



aluminum frame door technical manual

v1.25

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.

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Frame Profiles



AF002



AF003



AF004



AF006



AF007



AF009



AF010



AF011



AF014



AF015



AF016



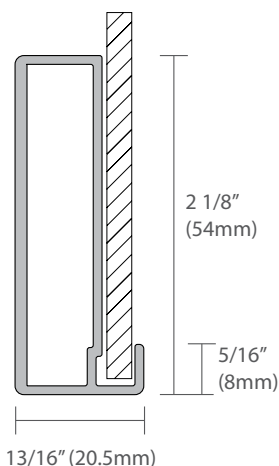
AF017



AF210

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

AF002

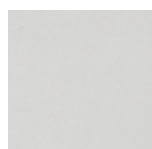


Design Guidelines:

- 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

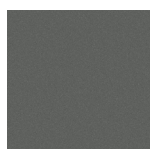


natural aluminum (N)



brushed stainless (S)

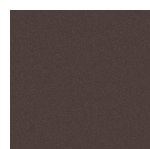
Coated



graphite (GR)



arctic silver (AS)



luxe bronze (LB)



chalk - white
matte (CK)



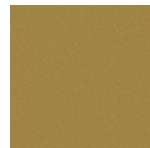
black (B)



gold (GLD)



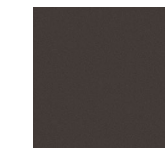
copper (C)



modern brass (MB)



onyx - black
matte (X)



bronze matte (BZM)



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:

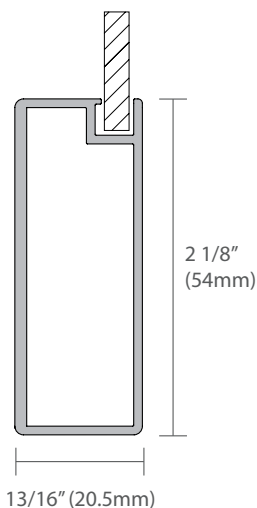
Profile AF002 utilizes standard 35mm cup screw-on hinges

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

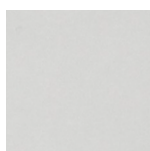


Design Guidelines:

- 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)



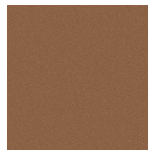
chalk - white
matte (CK)



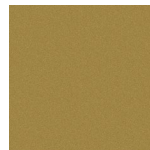
black (B)



gold (GLD)



copper (C)



modern brass (MB)



onyx - black
matte (X)



bronze matte (BZM)

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

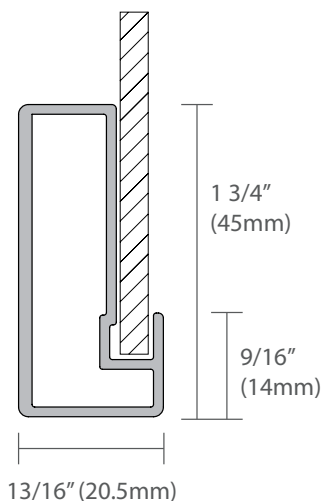
Element Designs recommends the following wide frame door hinges:

- 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

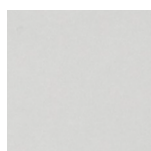


Design Guidelines:

- 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

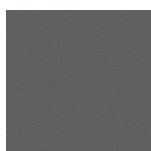


natural aluminum (N)



brushed stainless (S)

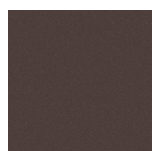
Coated



graphite (GR)



arctic silver (AS)



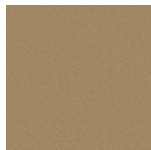
luxe bronze (LB)



chalk - white matte (CK)



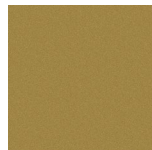
black (B)



gold (GLD)



copper (C)



modern brass (MB)



onyx - black matte (X)



bronze matte (BZM)

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

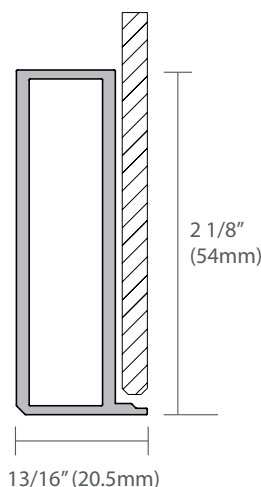
Element Designs recommends the following wide frame door hinges:

- 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

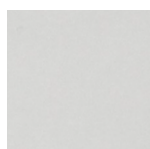


Design Guidelines:

- 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

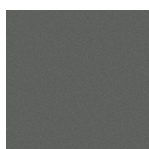


natural aluminum (N)



brushed stainless (S)

Coated



graphite (GR)



arctic silver (AS)



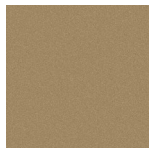
luxe bronze (LB)



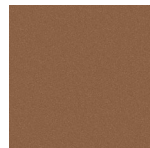
chalk - white
matte (CK)



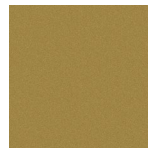
black (B)



gold (GLD)



copper (C)



modern brass (MB)



onyx - black
matte (X)



bronze matte (BZM)



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.**



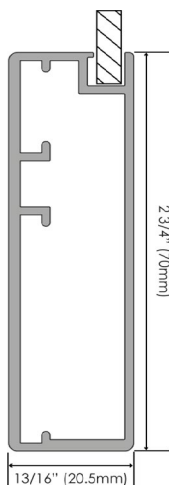
Hinge Information:

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

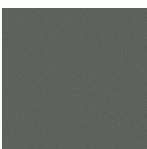


natural aluminum (N)



brushed stainless (S)

