°element®
DESIGNS
element-designs.com



aluminum frame door technical manual

v10.26

Element Designs is the leading manufacturer of custom aluminum frame doors in North America. All of our doors are built to our customers' specifications within 1/16". Our aluminum frame door program offers numerous profile options in several finishes and a vast selection of inserts to accent virtually any interior application.

Element Designs can provide complete door systems with hardware options such as hinges, AVENTOS lift systems and sliding hardware, making the door installation process simple.

Our customer service, quick lead times and quality are the foundation of our company. Our nationwide network of sales representatives and distributor locations provide a superior level of support to our customers and they are always available to assist with all orders.

Aluminum Frame Doors At A Glance 3
Profile AF002 4
Profile AF003 5
Profile AF004 6
Profile AF006 7
Profile AF007 8
Profile AF009 9
Profile AF010 10
Profile AF011 11
Profile AF014 12
Profile AF015 13
Profile AF016 14
Profile AF017 15
Profile AF210 16
Insert Options 17
°elusion Border Options 21
Functional Hardware 22
Hinge Boring Specifications 23
Hinge Quantity Requirements 24
Door Weight & Insert Subtract Calculation 25
AVENTOS Hardware At A Glance 26
Decorative Hardware 29
Handle Boring Specifications 32
Applied Divider Rails 33
Cleaning, Care, & Warranty 34

Frame Profiles



AF002



AF003



AF004



AF006



AF007



AF009



AF010



AF011



AF014



AF015



AF016



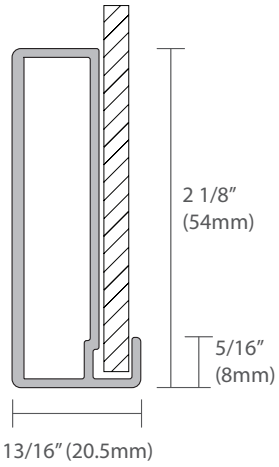
AF017



AF210

Door weight calculator can be found online:
www.element-designs.com/support/





AF002

Design Guidelines:

- Maximum width & height = 96" (2438.4mm)
- Minimum width & height = 5.5" (102mm)
- Maximum square footage = 24 sf
- Contact Element Designs for dimensions exceeding recommended maximums

Profile Finishes

Anodized

natural aluminum (N)


brushed stainless (S)

Coated


graphite (GR)


arctic silver (AS)


luxe bronze (LB)


onyx - black matte (X)


gold (GLD)


modern brass (MB)


bronze matte (BZM)


black (B)



Insert Specifications:

- 4mm (.156")
- Handle hole locations must be specified at time of order if insert is tempered glass

To Calculate Insert Size:

Insert Width = Door Width - .25"
Insert Height = Door Height - .25"
Insert Handle Hole Location (Center of hole) = Door Width and Height - .125"

HANDLE HOLE LOCATION(S) MUST BE SPECIFIED AT TIME OF ORDER



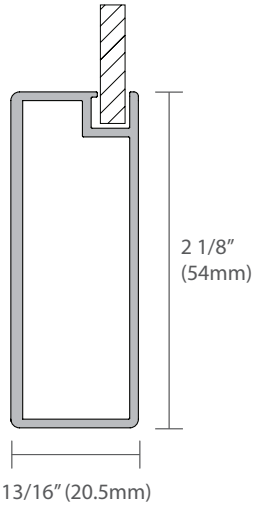
Hinge Information:

Profile AF002 utilizes standard 35mm cup screw-on hinges
Element Designs recommends the following wide frame door hinges:

- Blum 35mm Cup Hinge H71T5550
- Blum Blumotion 35mm Cup Hinge H71B3550
- Salice 35mm Cup Hinge C7P6AE9

Contact your local hardware distributor for other available hinge options.





AF003

Design Guidelines:

- Maximum width & height = 96" (2438.4mm)
- Minimum width & height = 5.5" (102mm)
- Maximum square footage = 24 sf
- Contact Element Designs for dimensions exceeding recommended maximums

Profile Finishes

Anodized

natural aluminum (N)


brushed stainless (S)

Coated


graphite (GR)


arctic silver (AS)


luxe bronze (LB)


onyx - black matte (X)


gold (GLD)


modern brass (MB)


bronze matte (BZM)


black (B)



Insert Specifications:

- 4mm (.156")
- Handle hole can be drilled through the frame

To Calculate Insert Size:

Insert Width = Door Width - 3.938"

Insert Height = Door Height - 3.938"



Hinge Information:

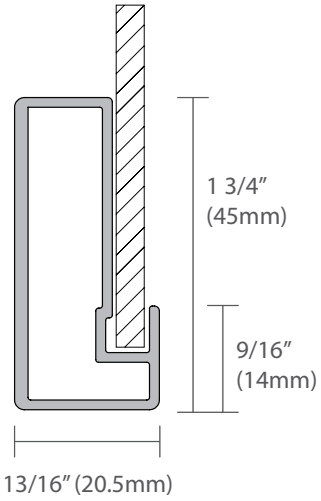
Profile AF003 utilizes standard 35mm cup screw-on hinges

Element Designs recommends the following wide frame door hinges:

- Blum 35mm Cup Hinge H71T5550
- Blum Blumotion 35mm Cup Hinge H71B3550
- Salice 35mm Cup Hinge C7P6AE9

Contact your local hardware distributor for other available hinge options.





AF004

Design Guidelines:

- Maximum width & height = 96" (2438.4mm)
- Minimum width & height = 5.5" (102mm)
- Maximum square footage = 24 sf
- Contact Element Designs for dimensions exceeding recommended maximums

Profile Finishes

Anodized

natural aluminum (N)


brushed stainless (S)

Coated


graphite (GR)


arctic silver (AS)


luxe bronze (LB)


onyx - black matte (X)


gold (GLD)


modern brass (MB)


bronze matte (BZM)


black (B)



Insert Specifications:

- 4mm (.156")
- Handle hole locations must be specified at time of order if insert is tempered glass

To Calculate Insert Size:

Insert Width = Door Width - .8125"
Insert Height = Door Height - .8125"
Insert Handle Hole Location (center of hole) = Door Width and Height - .4375"

HANDLE HOLE LOCATION(S) MUST BE SPECIFIED AT TIME OF ORDER



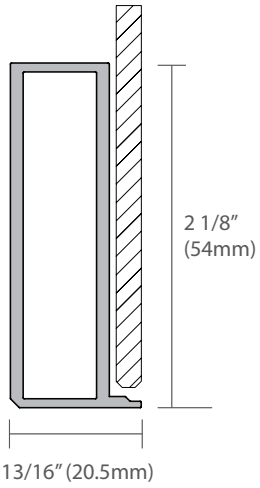
Hinge Information:

Profile AF004 utilizes standard 35mm cup screw-on hinges
Element Designs recommends the following wide frame door hinges:

- Blum 35mm Cup Hinge H71T5550
- Blum Blumotion 35mm Cup Hinge H71B3550
- Salice 35mm Cup Hinge C7P6AE9

Contact your local hardware distributor for other available hinge options.





