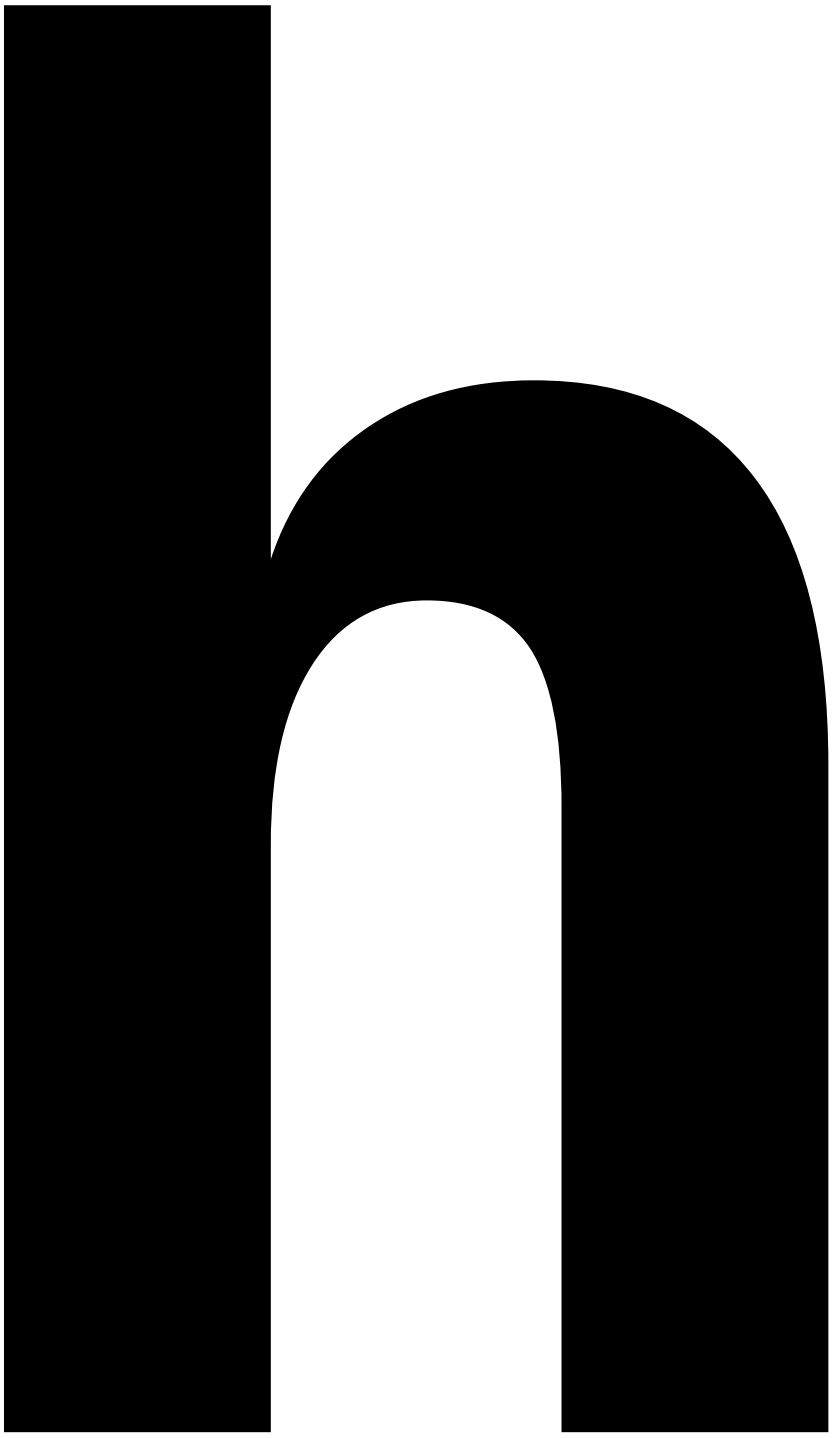


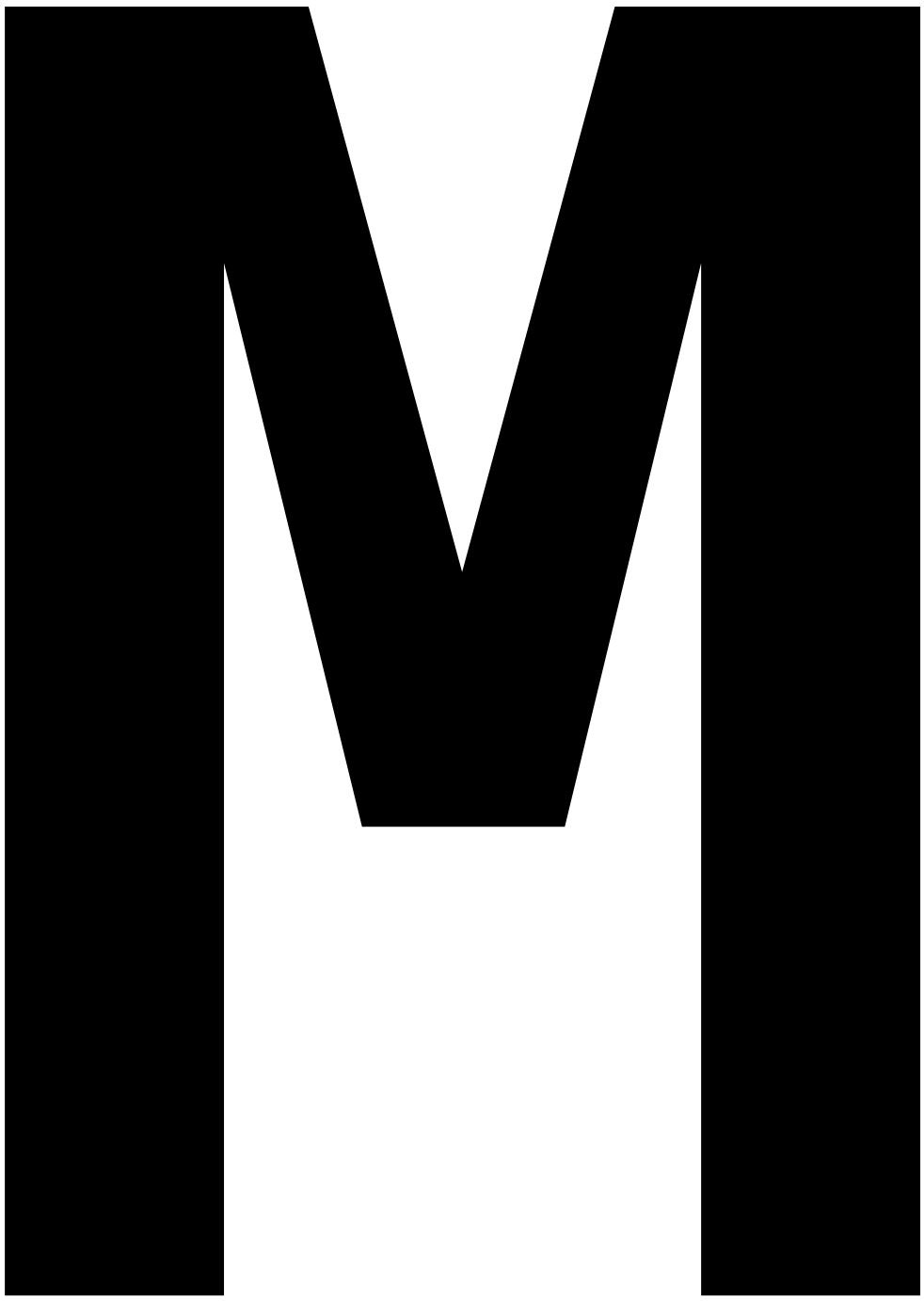


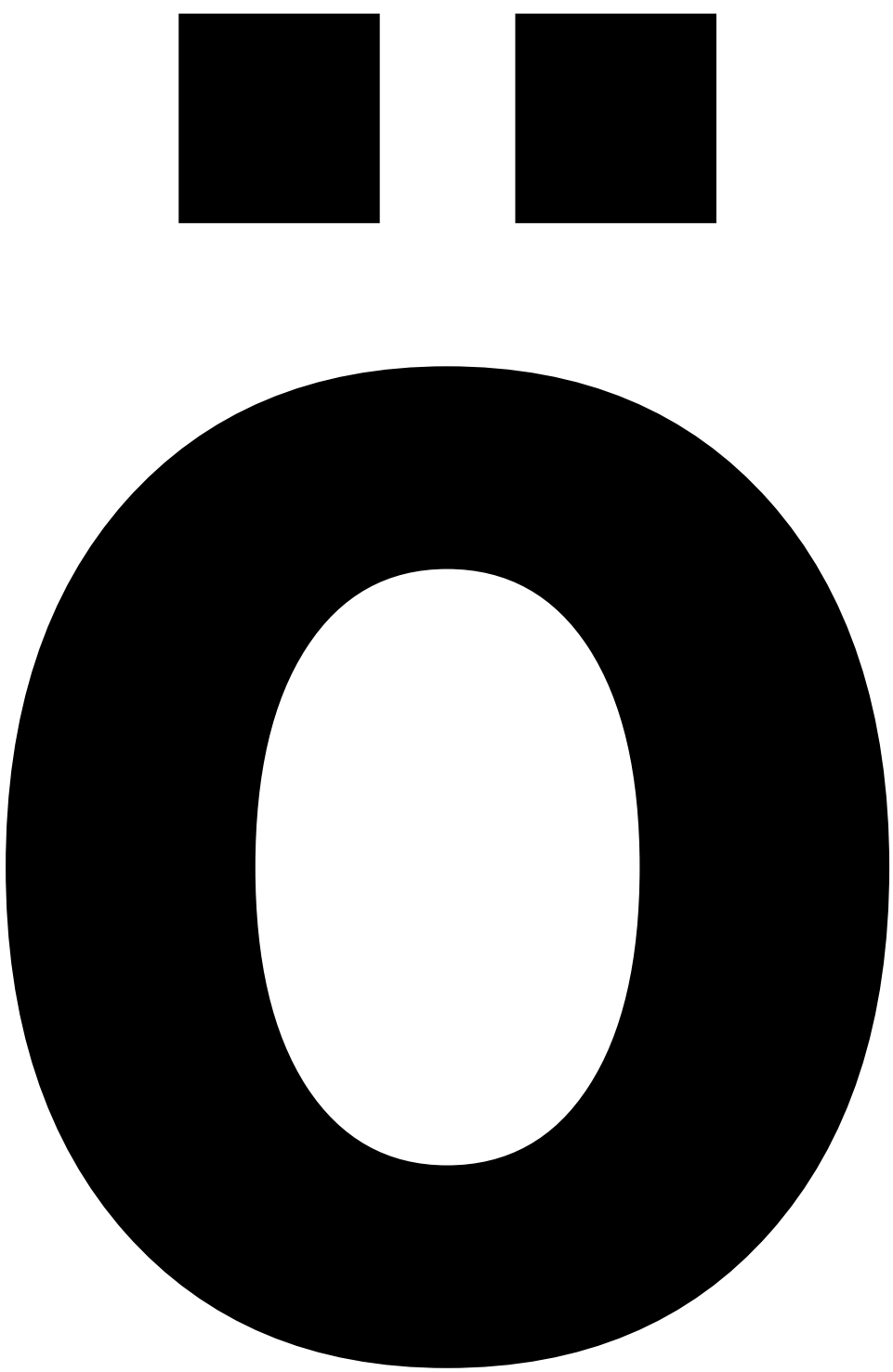


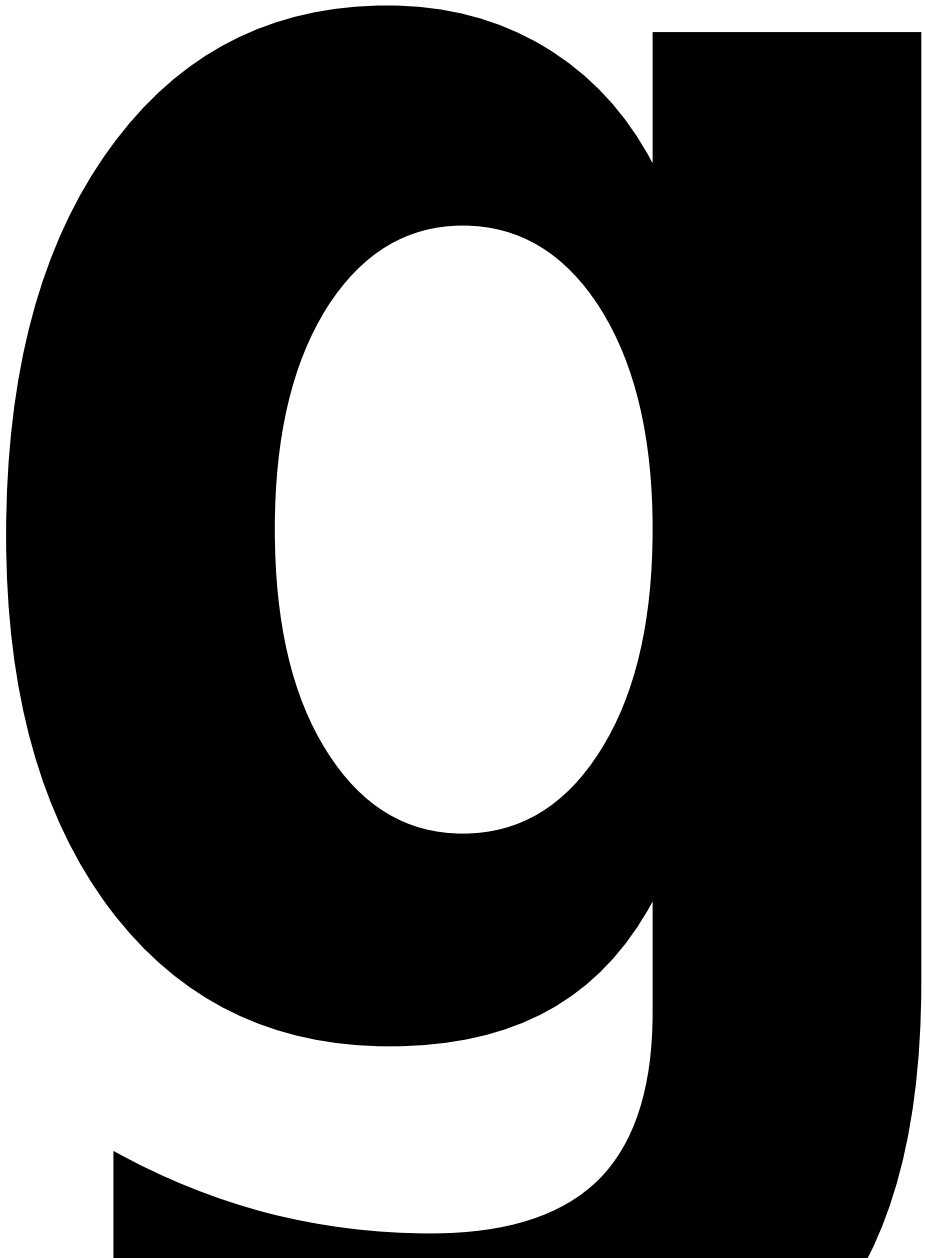


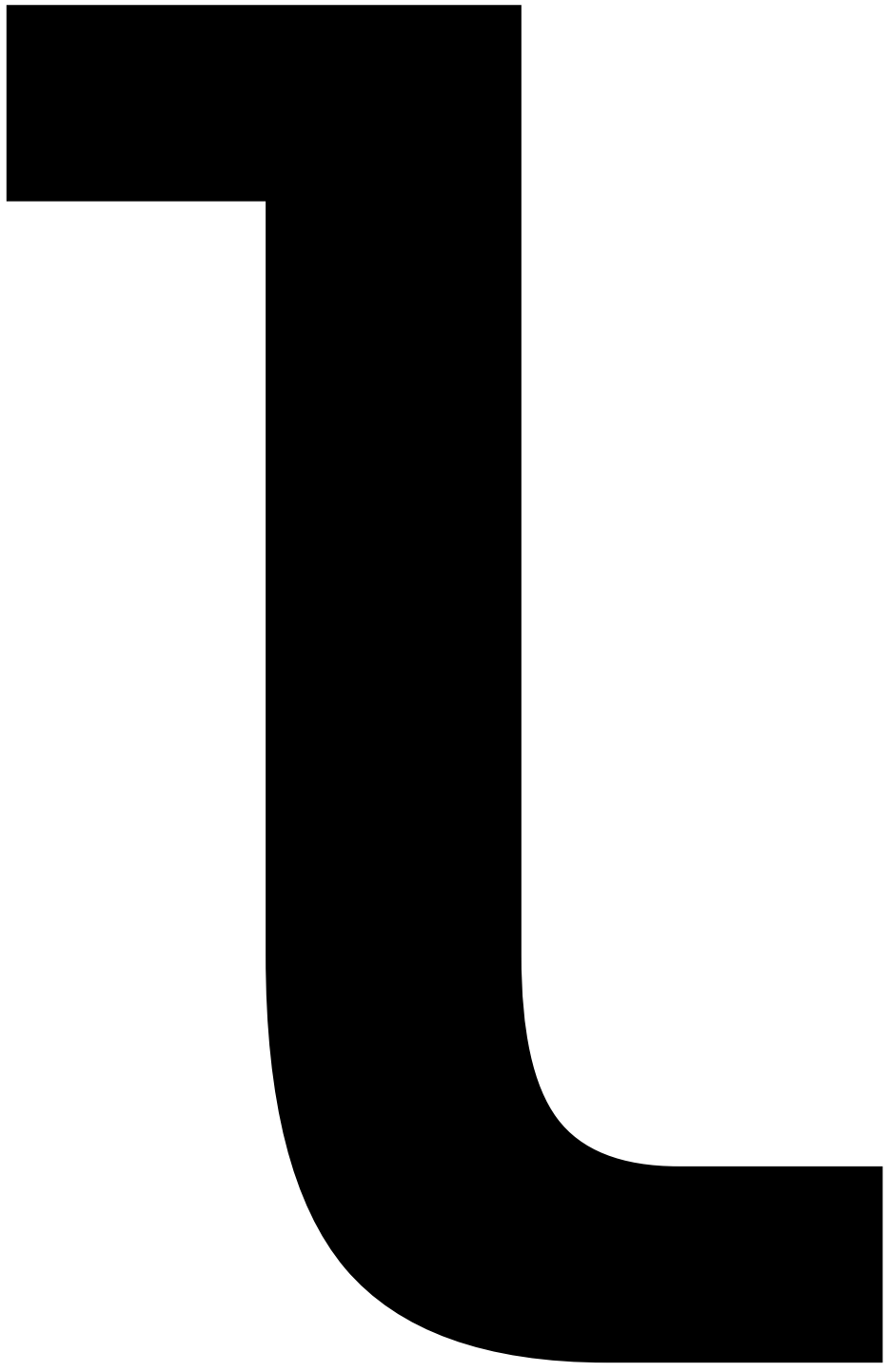


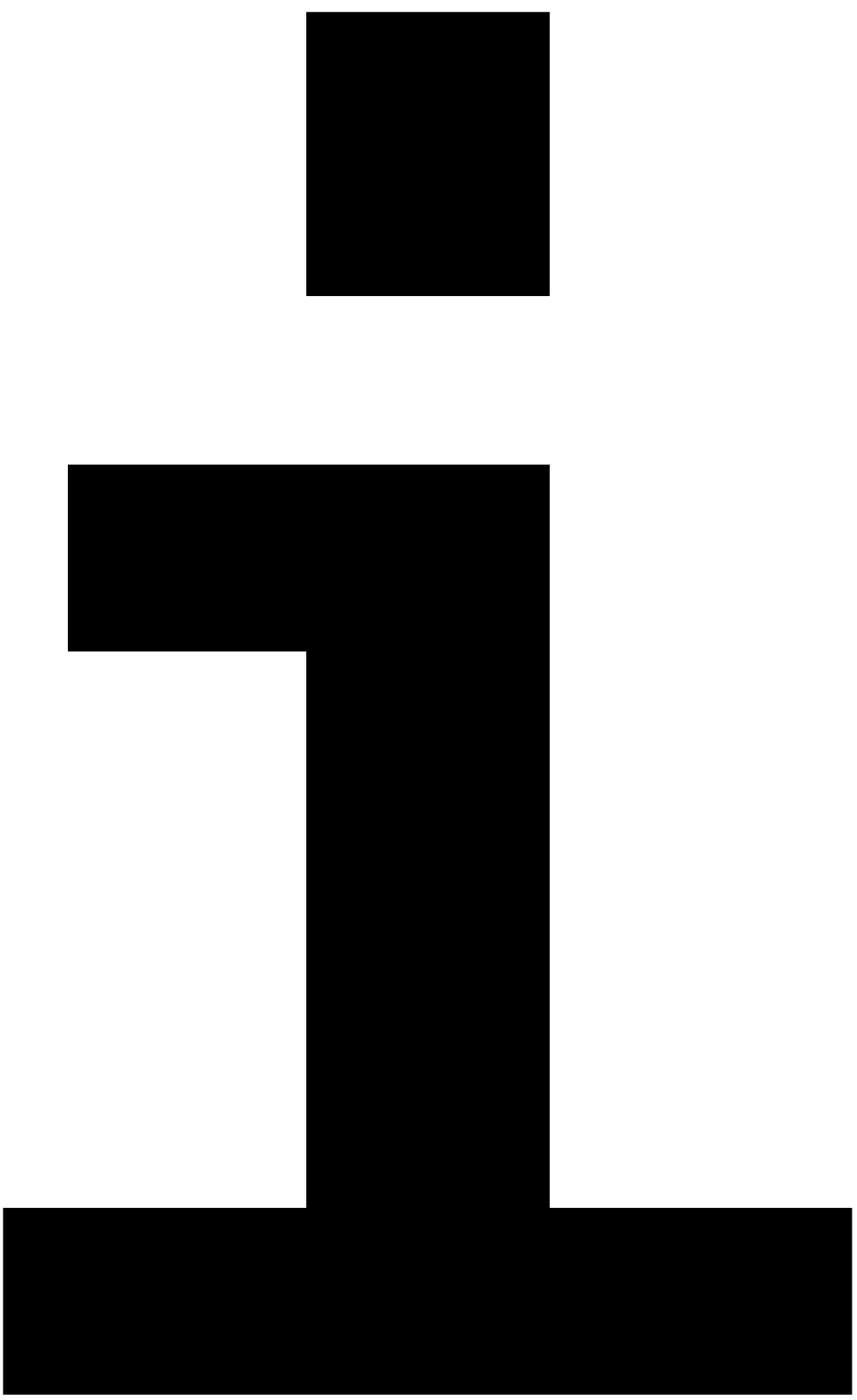


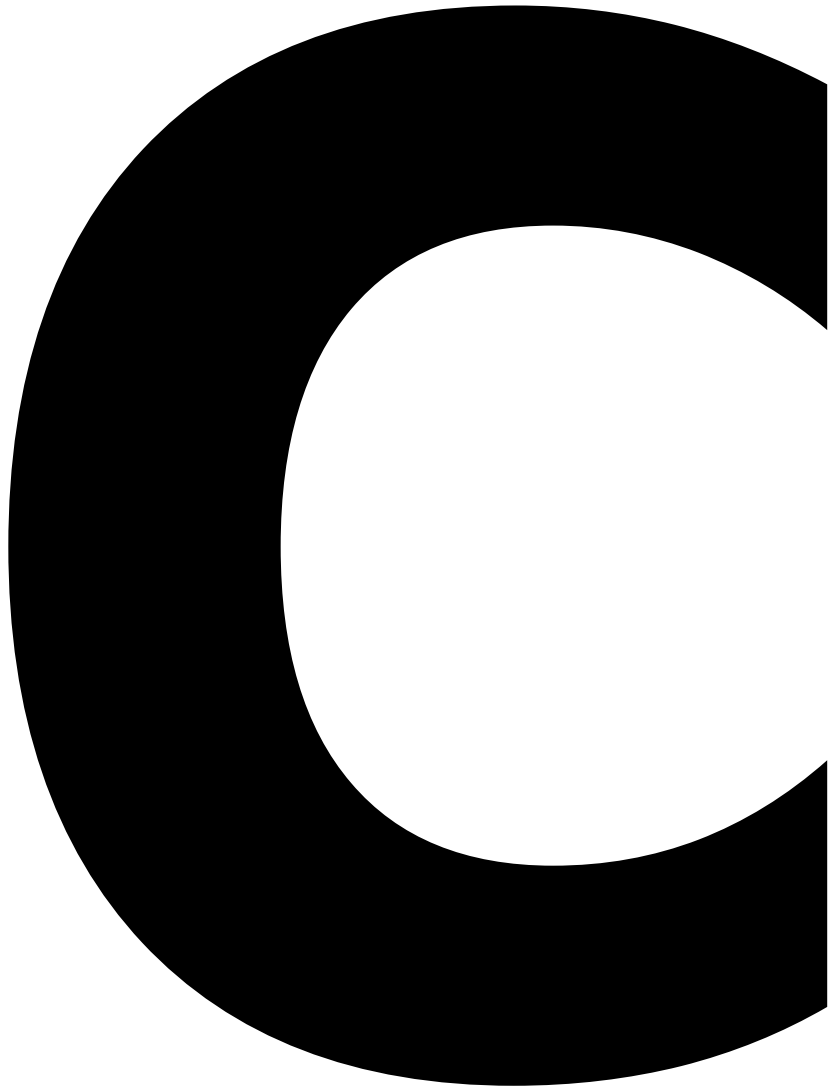


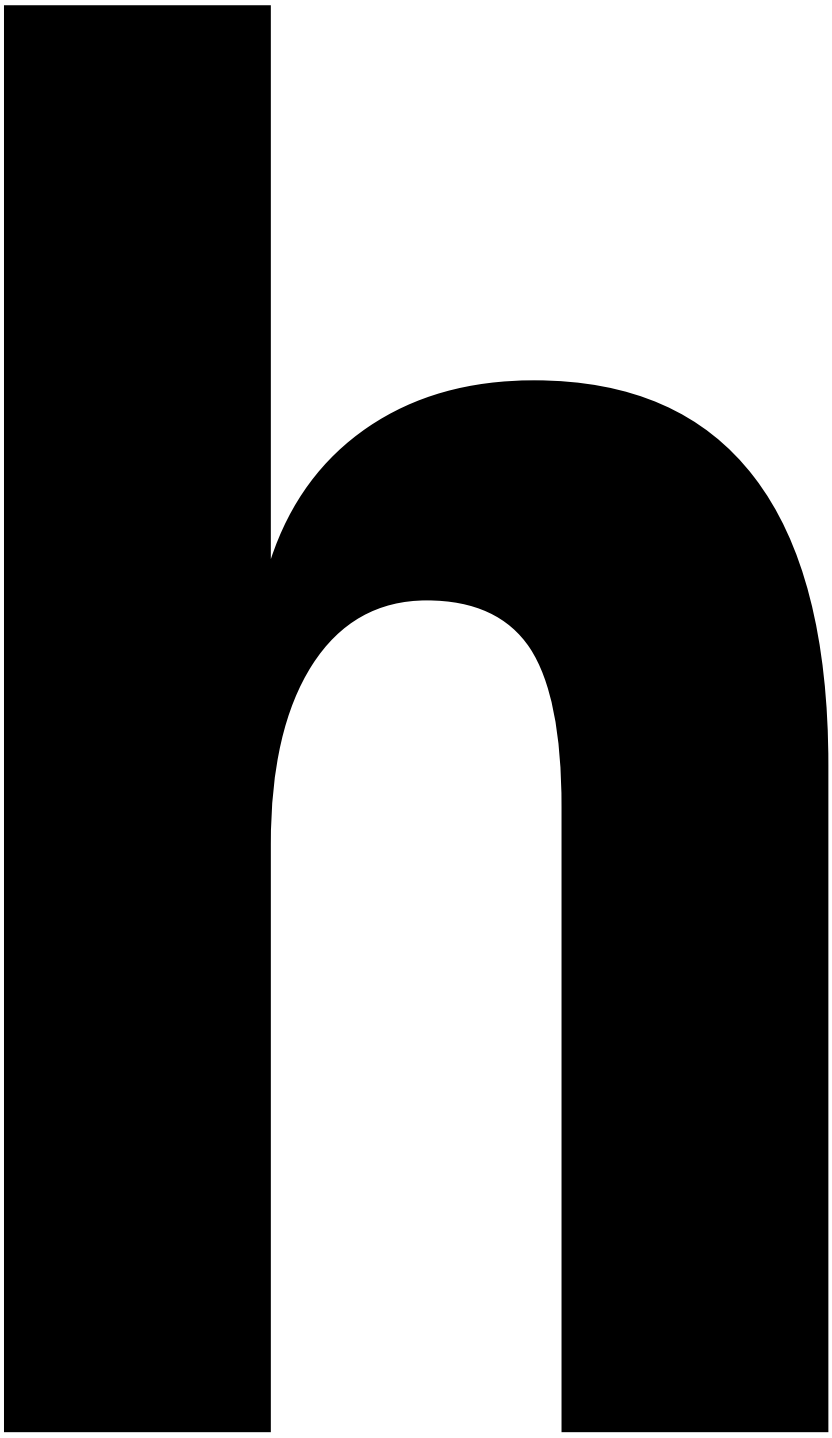


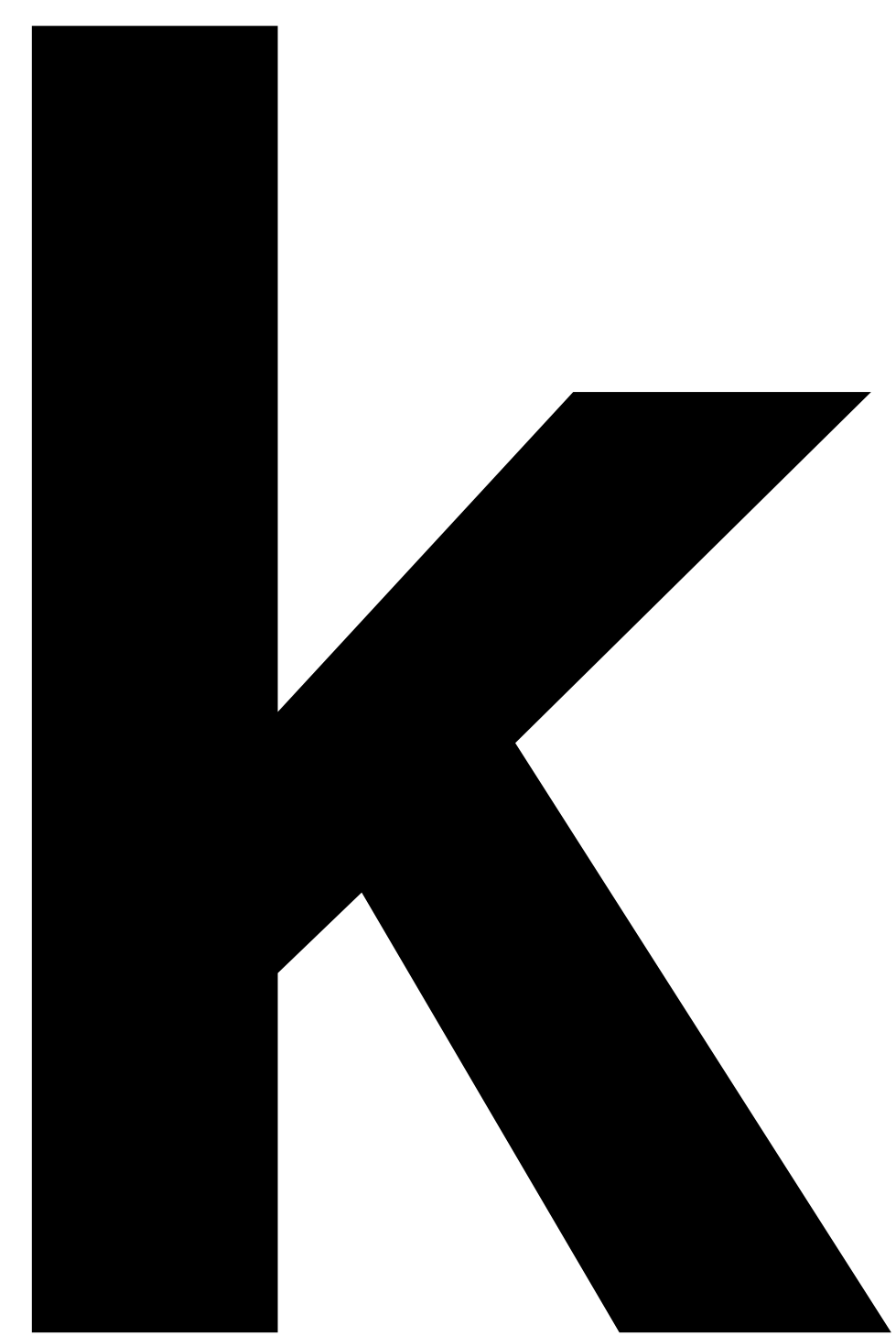


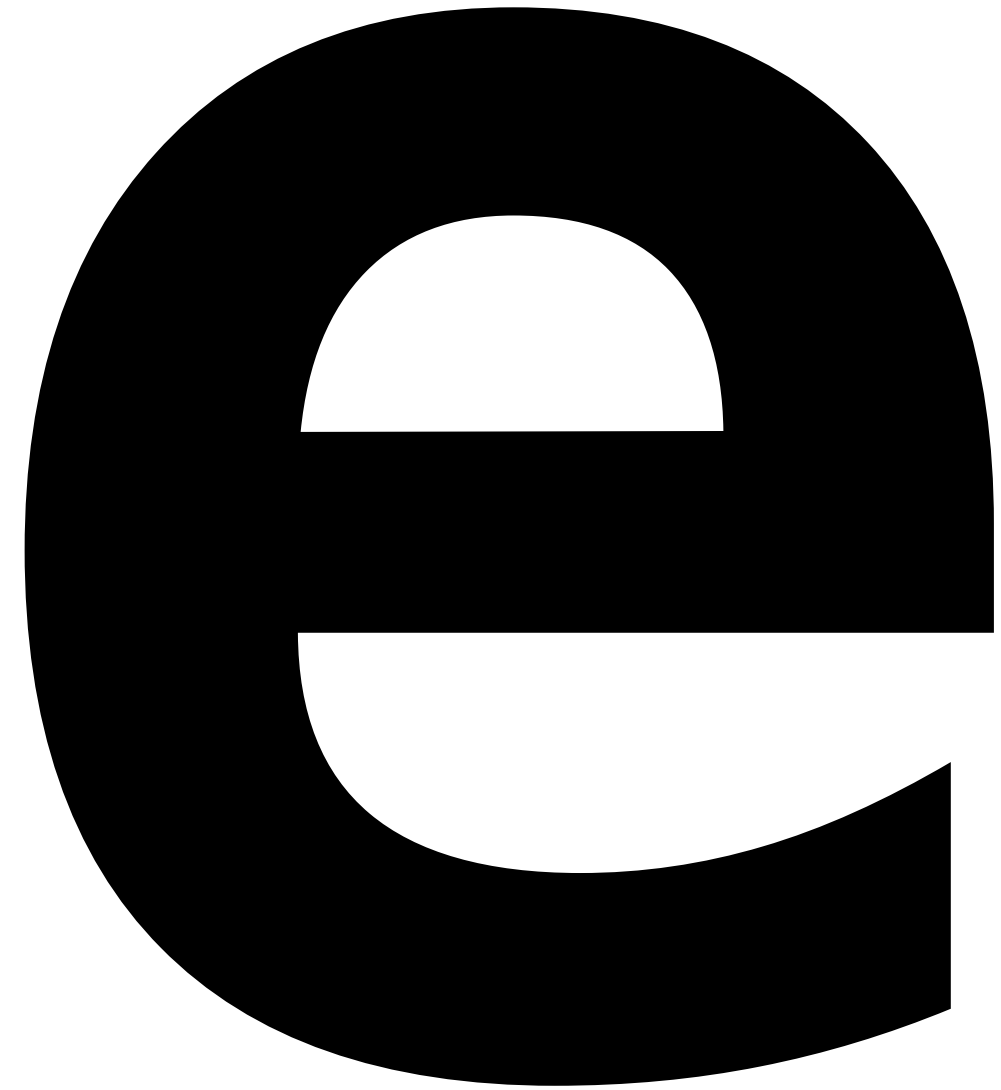


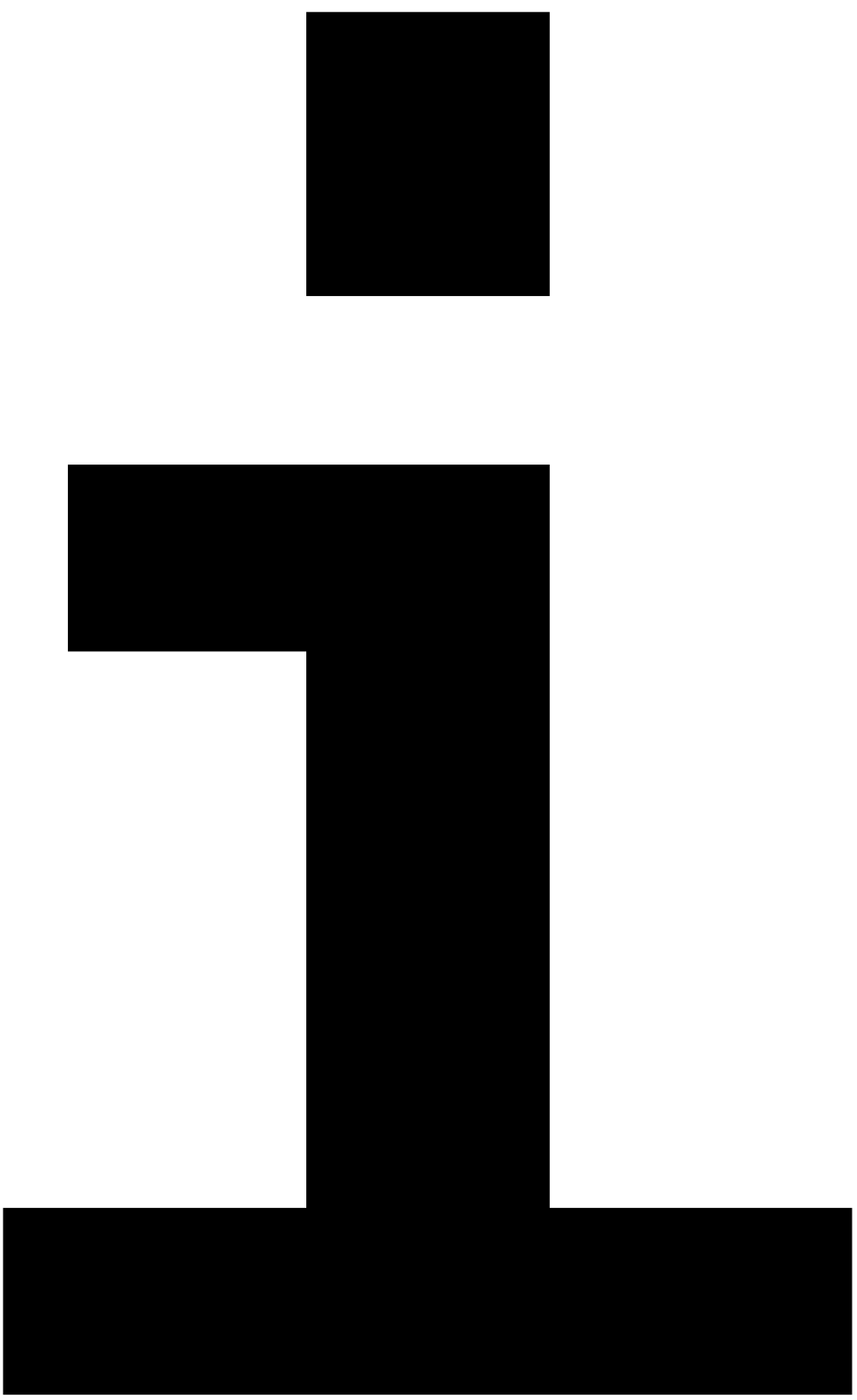


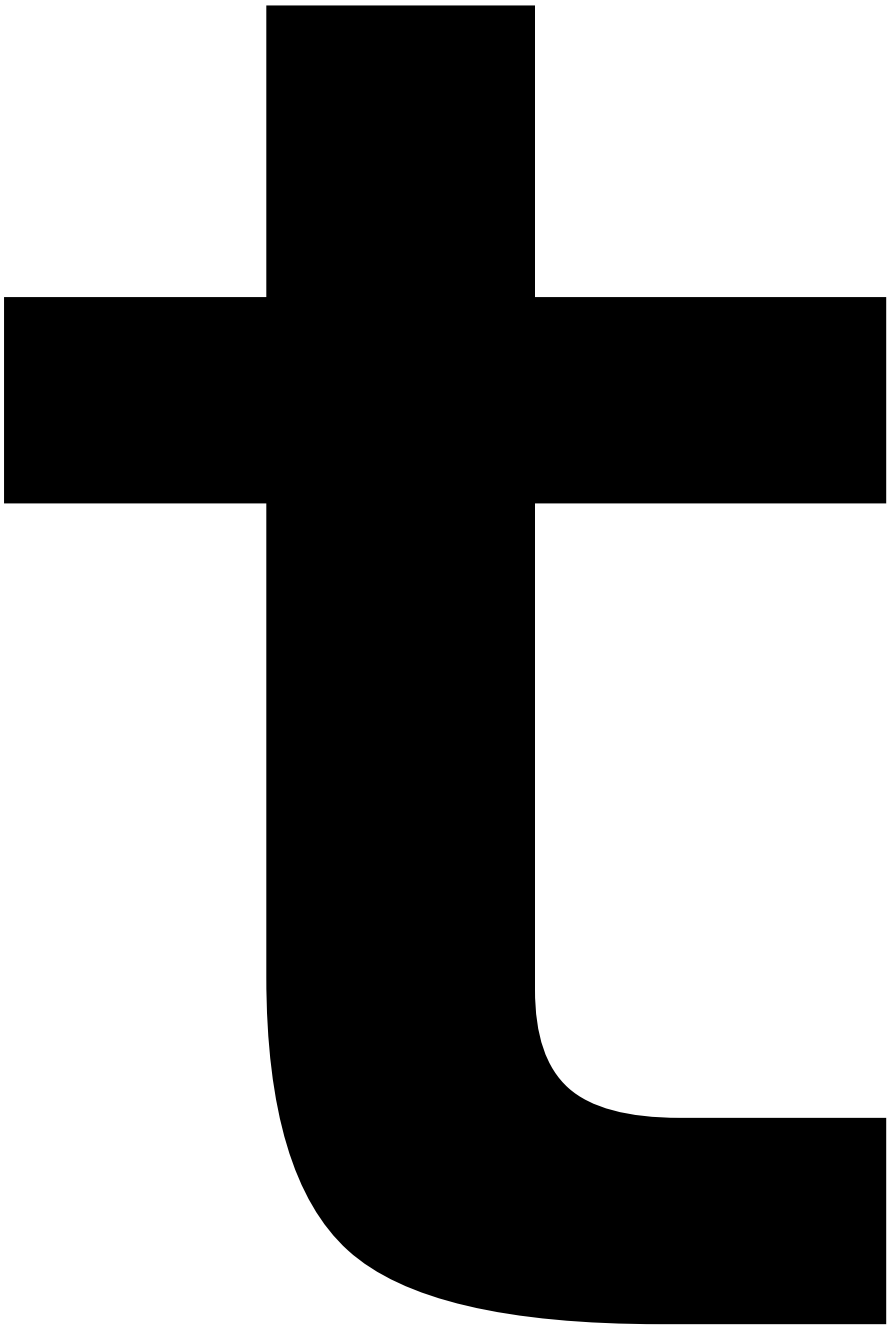


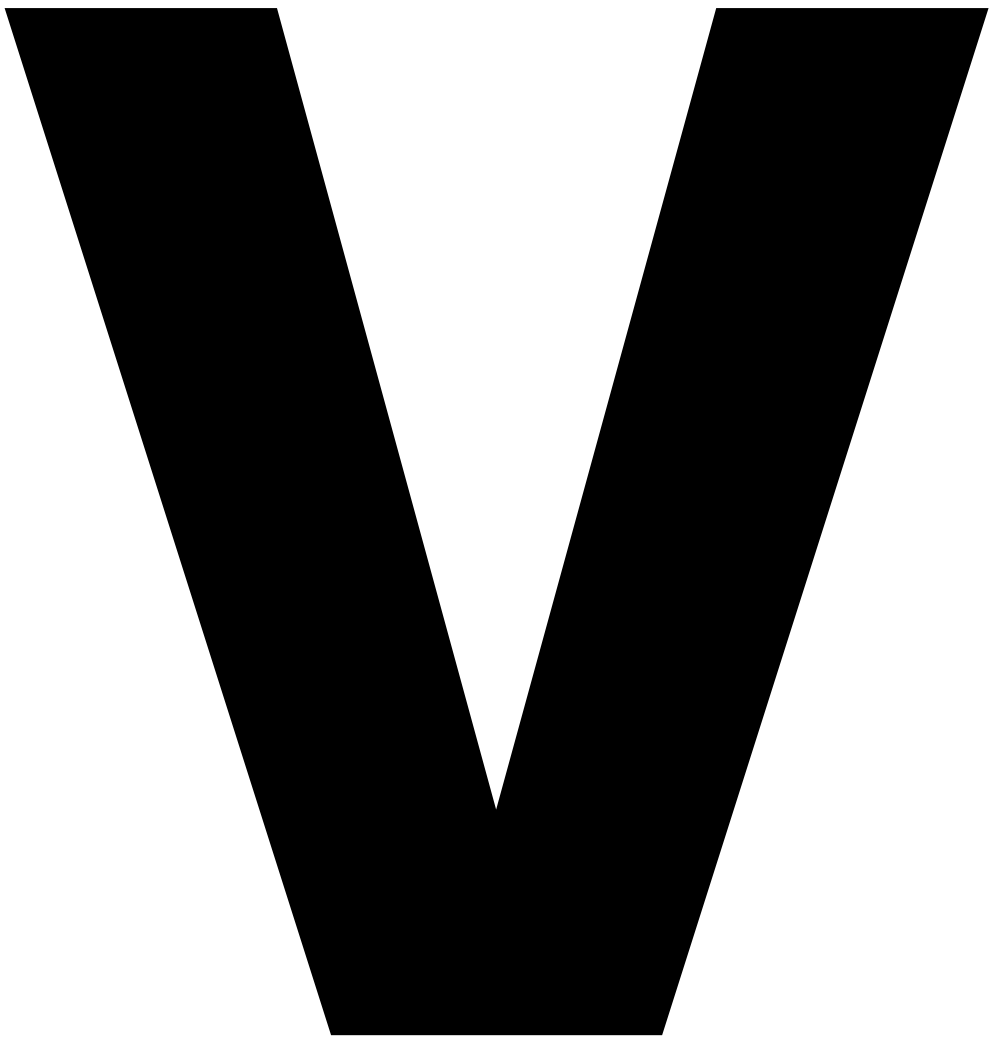


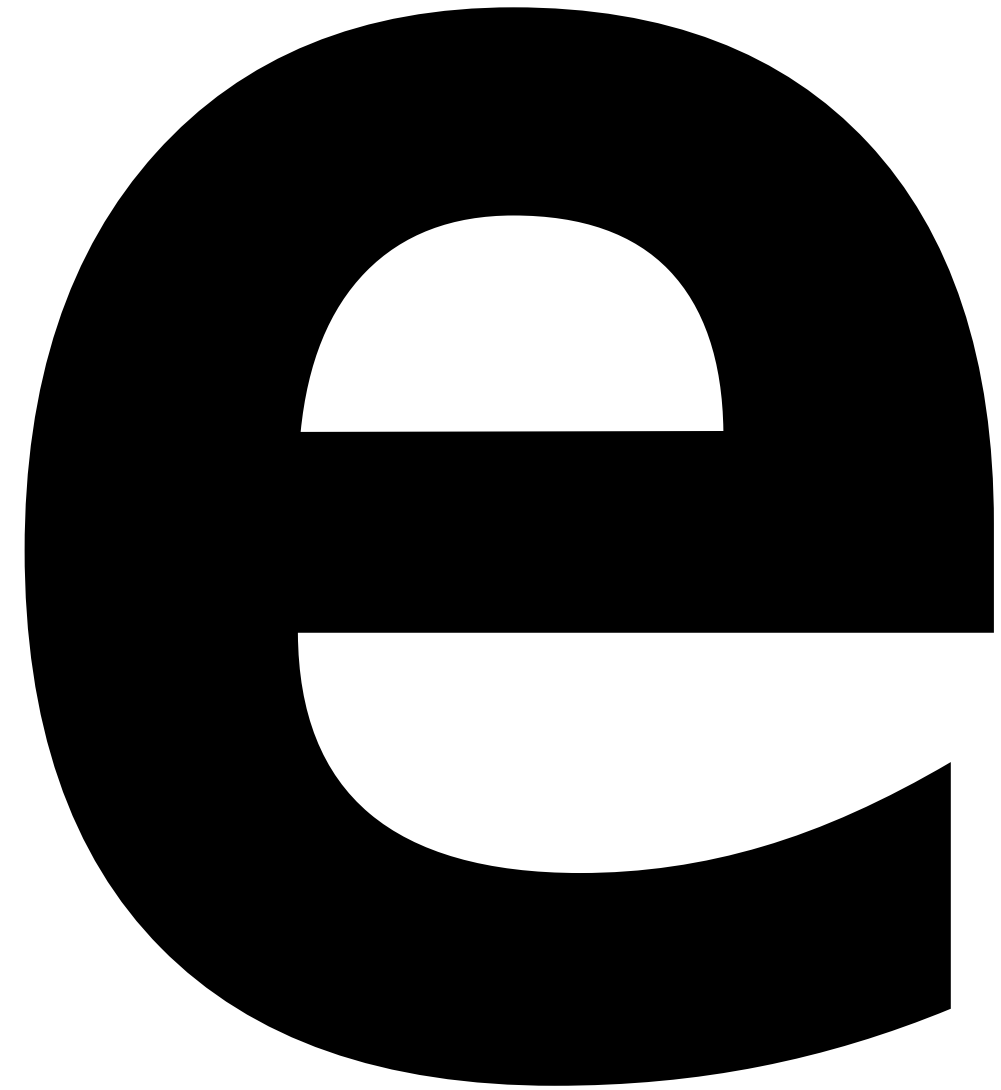


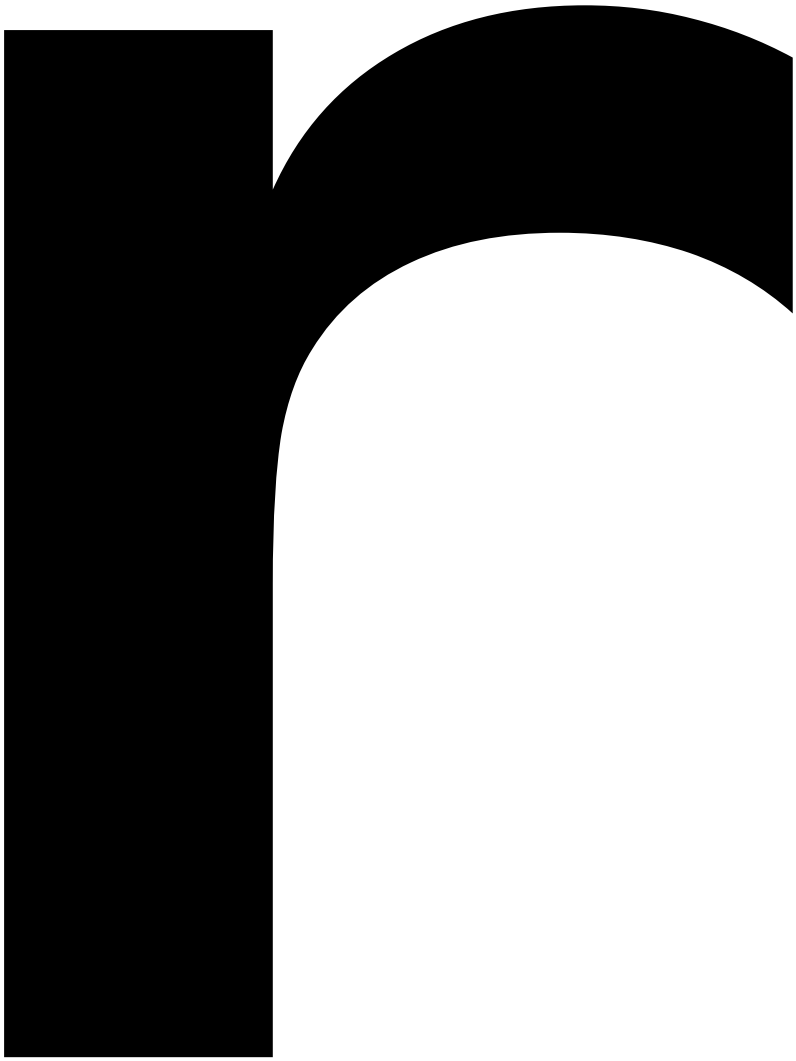


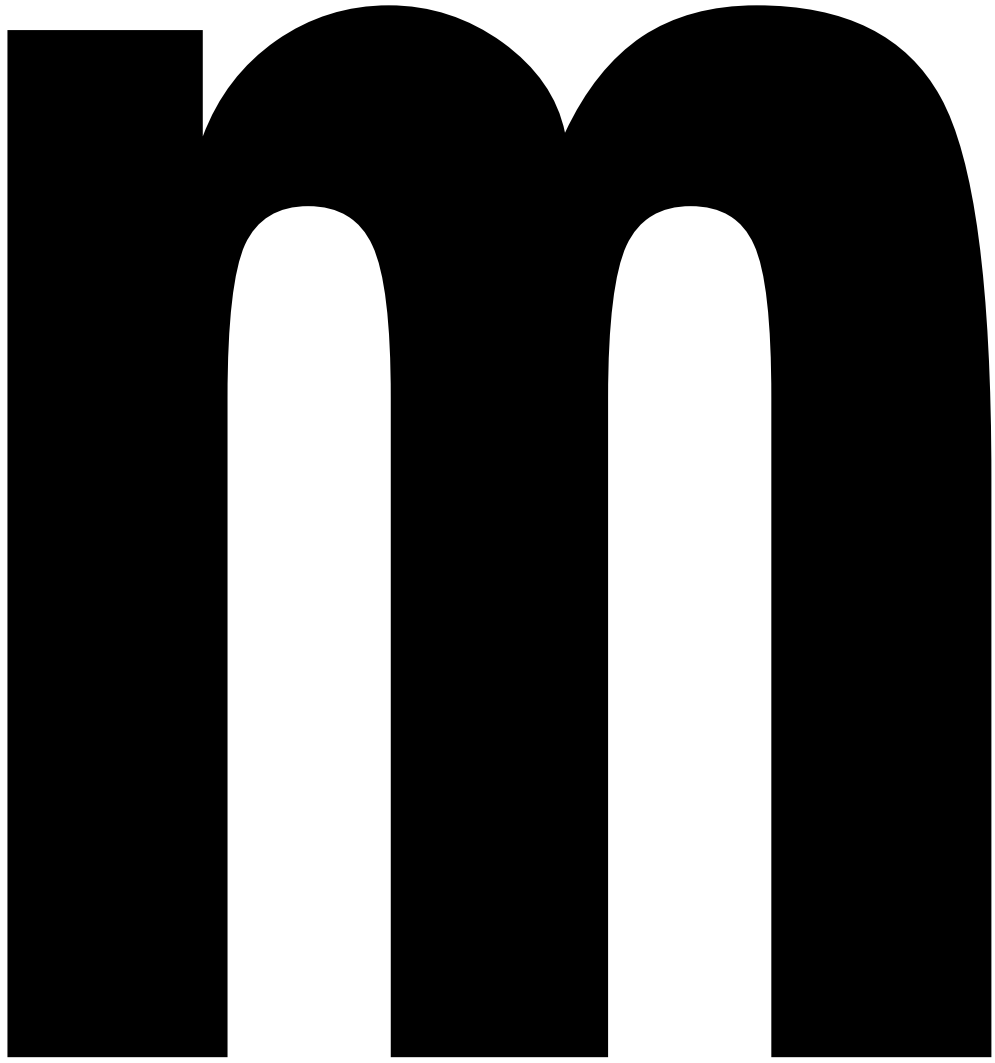


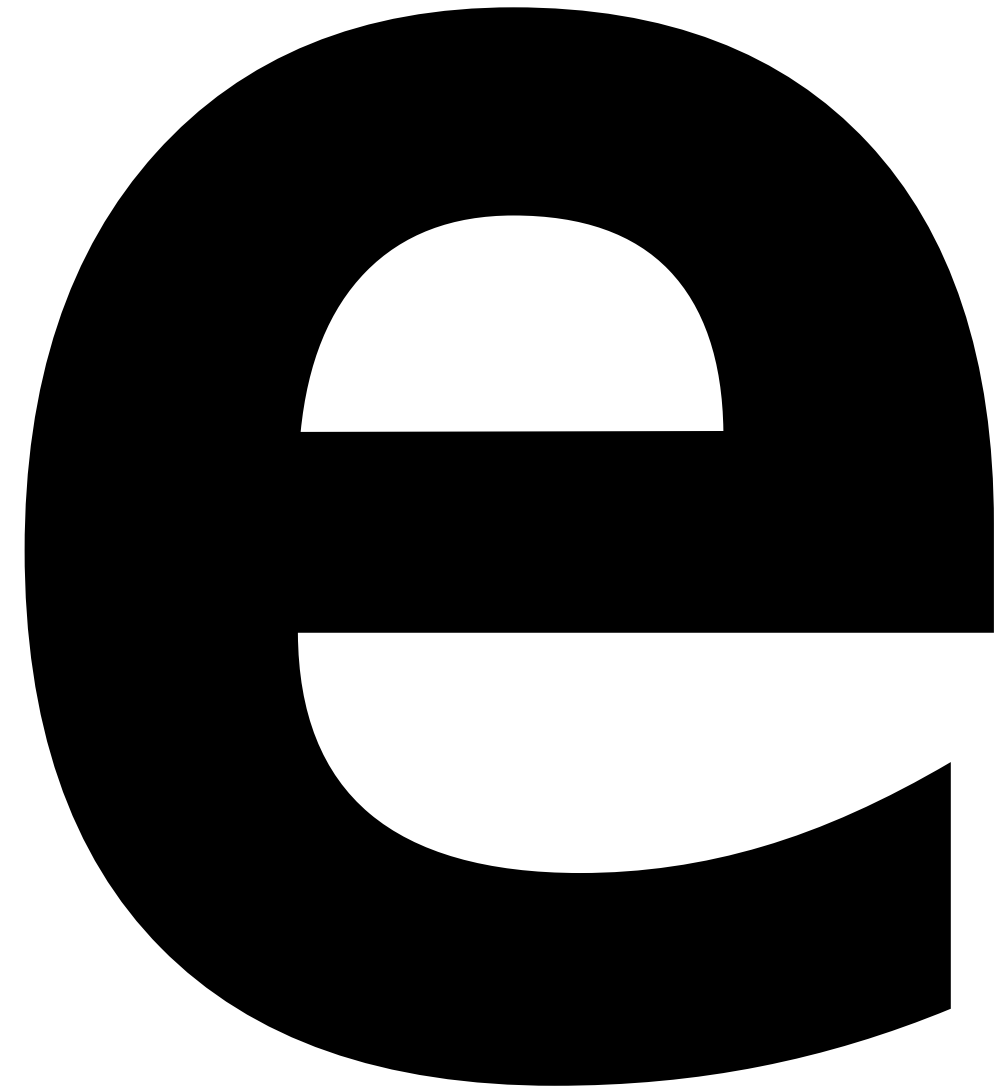


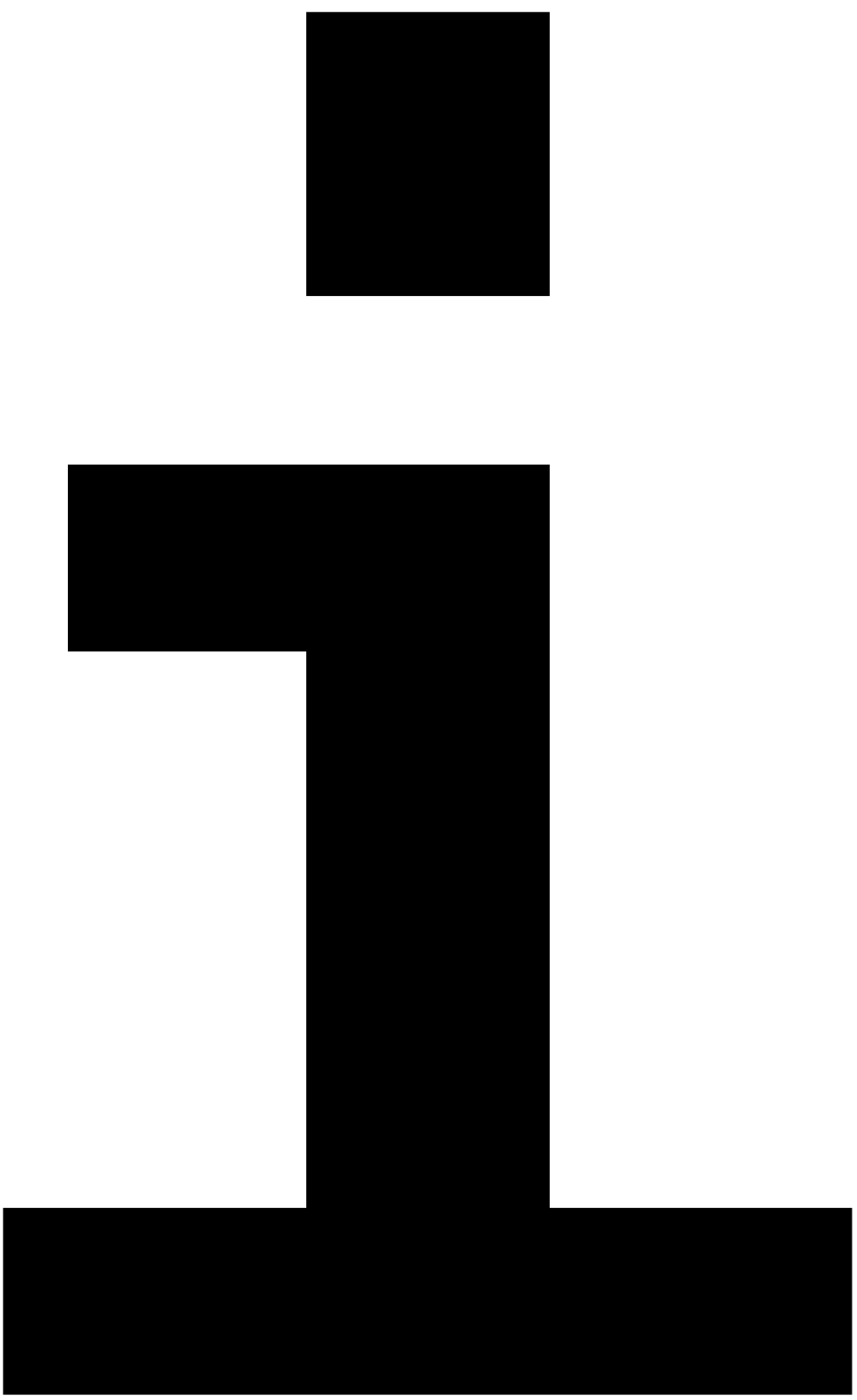




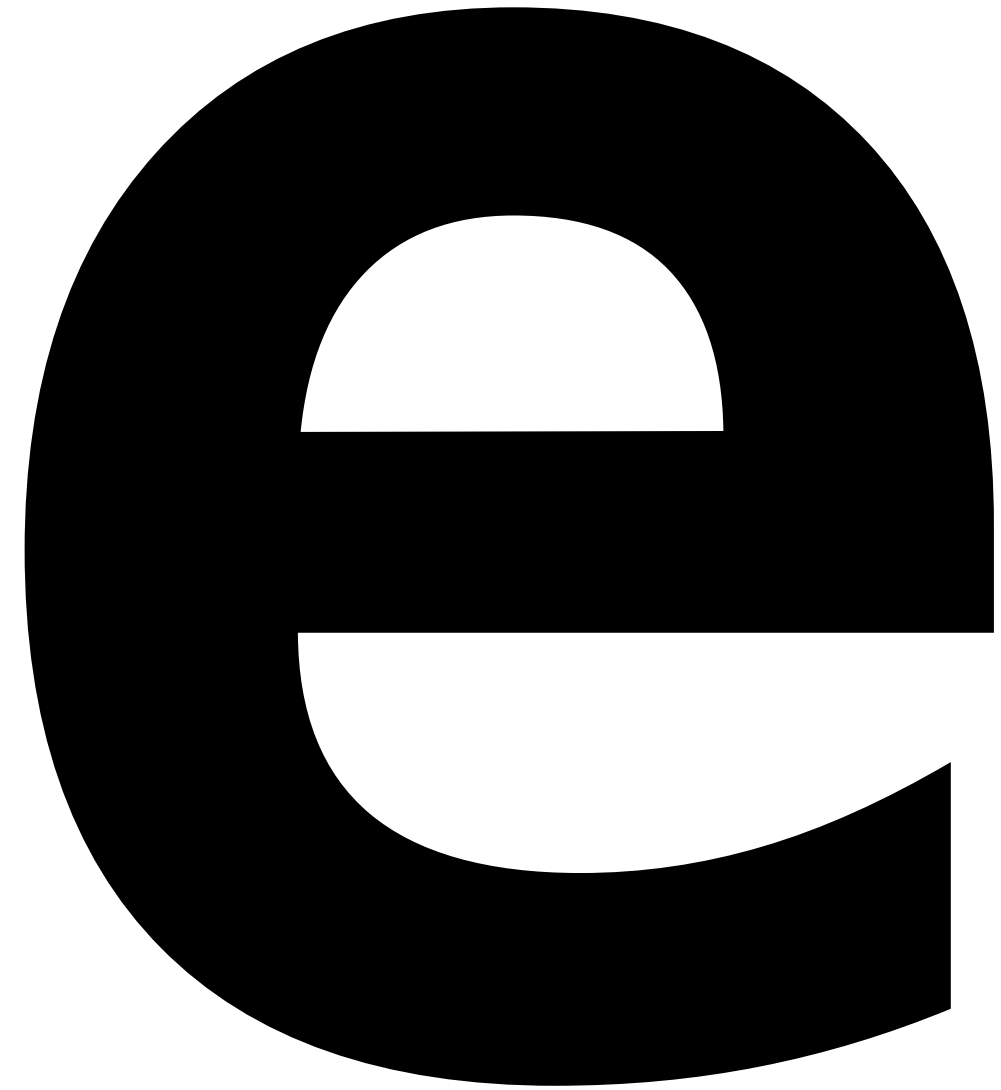


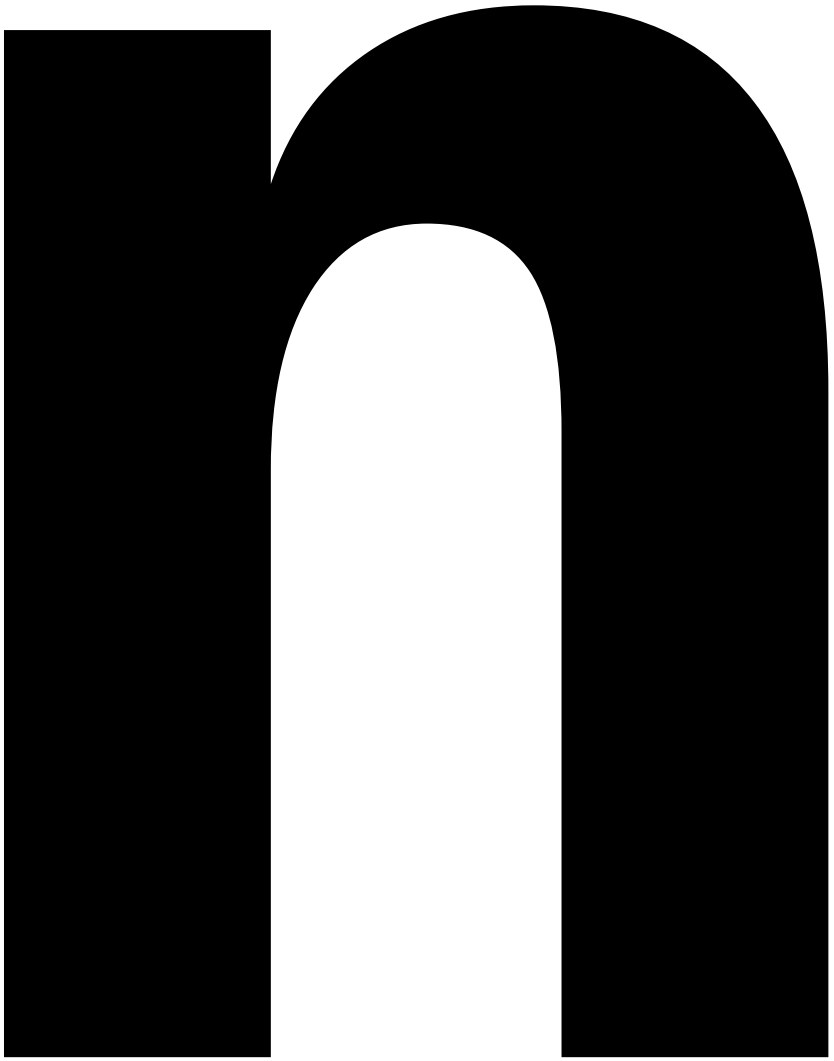


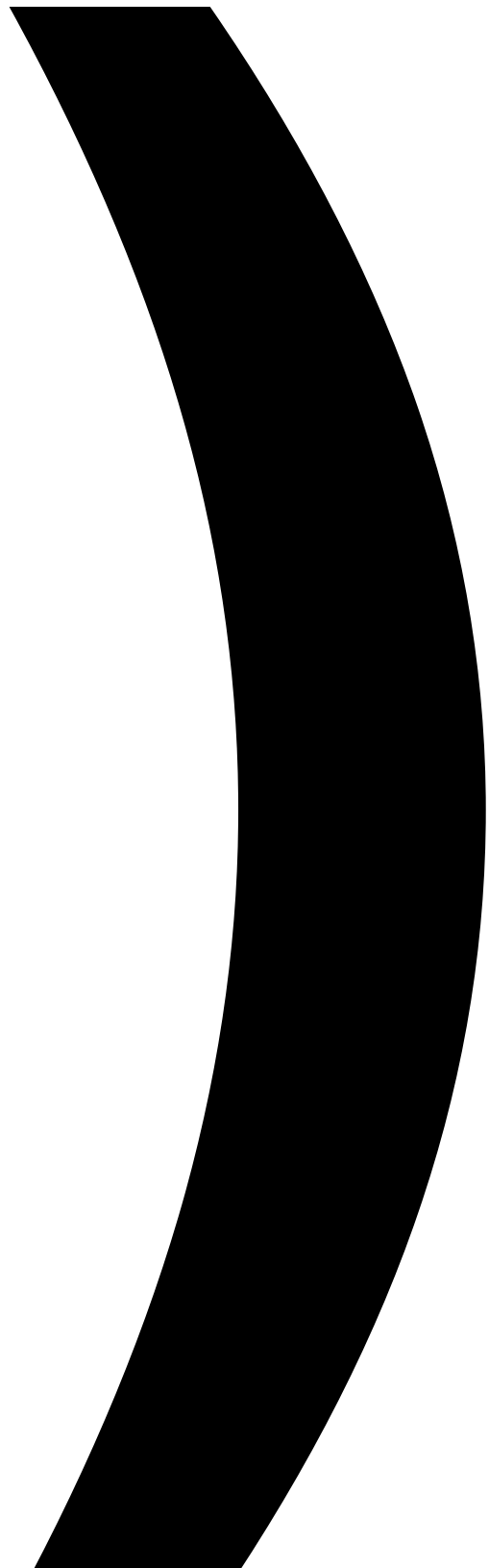




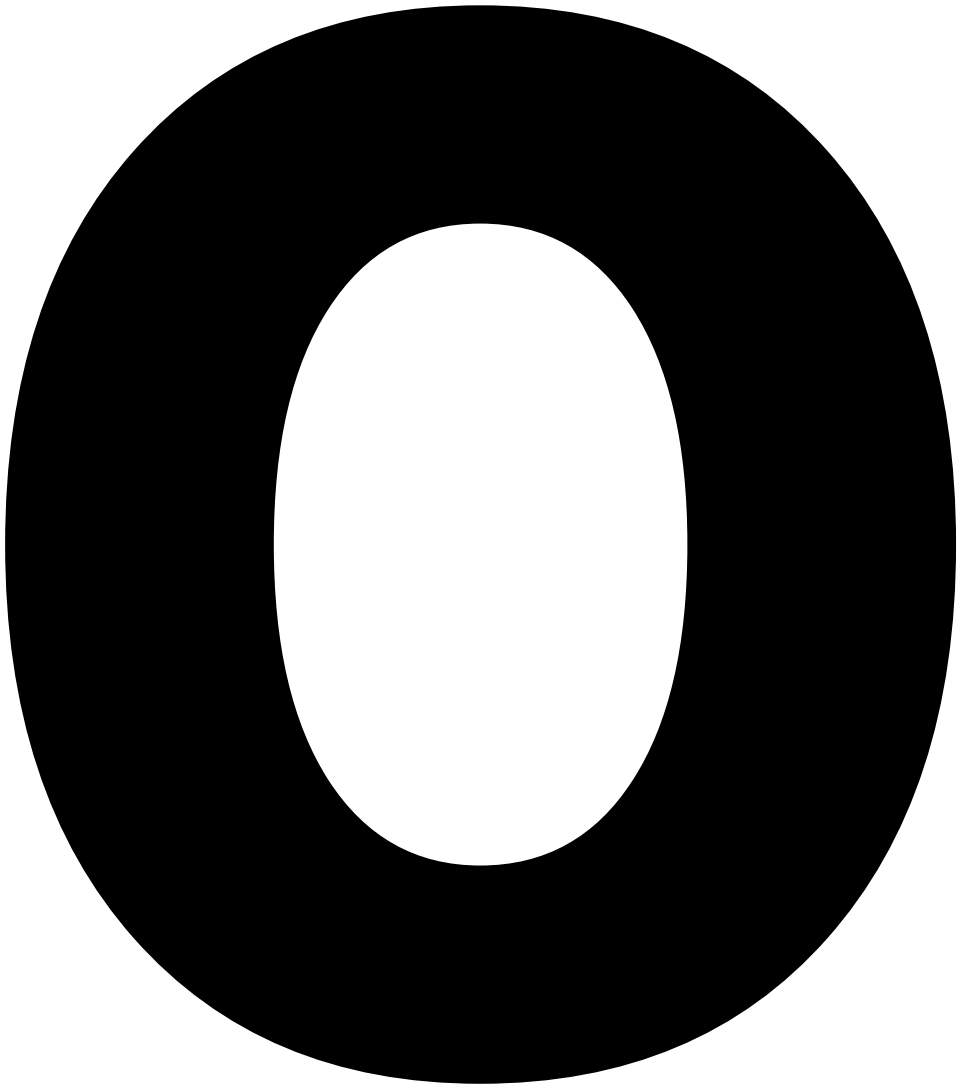
d

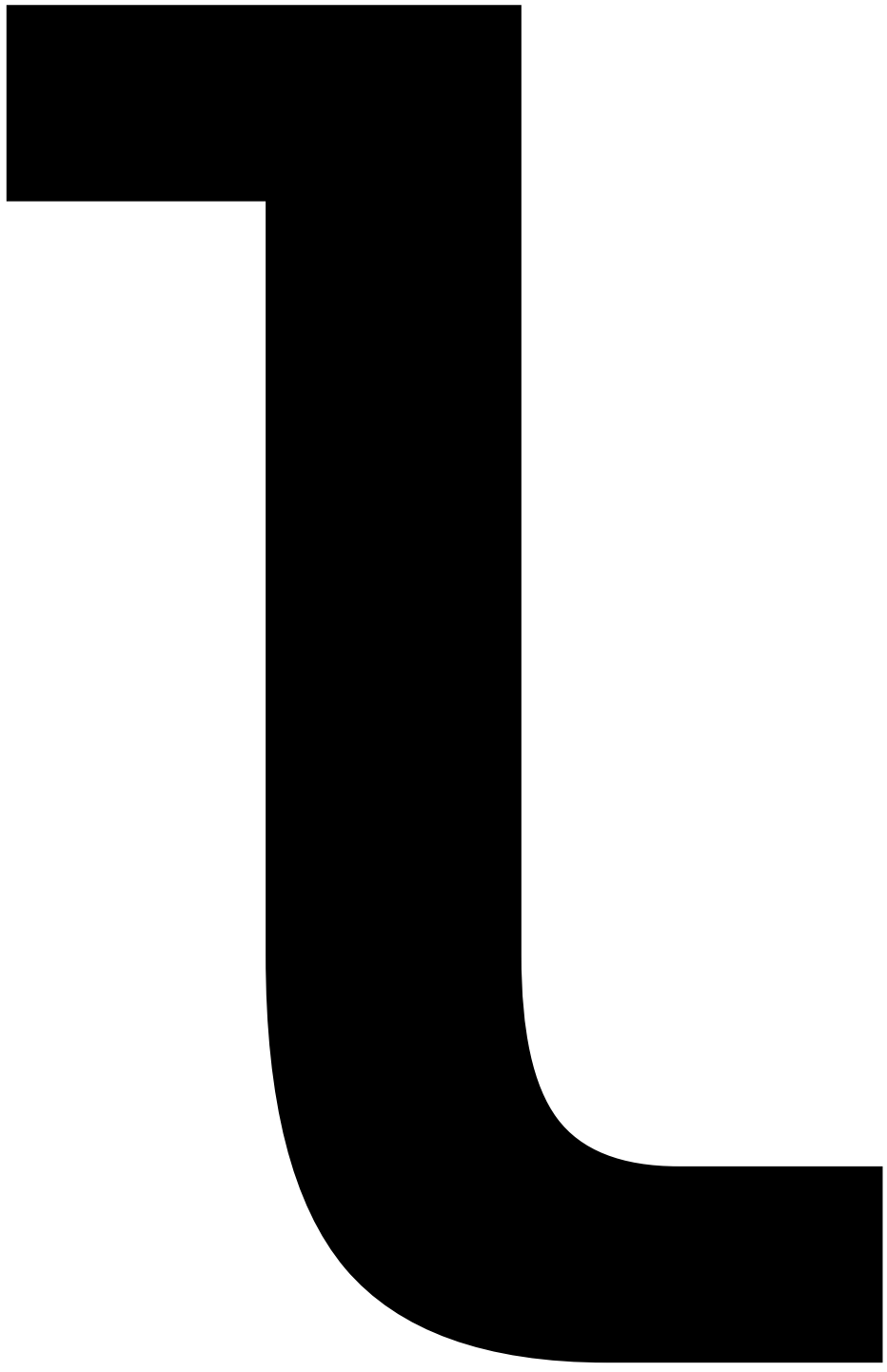


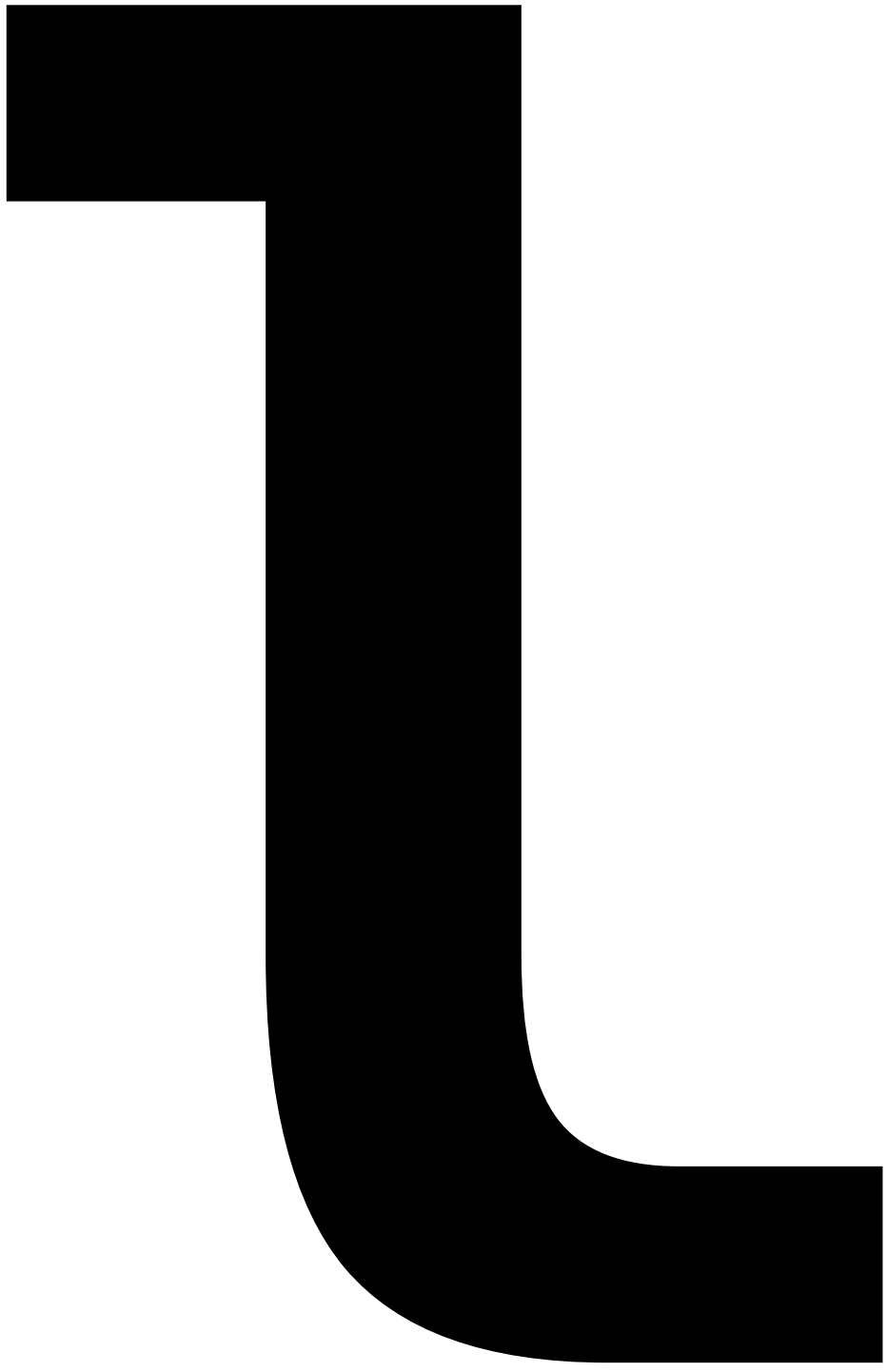


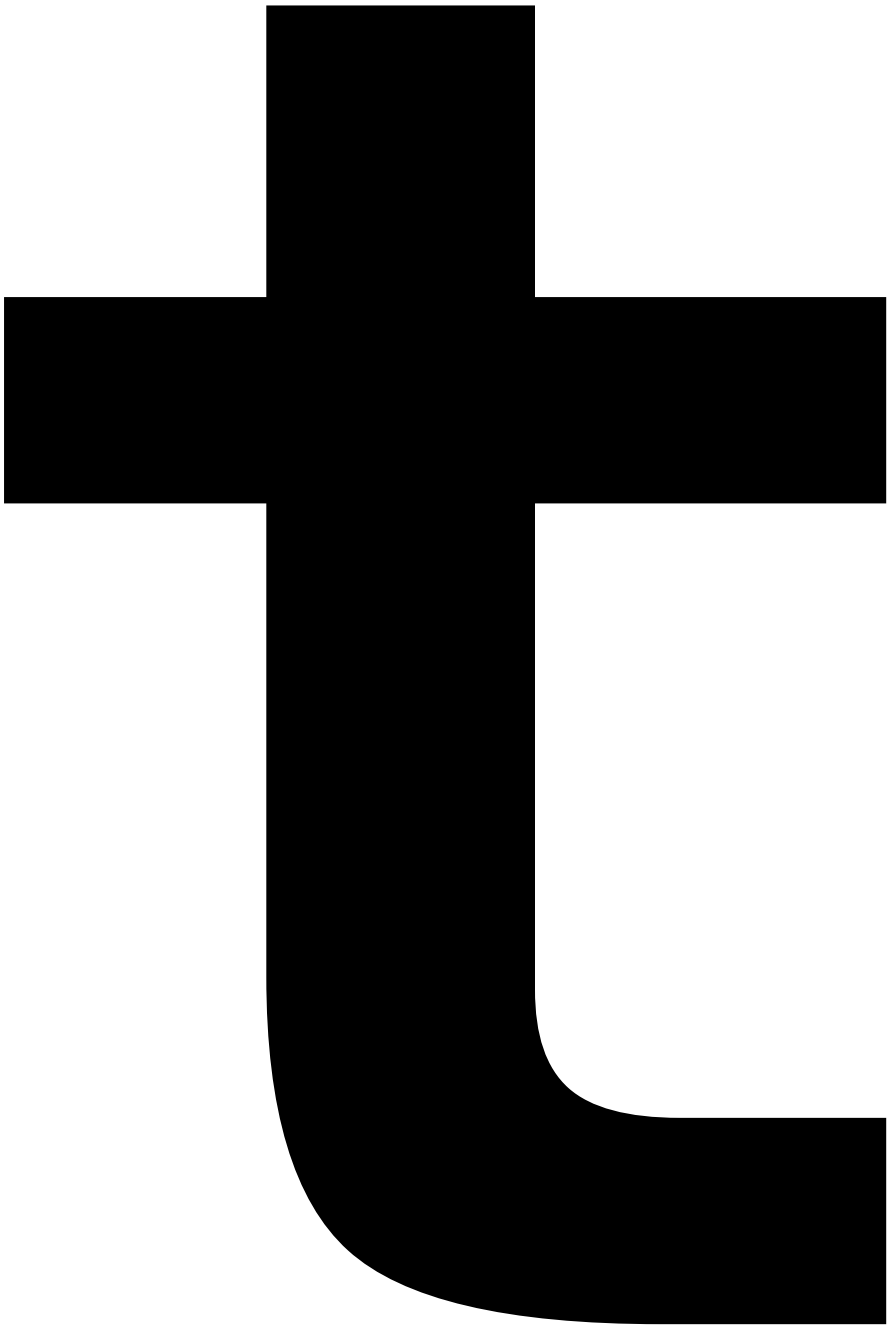


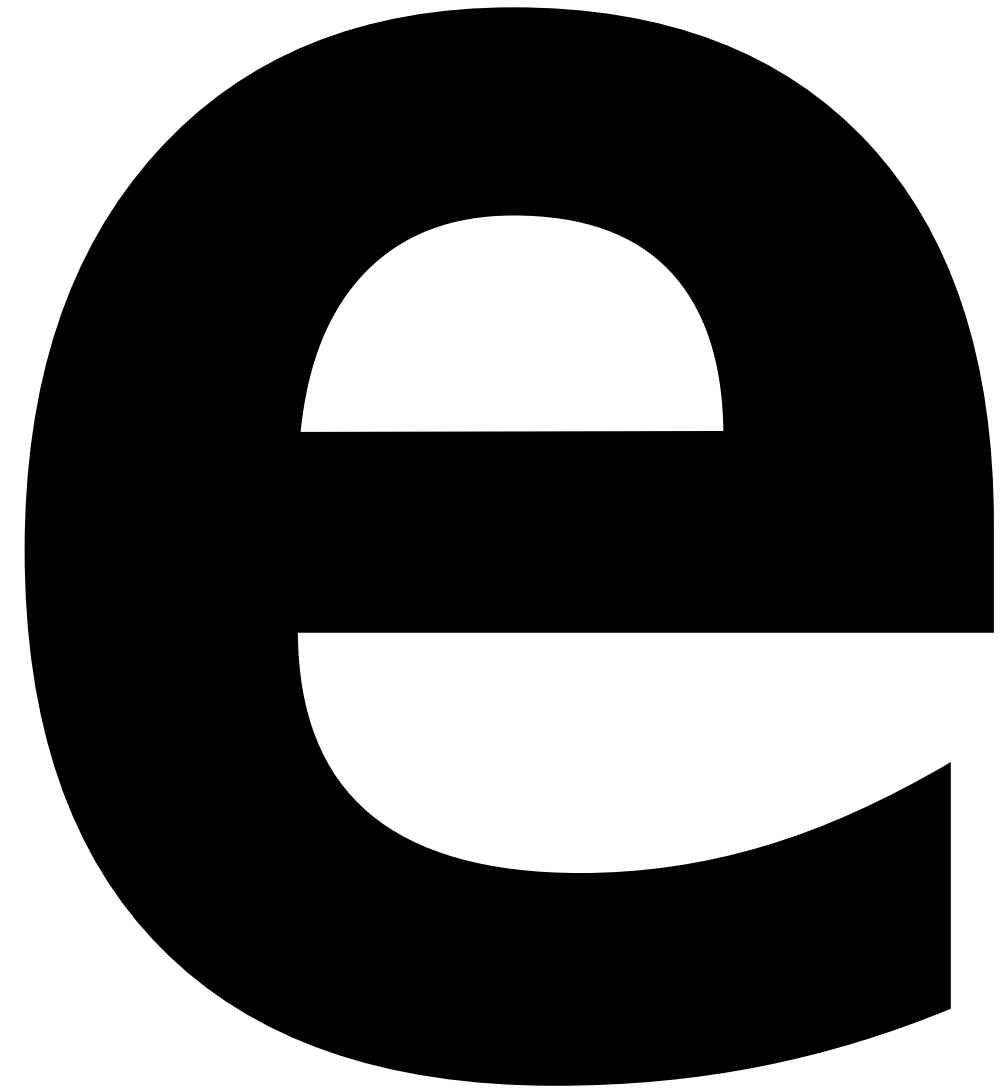
S

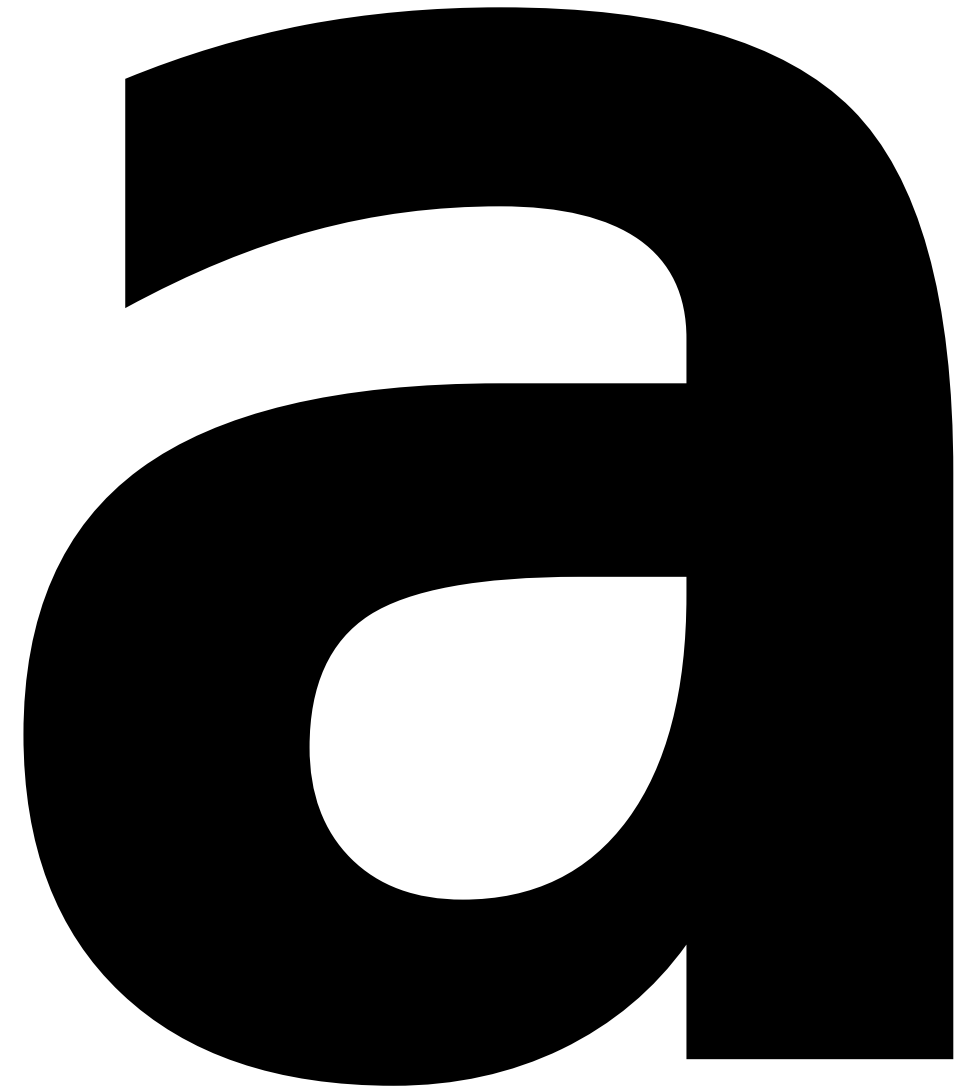




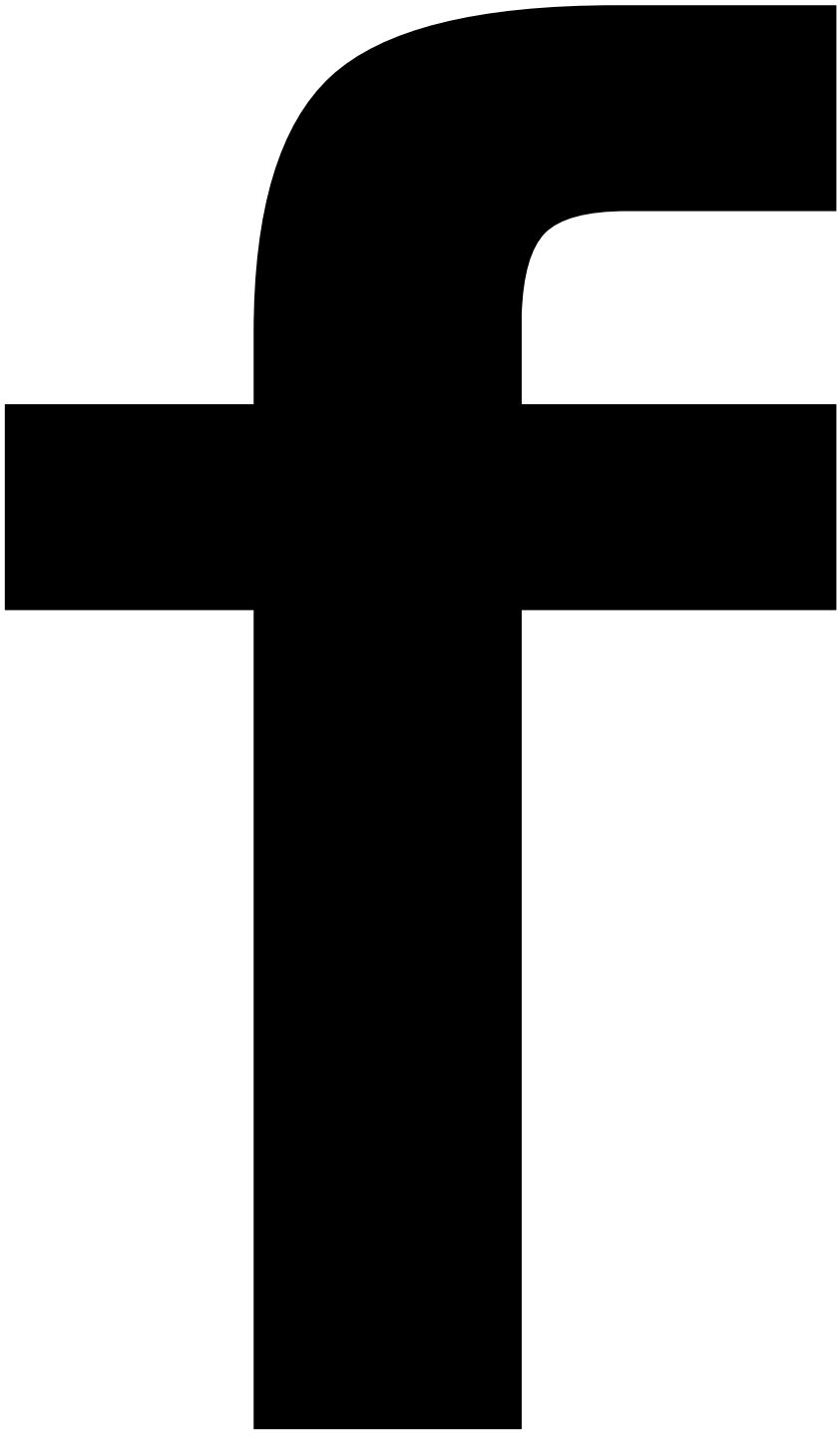


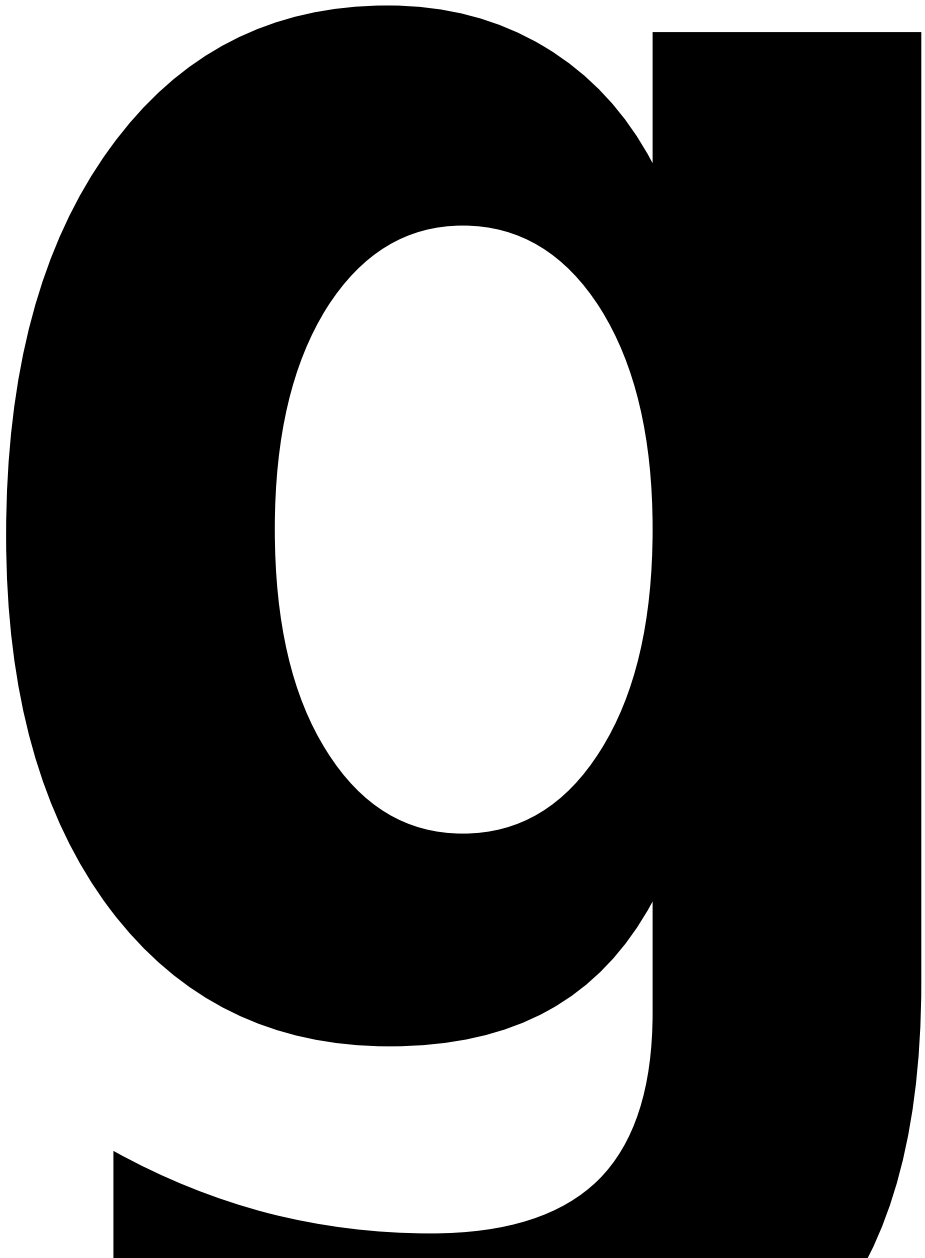


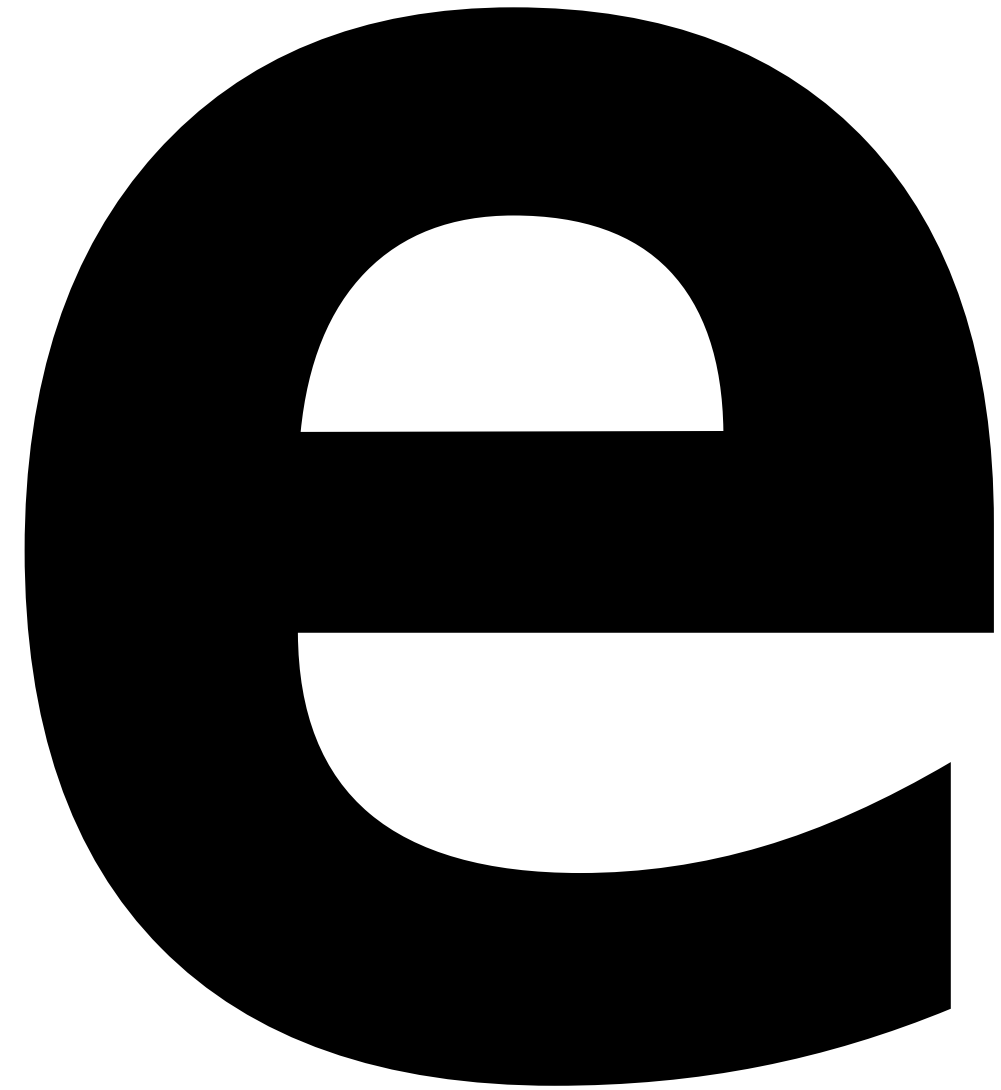


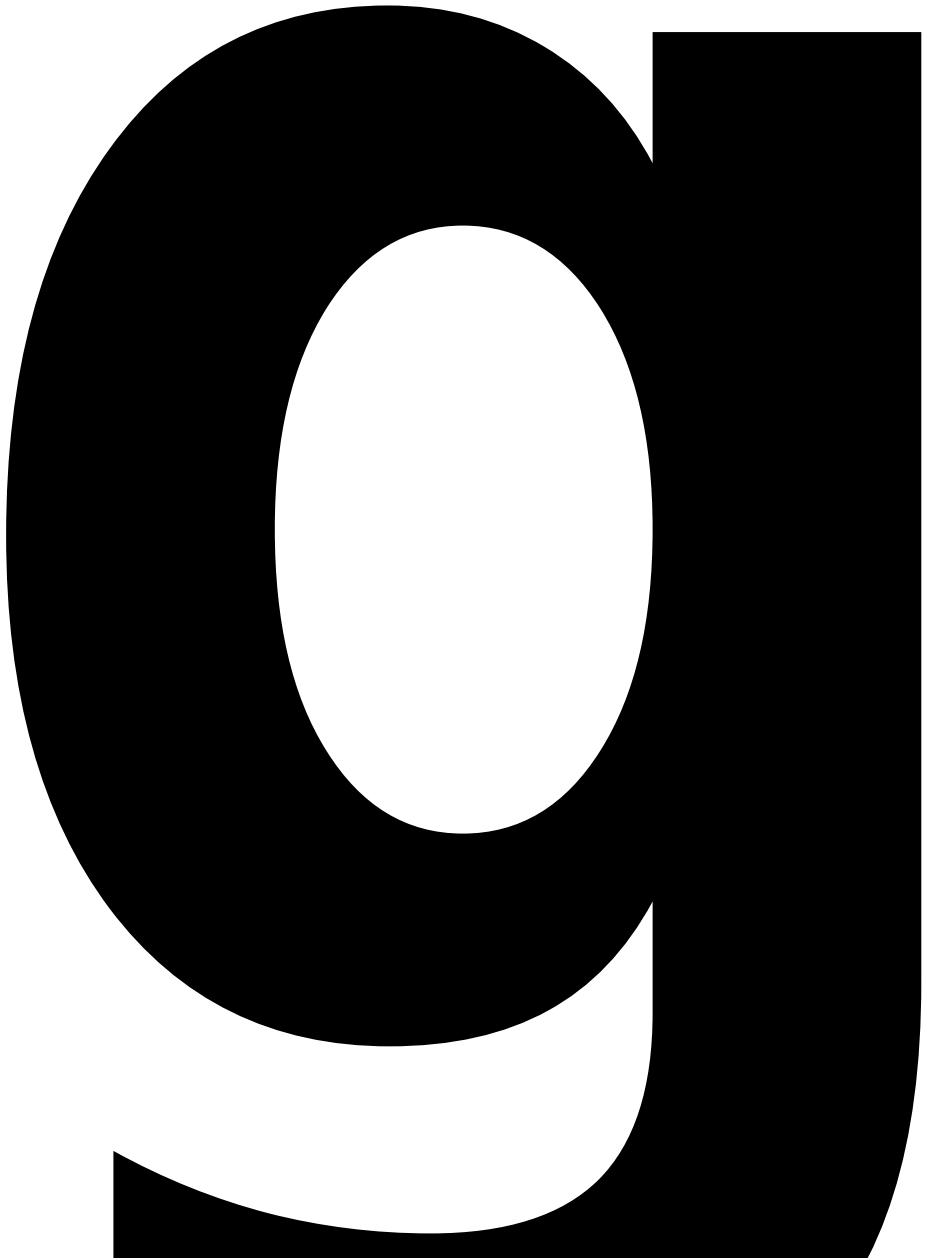


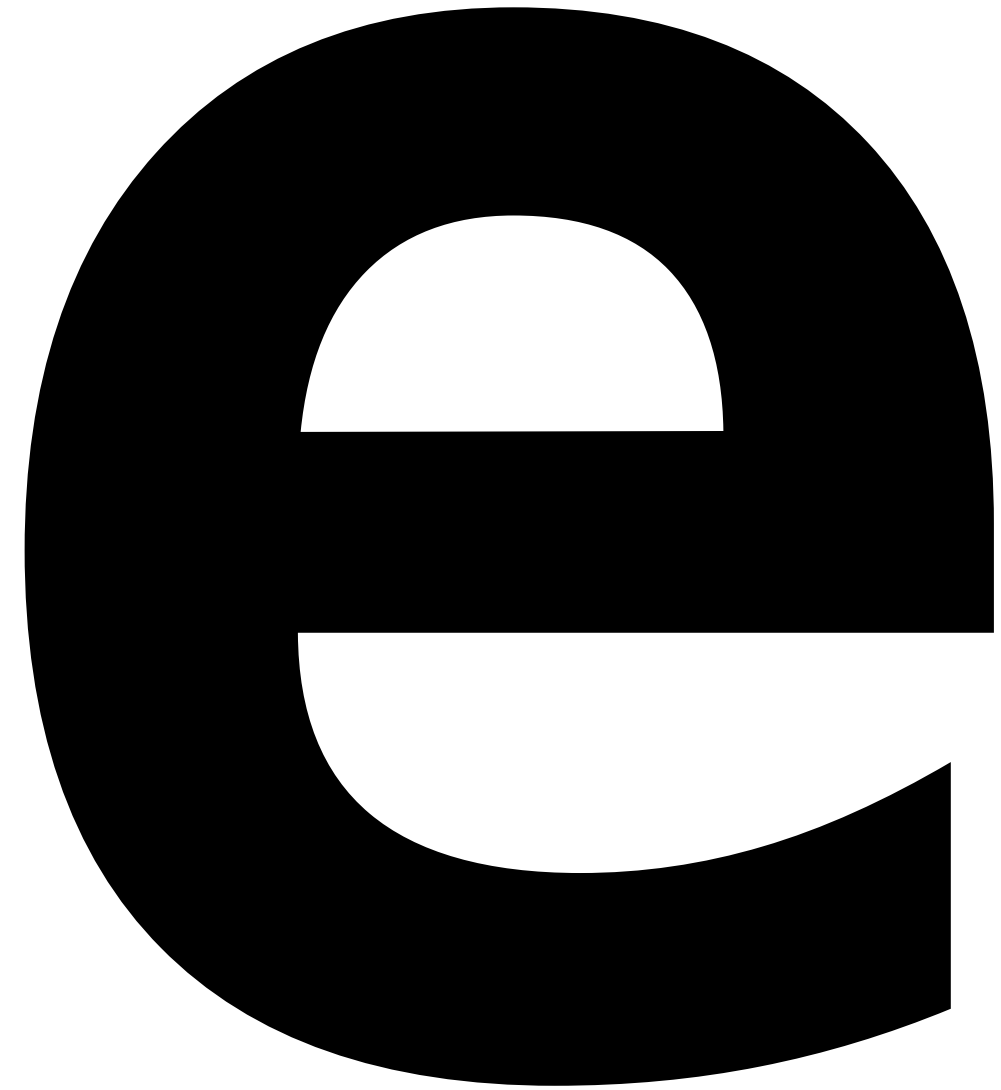
u

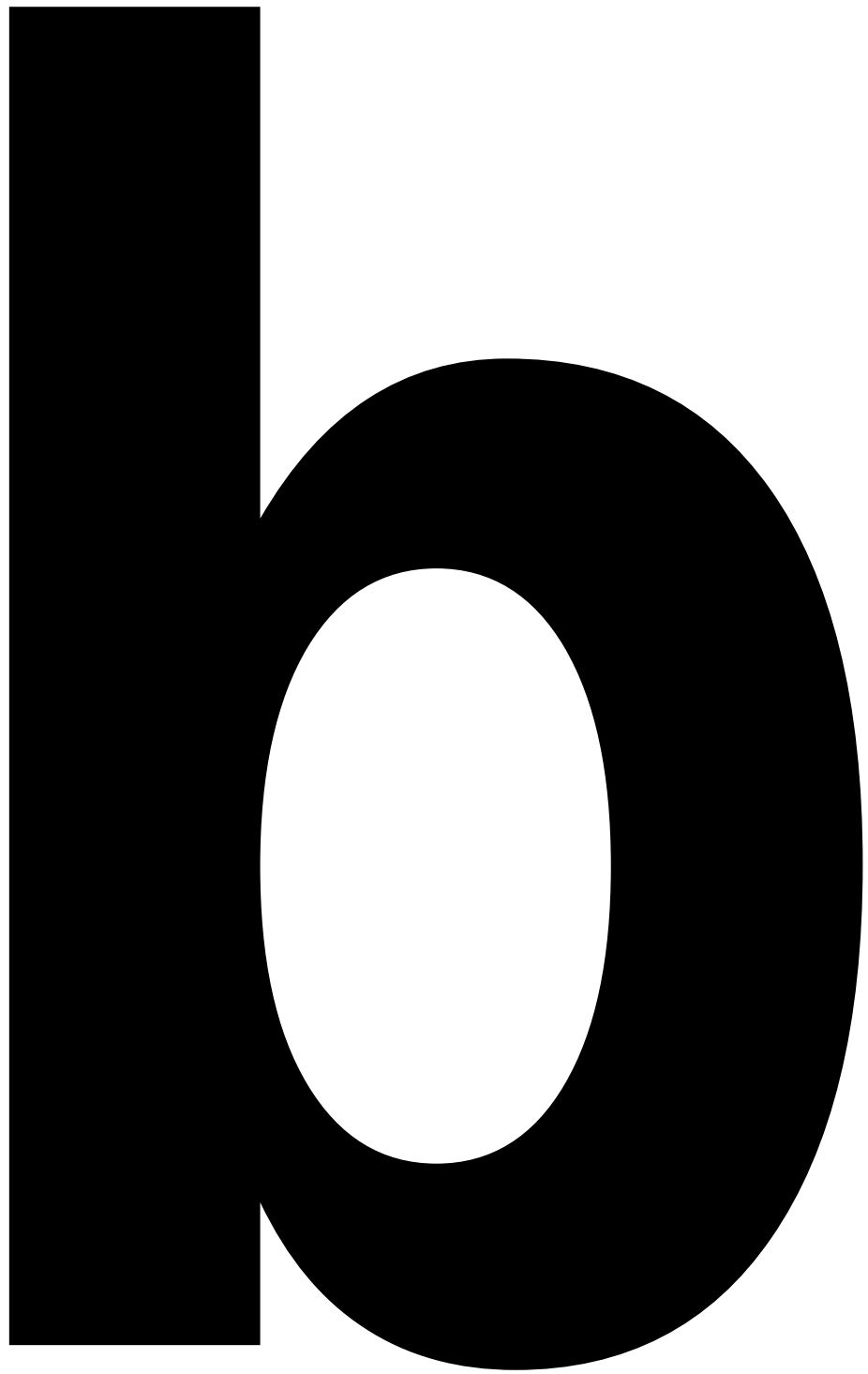


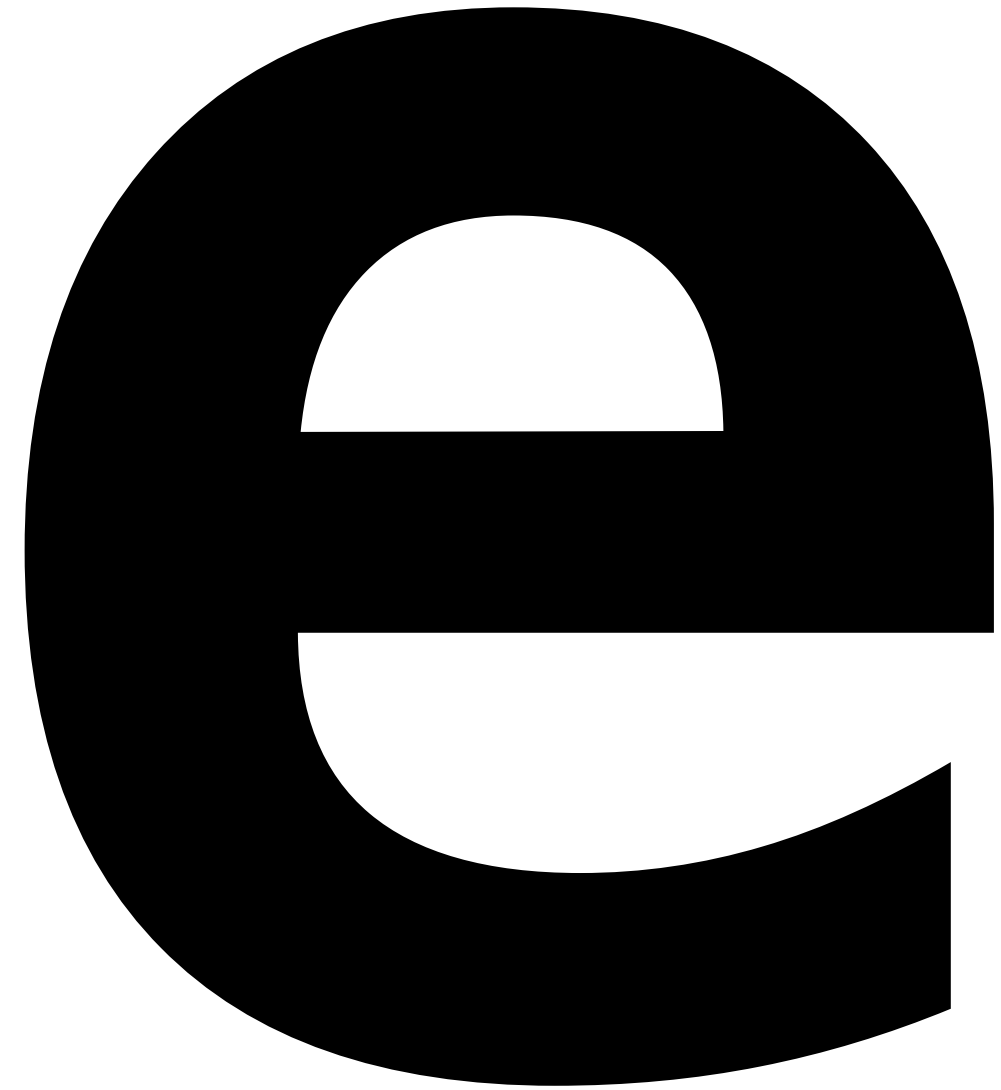


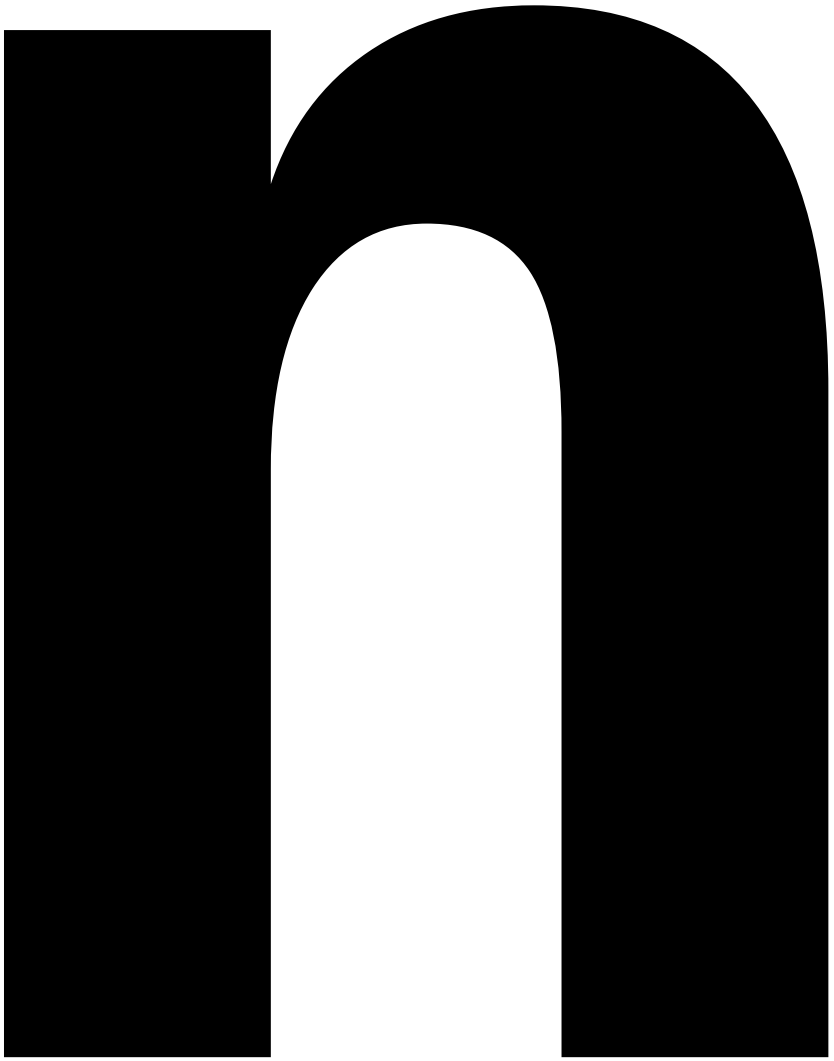


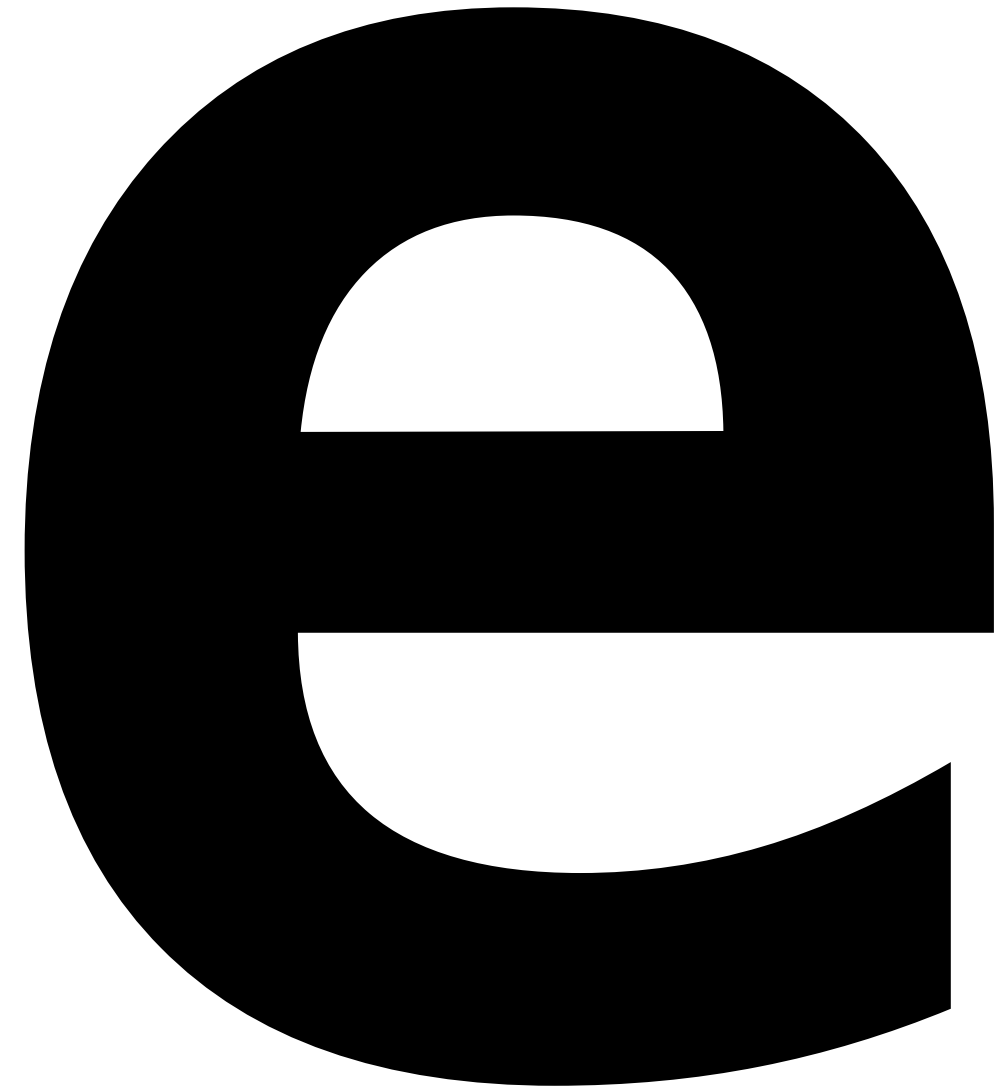


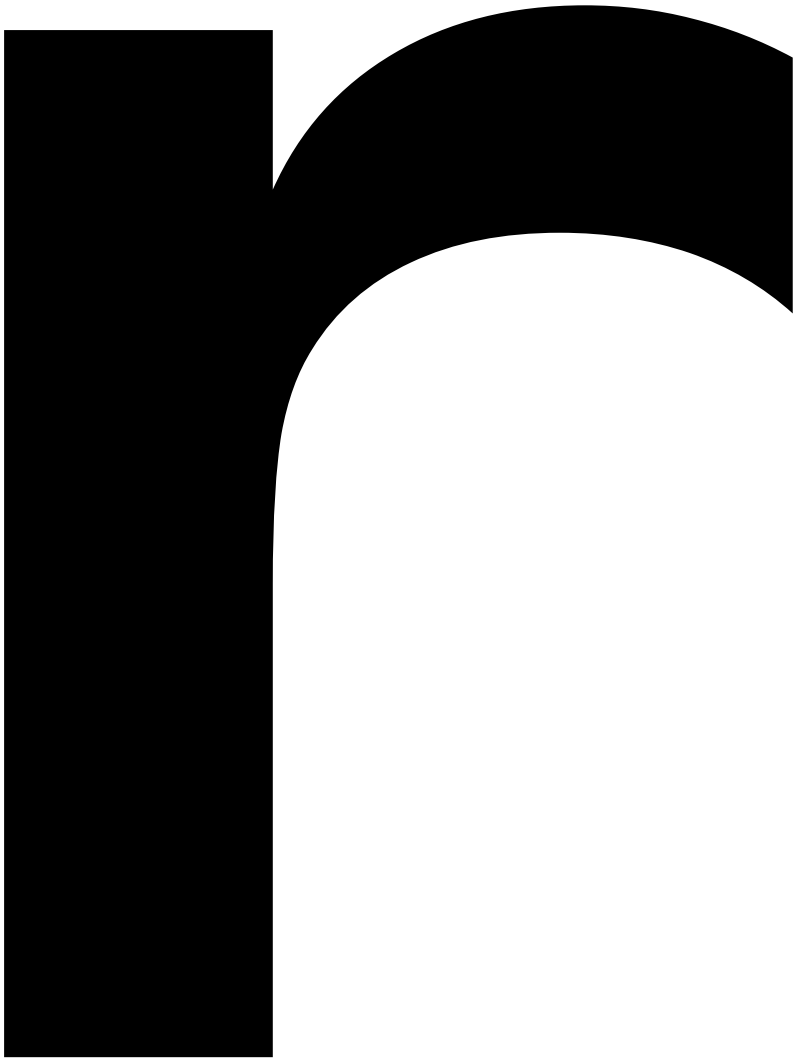




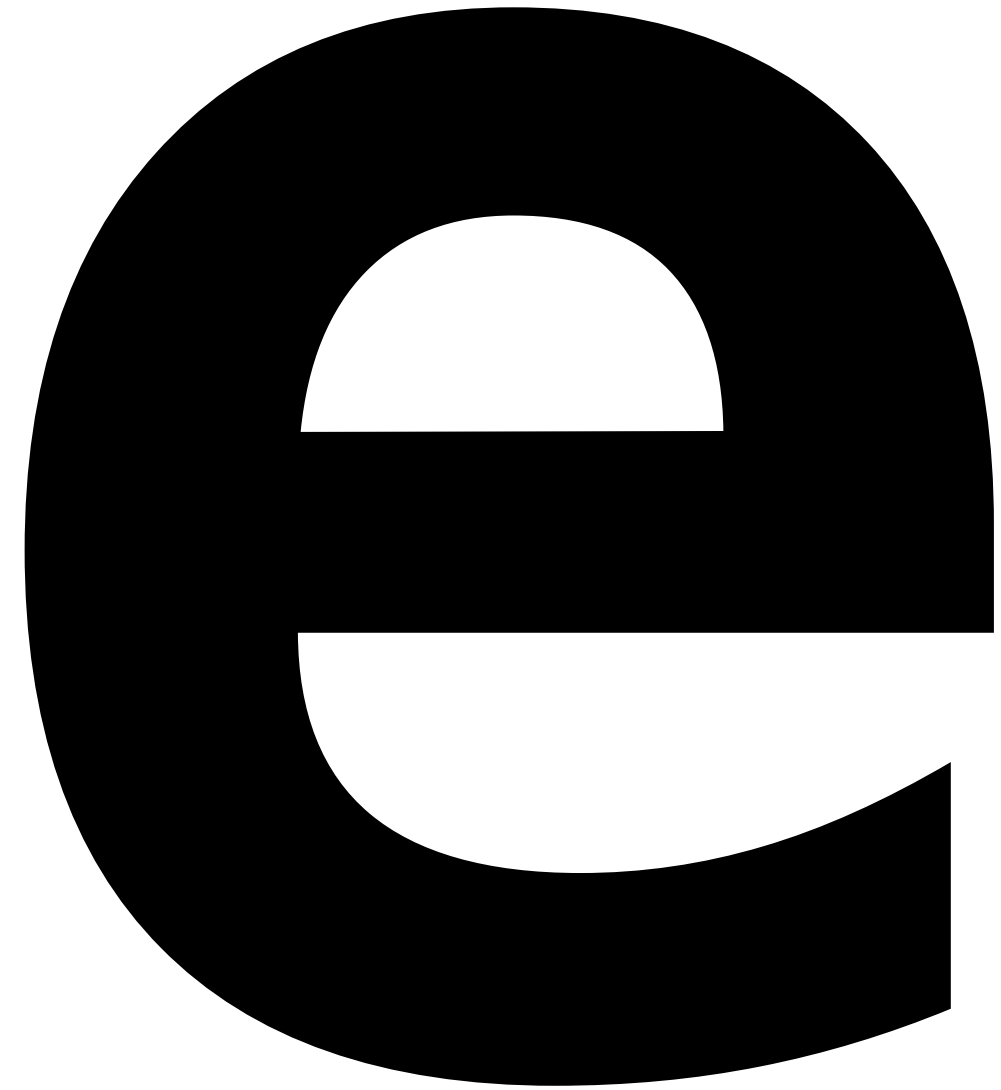


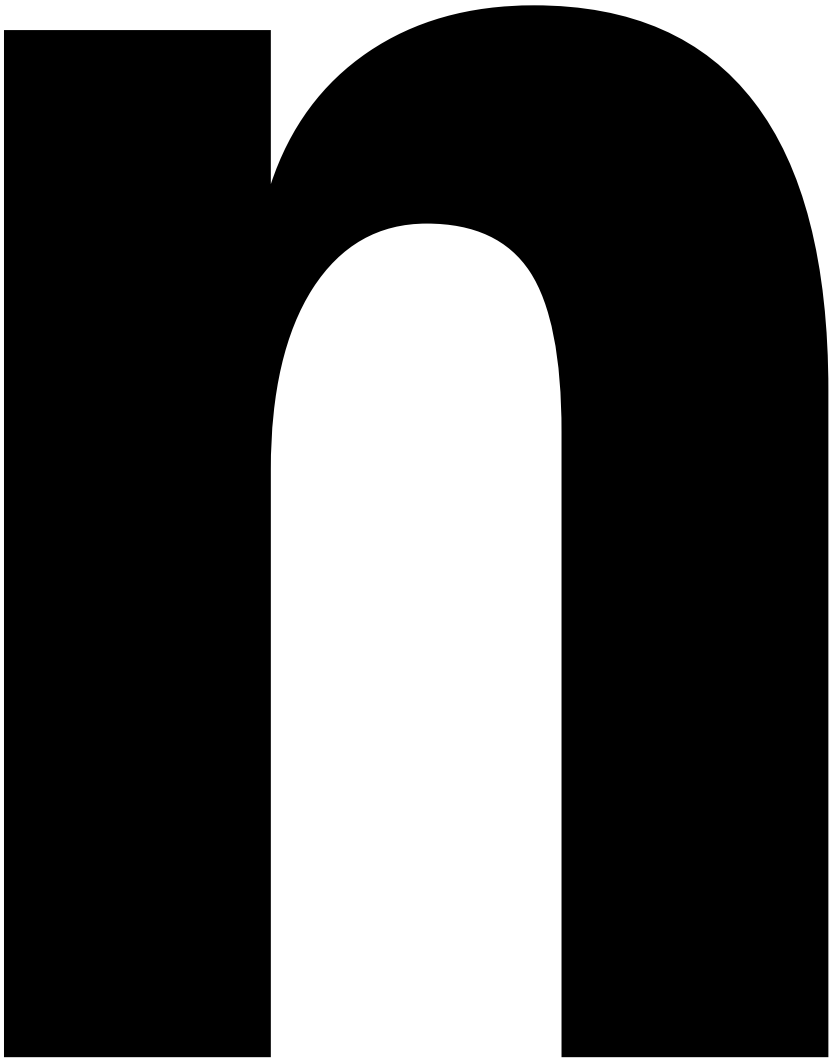


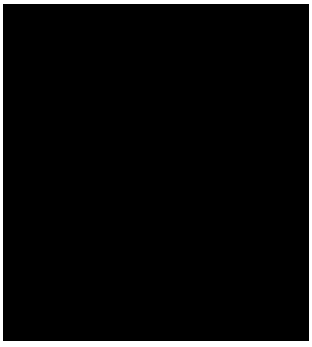


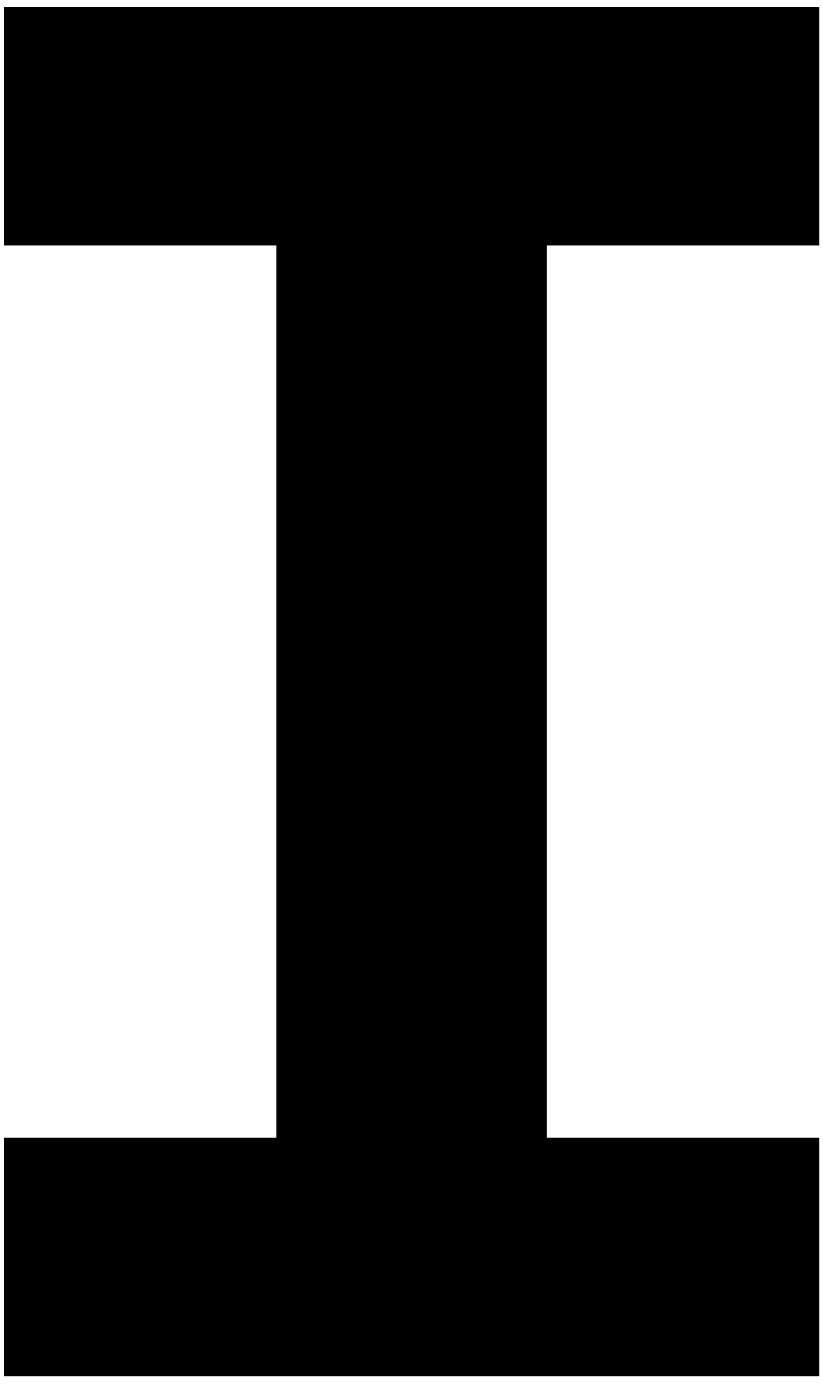


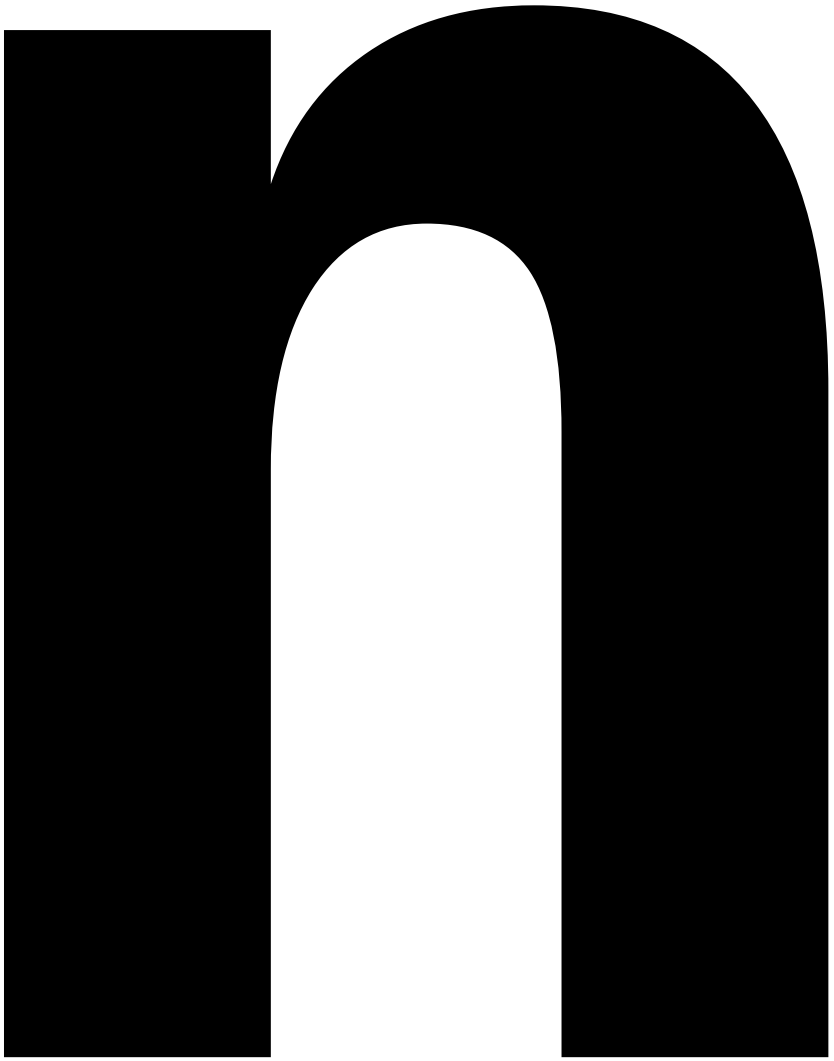
d



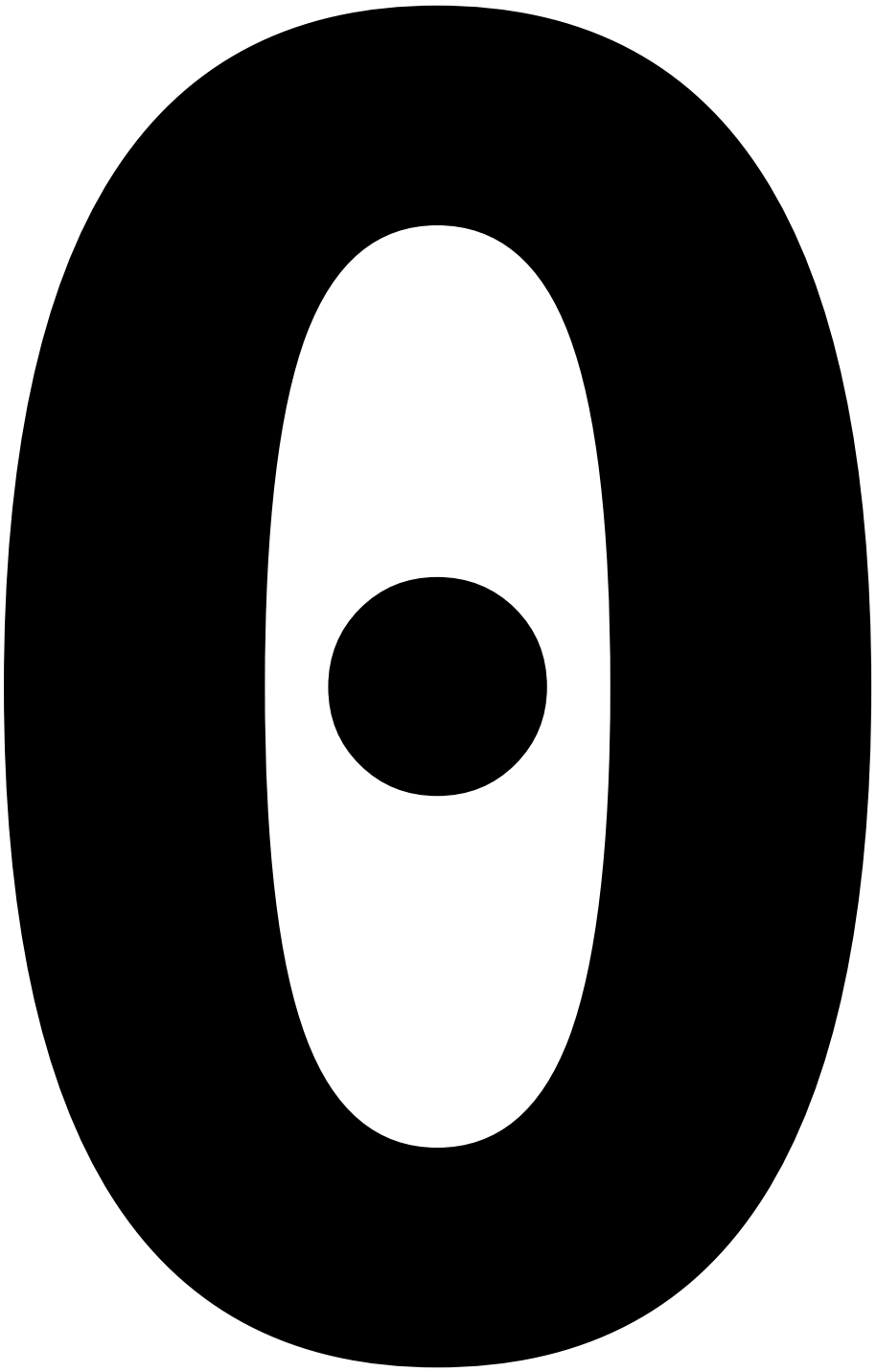


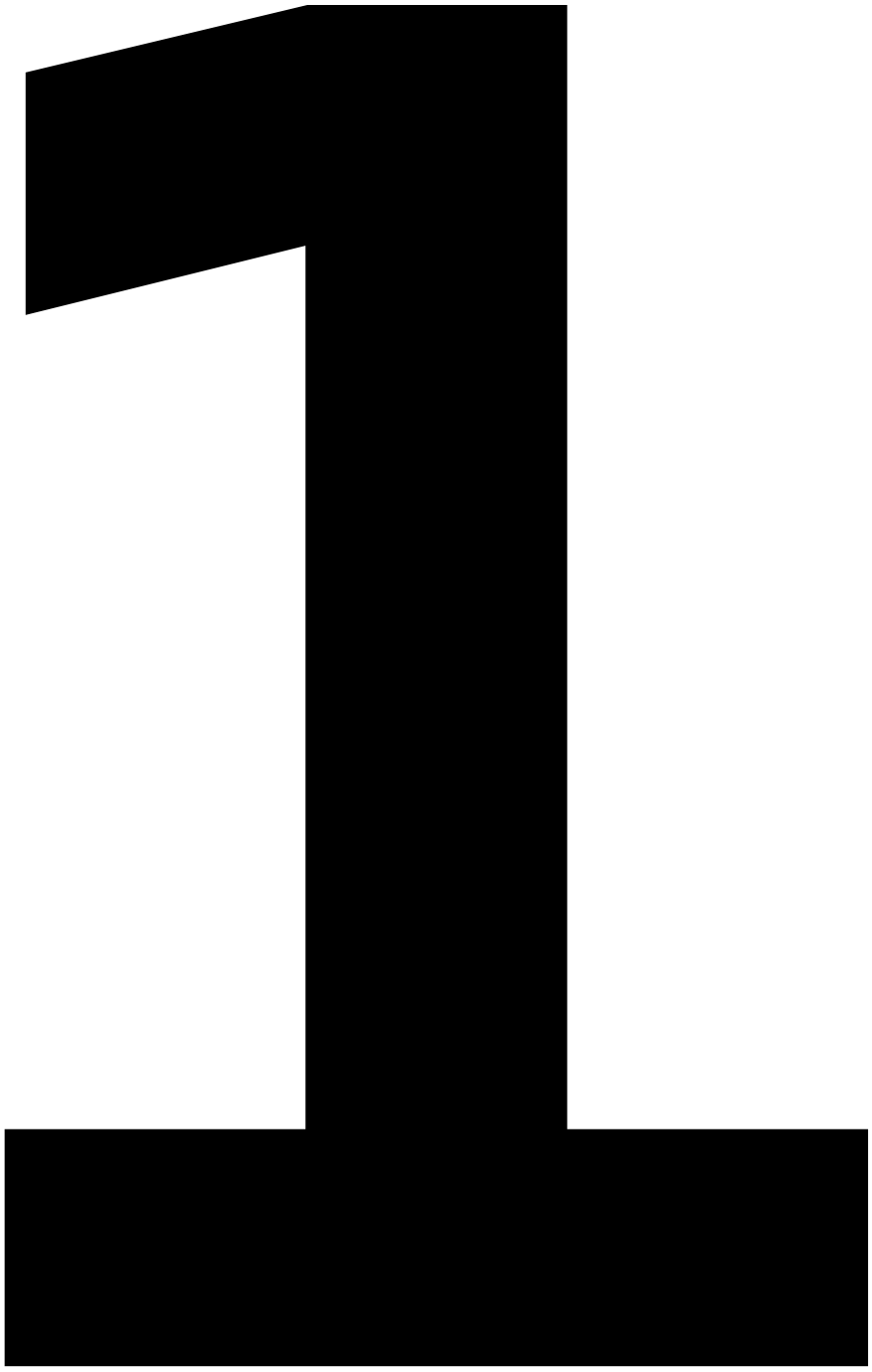


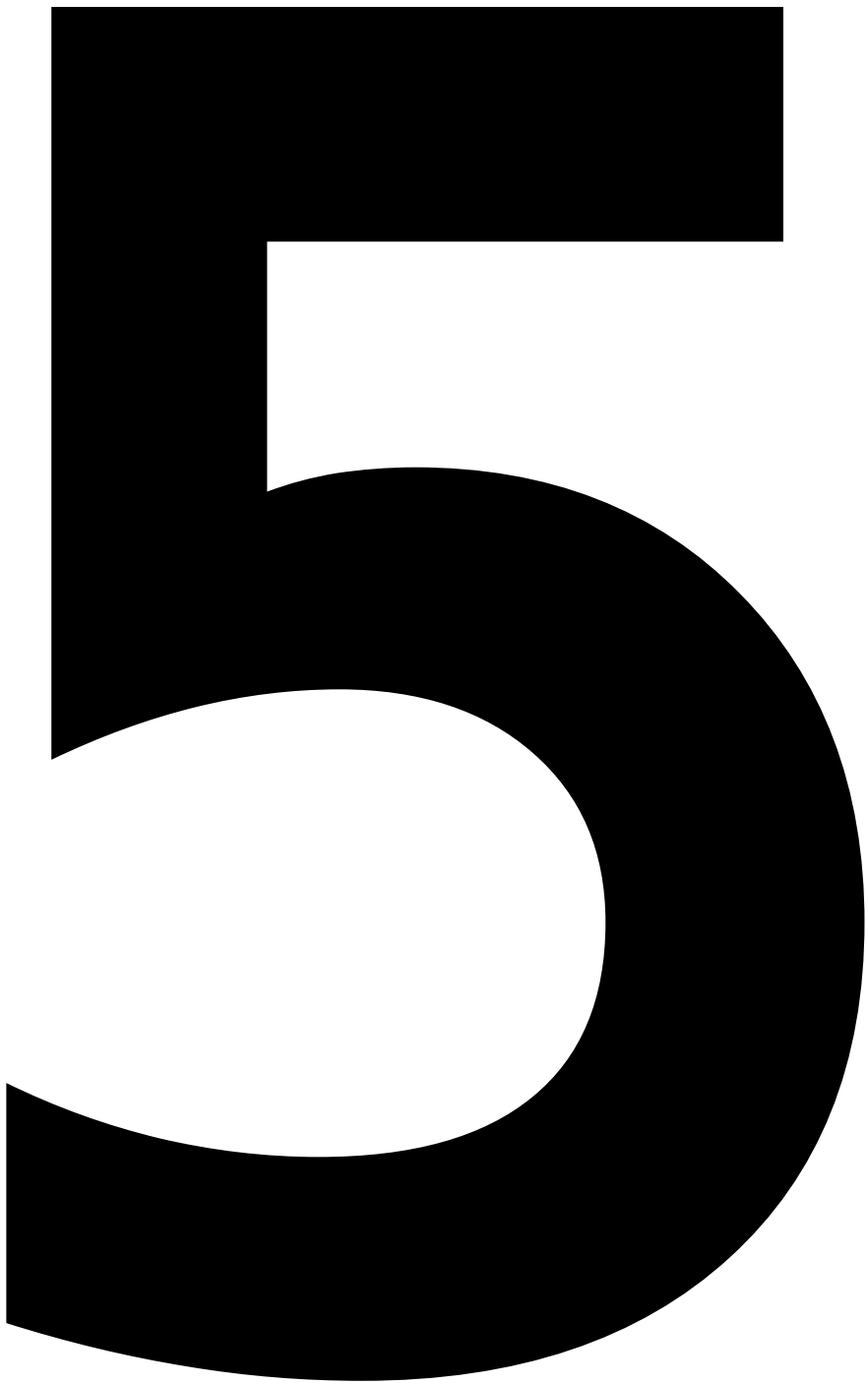




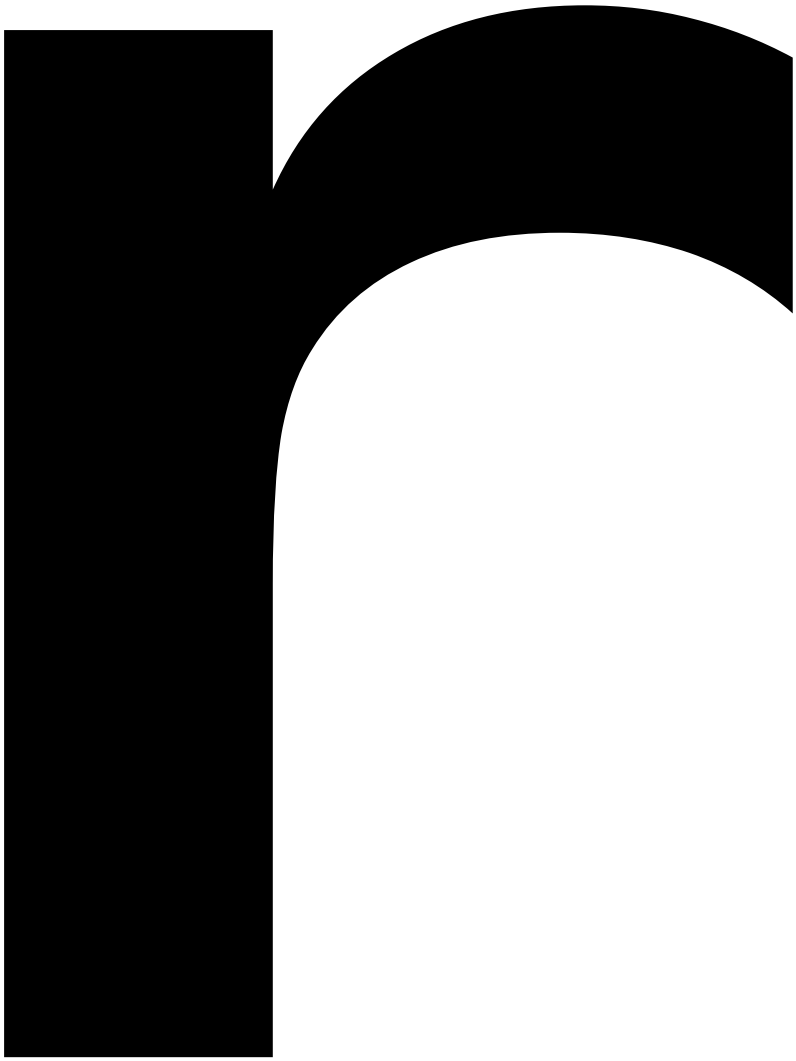
2



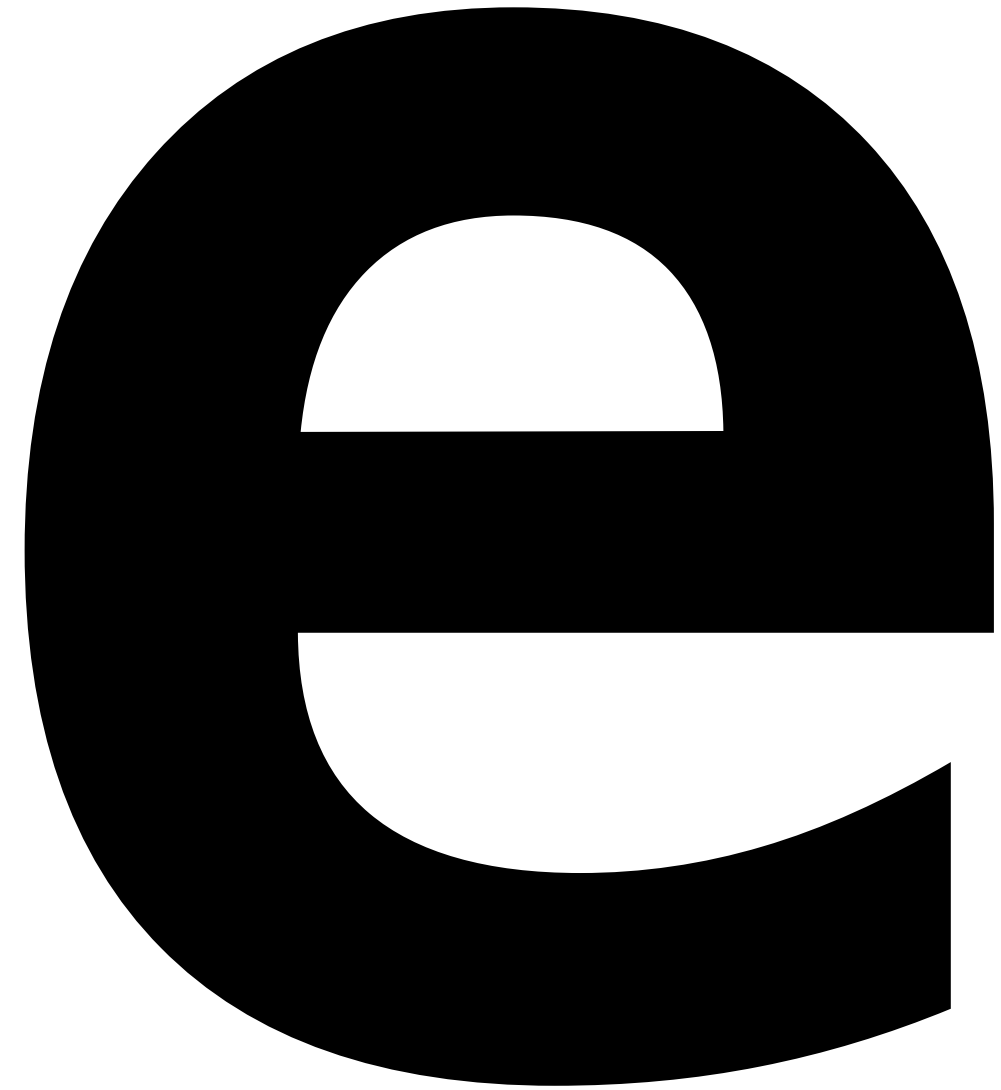


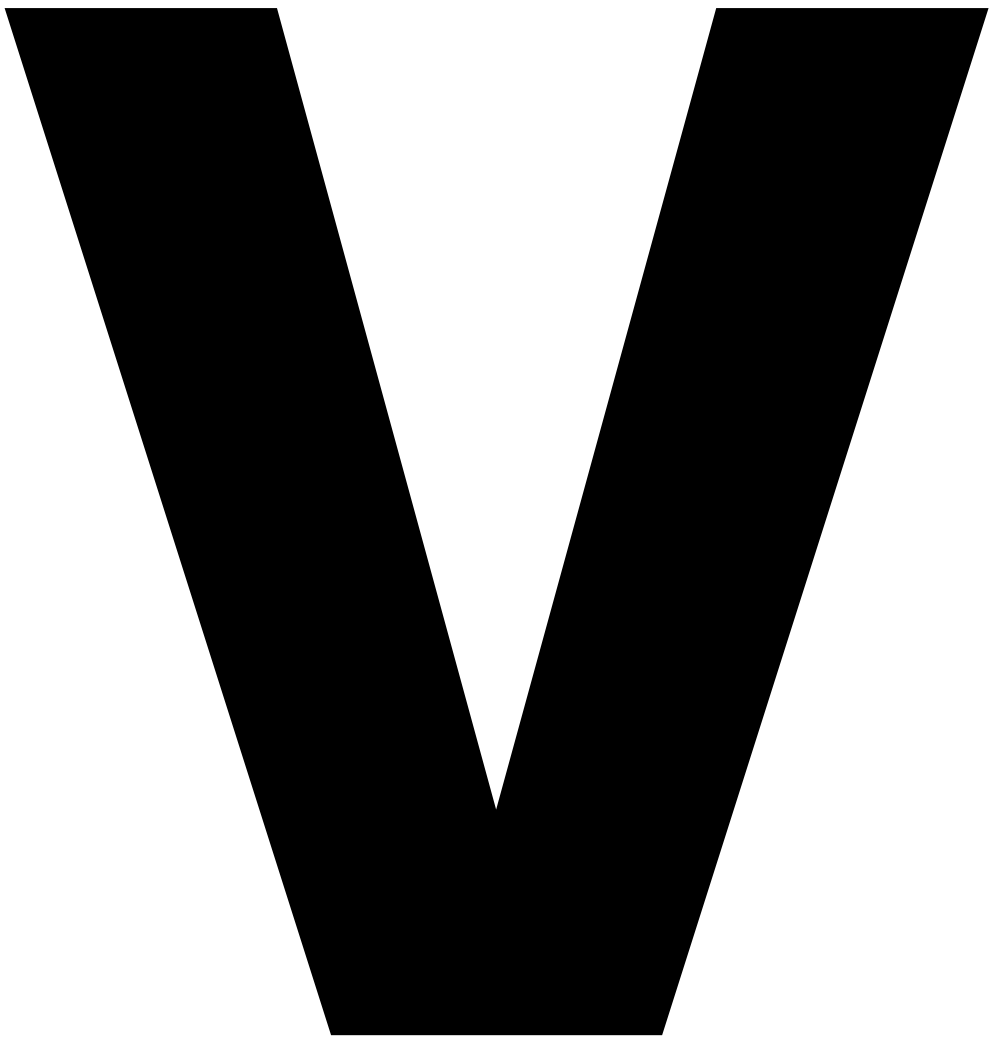


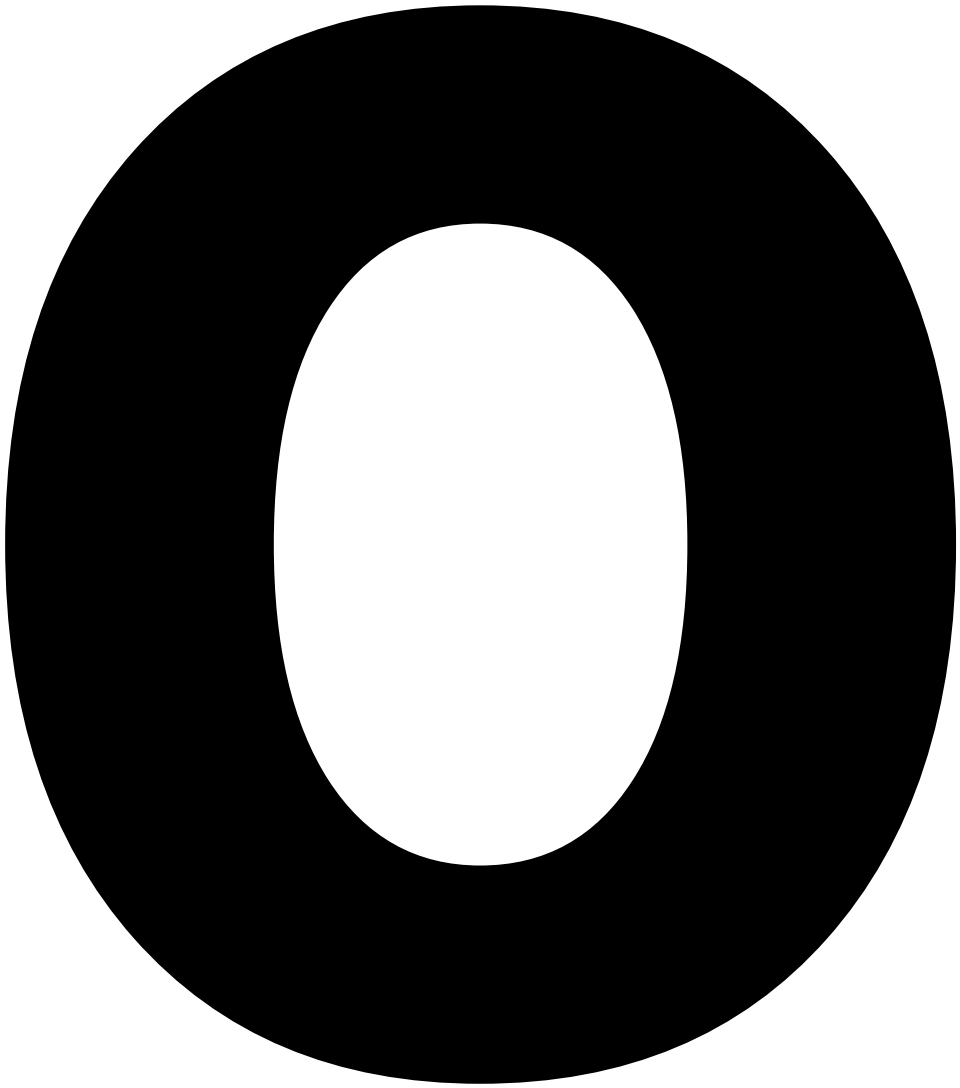
u

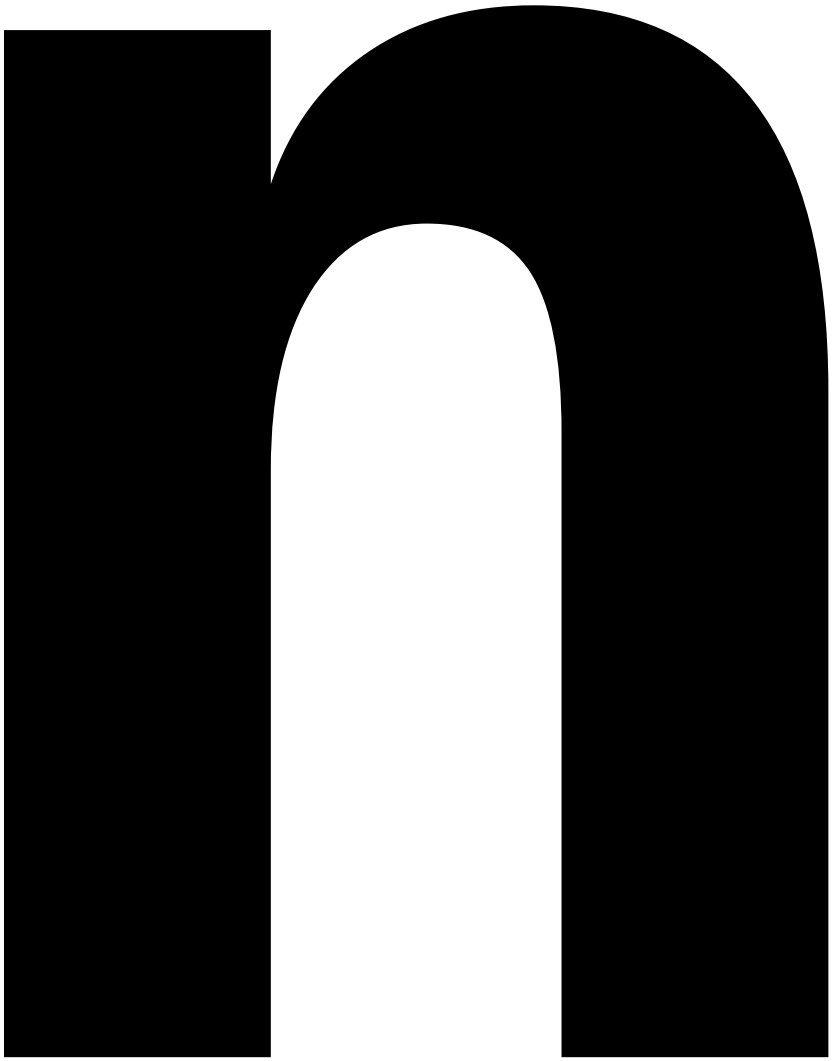


d

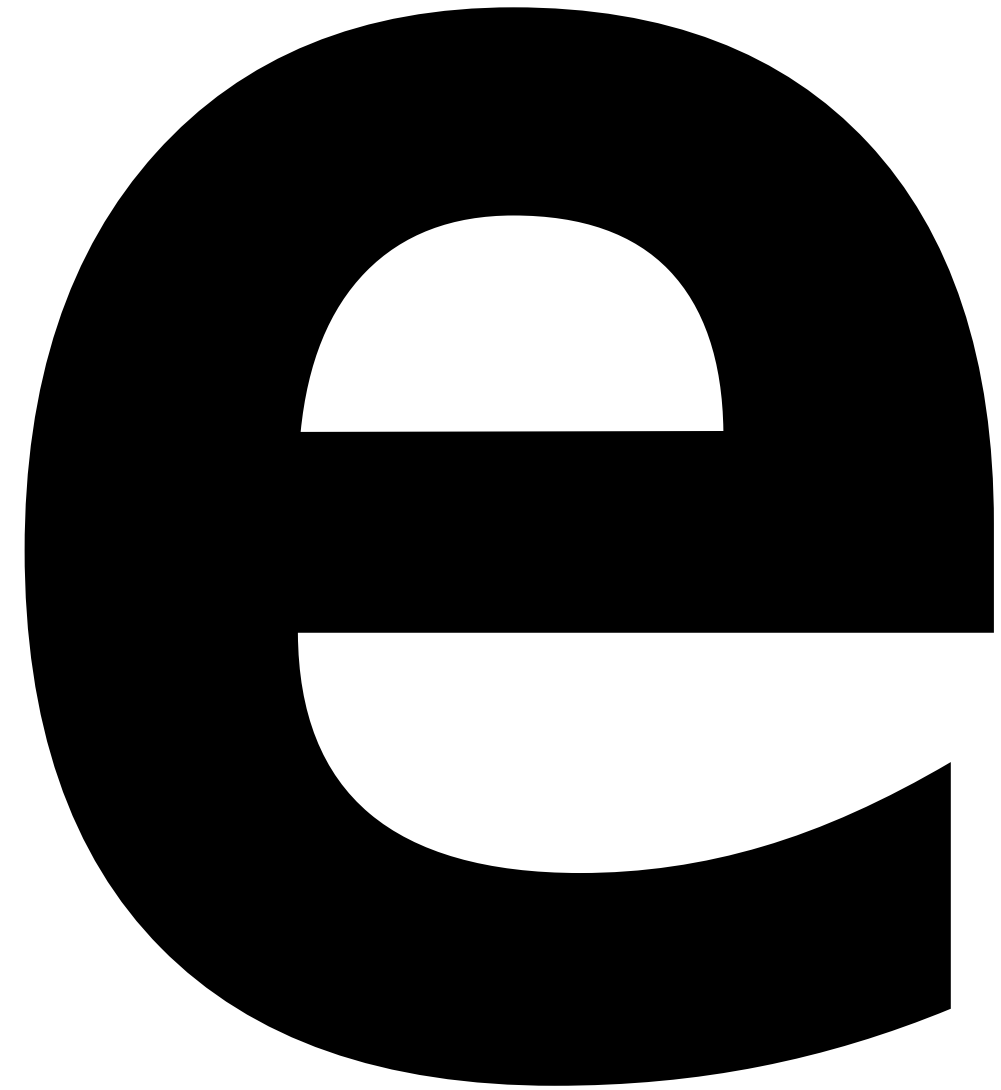


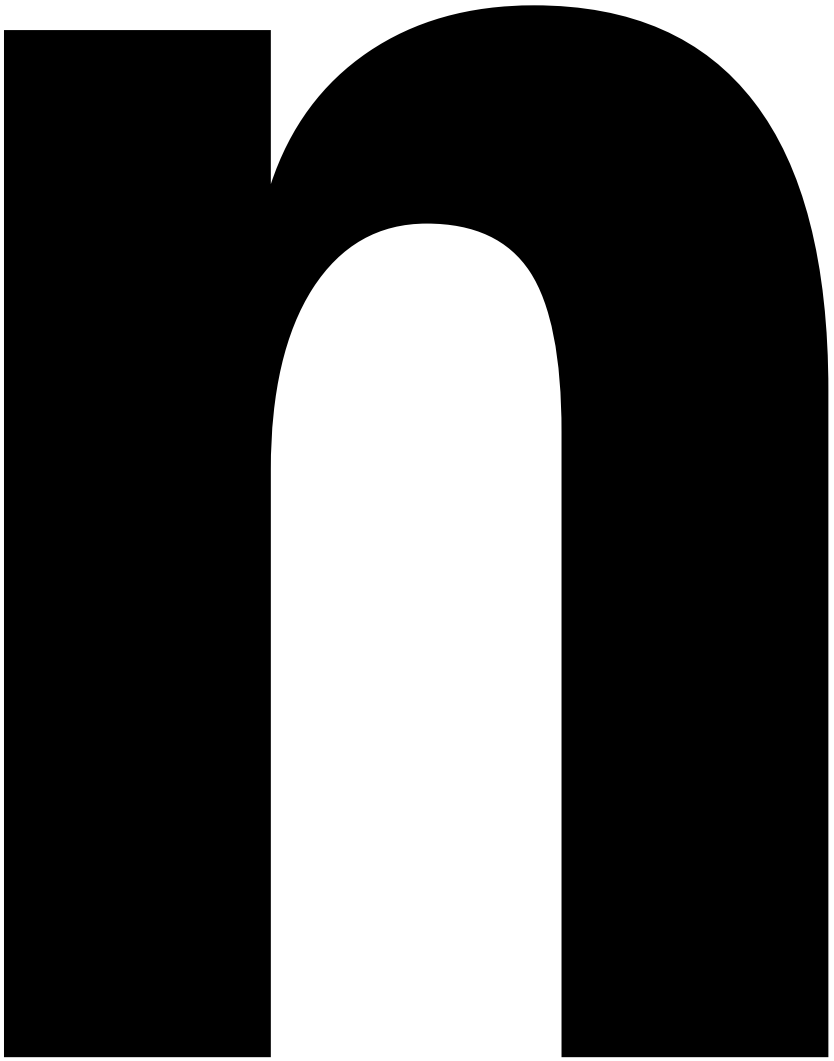




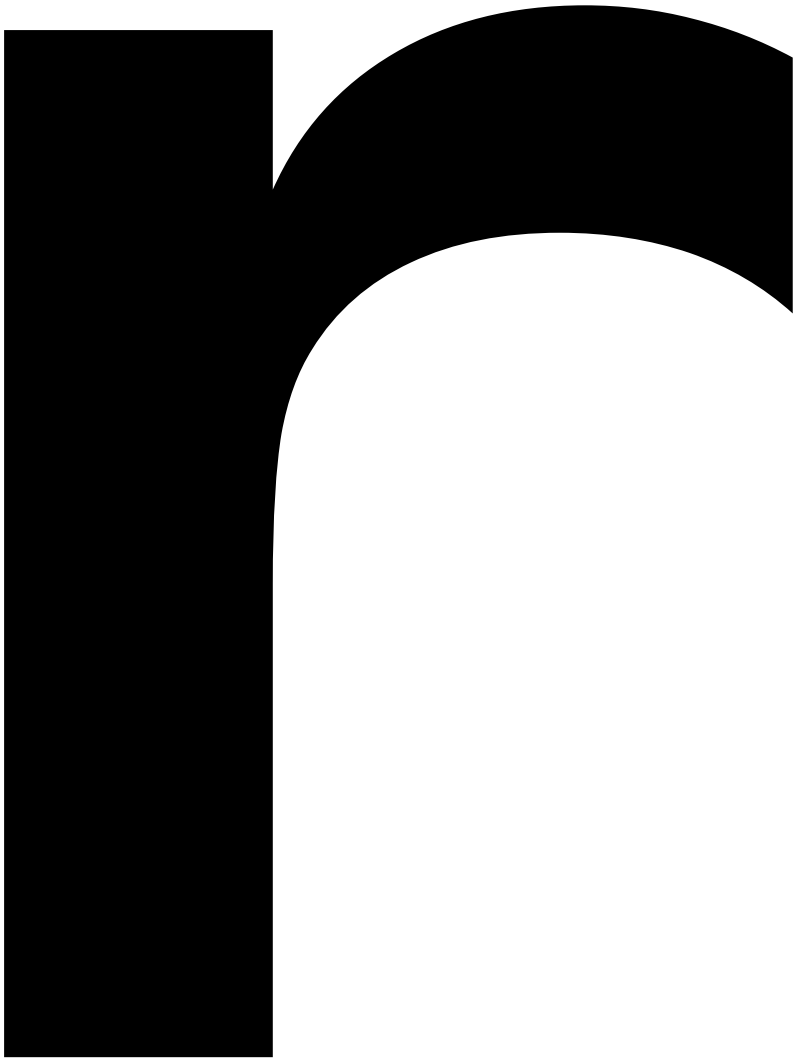


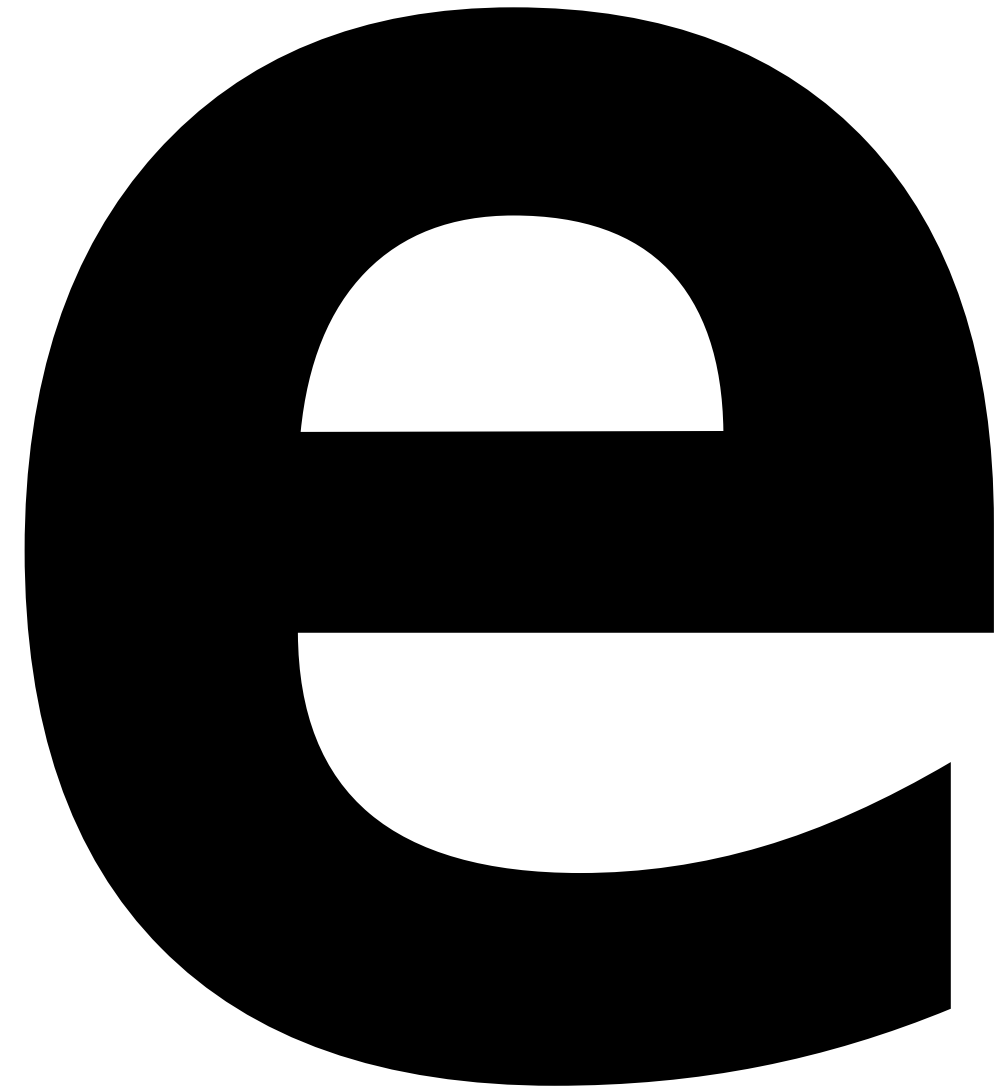
d

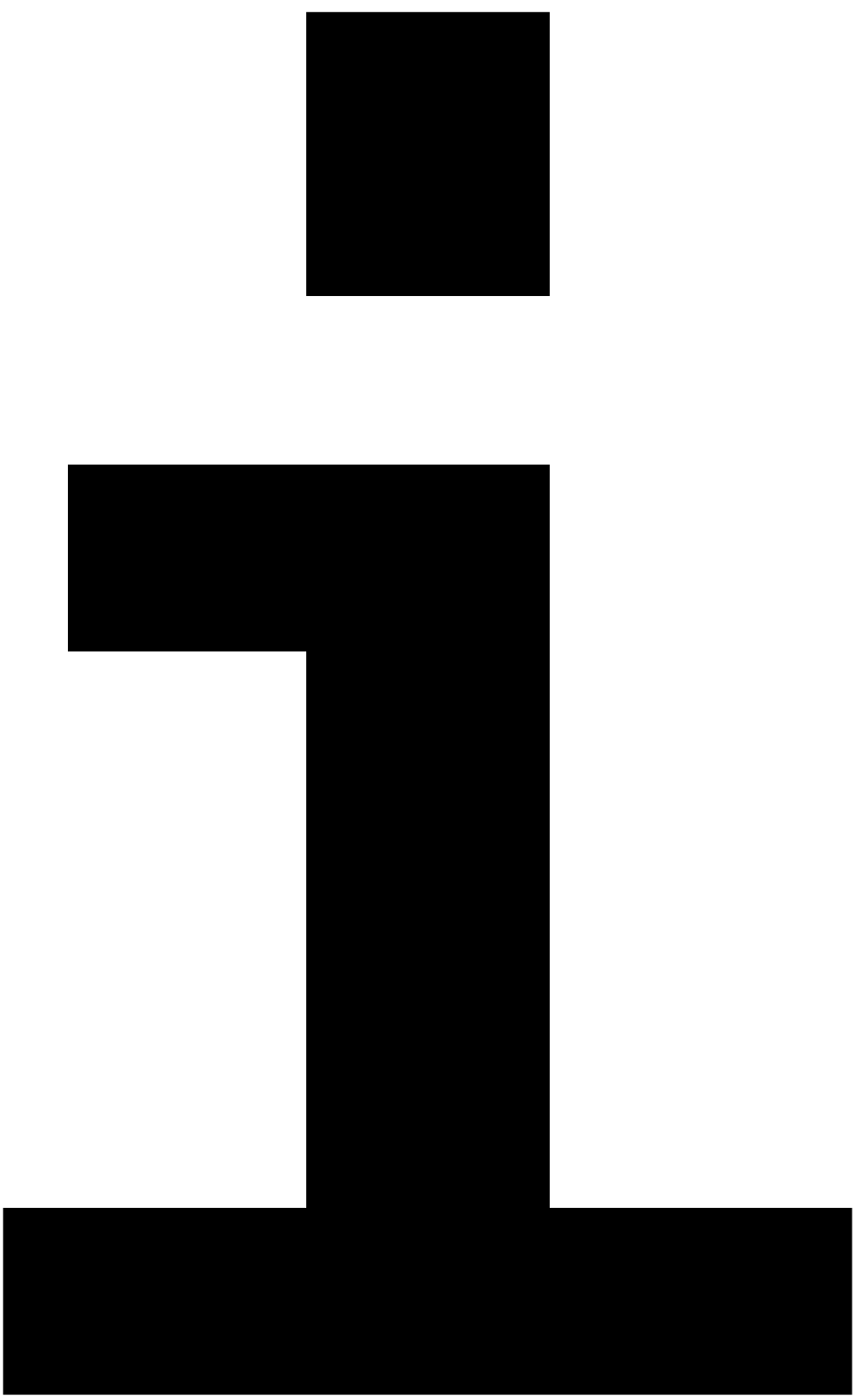


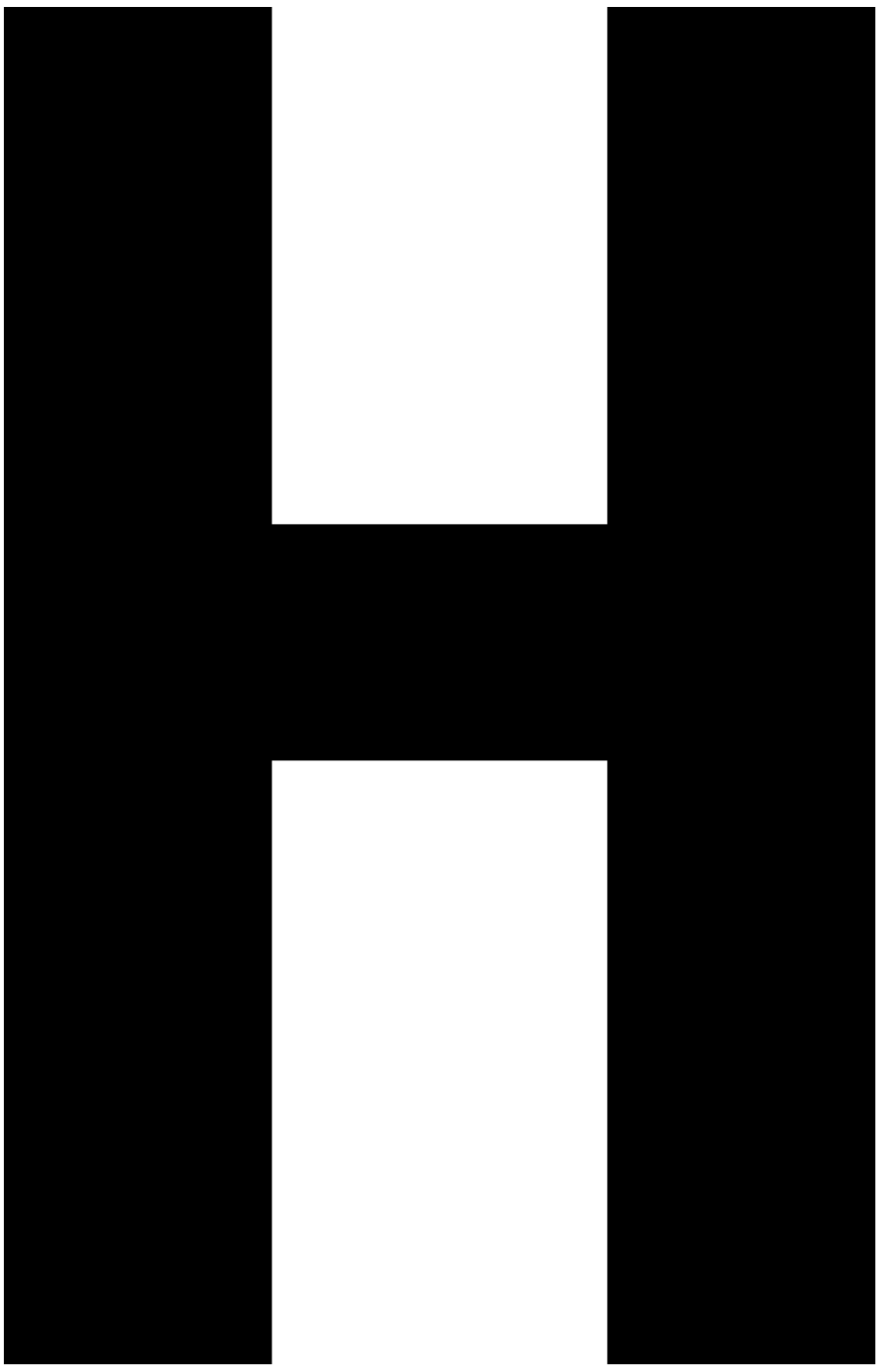


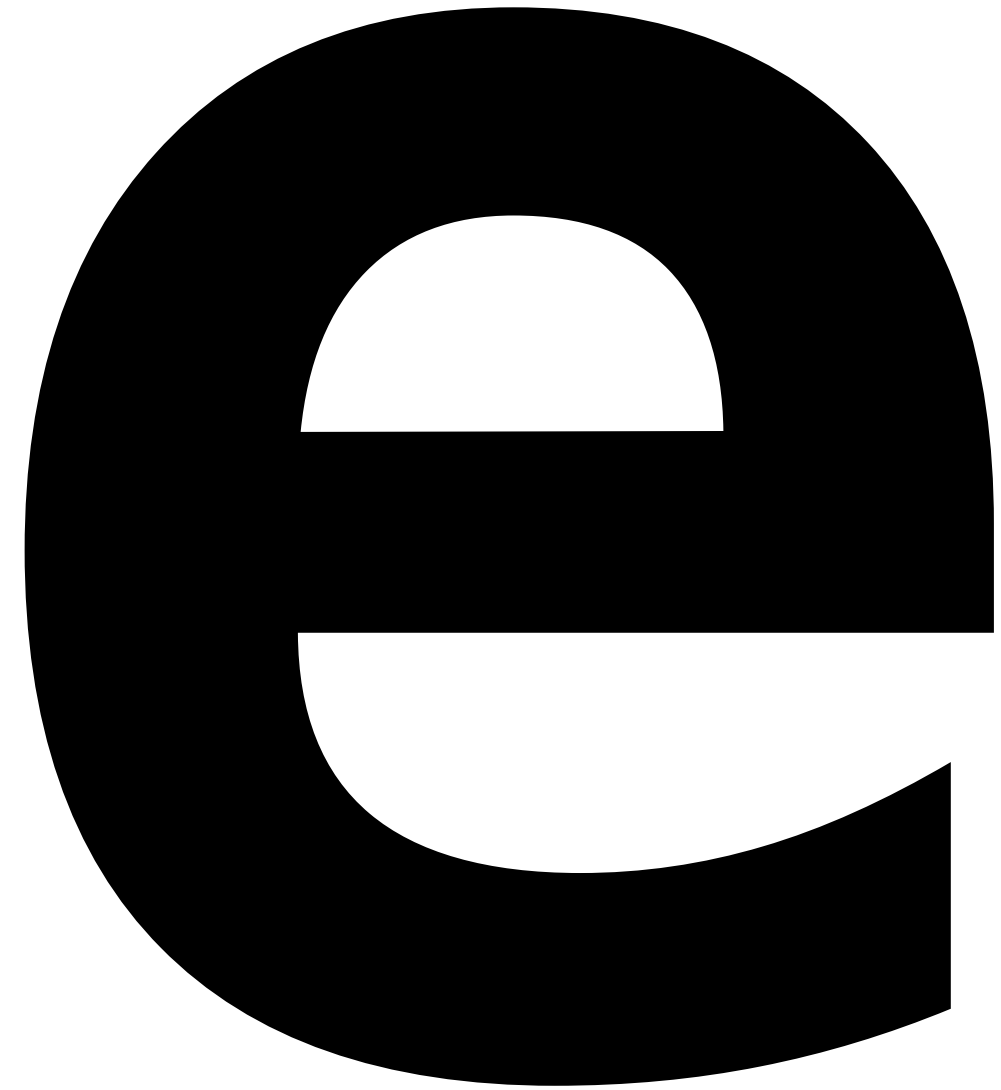
d

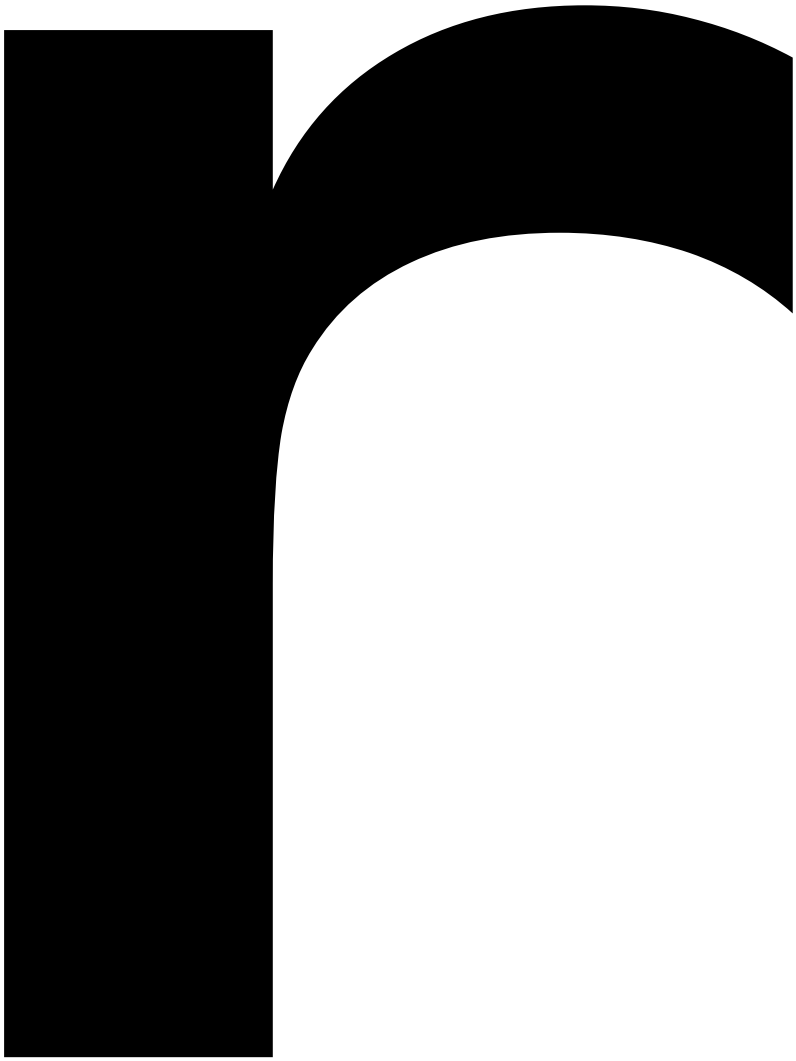


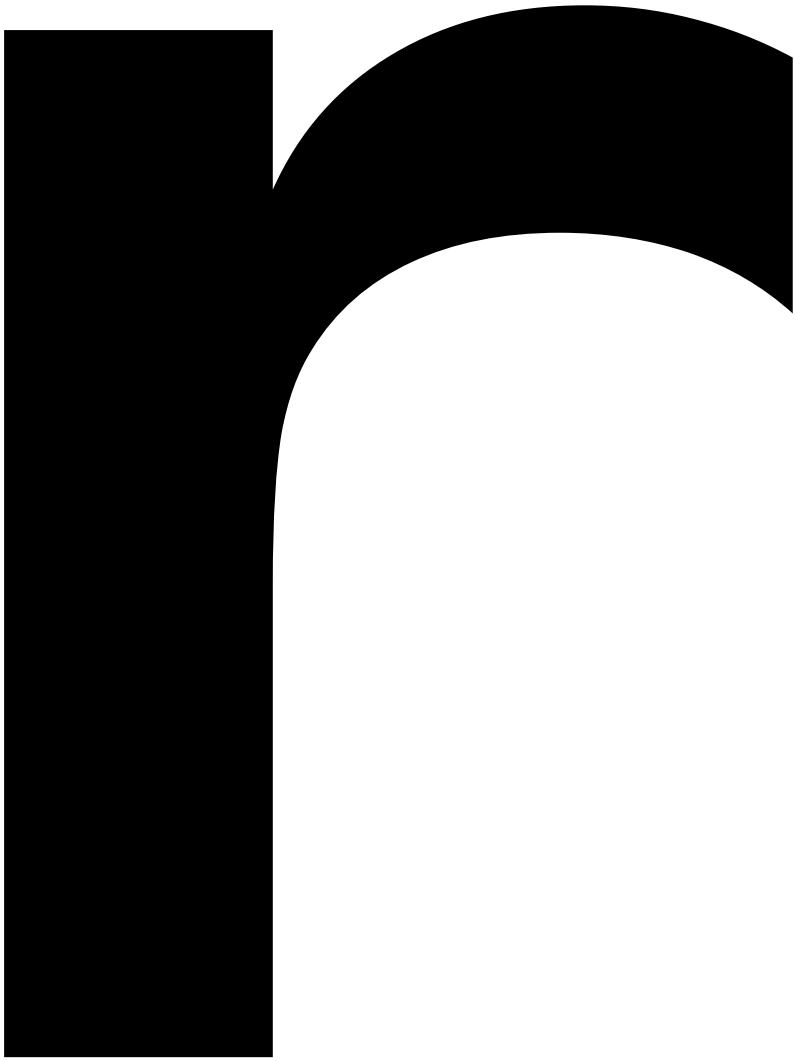


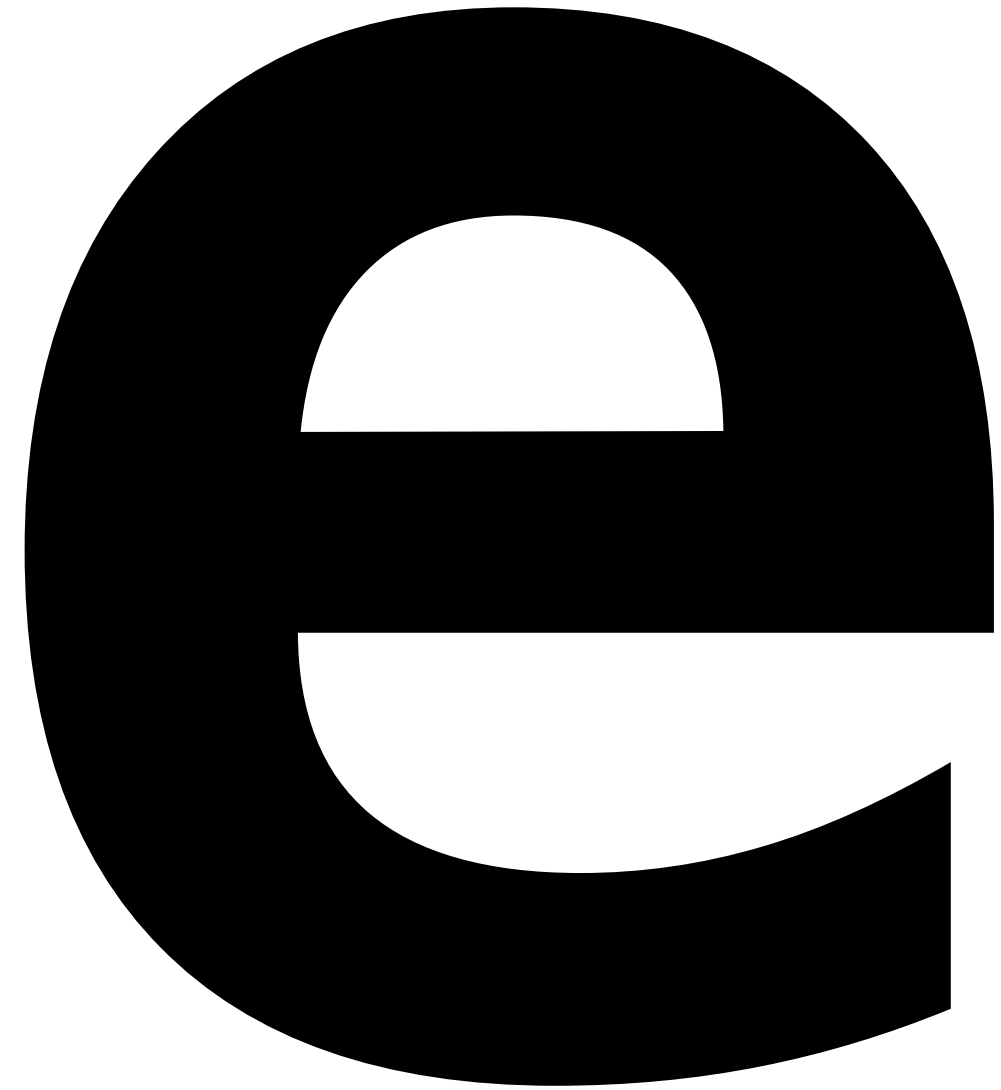


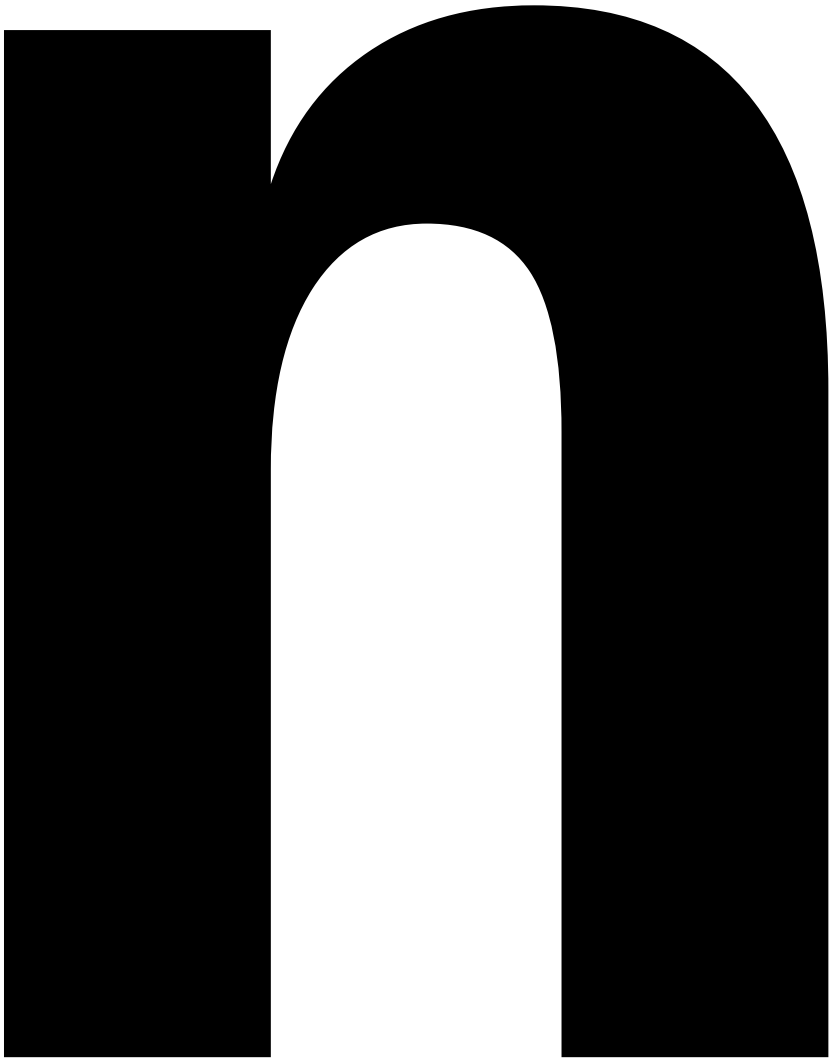


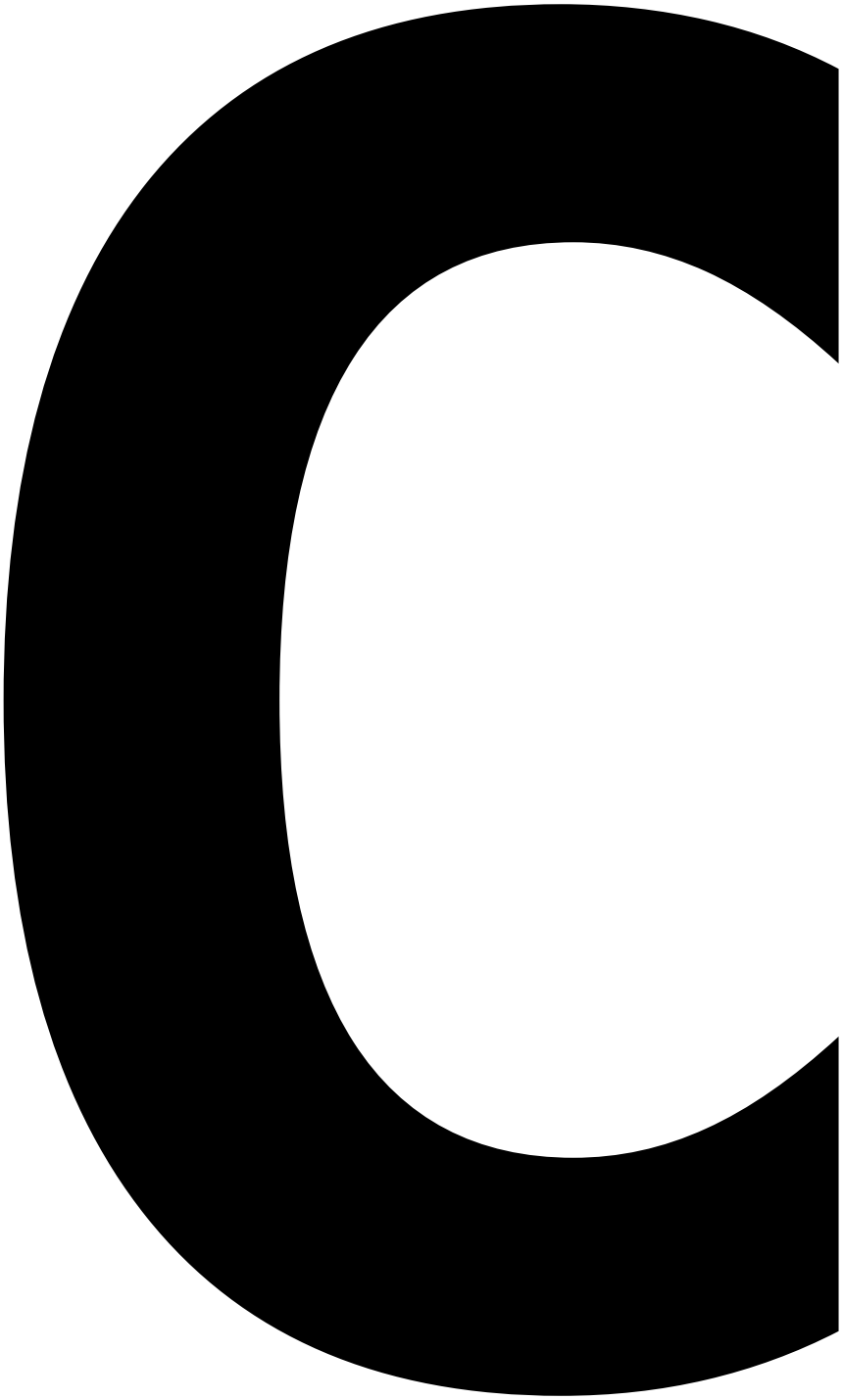


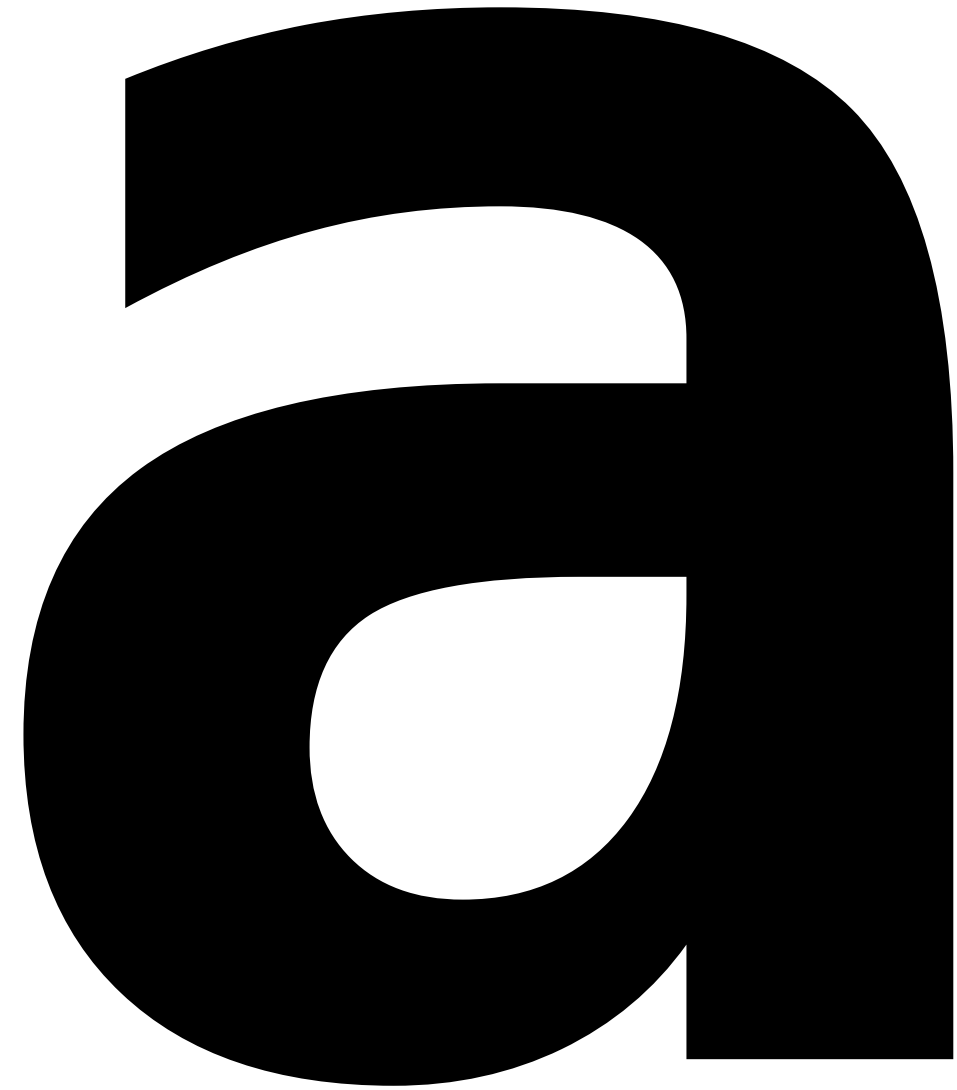


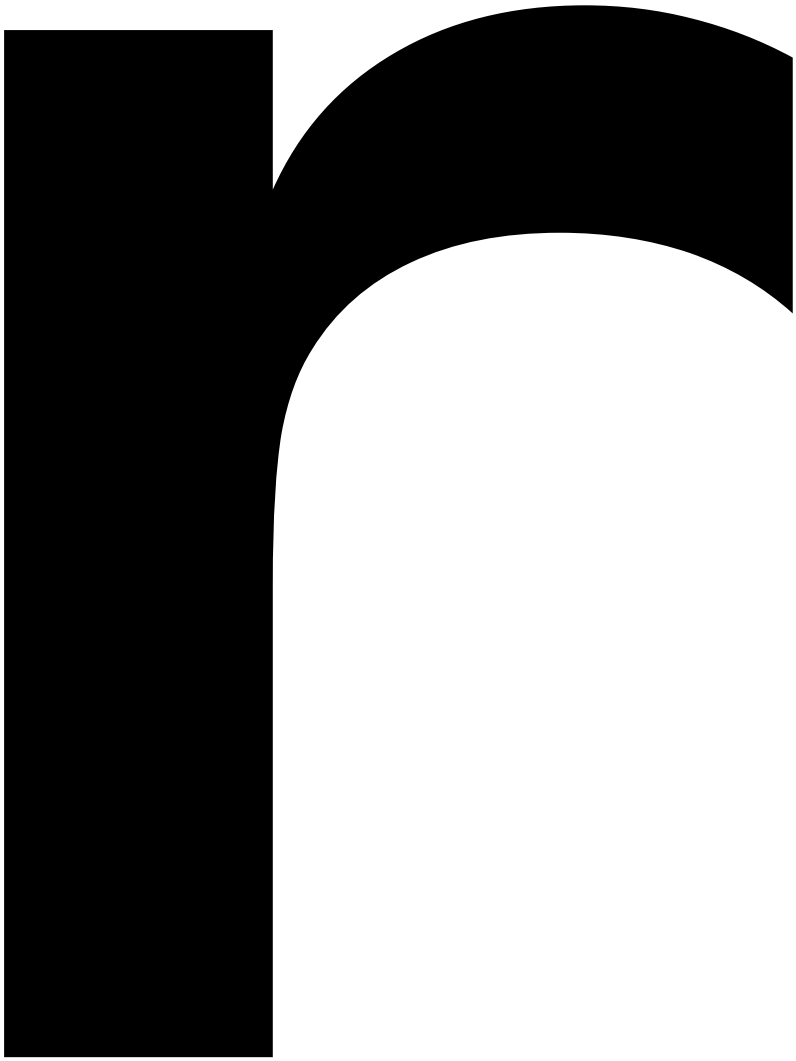


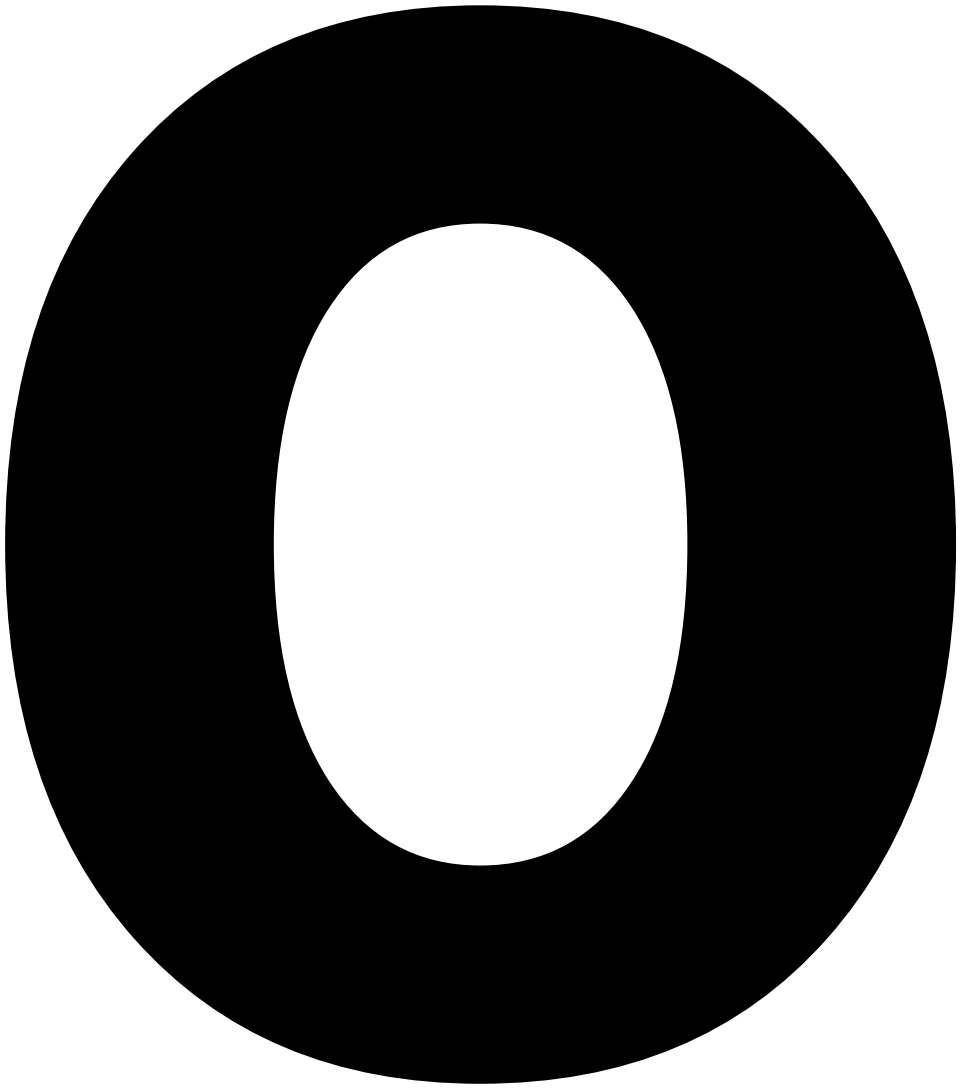


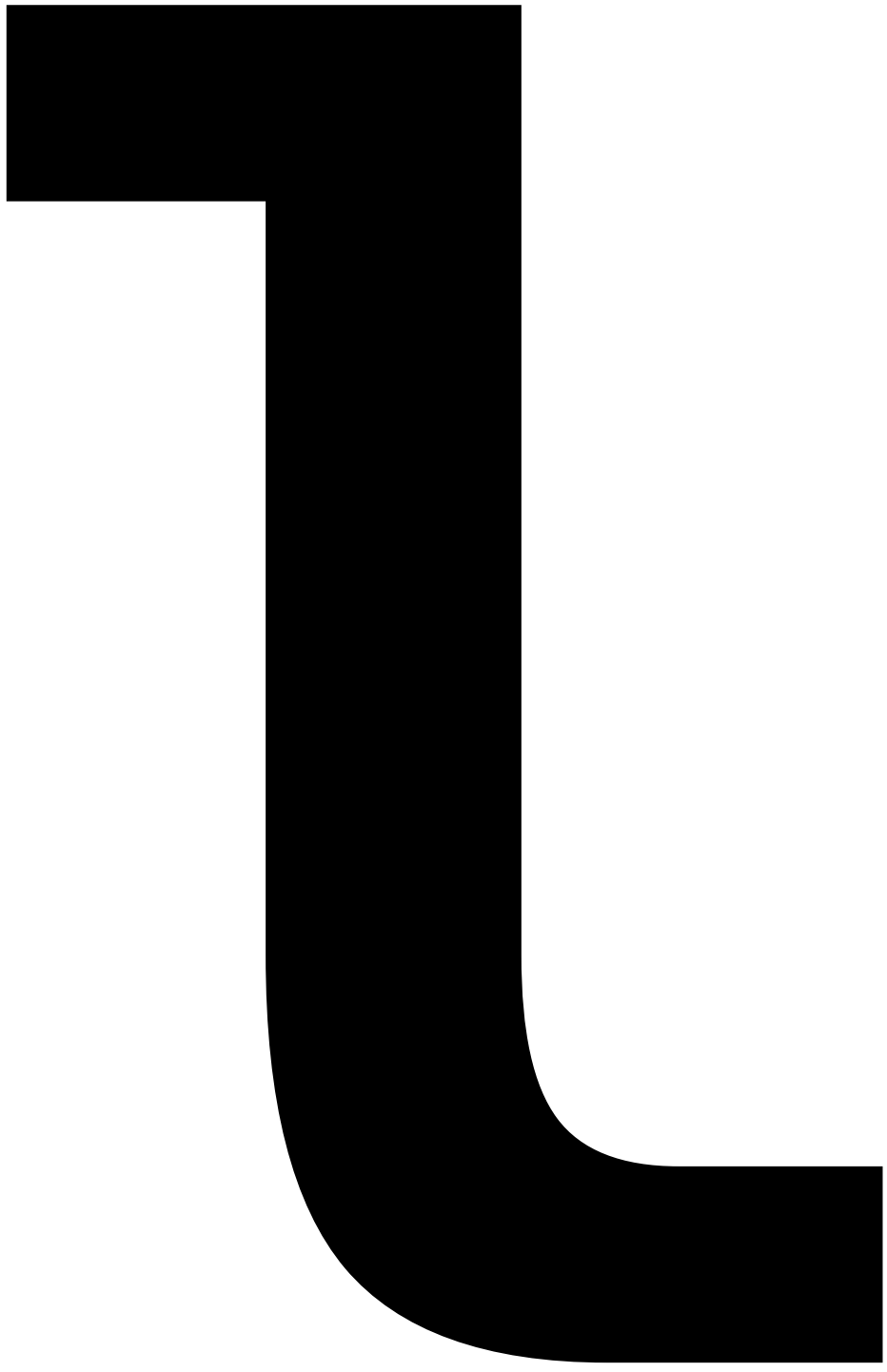


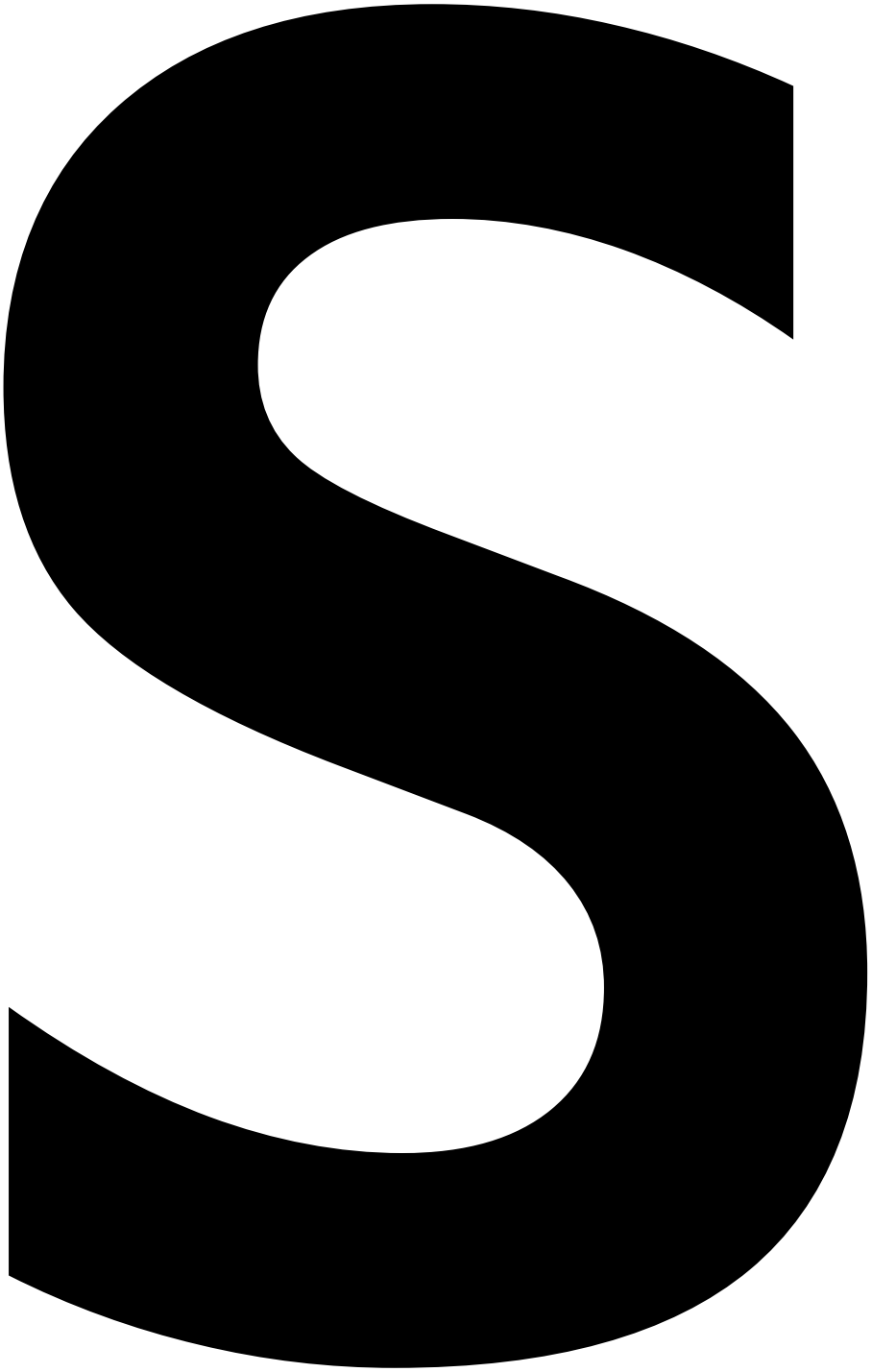


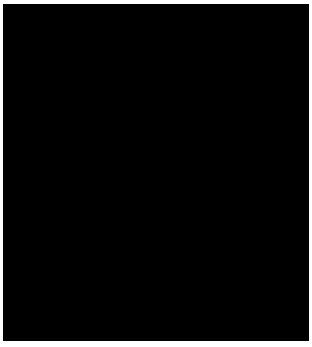


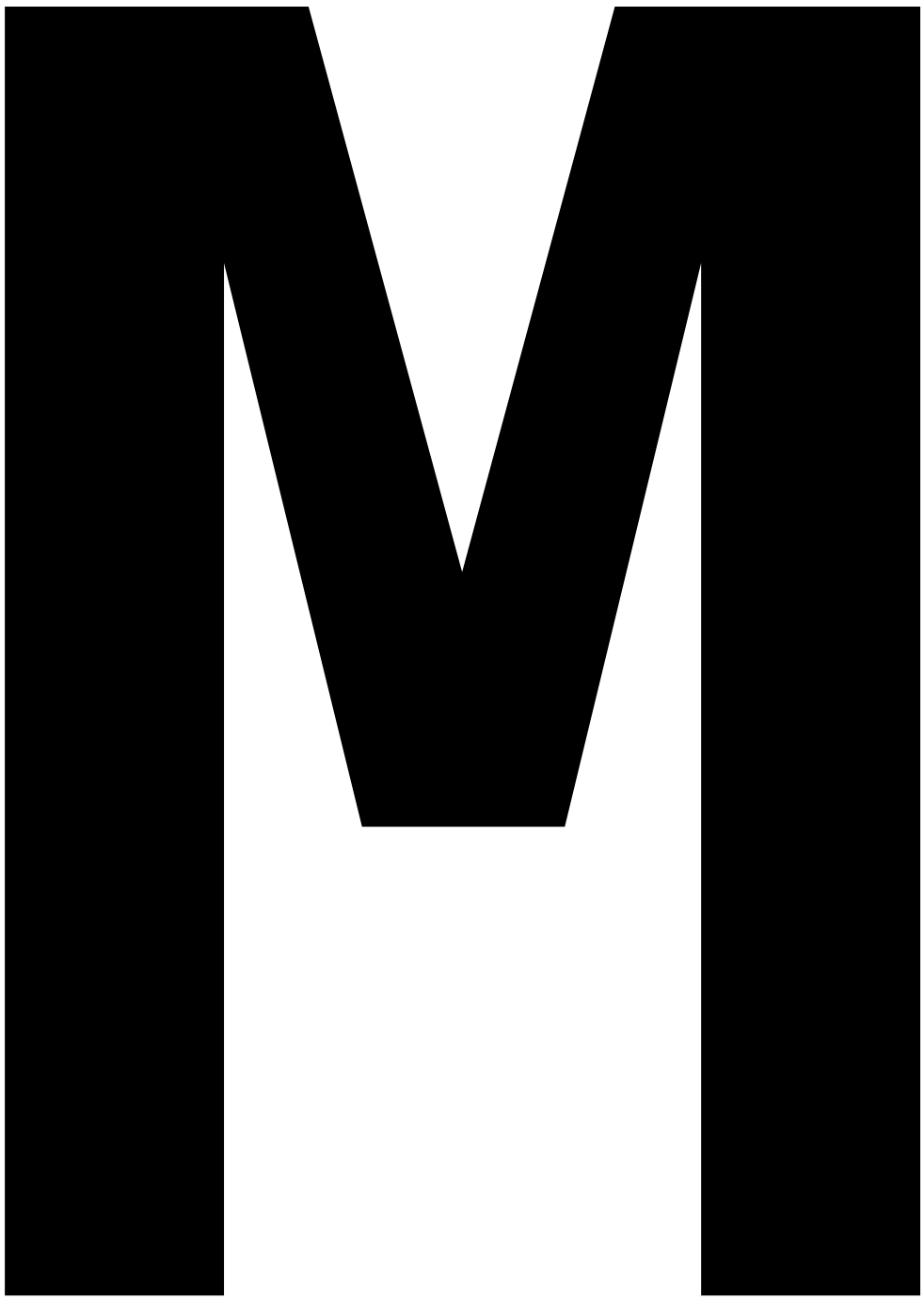


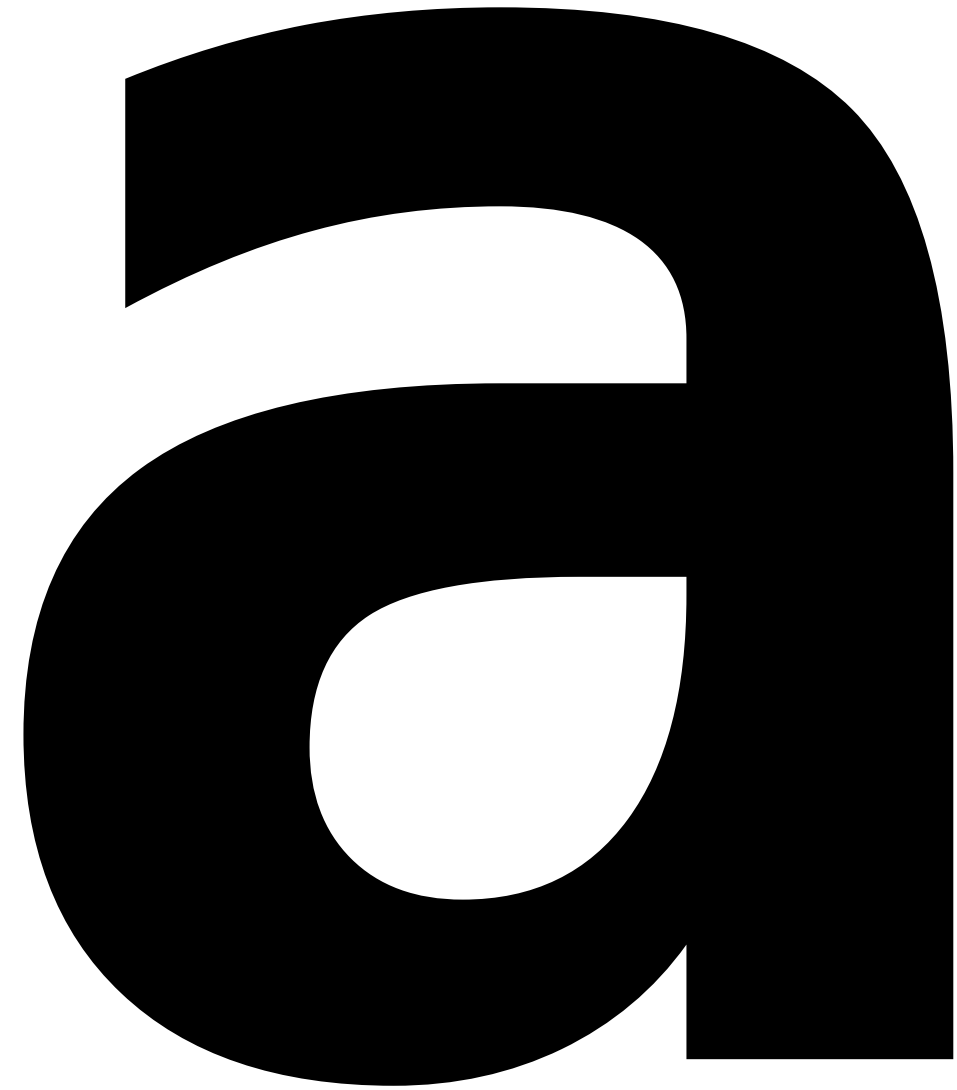


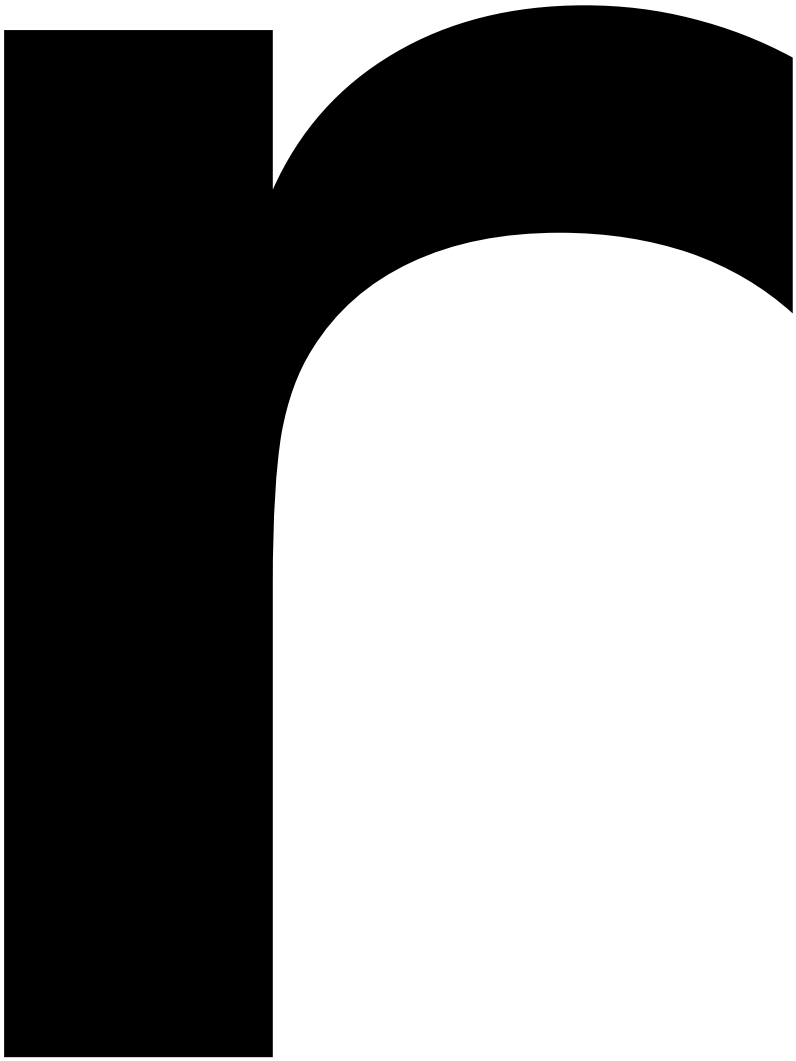


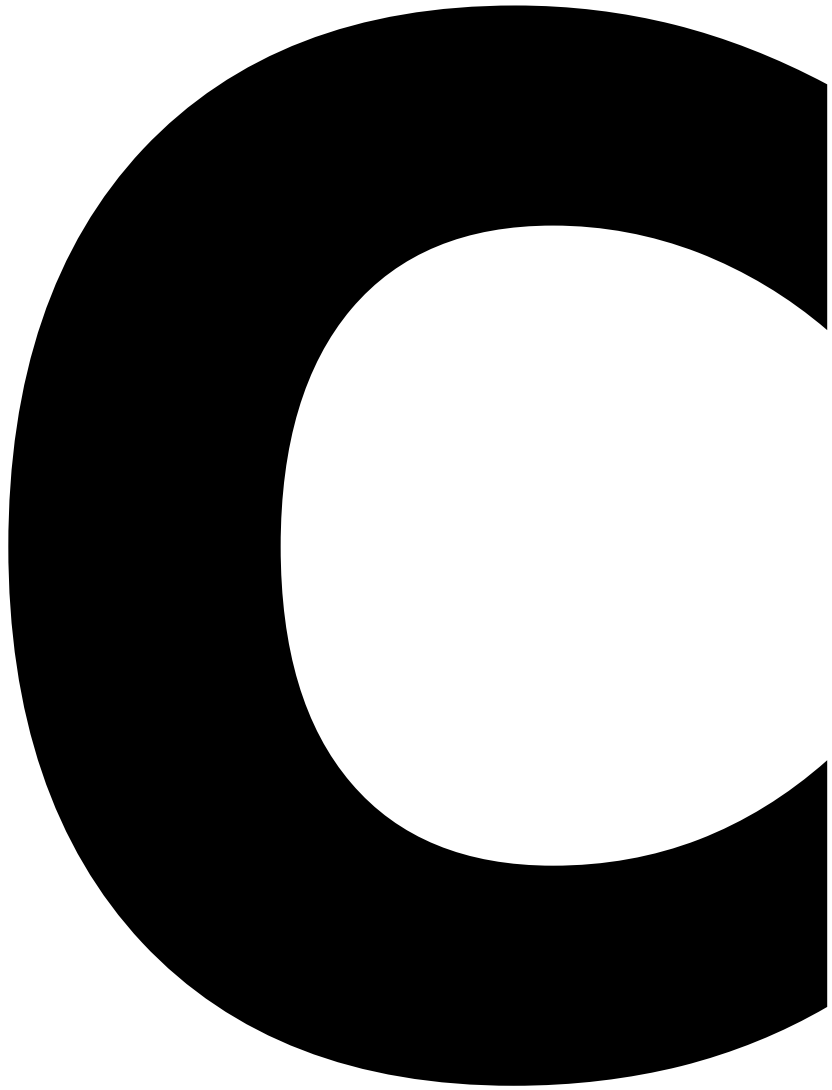






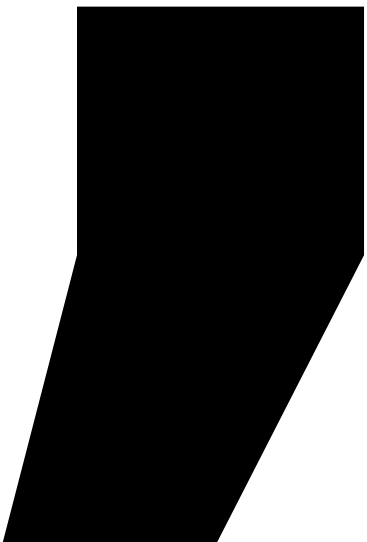


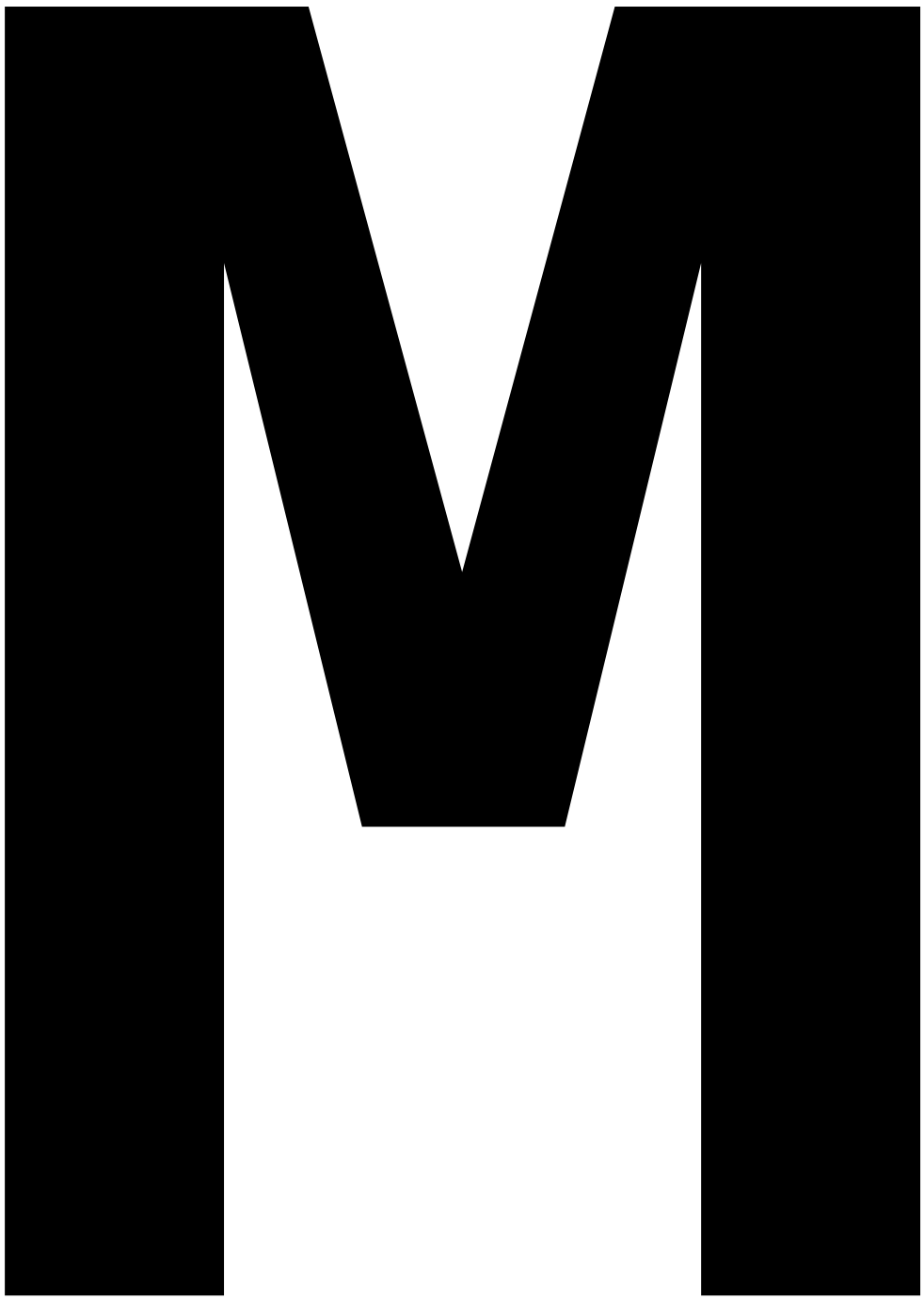


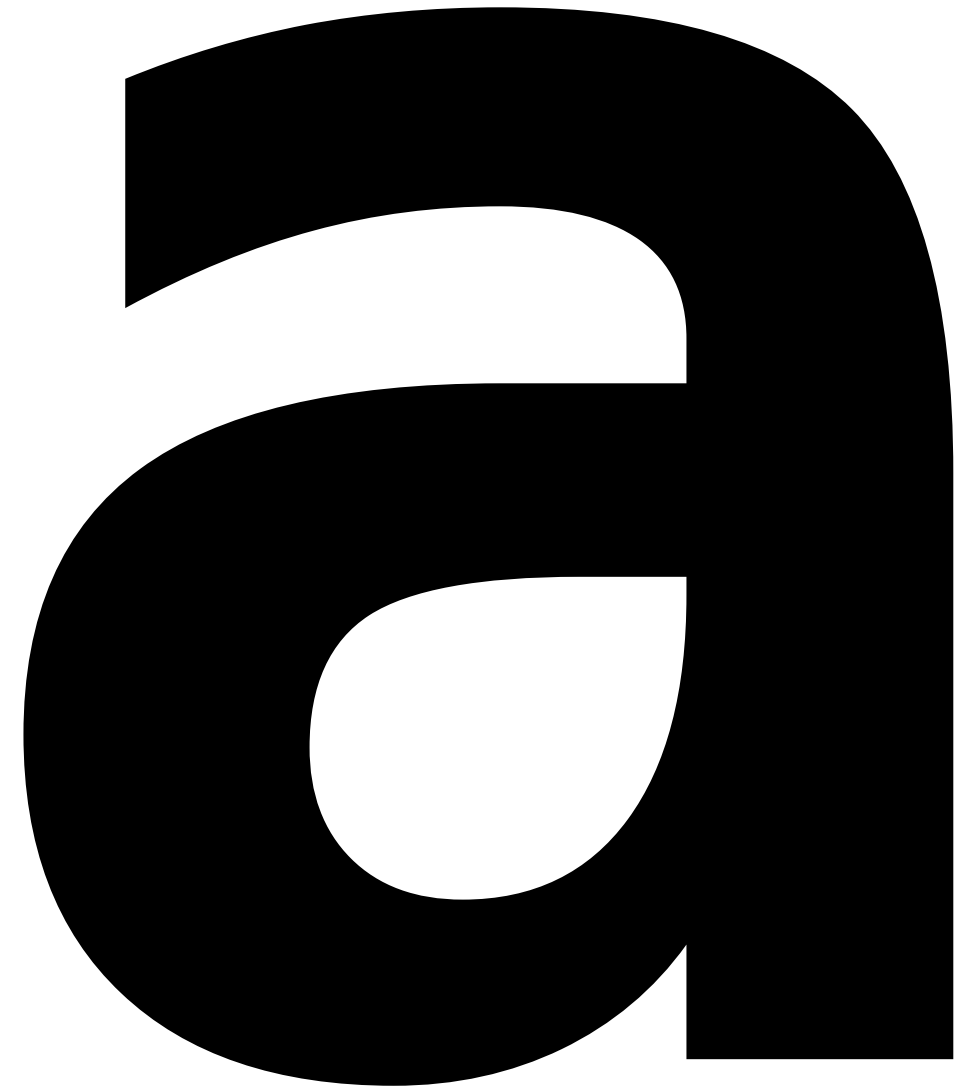


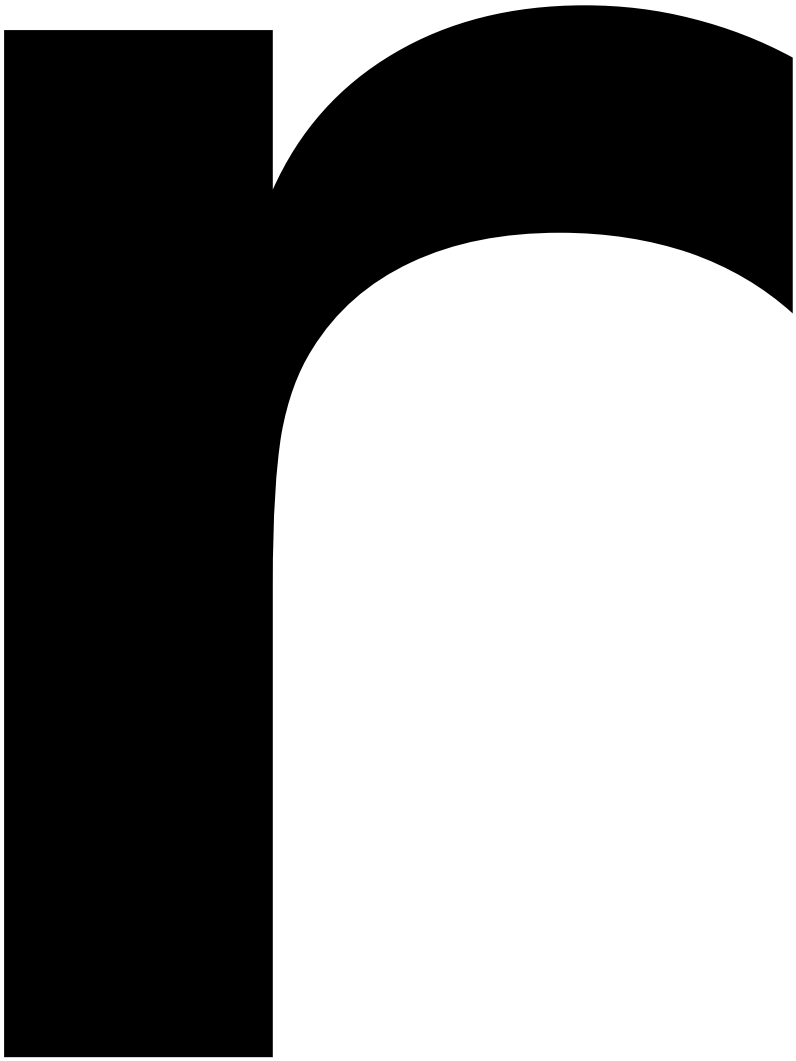
u

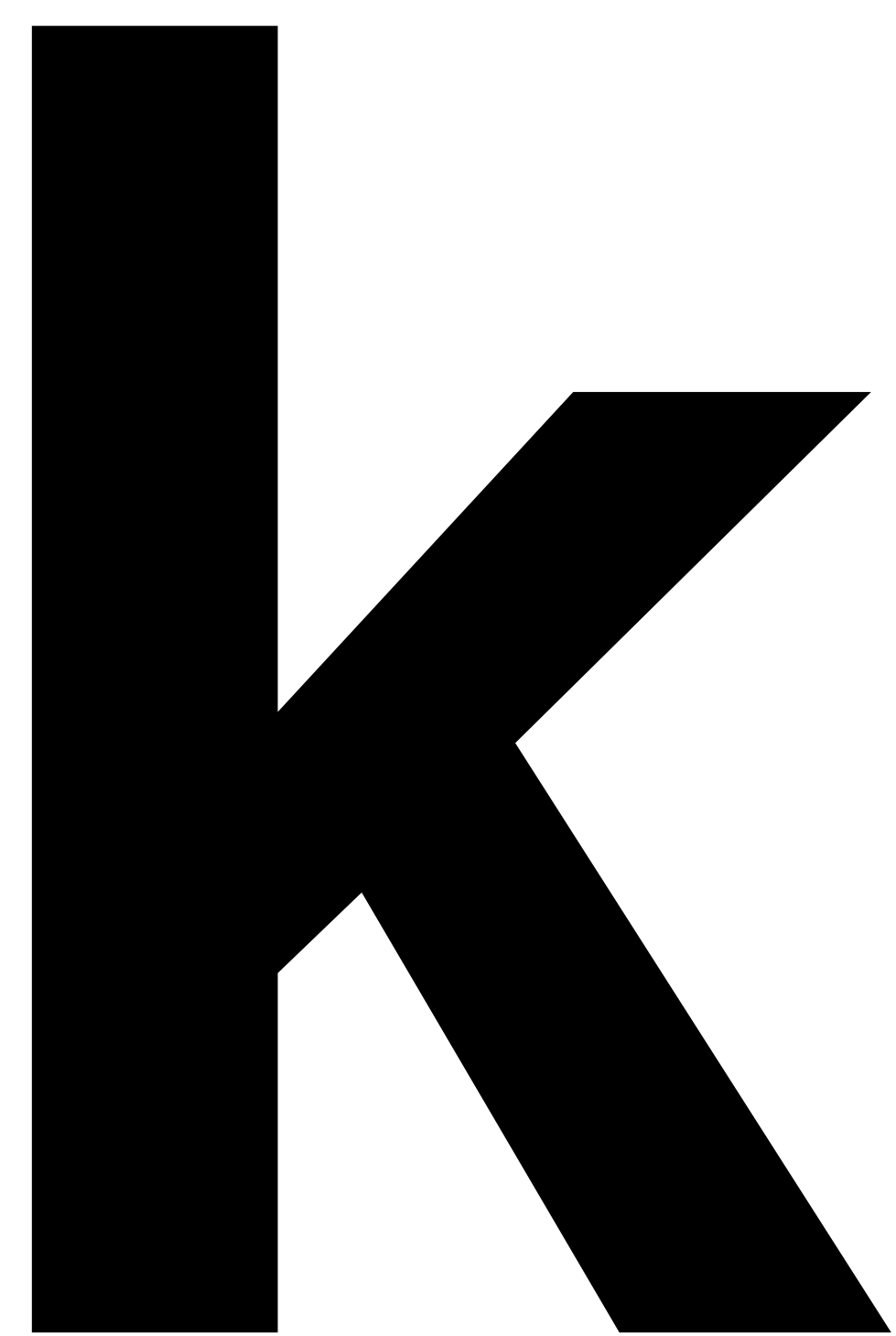
S

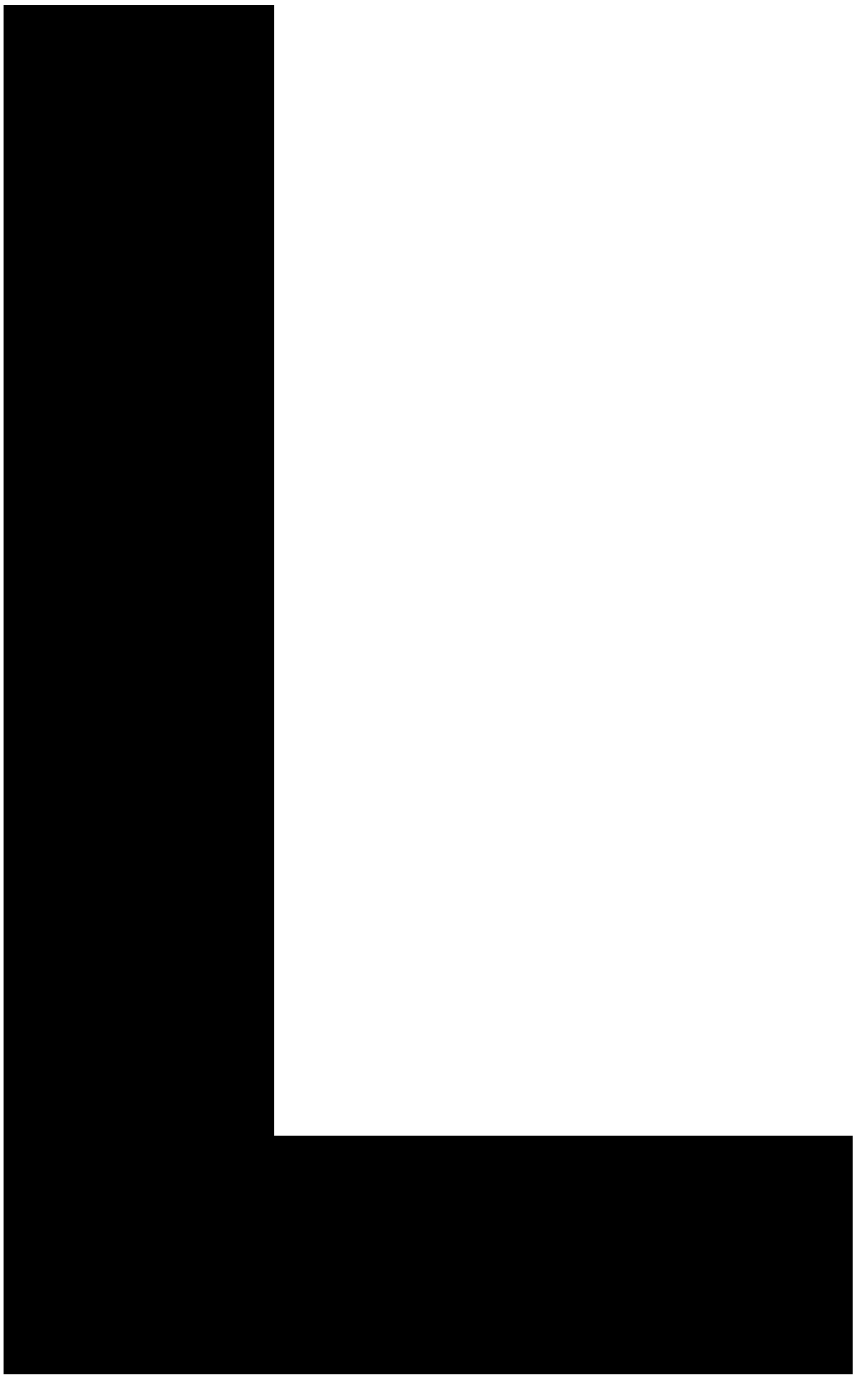


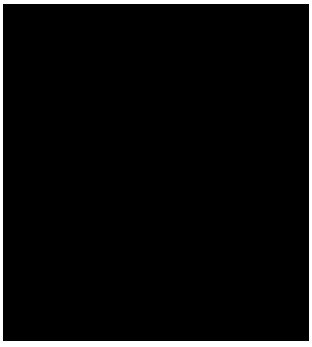


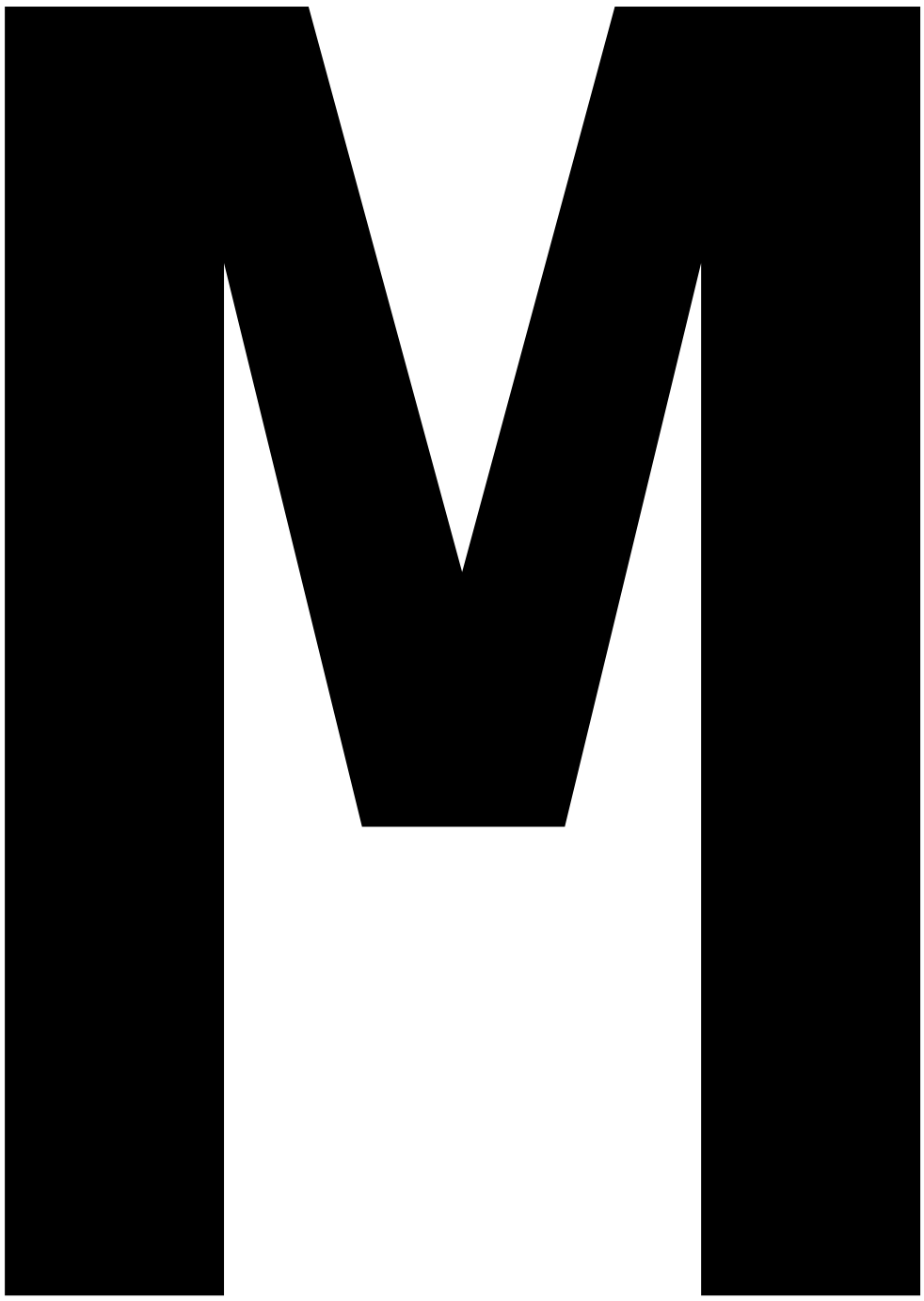


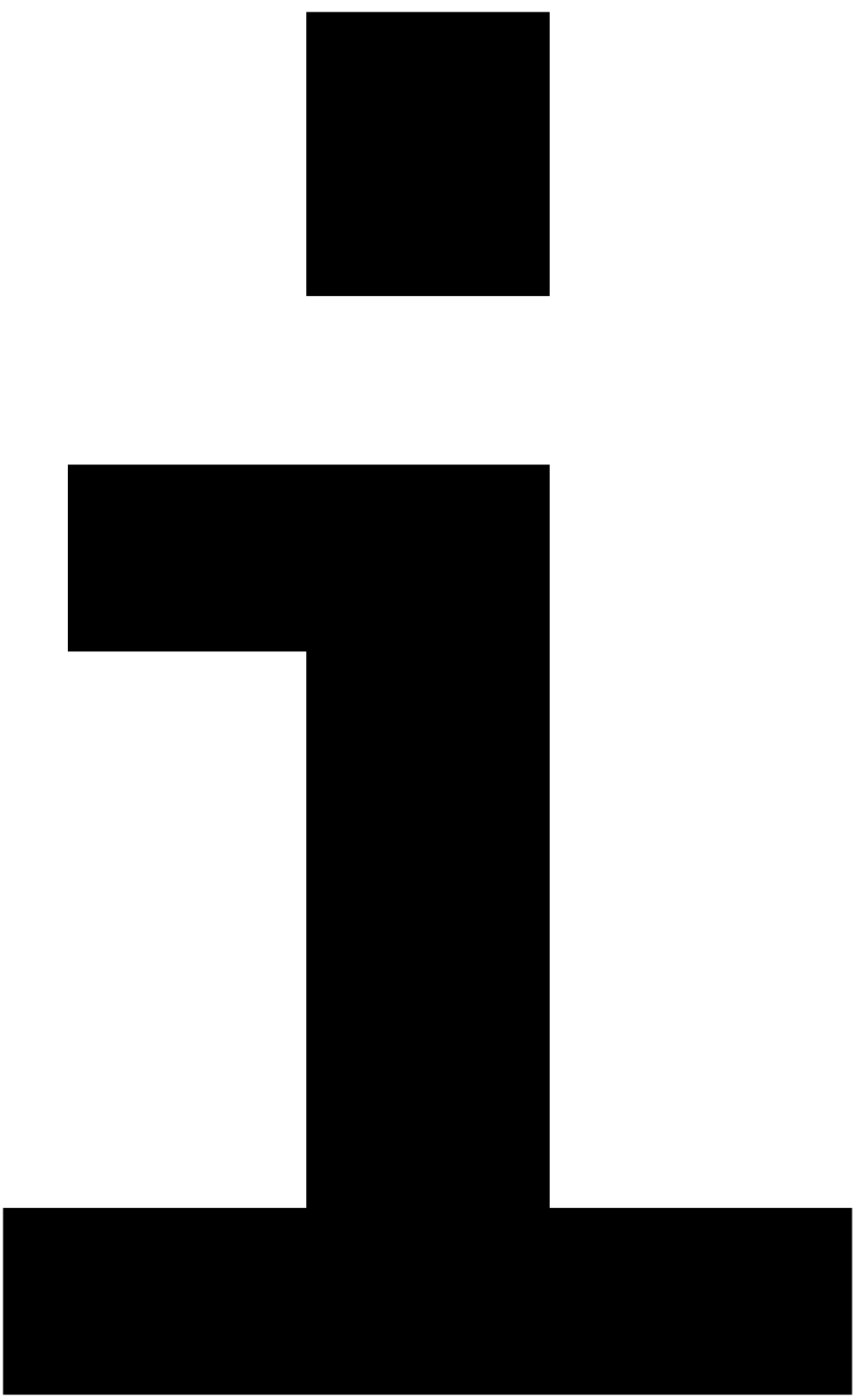


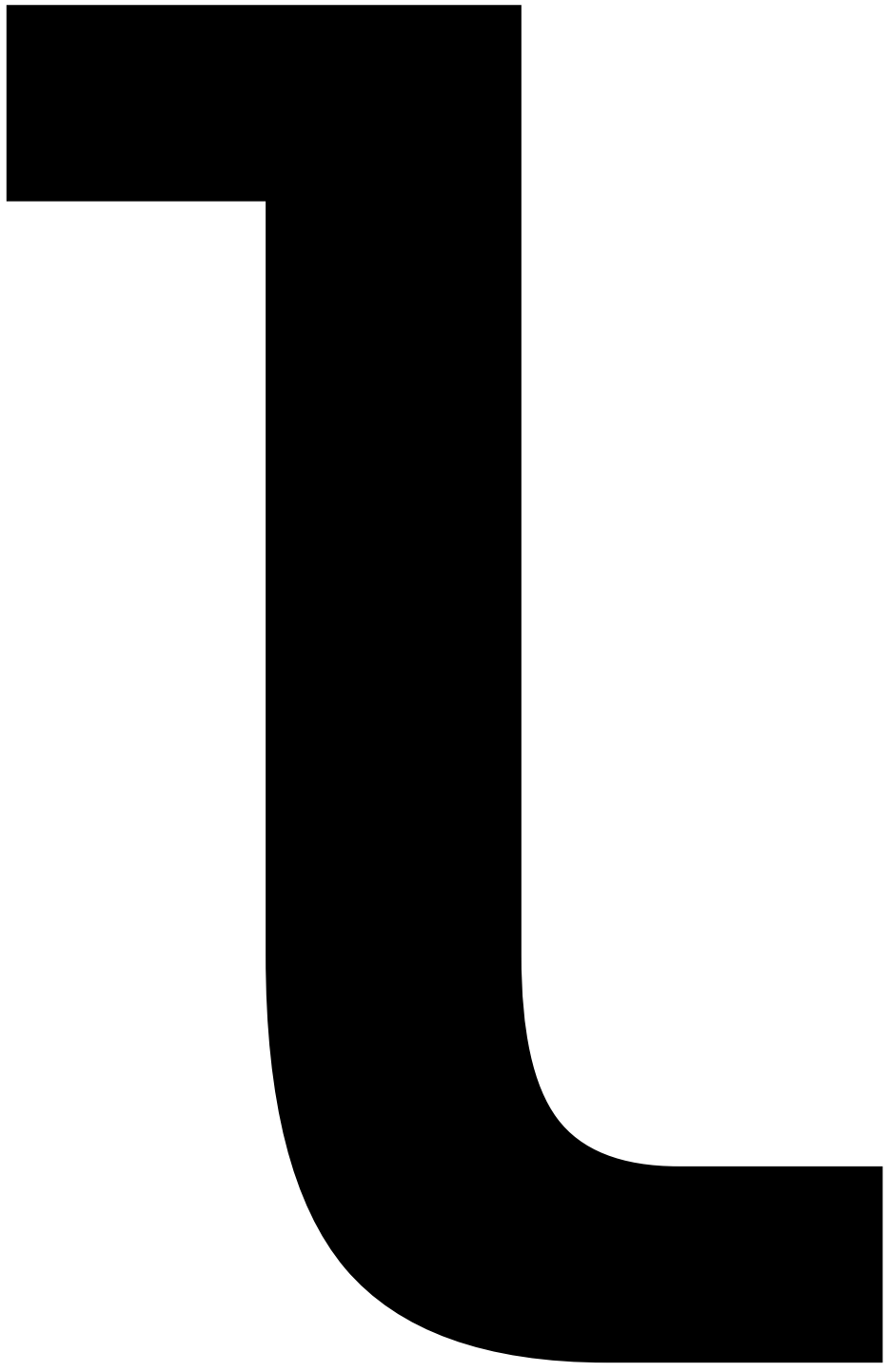


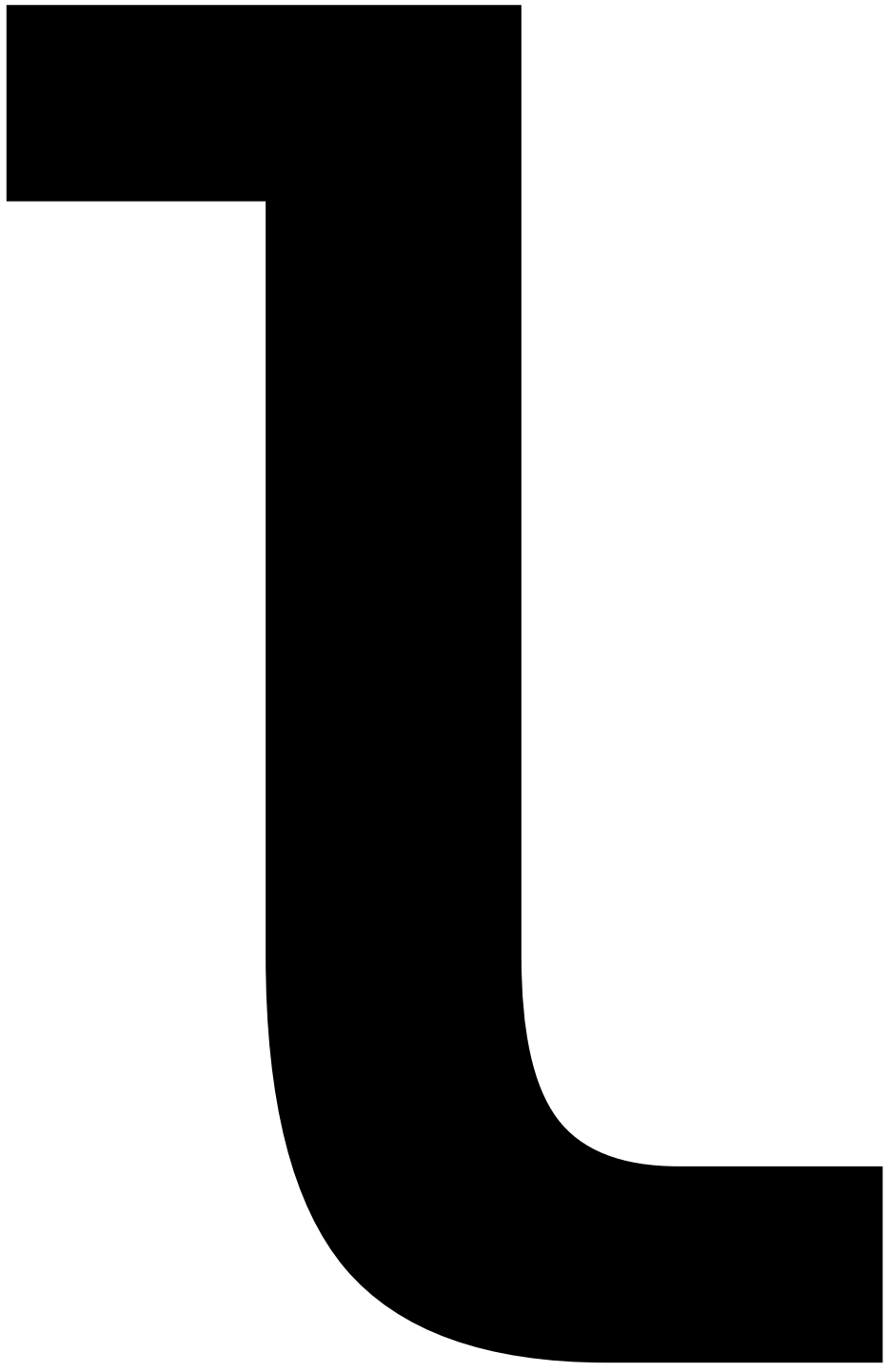


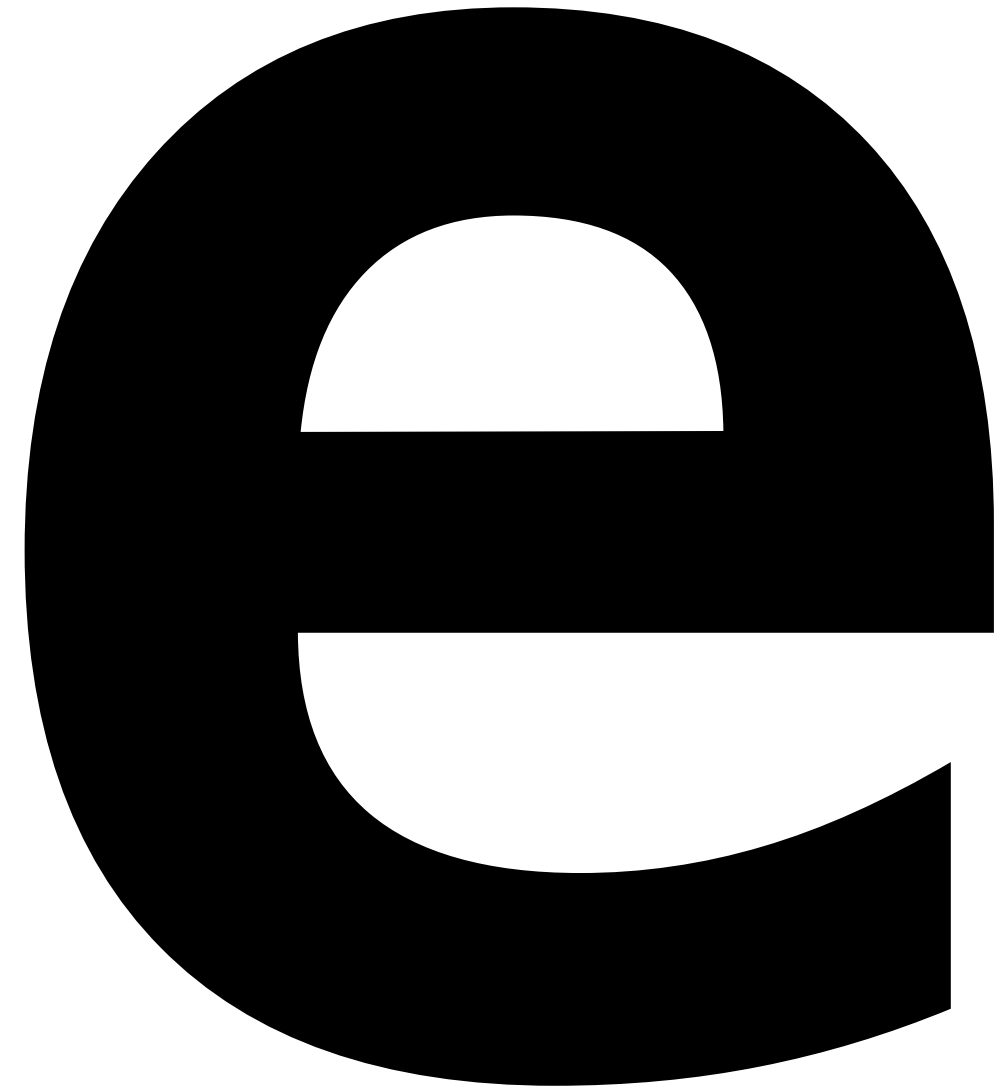


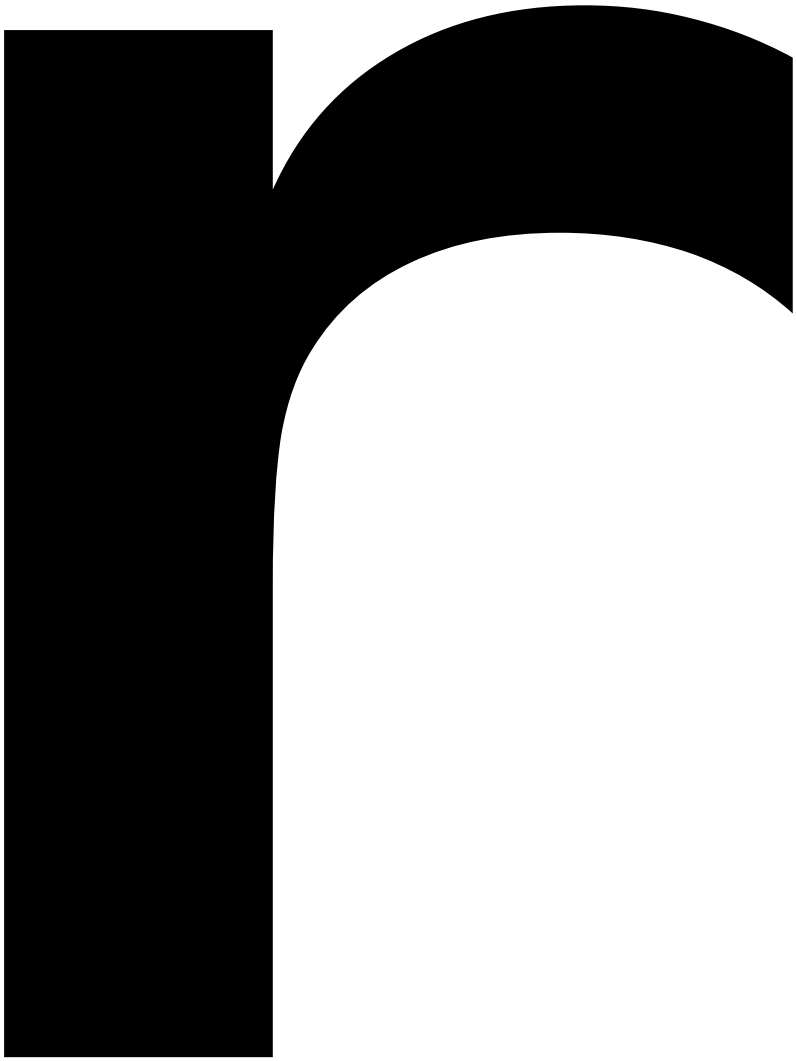




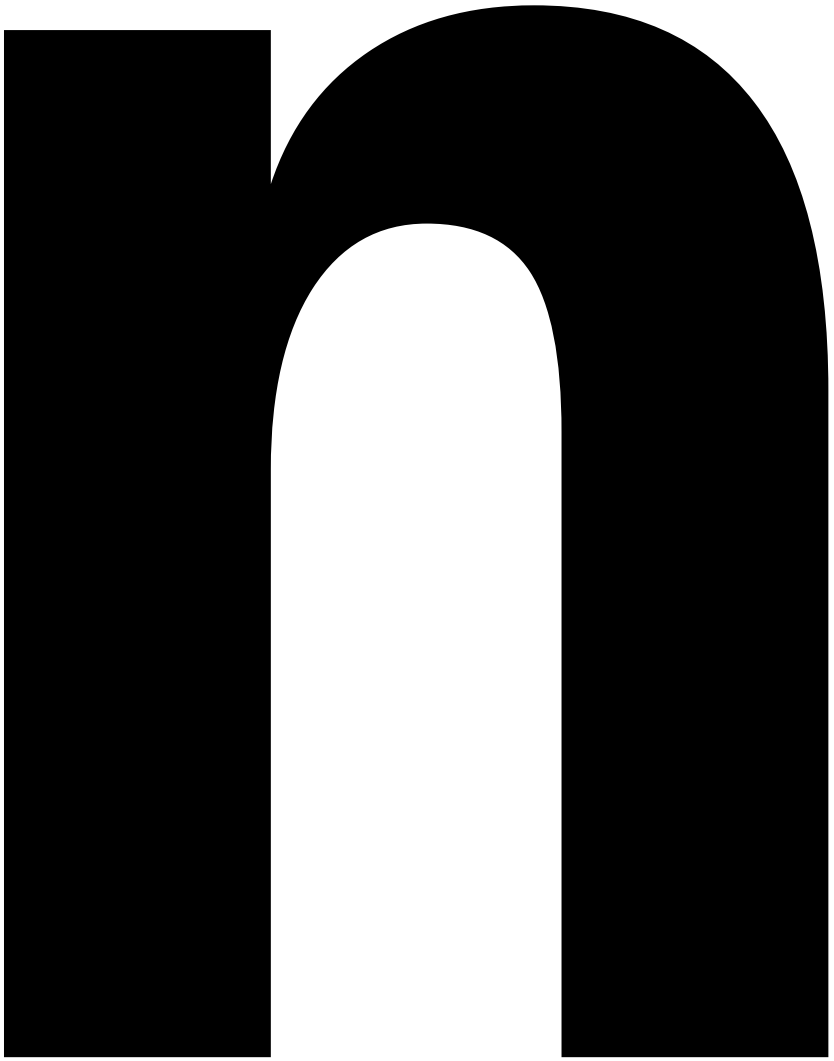




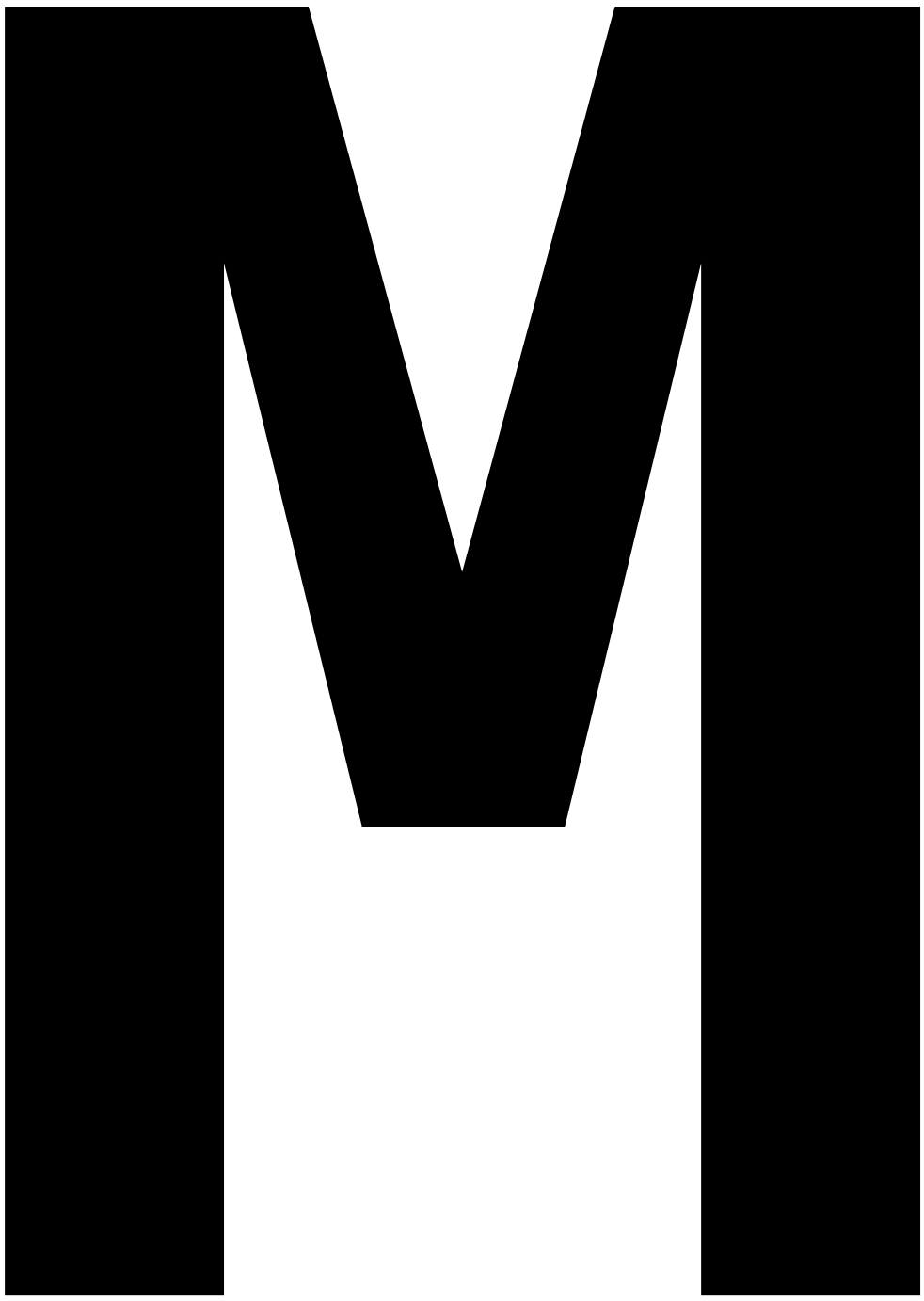


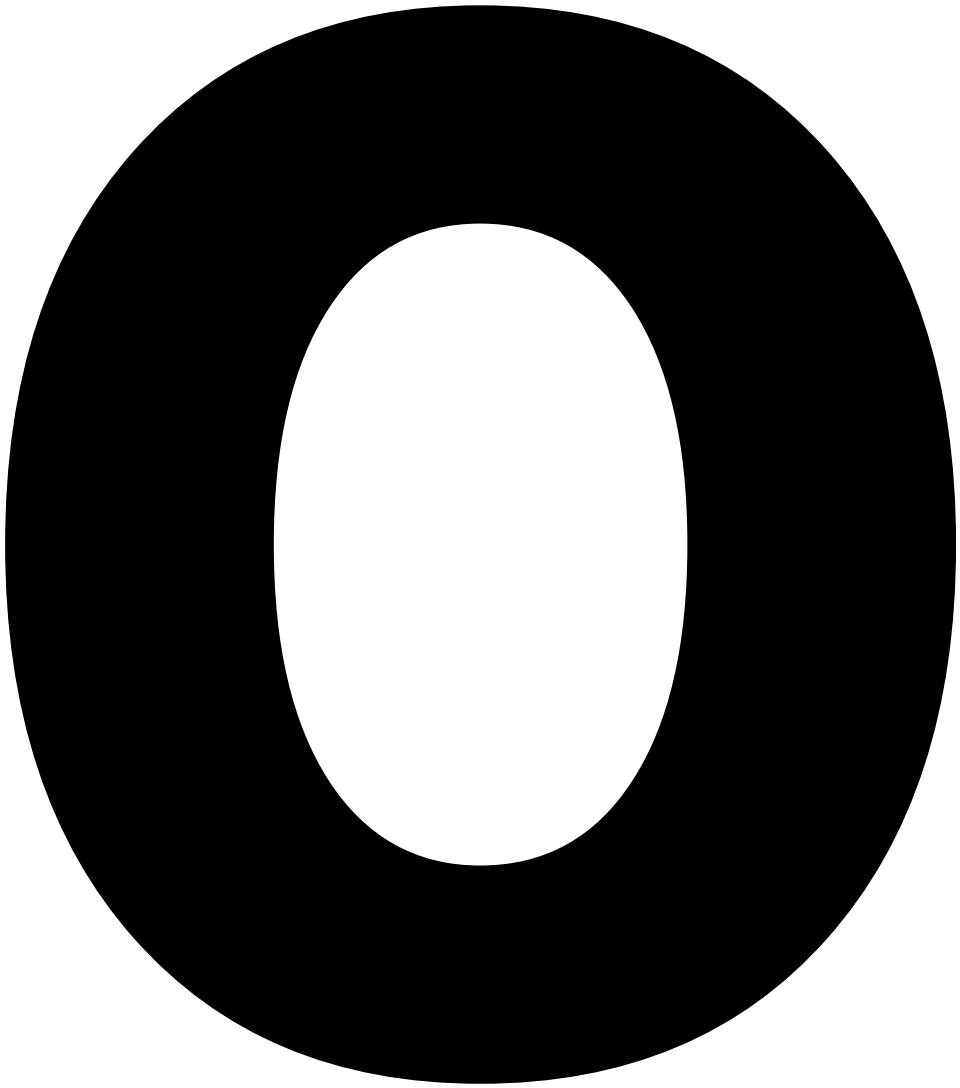


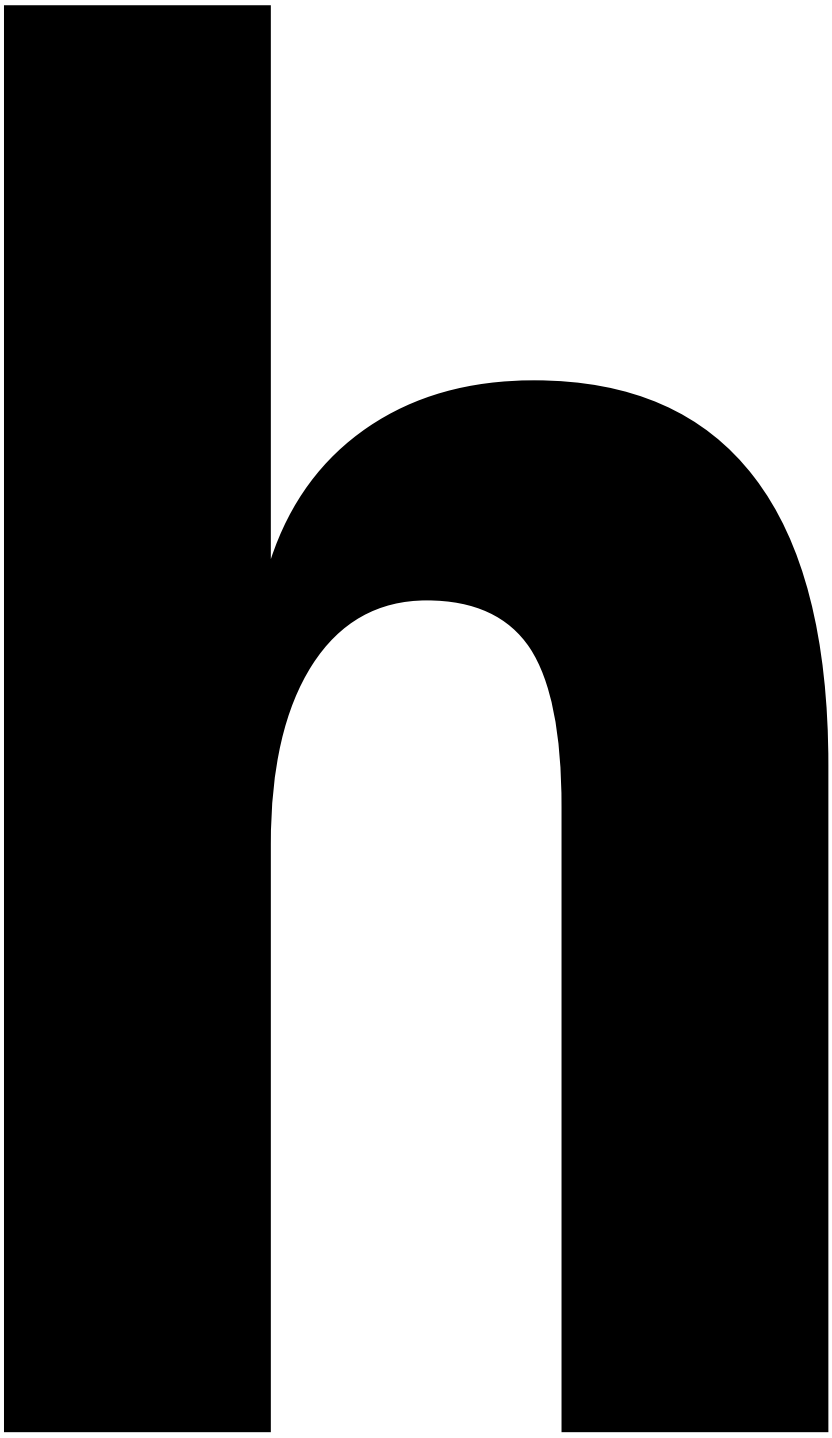
u

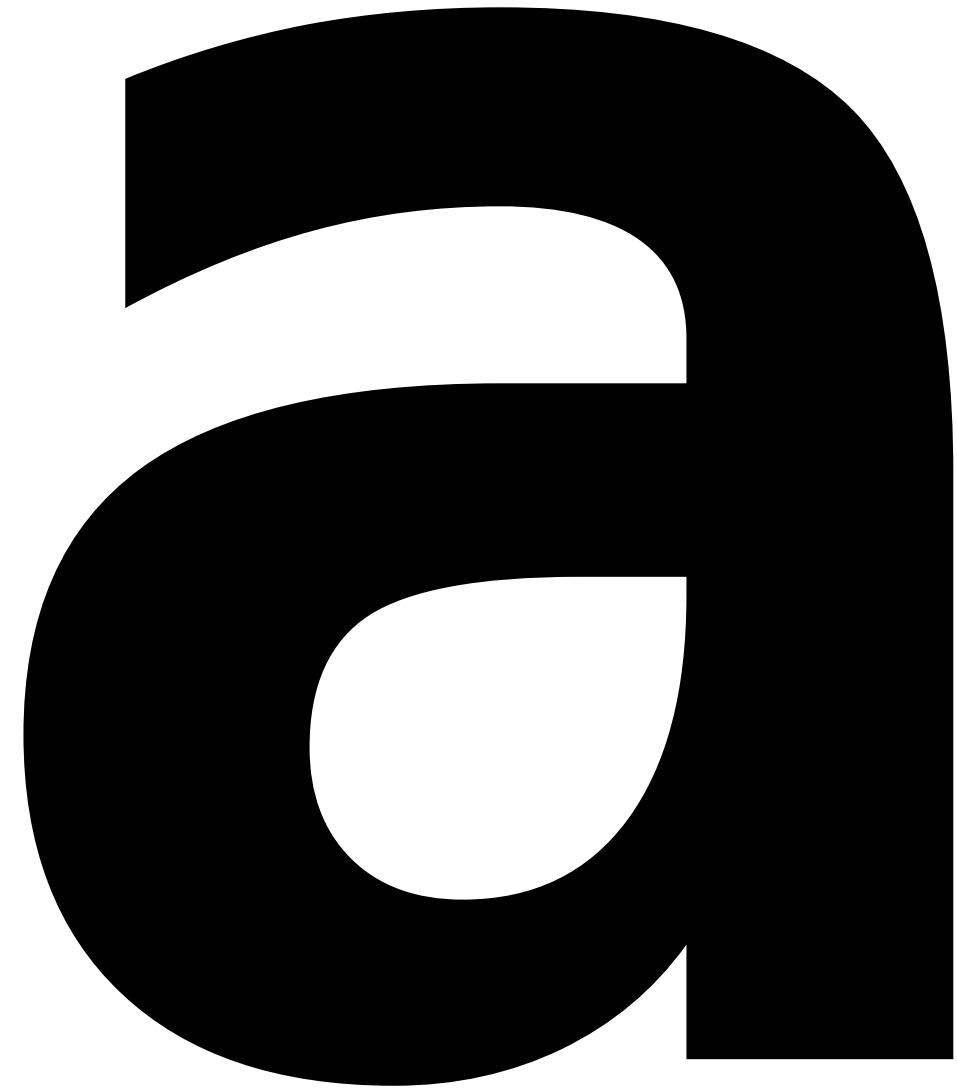


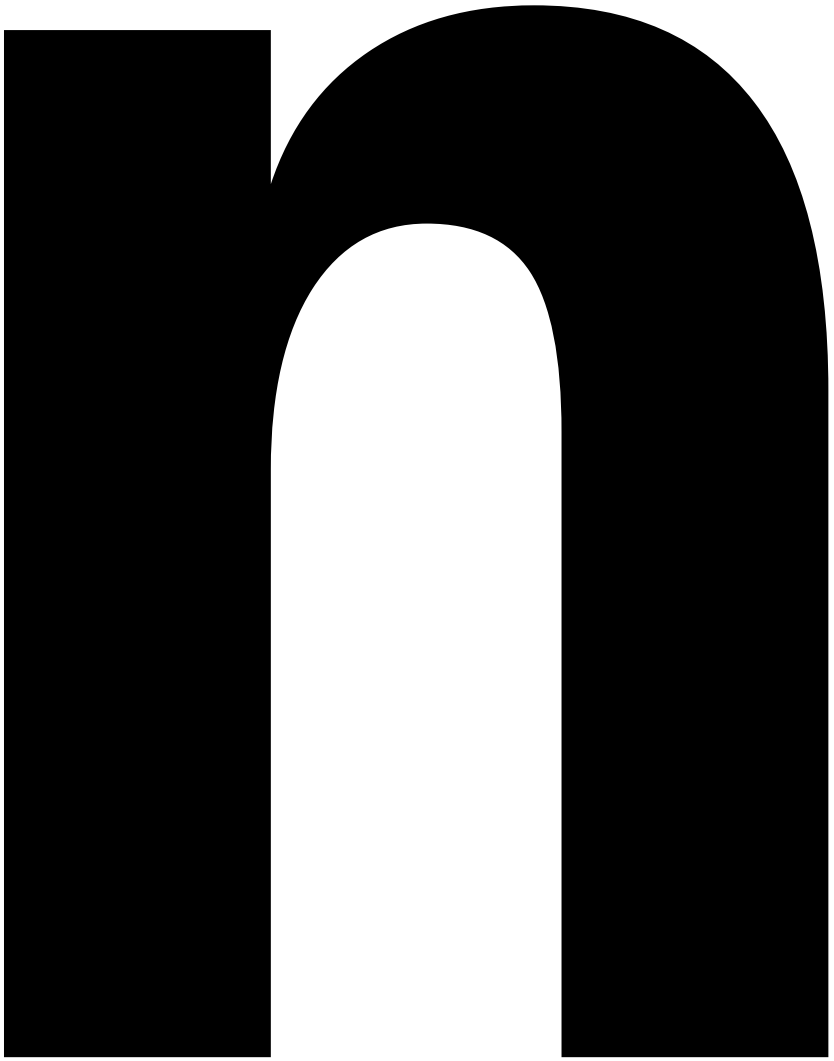
d

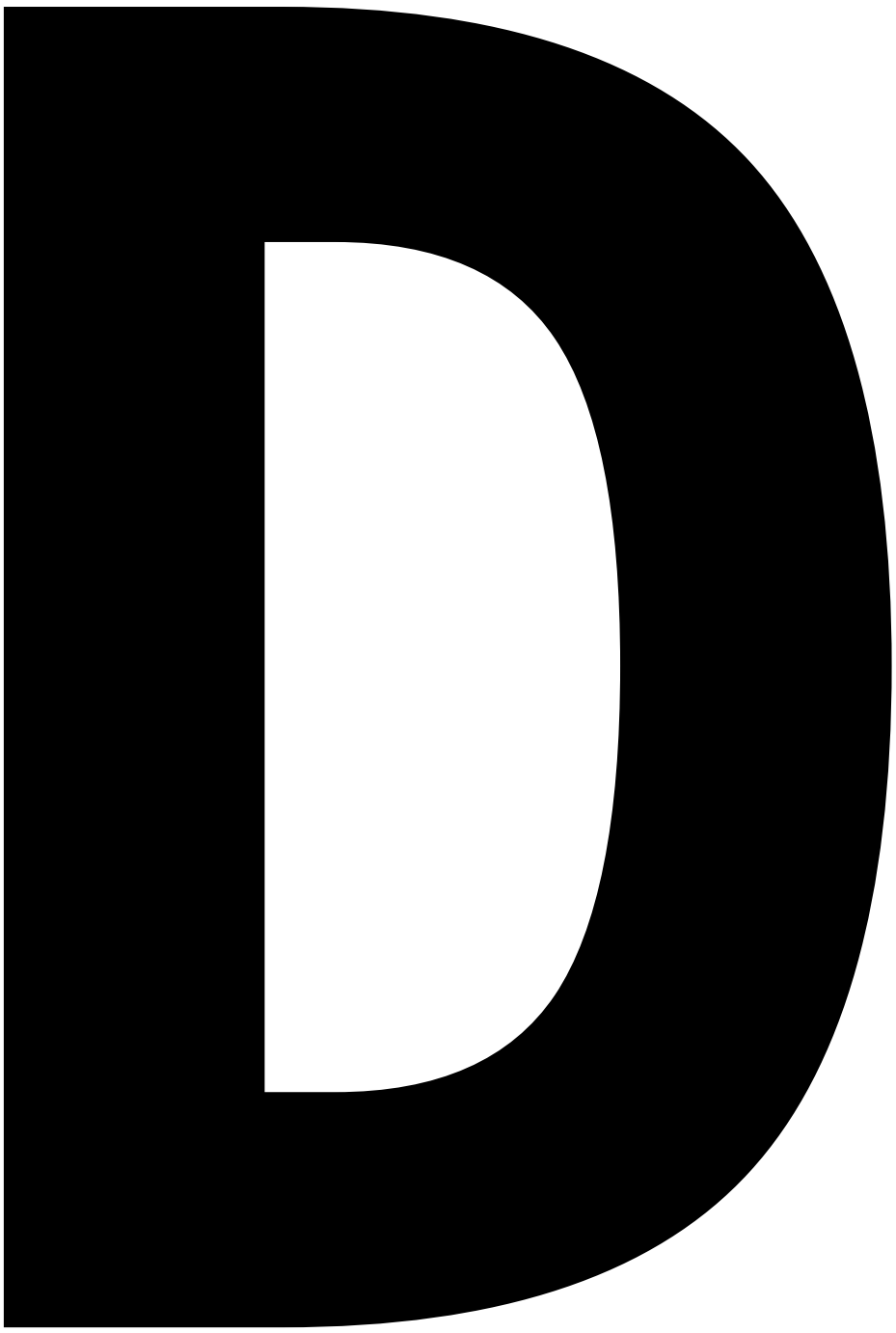


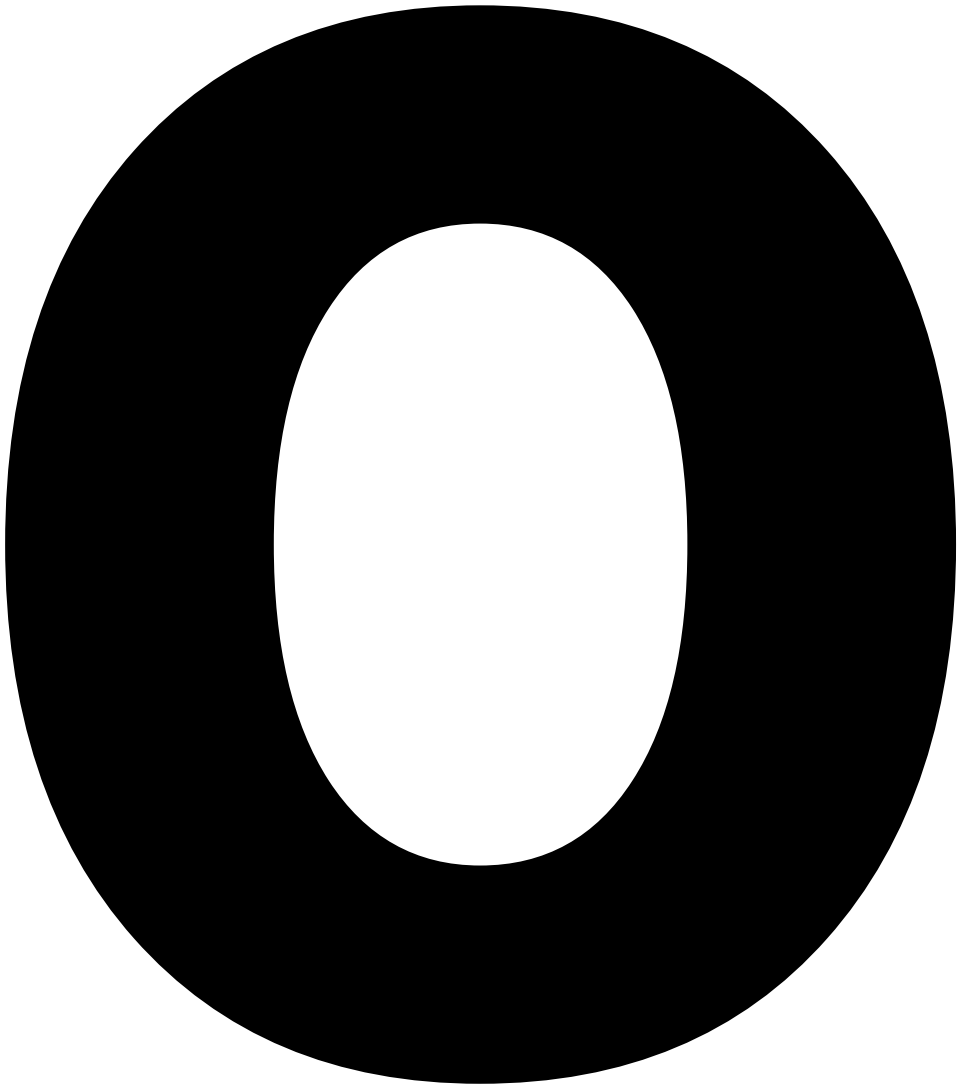






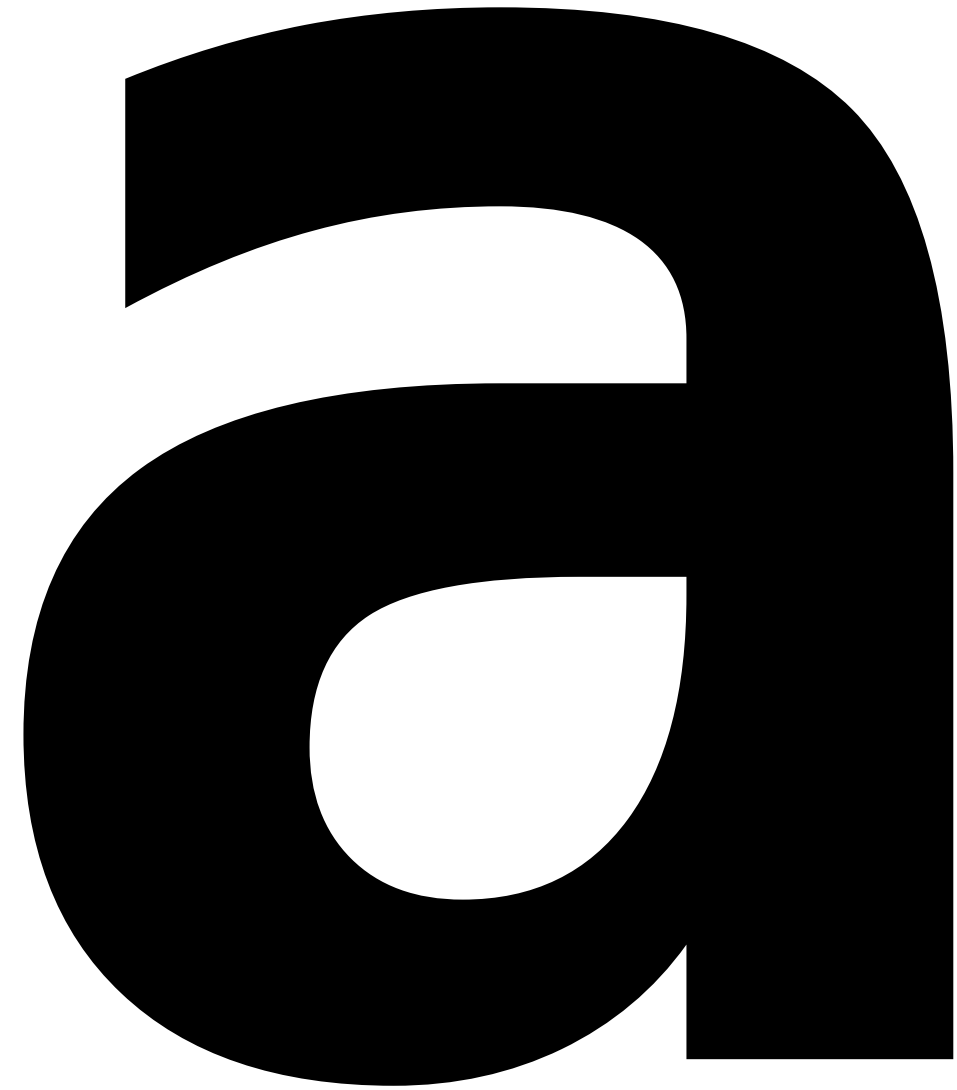


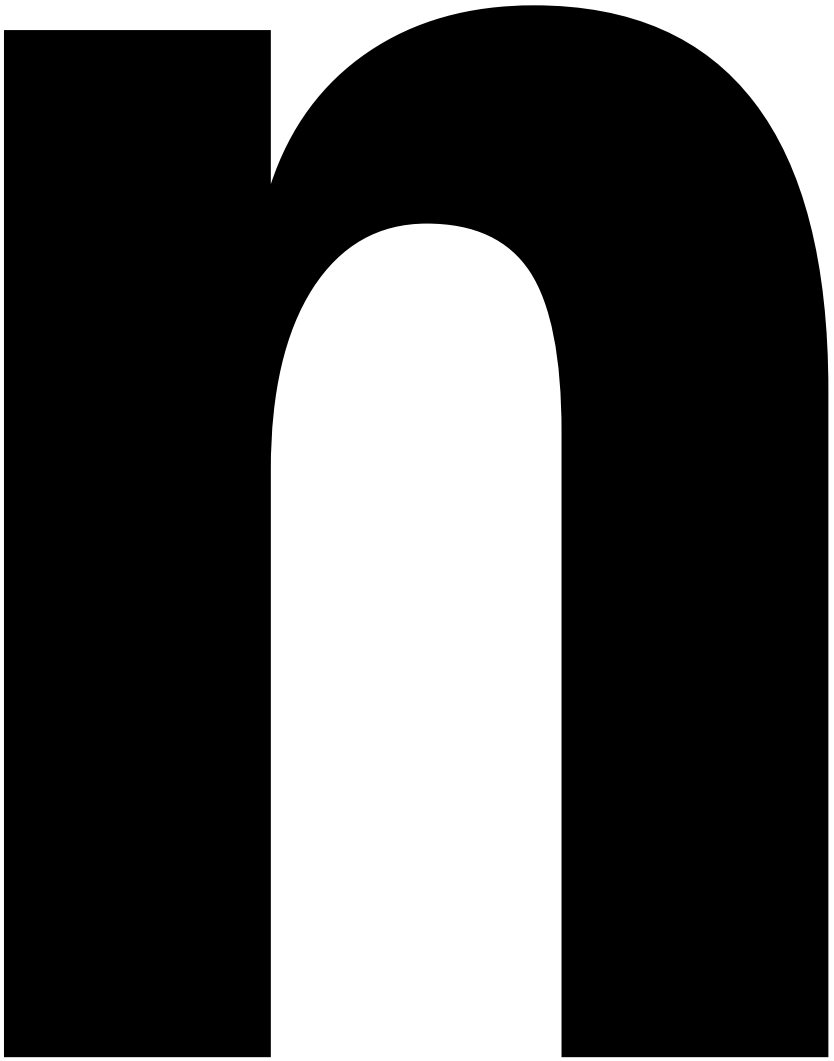




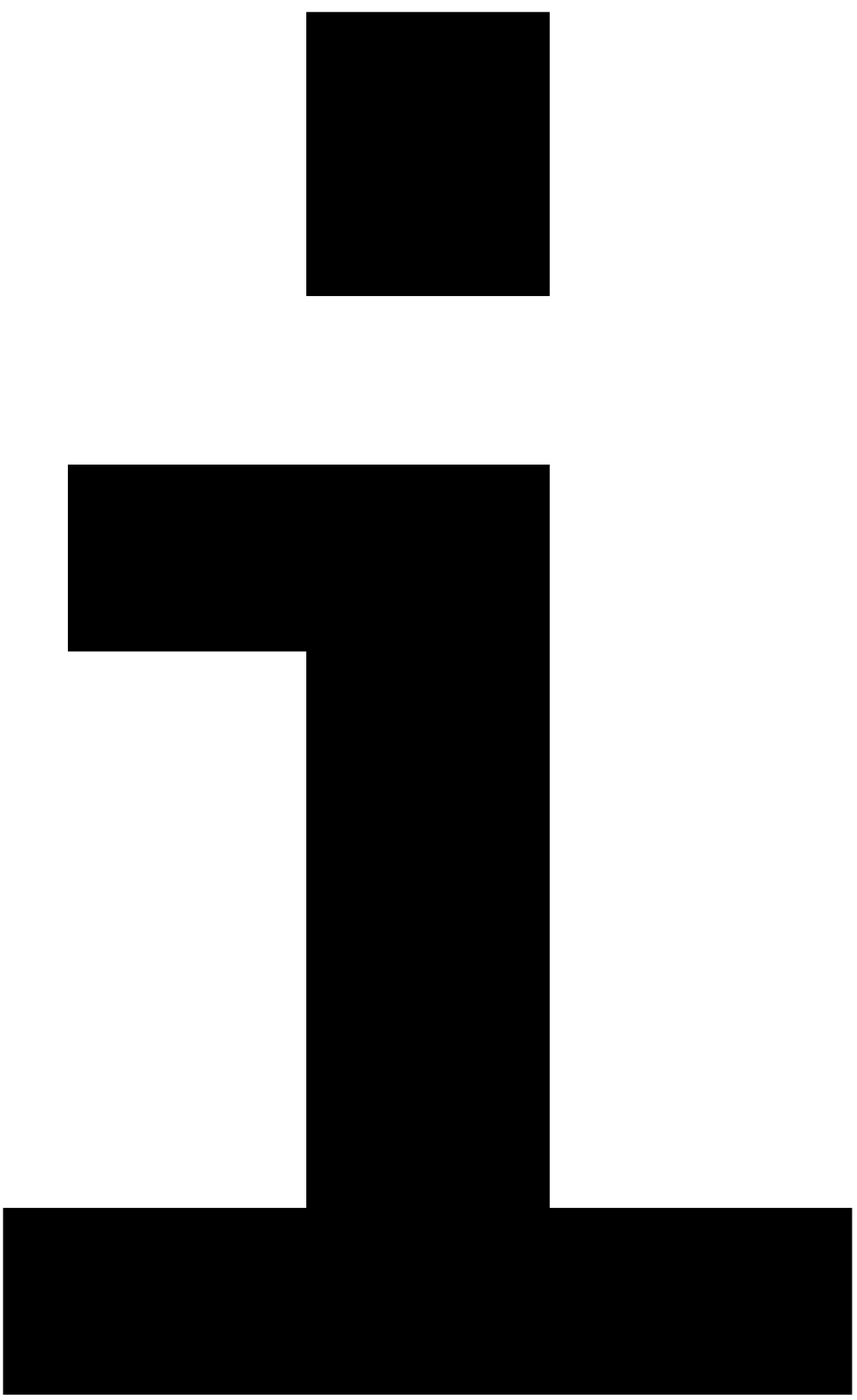
S

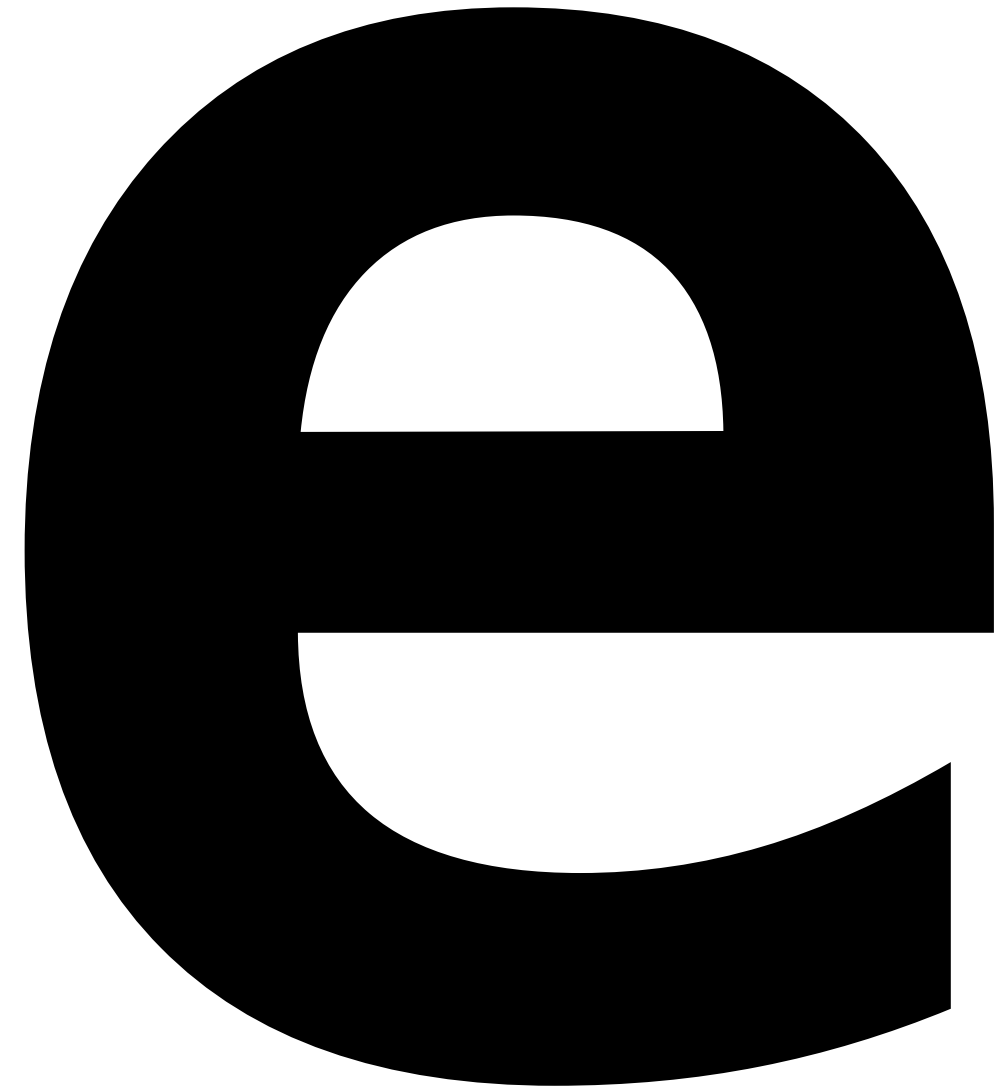
S

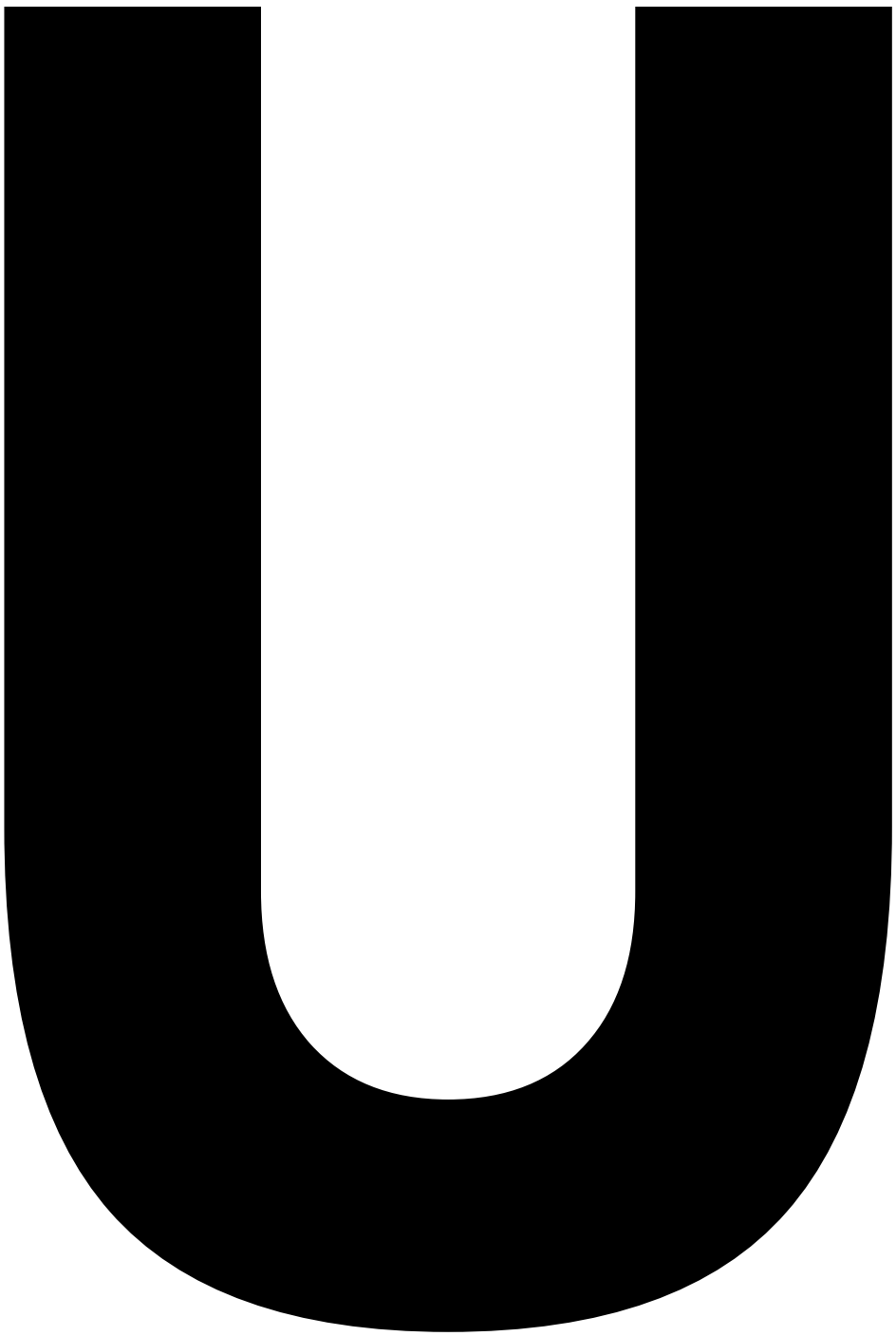


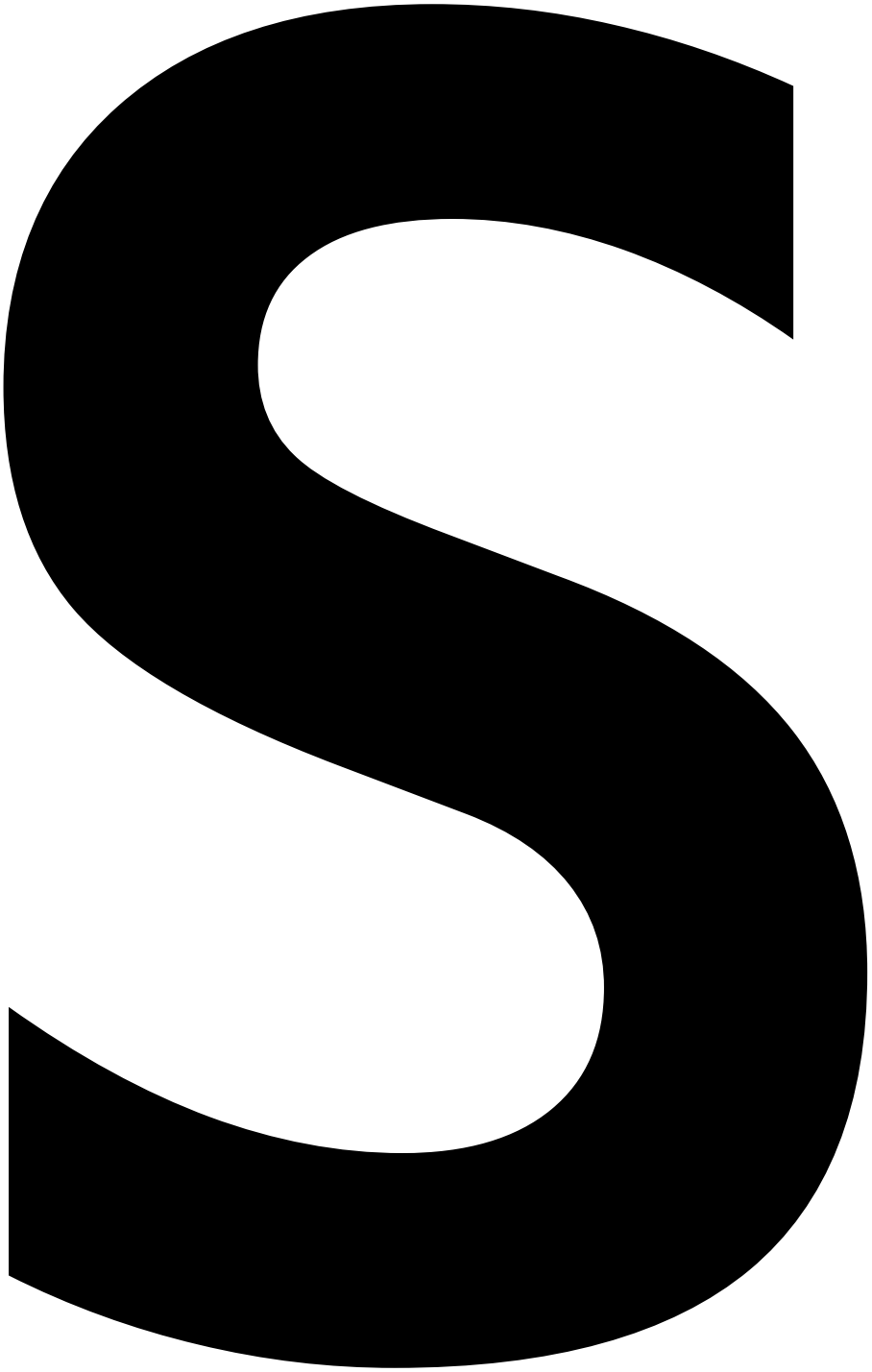


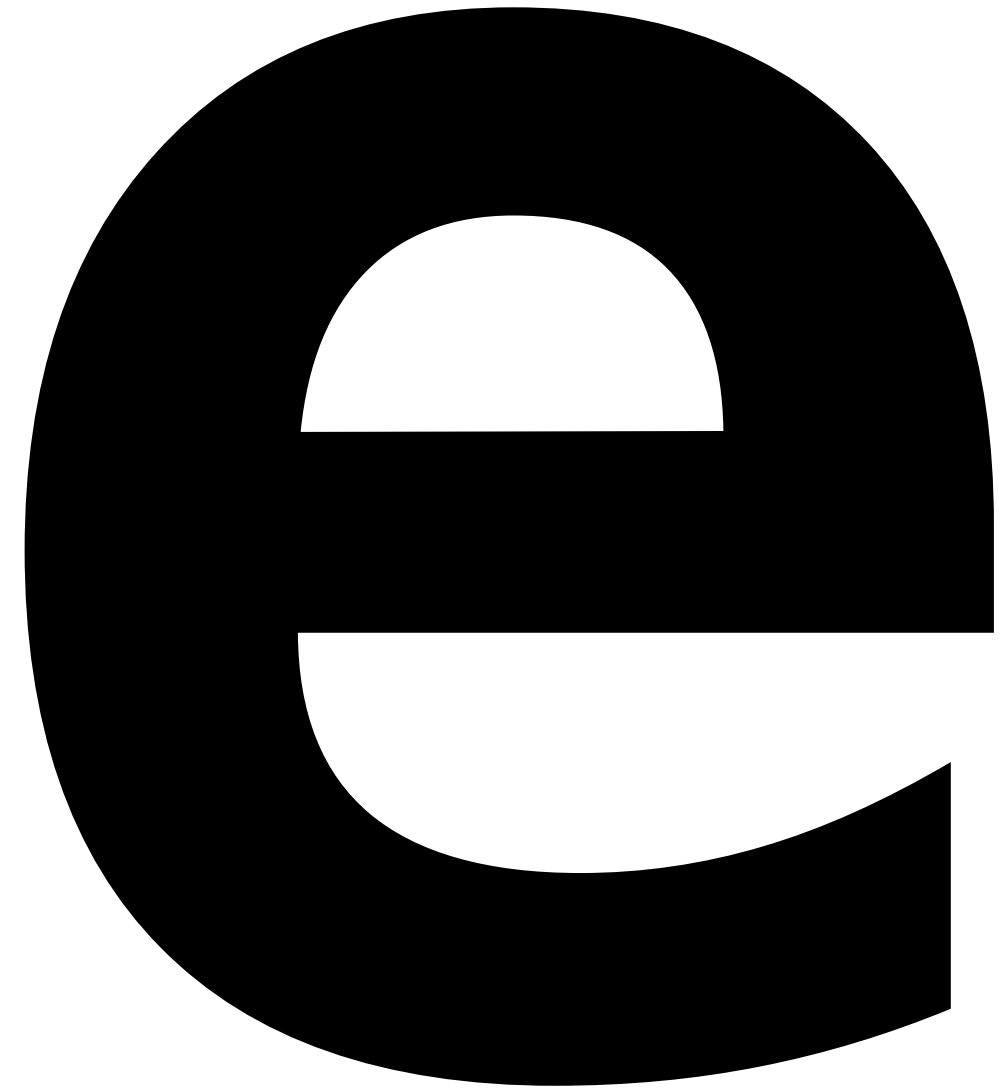
d

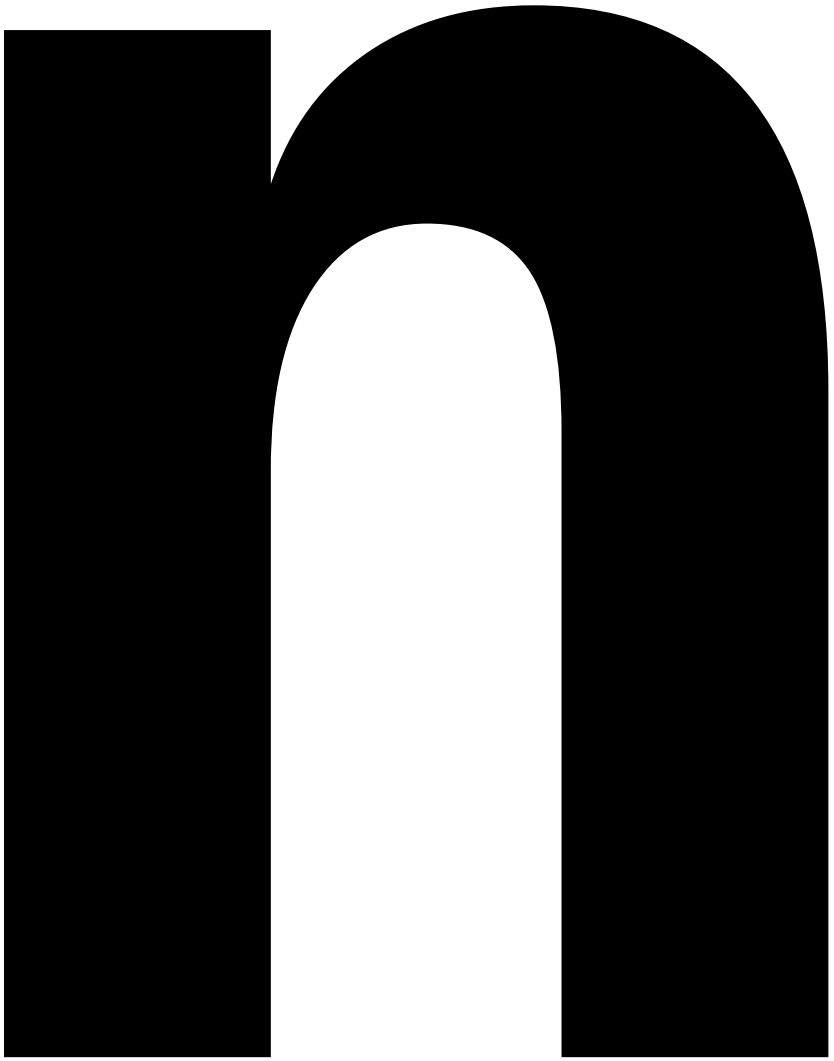


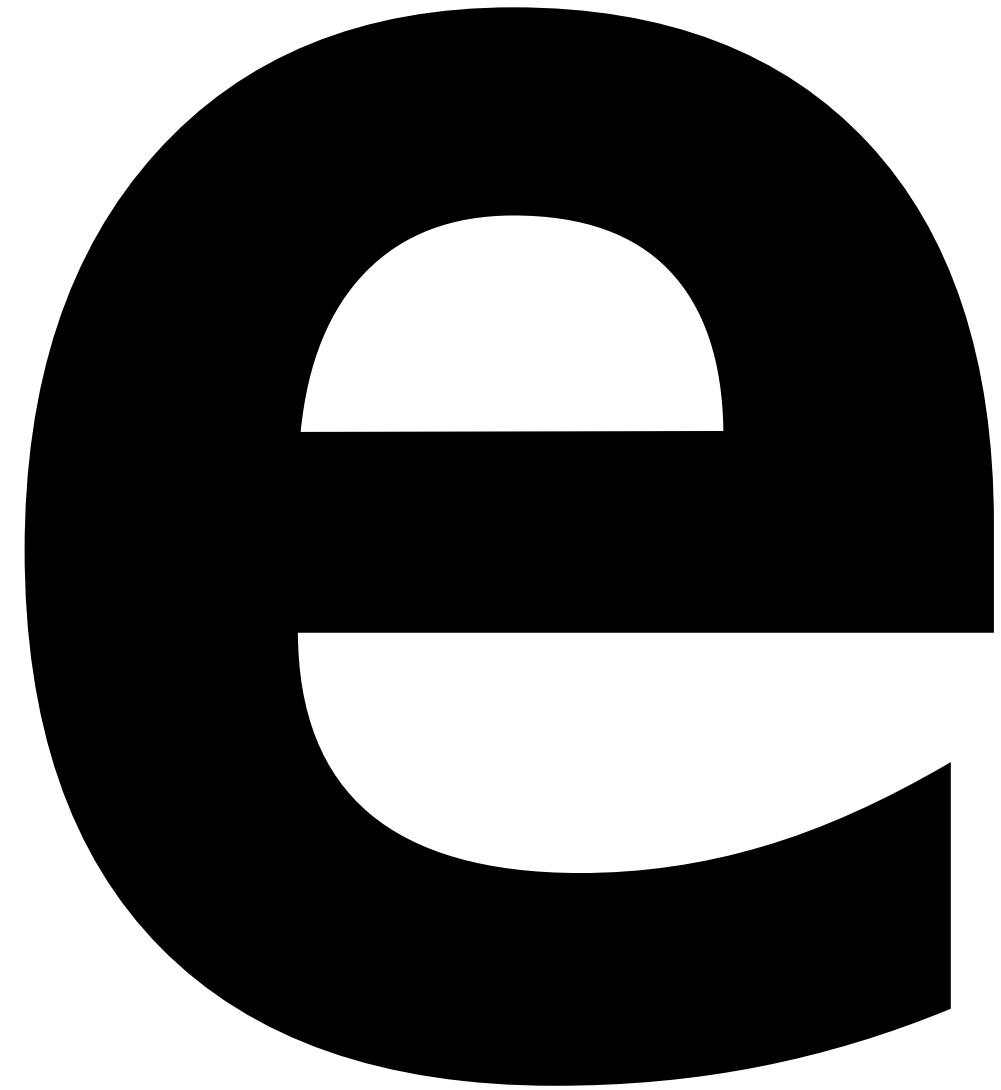


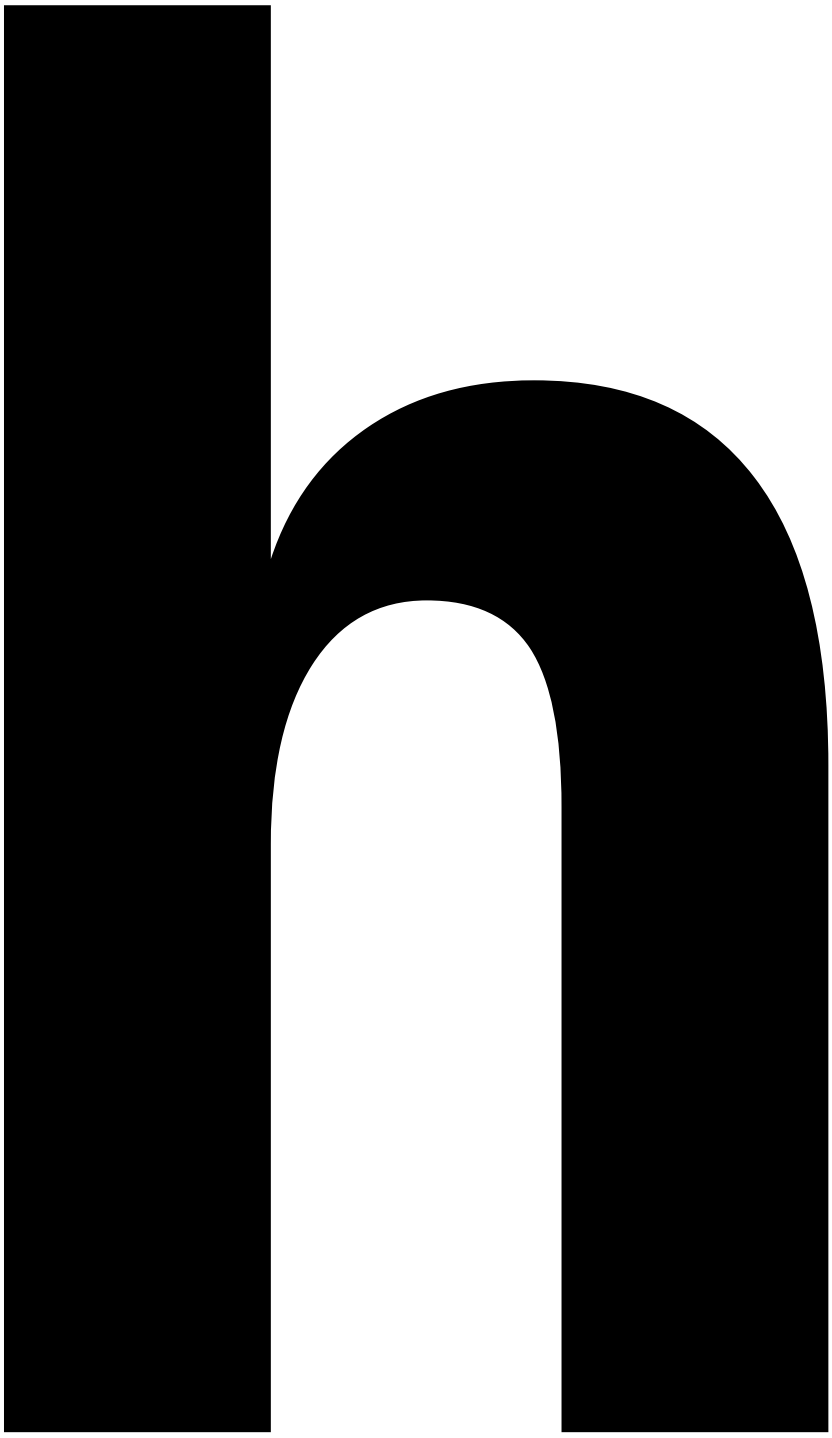


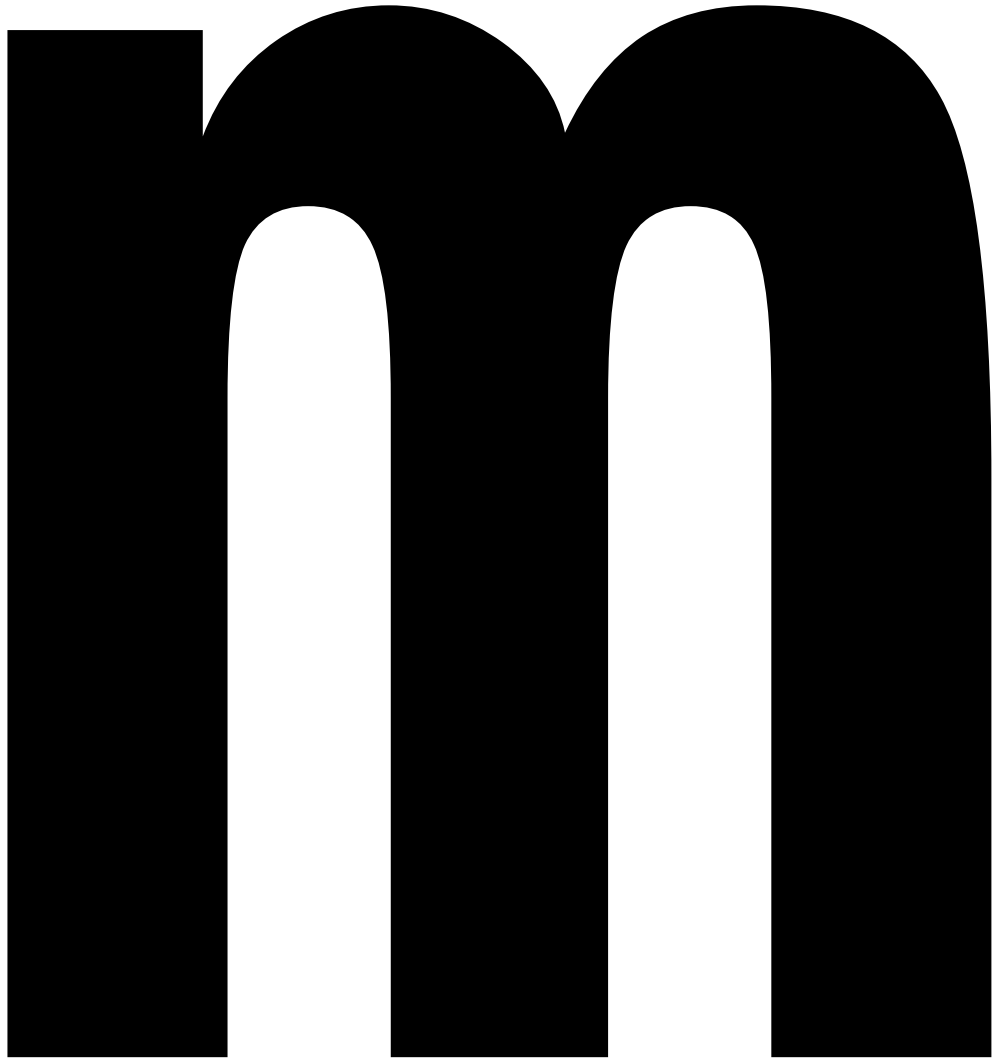


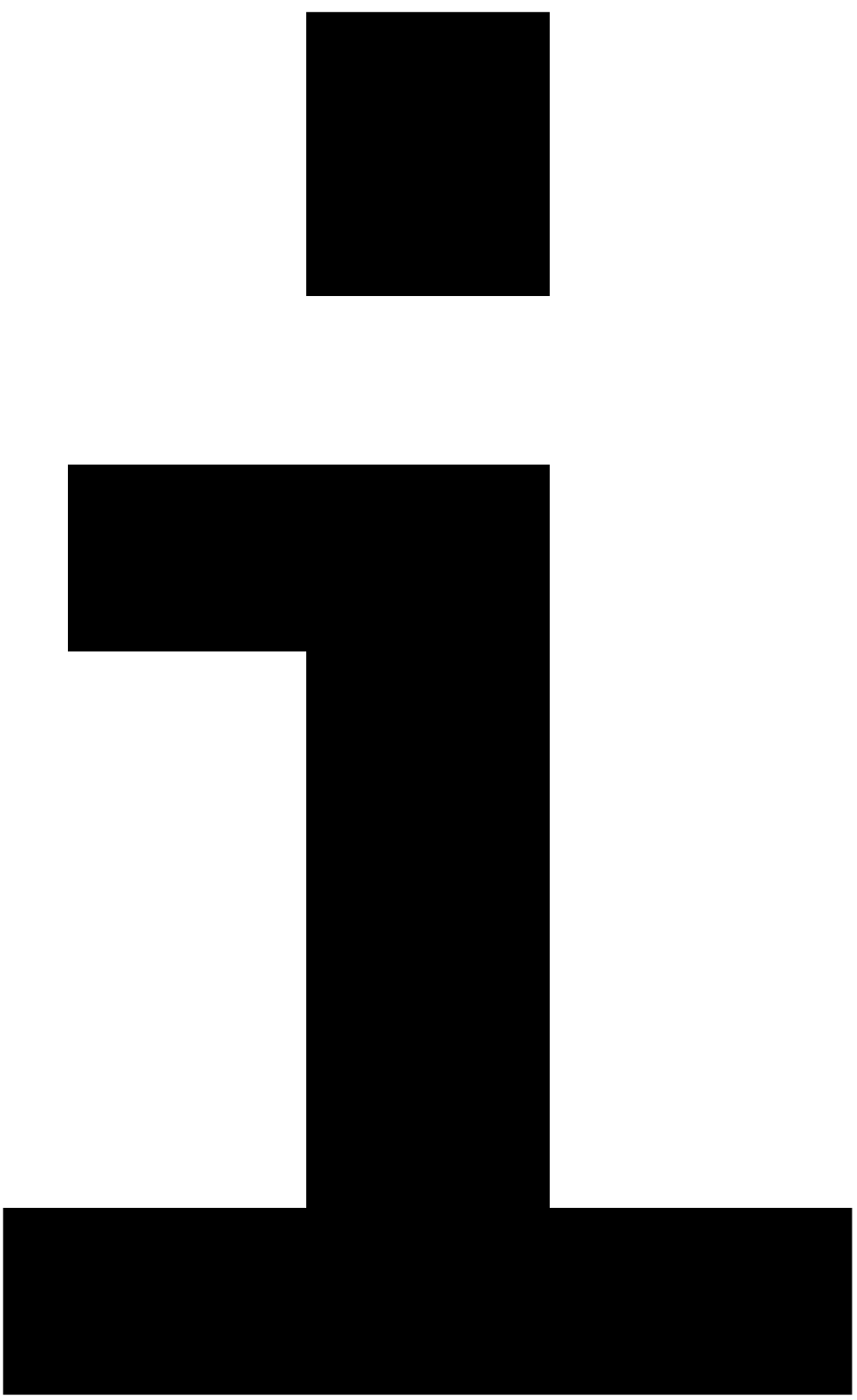


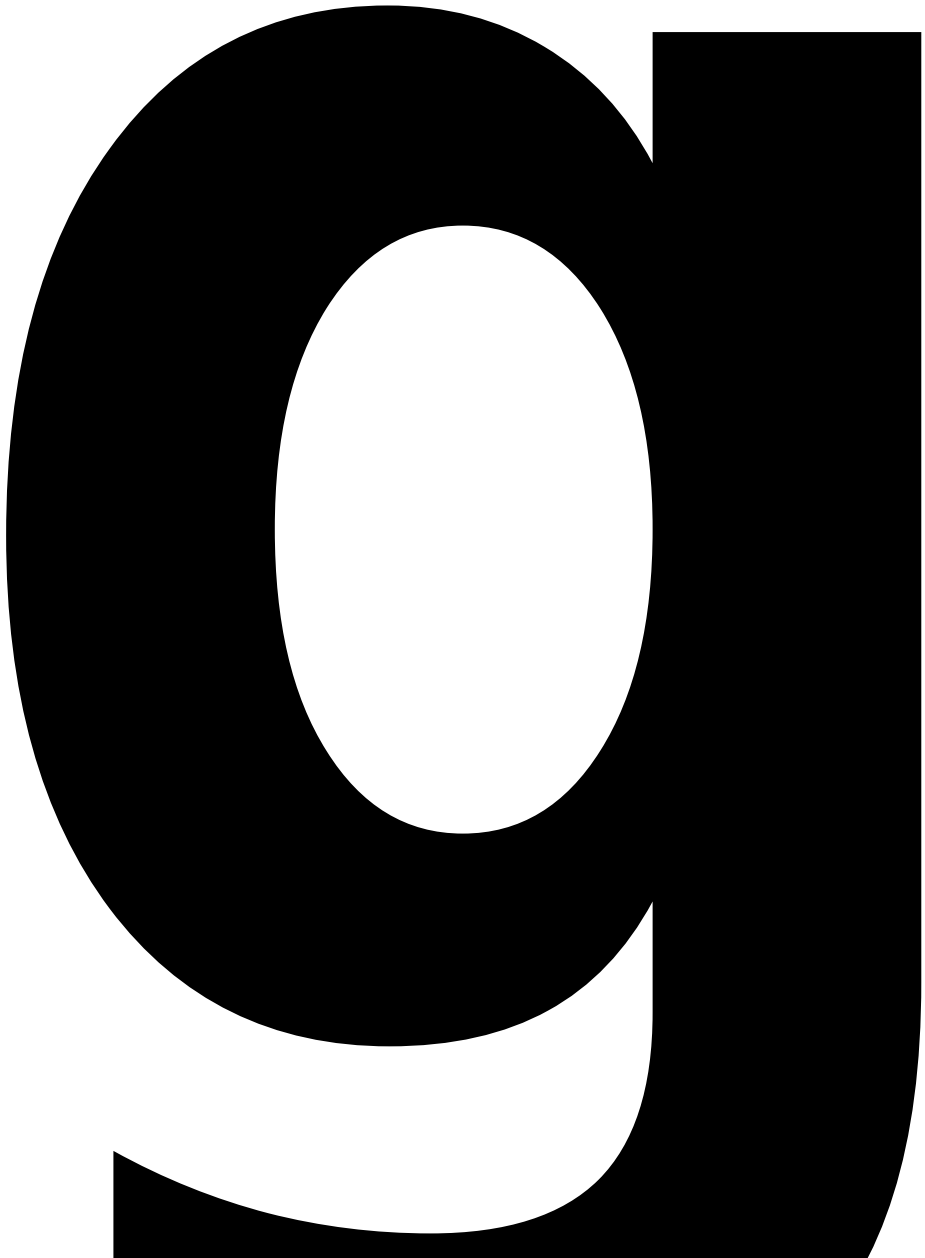




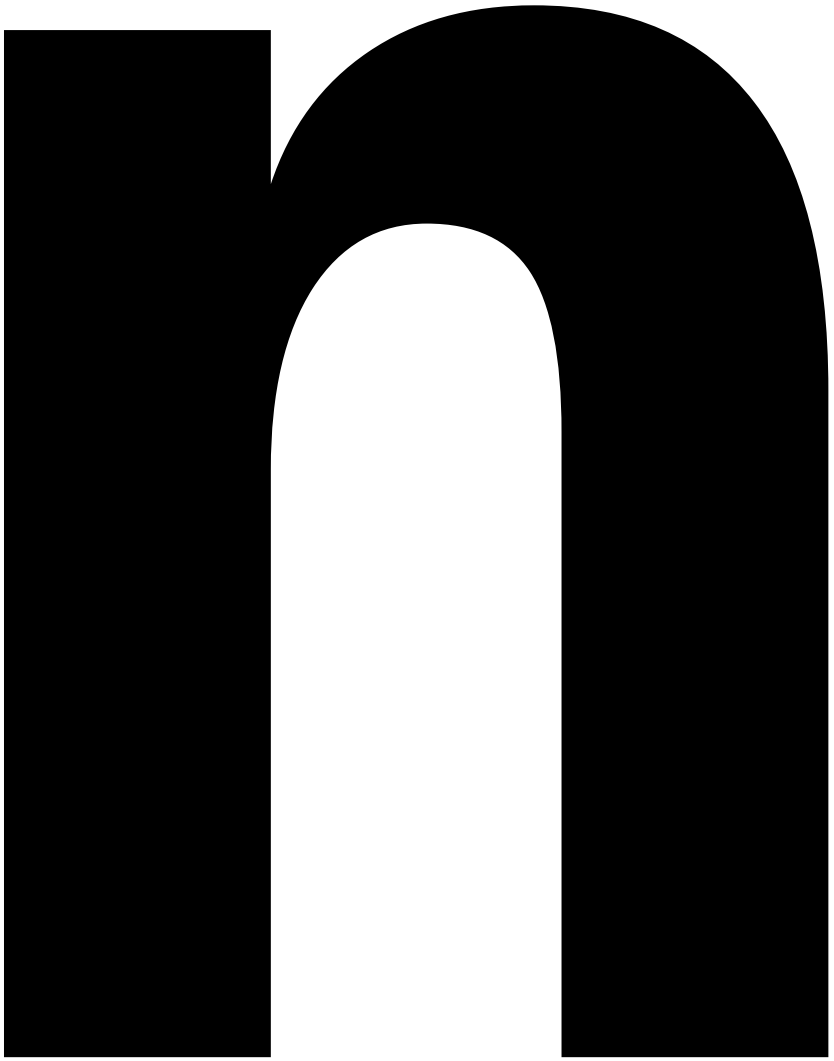


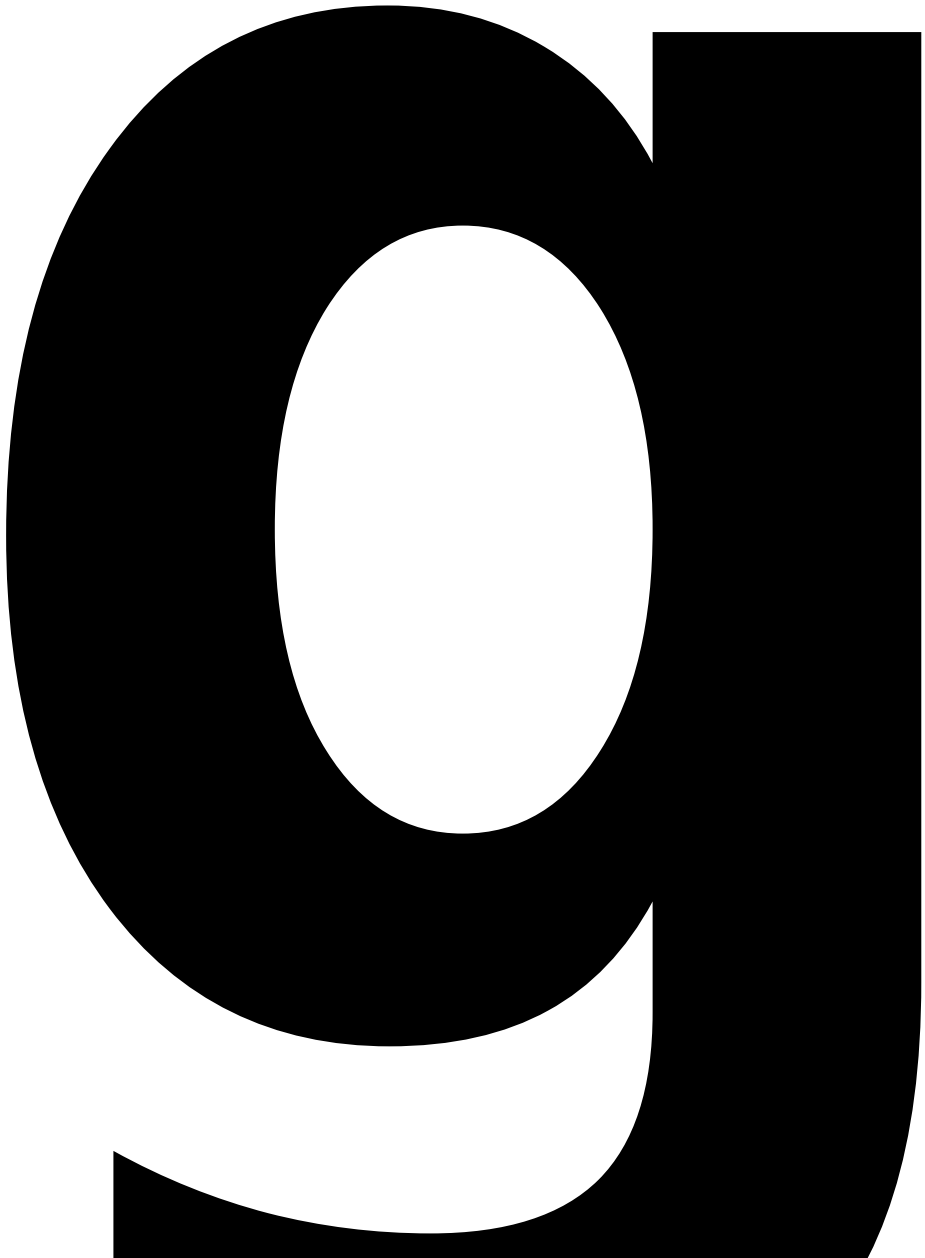




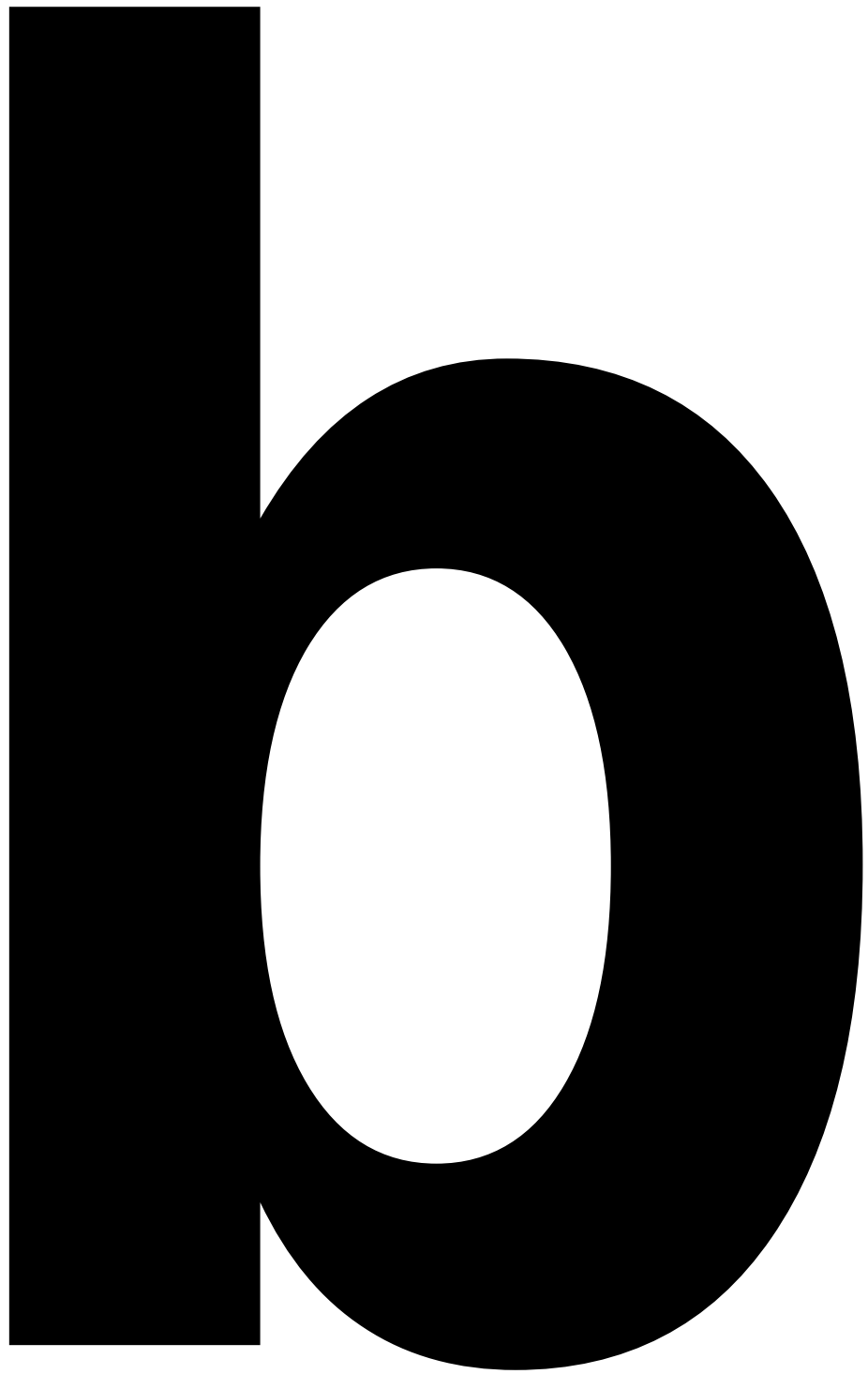


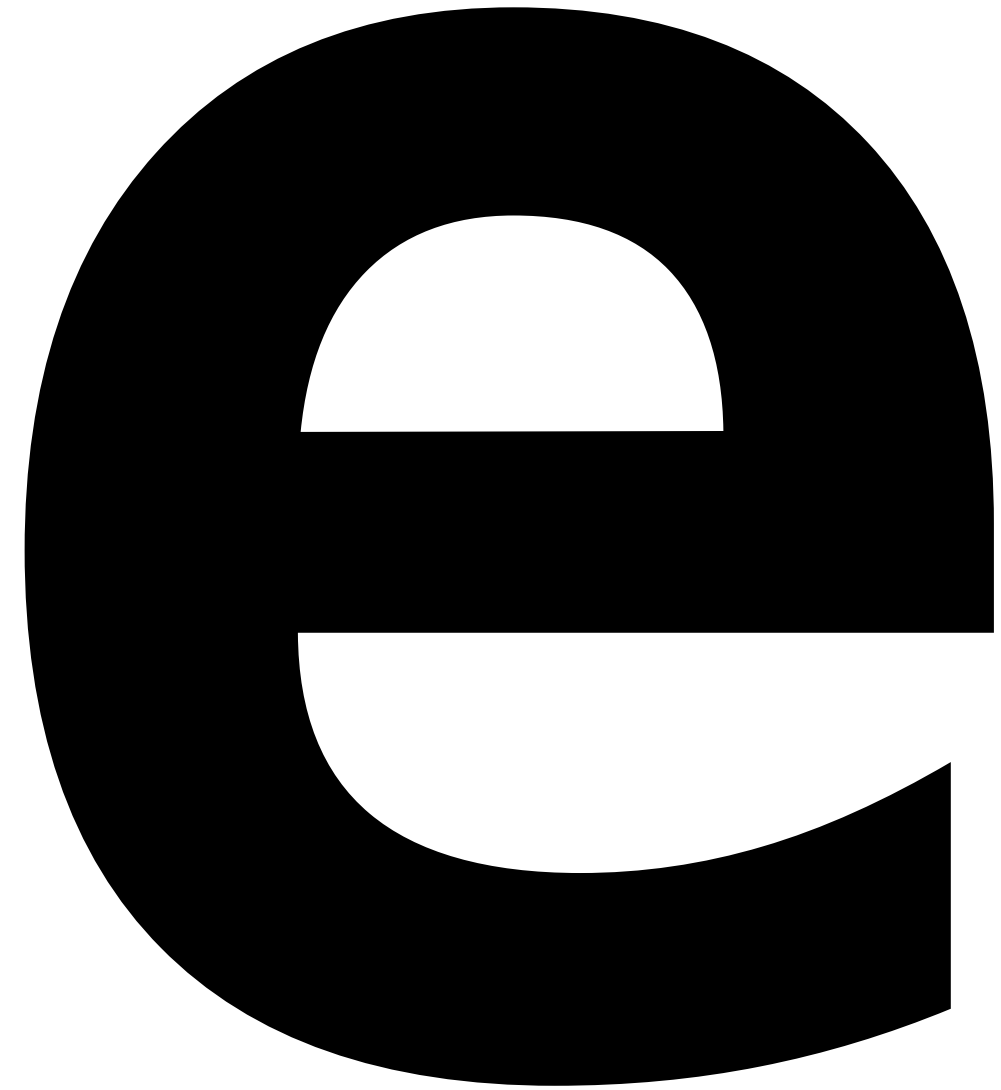
u

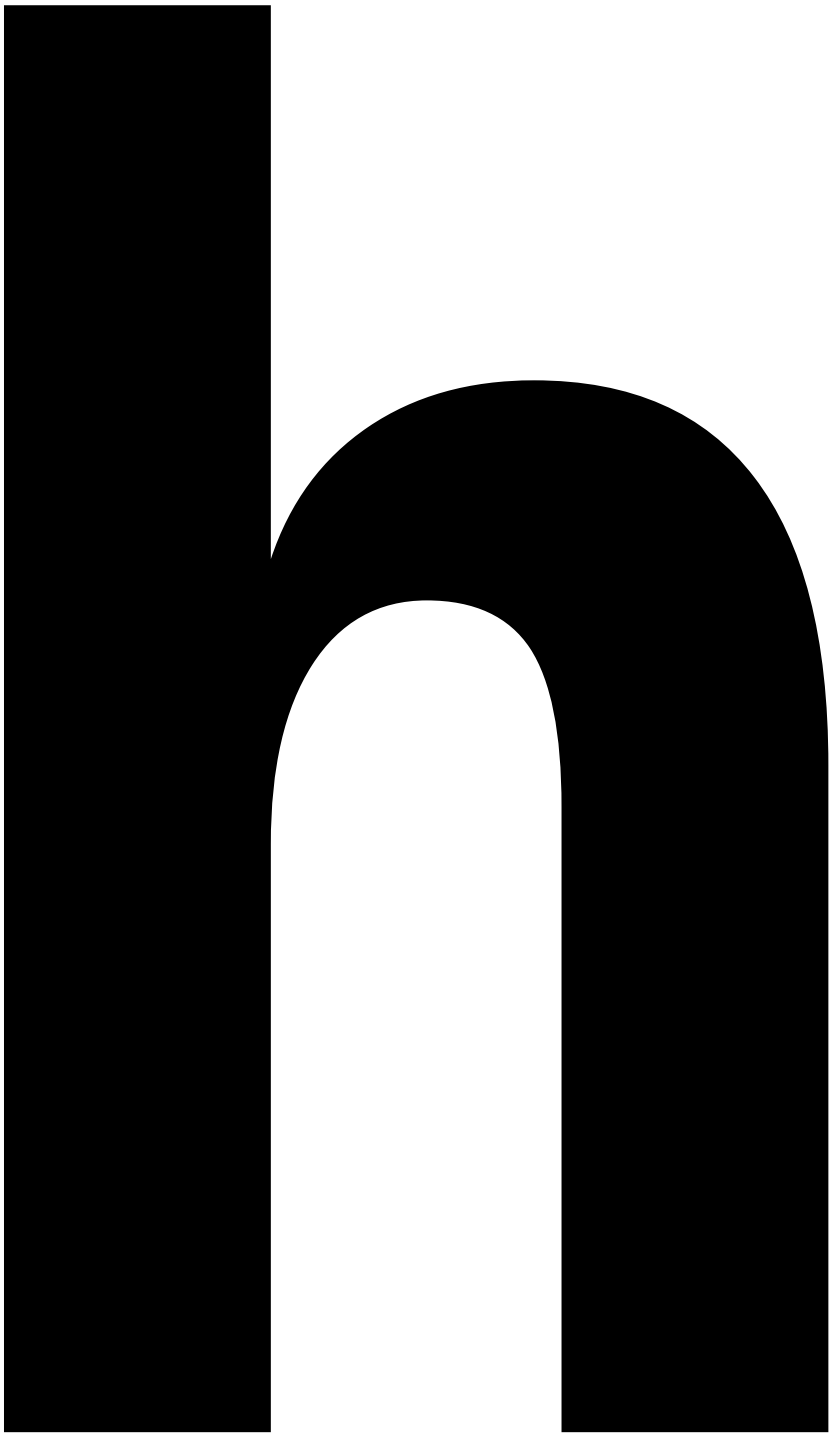


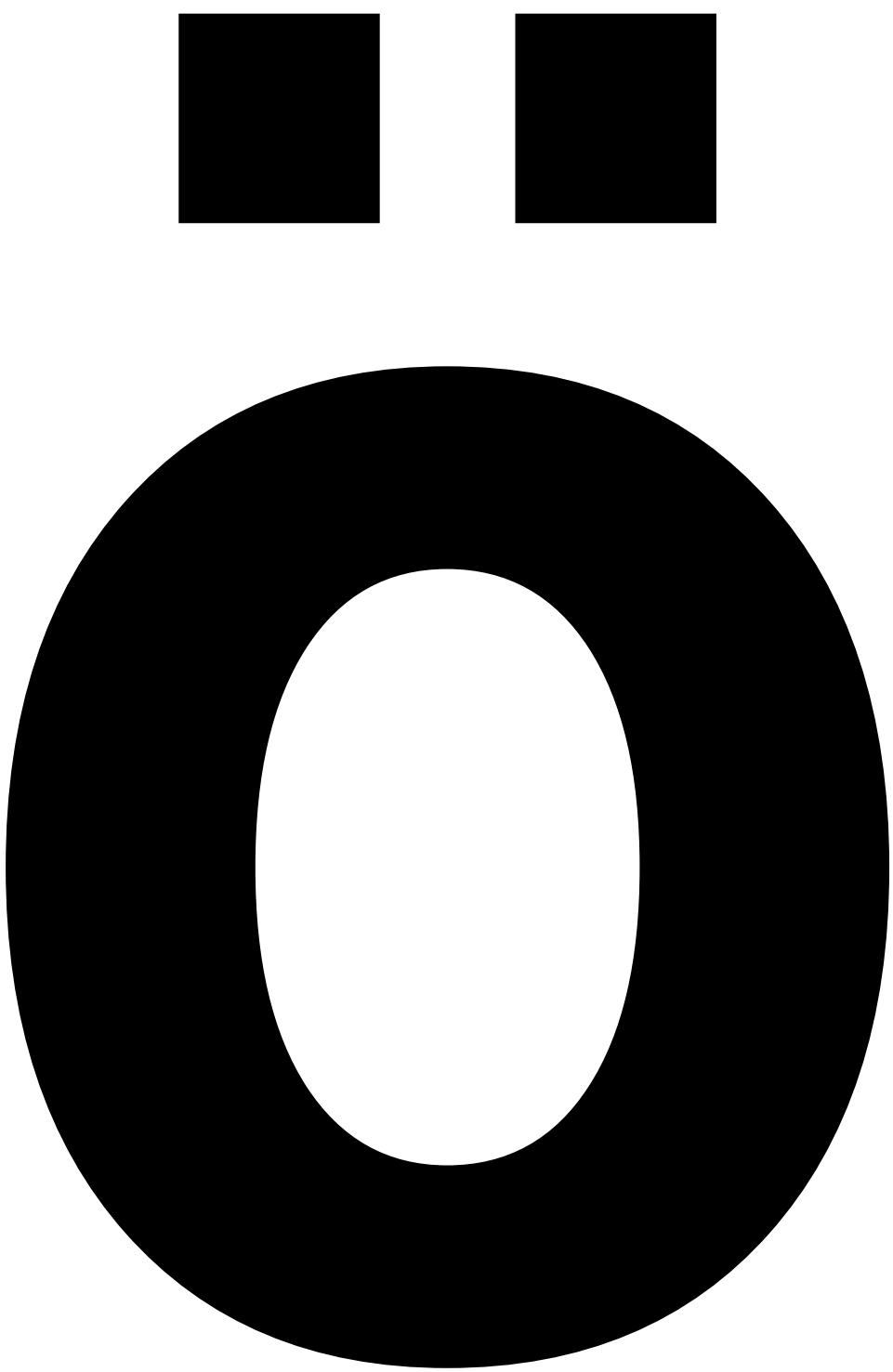


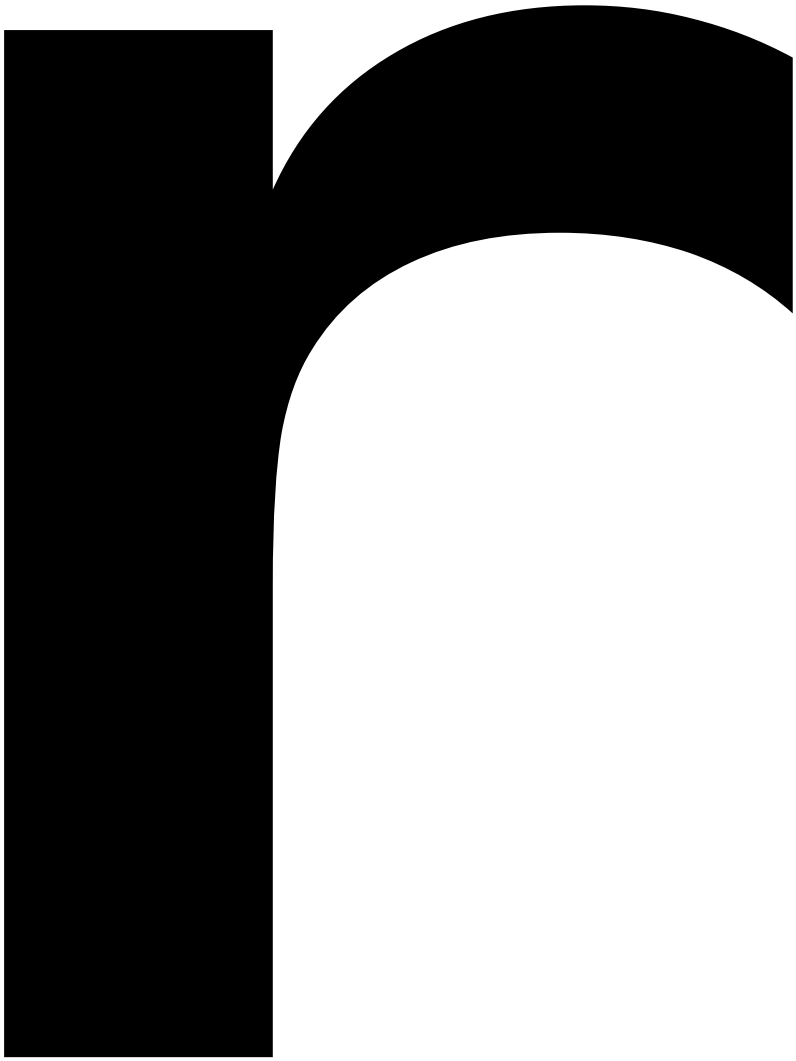
S



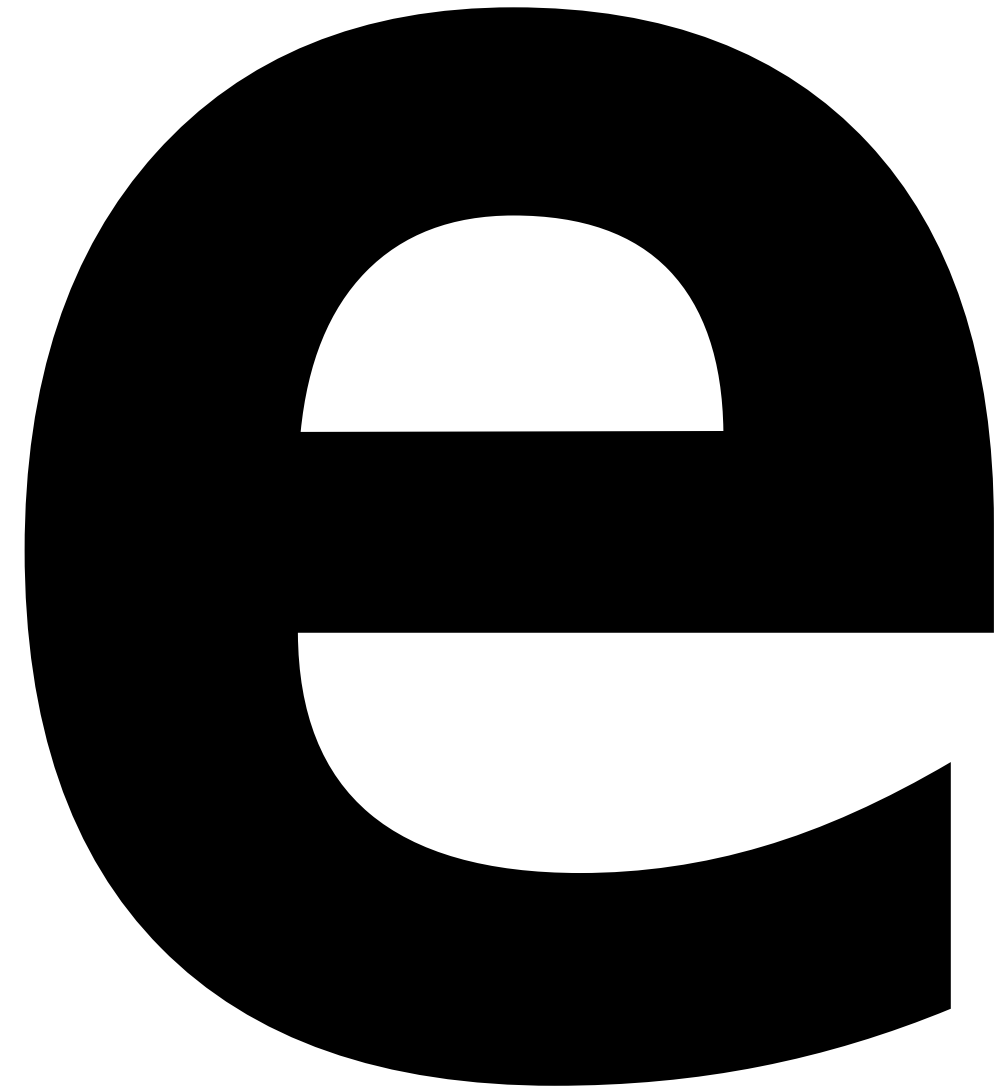




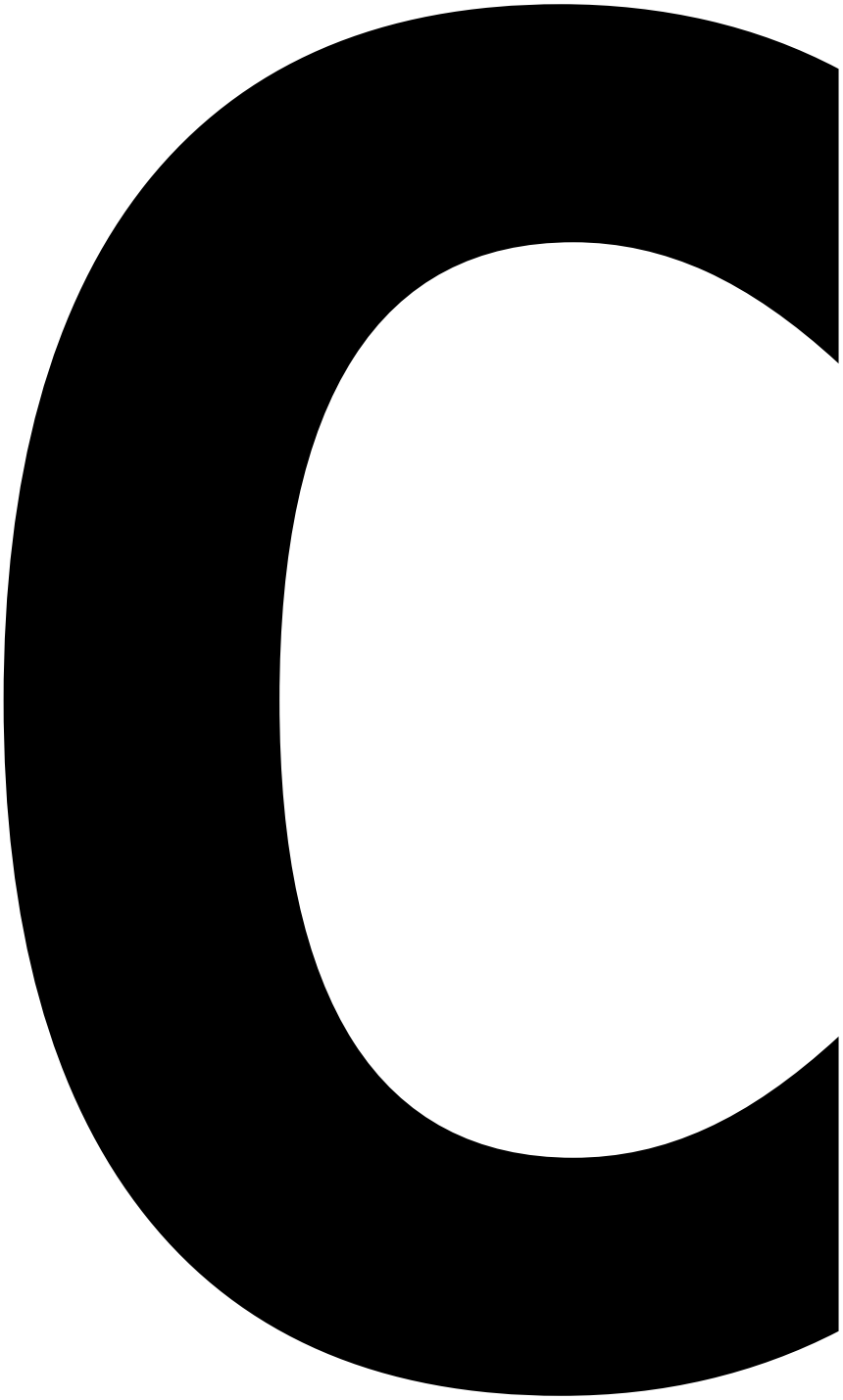


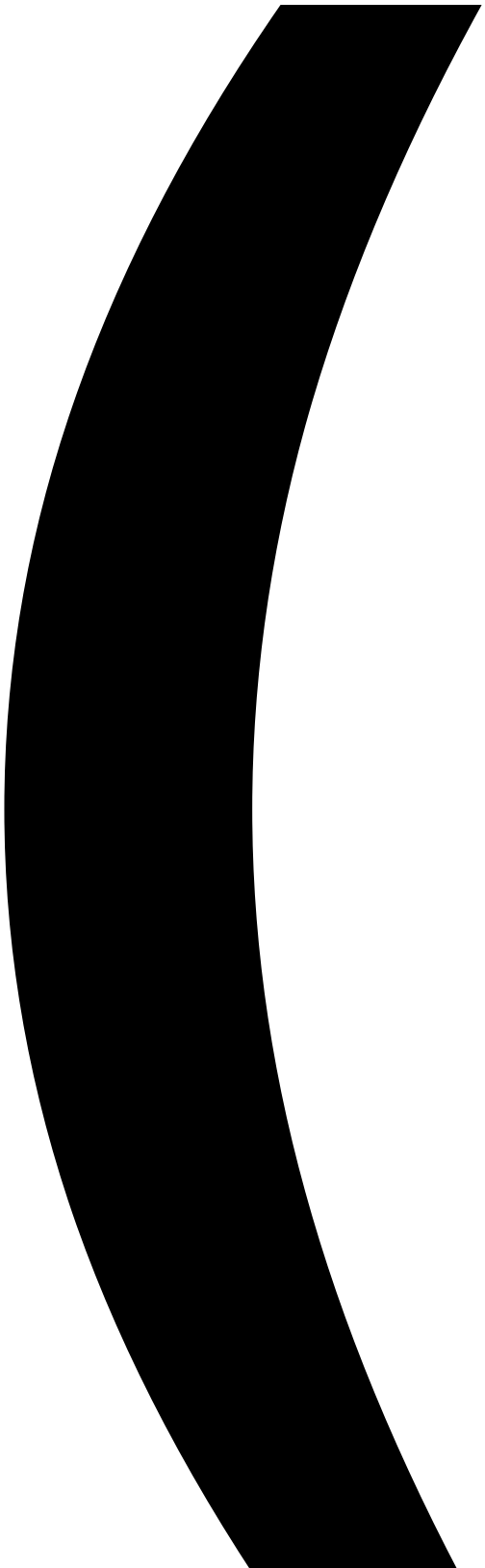


d



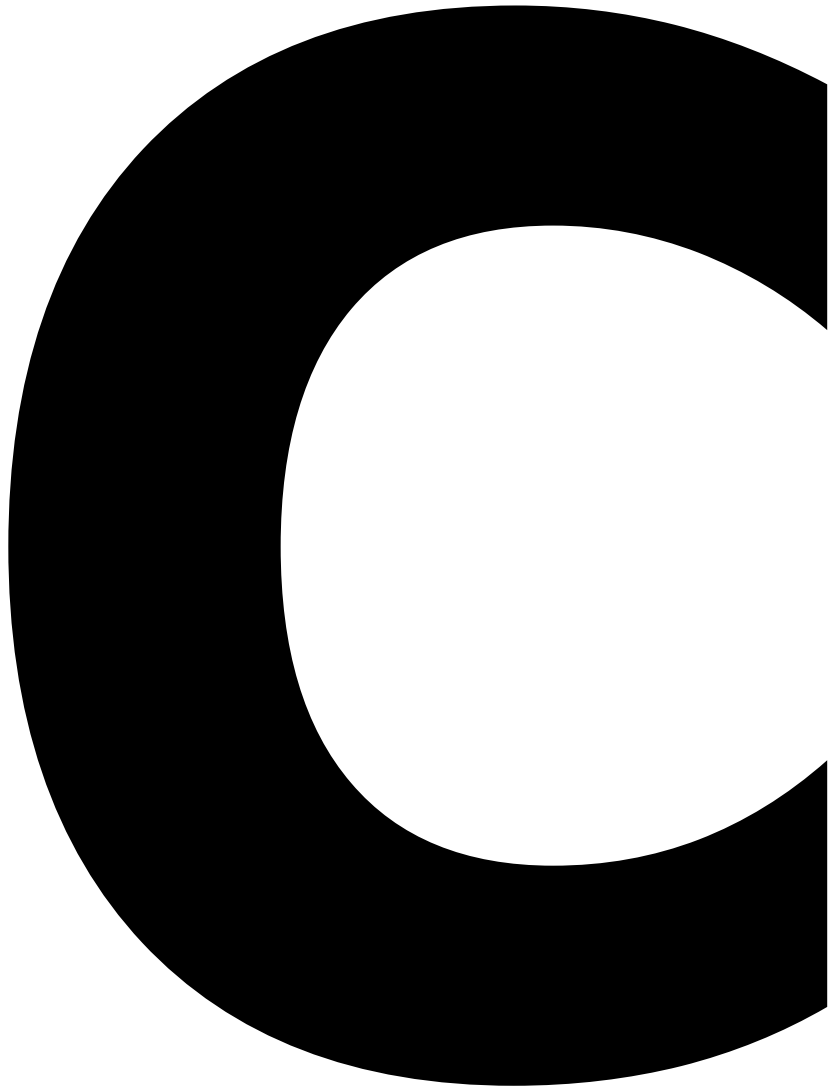
N

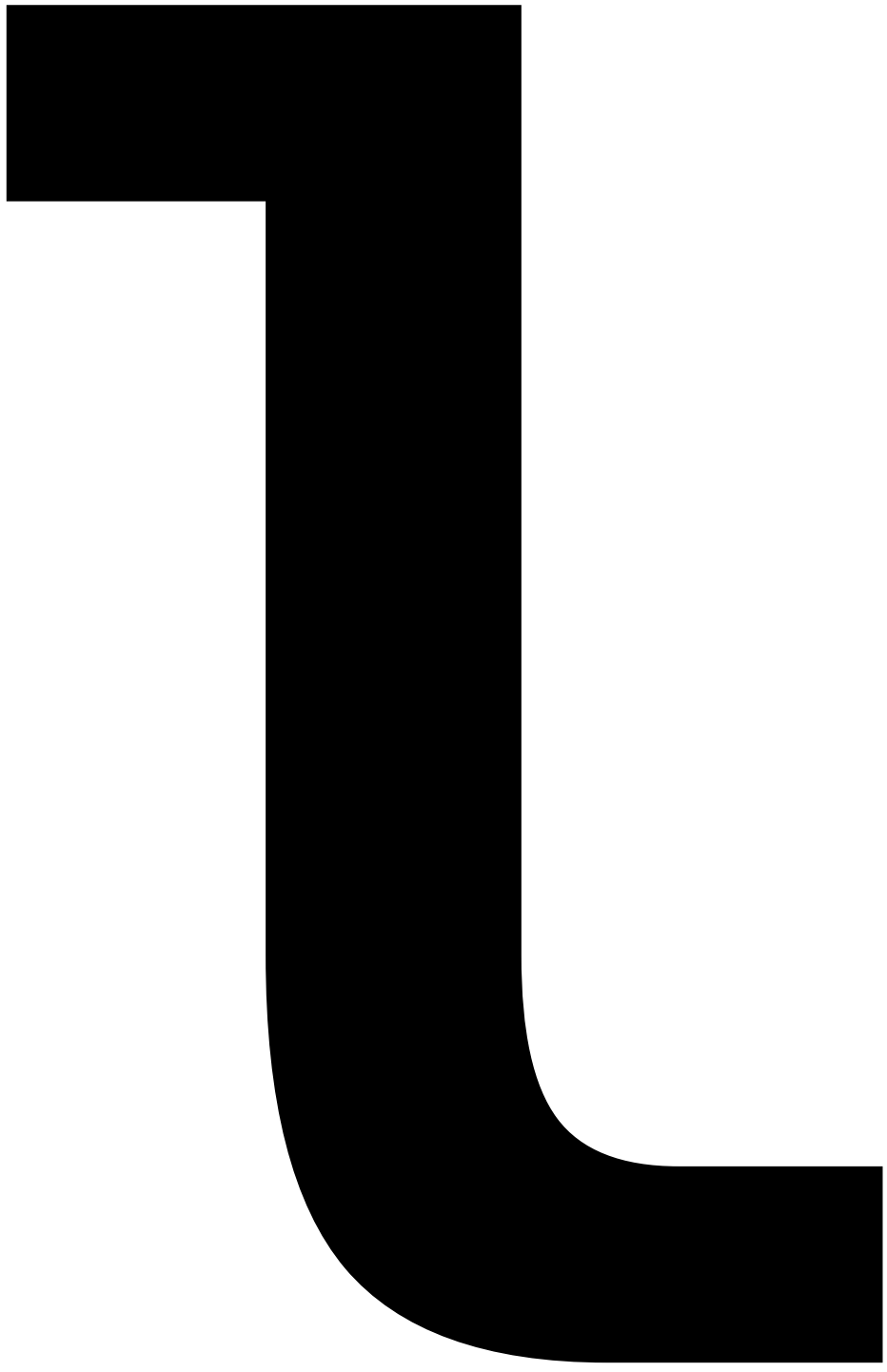


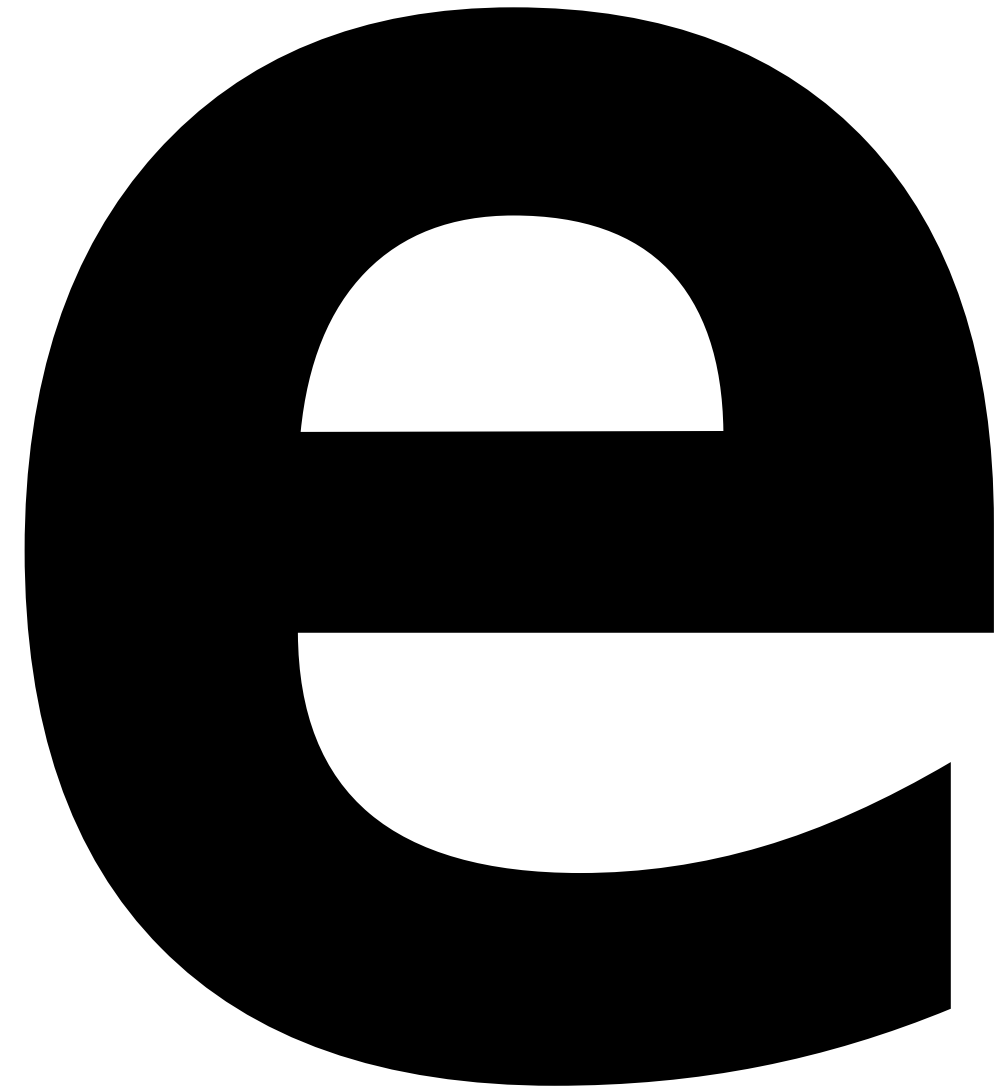


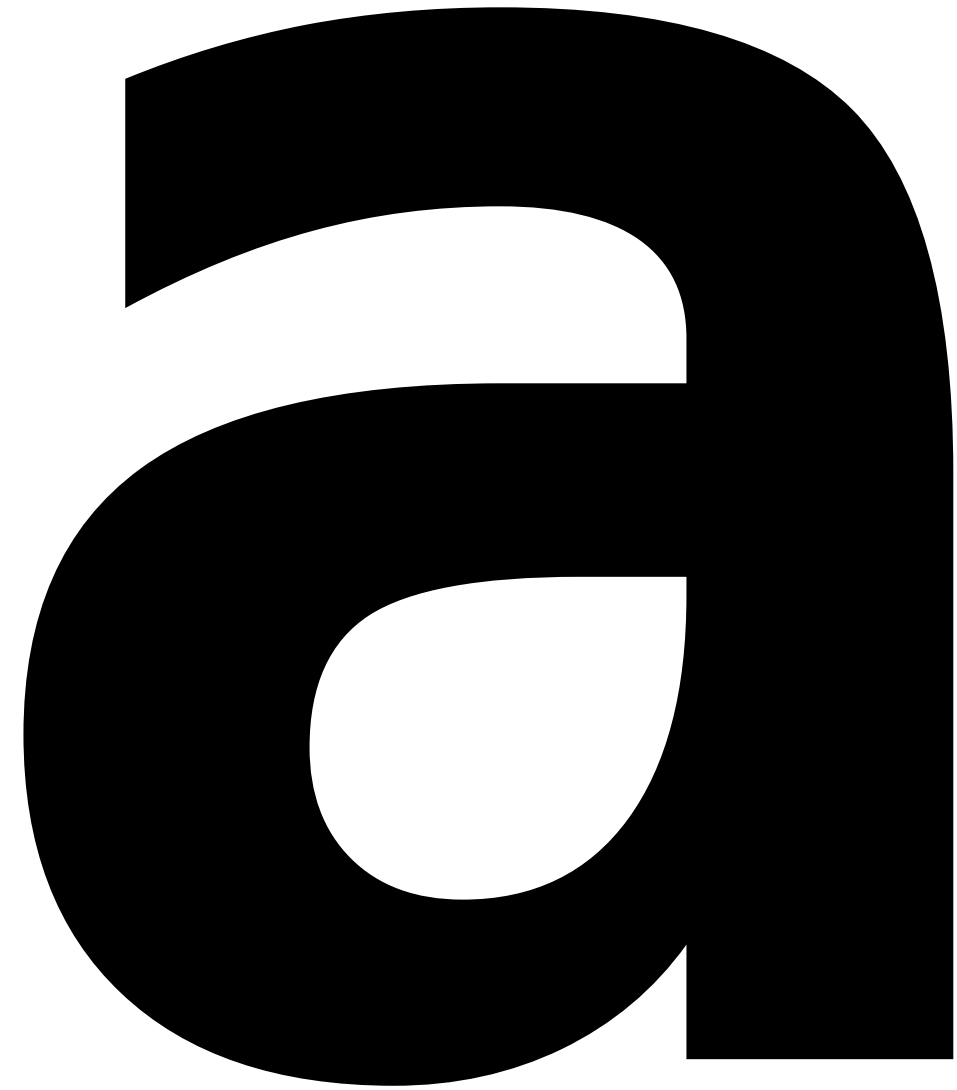
N

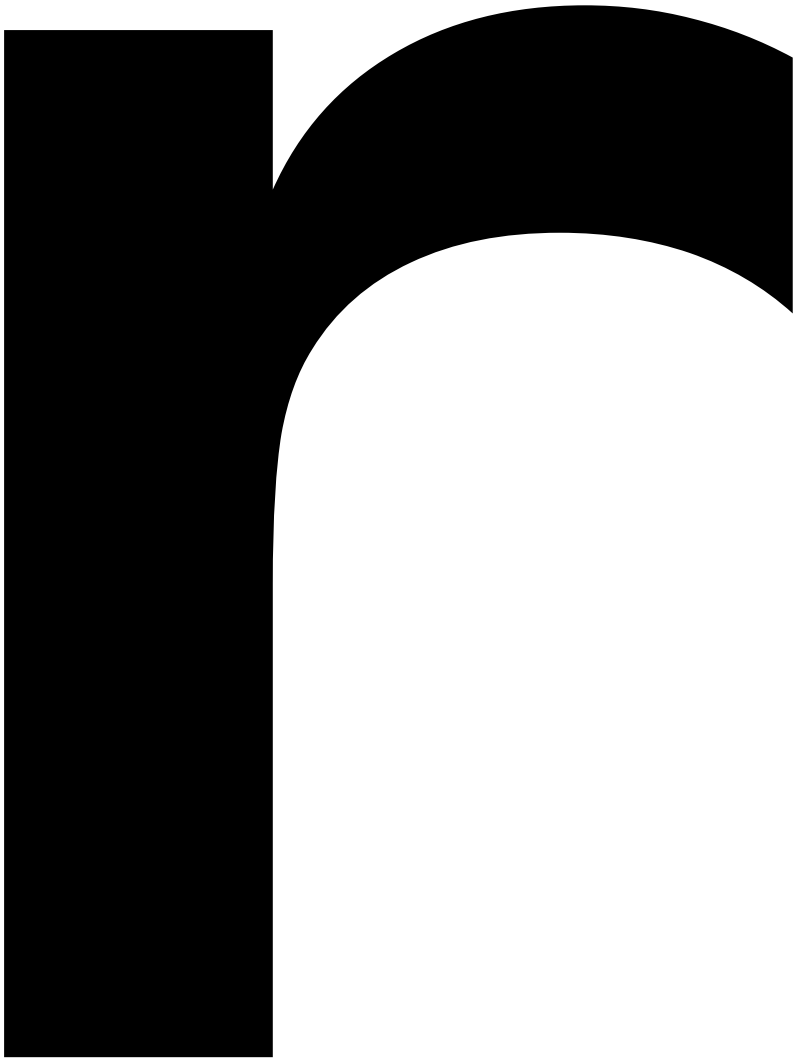
u

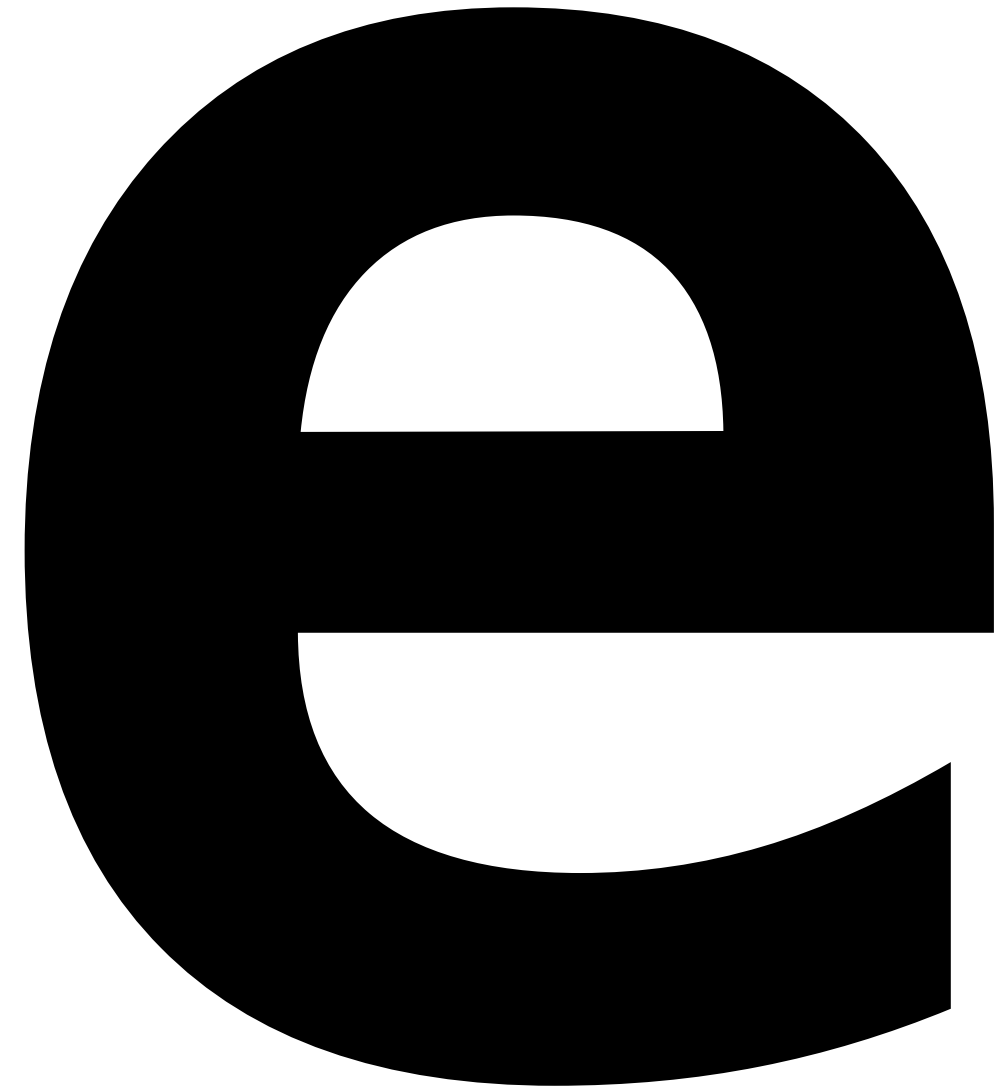


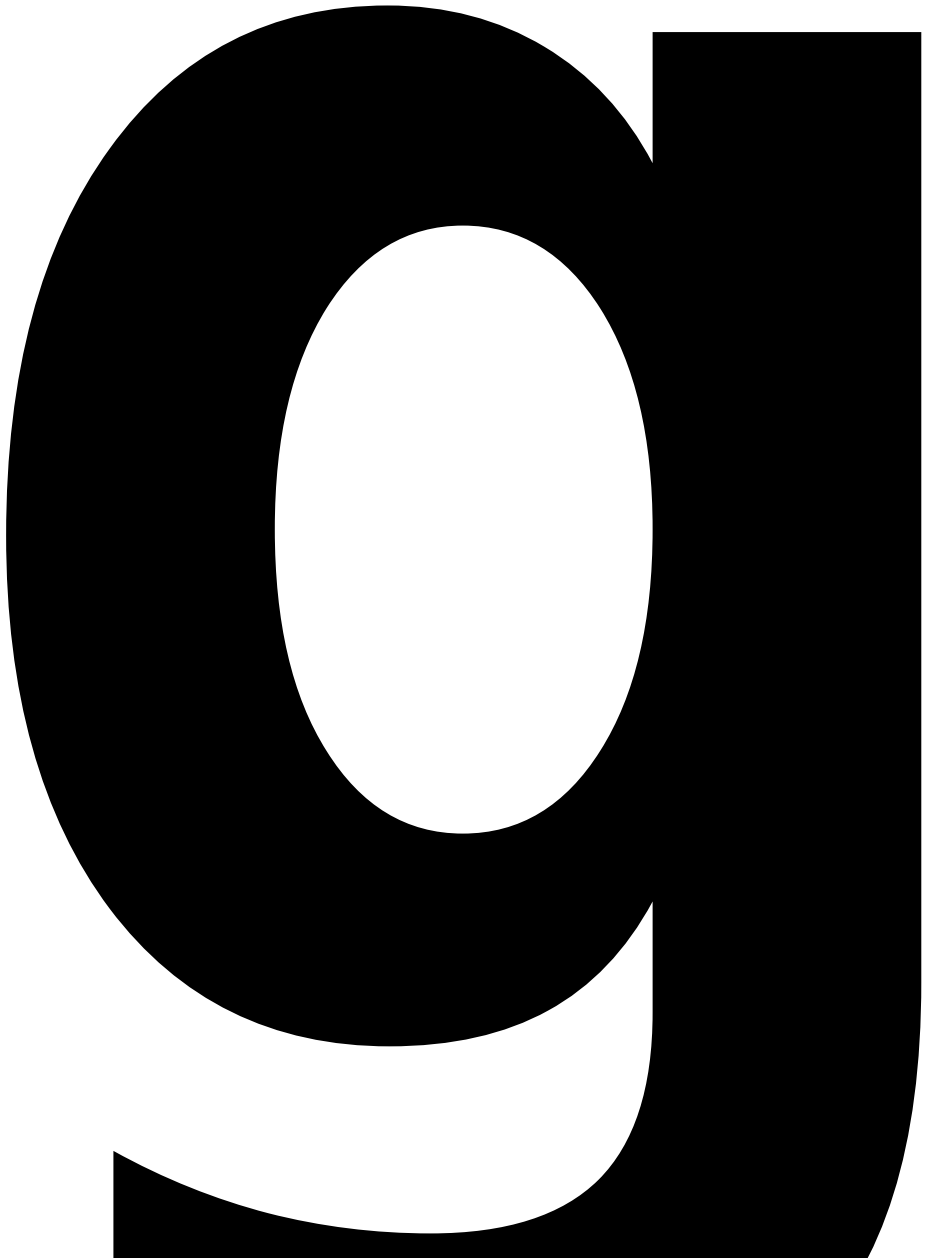




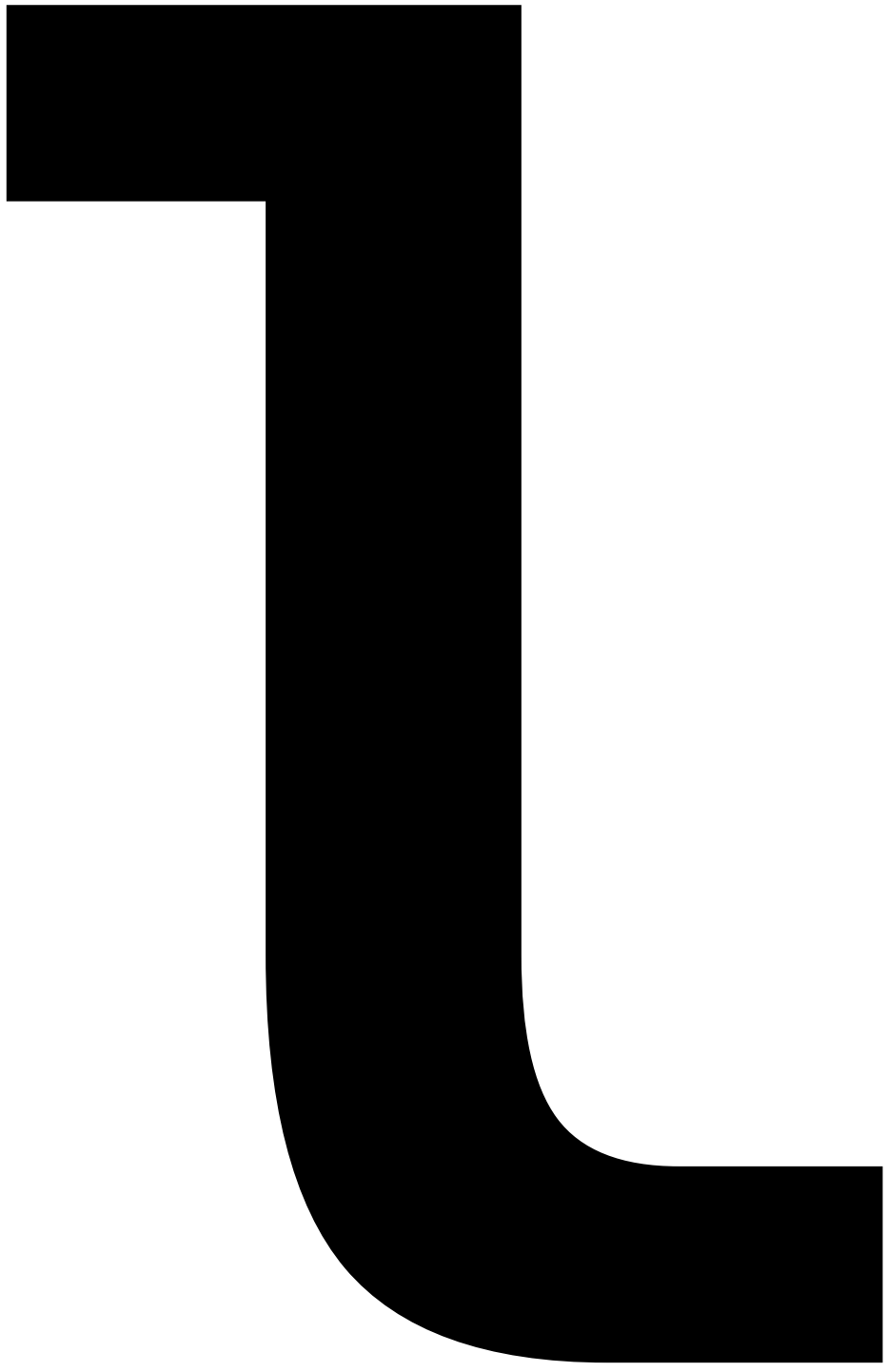


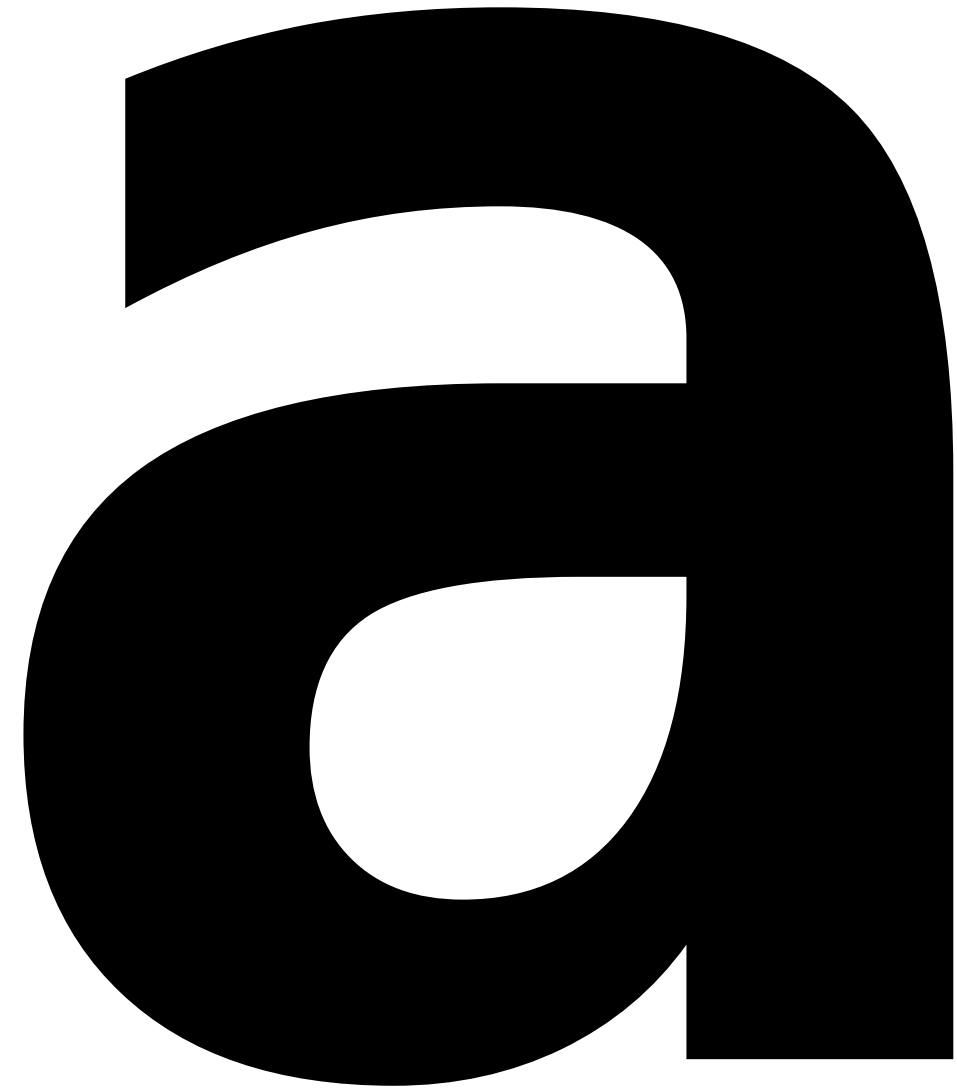


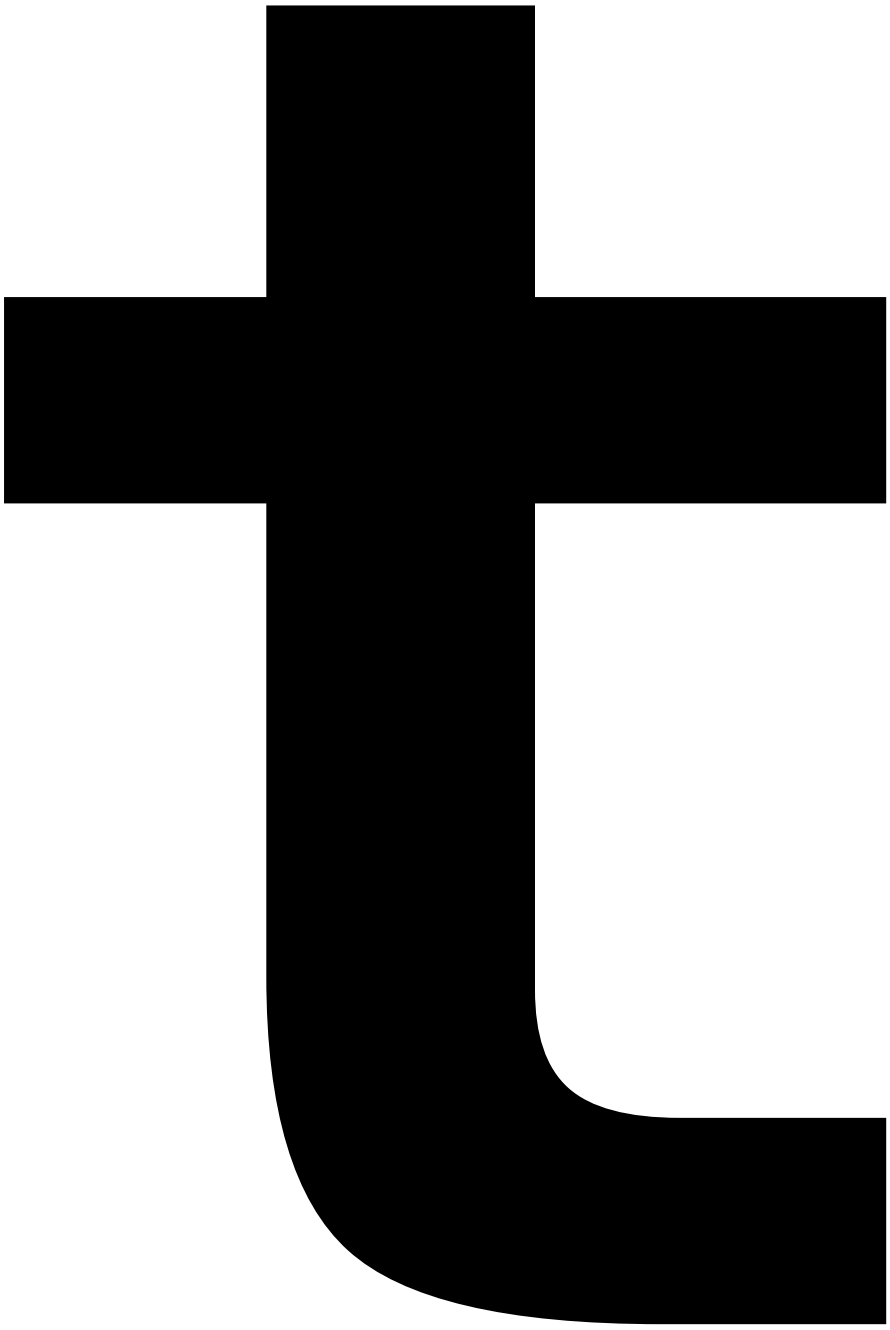


