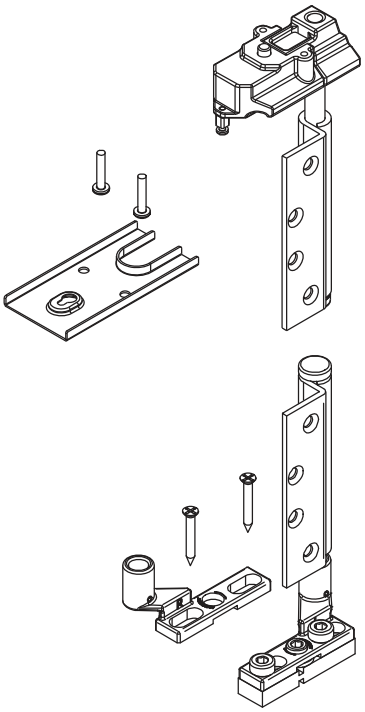
Weatherfold 50 & 100
Installation Instructions

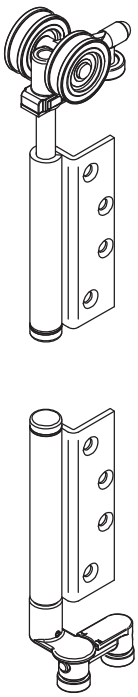
Maximum Weight (kg)	Maximum Width (mm)	Maximum Height (mm)	Panel Thickness (mm)
50 / 100	**1000**	**3000**	**35+**

Sets
"H" Type Non Mortice Hardware system shown. "T" Type Radius Mortice Hinges are available. Please call for details.