AF006

Design Guidelines:

- Maximum width & height = 96" (2438.4mm)
- Minimum width & height = 5.5" (102mm)
- Maximum square footage = 24 sf
- Contact Element Designs for dimensions exceeding recommended maximums

Profile Finishes

Anodized

natural aluminum (N)


brushed stainless (S)

Coated


graphite (GR)


arctic silver (AS)


luxe bronze (LB)


onyx - black matte (X)


gold (GLD)


modern brass (MB)


bronze matte (BZM)


black (B)



Insert Specifications:

- 4mm (.156") with flat edge polish
- **Only available with opaque backpainted glass & mirror glass inserts**
- Handle hole locations must be specified at time of order if insert is tempered glass

To Calculate Insert Size:

Insert Width = Door Width - .156"
Insert Height = Door Height - .156"

***Inserts are permanently adhered to AF006 profile. Doors cannot be disassembled.**
***Customer is responsible for insert bonding solution for frame only orders.**



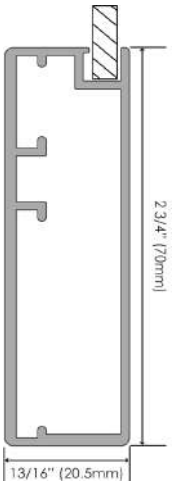
Hinge Information:

Profile AF006 utilizes standard 35mm cup screw-on hinges
Element Designs recommends the following wide frame door hinges:

- Blum 35mm Cup Hinge H71T5550
- Blum Blumotion 35mm Cup Hinge H71B3550
- Salice 35mm Cup Hinge C7P6AE9

Contact your local hardware distributor for other available hinge options.





AF007

Design Guidelines:

- Maximum width & height = 96" (2438.4mm)
- Minimum width & height = 6.75" (102mm)
- Maximum square footage = 24 sf
- Contact Element Designs for dimensions exceeding recommended maximums

Profile Finishes

Anodized

natural aluminum (N)


brushed stainless (S)

Coated


graphite (GR)


arctic silver (AS)


luxe bronze (LB)


onyx - black matte (X)


gold (GLD)


modern brass (MB)


bronze matte (BZM)


black (B)



Insert Specifications:

- 4mm (.156")
- Handle hole can be drilled through the frame

To Calculate Insert Size:

Insert Width = Door Width - 5.188"
Insert Height = Door Height - 5.188"
Insert Hole Location = Width or Height - 2.563"



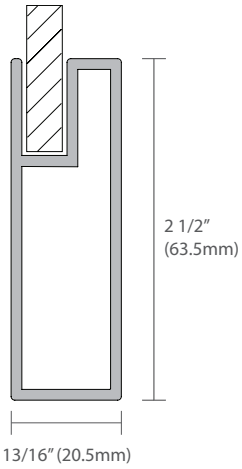
Hinge Information:

Profile AF007 utilizes standard 35mm cup screw-on hinges
Element Designs recommends the following wide frame door hinges:

- Blum 35mm Cup Hinge H71T5550
- Blum Blumotion 35mm Cup Hinge H71B3550
- Salice 35mm Cup Hinge C7P6AE9

Contact your local hardware distributor for other available hinge options.





AF009

Design Guidelines:

- Maximum width & height = 96" (2438.4mm)
- Minimum width & height = 6.25" (102mm)
- Maximum square footage = 32 sf
- Contact Element Designs for dimensions exceeding recommended maximums

Profile Finishes

Anodized

natural aluminum (N)


brushed stainless (S)

Coated


graphite (GR)


arctic silver (AS)


luxe bronze (LB)


onyx - black matte (X)


gold (GLD)


modern brass (MB)


bronze matte (BZM)


black (B)



Insert Specifications:

- 6mm (.236")
- Can fit 4mm (.156") inserts with special gasket
- Handle hole can be drilled through the frame

To Calculate Insert Size:

Insert Width = Door Width - 3.75"
Insert Height = Door Height - 3.75"

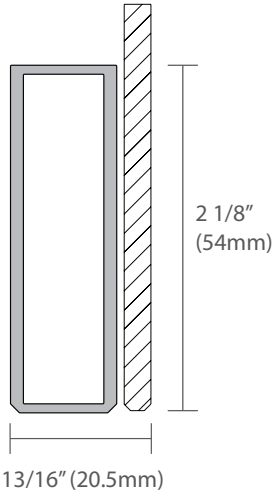


Hinge Information:

Profile AF009 utilizes standard 35mm cup screw-on hinges
Element Designs recommends the following wide frame door hinges:

- Blum 35mm Cup Hinge H71T5550
- Blum Blumotion 35mm Cup Hinge H71B3550
- Salice 35mm Cup Hinge C7P6AE9

Contact your local hardware distributor for other available hinge options.



AF010

Design Guidelines:

- Maximum width & height = 96" (2438.4mm)
- Minimum width & height = 5.5" (102mm)
- Maximum square footage = 24 sf
- Contact Element Designs for dimensions exceeding recommended maximums

Profile Finishes

Anodized

natural aluminum (N)


brushed stainless (S)

Coated


graphite (GR)


arctic silver (AS)


luxe bronze (LB)


onyx - black matte (X)


gold (GLD)


modern brass (MB)


bronze matte (BZM)


black (B)



Insert Specifications:

- 4mm (.156") with flat edge polish
- **Only available with opaque backpainted glass and mirror glass inserts**
- Handle hole locations must be specified at time of order

To Calculate Insert Size:

Insert Width = Door Width

Insert Height = Door Height

HANDLE HOLE LOCATIONS(S) MUST BE SPECIFIED AT TIME OF ORDER

***Inserts are permanently adhered to AF010 profile. Doors cannot be disassembled.**



Hinge Information:

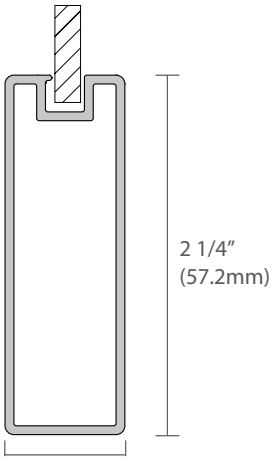
Profile AF010 utilizes standard 35mm cup screw-on hinges

Element Designs recommends the following wide frame door hinges:

- Blum 35mm Cup Hinge H71T5550
- Blum Blumotion 35mm Cup Hinge H71B3550
- Salice 35mm Cup Hinge C7P6AE9

Contact your local hardware distributor for other available hinge options.





AF011

Design Guidelines:

- Maximum width & height = 96" (2438.4mm)
- Minimum width & height = 5.5" (102mm)
- Maximum square footage = 24 sf
- Contact Element Designs for dimensions exceeding recommended maximums

Profile Finishes

Anodized

natural aluminum (N)


brushed stainless (S)

Coated


graphite (GR)


arctic silver (AS)


luxe bronze (LB)


onyx - black matte (X)


gold (GLD)


modern brass (MB)


bronze matte (BZM)


black (B)



Insert Specifications:

- 4mm (.156")
- Handle hole can be drilled through the frame

To Calculate Insert Size:

Insert Width = Door Width - 4.1875"

Insert Height = Door Height - 4.1875"



Hinge Information:

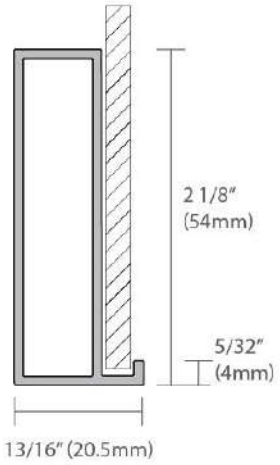
Profile AF011 utilizes standard 35mm cup screw-on hinges

Element Designs recommends the following wide frame door hinges:

- Blum 35mm Cup Hinge H71T5550
- Blum Blumotion 35mm Cup Hinge H71B3550
- Salice 35mm Cup Hinge C7P6AE9

Contact your local hardware distributor for other available hinge options.