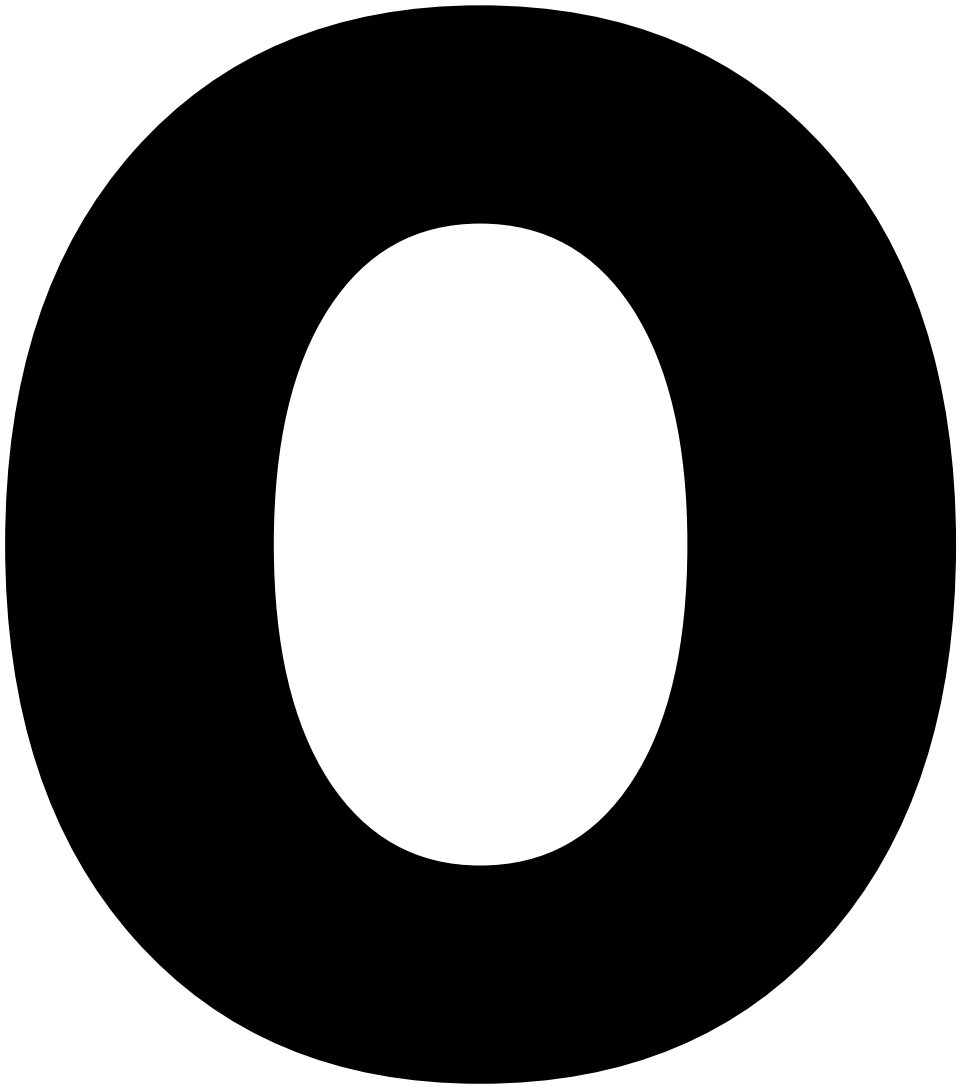


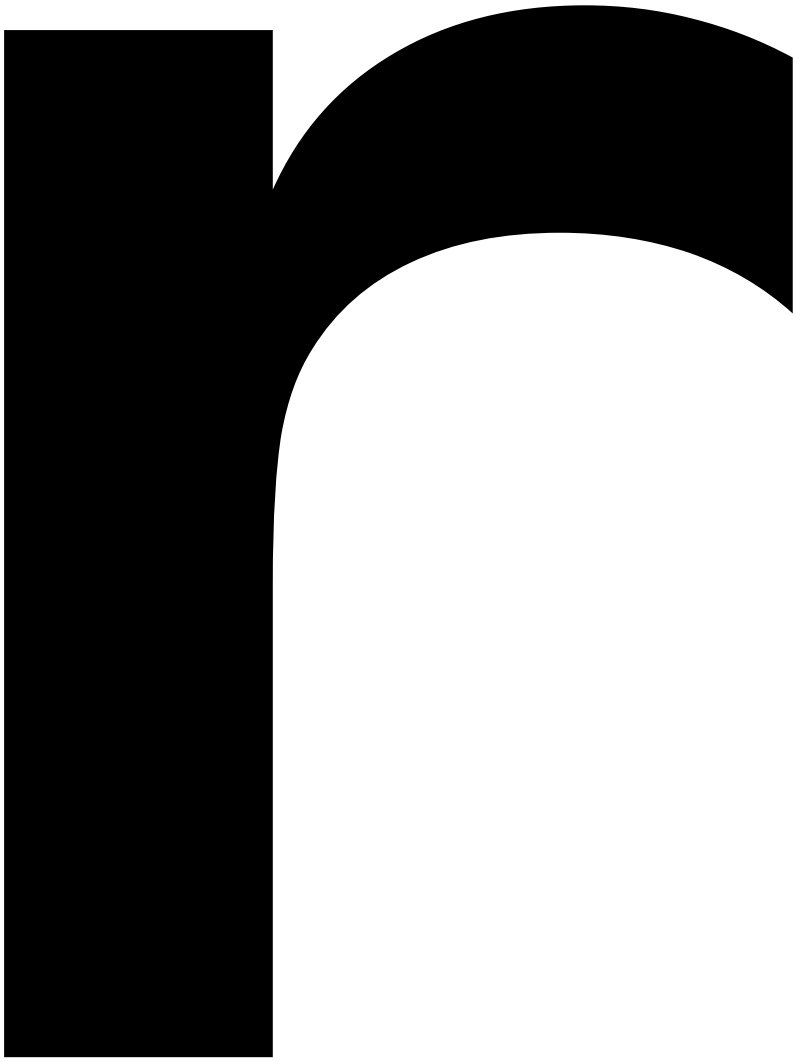
u

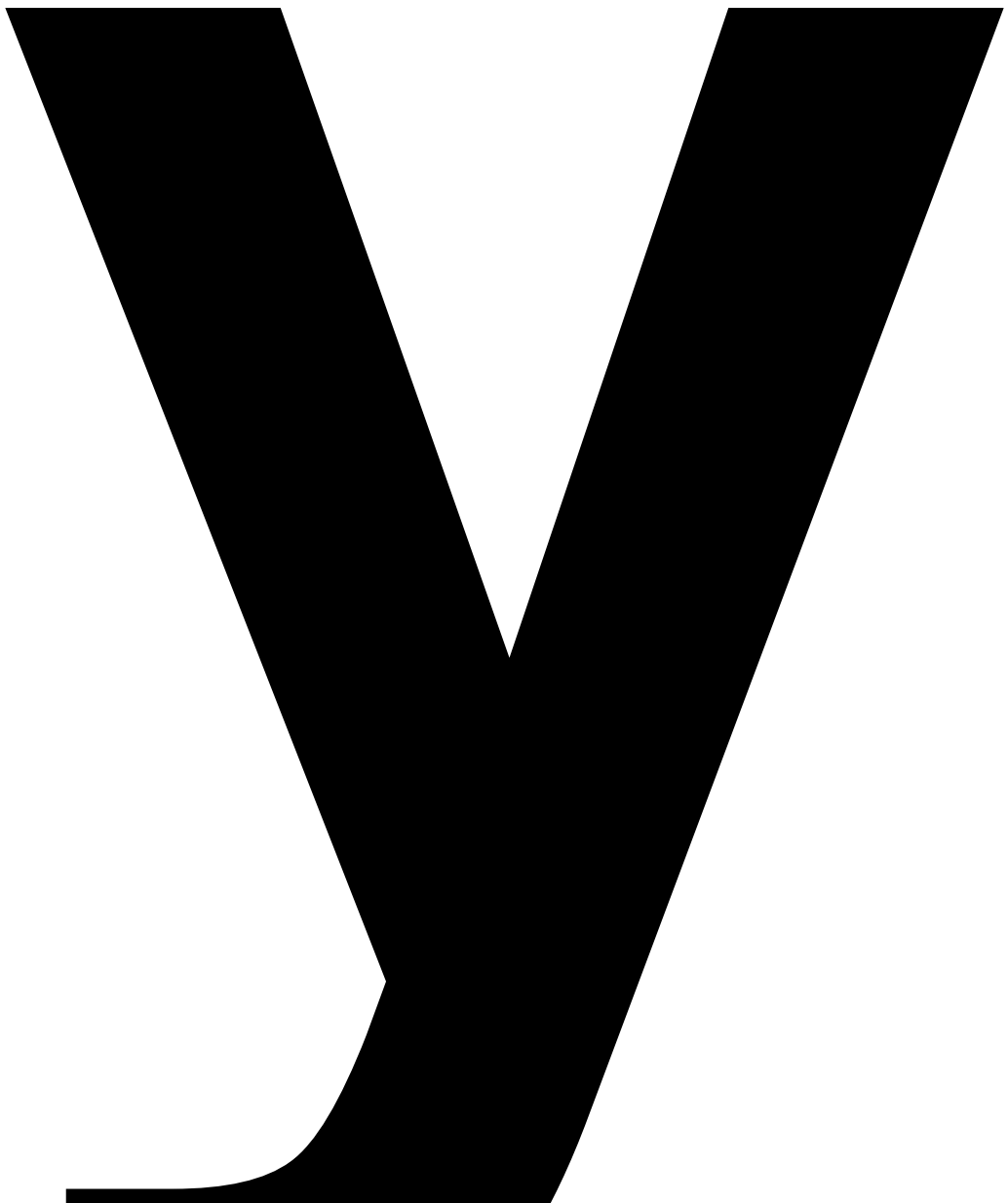


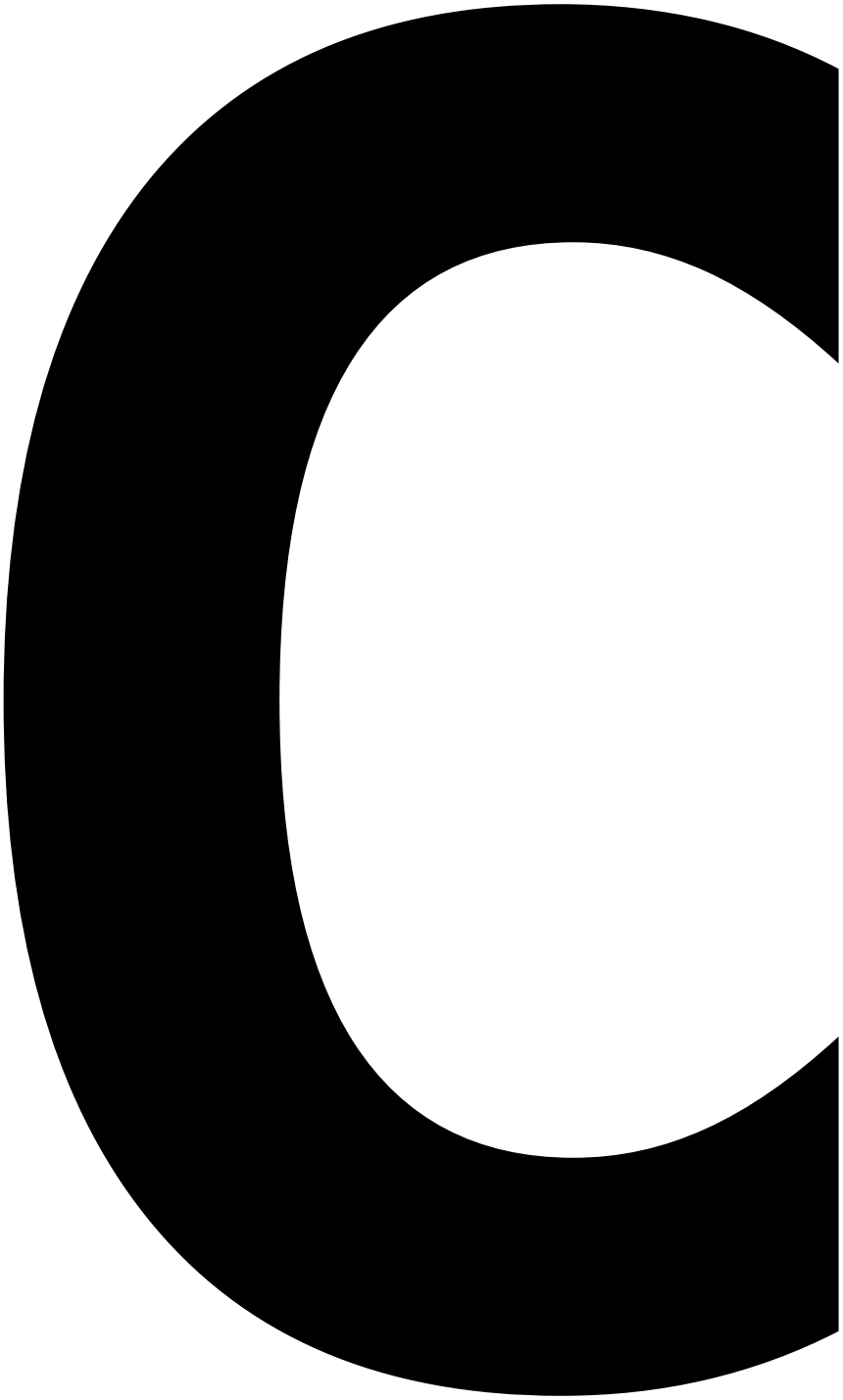


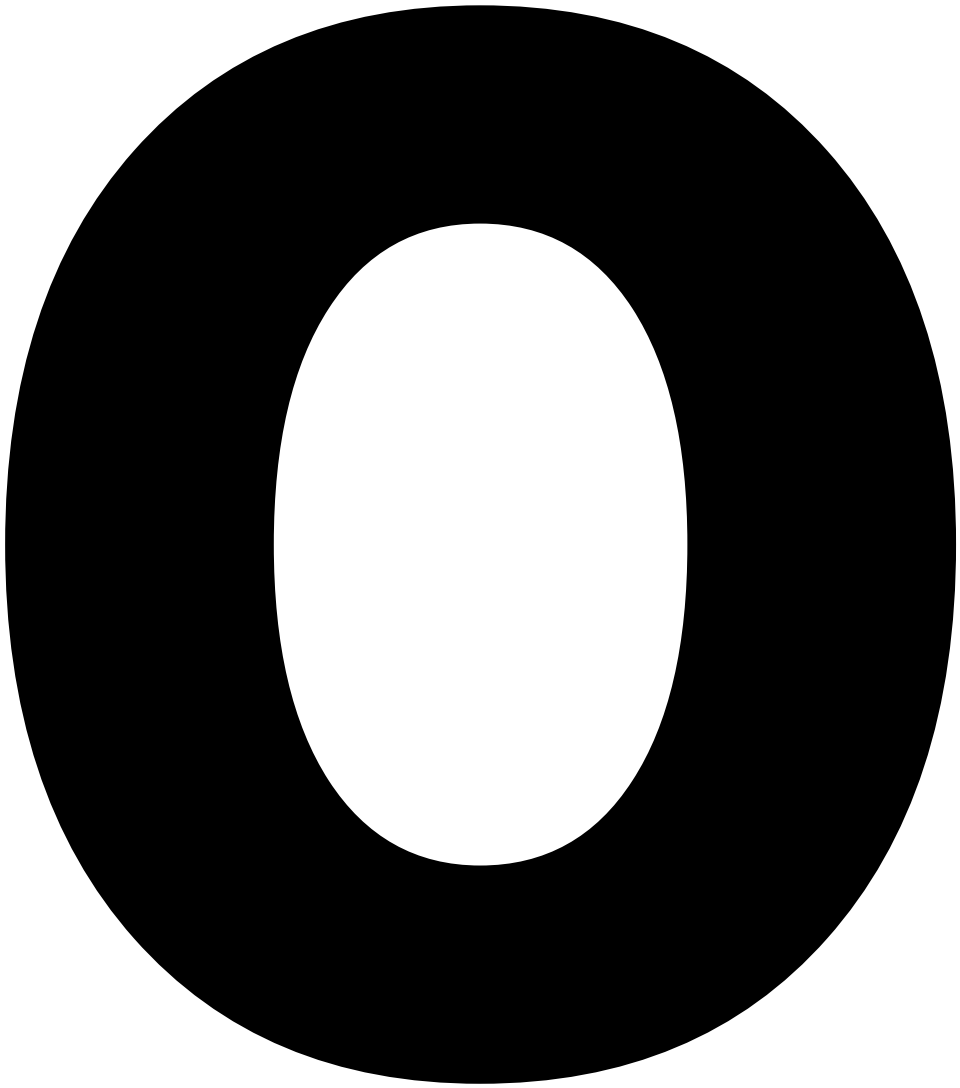


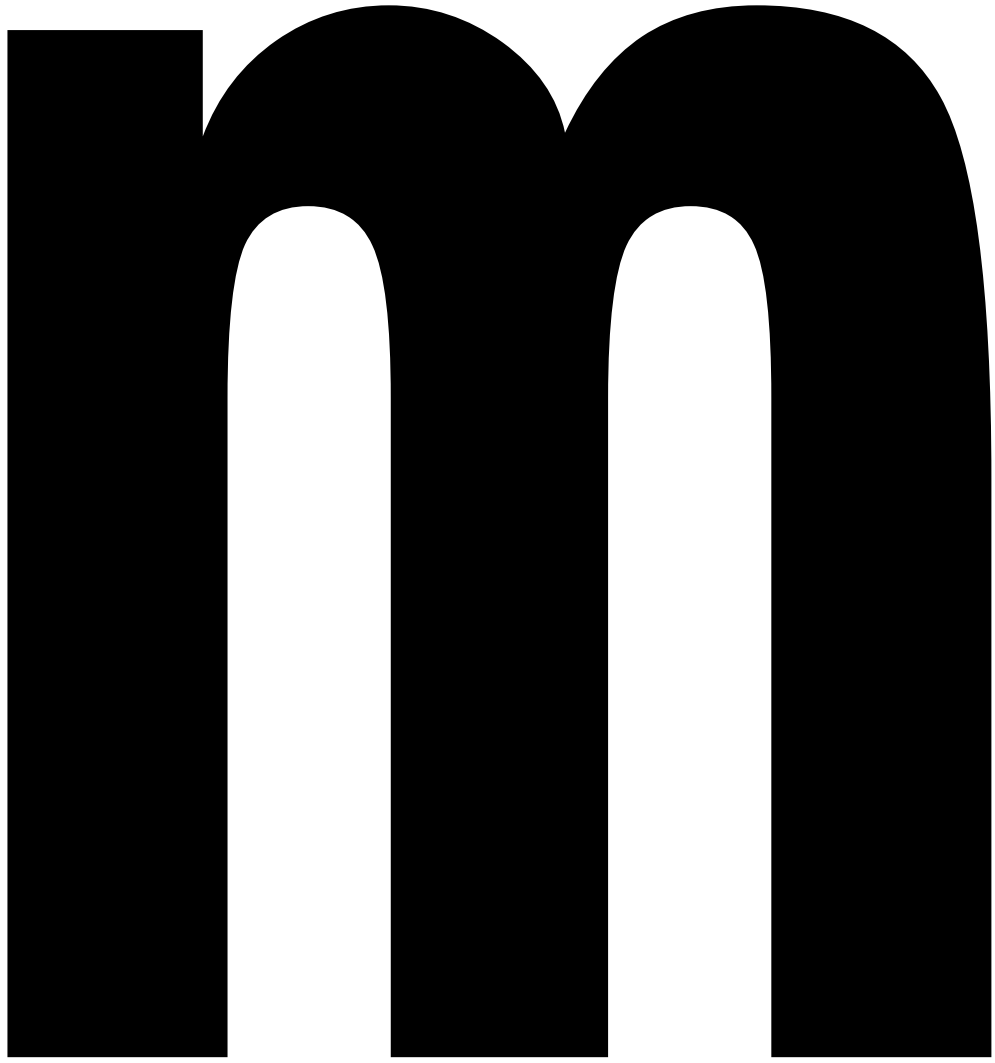


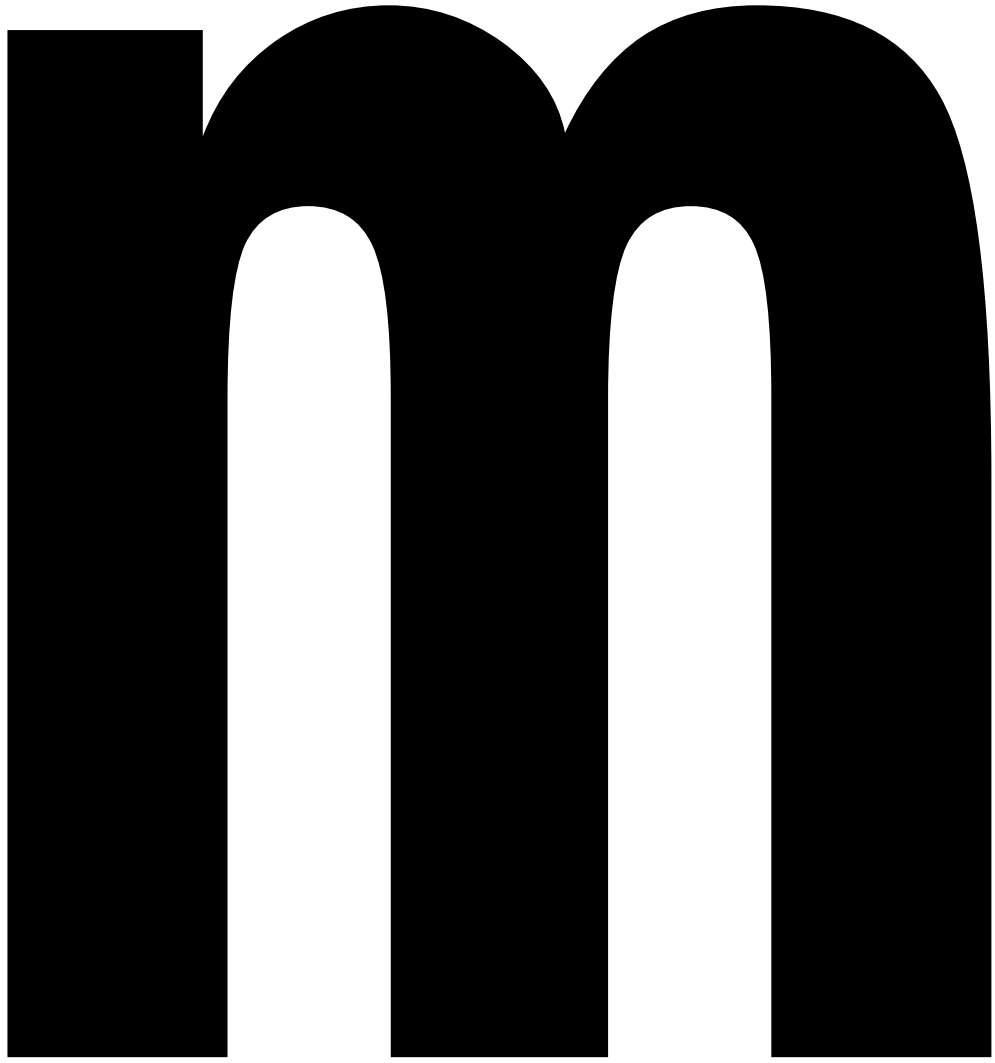


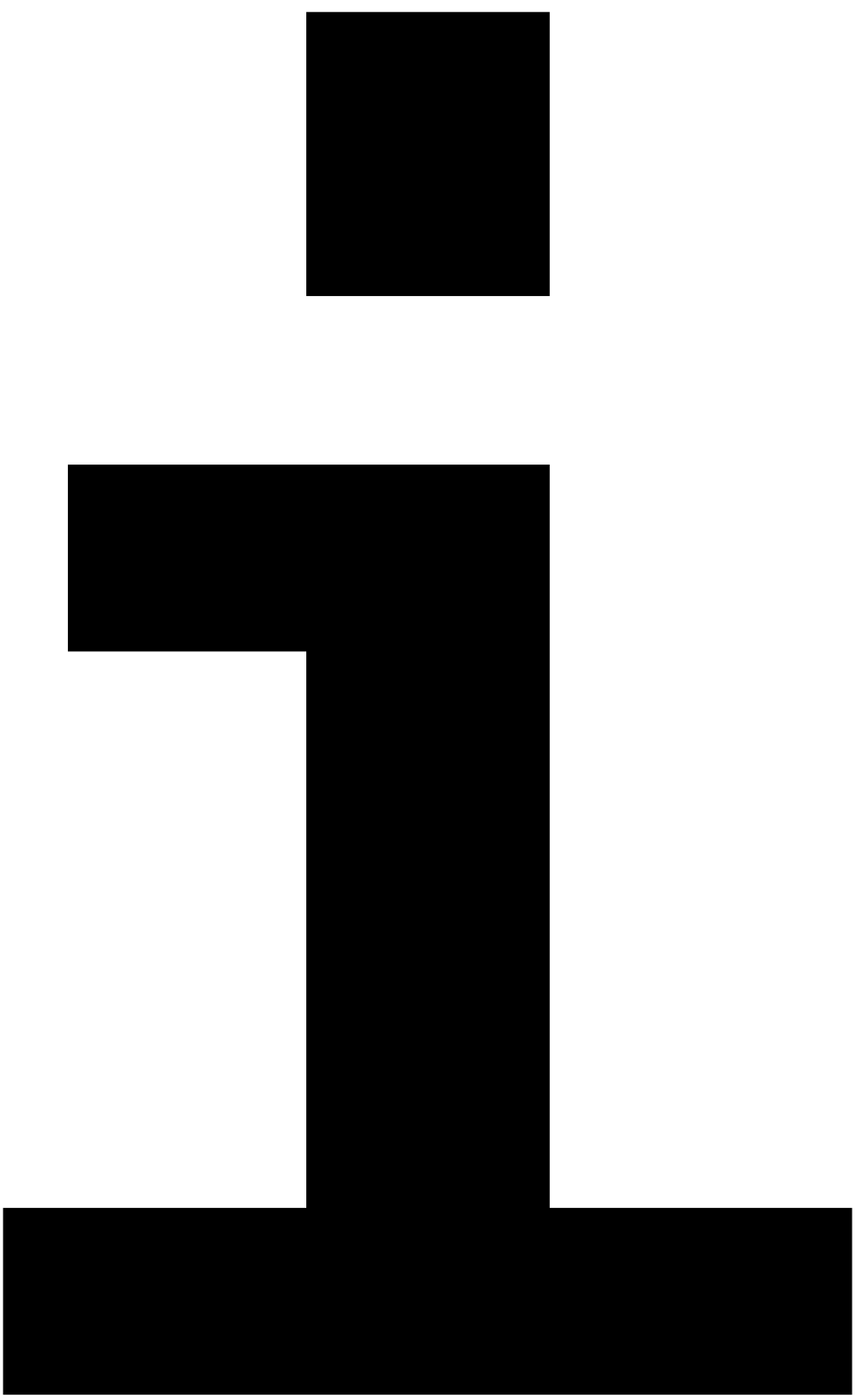






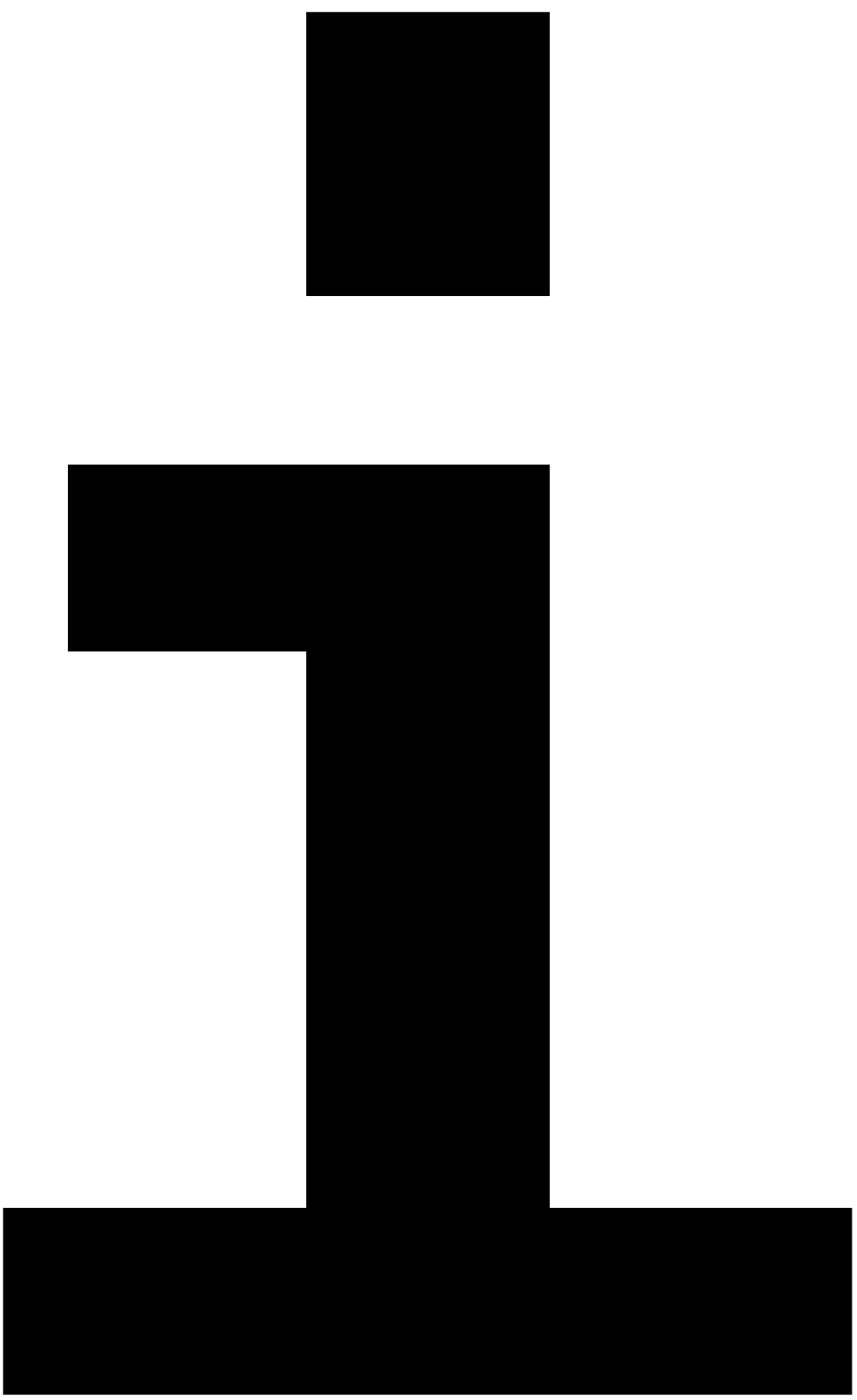


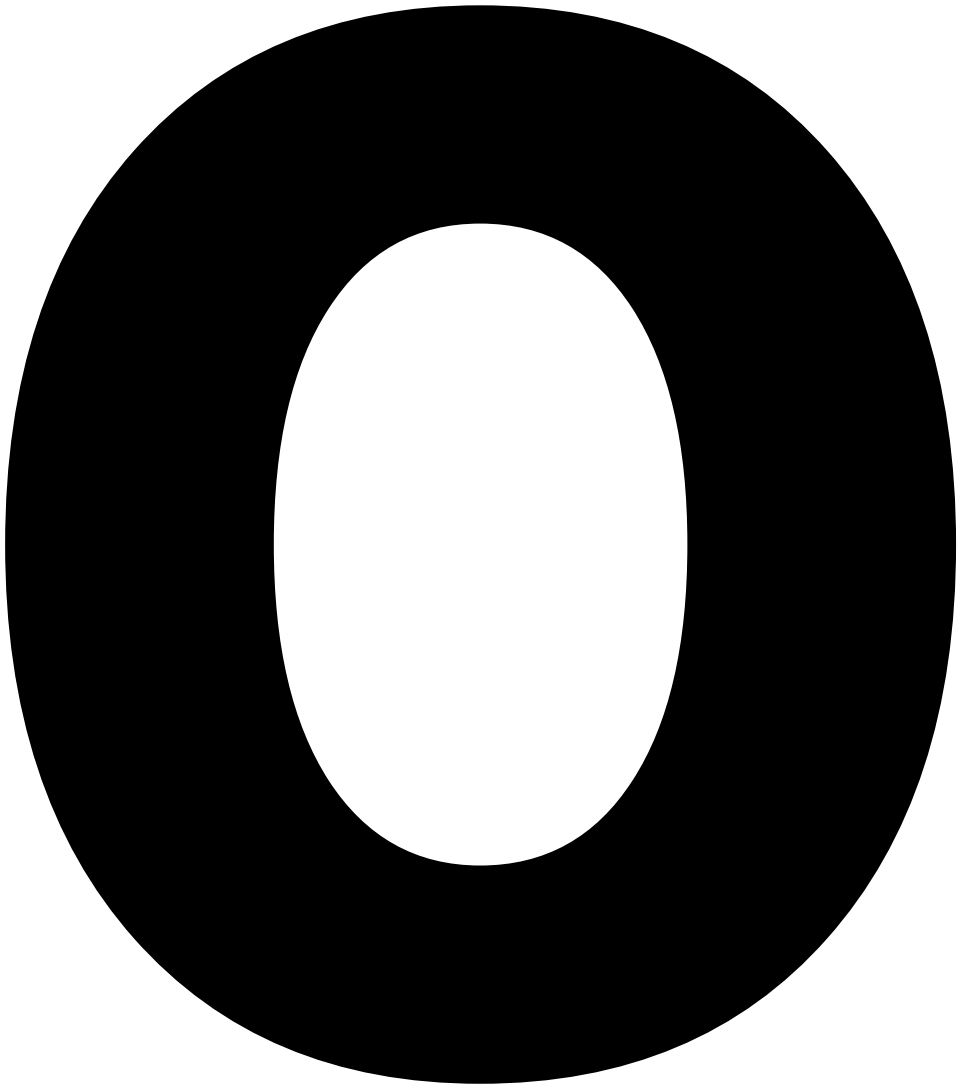


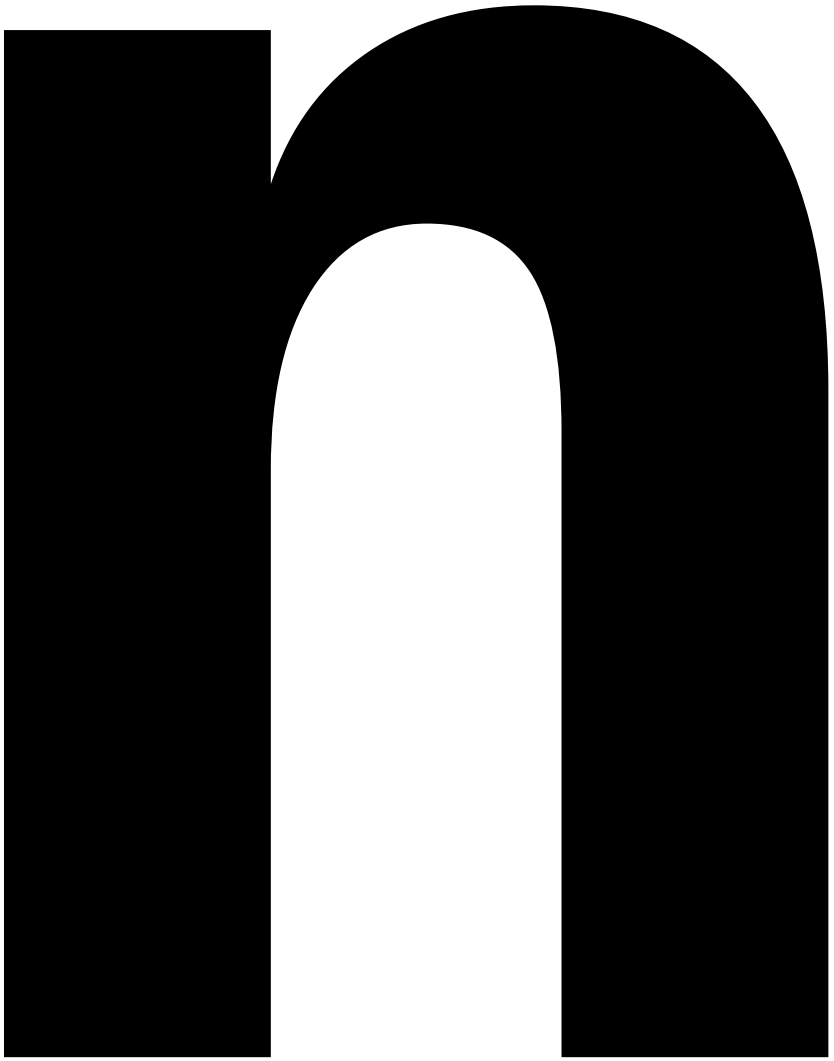


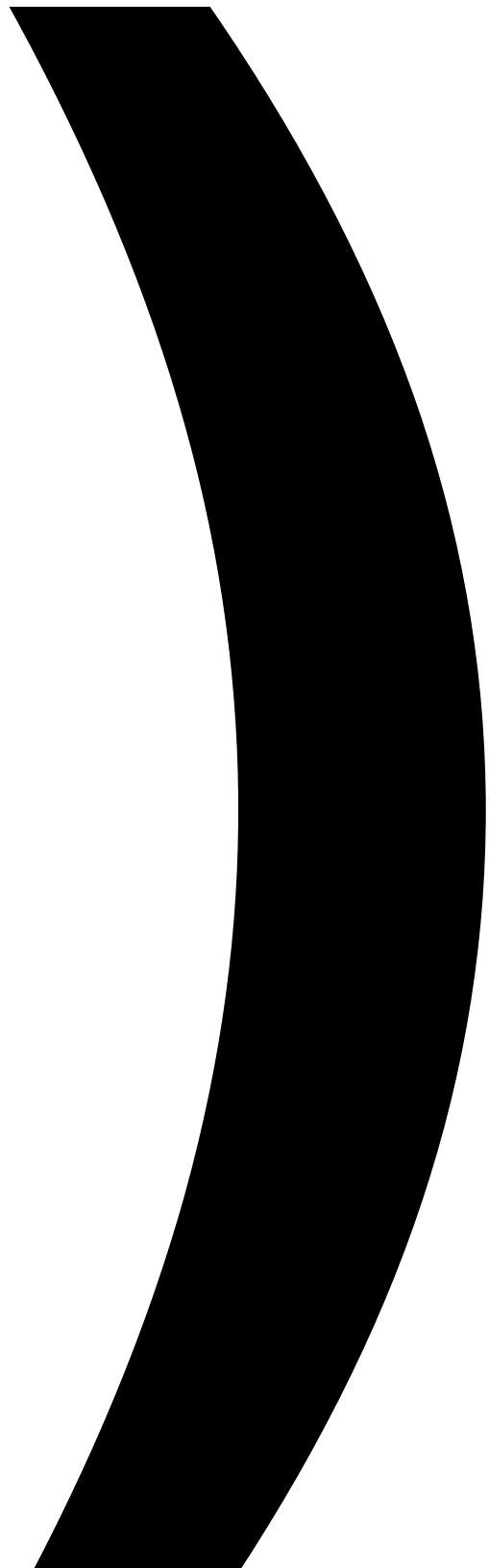
S

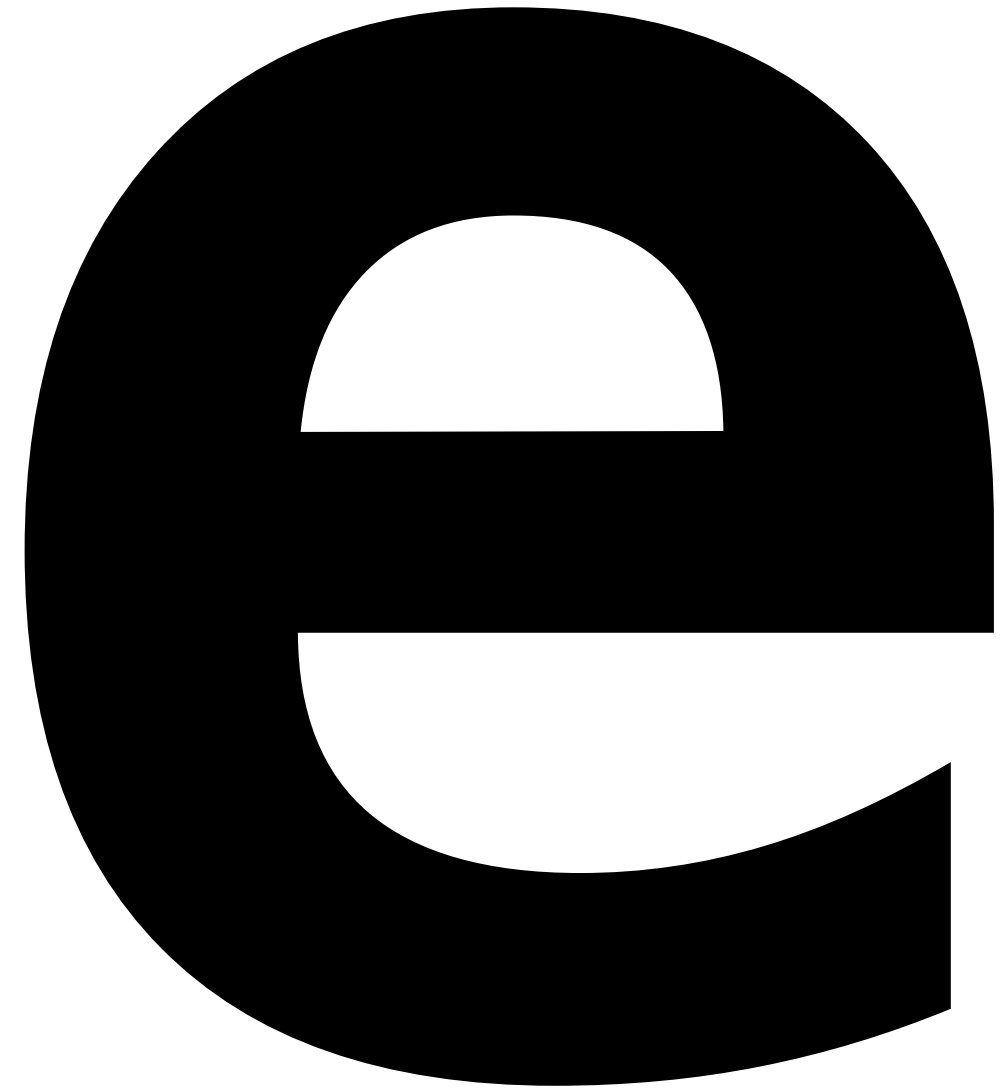
S

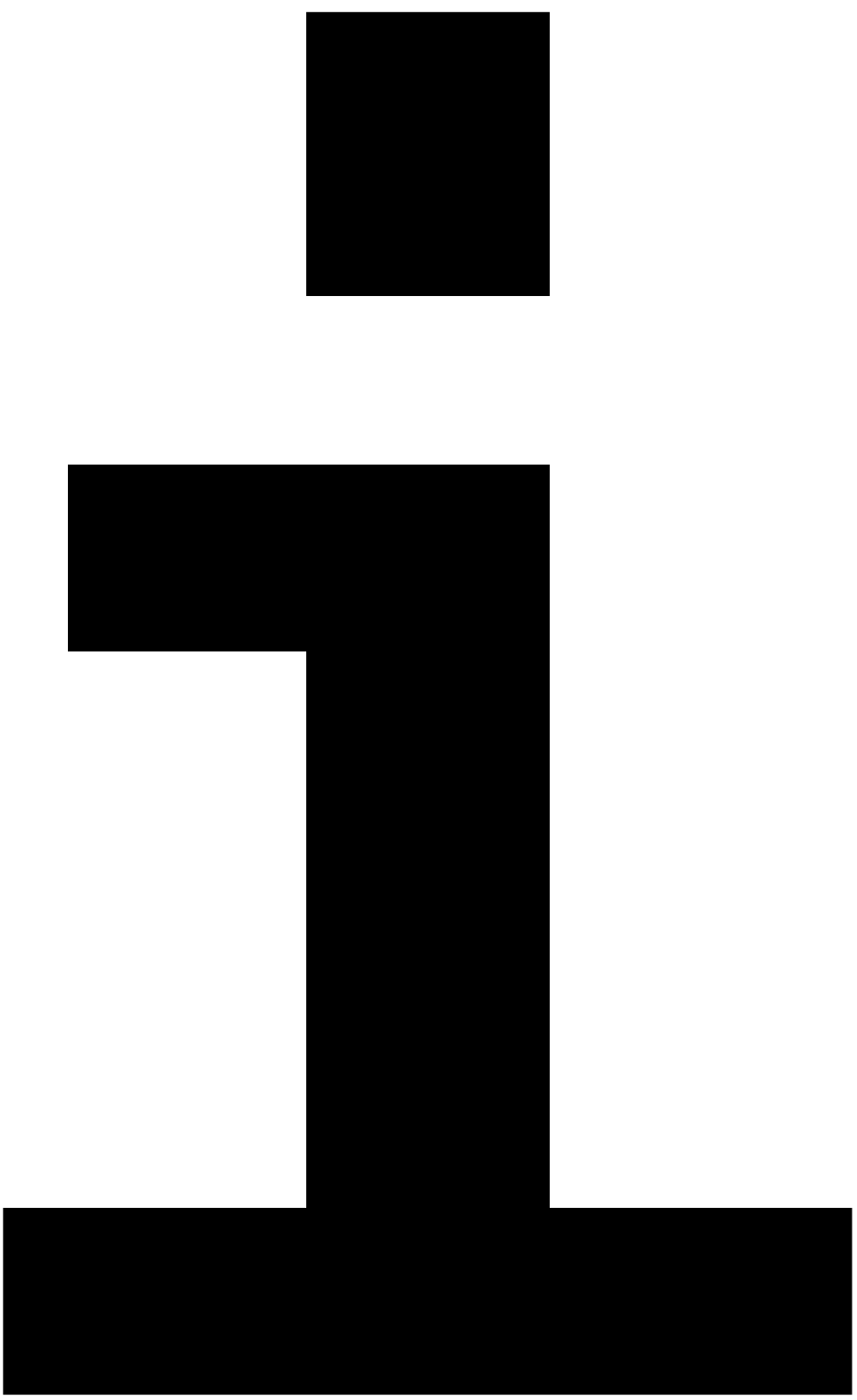


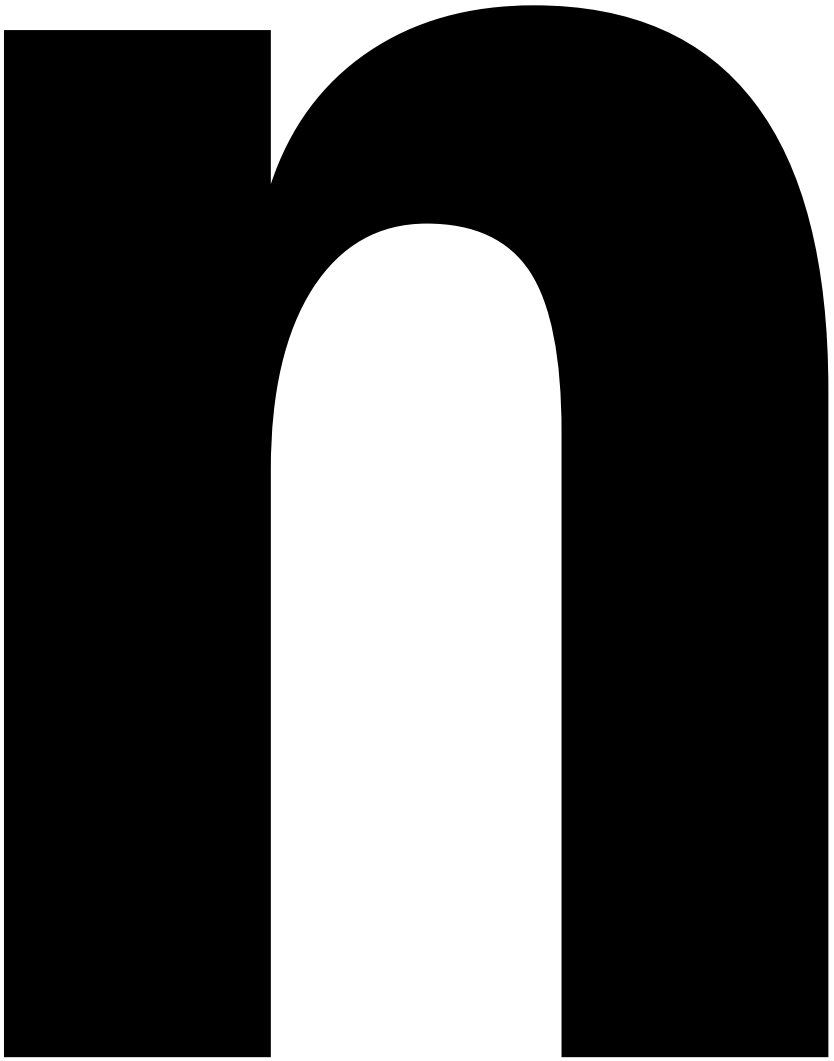


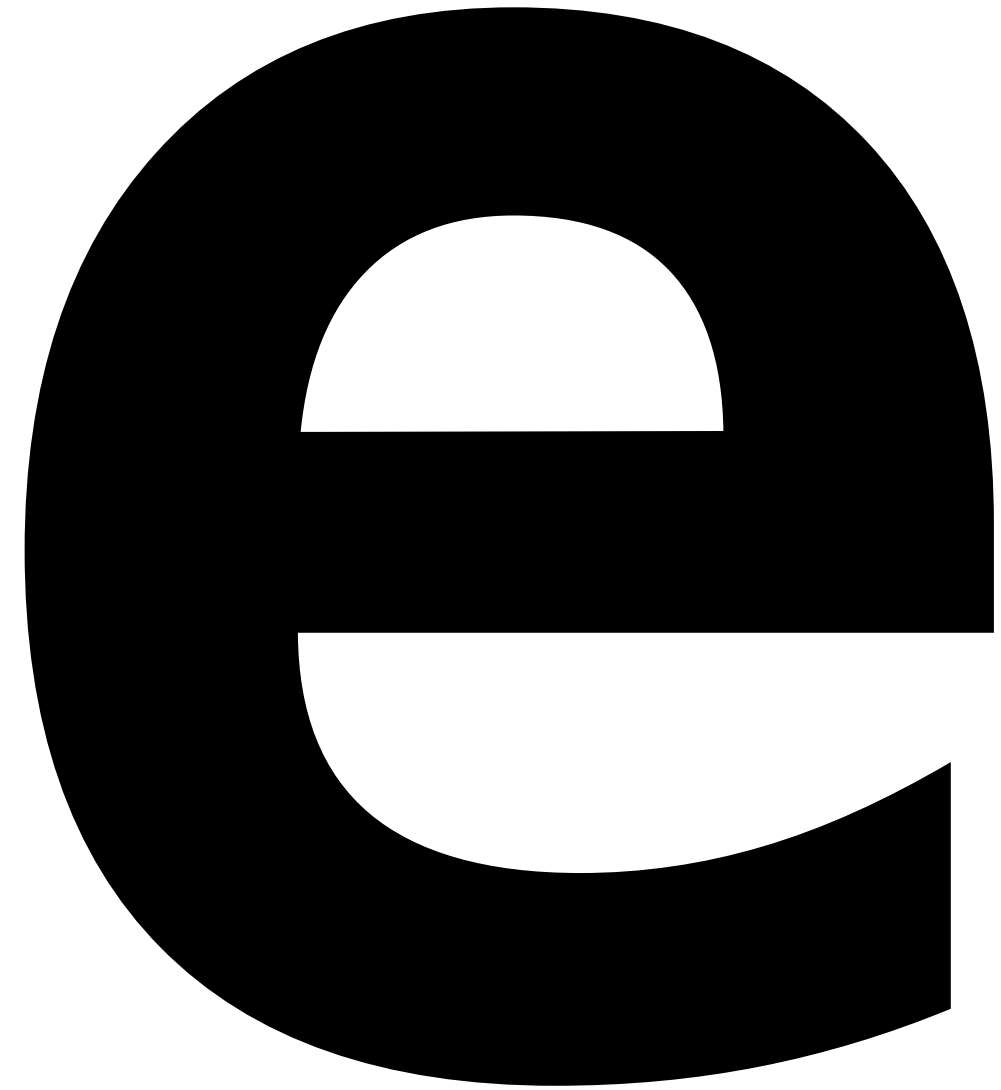


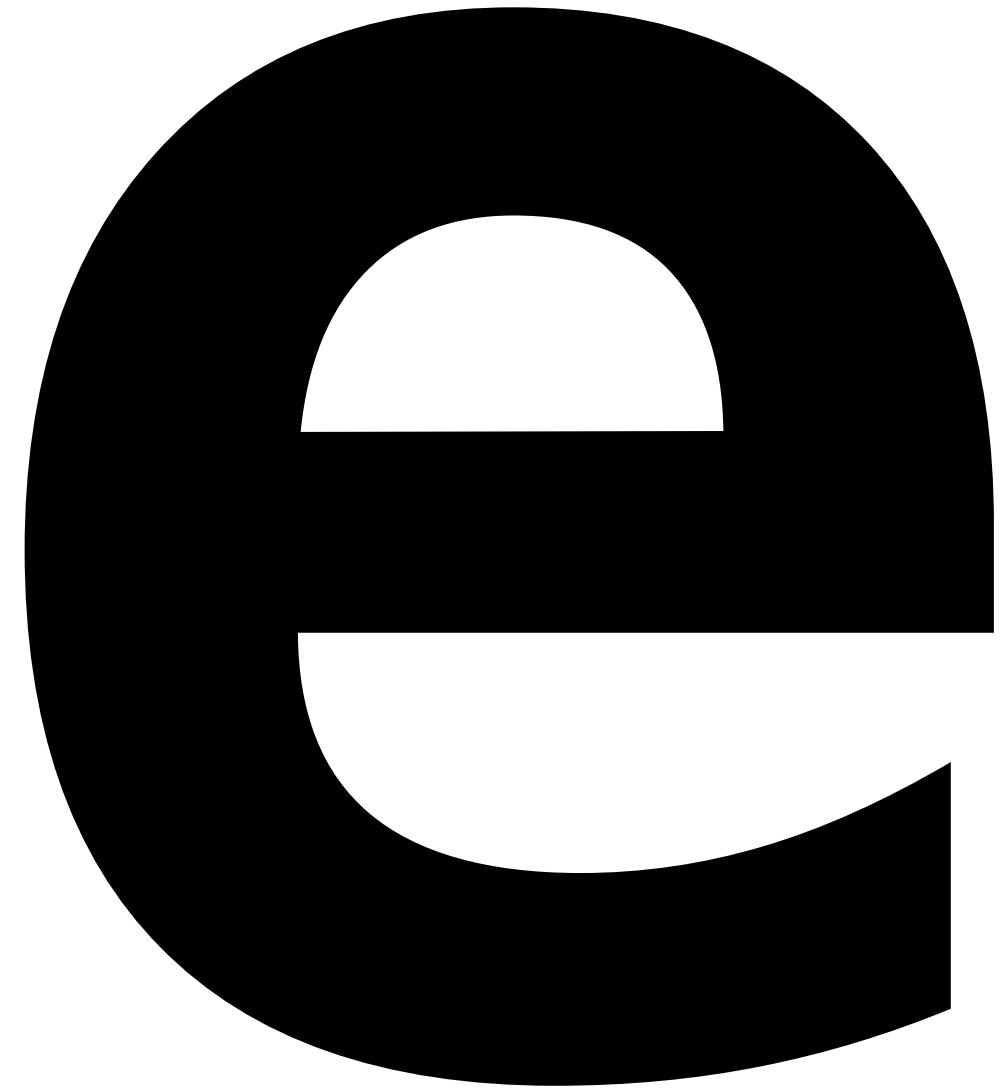


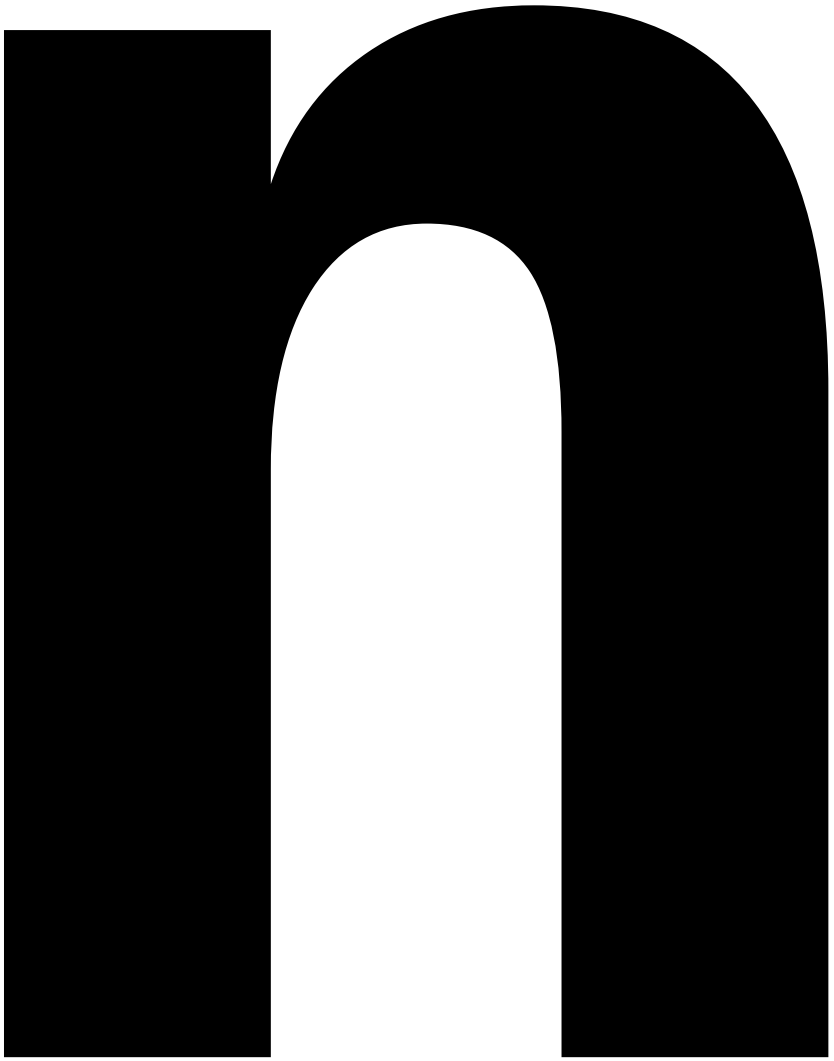


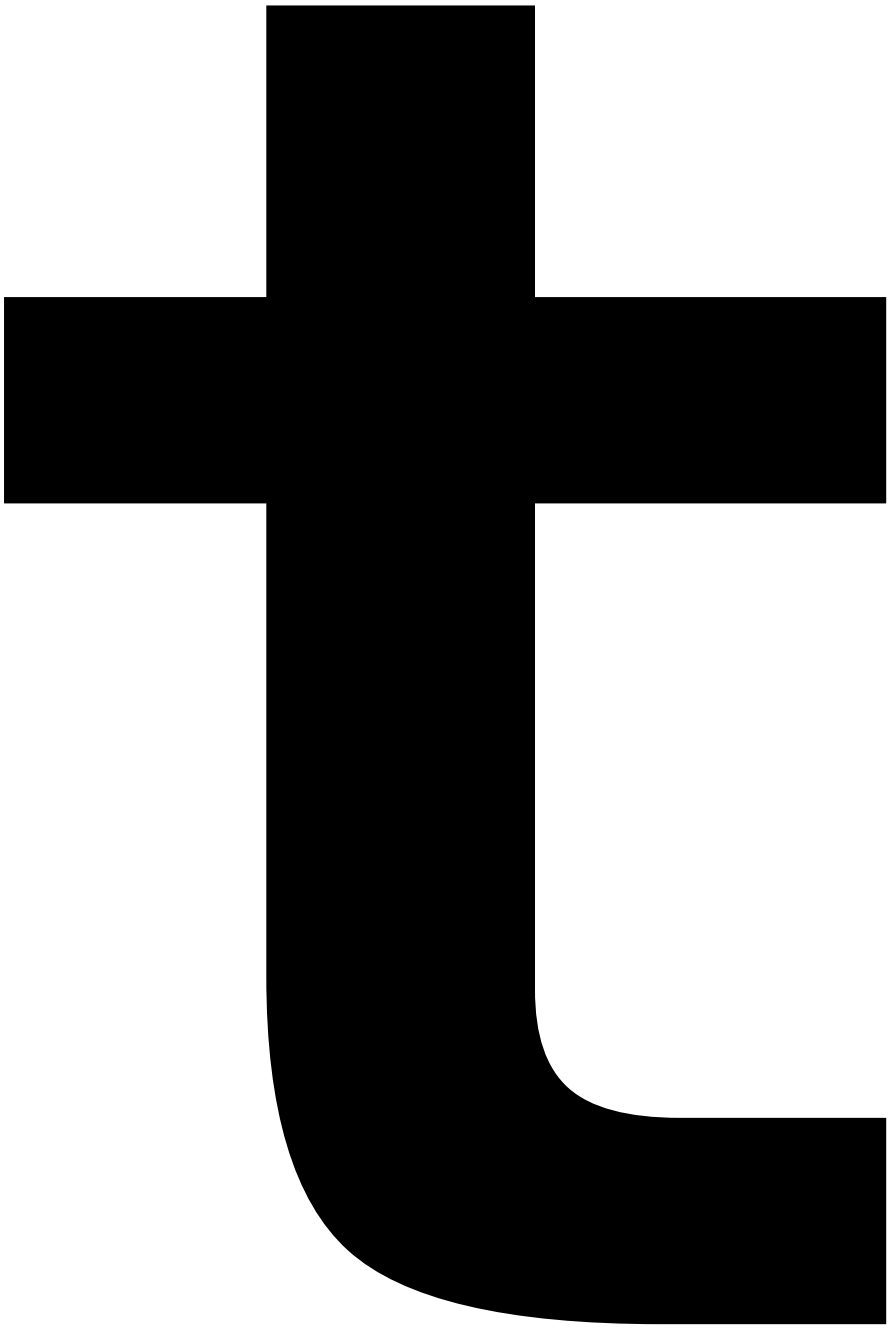




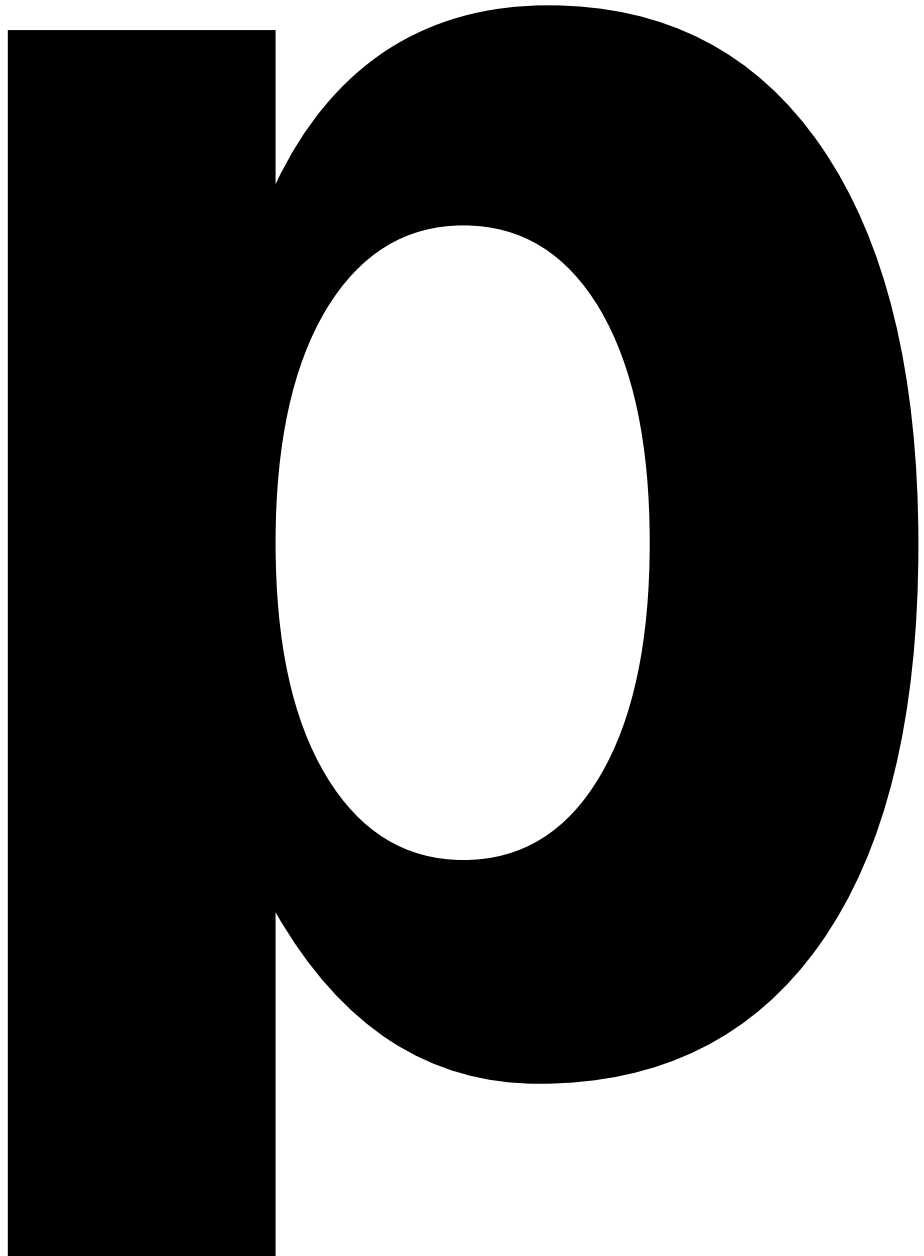


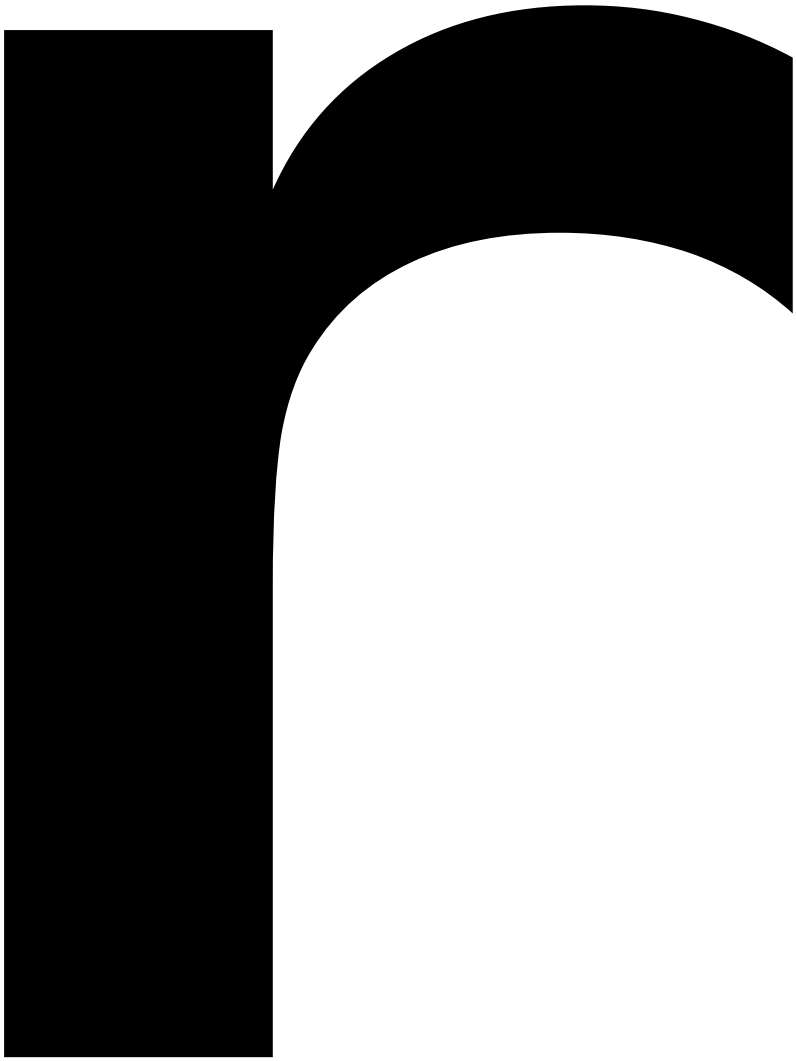


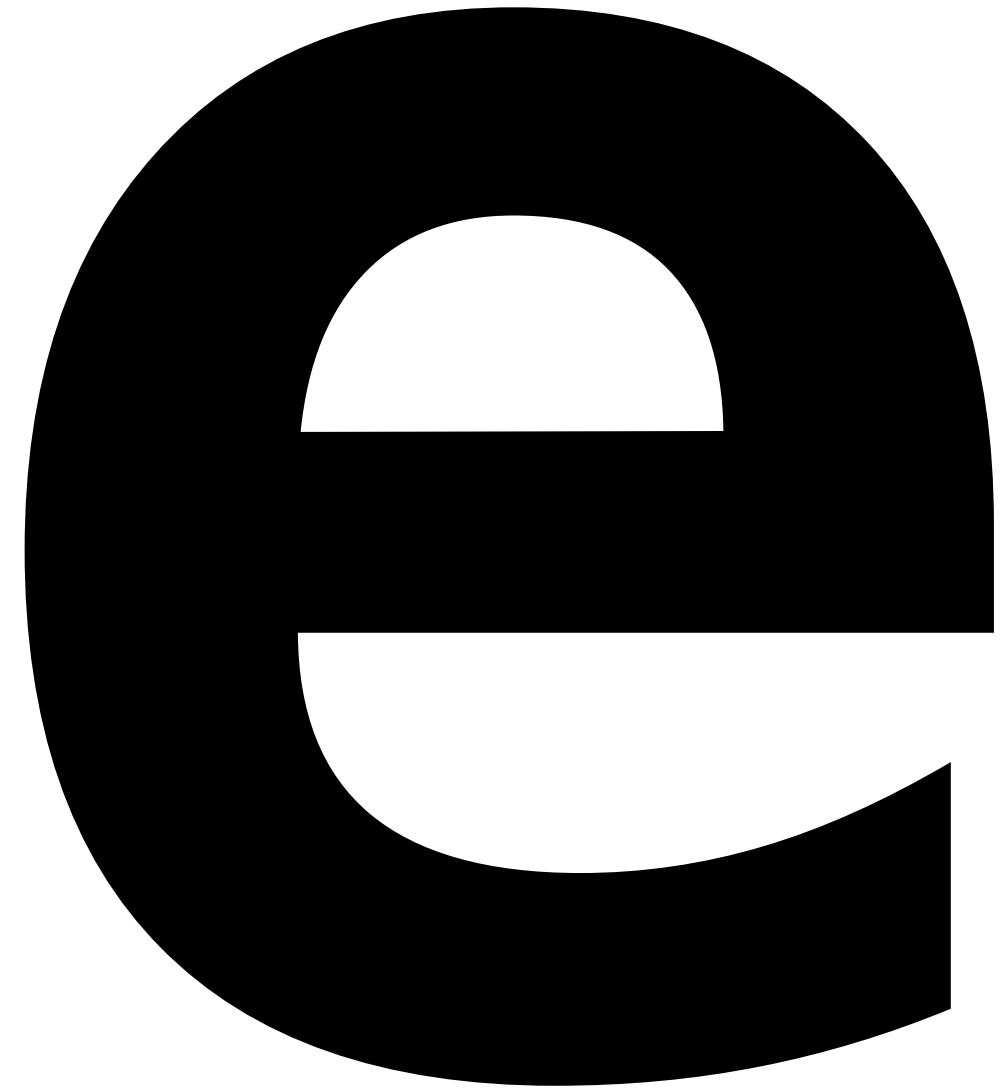


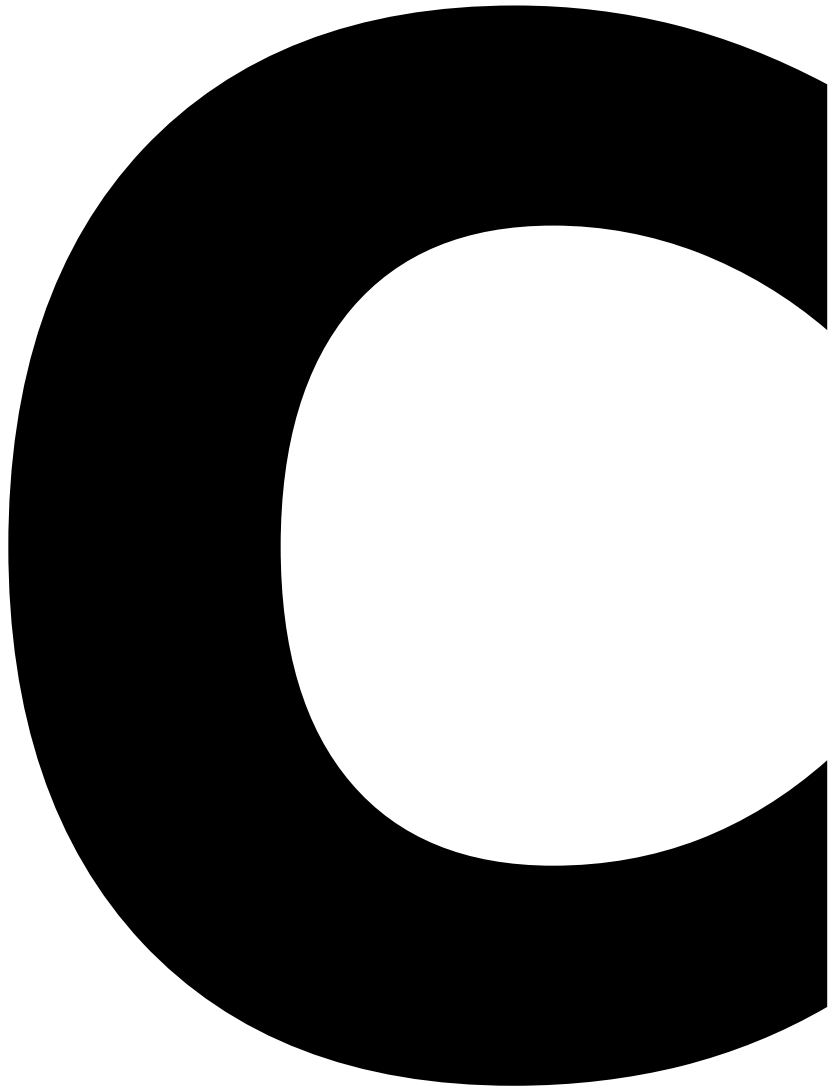


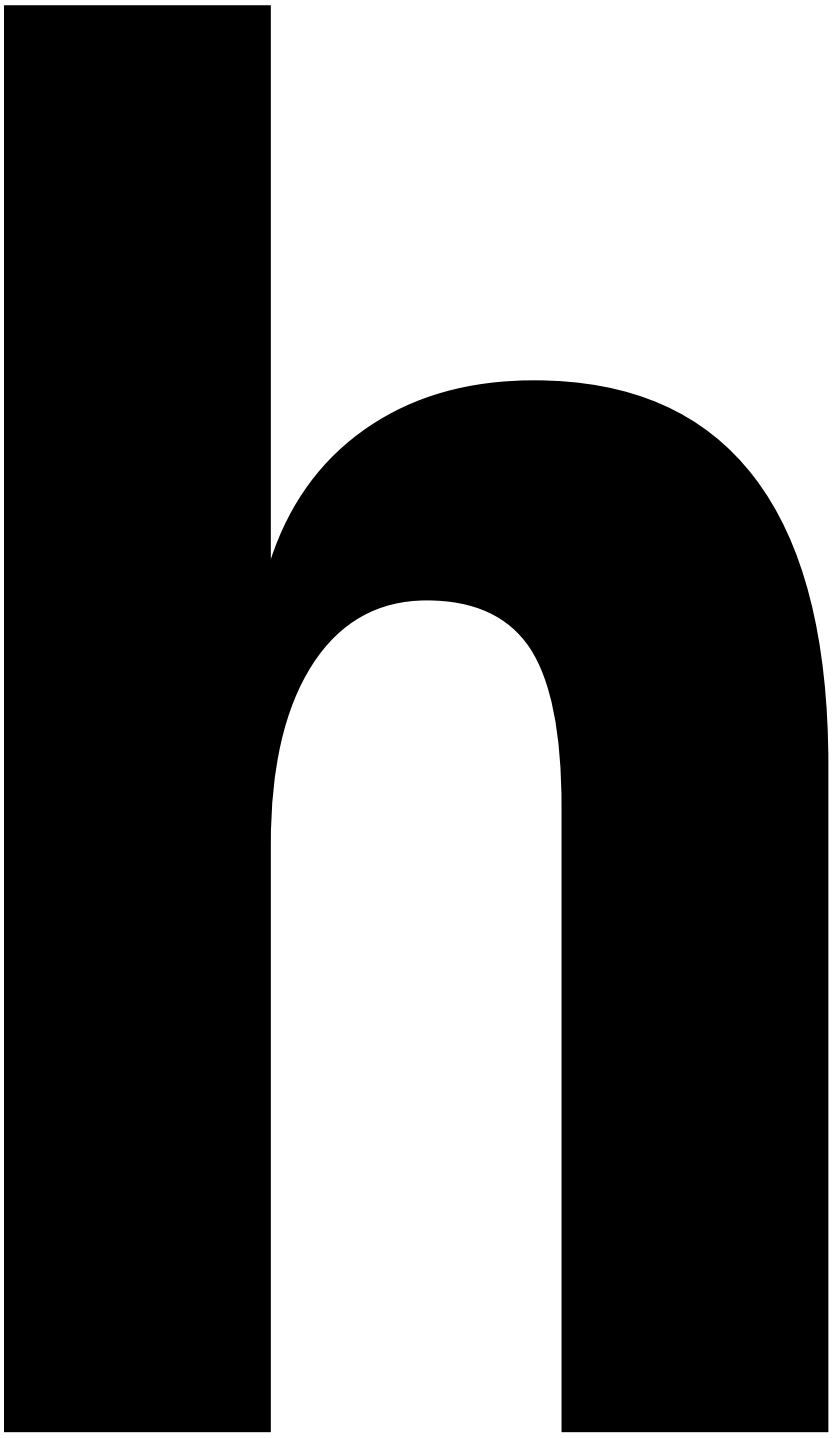
S

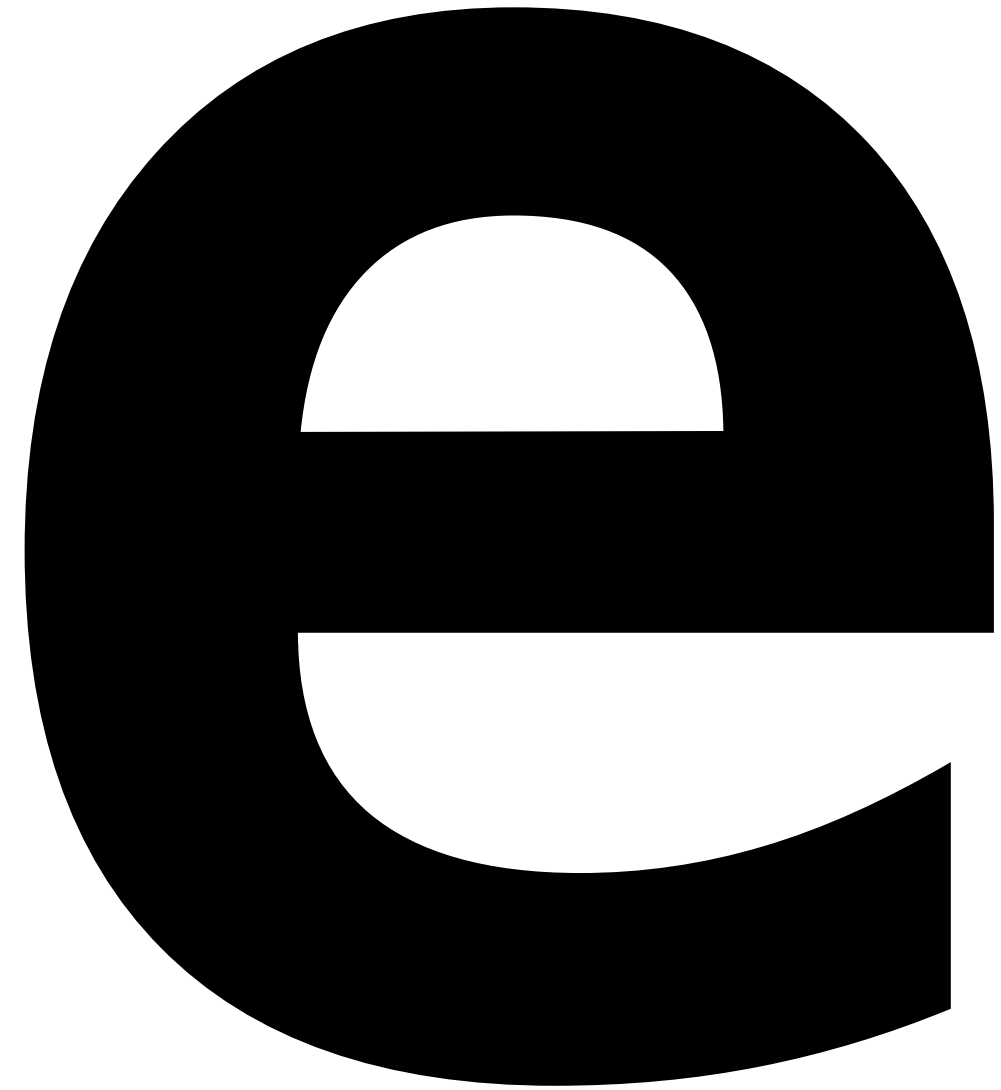


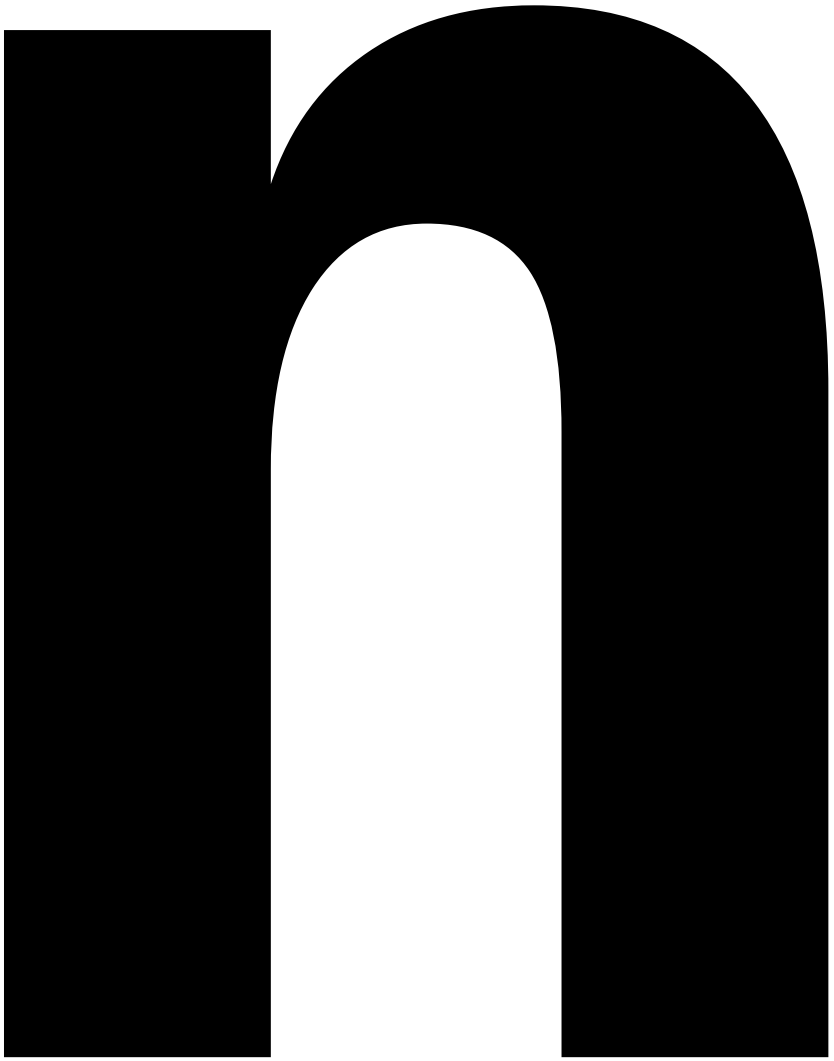




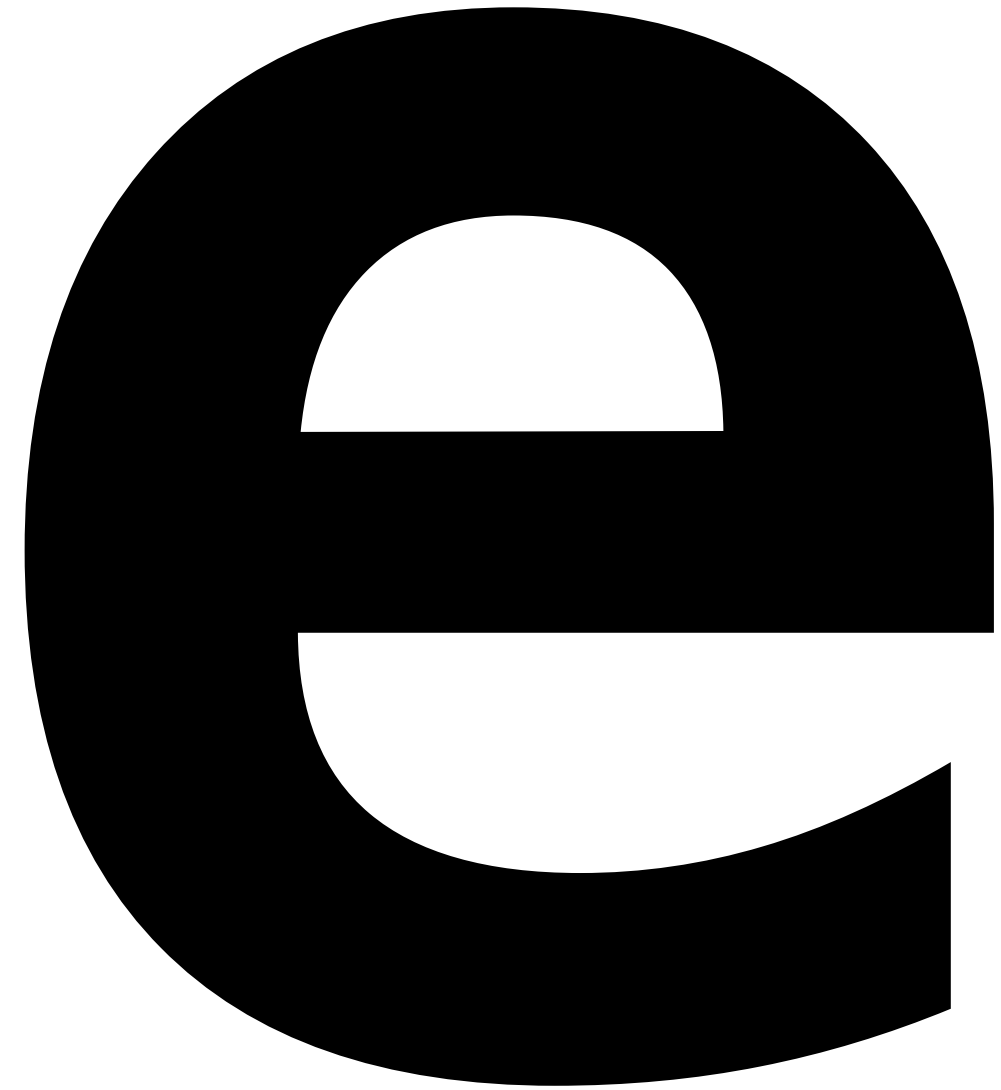


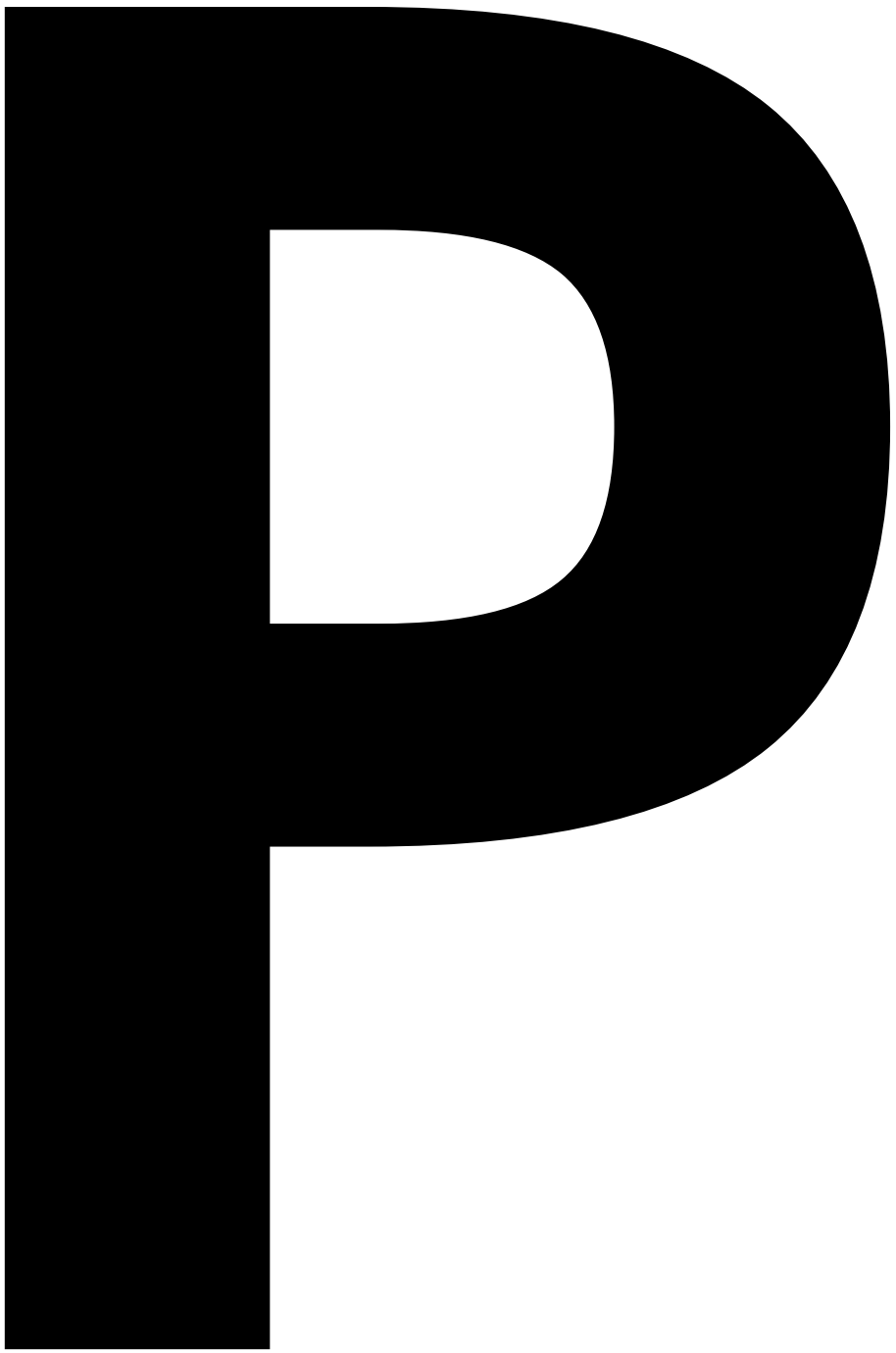


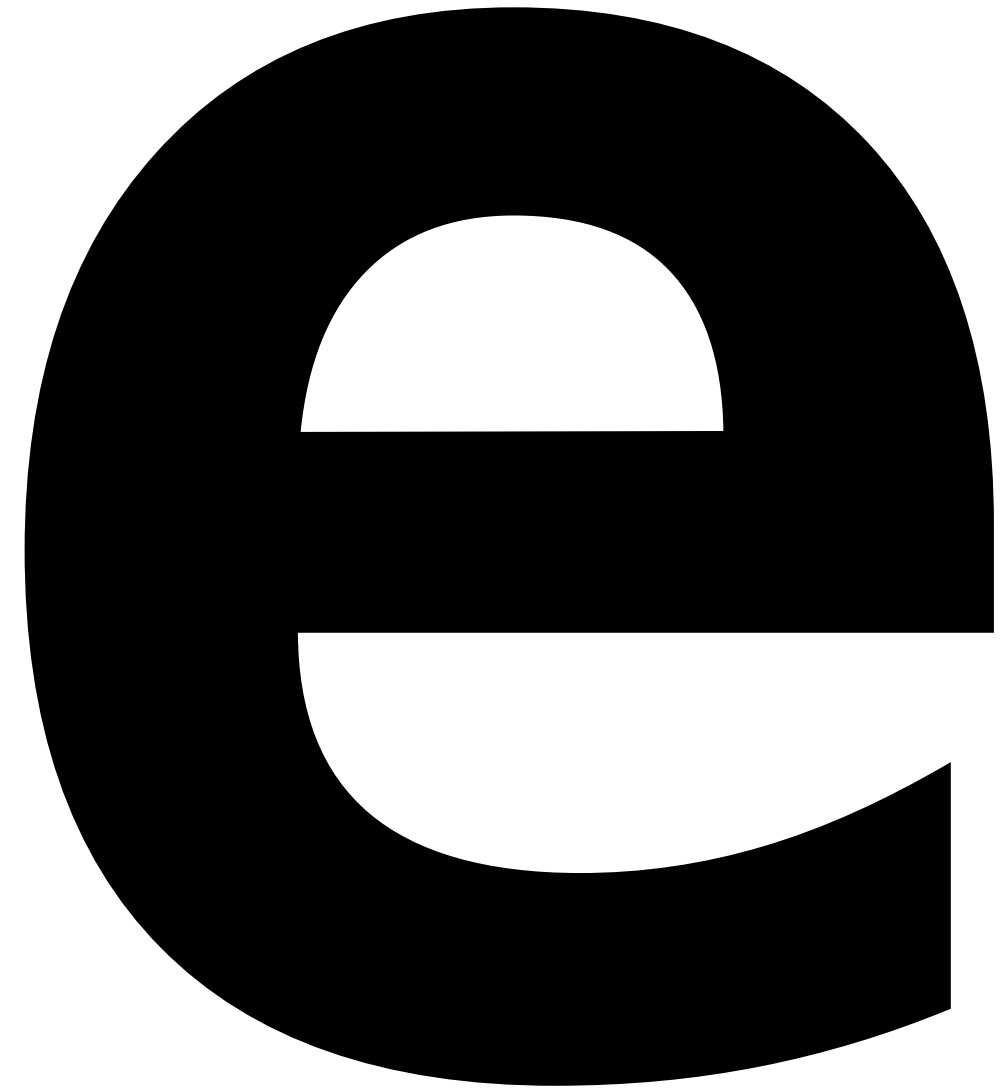


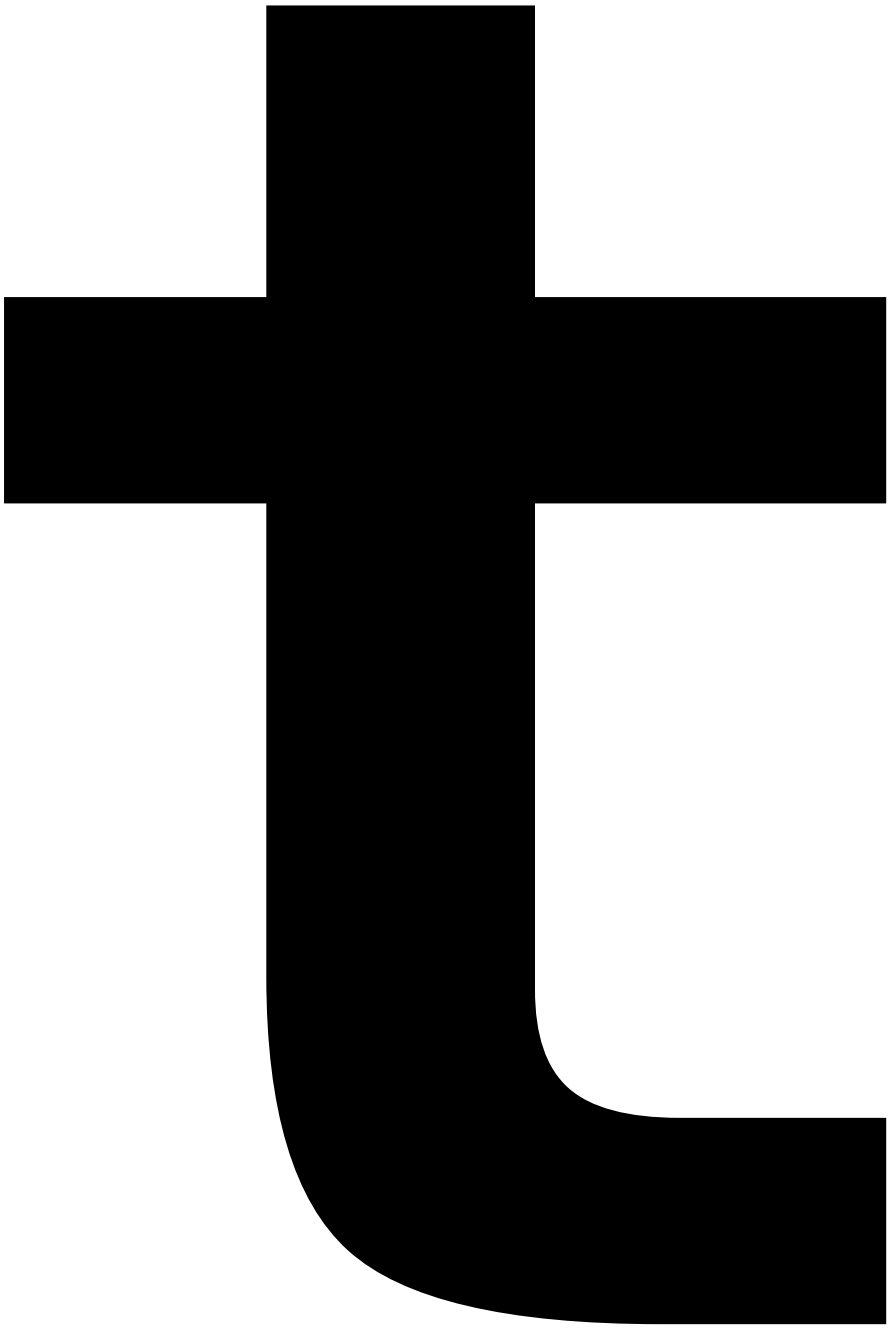


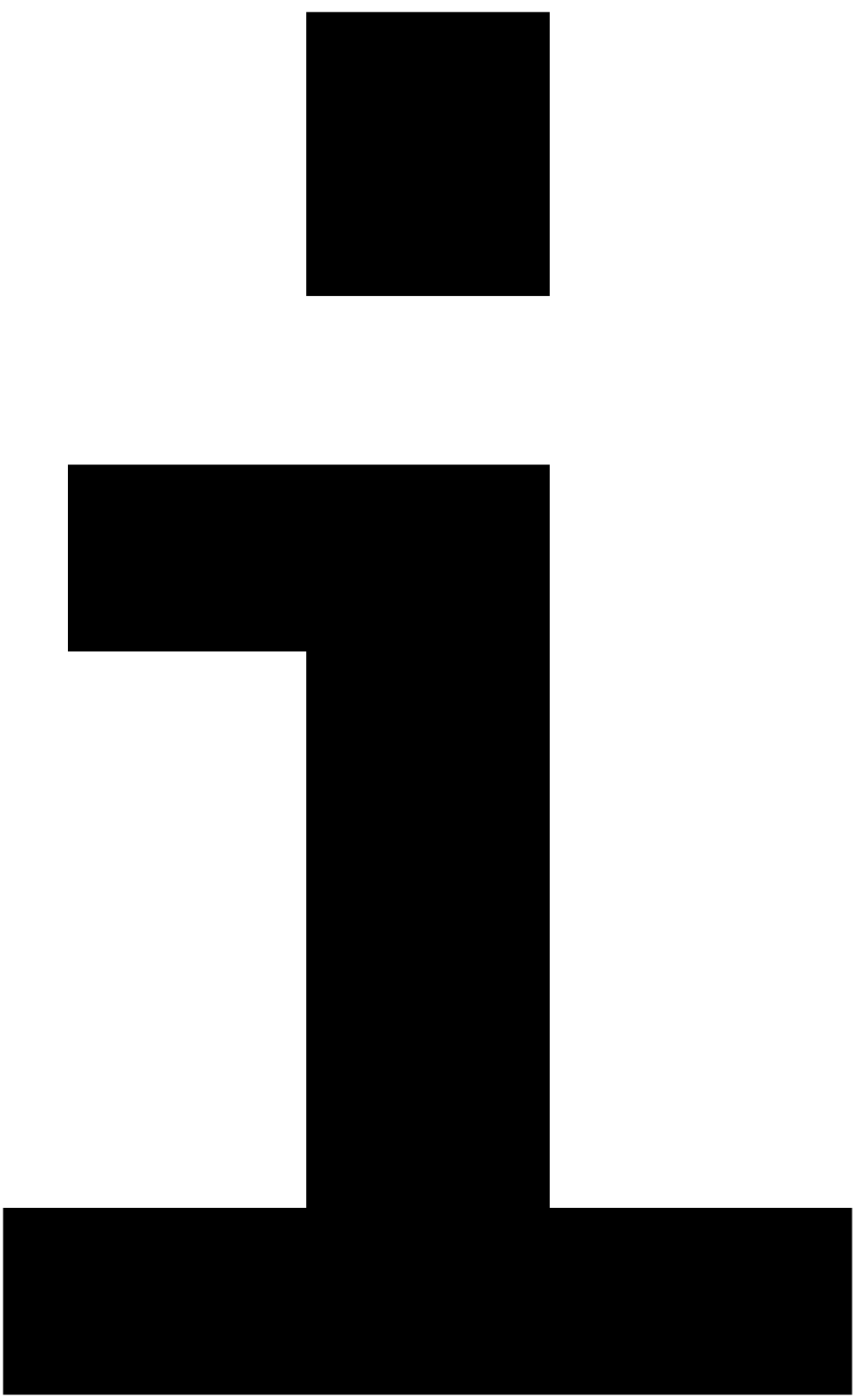
d

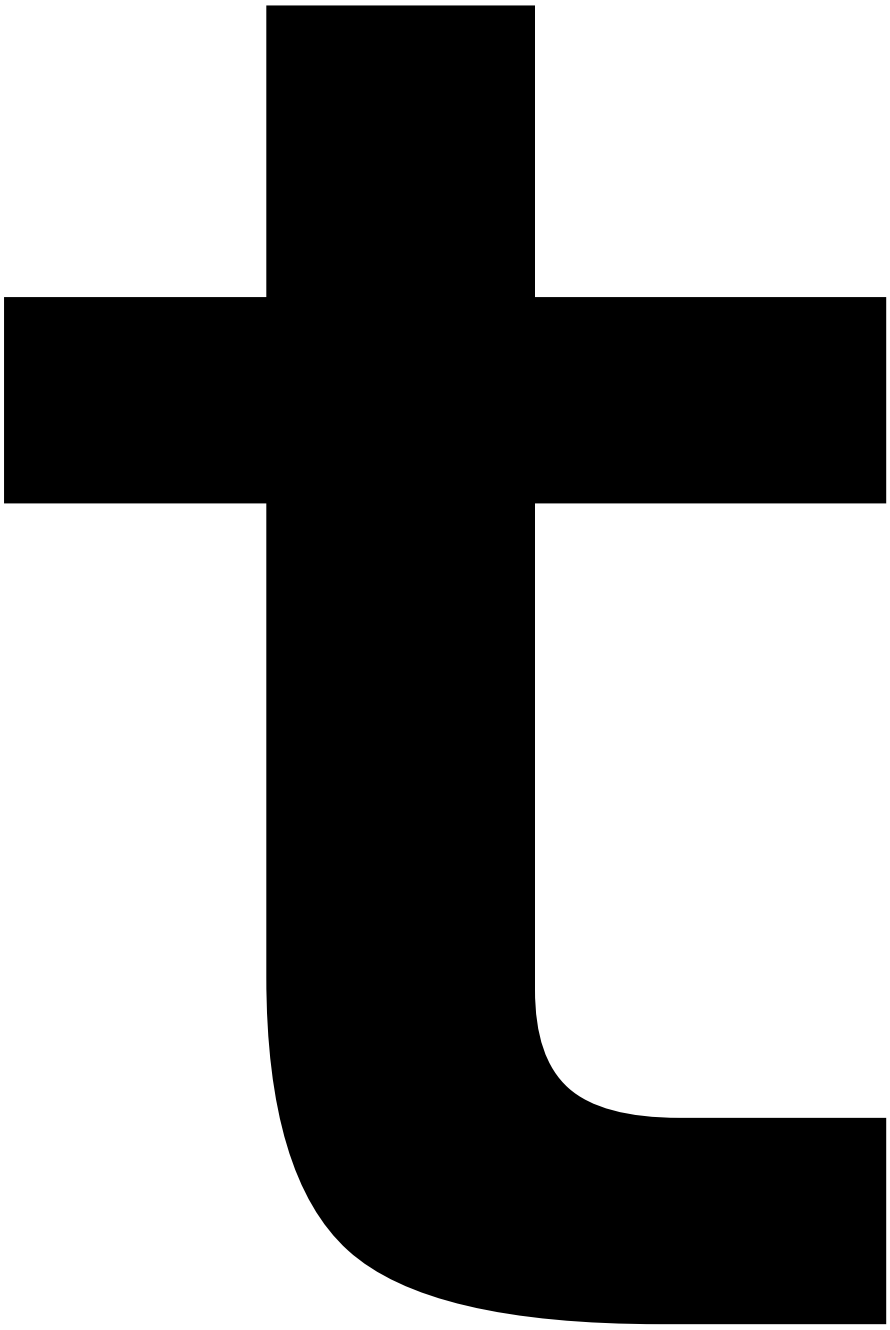


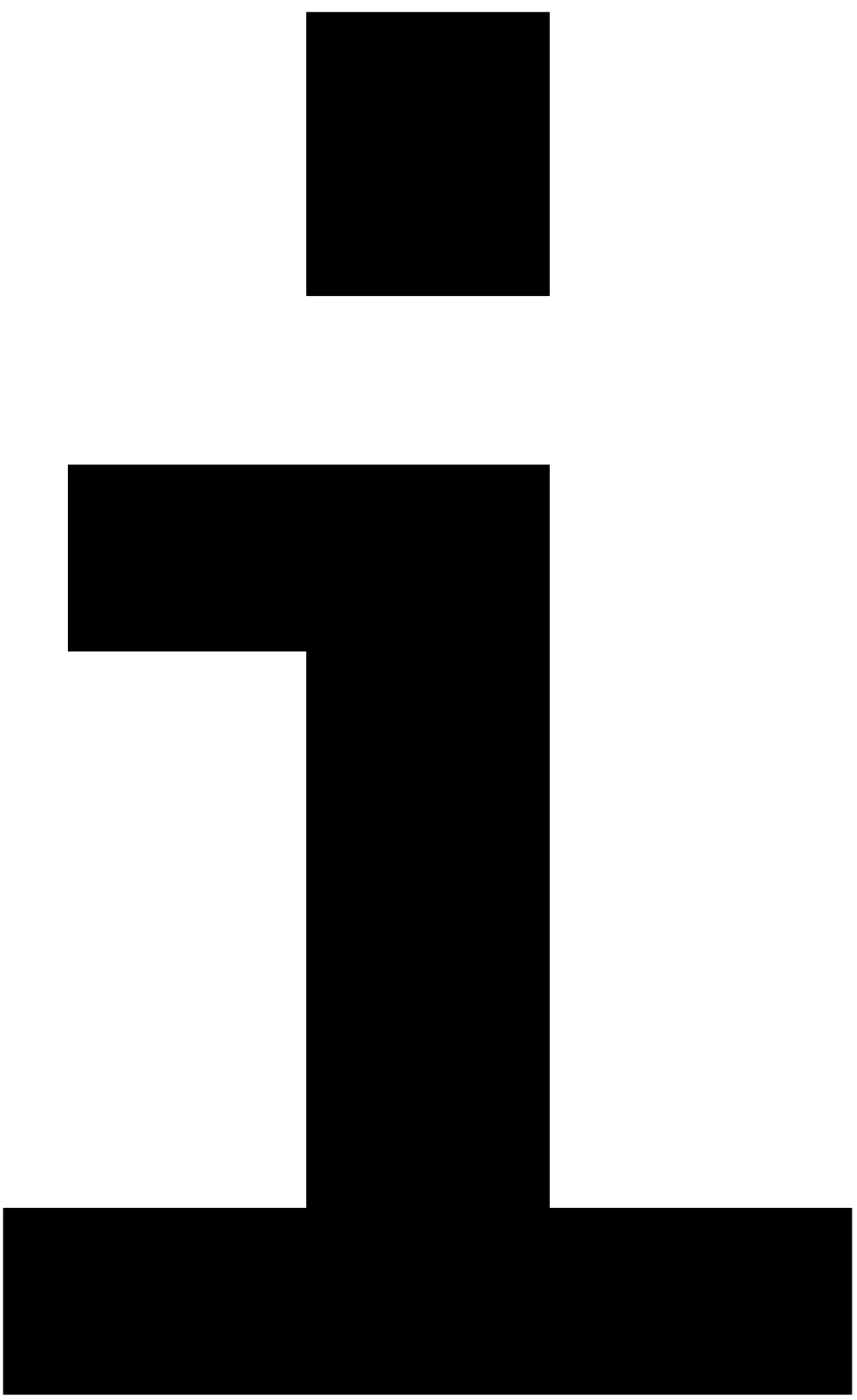


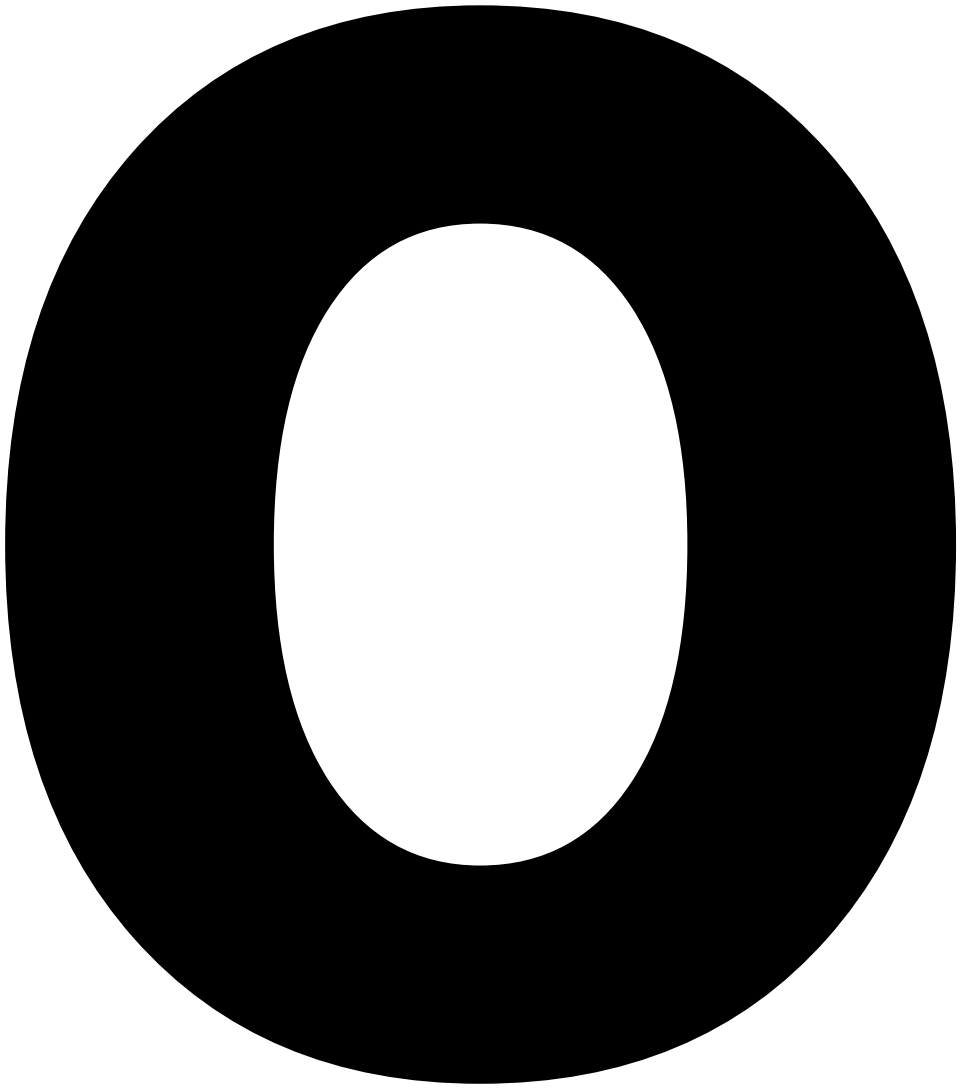


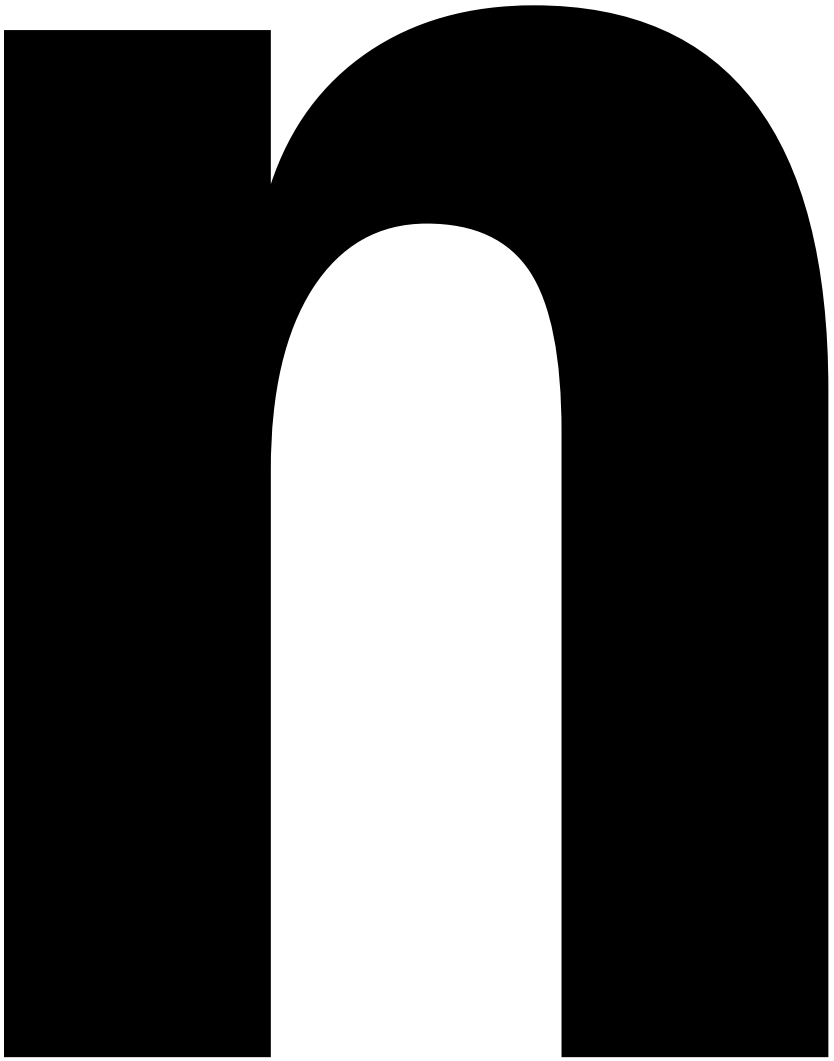


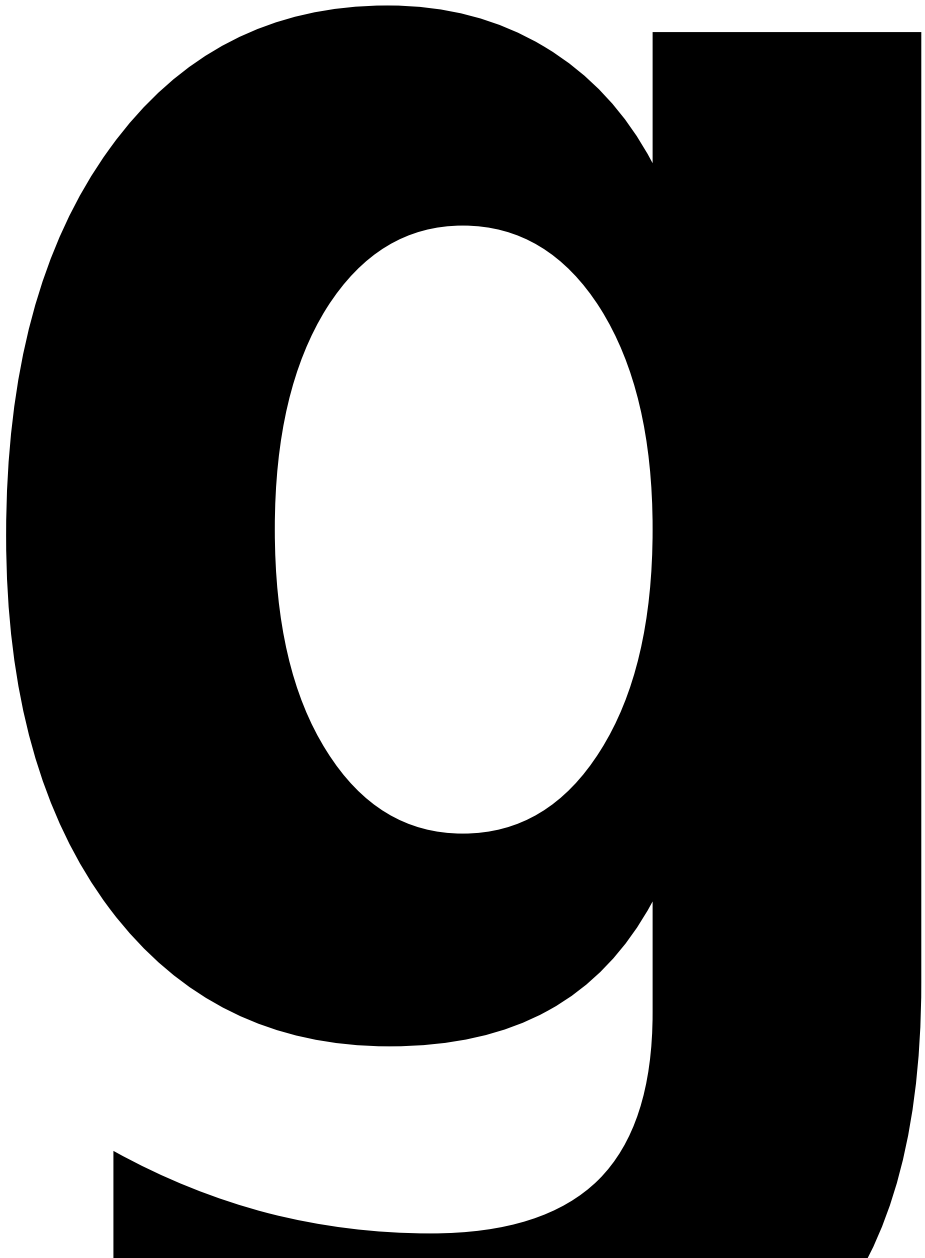


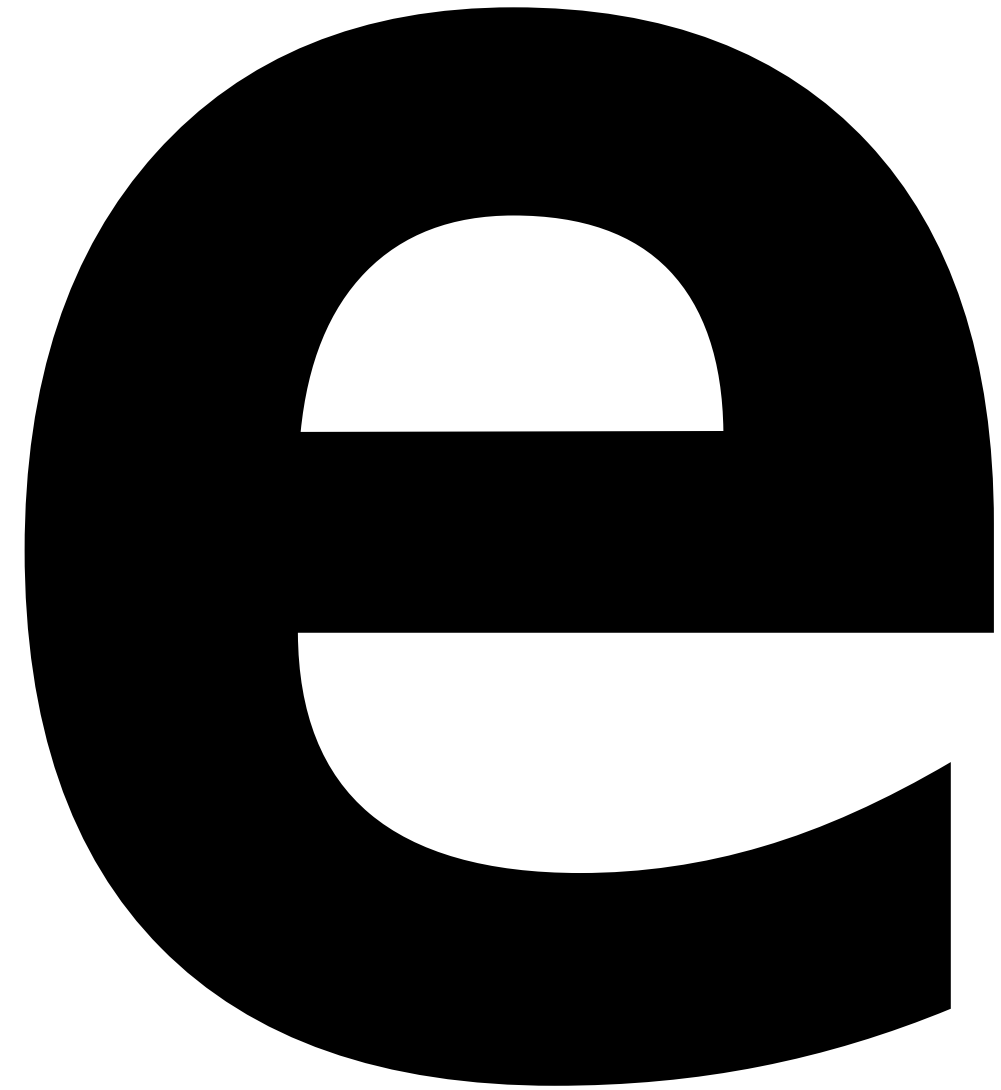




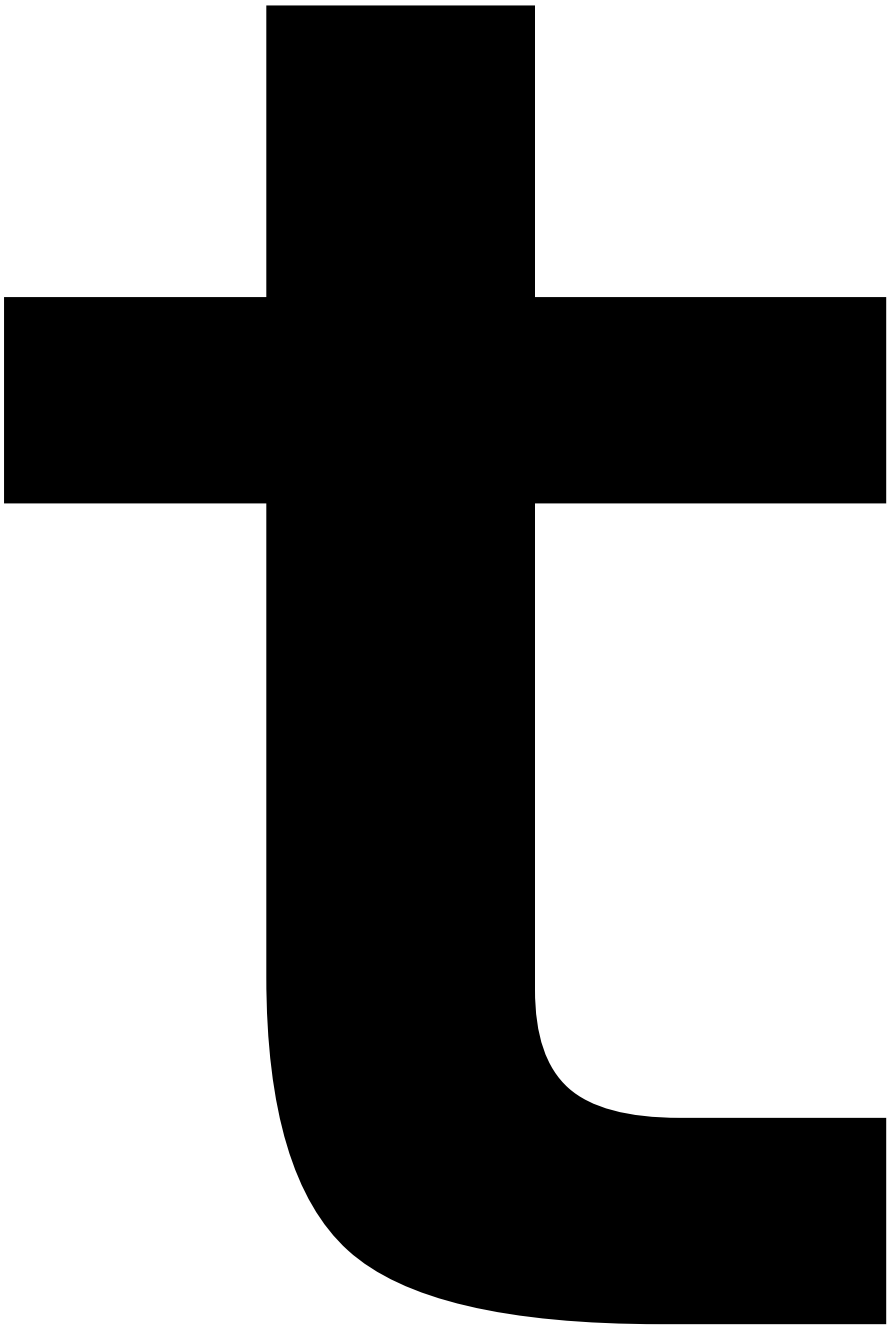


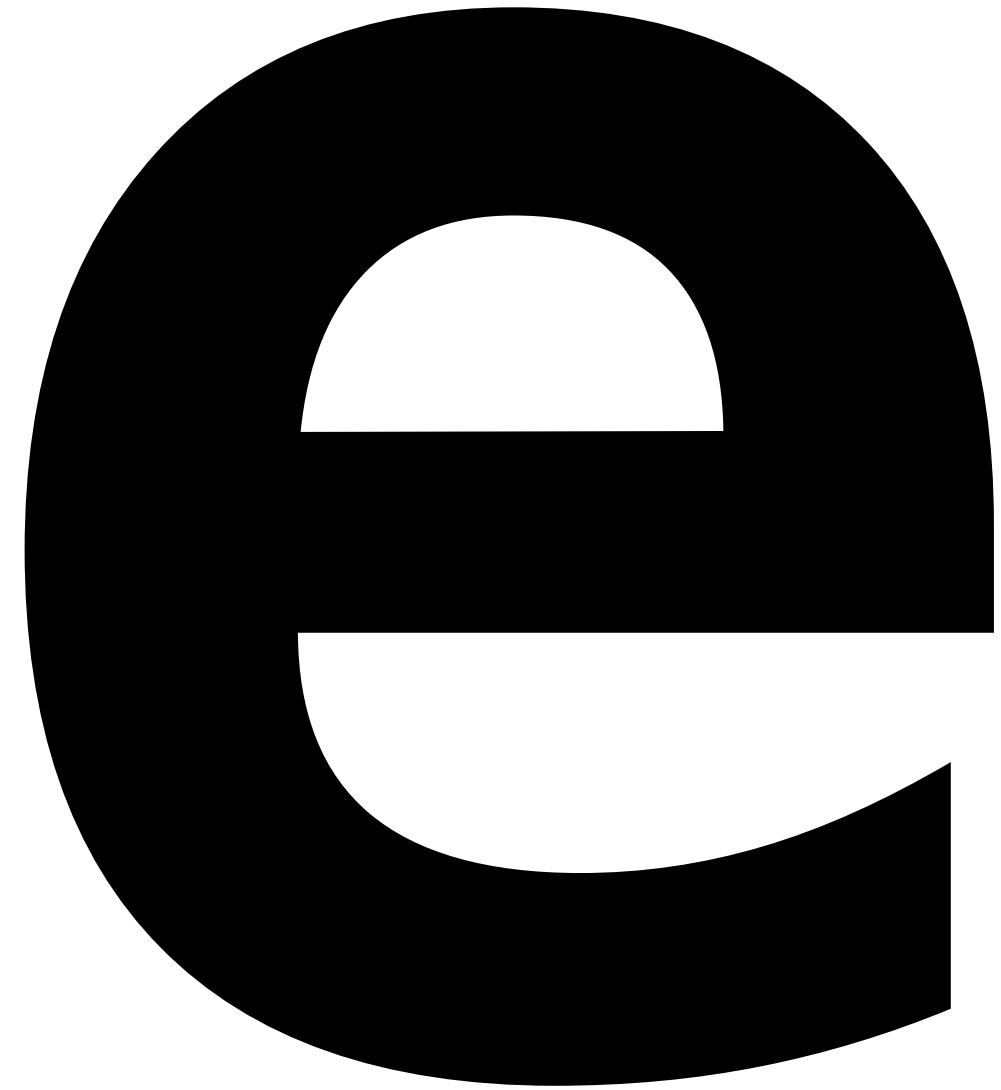


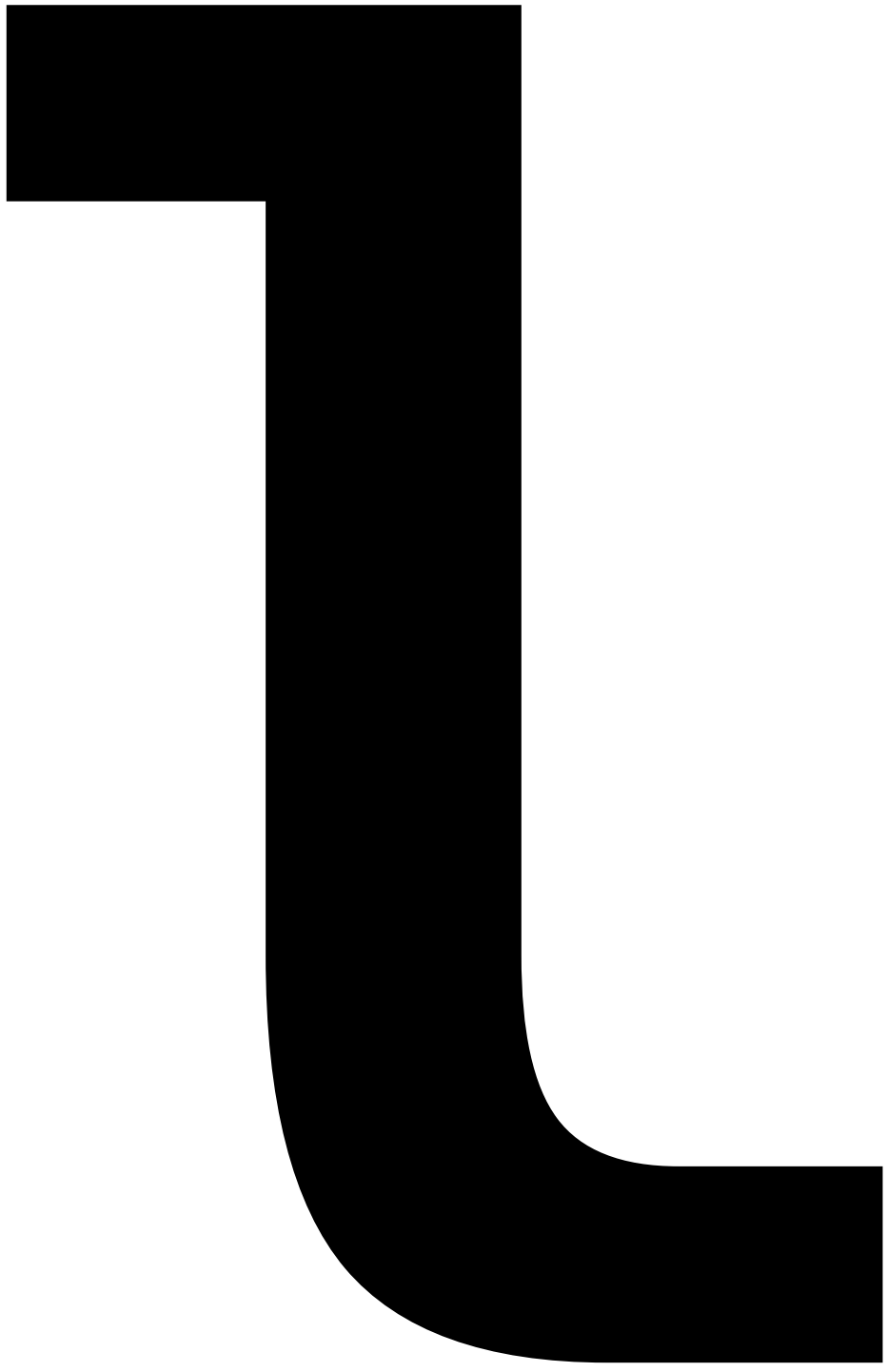


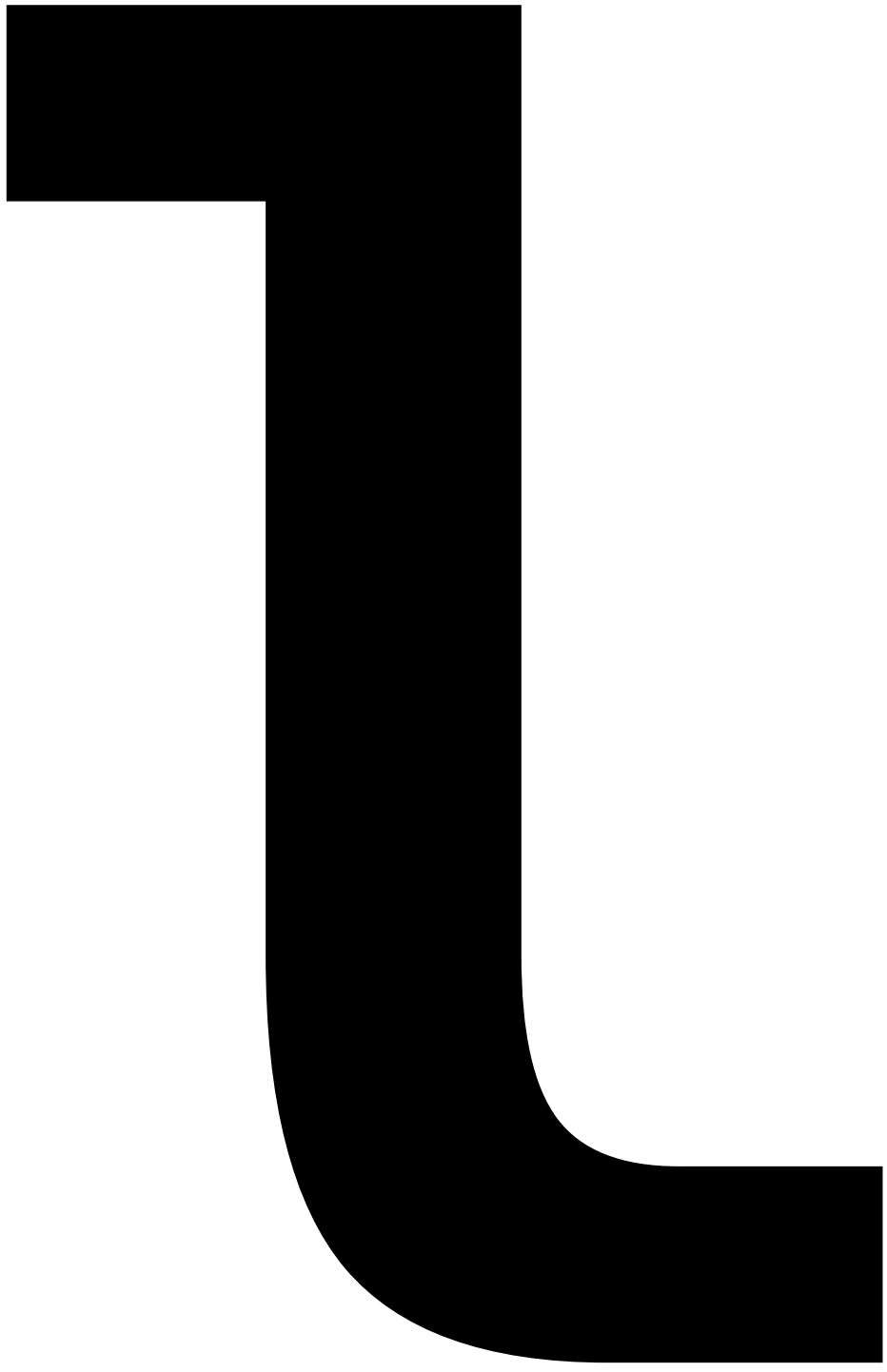


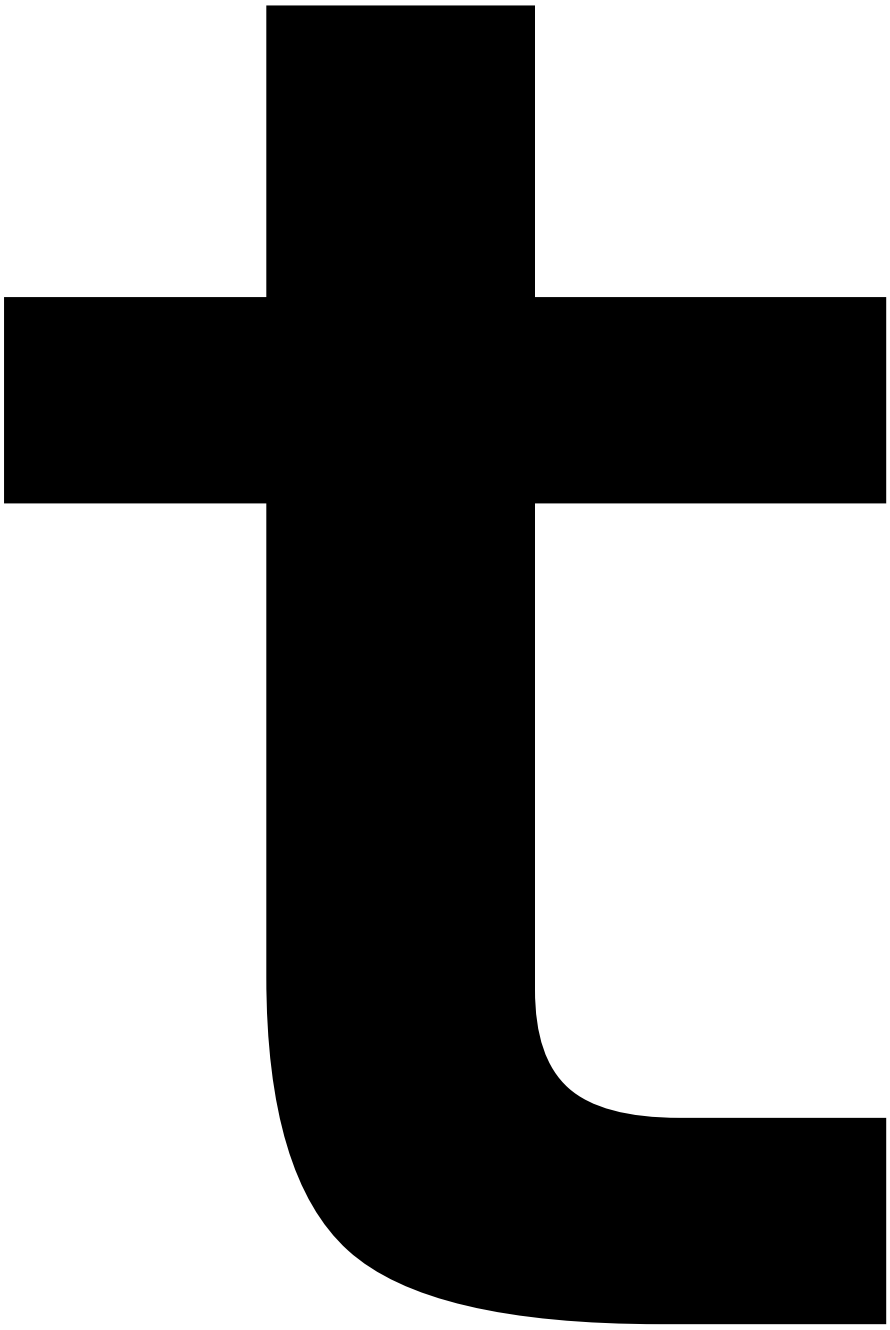
S

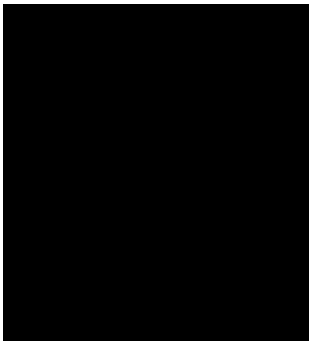


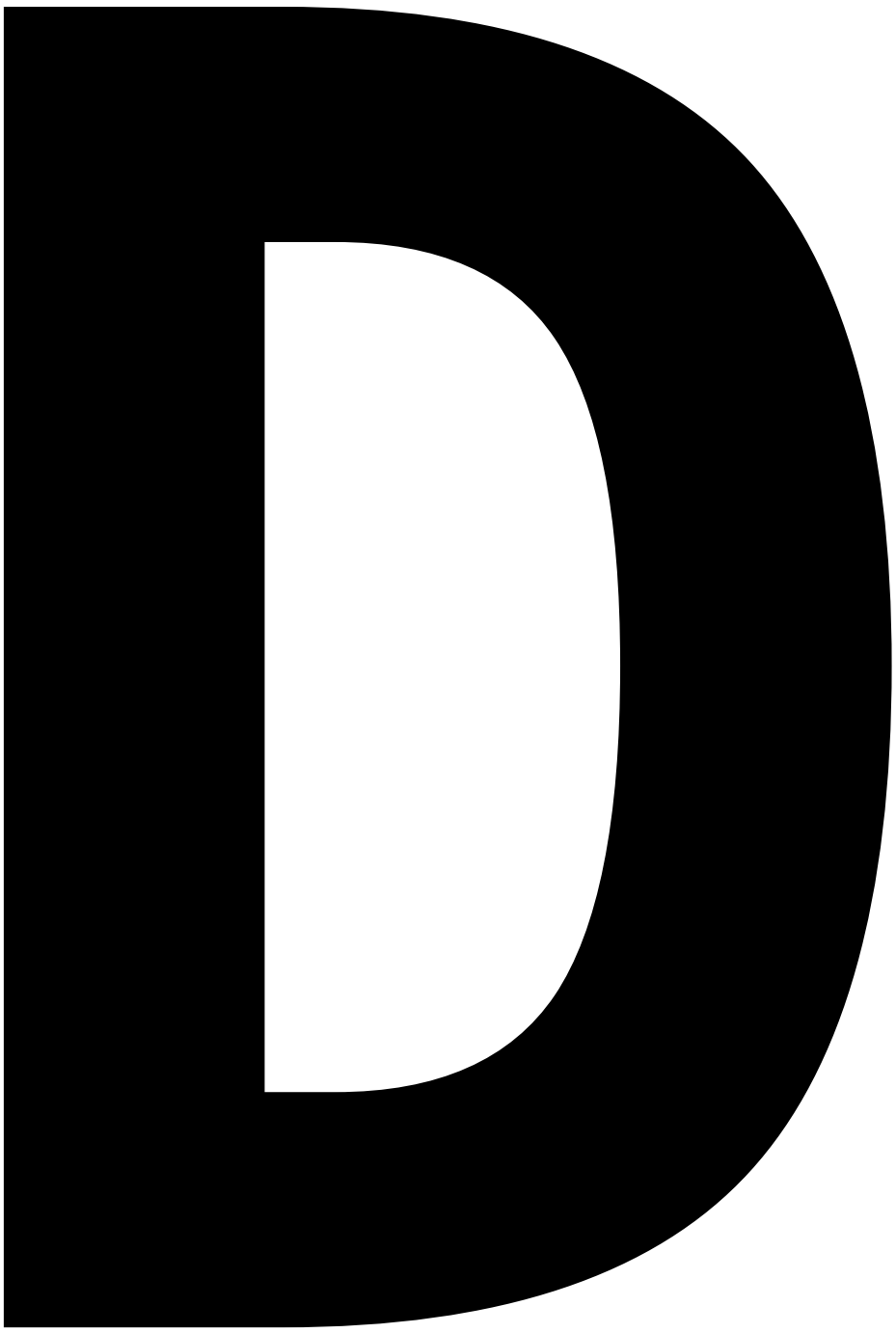


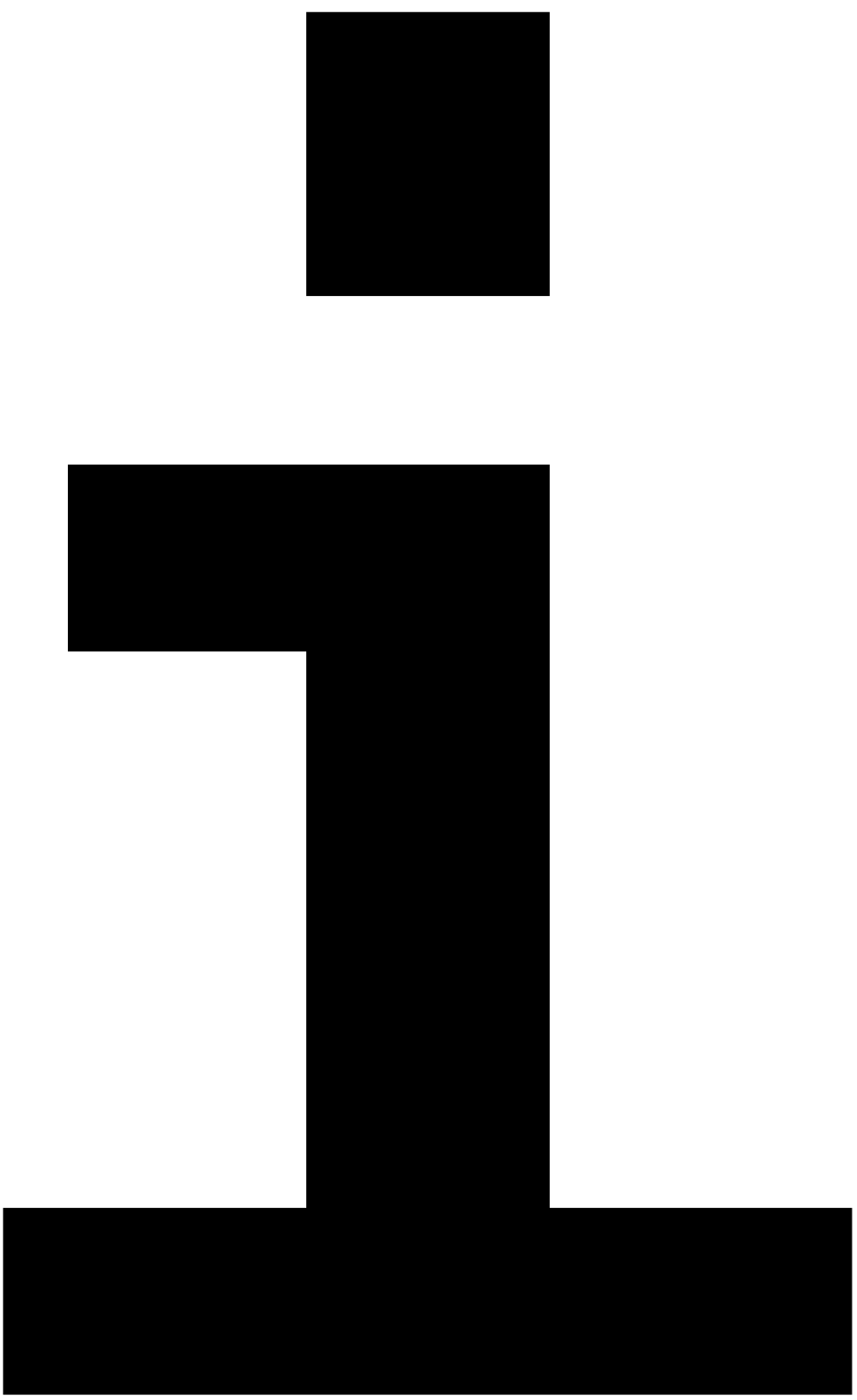


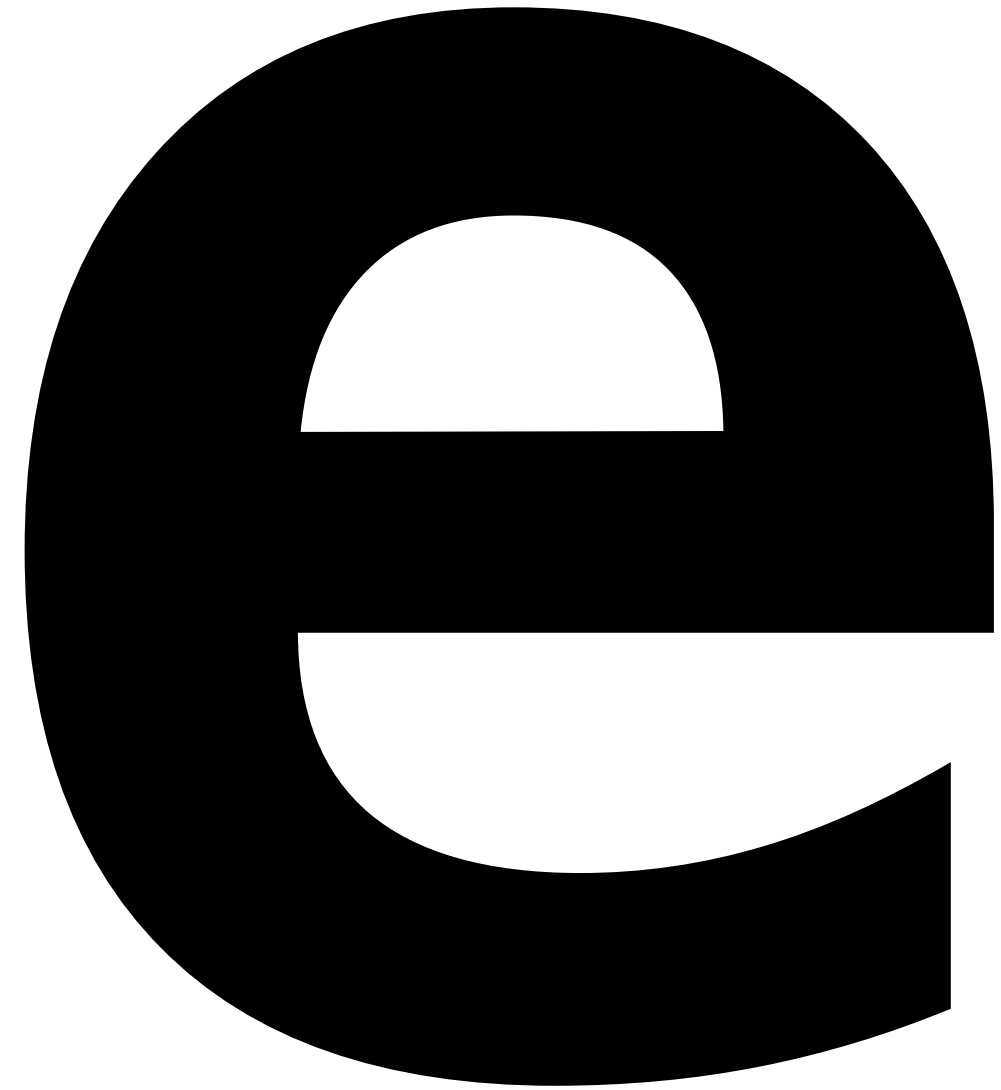


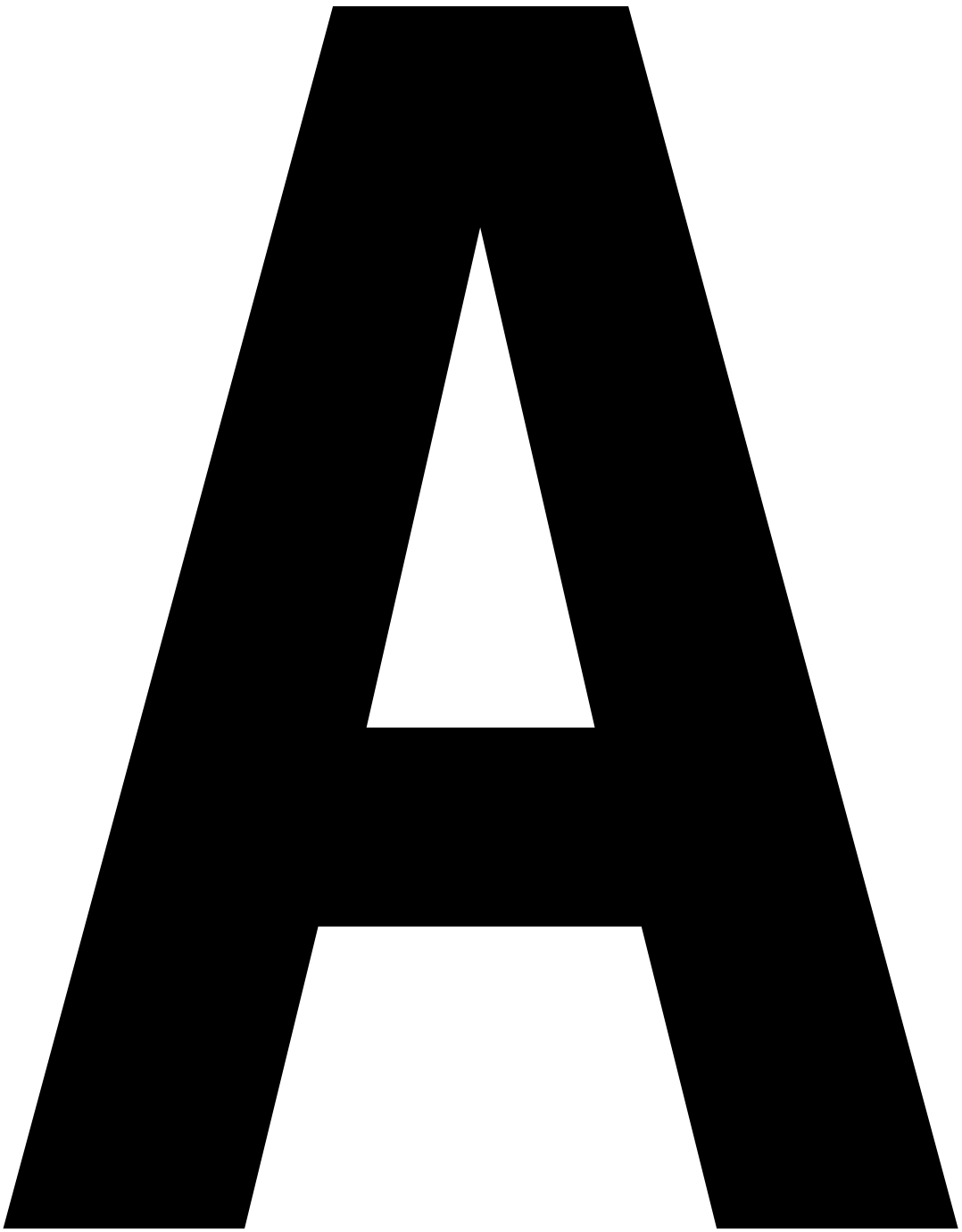


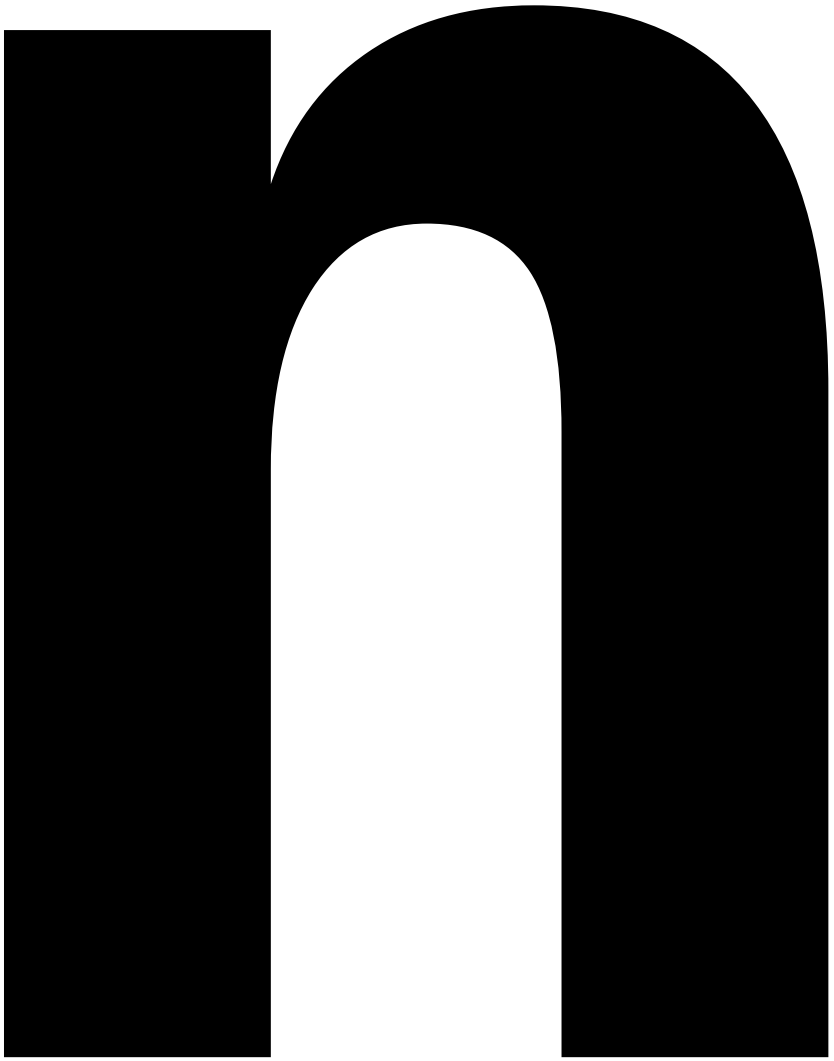


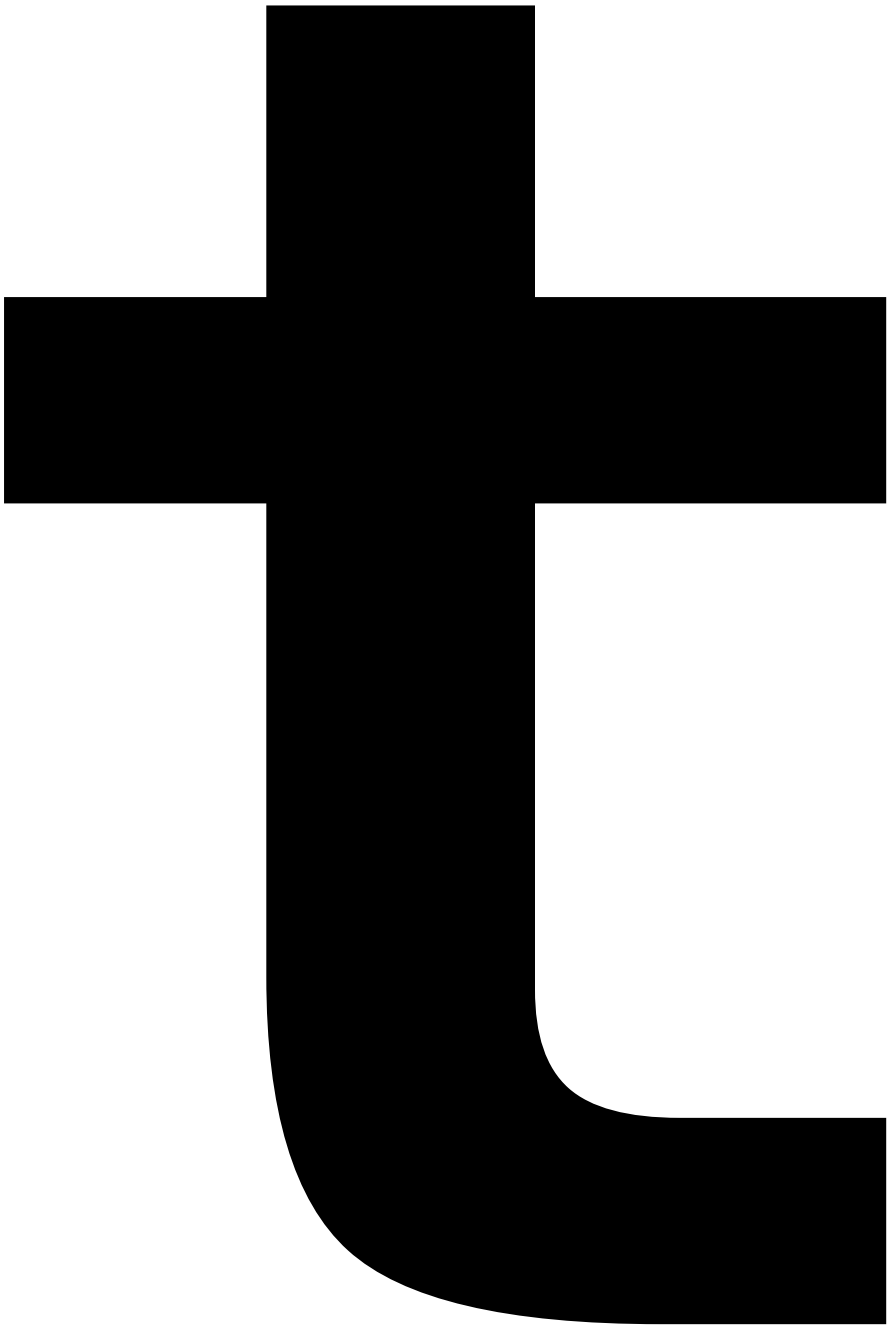


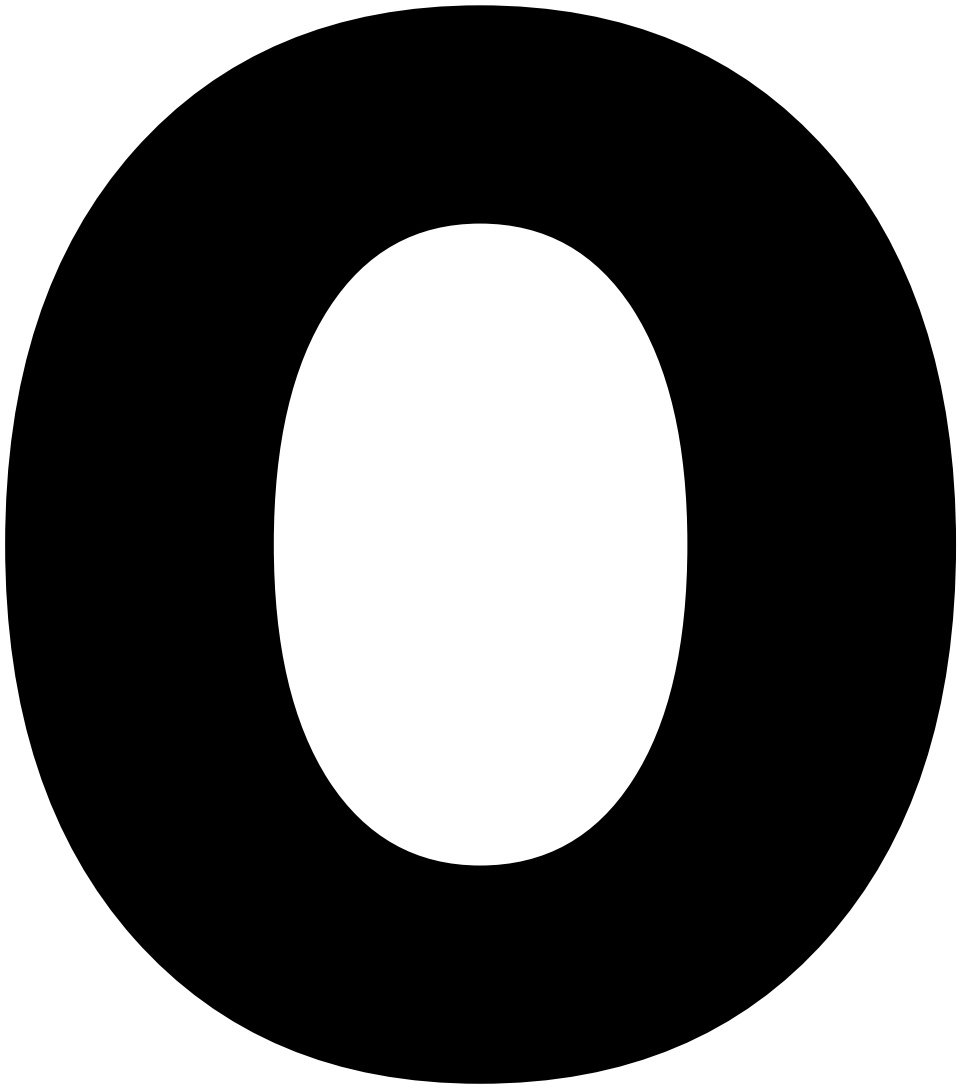


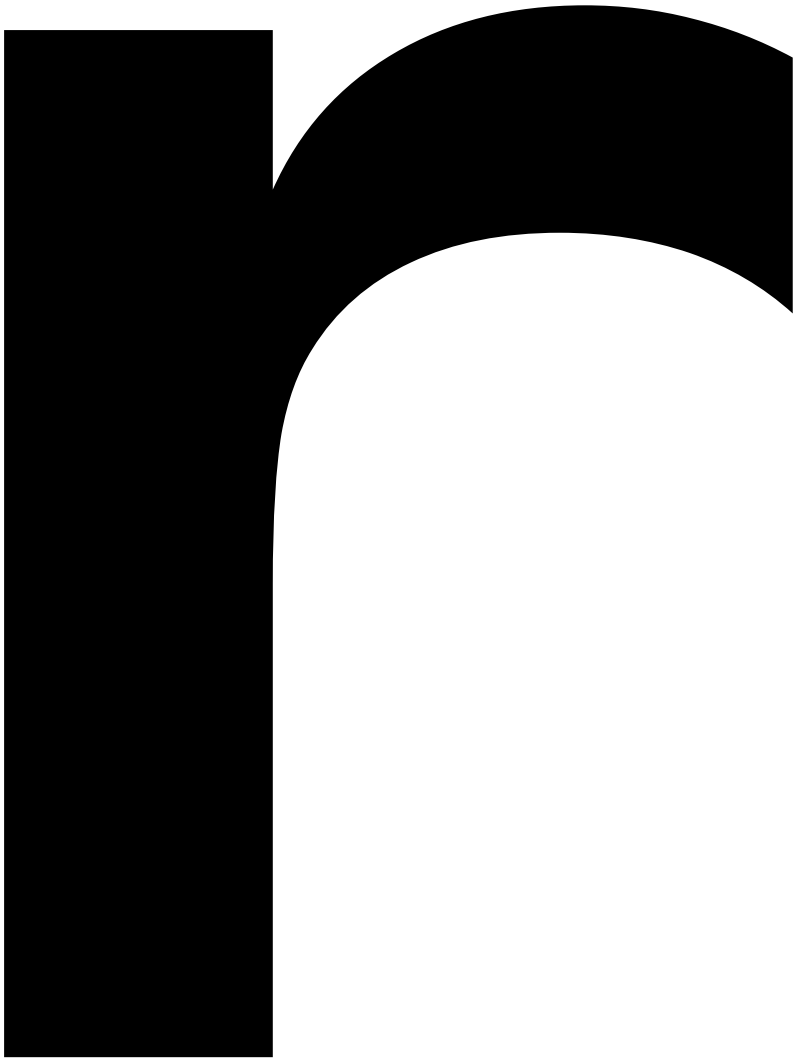


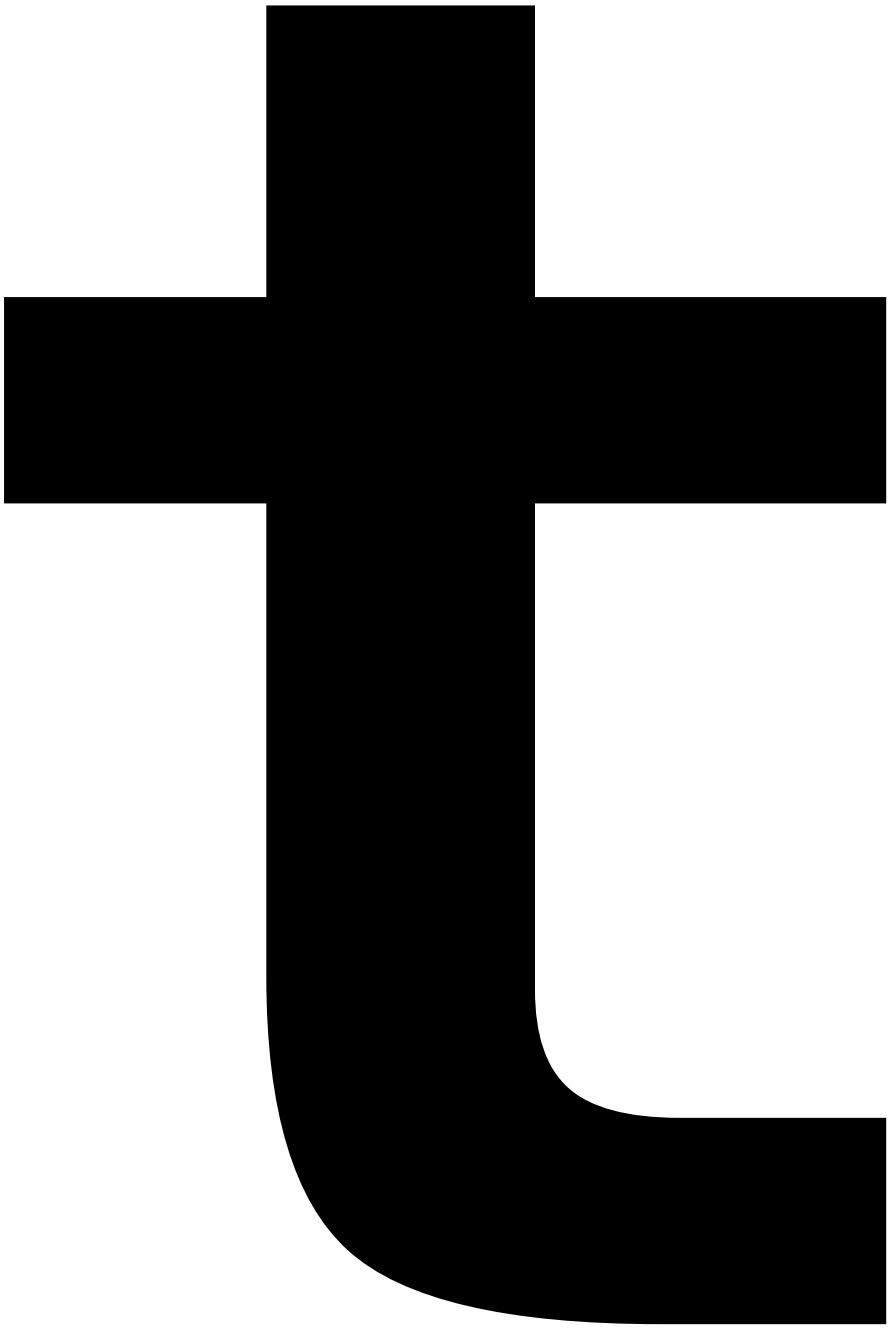




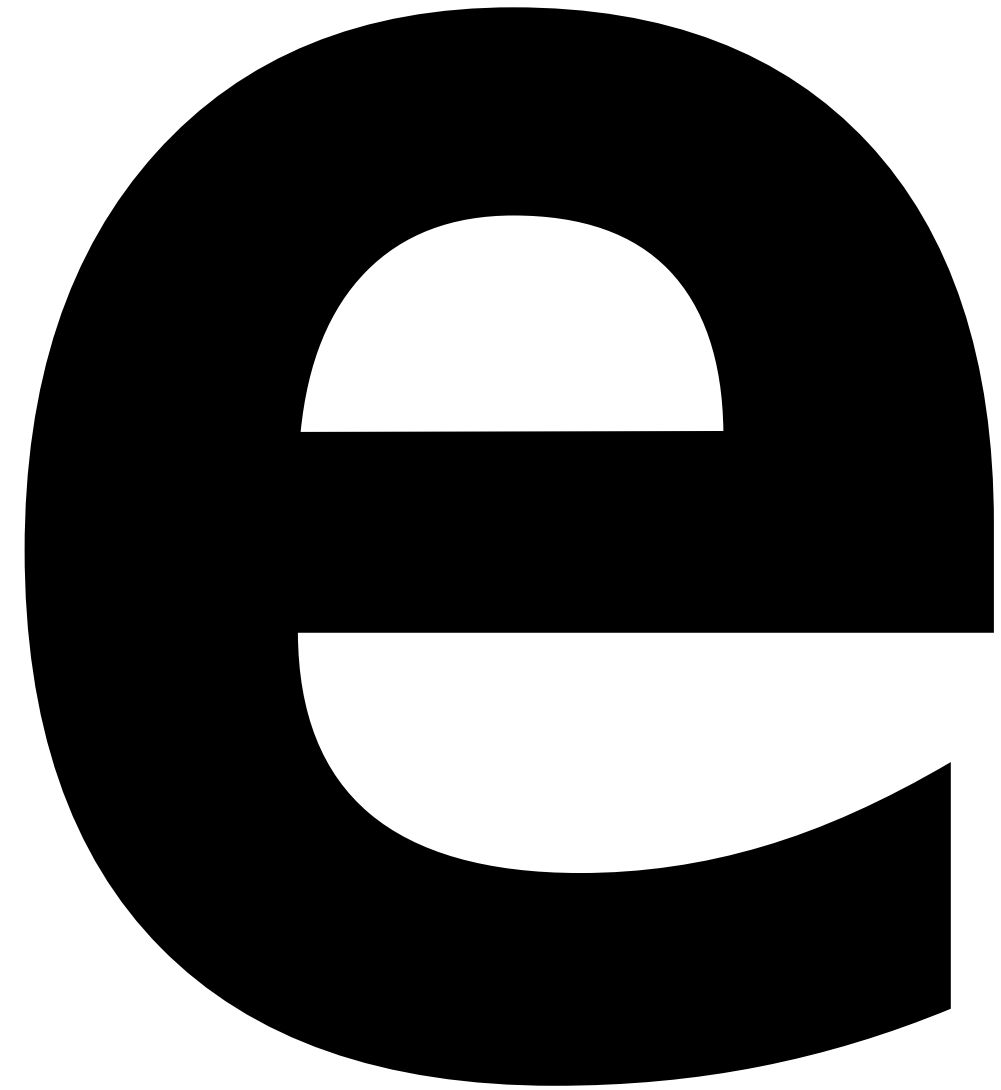


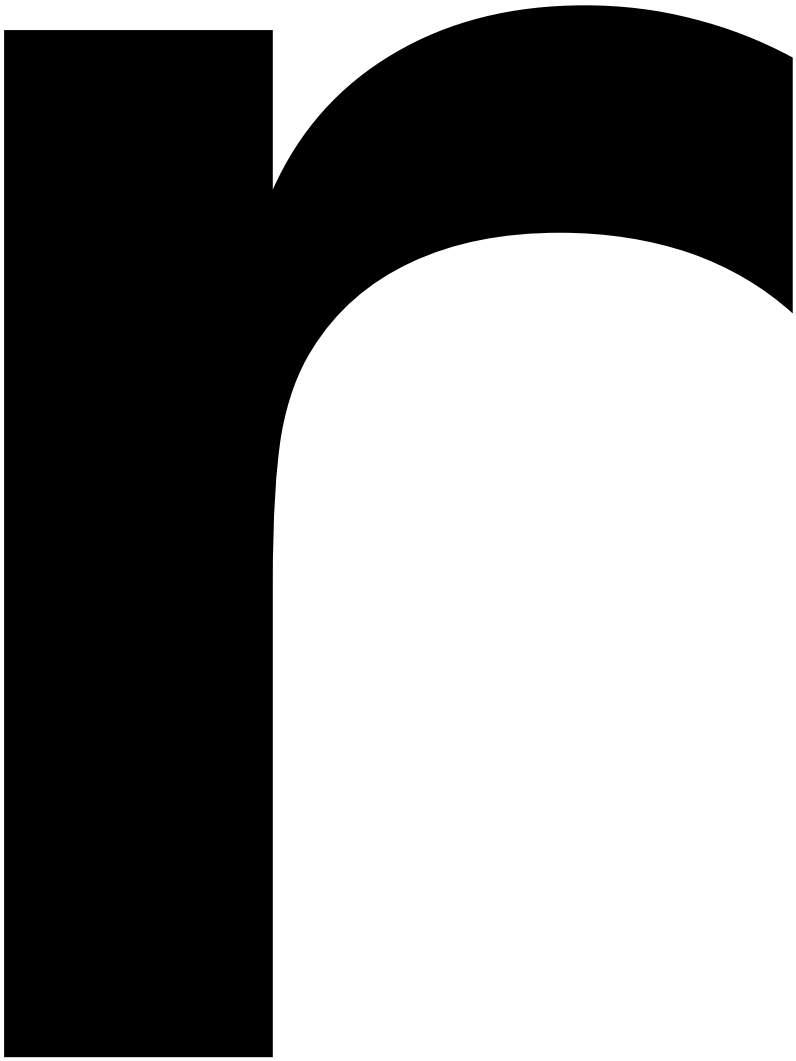


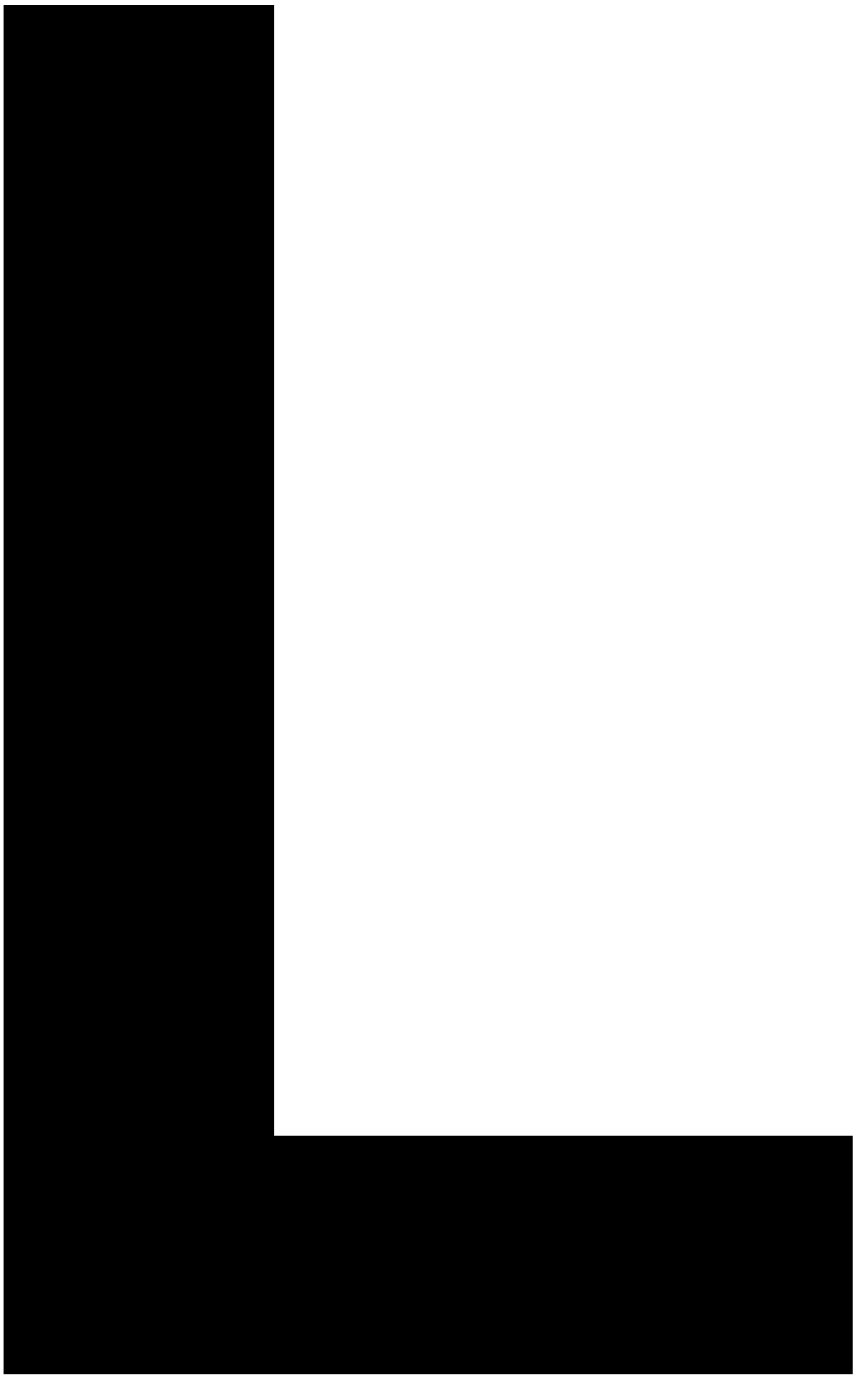


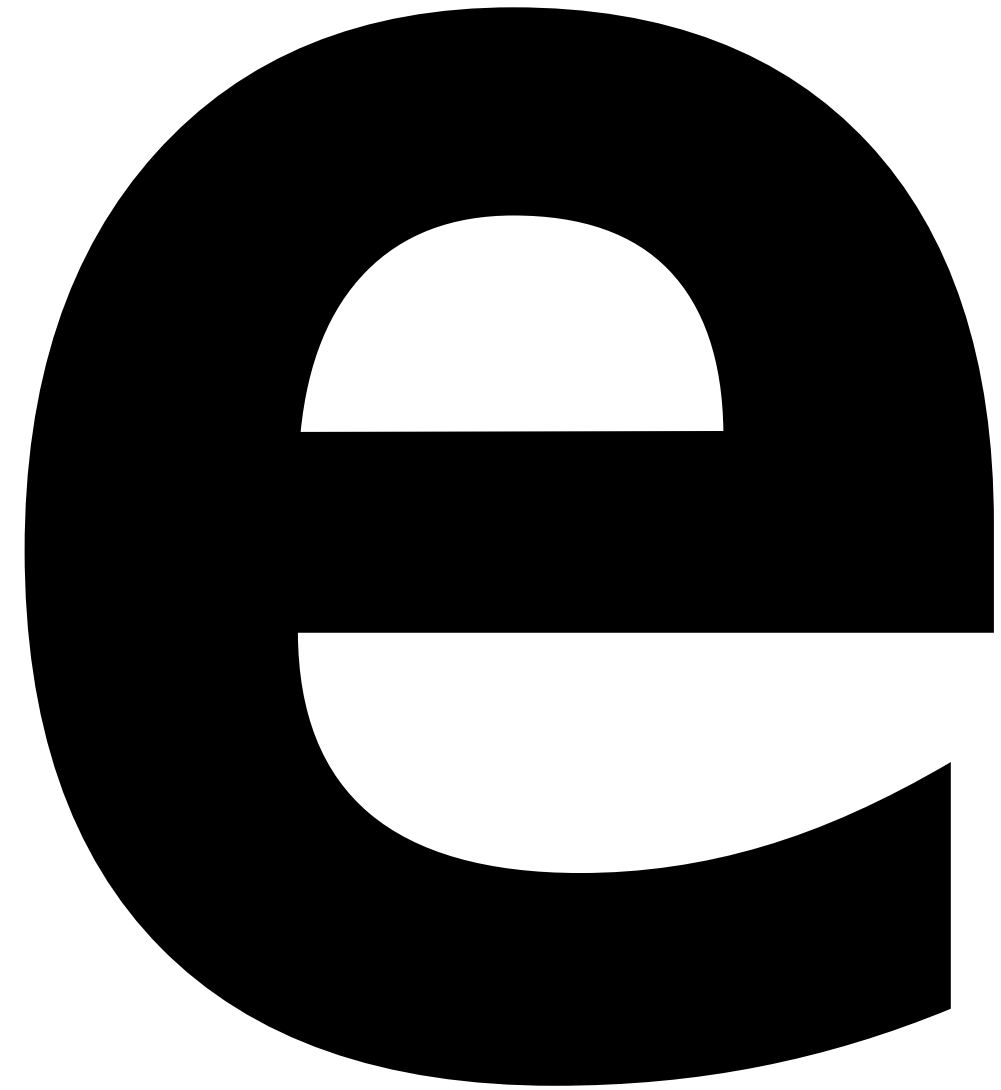


d

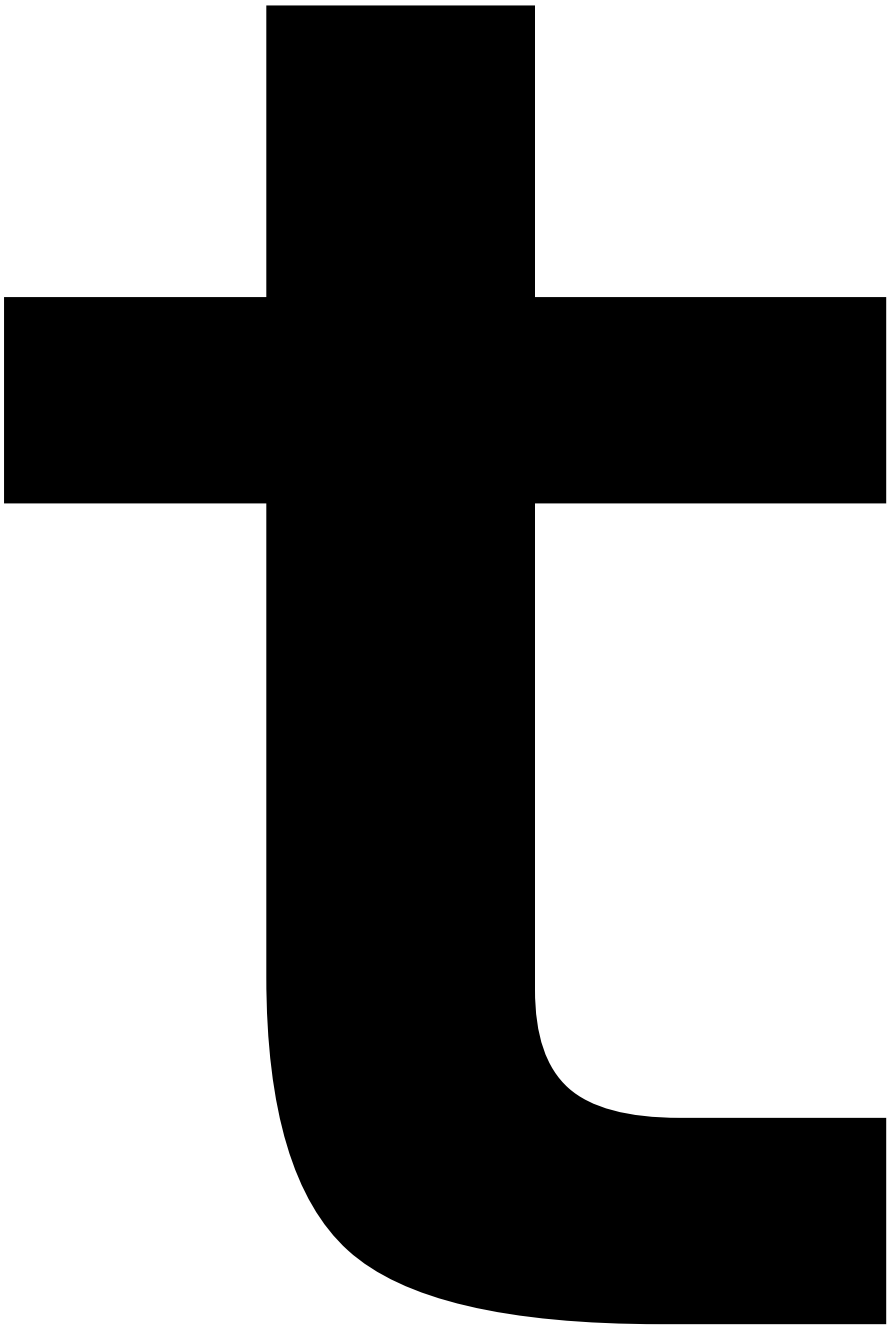


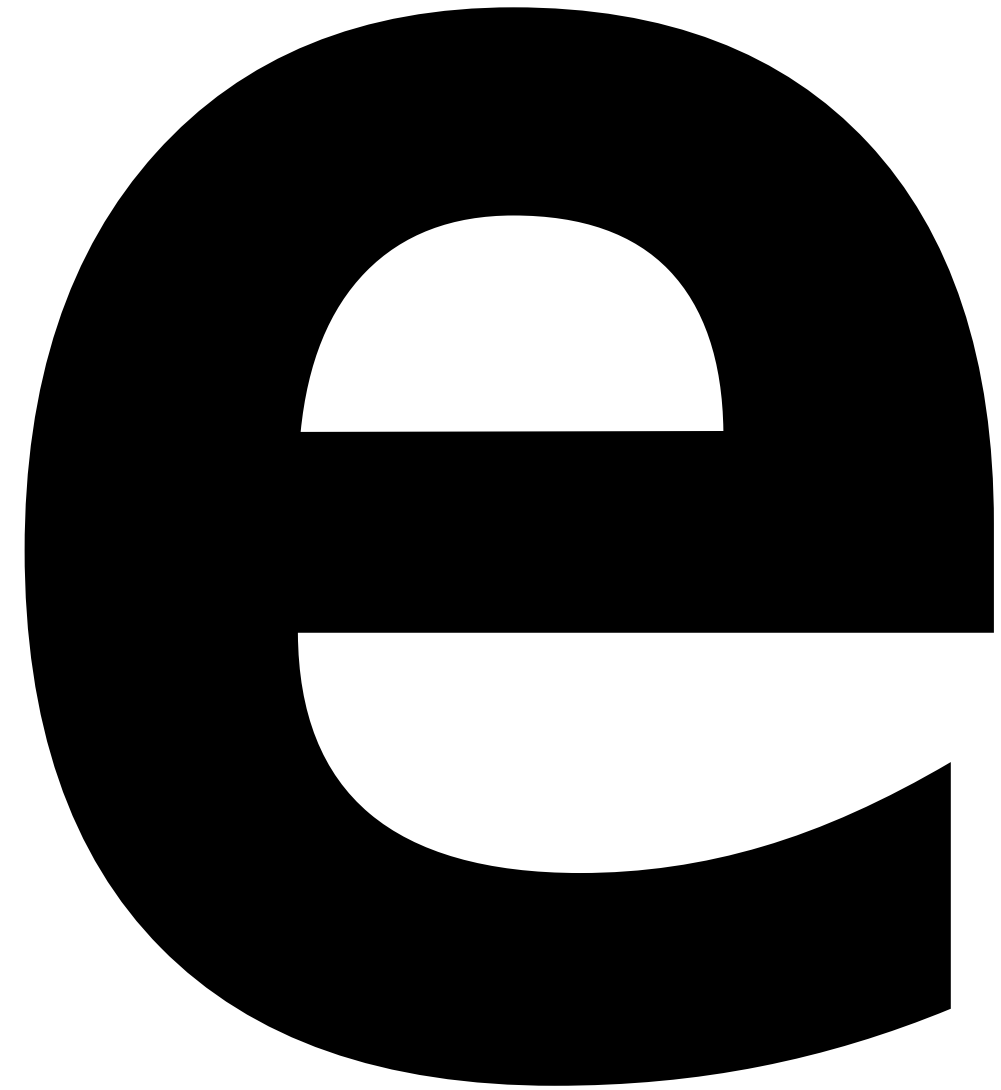


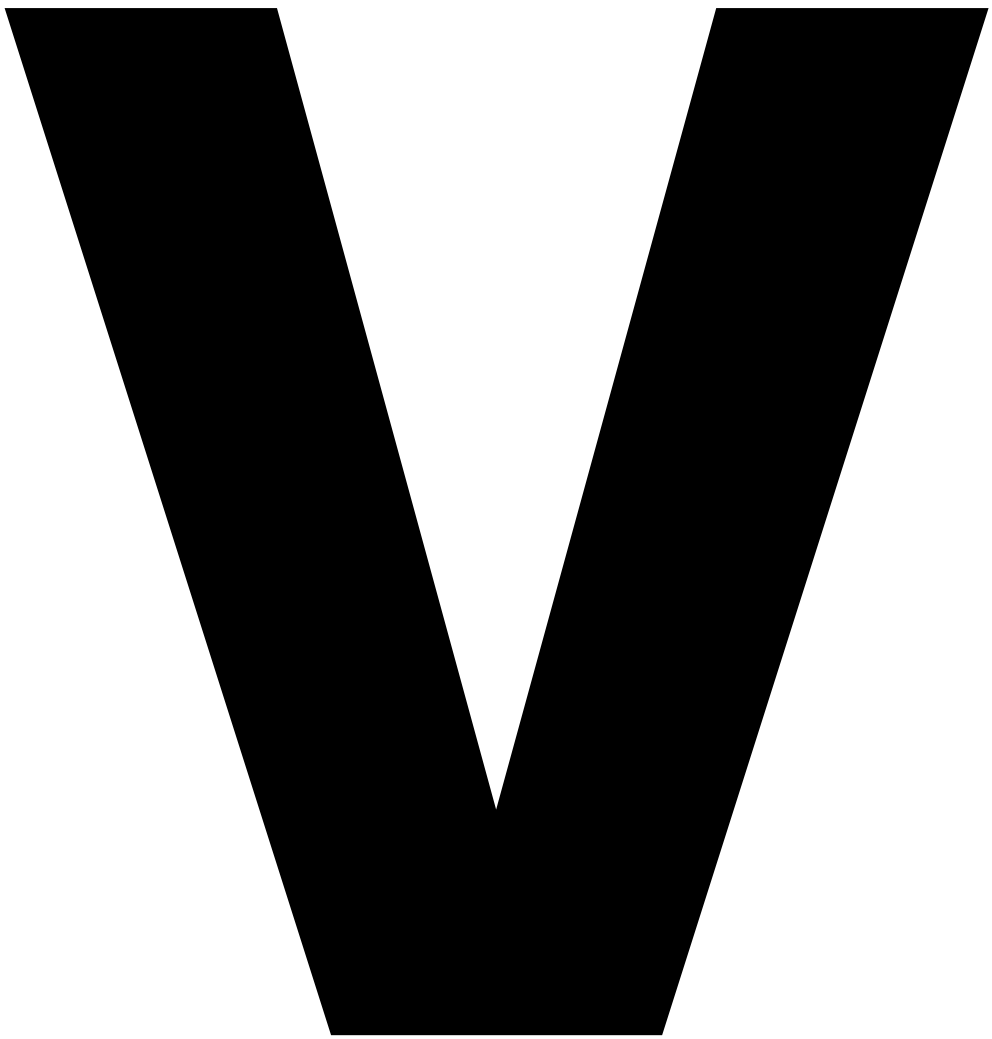


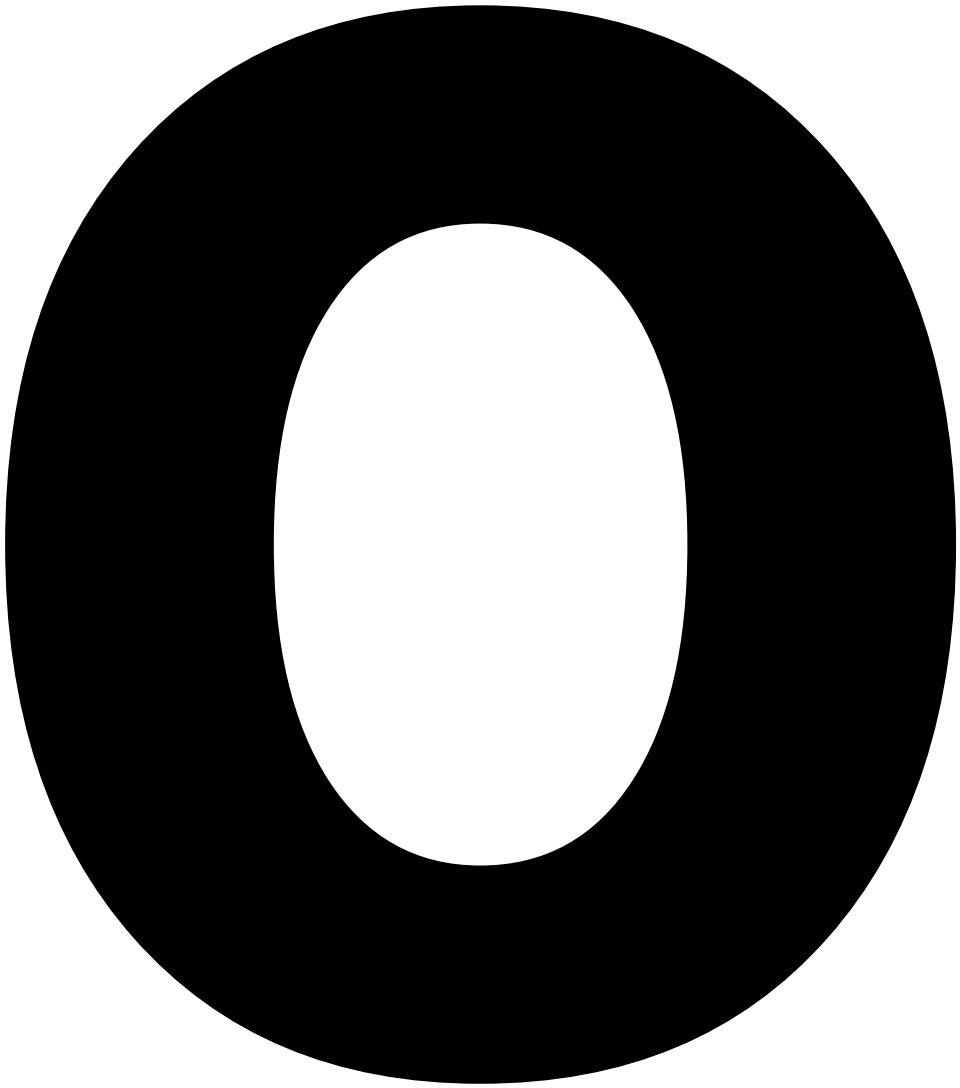


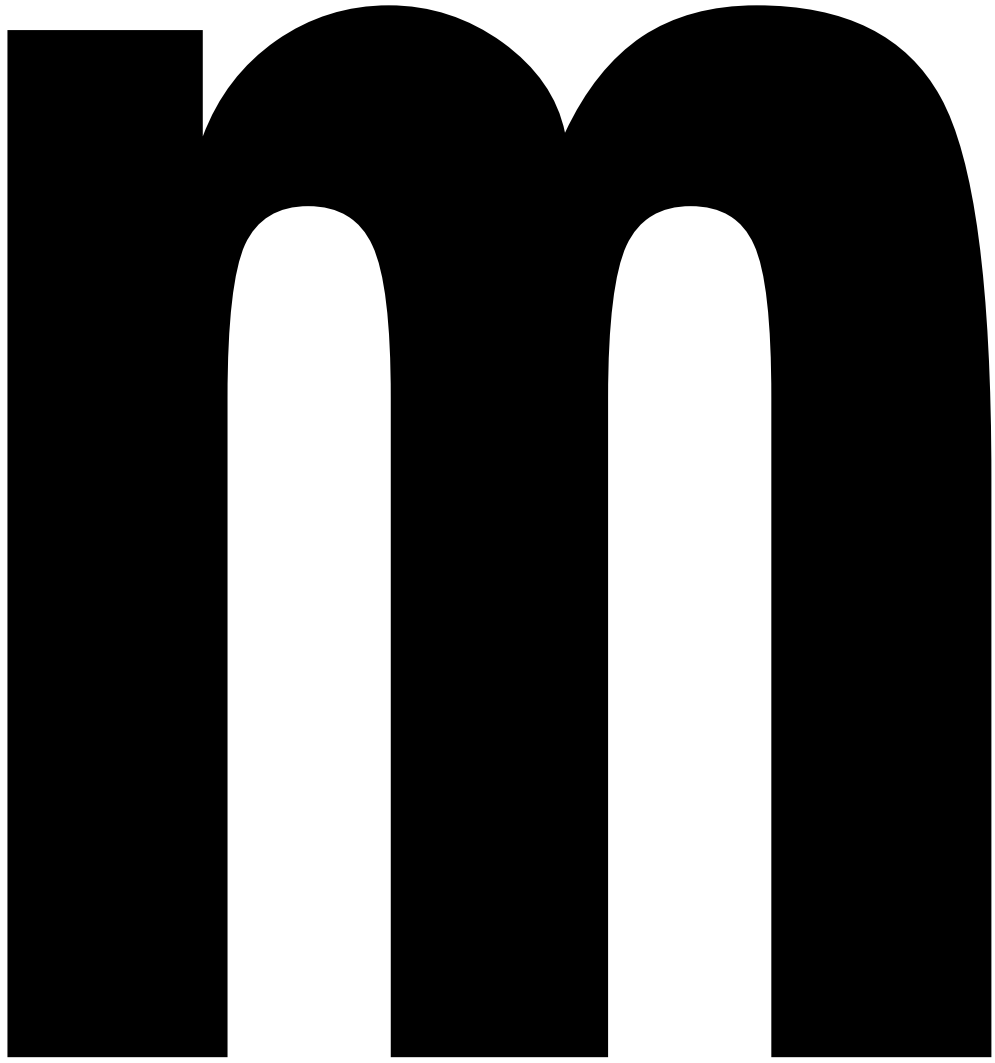
u



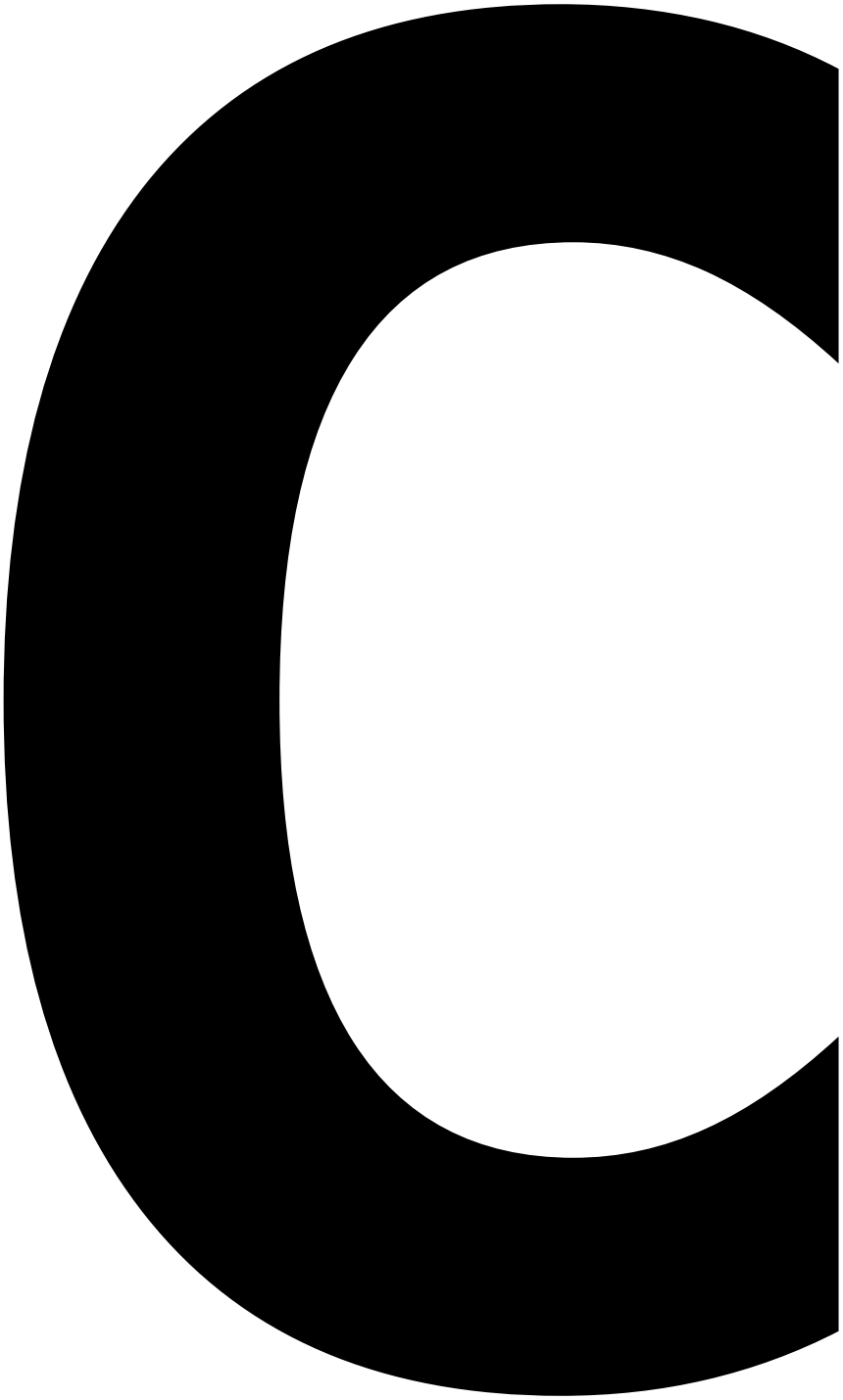


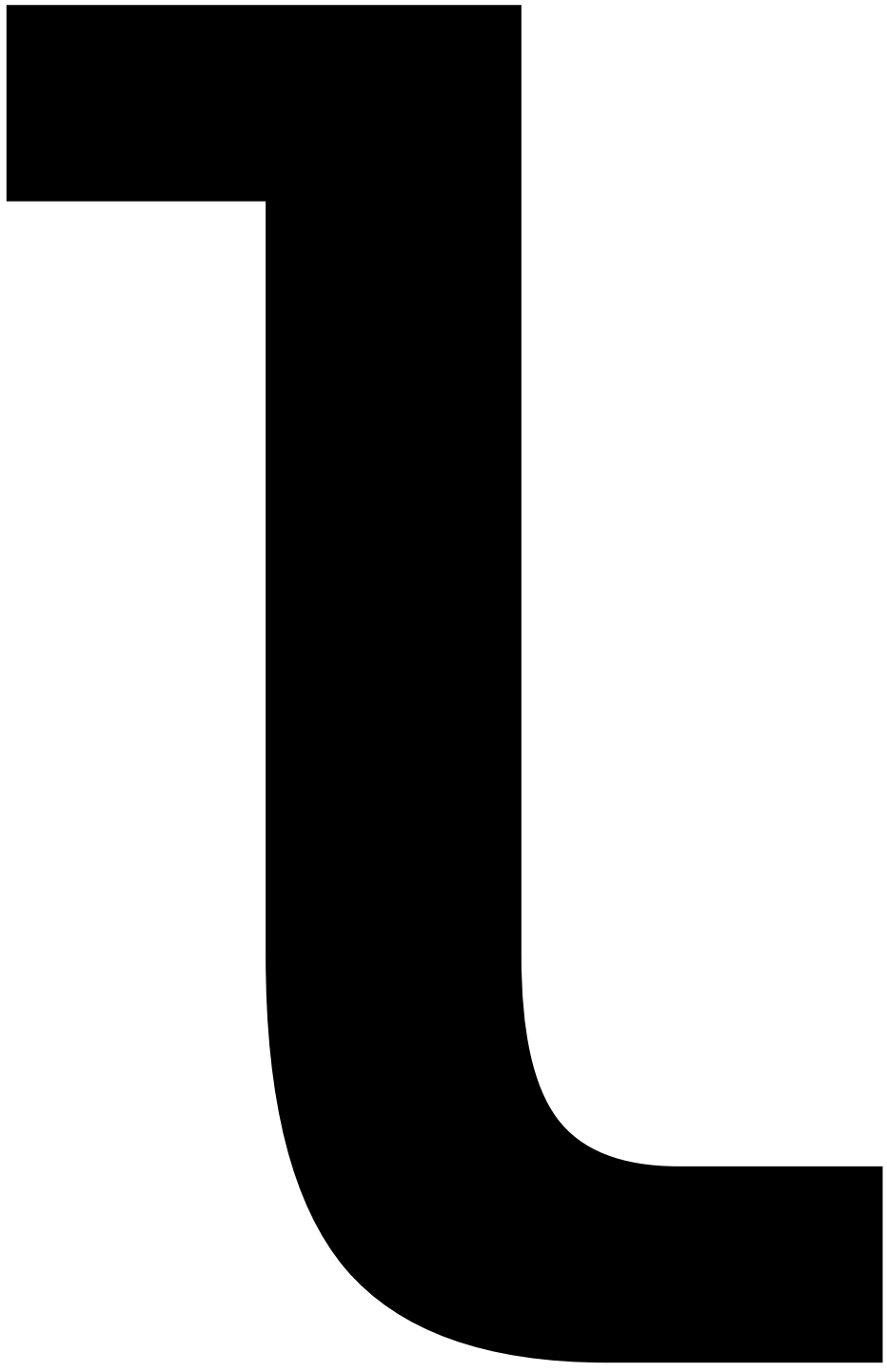


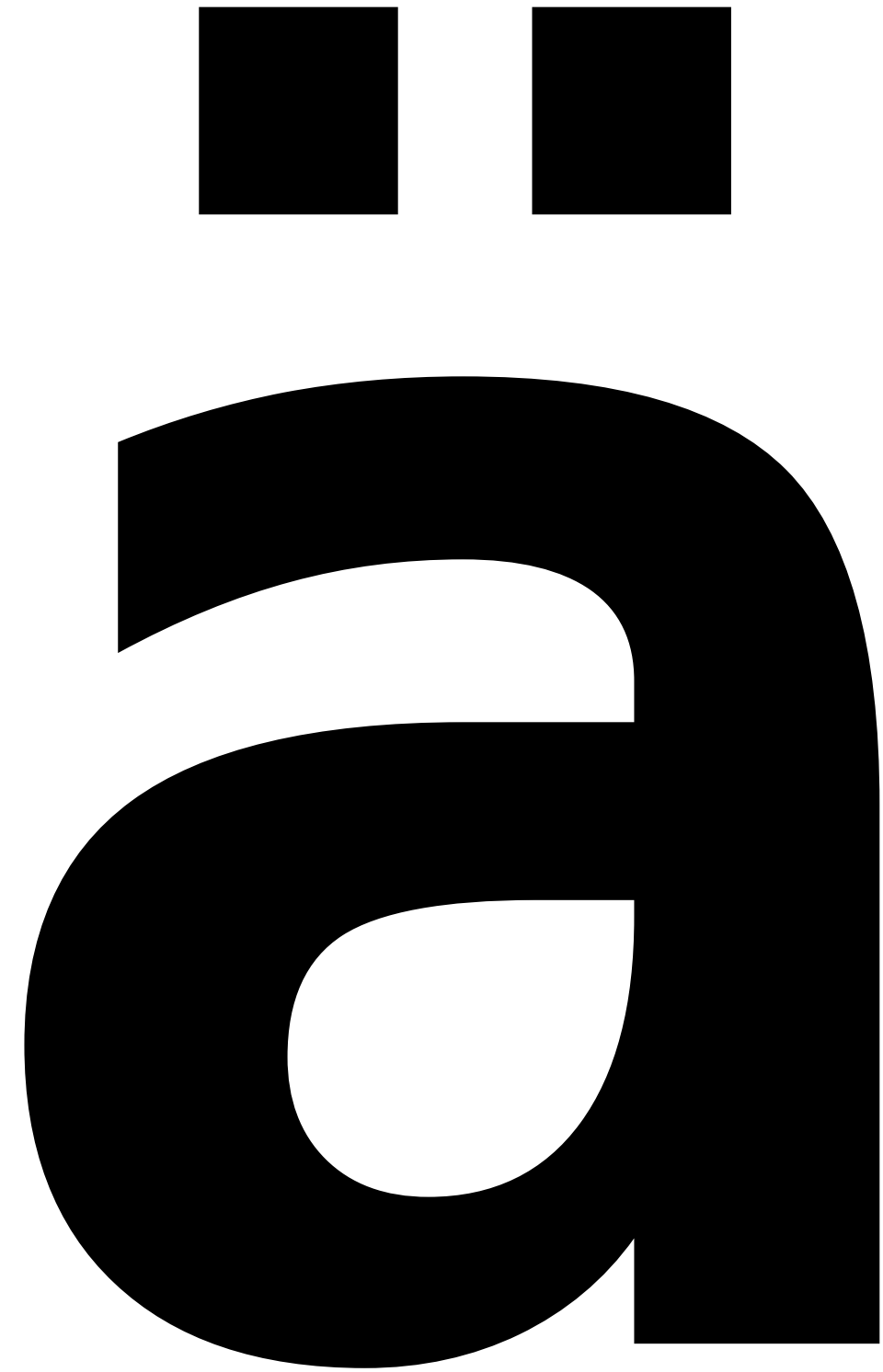




N

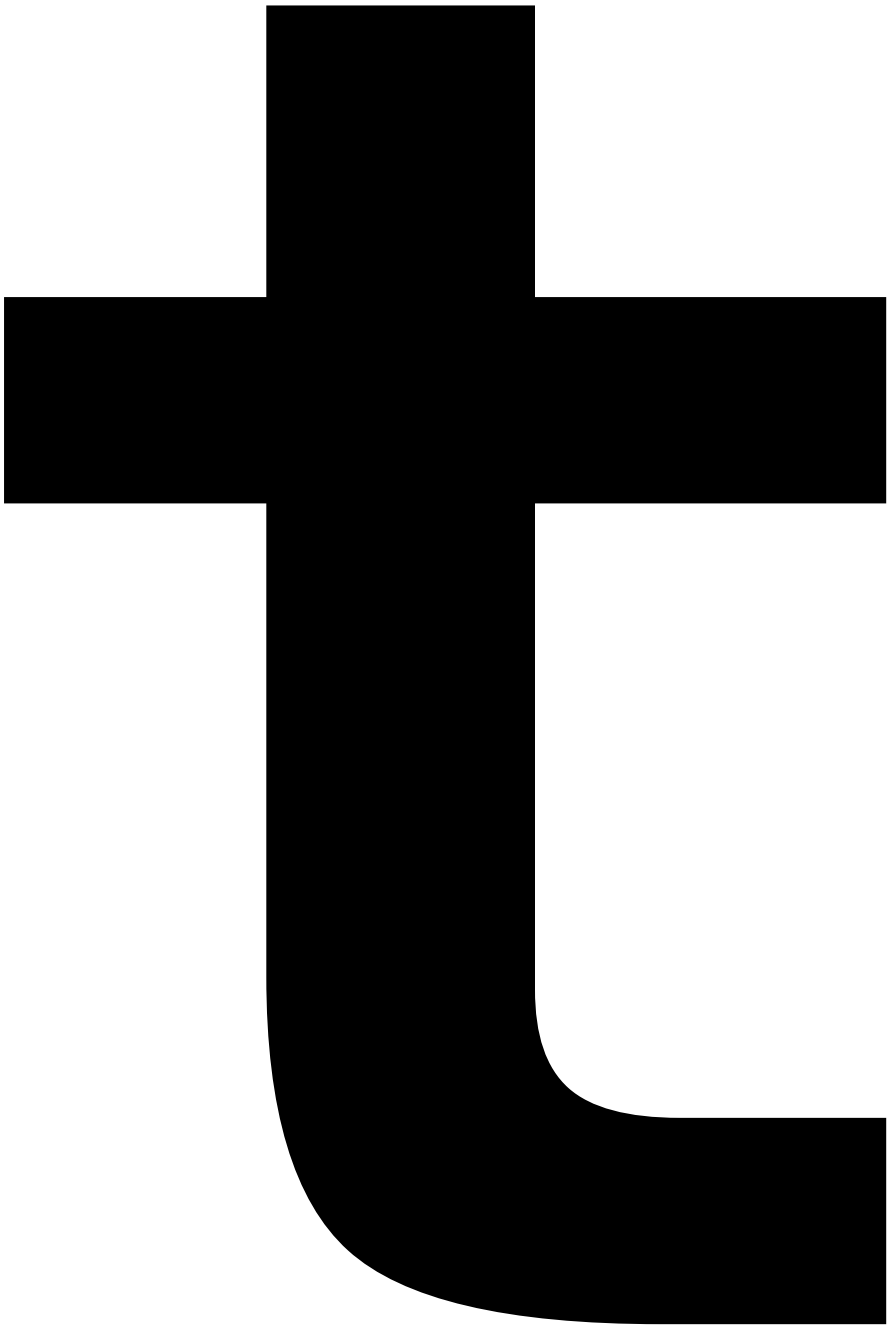


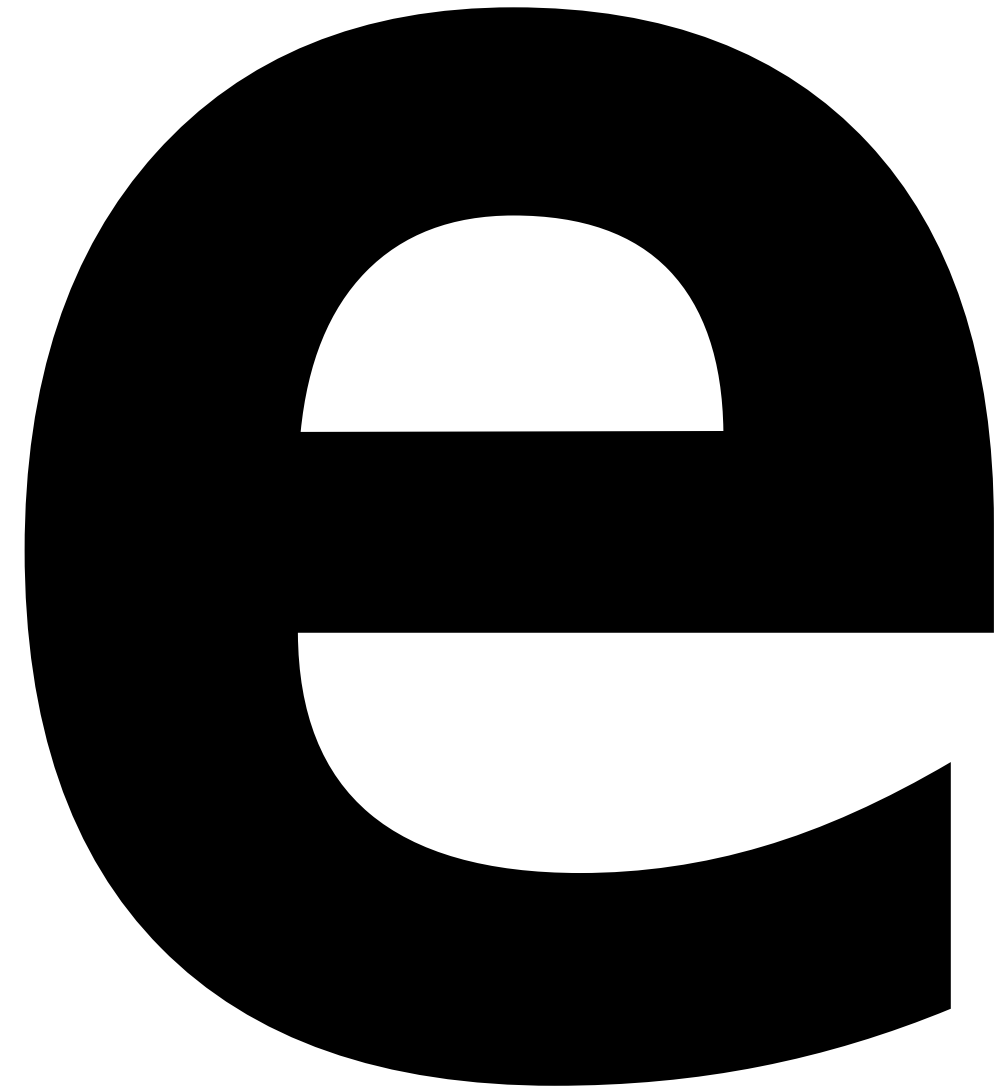


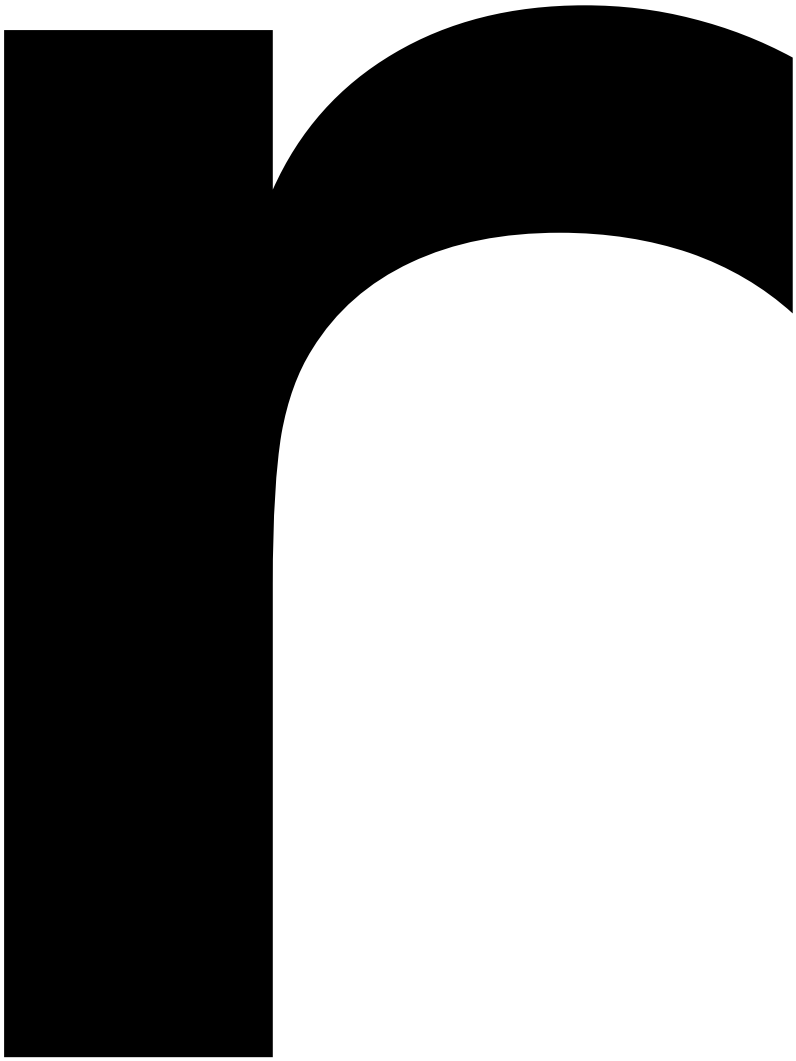


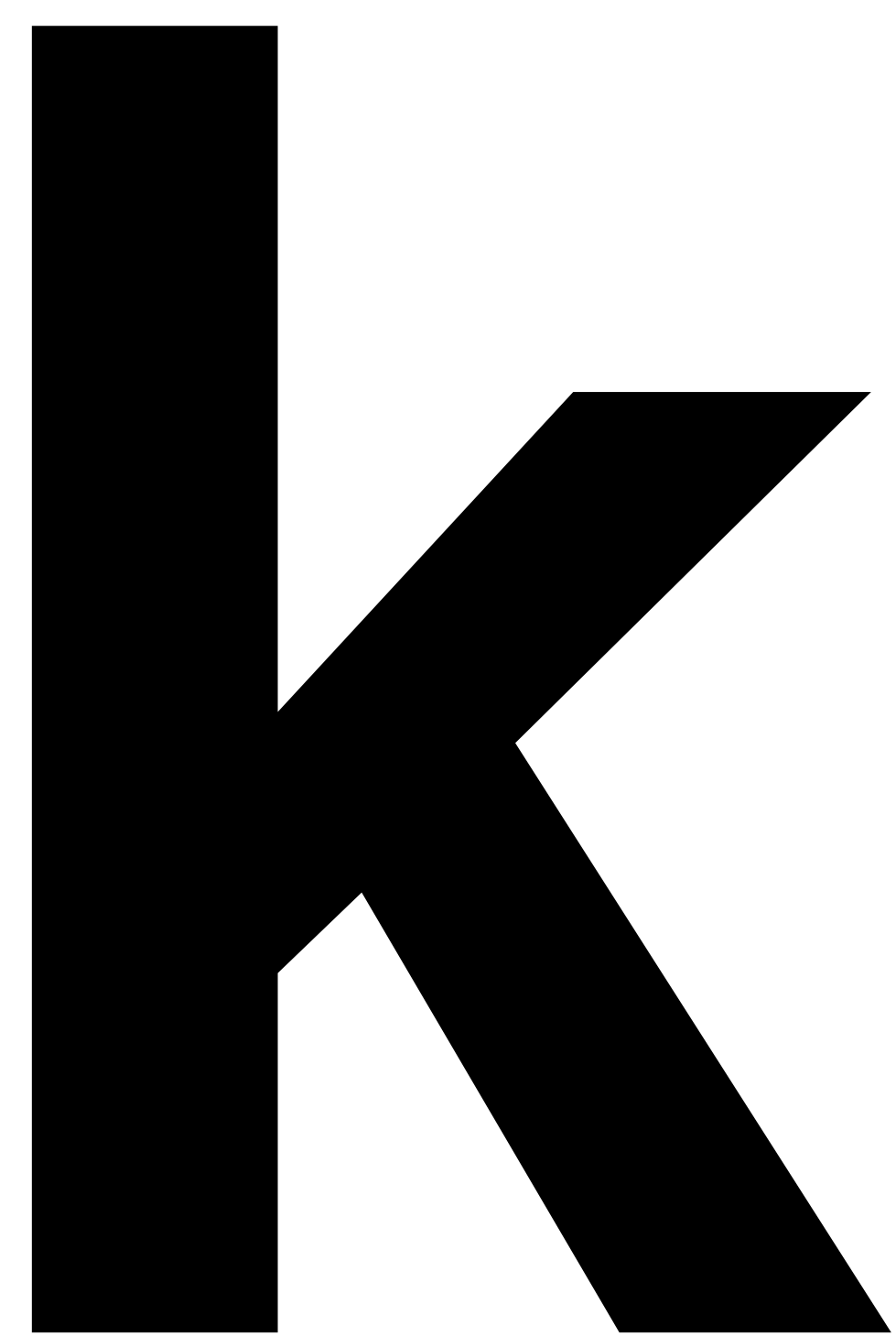
S

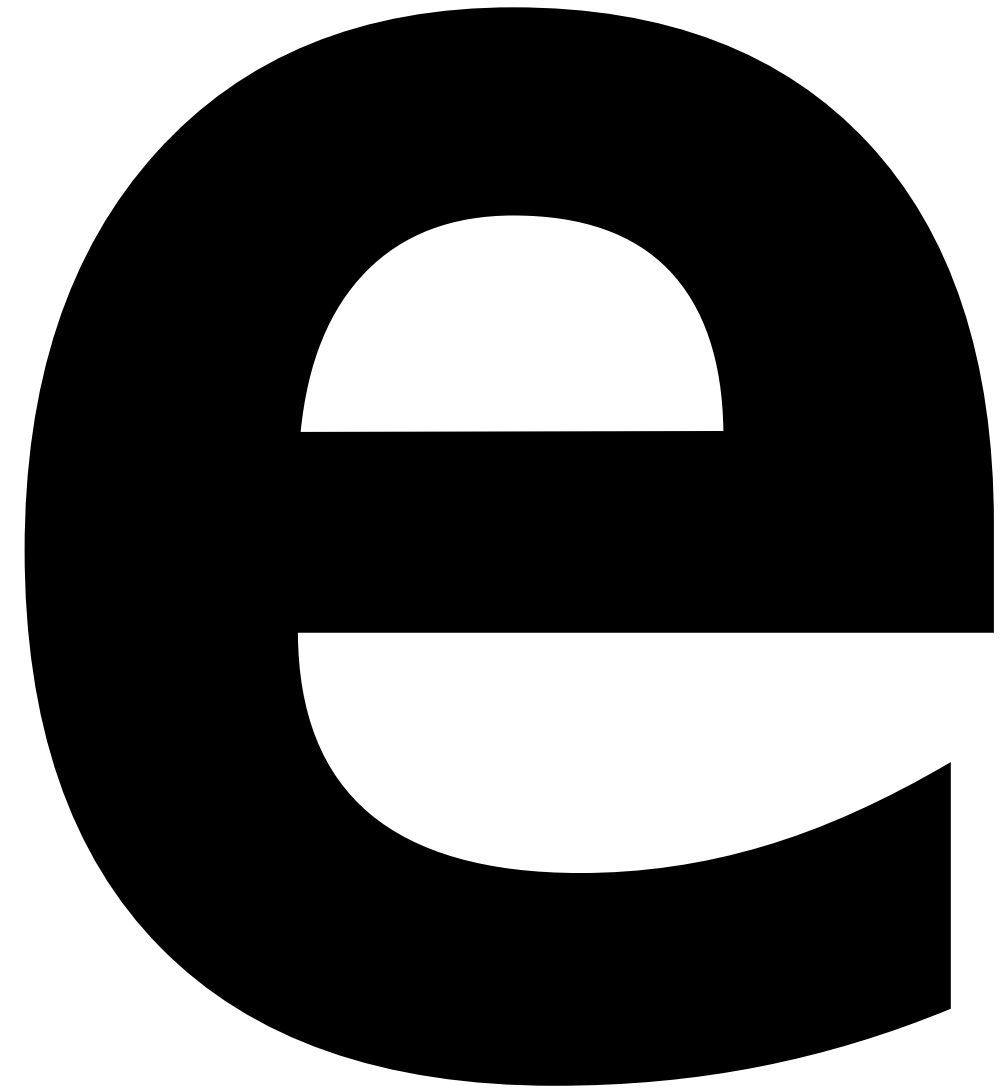
S

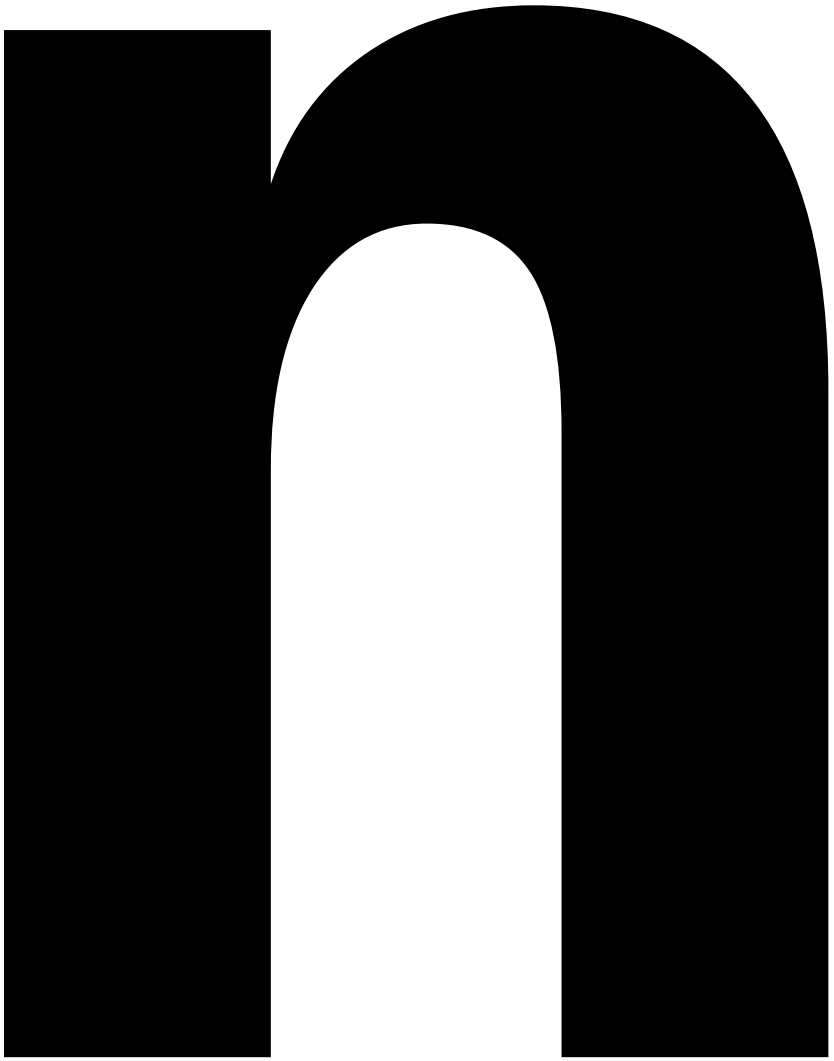


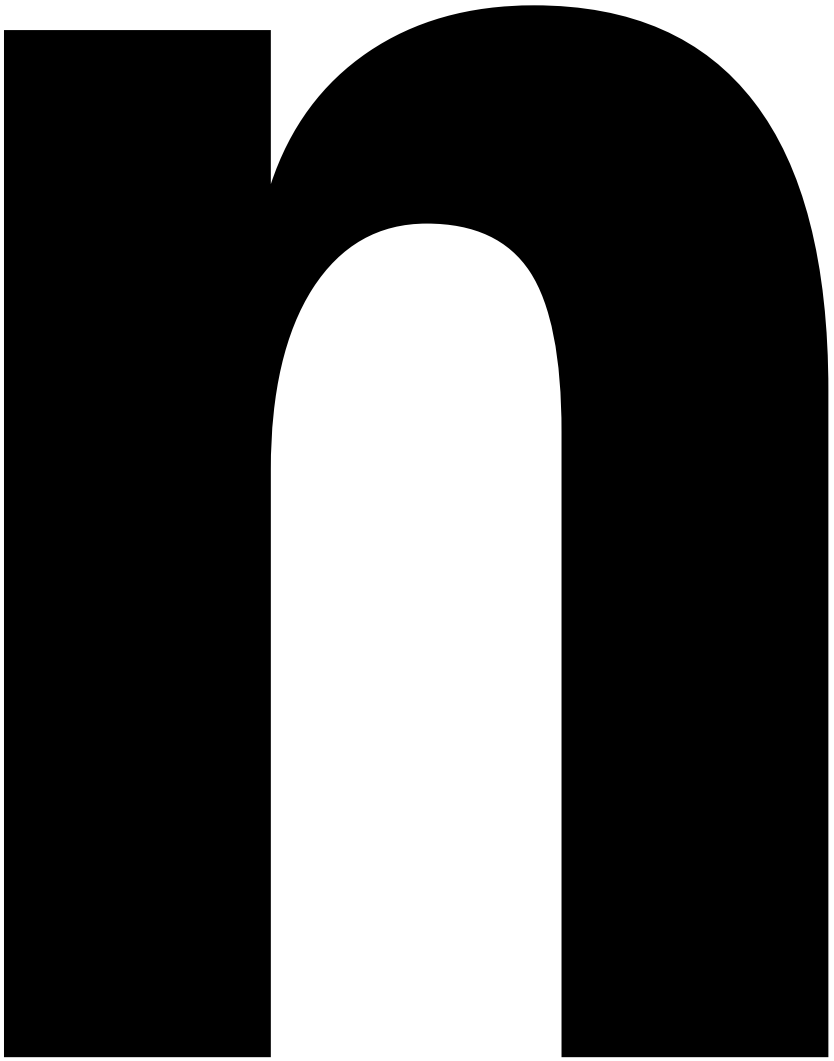


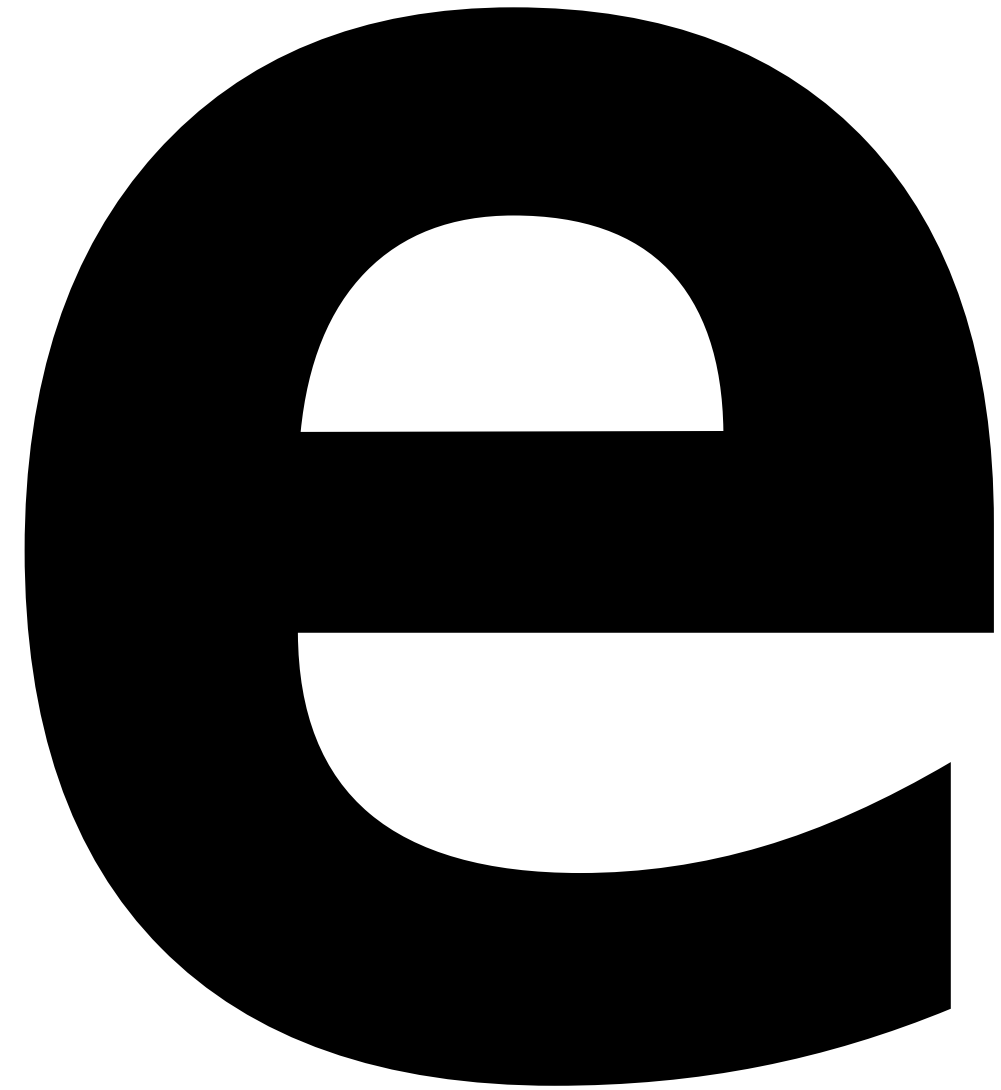


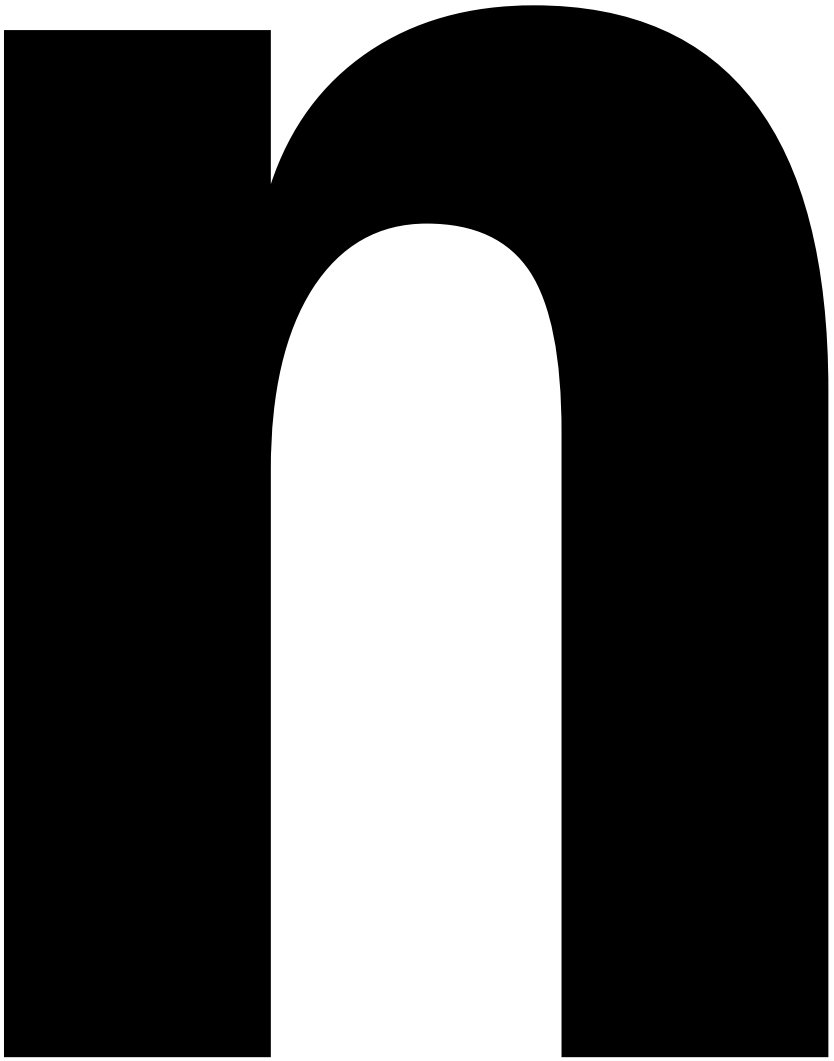


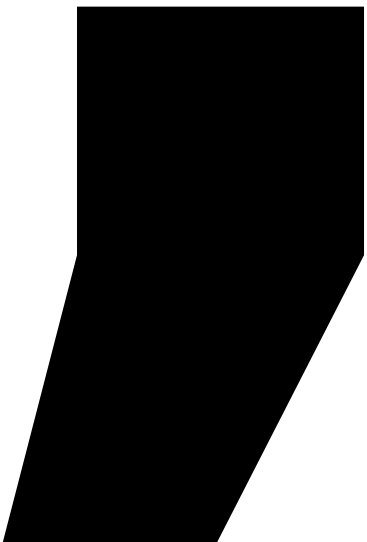




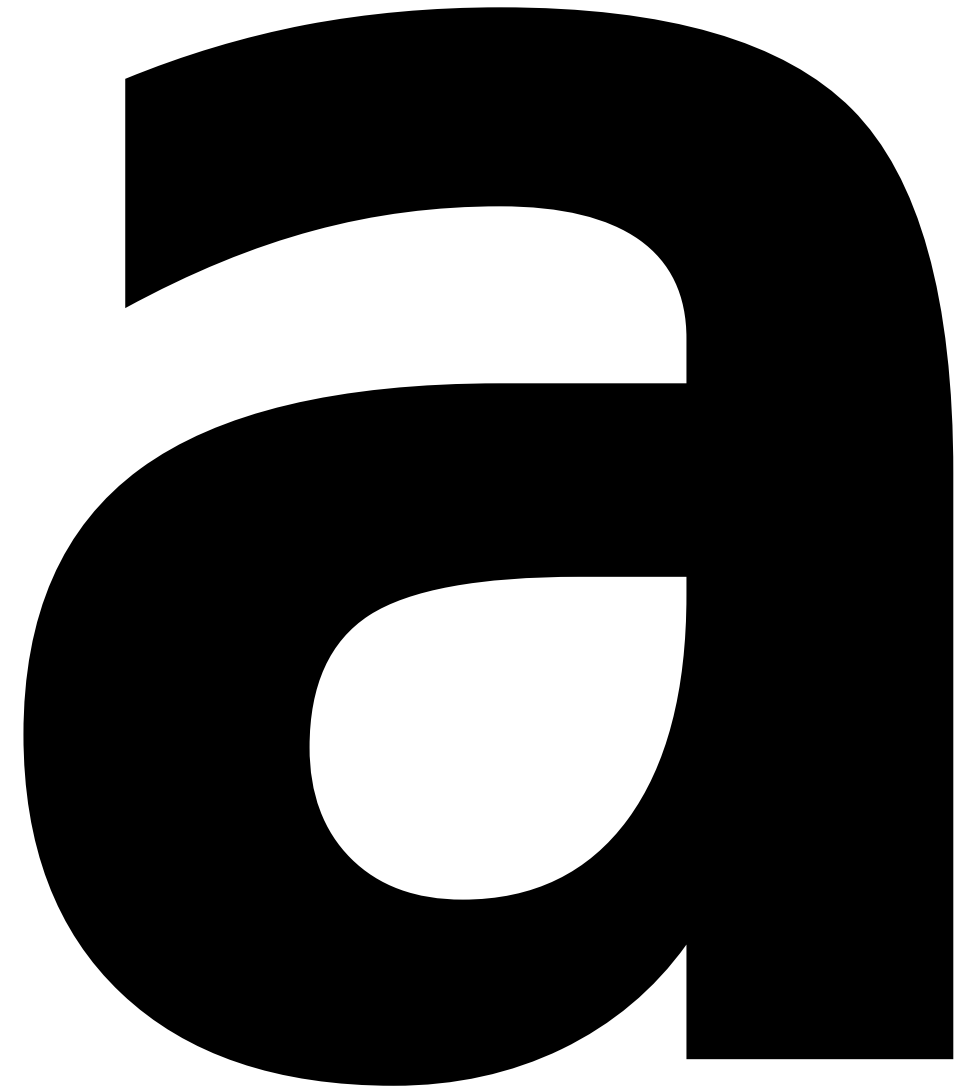


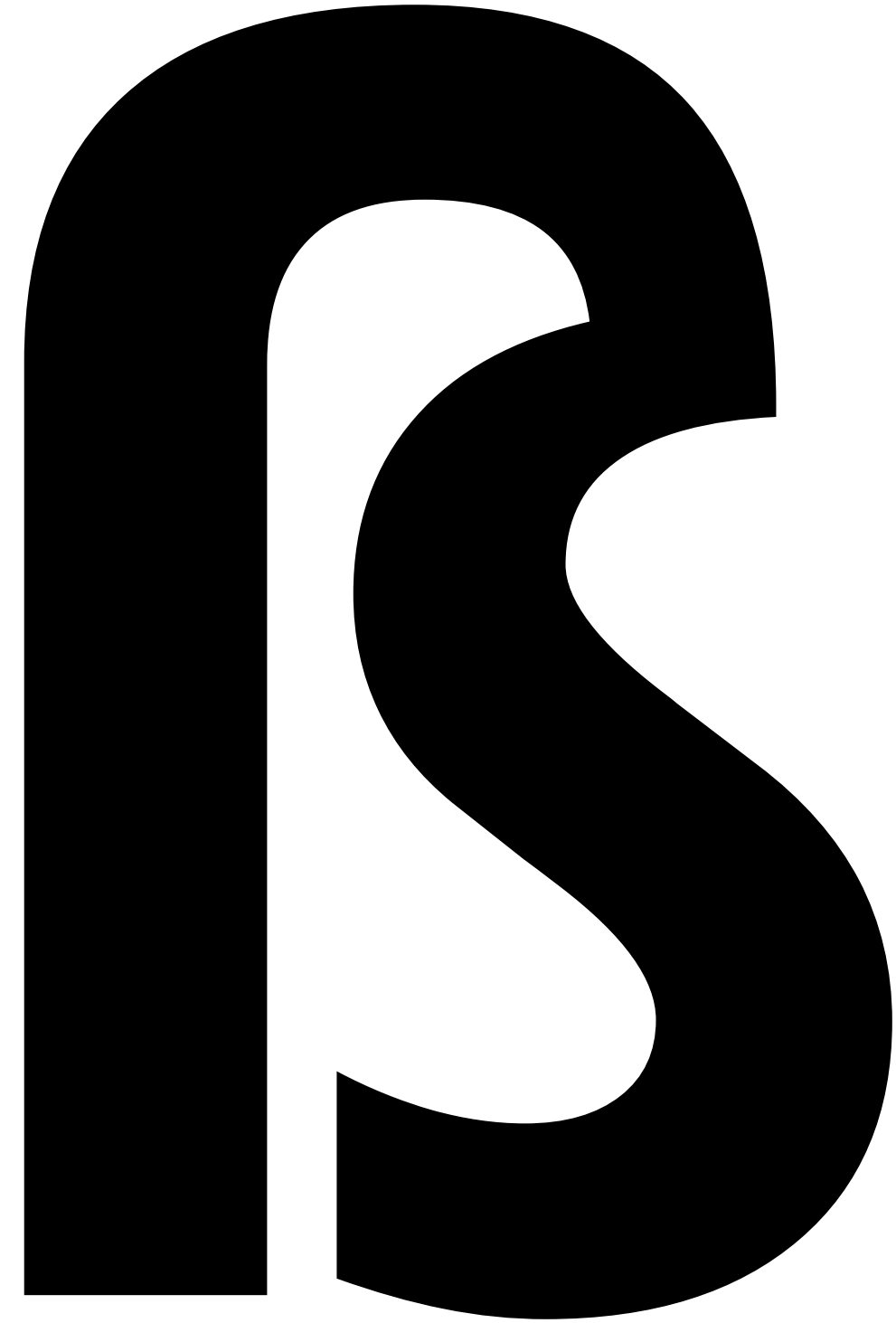


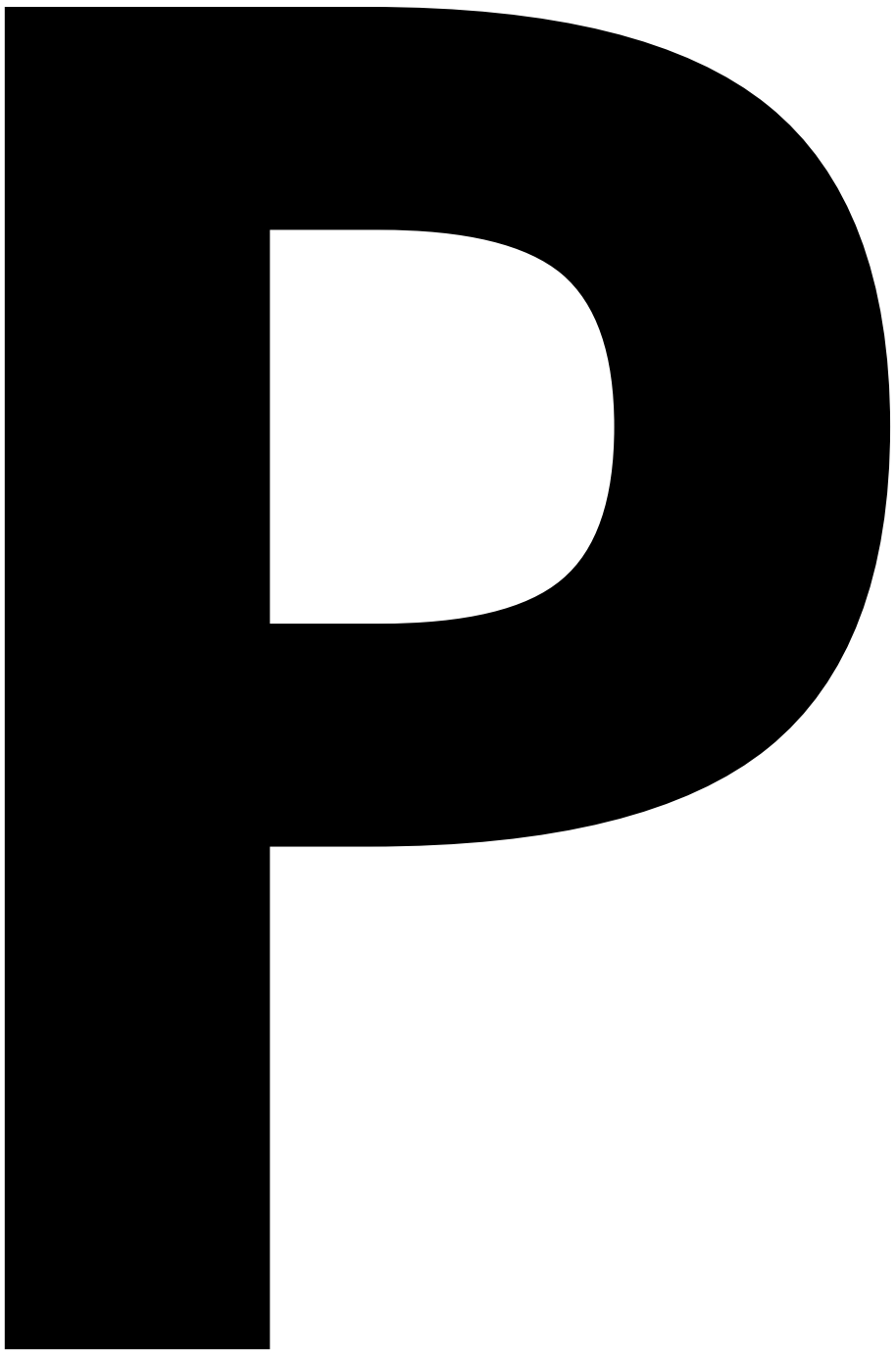


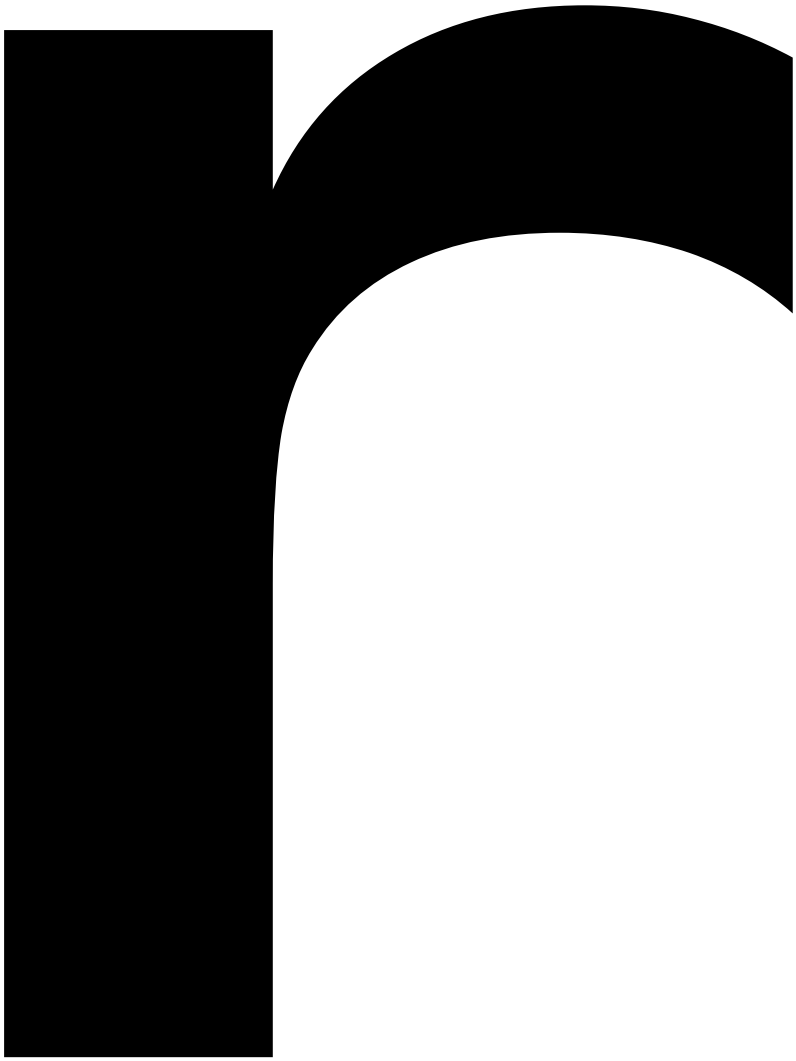


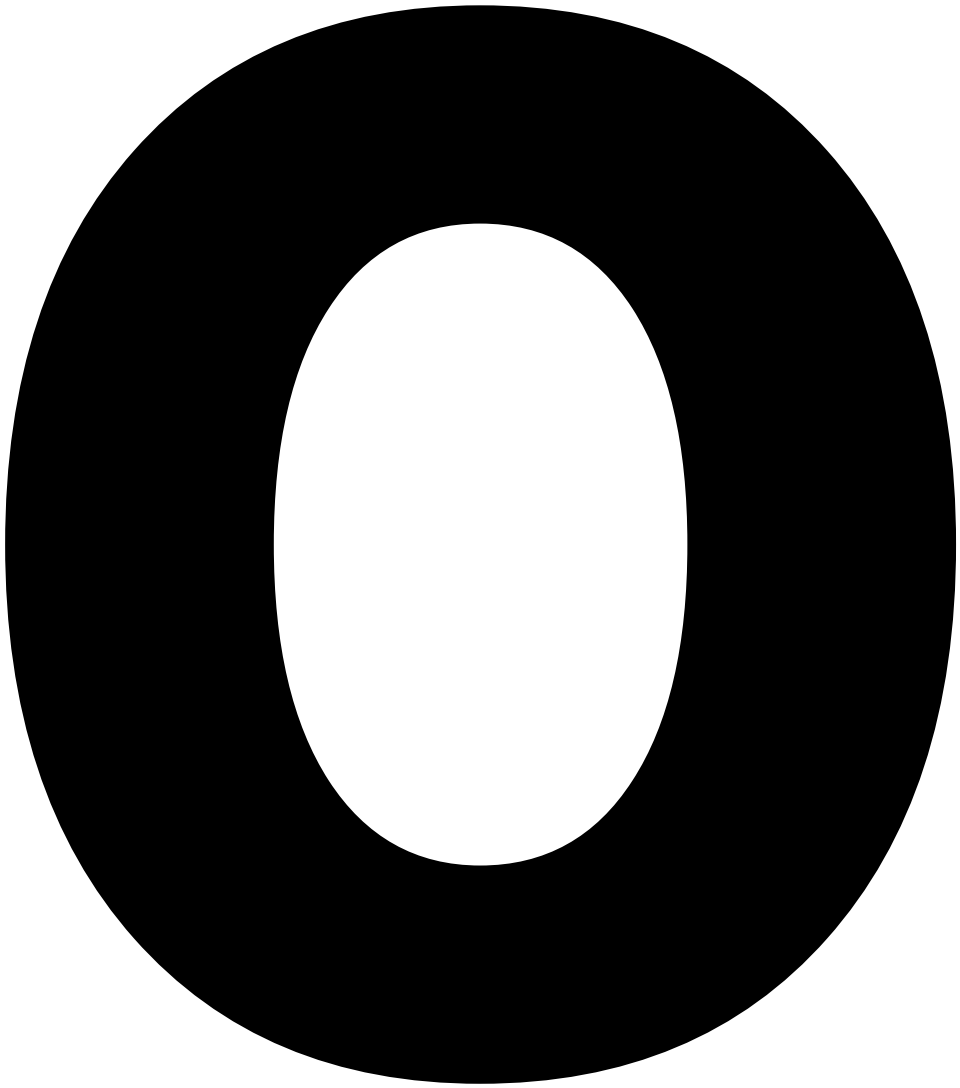
d

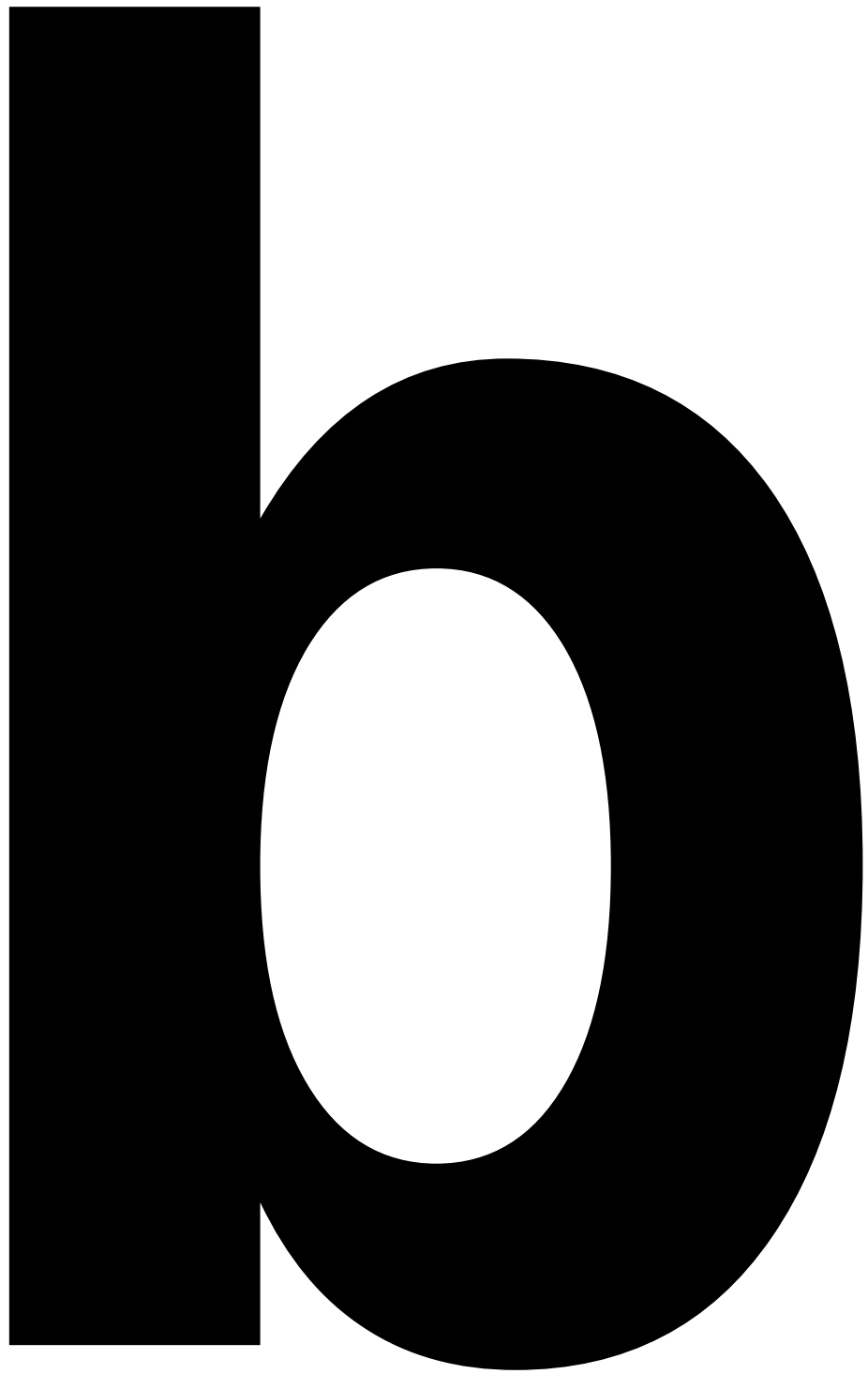


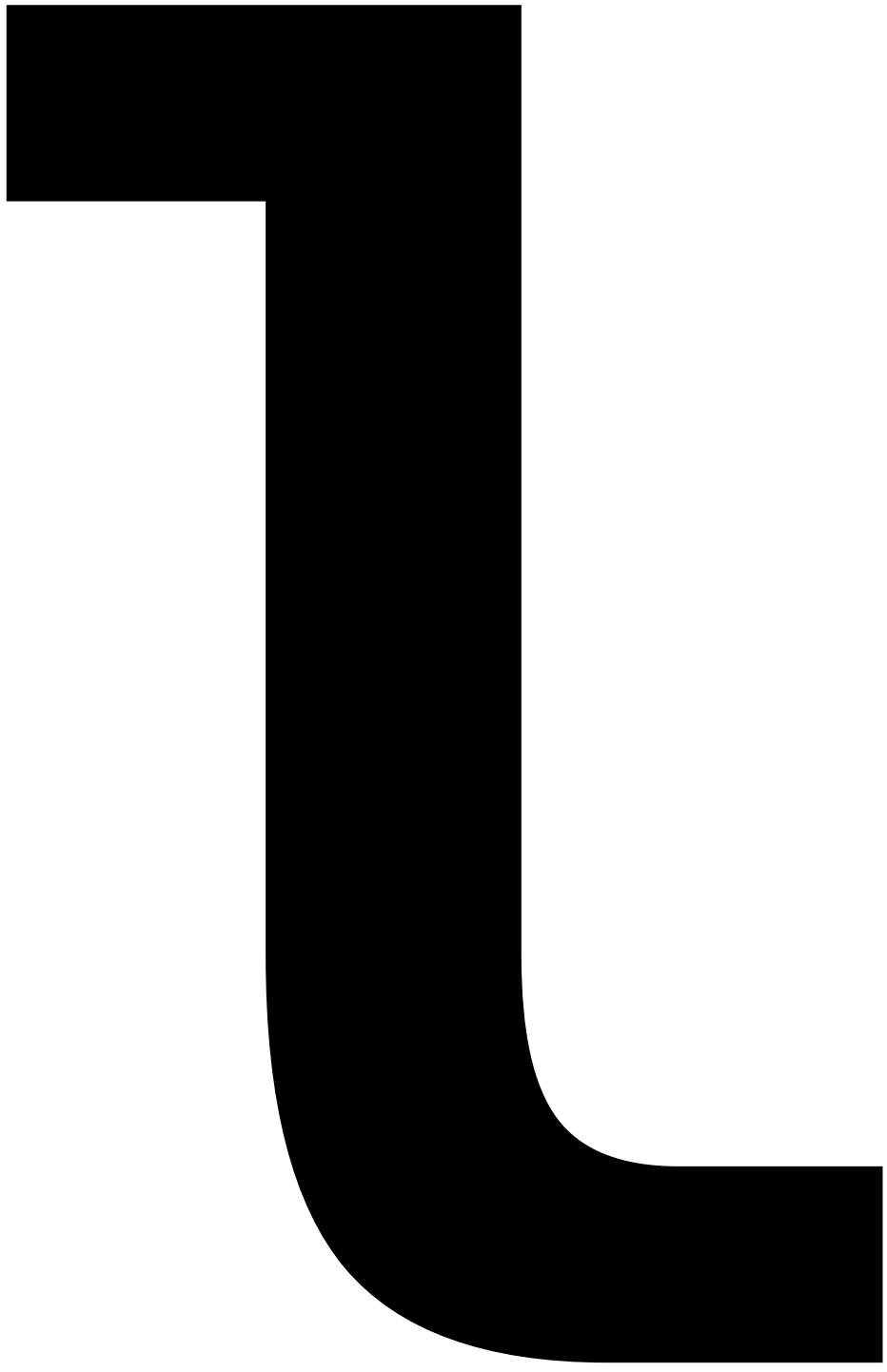


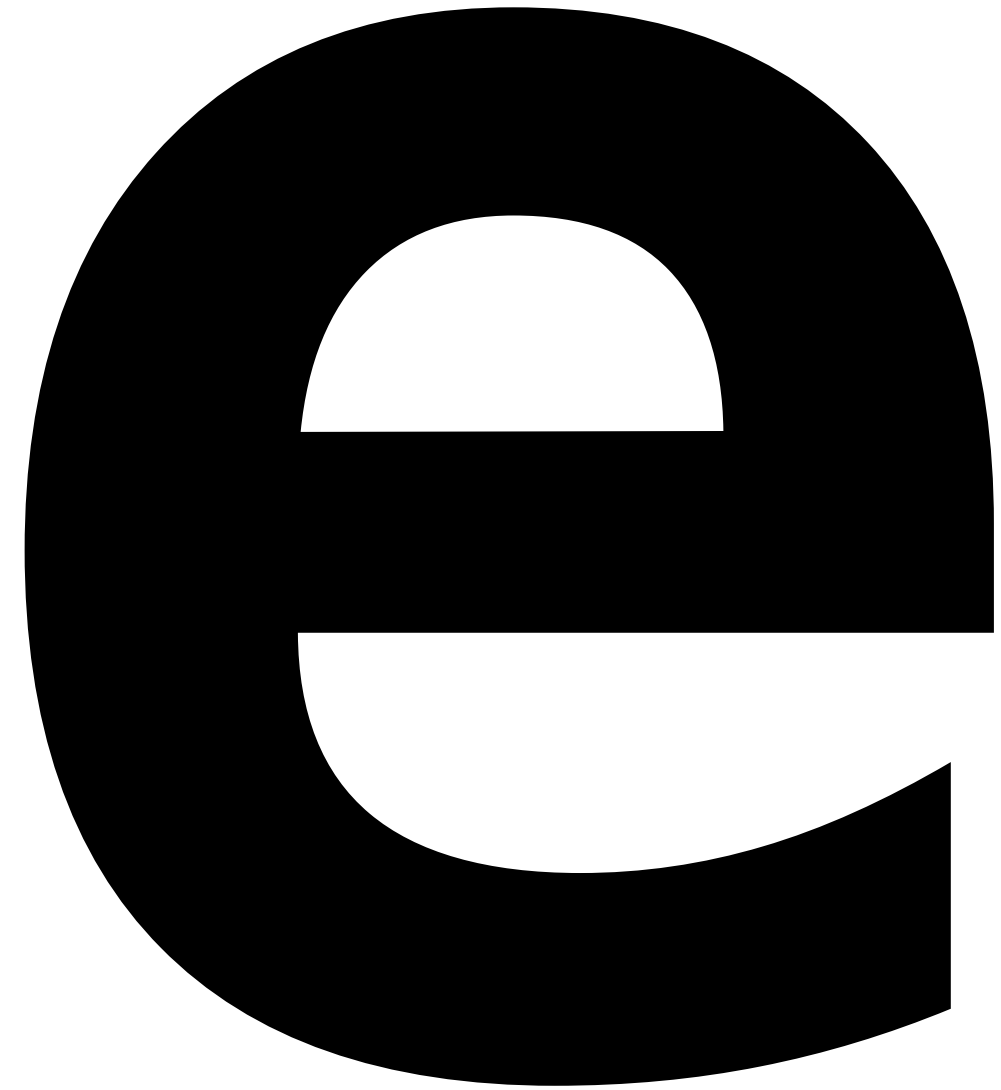


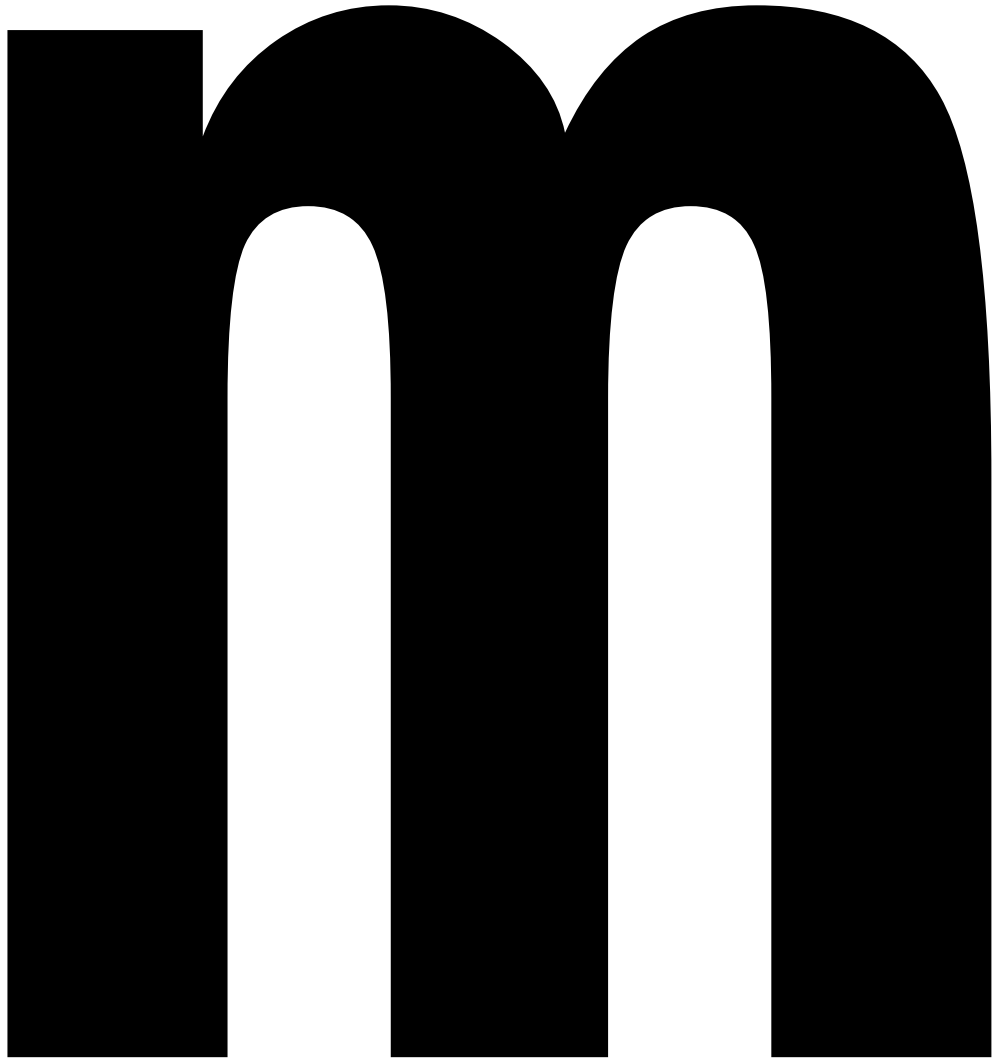


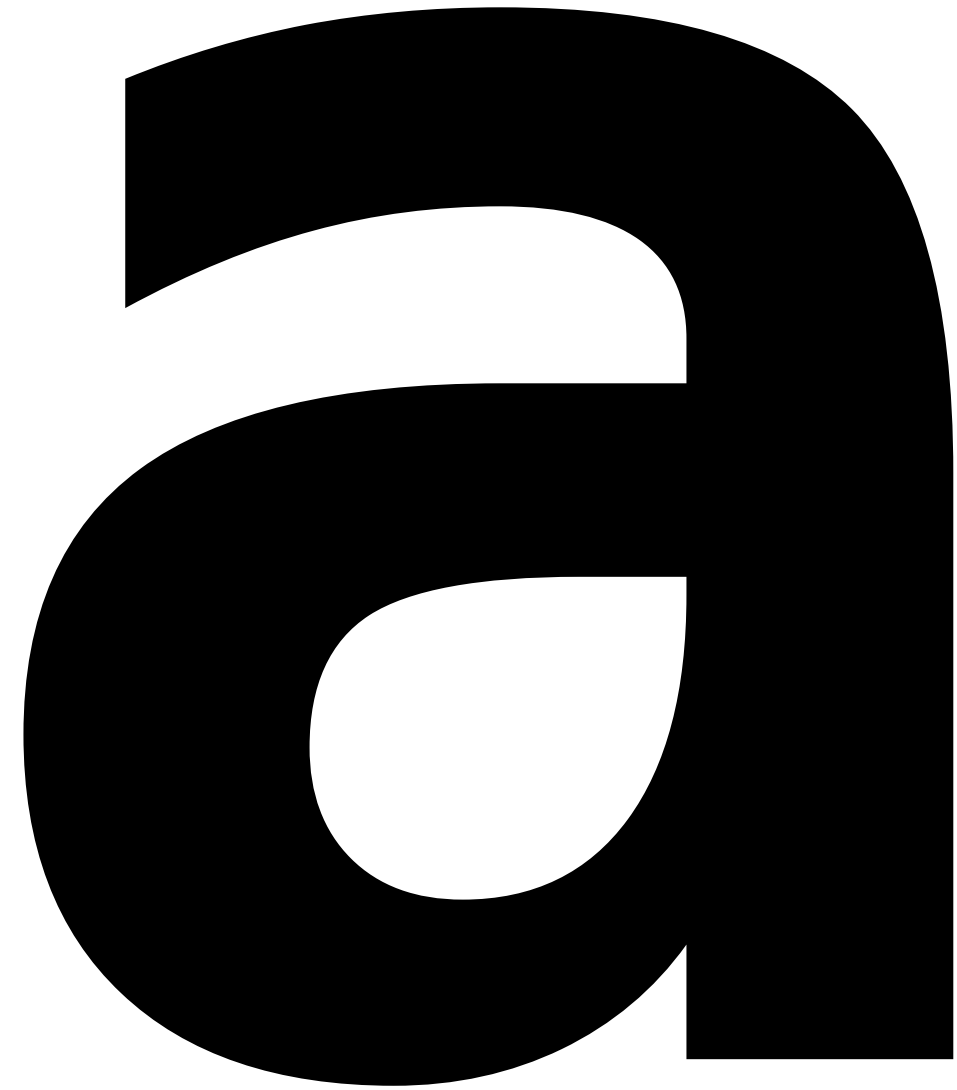


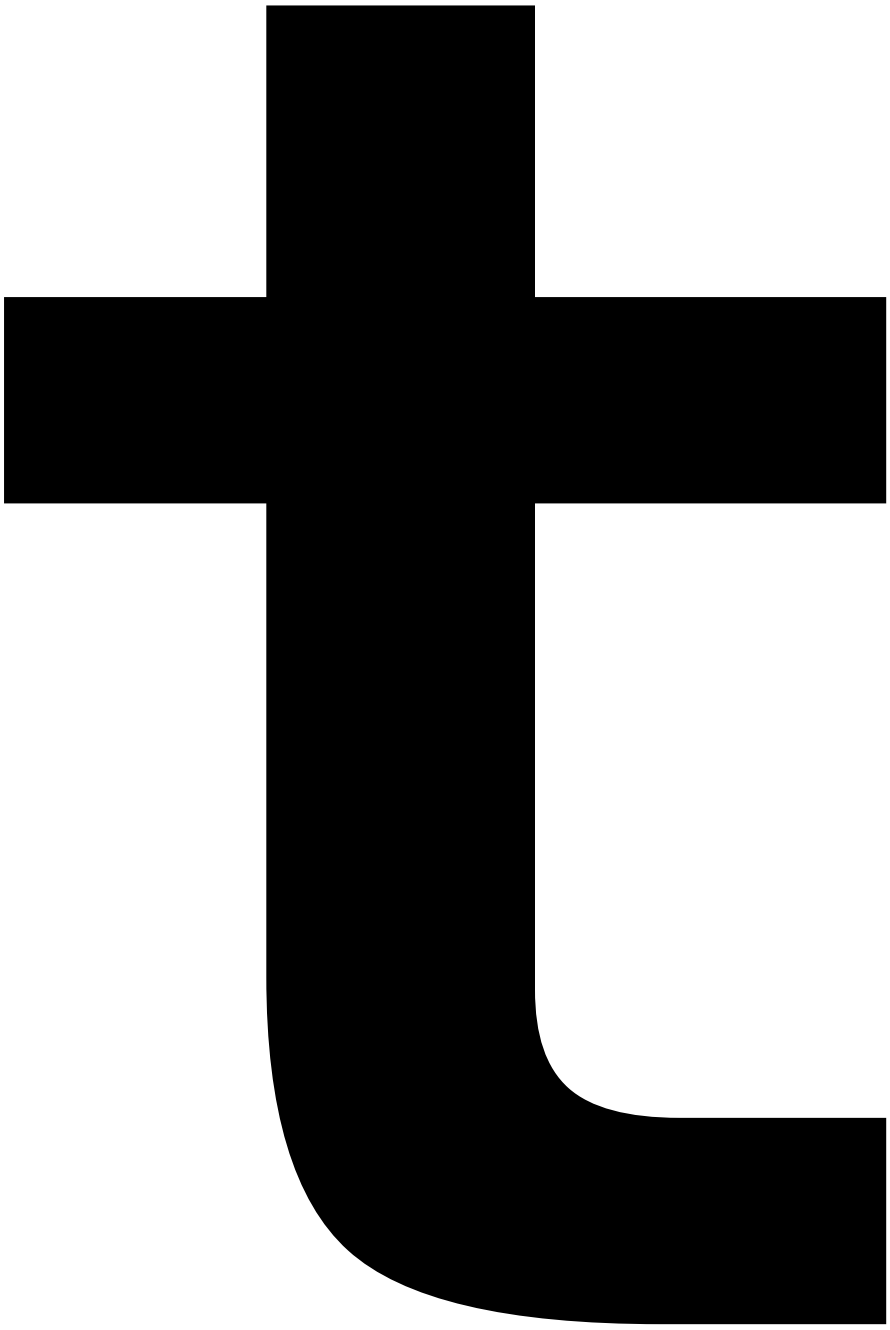


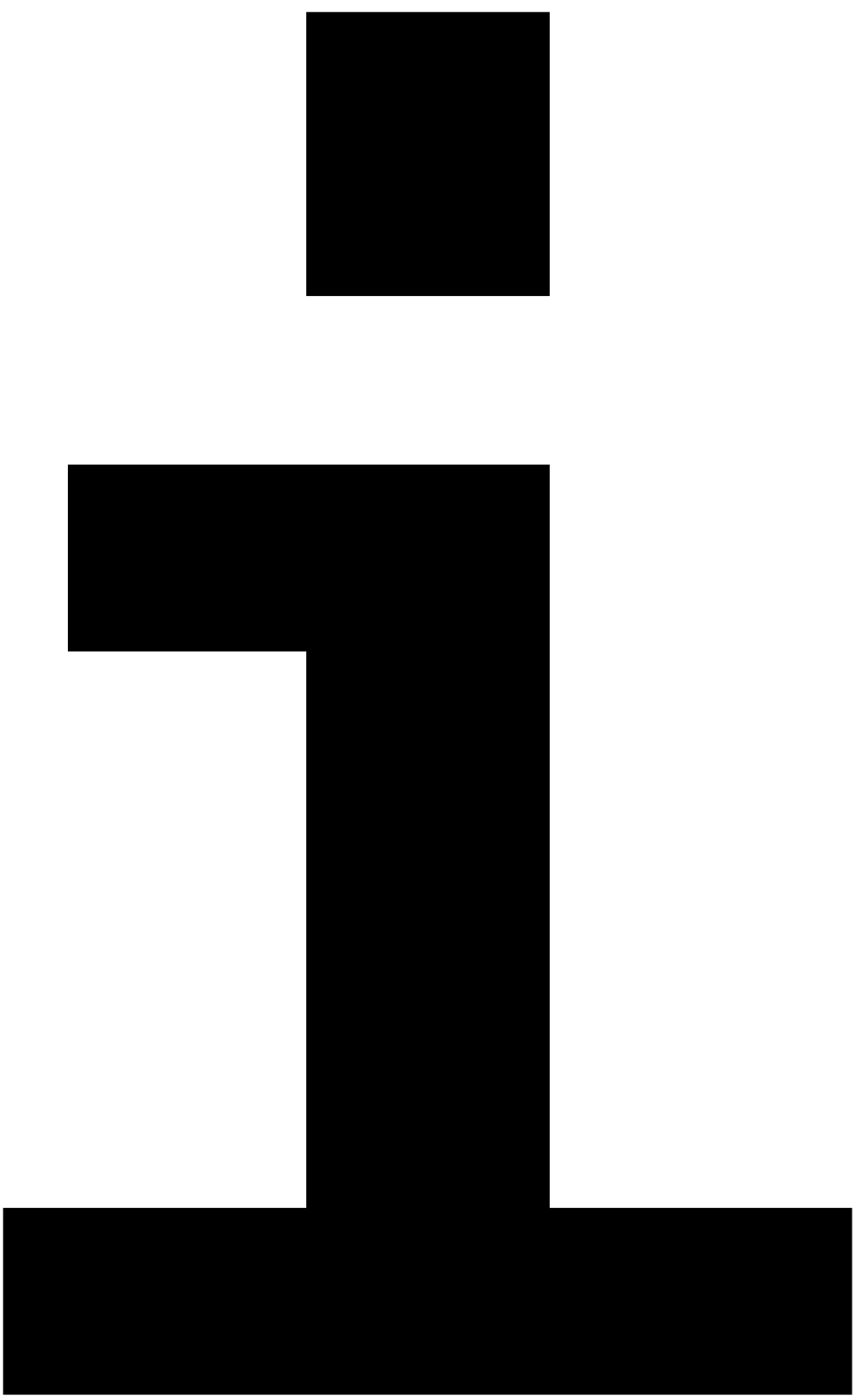


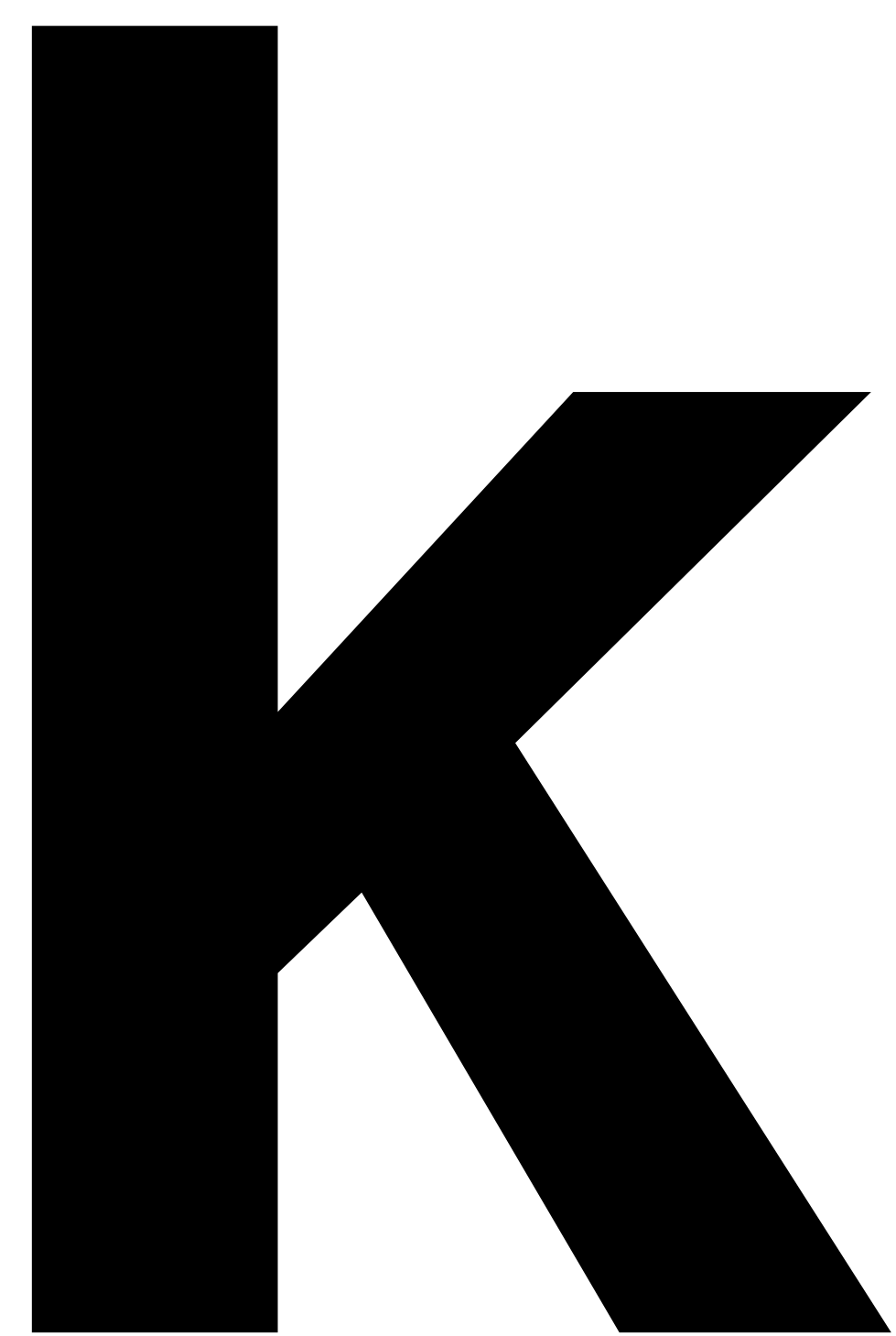






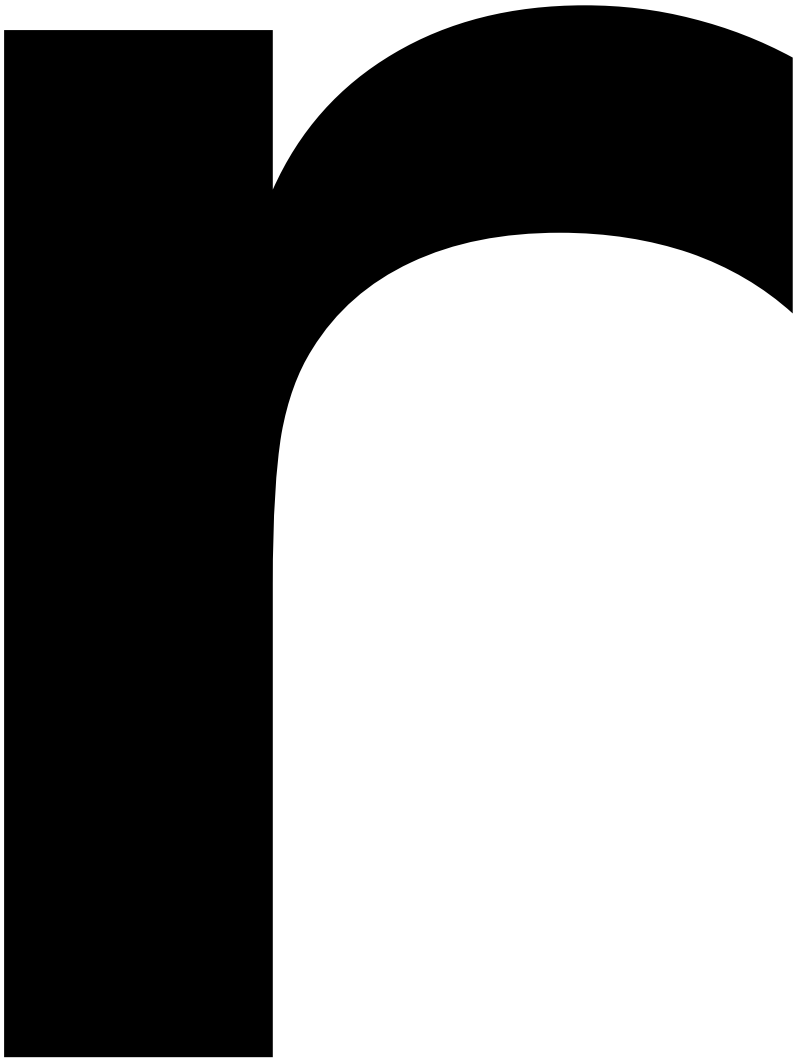


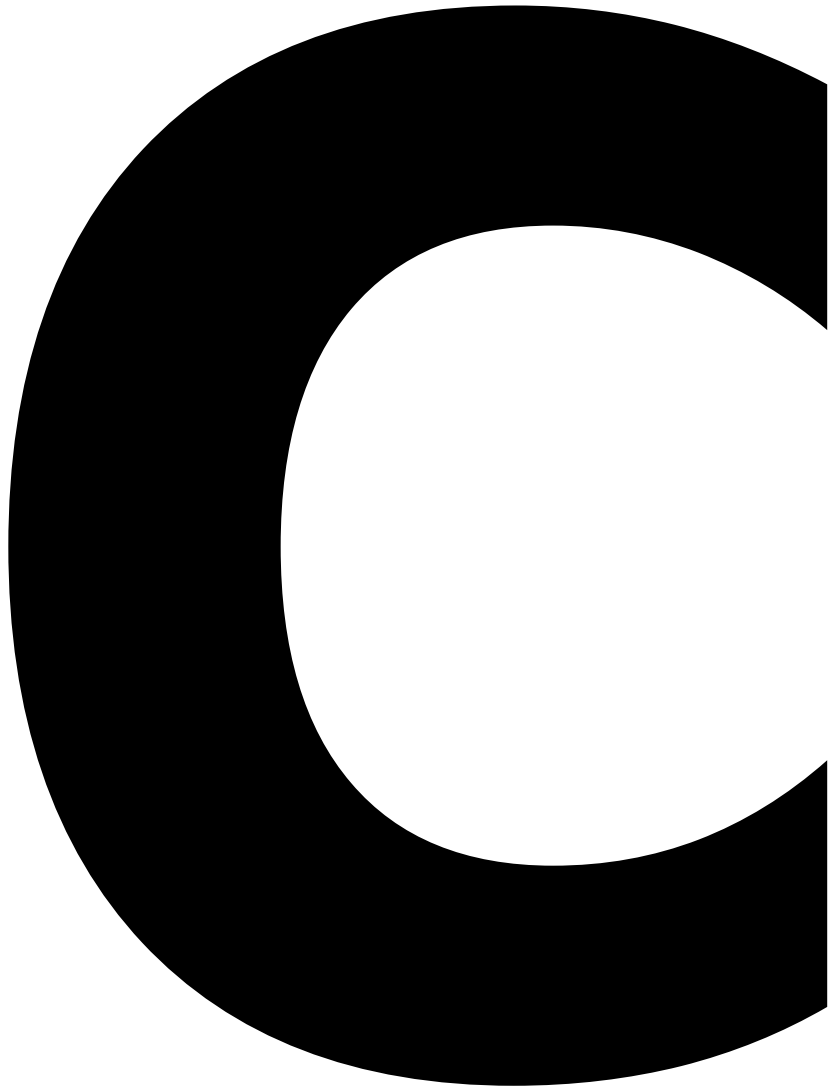


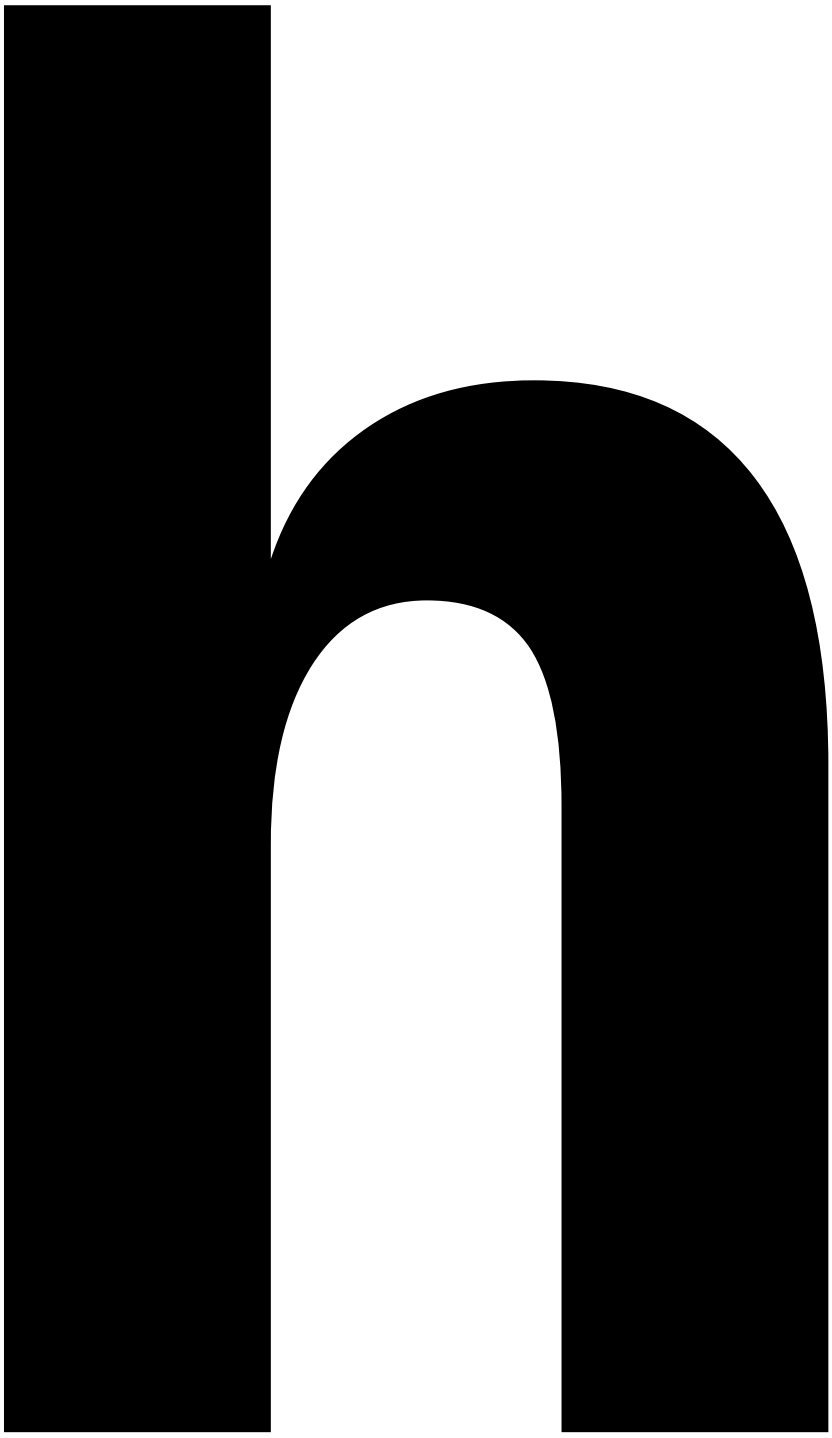


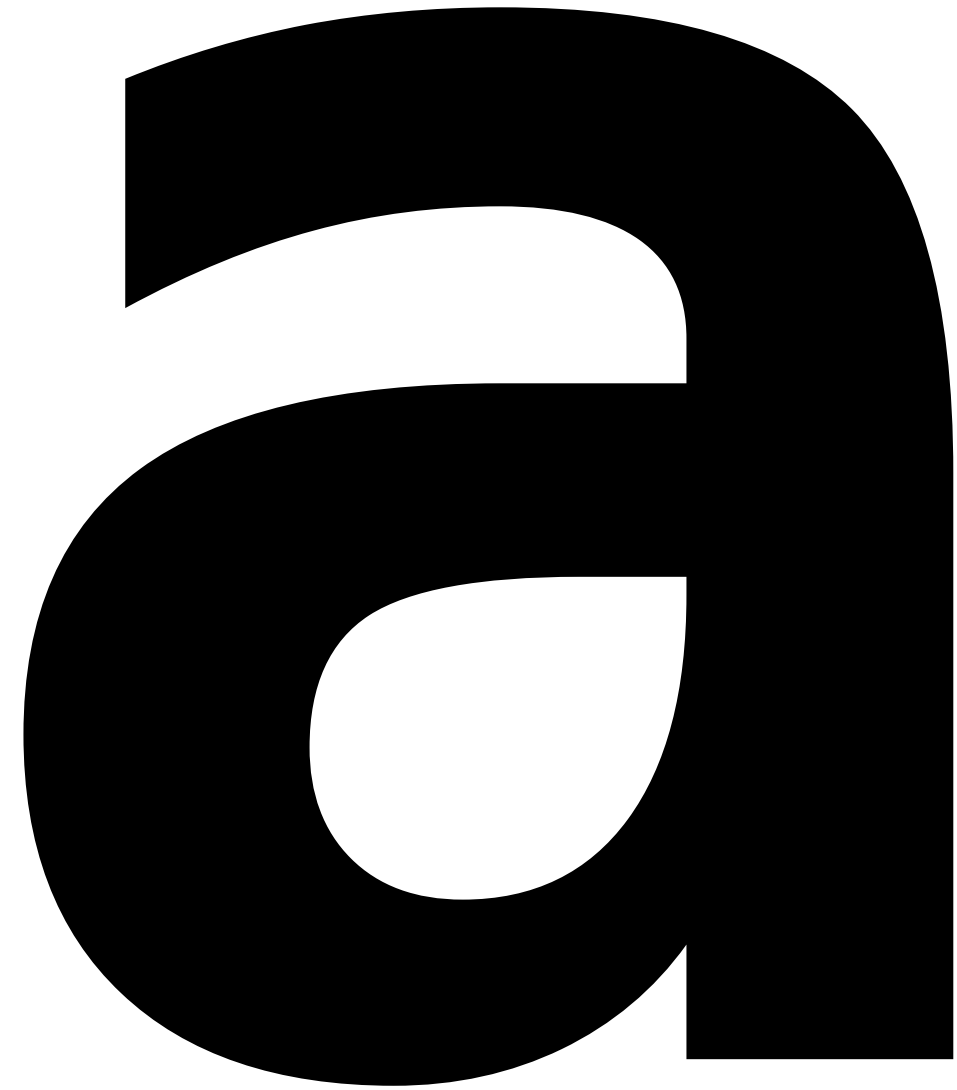
d

u



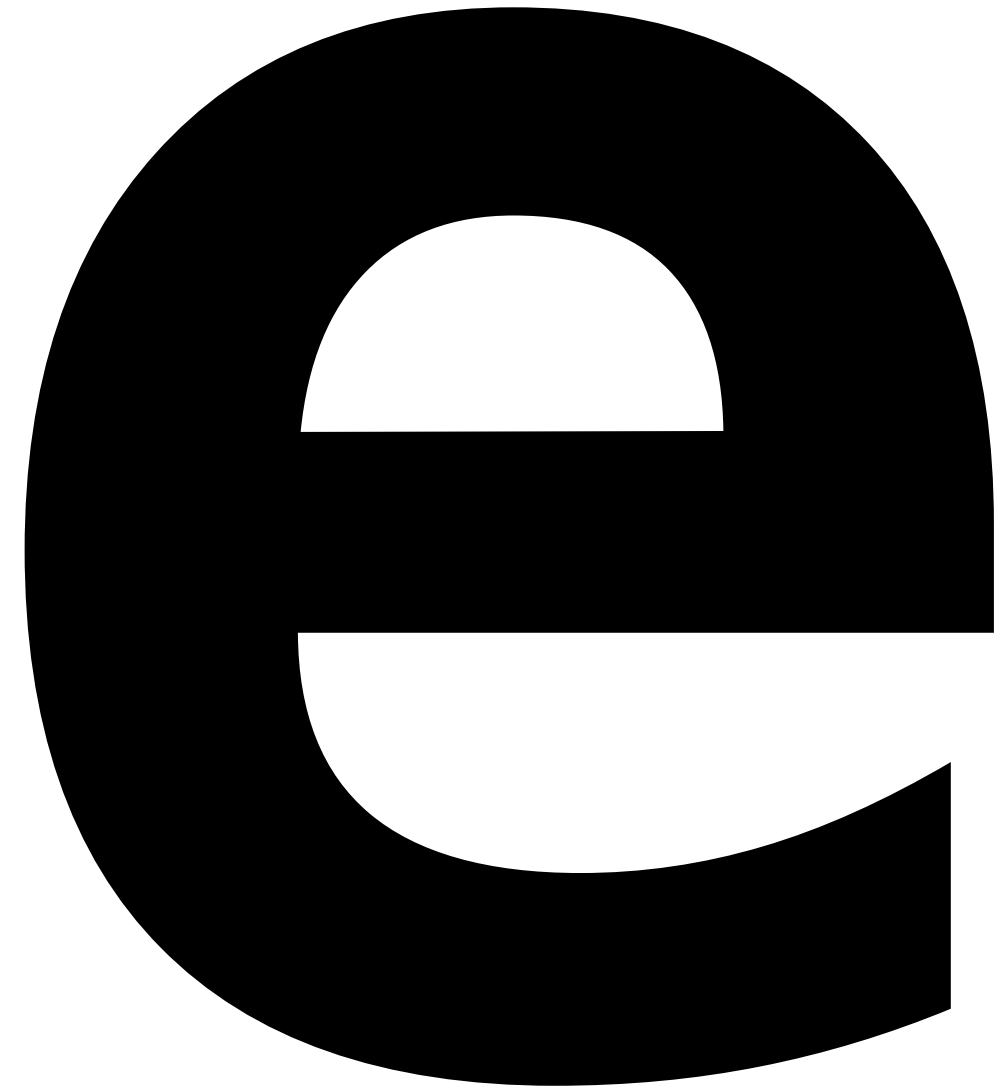


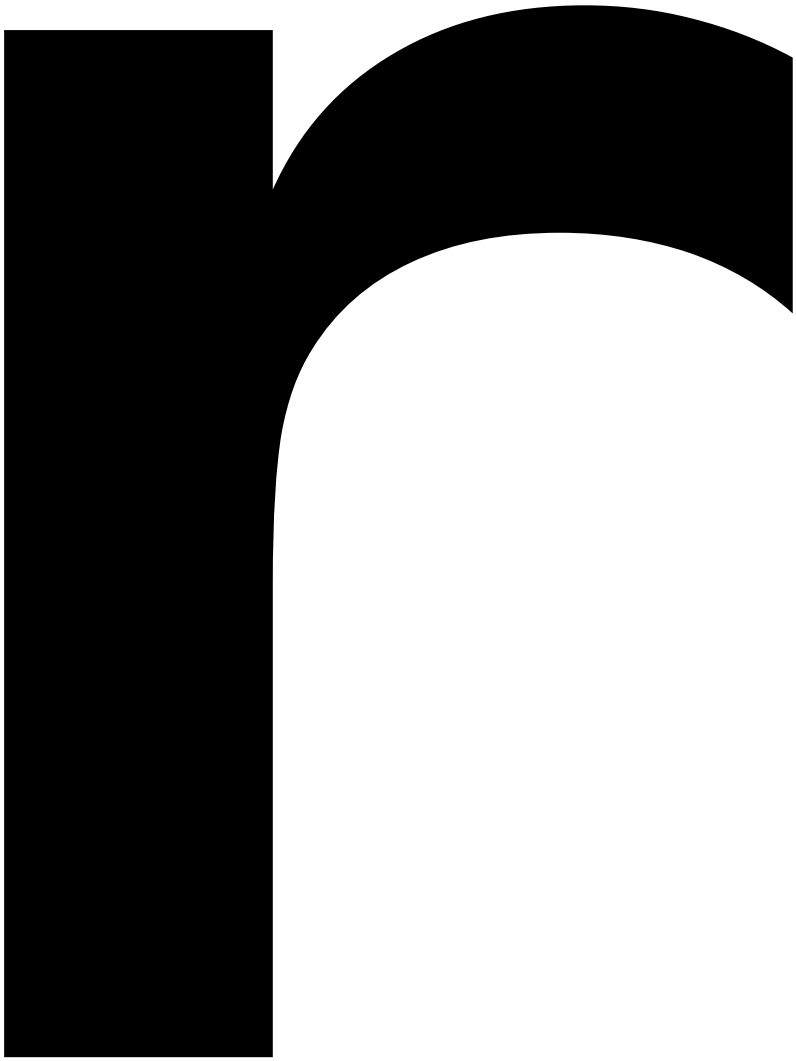


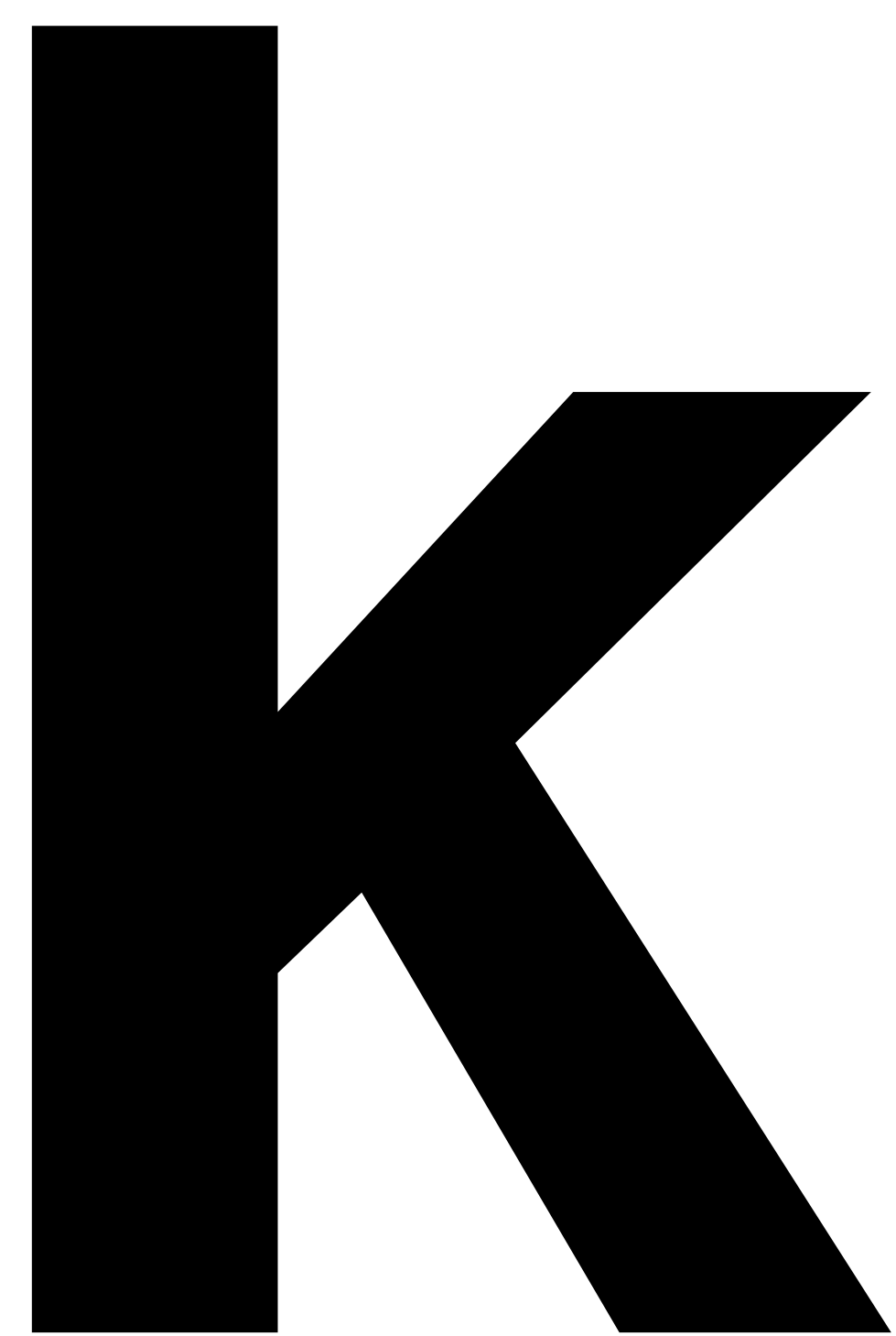


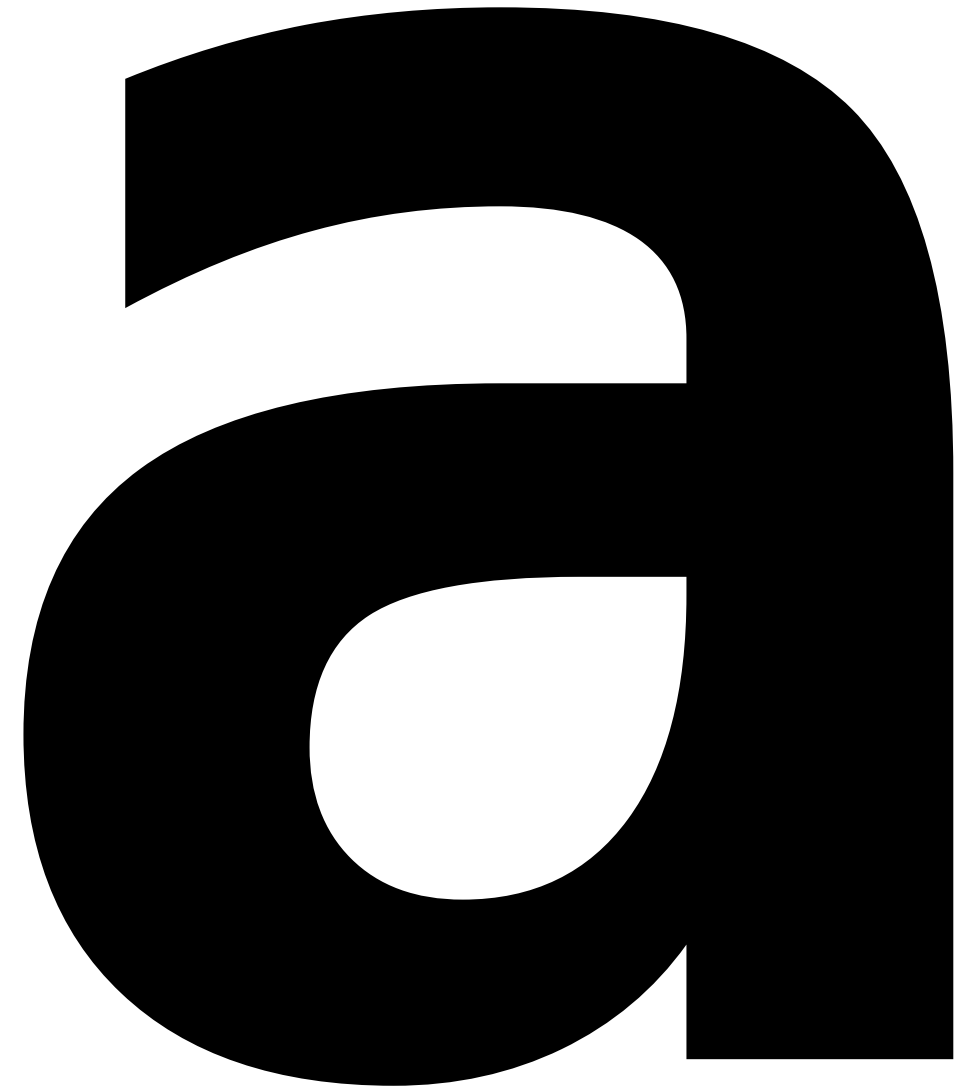
u

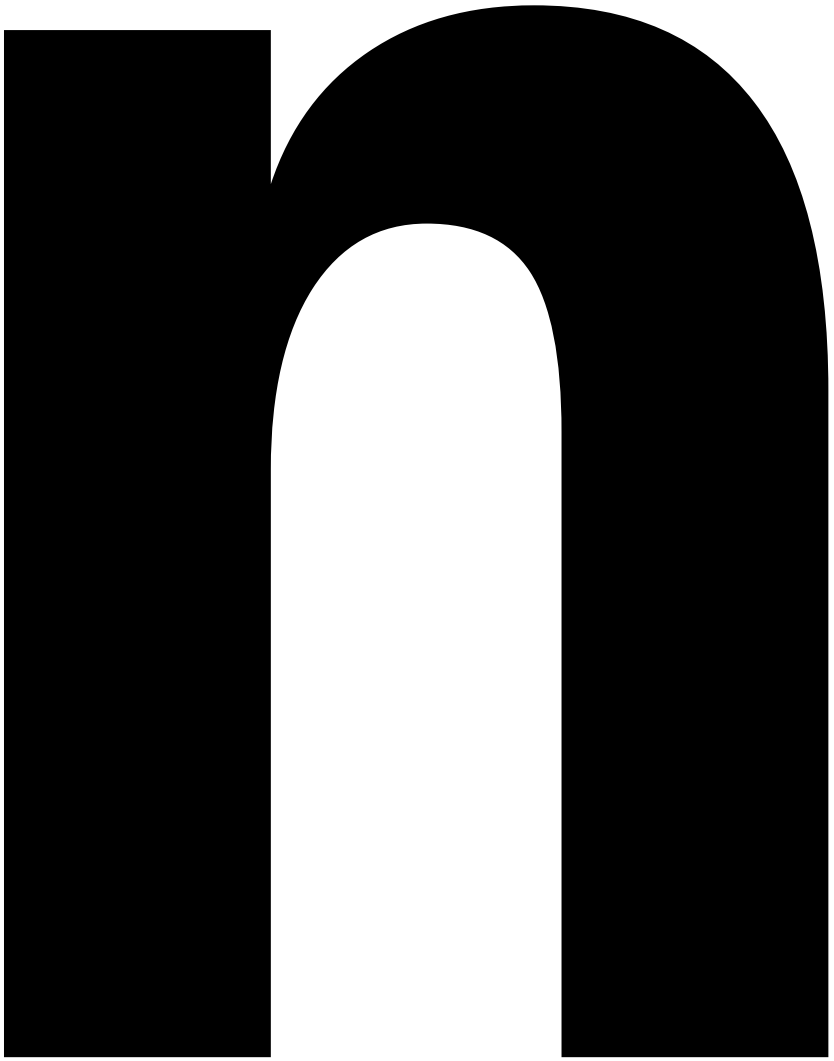
S

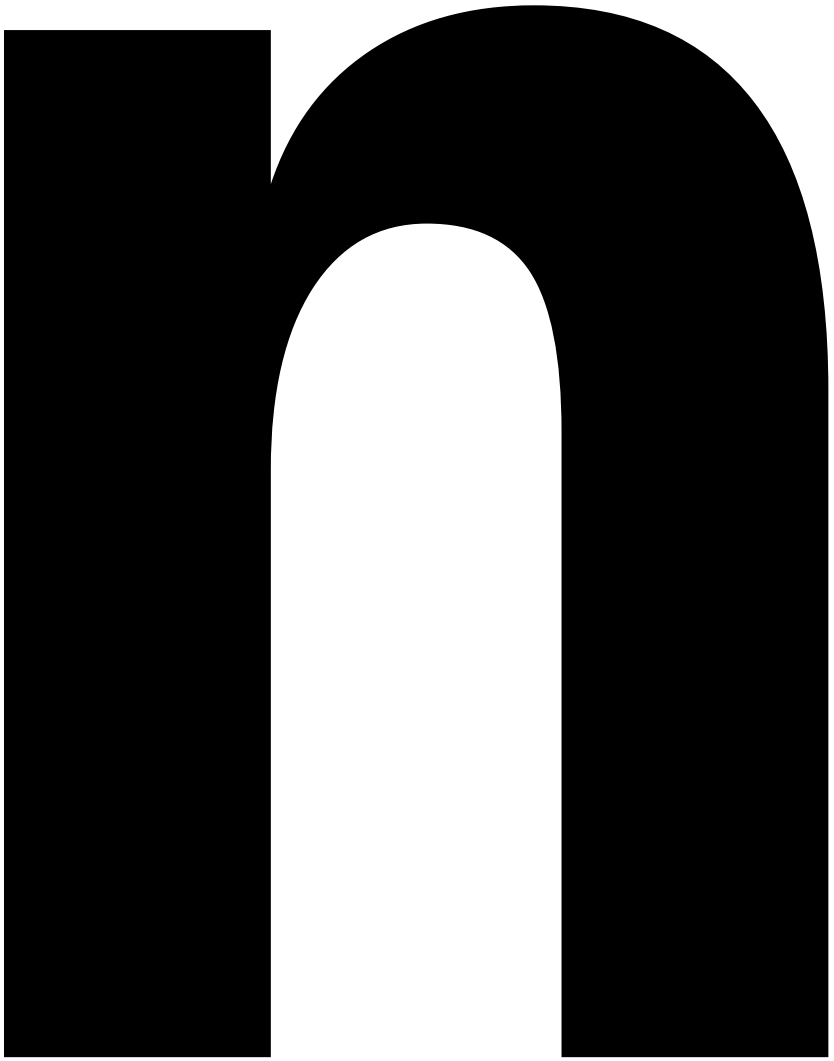


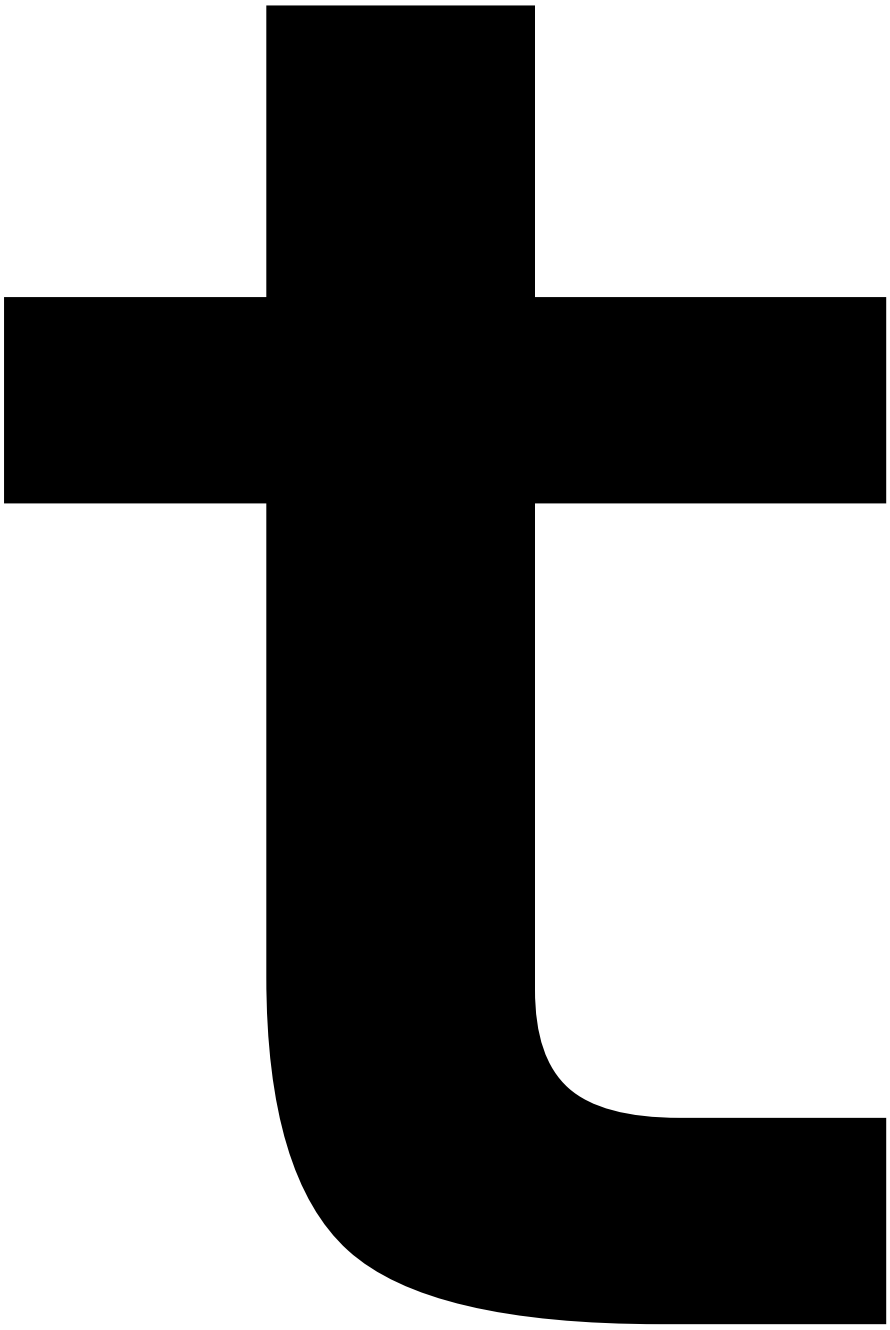


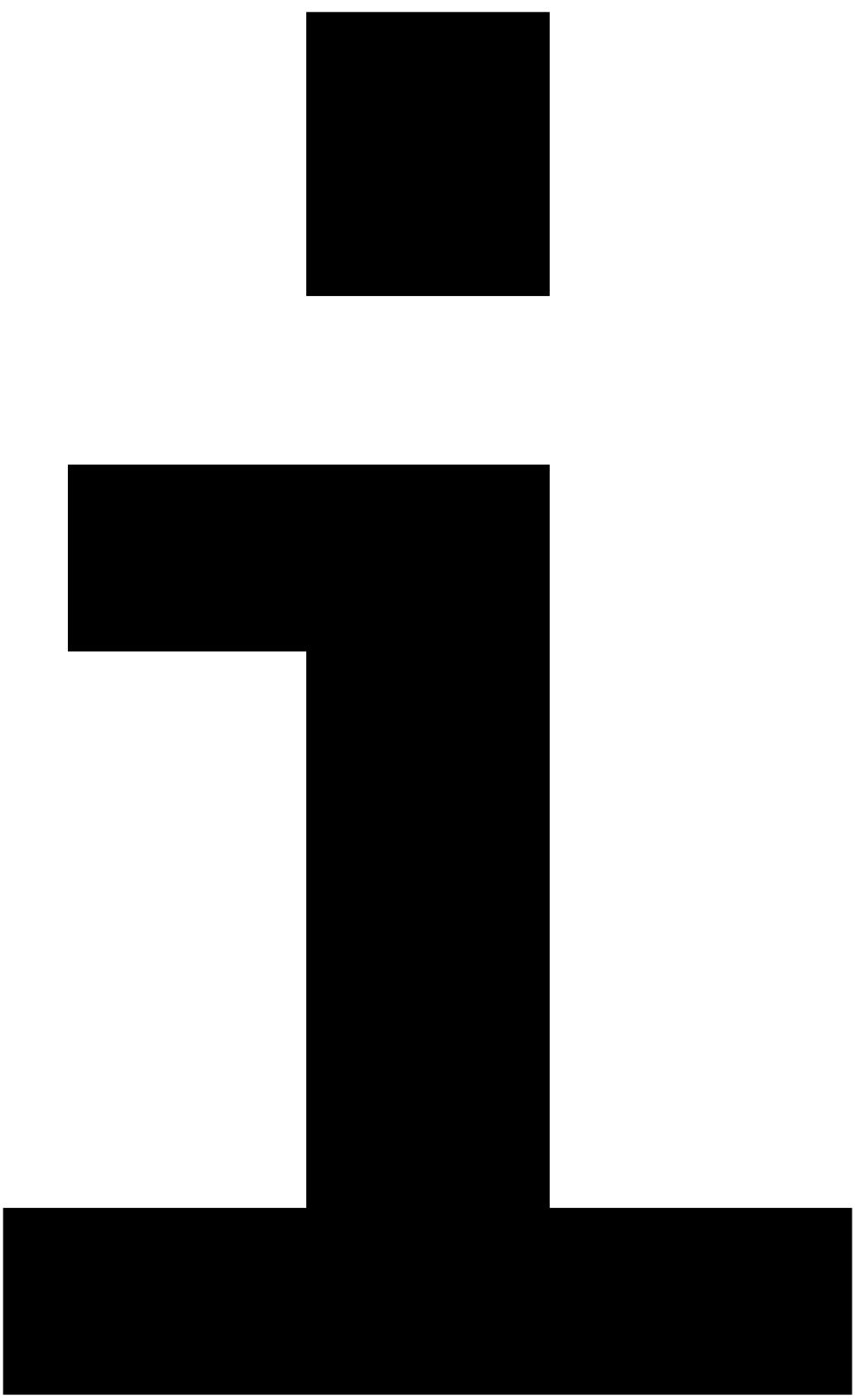




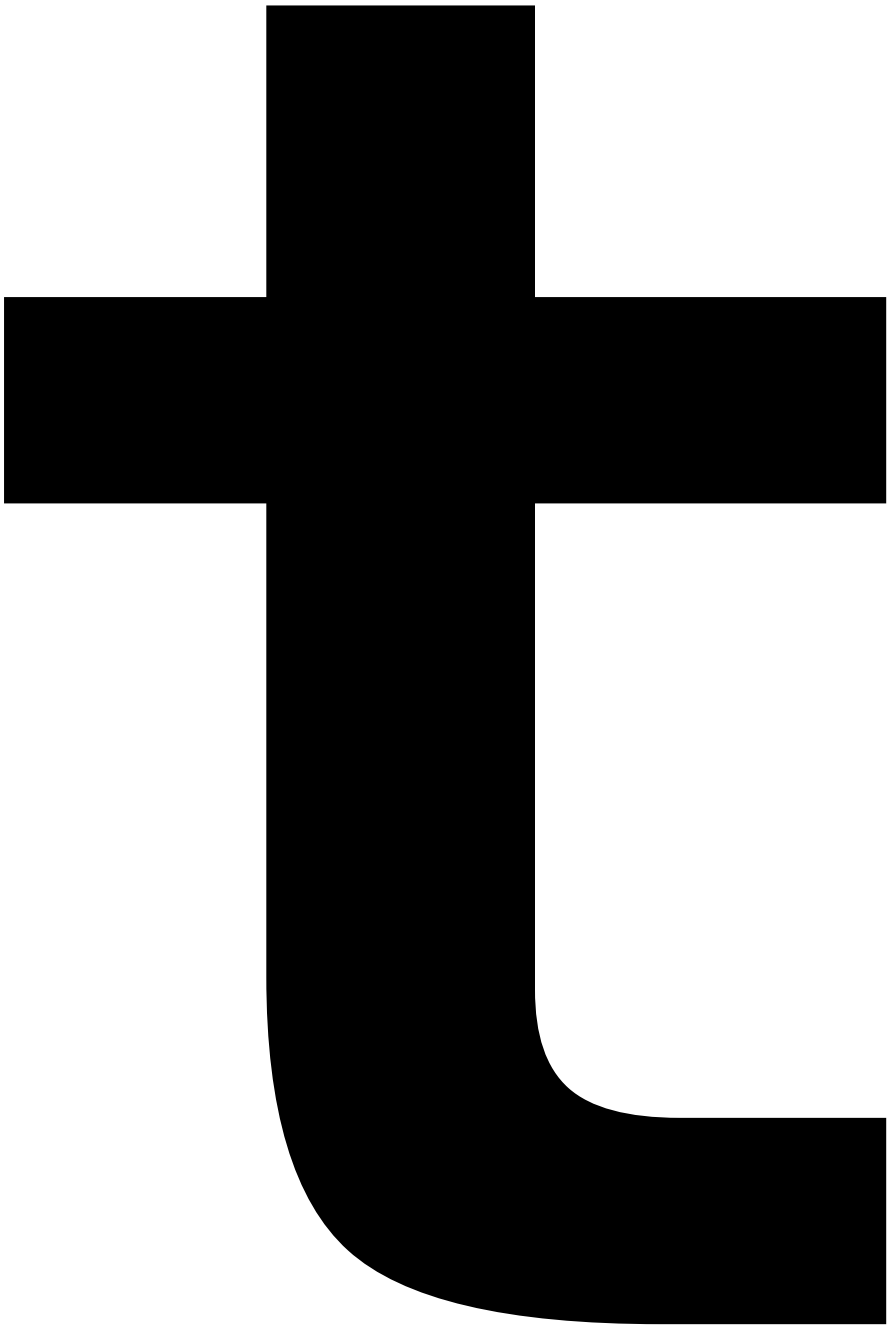


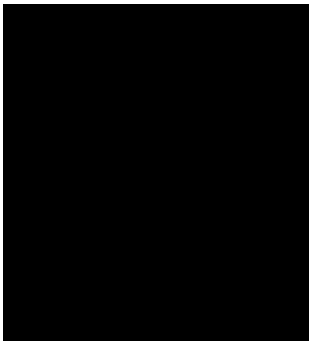


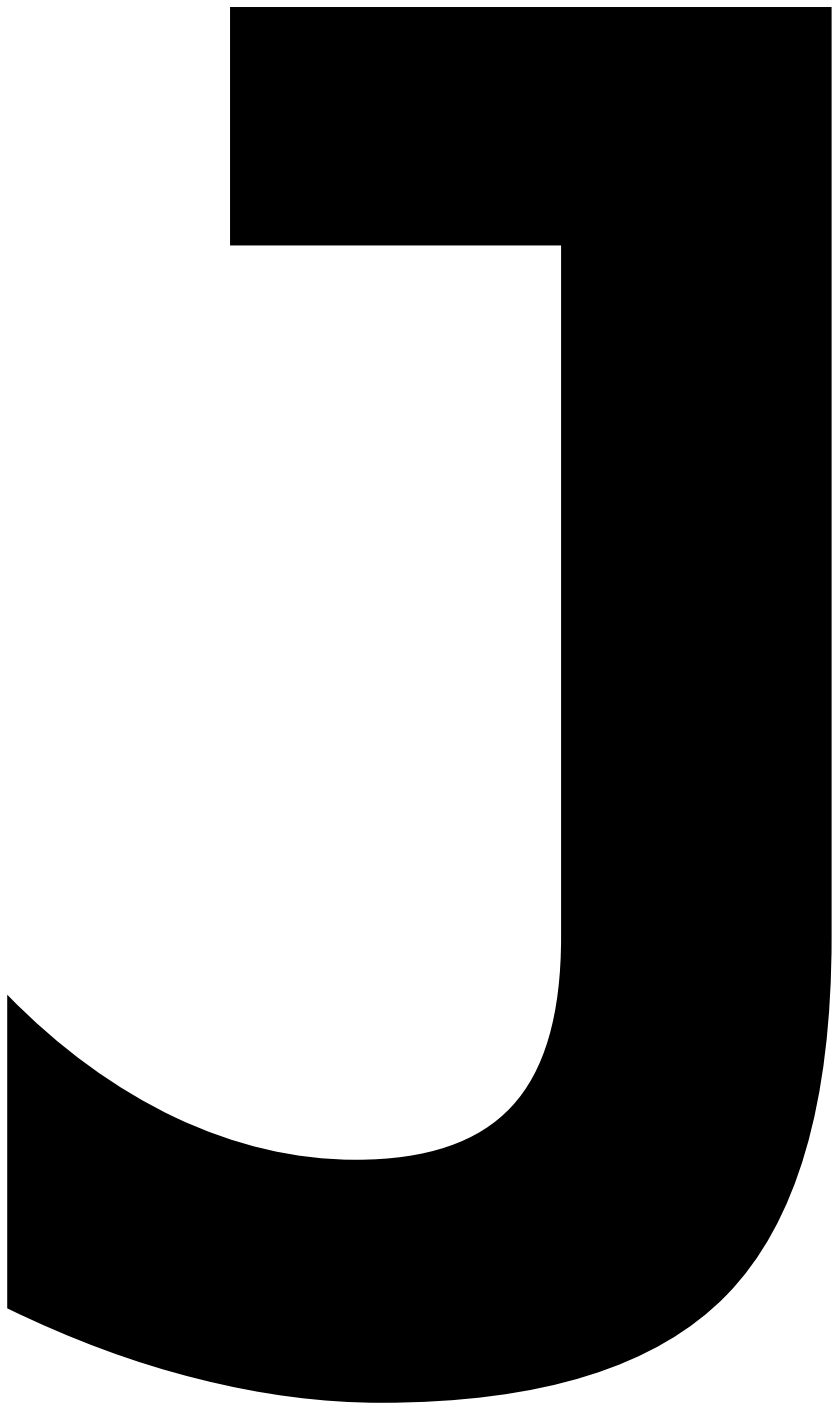


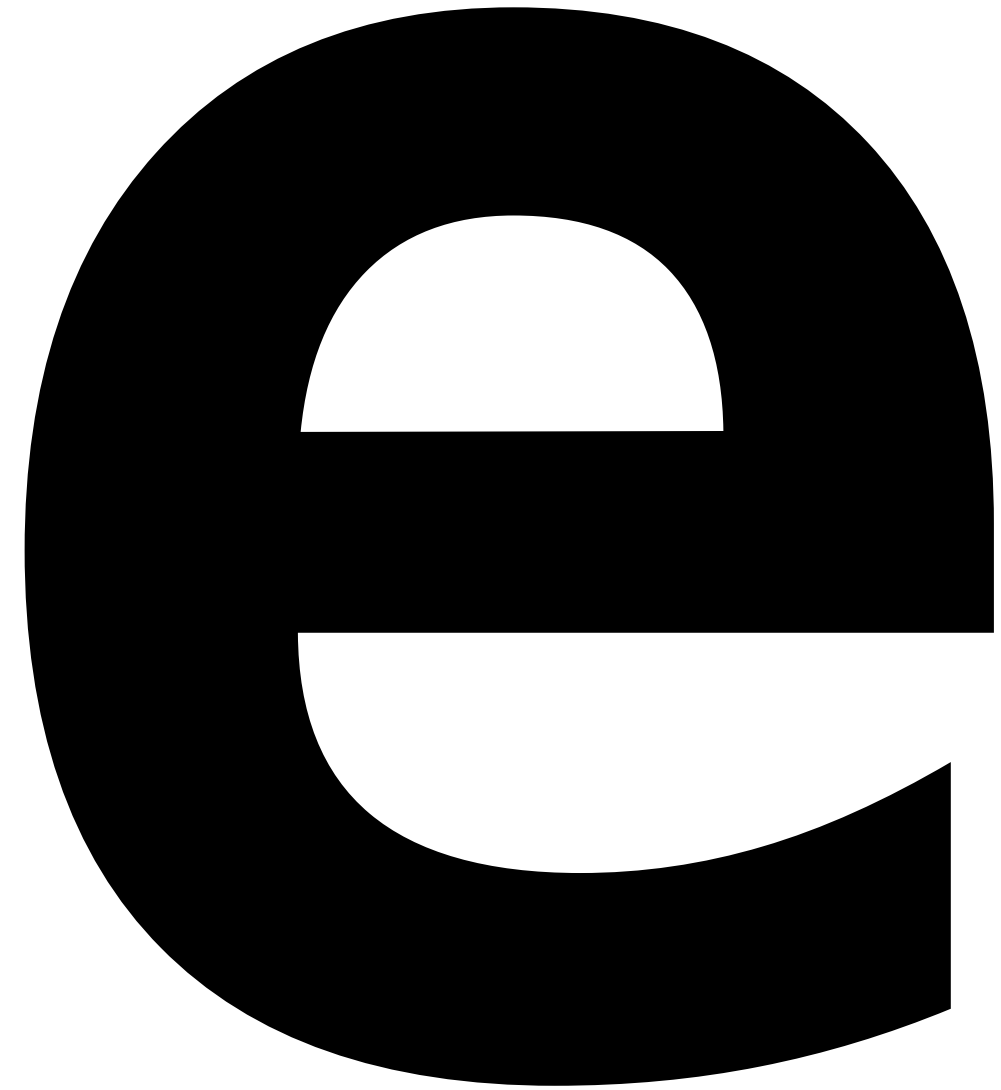


S

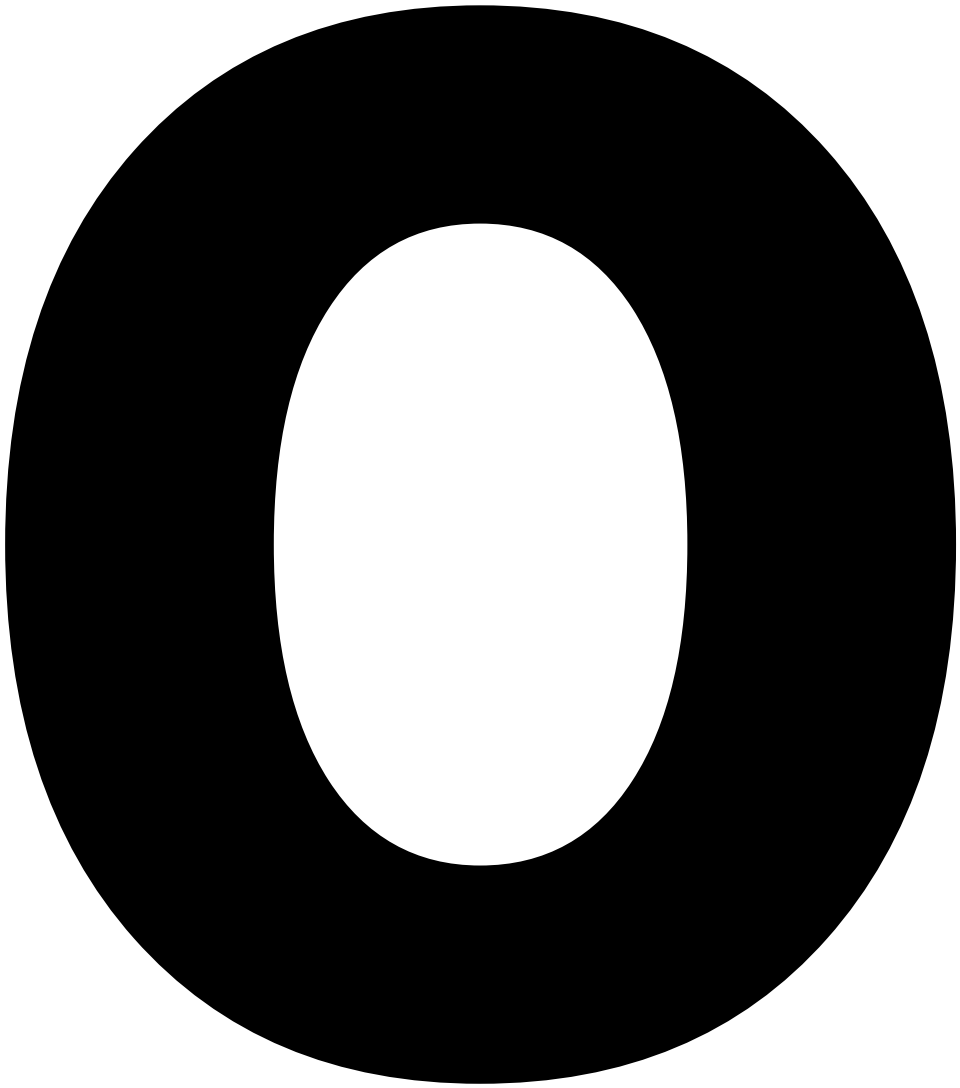


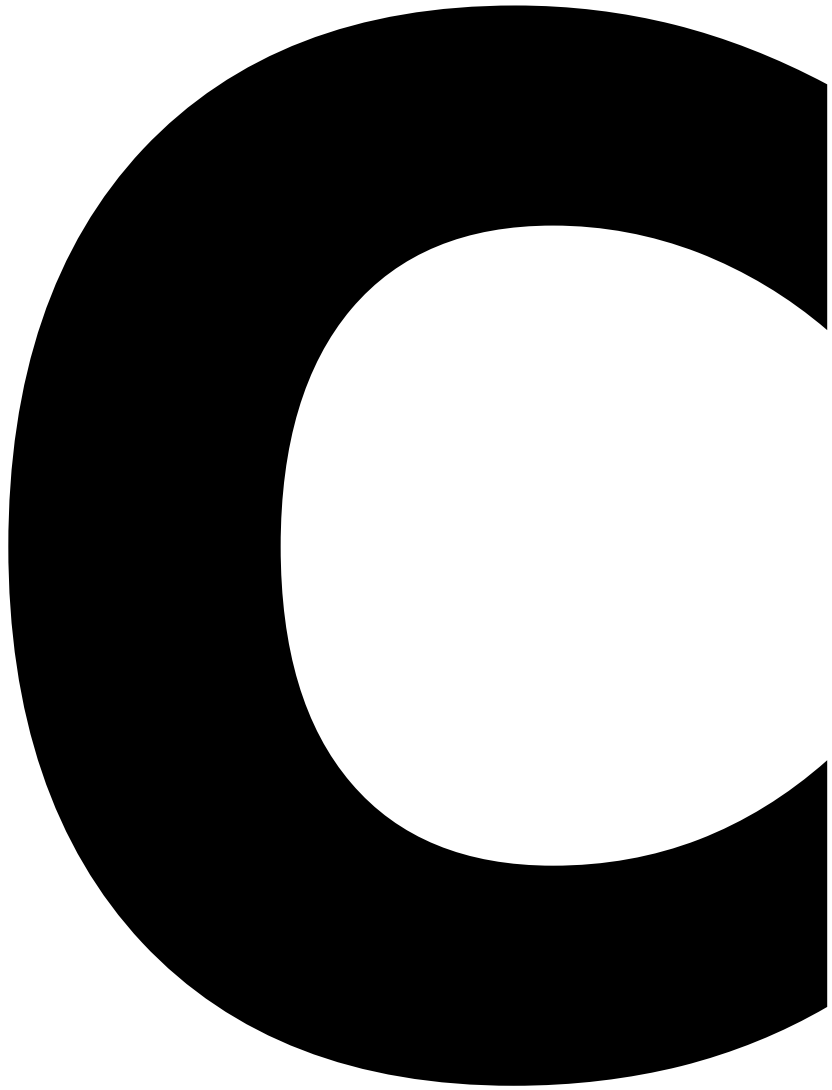


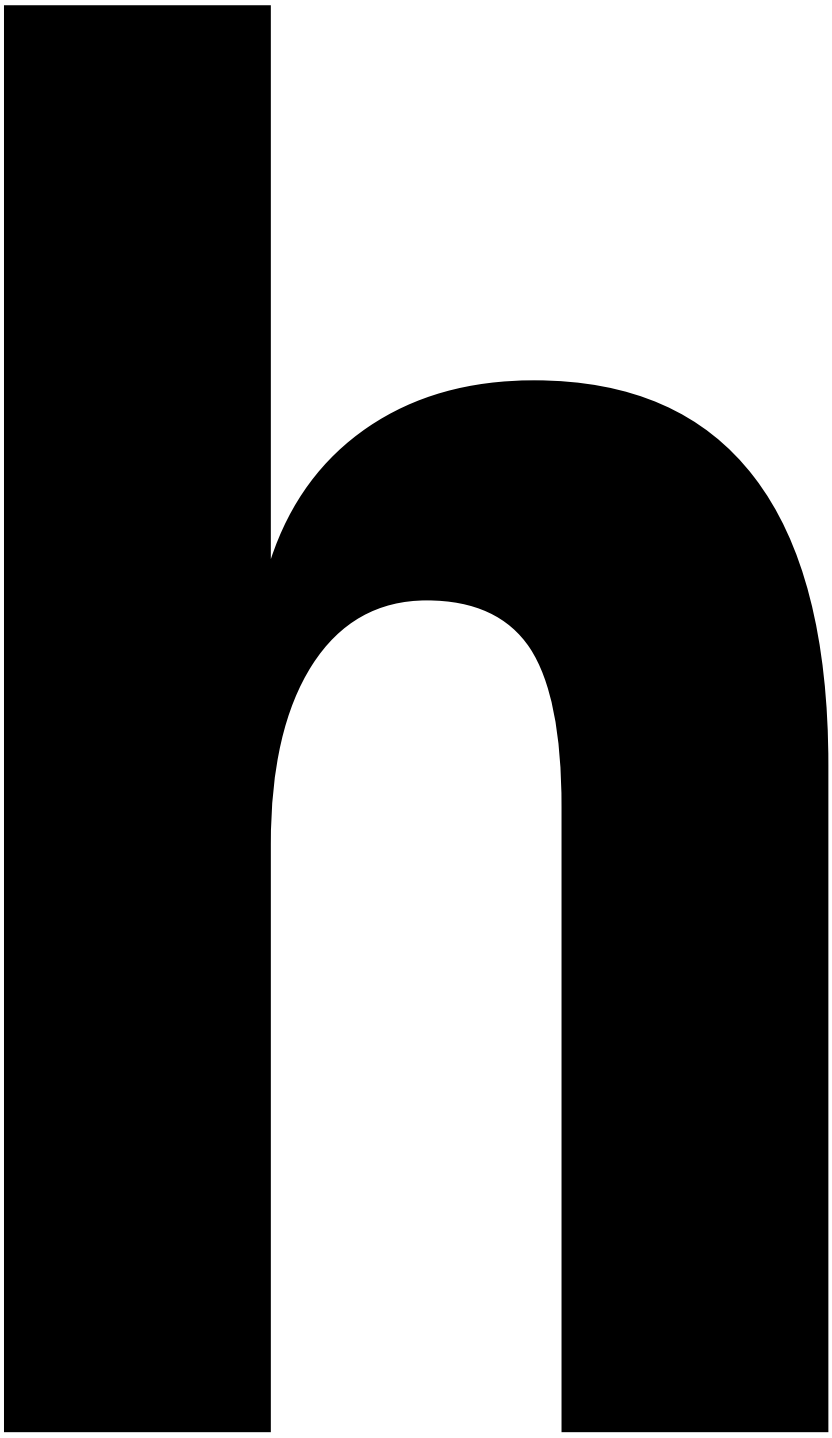




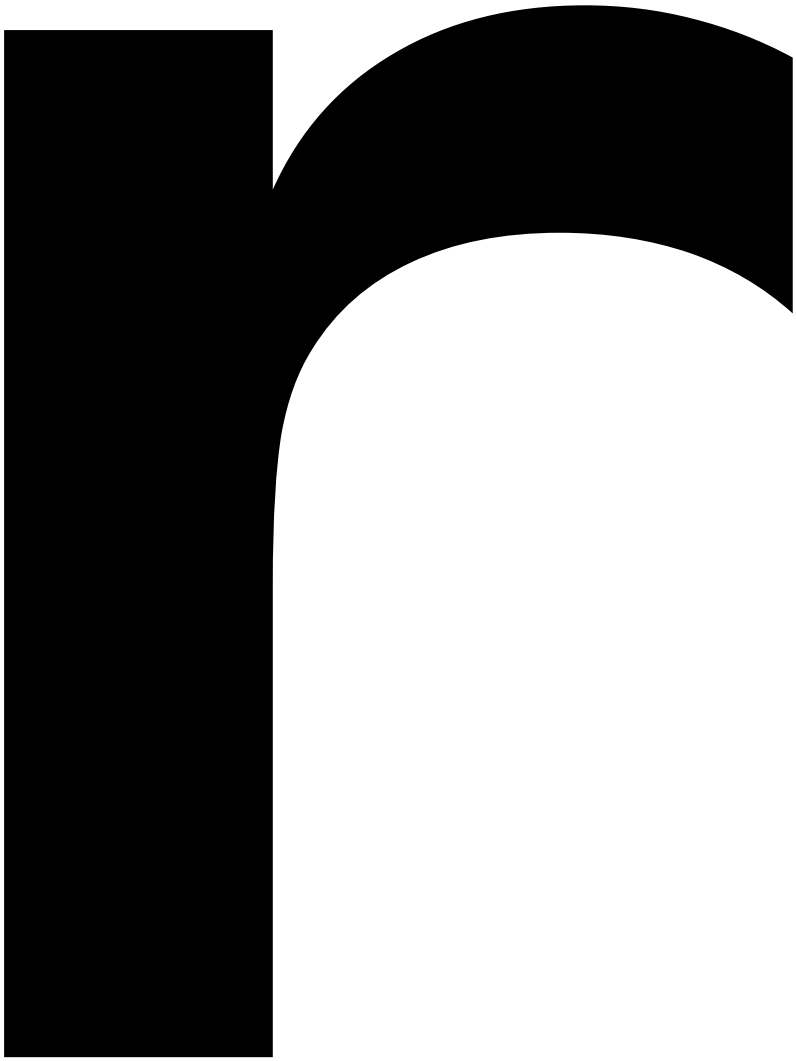
d



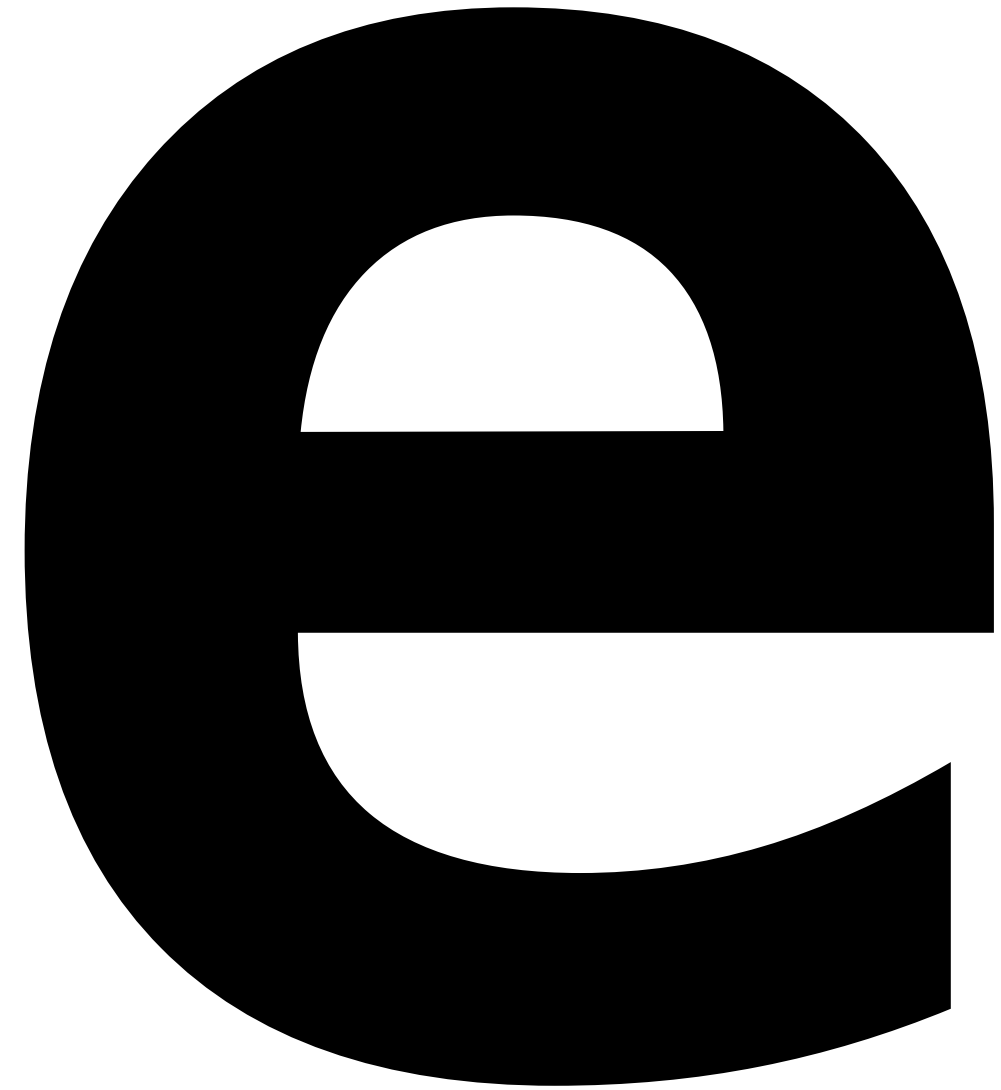




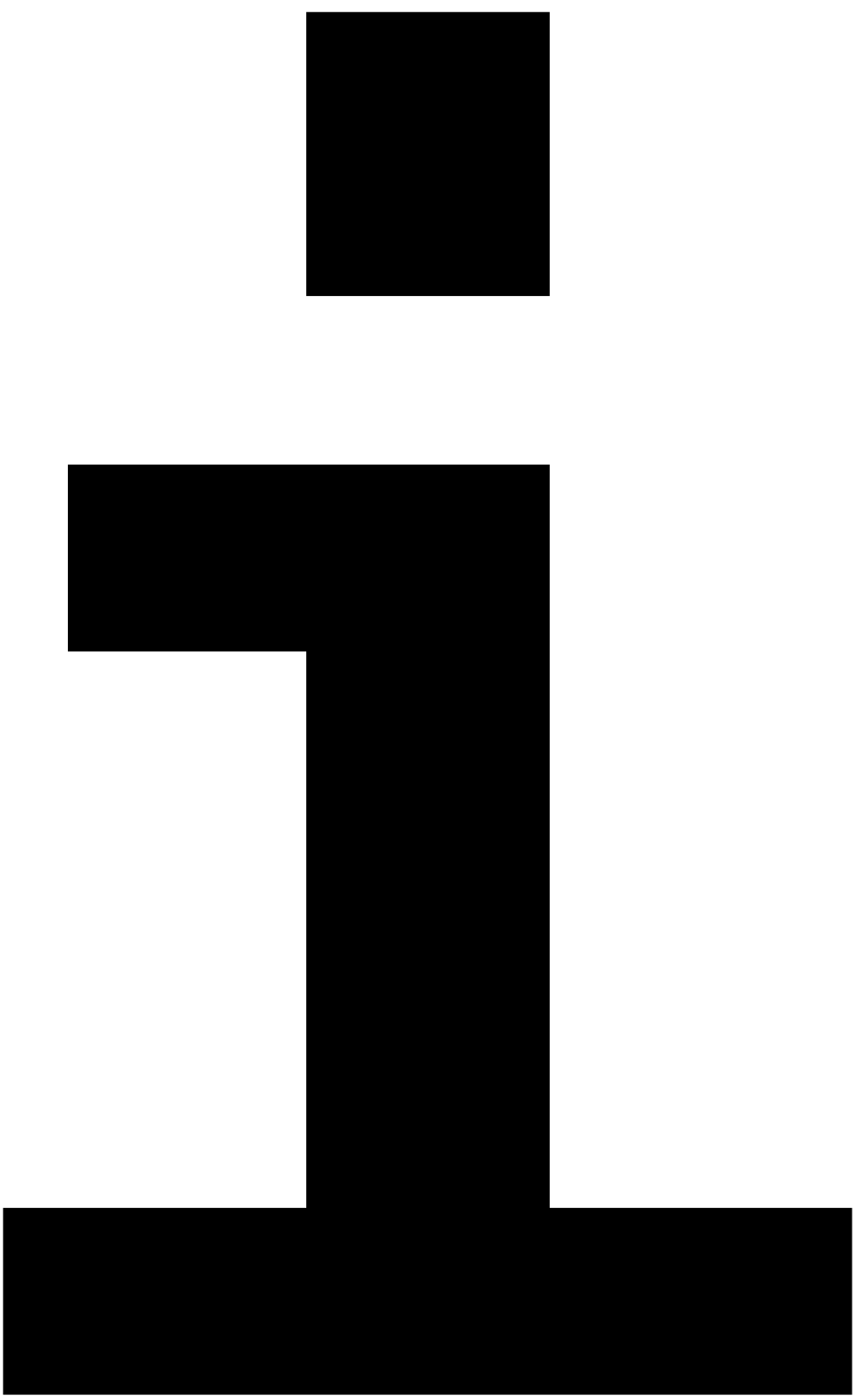
u

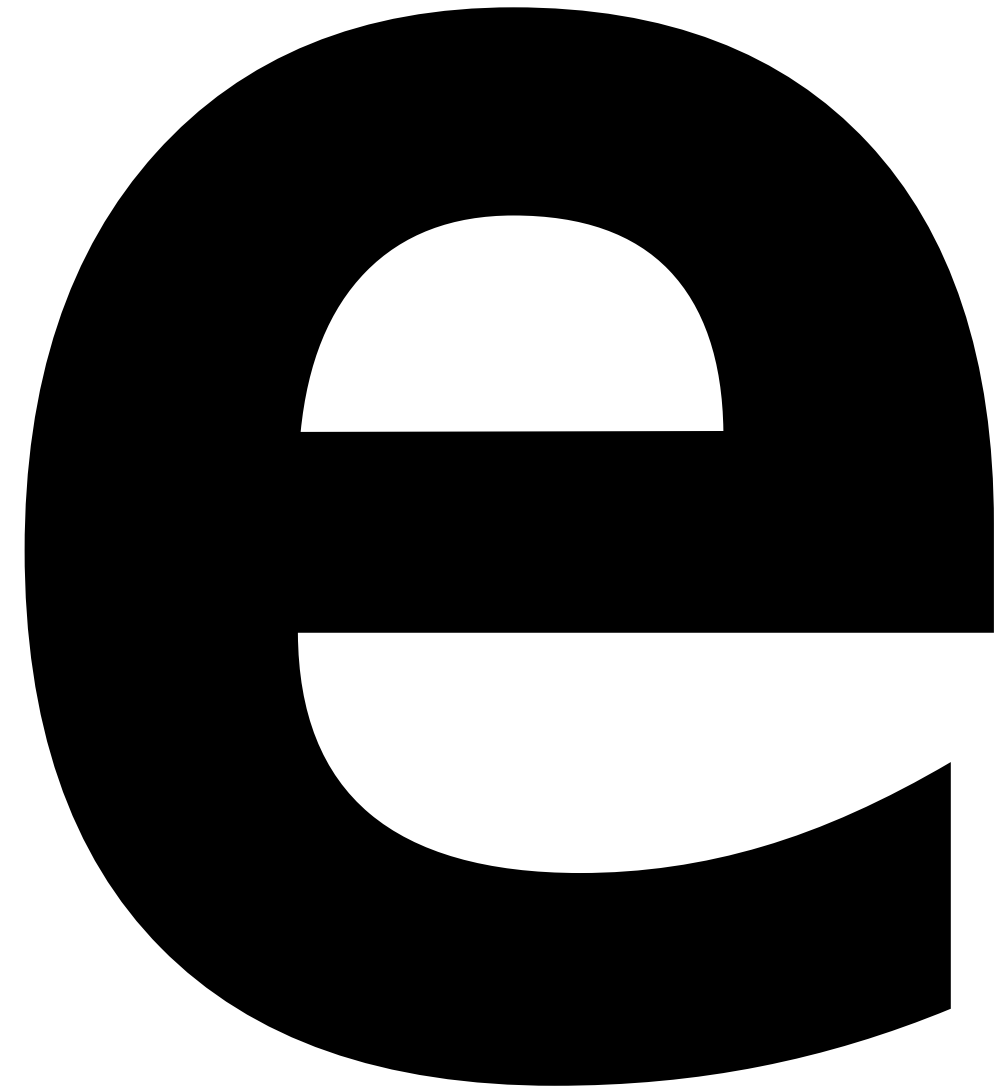


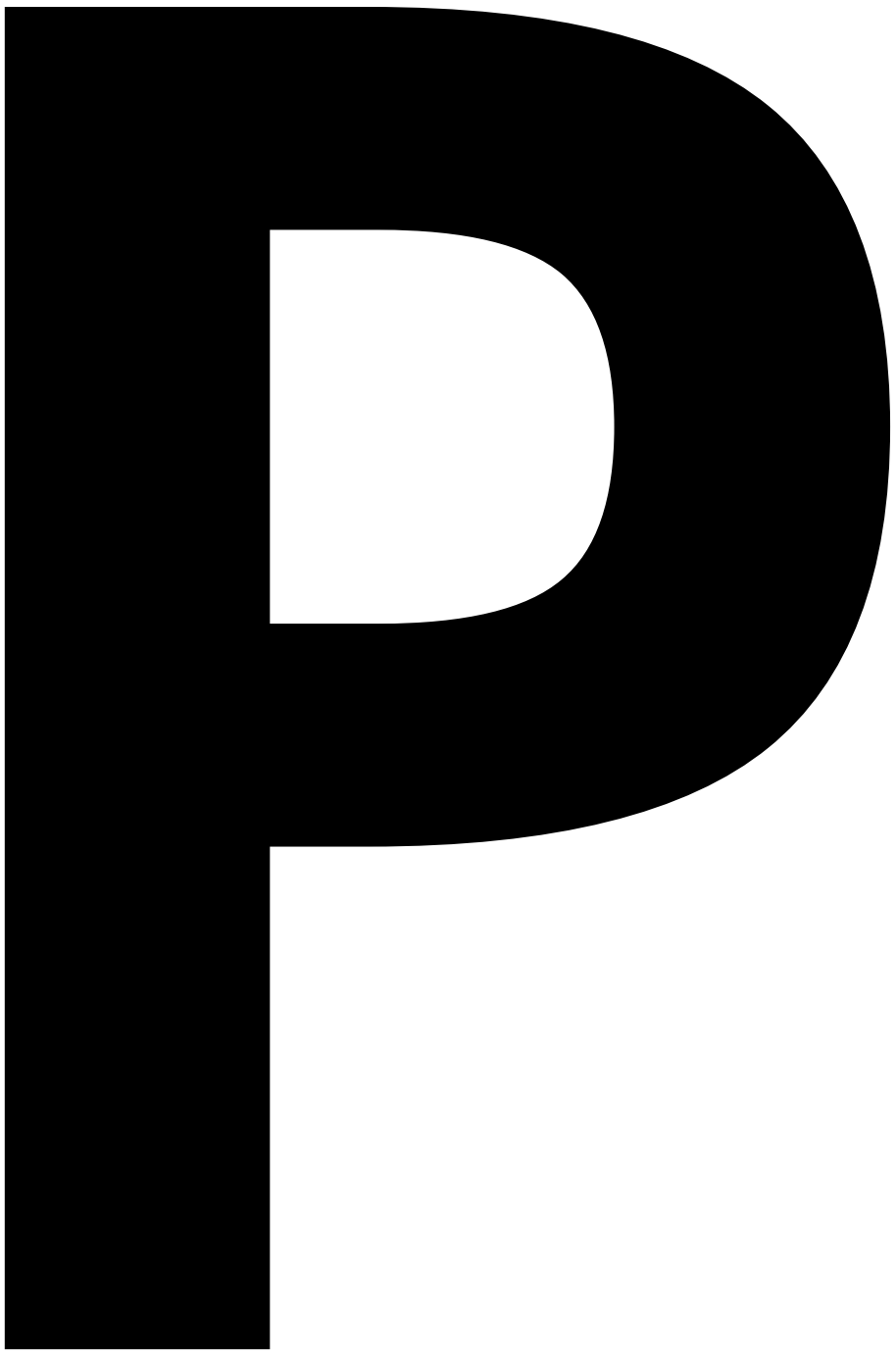
d

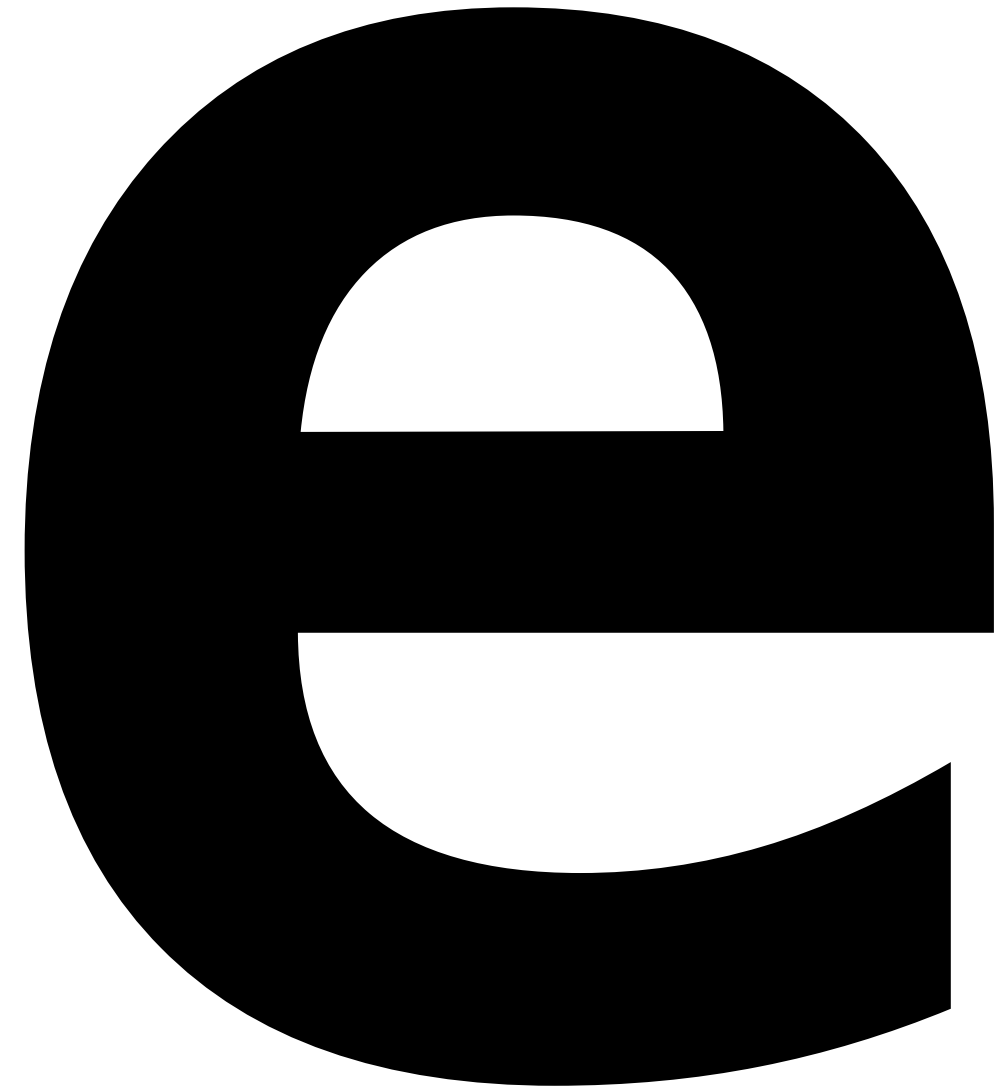


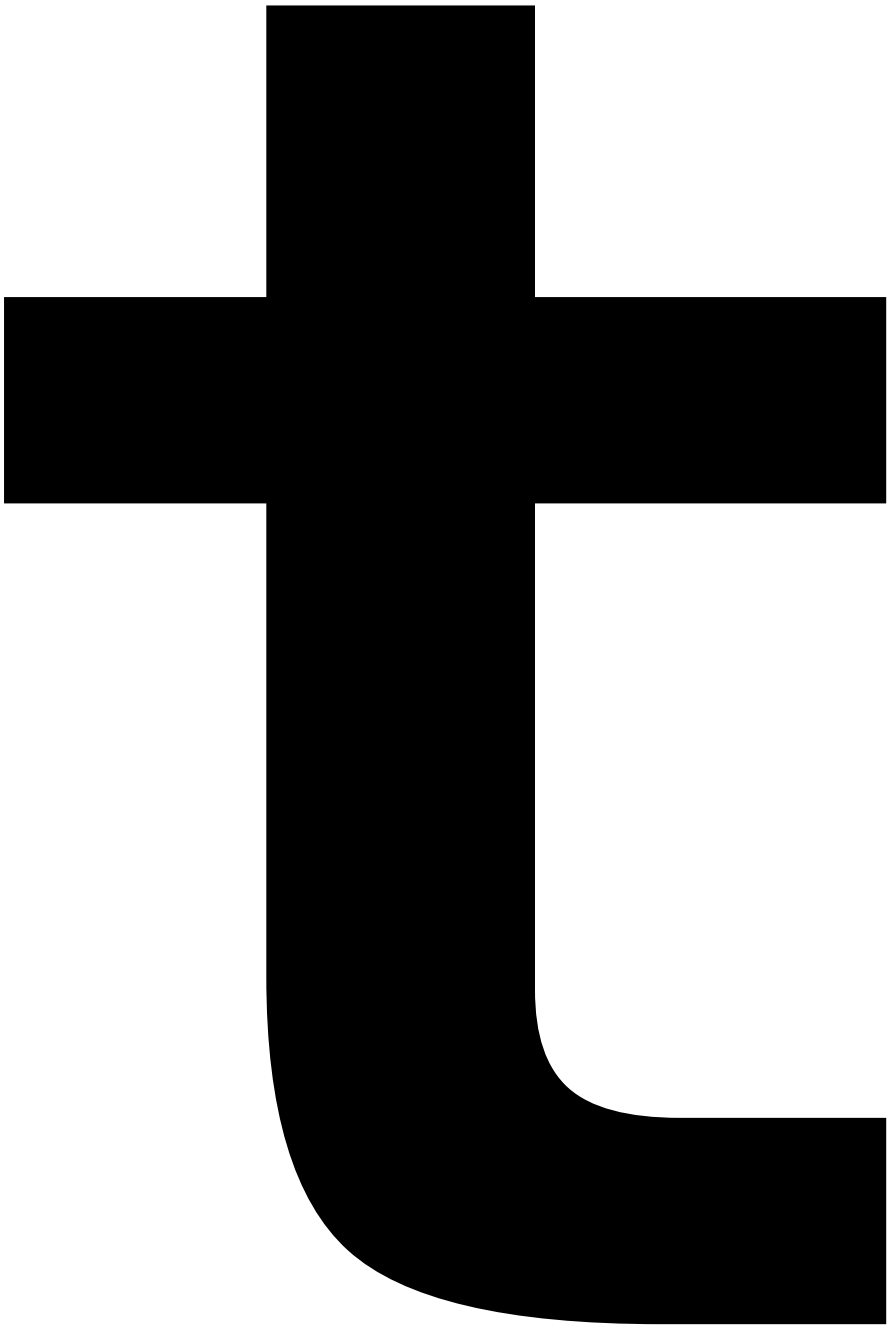
d

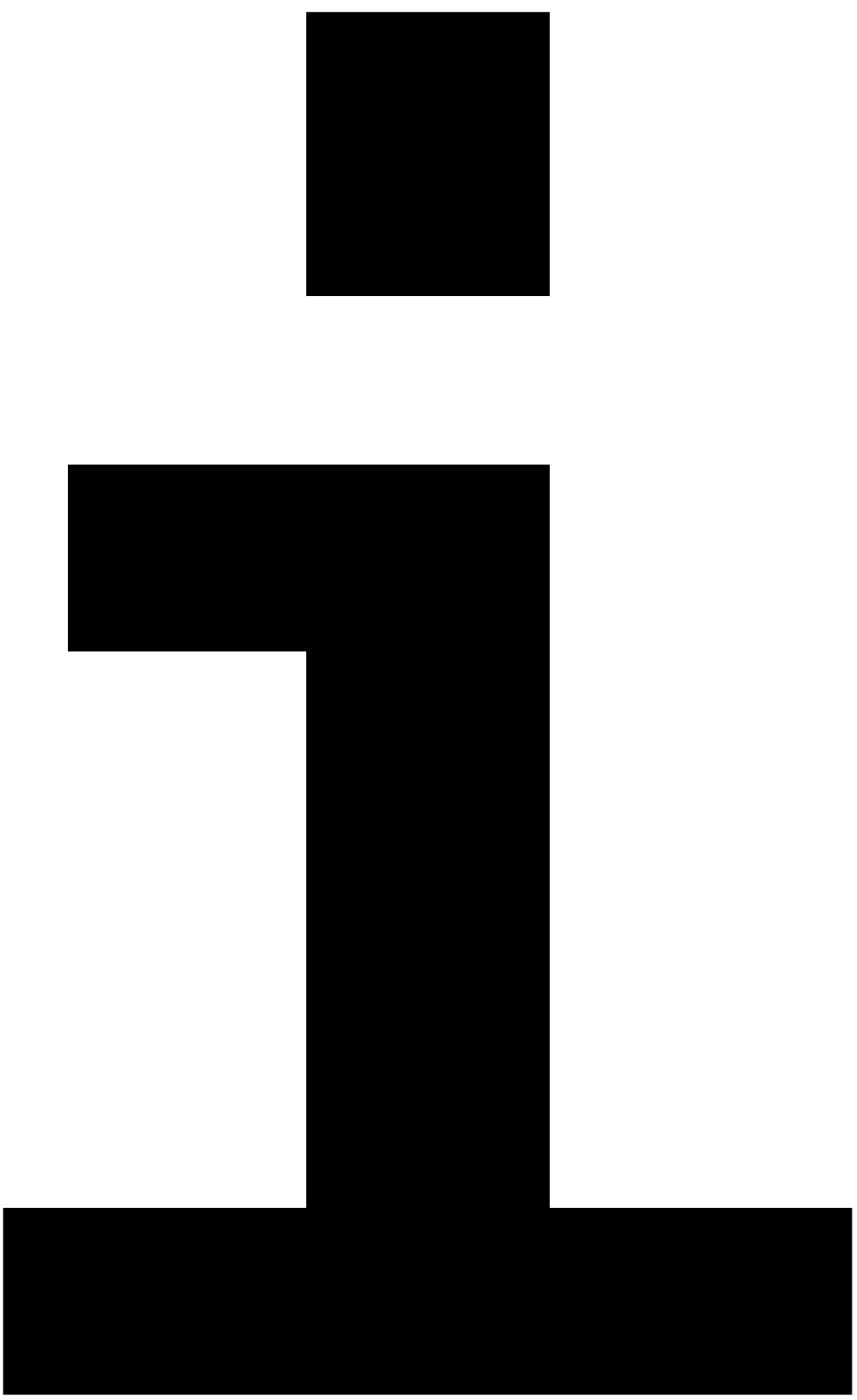


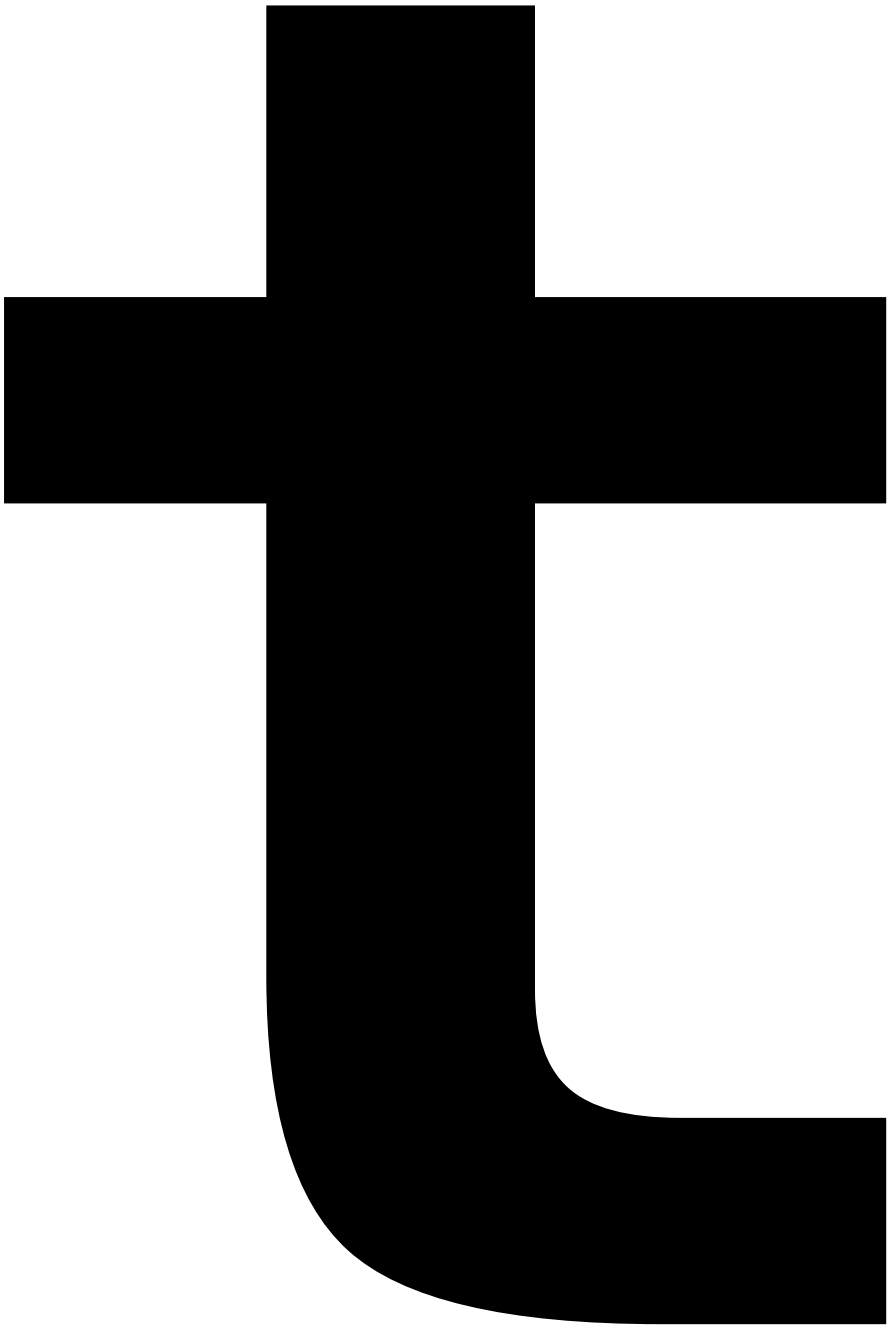


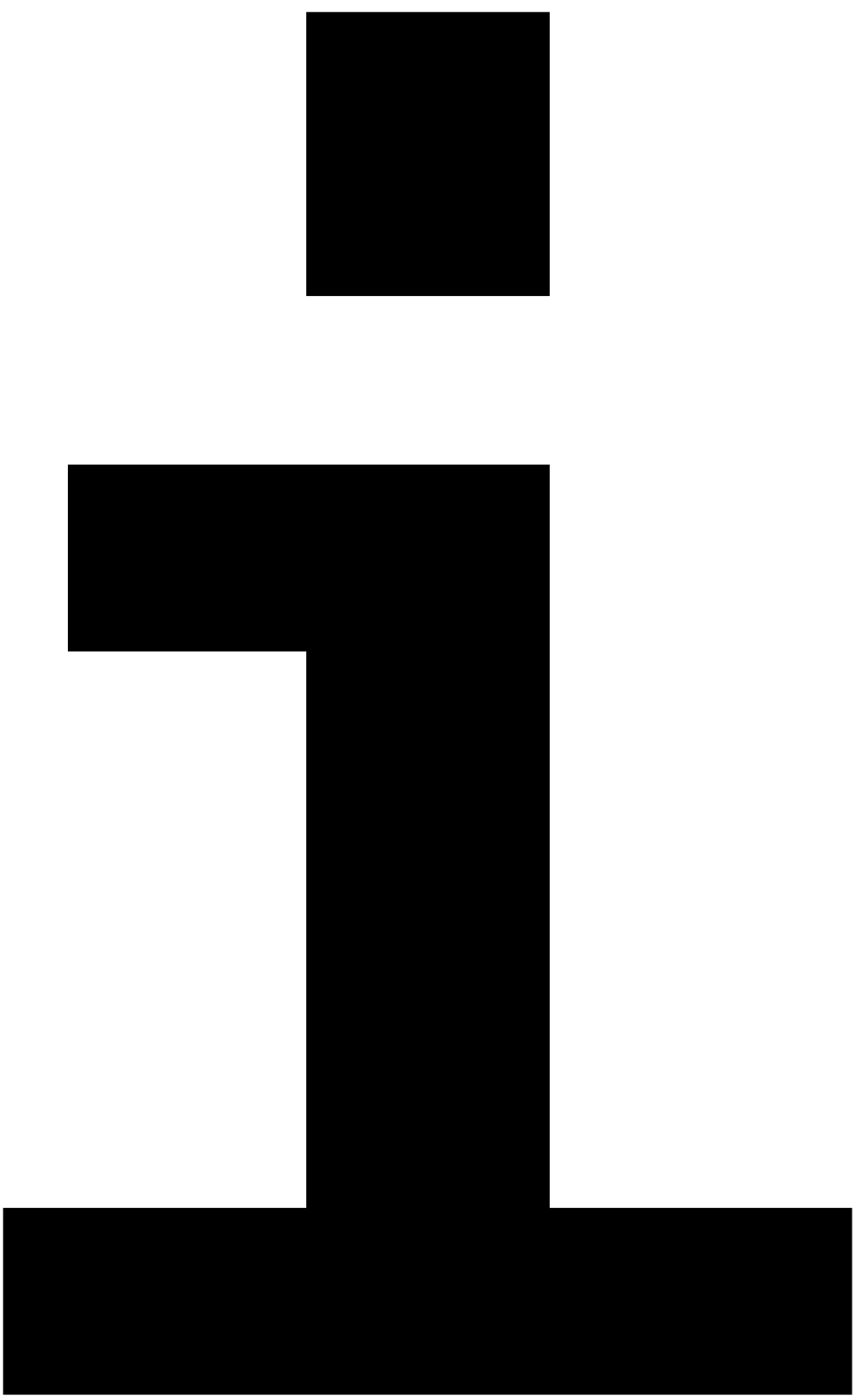


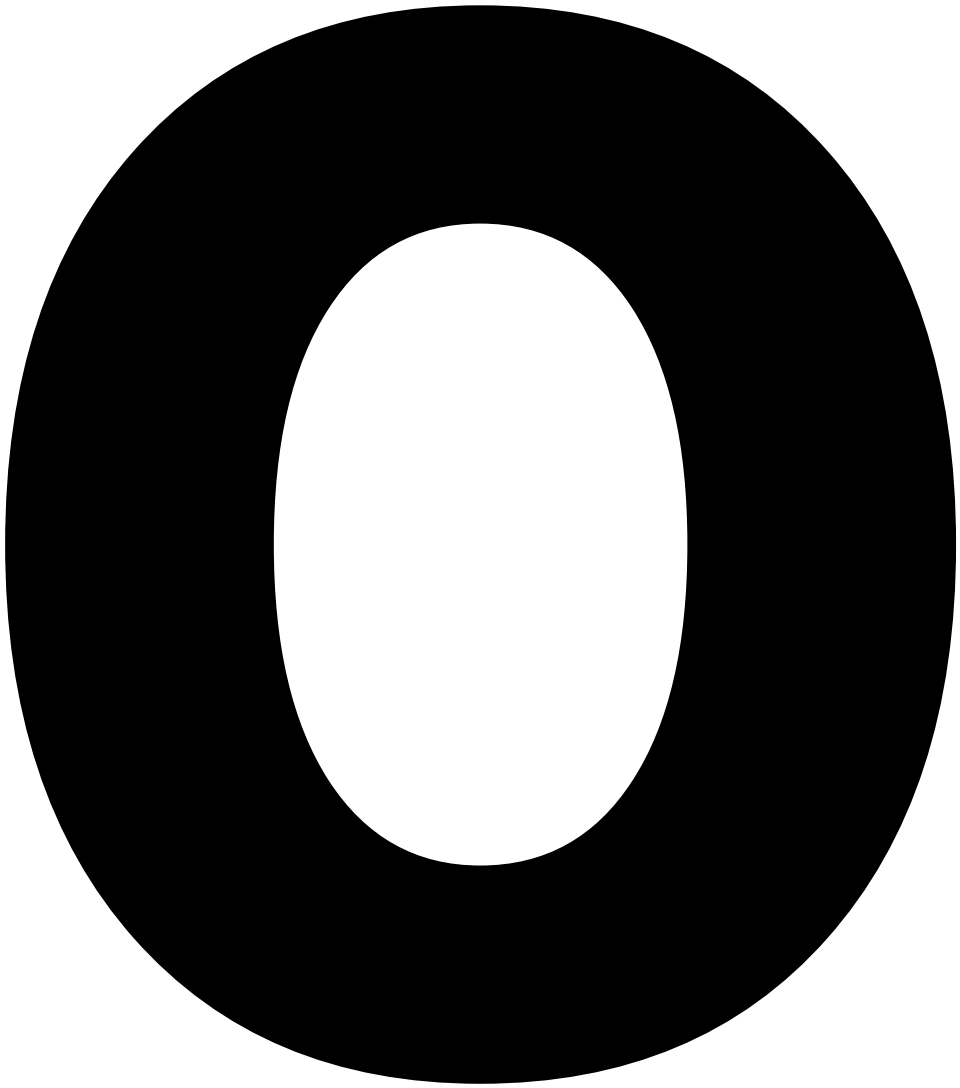


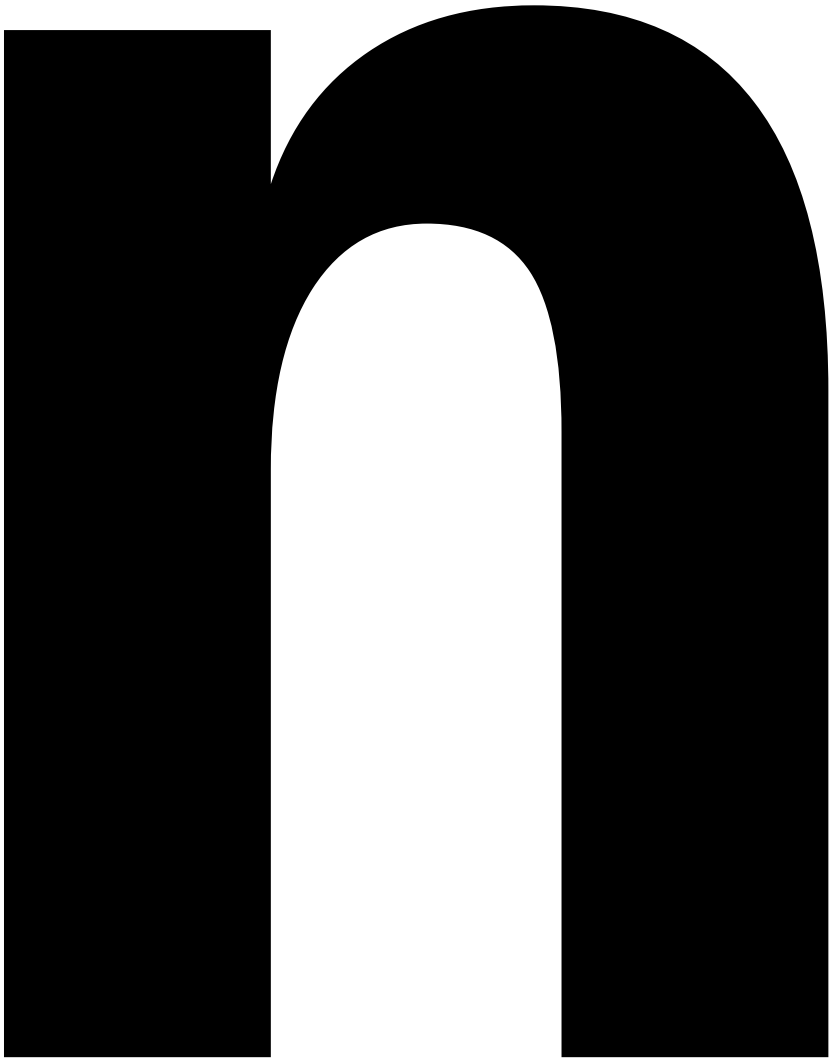


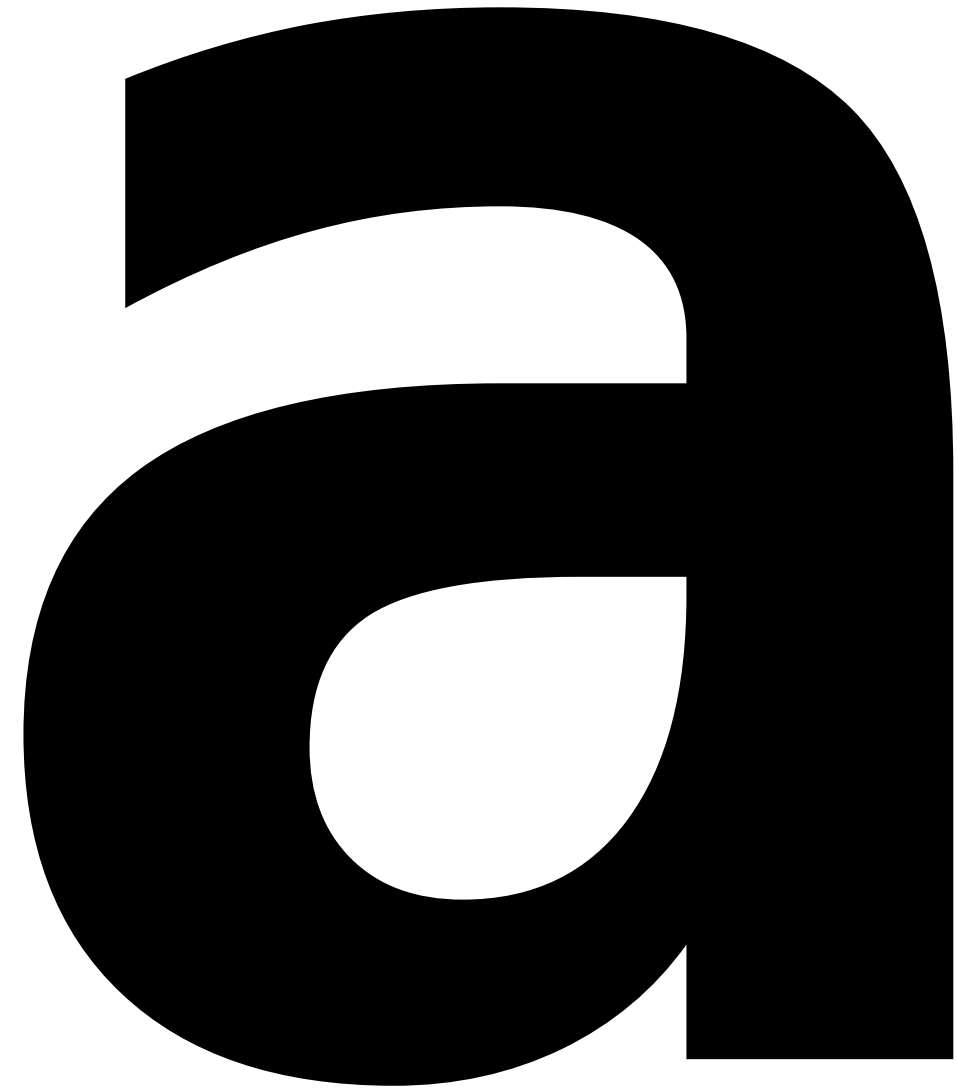


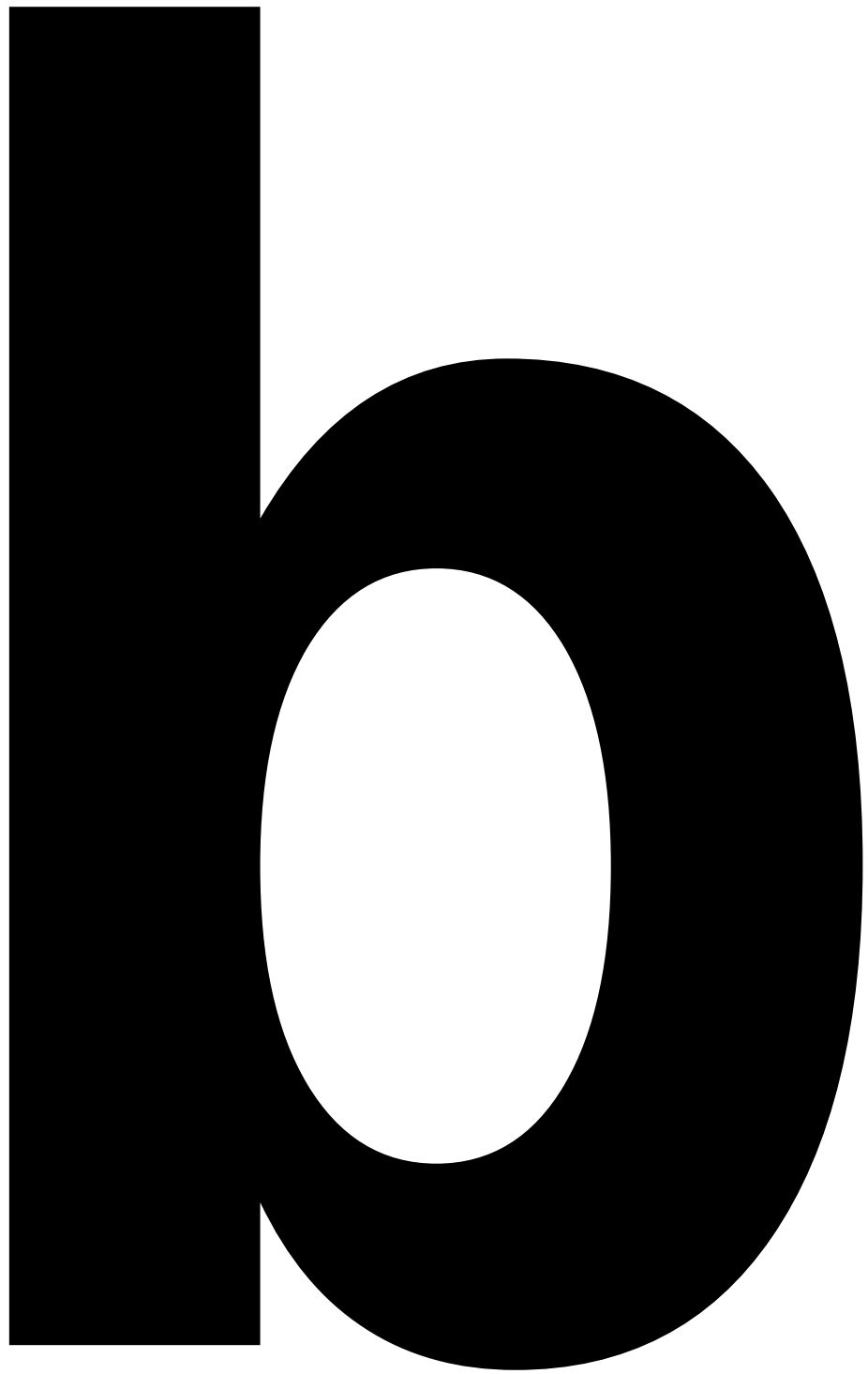


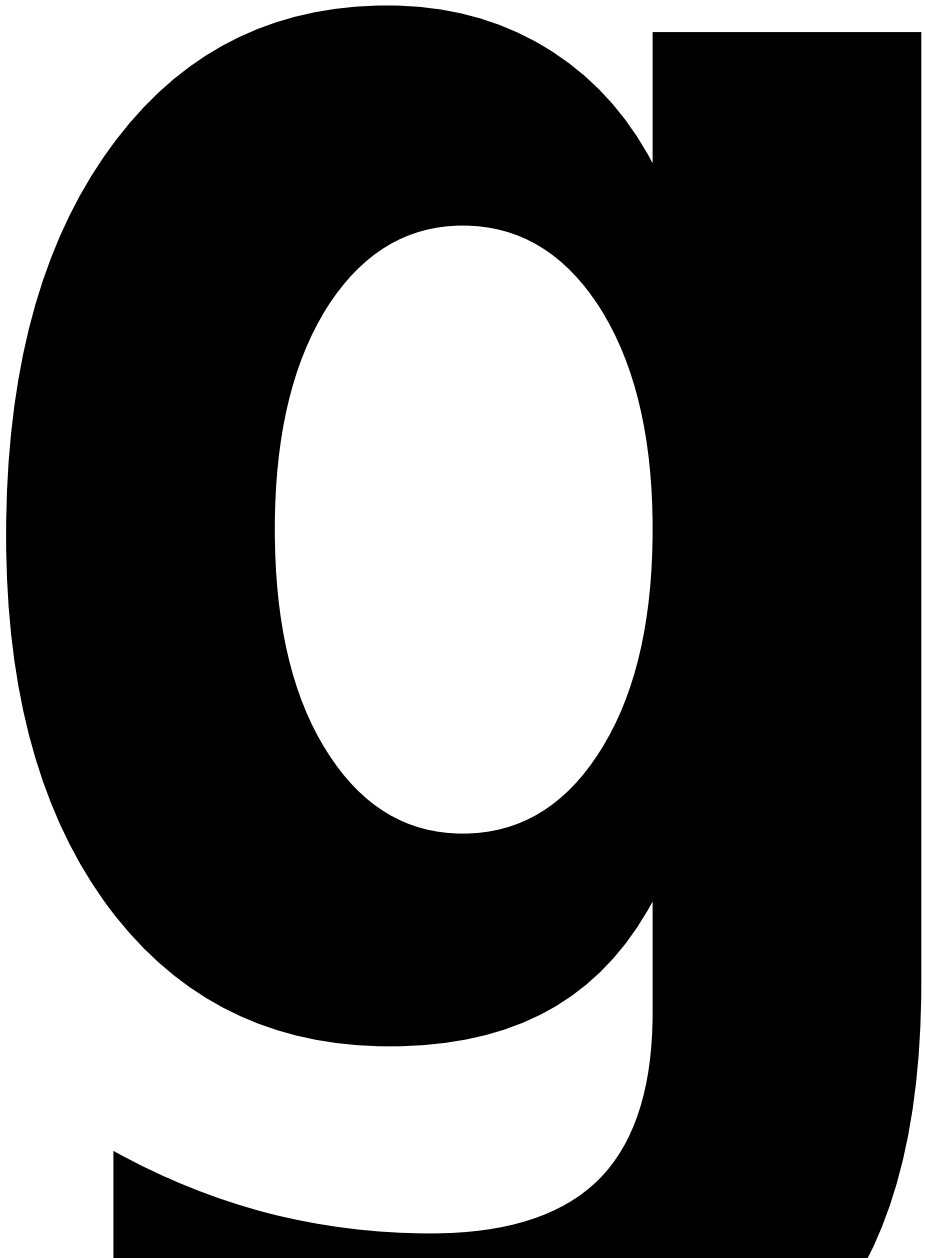


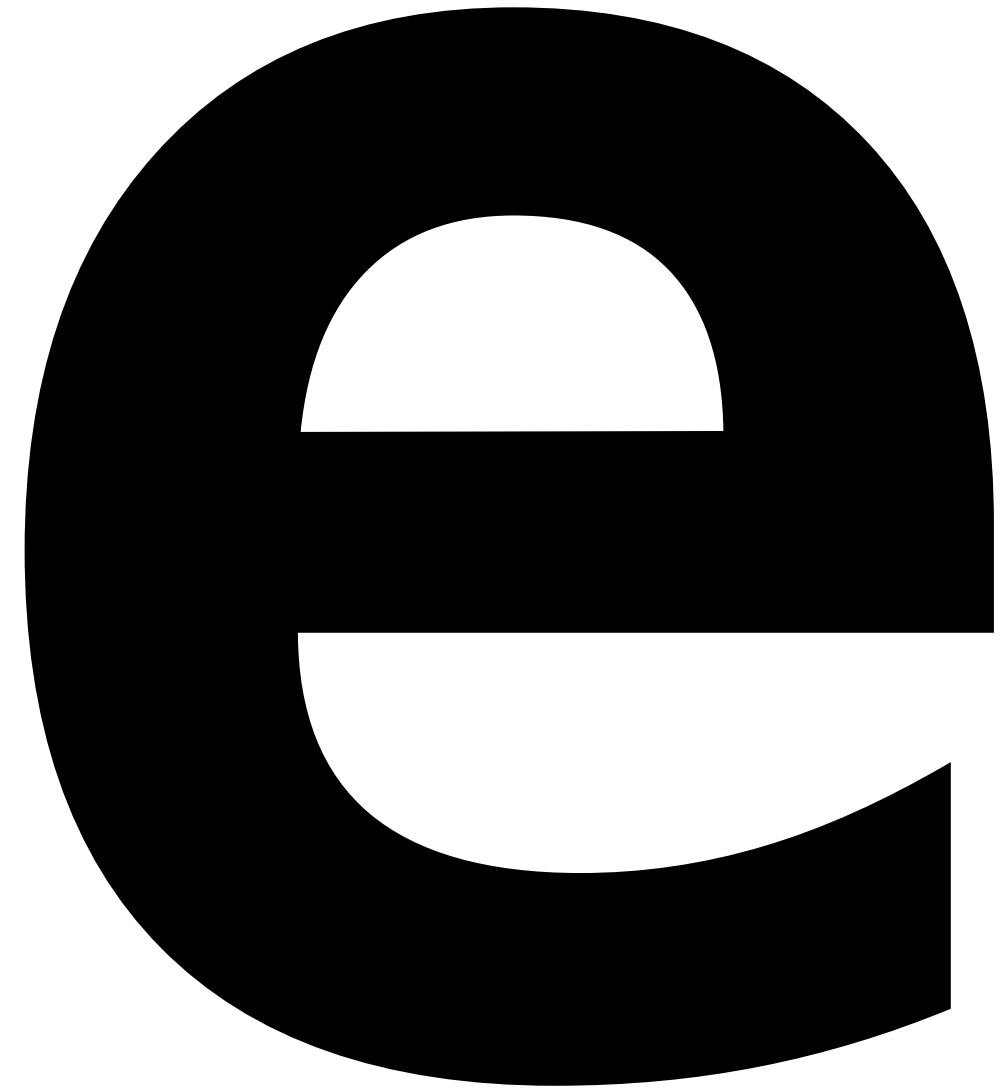


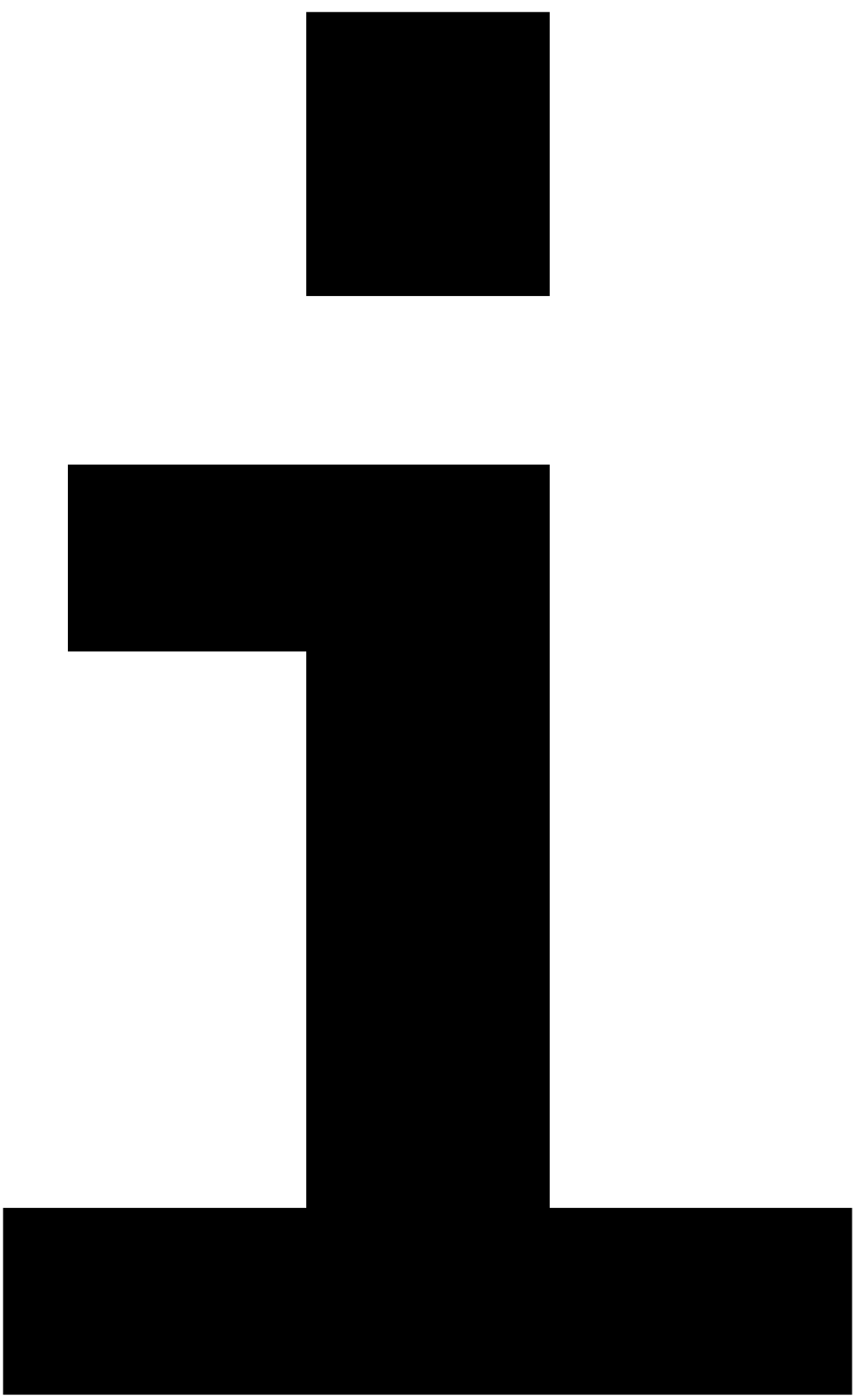


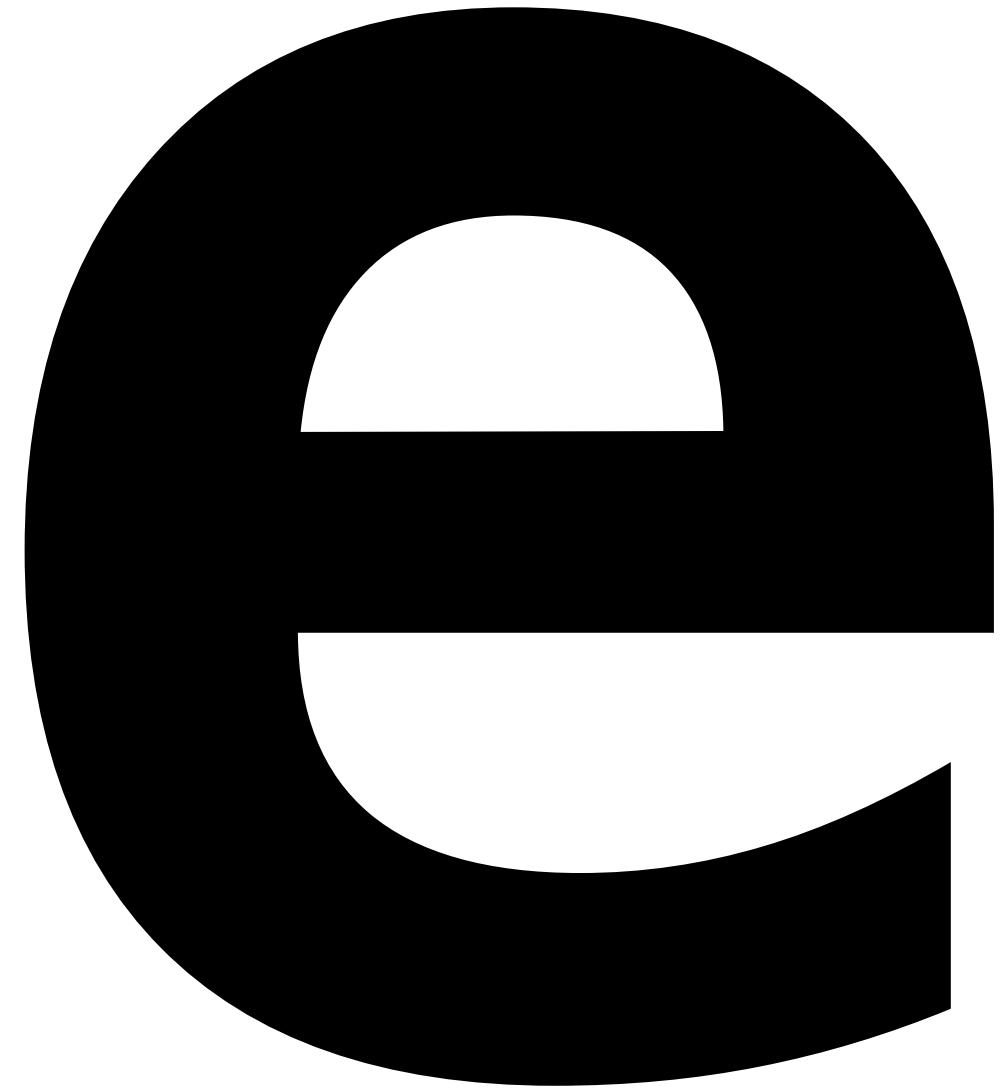




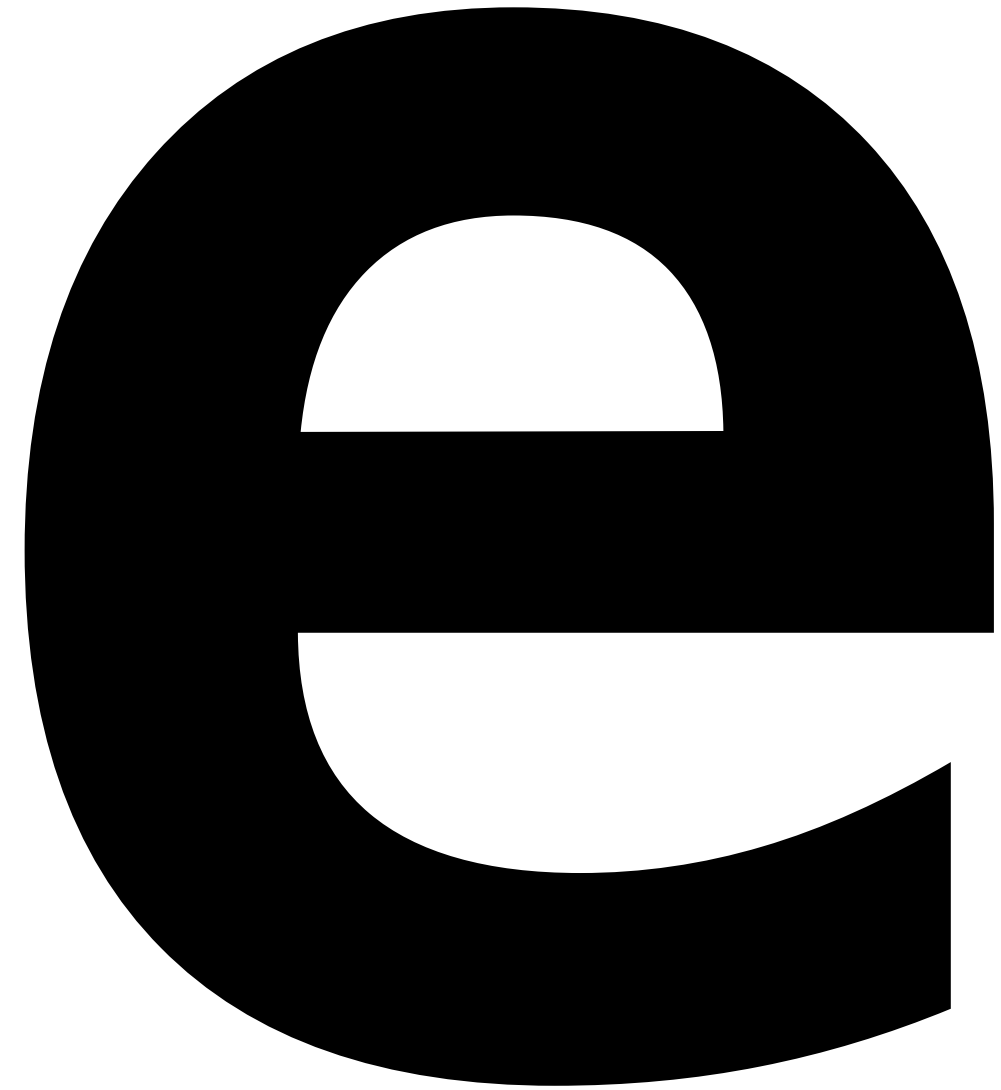


