

# INTEGRATED HINGE DOORS with SaliceAIR HINGES technical manual

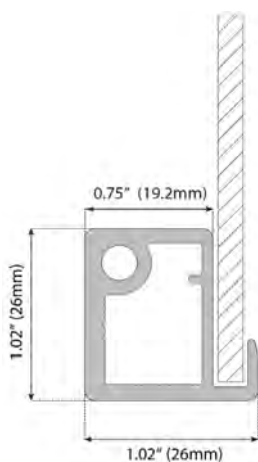


## table of contents

|   |                                  |
|---|----------------------------------|
| <b>AF012 Profile .....</b>                        | <b><u><a href="#">3</a></u></b>  |
| <b>AF013 Profile .....</b>                        | <b><u><a href="#">4</a></u></b>  |
| <b>Standard &amp; Premium Glass Inserts .....</b> | <b><u><a href="#">5</a></u></b>  |
| <b>Backpainted Glass Inserts .....</b>            | <b><u><a href="#">6</a></u></b>  |
| <b>Additional Insert Options .....</b>            | <b><u><a href="#">7</a></u></b>  |
| <b>Decorative Hardware .....</b>                  | <b><u><a href="#">8</a></u></b>  |
| <b>Hinge Installation .....</b>                   | <b><u><a href="#">9</a></u></b>  |
| <b>Hinge Adjustment .....</b>                     | <b><u><a href="#">10</a></u></b> |
| <b>Drilling Dimensions .....</b>                  | <b><u><a href="#">11</a></u></b> |
| <b>Cabinet Drilling Template .....</b>            | <b><u><a href="#">12</a></u></b> |
| <b>Overlay Calculation .....</b>                  | <b><u><a href="#">13</a></u></b> |
| <b>Additional Technical Details .....</b>         | <b><u><a href="#">14</a></u></b> |
| <b>Cleaning, Care &amp; Warranty.....</b>         | <b><u><a href="#">15</a></u></b> |



# AF012

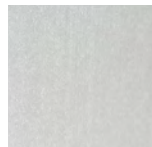


## Design Guidelines:

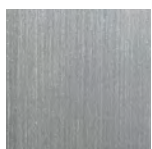
- Ideal for transparent applications with visible cabinet interior
- Hinges are fully concealed in upper and lower door corners
- Maximum height = 106.25" (2699mm)
- Maximum width = 24" (610mm)
- Maximum door weight = 55 lbs (25 kg)
- Minimum height = 5.5" (139.7mm)
- Minimum width = 5.5" (139.7mm)
- Maximum square footage = 17.7 sf
- NOT recommended as drawer fronts or lift up doors
- Door thickness = 1" (26mm)

## Profile Finishes

### Anodized

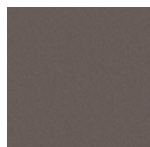


natural aluminum (N)

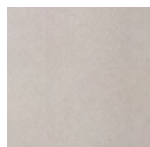


brushed stainless (S)

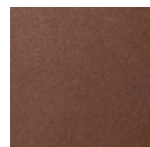
### Coated



graphite (GR)



arctic silver (AS)



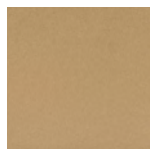
luxe bronze (LB)



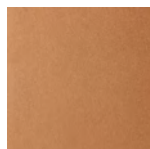
chalk - white  
matte (CK)



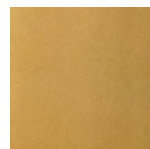
black (B)



gold (GLD)



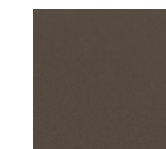
copper (C)



modern brass (MB)



onyx - black  
matte (X)



bronze matte (BZM)



## Insert Specifications:

- 4mm (.156")
- Handle hole can **NOT** be drilled through the frame
- Handle hole locations must be specified at time of order if using a glass insert

## To Calculate Insert Size:

Insert Width = Door Width - 0.25" (6mm)

Insert Height = Door Height - 0.25" (6mm)



## Hinge Information:

AF012 utilizes Salice AIR hinges.