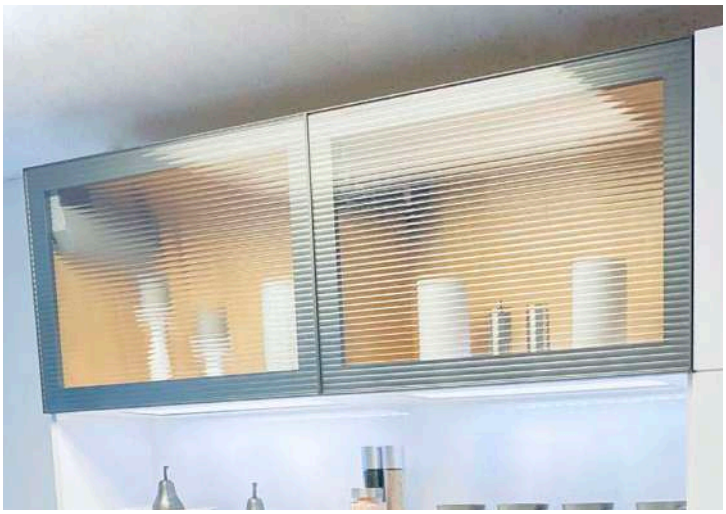
AF014

Design Guidelines:

- Maximum width & height = 96" (2438.4mm)
- Minimum width & height = 5.5" (102mm)
- Maximum square footage = 24 sf
- Contact Element Designs for dimensions exceeding recommended maximums

Profile Finishes

Anodized		Coated			
natural aluminum (N)	graphite (GR)	arctic silver (AS)	luxe bronze (LB)	onyx - black matte (X)	
brushed stainless (S)	gold (GLD)	modern brass (MB)	bronze matte (BZM)	black (B)	



Insert Specifications:

- 4mm (.156")
- Handle hole locations must be specified at time of order if insert is tempered glass

To Calculate Insert Size:

Insert Width = Door Width - 0.125"
Insert Height = Door Height - 0.125"



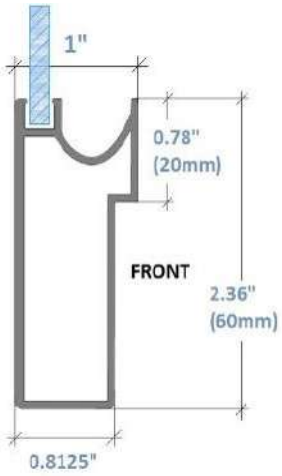
Hinge Information:

Profile AF014 utilizes standard 35mm cup screw-on hinges
Element Designs recommends the following wide frame door hinges:

- Blum 35mm Cup Hinge H71T5550
- Blum Blumotion 35mm Cup Hinge H71B3550
- Salice 35mm Cup Hinge C7P6AE9

Contact your local hardware distributor for other available hinge options.





AF015

Design Guidelines:

- Maximum width & height = 96" (2438.4mm)
- Minimum width & height = 5.5" (102mm)
- Maximum square footage = 24 sf
- Contact Element Designs for dimensions exceeding recommended maximums

Profile Finishes

Anodized

natural aluminum (N)


brushed stainless (S)

Coated


graphite (GR)


arctic silver (AS)


luxe bronze (LB)


onyx - black matte (X)


gold (GLD)


modern brass (MB)


bronze matte (BZM)


black (B)



Insert Specifications:

- 4mm (.156")
- Handle hole can be drilled through the frame

To Calculate Insert Size:

Insert Width = Door Width - 4.375"

Insert Height = Door Height - 4.375"



Hinge Information:

Profile AF015 utilizes standard 35mm cup screw-on hinges

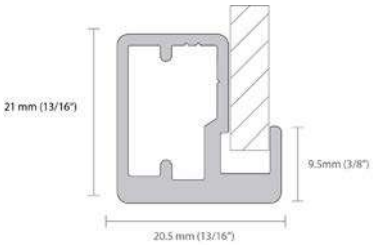
Element Designs recommends the following wide frame door hinges:

- Blum 35mm Cup Hinge H71T5550
- Blum Blumotion 35mm Cup Hinge H71B3550
- Salice 35mm Cup Hinge C7P6AE9

Contact your local hardware distributor for other available hinge options.

AF016





Design Guidelines:

- Maximum width & height = 96" (2438mm)
- Minimum width & height = 5.5" (140mm)
- Maximum square footage = 16 sf
- NOT recommended for drawer fronts 21mm (13/16")
- Contact Element Designs for dimensions exceeding these guidelines

Profile Finishes

Anodized

natural aluminum (N)


brushed stainless (S)

Coated


graphite (GR)


arctic silver (AS)


luxe bronze (LB)


onyx - black matte (X)


gold (GLD)


modern brass (MB)


bronze matte (BZM)


black (B)


Image Courtesy of Garcia Cabinet Makers

Insert Specifications:

- 4mm (.157") with seamed edge
- Handle hole locations must be specified at time of order if insert is tempered glass

To Calculate Insert Size:

Insert Width = Door Width - .5"

Insert Height = Door Height - .5"

Insert Handle Hole Location (center or hole) = Door Width and Height - .125"

***HANDLE HOLE LOCATION(S) MUST BE SPECIFIED AT TIME OF ORDER**
***HOLES CANNOT BE LOCATED ON FRAME**



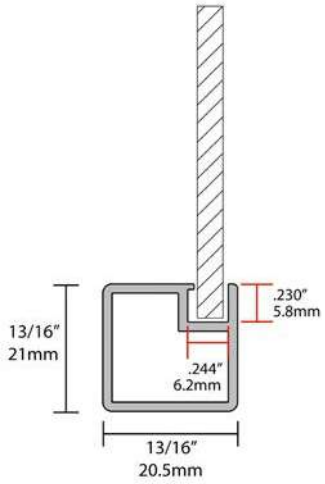
Hinge Information:

Profile AF016 utilizes special European narrow aluminum frame door hinges. Element Designs recommends the following narrow frame door hinges:

- Blum self close full 15mm overlay aluminum door hinge; H73T550A
- Blum self close full 17mm aluminum door hinge; H71T950A
- Blum blumotion soft-close full 15mm aluminum door hinge; H71B950A
- Salice self close full 19mm aluminum door hinge; HC2Z6A99
- More options available - contact Element Designs for details

Contact your local hardware distributor for other available hinge options.





AF017

Design Guidelines:

- Maximum width & height = 96" (1524mm)
- Minimum width & height = 5.5" (140mm)
- Maximum square footage = 16 sf
- NOT recommended for drawer fronts
- Contact Element Designs for dimensions exceeding recommended maximums

Profile Finishes

Anodized

- natural aluminum (N)
- brushed stainless (S)

Coated

- graphite (GR)
- arctic silver (AS)
- luxe bronze (LB)
- onyx - black matte (X)
- gold (GLD)
- modern brass (MB)
- bronze matte (BZM)
- black (B)



Insert Specifications:

- 4mm (0.156")
- Handle hole can be drilled through the frame

To Calculate Insert Size:

- Insert Width = Door Width - 1.345"
- Insert Height = Door Height - 1.345"



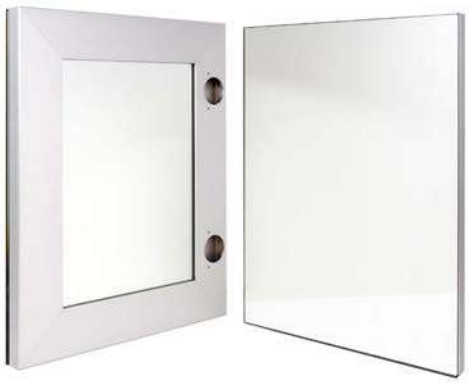
Hinge Information:

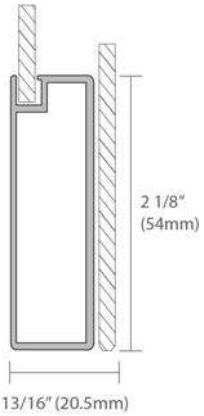
Profile AF017 utilizes special European narrow aluminum frame door hinges.

