

Brio®



Brio® where ideas unfold

**Brio® Weatherfold 4<sup>S</sup> Window & Servery**  
Exterior folding window hardware systems for sashes up to 35kg

## **Brio® where ideas unfold**

Watch your adventurous architectural ideas unfold into exciting reality with the Brio range of sliding and folding door hardware.

Brio is passionate about shaping the spaces in which people live, work and play. With subsidiaries in the UK and USA – Brio is recognised by architects worldwide as a leading design and manufacturing company.

Brio's R&D department brings a strong design element to the business, developing and testing ground breaking concepts that continue to be at the forefront of the industry.

So it's no surprise our name Brio translates to Energy, Spirit and Vitality – the core values that drive us to always discover new solutions for our customers.

We are committed to the continuous improvement of quality. That is why Brio, located in Sydney, is certified to Quality Management System AS/NZS ISO 9001:2008.

Brio, part of the Allegion family of brands





# Weatherfold 4s Window & Servery **Systems**



## Weatherfold 4s Servery 35

The Brio® Weatherfold 4s Servery 35 has been developed specifically to meet the requirements of servery type installations. As no sill or channel is required, the work surface is left completely unobstructed from one side to the other making this an ideal solution for kitchen serveries that open out to exterior dining areas.

**Max Sash weight:** 35kg  
**Max Sash height:** 1800mm  
**Max Sash width:** 650mm  
**Min Sash thickness:** 35mm  
**Max number:** 2 each way  
**Max opening:** 2600mm  
**Hinge type:** Non mortice

### Materials

**Hanger:** Nickel Plated Zinc Alloy  
**Guides:** 304SS  
**Bolts:** 304SS  
**Hinges:** 304SS  
**Finishes:** Stainless Steel (SS), Polished Stainless (PS)

## Weatherfold 4s Window 35

Brio® Weatherfold 4s Window 35 is designed for exterior folding windows in residential or light commercial applications with up to six panels folding in one direction. Each window sash can be up to 1000mm wide and weigh 35kg, comfortably accommodating a span of 12 metres. This is made possible by the new recessed bottom guide system. The guide system not only provides stability for folding up to 12 window sashes, its concealed low profile design and excellent weatherproofing capabilities make it an ideal option for window sills.

**Max Sash weight:** 35kg  
**Max Sash height:** 1800mm  
**Max Sash width:** 1000mm  
**Min Sash thickness:** 35mm  
**Max number:** 6 each way  
**Max opening:** 12000mm  
**Hinge type:** Non mortice

**Max Panel height:** 2600mm  
**Max Panel width:** 820mm

### Materials

**Hanger:** Nickel Plated Zinc Alloy  
**Guides:** 304SS  
**Bolts:** 304SS  
**Hinges:** 304SS  
**Finishes:** Stainless Steel (SS), Polished Stainless (PS)



# Weatherfold 4s Window & Seryery

Brio® Weatherfold 4s Window 35 and Brio® Weatherfold 4s Seryery 35 utilise the same technology as the Weatherfold 4s door systems, but on a smaller scale. High-speed precision bearings, grooved-wheel hangers and set and forget height adjustment locking.

The compact structural aluminium 120 track profile serves to reduce the risk of contamination as debris is less likely to accumulate on the raised rails. The 120 track is available in either Mill or 25 micron clear anodised aluminium for improved corrosion resistance.

Tested for durability, Brio® Weatherfold 4s Window & Seryery systems comfortably exceeded 100,000 cycles.



## Application

The Weatherfold 4s Window 35's and Seryery 35's clean lines, smooth operation and flexible functionality, makes the systems suitable for many applications with a wide range of configurations. The Weatherfold 4s 35 family is most suited for applications that include kitchen seryeries, living areas, bedrooms, cafes, hotels, bars and restaurants or where an architectural feature is desired.

## Sash sizing

The innovative hinge and pivot system from Brio® enables the use of equal sized sashes regardless of the window configuration ensuring a uniform look and greater manufacturing efficiency is achieved.