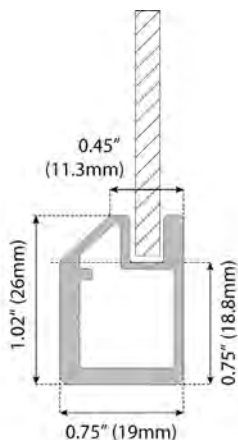
### Hinge Finish Options:

- Titanium
- Nickel

### Hinge Motion Options:

- Soft Close
- Push to Open

# AF013

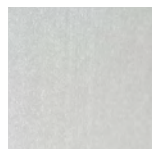


## Design Guidelines:

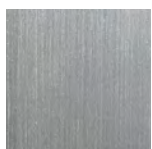
- Ideal for transparent applications with visible cabinet interior
- Hinges are fully concealed in upper and lower door corners
- Maximum height = 106.25" (2699mm)
- Maximum width = 24" (610mm)
- Maximum door weight = 55 lbs (25 kg)
- Minimum height = 5.5" (139.7mm)
- Minimum width = 5.5" (139.7mm)
- Maximum square footage = 17.7 sf
- NOT recommended as drawer fronts or lift up doors
- Door thickness = 3/4" (18mm)

## Profile Finishes

### Anodized

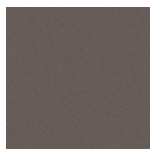


natural aluminum (N)

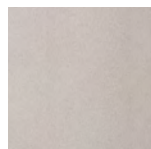


brushed stainless (S)

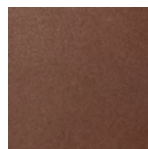
### Coated



graphite (GR)



arctic silver (AS)



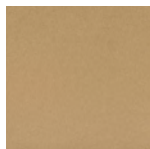
luxe bronze (LB)



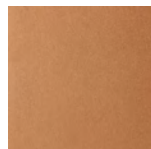
chalk - white  
matte (CK)



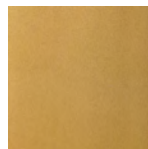
black (B)



gold (GLD)



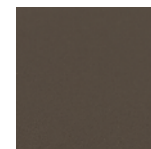
copper (C)



modern brass (MB)



onyx - black  
matte (X)



bronze matte (BZM)

## Insert Specifications:

- 4mm (.156")

- Handle hole can **NOT** be drilled through the frame
- Handle hole locations must be specified at time of order if using a glass insert

## To Calculate Insert Size:

Insert Width = Door Width - 1.52" (38.5mm)

Insert Height = Door Height - 1.52" (38.5mm)



## Hinge Information:

AF013 utilizes Salice AIR hinges.

### Hinge Finish Options:

- Titanium
- Nickel

### Hinge Motion Options:

- Soft Close
- Push to Open



## Standard Glass



low-iron  
clear



low-iron  
satin



mirror



clear



satin



grey  
clear



bronze  
clear



listral D



reeded

## Premium Glass



grey  
satin



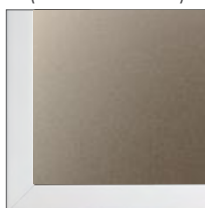
grey satin  
mirror  
(non-reflective)



low-iron  
mirror



bronze  
satin



bronze satin  
mirror  
(non-reflective)



low-iron satin  
mirror  
(non-reflective)

- Glass inserts are 5/32" (4mm) thick
- Etched and patterned side facing in
- Glass is tempered safety glass without a tempered logo, unless otherwise specified
- Mirror glass is not tempered, but includes safety backer
- Pattern glass options (listral D & reeded) have max height of 84" (2133mm)

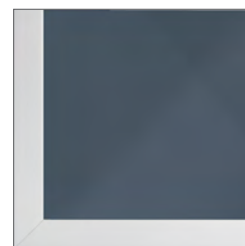


## Backpainted Glass

- High quality water based paint on low iron glass
- All glass is tempered safety glass without a tempered logo unless otherwise specified
- 177 Non-Standard and Custom colors available
- All backpainted glass has a light grey backer for added durability