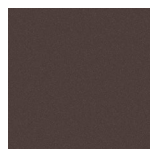
Coated



graphite (GR)



arctic silver (AS)



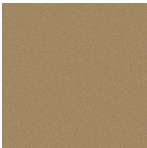
luxe bronze (LB)



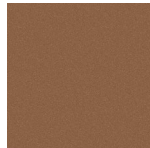
chalk - white
matte (CK)



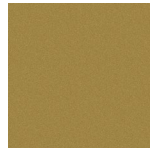
black (B)



gold (GLD)



copper (C)



modern brass (MB)



onyx - black
matte (X)



bronze matte (BZM)



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

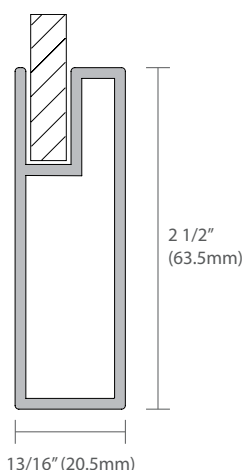
Element Designs recommends the following wide frame door hinges:

- 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

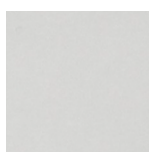


Design Guidelines:

- 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

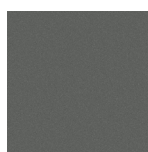


natural aluminum (N)



brushed stainless (S)

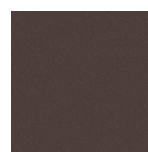
Coated



graphite (GR)



arctic silver (AS)



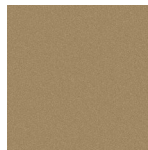
luxe bronze (LB)



chalk - white
matte (CK)



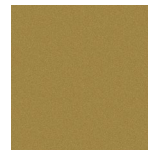
black (B)



gold (GLD)



copper (C)



modern brass (MB)



onyx - black
matte (X)



bronze matte (BZM)

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"



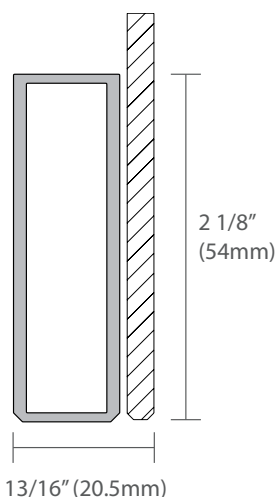
Hinge Information:

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.



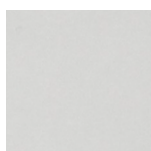
AF010

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

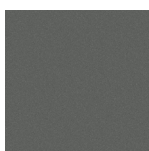


natural aluminum (N)



brushed stainless (S)

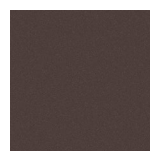
Coated



graphite (GR)



arctic silver (AS)



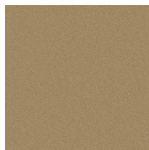
luxe bronze (LB)



chalk - white
matte (CK)



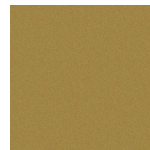
black (B)



gold (GLD)



copper (C)



modern brass (MB)



onyx - black
matte (X)



bronze matte (BZM)



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:

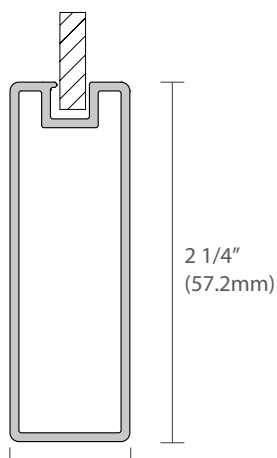
Profile AF010 utilizes standard 35mm cup screw-on hinges

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

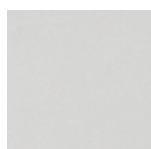


Design Guidelines:

- 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

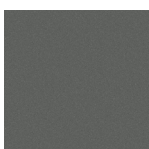


natural aluminum (N)



brushed stainless (S)

Coated



graphite (GR)



arctic silver (AS)



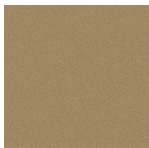
luxe bronze (LB)



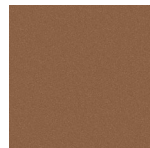
chalk - white matte (CK)



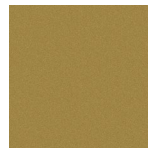
black (B)



gold (GLD)



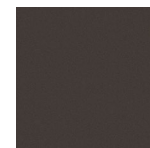
copper (C)



modern brass (MB)



onyx - black matte (X)



bronze matte (BZM)

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:

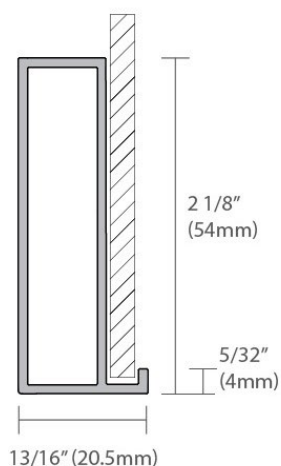
Profile AF011 utilizes standard 35mm cup screw-on hinges

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

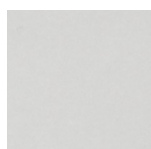


Design Guidelines:

- 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

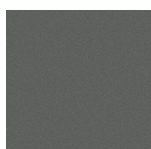


natural aluminum (N)



brushed stainless (S)

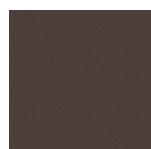
Coated



graphite (GR)



arctic silver (AS)



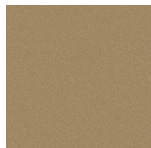
luxe bronze (LB)



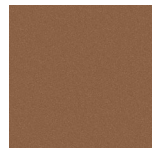
chalk - white matte (CK)