## Weathersealing

Combined with proprietary seals around the frame and sashes both Weatherfold 4s Window 35 and Weatherfold 4s Seryery 35 can deliver outstanding weatherproofing characteristics.

## Sash security

To complete the Window system, a complete range of window flush bolts is available, including the 360 flush bolt for timber and the 512 for aluminium, both available in lockable and non-lockable models.

## Installation & adjustment

The system is conveniently supplied in kits which cover a wide range of configurations. Detailed, easy to follow instructions are provided as well as all fixing screws. Both Weatherfold Window 35 and Seryery 35 systems allow easy adjustment onsite for imperfect frame installations.



## New guide system

It took many years to perfect a guide system that could meet so many requirements. The guide system had to carry the load of an exceptionally larger sash of 1000mm, a width beyond most servery systems. The guide system had to accommodate variations in height that commonly occur across the opening. Weatherfold 4s Window 35 guide with its double roller design can accommodate such imperfections.

In addition to making the window sill look great, the new bottom guide channel with its low profile concealed design makes the system easy to install and maintain.

## New adjustment locking

The 4s 50-100 height adjustment locking without loose parts has been brought to the Weatherfold 4s Servery and Window Systems. The push button locking mechanism is simple to use and fail safe as it automatically locks after adjustment is completed.

## Specification

Both systems are suitable for folding timber and aluminium windows with a maximum panel weight of 35kg. CAD detail is available for download from the Brio website or contact Brio® for our free specification service.

## Software

Brio® Weatherfold 4s Window 35 and Severy 35 software facilitates simple calculation of the sash sizes for any opening or configuration, and is available as a free download from the Brio website.