Element Designs recommends the following narrow frame door hinges:

- Blum Narrow Frame Aluminum Door Hinge H73T550A
- Blum Narrow Frame Aluminum Door Hinge H71T950A
- Blumotion Narrow Frame Aluminum Door Hinge H71B950A
- Salice Narrow Frame Aluminum Door Hinge HC2Z6A99

Contact your local hardware distributor for other available hinge options.





AF210

Design Guidelines:

- Maximum width & height = 96" (2438.4mm)
- Minimum width & height = 5.5" (140mm)
- Maximum square footage = 16 sf
- Contact Element Designs for dimensions exceeding these guidelines

Profile Finishes

Anodized

natural aluminum (N)


brushed stainless (S)

Coated


graphite (GR)


arctic silver (AS)


luxe bronze (LB)


onyx - black matte (X)


gold (GLD)


modern brass (MB)


bronze matte (BZM)


black (B)



Insert Specifications:

- 4mm (.157") with flat edge polish
- Only available with backpainted glass and mirror inserts on door front
- Handle hole locations must be specified at time of order

To Calculate Insert Size:

- To Calculate Front Insert Size: Insert Width = Door Width, Insert Height = Door Height
- To Calculate Back Insert Size: Insert Width = Door Width - 3.9375", Insert Height = Door Height - 3.9375"
- Insert Handle Hole Location (center or hole) = Door Width and Height - .125"

***HANDLE HOLE LOCATION(S) MUST BE SPECIFIED AT TIME OF ORDER**
***HOLES CANNOT BE LOCATED ON FRAME**



Hinge Information:

Profile AF015 utilizes standard 35mm cup screw-on hinges

Element Designs recommends the following wide frame door hinges:

- Blum 35mm Cup Hinge H71T5550
- Blum Blumotion 35mm Cup Hinge H71B3550
- Salice 35mm Cup Hinge C7P6AE9

AF210 doors will need additional hinges due to door weight.
Please use our door weight calculator to determine requirements.

Glass & Mirror Inserts


low-iron clear*

low-iron satin*


clear*


satin*


reeded


narrow reeded


satin reeded


bronze reeded


bronze satin reeded


grey satin


bronze satin


grey reflective


bronze reflective


grey clear*


bronze clear*


grey satin mirror


bronze satin mirror


low-iron satin mirror


mirror


low-iron mirror

Additinal Information

- Glass inserts are 5/32" (4mm) thick
- Handle holes can be drilled, but must be specified at time of order, prior to being tempered.
- Patterned side facing in, unless requested otherwise.
- Tempered safety glass without tempered logo unless specifed. Tempering done in-house.
- Mirror is NOT tempered, but includes safety backer.
- **Narrow Reeded pattern is 1/8" (3.2mm) apart**
- **Regular Reeded pattern is 1/2" (12.7mm) apart**
- **All reeded glass can be backpainted, but pattern side must face out.**
- **Narrow Reeded Max Height (vertical line pattern) = 96" (2438.4mm)**
- **Regular Clear Reeded Max Height (vertical line pattern) = 96" (2438.4mm)**
- **Satin Reeded, Bronze Satin Reeded, and Bronze Clear Reeded Max Height (vertical line pattern) = 92" (2438.4mm)**
- **Regular Clear Reeded, Satin Reeded, and Narrow Clear Reeded Max Height (horizontal line pattern) = 68" (1727mm)**
- **Bronze Satin Reeded and Bronze Clear Reeded Max Height (horizontal line pattern) = 78" (1981mm)**
- Glass can be backpainted in any custom color or any of our standard colors.
- °elusion backpainted glass available on low-iron clear, grey clear, and bronze clear.

Backpainted Glass

- High quality water based paint on low iron glass
- All glass is tempered safety glass without a tempered logo unless otherwise specified
- All backpainted glass has a light grey backer for added durability
- Available in gloss, matte, writable matte, reeded, and narrow reeded

Standard Colors


white


cream


sand


amarillo


bronze


mist


slate


sienna


oasis


navy


black


non-standard color


custom color



3form Architectural Resin

- Inserts are 5/32" (4mm) thick with Sandstone finish on front and back
- Inserts contain organic materials and may vary in color and density



Recycled Leather

- Recycled Leather on both sides
- Inserts are 5/32" (4mm) thick
- Available as cut-to-size panels
- Sustainable and resilient



dECOLuxe Solid Acrylic

- Not available with AF006 or AF010
- Inserts are 5/32" (4mm) thick
- Water resistant, UV and fade resistant

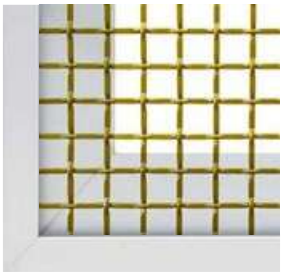


Wire Mesh Grille Insert Options

- Available with all frame profiles EXCEPT, AF006, AF009, AF010, and AF210
- Maximum size is 28" x 60", except in frame profiles AF012 & AF013 where the max size is 24" x 60"
- NOT available in cut-to-size, only as insert option in aluminum frame doors
- 3 available patterns: Fine, Bold, & Classic
- 3 available finish options: Brass, Onyx, & Pewter



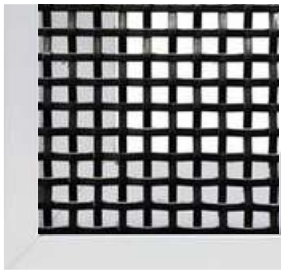
classic onyx
SQ1214



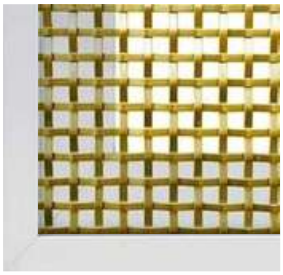
classic brass
SQ1214



classic pewter
SQ1214



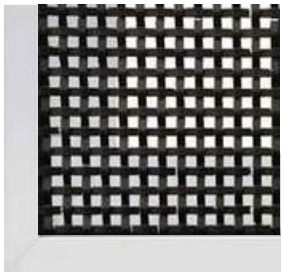
bold onyx
SQ286S



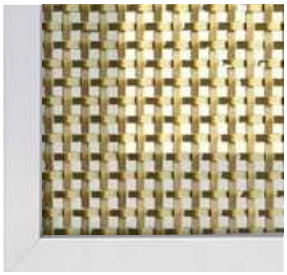
bold brass
SQ286S



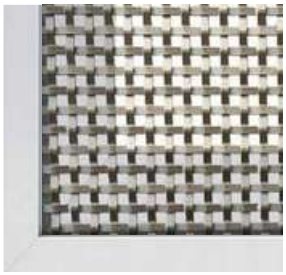
bold pewter
SQ286S



fine onyx
RE25



fine brass
RE25



fine pewter
RE25



- Painted border conceals cabinet frames beneath
- Standard painted border = 2 1/4"
- Add depth and dimension to cabinetry
- Custom border widths available
- Single or multiple sections outlined with border
- Glass inserts are 5/32" (4mm) thick
- Glass is tempered glass without logo unless otherwise specified