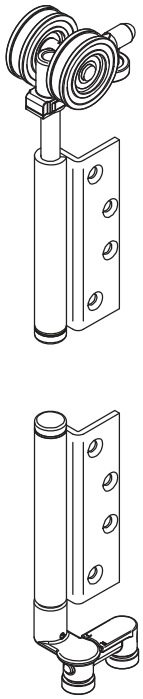
BWS1-100H



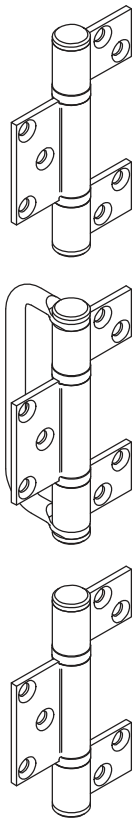
BWS2-50SH



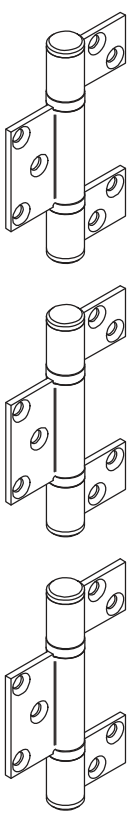
BWS2-100SH



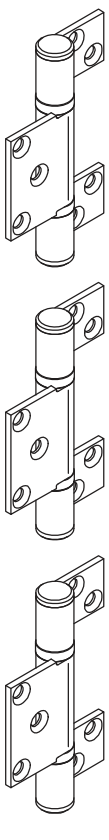
BW3-100H



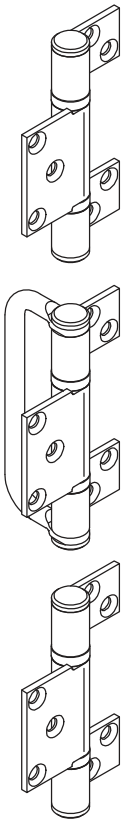
BW5-100H



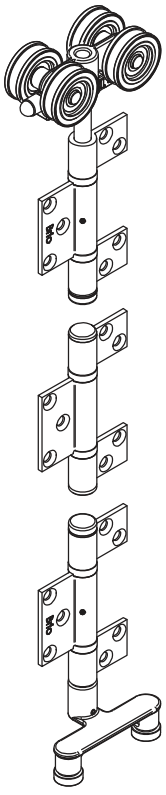
BW6-100H



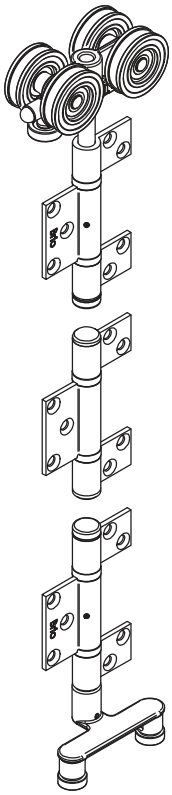
BW7-100H



BWS4-50SH

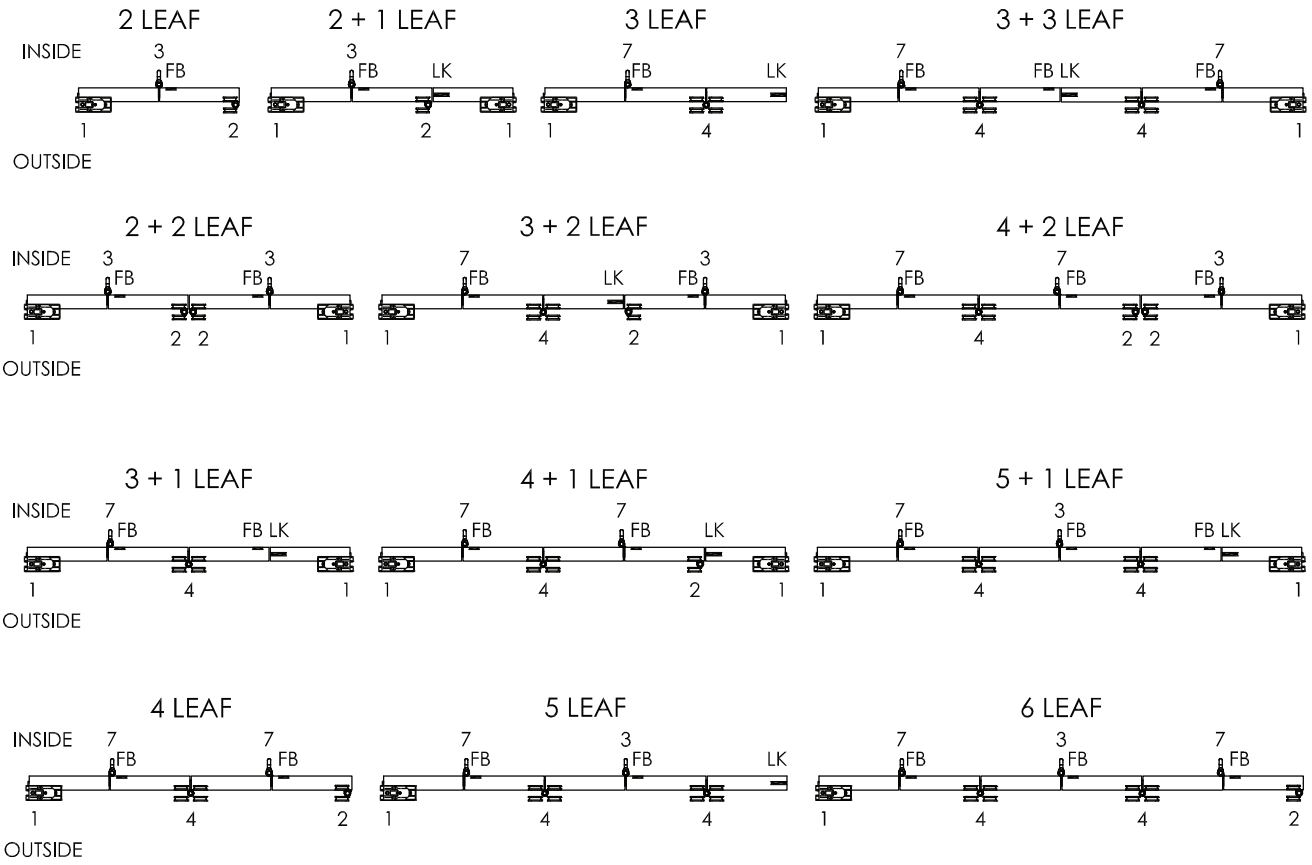


BWS4-100SH

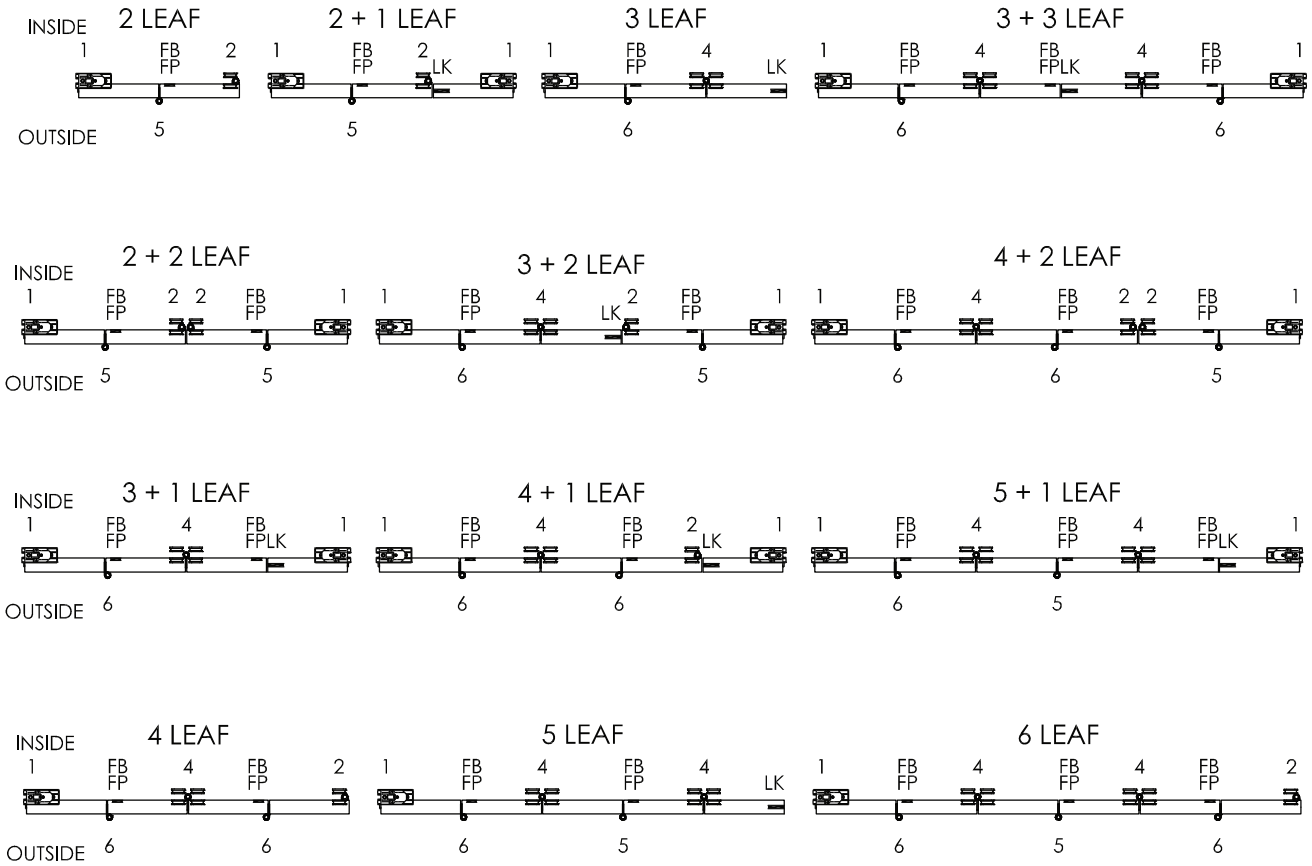


Door Hardware Set Orientation FB = Flush Bolt, FP = Flush Pull, LK = Lock, left systems shown

OUTWARD OPENING

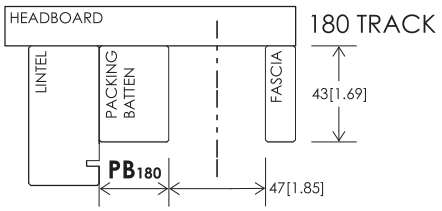


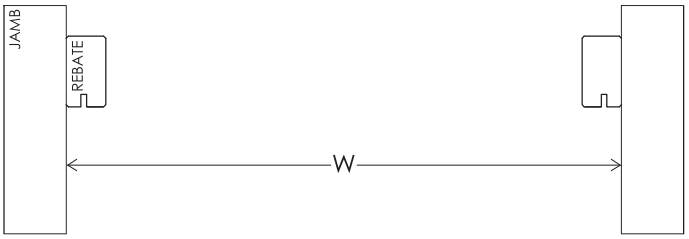
INWARD OPENING

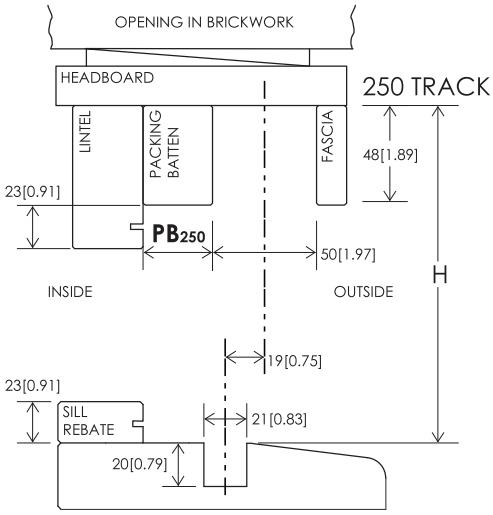


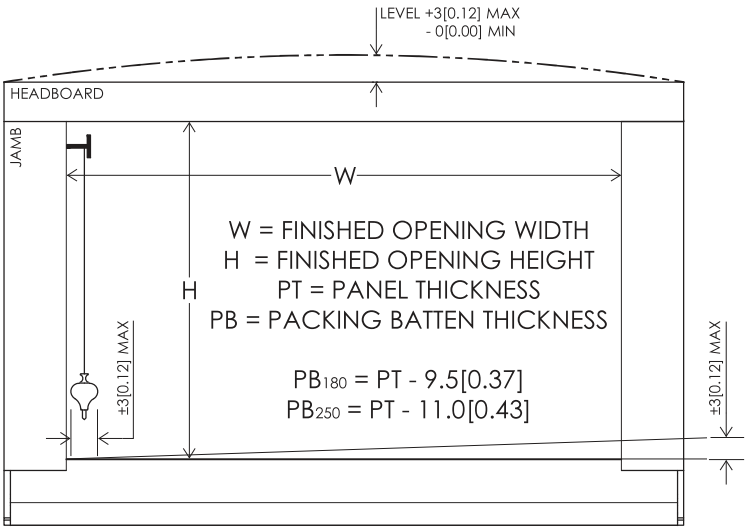
Opening Preparation outward opening system shown, dimensions shown in mm[inches]