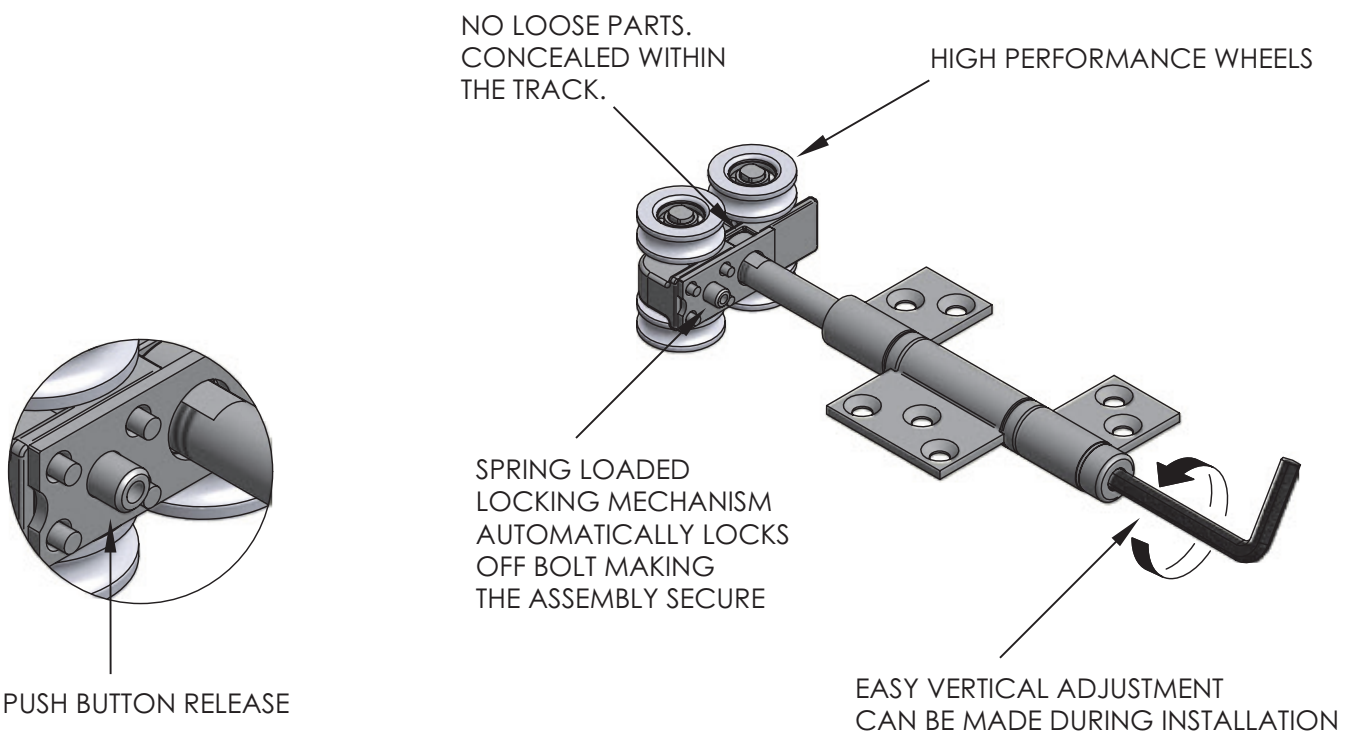
## Weather Resistant

Brio® passivates all visual stainless steel surfaces and electro-polishes all cast stainless components. This removes contaminants and greatly reduces or eliminates surface rust often referred to as 'tea-staining'.

Tea-staining is the visually brown discolouration of the surface of stainless steels that is a relatively common occurrence in coastal and marine environments or when in contact with water containing significant chlorides. Higher temperatures, humidity, wind and salt deposits from intermittent sea spray are all contributing factors to this staining that generally becomes progressively worse closer to the coast. Aesthetically unpleasant, tea-staining does not affect the structural integrity, or longevity of the material. Rough grained surface finishes tend to promote tea-staining, the smoother the finish the better. Smooth polished finishes do not have grains or crevices where chlorides and other contaminants can collect. For this reason Brio® strongly recommends on coastal or marine applications within 5 kilometres of the coastline or high chloride environments, Polished stainless steel or PVD Brass hardware be installed.