Profile Finishes

Anodized


natural aluminum (N)


brushed stainless (S)

Coated


graphite (GR)


arctic silver (AS)


luxe bronze (LB)


onyx - black matte (X)


gold (GLD)


modern brass (MB)


bronze matte (BZM)


black (B)

Standard Glass Insert Options

* Grey & Bronze clear tint may a ect painted border color

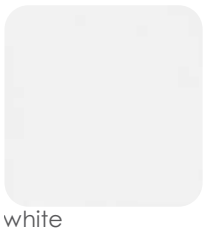

low-iron clear
pictured with white border


bronze clear
pictured with white border


grey clear
pictured with white border

Backpainted Glass Border Options

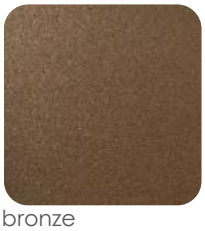

custom


white

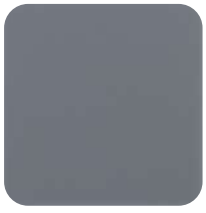
cream

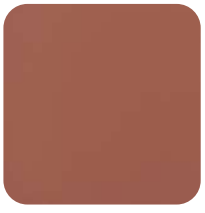
sand


amarillo


bronze

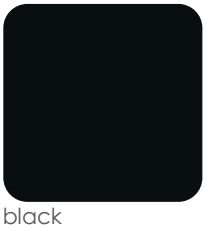

mist


slate


sienna


oasis


navy


black



BLUMOTION Blum® narrow frame hinge
straight arm, 95°, 5/8" (15mm) overlay, soft close
with deactivation switch
(PN H71B950A)



Blum® narrow frame hinge:
straight arm, 95°, 11/16" (17mm) overlay, self close
(PN H71T950A)

Additional narrow frame full and partial overlay
hinges available, contact Element Designs for details



BLUMOTION Blum® 35mm cup hinge:
straight arm, 110°, soft close with deactivation switch
(PN H71B3550)

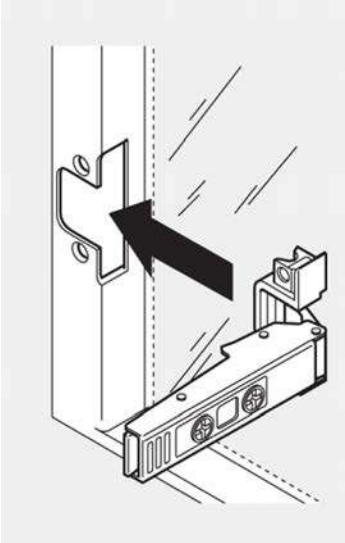


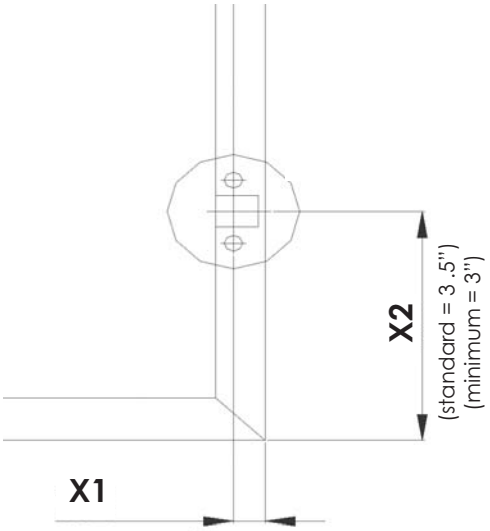
Blum® 35mm cup hinge:
straight arm, 120°, self close
(PN H71T5550)

- TIP-ON for doors by Blum also available
- Contact Element Designs for availability of other hinge options and applications
- Complimentary hinge screws shipped with every order

Narrow Frame Doors (AF016 & AF017)

- Require special narrow frame hinge for aluminum frame doors
- Customer must specify hinge manufacturer and provide boring pattern at time of order
- Special aluminum frame hinge screws will be provided with each door
- For hinge cutout: 3" minimum from top and bottom of door to center of cup (X2)

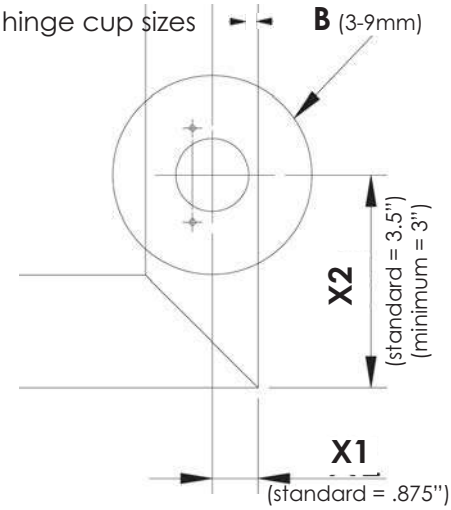




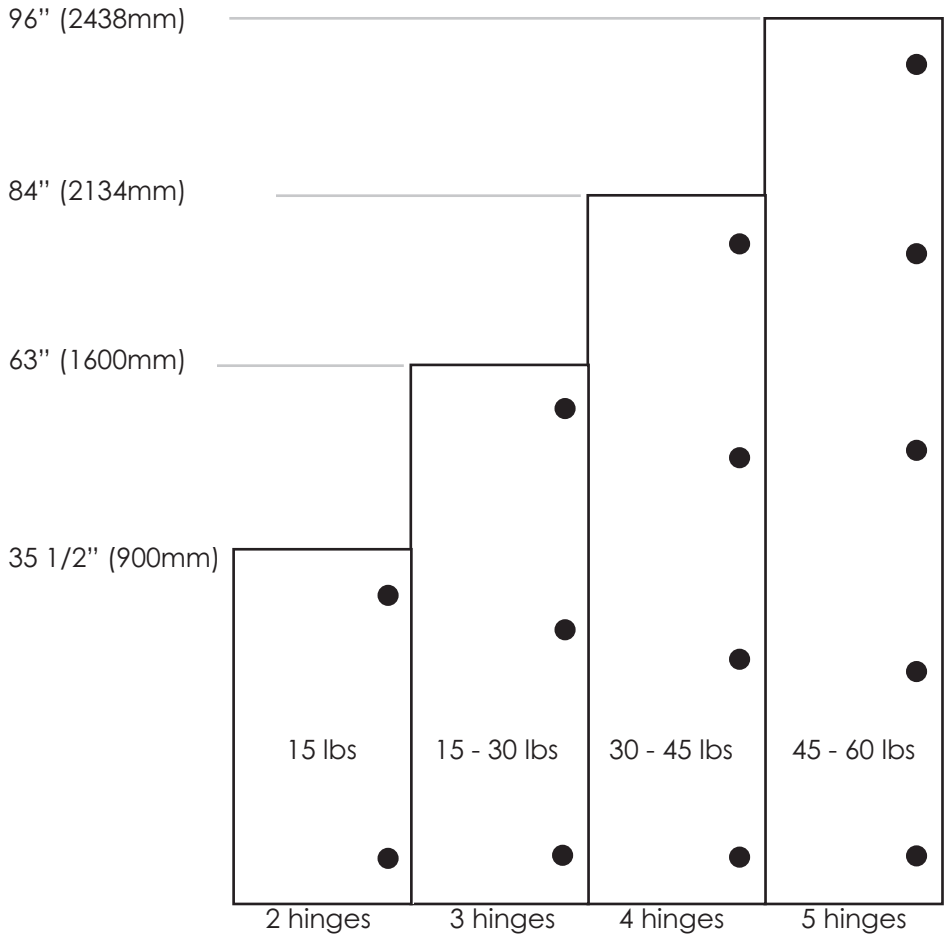
Wide Frame Doors (AF002, AF003, AF004, AF006, AF007, AF009, AF010, AF011, AF014 & AF015)