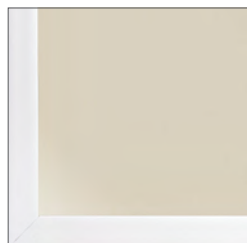
non-standard color  
matte



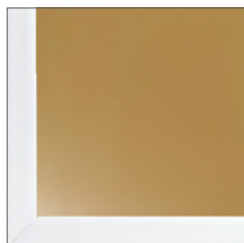
custom color  
gloss



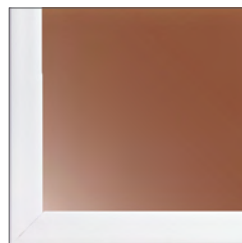
white  
gloss



sand  
gloss



amarillo  
gloss



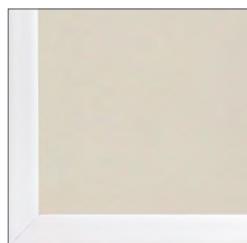
sienna  
gloss



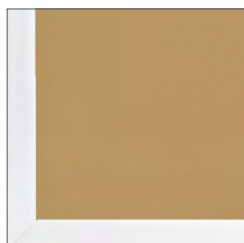
slate  
gloss



white  
matte



sand  
matte



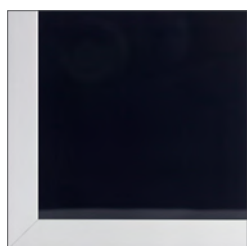
amarillo  
matte



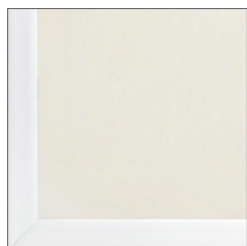
sienna  
matte



slate  
matte



black  
gloss



cream  
gloss



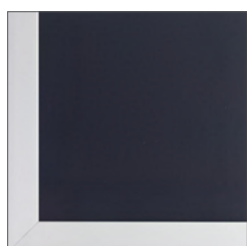
oasis  
gloss



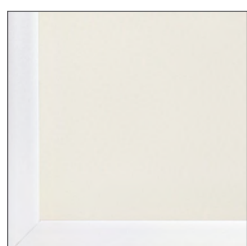
navy  
gloss



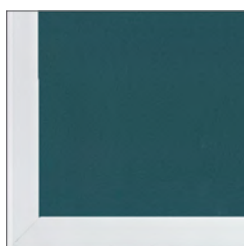
mineral  
gloss



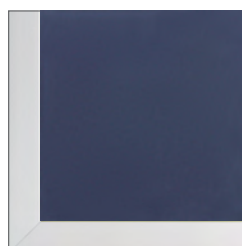
black  
matte



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



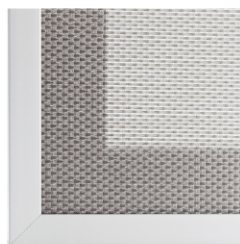
villa pure



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
- Inserts are 5/32" (4mm) thick
- Water resistant, UV and fade resistant



alpine white



white



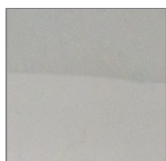
turquoise



cobalt blue



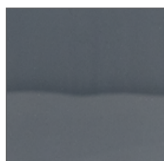
signal red



light grey



stone grey



anthracite



black

## Knobs



K001



K005



K006



K007



K008



K009

## Bar Handles



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.)

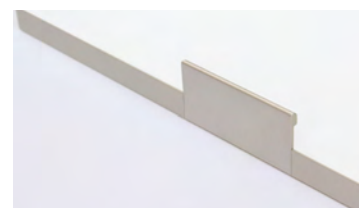
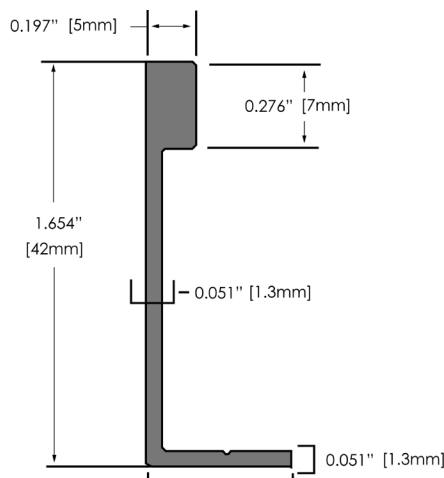
## Finger Pull

### Installation Options



P3-42

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



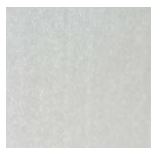
flush mount\*



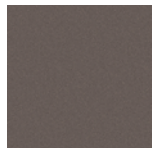
surface mount

Profiles AF013 **ONLY** standard 3" length  
Profiles AF012 standard 3" length and custom sizes available

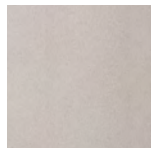
## Finish Options



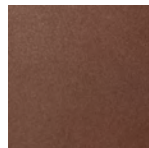
natural aluminum (N)



graphite (GR)



arctic silver (AS)



luxe bronze (LB)



chalk - white  
matte (CK)