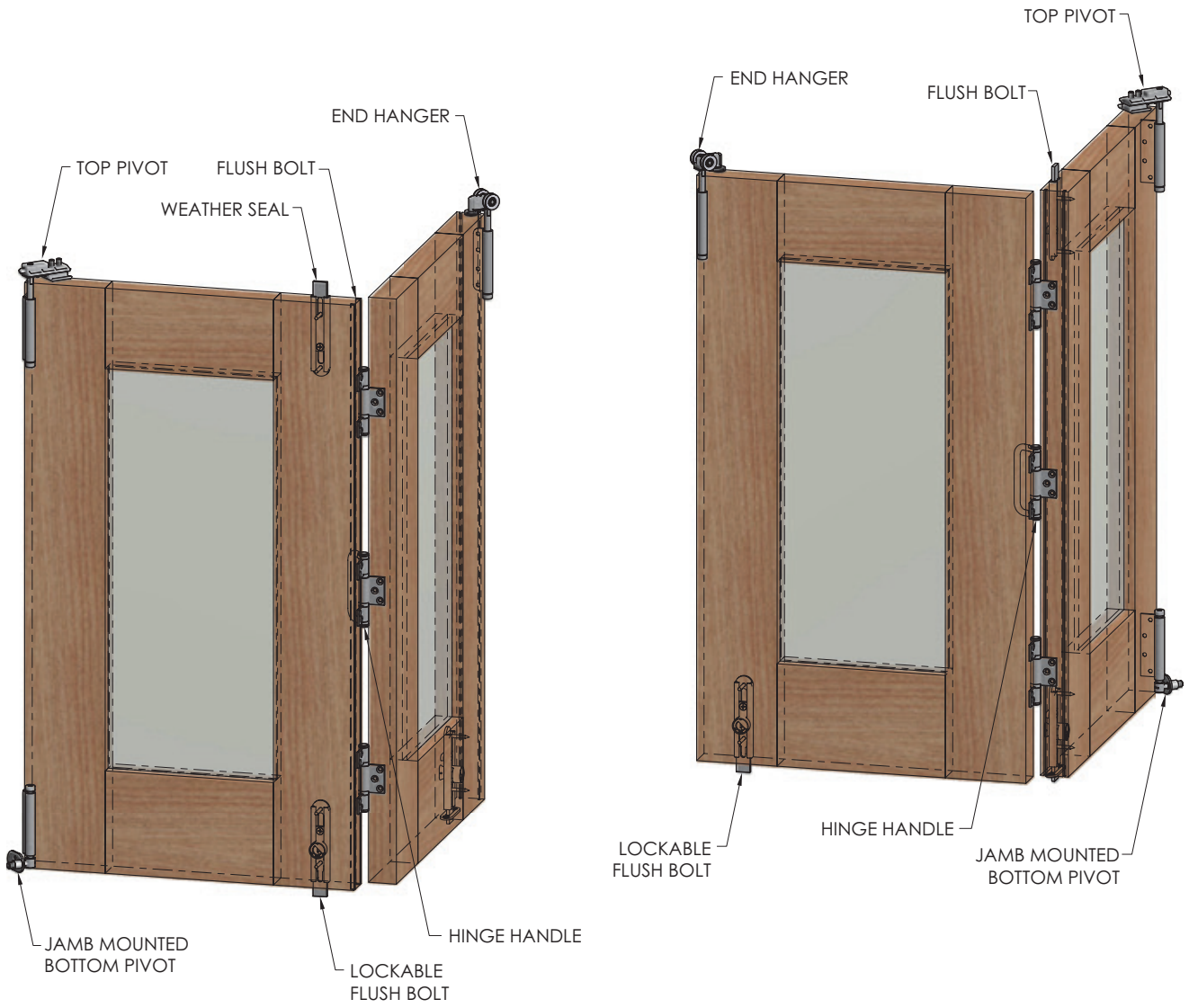
## Care & maintenance

To help prevent tea-staining, Brio® recommends to wash regularly, even smooth stainless steel finishes in coastal environments may show signs of tea-staining if not washed regularly. Sheltered area's that are not rain washed are particularly susceptible. As a guide, if a window or door requires washing then wash the hardware. Wash with soap or mild detergent and warm water followed by rinsing with clean cold water and wipe dry.