180 Track for 50kg(110lbs)
250 Track for 75kg(165lbs) & 100kg(220lbs)



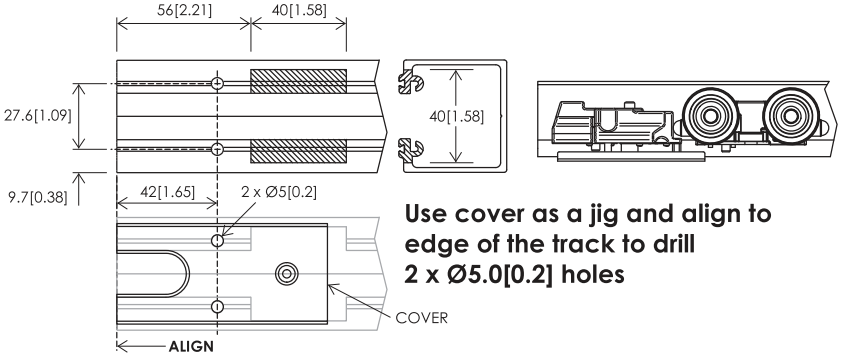






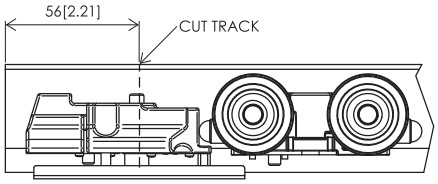
Track Preparation track and chanel cut to length 'W' (finished opening width)

OPTION A - Allows access to hangers through notch in track



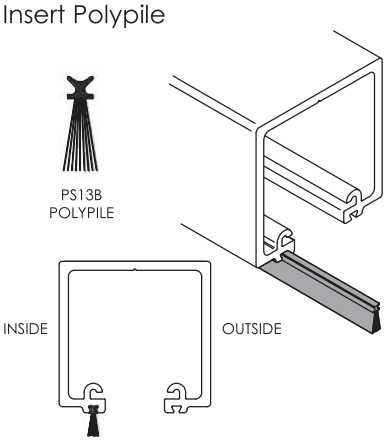
Use cover as a jig and align to edge of the track to drill 2 x Ø5.0[0.2] holes

OPTION B - Allows access to hangers by removing track section



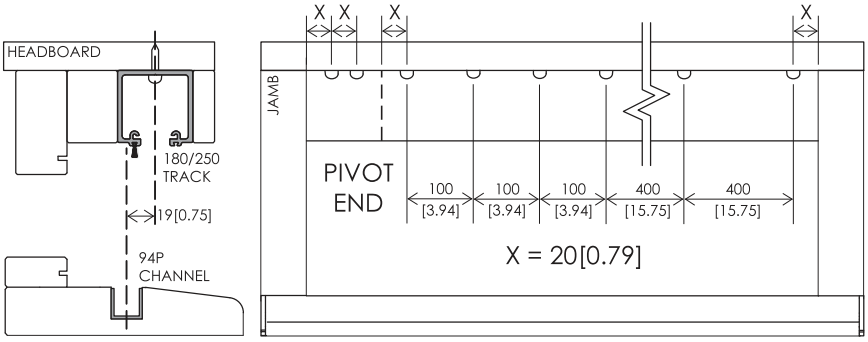
Install Track & Channel

Insert Polypile



Install polypile on inside of system

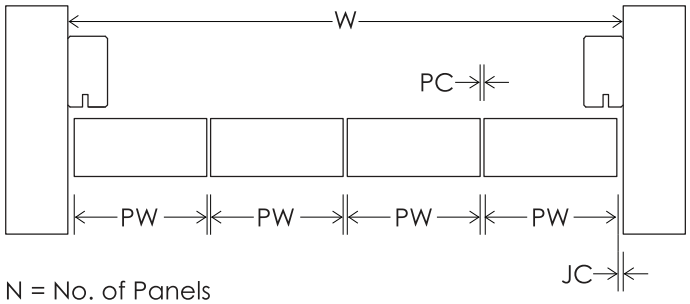
Fix track with 10G screws. After initial 6 fixings, fix screws at 400[15.75] intervals. Secure polypropylene channel with adhesive.



If installing 94PA, recess into sill 23[0.91] deep by 25[0.95] wide then countersink and screw fix at 400[15.75] intervals. Install 94P last.

Panel Size Calculation free leaf width calculator available from Brio (includes BOM & pricing)

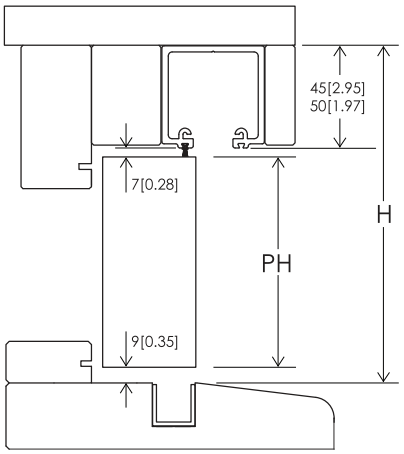
Brio Weatherfold 4s allows for equal size panels



N = No. of Panels
PW = Panel Width
JC = Jamb Clearance = 6[0.24]
PC = Panel Clearance = 4[0.16]

$$PW = \frac{W-[PC(N-1) + 2(JC)]}{N}$$

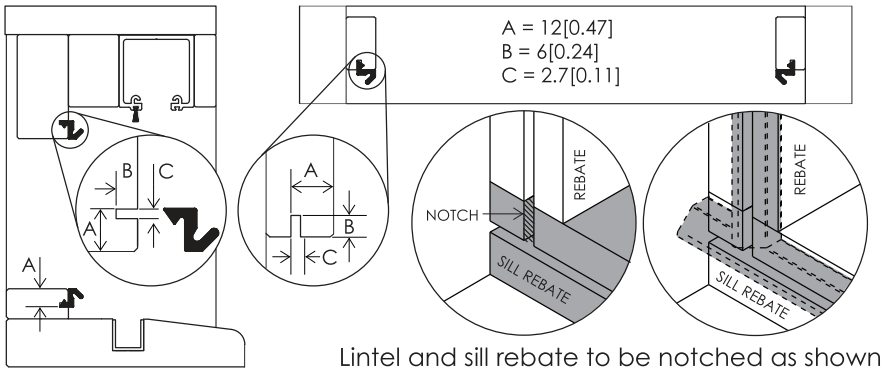
PH = Panel Height



$PH_{180\ TRACK} = H - 61[2.40]$
$PH_{250\ TRACK} = H - 66[2.60]$

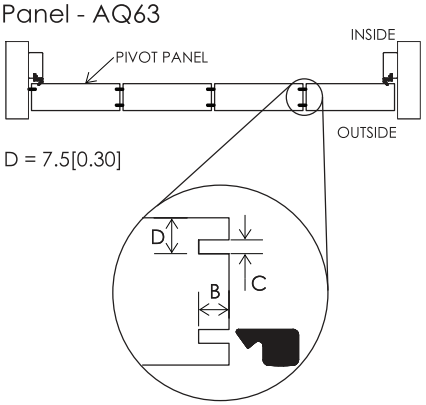
Seal Preparation left, outward opening system shown