- Supports any type of concealed (European) screw on hinge for framed and frameless cabinetry
- Customer must specify hinge manufacturer and provide boring pattern at time of order
- Must be screw-in type hinge
- Special aluminum frame self tapping machine hinge screws will be provided by Element Designs with each door
- Maximum hinge cup depth of 12.7mm
- For hinge cutout: 3" minimum from top and bottom of door to center of cup (X2)
- B dimension (door edge to cup edge) can be 3 - 9mm (depends on profile)
  X1 = B + 17.5 (1/2 of cup diameter)
- Contact Element Designs for boring instructions with other hinge cup sizes





The number of hinges required is dependent on the size and weight of the door. Use the diagram below to determine the required number of hinges.



Hinge quantity and location requirements may vary by hinge manufacturer.

Contact hinge manufacturer for exact specifications

* Visit Element Designs website for automated door weight calculator

Approximate Door Weight Calculation (lbs)	
Profile (X)	
AF002 Profile/ Linear Foot	.413/ lf
AF003 Profile/ Linear Foot	.428/ lf
AF004 Profile/ Linear Foot	.390/ lf
AF006 Profile/ Linear Foot	.390/ lf
AF007 Profile/ Linear Foot	.591/ lf
AF009 Profile/ Linear Foot	.679/ lf
AF010 Profile/ Linear Foot	.390/ lf
AF011 Profile/ Linear Foot	.390/ lf
AF014 Profile/ Linear Foot	.413/ lf
AF015 Profile/ Linear Foot	.591/ lf
AF016 Profile/ Linear Foot	.214/ lf
AF017 Profile/ Linear Foot	.217/ lf
AF210 Profile/ Linear Foot	.428/ lf
Internal Hardware (Y)	
Internal Door Hardware - Narrow Frame AF016 & AF017	.23 lb
Internal Door Hardware - Wide Frame AF002,03,04,05,06,07,09,10,11,14, 15, 210	.53 lb
Insert (Z)	
Glass Insert/ Sq. Ft. (4mm or .156")	2.05/ sq ft
Glass Insert/Sq. Ft. (6mm or .25") AF009 only	3.0/ sq ft
3Form, High Gloss Solid Acrylic, Metal Laminate / Sq. Ft.	1.0/ sq ft

Insert Subtract (in.)	
Profile	**Subtract**
AF002	-0.250
AF003	-3.938
AF004	-0.813
AF006	-0.156
AF007	-5.188
AF009	-0.250
AF010	-3.75
AF010	0.00
AF011	-4.188
AF014	-0.125
AF015	-4.375
AF016	-0.250
AF017	-1.188
AF210 - FRONT	0.00
AF210 - BACK	-3.938

Door Weight Calculation Formula

Online Calculator Can Be Found On Our Website:
element-designs.com/technical/Door-Weight-Calculator-v7.25.xls

Door Weight = ((2W+ 2H)/12)X + Y + ((IW x IH)/144)Z

All dimensions must be in INCHES

W = Door Width
H = Door Height
IW = Insert Width*
IH = Insert Height*
(*See insert subtract chart above to calculate insert size)

Example: 24"W x 36"H AF002 Door with Satin Glass

= ((((2 x 24) + (2 x 36))/12) x .413) + .53 + (((35.6875 x 23.6875)/144) x 2.05)
= (120/12 x .413) + .53 + ((845.3)/144) x 2.05)
= (10 x .413) + .53 + (5.9 x 2.05)
= 4.13 + .53 + 12.1
= 16.7 lbs

	HF top	HS top	HL top	HK top	HKi	HK--XS
Area of Application						
Tall wall cabinets	✔	✔				
Medium wall cabinets	✔	✔	✔	✔		✔
Small wall cabinets			✔	✔	✔	✔
Above refrigerator cabinets				✔	✔	✔
Room Planning						
Minimal top space requirement	✔	✔		✔	✔	✔
Design						
Cabinet height range	18 7/8" - 42"	13 3/4" - 31 1/2"	11 13/16" - 22 13/16"	11 13/16" - 24"	7 3/8" - 15 3/4"	9 3/8" - 24"
Cabinet width range	15" - 72"	15" - 72"	15" - 72"	15" - 72"	15" - 39"	15" - 72"



AVENTOS is available with Blum's SERVO-DRIVE opening feature. SERVO-DRIVE allows a cabinet with lift up doors to open with just a light touch and an easily accessible switch to close the door quietly with BLUMOTION.

	HF	HS	HL	HK	HK-S	HK--XS
Area of Application						
Tall wall cabinets	✔	✔				
Medium wall cabinets	✔	✔	✔	✔		✔
Small wall cabinets			✔	✔	✔	✔
Above refrigerator cabinets				✔	✔	✔
Room Planning						
Minimal top space requirement	✔	✔		✔	✔	✔
Design						
Cabinet height range	18 7/8" - 42"	13 3/4" - 31 1/2"	11 13/16" - 22 13/16"	11 13/16" - 24"	7 3/8" - 15 3/4"	9 3/8" - 24"
Cabinet width range	15" - 72"	15" - 72"	15" - 72"	15" - 72"	15" - 39"	15" - 72"



AVENTOS HF top - Bi-Fold

- Two part door front that folds in the center when opening
- Ideal for wall cabinets with large fronts because the handle stays within reach
- Can combine different door front styles (wood and aluminum)
- Innovative release feature that ensures finger safety



AVENTOS HS top - Up and Over

- Single door front that swings over the top of the cabinet
- Ideal for wider wall cabinets with single fronts
- Suitable for wall cabinets with crown moulding



AVENTOS HL top - Lift Up

- Single door front that lifts up parallel to the cabinet
- Suitable for wall cabinets in kitchens with high ceilings
- Ideal for counter top appliance garage applications



AVENTOS HK top - Stay Lift

- Single door front that swings upward
- Ideal for small wall cabinets or accent cabinets 11 13/16" to 24" tall
- Suitable for wall cabinets with crown mouldings



AVENTOS HKi - Stay Lift [integrated]

- HKi can be used in cabinet side panels just 16 mm thick. The dimensions grant you plenty of creative freedom, and all standard heights up to 610 mm high and all widths up to 1828 mm wide can be used



AVENTOS HK-XS - Stay Lift

- Single door front that swings upward
- Ideal for small wall cabinets or accent cabinets 9 3/8" to 24" tall
- Symmetrical Lift Mechnanism - can be used on one or both sides
- Designed for use with BLUMOTION hinges