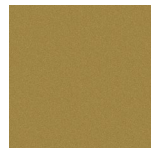
black (B)



gold (GLD)



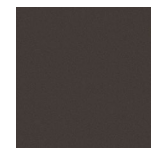
copper (C)



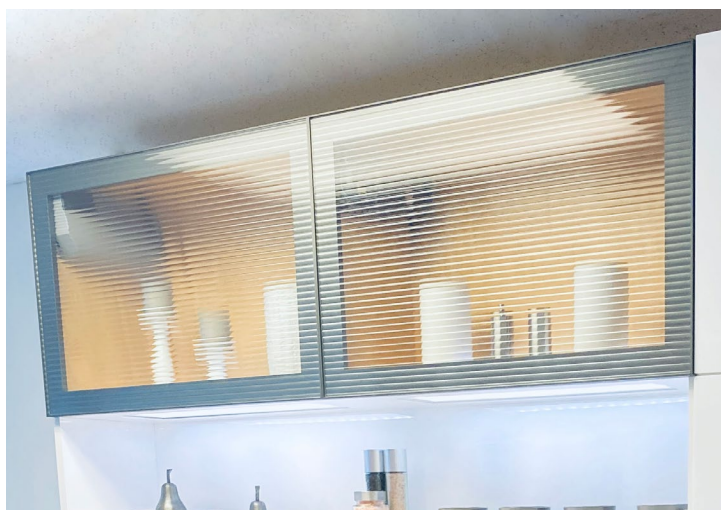
modern brass (MB)



onyx - black matte (X)



bronze matte (BZM)



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"



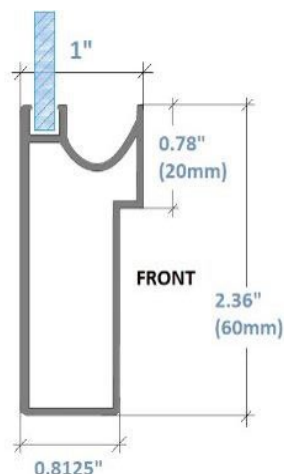
Hinge Information:

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.



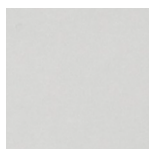
AF015

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

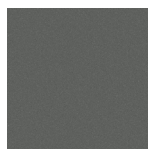


natural aluminum (N)



brushed stainless (S)

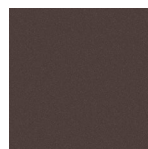
Coated



graphite (GR)



arctic silver (AS)



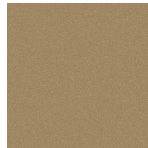
luxe bronze (LB)



chalk - white matte (CK)



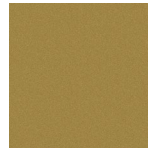
black (B)



gold (GLD)



copper (C)



modern brass (MB)



onyx - black matte (X)



bronze matte (BZM)

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:

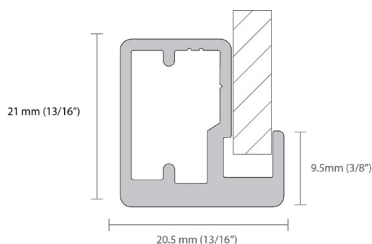
Profile AF015 utilizes standard 35mm cup screw-on hinges

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

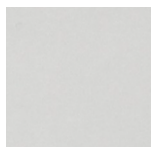


Design Guidelines:

- 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

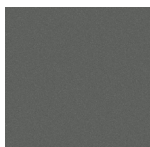


natural aluminum (N)



brushed stainless (S)

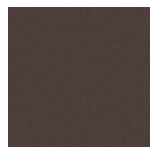
Coated



graphite (GR)



arctic silver (AS)



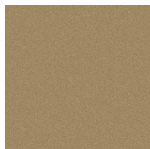
luxe bronze (LB)



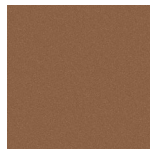
chalk - white matte (CK)



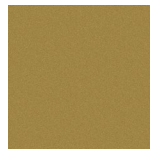
black (B)



gold (GLD)



copper (C)



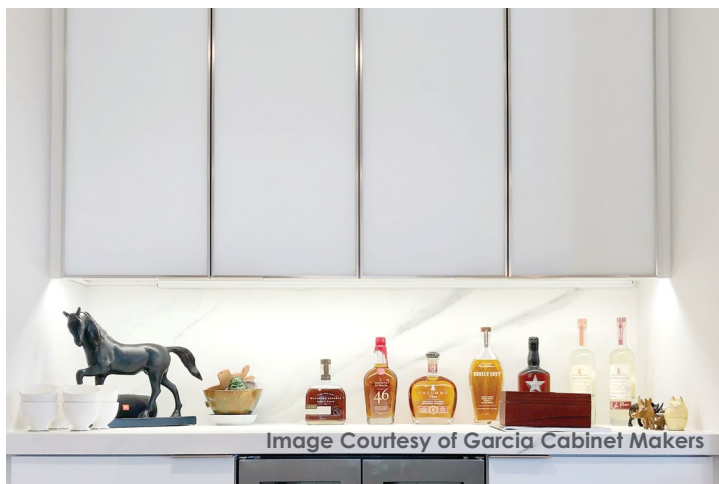
modern brass (MB)



onyx - black matte (X)



bronze matte (BZM)



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:

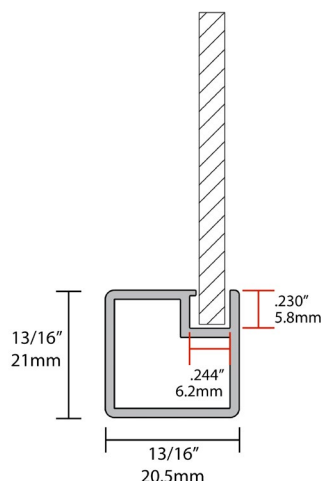
Profile AF016 utilizes special European narrow aluminum frame door hinges. Element Designs recommends the following narrow frame door hinges:

- 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; HC226A99
- More options available - contact Element Designs for details

Contact your local hardware distributor for other available hinge options.