Frame - AQ21 perimeter seals to butt against each other in all corners



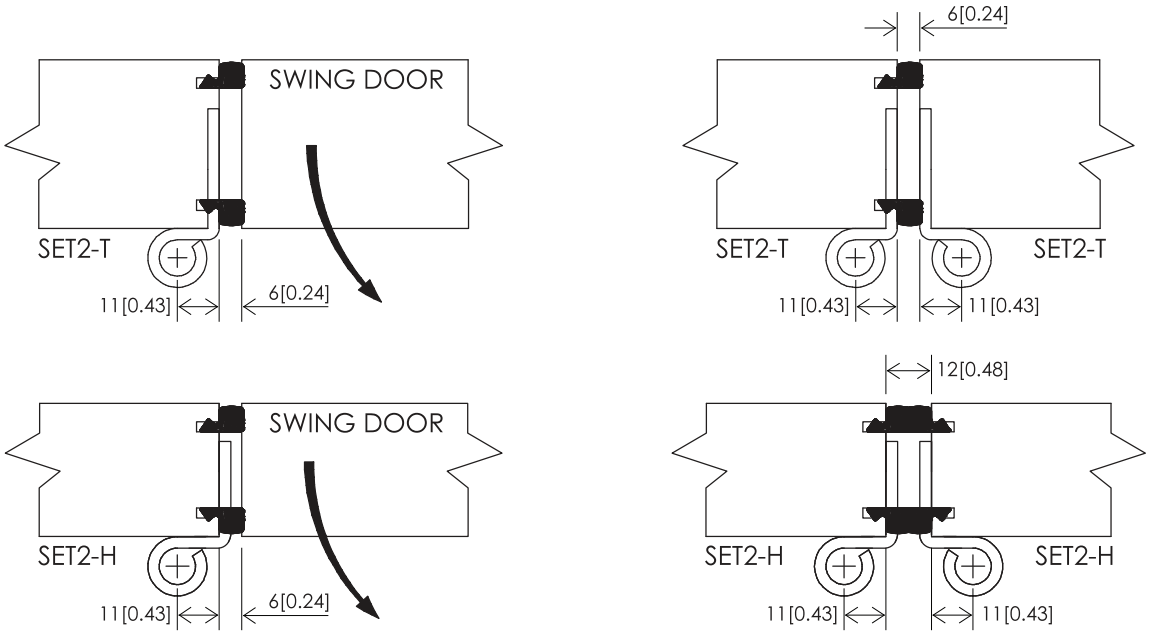
Lintel and sill rebate to be notched as shown

Panel - AQ63



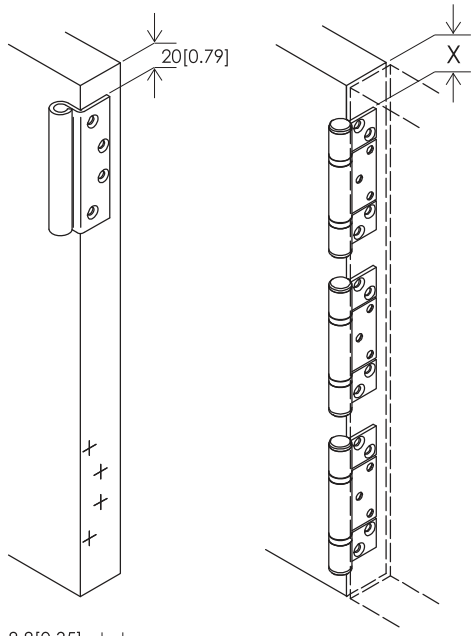
Meeting Door Selection

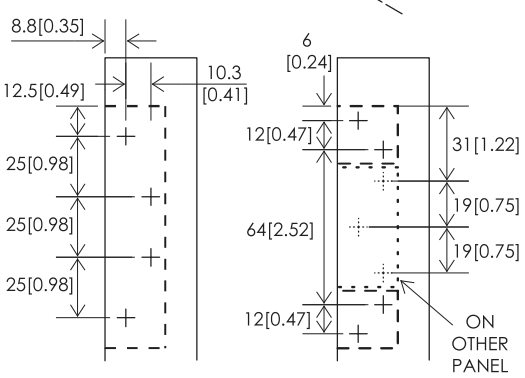
2 Meeting square doors



Hinge Installation pilot hole of Ø2.5mm[0.12"] recommended

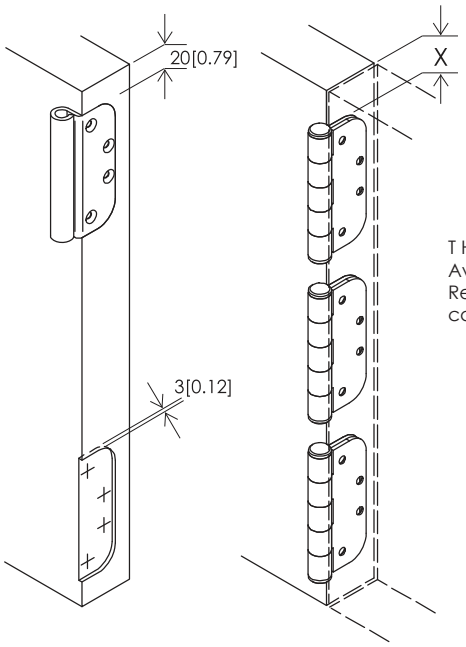
Non-mortice H
35[1.38]-68[2.68] Panel Thickness



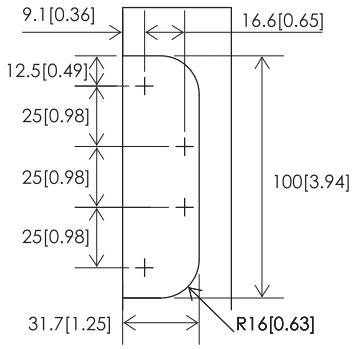


X=20[0.79] on Set 4
X=60[2.36] min on Sets 3, 5, 6 & 7
Drilling jig available for H Sets

Mortice Radius Corner T
44[1.73]-68[2.68] Panel Thickness



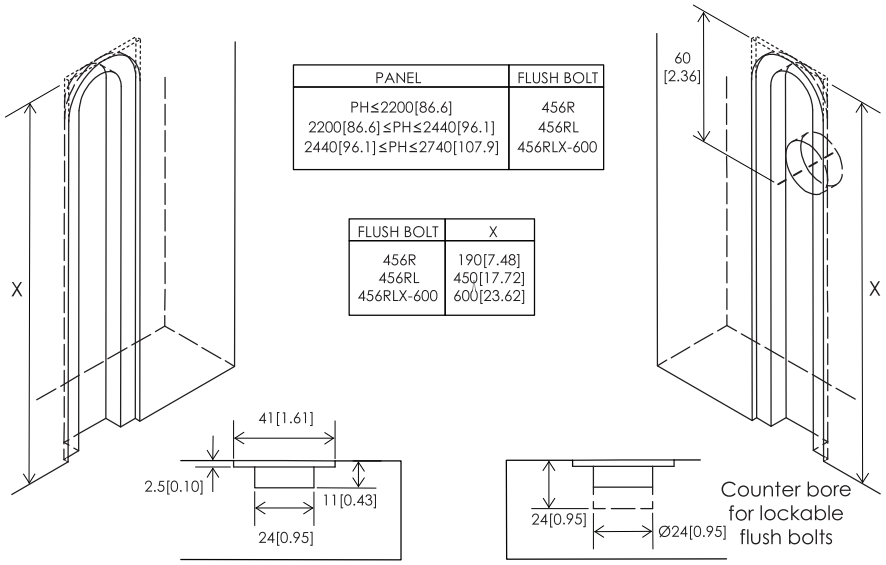
T Hinge System Available Upon Request. Please call for details