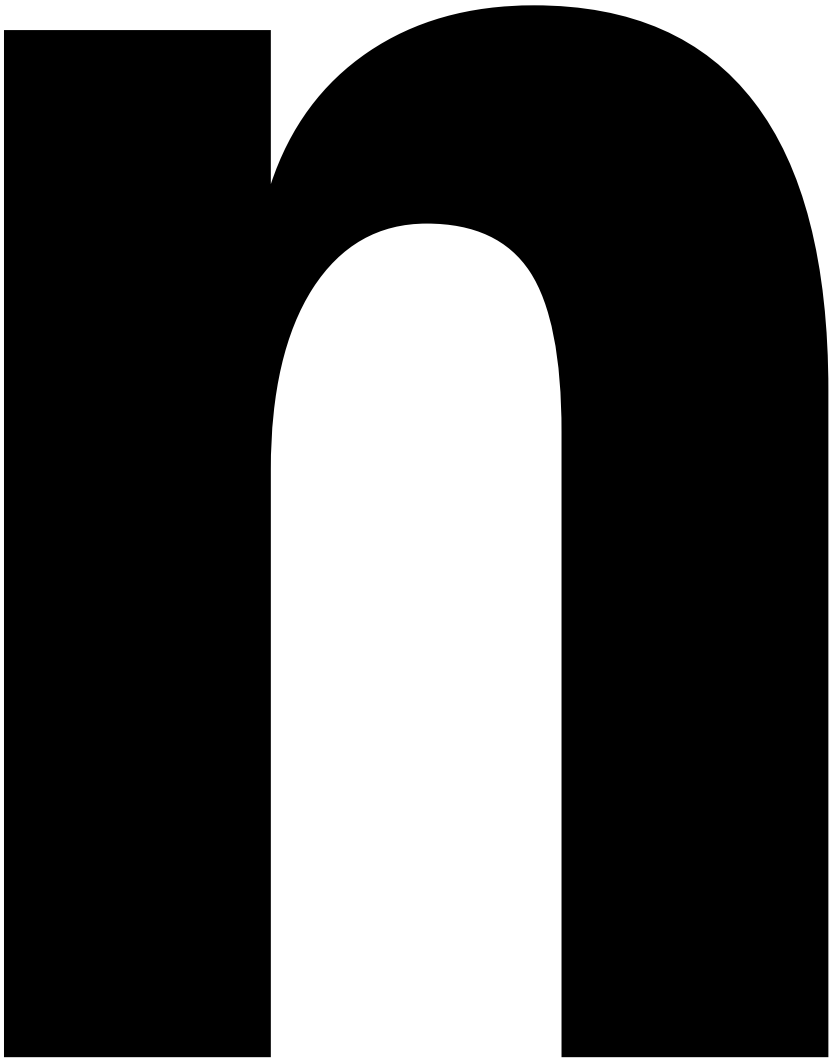


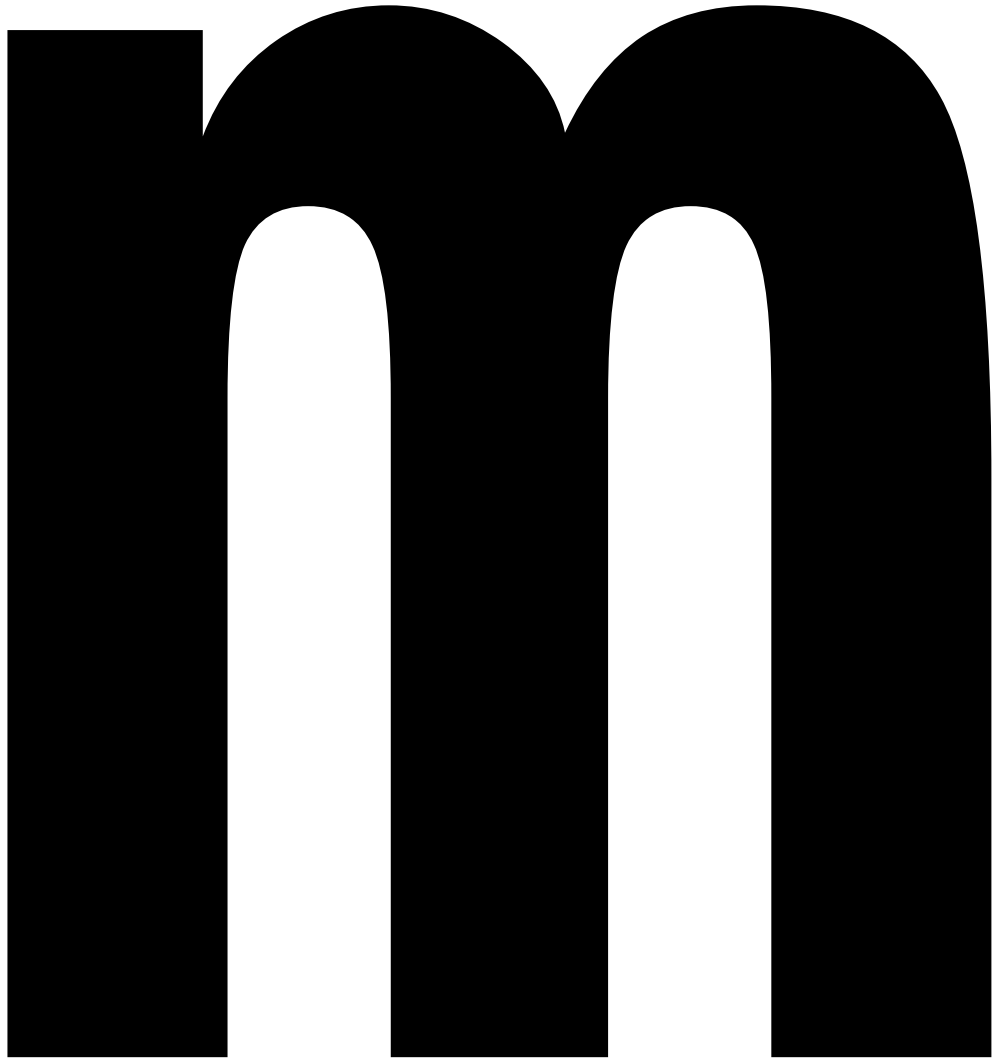


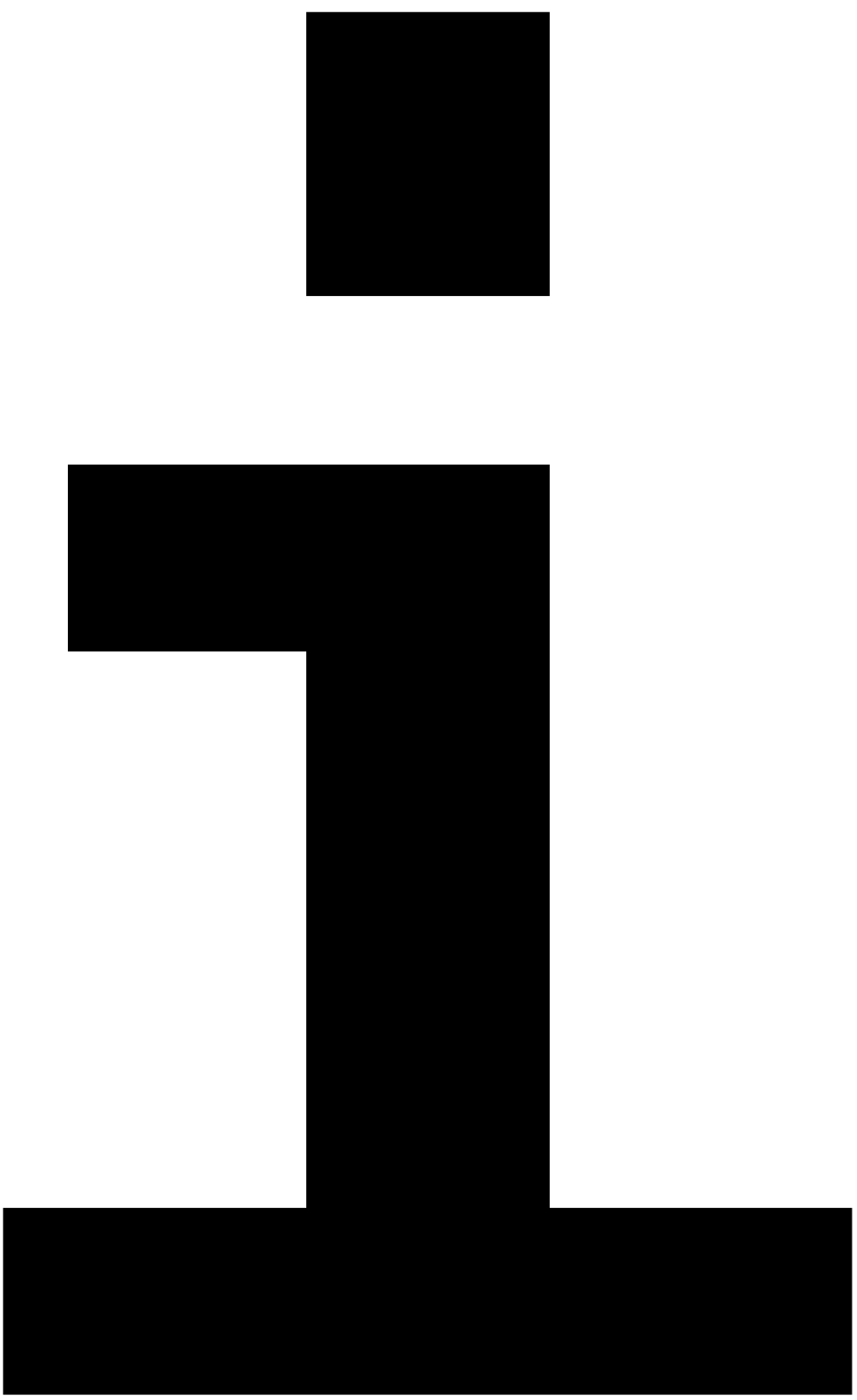


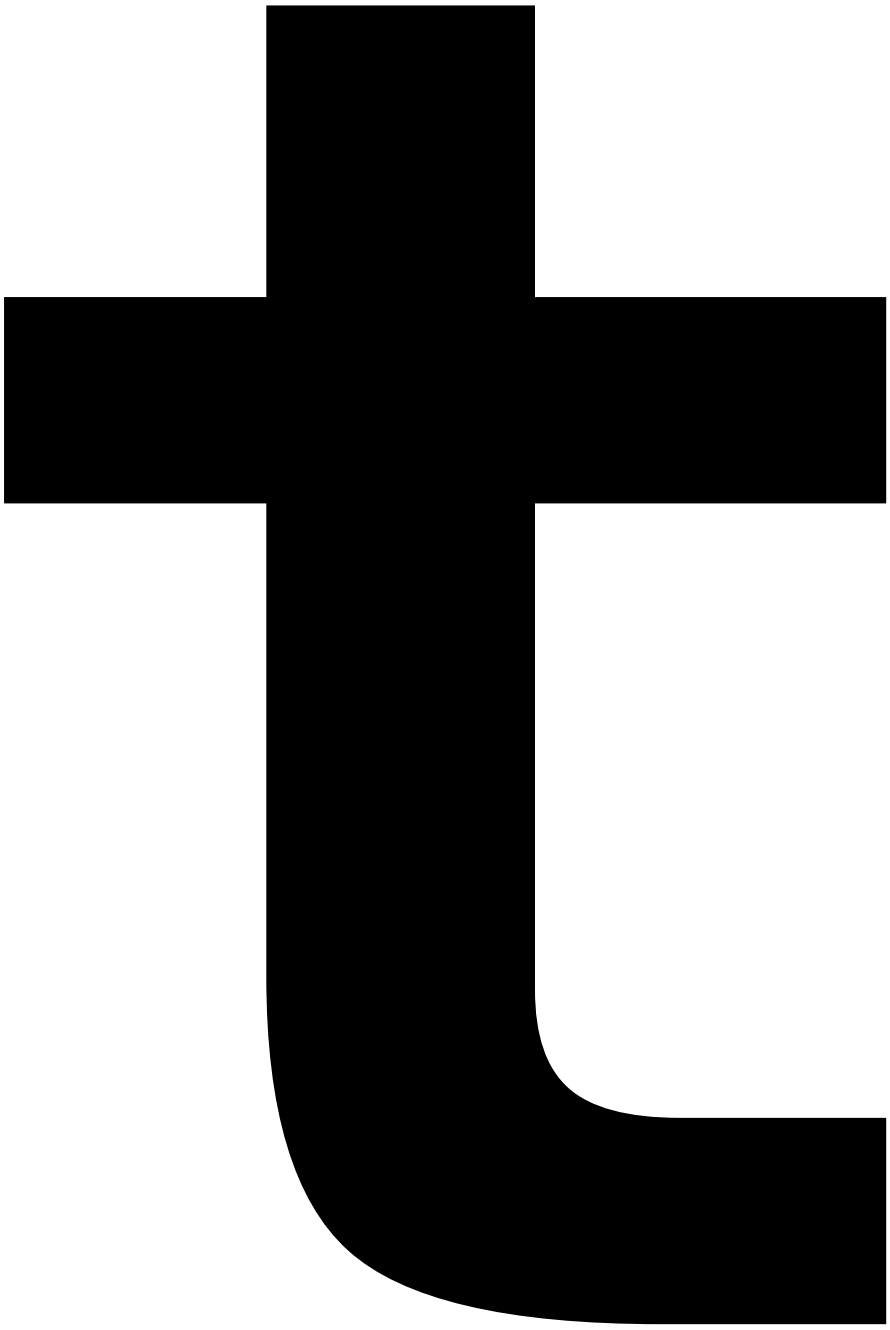
S



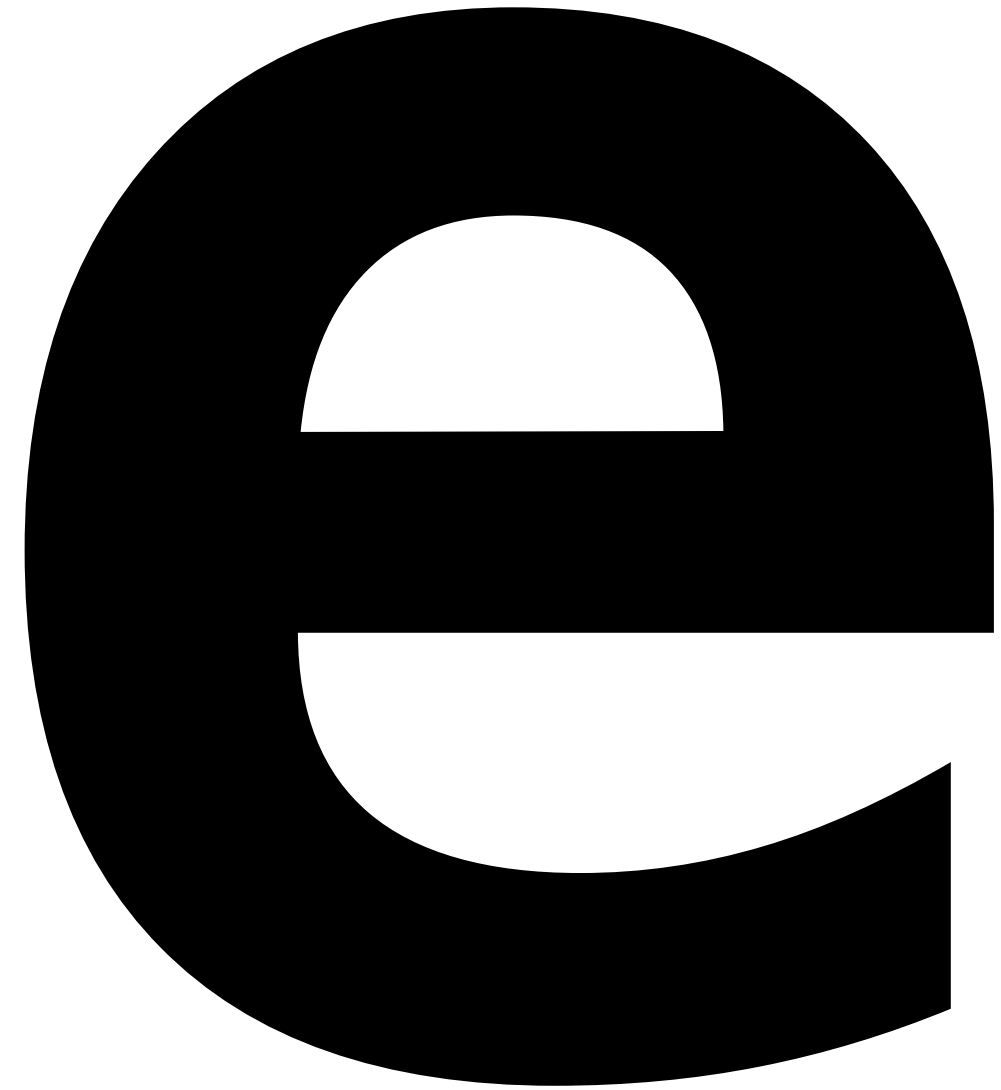


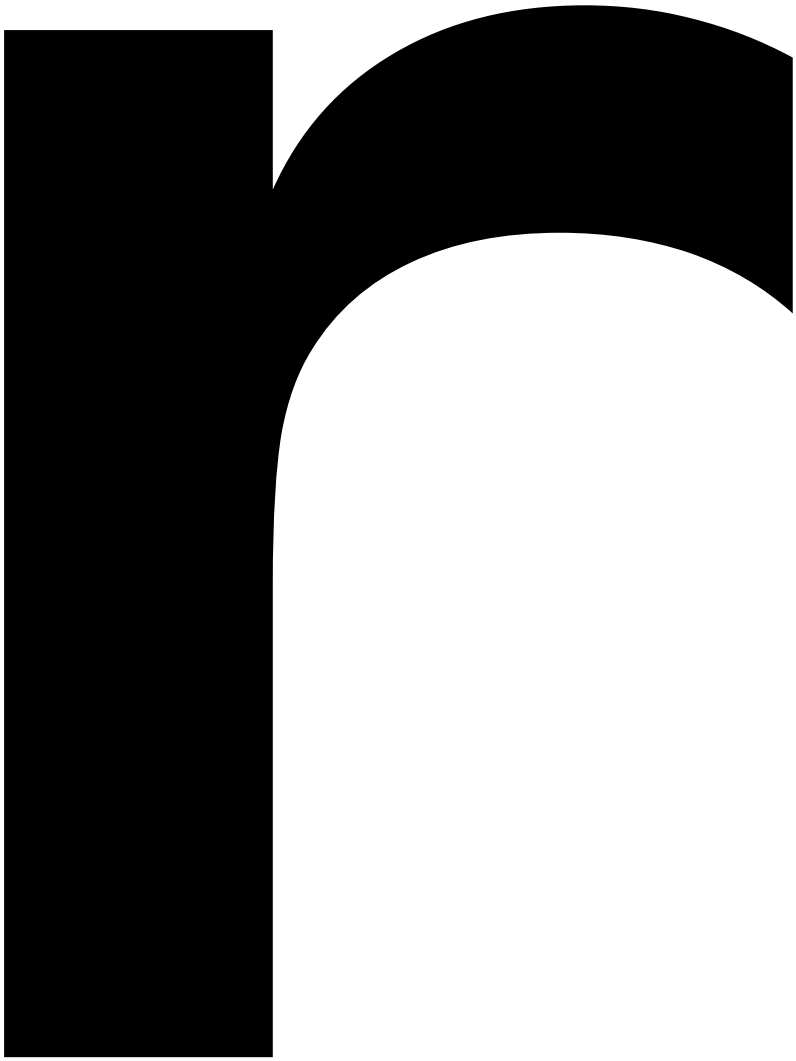




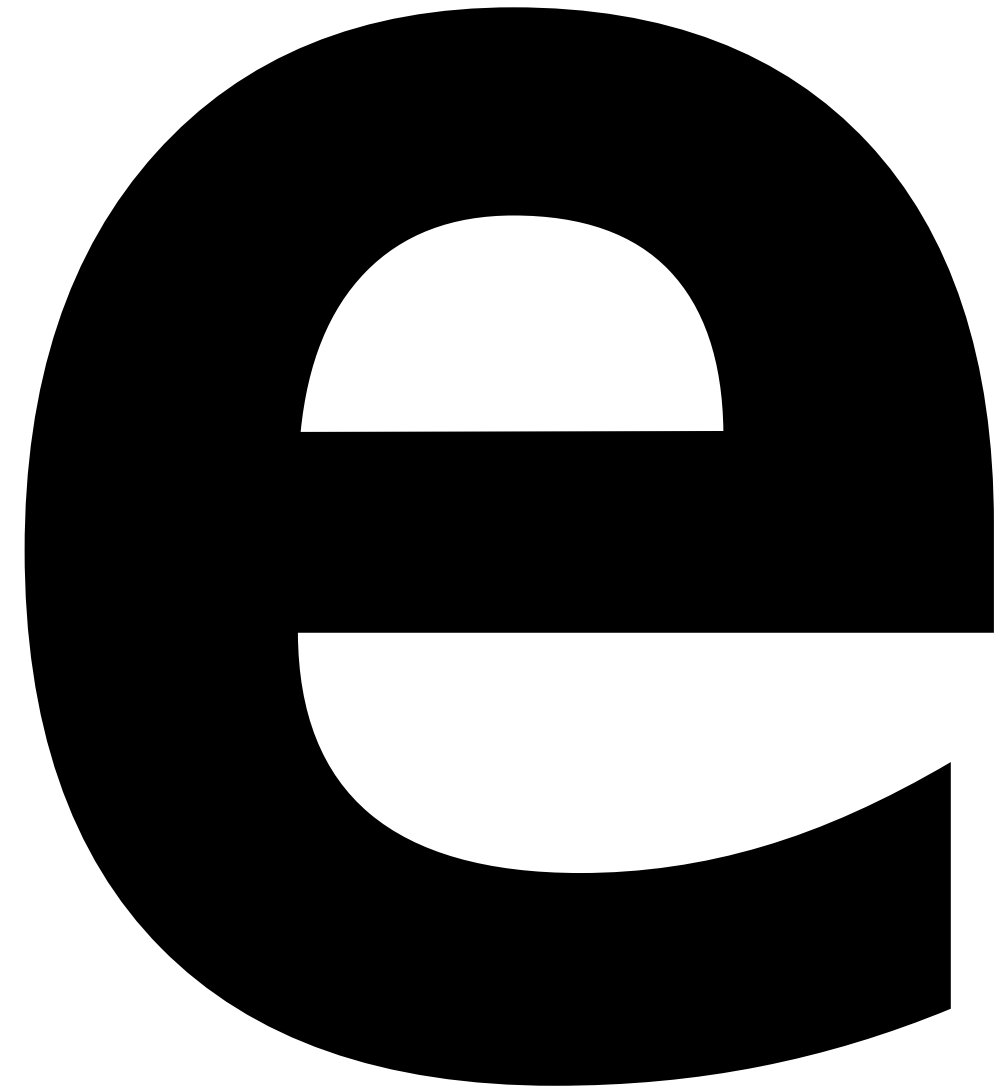


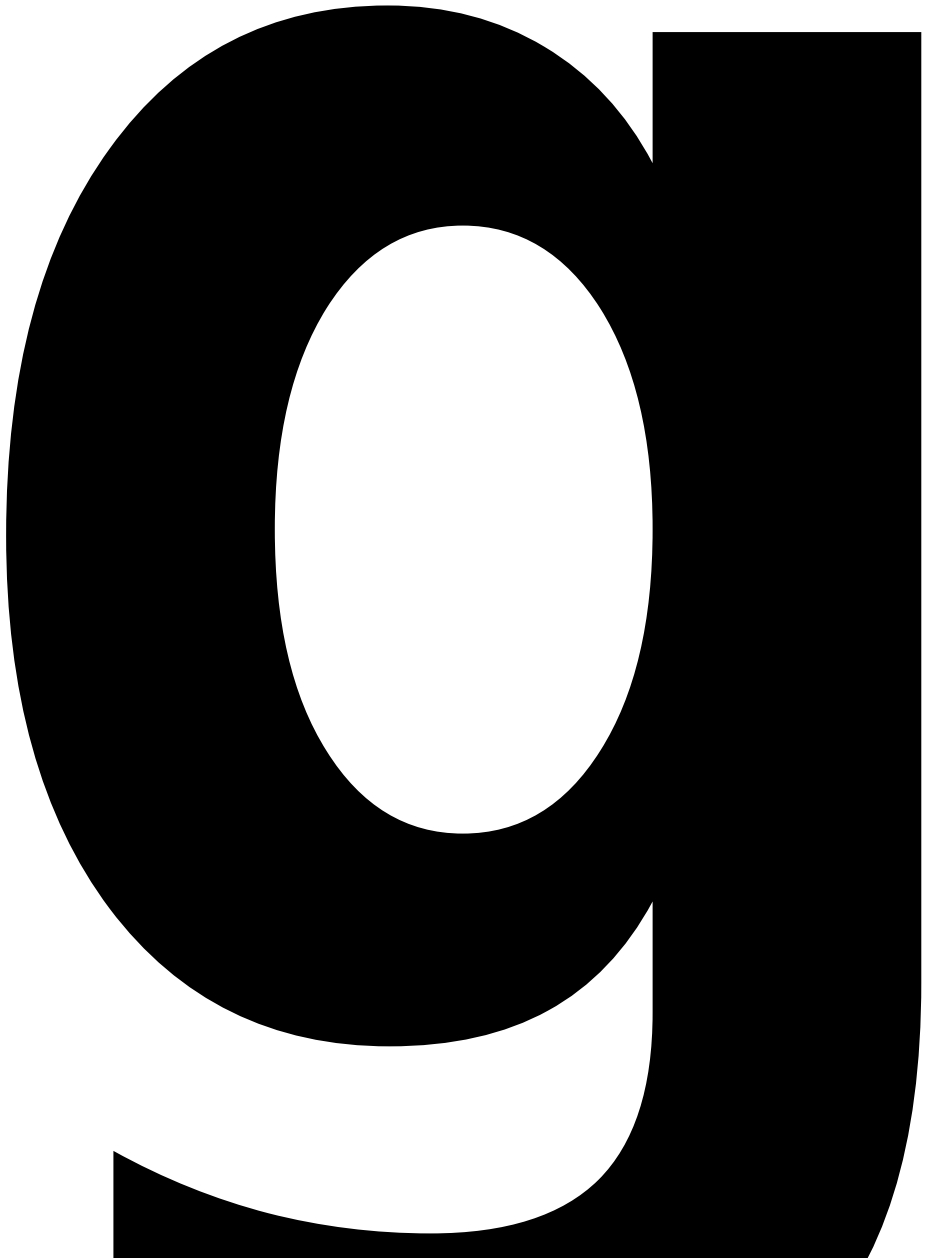
d

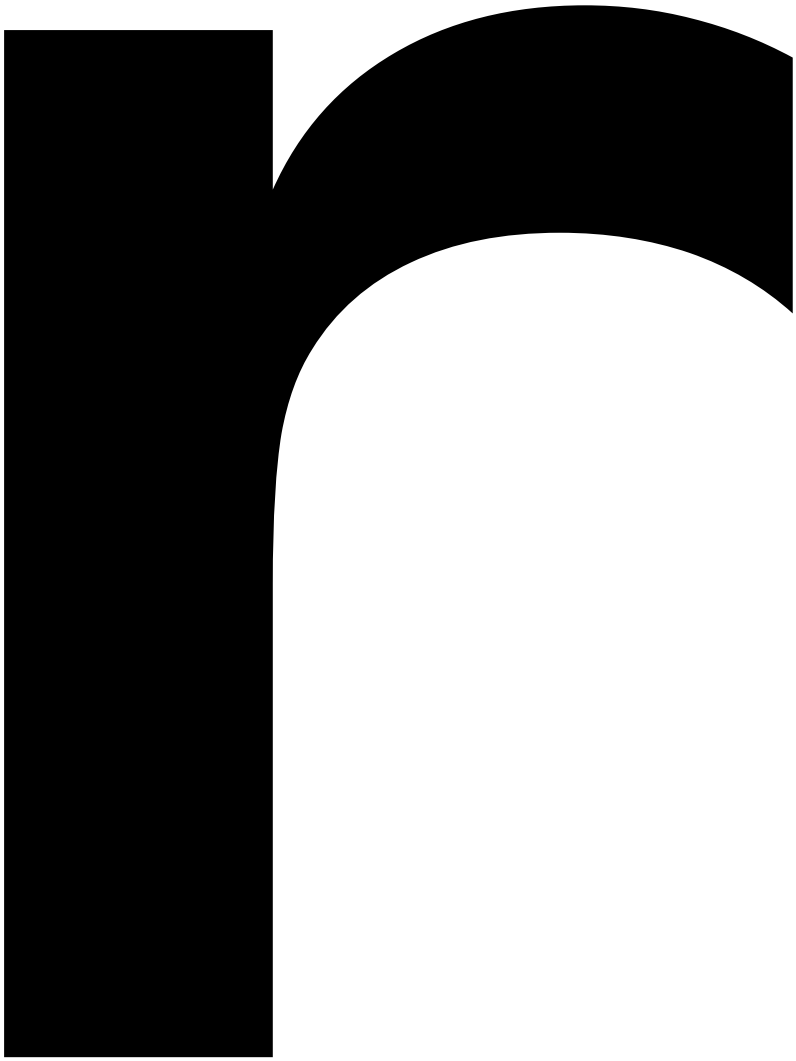


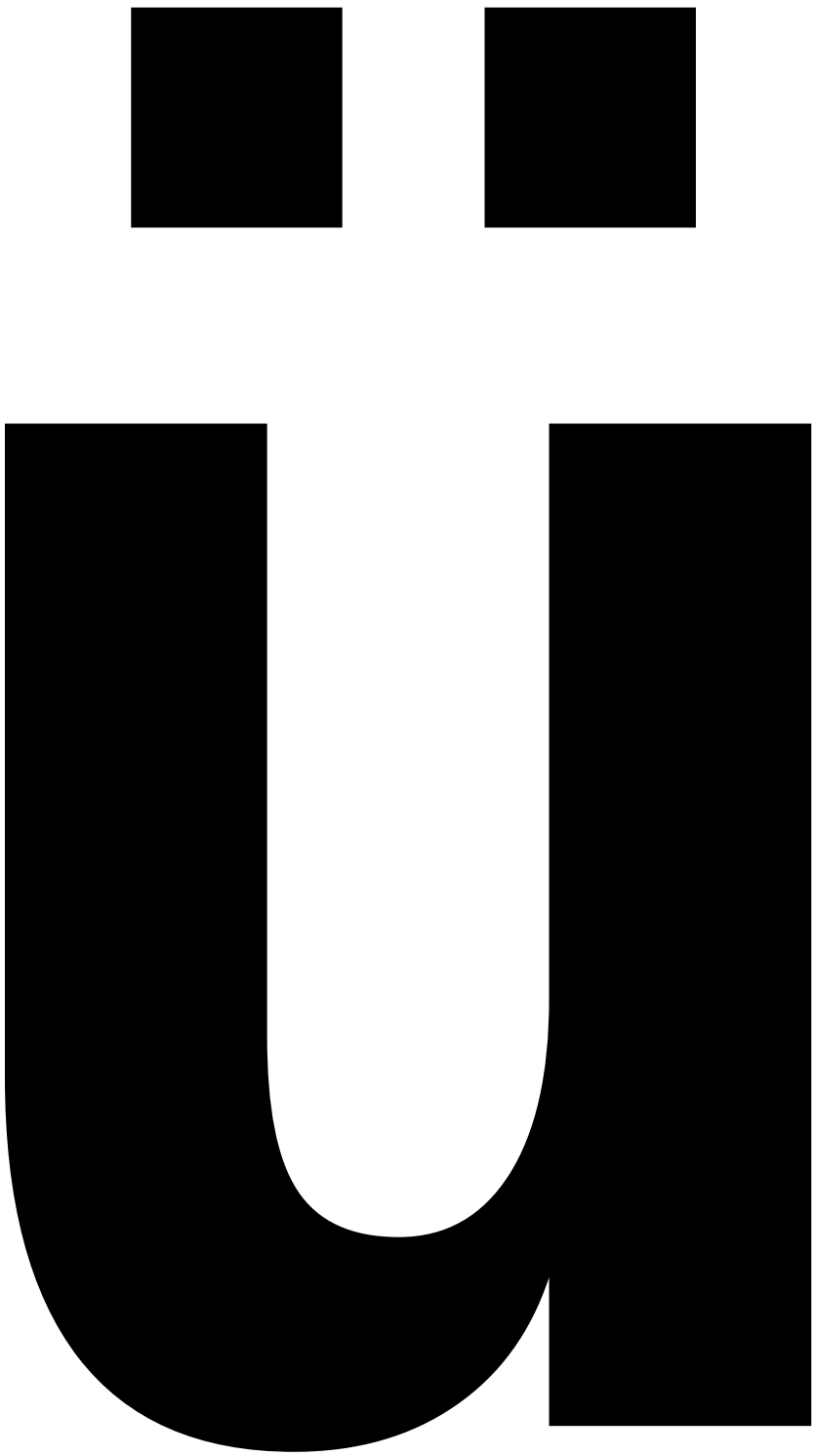


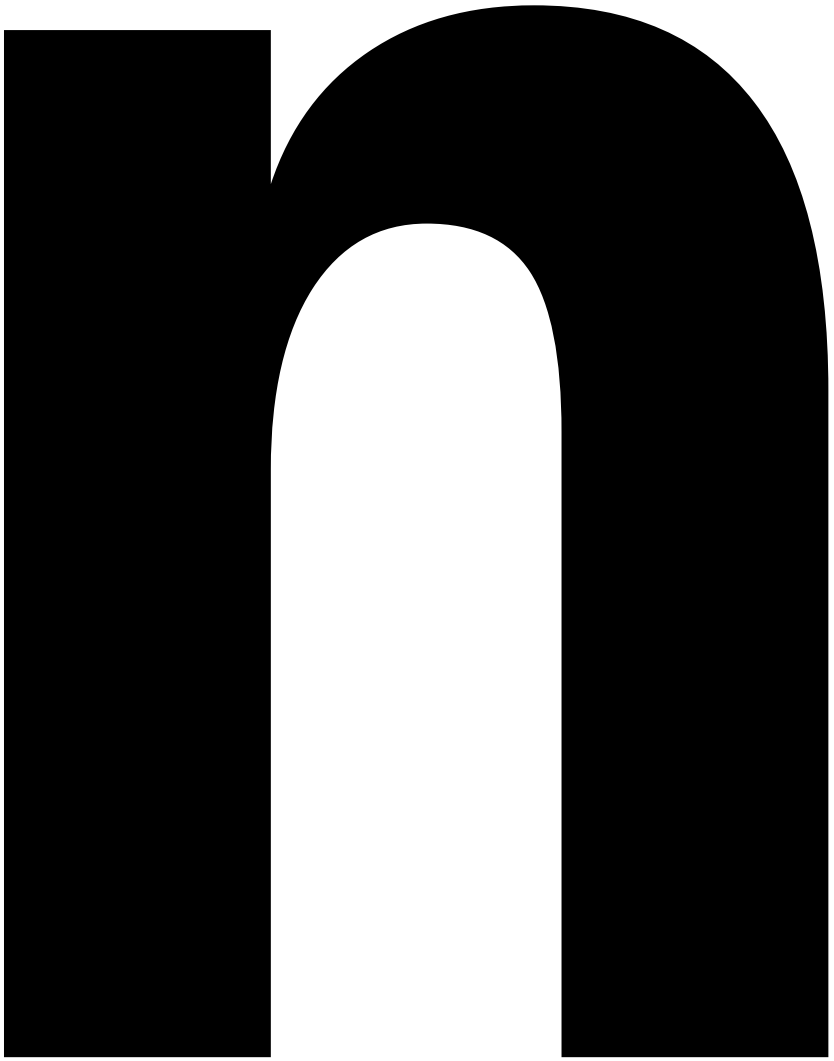
B





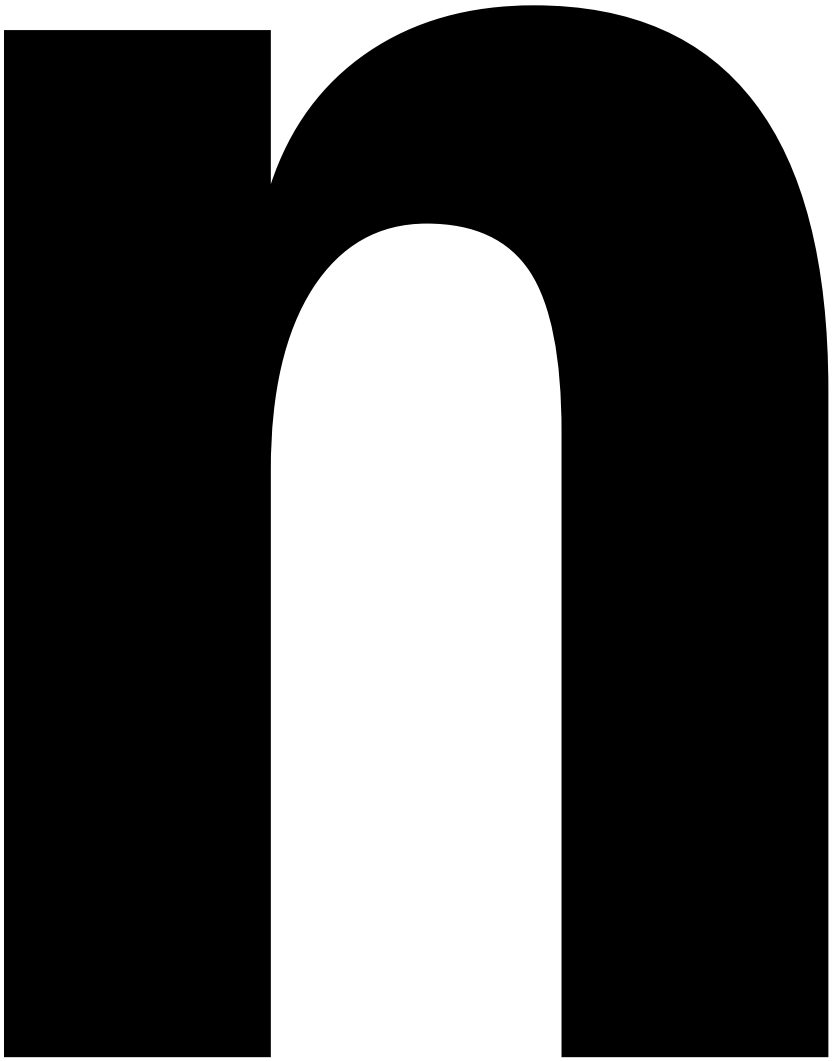


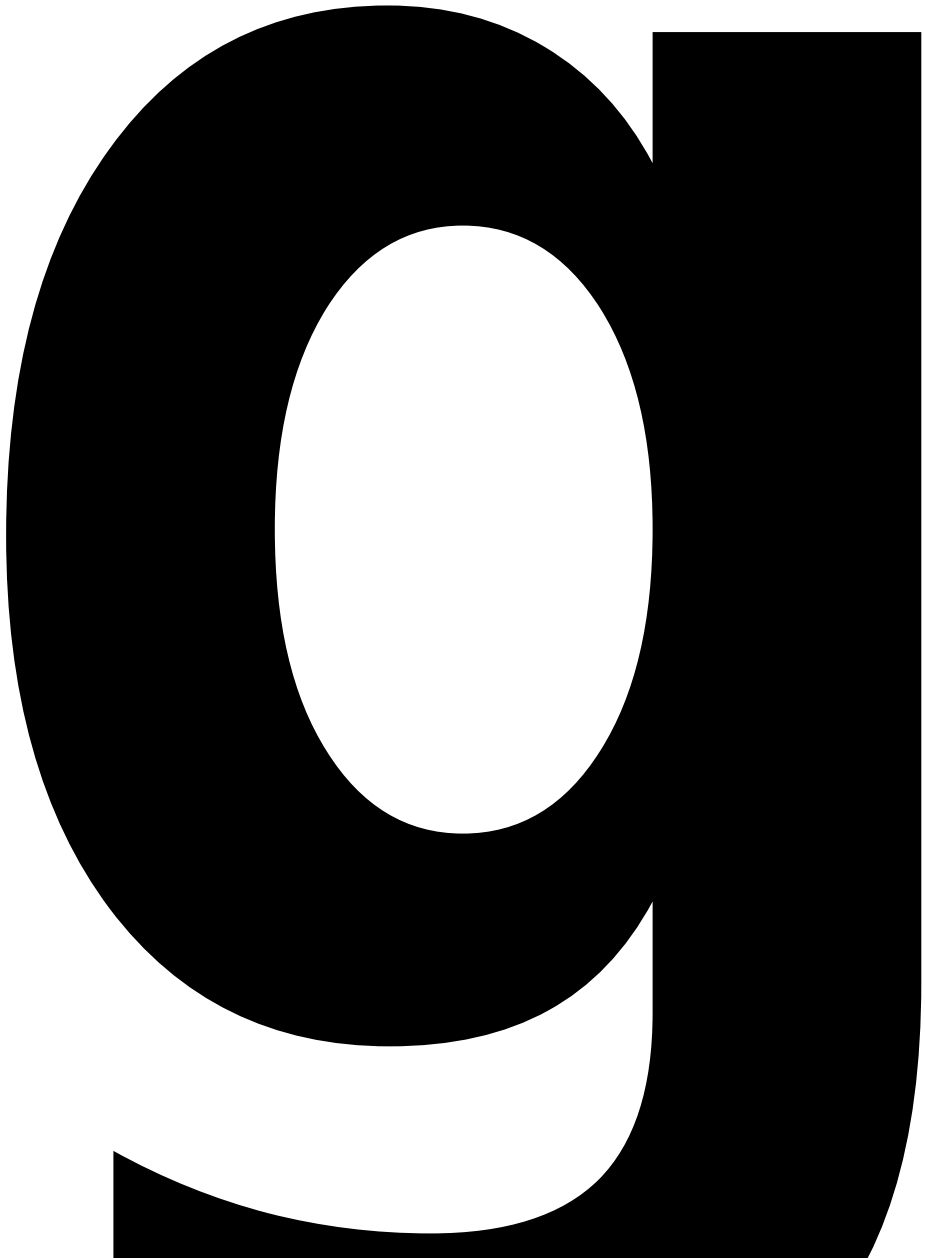


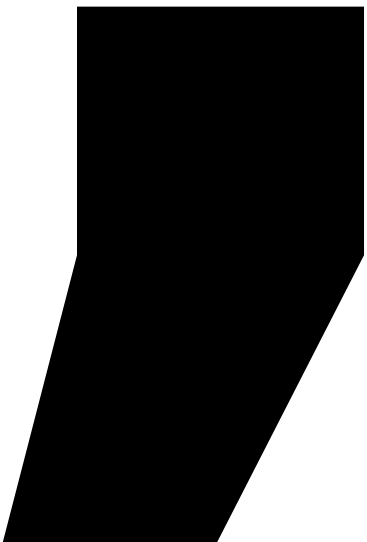


d

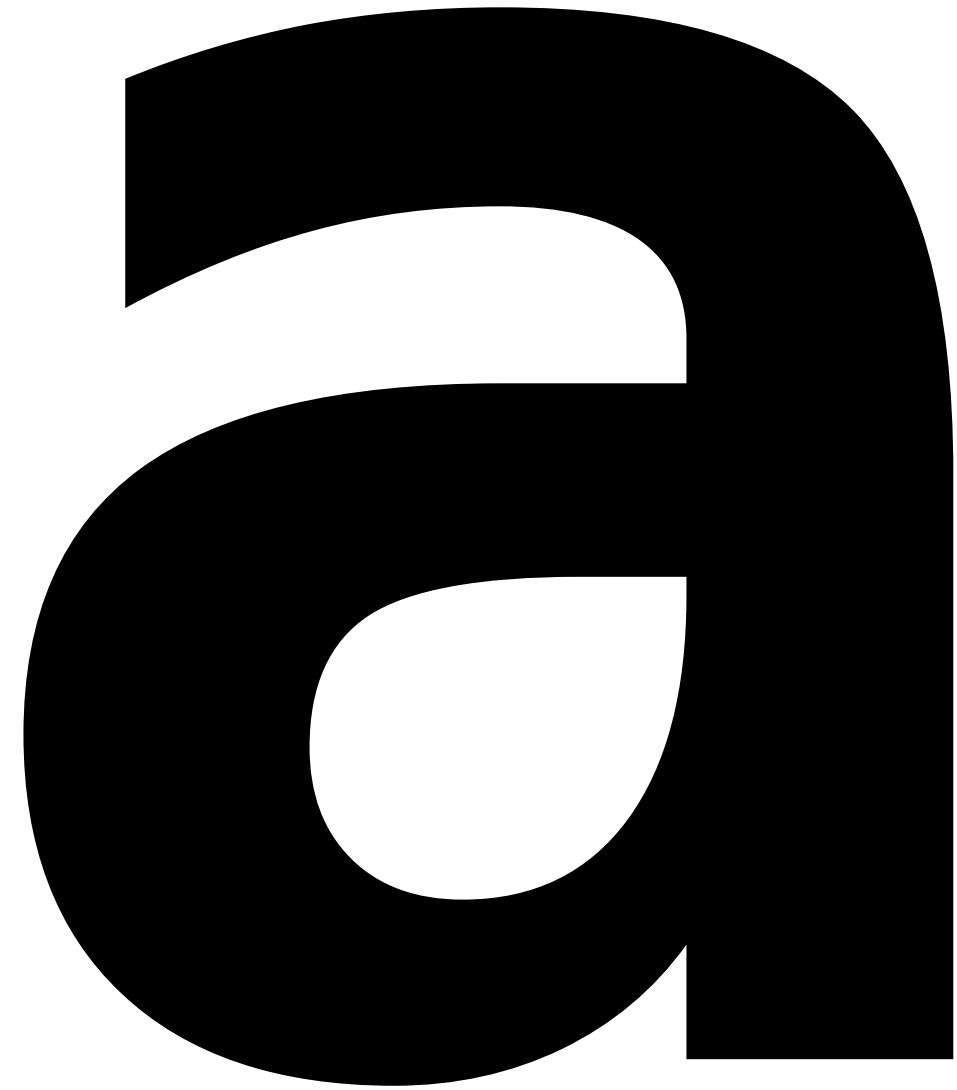
u

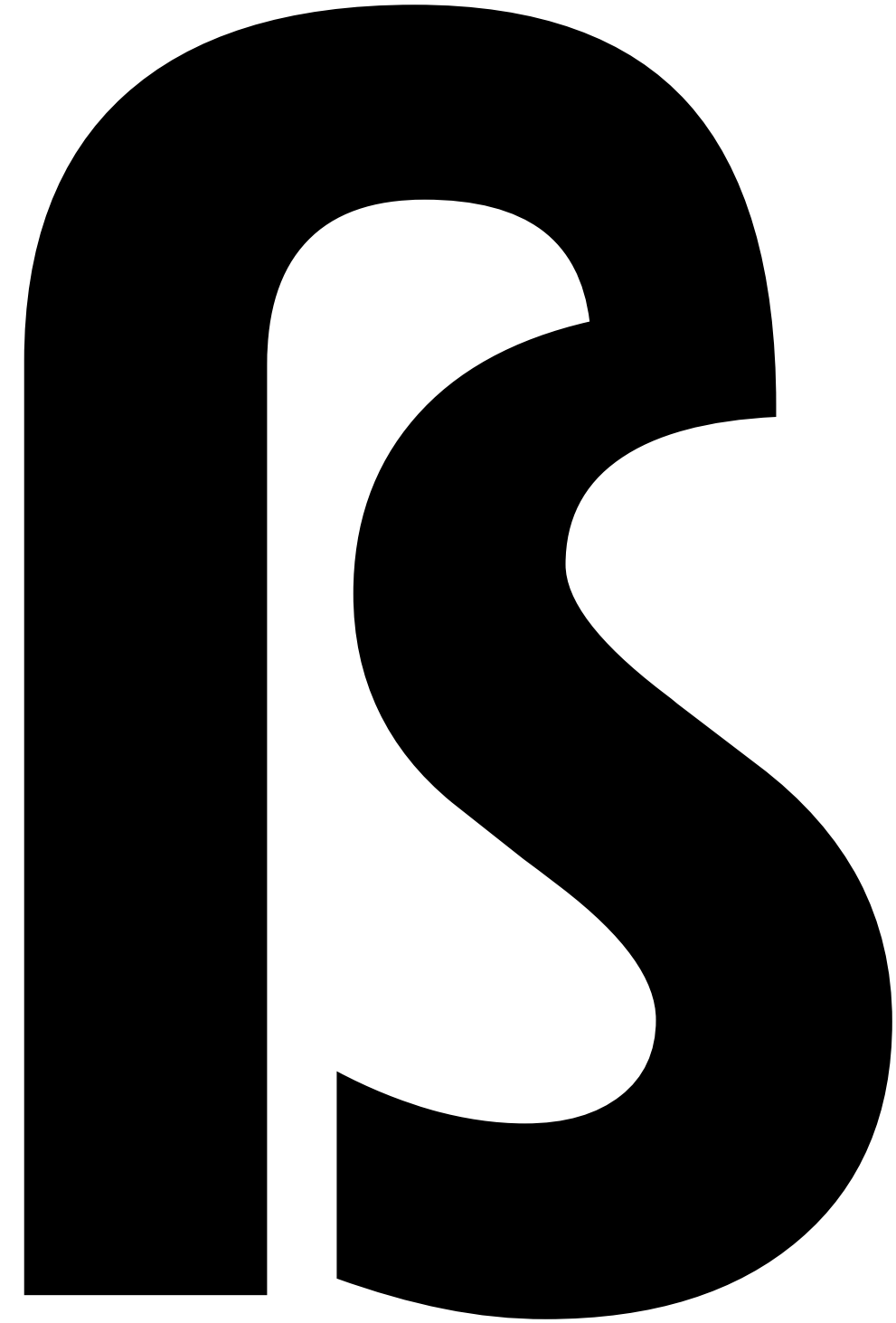


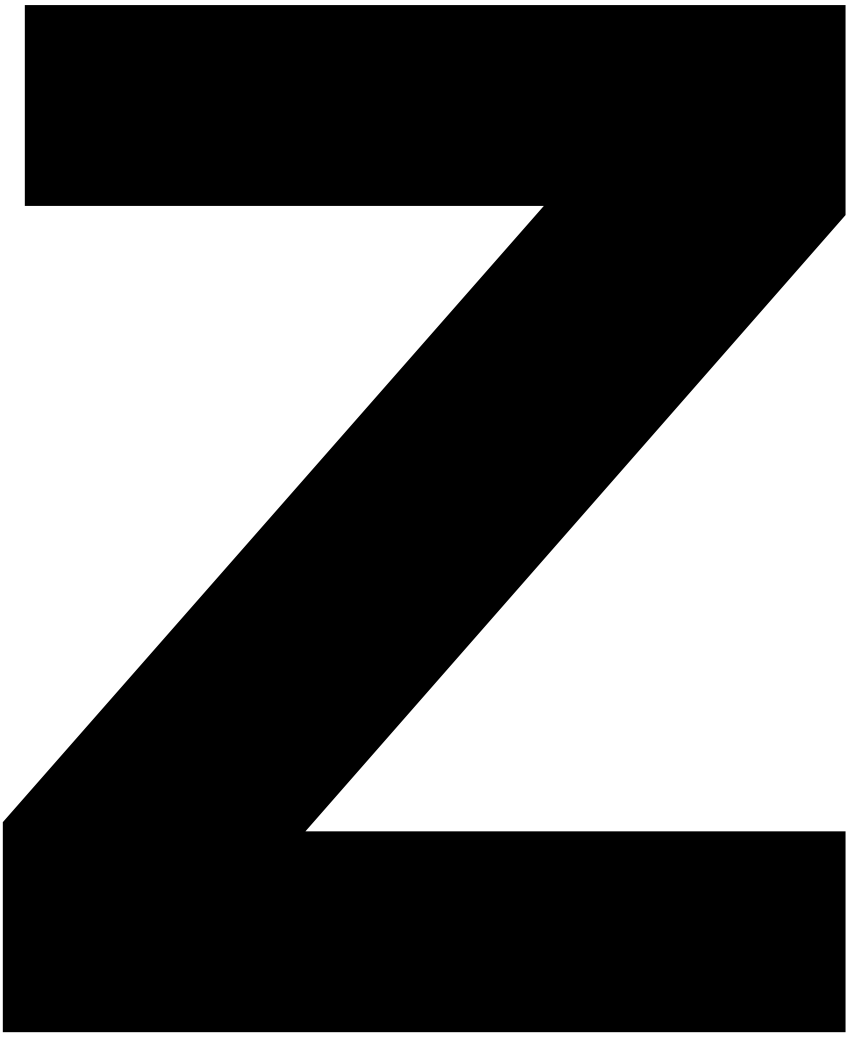




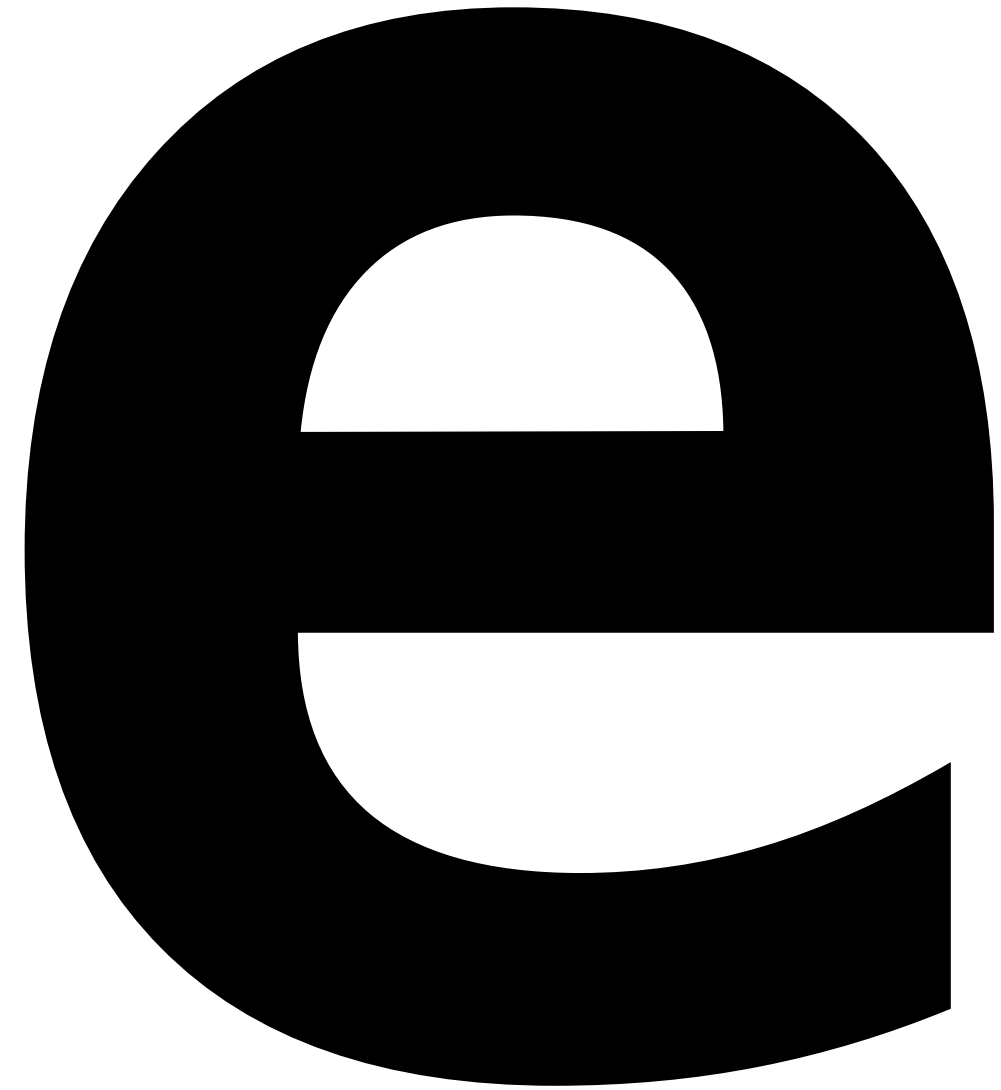
d

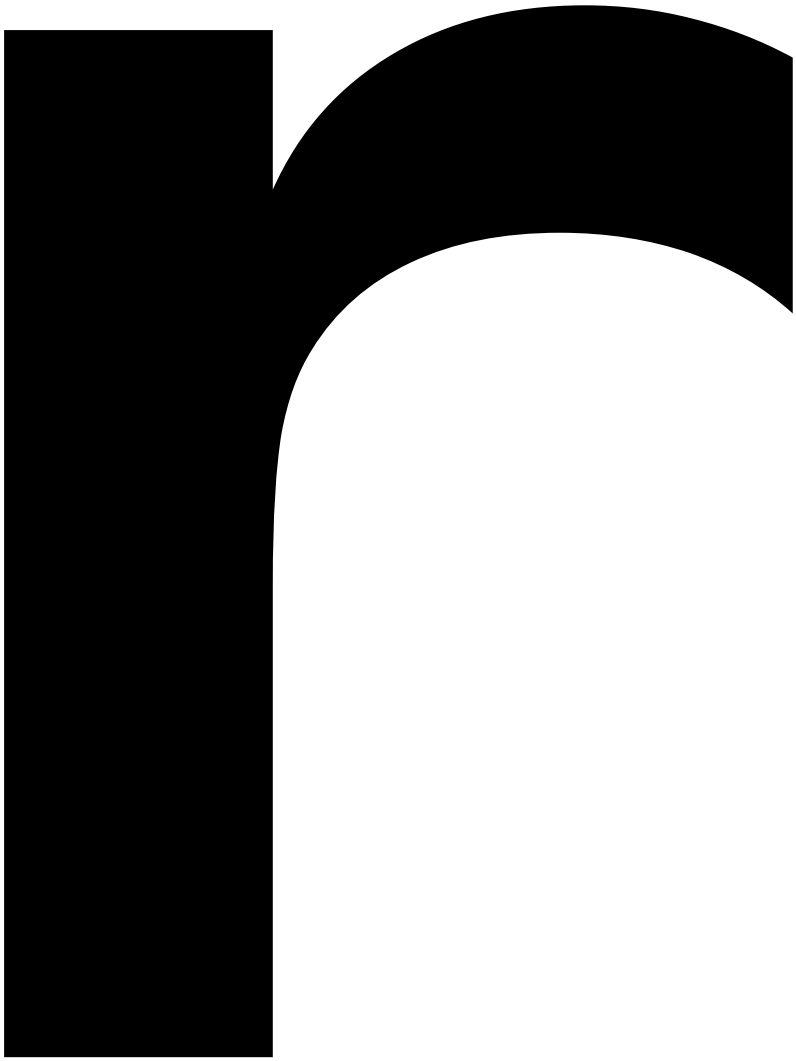




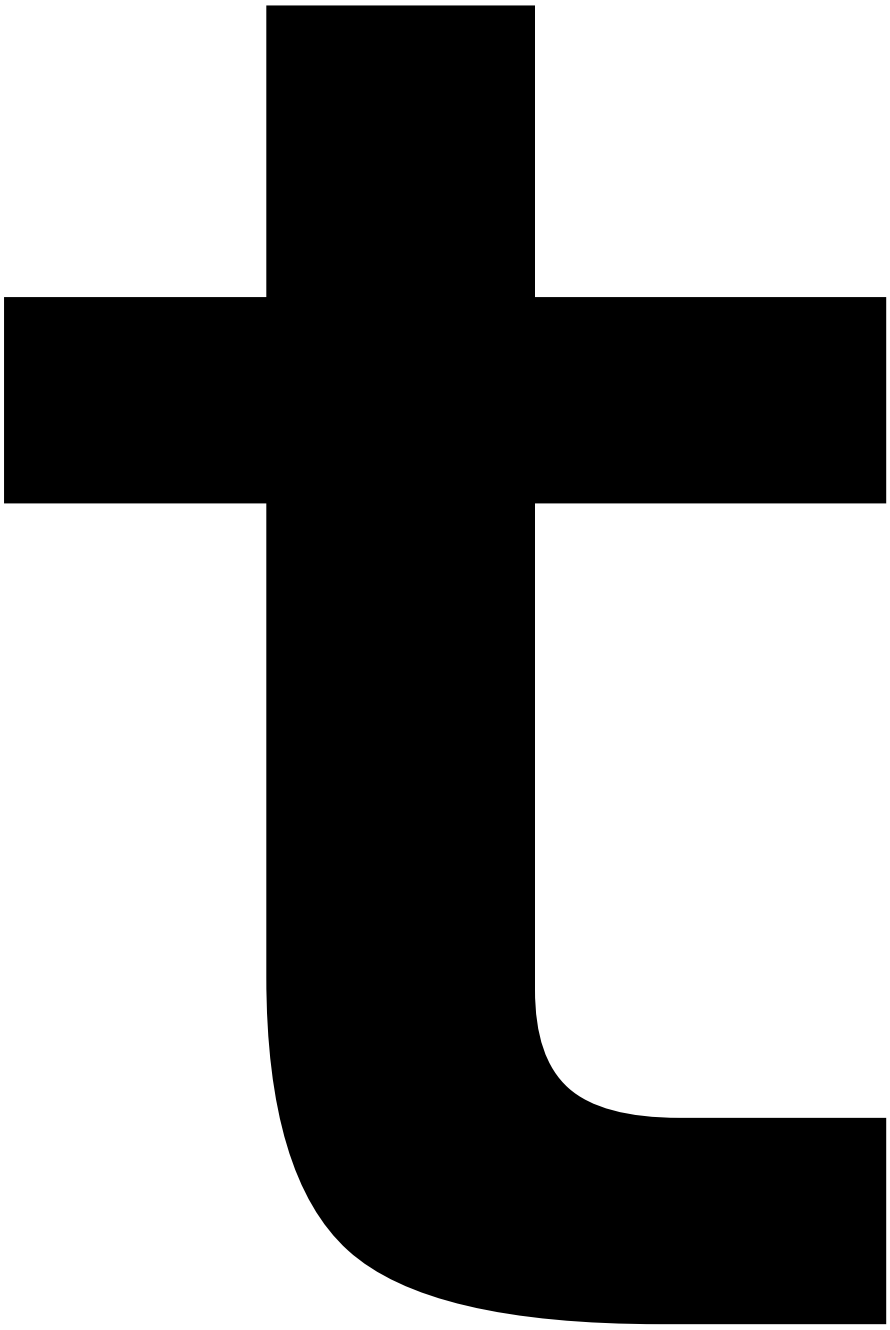


u

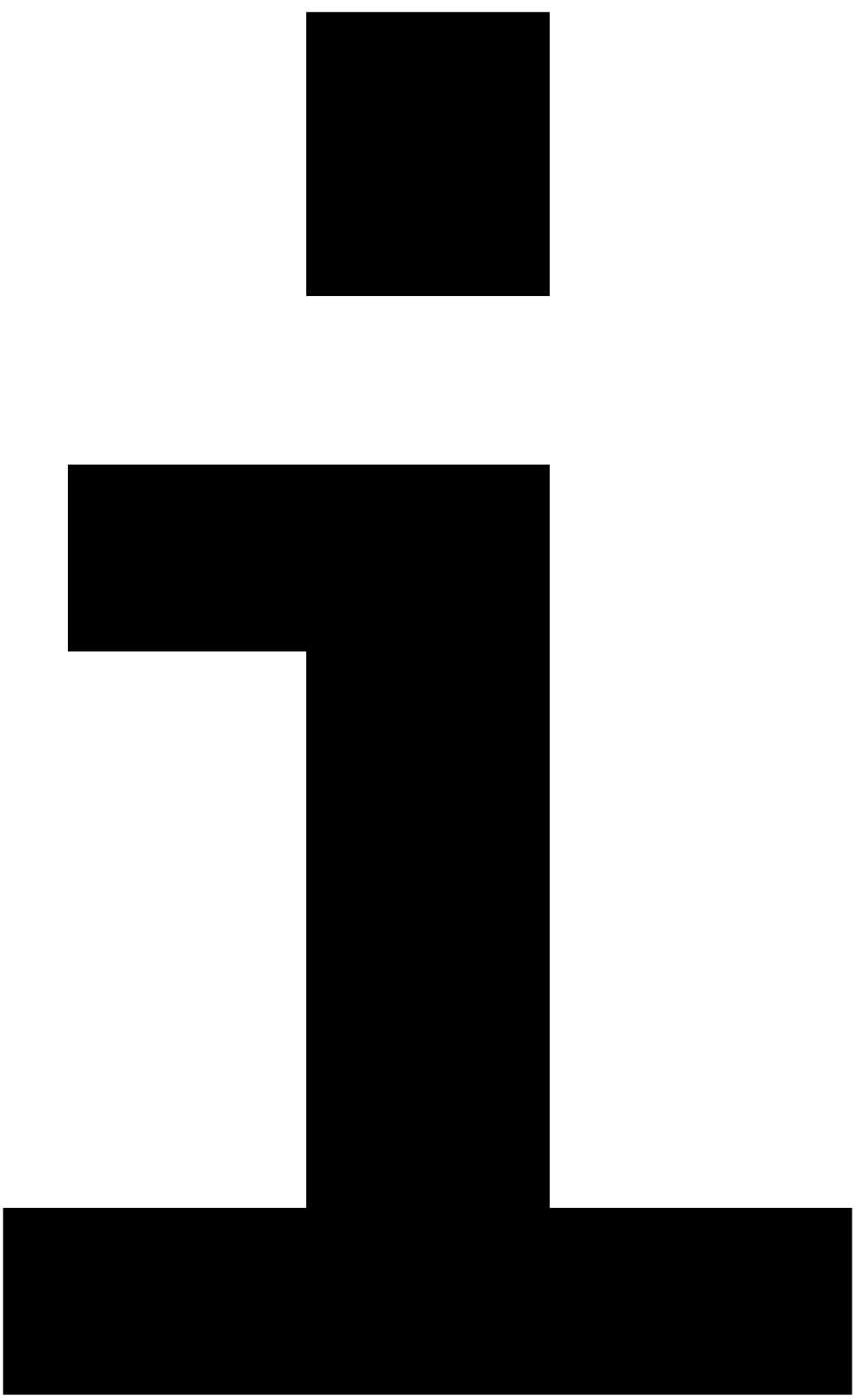


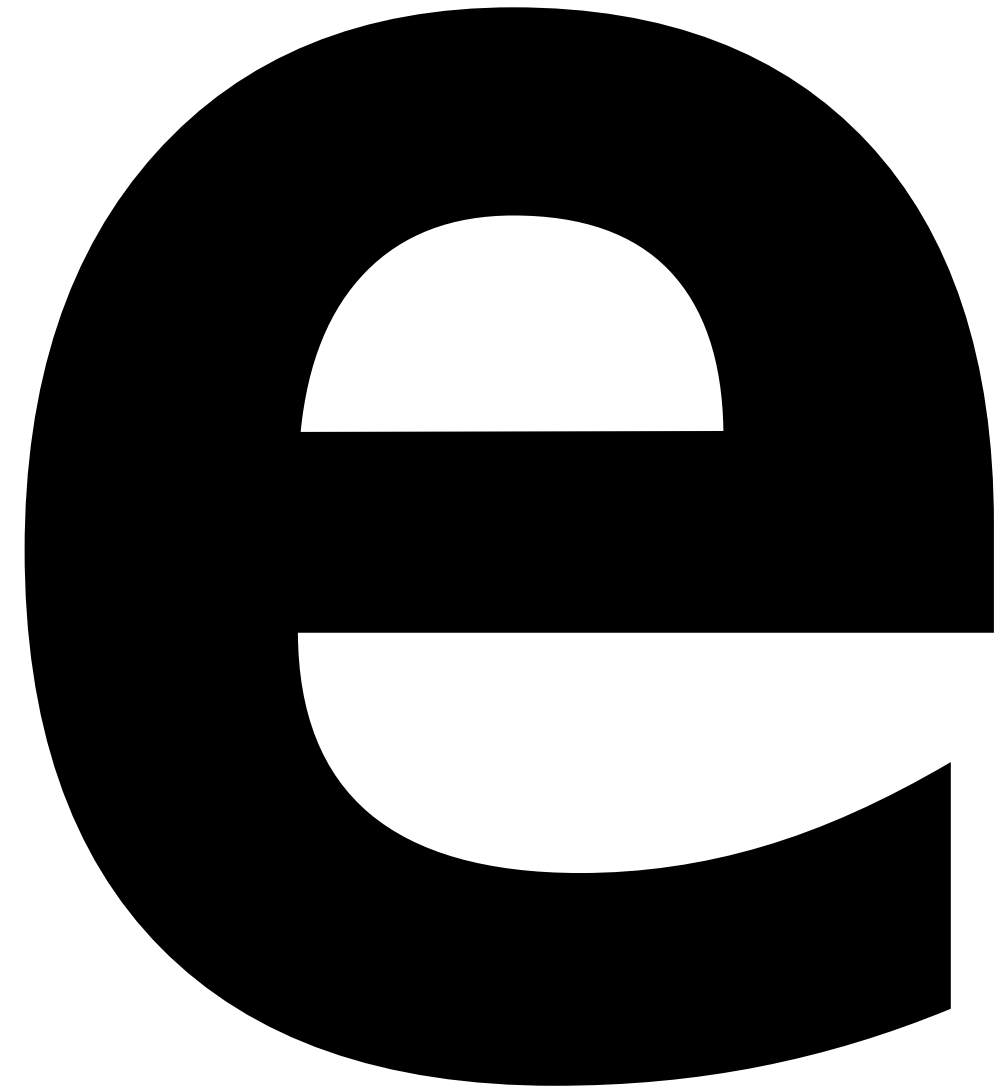


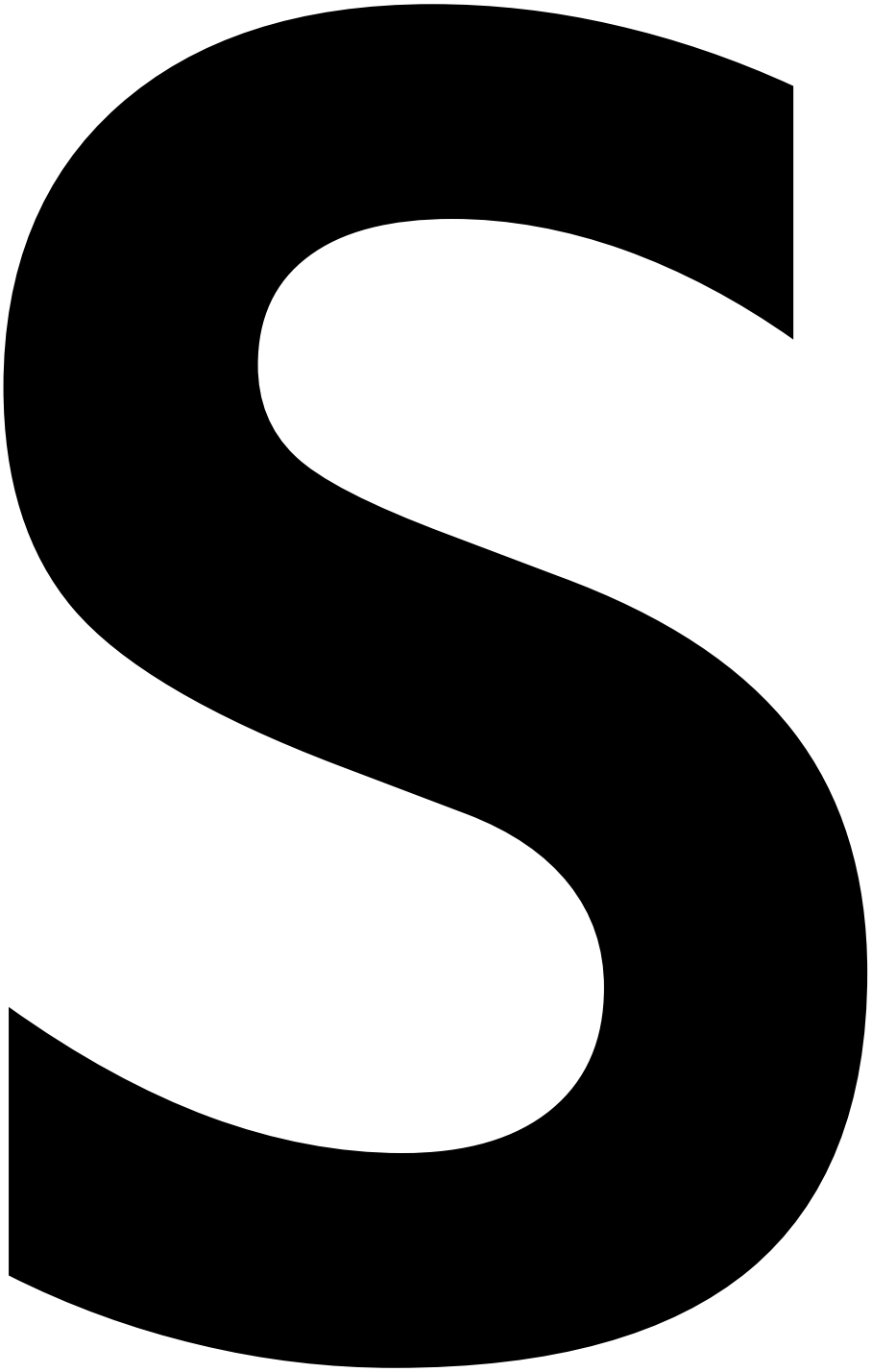
S

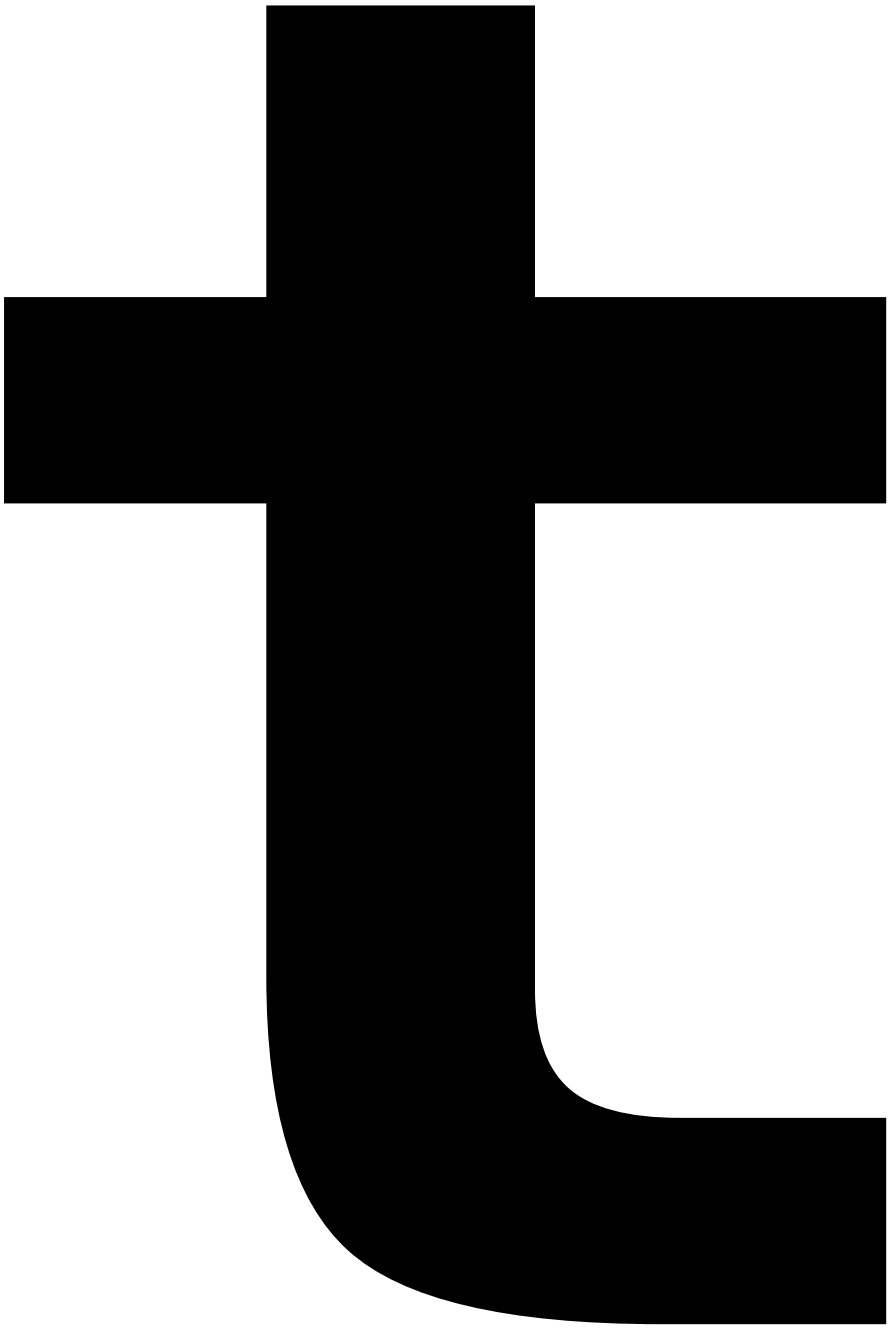


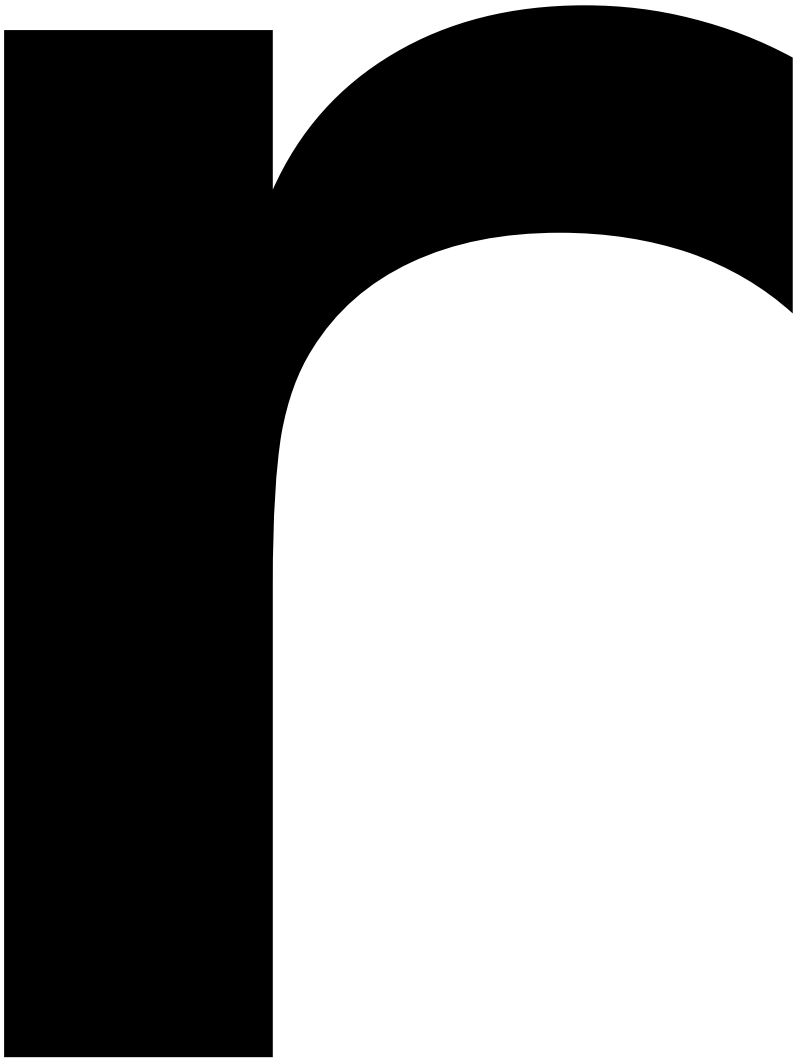
d

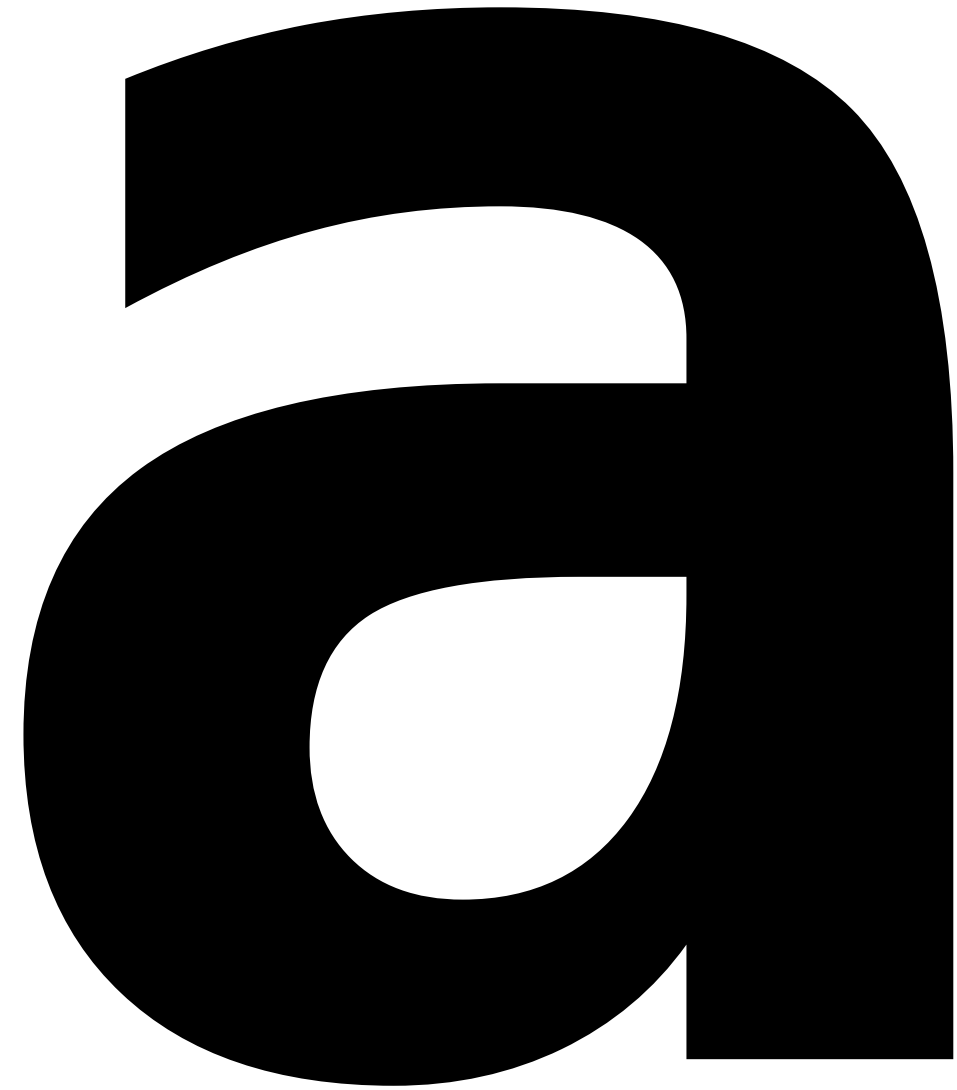


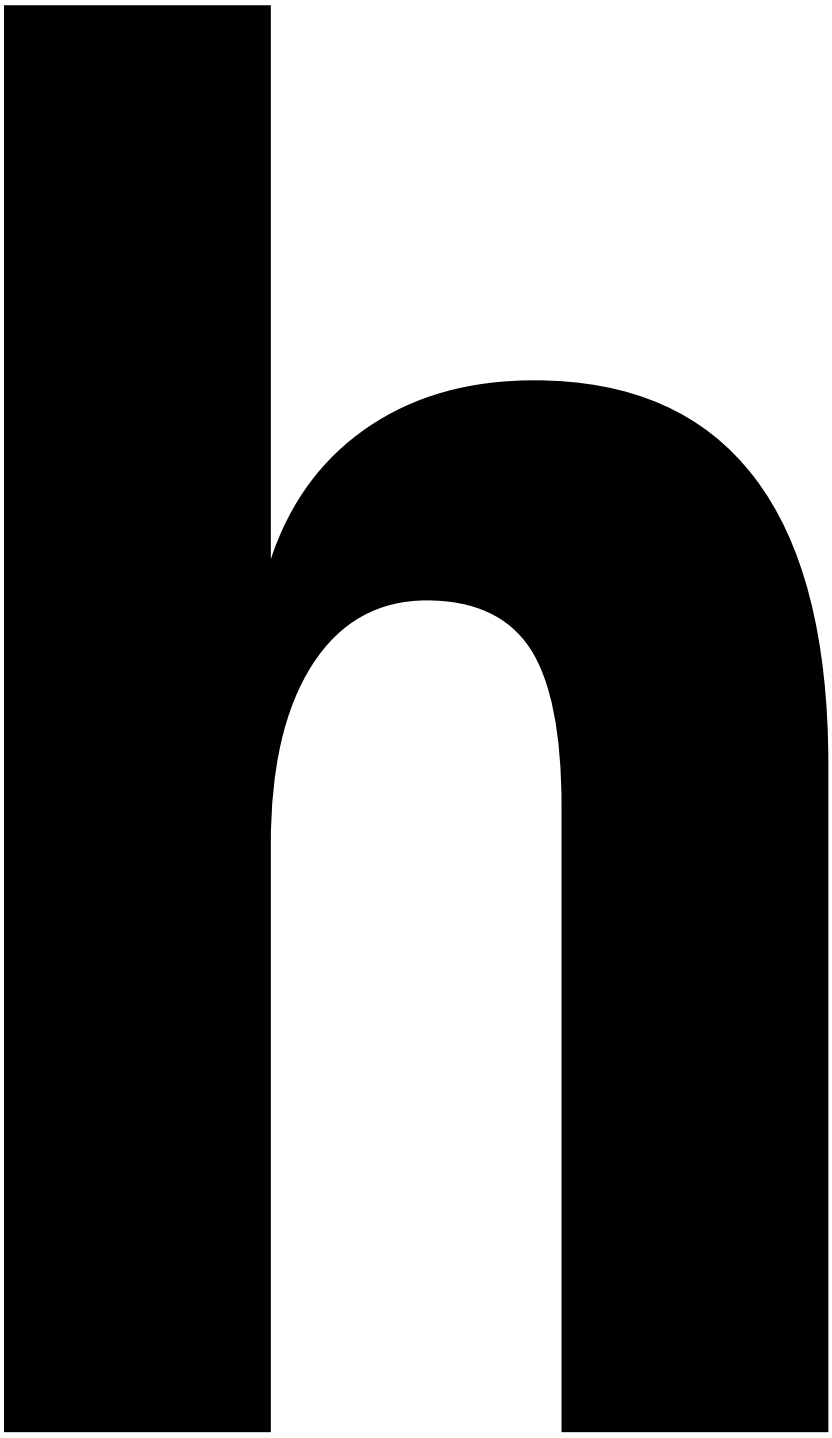


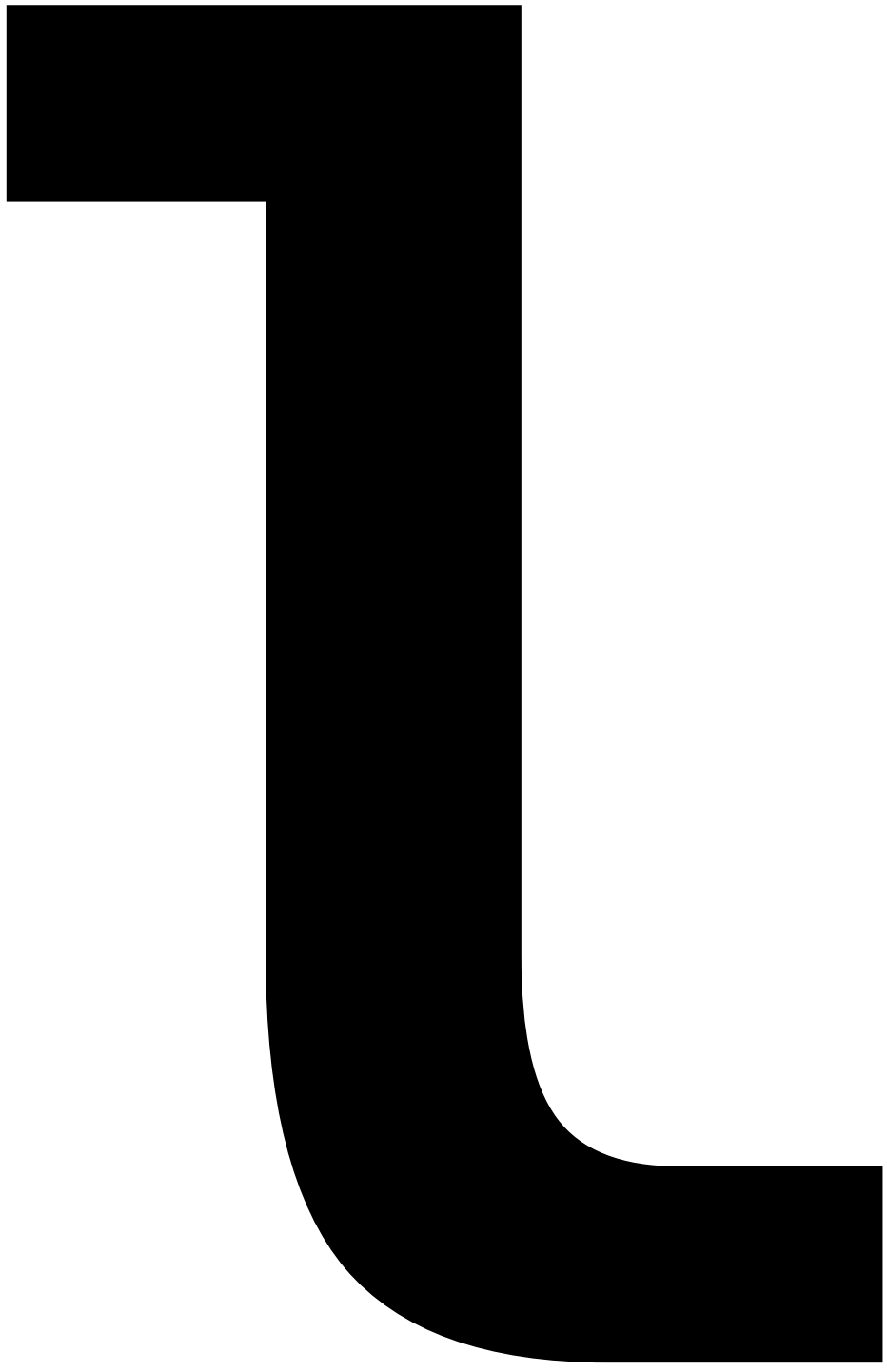


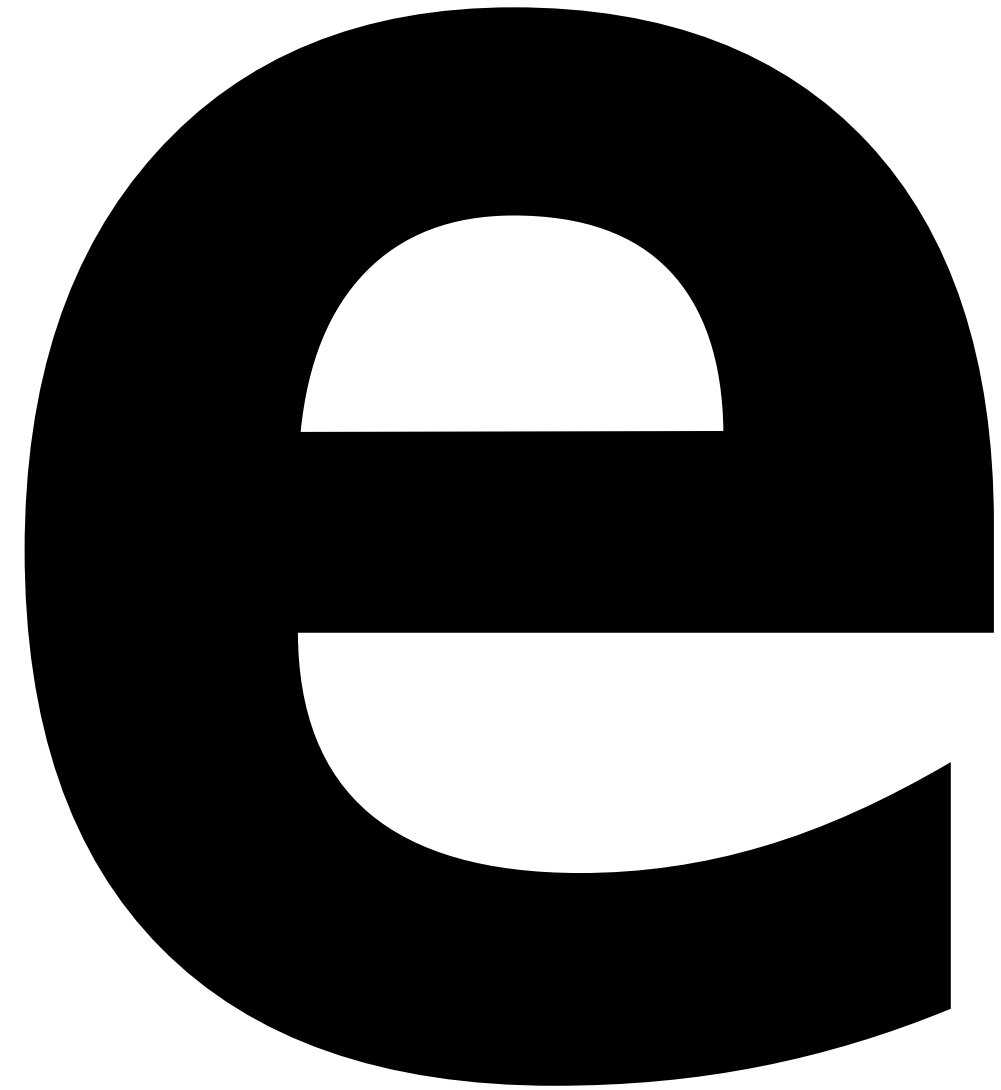


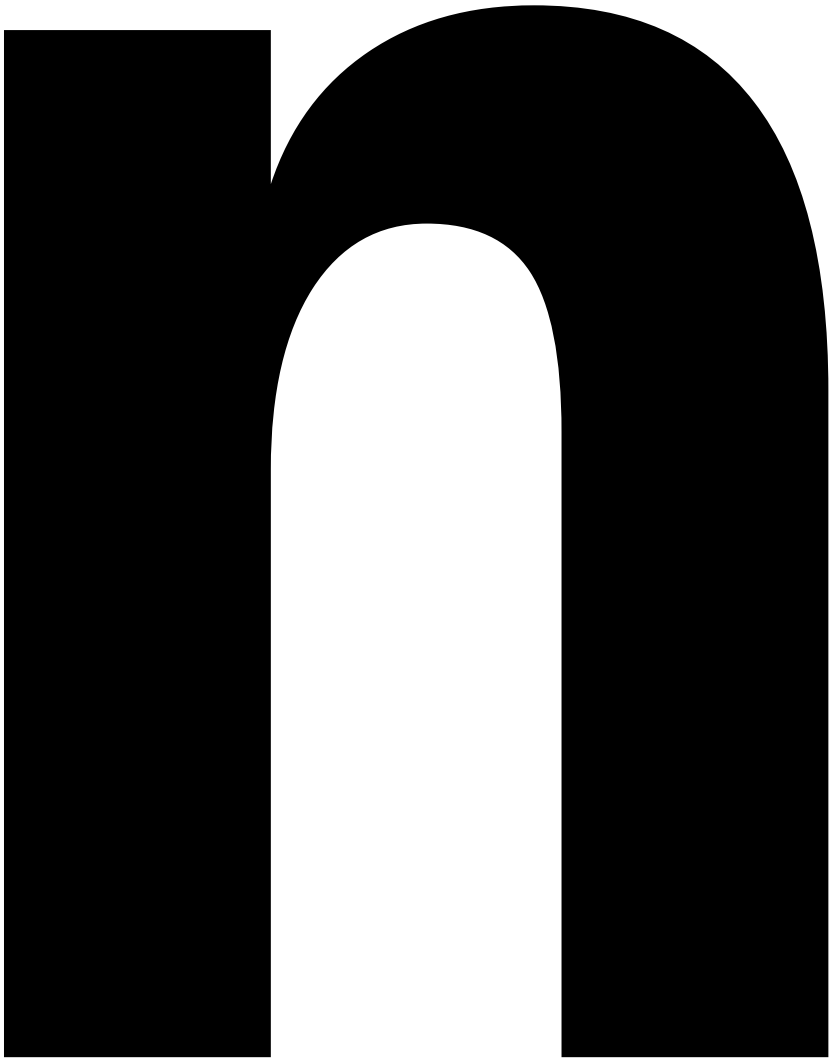




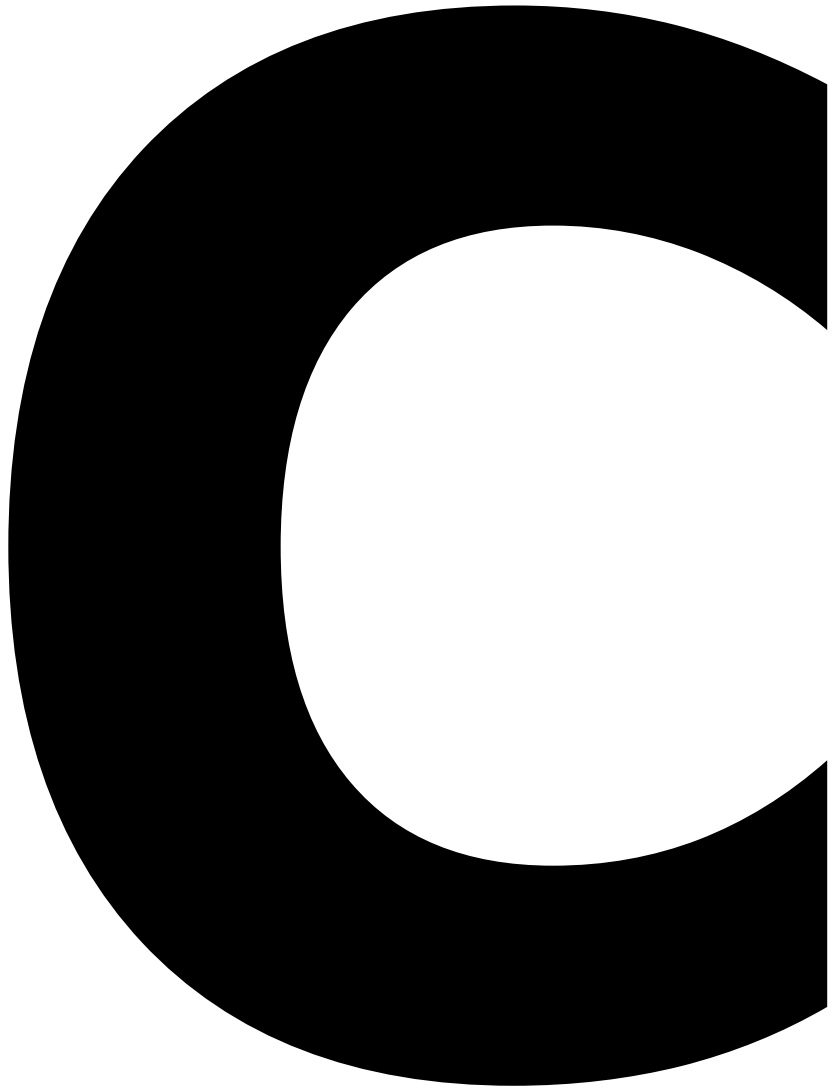


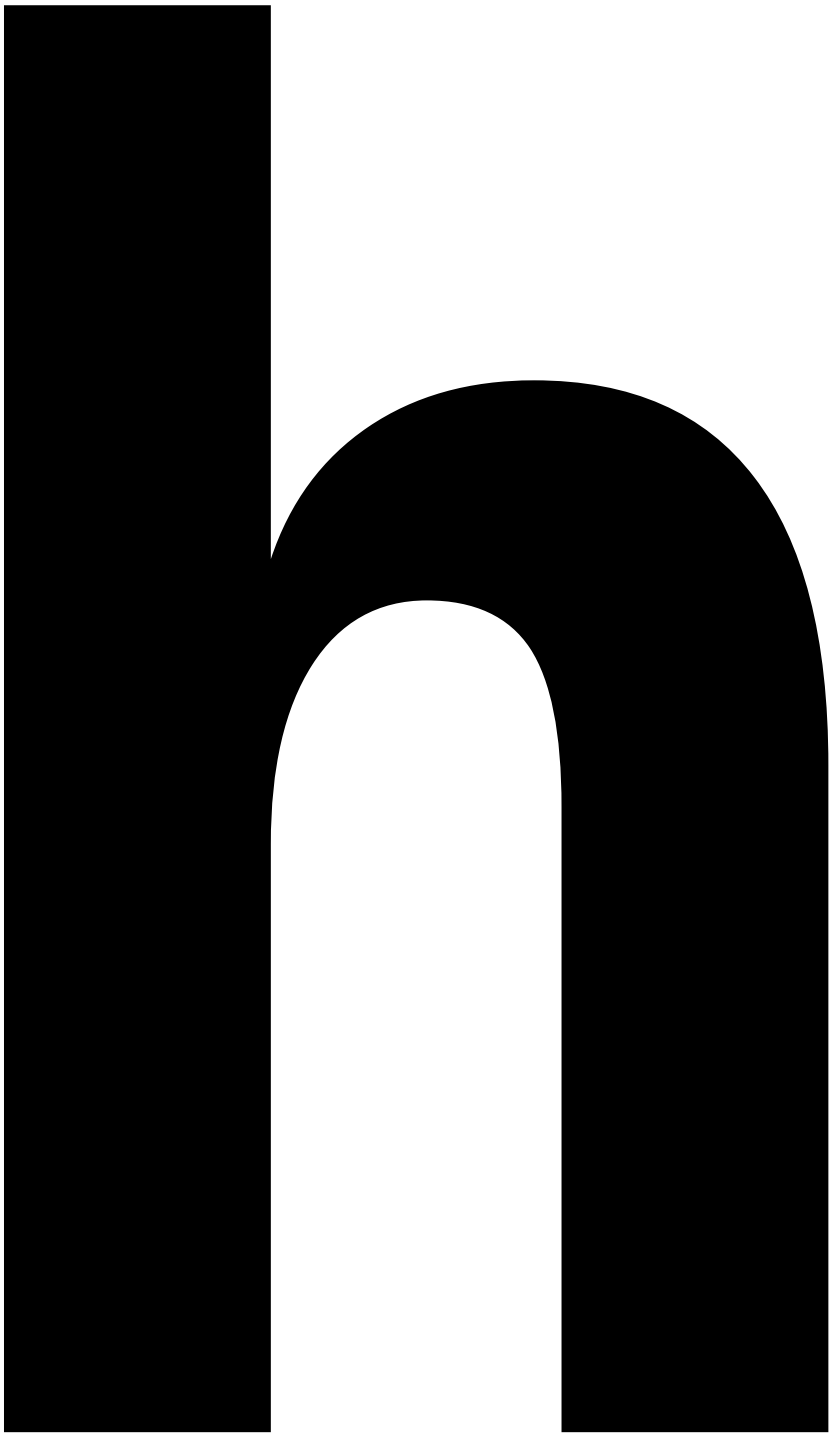




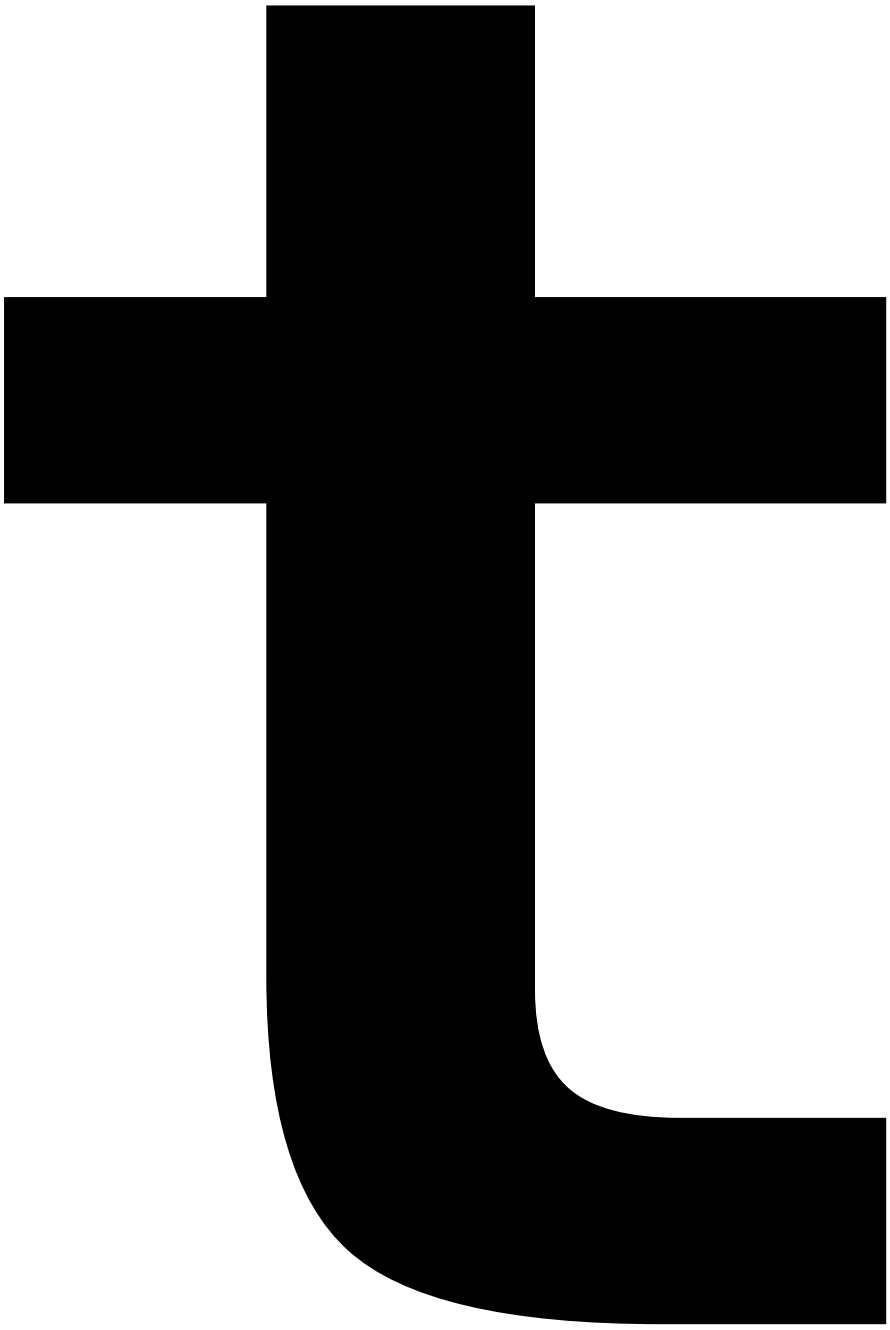


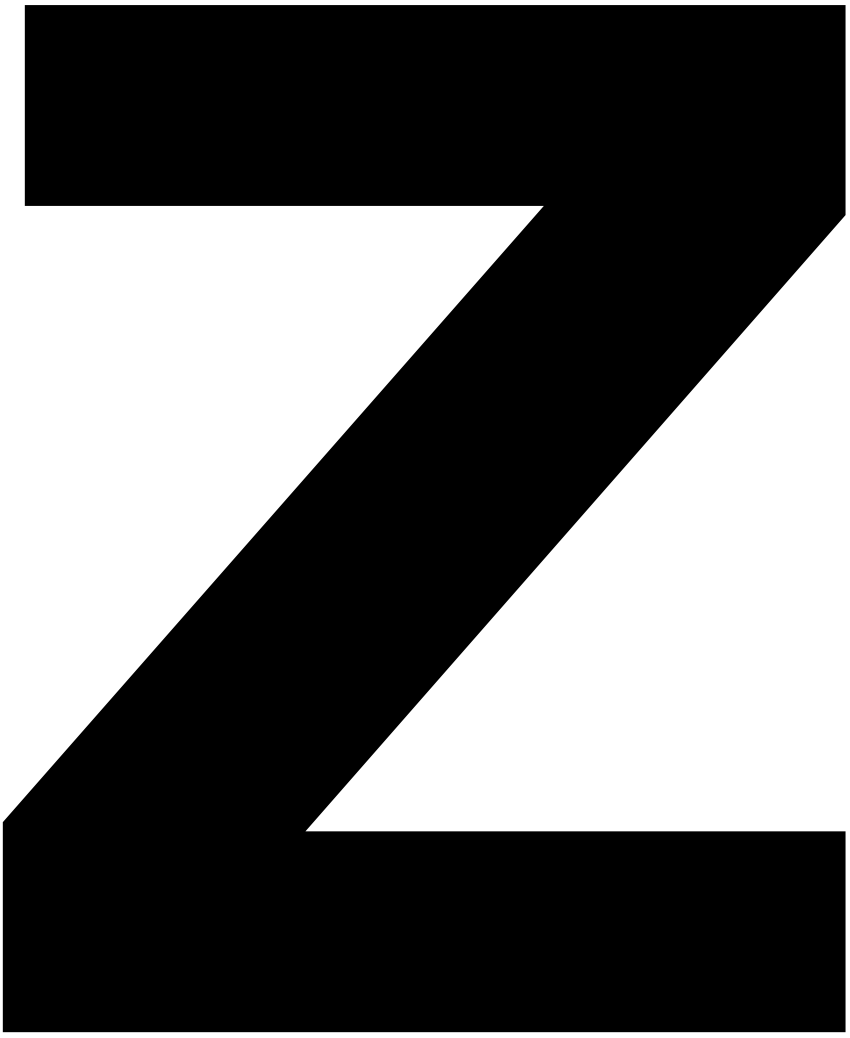
S

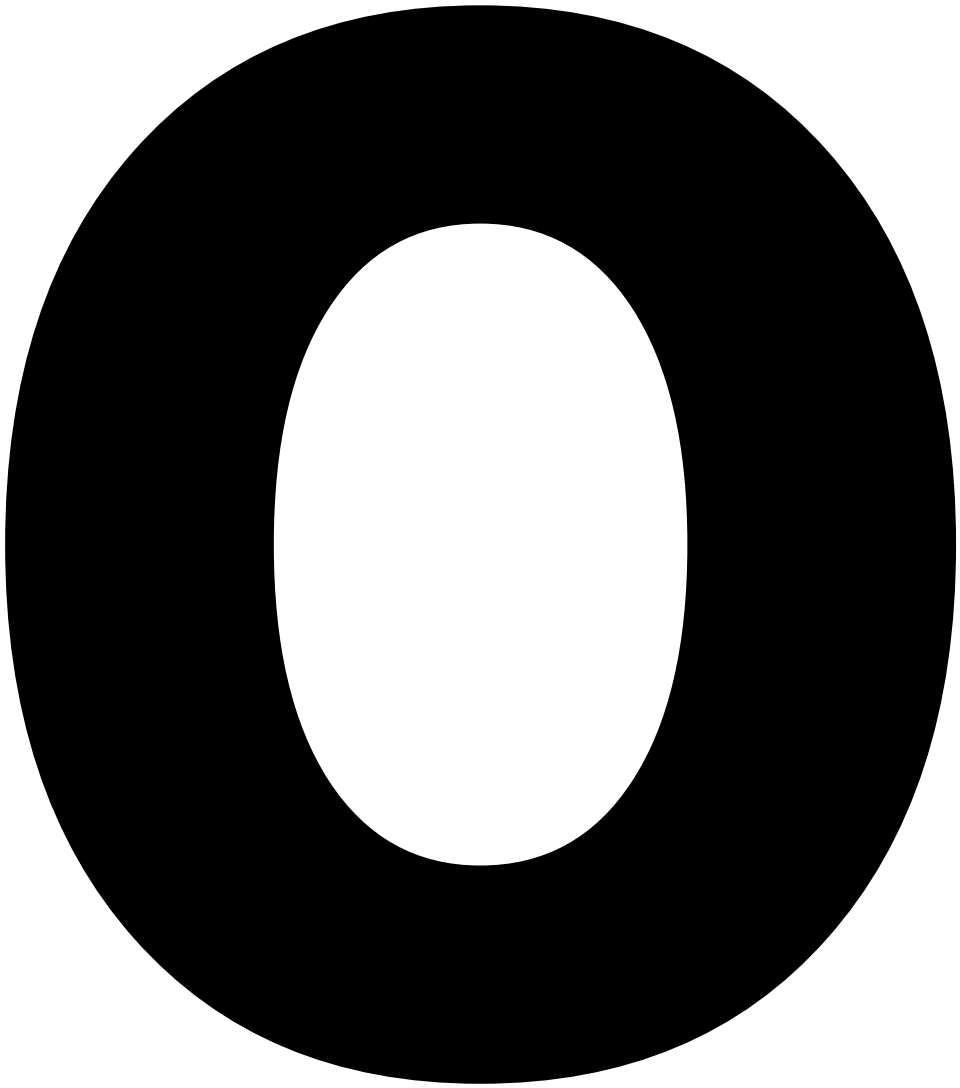


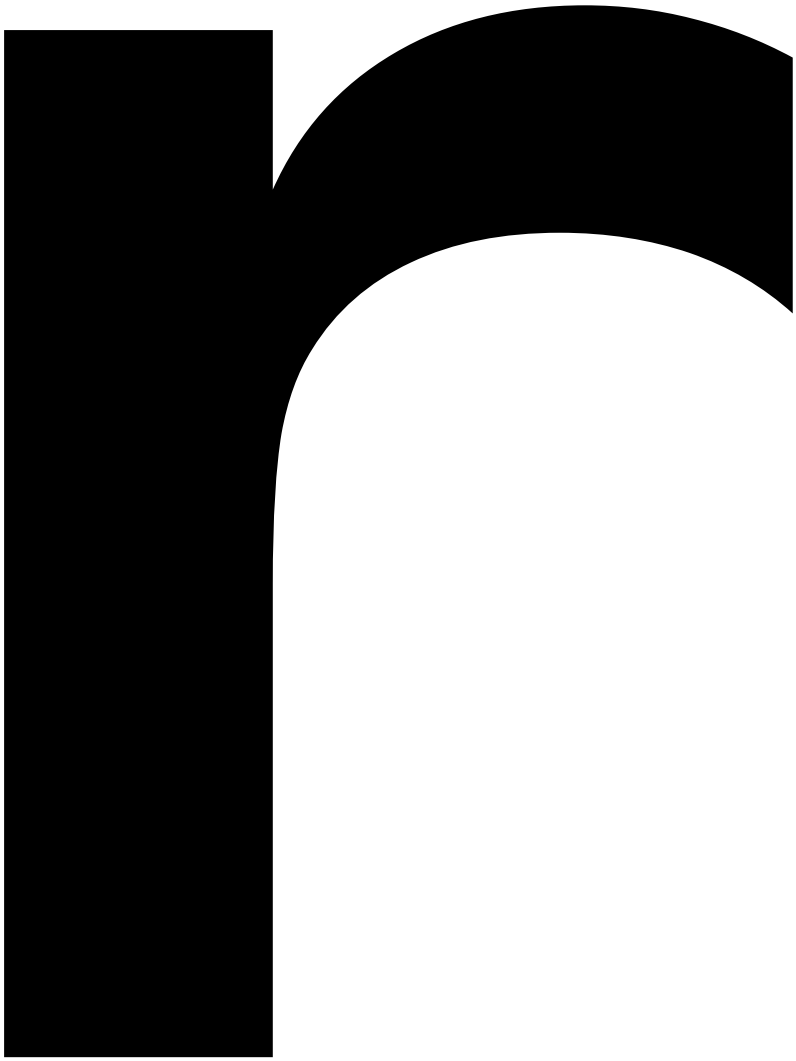


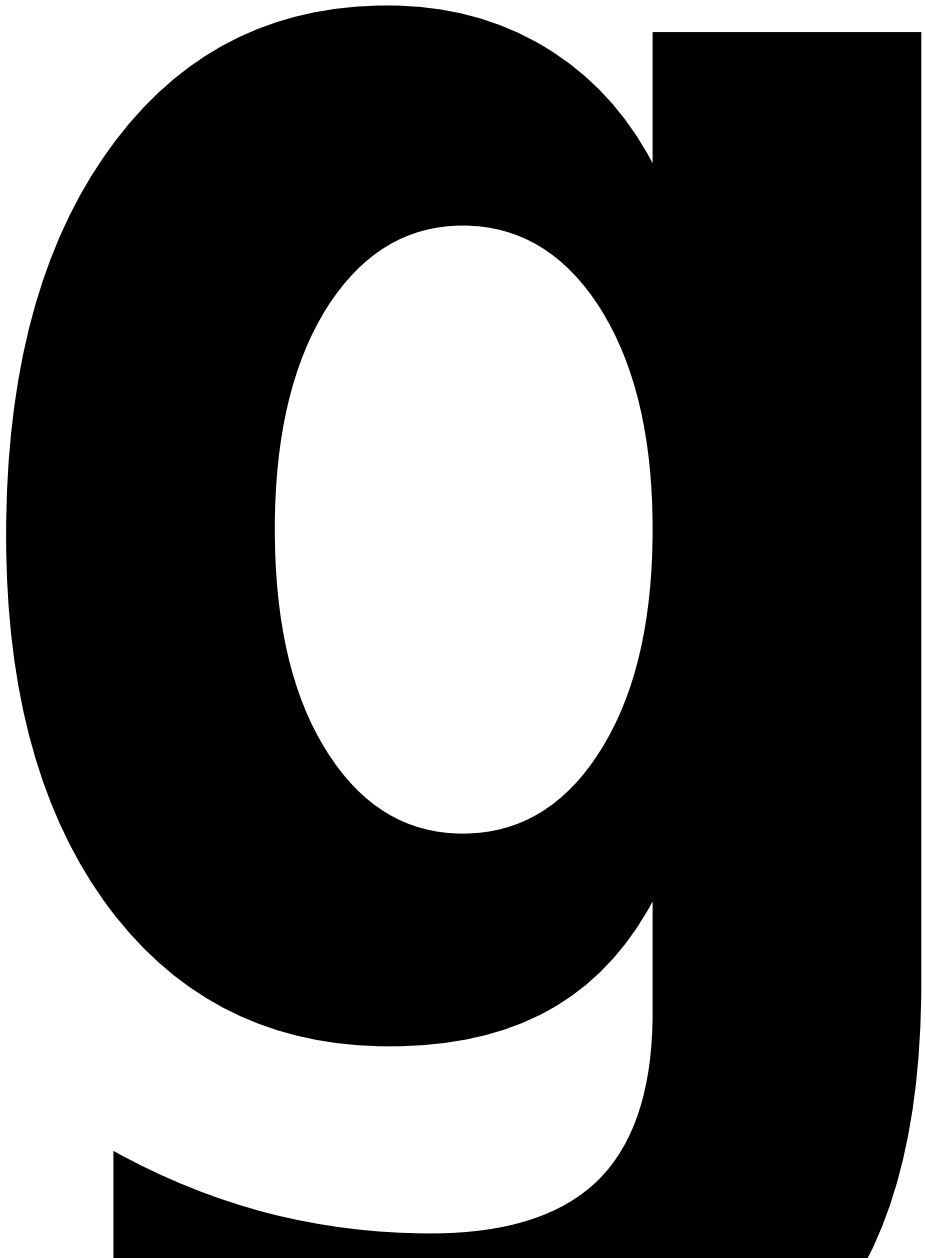
u

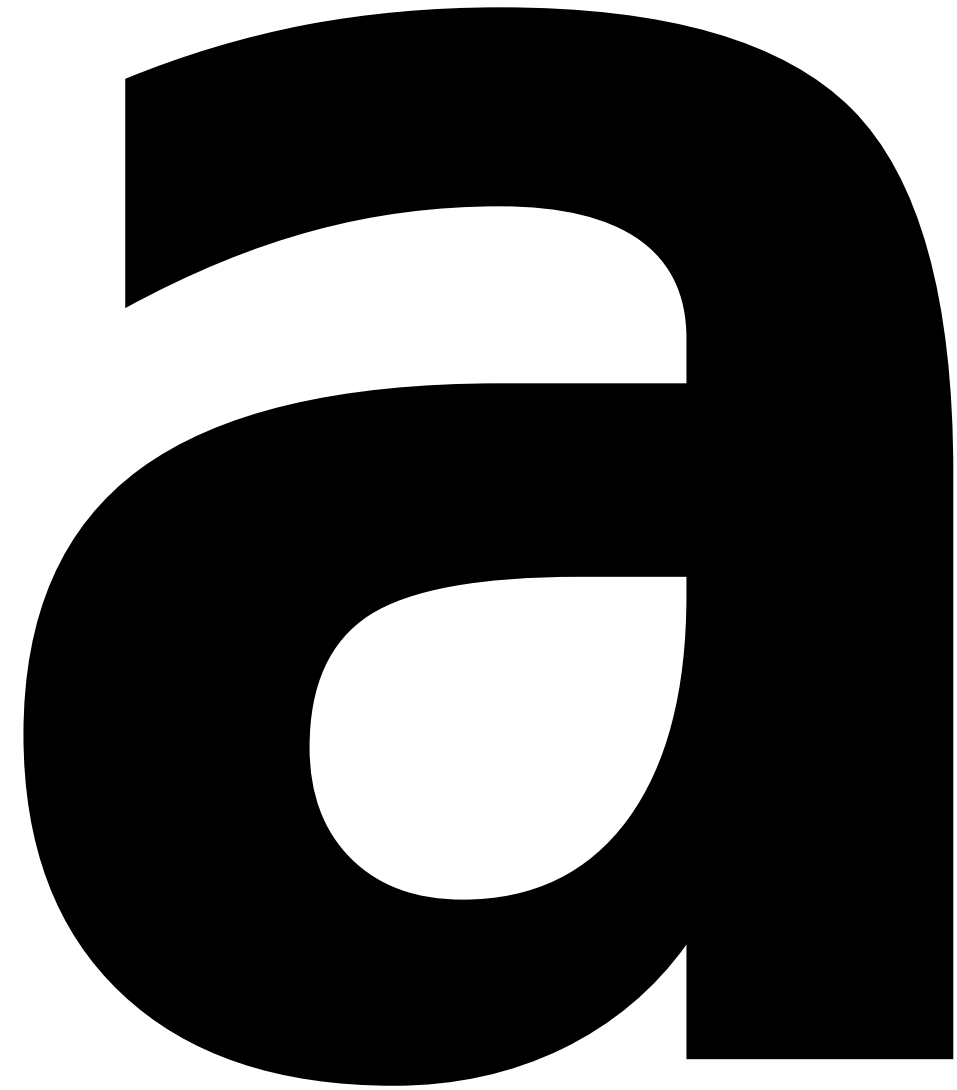


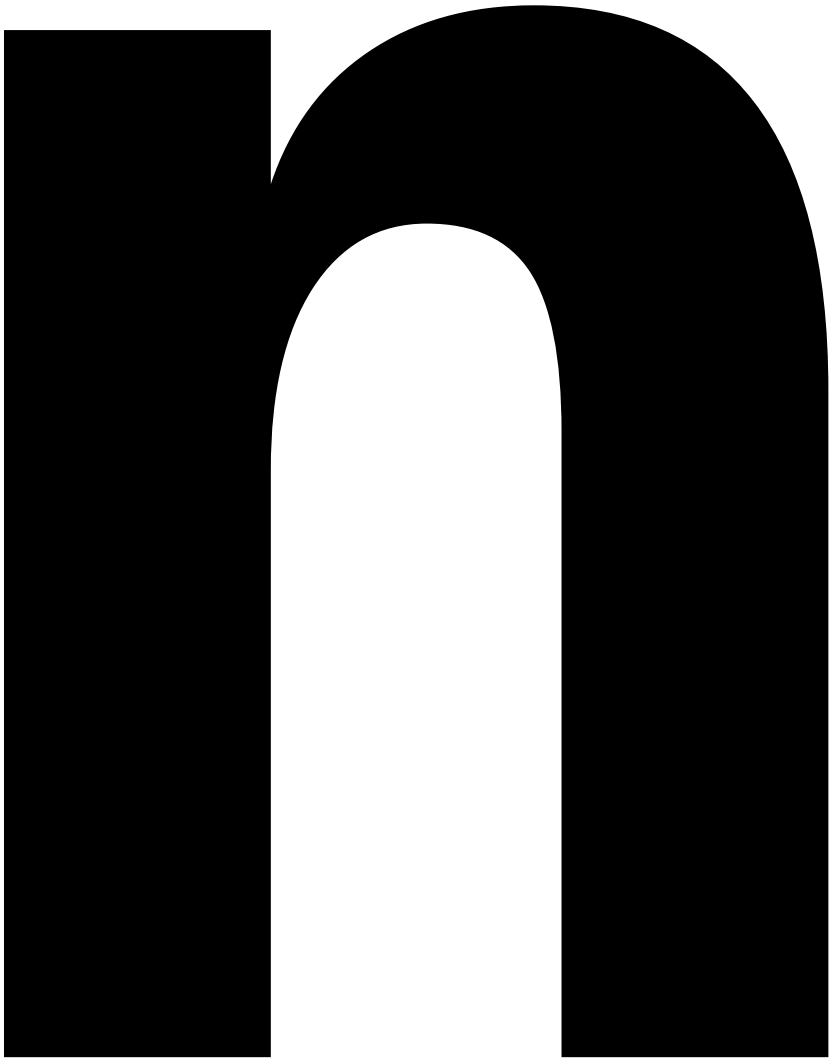


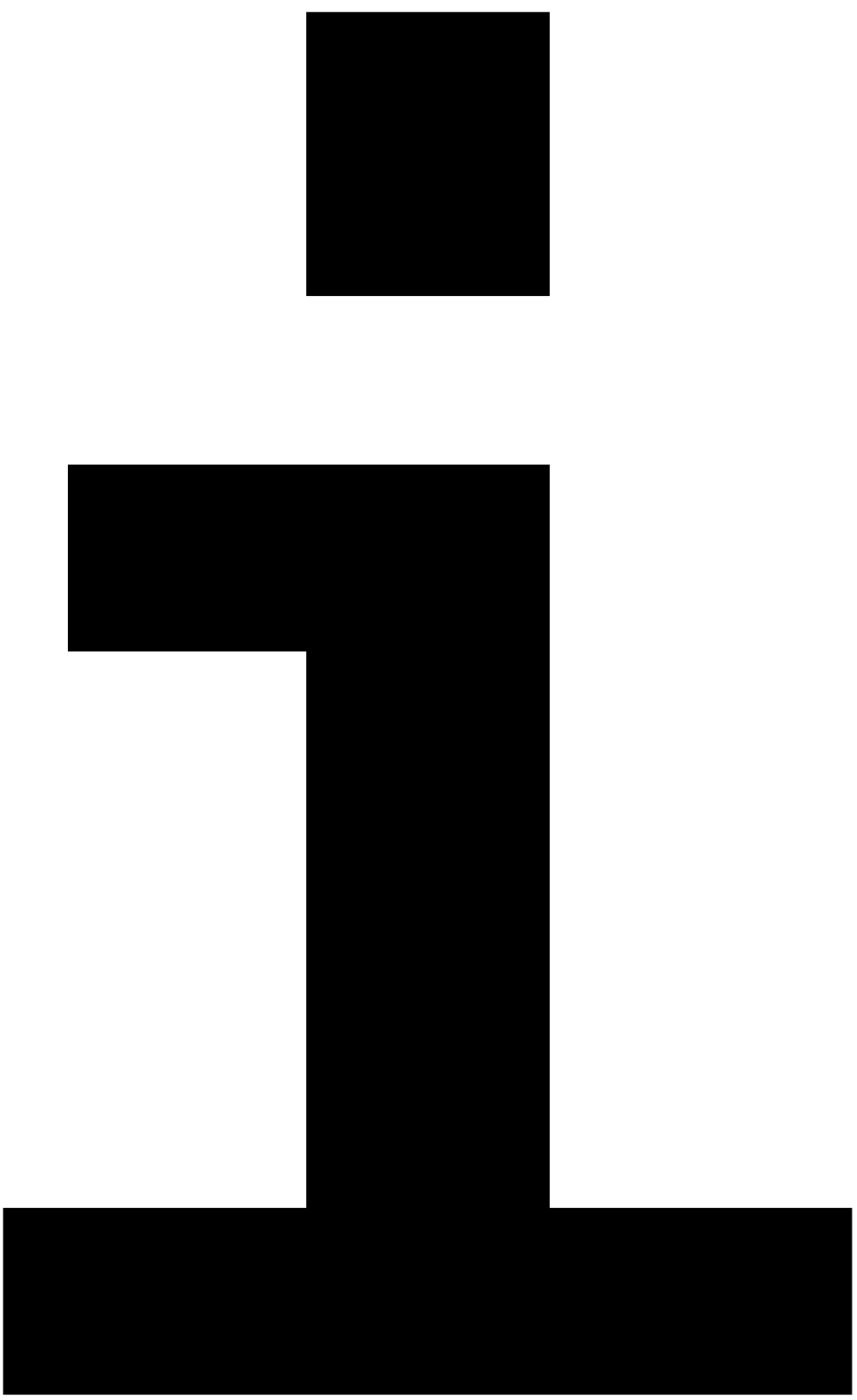




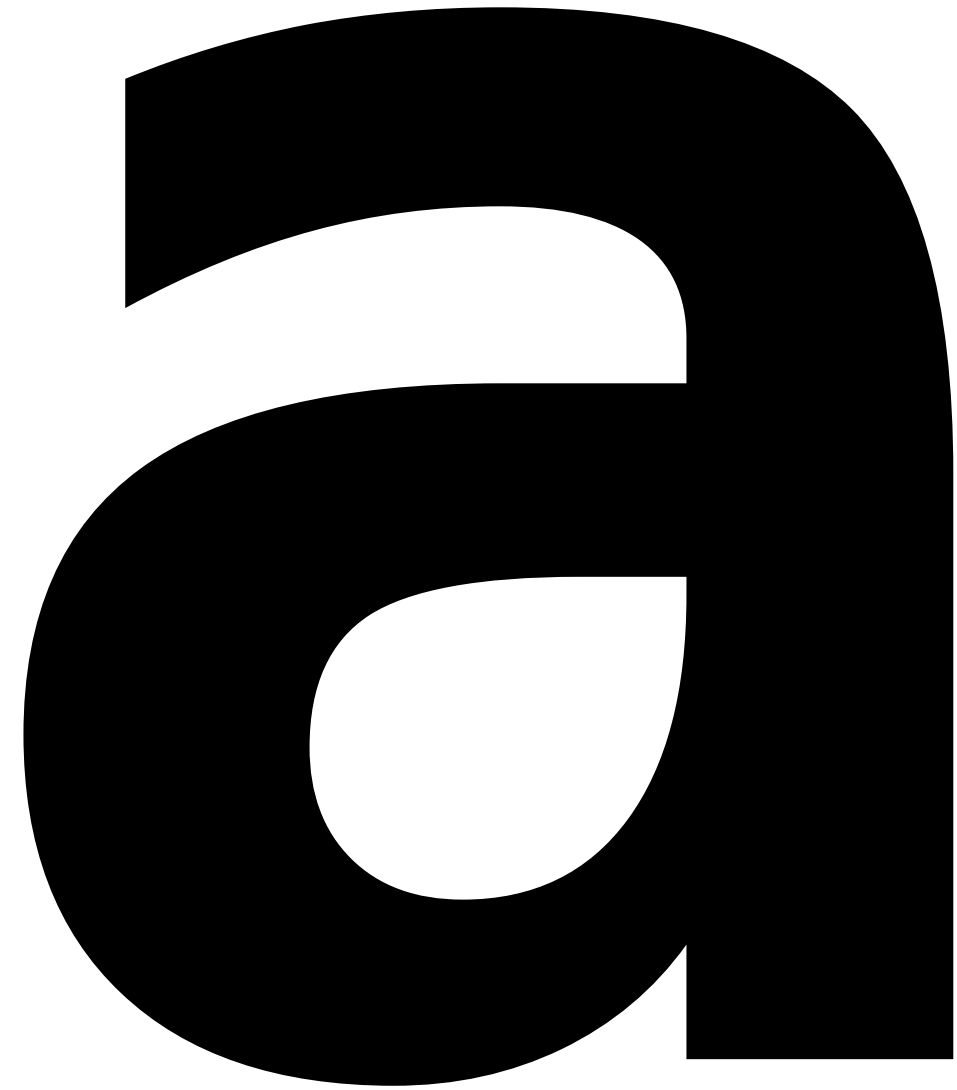


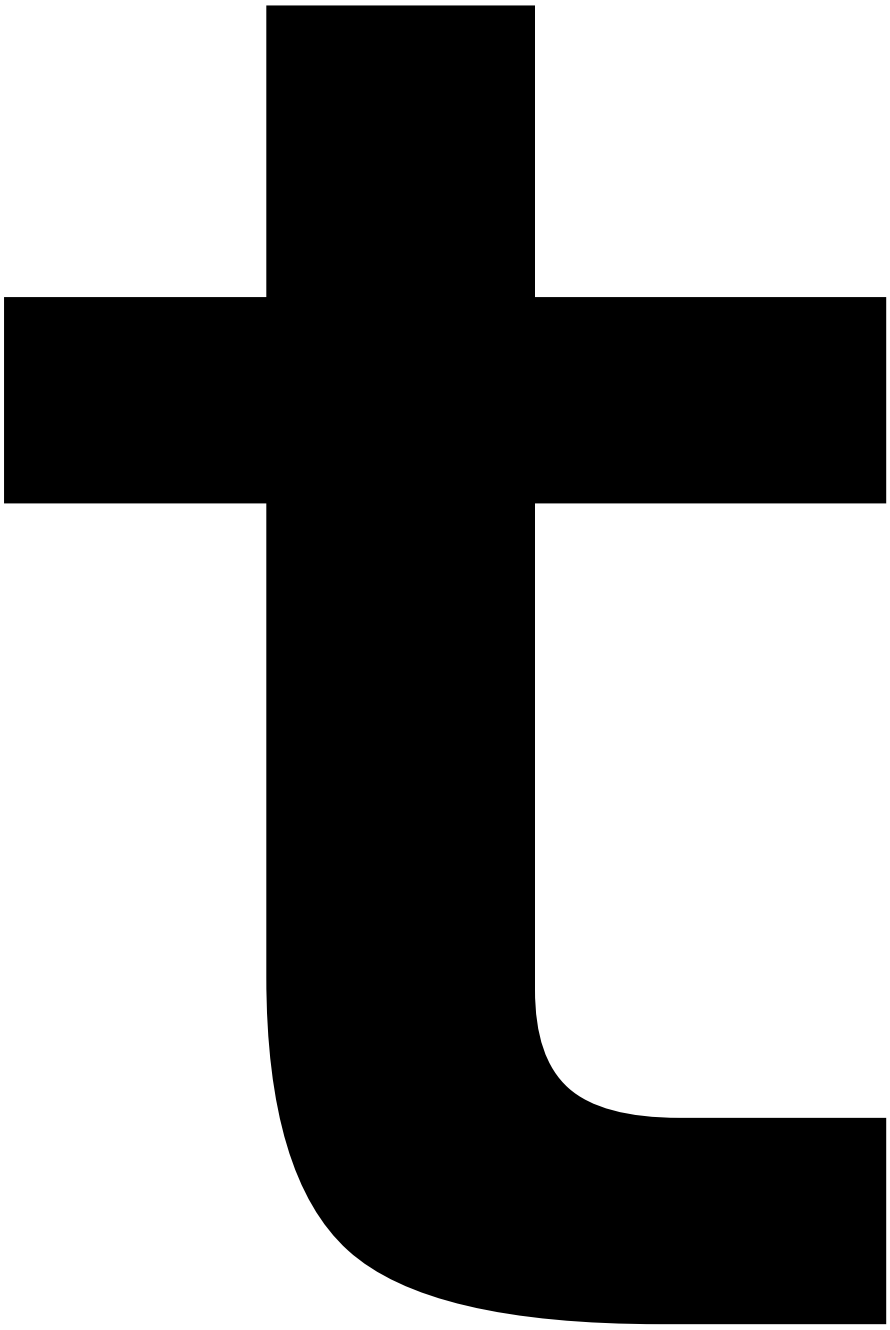


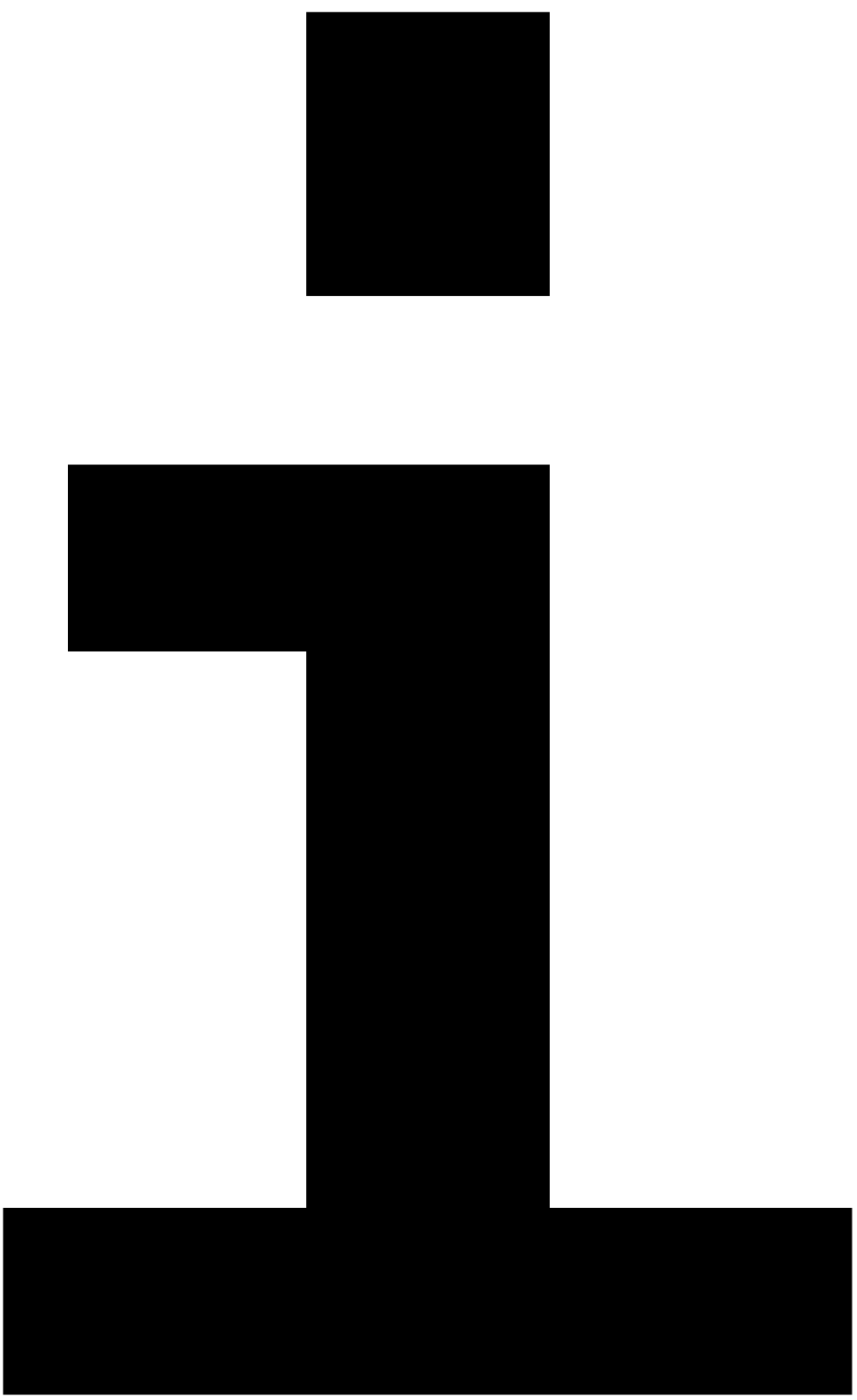


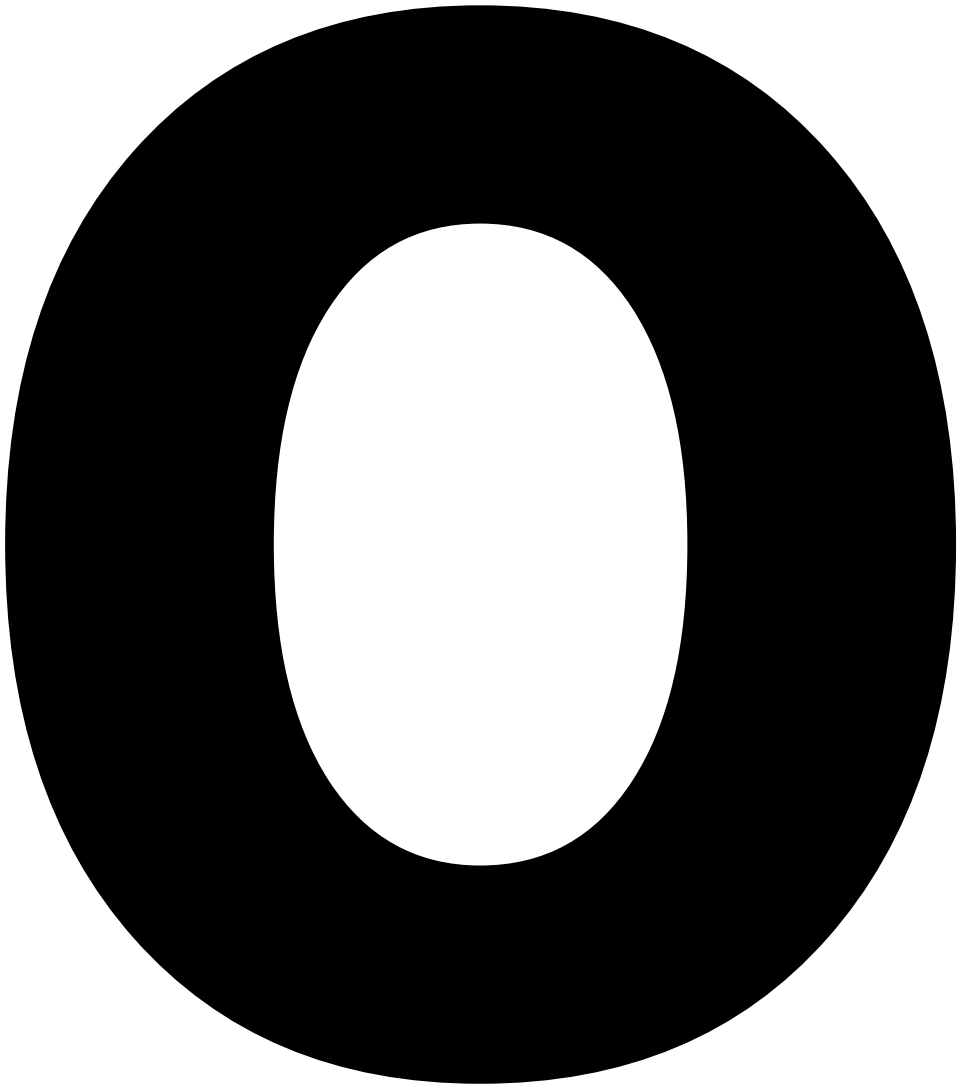


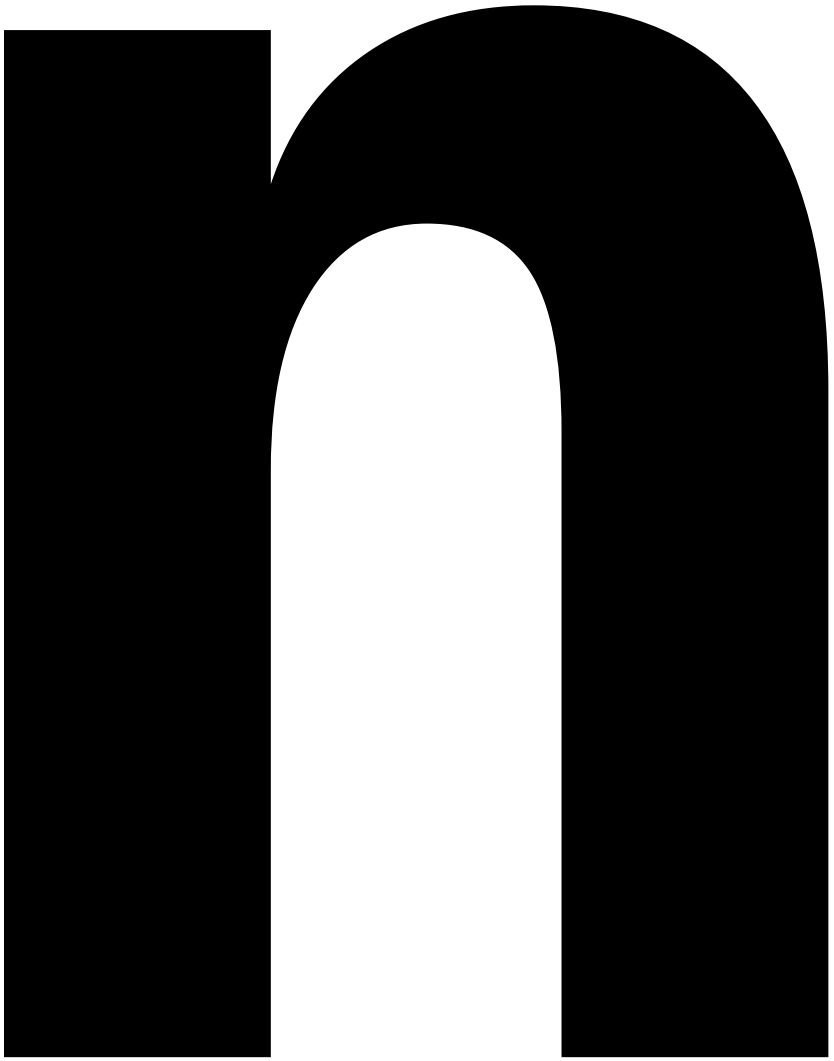
S

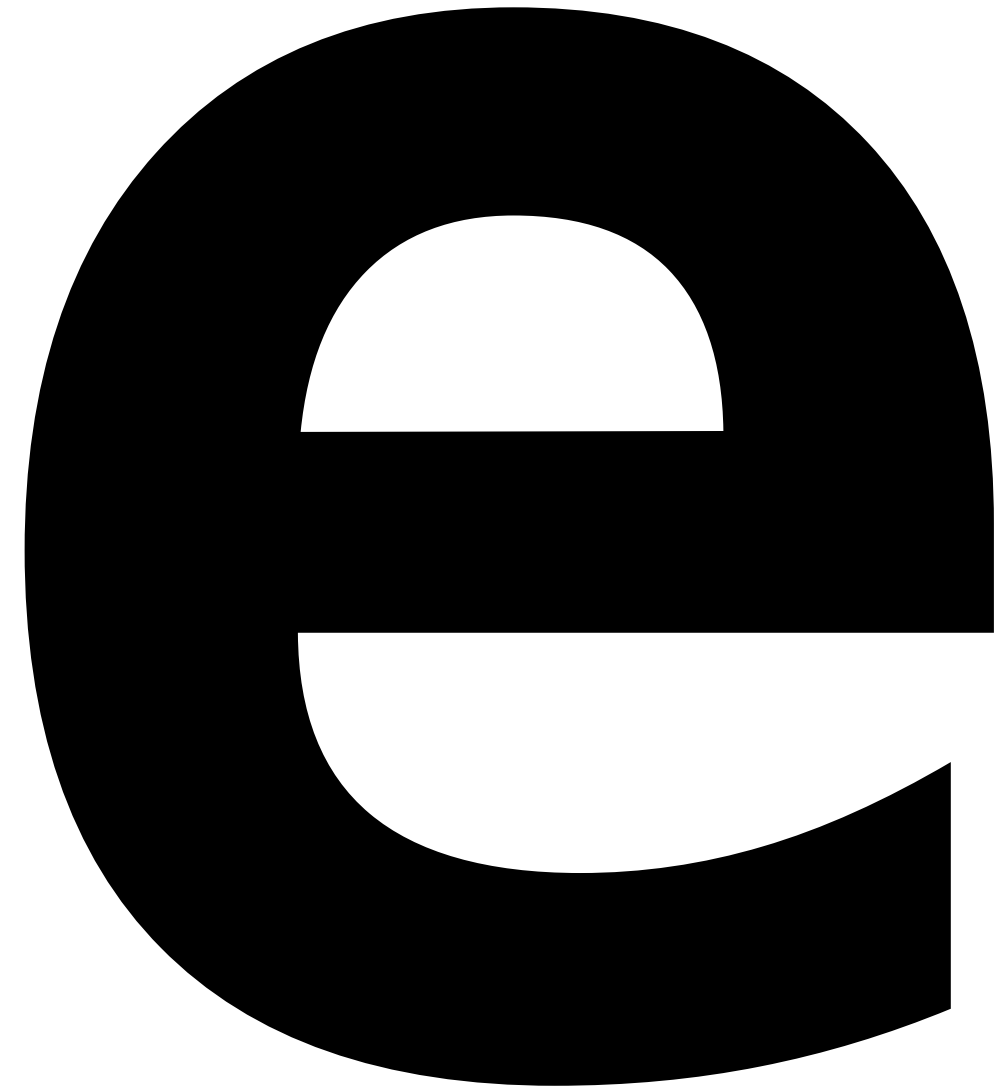


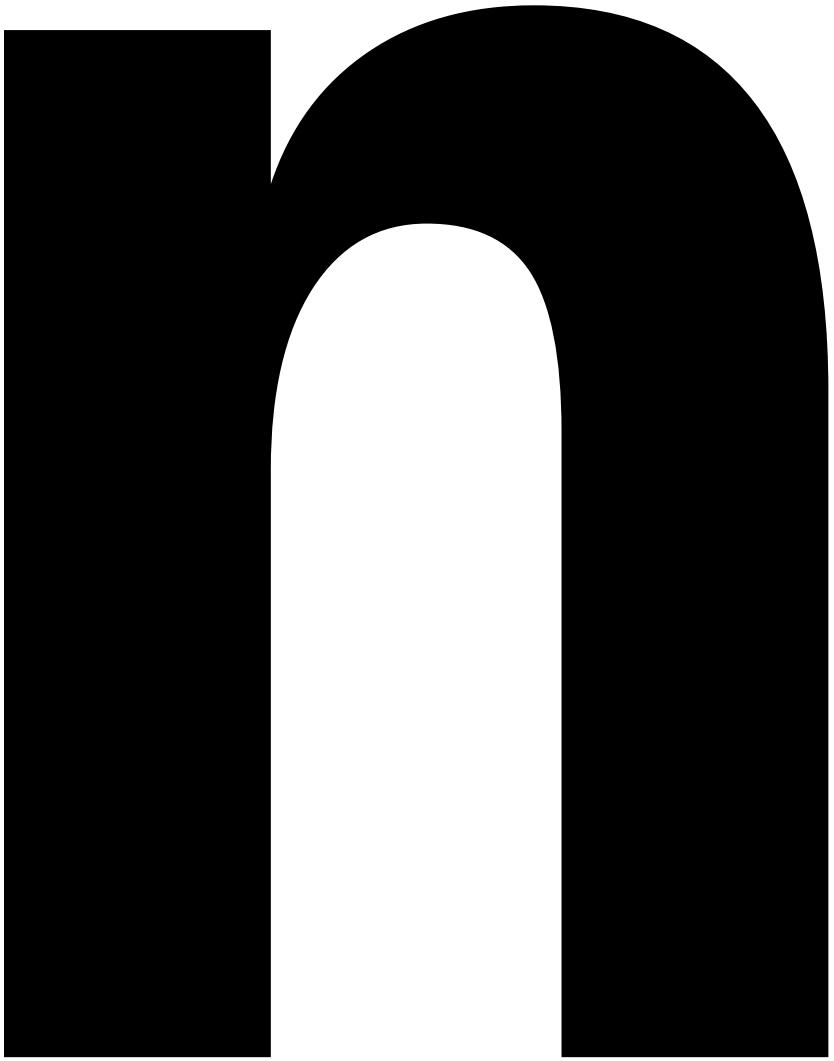


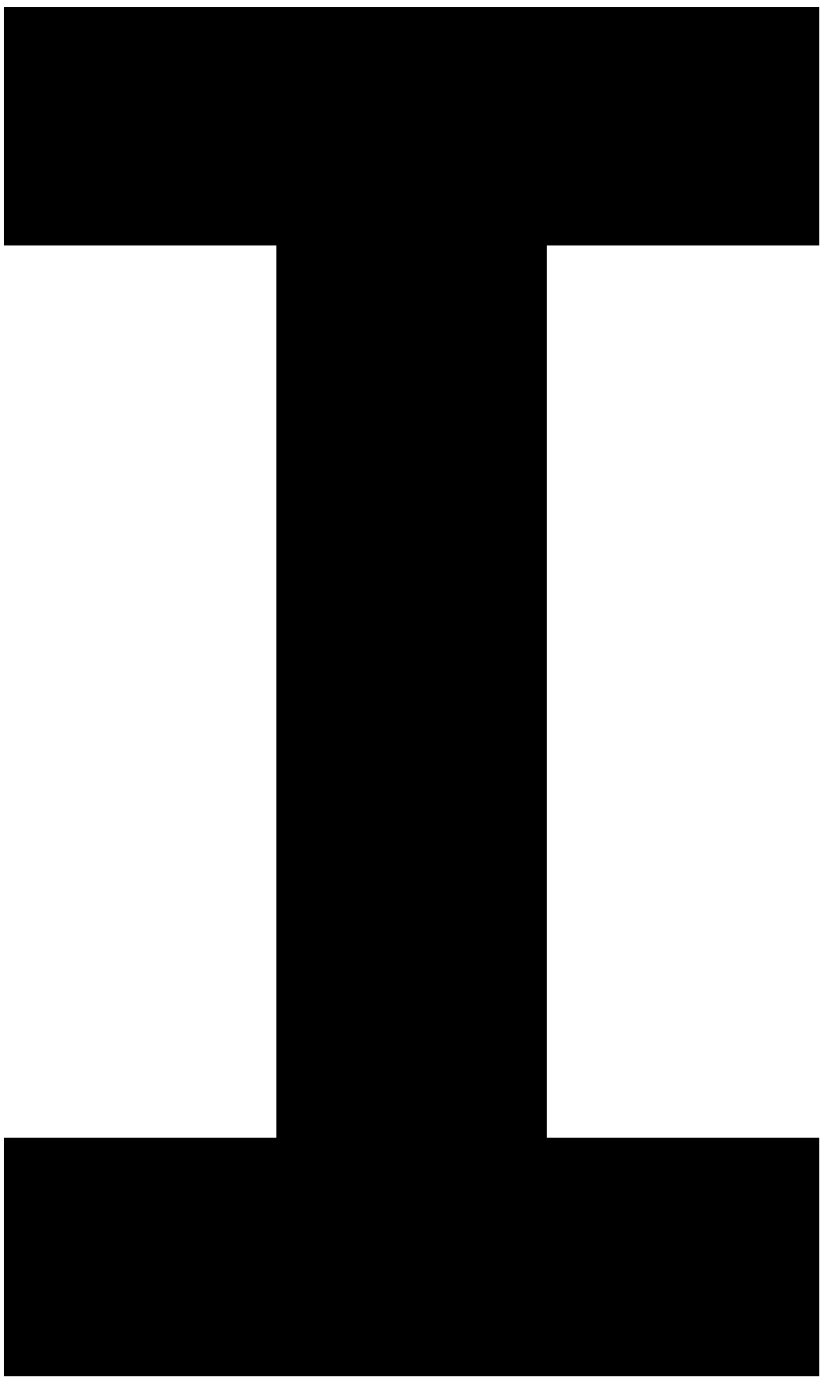


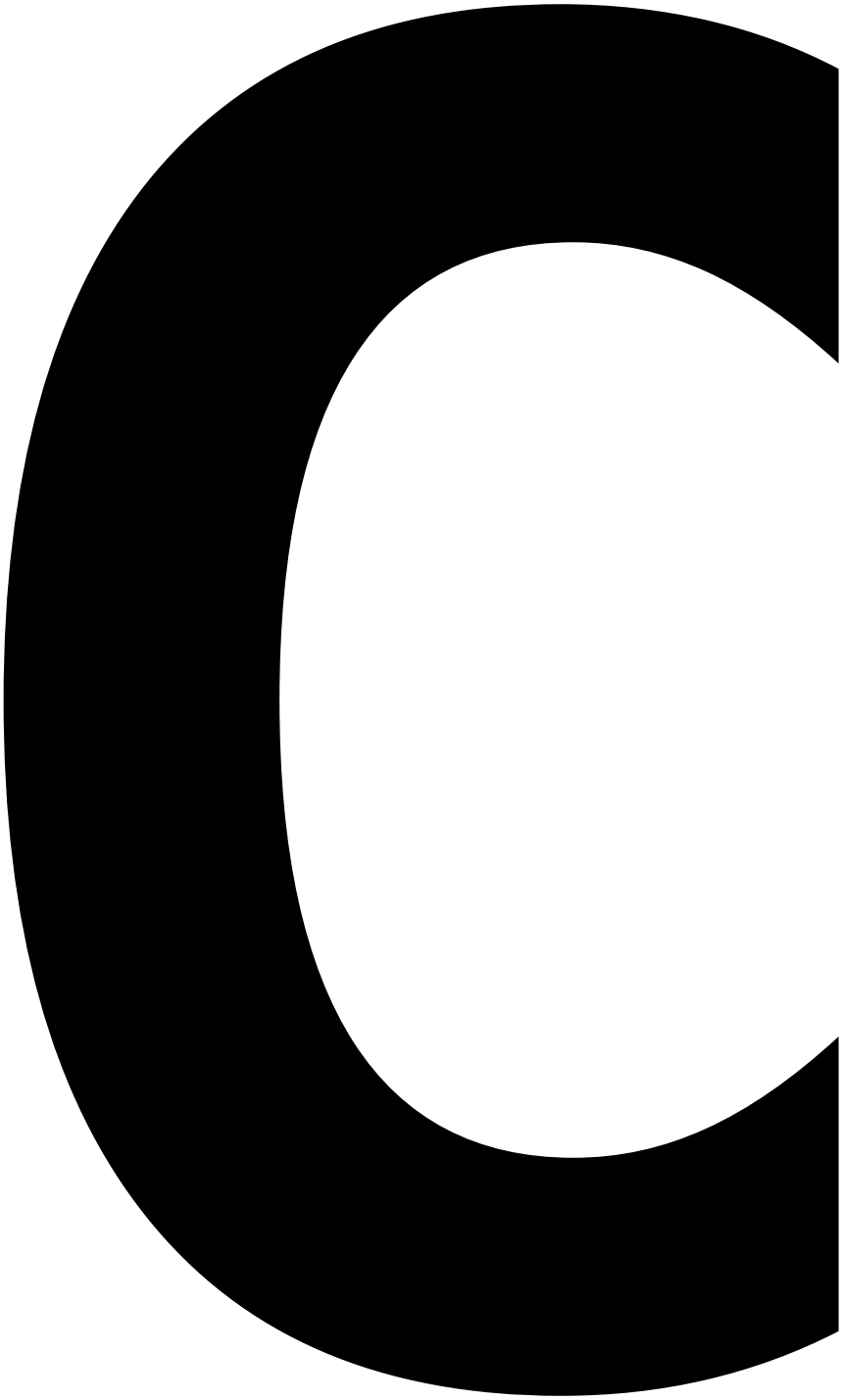


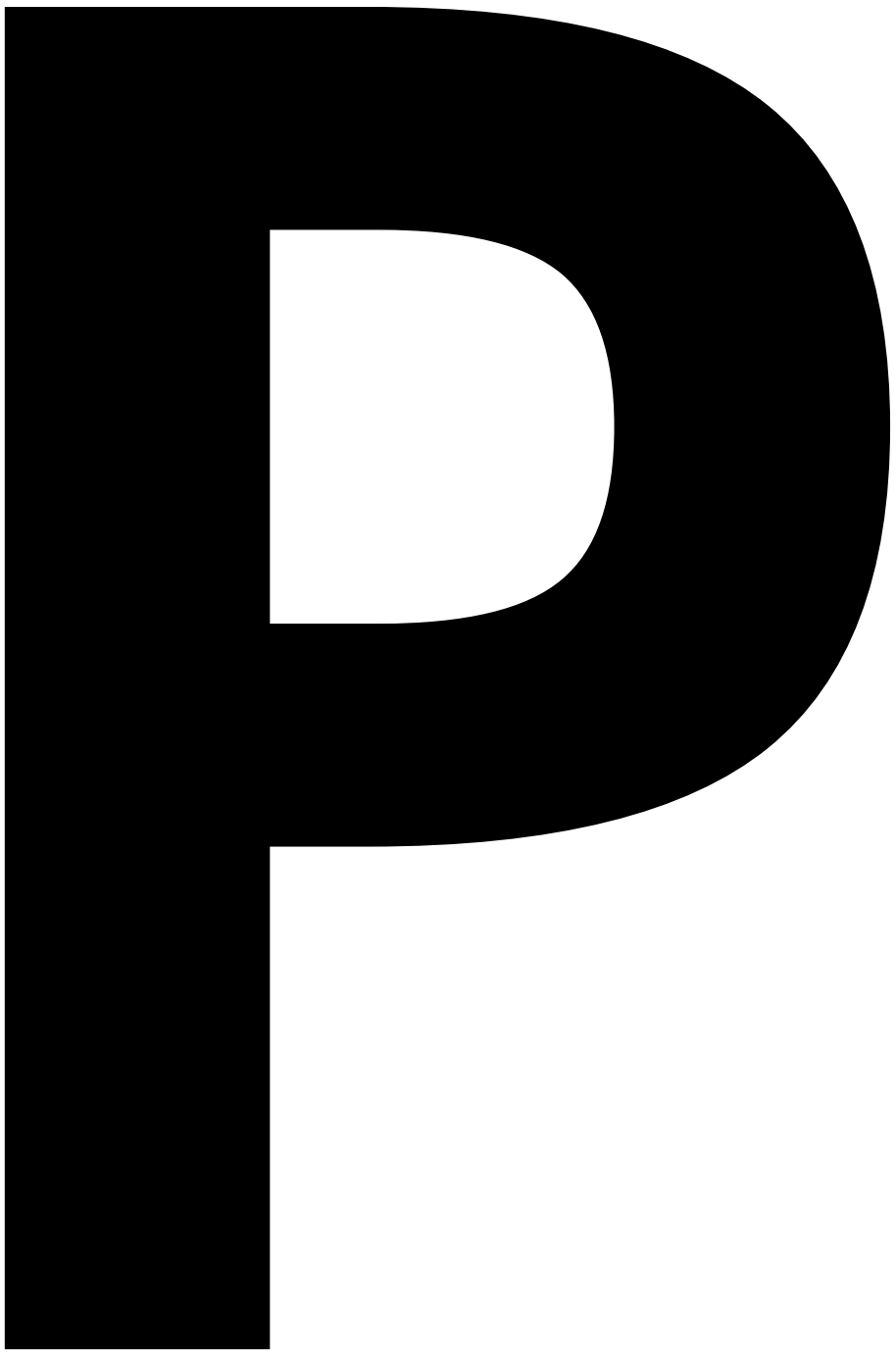


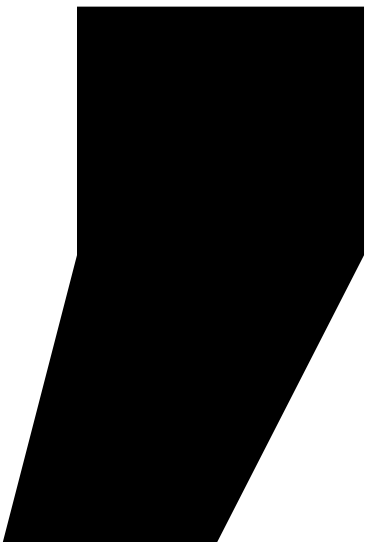


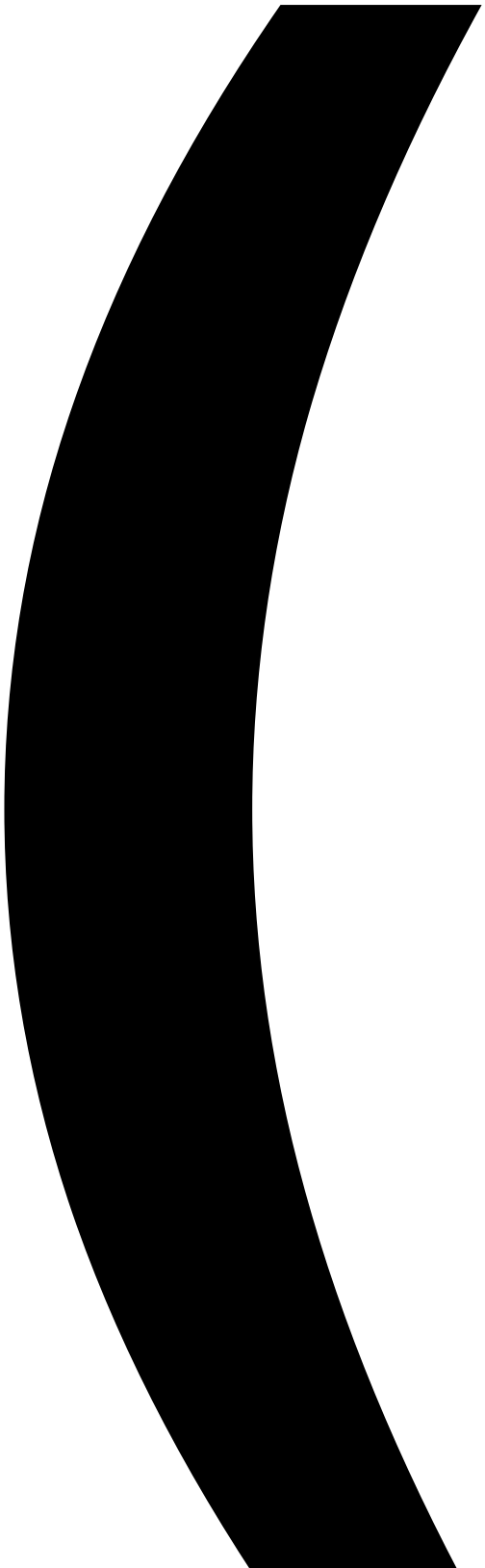


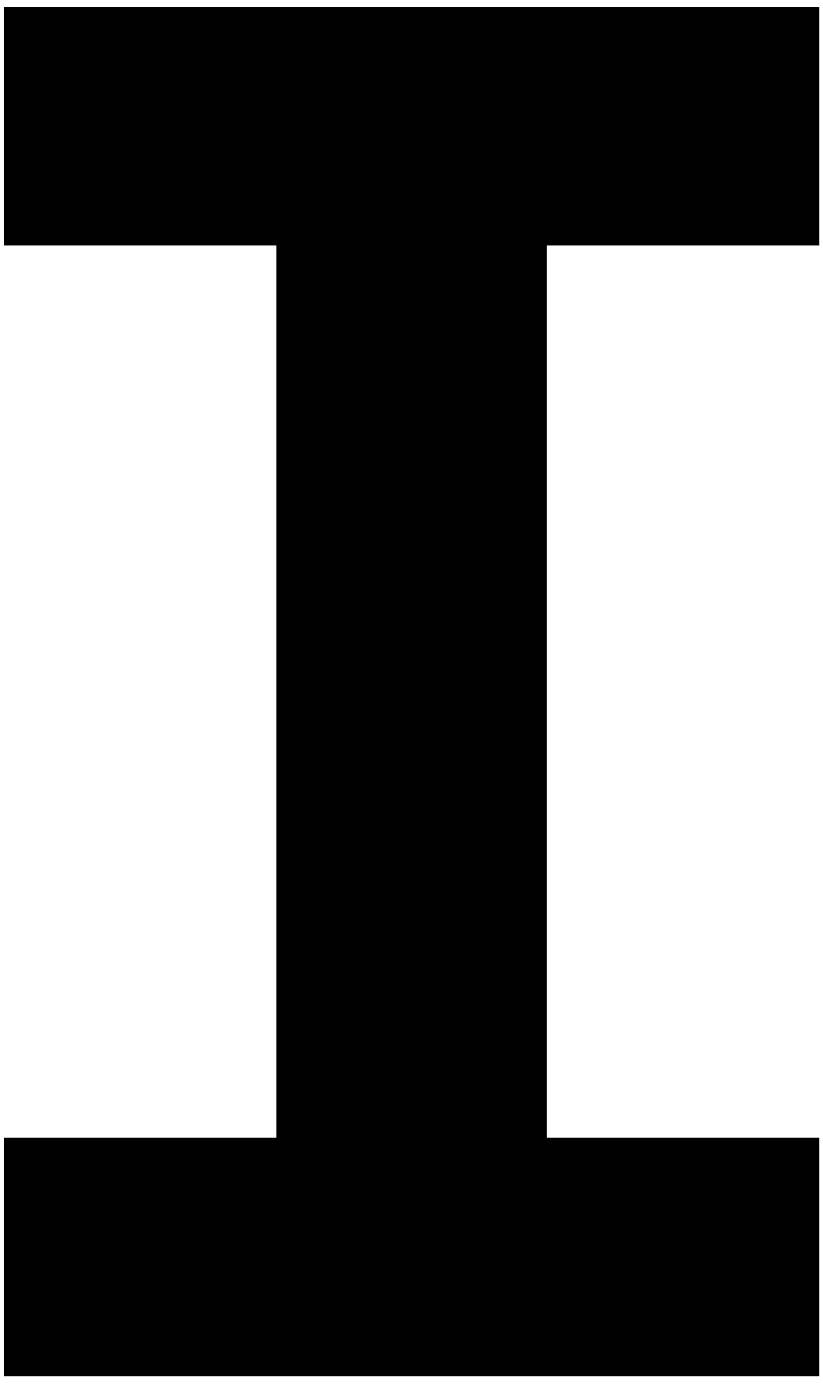


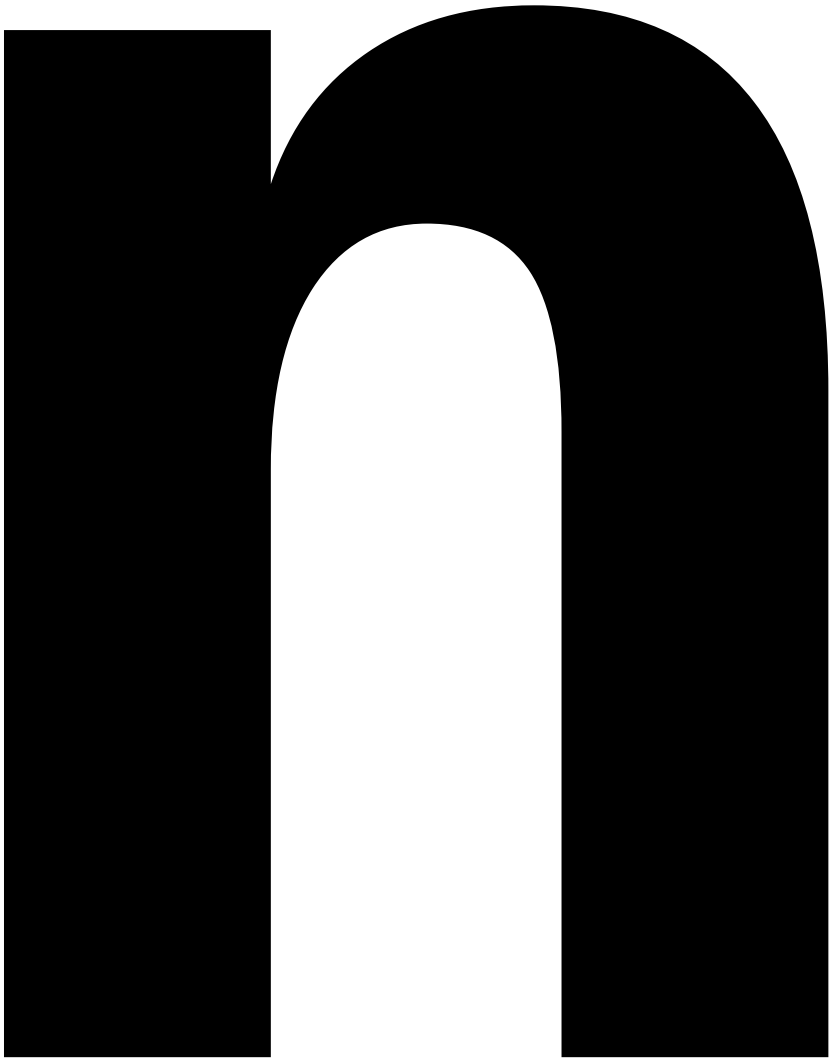


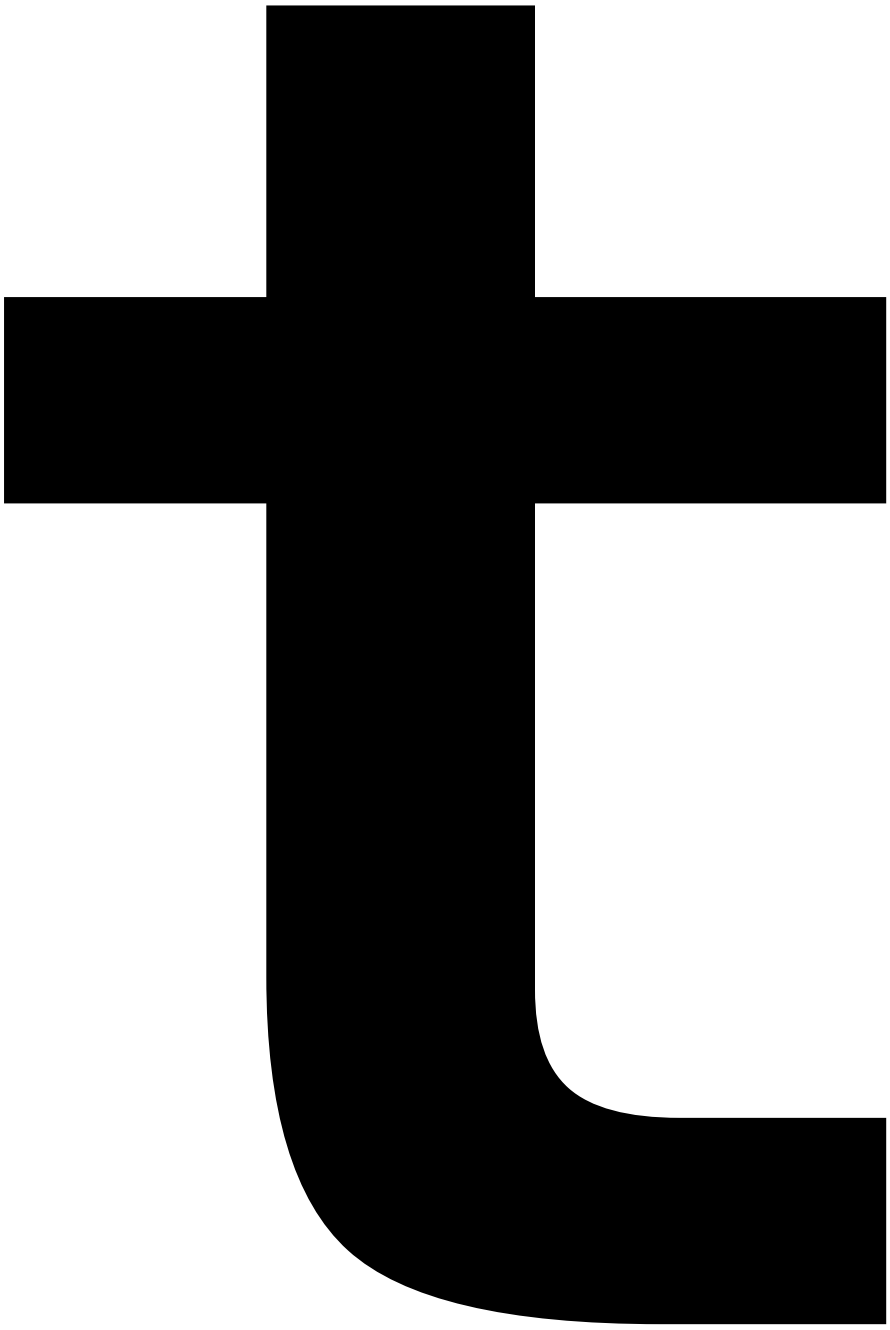


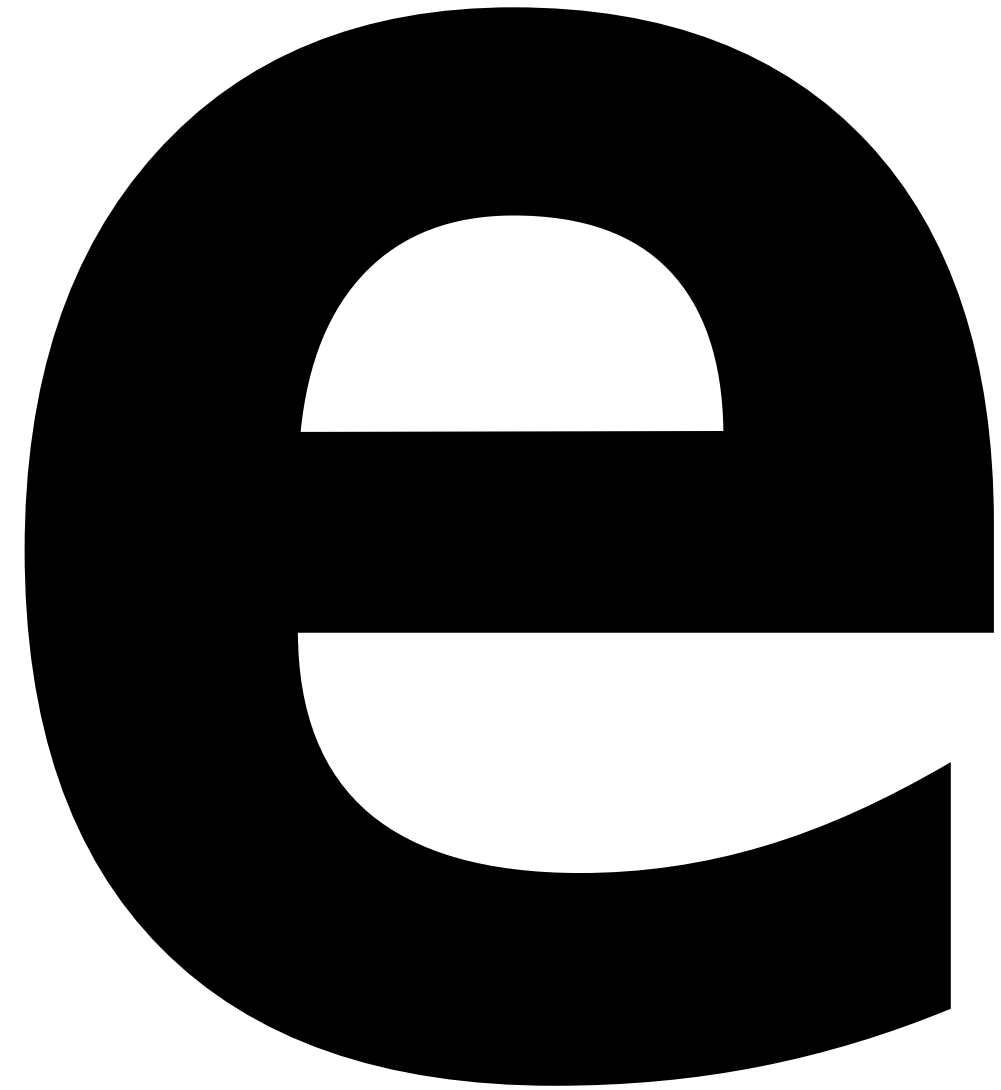


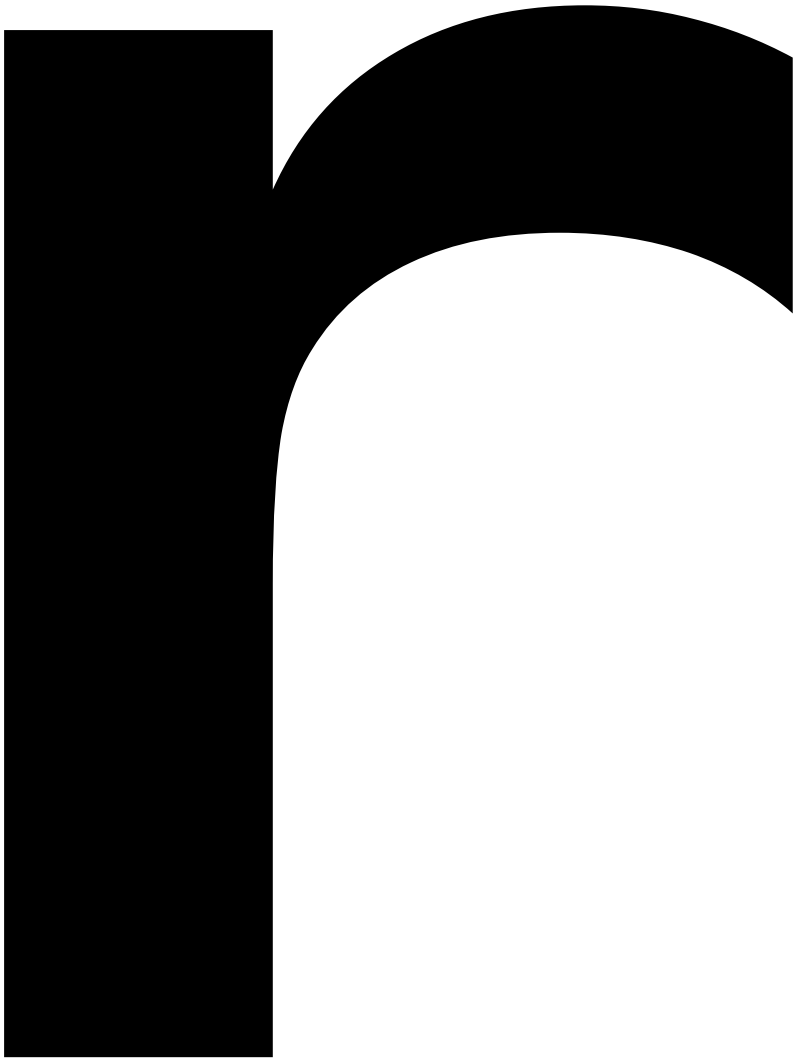


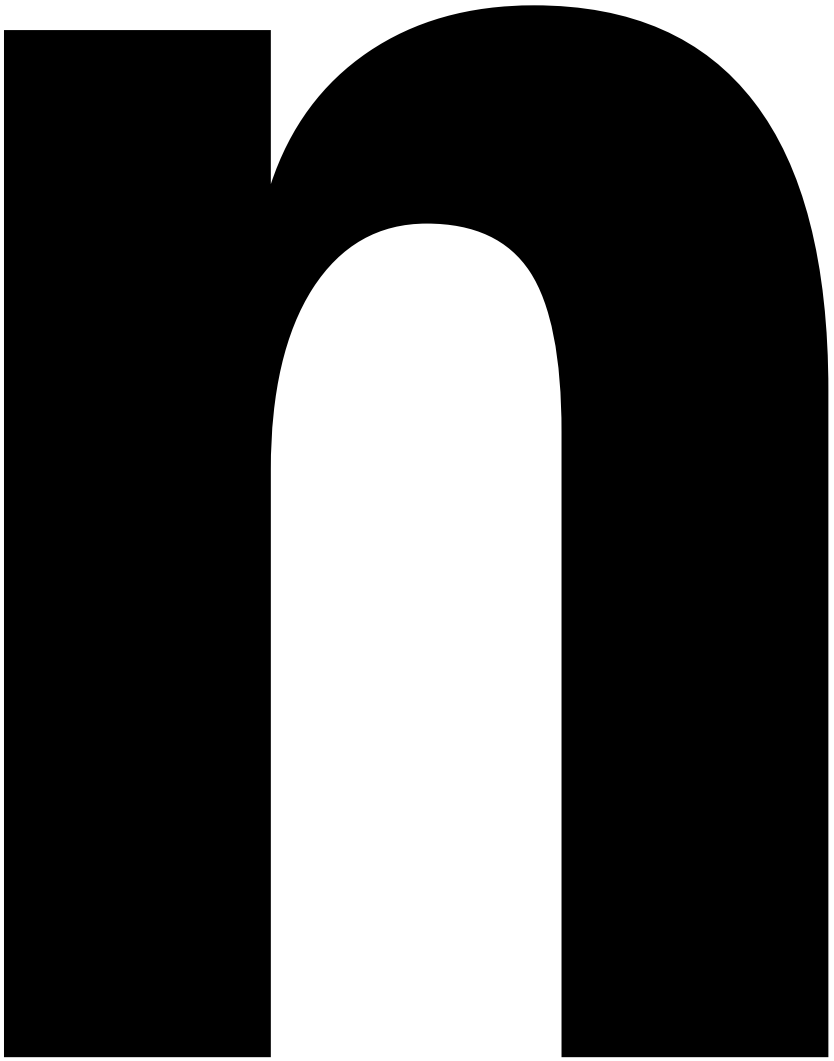


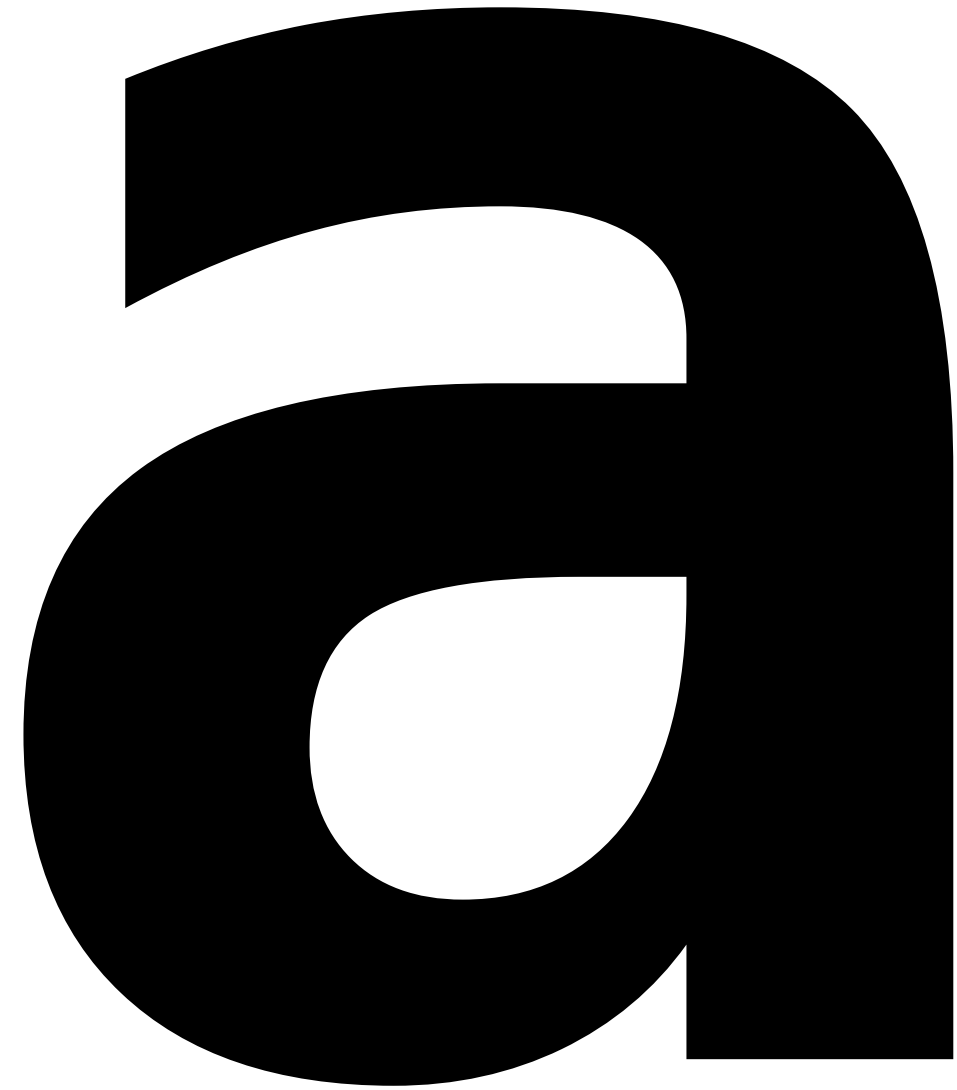


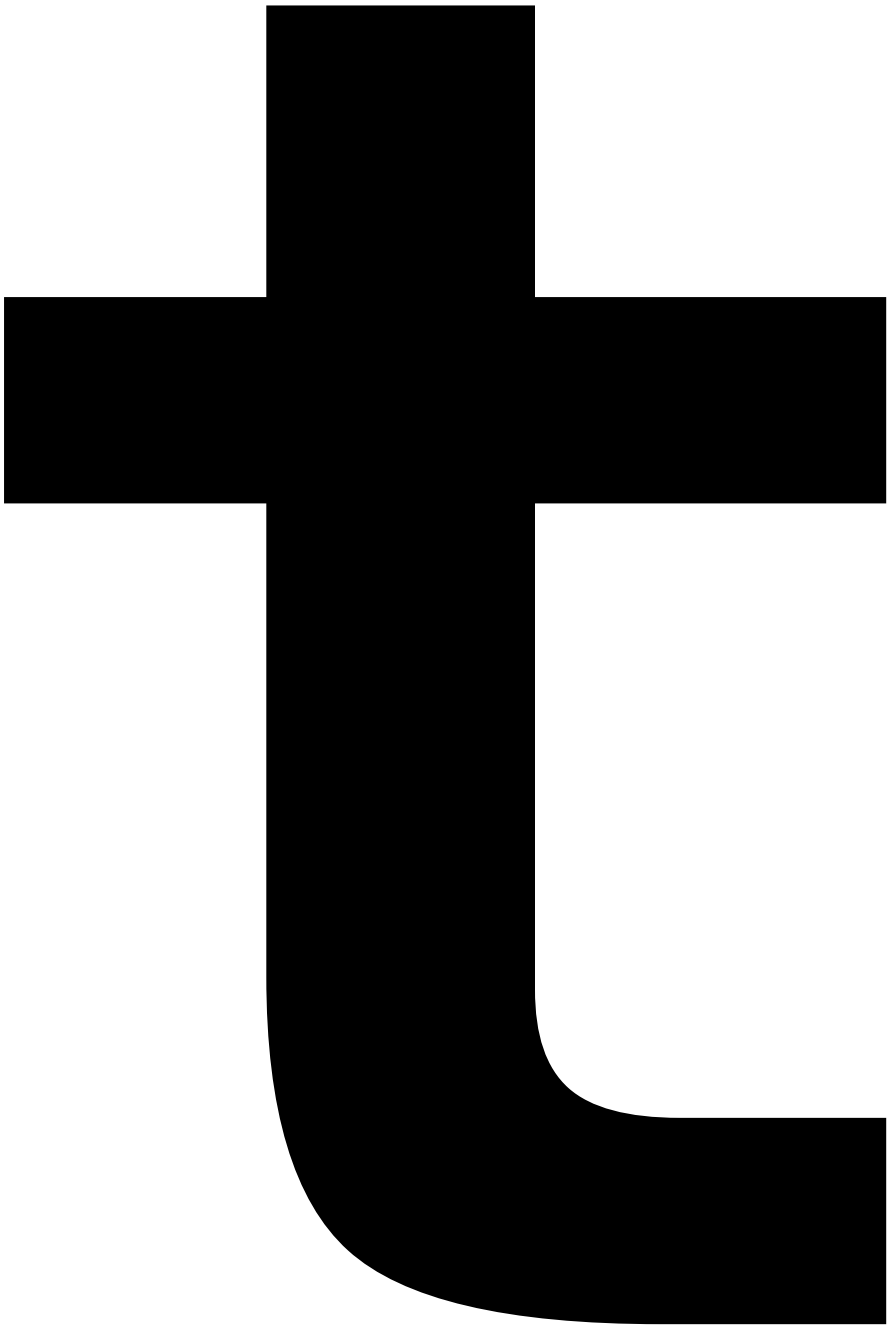


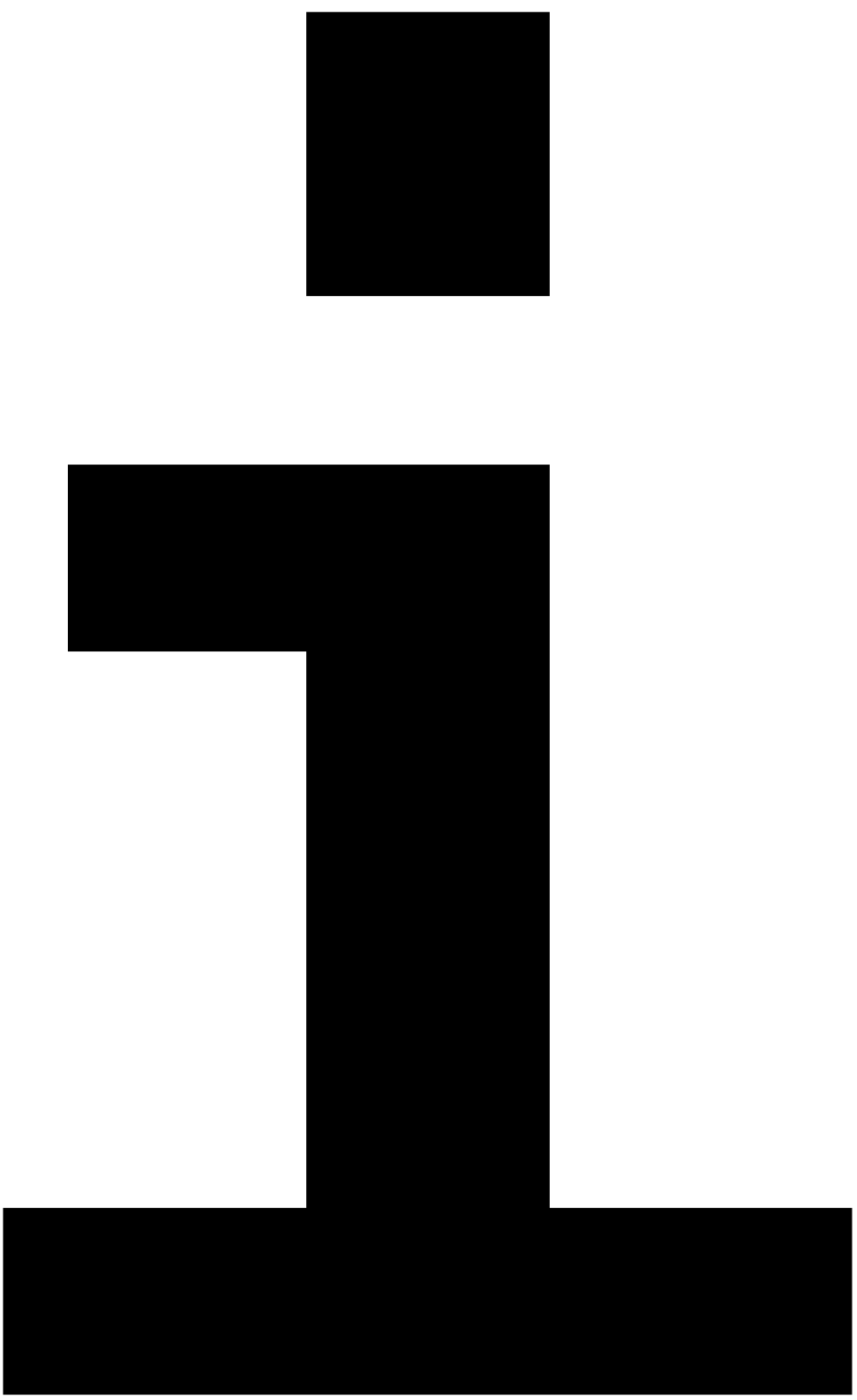


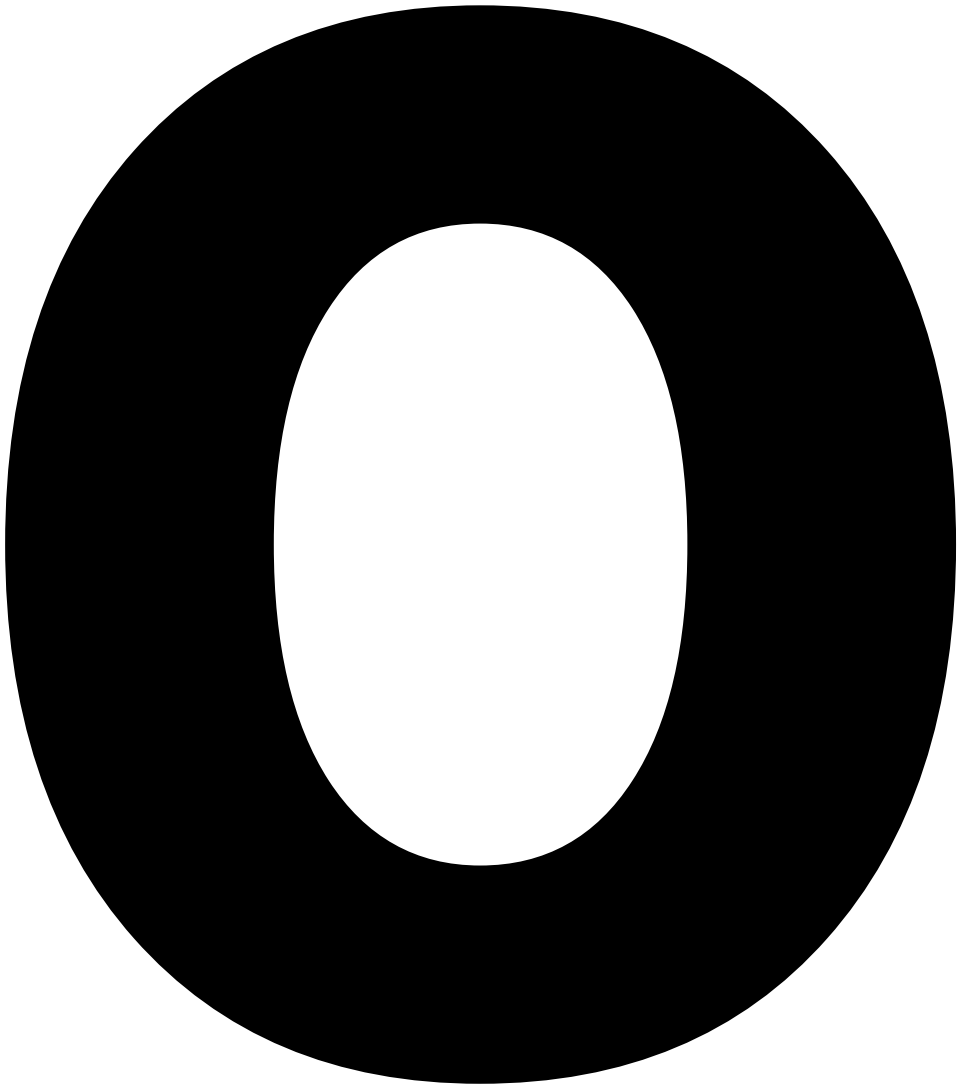


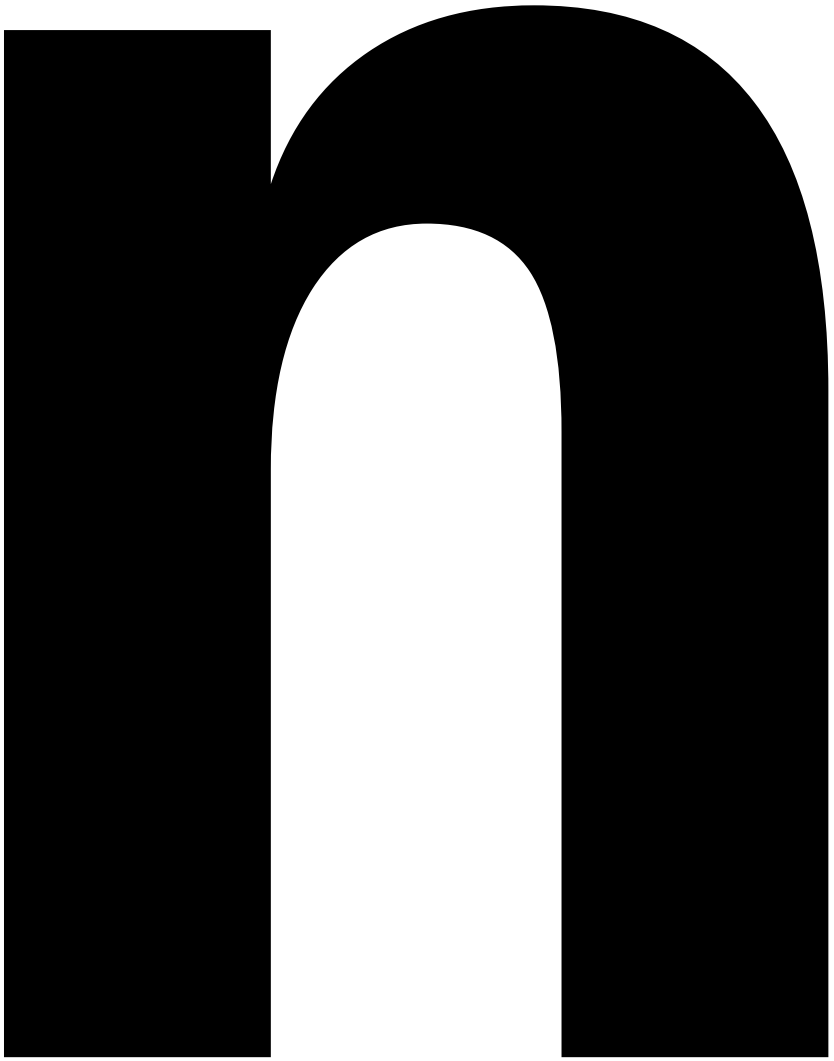


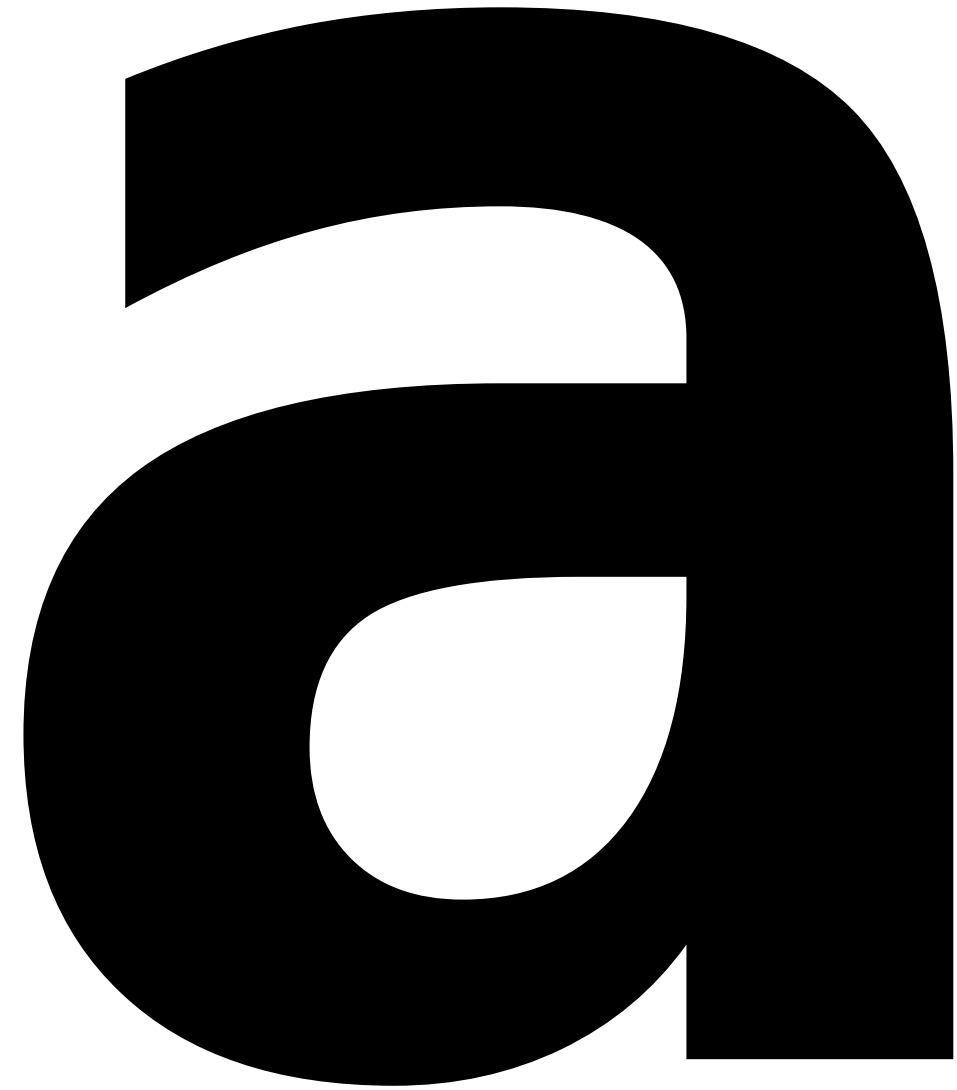


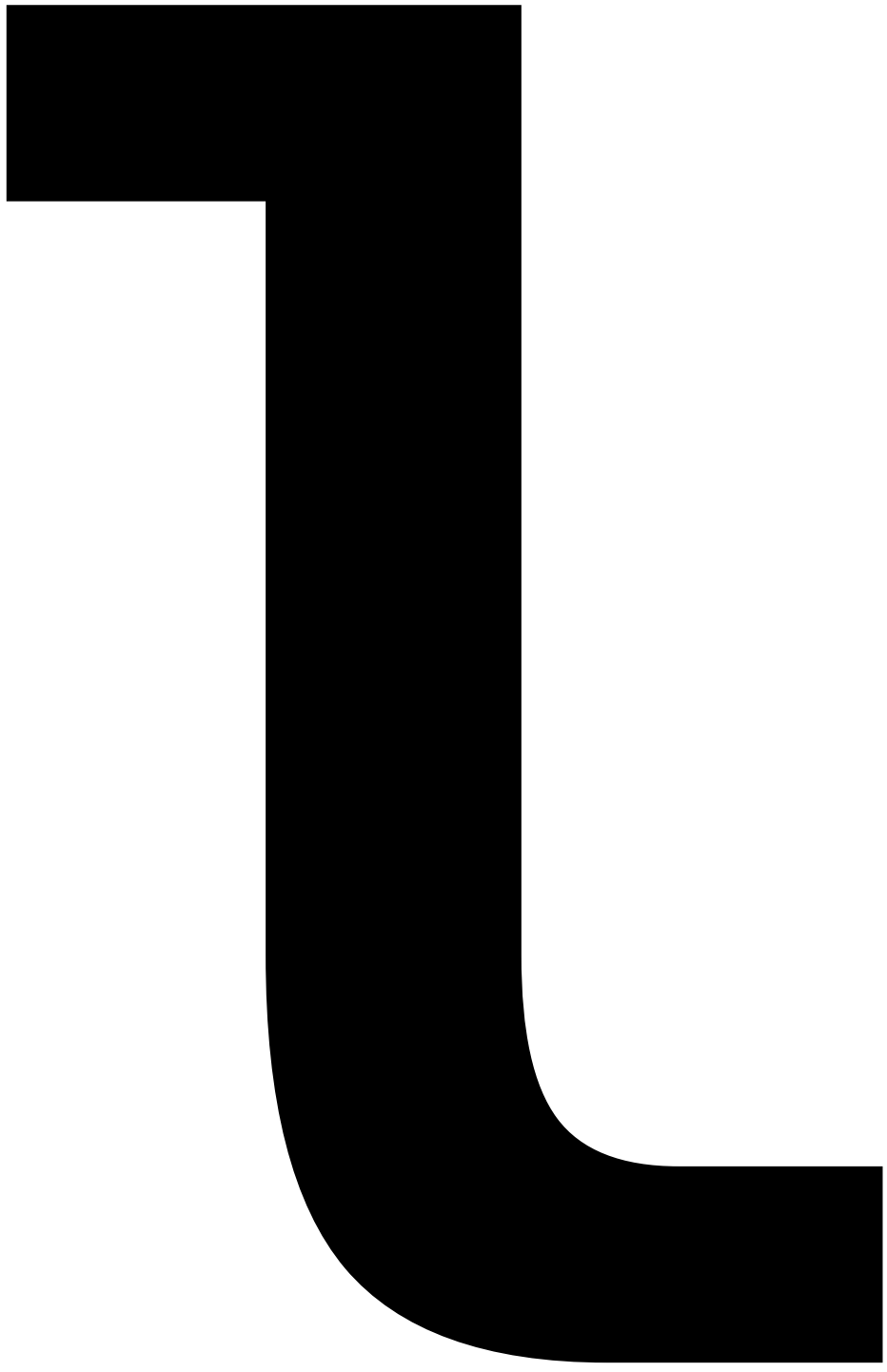


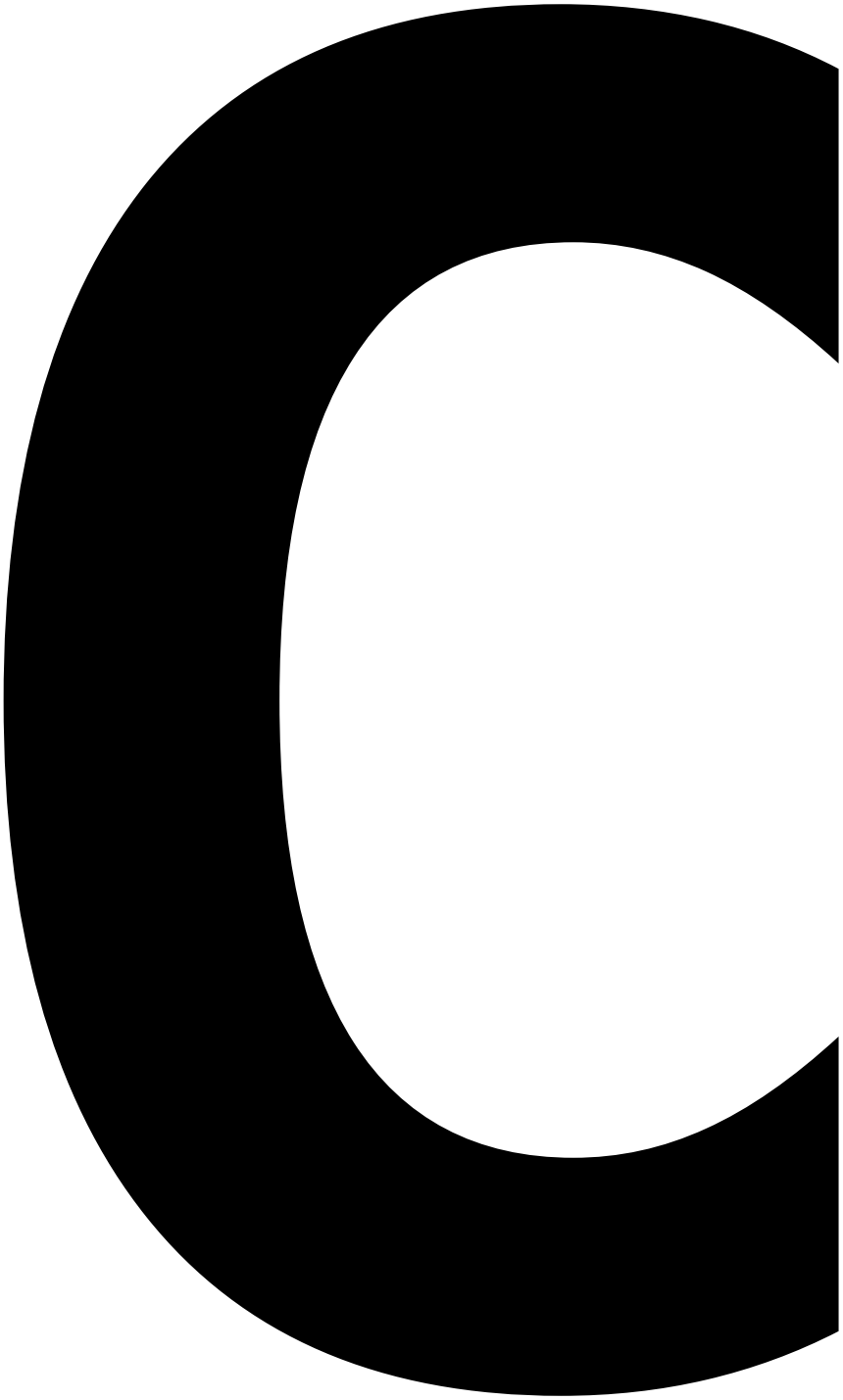


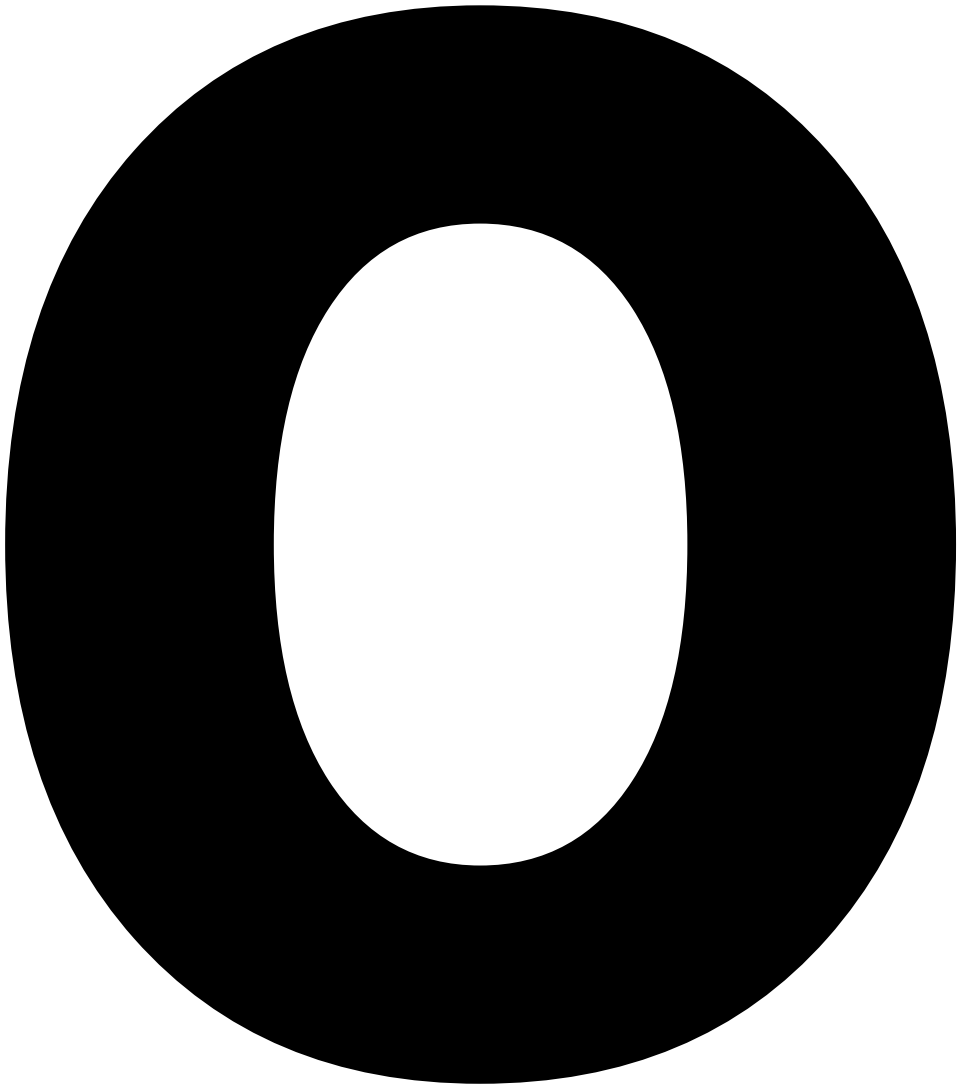


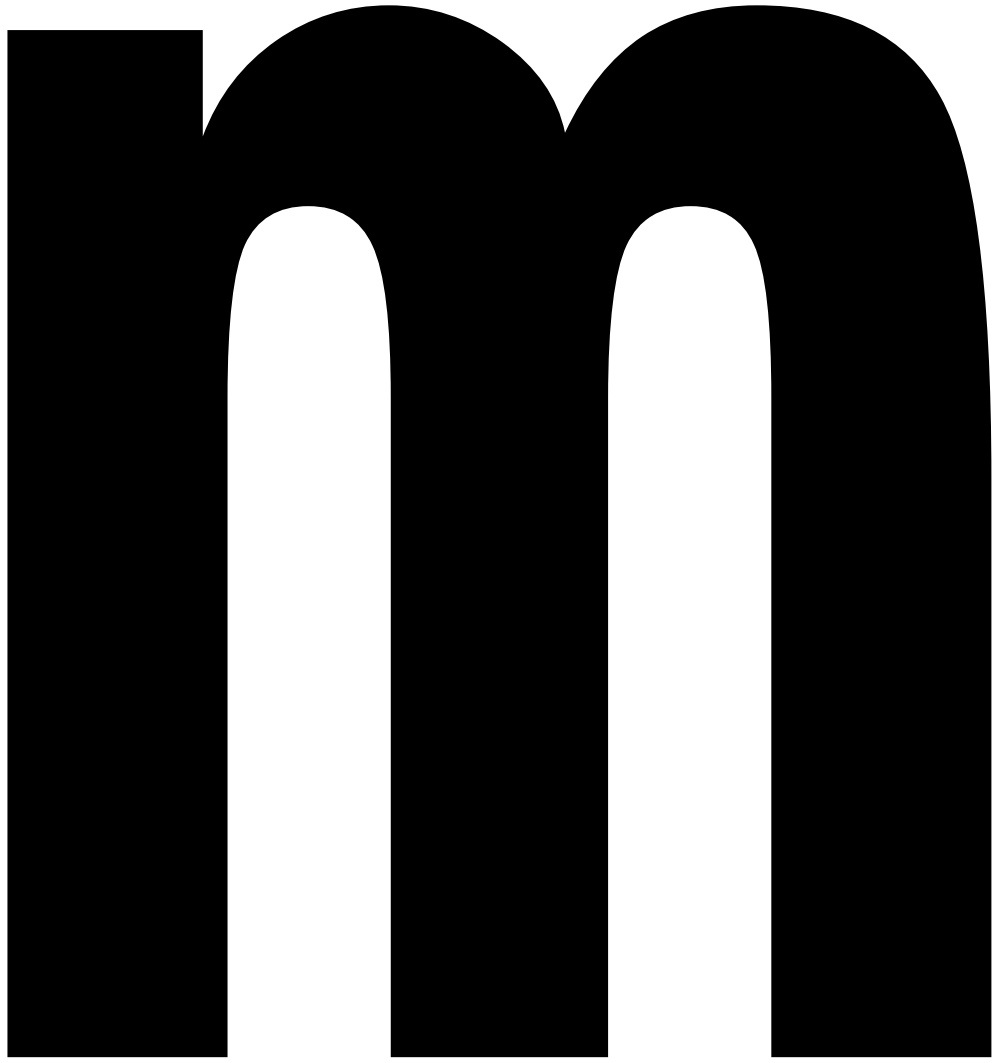


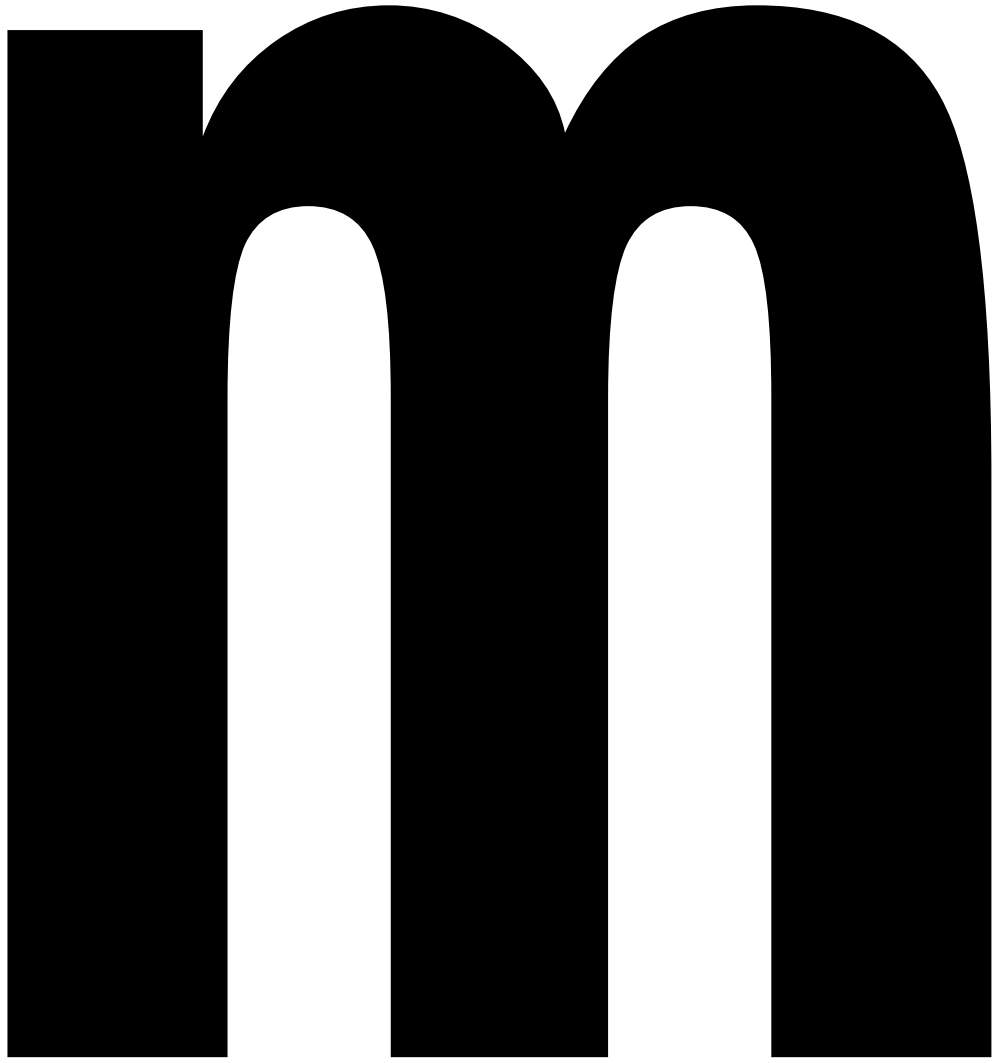


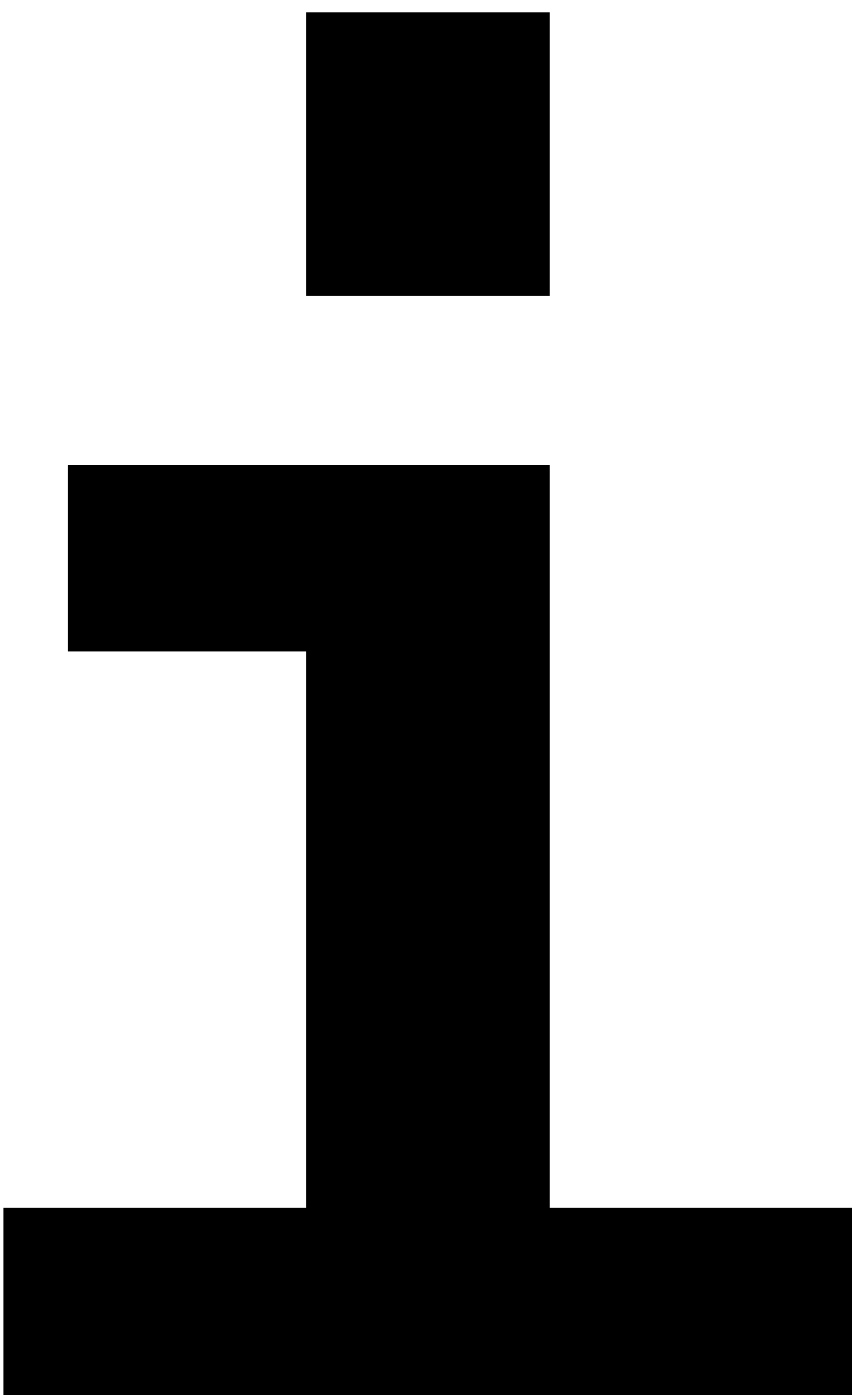






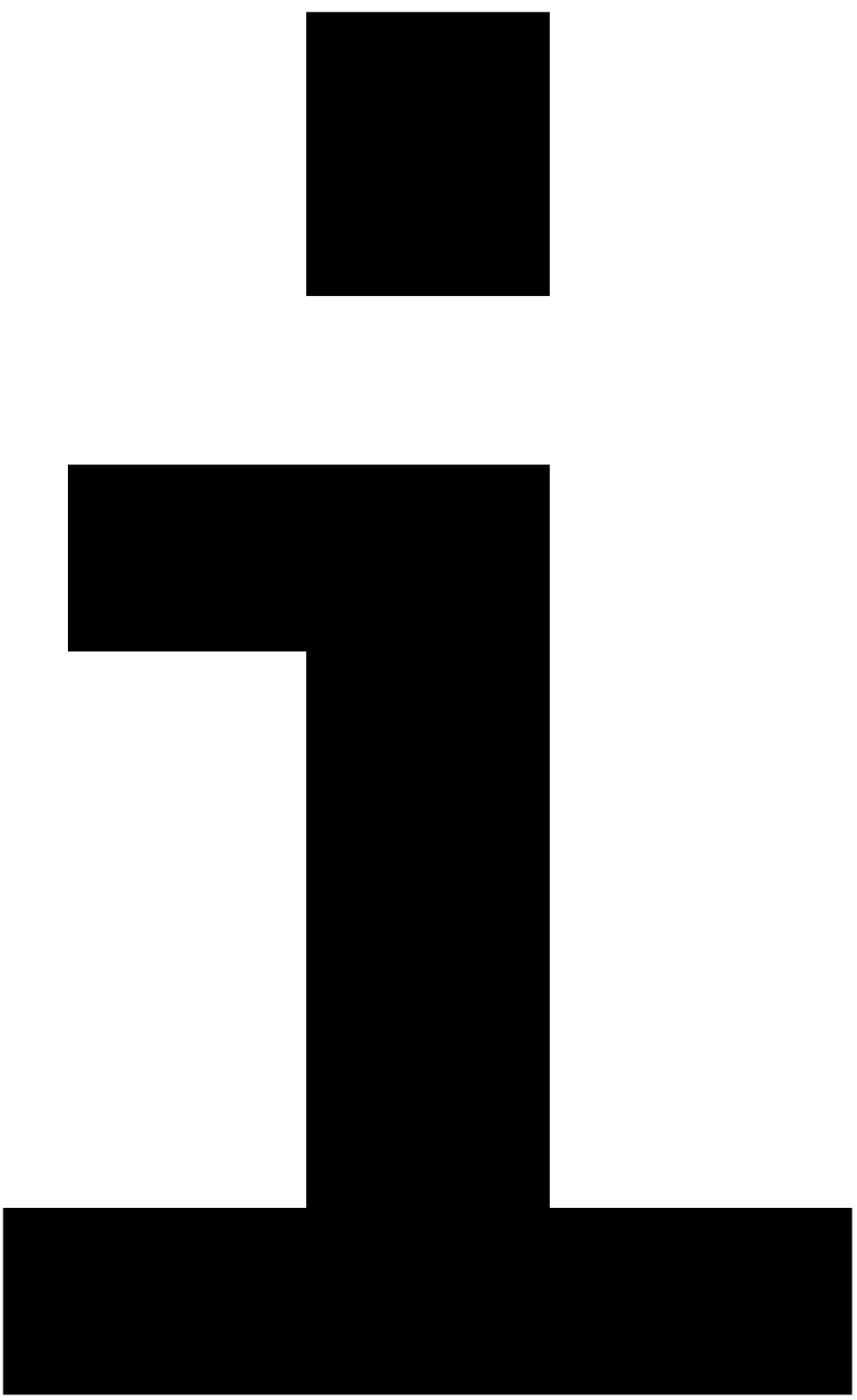


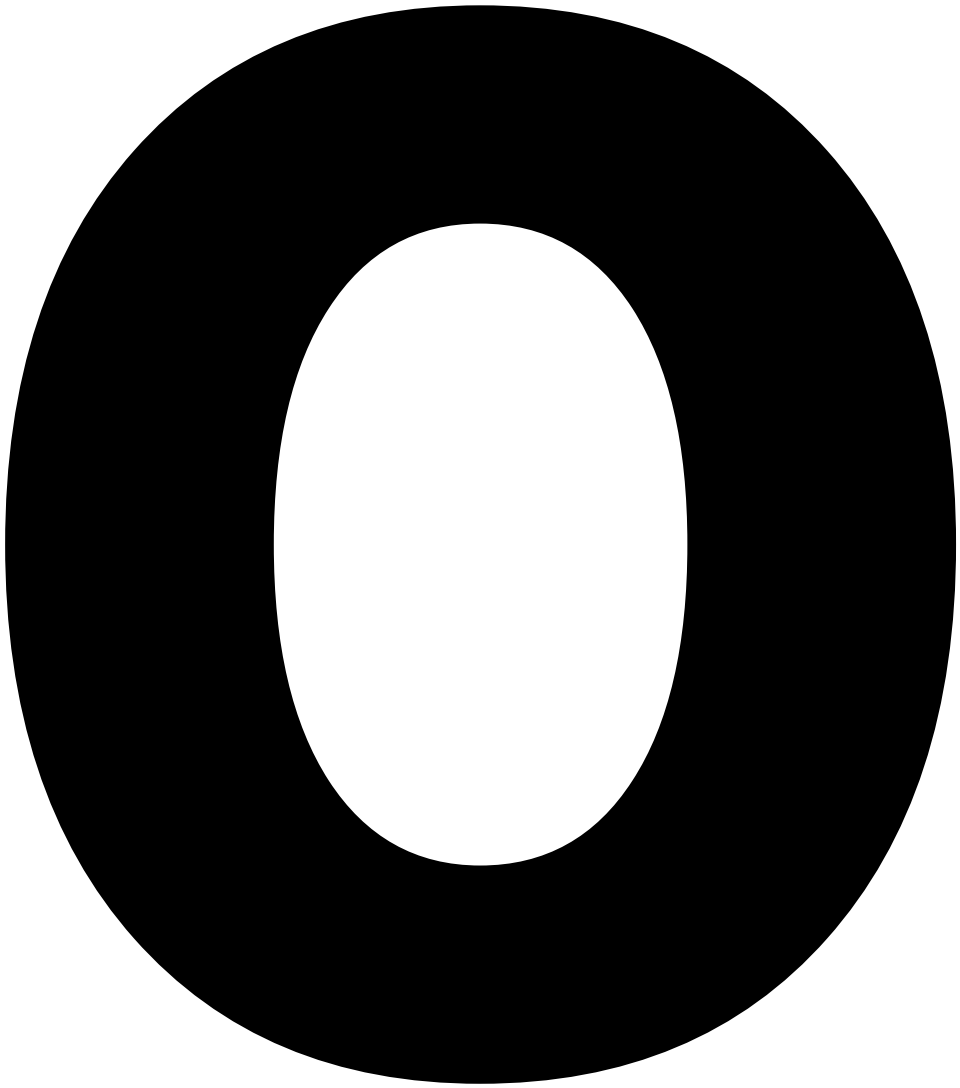


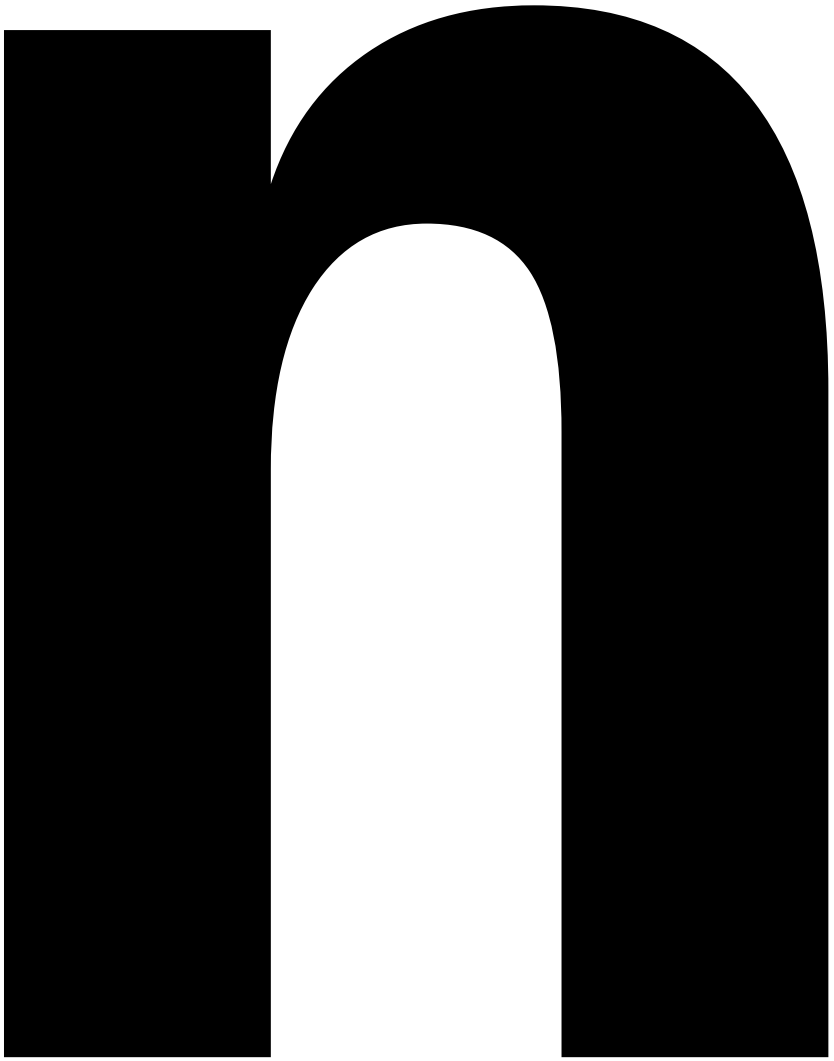


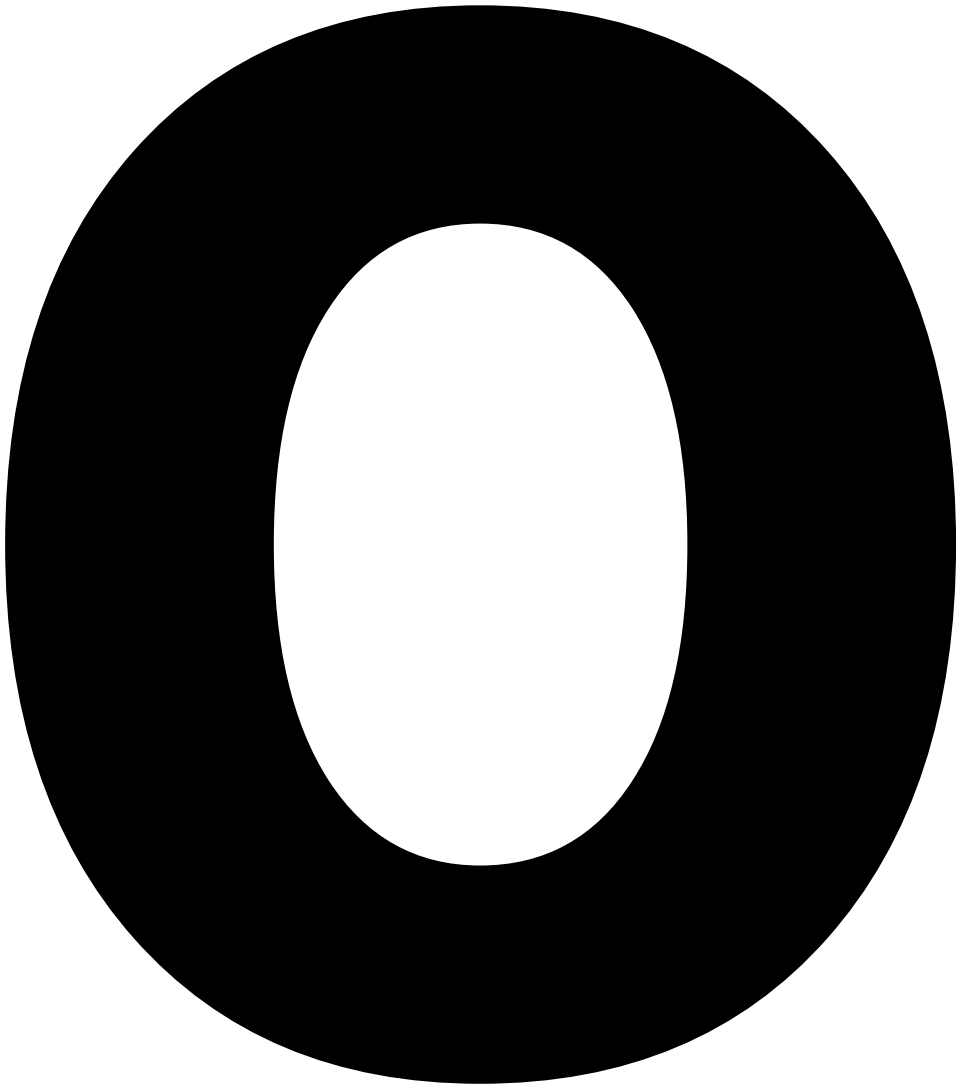
S

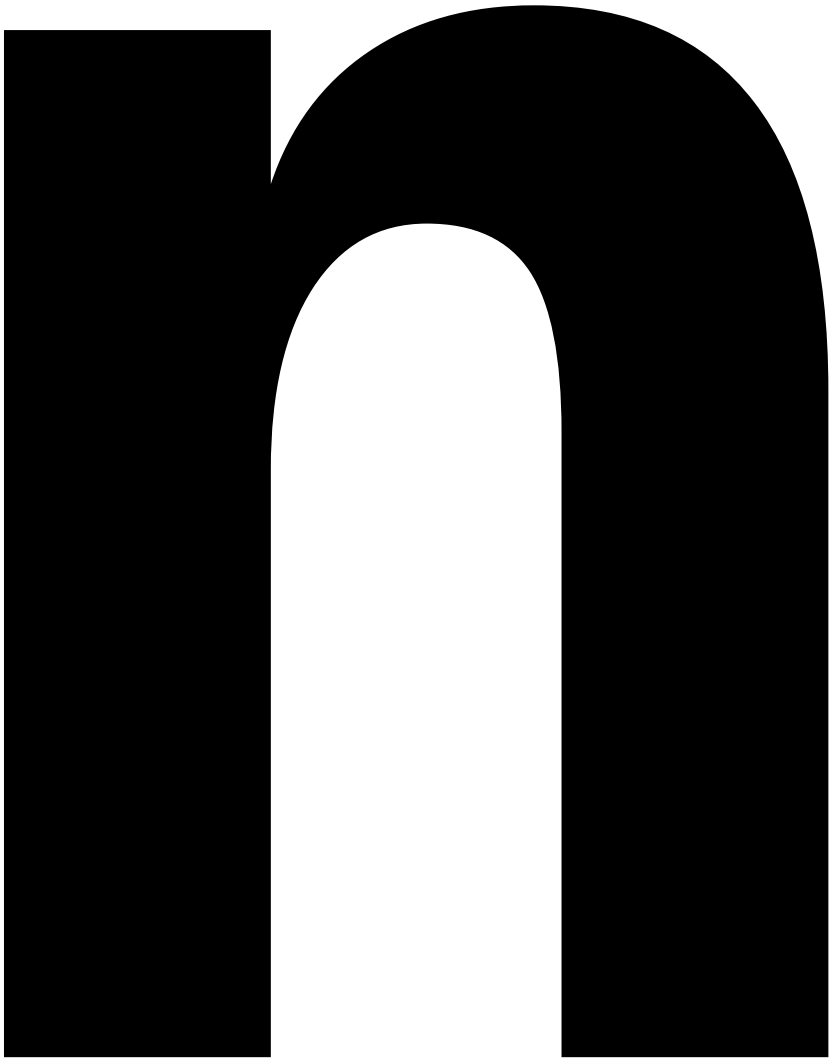
S

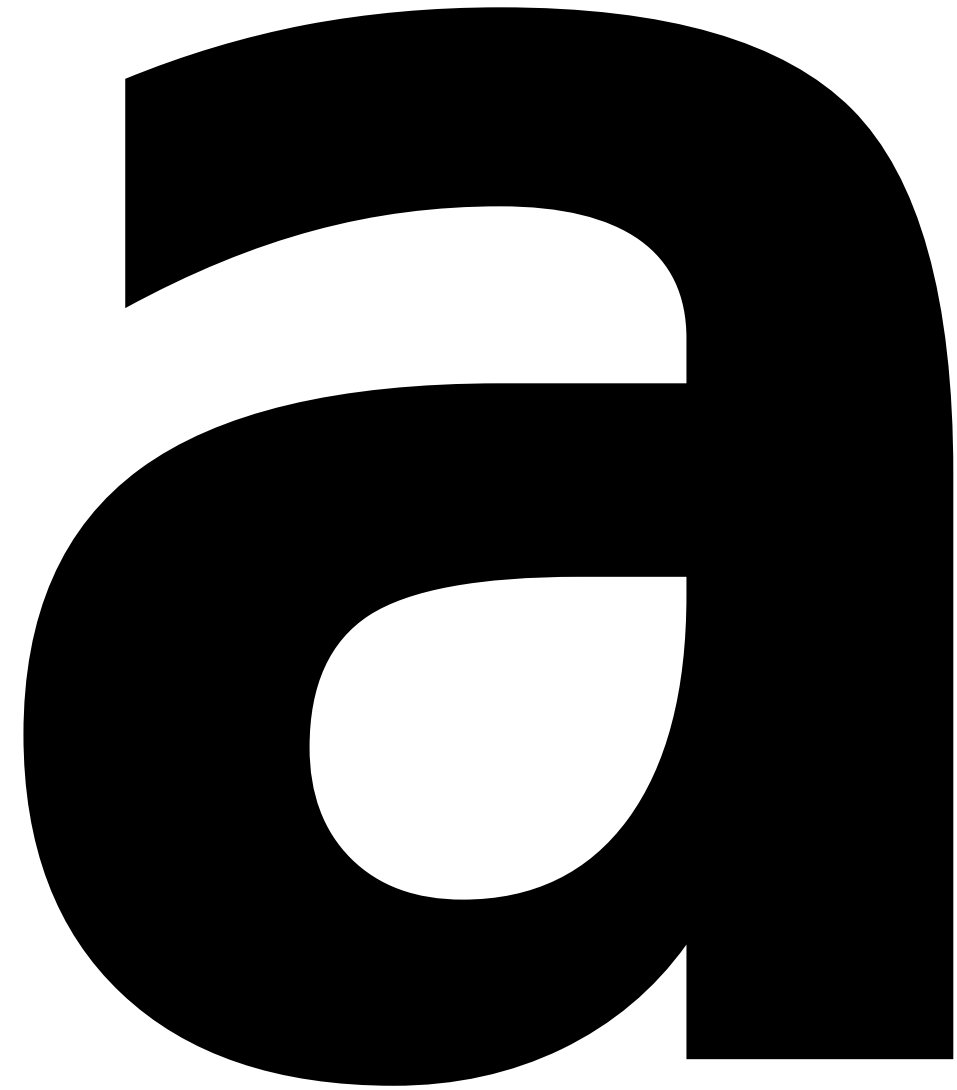




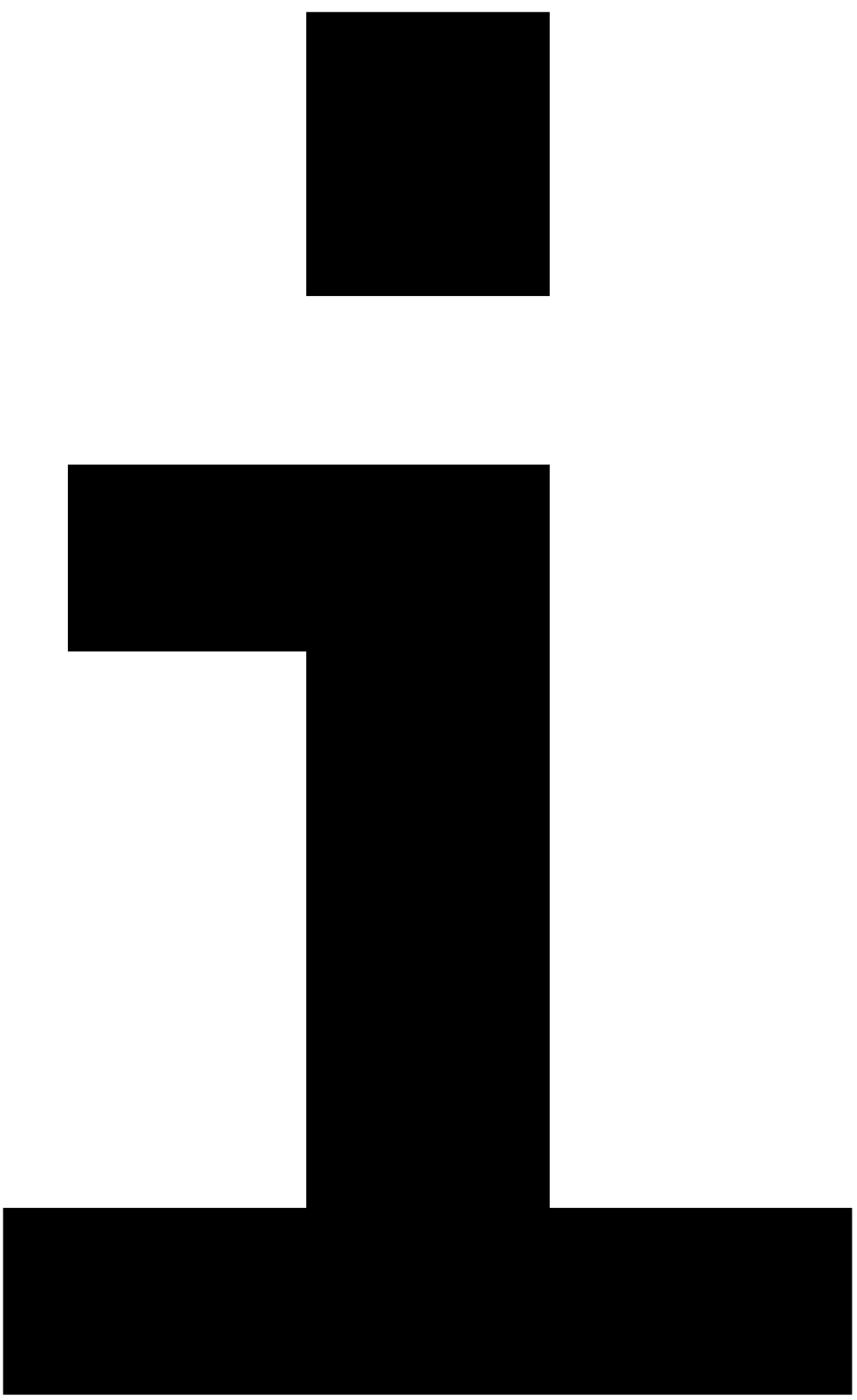


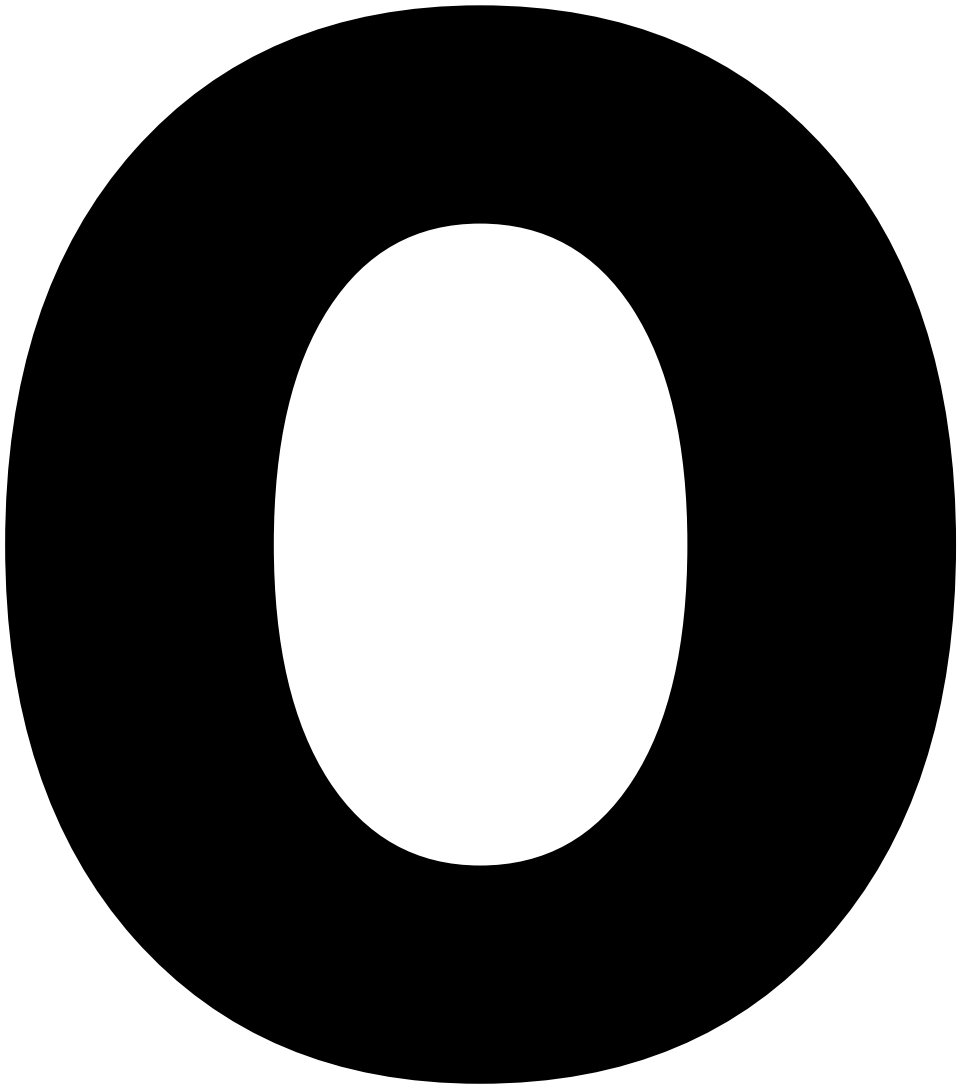


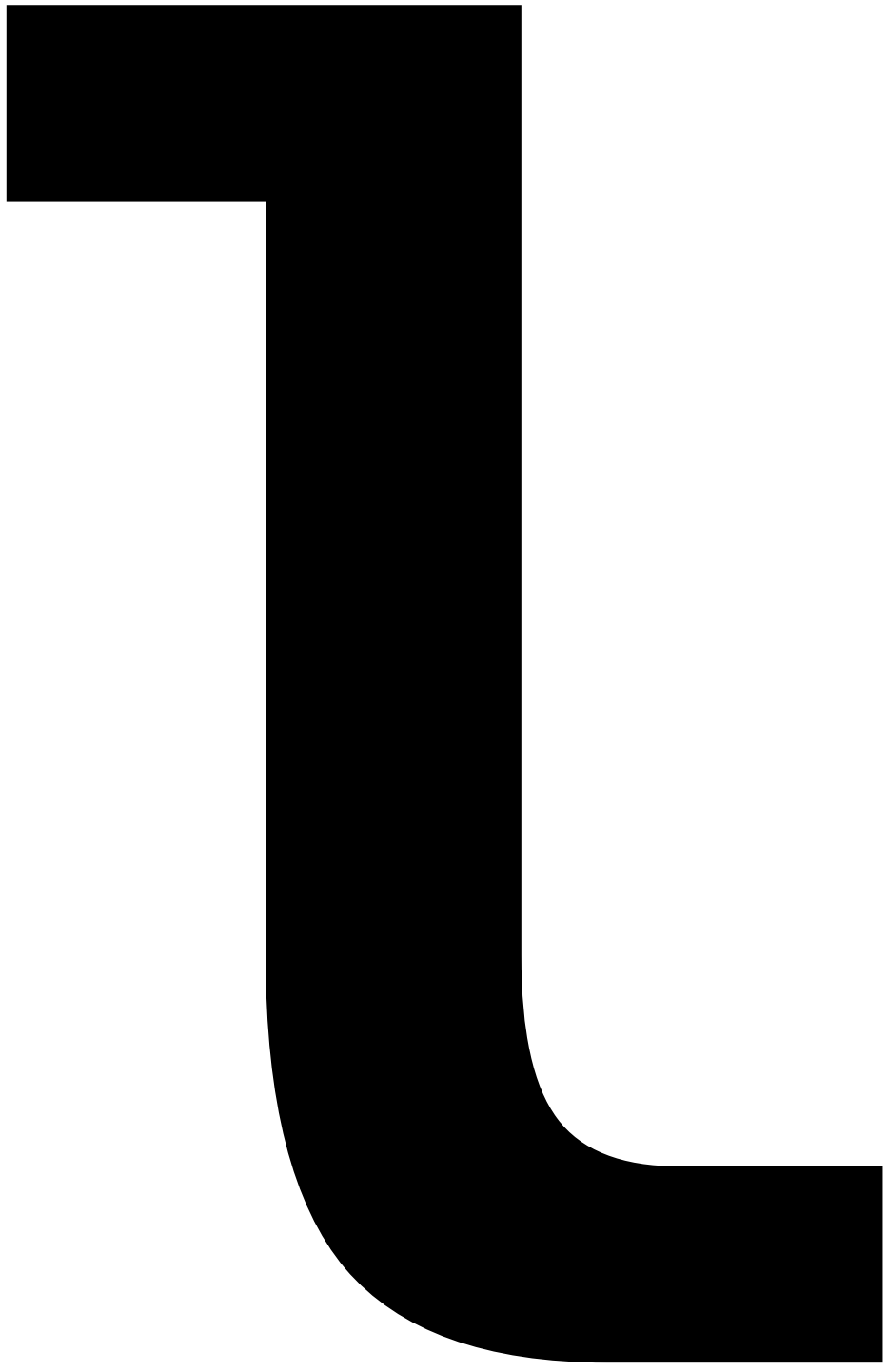


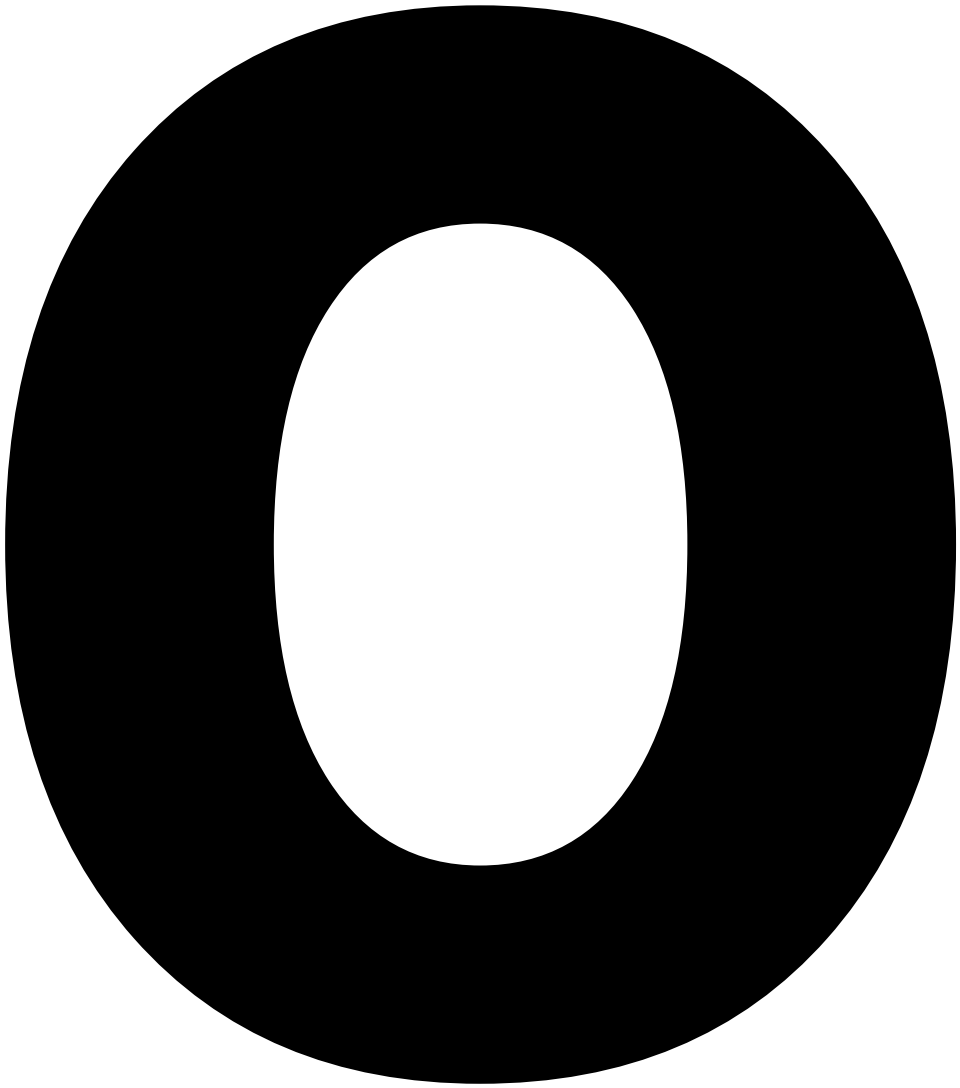


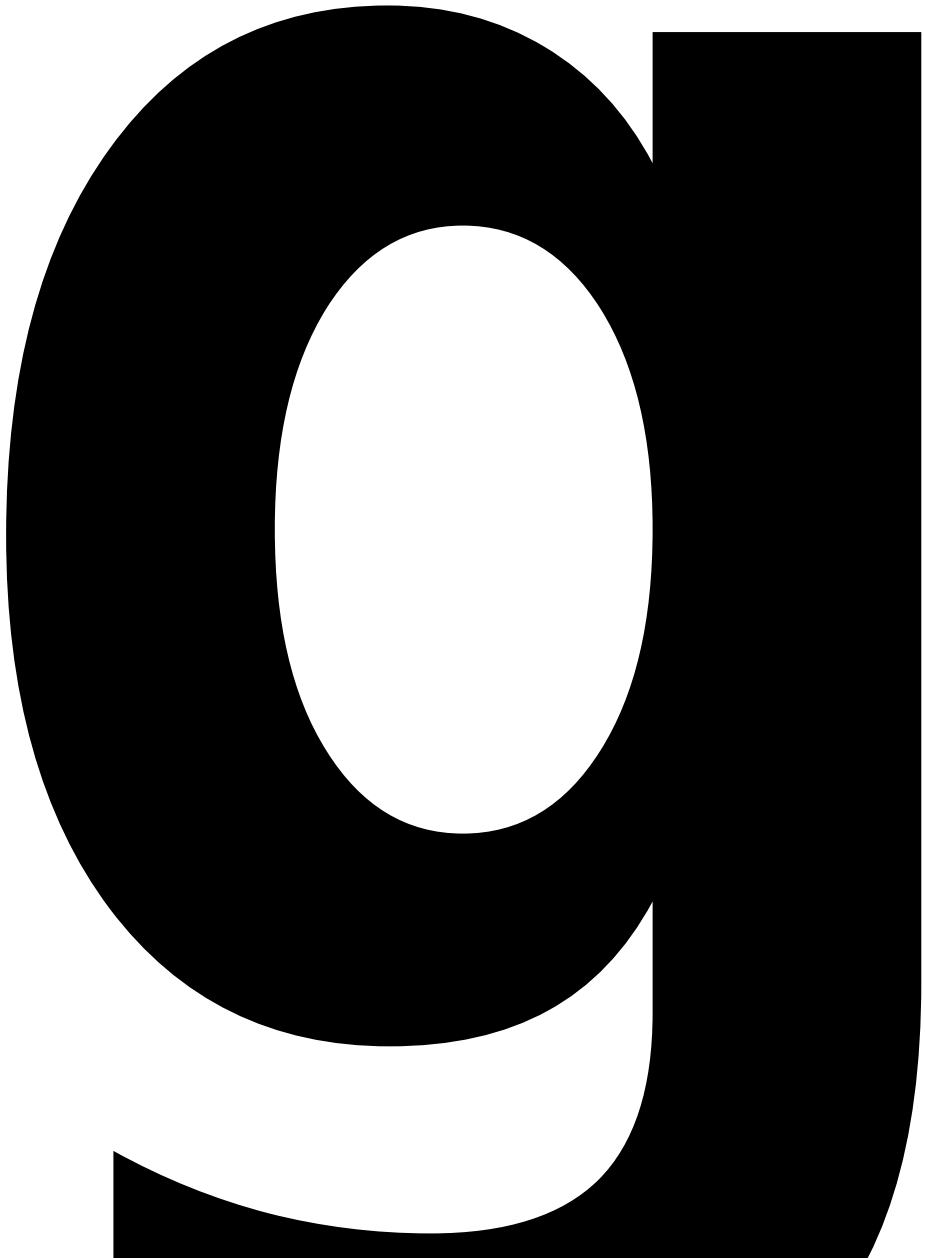
d

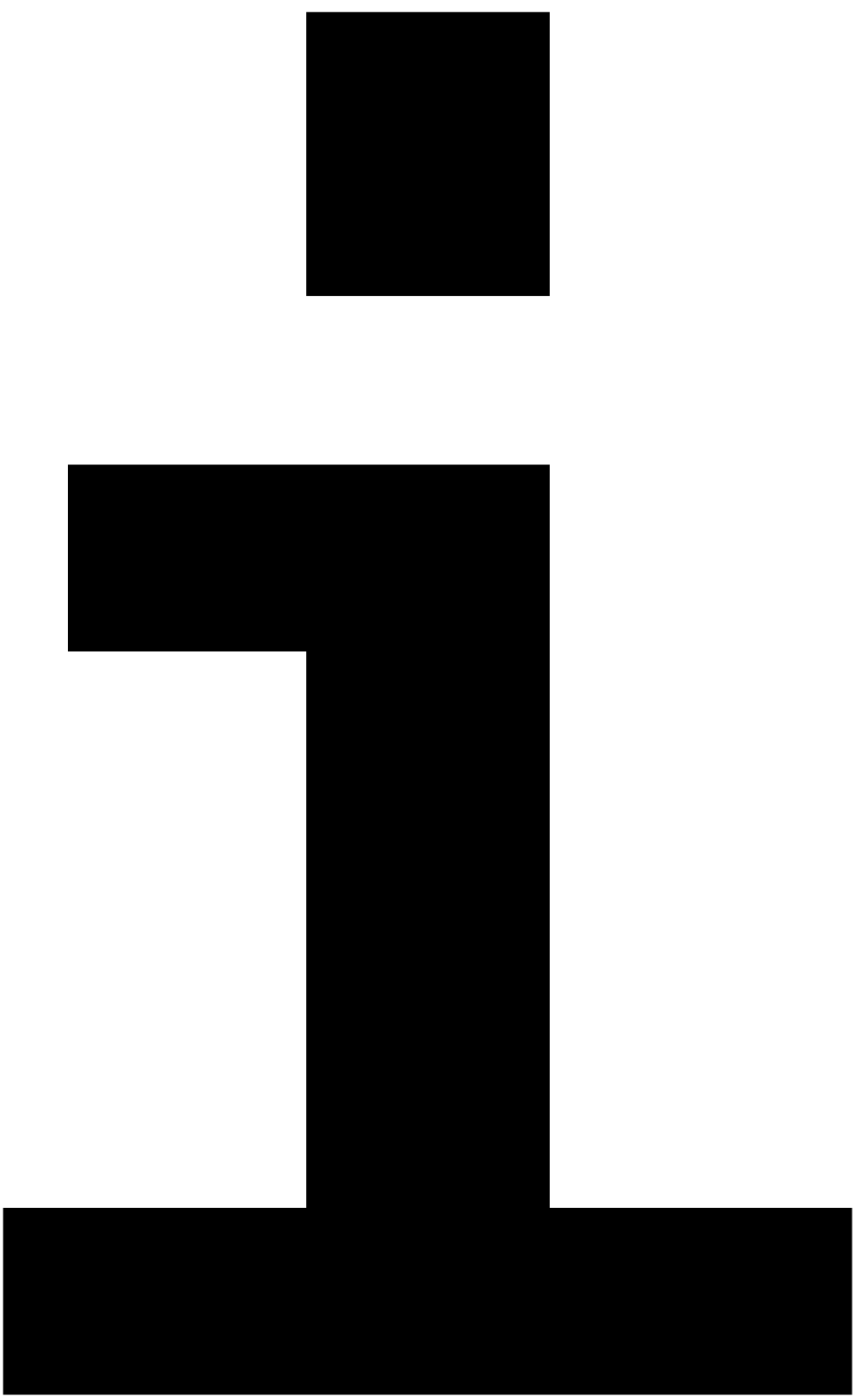


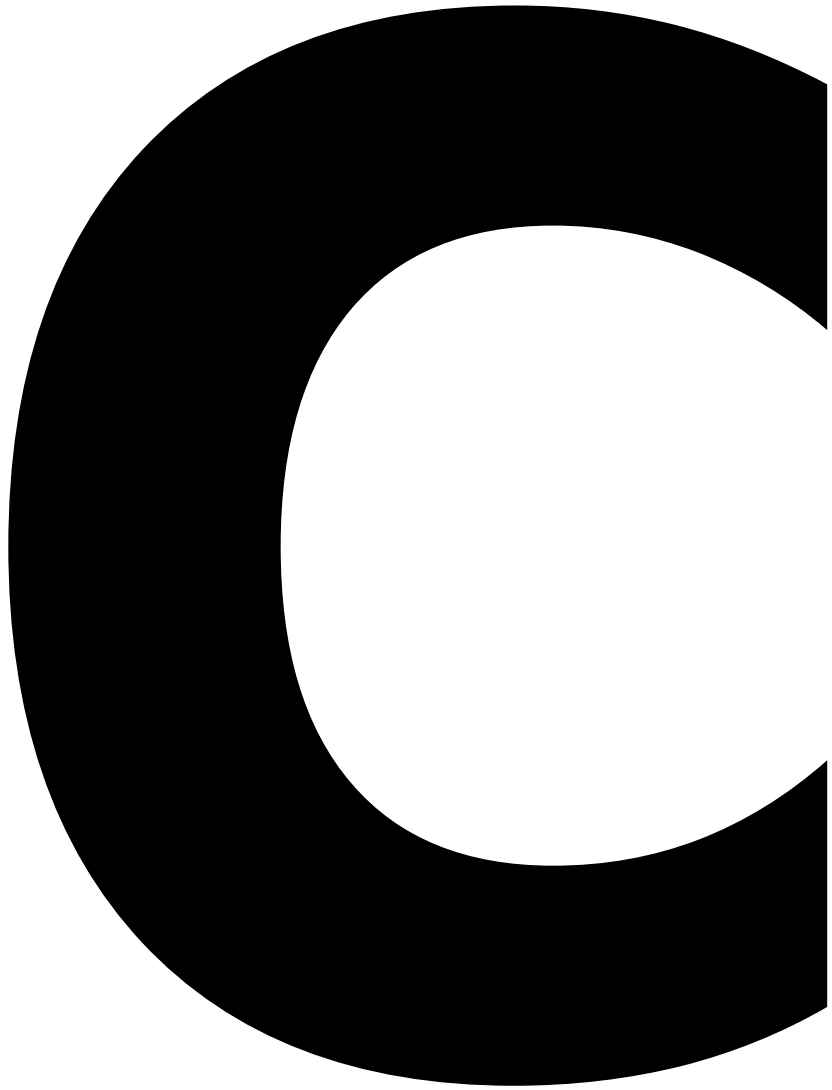


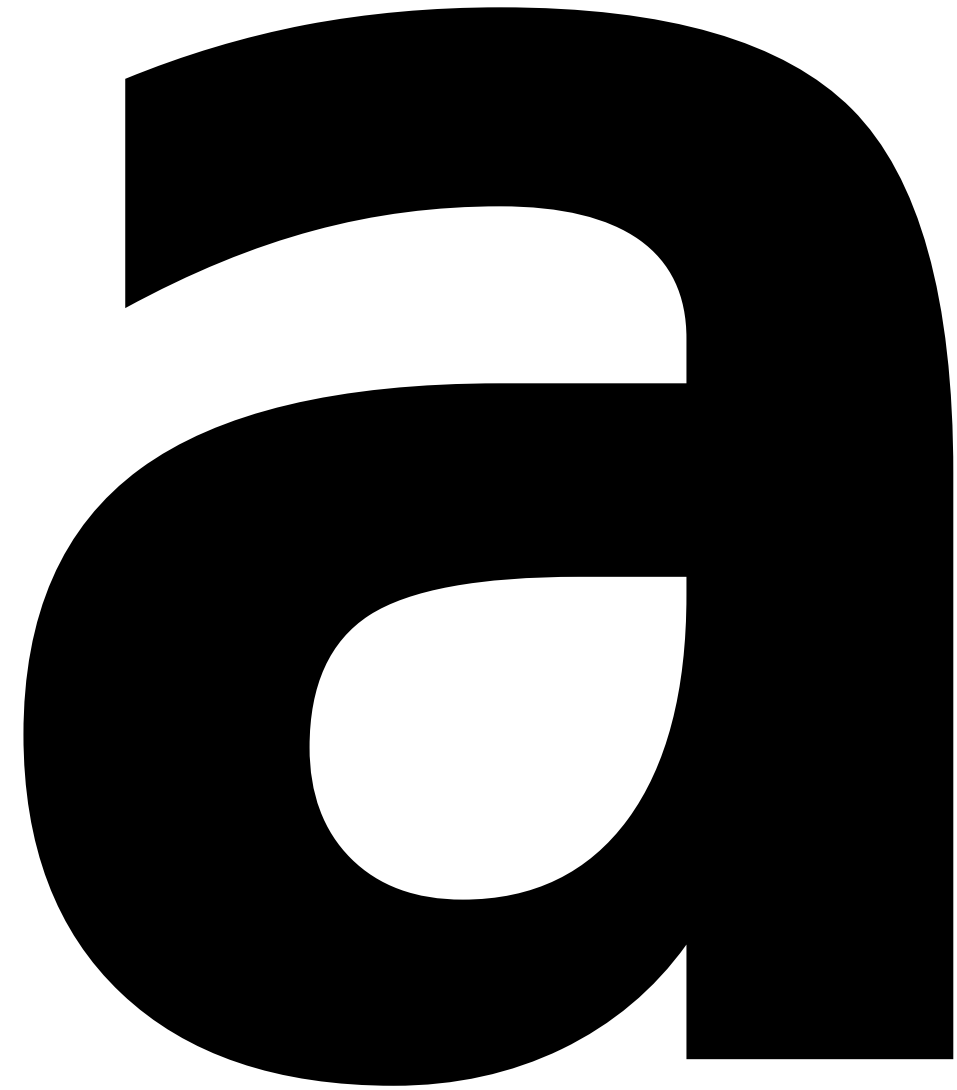


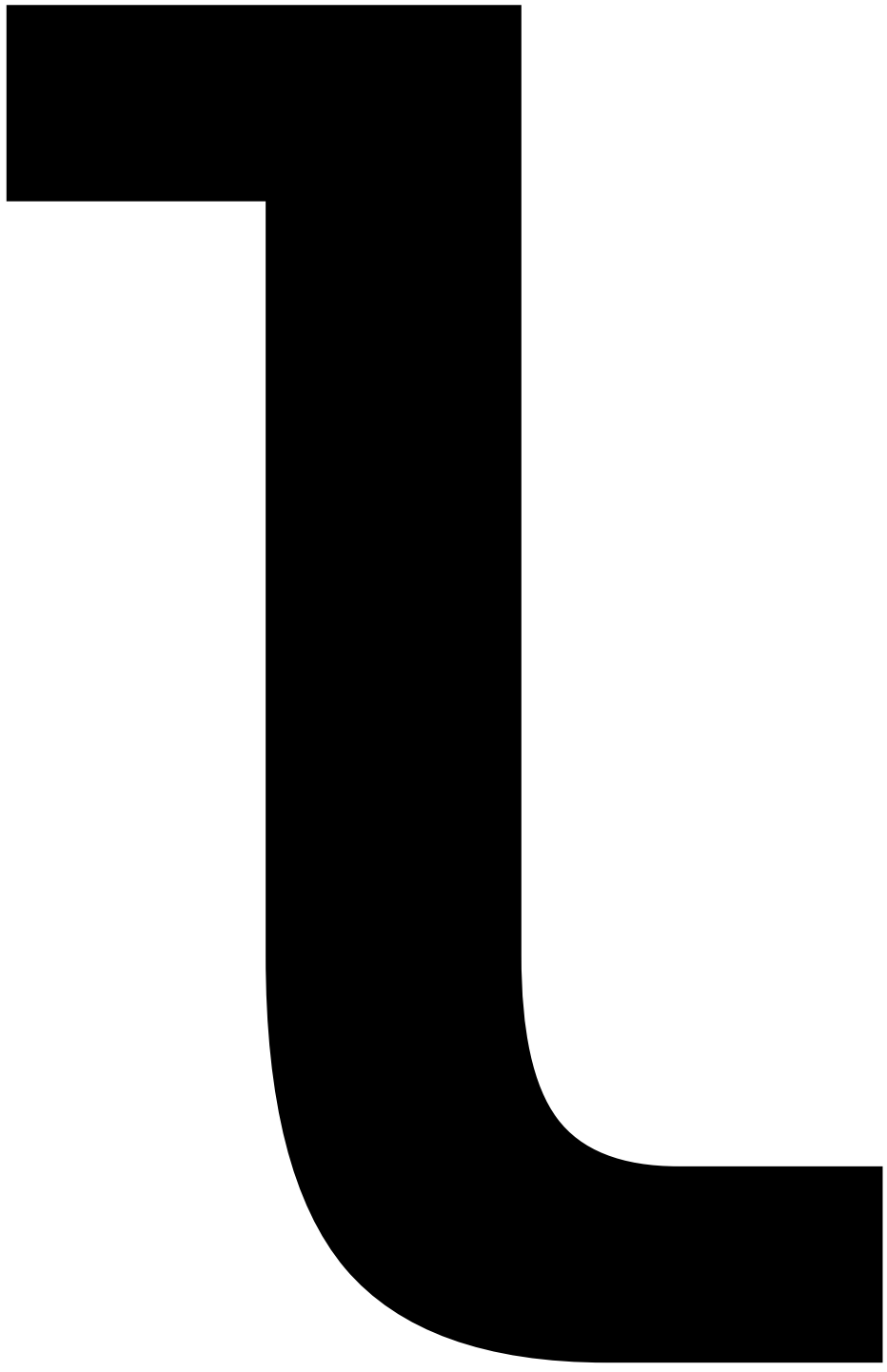


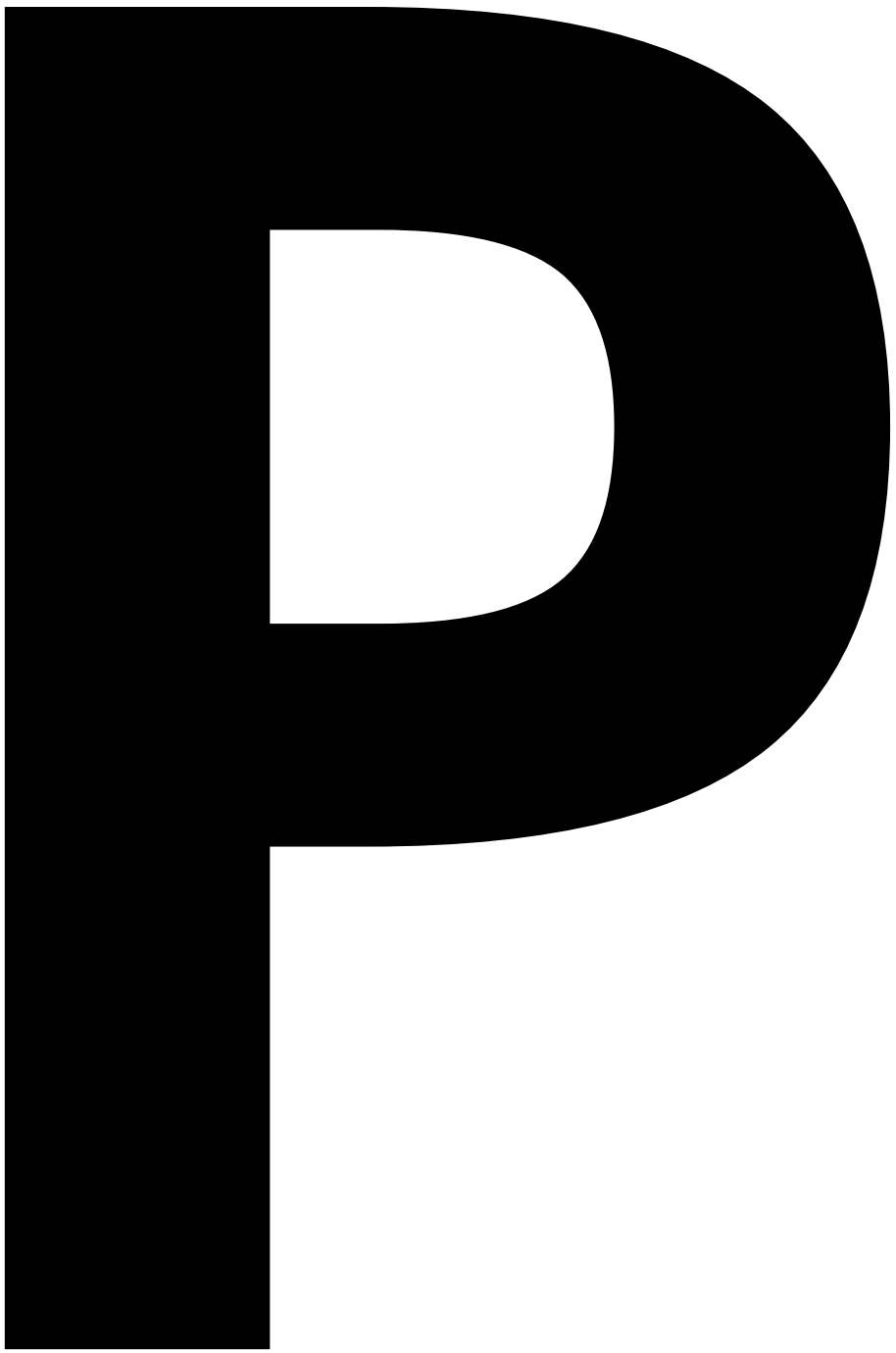


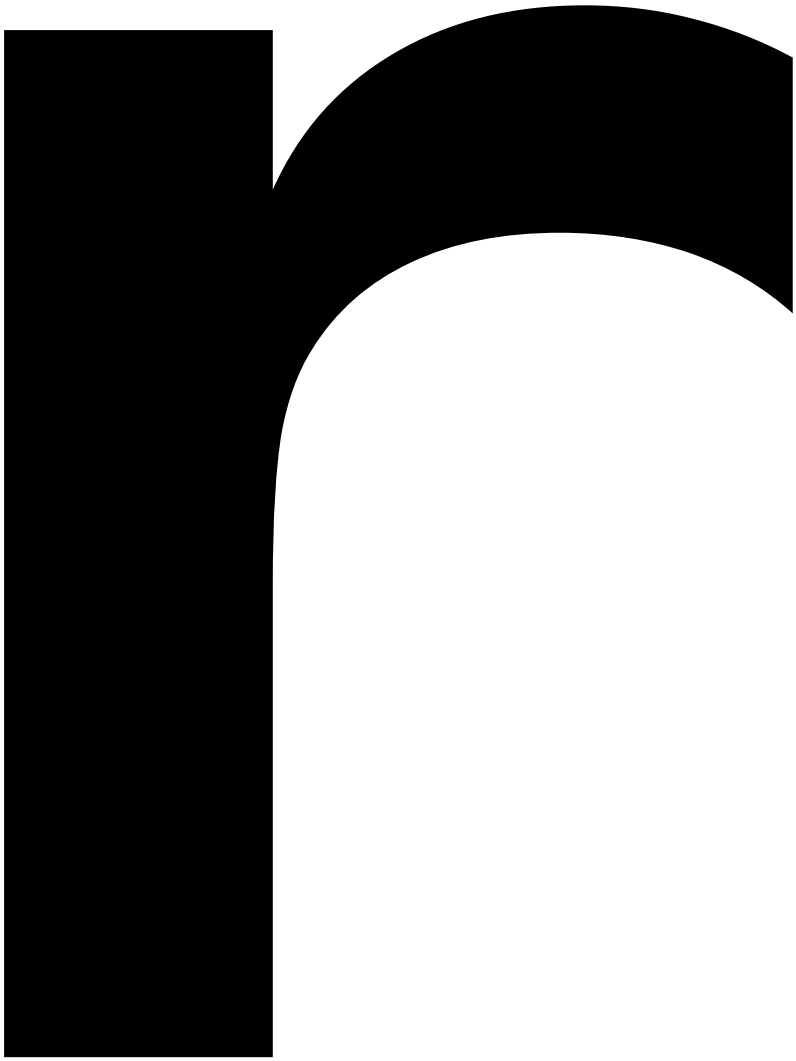


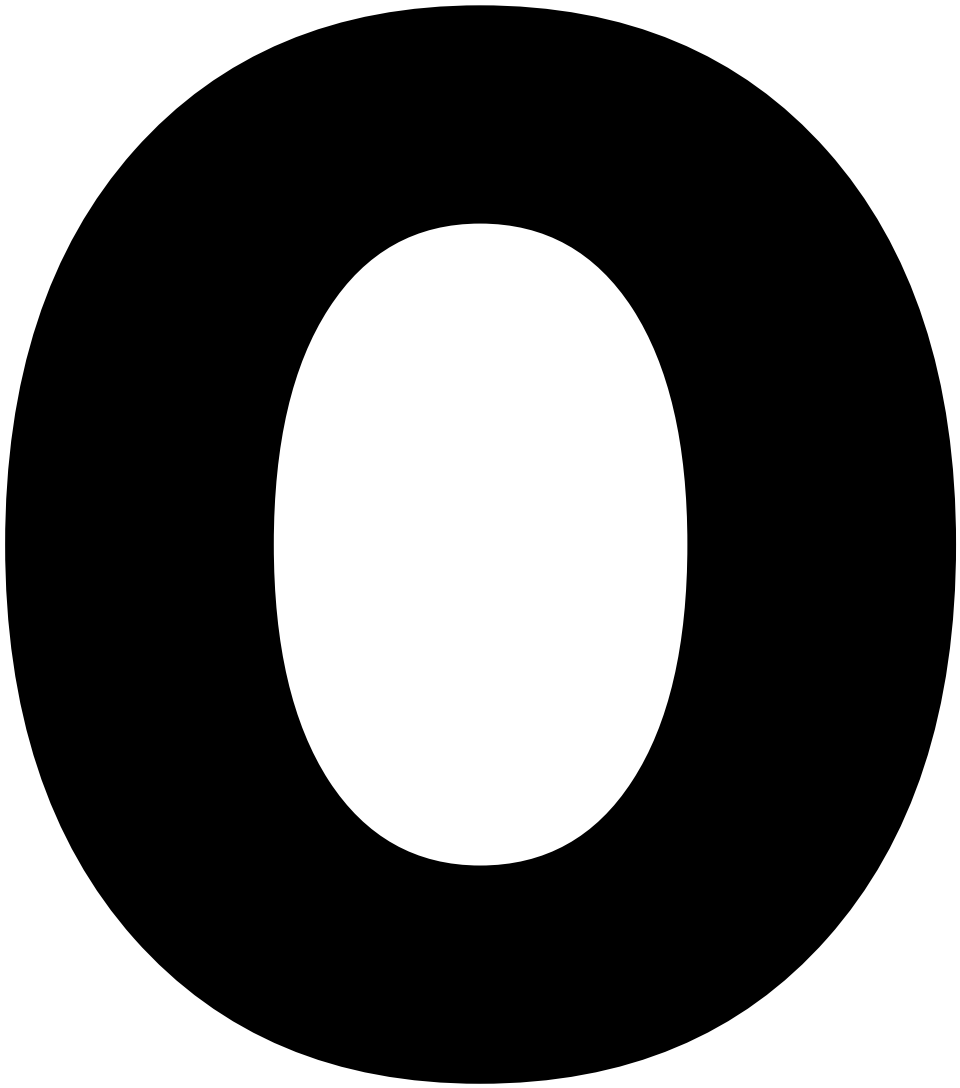


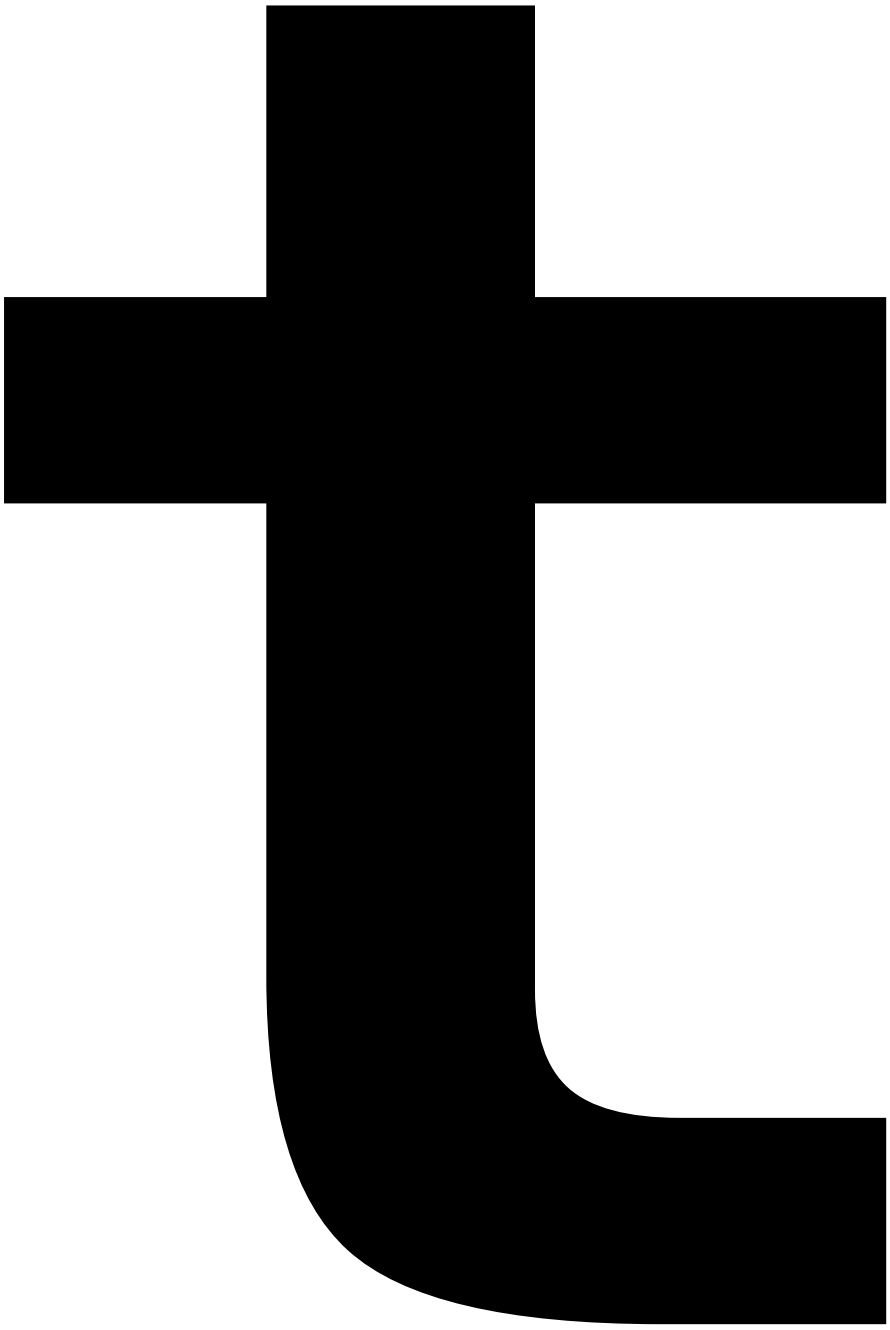


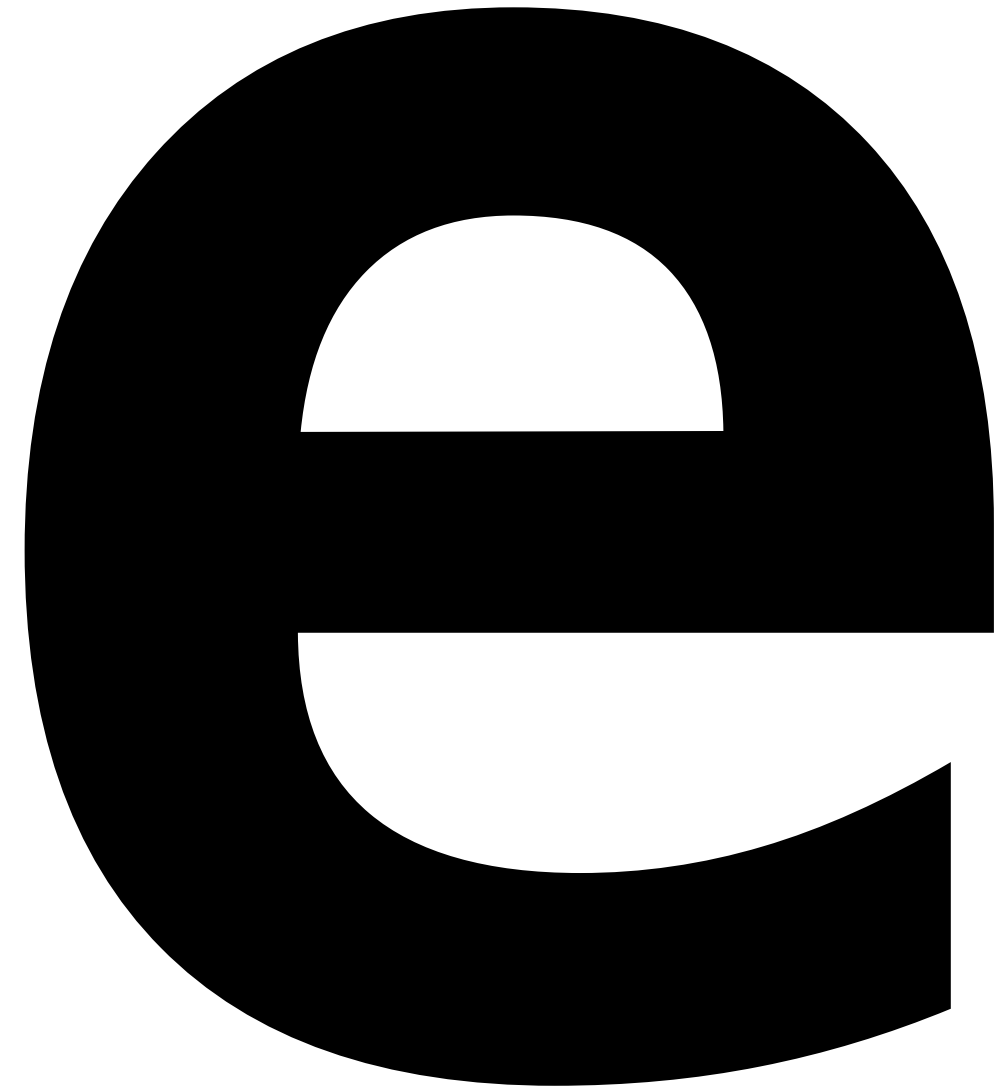


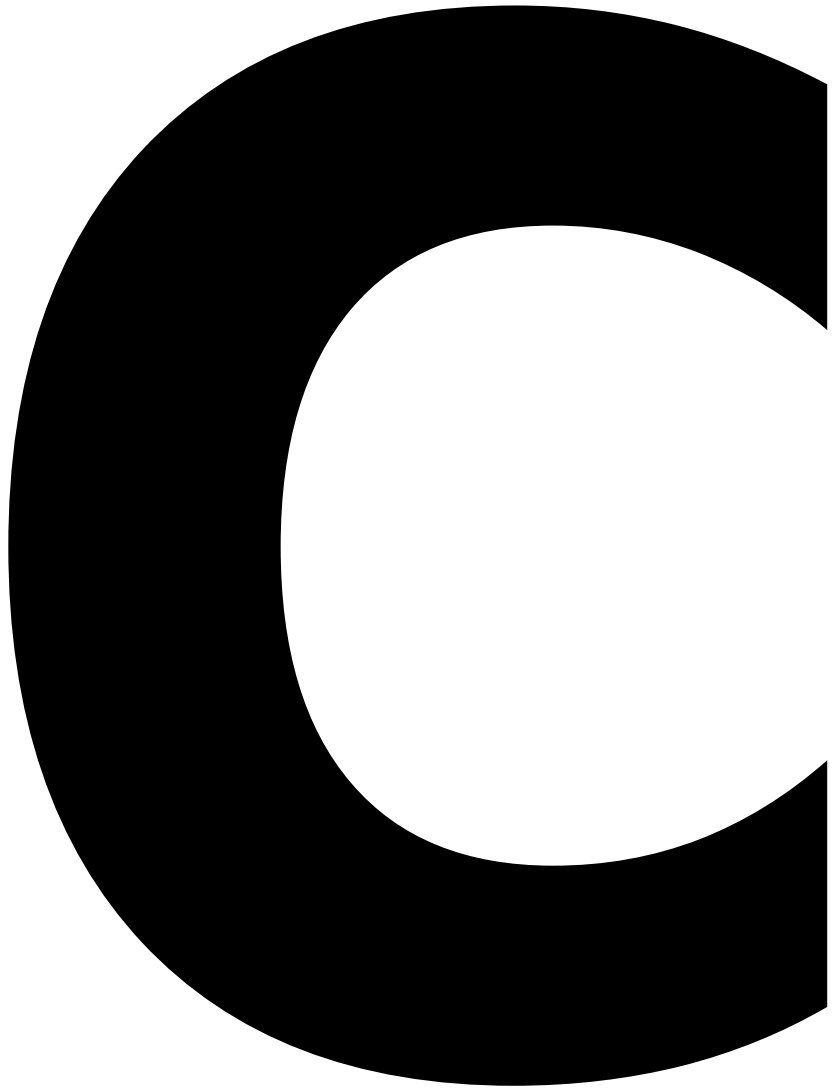


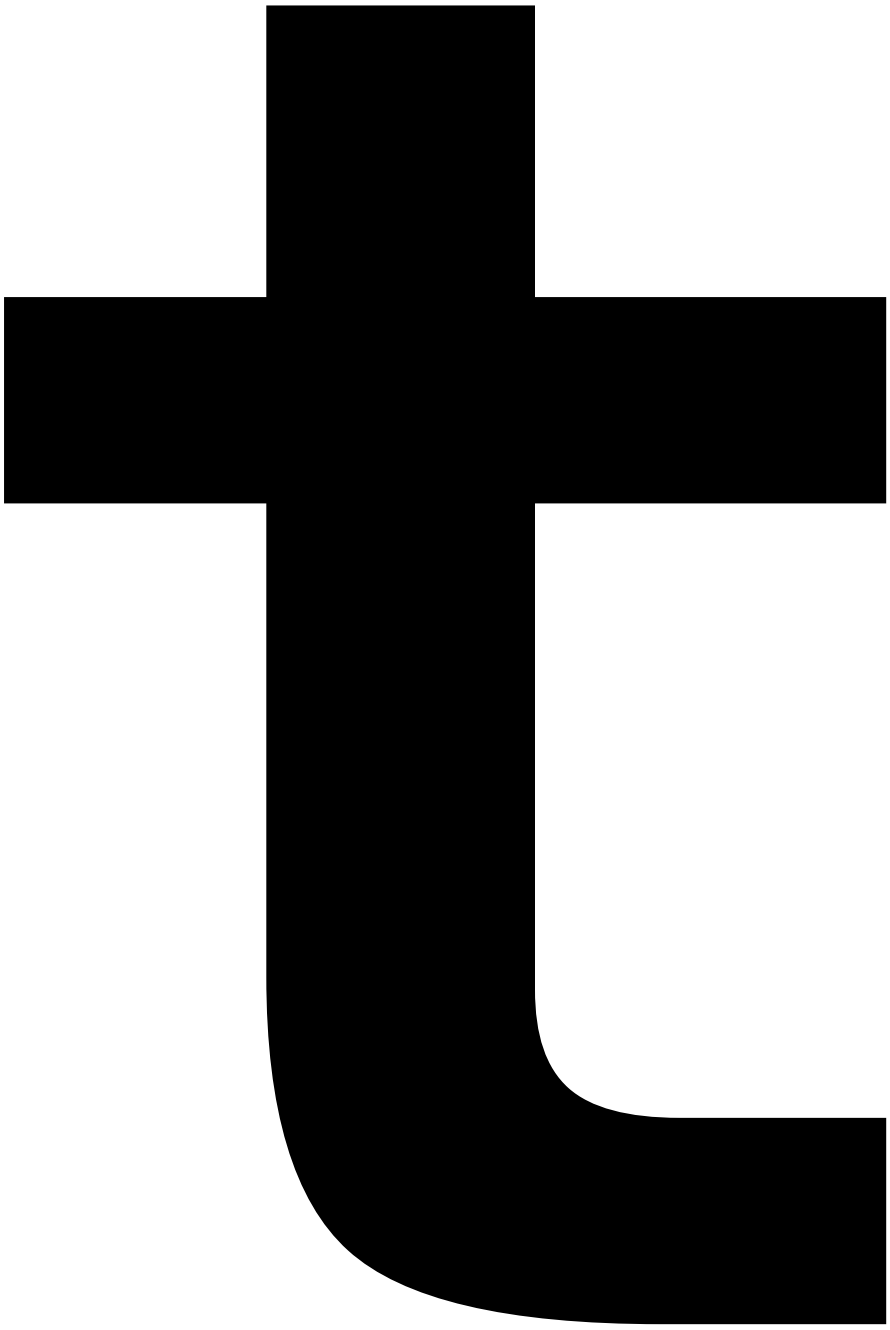


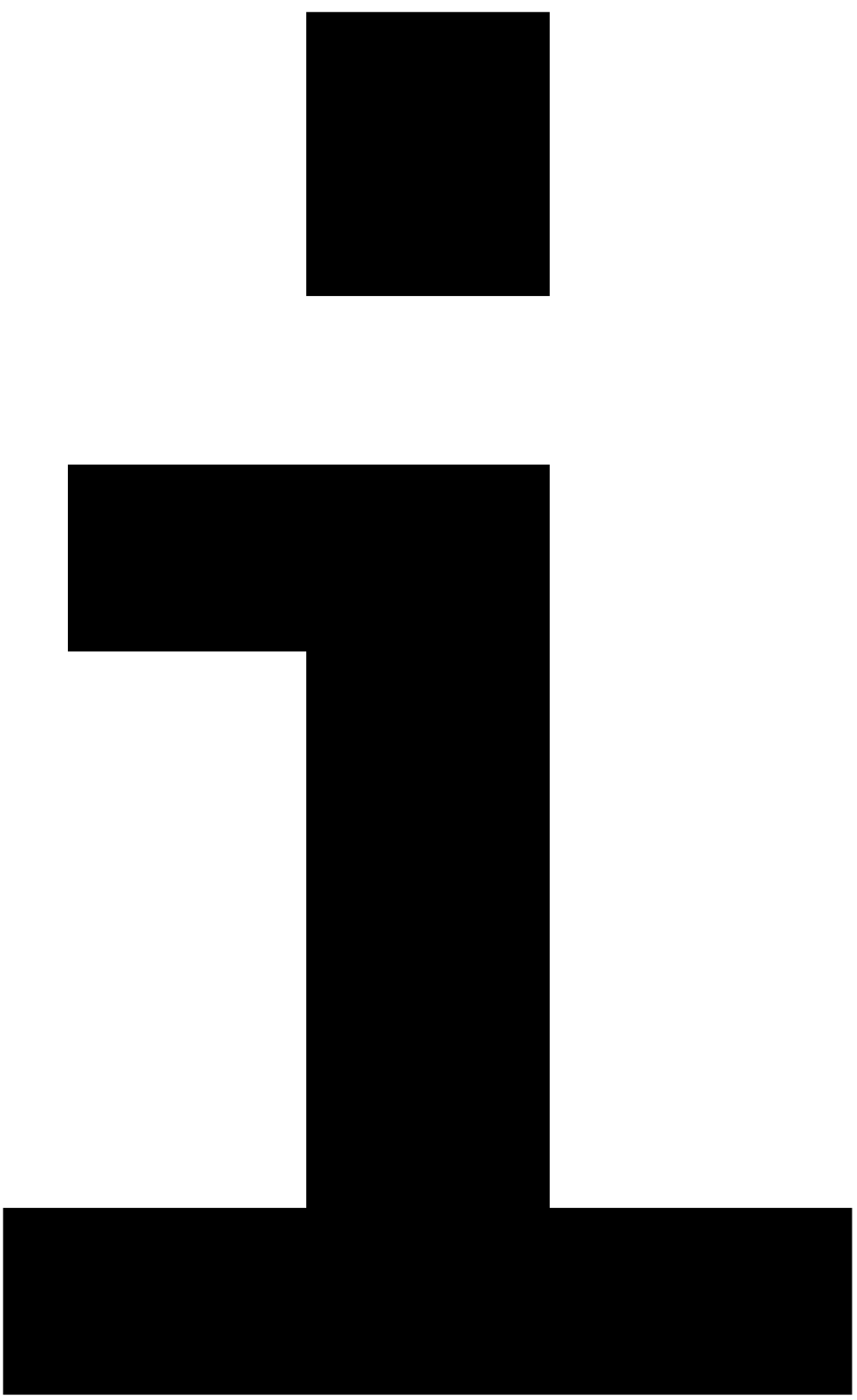


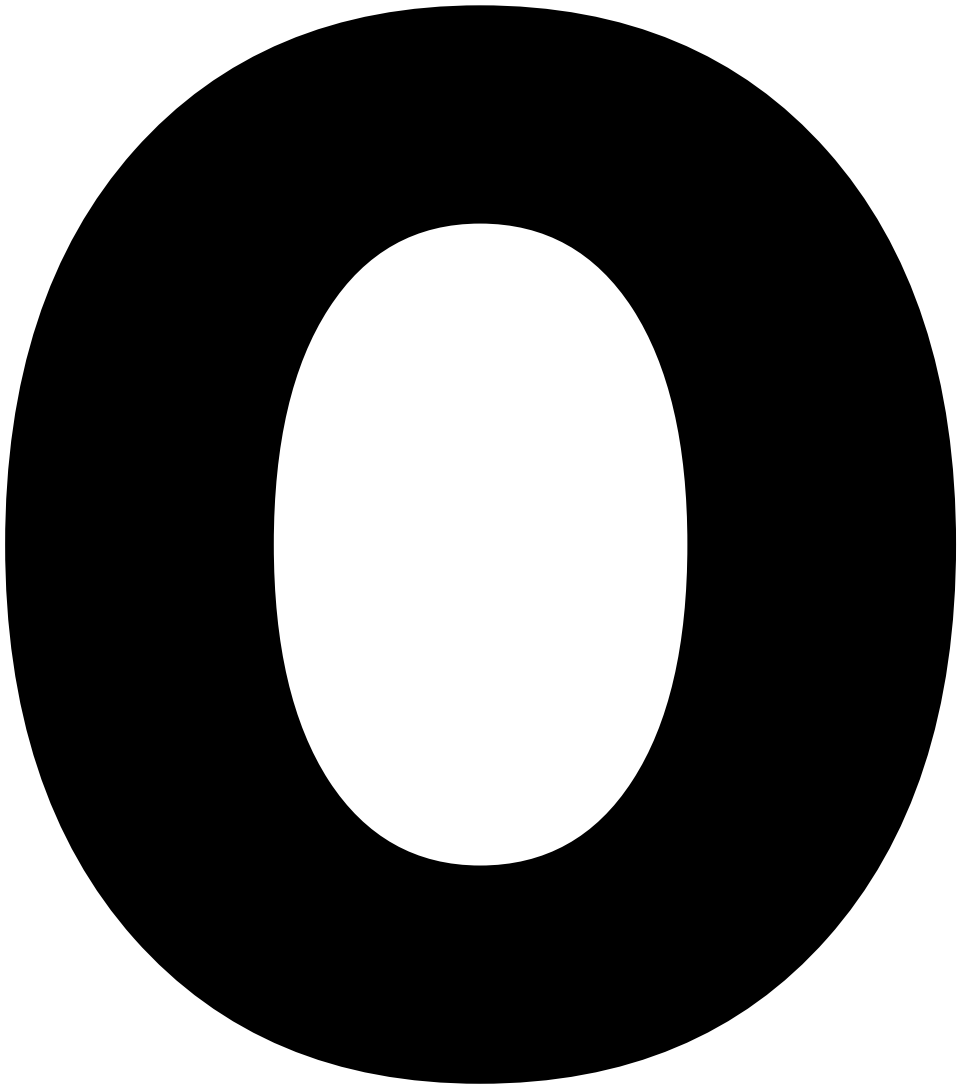


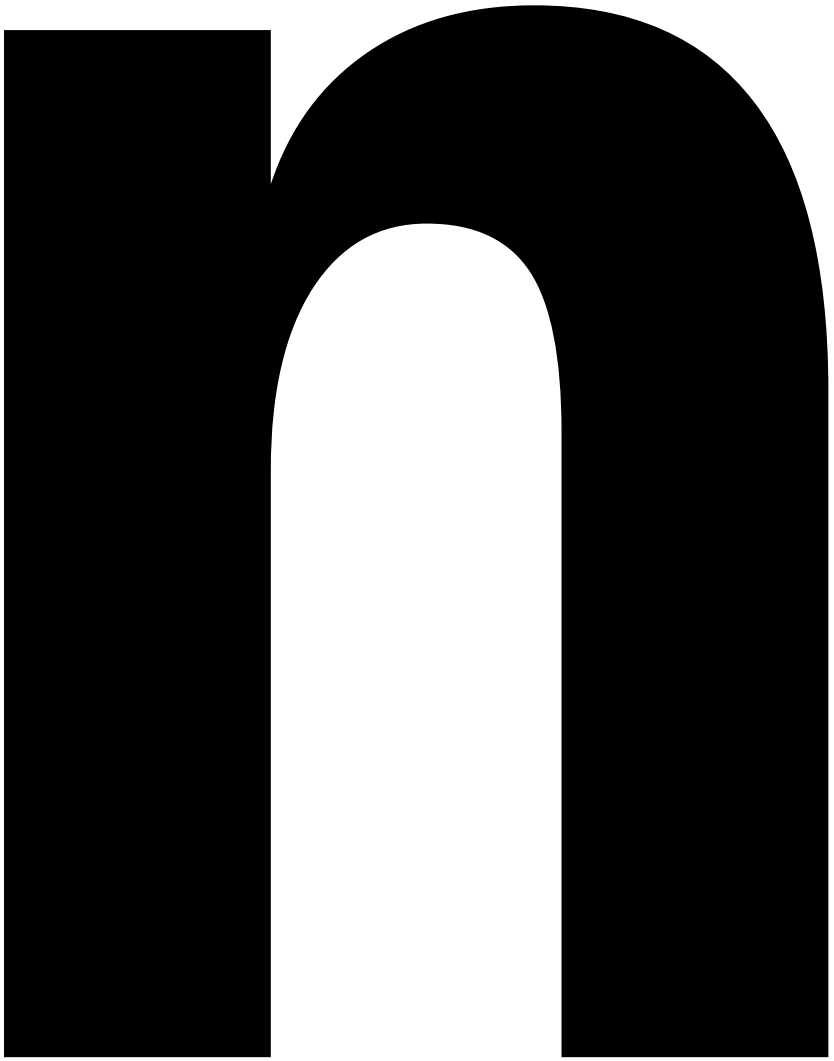


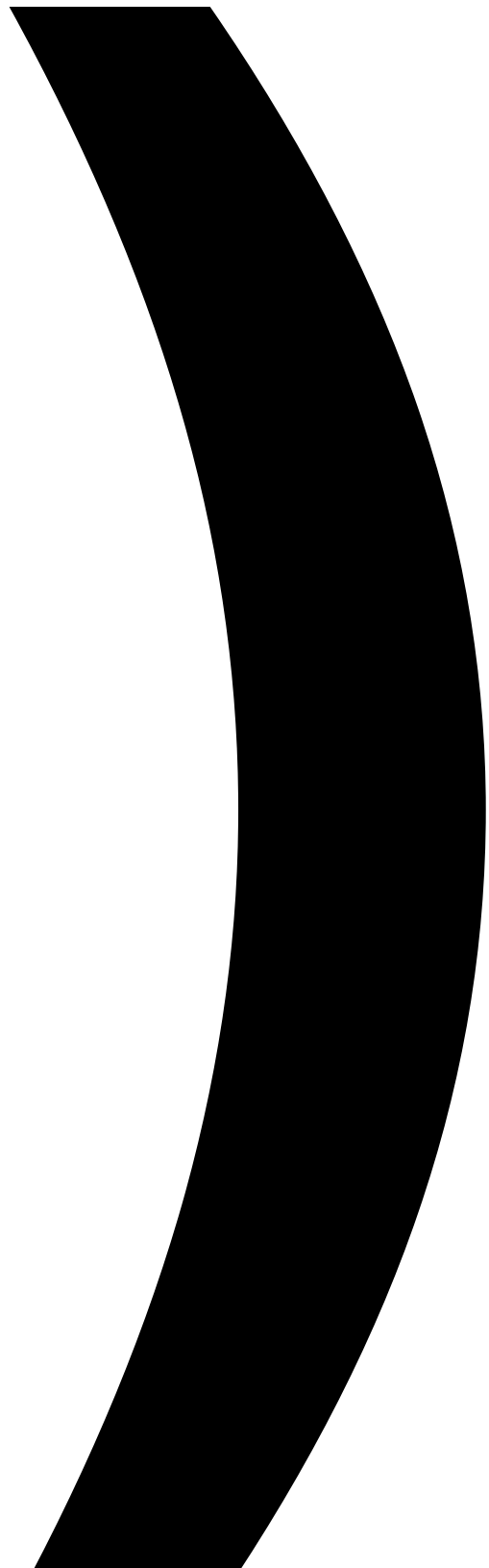




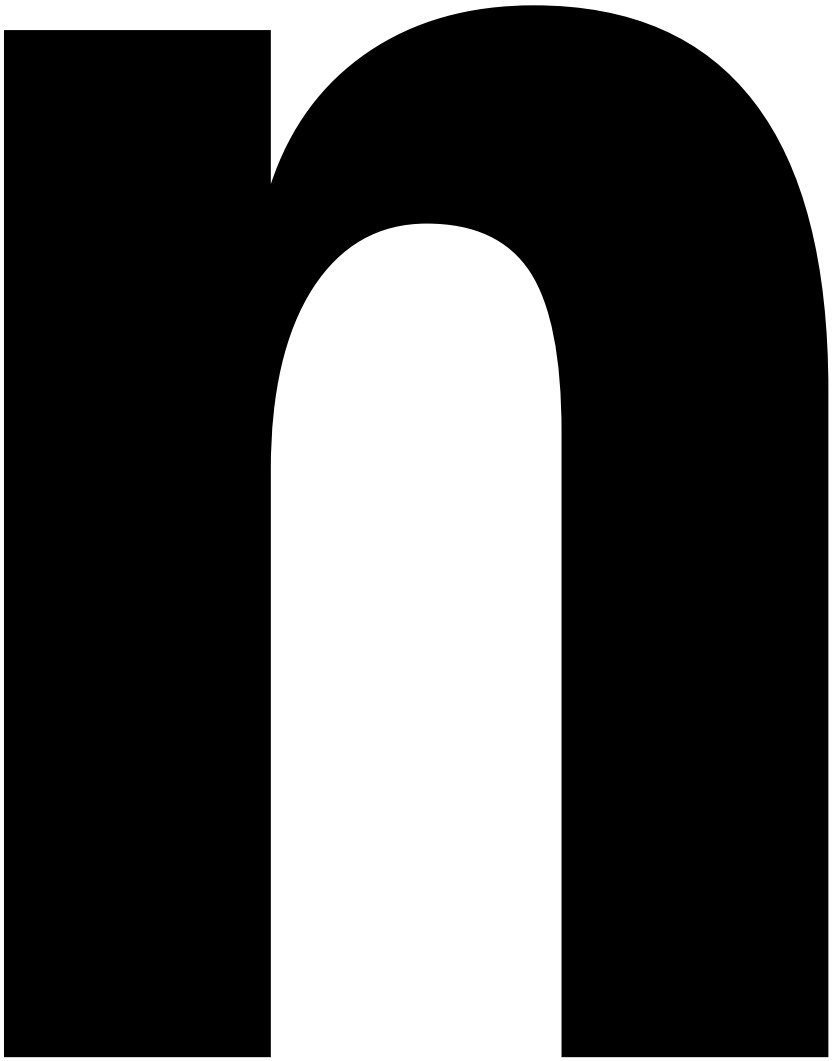






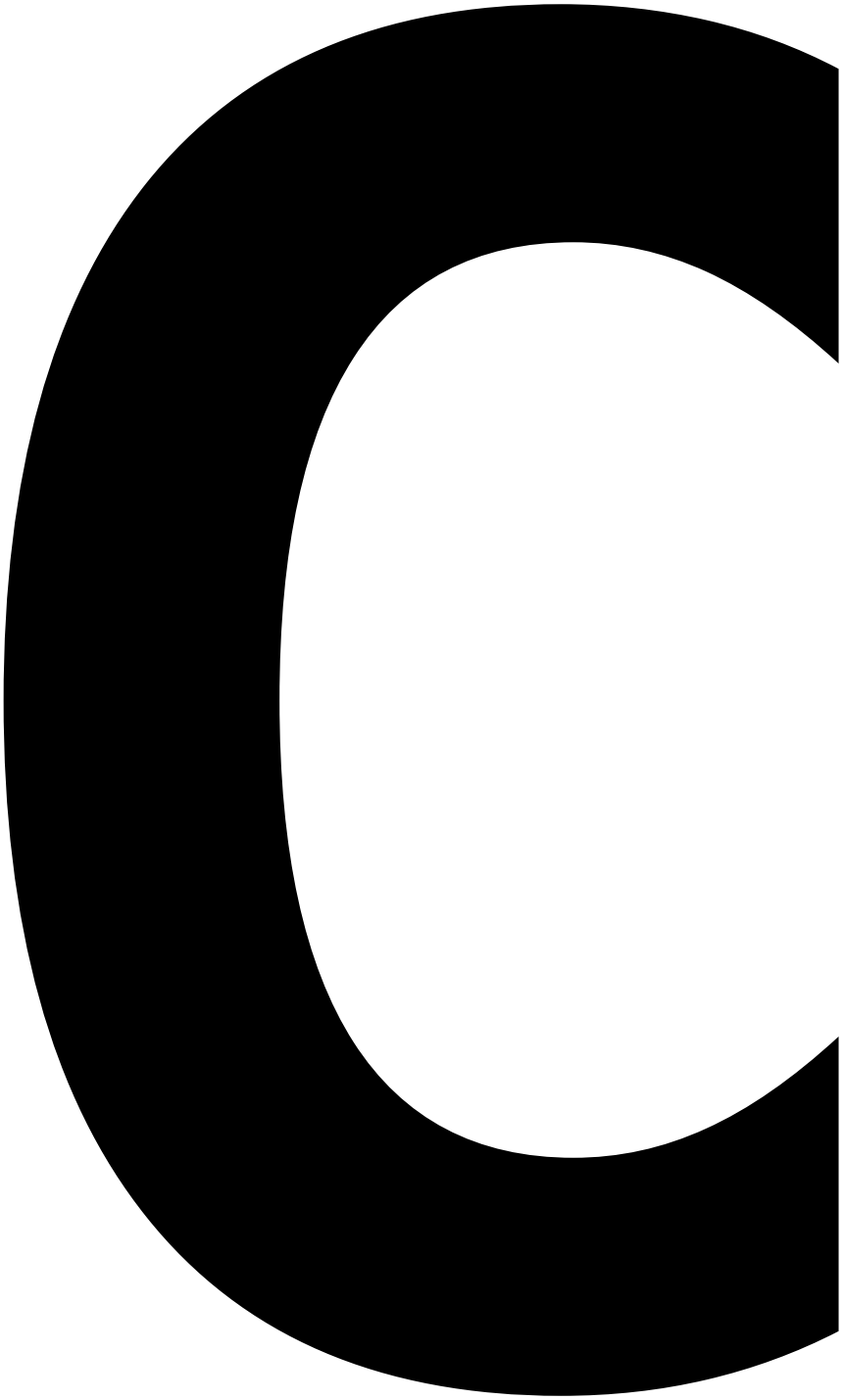


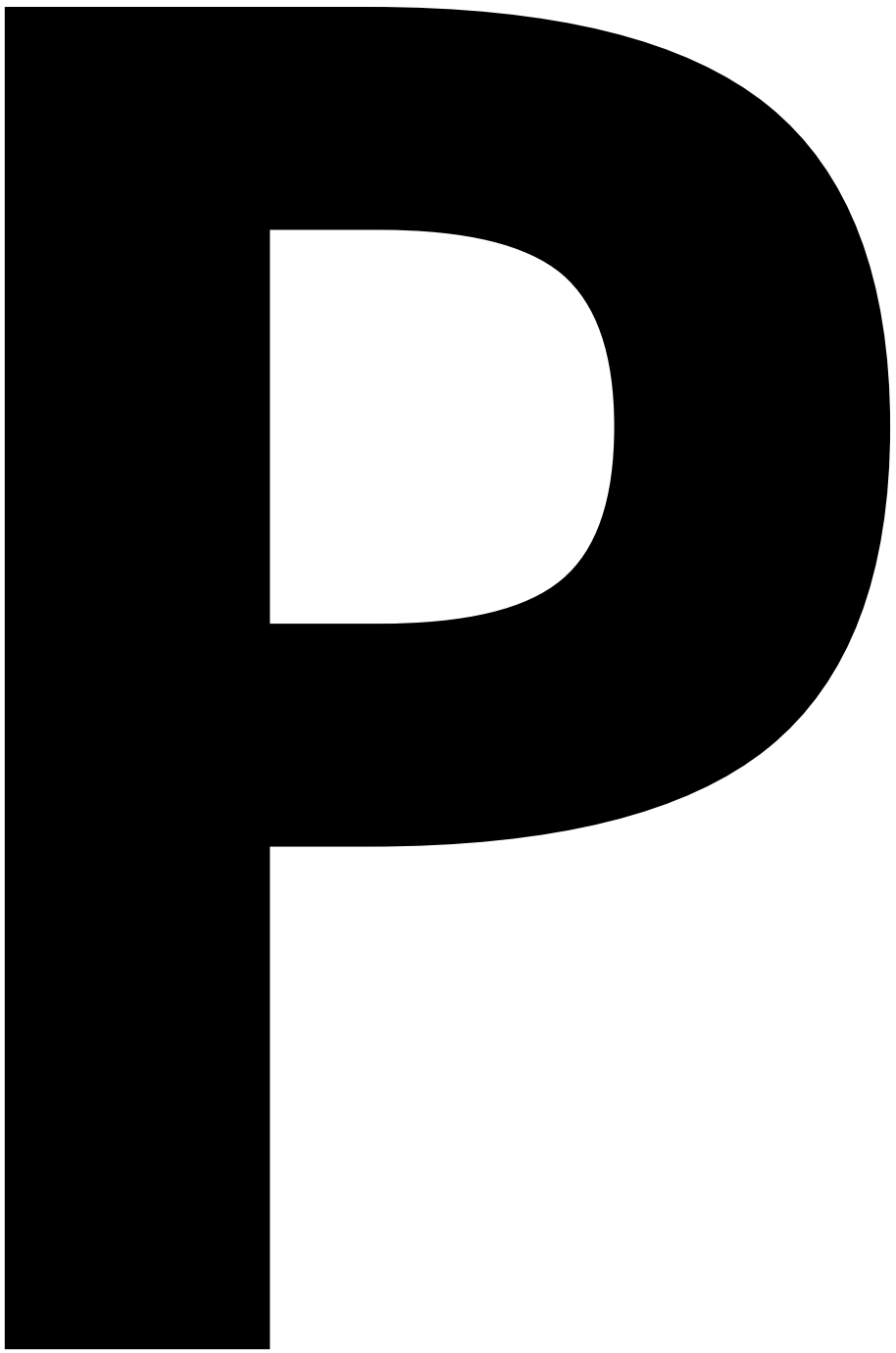
u

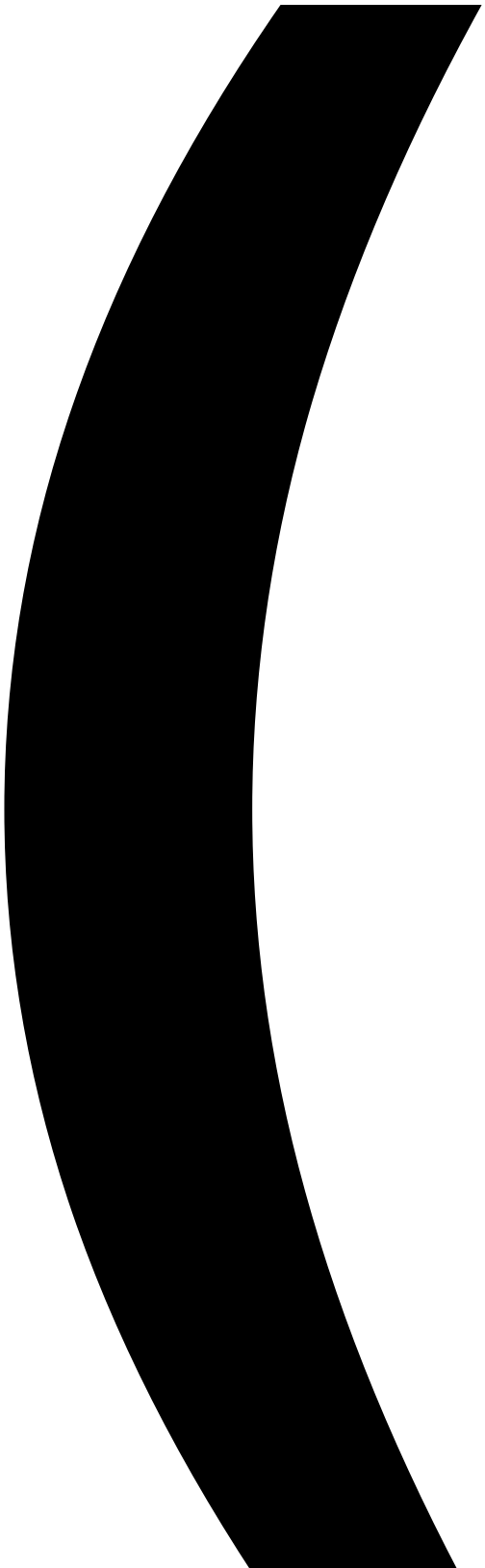


d

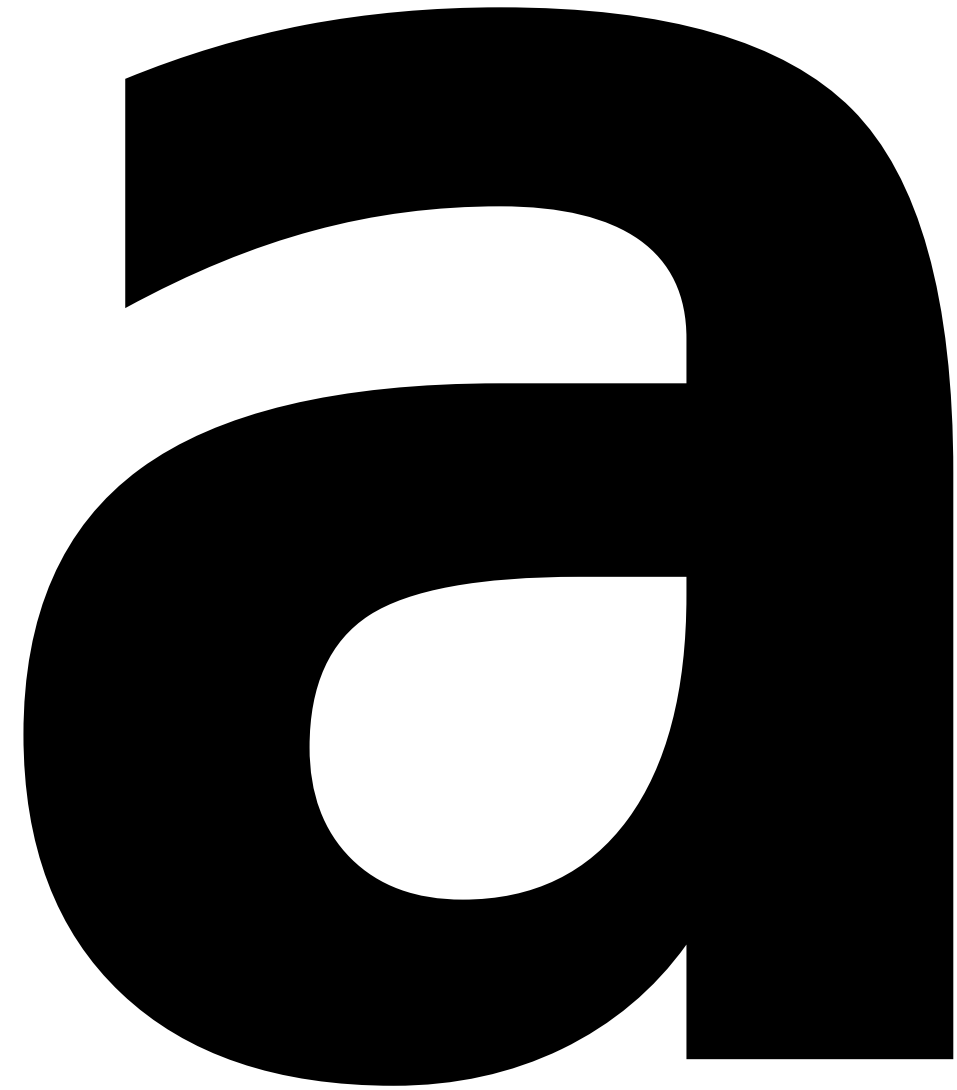
N

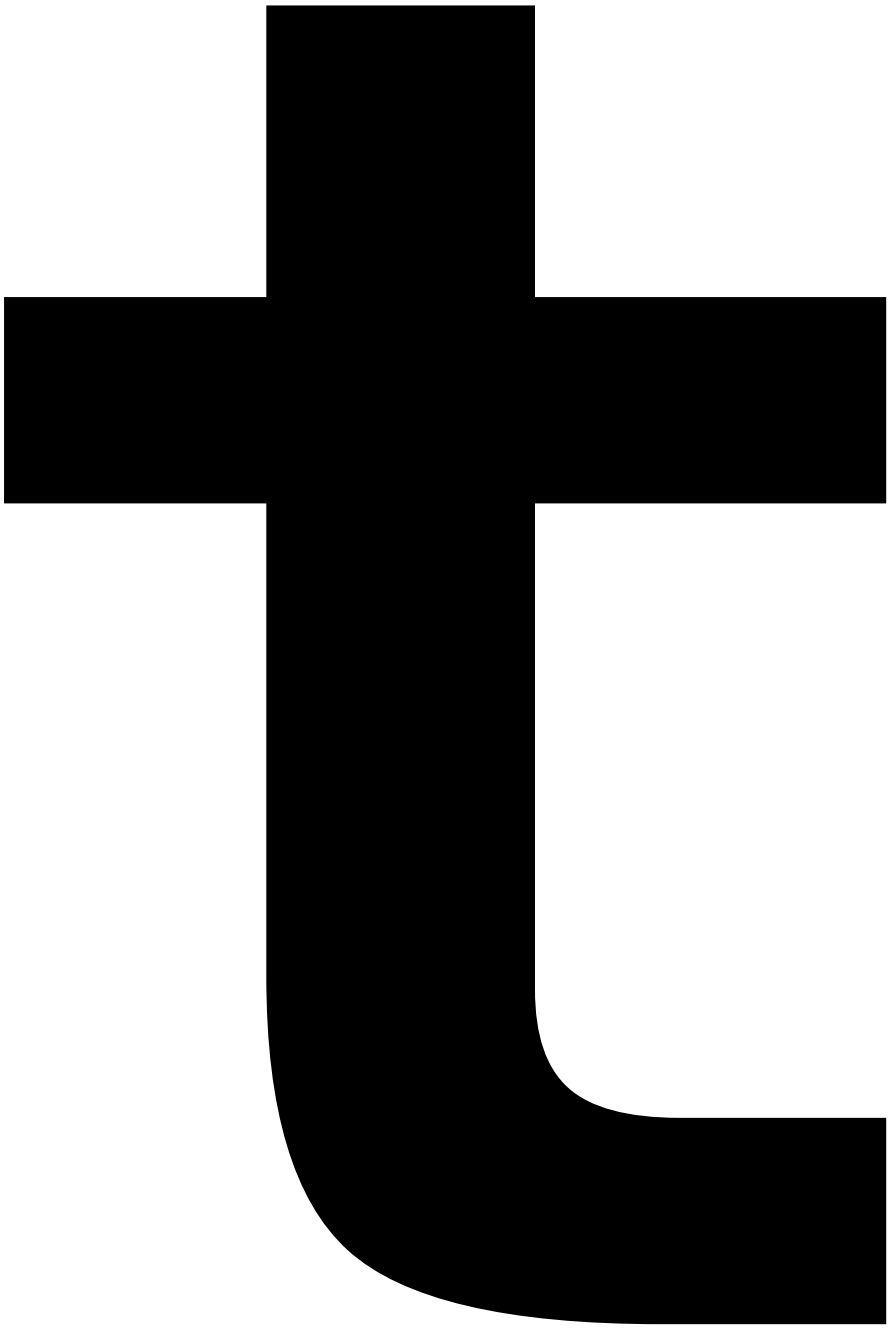


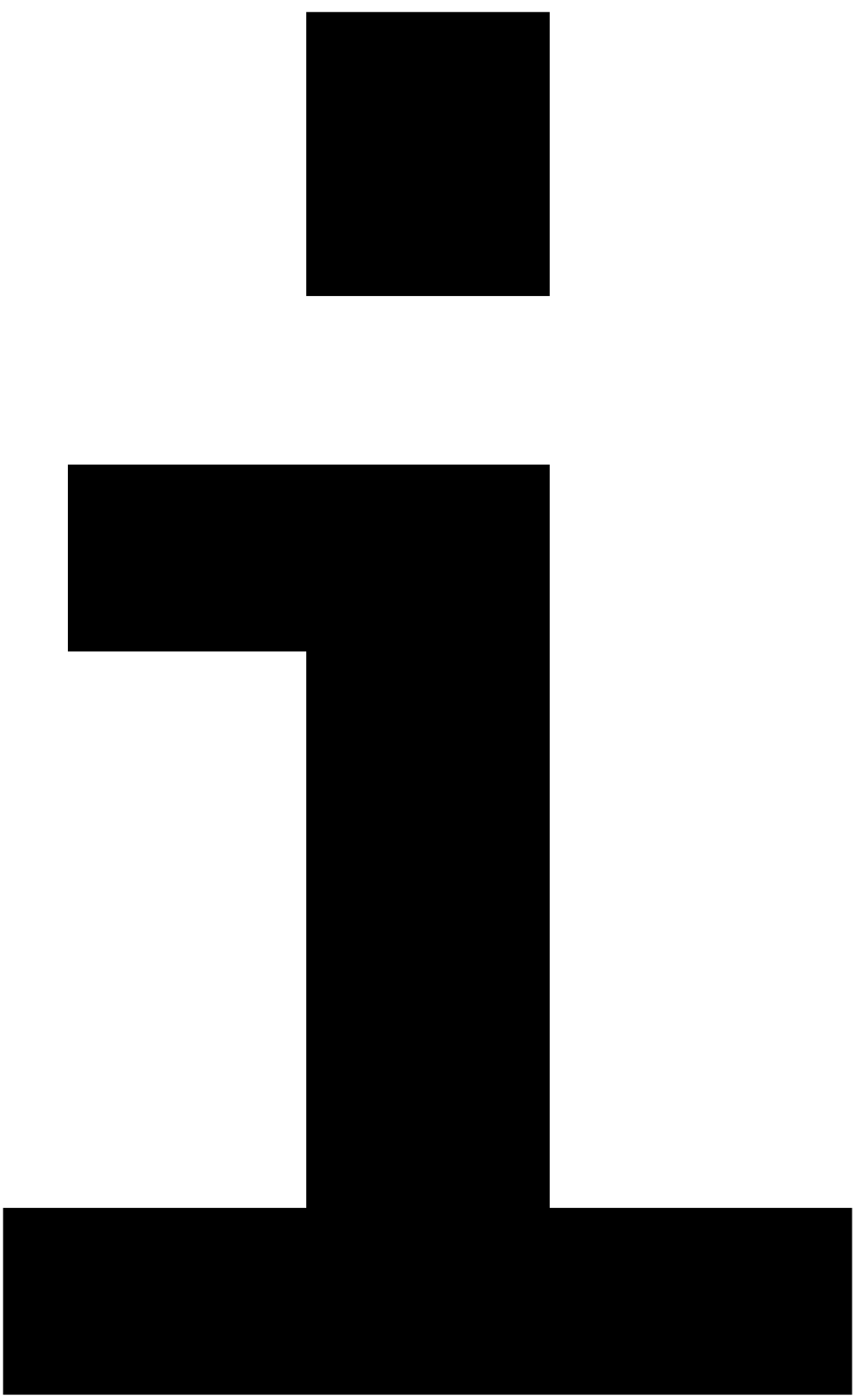


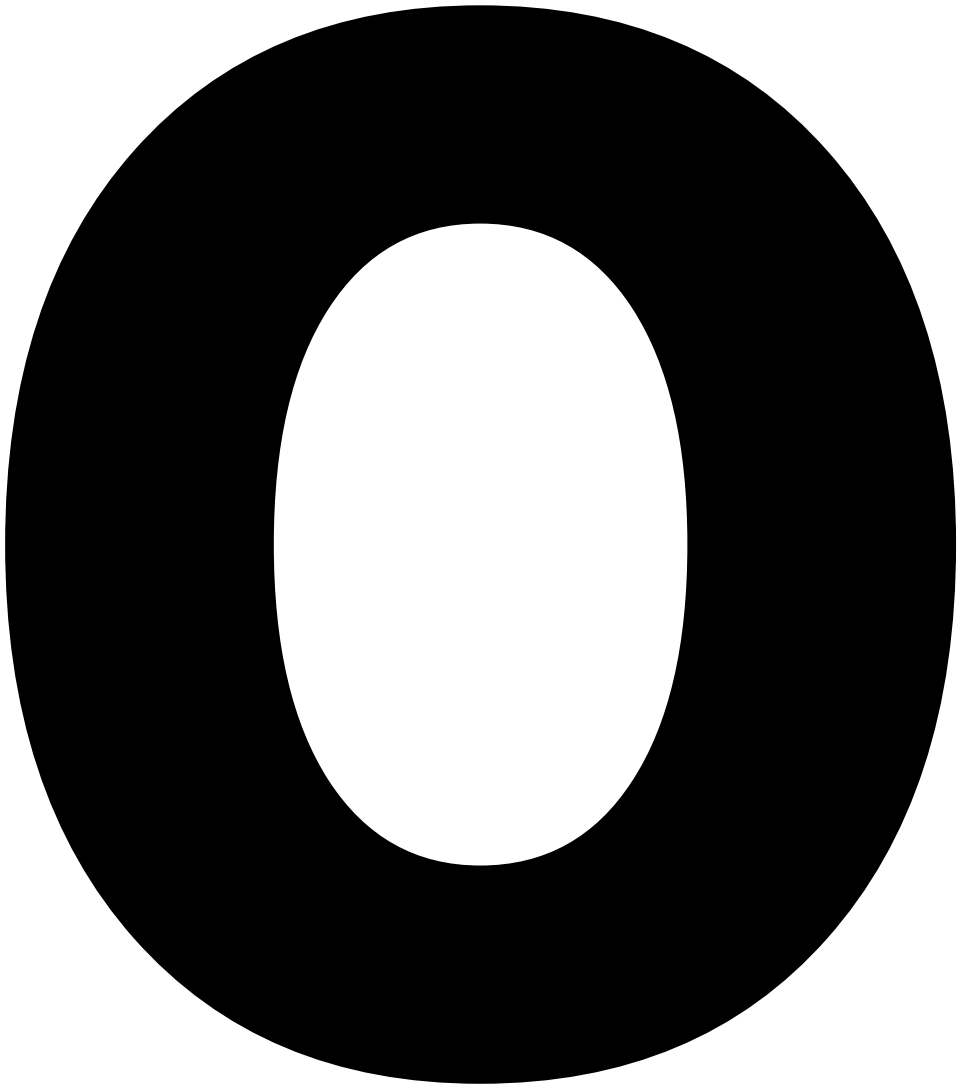


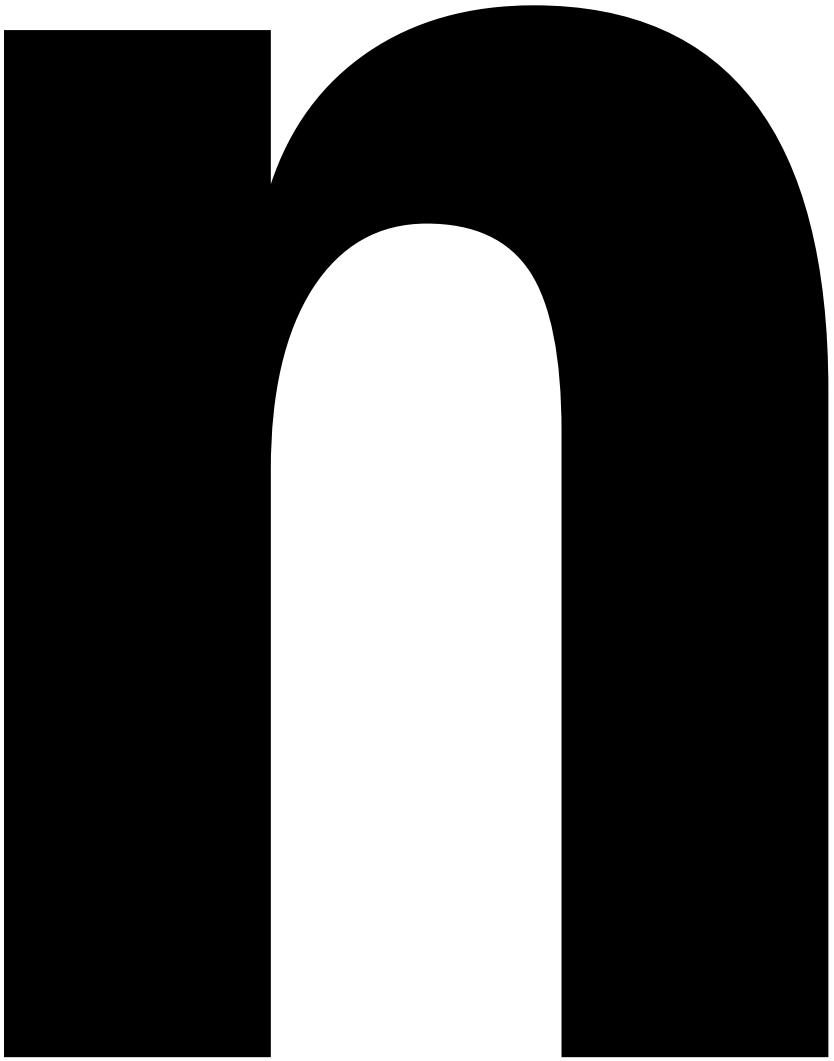
N

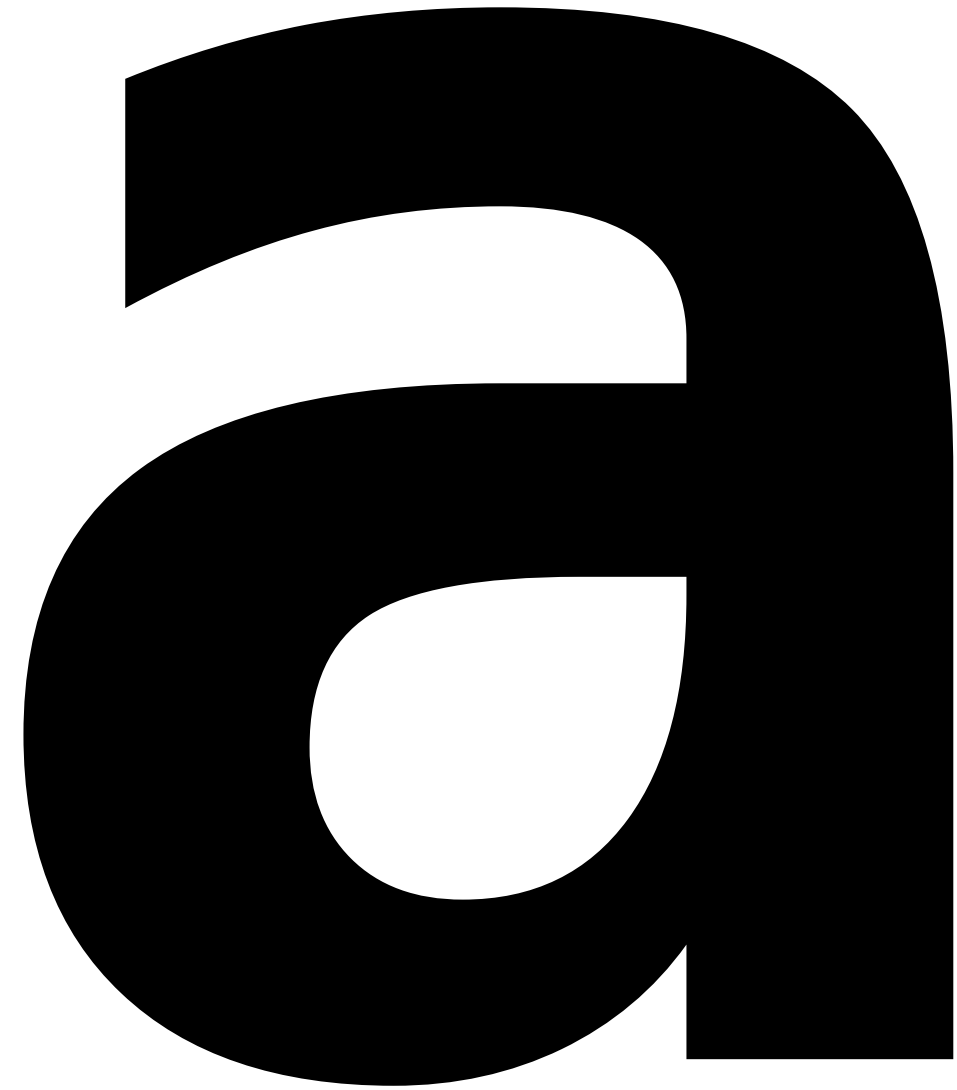


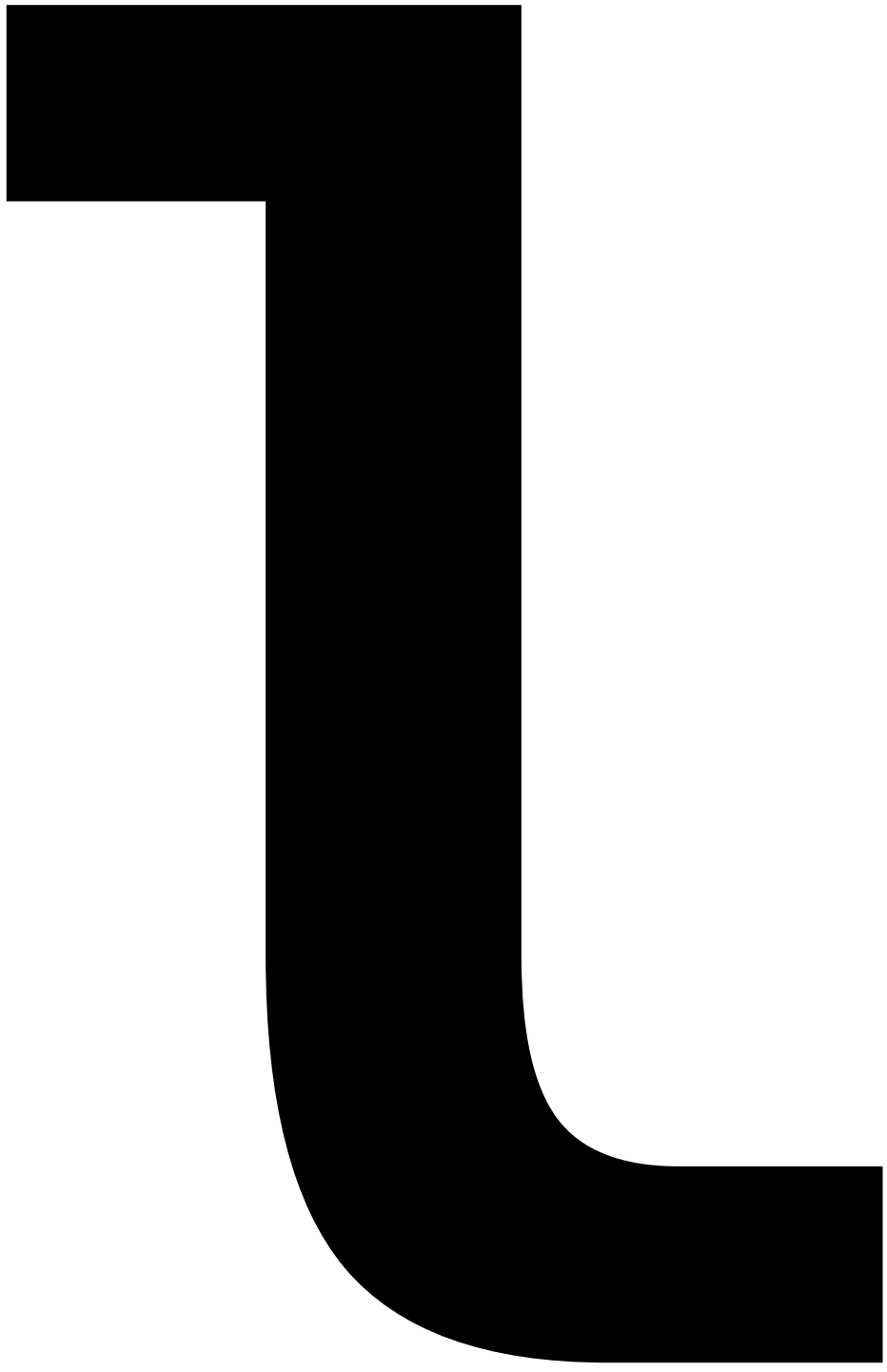


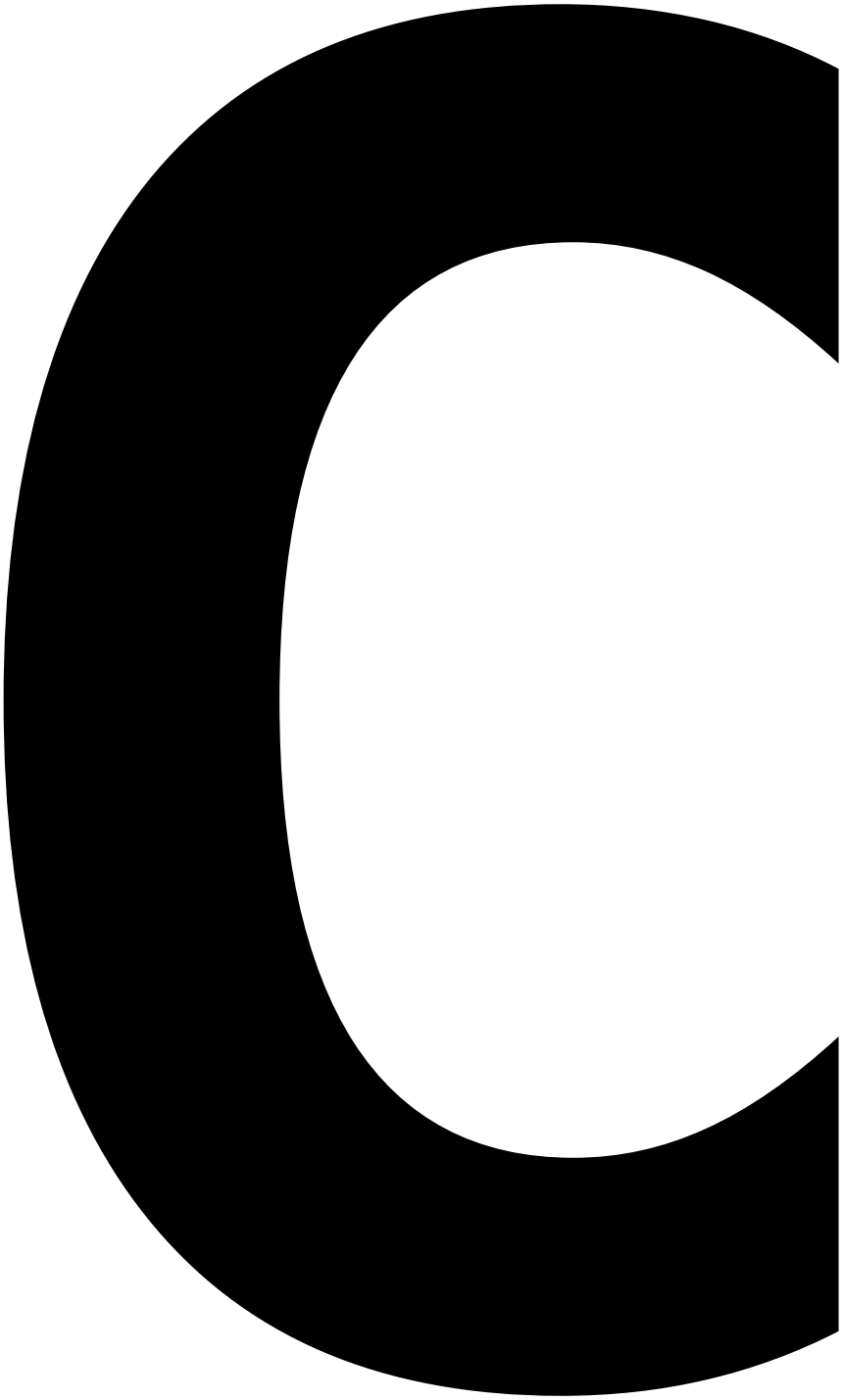


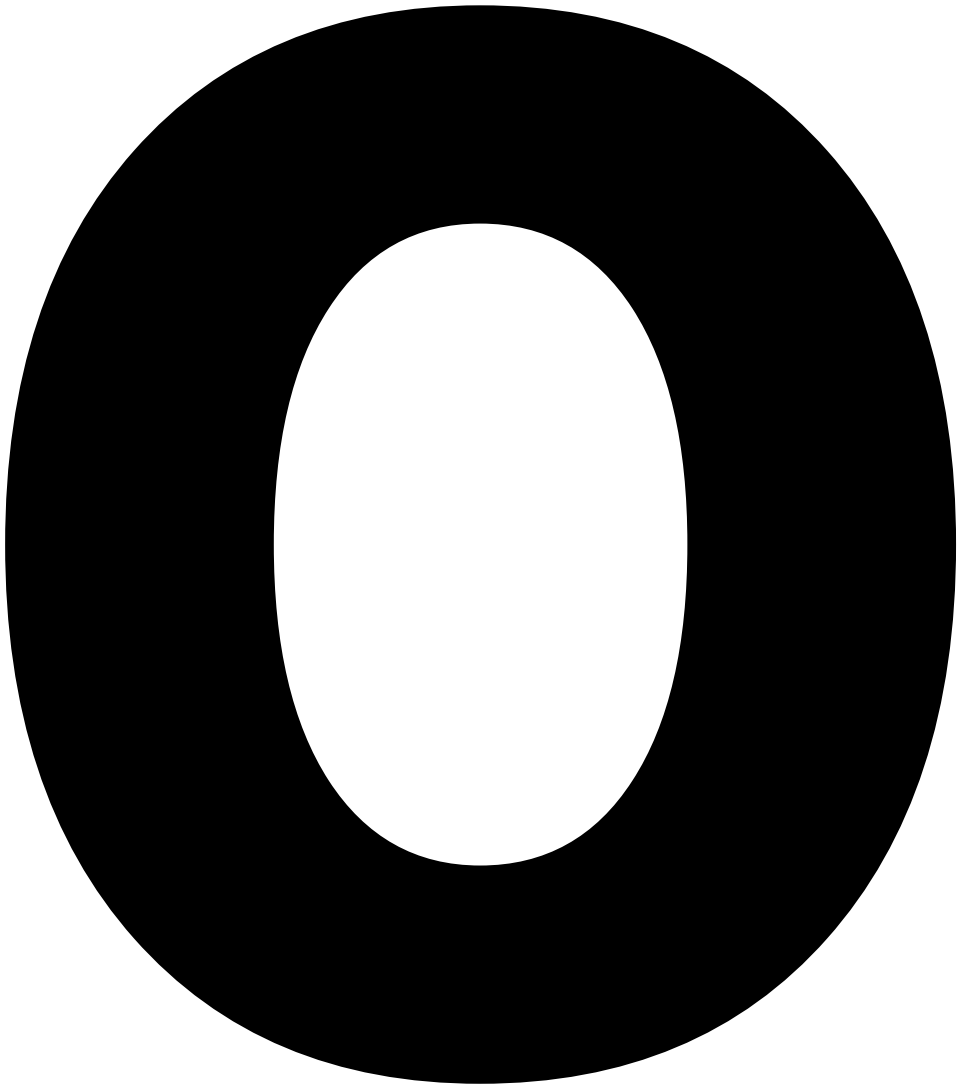




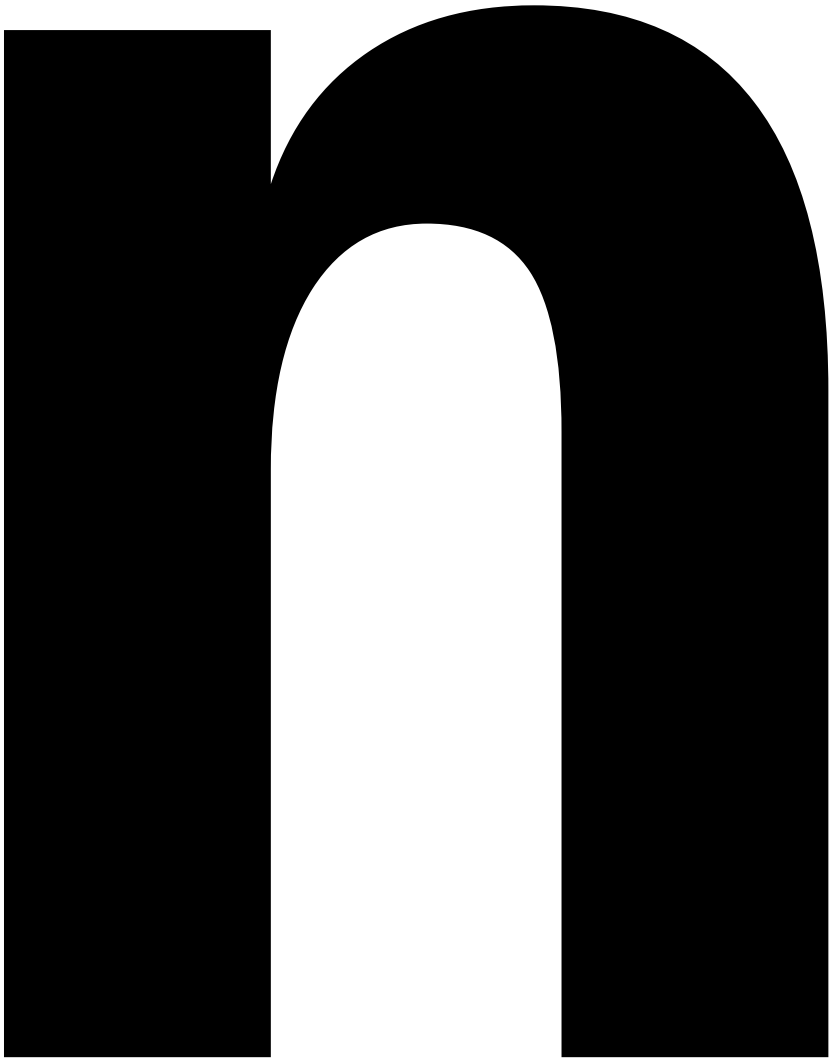


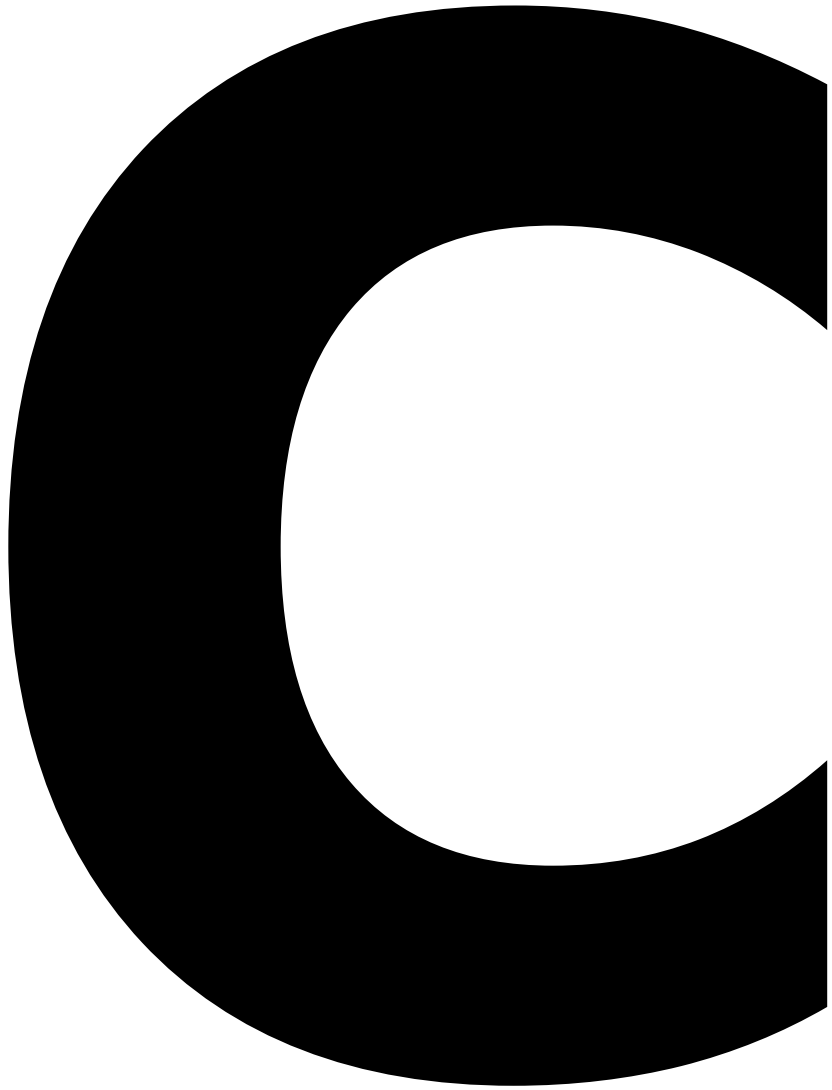


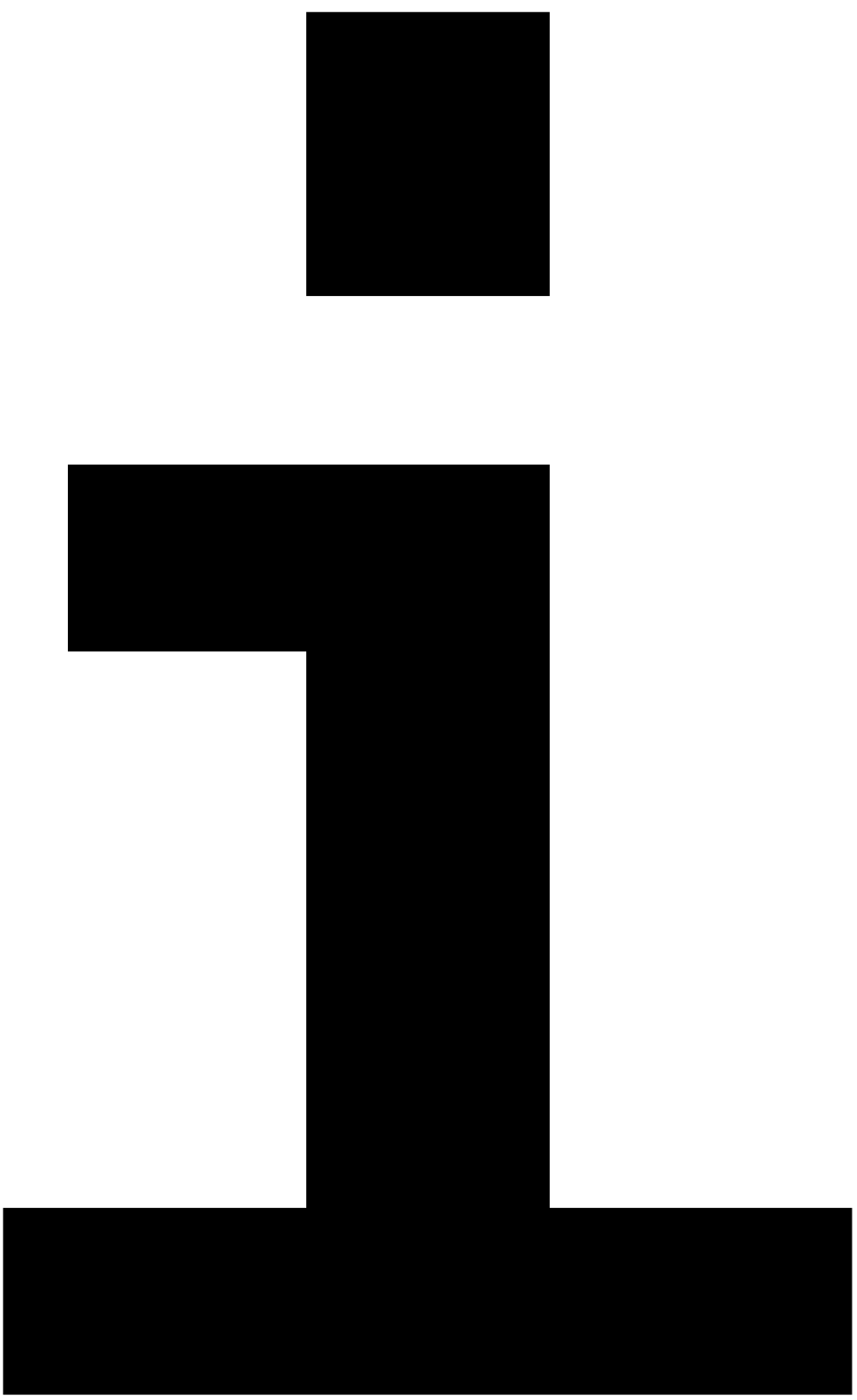


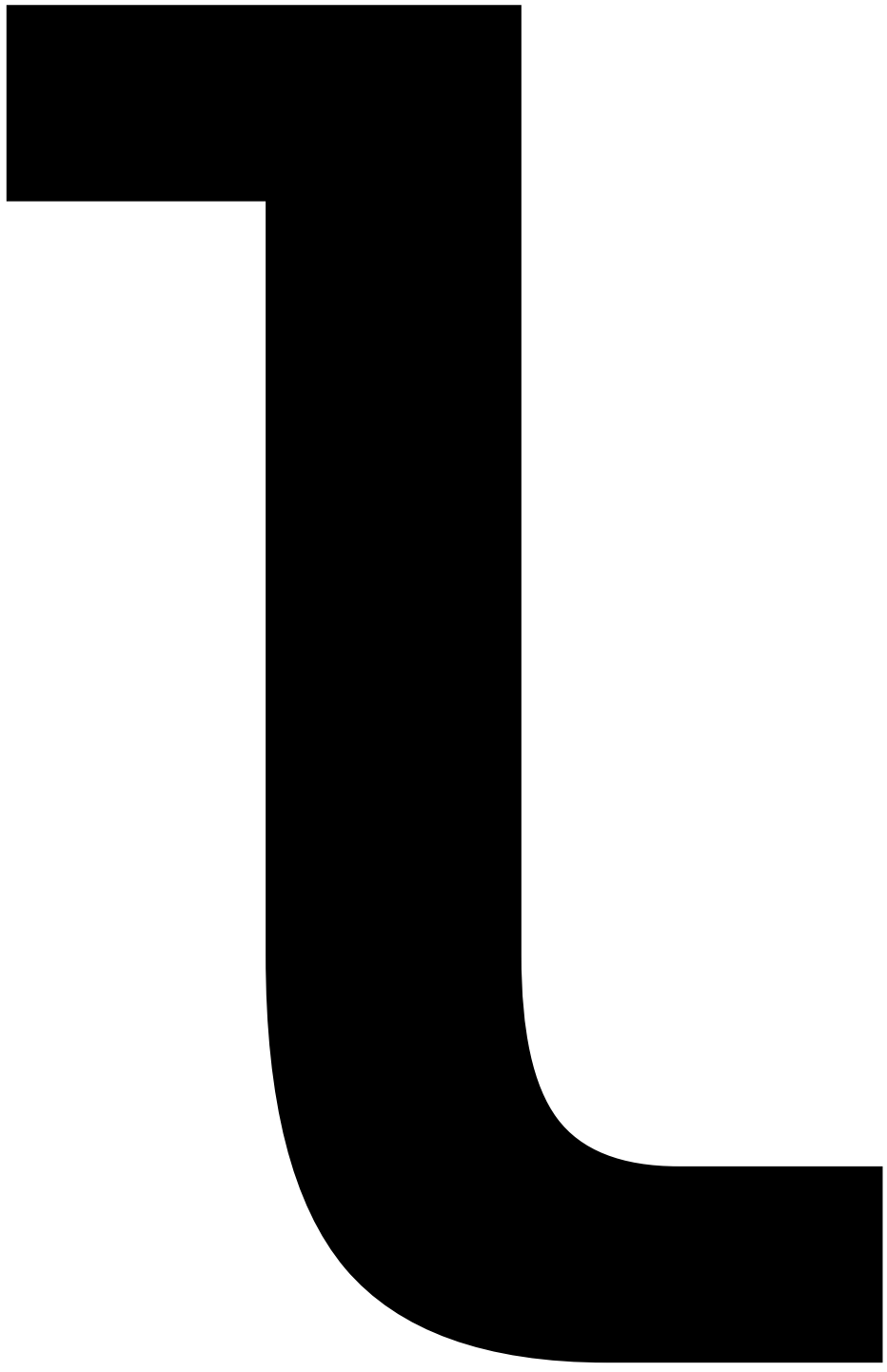


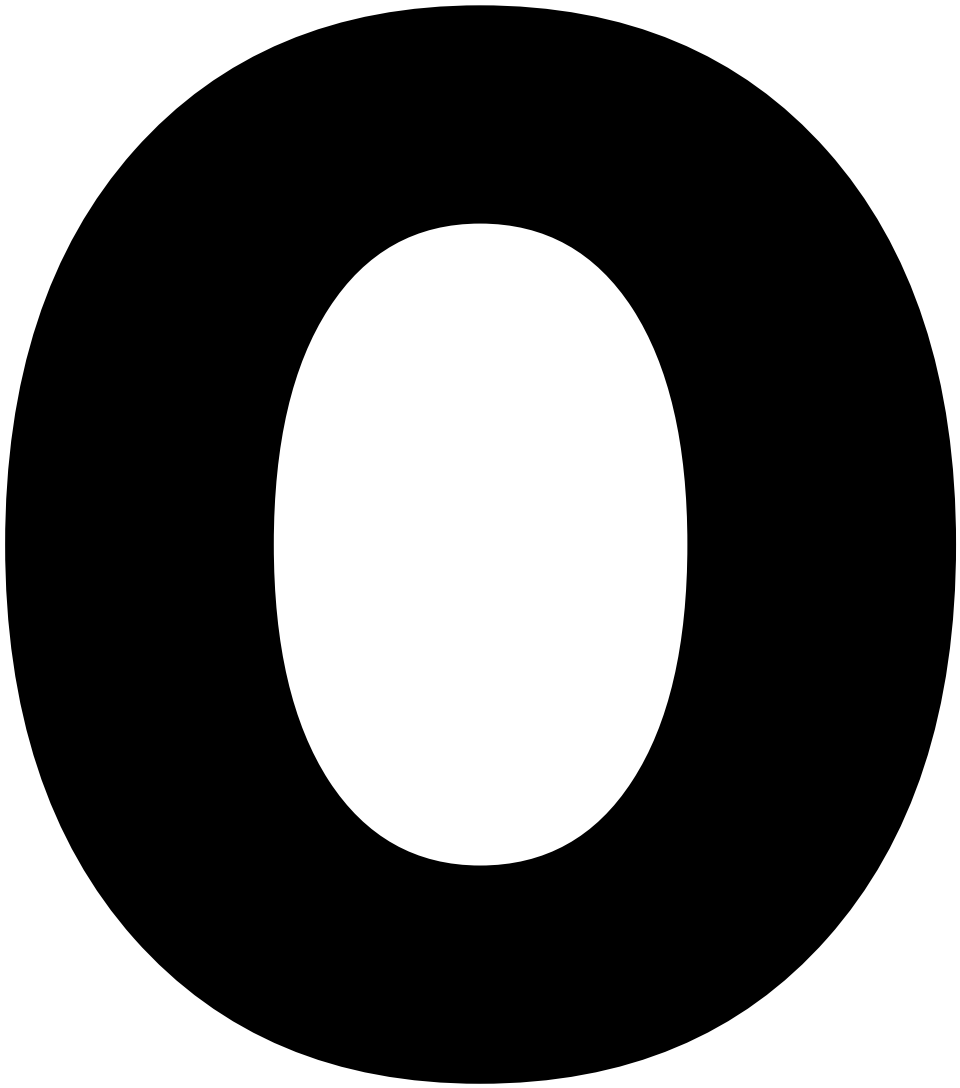
u

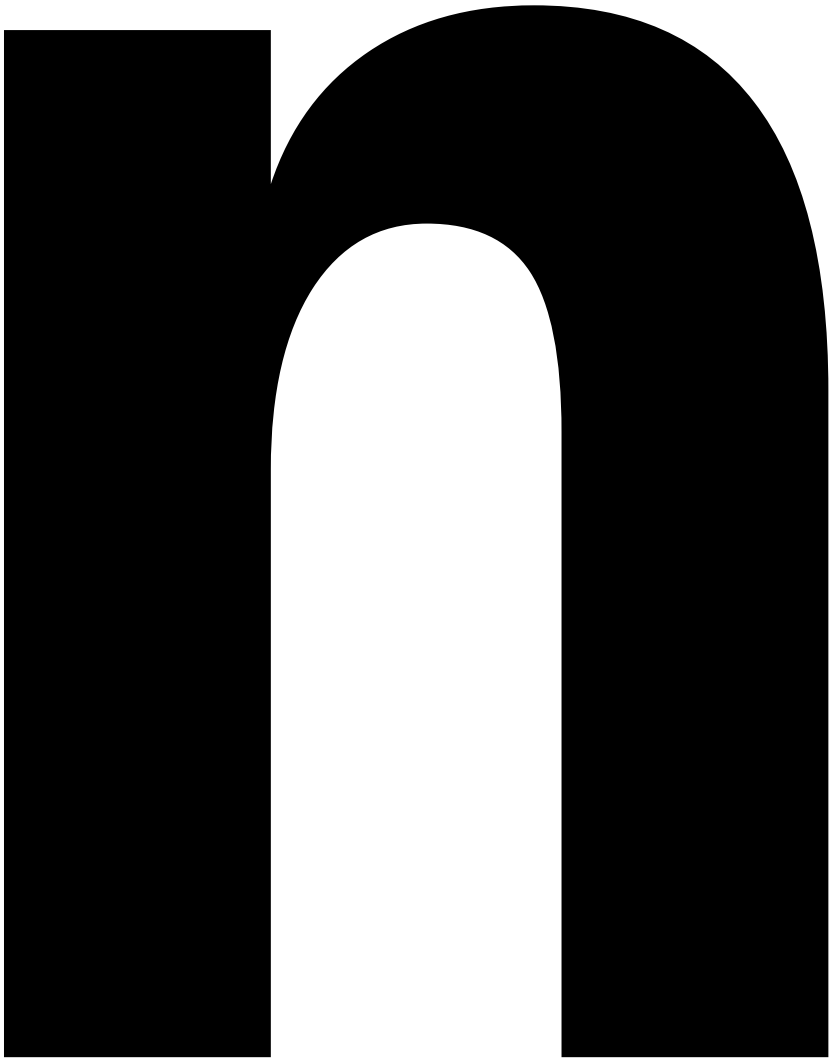


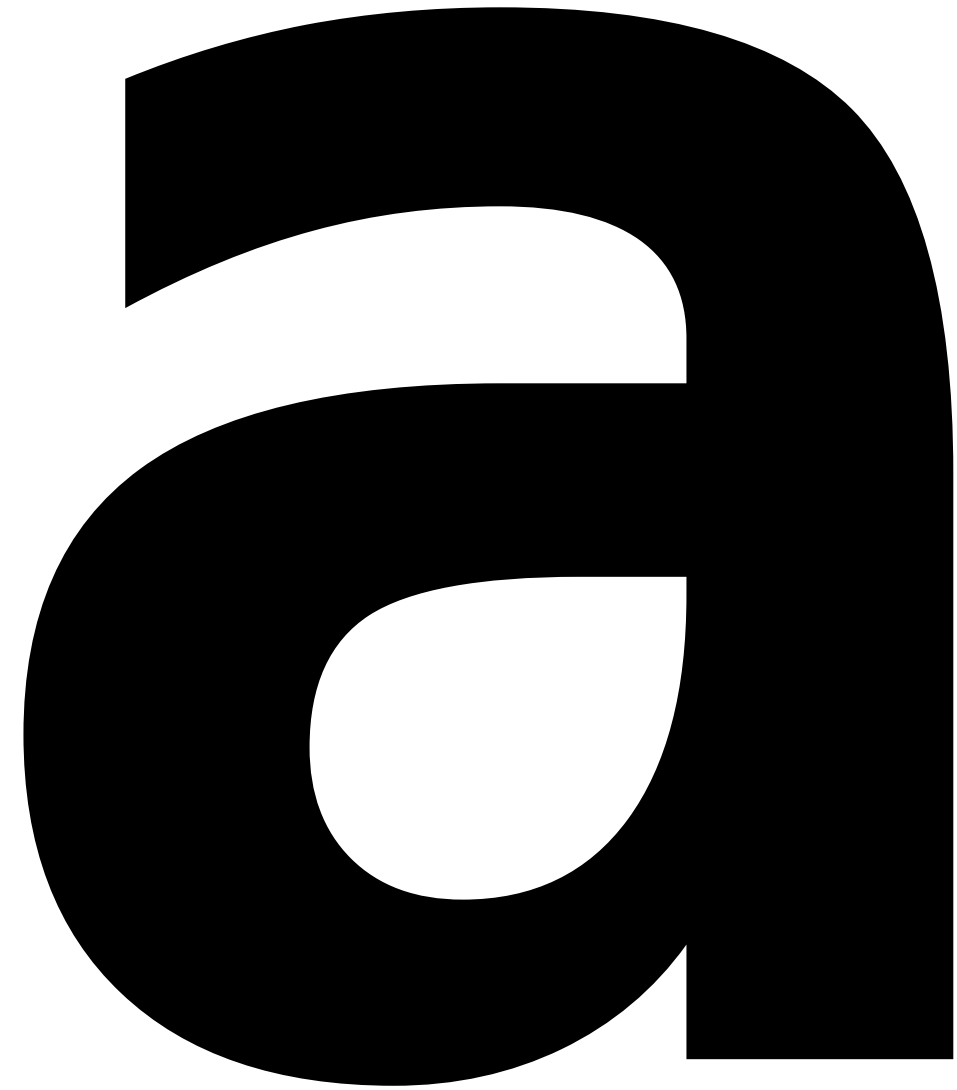




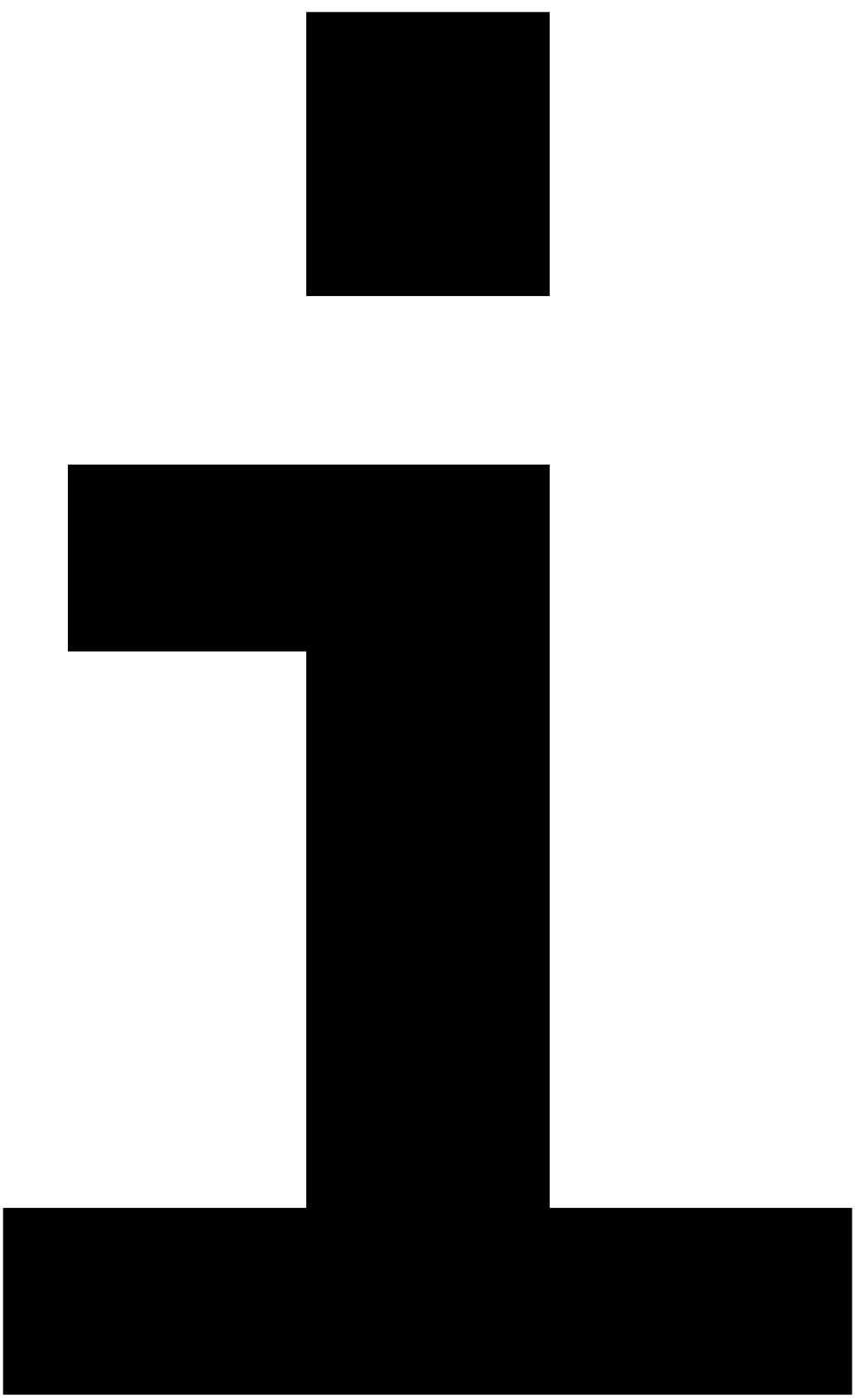


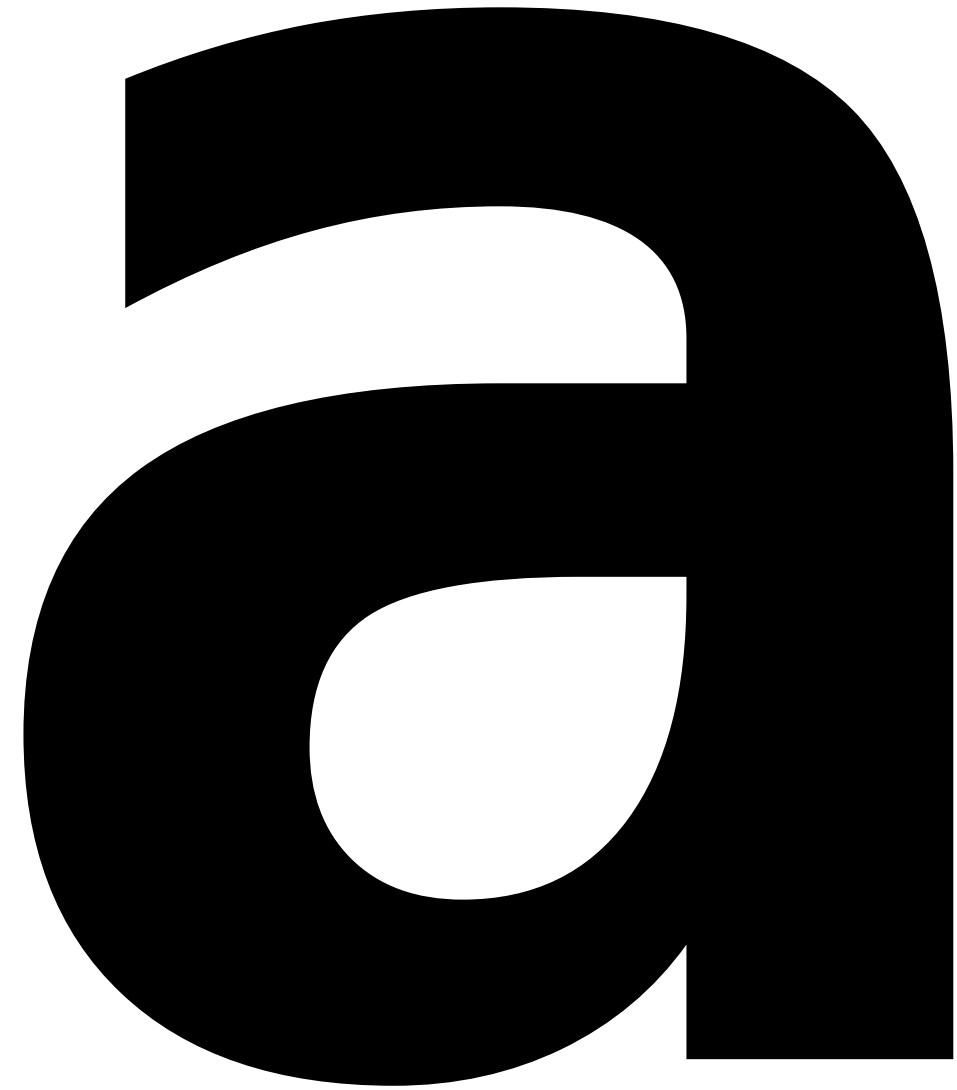


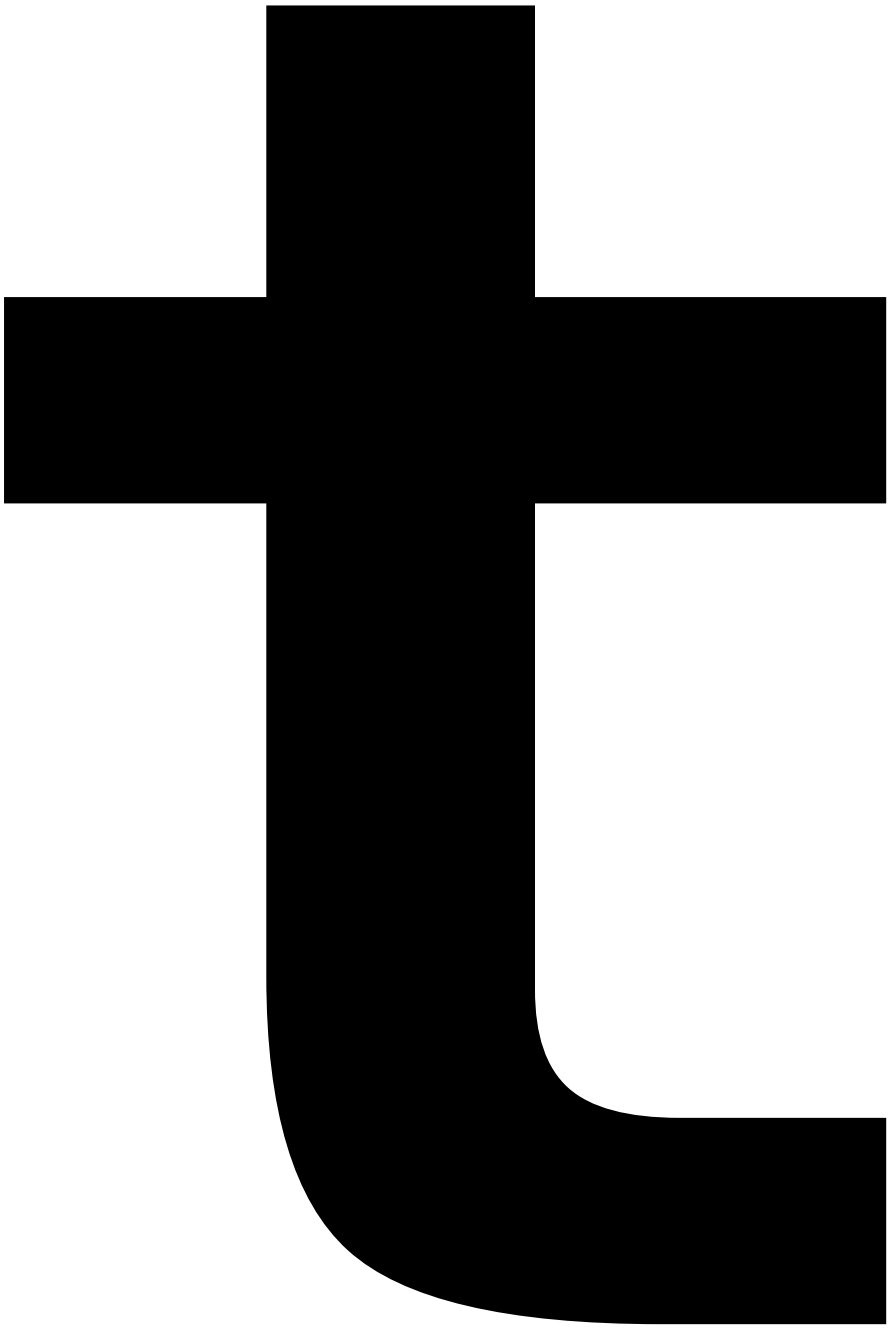


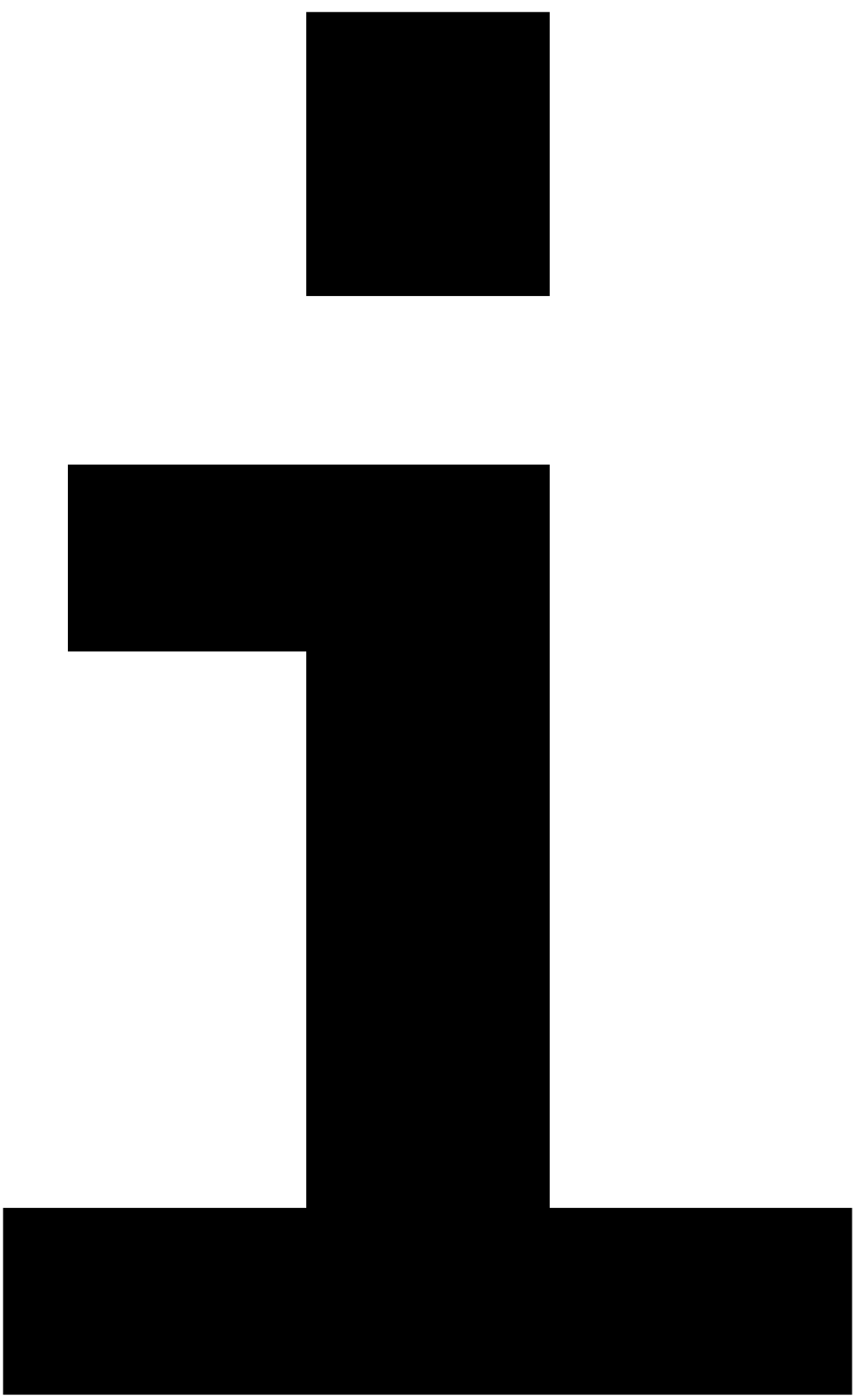


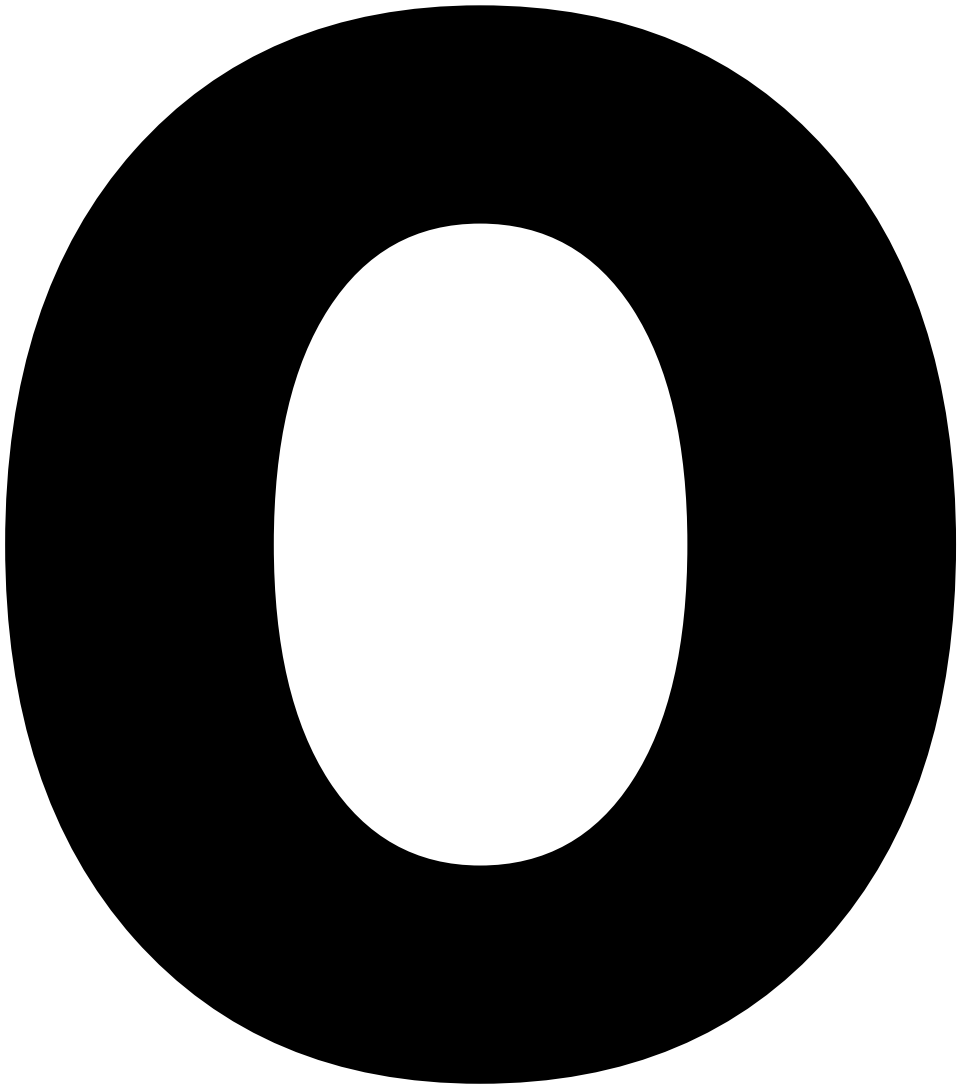
d

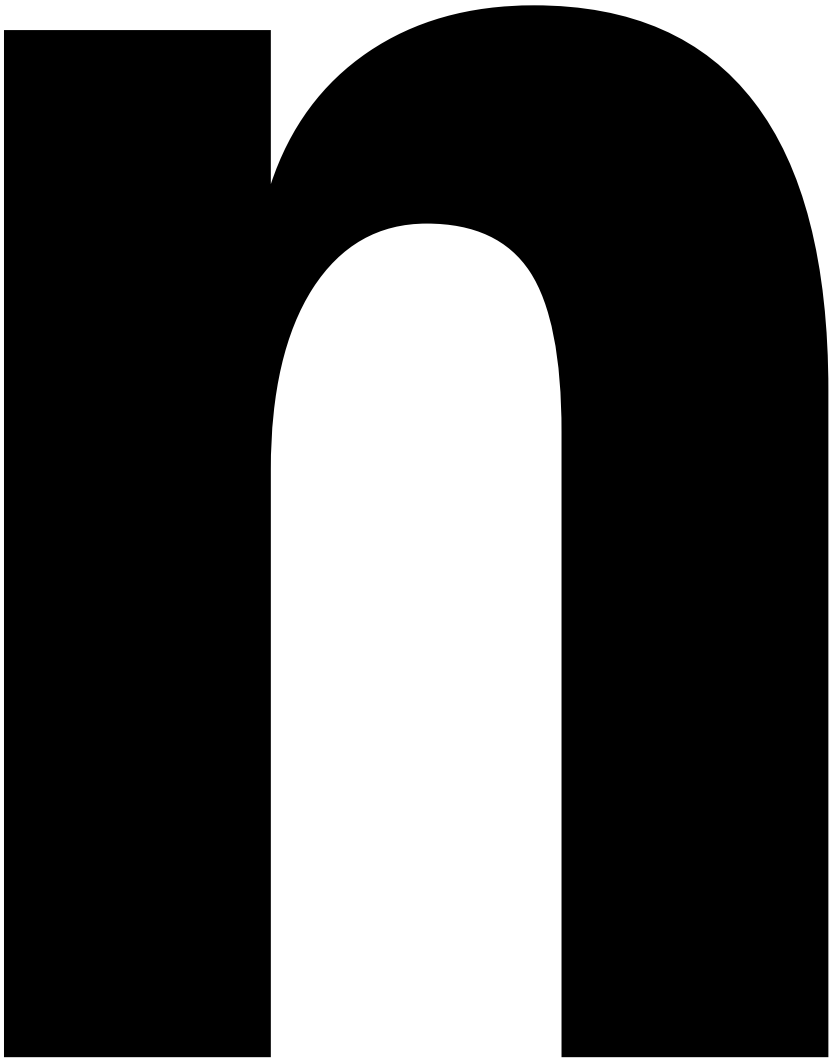


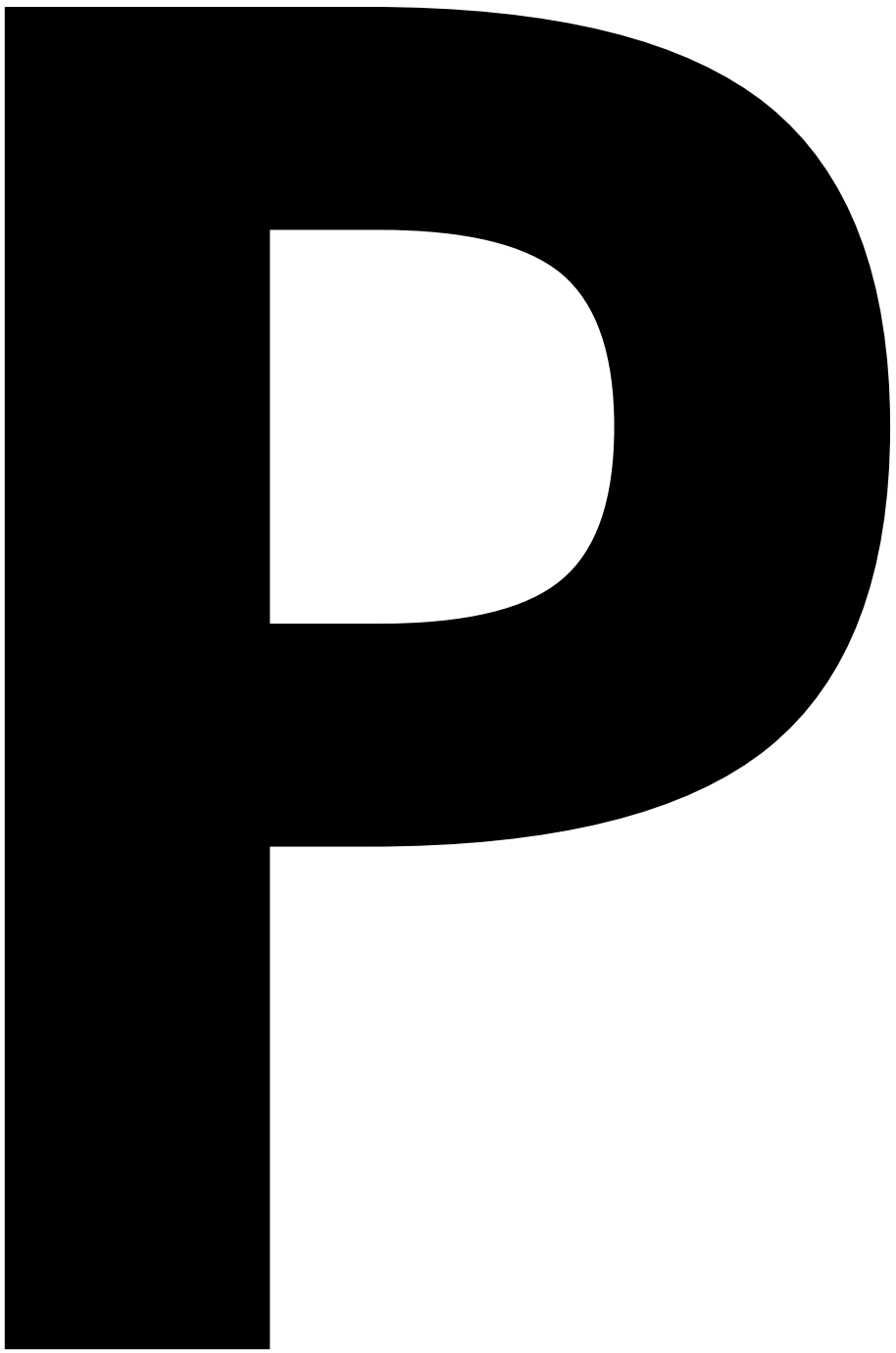


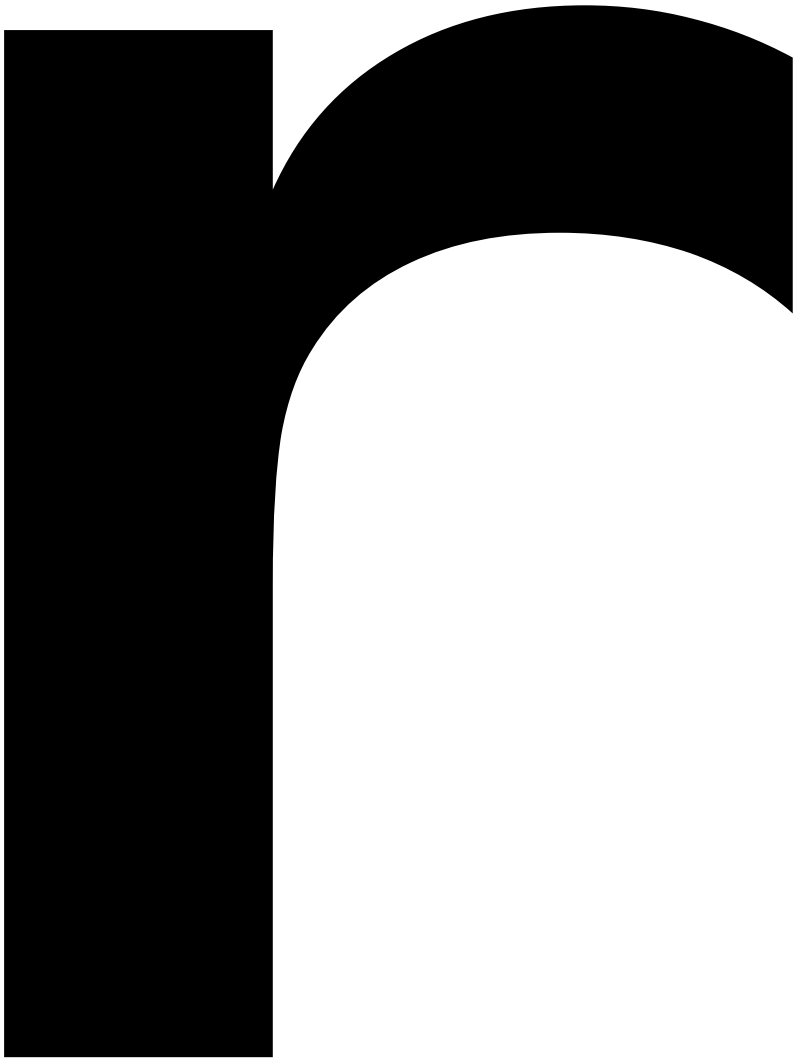


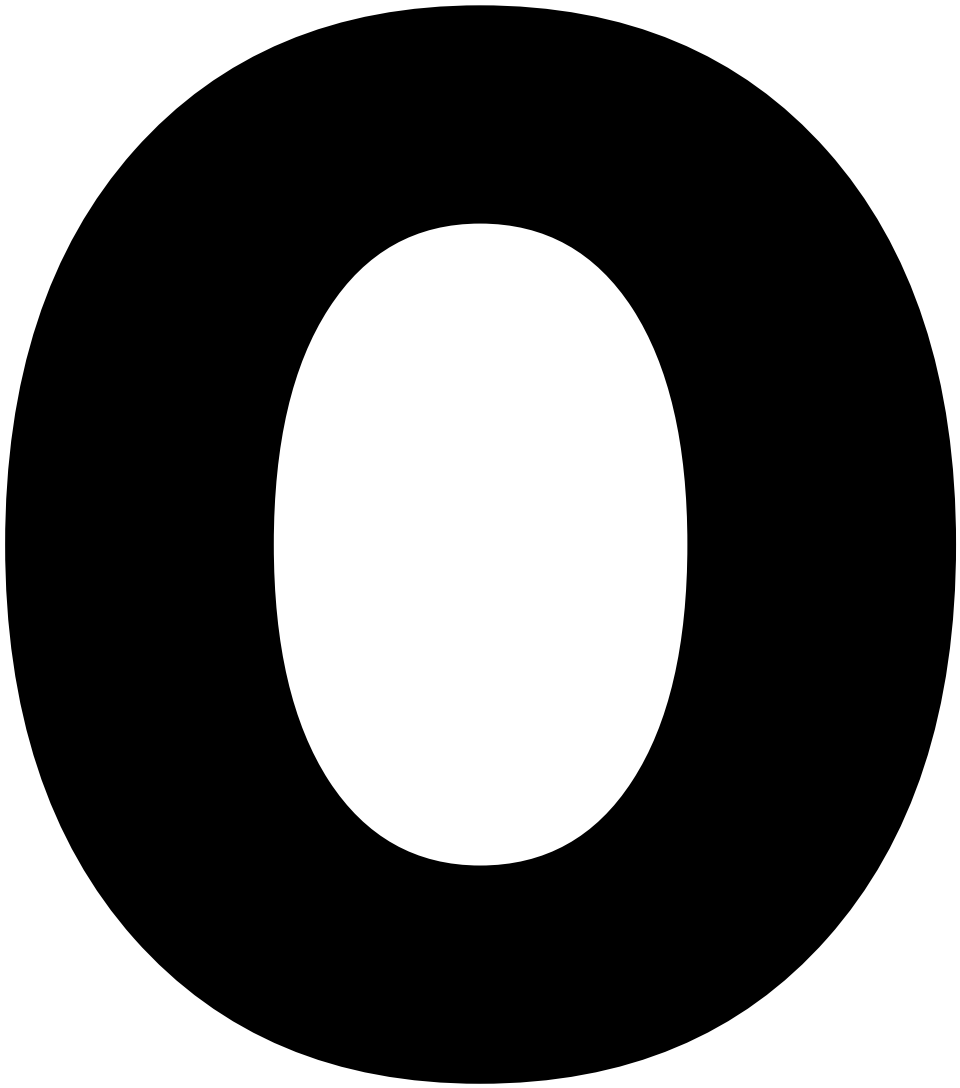


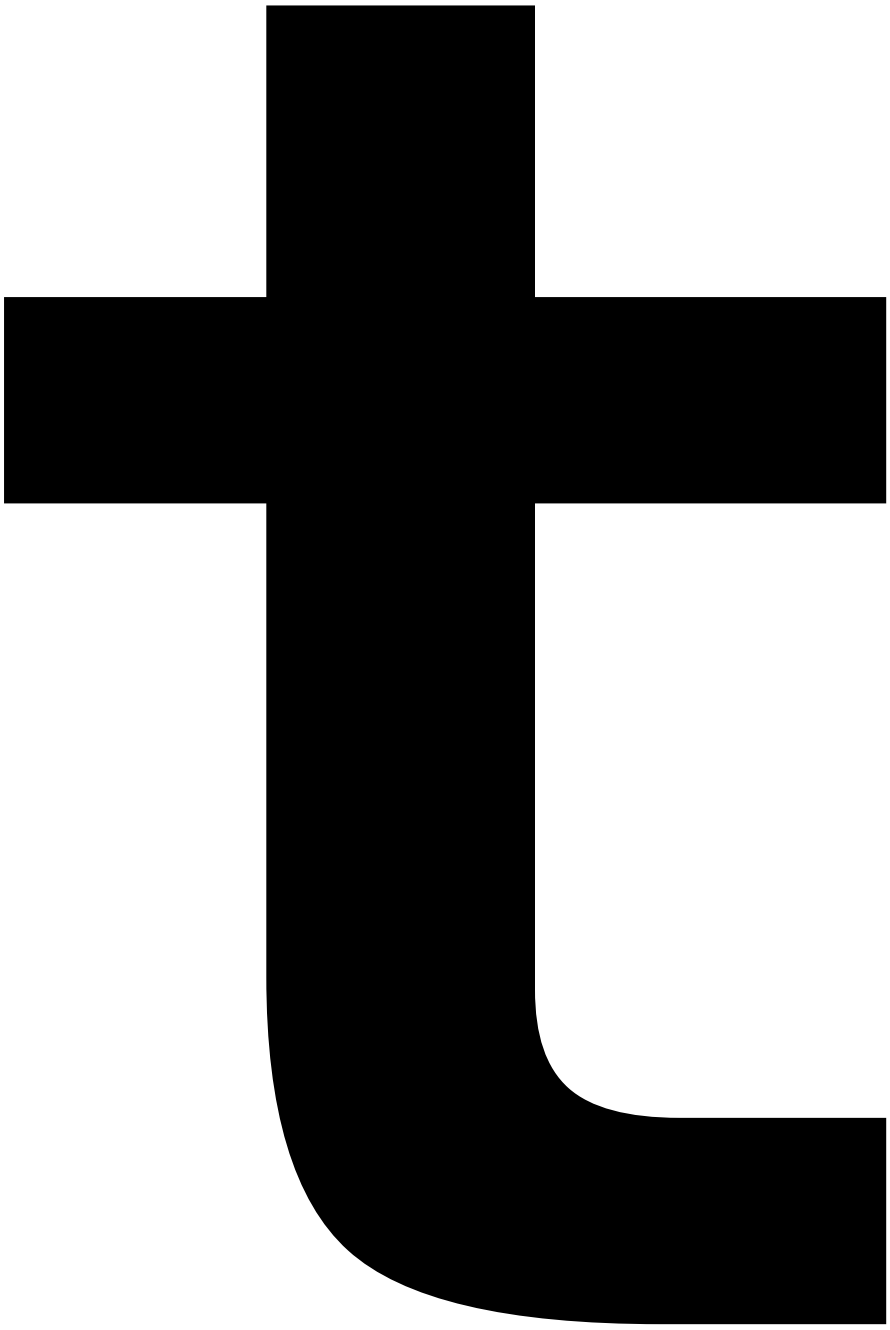