AF017

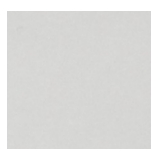


Design Guidelines:

- 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

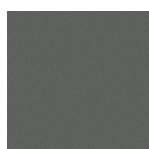


natural aluminum (N)



brushed stainless (S)

Coated



graphite (GR)



arctic silver (AS)



luxe bronze (LB)



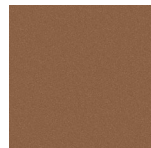
chalk - white
matte (CK)



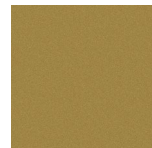
black (B)



gold (GLD)



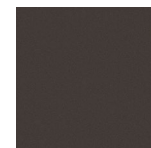
copper (C)



modern brass (MB)



onyx - black
matte (X)



bronze matte (BZM)

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"

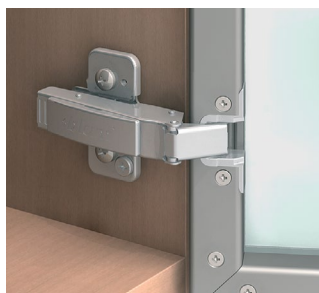


Hinge Information:

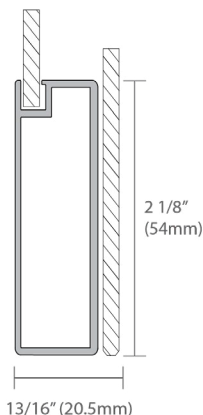
Profile AF017 utilizes special European narrow aluminum frame door hinges.

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.



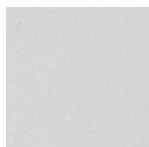
AF210

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

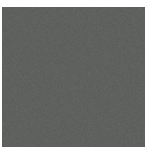


natural aluminum (N)



brushed stainless (S)

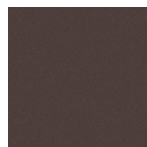
Coated



graphite (GR)



arctic silver (AS)



luxe bronze (LB)



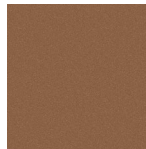
chalk - white
matte (CK)



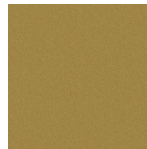
black (B)



gold (GLD)



copper (C)



modern brass (MB)



onyx - black
matte (X)



bronze matte (BZM)



Image Courtesy of Amadas Coach

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:

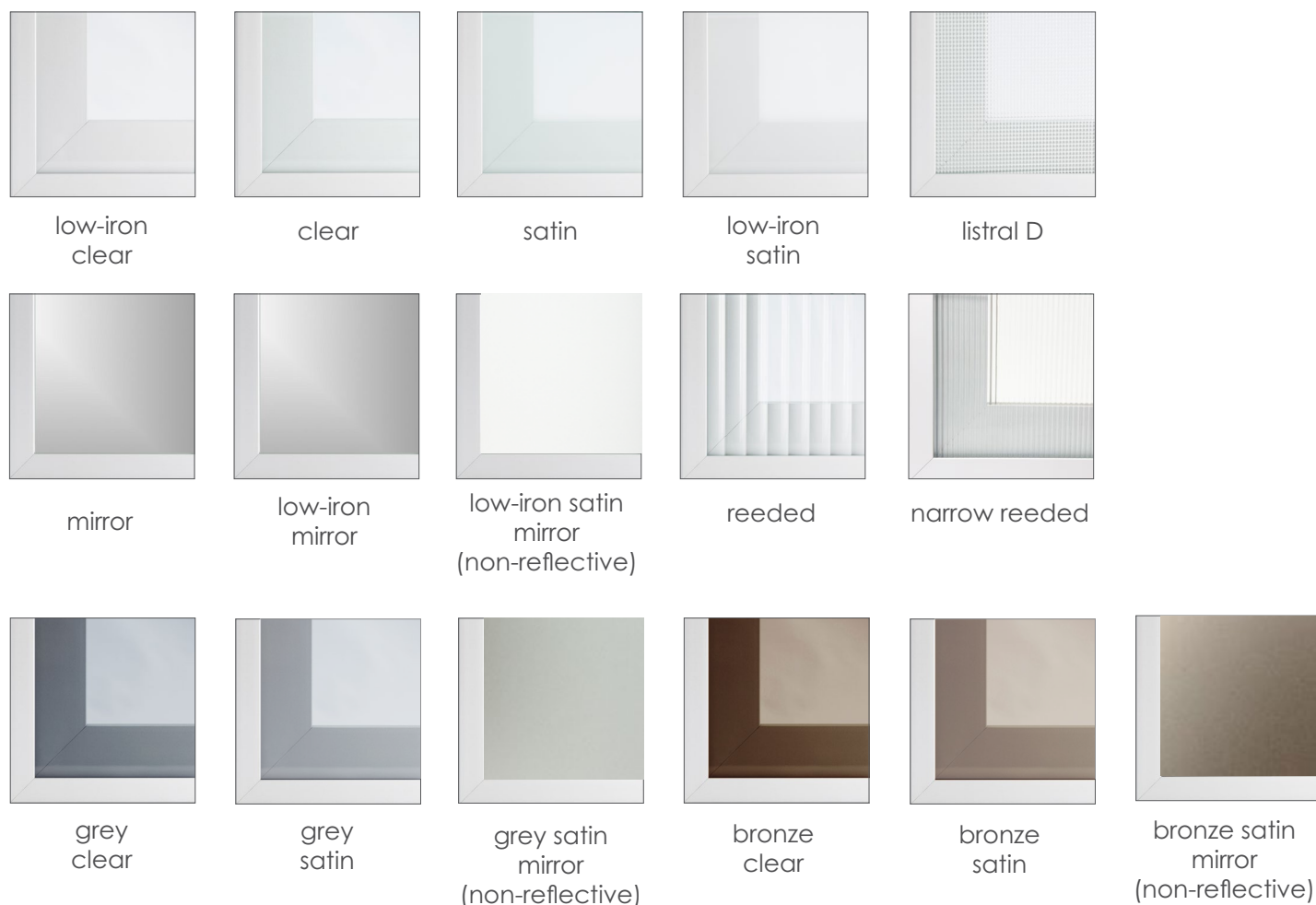
Profile AF015 utilizes standard 35mm cup screw-on hinges
Element Designs recommends the following wide frame door hinges:

- 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



Additional 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 specified. 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) = 82" (2082.8mm)
- Regular Reeded Max Height (vertical line pattern) = 96" (2438.4mm)
- All Reeded Max Height (horizontal line pattern) = 60" (1524mm)
- 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



non-standard color
matte



custom color
gloss



white
gloss



sand
gloss



amarillo
gloss



sienna
gloss



slate
gloss



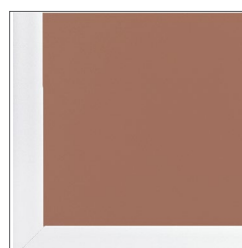
white
matte



sand
matte



amarillo
matte



sienna
matte



slate
matte



black
gloss



cream gloss



oasis
gloss



navy
gloss



mineral
gloss



black
matte



cream matte



oasis
matte



navy
matte



mineral
matte

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



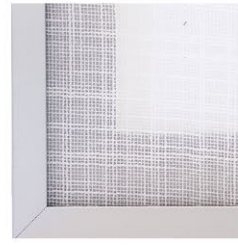
gold weave
metallic



tribe pure



vera pure



villa pure



woven lotka pure



linea ivory



quattro carbon



swept gold



swept silver



wisp silver

Recycled Leather

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



grey umber
buffalo



cocoa buffalo



gold grey metallic
buffalo



black shagreen



pebble shagreen



grey stone
shagreen

dECOLuxe Solid Acrylic

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



alpine white



white



turquoise



cobalt blue



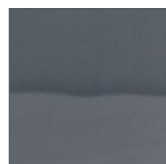
signal red



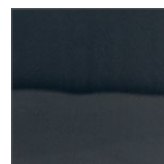
light grey



stone grey



anthracite



black

Frame Profiles



AF006

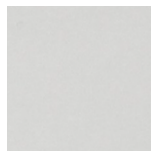


AF010

- Standard painted border = 2 1/4"
- Matte side facing in for satin glass unless otherwise specified
- Glass inserts are 5/32" (4mm) thick
- Glass is tempered glass without logo unless otherwise specified

Profile Finishes

Anodized

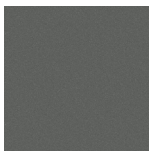


natural aluminum (N)

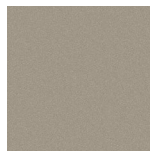


brushed stainless (S)

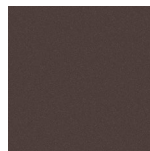
Coated



graphite (GR)



arctic silver (AS)



luxe bronze (LB)



chalk - white
matte (CK)



black (B)



gold (GLD)



copper (C)



modern brass (MB)



onyx - black
matte (X)



bronze matte (BZM)

Standard Glass Insert Options

* Grey & Bronze clear tint may affect painted border color



low-iron
clear



low-iron
satin



satin



clear



grey
clear or satin



bronze
clear or satin

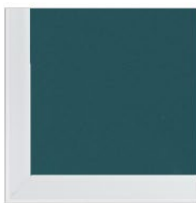
Backpainted Glass Border Options



black



cream



oasis



navy



mineral



non-standard



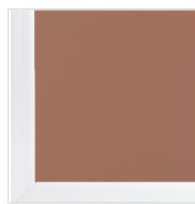
white



sand



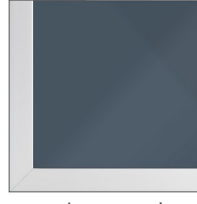
amarillo



sienna



slate



custom color



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, 120°, 5/8" (15mm) overlay, self close
(PN H73T550A)



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:

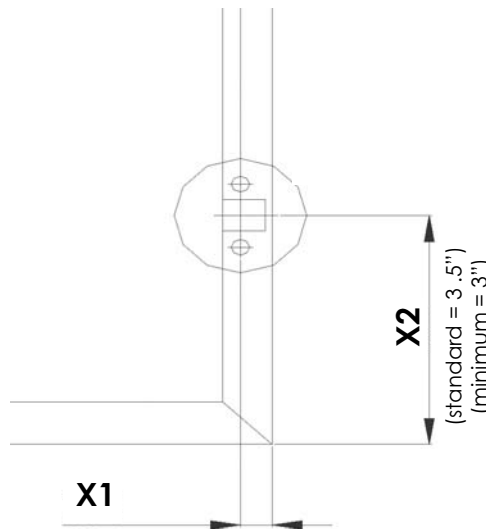
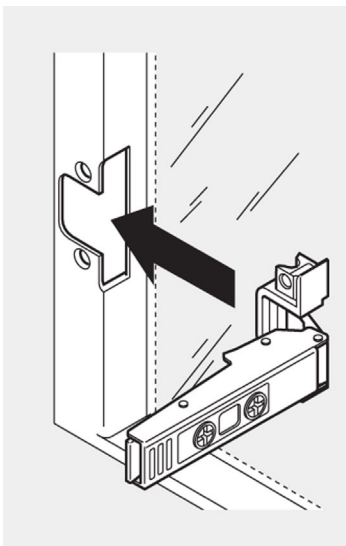
straight arm, 120°, self close
(PN H71T5550)