X=20[0.79] on Set 4
X=60[2.36] min on Sets 3, 5, 6 & 7

Flush bolt Position see page 2 for flush bolt location for all configurations, router available

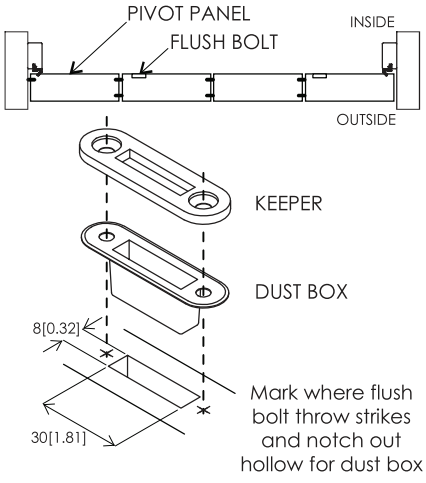
Install flush bolt to panel



PANEL	FLUSH BOLT
PH≤2200[86.6]	456R
2200[86.6]≤PH≤2440[96.1]	456RL
2440[96.1]≤PH≤2740[107.9]	456RLX-600

FLUSH BOLT	X
456R 456RL 456RLX-600	190[7.48] 450[17.72] 600[23.62]

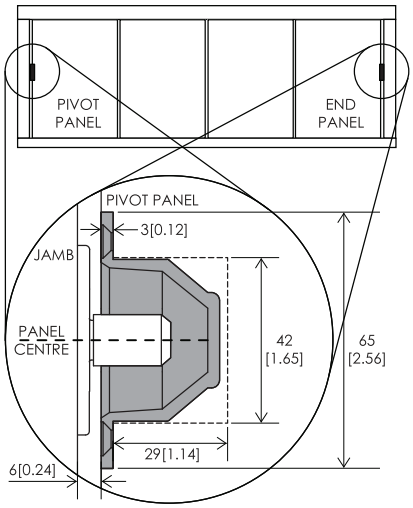
Install flush bolt keeper to sill

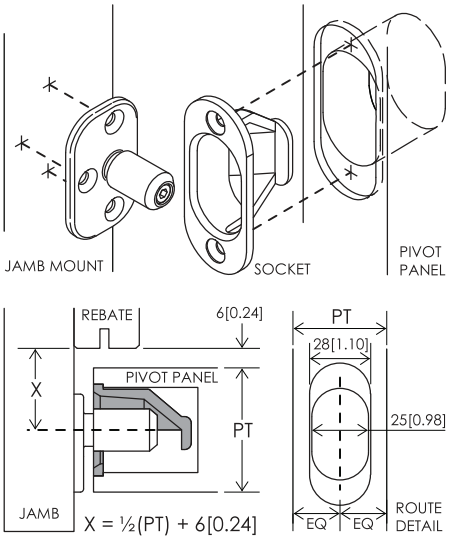


Extended keeper available

Optional Security Aligner 199SS aligns panel to seal perimeter, secures against lifting

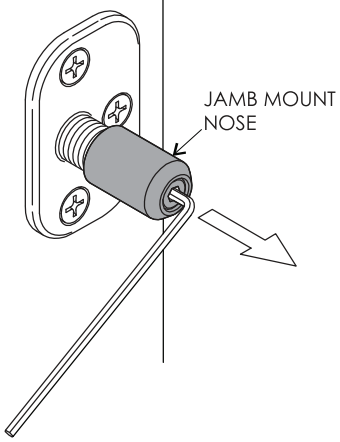
Installation





Can be installed on either pivot or end panel, Minimum PT = 38[1.50]

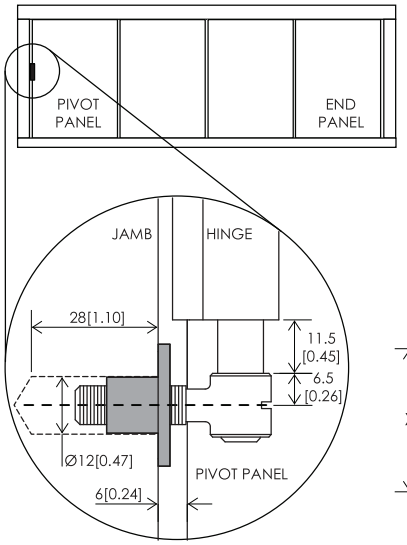
Adjustment

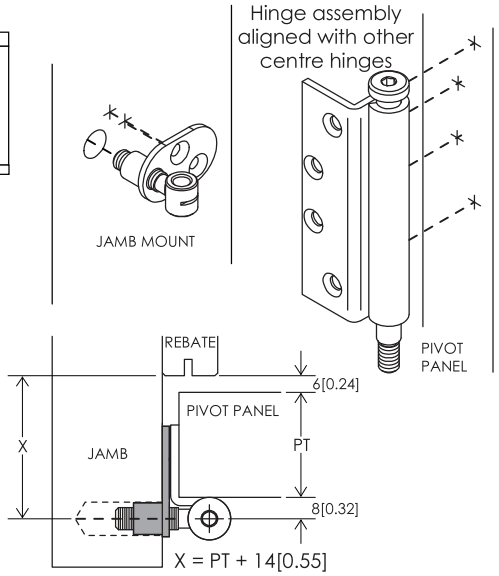


Wind nose of jamb mount away from jamb until panel is pulled in to seal perimeter when closed

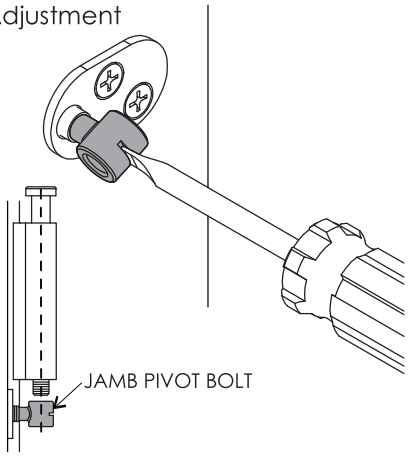
Optional Jamb Pivot BW189H_ non mortice type H shown but all hinge types available