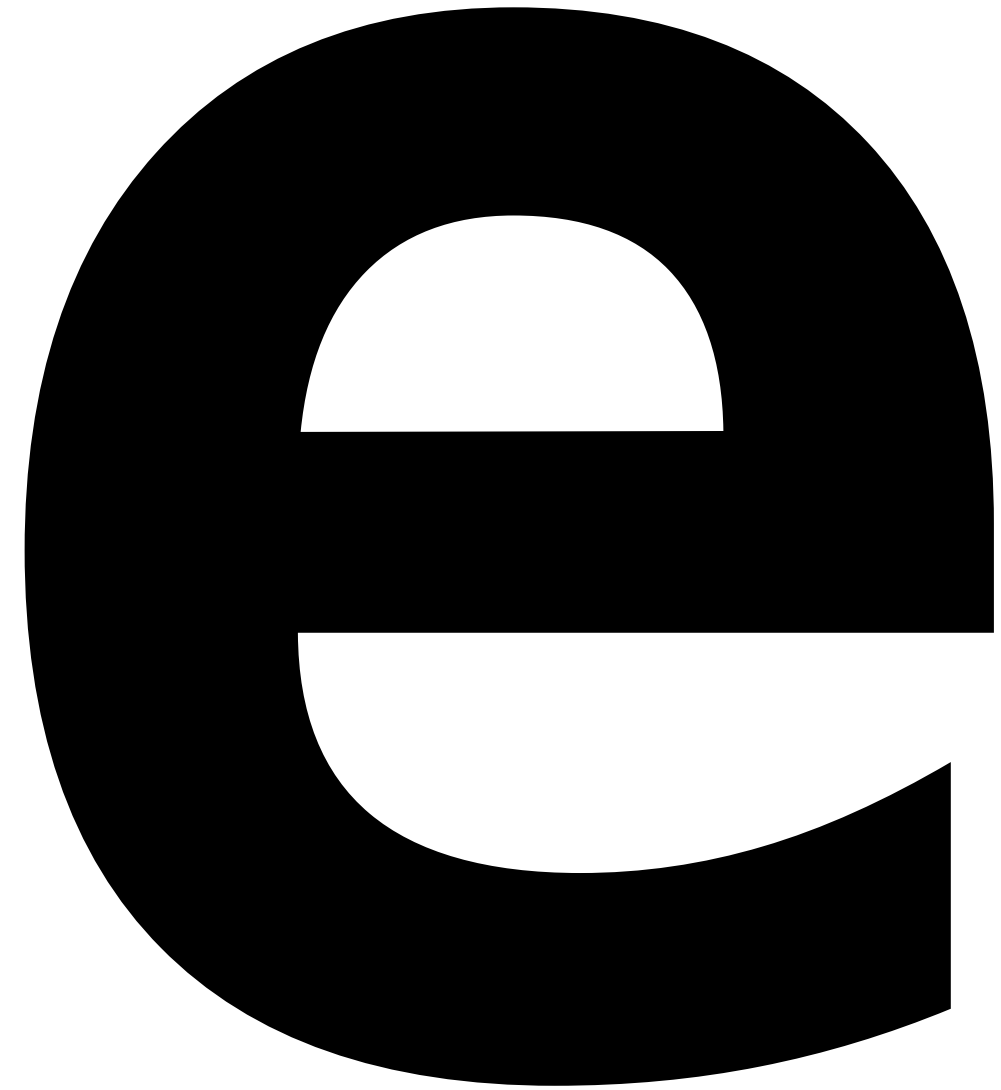


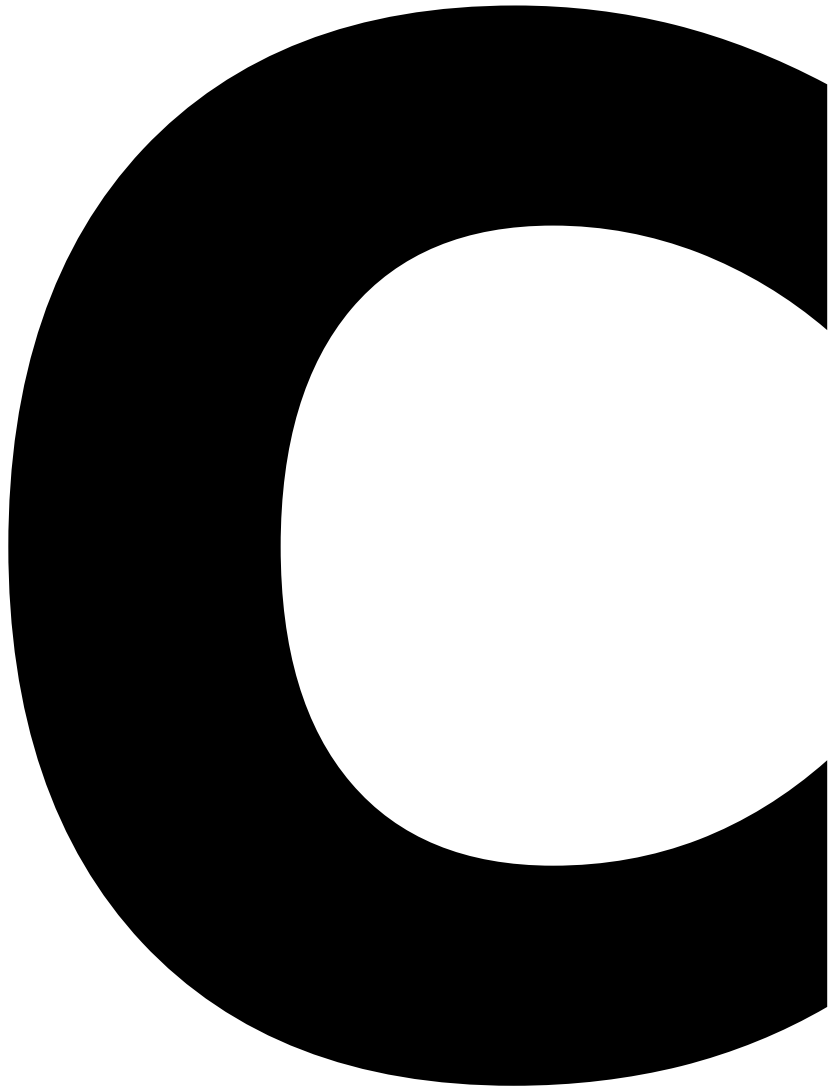


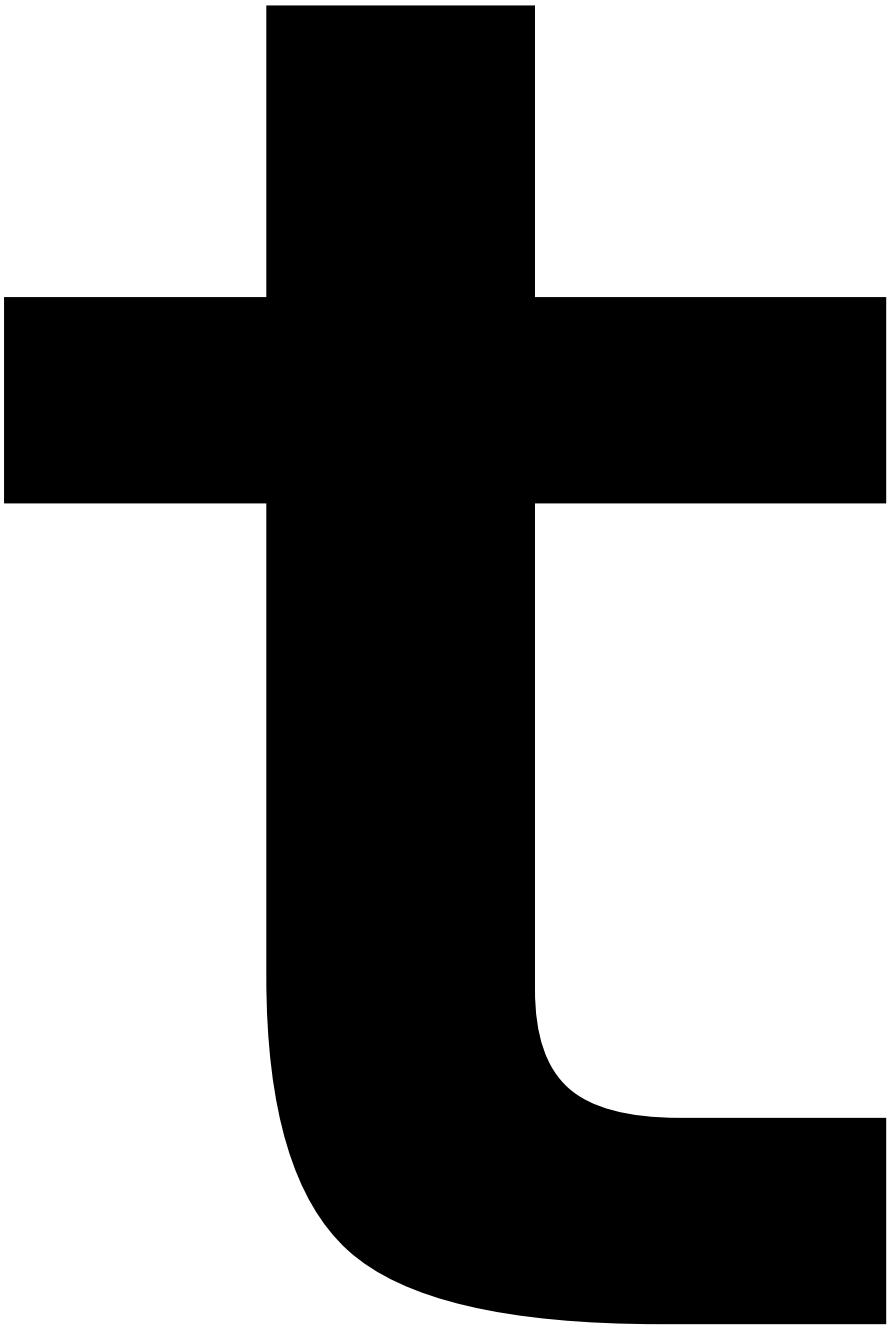


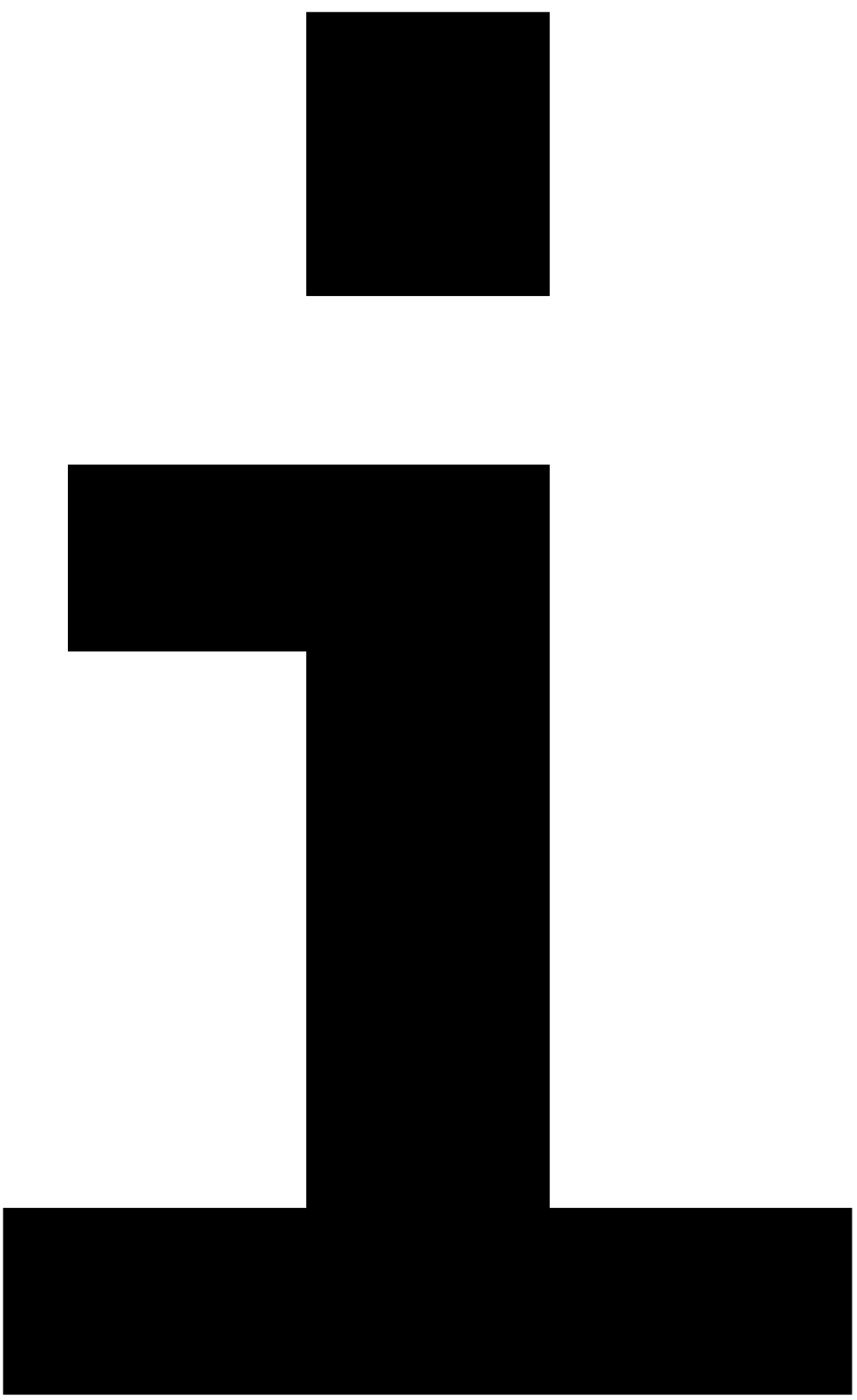


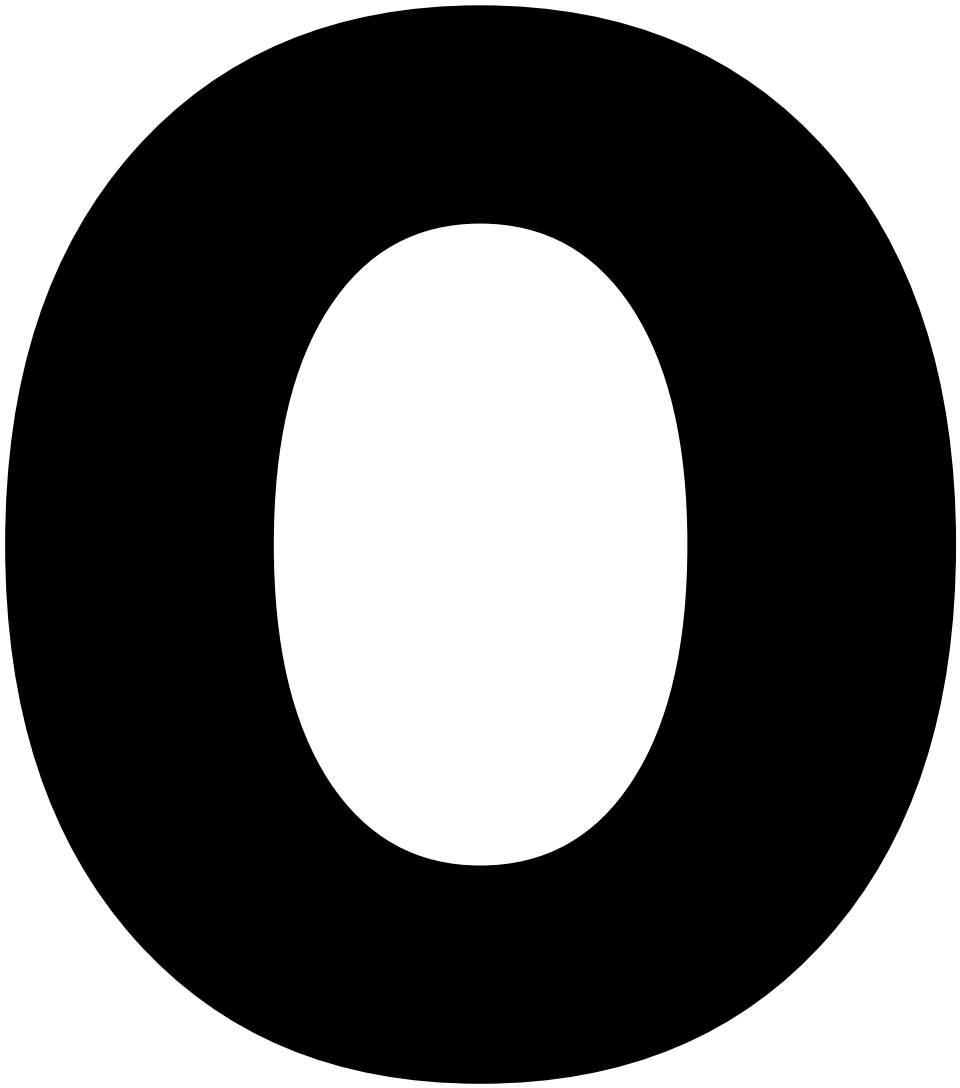


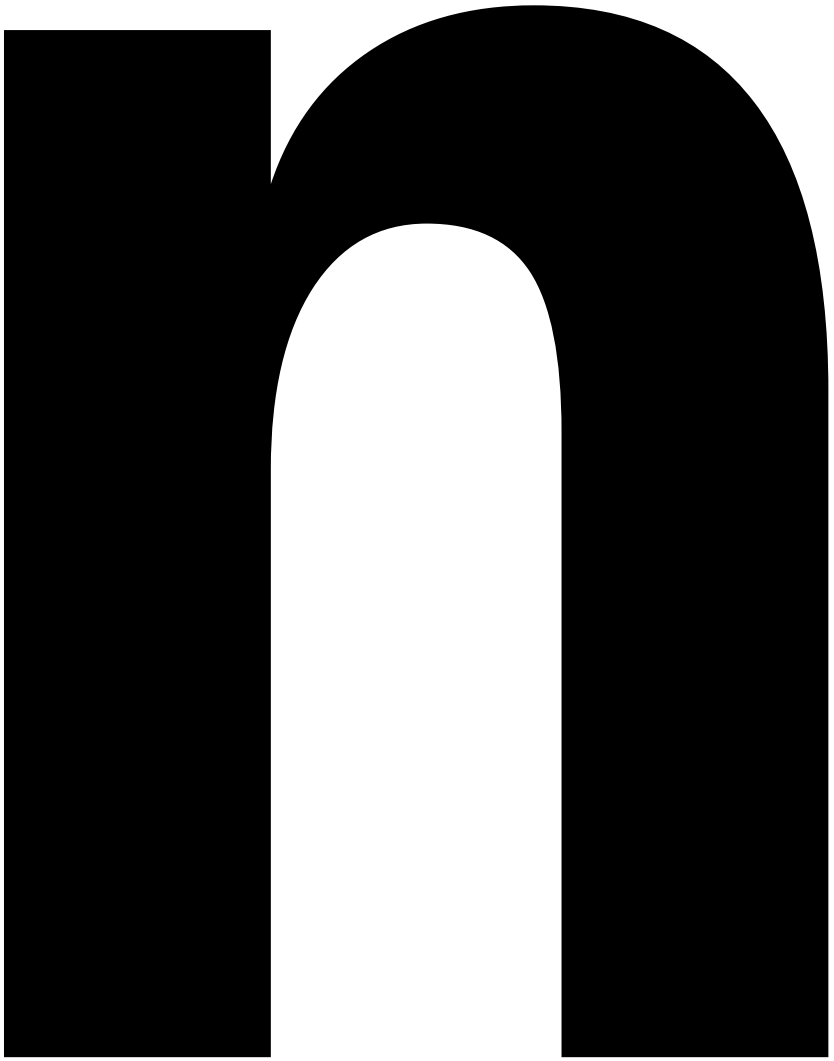


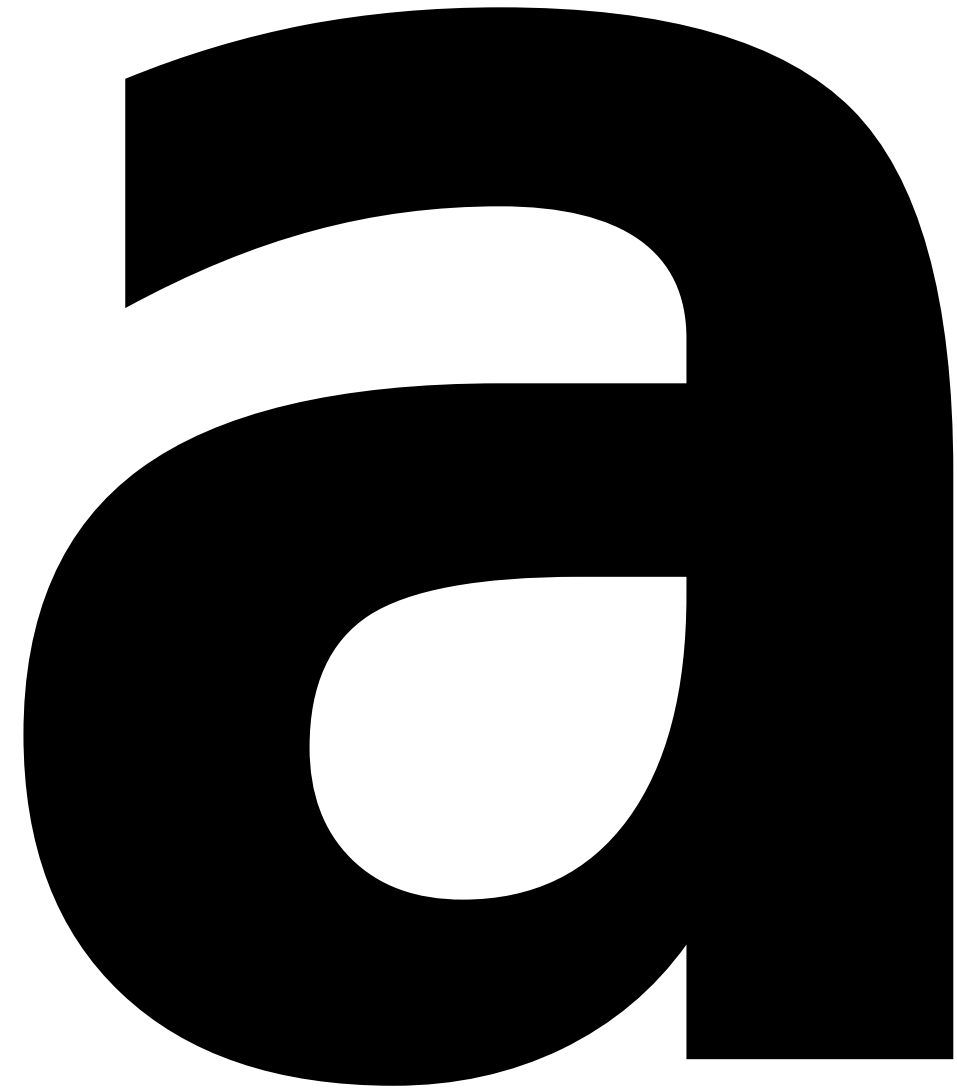


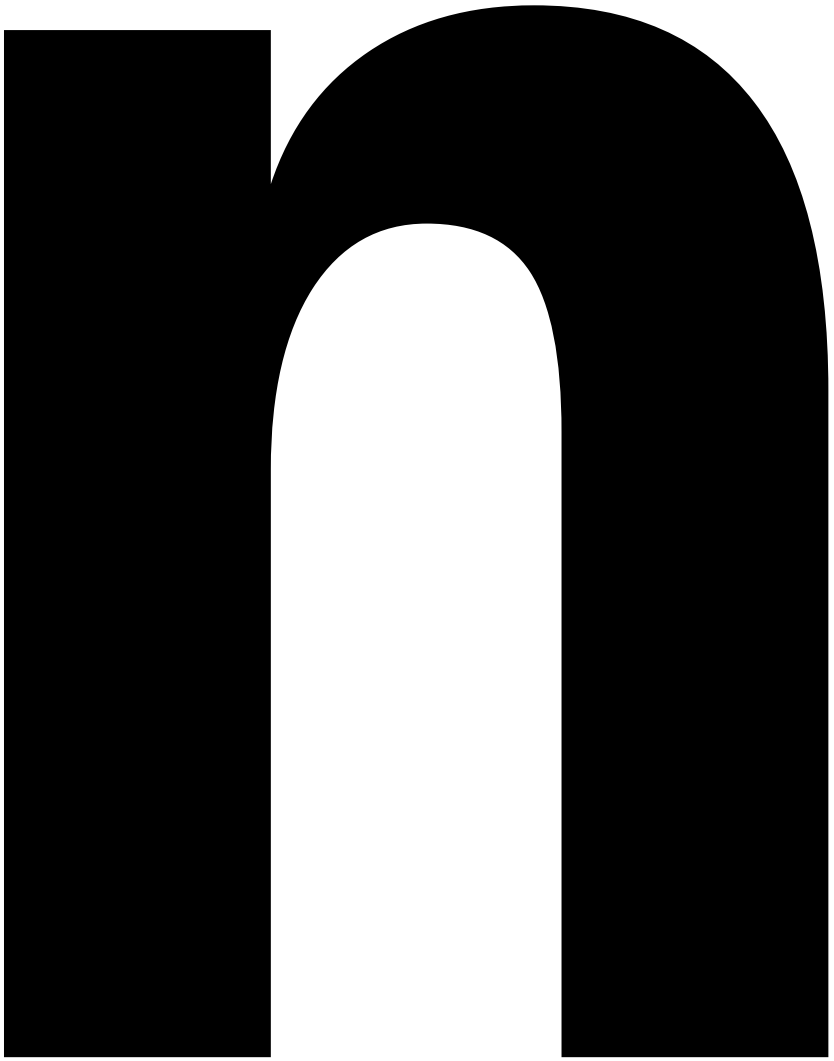




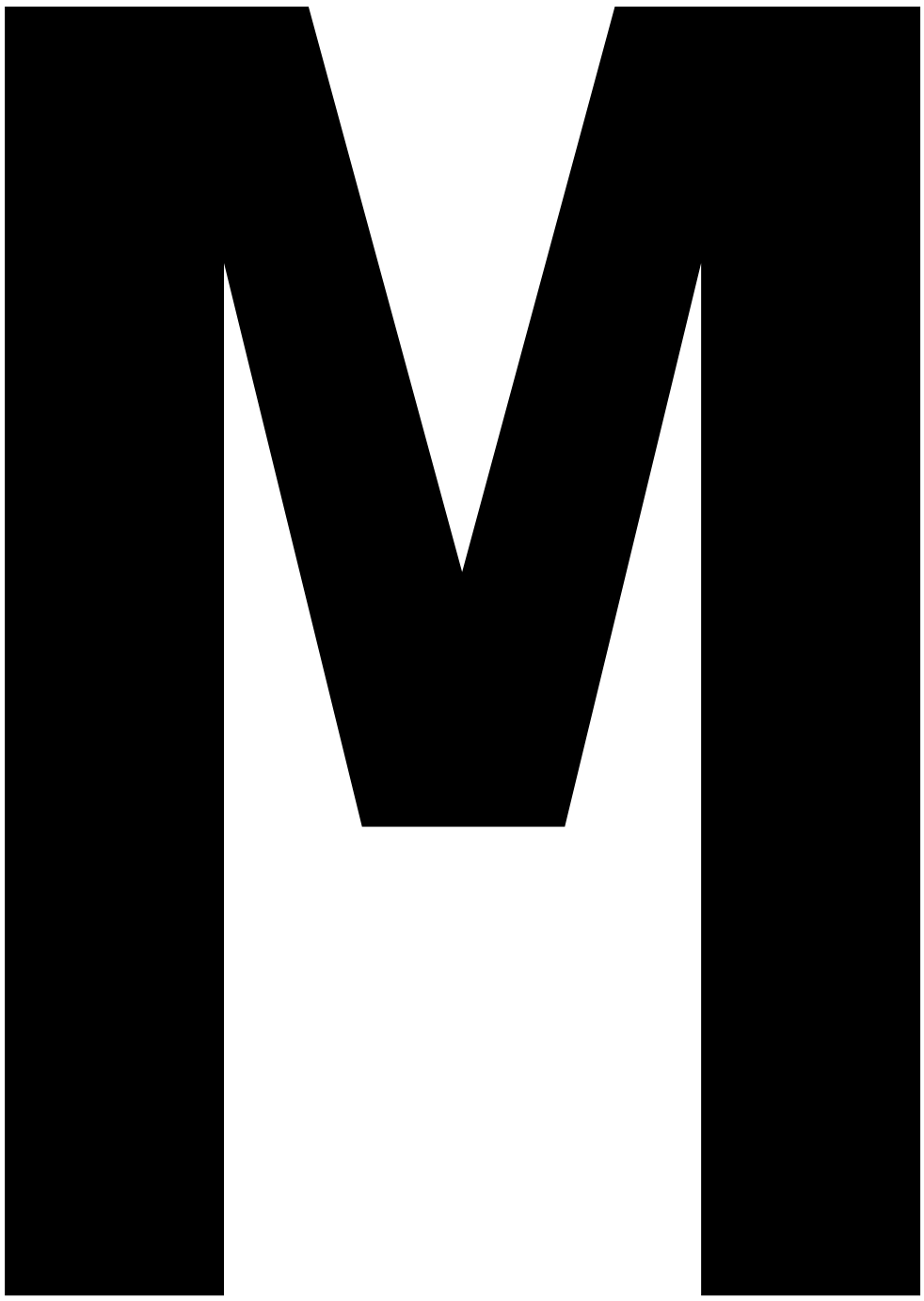


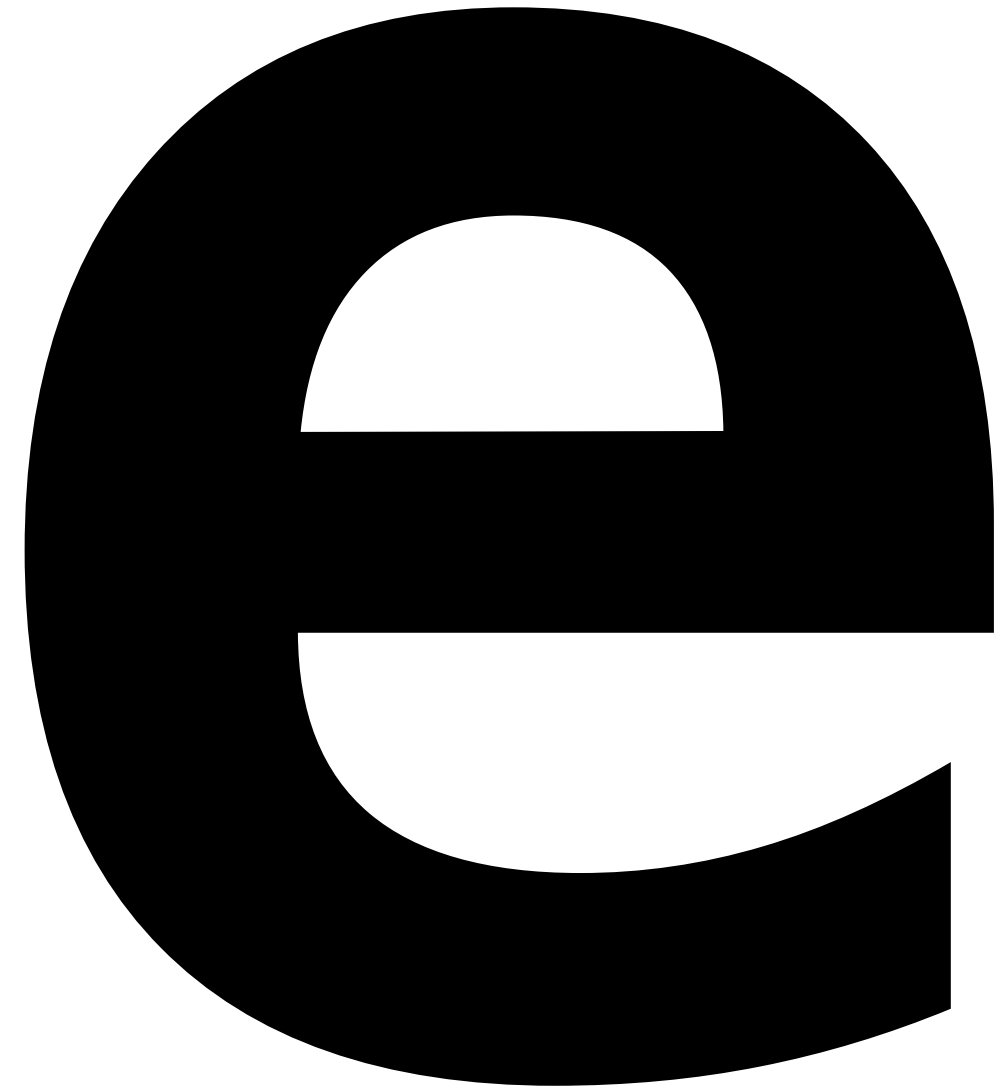


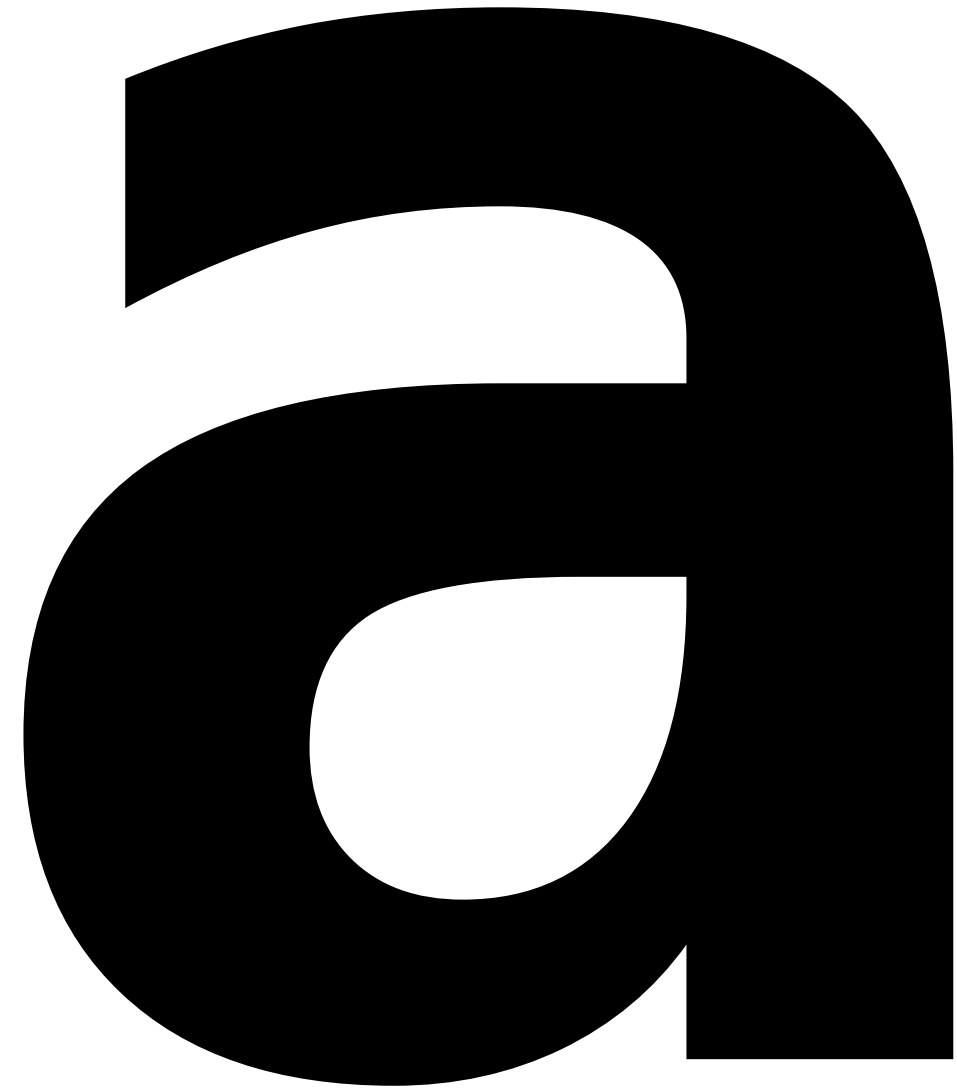




d

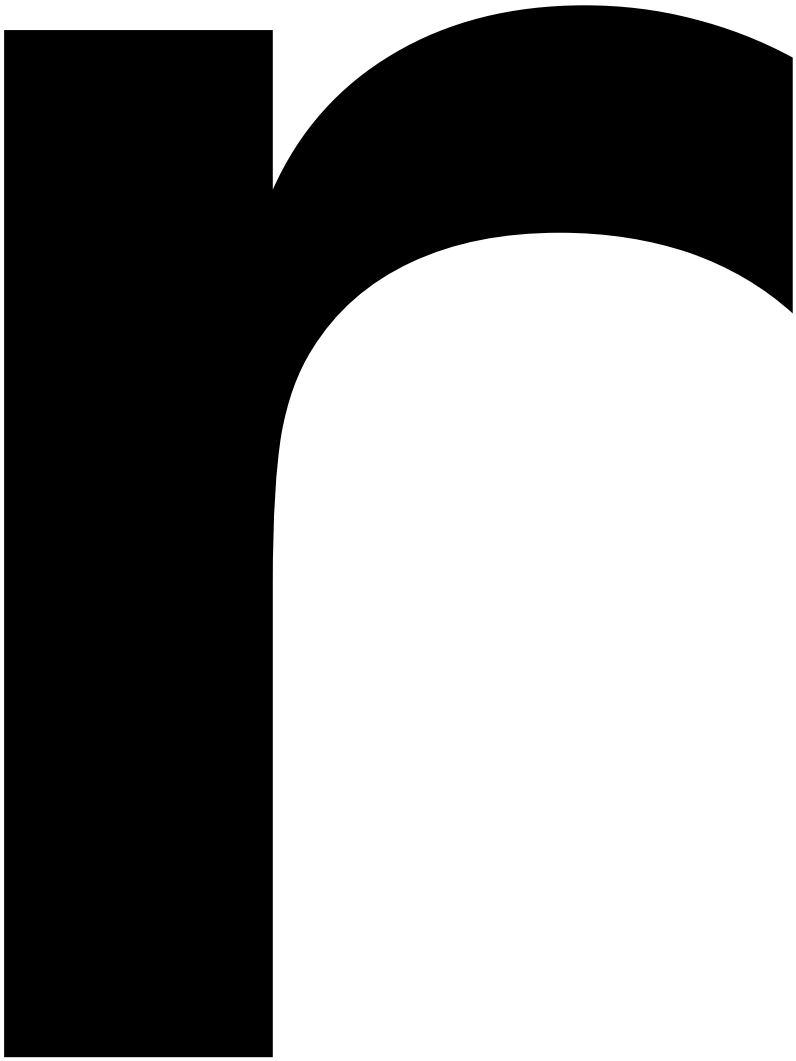


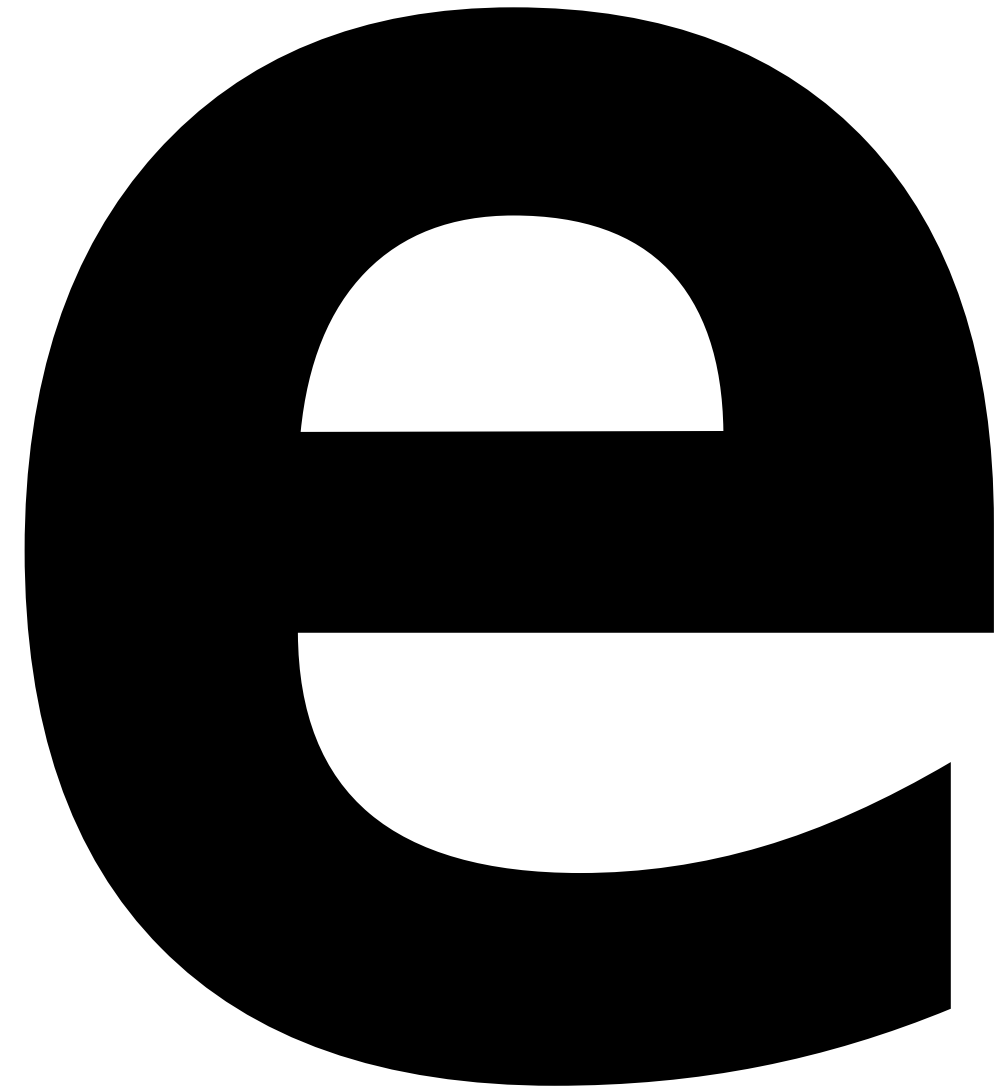


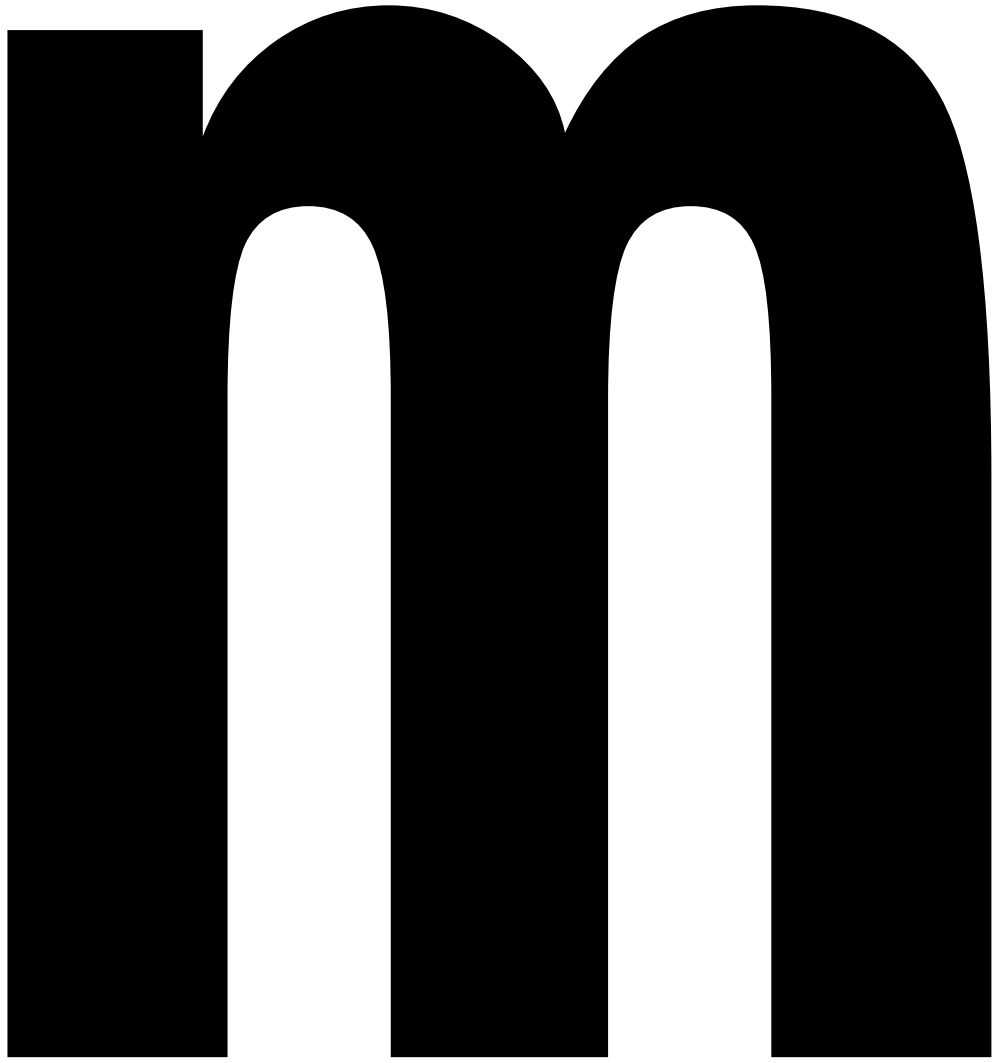


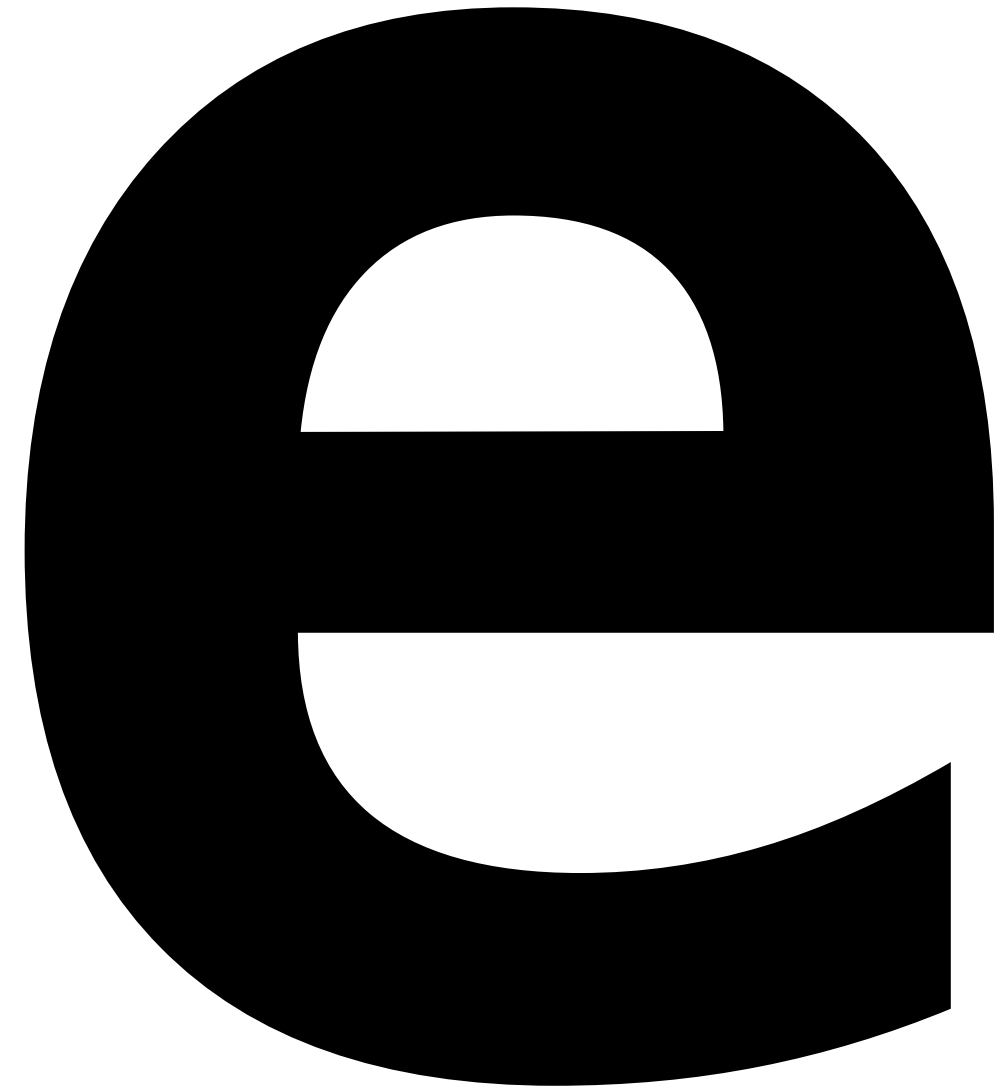
S

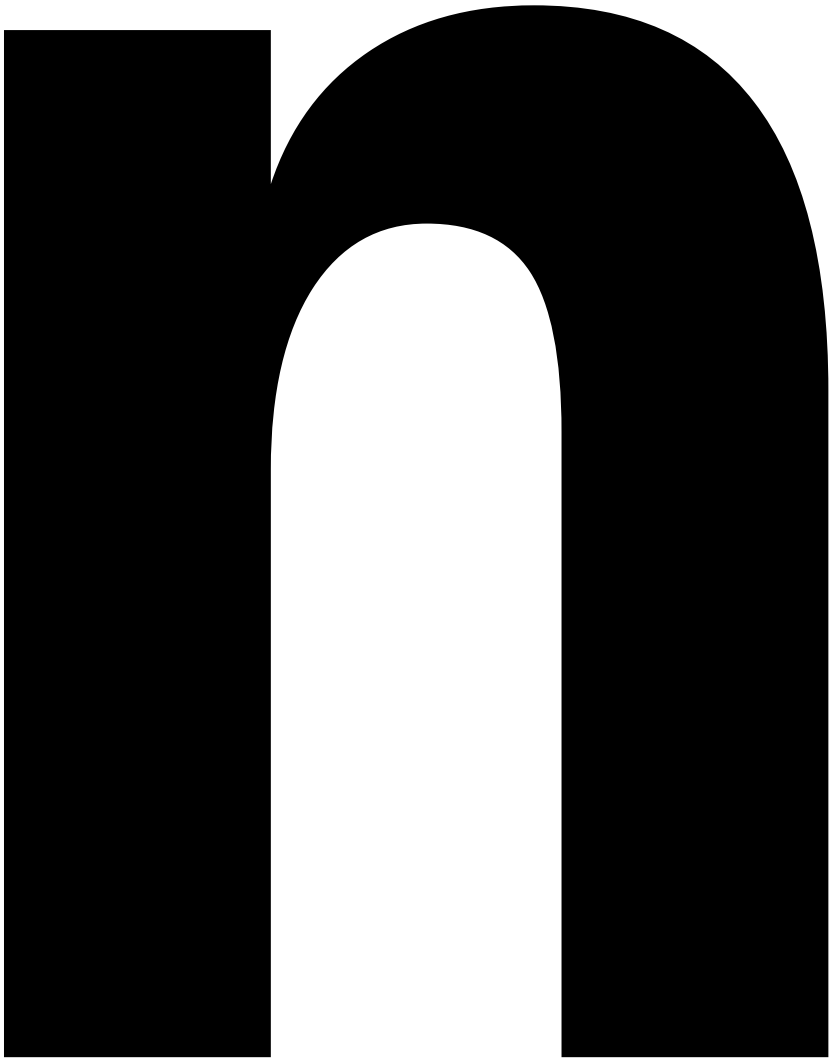
u

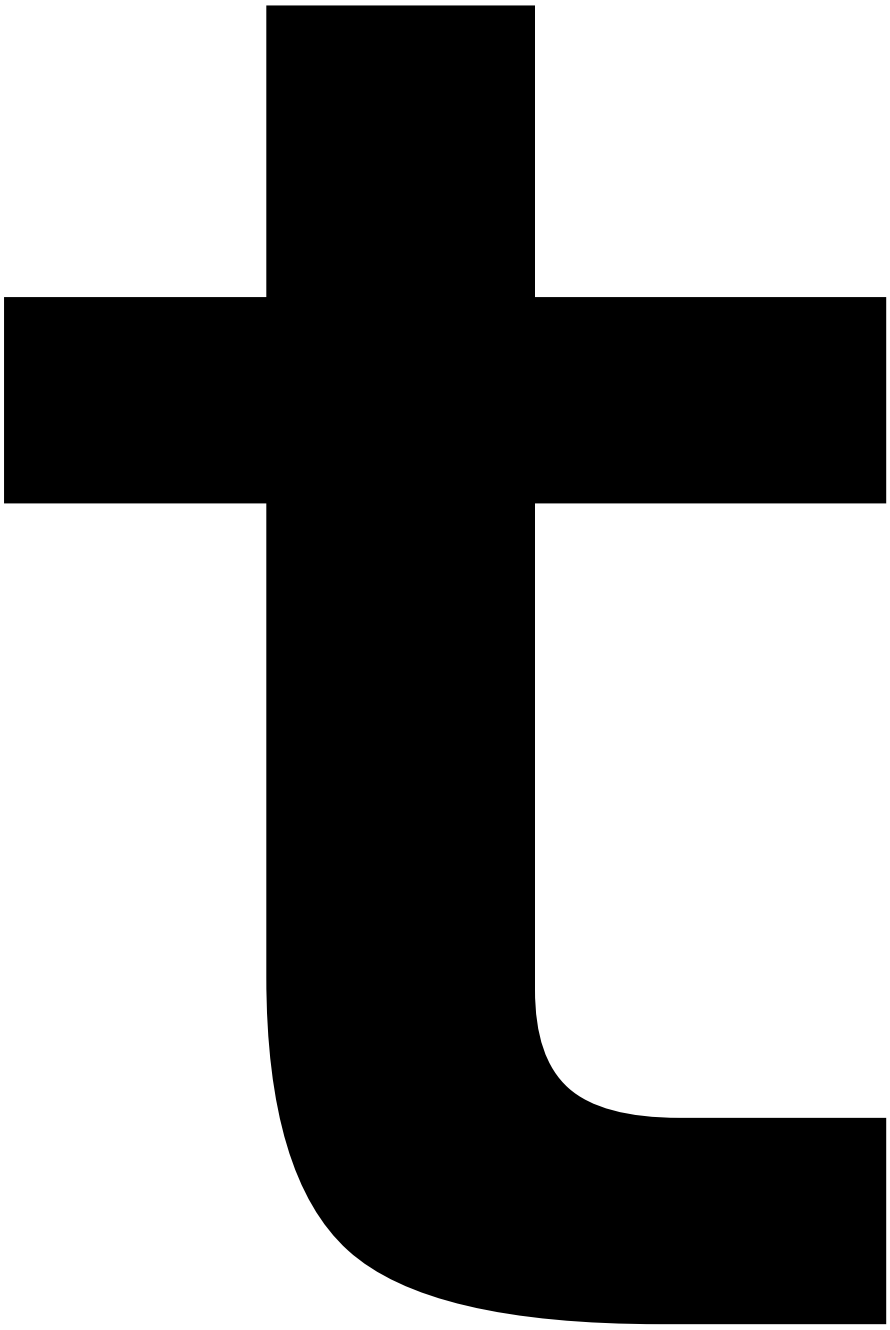




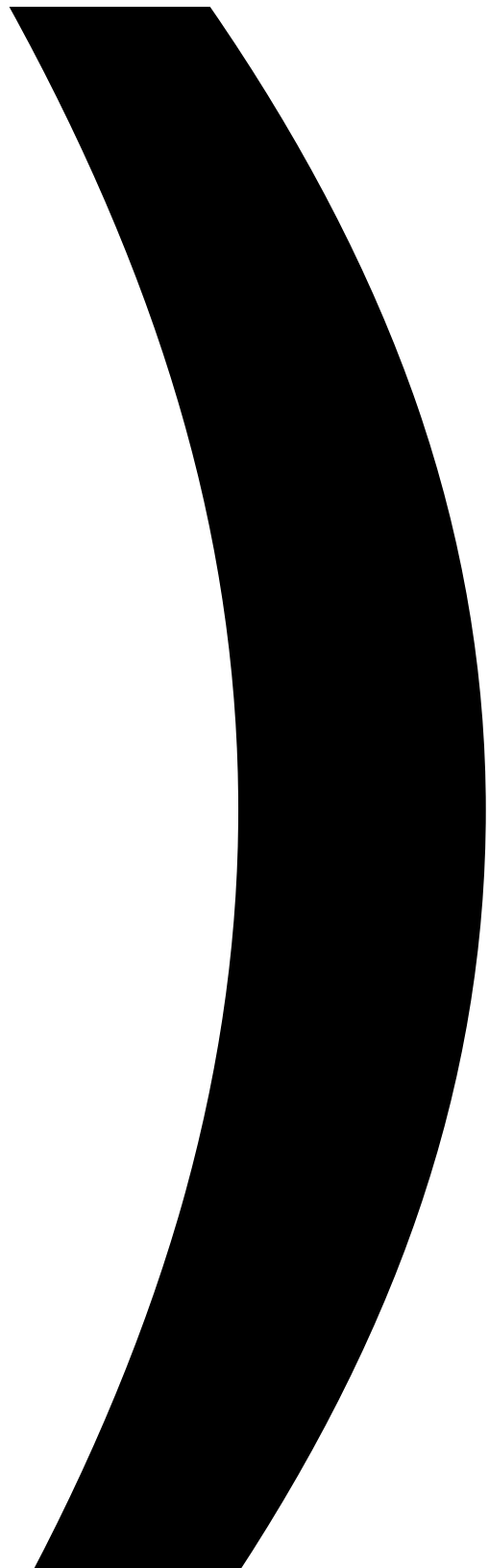


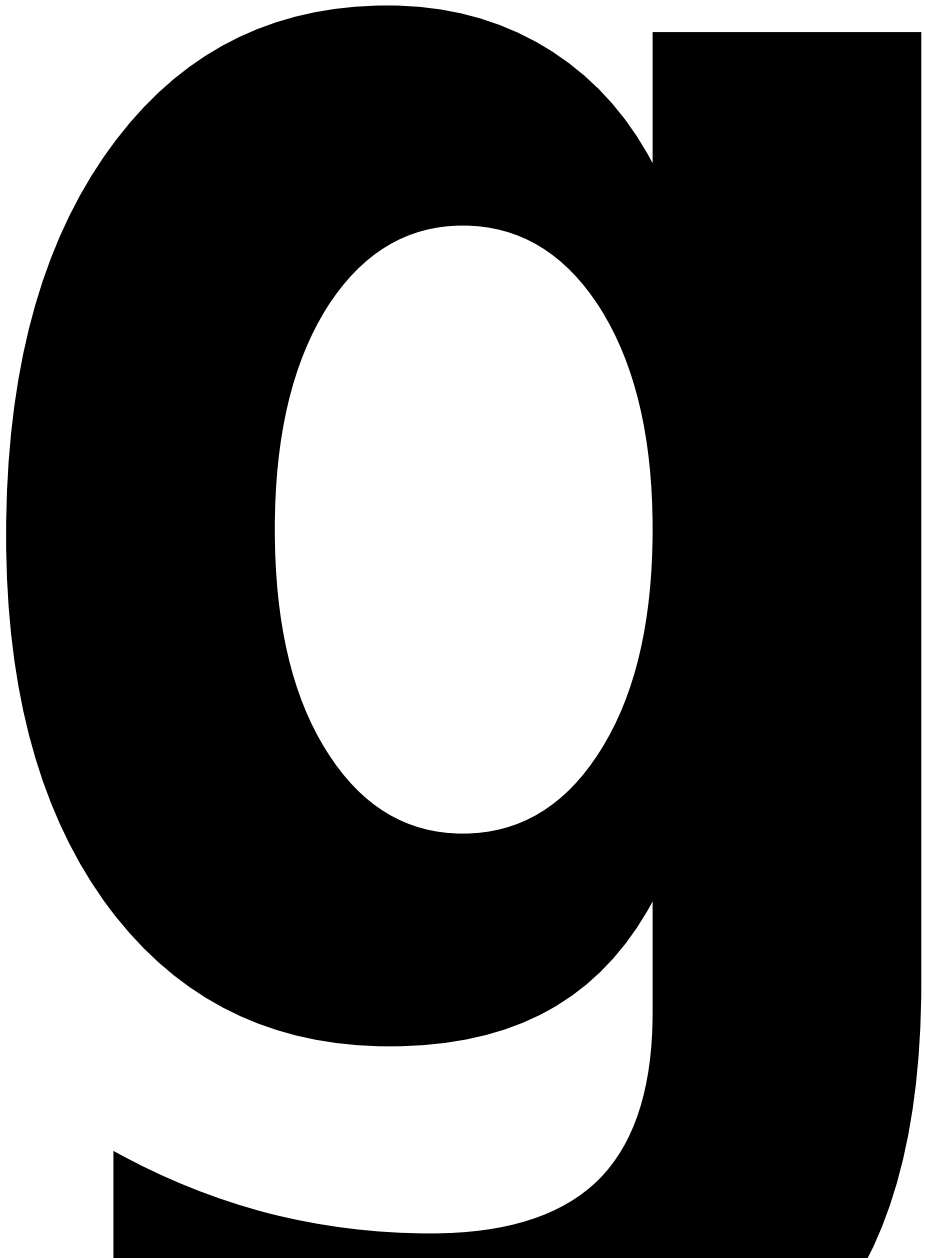


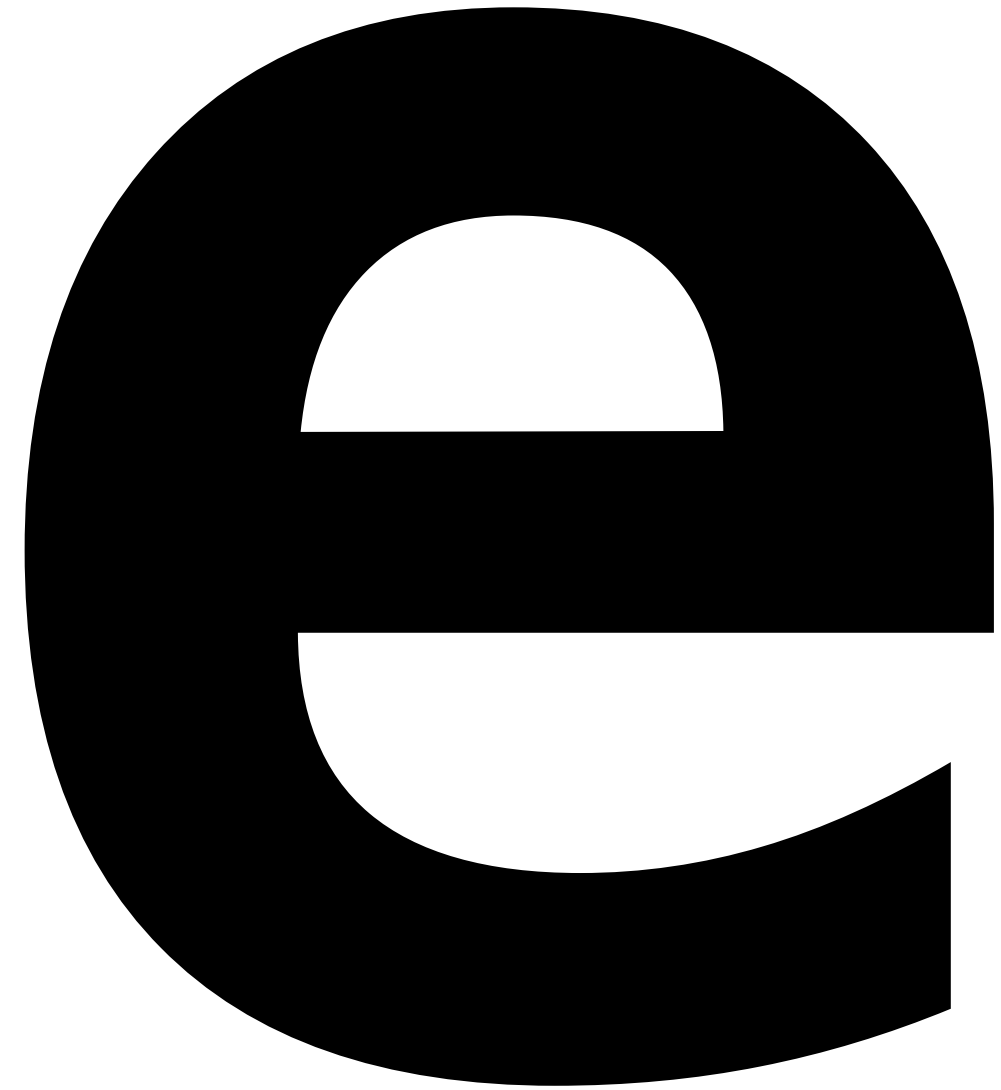


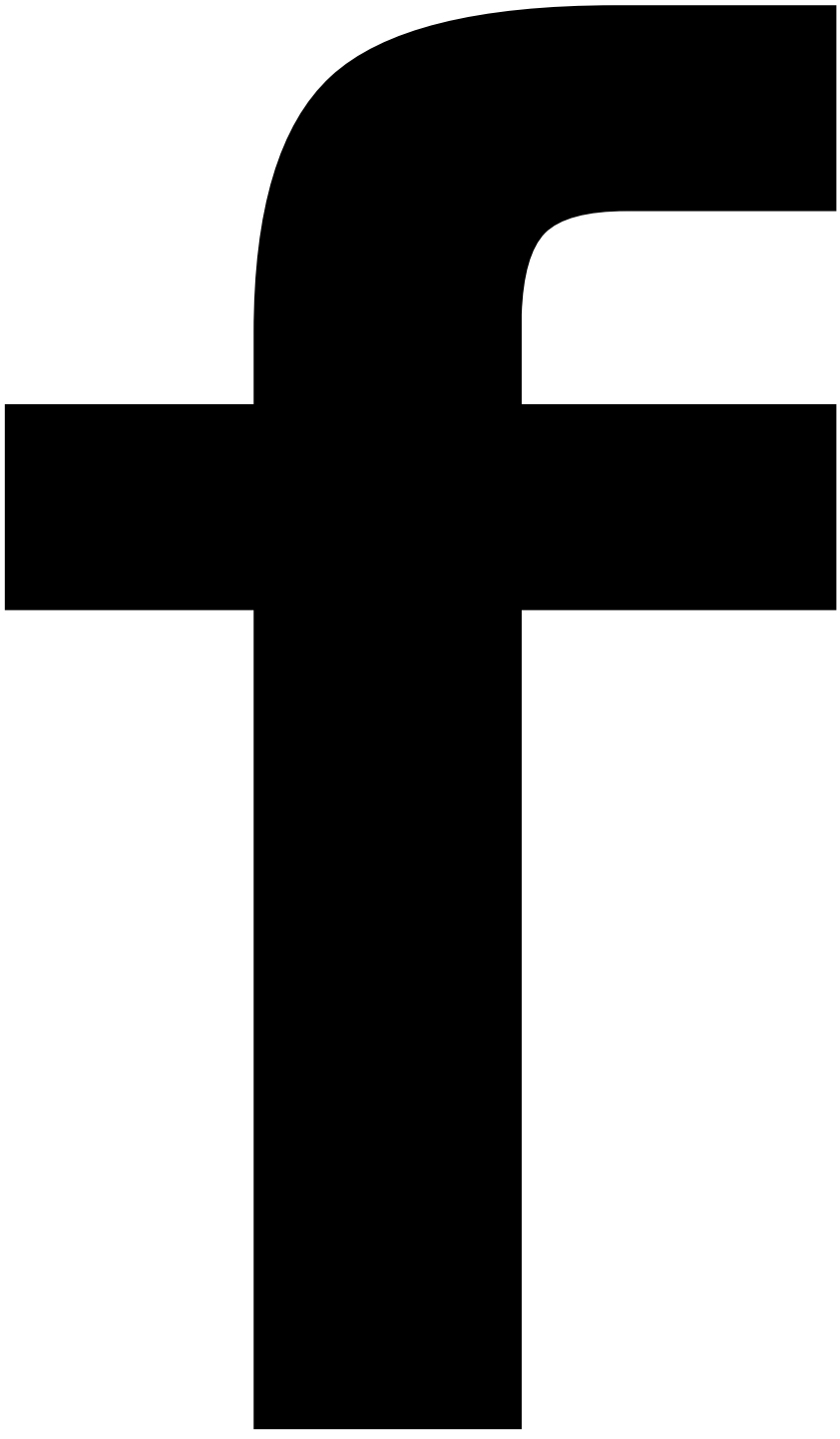


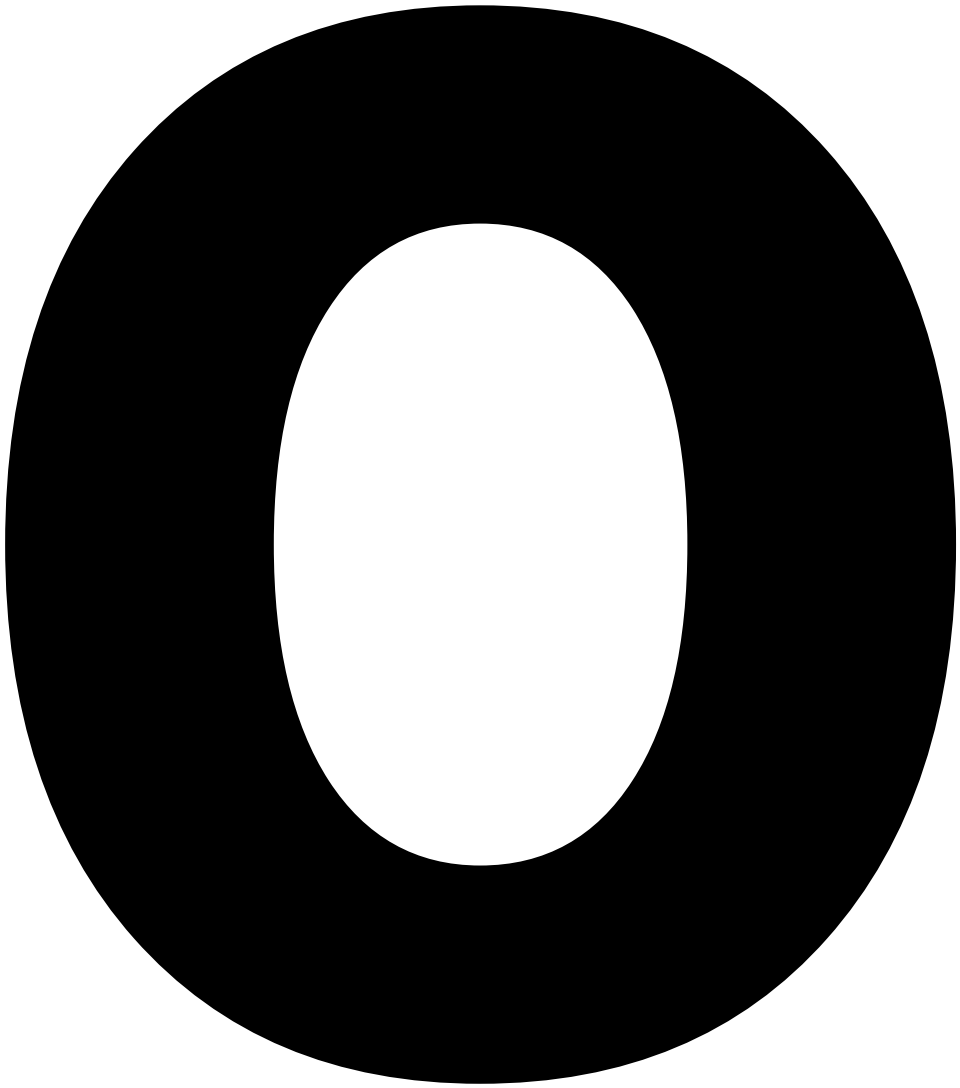
S

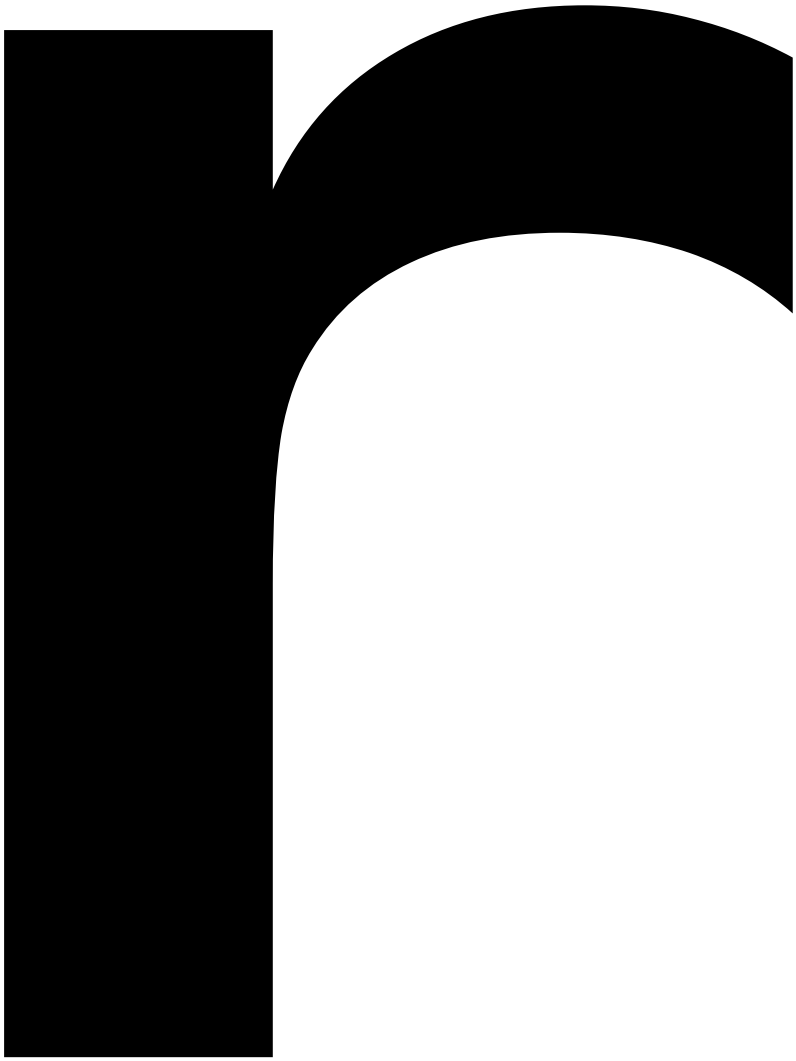




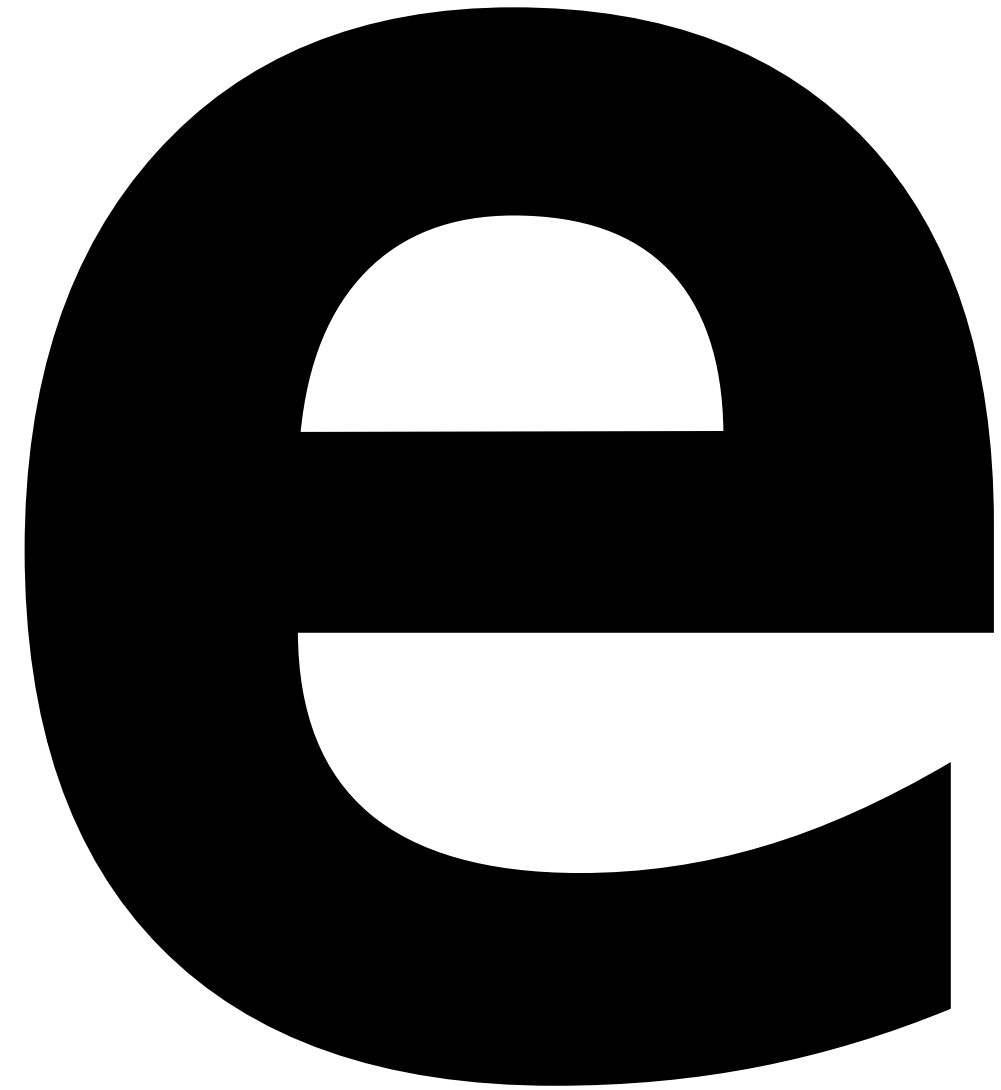


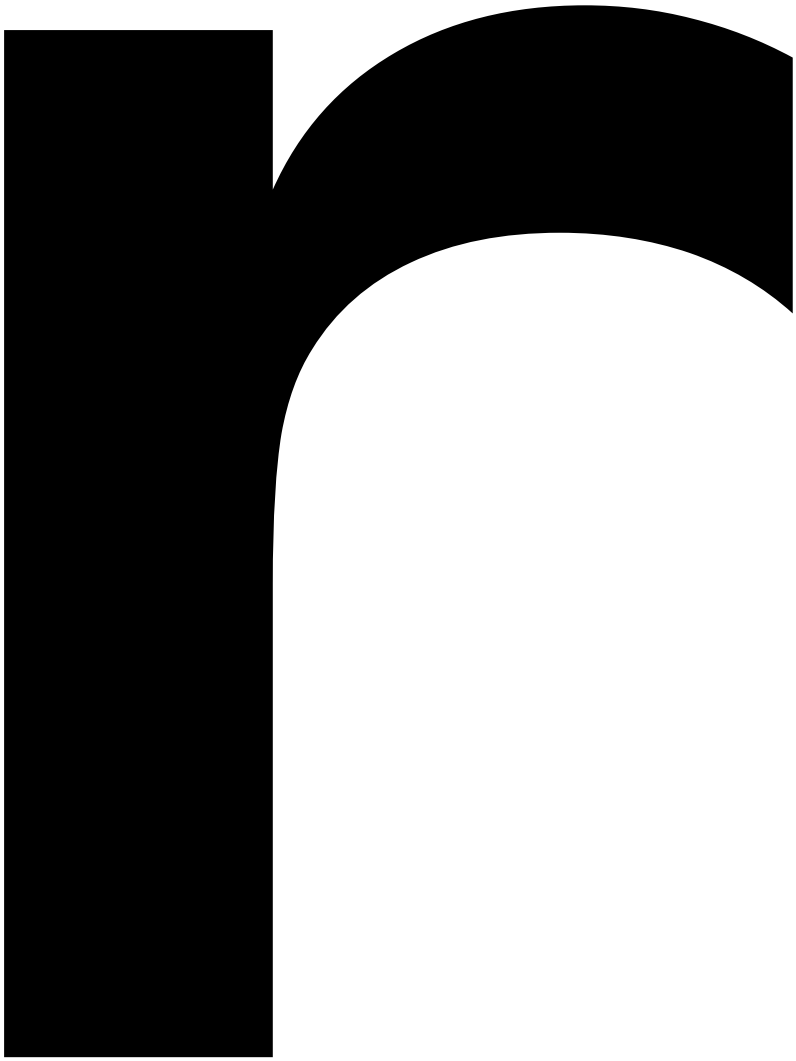


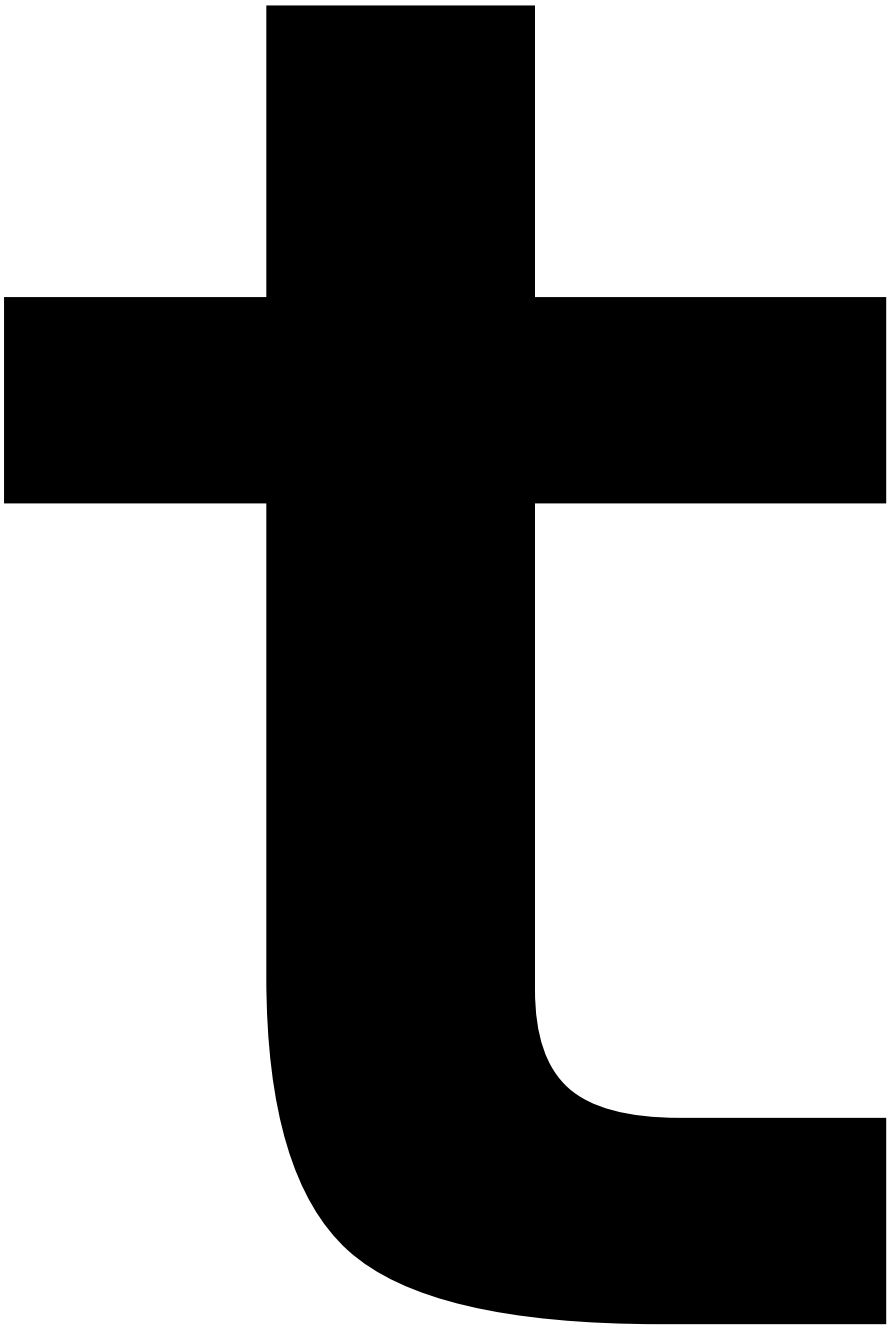




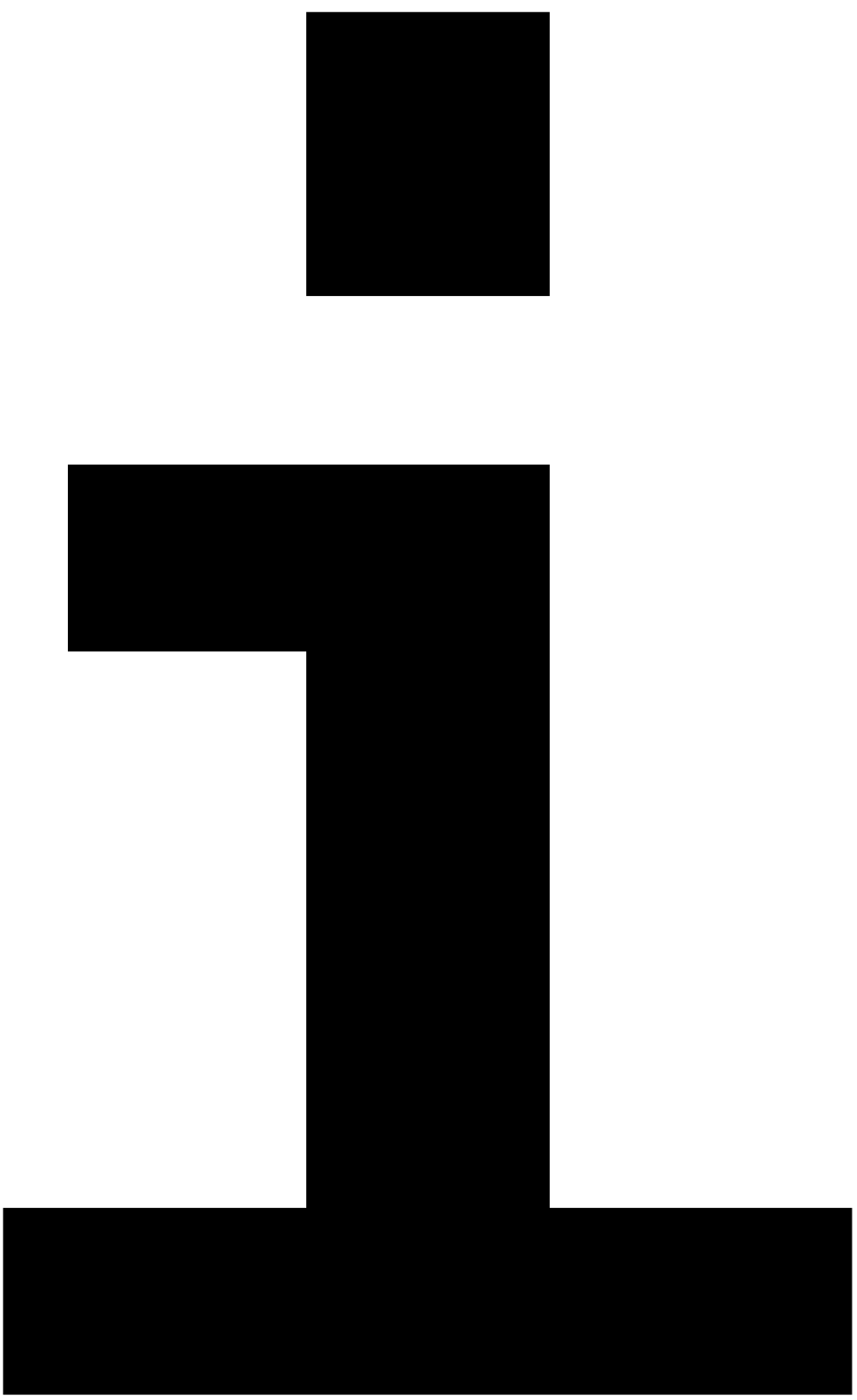
d

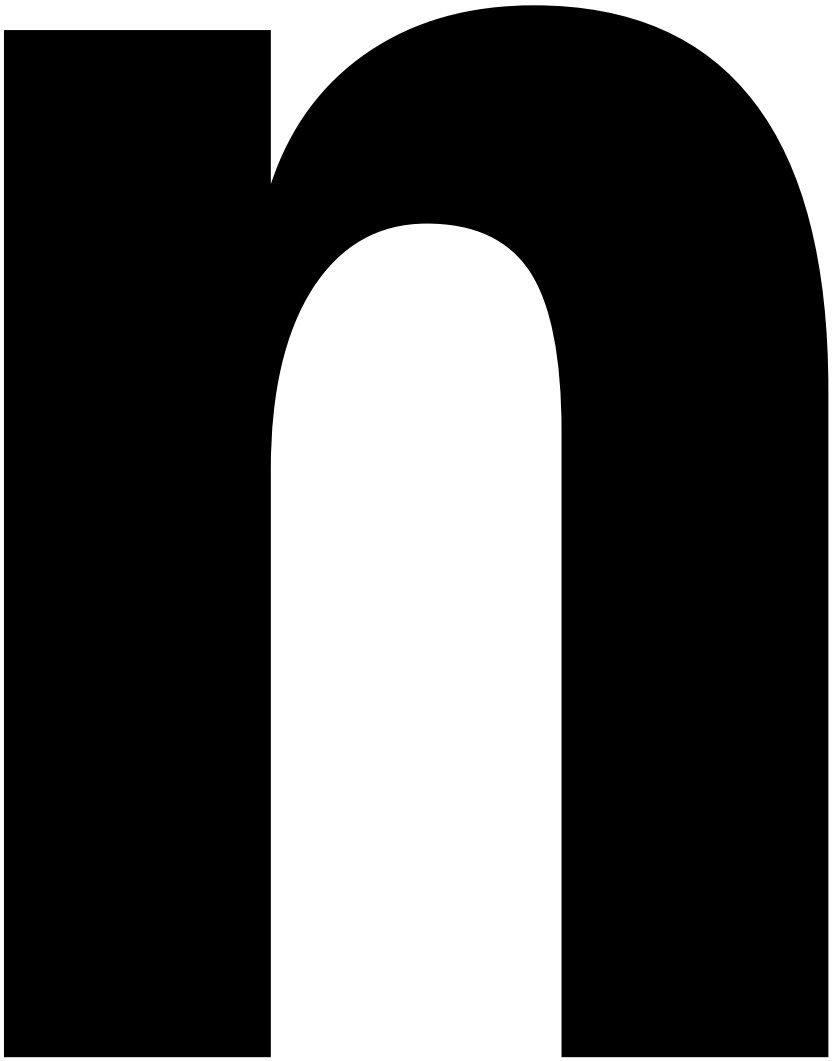




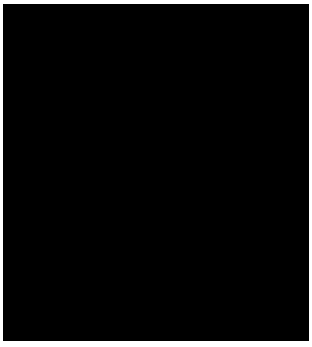


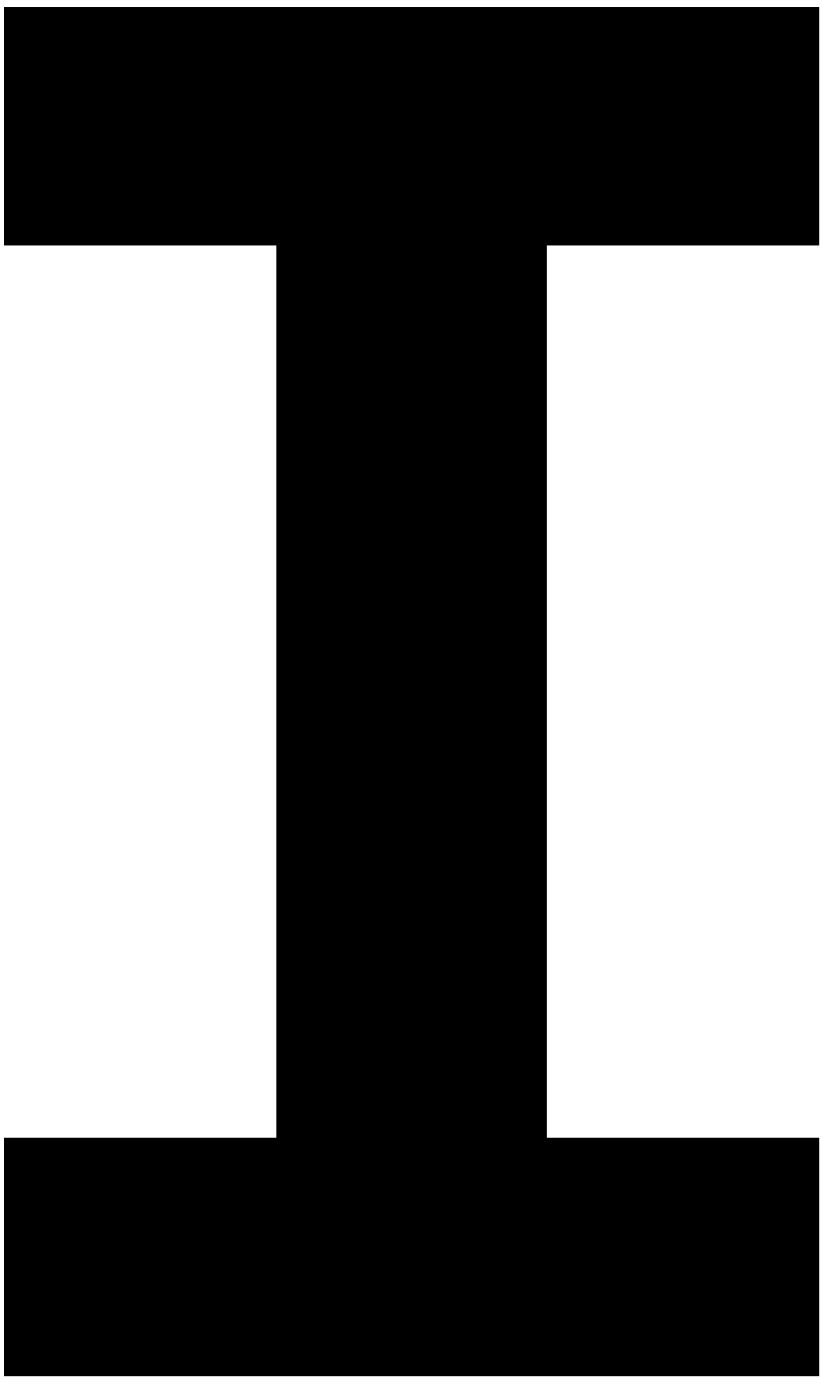
S

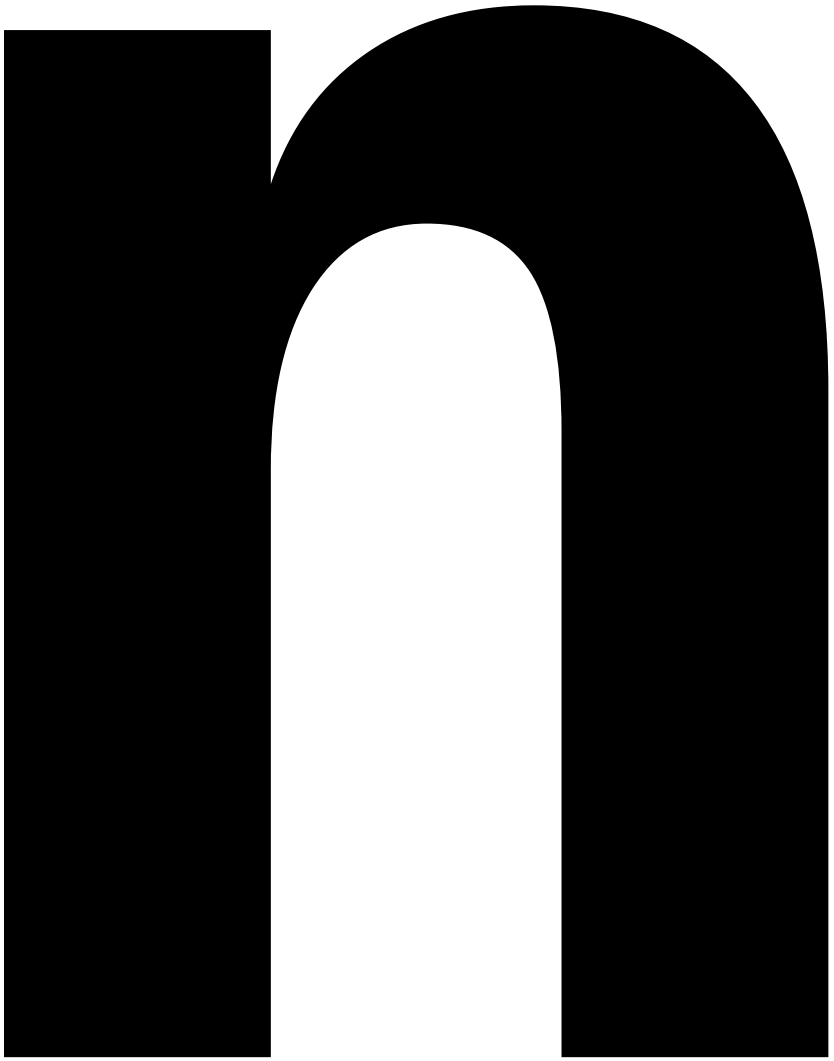


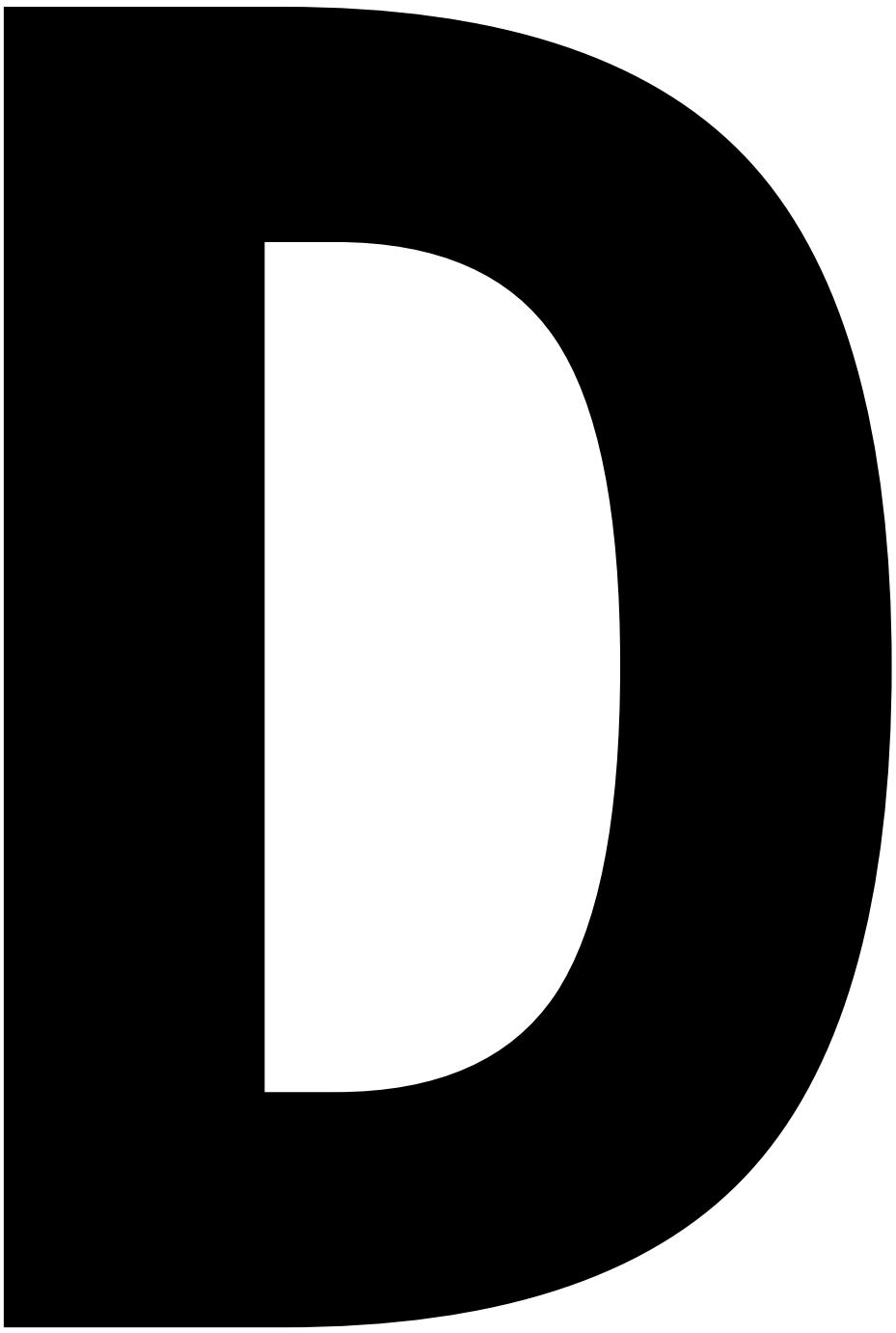


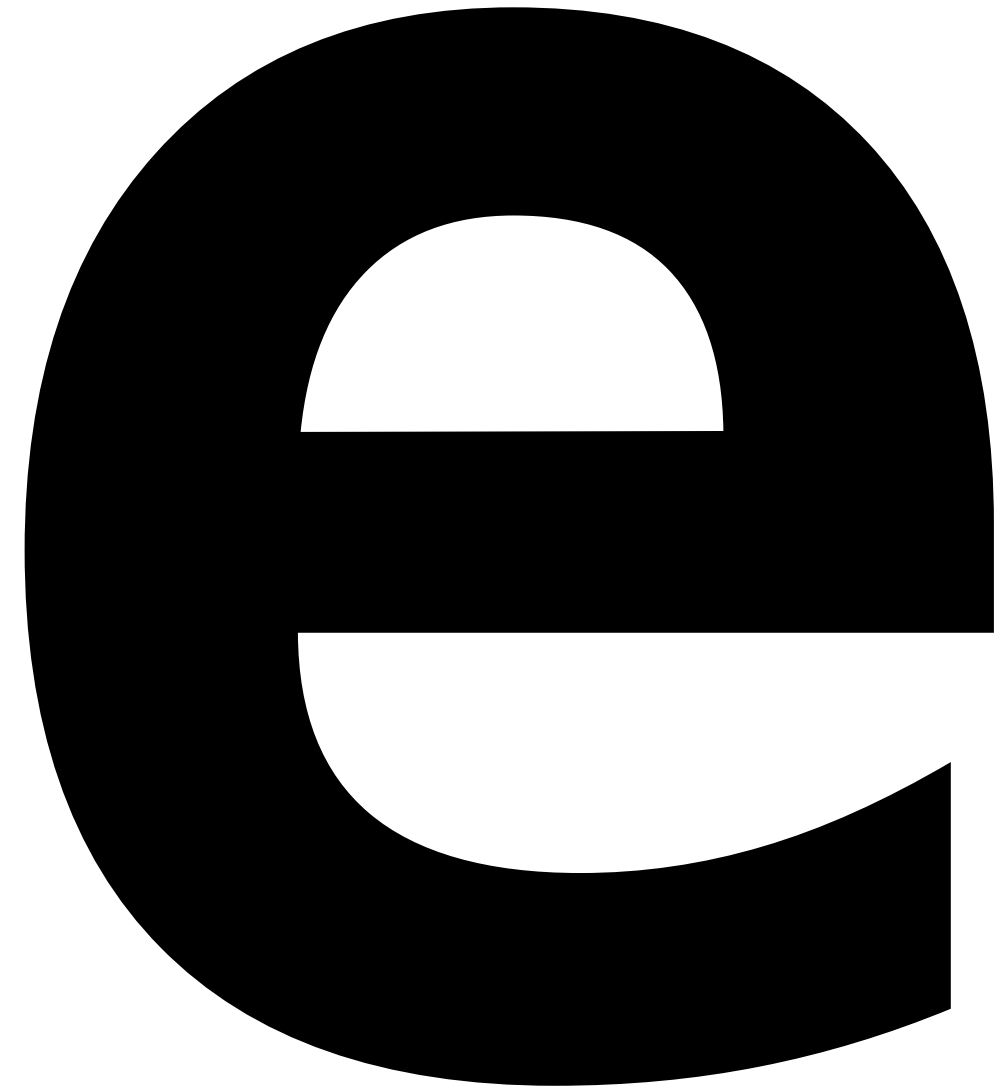
d



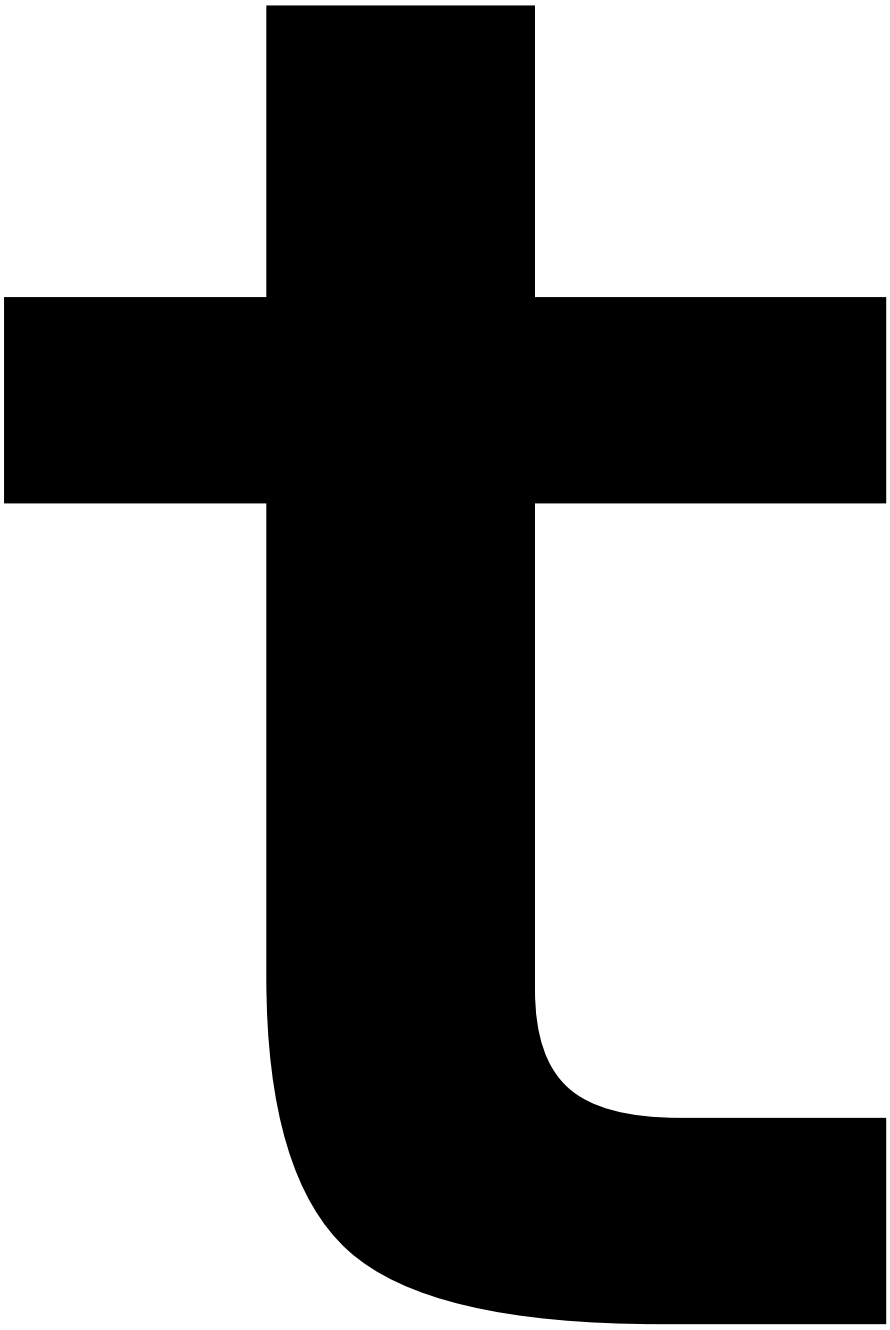




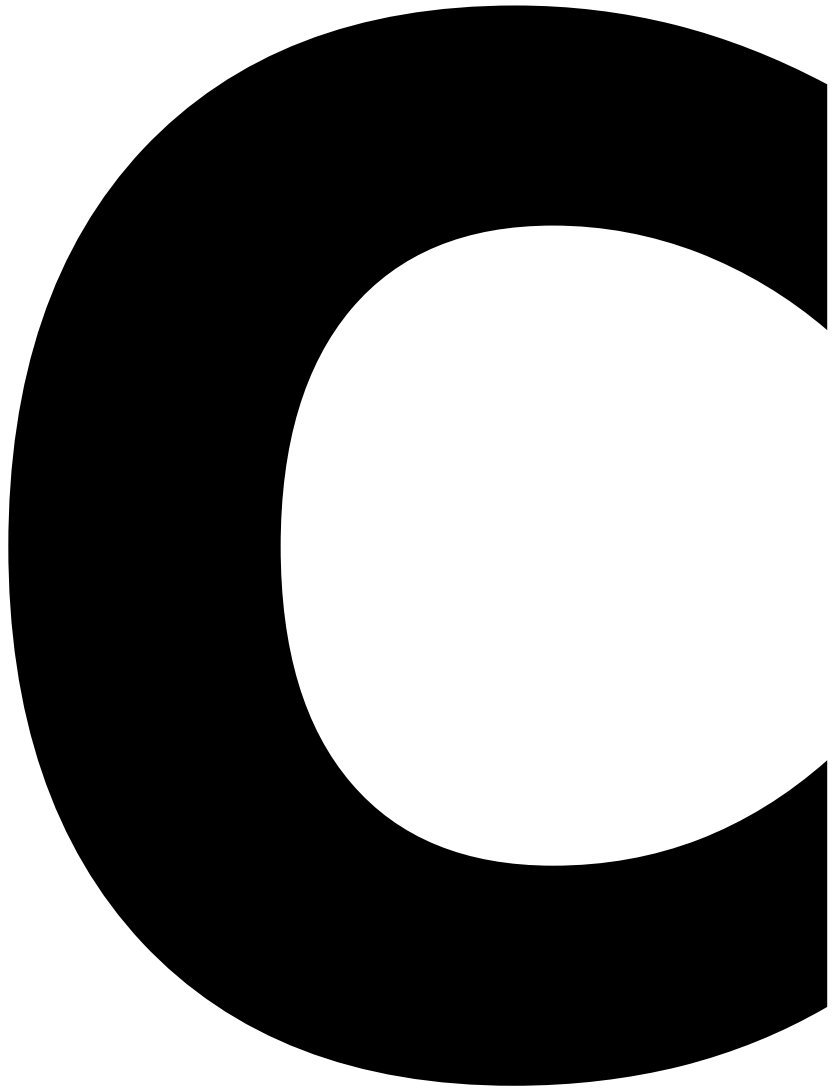


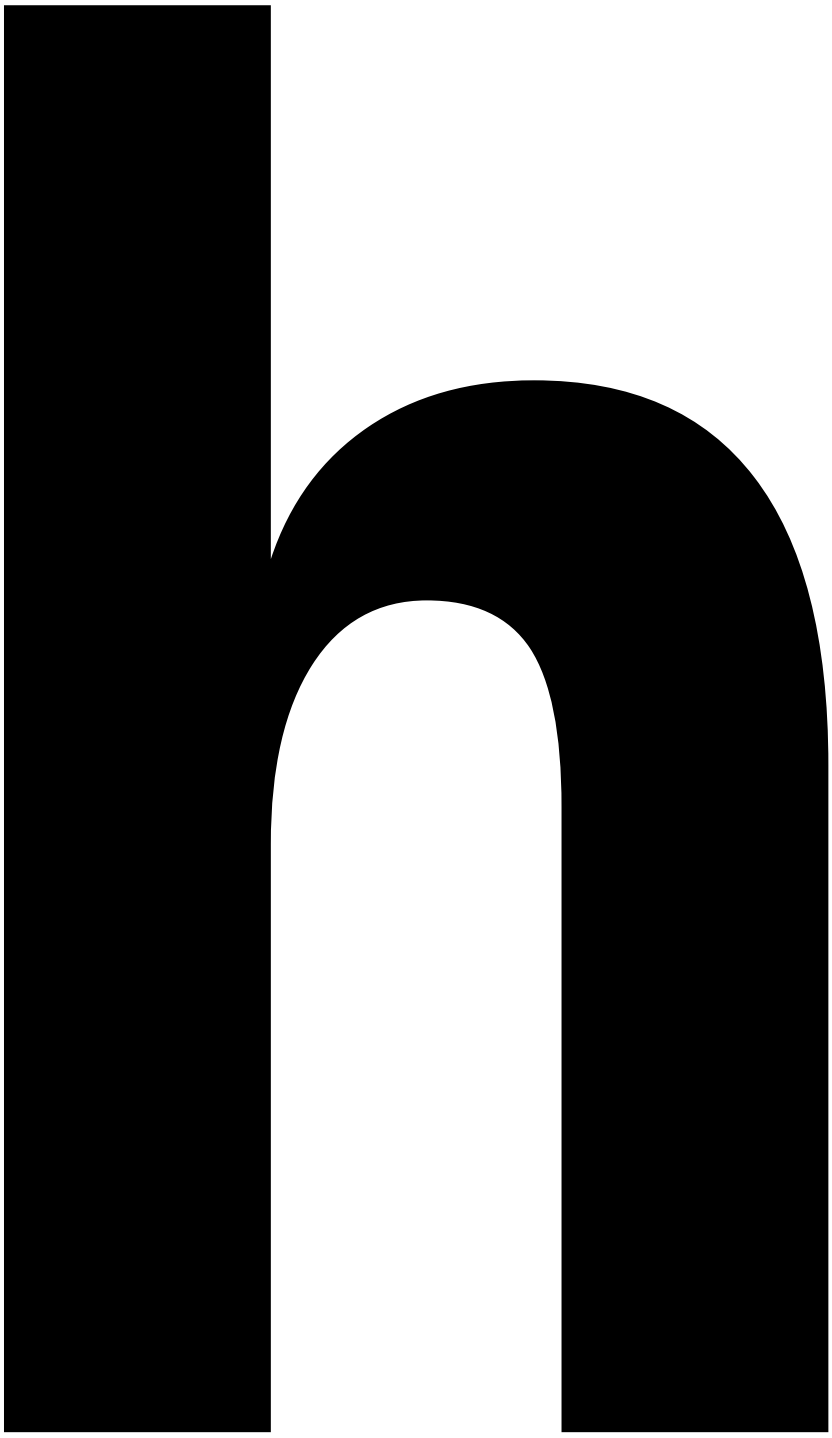


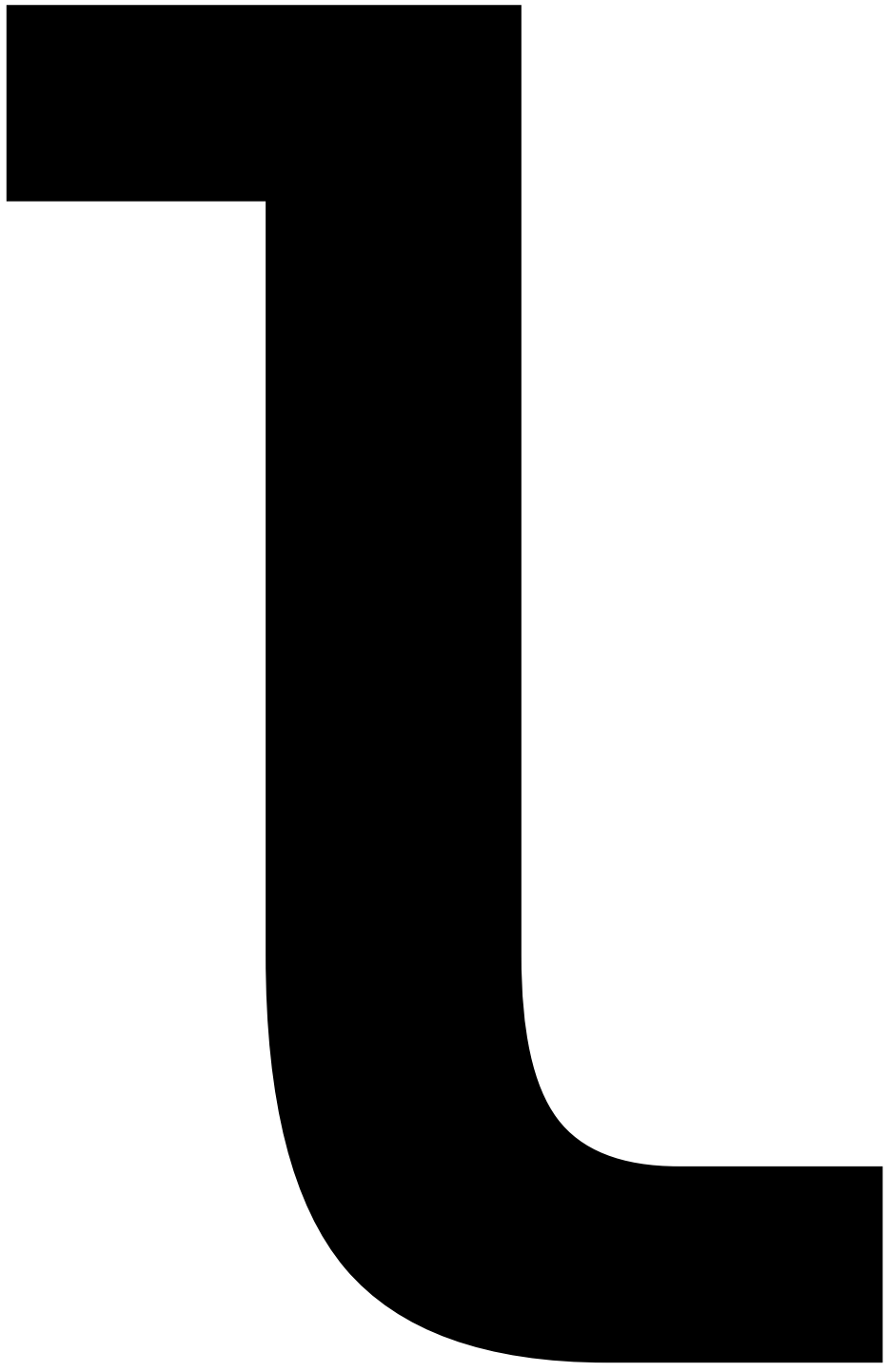
u

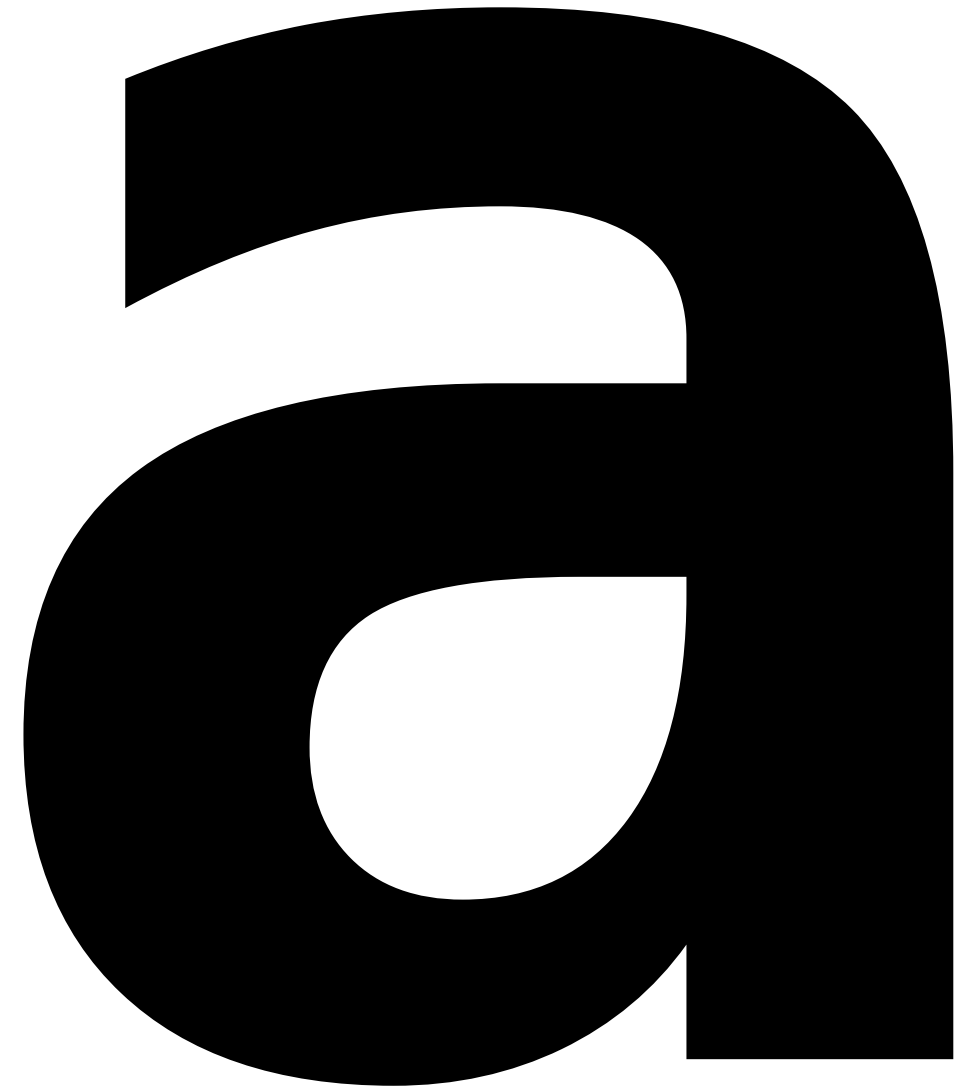


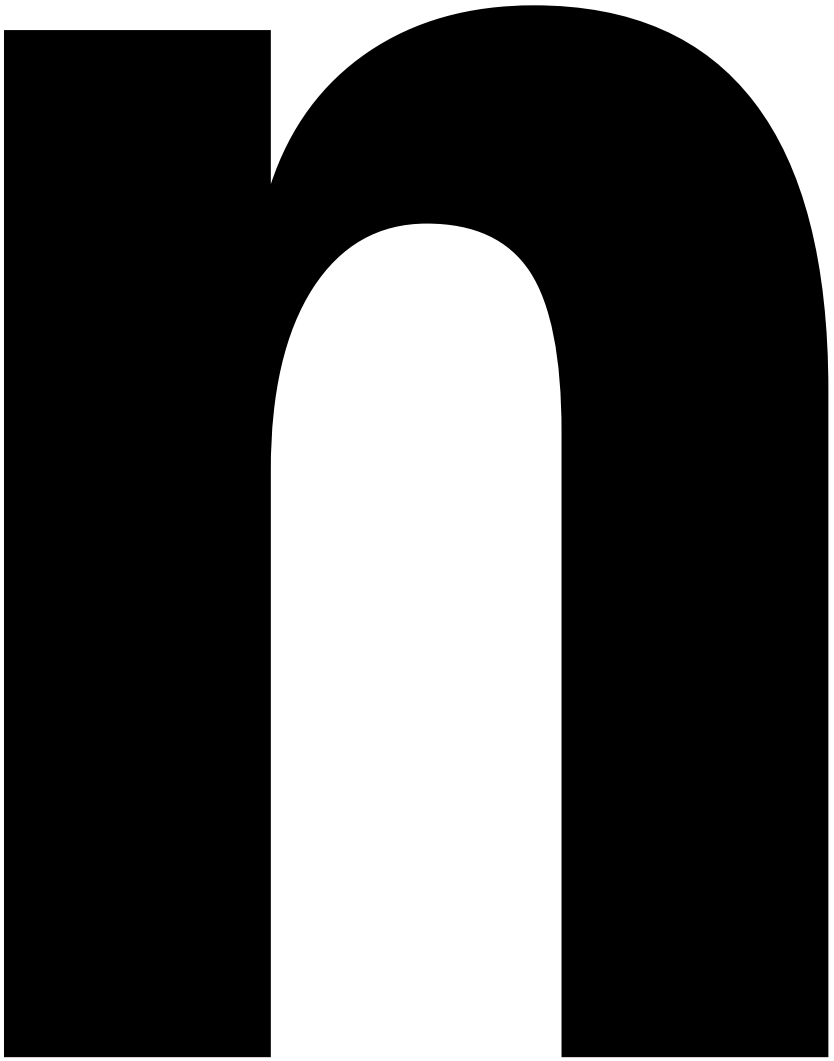
S



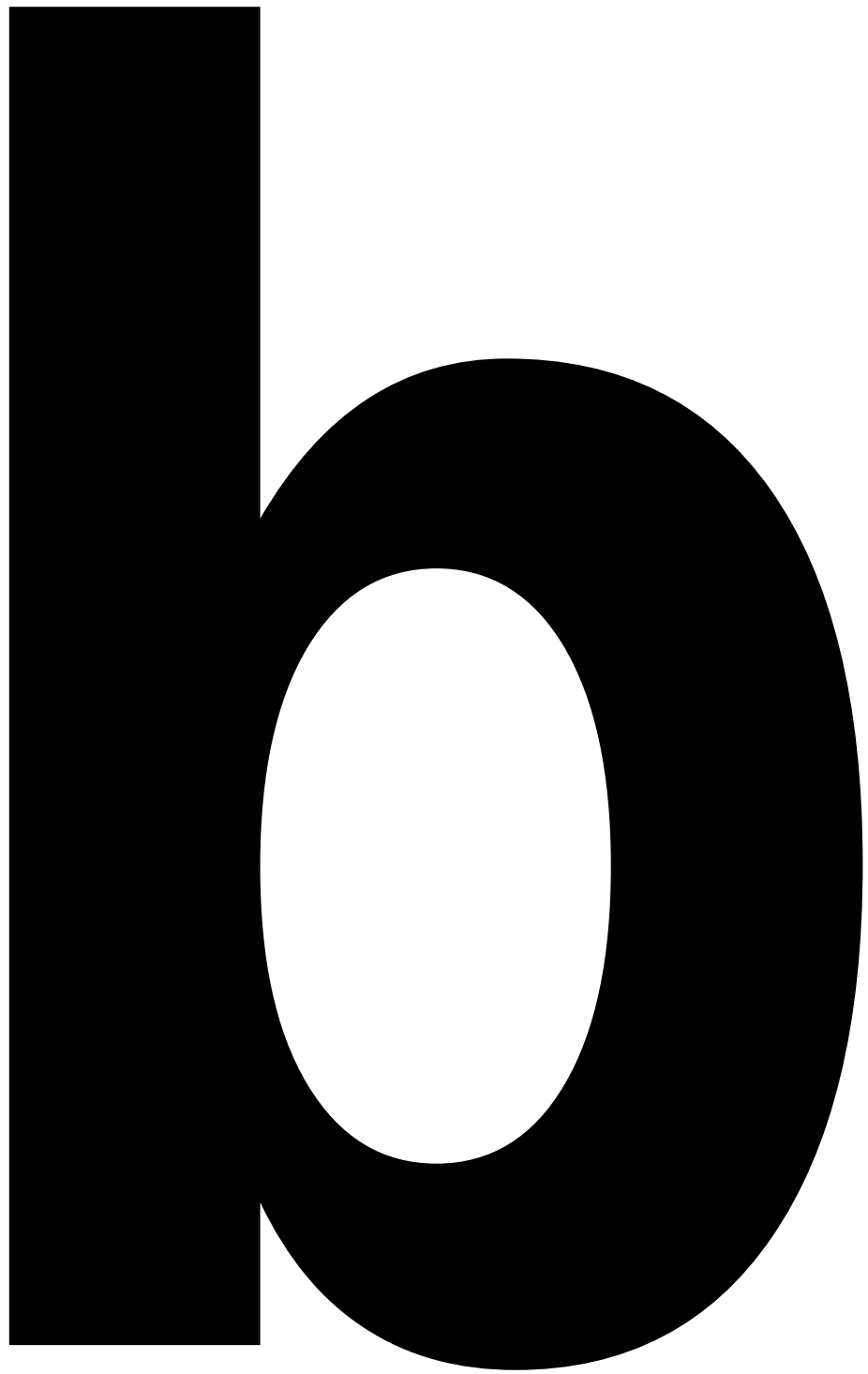


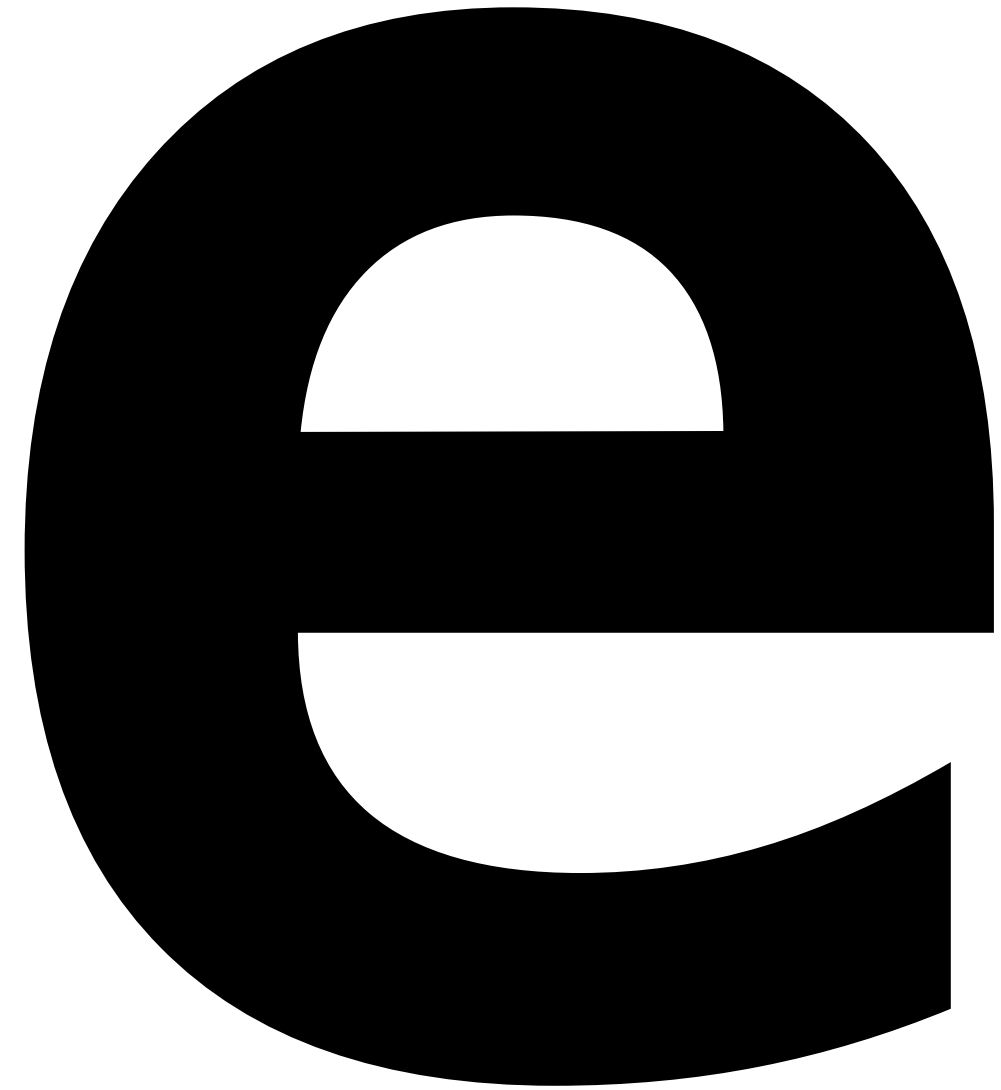




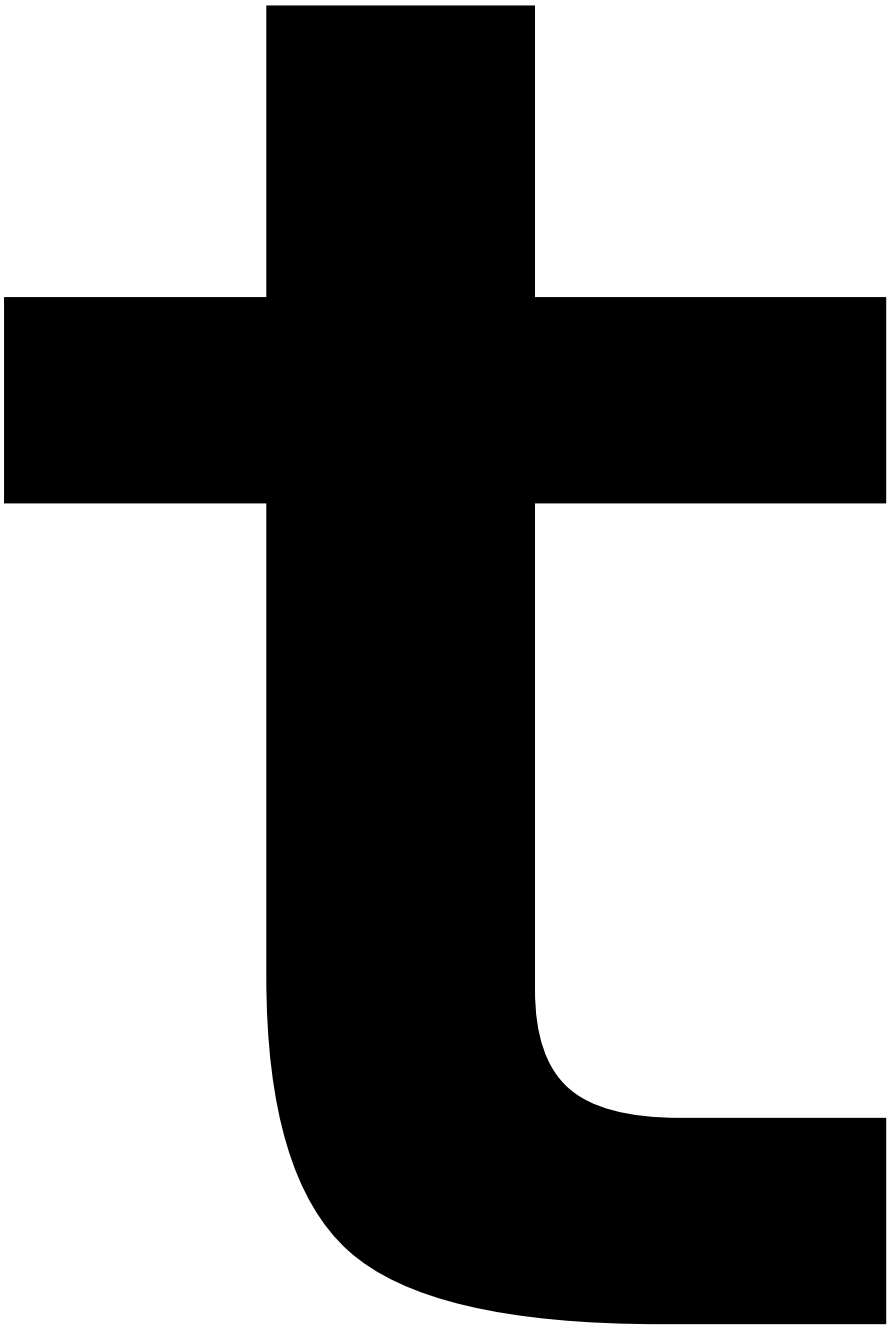


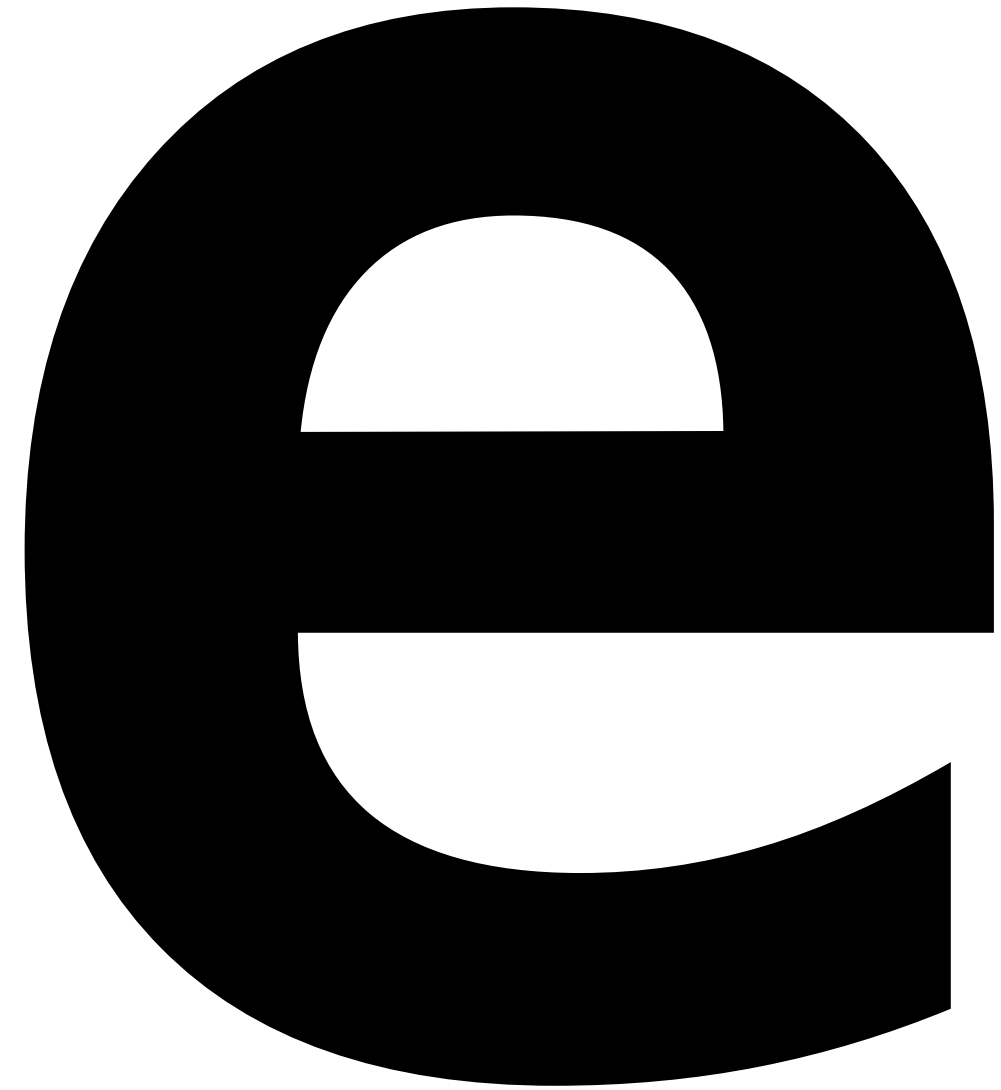
d

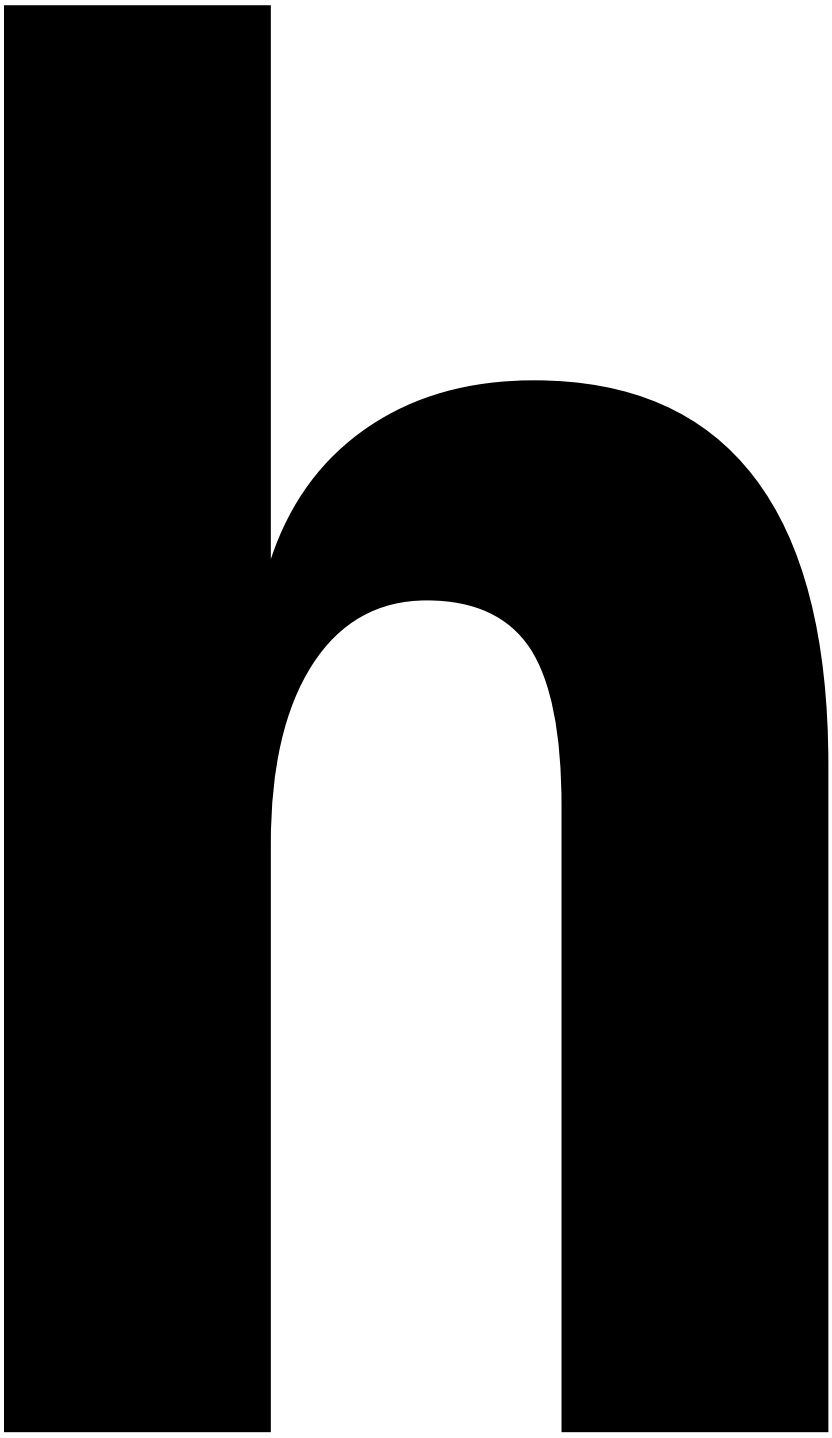


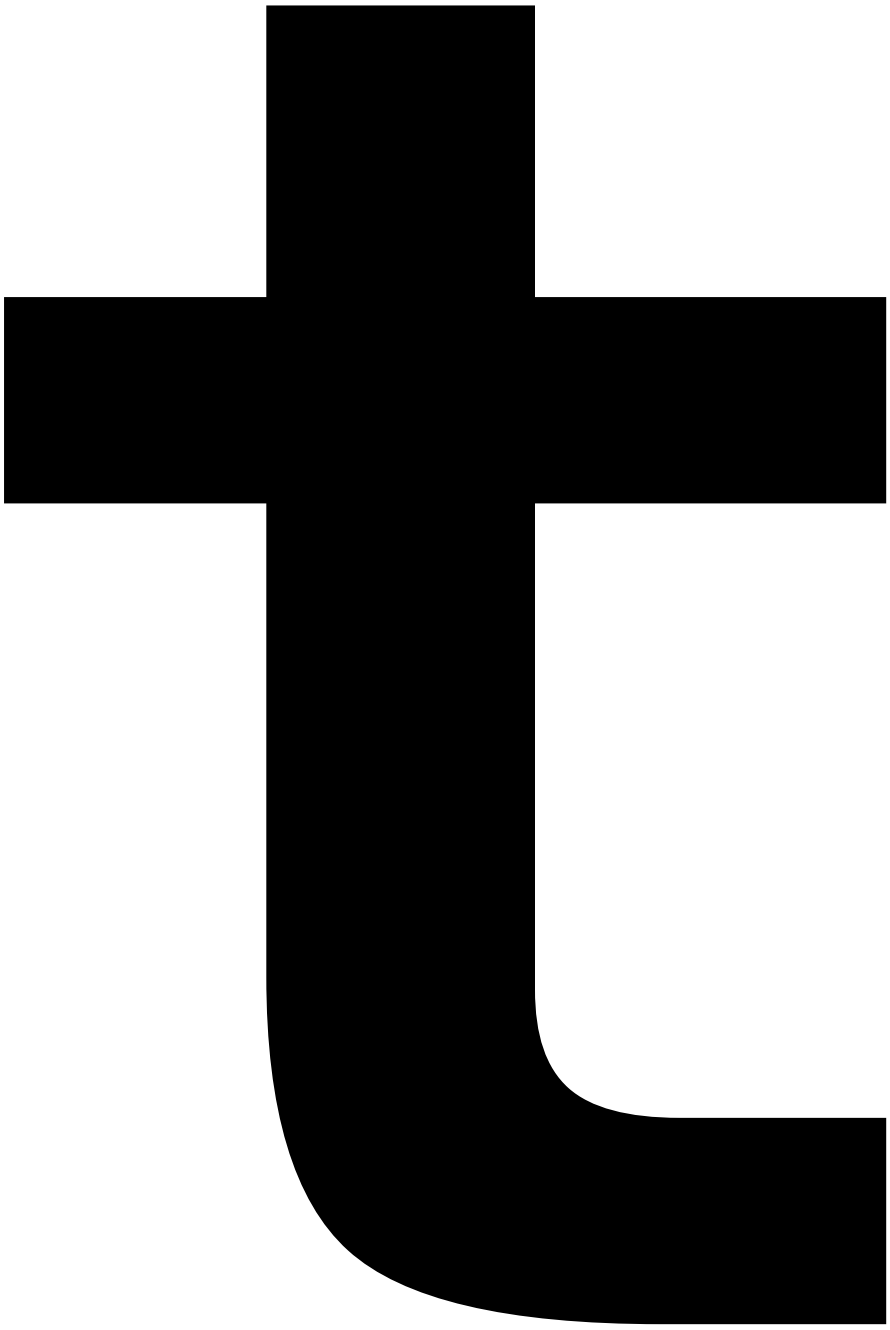


S

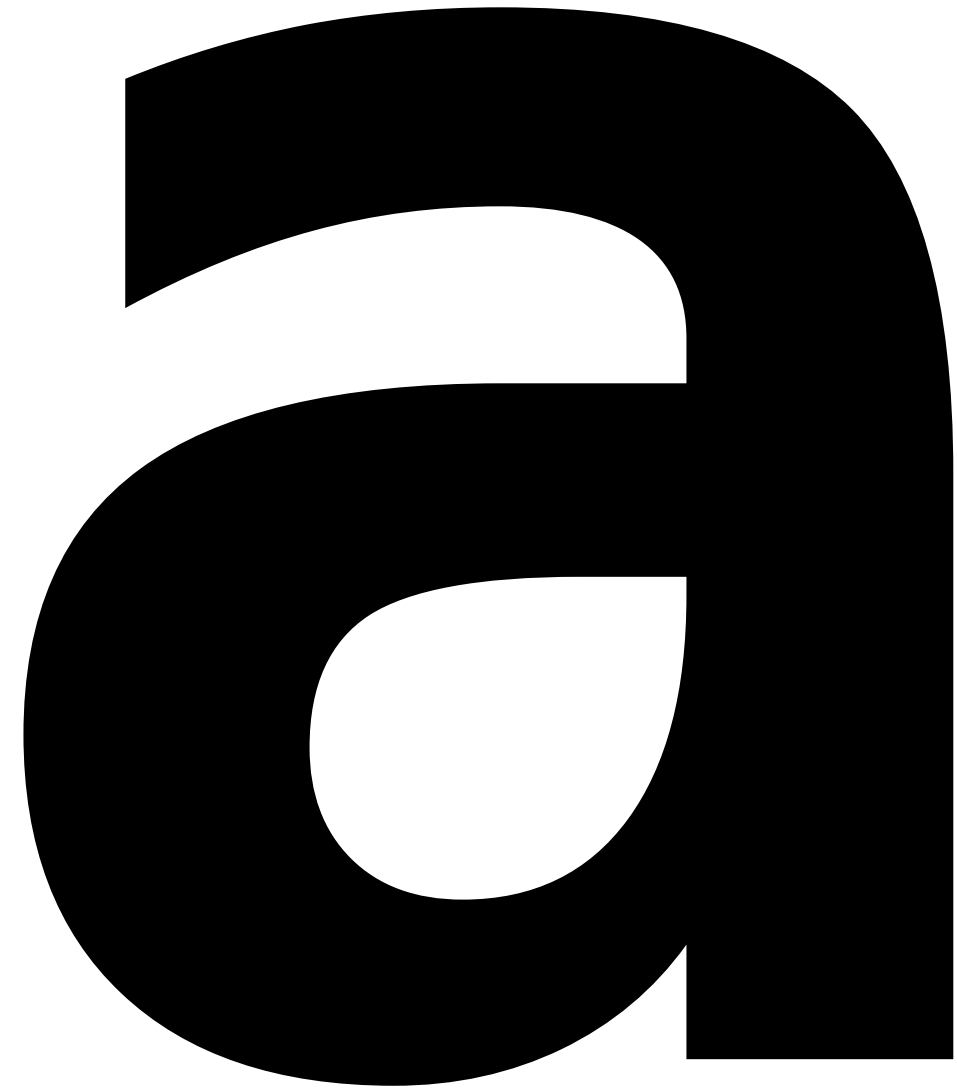


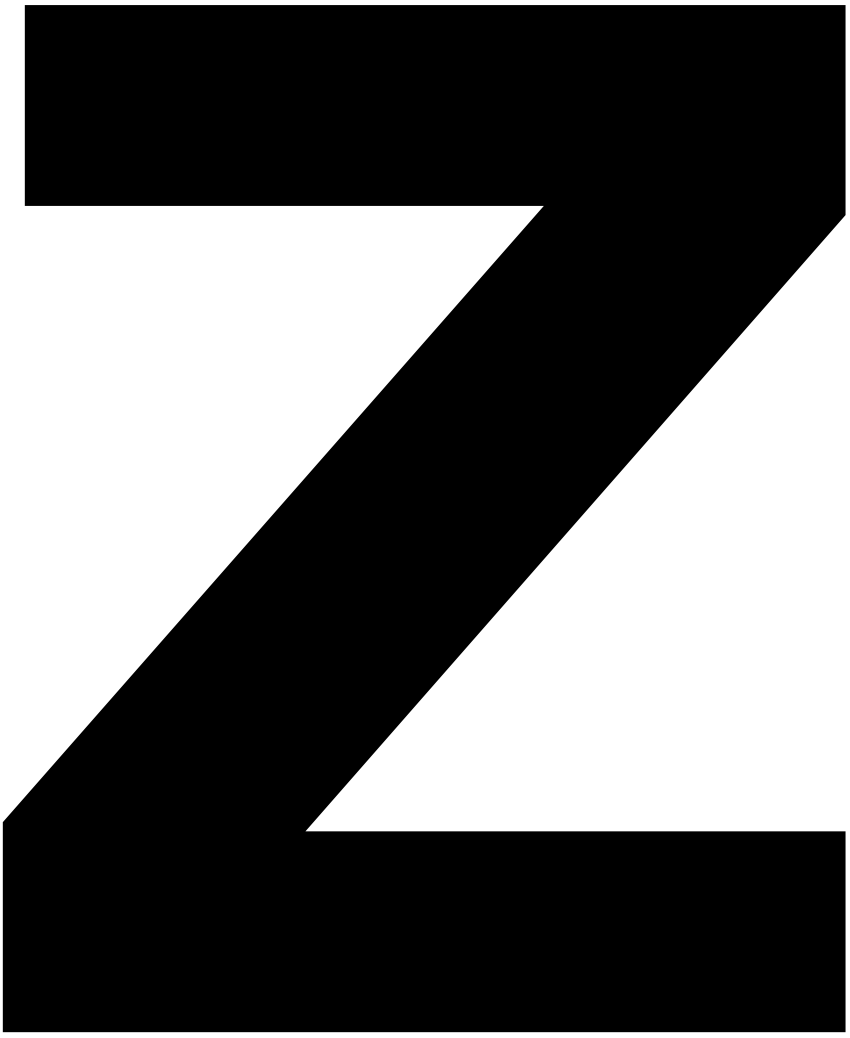




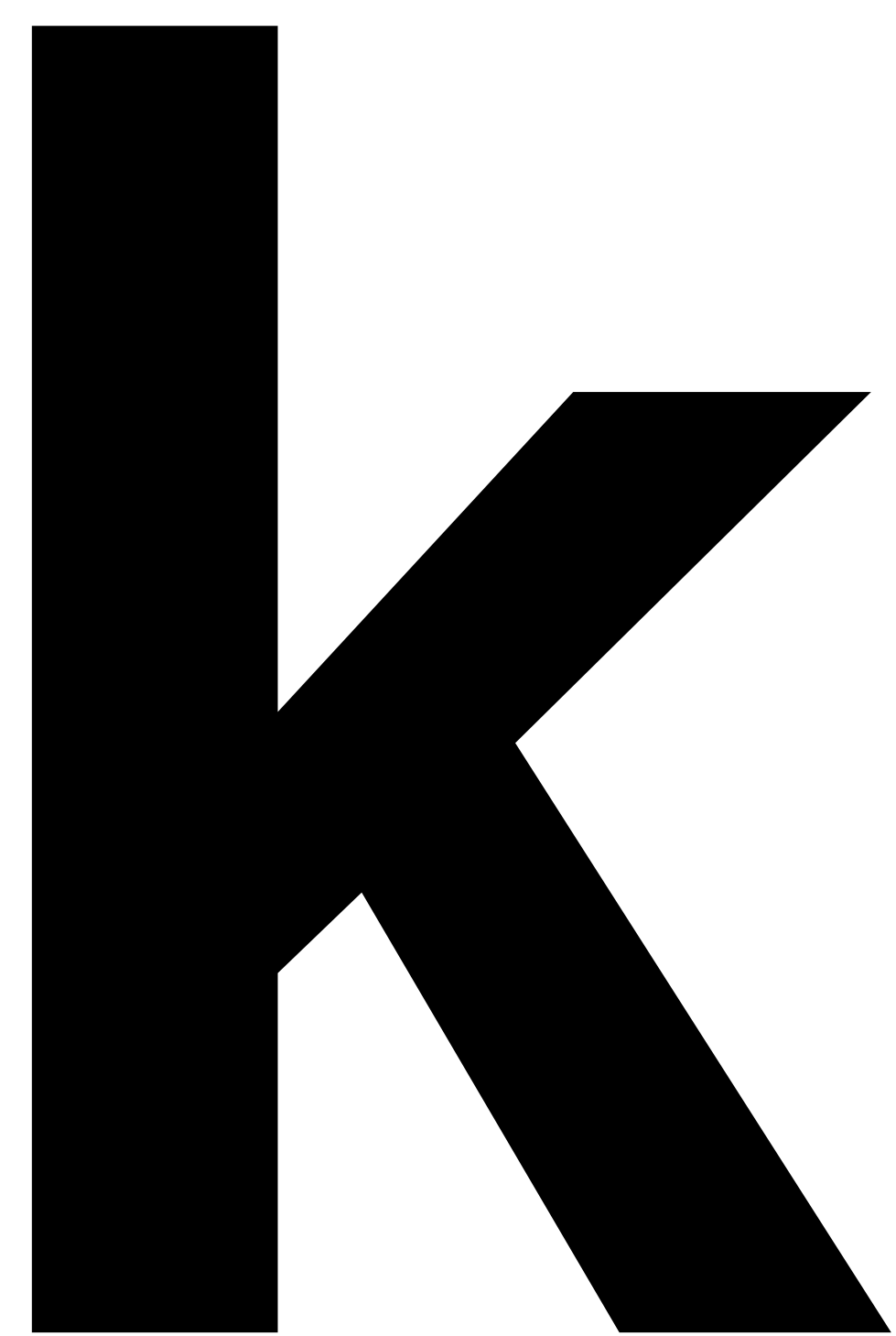


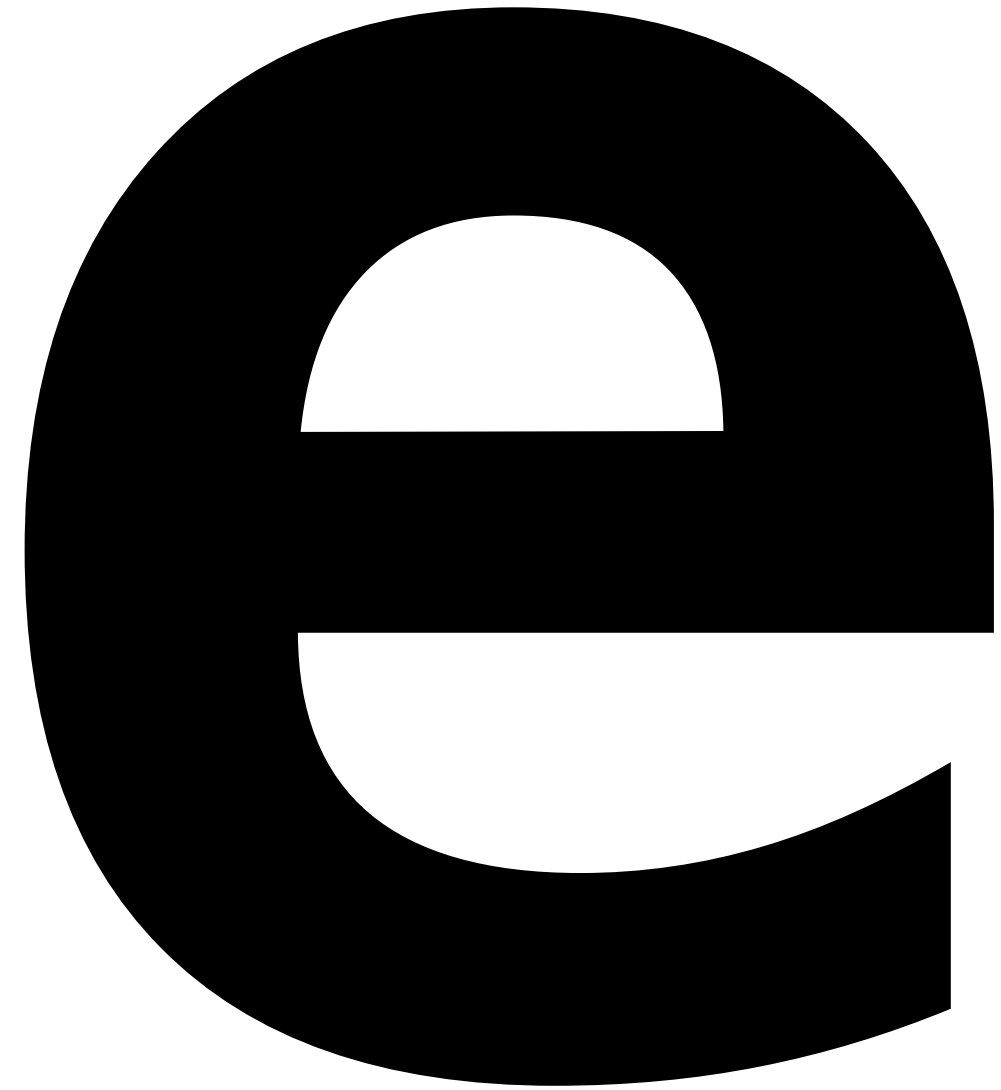
d

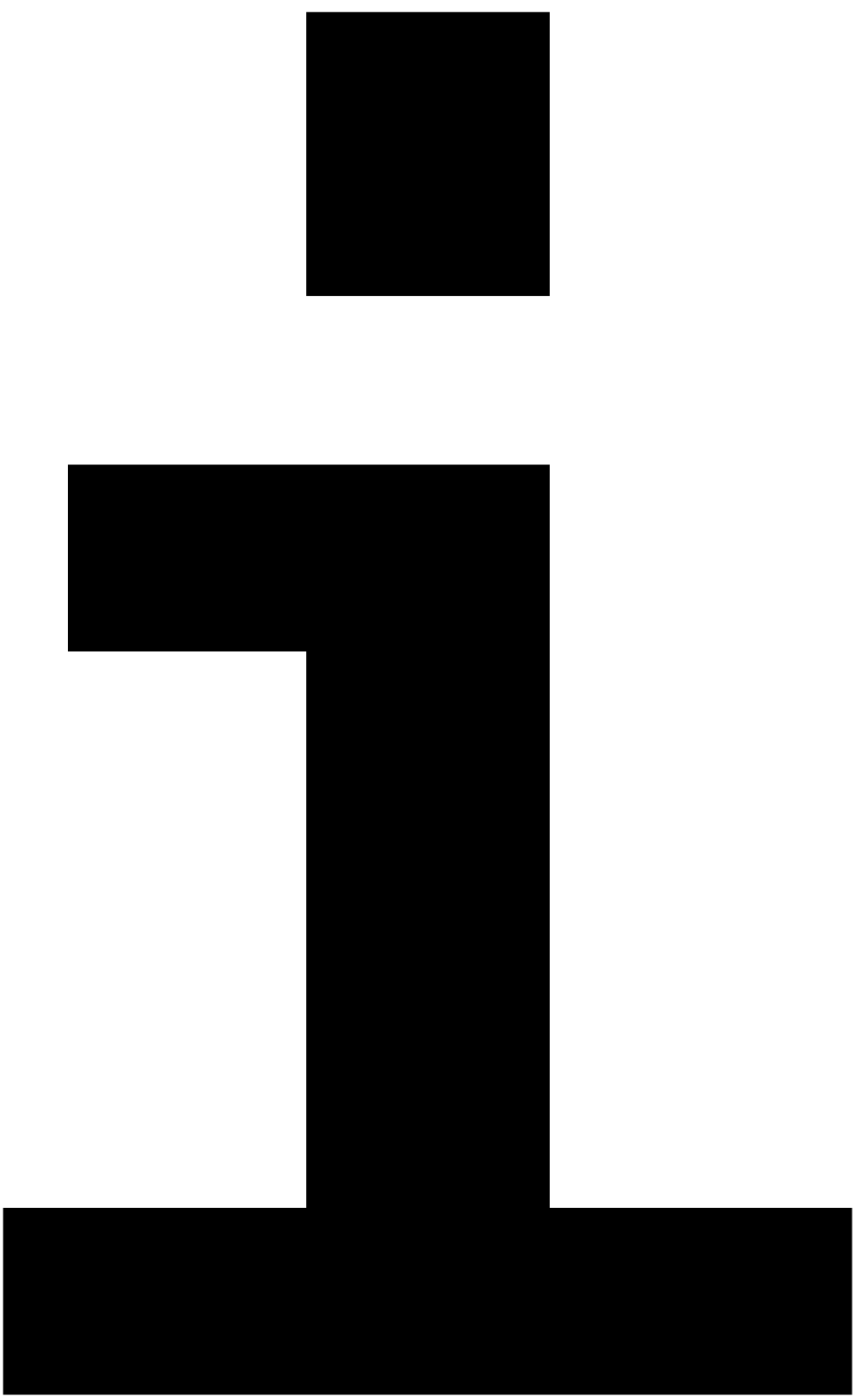


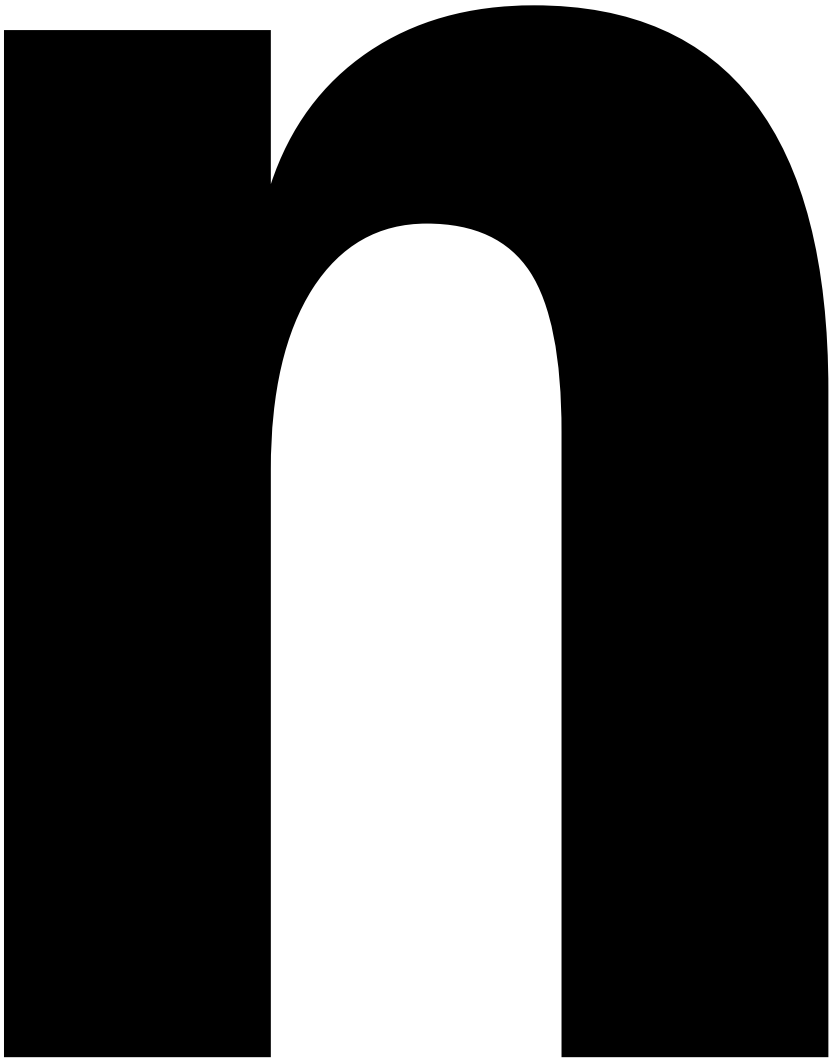


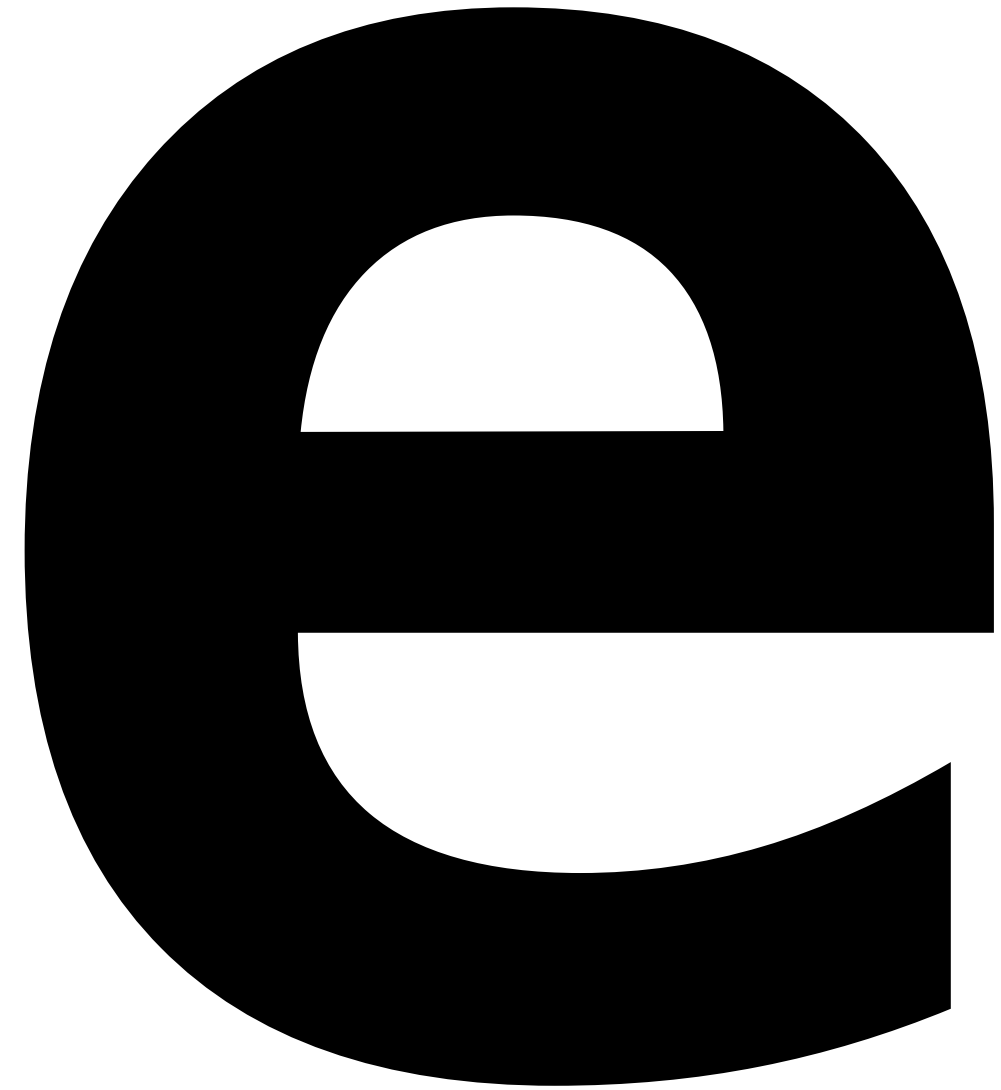
u

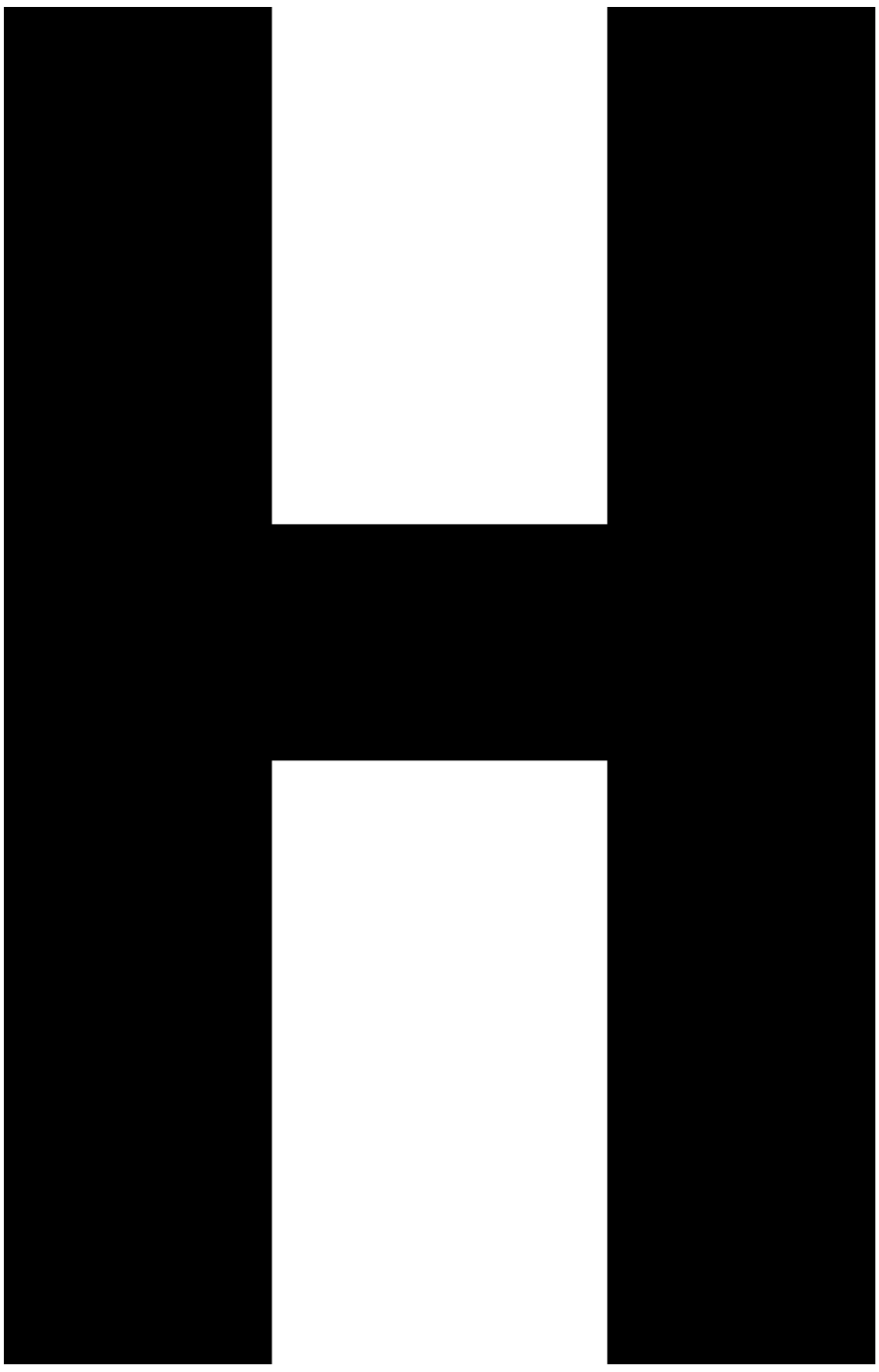


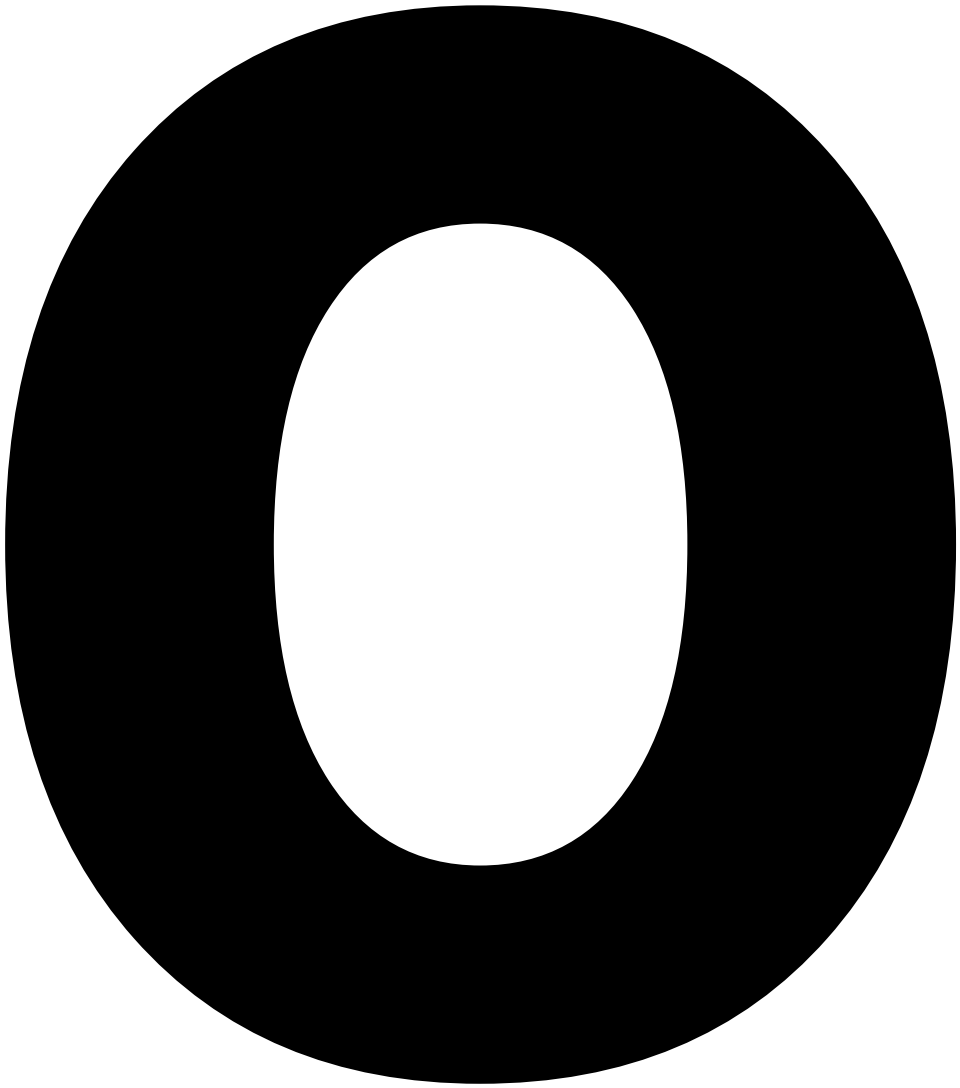


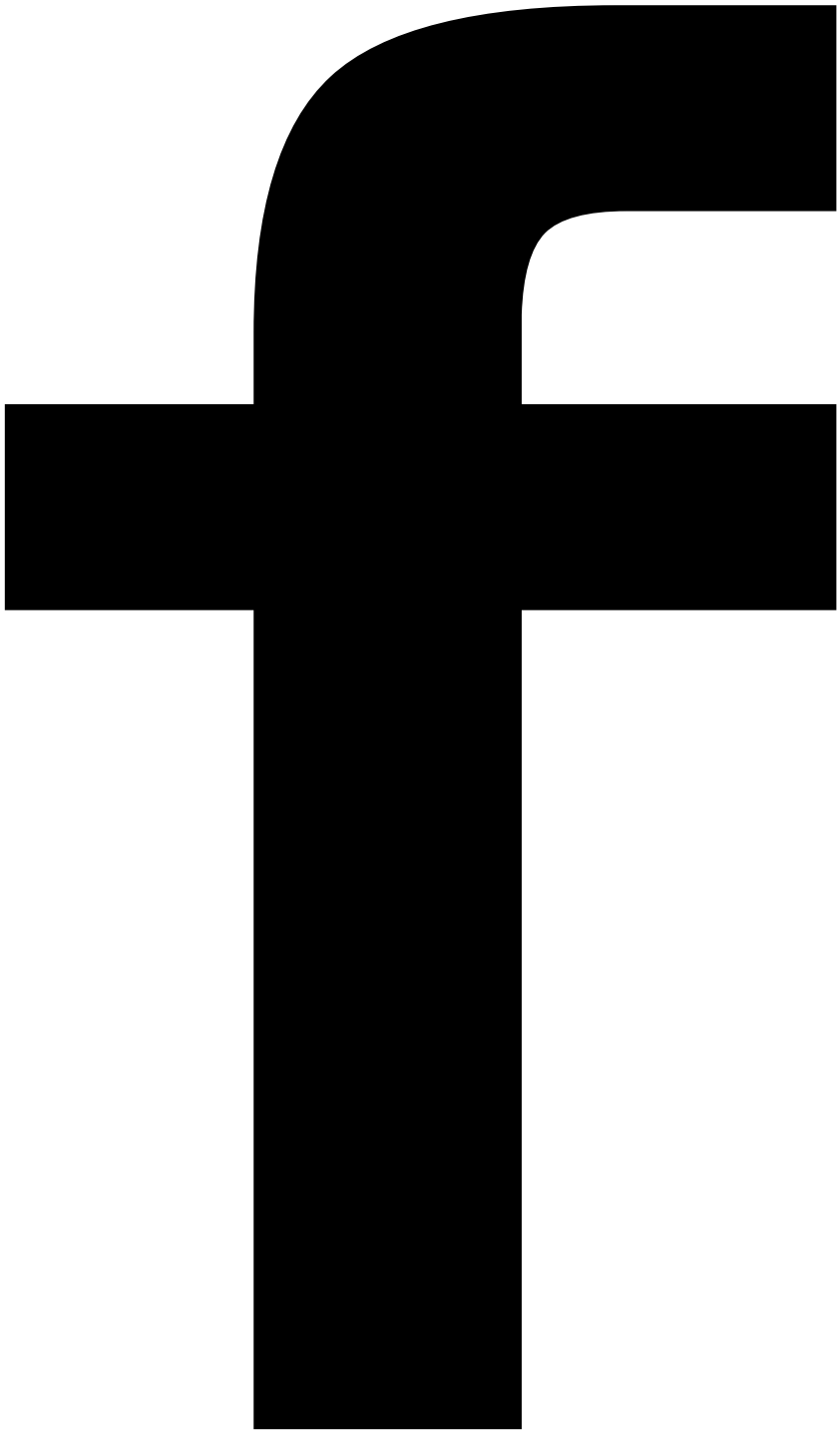


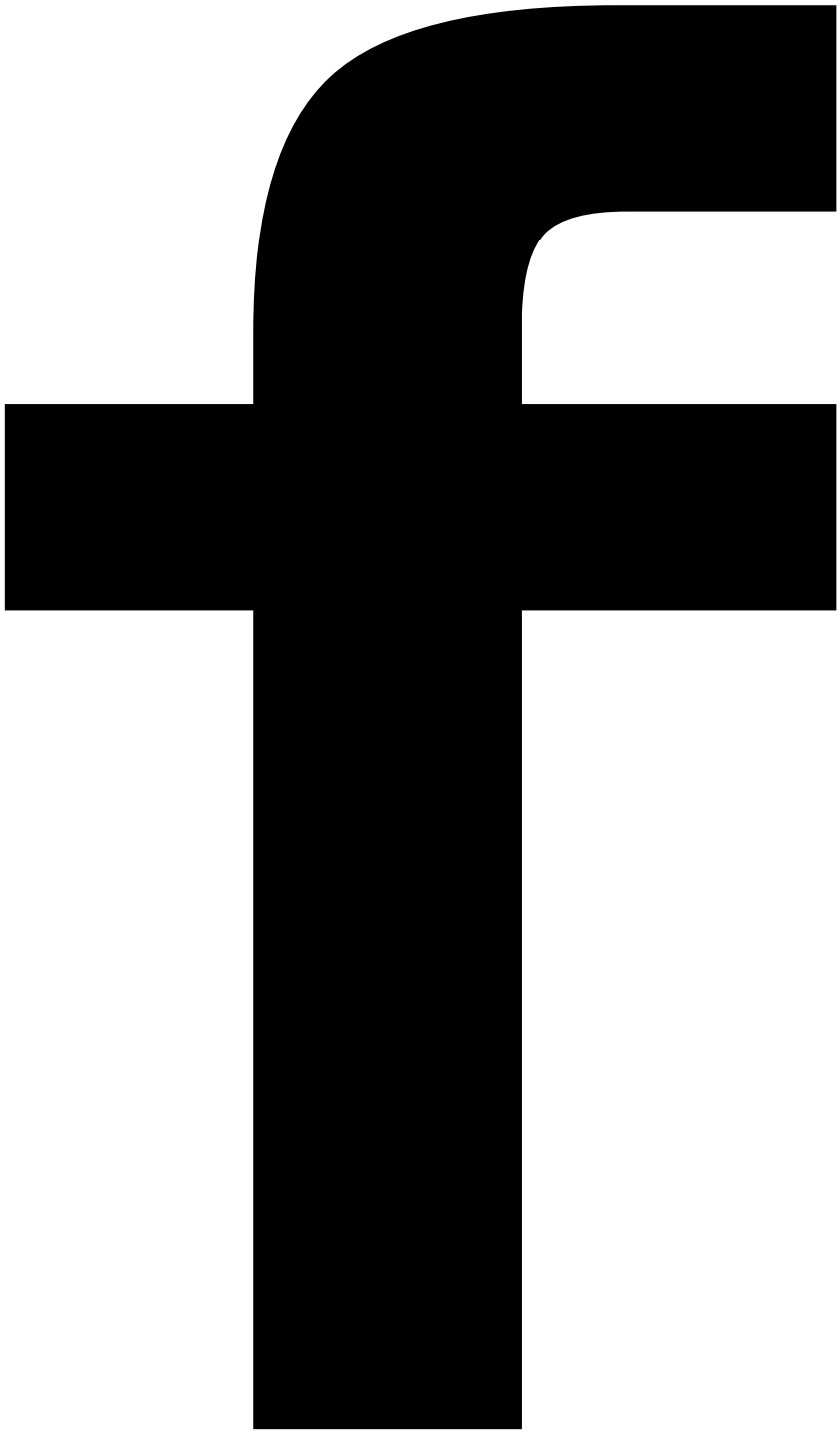


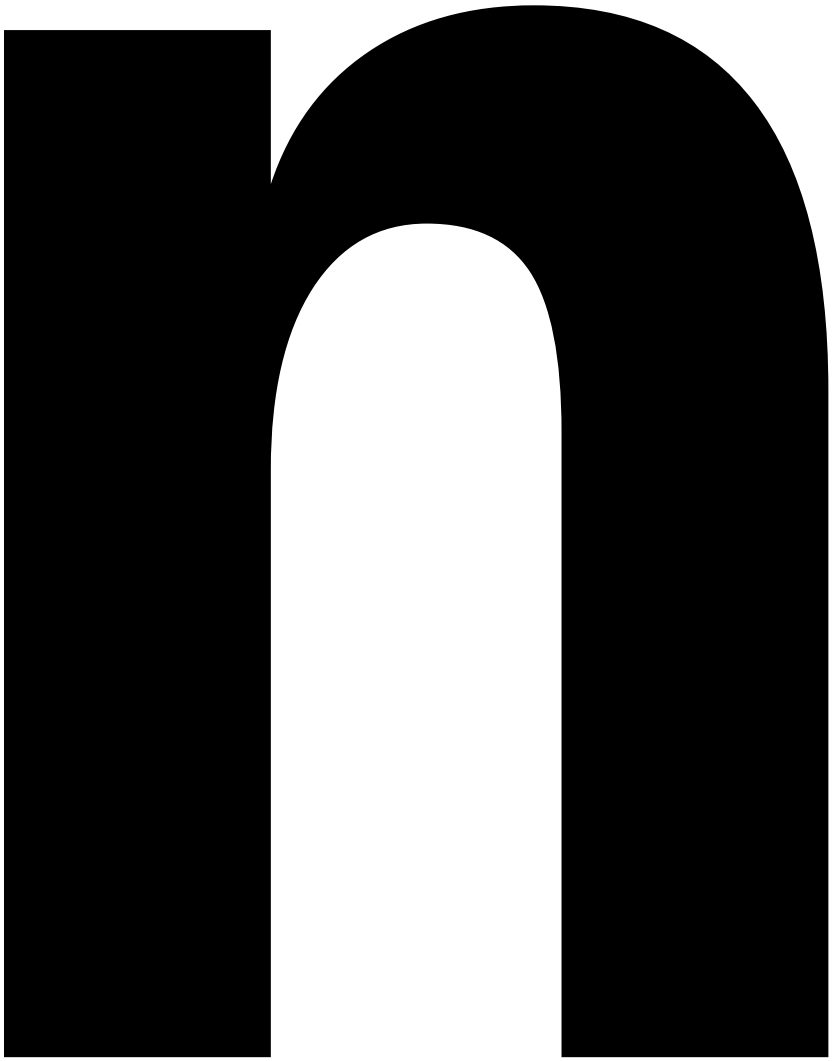




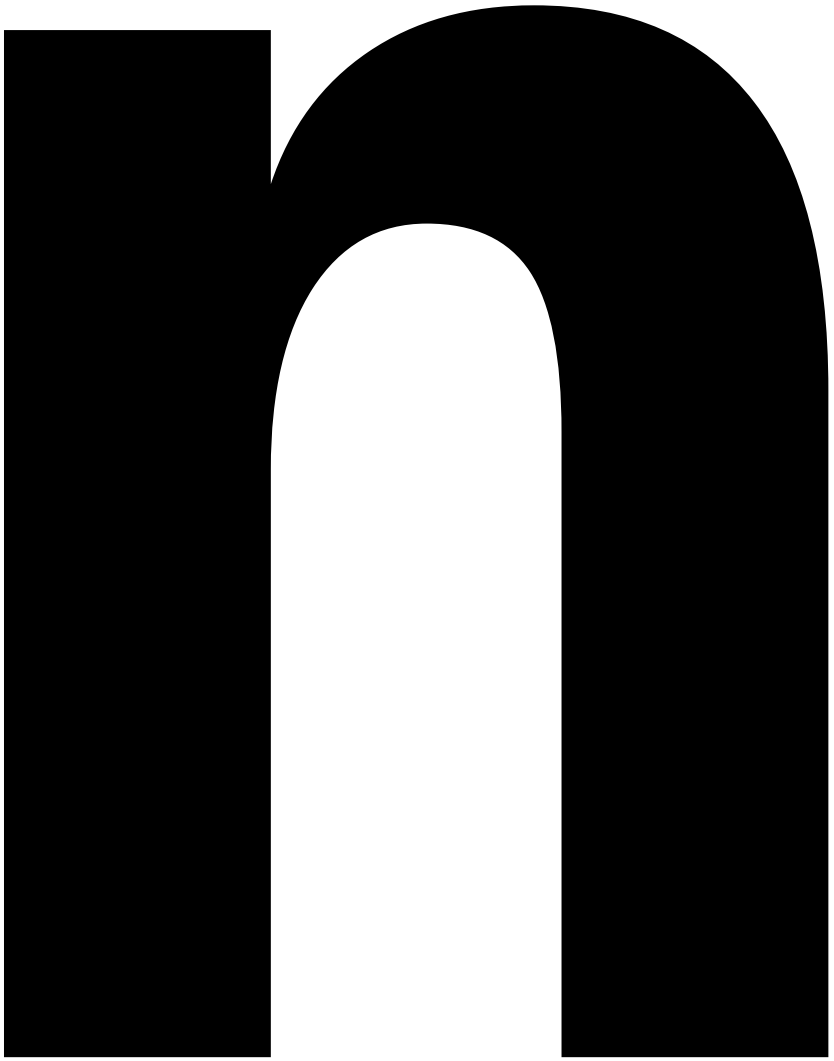


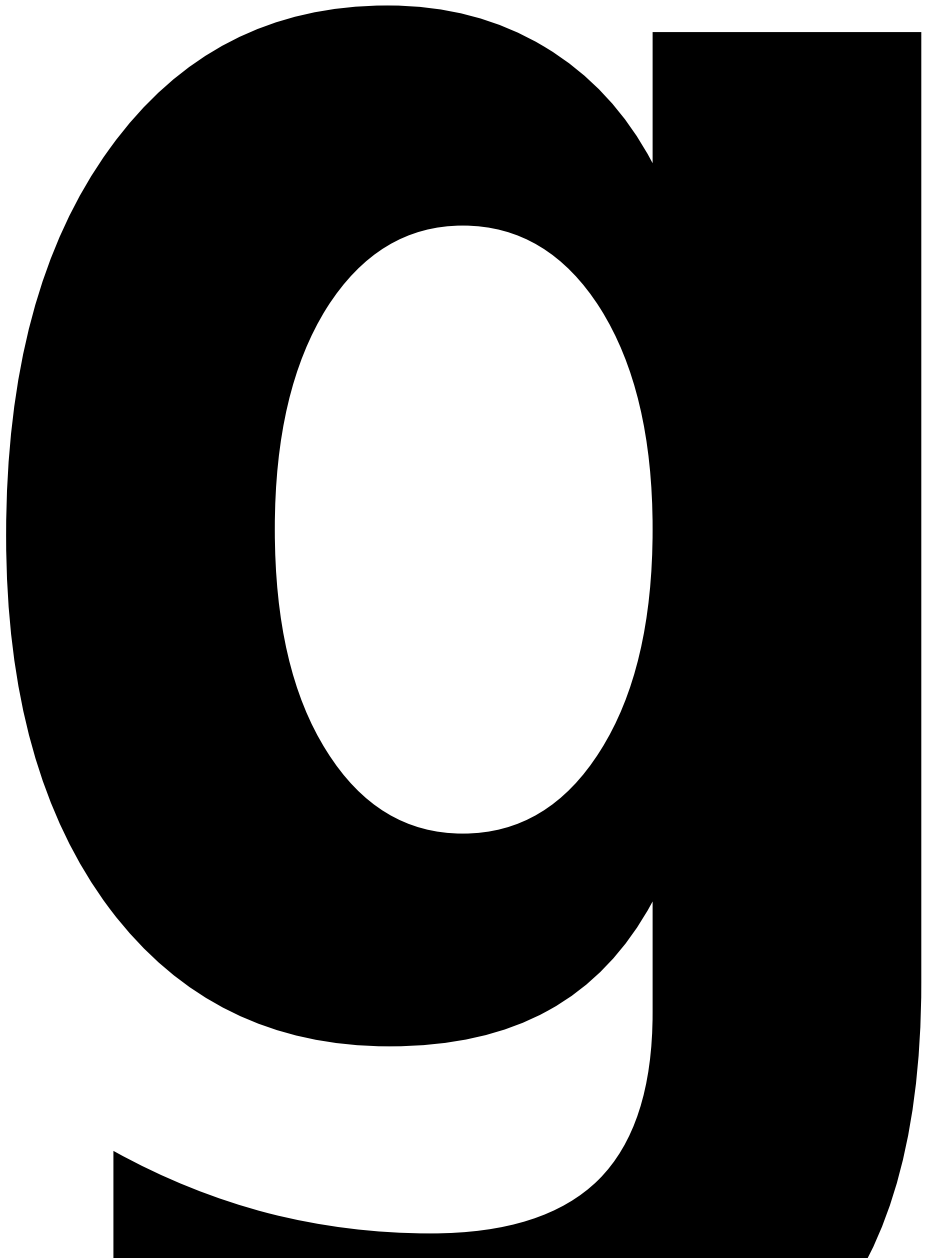


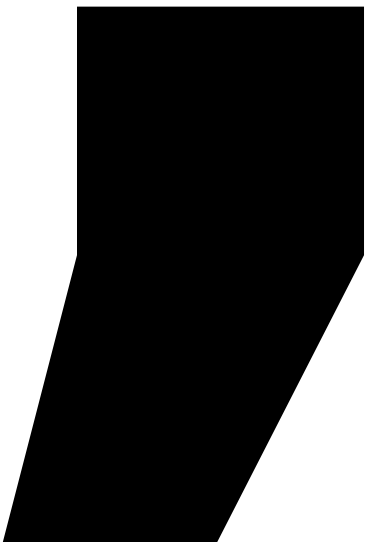




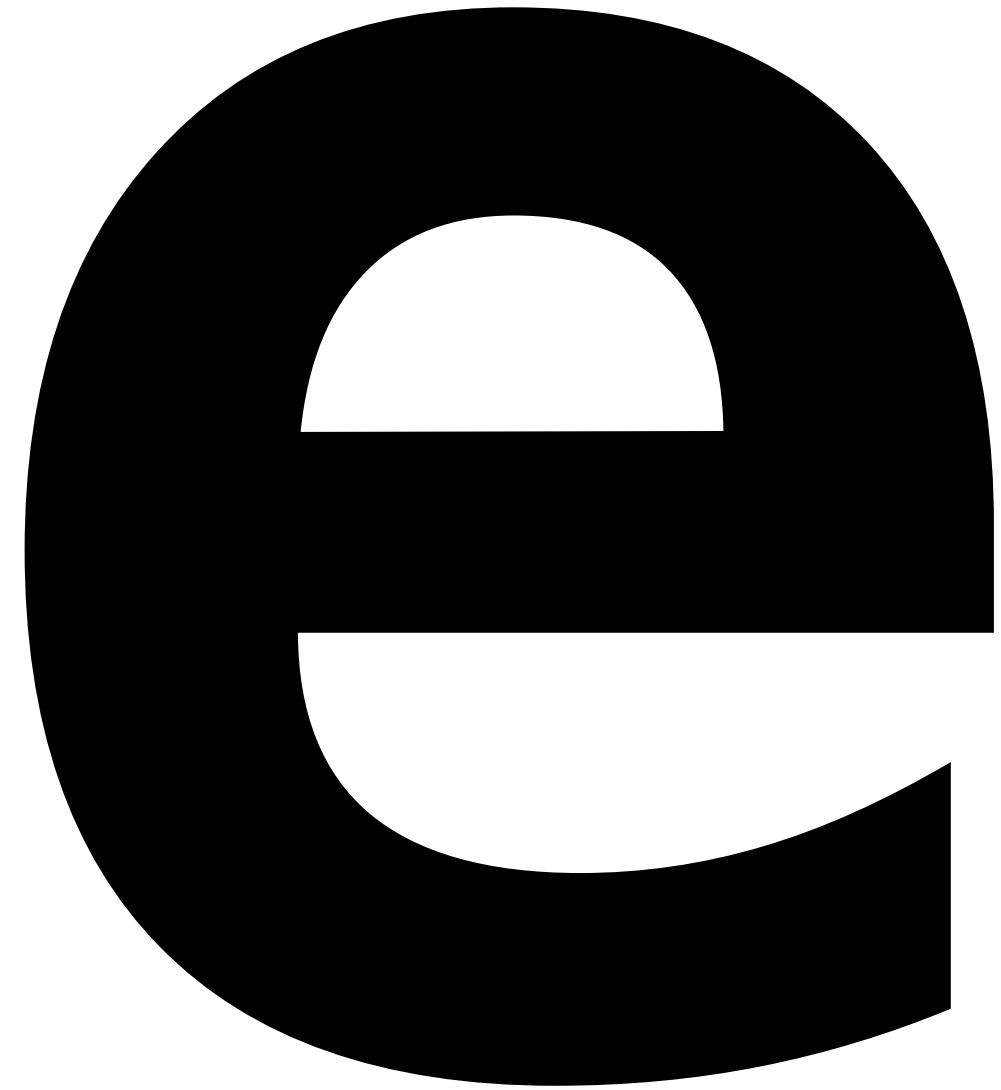
u

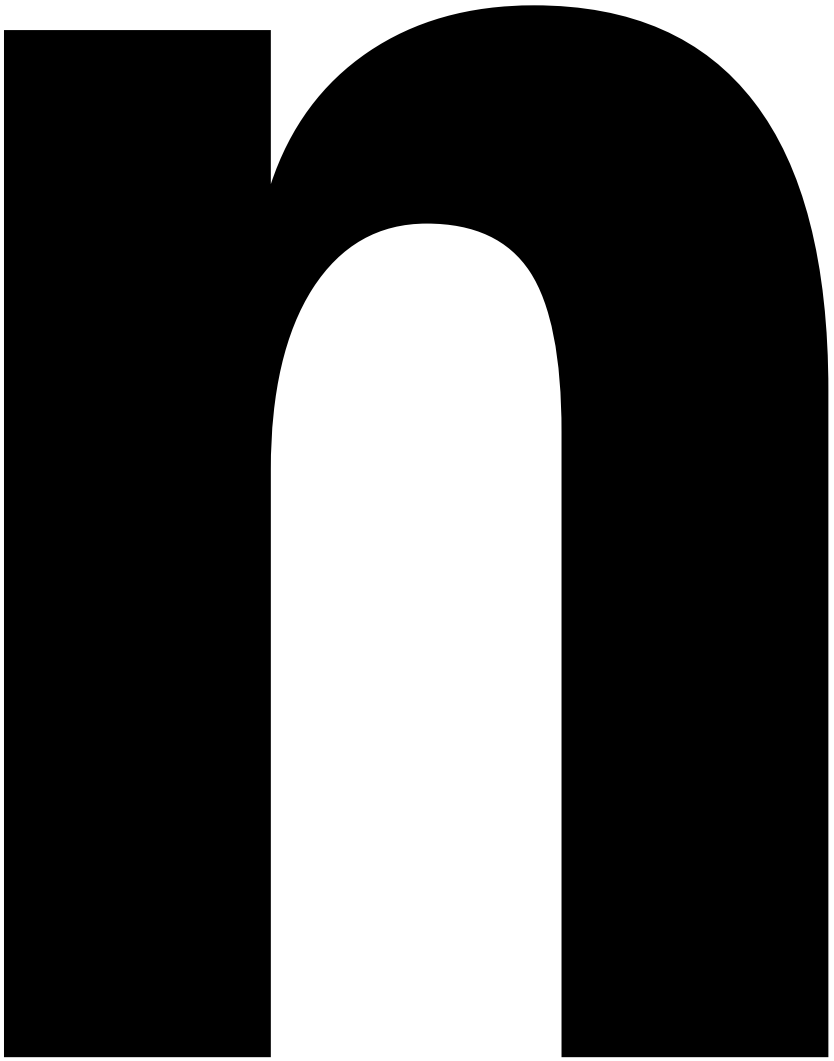


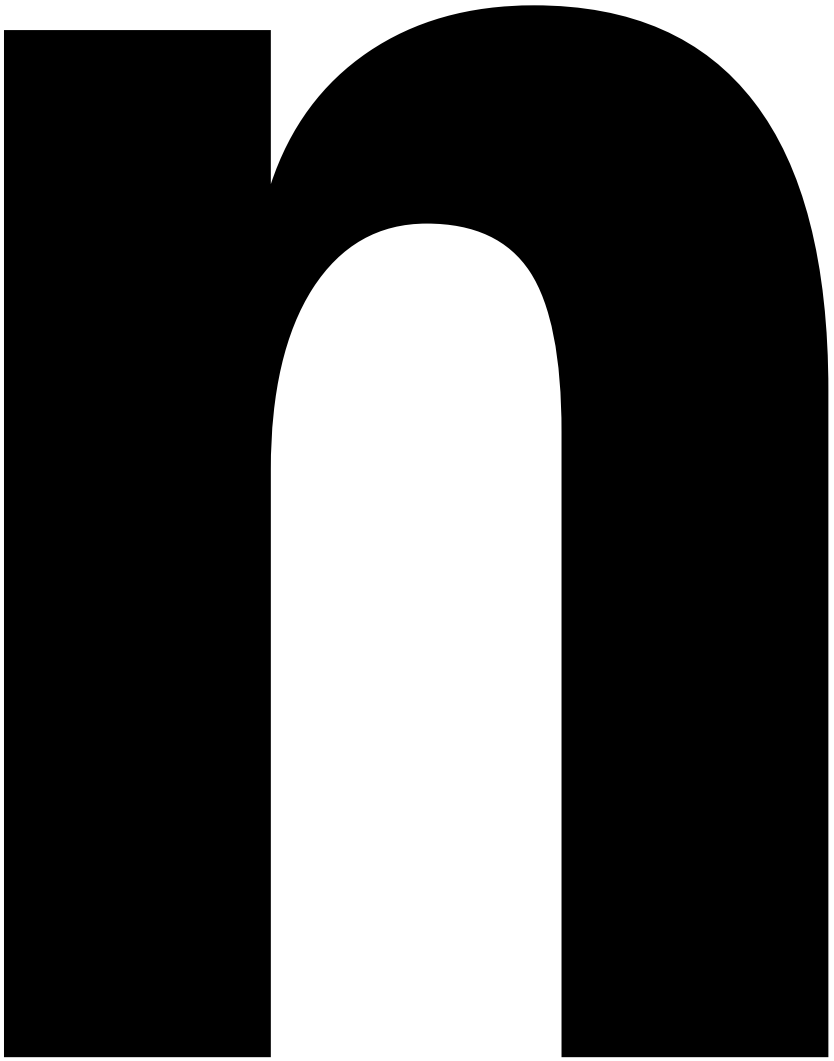




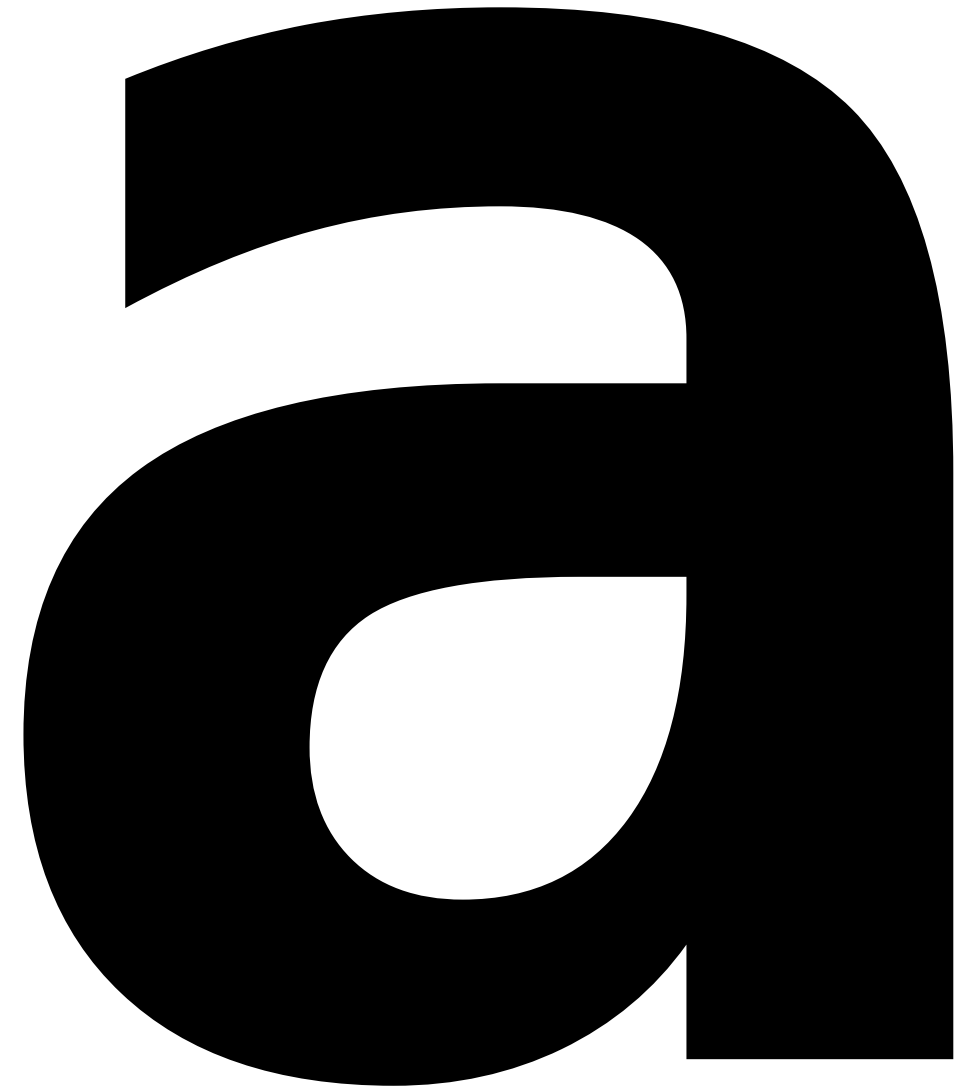
d







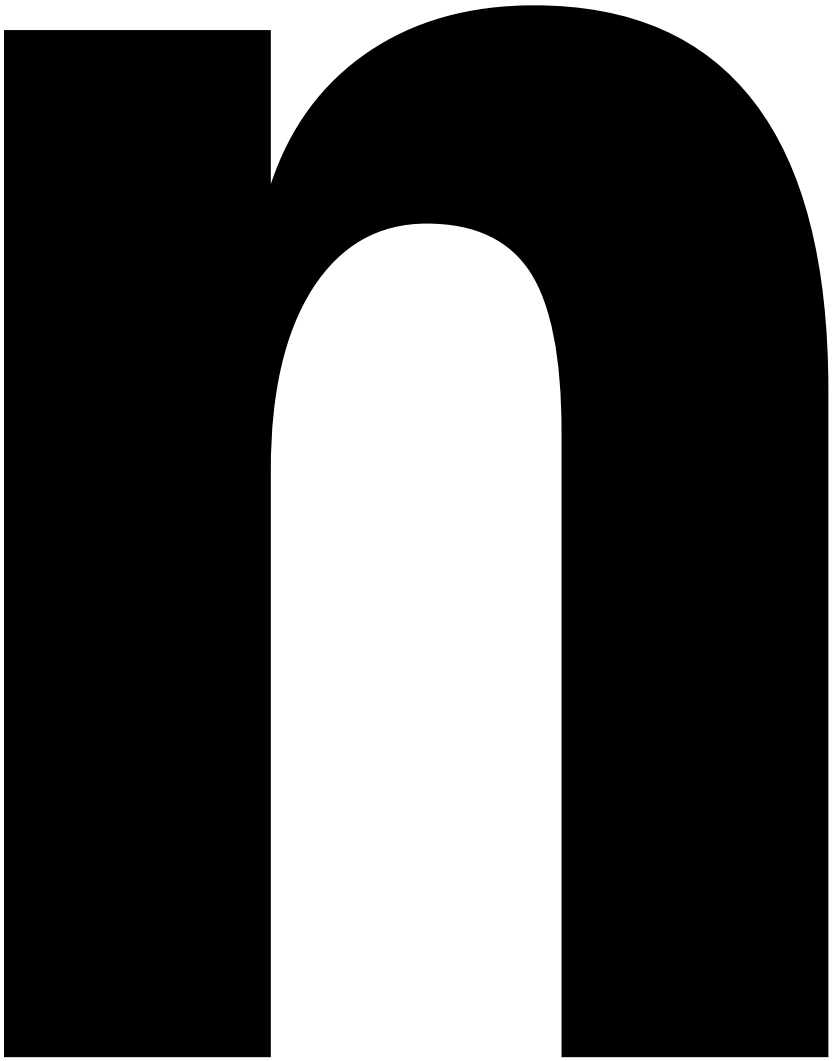
d



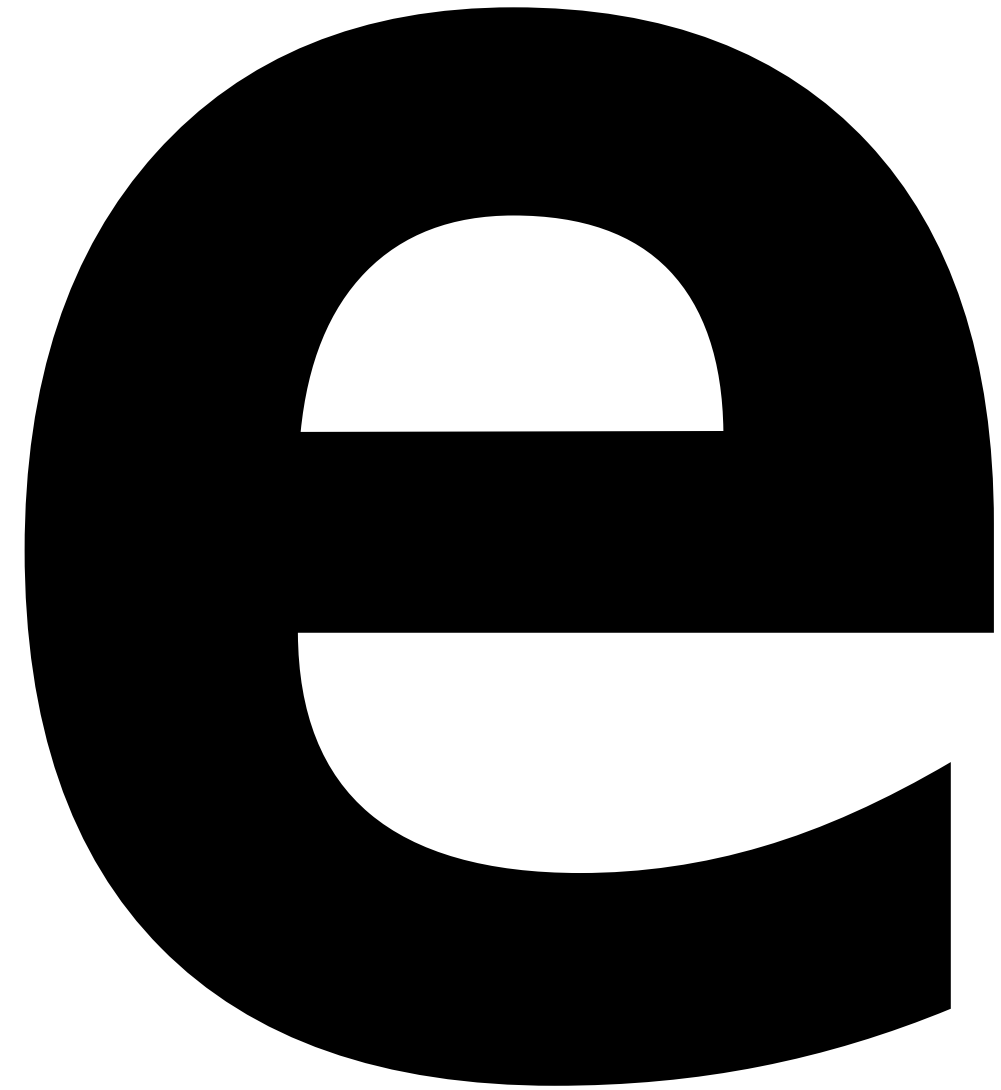
S

B

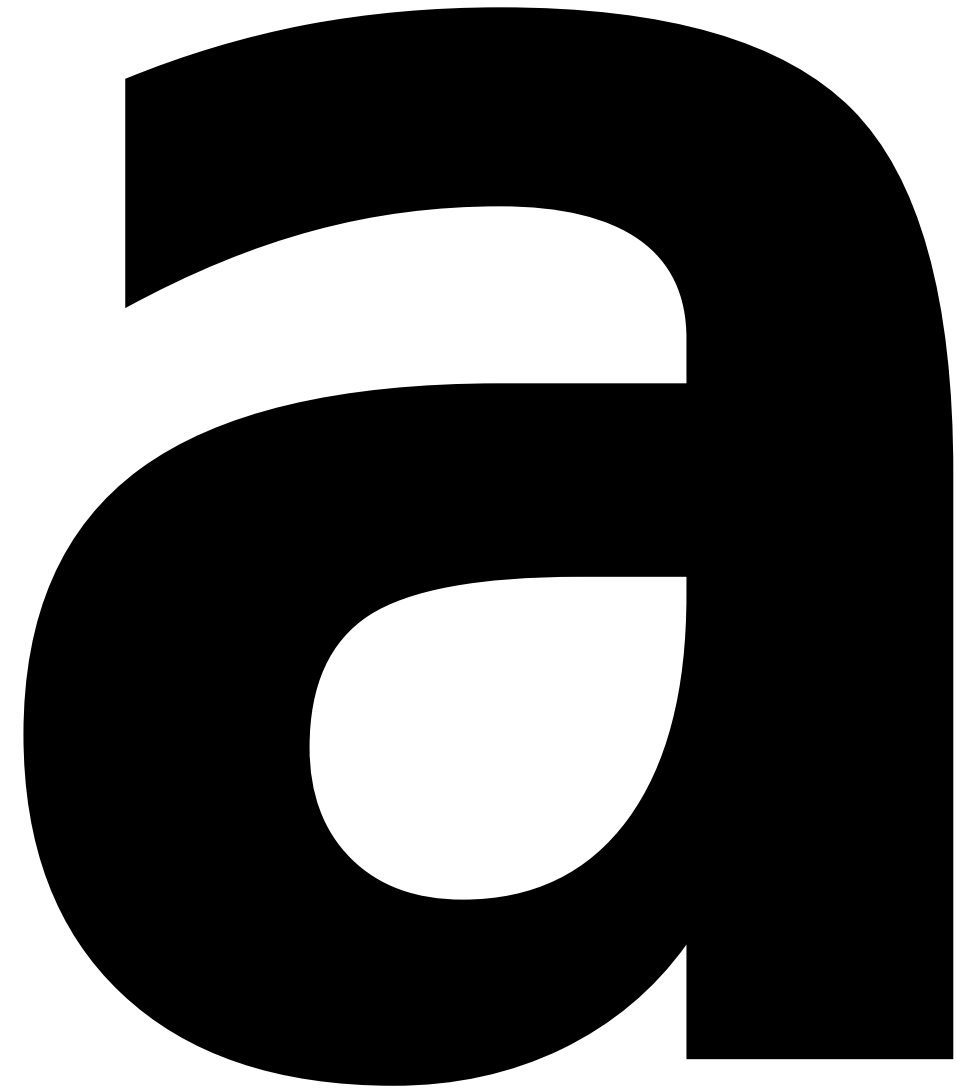
u

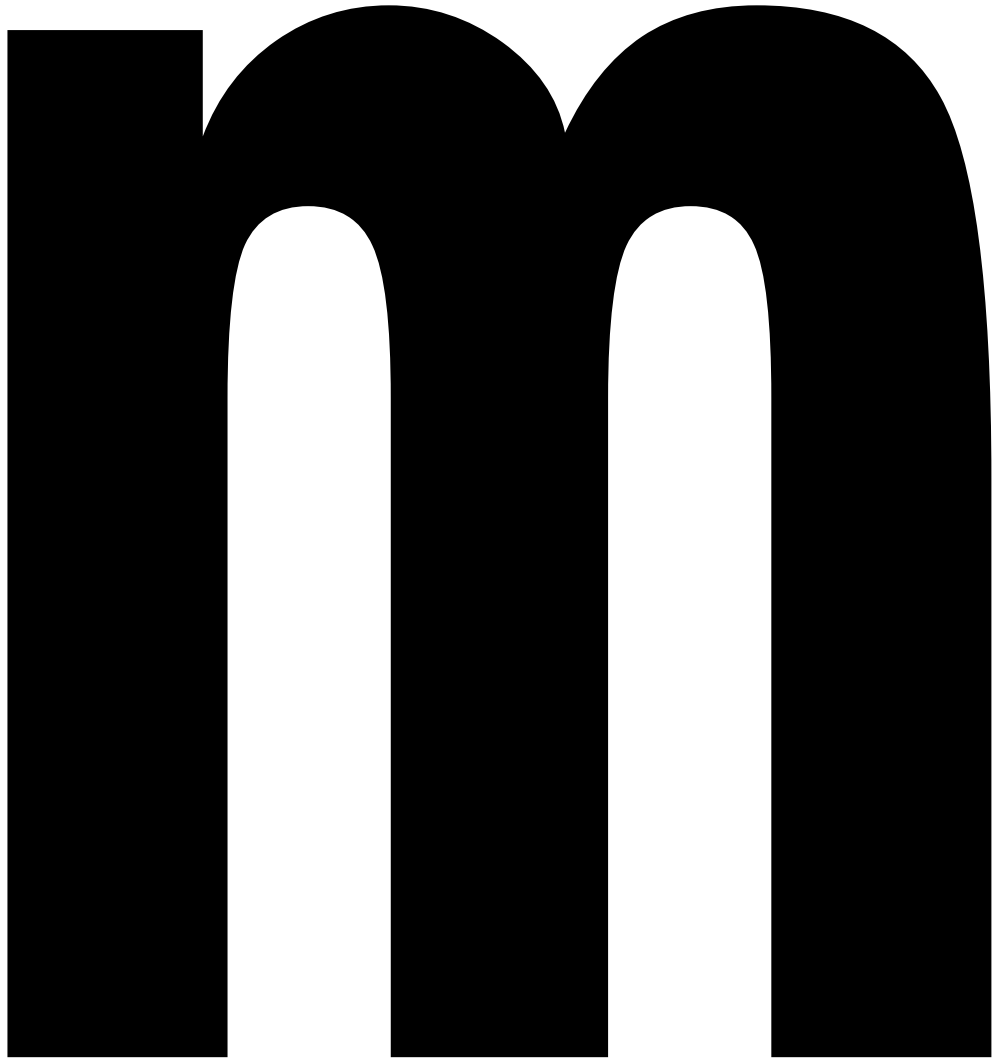


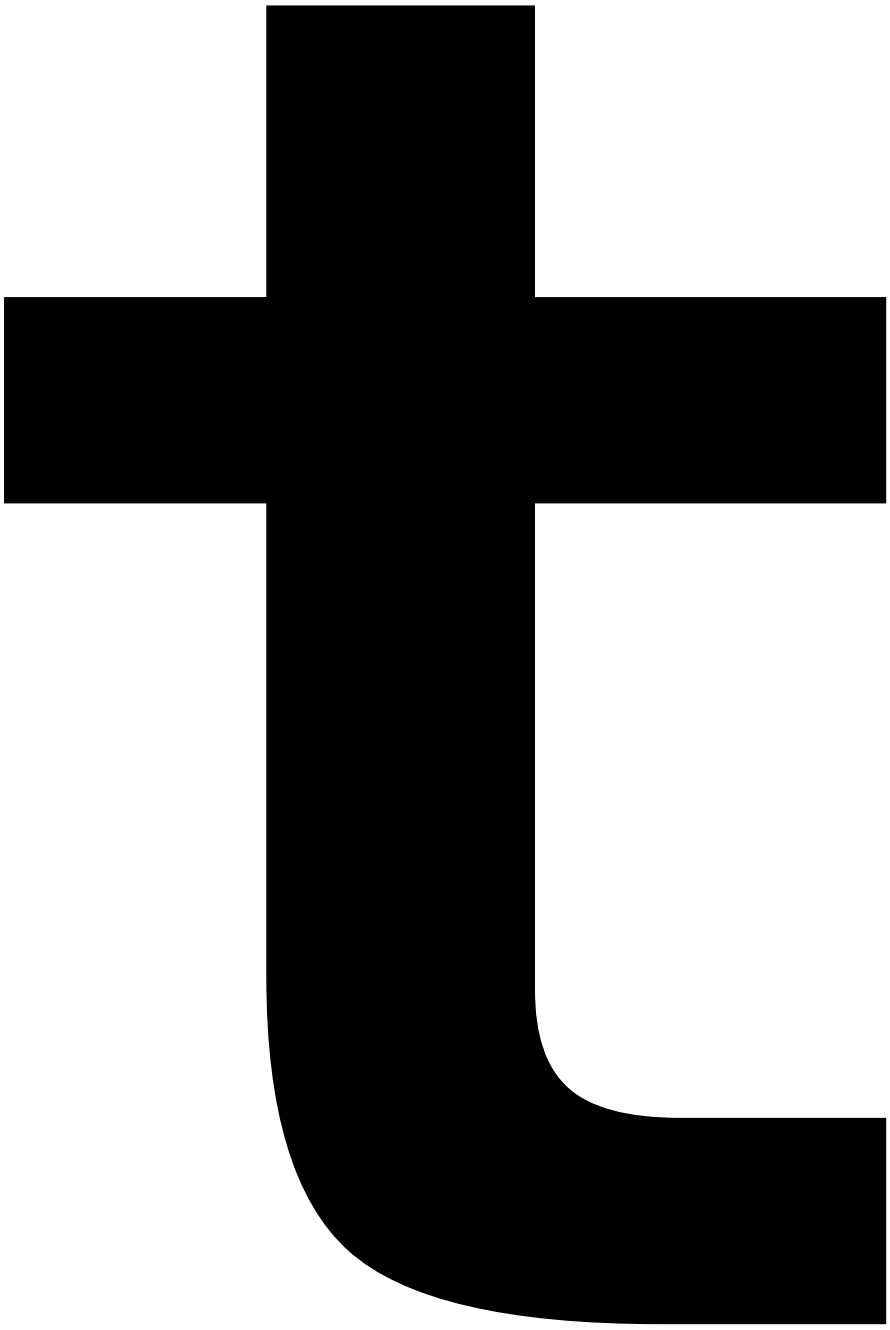
d

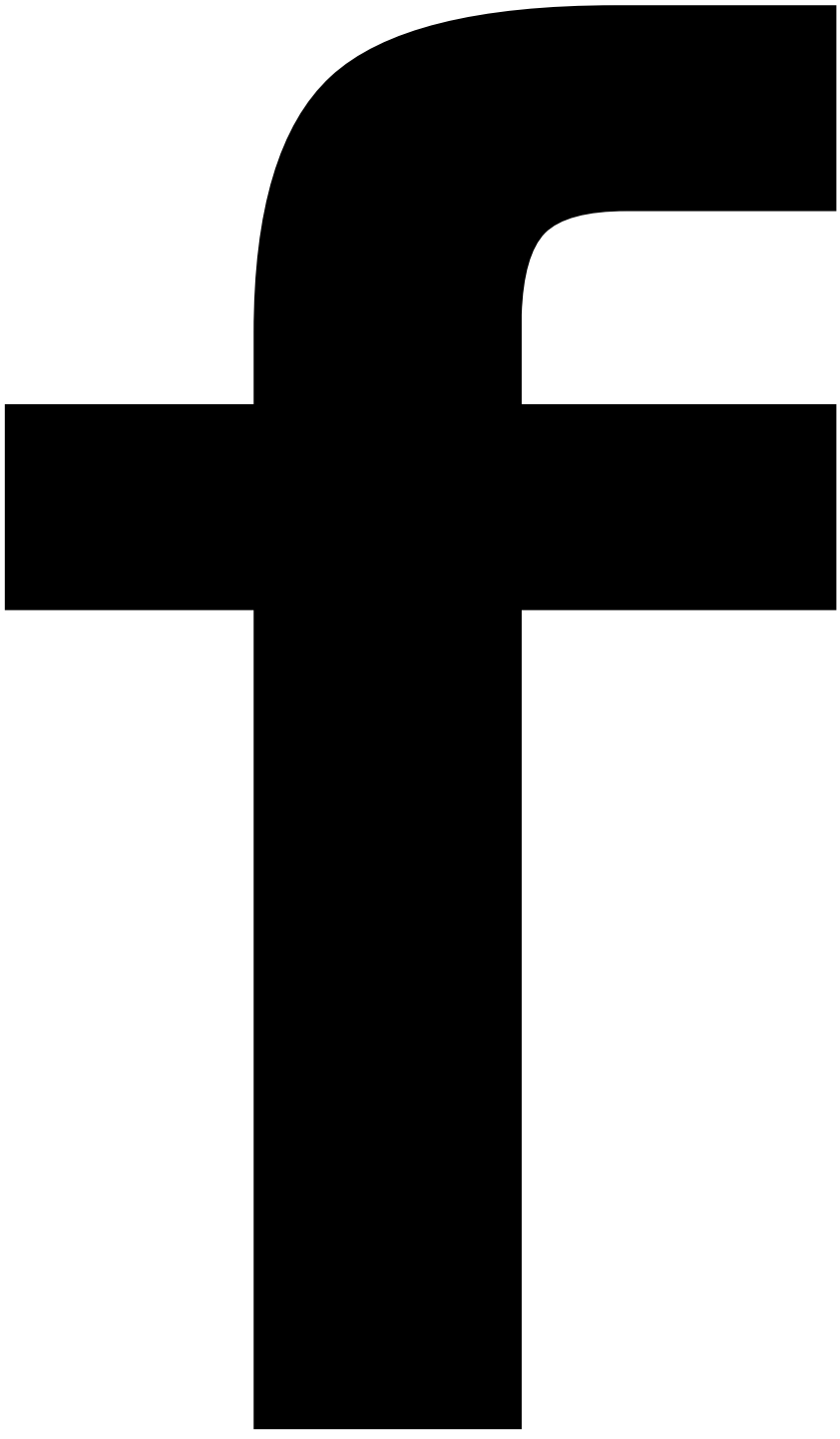


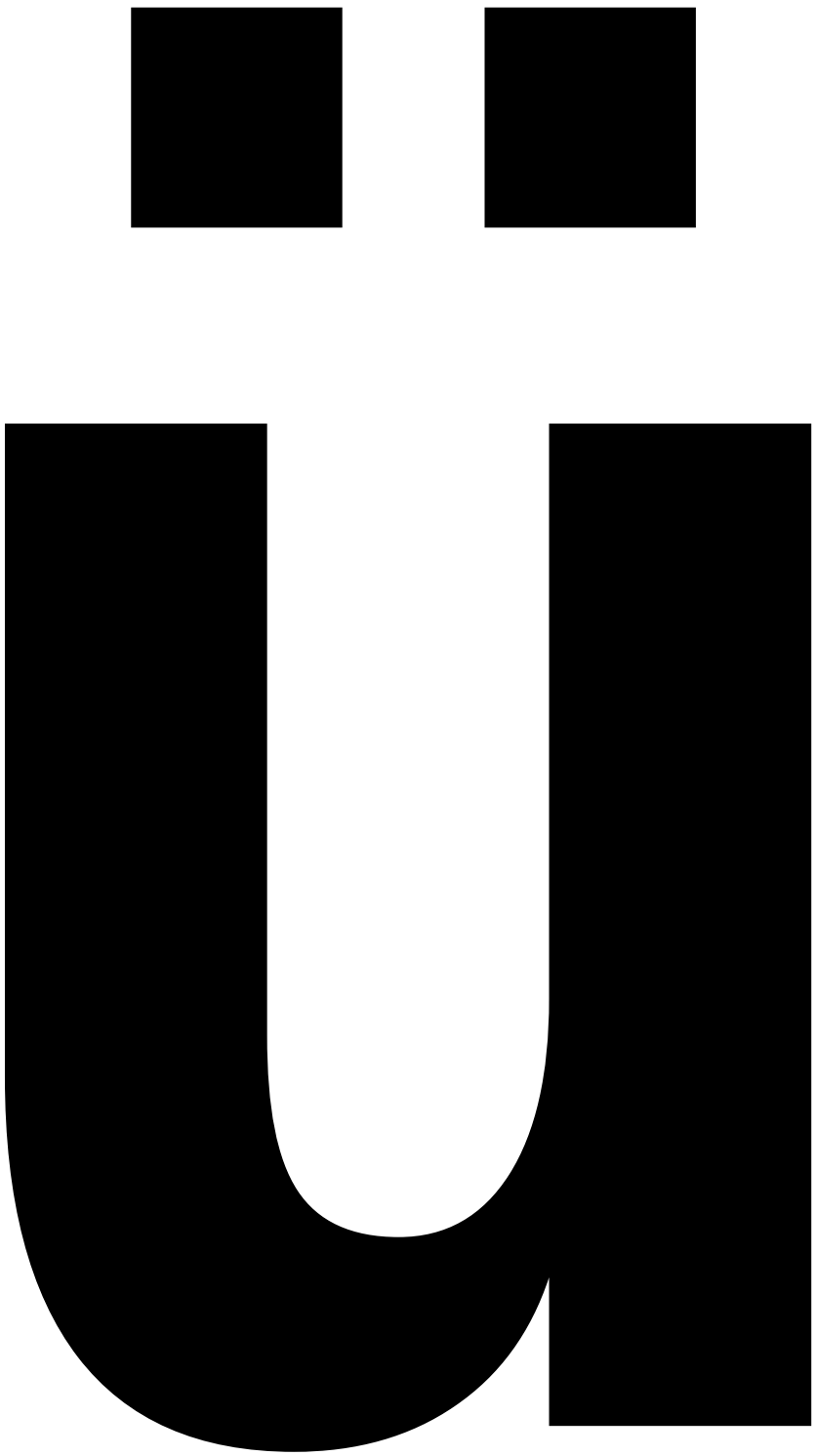
S

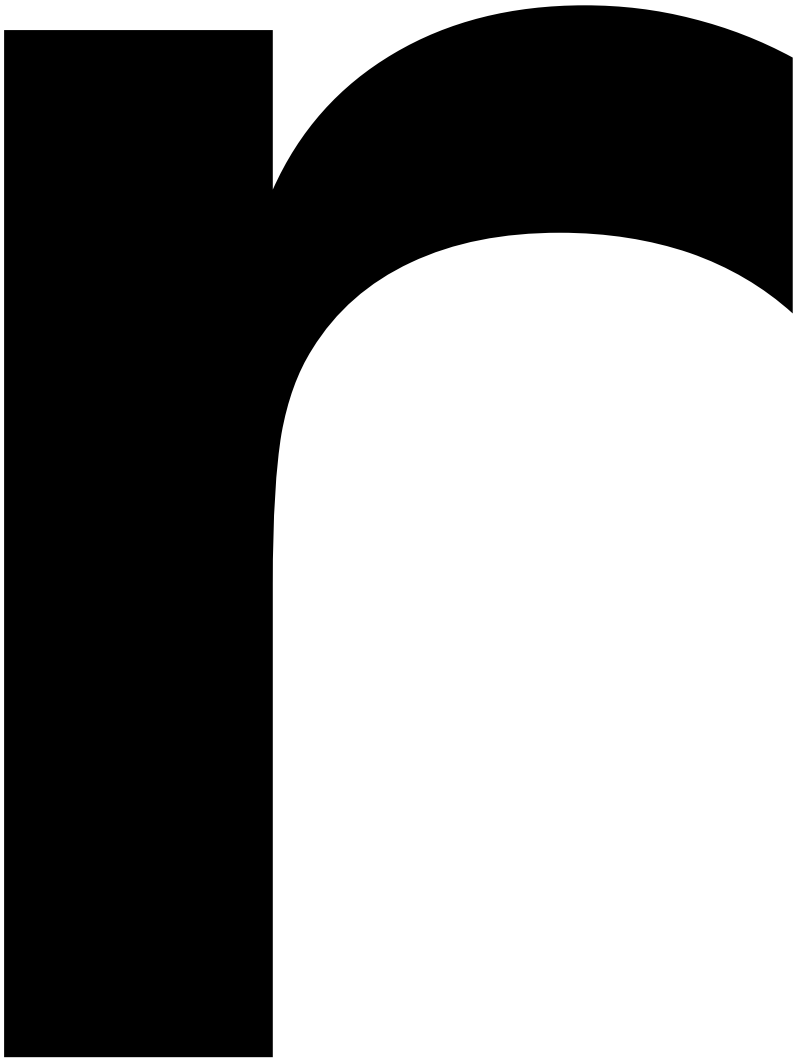


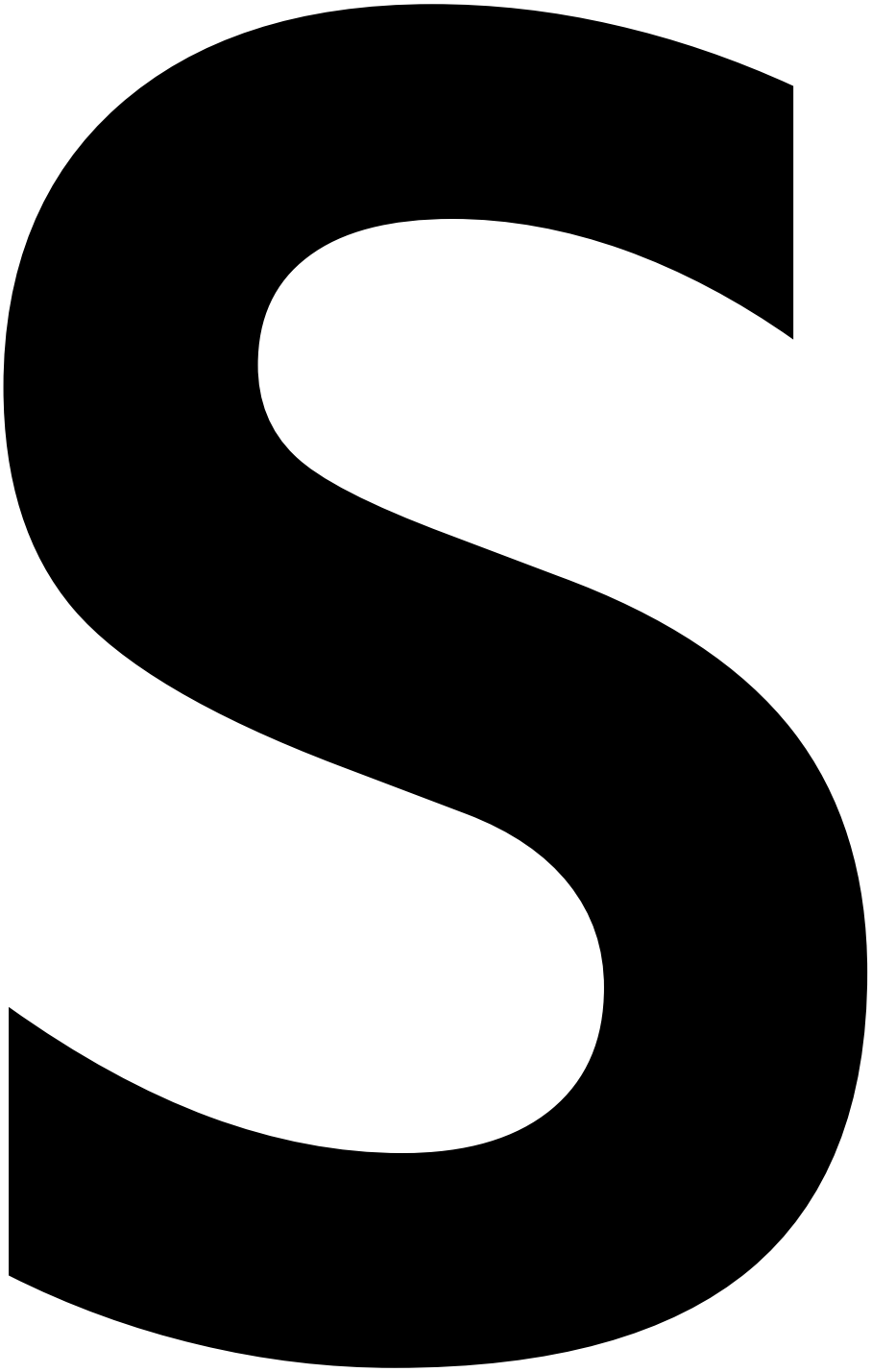


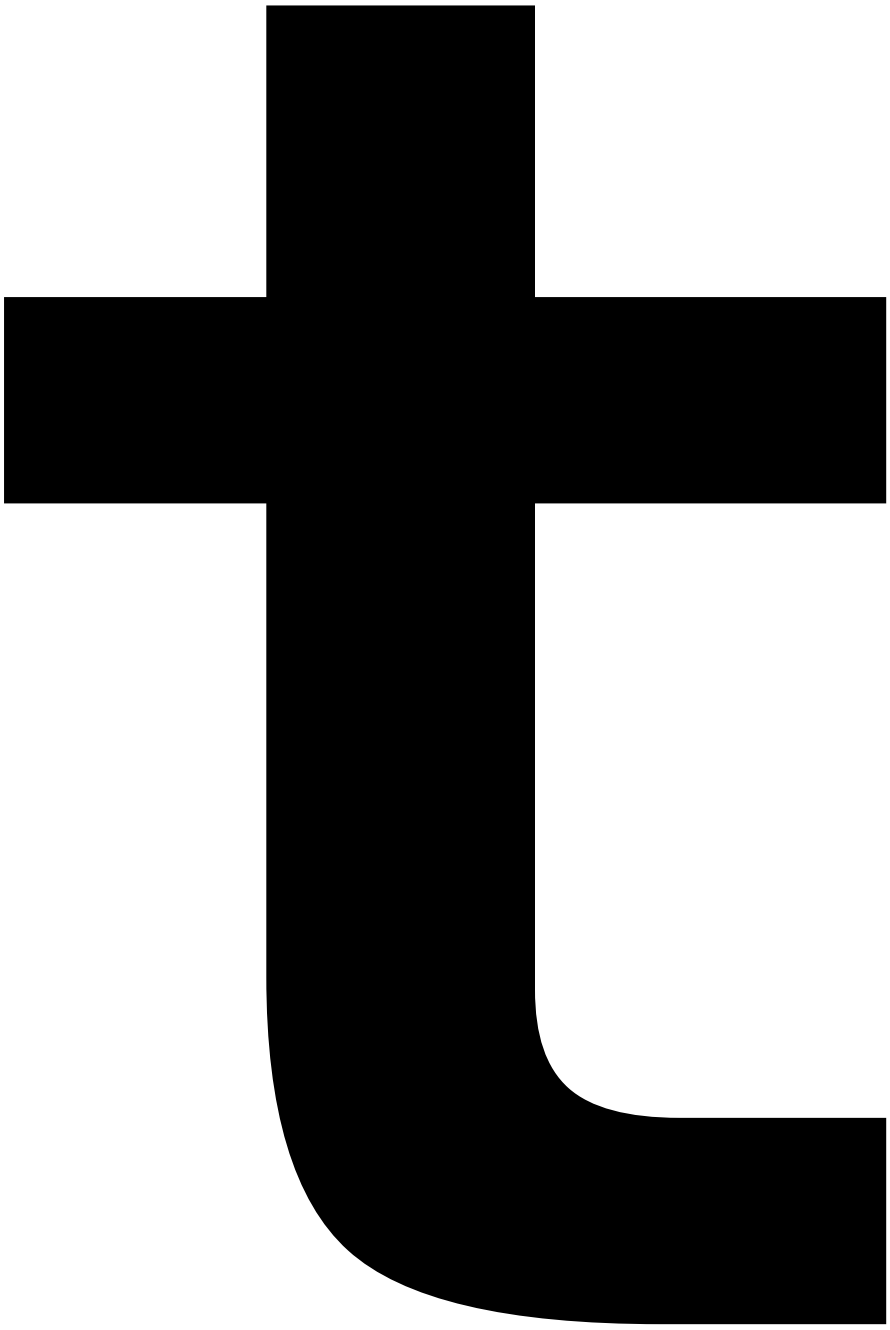


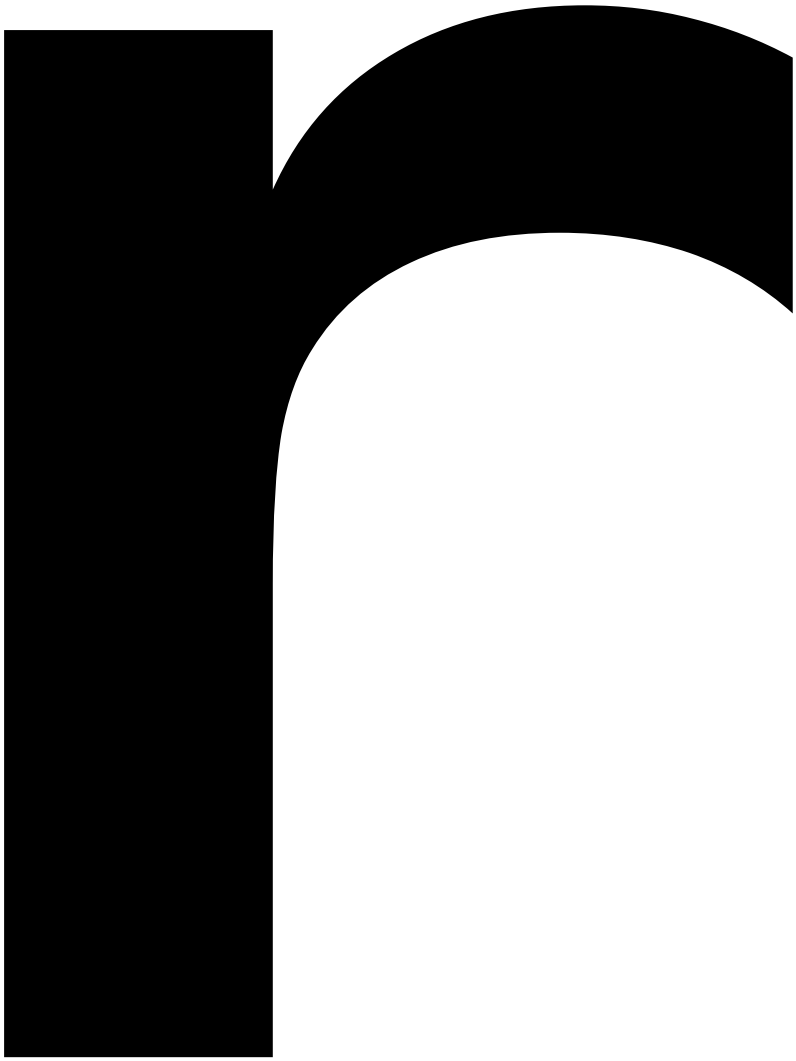


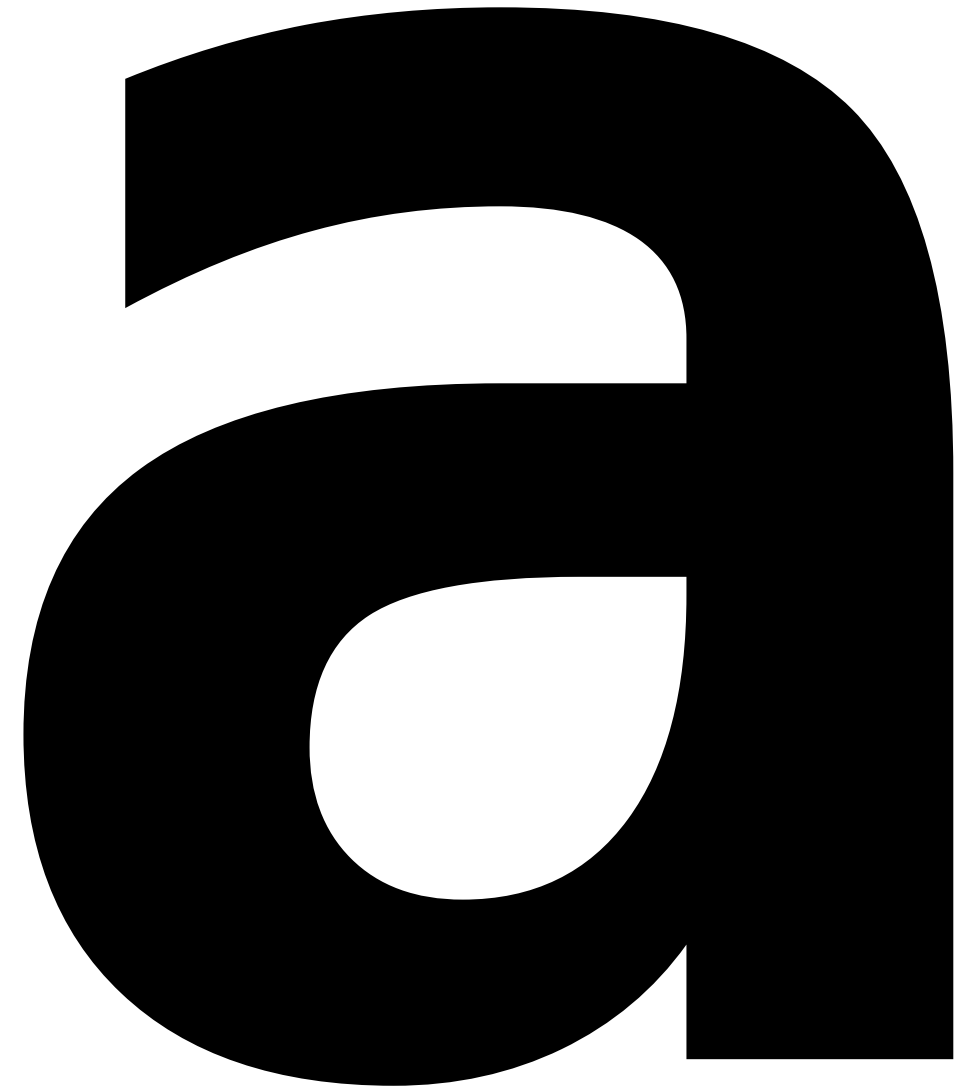


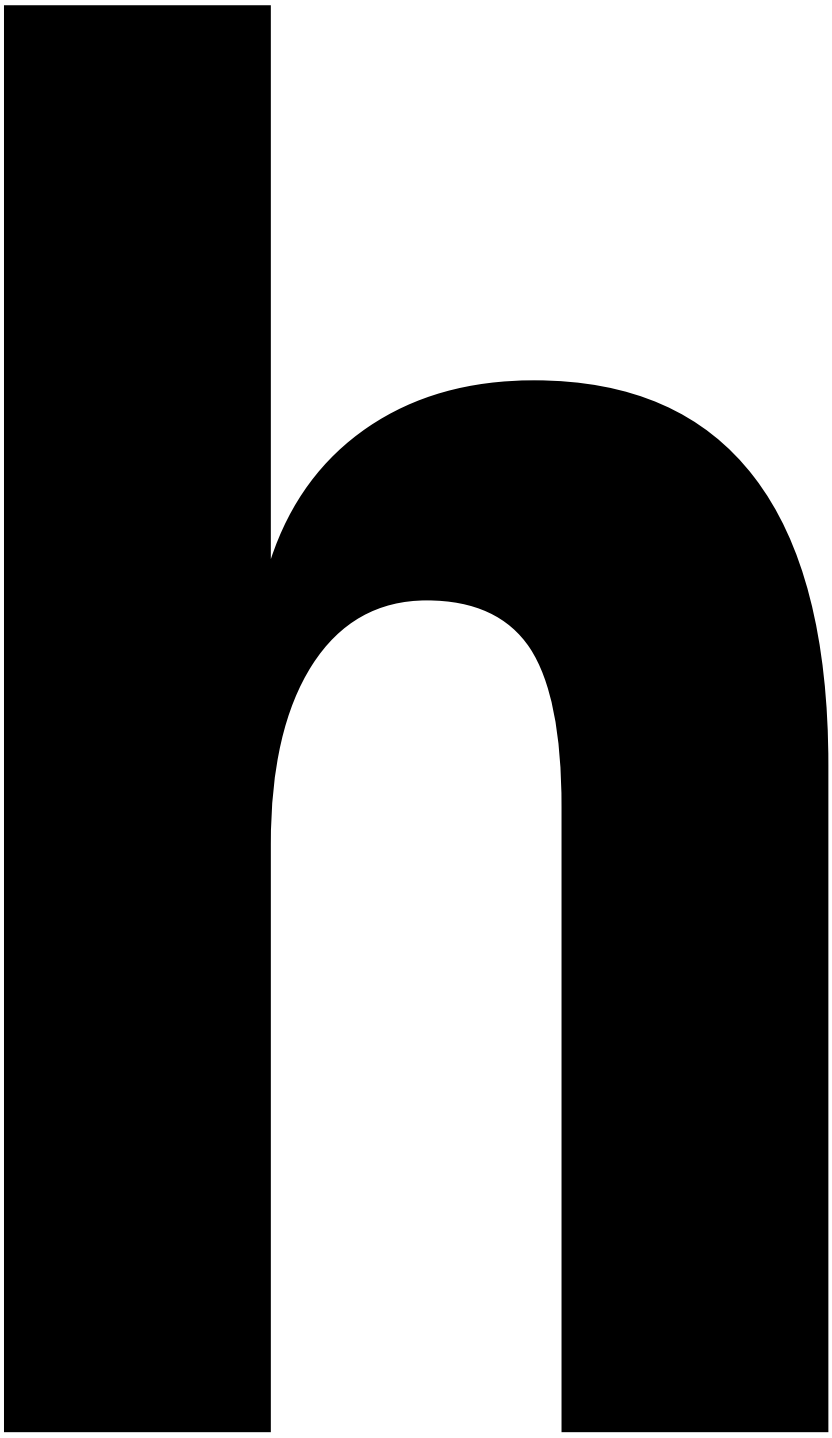


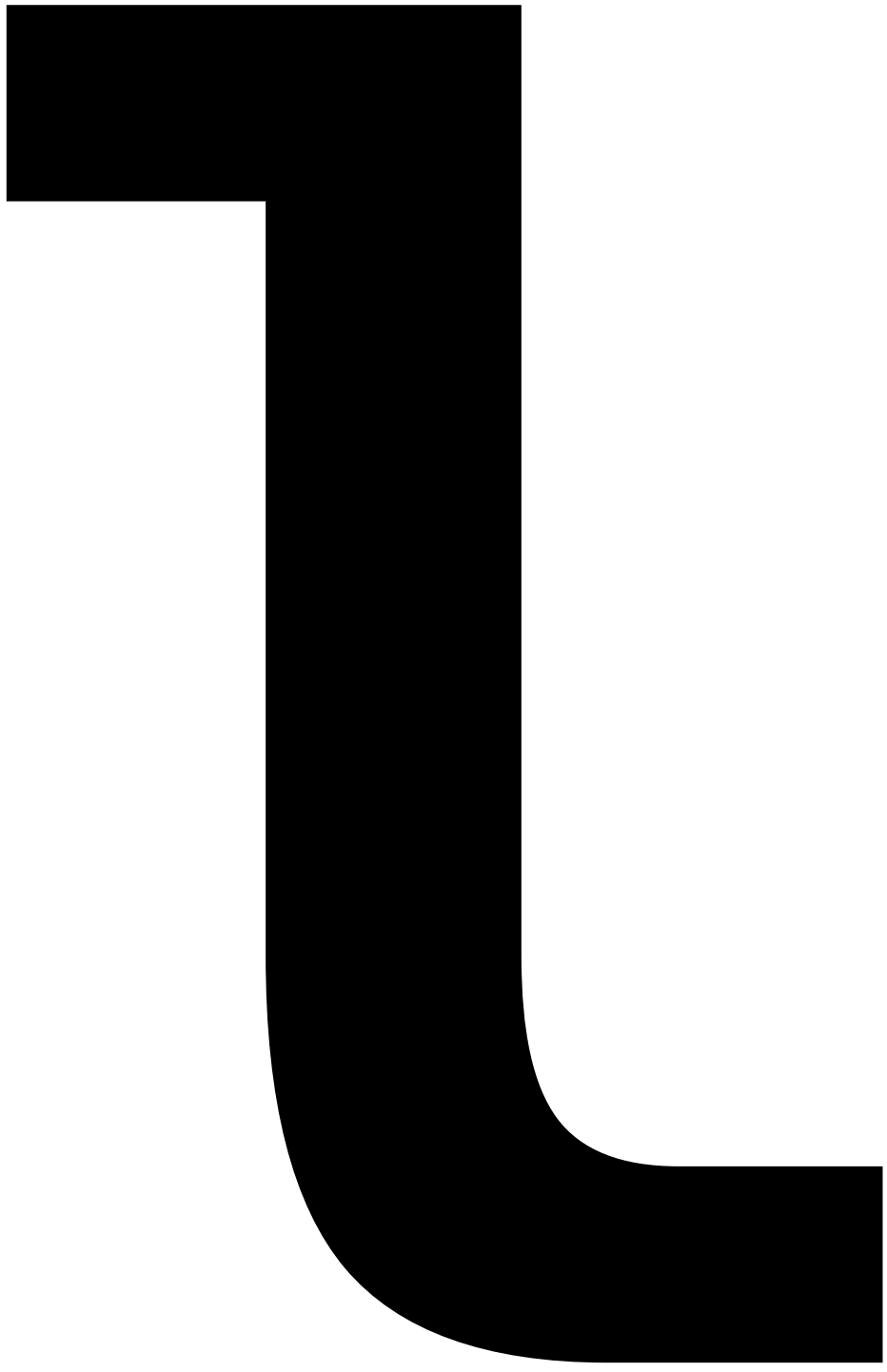


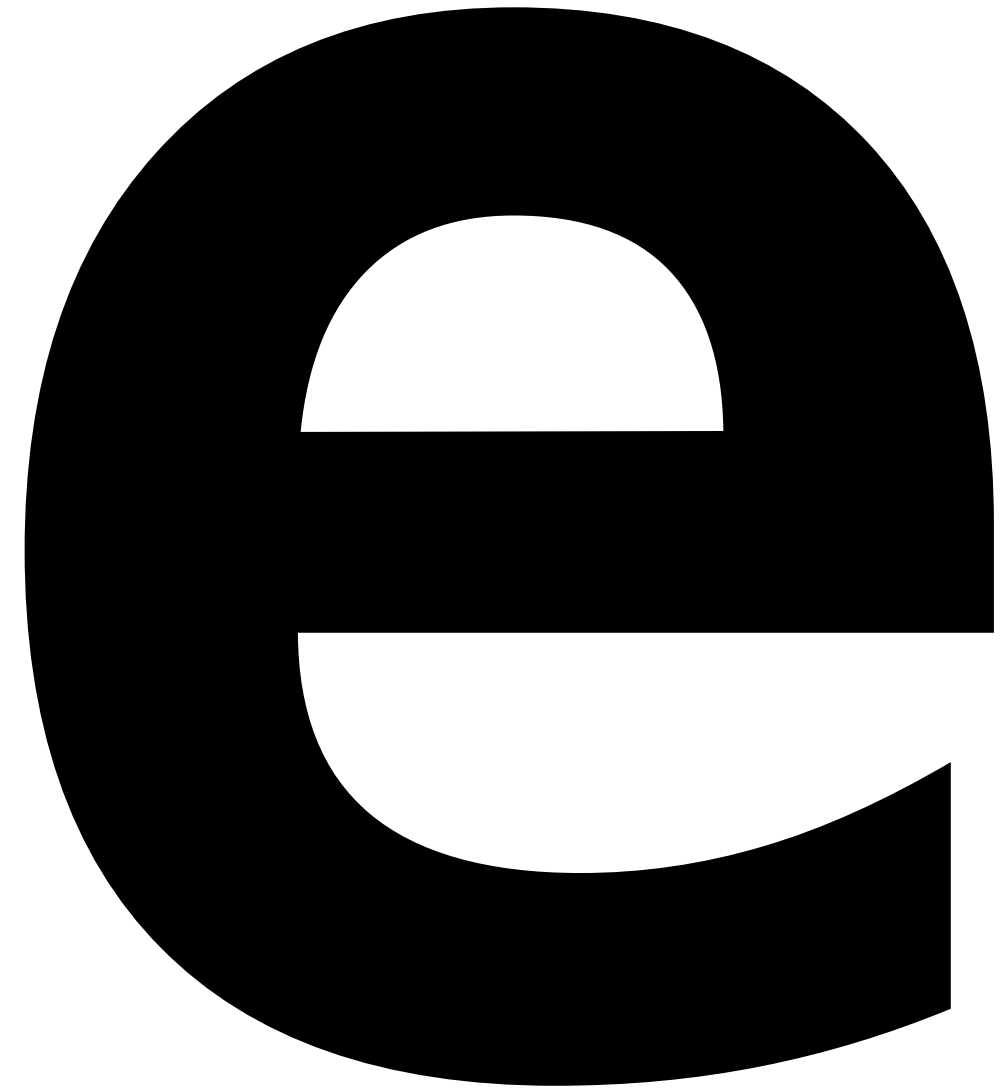


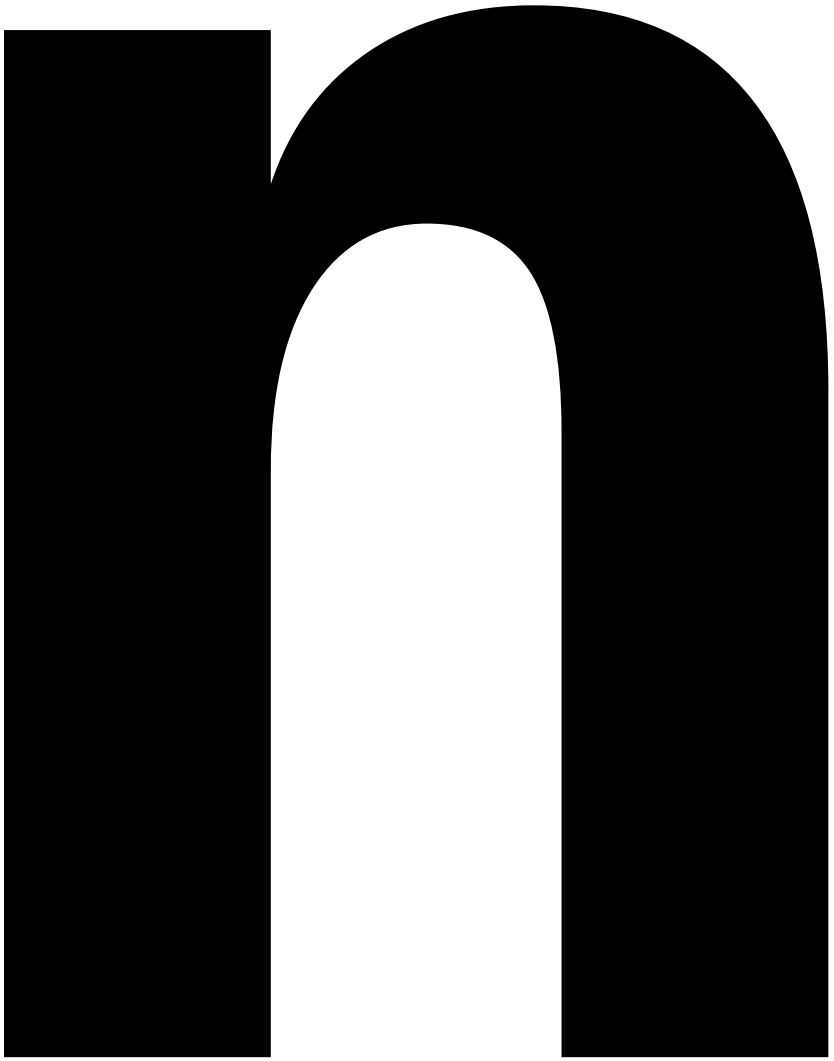






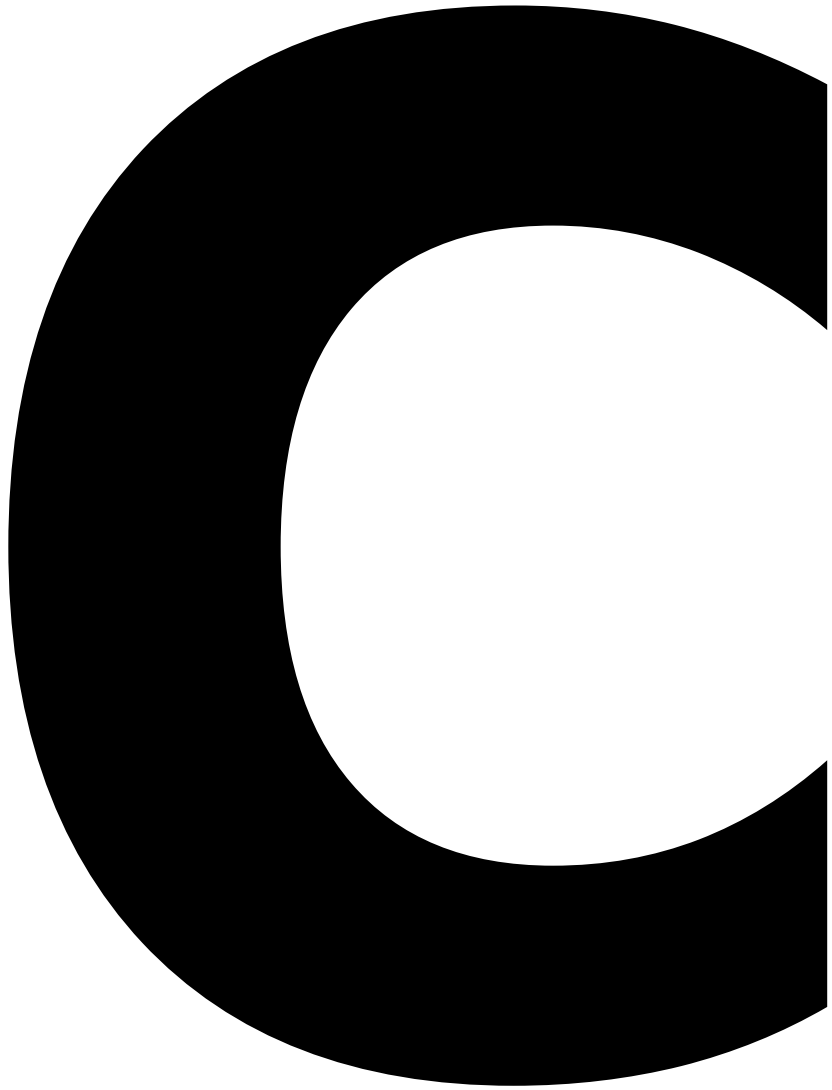


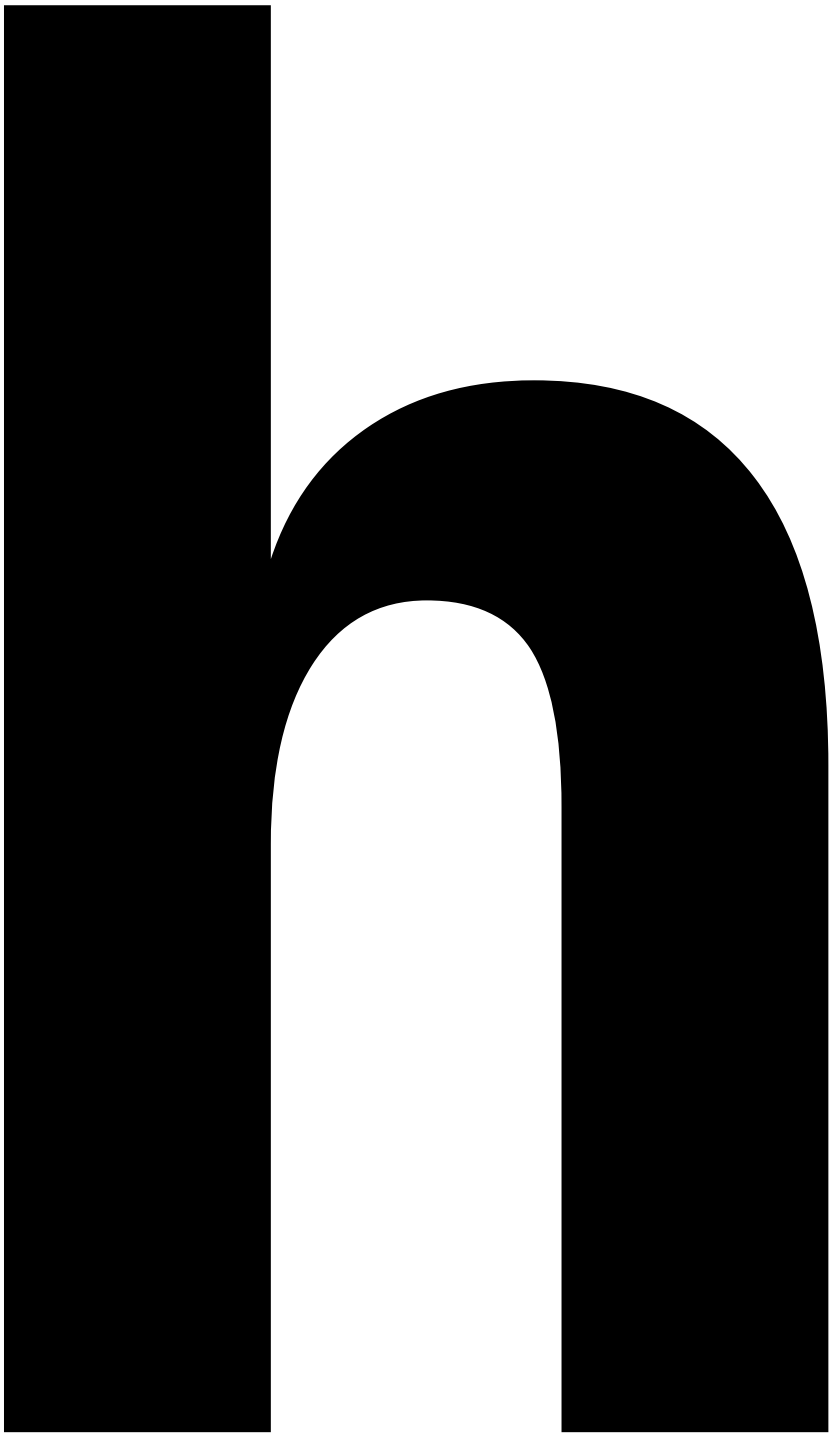




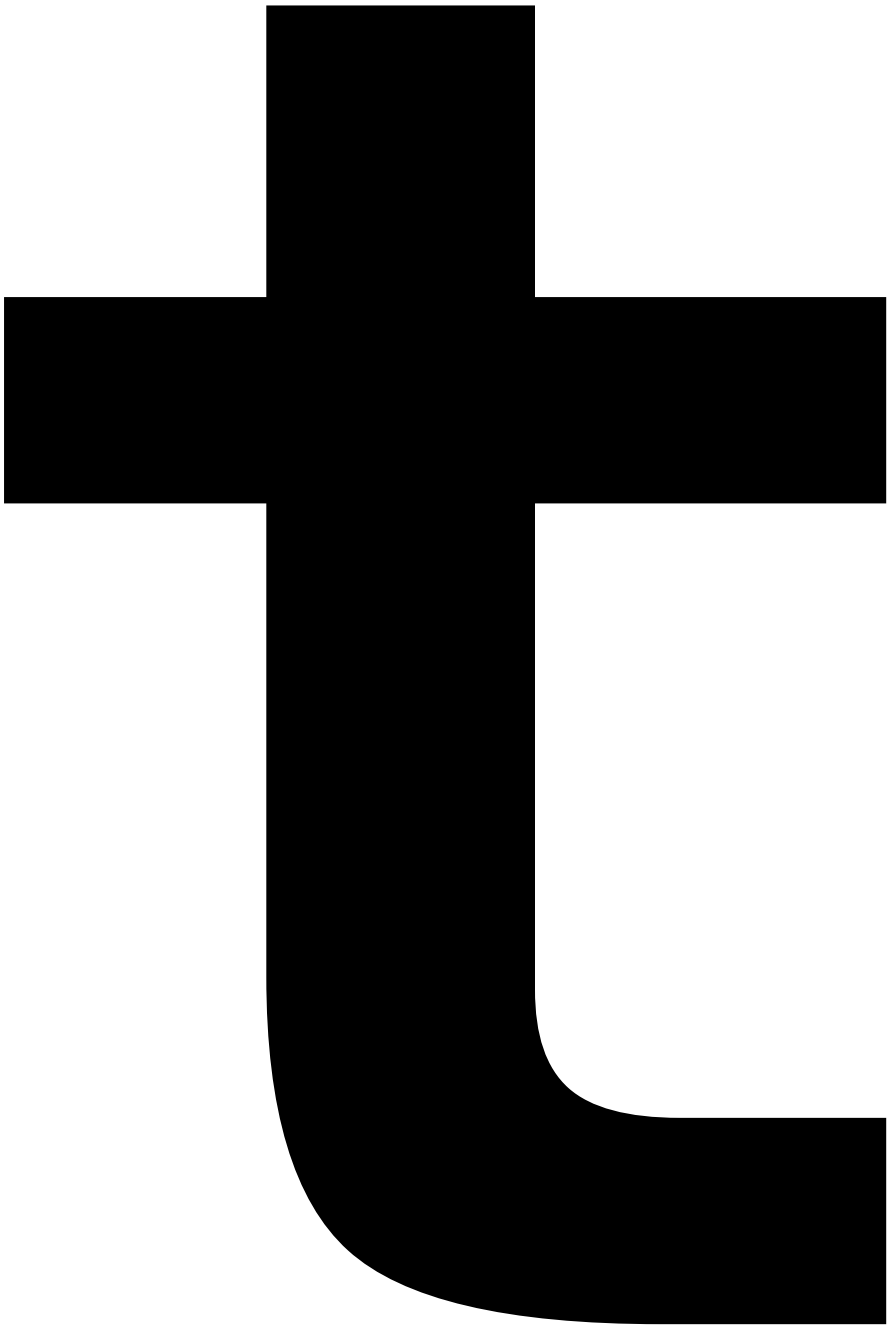
d

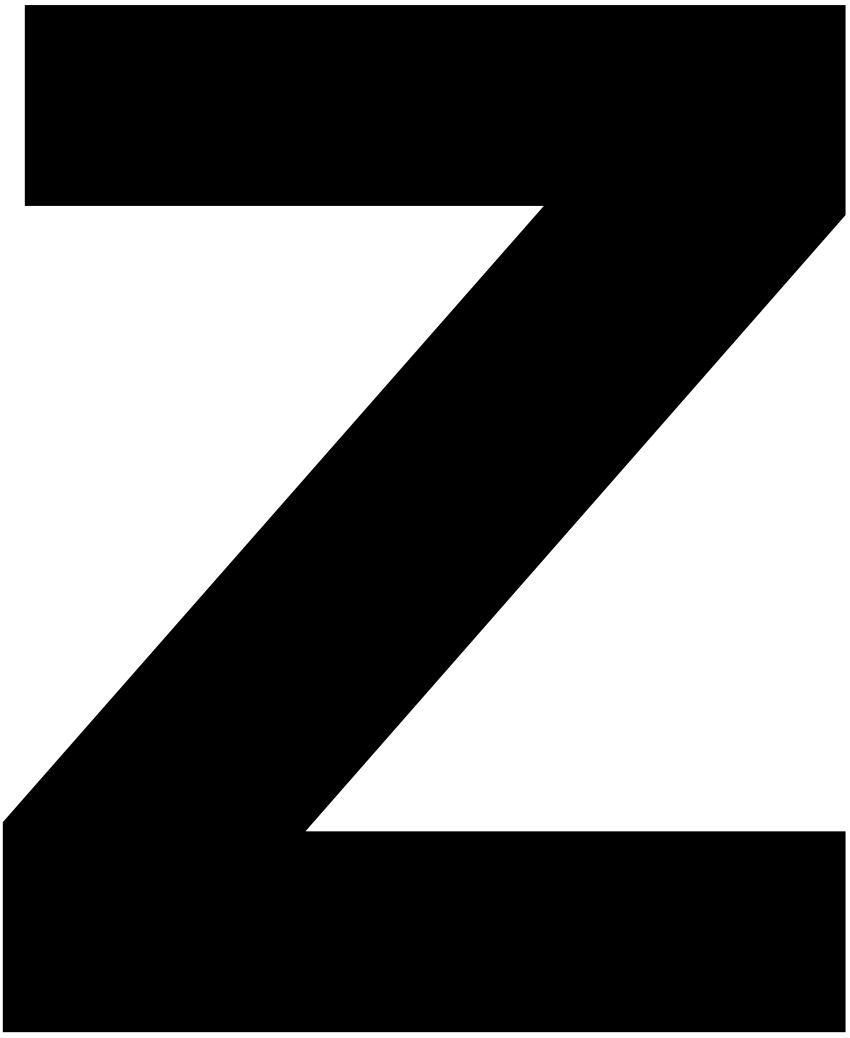
S

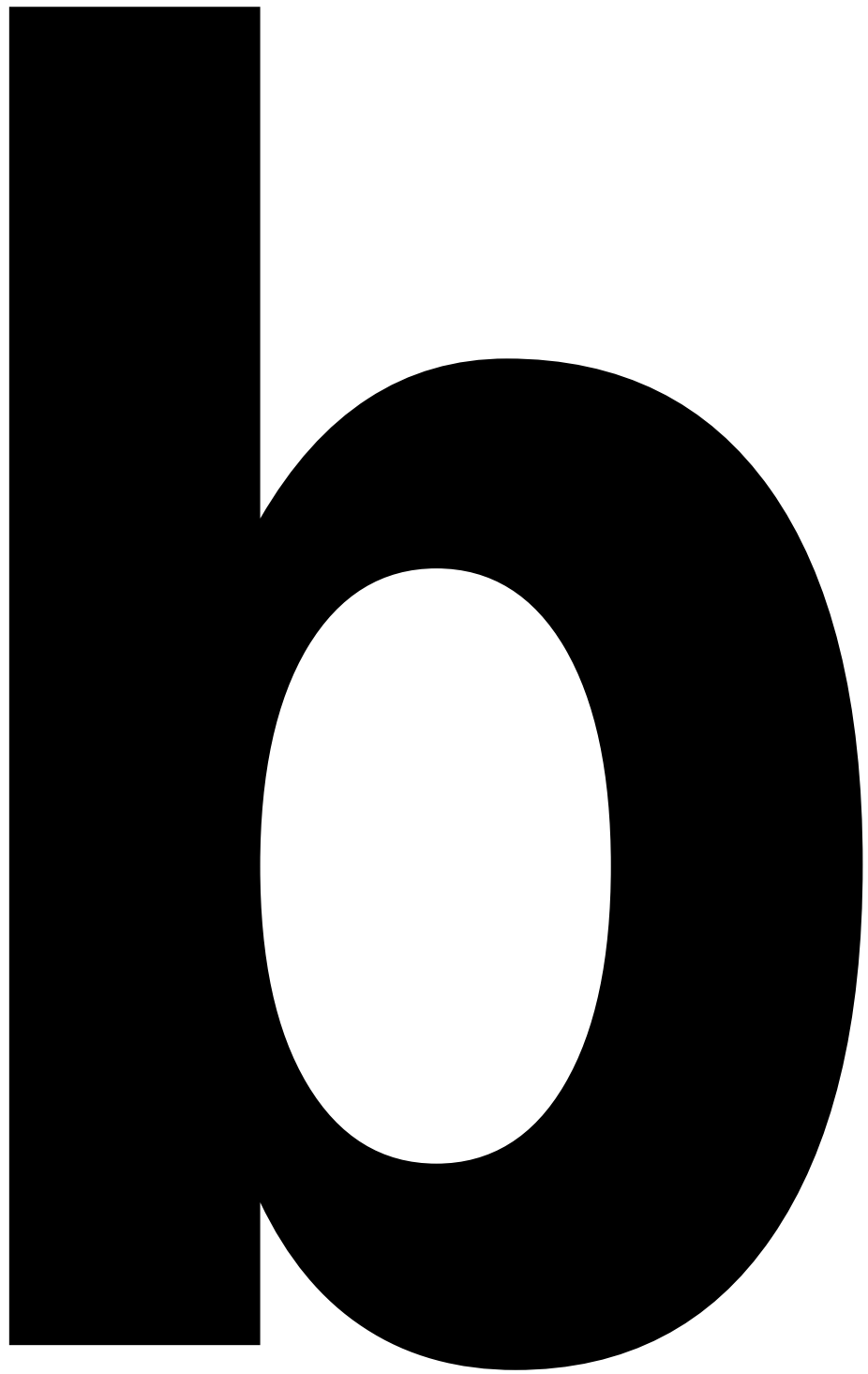


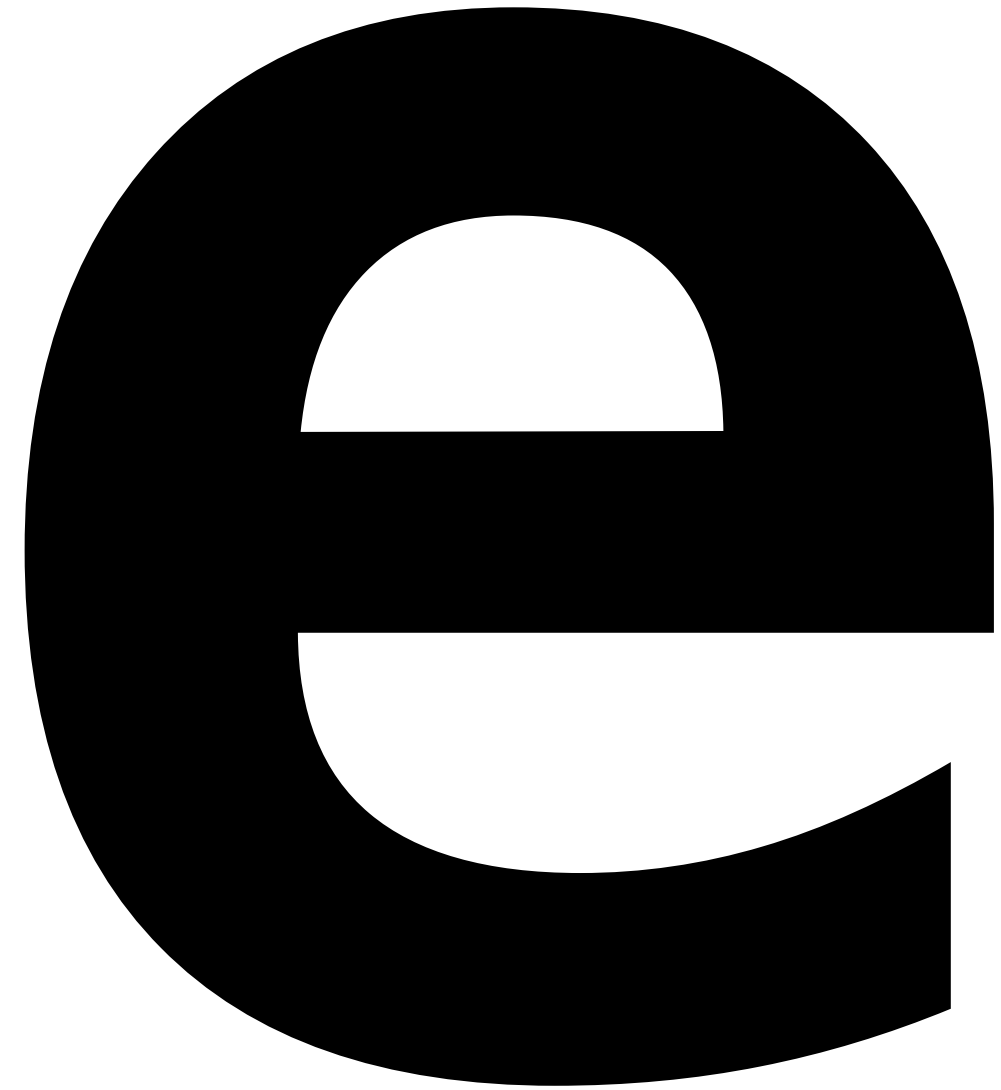


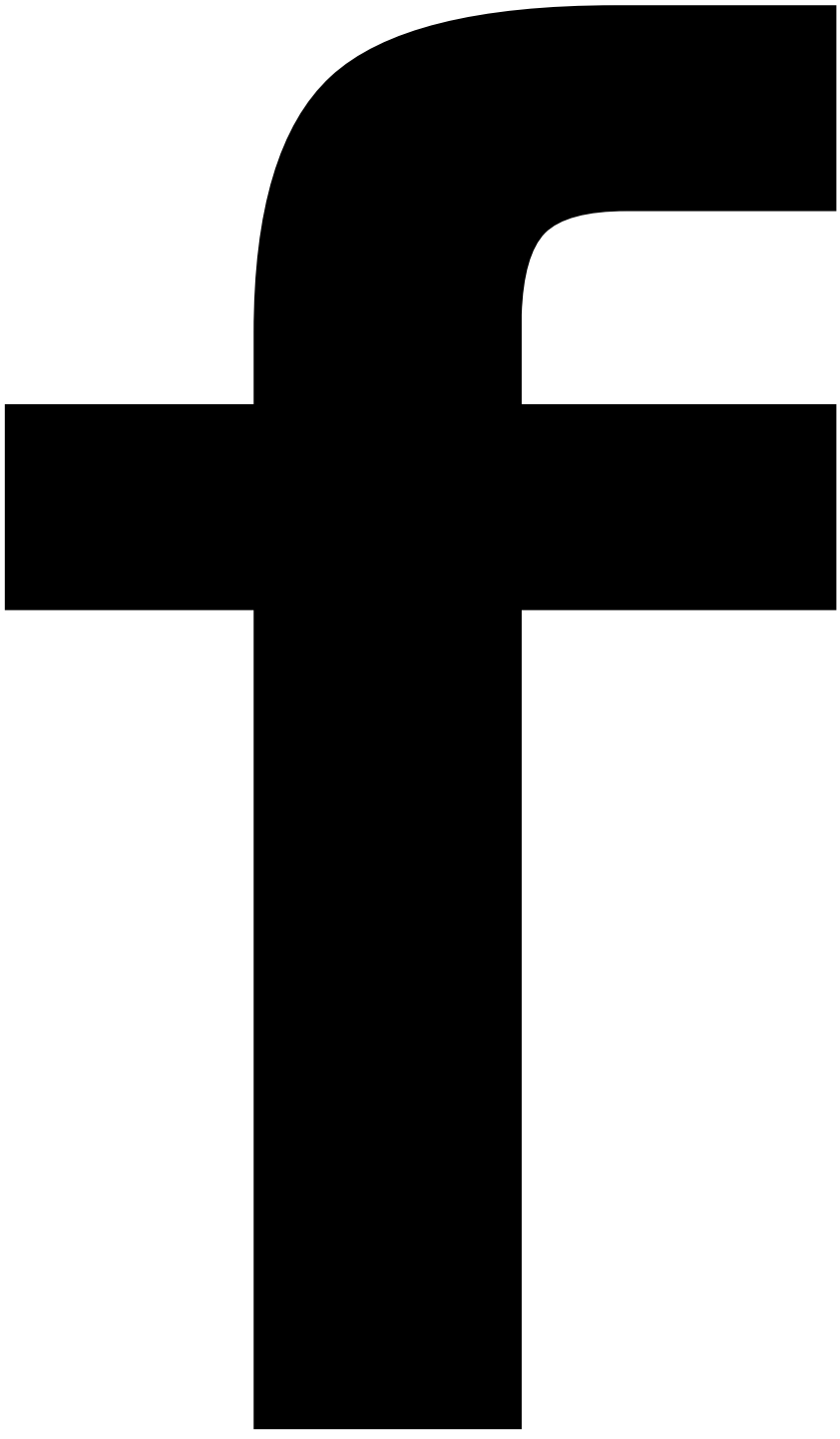
u

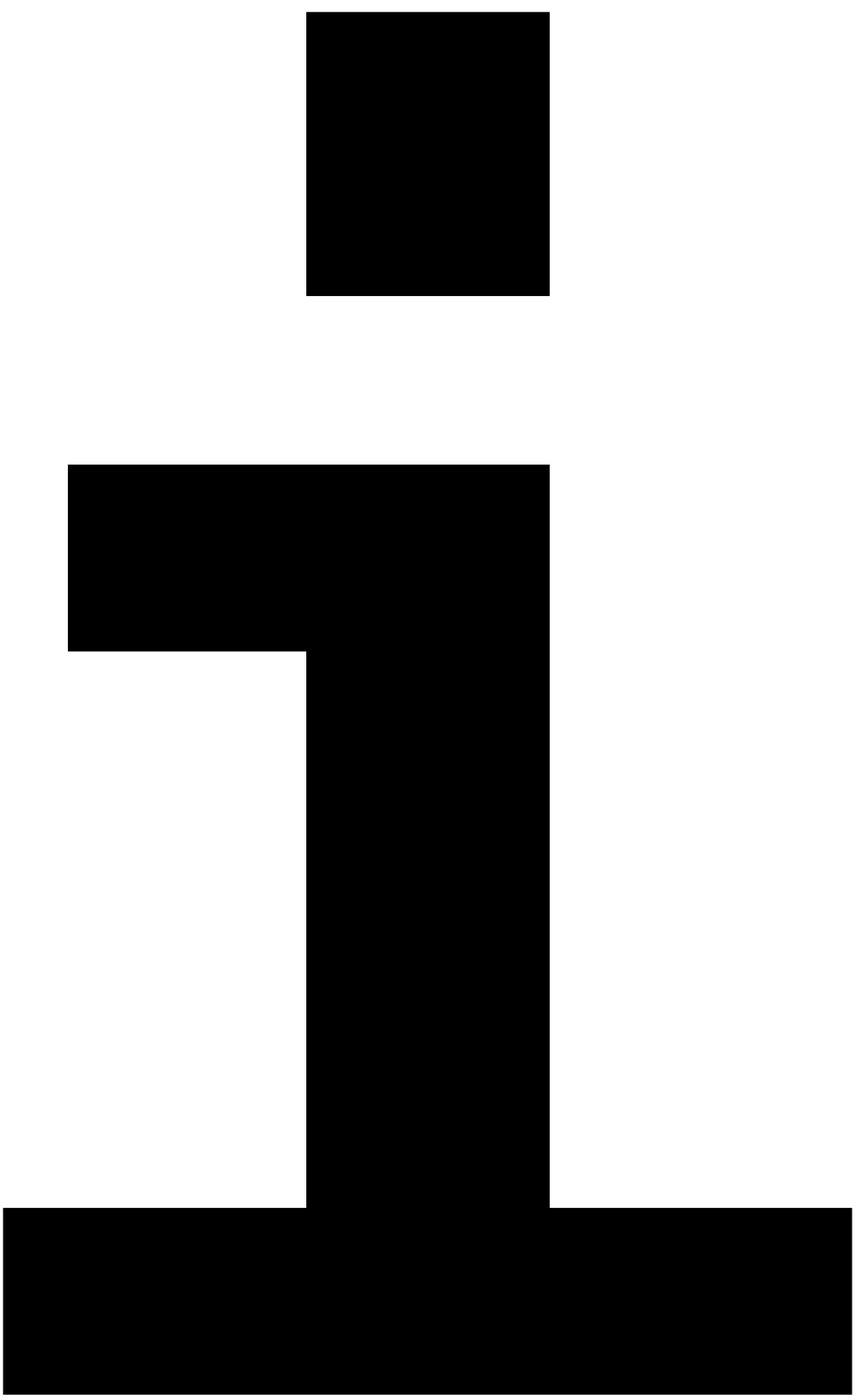


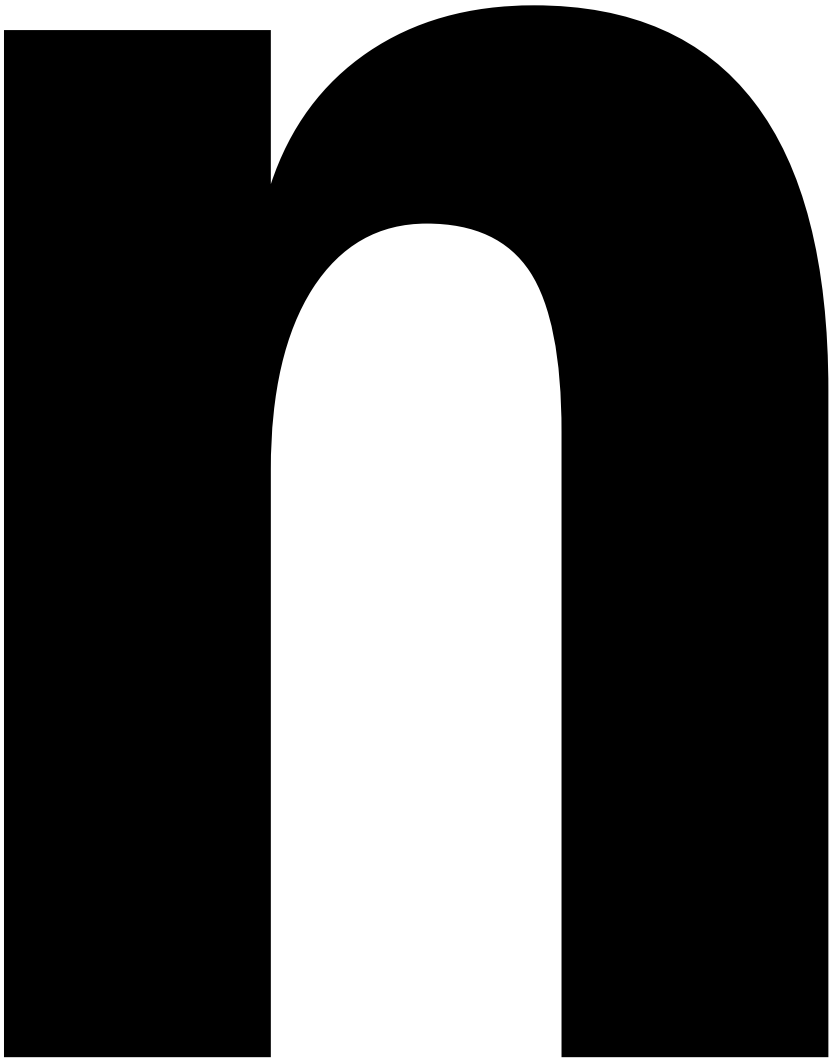




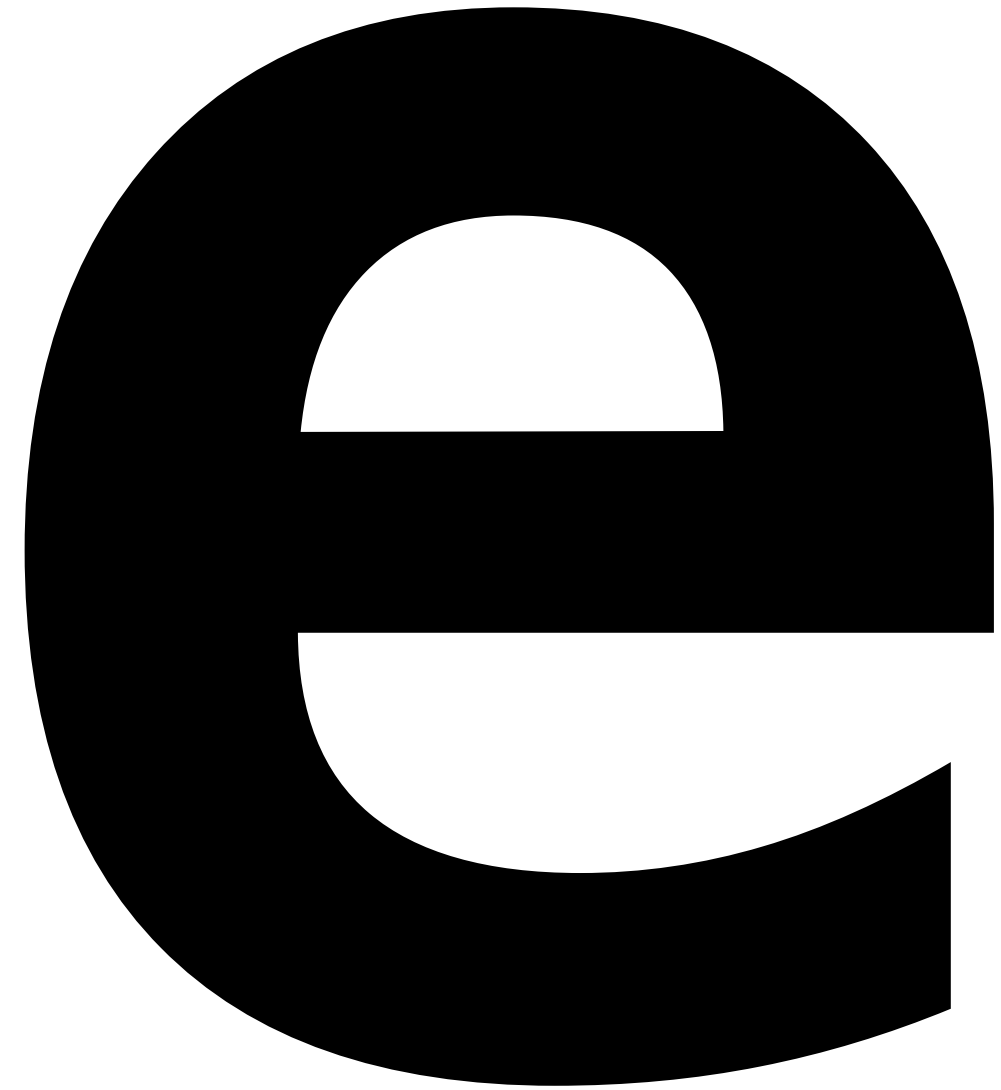


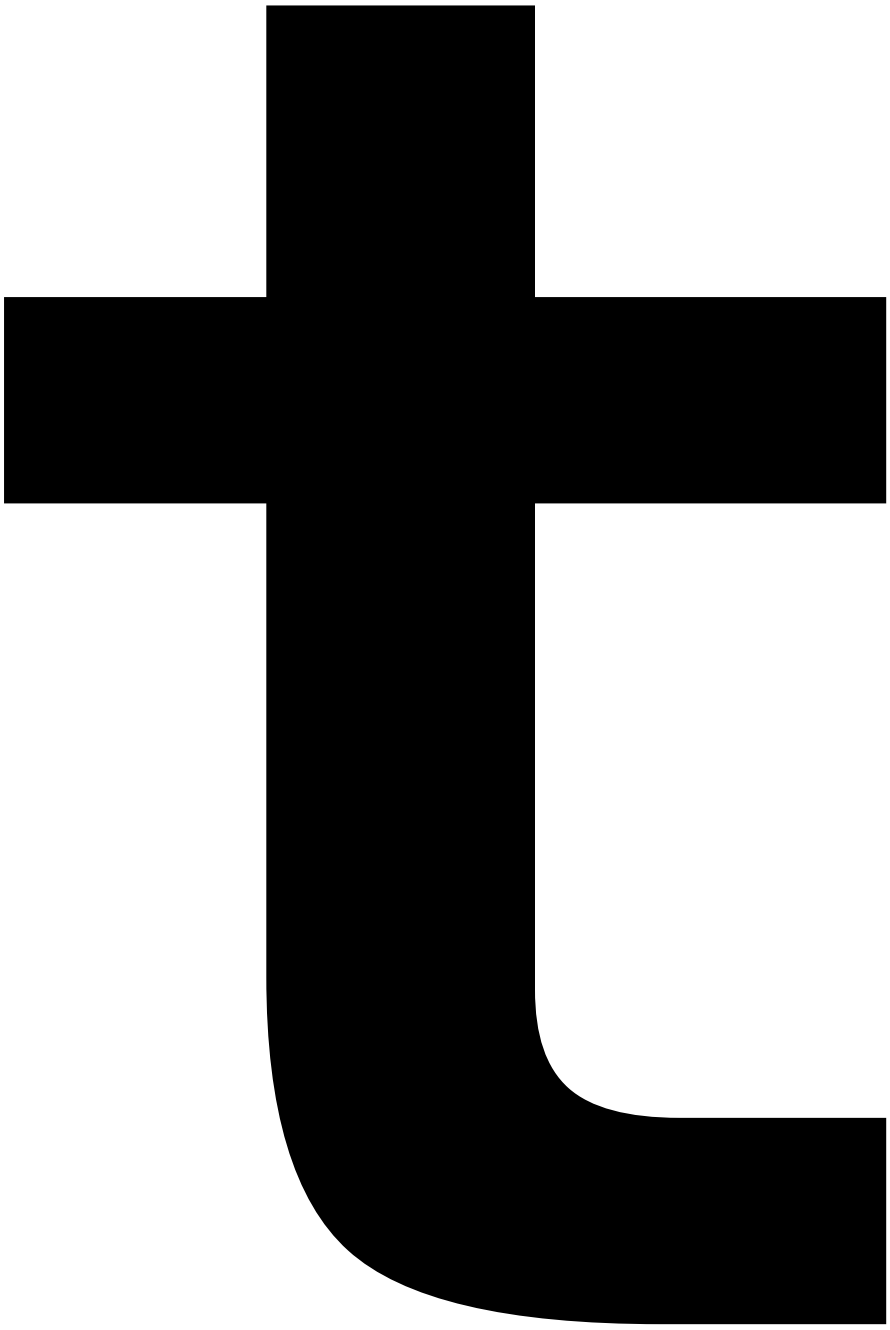




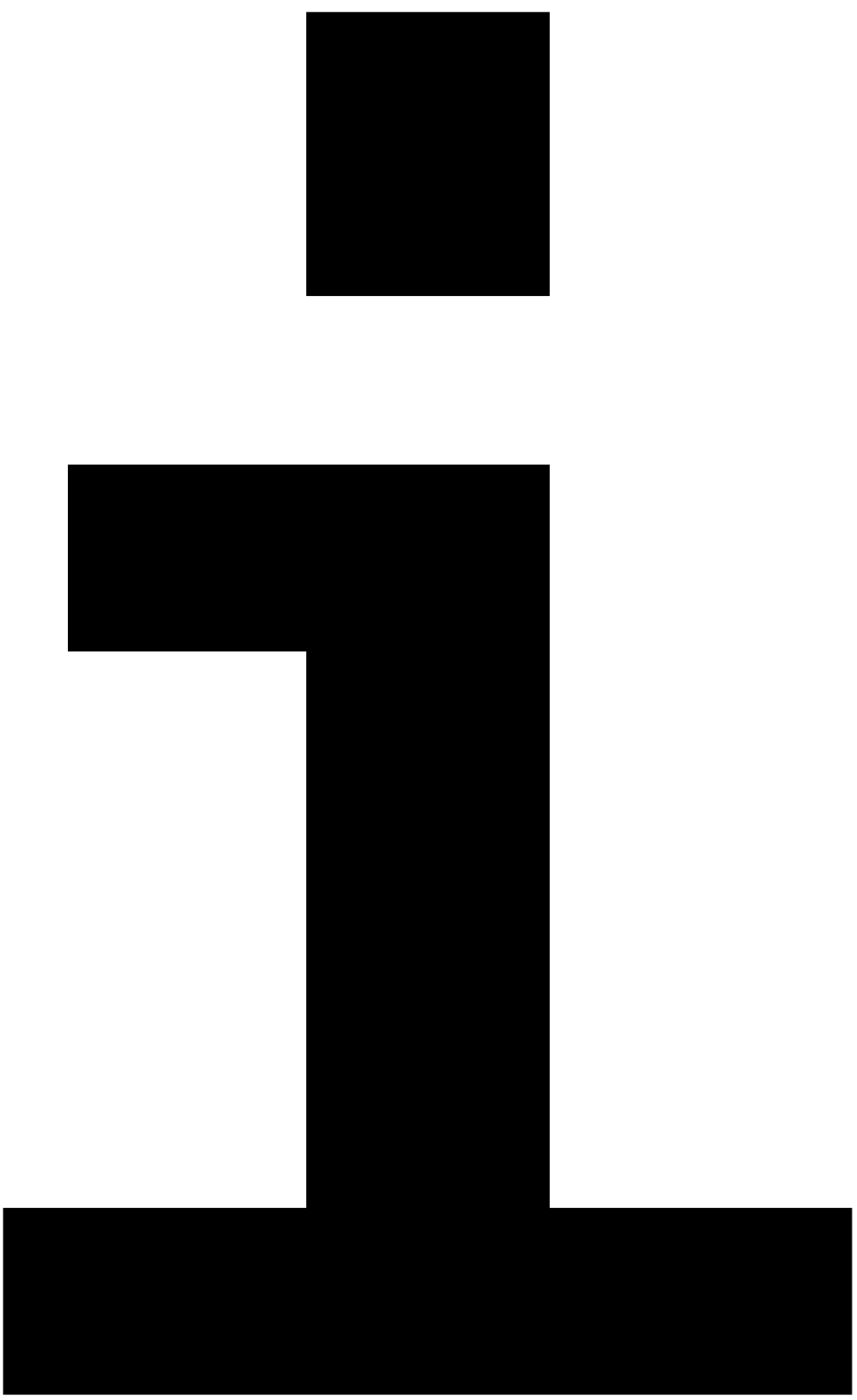


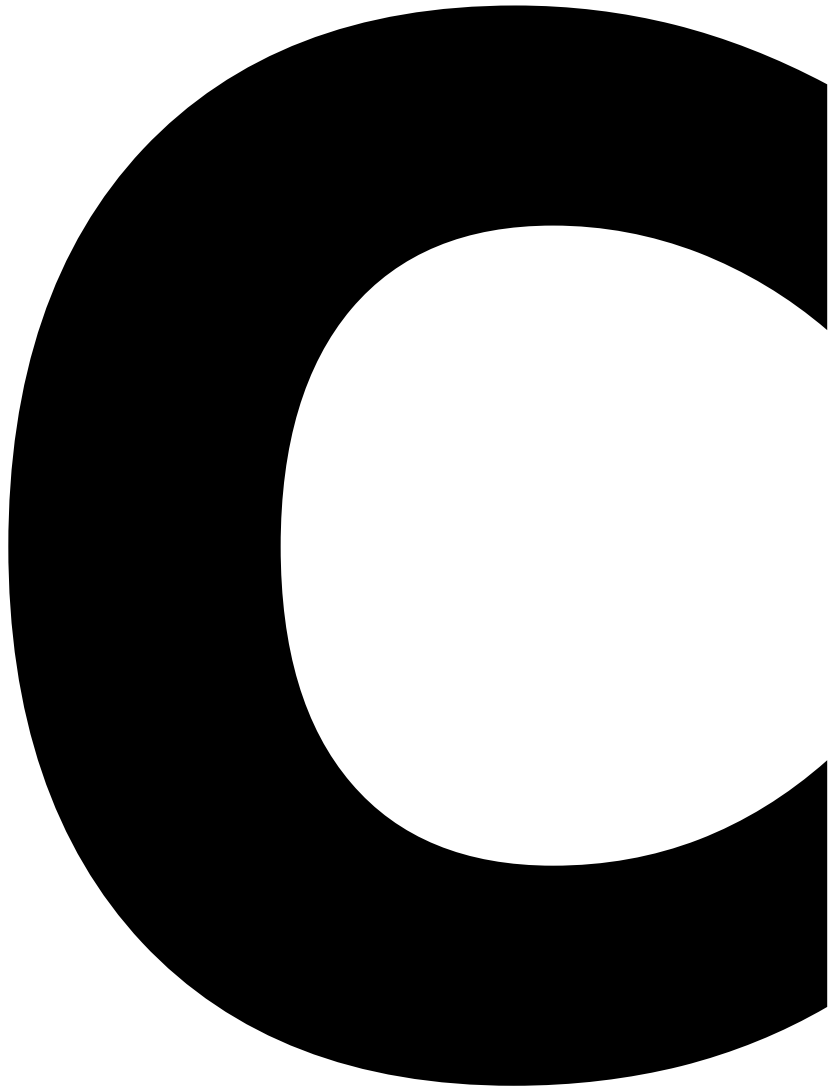
d

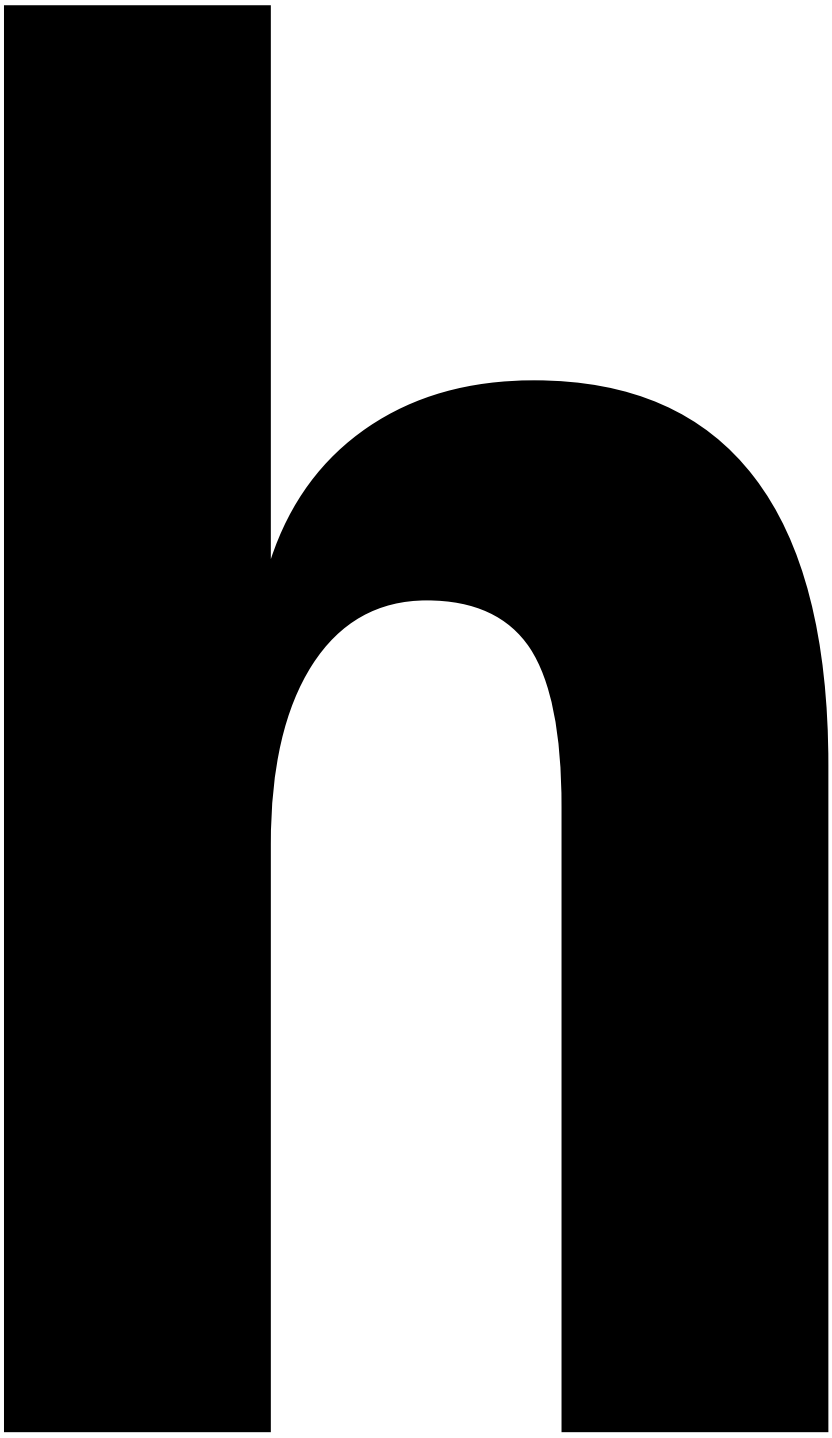




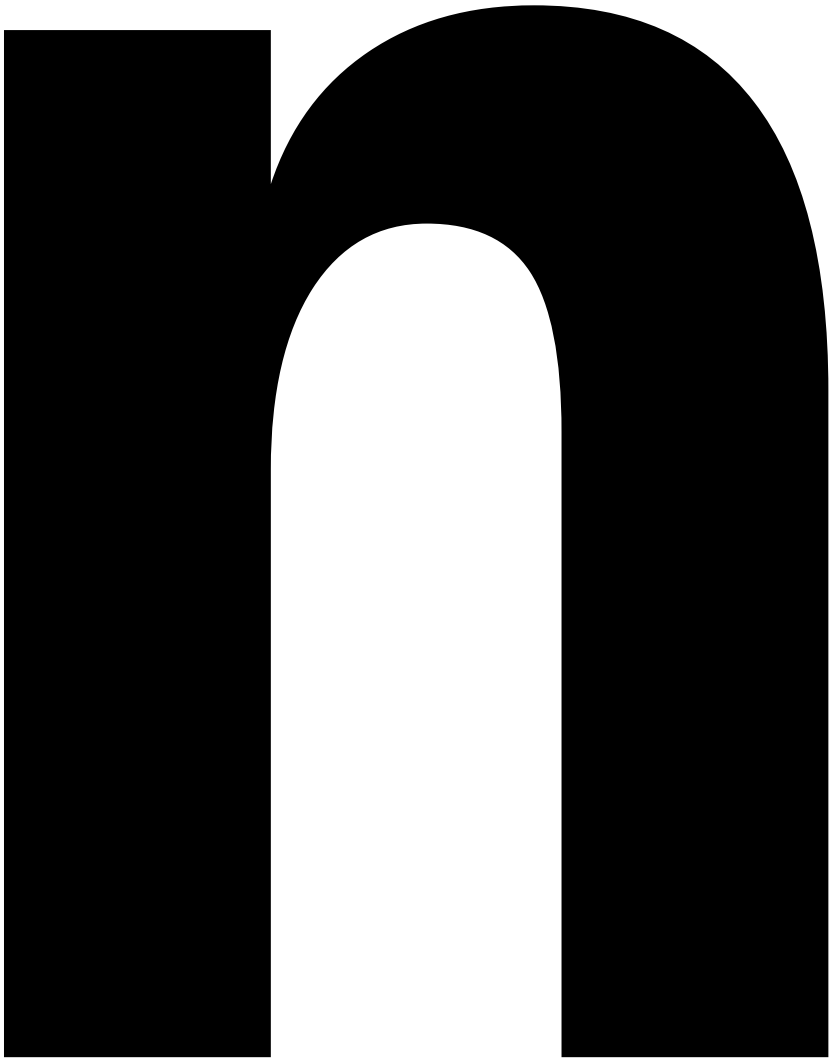
S

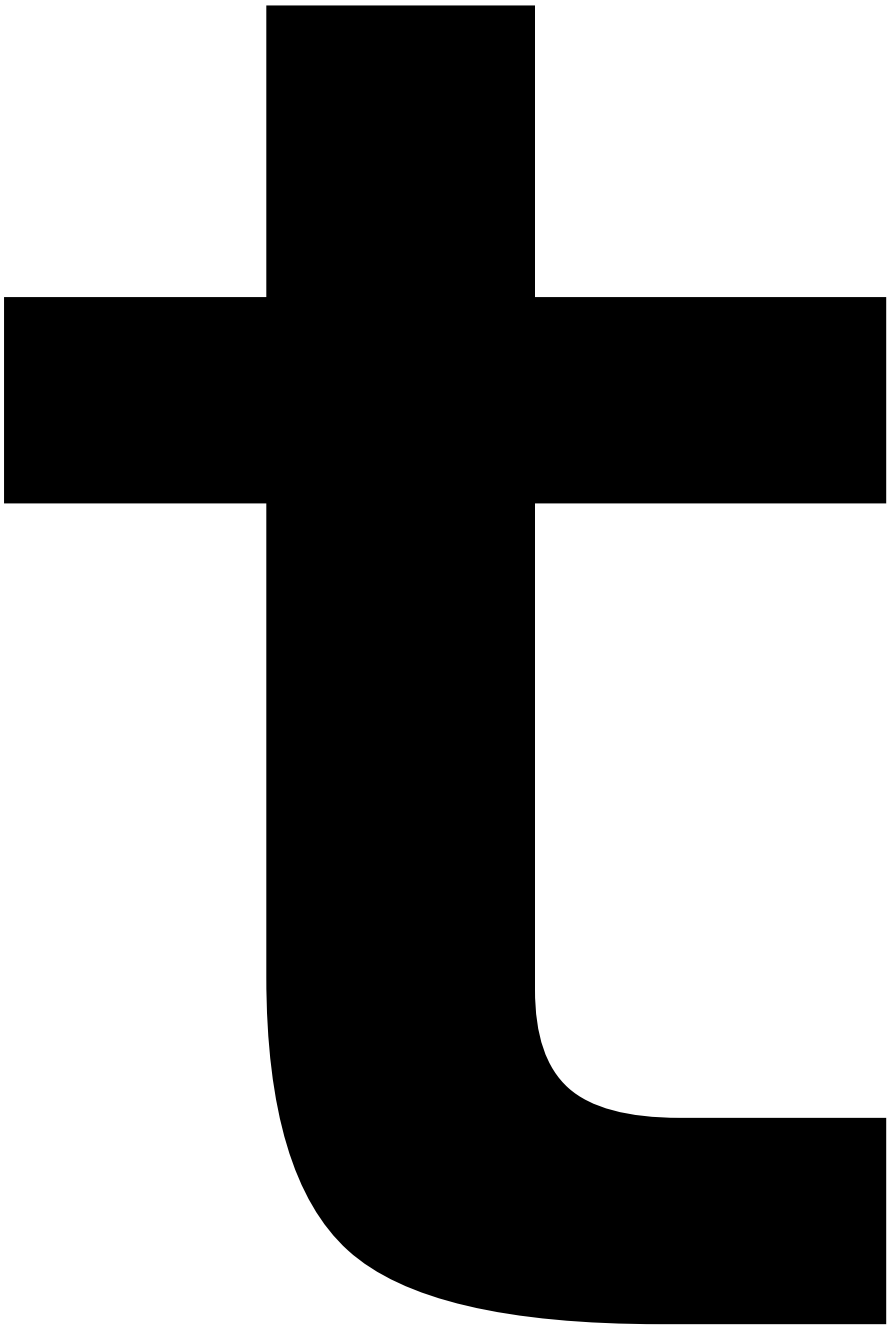


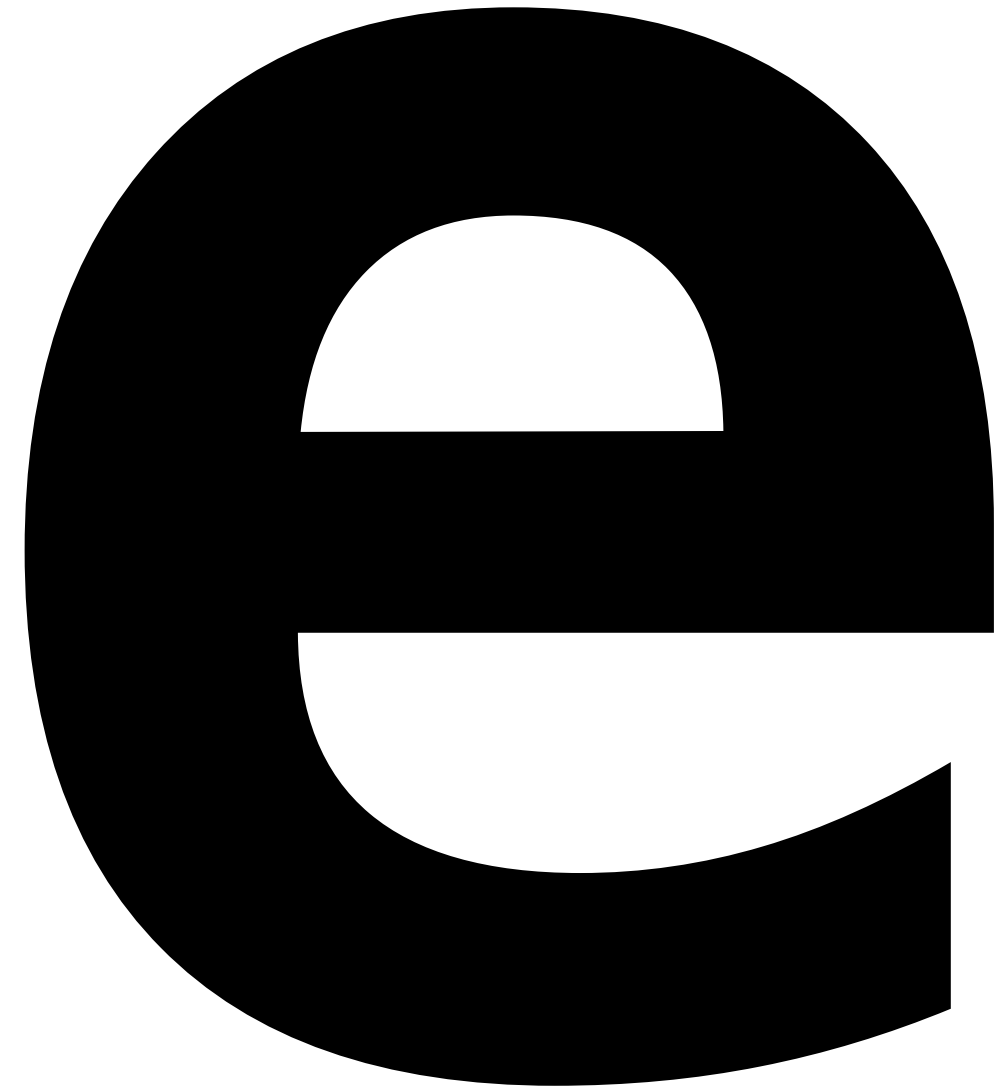


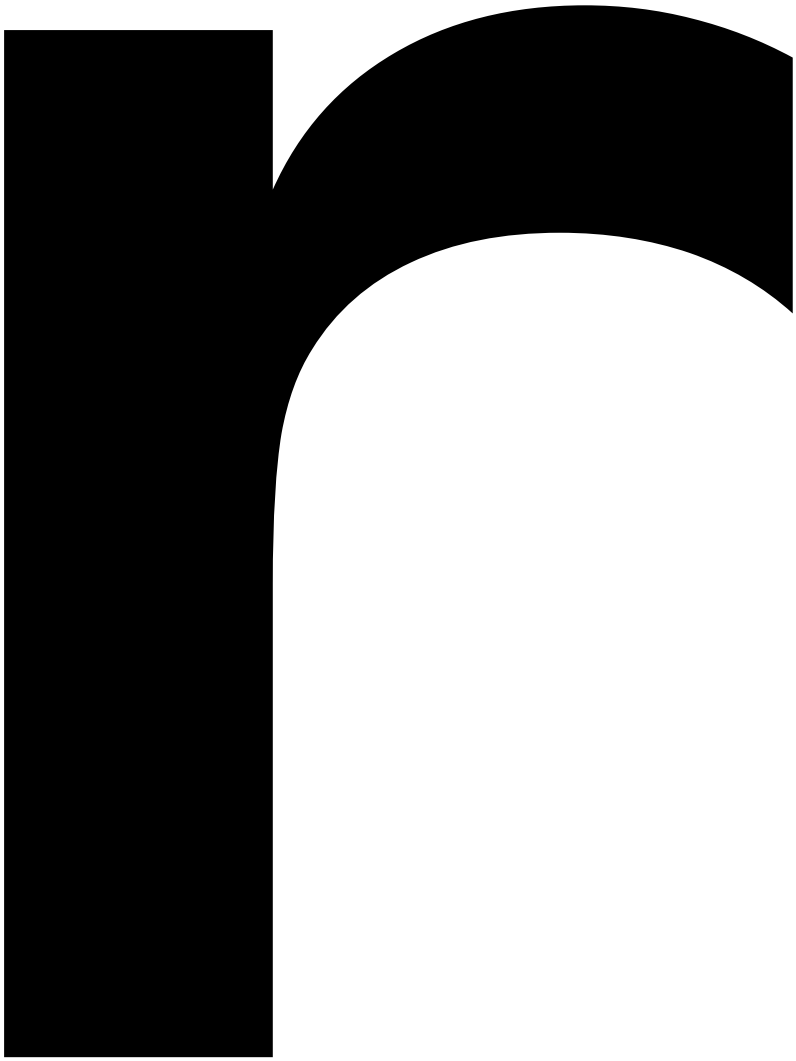


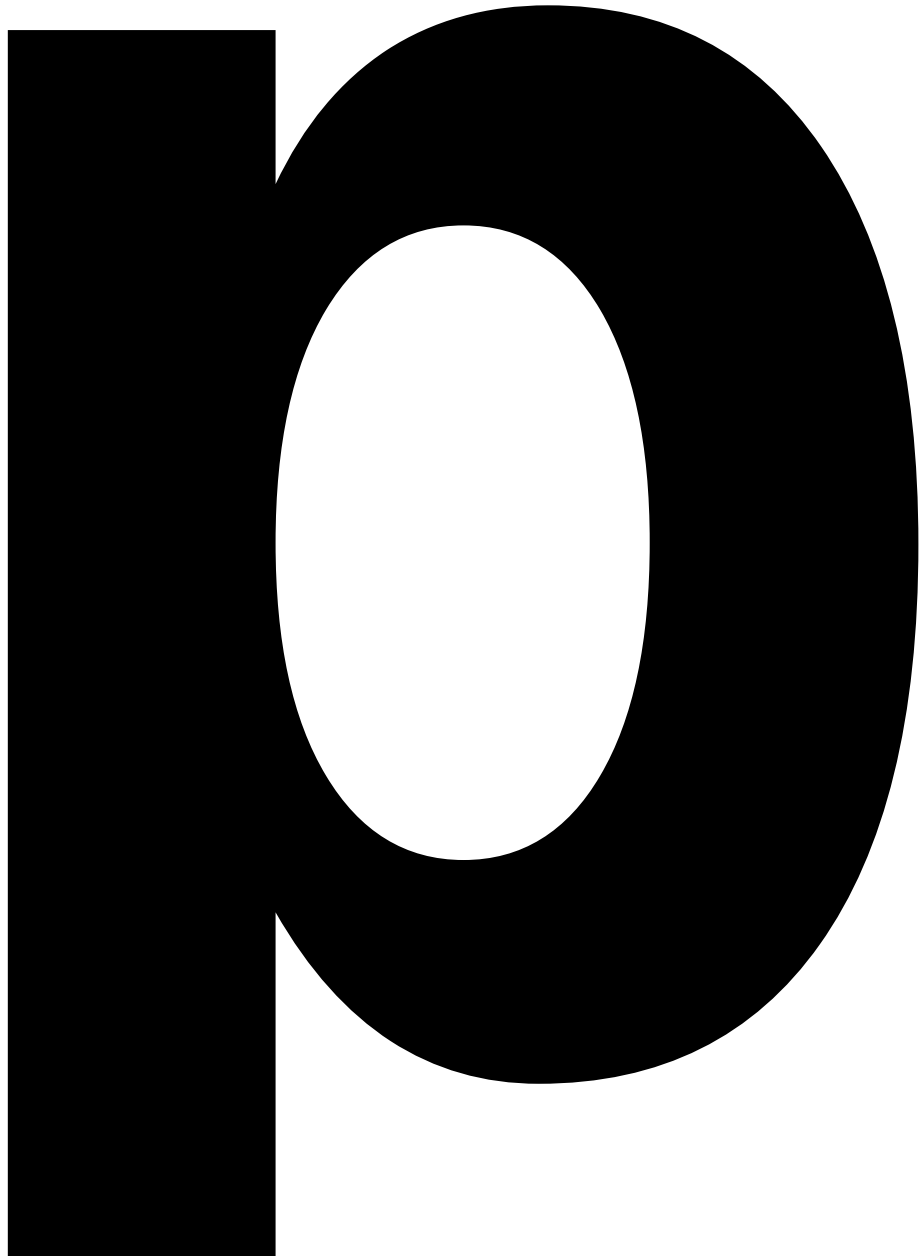
u

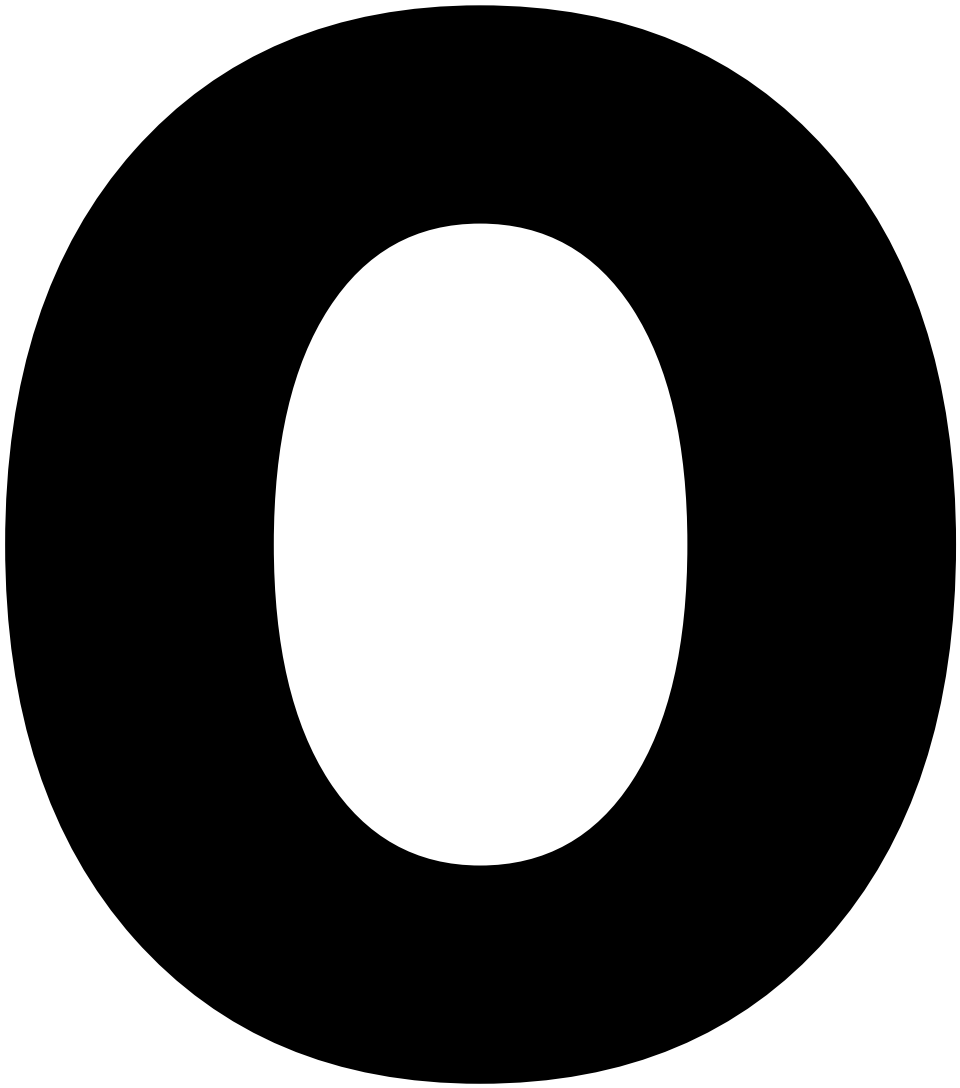


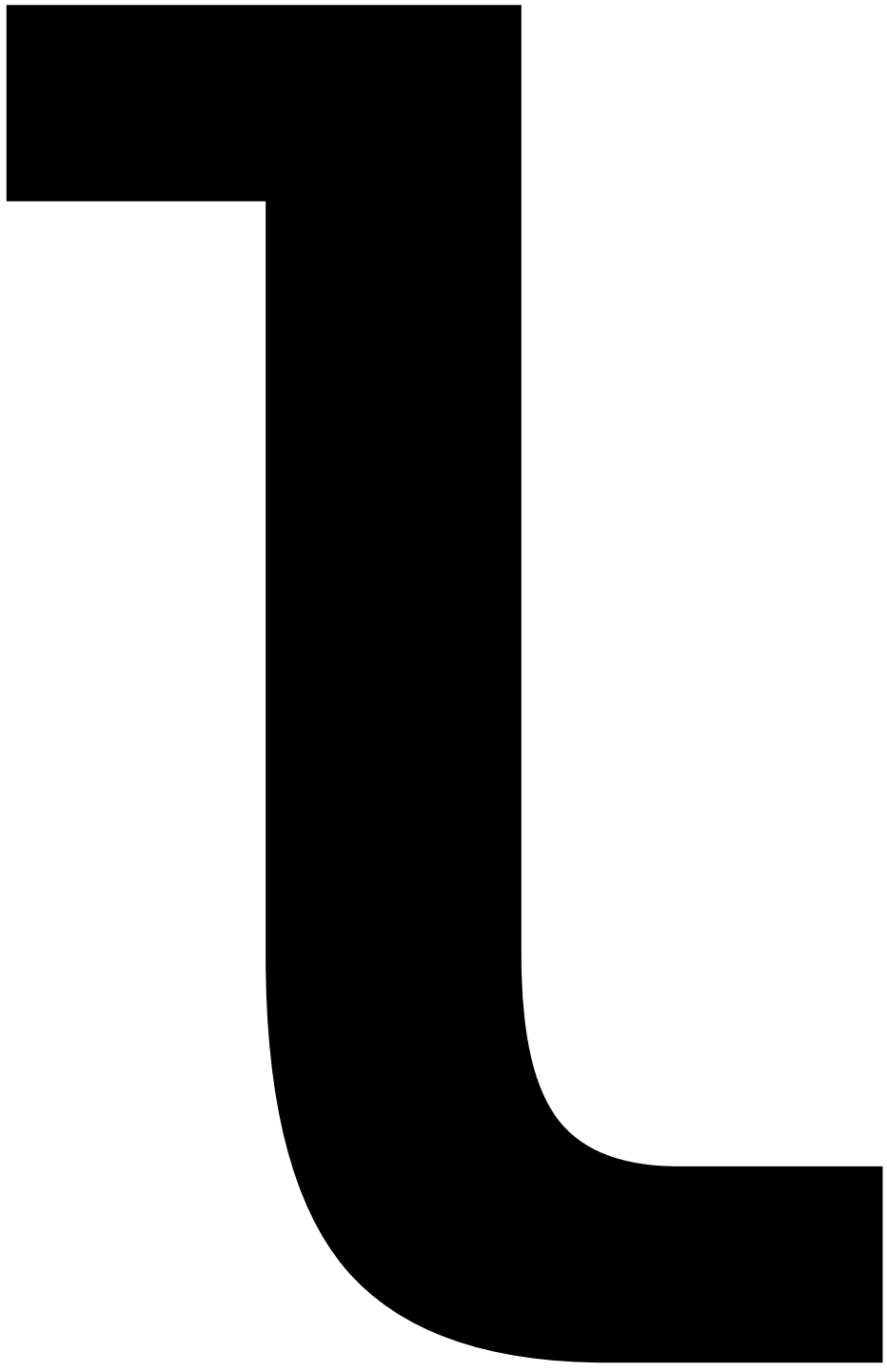


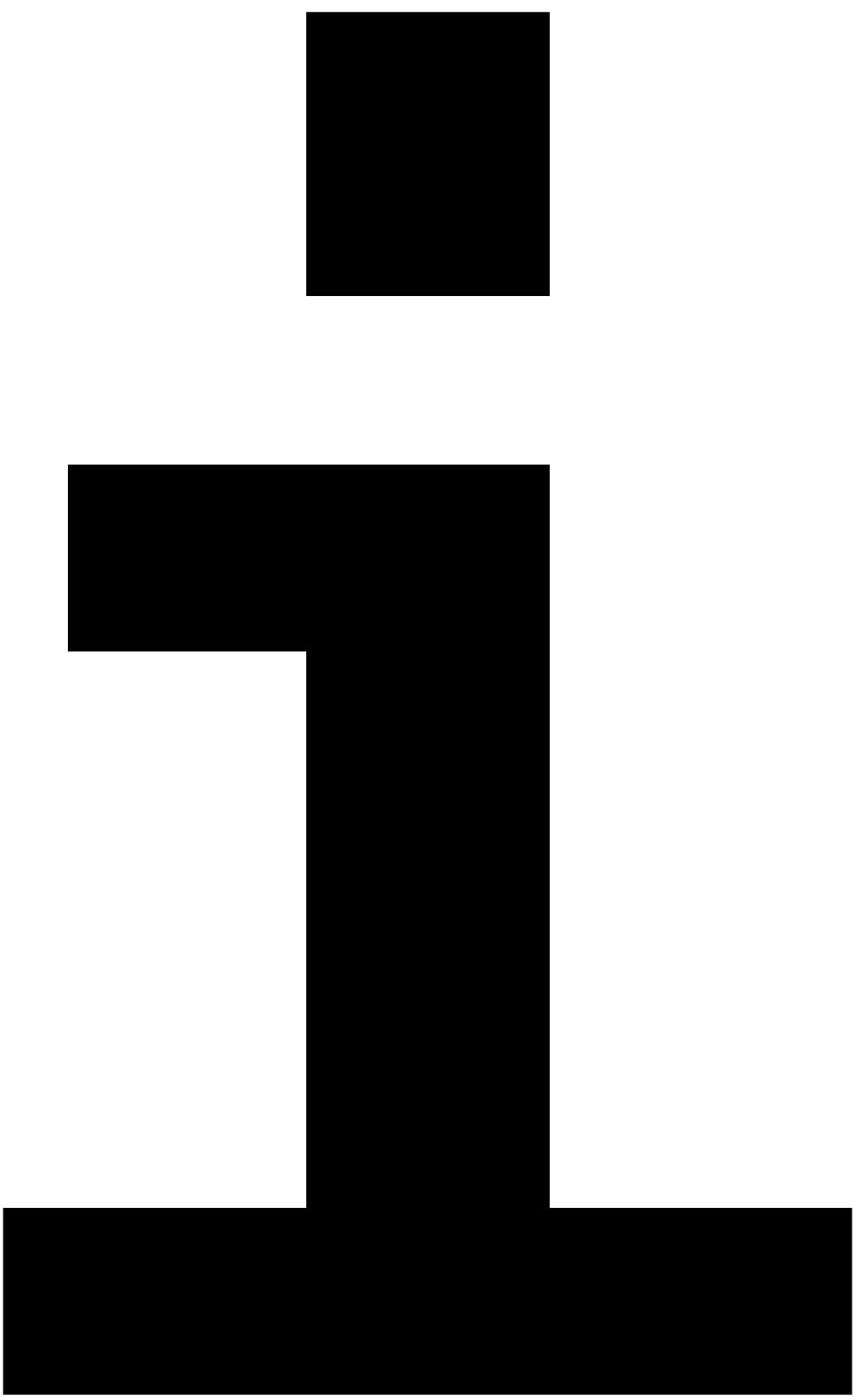


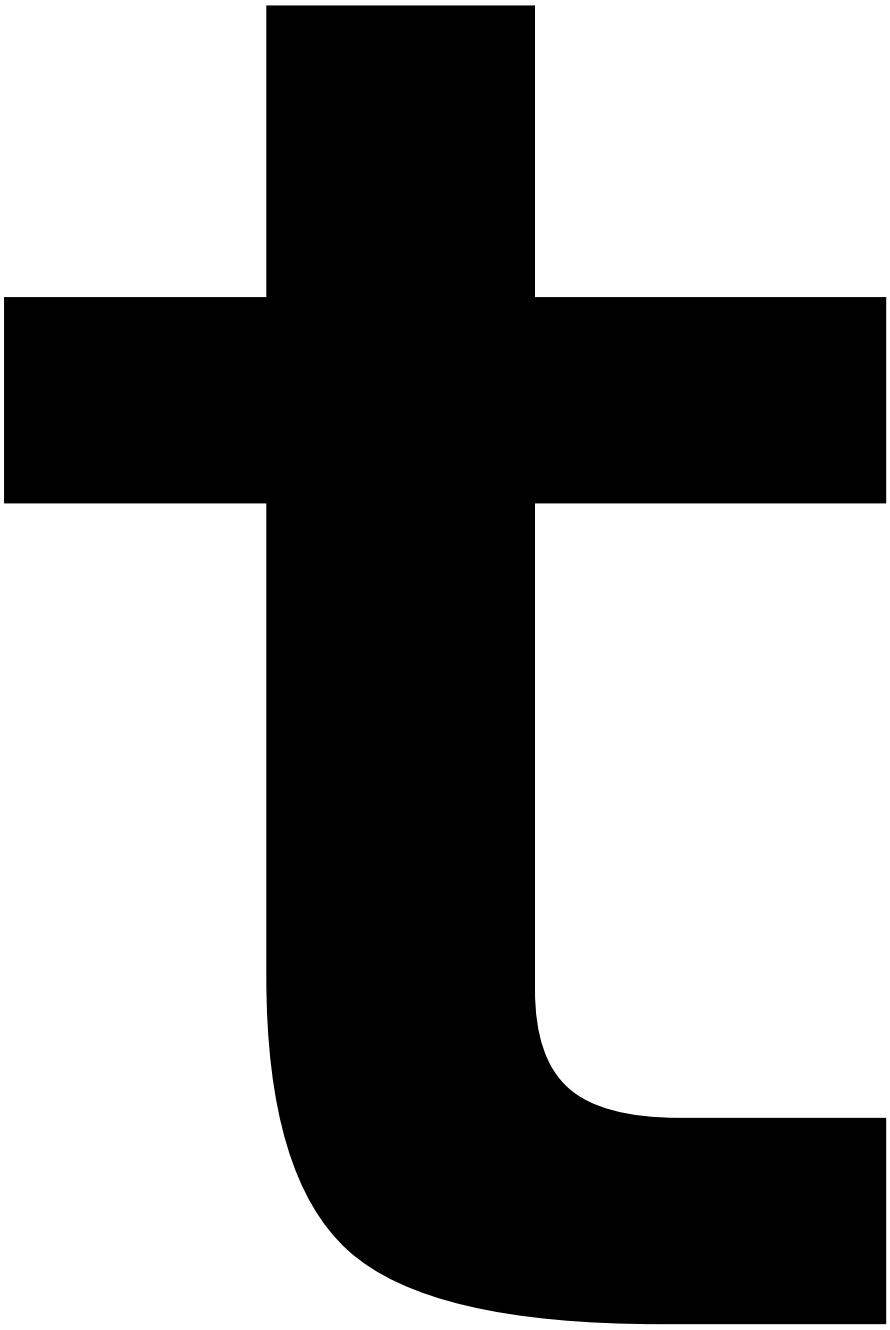


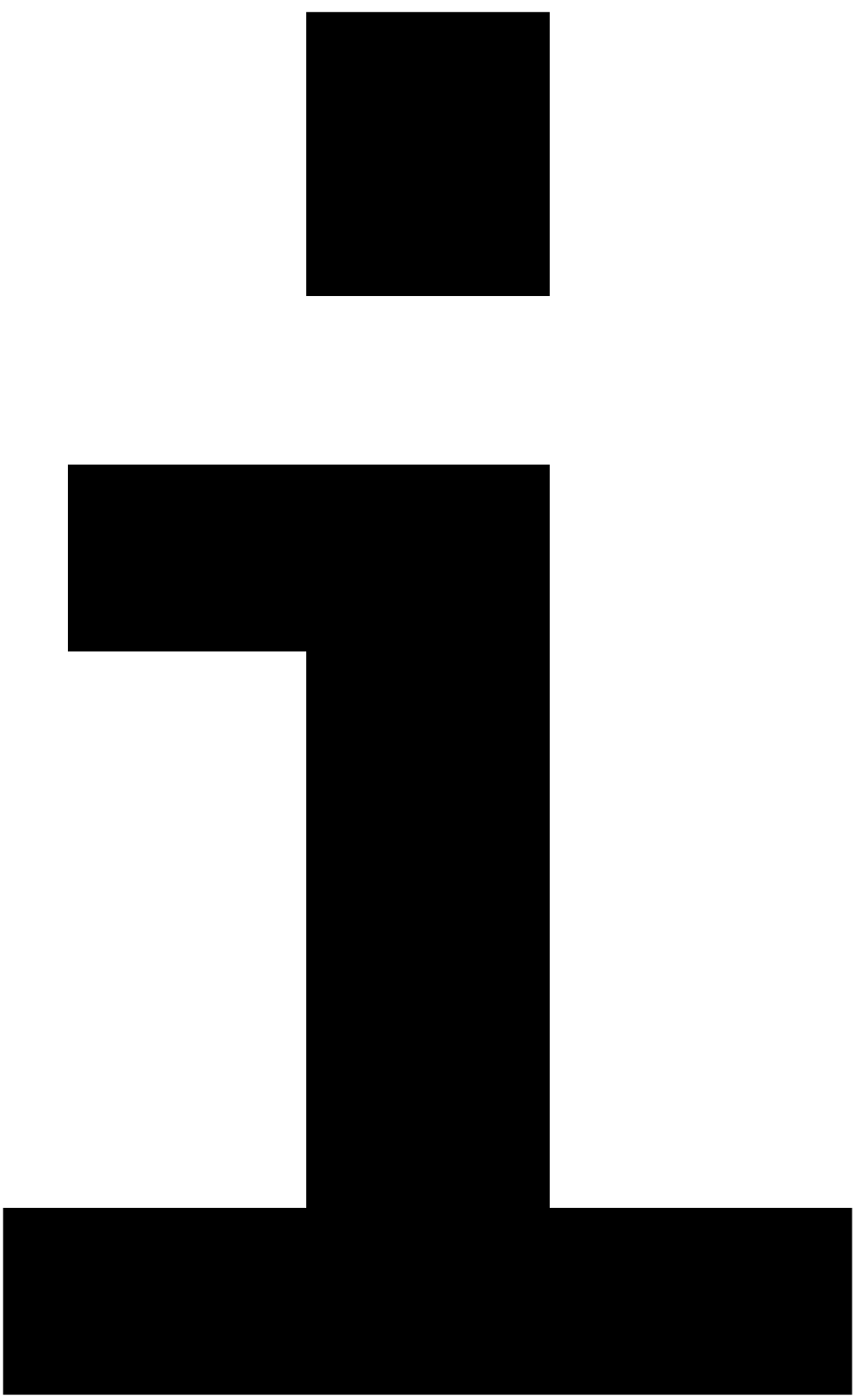




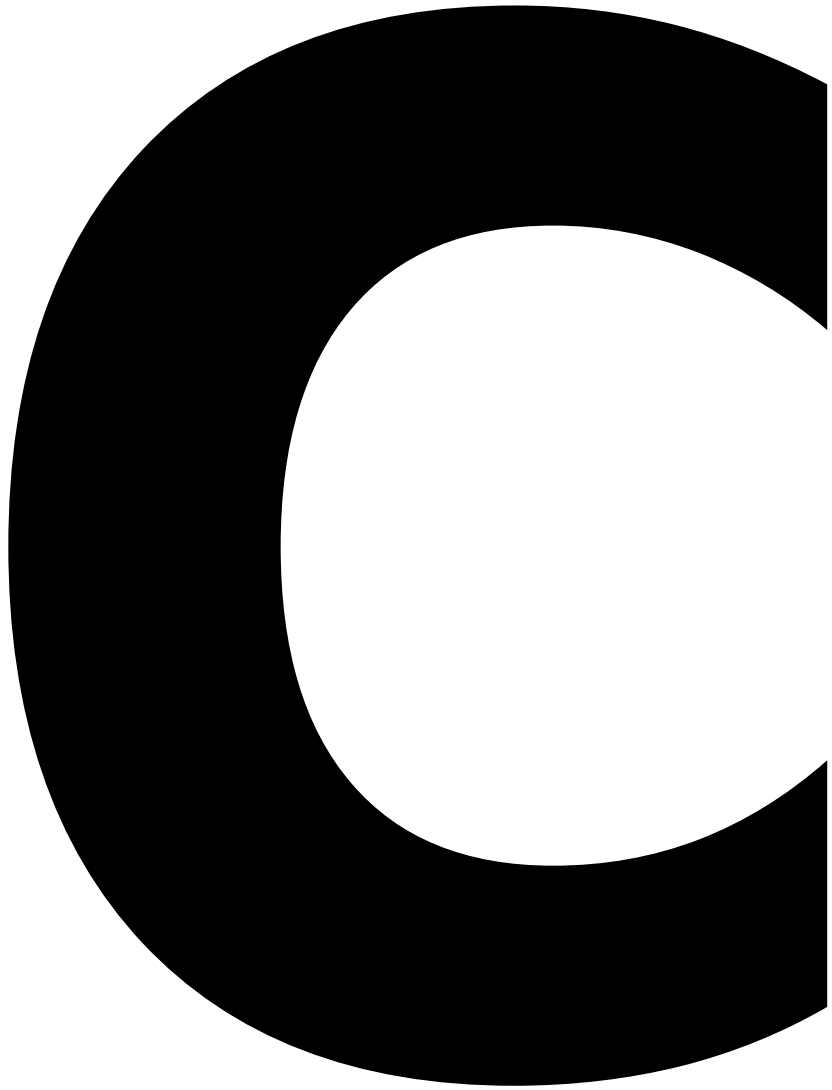


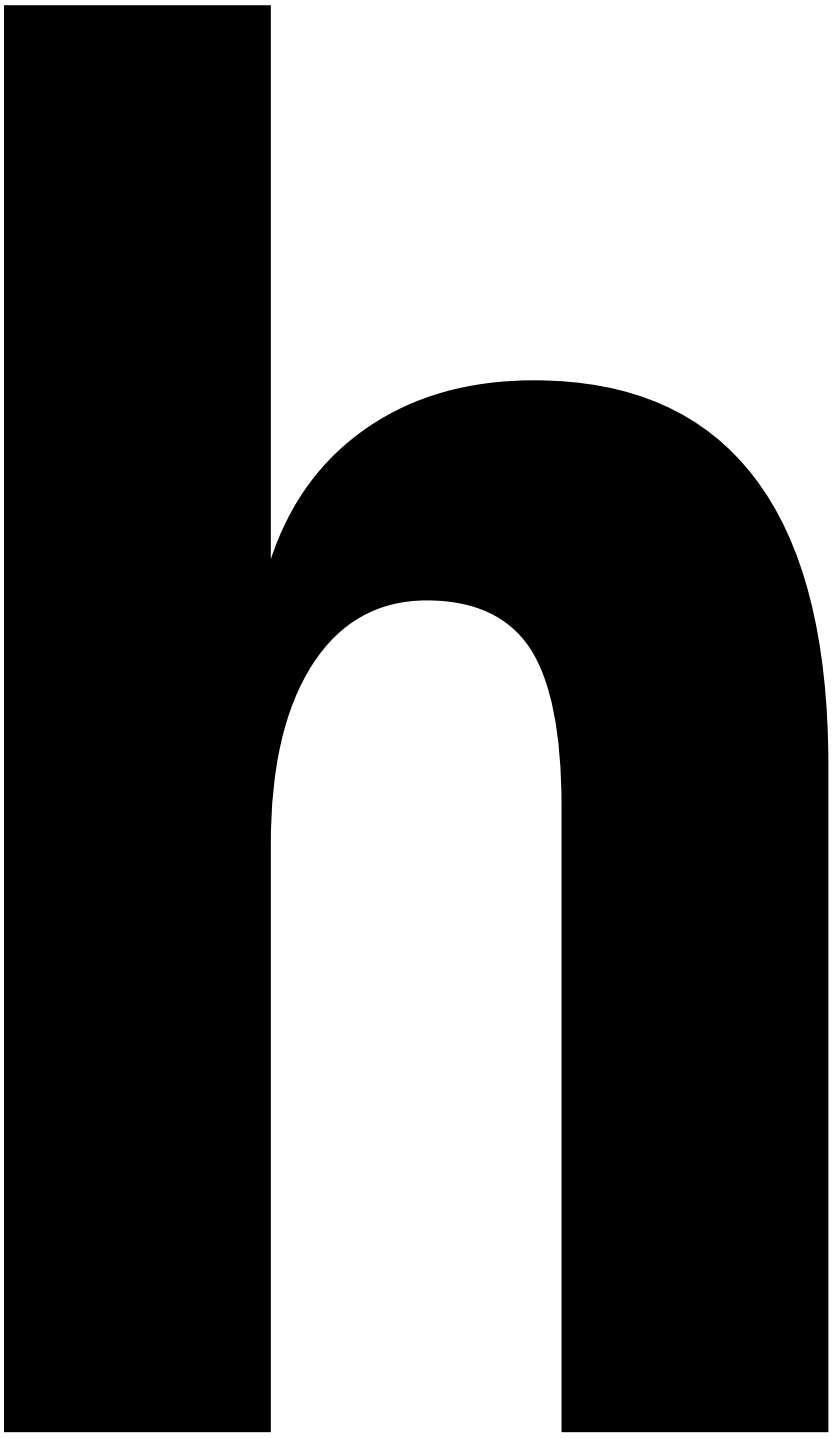


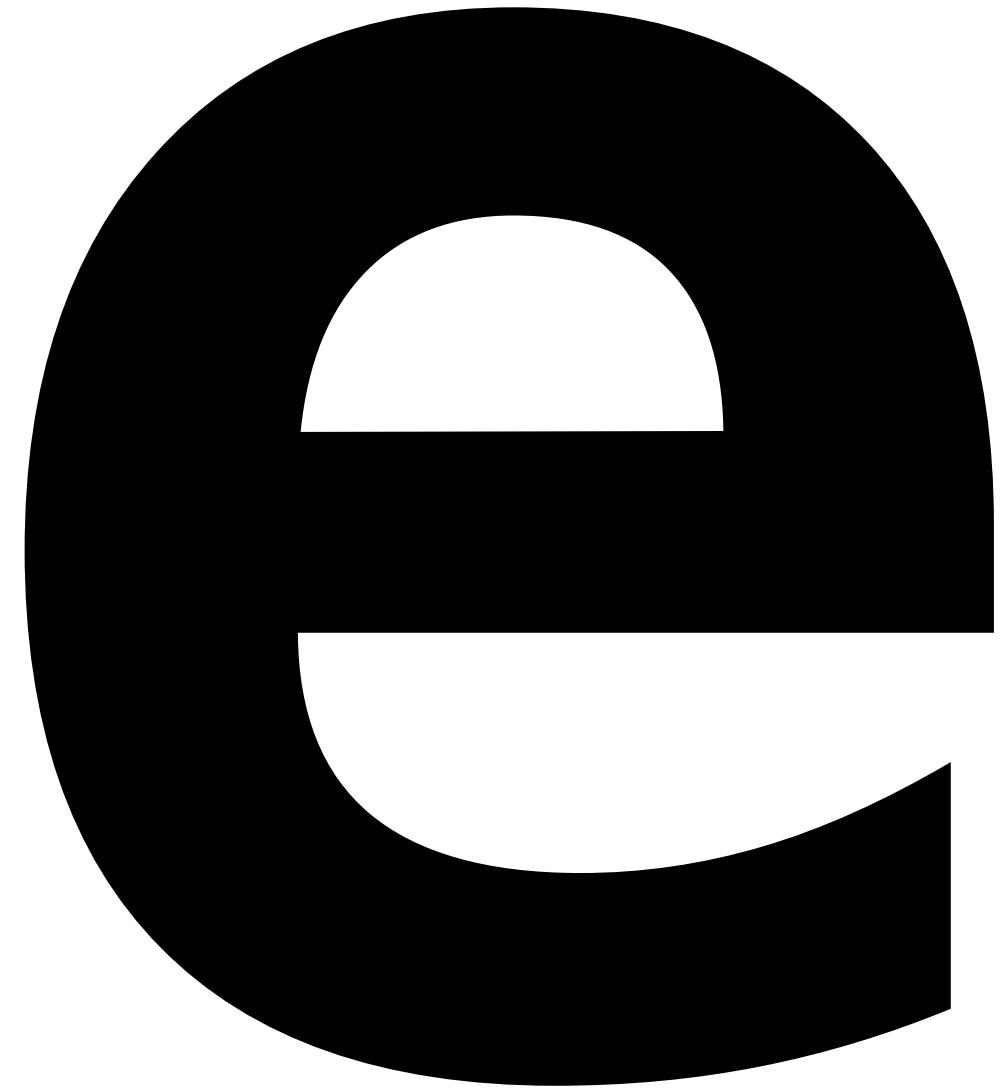


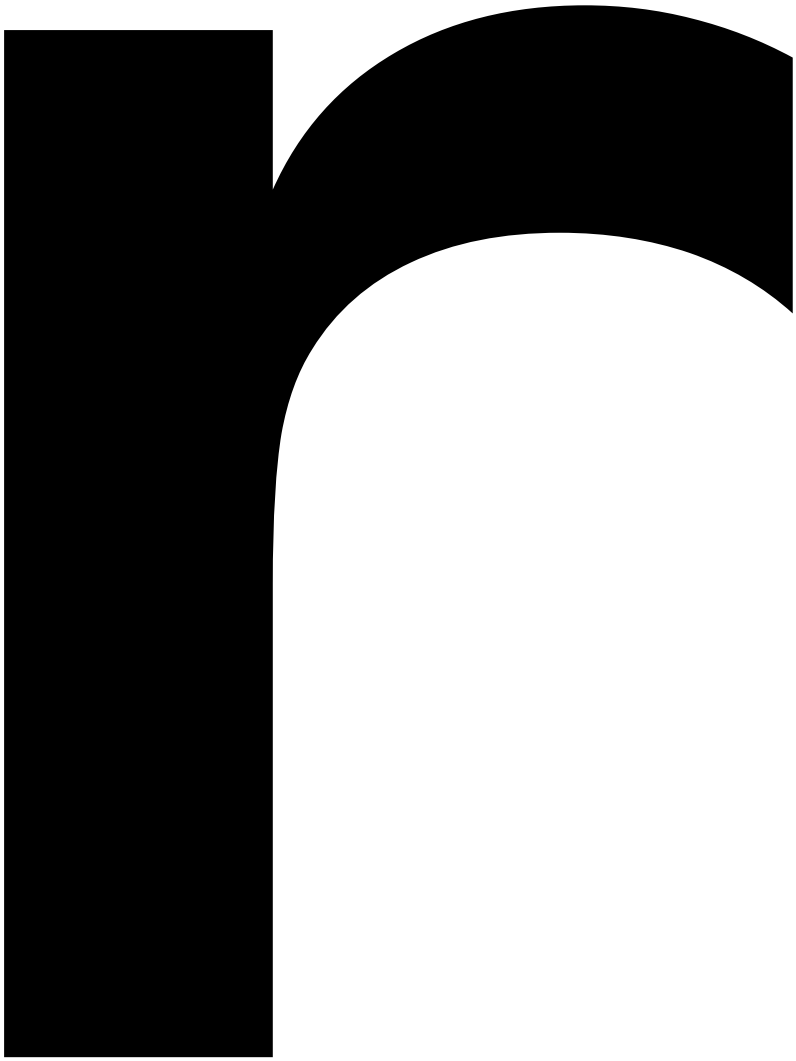


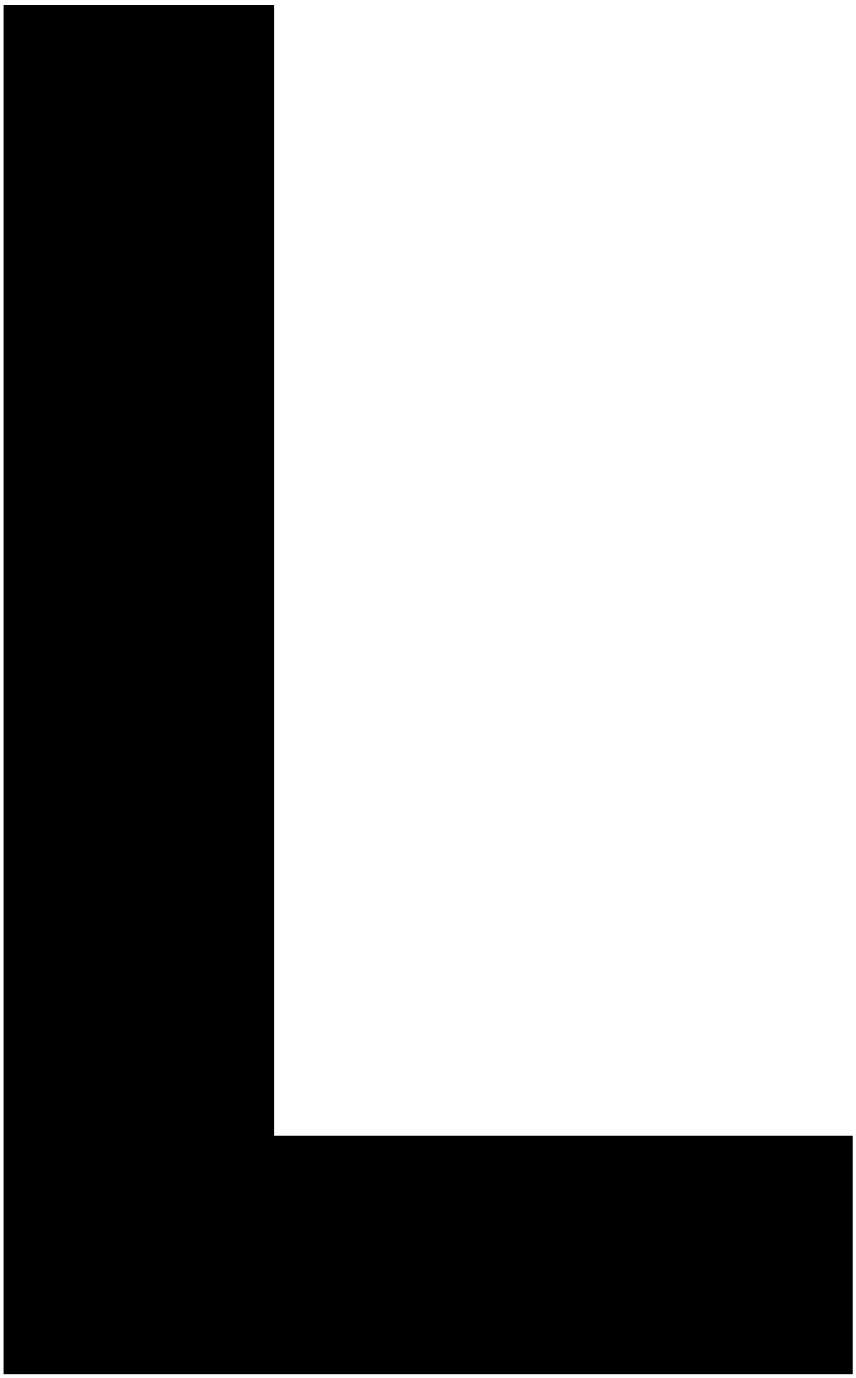
S

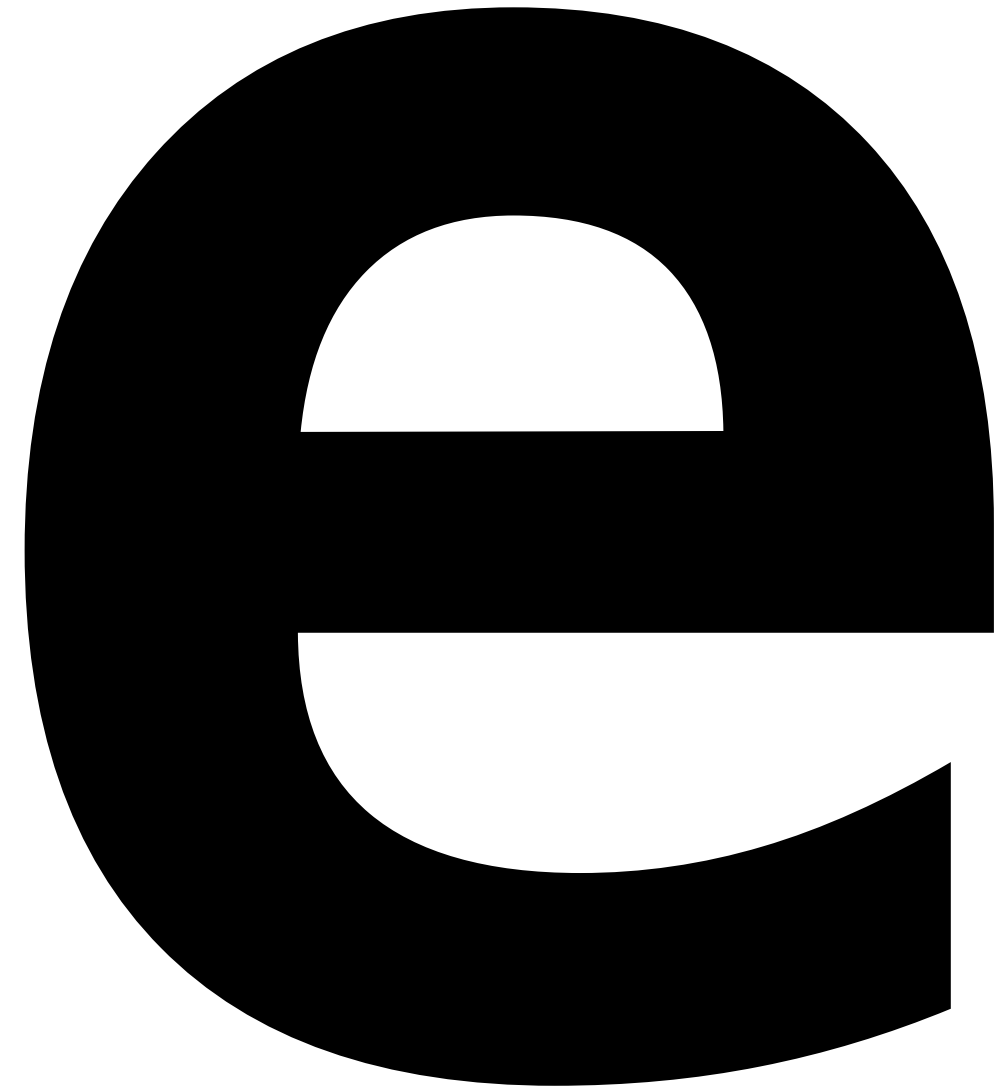


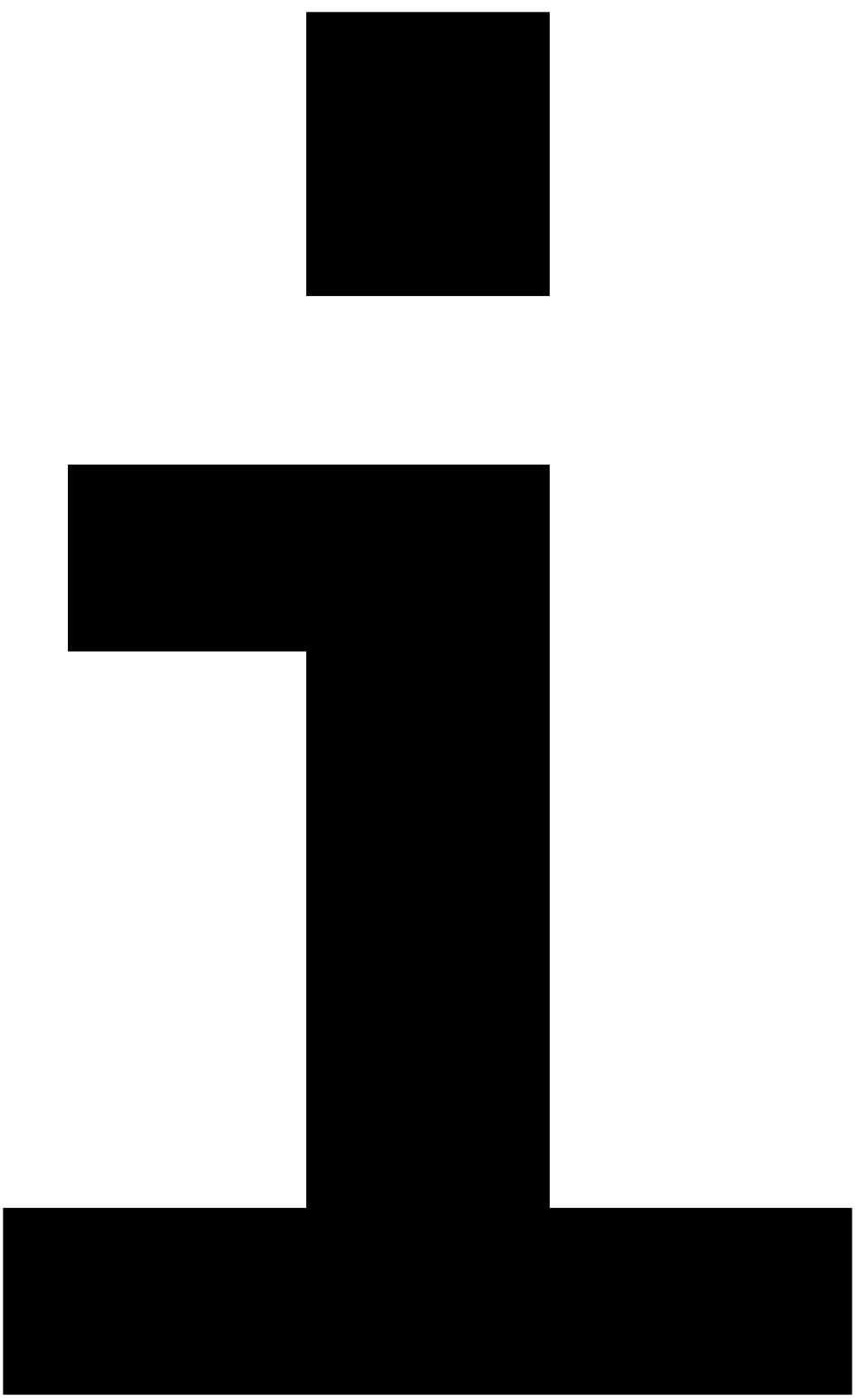


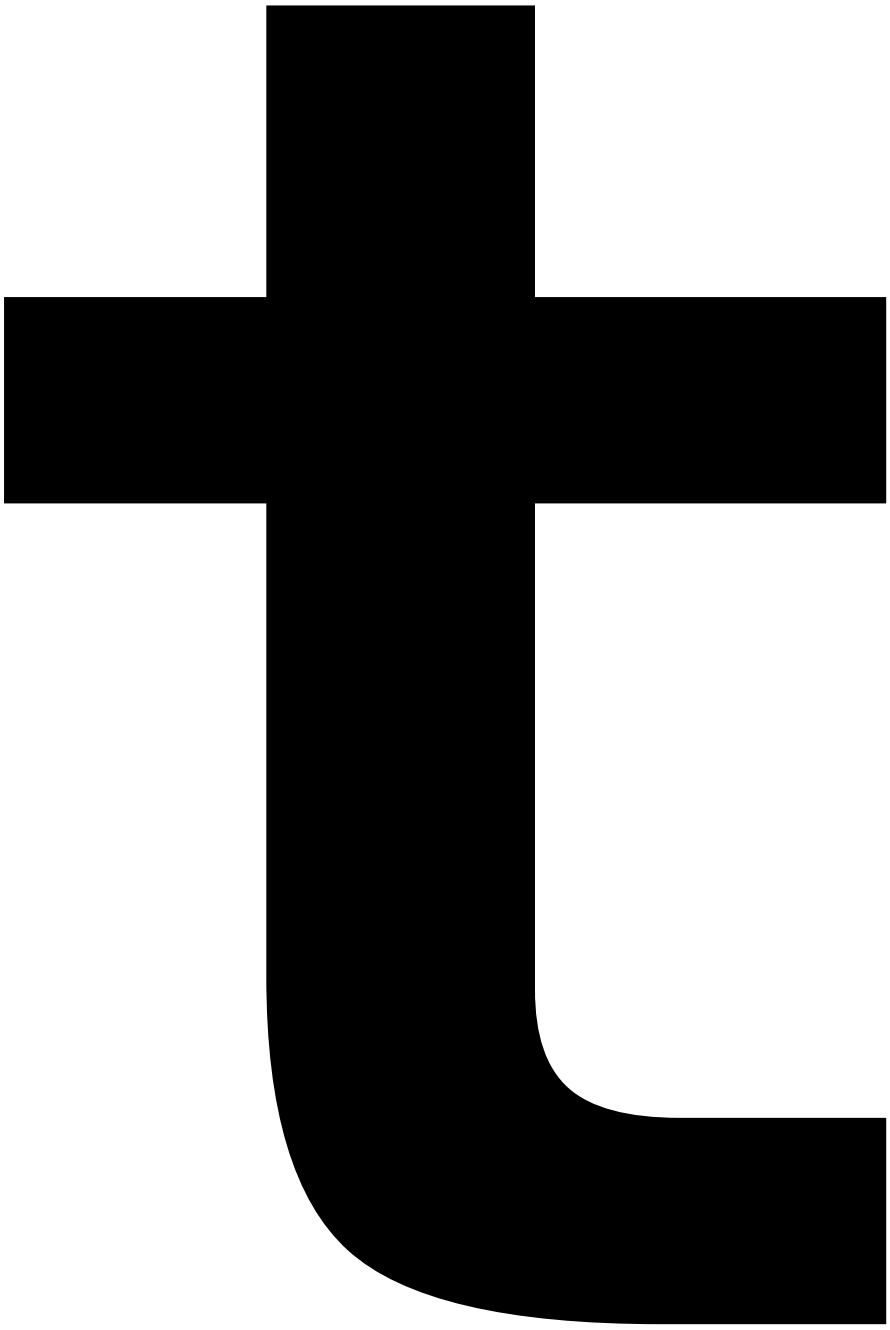




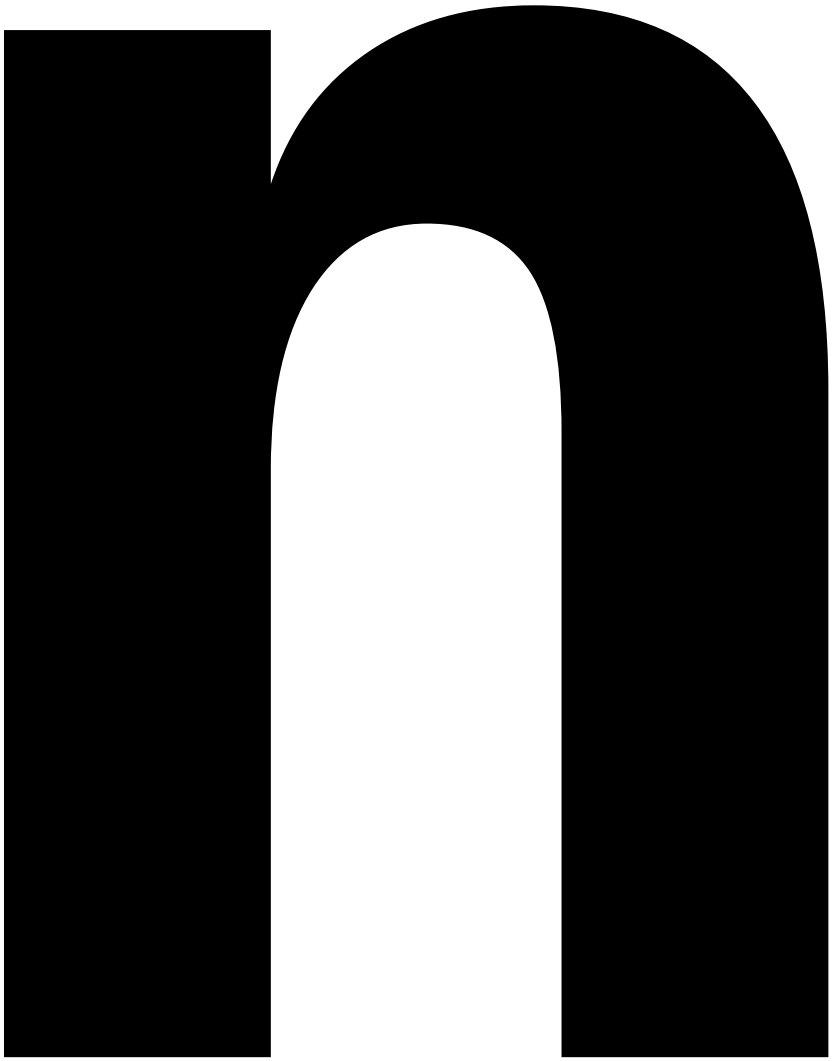


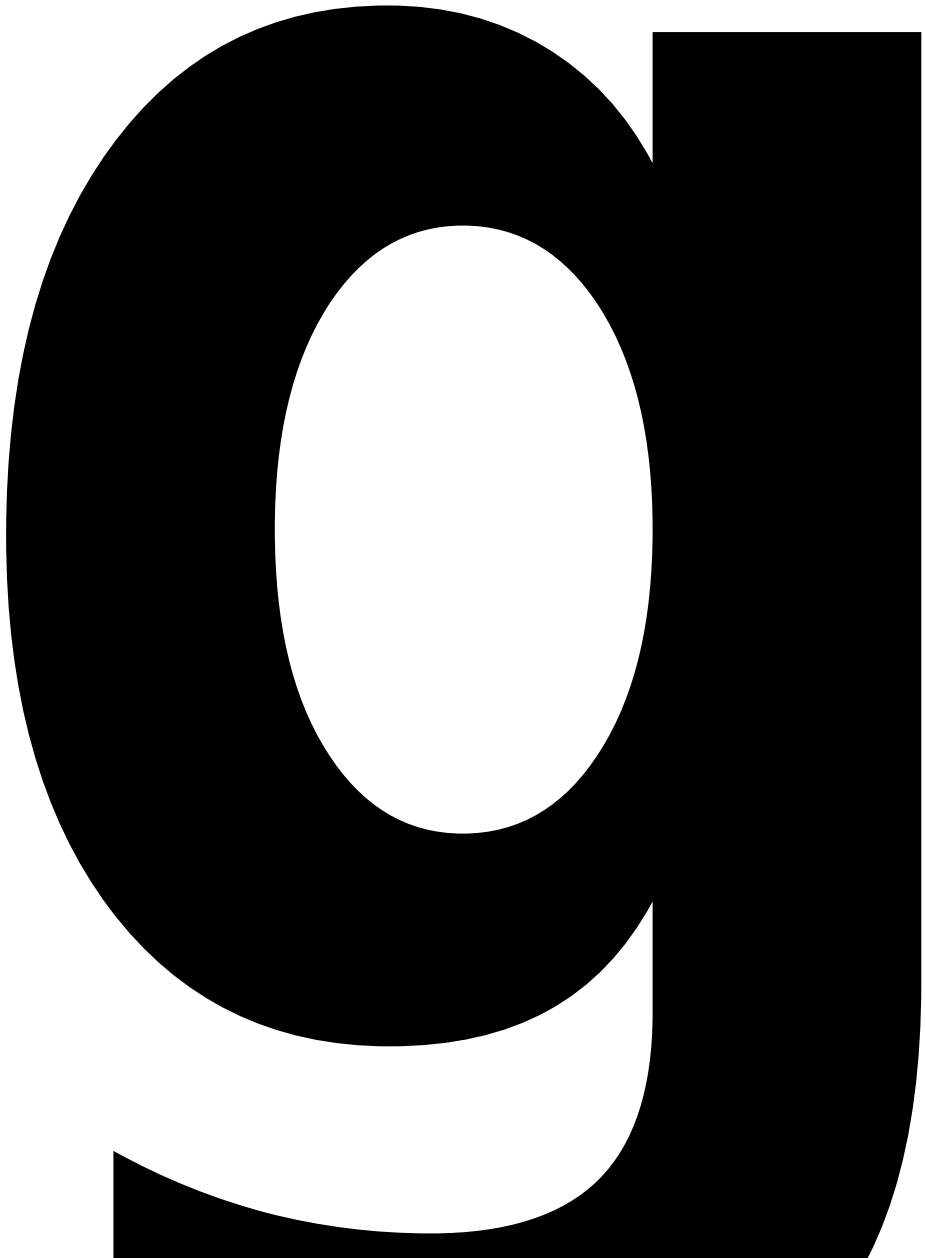


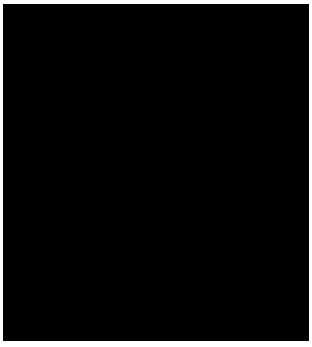


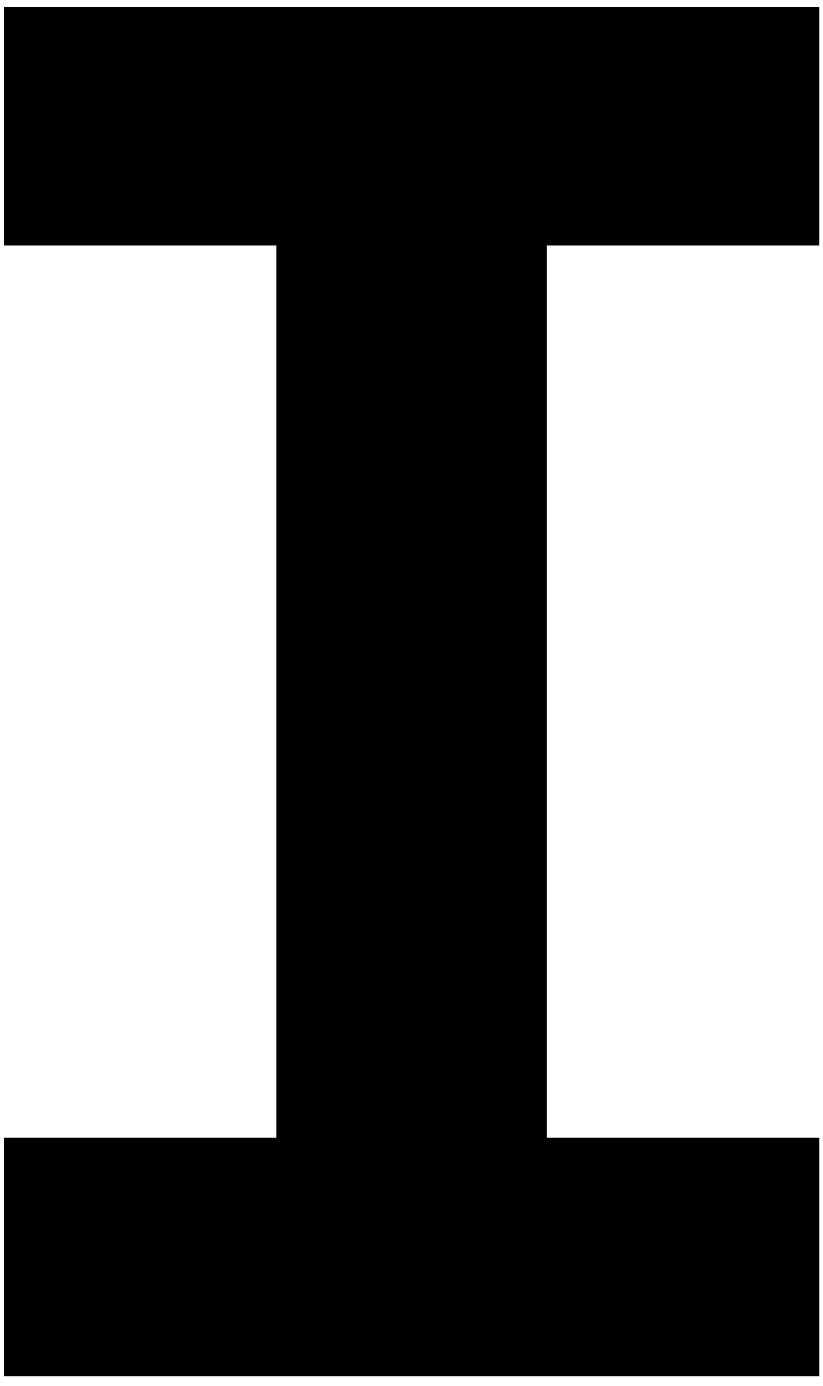


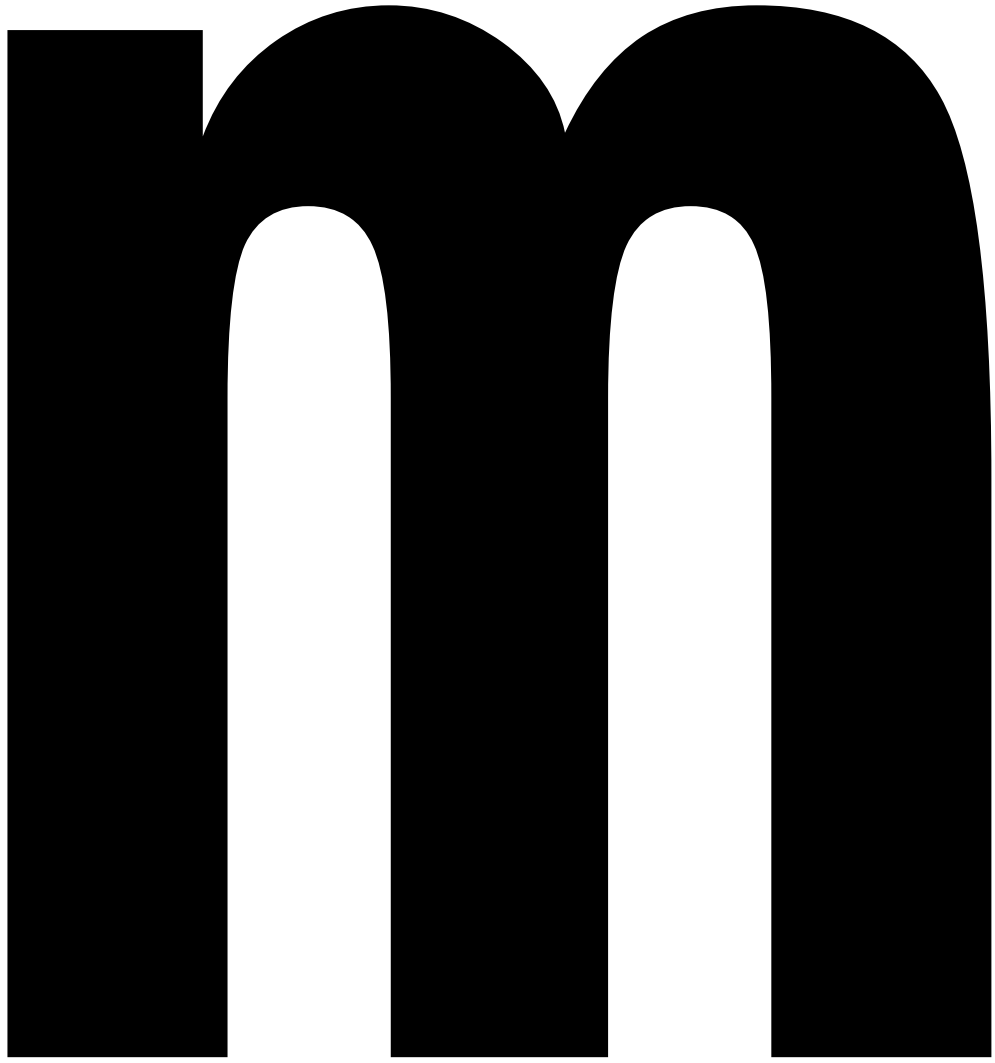
u

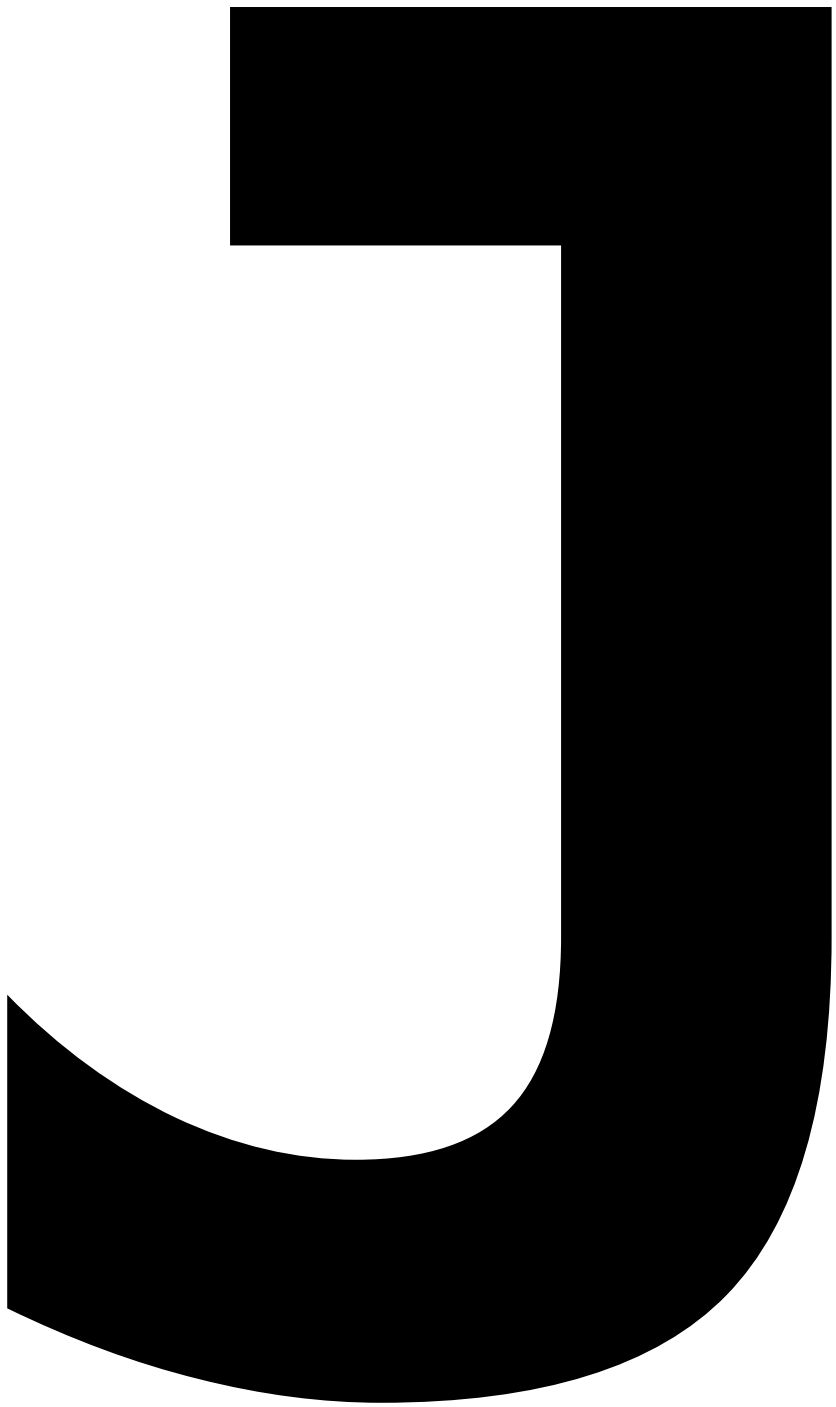


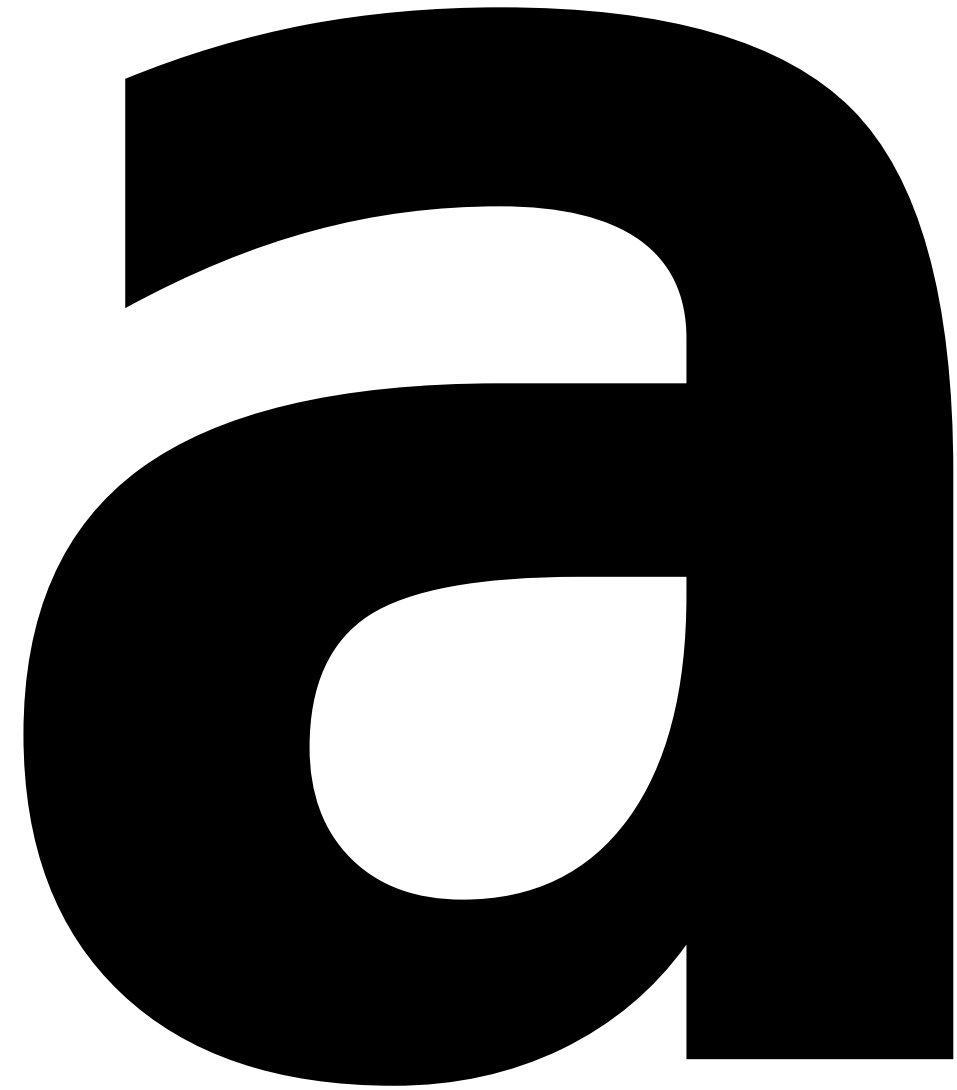


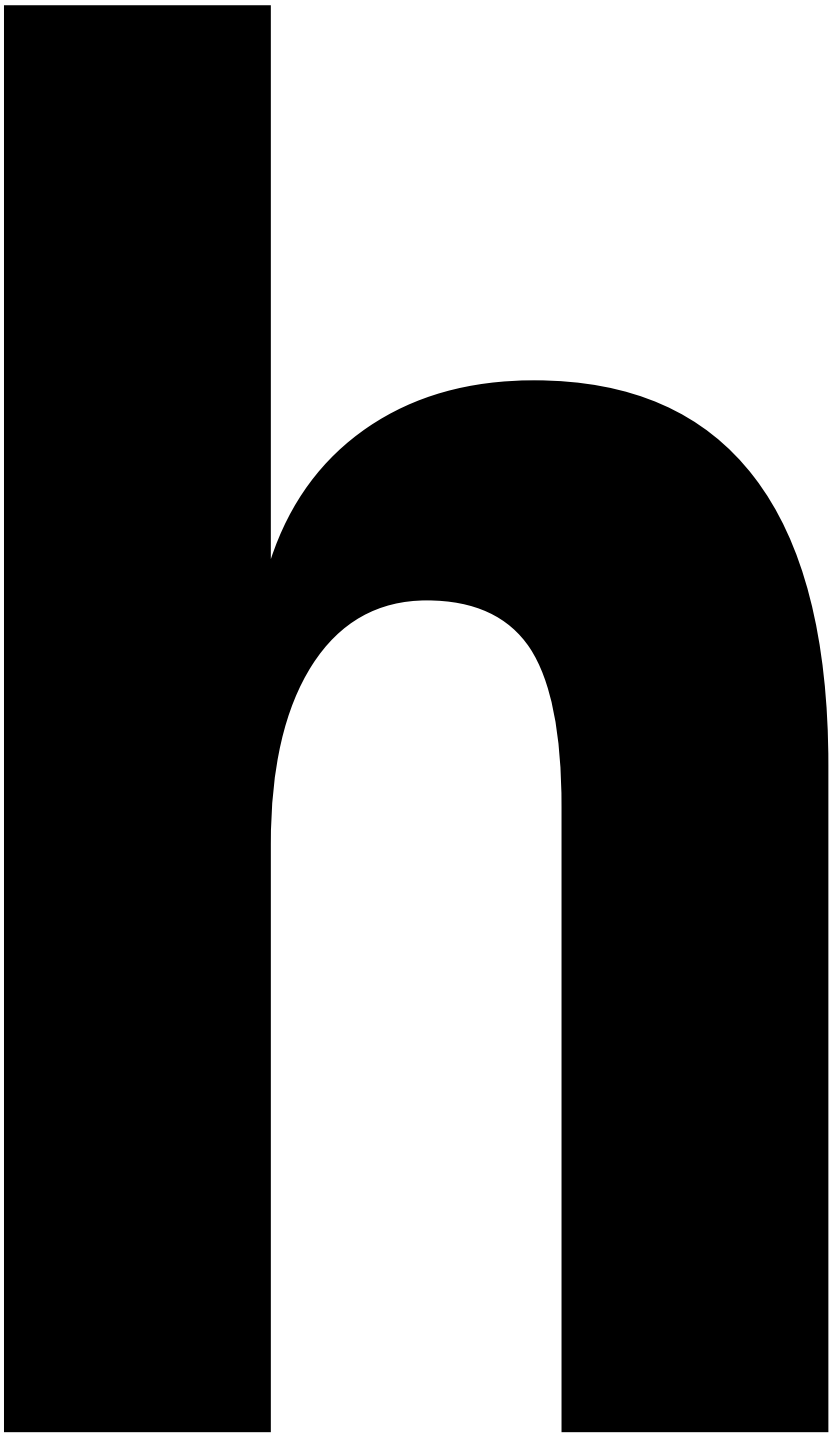


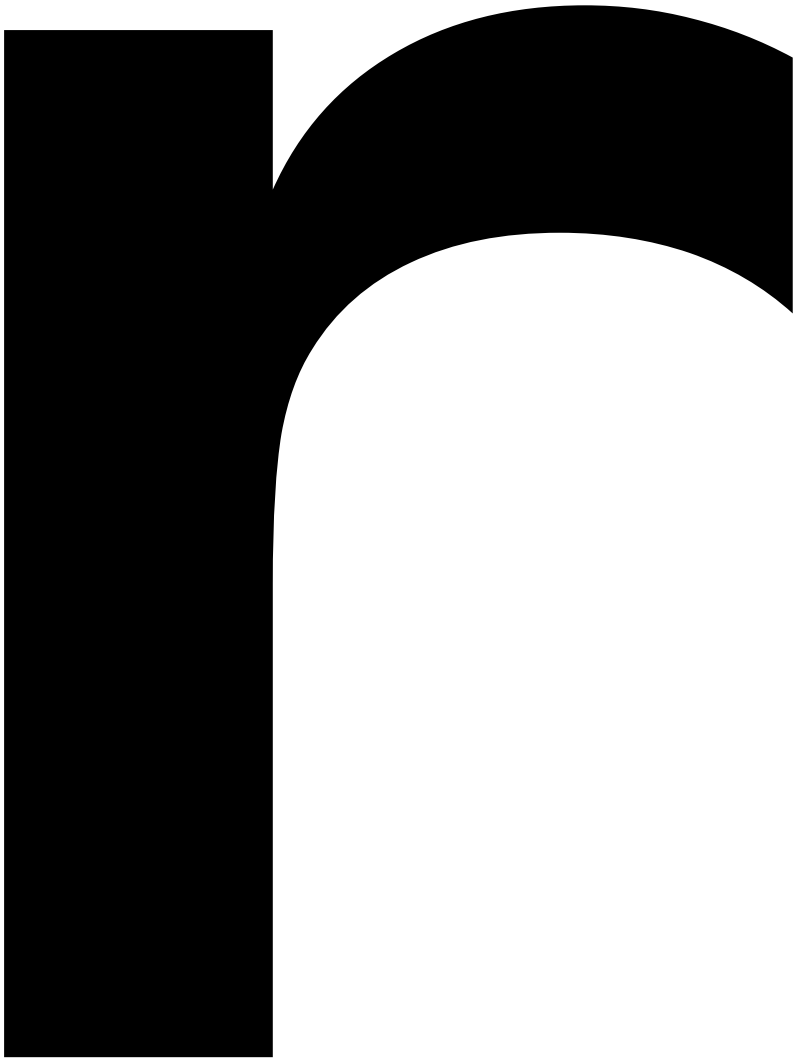


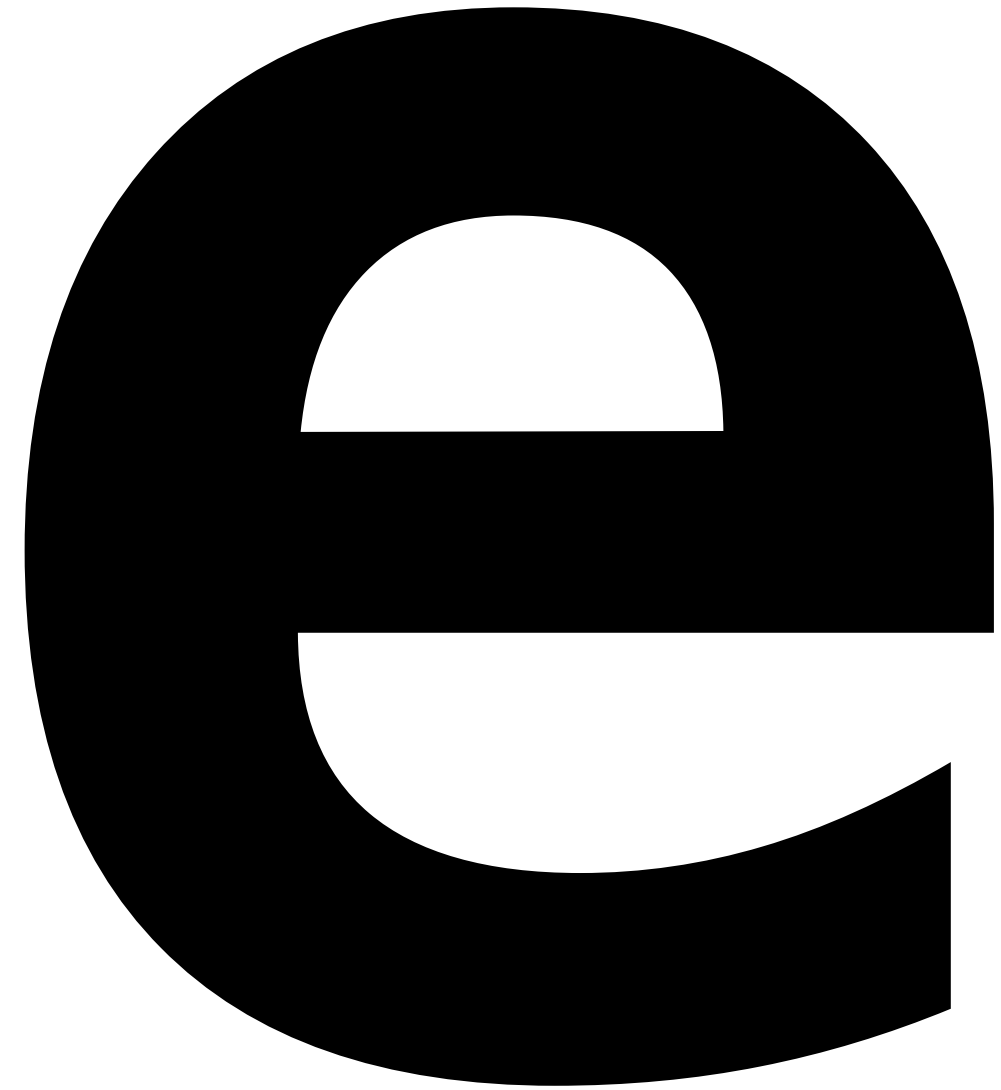




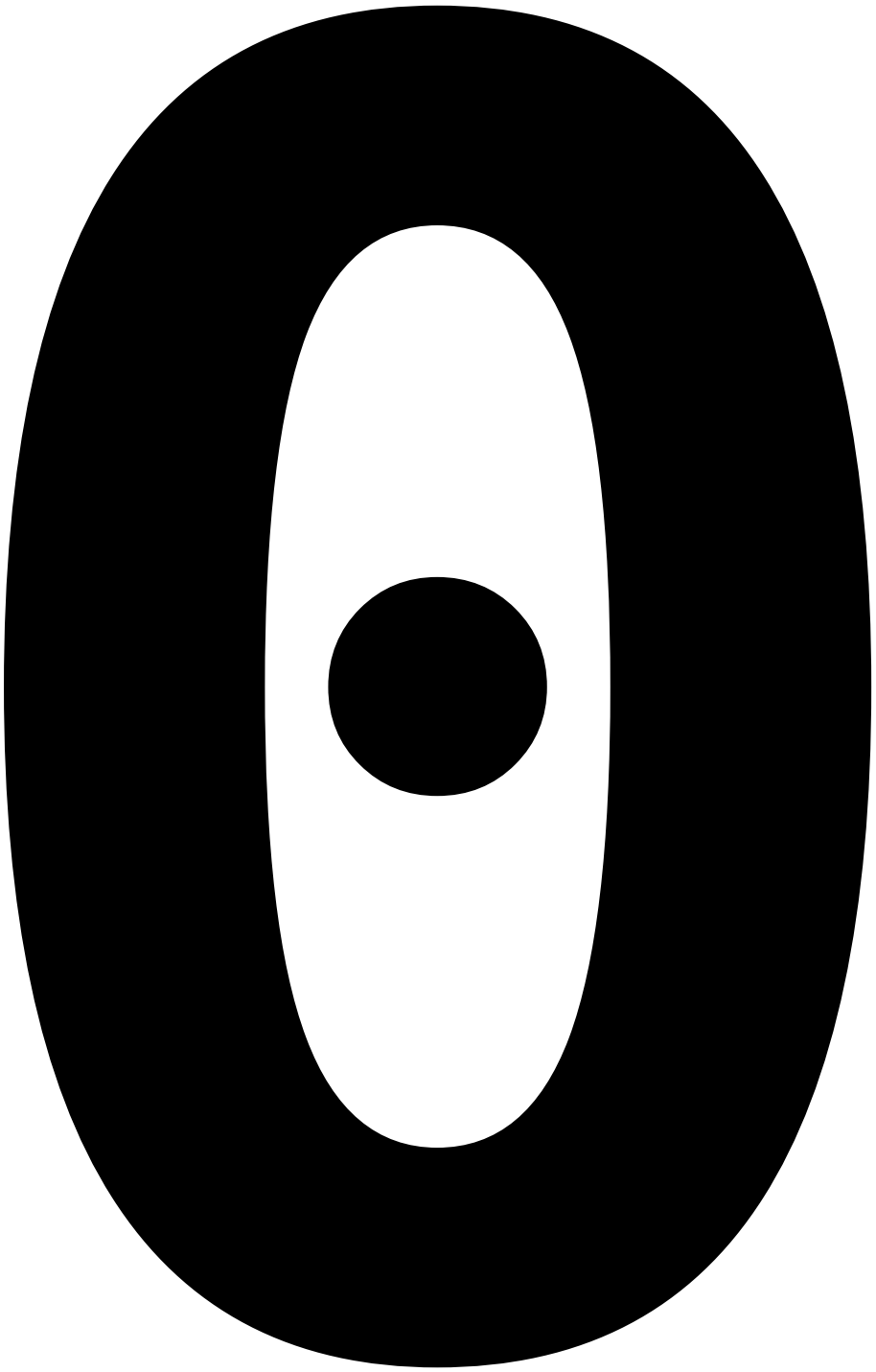


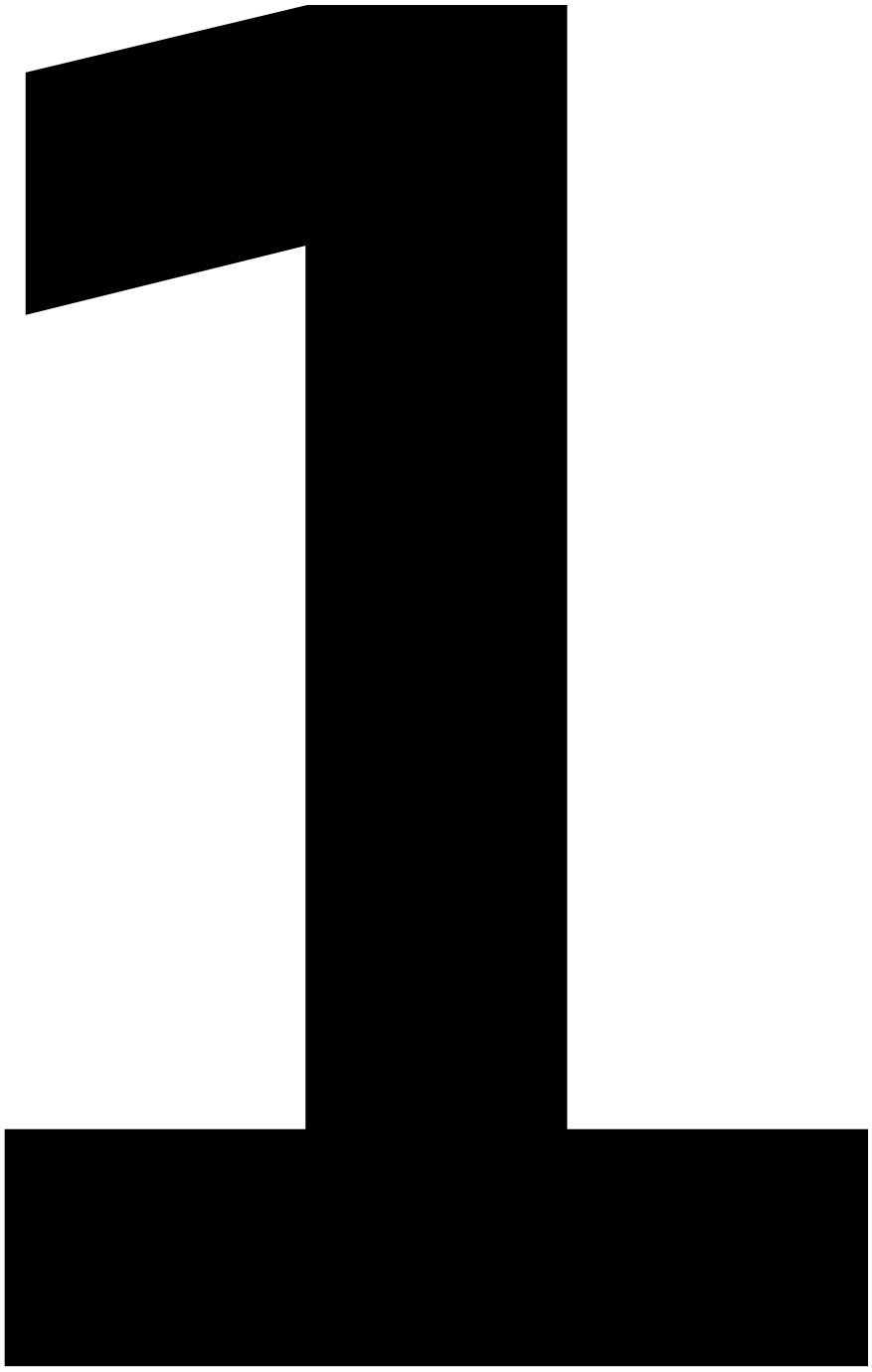


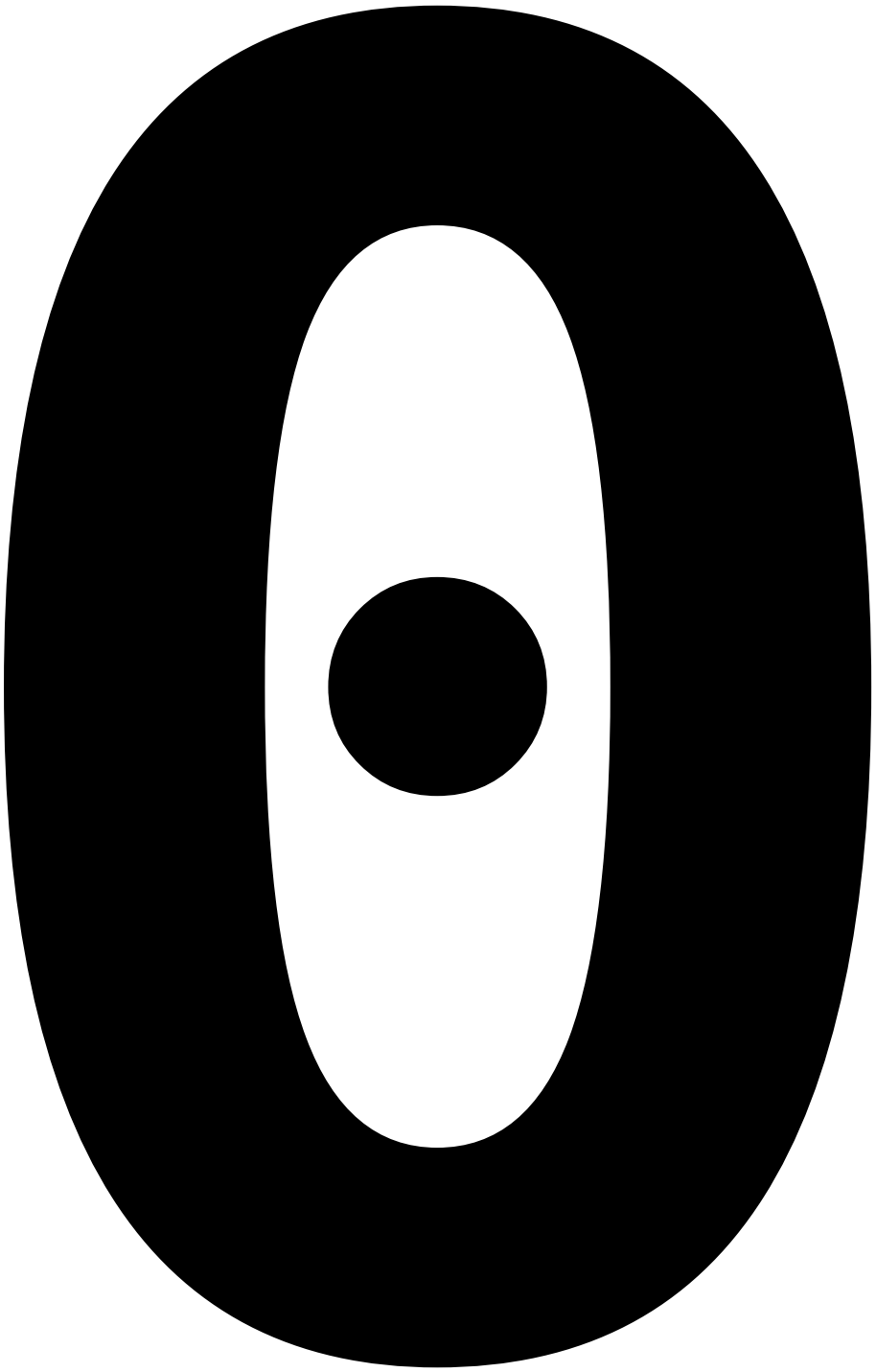