- 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 (AF001 & AF016)

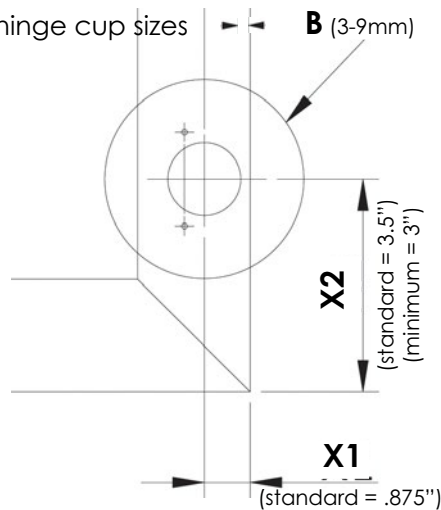
- Require special narrow frame hinge for aluminum frame doors
- Customer must specify hinge manufacturer and provide boring pattern at time of order
- Special aluminum frame hinge screws will be provided with each door
- For hinge cutout: 3" minimum from top and bottom of door to center of cup (X2)



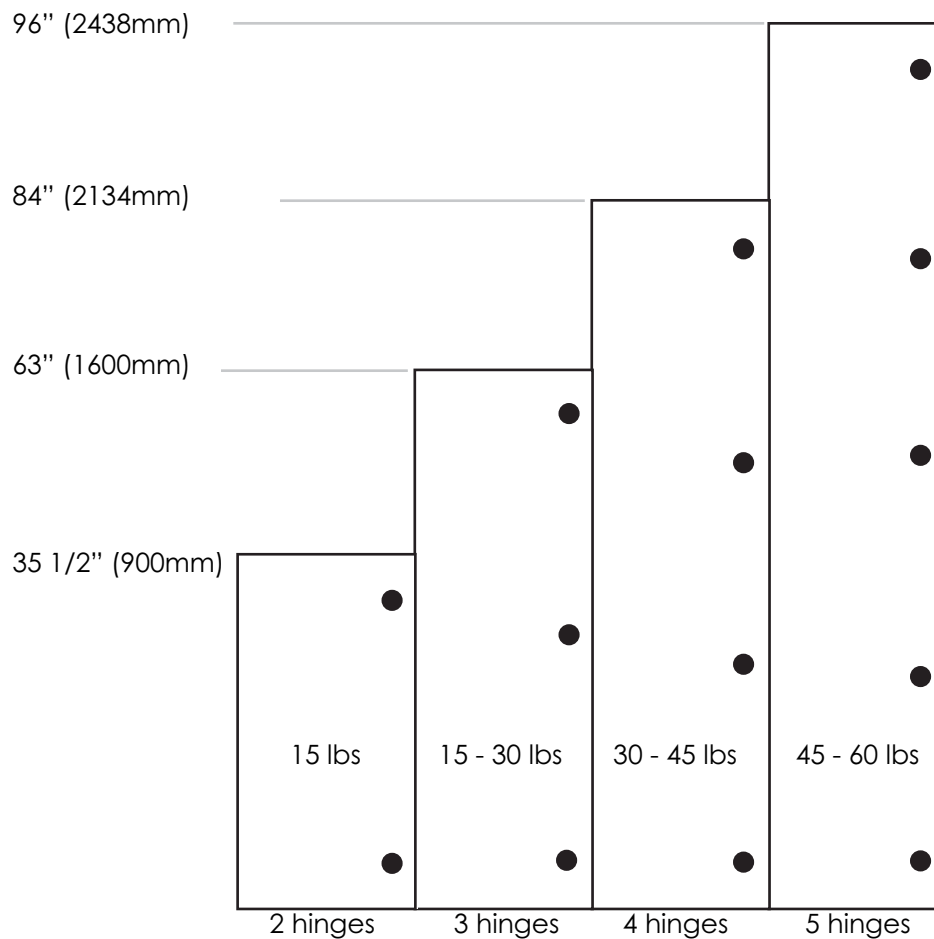
Wide Frame Doors (AF002, AF003, AF004, AF006, AF007, AF009, AF010, AF011, AF014 & AF015)

- 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)

$$X1 = B + 17.5 \text{ (1/2 of cup diameter)}$$
- 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)	
AF001 Profile/ Linear Foot	.217/ lf
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
AF210 Profile/ Linear Foot	.428/ lf
Internal Hardware (Y)	
Internal Door Hardware - Narrow Frame AF001 & AF016	.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
AF001	-1.188
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
af210 f	0.00
af210 b	-3.938
af016	-0.250

Door Weight Calculation Formula

(Online Calculator Can Be Found On Our Website: www.element-designs.com/downloads.html)

$$\text{Door Weight} = ((2W + 2H)/12)X + Y + ((IW \times IH)/144)Z$$

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

$$\begin{aligned}
 &= (((2 \times 24) + (2 \times 36))/12) \times .413 + .53 + (((35.6875 \times 23.6875)/144) \times 2.05) \\
 &= (120/12 \times .413) + .53 + ((845.3)/144) \times 2.05 \\
 &= (10 \times .413) + .53 + (5.9 \times 2.05) \\
 &= 4.13 + .53 + 12.1 \\
 &= \mathbf{16.7 \text{ lbs}}
 \end{aligned}$$

	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



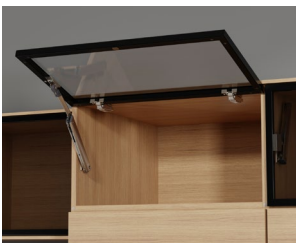
AVENTOS HK top - Stay Lift

- 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 Mechanism - 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 Mechanism - can be used on one or both sides
- Designed for use with BLUMOTION hinges

Knobs



K001



K005



K006



K007



K008



K009

Bar Pulls (Handles)



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.)