Installation





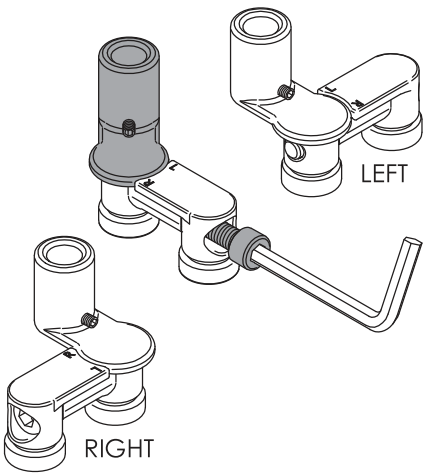
Adjustment



Wind jamb pivot bolt in or out until it aligns with hinge on panel after top and bottom pivot are set

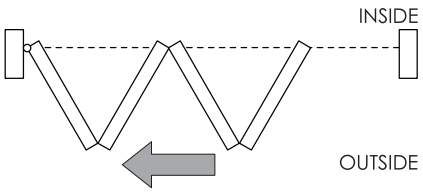
End Guide when viewed from outside doors folding left need a left end guide and vice versa for right

Handing End Guide

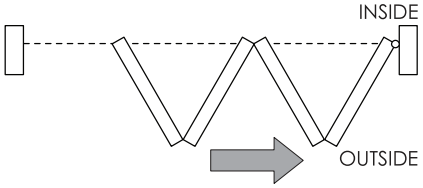


Back off cap screw and rotate guide arm into left or right position

Determining System Orientation

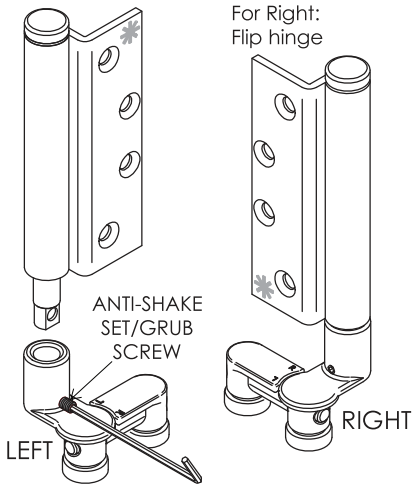


Left, outward opening system



Right, outward opening system

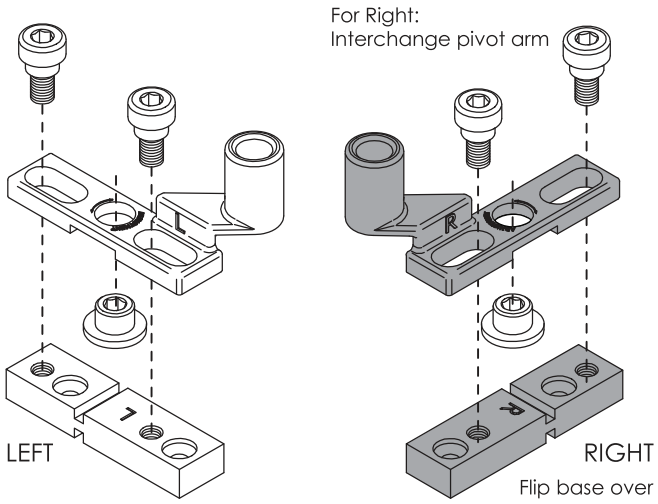
Handing end set hinge



Lock off anti-shake set/grub screw

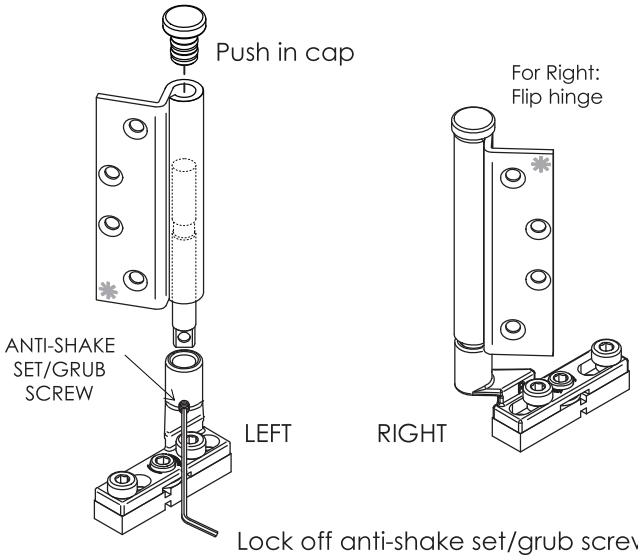
Bottom Pivot when viewed from outside doors folding left need a left pivot and vice versa for right

Handing Bottom Pivot



Secure assembly by locking off cap screws

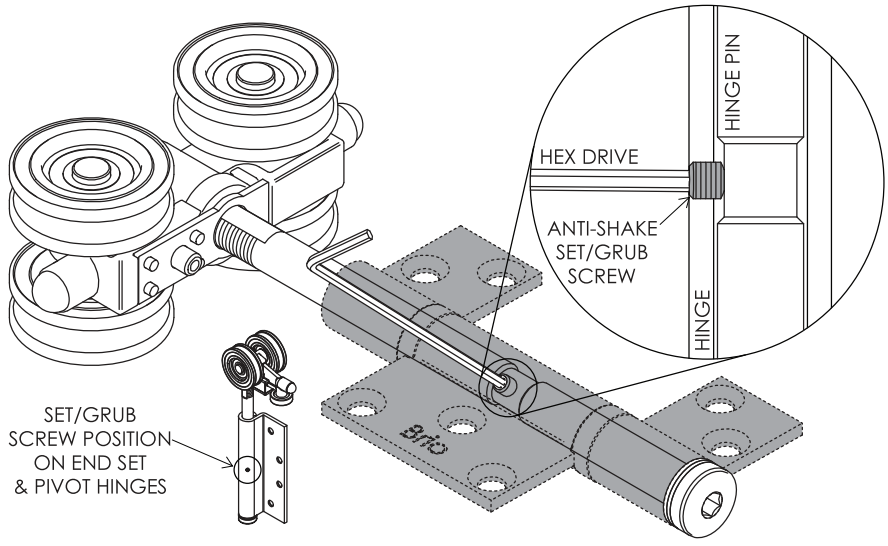
Handing pivot set hinge



Lock off anti-shake set/grub screw

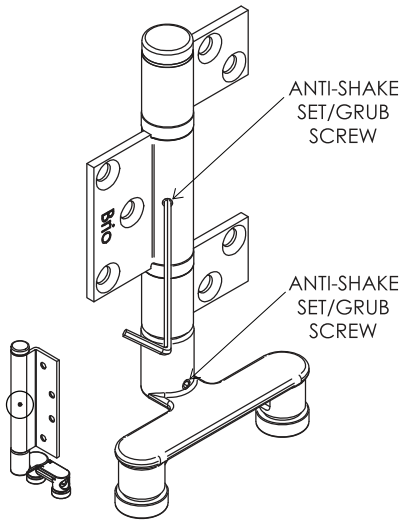
System Security type H hinge shown but security set/grub screw applicable in hinge types T and M too