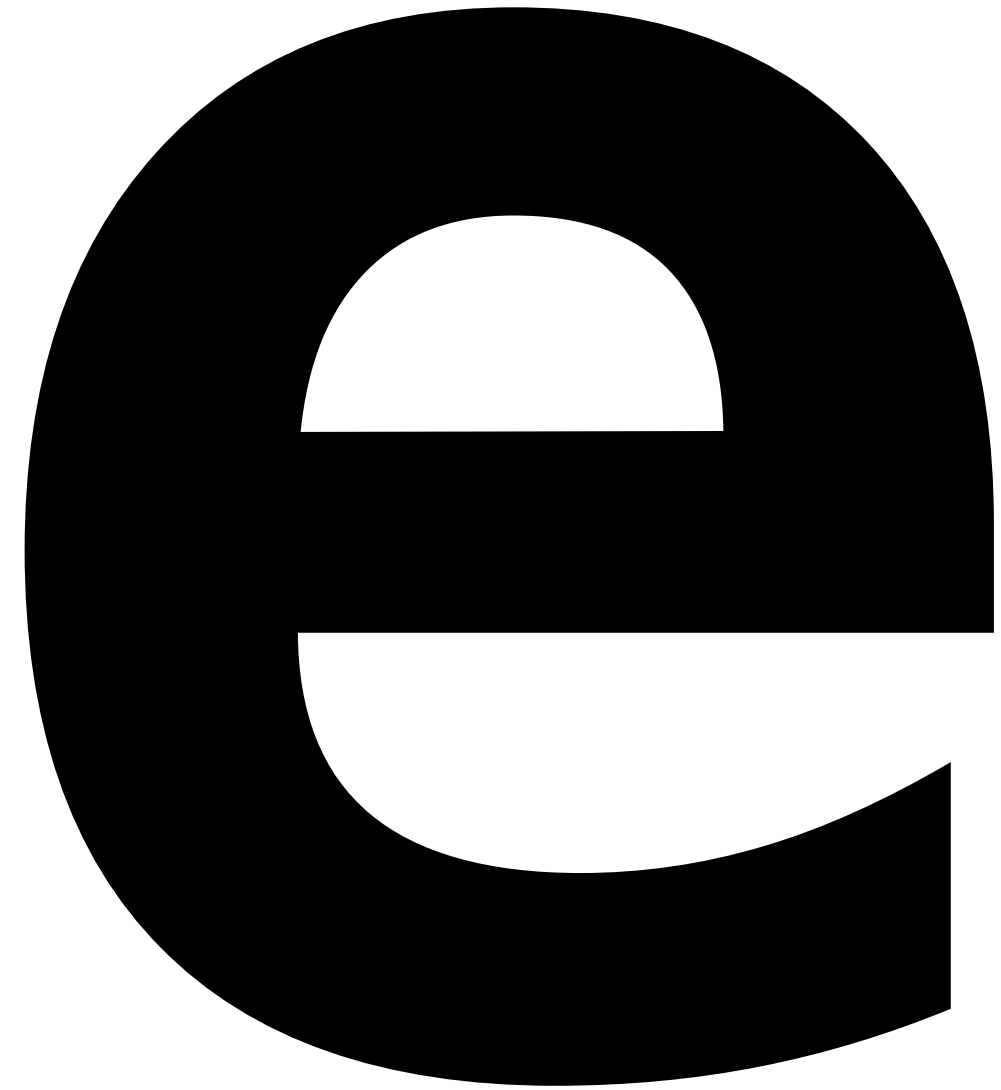


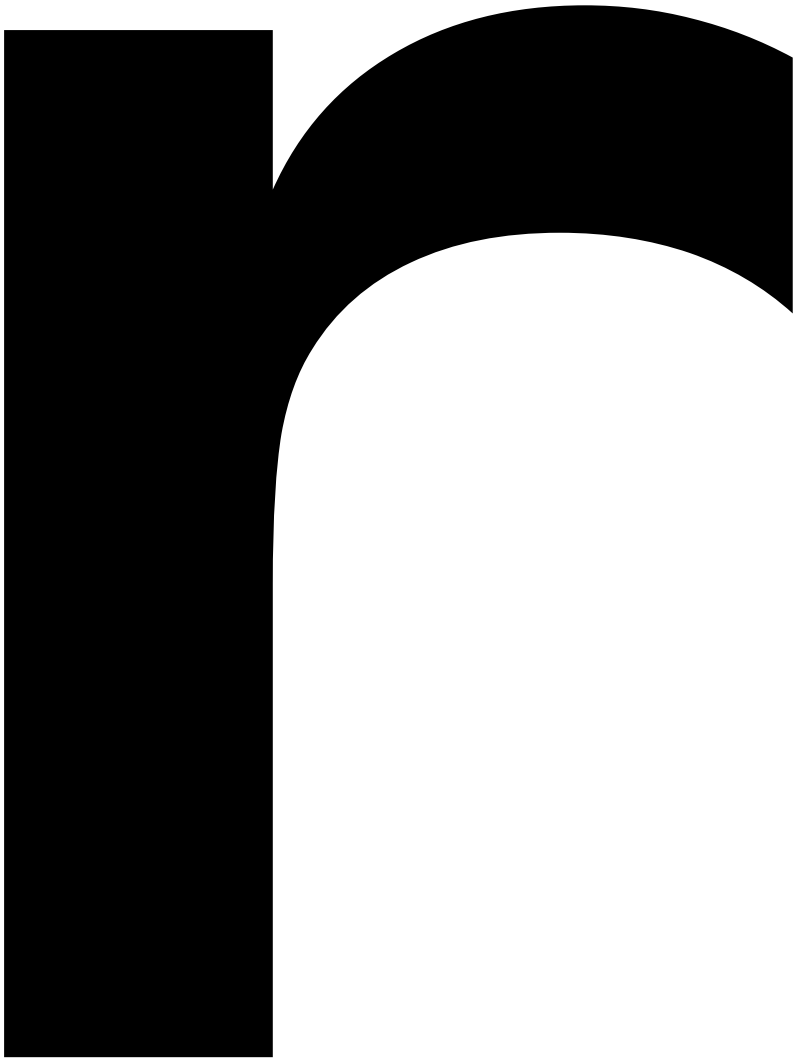
2

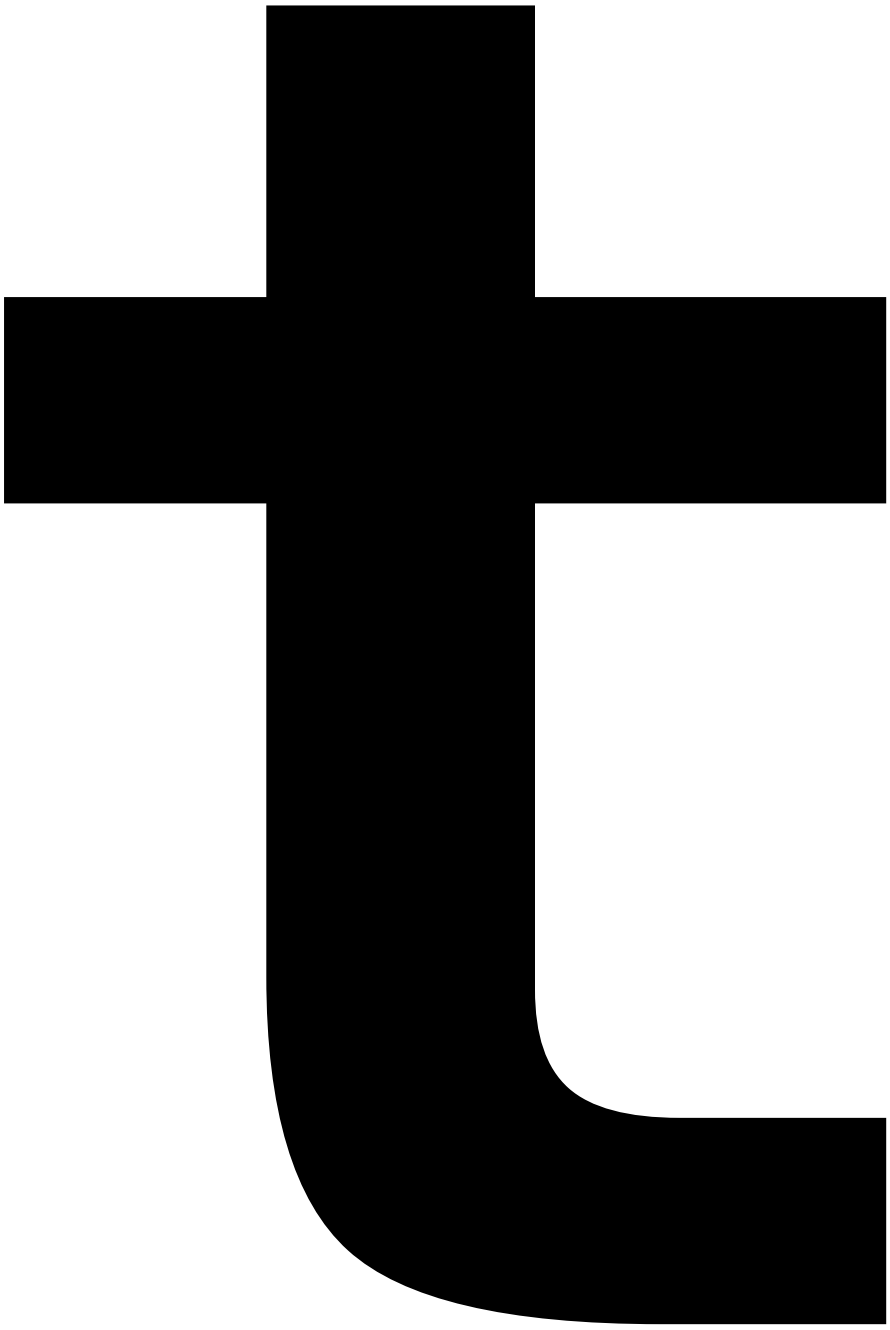


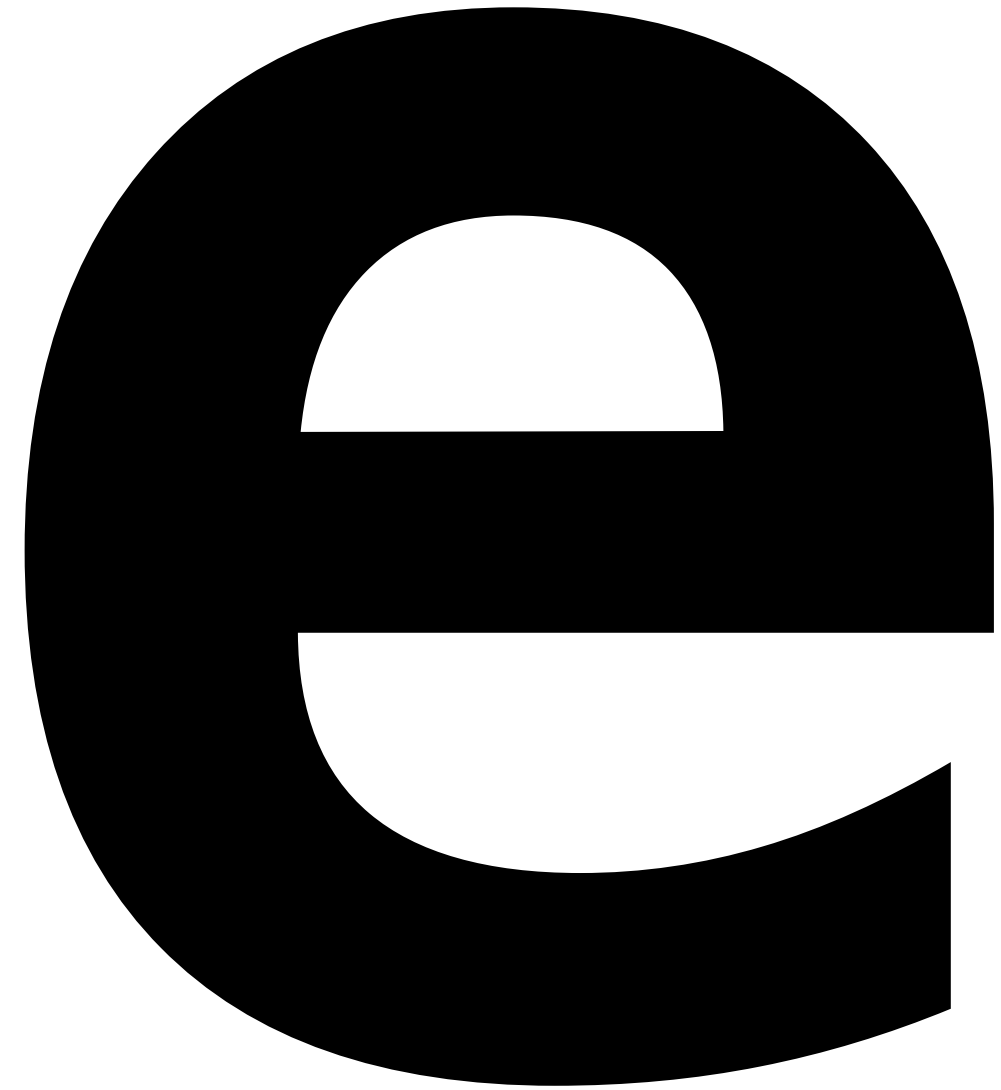


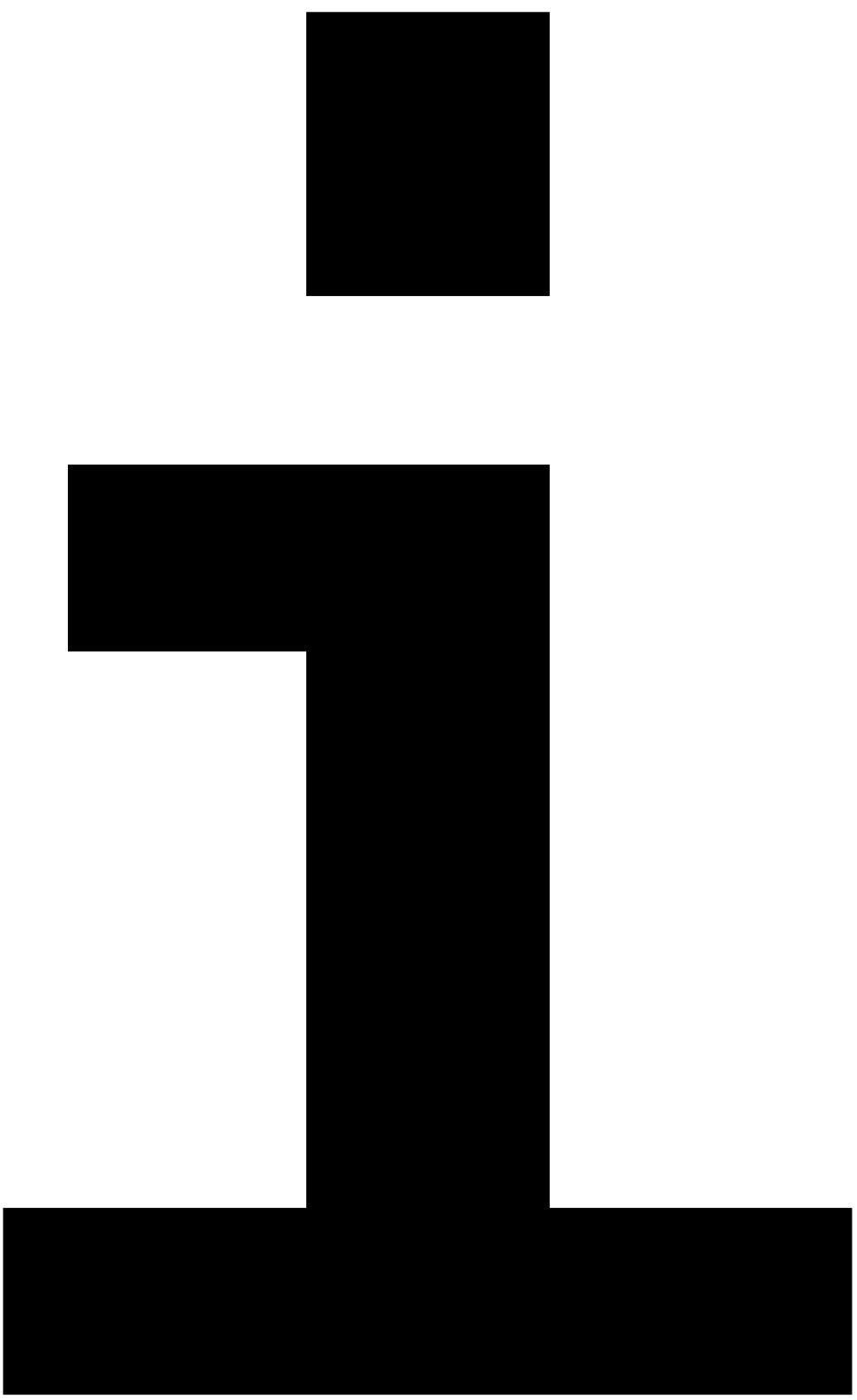


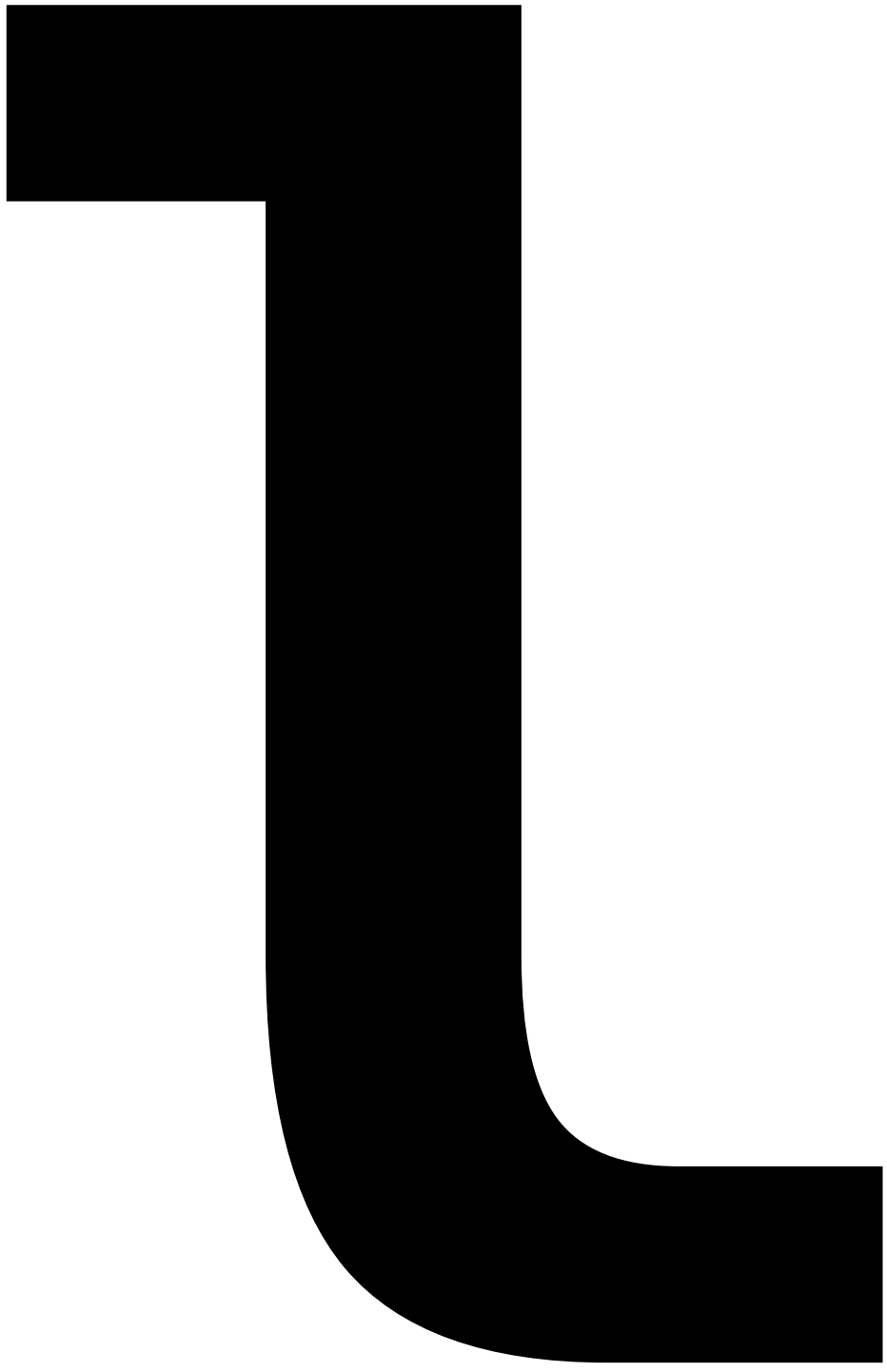


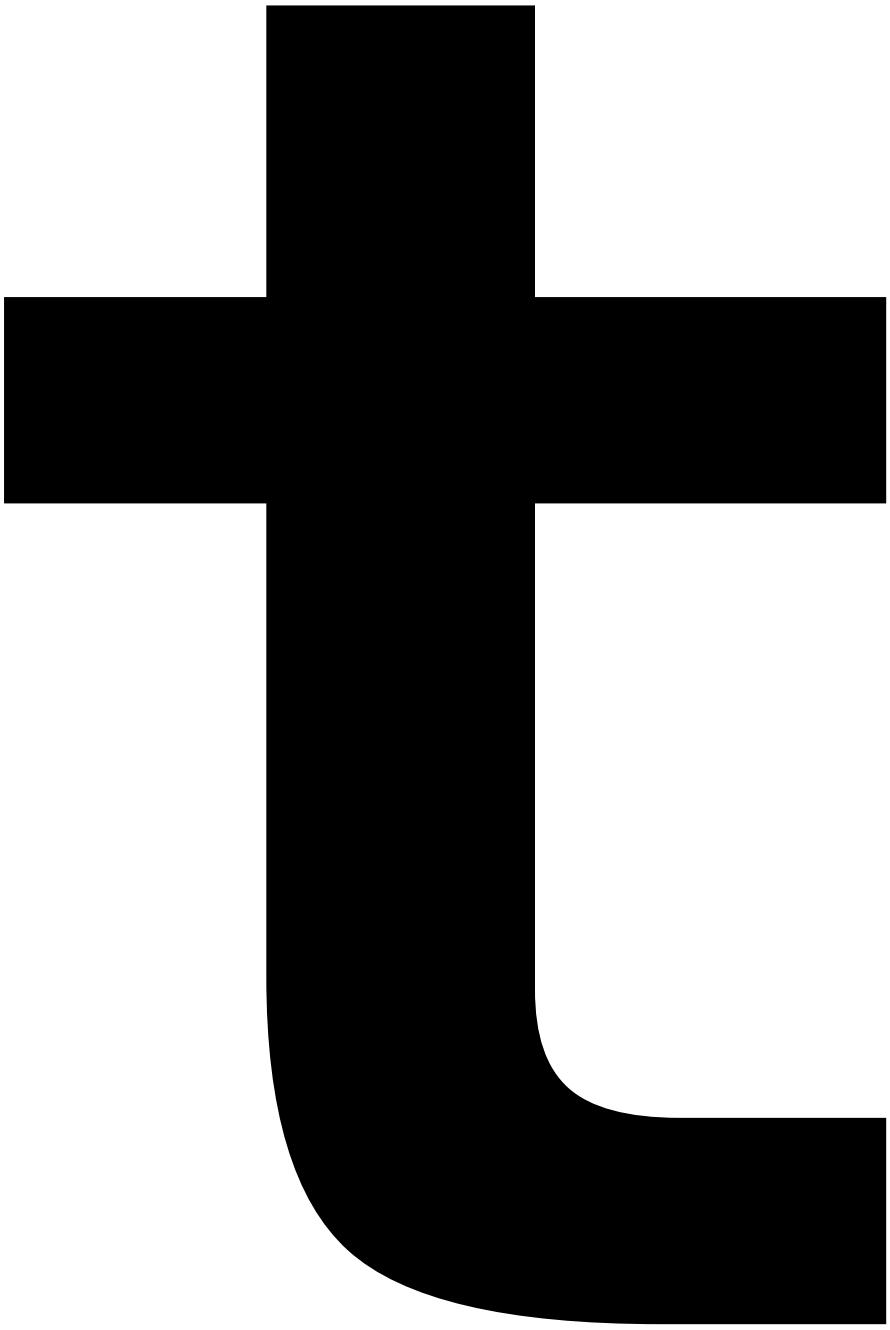


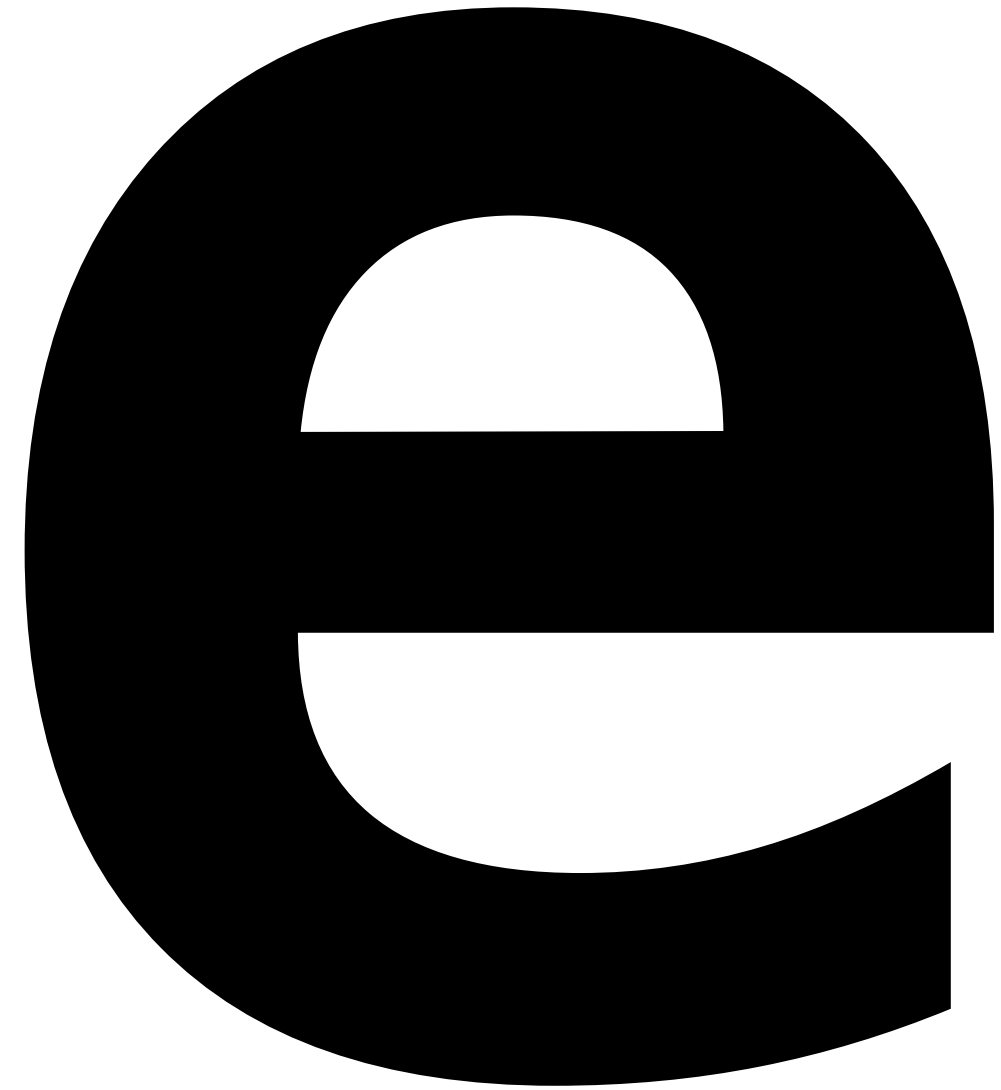


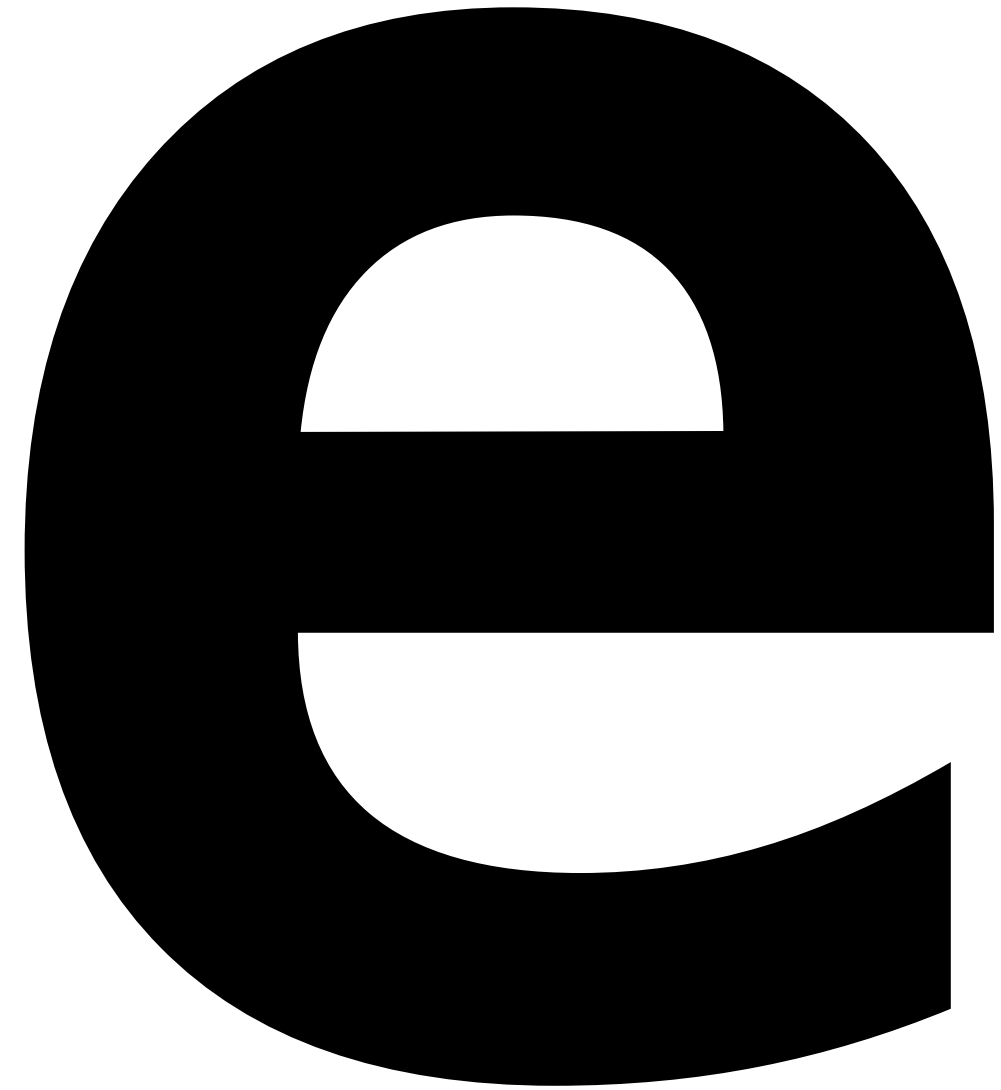




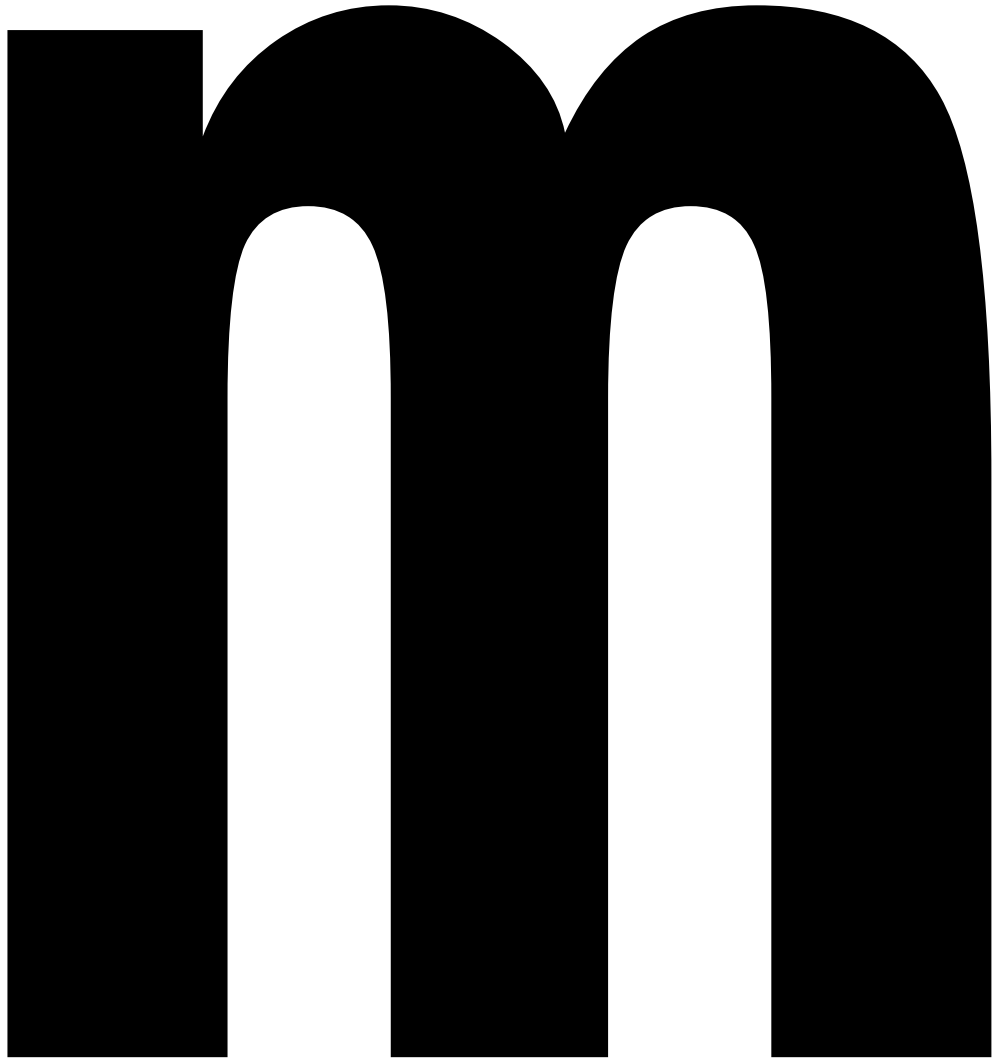


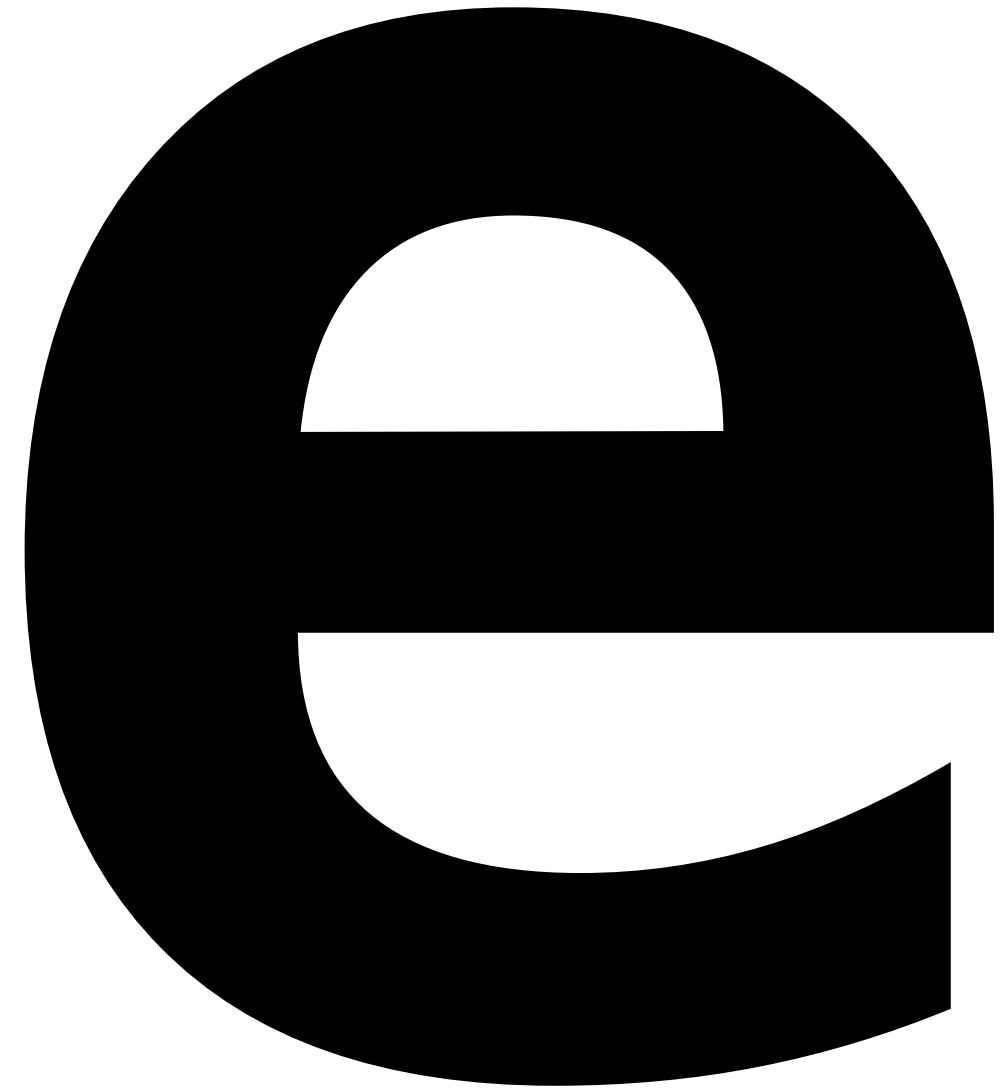


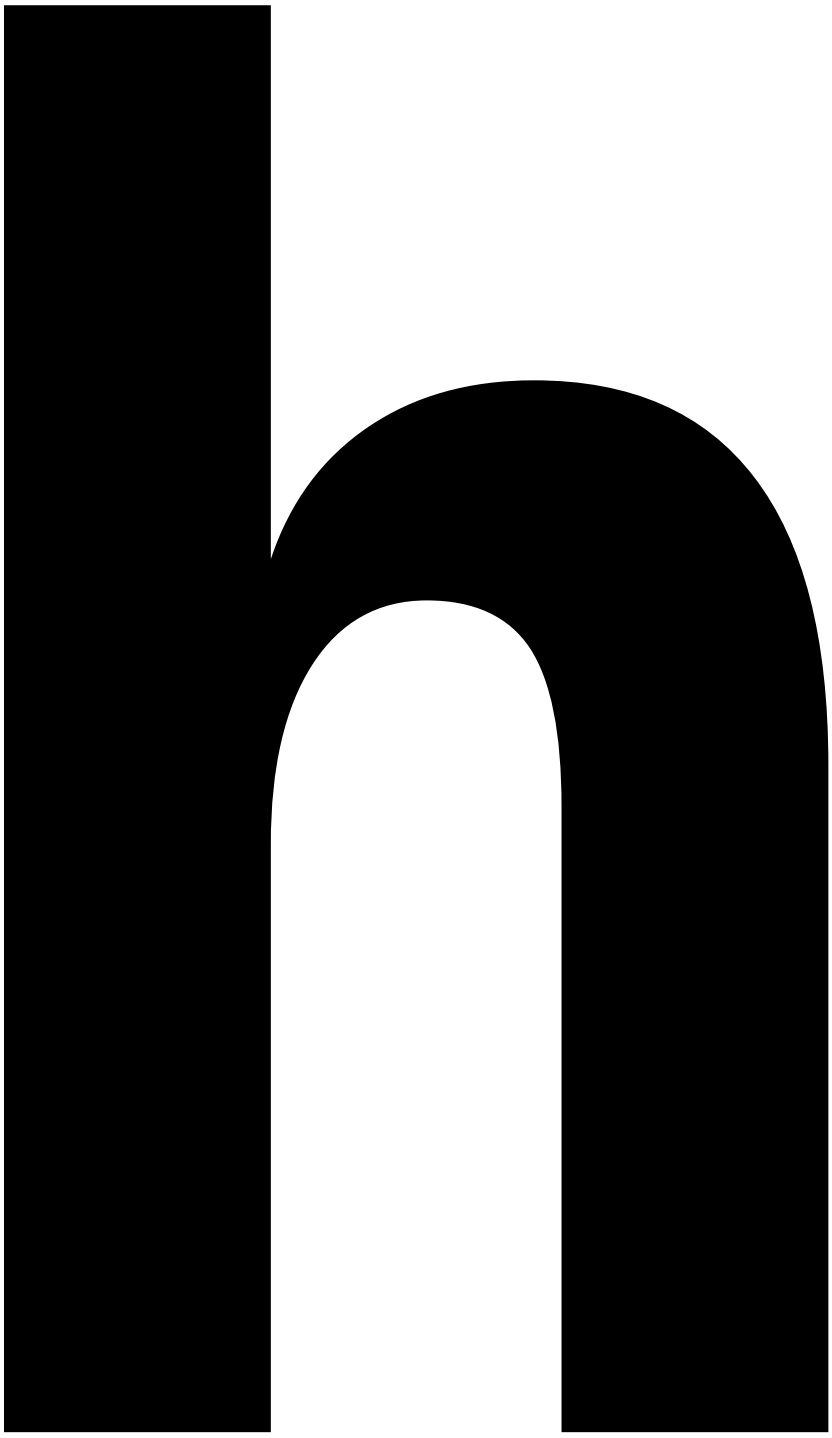


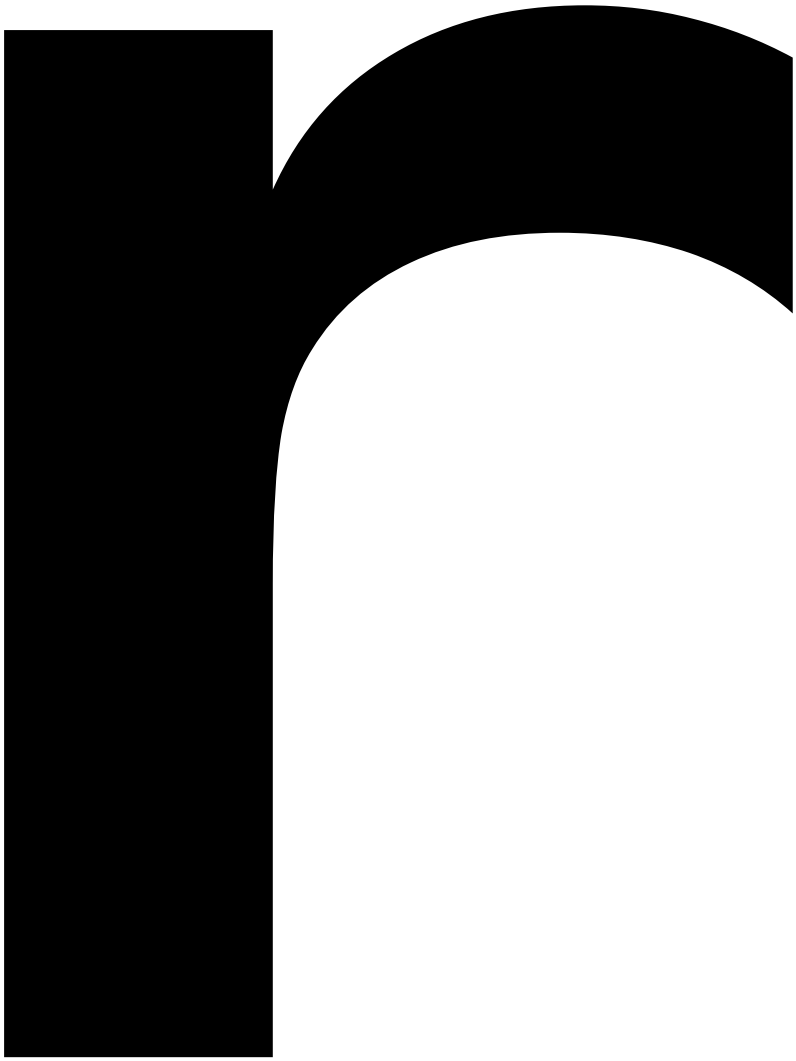


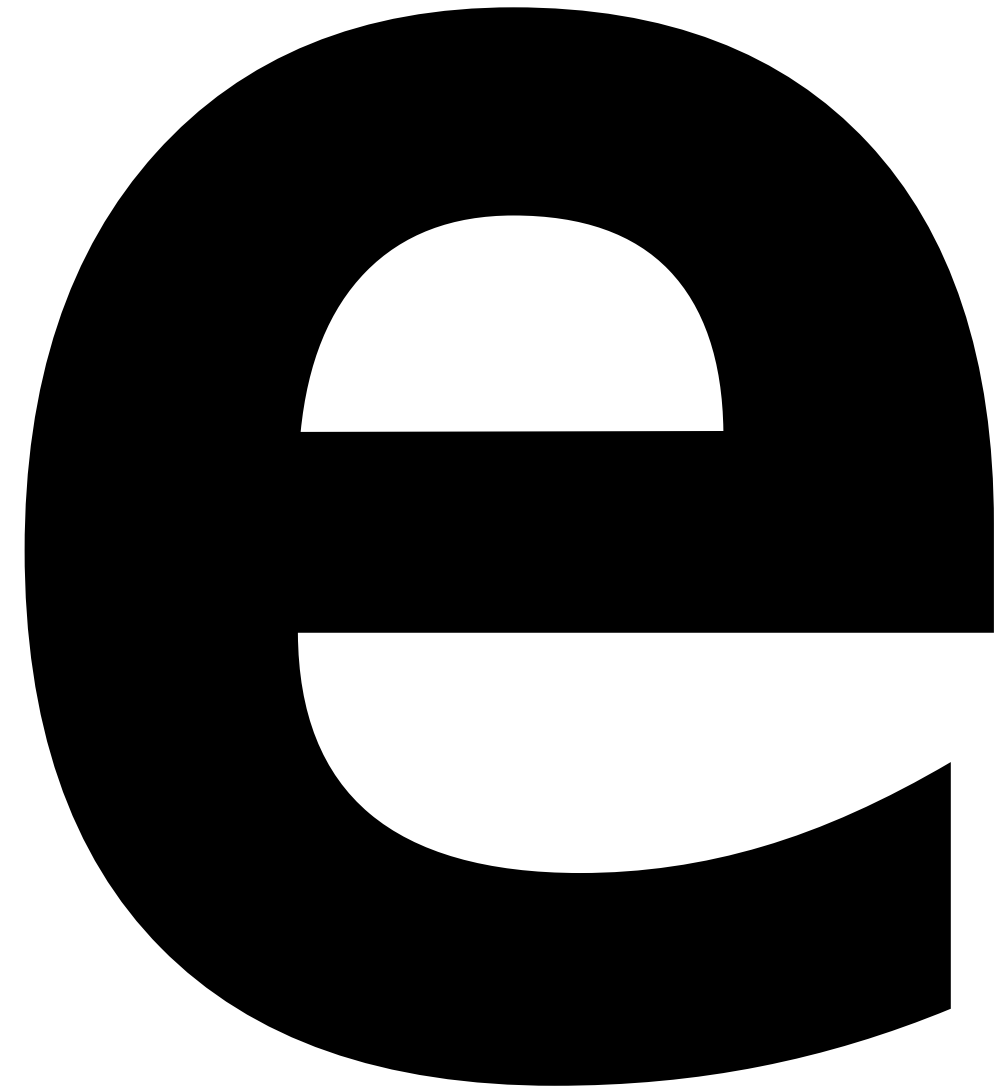
S

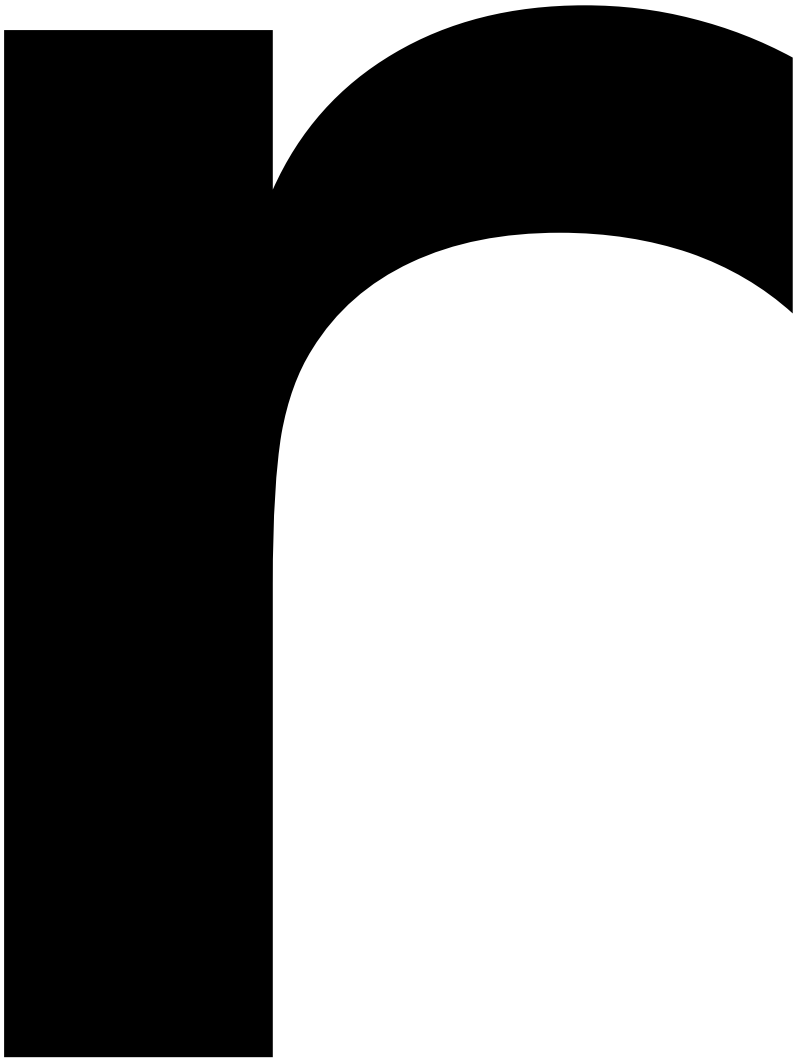


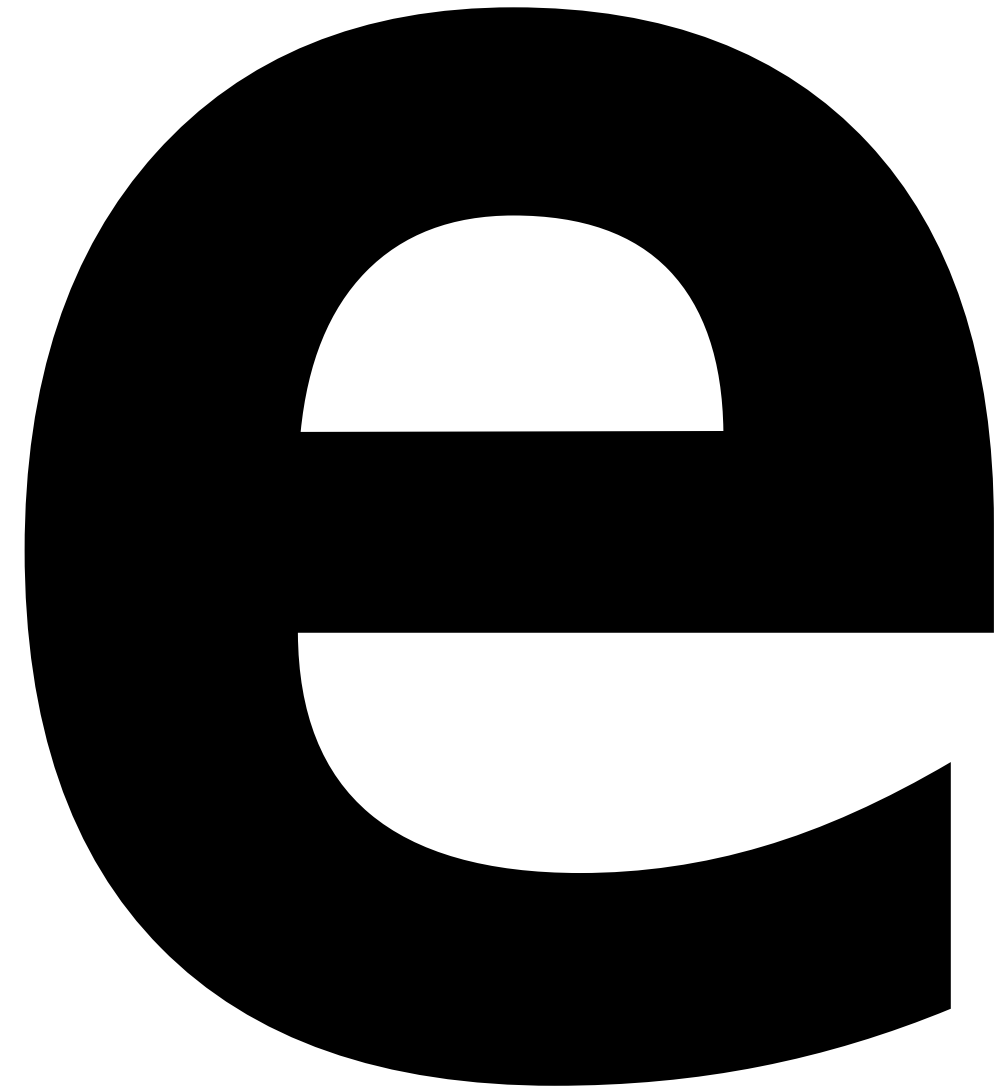


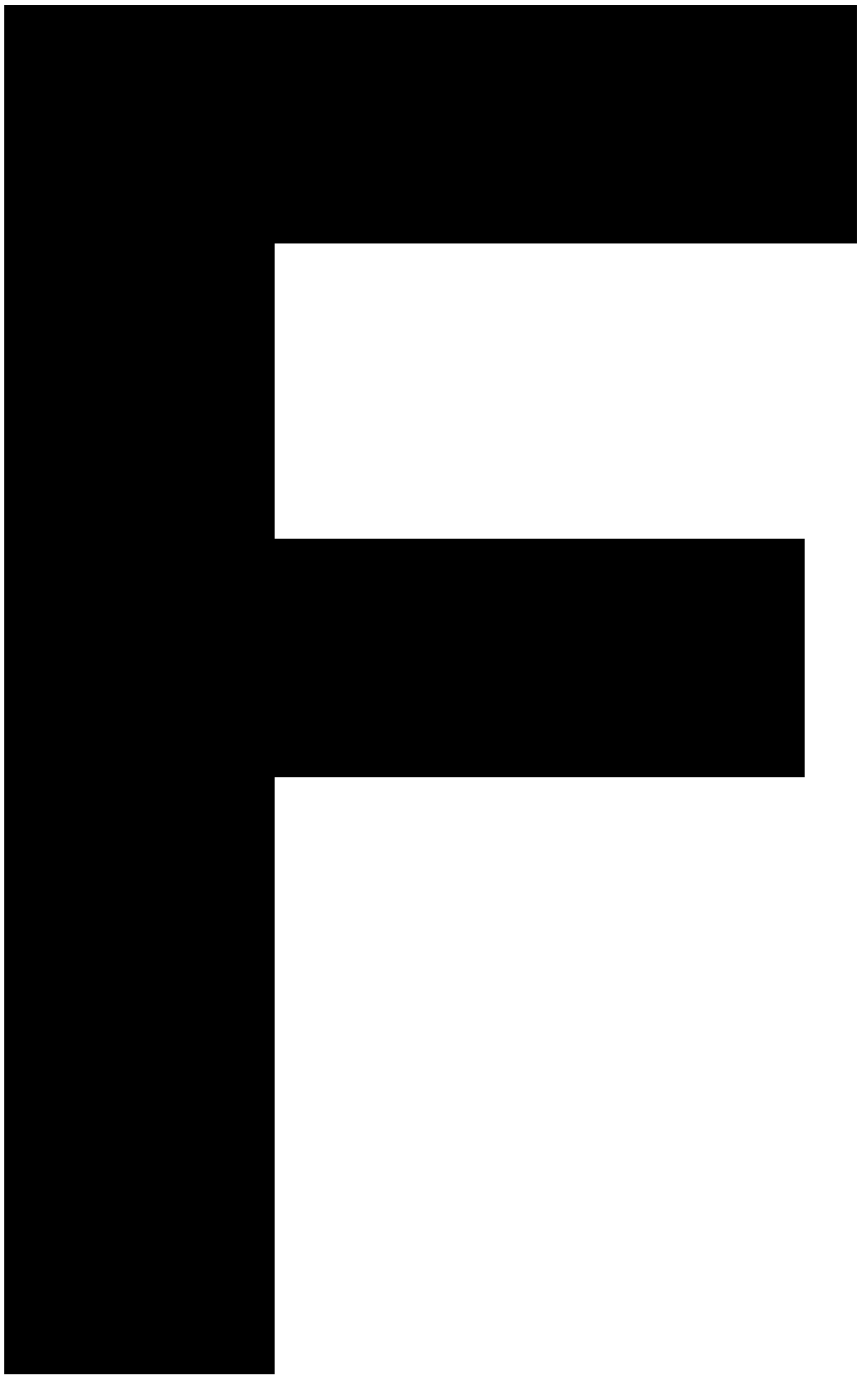


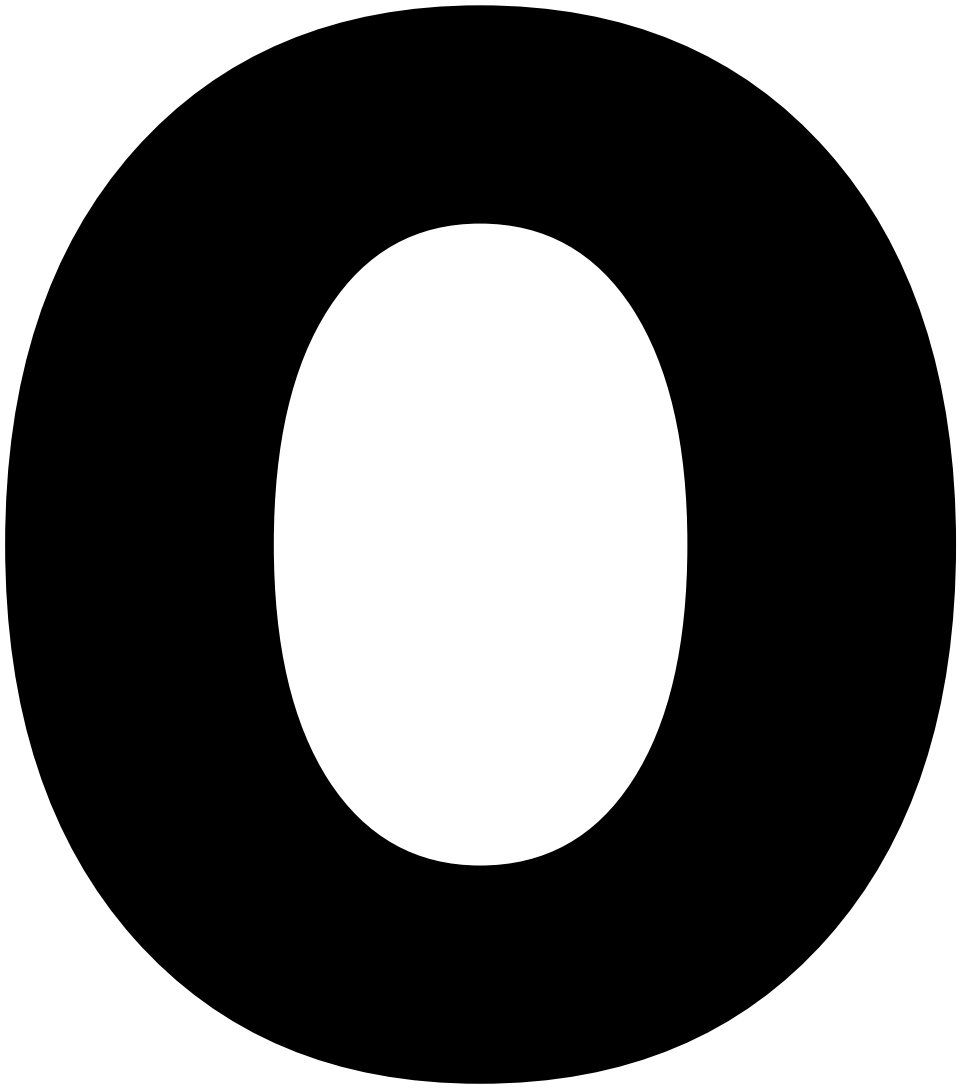


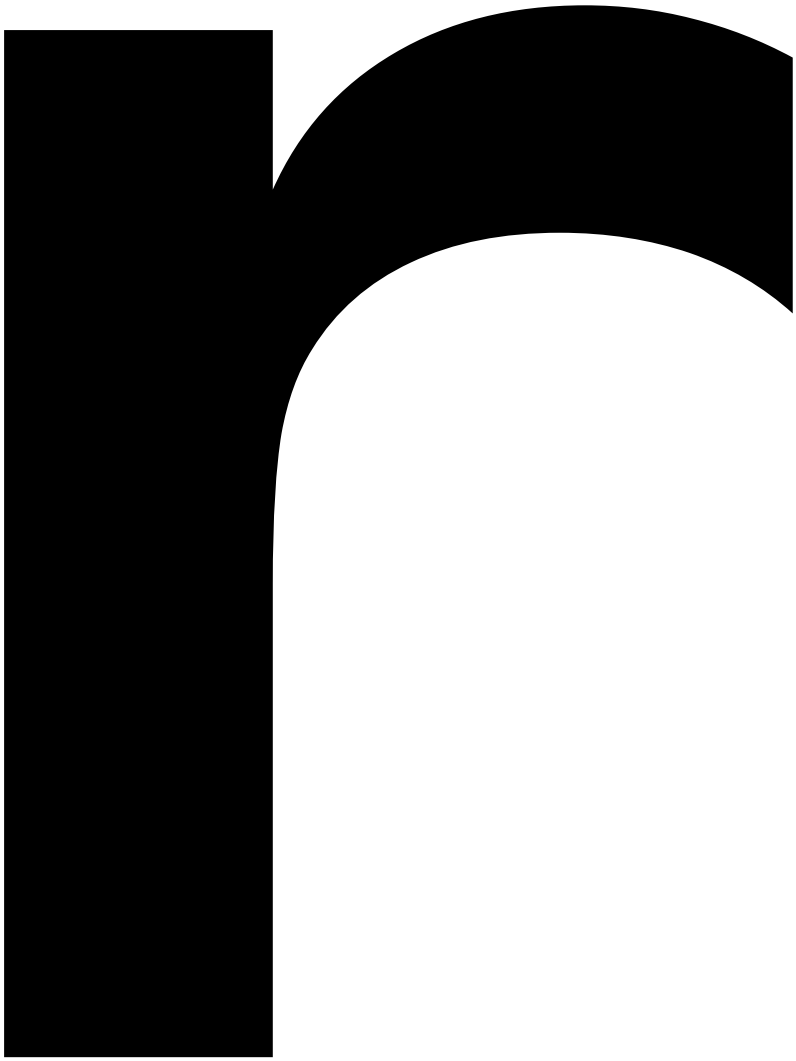




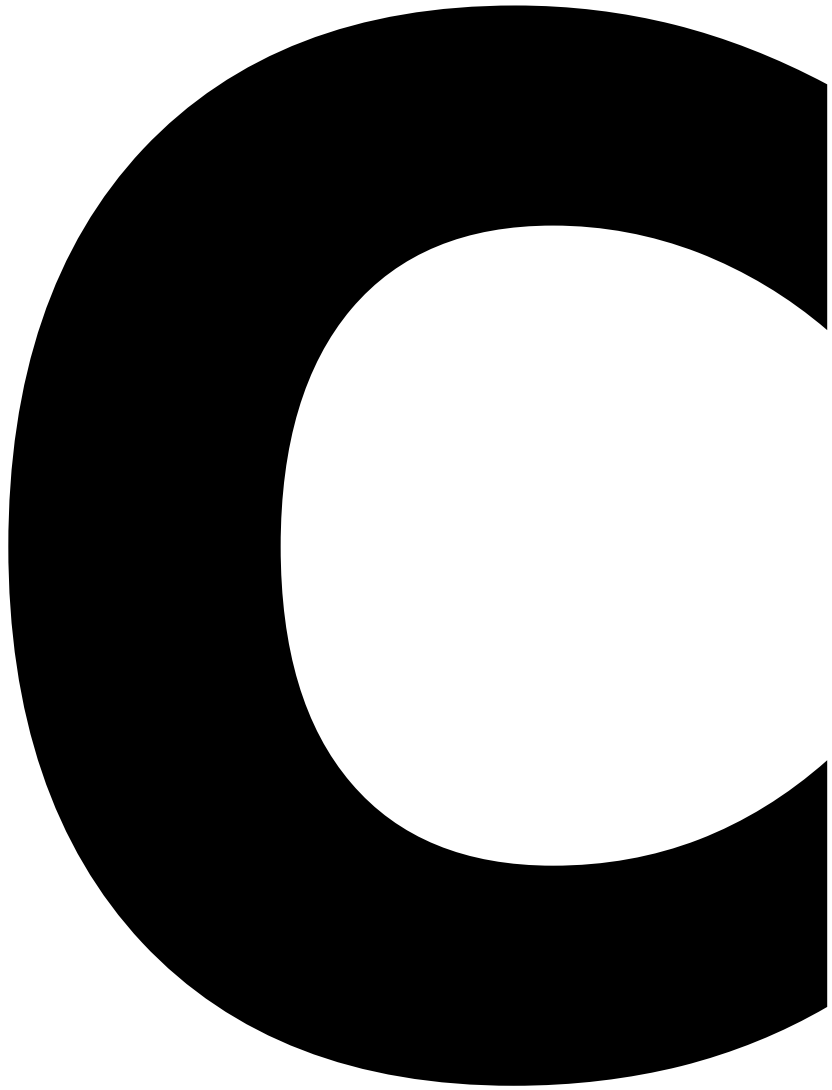


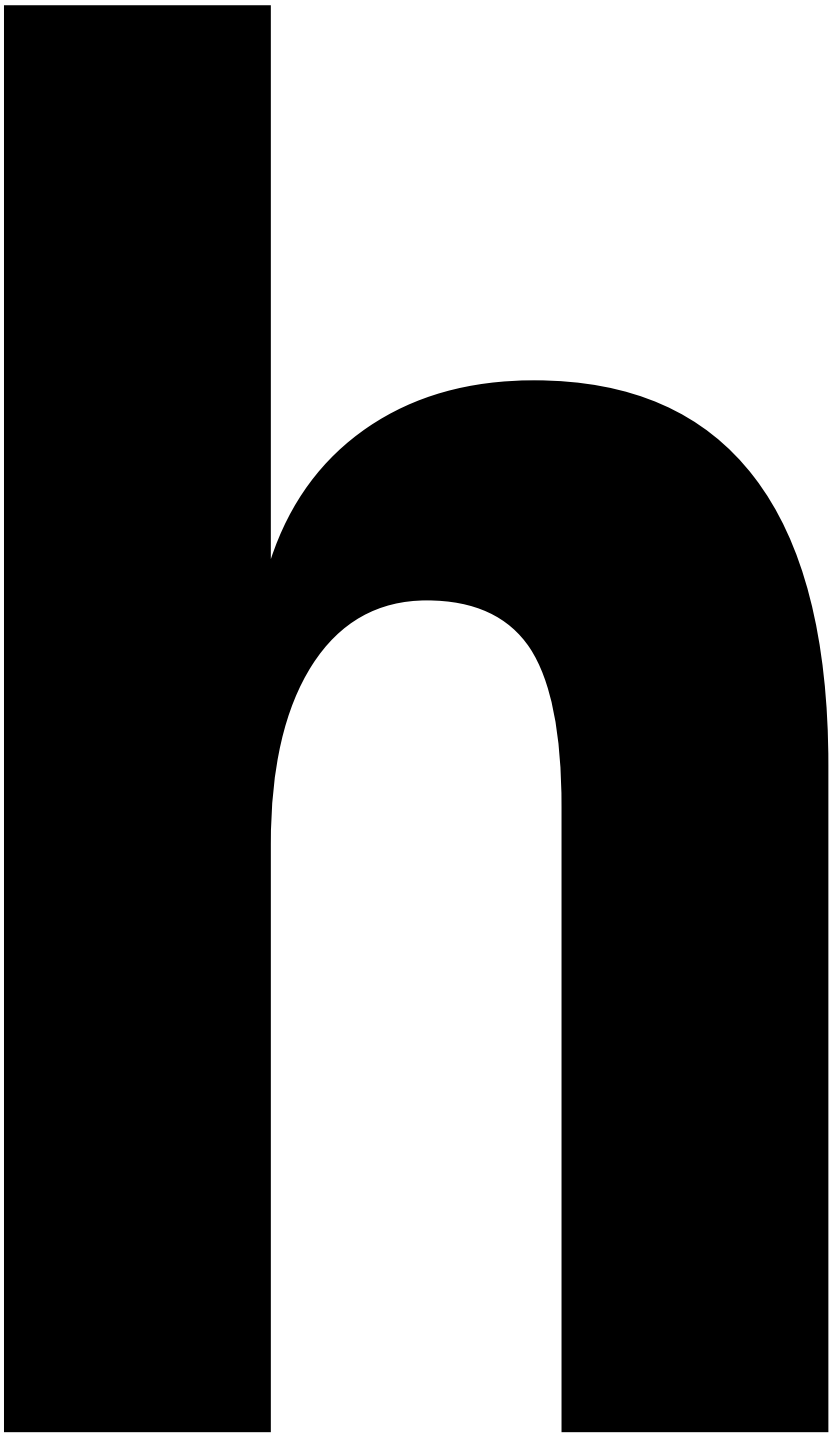




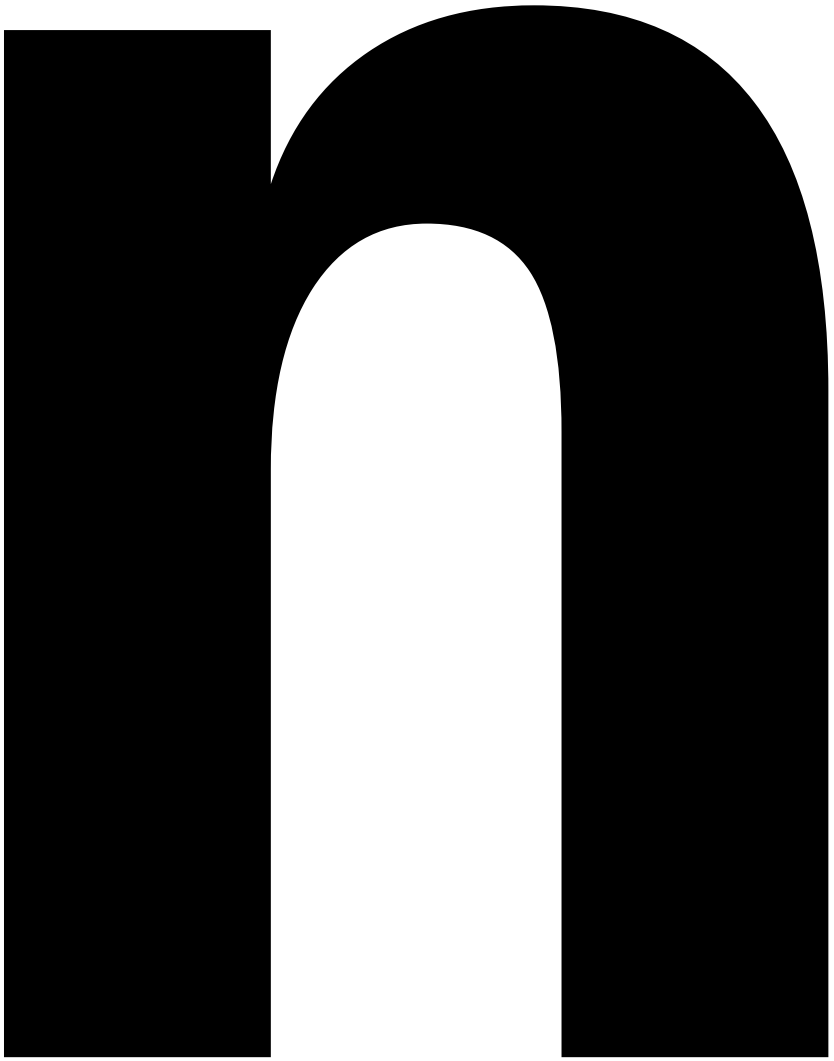


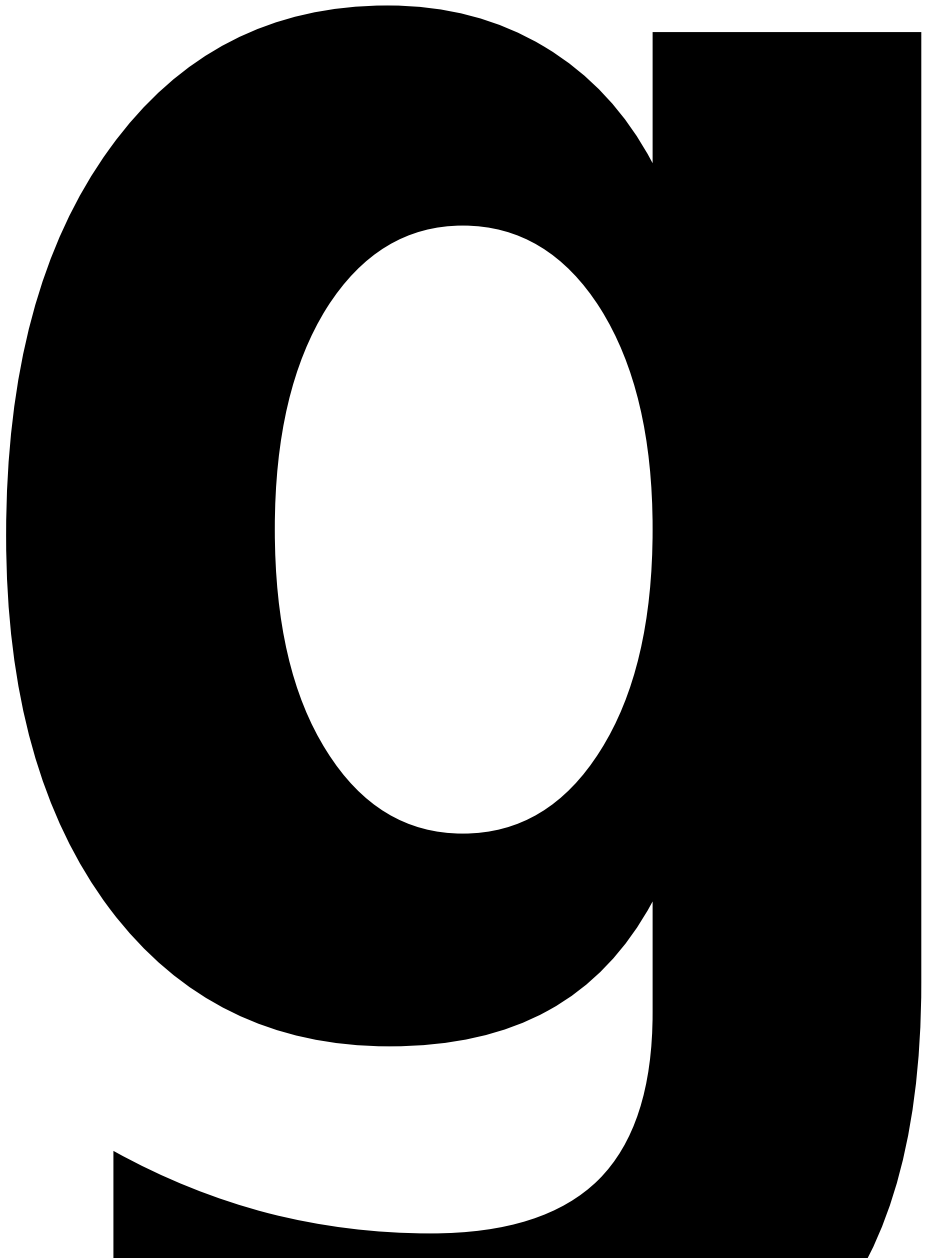
S



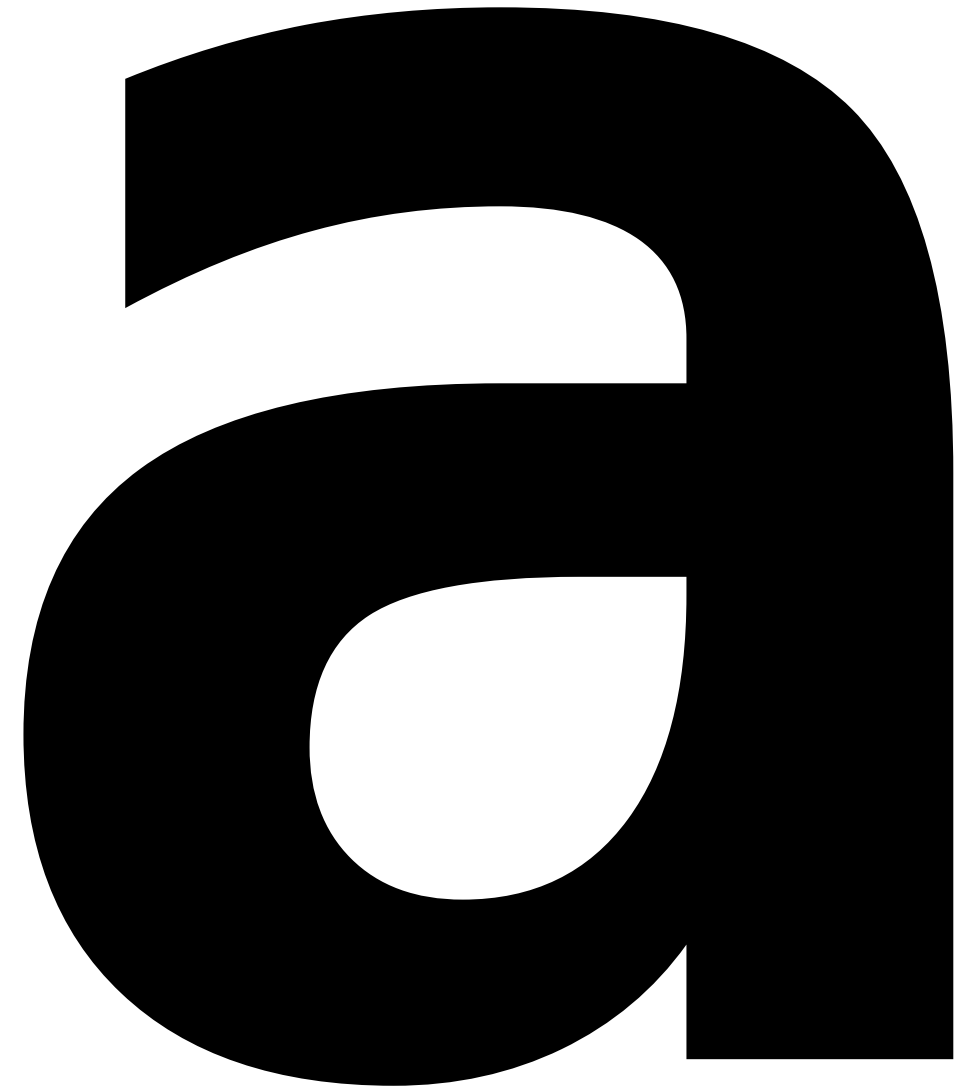


u

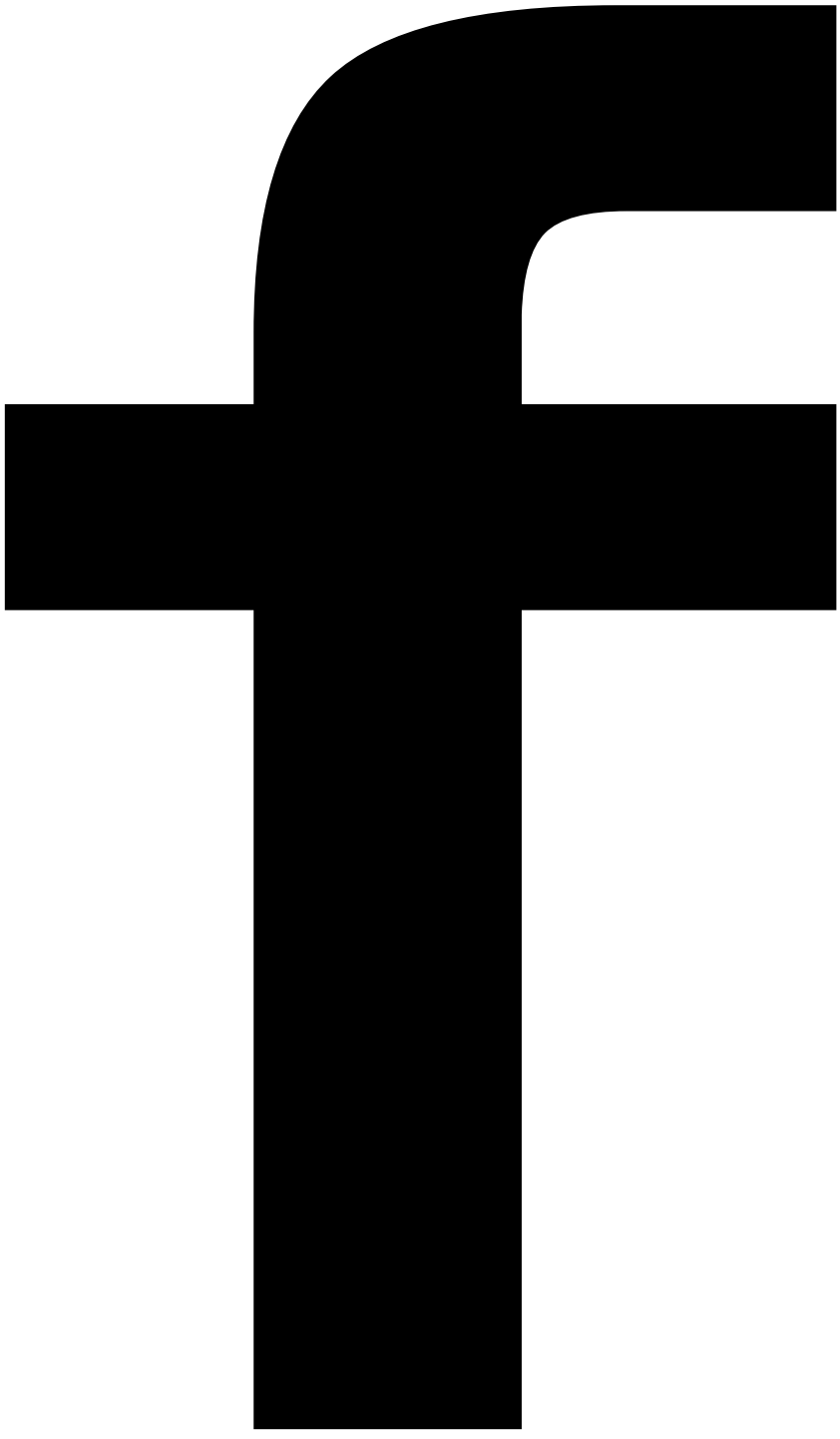


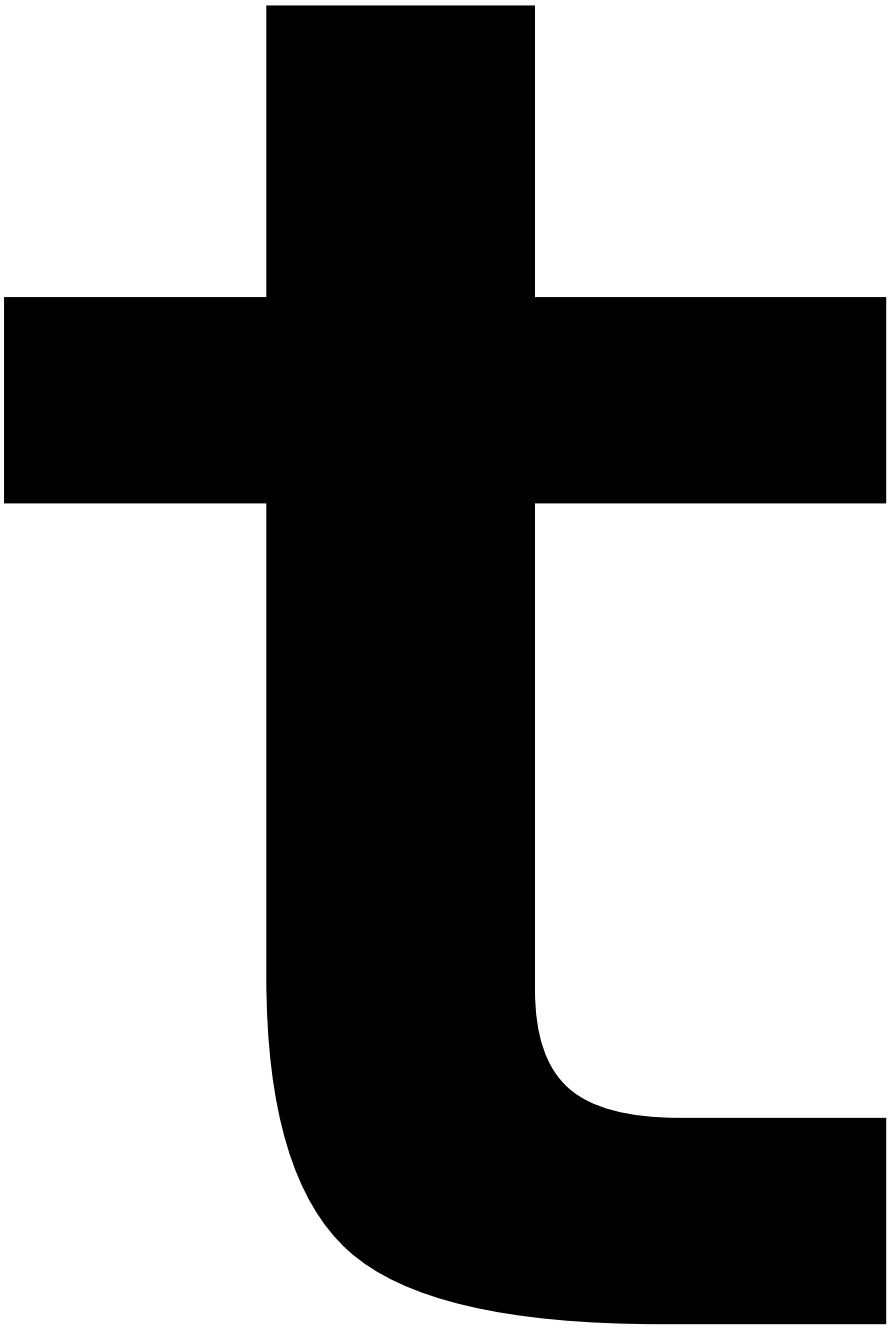


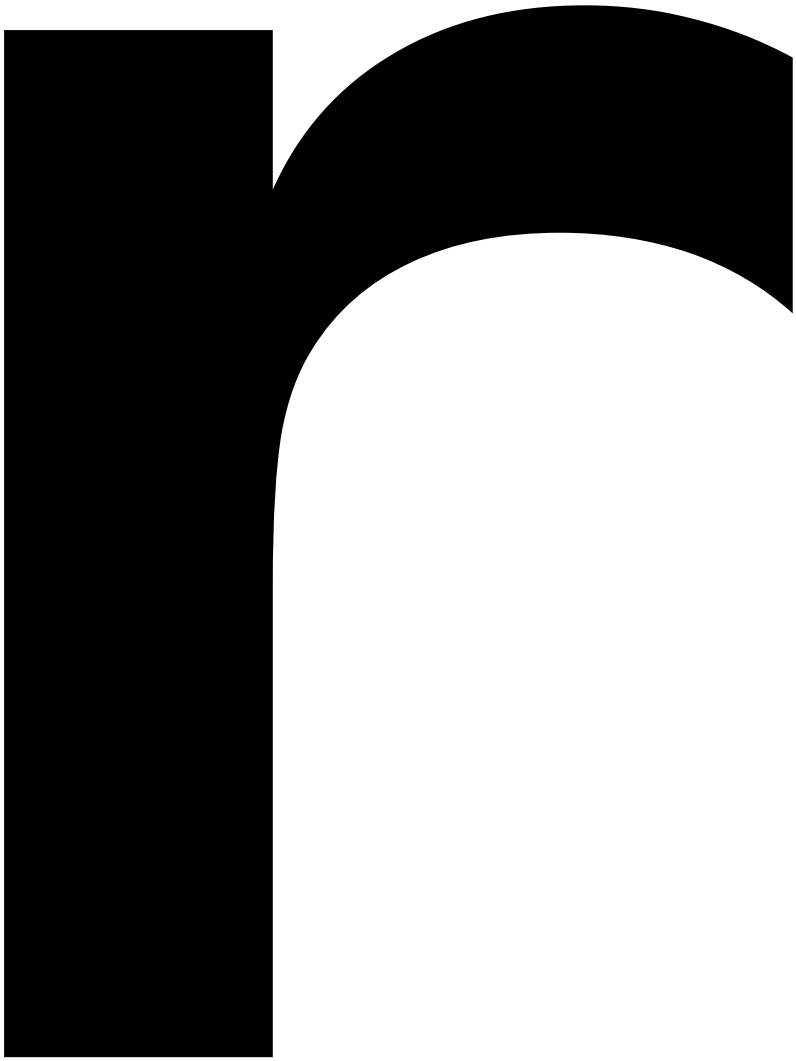
S

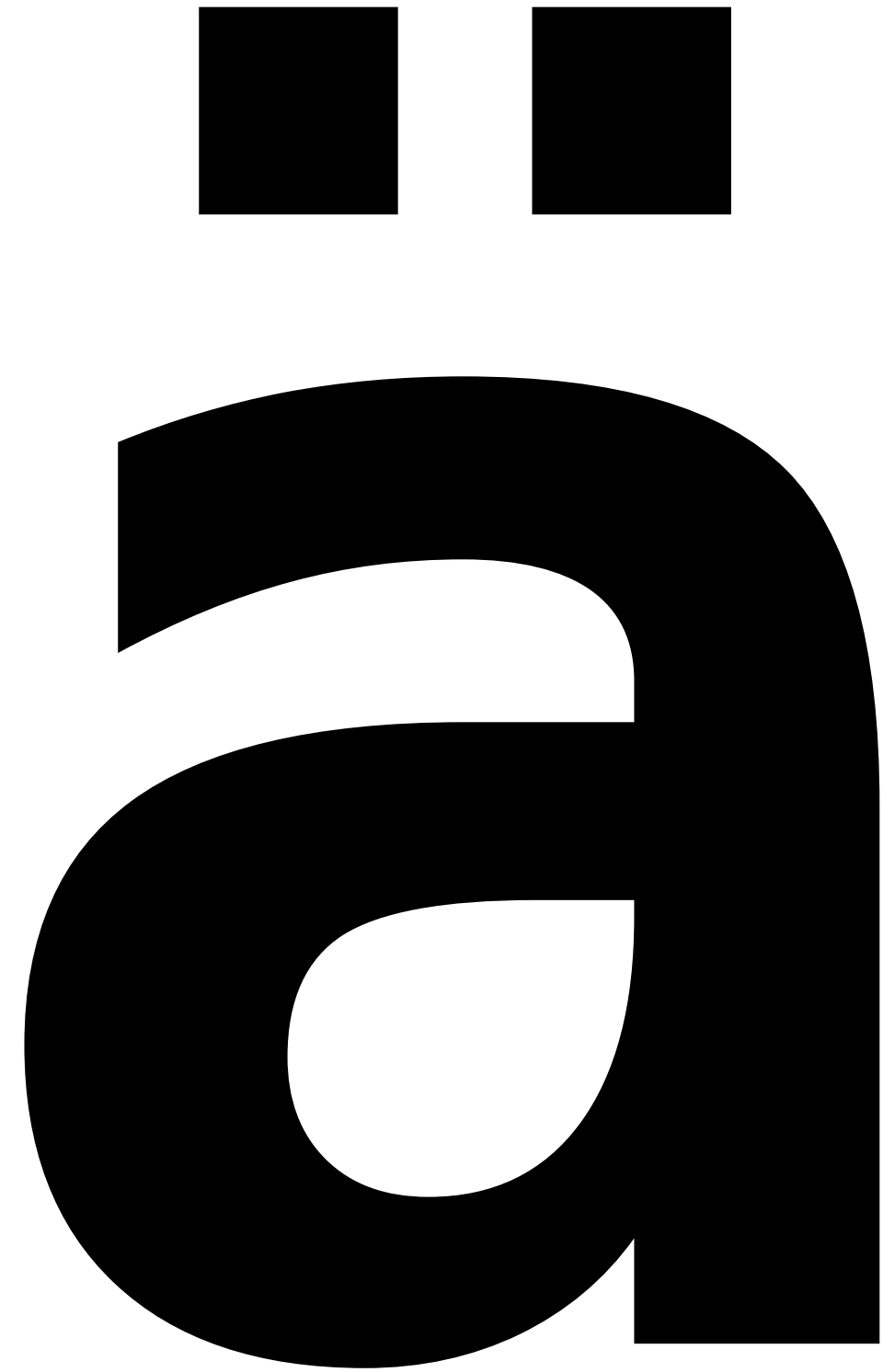


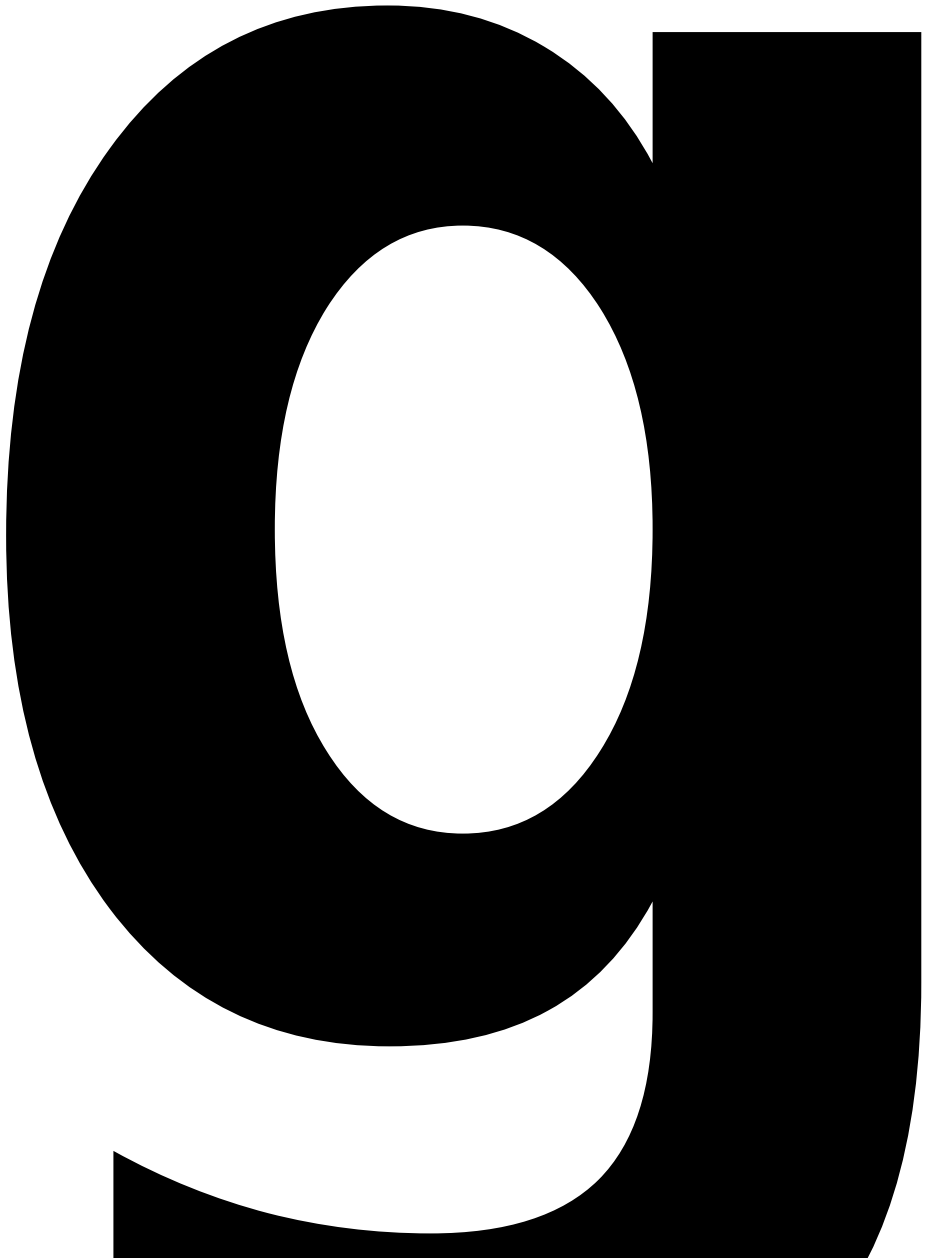
u

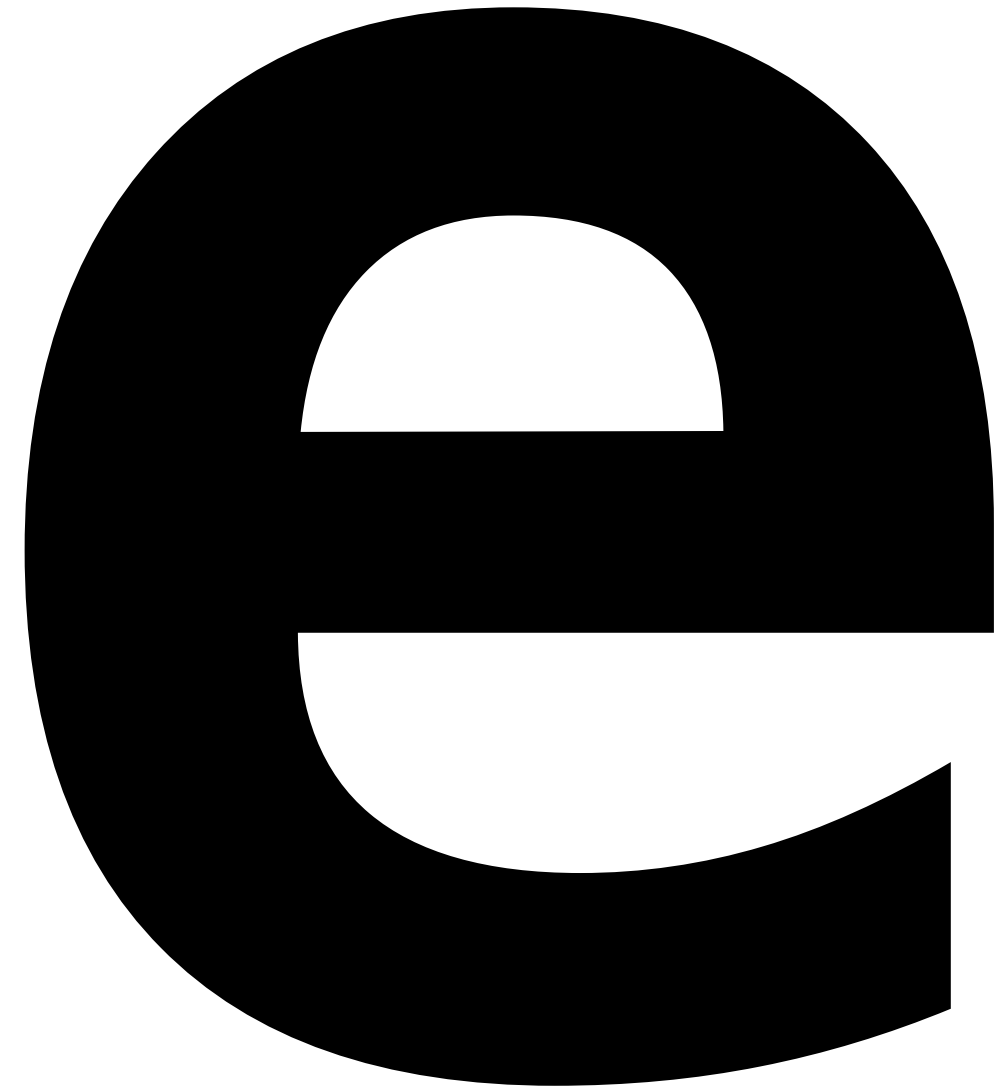


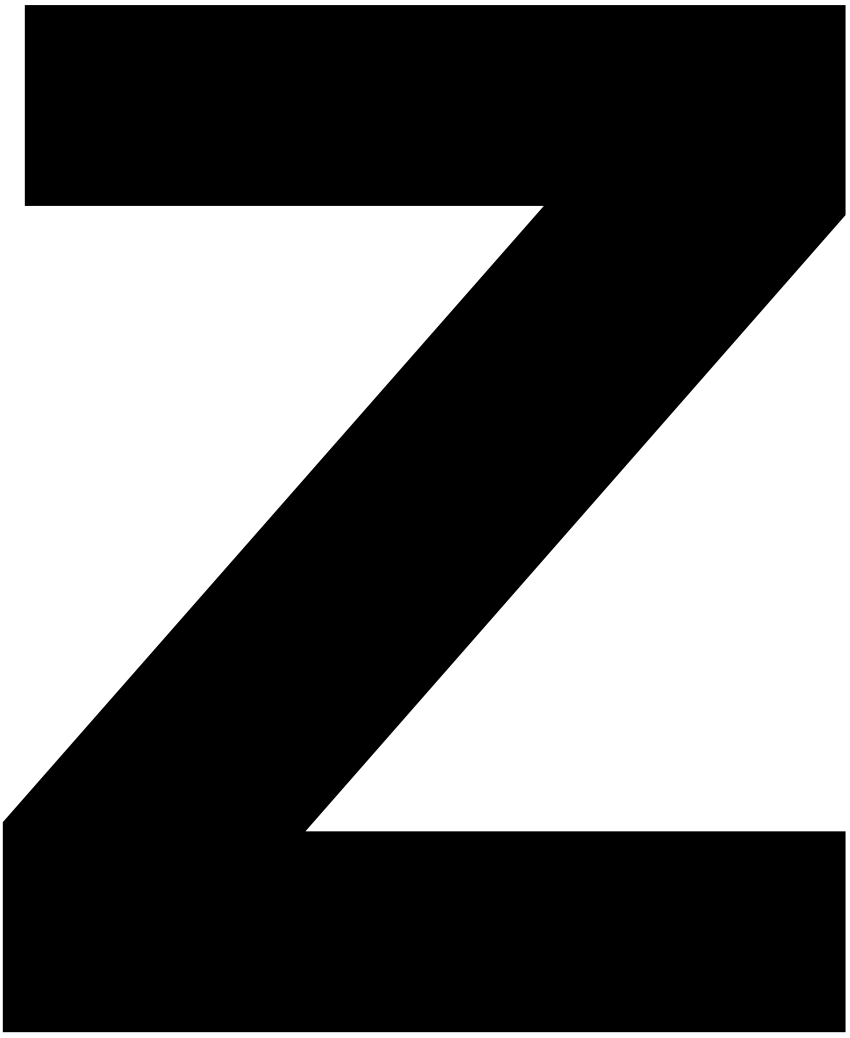




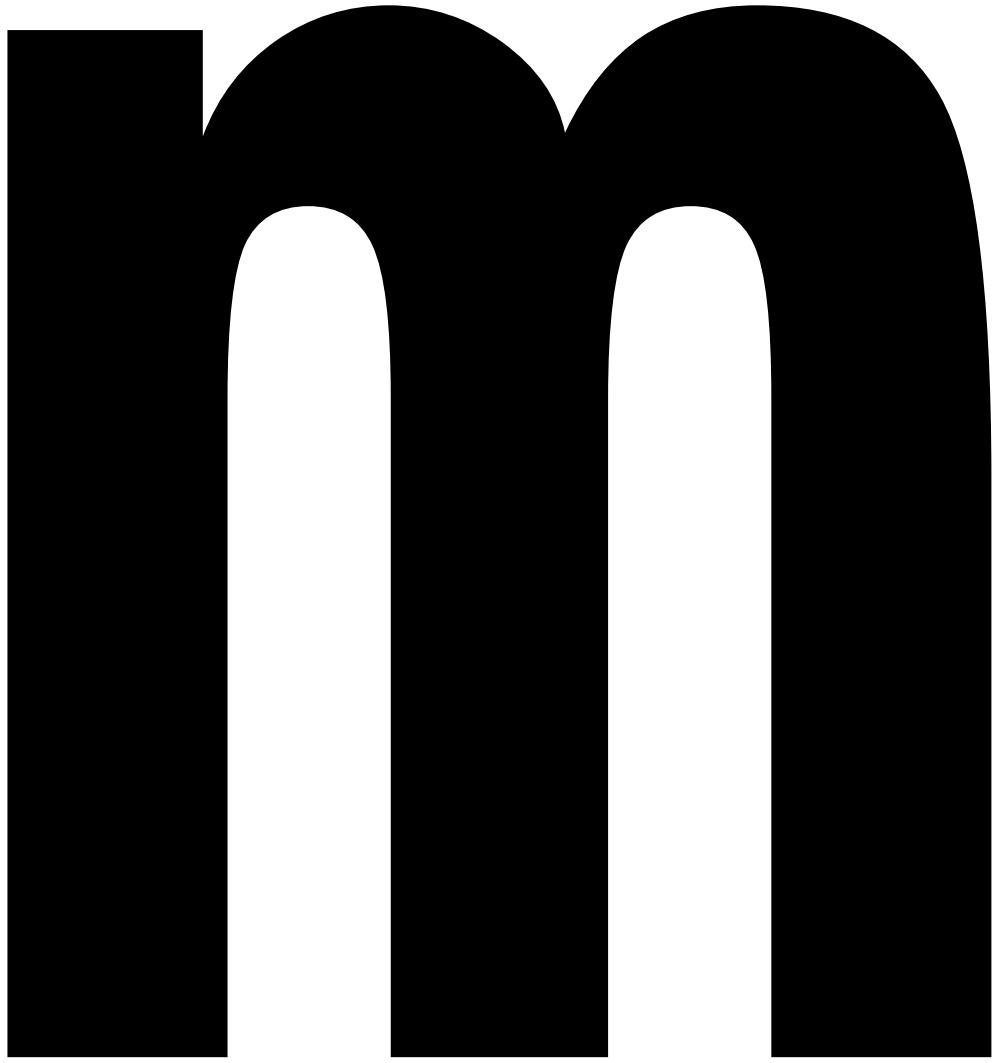




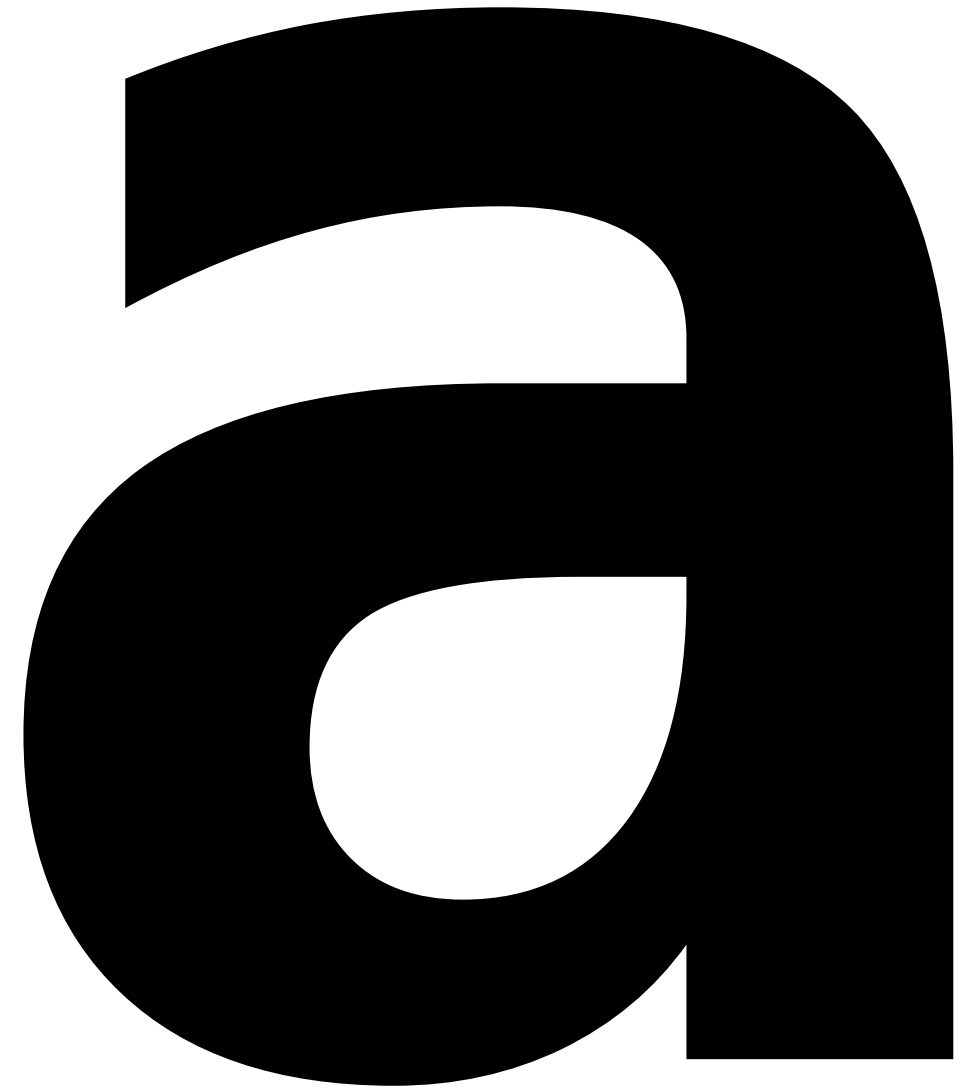


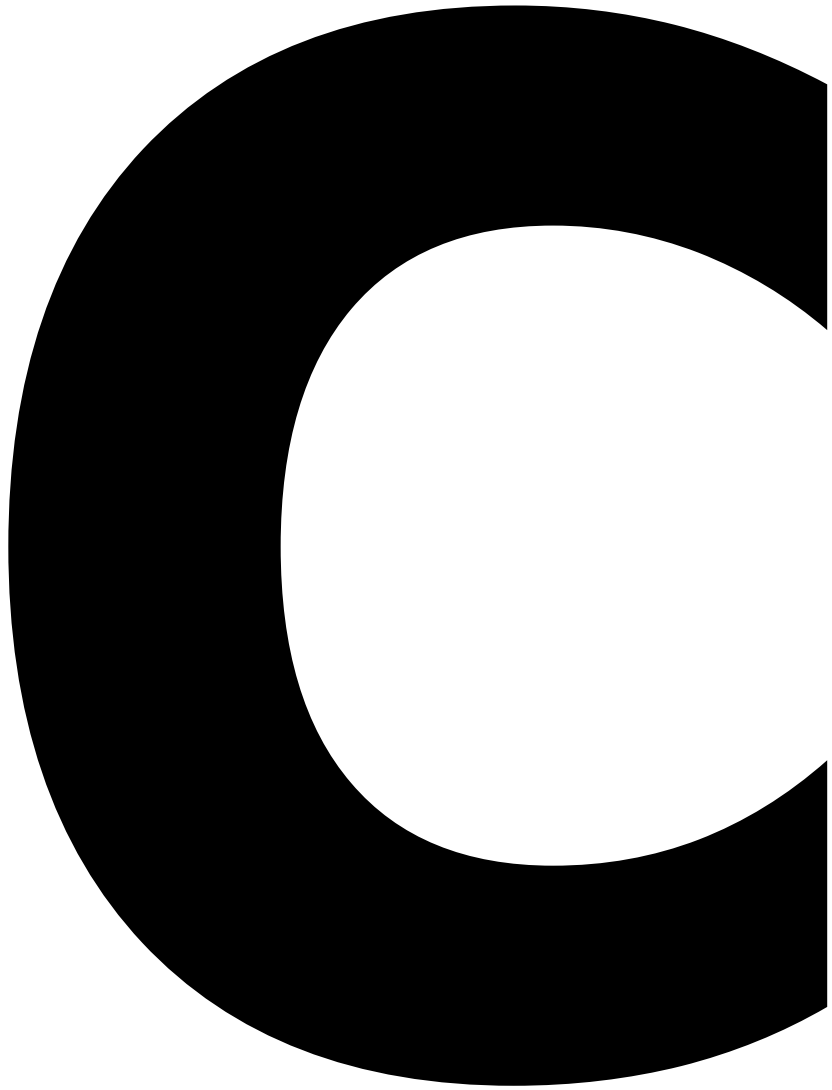


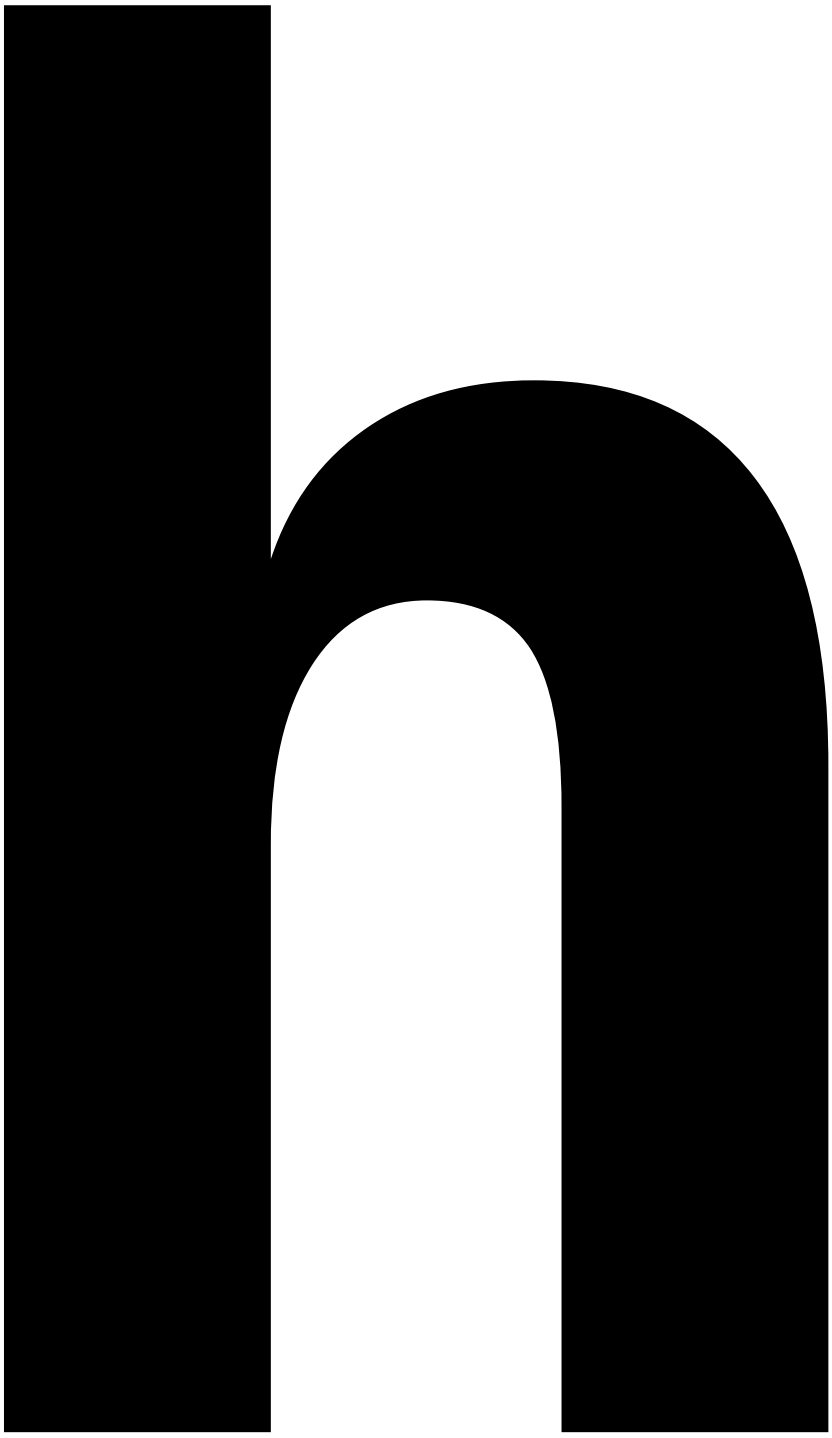
u

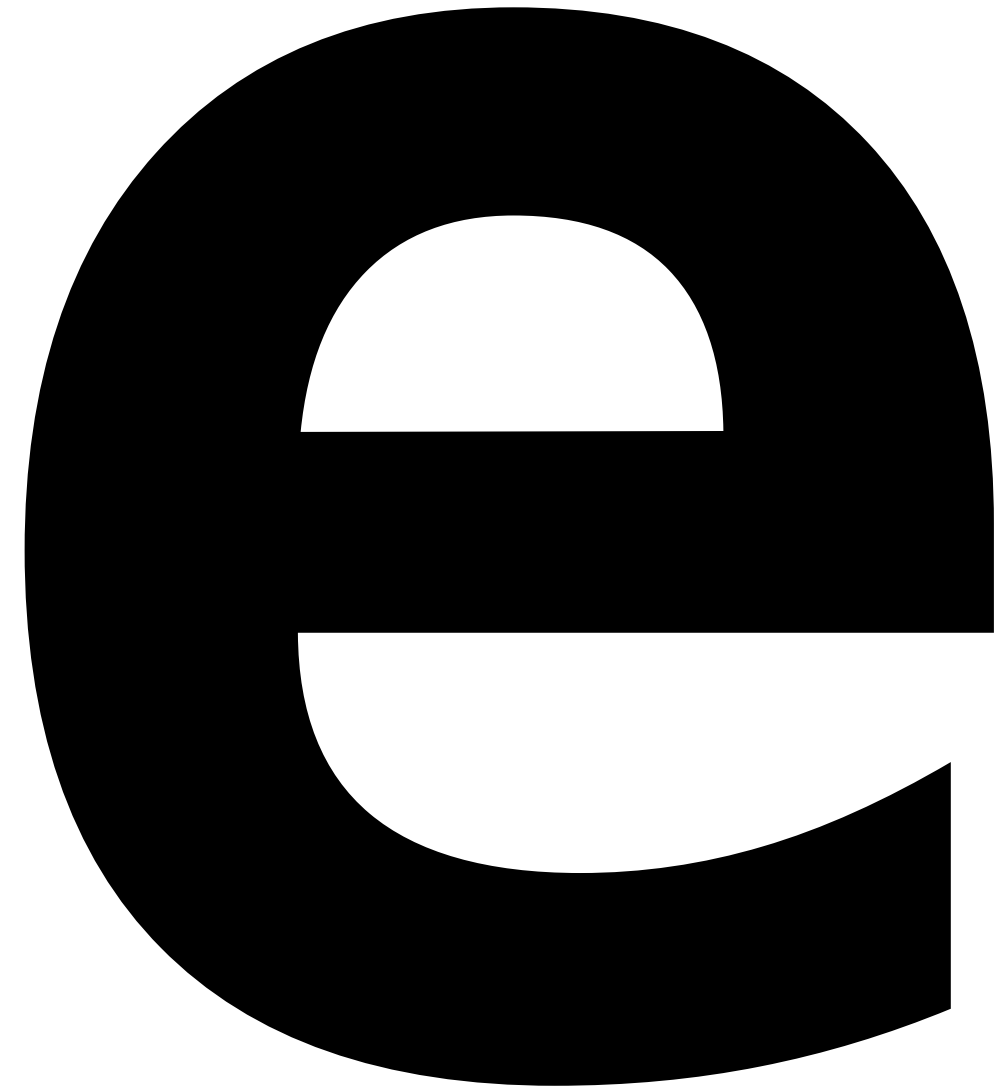


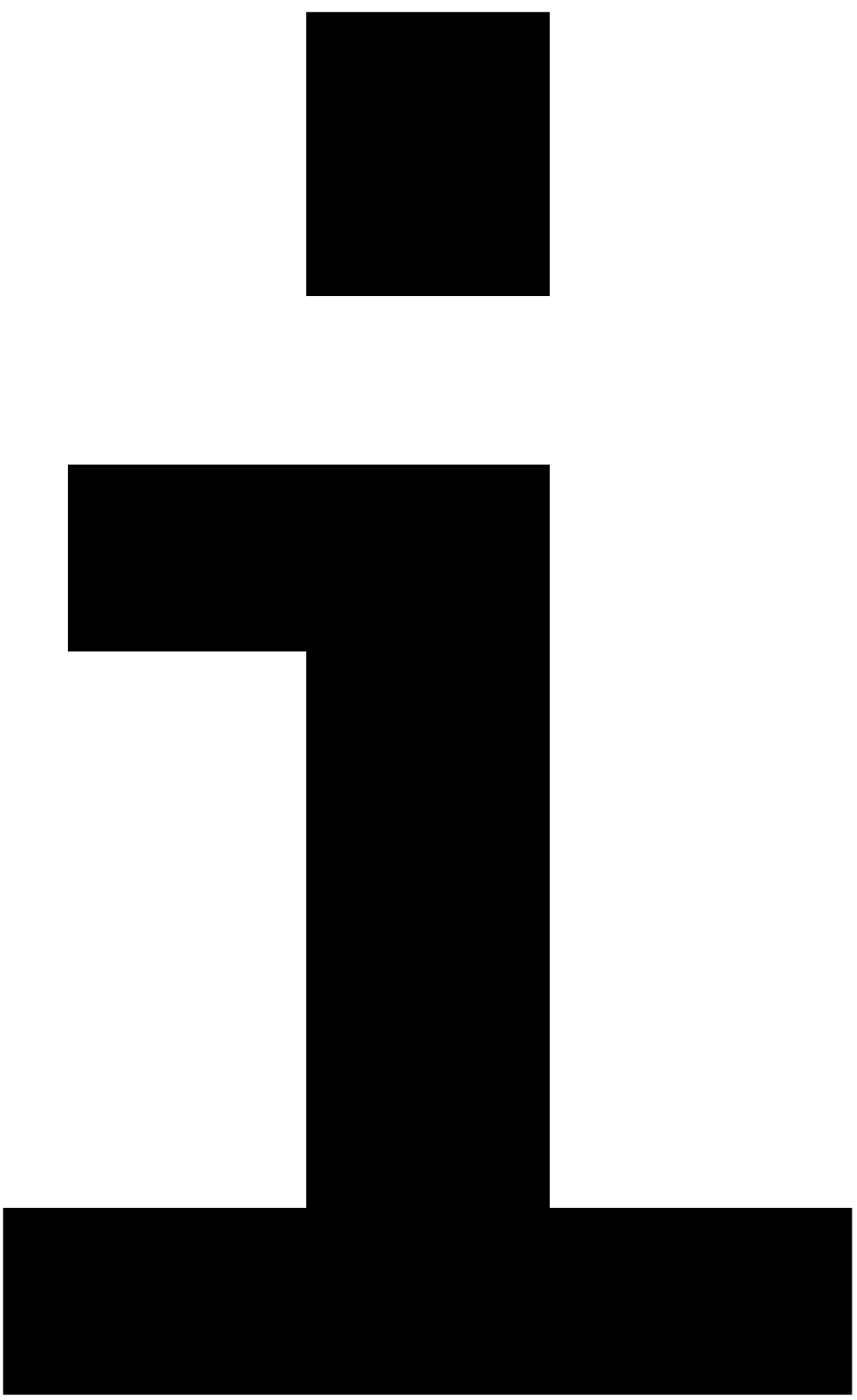
N





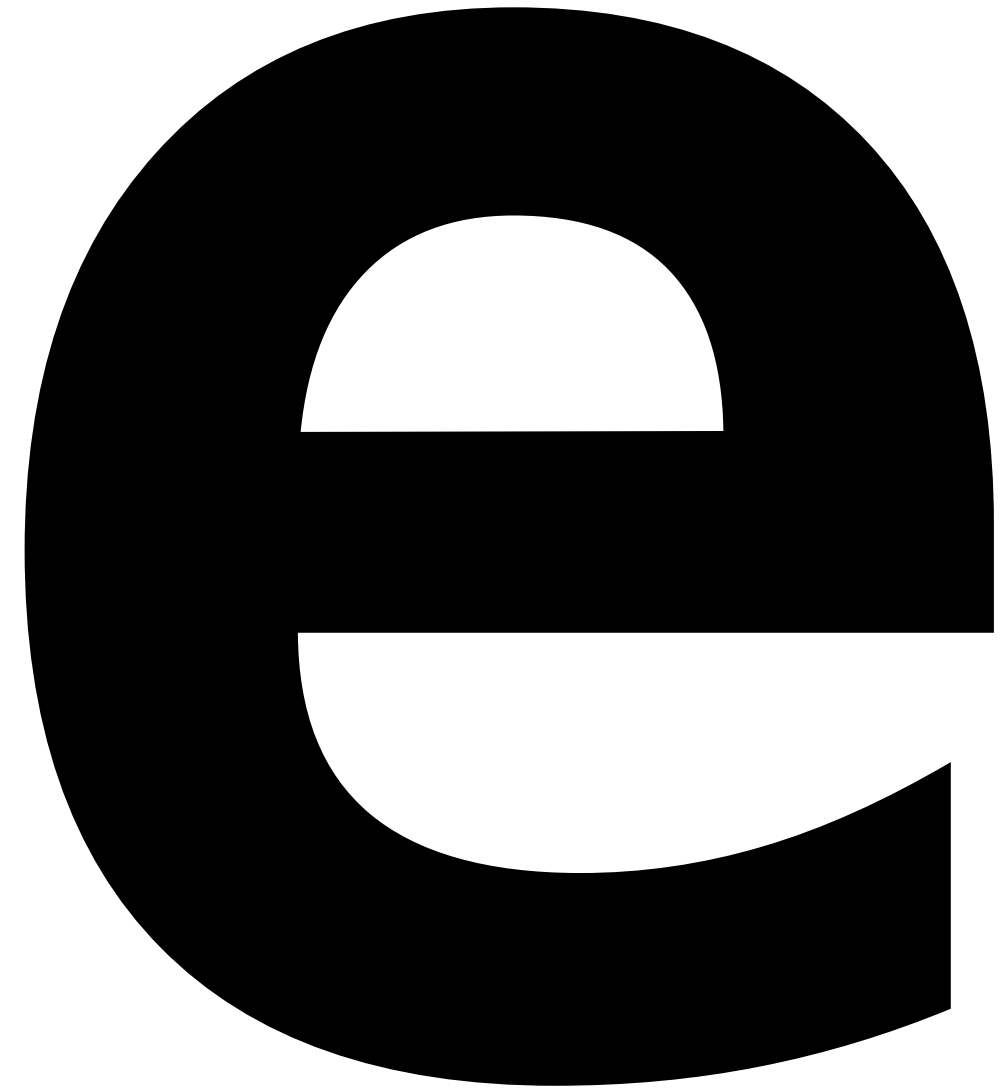


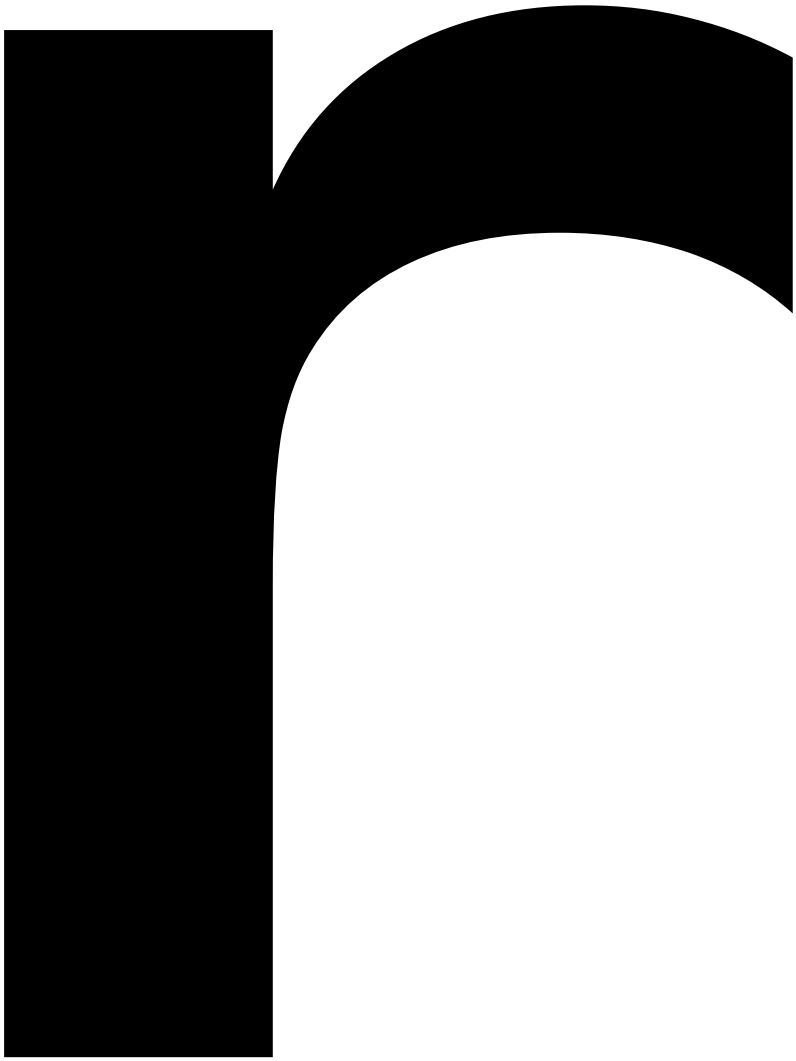


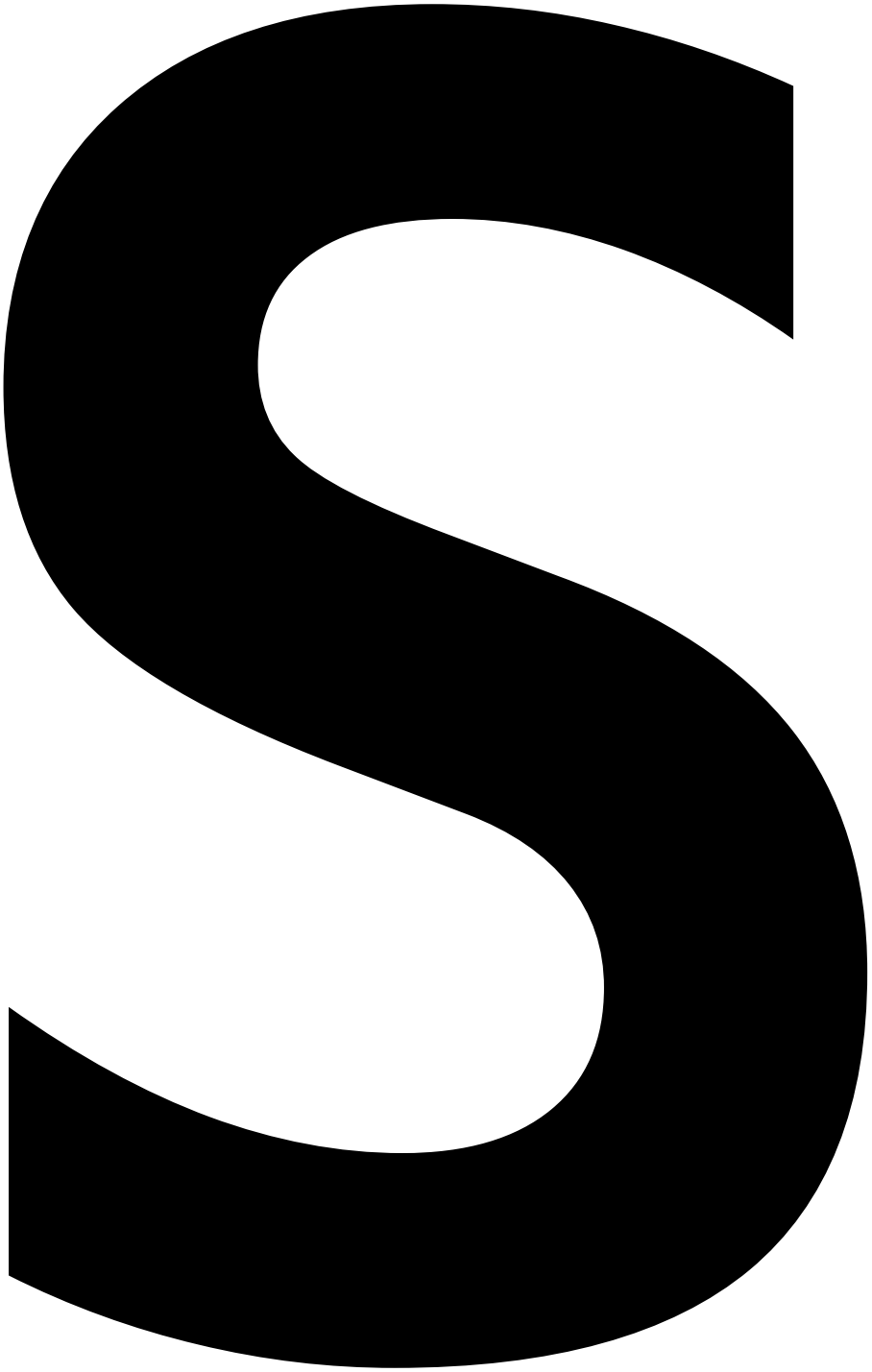


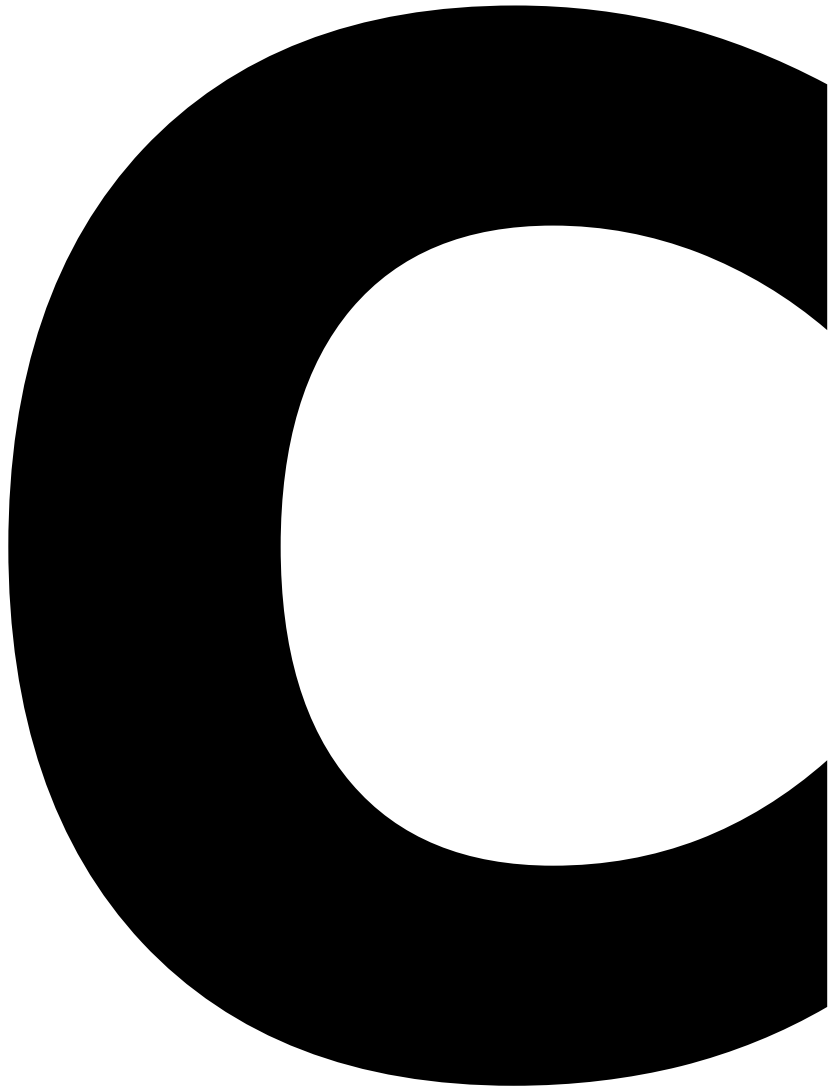
S

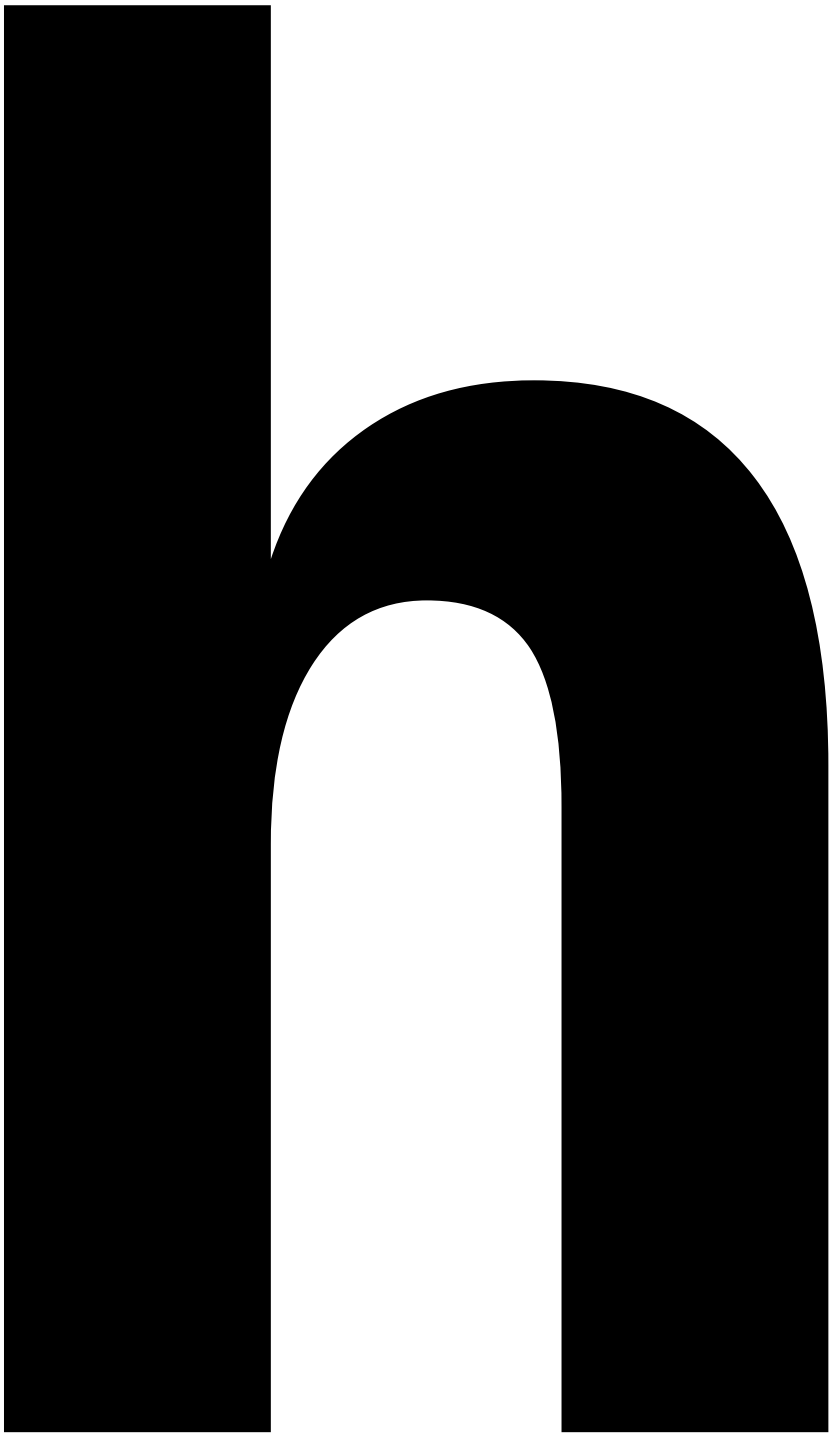
d

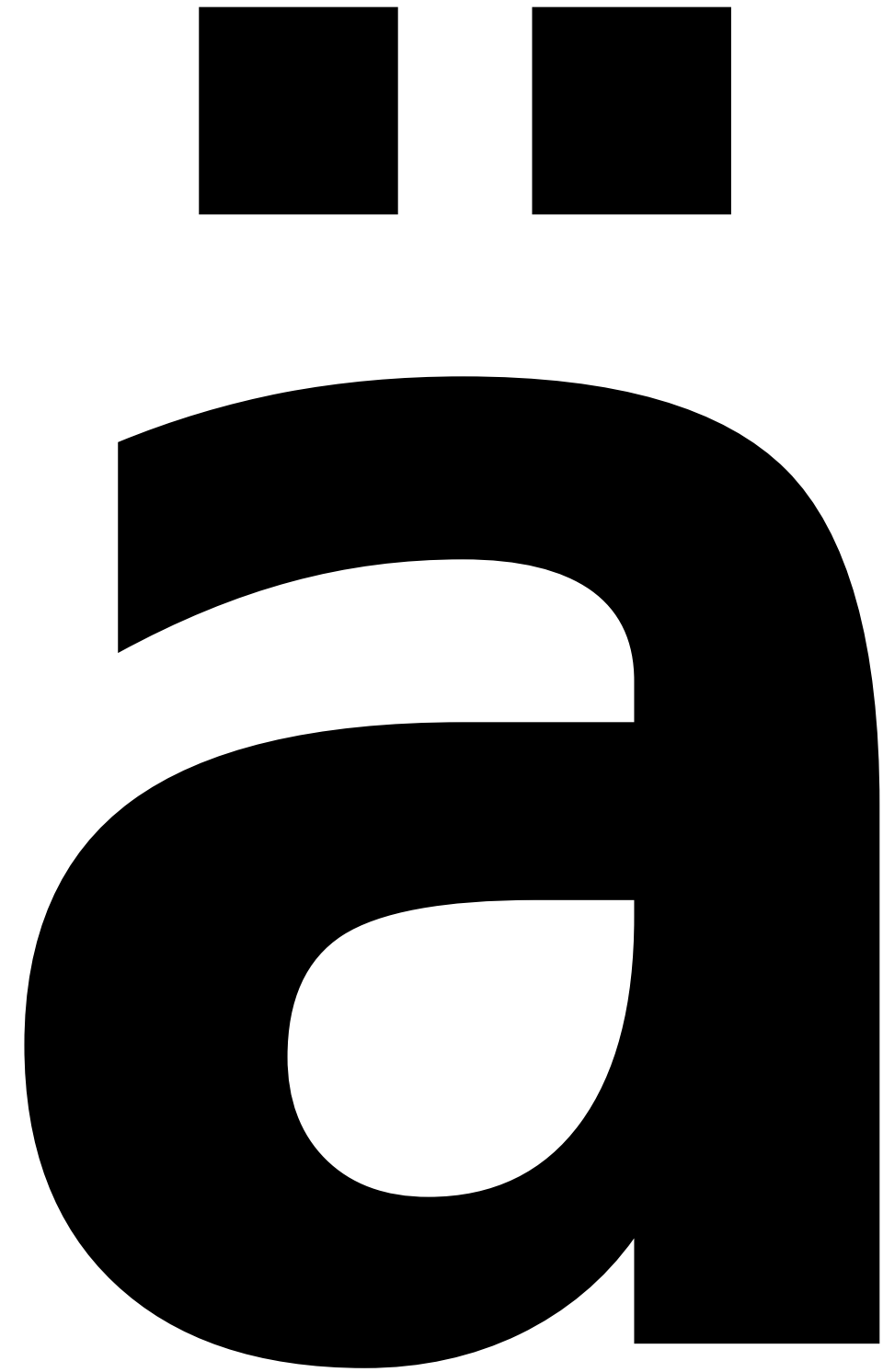




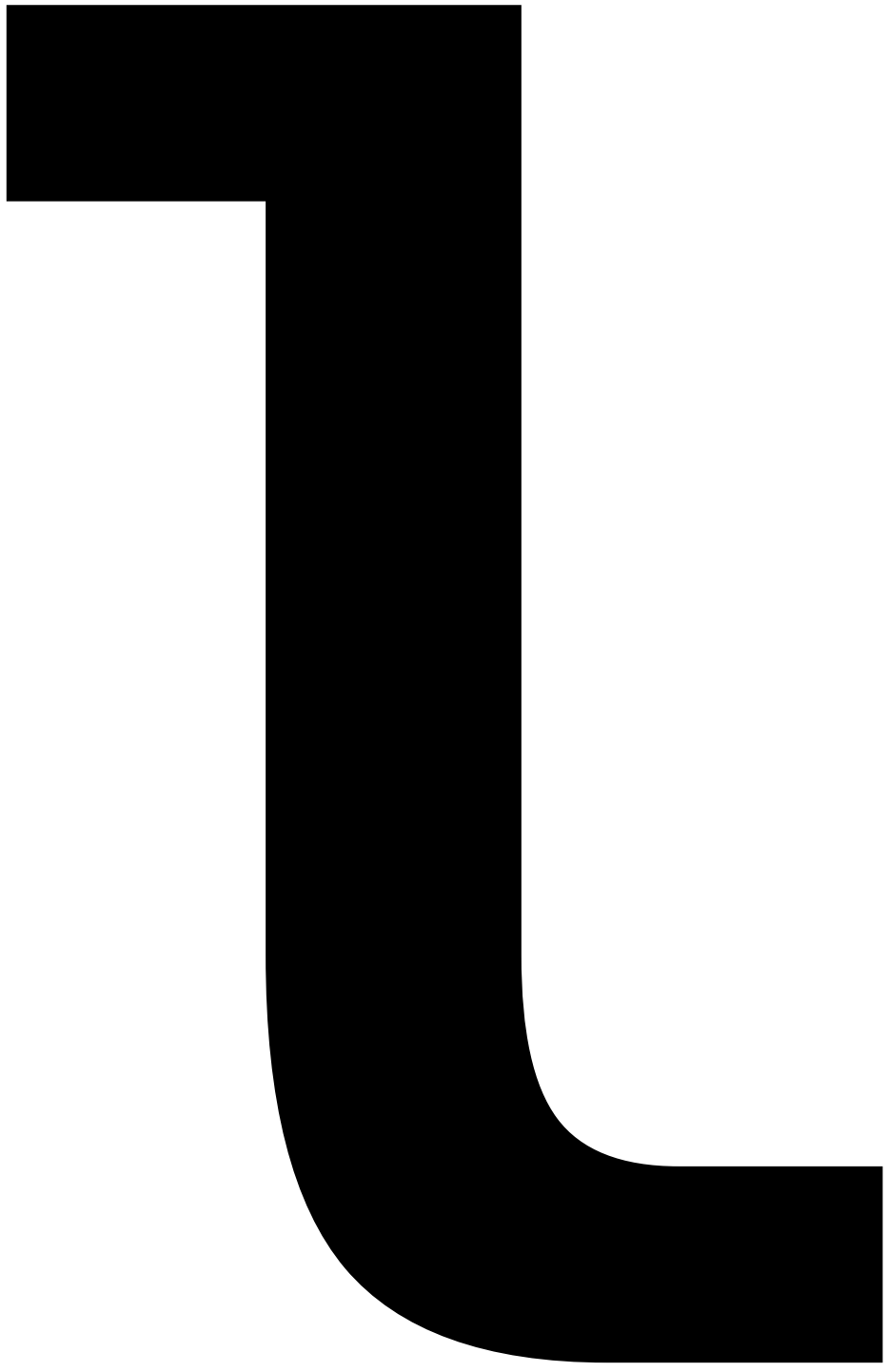


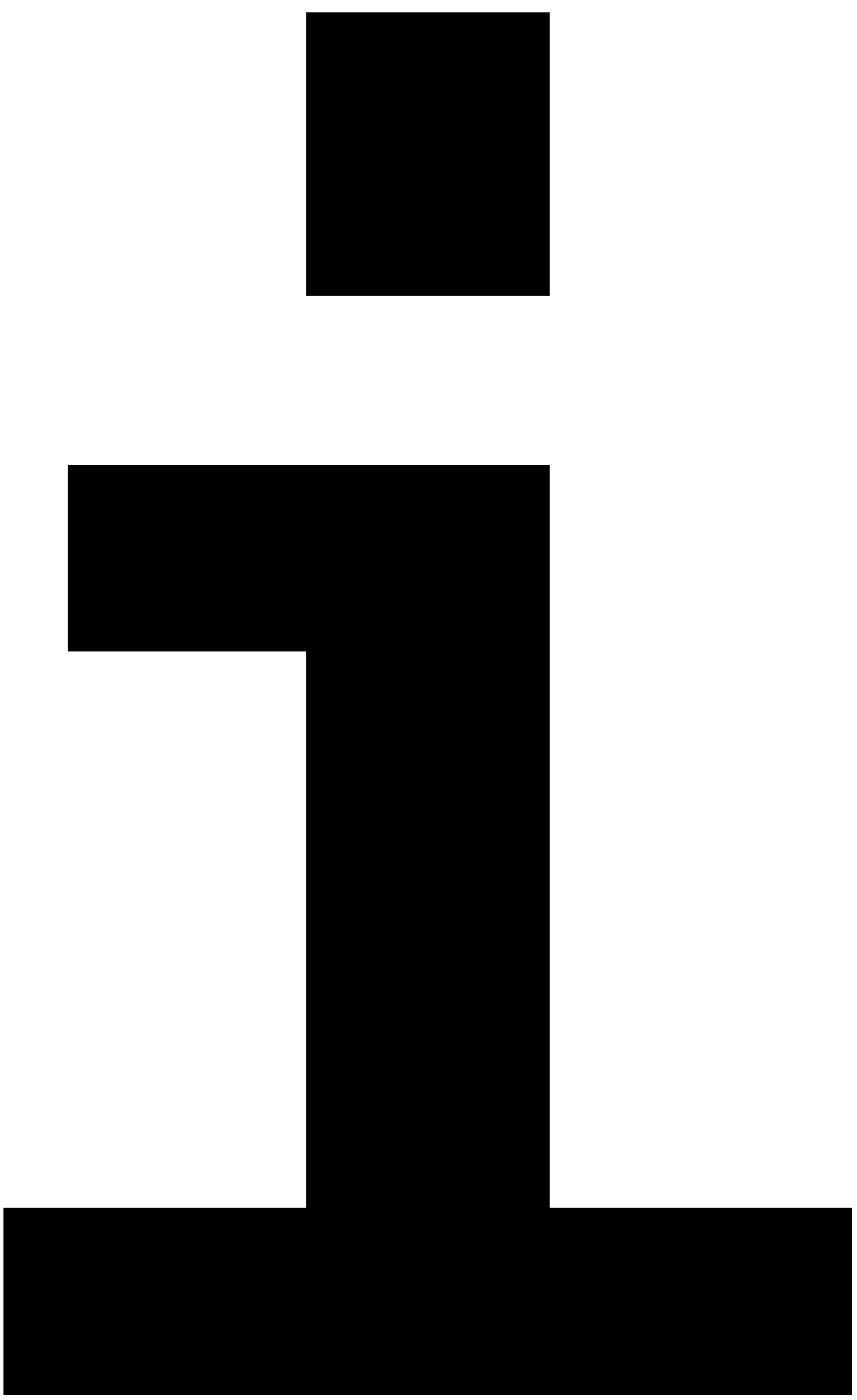


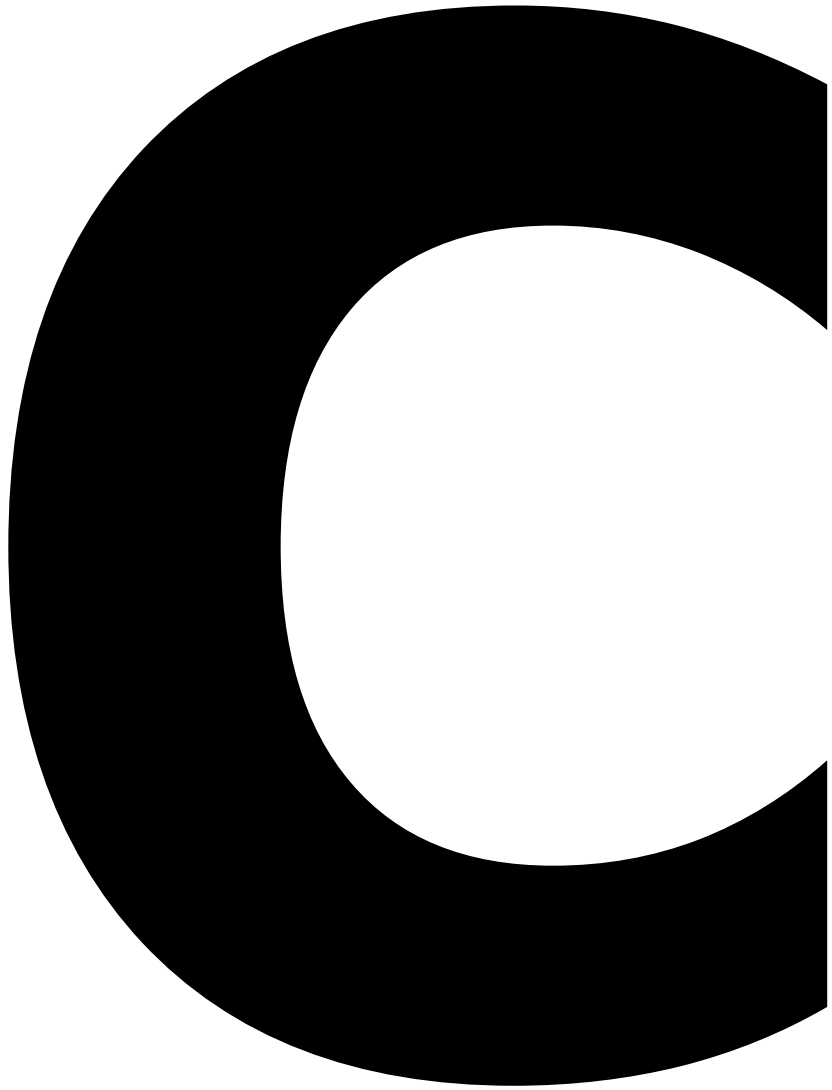


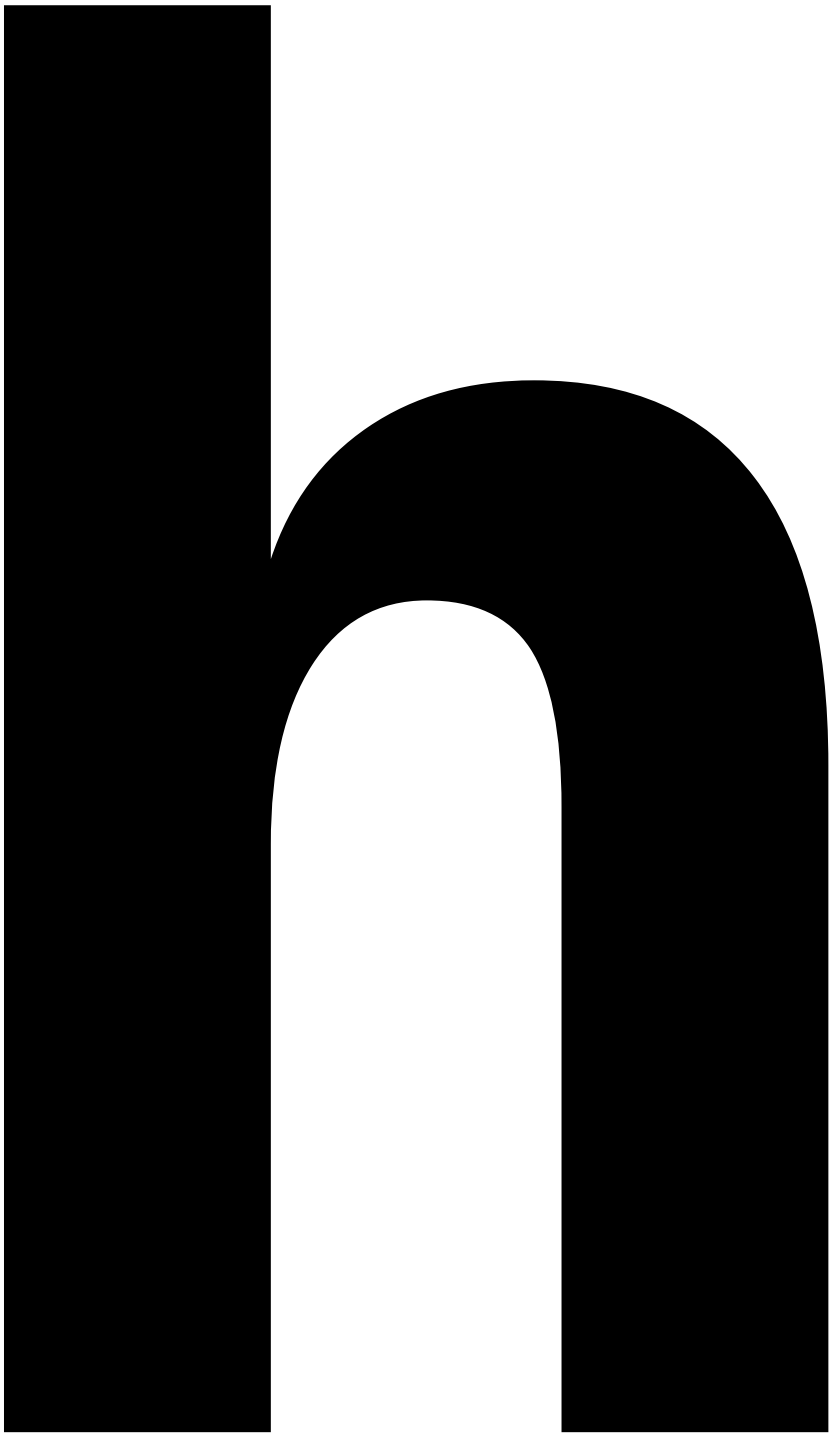


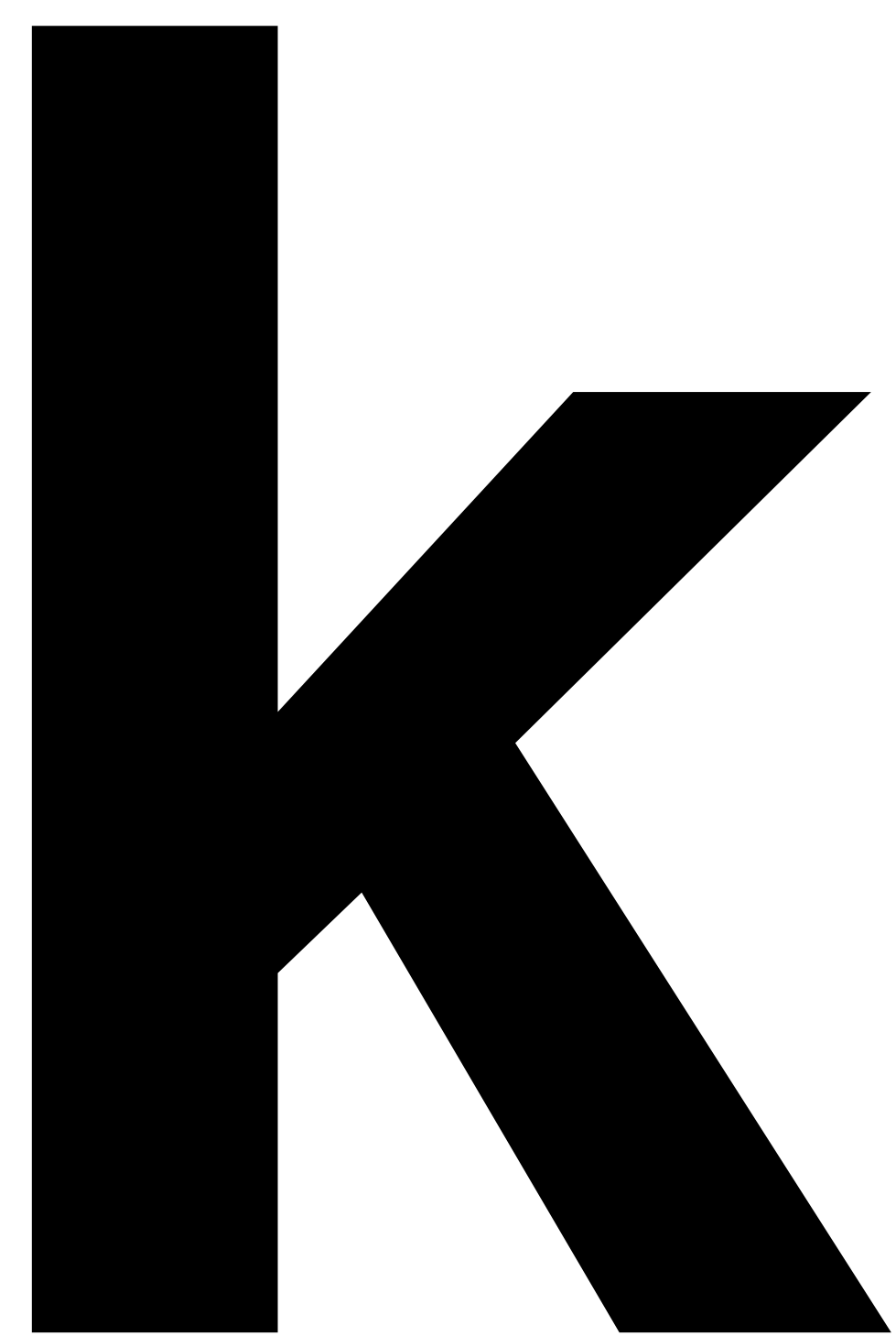
d

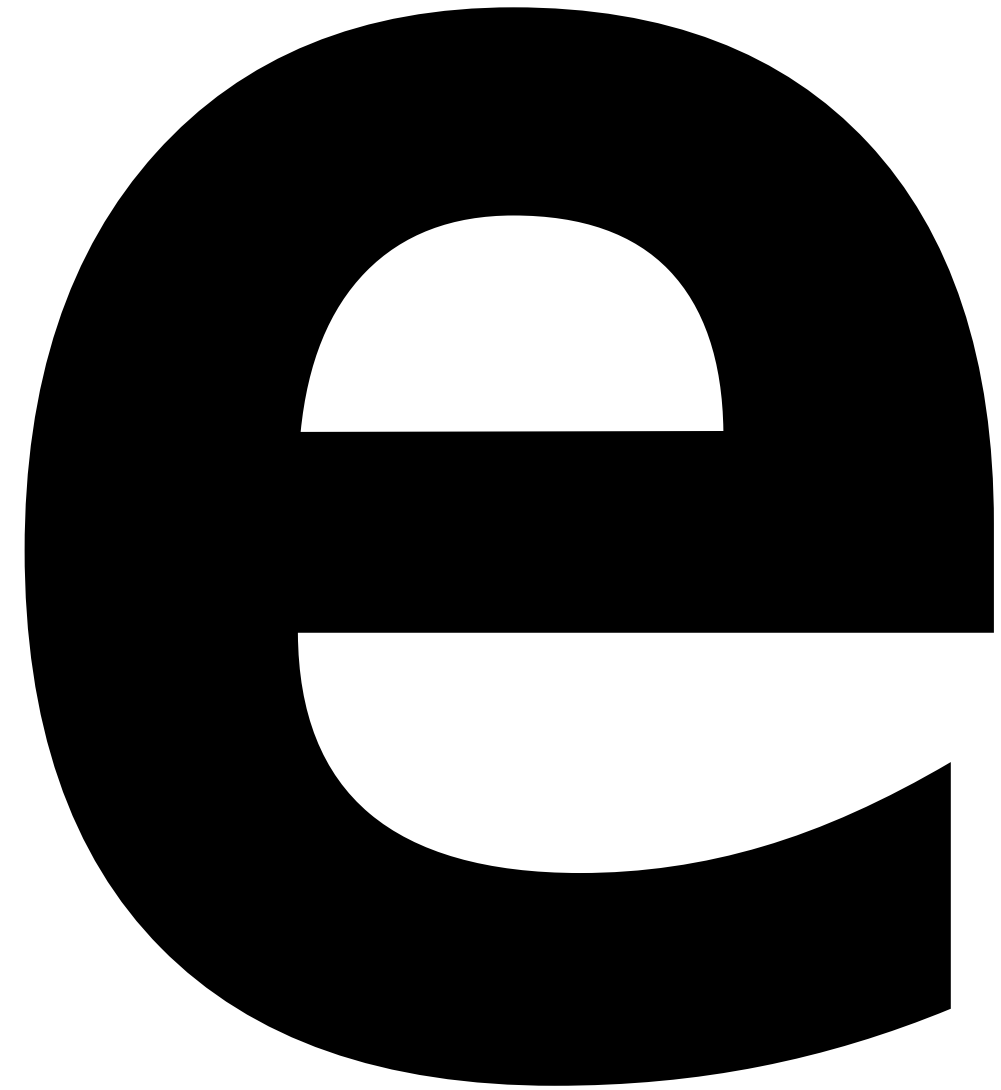


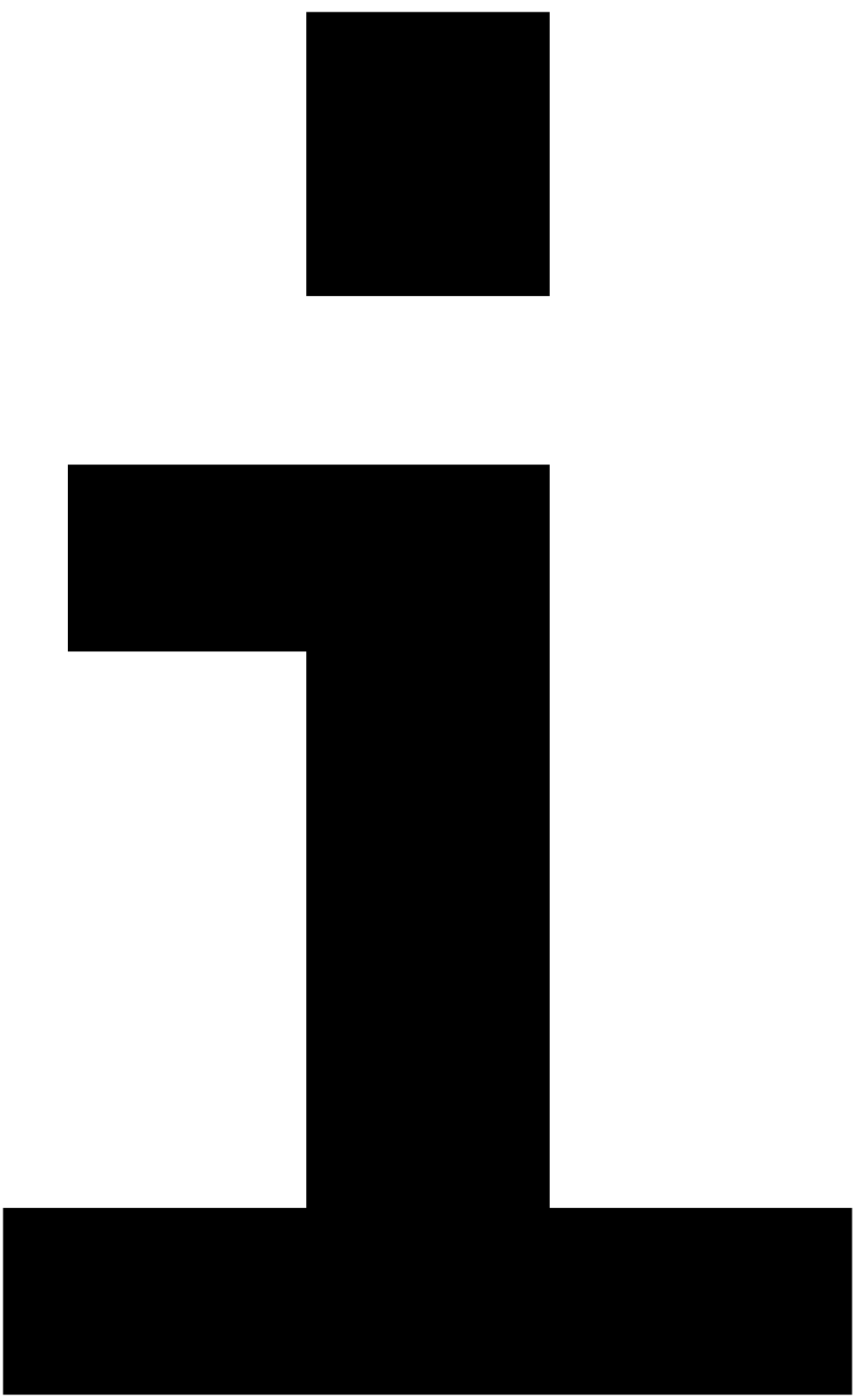


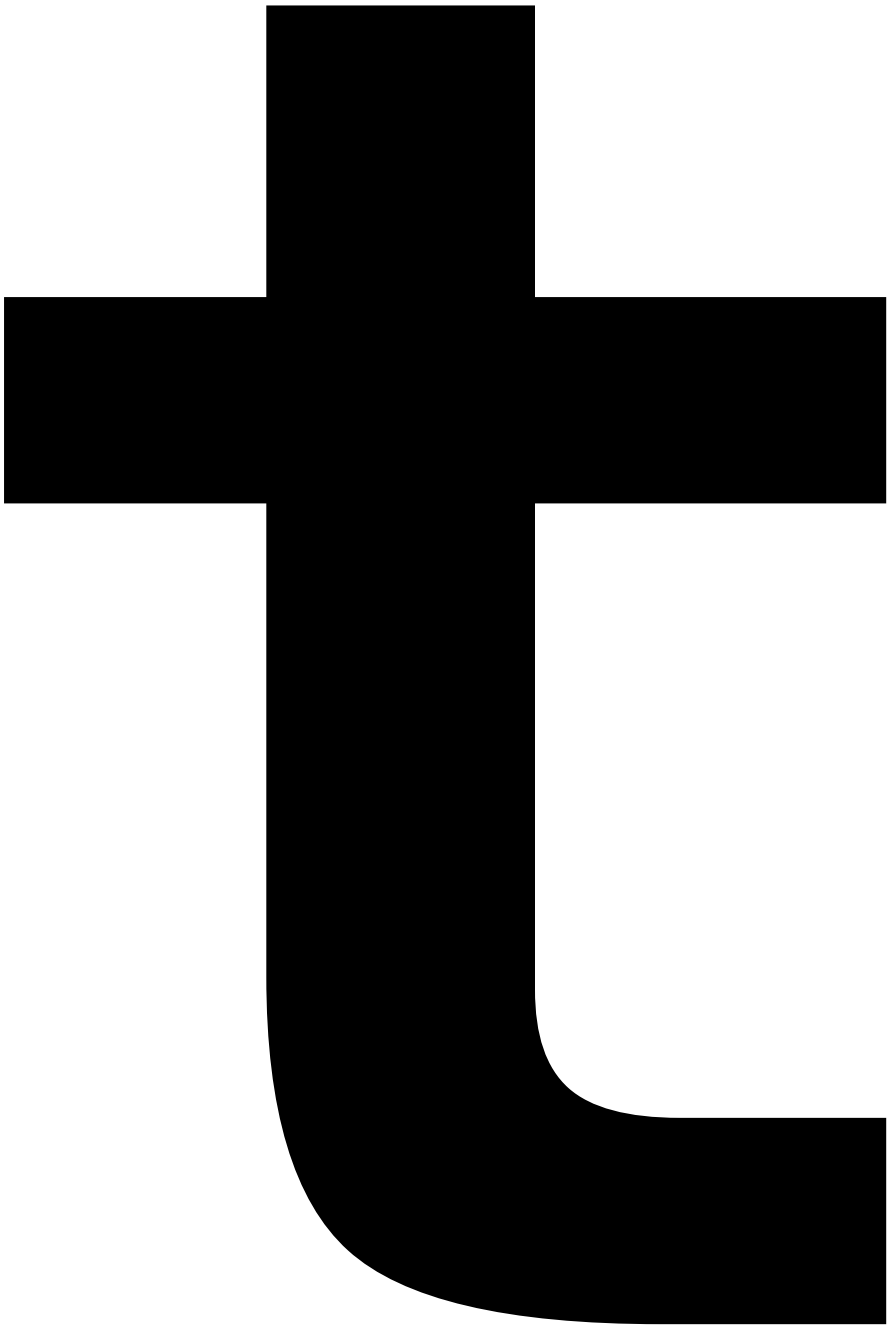


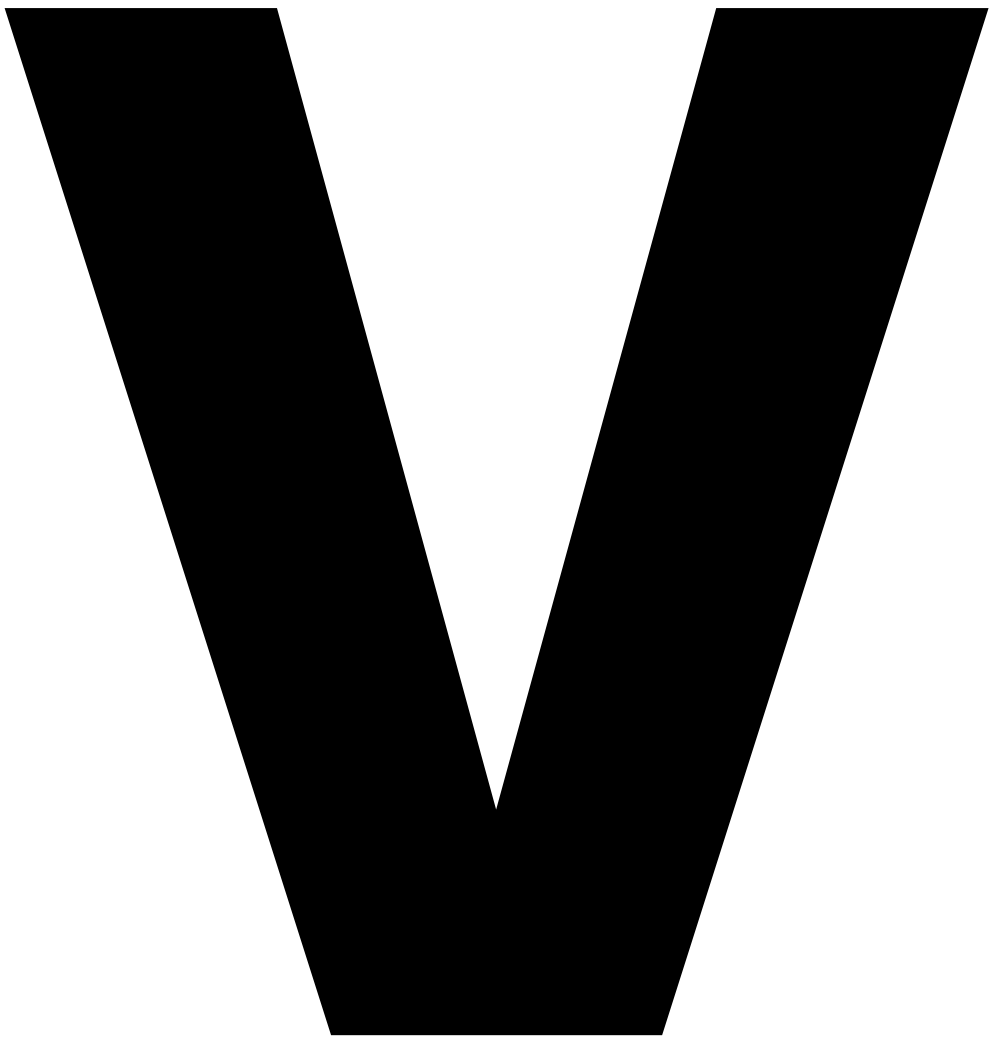


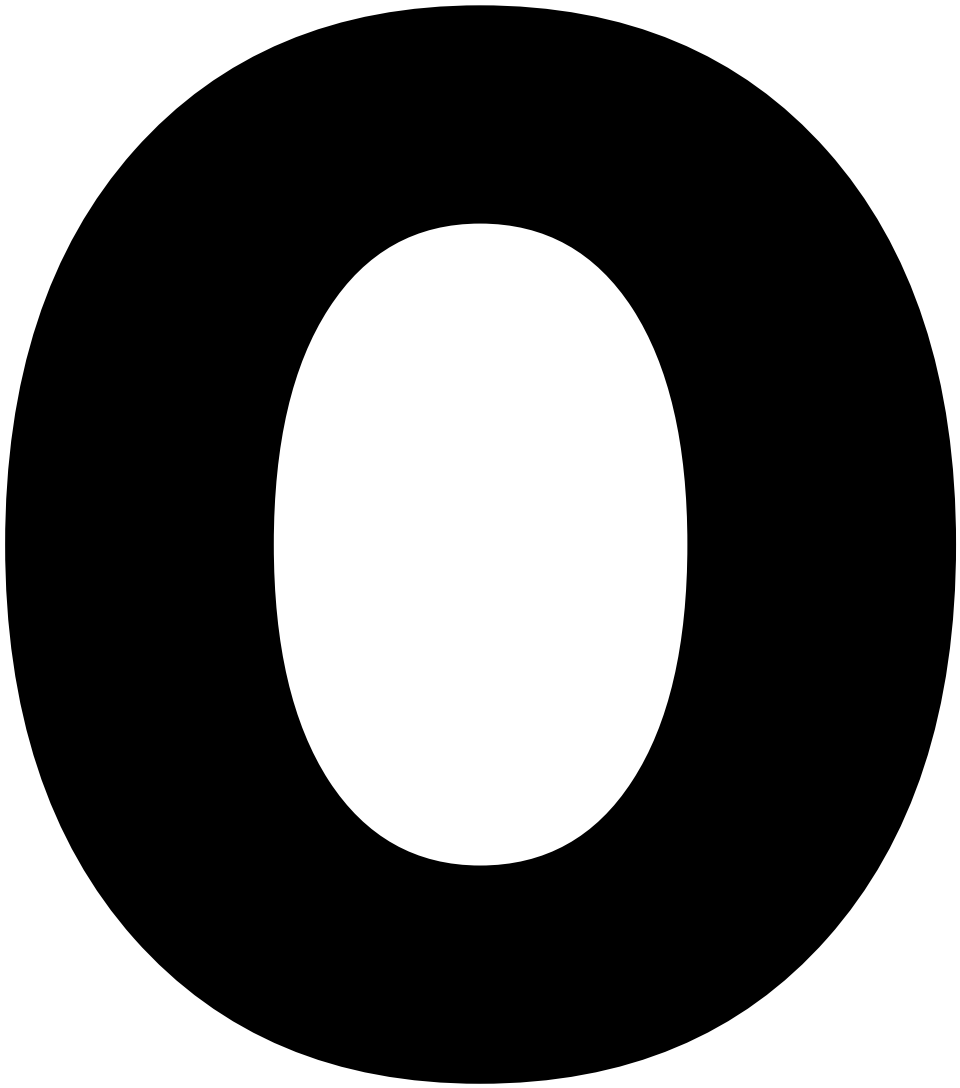


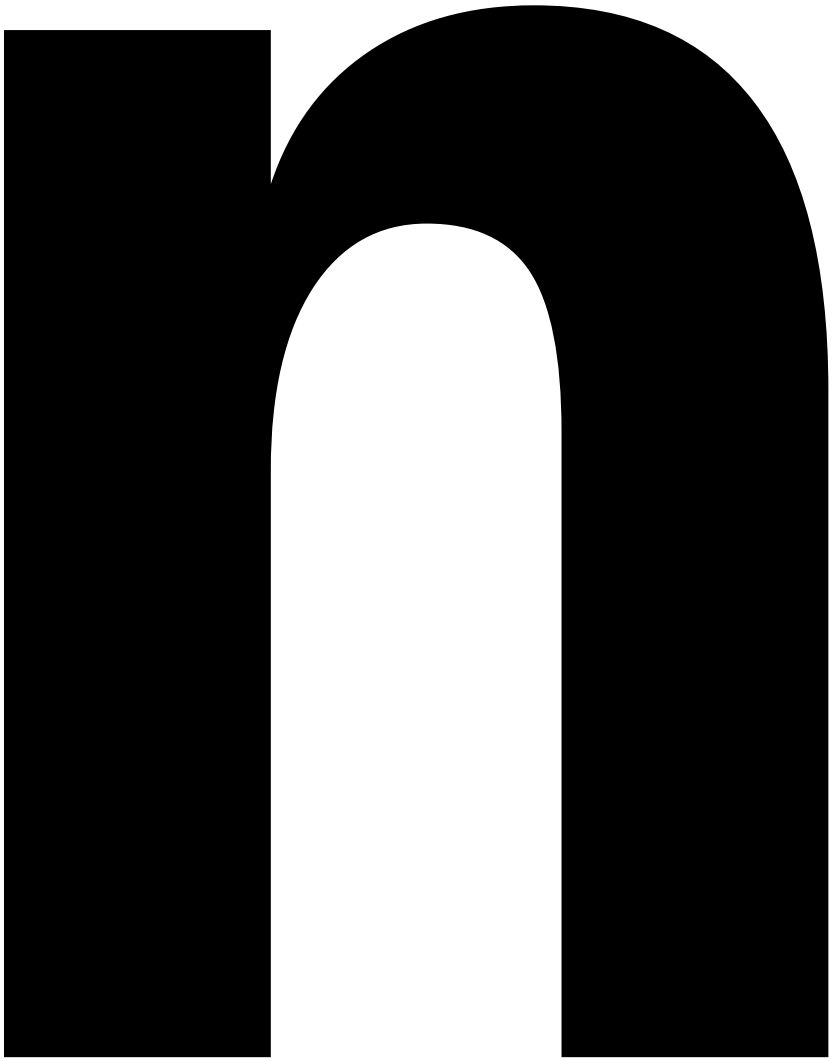




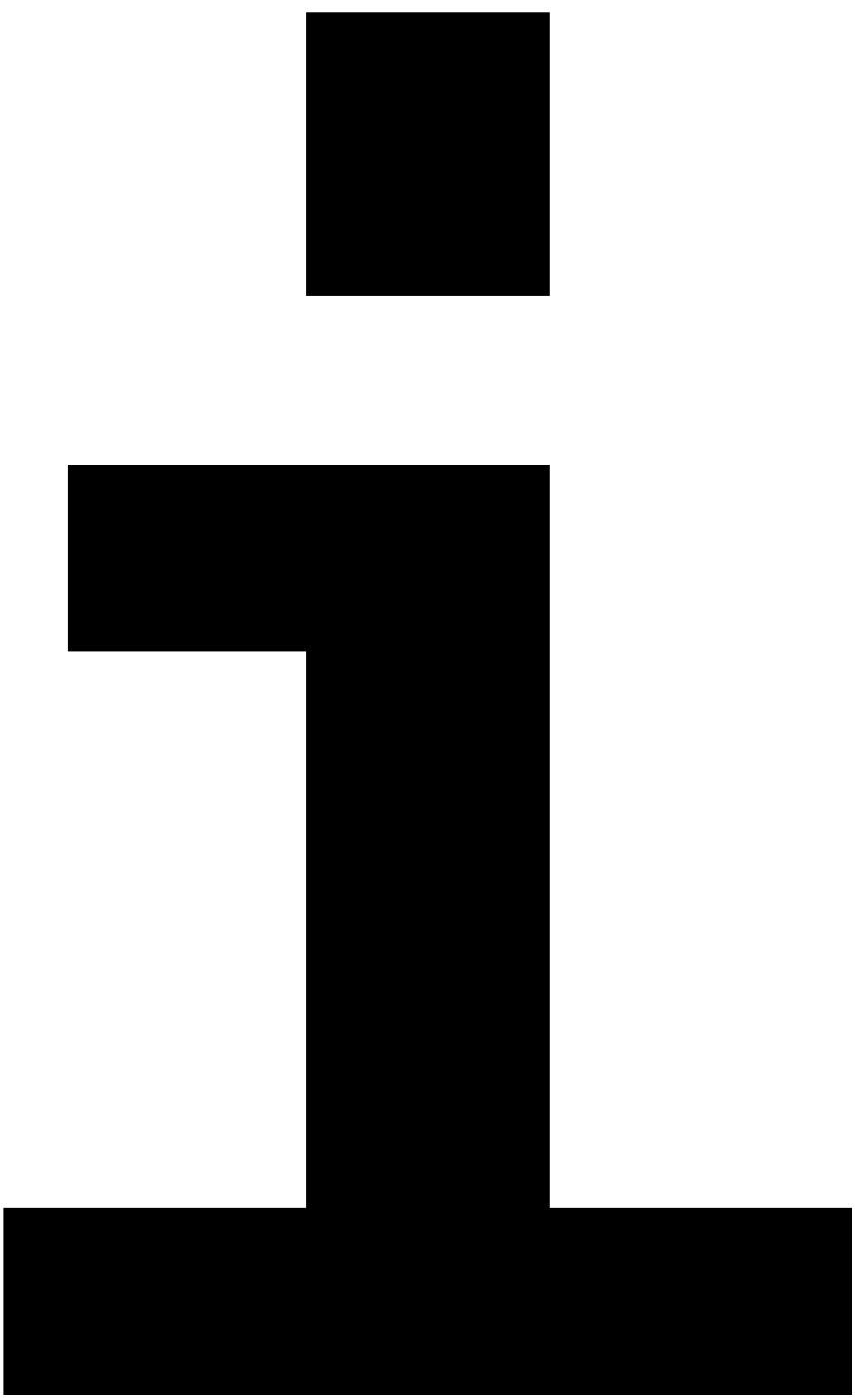


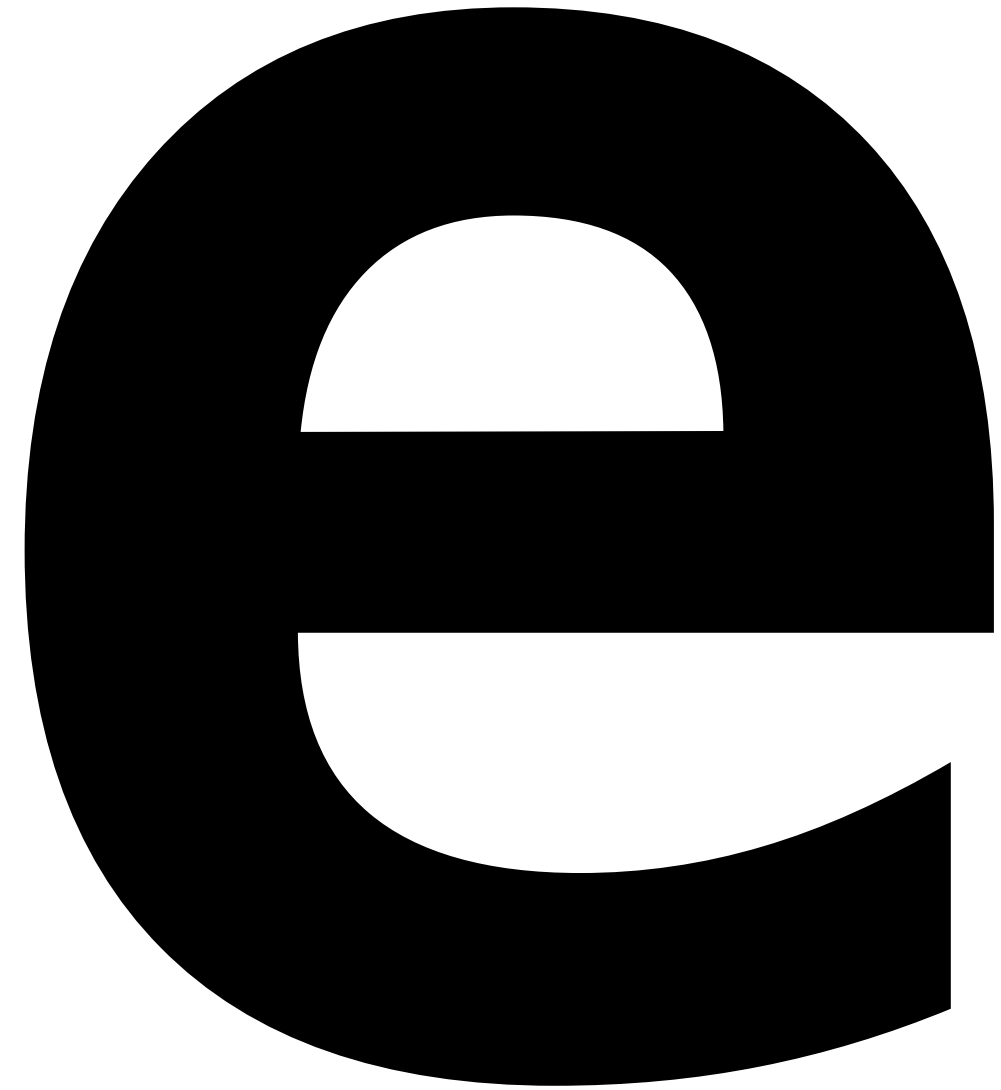




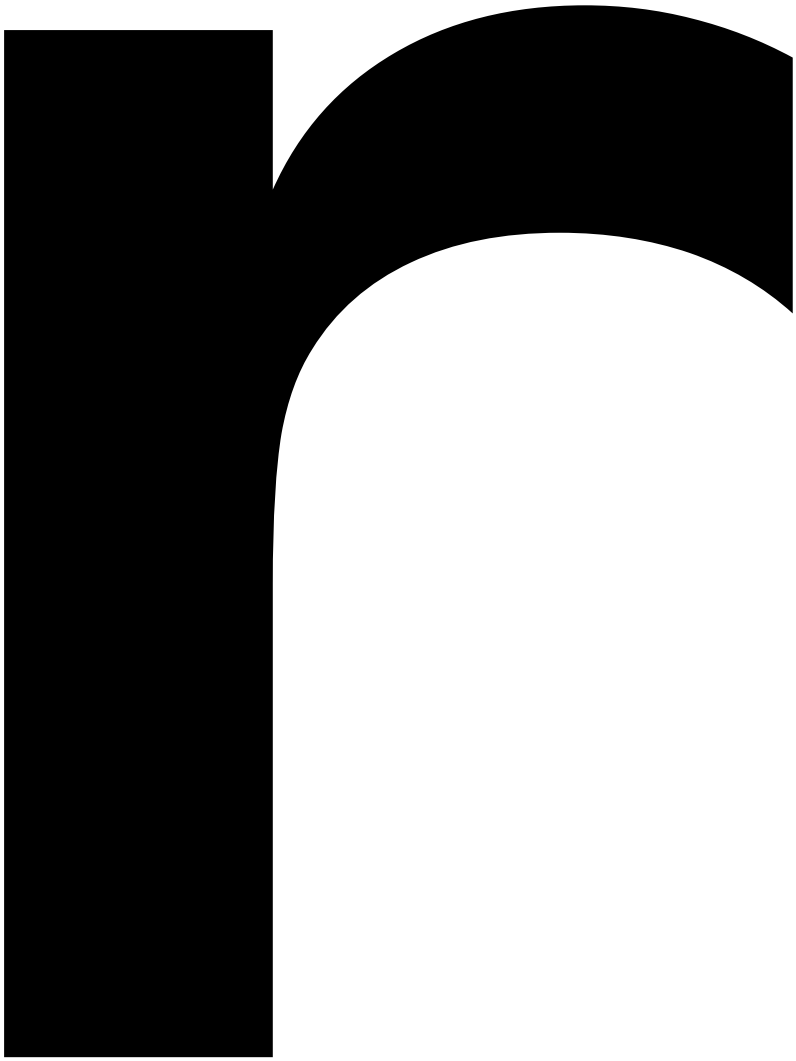


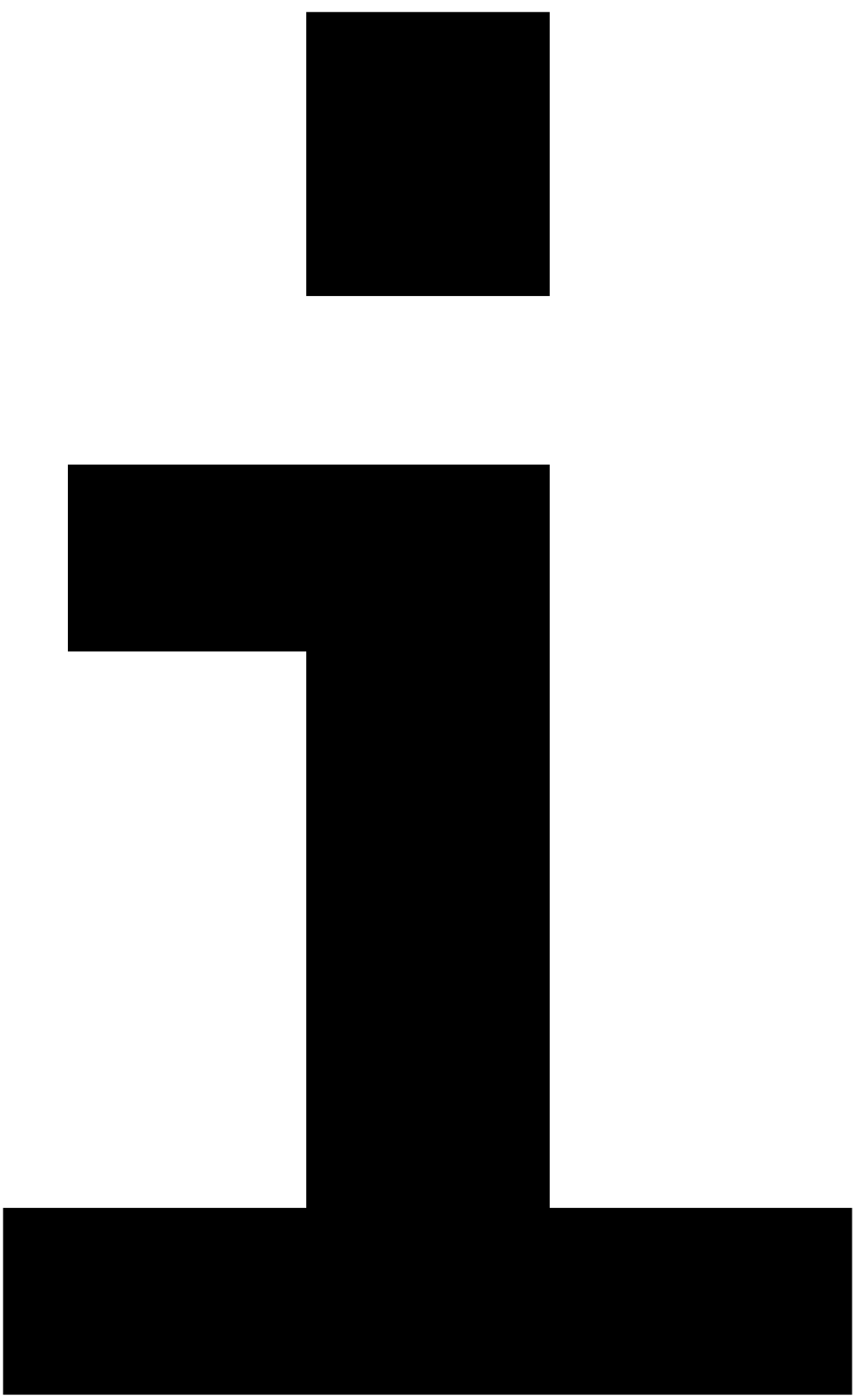
N

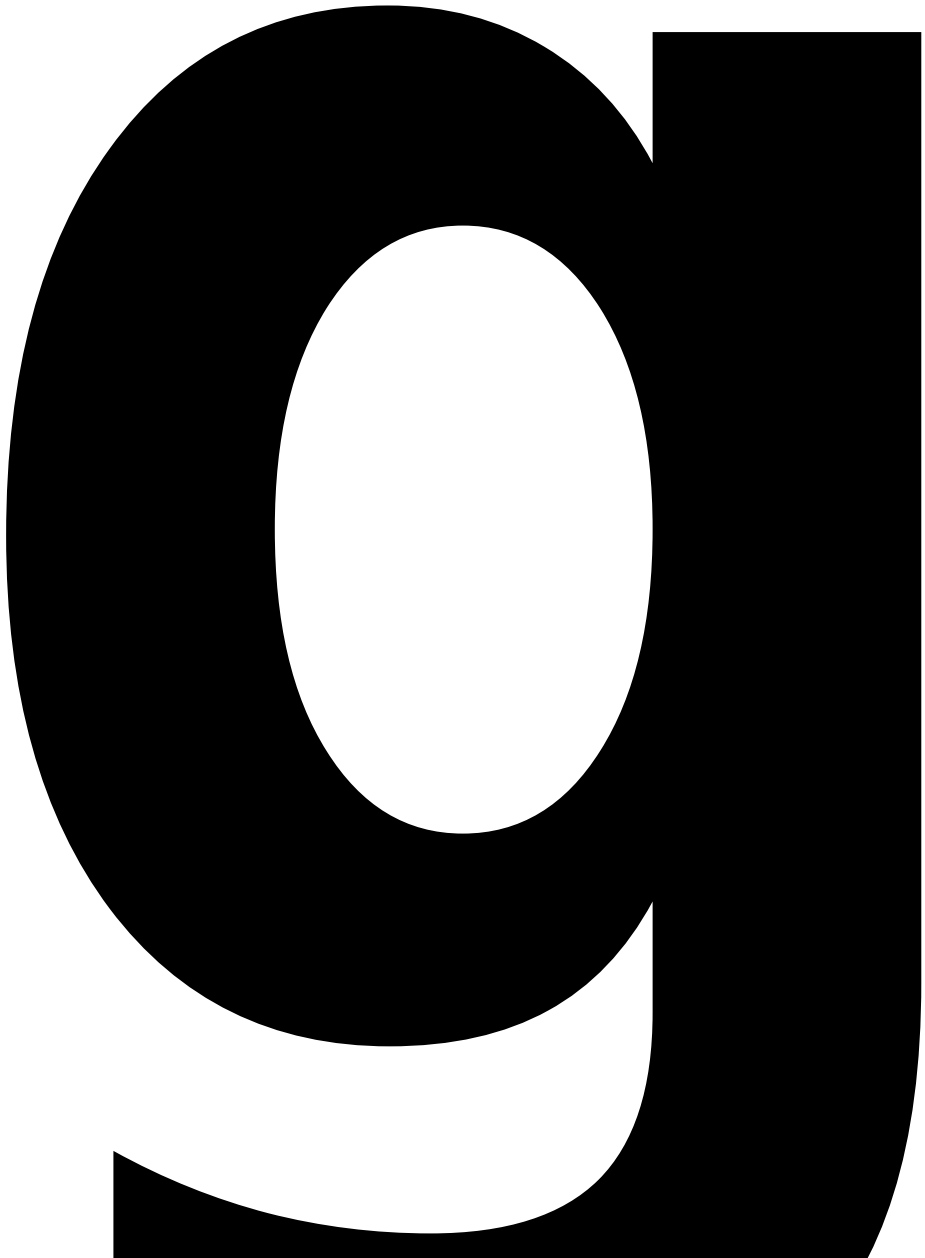




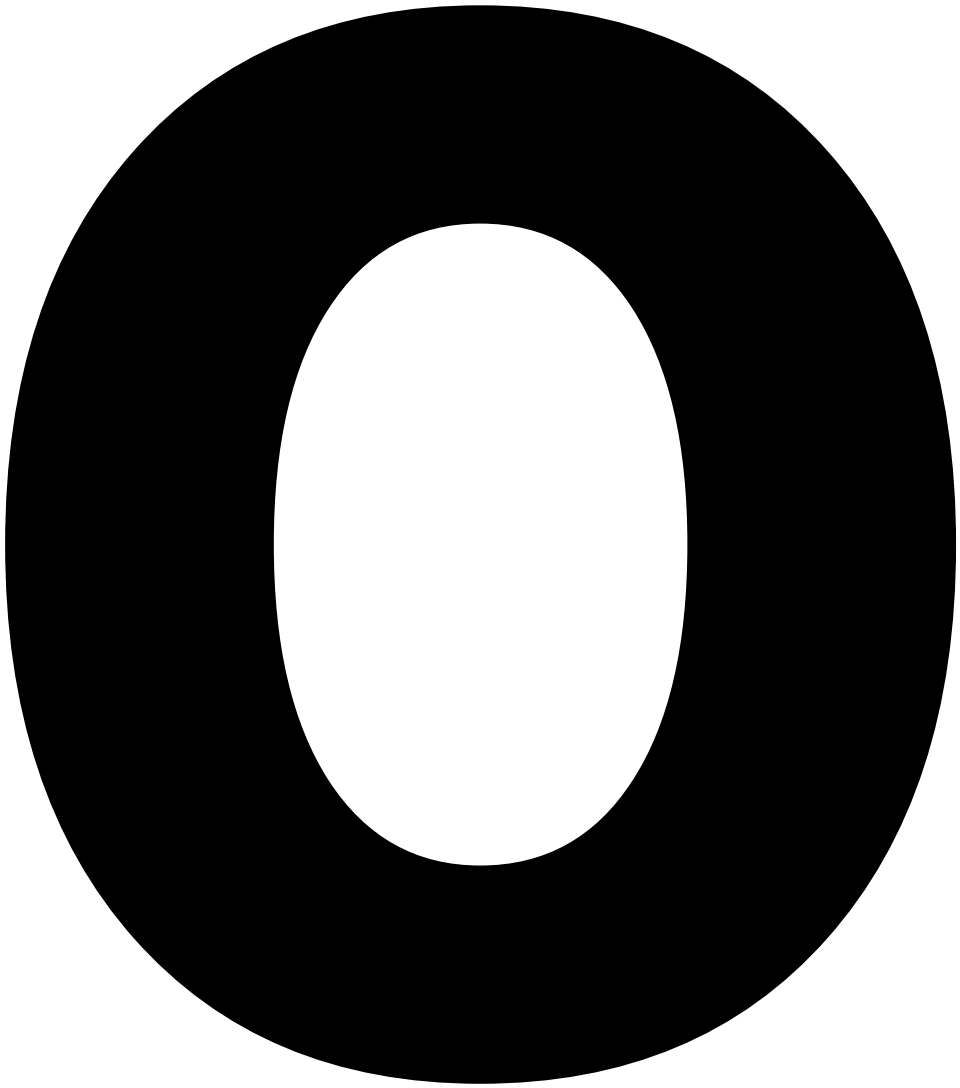
d



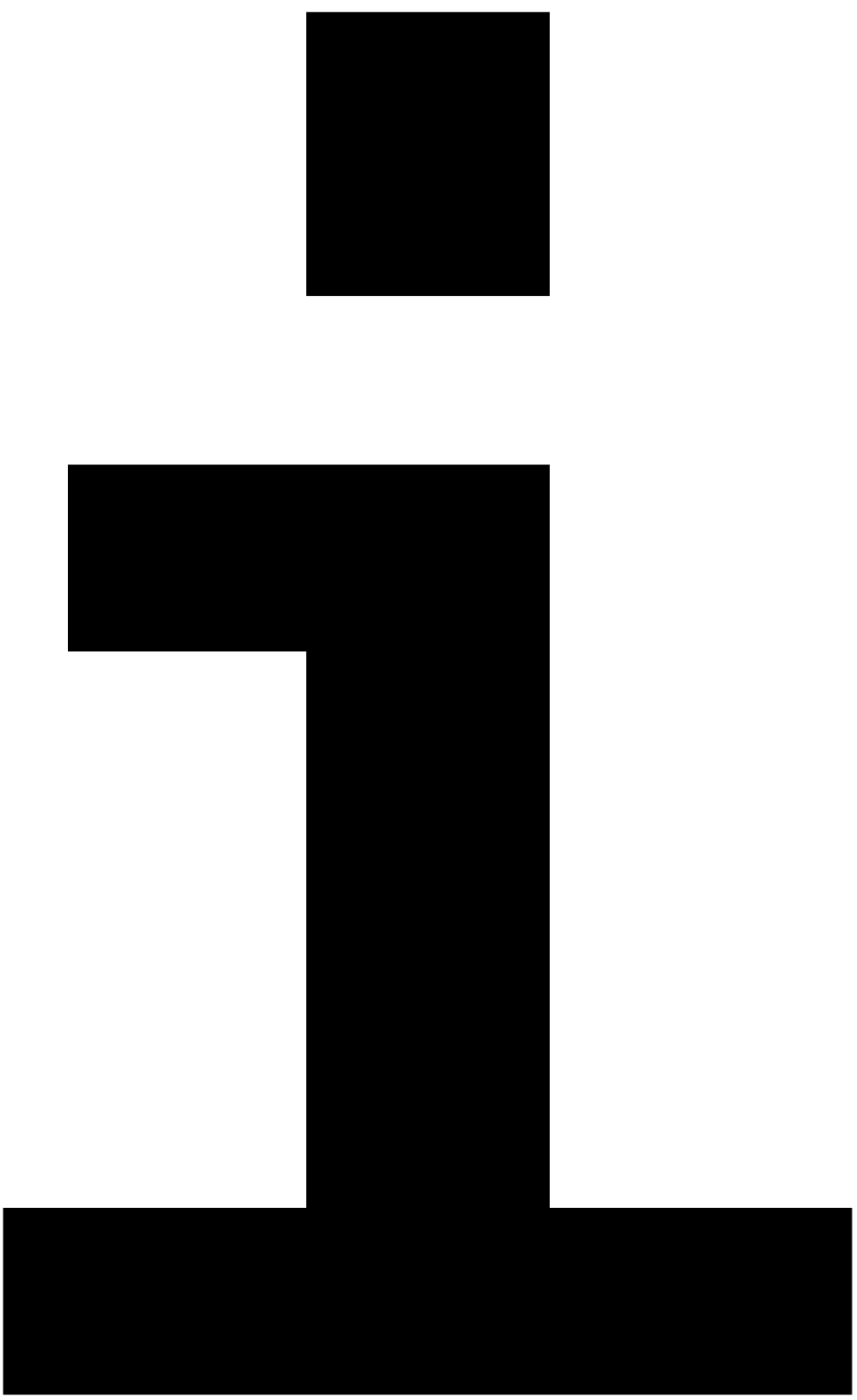




d

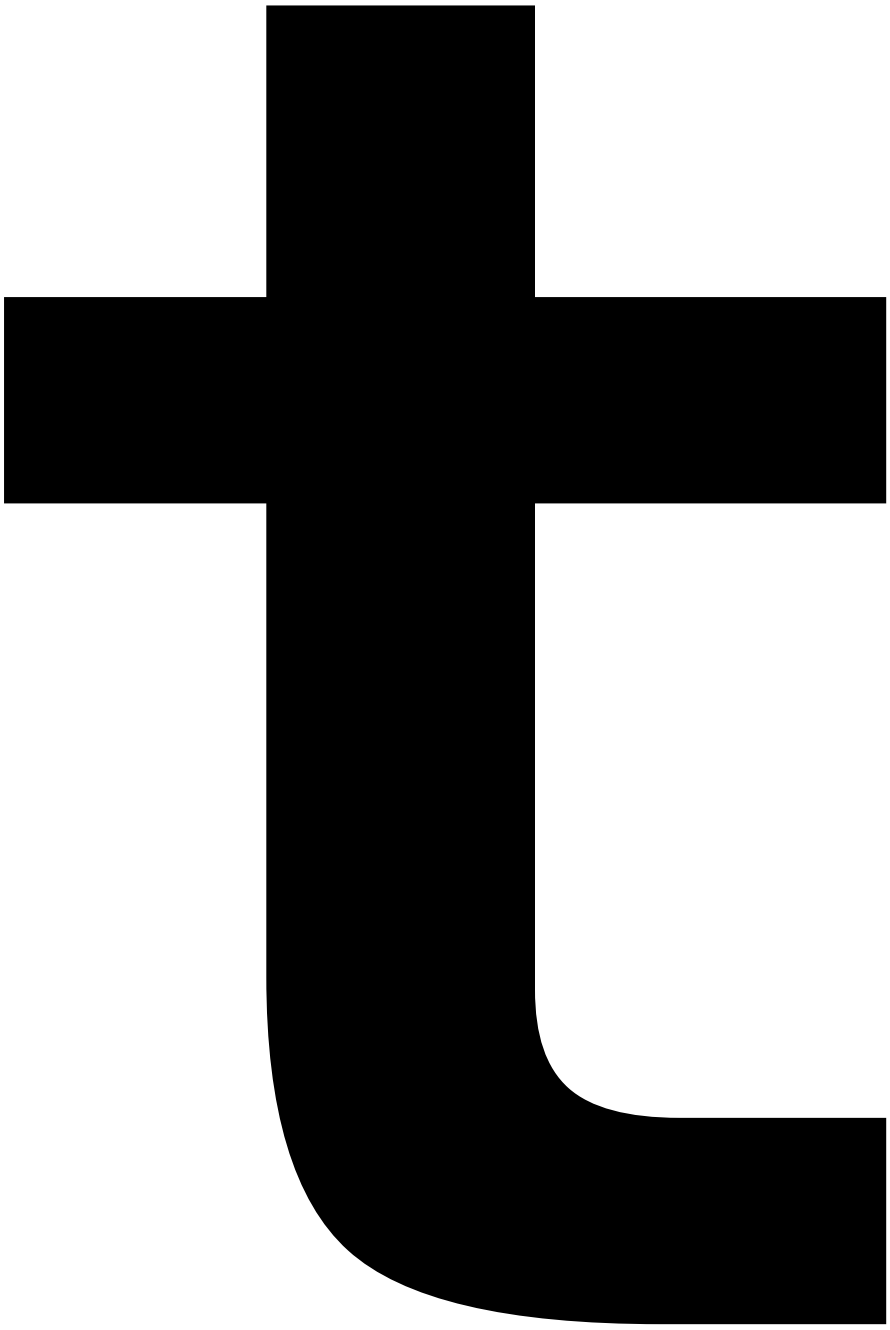


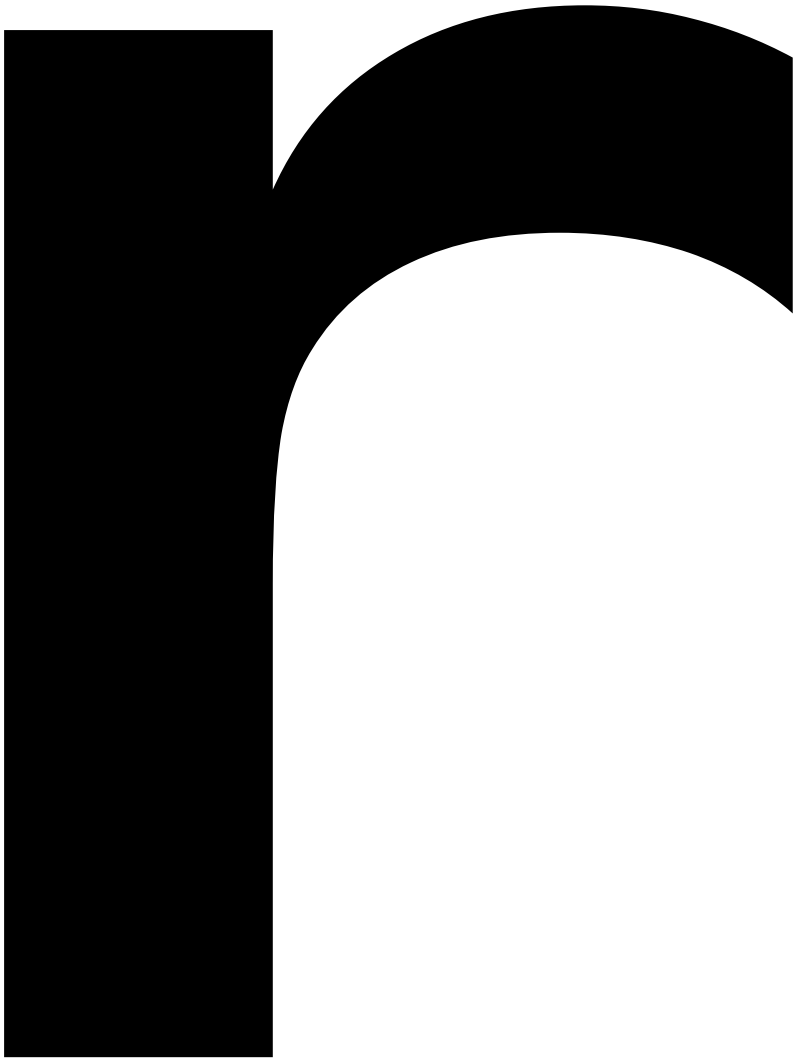
S

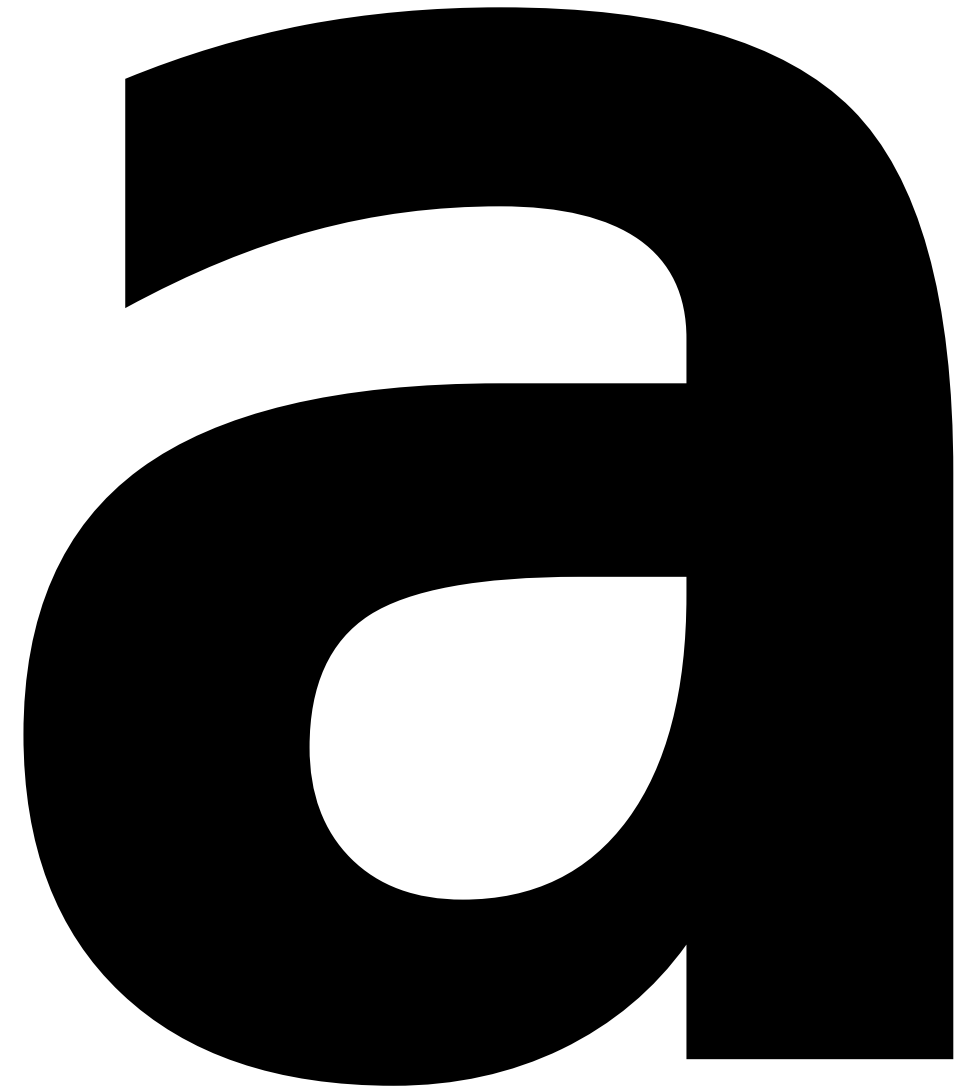


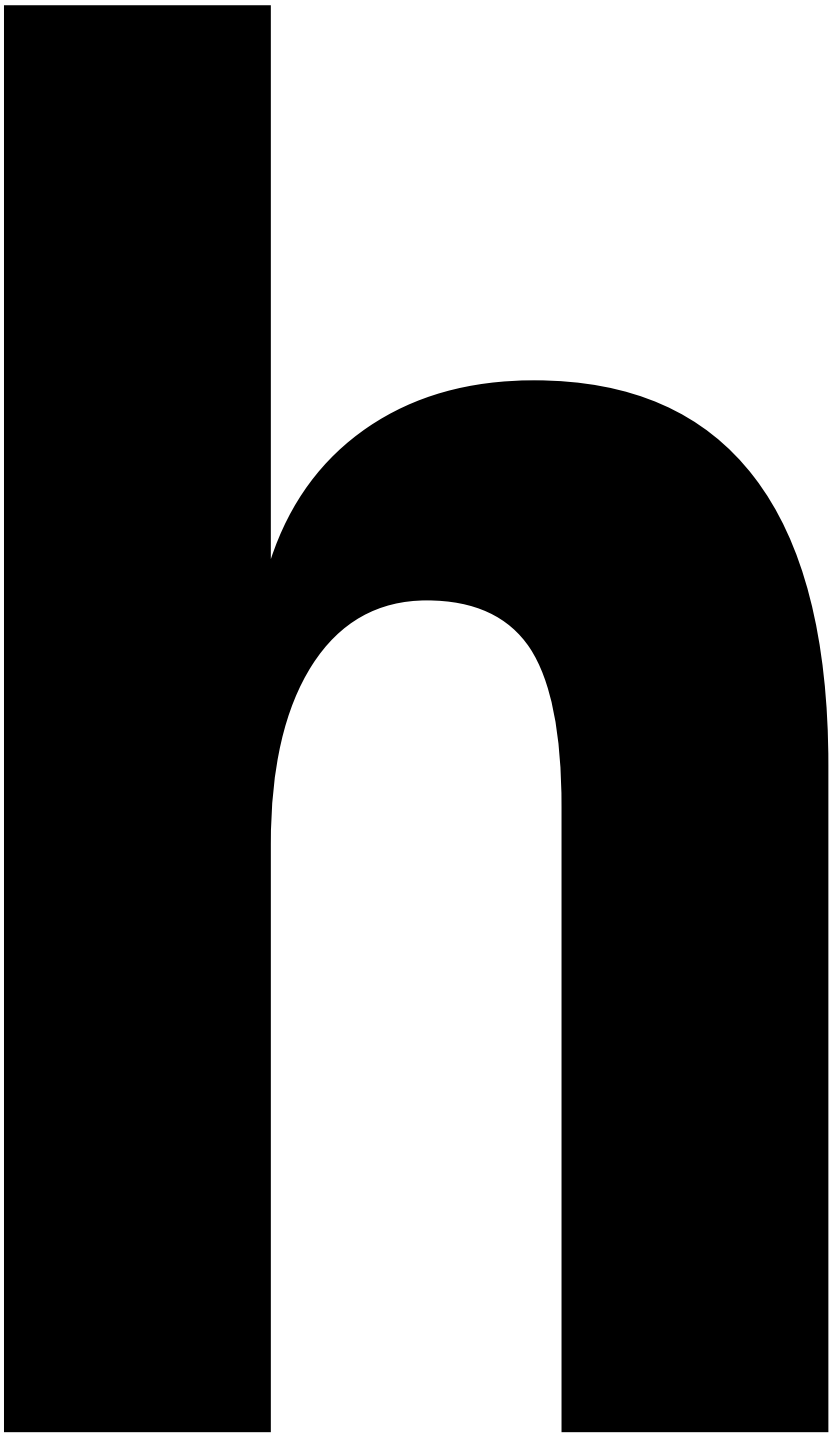
S

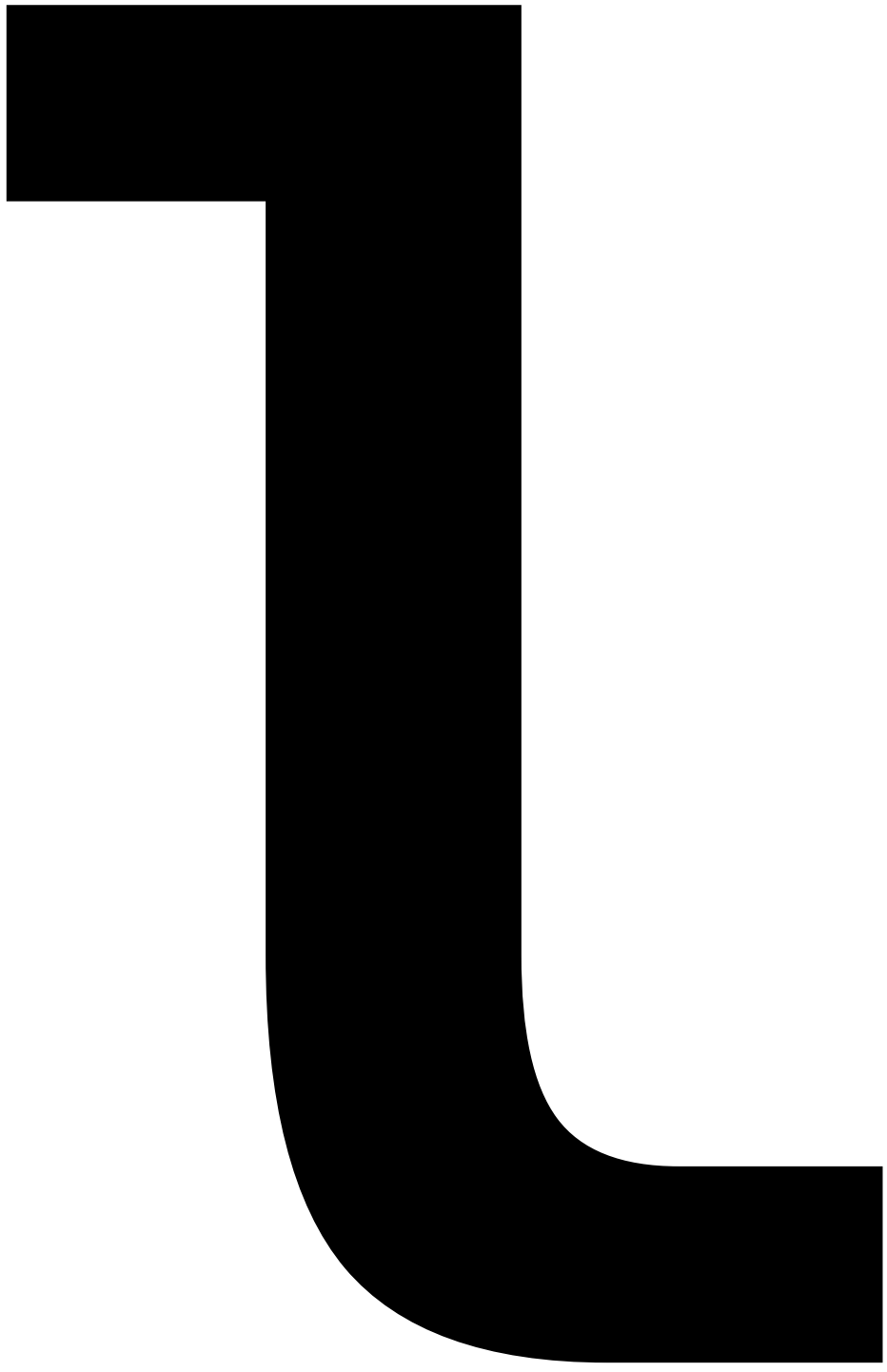
S



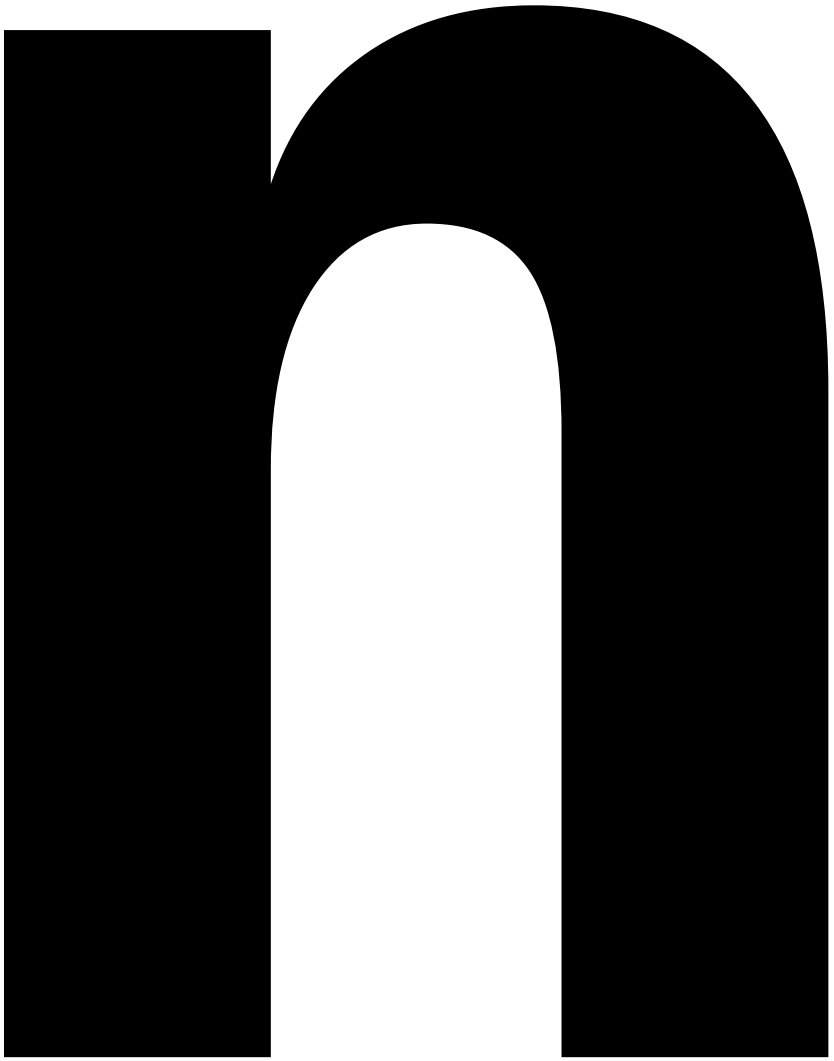


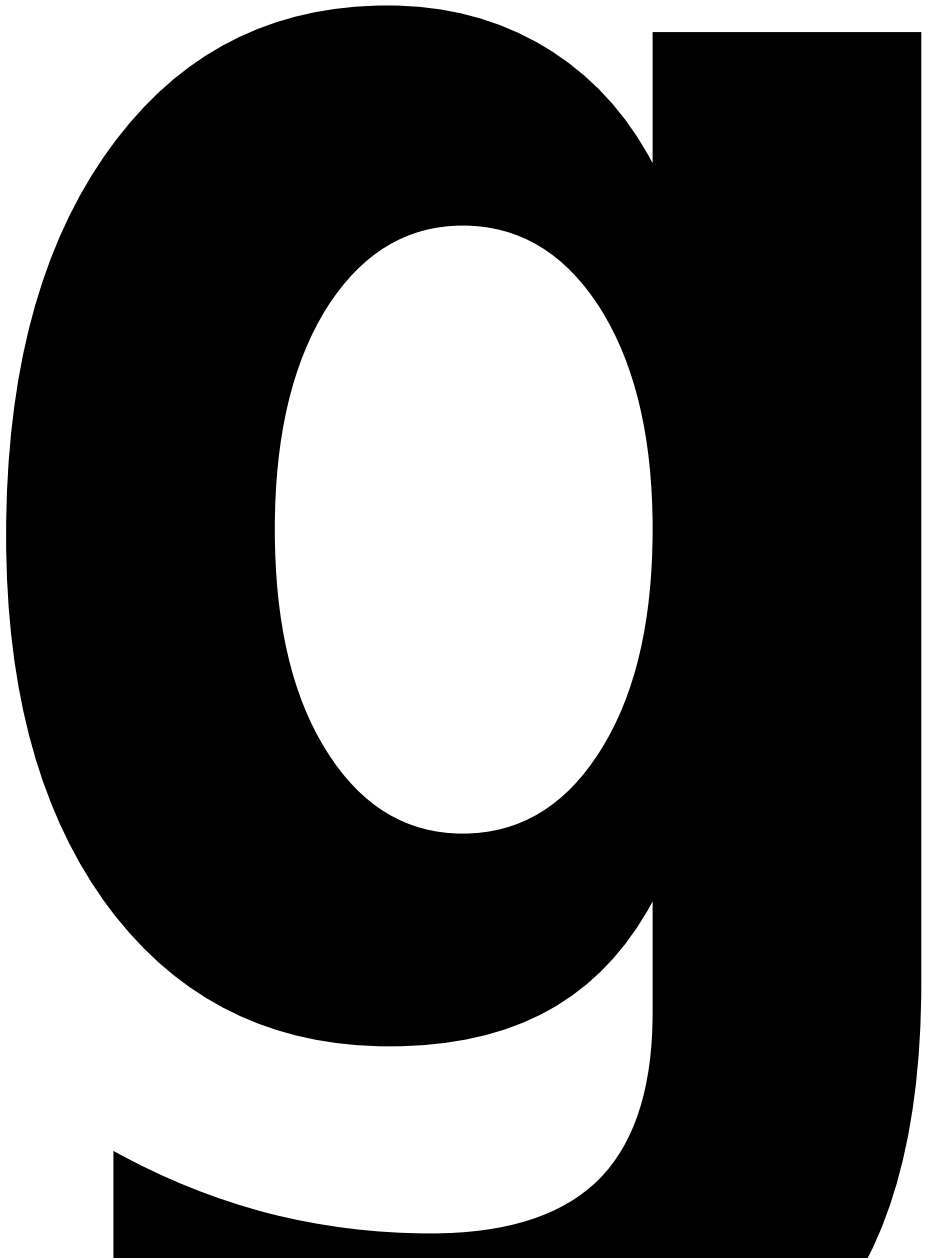


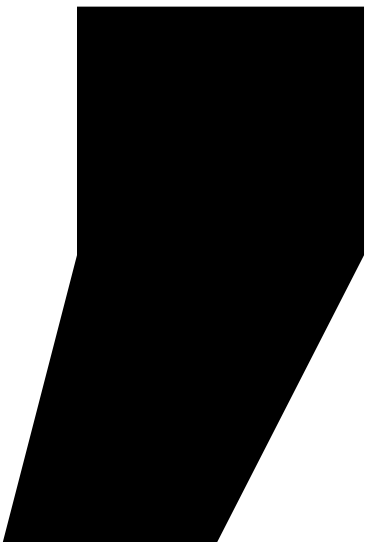




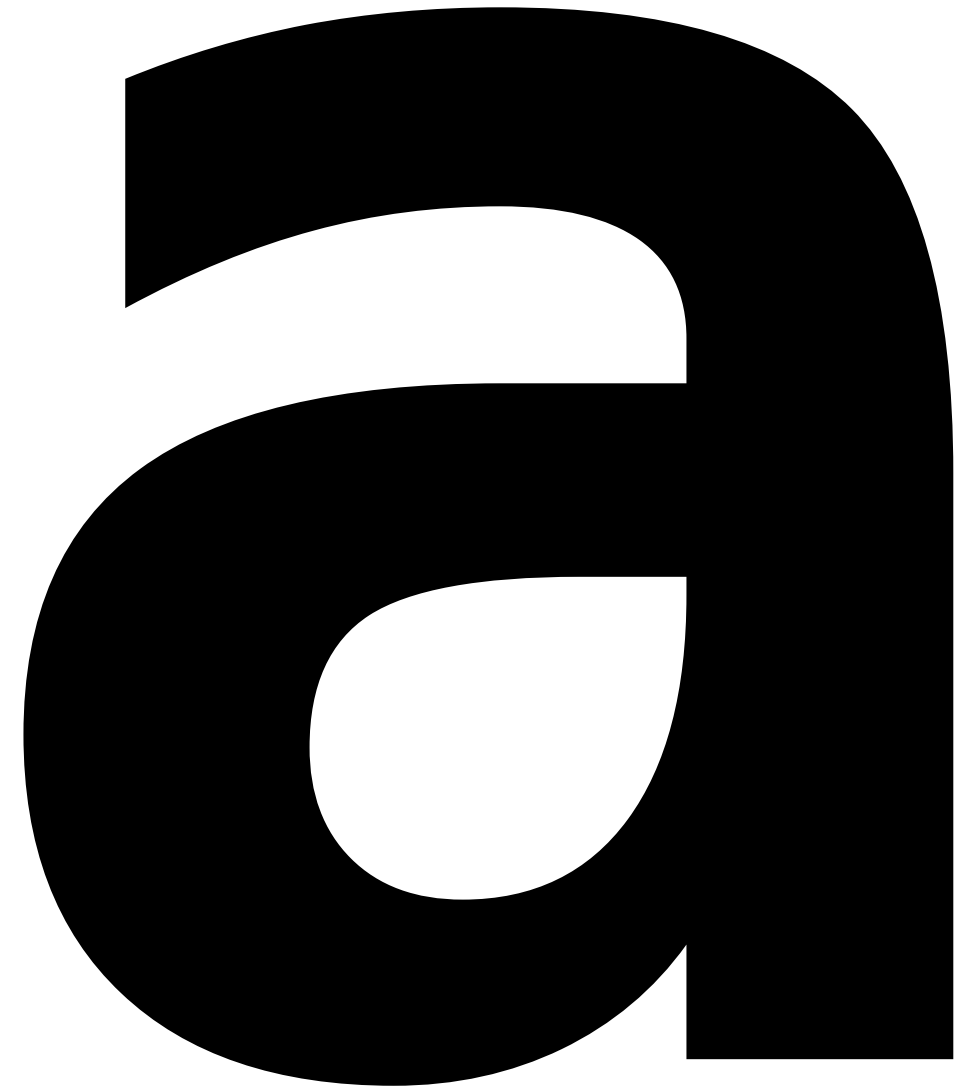
u



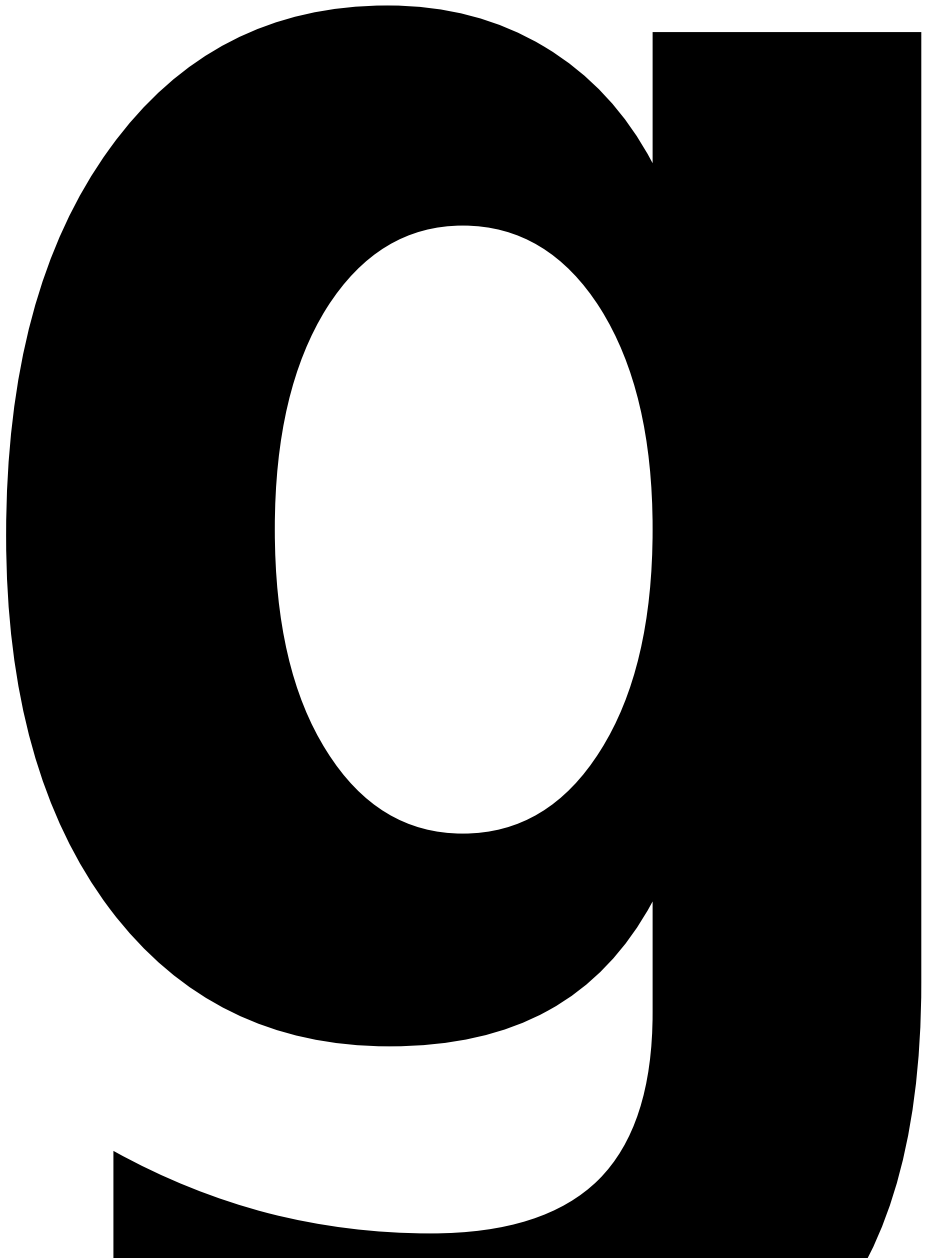


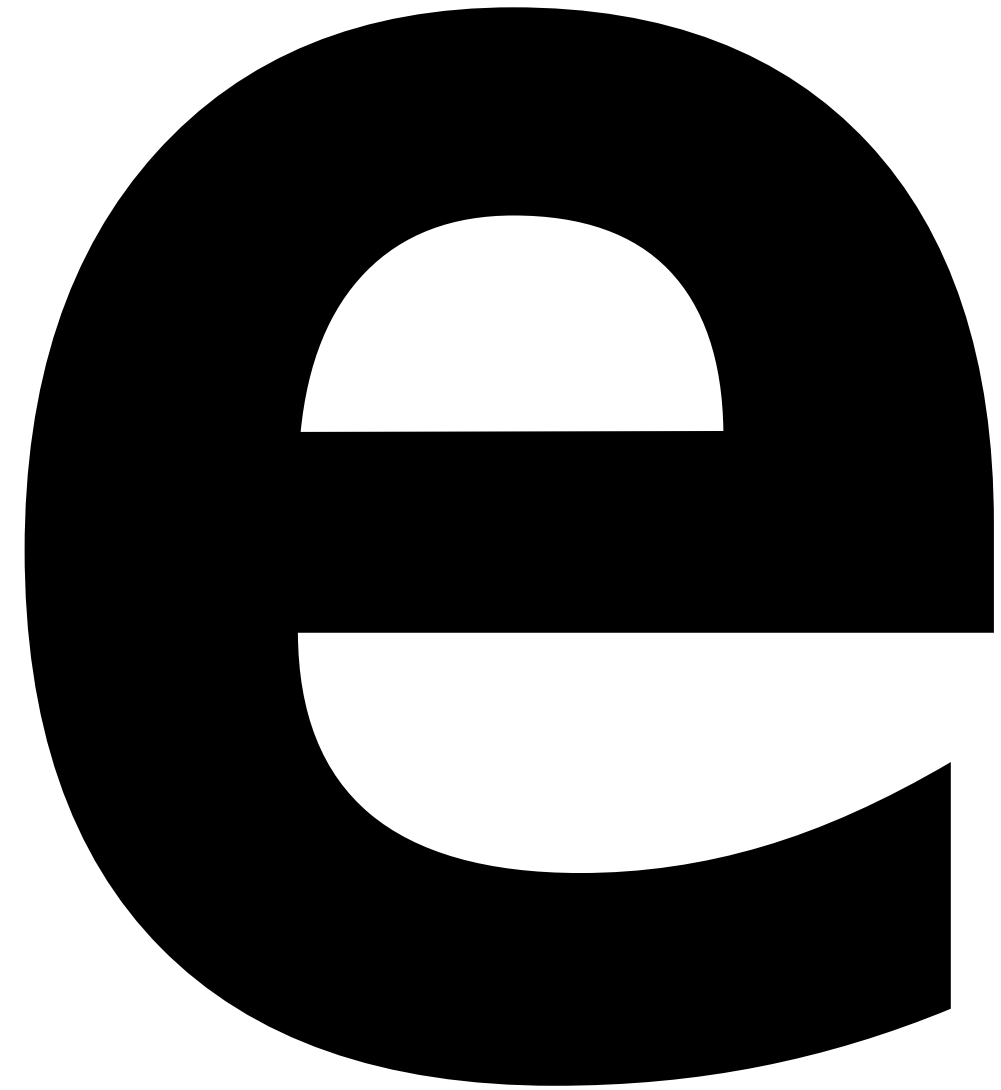


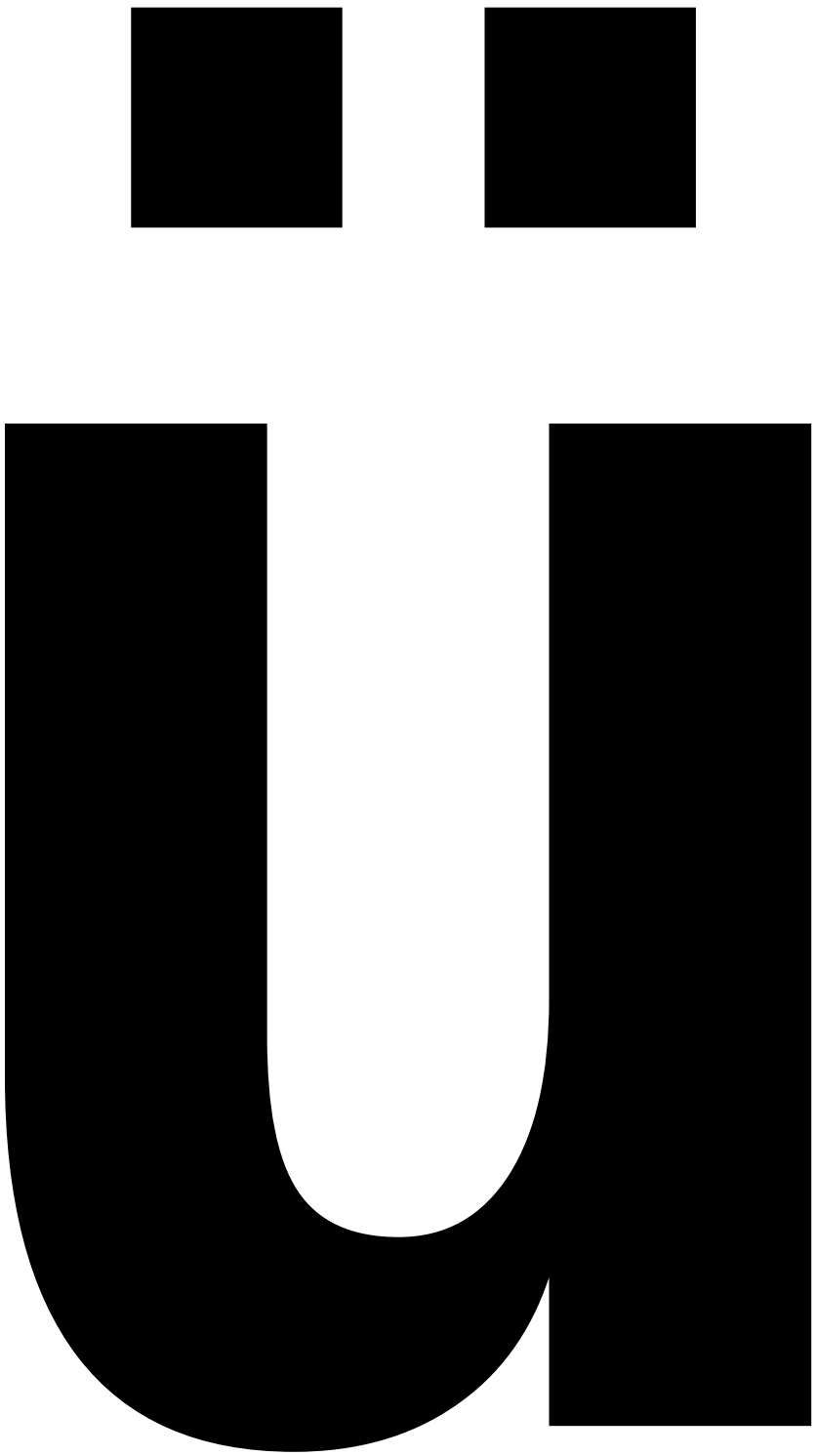
d

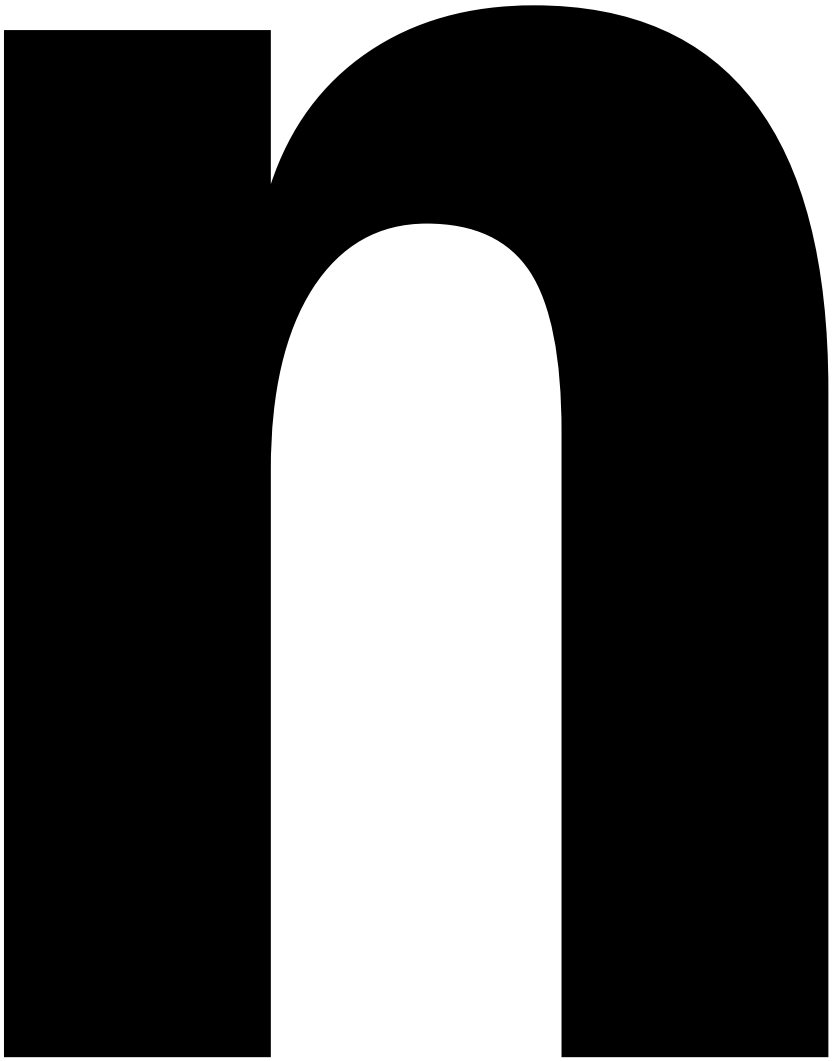


S

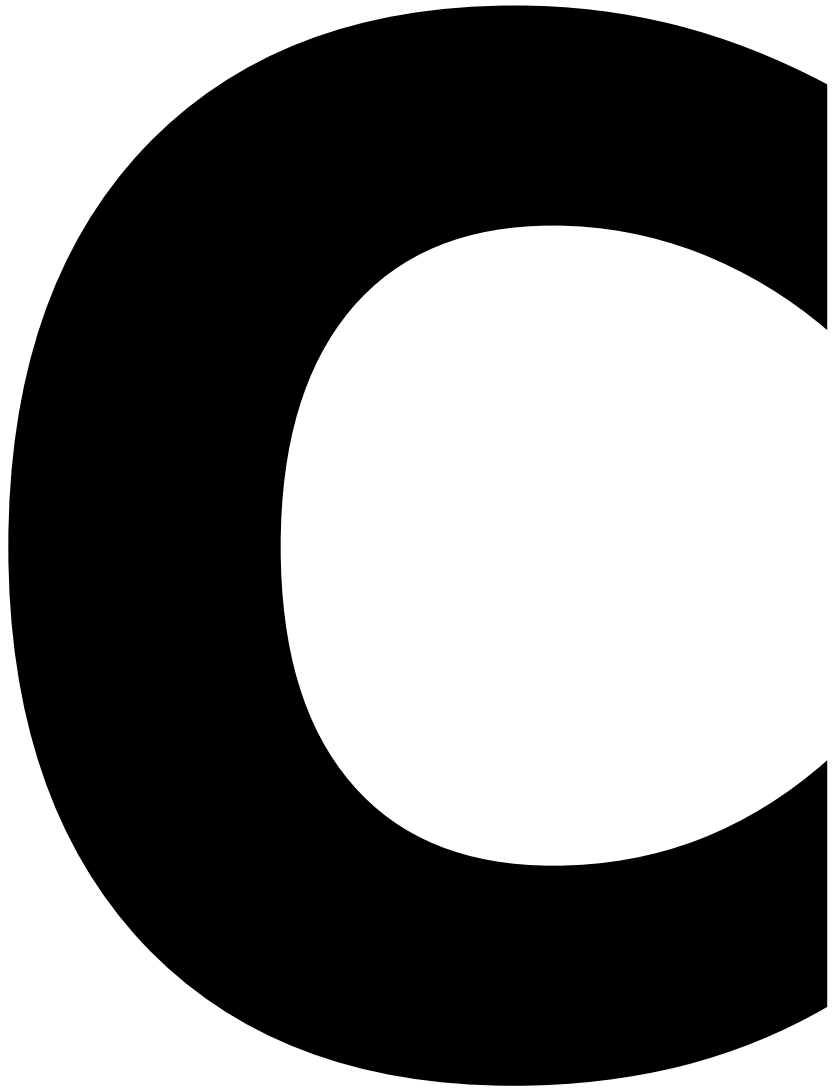


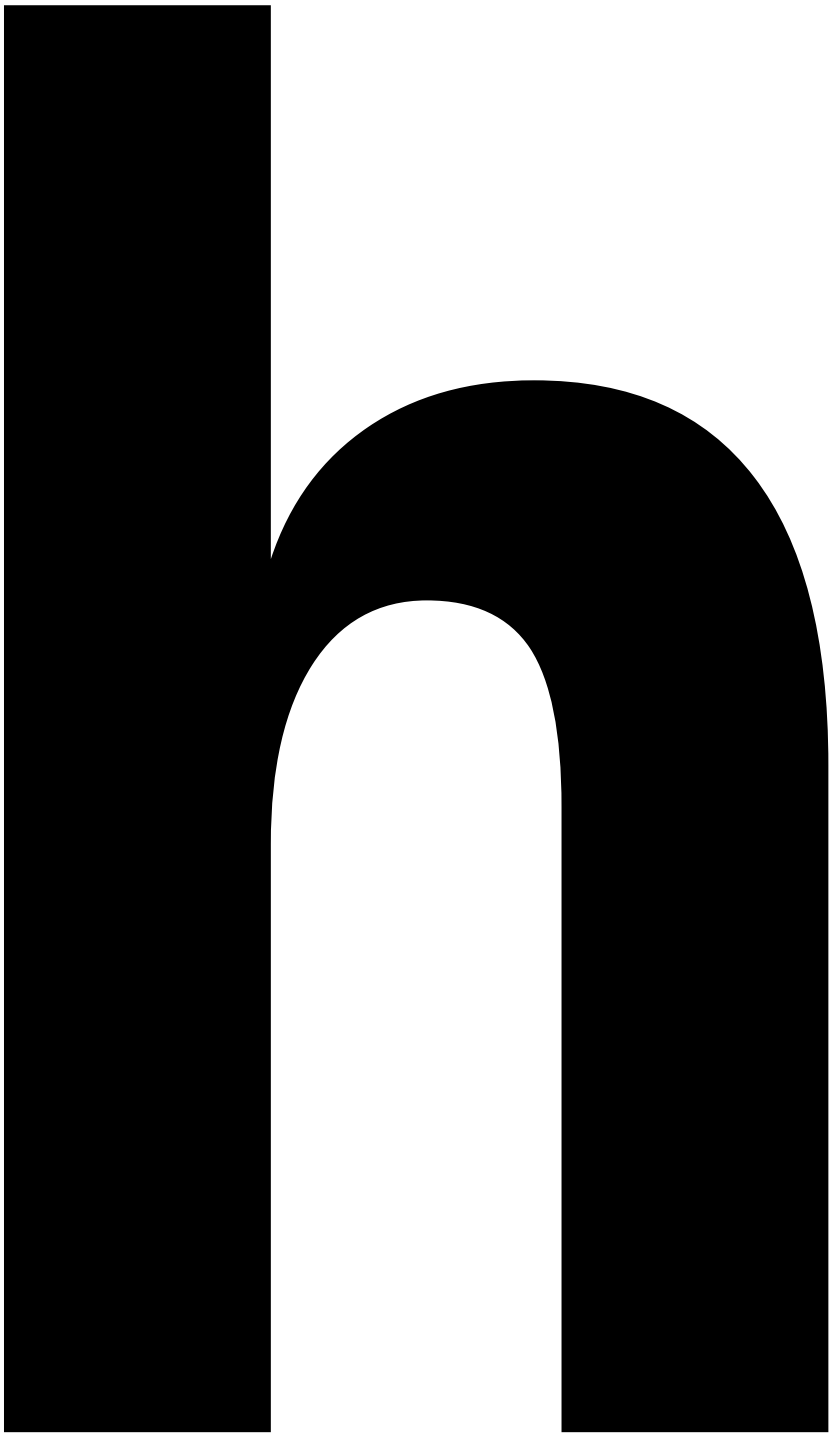


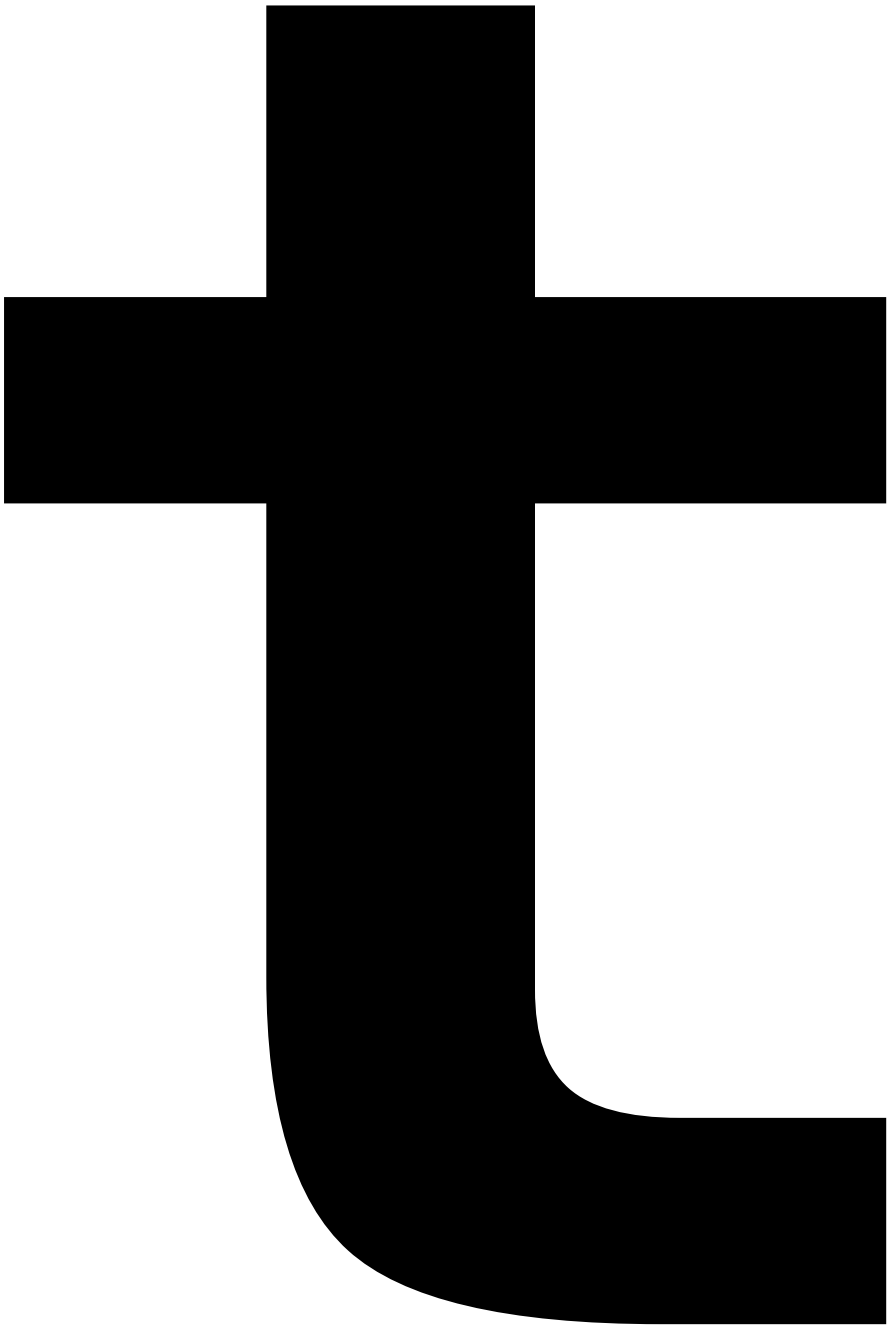


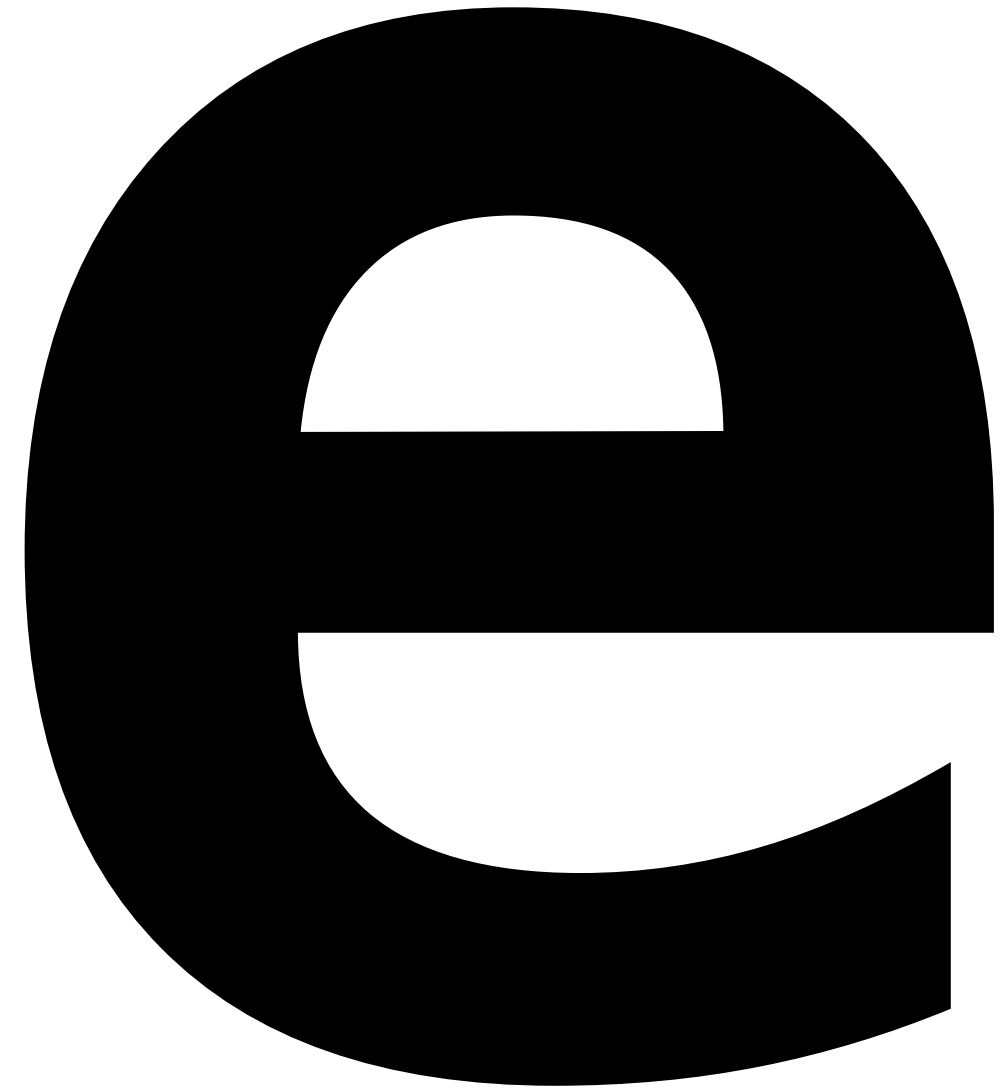


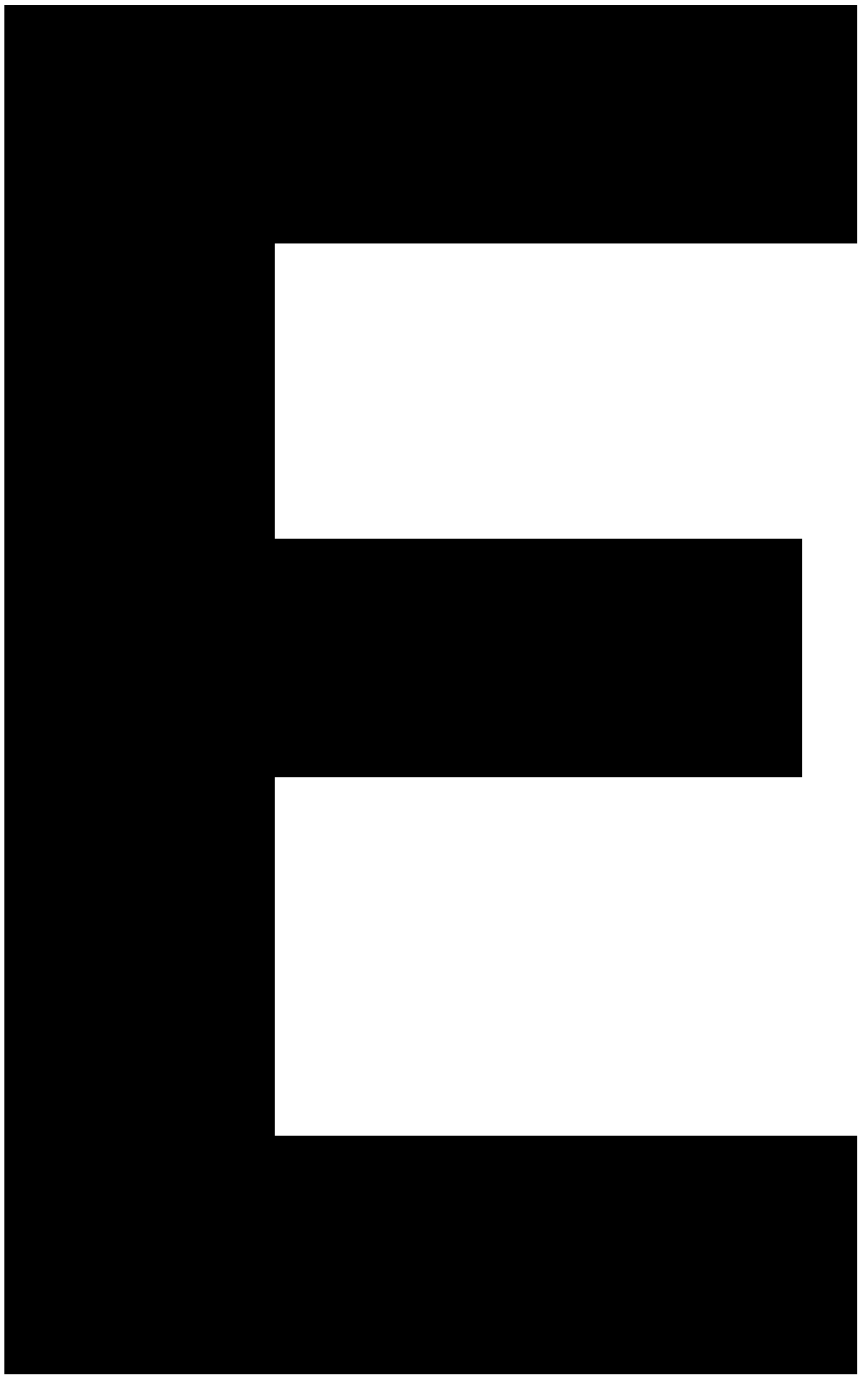
S

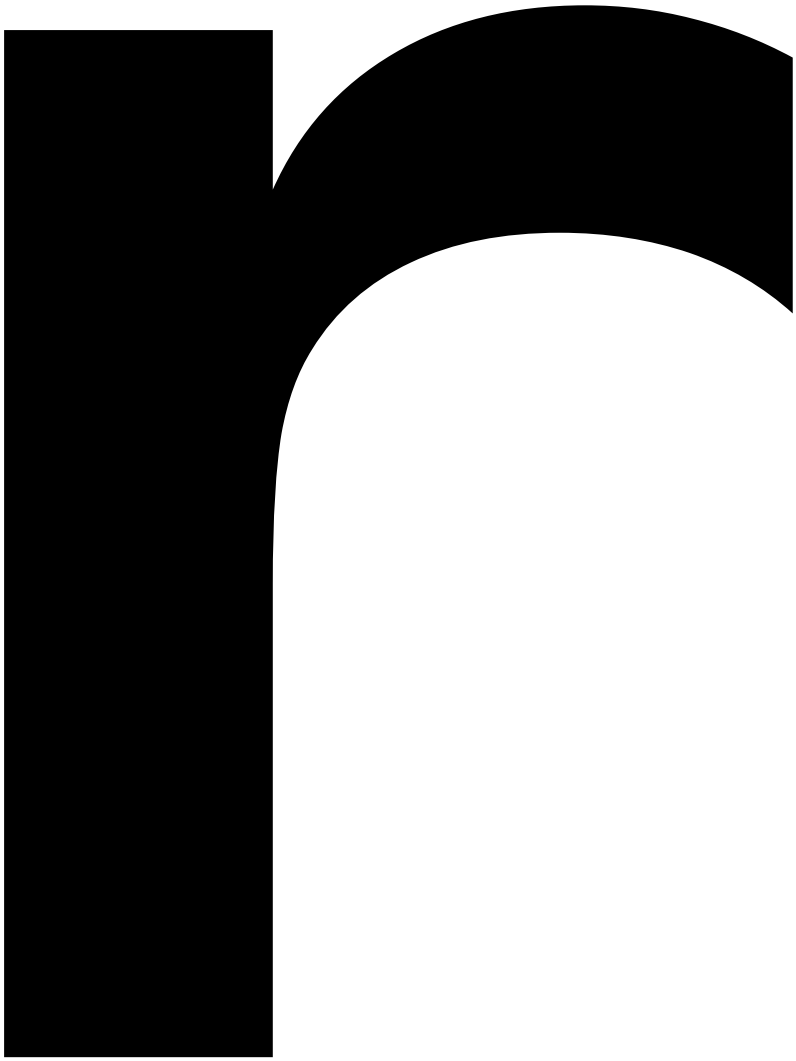


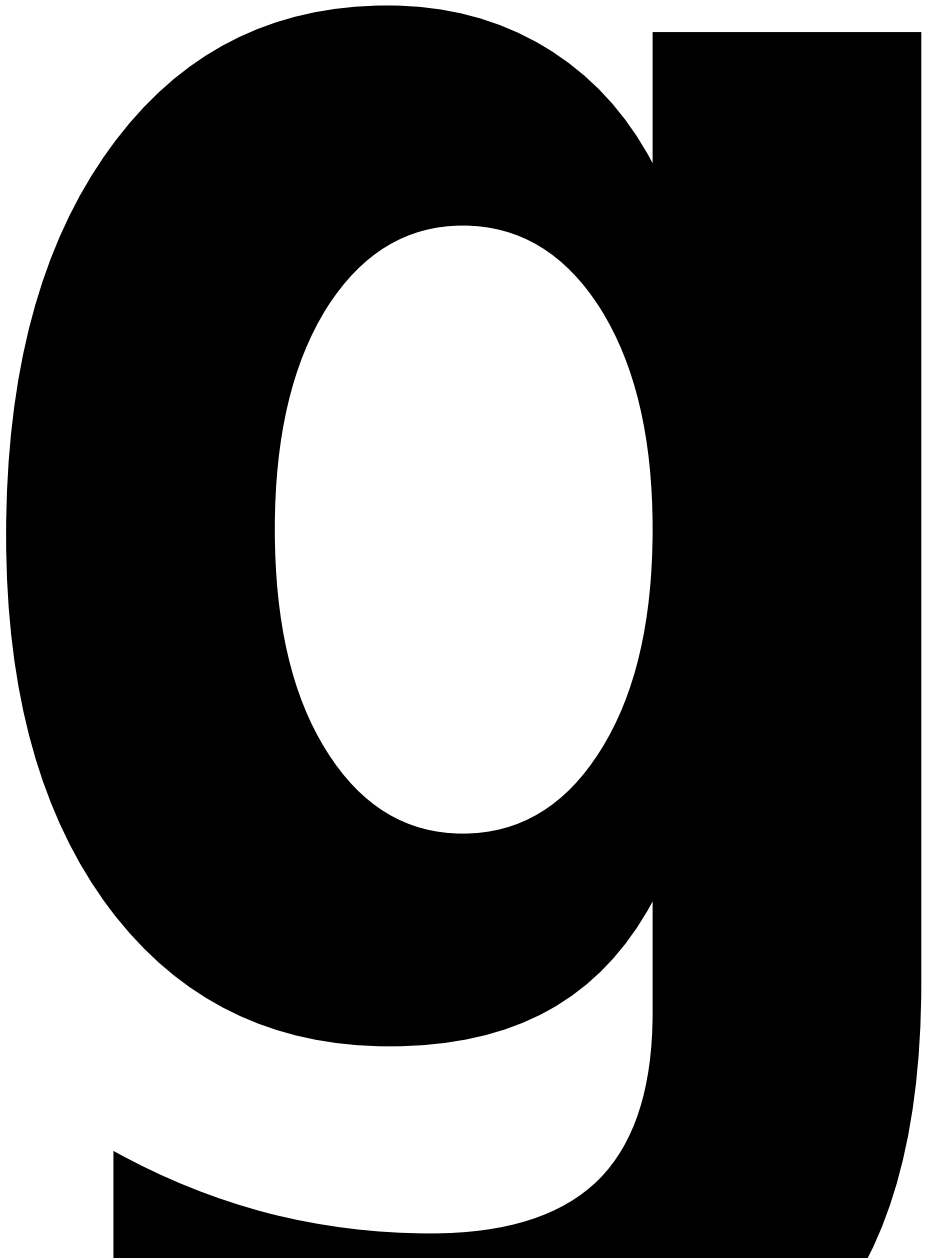


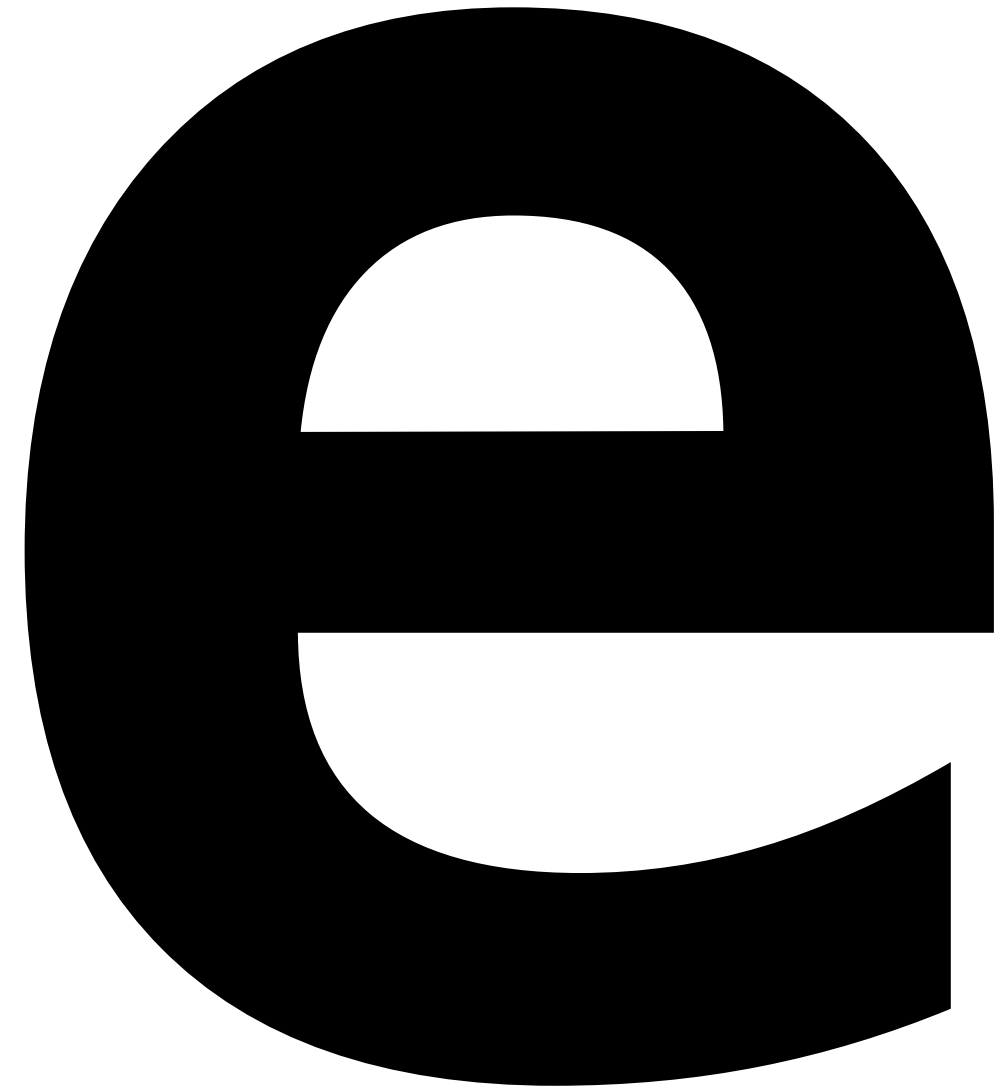


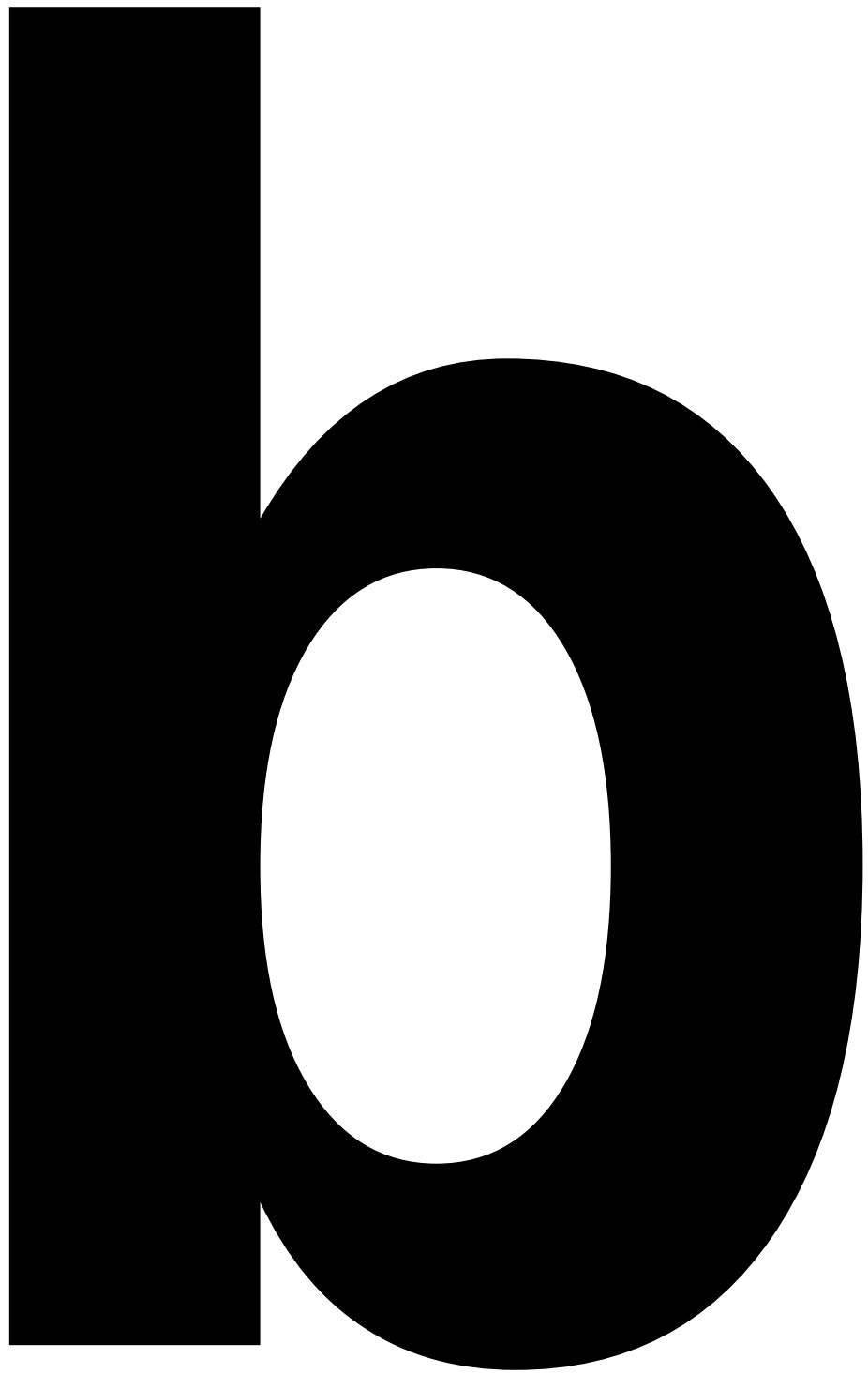


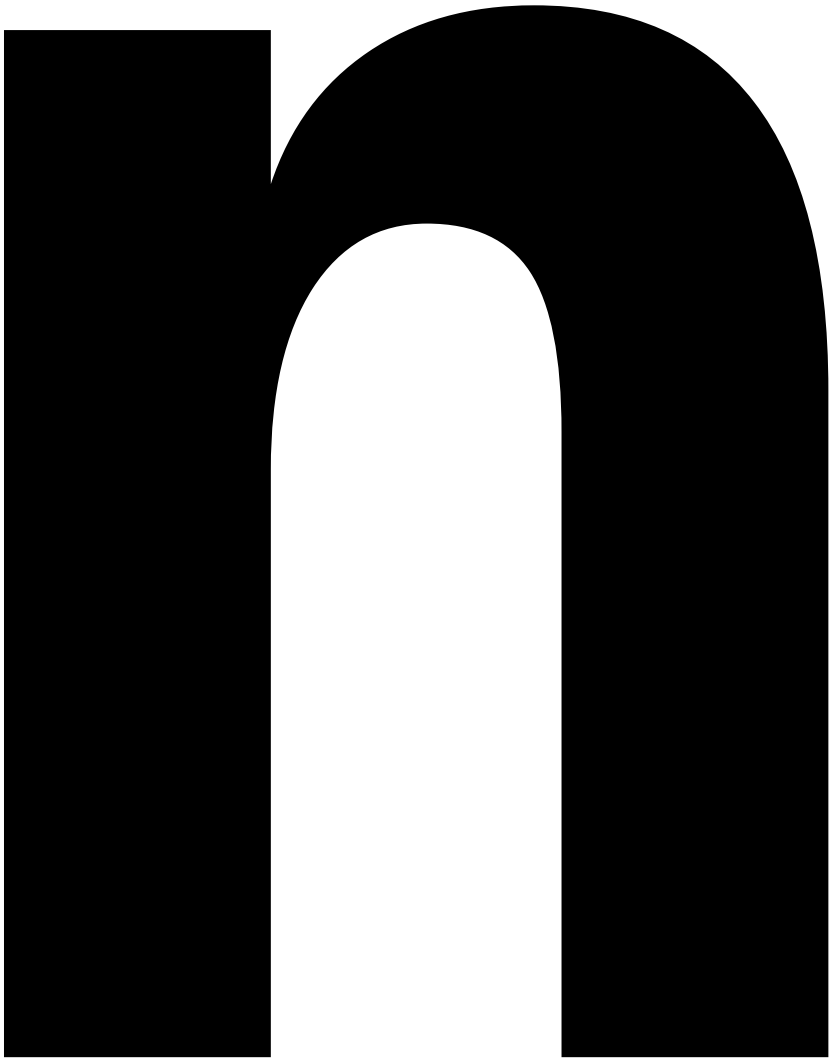


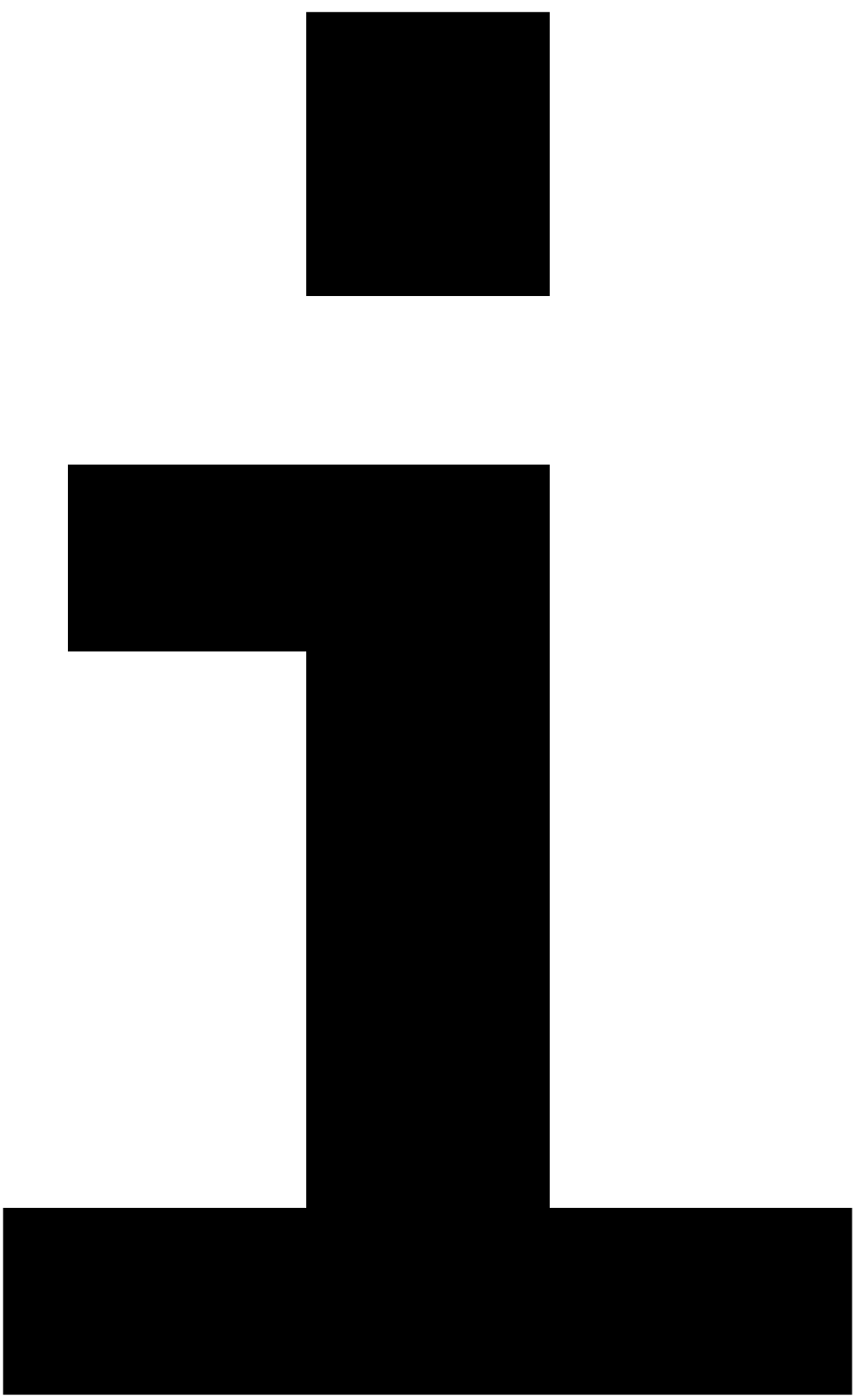






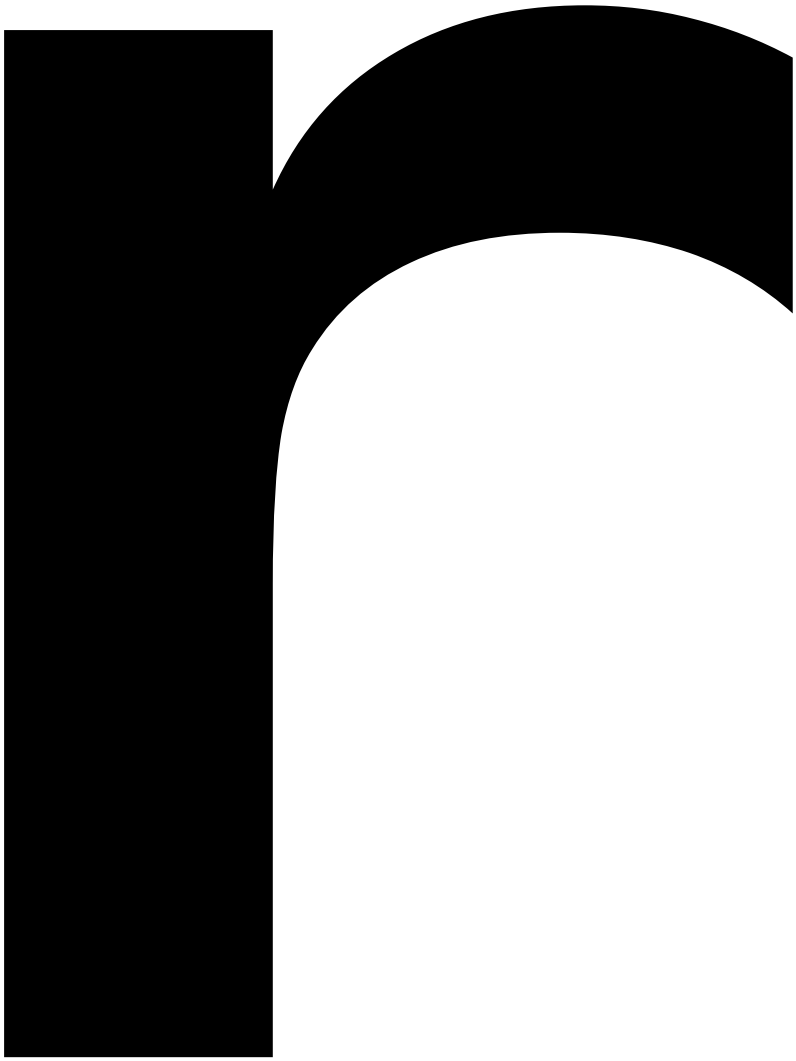




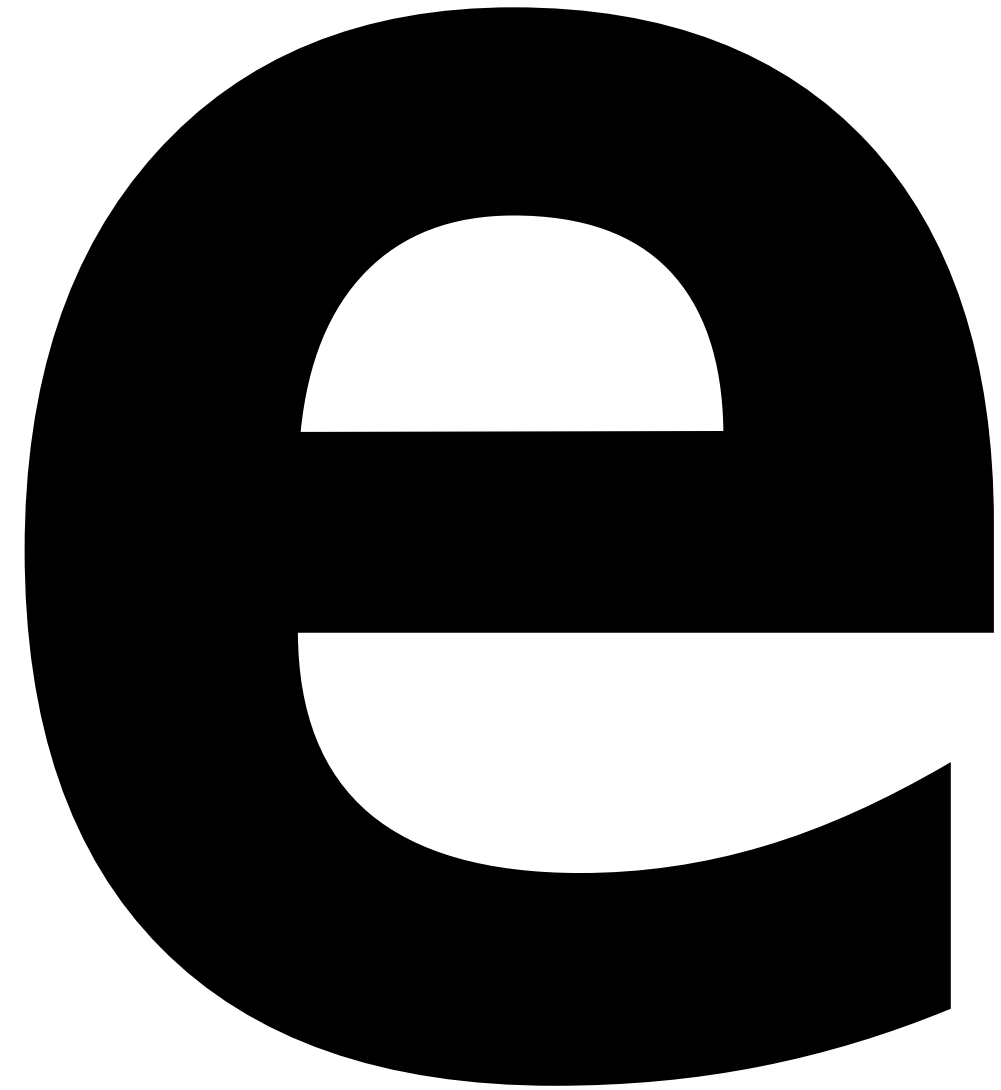


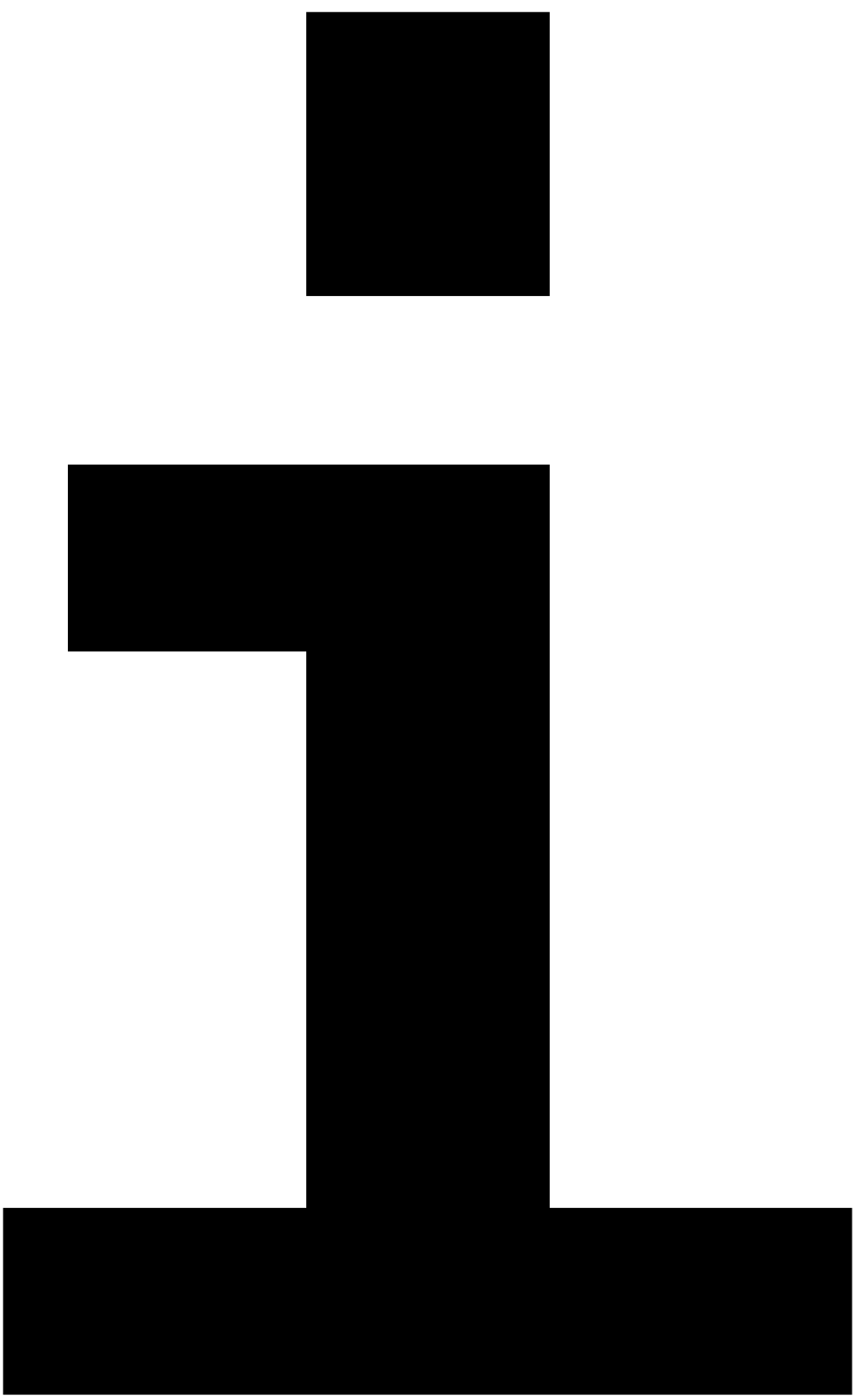
S

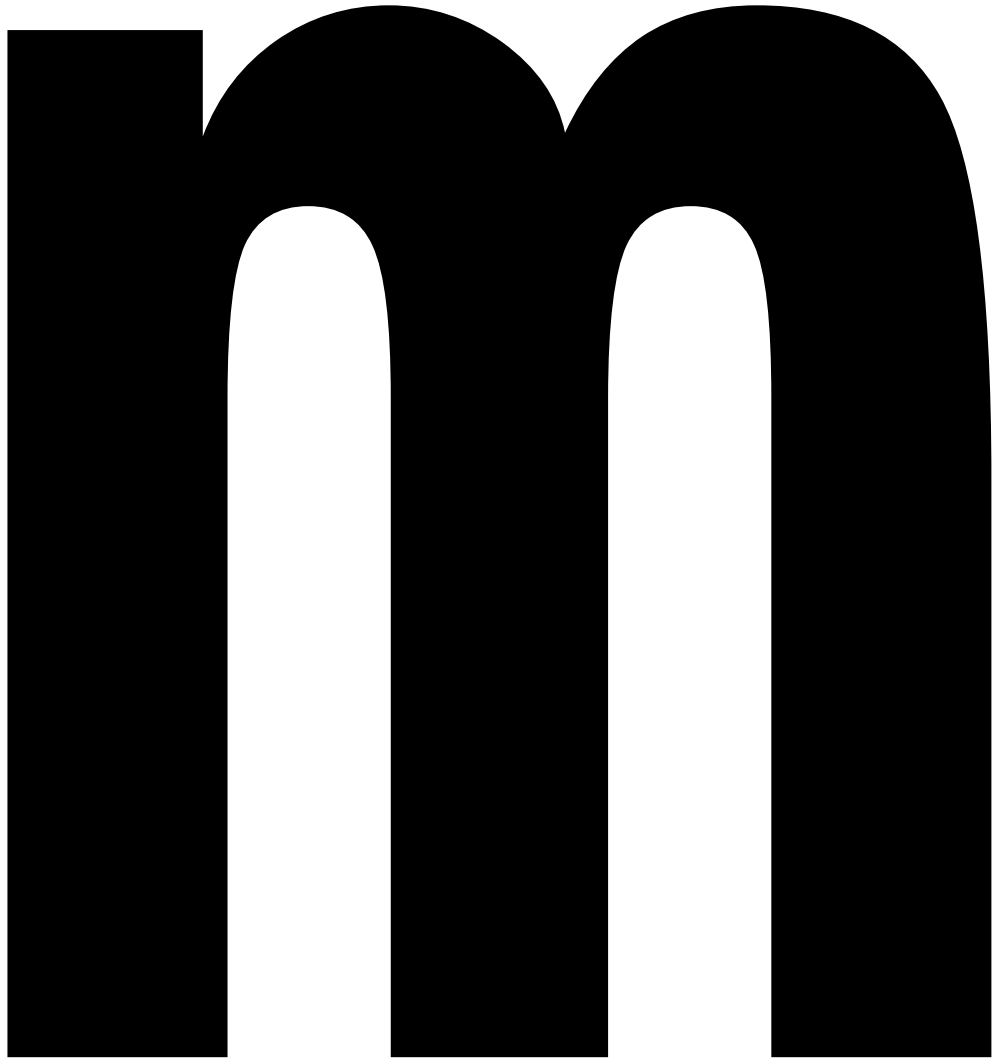
u

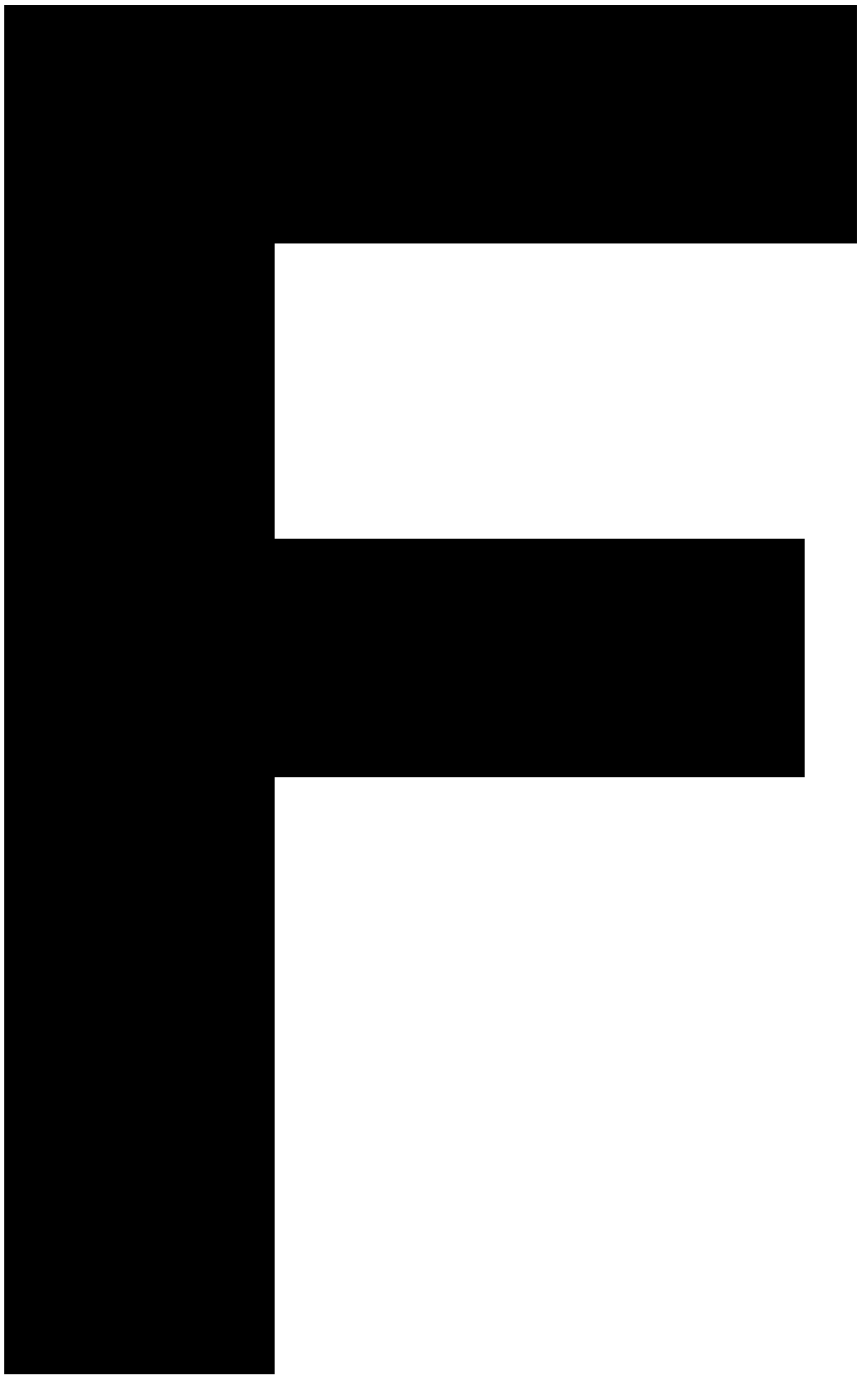


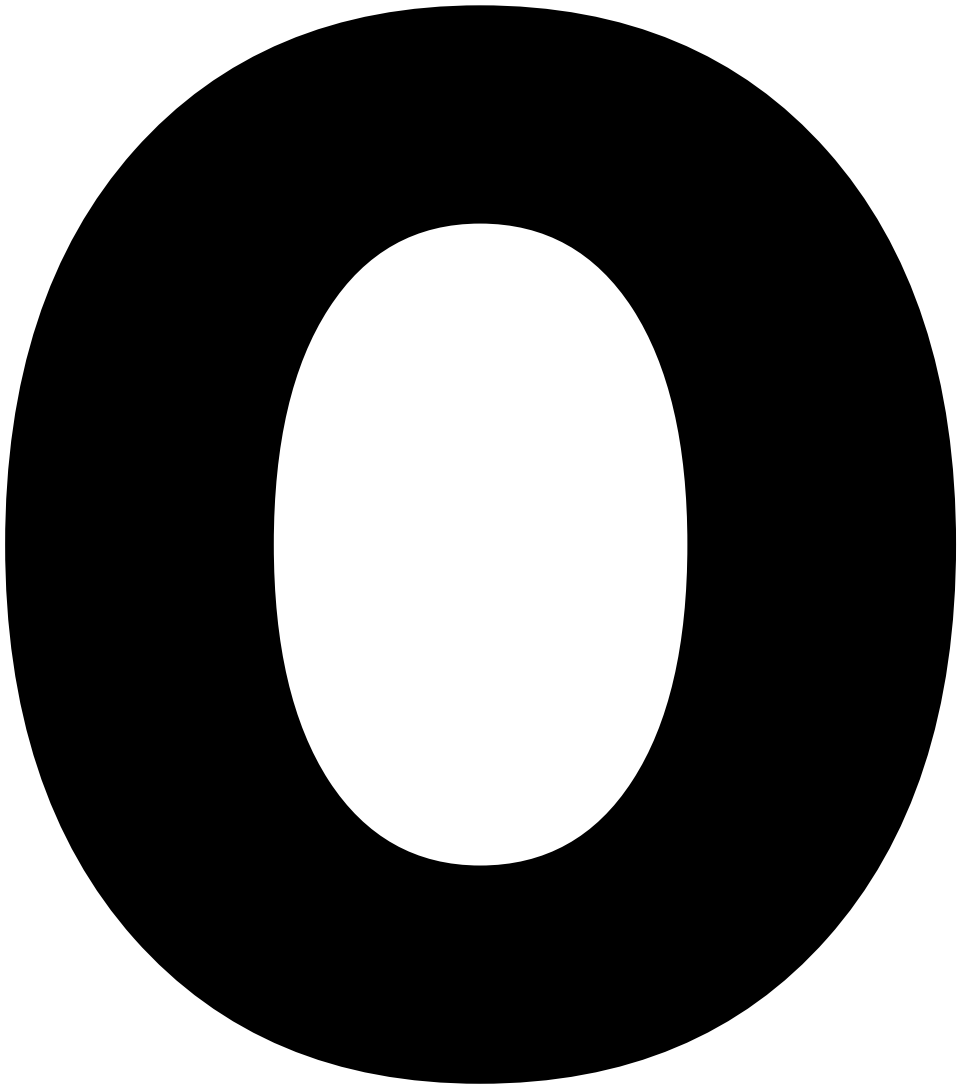
d

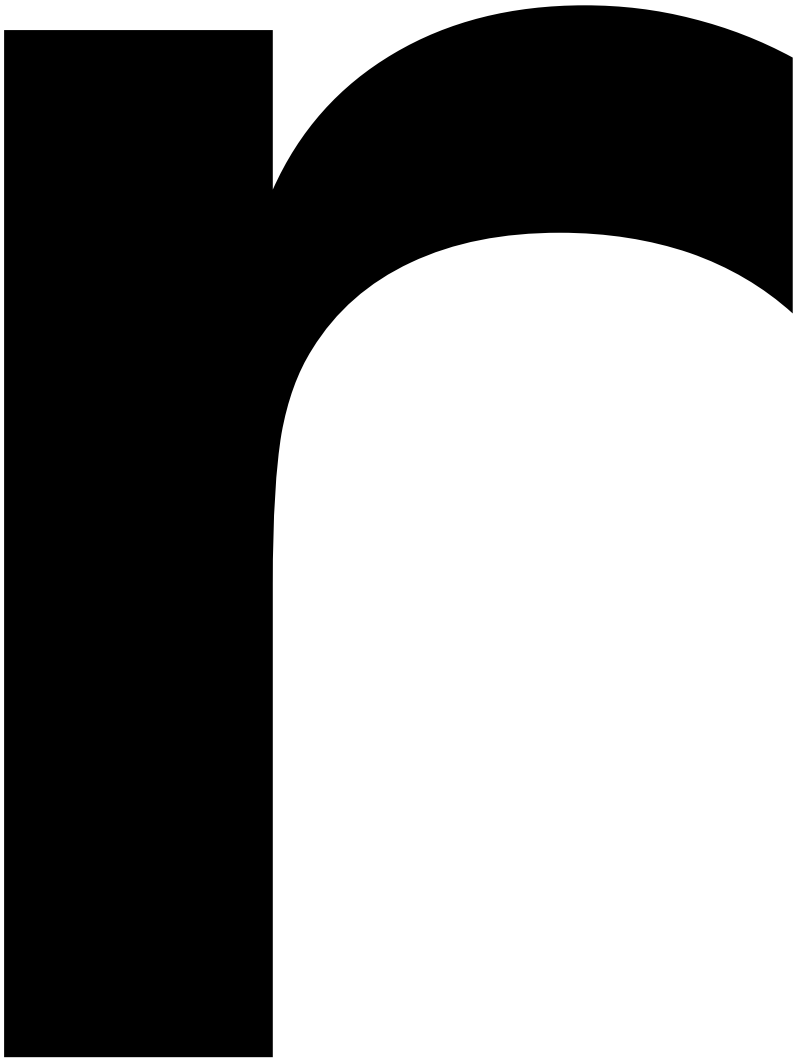




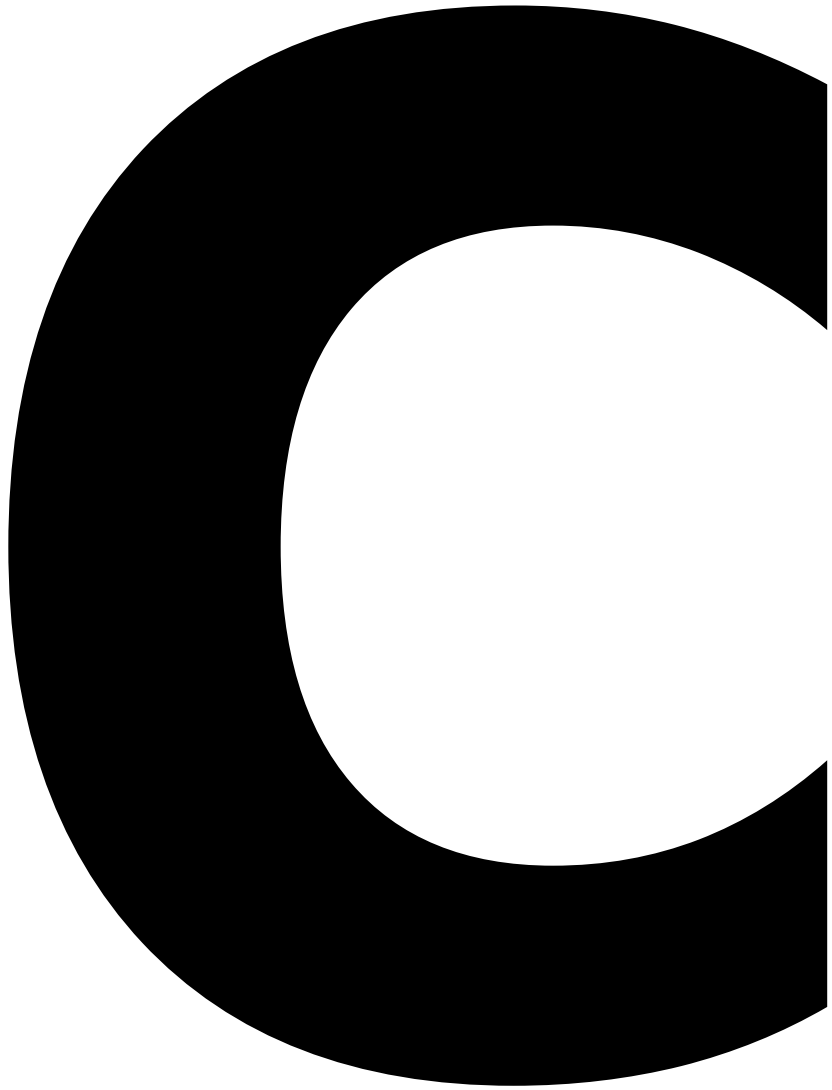


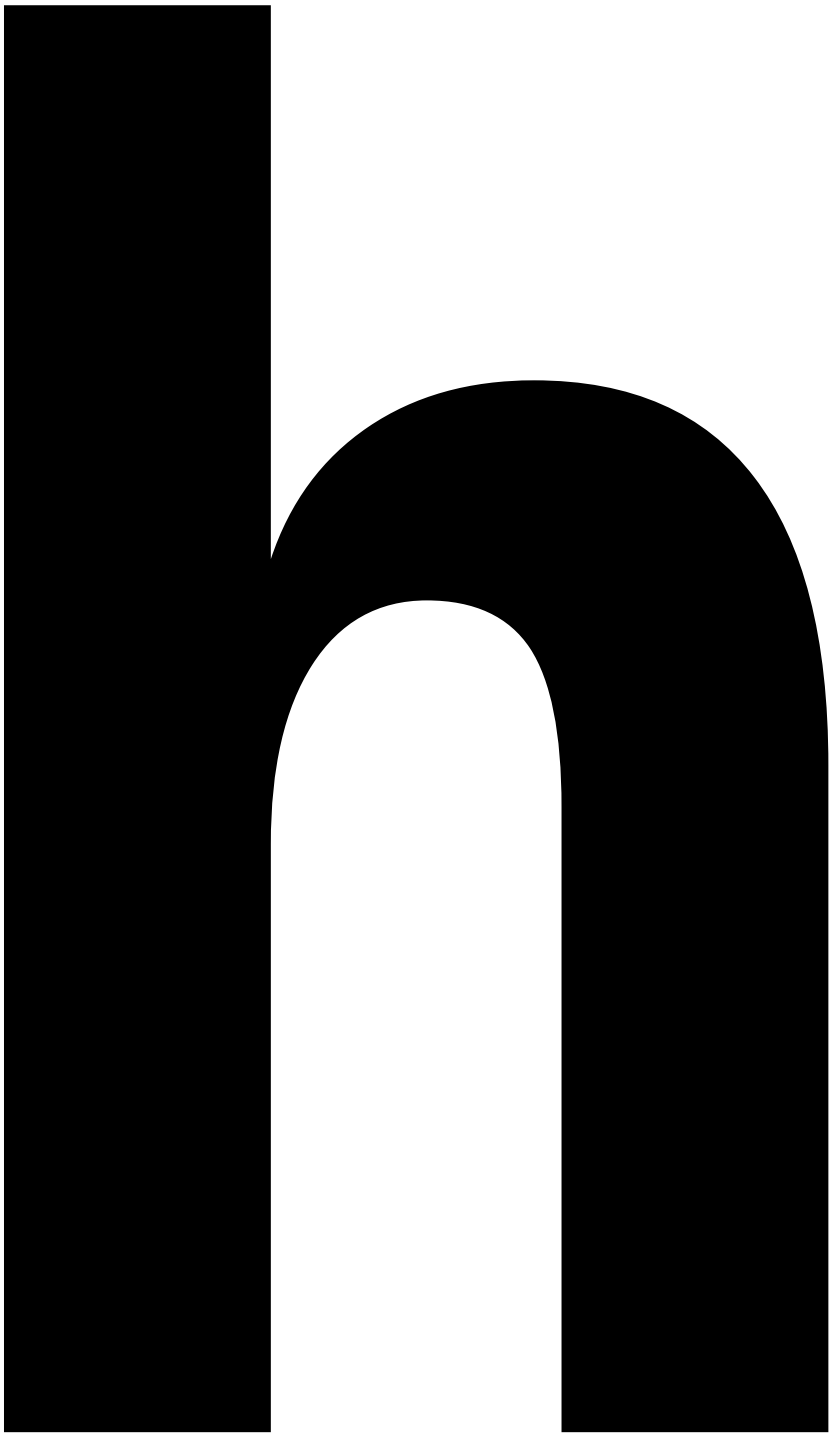




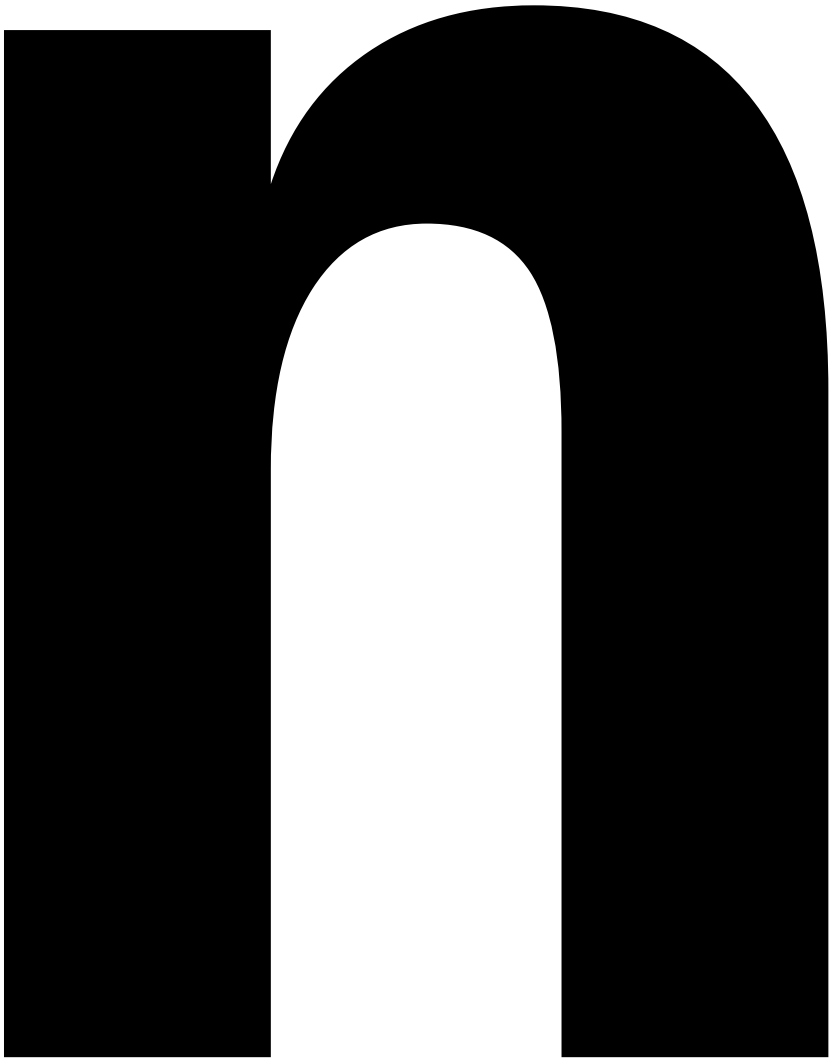


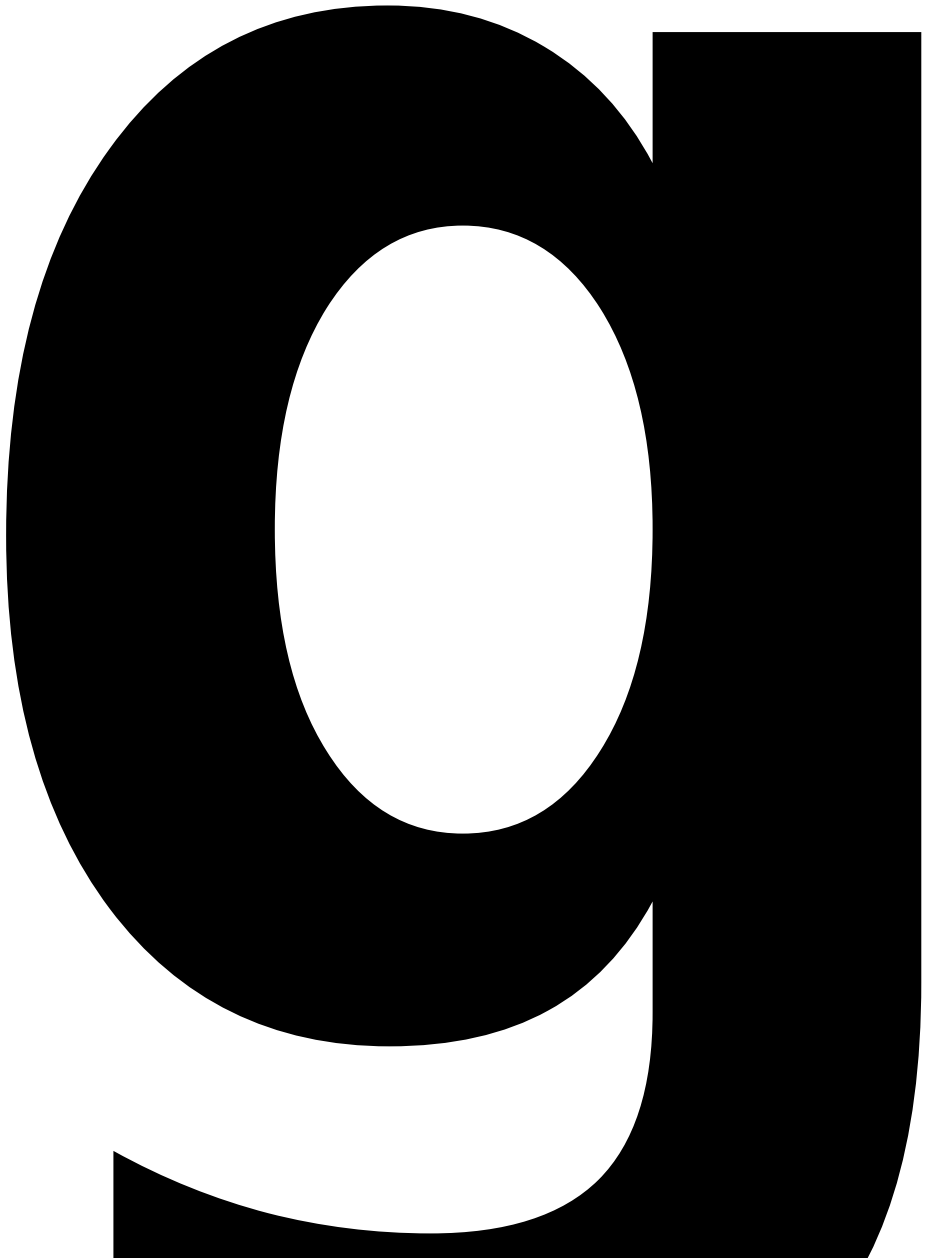
S



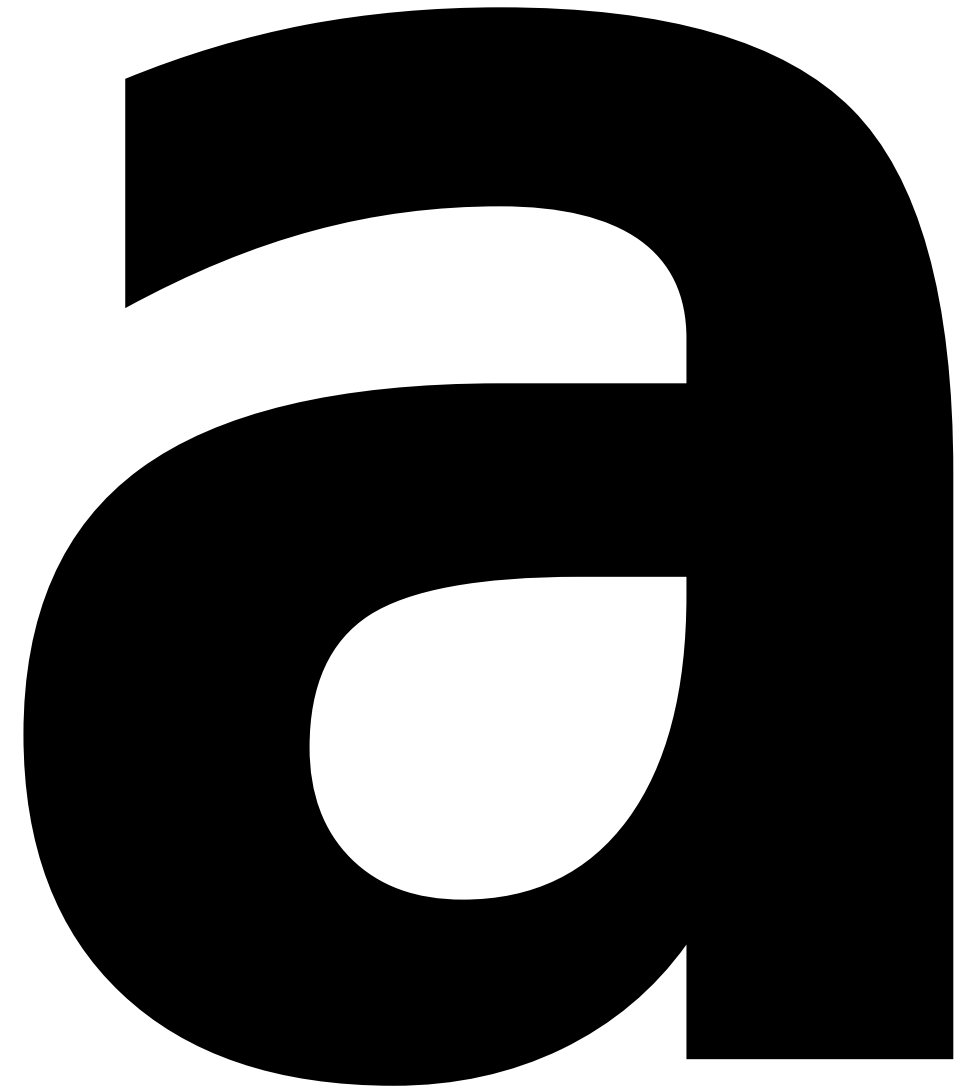


u

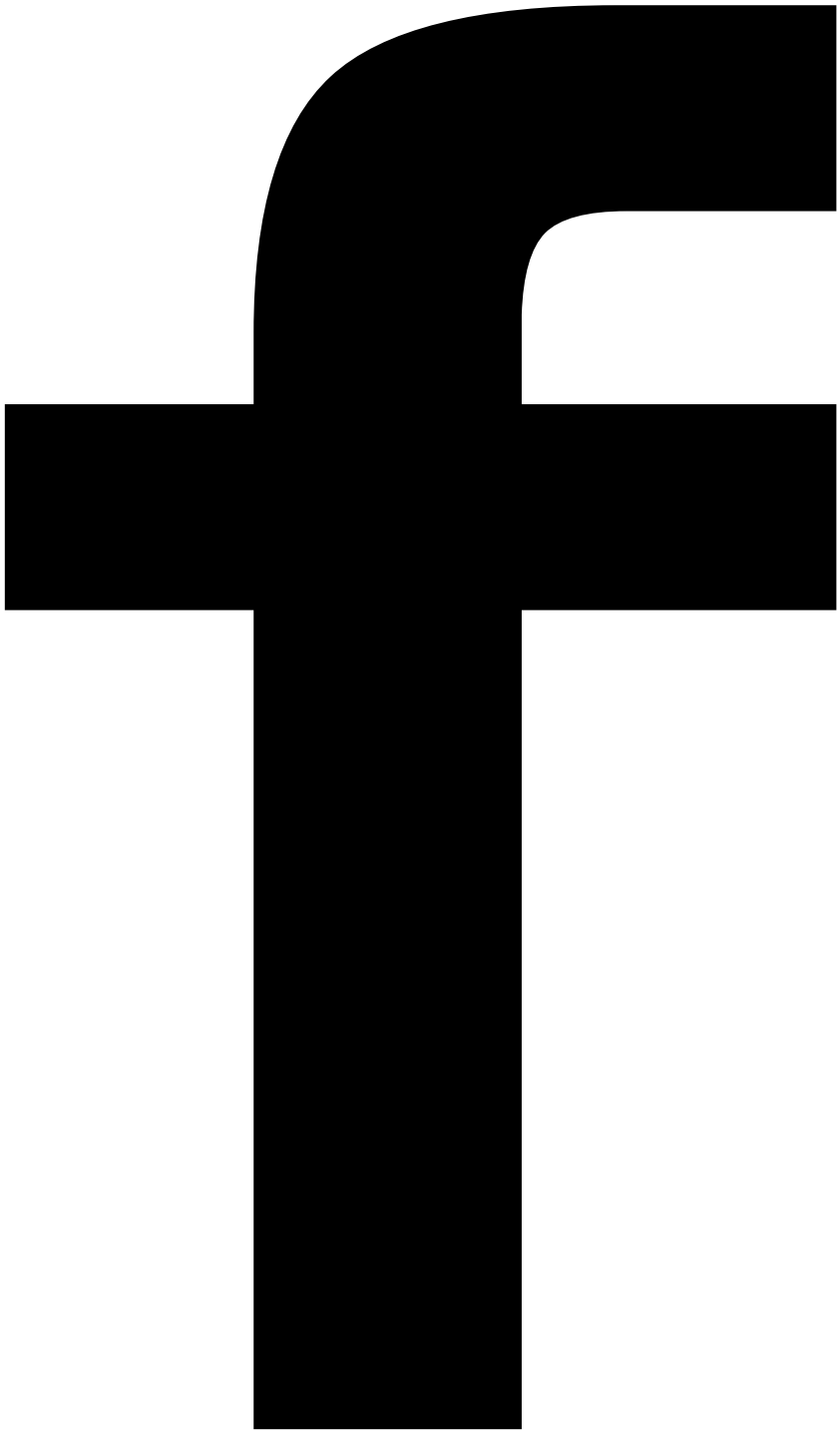


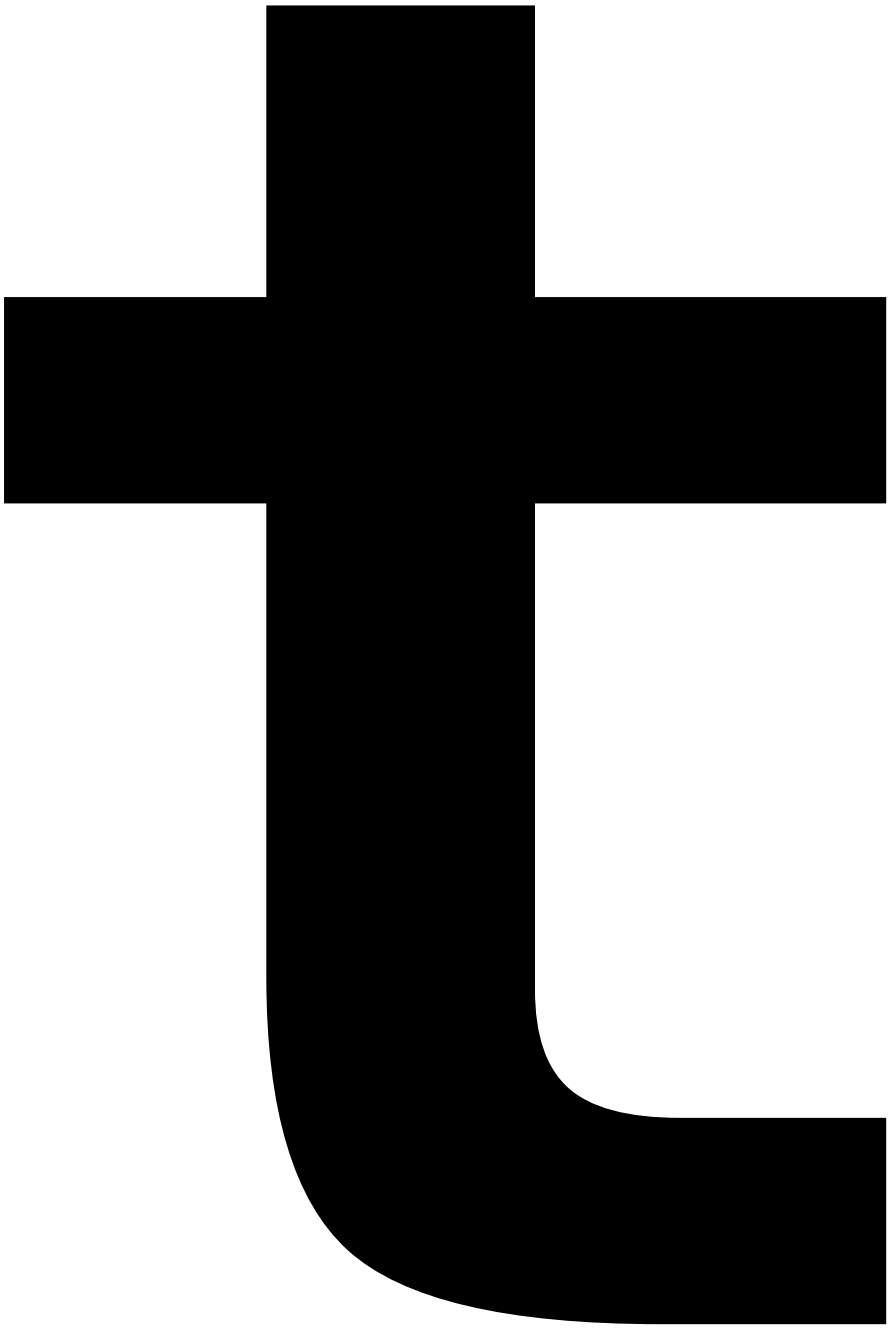


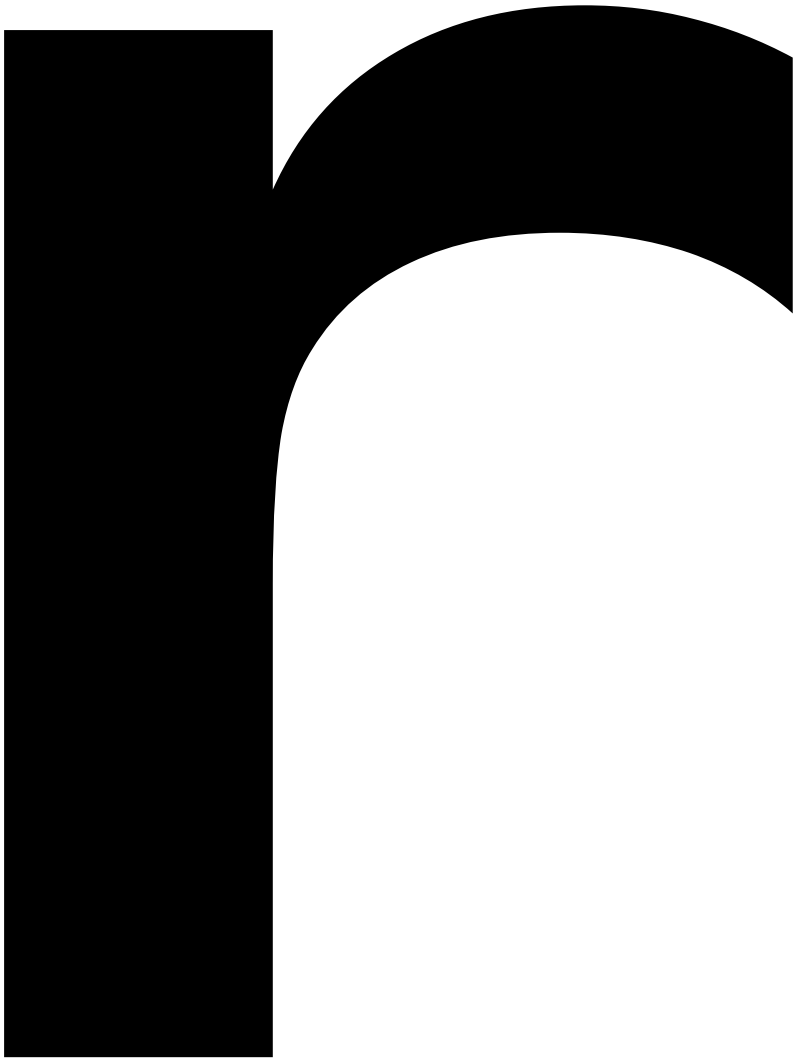
S

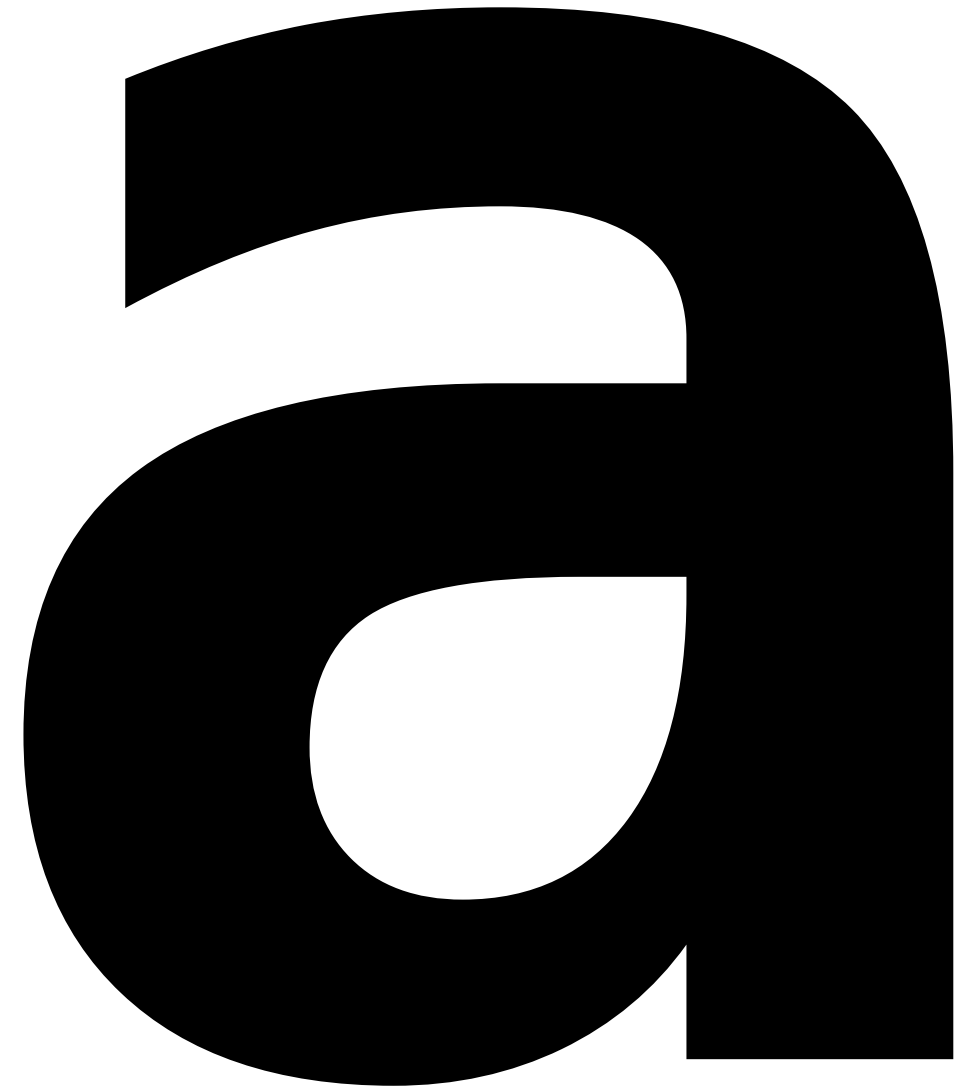


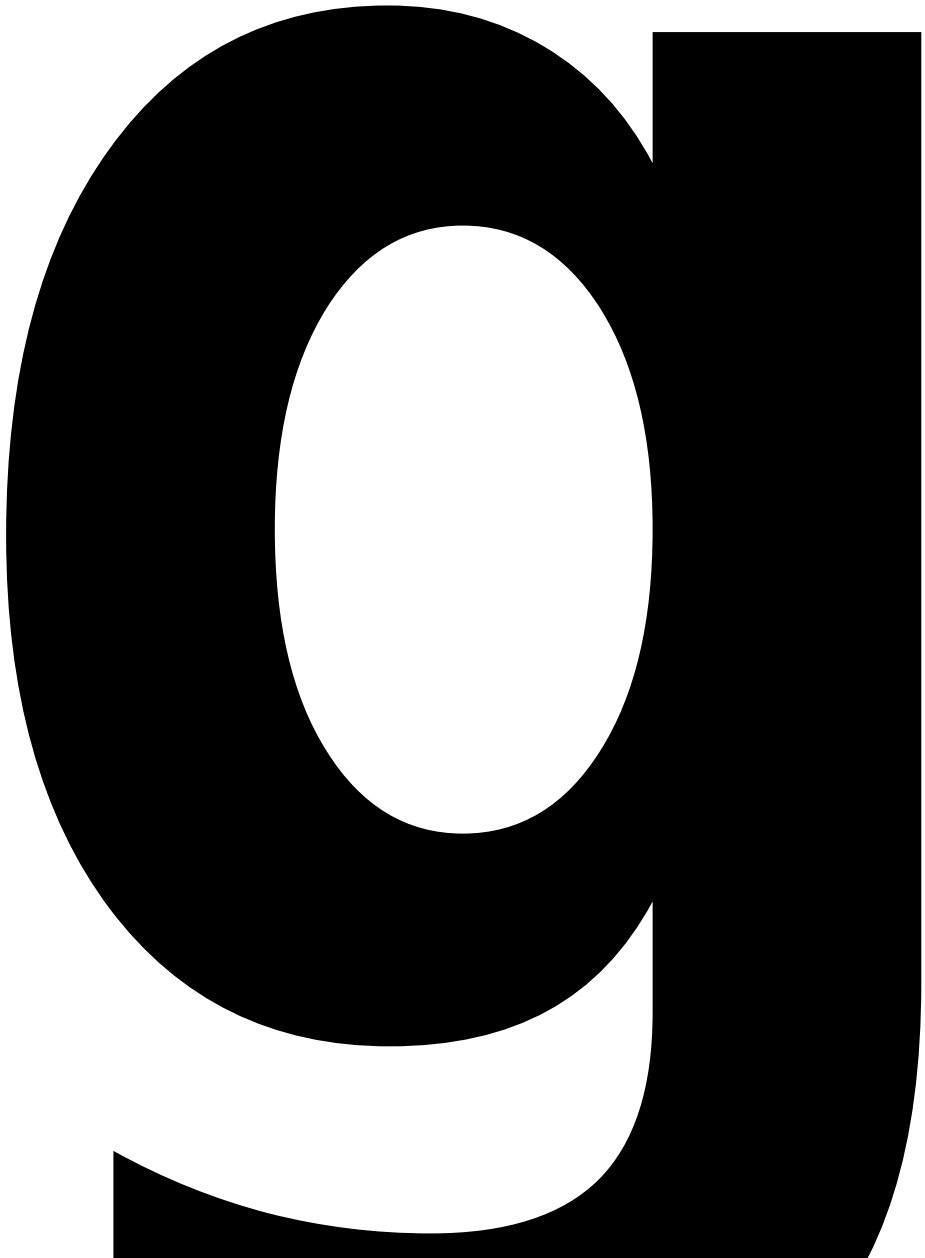
u



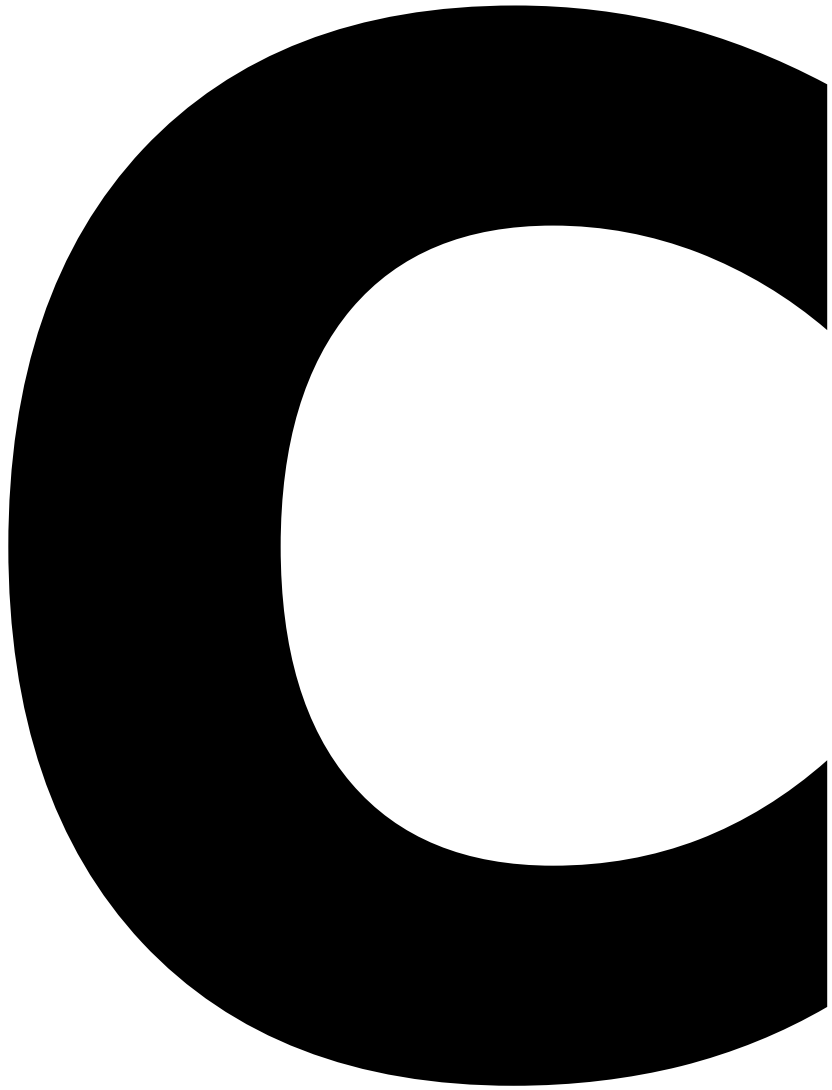


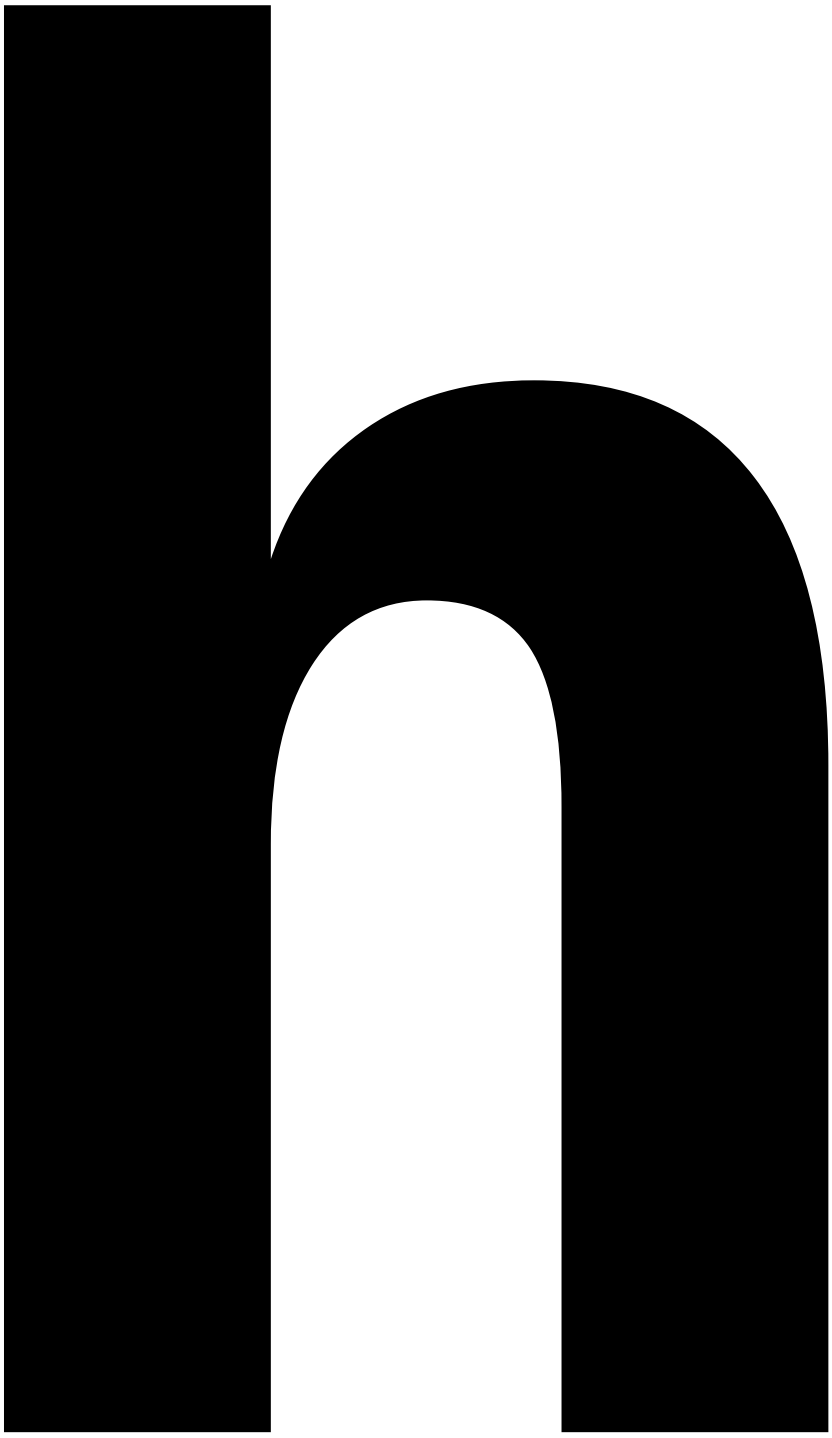


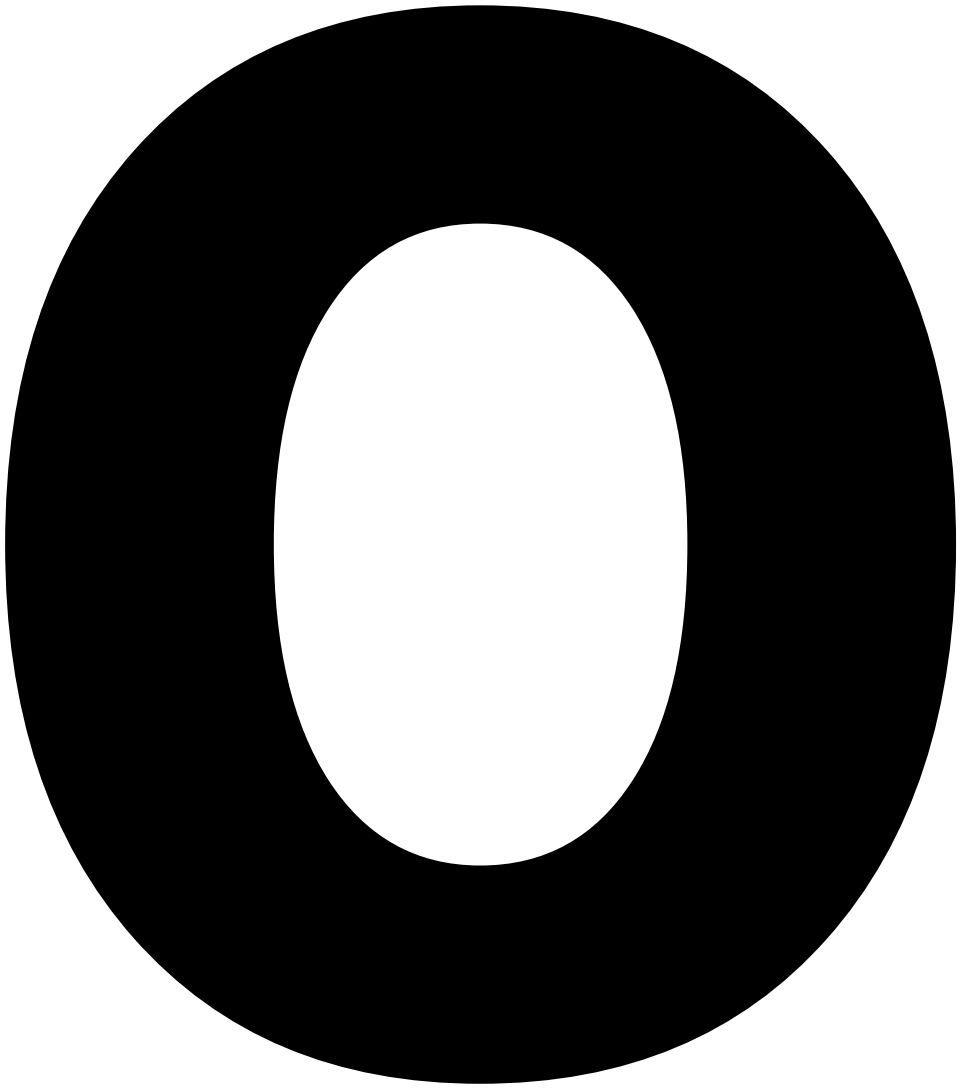


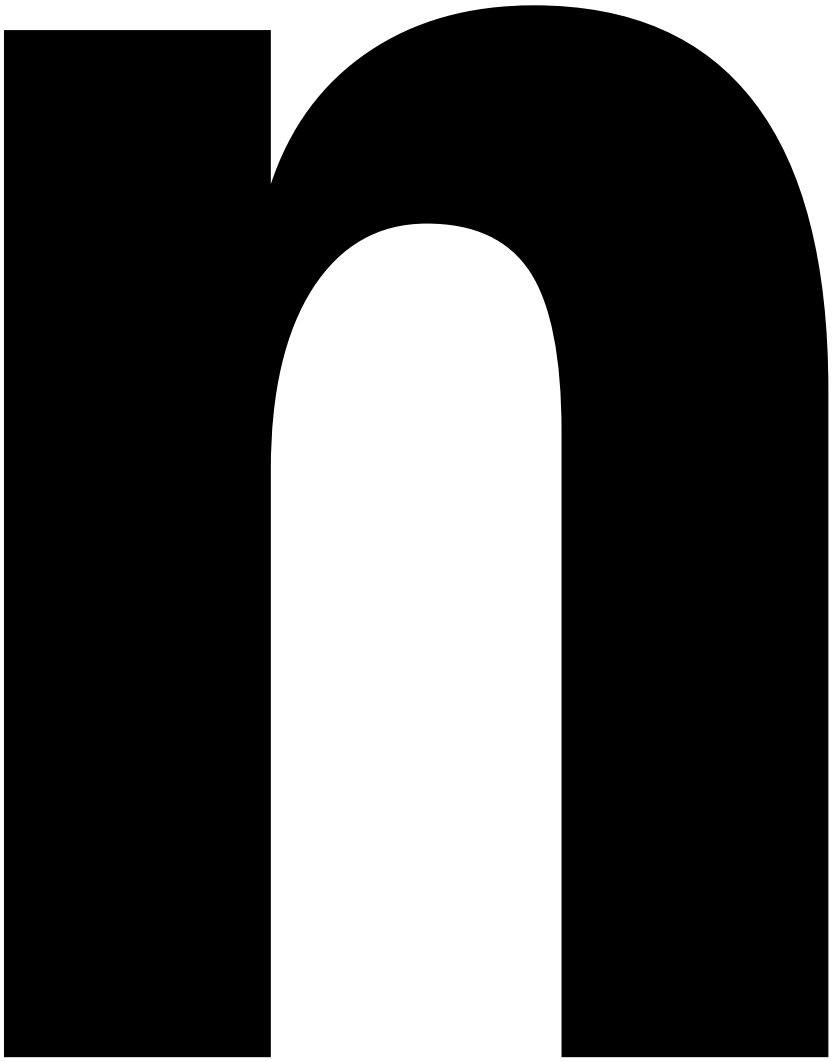


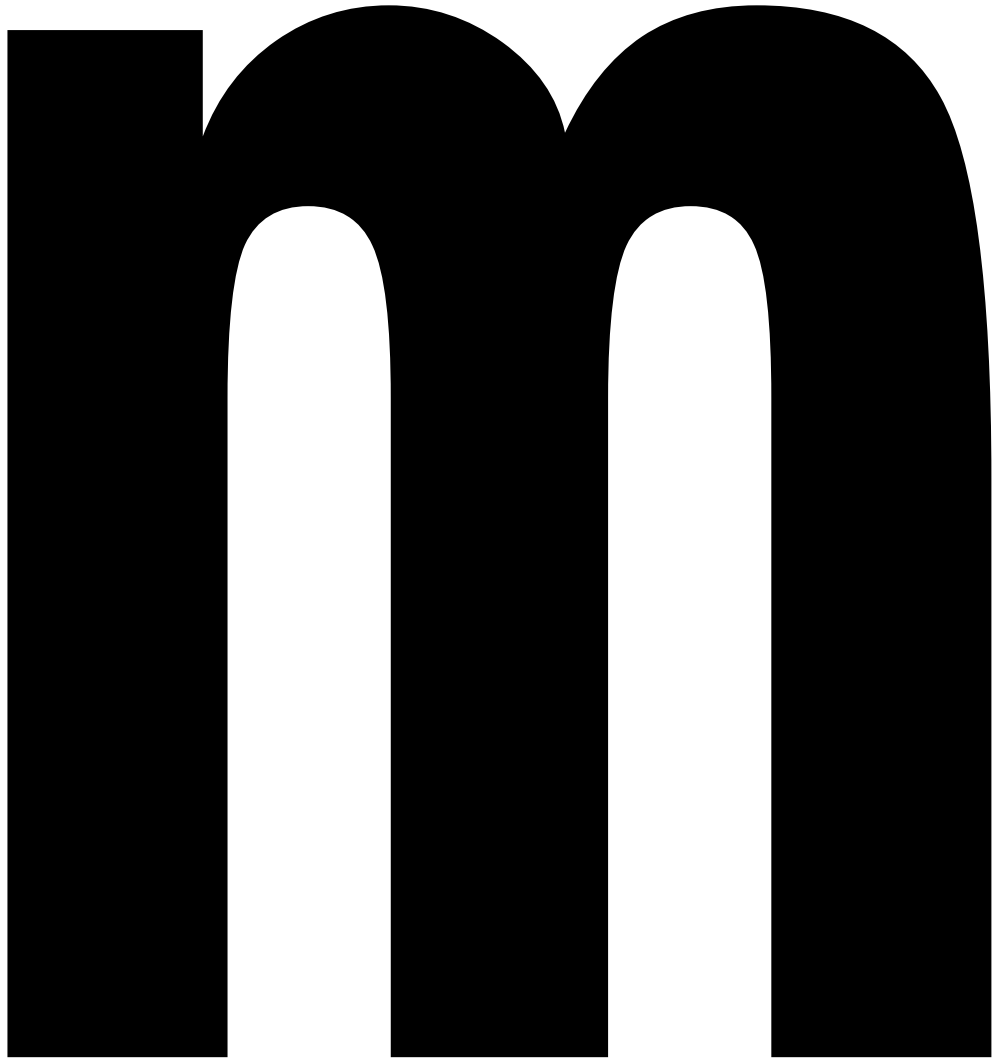
S

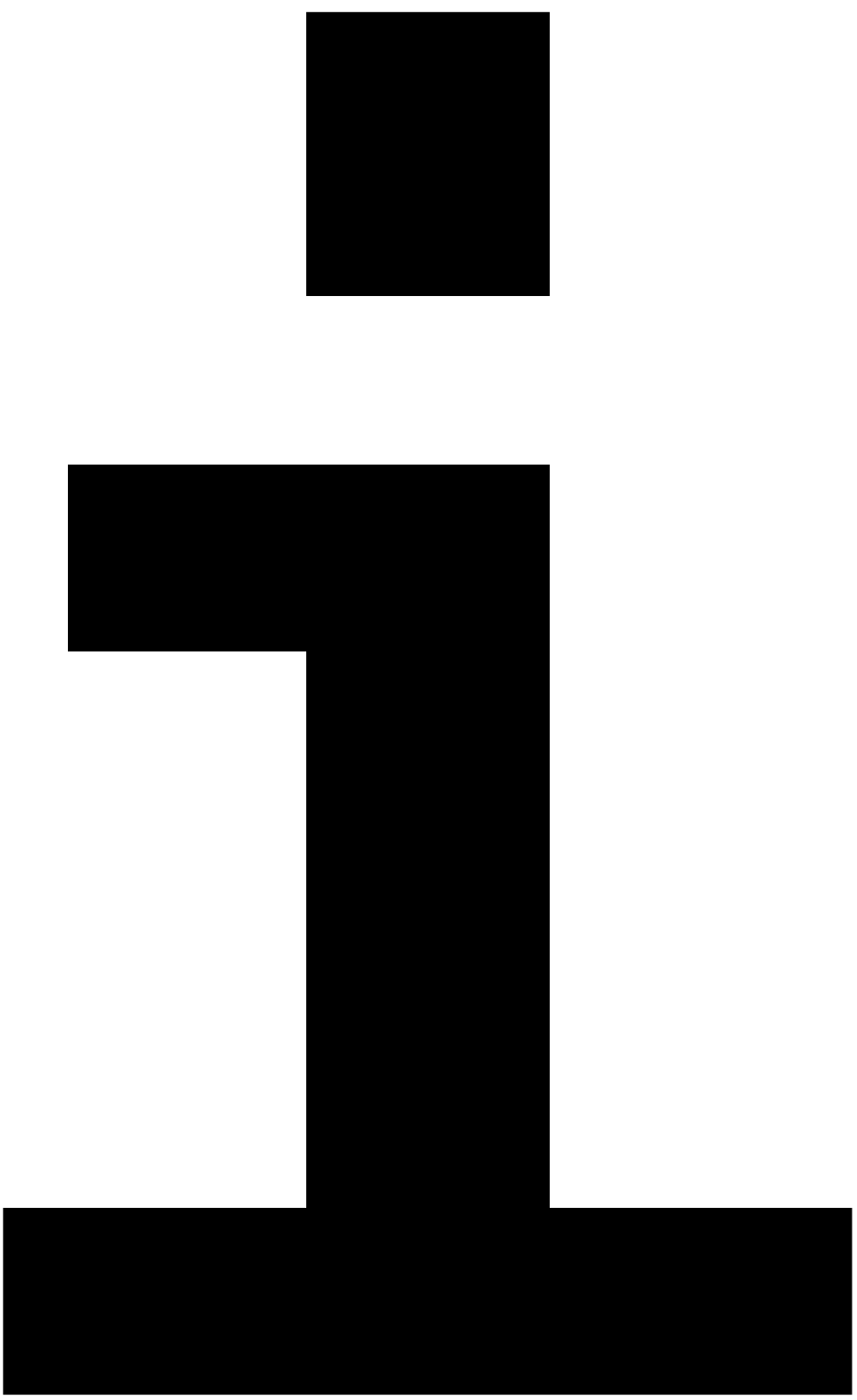


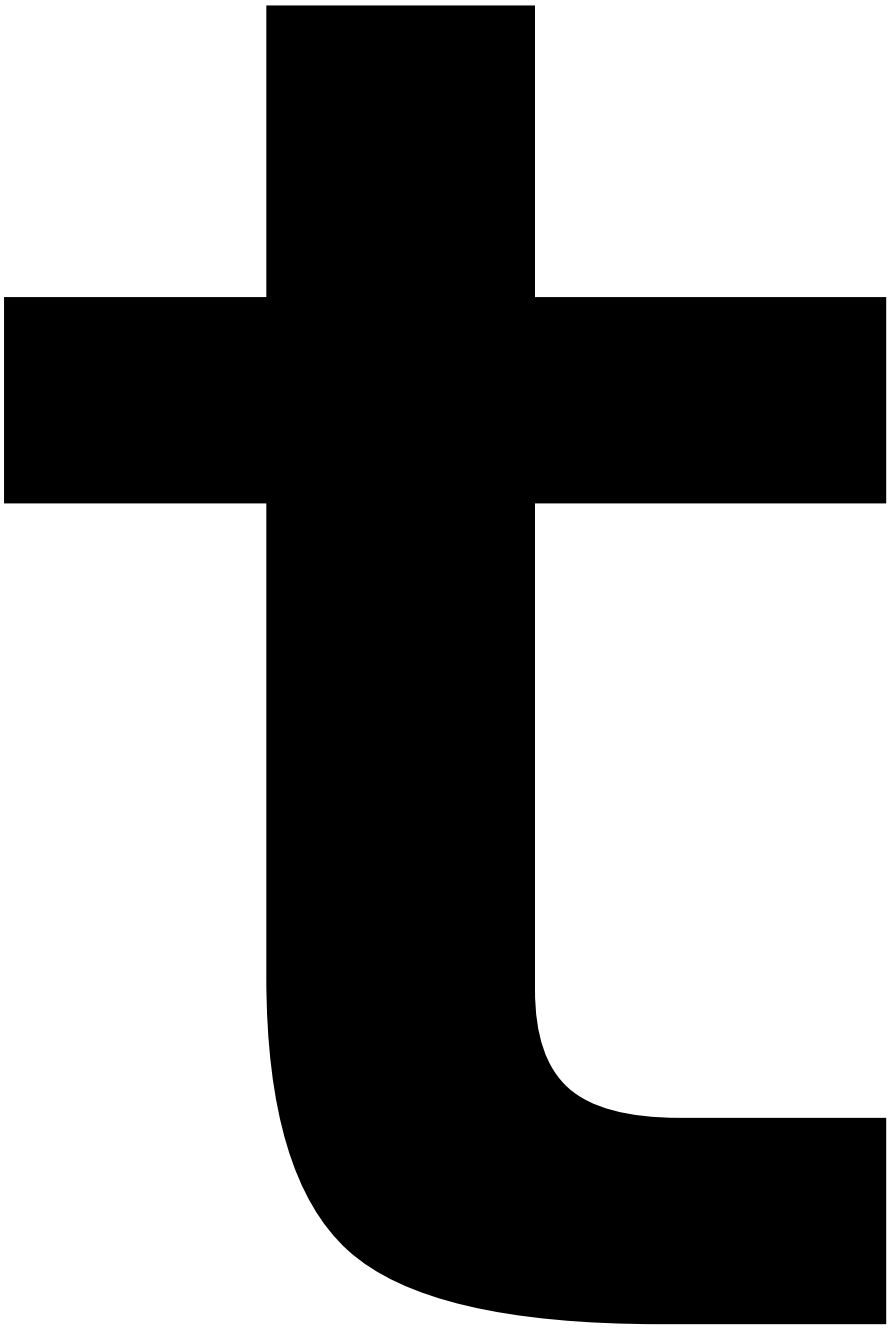


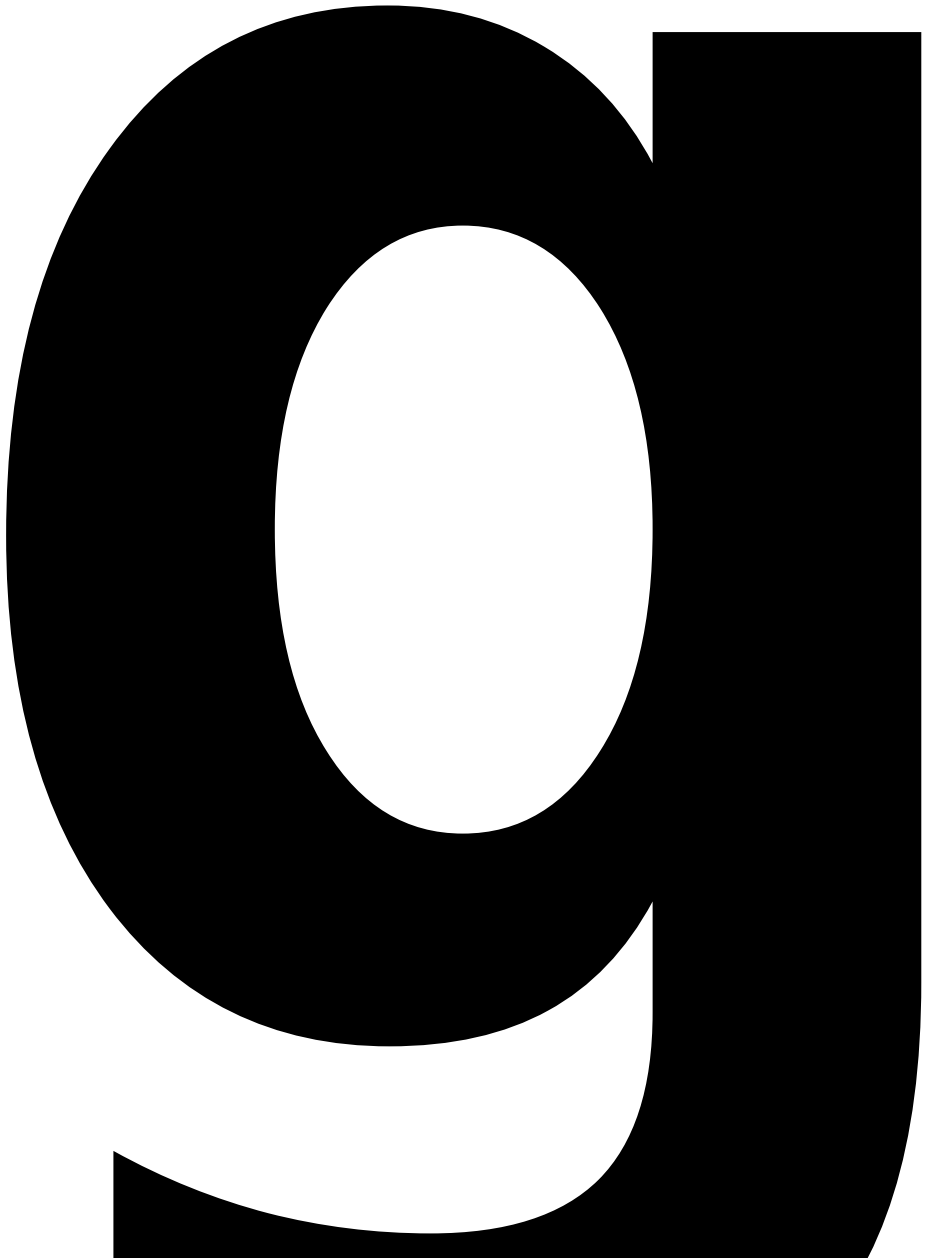


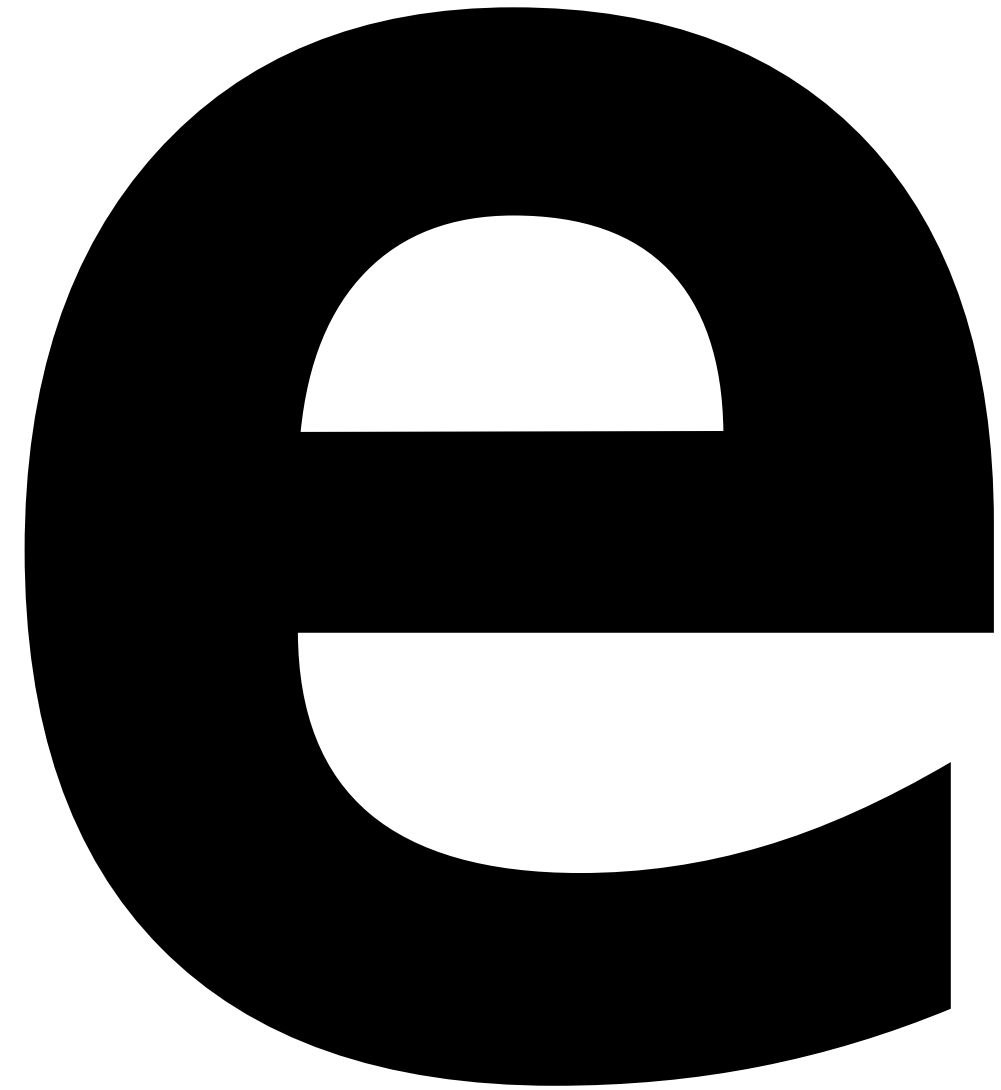


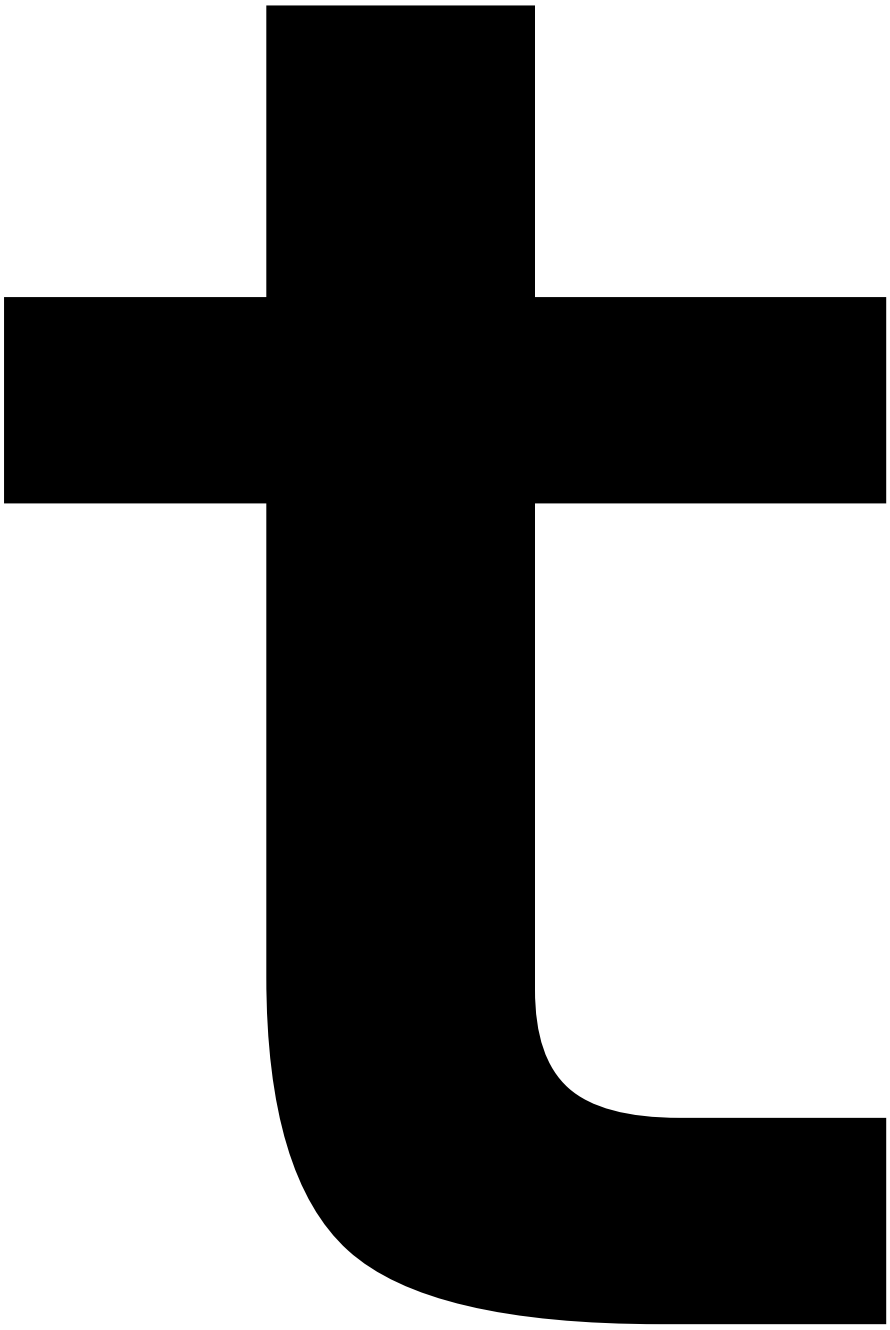


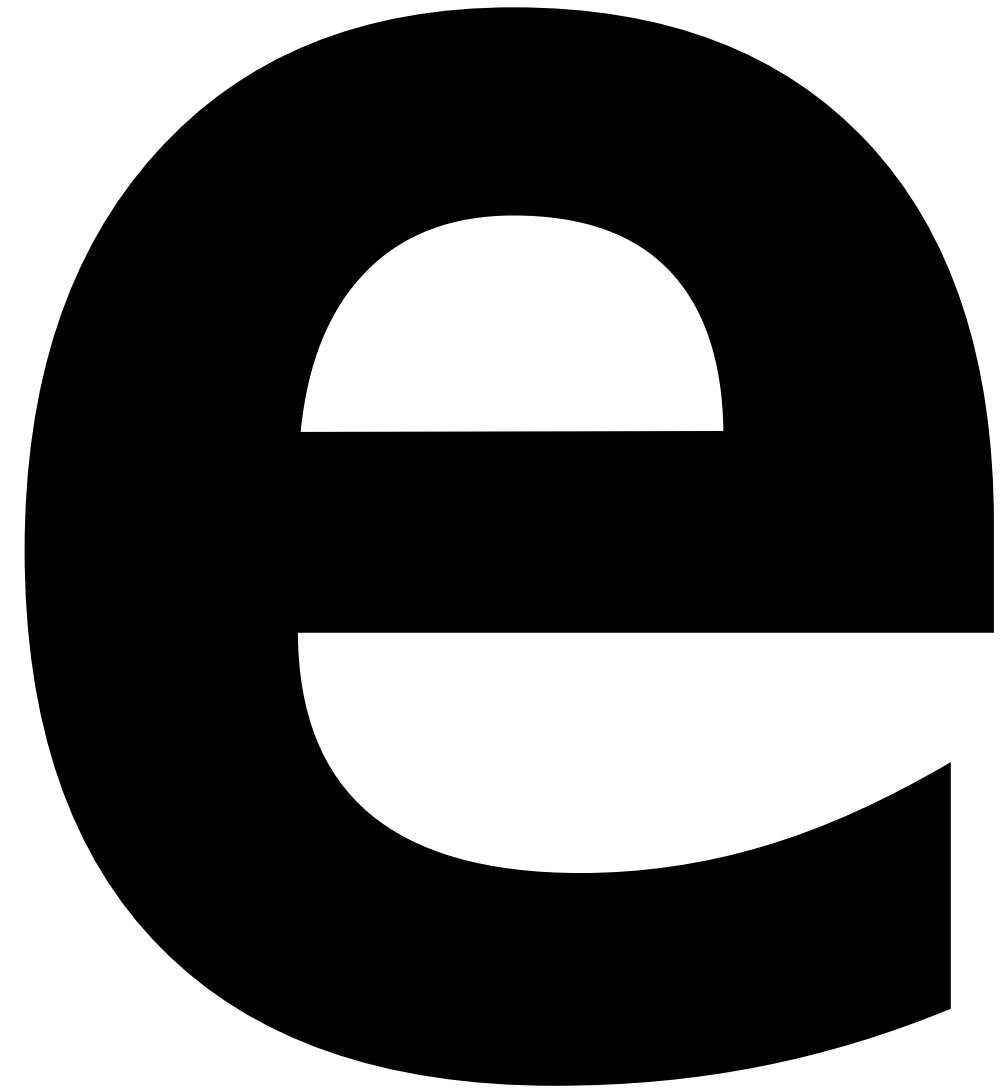


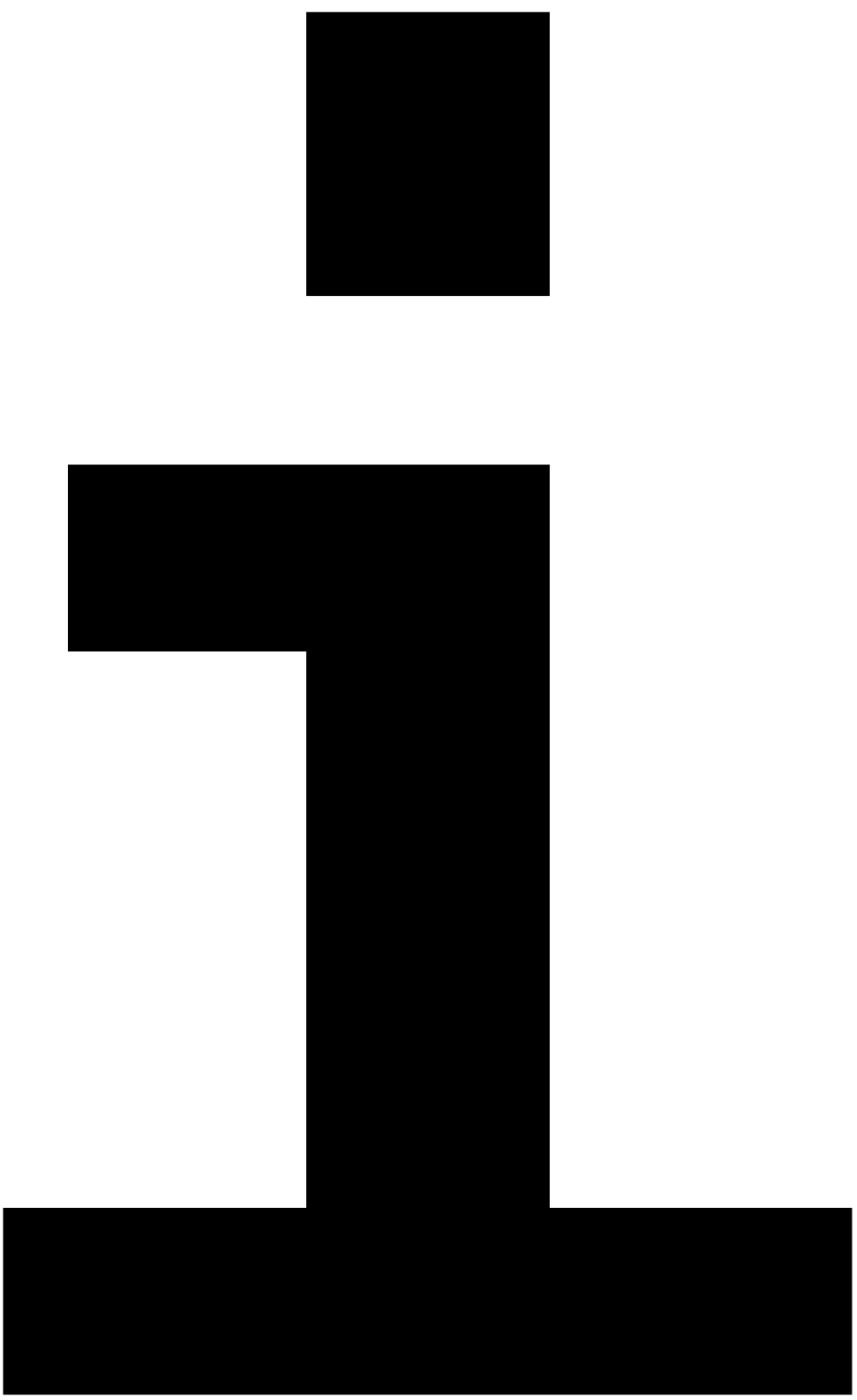


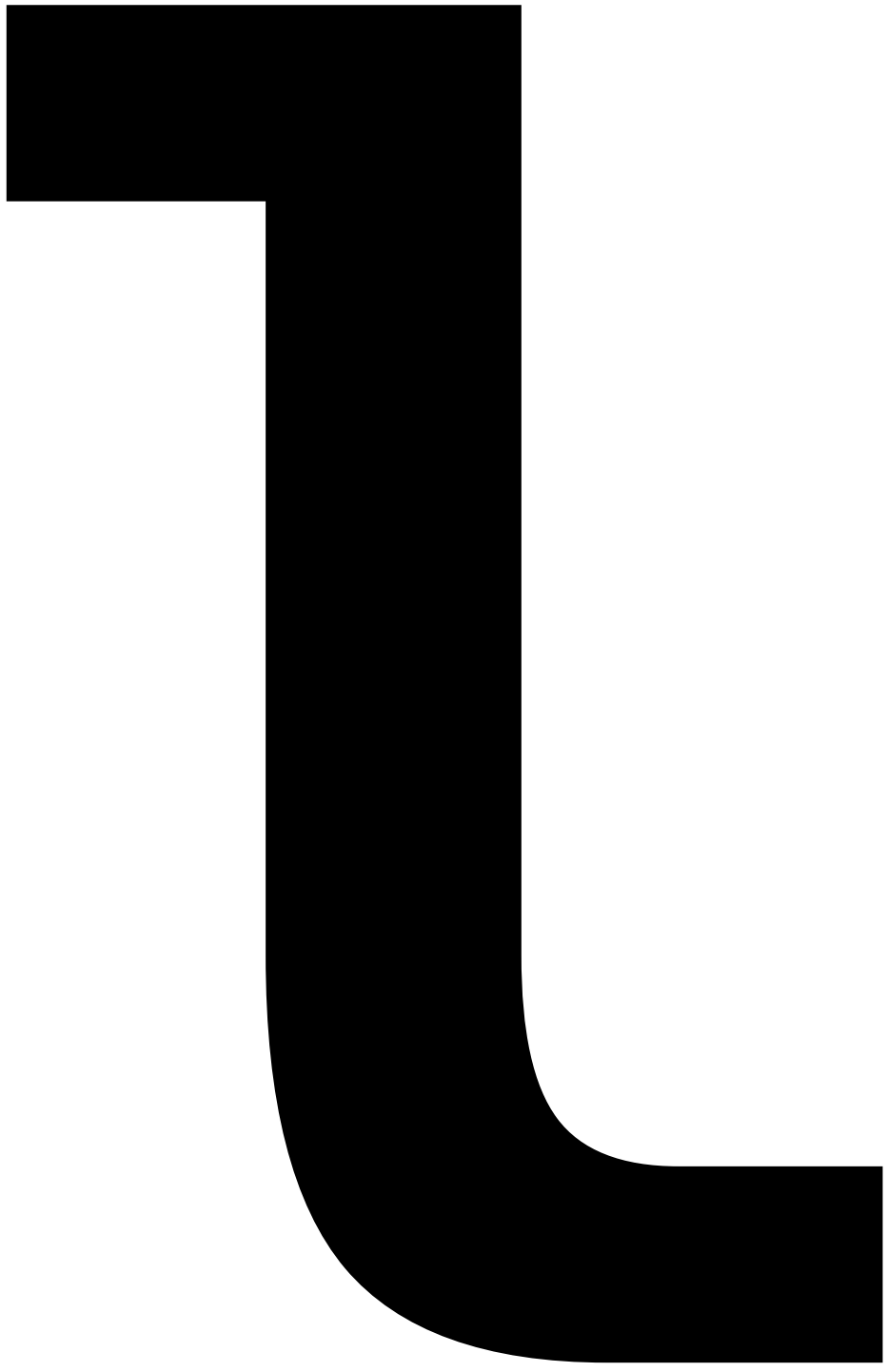


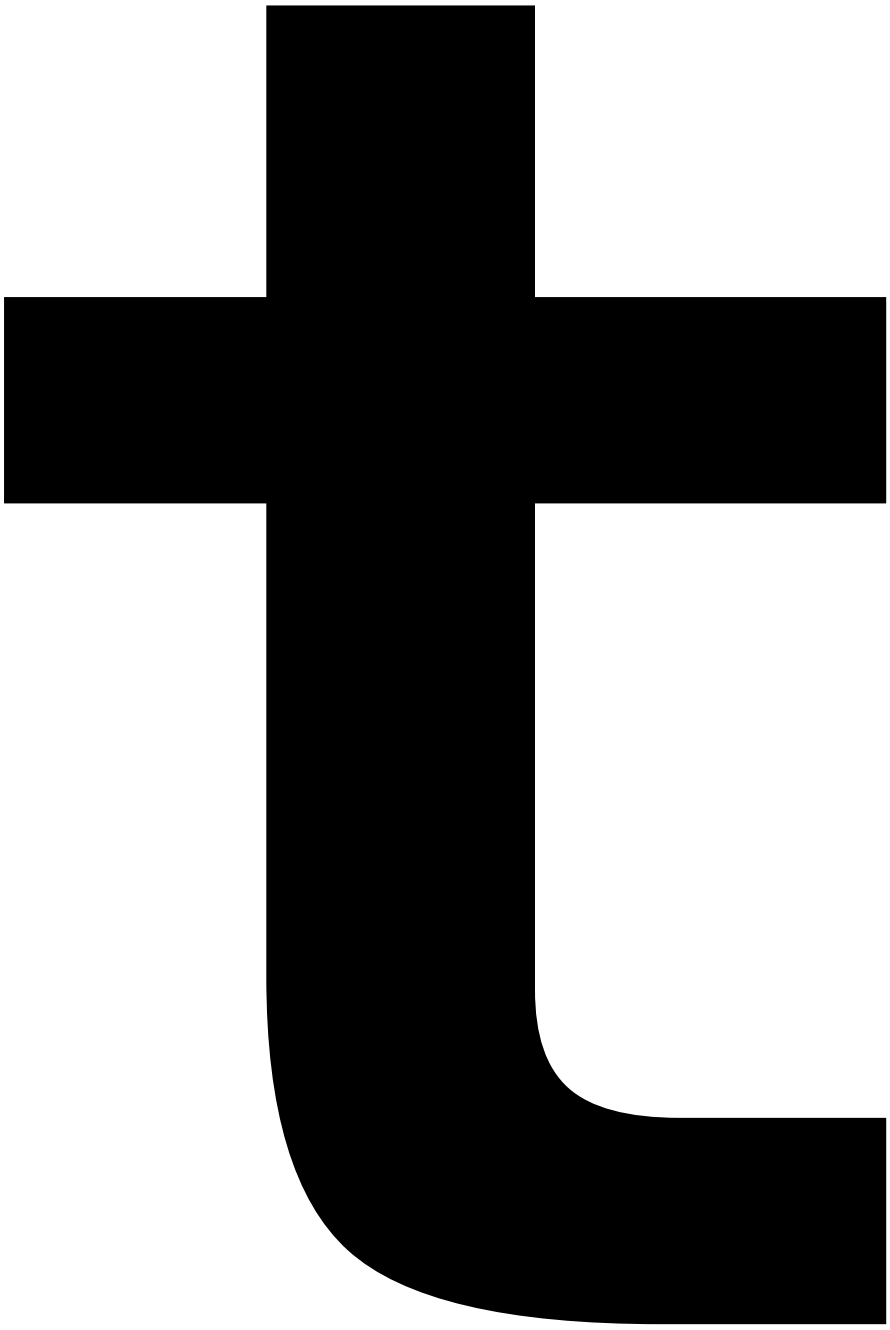


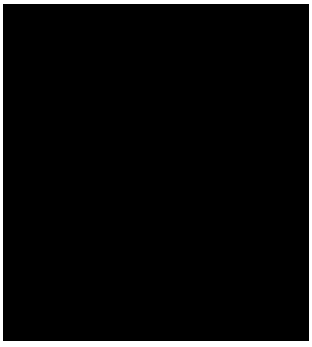


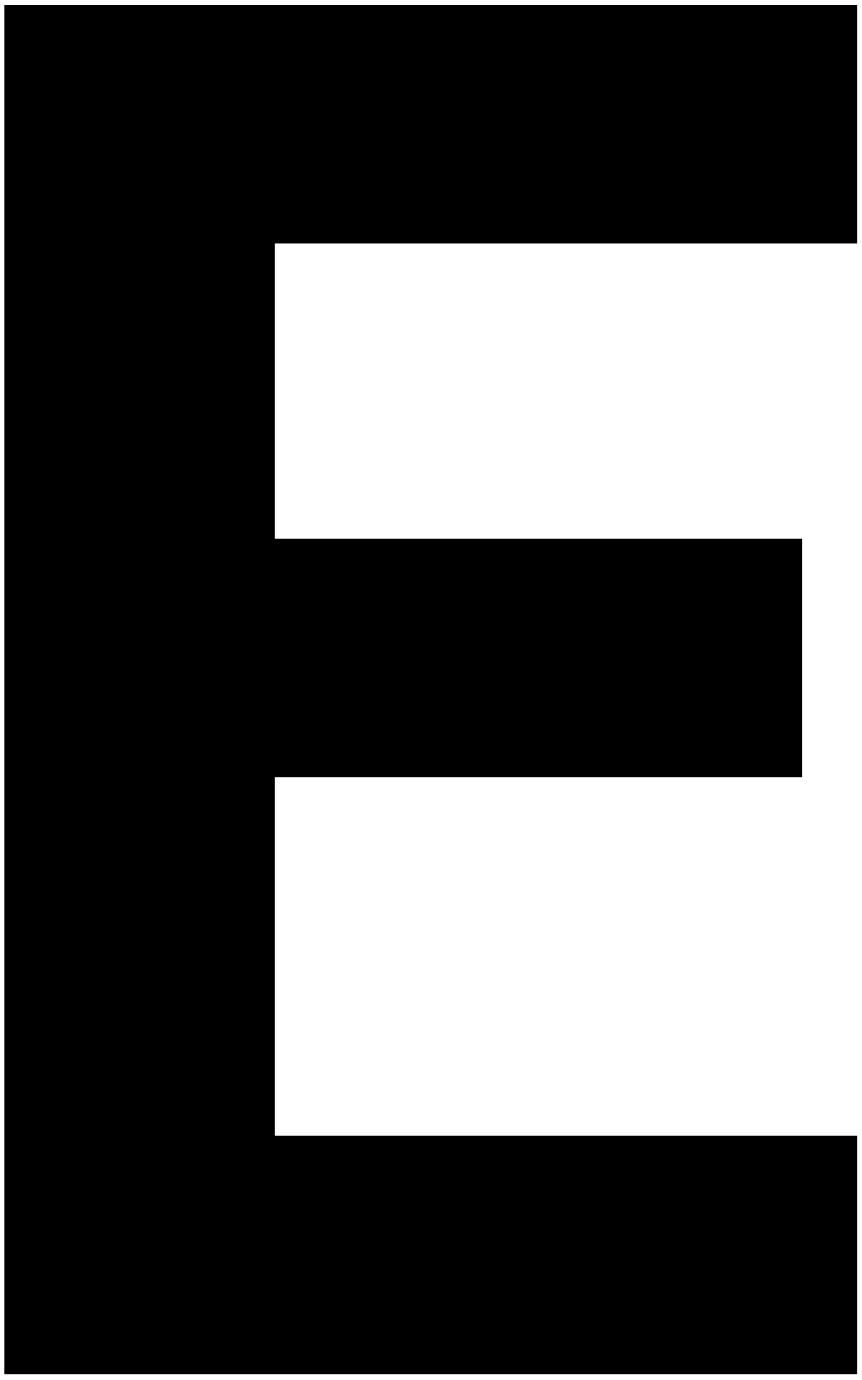




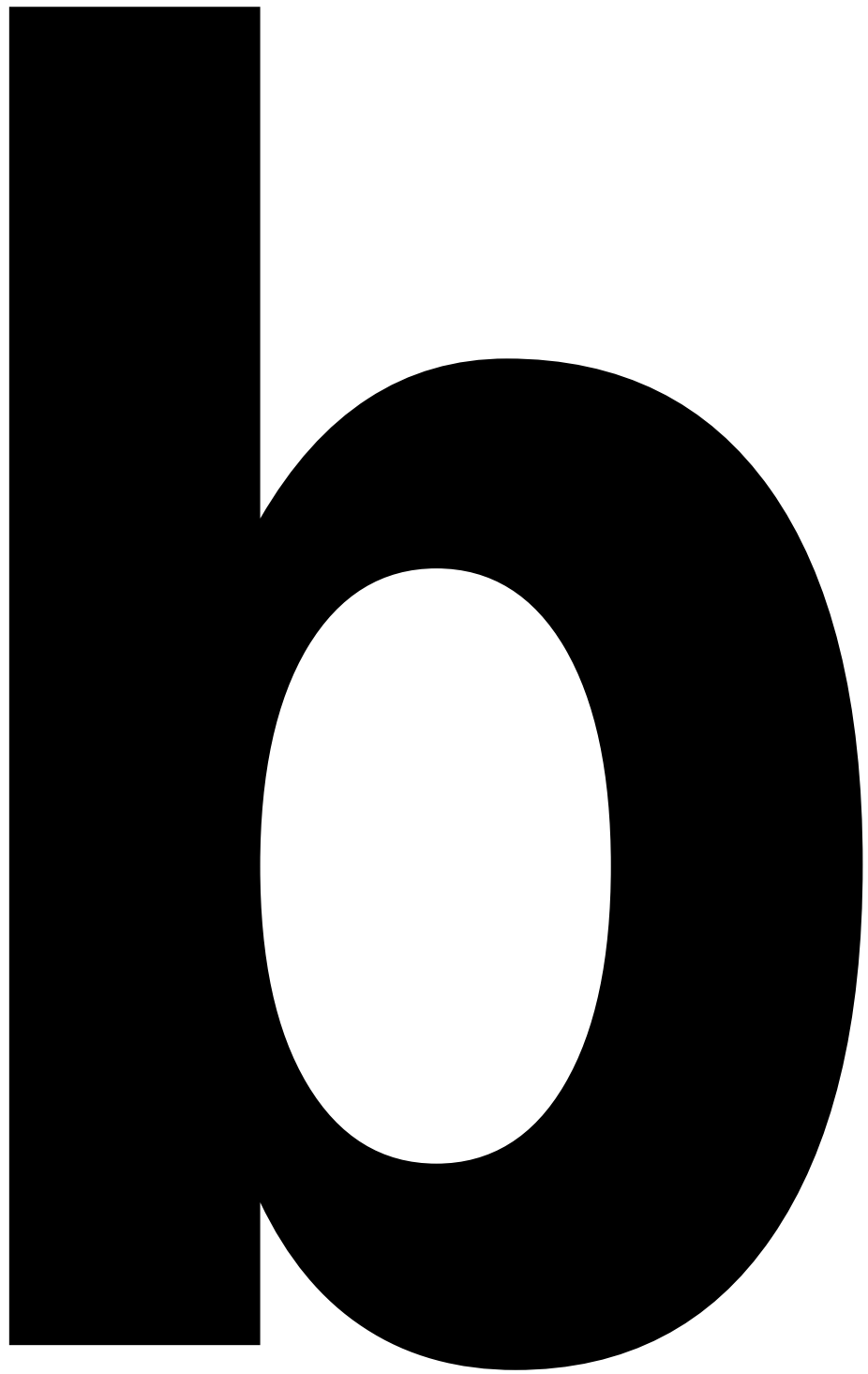


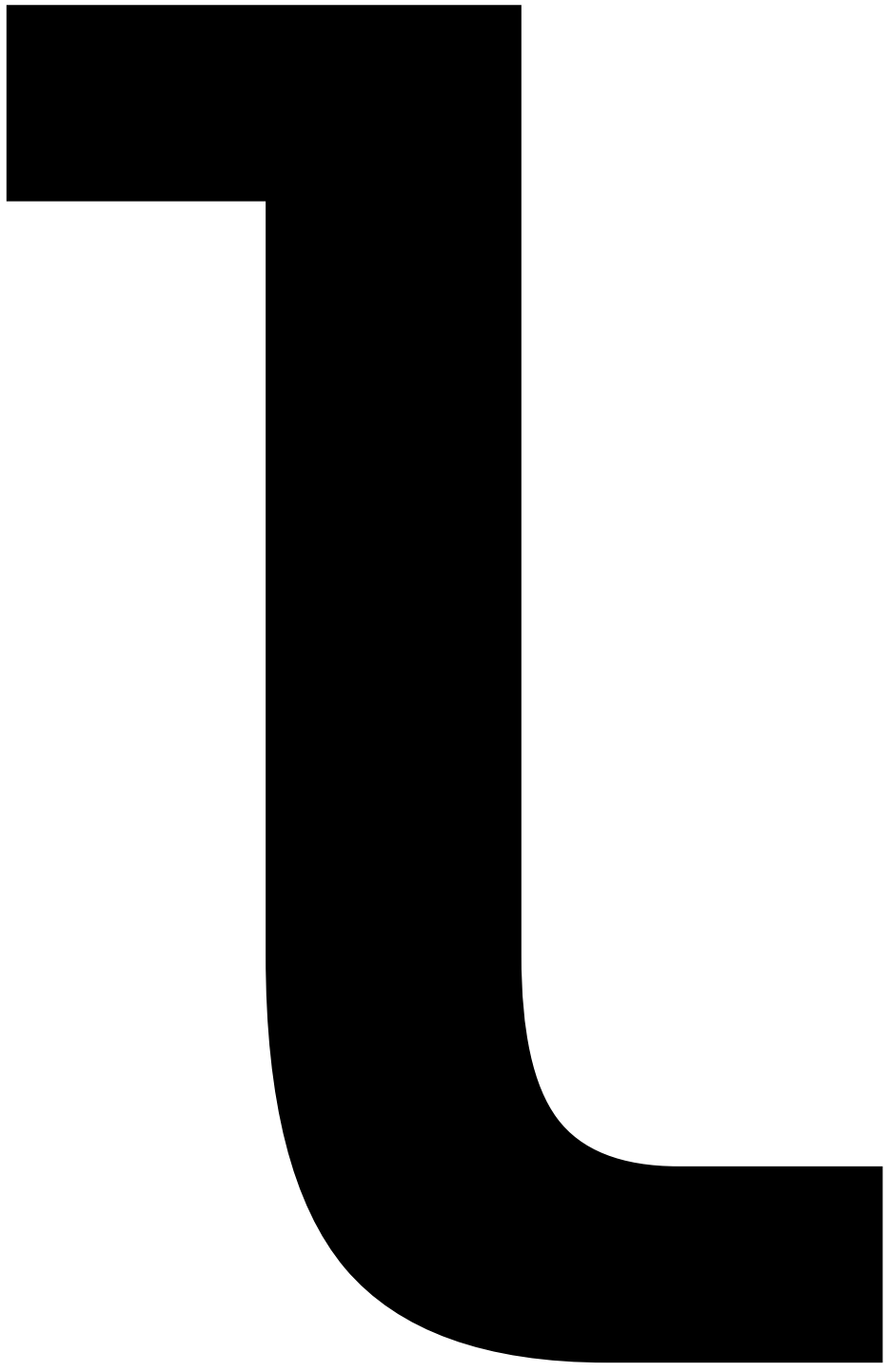


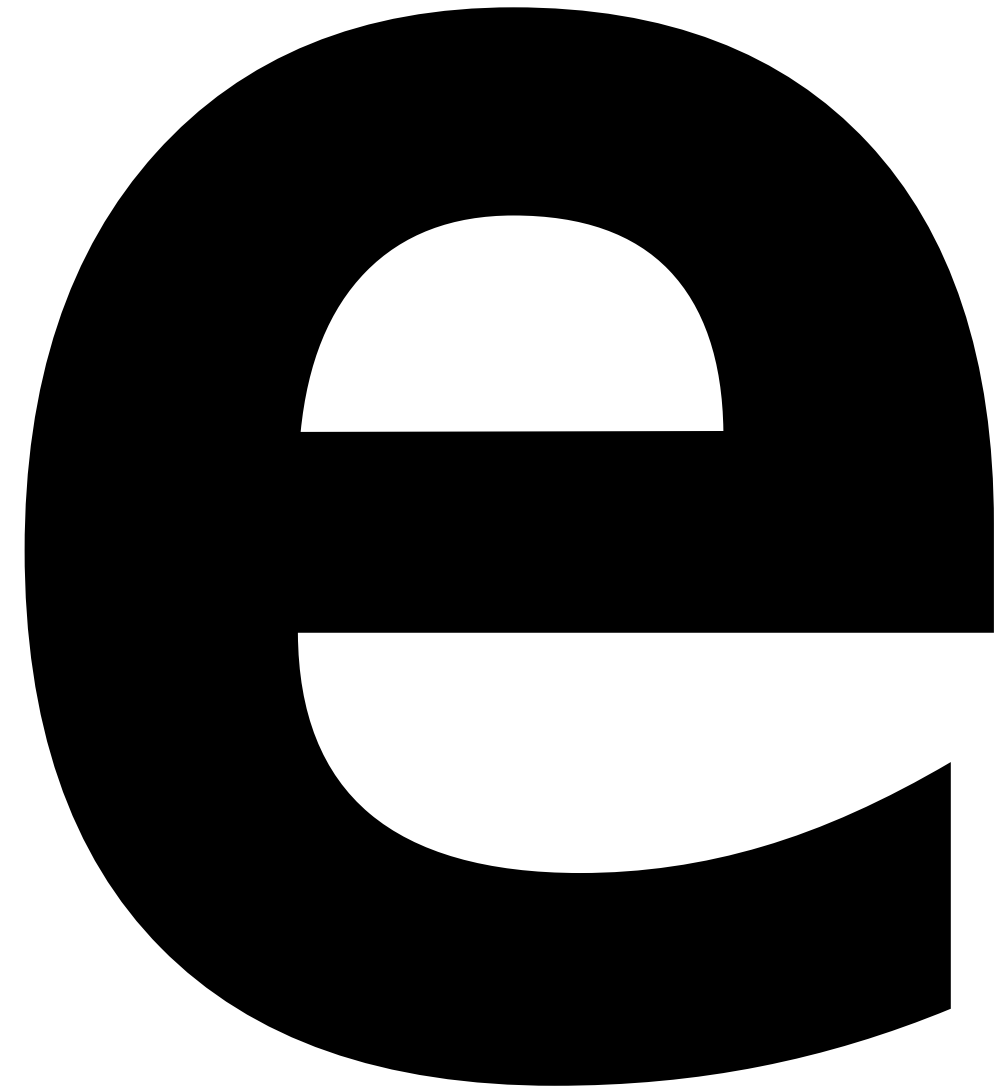


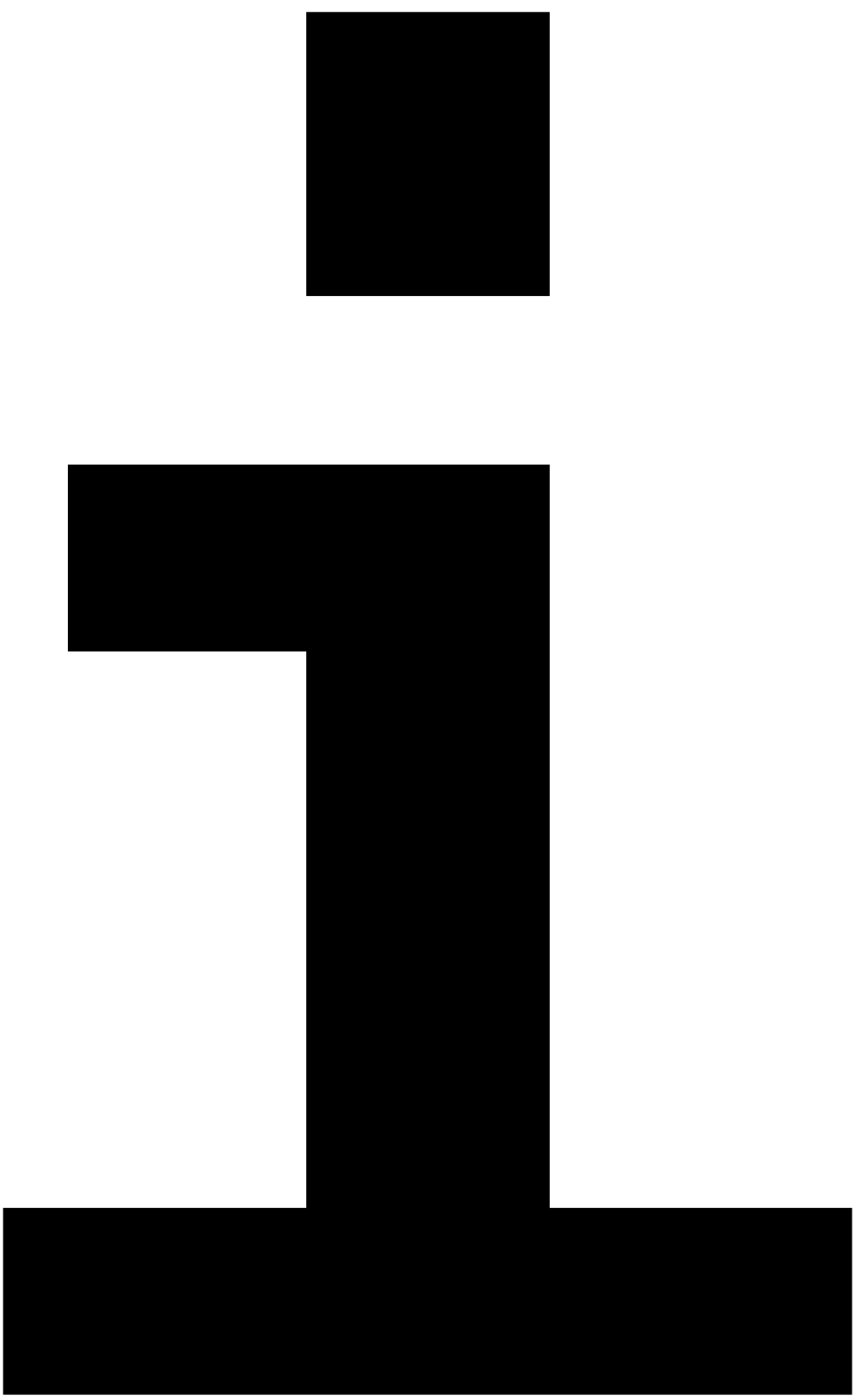


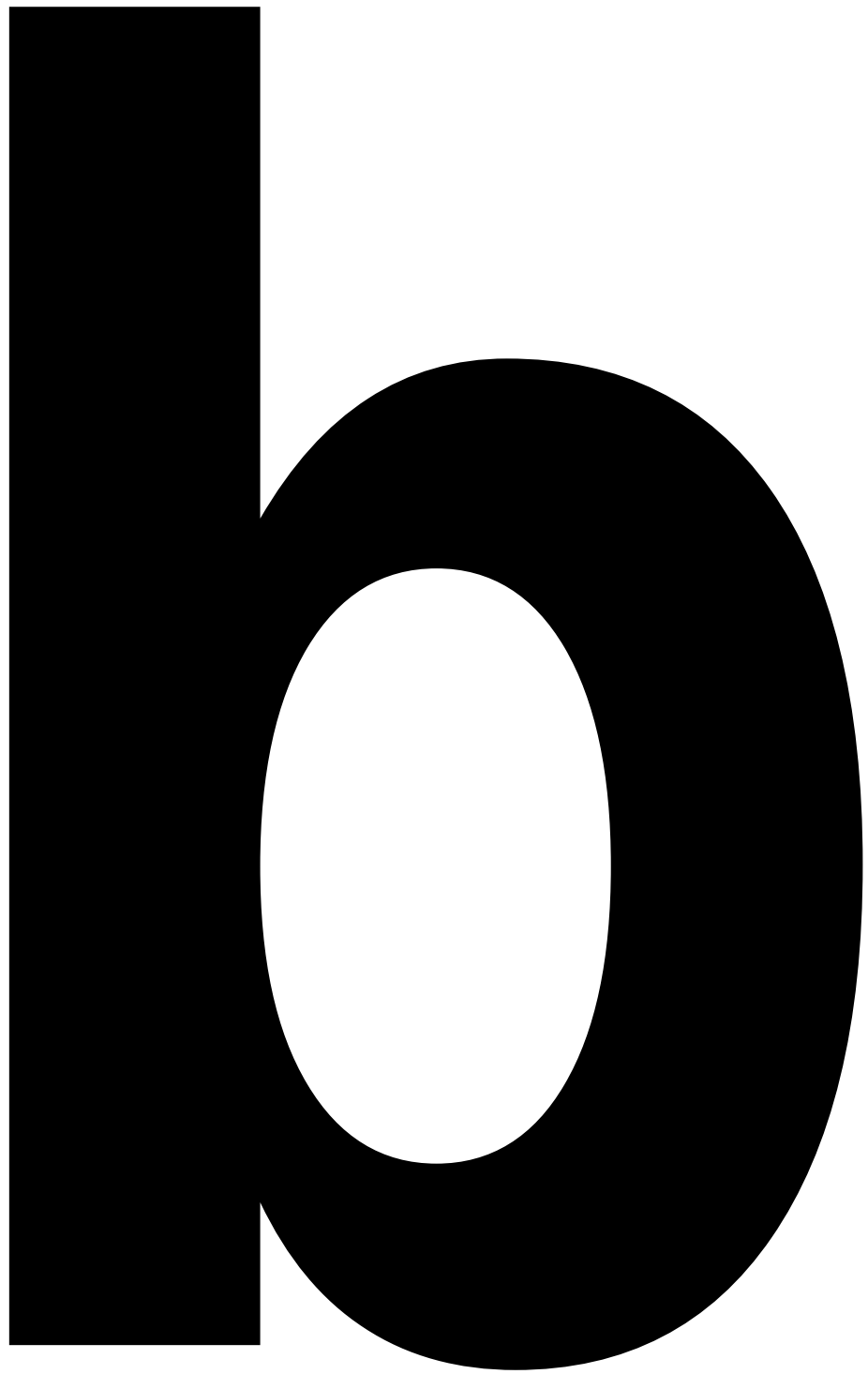
S

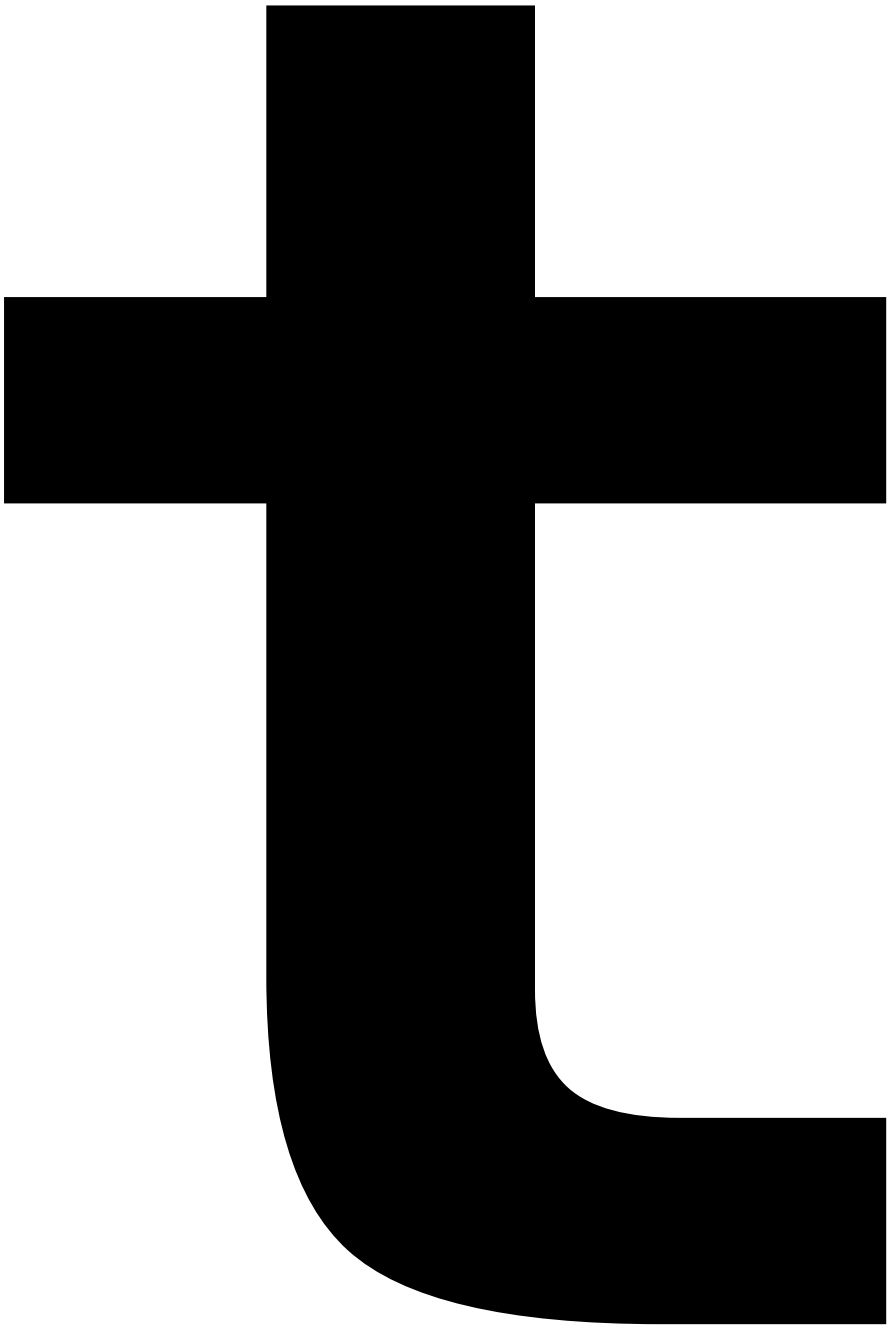




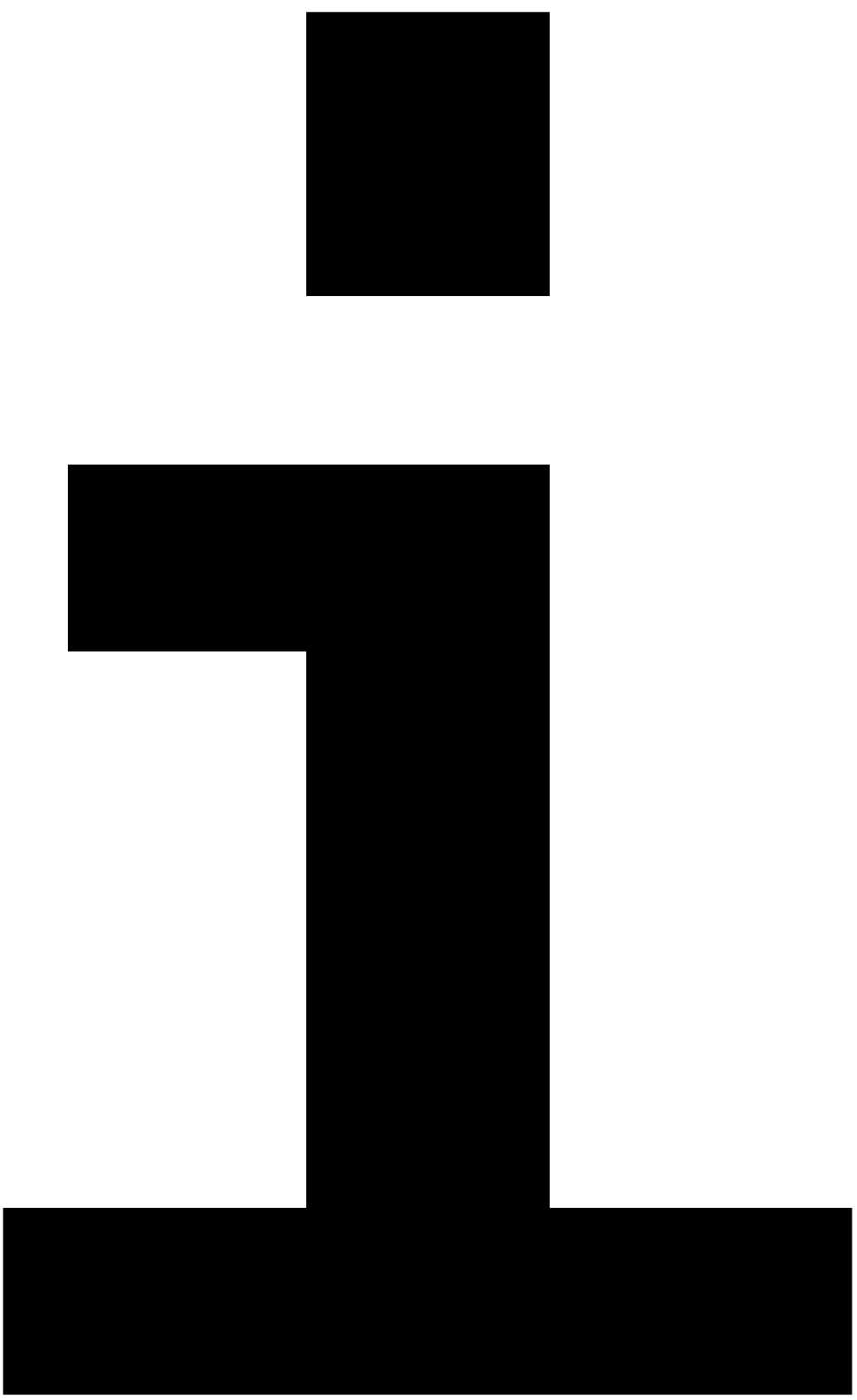