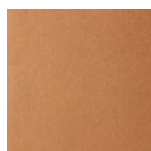
black (B)



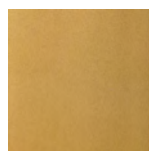
brushed stainless (S)



gold (GLD)



copper (C)



modern brass (MB)



onyx - black  
matte (X)

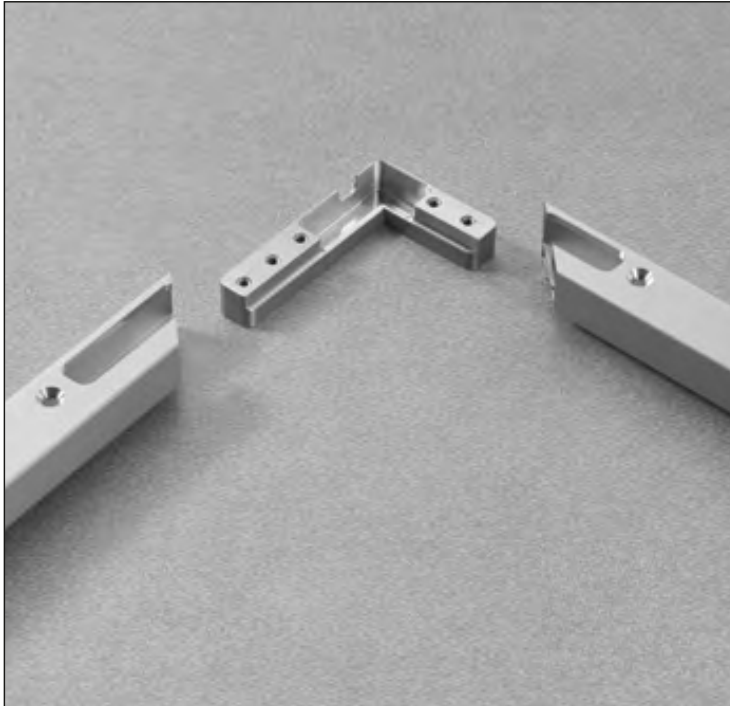


bronze matte (BZM)

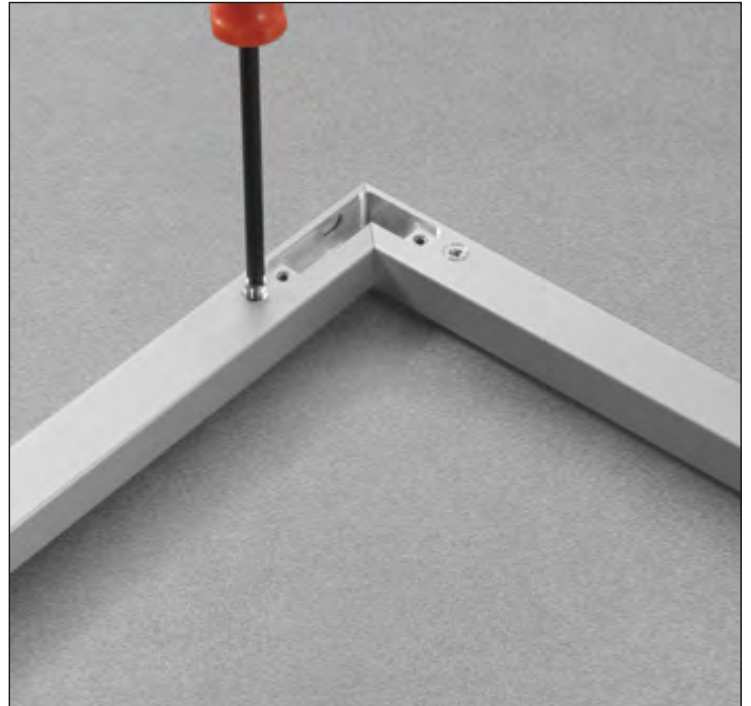


The profiles which make up the door must be cut and the ends mitred at 45°, and milled for the insertion of the corner connectors.