Hanger security



Anti-shake set/grub screw prevents pin being removed from hinge

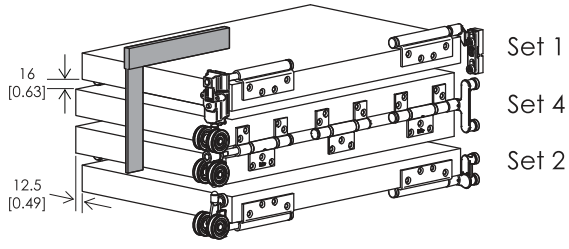
Guide security

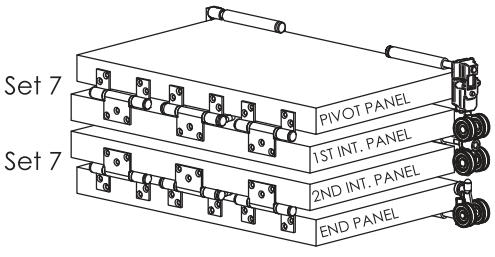


Lock off both set/grub screws

Attaching Hardware to Panels recommended before installation

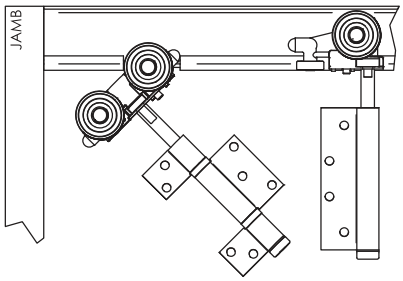
Ensure doors are level and square from top

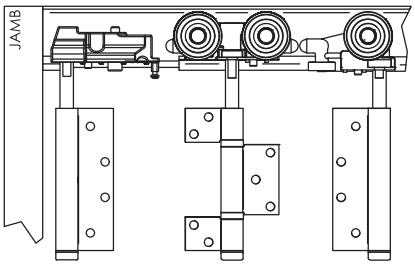




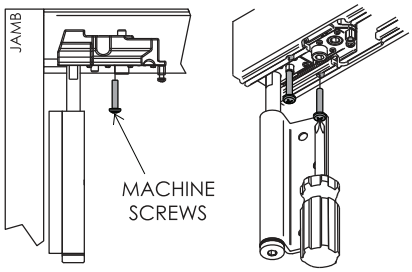
Installing Hardware and Hanging Panels clean down inside of track and channel

Viewed from outside, insert rollers through access notch in correct order

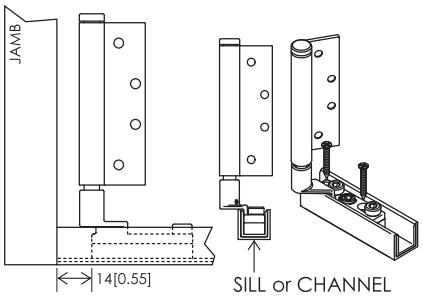




Fix top pivot into position with machine screws supplied

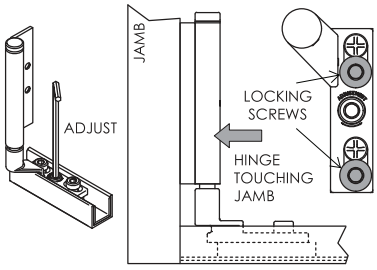


Place bottom pivot in channel

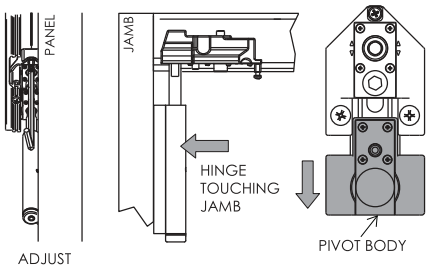


Screws pass through assembly

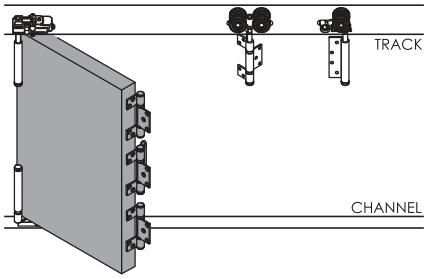
Loosen locking screws and adjust bottom pivot so that hinge is touching the jamb. Lock off when in position.



Loosen locking screw and adjust top pivot so that hinge is touching the jamb Lock off when in position.

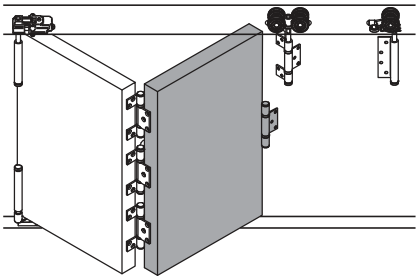


Bring pivot panel to pivot set



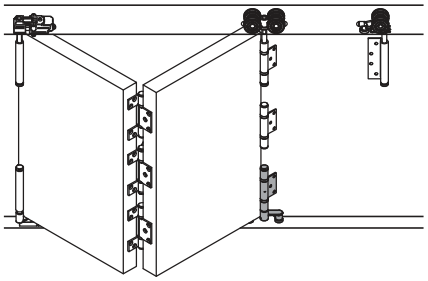
Hinge set 7 attached to panel

Bring 1st int. panel to pivot panel



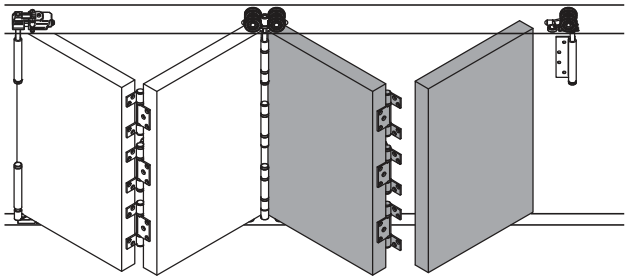
Middle hinge of int. set attached

Fix int. hanger to int. panel



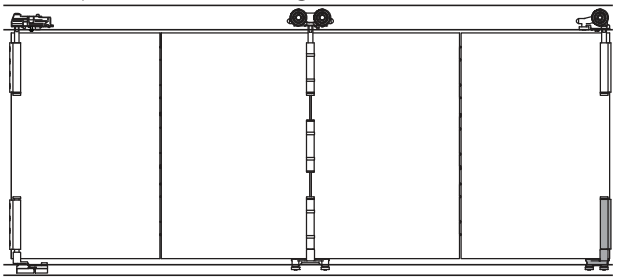
Attach int. guide to int. panel

Bring 2nd int. panel to the int. hanger with hinge set 7



Bring end panel to hinge set 7

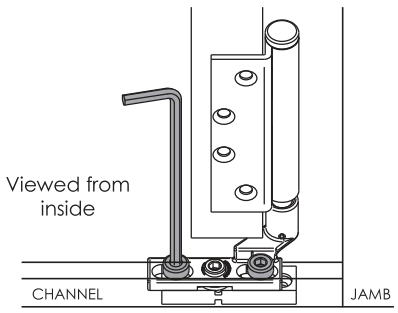
Fix end panel to end hanger



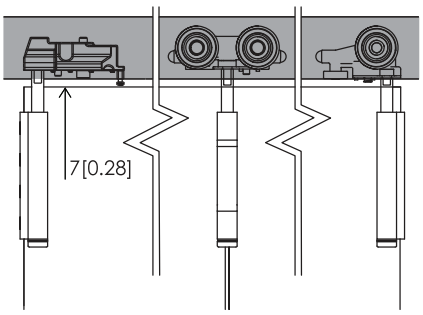
Attach end guide to end panel, close all panels

Adjustment hinge pin locking mechanism applied to all hangers and top pivot

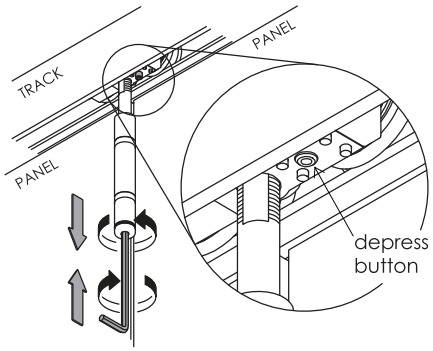
Now that the doors are in place, open doors and loosen locking screws.