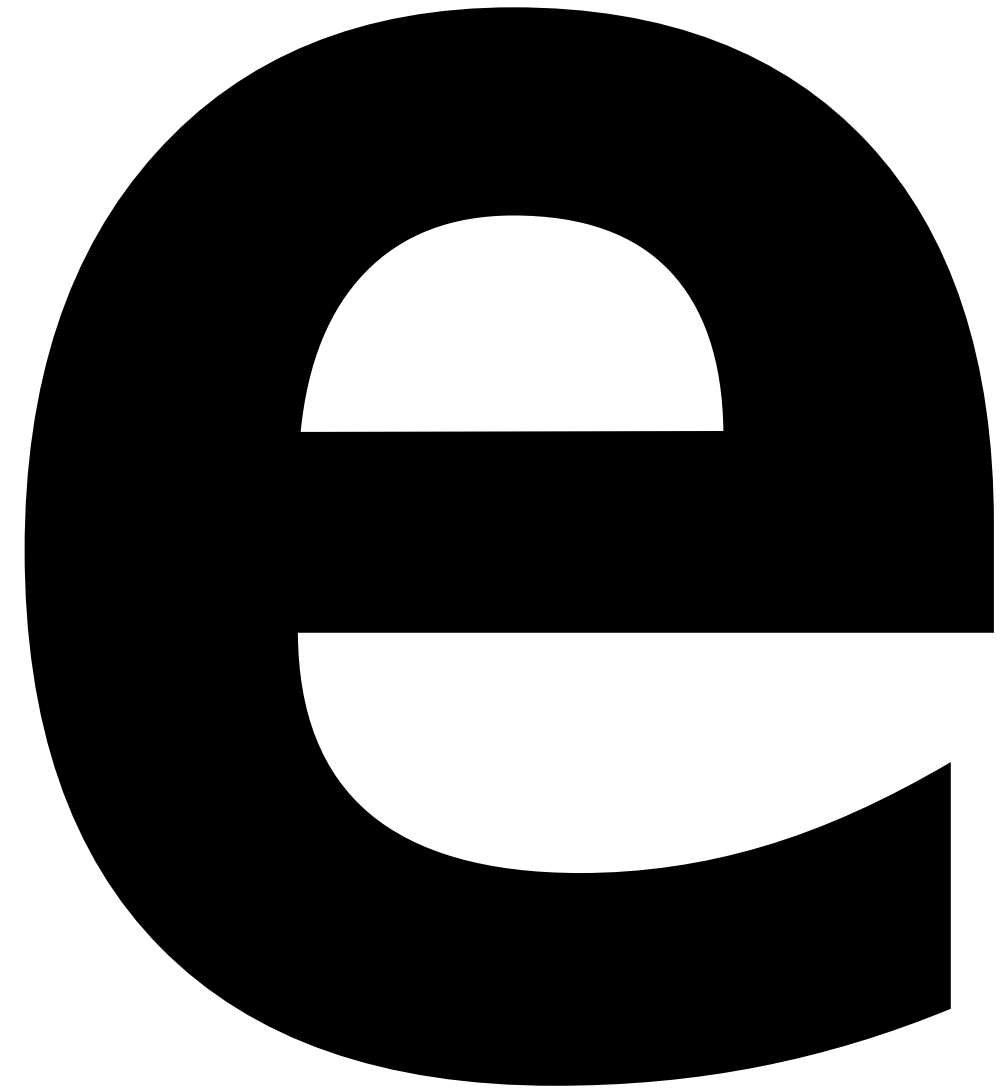


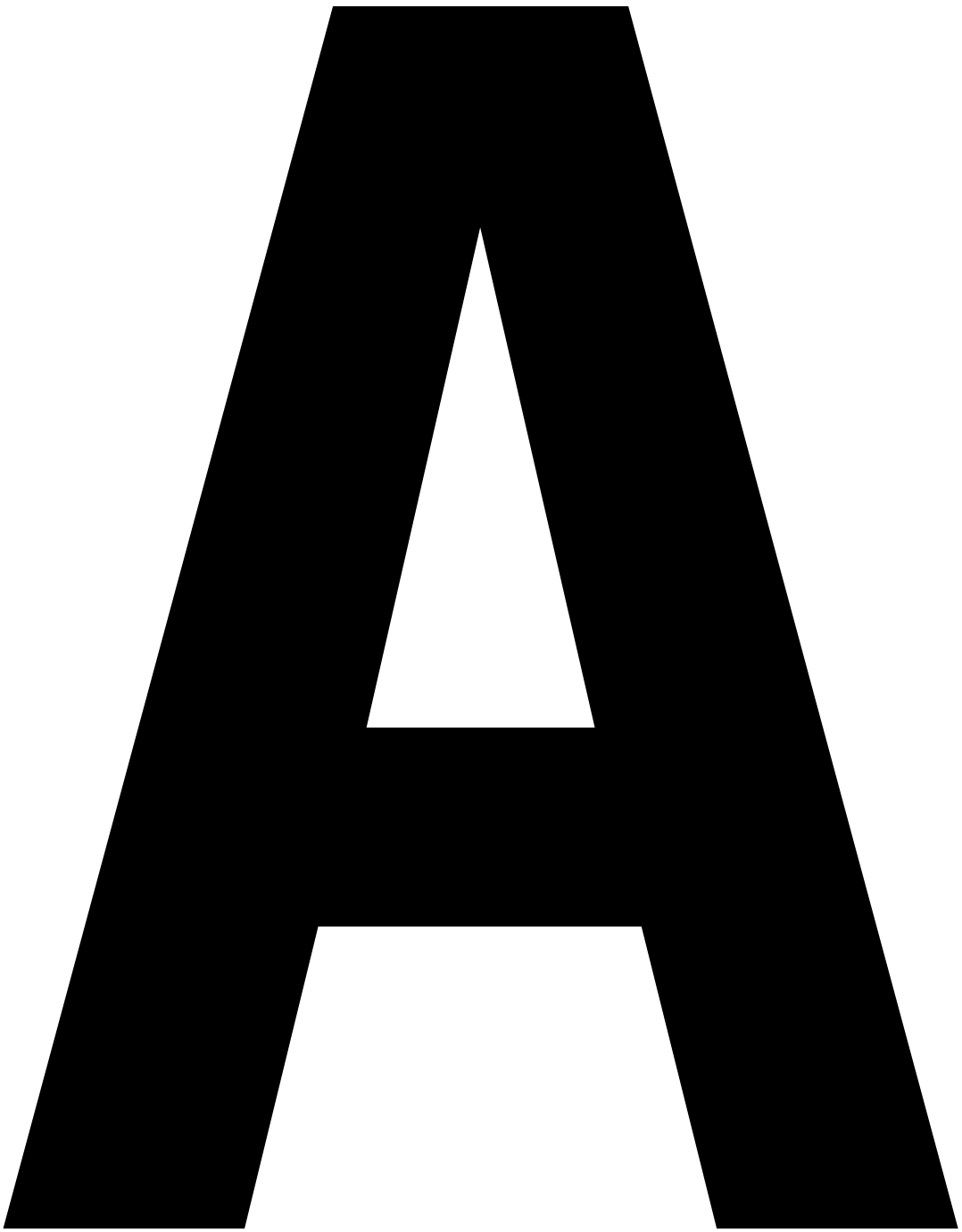




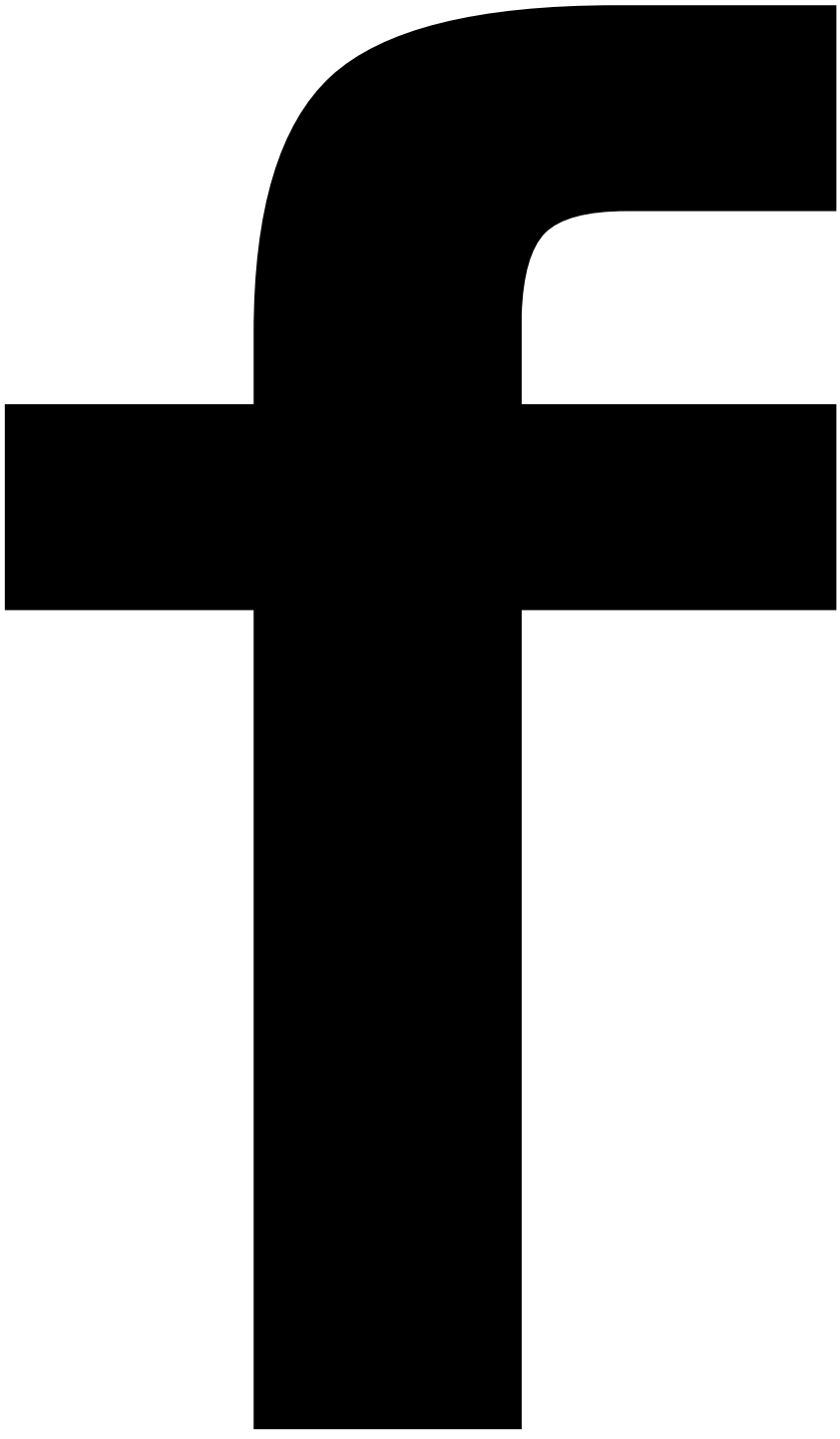
d

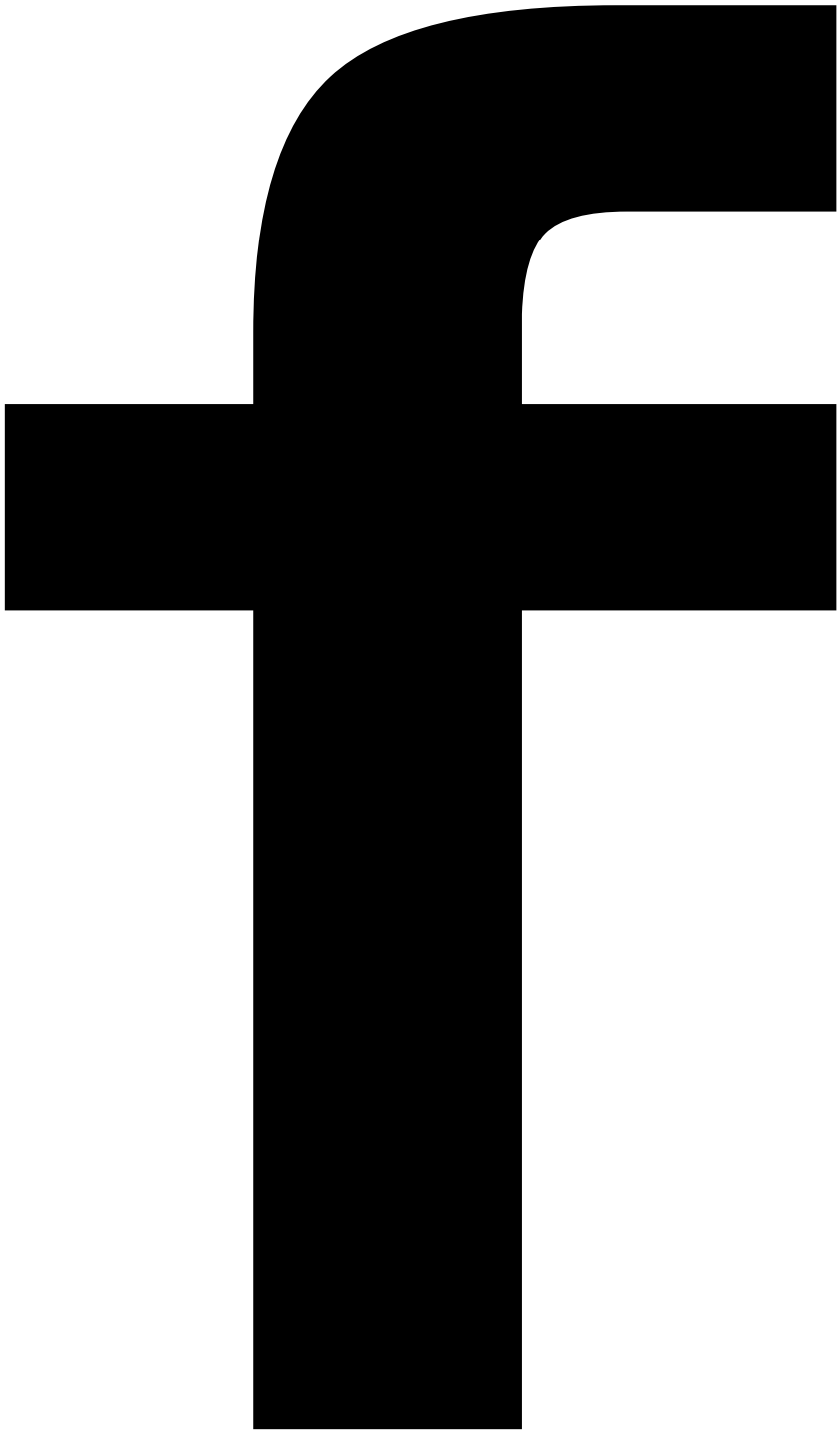


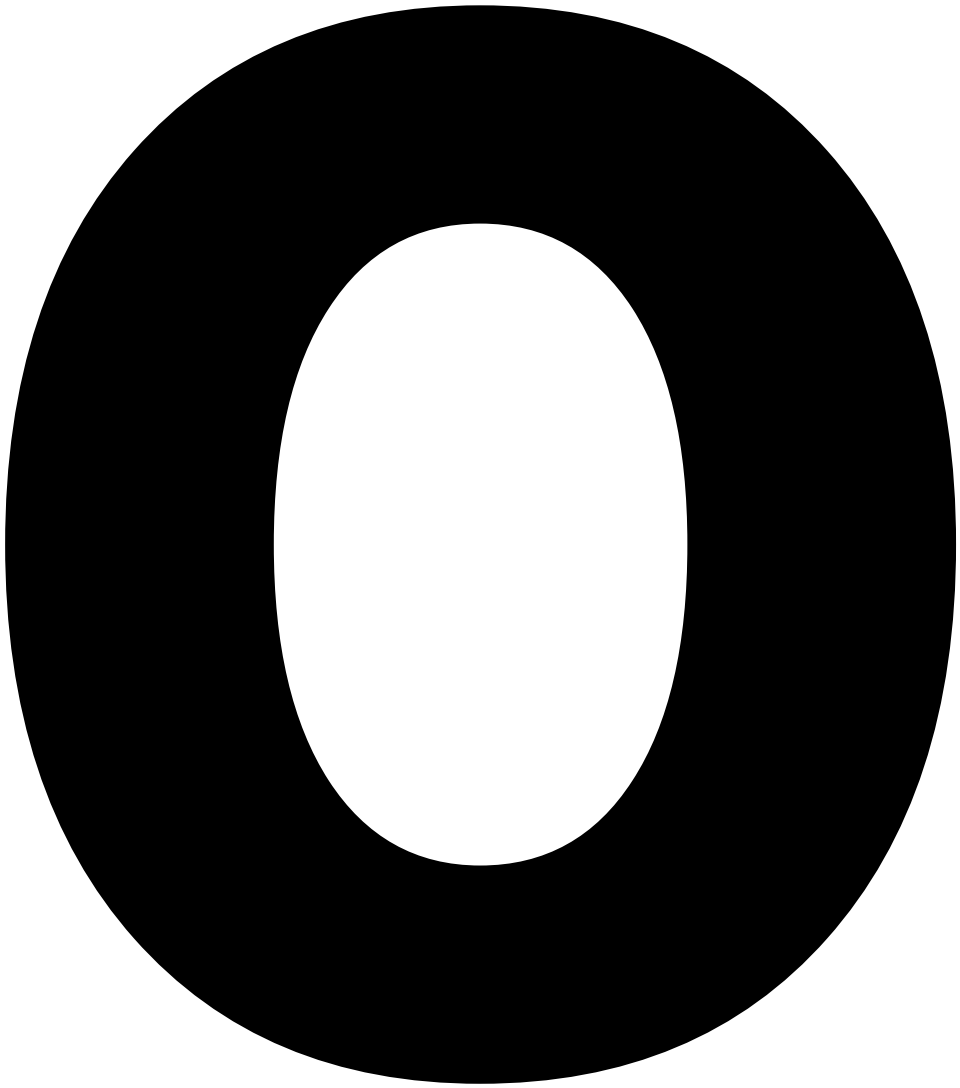


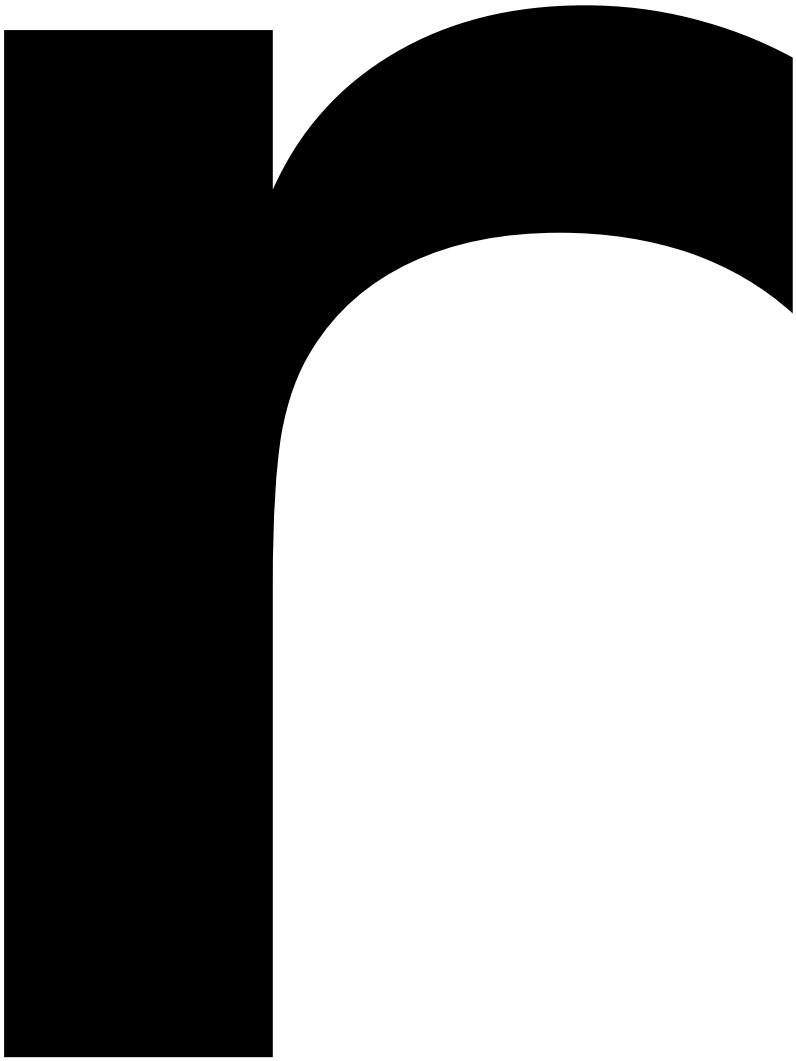


u

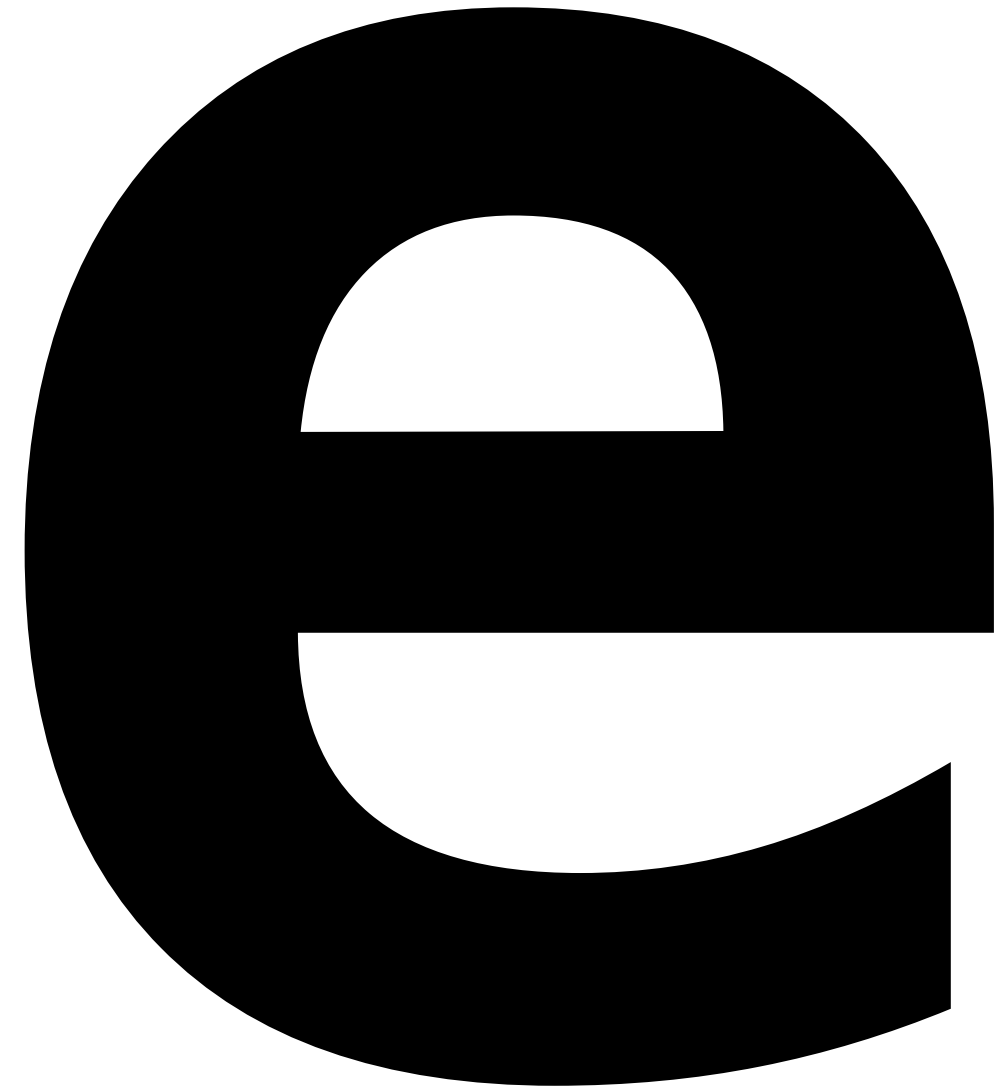


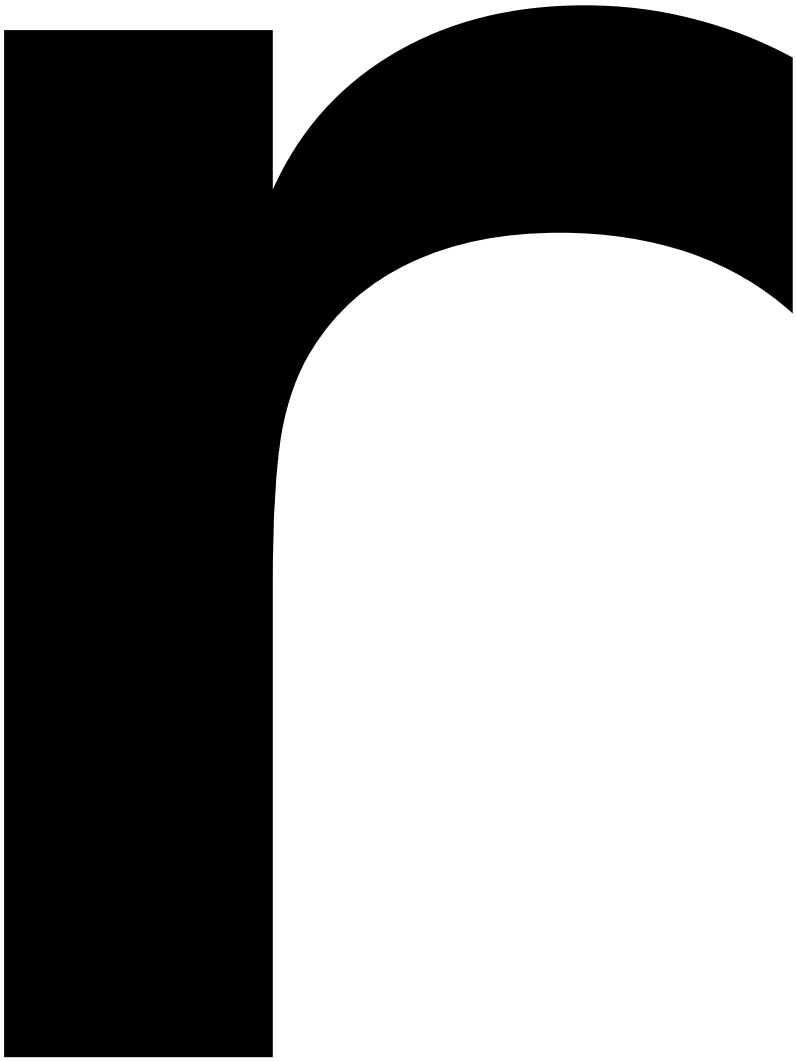




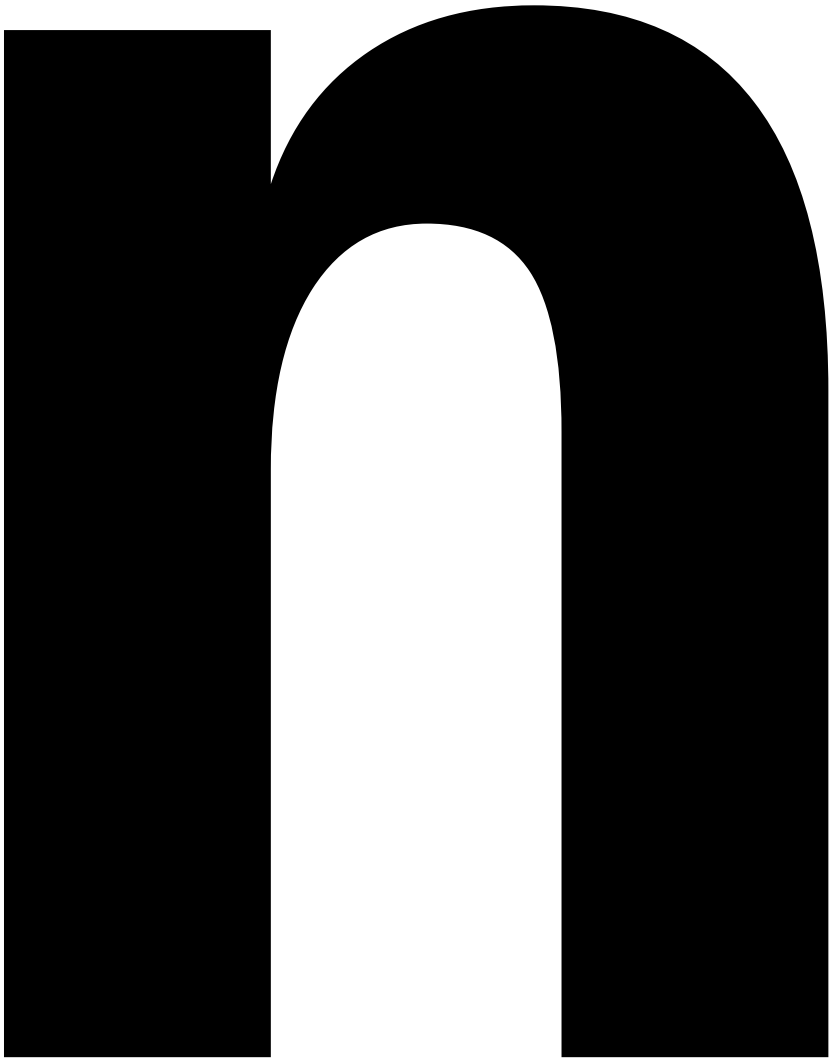


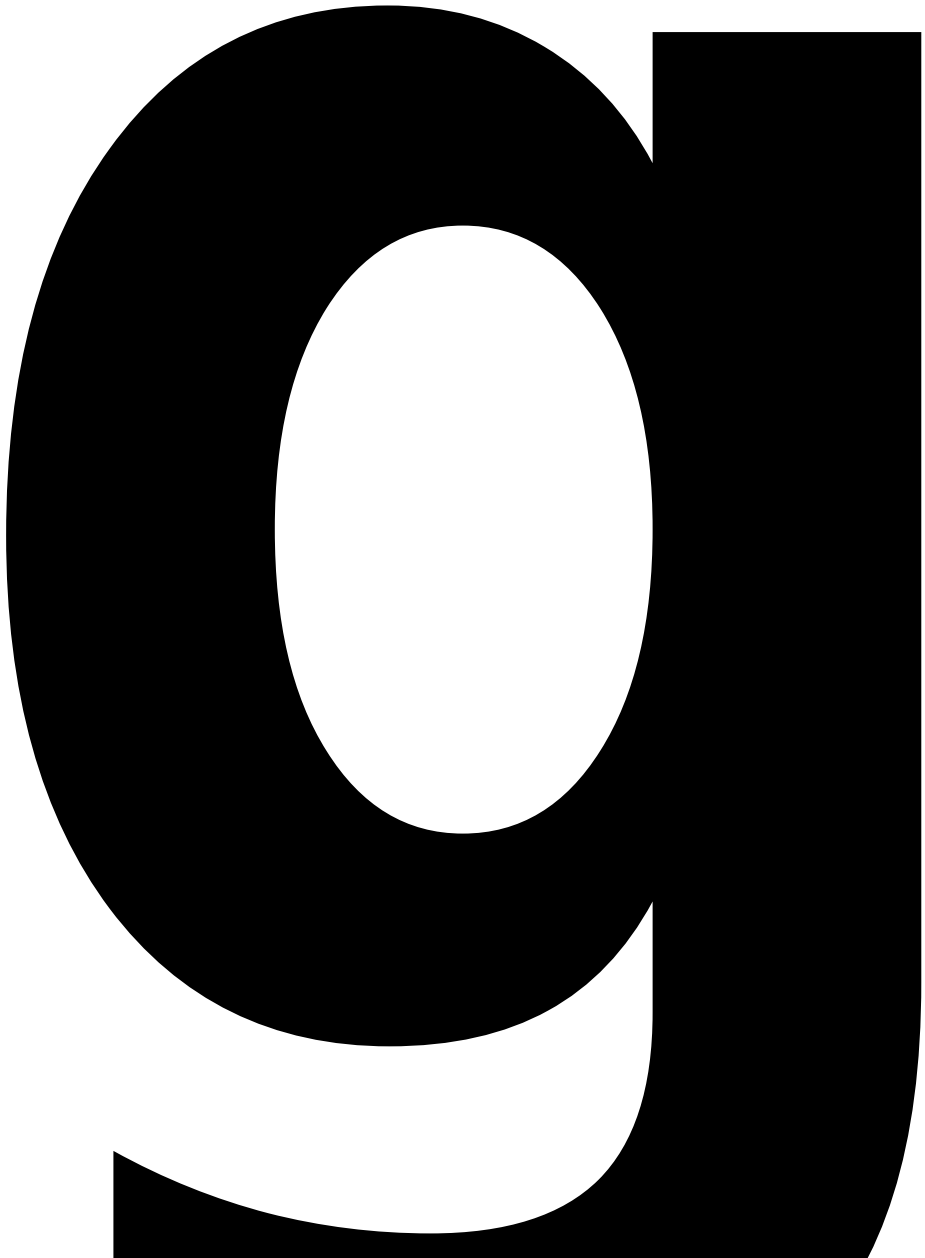
d

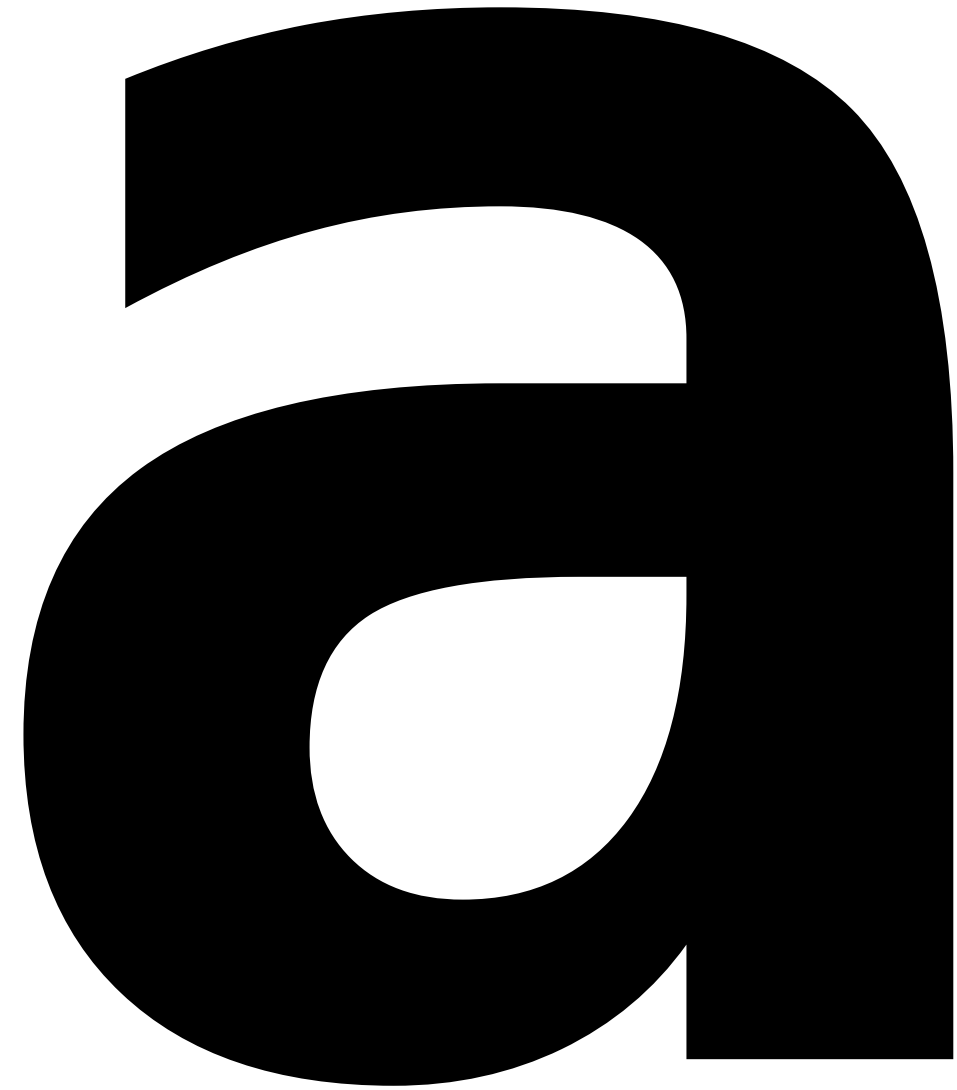


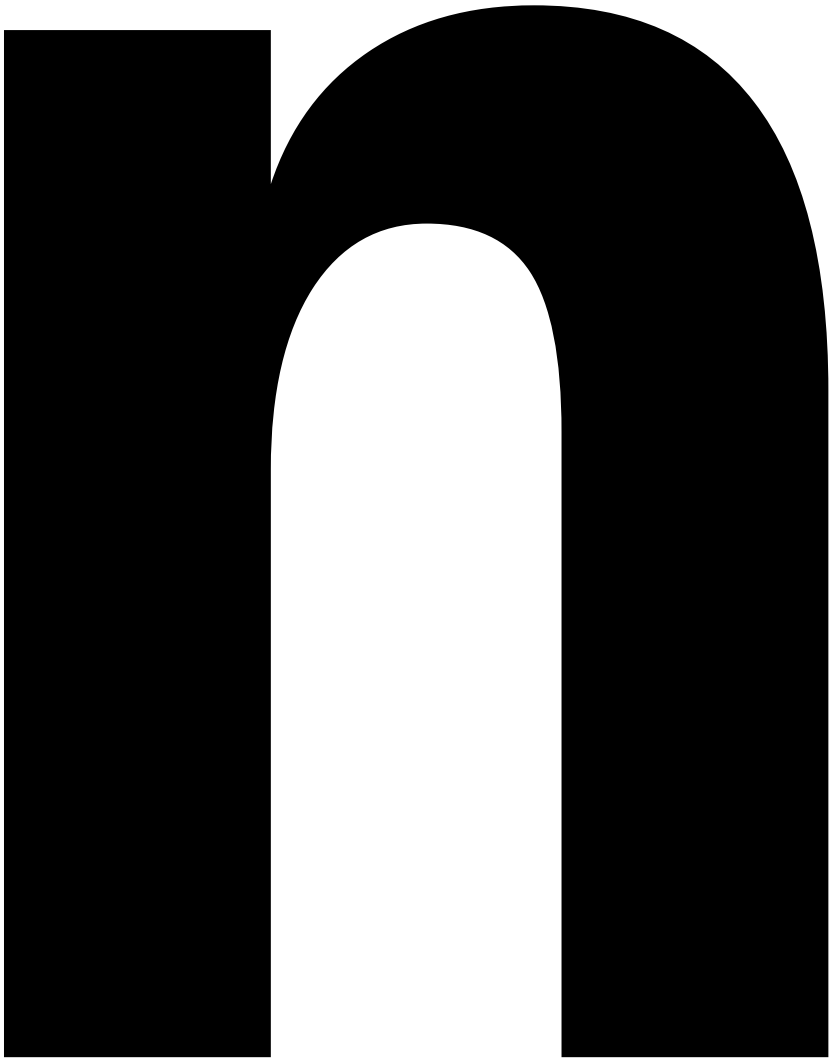


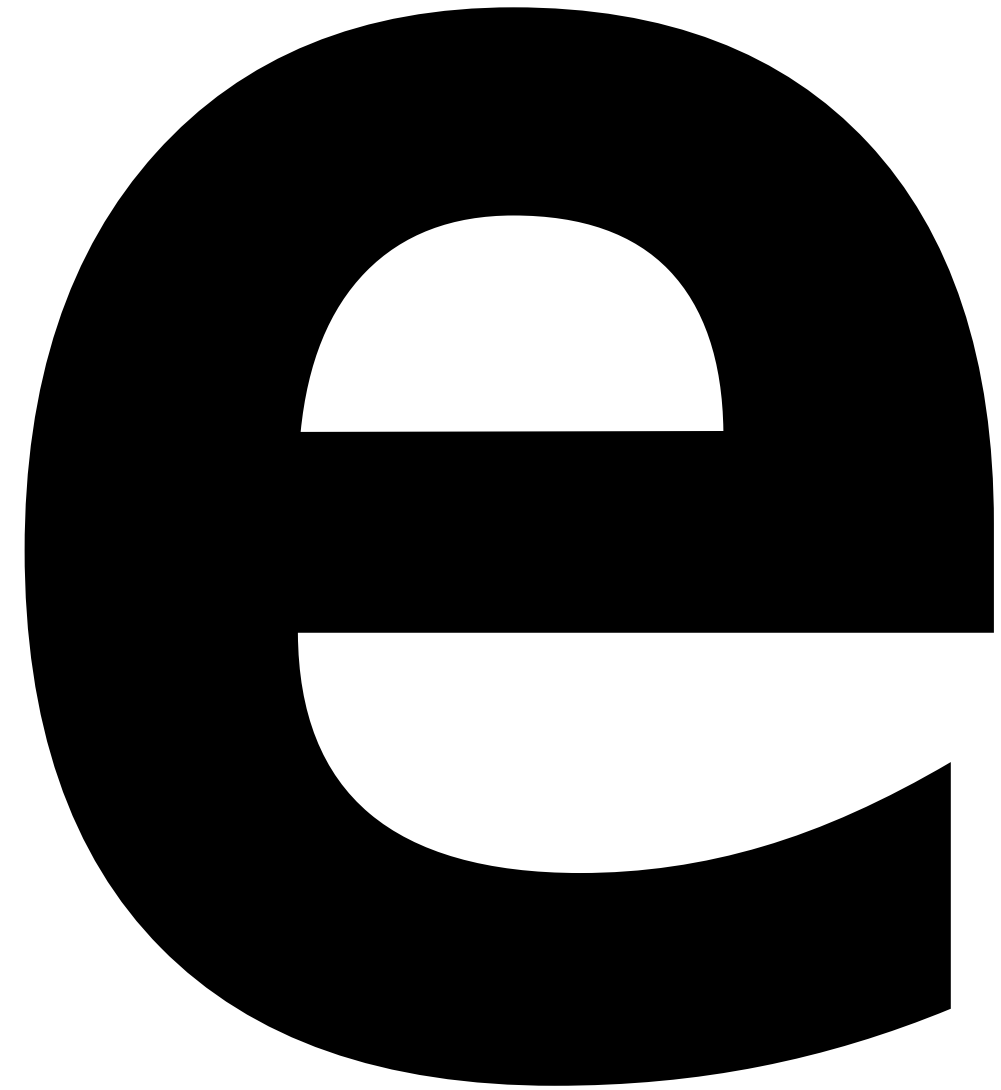
u

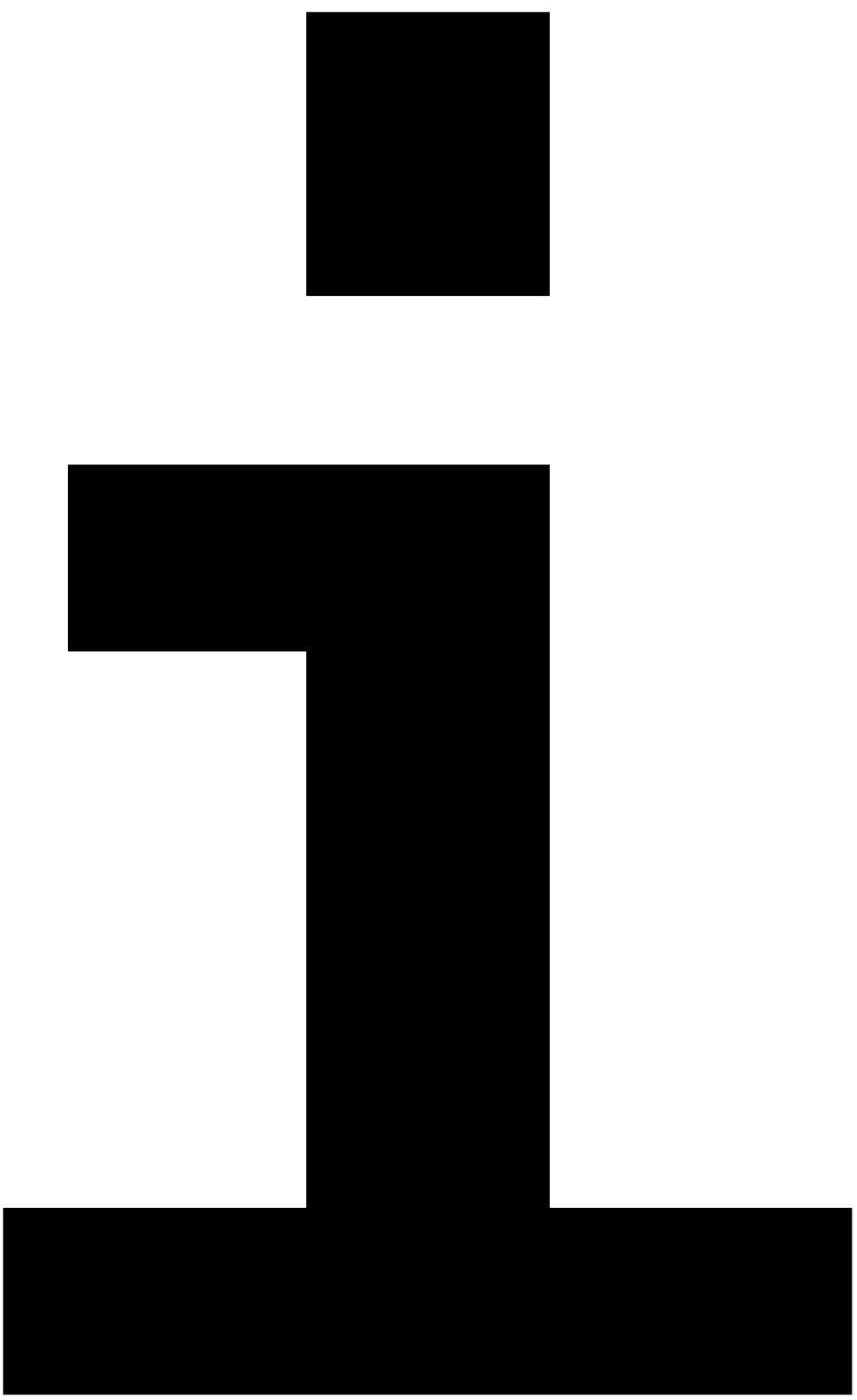


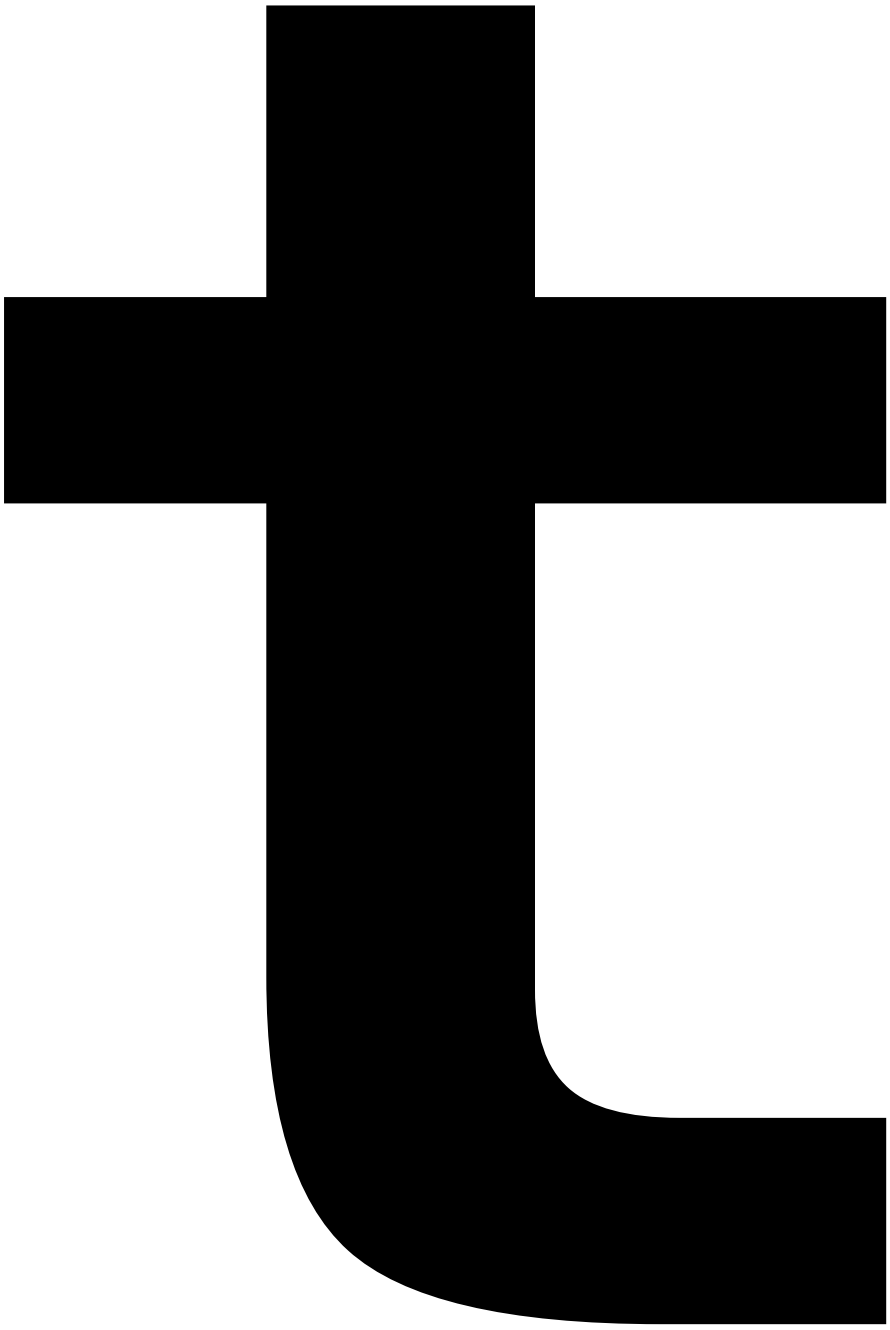


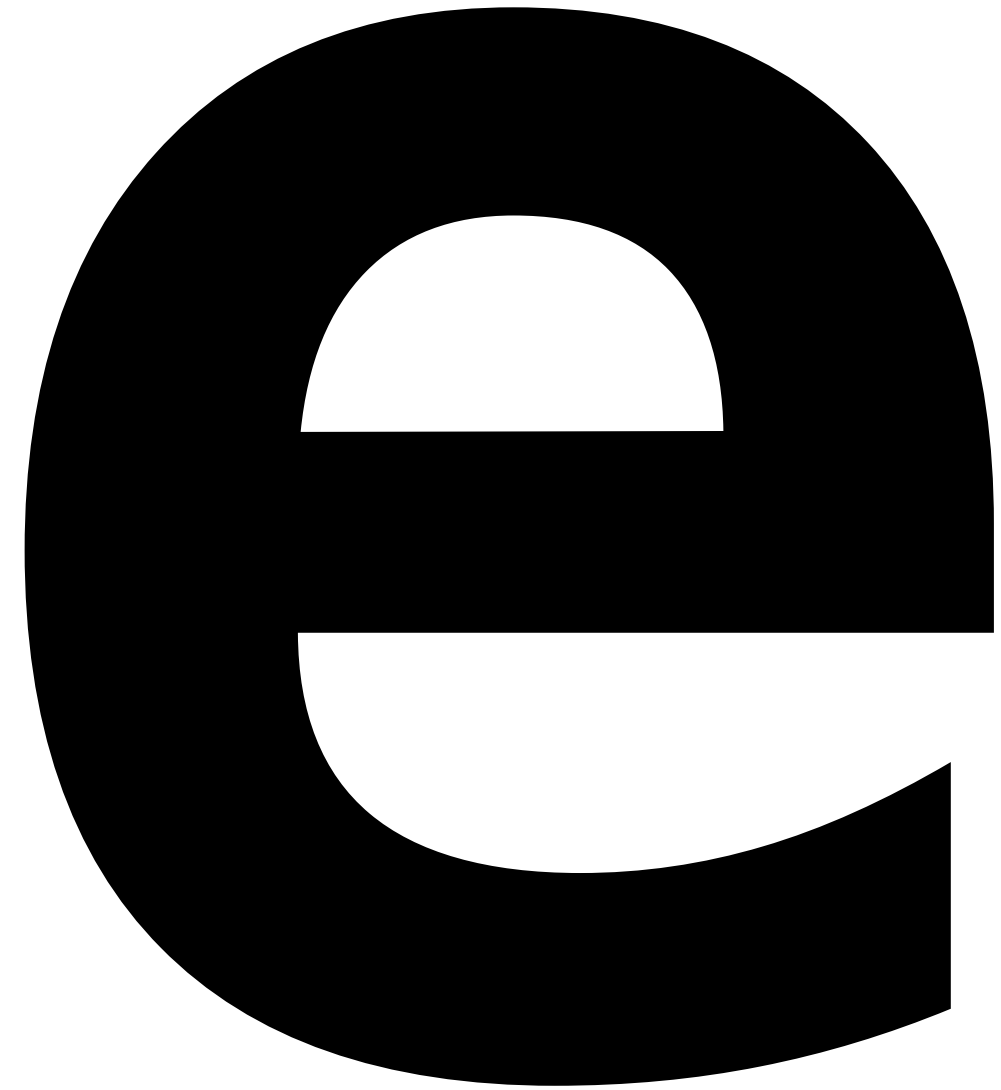


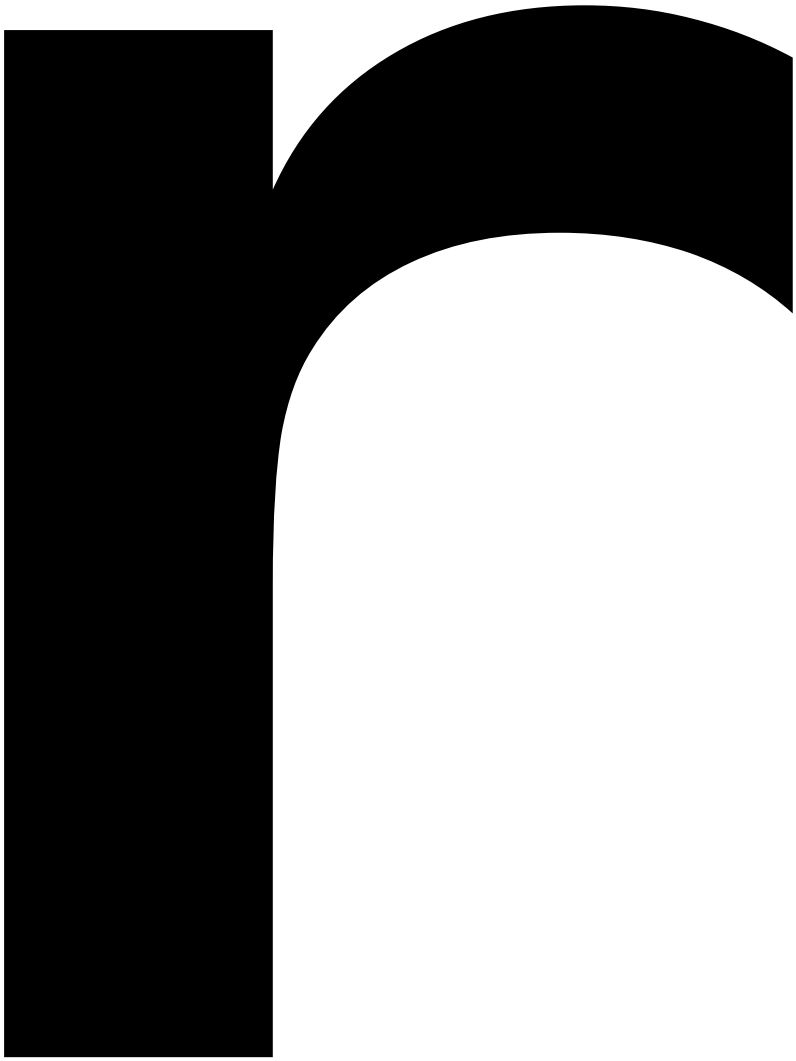


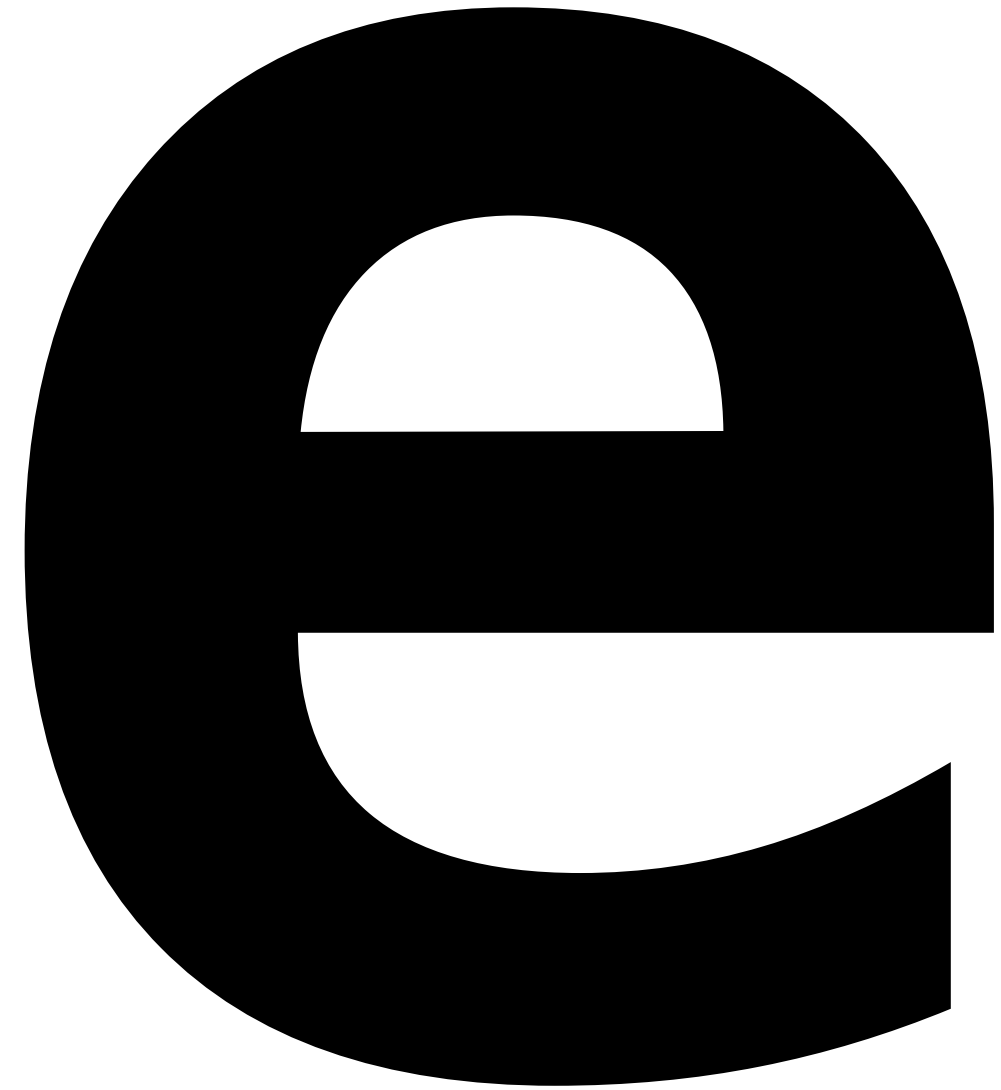


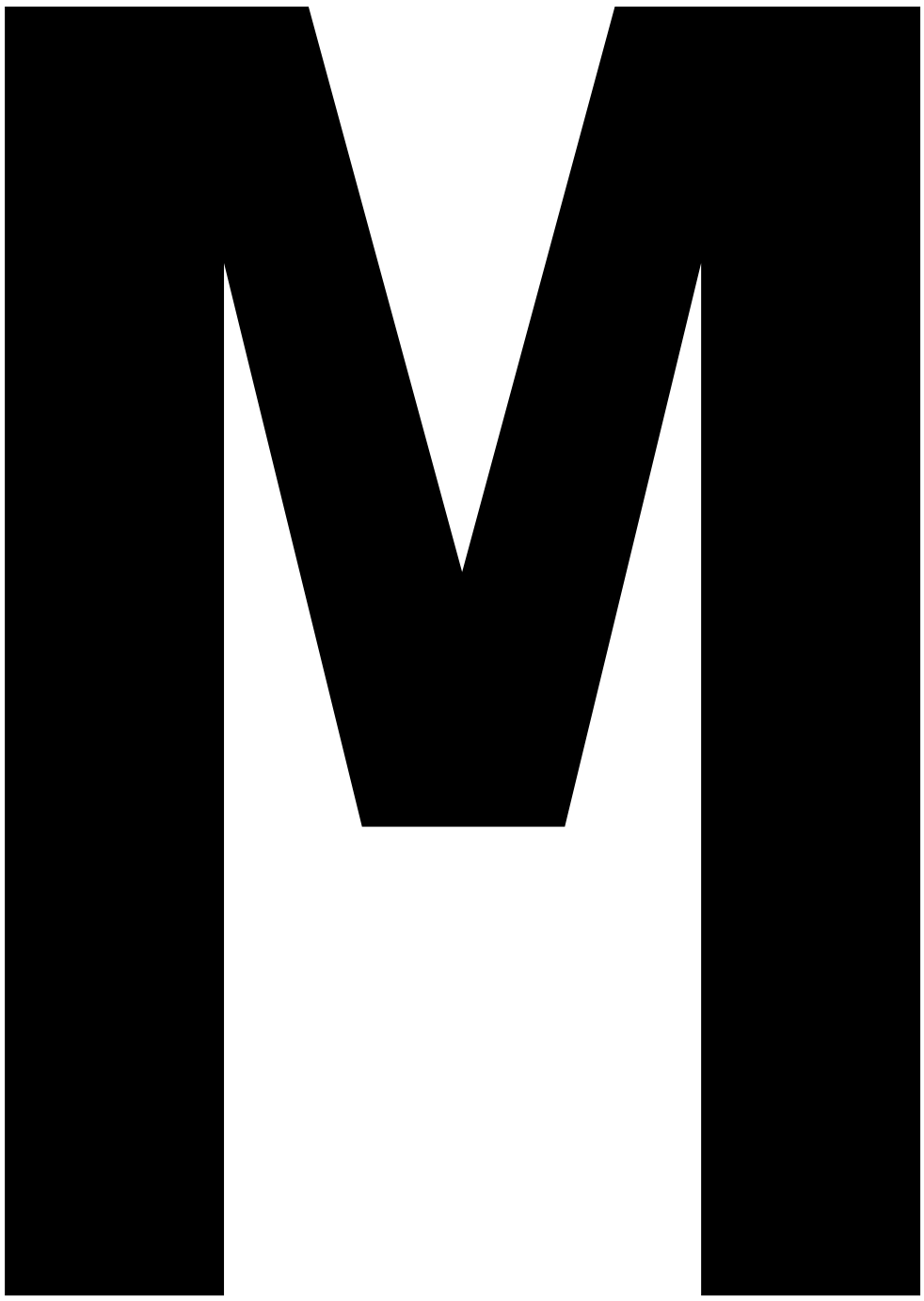


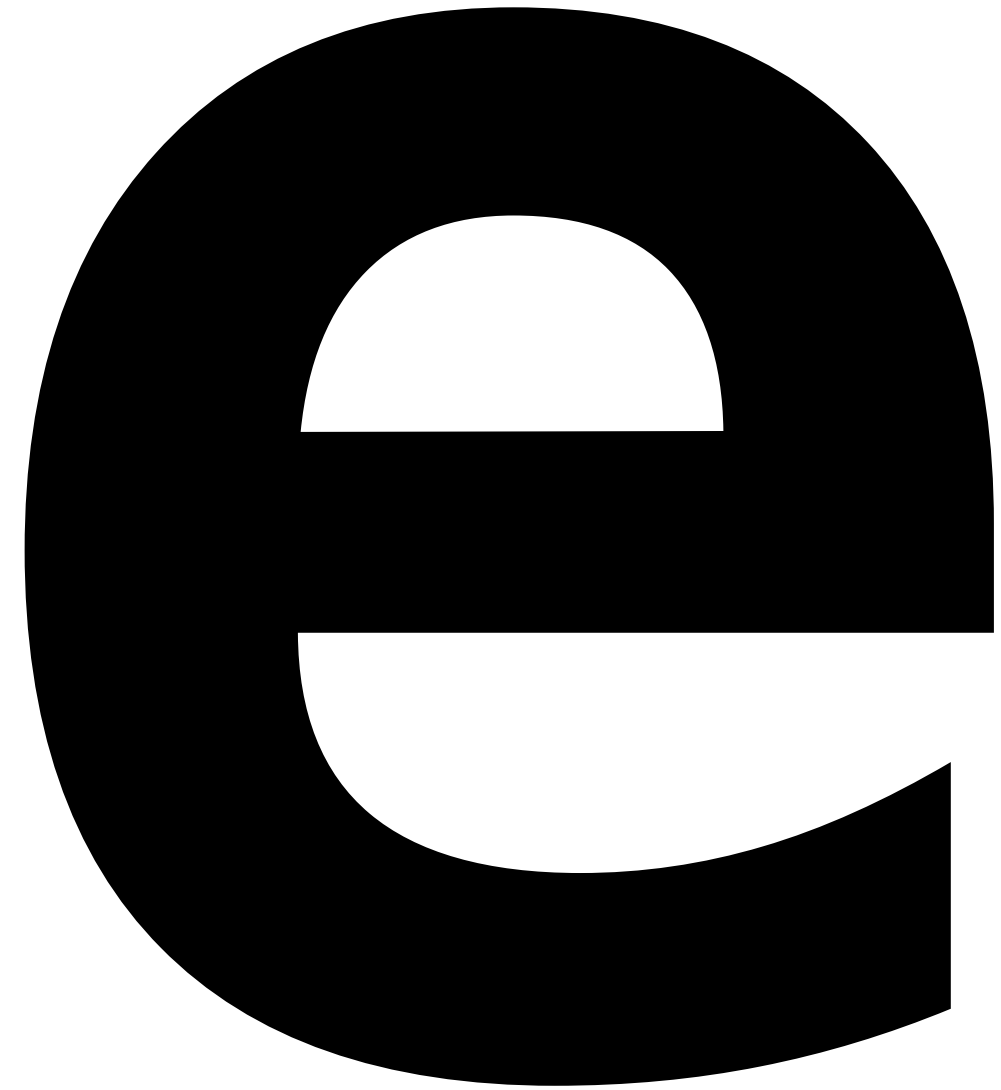




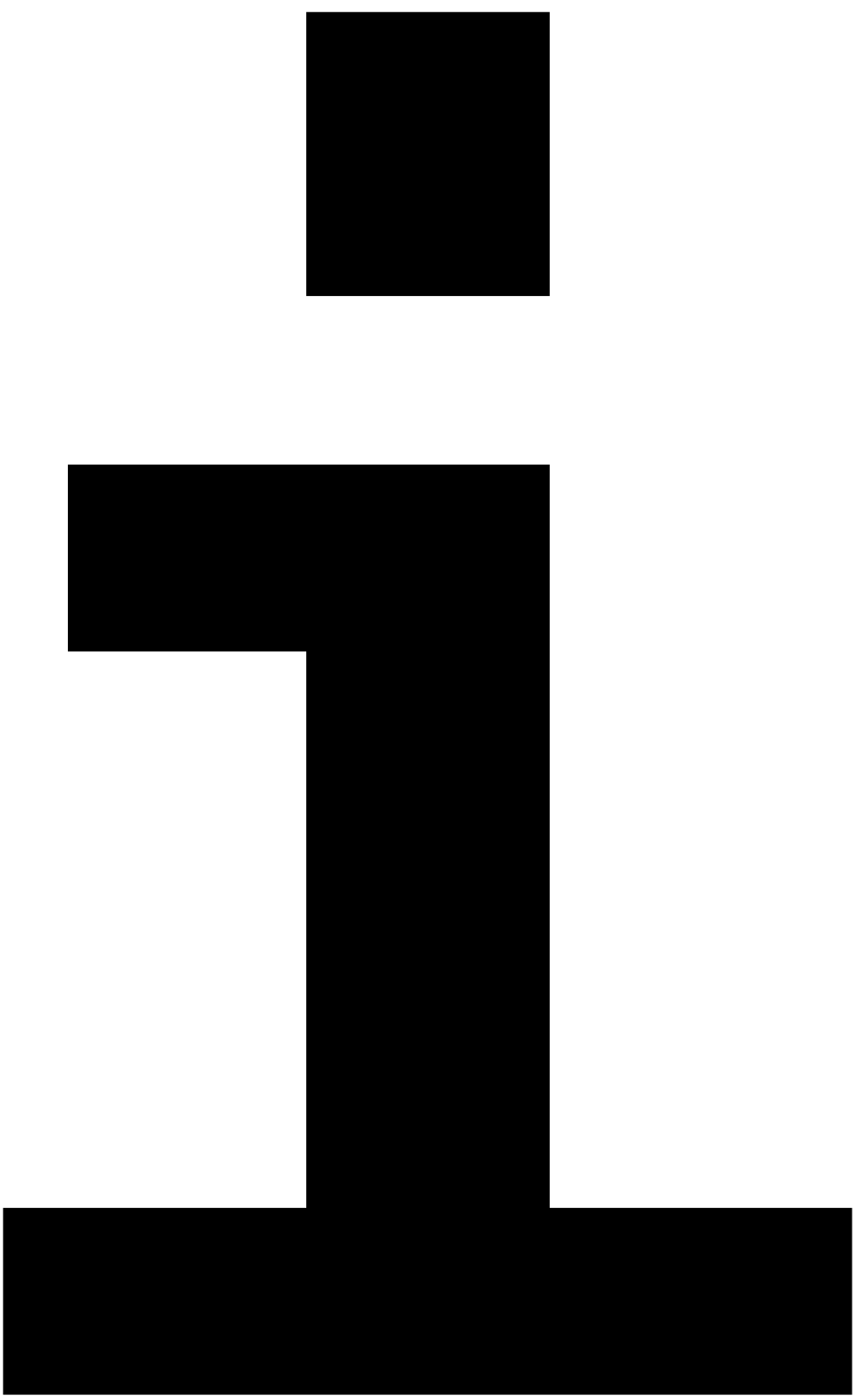


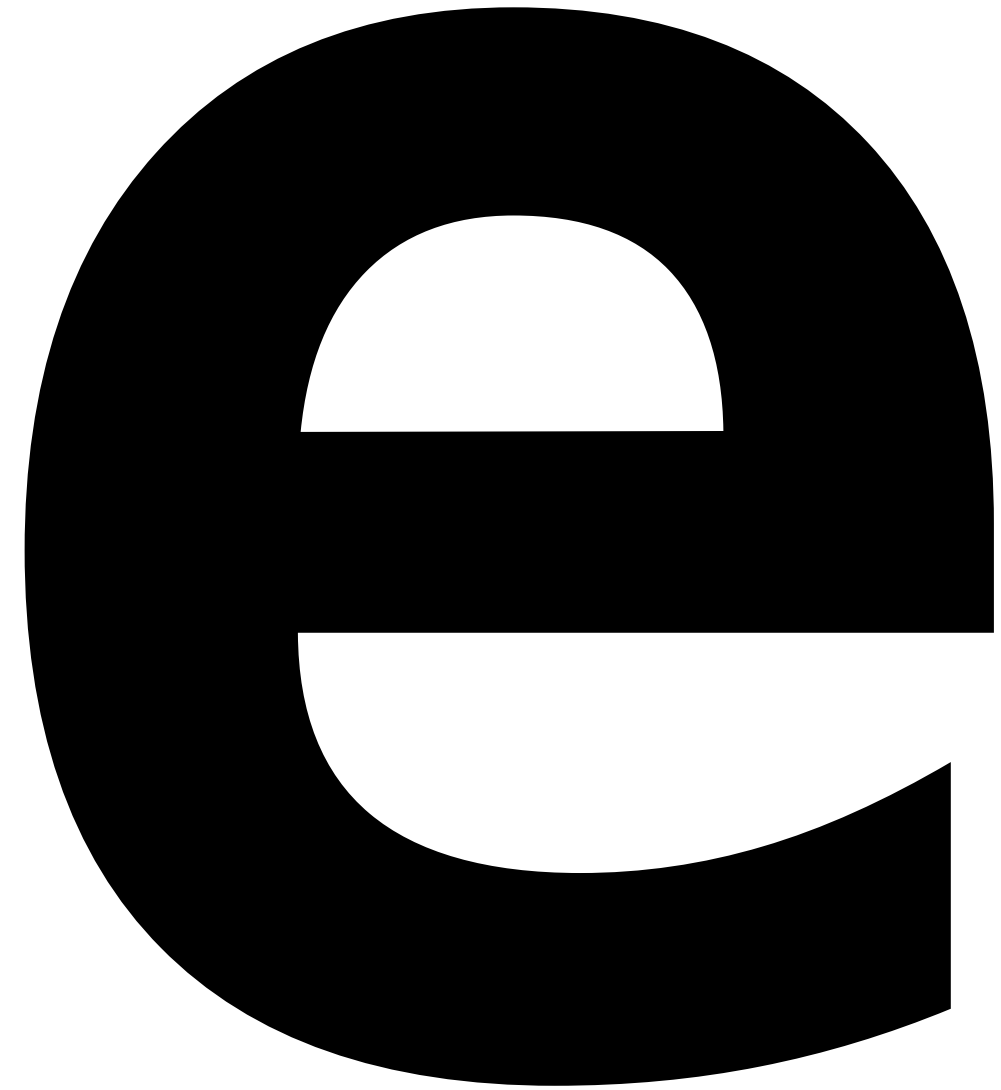


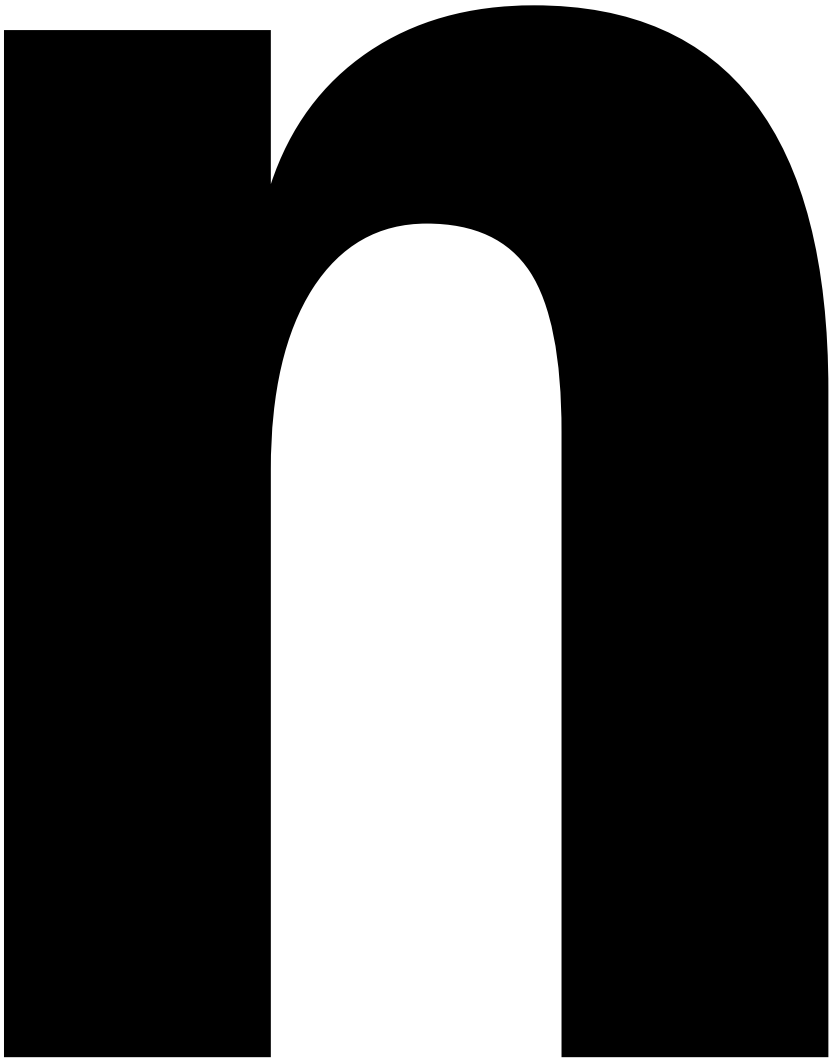




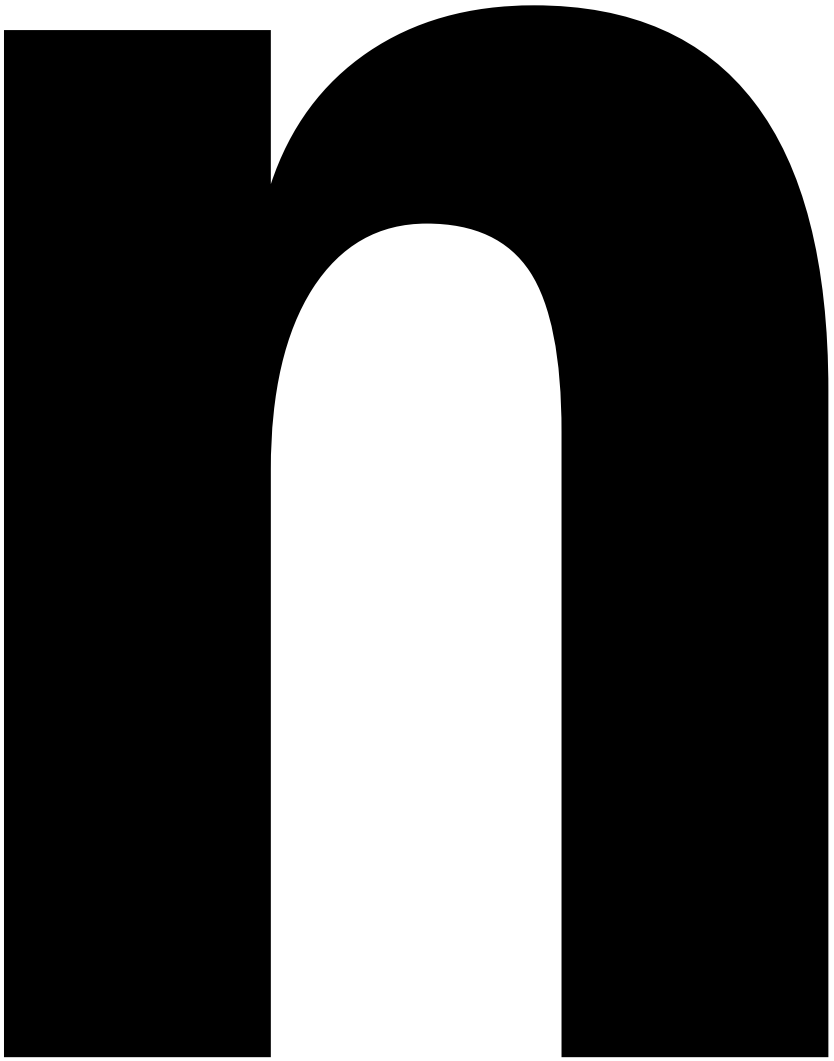
d



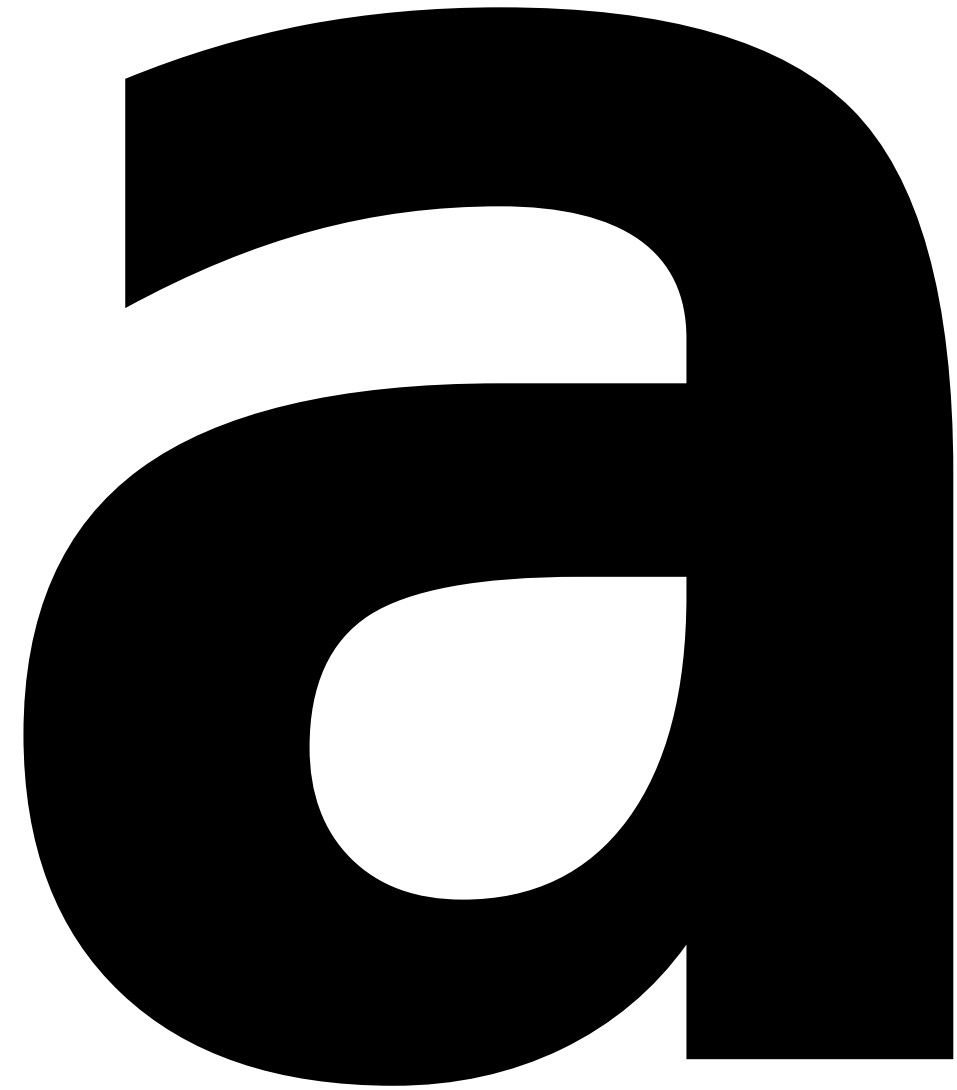


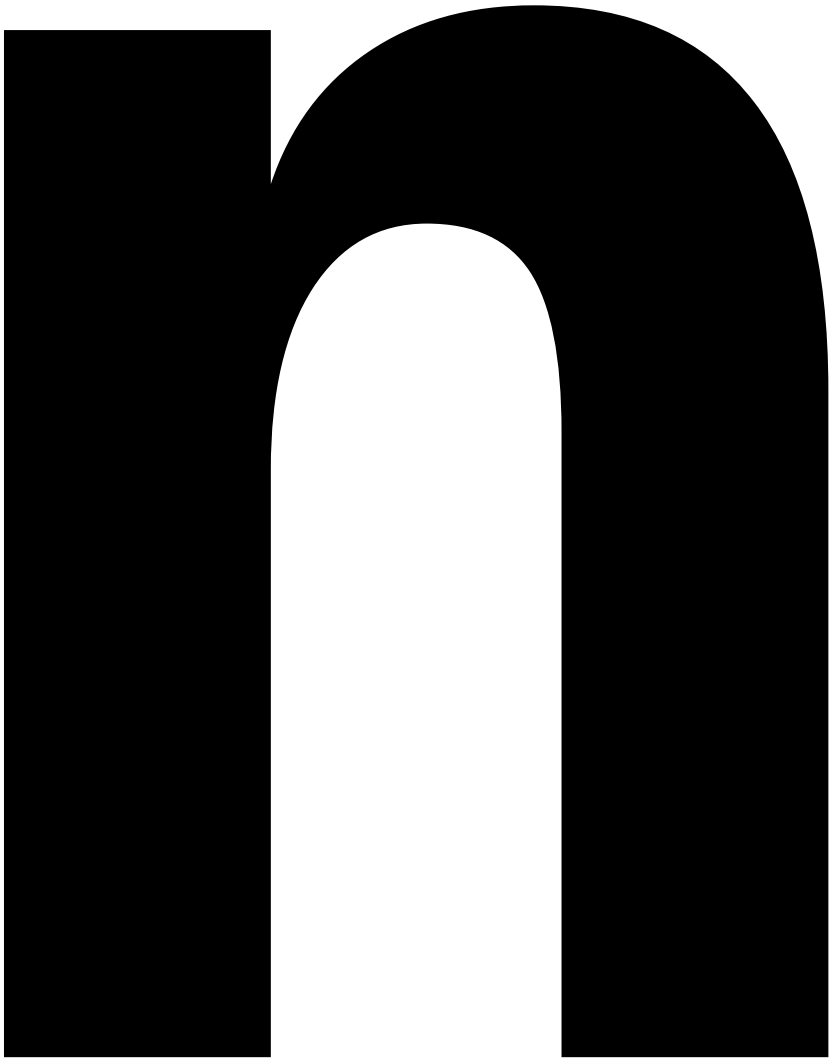


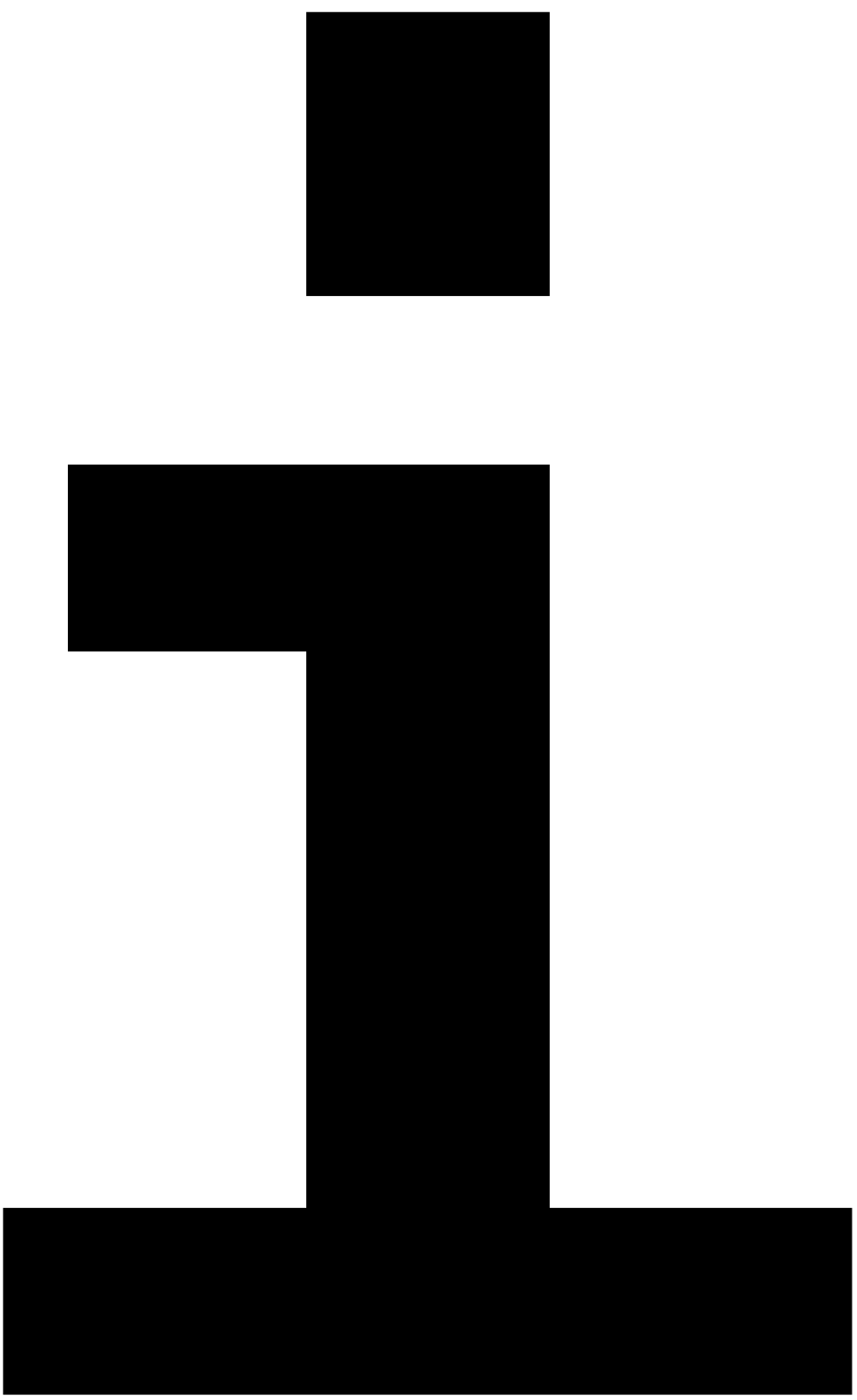
u

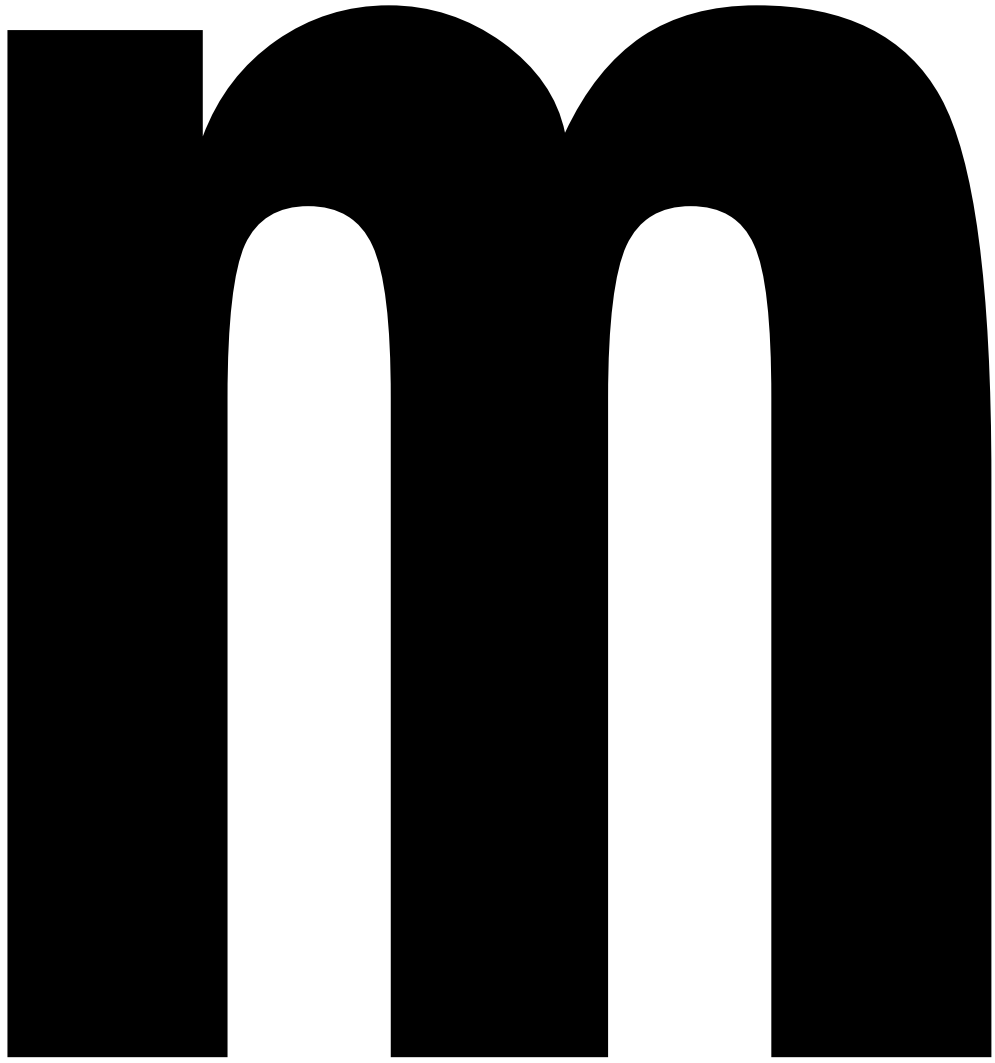


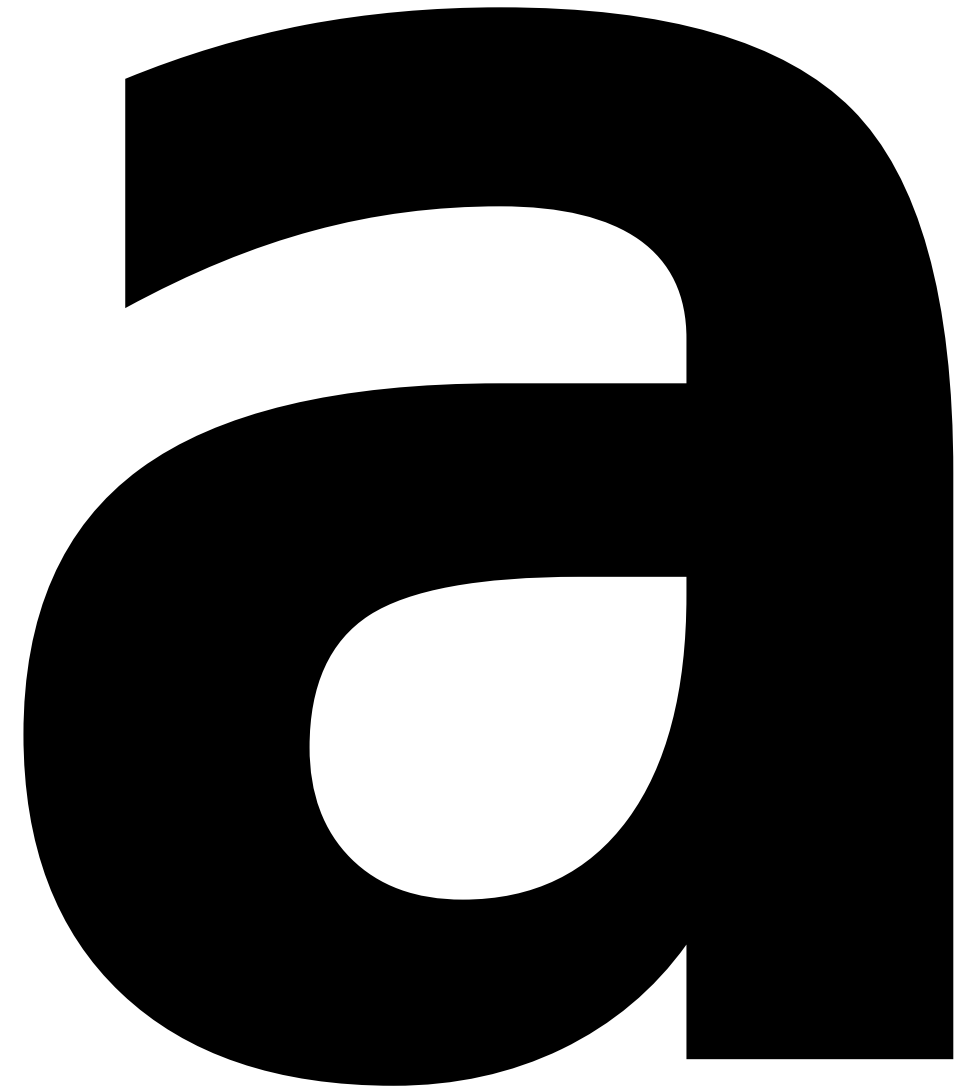
d

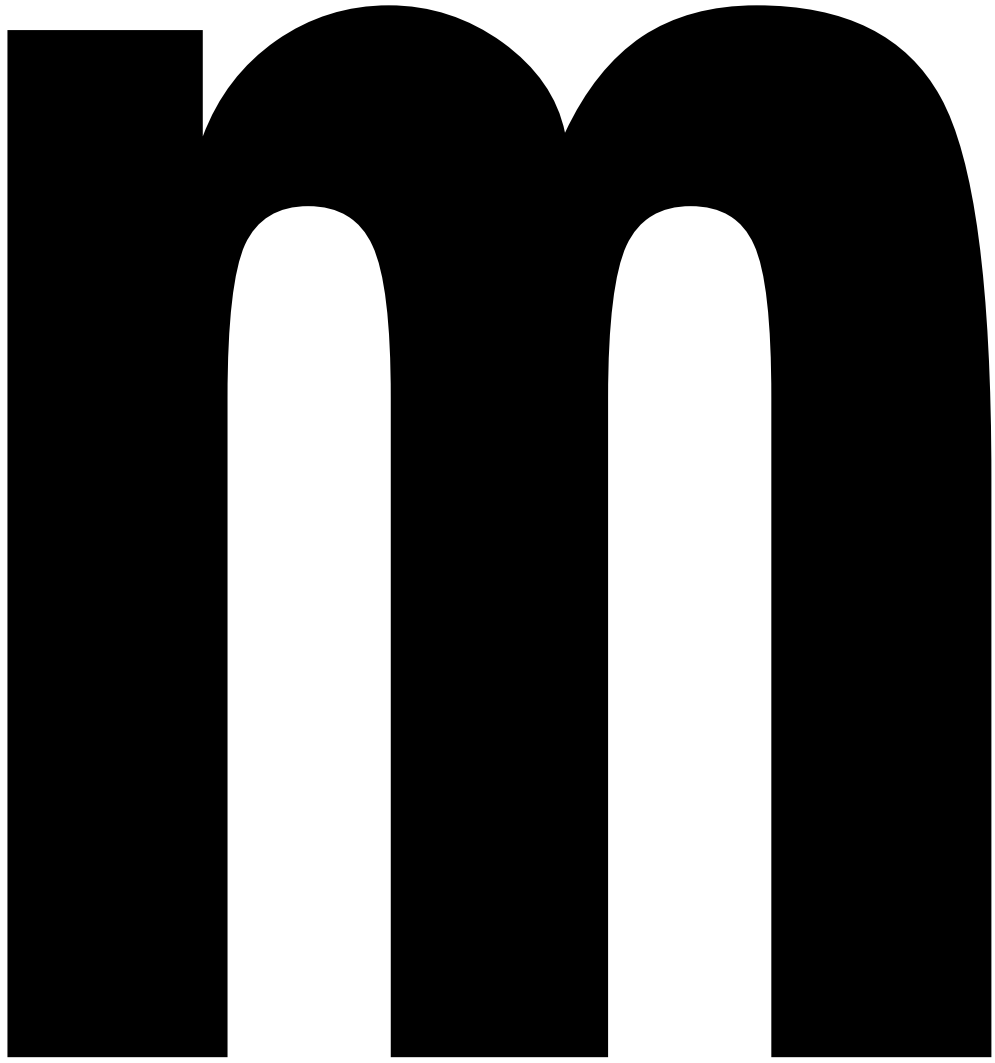


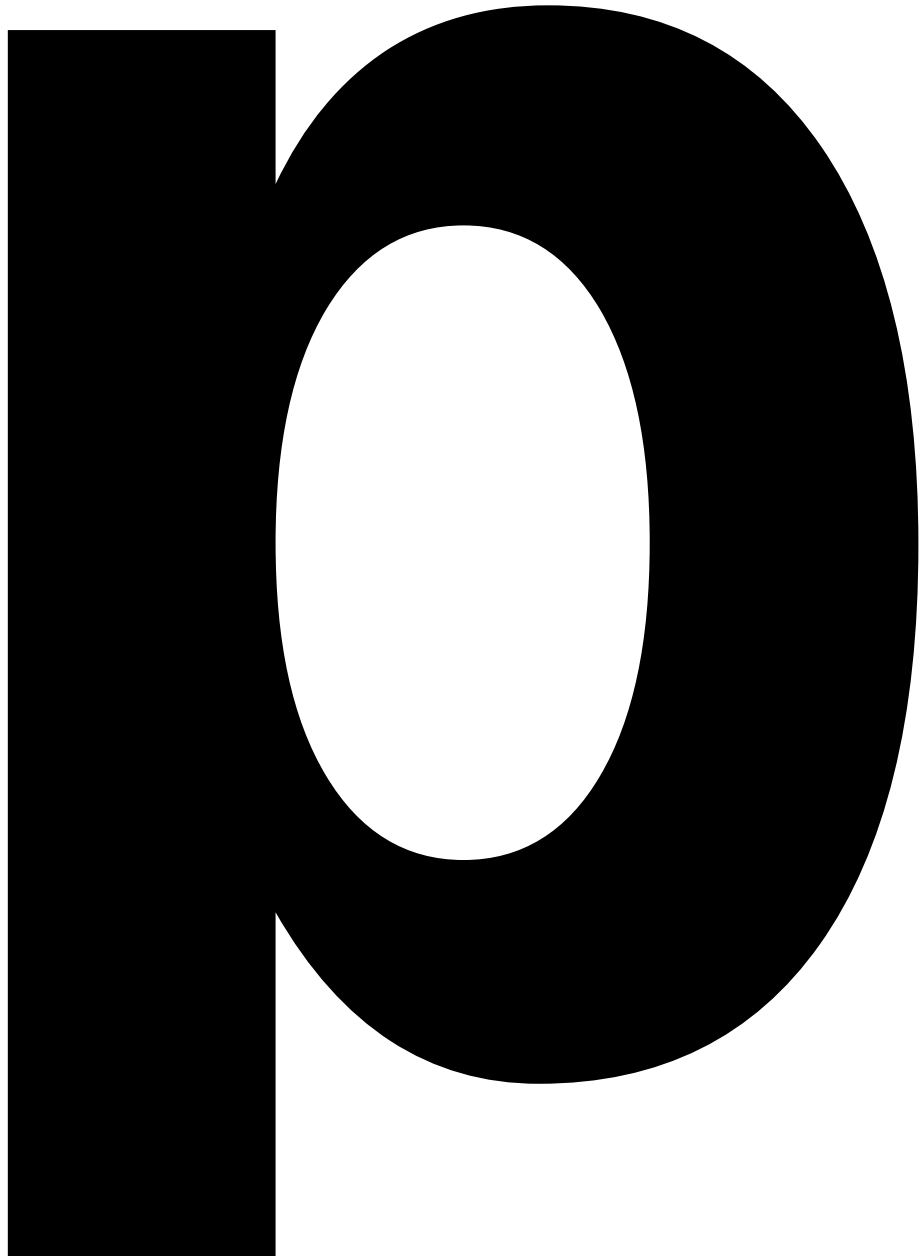


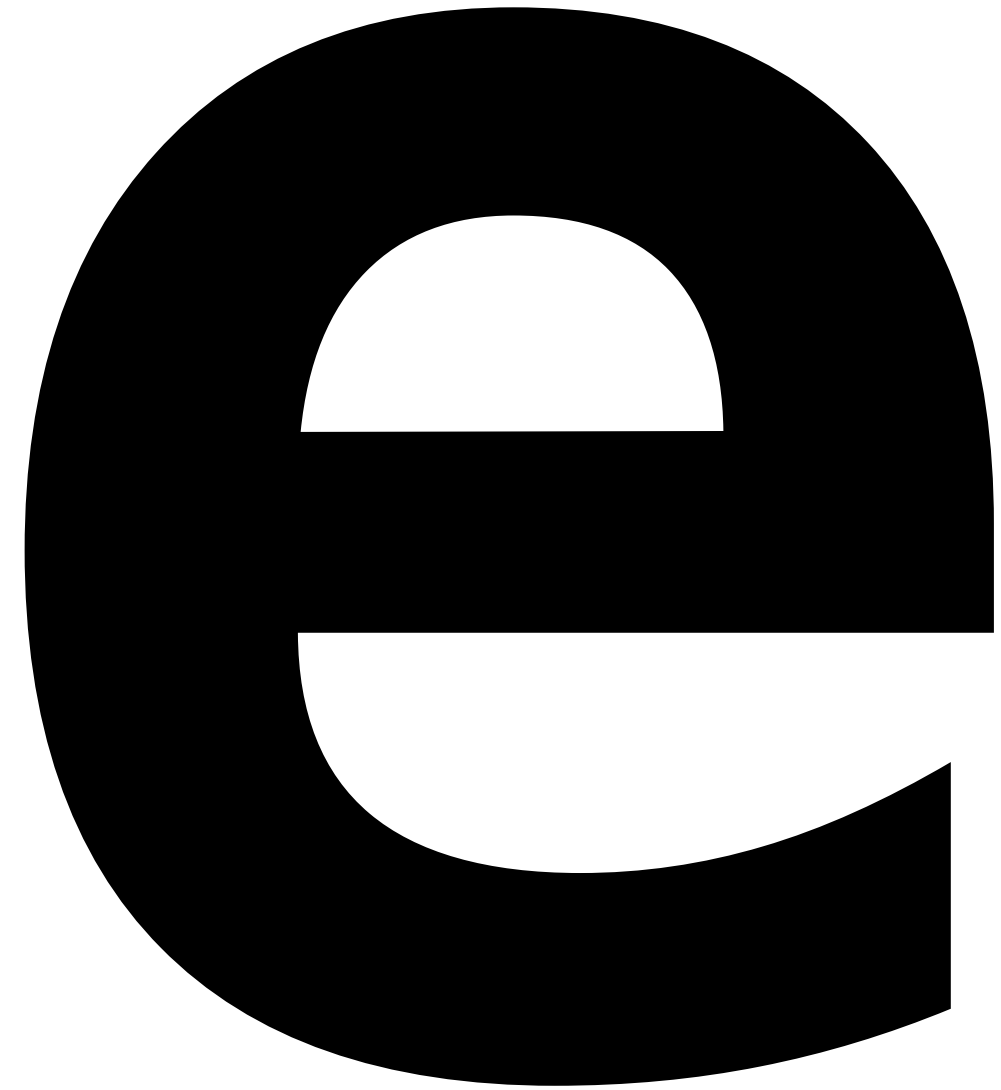


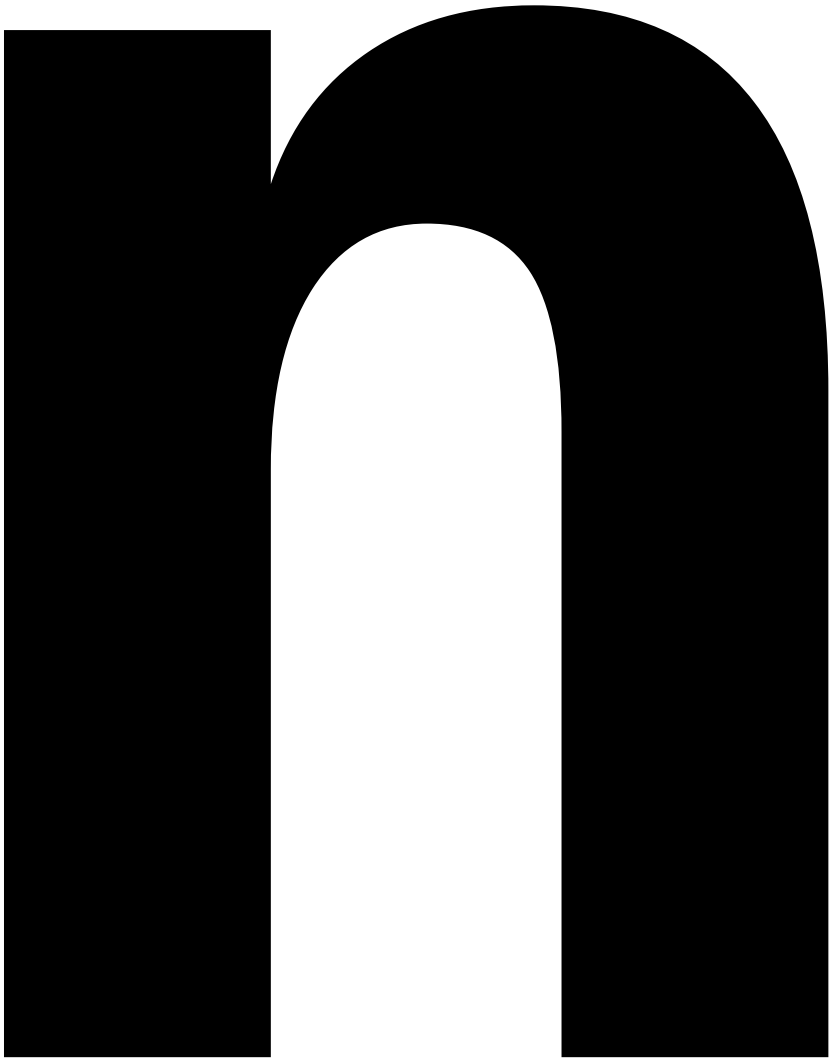


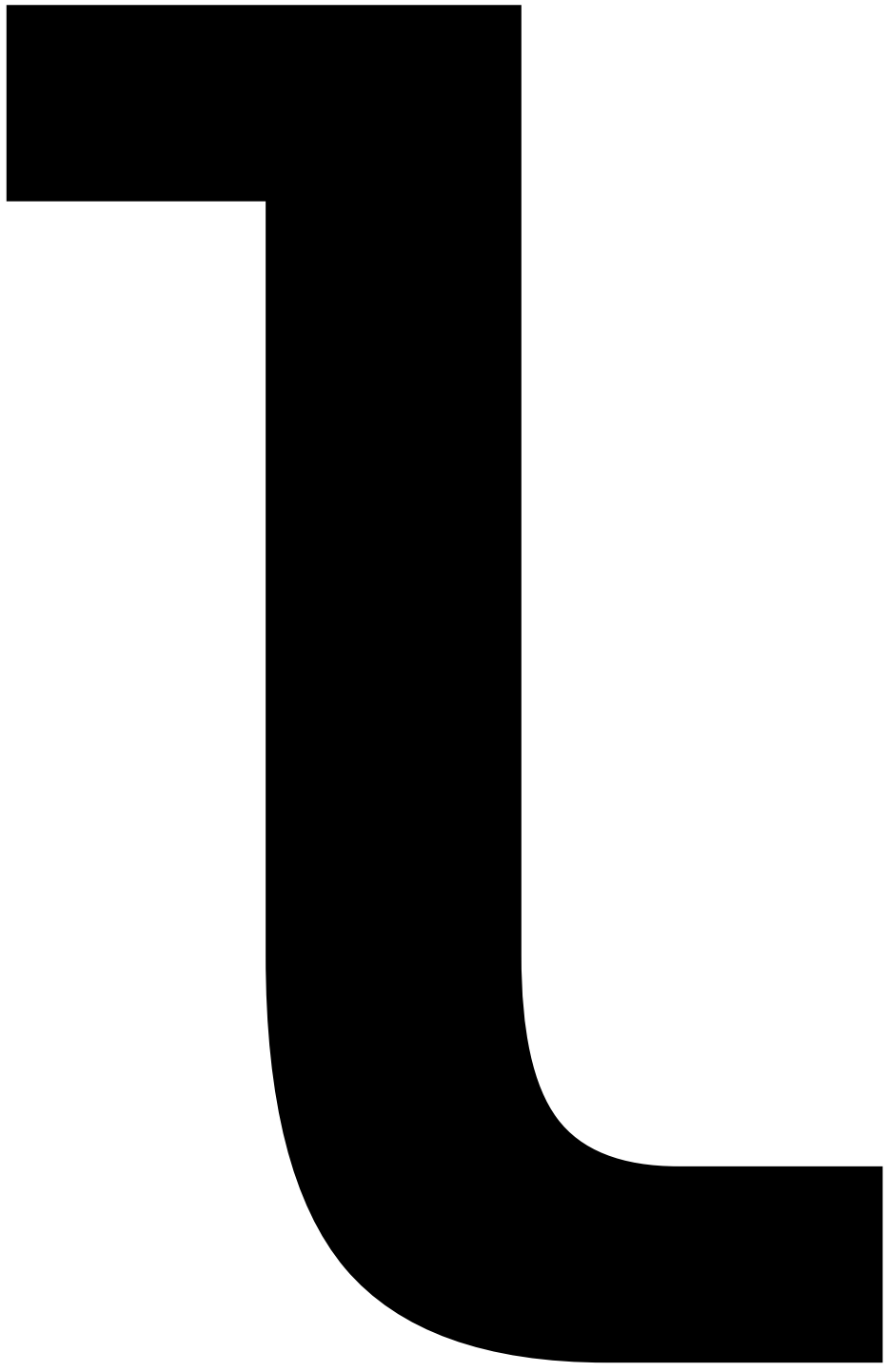


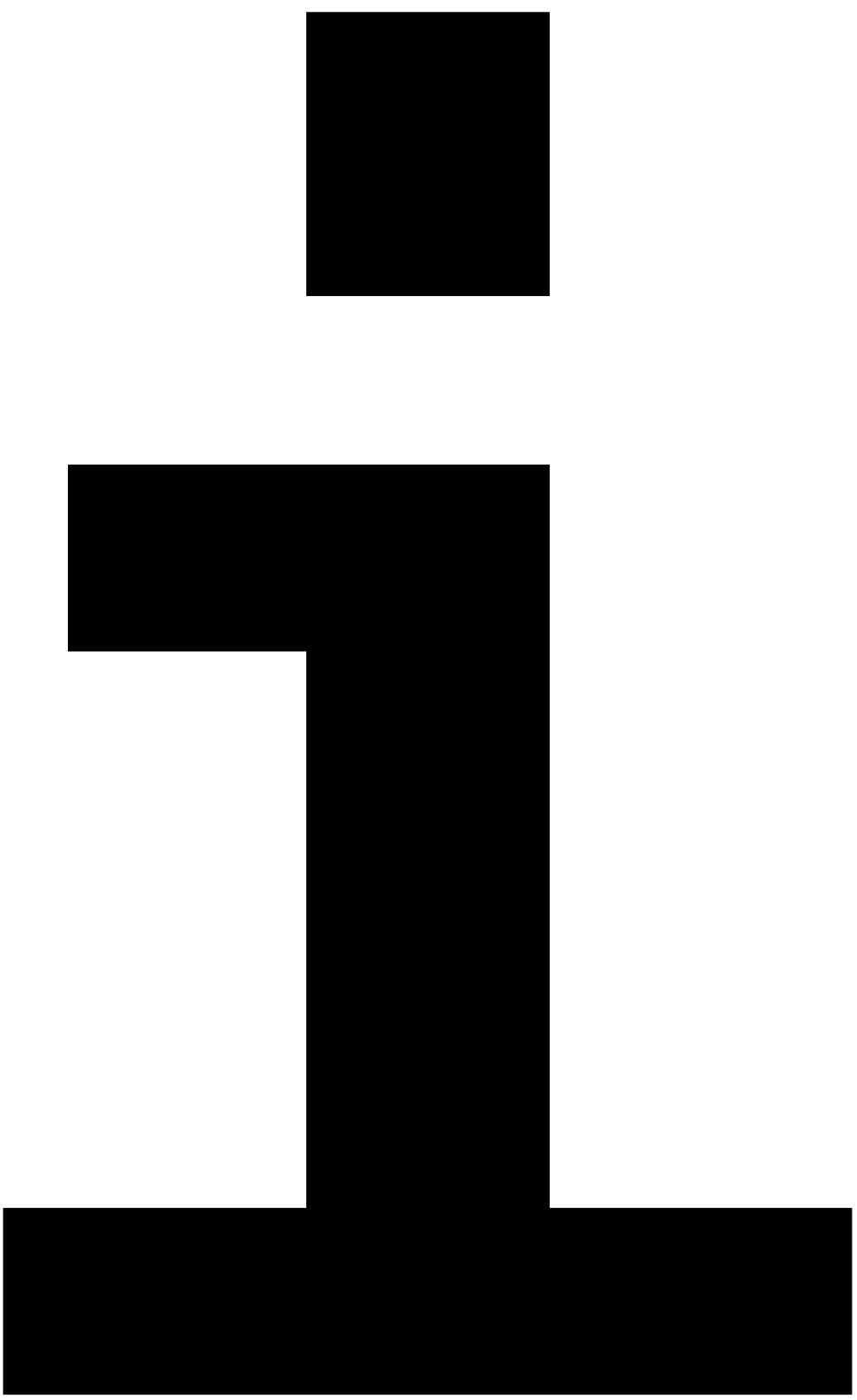


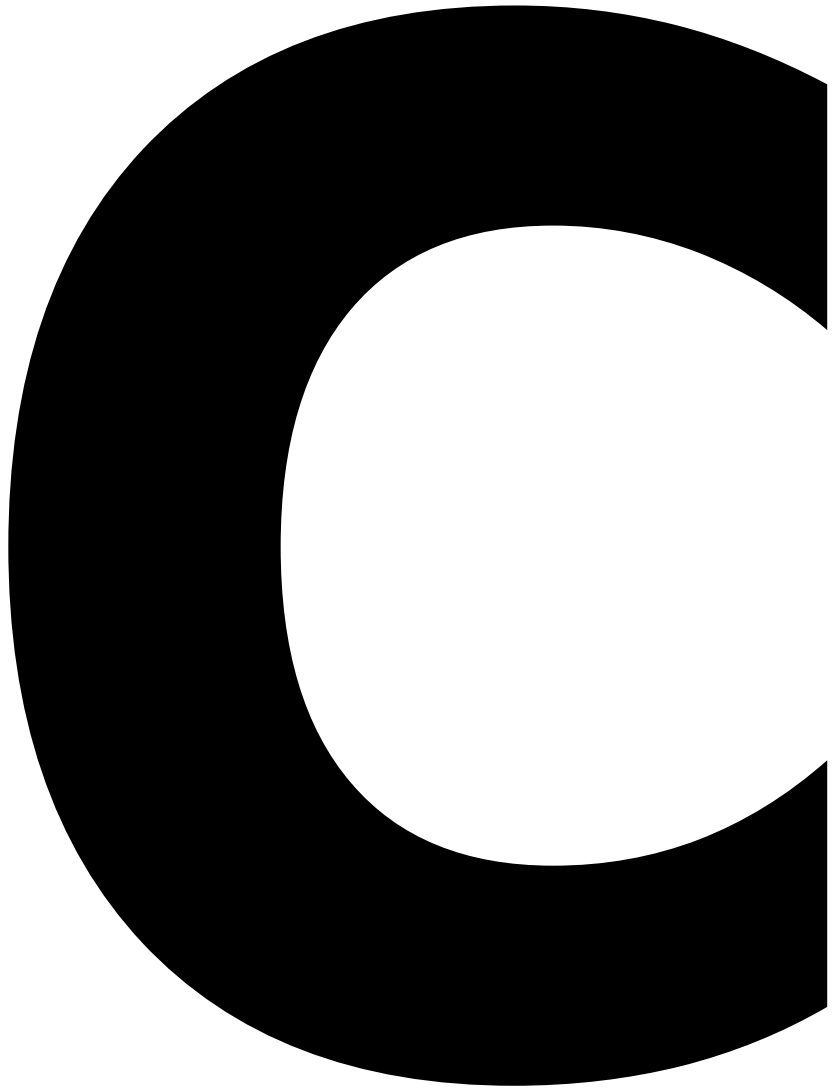


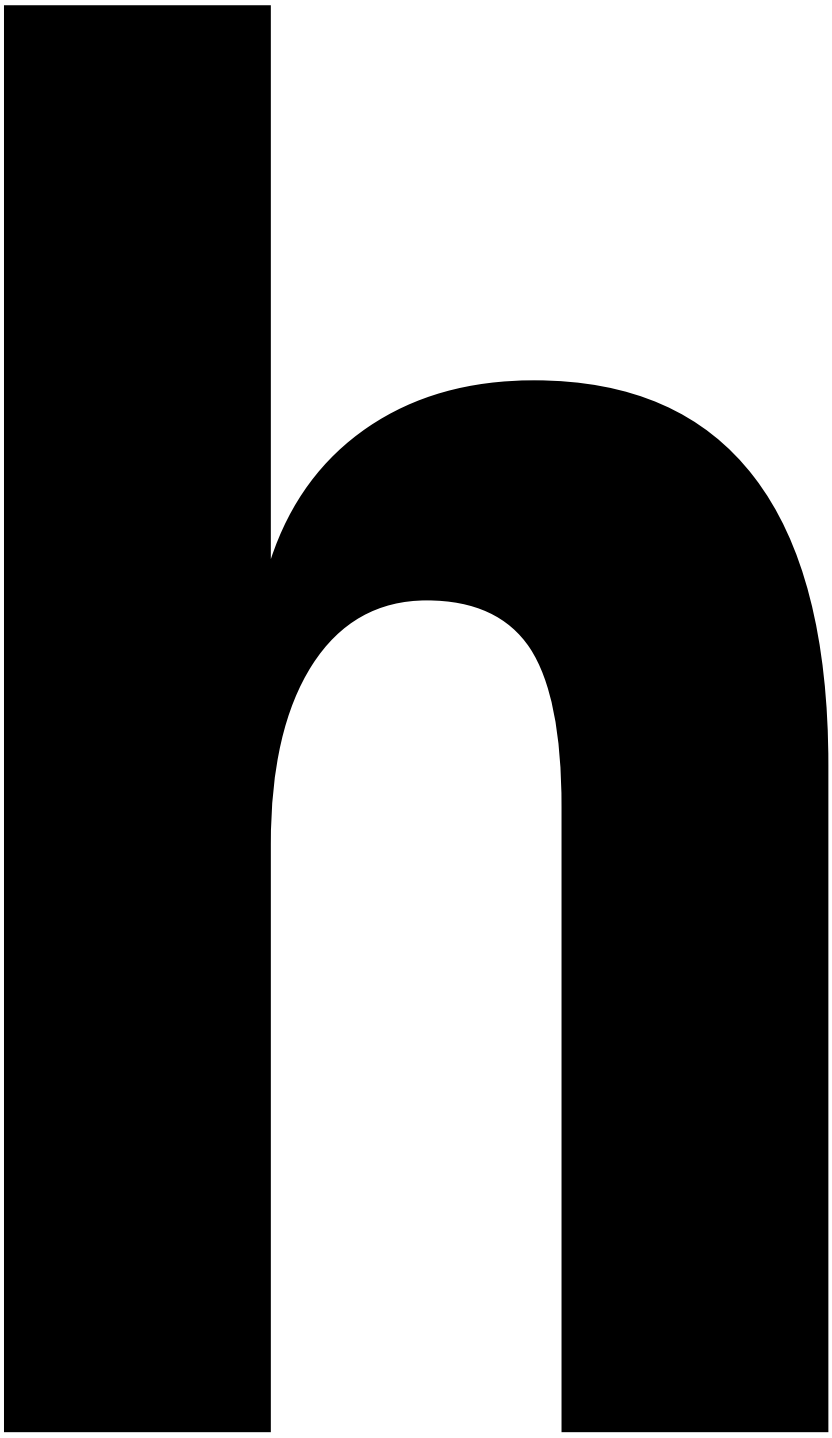


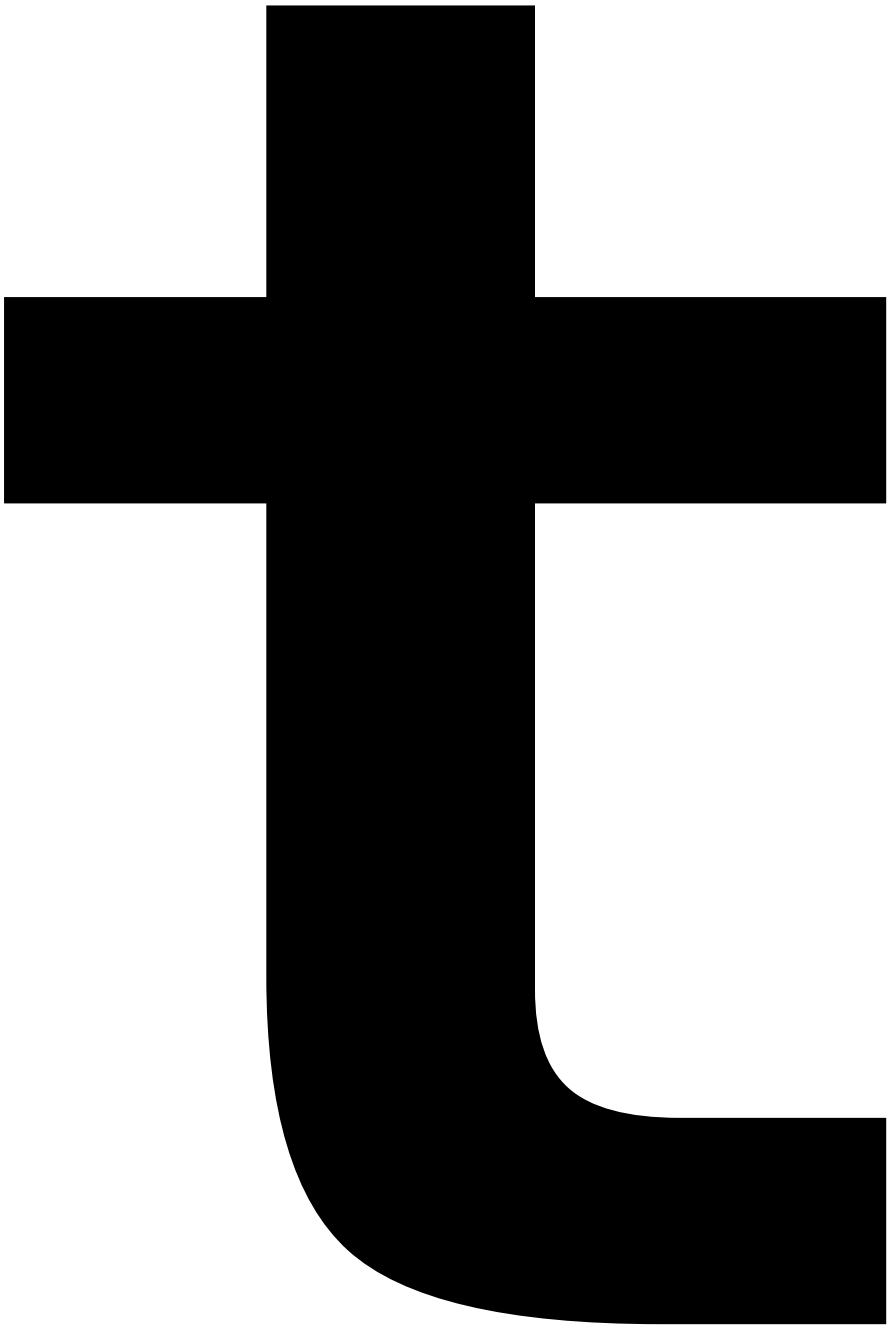




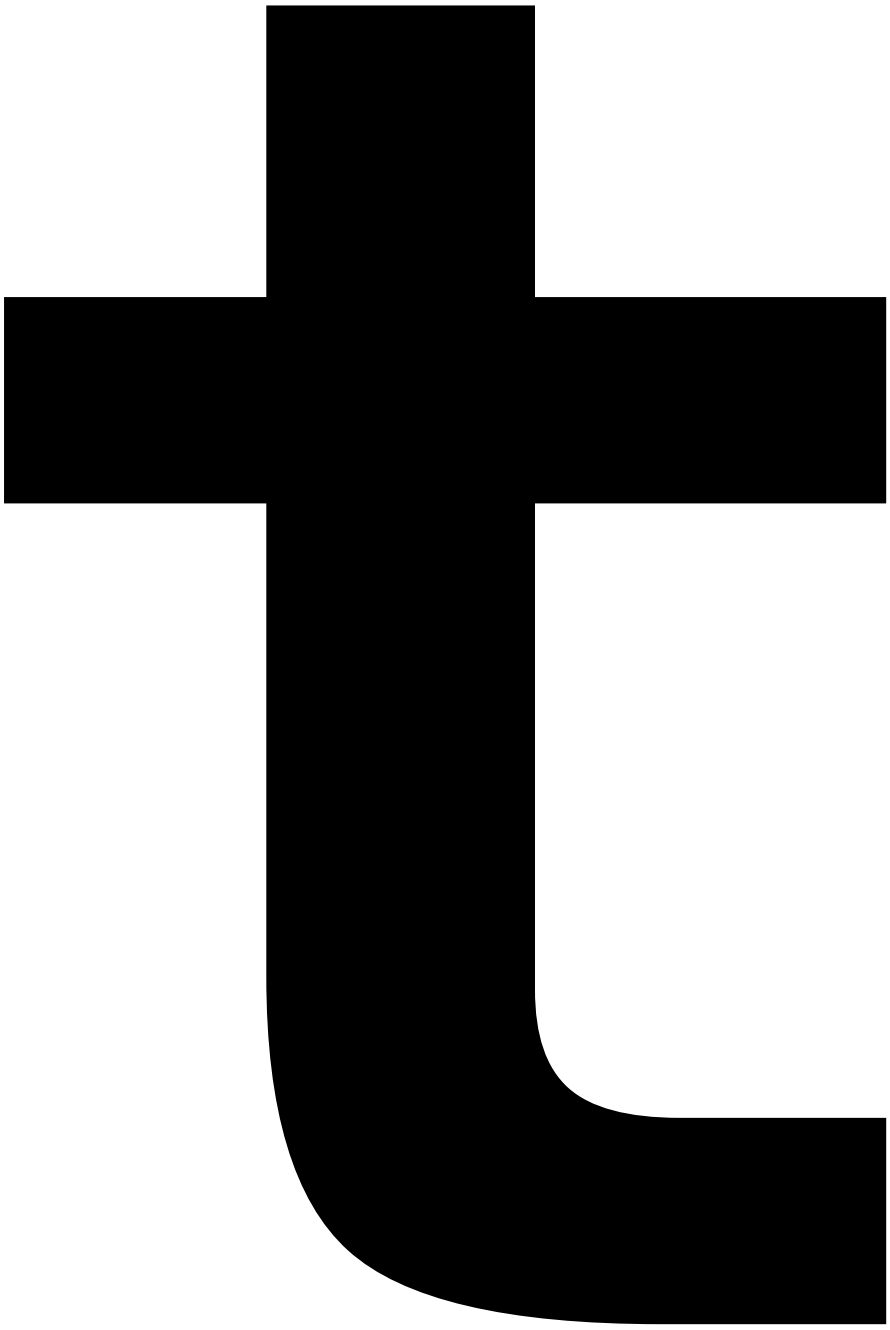


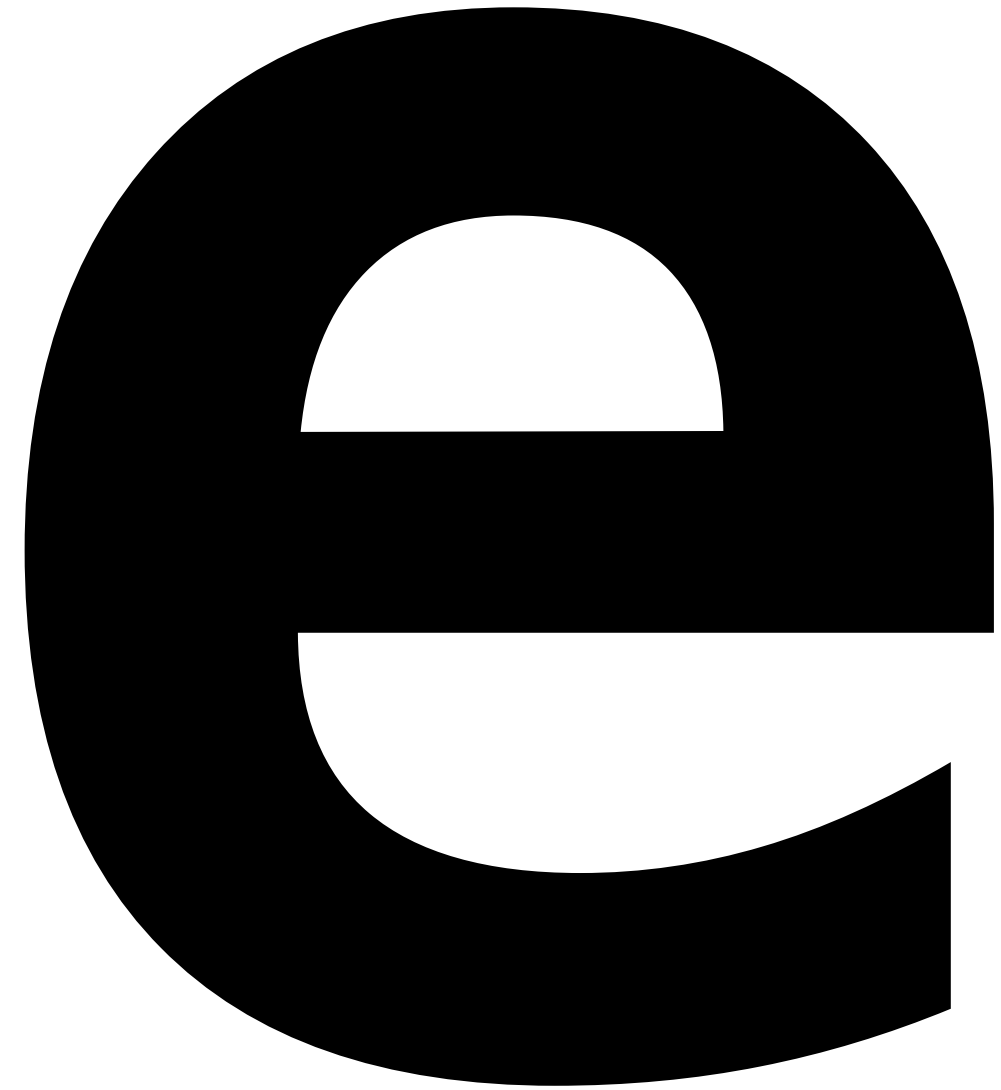


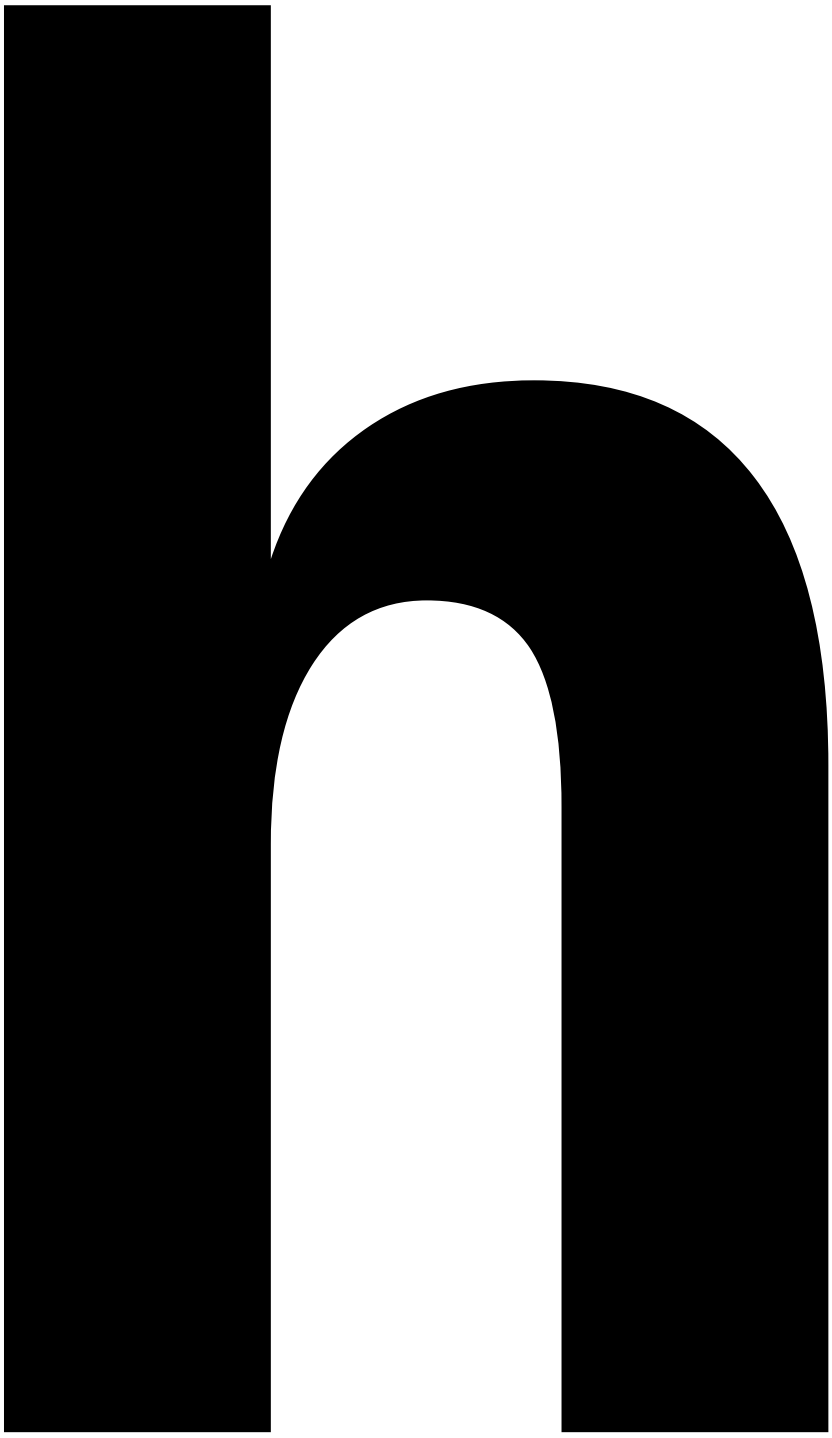


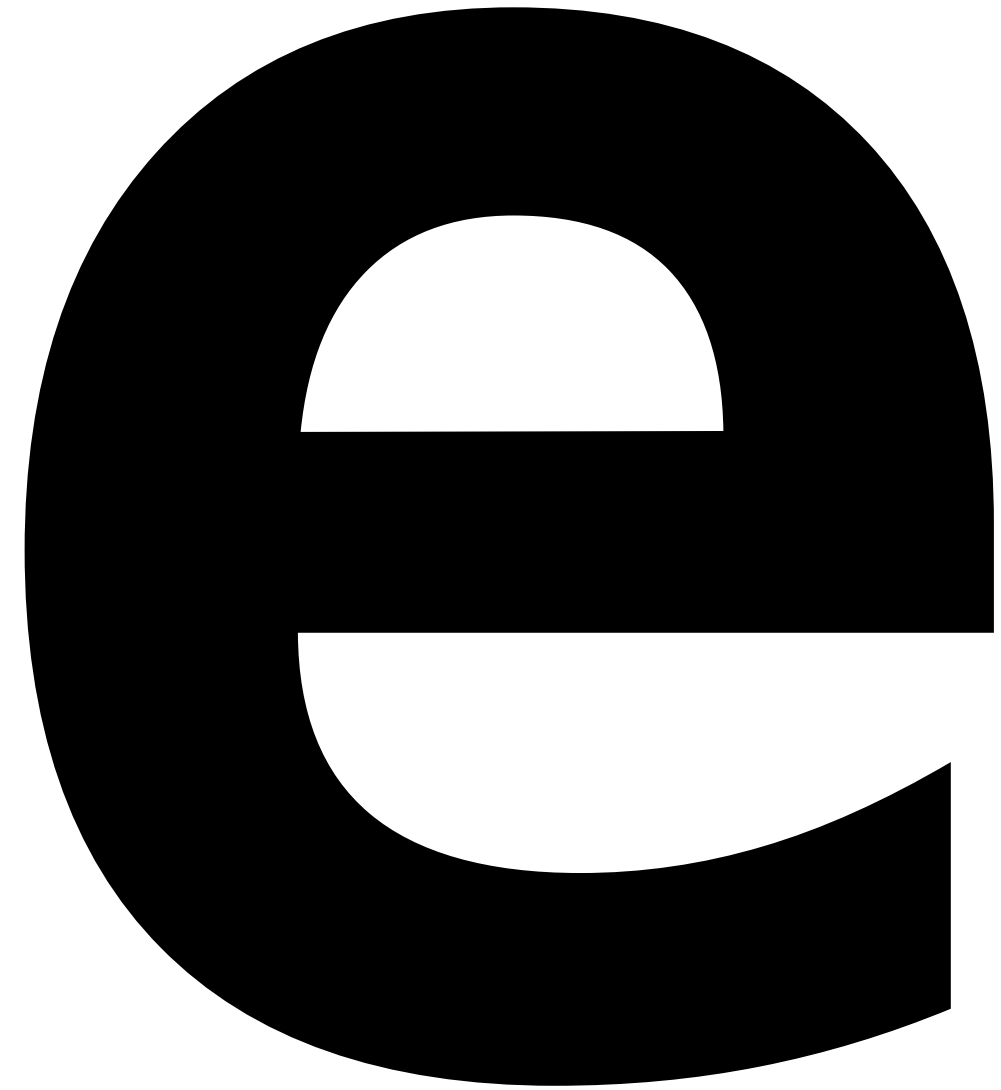


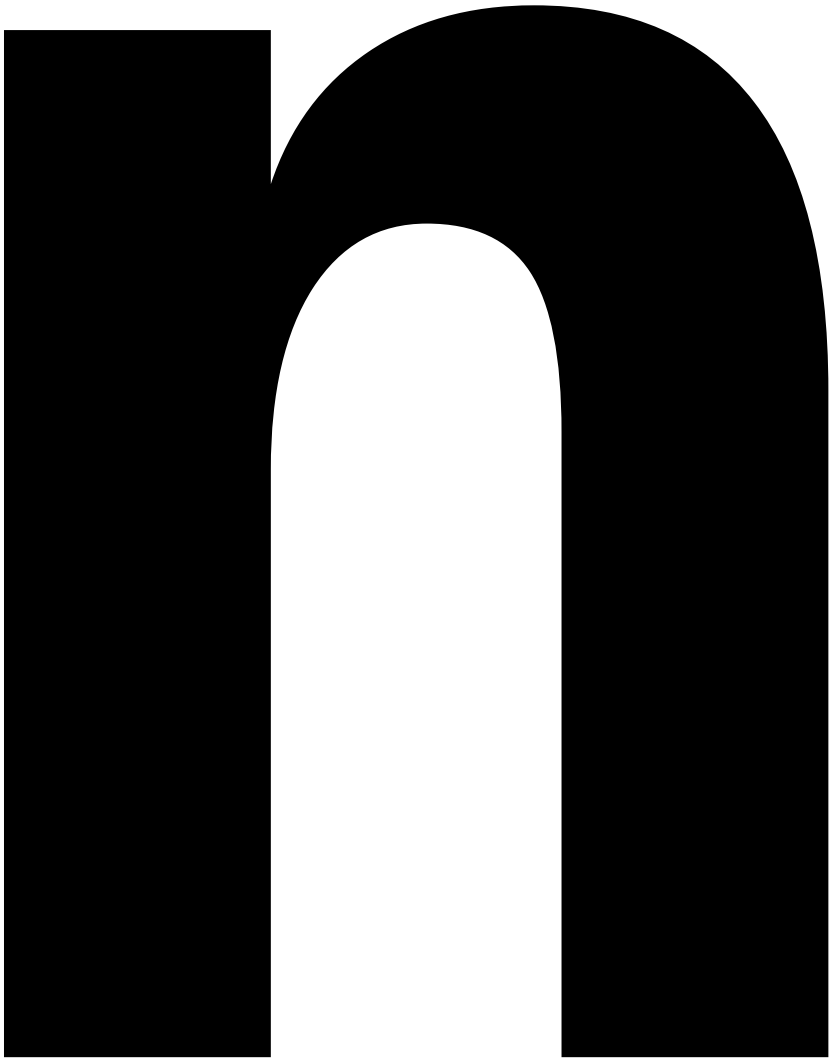
S



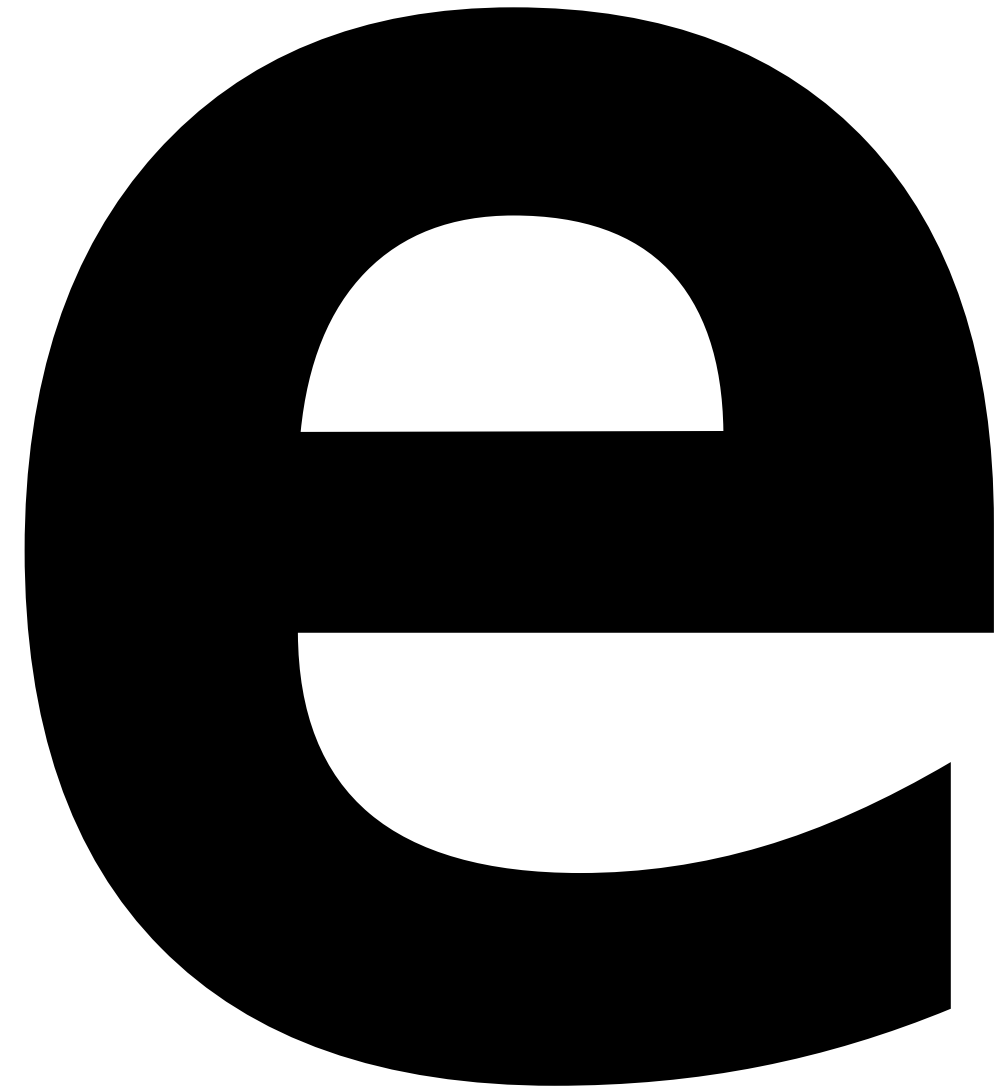


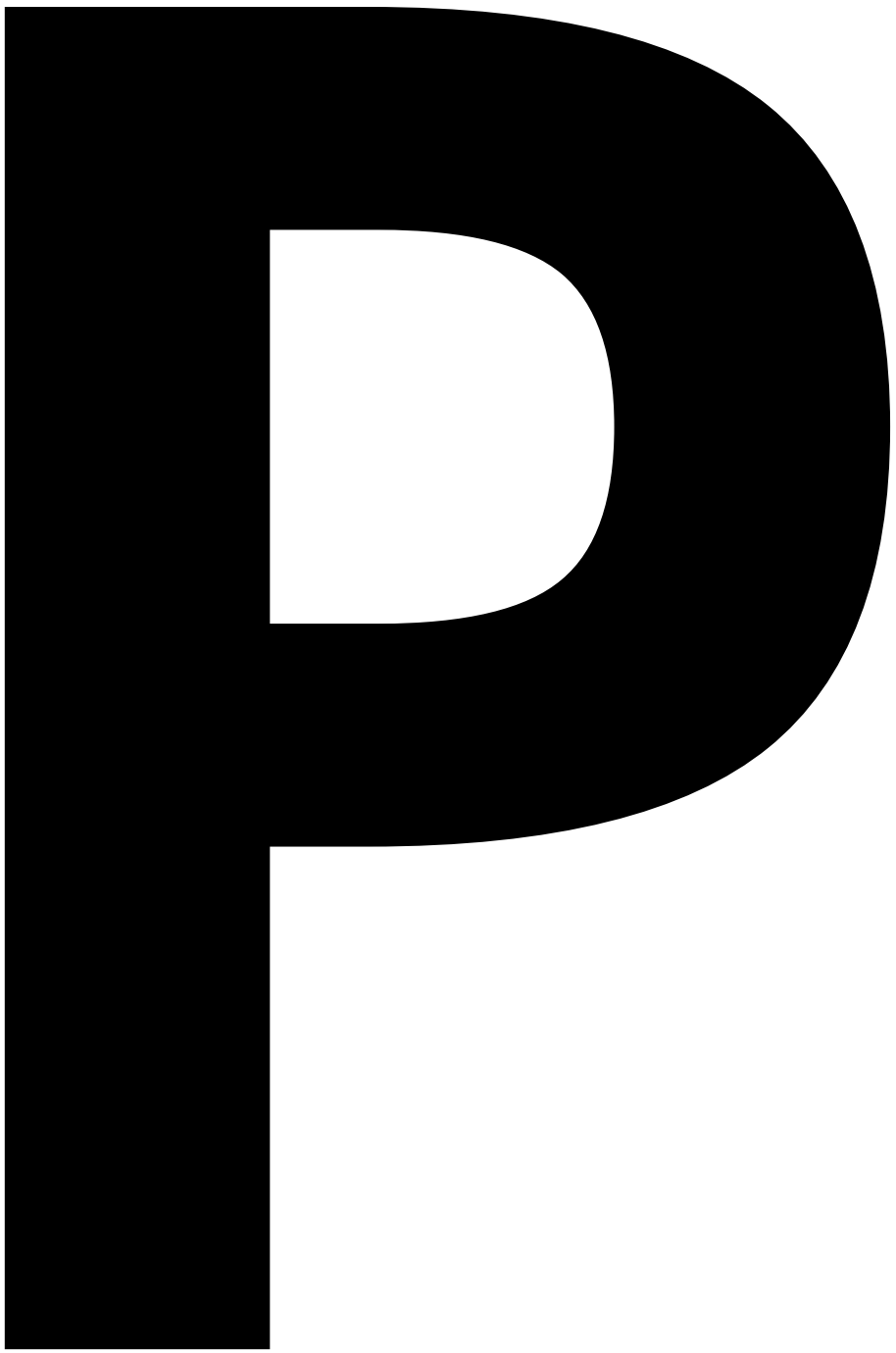


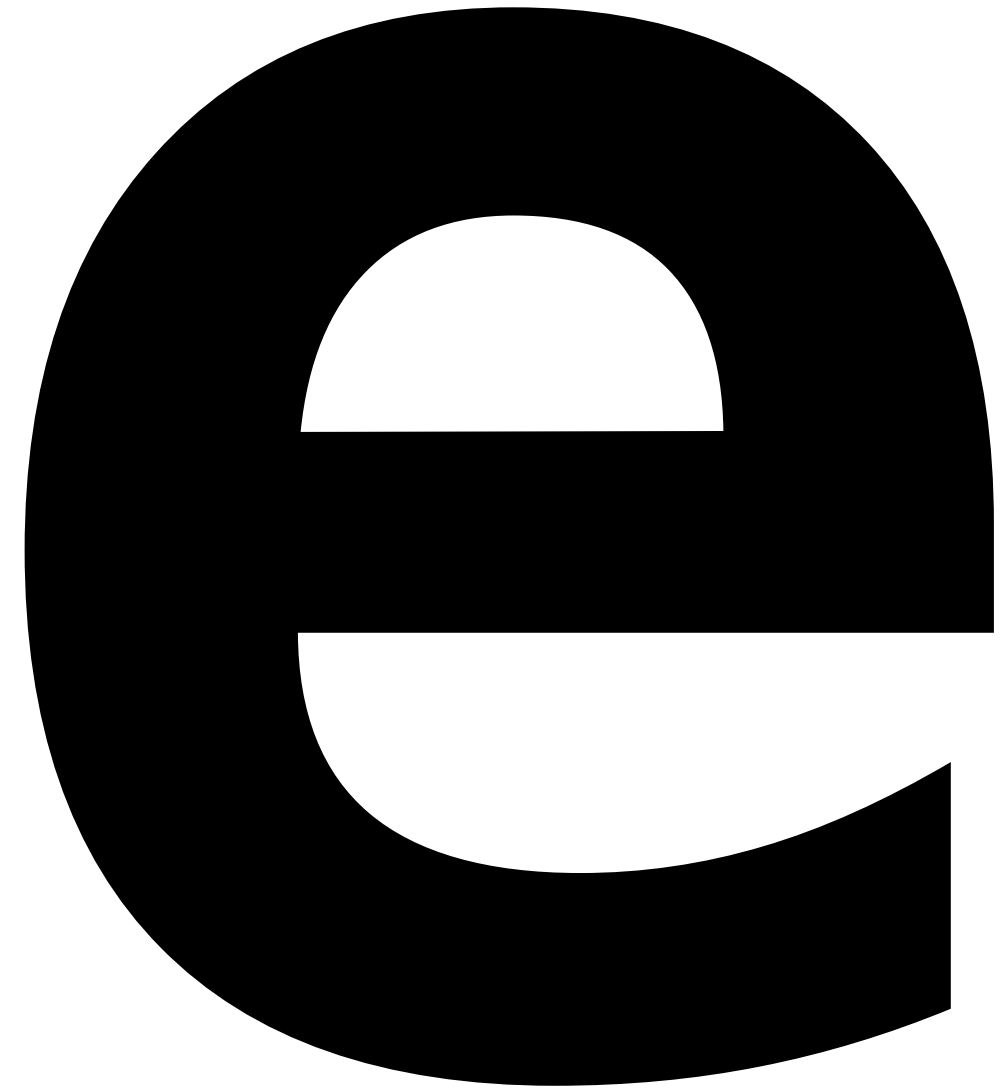


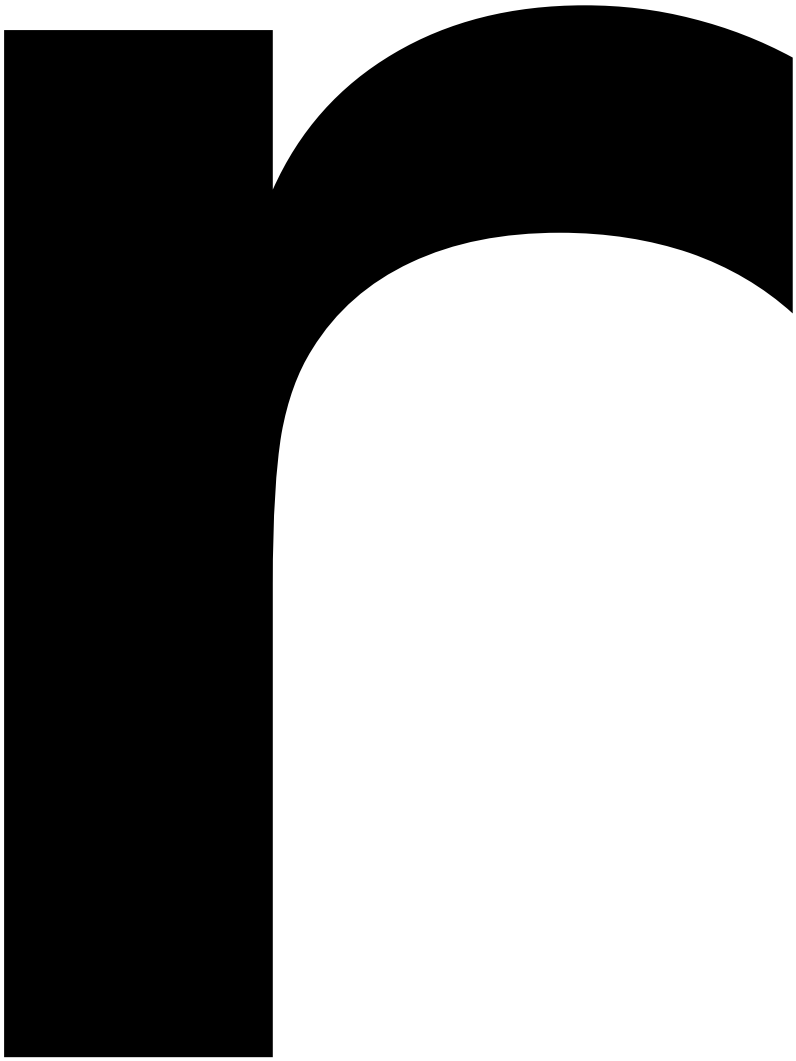


d

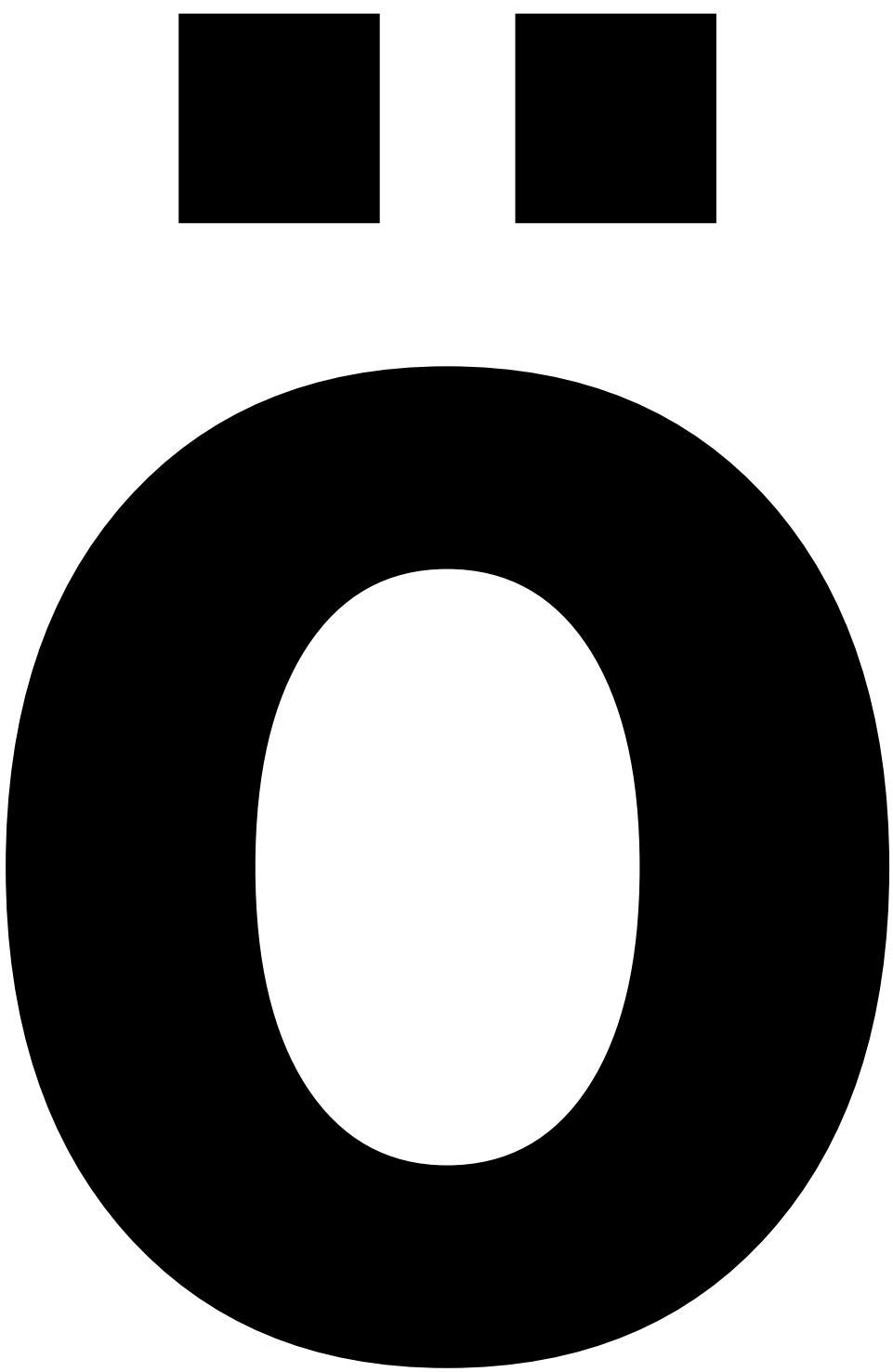


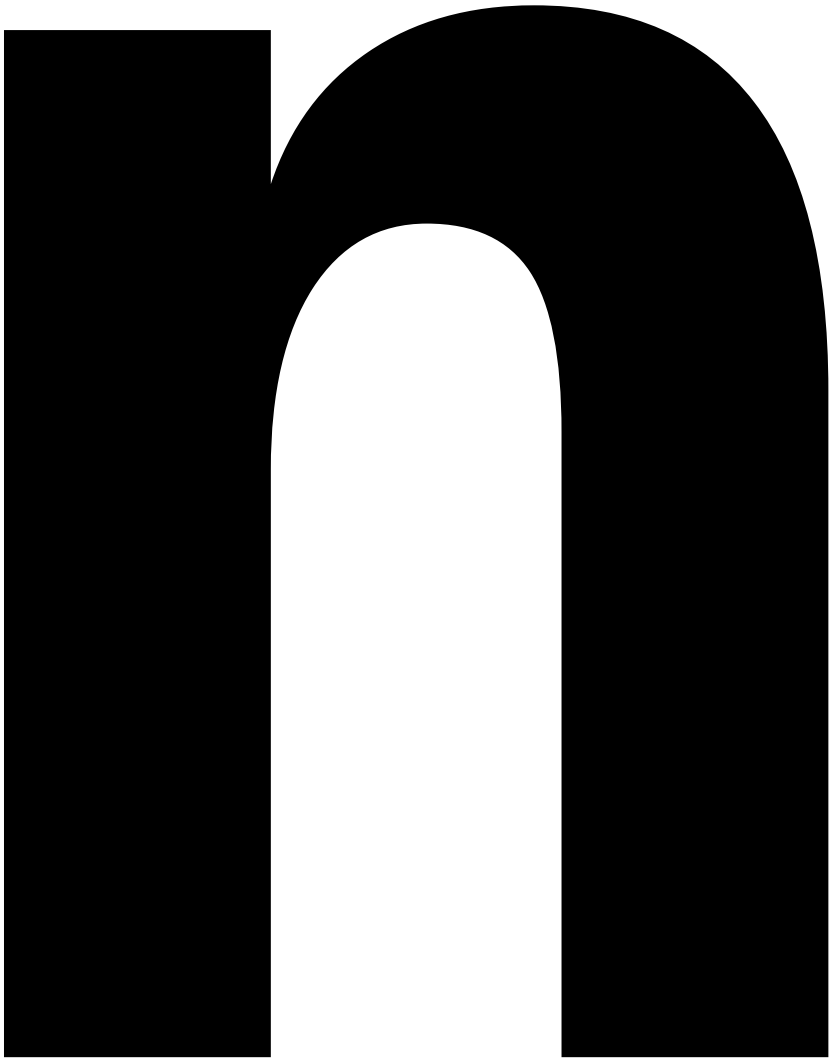


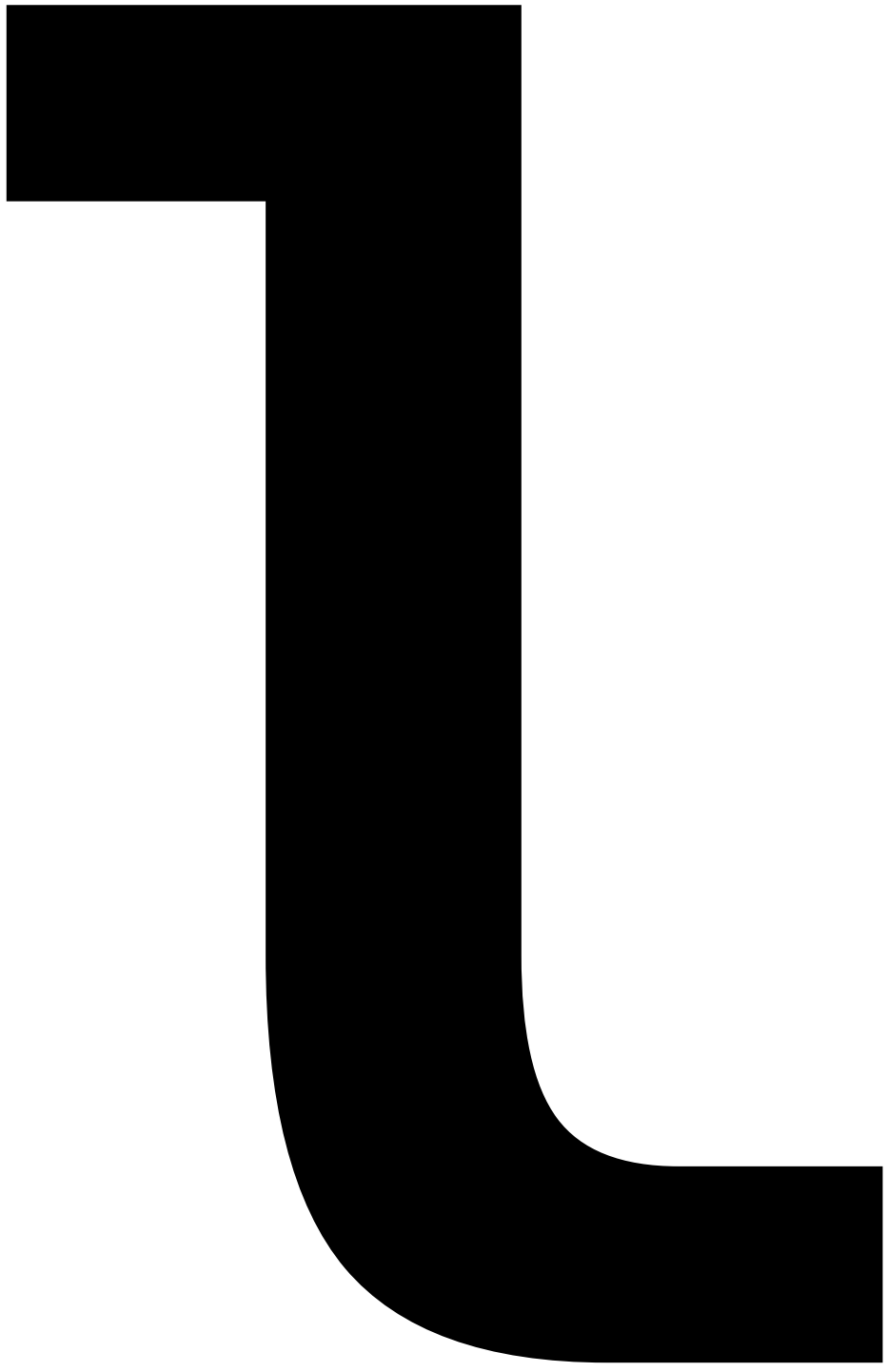


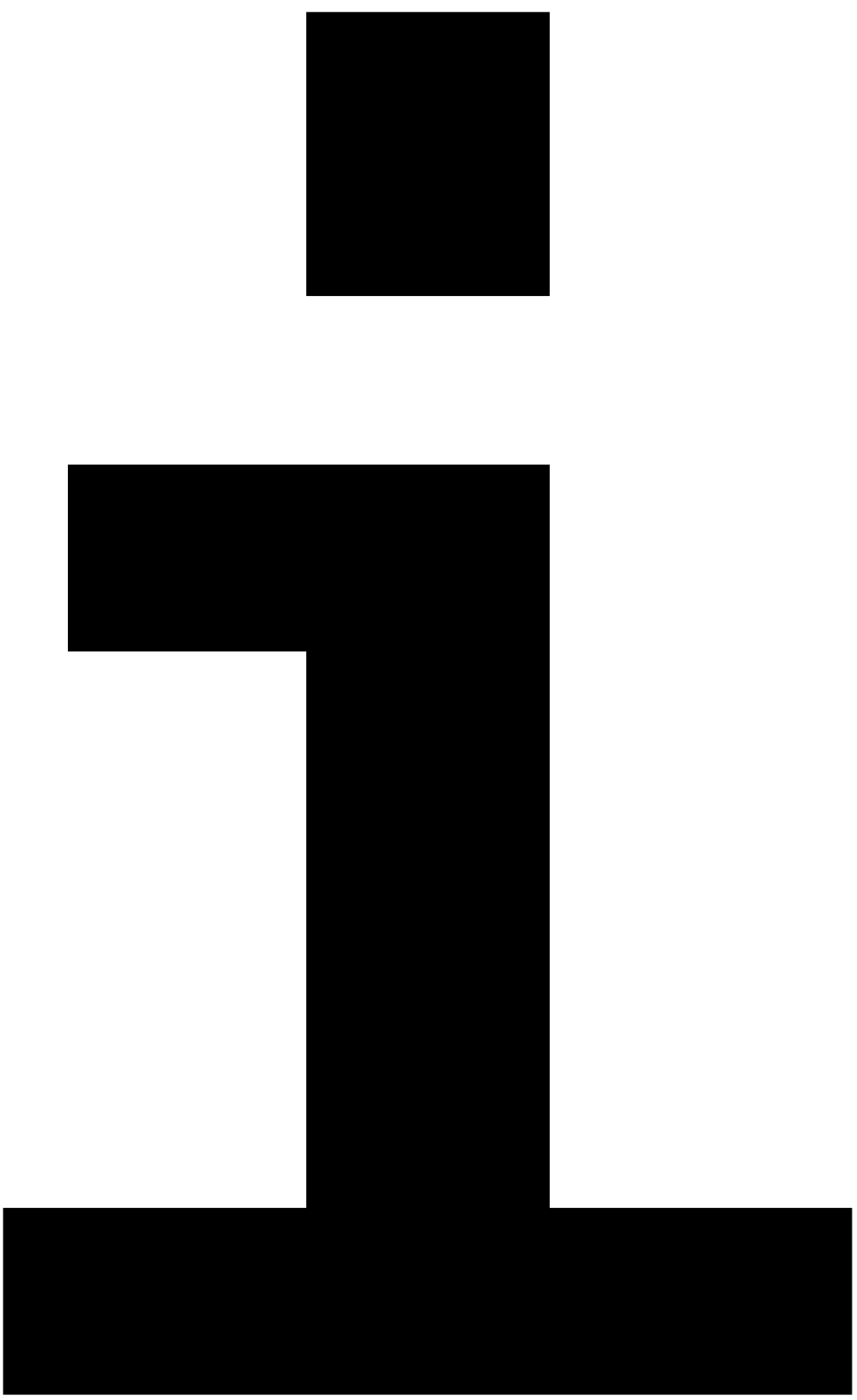


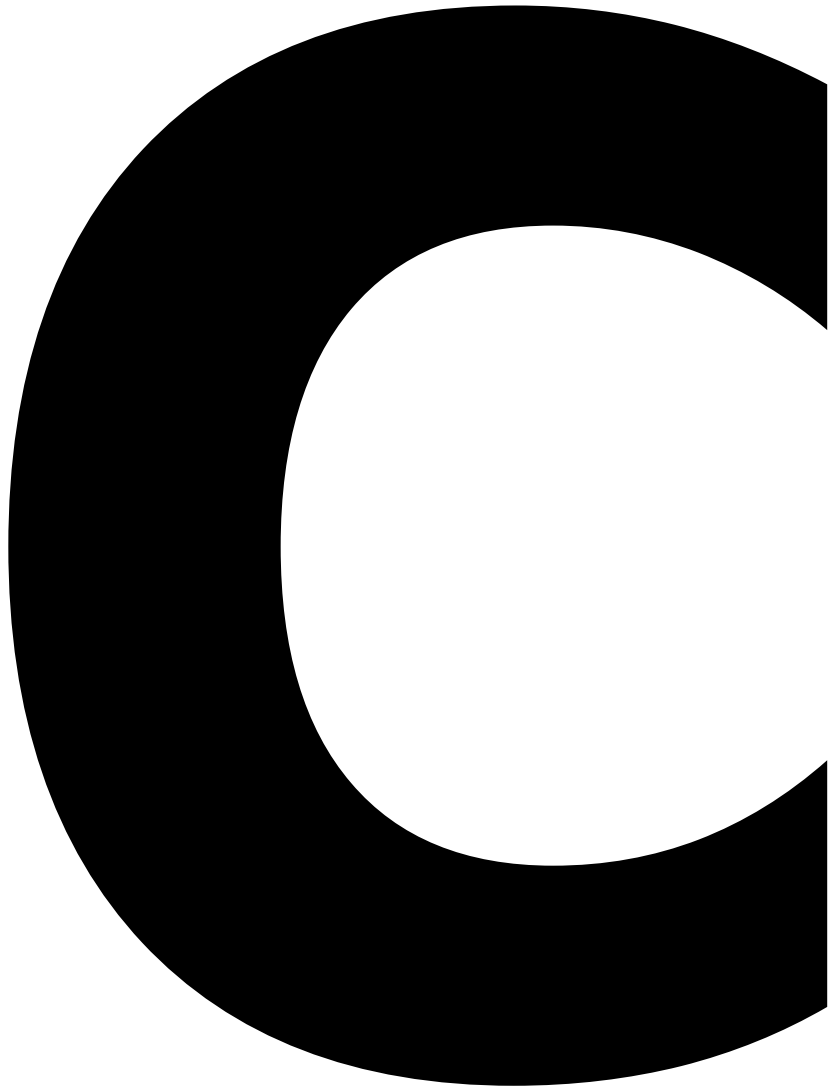
S

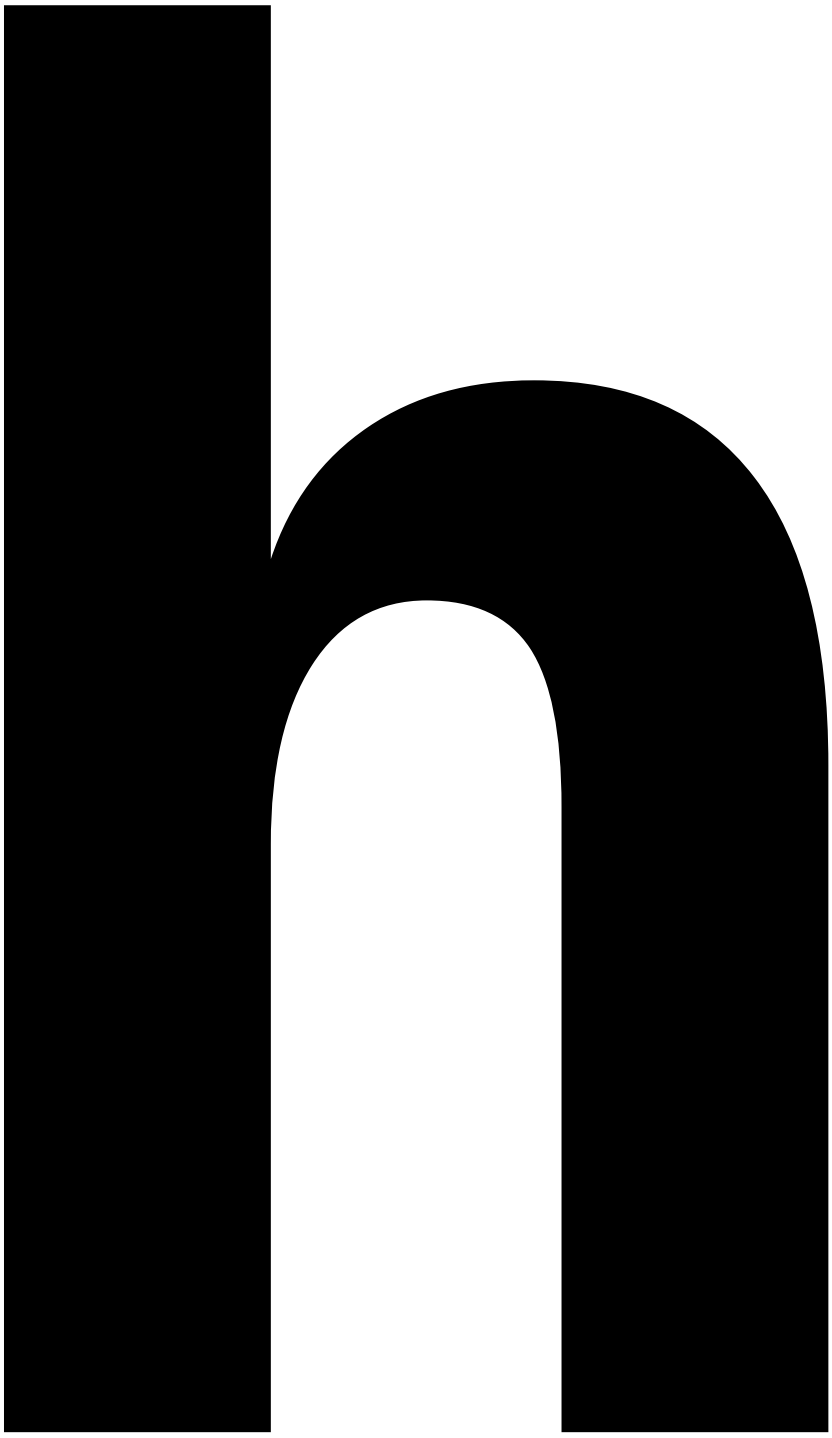


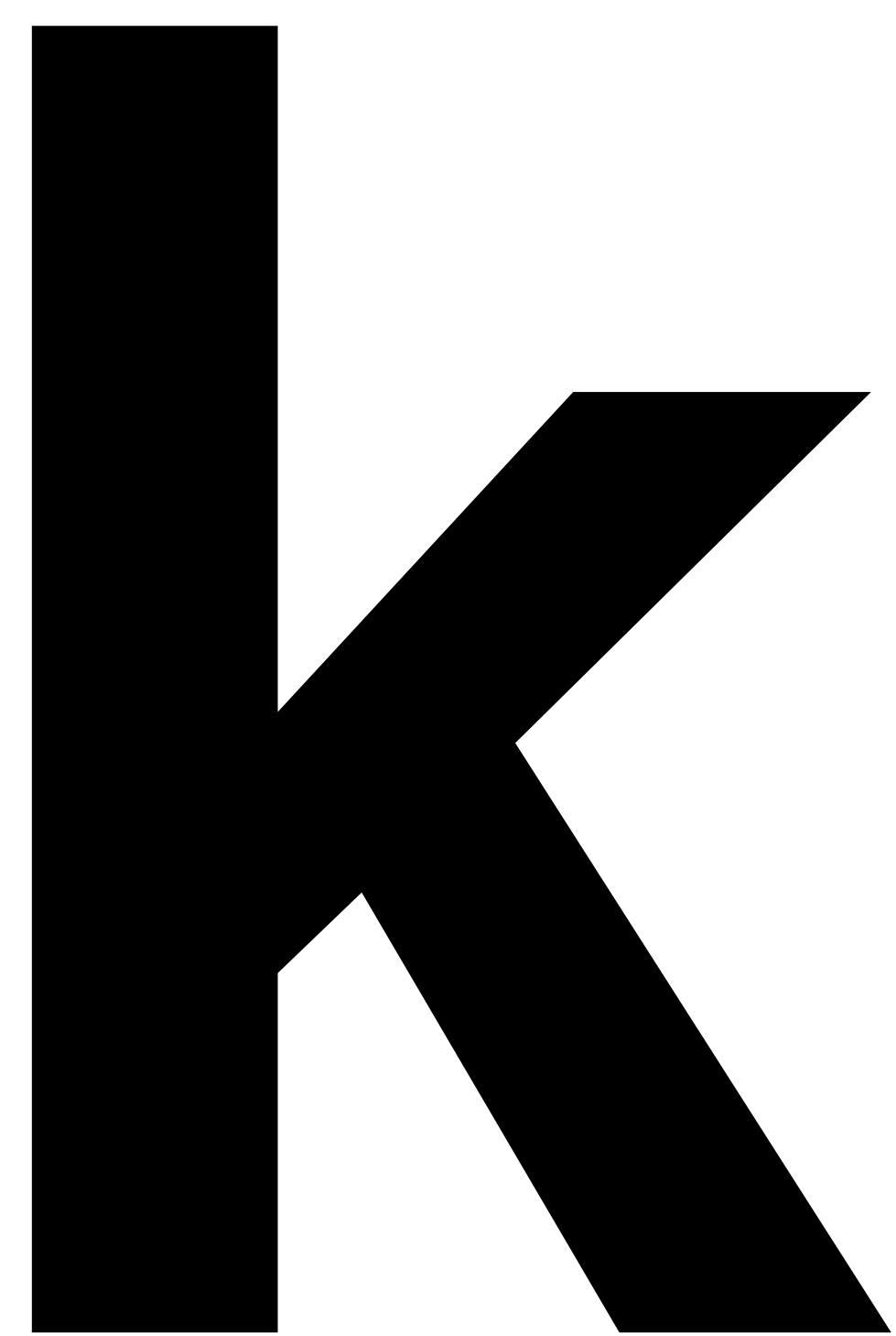


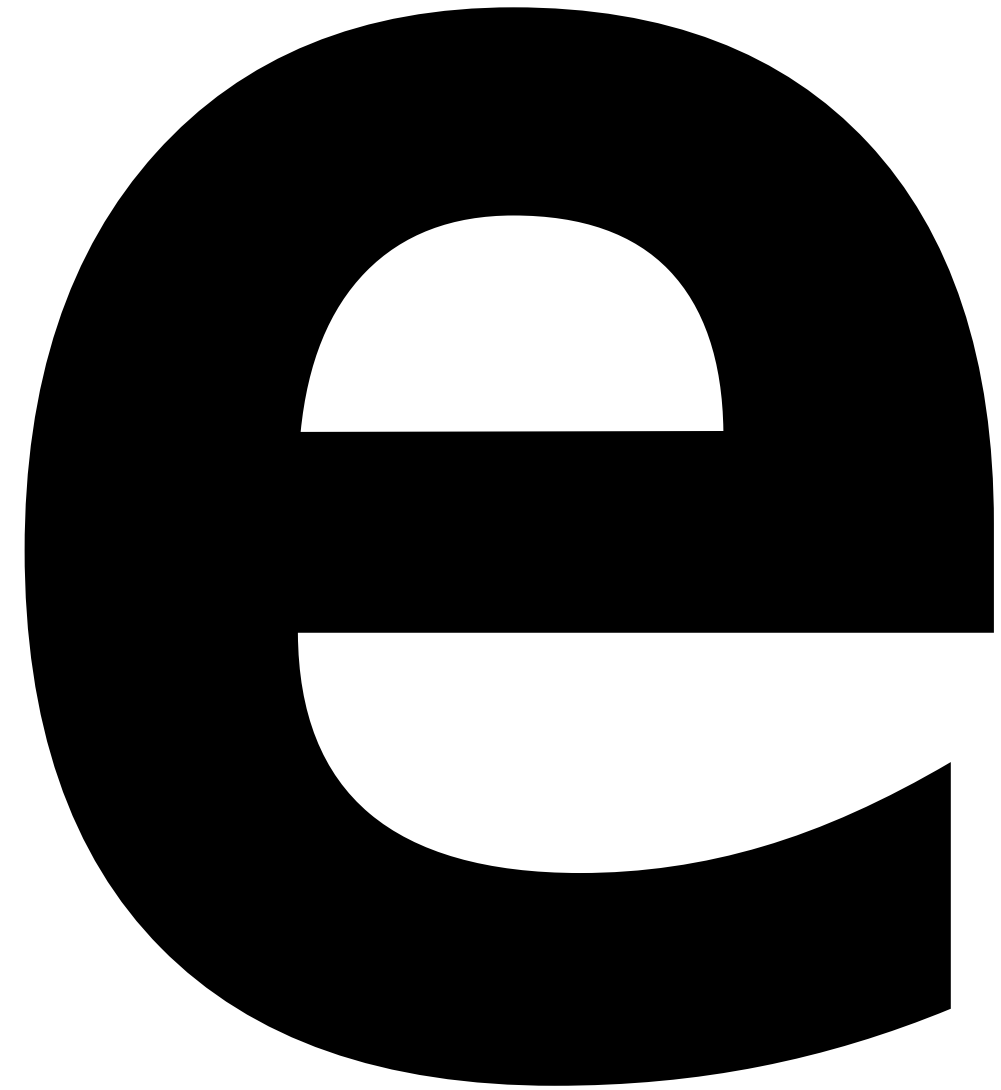


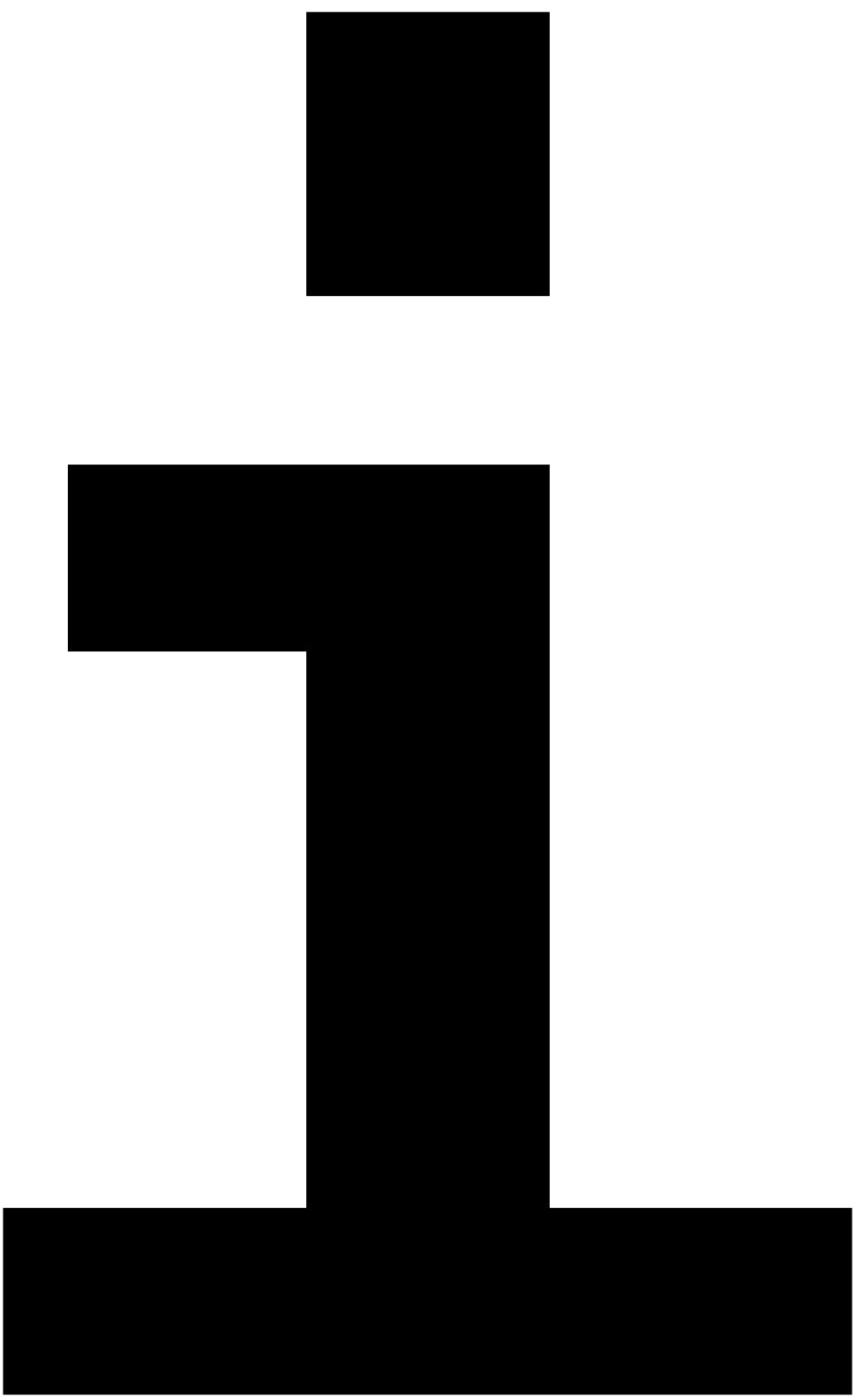


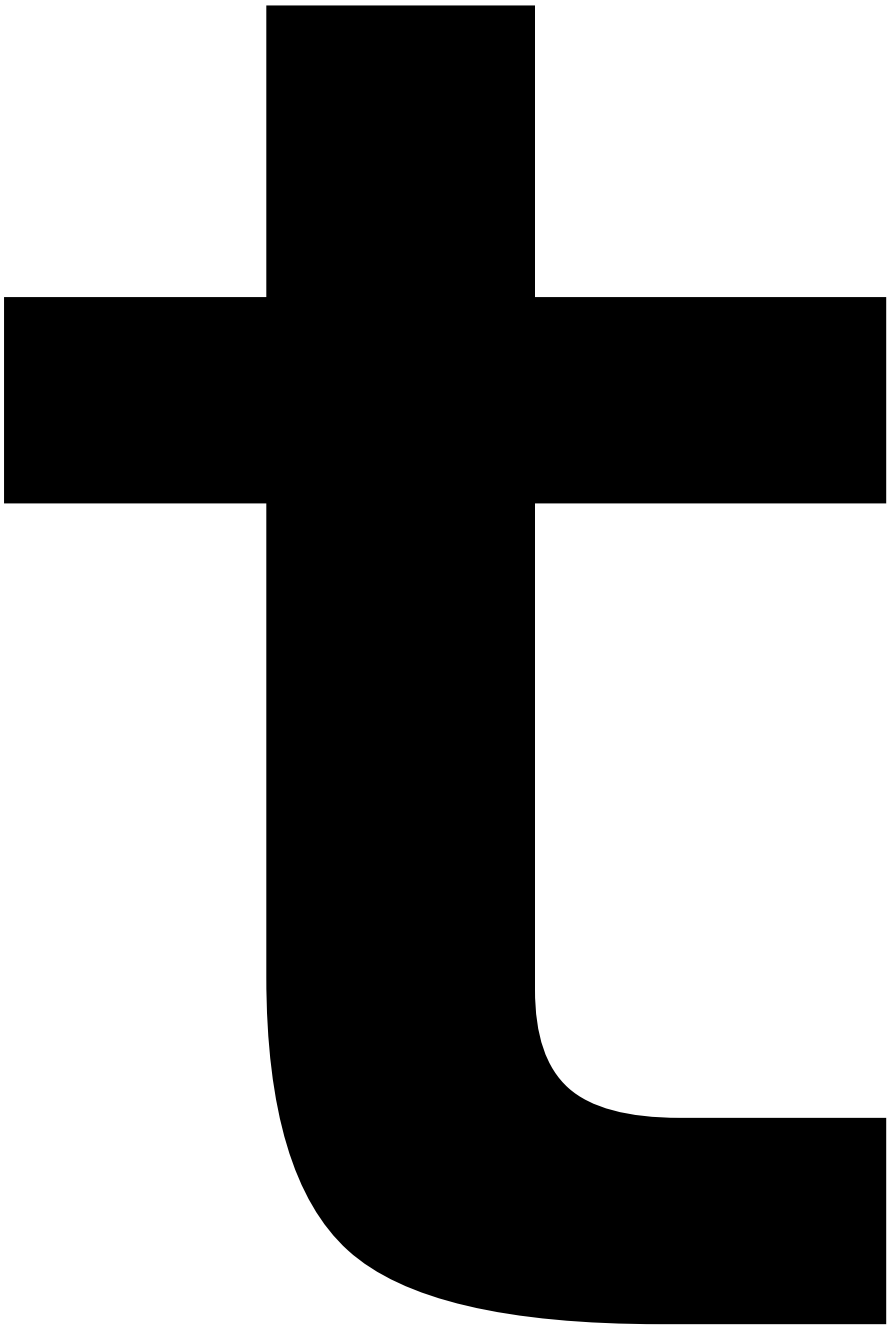


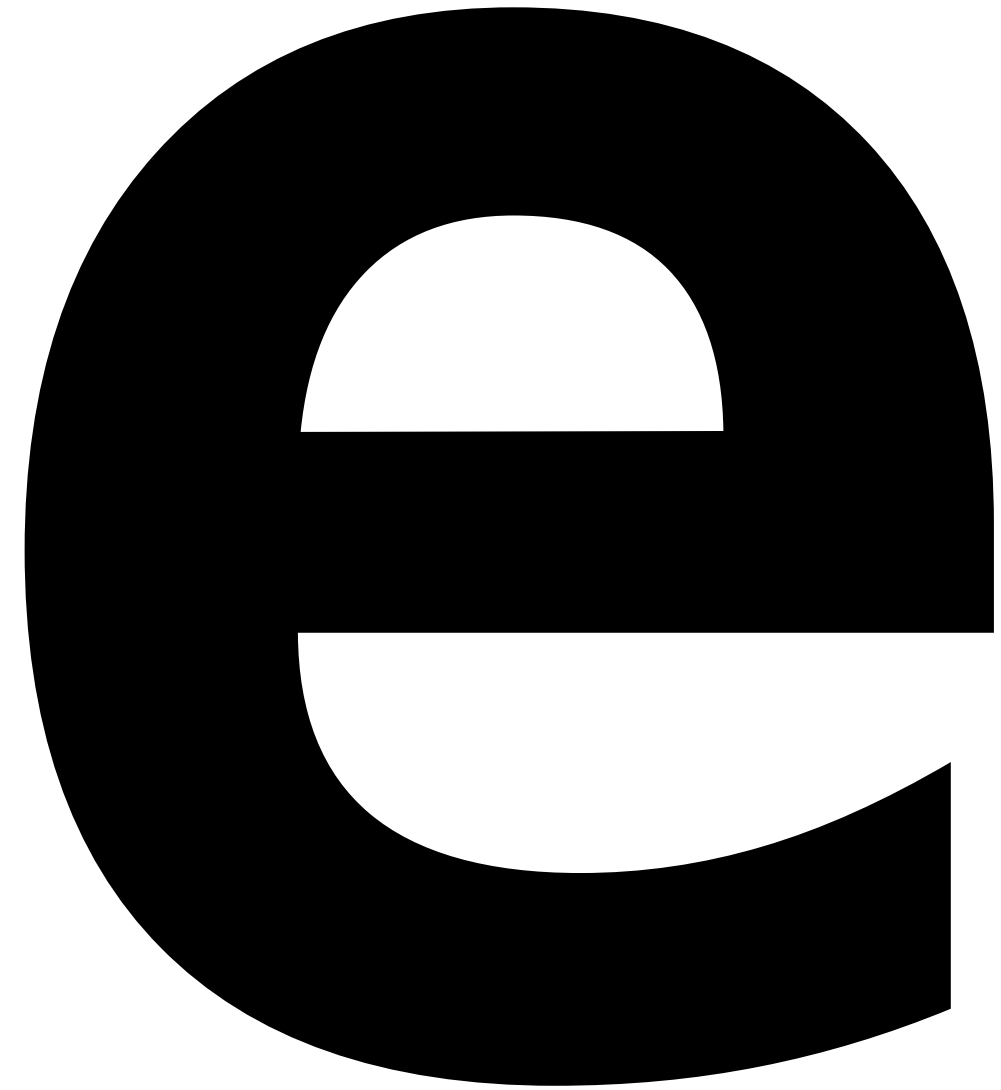


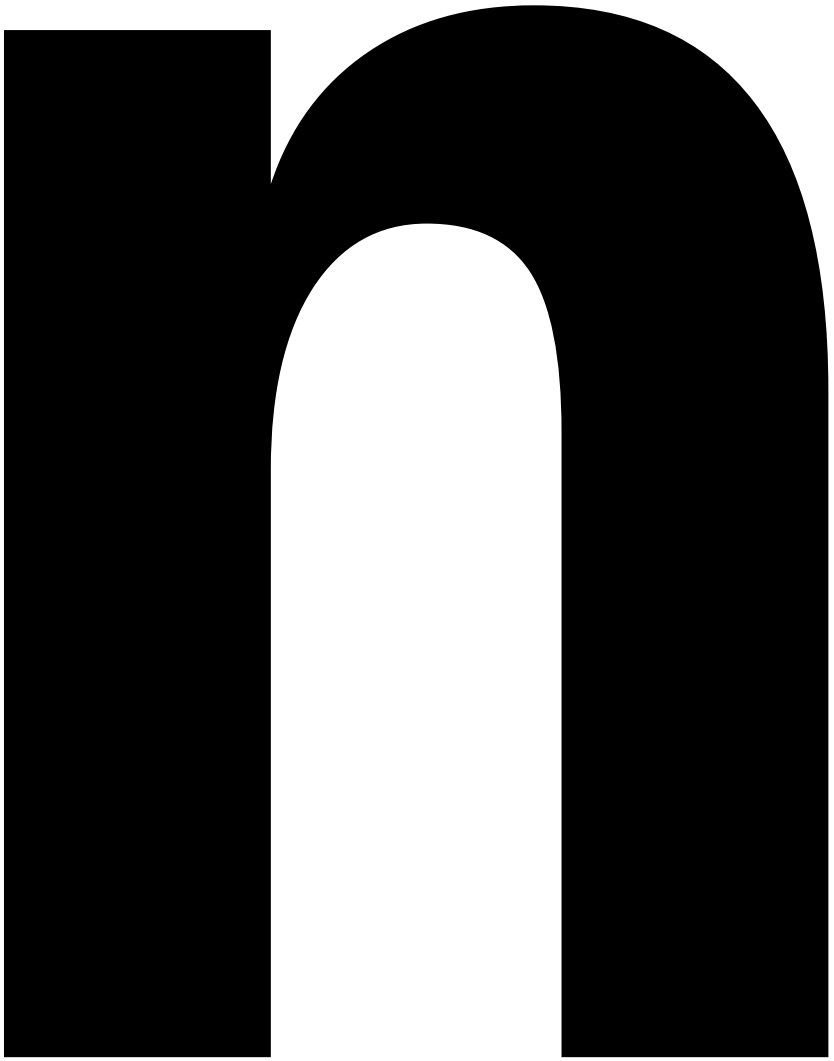


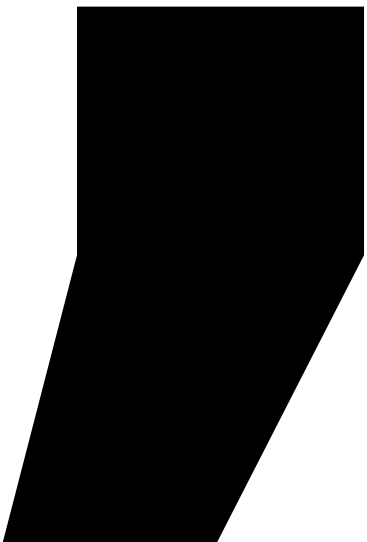




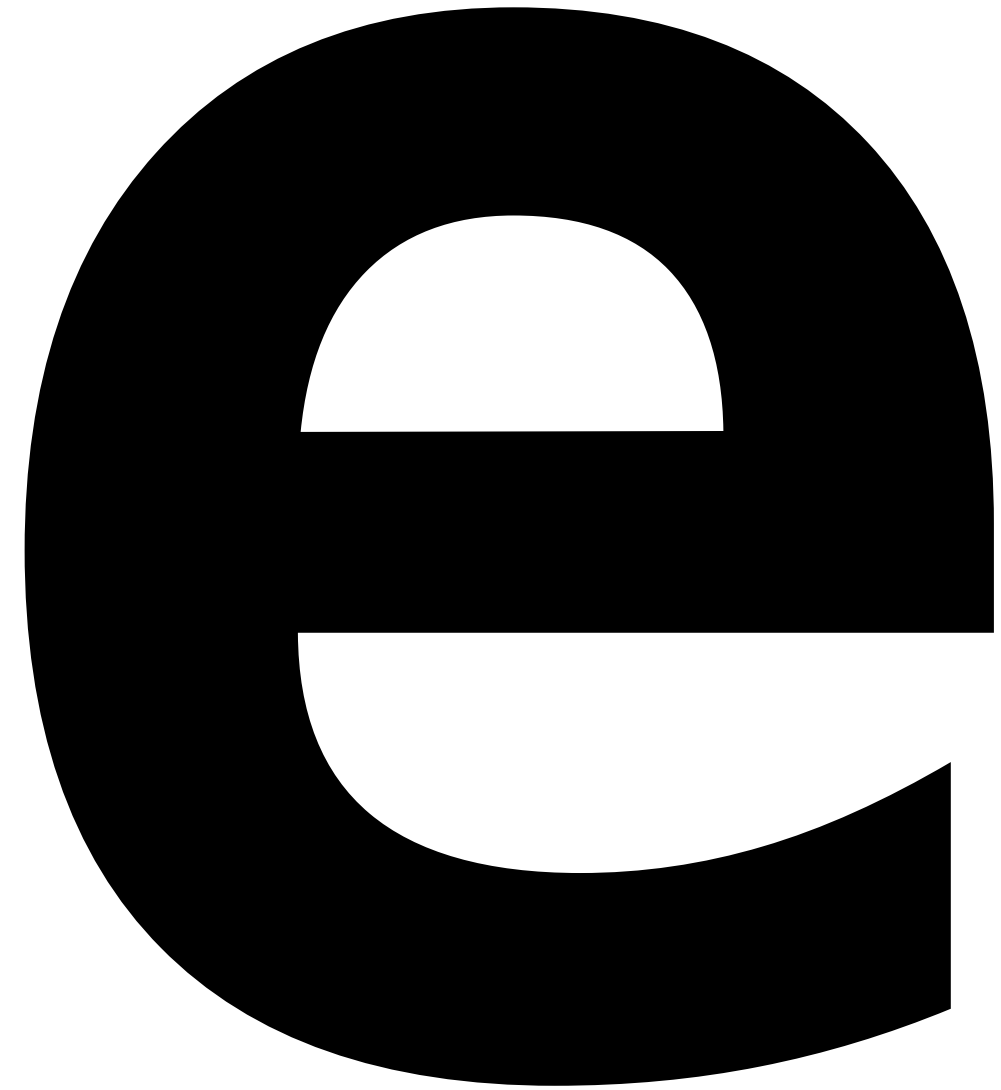


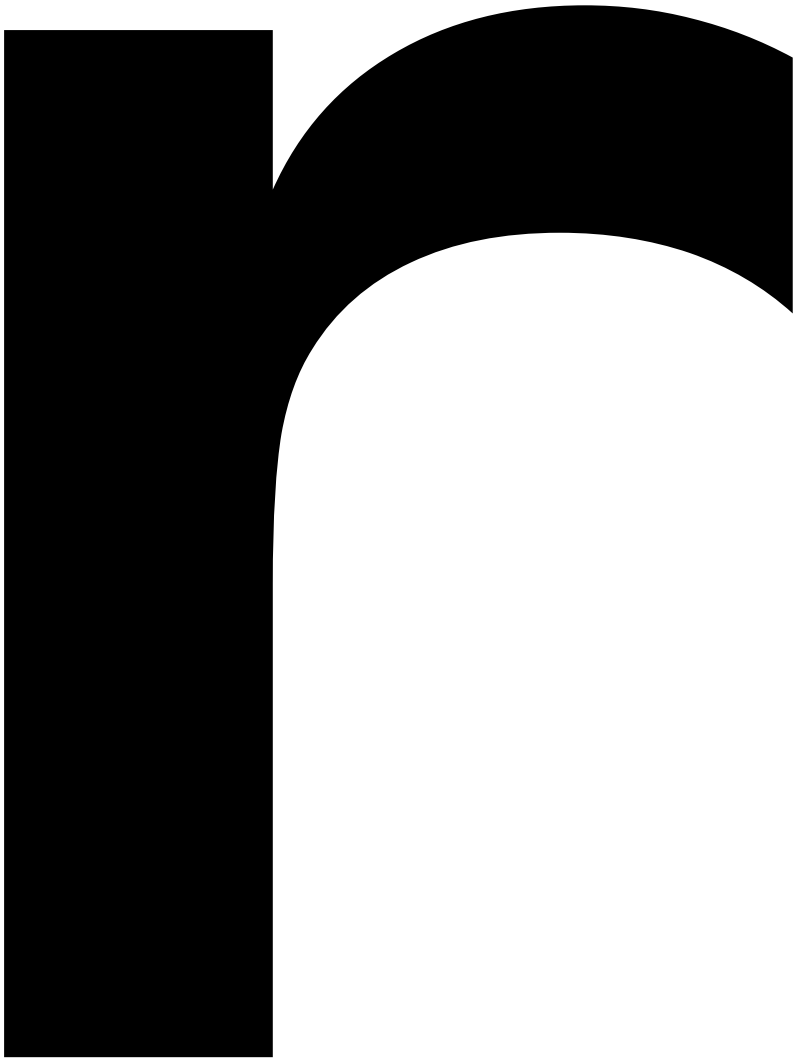


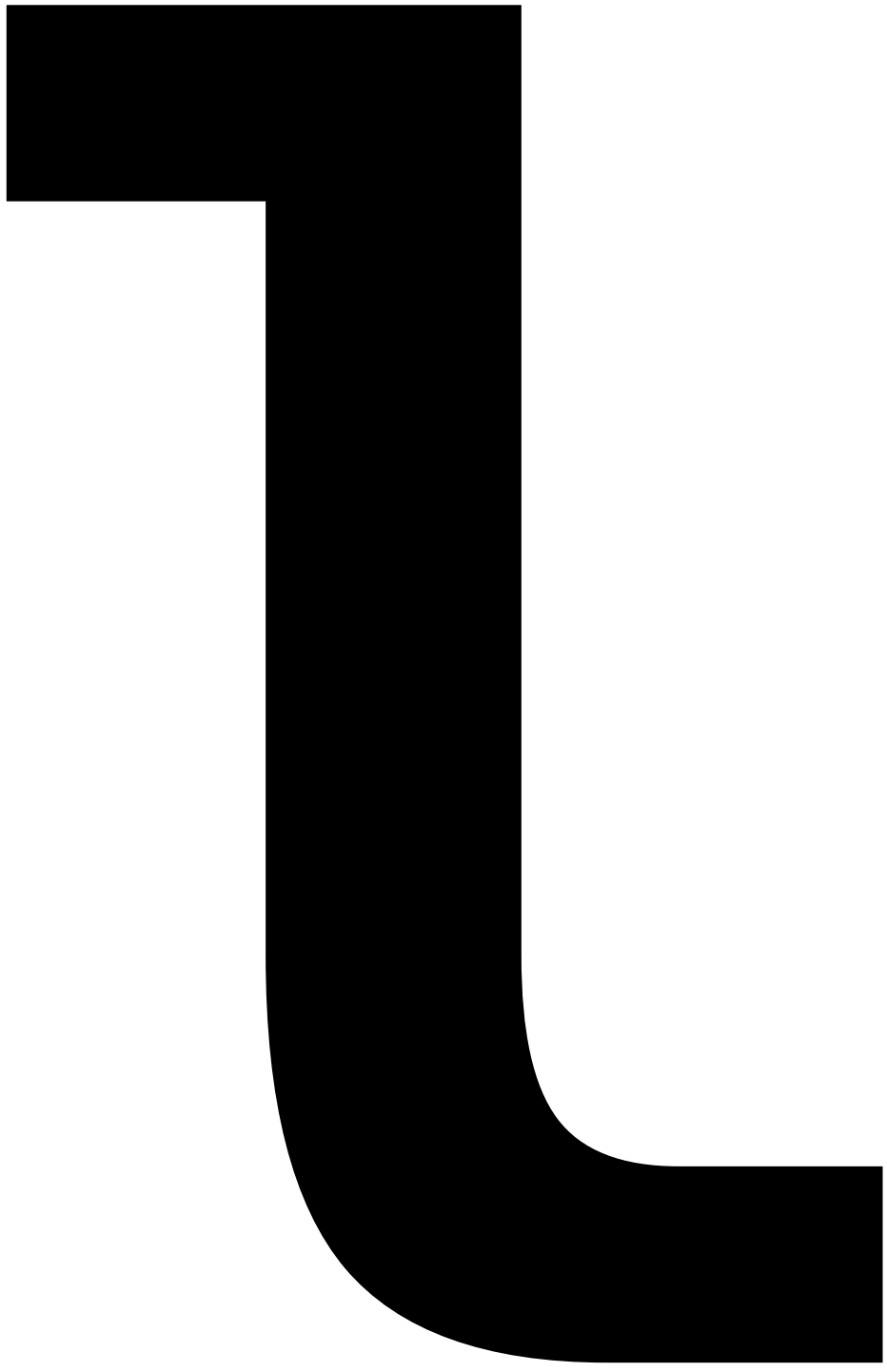


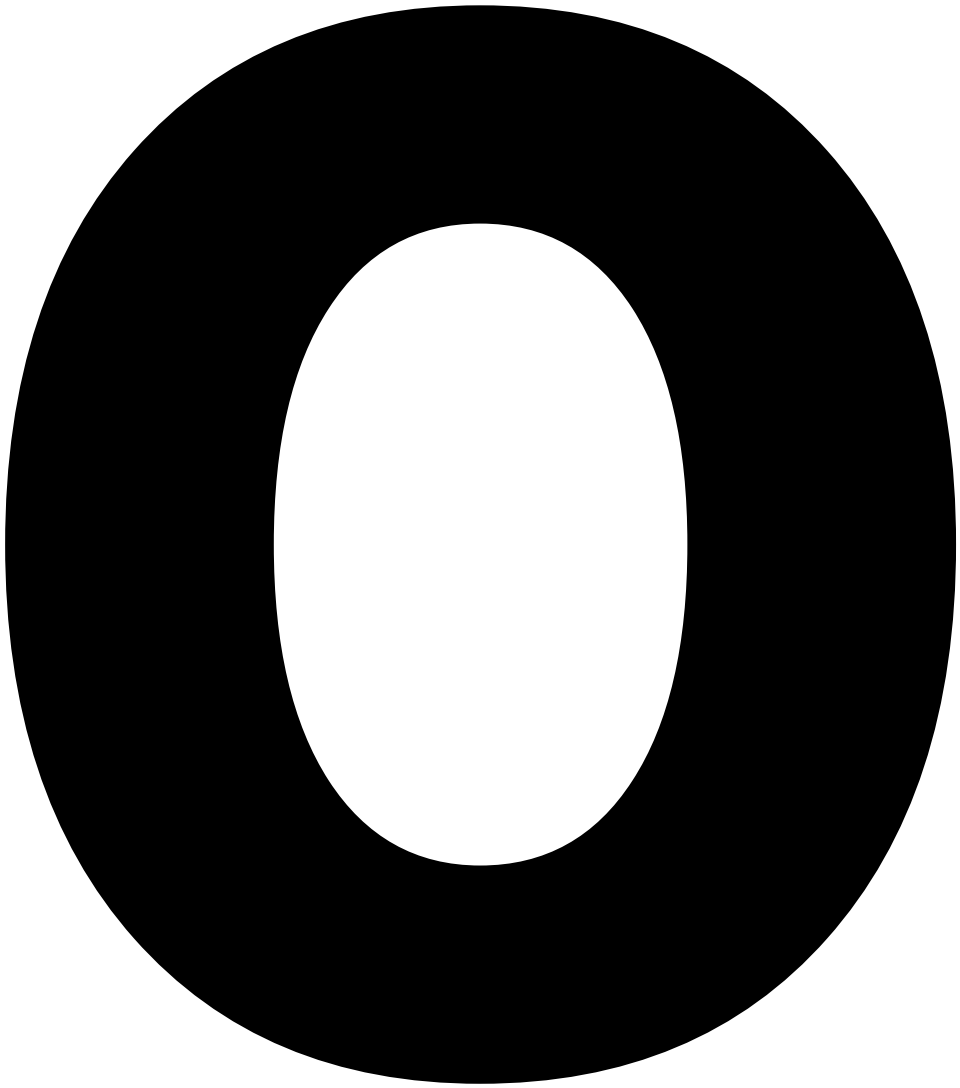


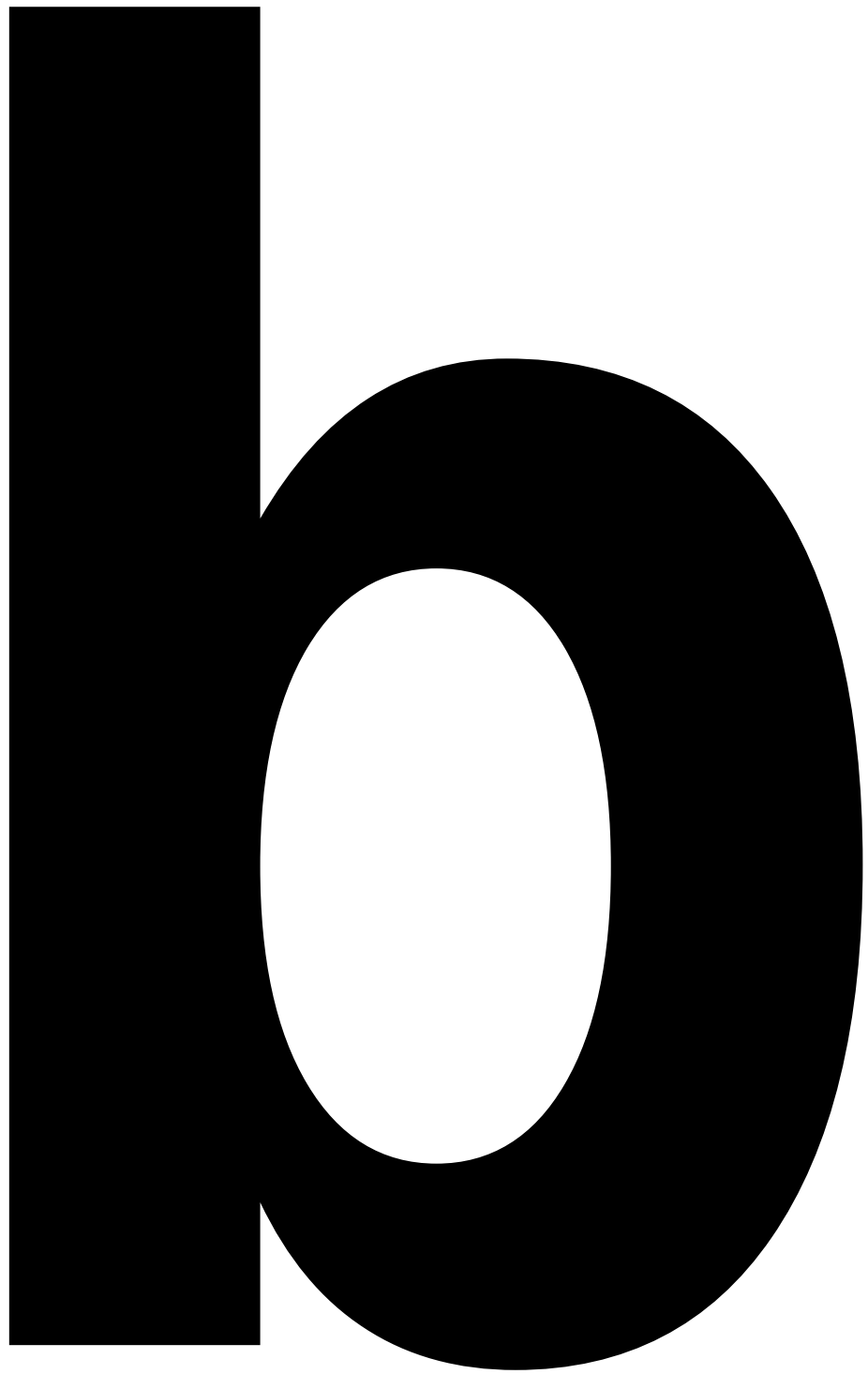
d

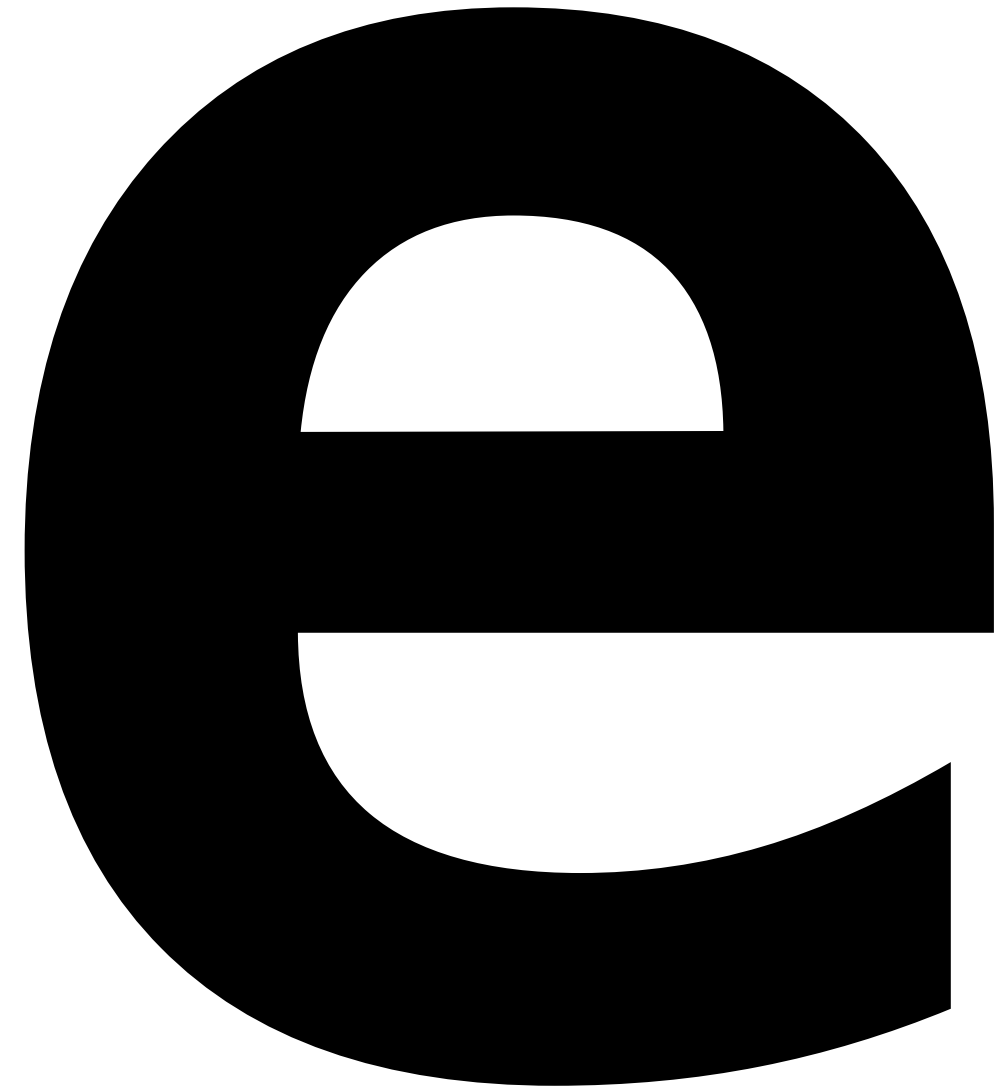


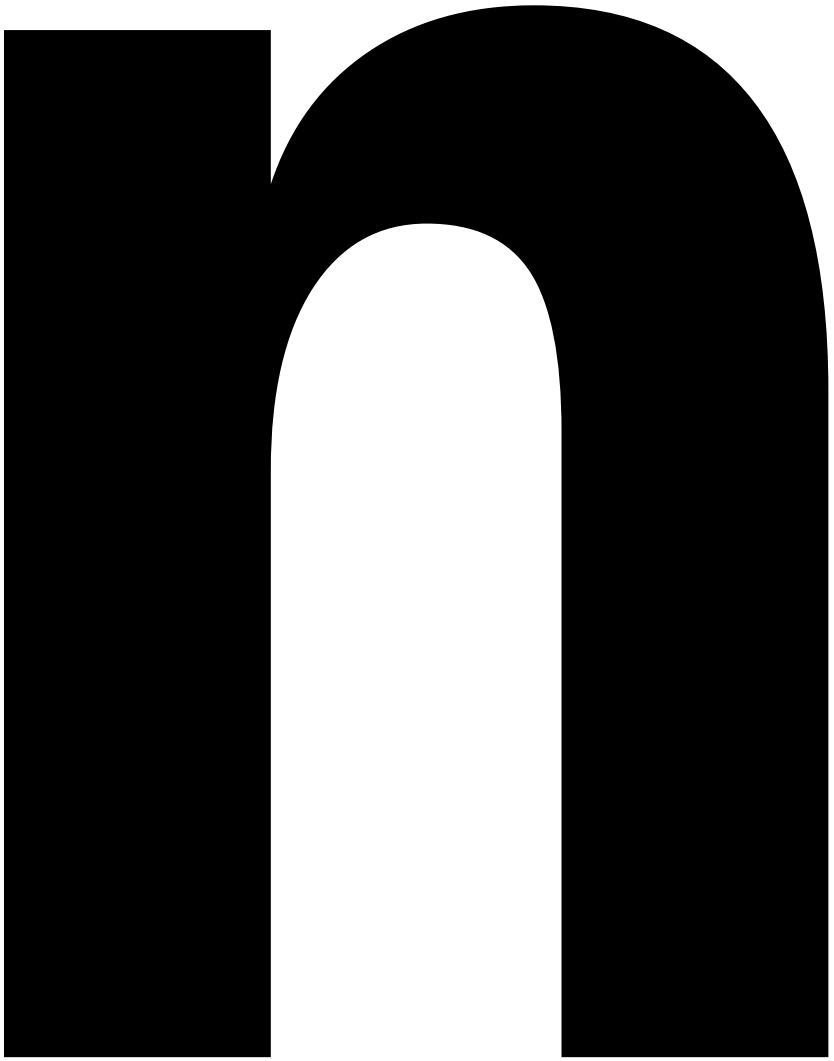




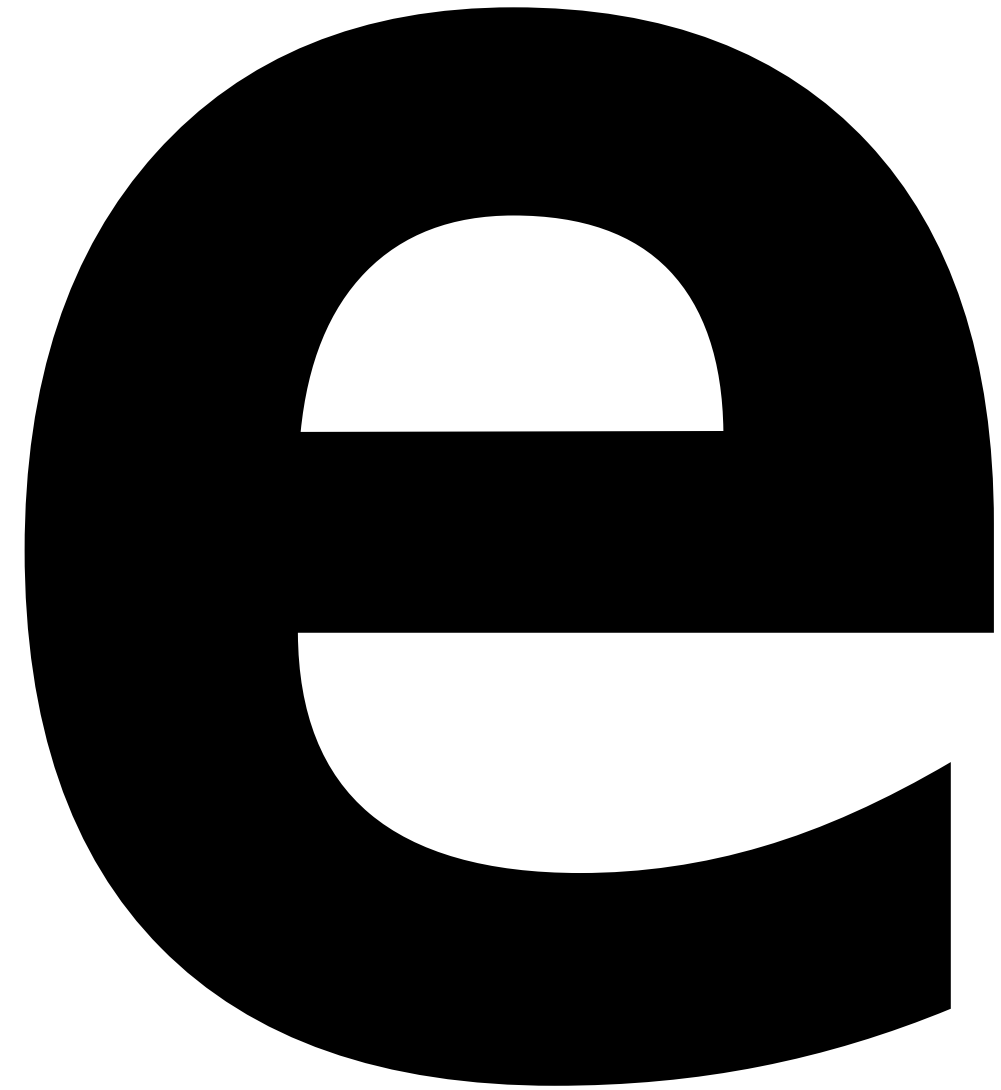


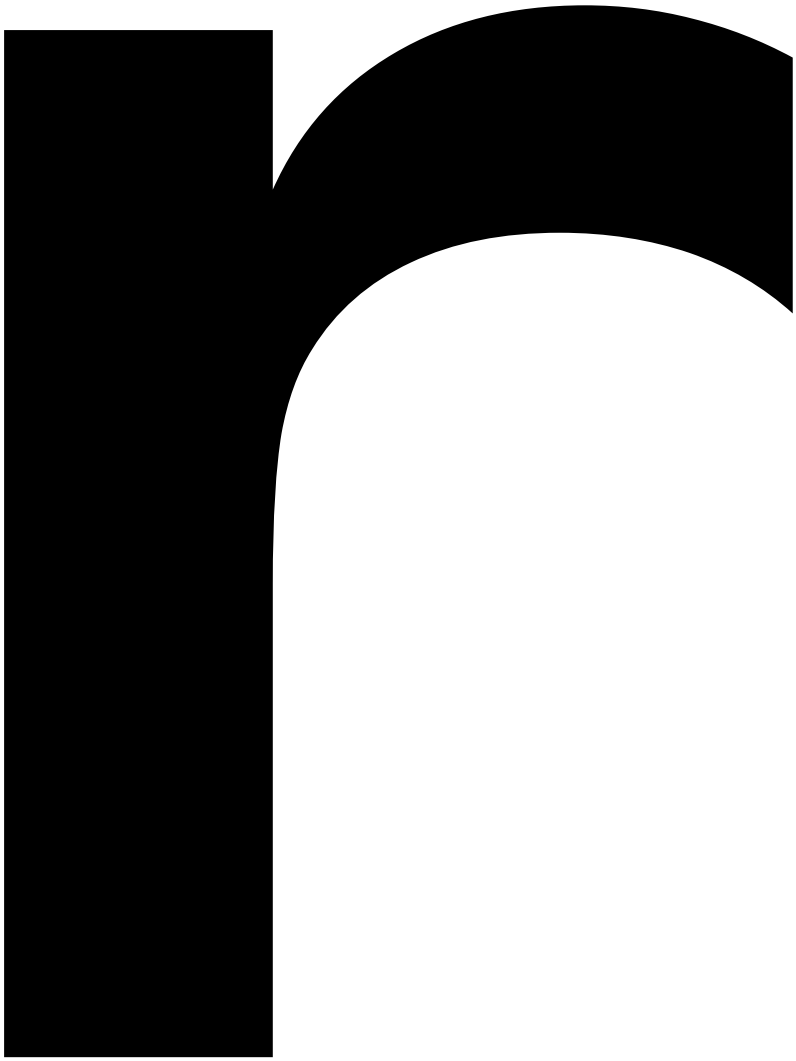


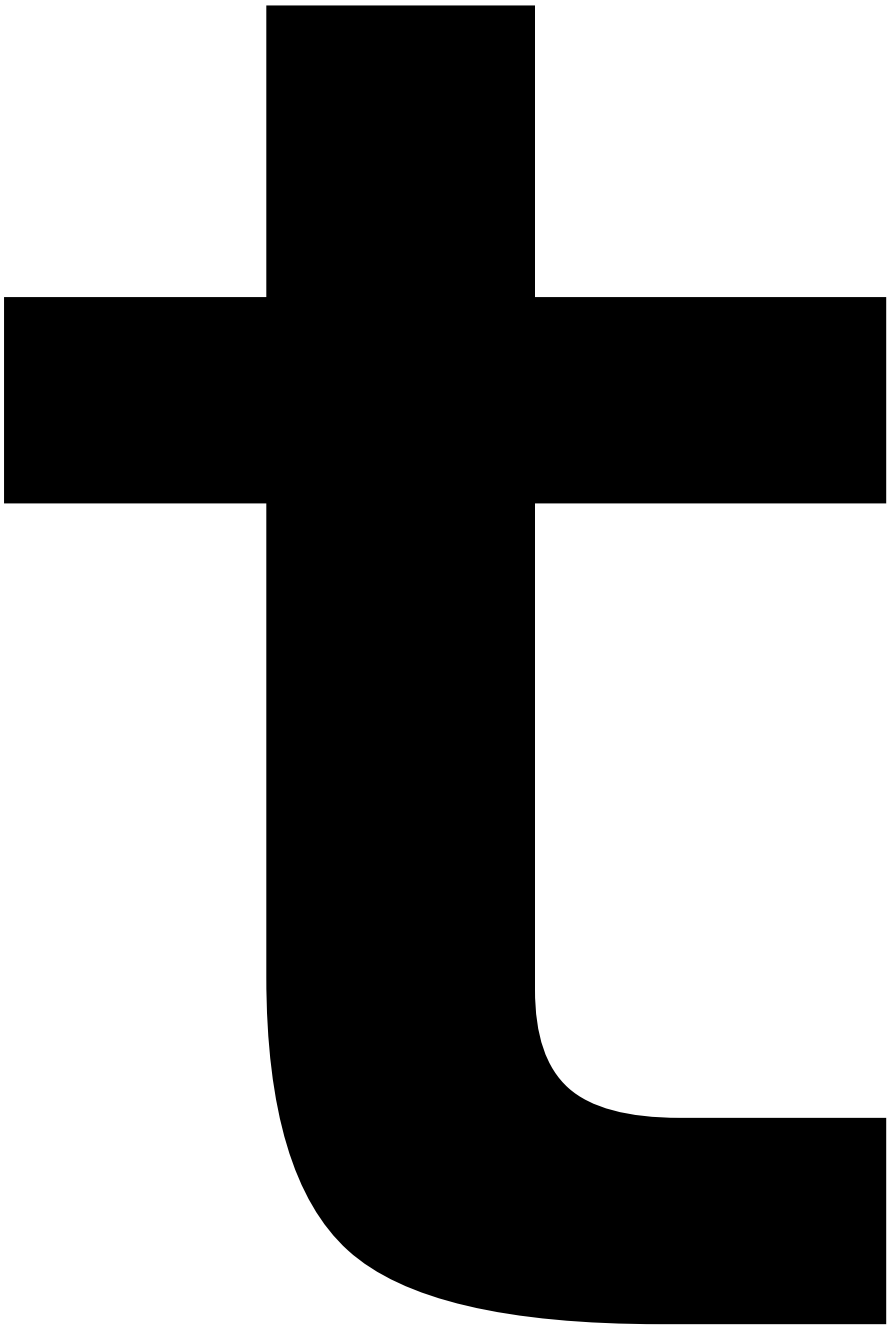


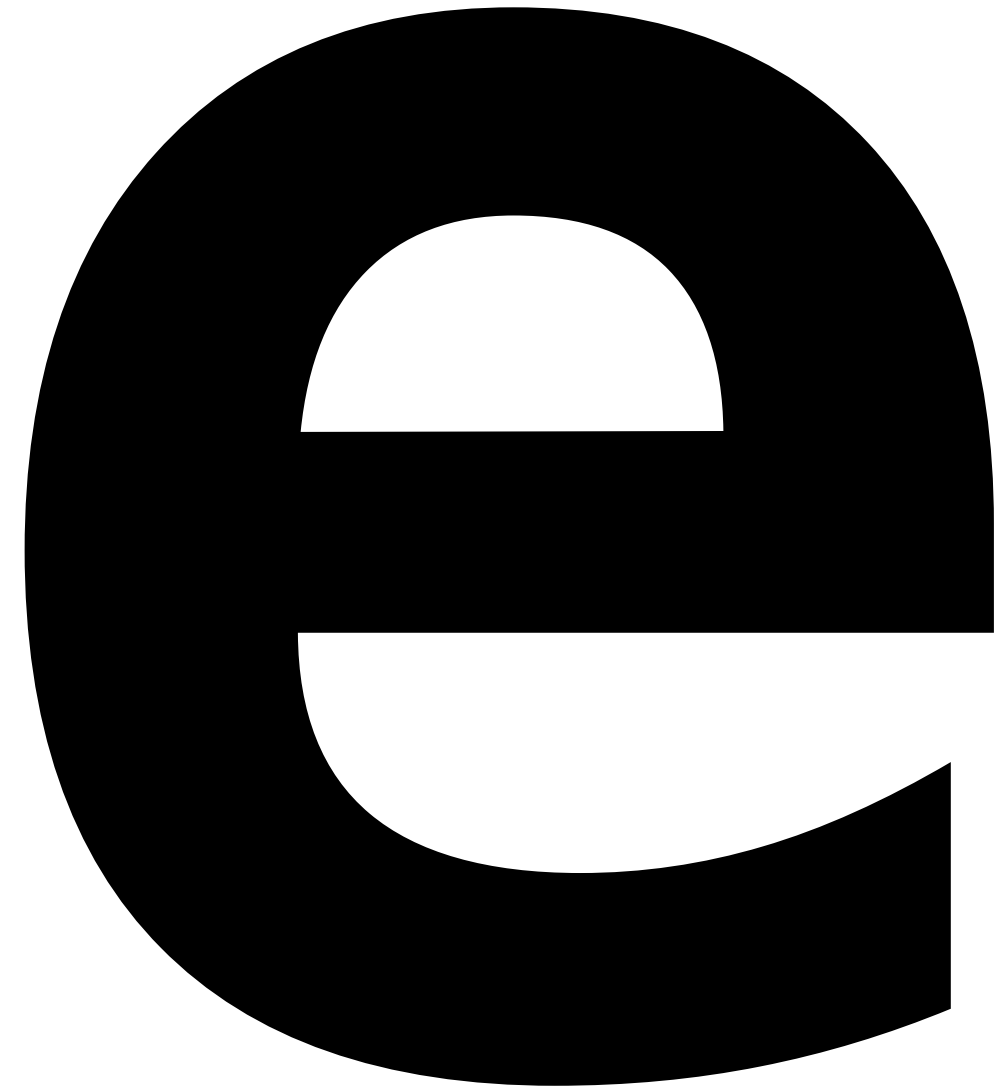


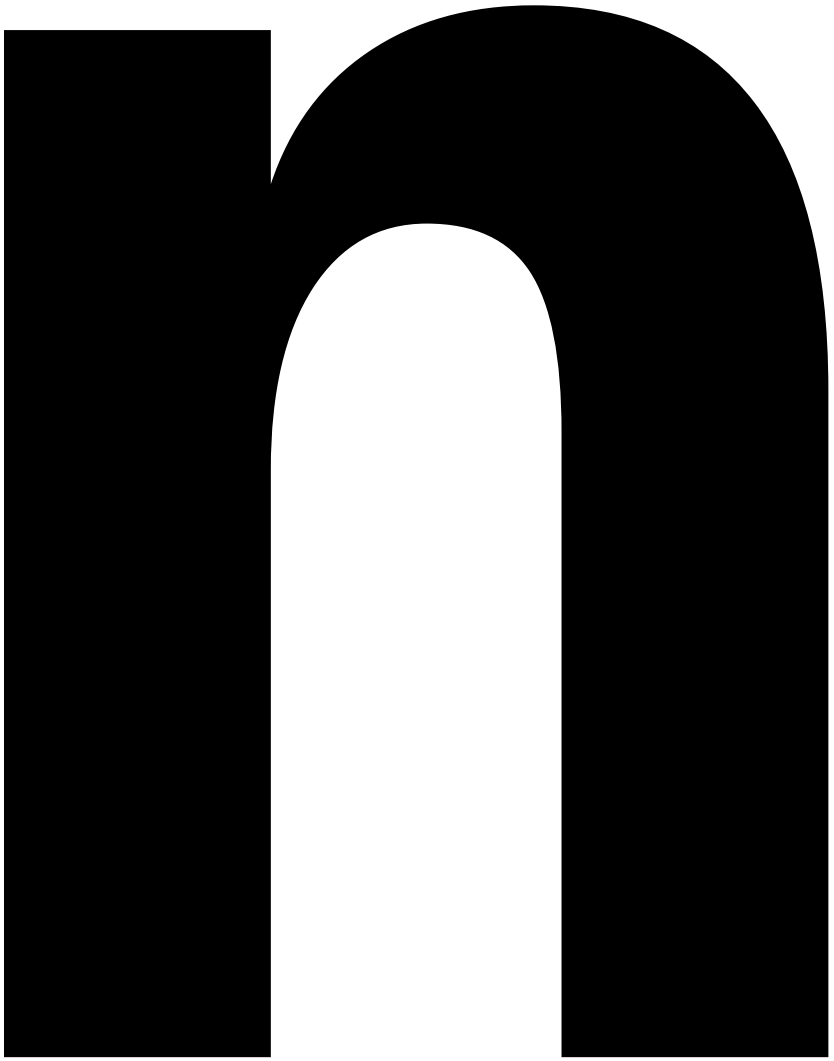
S

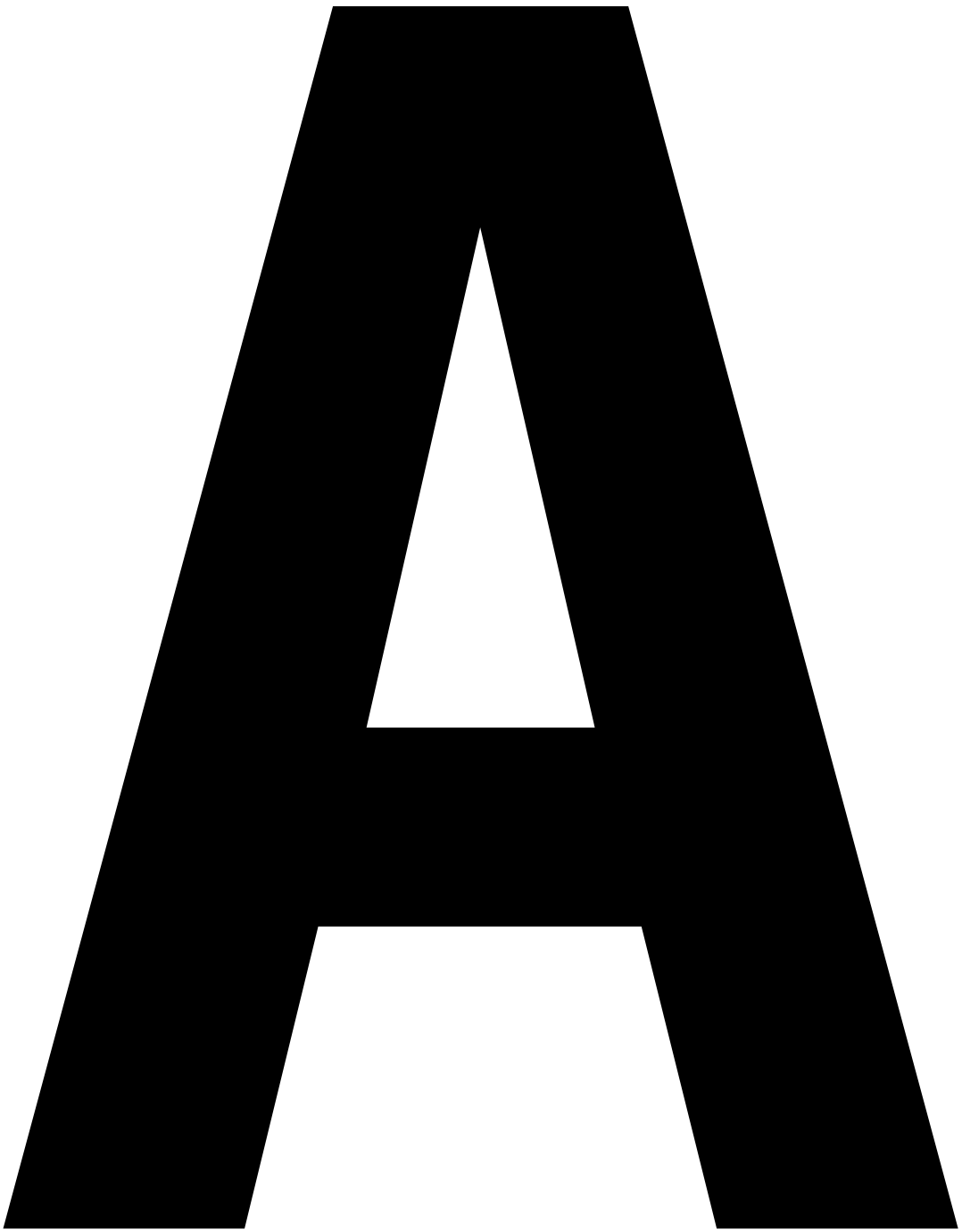


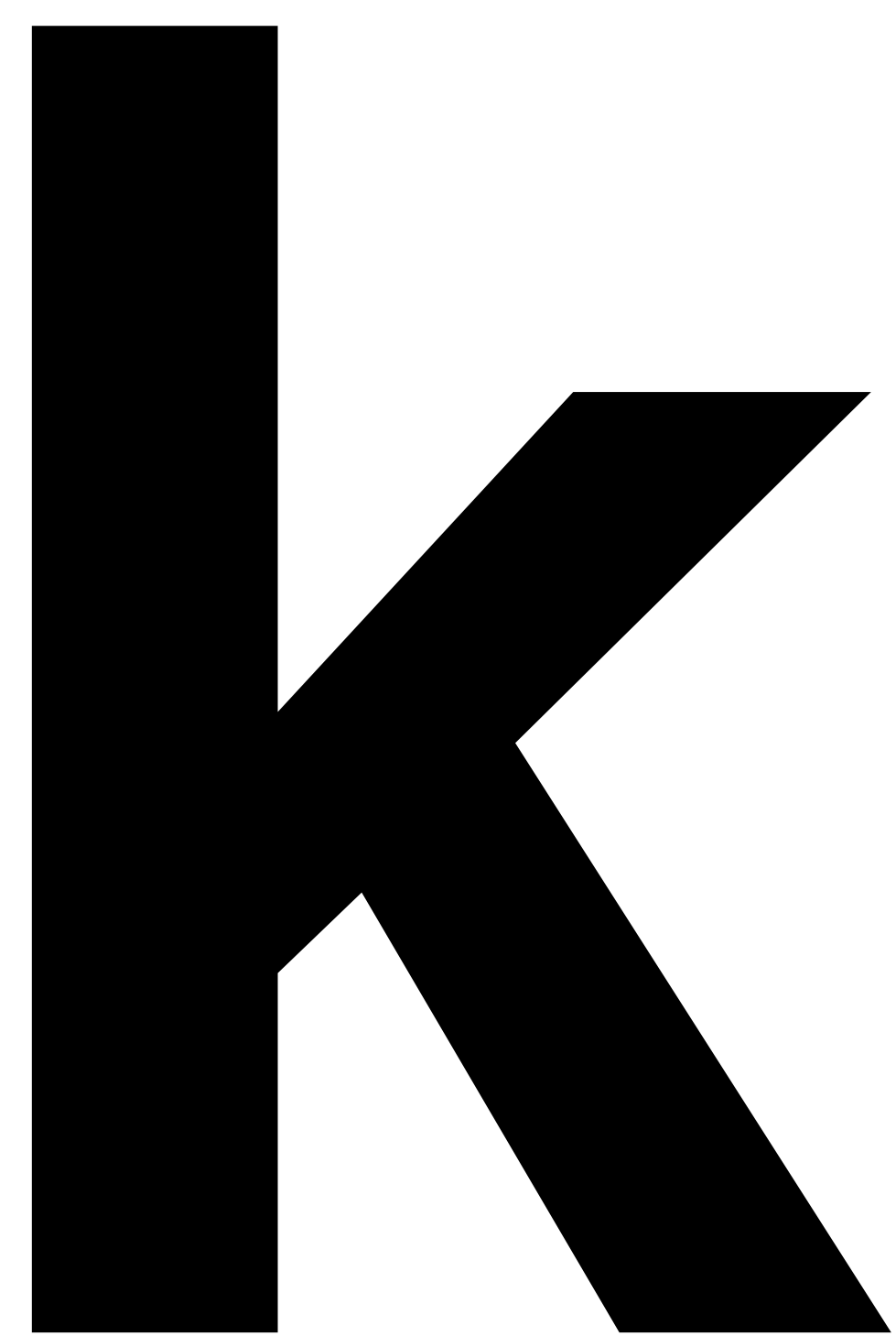


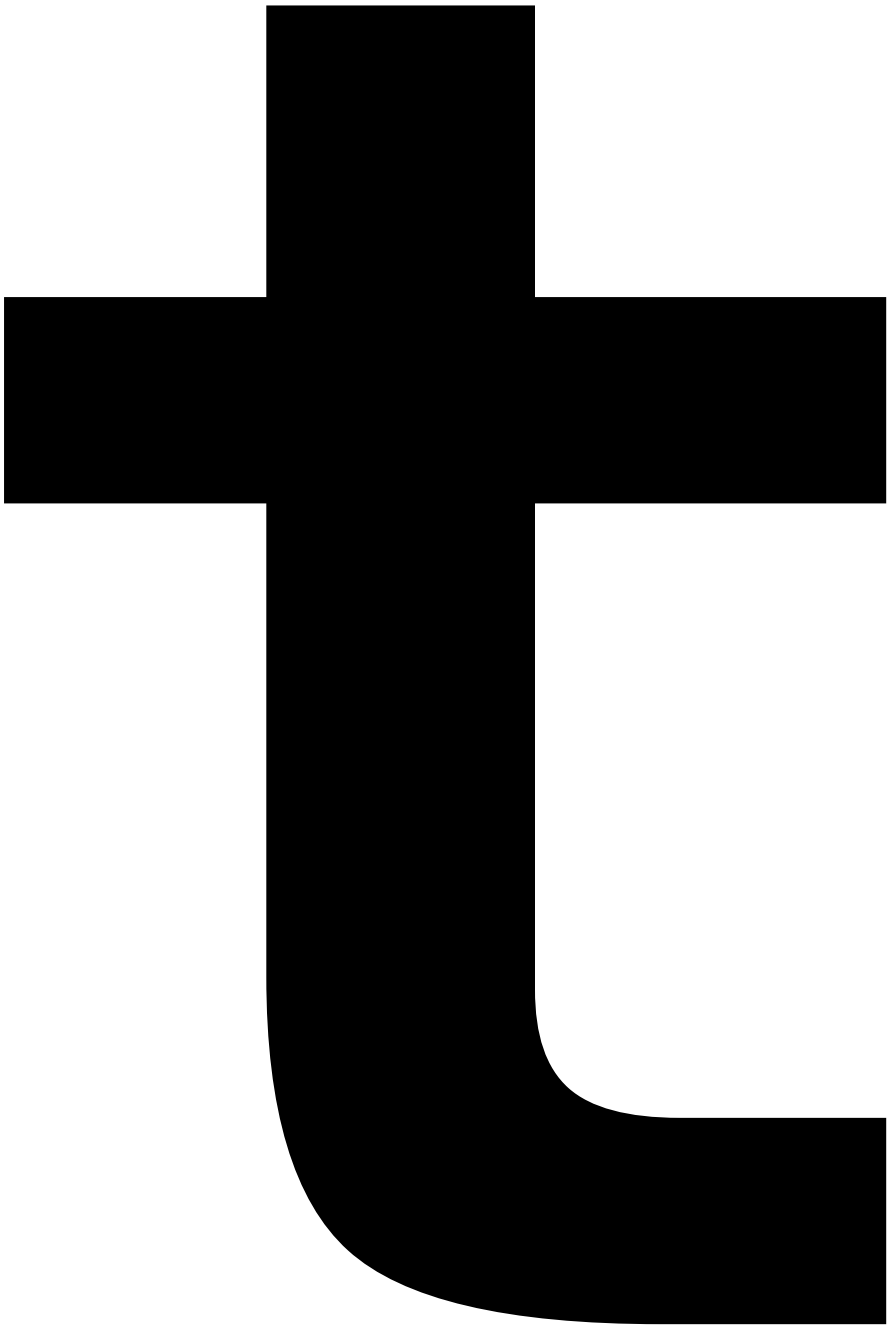


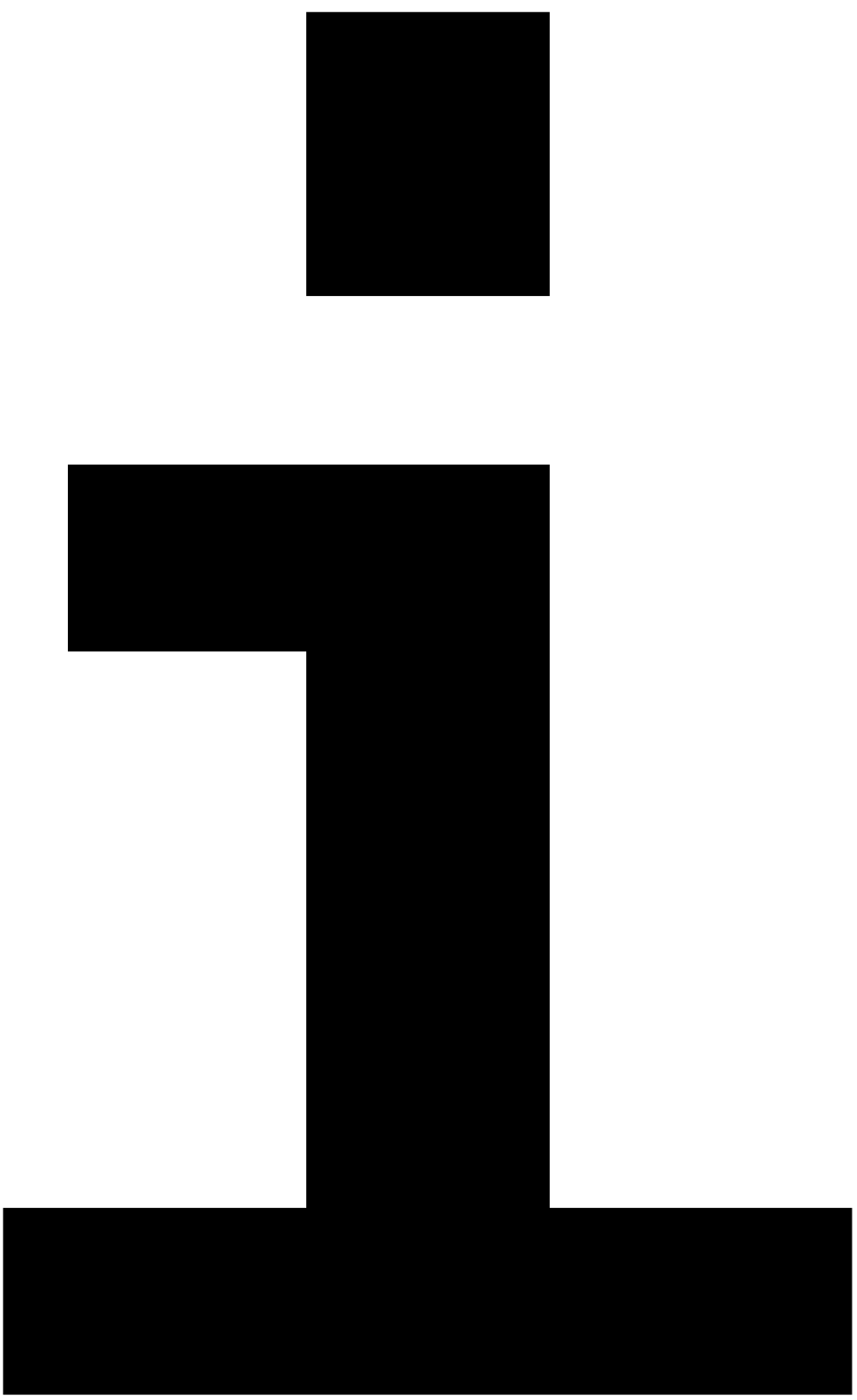


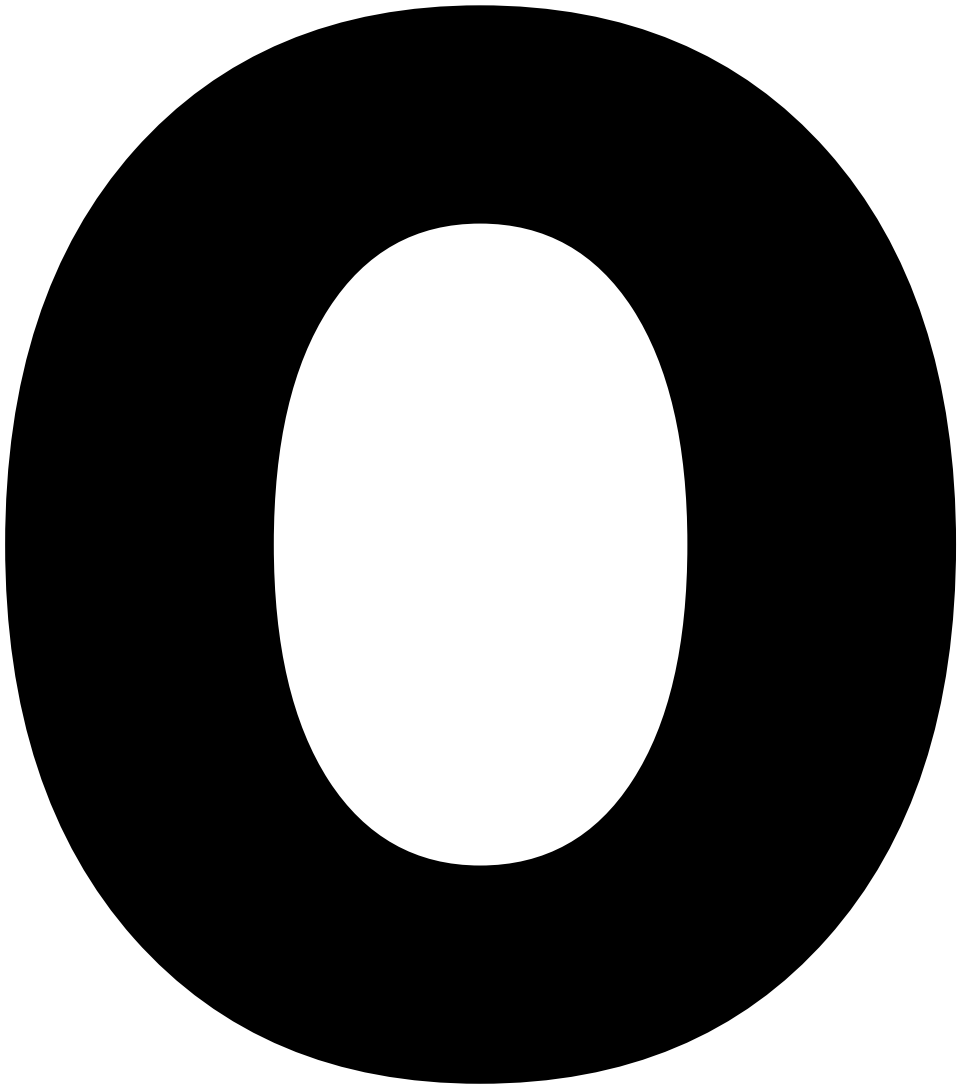


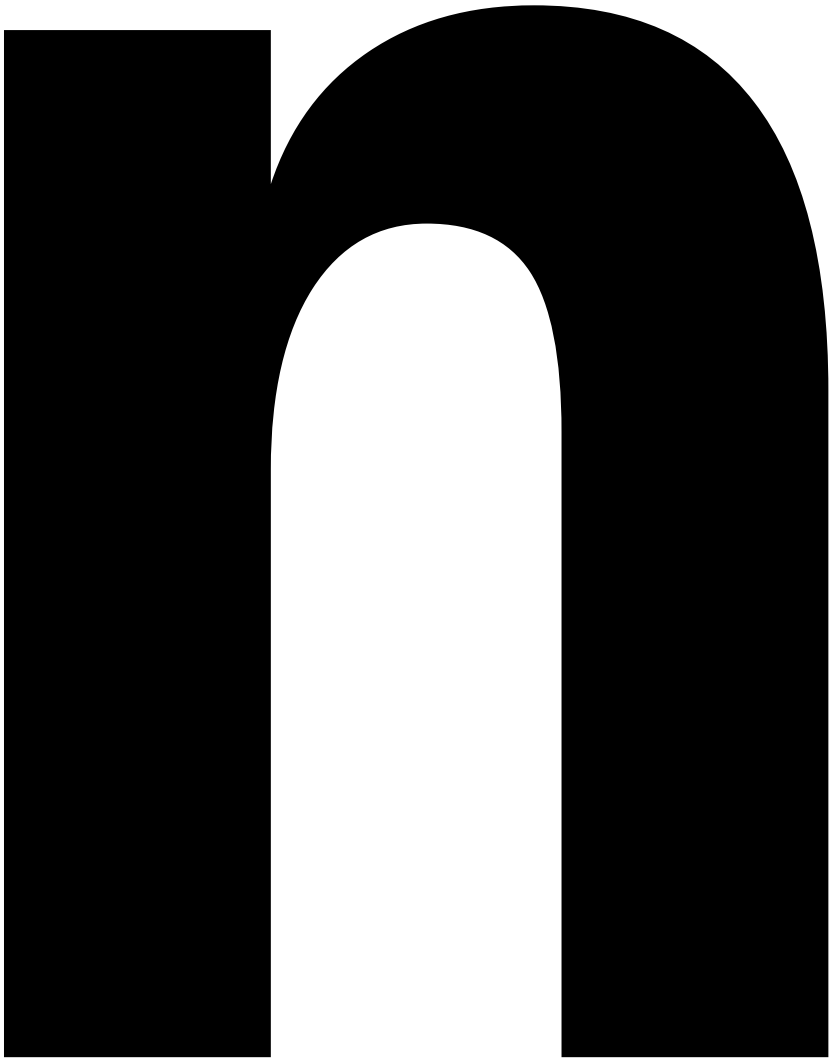




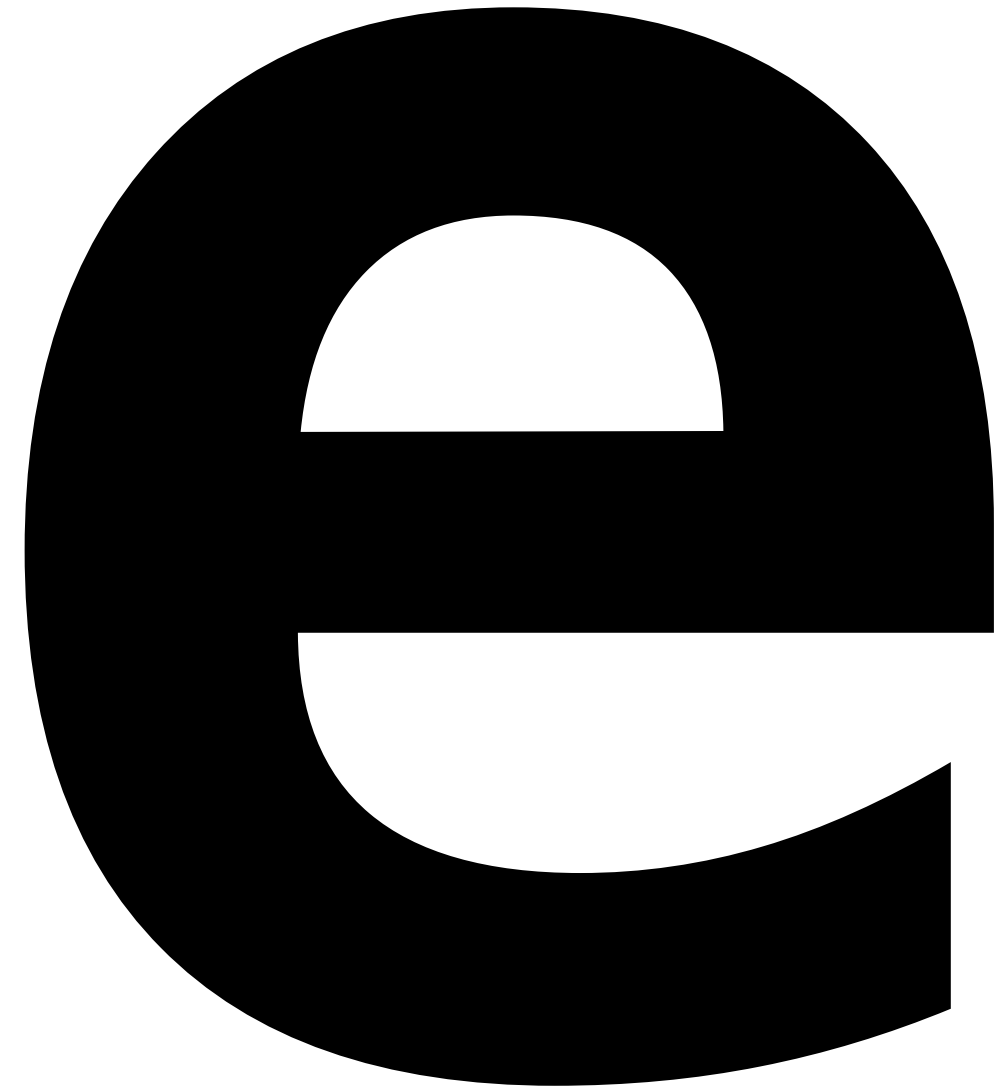




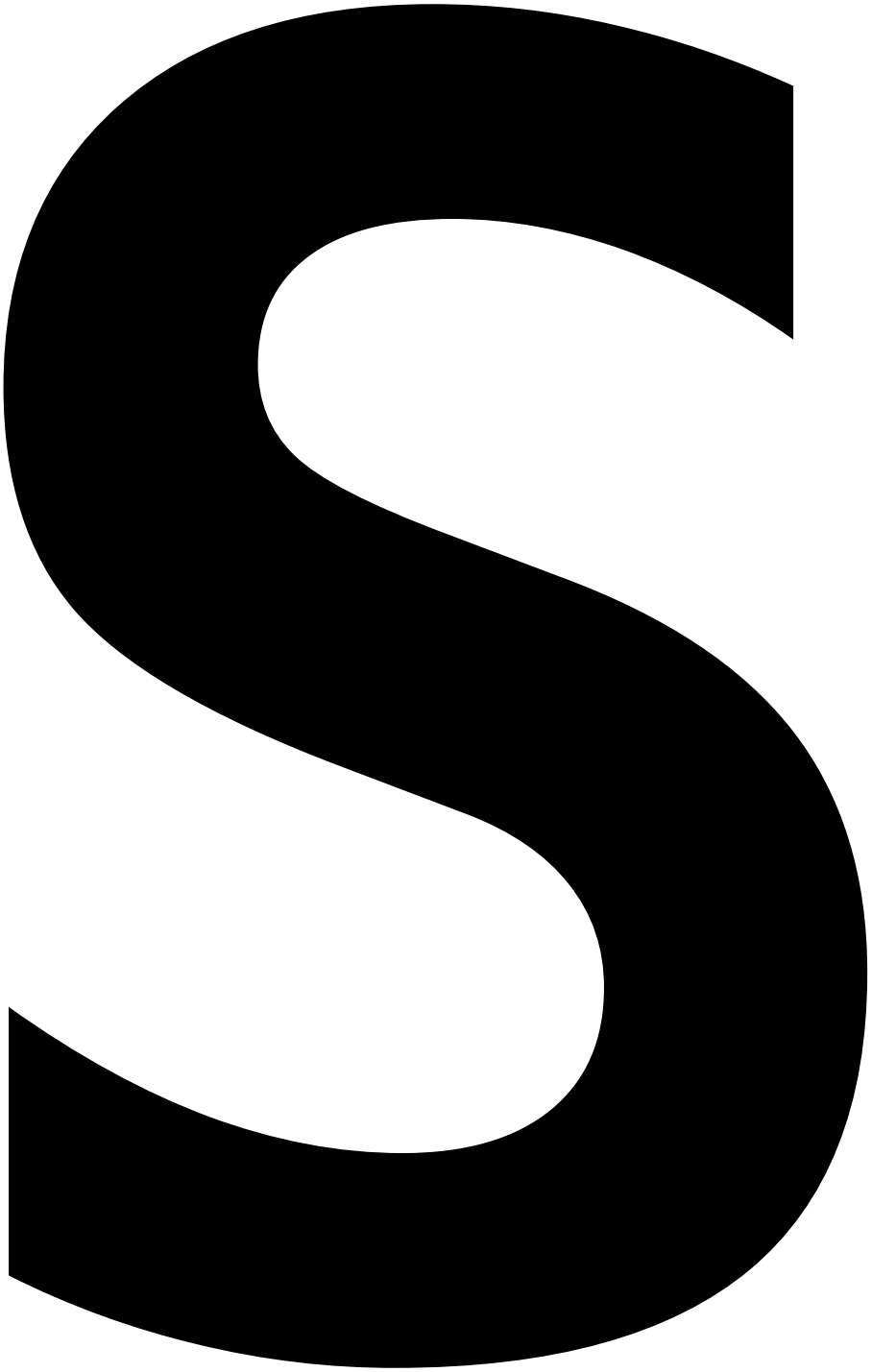


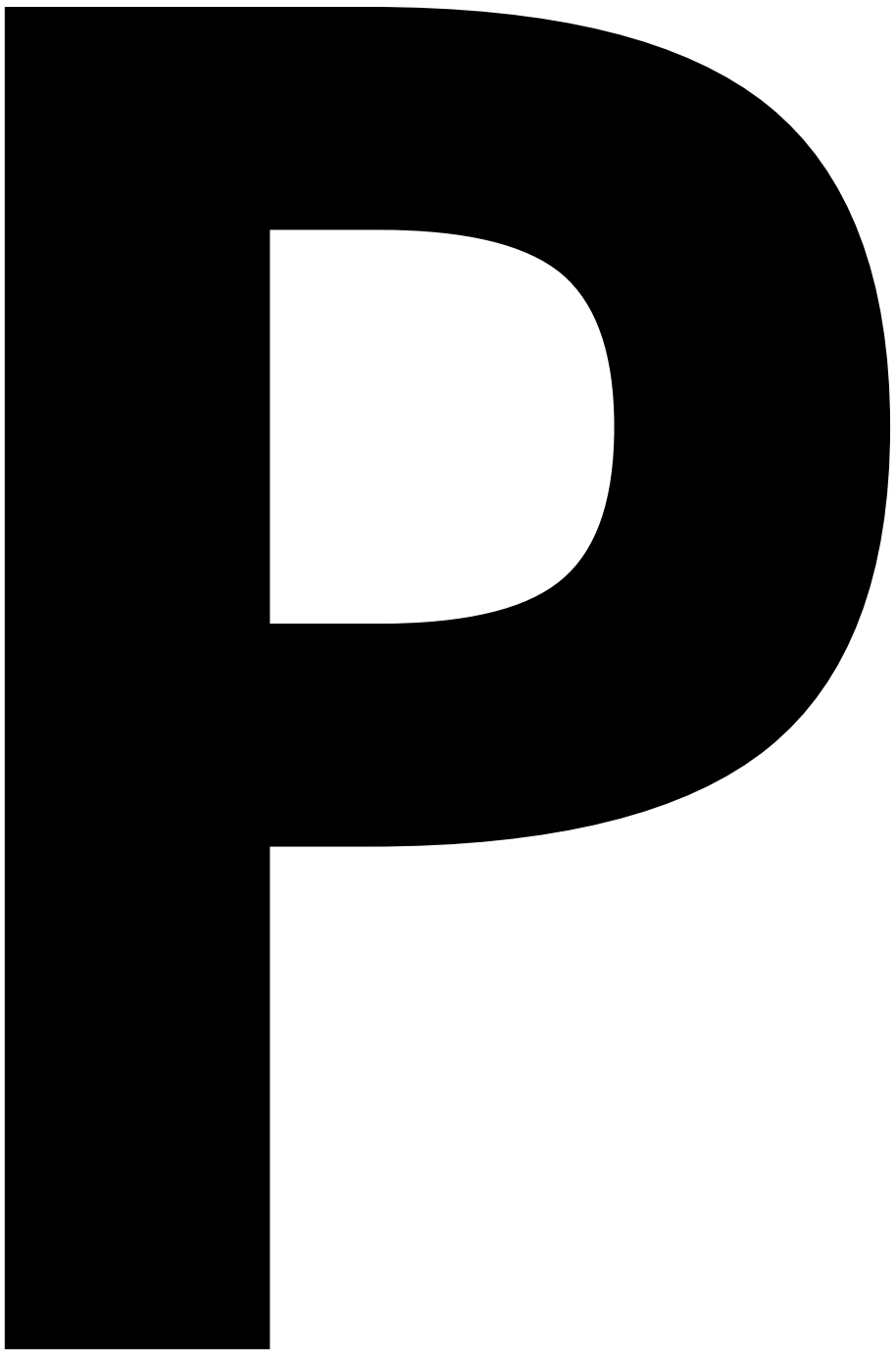


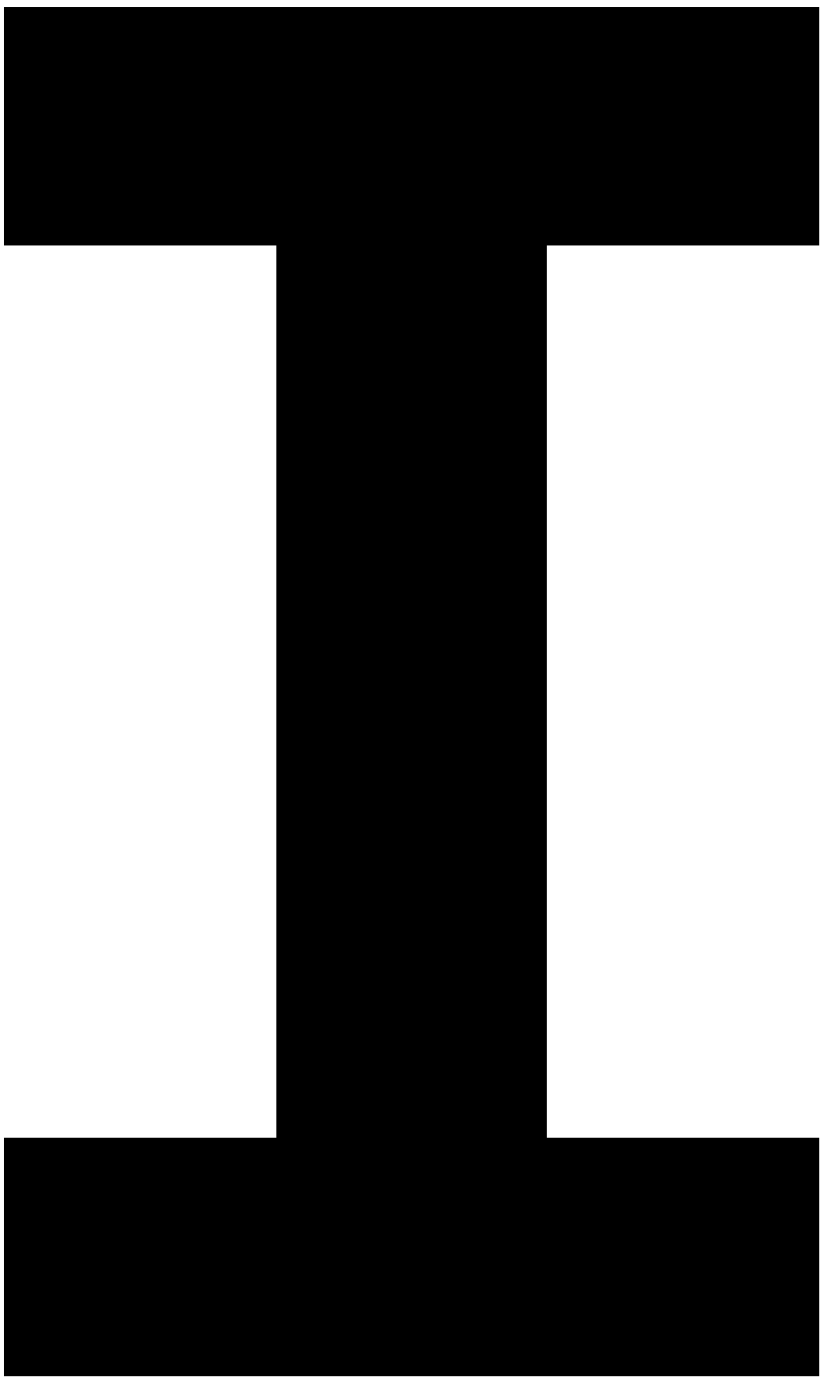
d

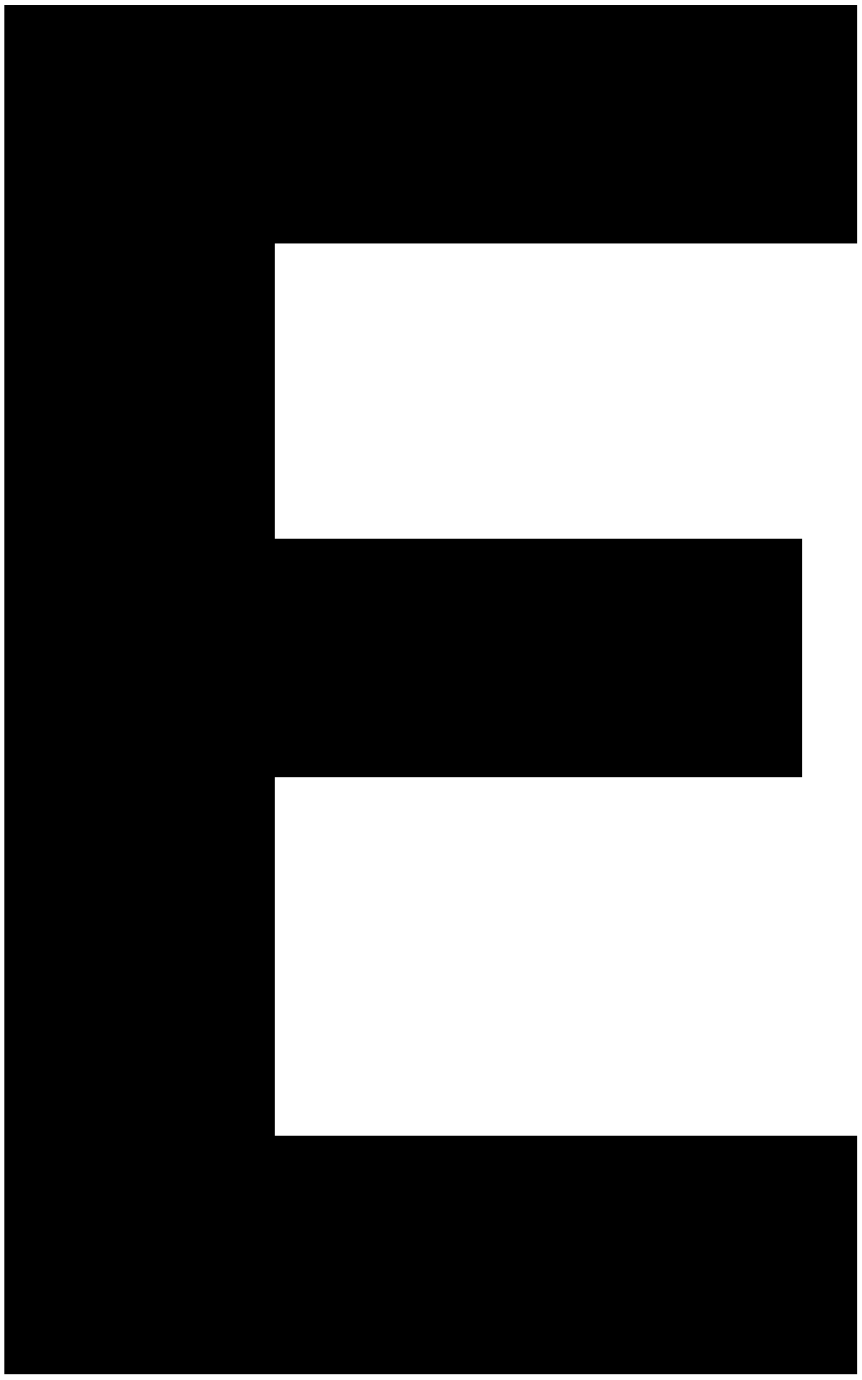


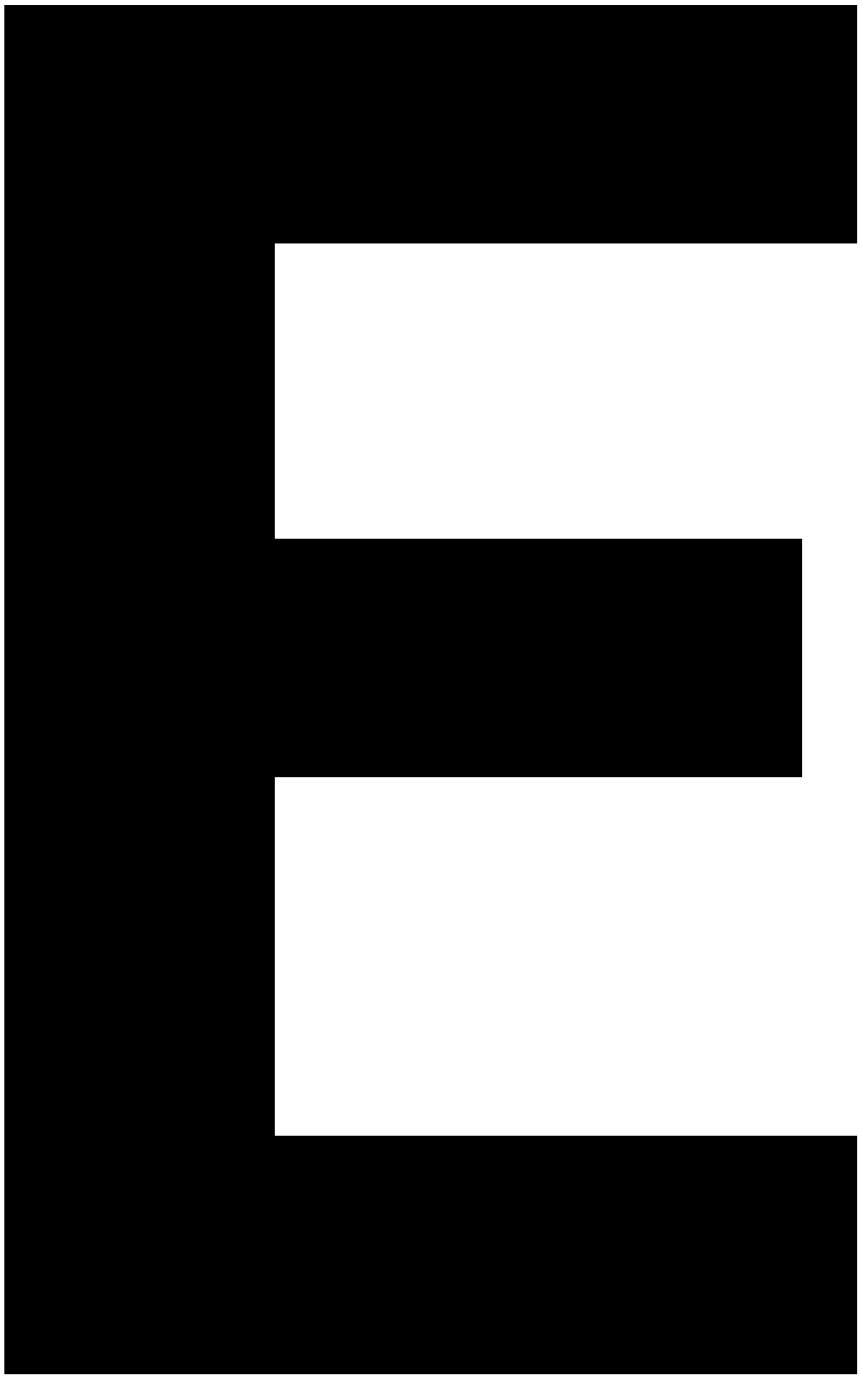
S

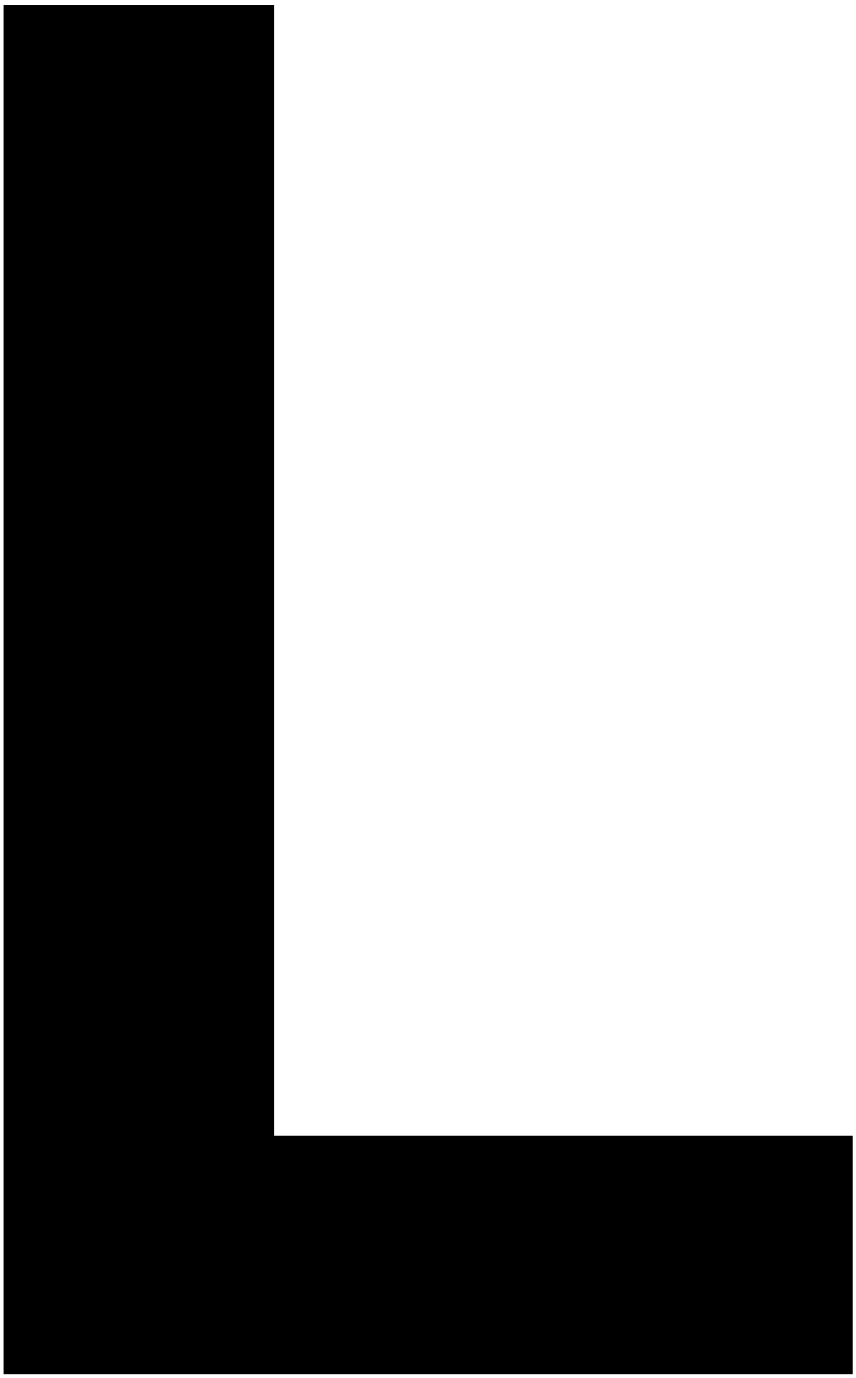




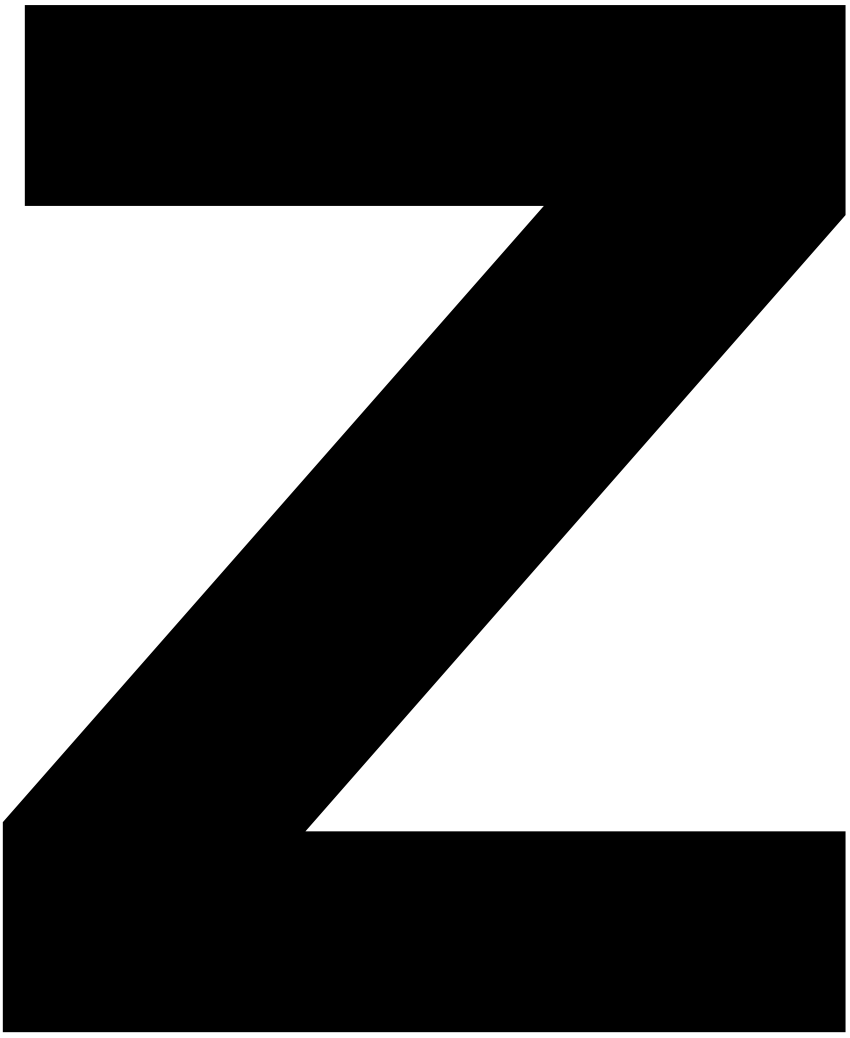




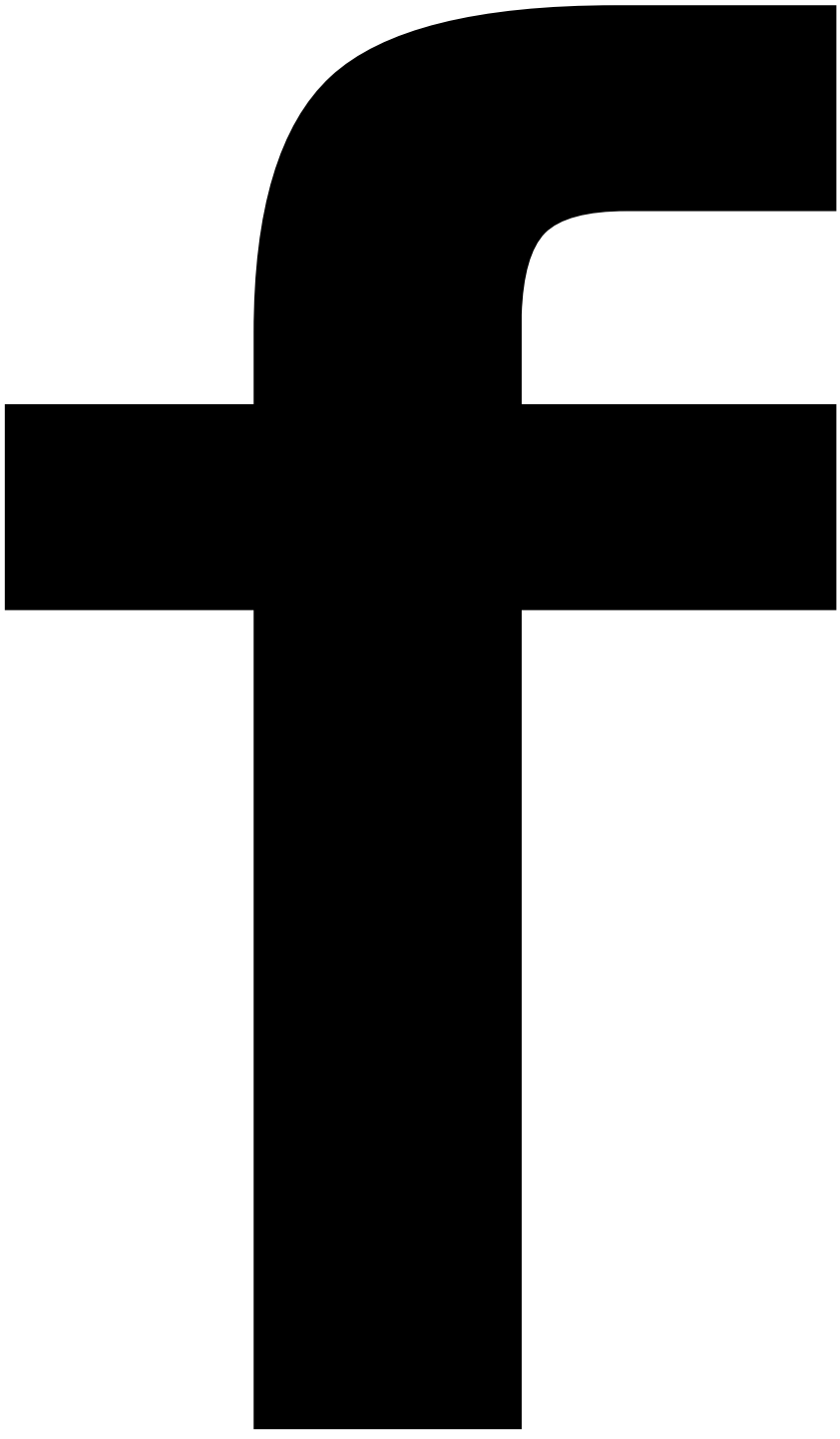


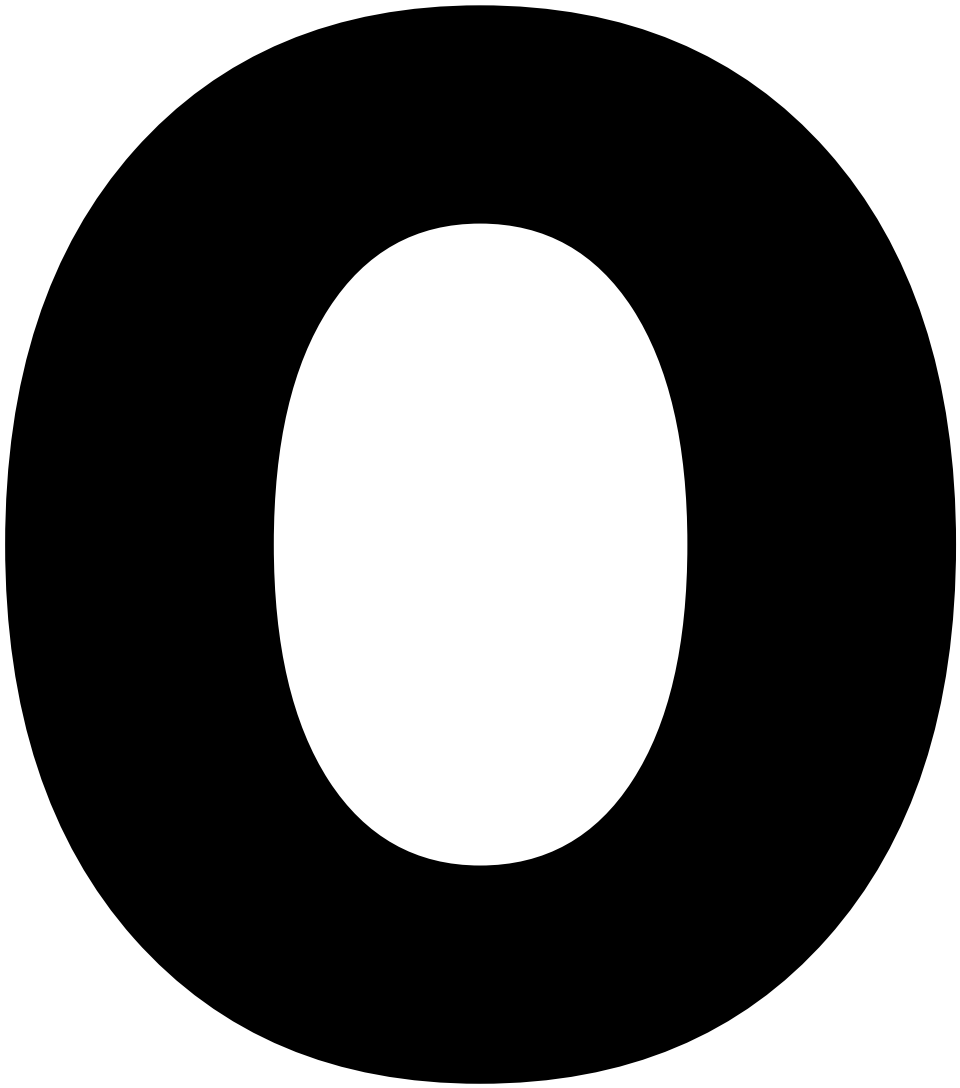


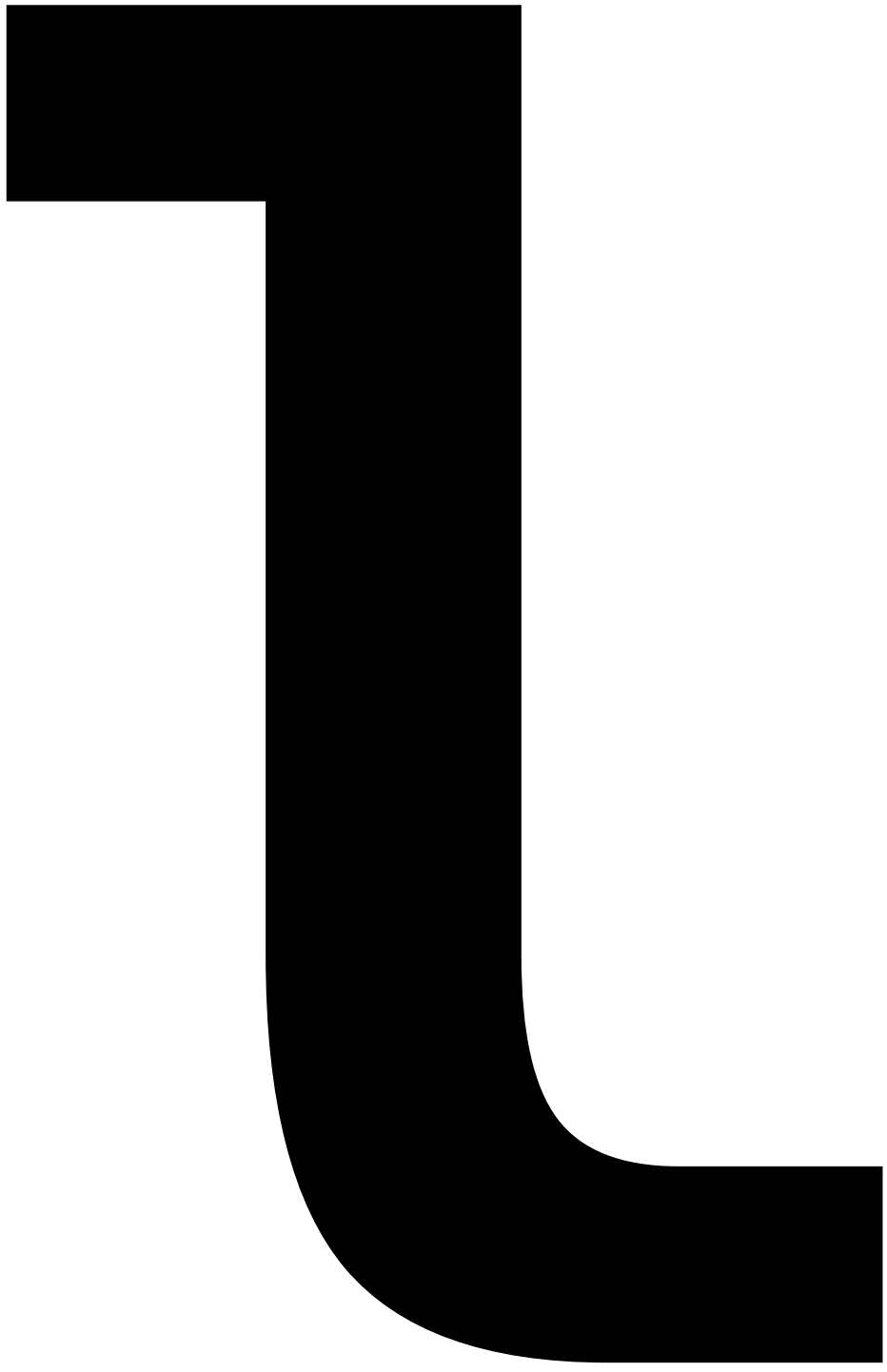
S

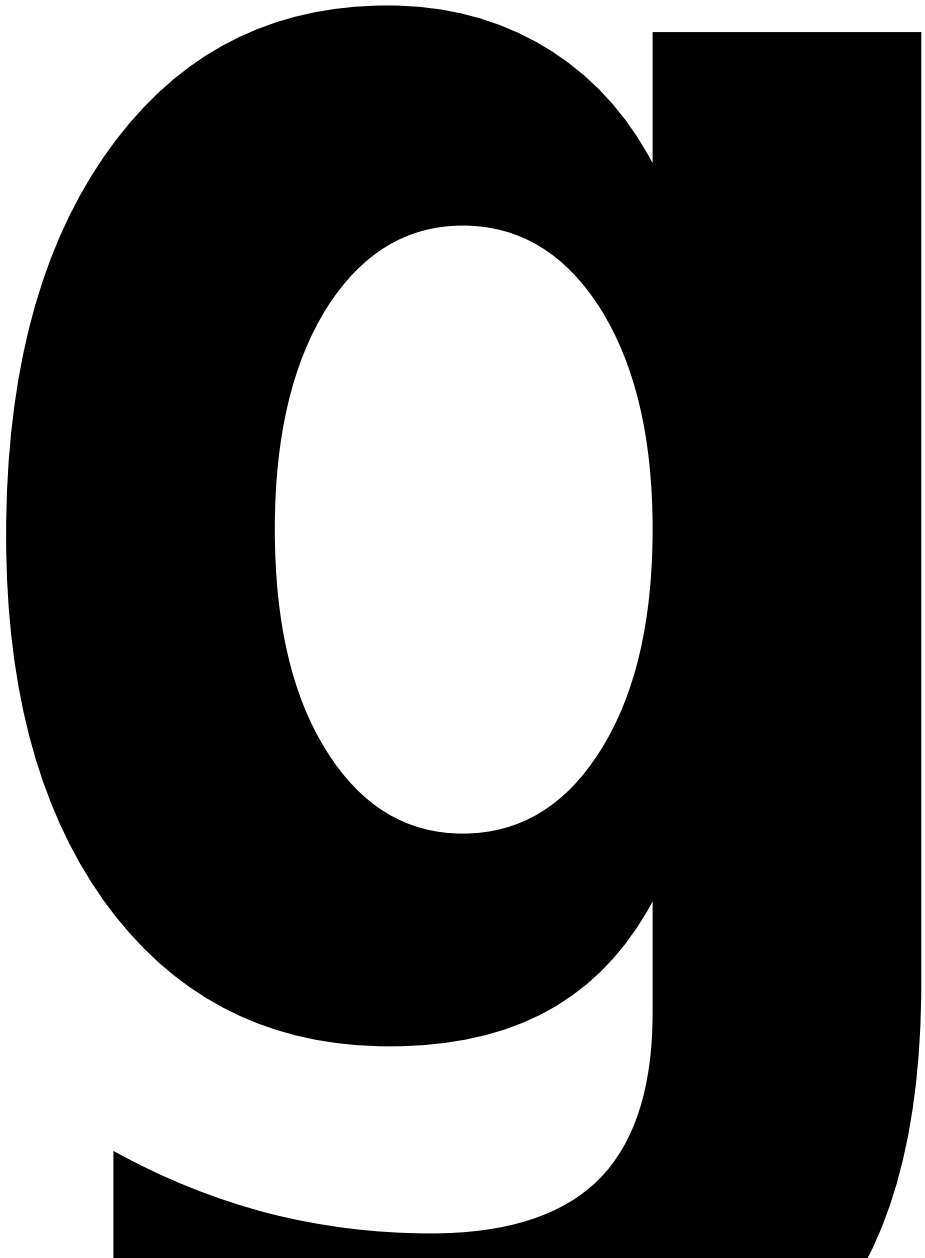


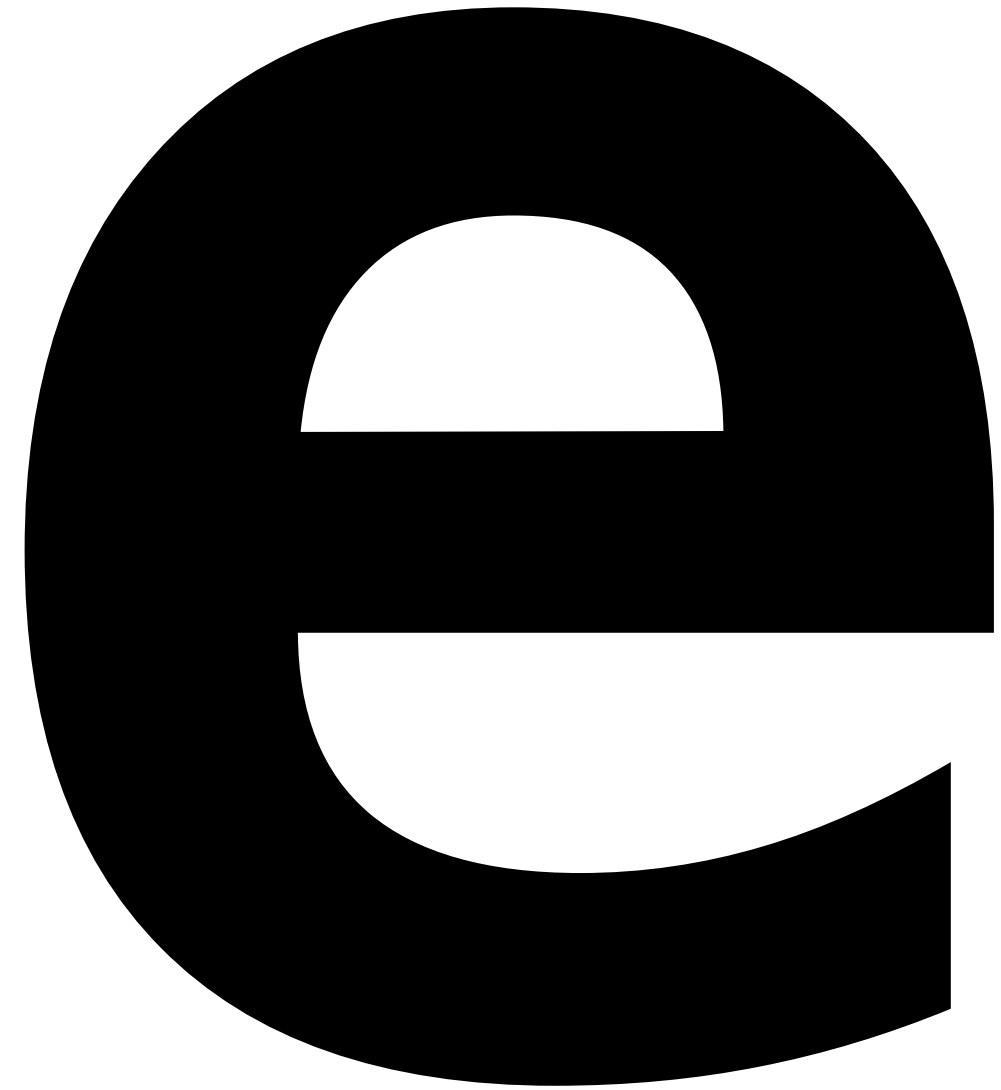
u

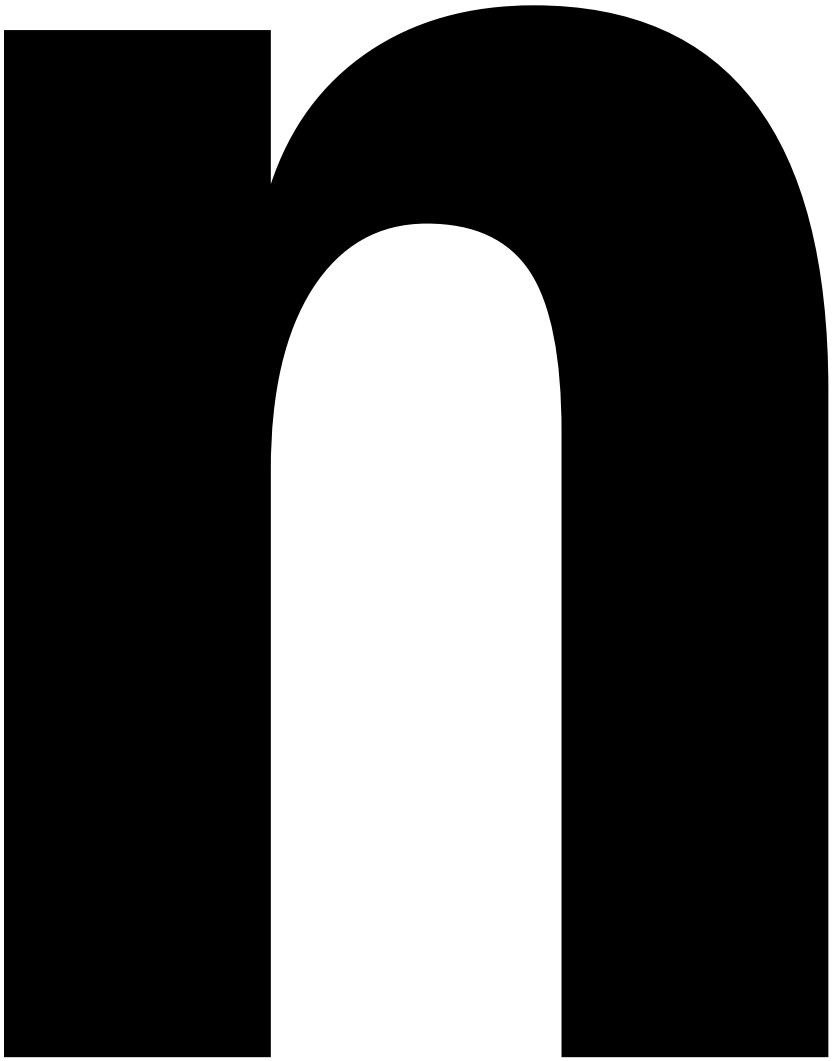


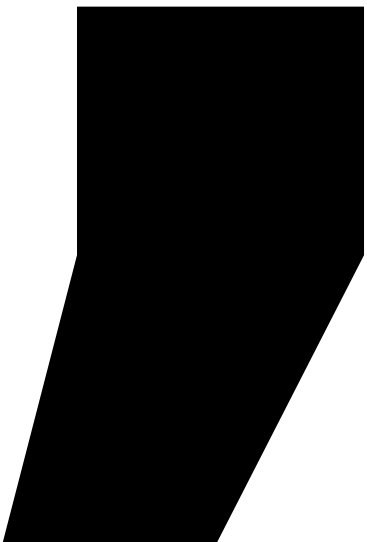




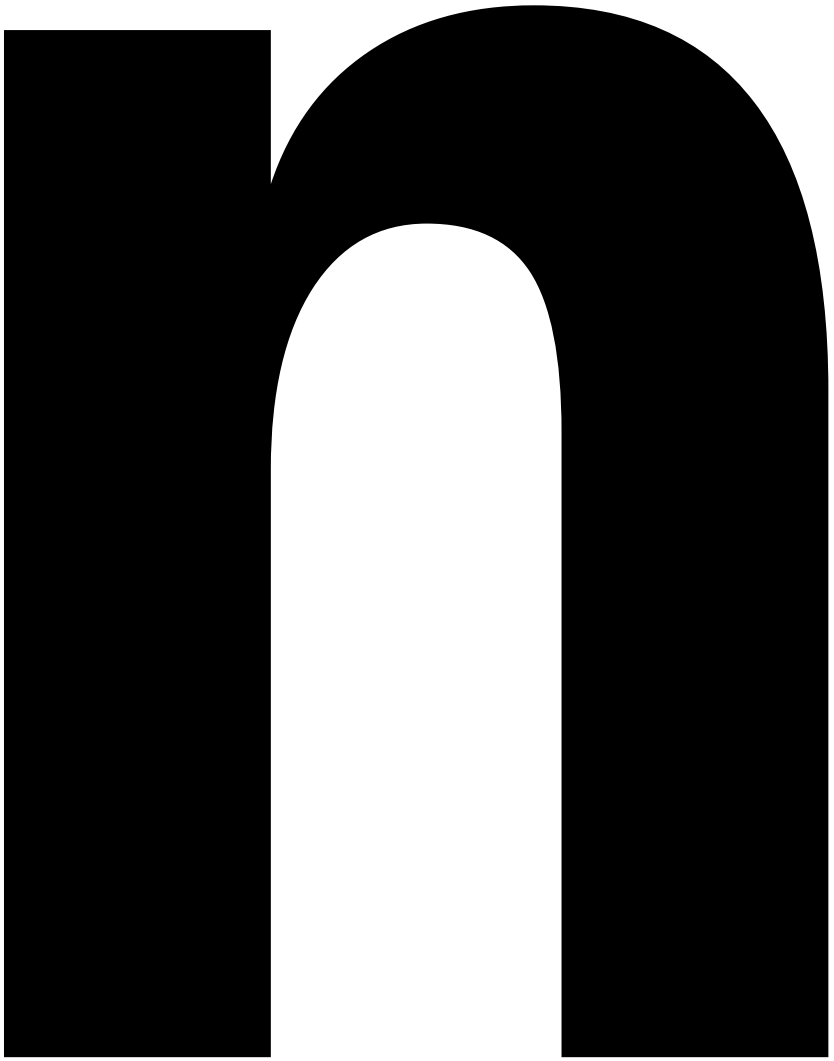






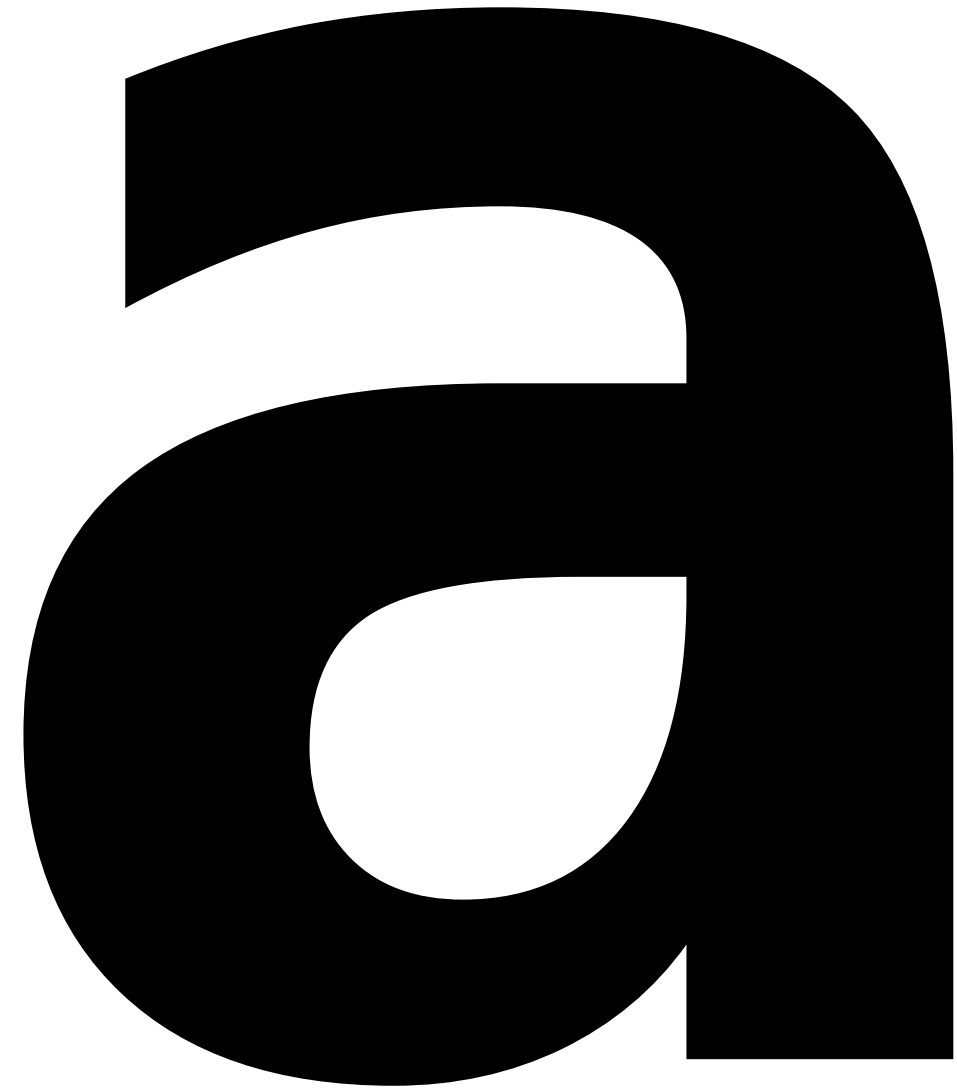


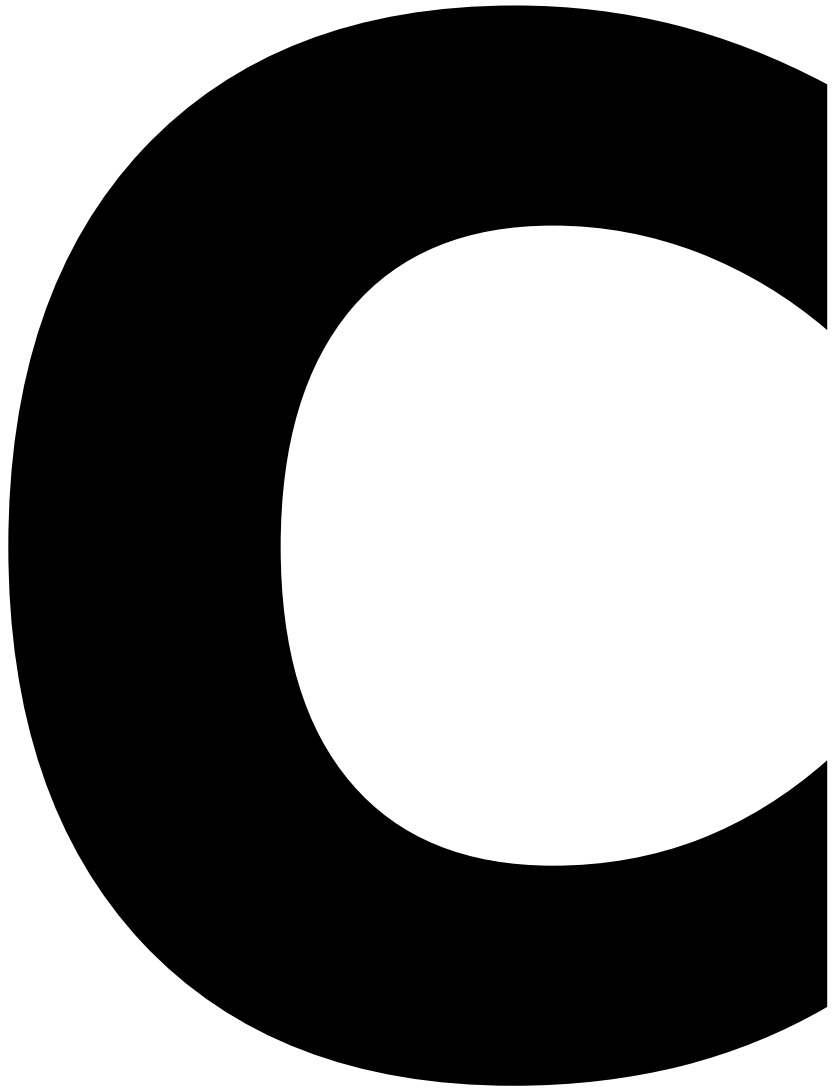
u

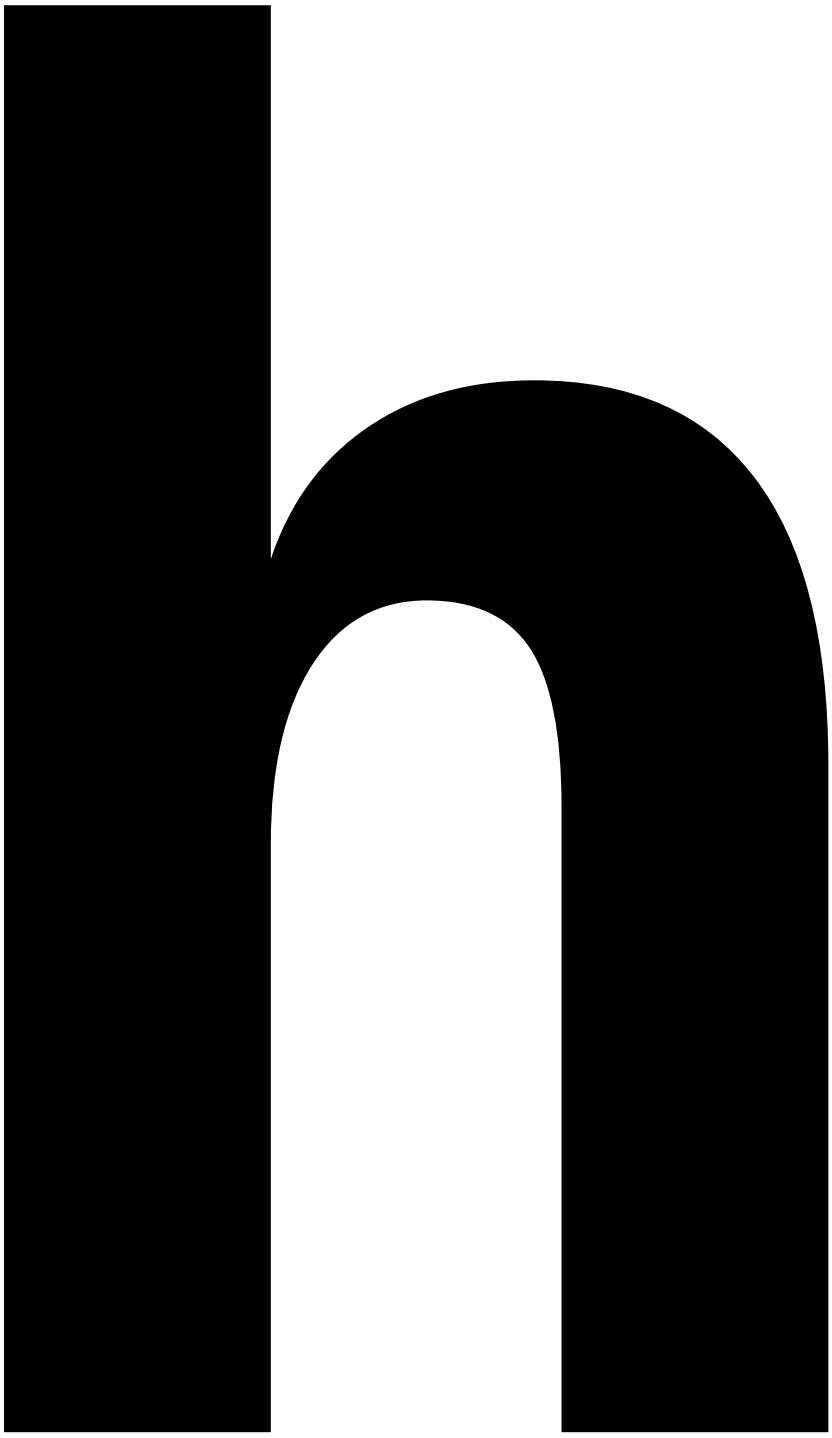


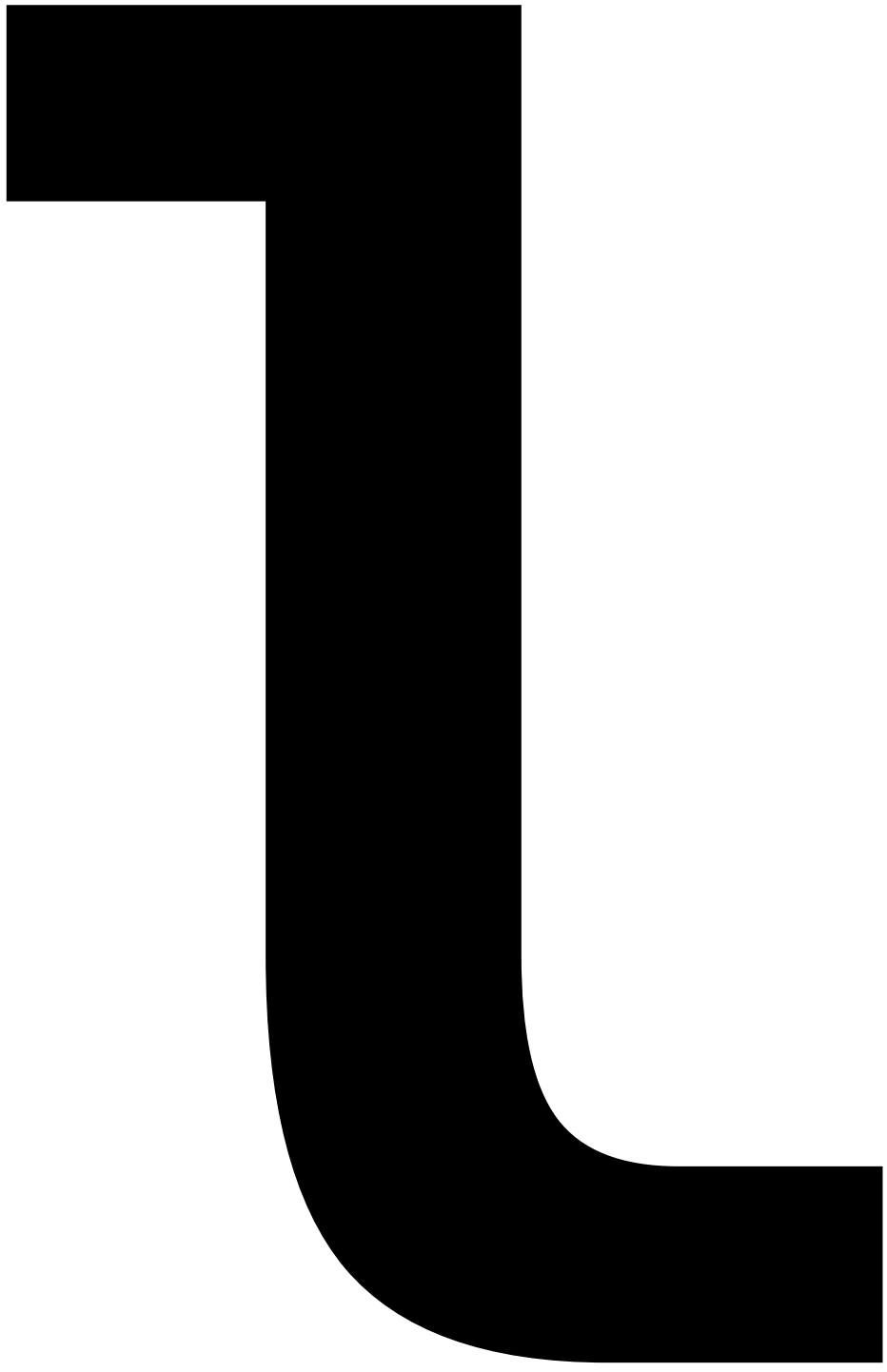
d

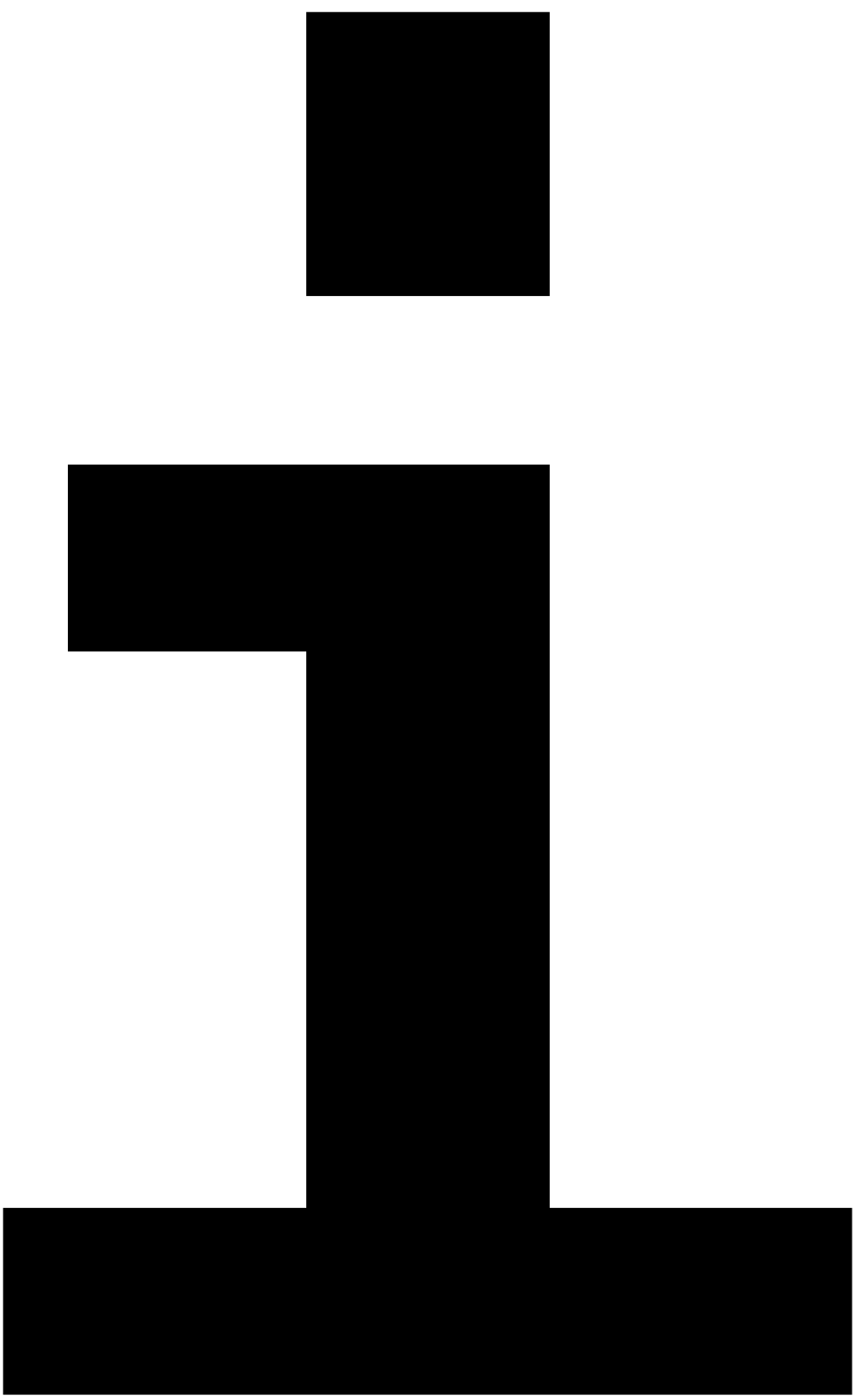
S

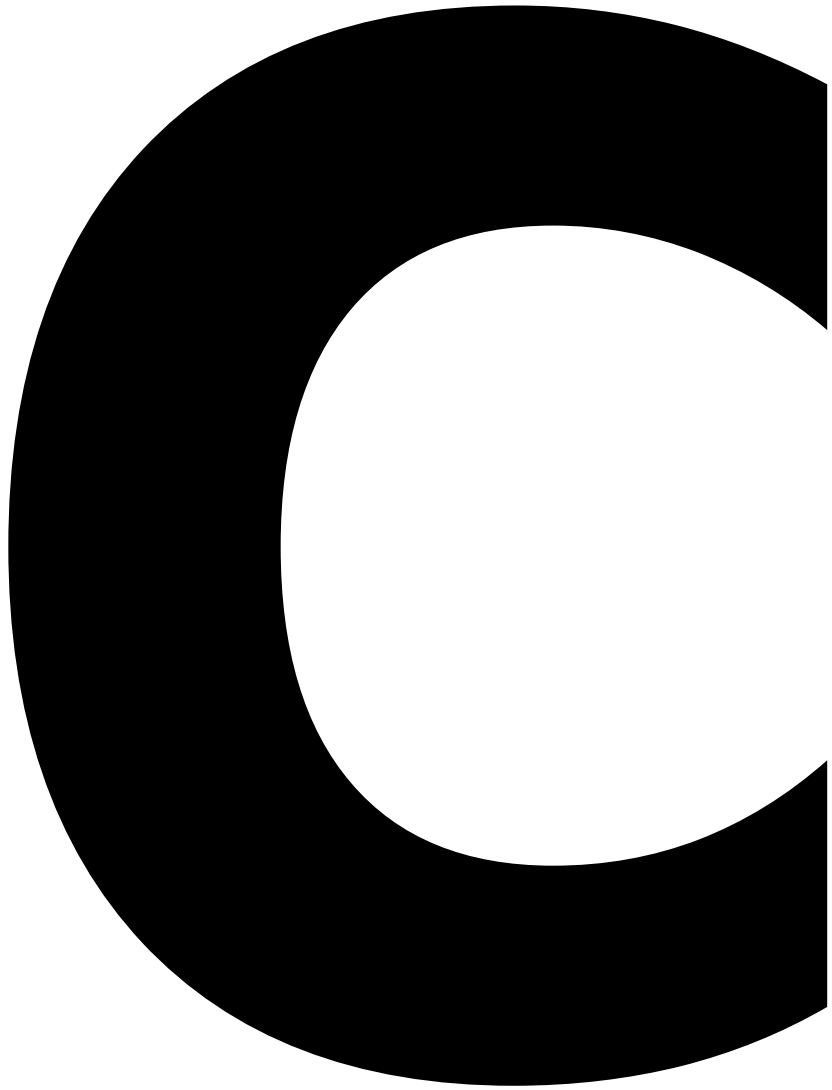


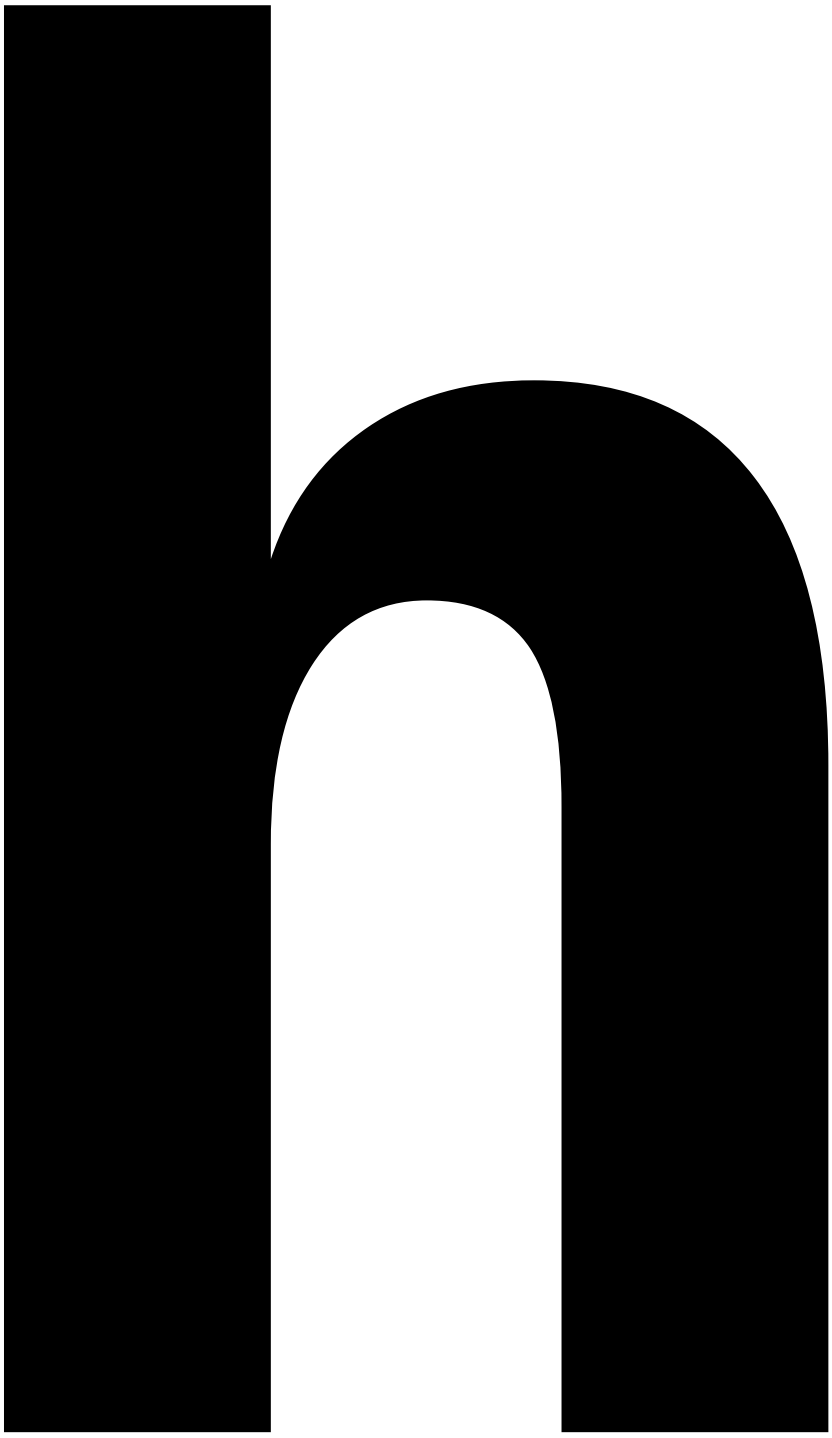


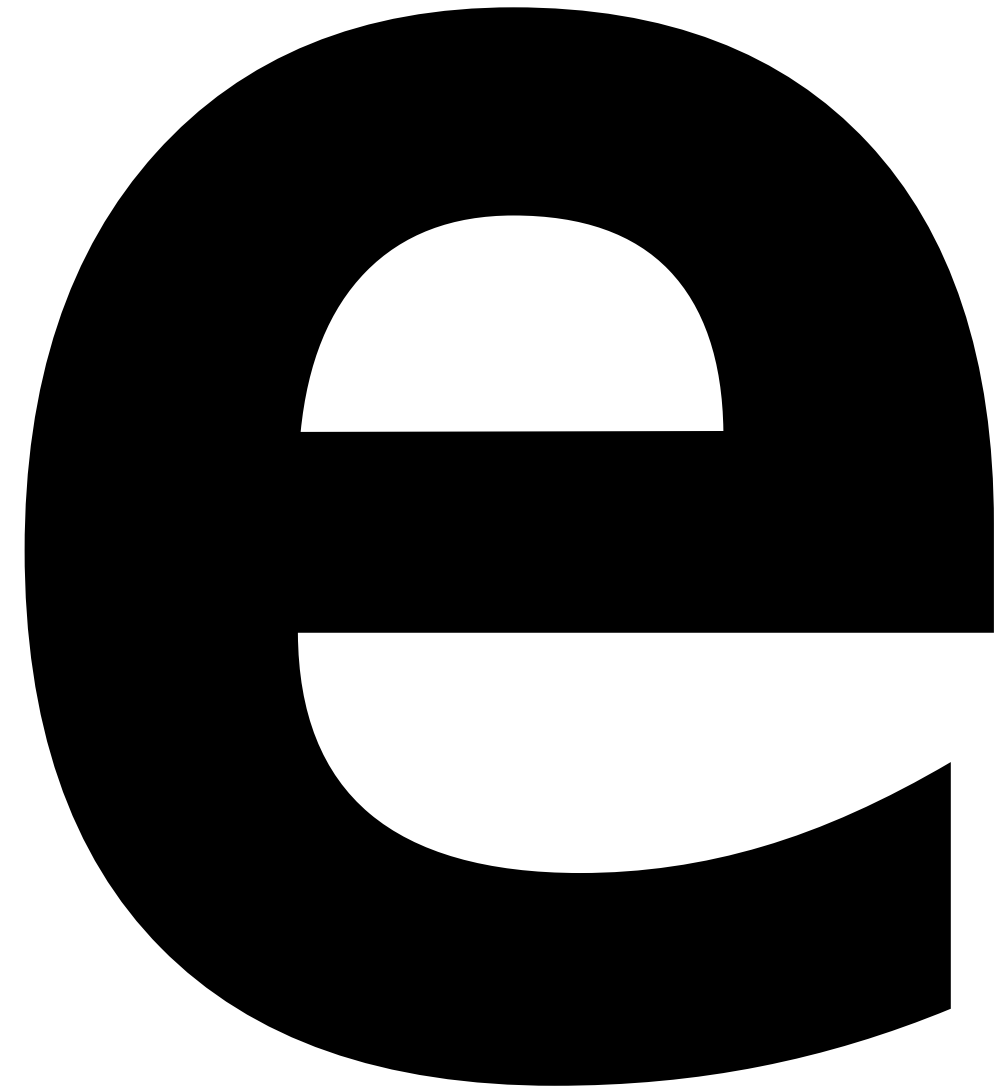


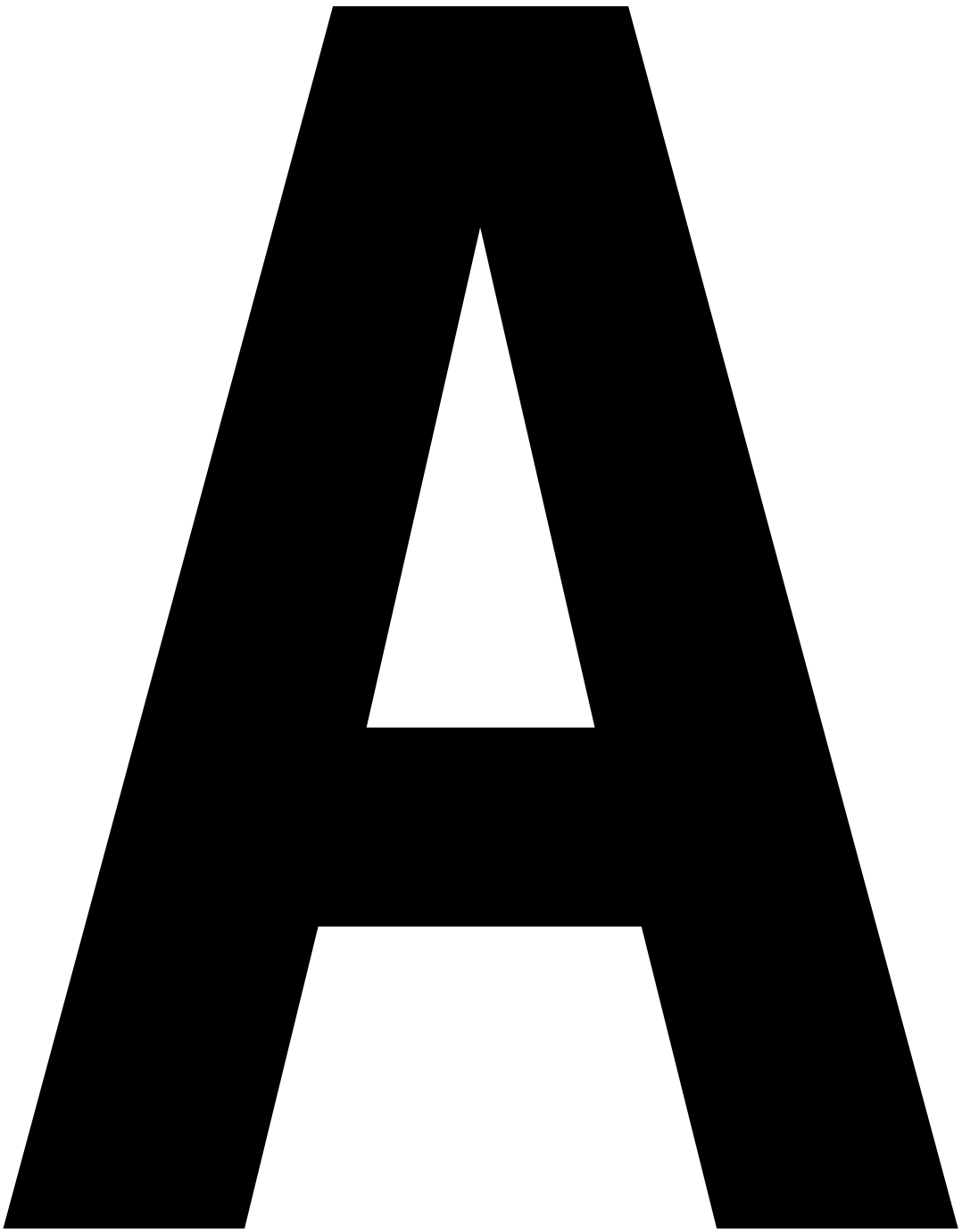




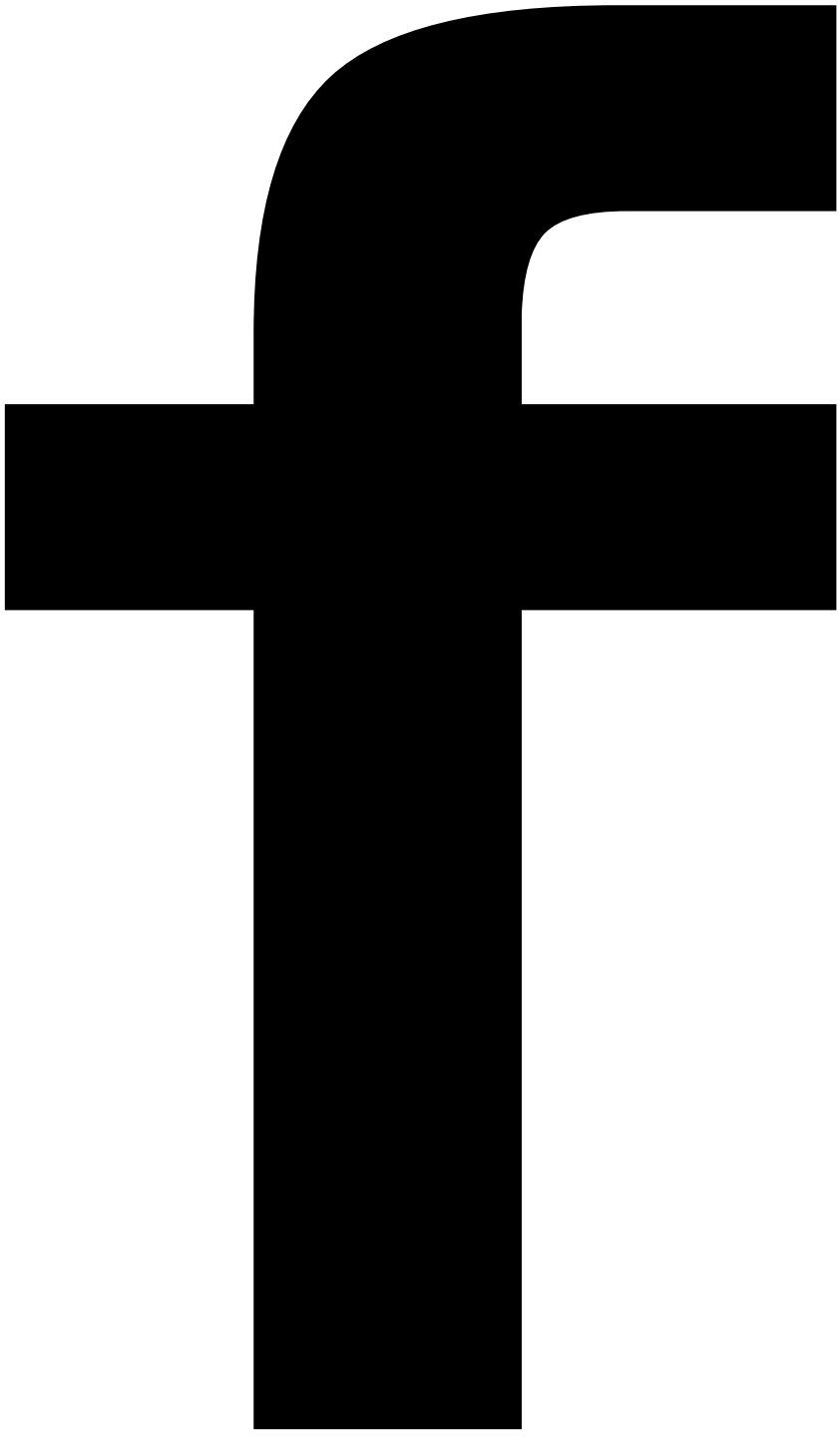


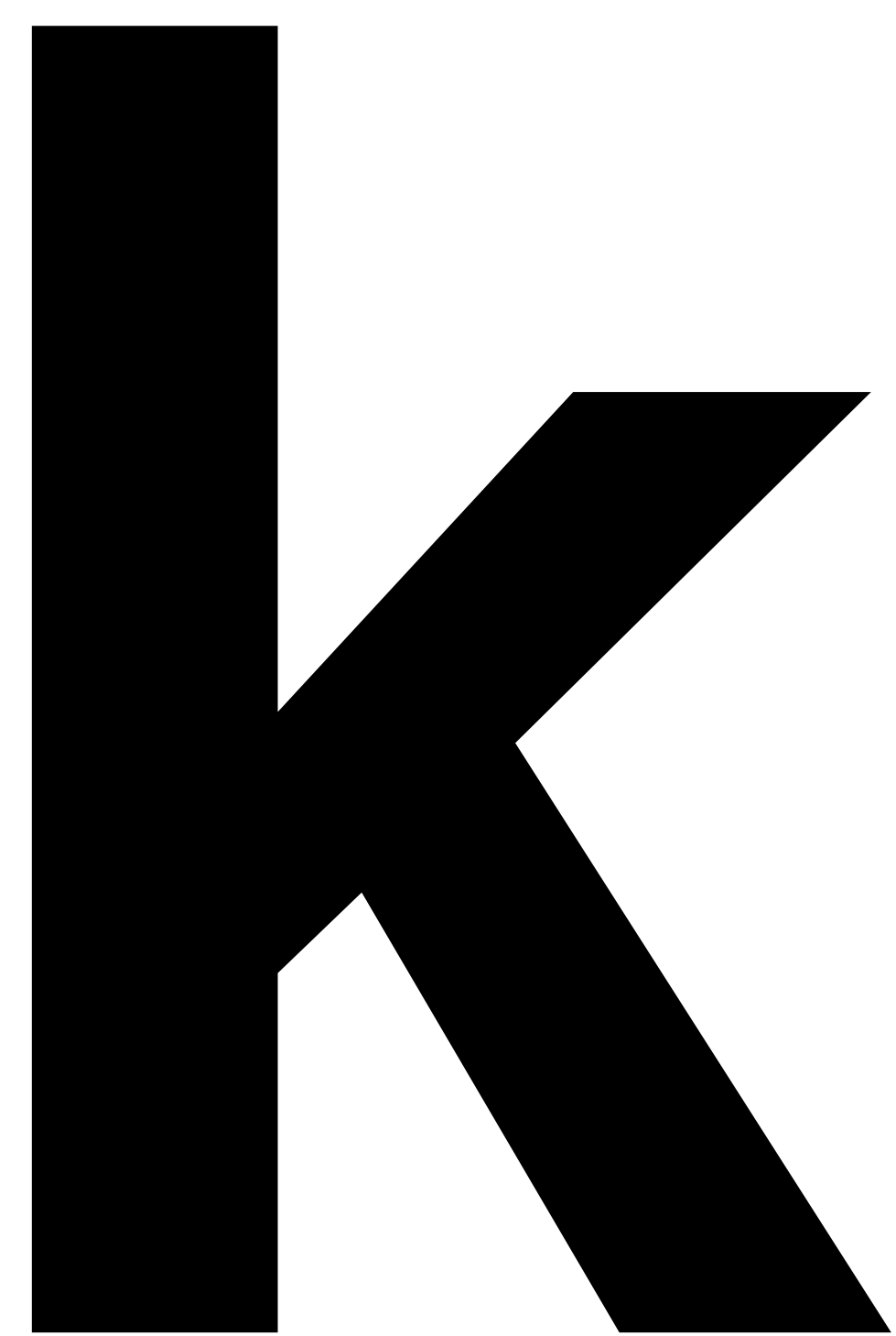


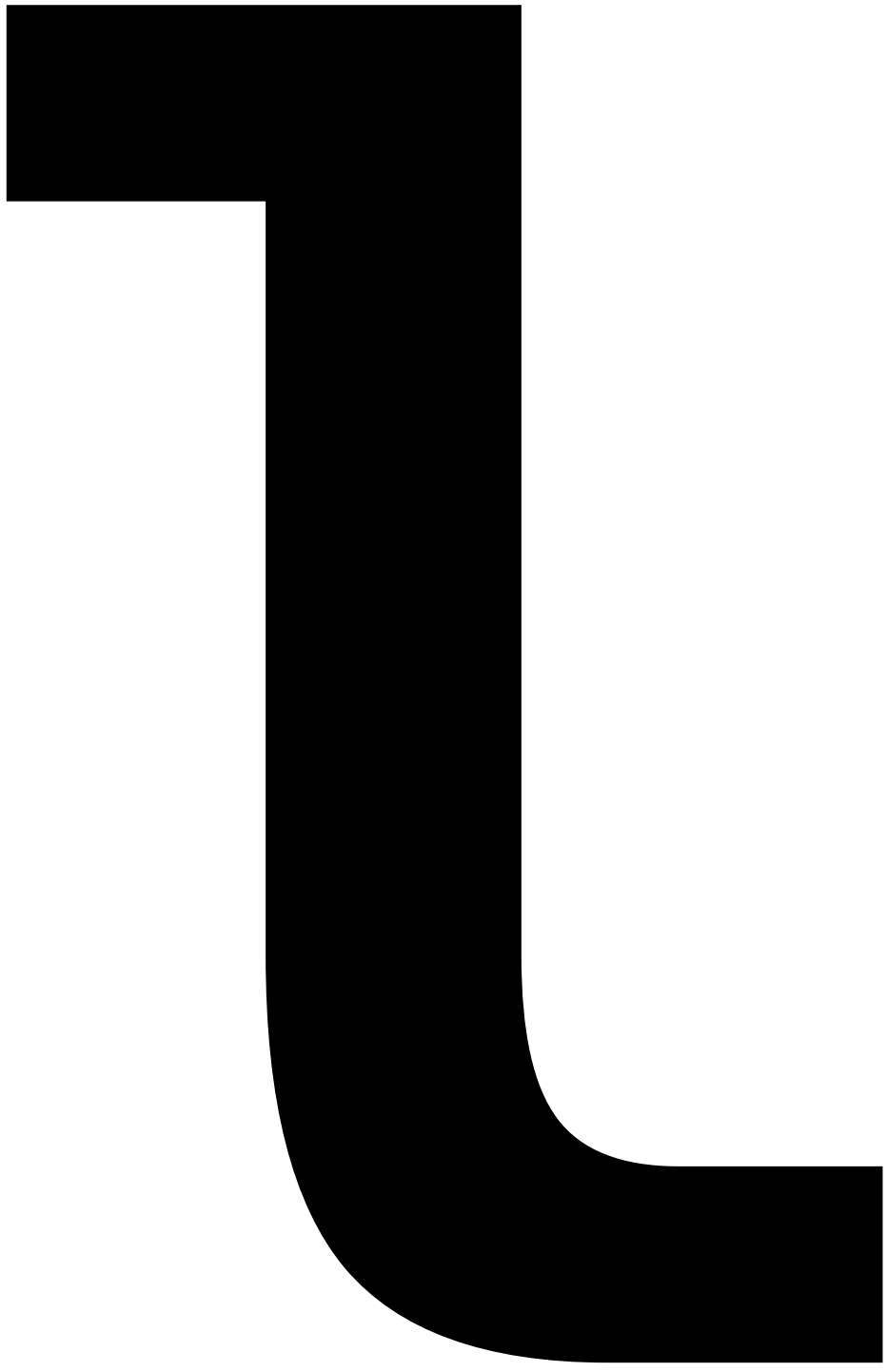


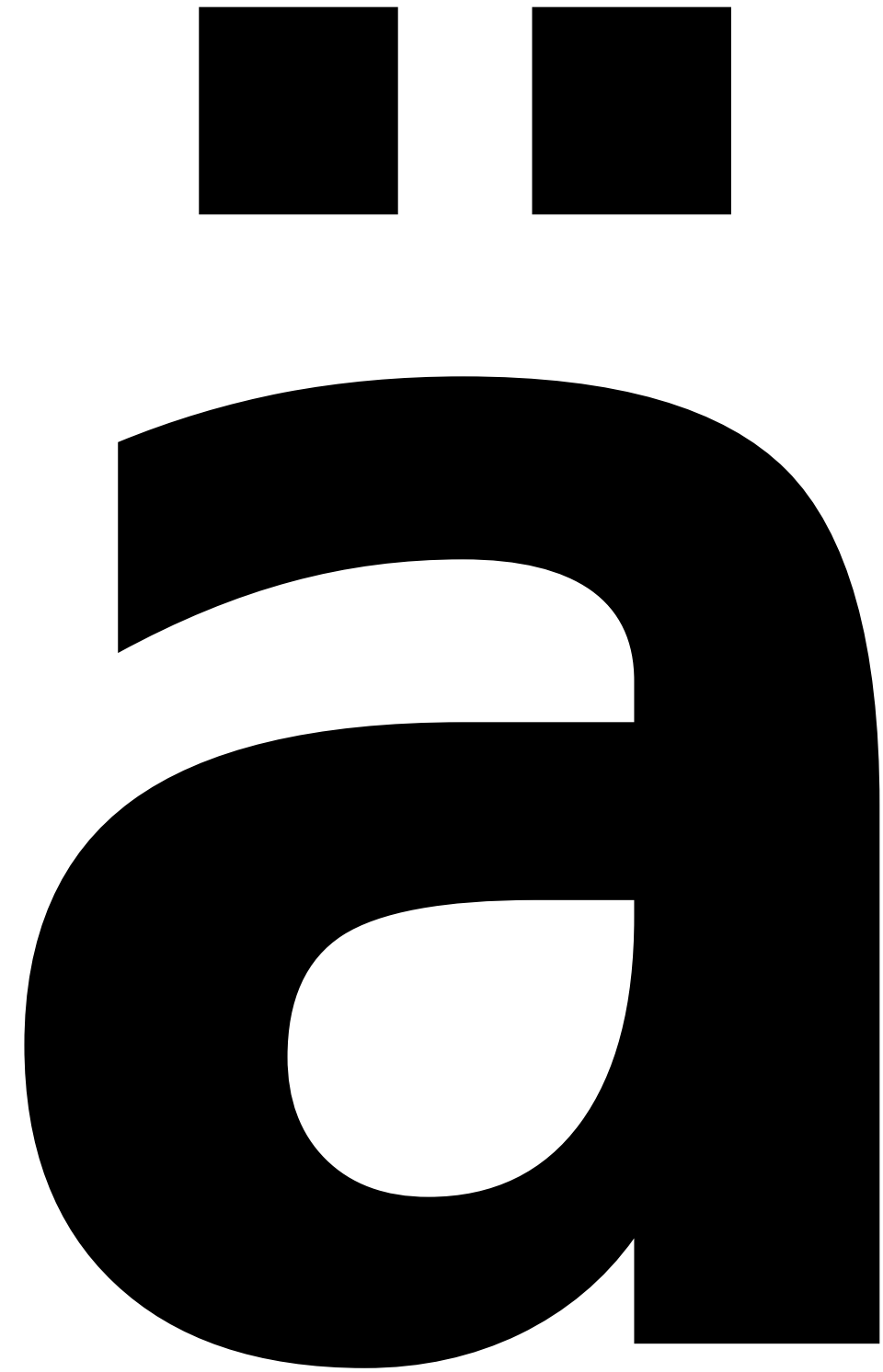


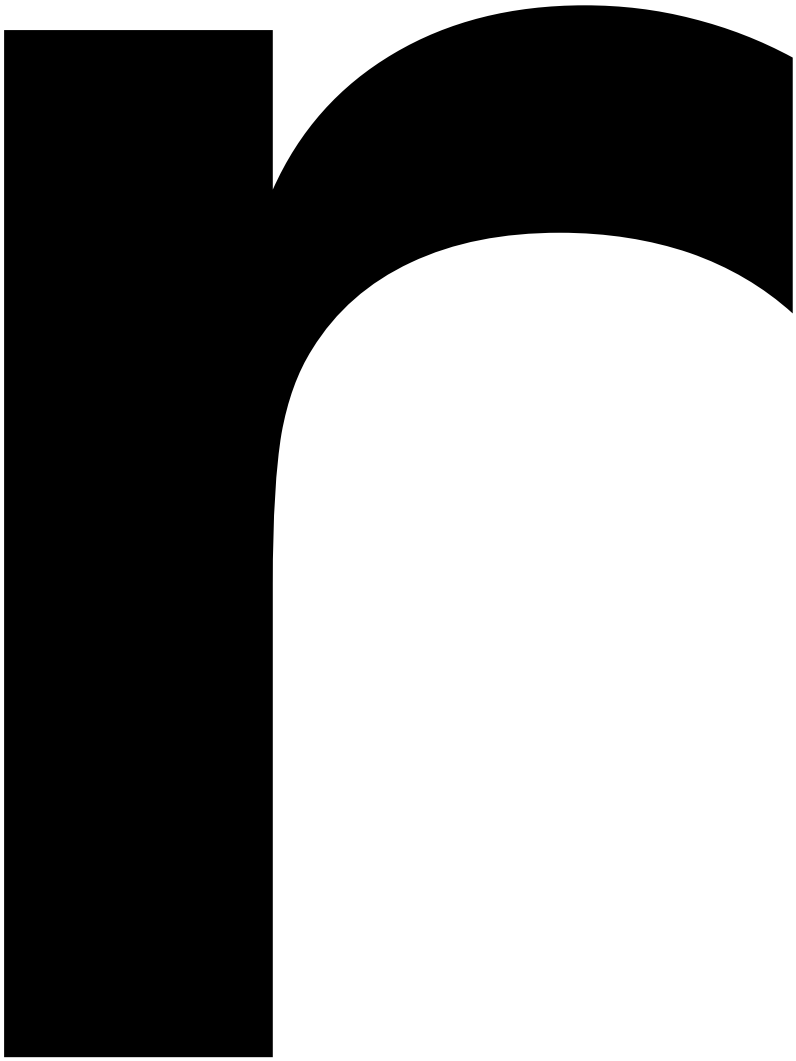
u



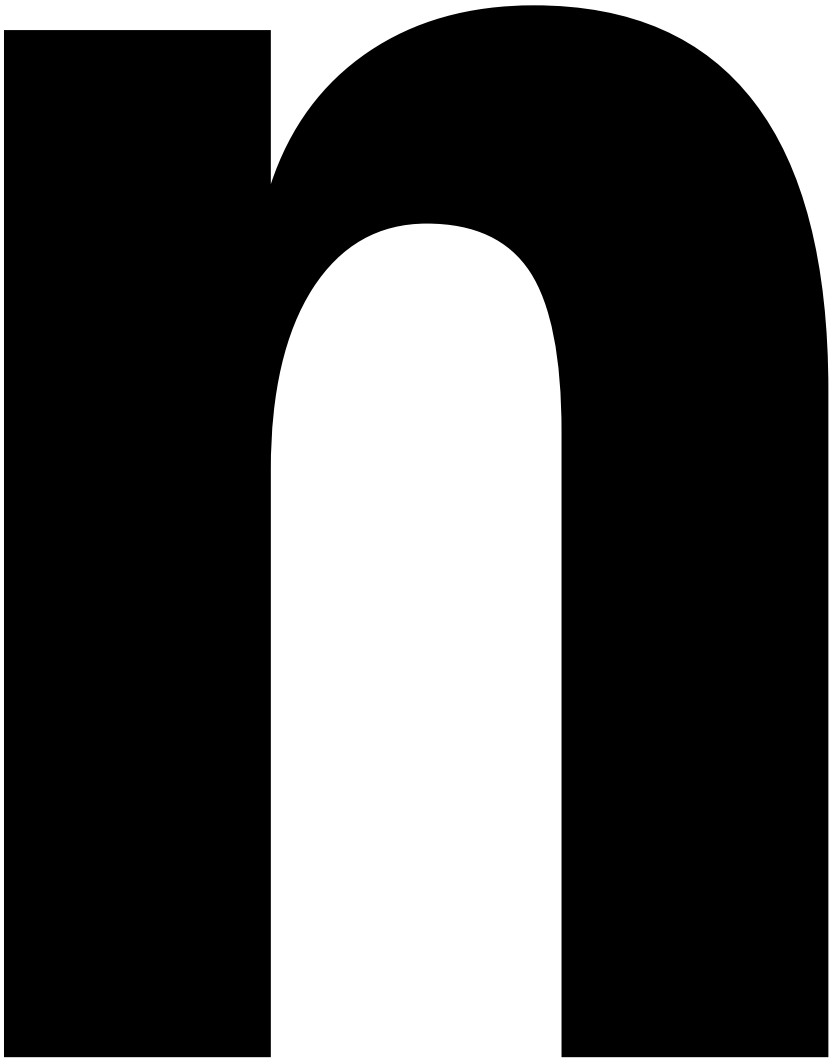


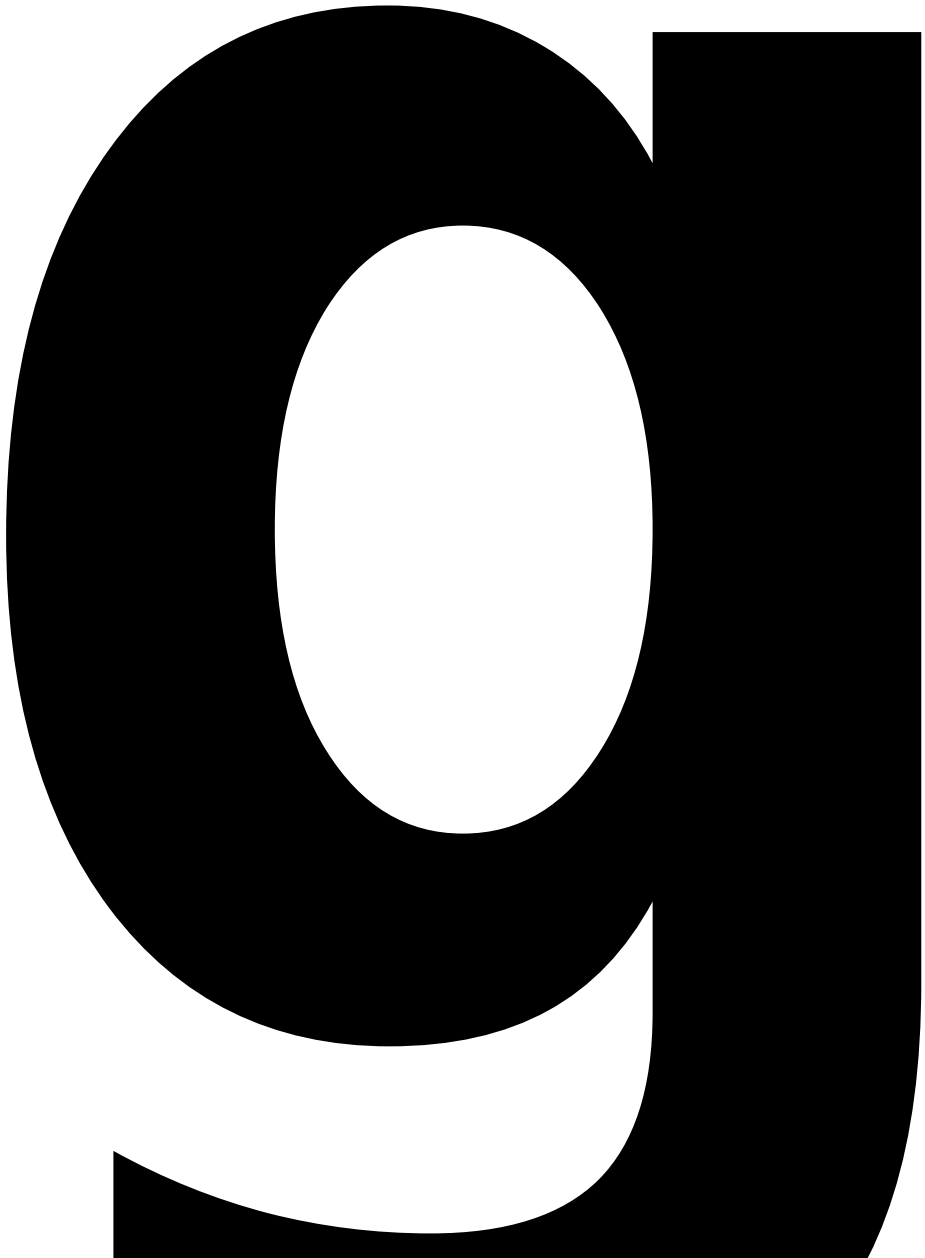


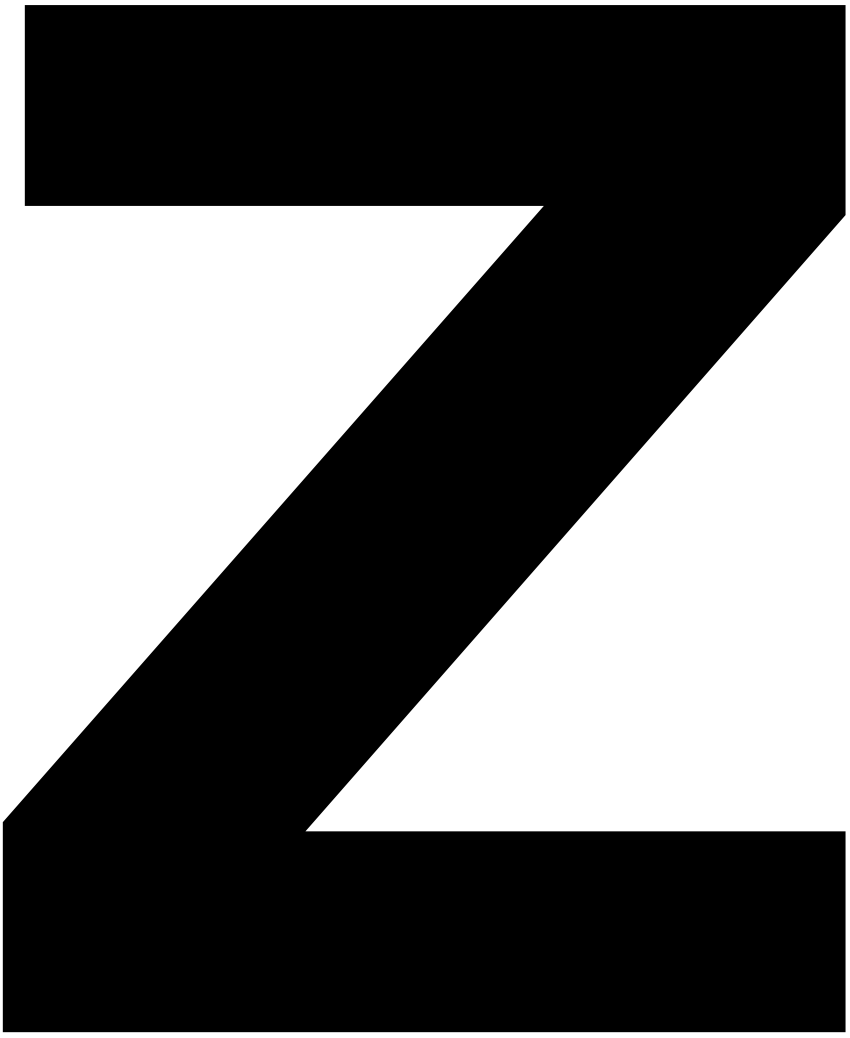




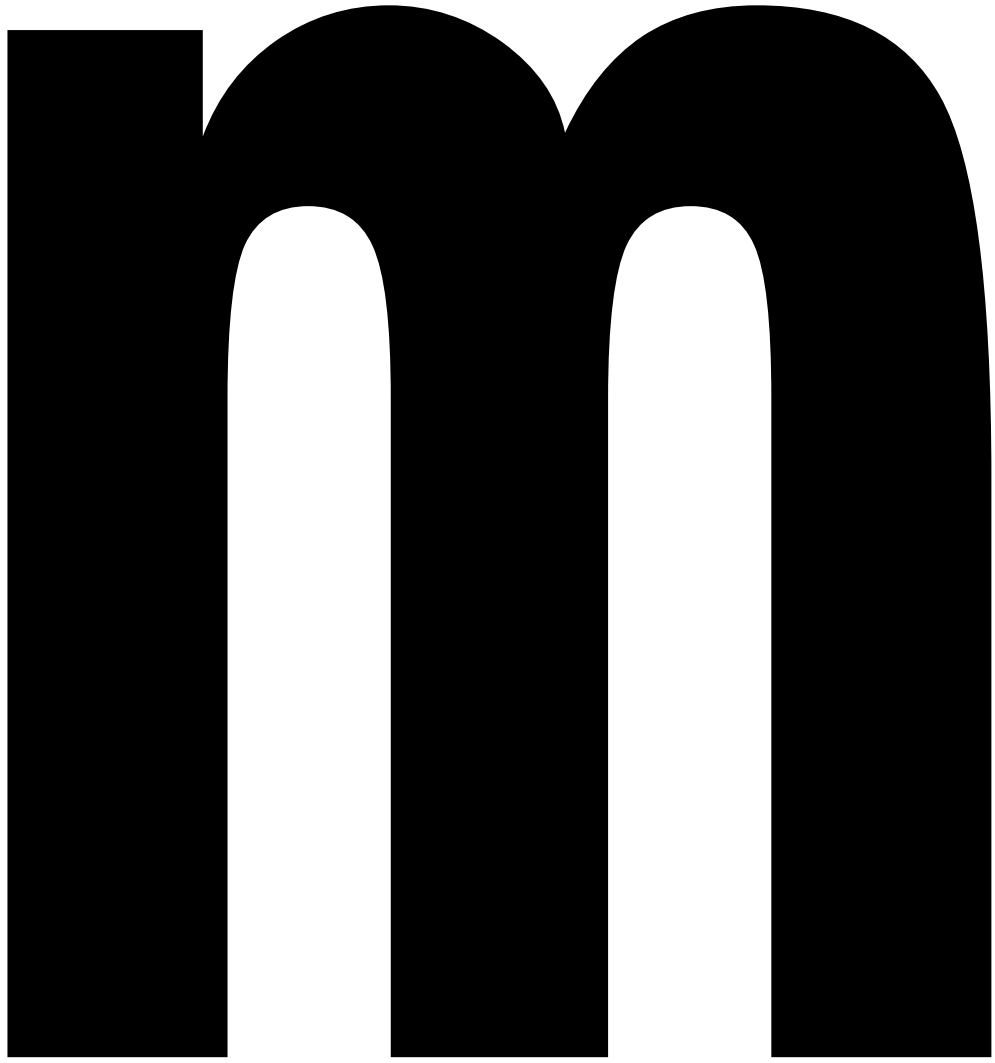
u

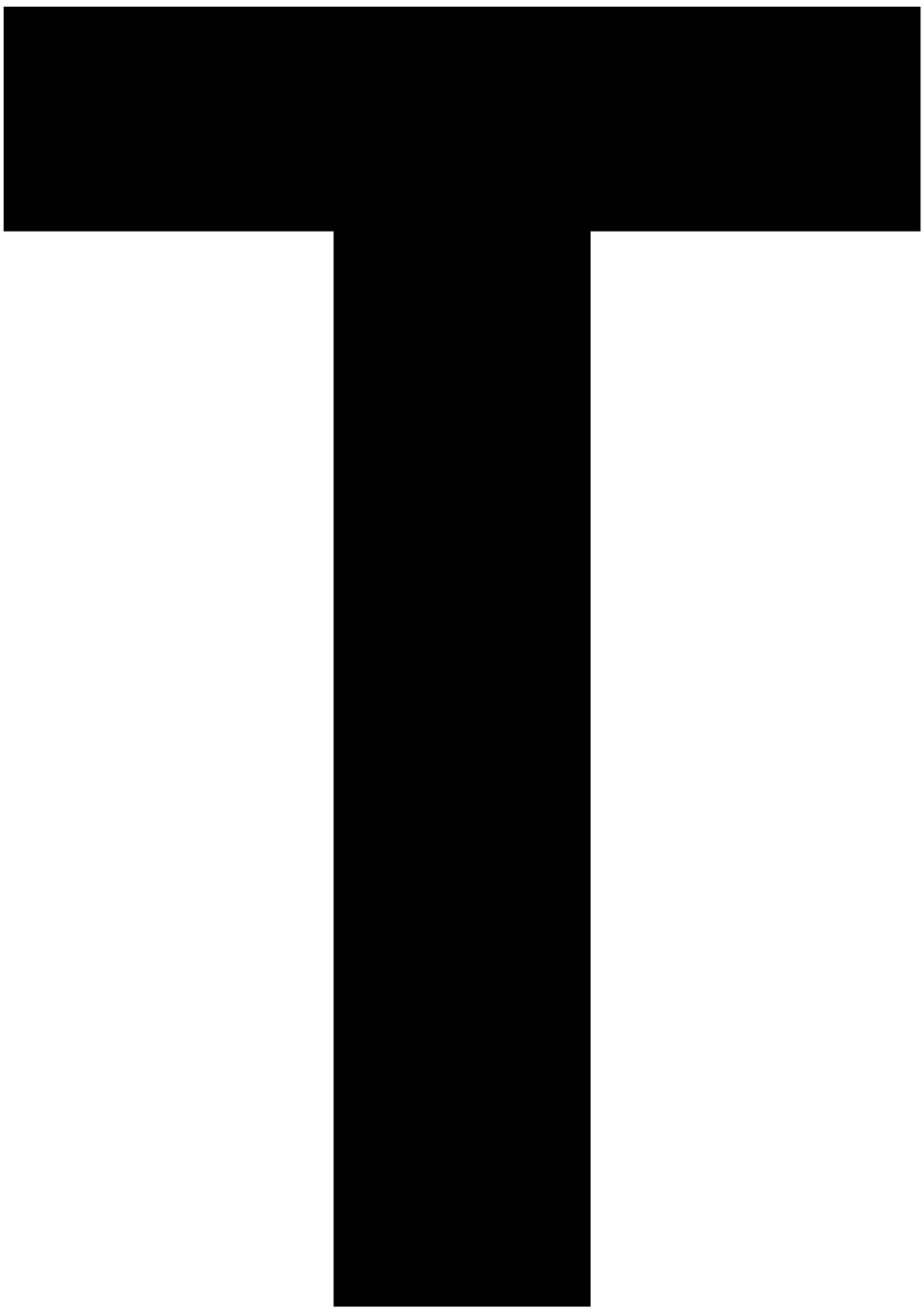


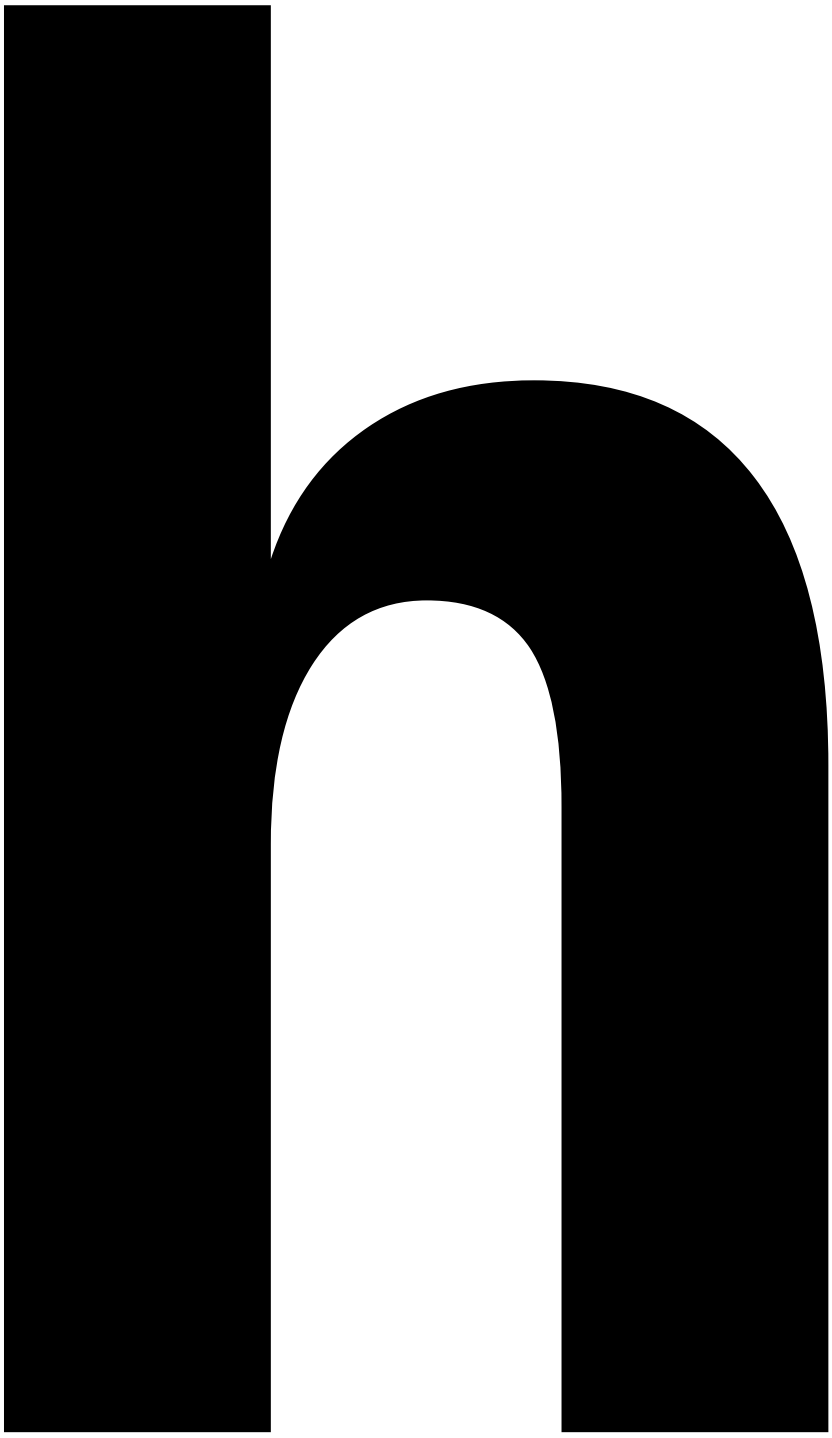


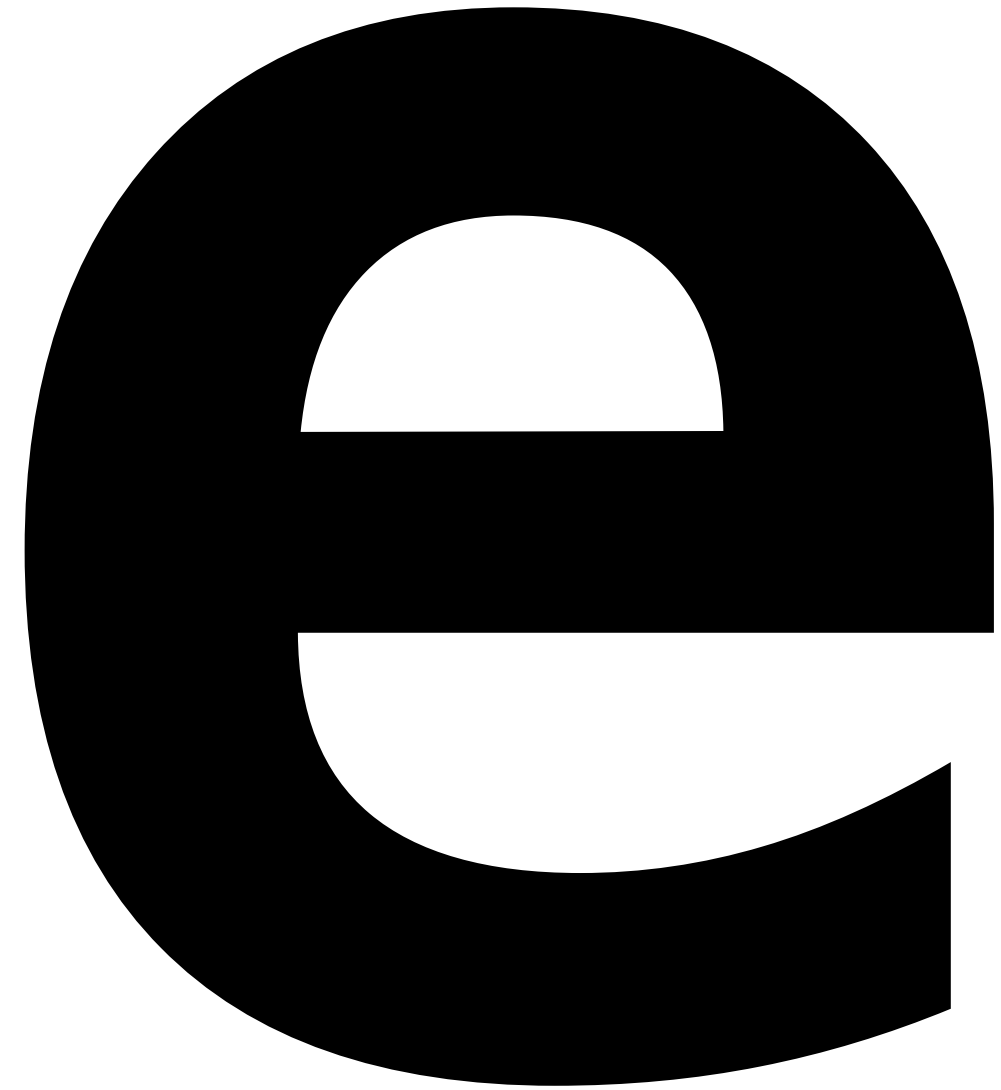


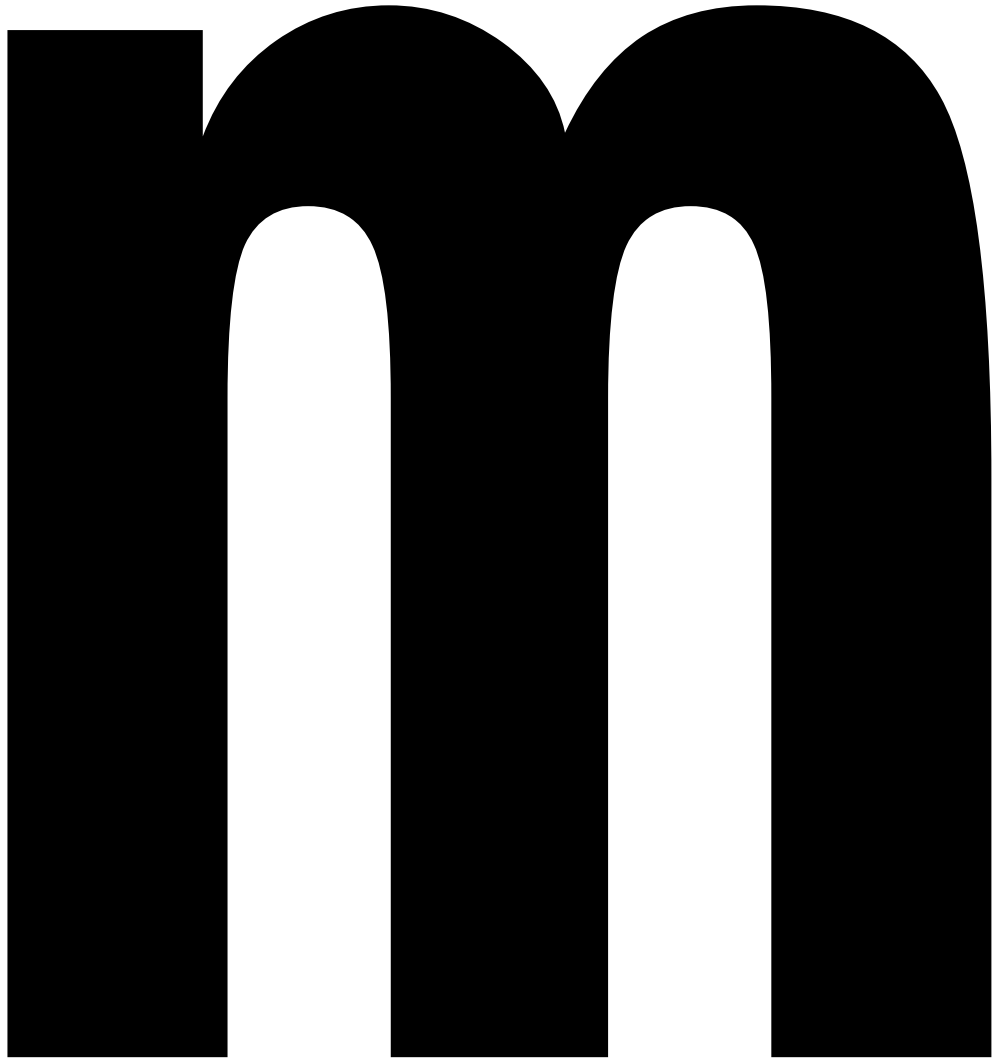
u

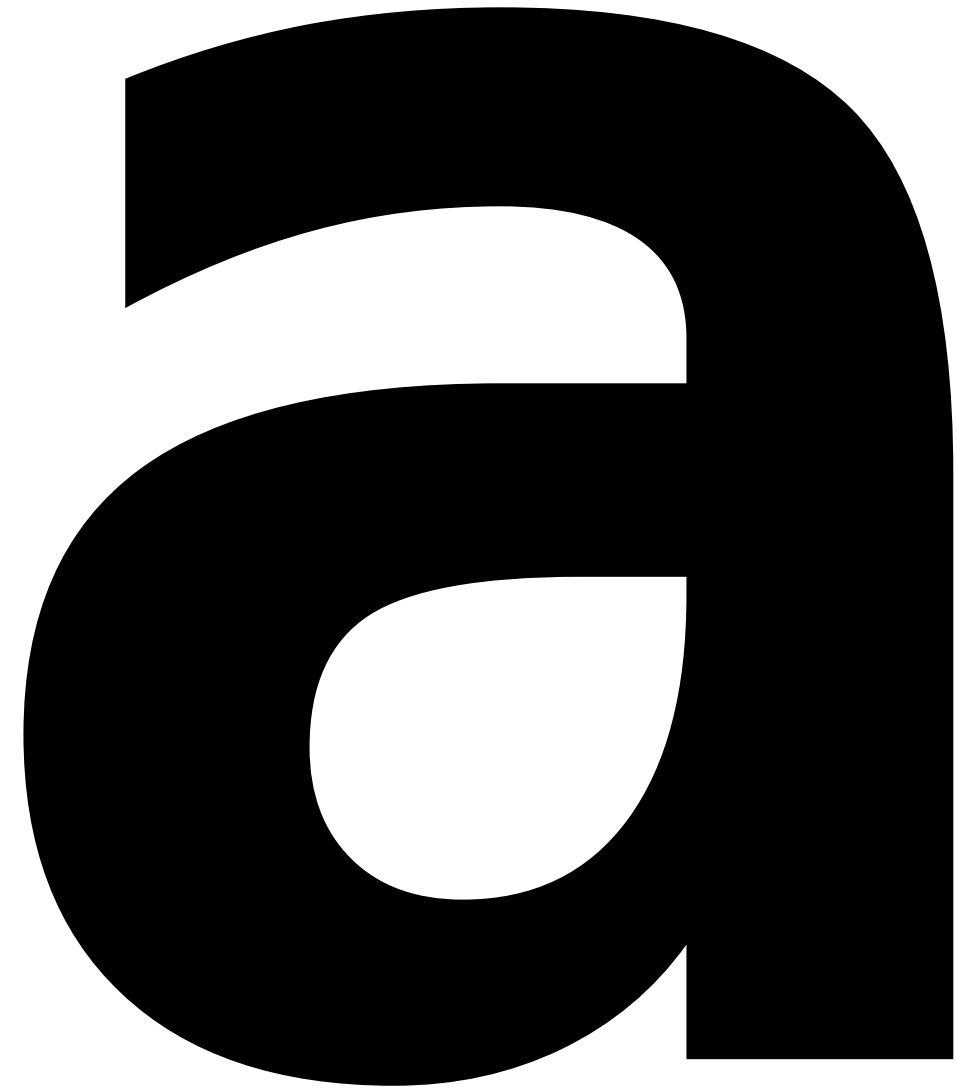


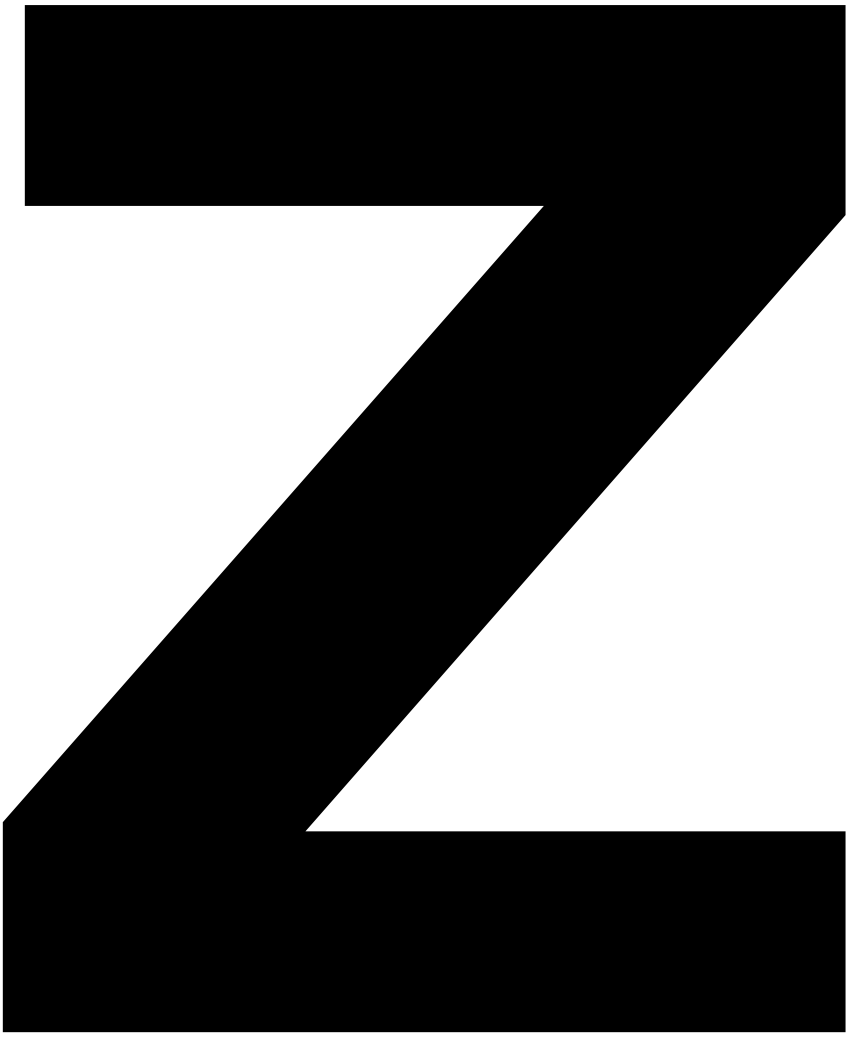




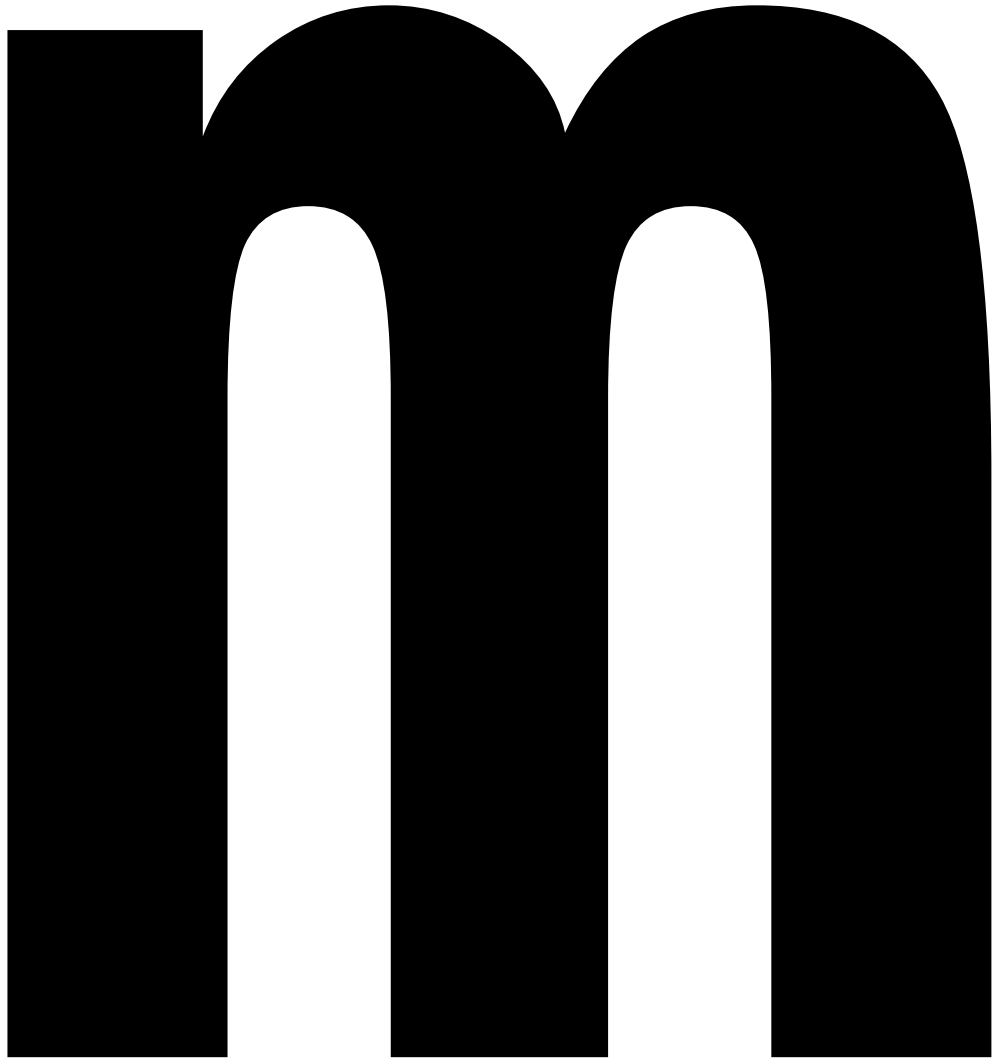


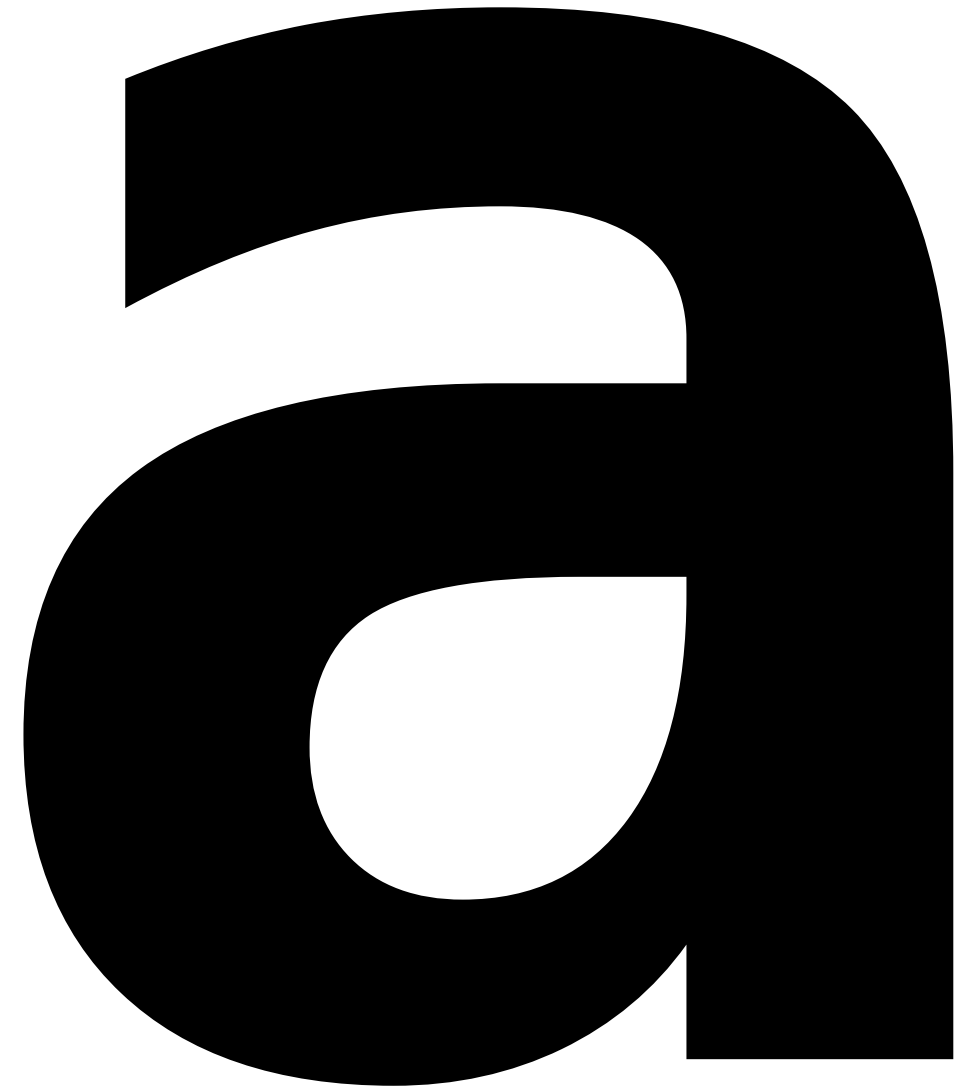


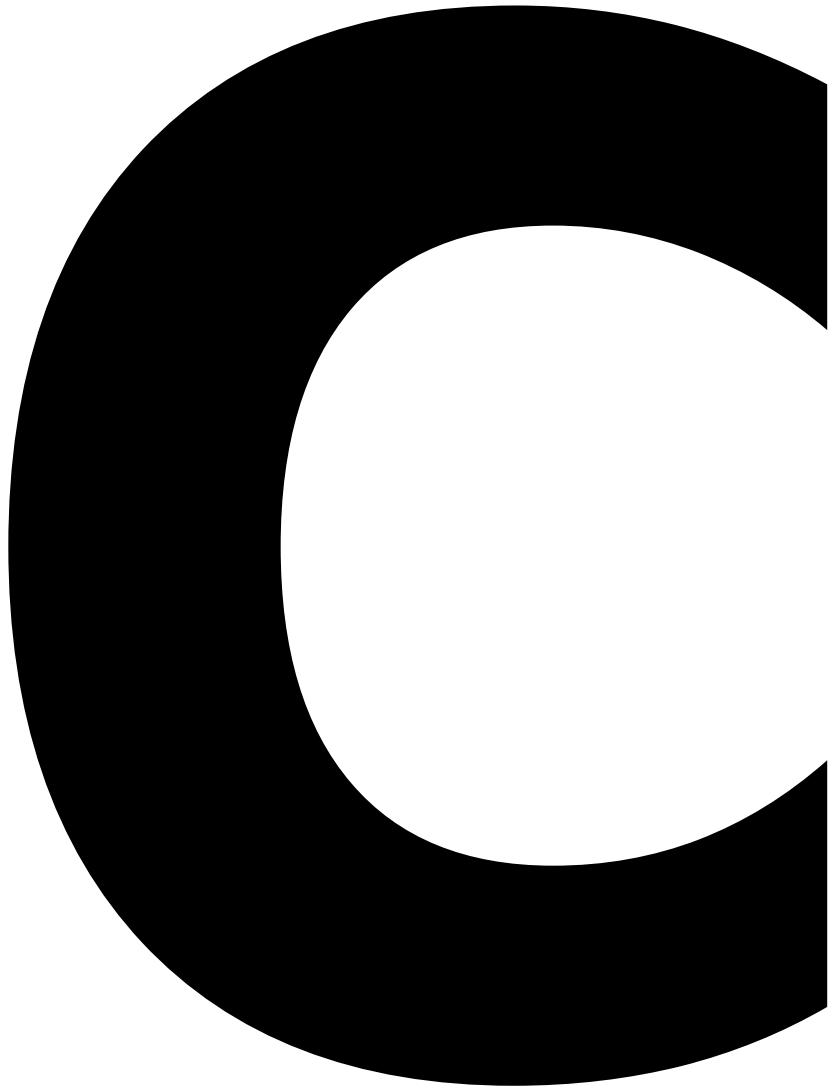


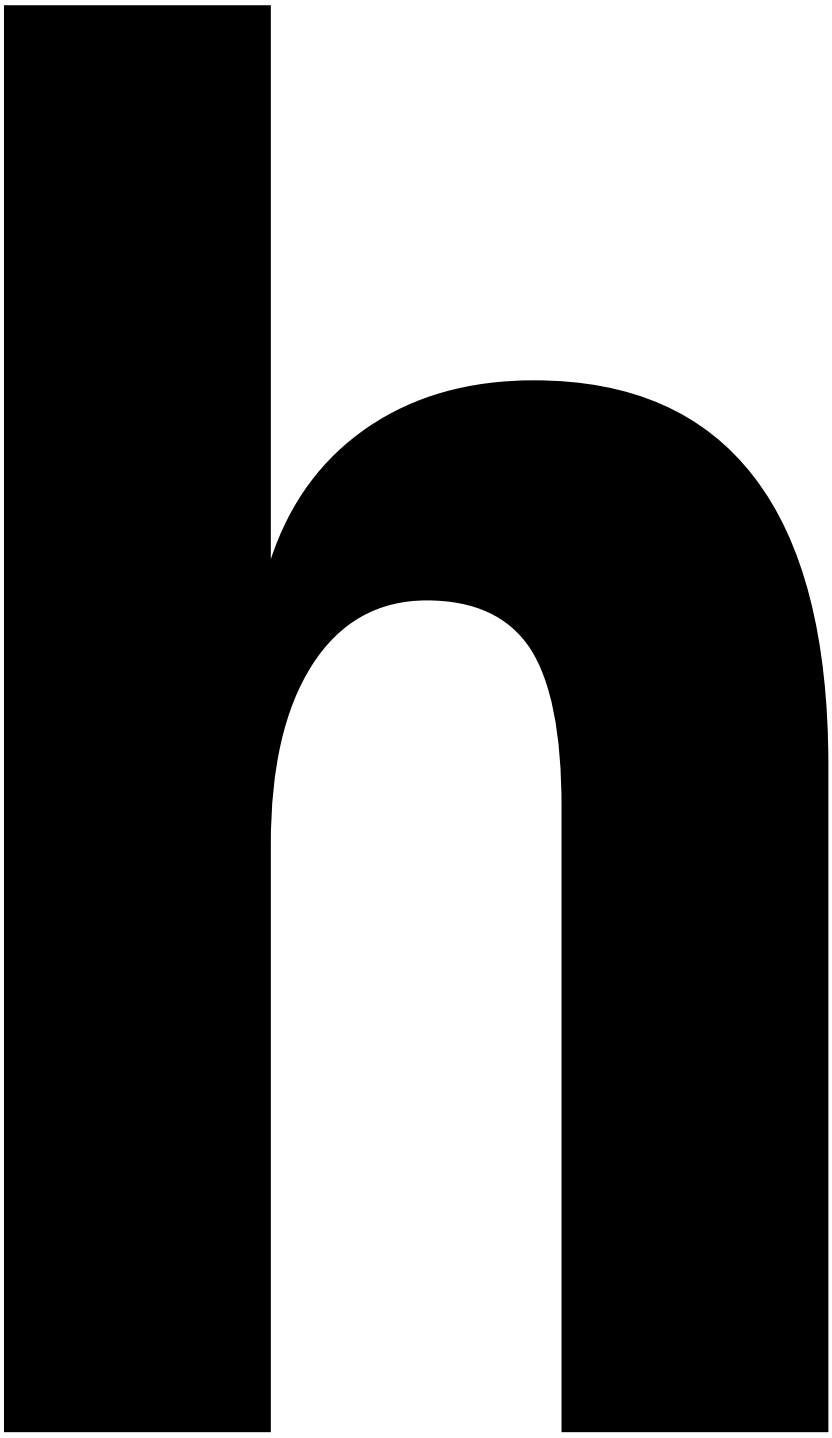


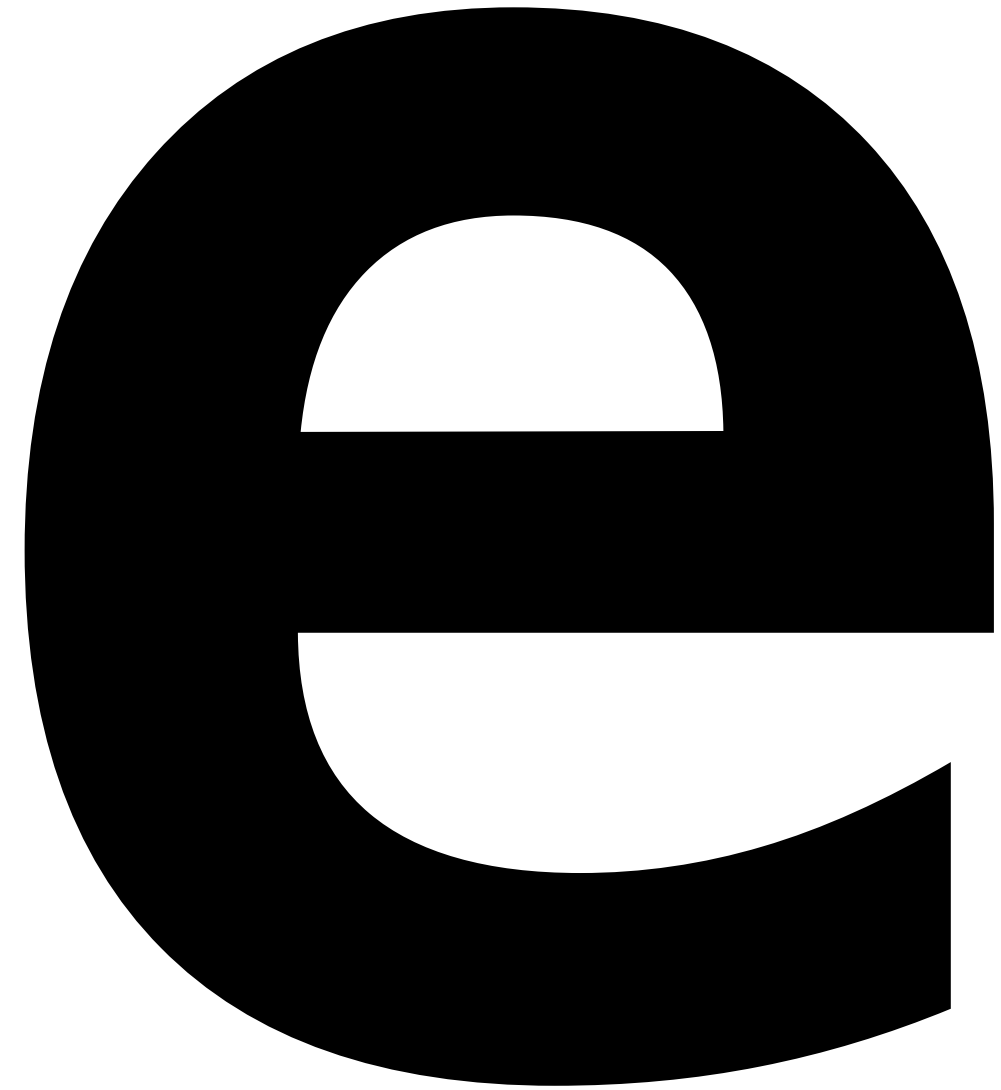
u

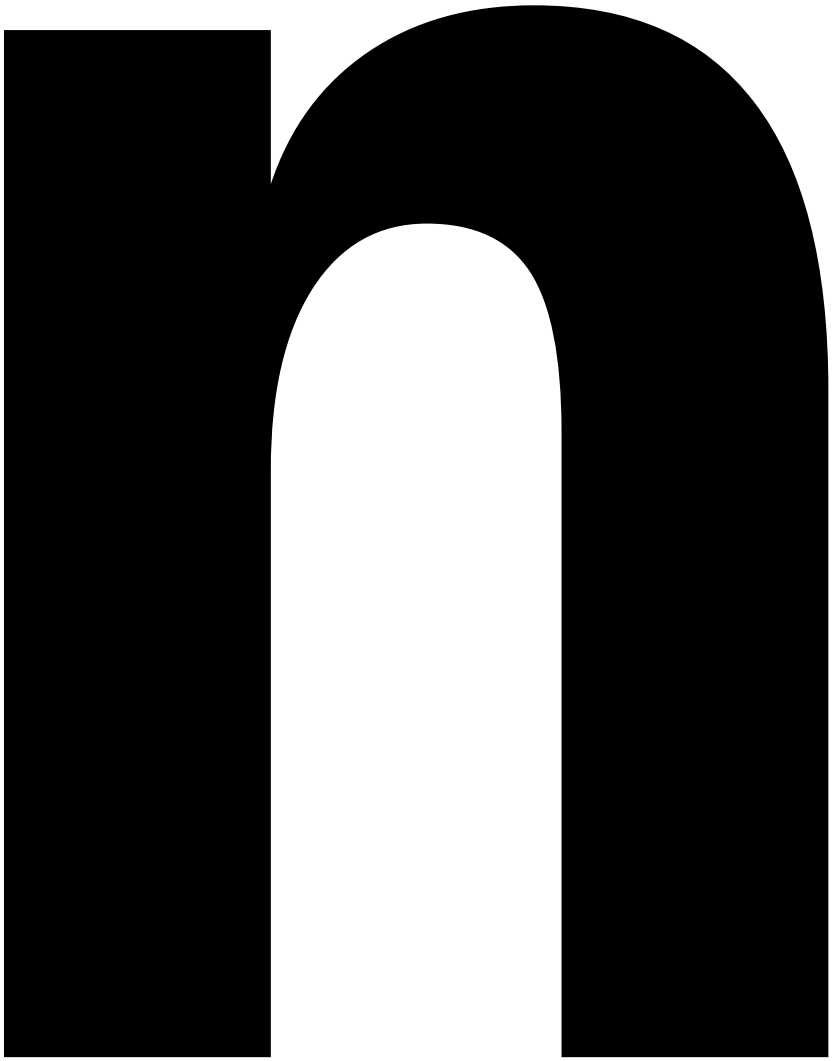


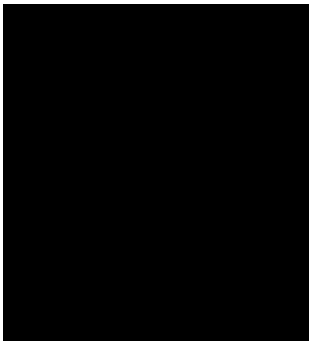


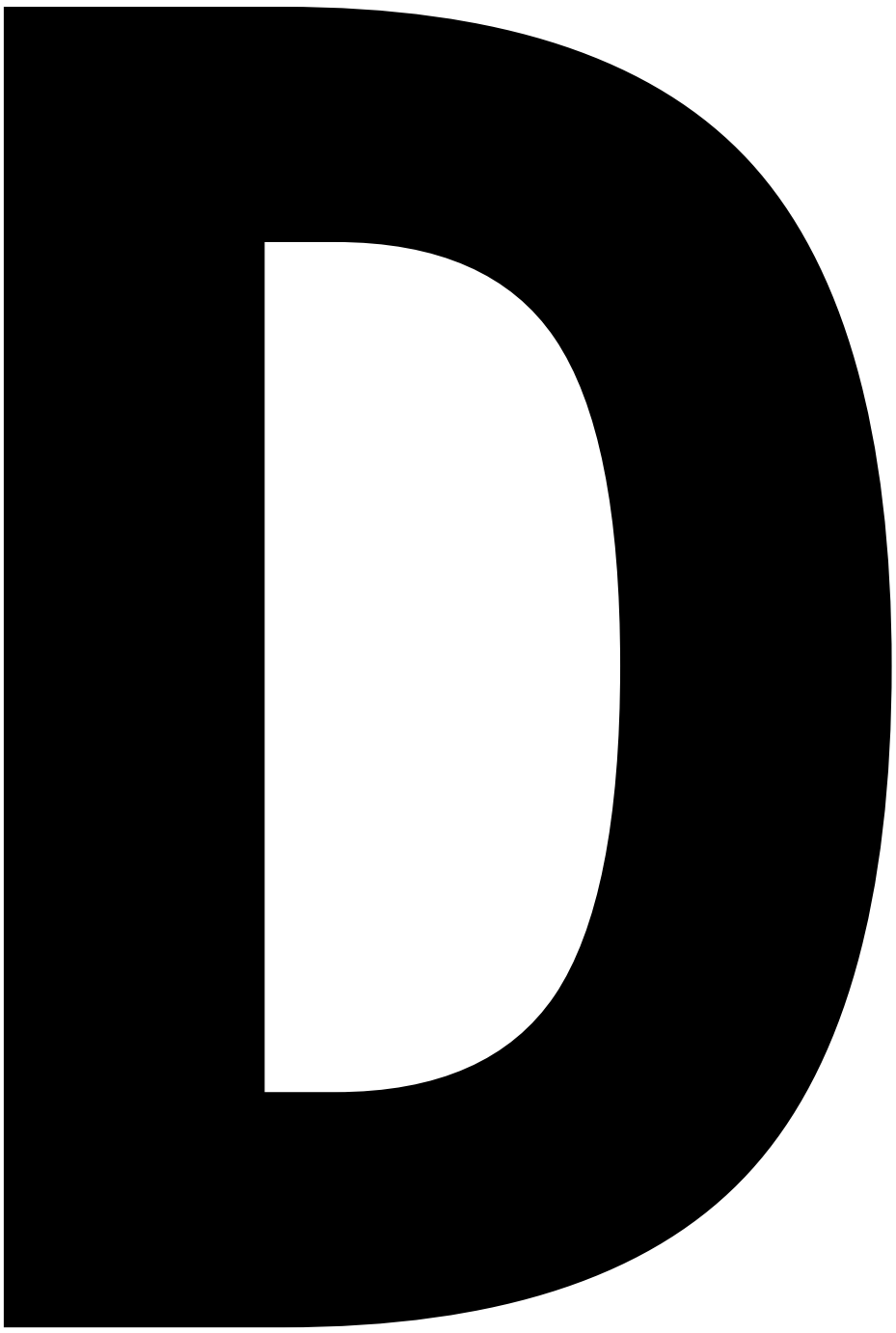