# Weatherfold 4s Servery 35

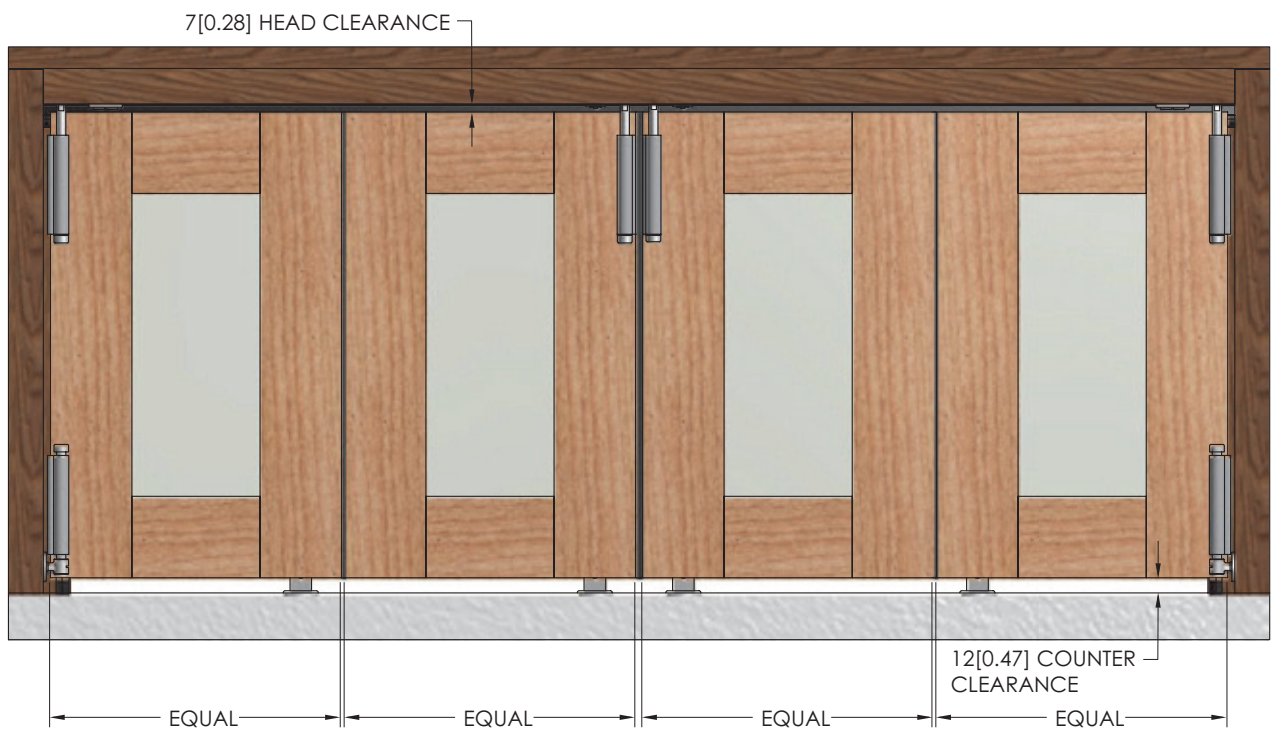