AVENTOS HF - Bi-Fold

- Two part door front that folds in the center when opening
- Ideal for wall cabinets with large fronts because the handle stays within reach
- Can combine different door front styles (wood and aluminum)
- Innovative release feature that ensures finger safety



AVENTOS HS - Up and Over

- Single door front that swings over the top of the cabinet
- Ideal for wider wall cabinets with single fronts
- Suitable for wall cabinets with crown moulding



AVENTOS HL - Lift Up

- Single door front that lifts up parallel to the cabinet
- Suitable for wall cabinets in kitchens with high ceilings
- Ideal for counter top appliance garage applications



AVENTOS HK - Stay Lift

- Single door front that swings upward
- Ideal for small wall cabinets or accent cabinets 11 13/16" to 24" tall
- Suitable for wall cabinets with crown mouldings



AVENTOS HK-S - Stay Lift

- Single door front that swings upward
- Best suited for smaller wall cabinets 7 3/8" to 15 3/4" tall
- Ideal for applications above a refrigerator or pantry
- Suitable for wall cabinets with crown mouldings



AVENTOS HK-XS - Stay Lift

- Single door front that swings upward
- Ideal for small wall cabinets or accent cabinets 9 3/8" to 24" tall
- Symmetrical Lift Mechnanism - can be used on one or both sides
- Designed for use with BLUMOTION hinges

Knobs


K001


K005


K007


K008


K009

Bar Pulls (Handles)

natural aluminum finish



Natural aluminum available lengths:

P1-127 Length: 7 3/8" (5" c. to c.)

P1-190 Length: 9 13/16" (7 1/2" c. to c.)

P1-250 Length: 12 13/16" (9 13/16" c. to c.)

P1-380 Length: 17 5/16" (14 15/16" c. to c.)

P1-640 Length: 27 9/16" (25 3/16" c. to c.)

P1-880 Length: 37" (34 5/8" c. to c.)

Finish Options

Anodized

natural aluminum (N)

Coated


graphite (GR)


arctic silver (AS)


luxe bronze (LB)


onyx - black matte (X)


gold (GLD)


modern brass (MB)


bronze matte (BZM)

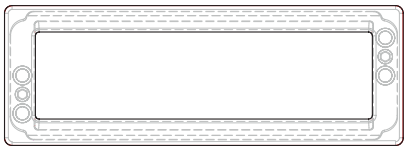

black (B)

Recessed Pull



R1-96

Length = 102.5mm (4 1/32") Width = 37mm (1 15/32") Depth = 11.5mm (29/64")





Available in all finishes below

Finish Options

Coated

natural aluminum (N)


graphite (GR)


arctic silver (AS)


luxe bronze (LB)


onyx - black matte (X)


brushed stainless (S)

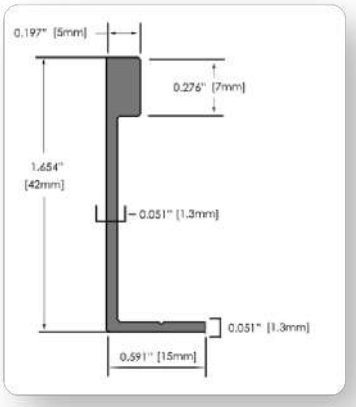

gold (GLD)


modern brass (MB)


bronze matte (BZM)


black (B)

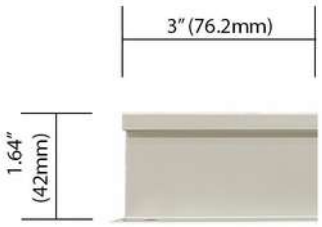




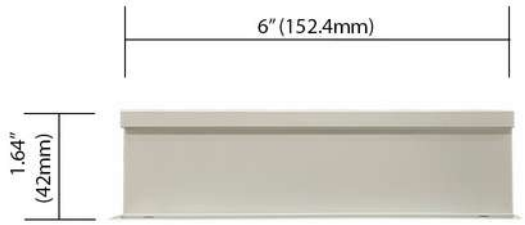
DESIGN GUIDELINES

- Sleek wrap around finger pull design
- Mounts to back of door or drawer front
- Backplate Height: 9/16" (15mm)
- Finger Pull Height: 1 11/16" (42mm)
- Flush mount fabrication NOT available with AF010 or AF014
- AF002 flush mount available with 3" finger pull ONLY
- Brushed Stainless finish ONLY available with FP-3





3" FINGER PULL [FP-3]



6" FINGER PULL [FP-6]



9" FINGER PULL [FP-9]



12" FINGER PULL [FP-12]

natural aluminum (N)

brushed stainless (S)

*(S) ONLY avail FP-3

black (B)

onyx (X)

bronze matte (BZM)

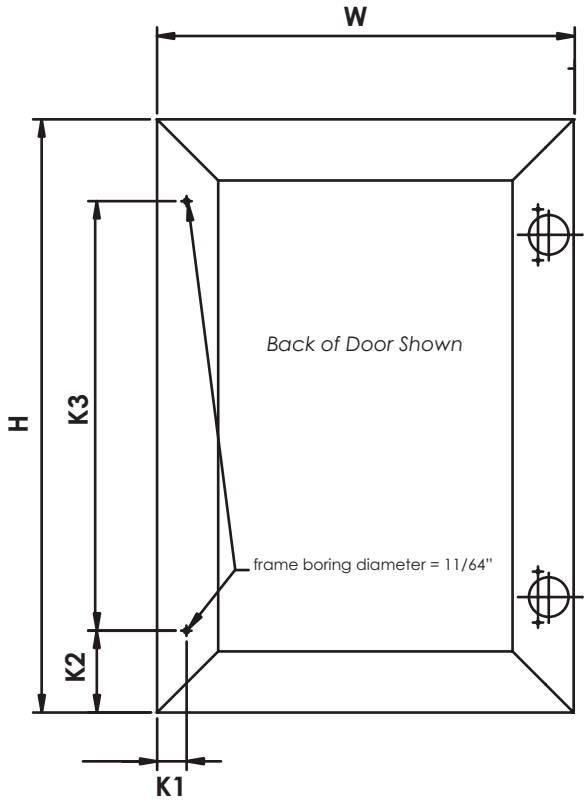
luxe bronze (LB)

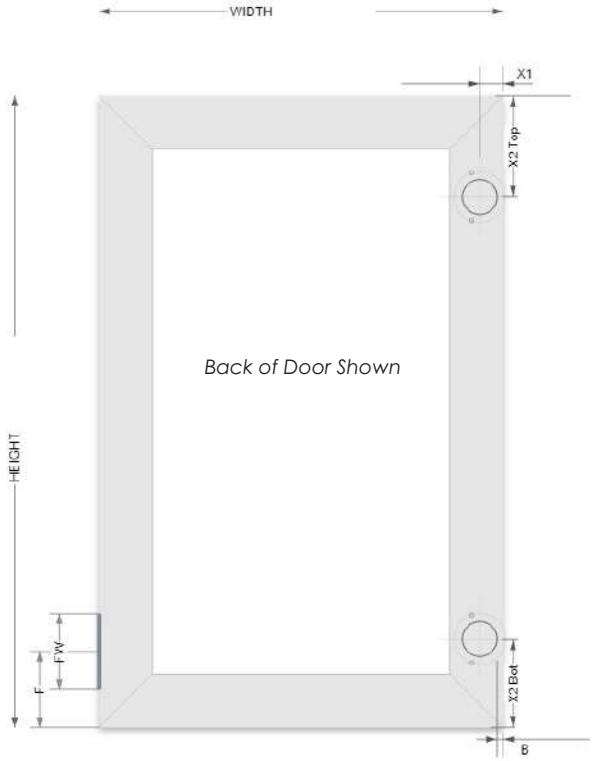
graphite (GR)

modern brass (MB)

gold (GLD)

arctic silver (AS)