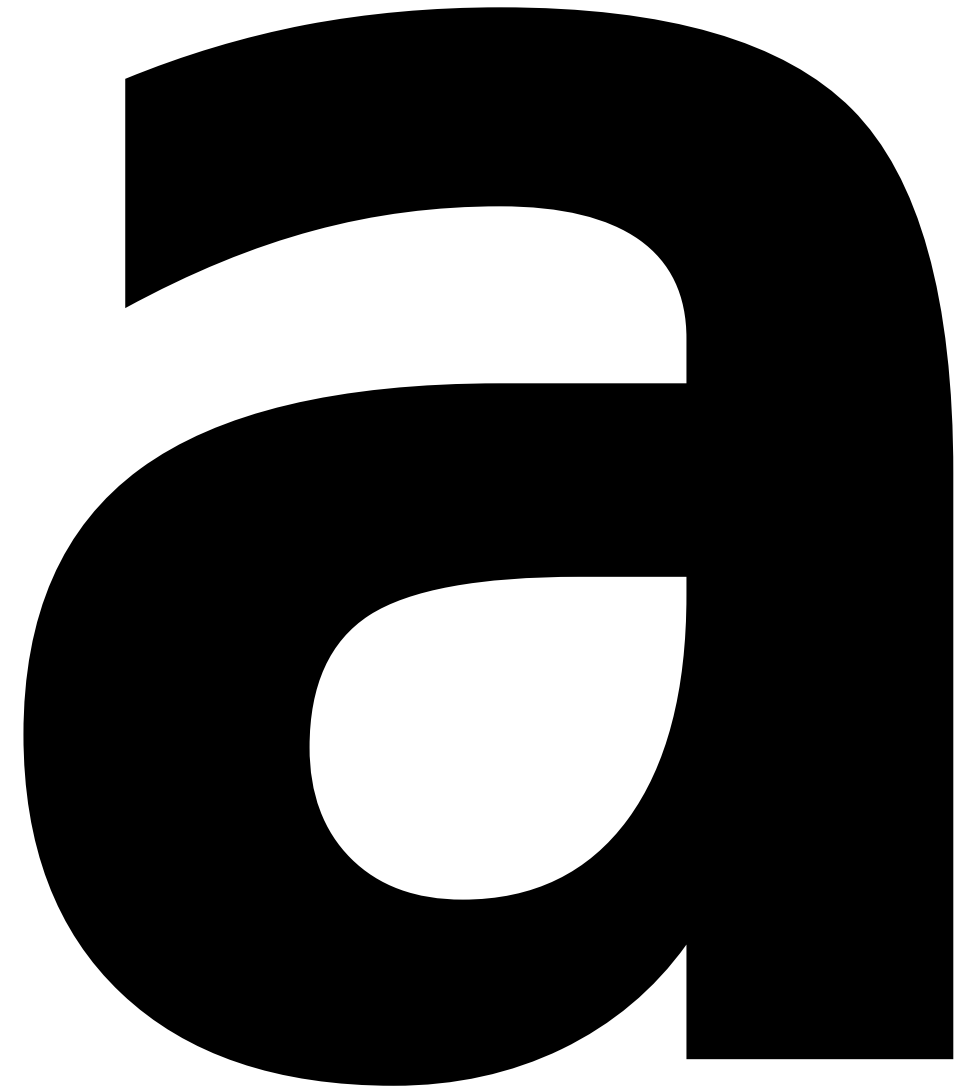


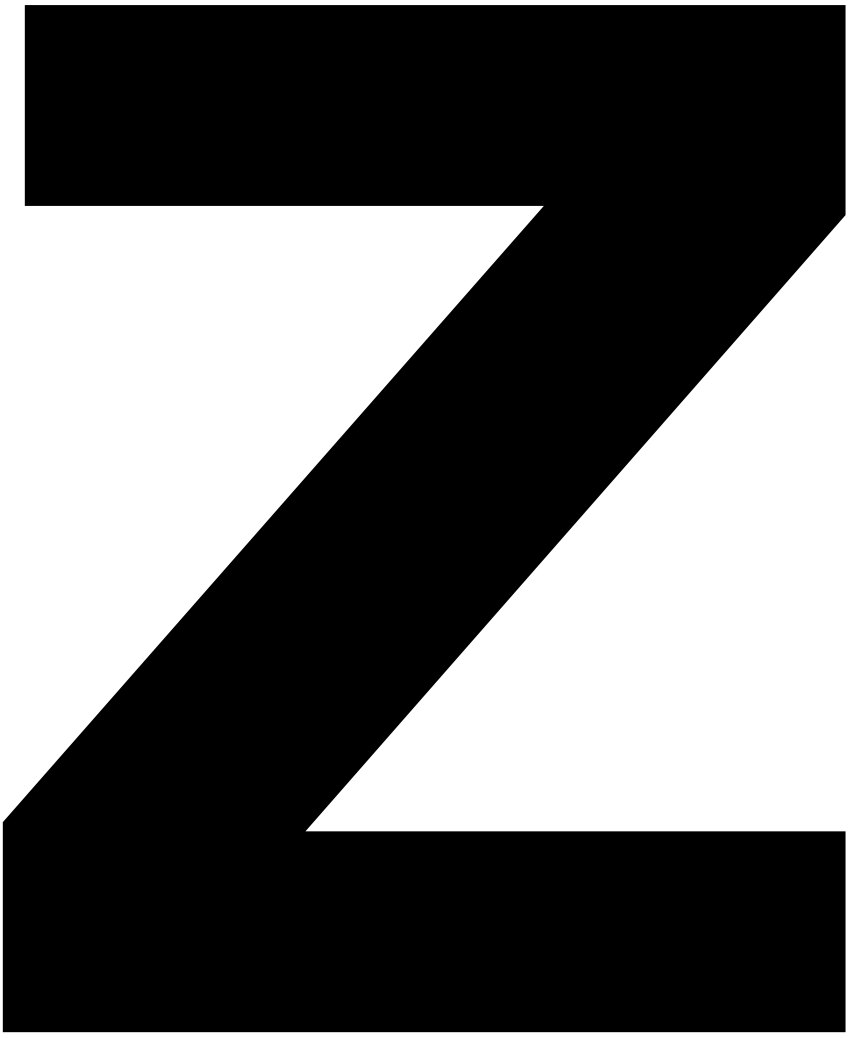




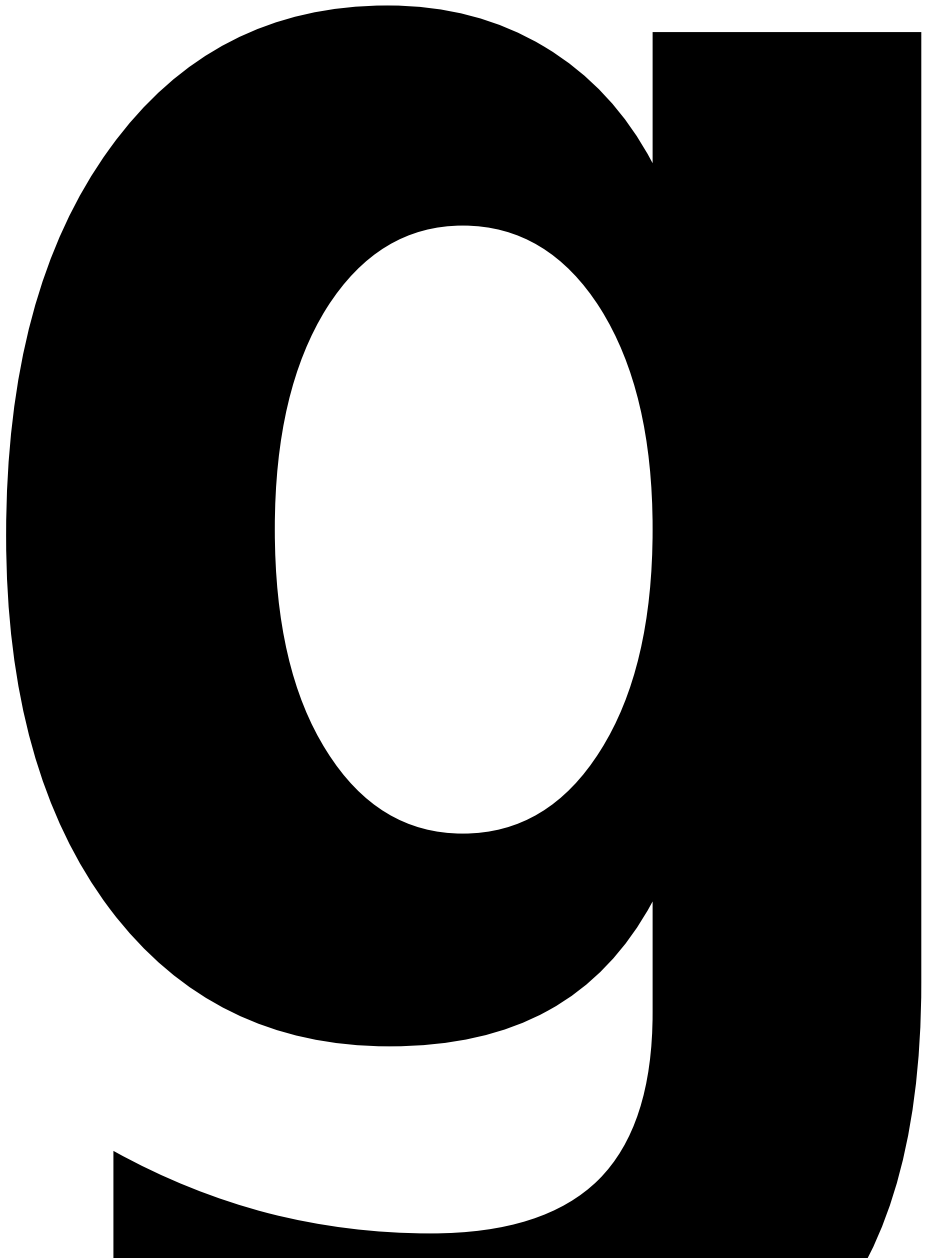


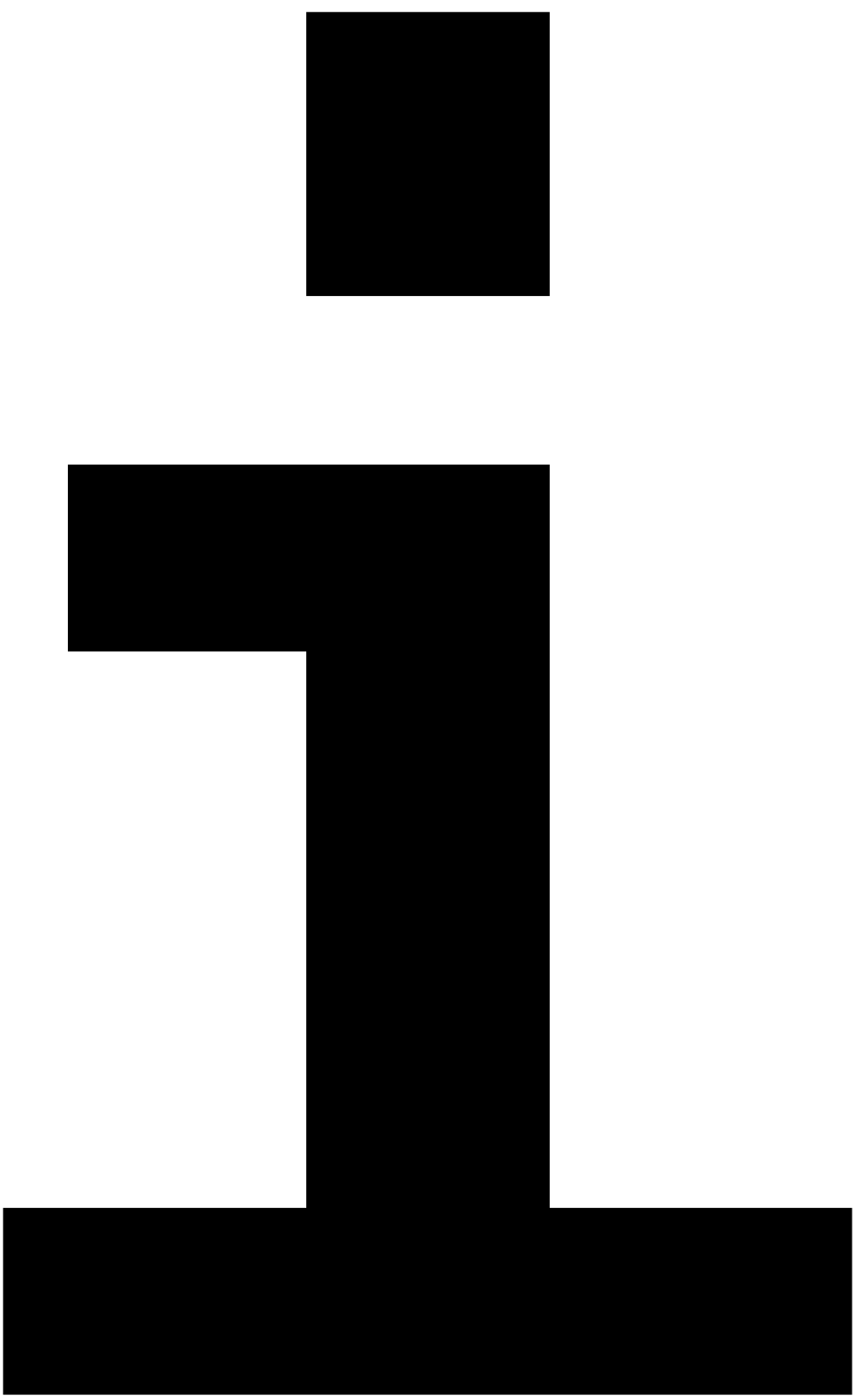


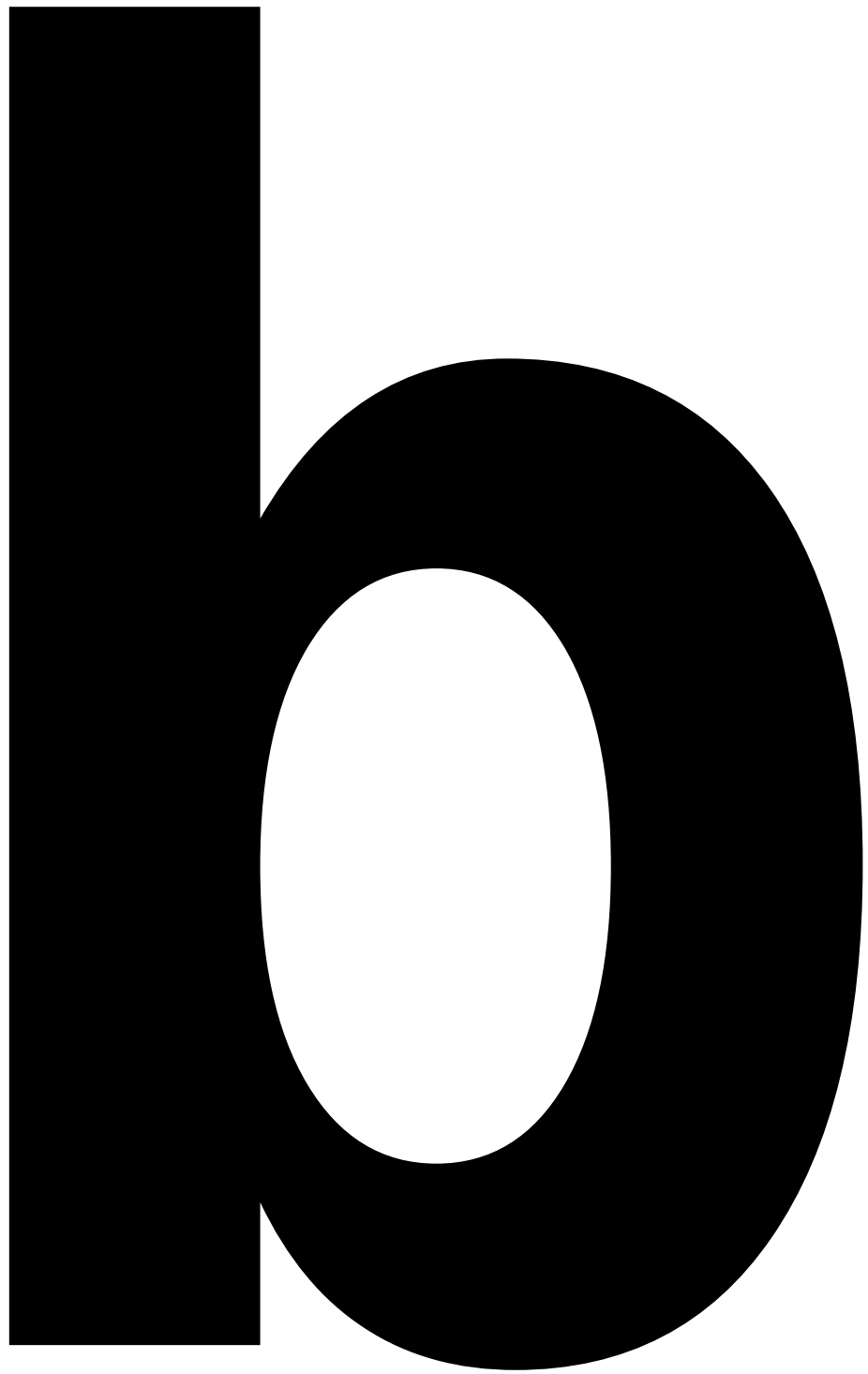


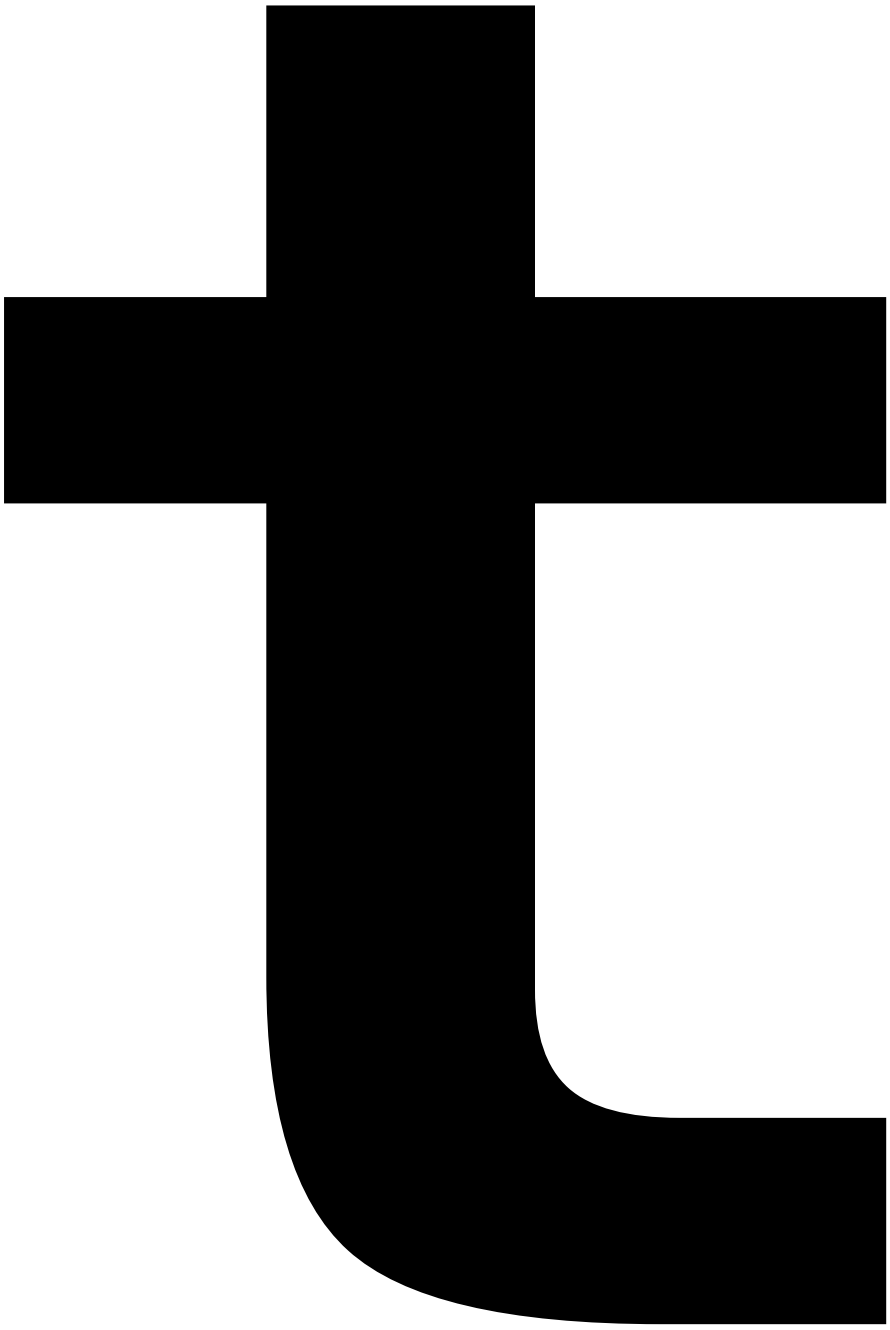


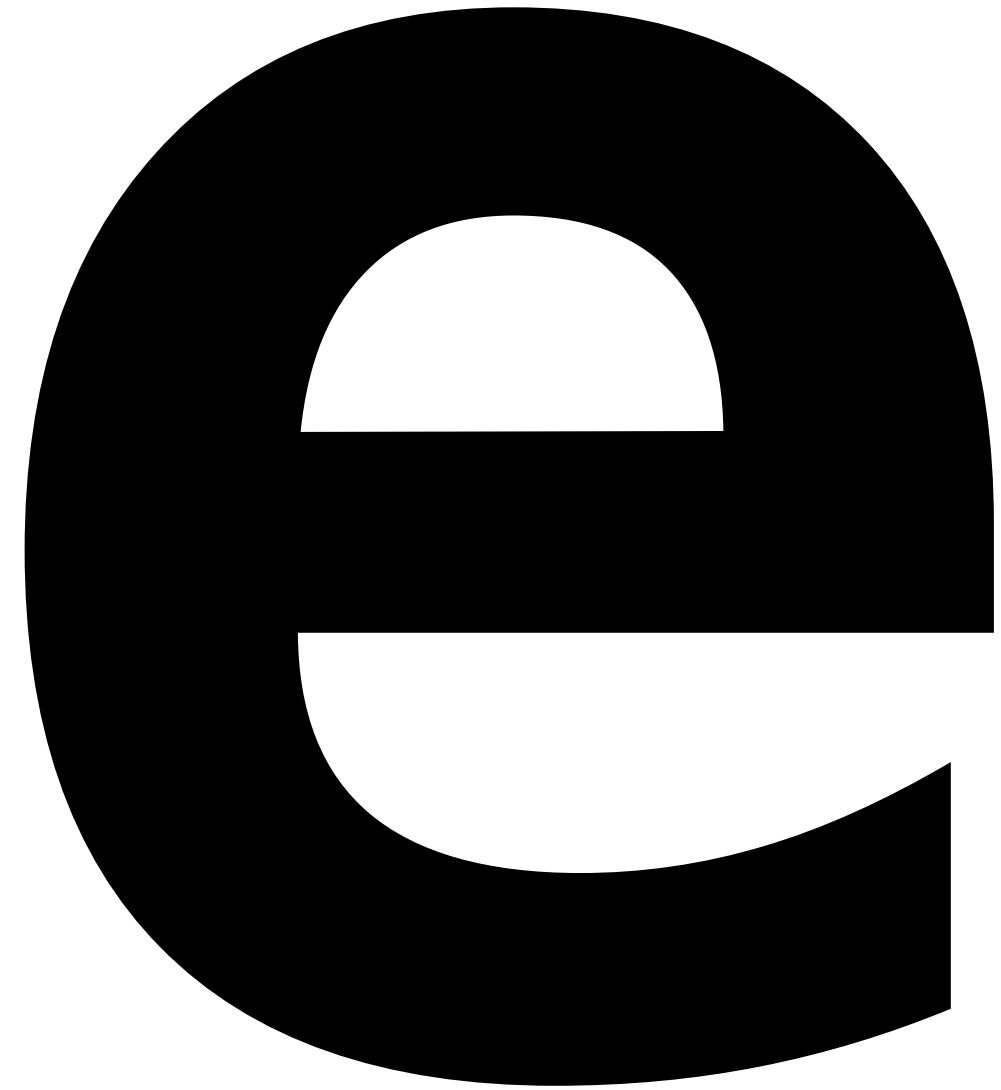
u





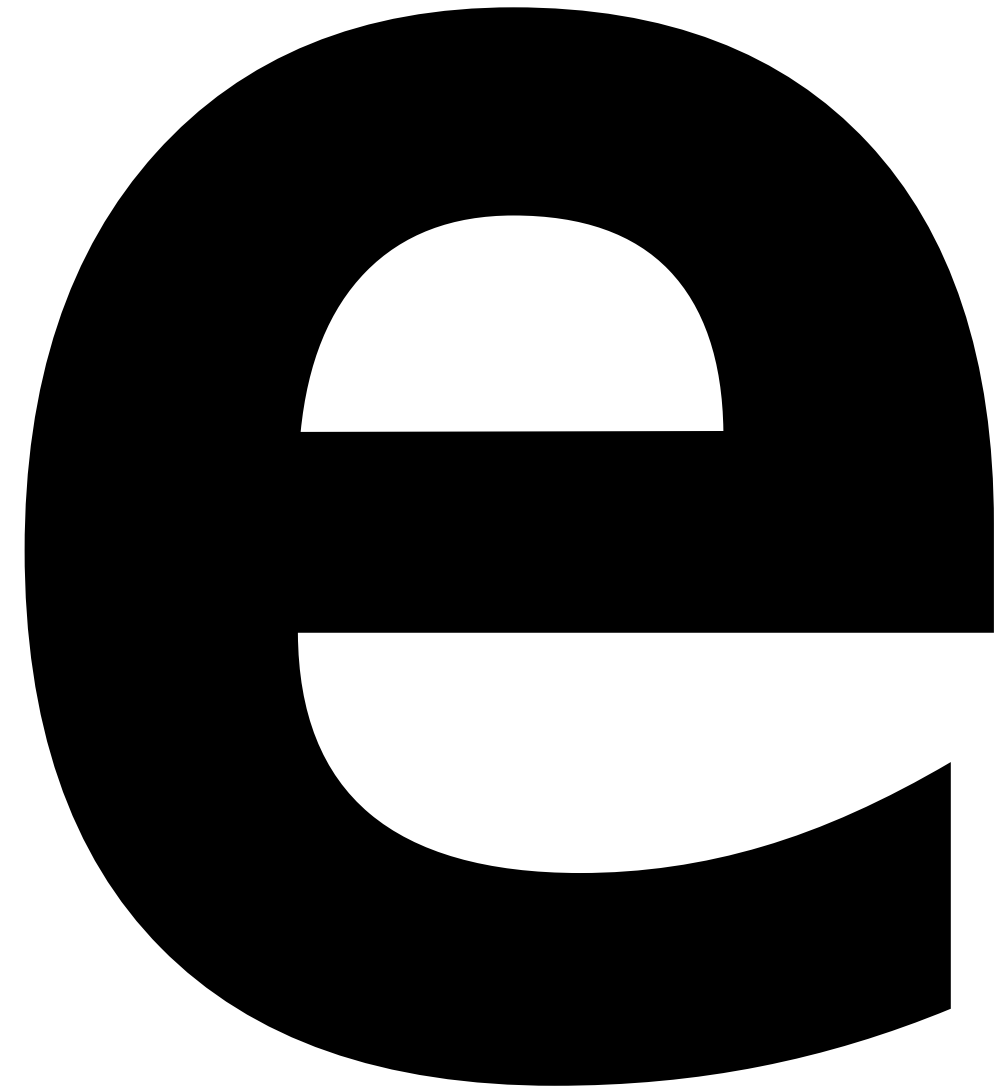


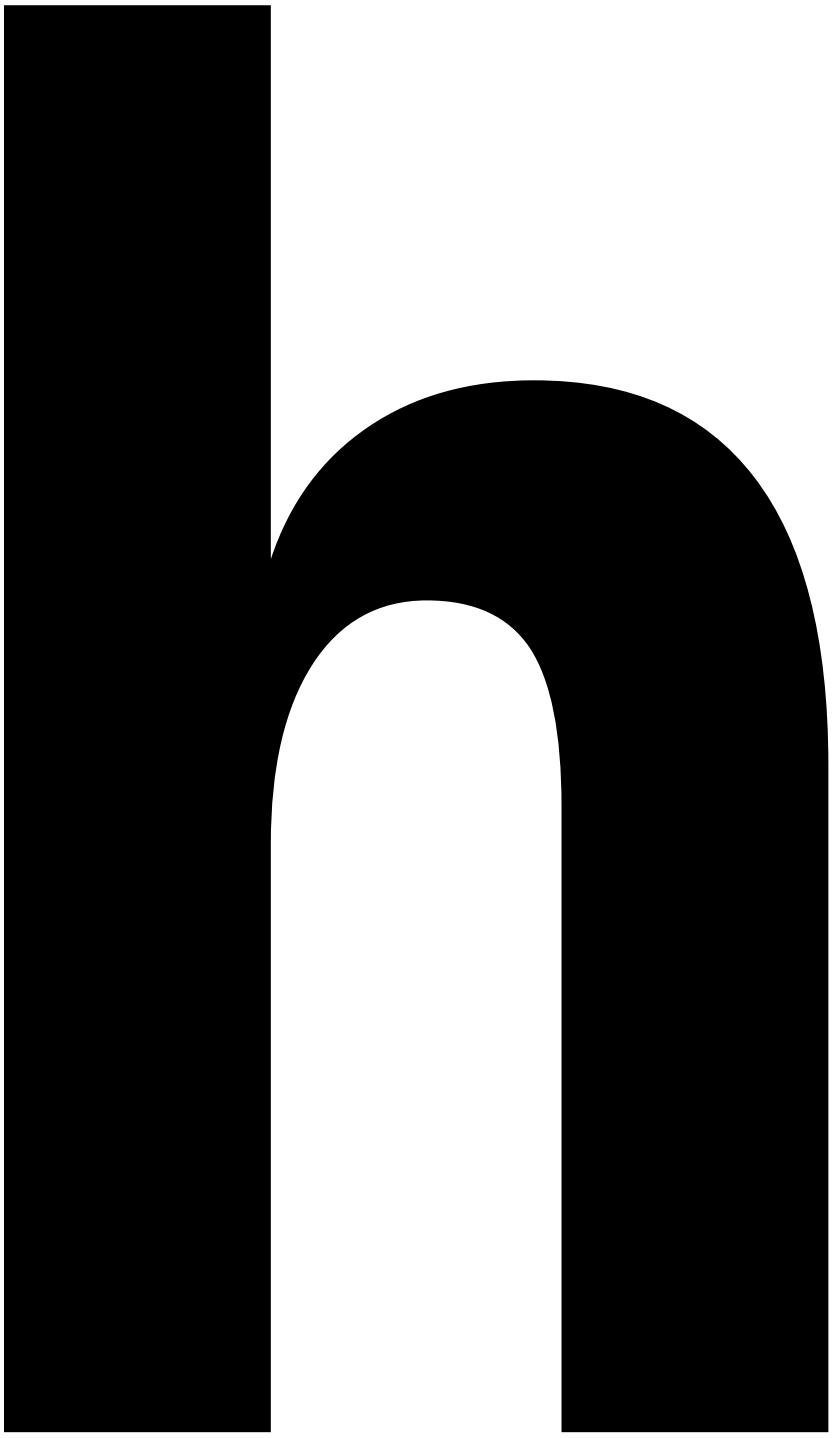


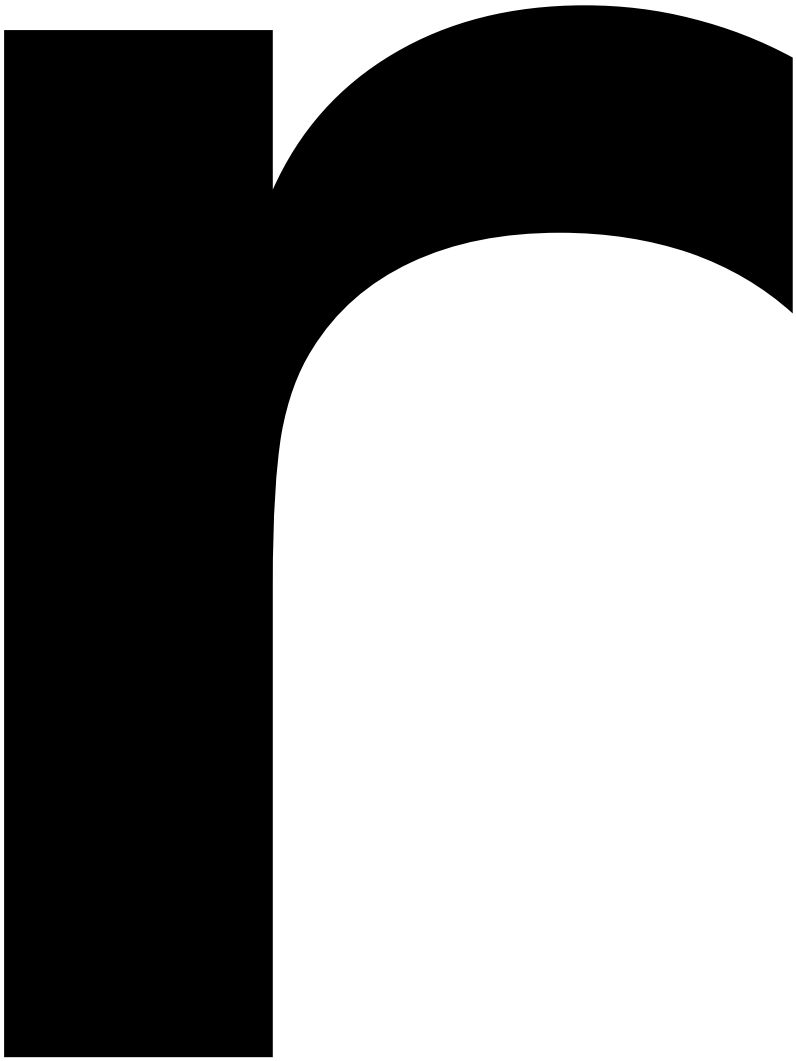


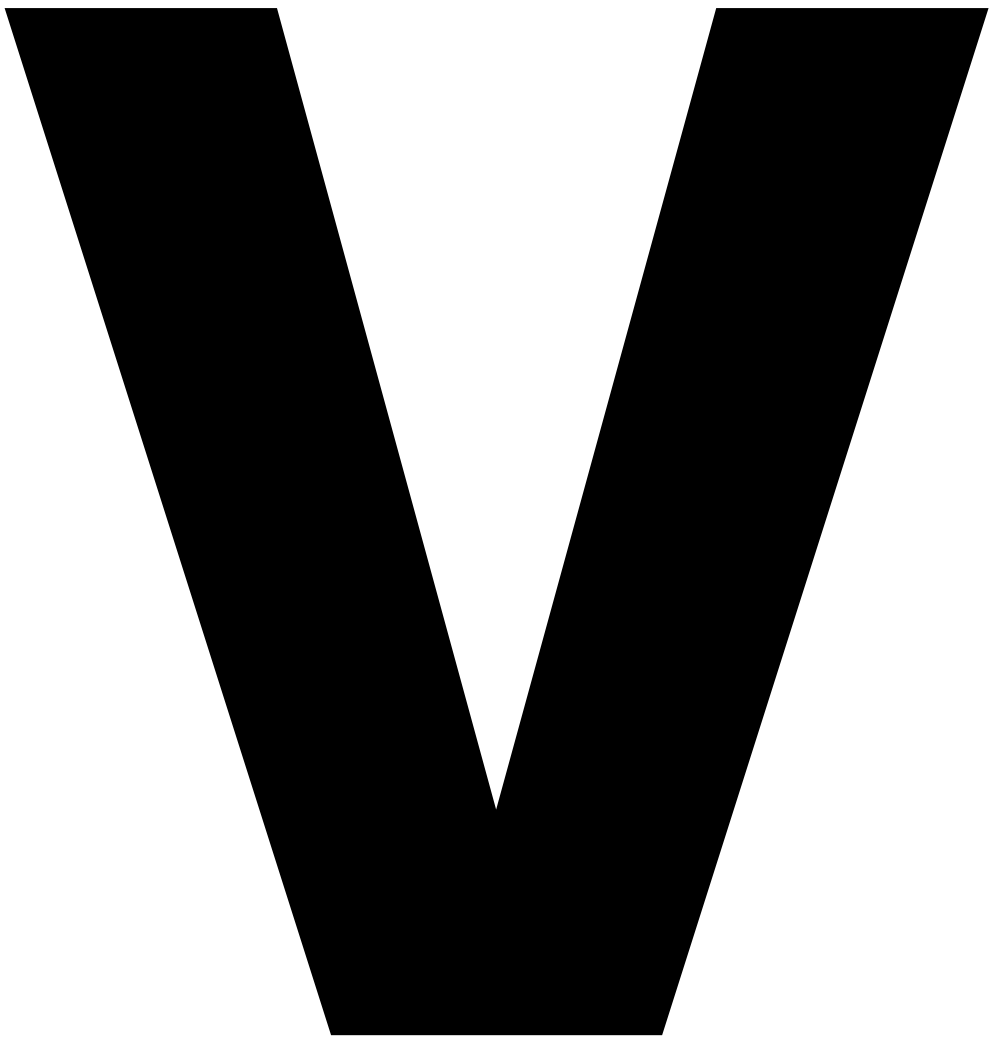
S

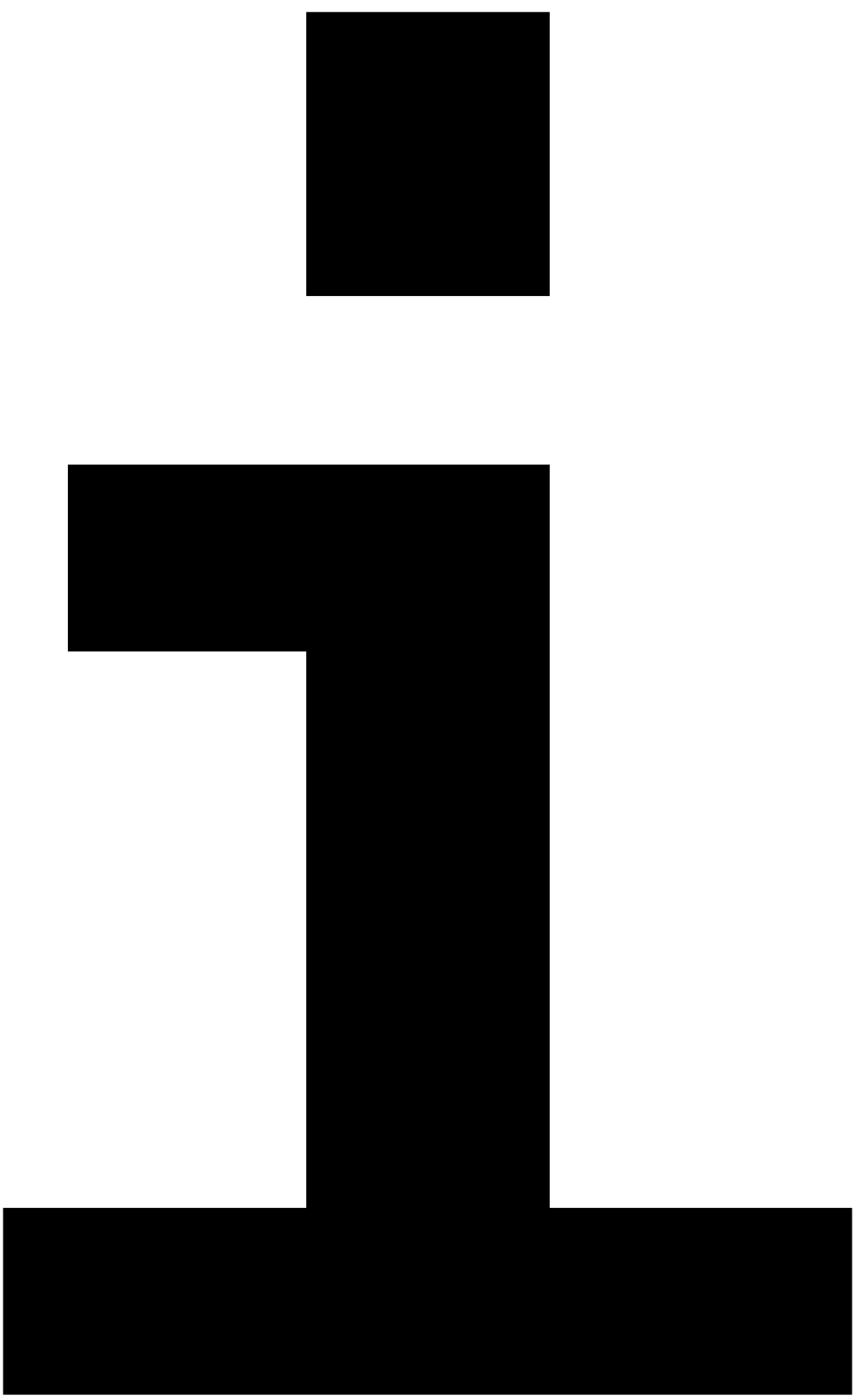
S

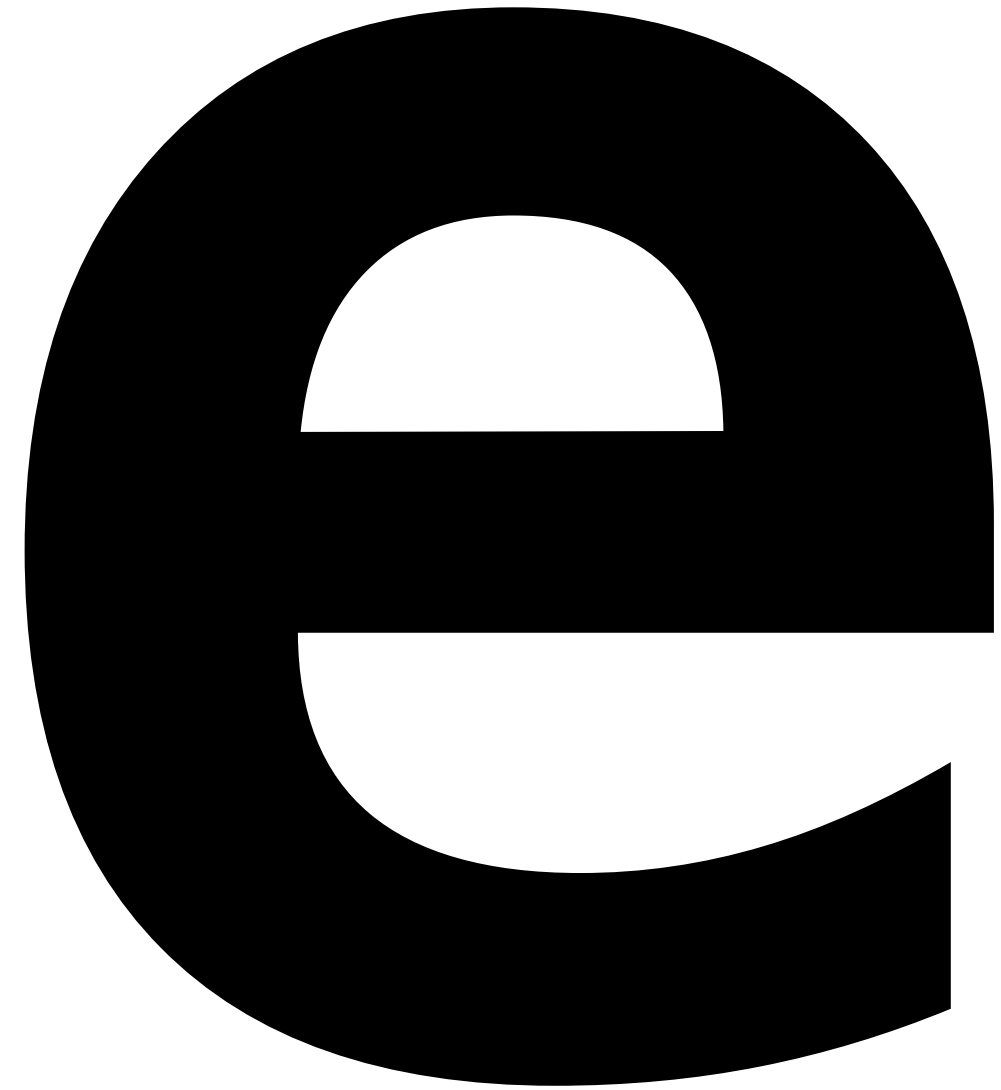


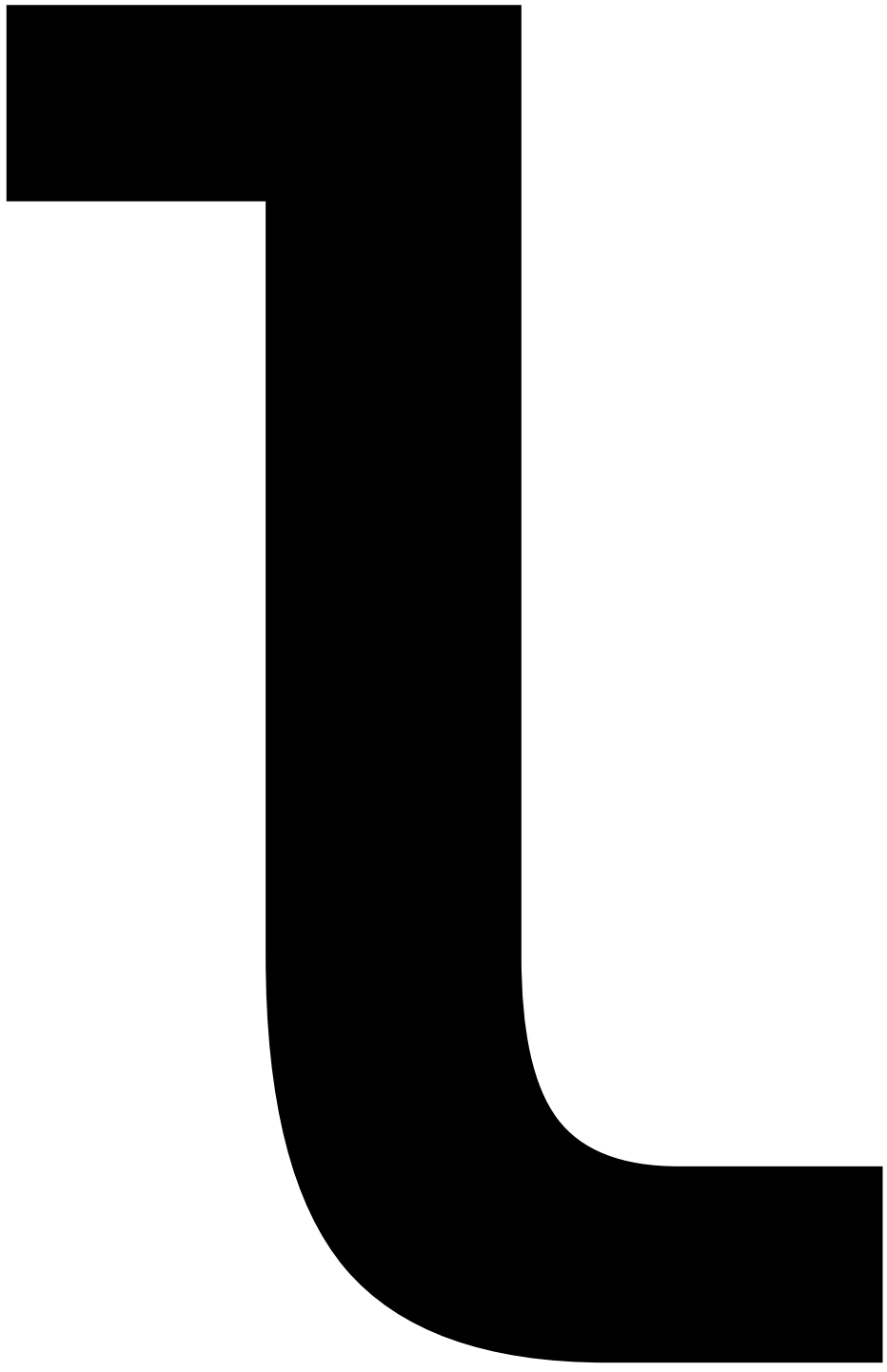


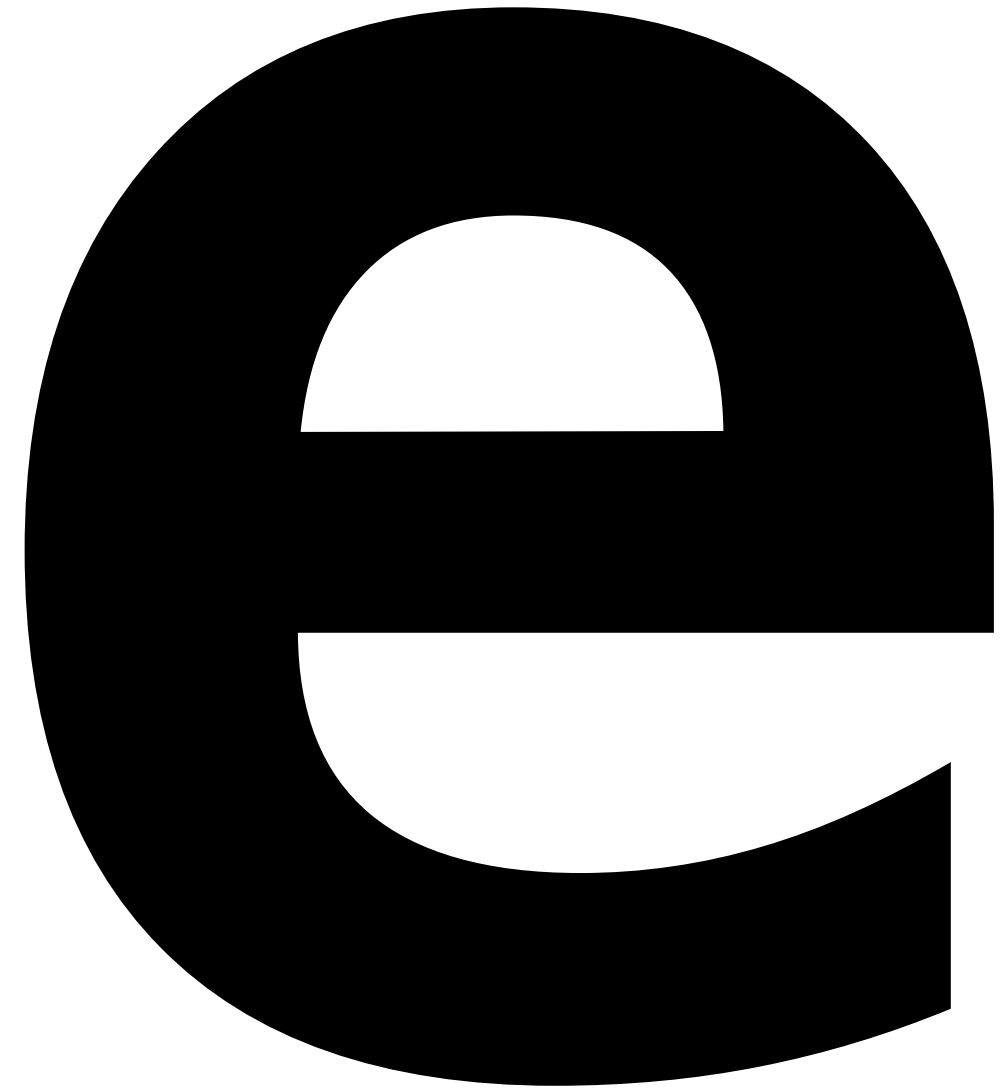


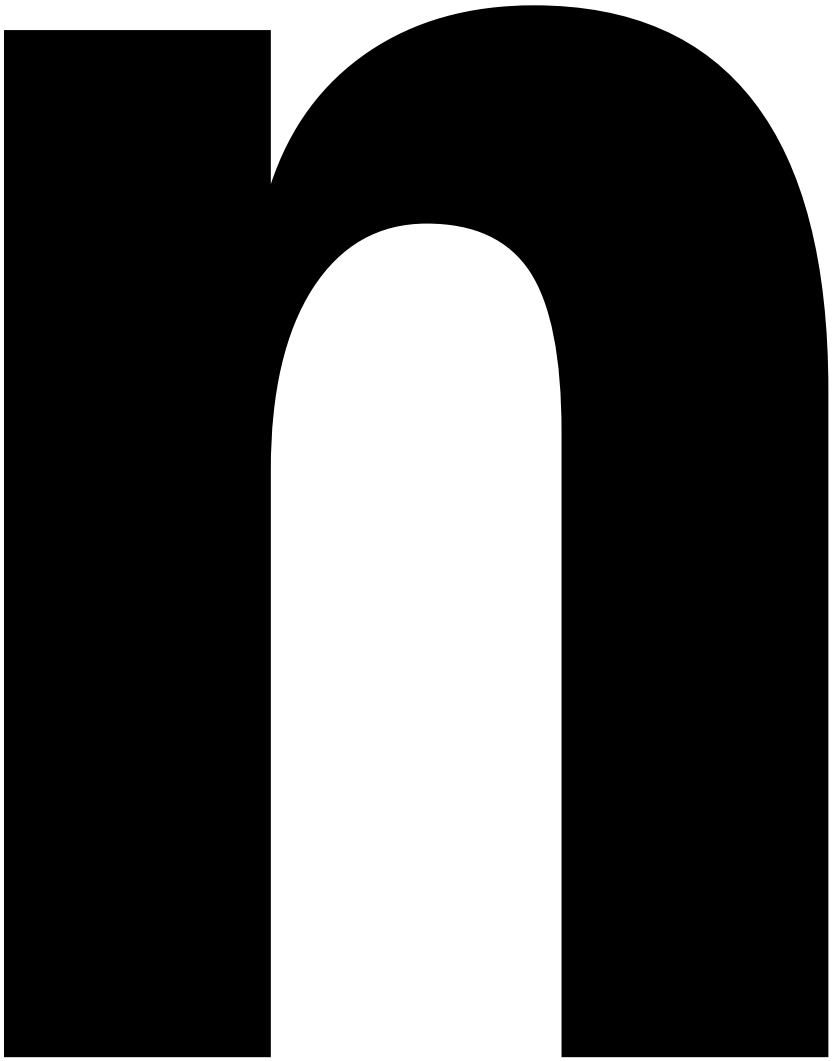


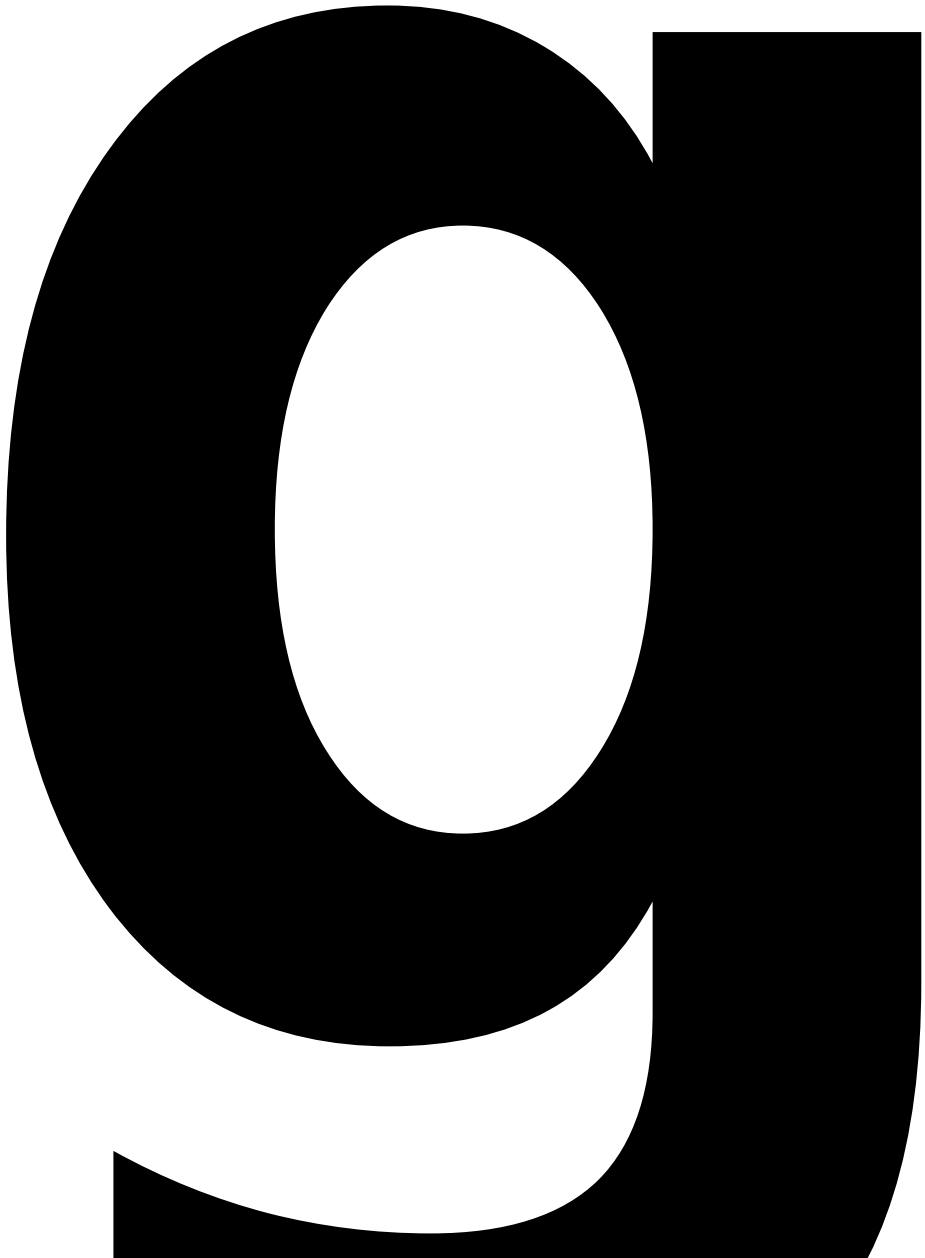


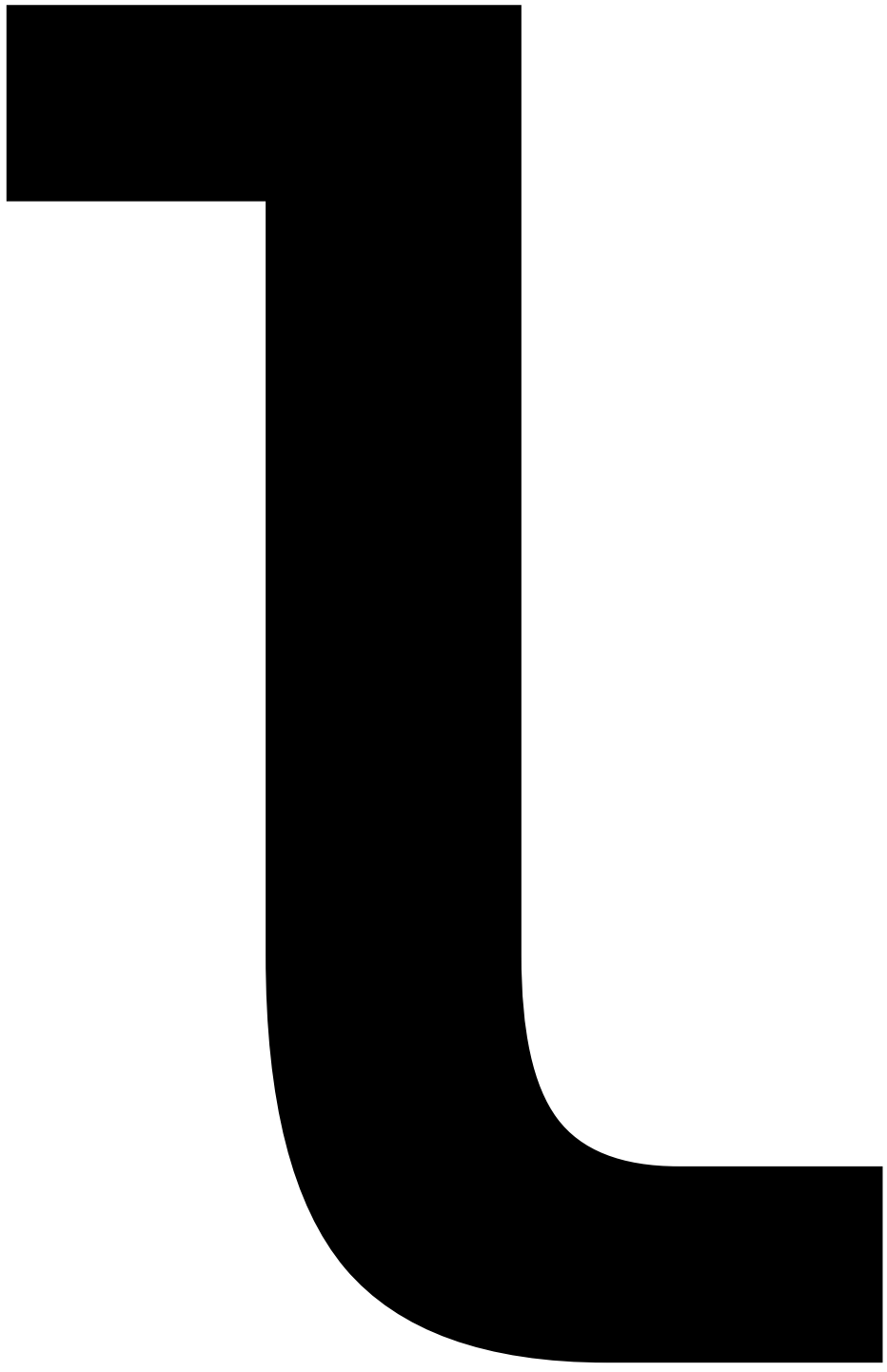


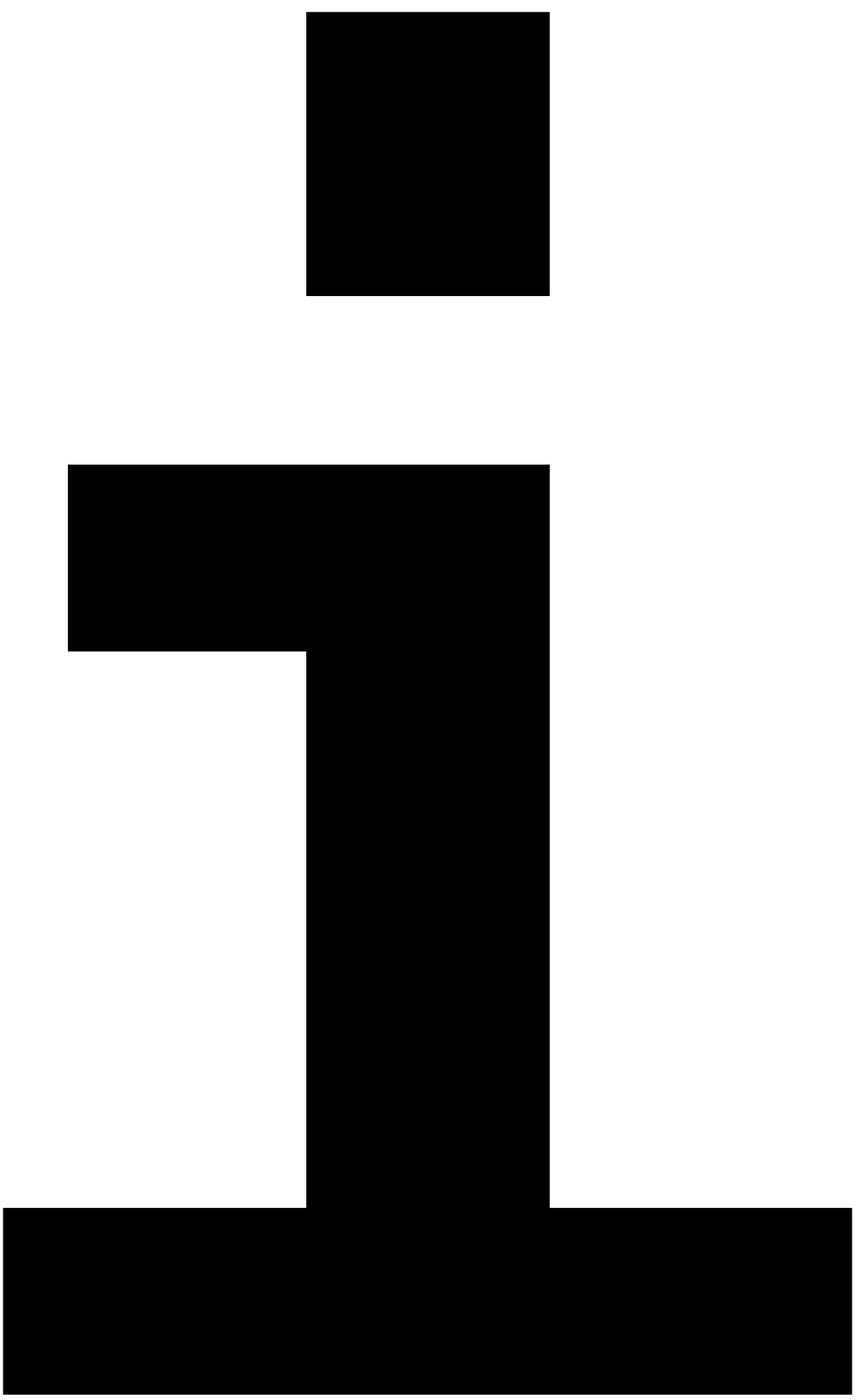




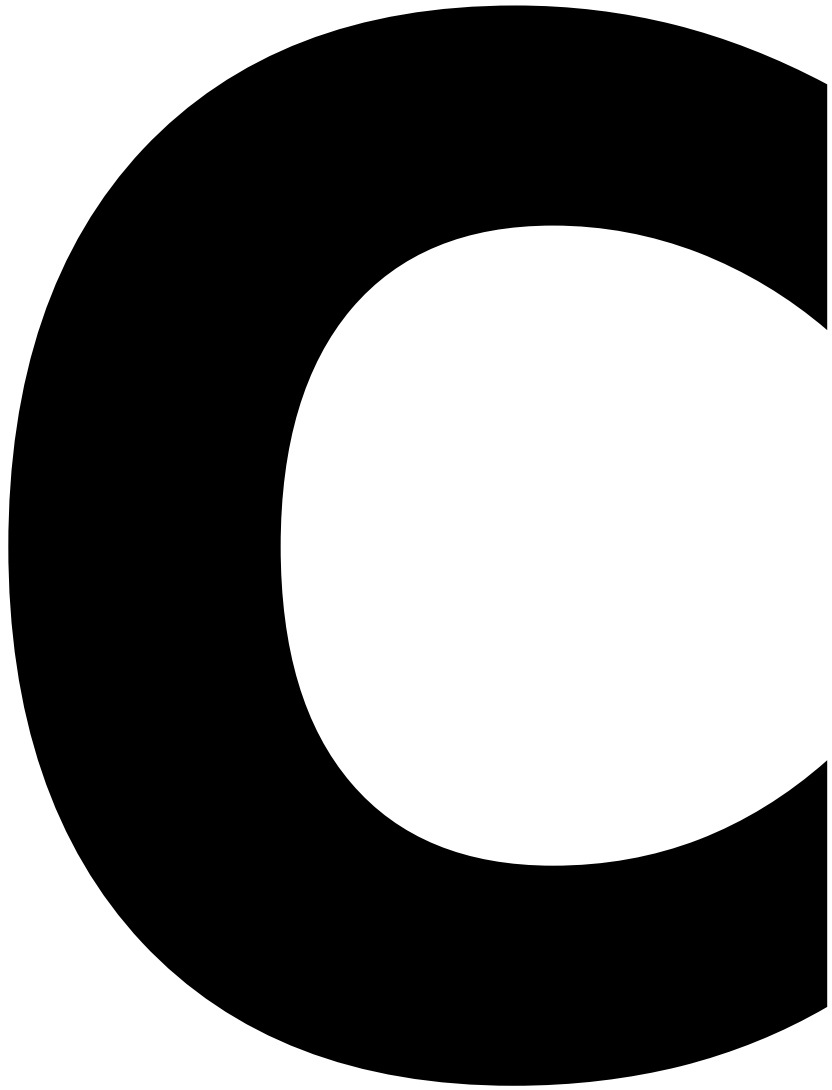


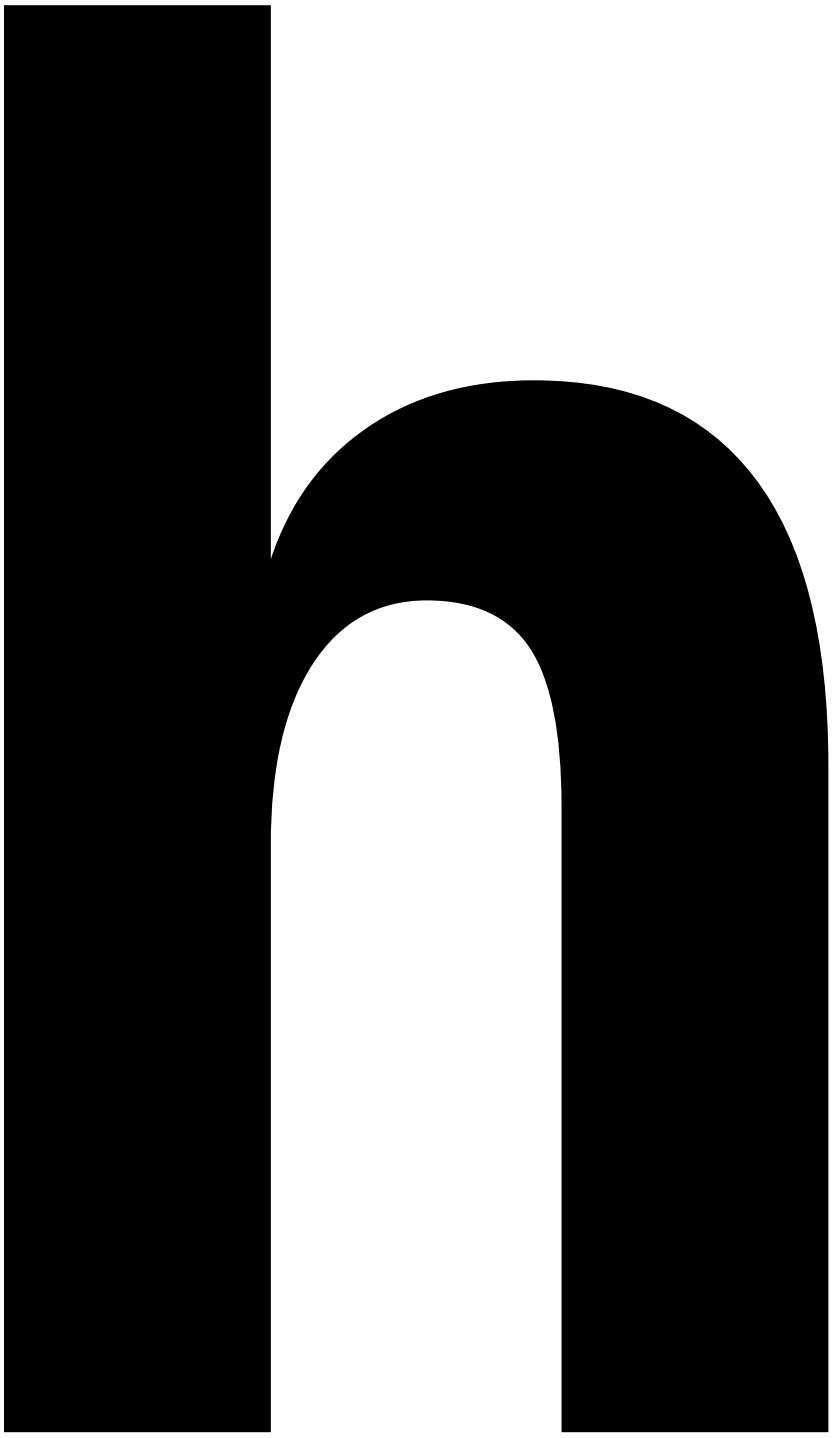




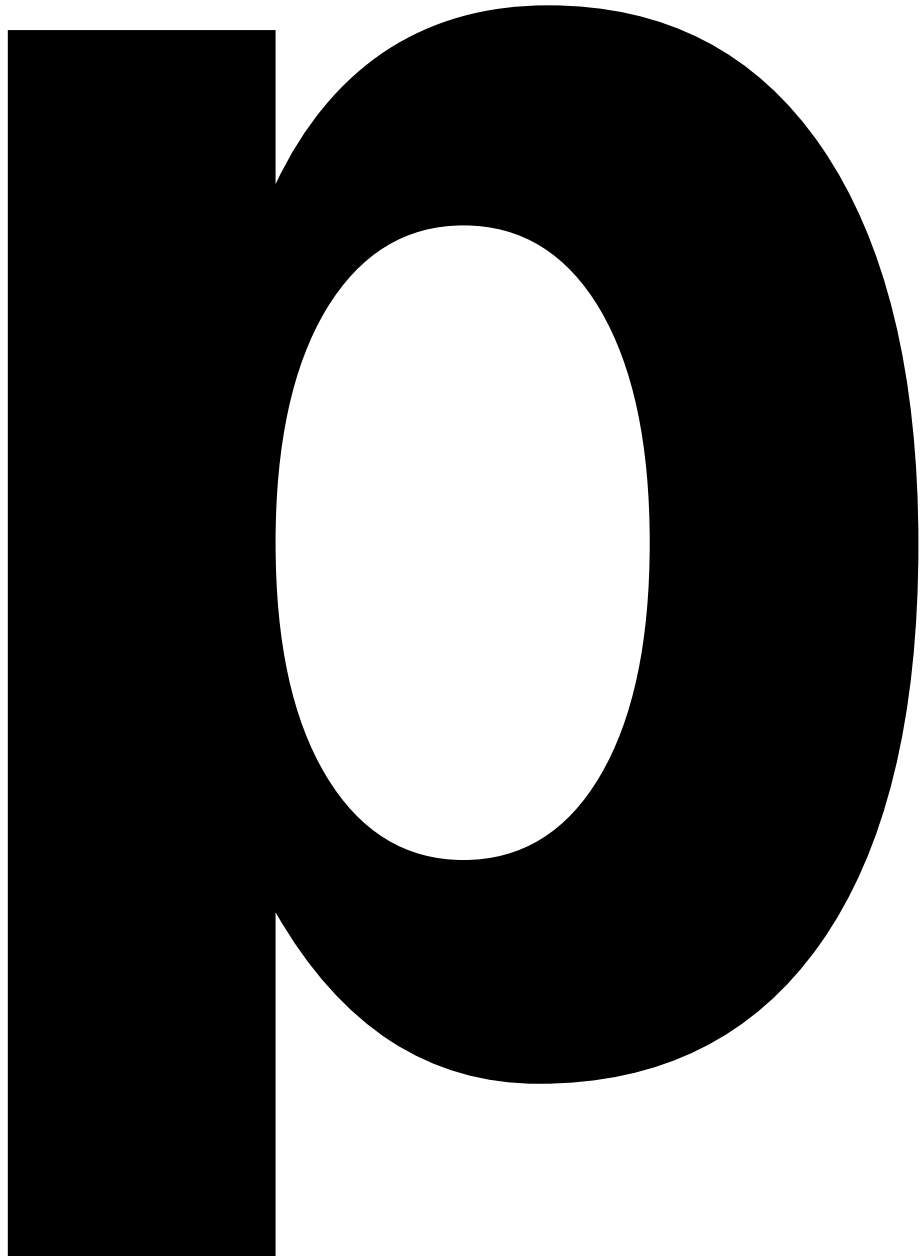


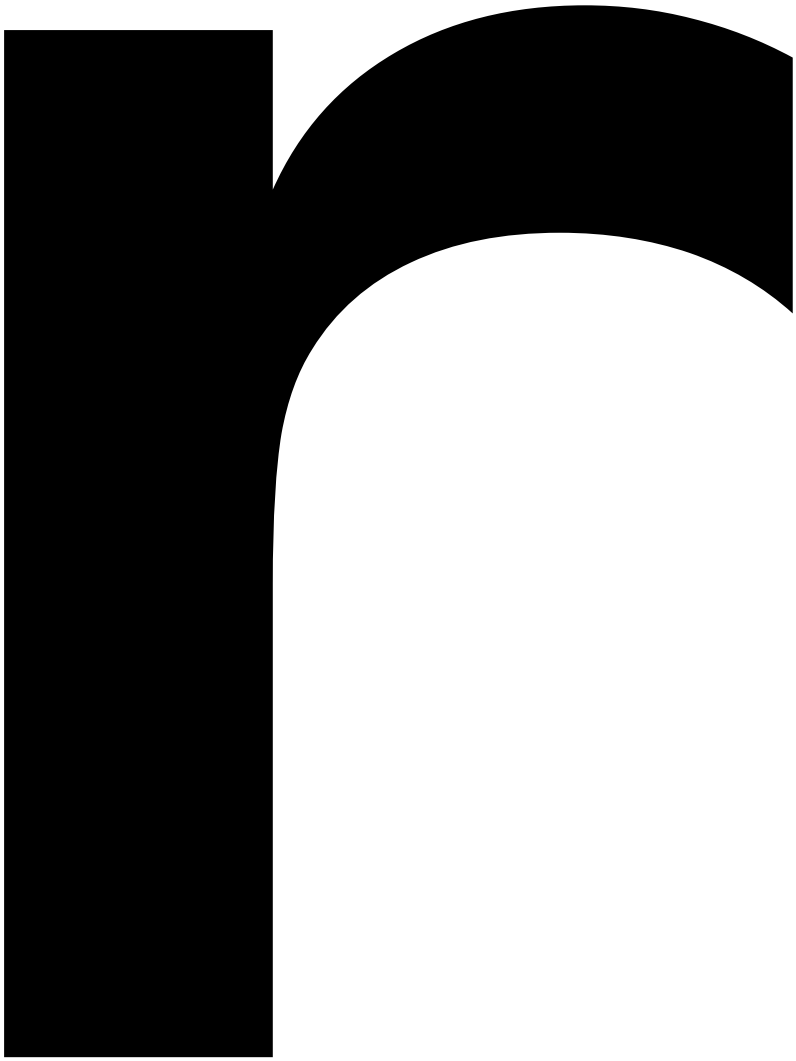
S

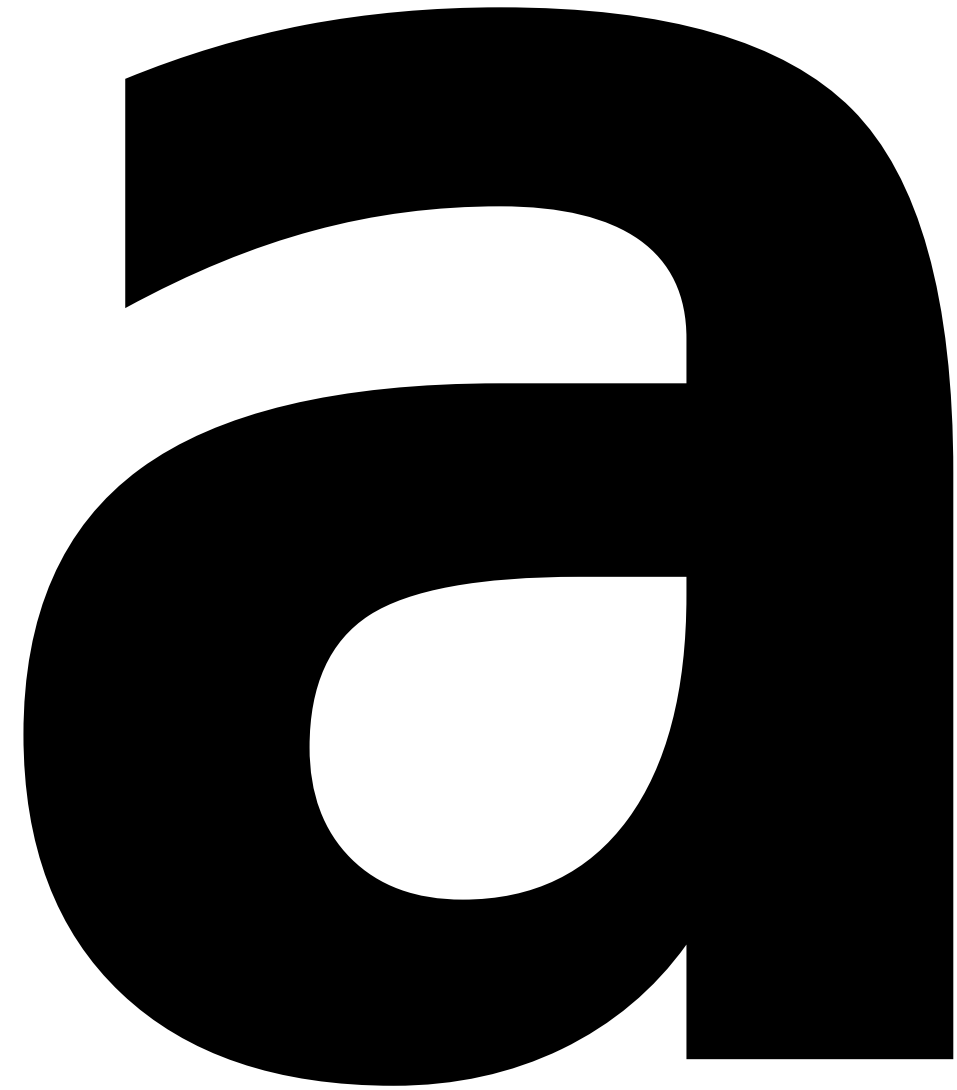


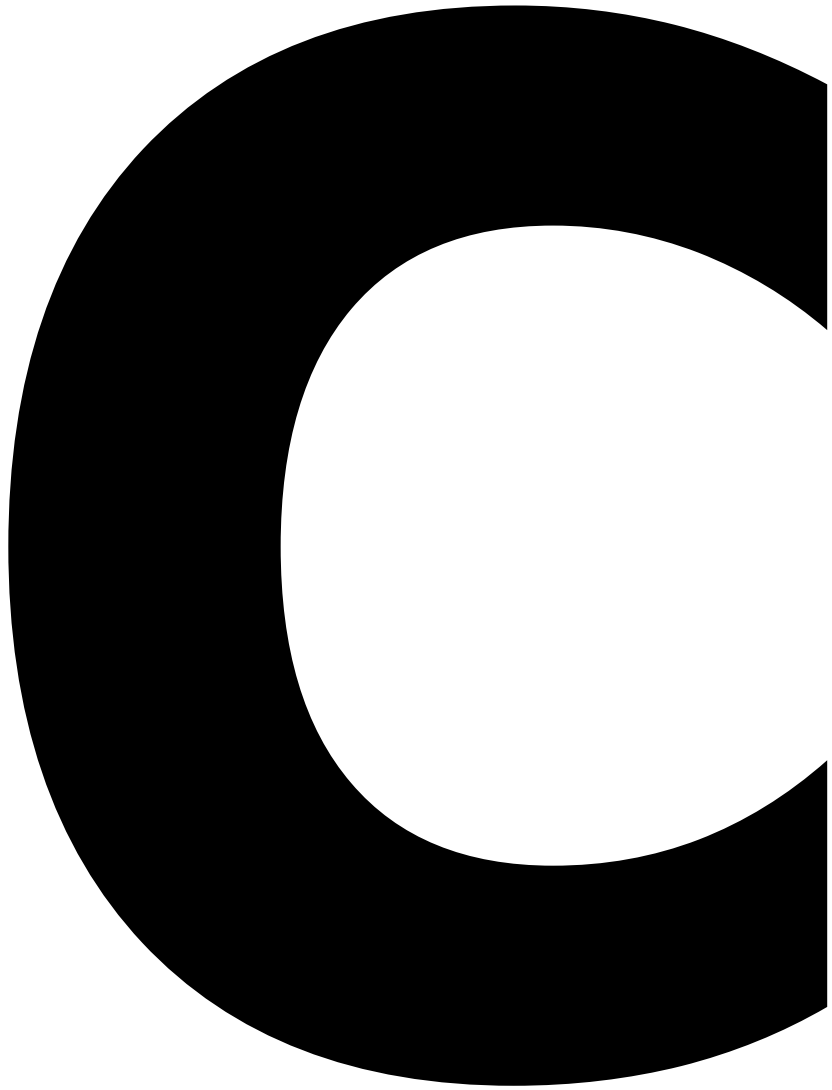


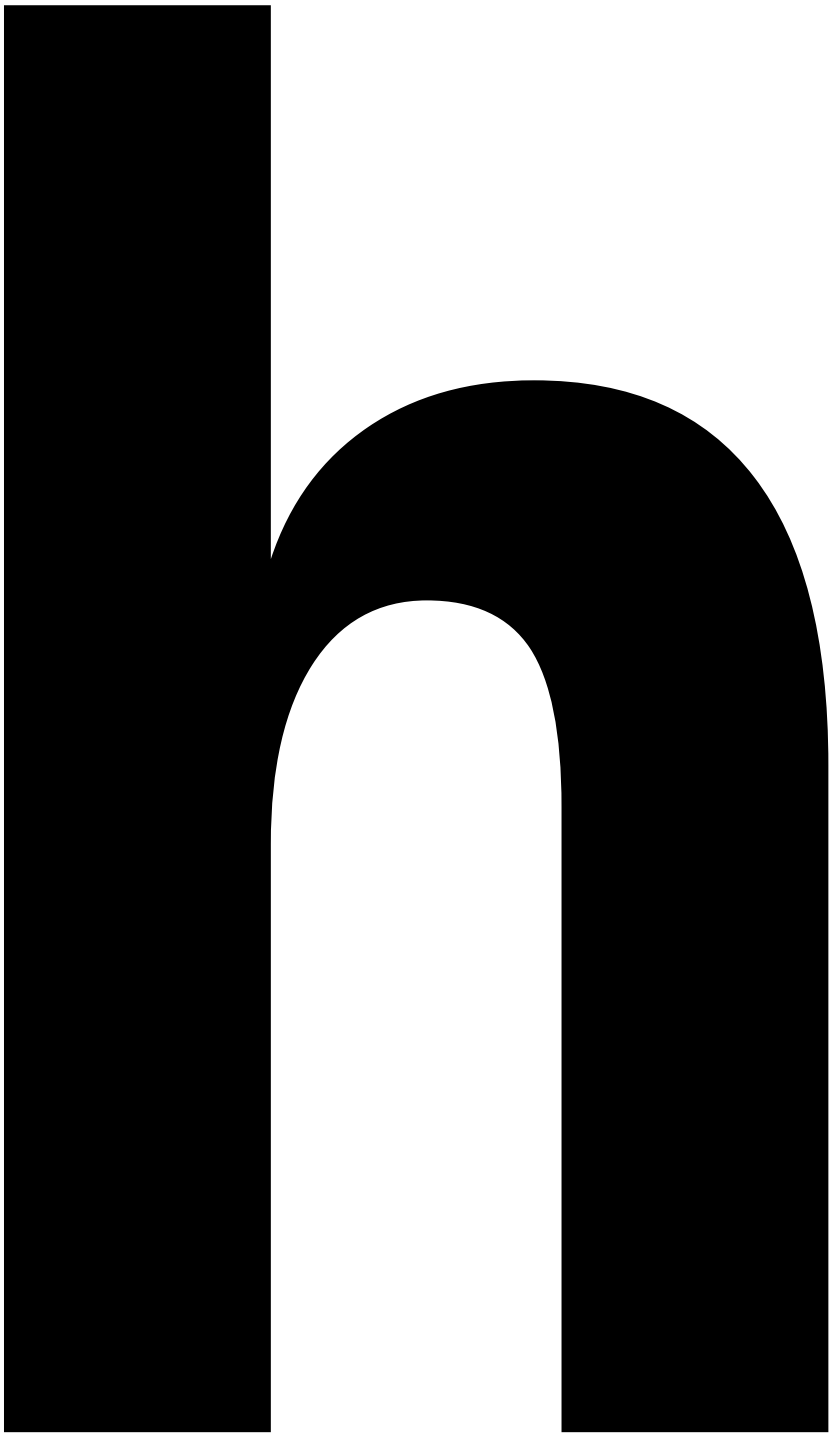
S

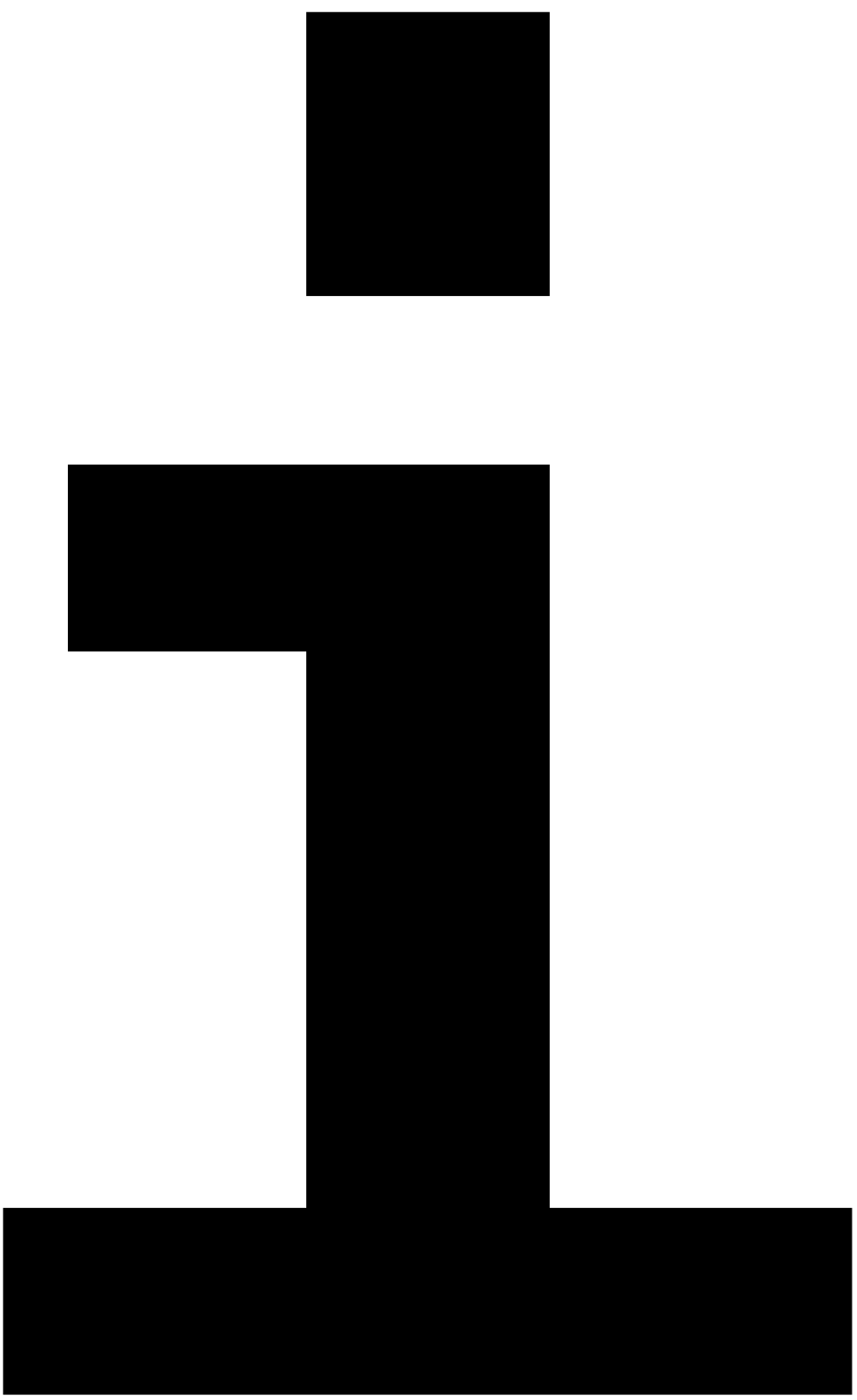


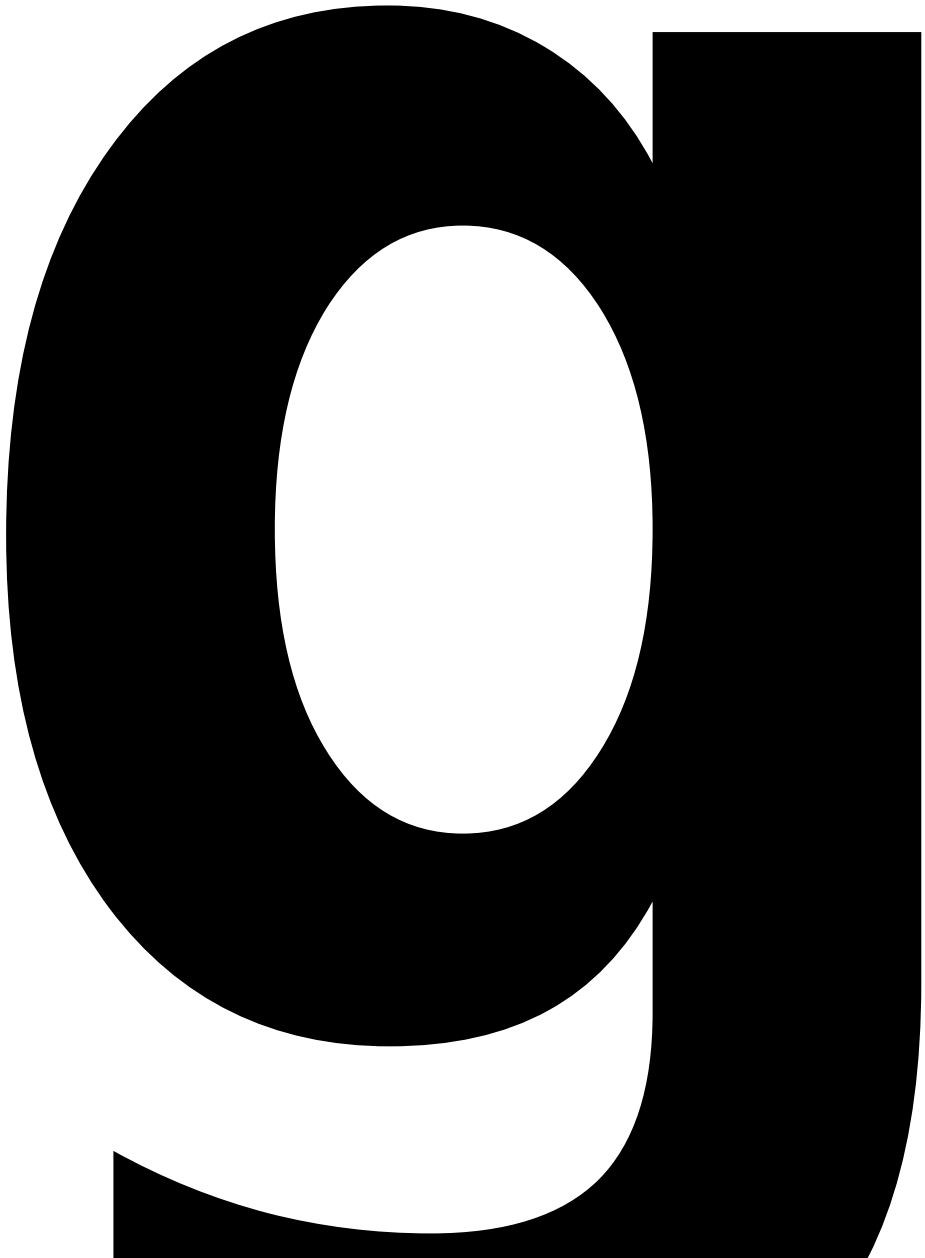


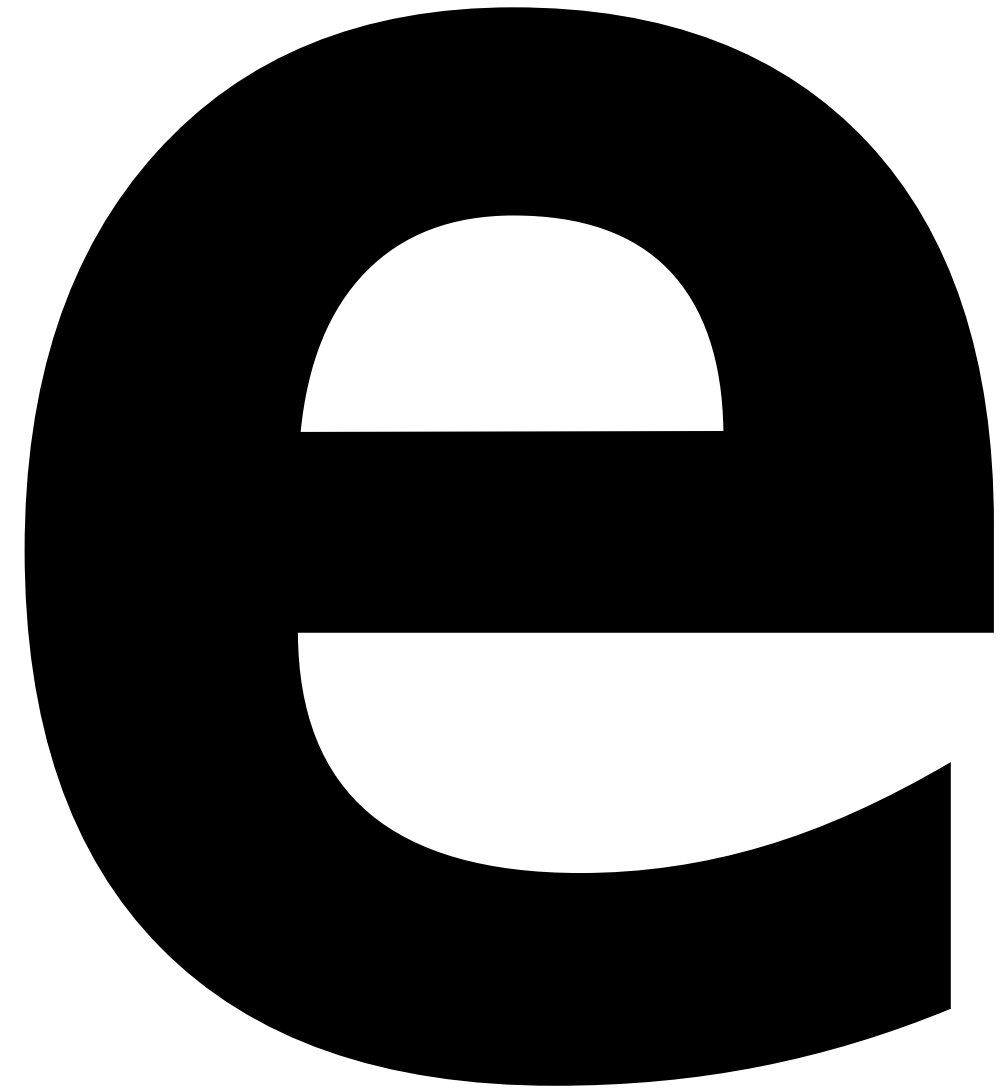


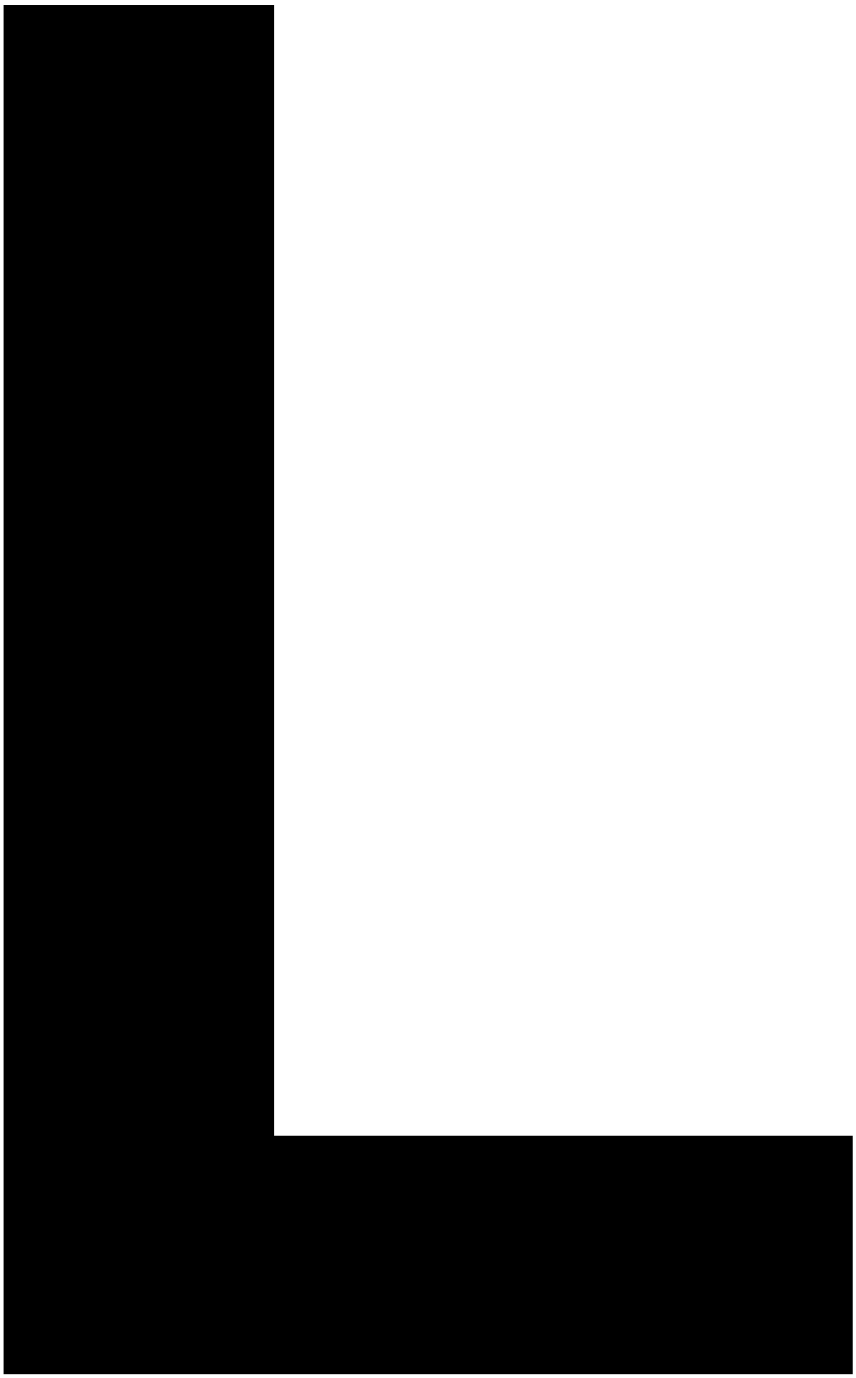


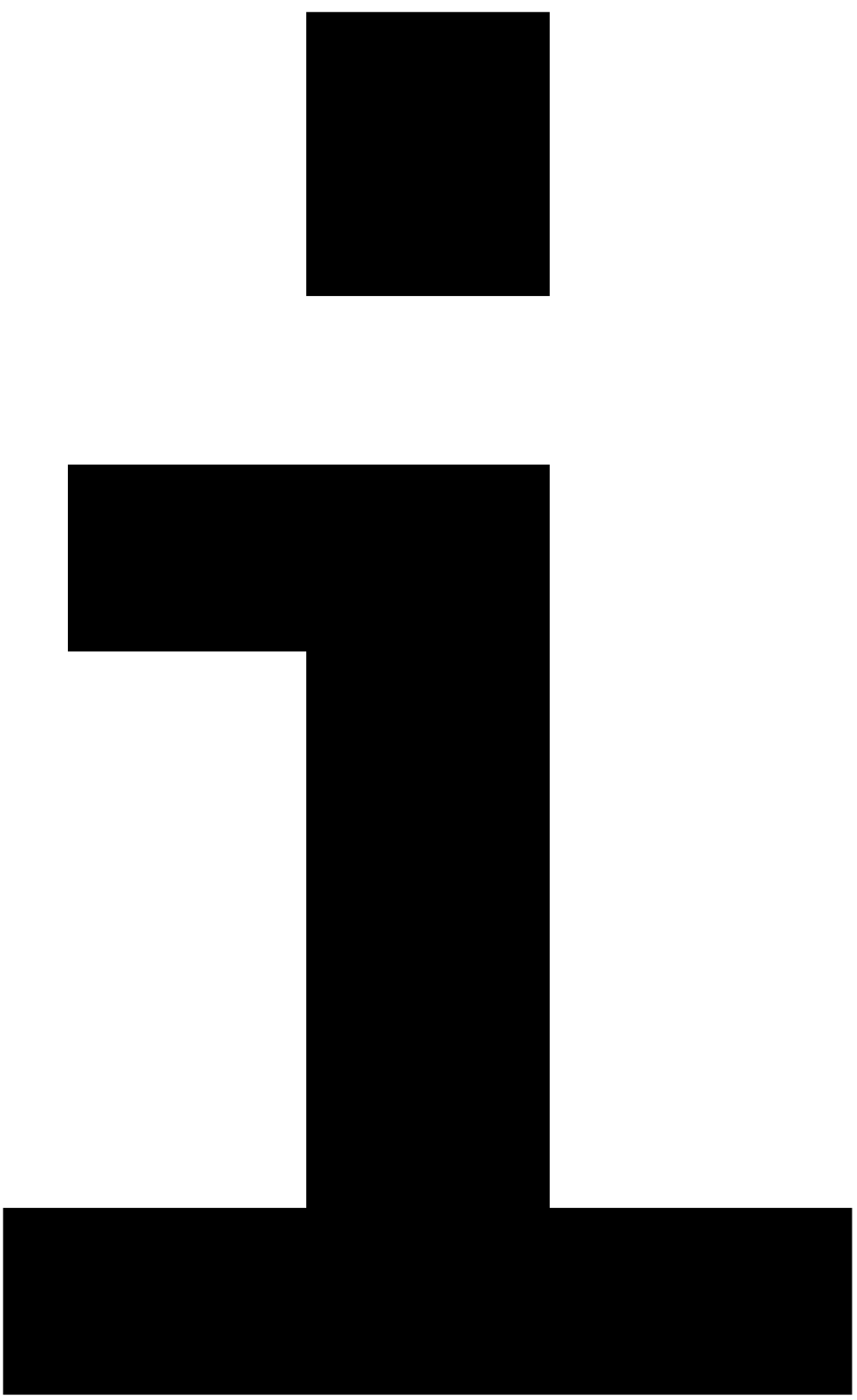


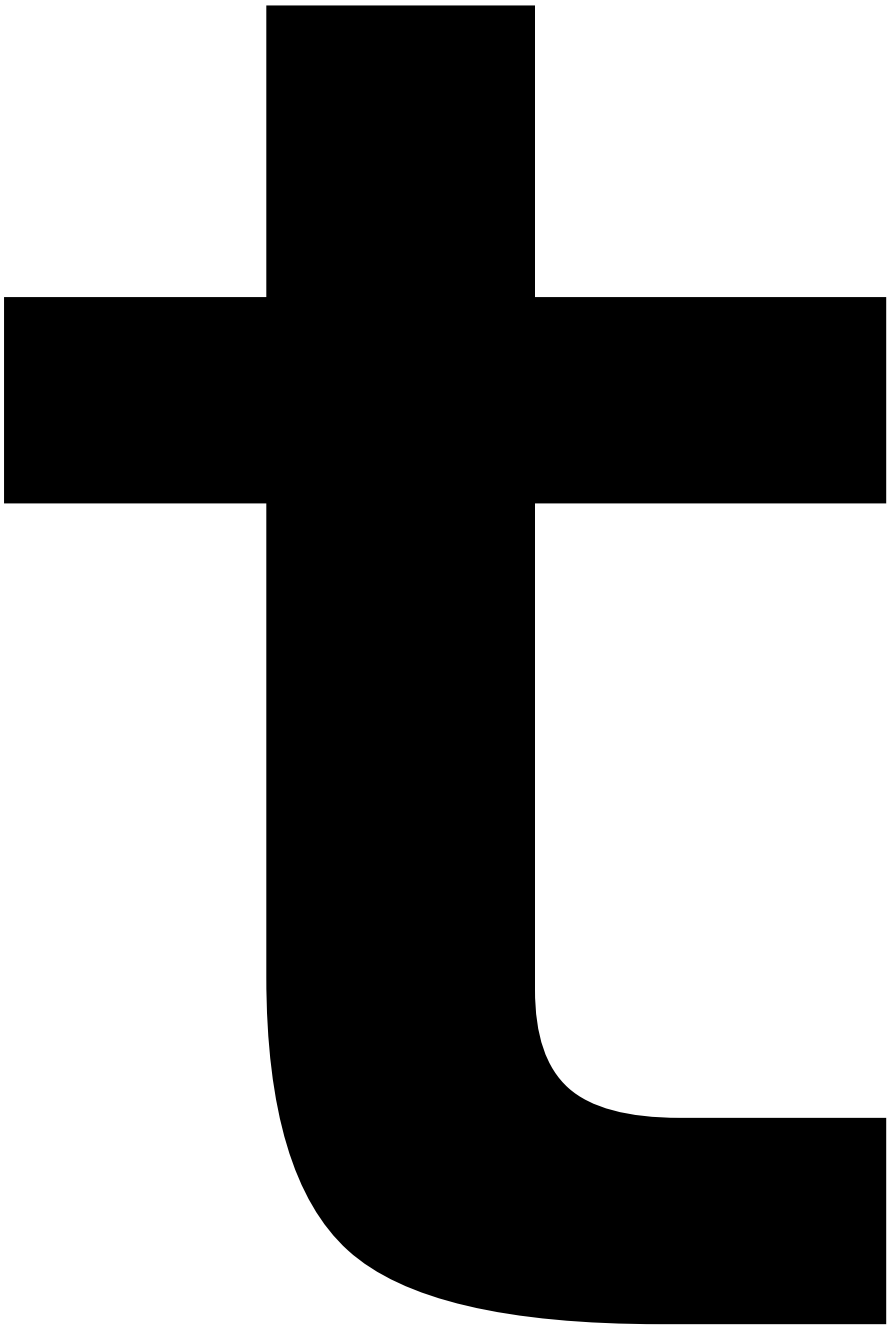


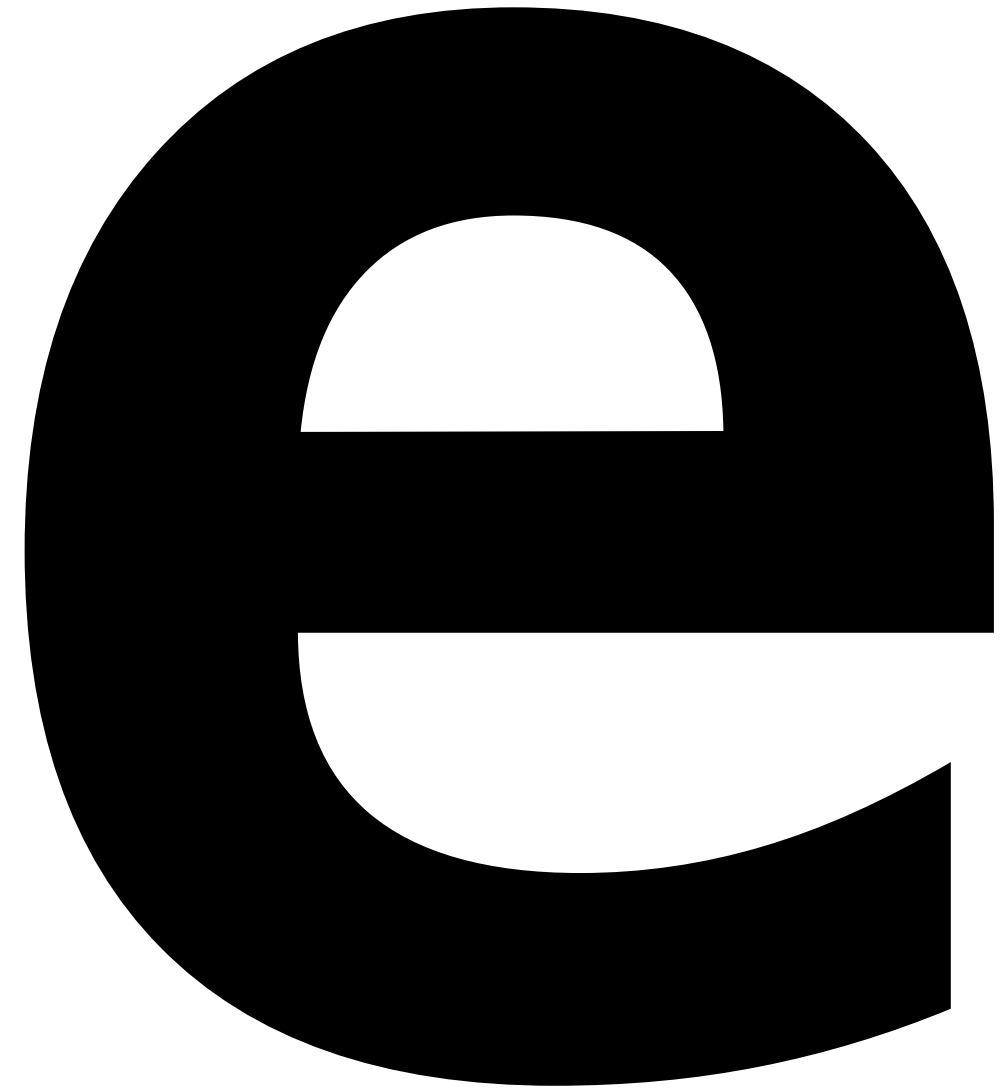


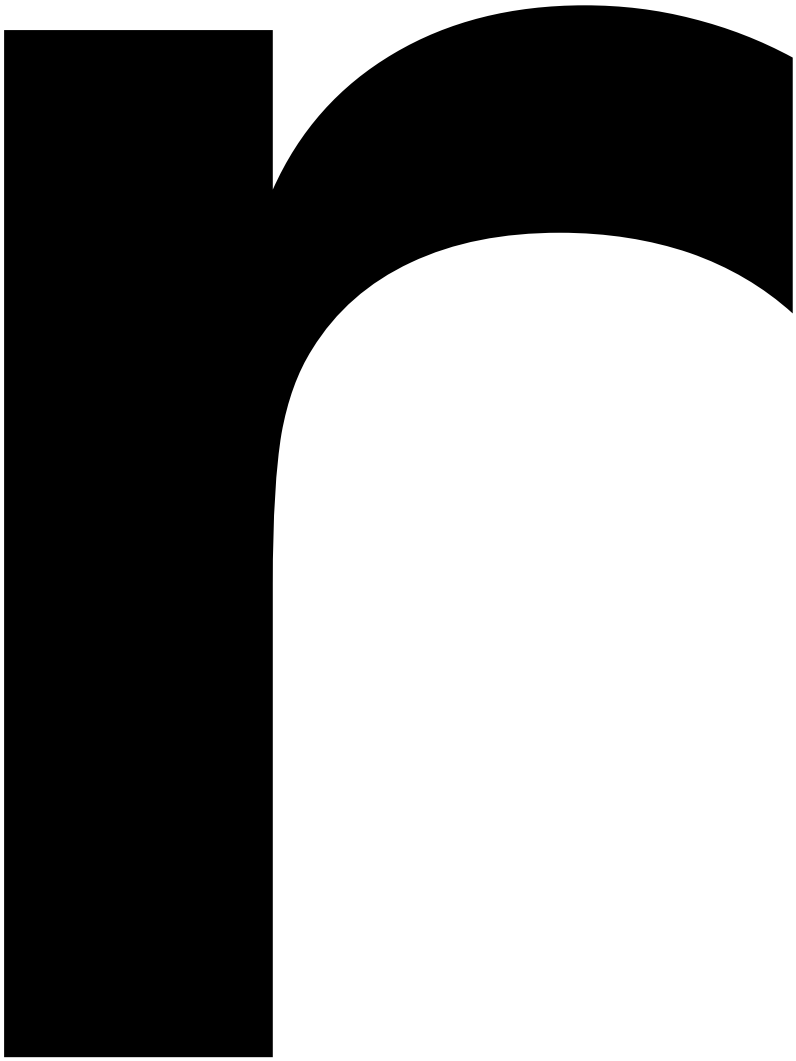


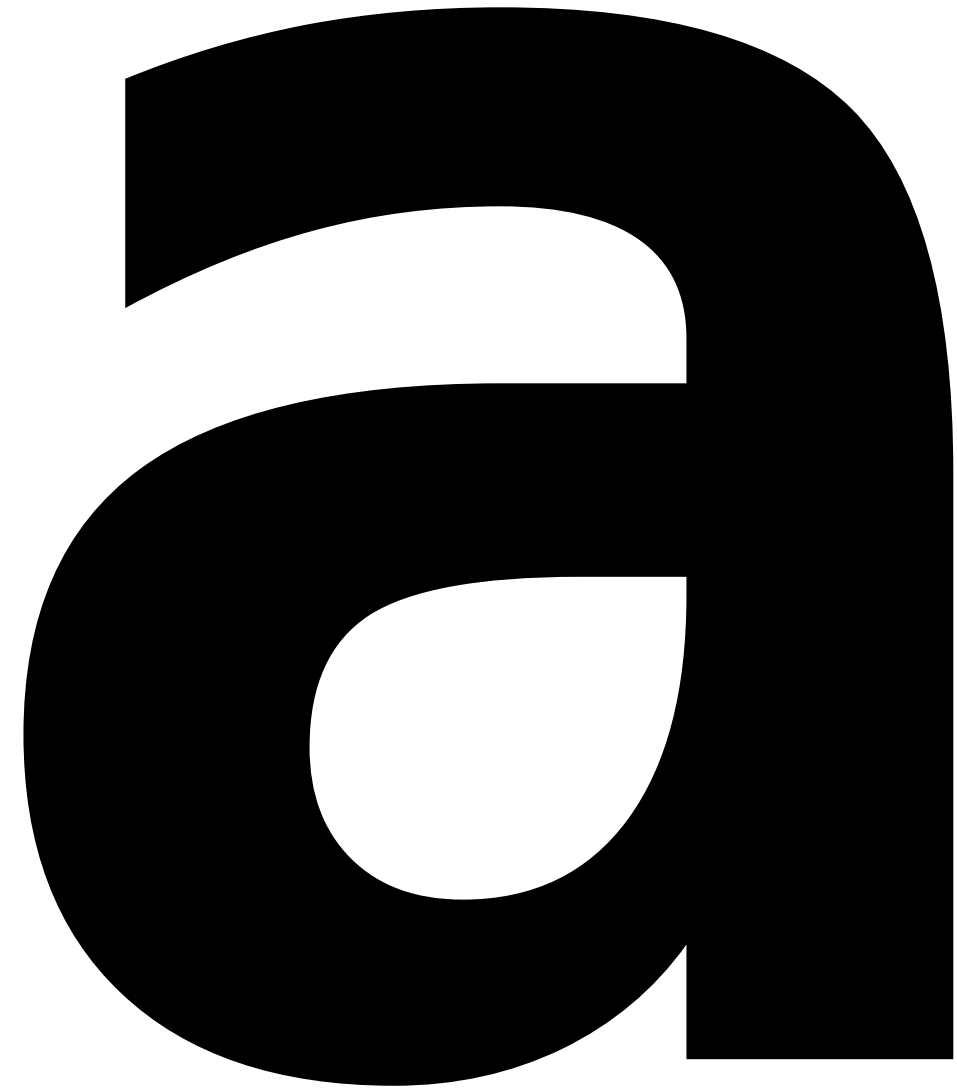


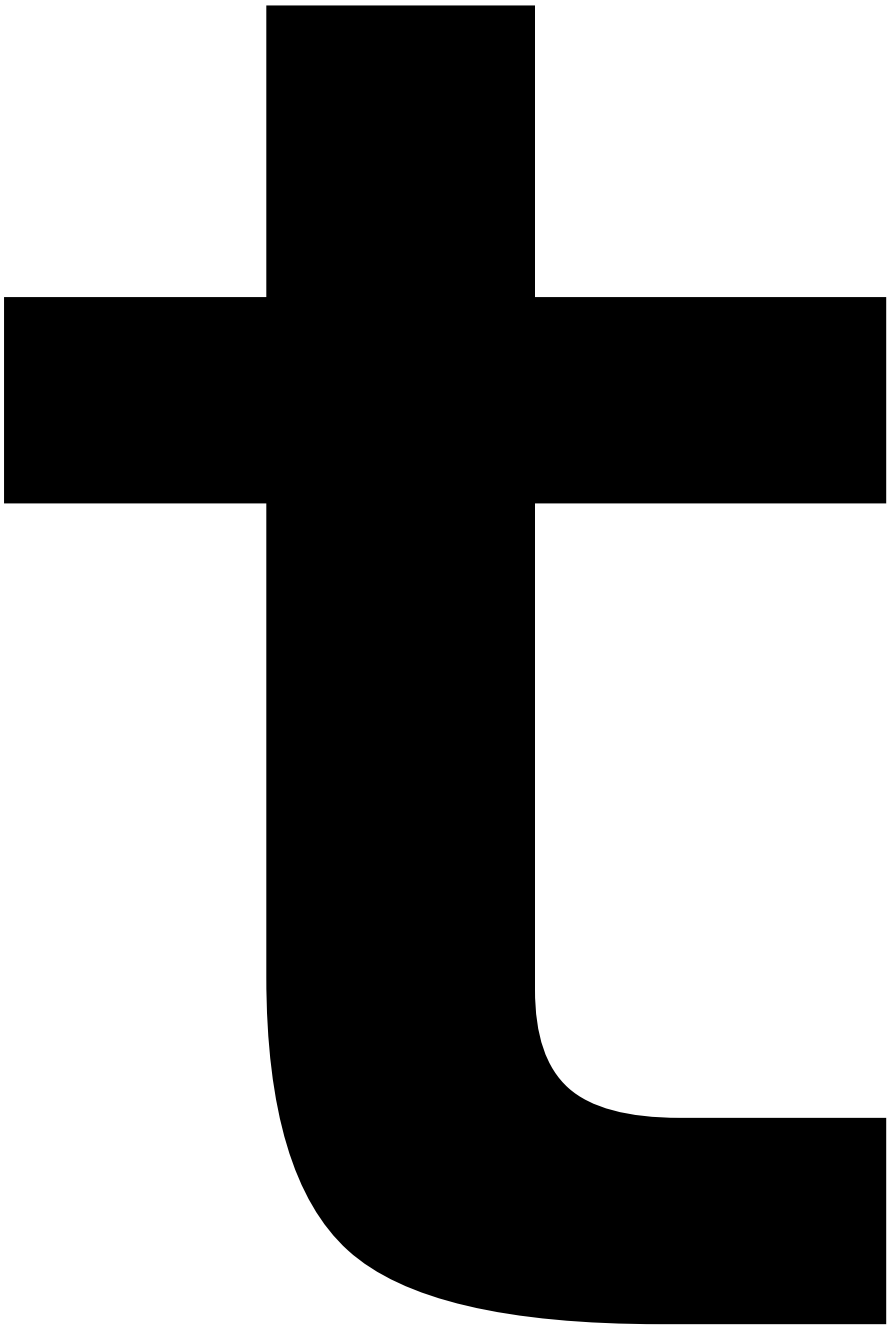




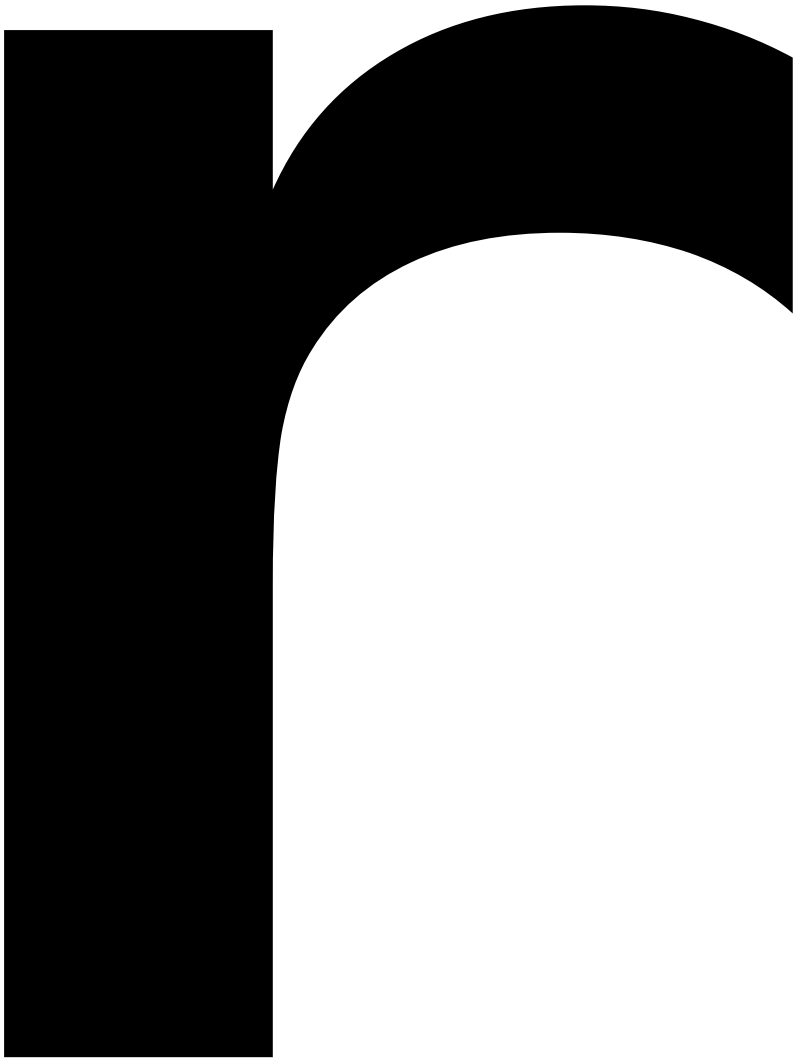


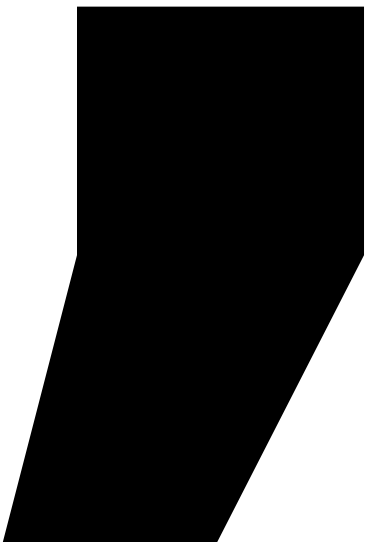


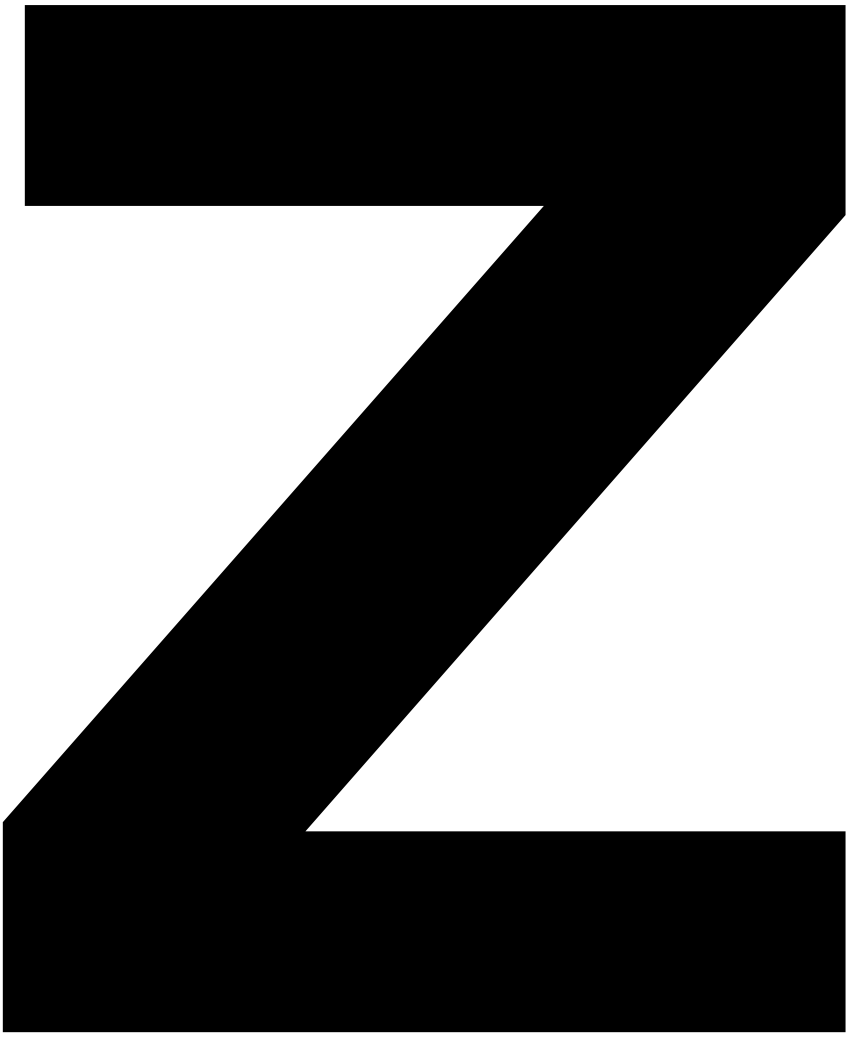


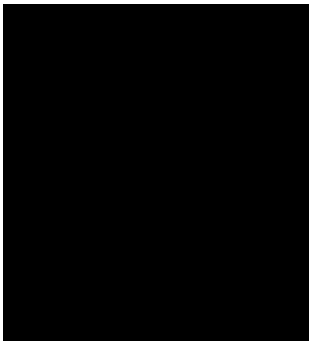


u

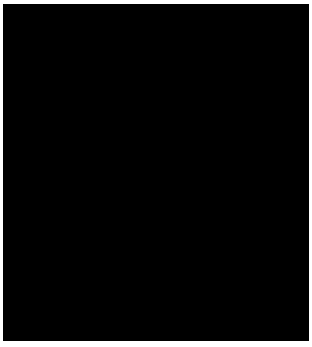




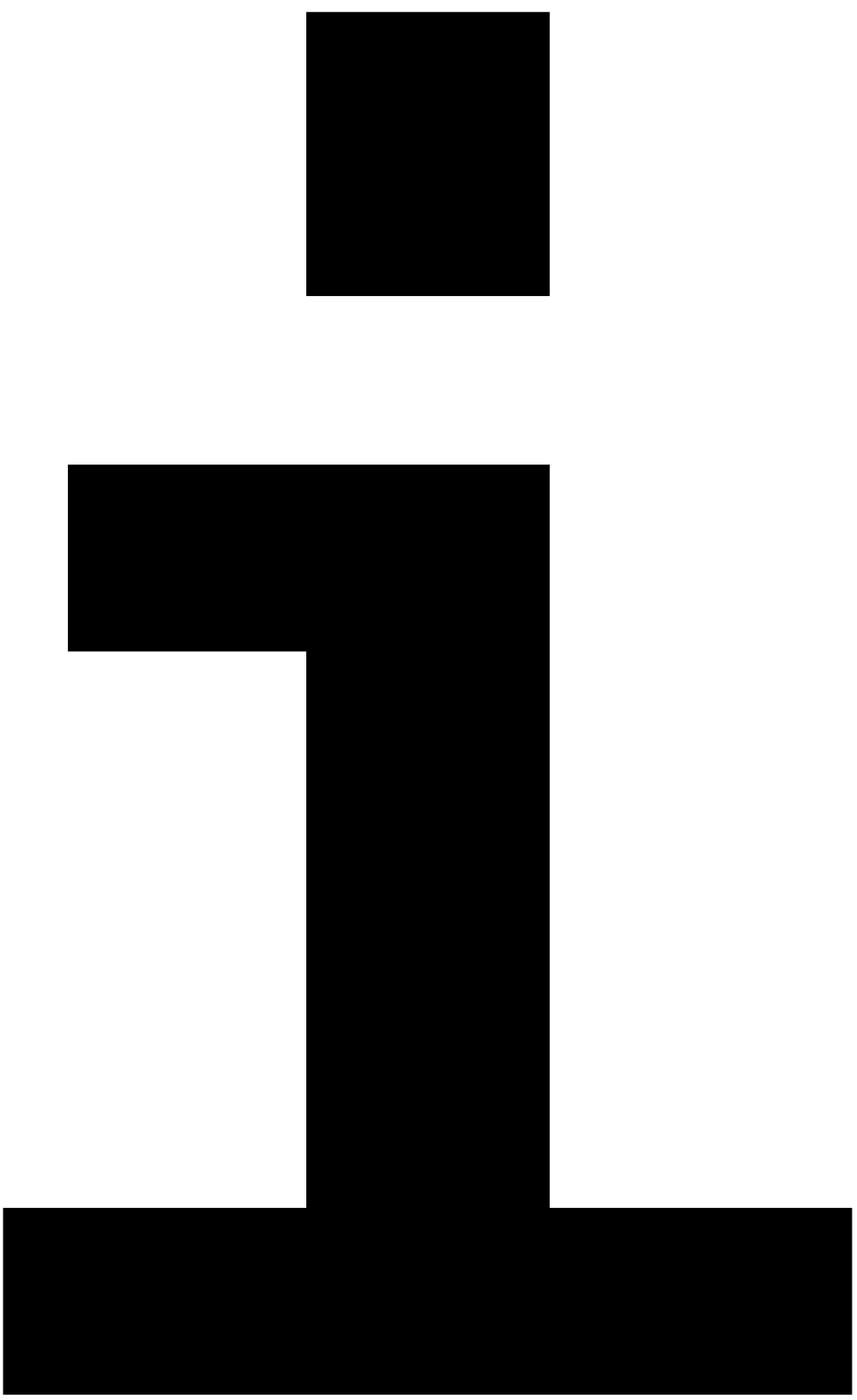


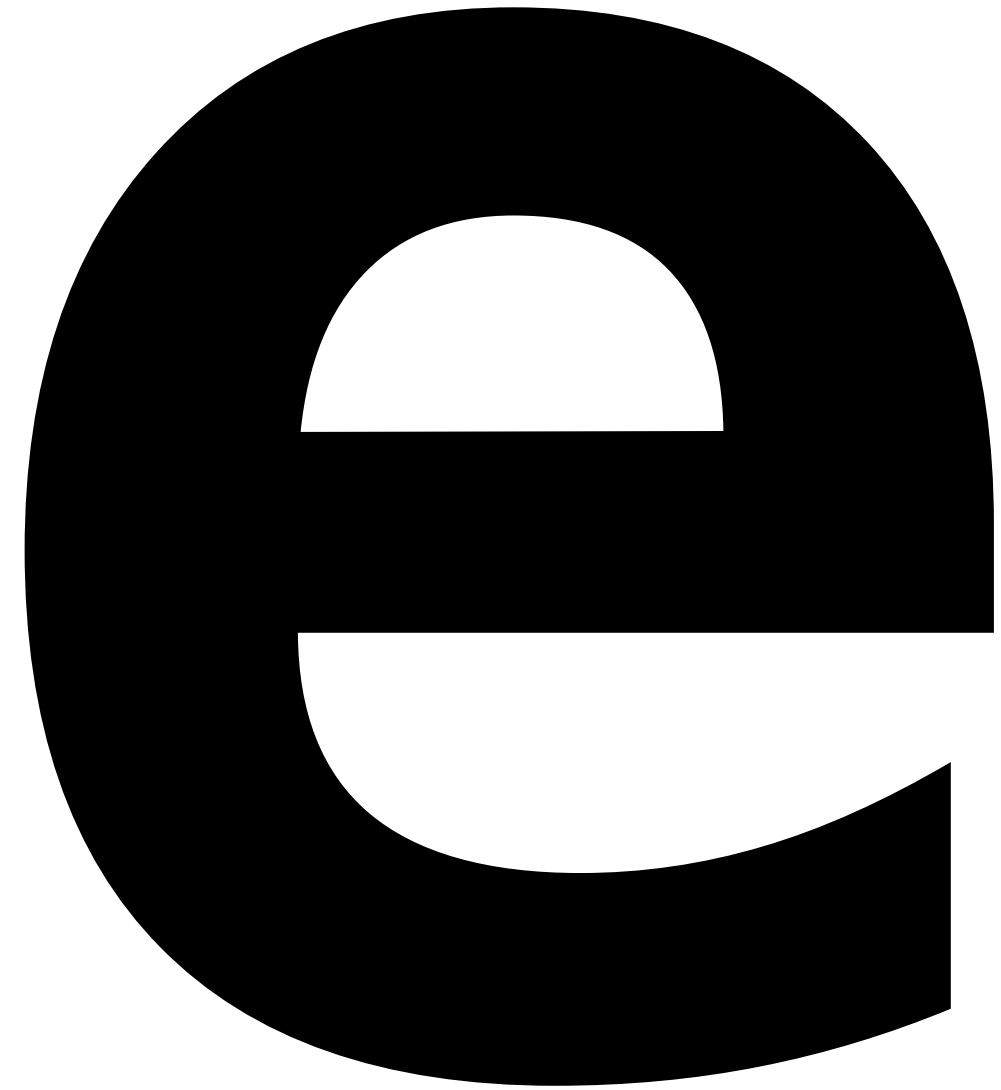


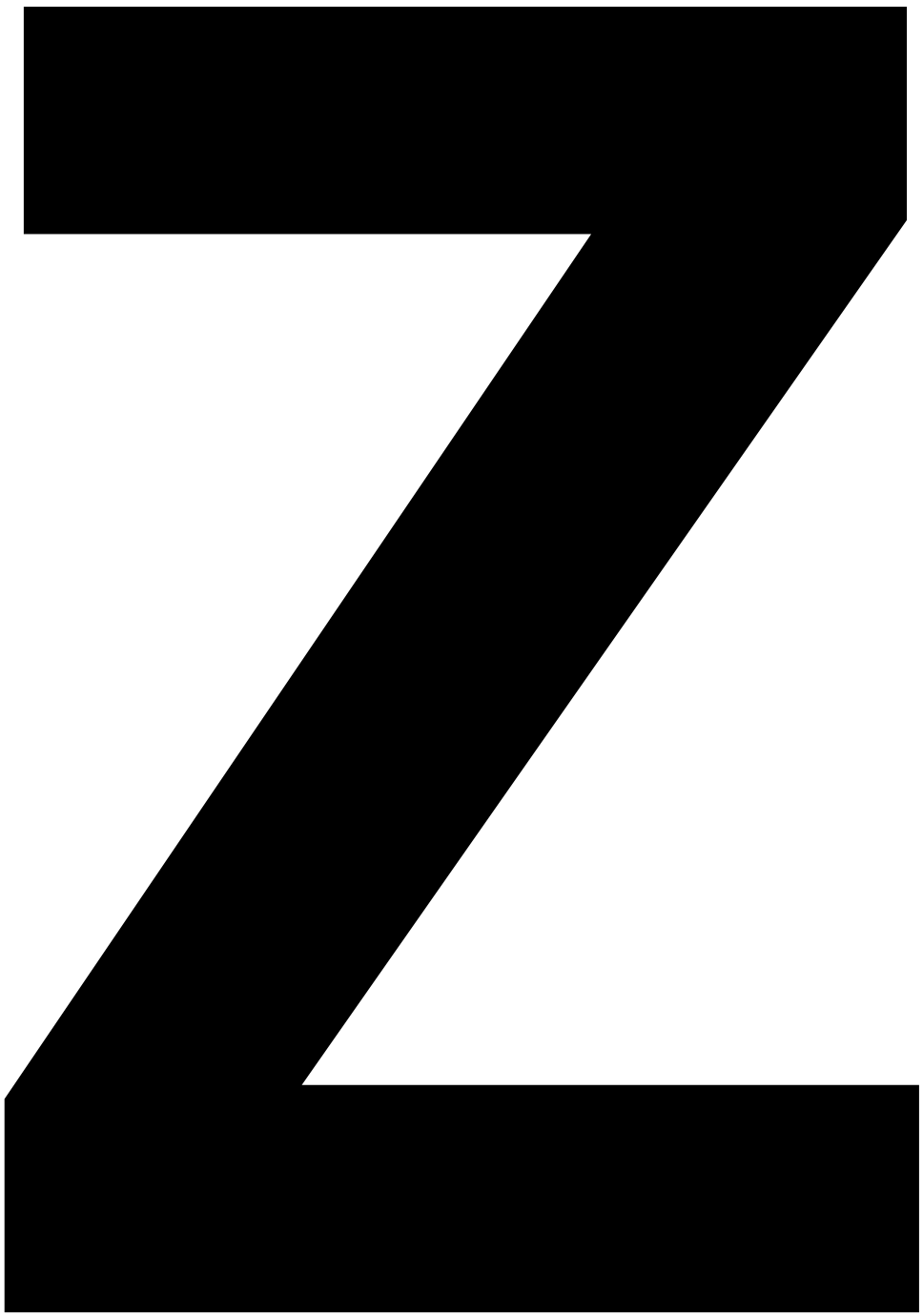
B

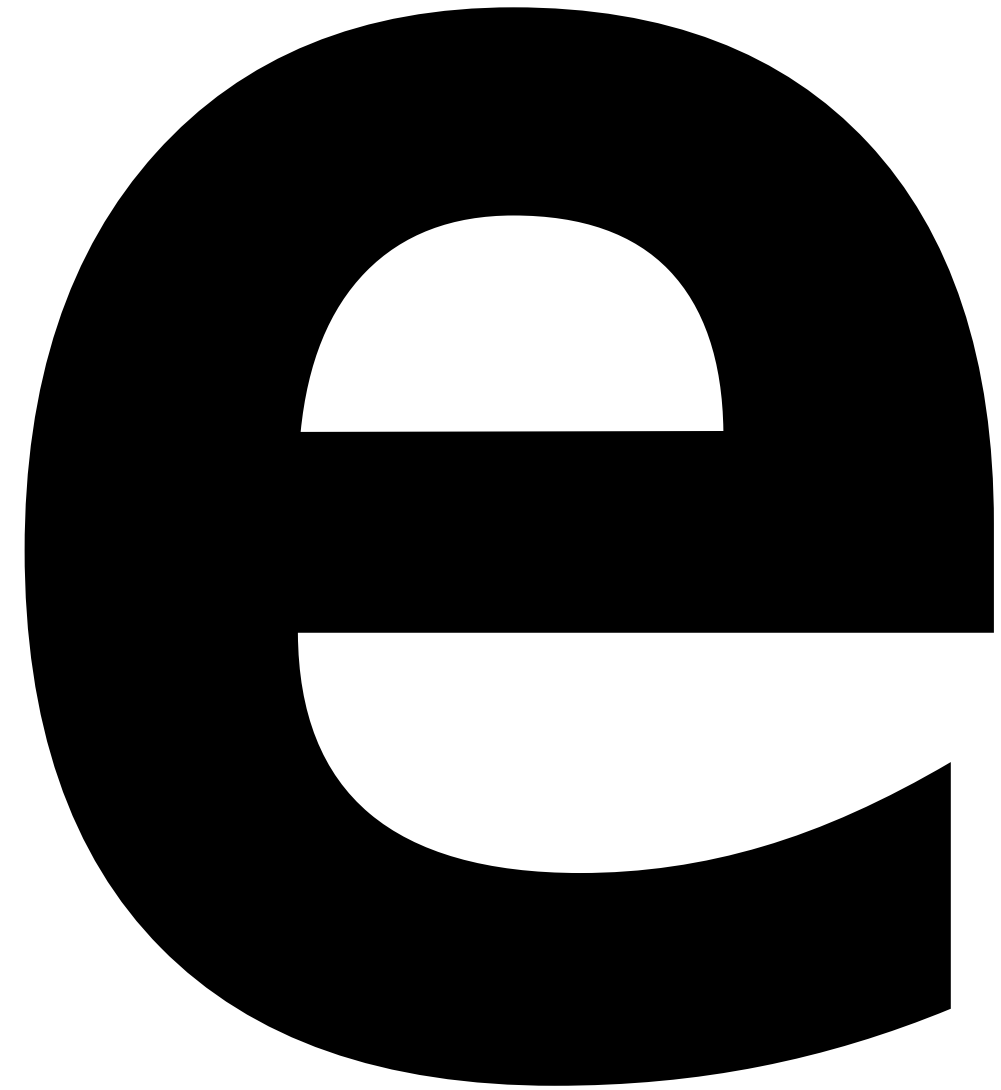


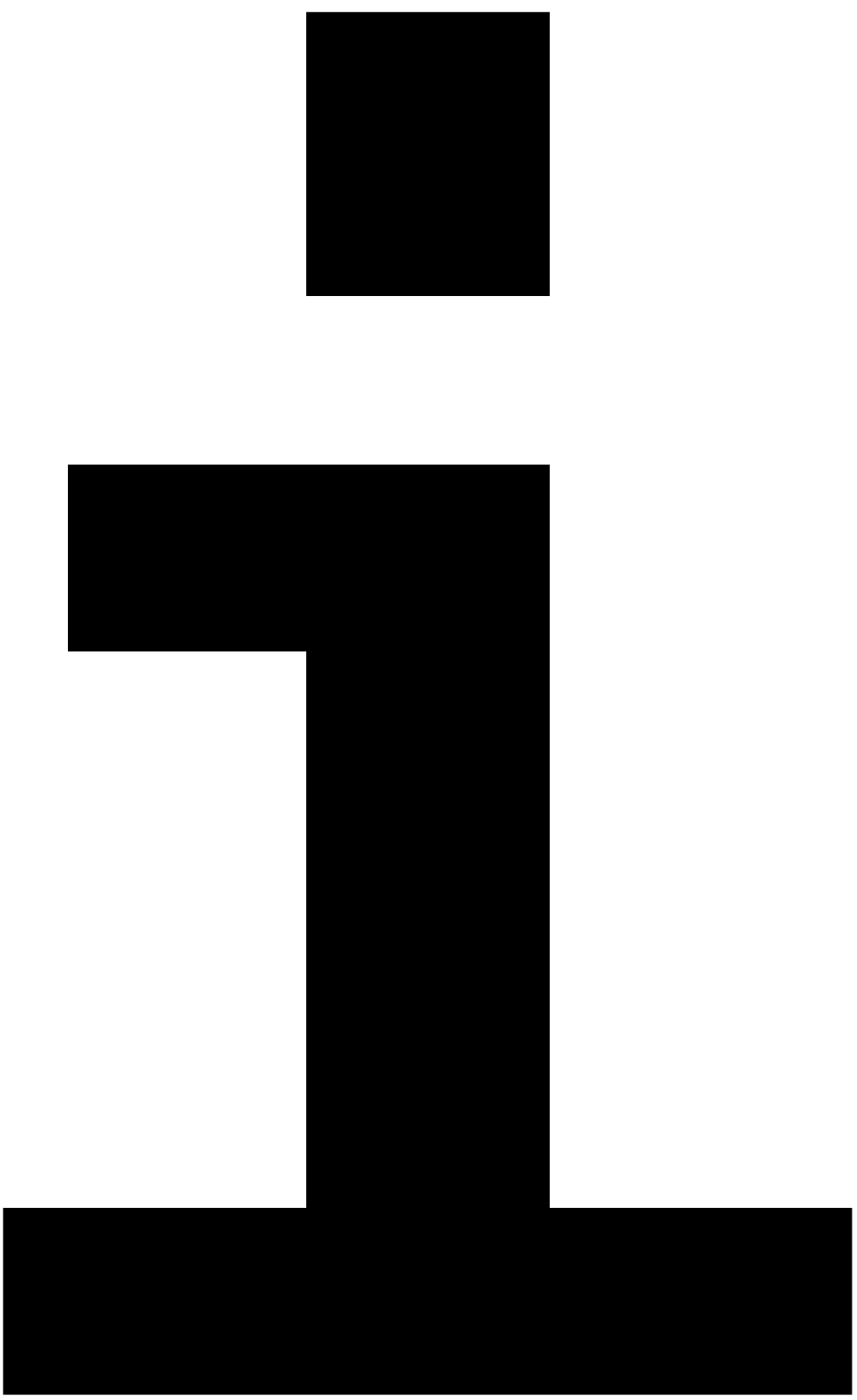
d

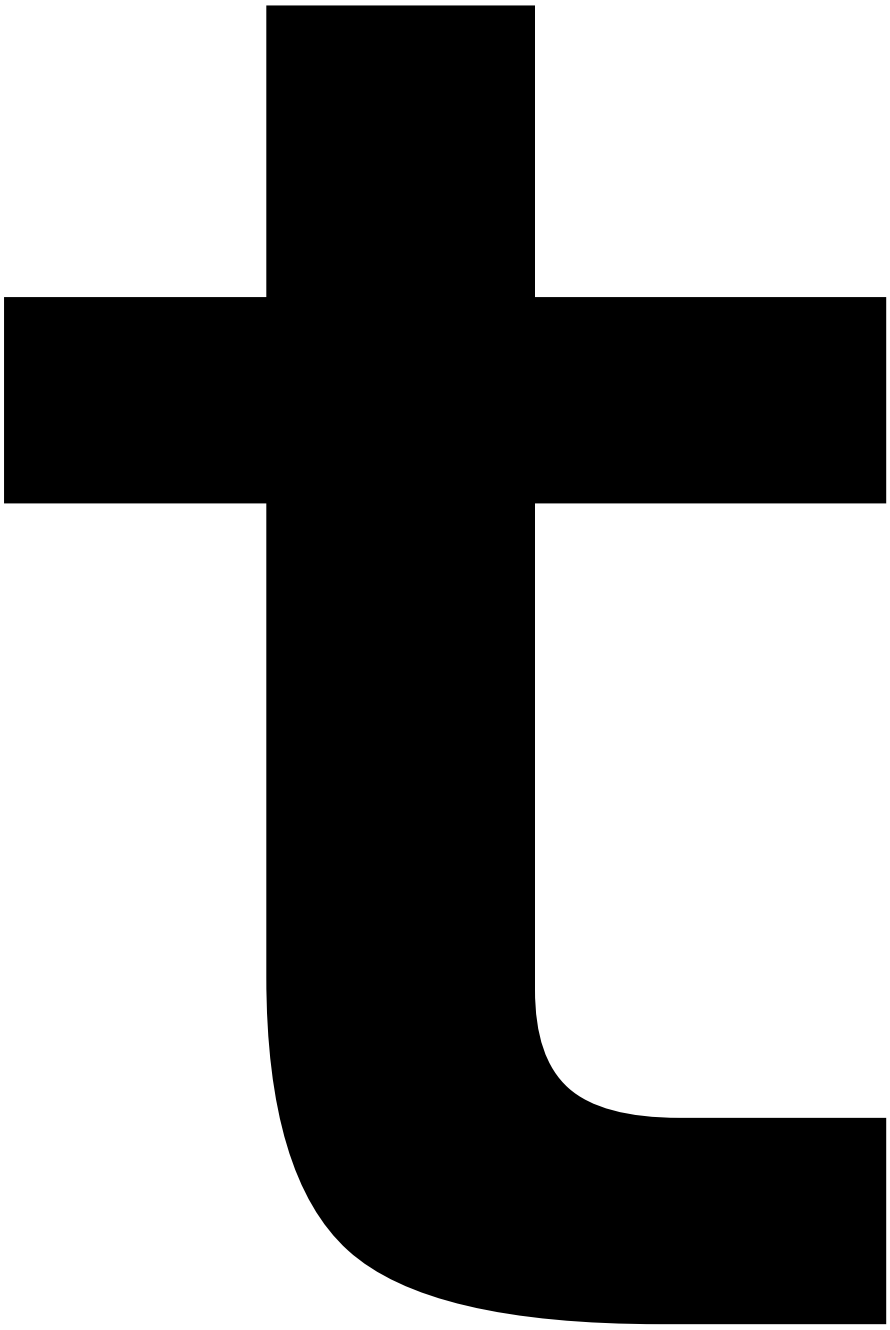




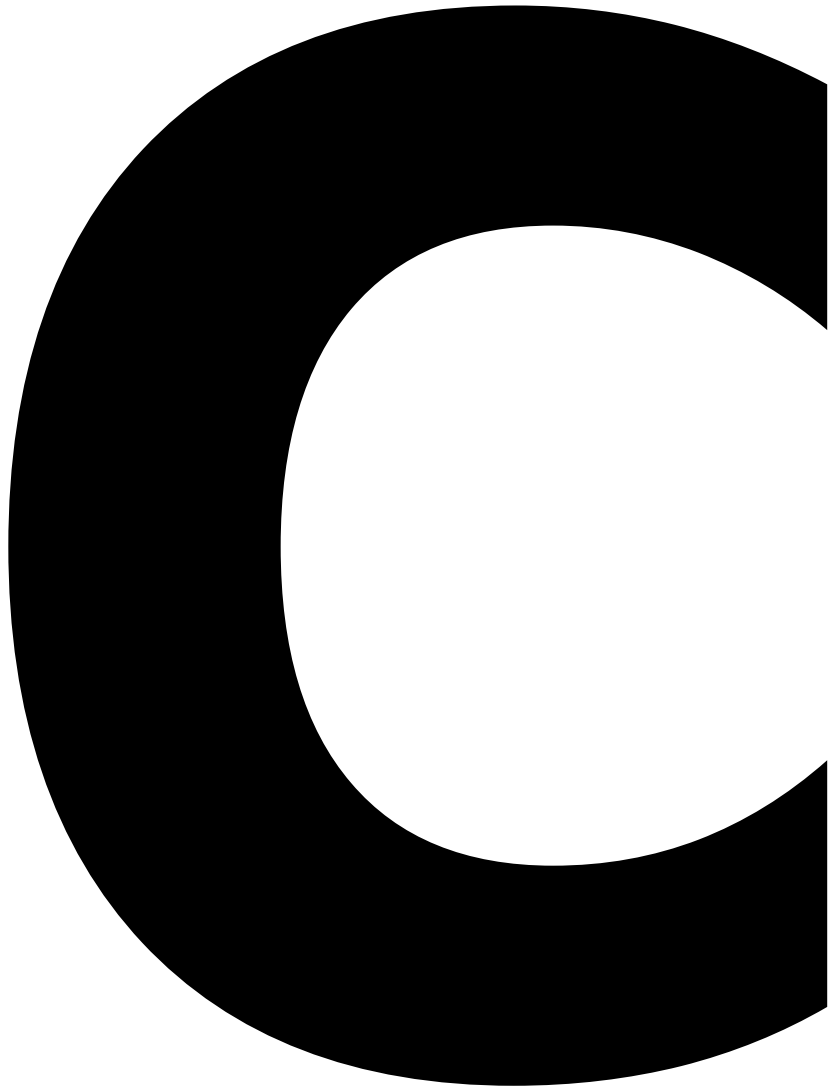


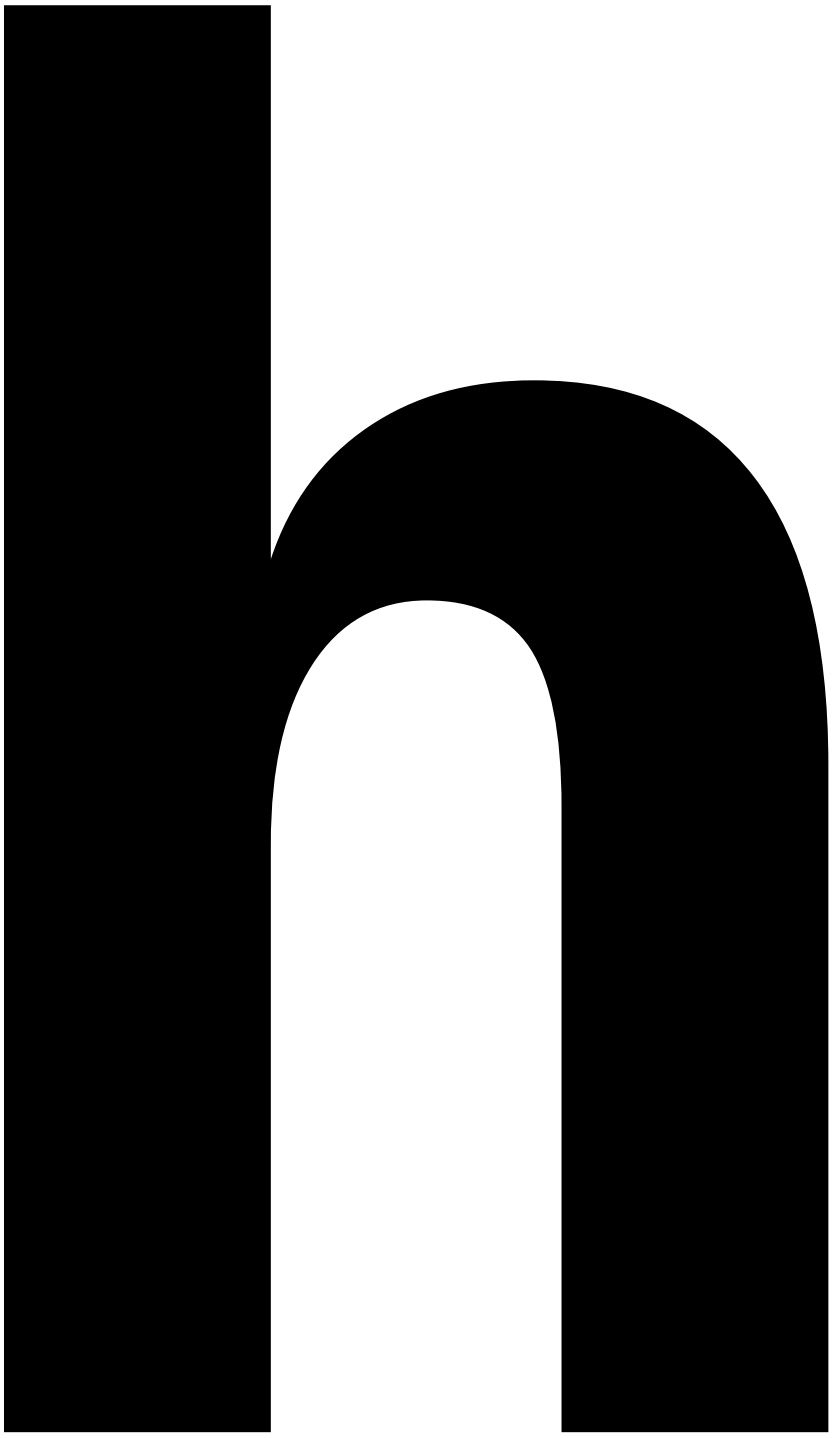


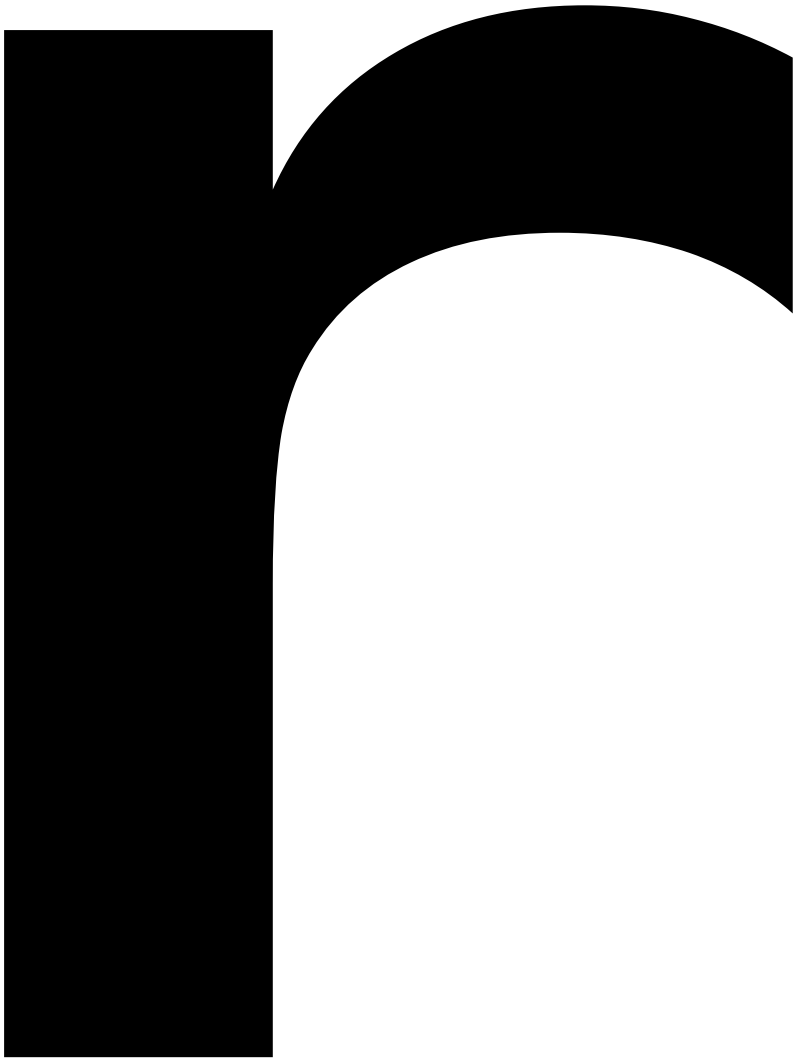


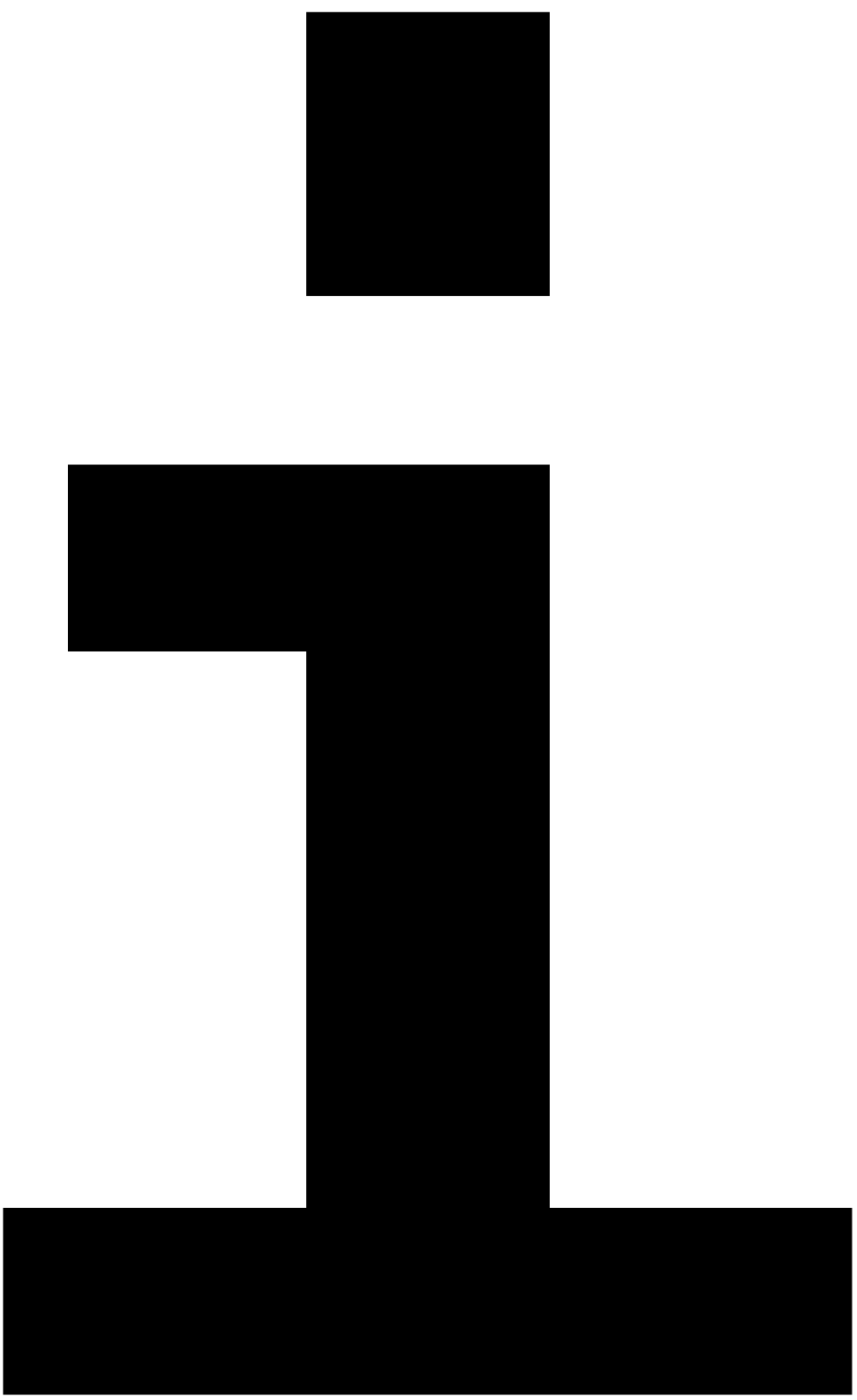


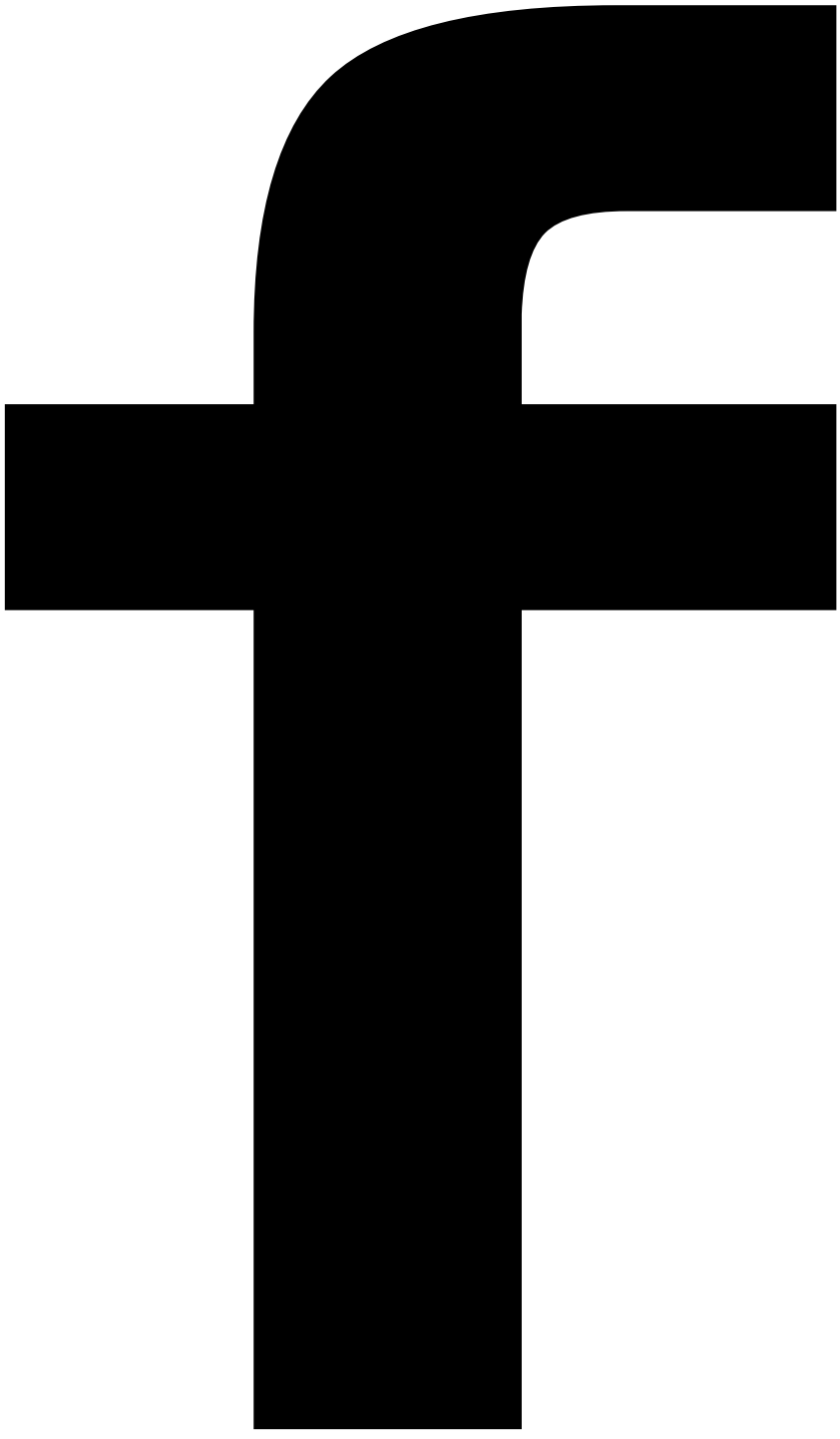
S

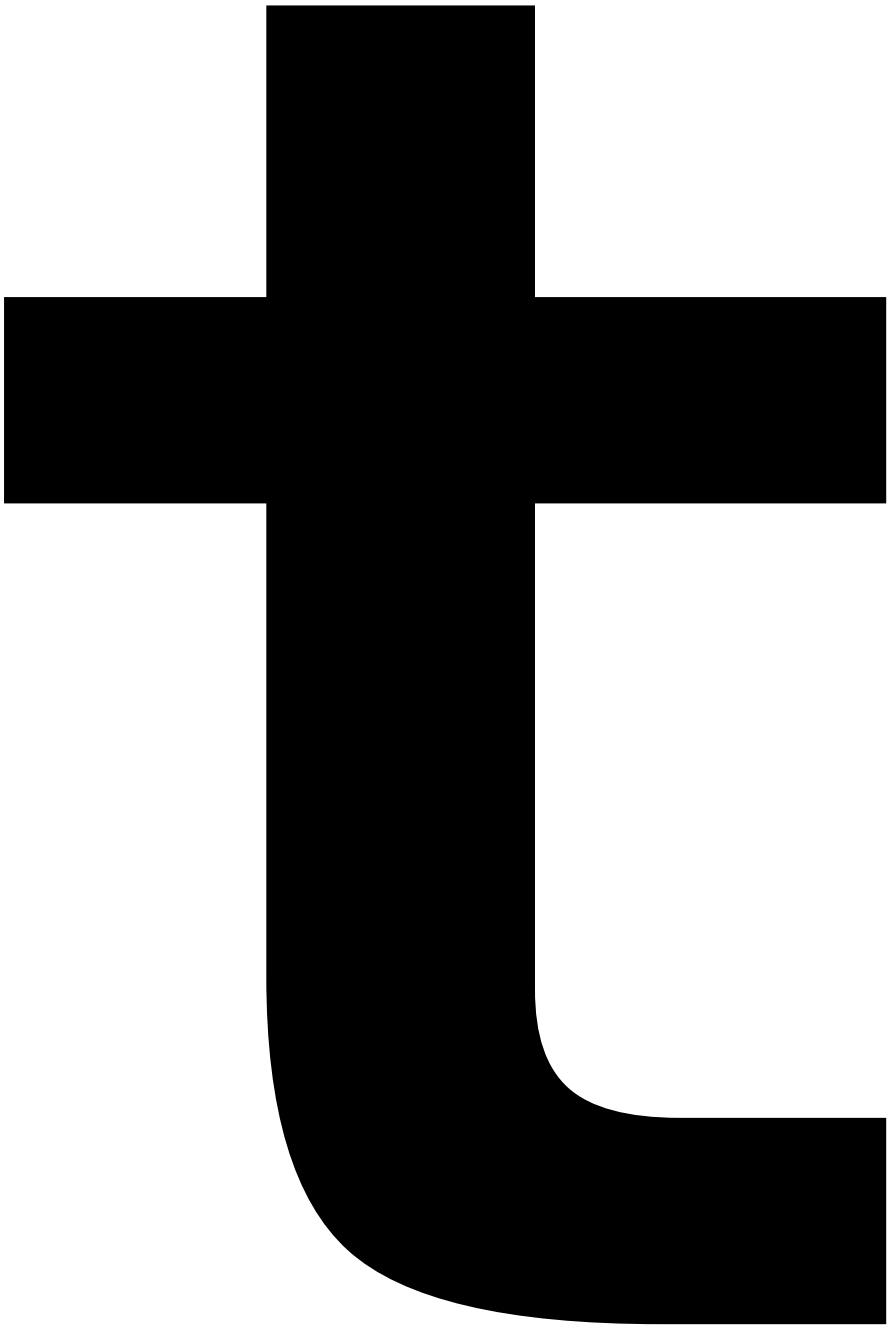




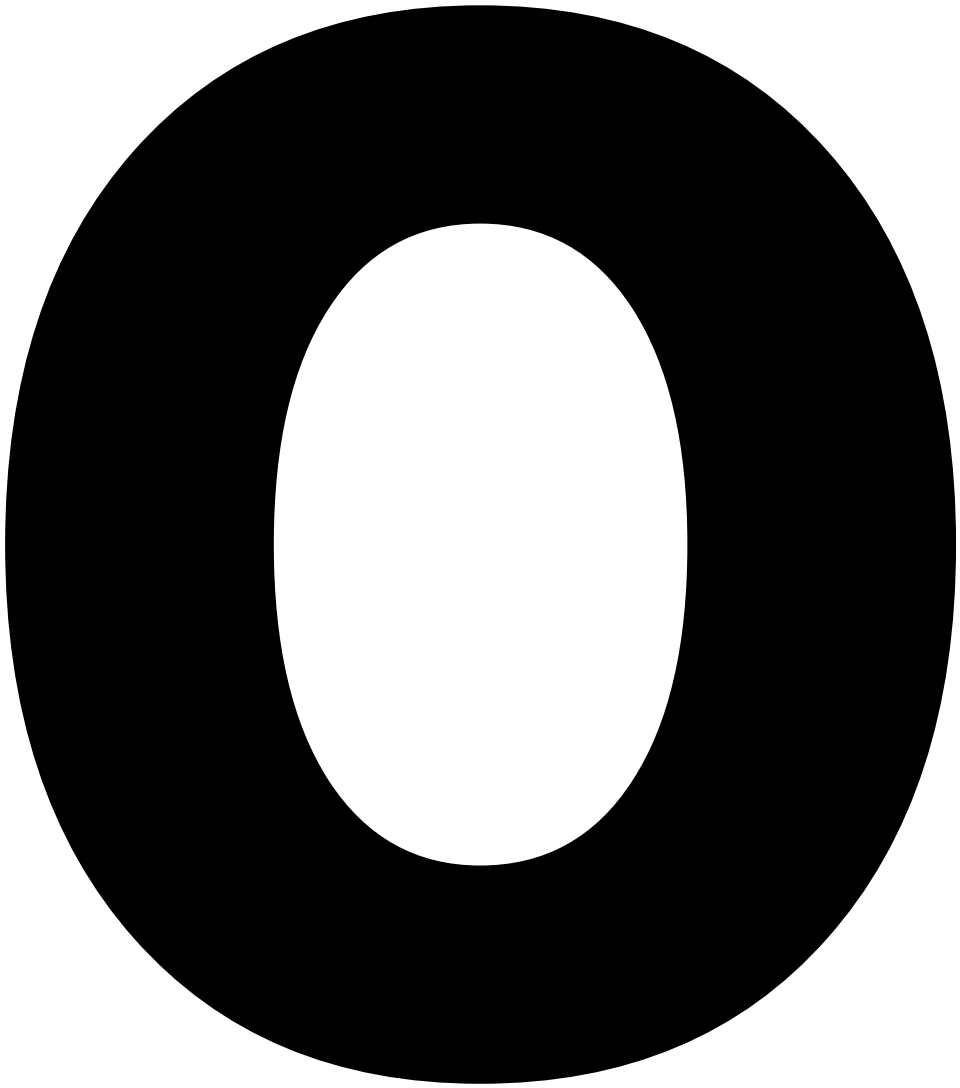




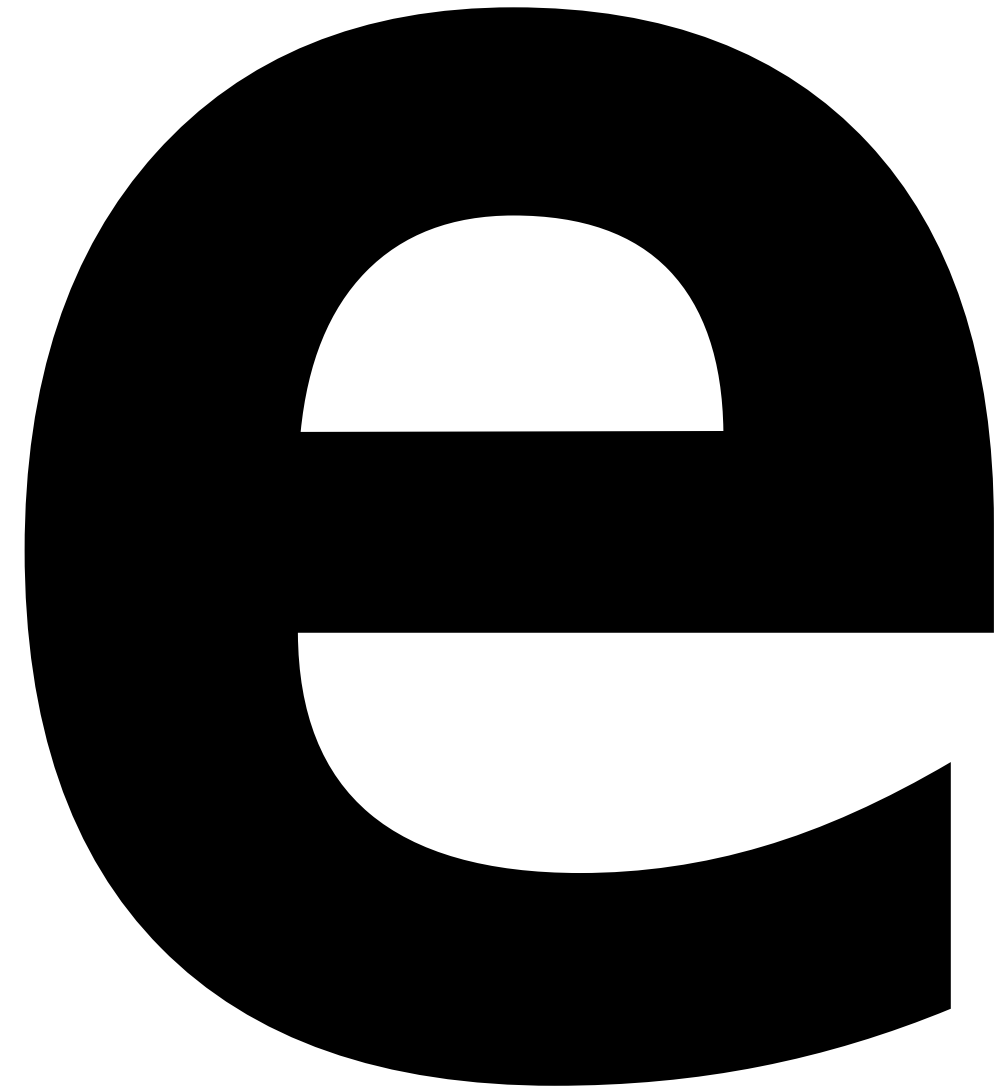


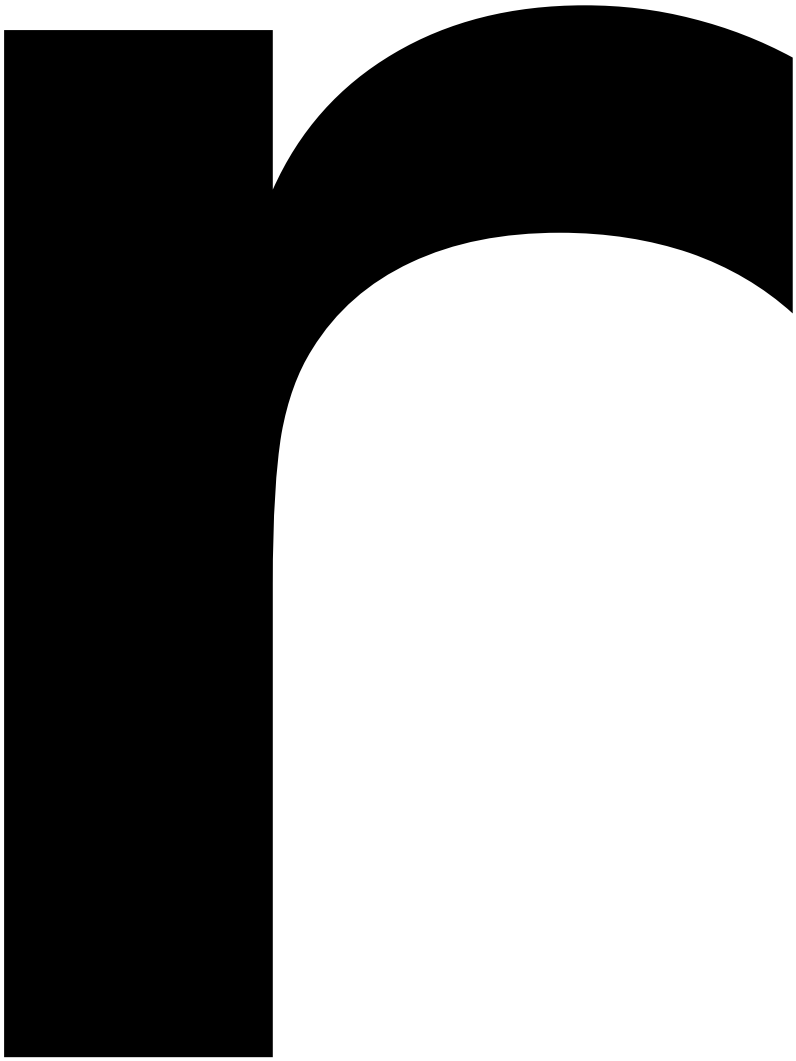


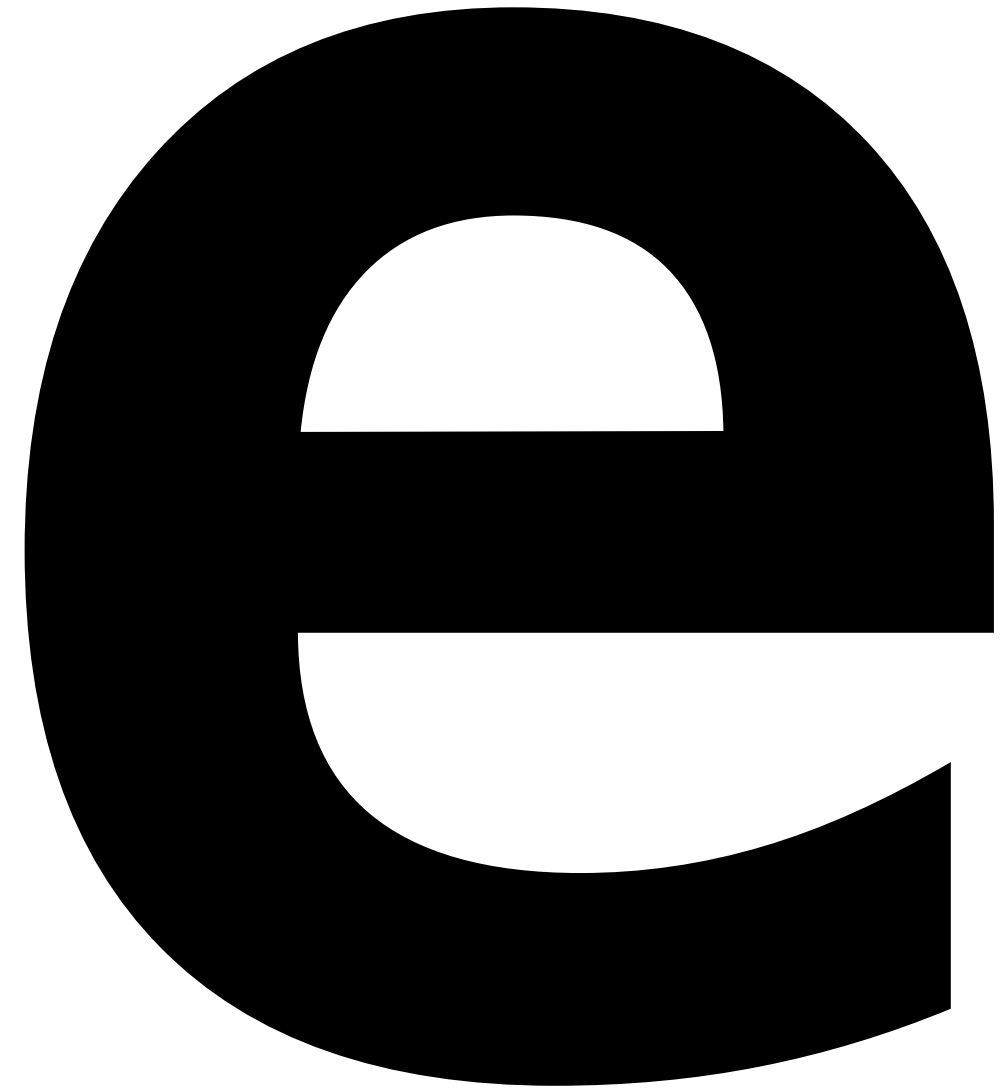
d



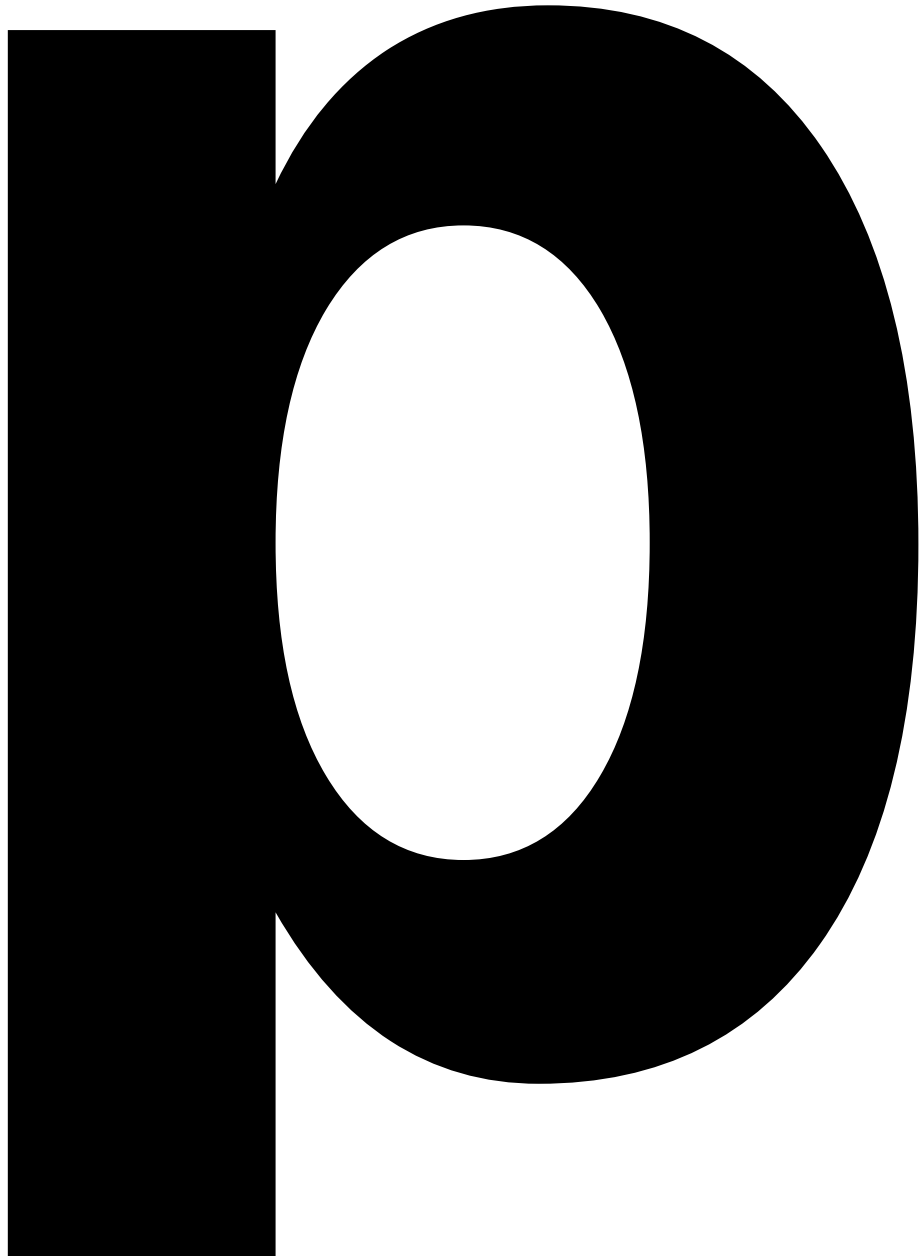
S

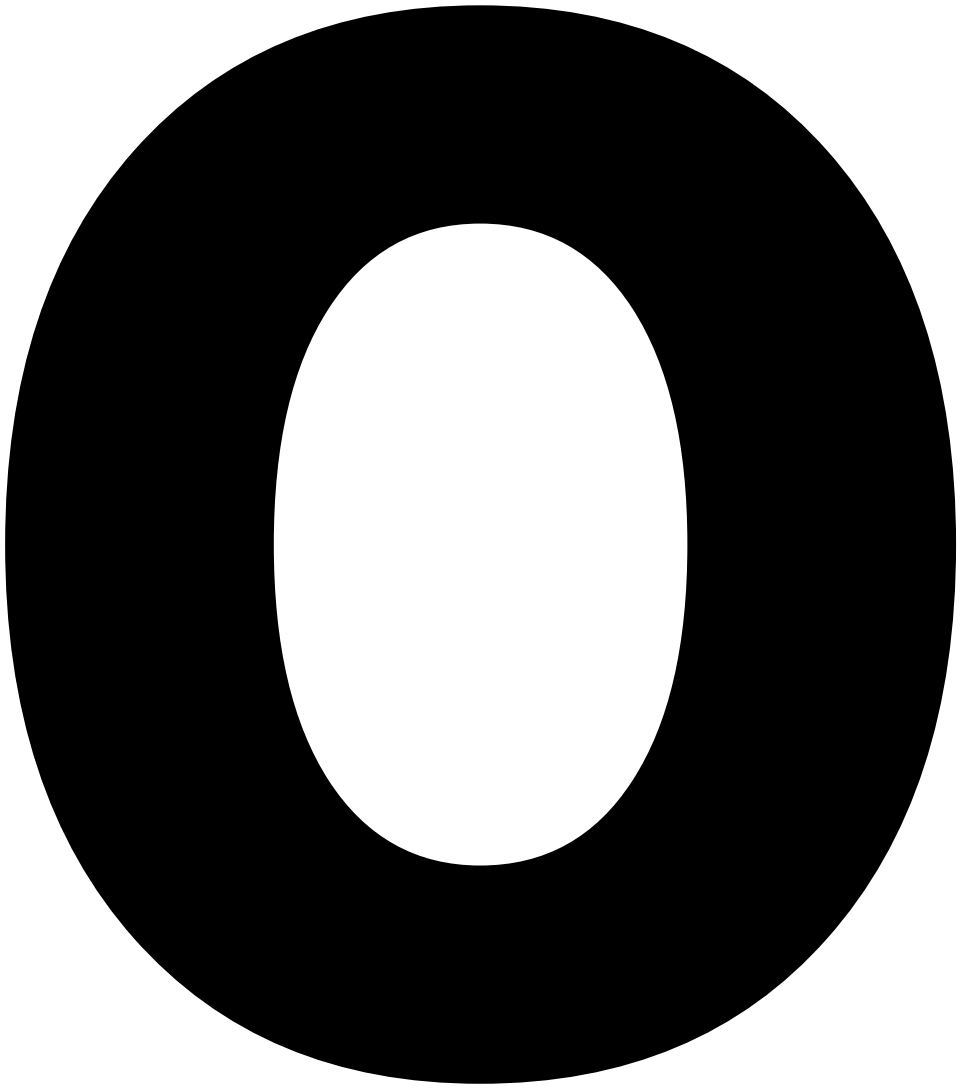


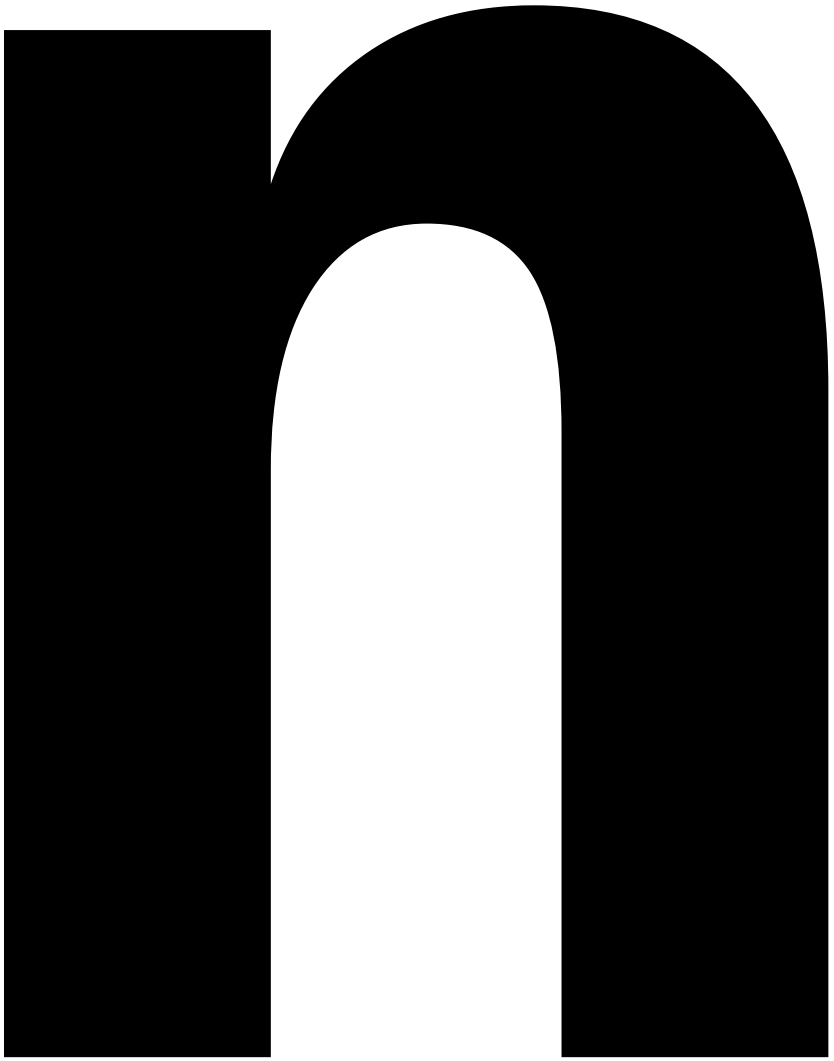




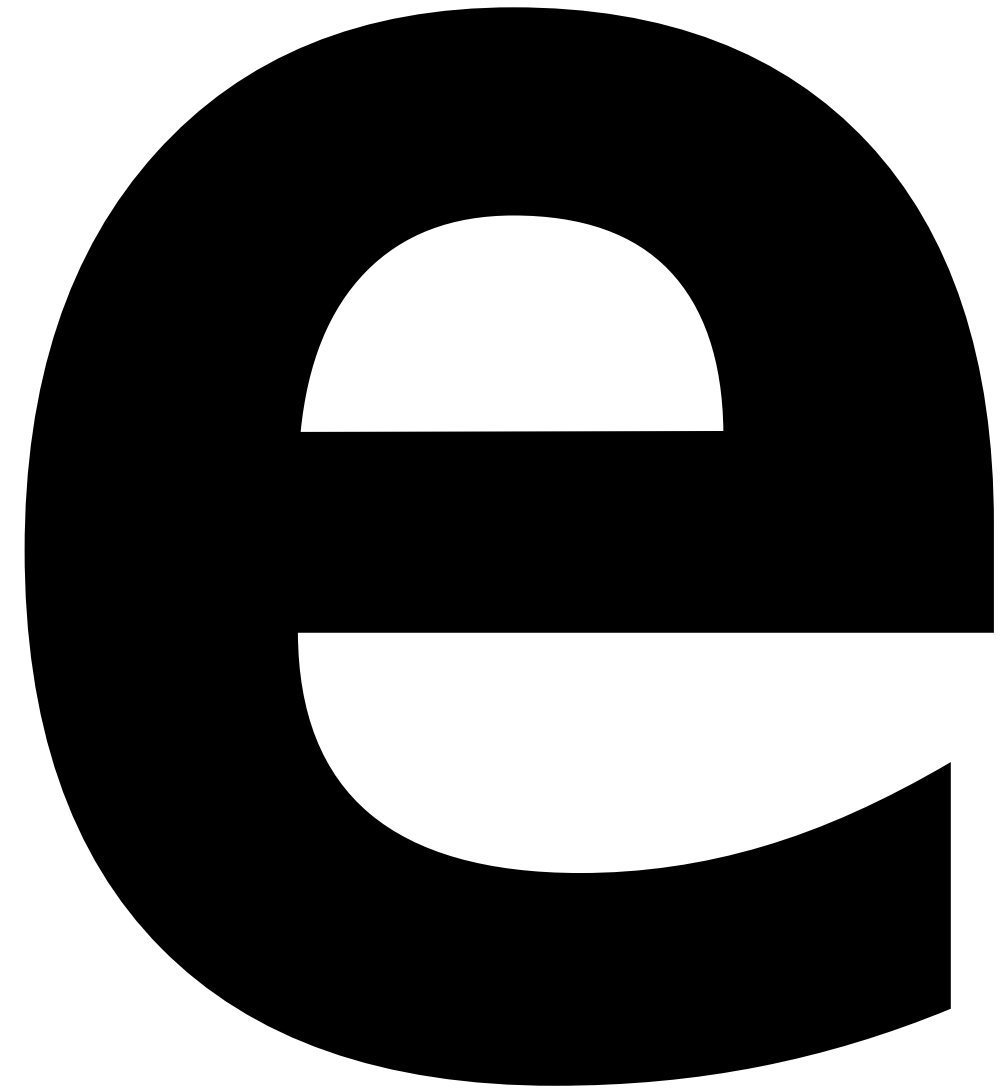
S

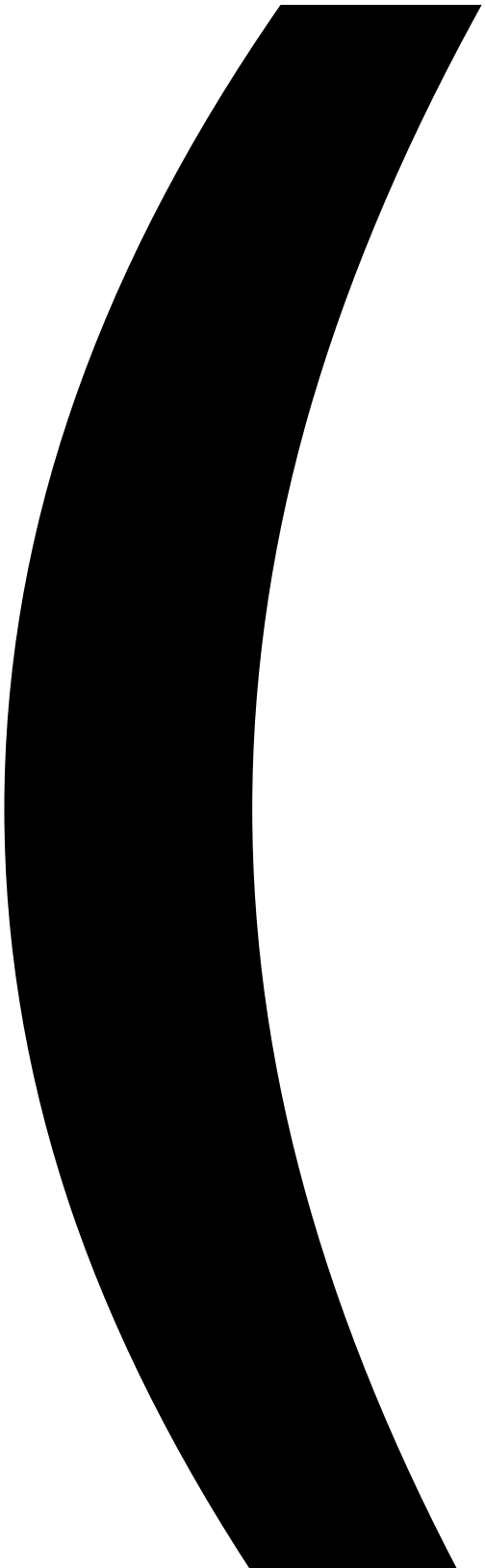


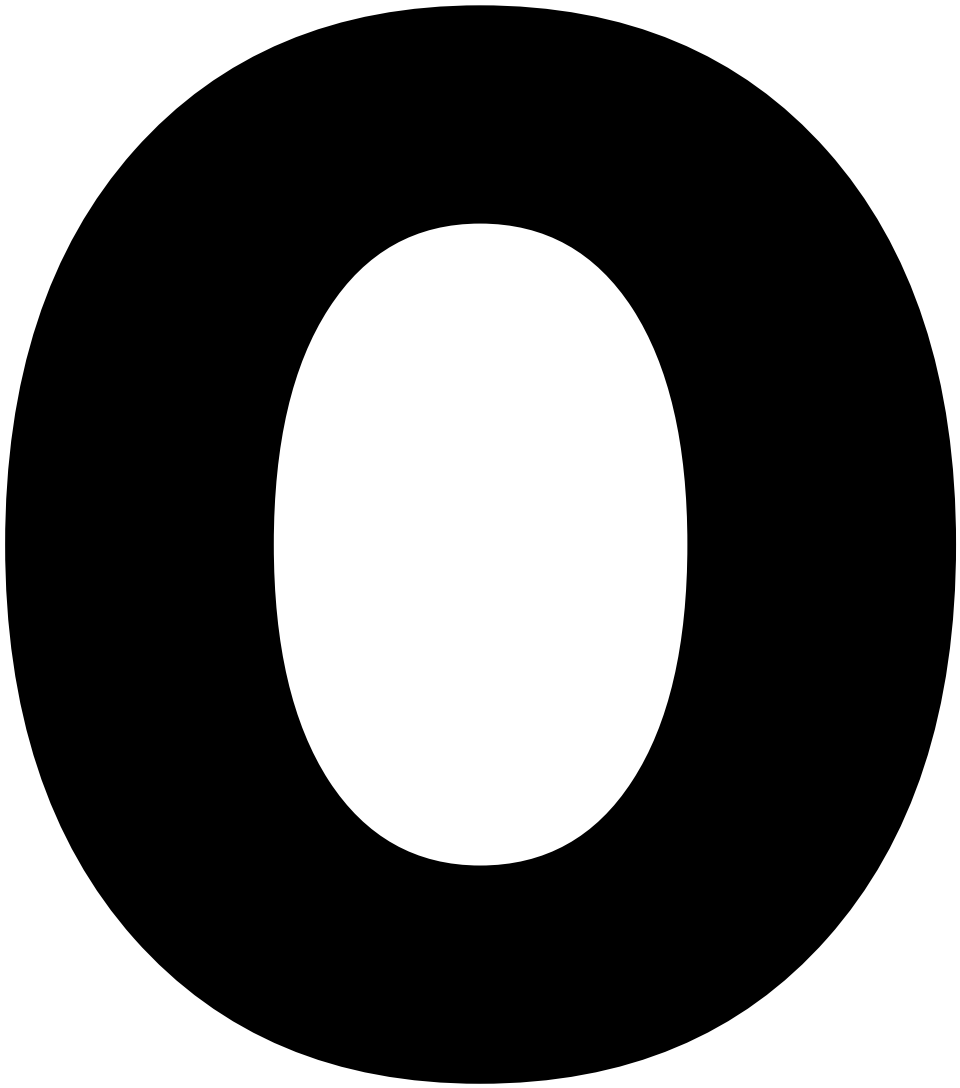




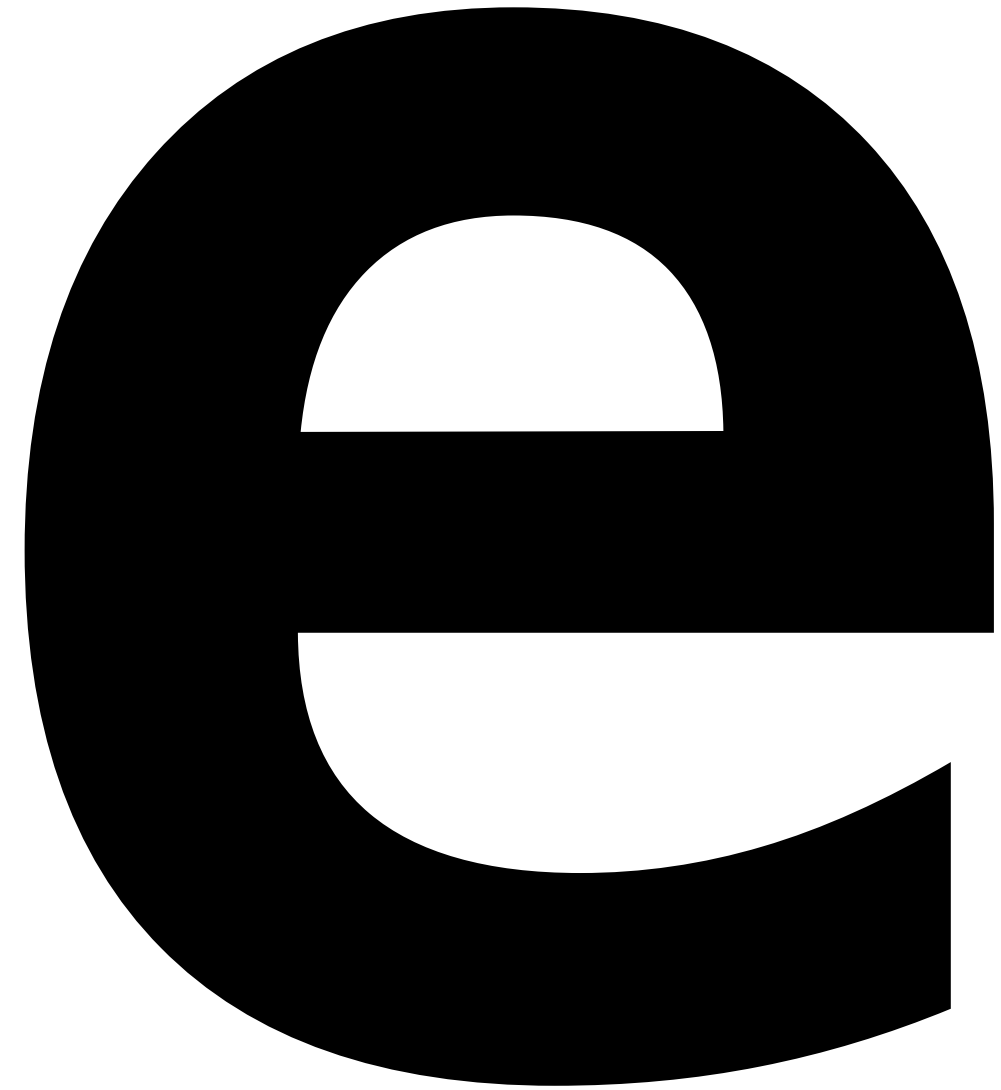
S

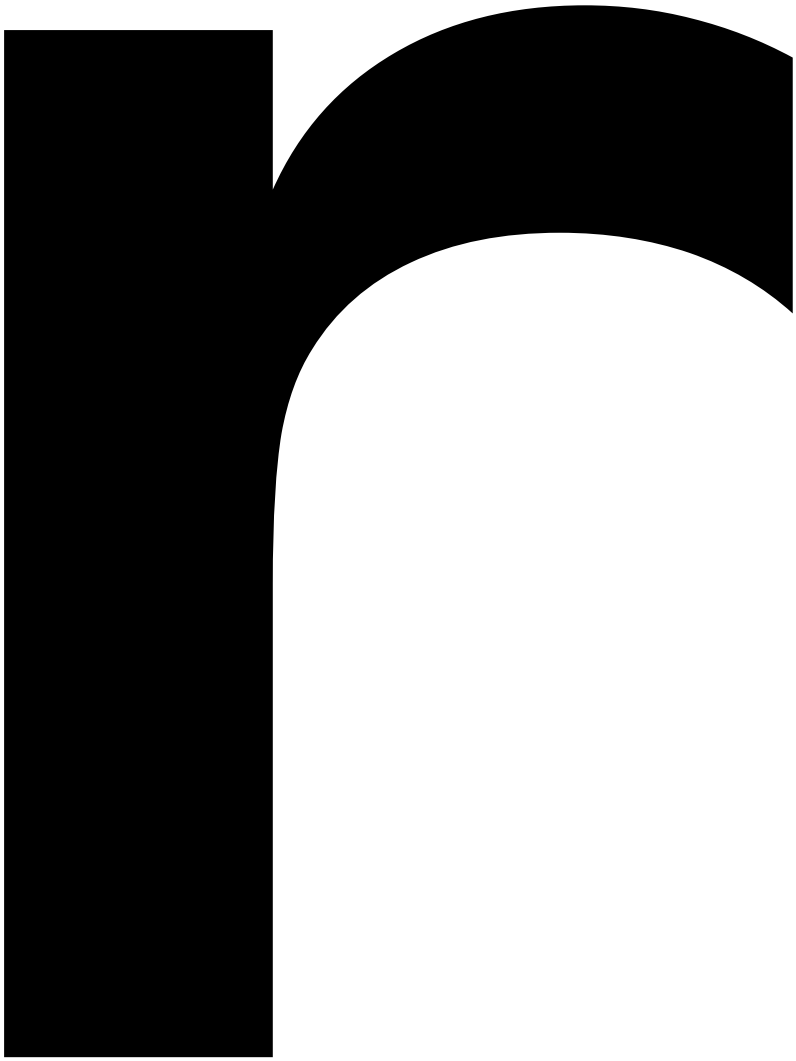


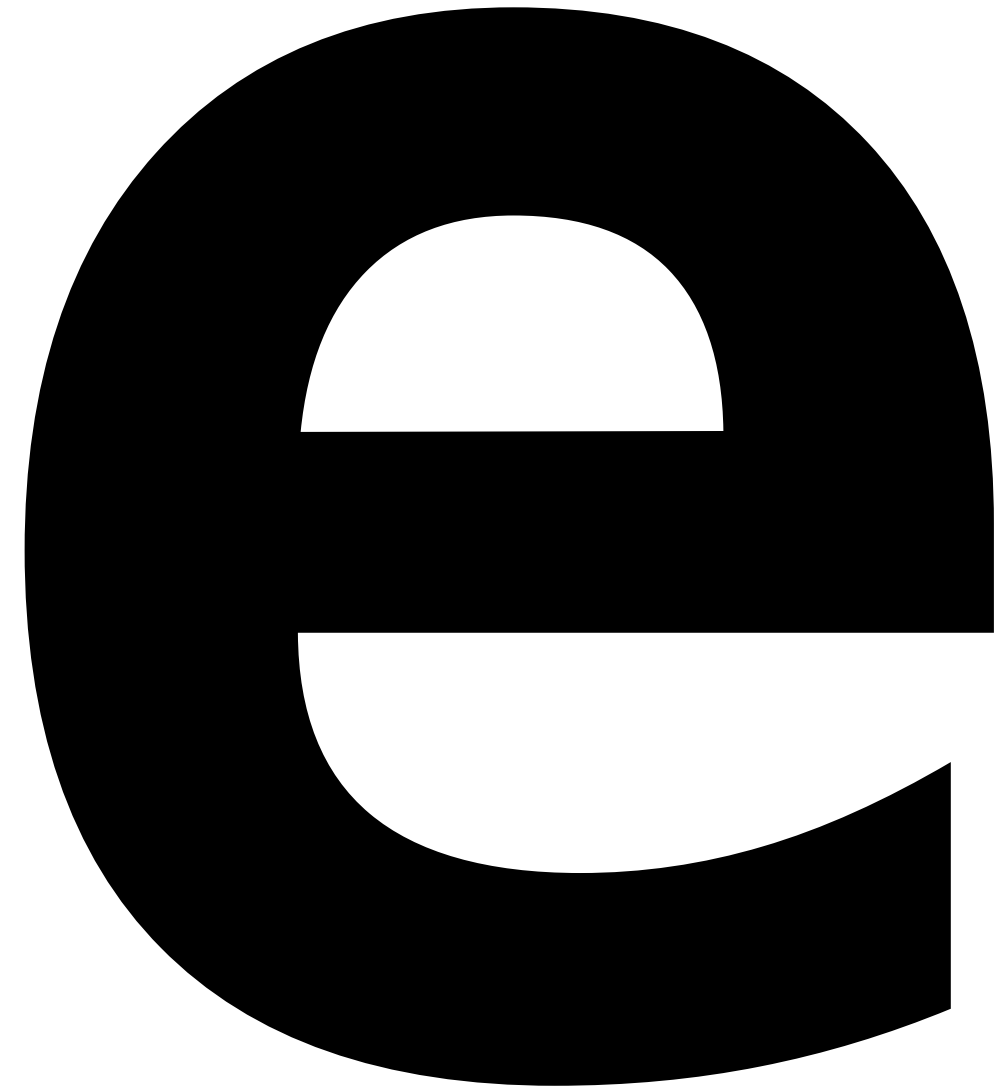


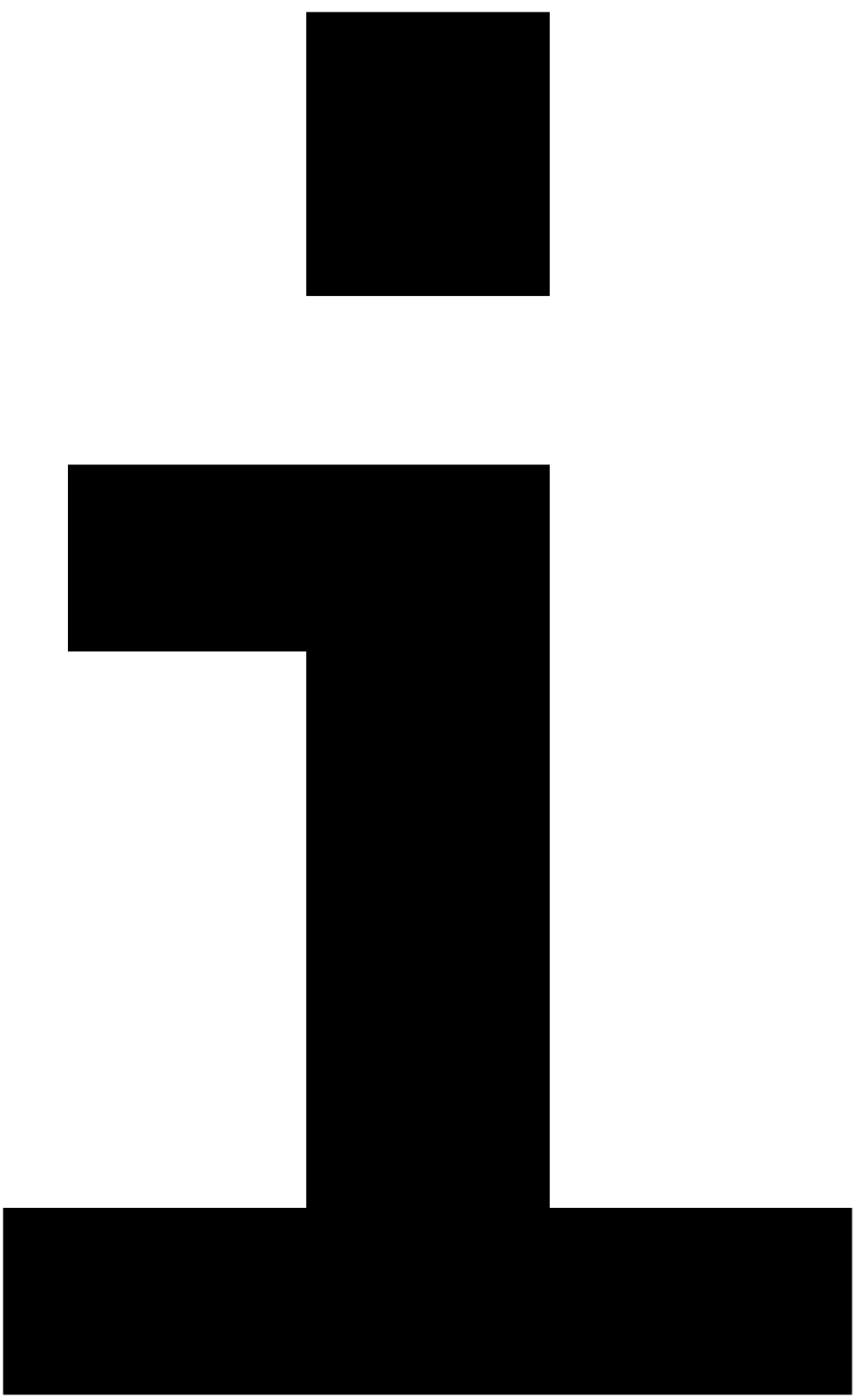


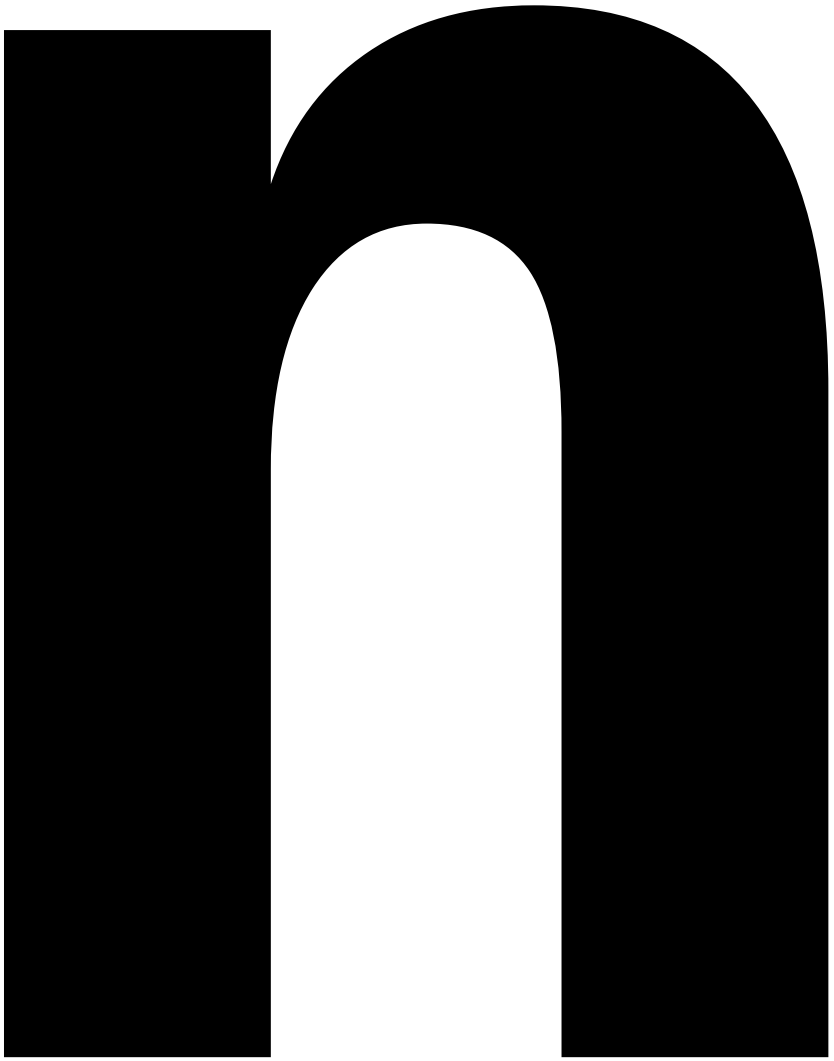
d





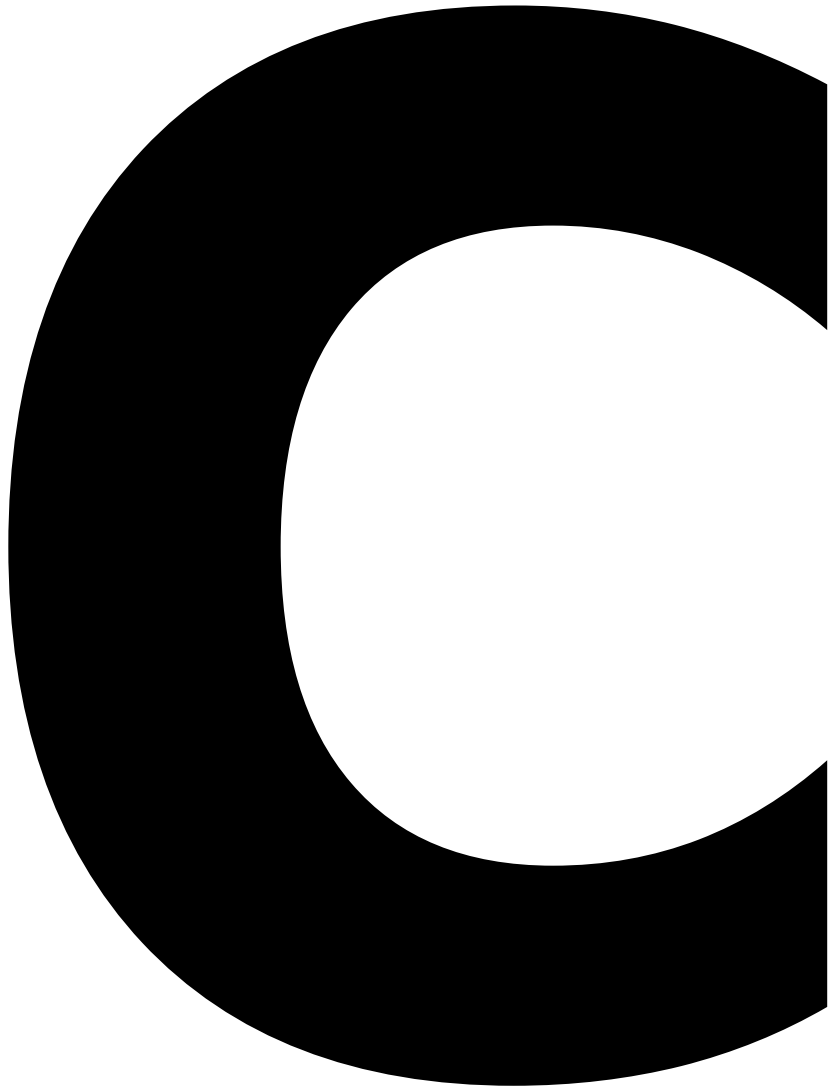


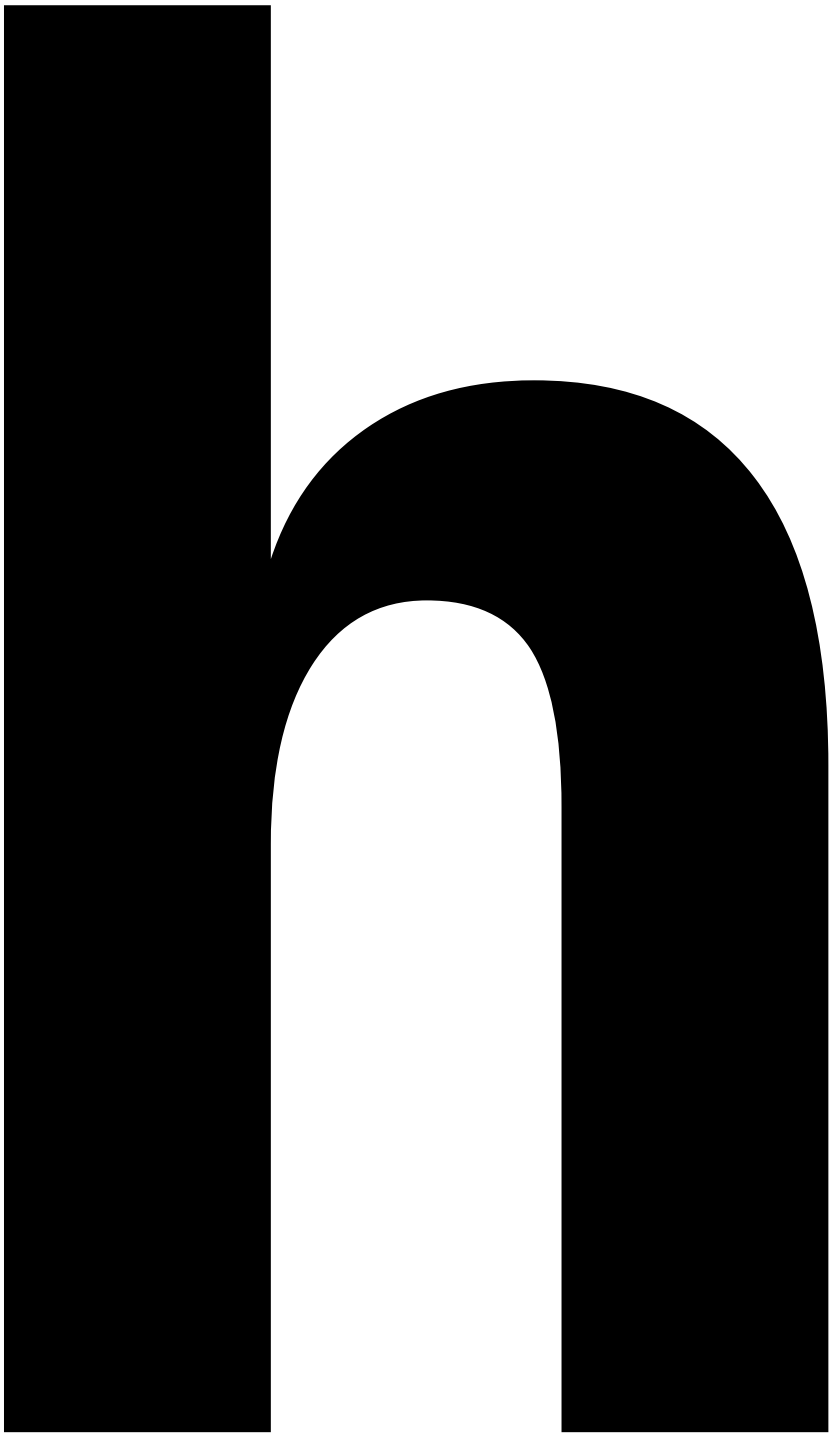


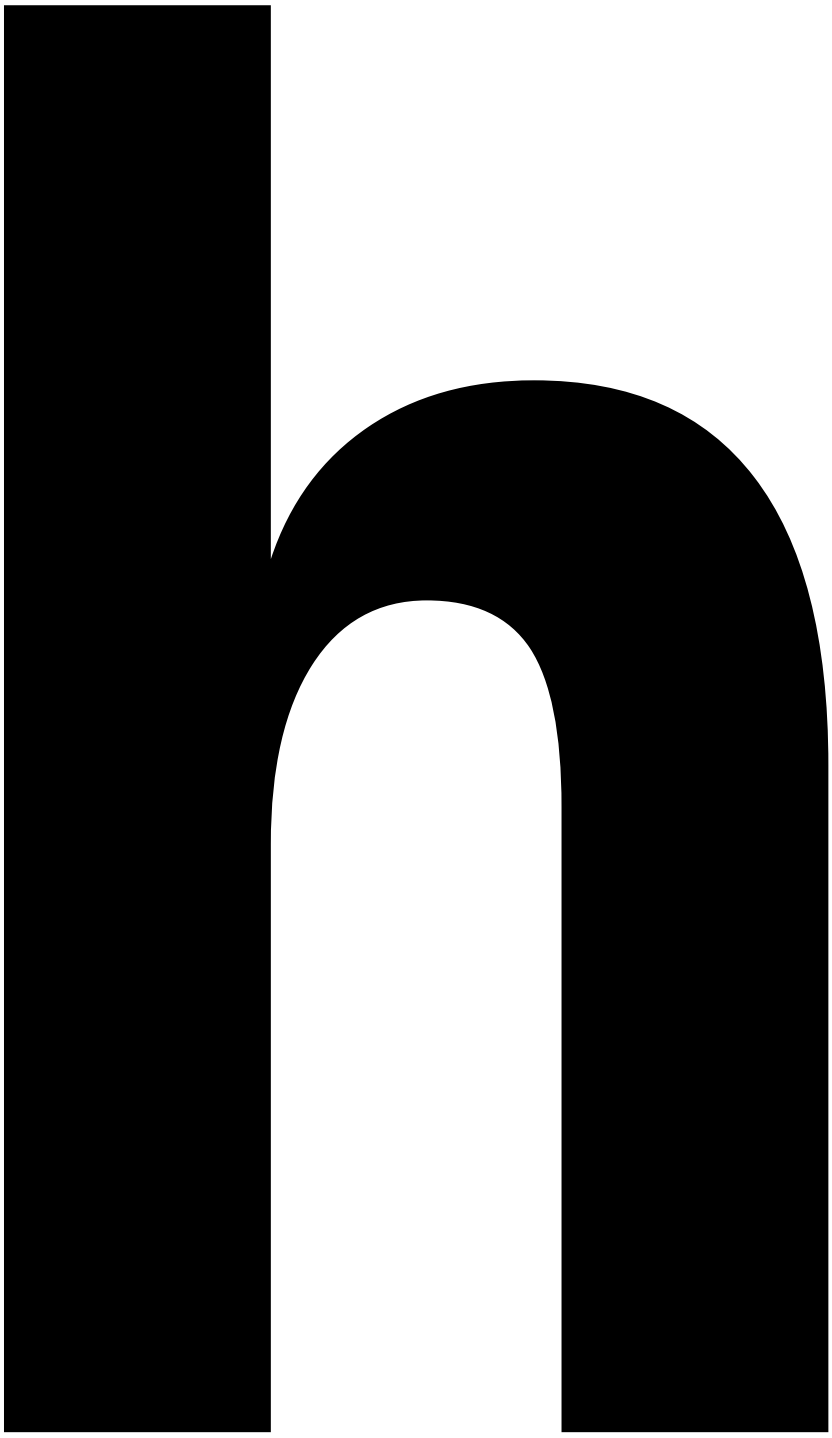


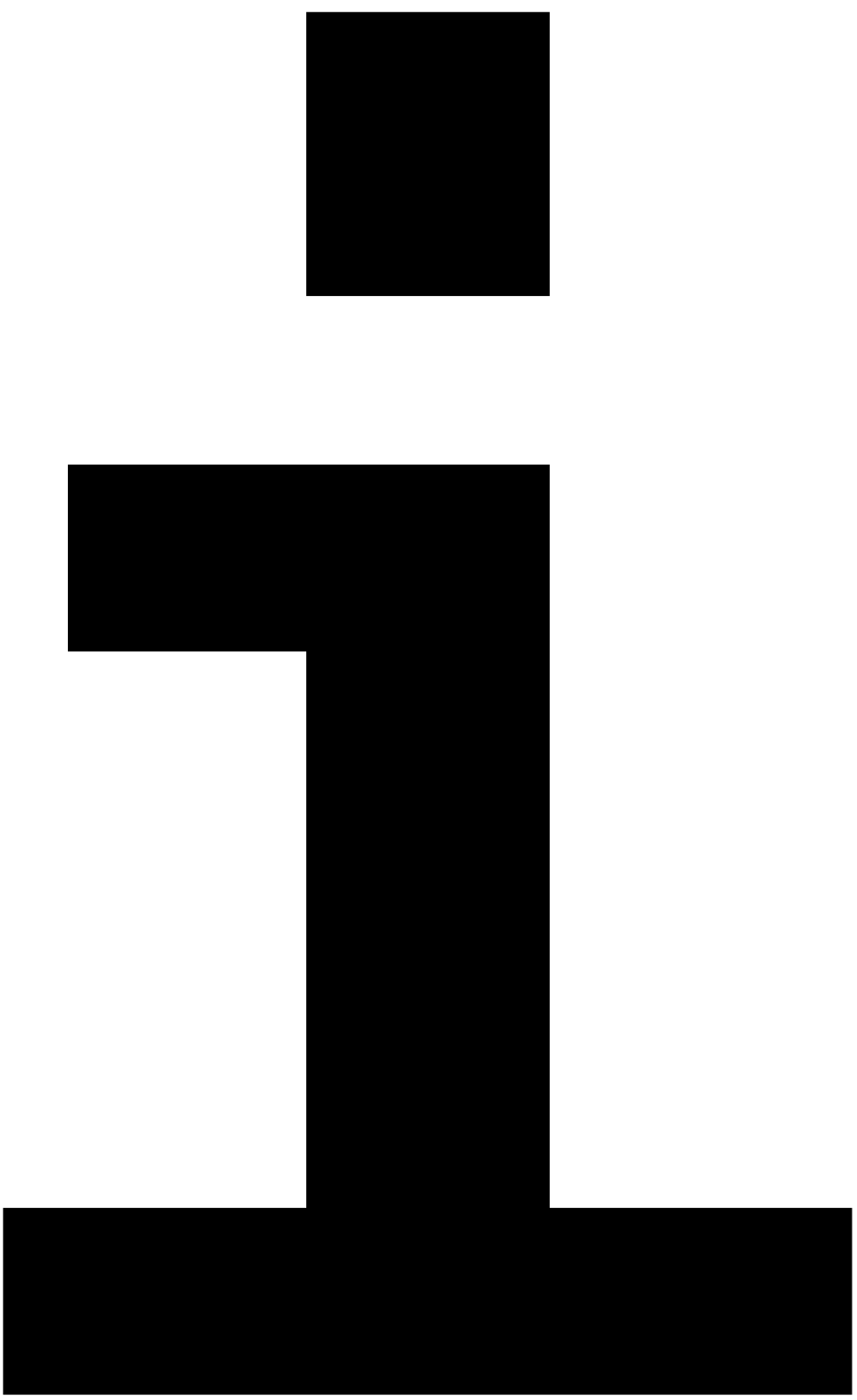
B

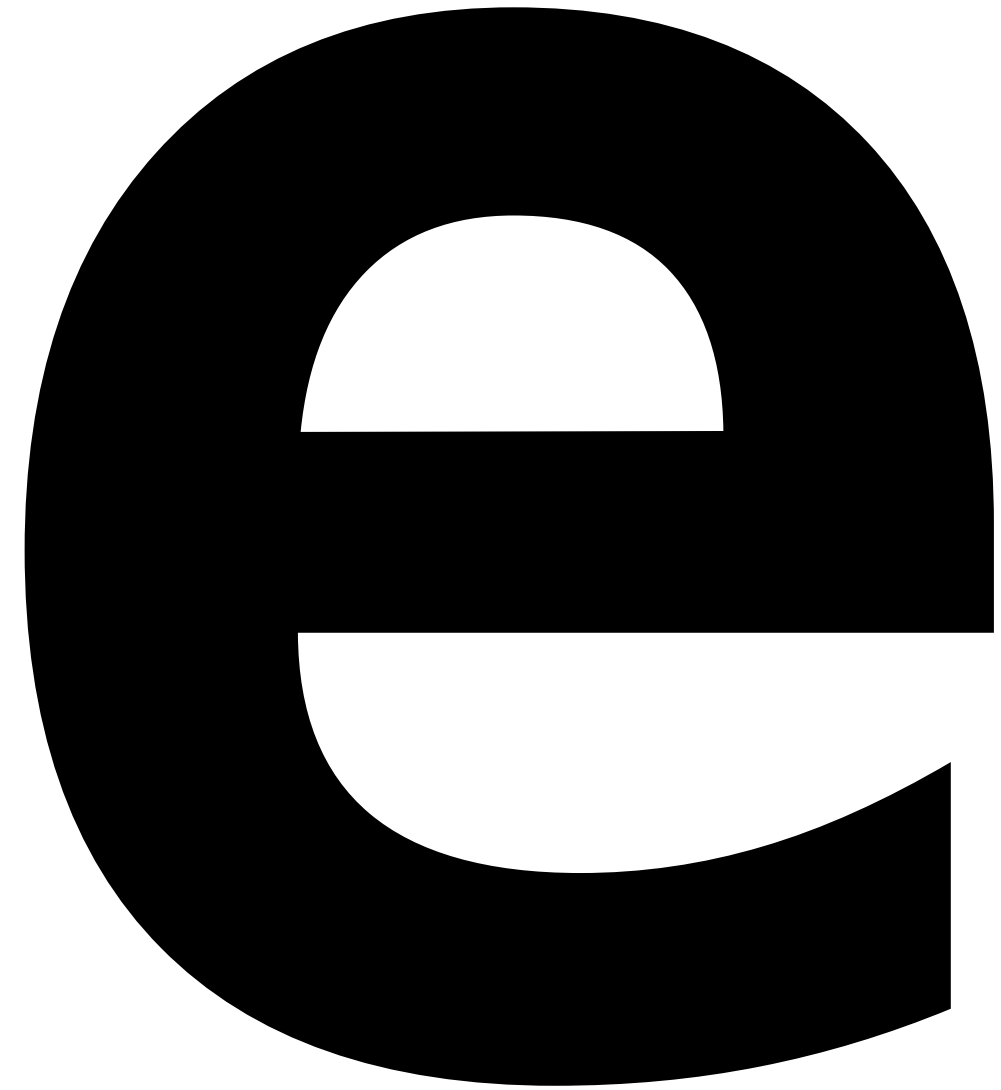
u

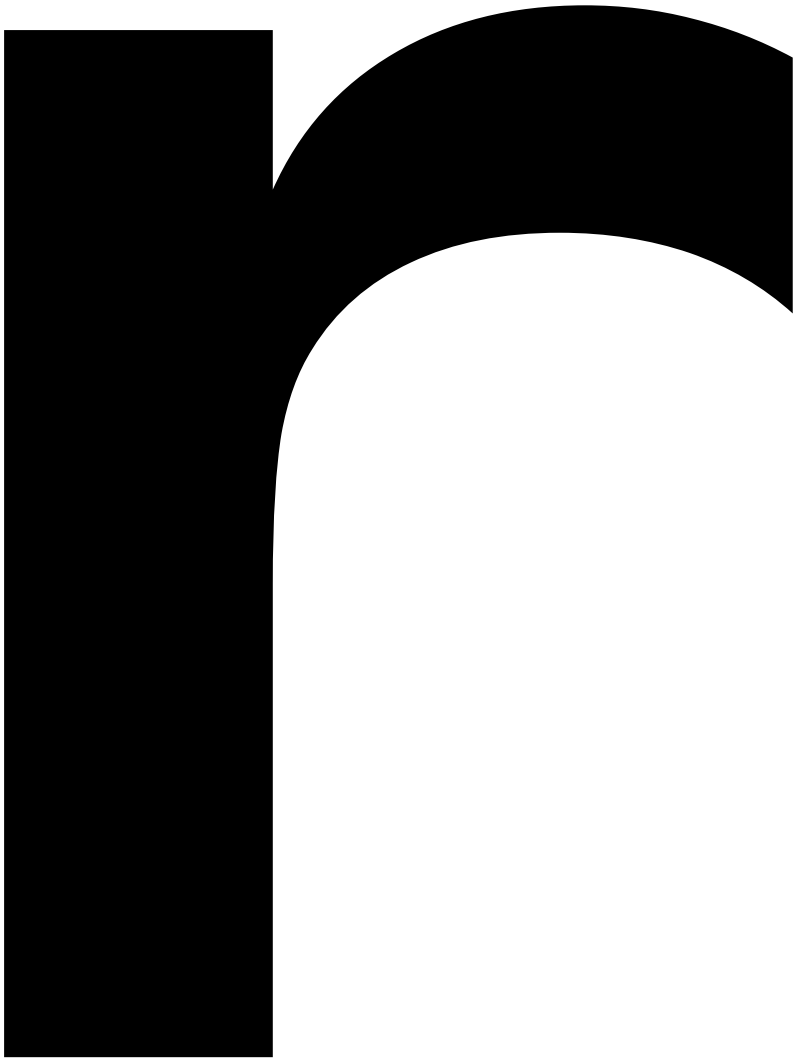


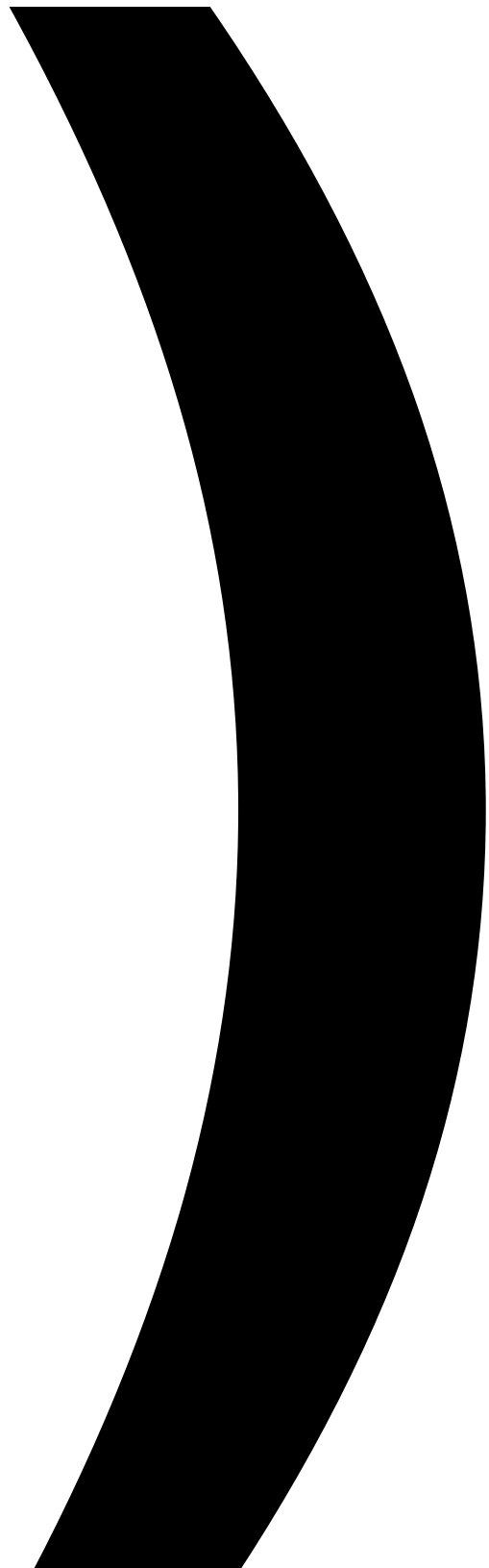


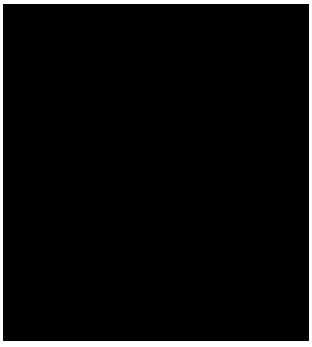


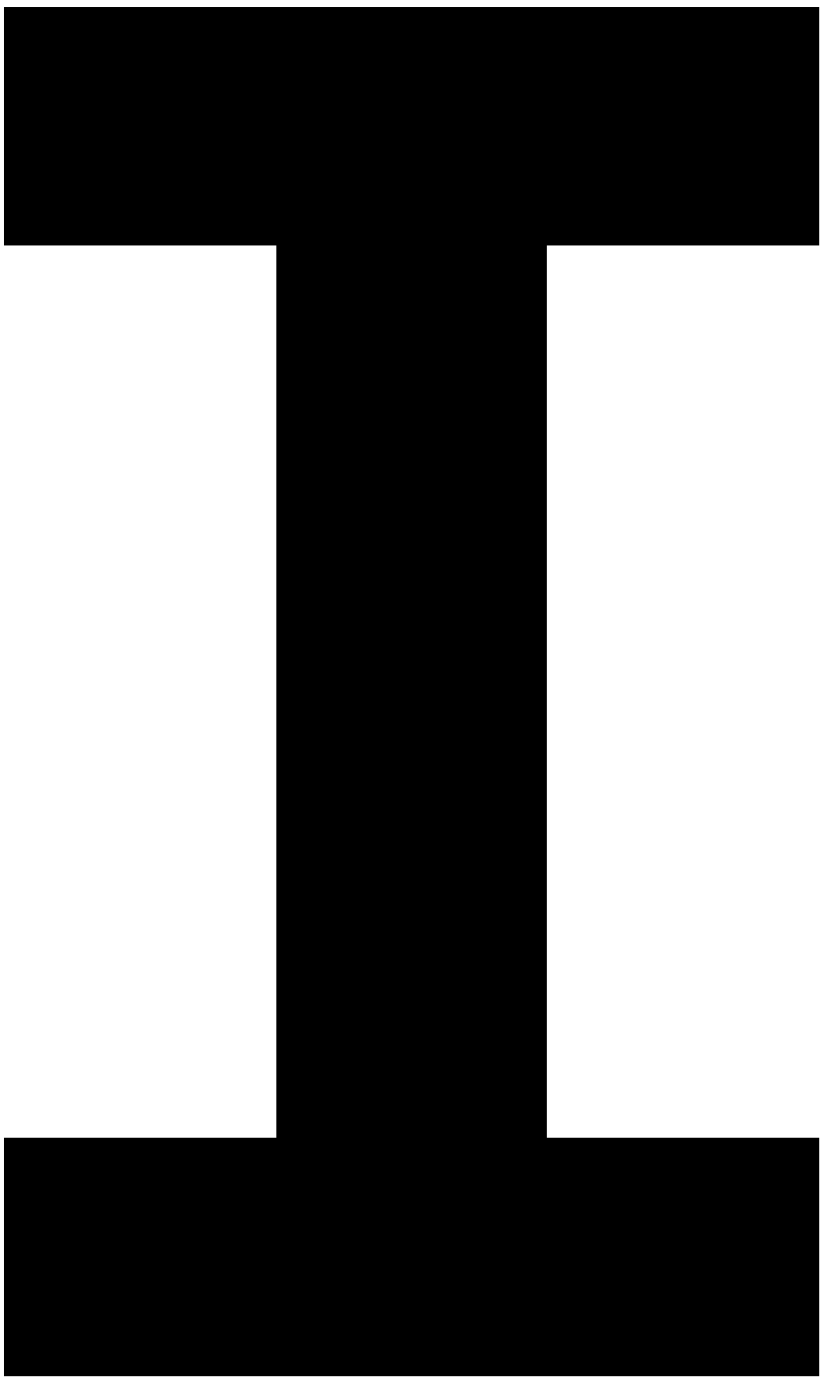


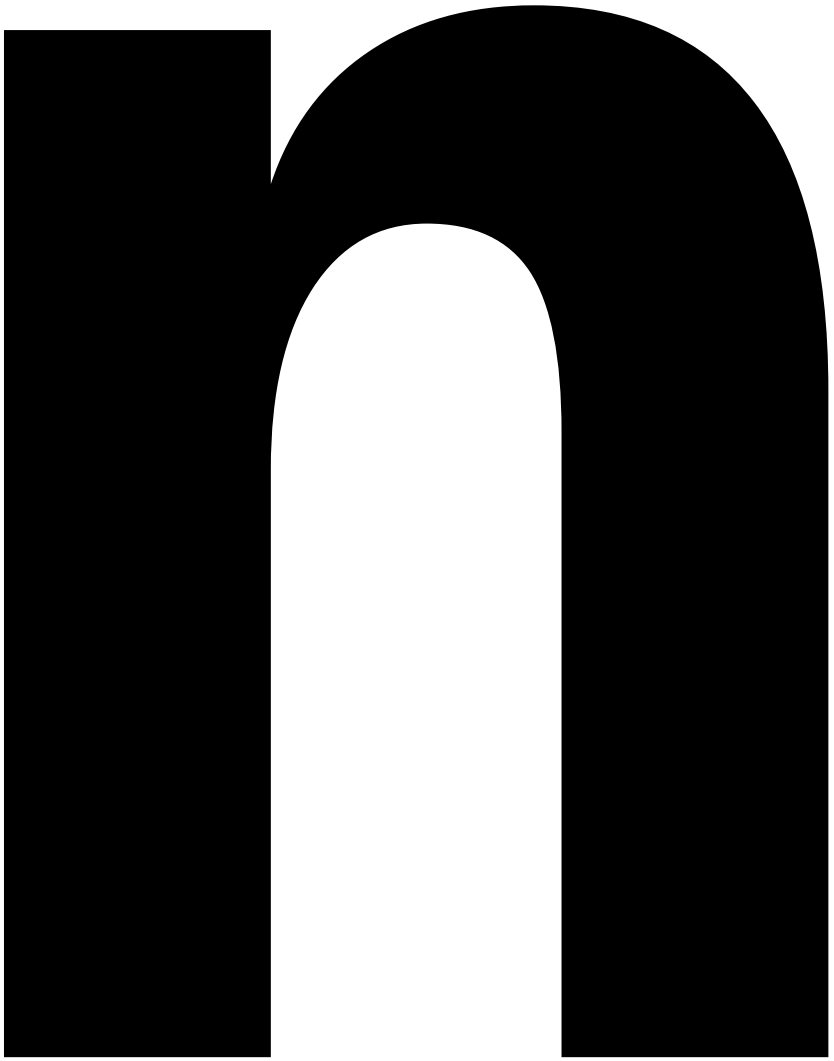


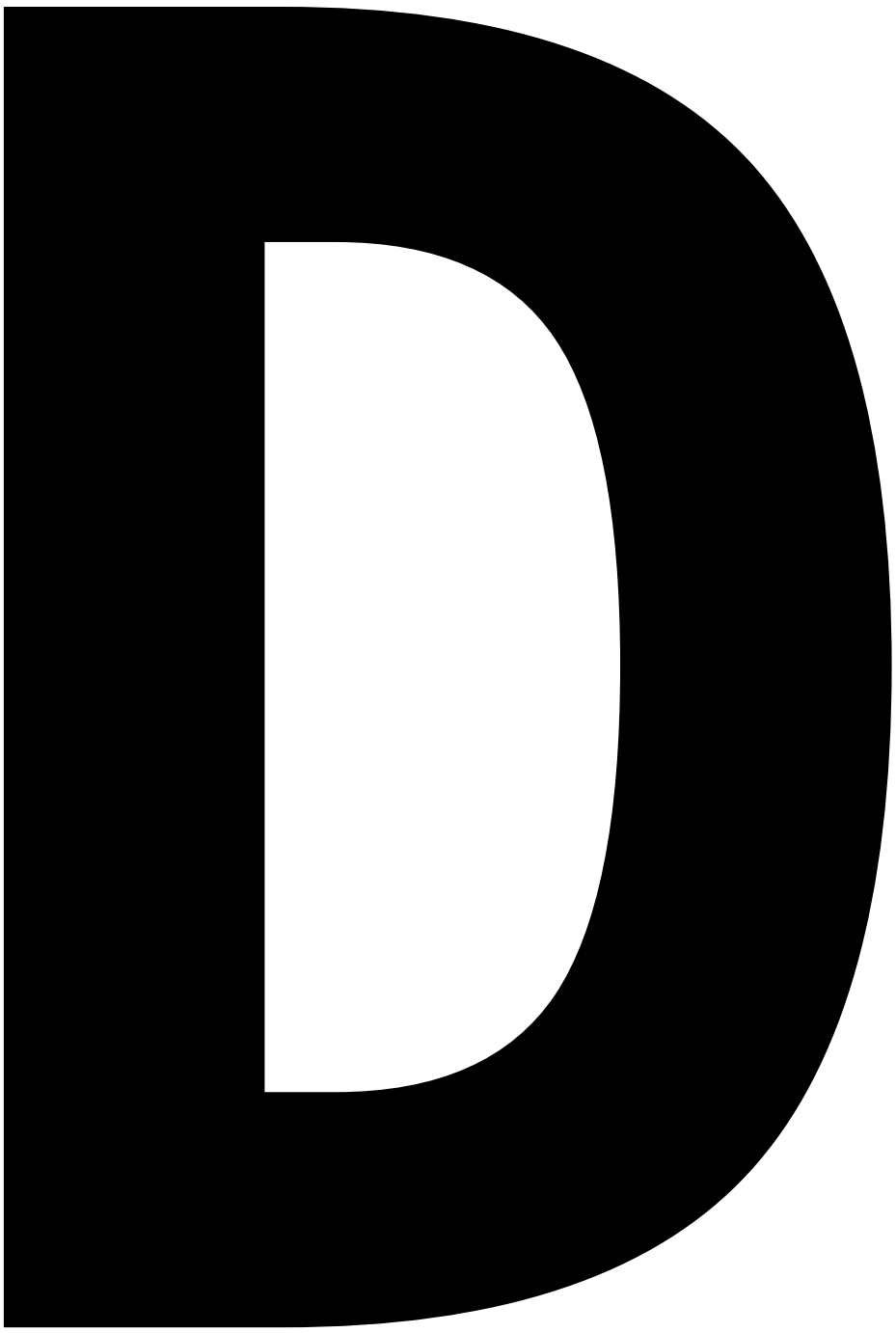


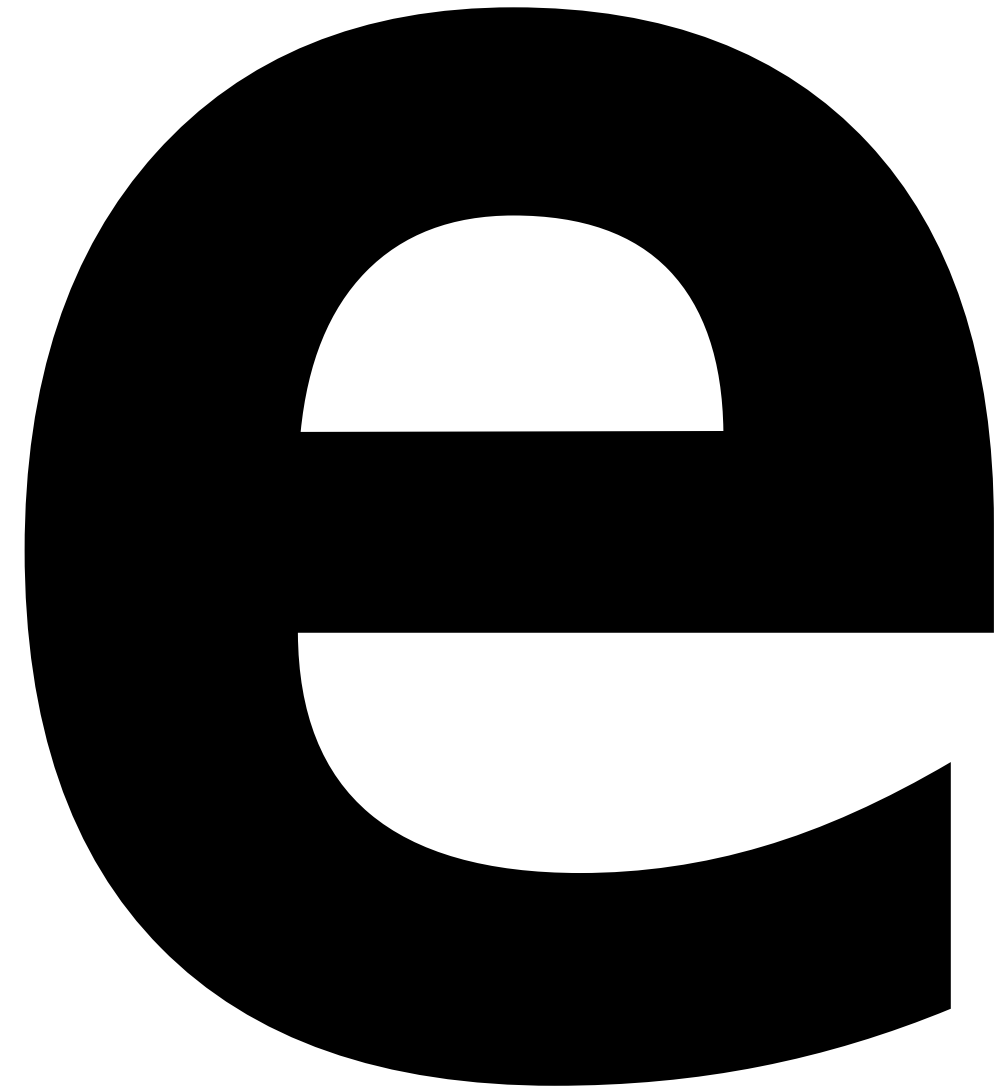




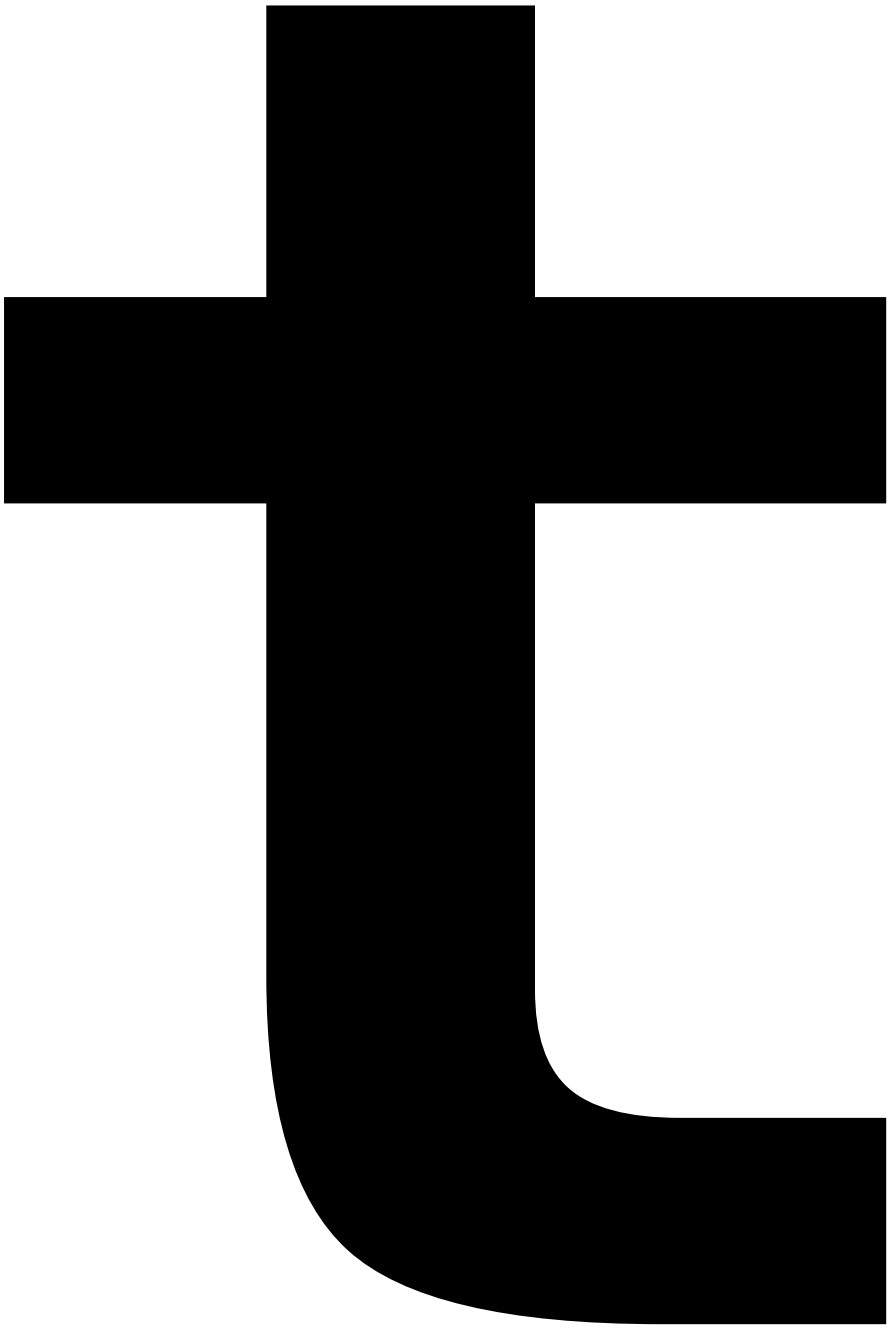




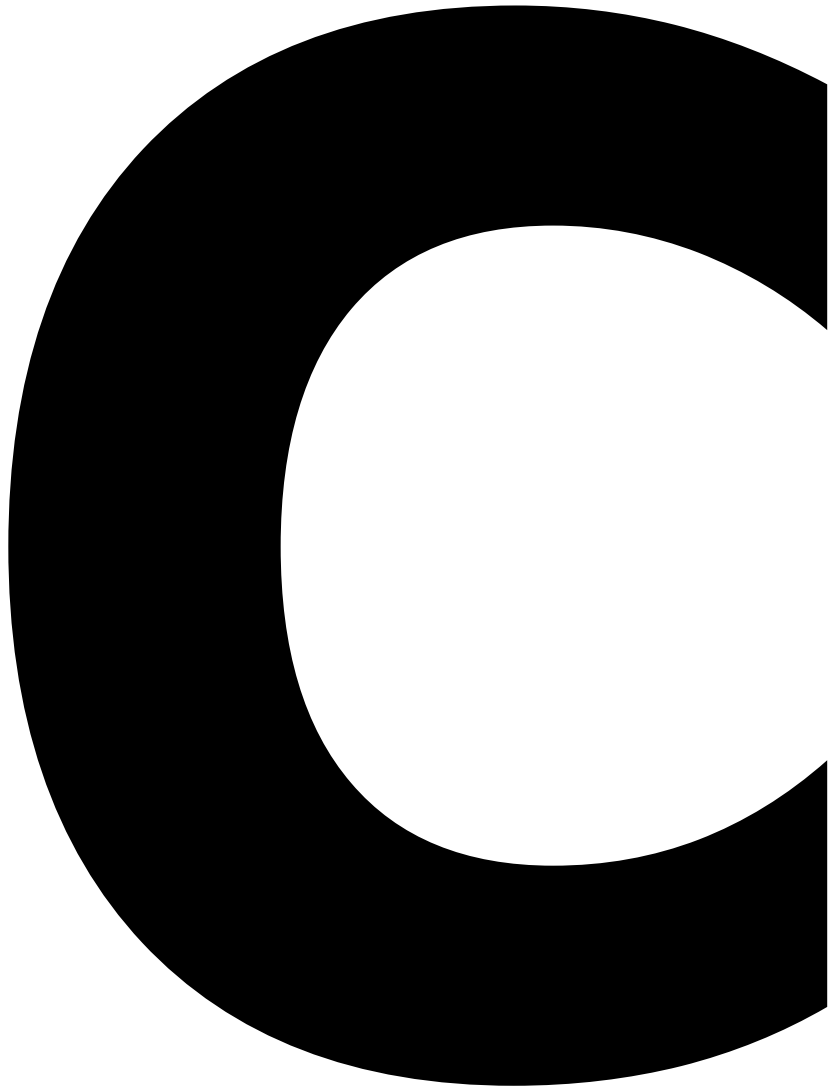


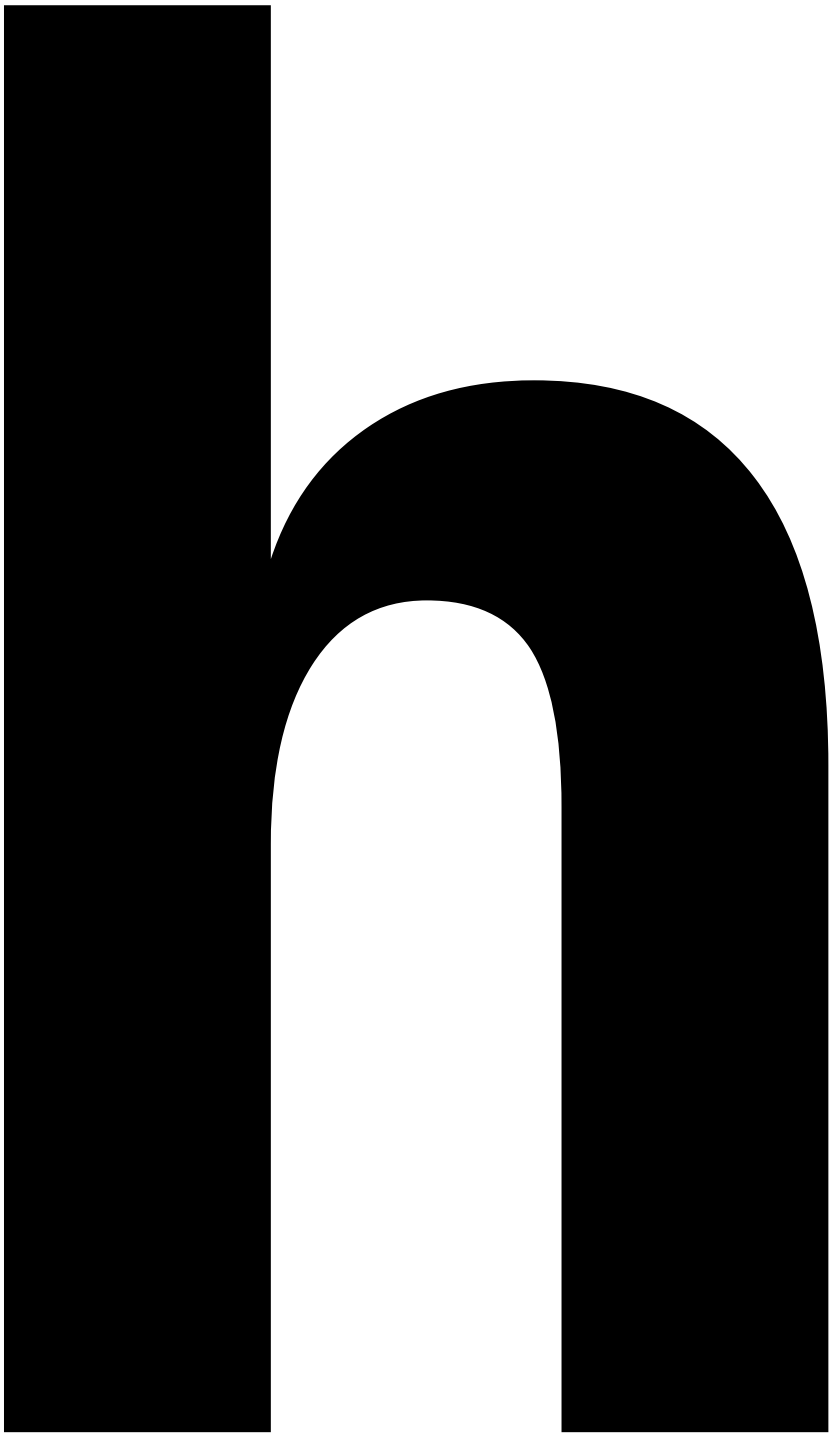


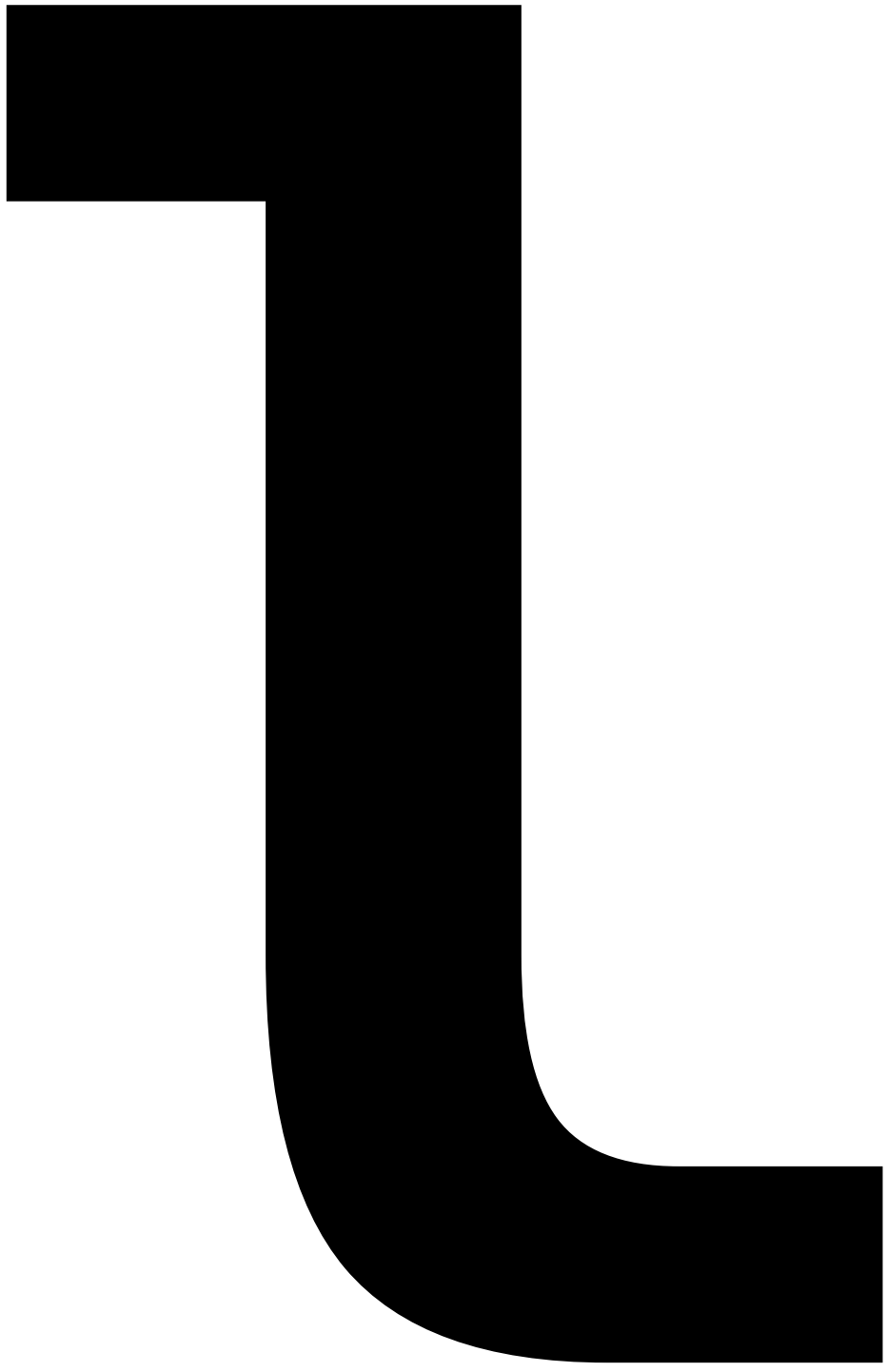
u

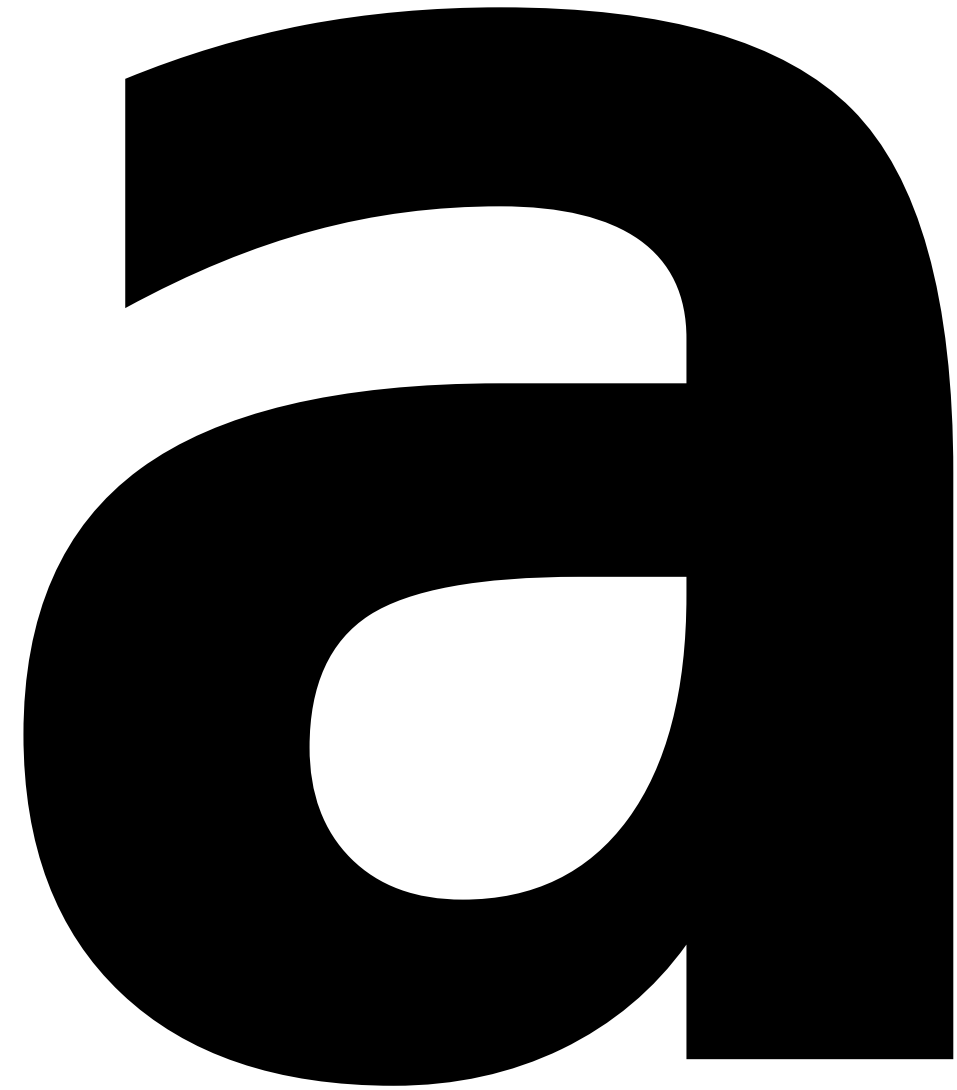


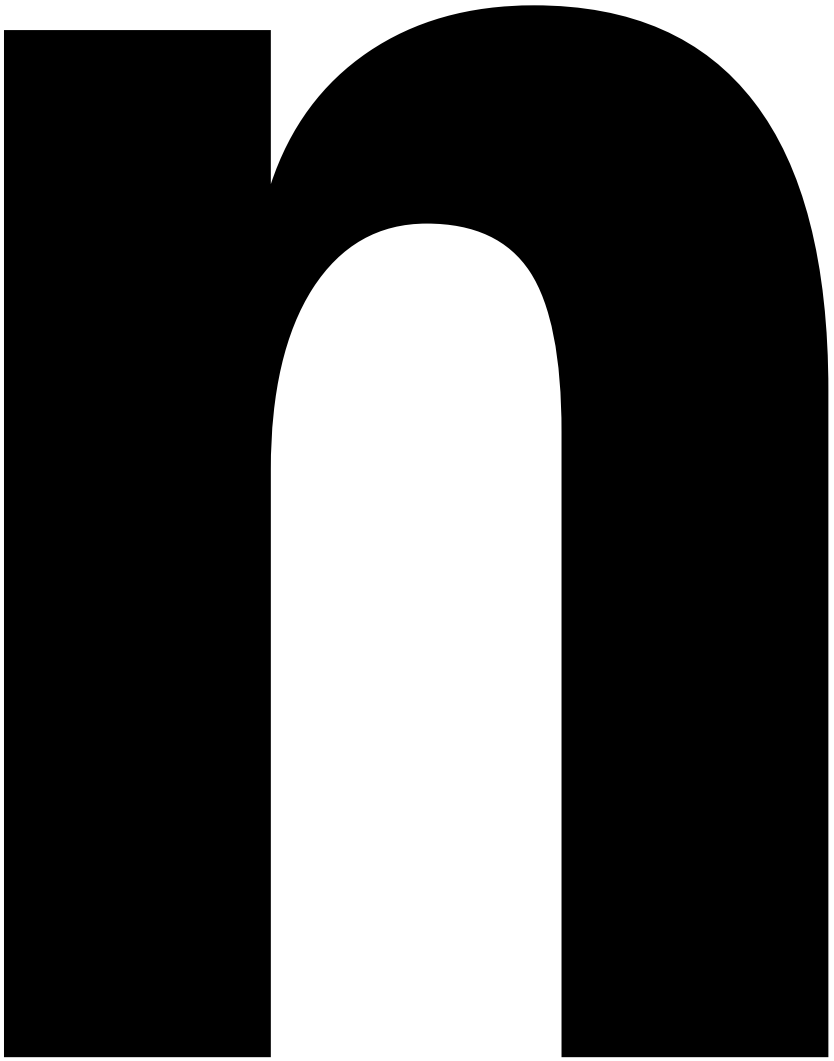
S



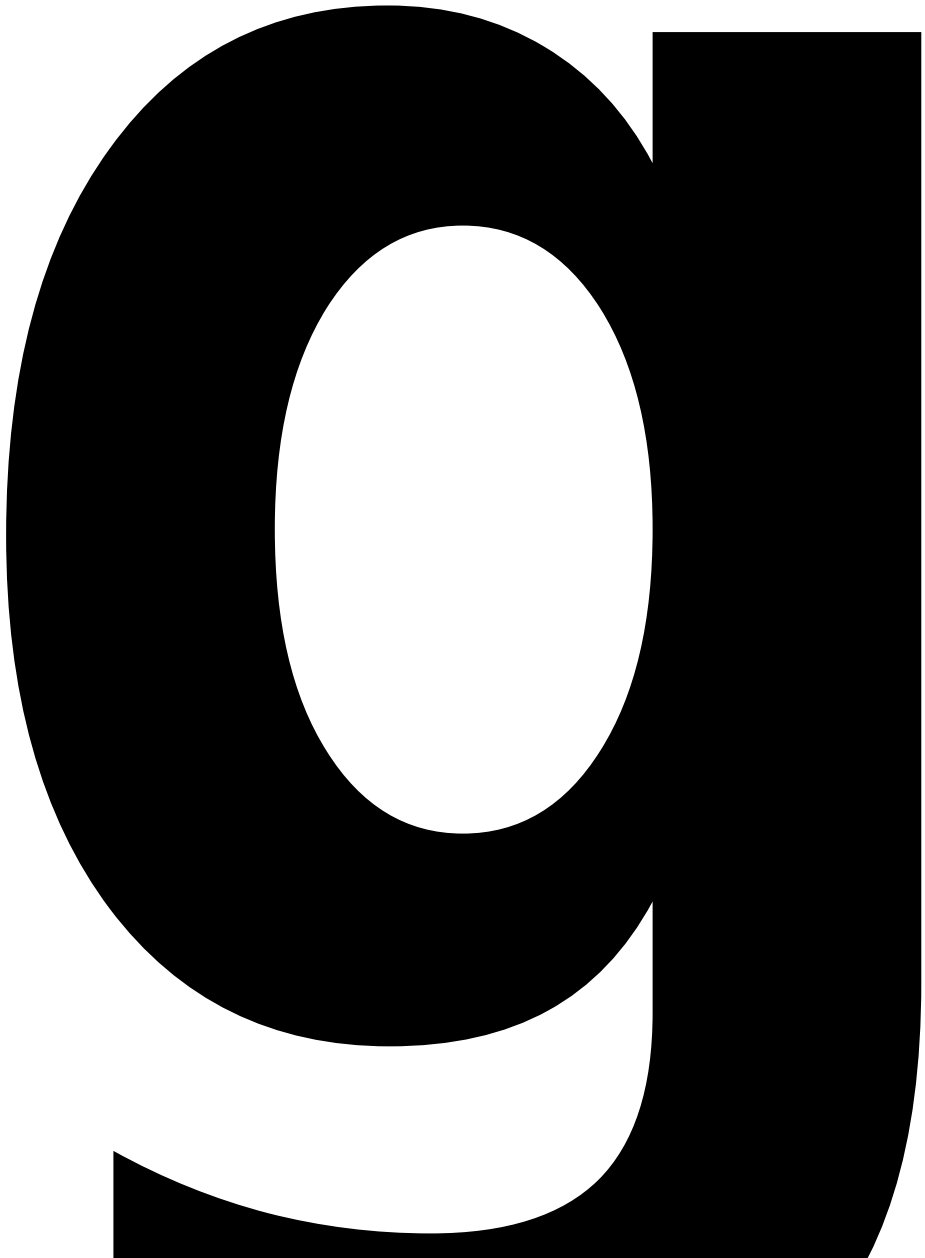


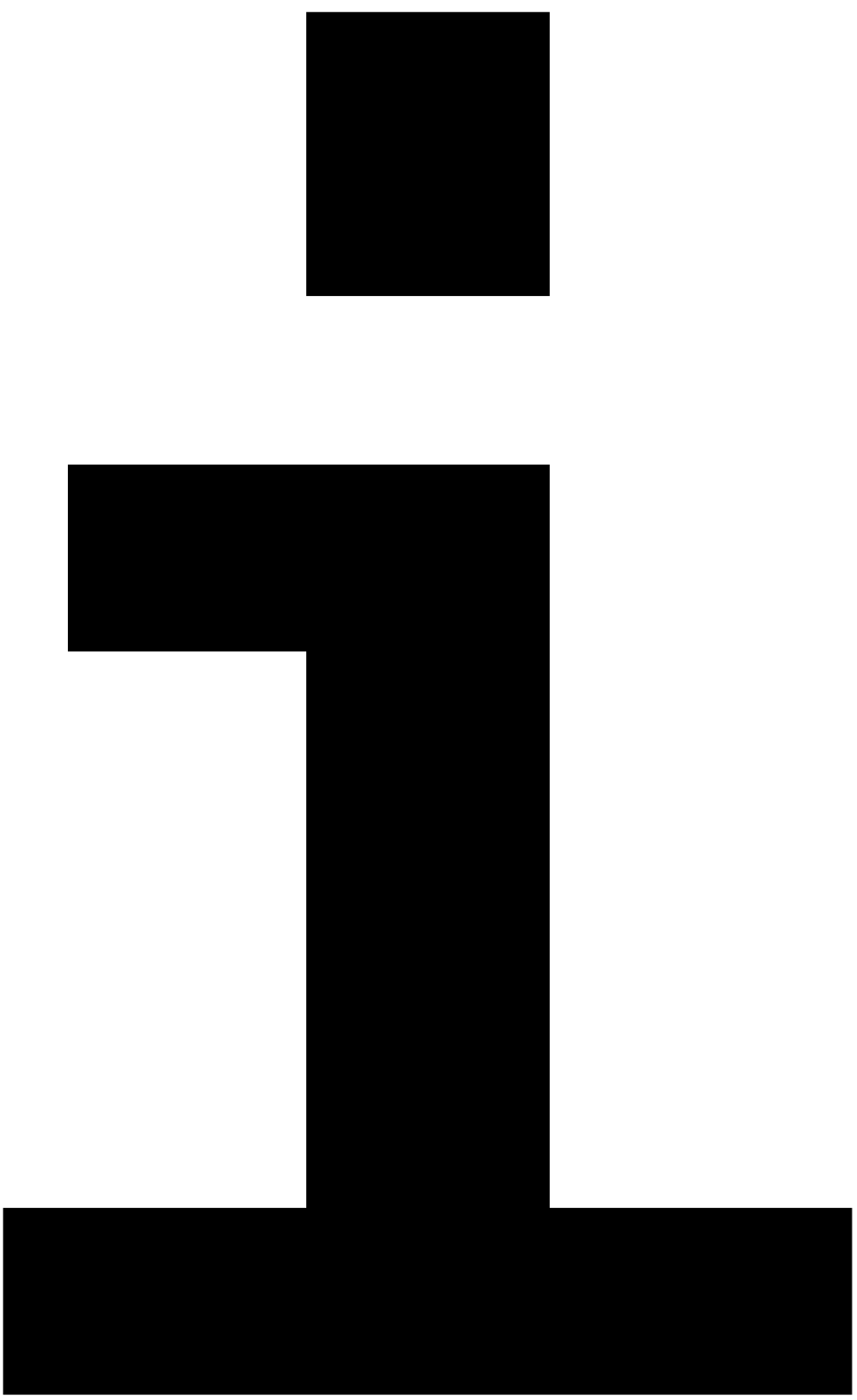


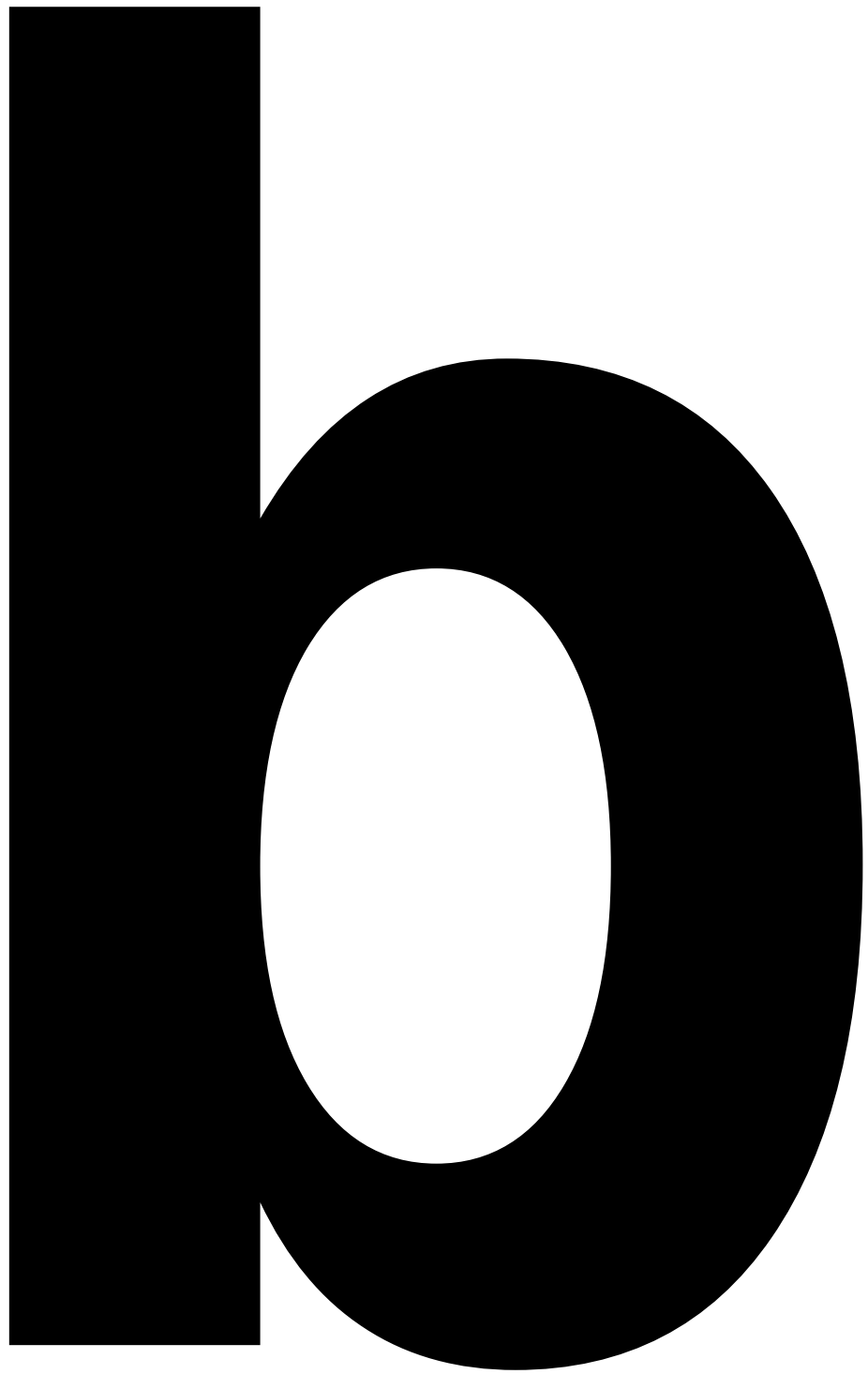


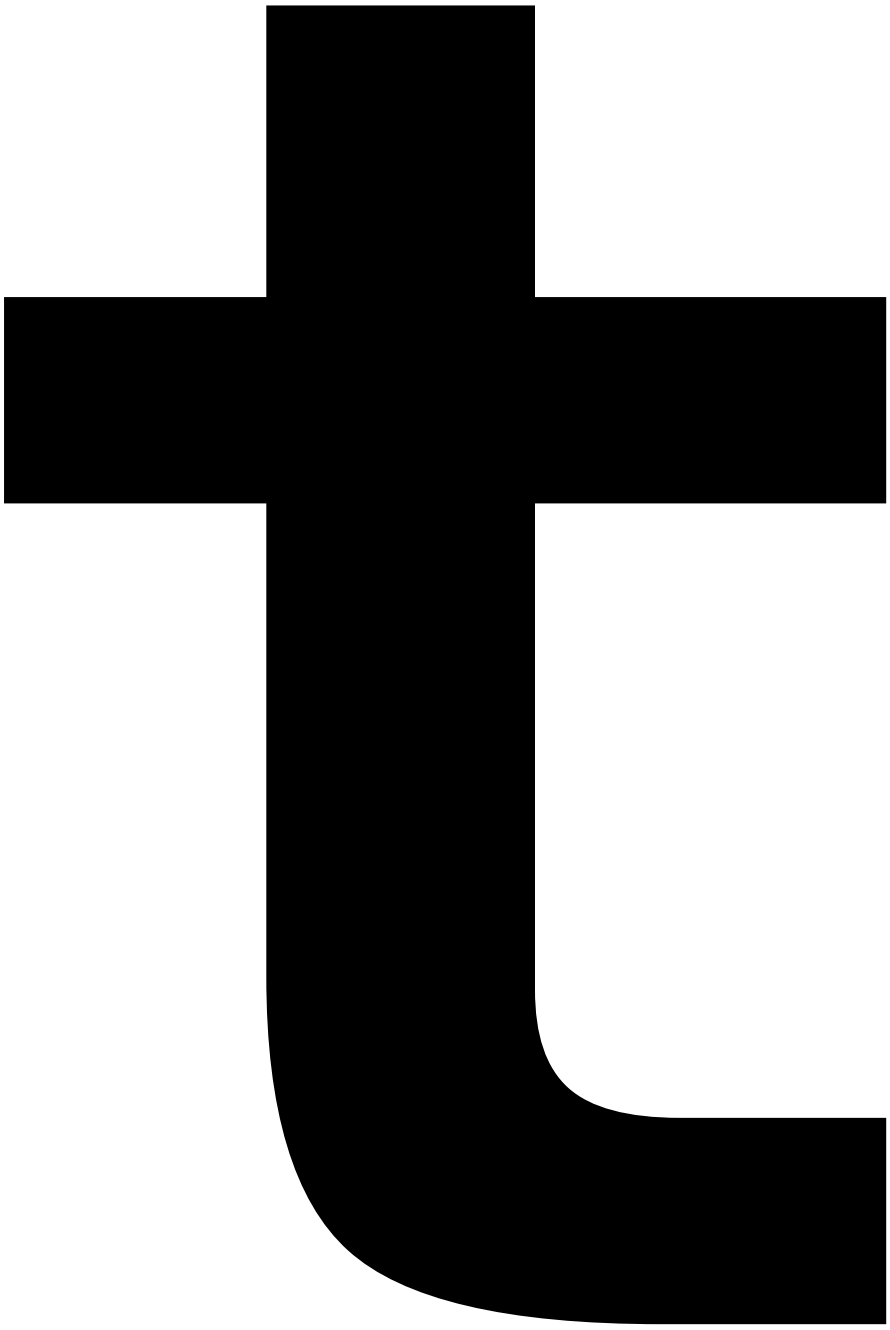


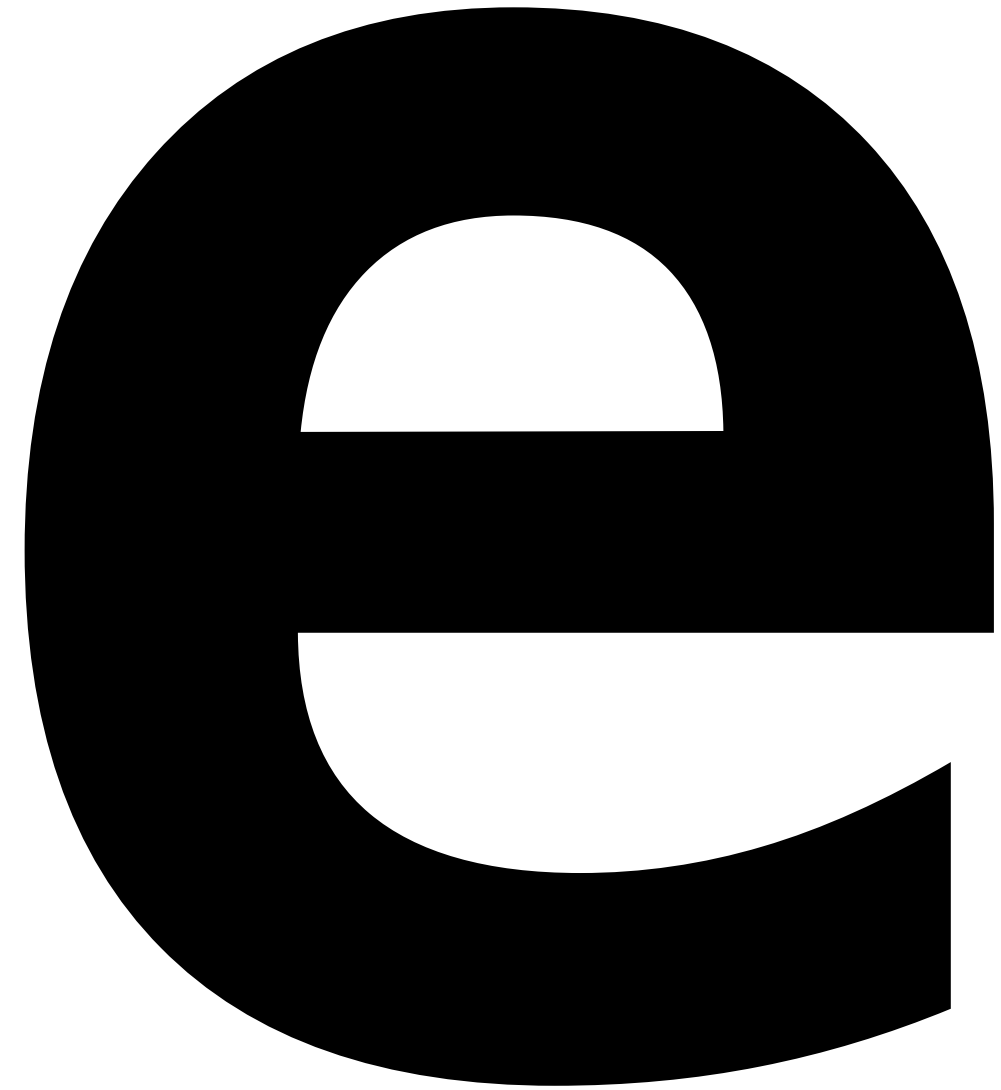
d



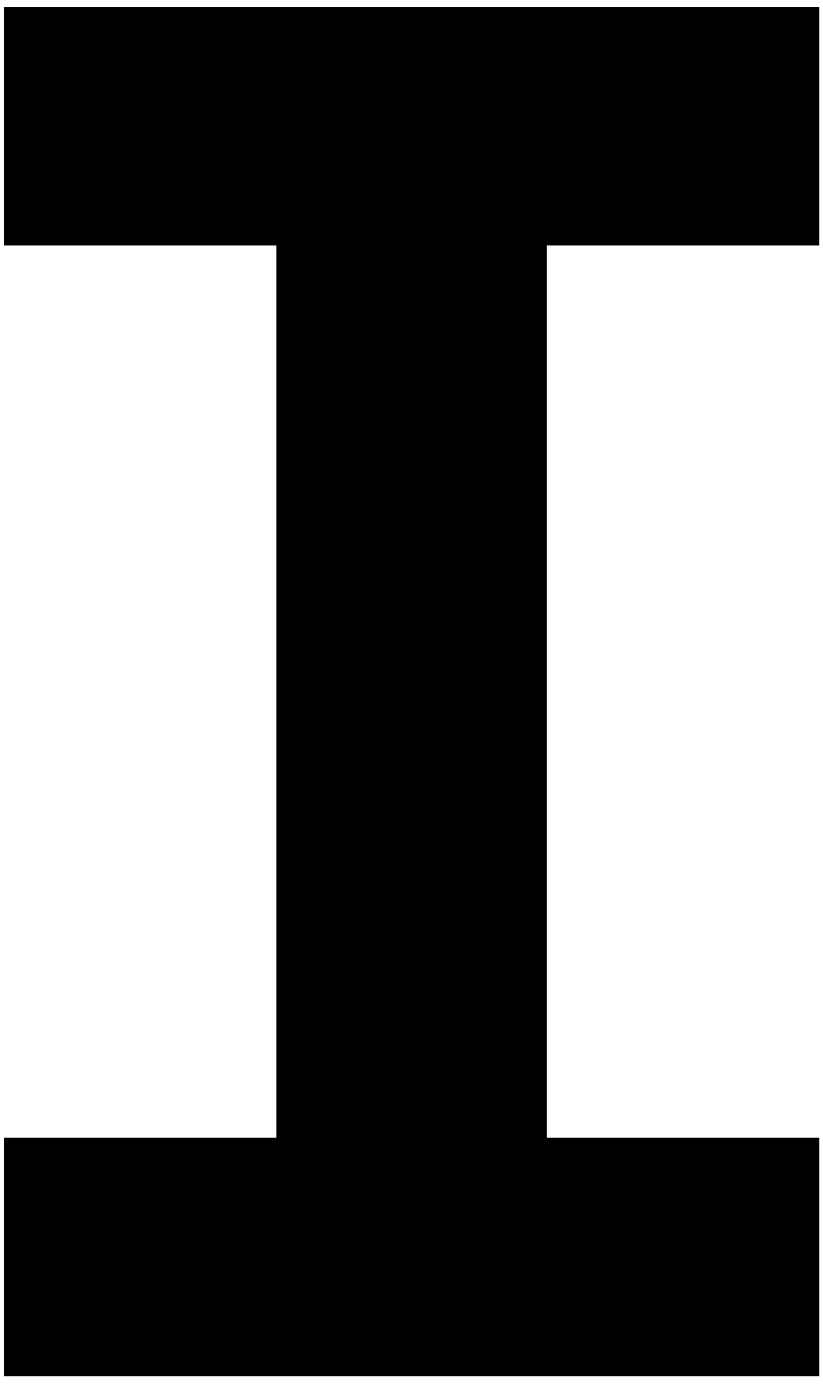


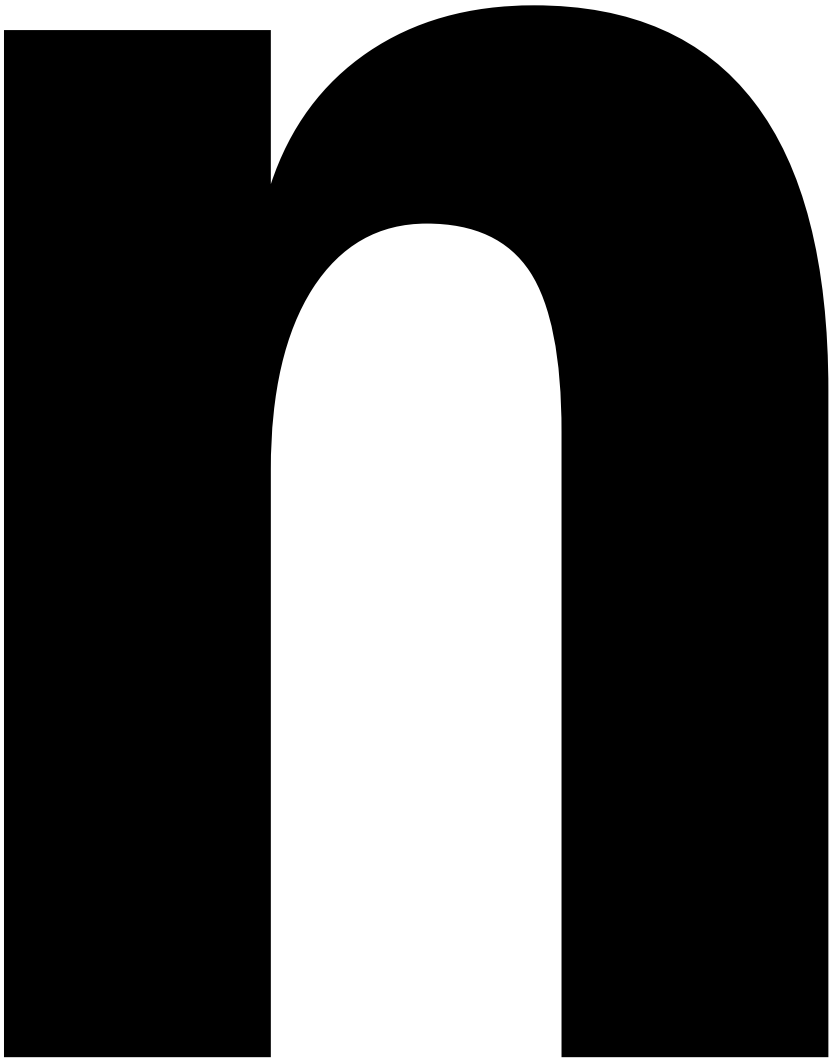


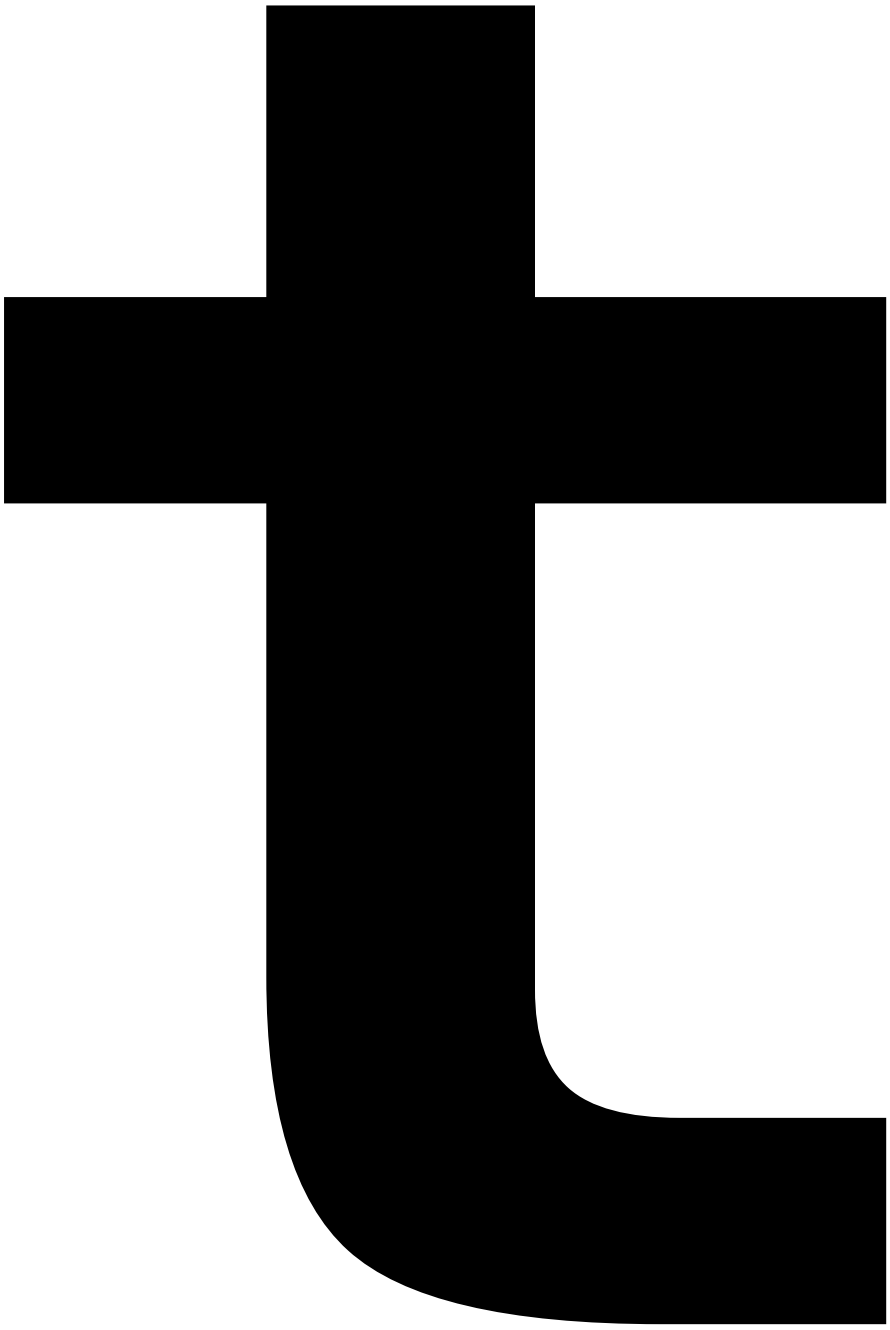


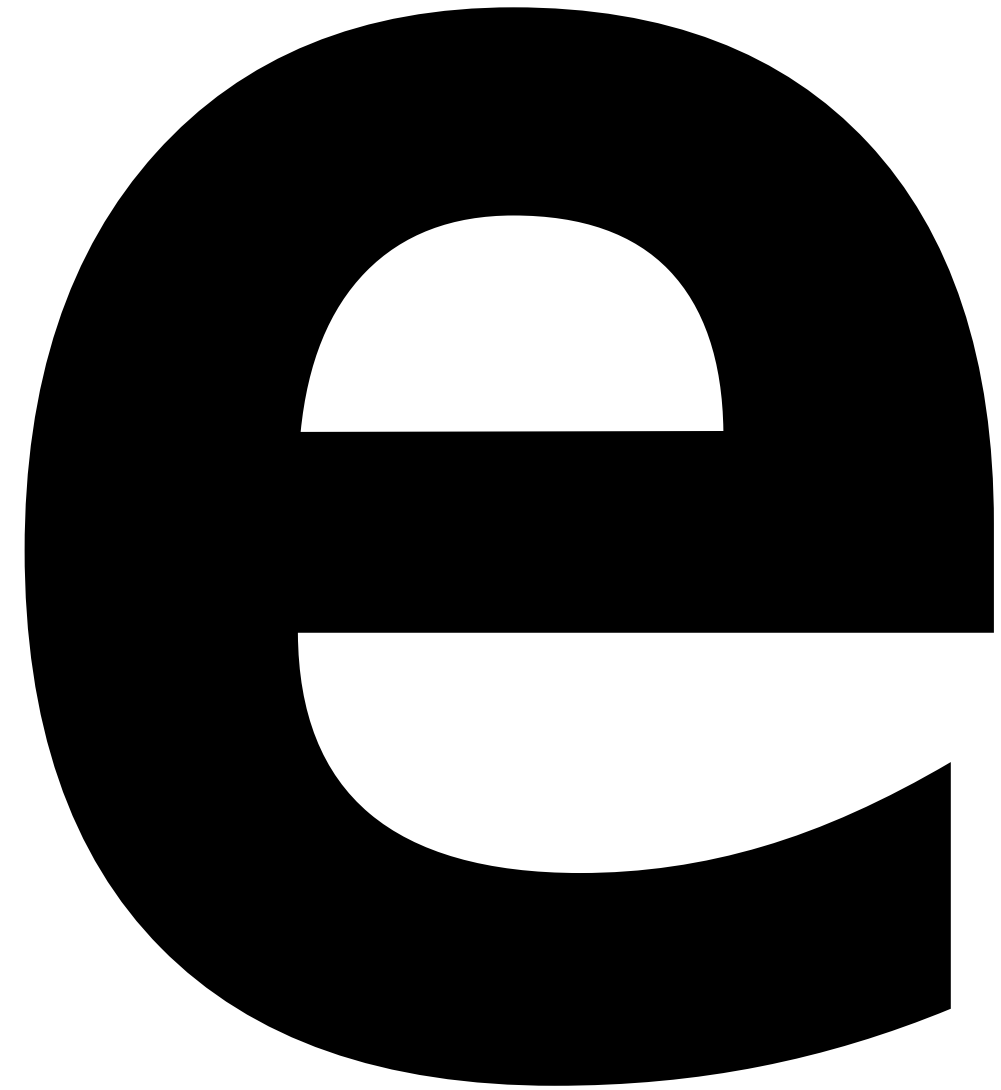


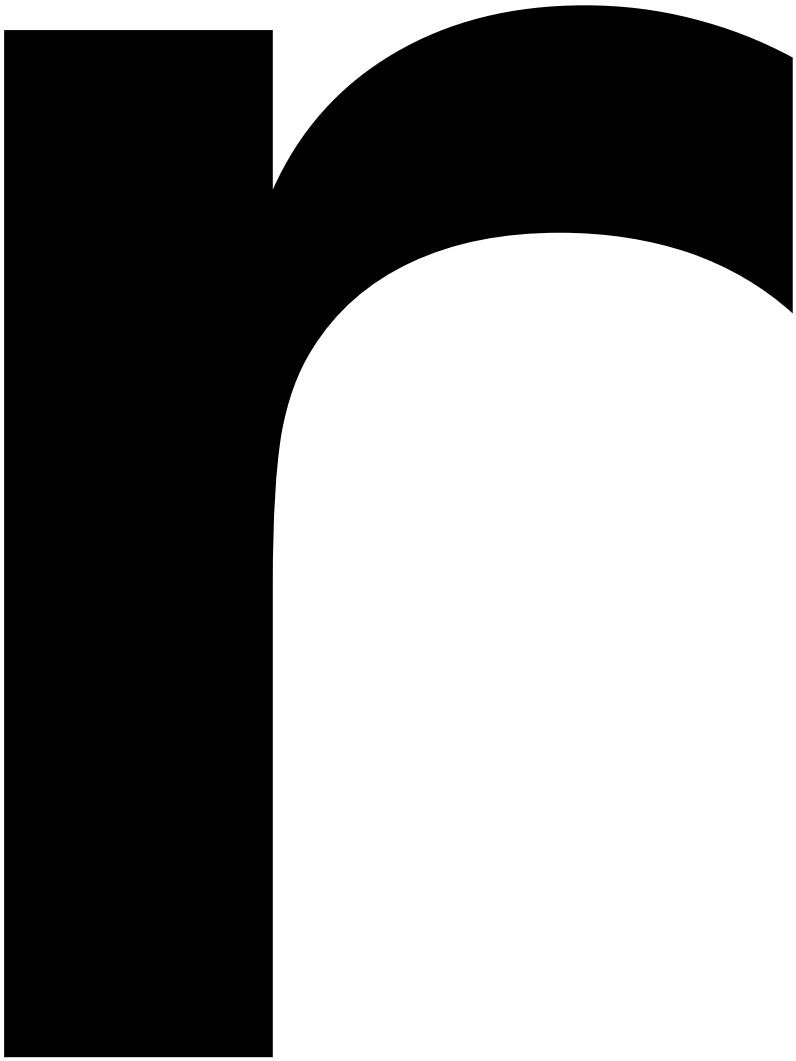
S

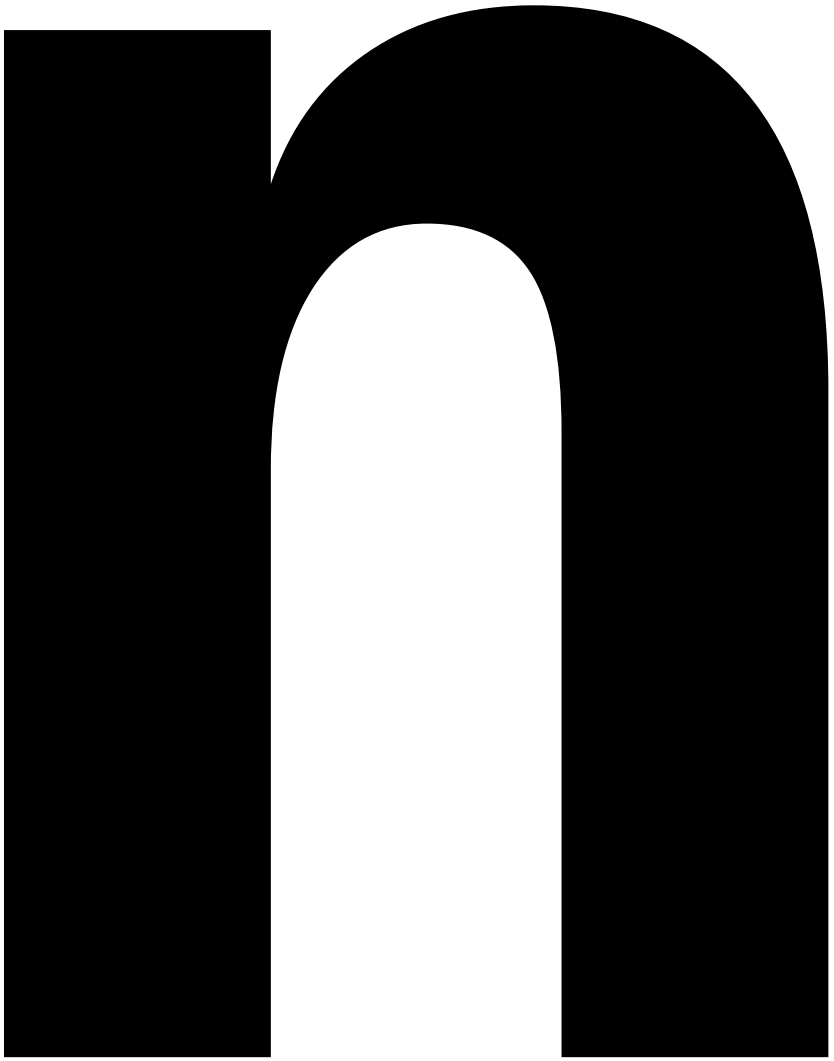


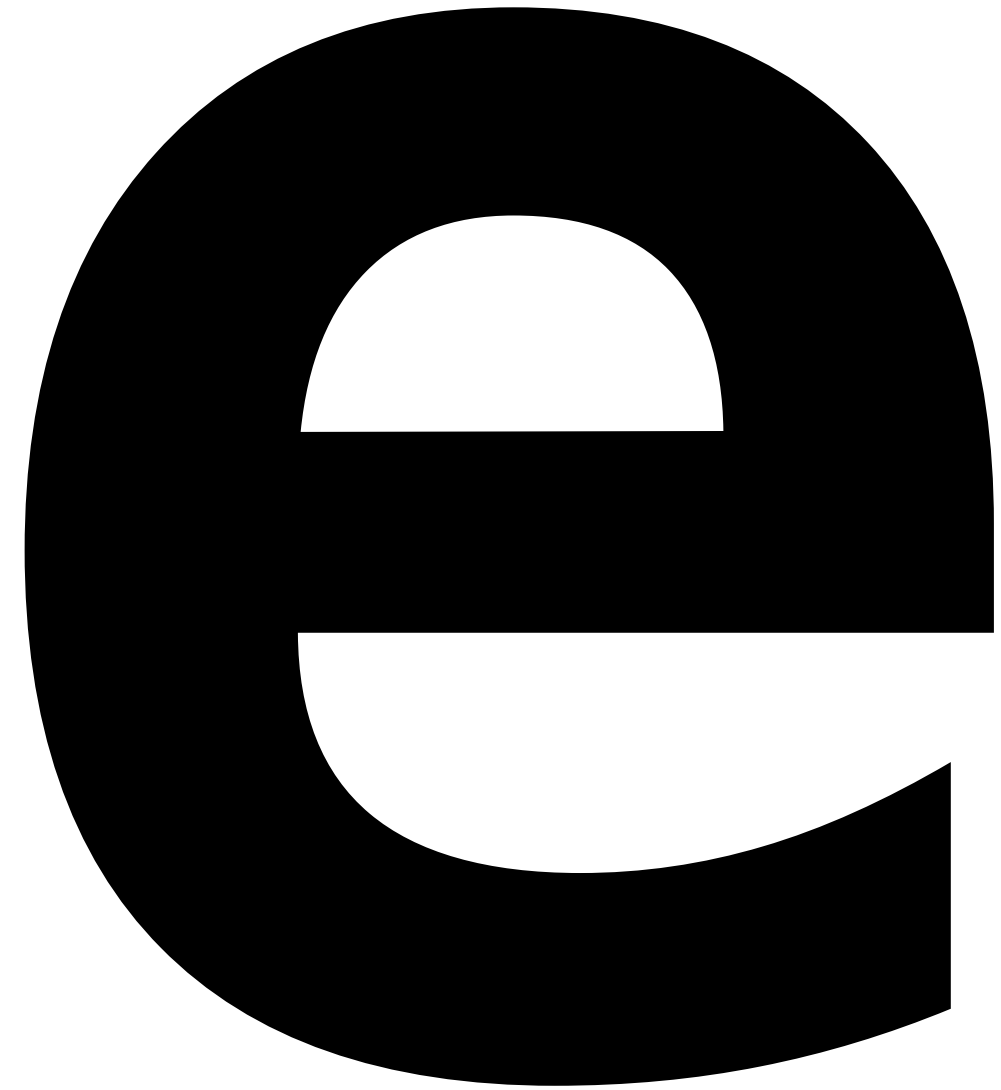


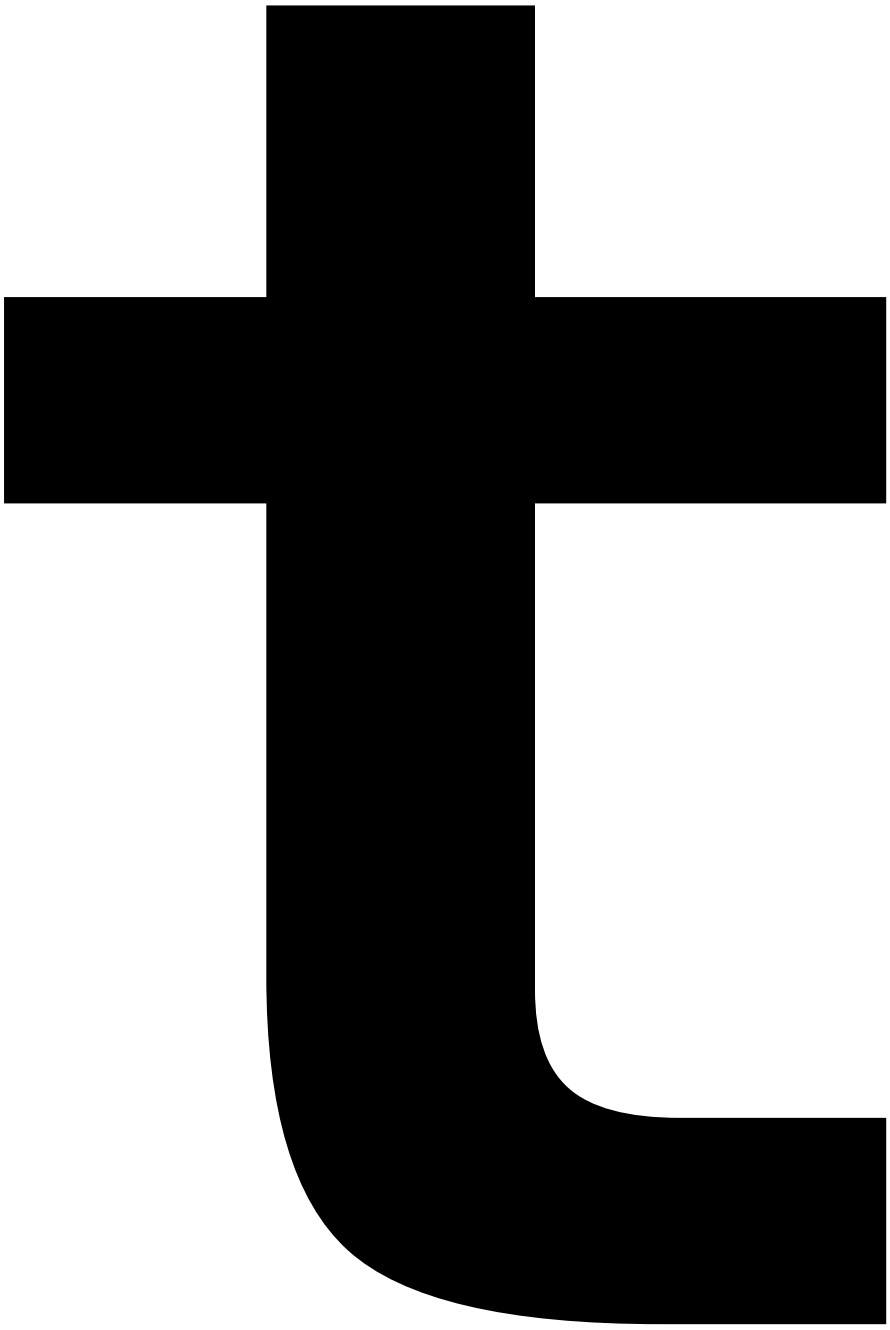




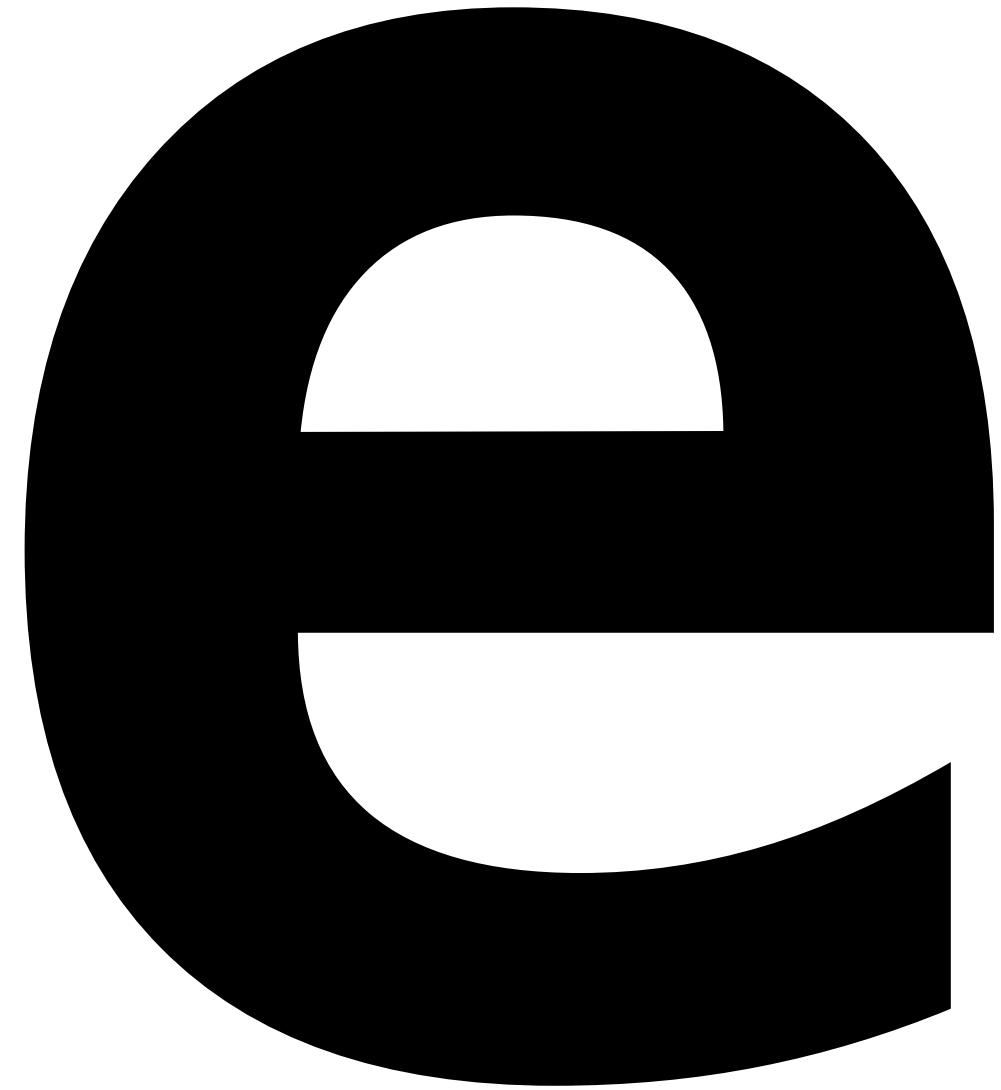


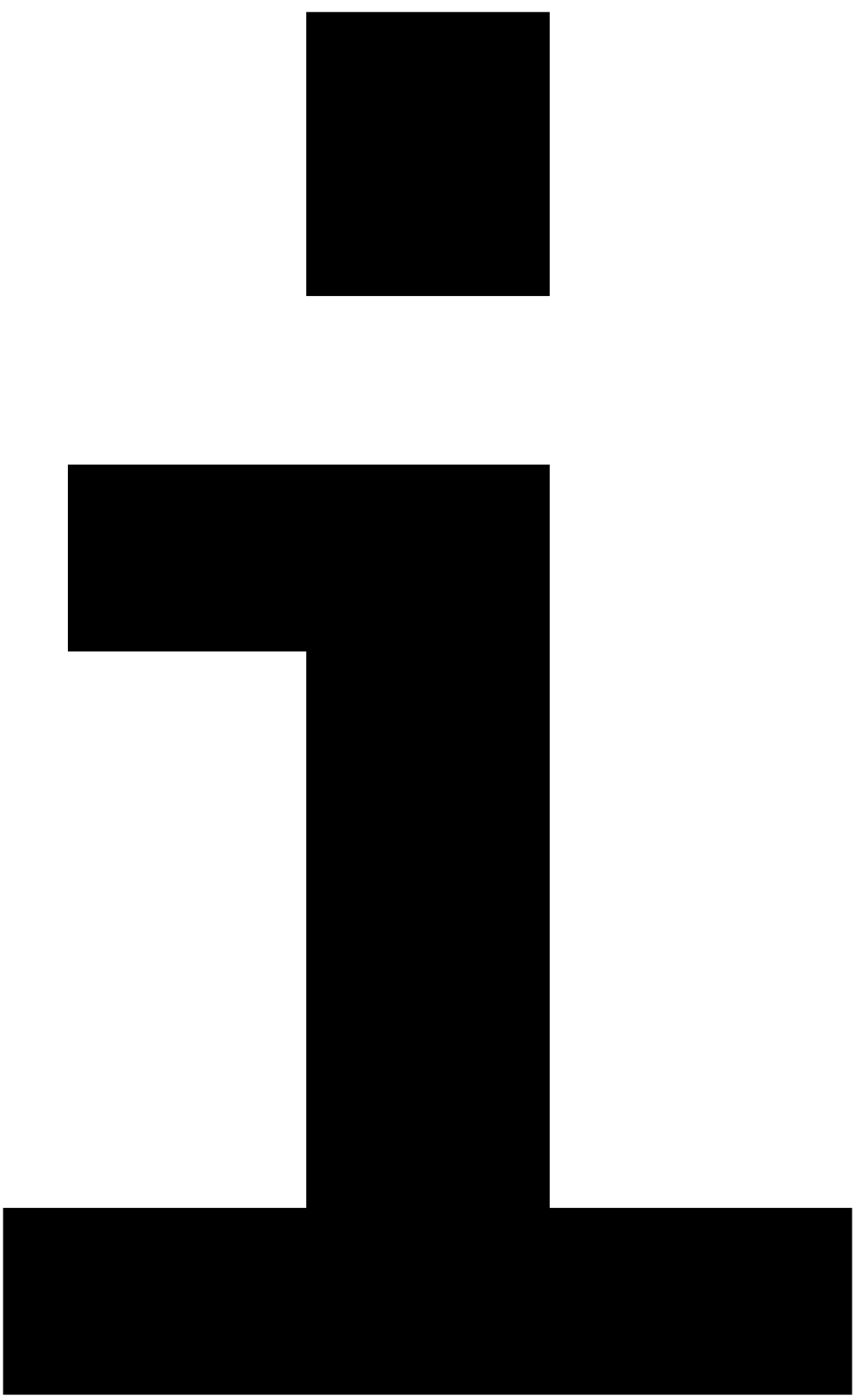


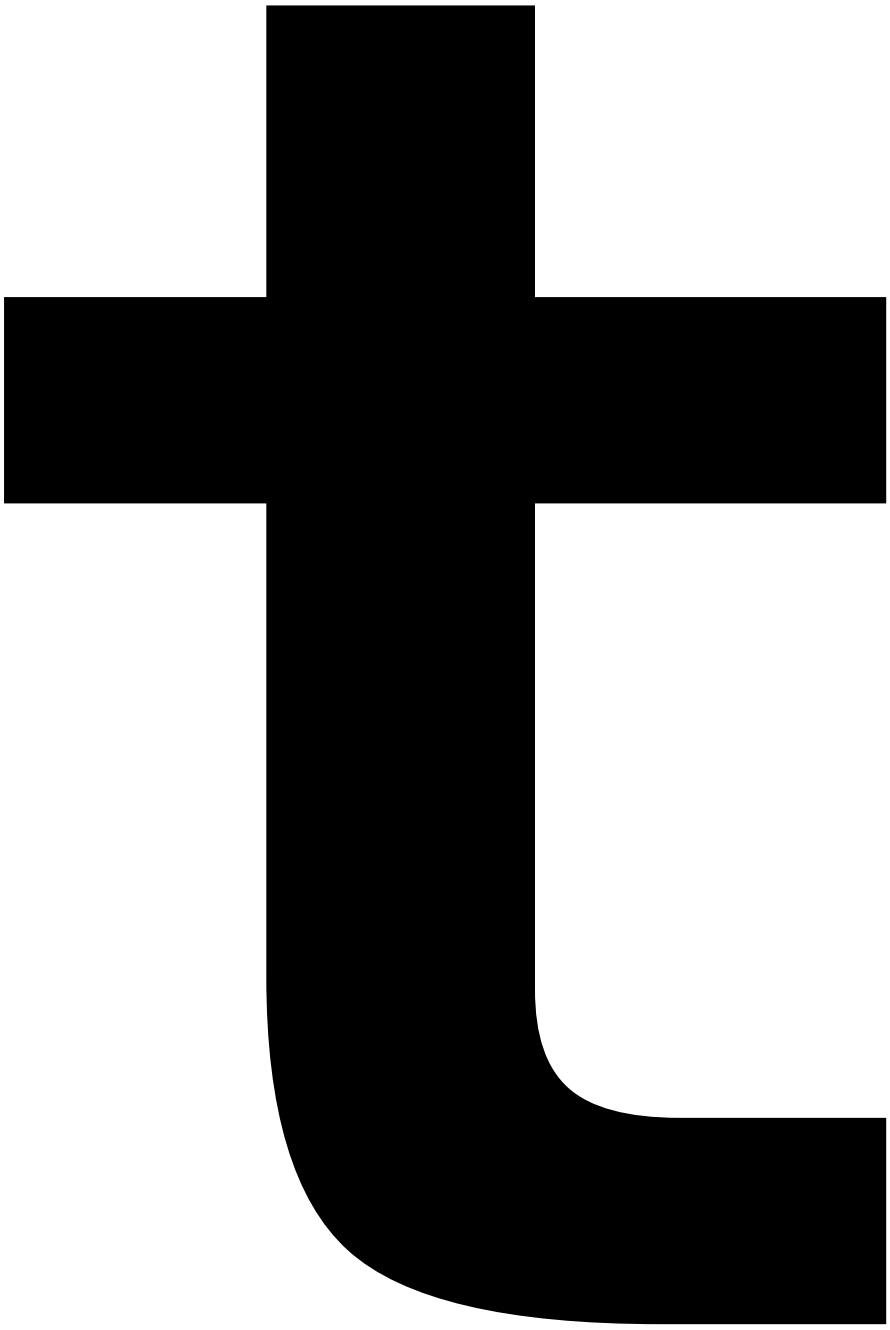


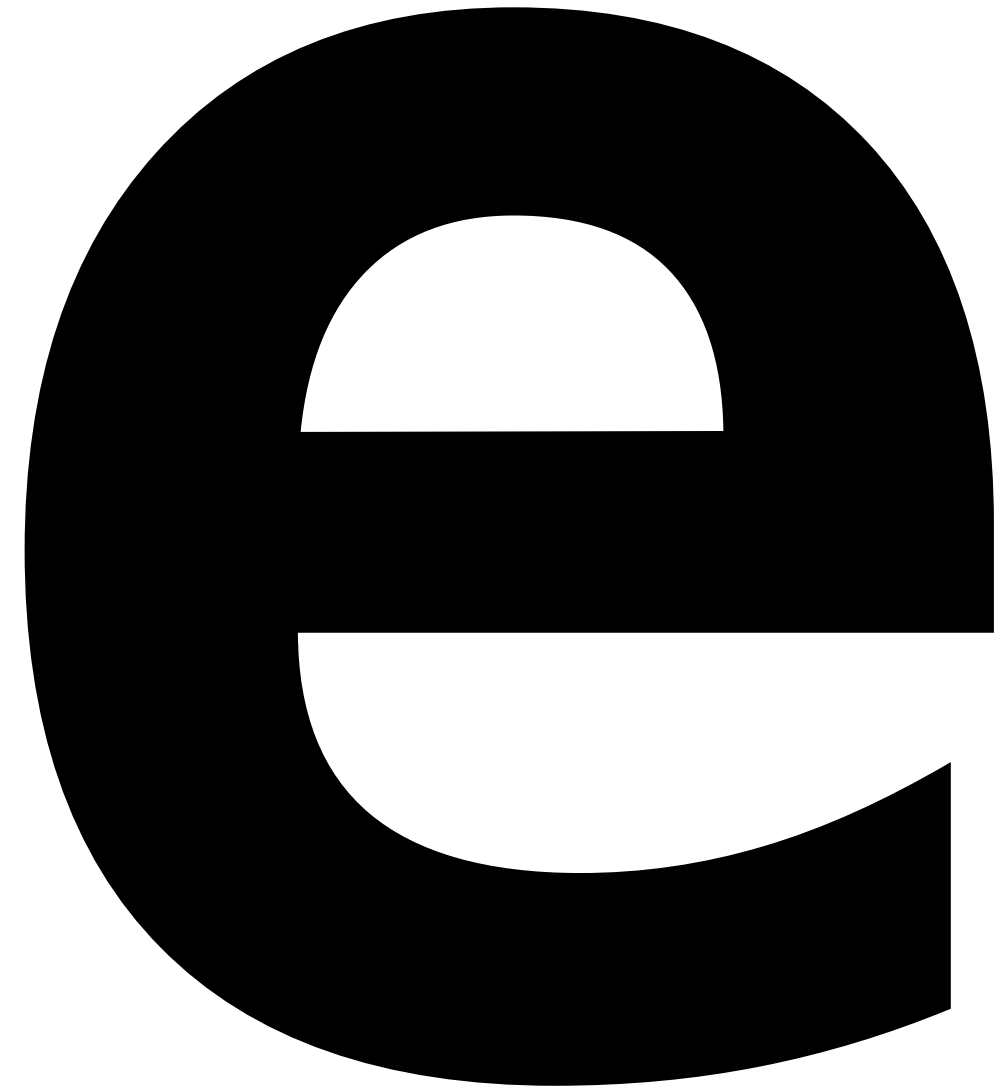


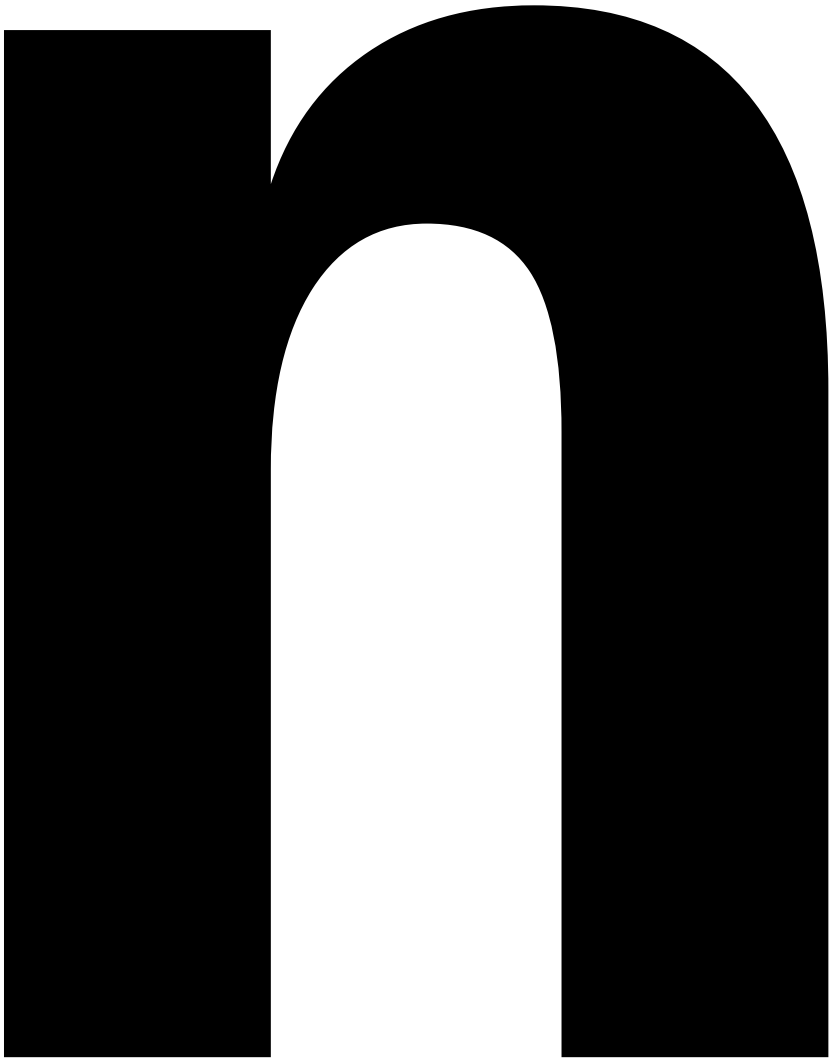
S

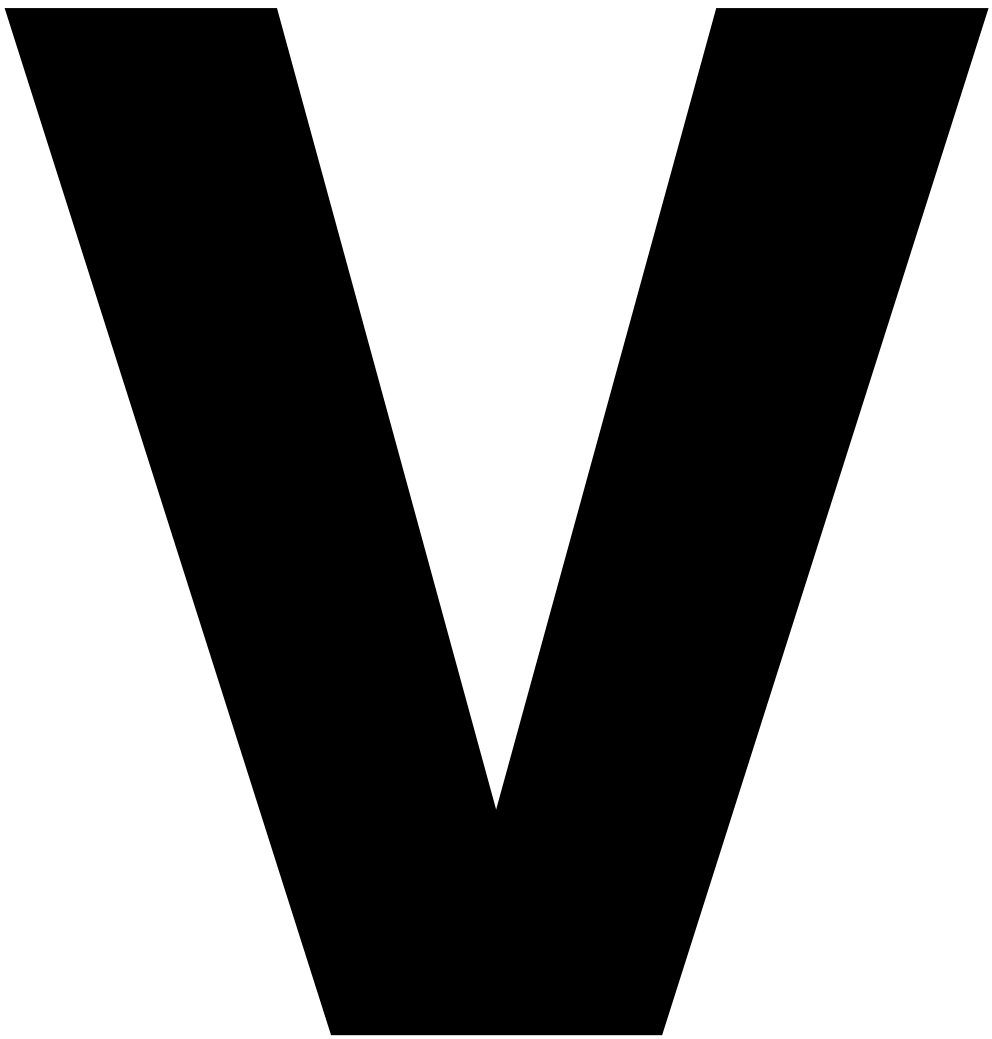


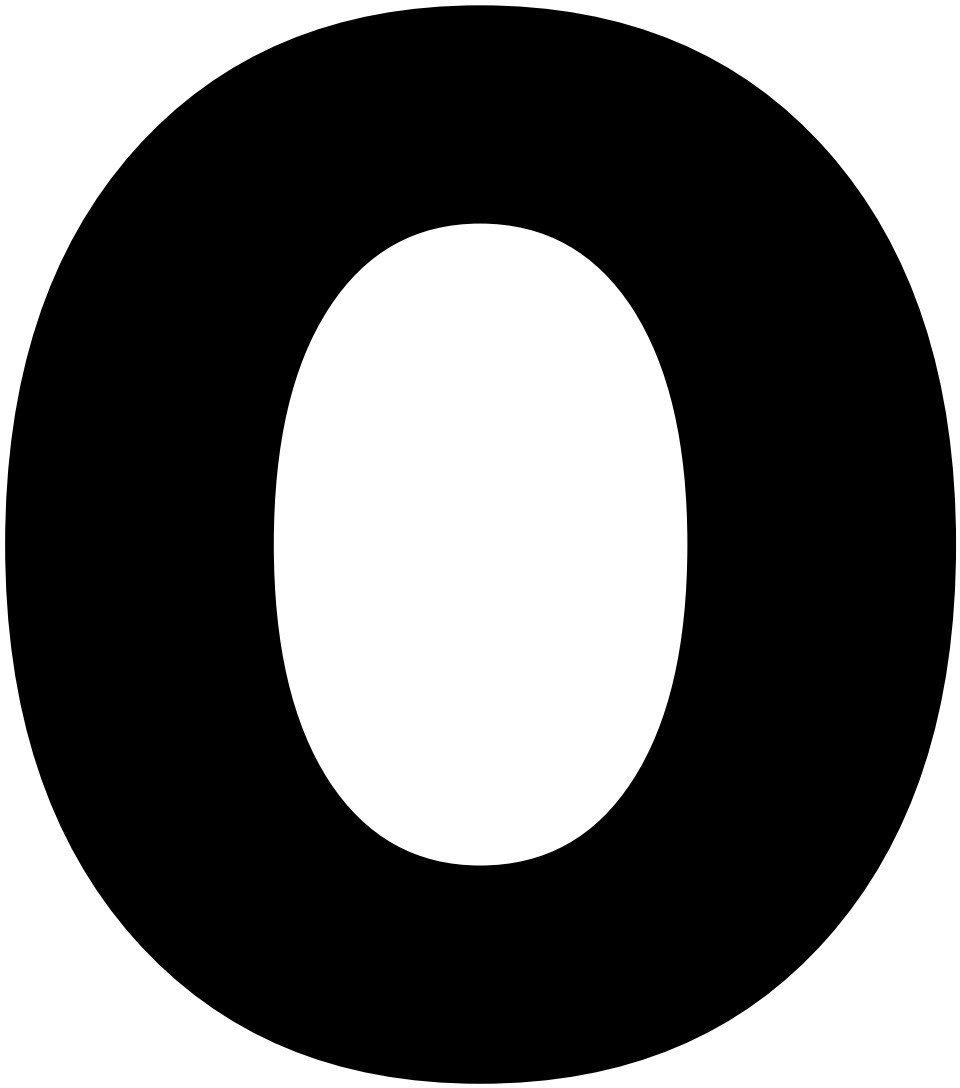


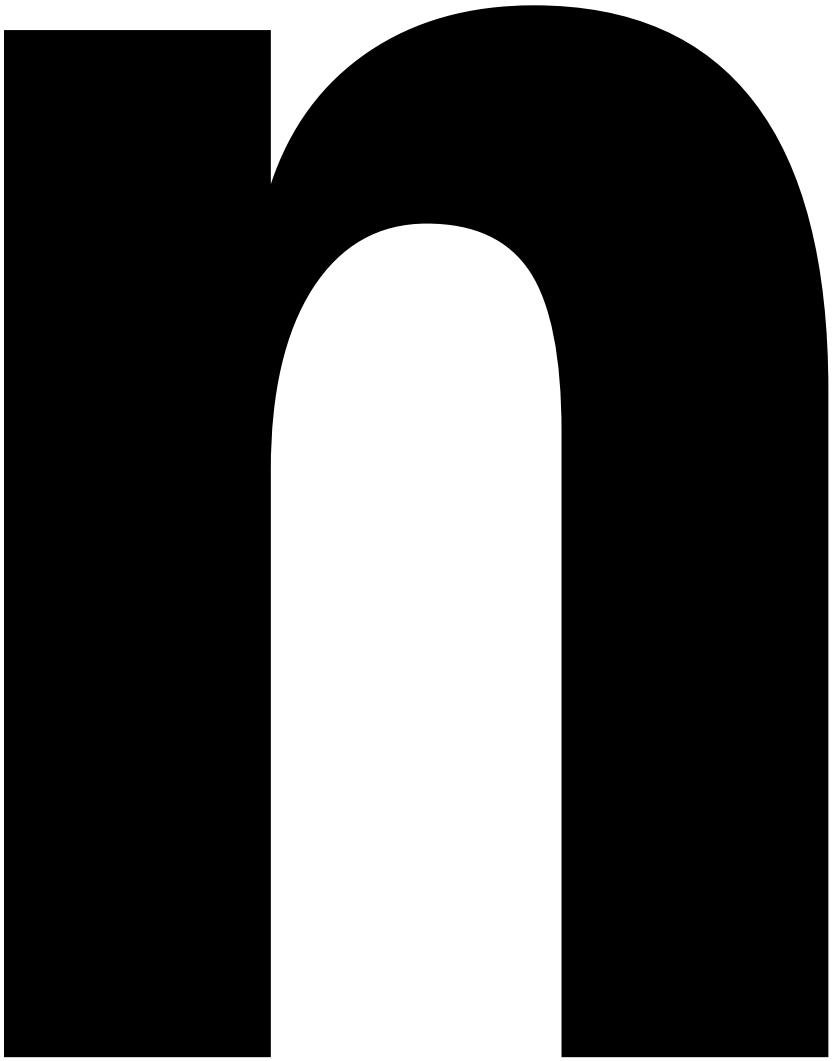


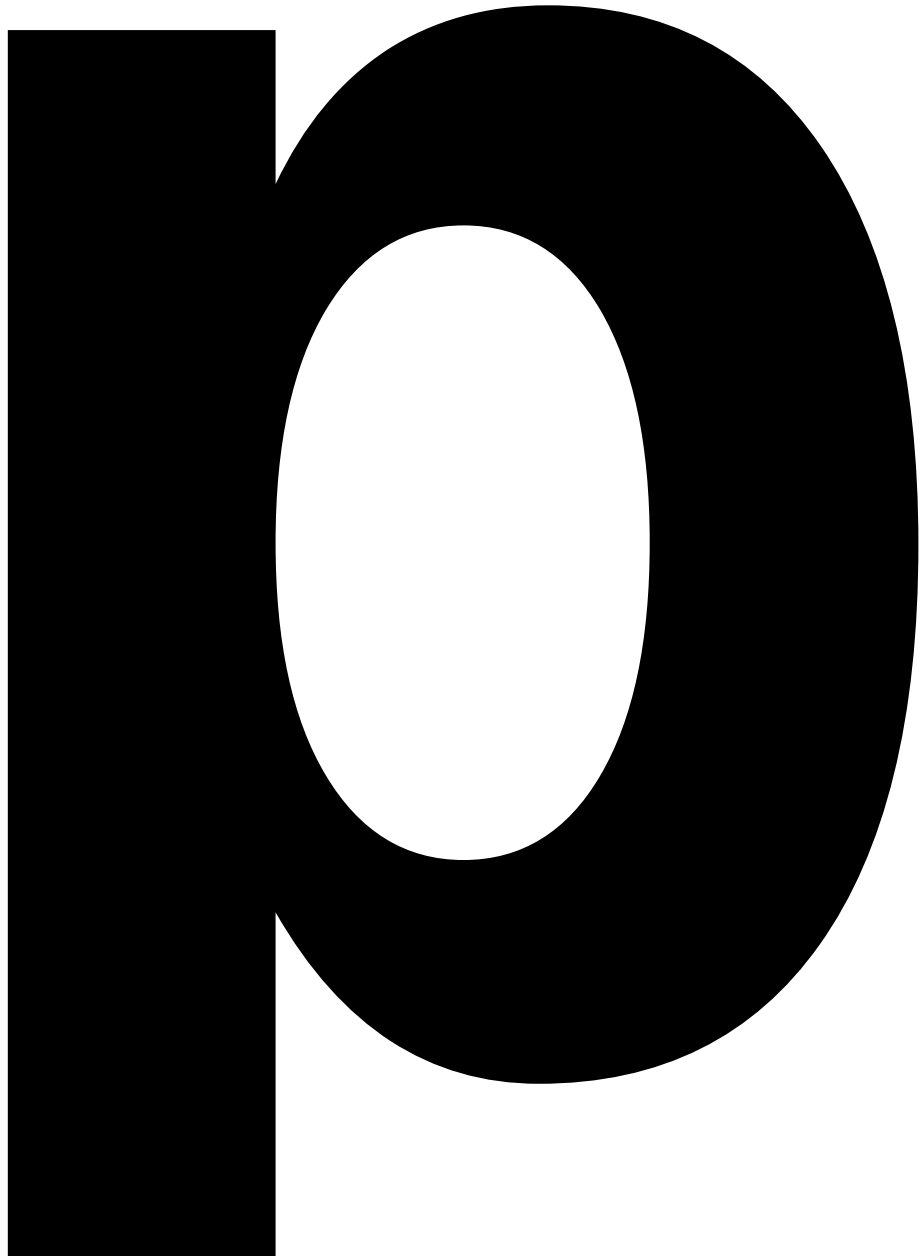


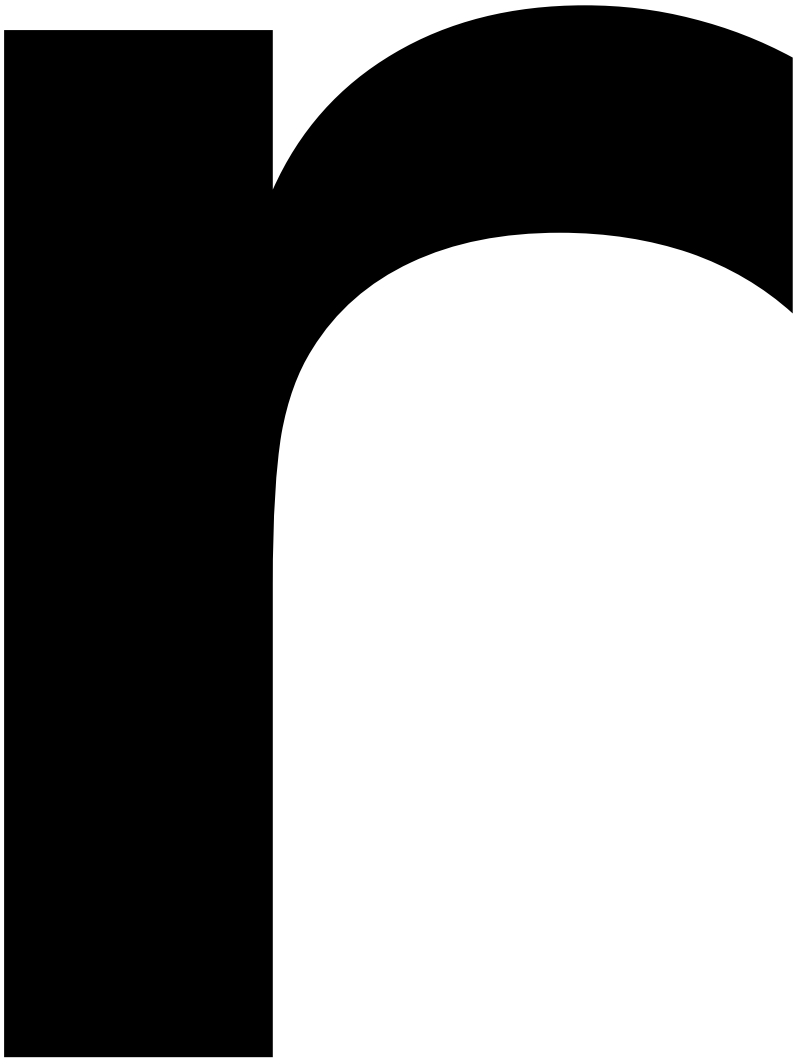


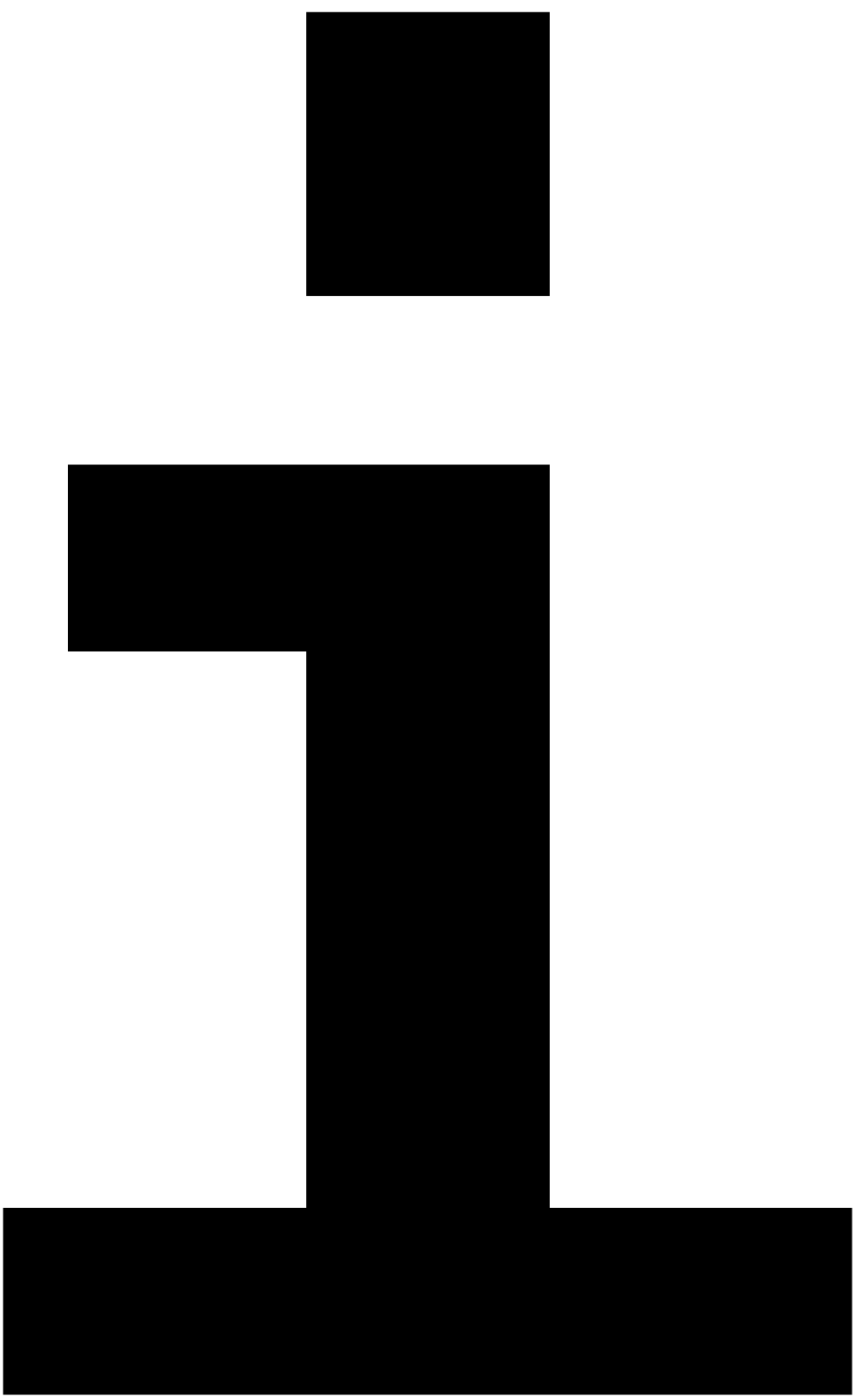


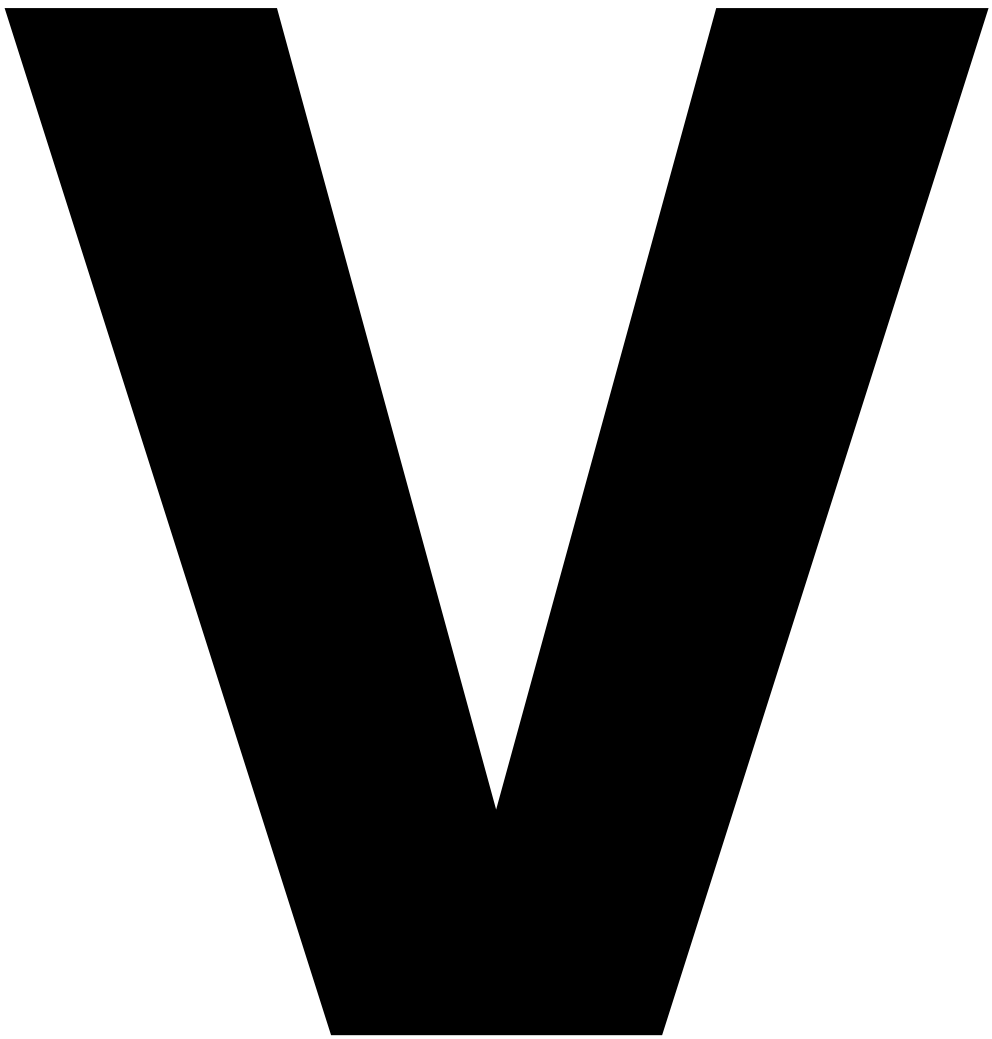


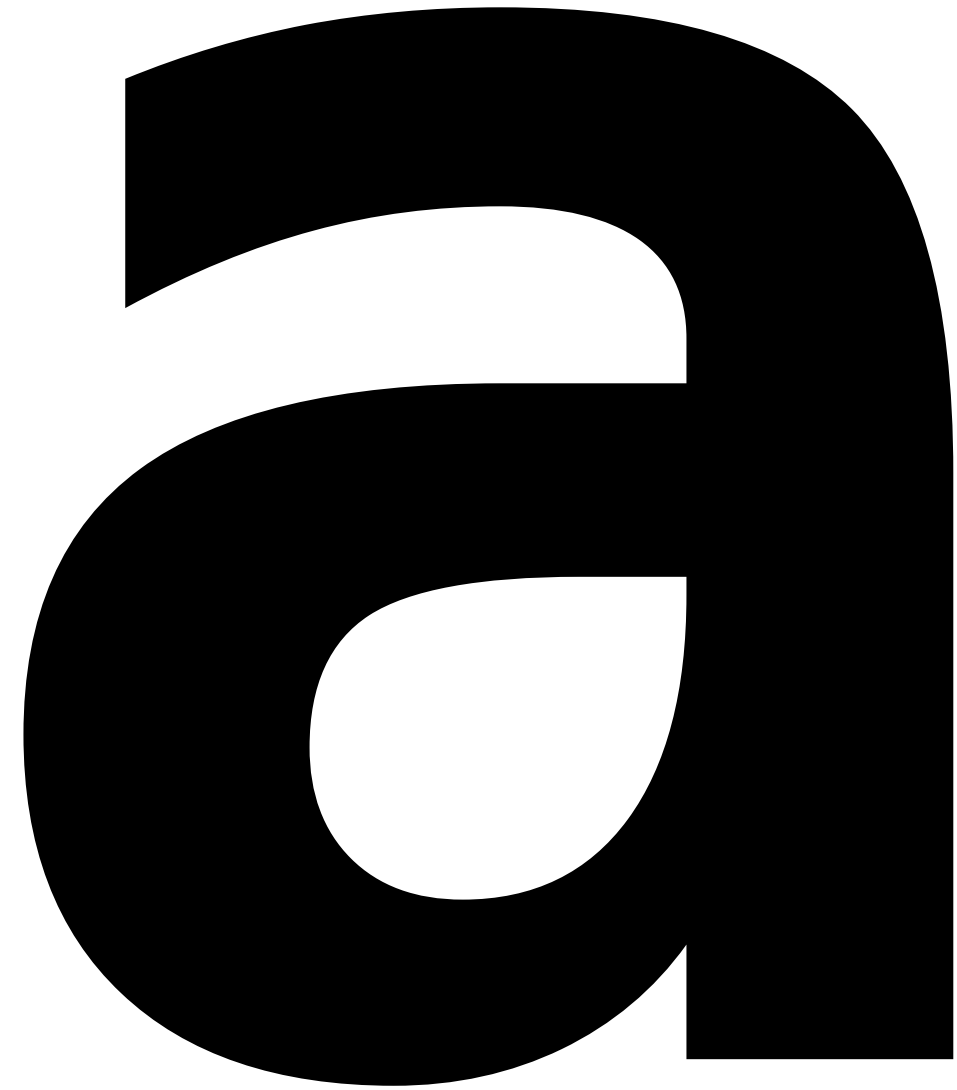


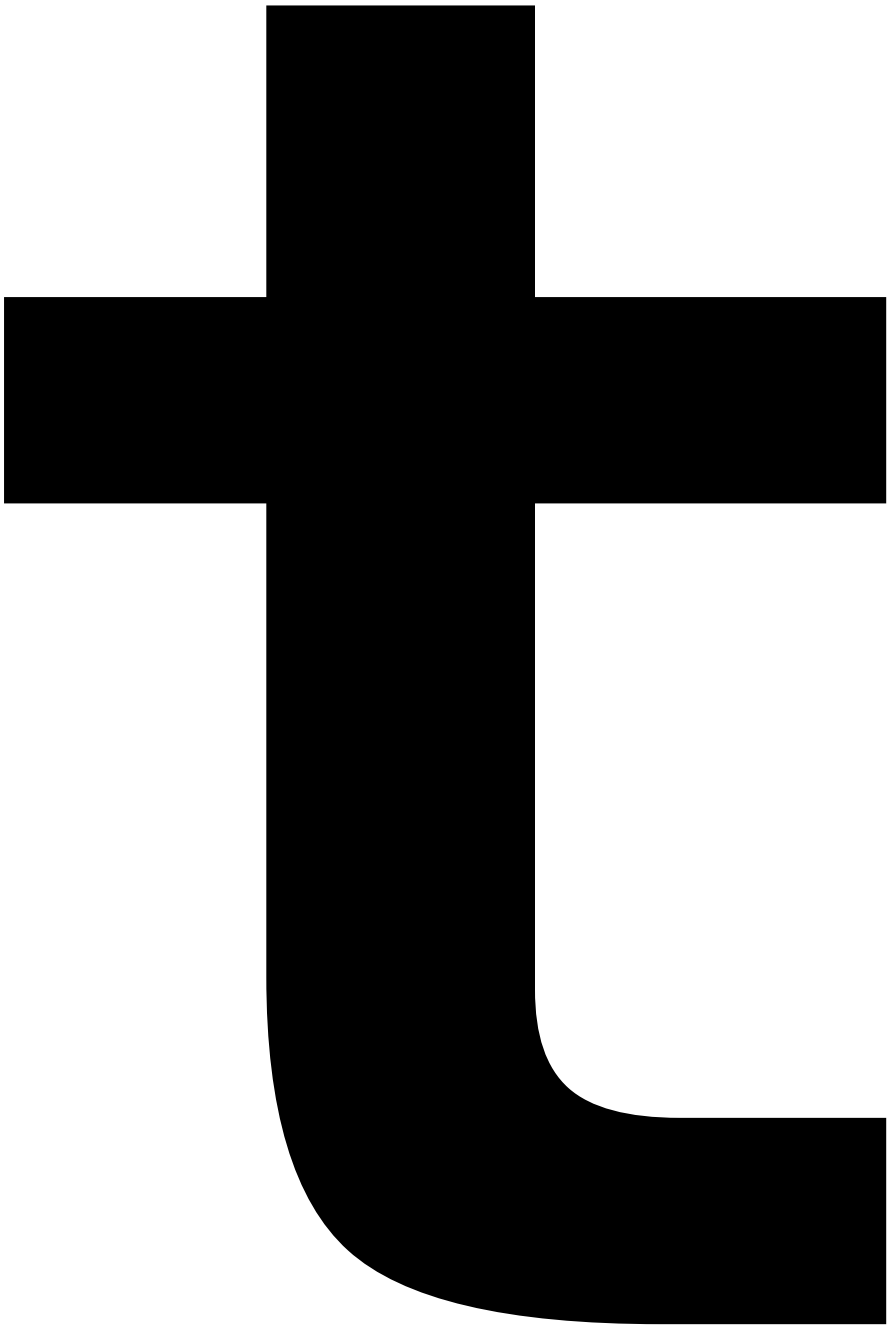


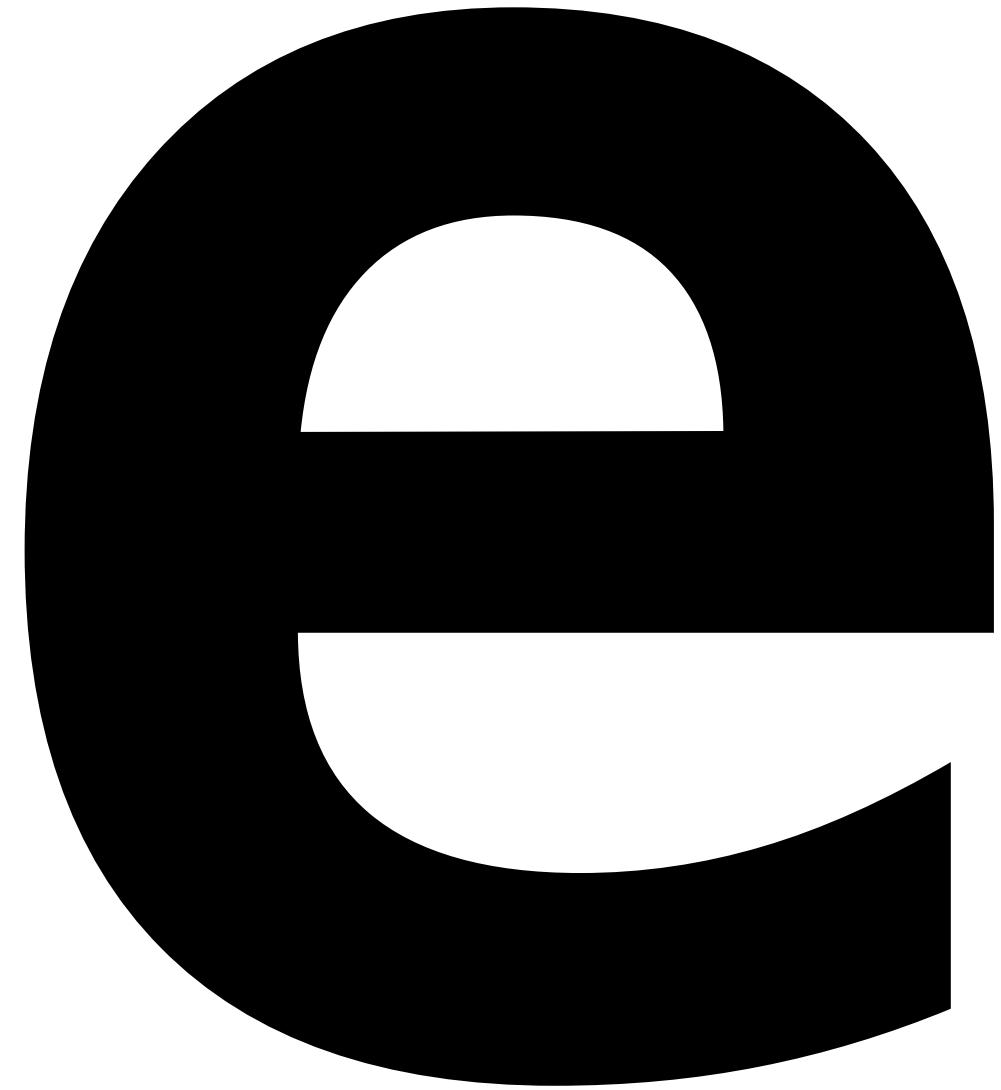


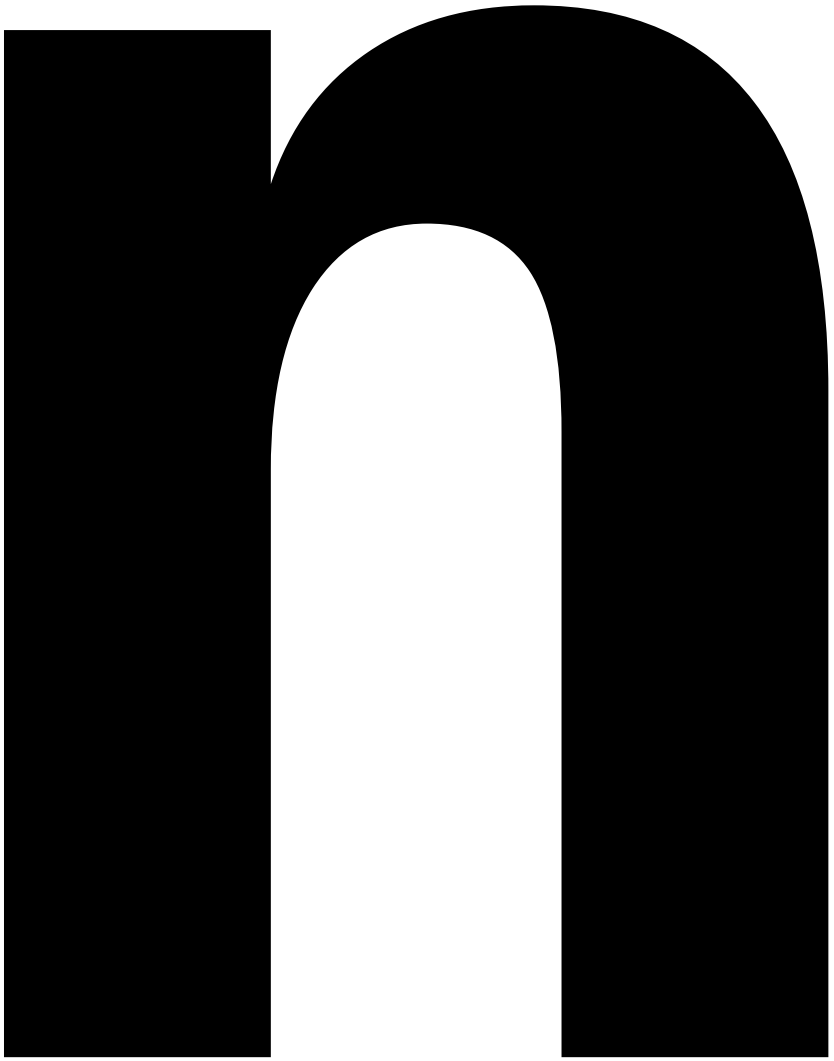


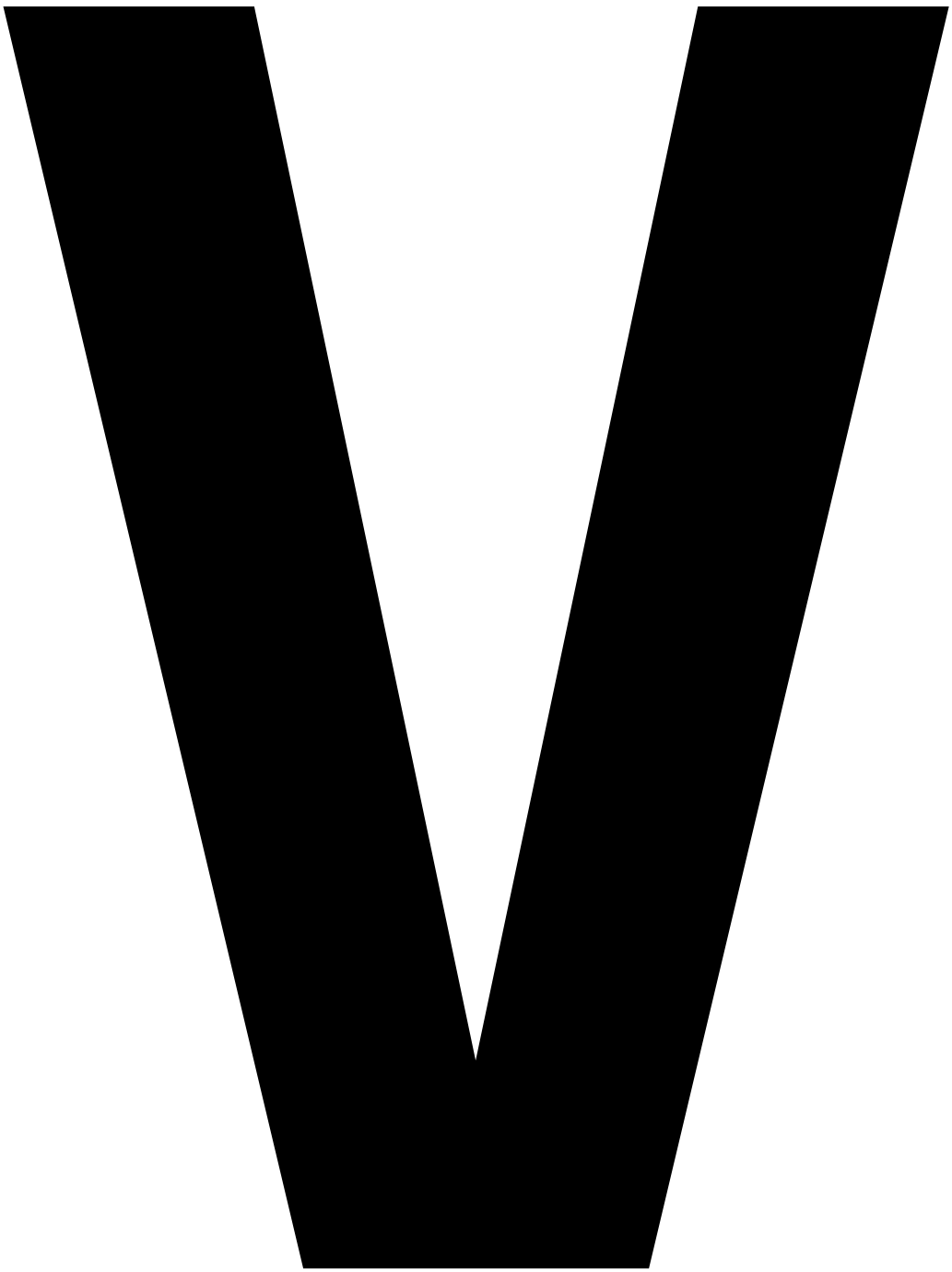


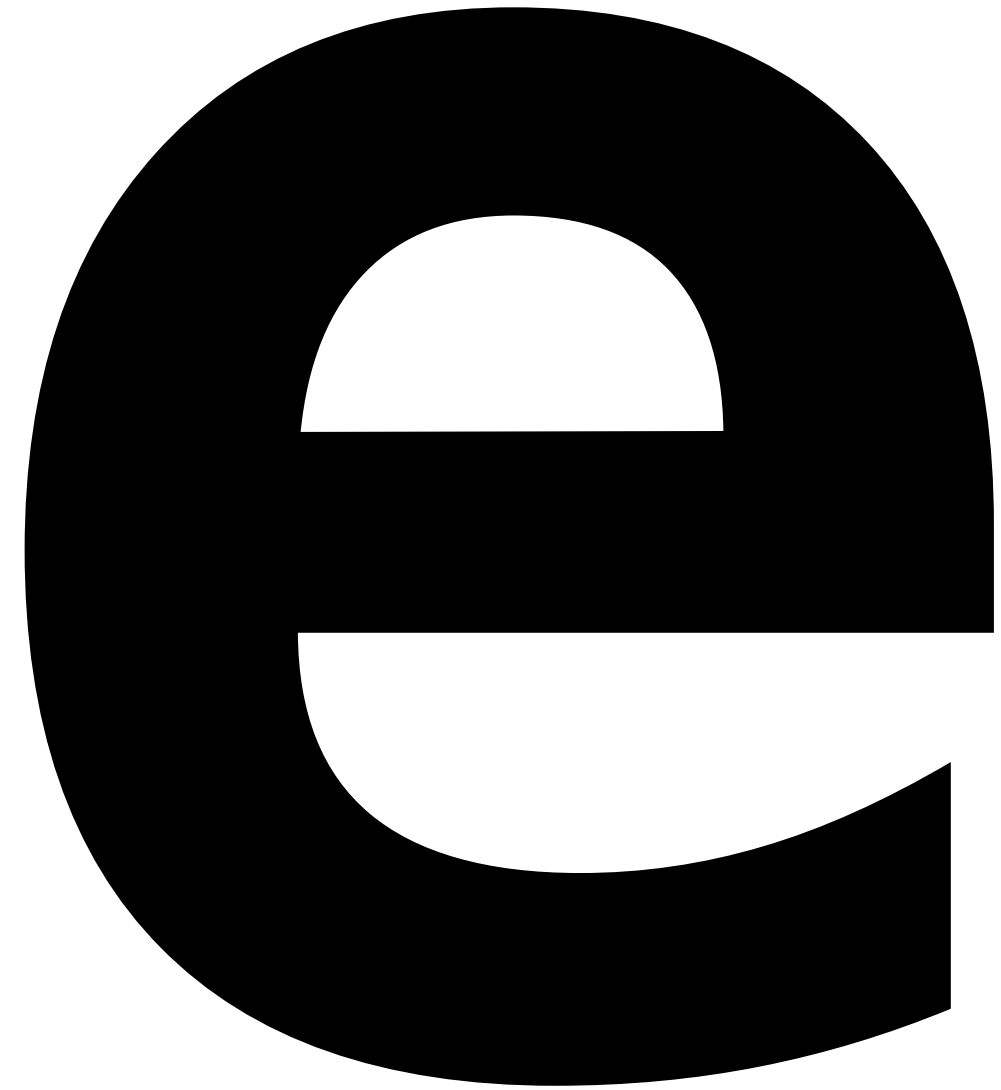


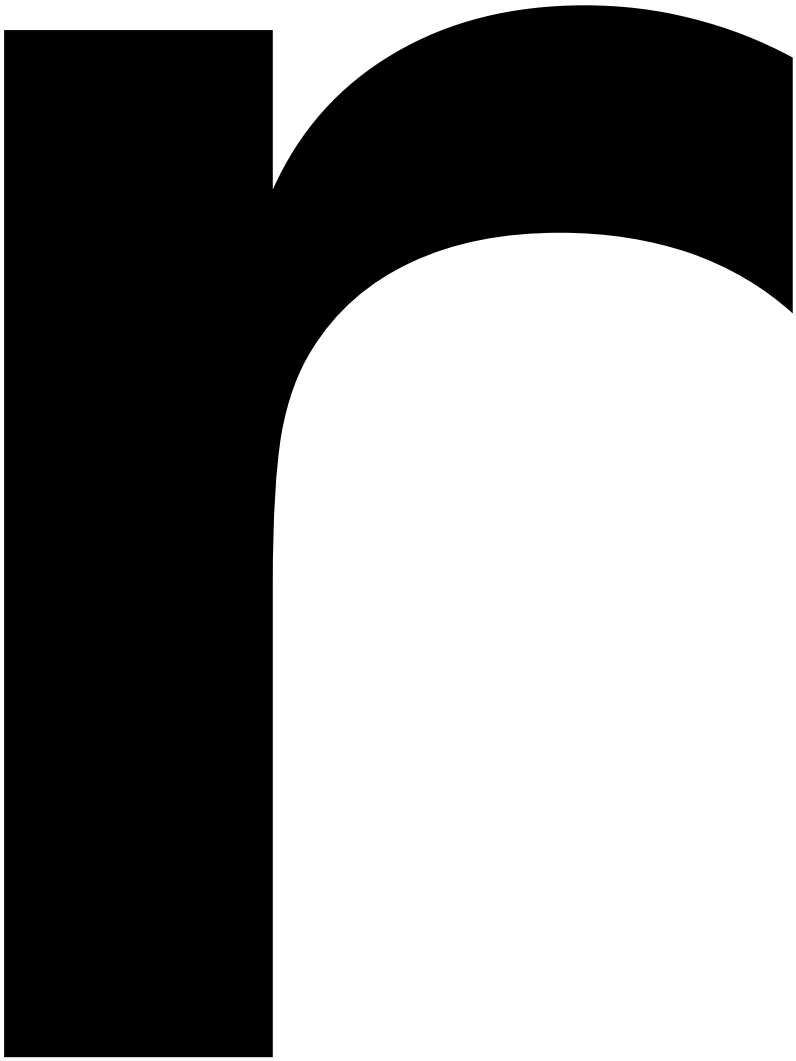


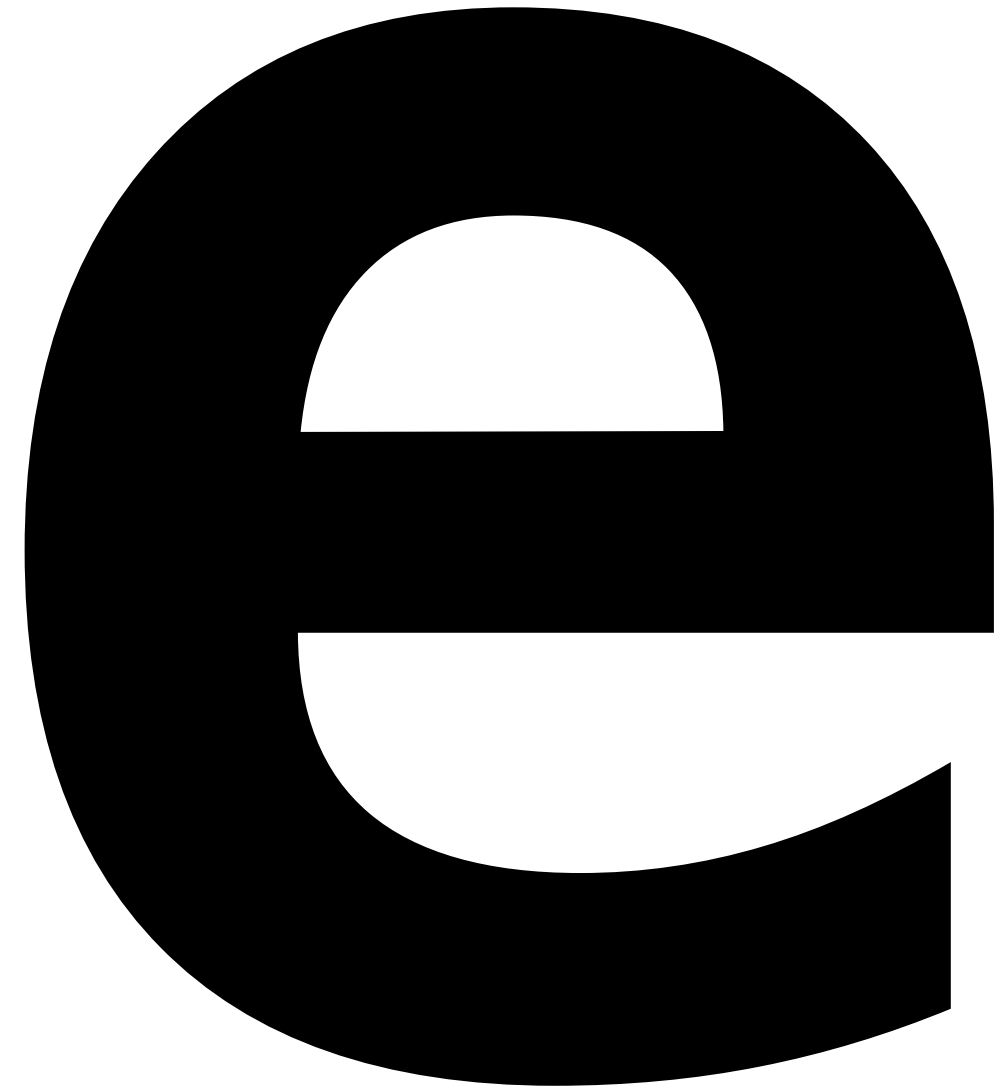


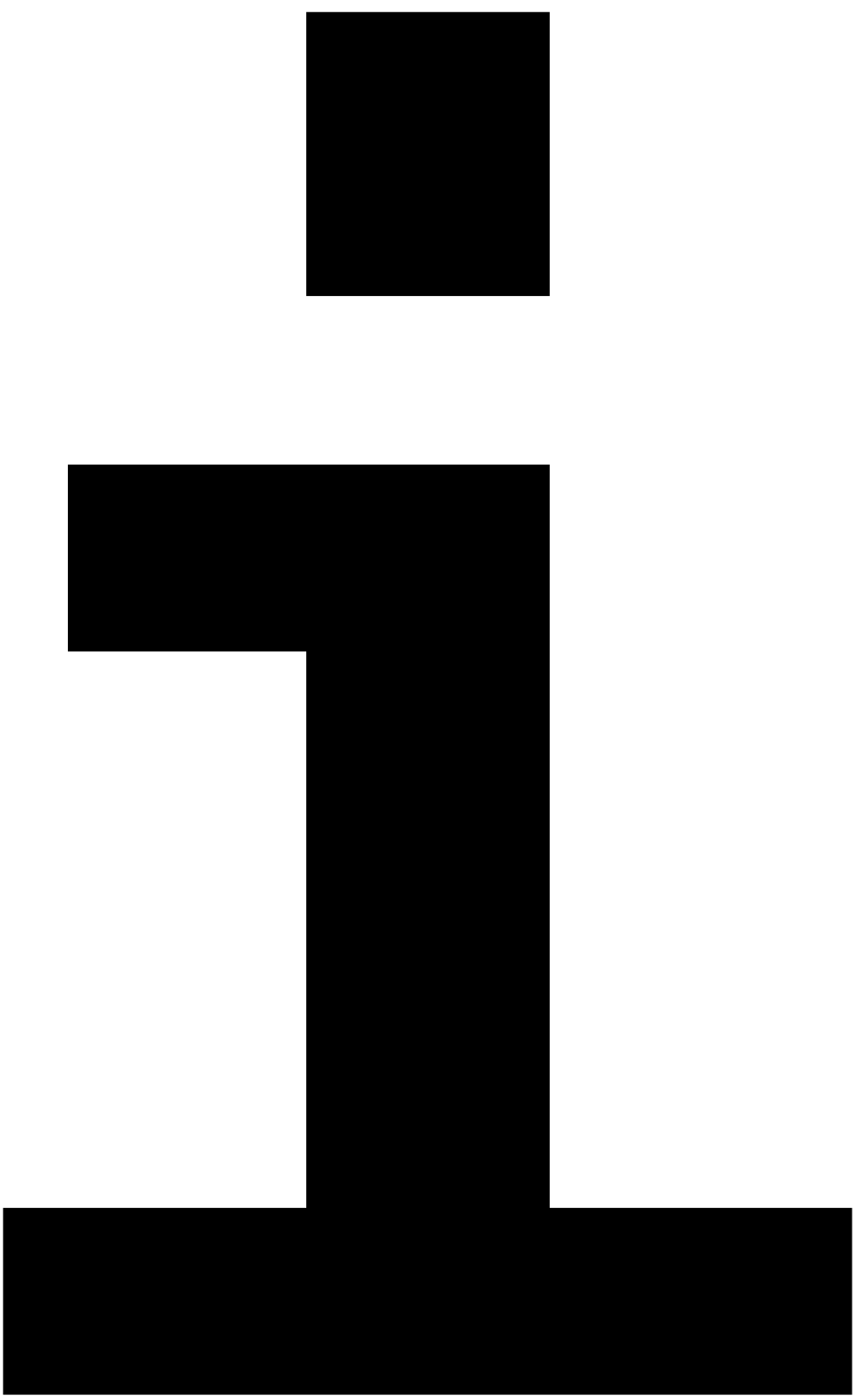


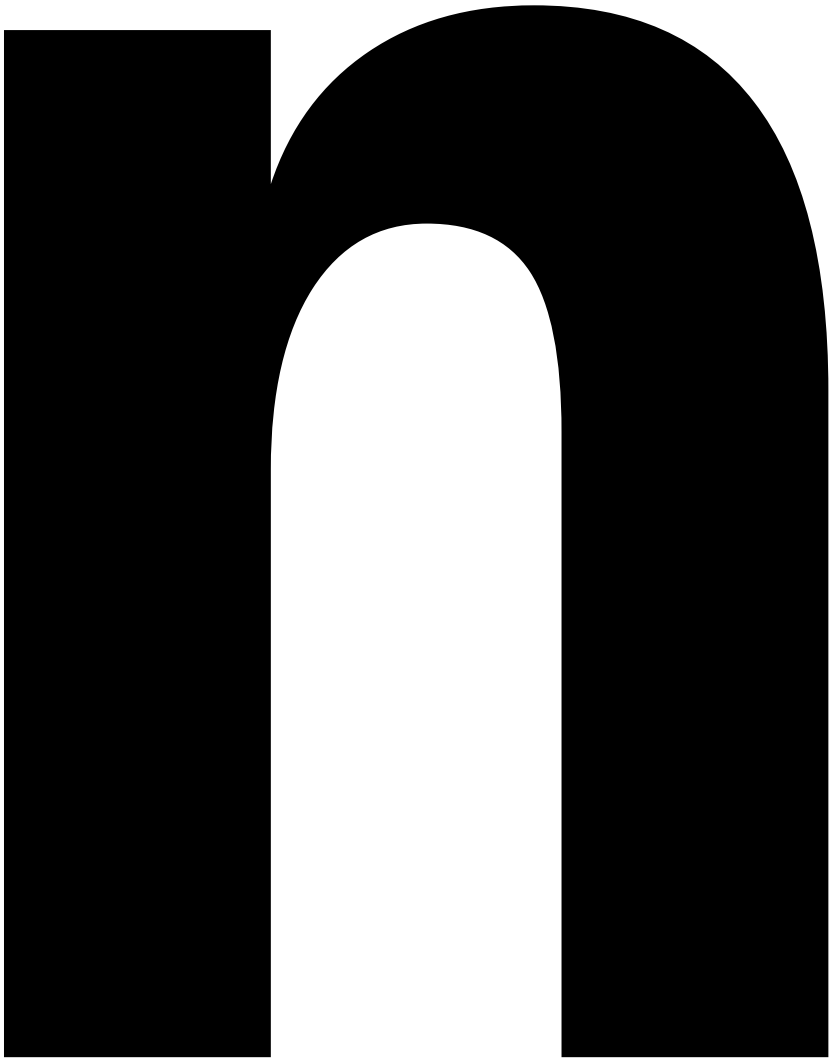


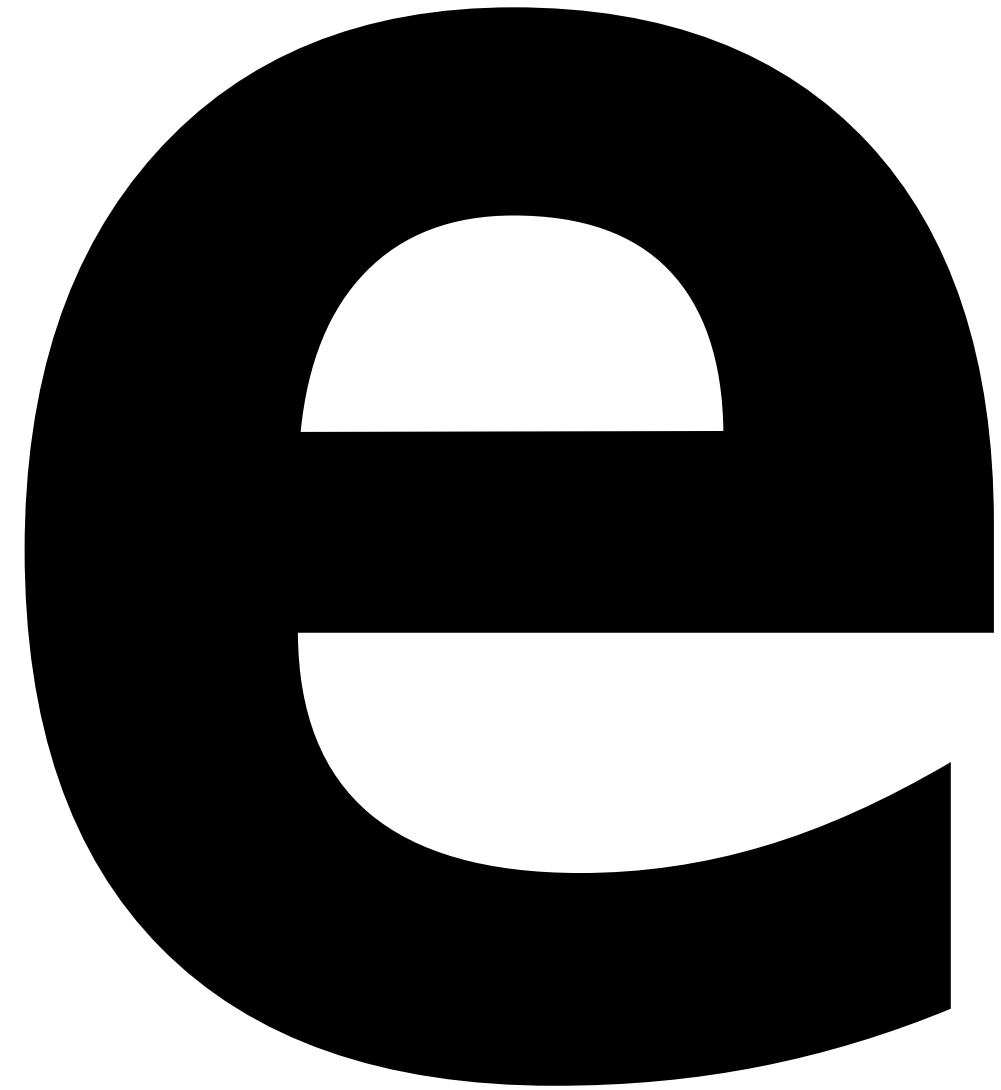


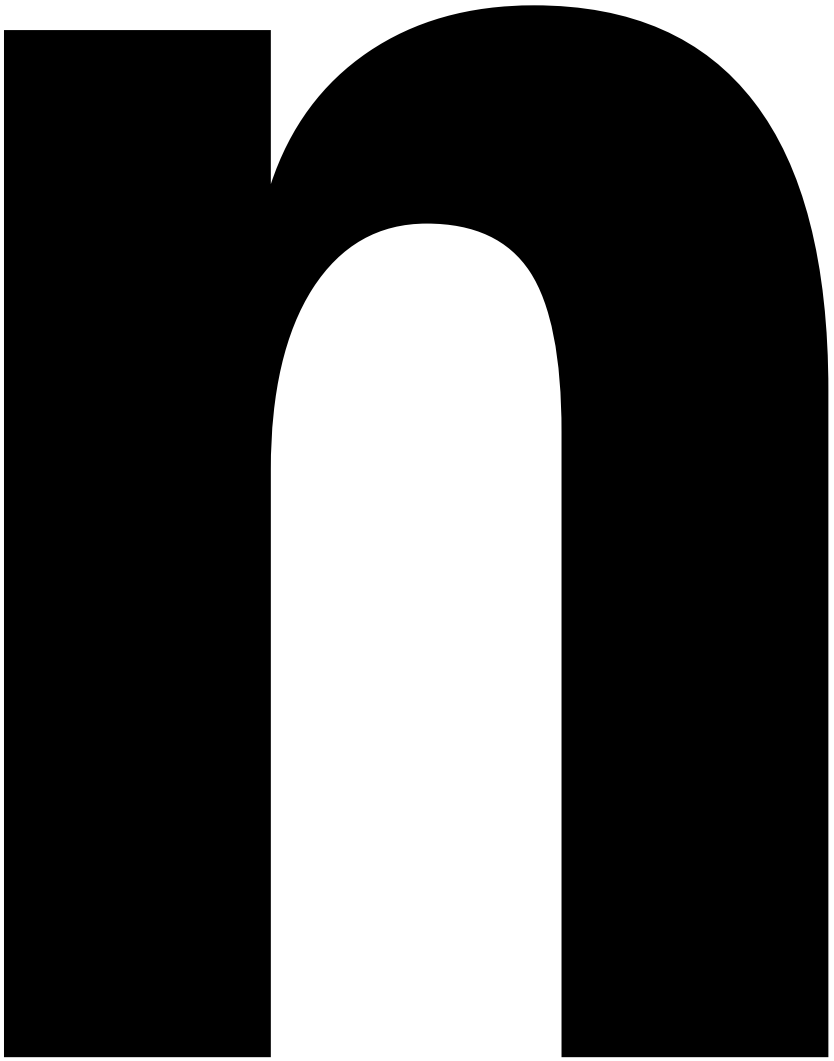


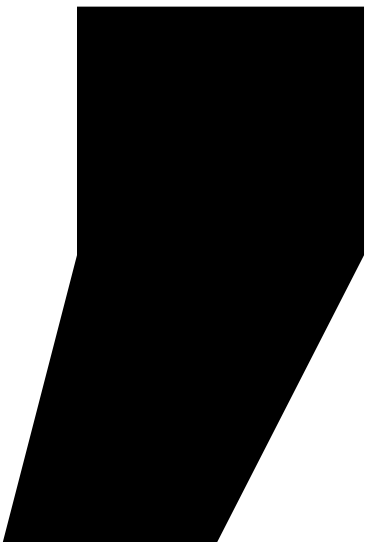


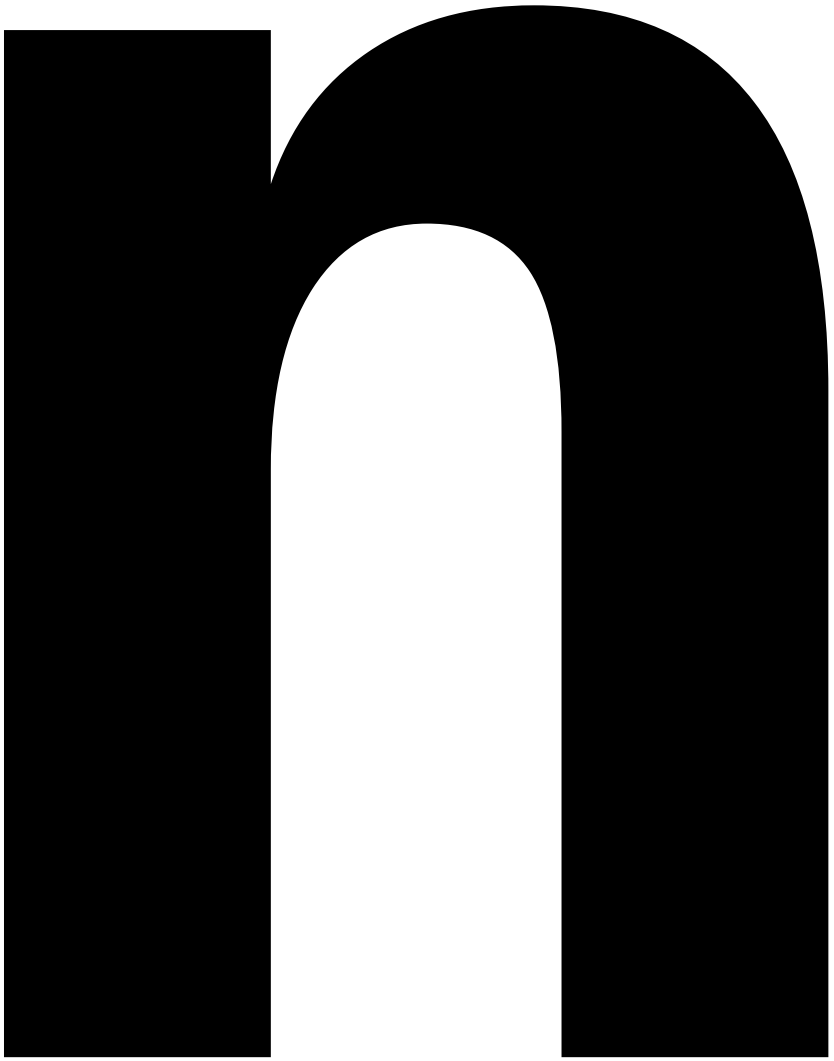




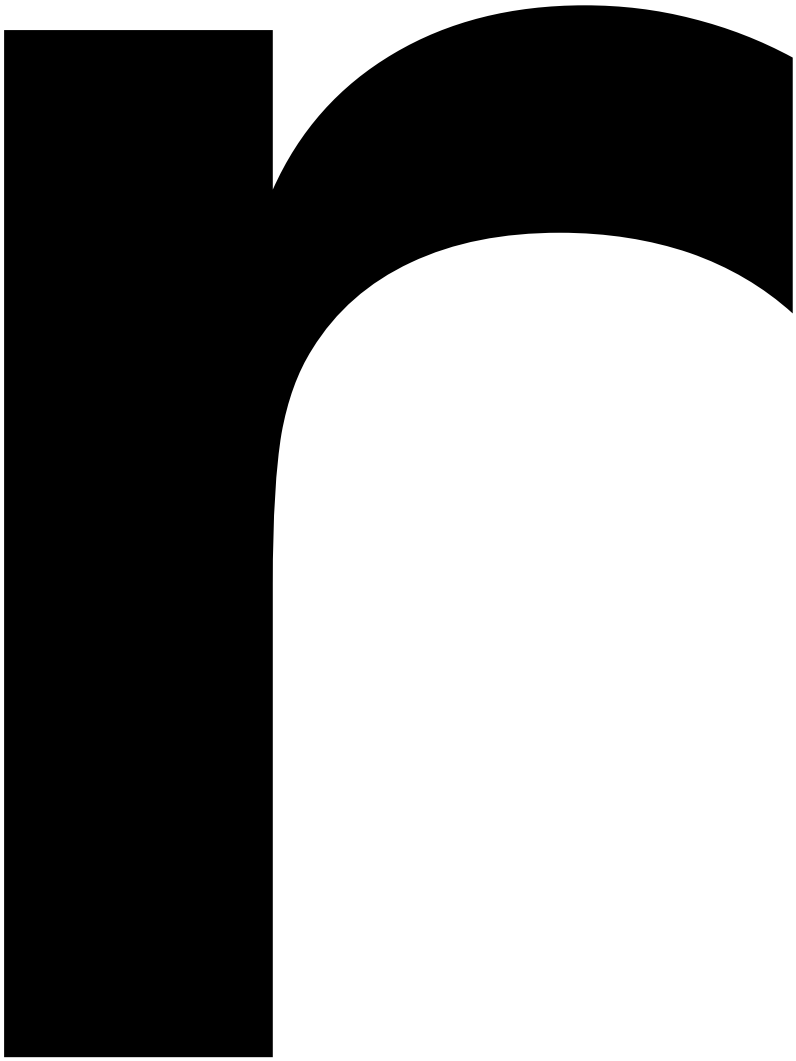