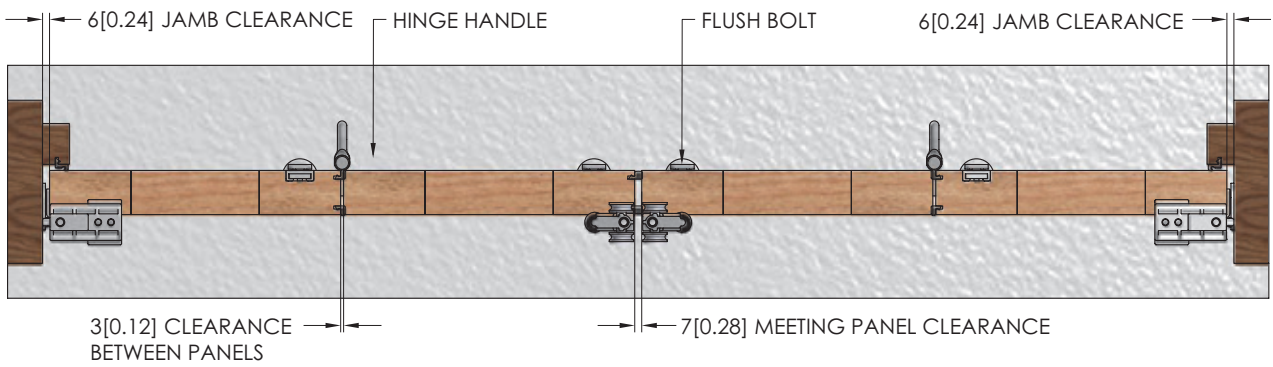
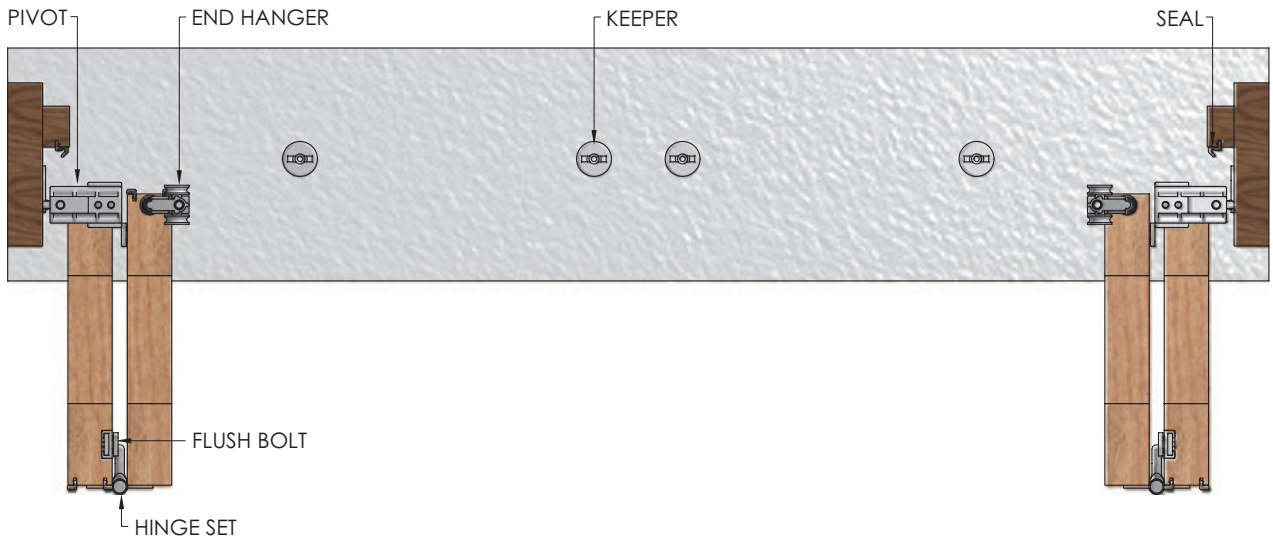
## Hardware Layout