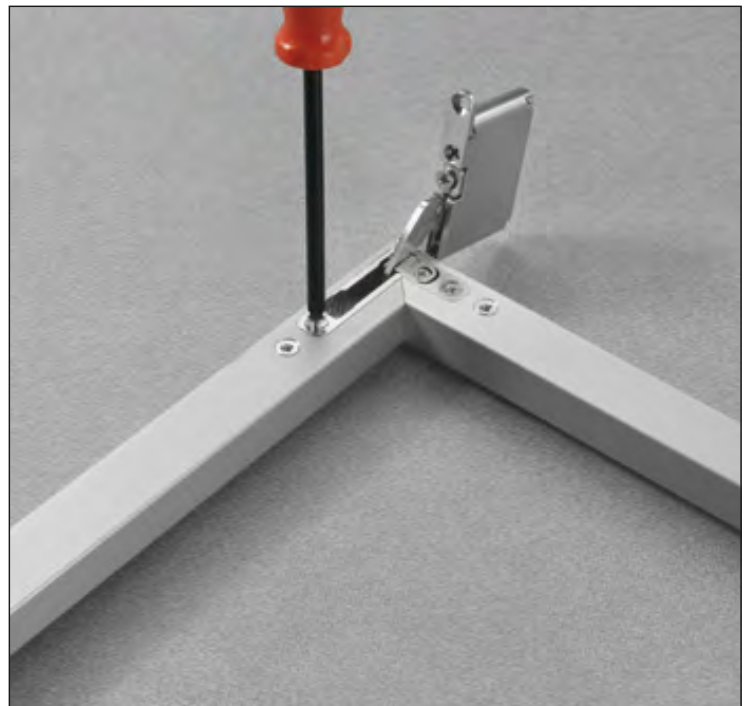
Insert the corner connectors into the profile and fix them with the screws provided.



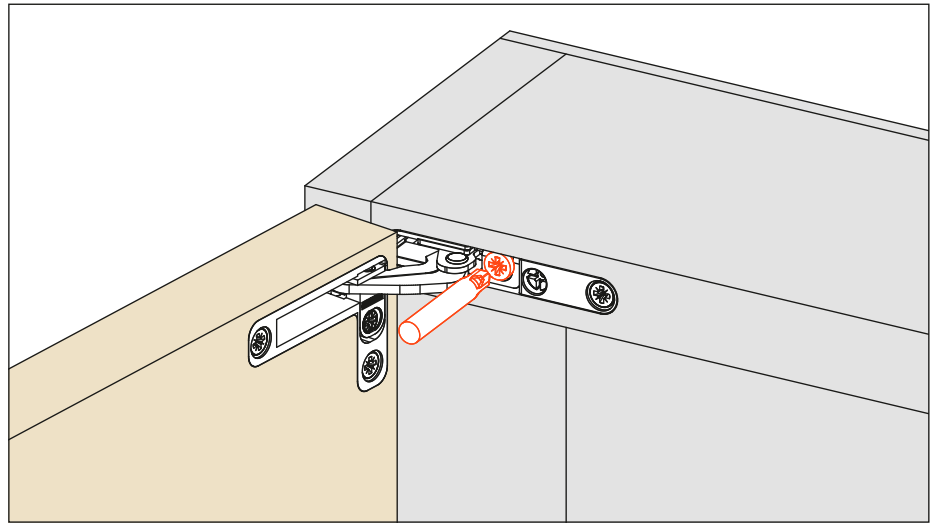
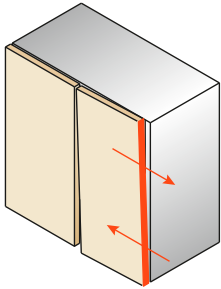
Insert the hinges into the recesses.



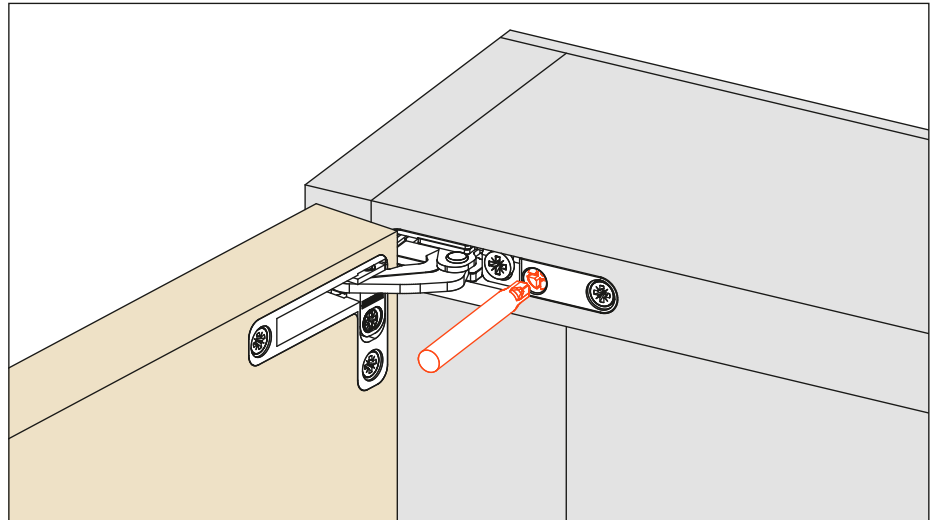
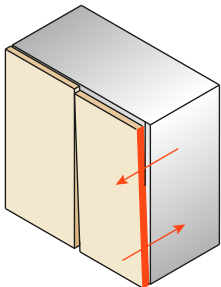
Fix with the screws provided.