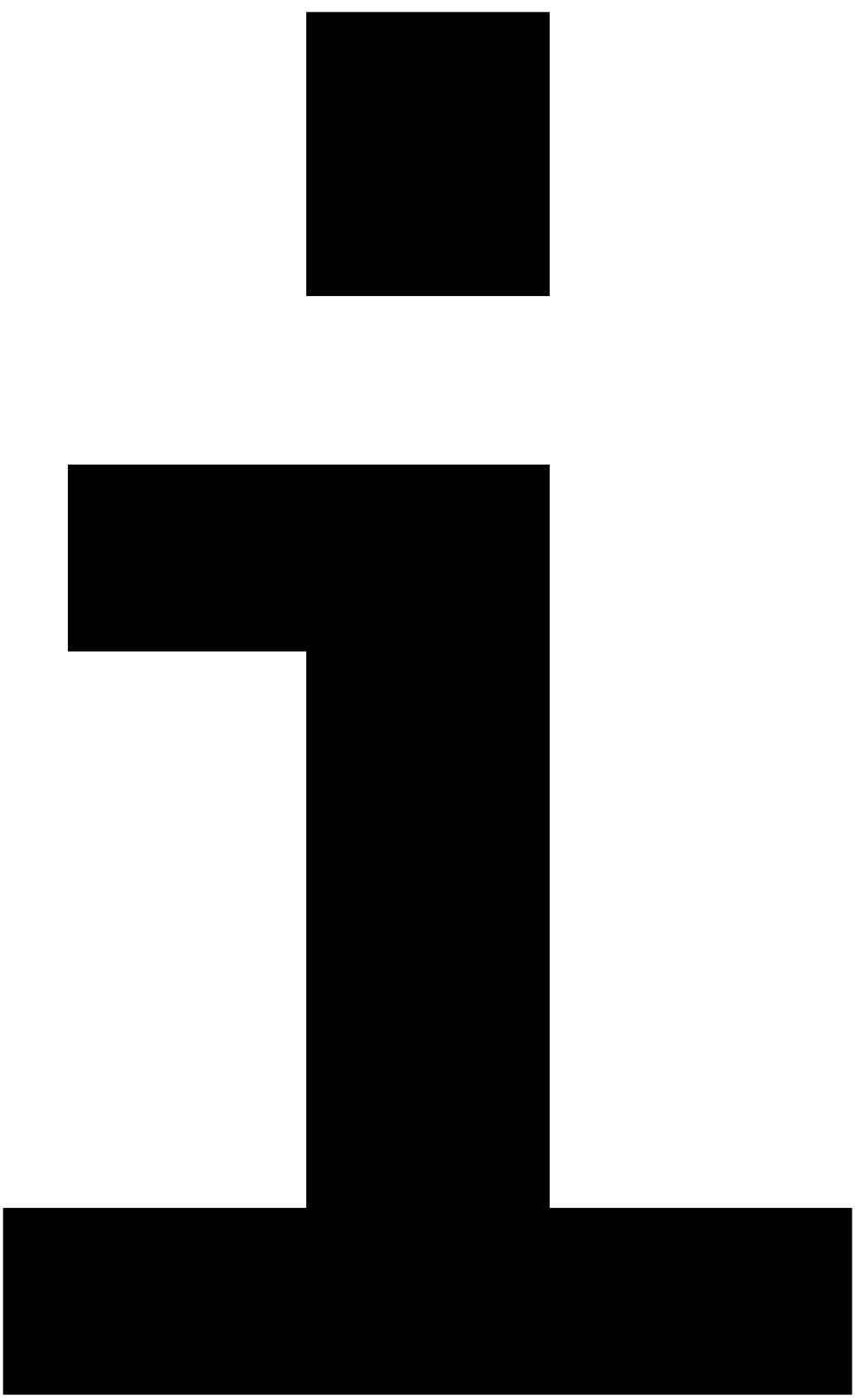


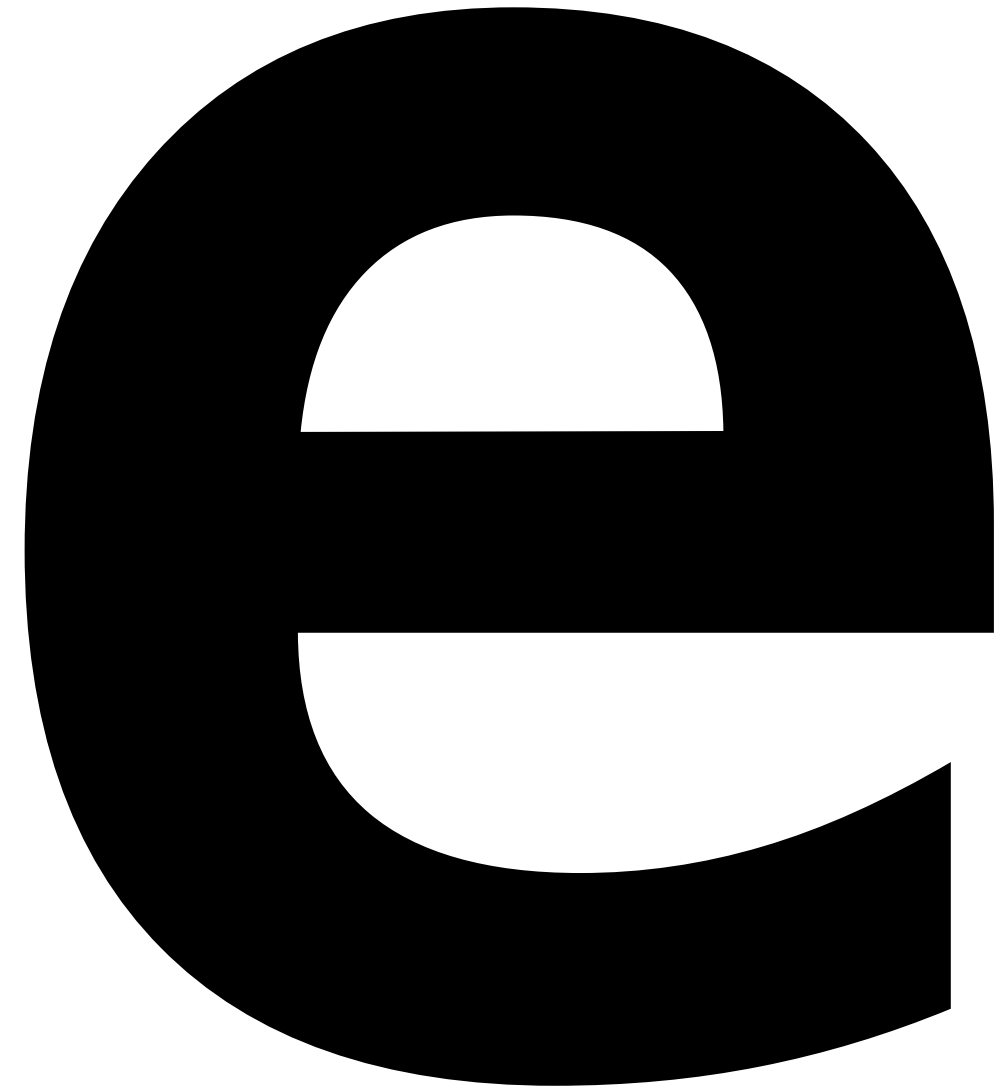


u

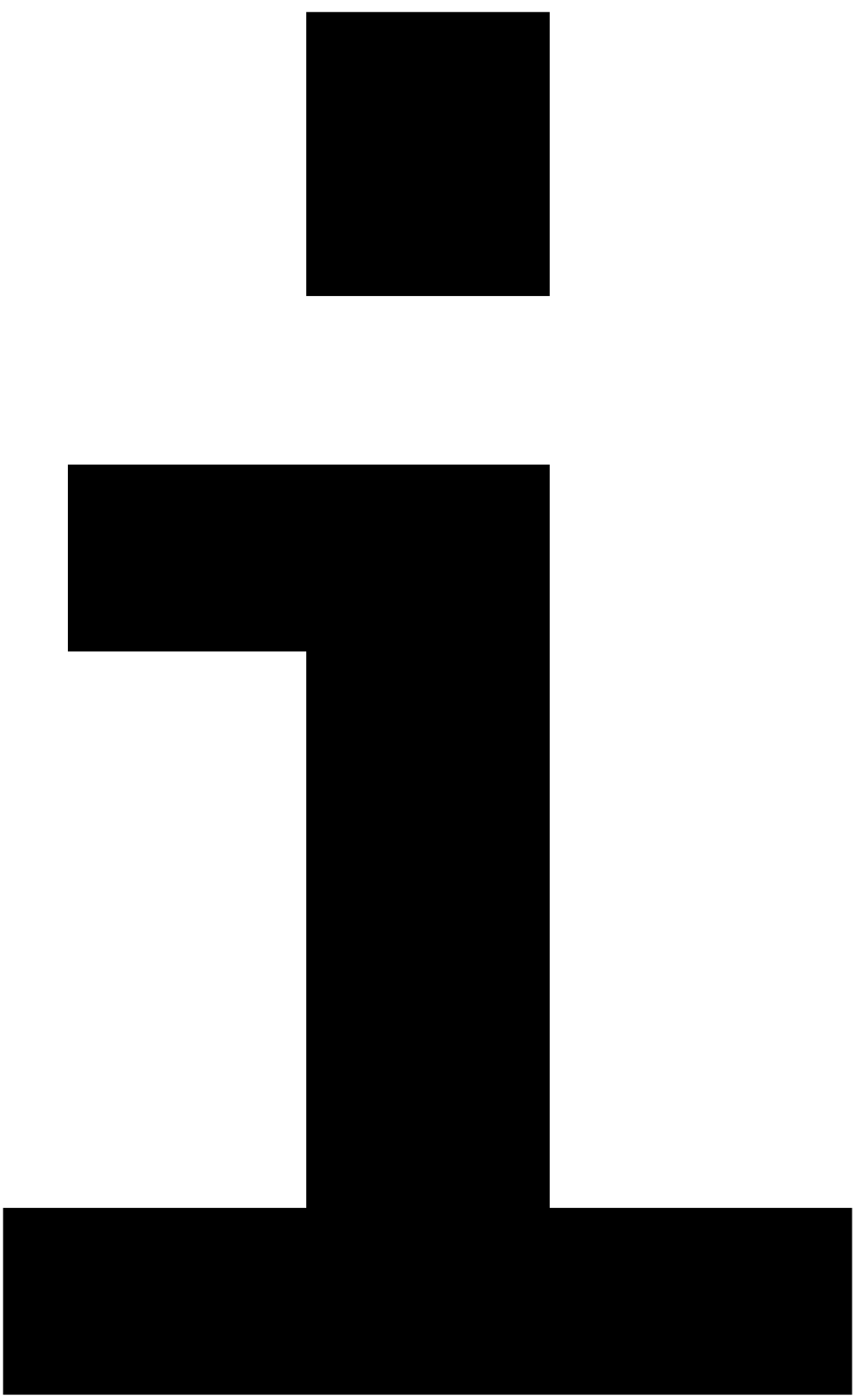


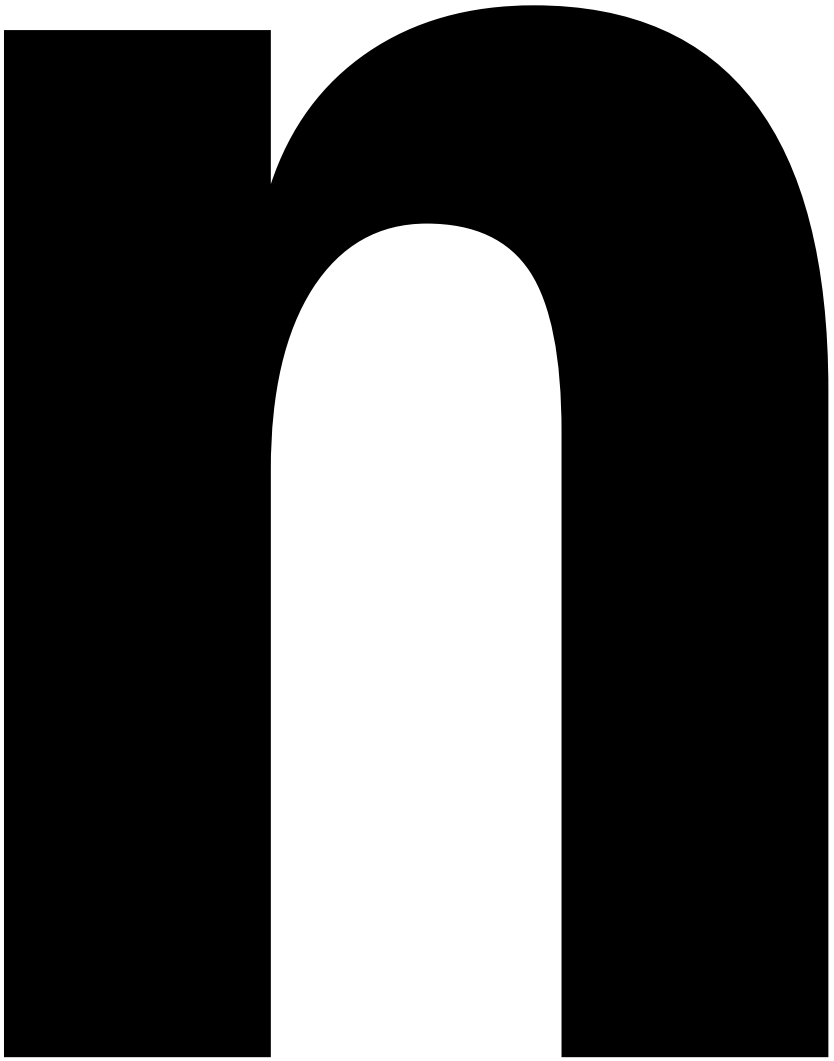
S





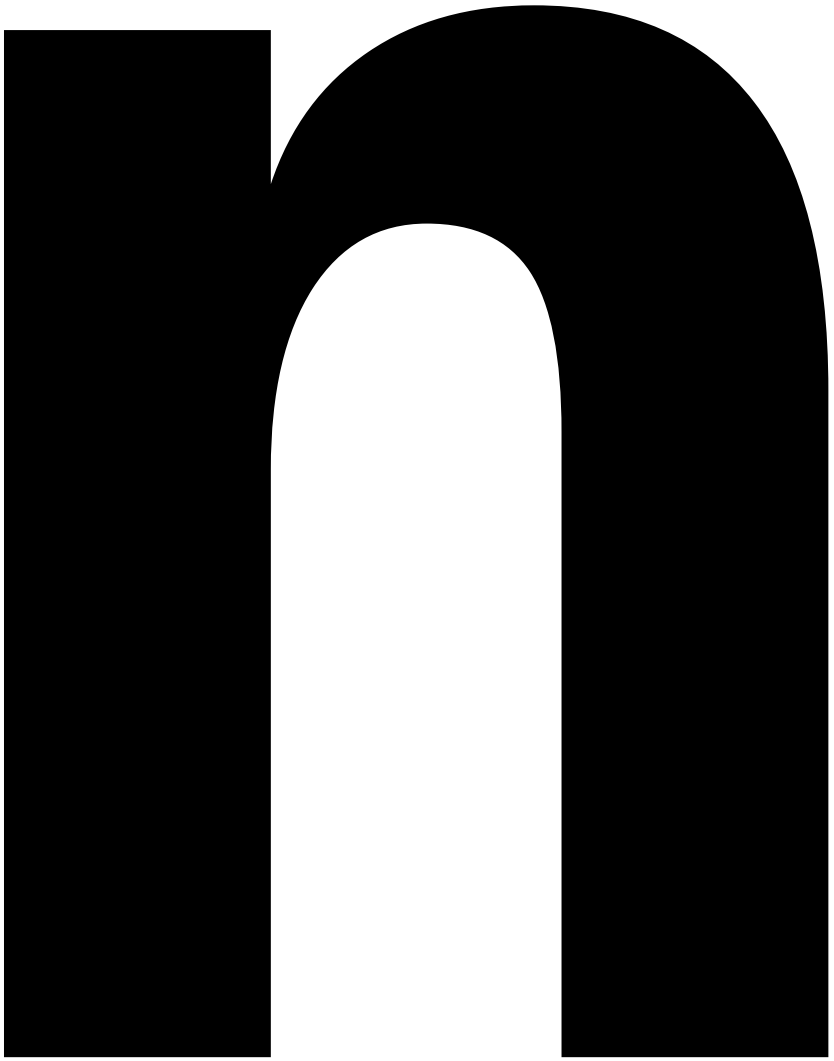
S

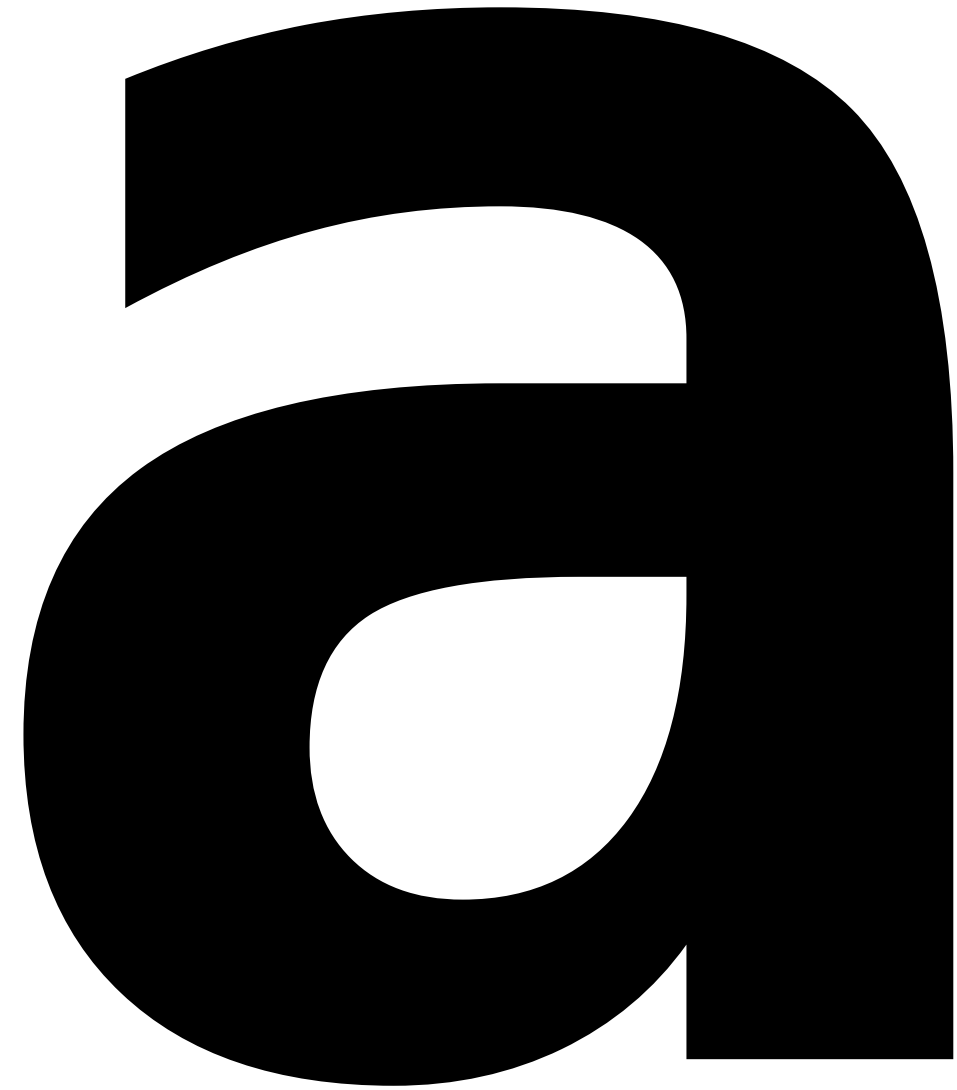


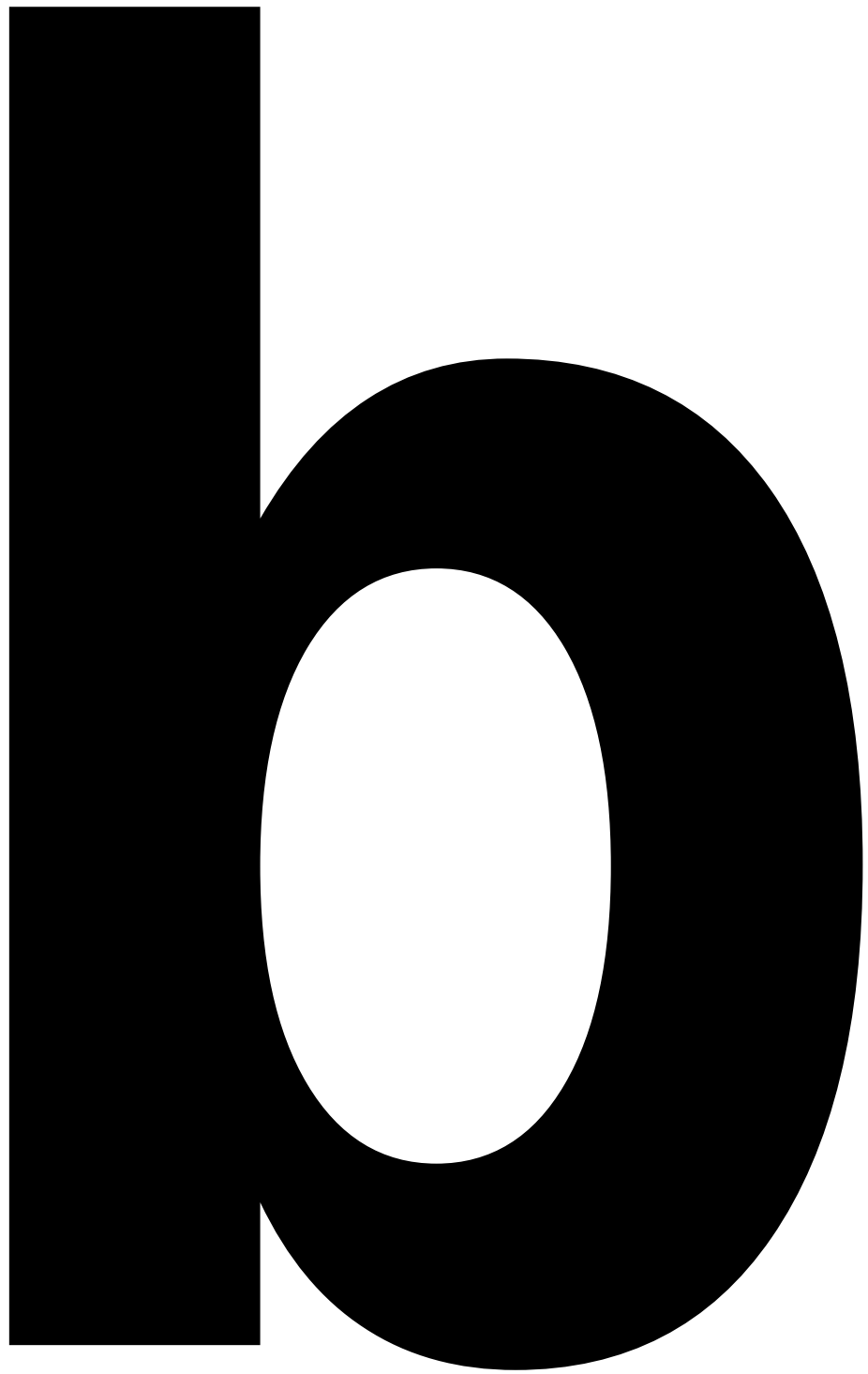


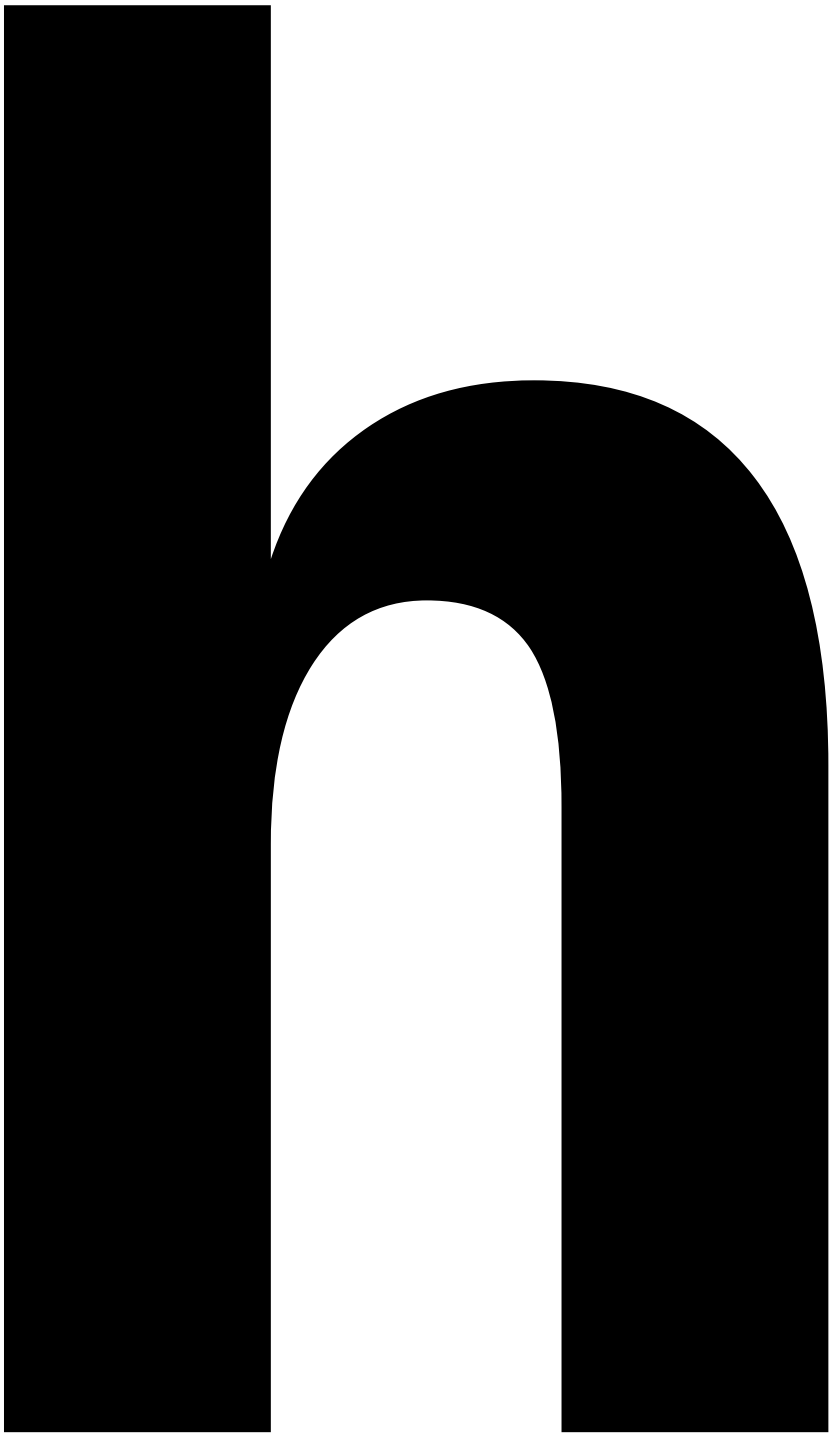
d

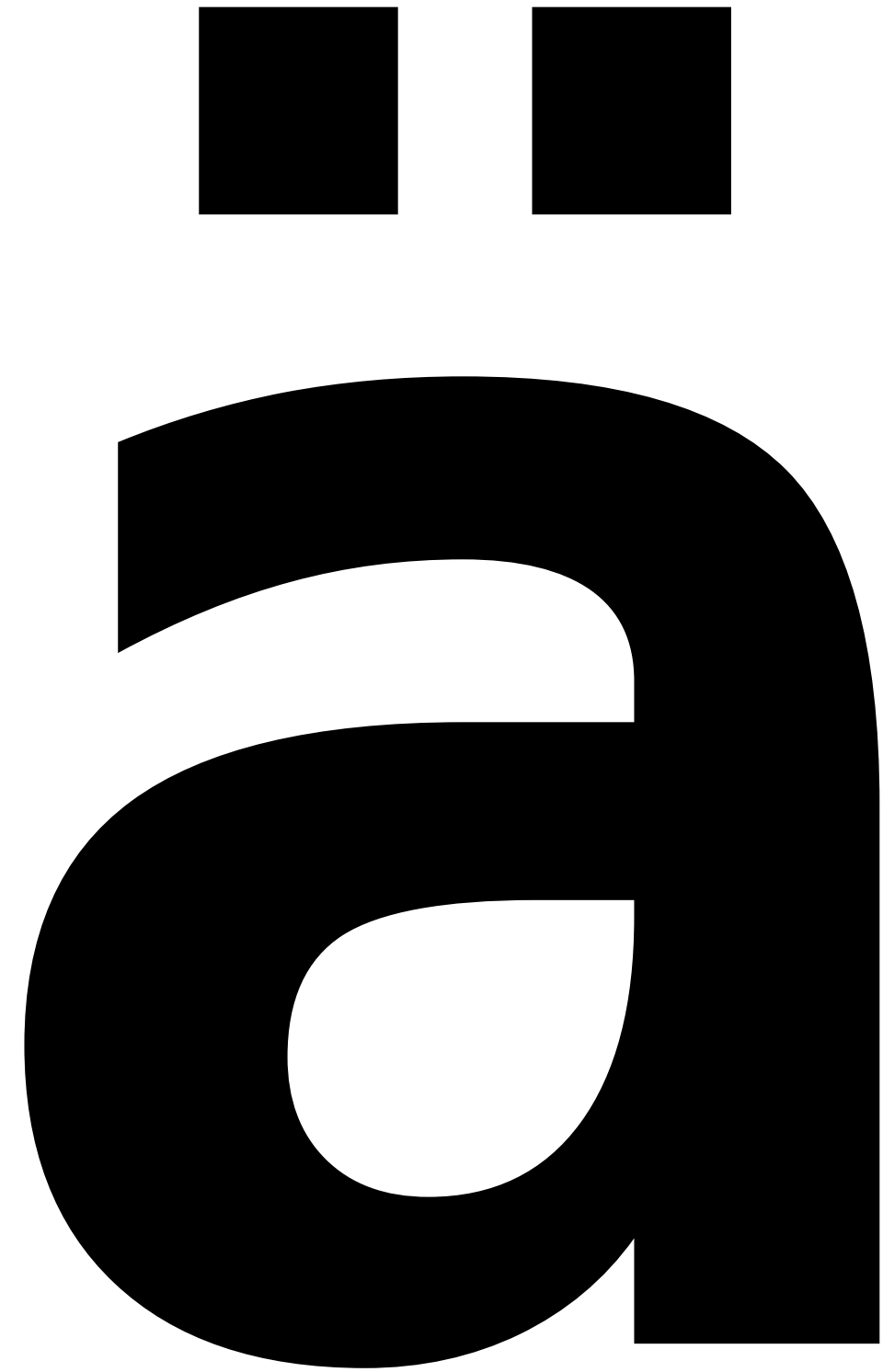
u

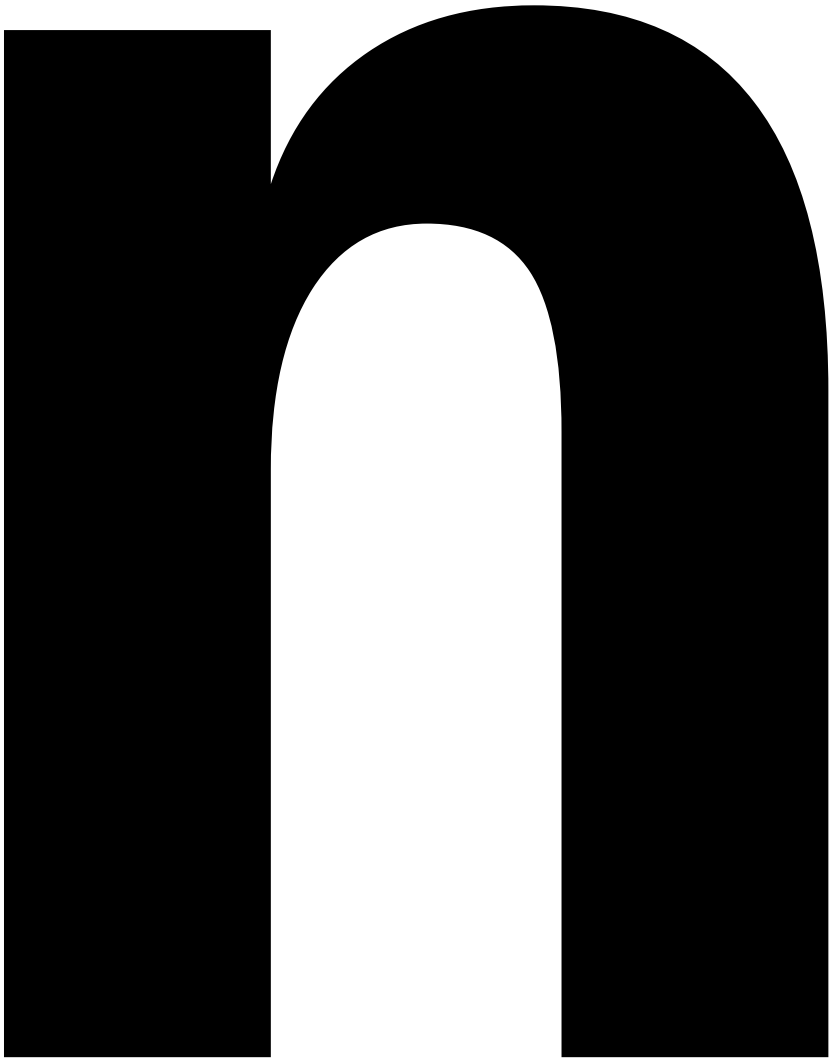


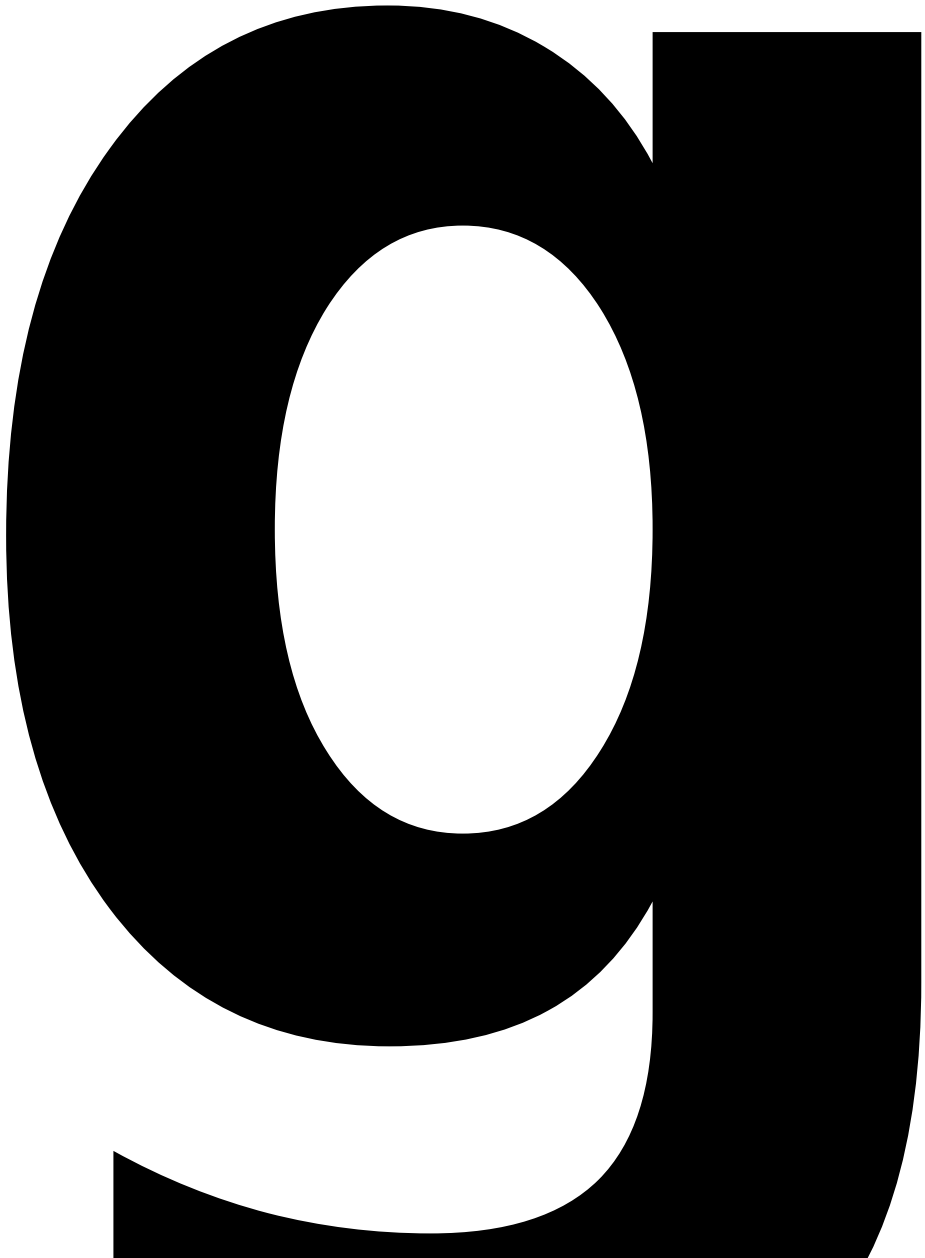


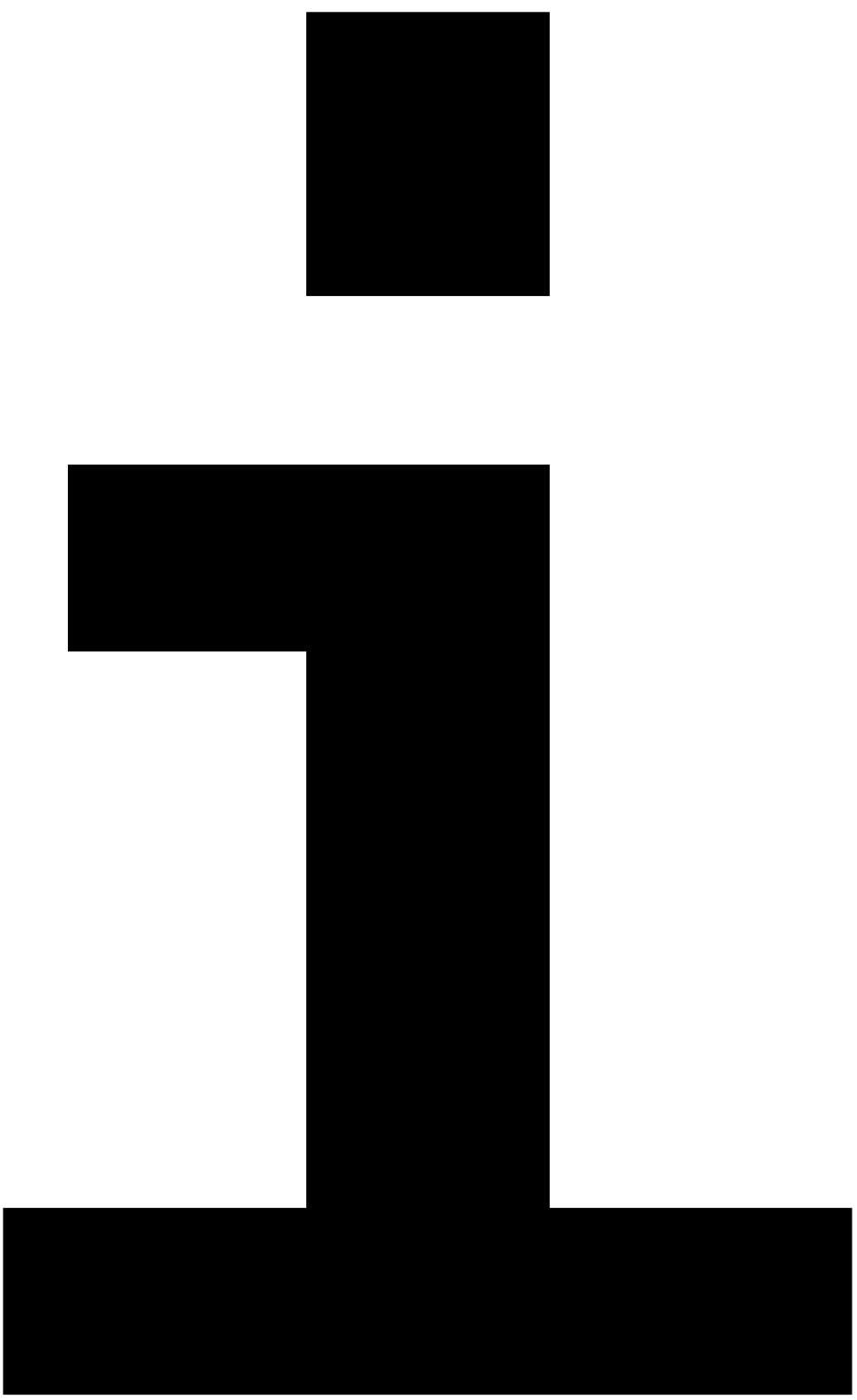


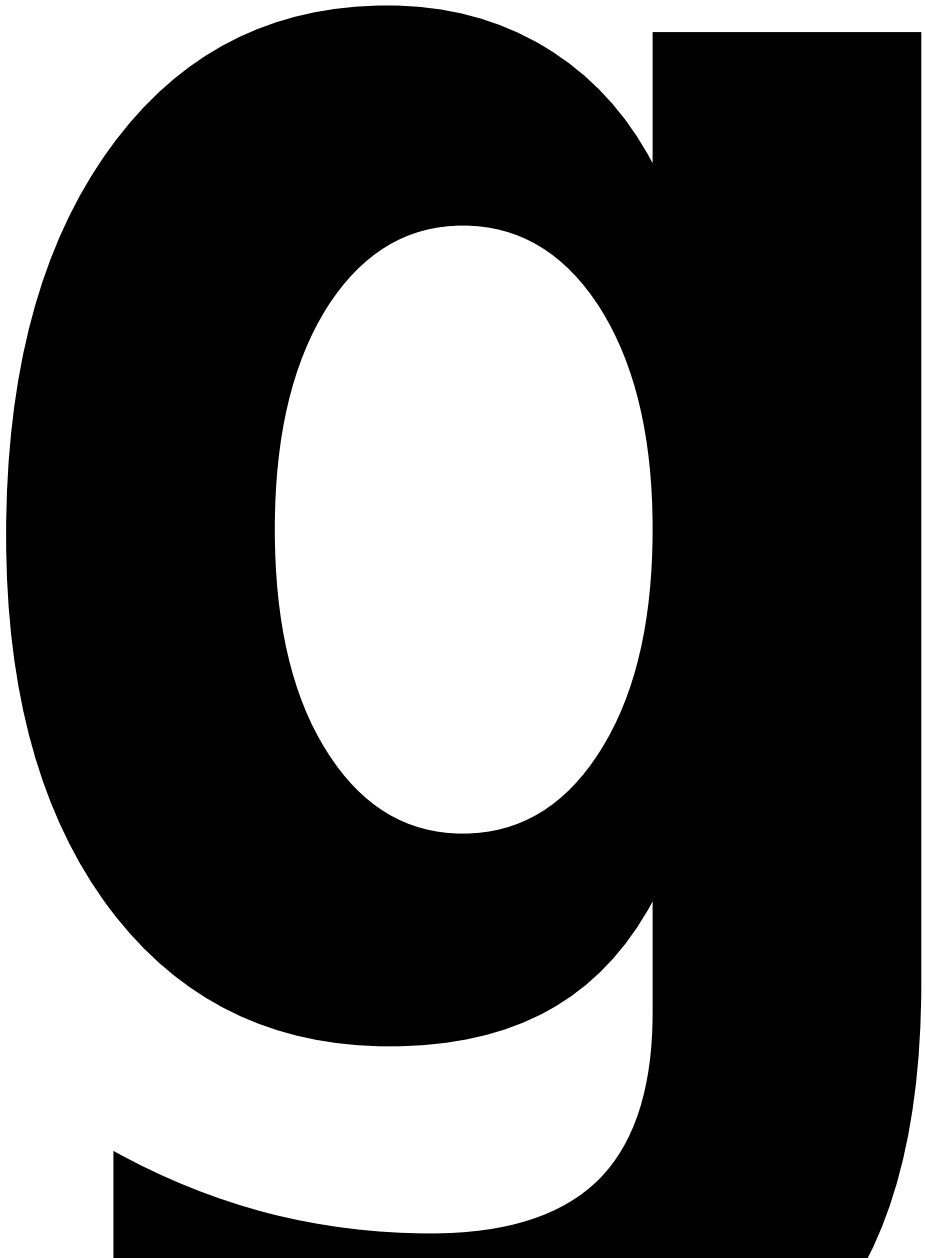




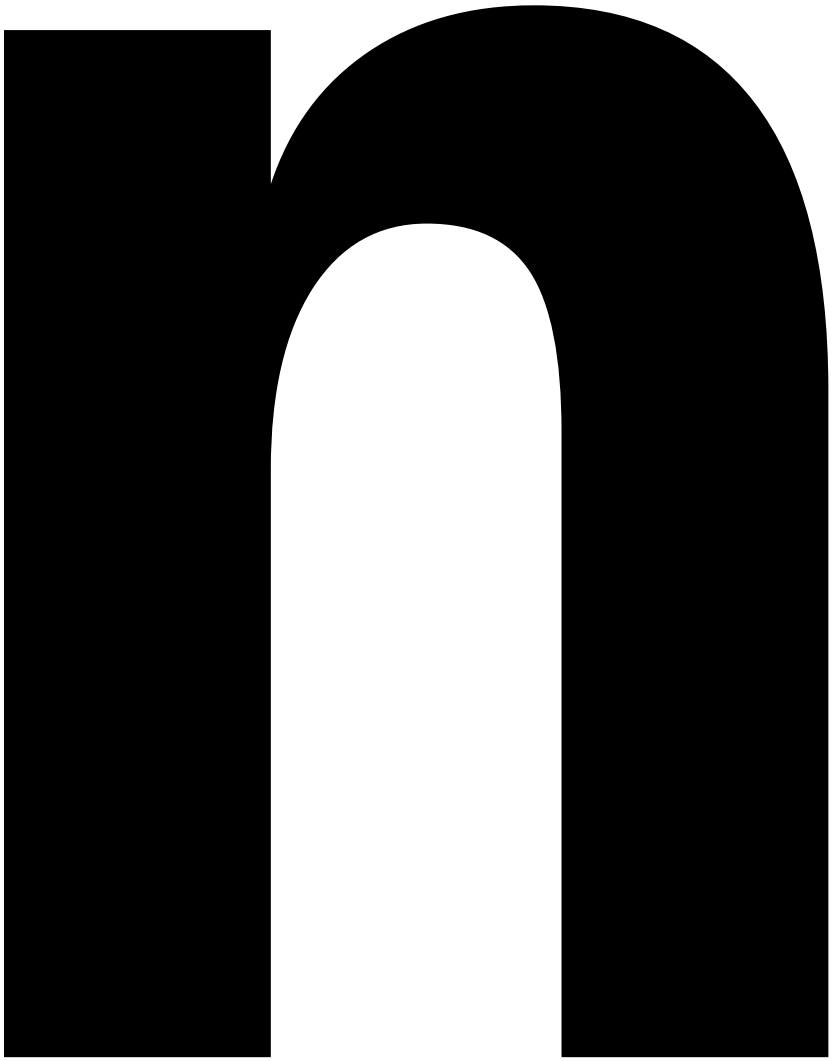




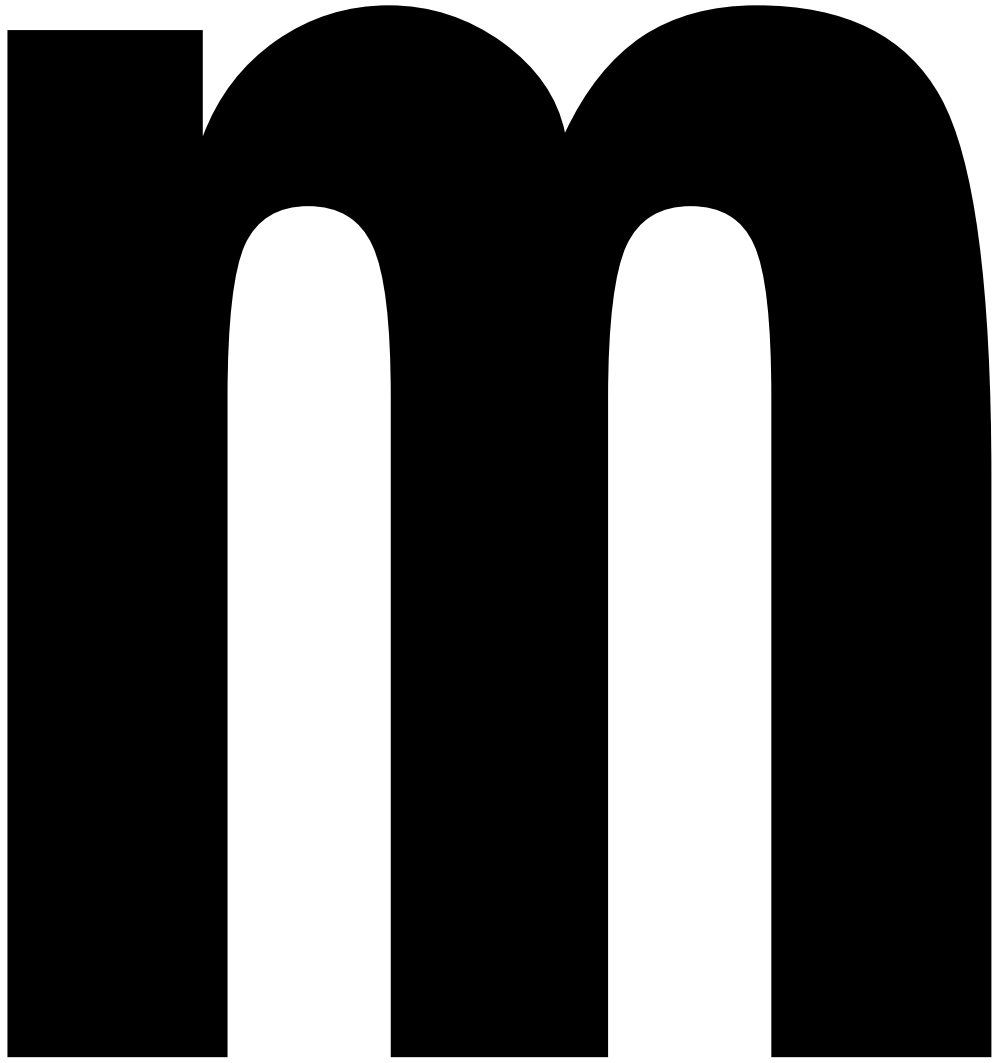


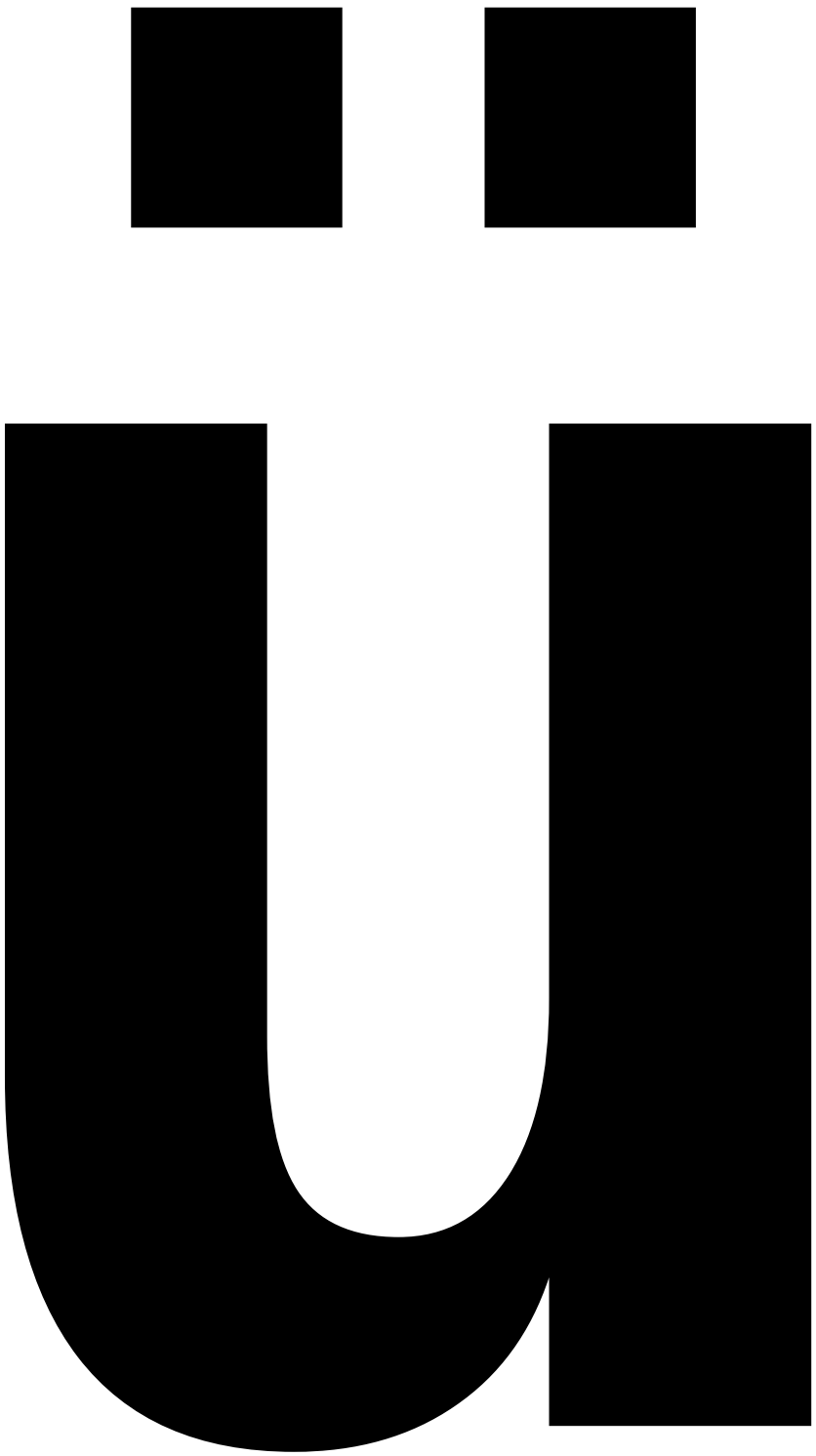


u



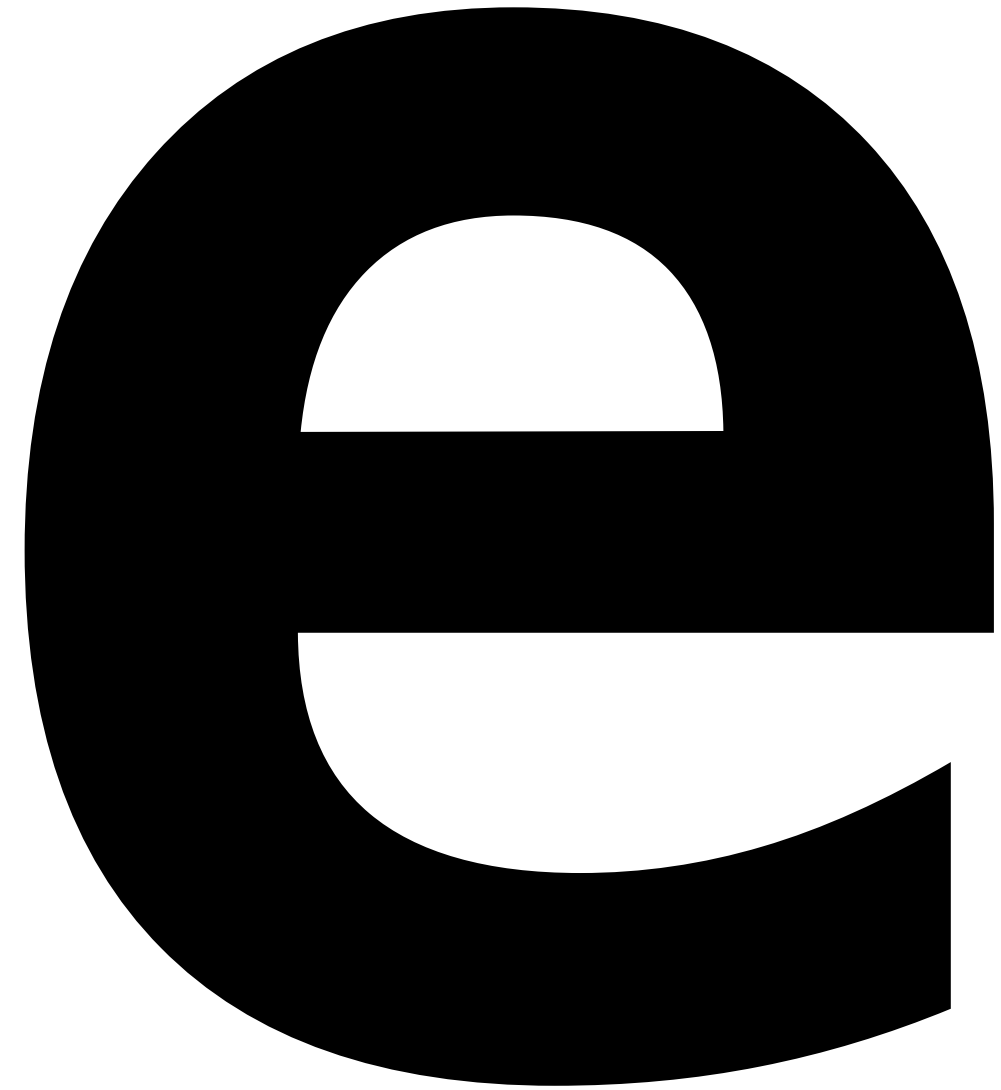
d

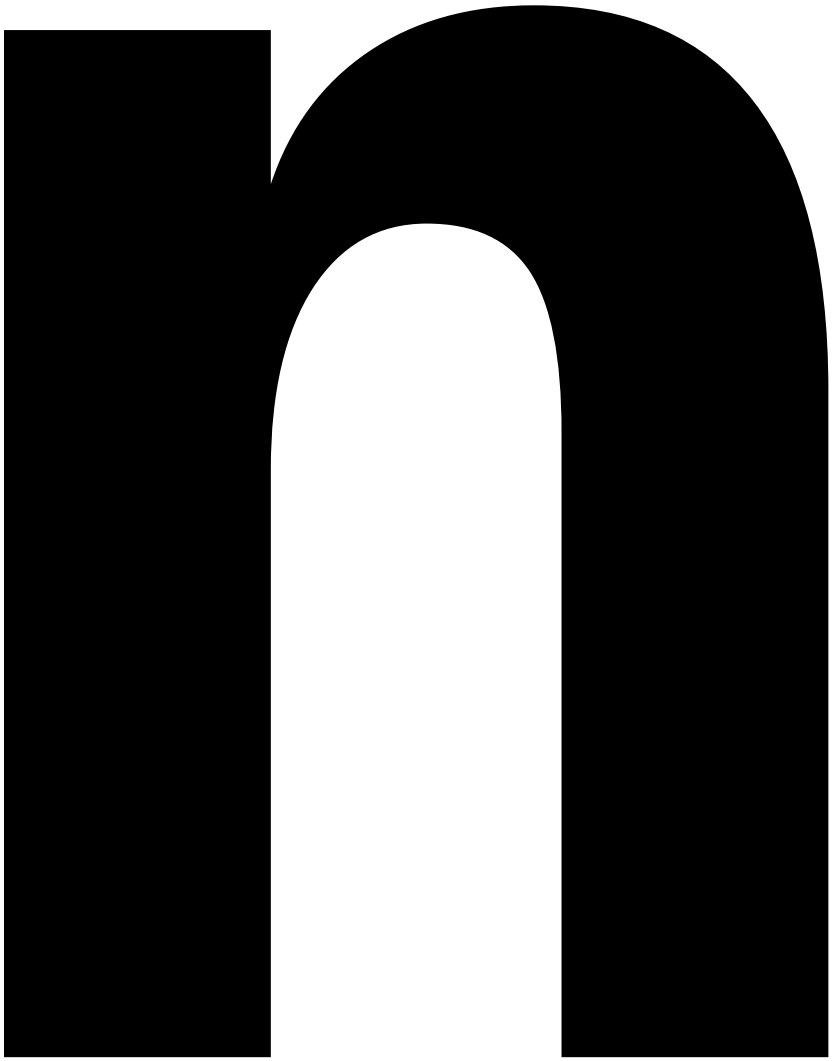


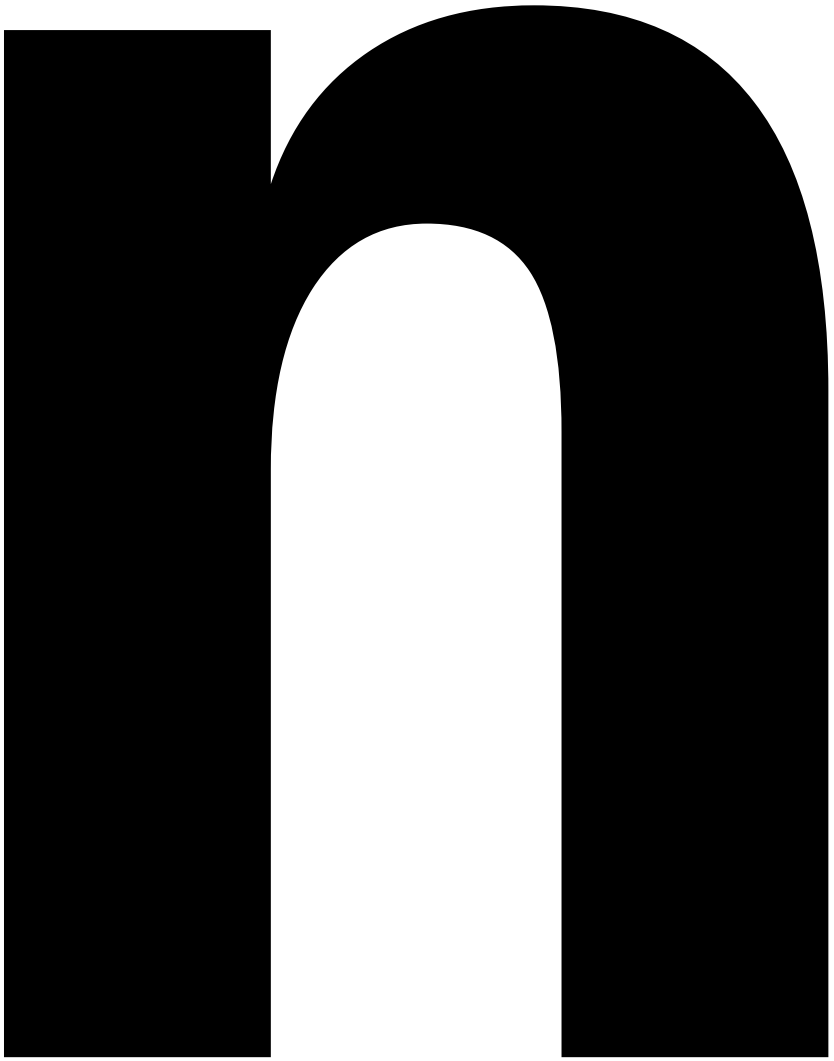


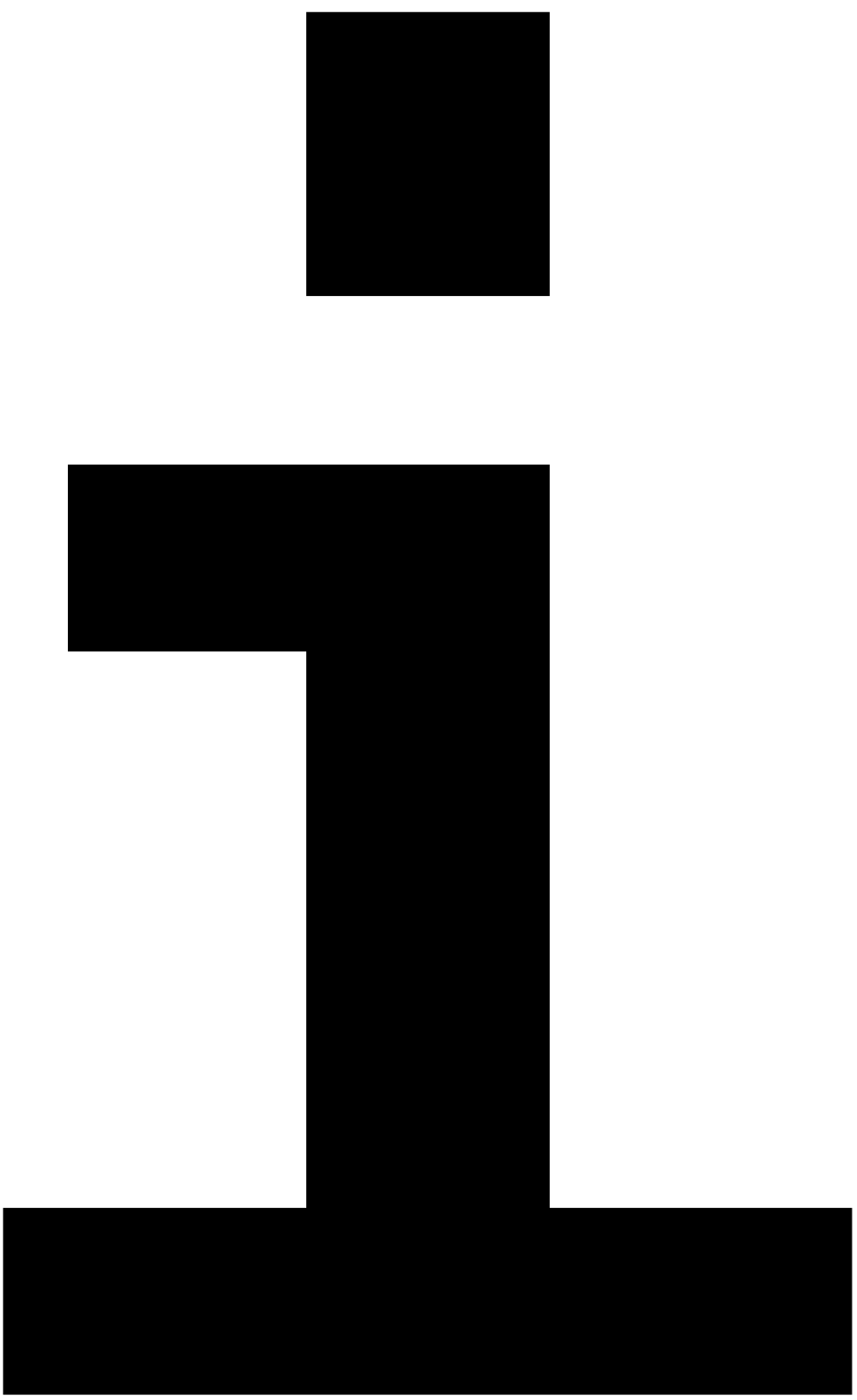
S

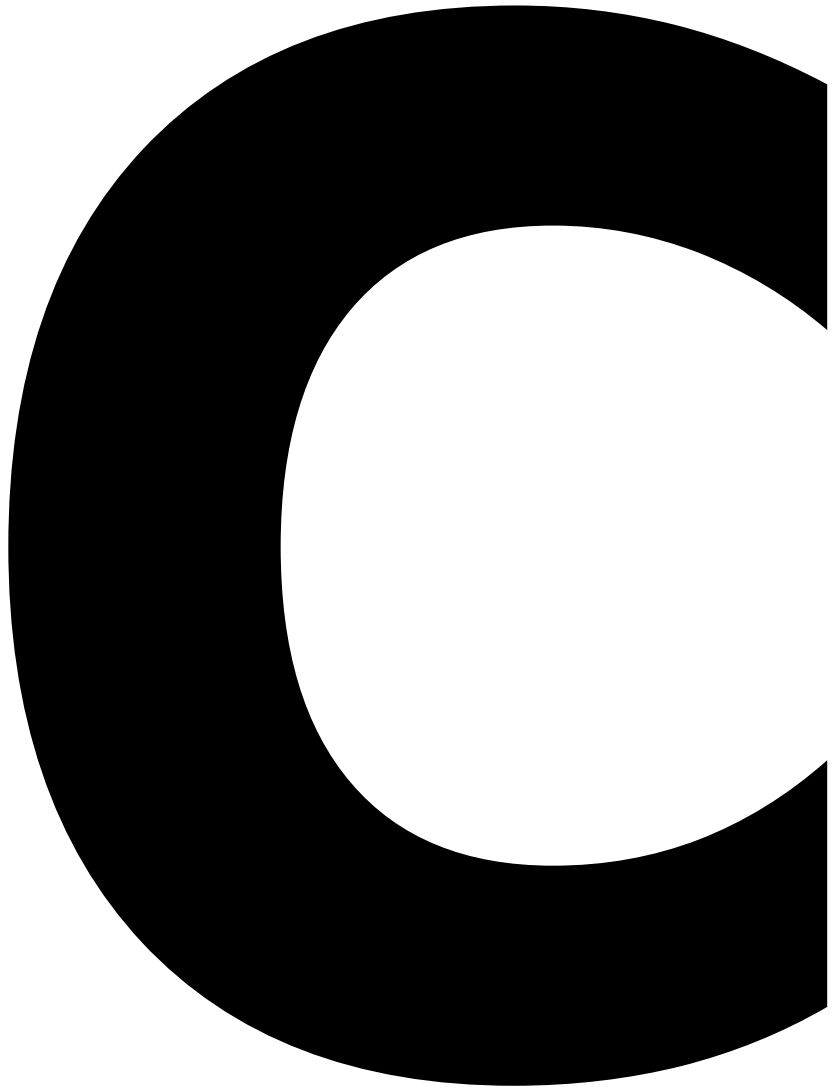
S

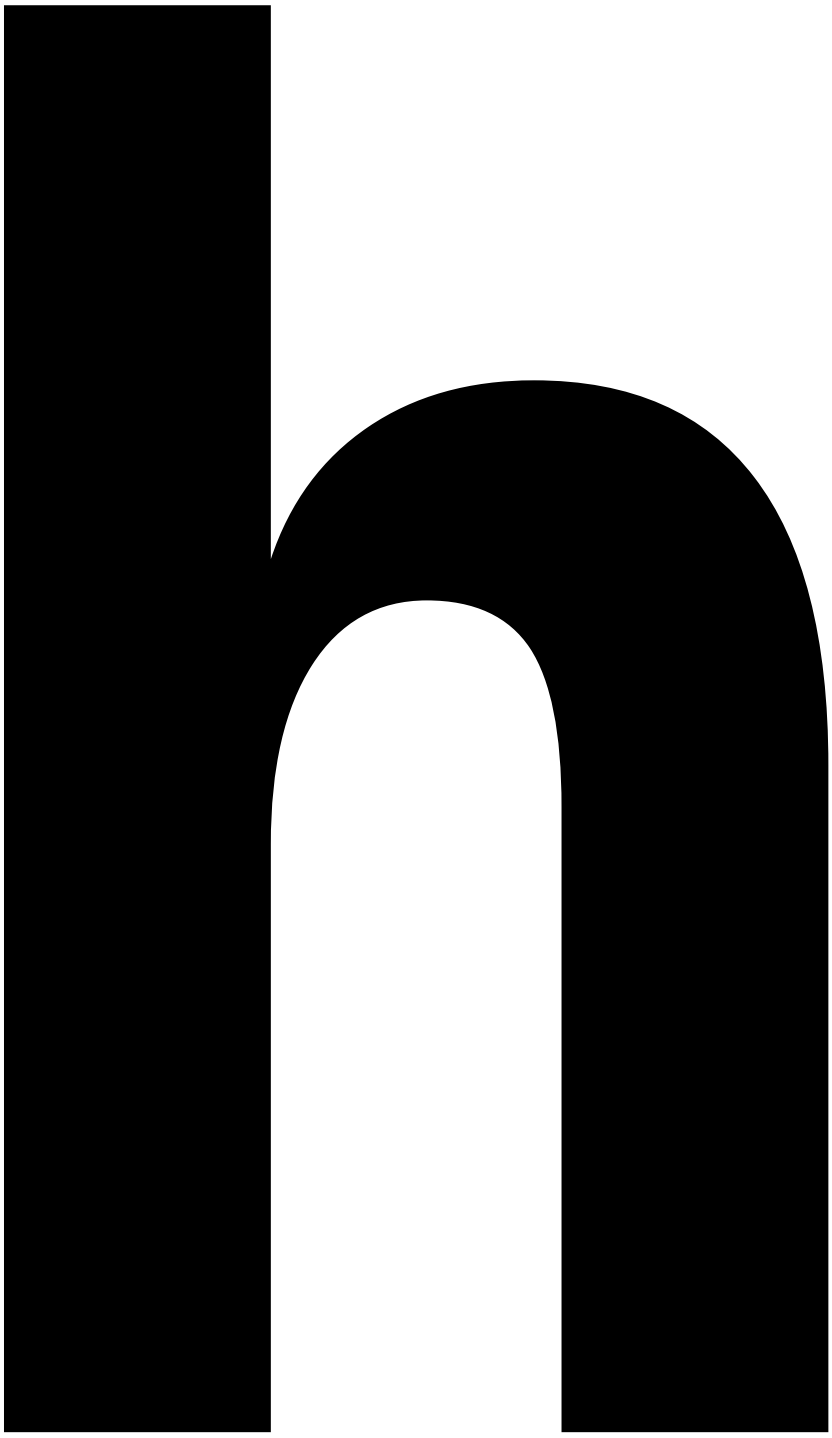


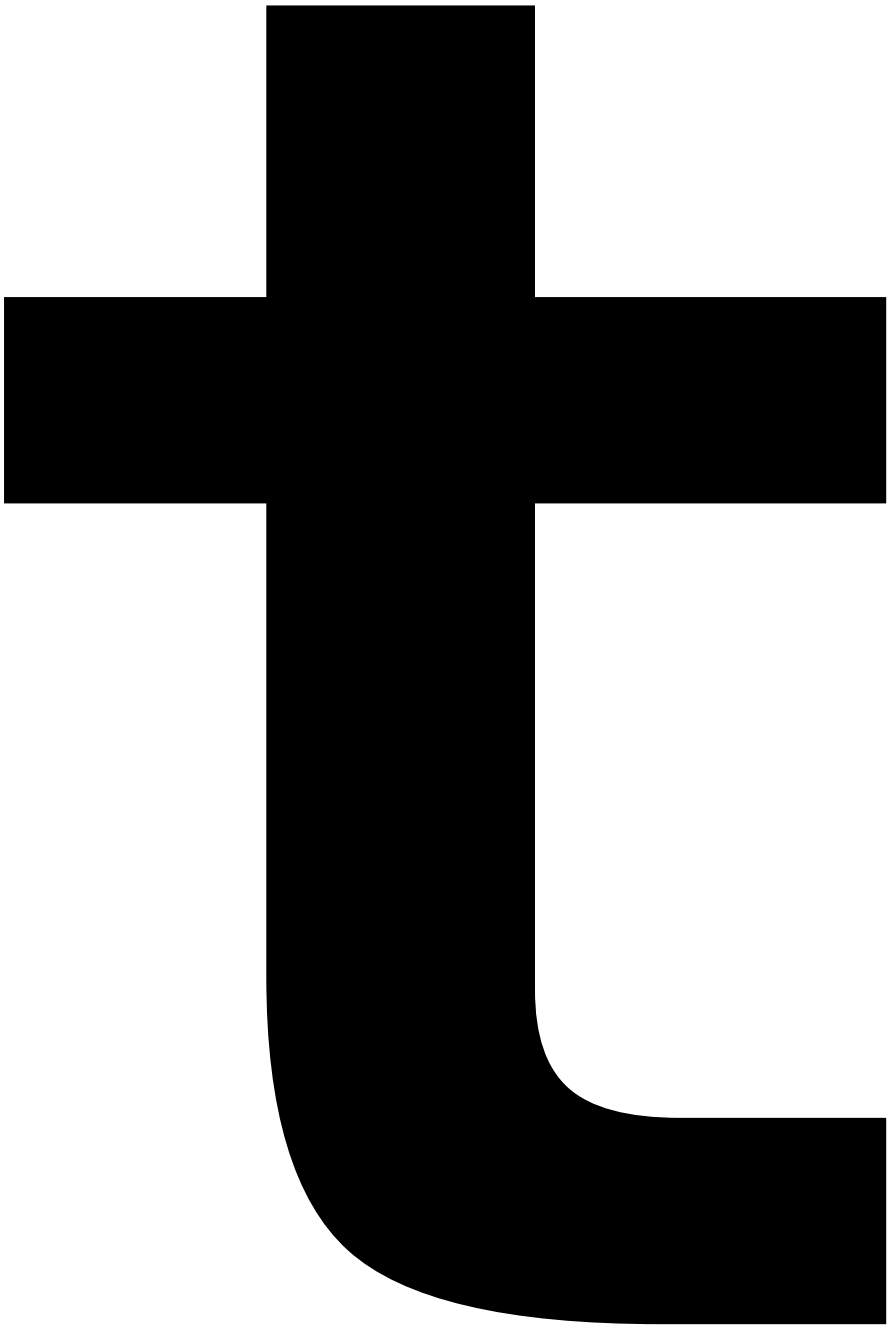


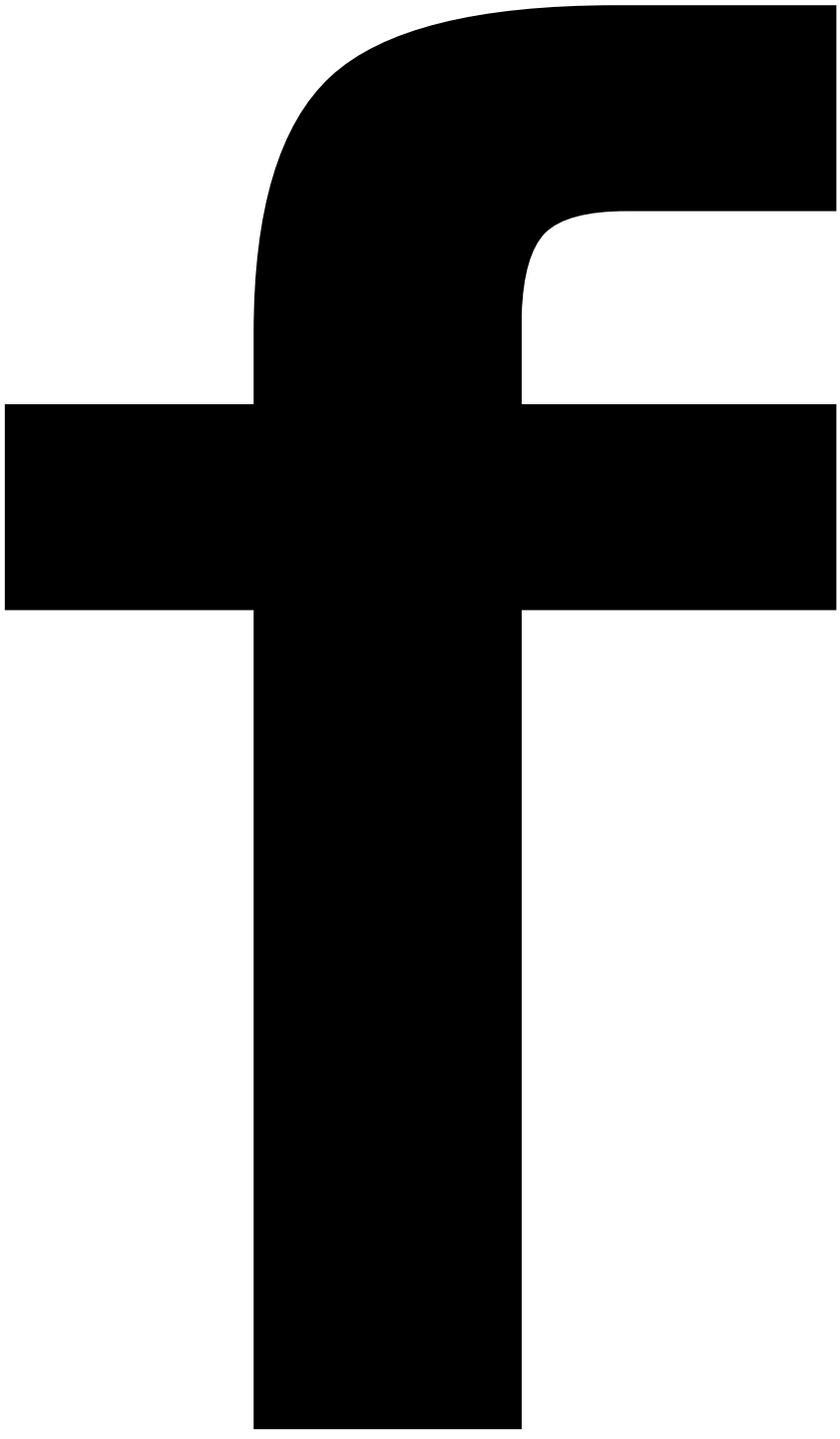


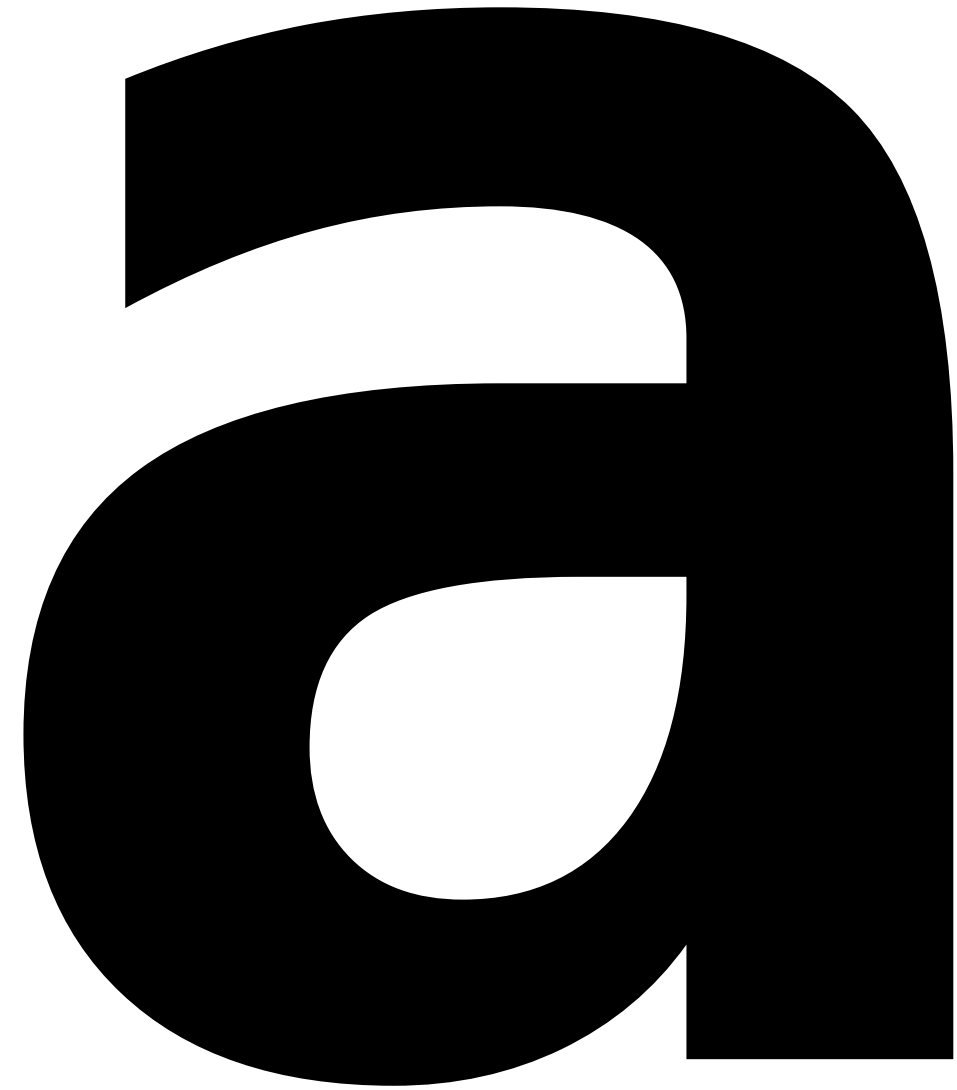


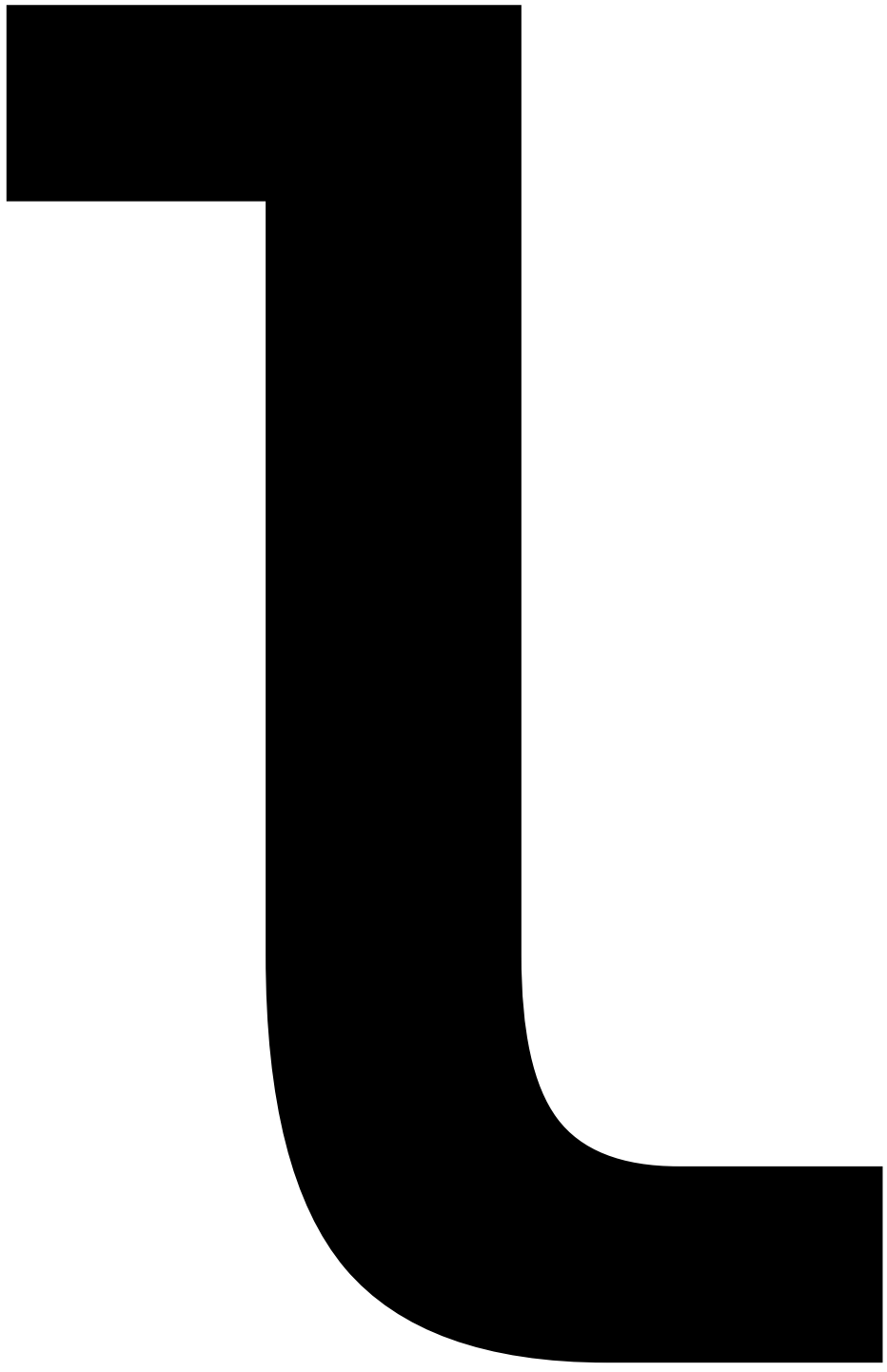




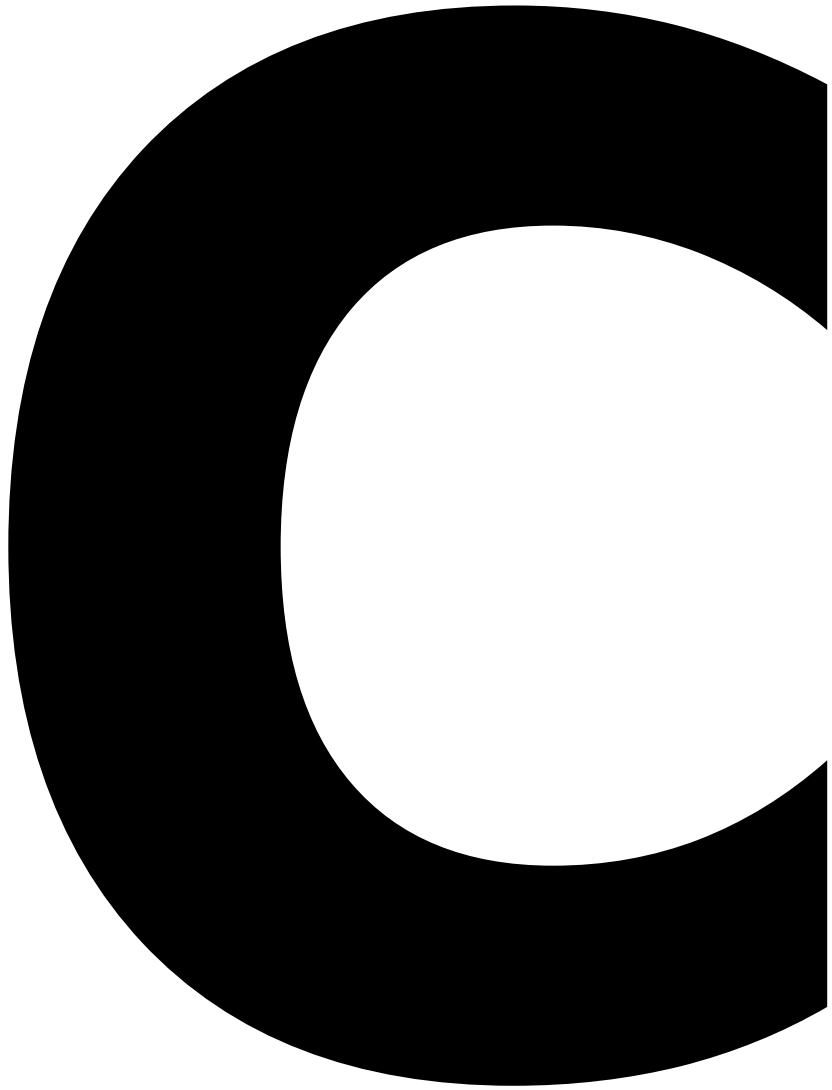


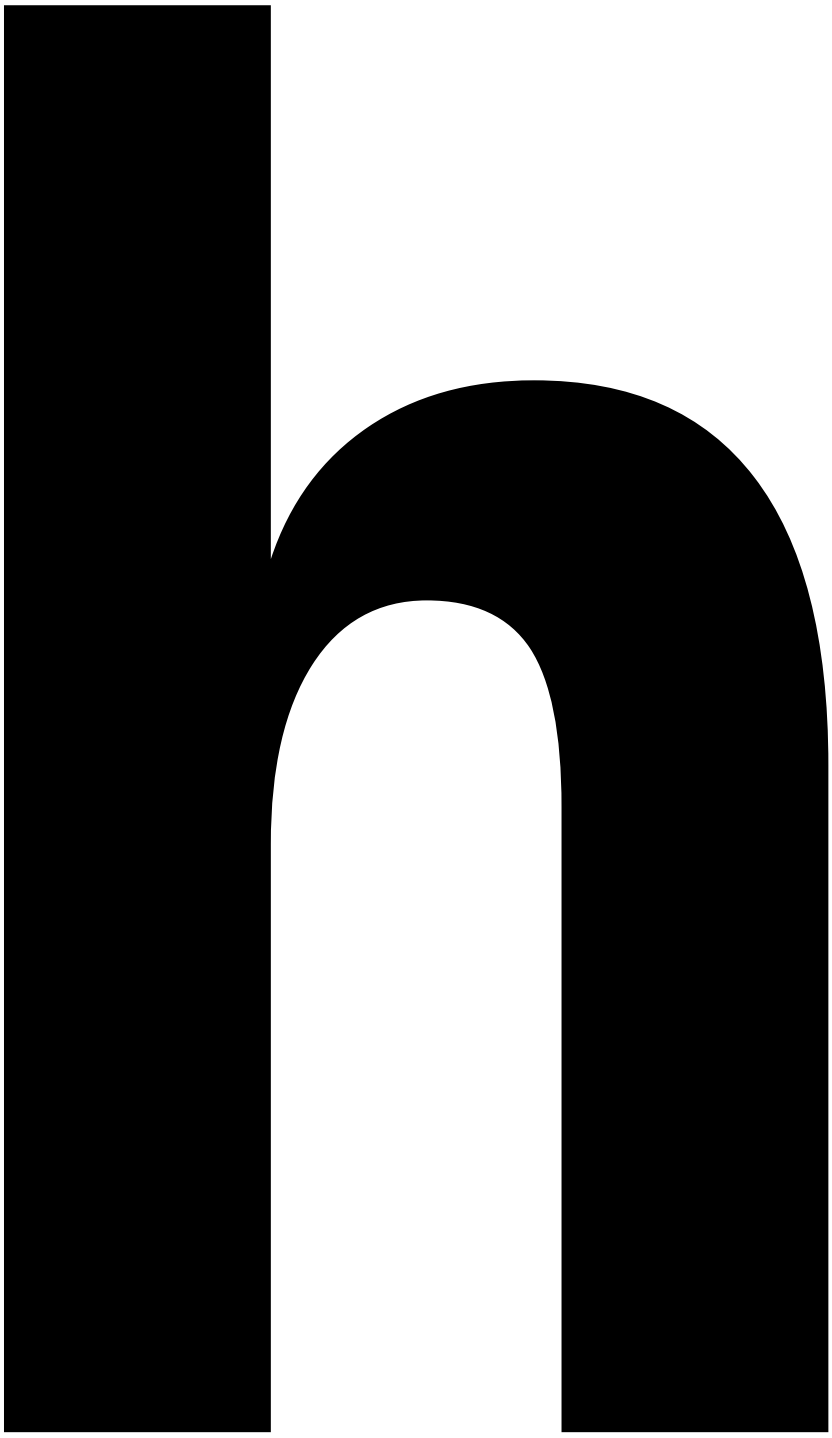


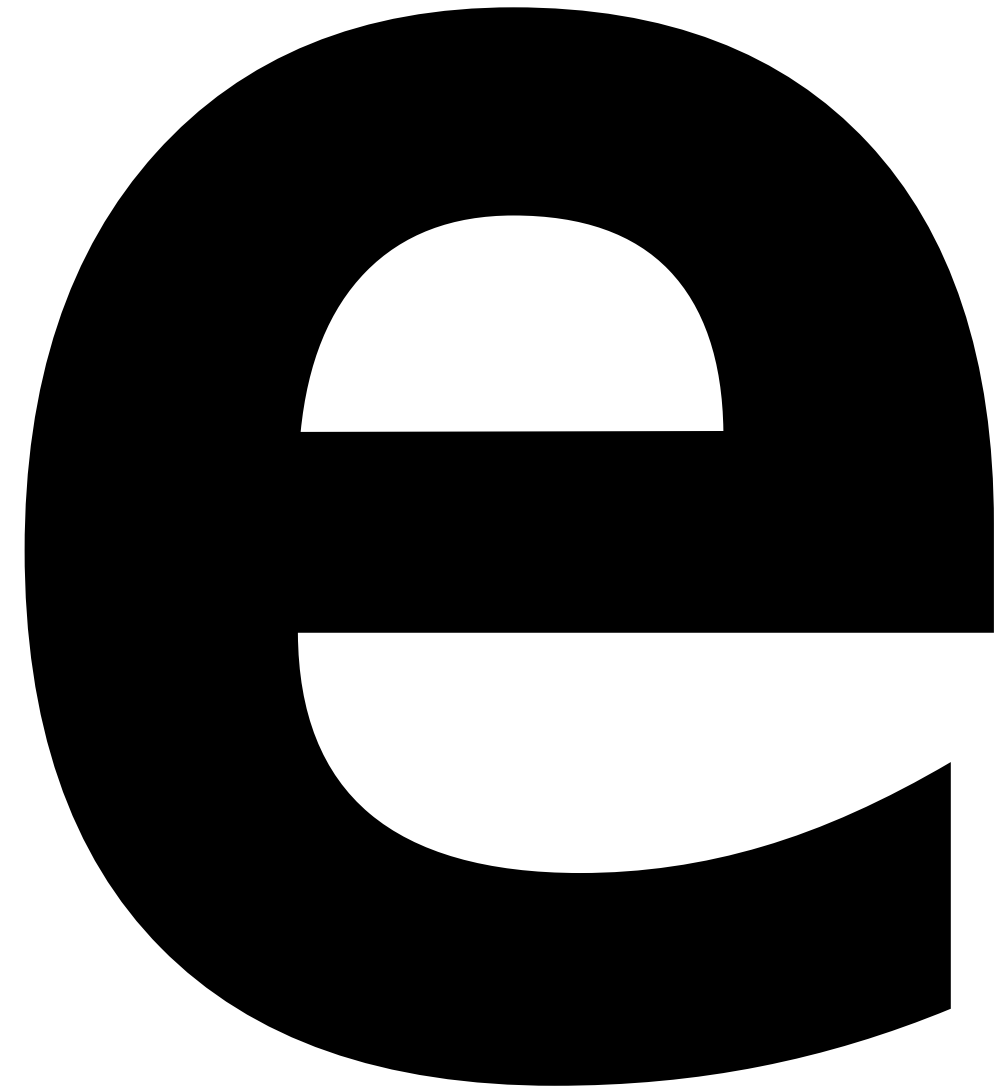


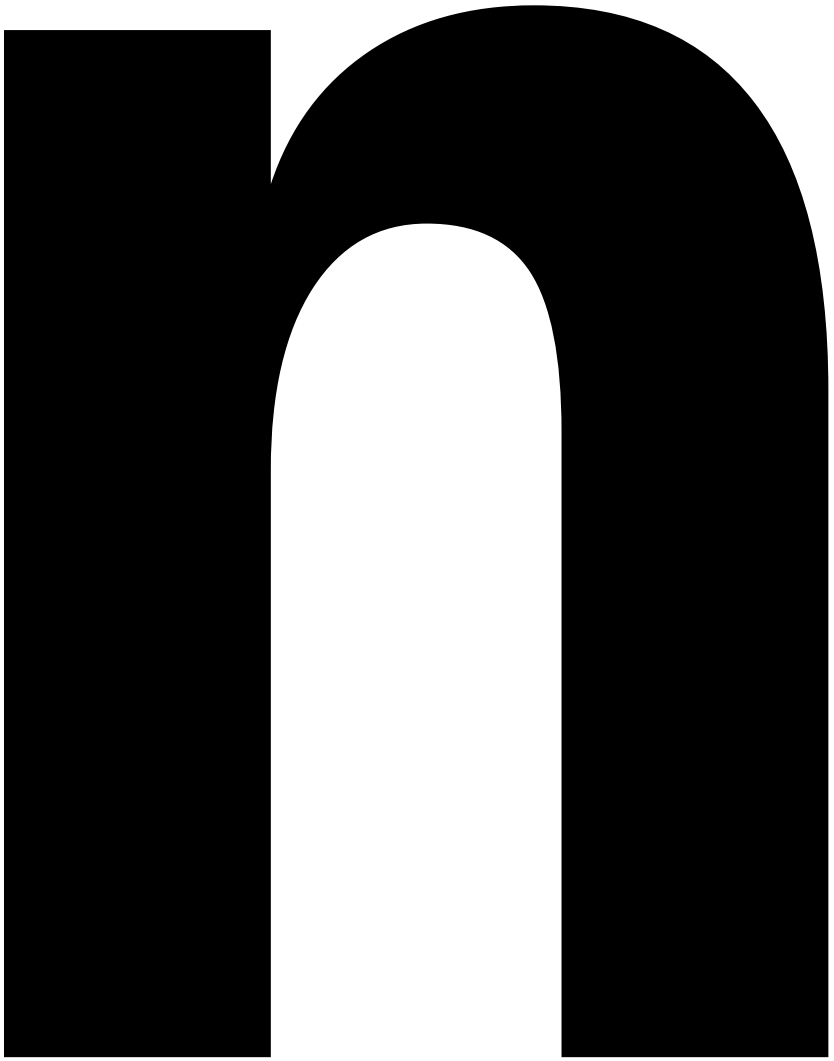


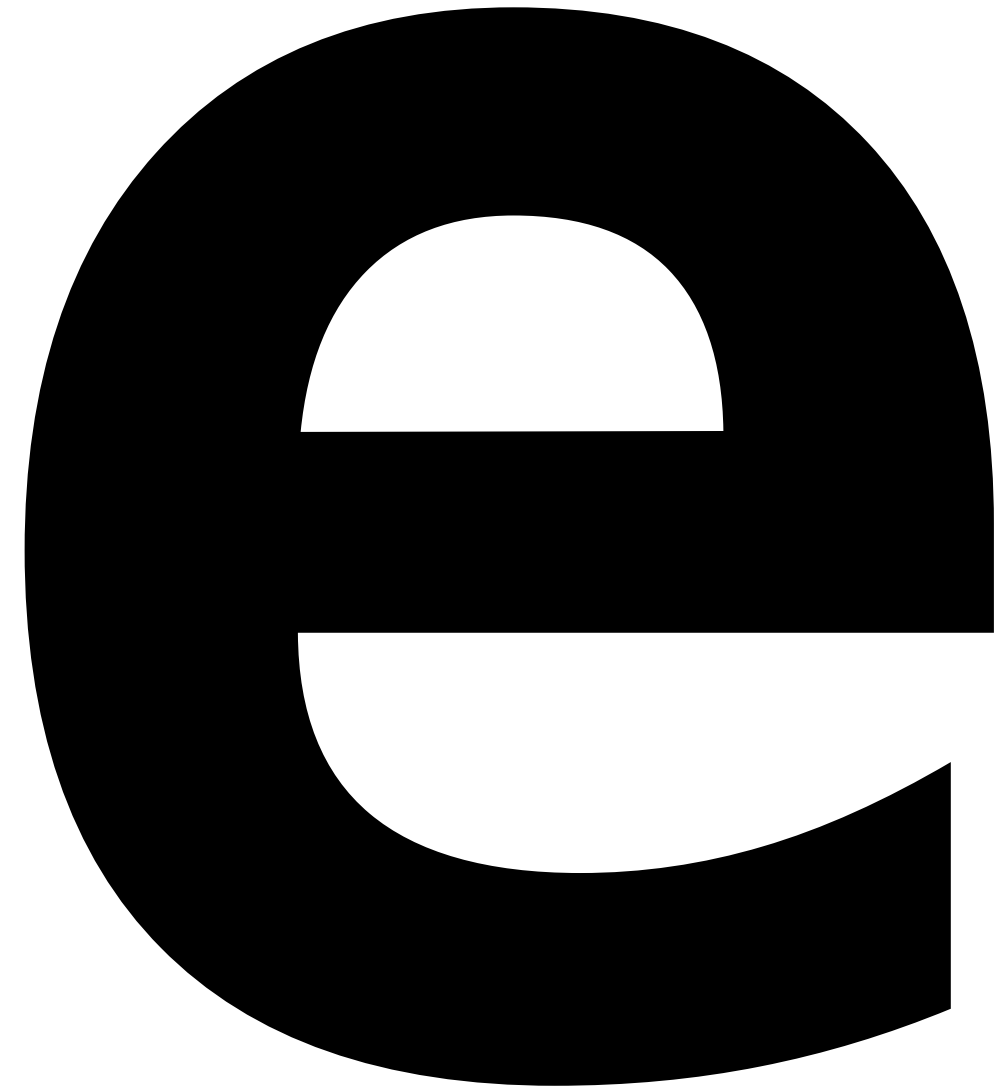
S



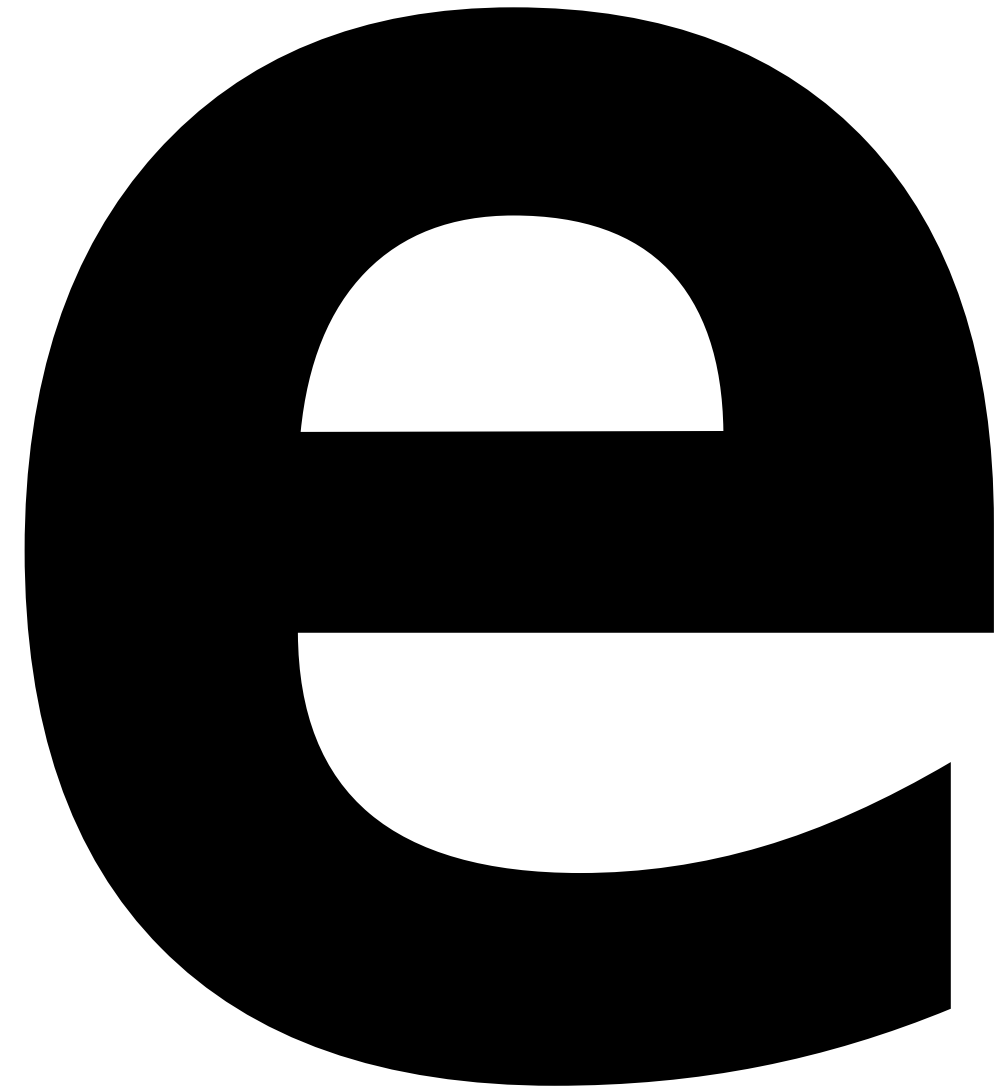


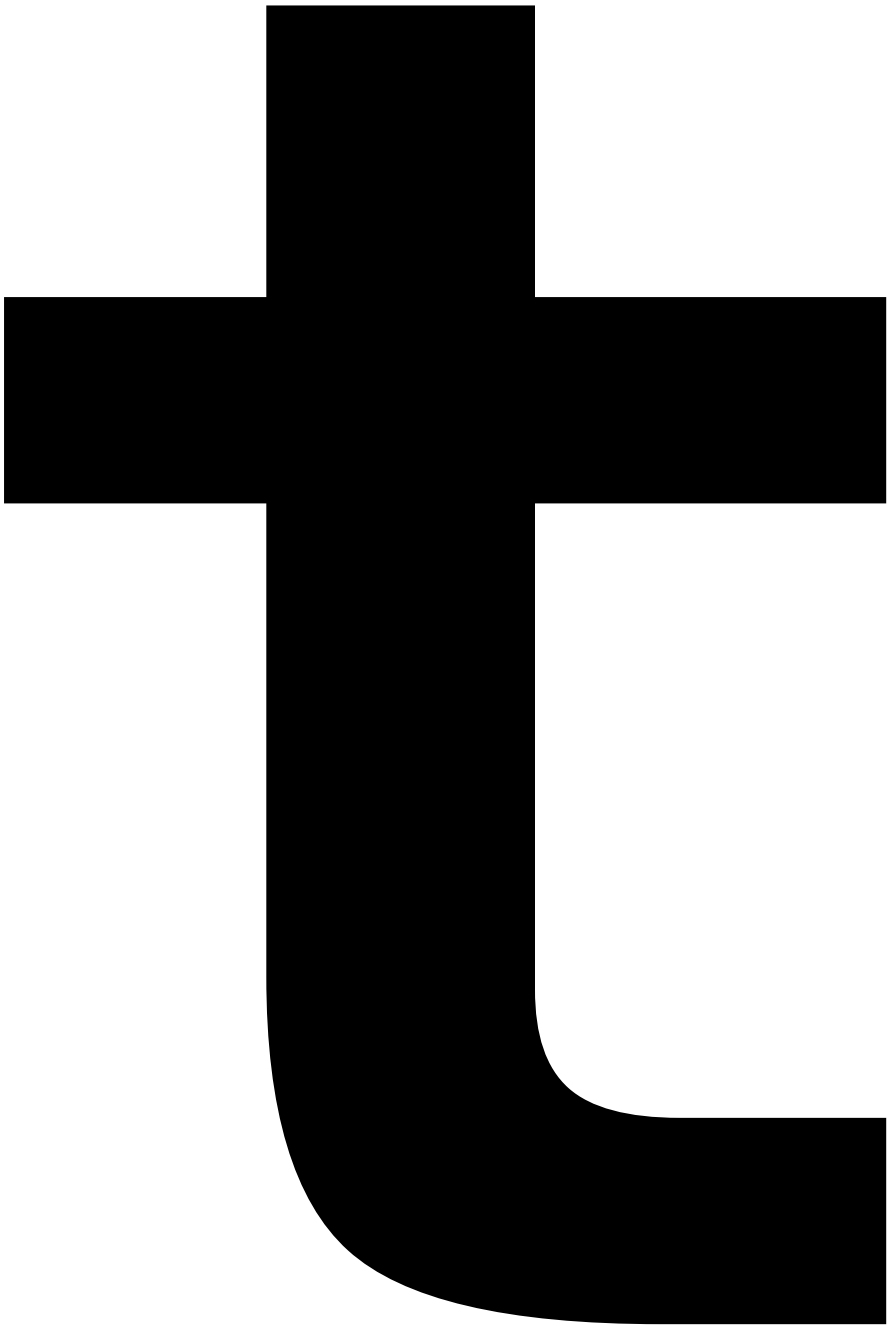


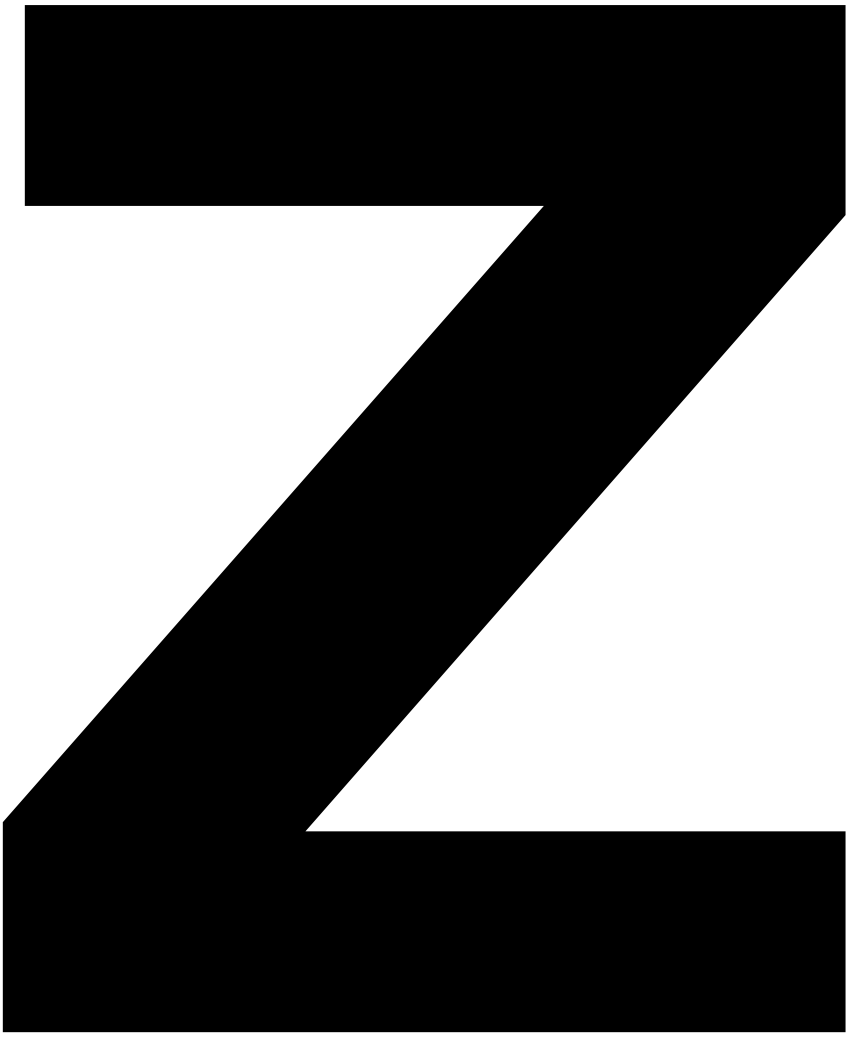


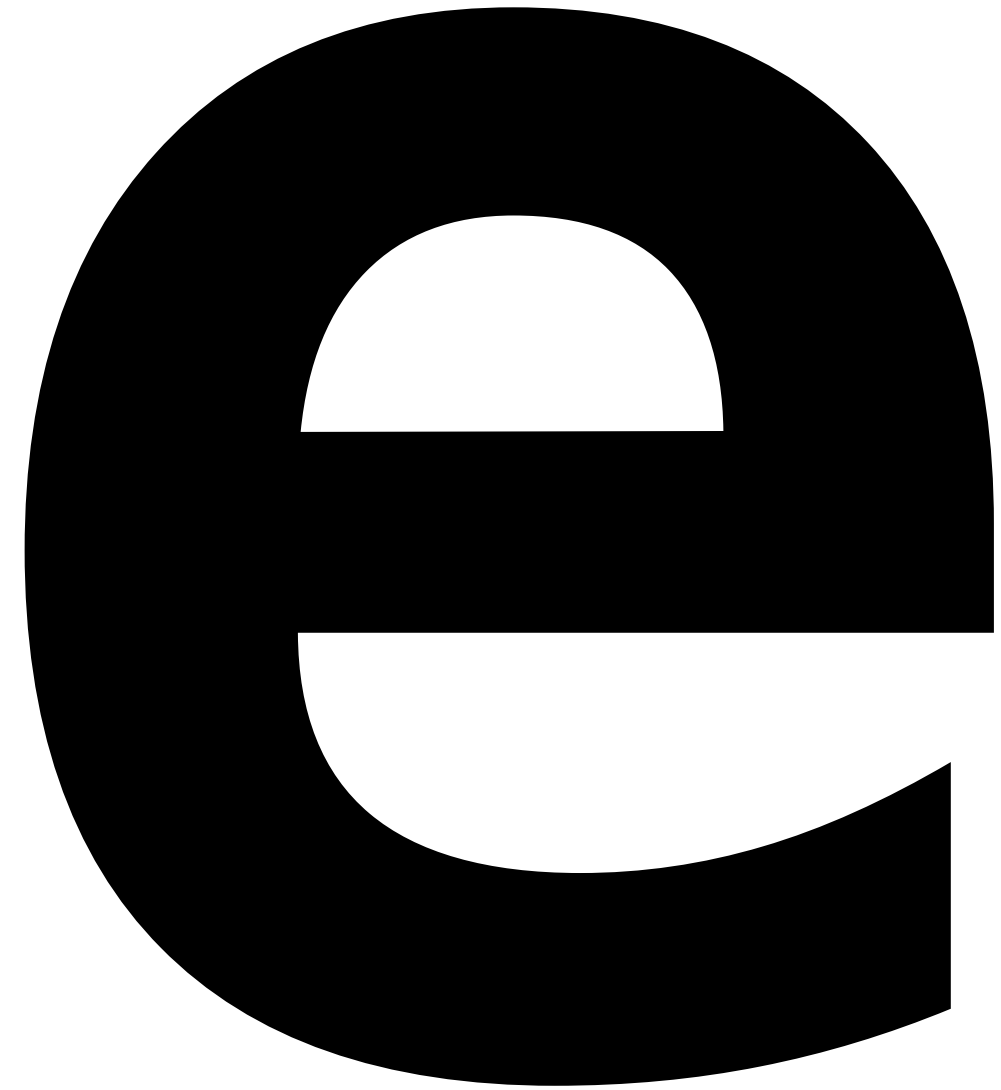


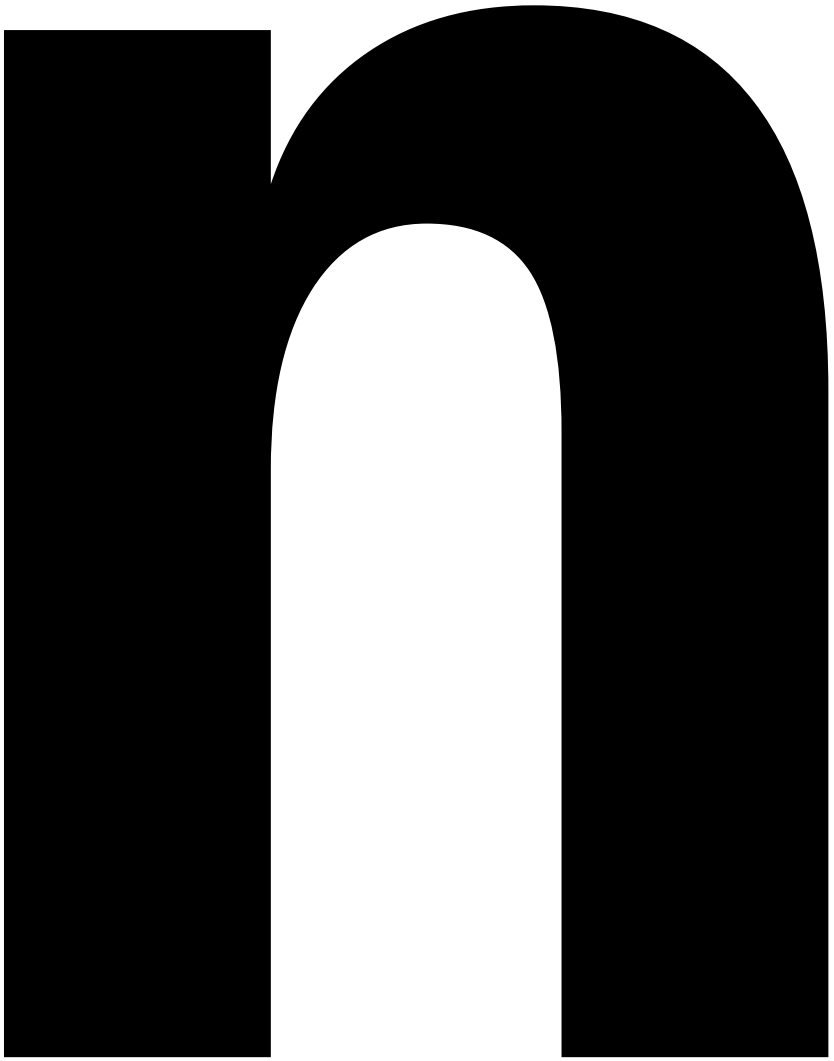
S

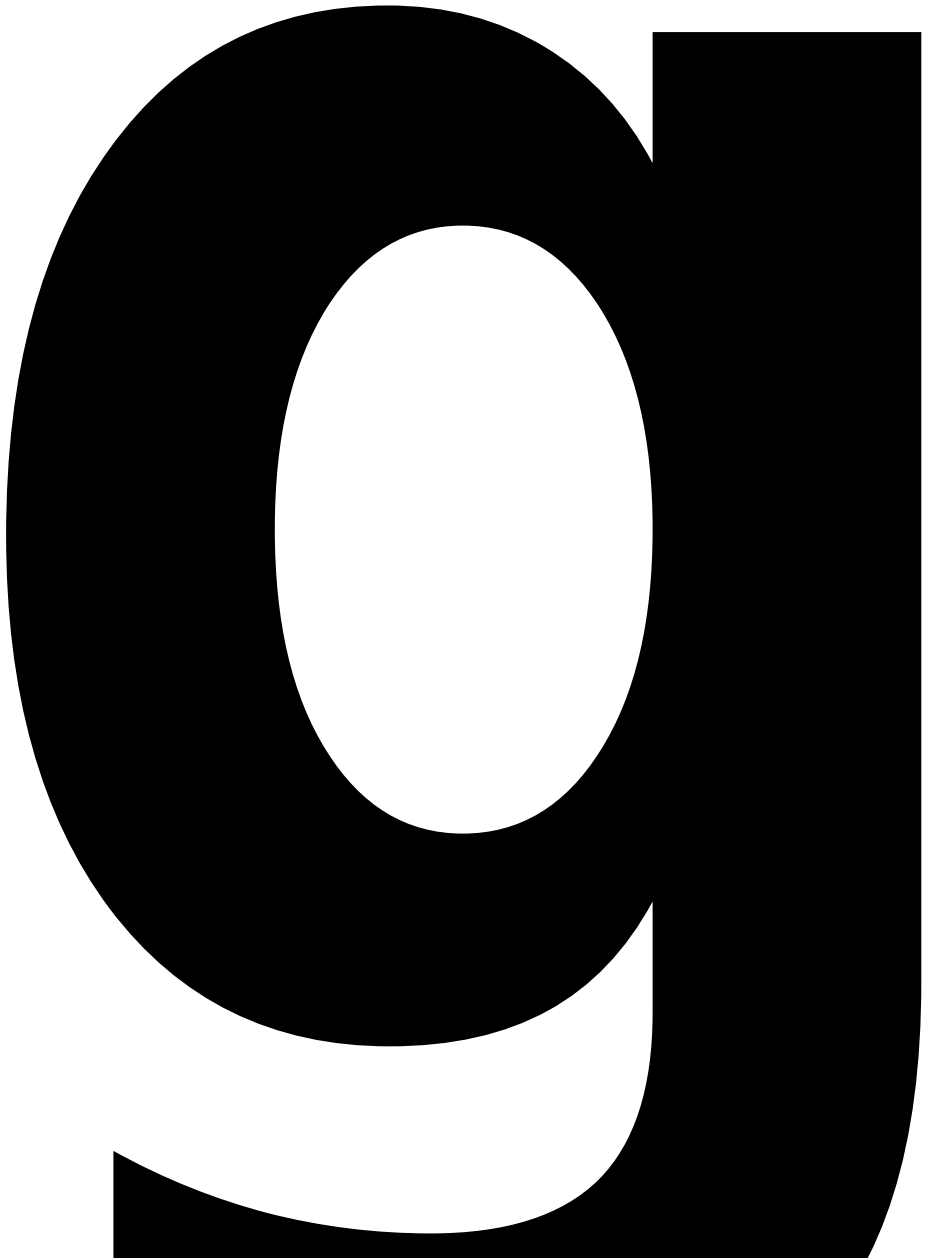


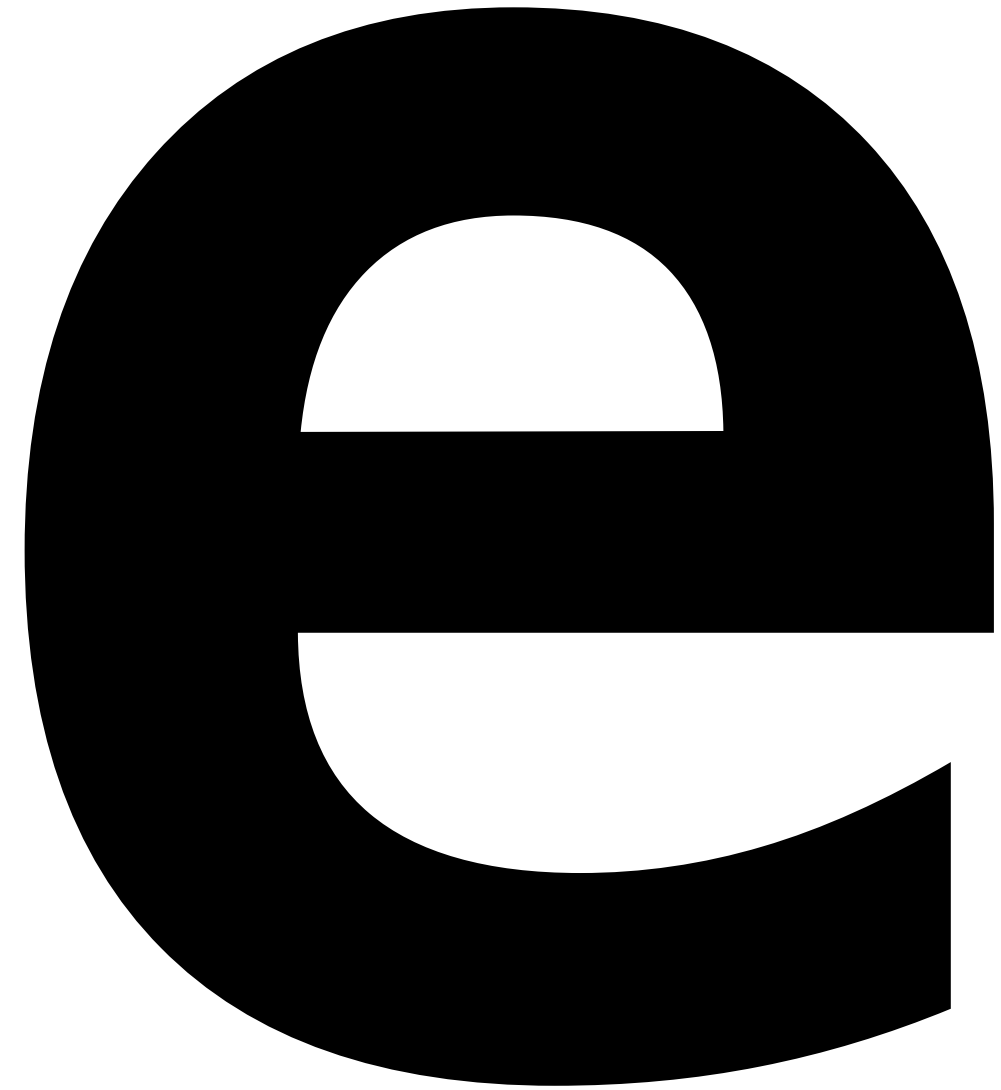


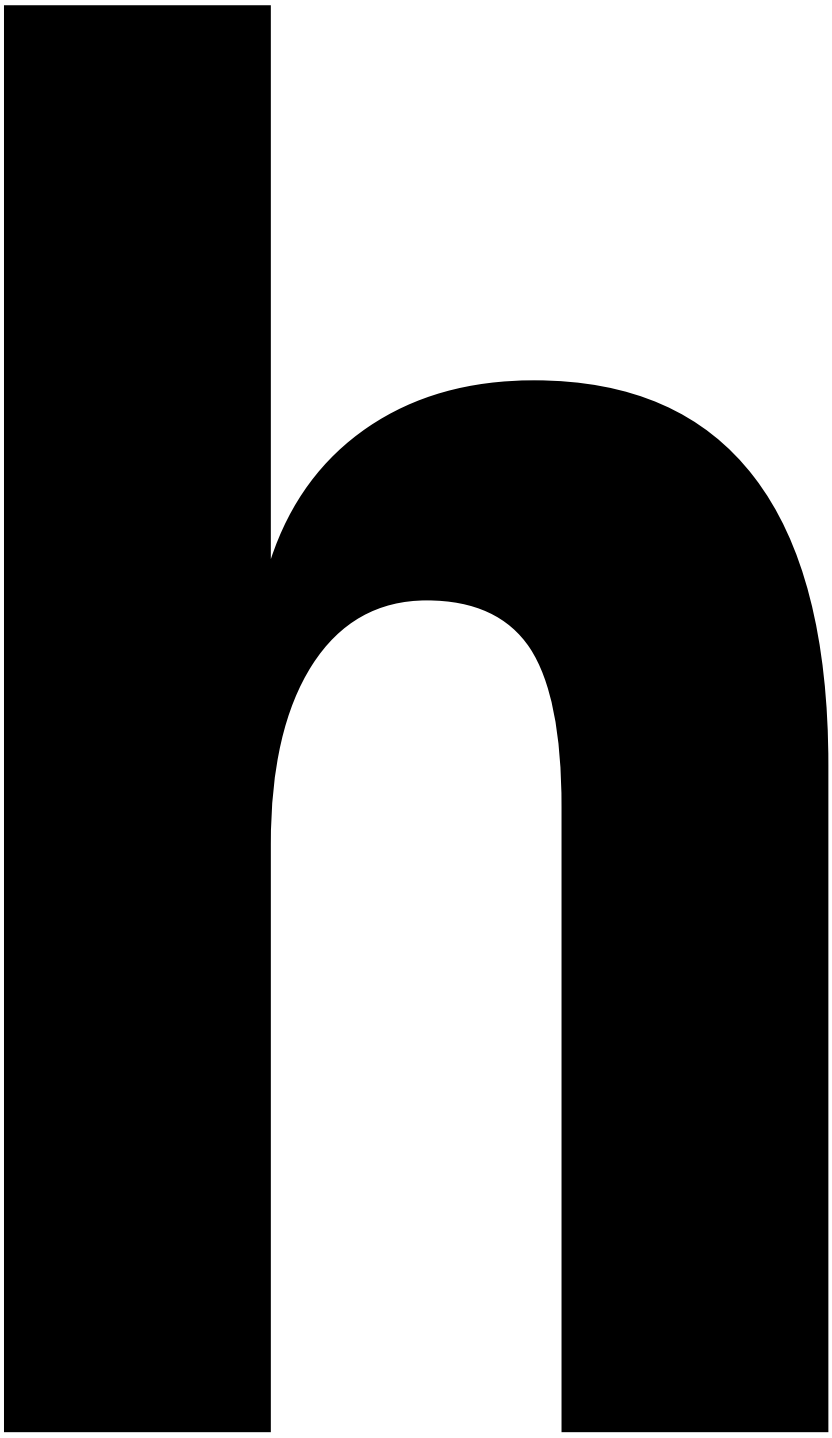


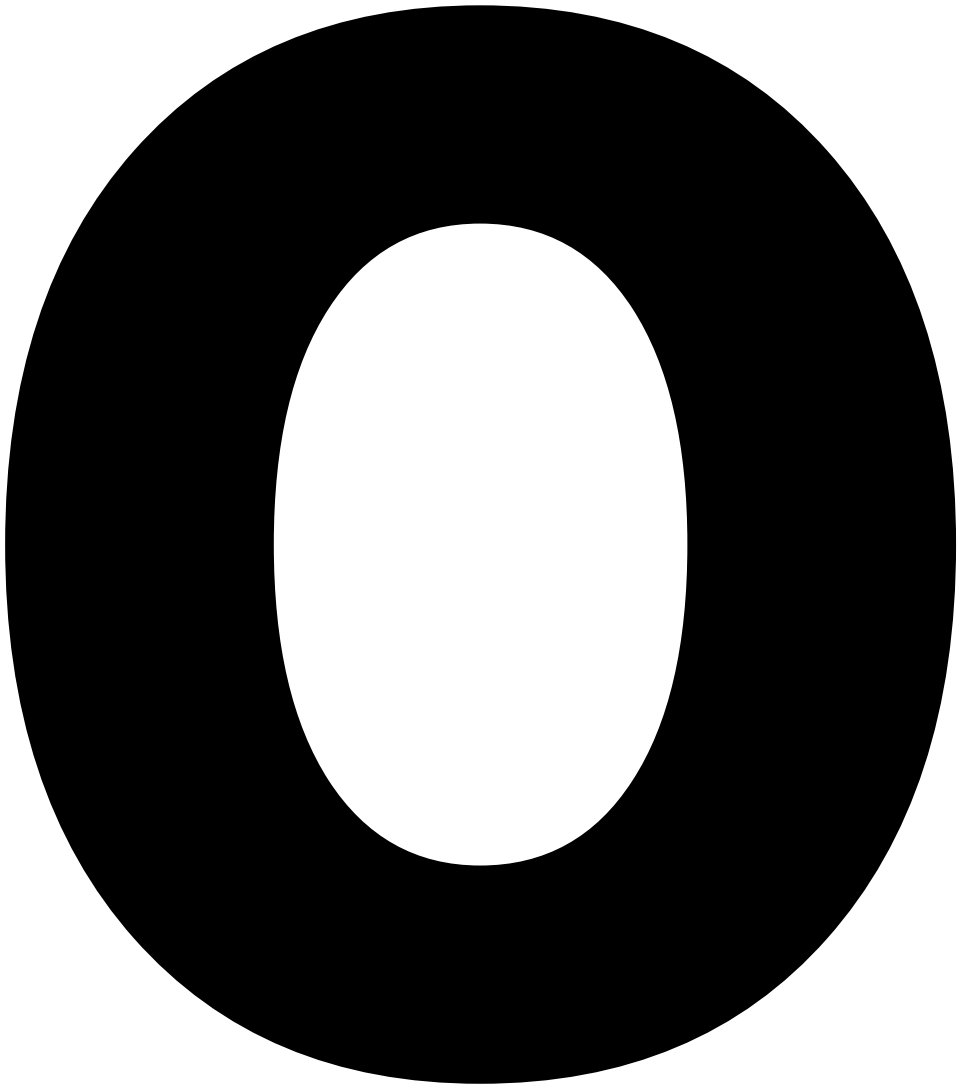


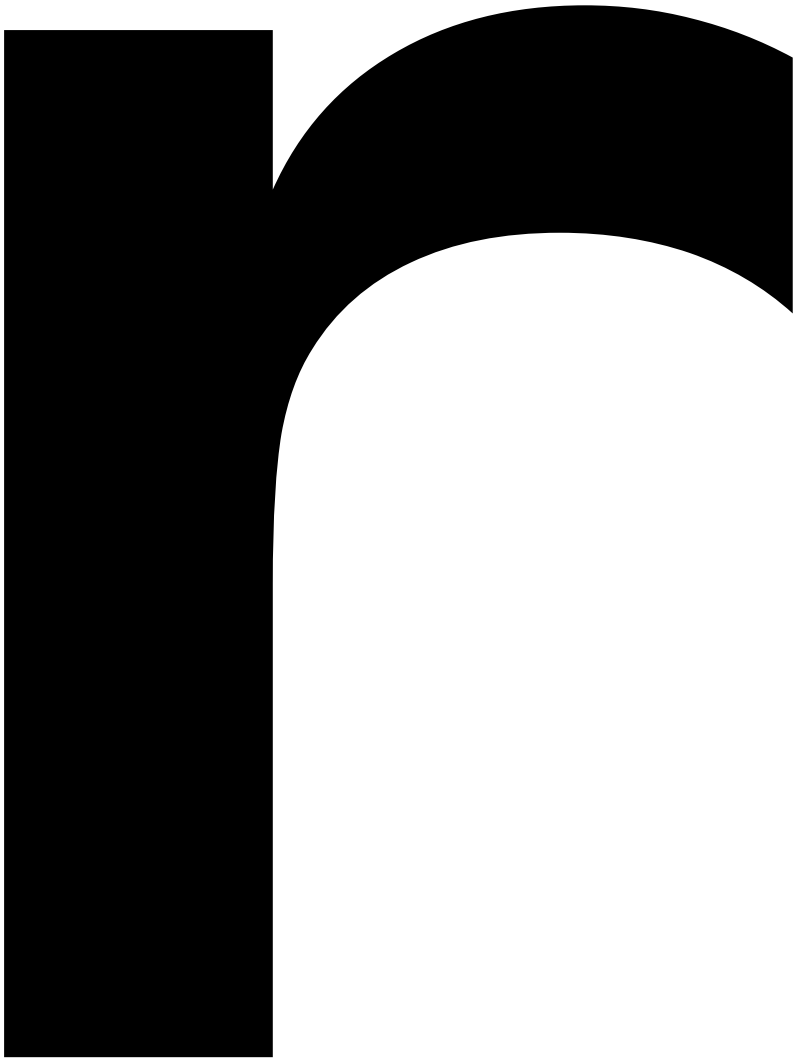


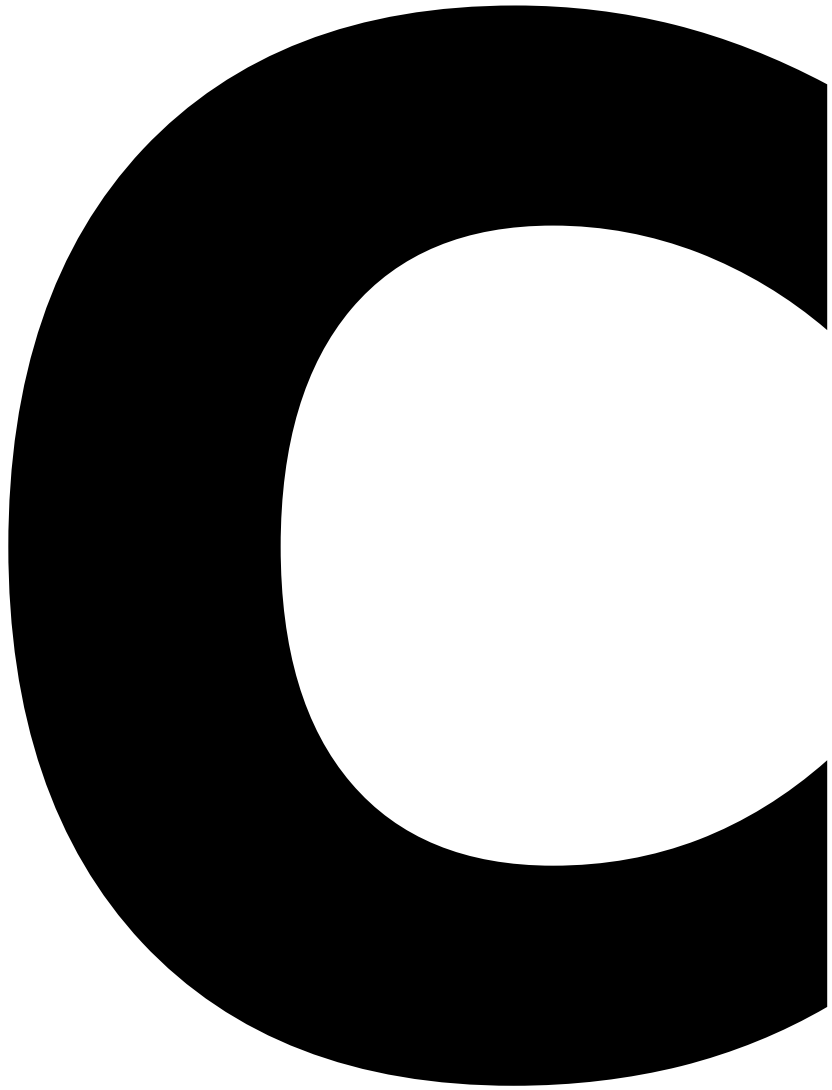


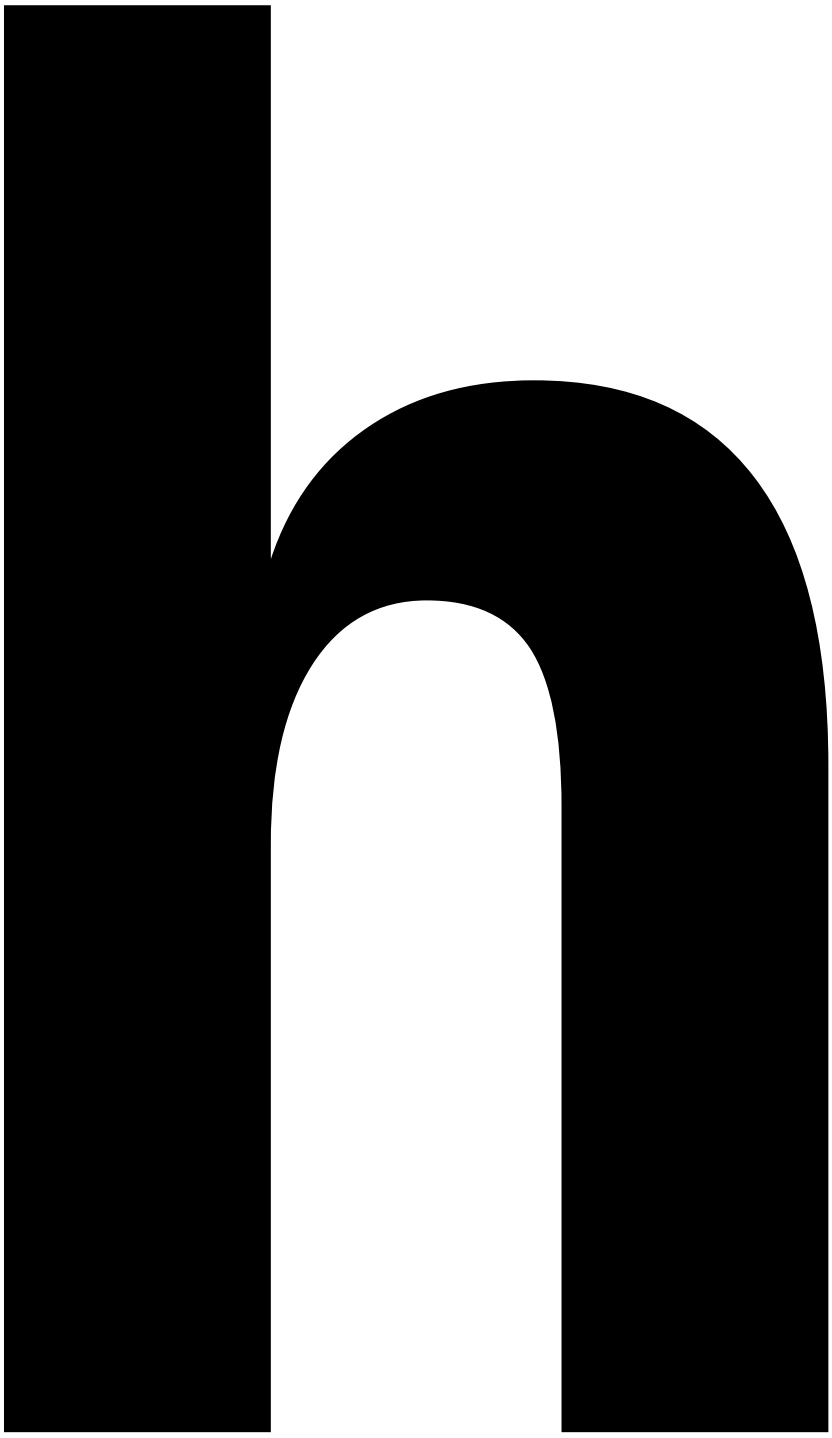


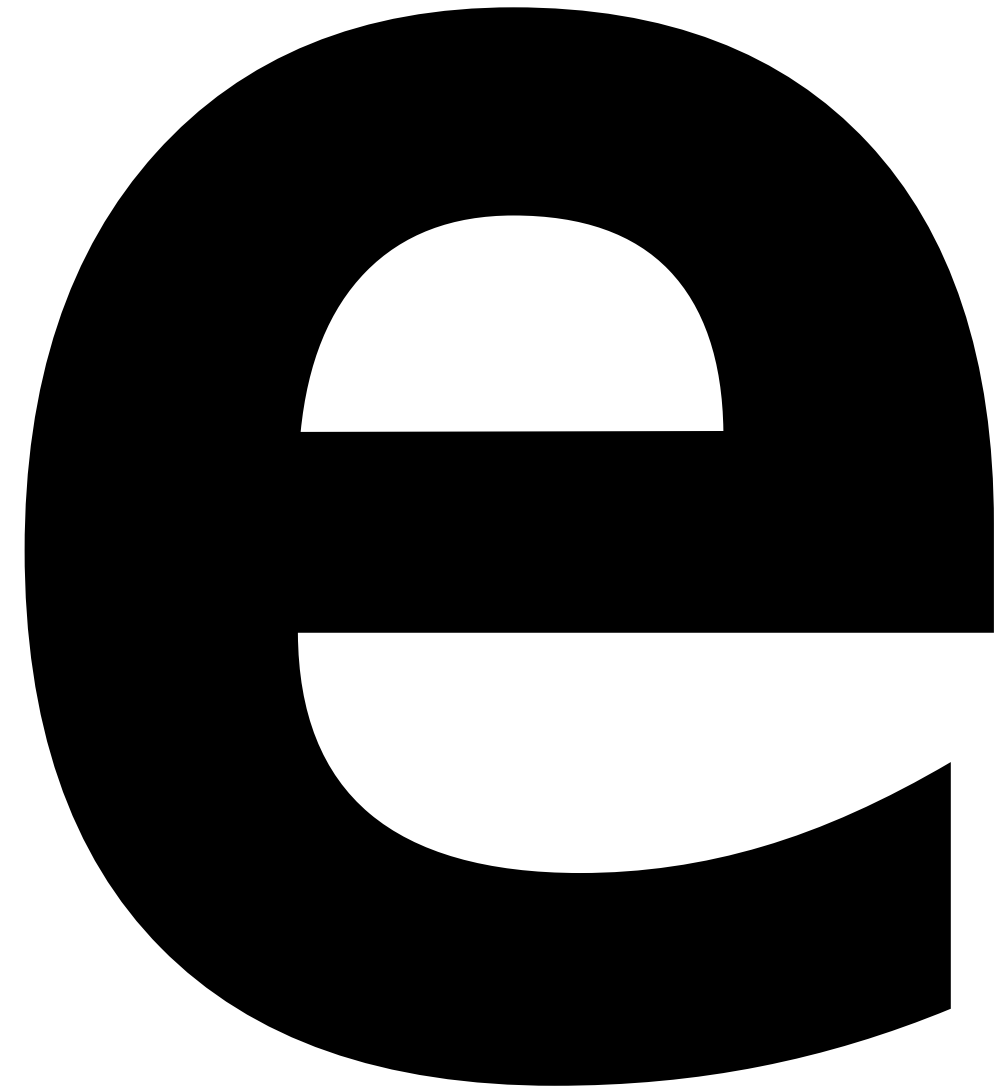


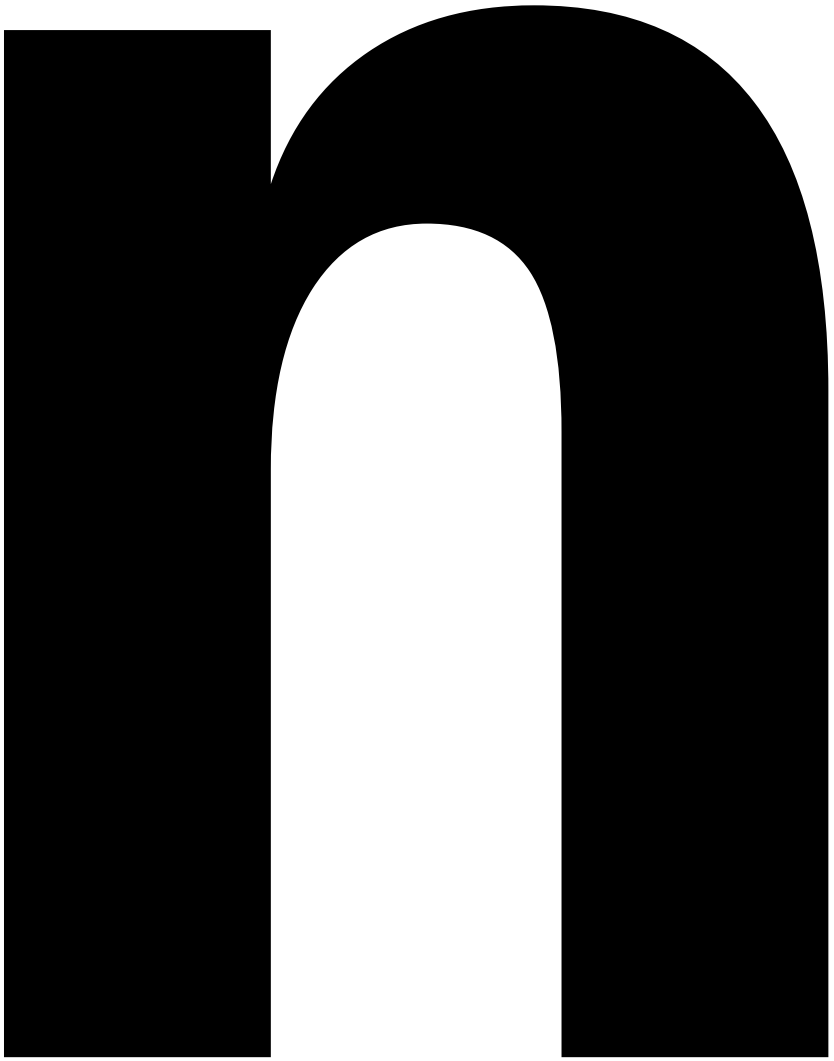


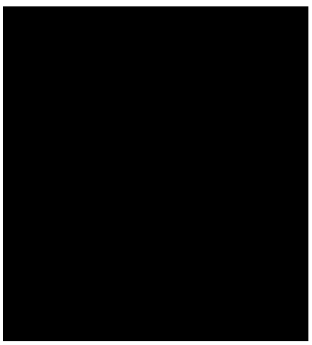


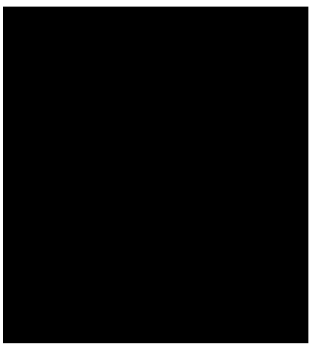


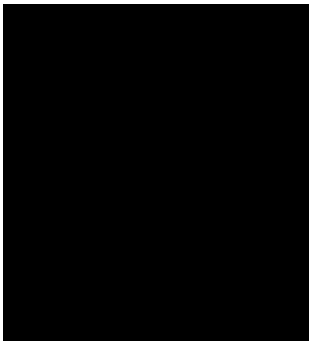


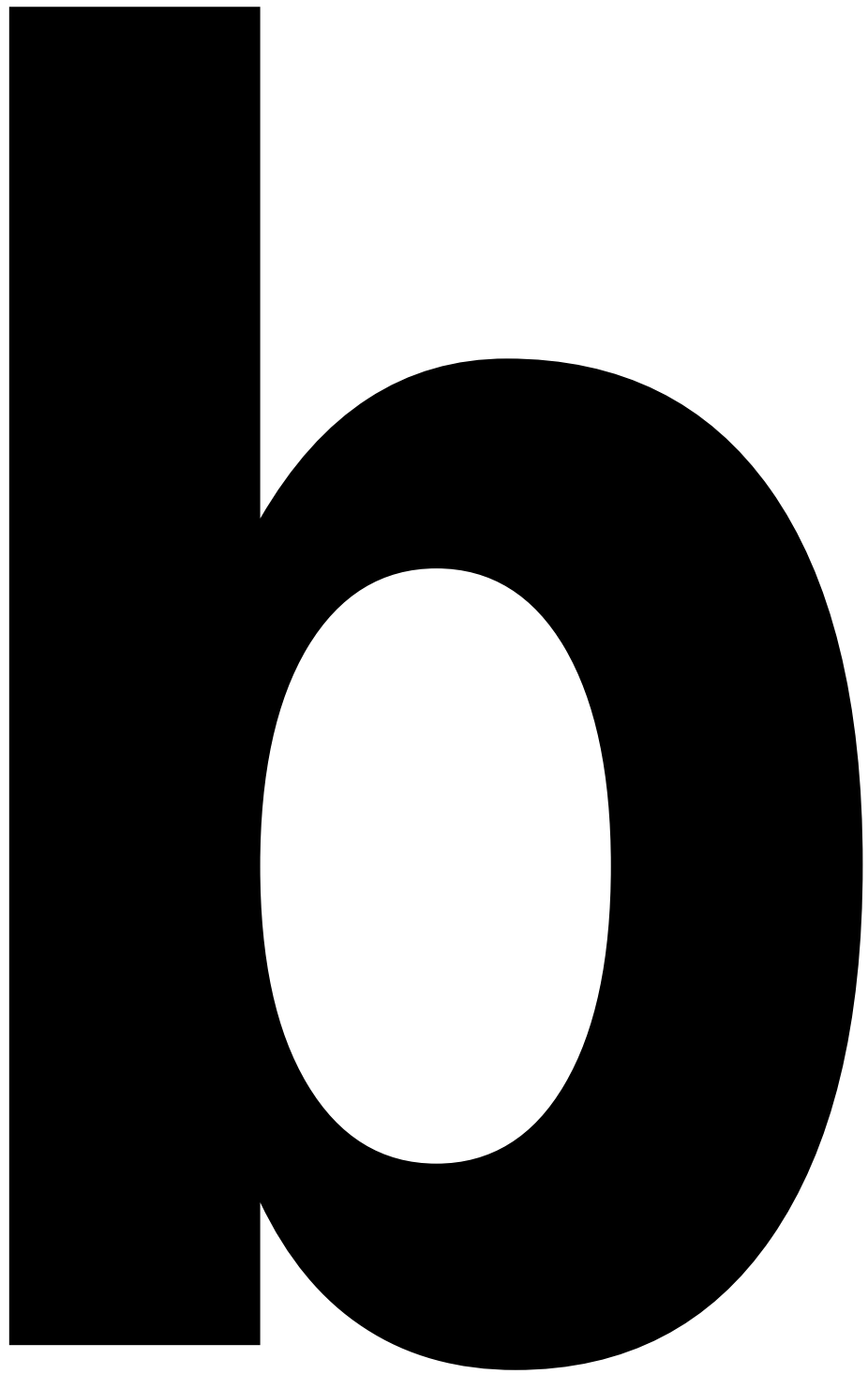




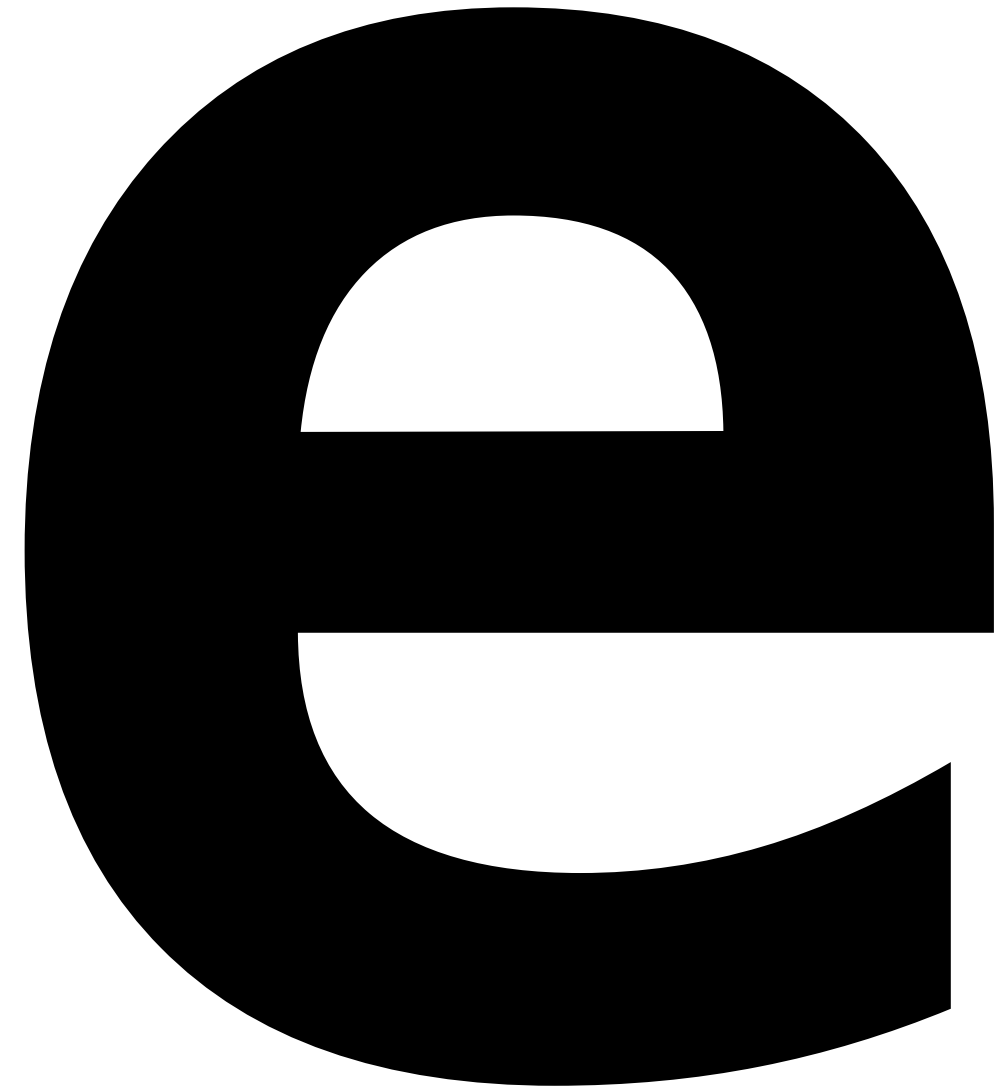


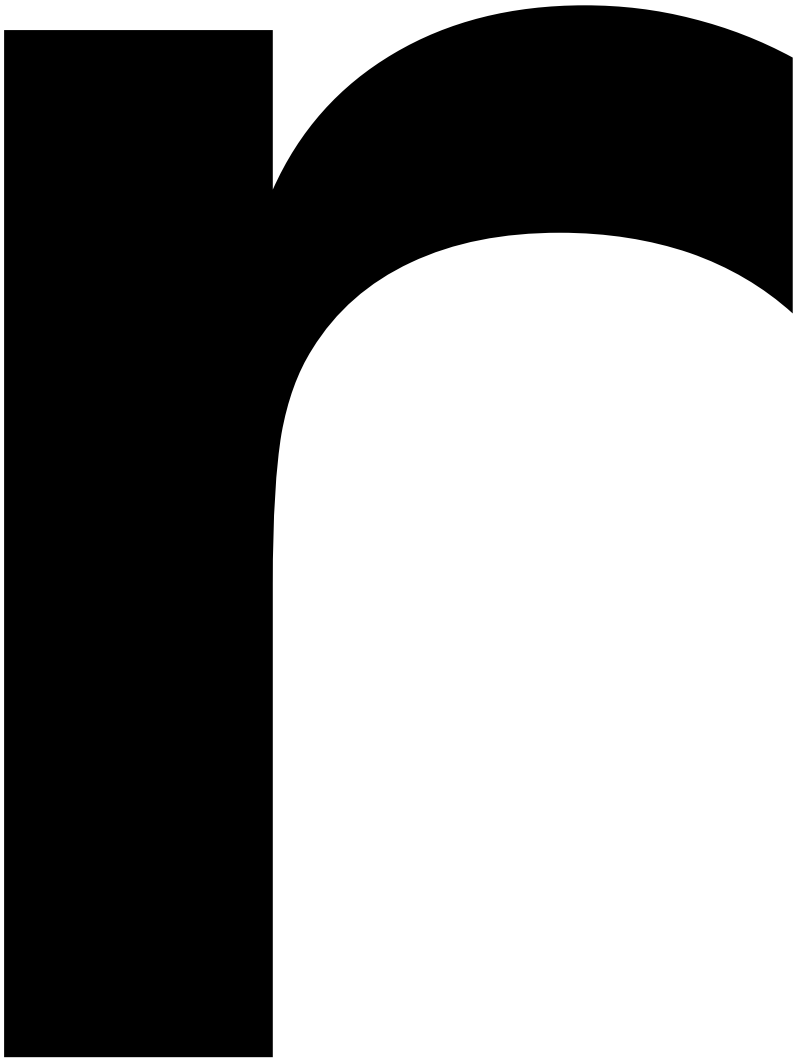


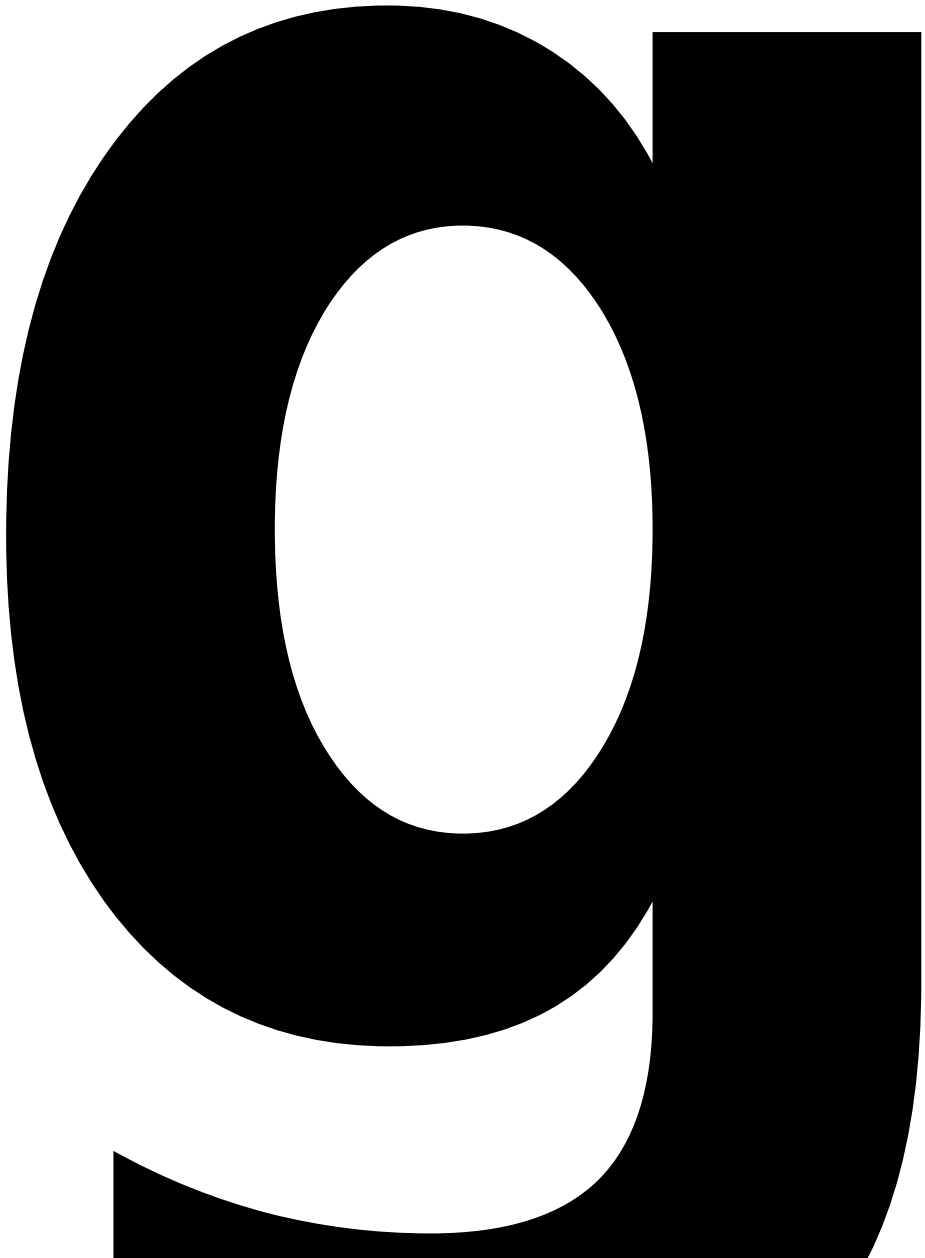


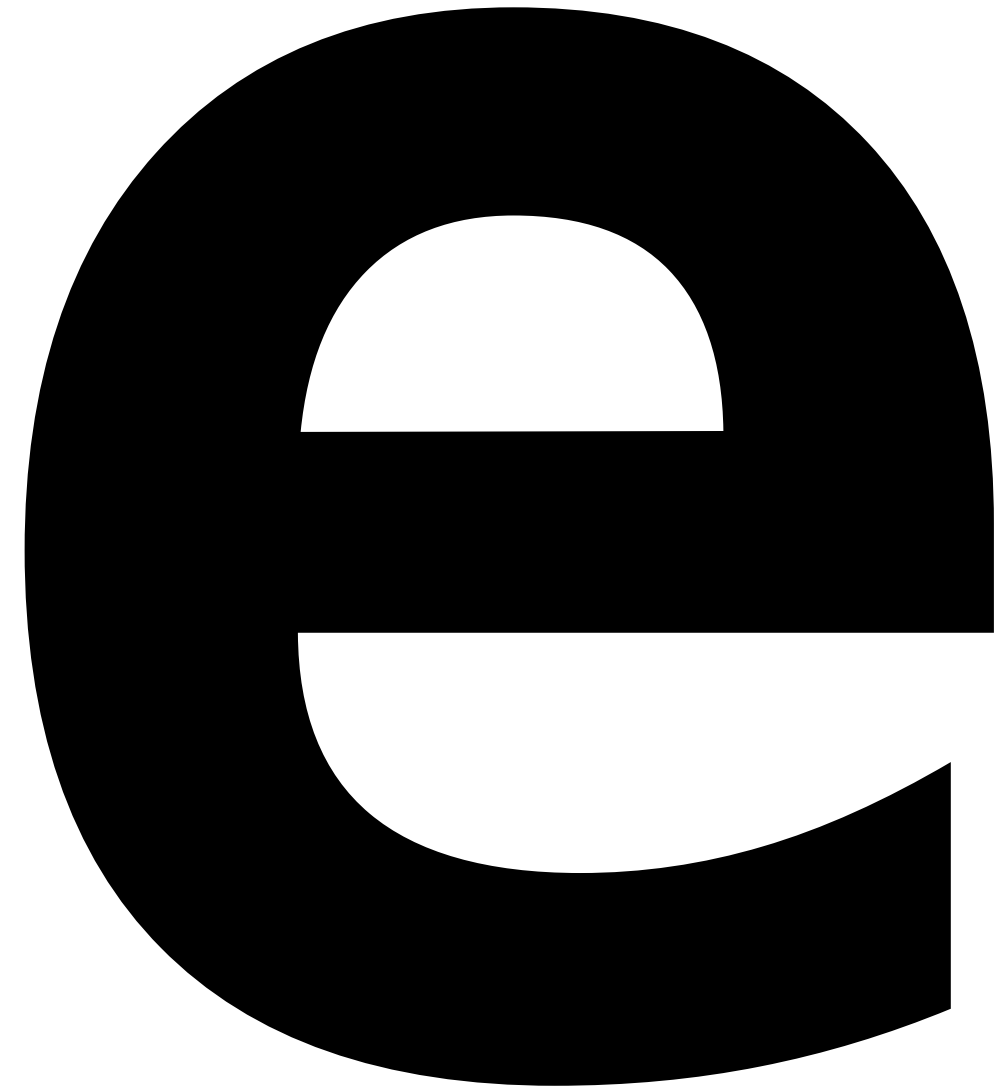


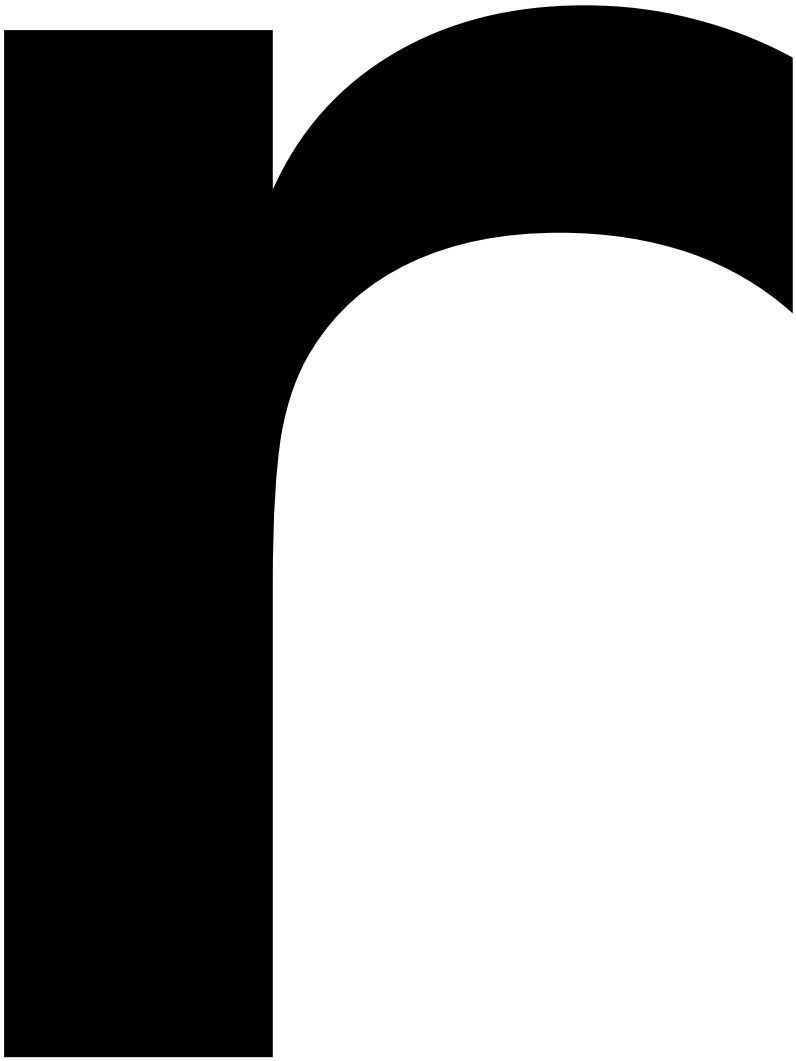
u

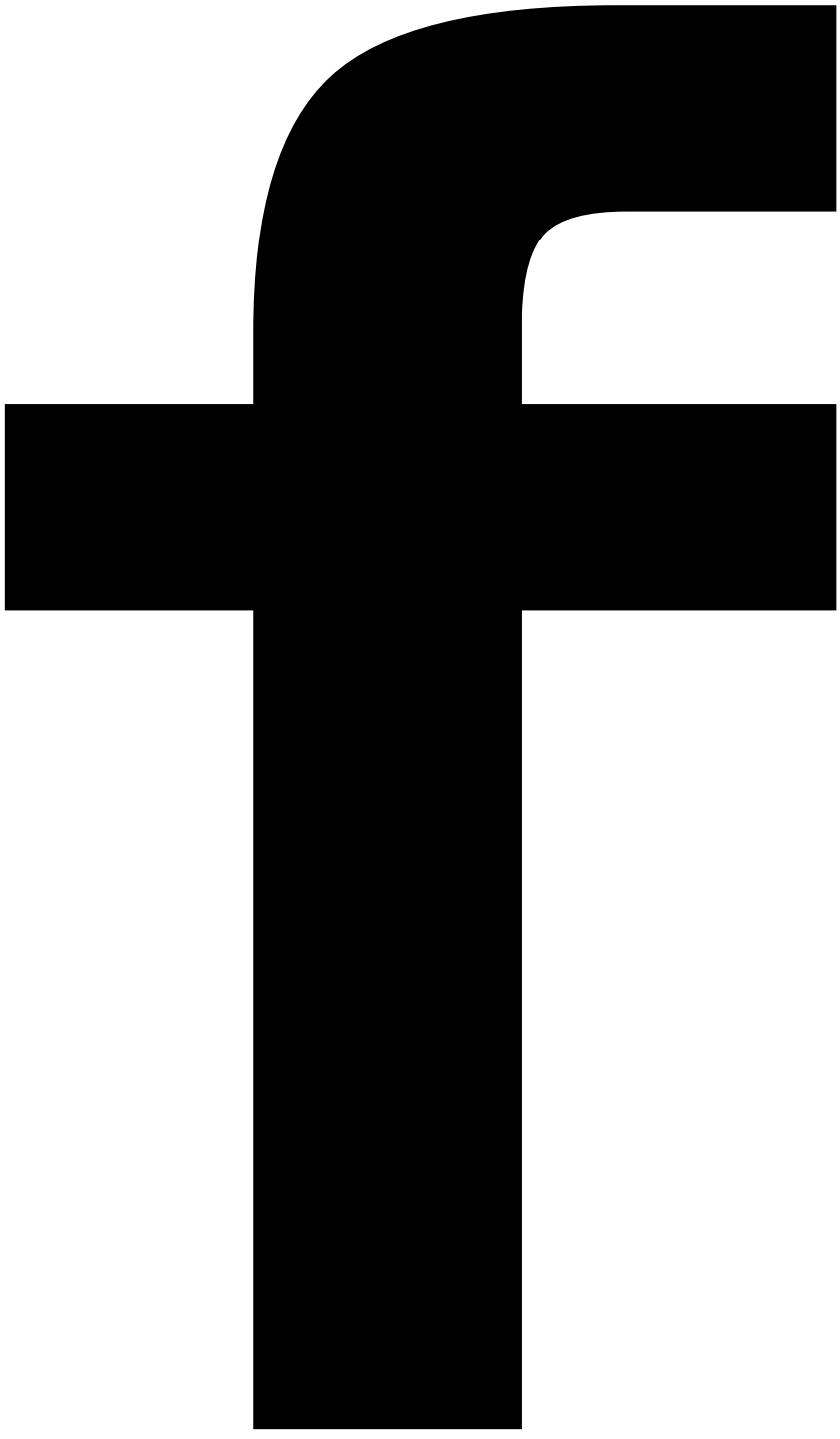




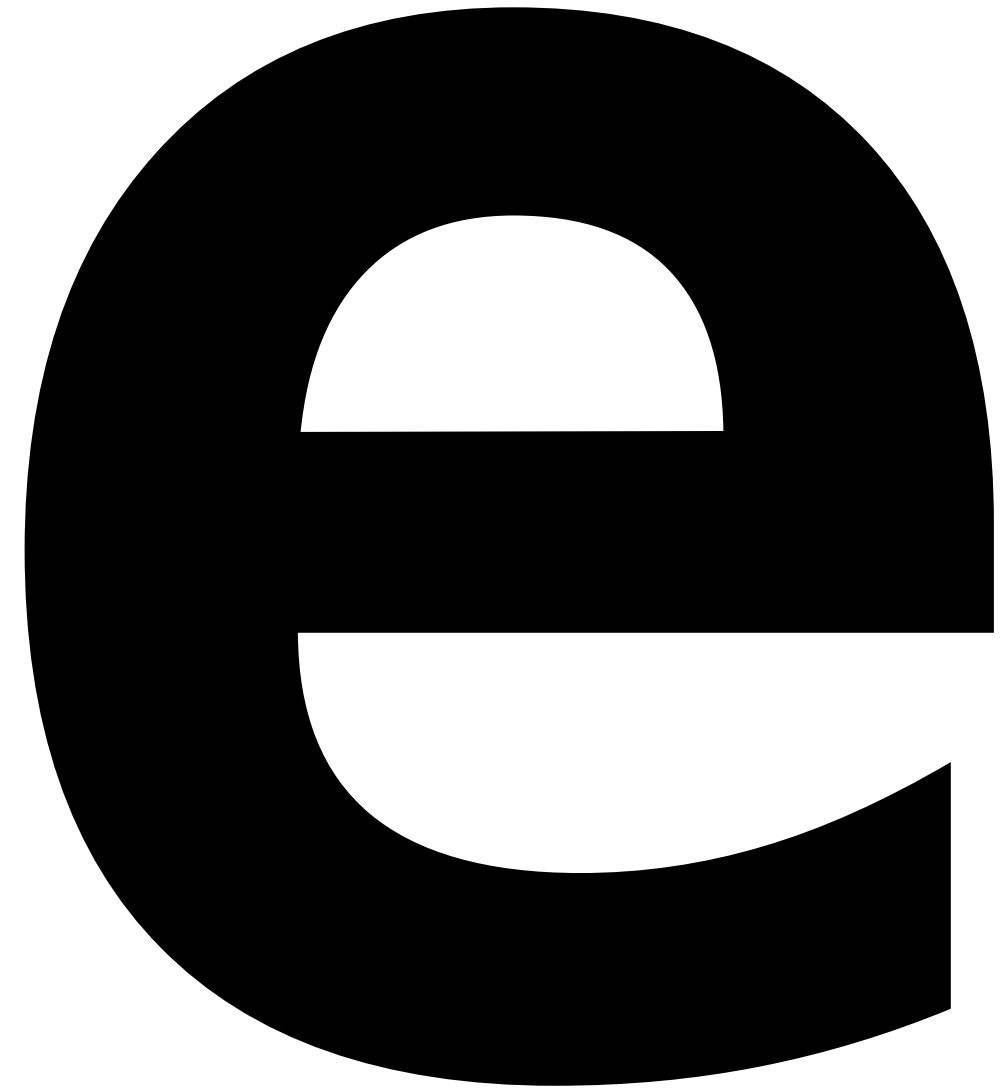


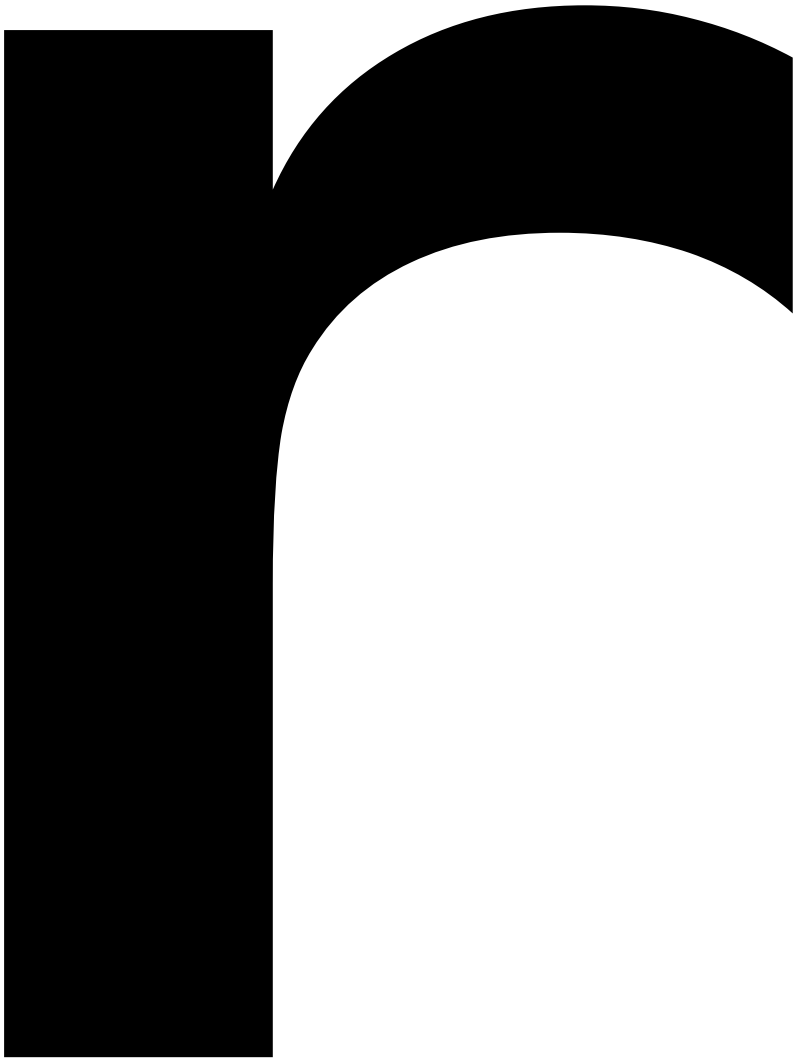


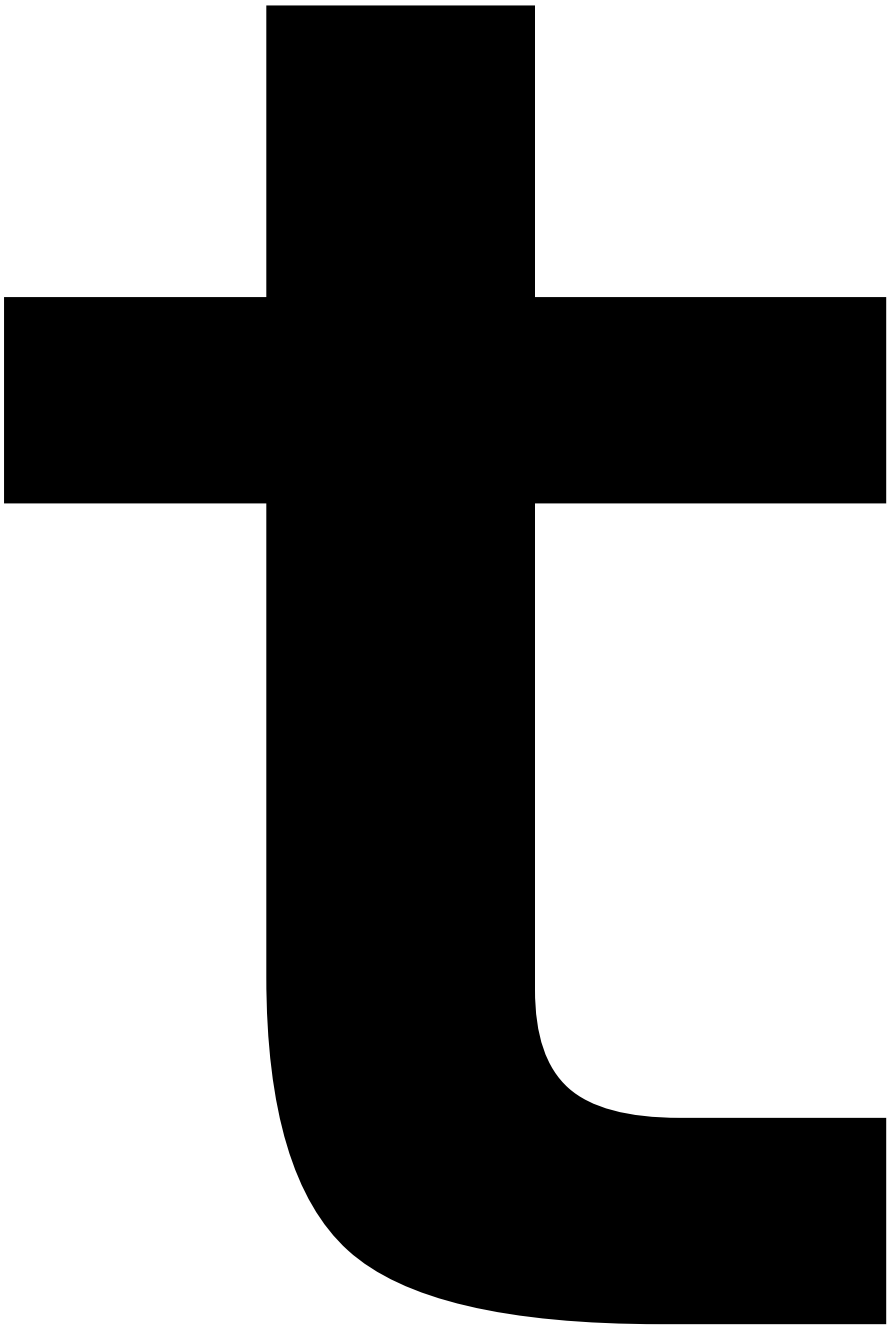


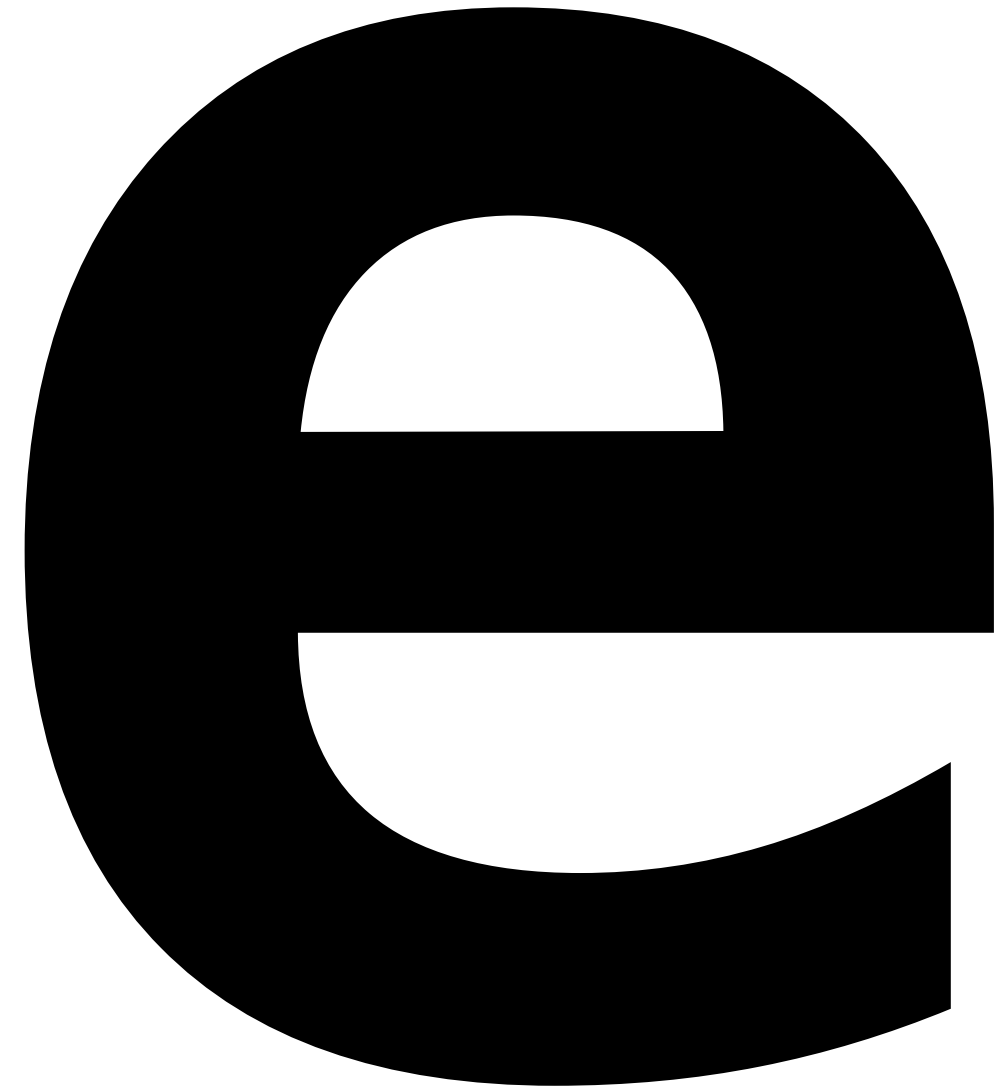


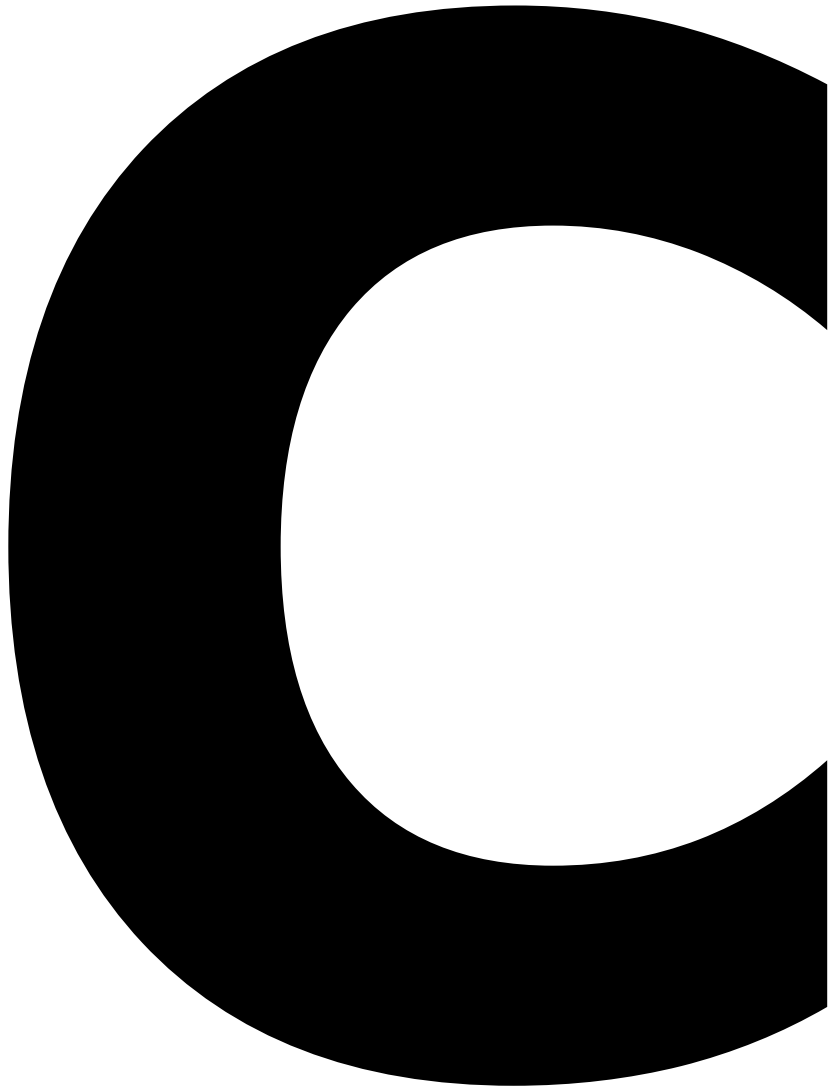
u

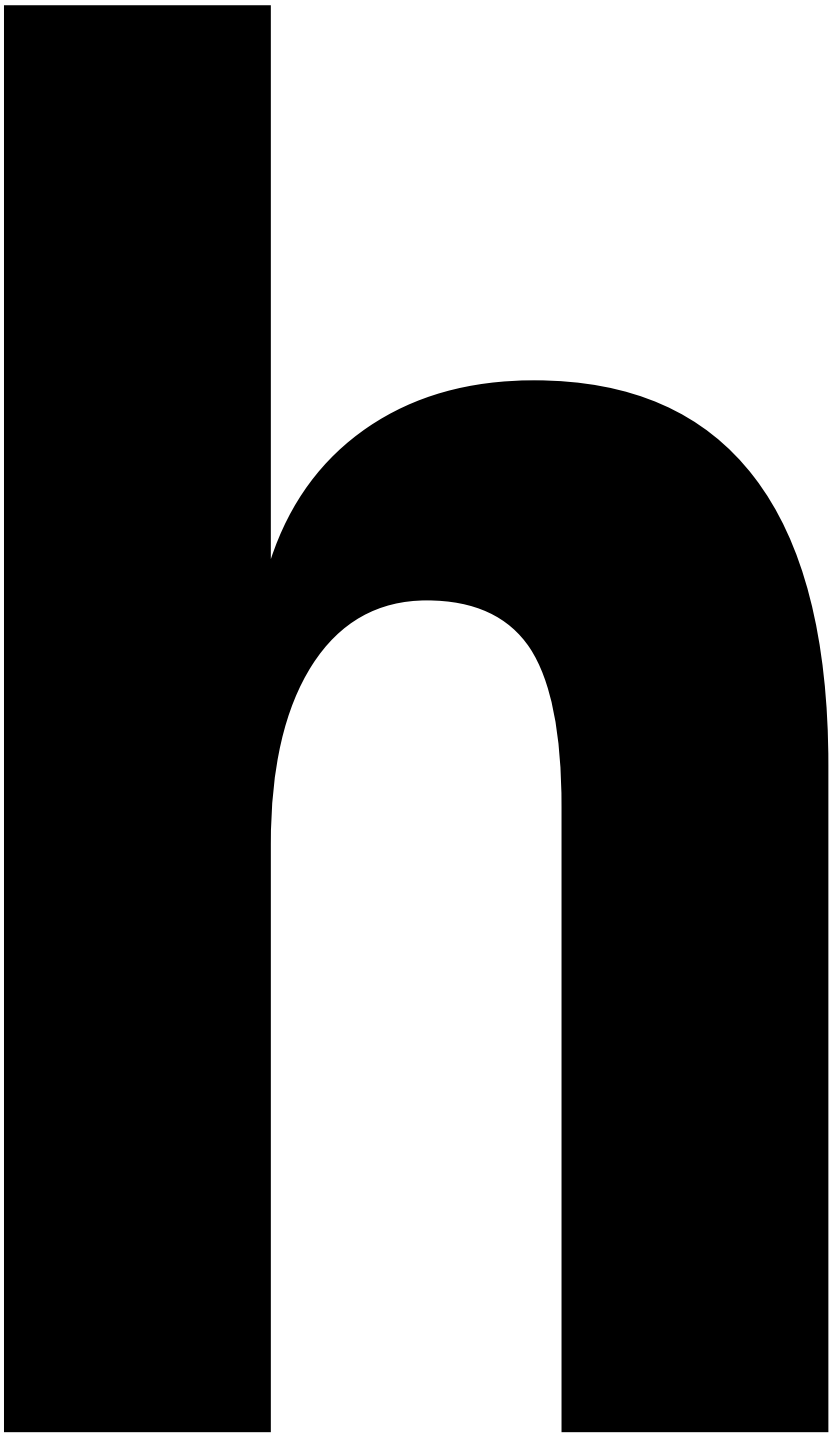


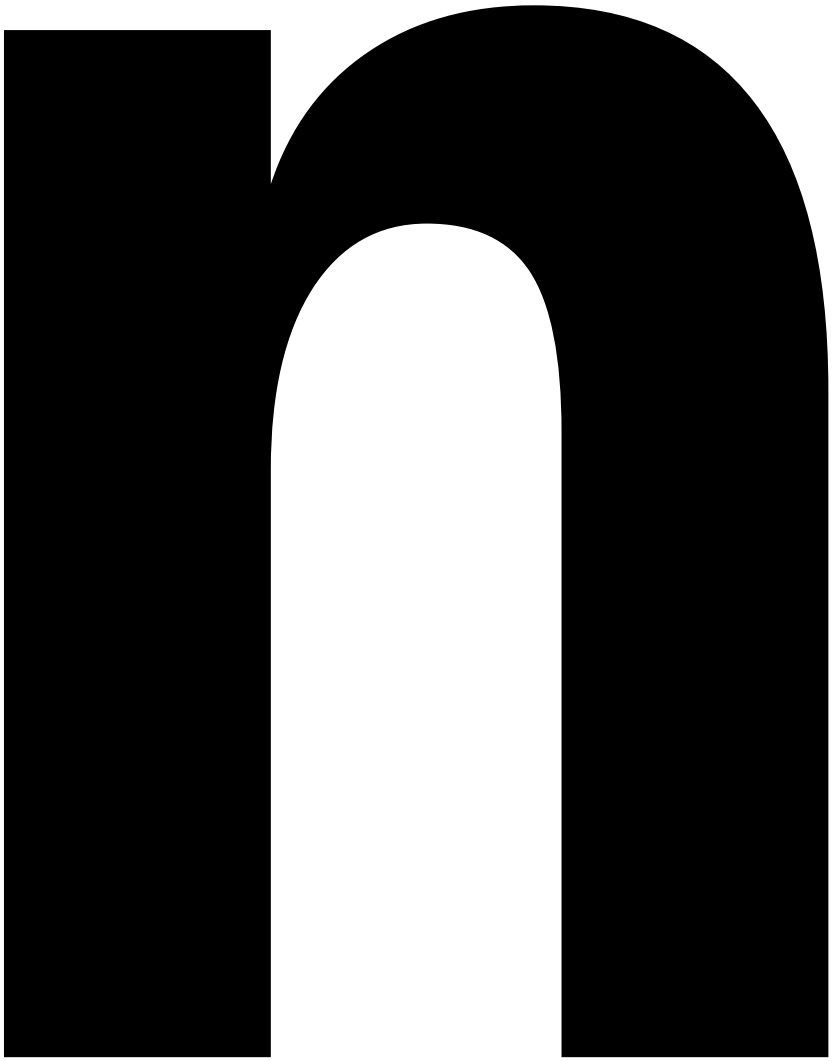


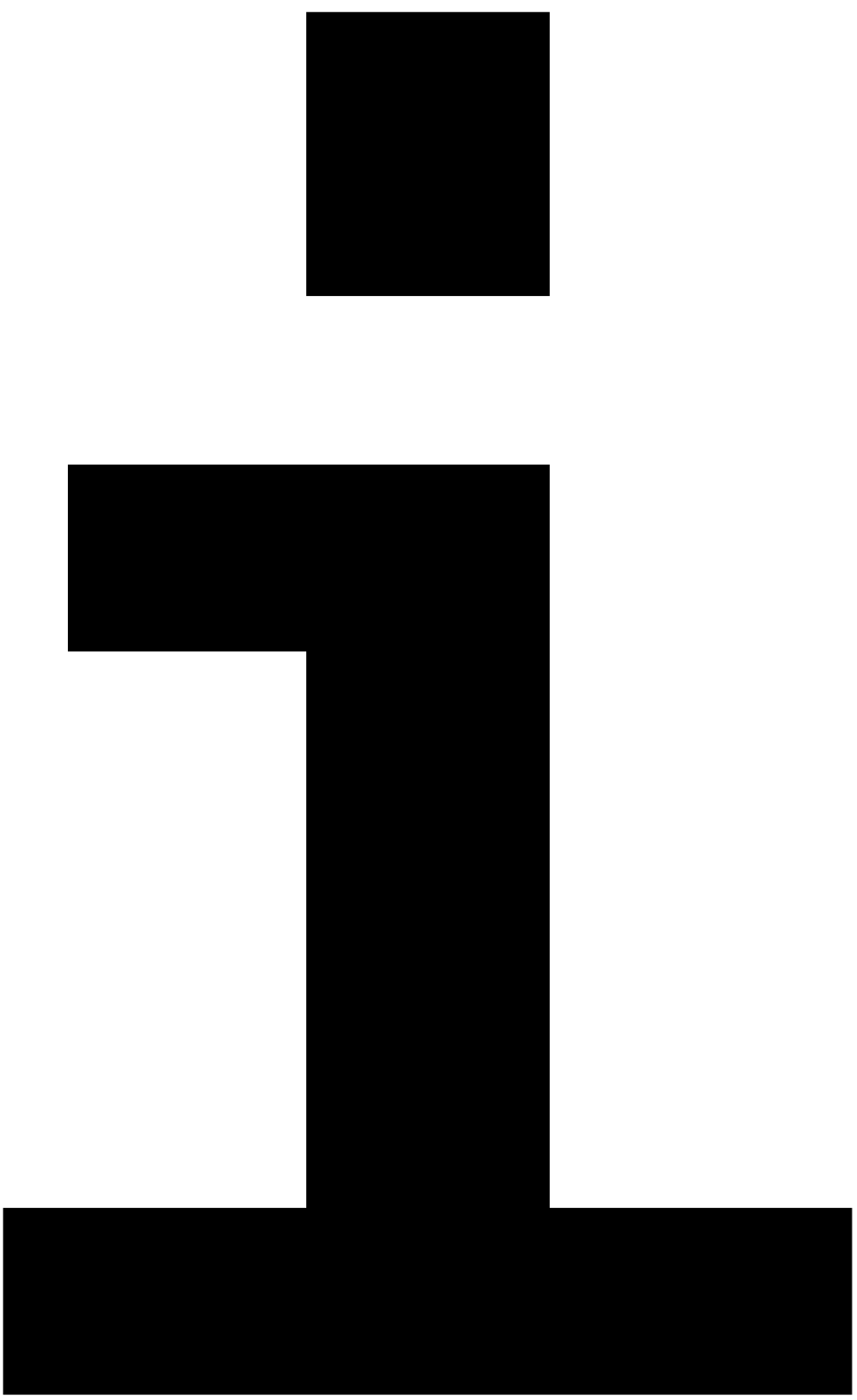


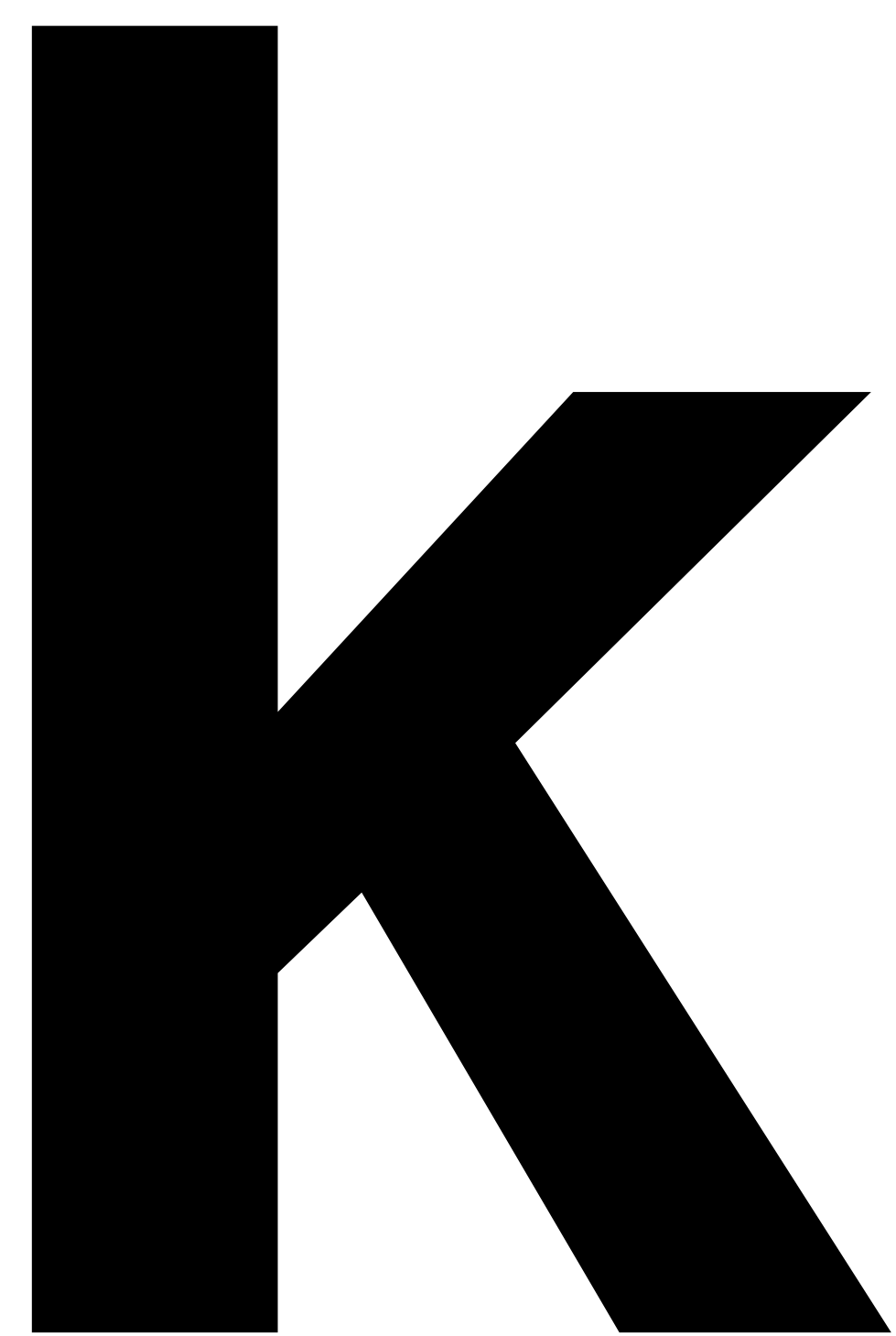


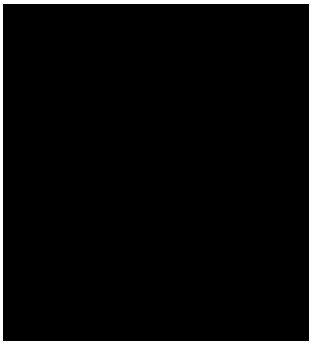




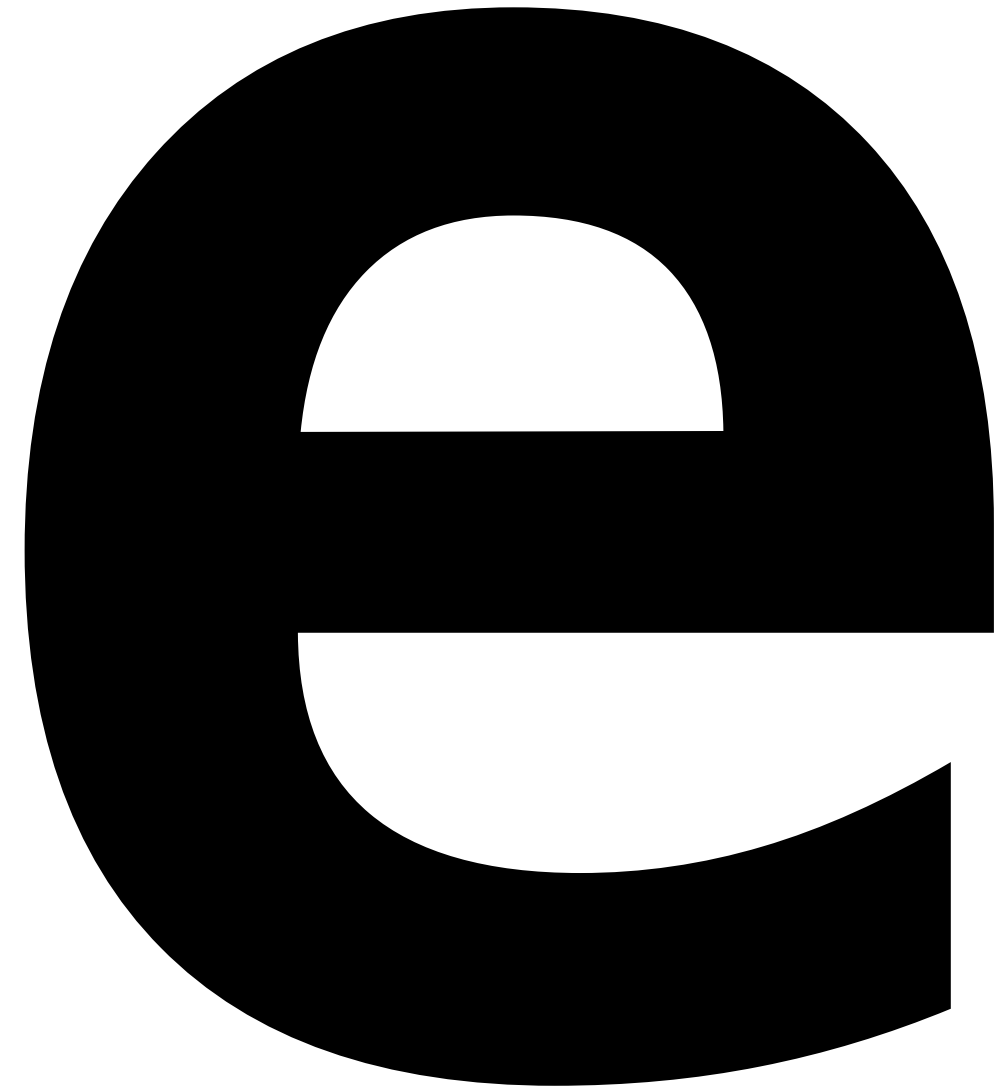


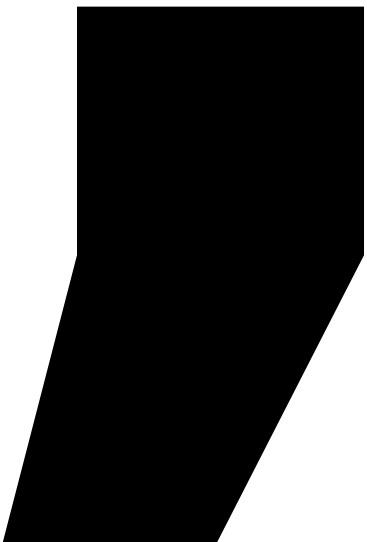


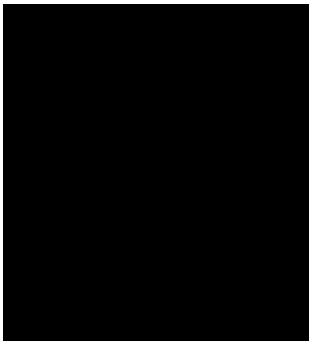


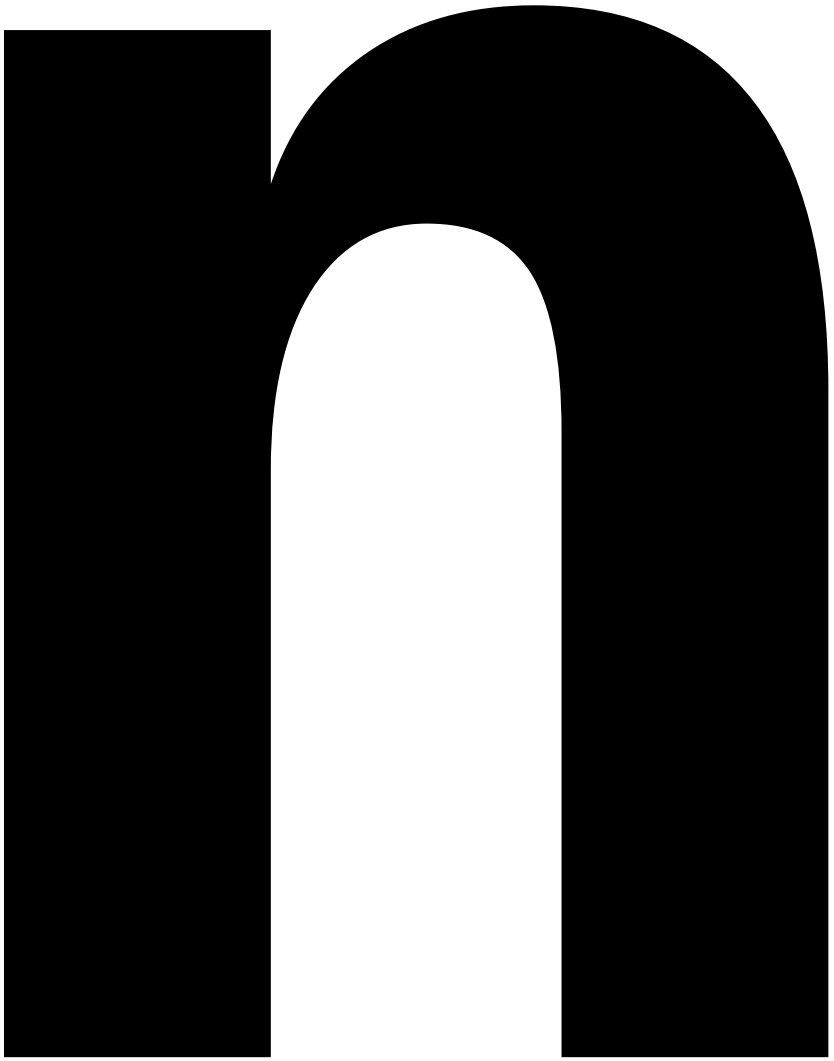


d

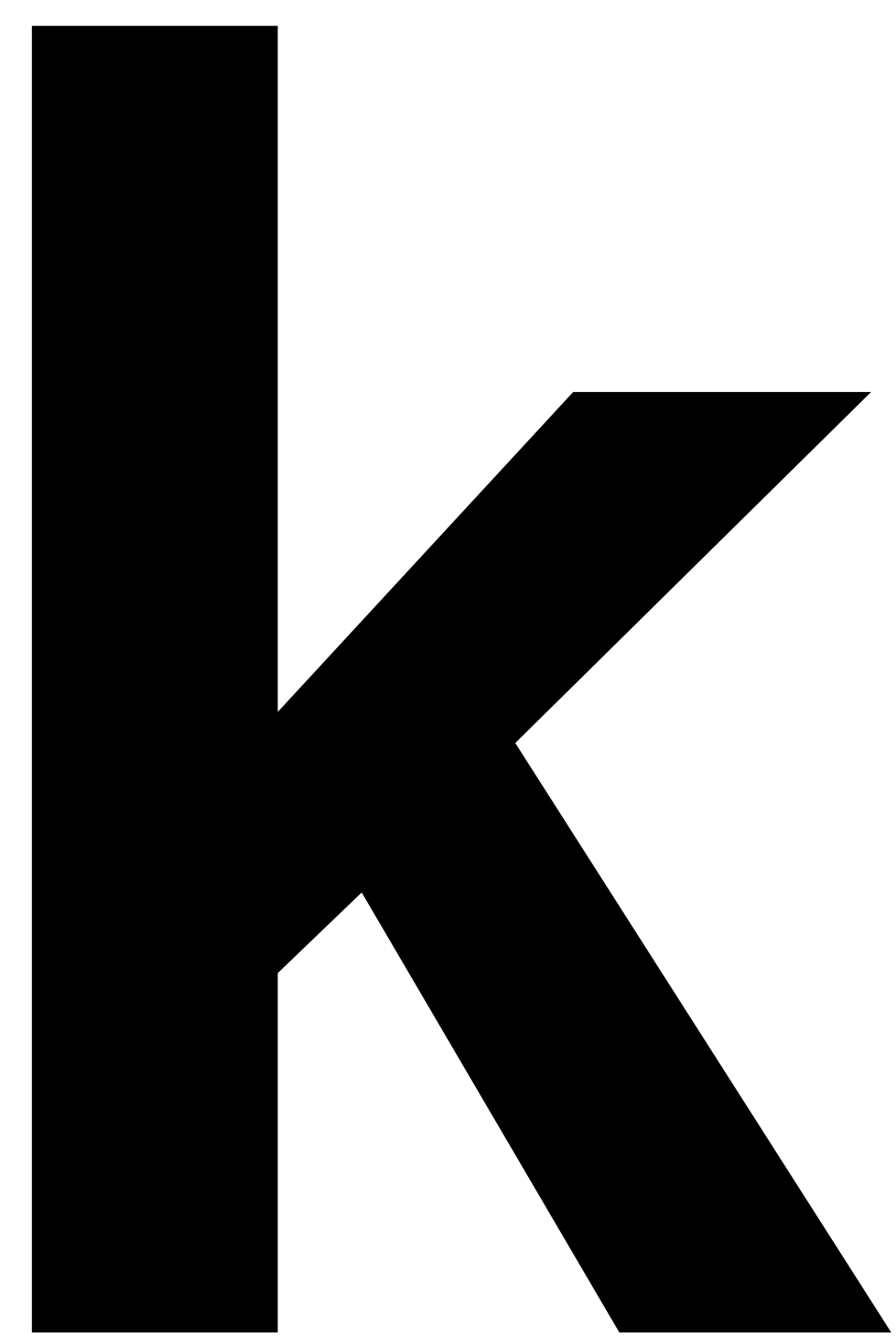


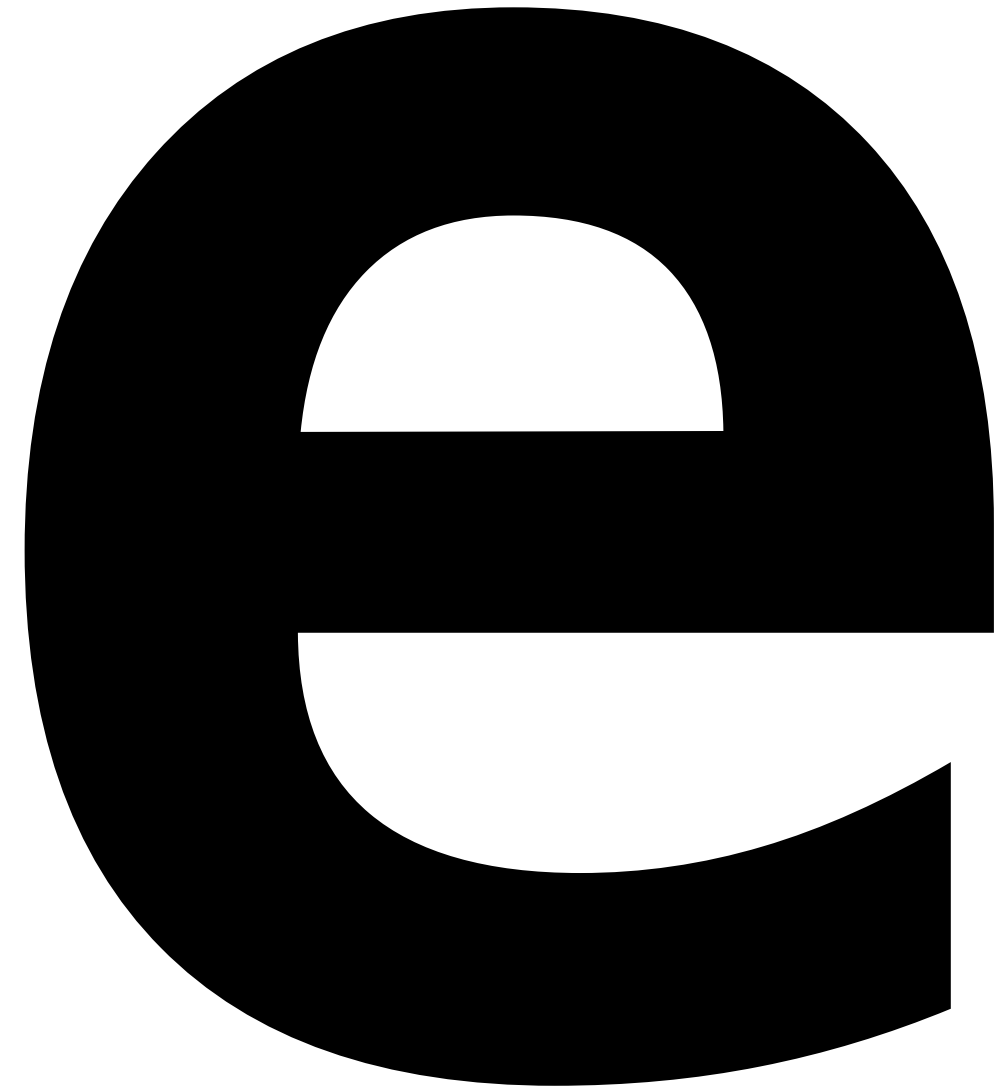


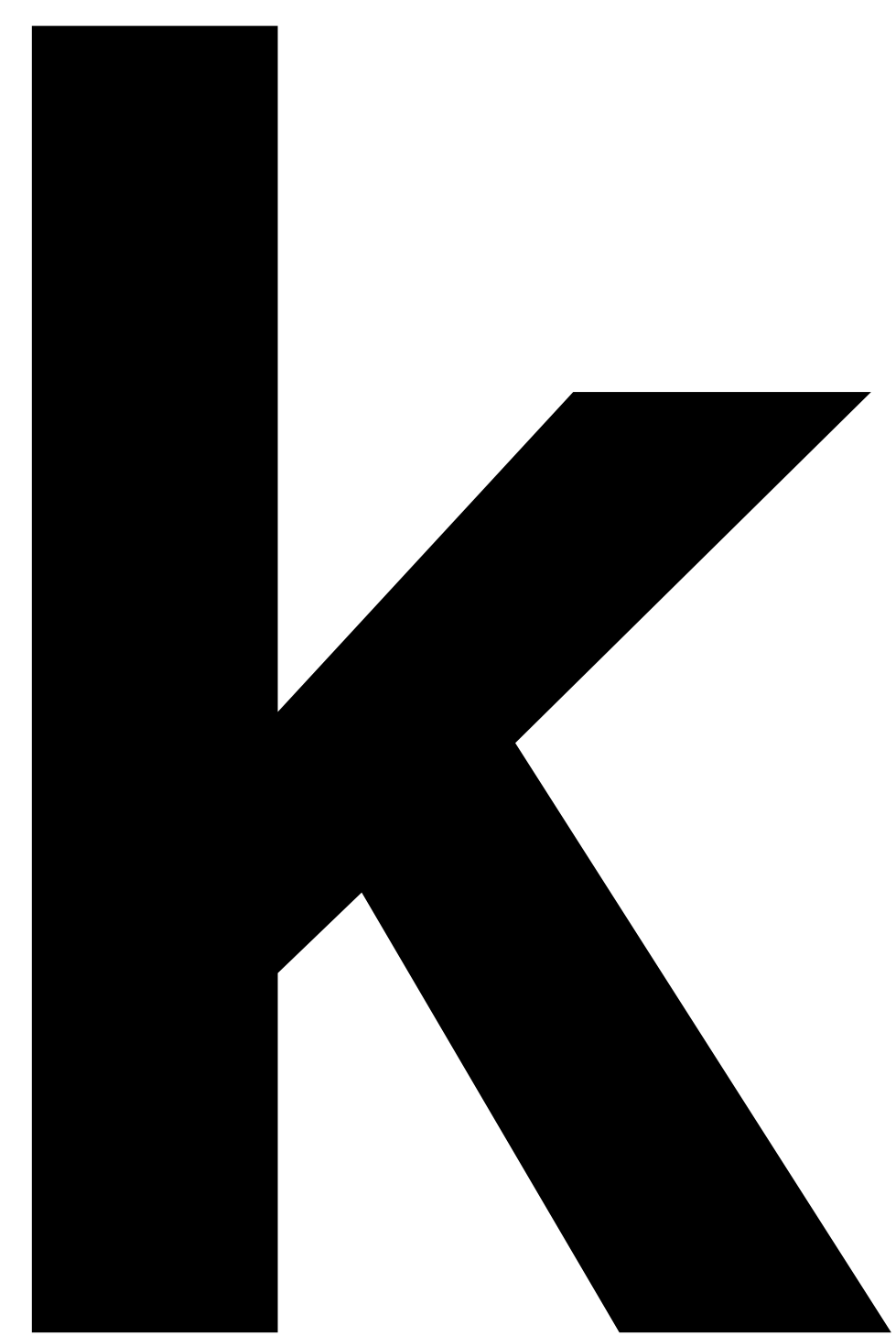


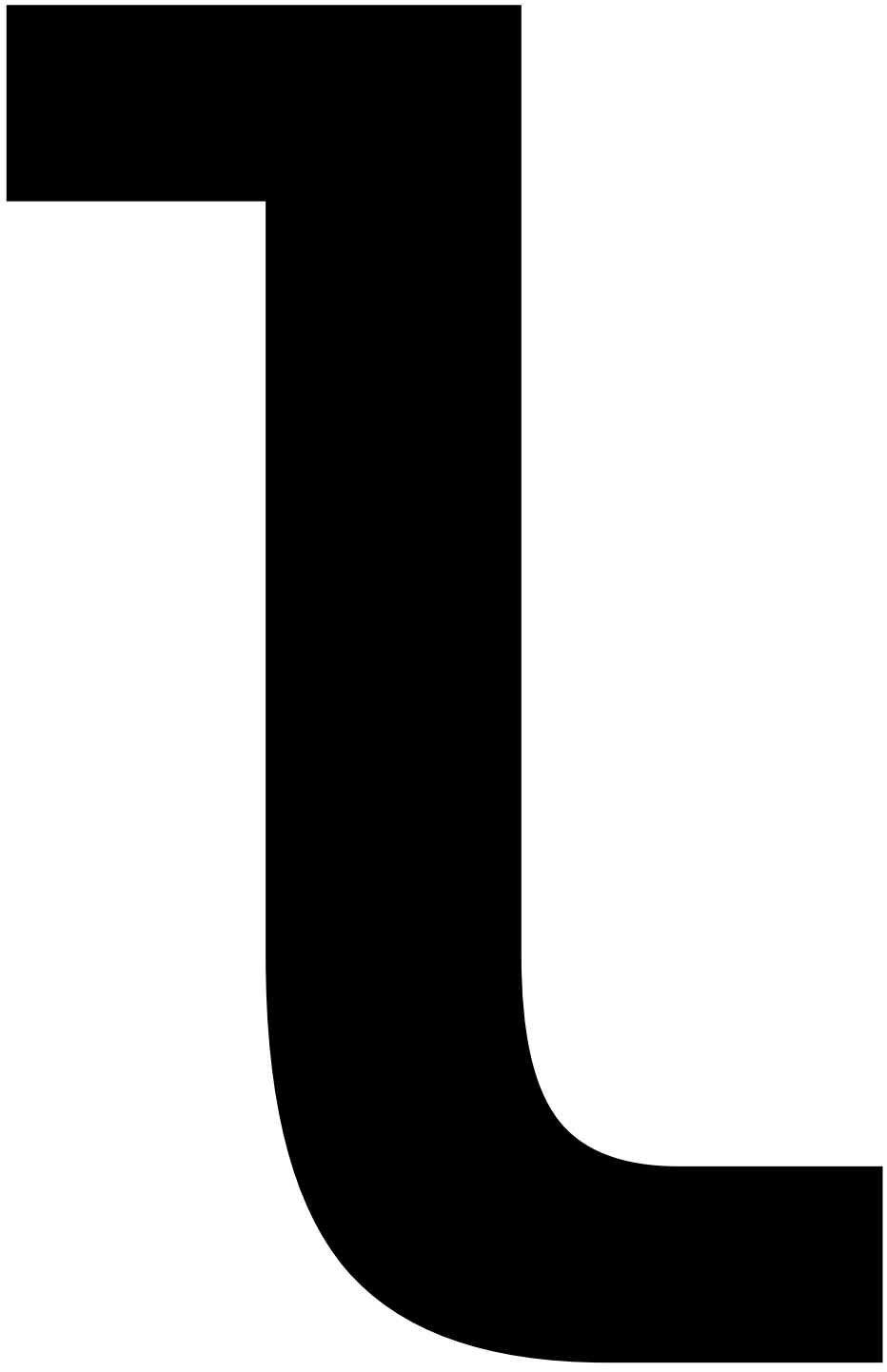


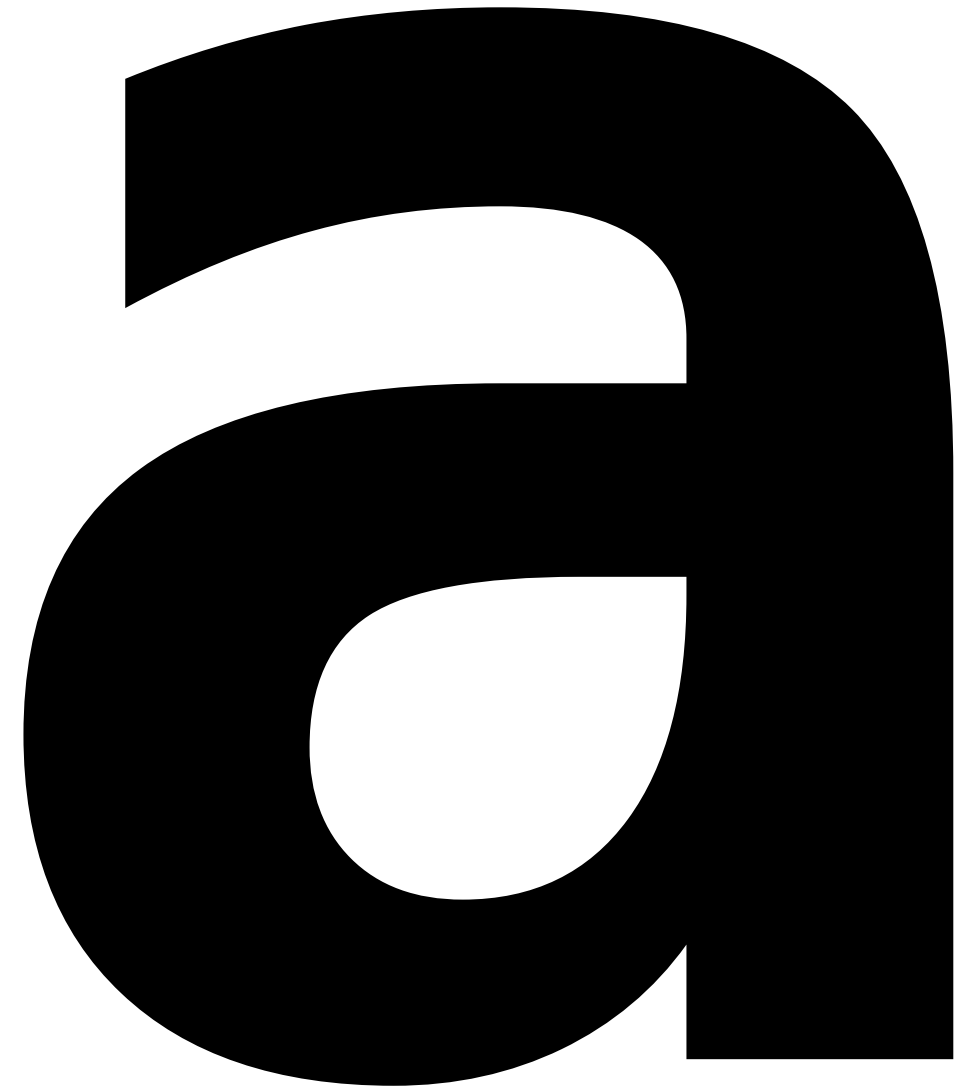
u





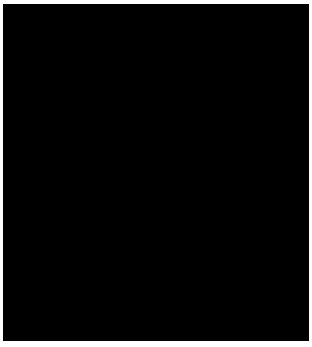




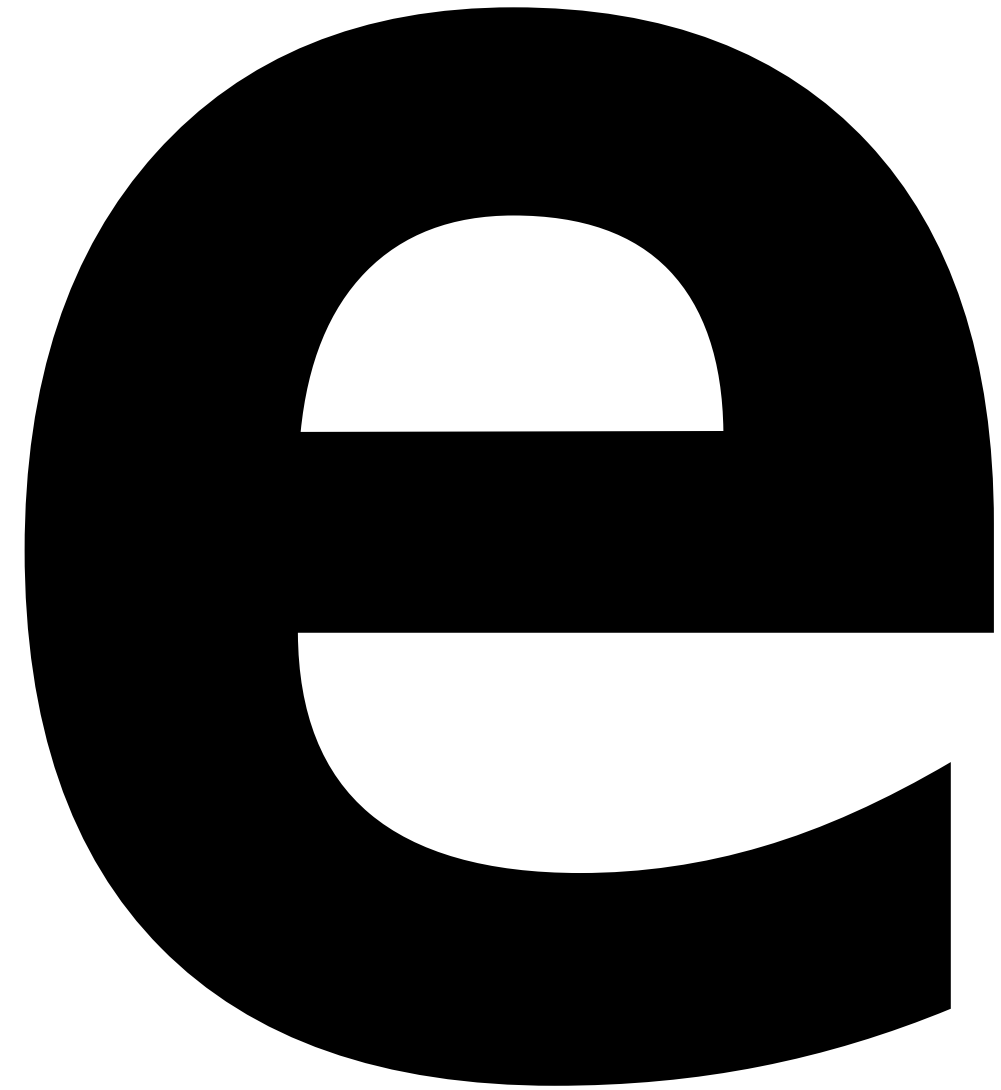


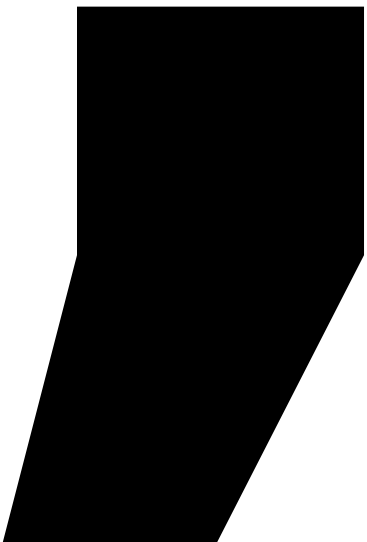
u

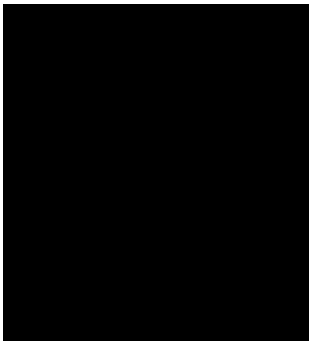
S

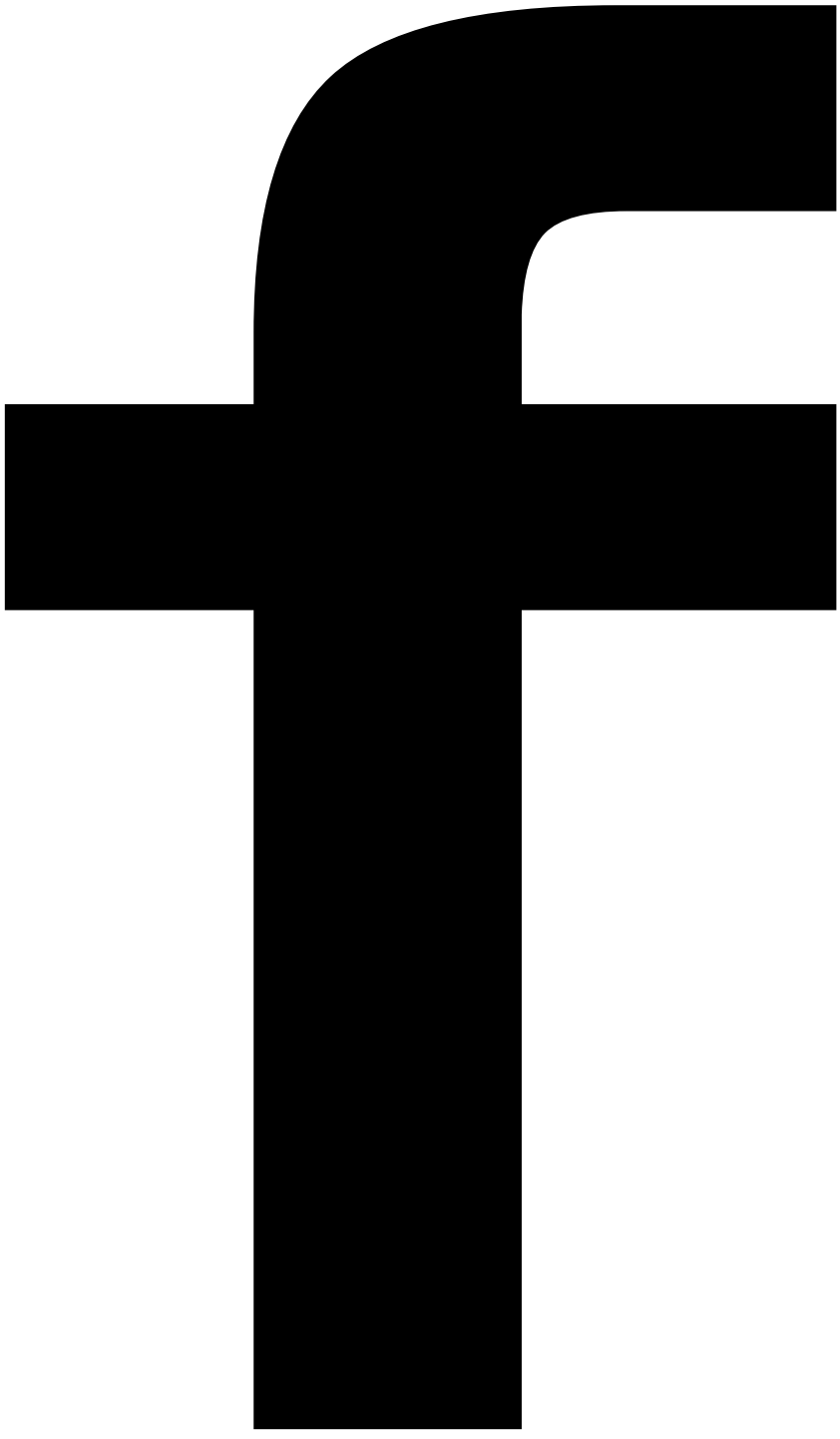


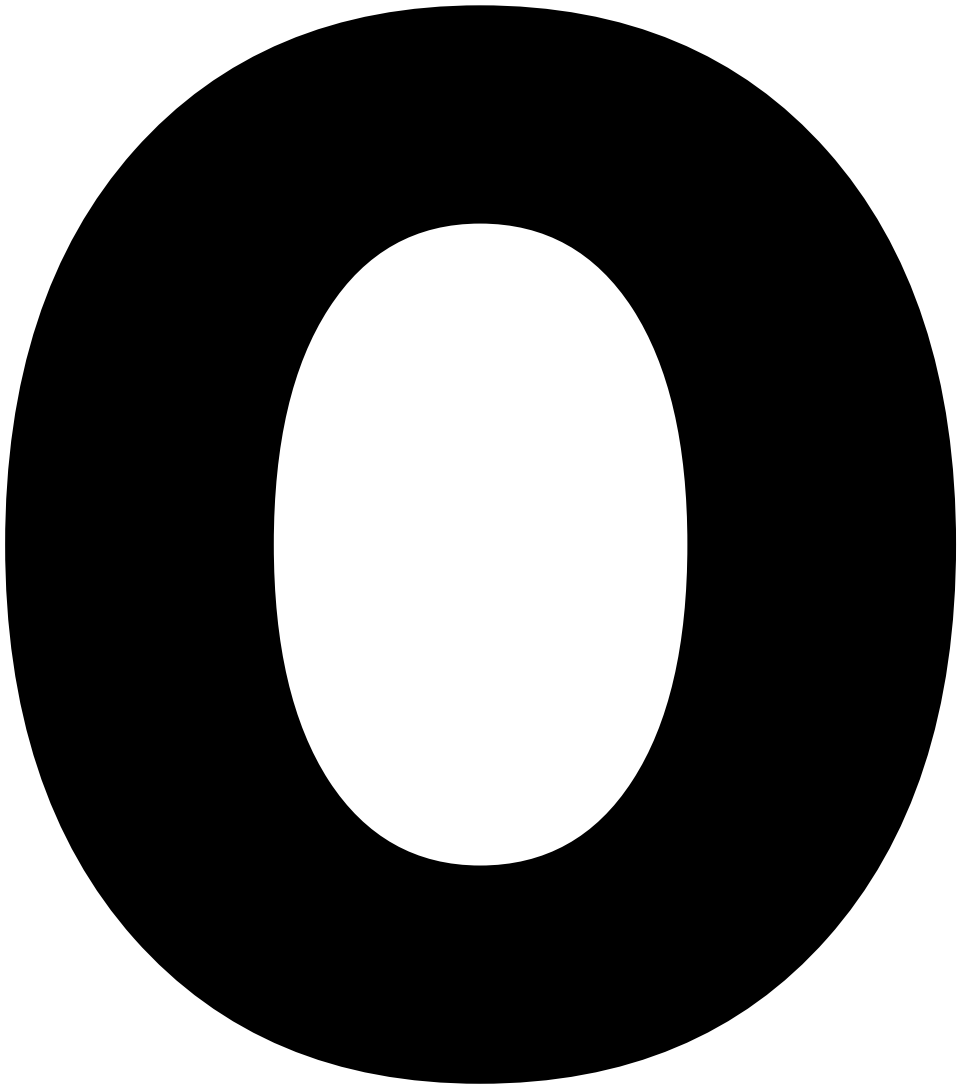
d

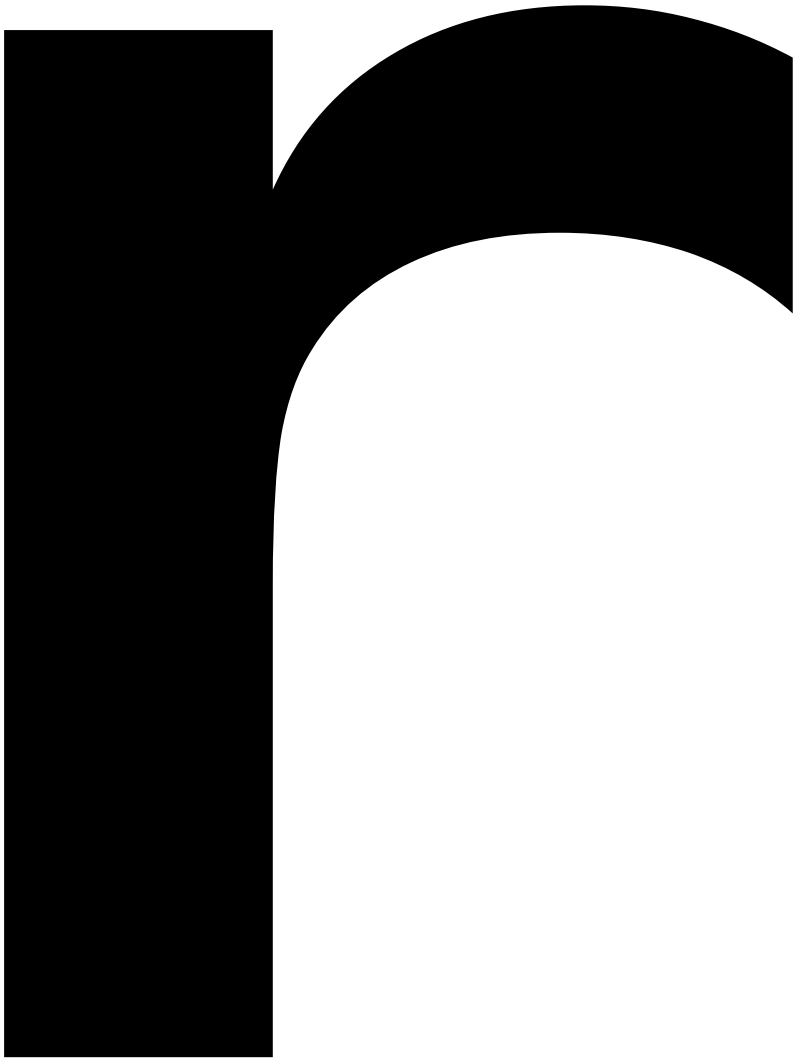


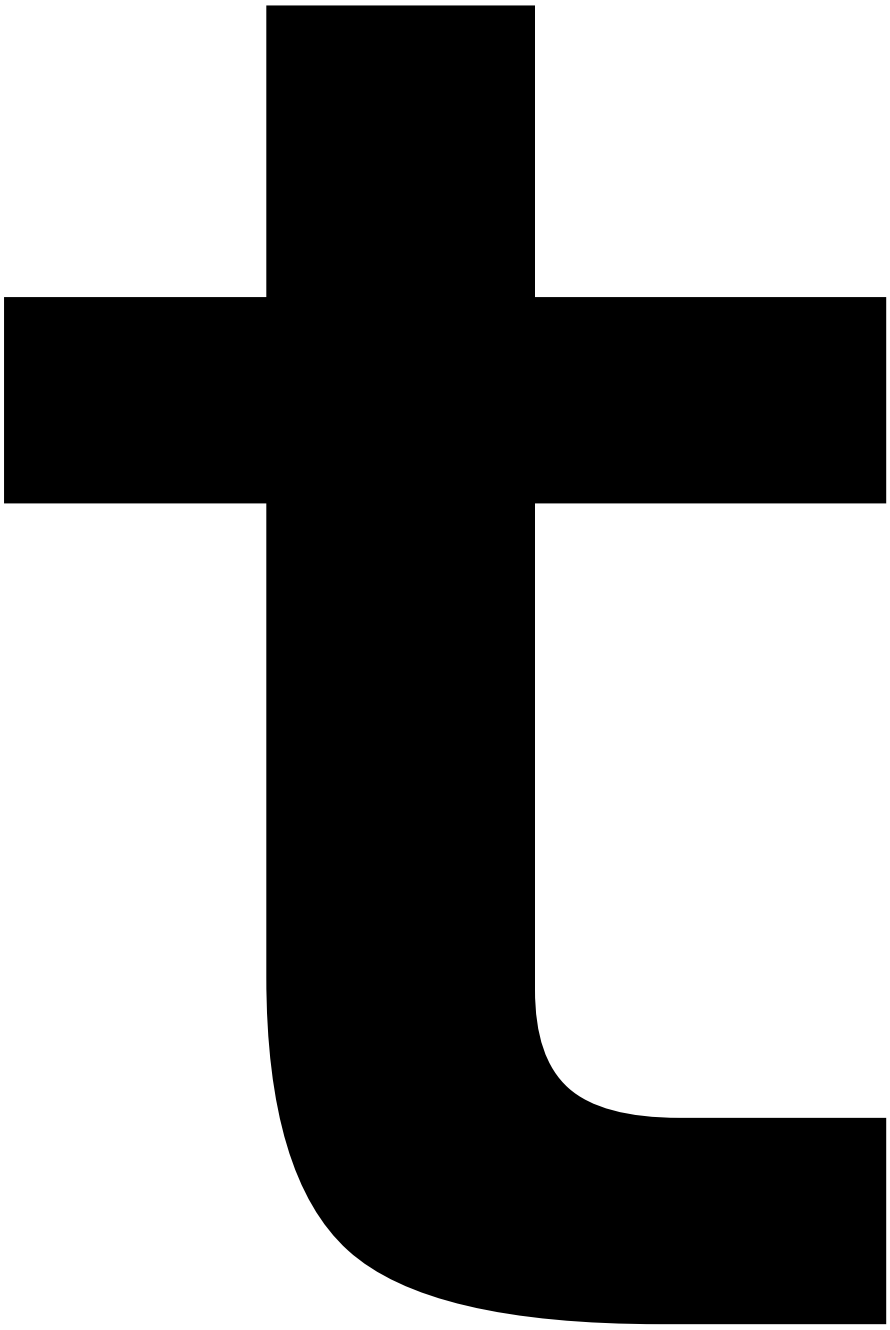




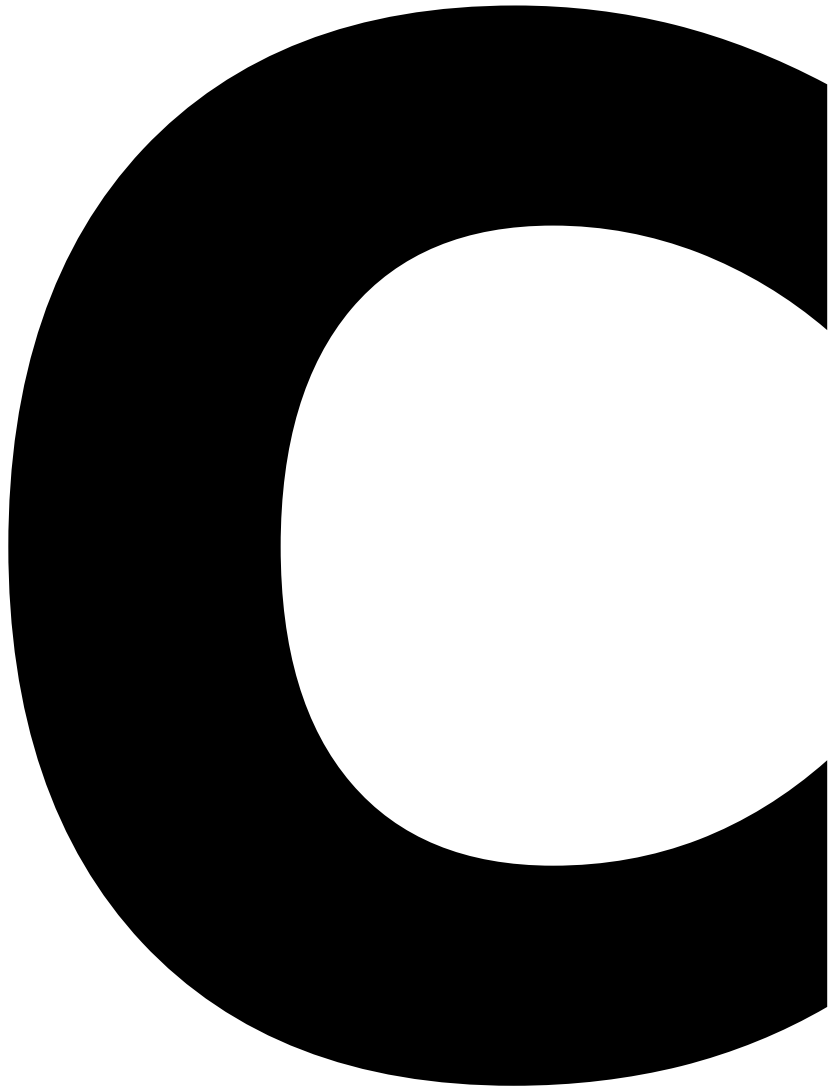


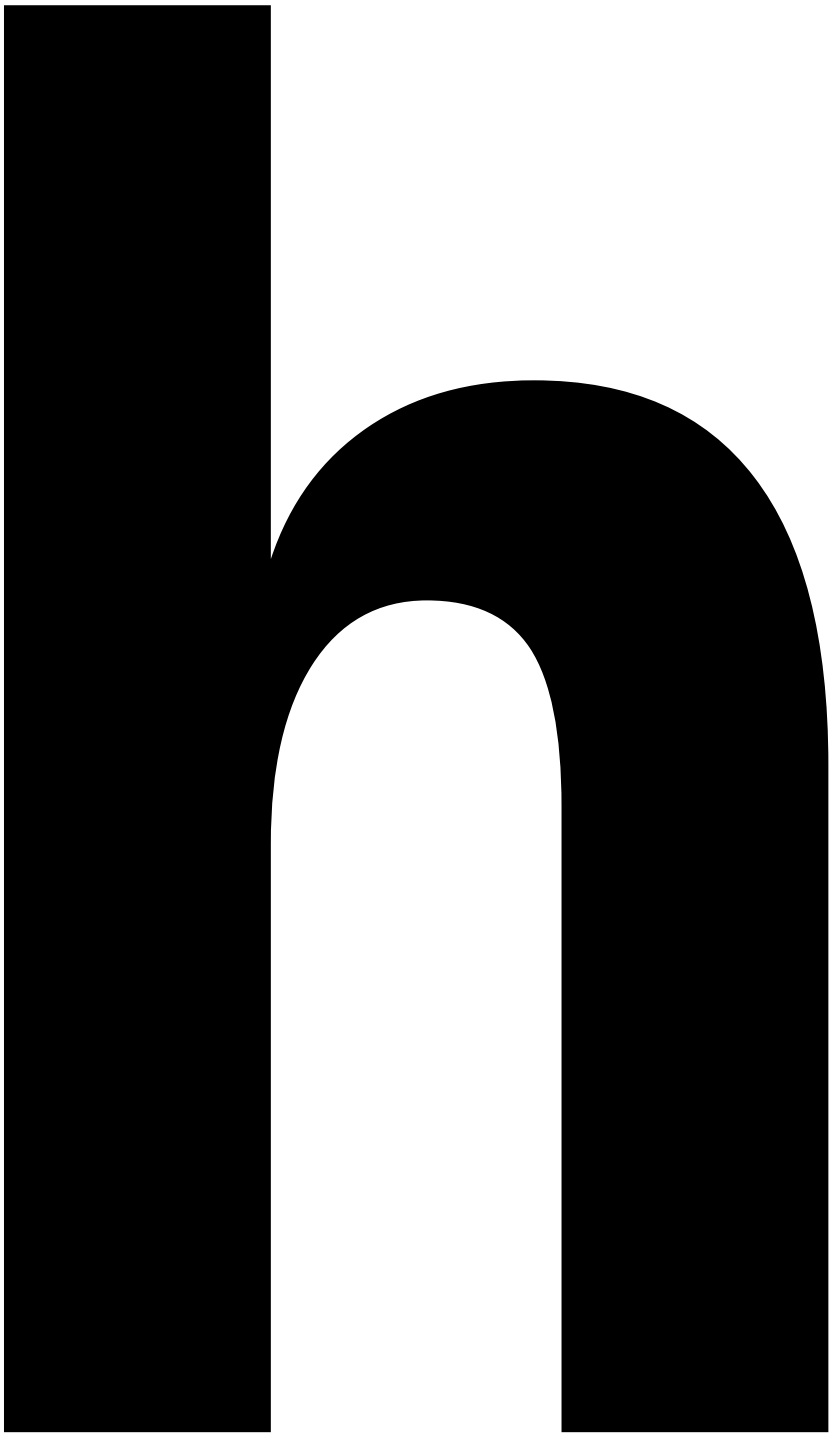


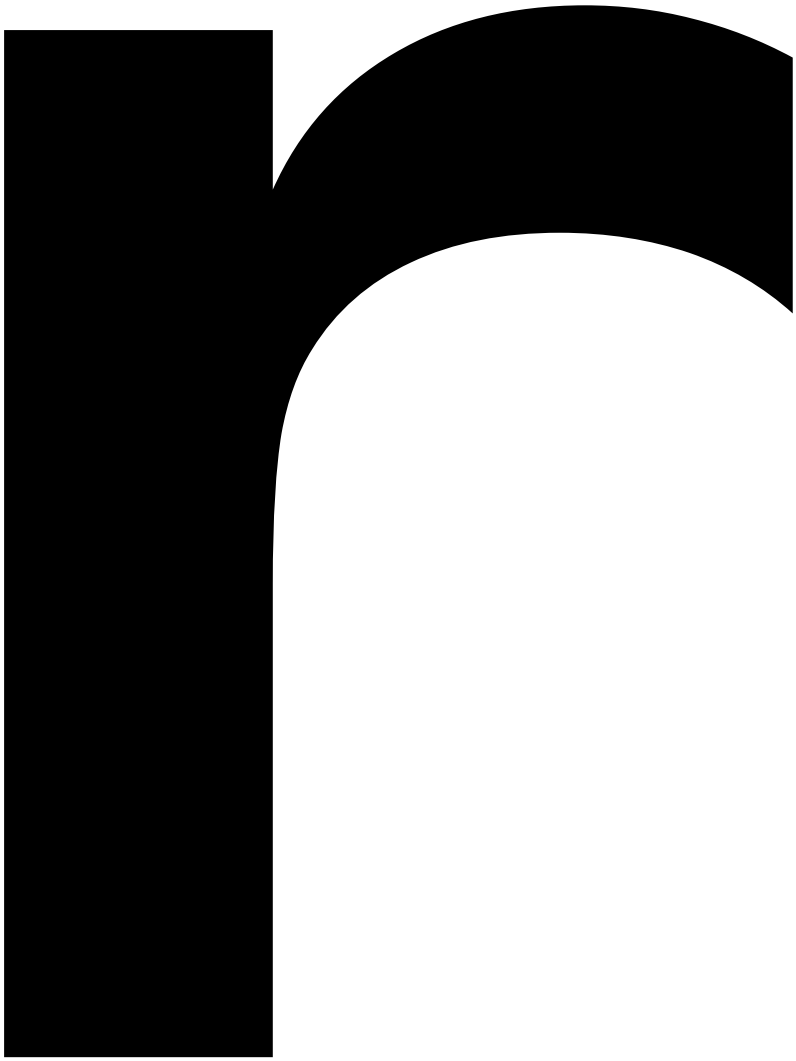


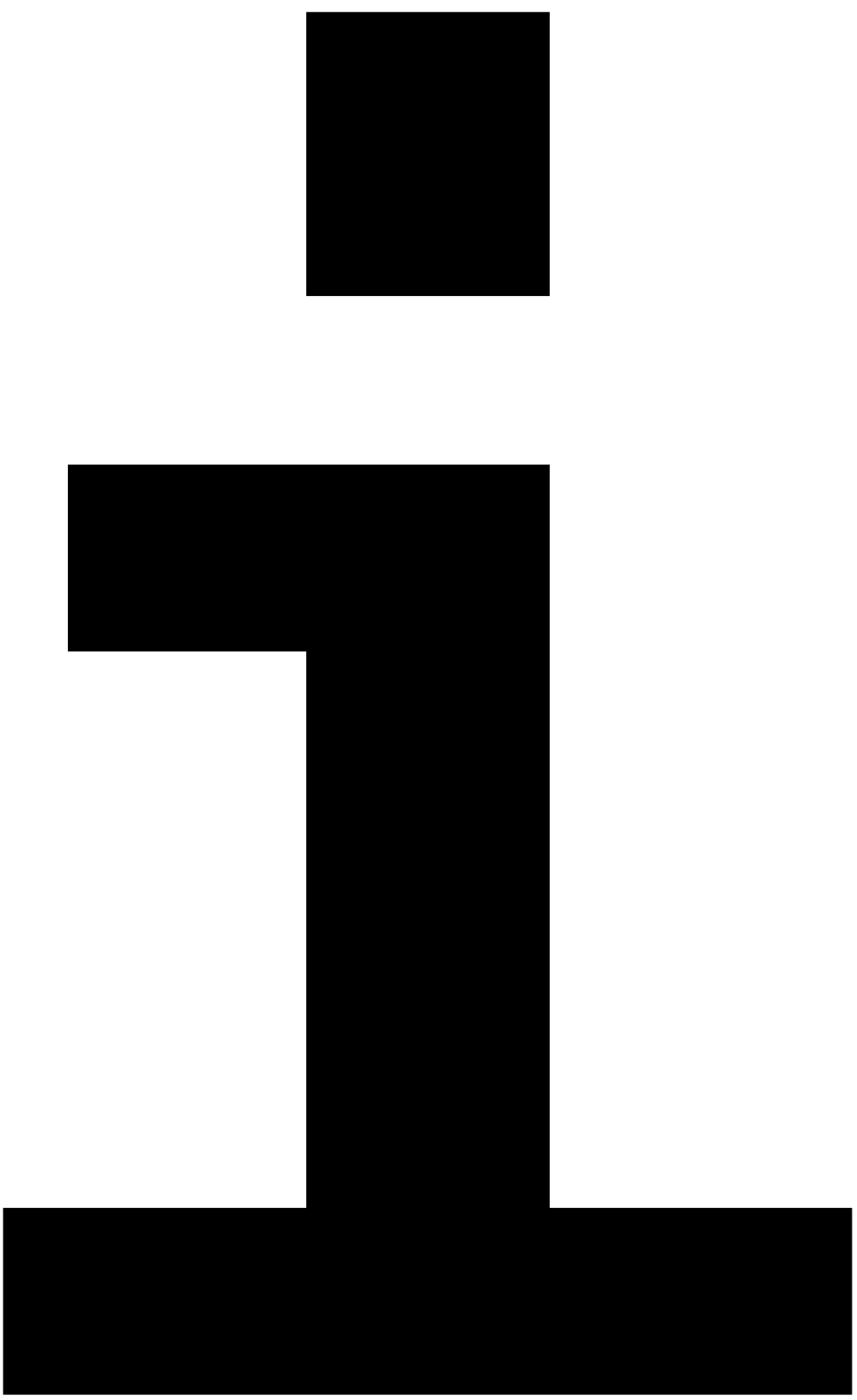


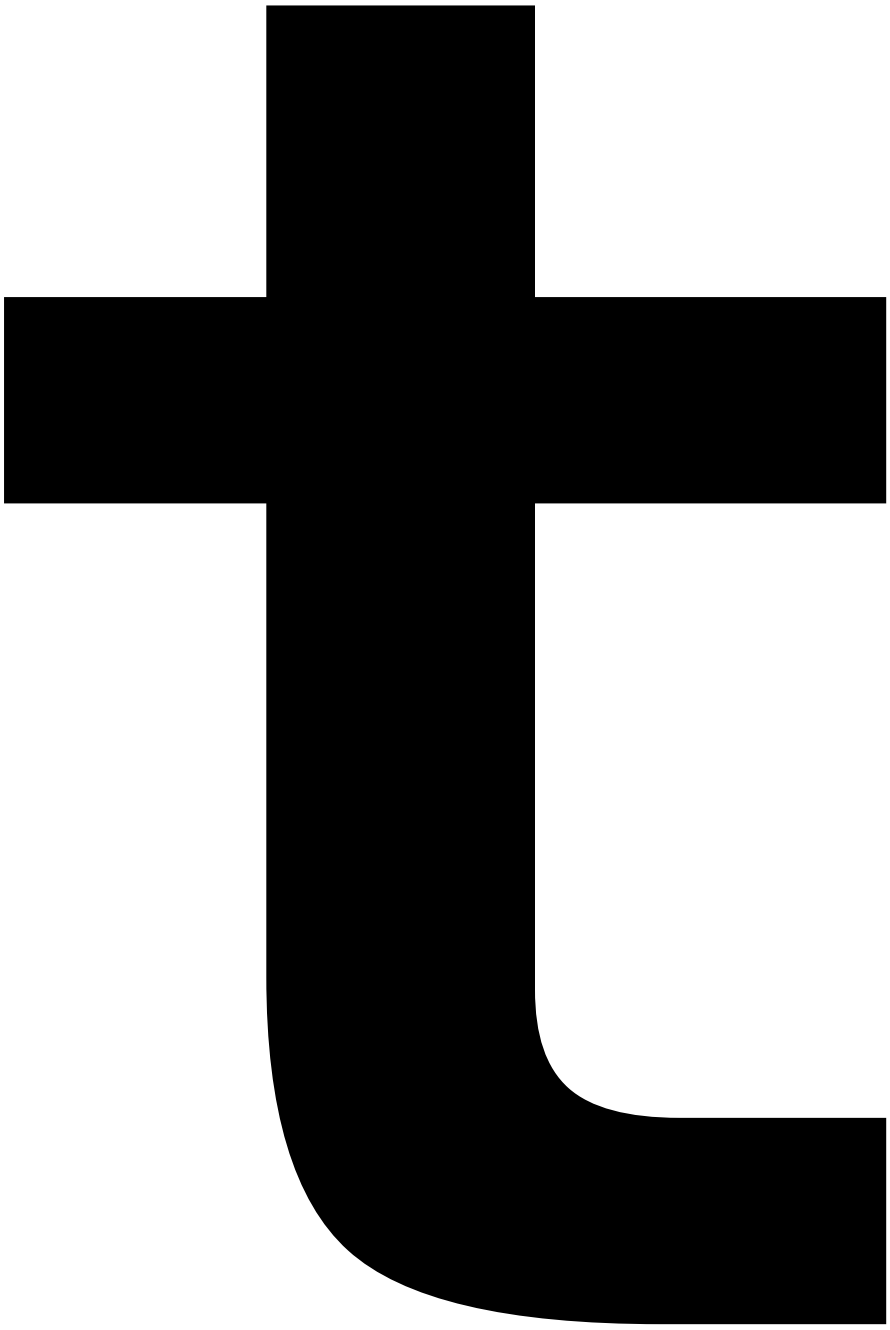
S

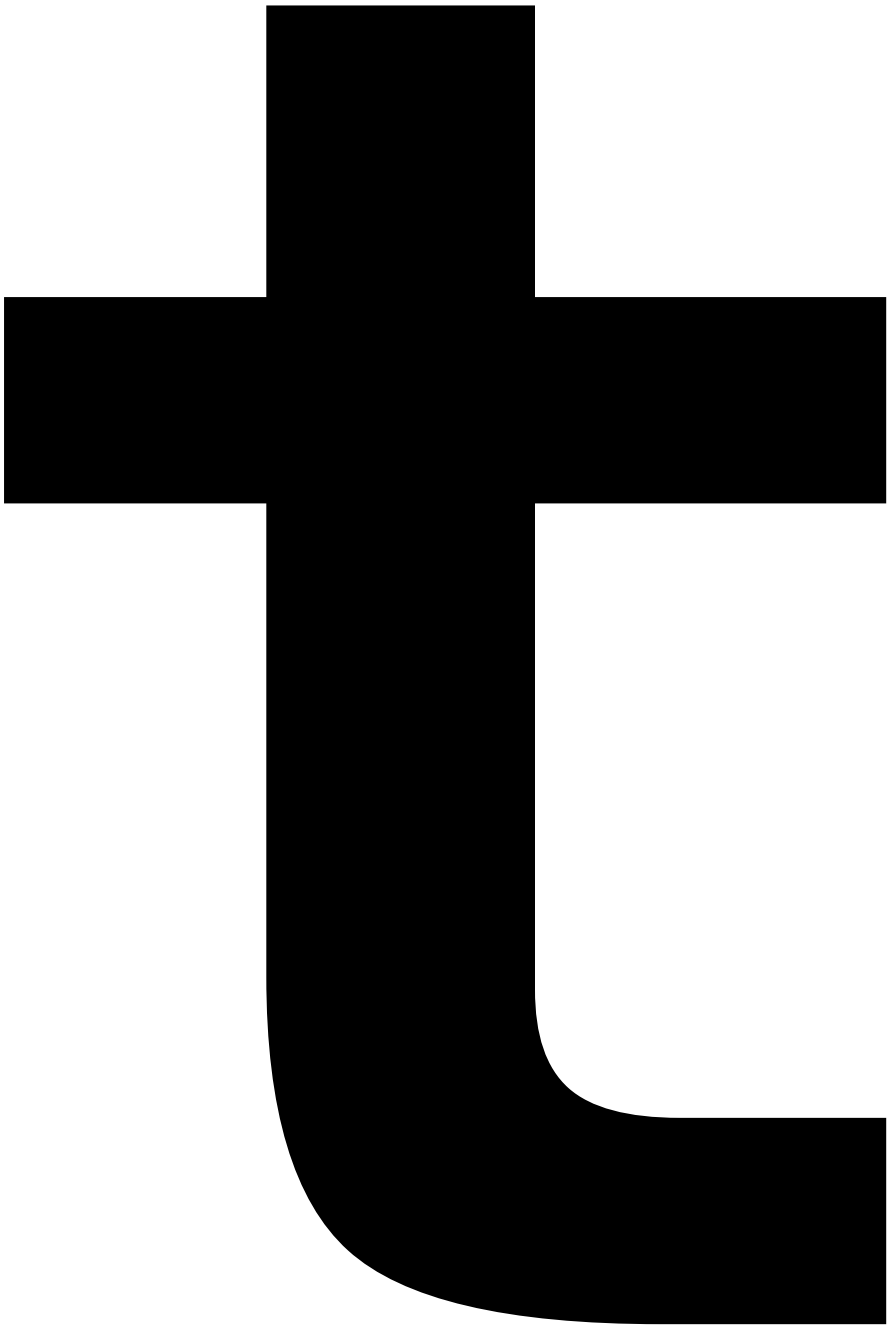


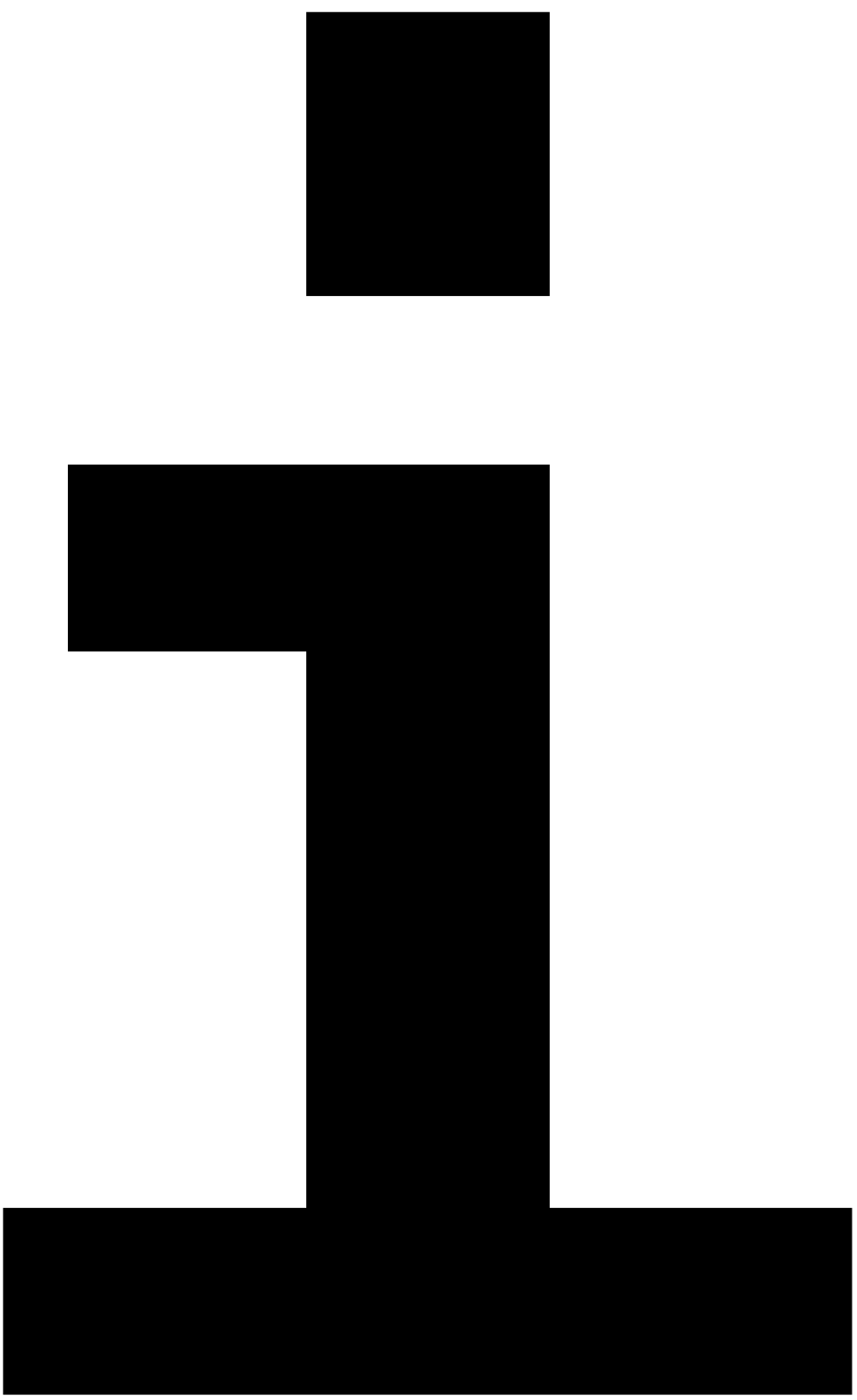


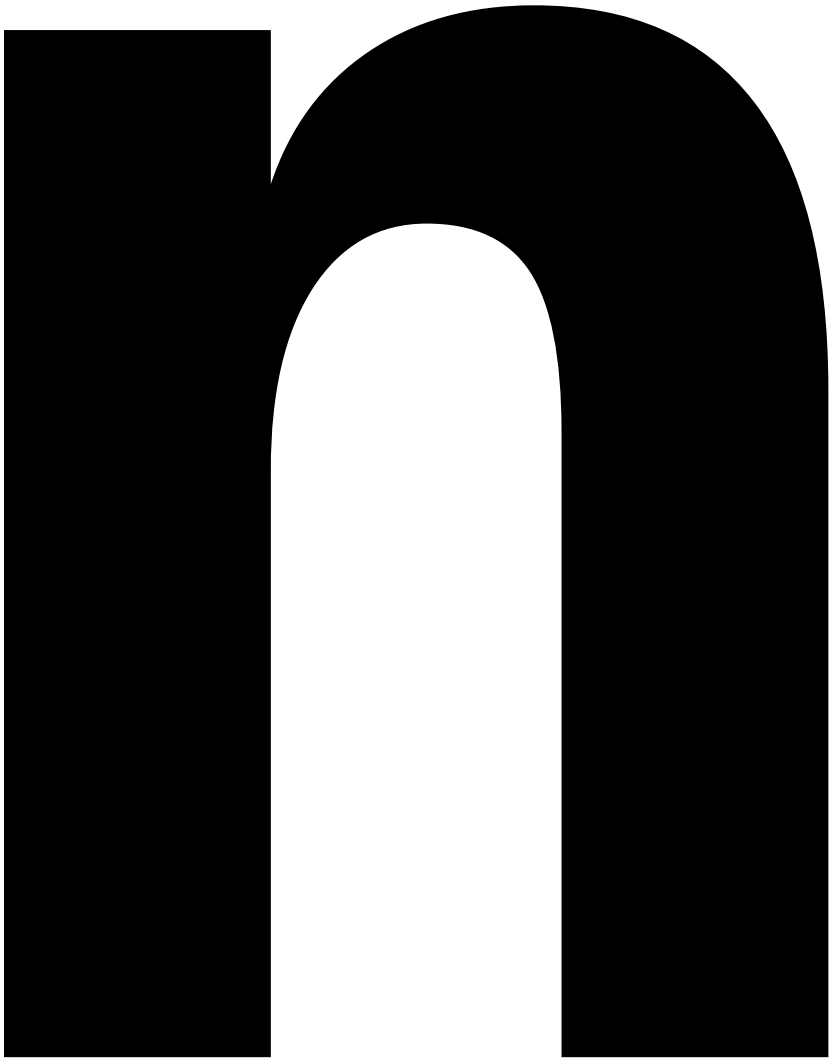


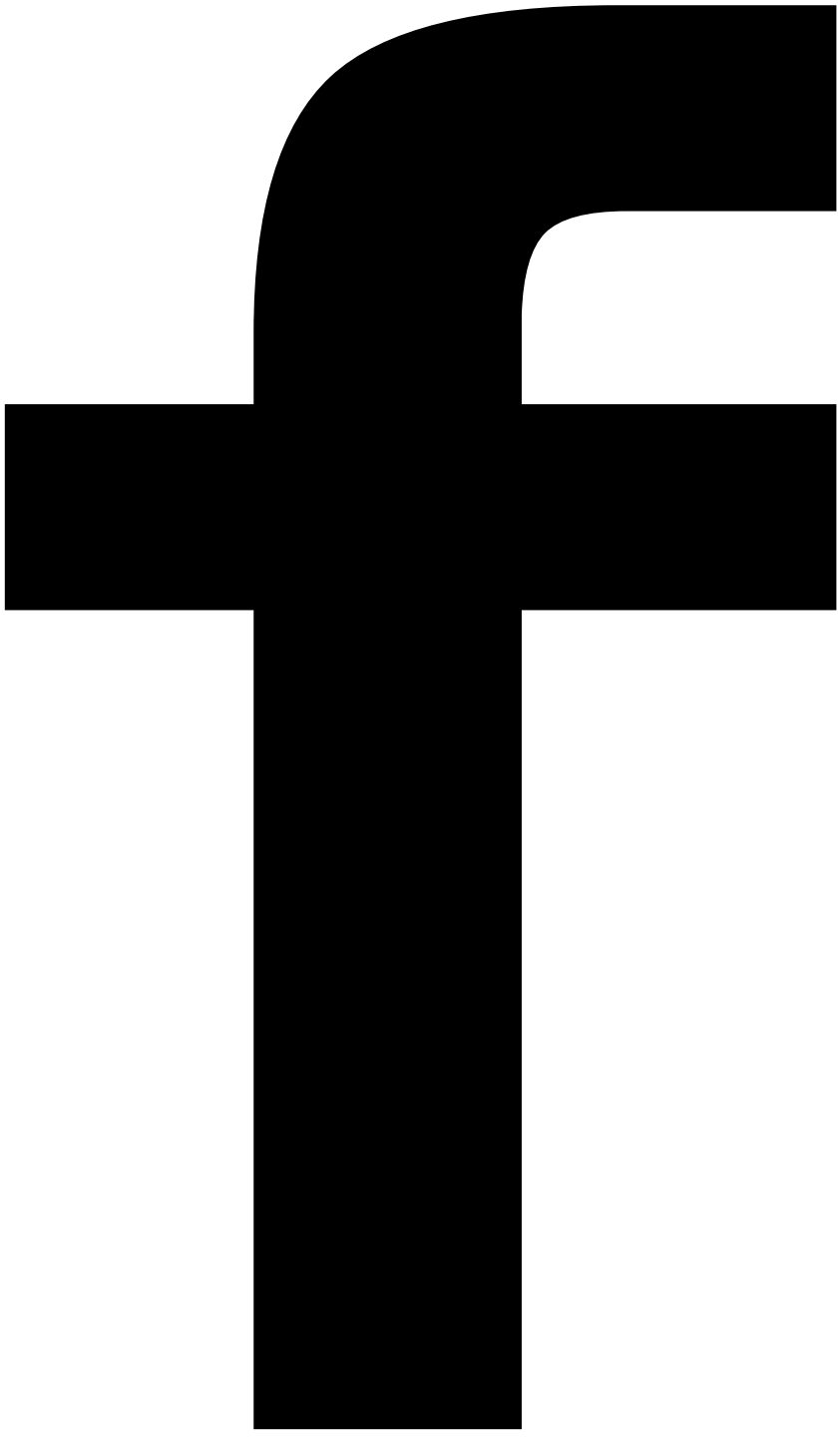


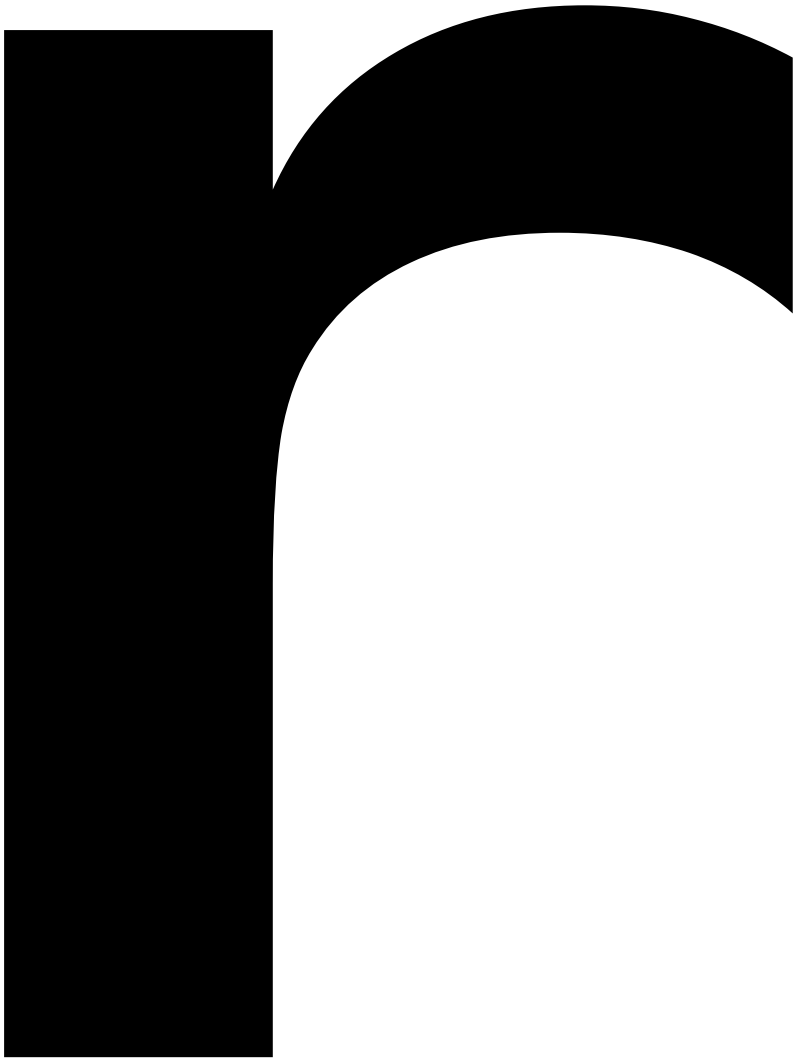


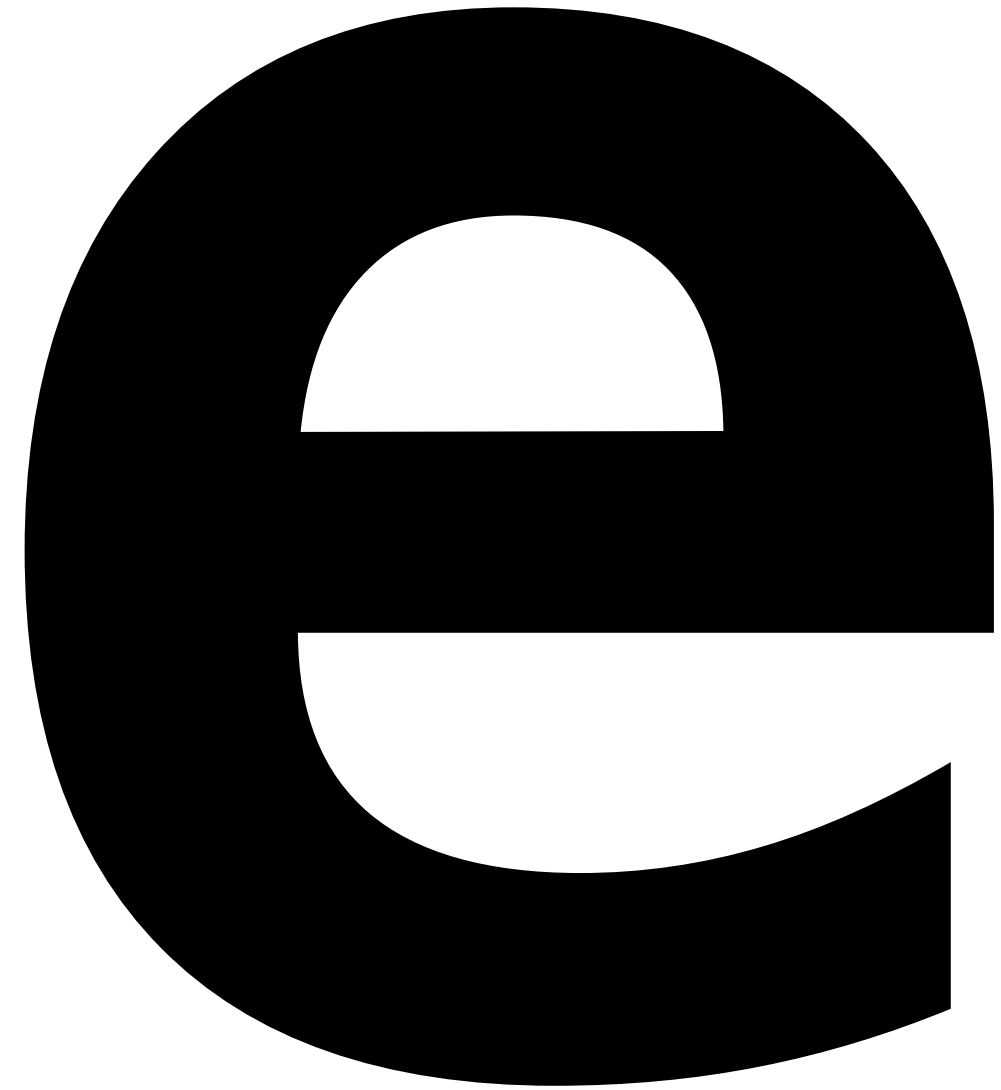


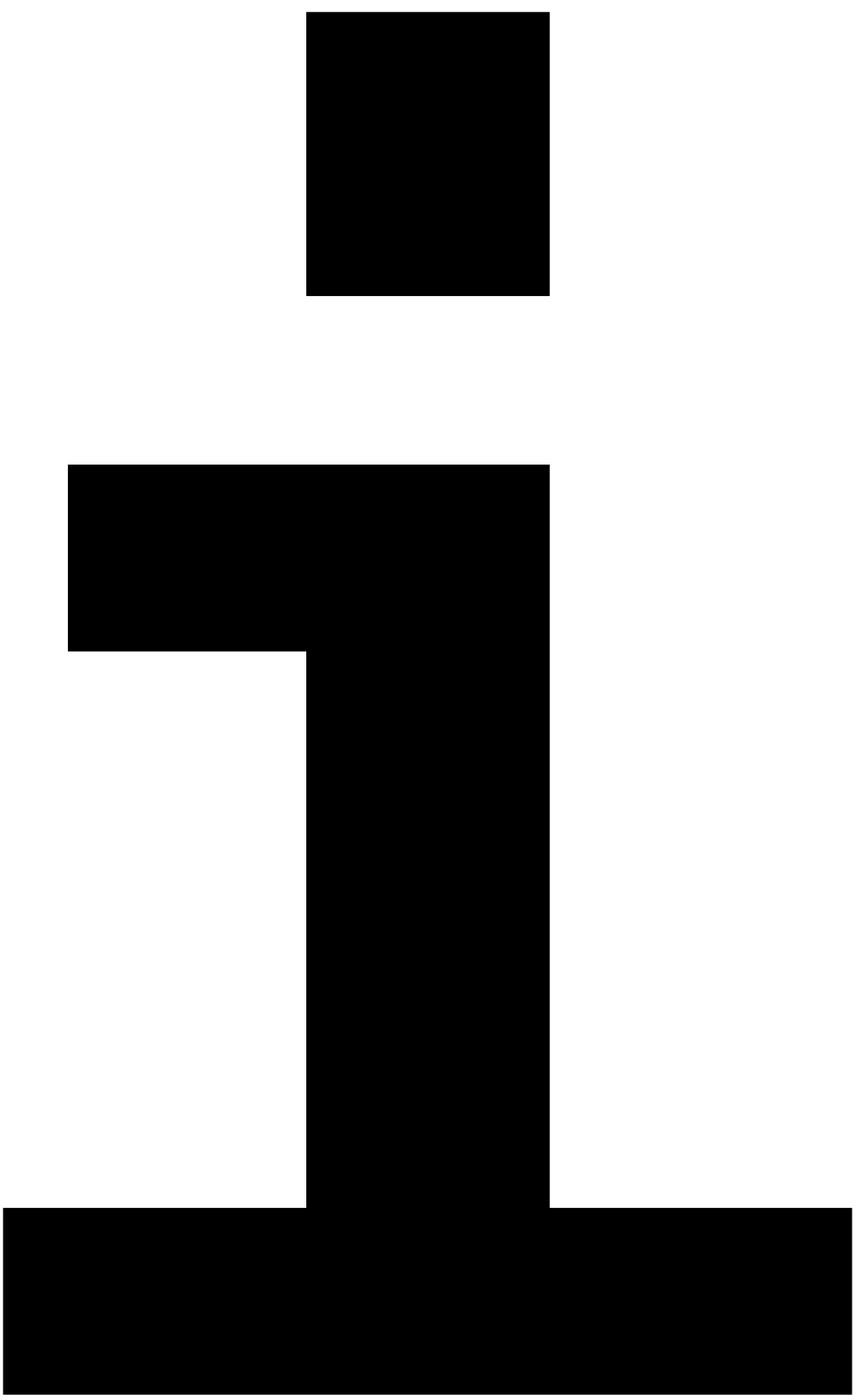


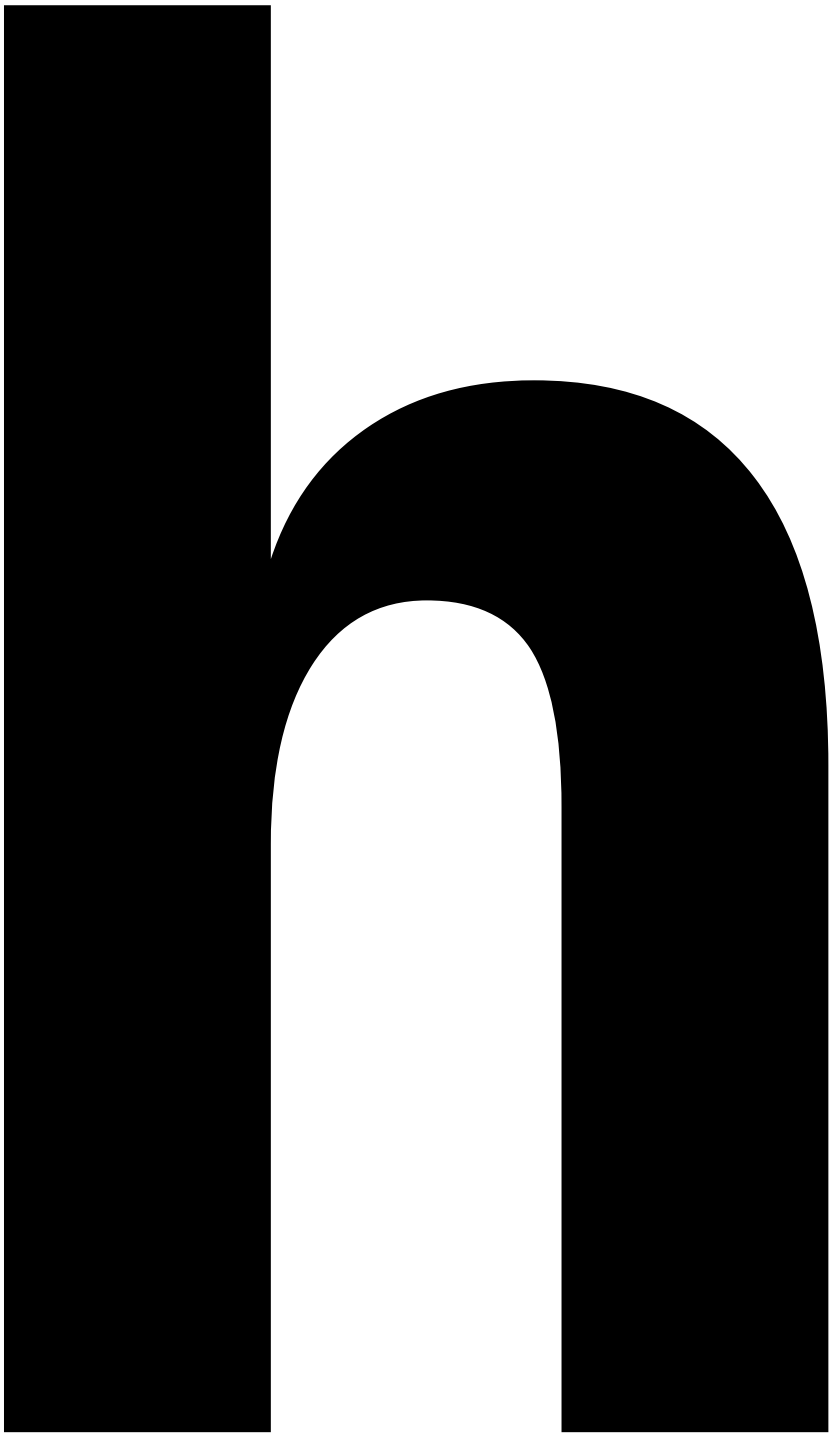


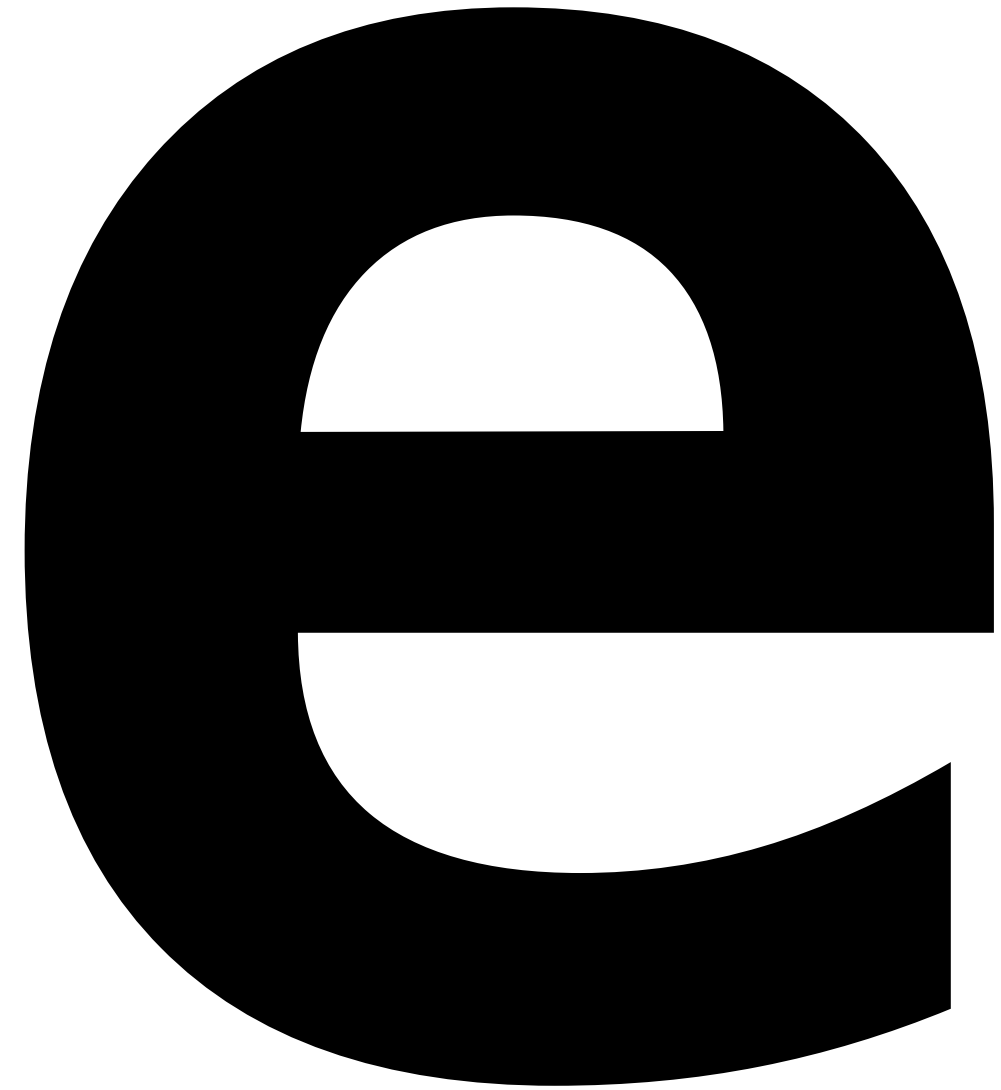


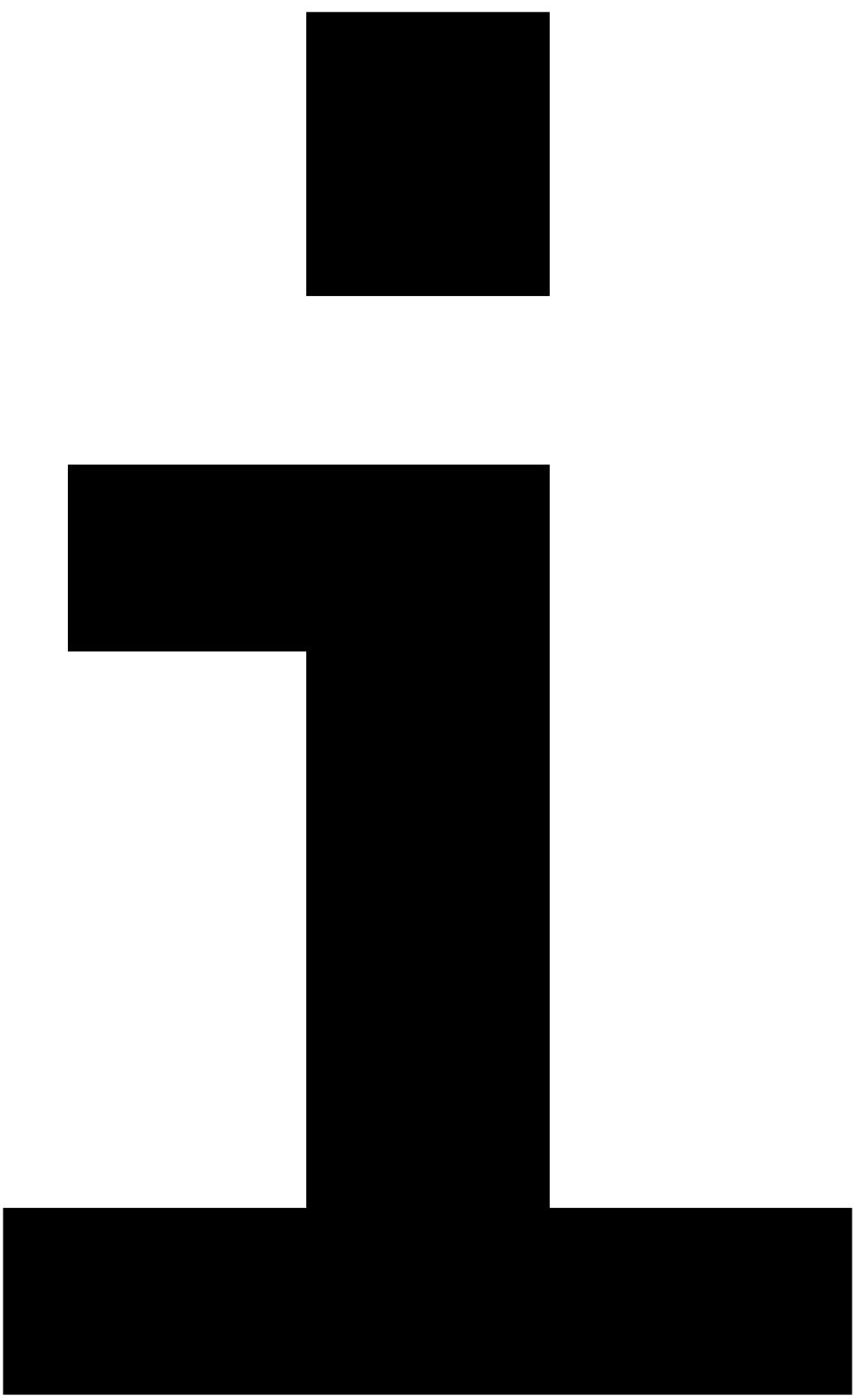


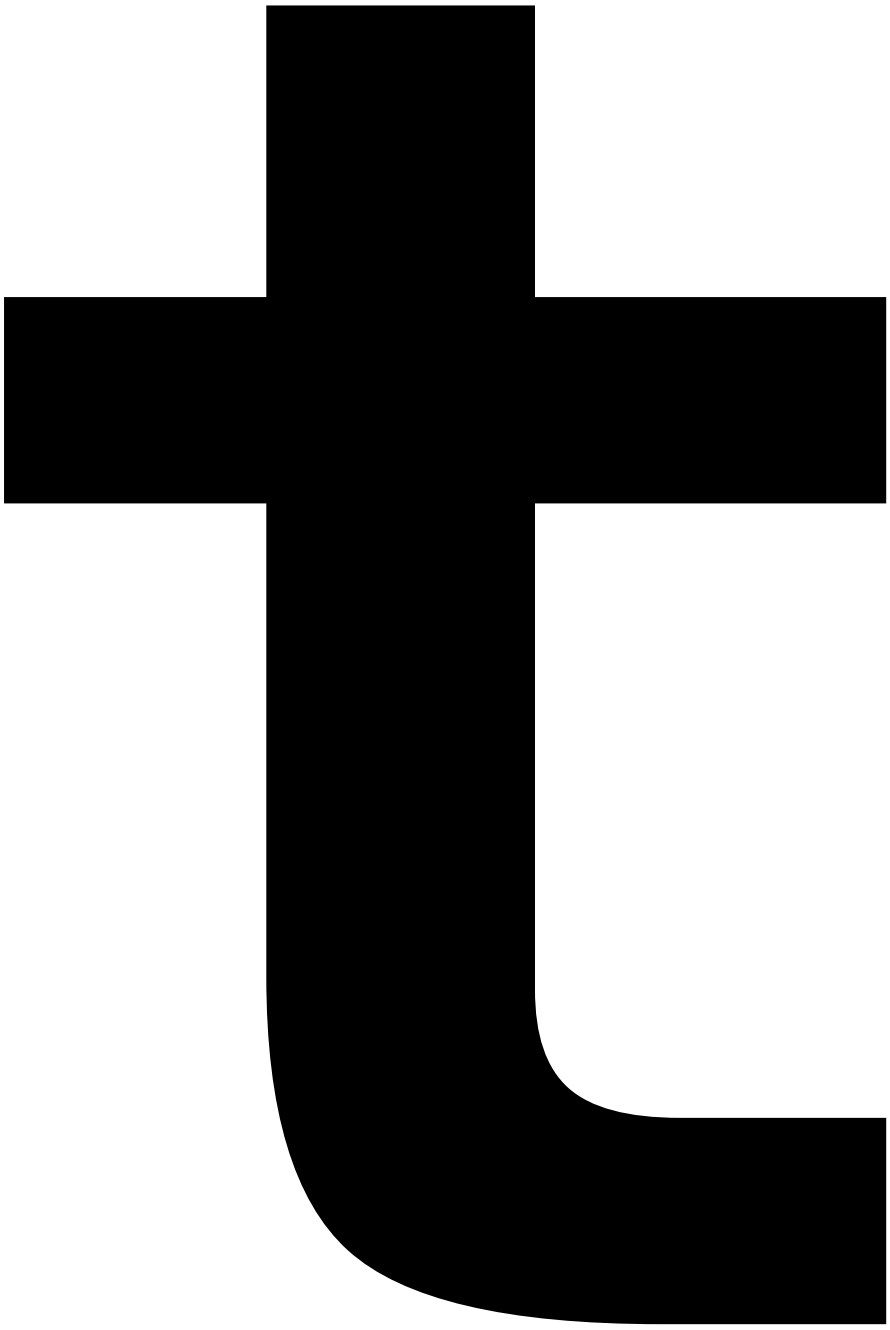


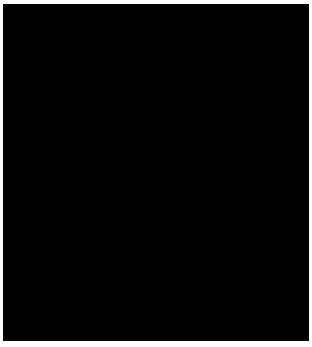




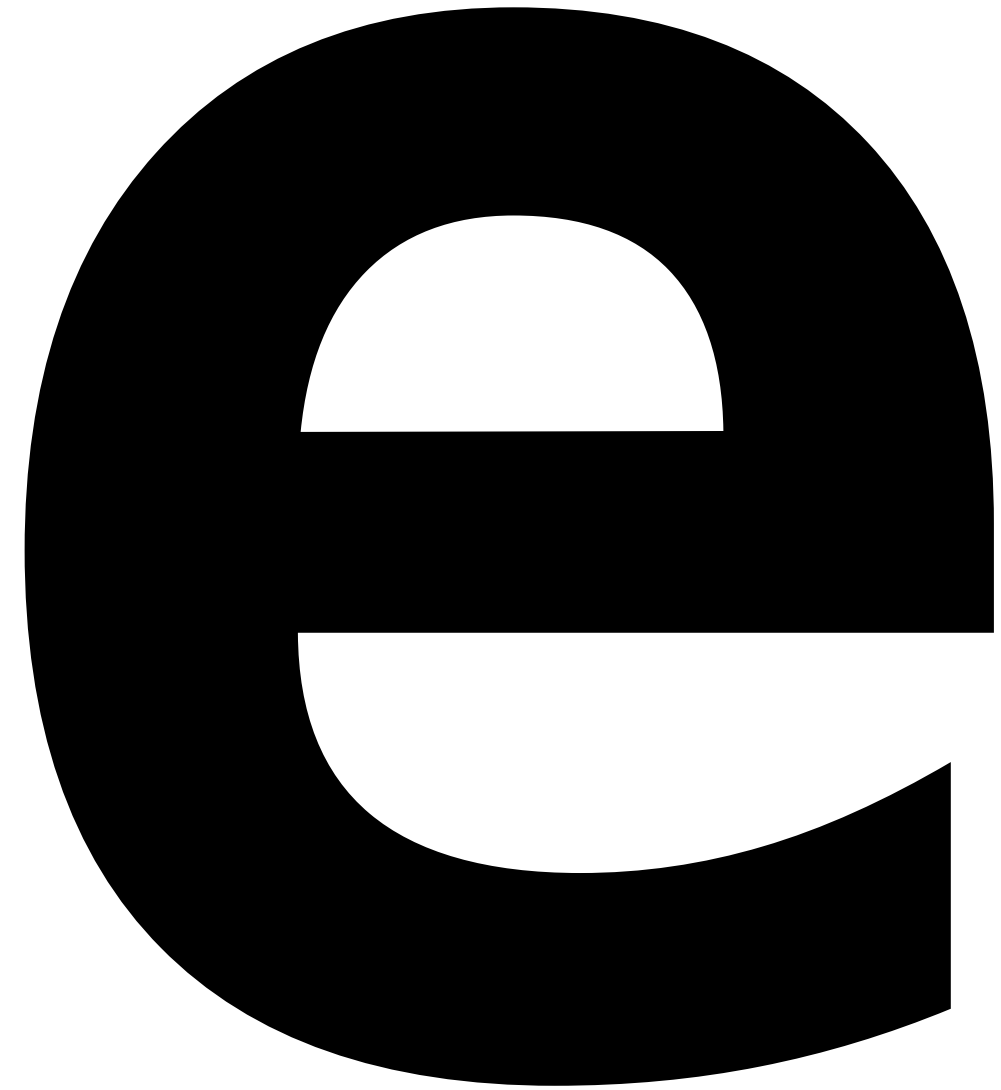


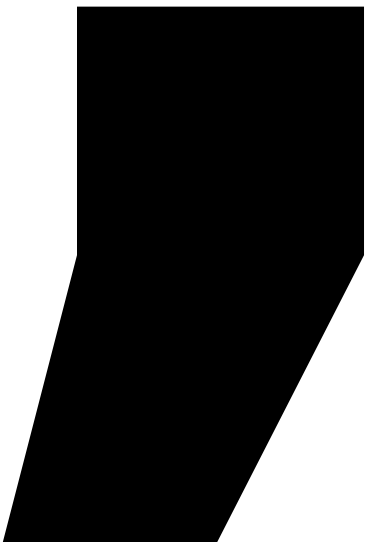


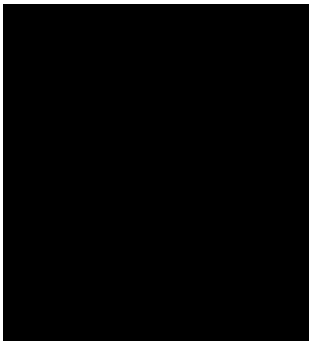


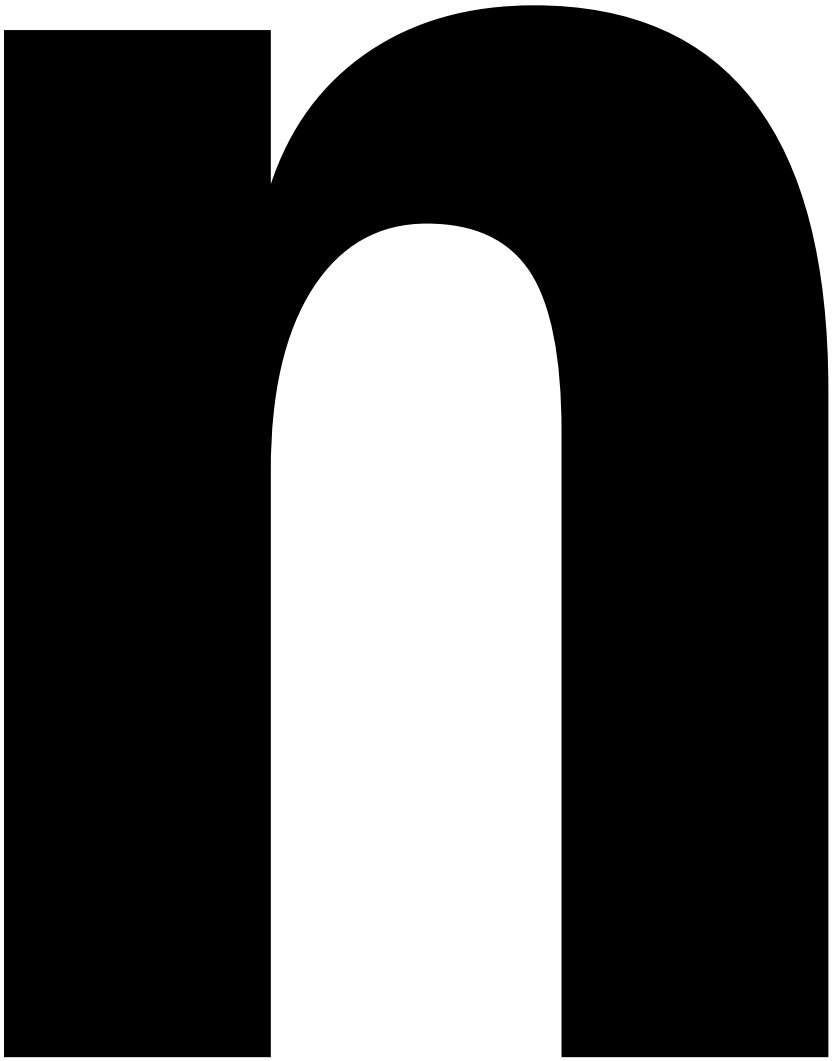


d

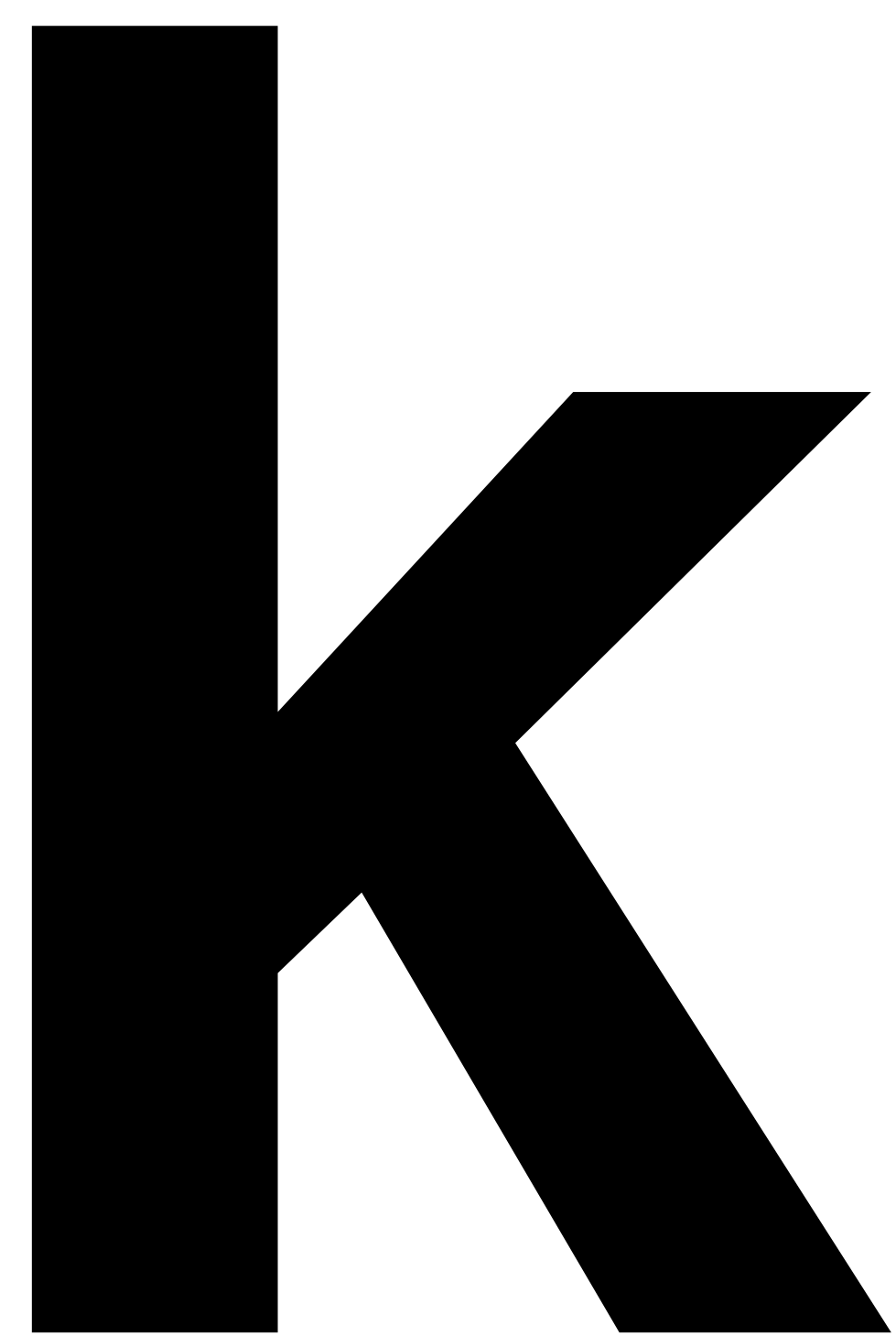


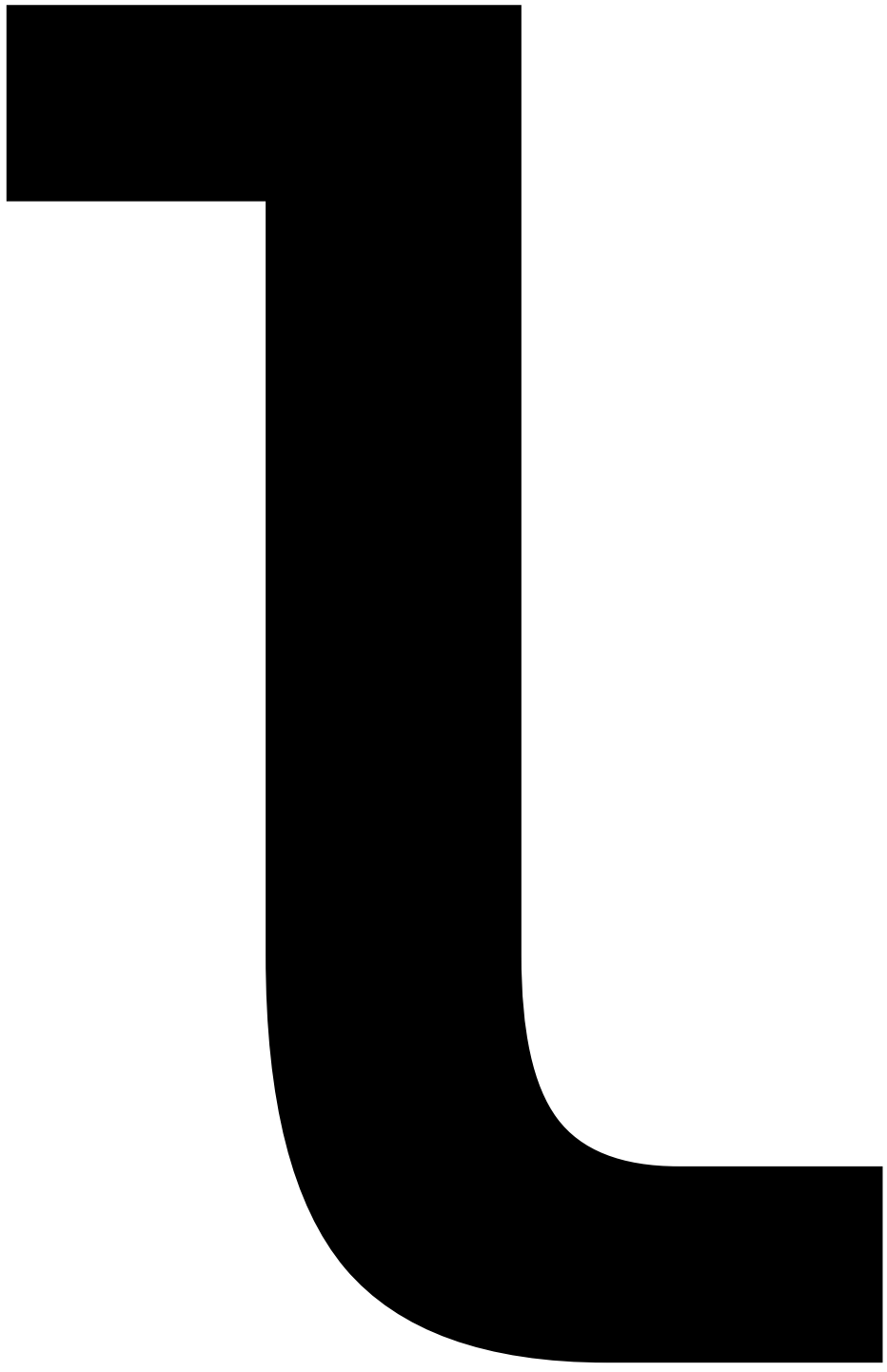


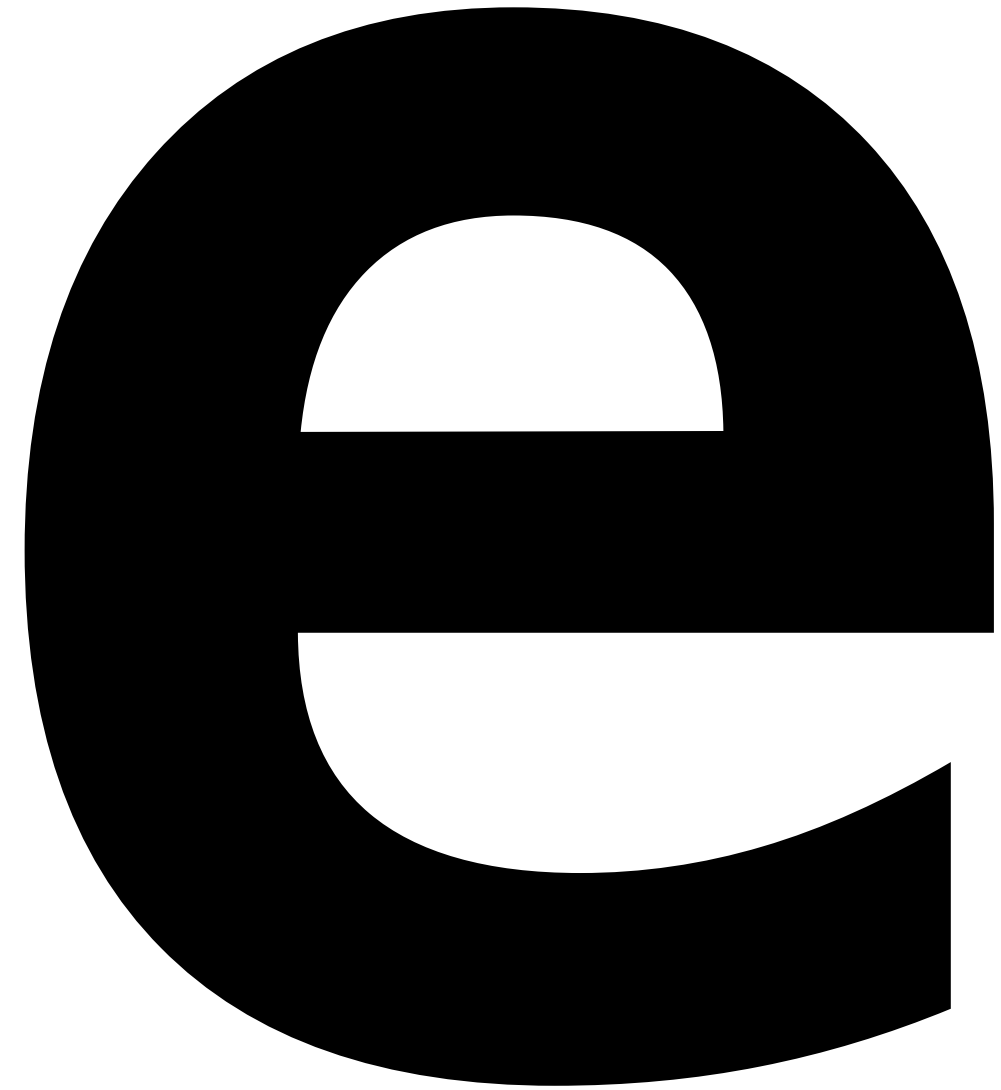


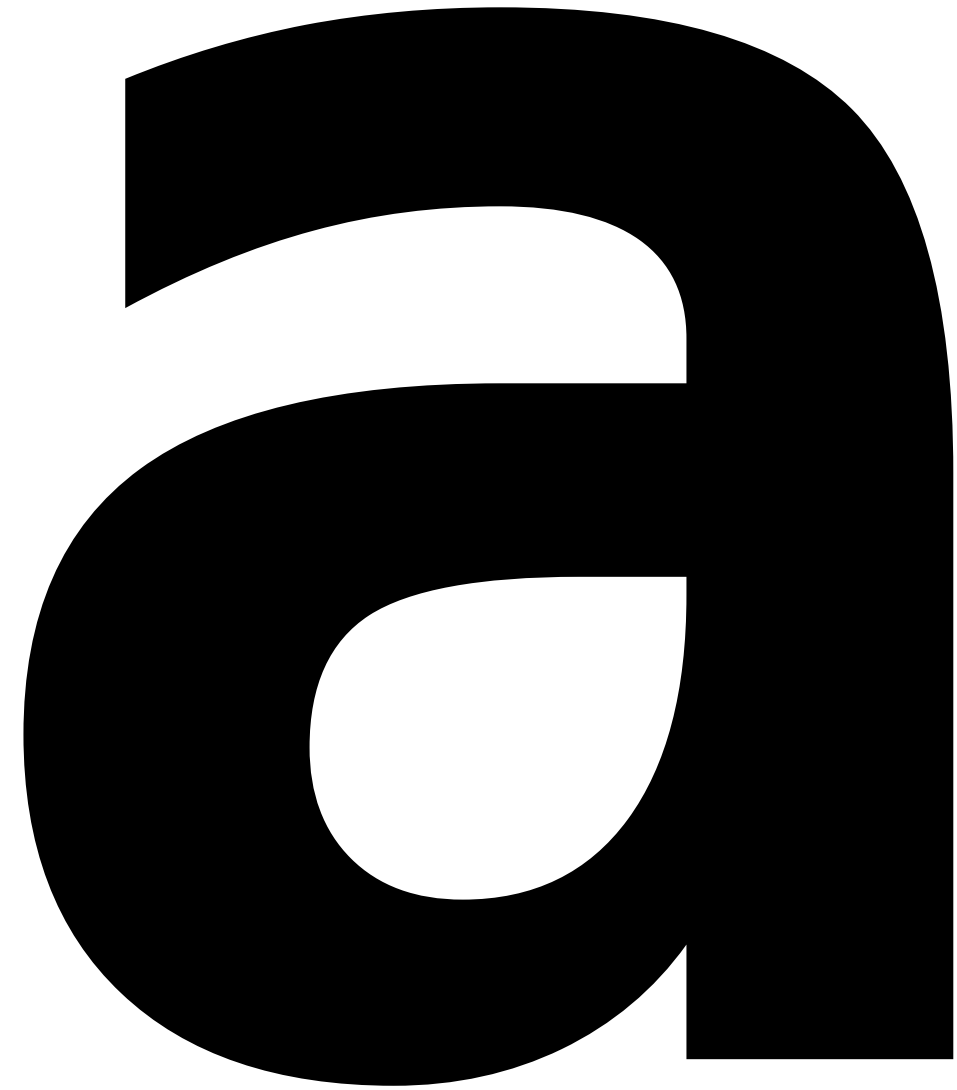


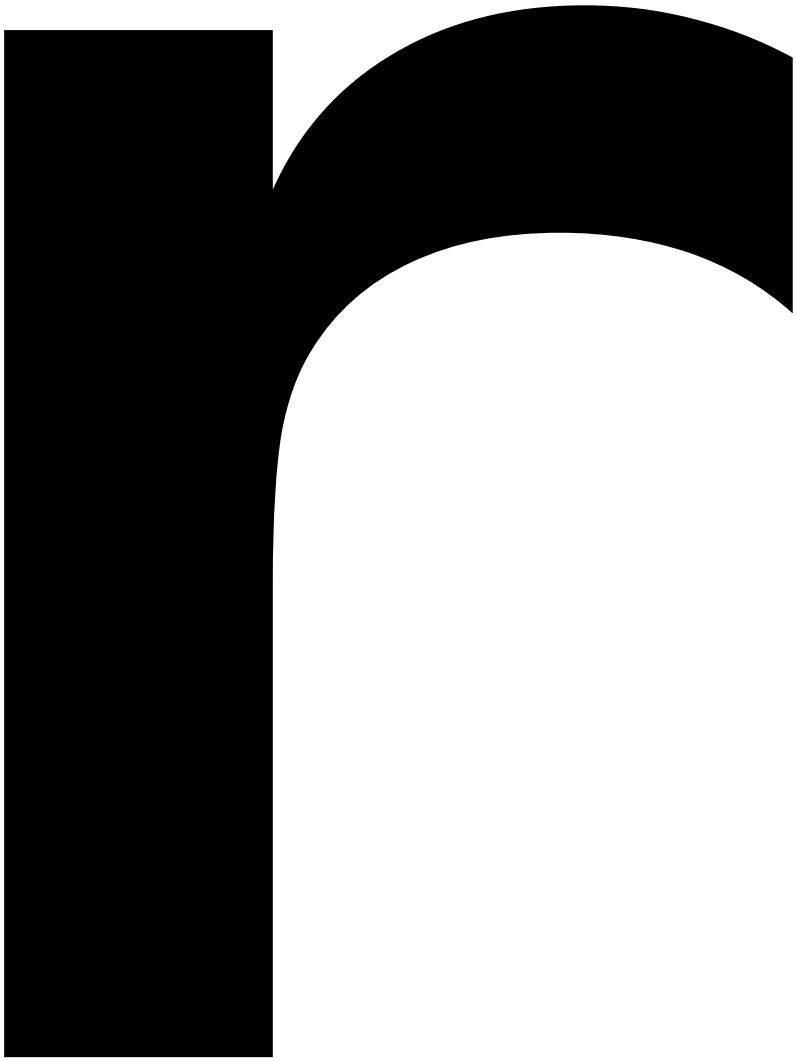
u

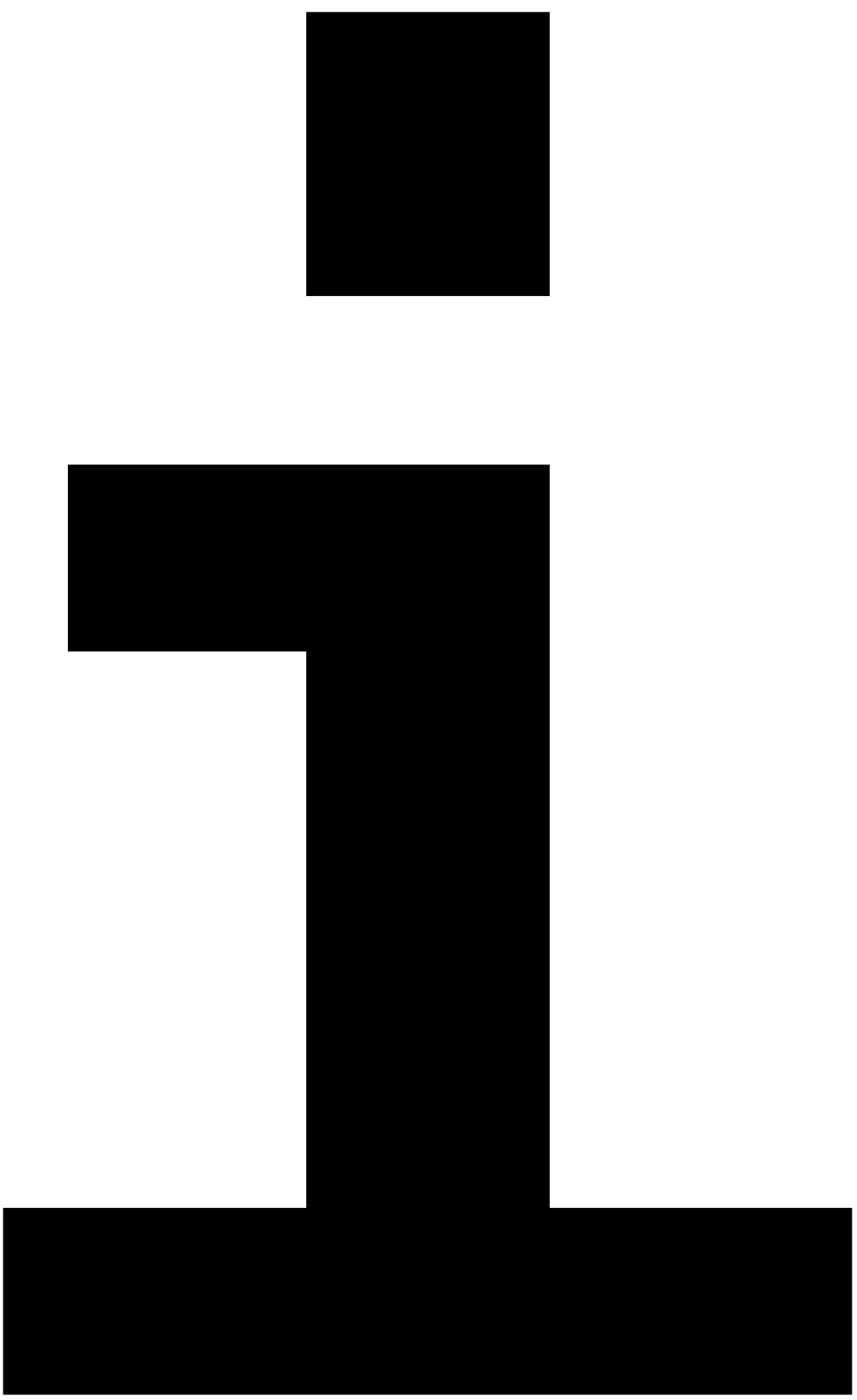


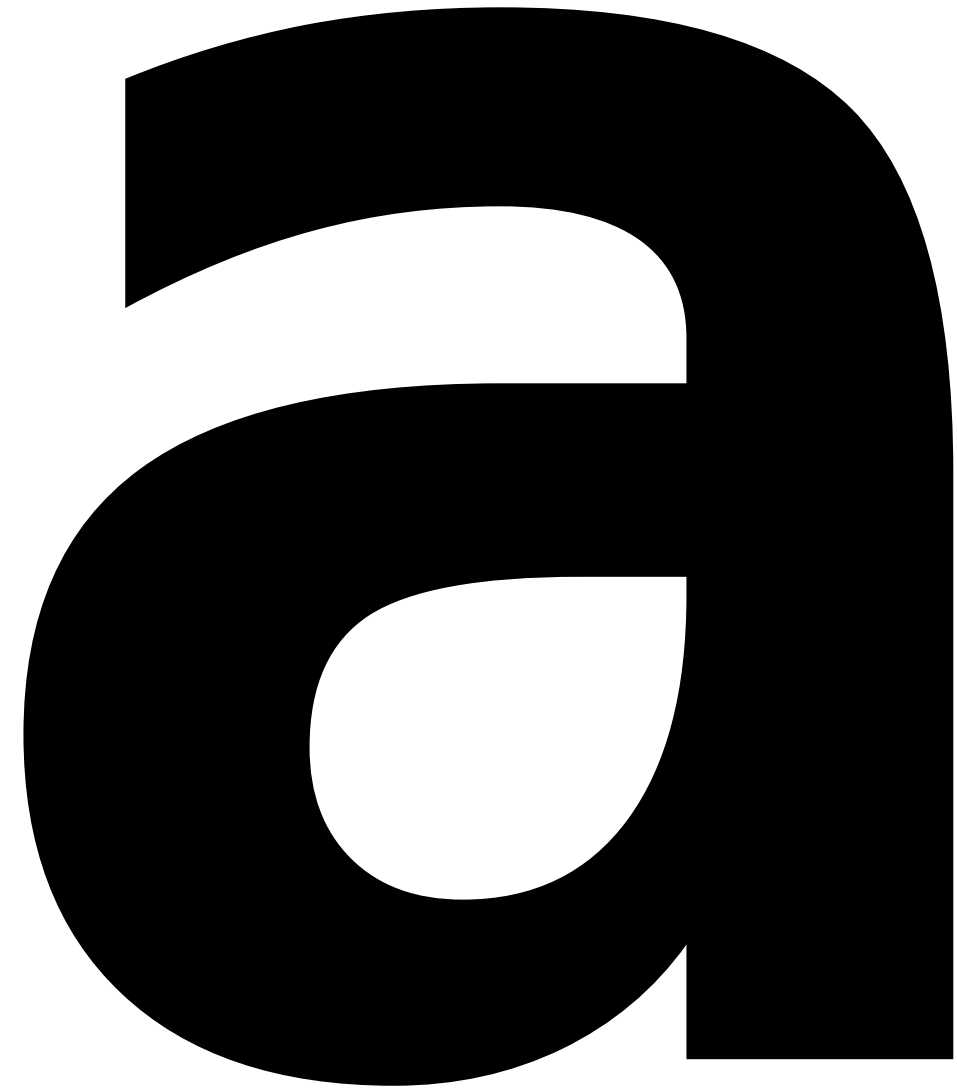


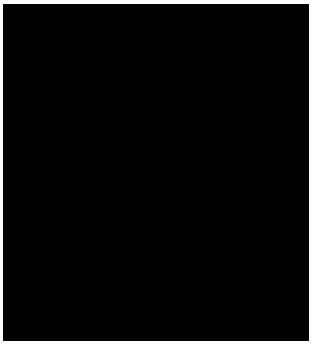




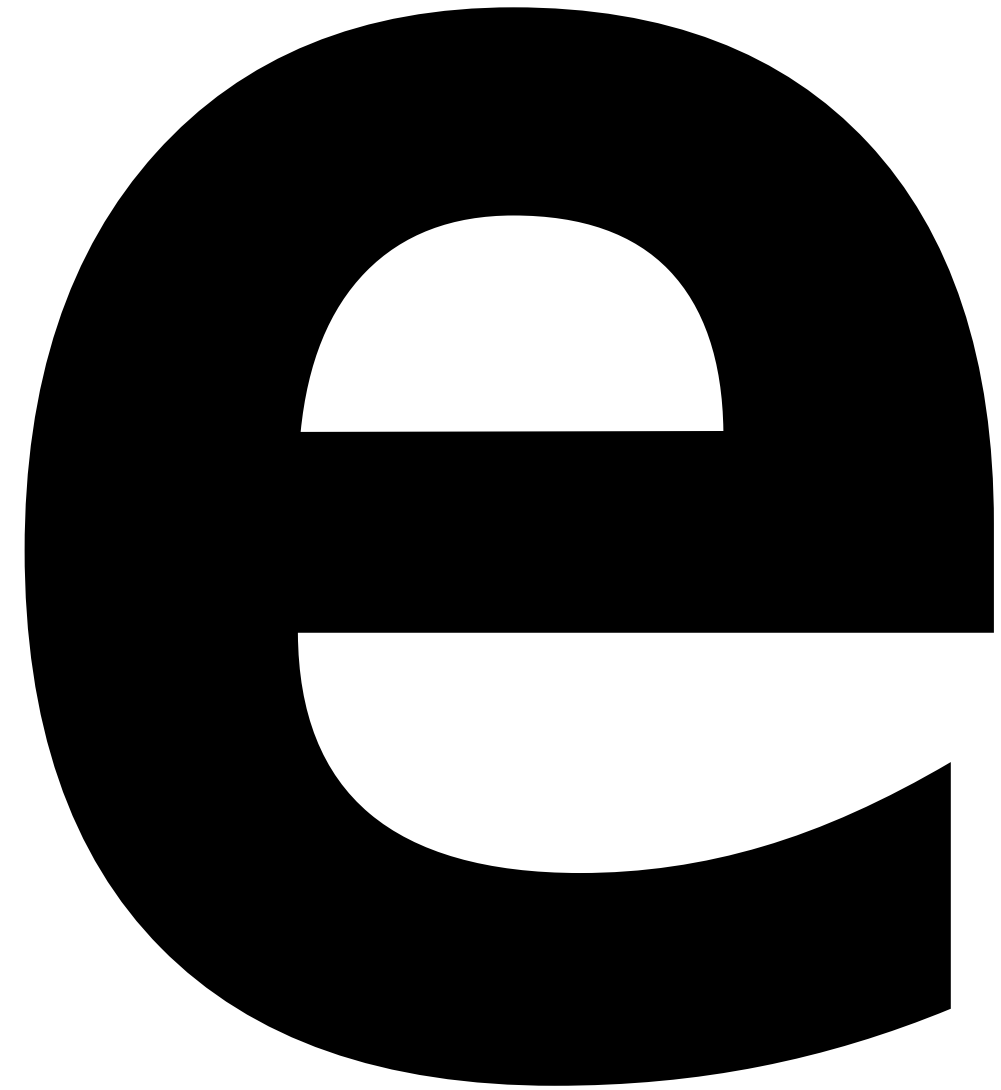


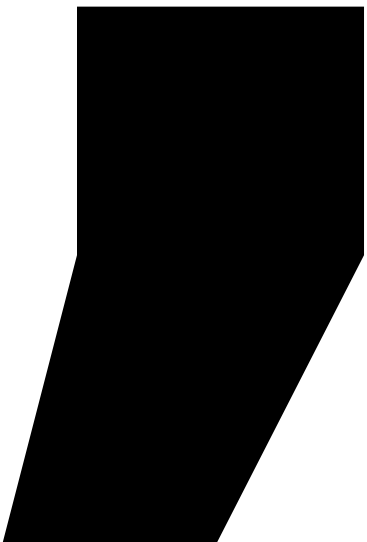


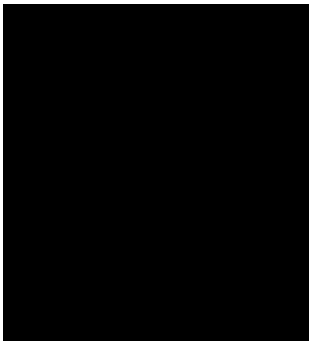


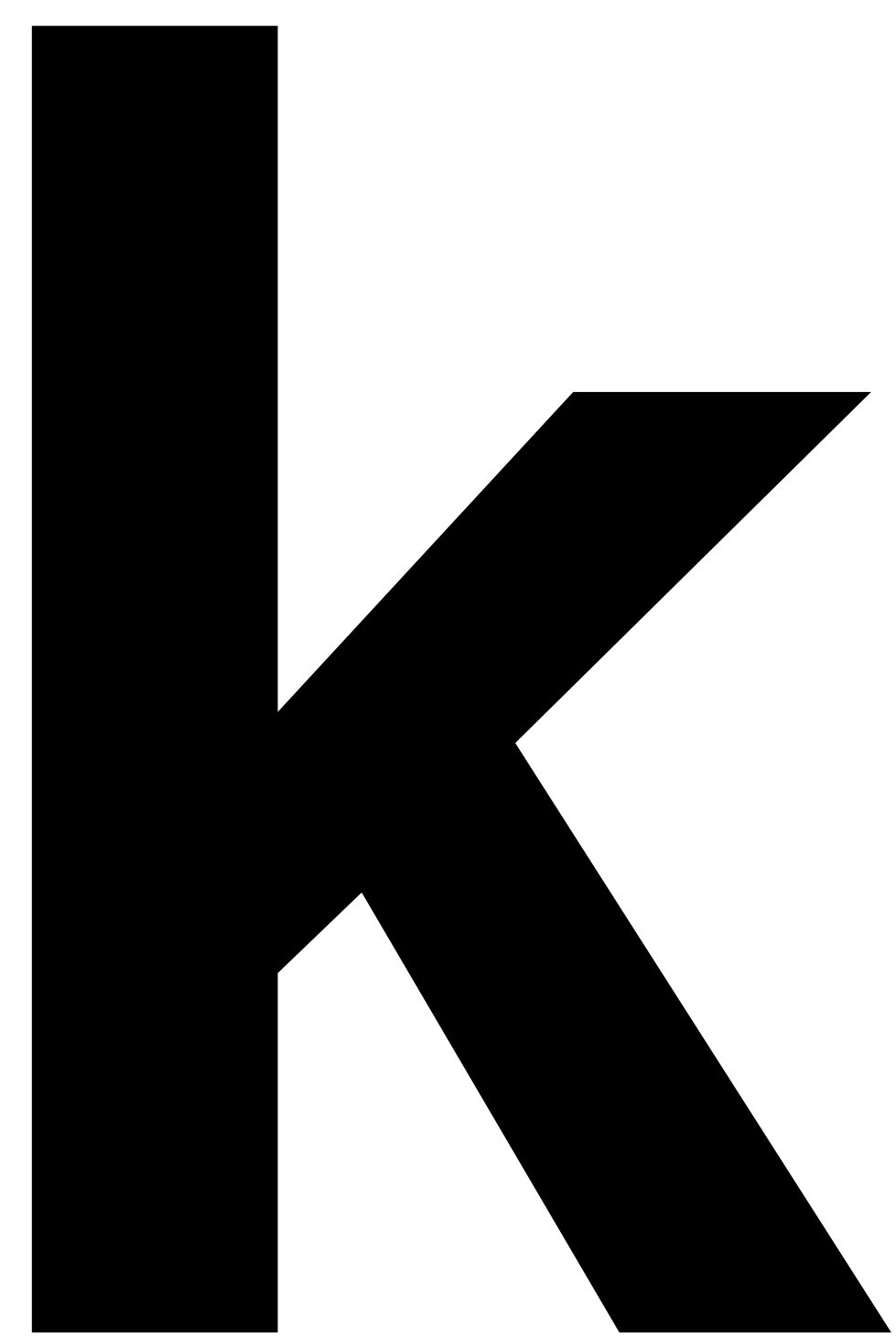


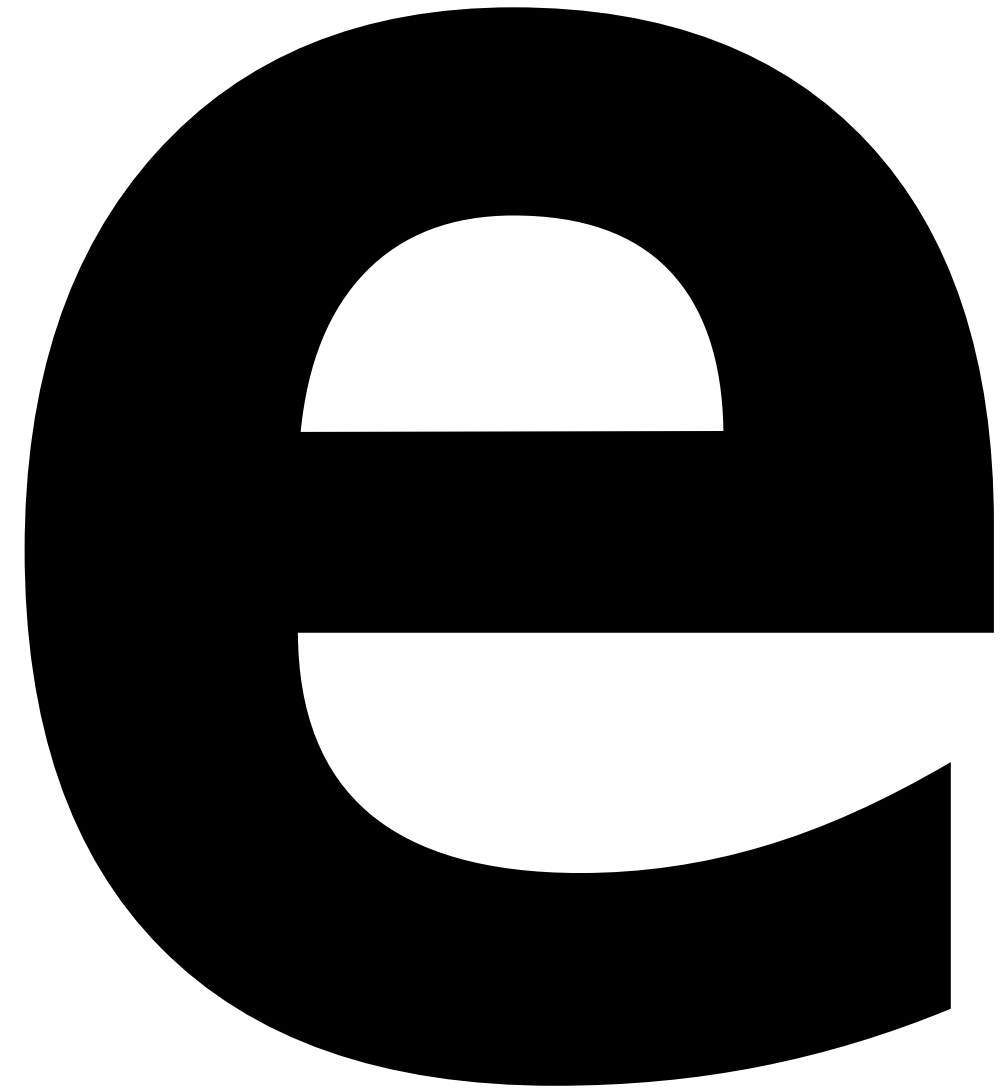
d

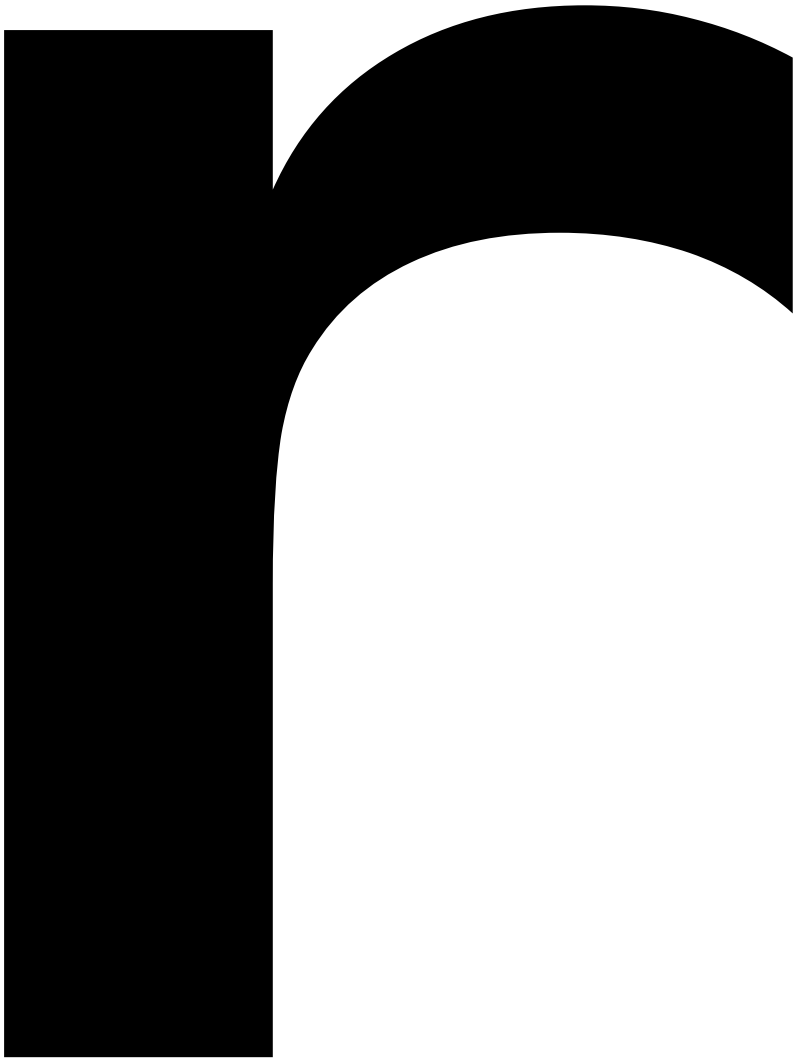


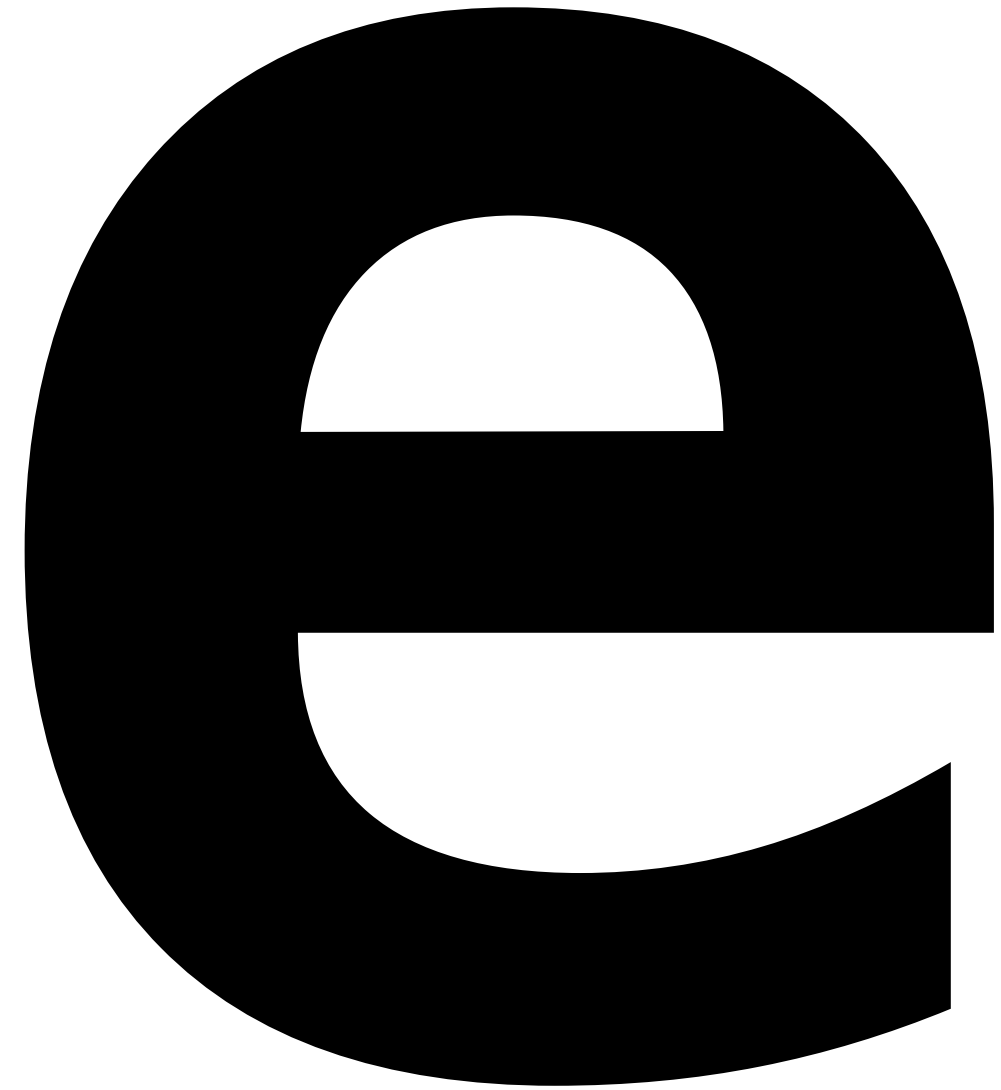




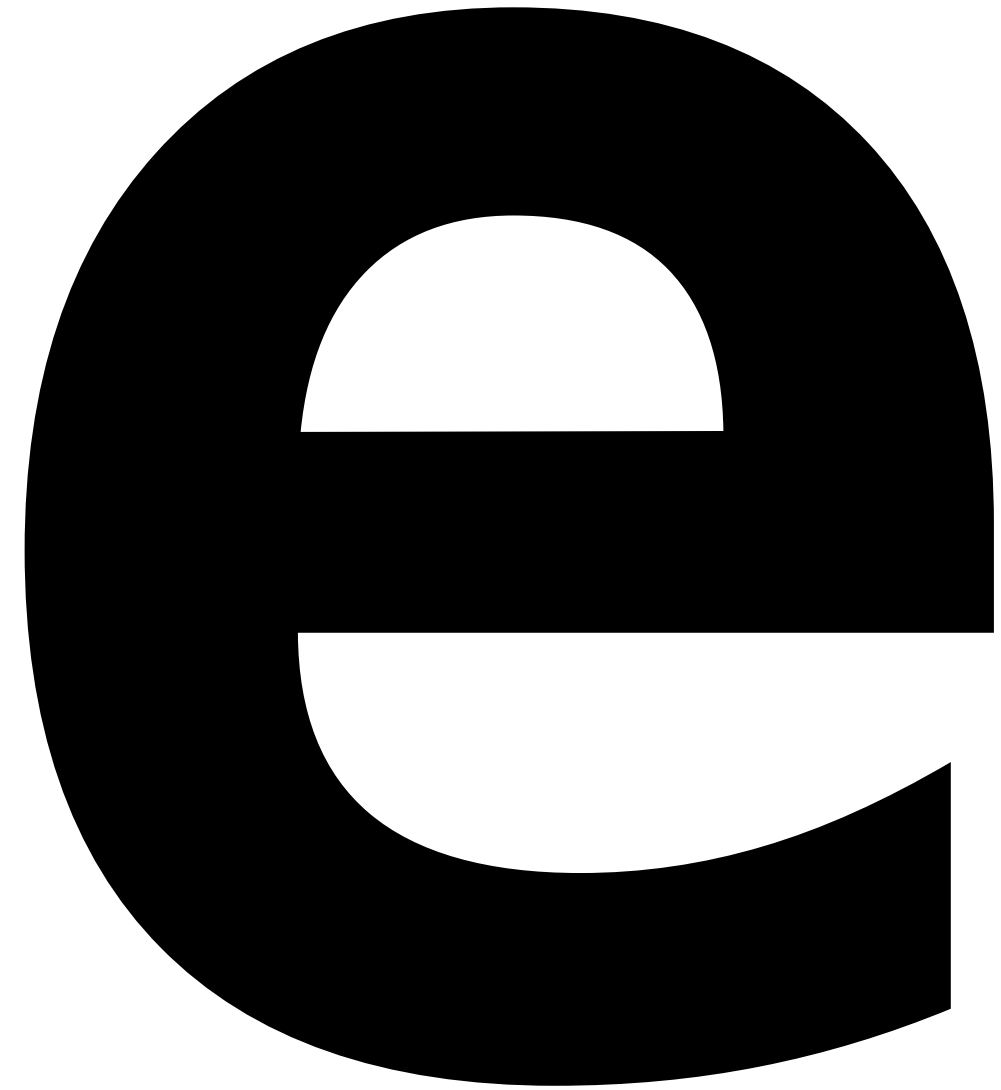


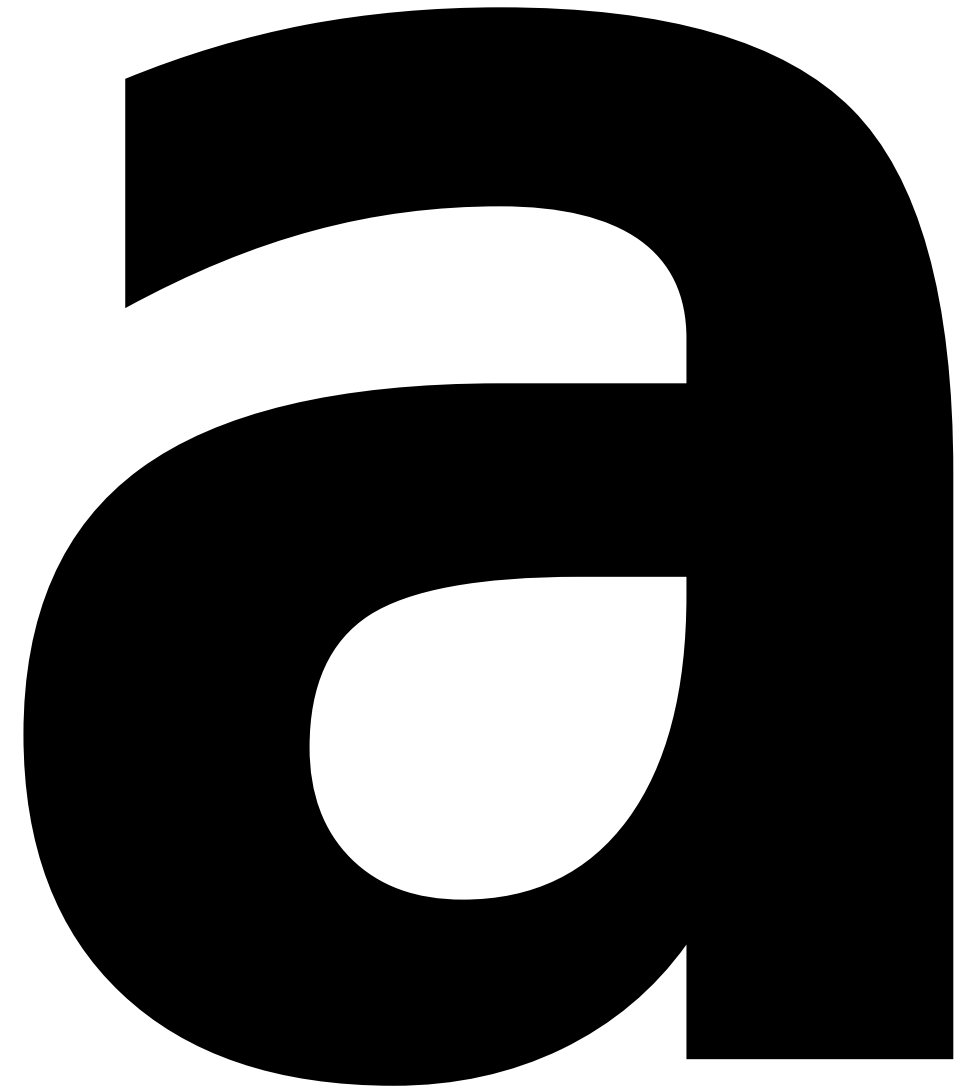


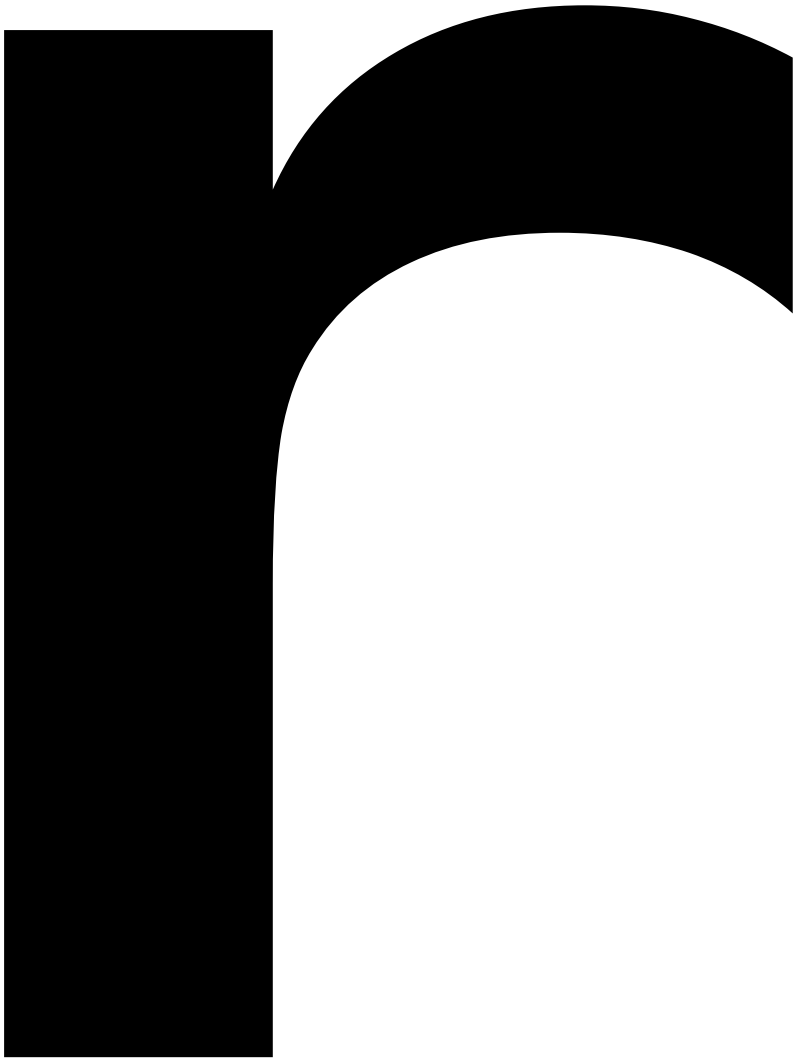


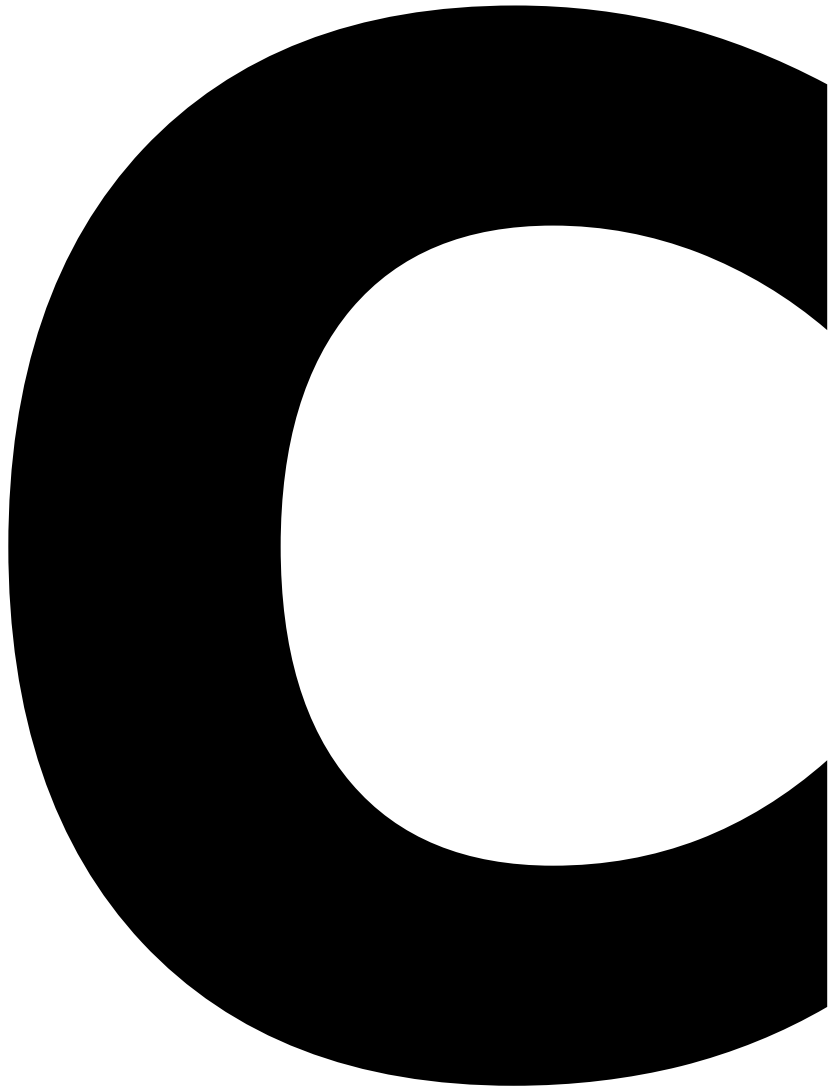


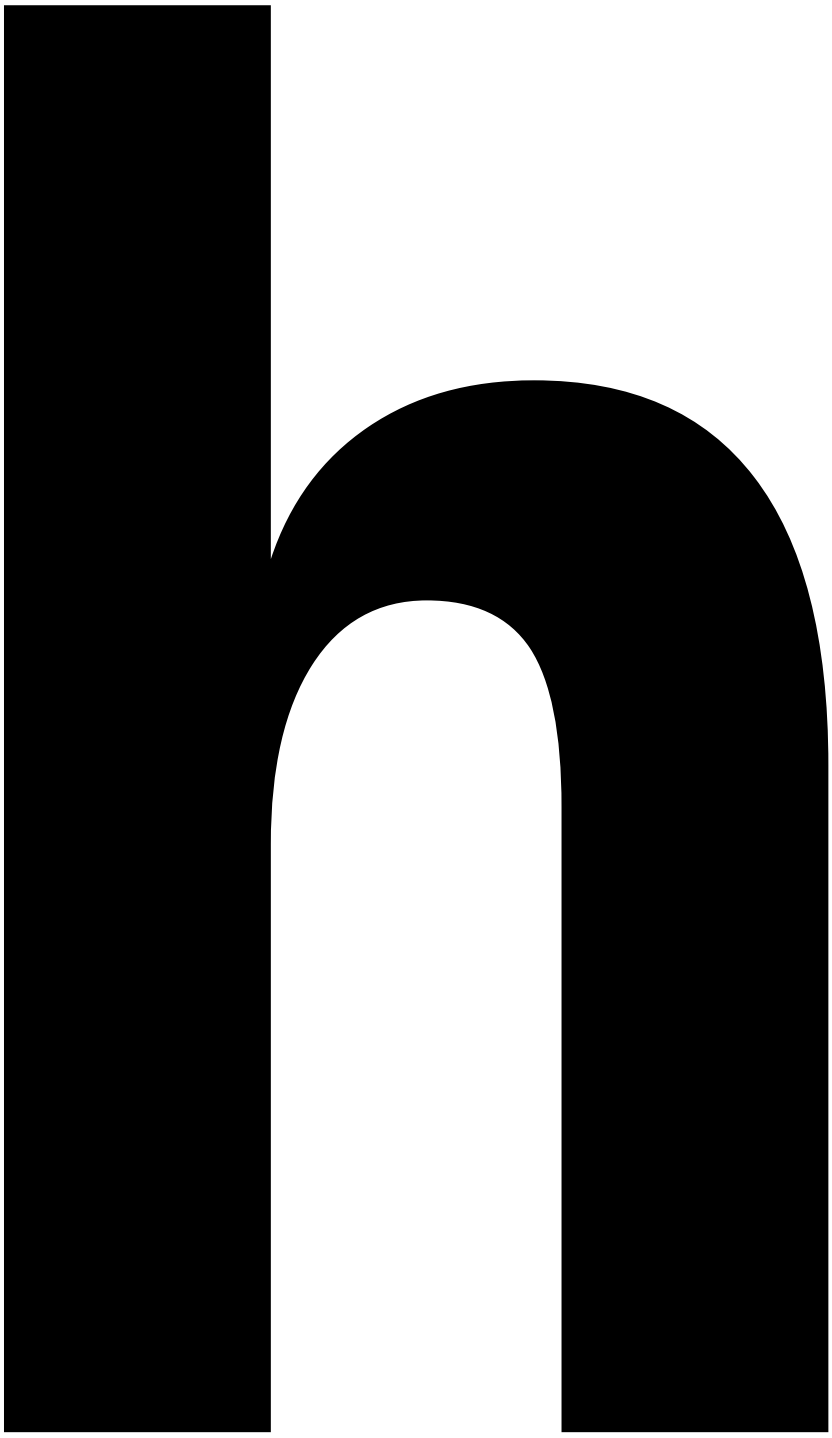
S

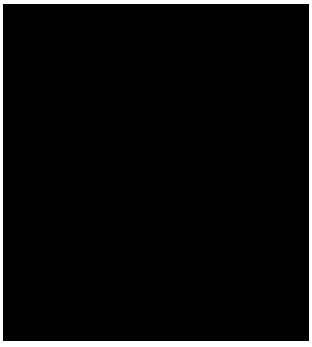
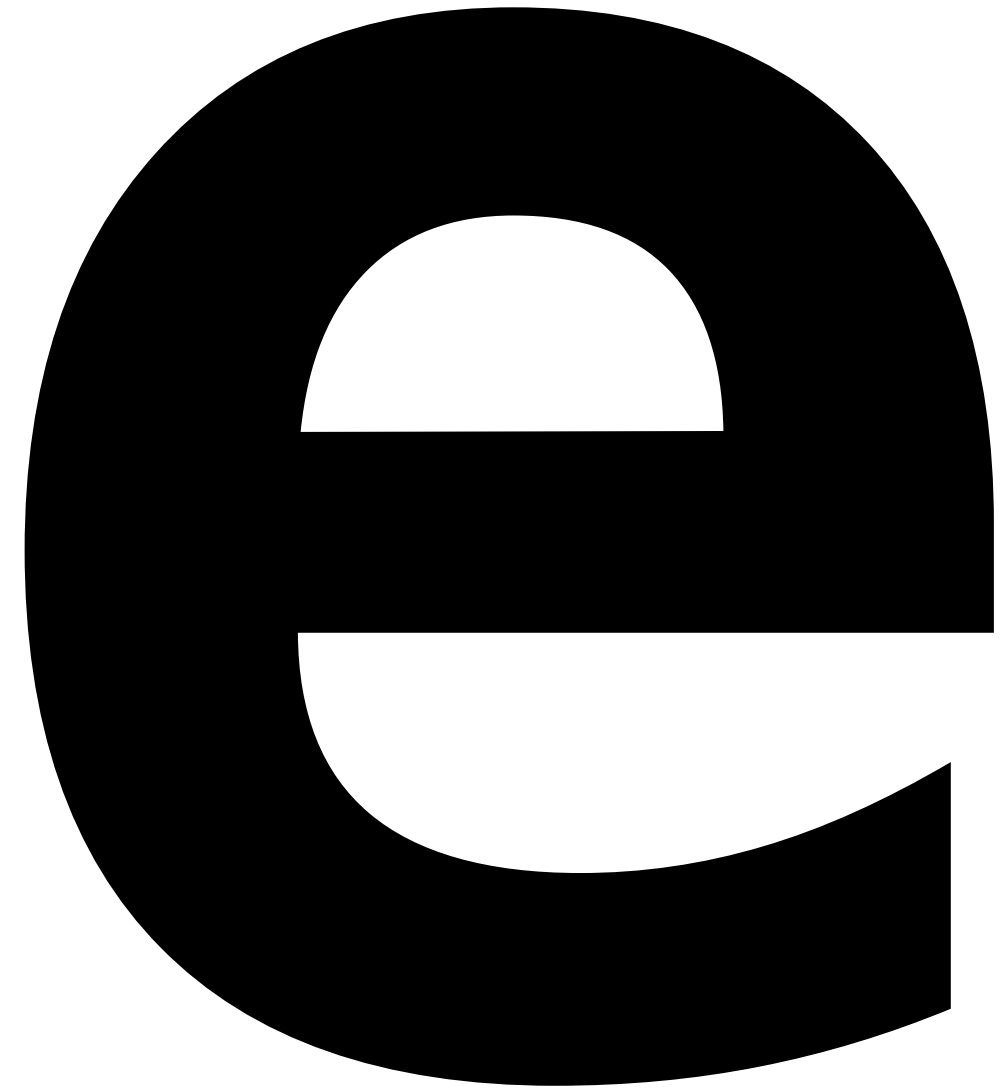












d