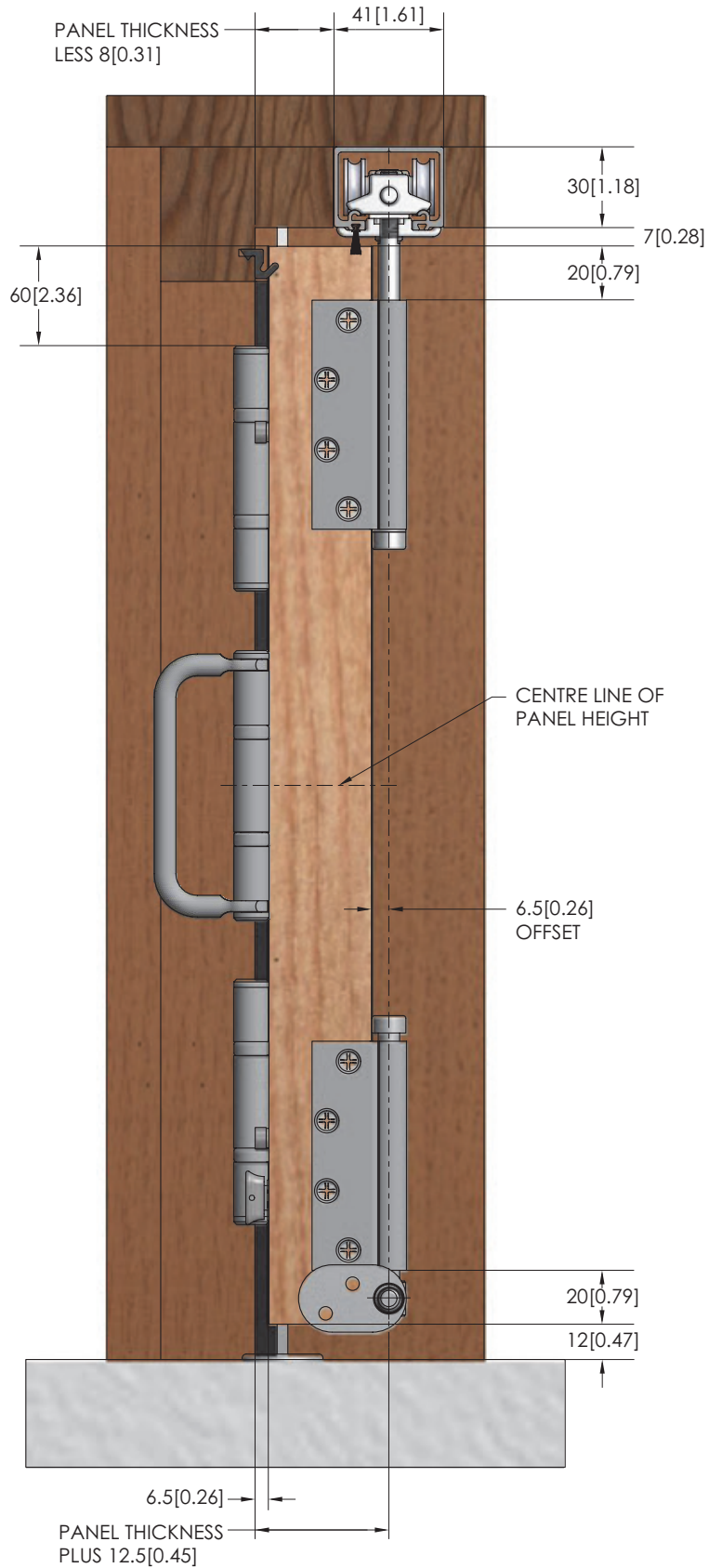
# Weatherfold 4s Servery 35

## Top and Front Views