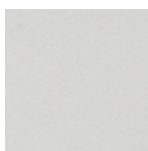
P1-380 Length: 17 5/16" (14 15/16" c. to c.)

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

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

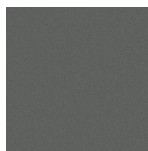
Finish Options

Anodized



natural aluminum (N)

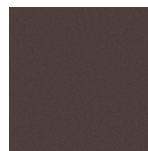
Coated



graphite (GR)



arctic silver (AS)



luxe bronze (LB)



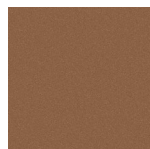
chalk - white
matte (CK)



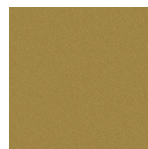
black (B)



gold (GLD)



copper (C)



modern brass (MB)



onyx - black
matte (X)



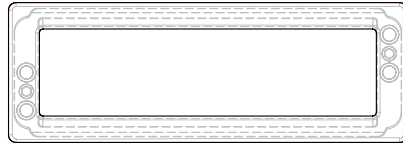
bronze matte (BZM)

Recessed Pull



R1-96

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



R1-160

Length = 166.5mm (6 9/16") Width = 37mm (1 15/32") Depth = 11.5mm (29/64")



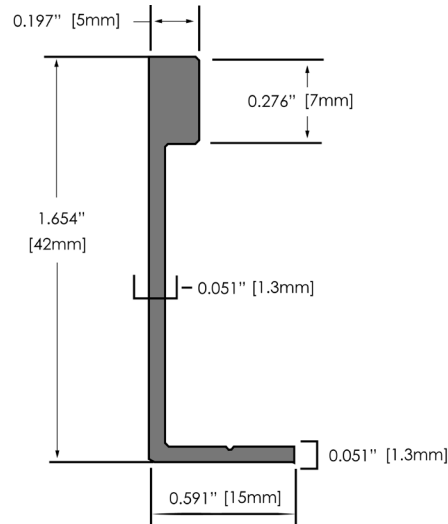
Available in all finishes below

Finger Pull

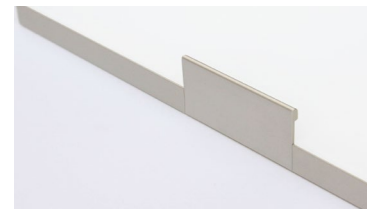
FP-3



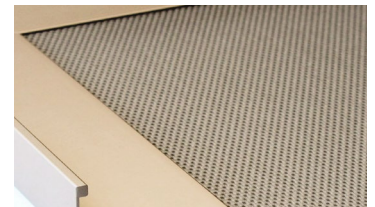
Length: 3" (2" c. to c.)



Installation Options



flush mount*



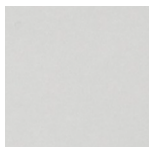
surface mount

*Flush mount installation NOT available with AF010 or AF210 profile

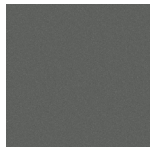
Profiles AF002, AF013, AF014, AF016 - **ONLY** standard 3" length

Profiles AF001, AF003, AF004, AF006, AF007, AF009, AF011, AF012 - standard 3" length P3-42 or custom length P3-42

Pull Finishes



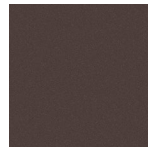
natural aluminum (N)



graphite (GR)



arctic silver (AS)



luxe bronze (LB)



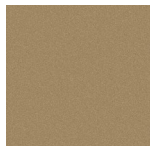
chalk - white
matte (CK)



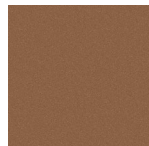
black (B)



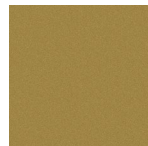
brushed stainless (S)



gold (GLD)



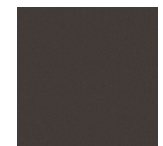
copper (C)



modern brass (MB)



onyx - black
matte (X)



bronze matte (BZM)

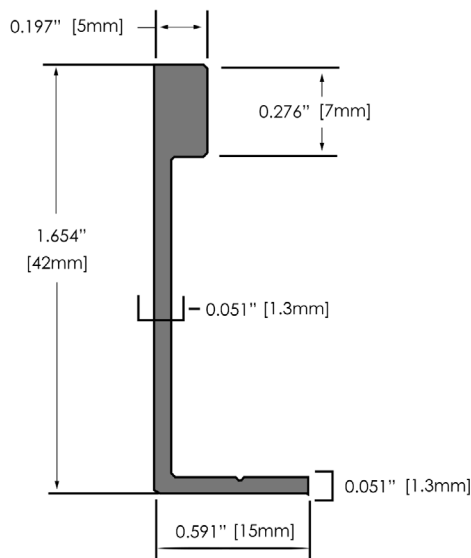
DESIGNS

FINGER PULLS

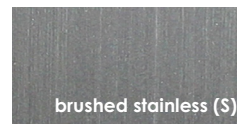


DESIGN GUIDELINES

- Sleek wrap around finger pull design
- Mounts to back of door or drawer front
- Backplate Height: $\frac{5}{16}$ " (15mm)
- Finger Pull Height: $1\frac{1}{4}$ " (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

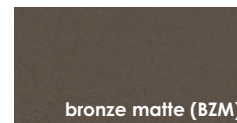


natural aluminum (N)