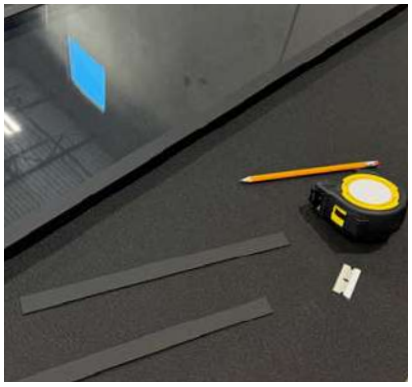




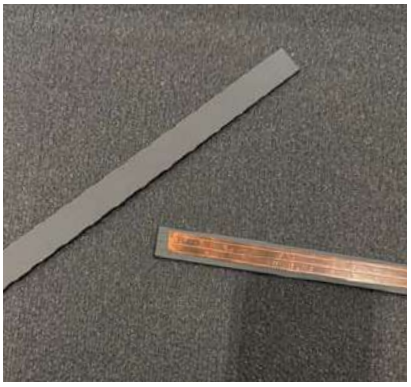
Profile	K2 Standard (Knob/ Pull Center from door edge)	K2 Minimum (Knob/ Pull Center from door edge)	K1 Standard (centered on profile)	Std. Handle Boring Through Glass (If yes, customer MUST specify hole location at order)	Flush Mount Finger Pull Minimum (center of 3" pull to door edge)
AF002	2.5" (63.5mm)	2.25" (57mm)	1.063" (27mm)	**YES**	3.75" (95.2mm)
AF003	2.5" (63.5mm)	2.25" (57mm)	1.063" (27mm)	NO	3.75" (95.2mm)
AF004	2.5" (63.5mm)	2.25" (57mm)	1.156" (29mm)	**YES**	3.75" (95.2mm)
AF006	2.5" (63.5mm)	2.25" (57mm)	1.063" (27mm)	**YES**	3.75" (95.2mm)
AF007	2.5" (63.5mm)	2.25" (57mm)	1.375"	NO	3.75" (95.2mm)
AF009	2.5" (63.5mm)	2.25" (57mm)	.875" (22mm)	NO	3.75" (95.2mm)
AF010	2.5" (63.5mm)	2.25" (57mm)	1.063" (27mm)	**YES**	**NOT AVAILABLE**
AF011	2.5" (63.5mm)	2.25" (57mm)	1.125" (29mm)	NO	3.75" (95.2mm)
AF012	3.625" (92mm)	3.625" (92mm)	Contact Element	**YES**	5.125"
AF013	3.625" (92mm)	3.625" (92mm)	0.5" (13mm)	NO	5.125"
AF014	2.5" (63.5mm)	2.25" (57mm)	1.125" (29mm)	**YES**	3.75" (95.2mm)
AF015	2.5" (63.5mm)	2.25" (57mm)	0.781" (20mm)	NO	3.75" (95.2mm)
AF016	2.5" (63.5mm)	2" (50.8mm)	Contact Element	YES	3.75" (95.2mm)
AF011	2.5" (63.5mm)	2" (50.8mm)	0.375 (10mm)	YES	3.75" (95.2mm)
AF210	2.5" (63.5mm)	2.25" (57mm)	1.063" (27mm)	**YES**	**NOT AVAILABLE**

- Standard Aluminum Handle Boring Diameter = 11/64" (4.3mm)
- Standard Glass Handle Boring Diameter = 5/16" (8mm)

*Doors with standard handle hole in glass come with plastic grommet installed, which should be left in place when handle is installed to protect edge of glass hole and to prevent overtightening and glass shattering







1. **Start on the back side of door/glass**
2. **Measure and mark location to apply divider rail**
3. **Peel off backer to expose adhesive**
4. **Place back divider rail between marks**
5. **Align and apply pressure to activate adhesive**
6. **Remove any marks with windex and cloth**
7. **Flip door over to apply front divider rail to glass**
8. **Align with back divider rail and gently apply pressure to activate adhesive**
9. **Repeat process for any additional divider rails.**

WATCH OUR QUICK HOW-TO VIDEO HERE







PRODUCT FEATURES

• Available in all specialty coat finishes: Arctic Silver, Black, Bronze Matte, Copper, Gold, Graphite, Luxe Bronze, Modern Brass, & Onyx
• Cut-to-size rails based on door dimensions & profile selected
• Designed for widths up to 48"
• 3/4" (19mm) wide, 1/16" (1.6mm) thick
• Front and back rails provided.
• Flush with frame when installed
• NOT available in Natural Aluminum or Brushed Stainless Finish
• NOT compatible with AF006, AF010 or AF210 profiles

DIVIDER RAIL WIDTH CALCULATOR

Profile	Divider Length Calculation Front	Divider Length Calculation Back
AF002	Door Width - 16.3mm	Door width - 108.3mm
AF003	Door width - 108.3mm	Door width - 108.3mm
AF004	Door width - 28.3mm	Door width - 90.3mm
AF007	Door width - 140.3mm	Door width - 140.3mm
AF009	Door width - 126.3mm	Door width - 126.3mm
AF011	Door width - 113.3mm	Door width - 113.3mm
AF012	Door width - 19.3mm	Door width - 52.3mm
AF013	Door width - 51.3mm	Door width - 51.3mm
AF014	Door width - 8.3mm	Door width - 108.3mm
AF015	Door width - 120.3mm	Door width - 120.3mm
AF016	Door width - 19.3mm	Door width - 42.3mm
AF017	Door width - 42.3mm	Door width - 42.3mm

*red denotes different length for front and back

Cleaning & Care Guide

To insure proper cleaning and care of your product, please follow these simple suggestions for our materials:

Glass (gloss or satin surfaces)

We recommend using 99% isopropyl alcohol, citrus or vinegar based cleaners on a clean, non-abrasive cloth or paper towel. If a heavy stain is present and does not come clean using the suggestions above, use isopropyl alcohol with a Magic Eraser by gently scrubbing until the mark is removed.

Backpainted Glass

Follow instructions above for the gloss and/or satin surface of the glass, opposite the painted side. For the backpainted water based coating, we recommend using a mildly damp (water only) on a non-abrasive cloth to gently clean the coated side of the glass.

Aluminum Extrustions

Use a clean cloth with a mild detergent to clean the aluminum.

NEVER use an abrasive cleaning pads such as a metallic sponge, solvents, strong detergents or other chemical agents when cleaning glass or aluminum.

Warranty

Element Designs' aluminum frame cabinet door products are covered by a limited liability warranty from defects in material and workmanship over the functional lifetime of the doors. The warranty includes any defects in the fabricated door size, boring locations, aluminum framing flaws outside of quality standards, and glass imperfections outside of quality standards. Element Designs also warrants its doors from deterioration, discoloring, degrading, or overall changing through the course of the product's lifetime. This warranty does not apply if, in the judgment of Element Designs, the product fails due to damage from shipment, handling, storage, accident, abuse or misuse, or if it has been used or maintained in a manner not conforming to product's care instructions, has been modified in any way, or has been defaced. Repair by anyone other than Element Designs or an approved agent voids this warranty. The maximum liability of Element Designs is the product purchase price.