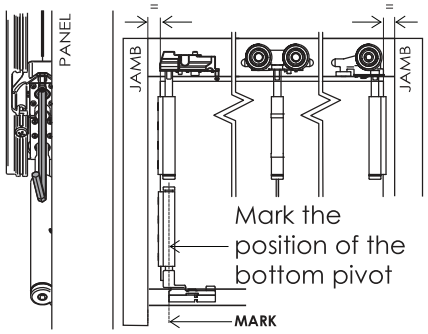
Adjust all hangers and top pivot until panels are parallel with 7mm gap between the track



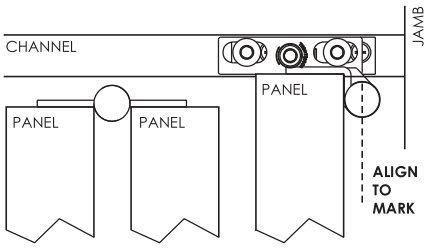
To adjust height, depress button and wind bolt. Bolt locks off automatically on flats.



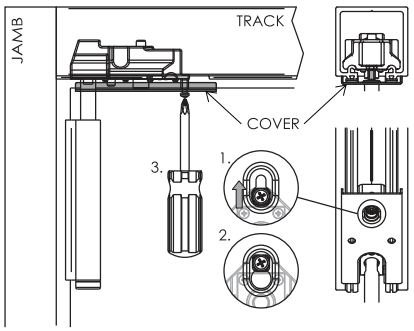
With the panels closed, loosen top pivot locking screw and adjust to centralise door panels. Then lock off top pivot and mark the position of the bottom pivot



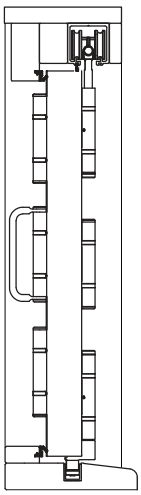
Open the panels and adjust the bottom pivot to the mark. Then tighten locking screws

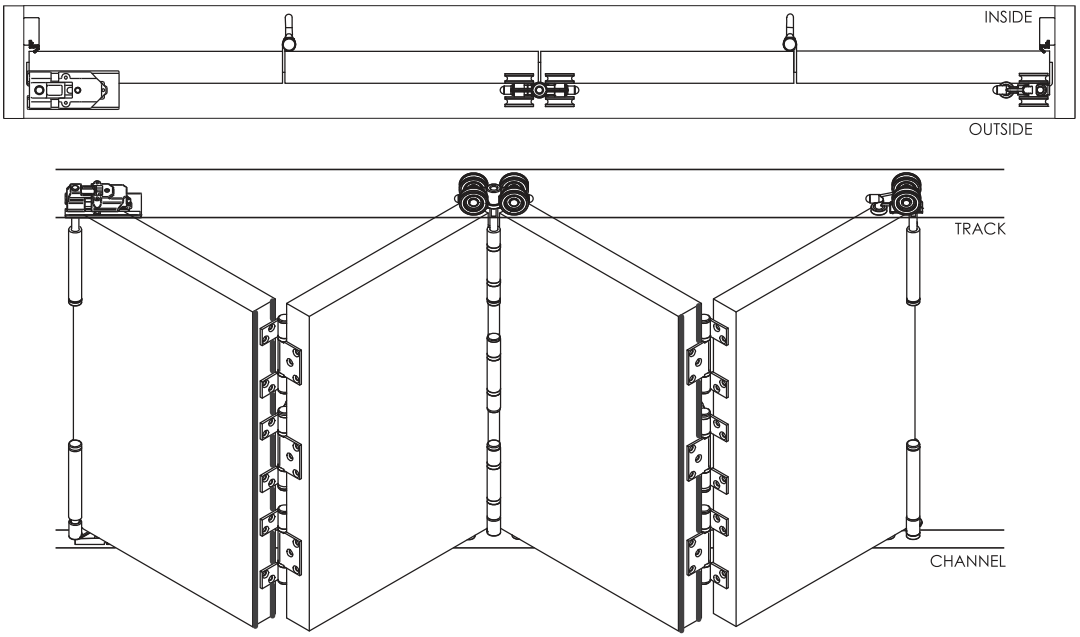


Close doors & fix cover into pivot to cover notch.



System Overview





Care and Maintenance

Hardware is subject to deterioration from everyday use and from the environment that it is in. In particular, it is important that routine maintenance be carried out in harsh coastal or marine environments and industrial applications.

General

Inspect all fixing bolts for tightness every six months, including those securing brackets. Tighten if necessary. Routinely check for wear and if excessively worn, the part should be replaced.

To help prevent surface corrosion, Brio® recommends washing regularly; even stainless steel finishes in coastal environments may show signs of surface corrosion If not washed regularly. Sheltered areas that are not rain washed are particularly susceptible. Wash with soap or mild detergent and warm water followed by rinsing with clean cold water and wipe dry.

As a guide, if a window or door requires washing then wash the hardware, however Brio® recommend for marine and industrial environments washing a minimum of every 3 months and 6 months for general environments. In coastal or marine environments Brio® recommends applying a light application of corrosion preventative such as CRC Marine 66 or Inox® for Marine, to all surfaces and using a dry cloth to remove excess. When using lubricant or corrosion protection compounds, be careful to avoid the adjacent surfaces and always follow the manufacturer's instructions.

Track

Keep track free from obstruction and excessive dirt or water. Visible surfaces should be cleaned using a damp cloth and mild detergent, then wiped dry.

Where fitting to the outside of the building, it is recommended that the appropriate track is specified.

Hangers & Pivots

All hangers are fitted with lubricated ball-bearings or plain bearings, requiring no greasing. If doors 'settle' and door clearance is reduced causing friction, raise the door by the hanger adjustment nuts.

Wash as per the above recommendation and apply a light application of corrosion preventative to all surfaces, using a dry cloth to remove excess.

Guides

Guide roller and guide channel must be kept clear and free of obstructions.

Wash as per the above recommendation and apply a light application of corrosion preventative to all surfaces, using a dry cloth to remove excess.

Rollers

All bottom rails should be free from obstruction and excessive dirt or water. Visible surfaces should be cleaned using a damp cloth and mild detergent, then wiped dry. All rollers are fitted with sealed precision bearings requiring no maintenance.

Hinges

Visible surfaces should be cleaned using a damp cloth and mild detergent, then wiped dry. Apply a light application of corrosion preventative to all surfaces, using a dry cloth to remove excess. Repeat at intervals no greater than 3 months.

Flush Bolts

Visible surfaces should be cleaned using a damp cloth and mild detergent, then wiped dry. Apply a light application of lubricant to internal mechanisms and bolt using a suitable nozzle-spray.

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