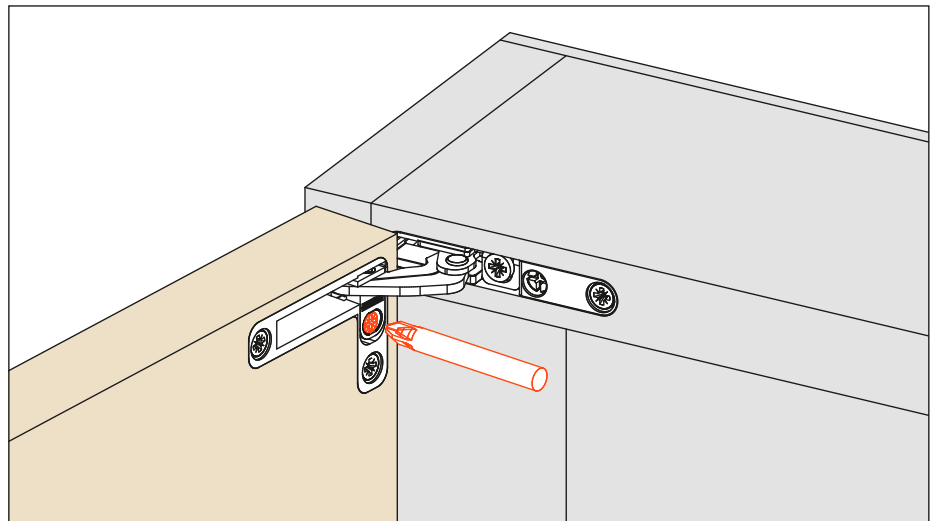
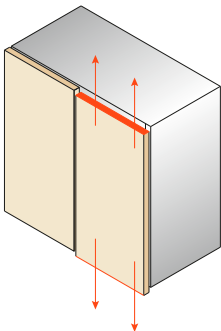
**Side adjustment range +2 to -2**