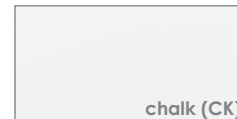


brushed stainless (S)

*(S) ONLY avail FP-3



bronze matte (BZM)



chalk (CK)



onyx (X)



black (B)



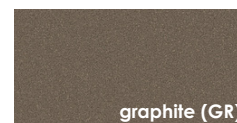
arctic silver (AS)



copper (CP)



gold (GLD)



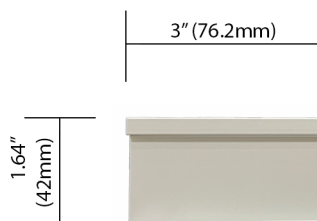
graphite (GR)



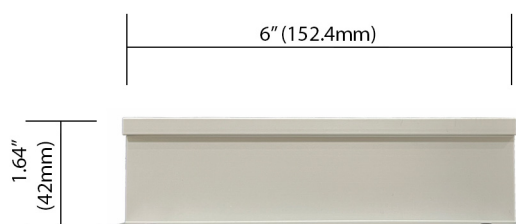
luxe bronze (LB)



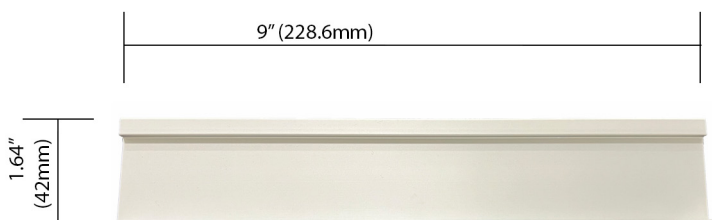
modern brass (MB)



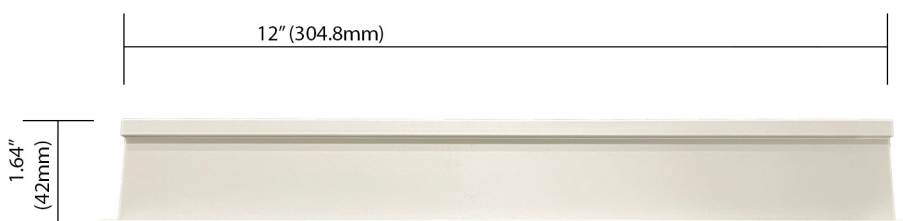
3" FINGER PULL [FP-3]



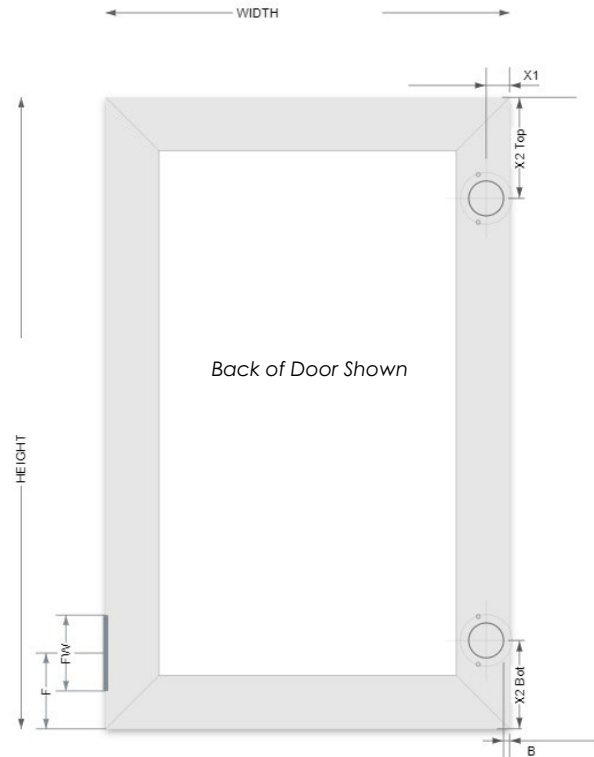
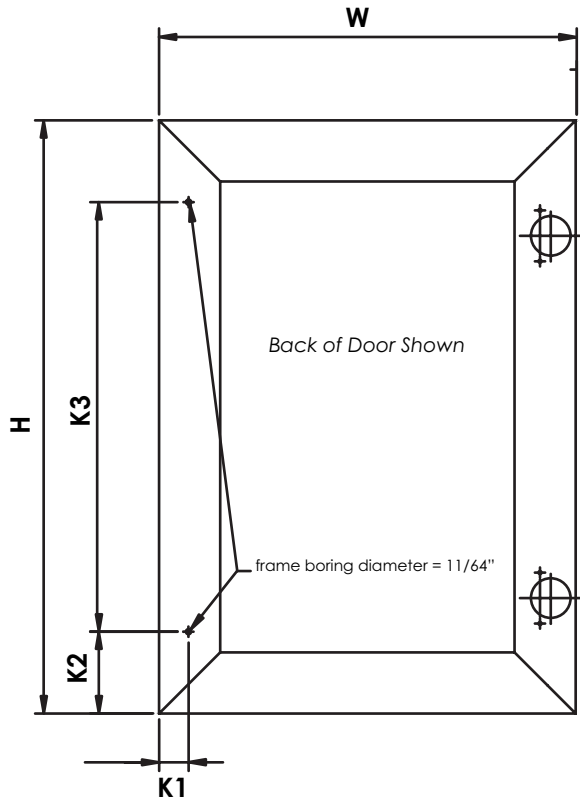
6" FINGER PULL [FP-6]



9" FINGER PULL [FP-9]



12" FINGER PULL [FP-12]



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)	F Flush Mount P3-42 Minimum (center of 3" pull to door edge)
AF001	2.5" (63.5mm)	2" (50.8mm)	.375" (10mm)	NO	3.75" (95.2mm)
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)
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

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 Extrusions

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.