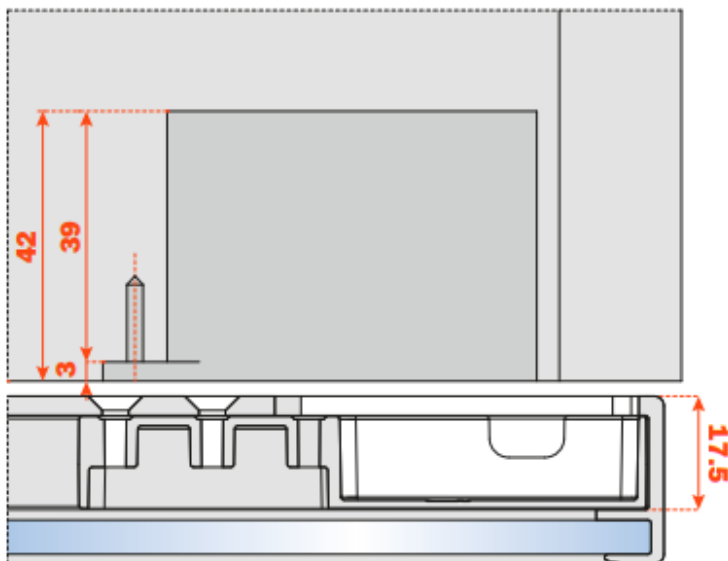
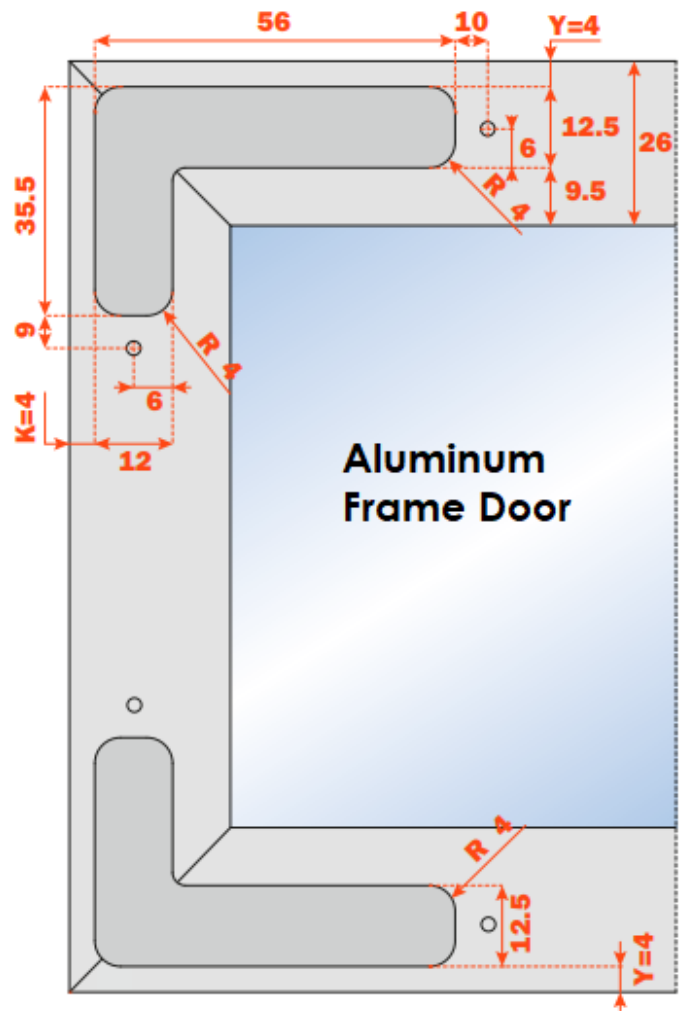
**Depth adjustment range +2 to -0.5**



**Height adjustment range +1.5 to -1.5**



Note: Always use a #2 Pozi screw driver for adjustments.



**D1 = Top Overlay (min = 16.5mm)**

## Cabinet Drilling Template

A template set is available for purchase to aid in the drilling of the holes in the cabinet box for the Salice AIR hinge, and in depth directions and “how to” videos on a USB drive are included in the set. Images and descriptions of the set contents are below. A router is needed to drill the holes.



- (2) Short “U” shaped aluminum channels used as stop bars.
- (4) Long aluminum channel guide rails.
- (2) Large black templates (1R & 1L).
- (1) Hardware package
- (1) Whiteside Tool pack



Whiteside 10 mm dia., spiral up-cut router bit and 3/4" dia. brass guide bushing.



Hardware package which includes:

- (2) Allen wrenches, (8) round head machine screws & washers, (2) flat head machine screws, (8) flat channel nuts for long guide rails, (2) flat channel nuts for small aluminum stop bars and (4) ring pins.



**K1 (door drilling distance) = 4mm**  
**(set dimension for aluminum frame doors)**

| K2 = top/bottom<br>drilling distance | OVERLAY (D) |
|--------------------------------------|-------------|
| 0                                    | 20.5        |
| 0.5                                  | 20          |
| 1                                    | 19.5        |
| 1.5                                  | 19          |
| 2                                    | 18.5        |
| 2.5                                  | 18          |
| 3                                    | 17.5        |
| 3.5                                  | 17          |
| 4                                    | 16.5        |
| 4.5                                  | 16          |
| 5                                    | 15.5        |
| 5.5                                  | 15          |
| 6                                    | 14.5        |
| 6.5                                  | 14          |
| 7                                    | 13.5        |
| 7.5                                  | 13          |
| 8                                    | 12.5        |
| 8.5                                  | 12          |
| 9                                    | 11.5        |

Max overlay is 20.5mm with a K2 of 0mm

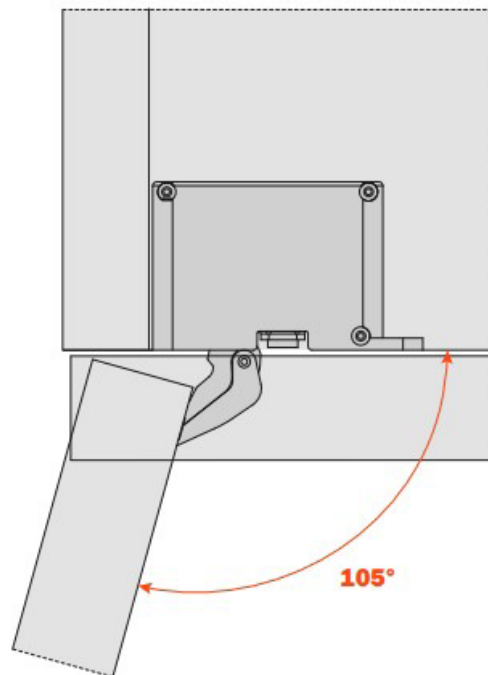
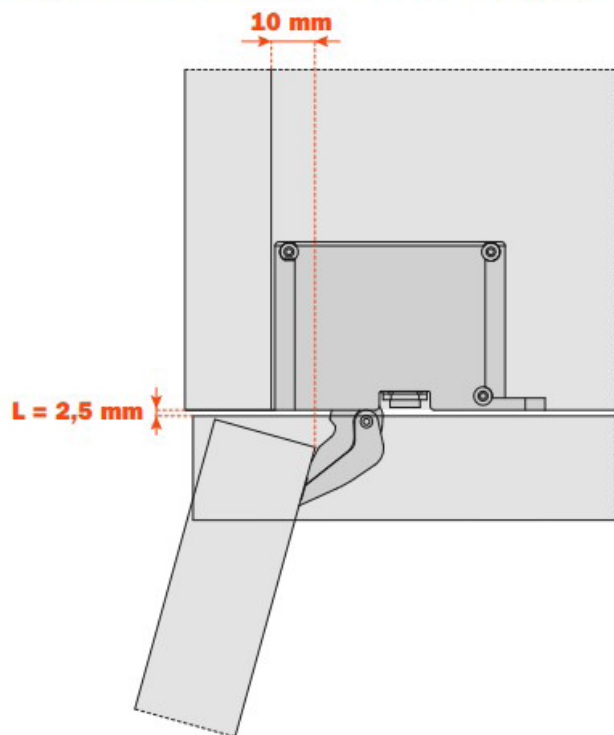
Please contact Salice America for more detailed information regarding how to use the drilling templates and set up the overlay.

NOTE: It is recommended to choose the overlay that allows the largest drilling distance (K2) for the door and panels.

**For drilling wood doors, please contact Salice for drilling distance information.**

## Projection of the door

Projection of the door from the cabinet side at the max. opening.  
The figures are based on K value = 3 and door overlay = 19 mm.

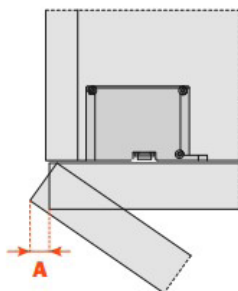


## Technical features

**Air hinges, with integrated soft close mechanism or Push self-opening system, are small and compact. They are fitted to the top and bottom panel of the cabinet.**

For min. 18 mm thick wooden doors and for aluminium-framed doors.  
Max. door weight 20 Kg.  
Max. dimensions of the door : height 2100 mm, width 600 mm.  
16.5 mm deep metal cup.  
L = 2.5 mm  
105° opening.  
Possible drilling distance on the door (K): from 3 to 6 mm for wooden doors.  
Fixed K = 4 mm for aluminium-framed doors.

## Space needed to open the door



|     | T= | 18 | 20  | 22  | 24  | 26  | 28  | 30  | 32   |
|-----|----|----|-----|-----|-----|-----|-----|-----|------|
| K=3 | A= | 0  | 0.2 | 0.5 | 0.8 | 2.3 | 4.9 | 7.5 | 10.0 |
| K=4 | A= | 0  | 0.2 | 0.4 | 0.8 | 1.3 | 3.9 | 6.5 | 9.0  |
| K=5 | A= | 0  | 0.2 | 0.4 | 0.8 | 1.3 | 2.9 | 5.5 | 8.0  |
| K=6 | A= | 0  | 0.2 | 0.4 | 0.8 | 1.2 | 1.9 | 4.5 | 7.0  |

**The above values are calculated on the assumption that the doors have square edges. They are reduced if the doors have radiussed edges.**

## 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.