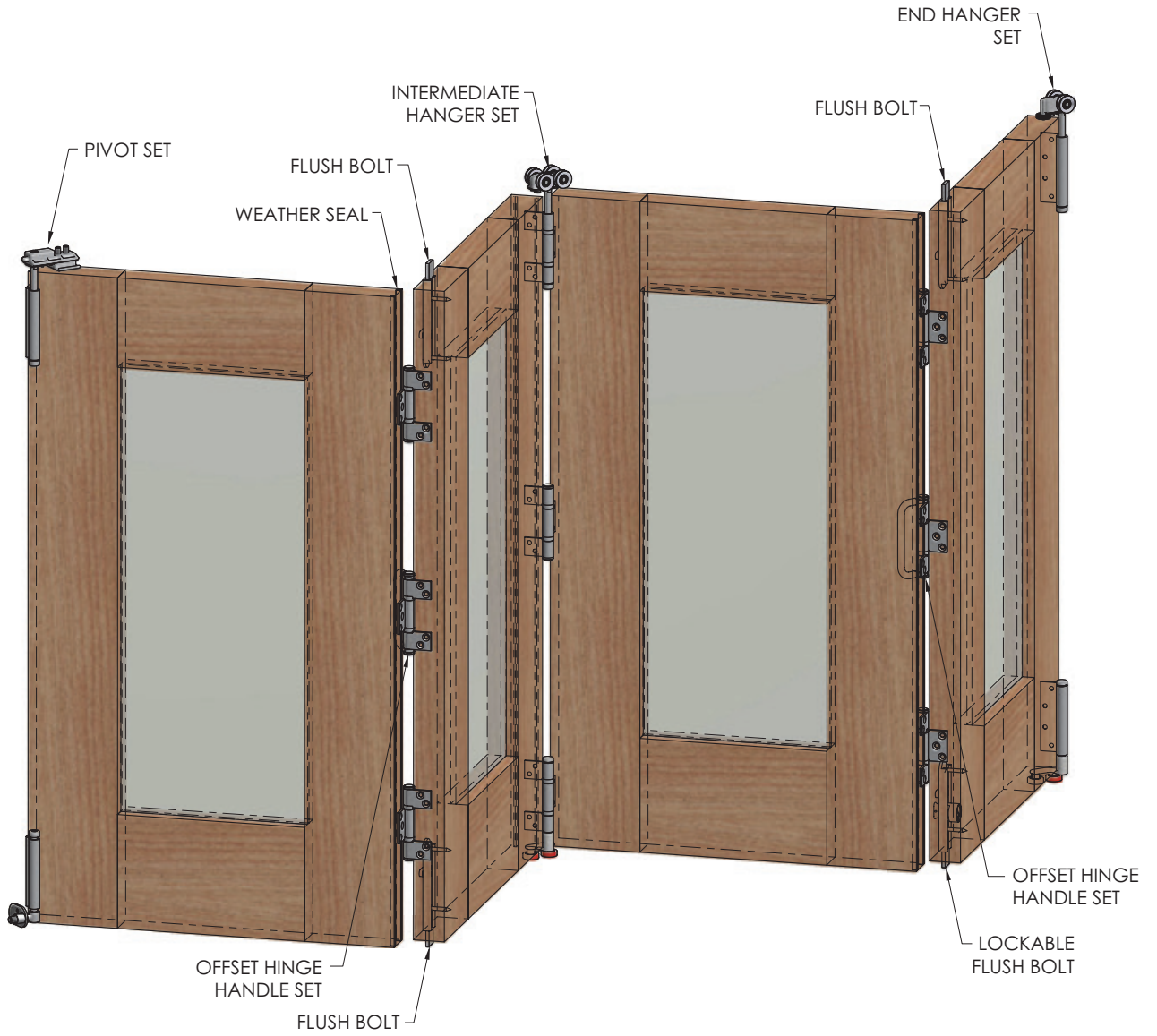
# Weatherfold 4s Servery 35

End View



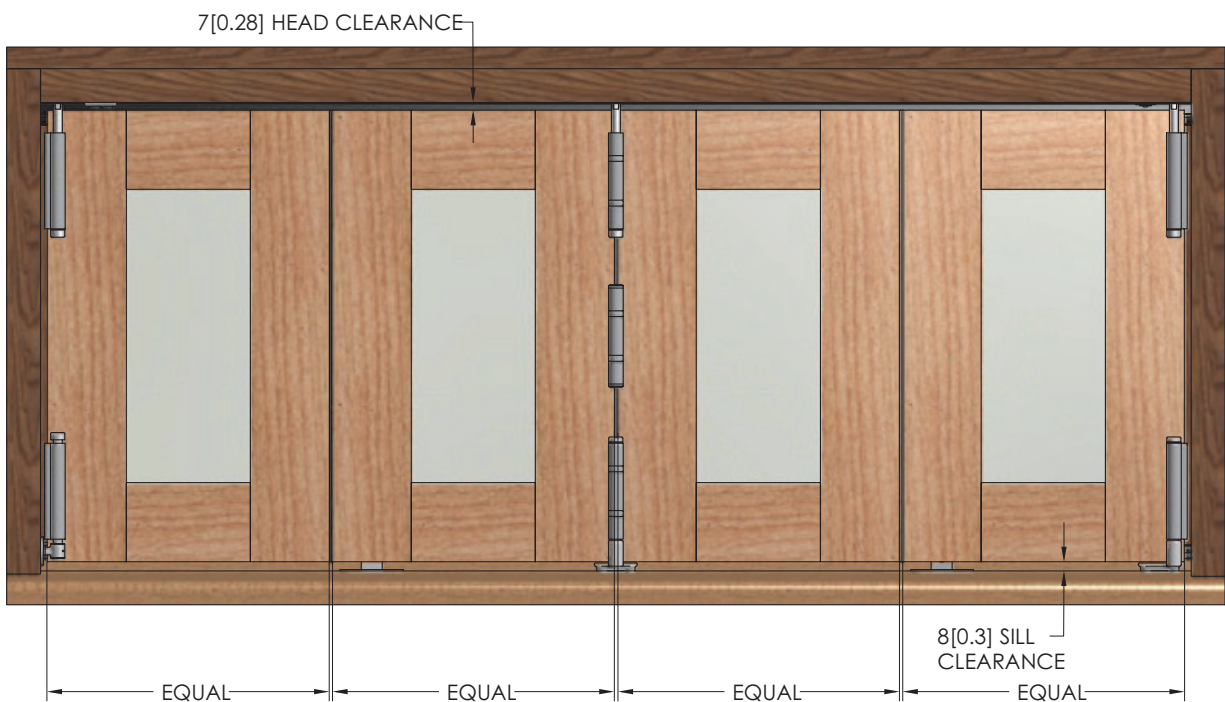
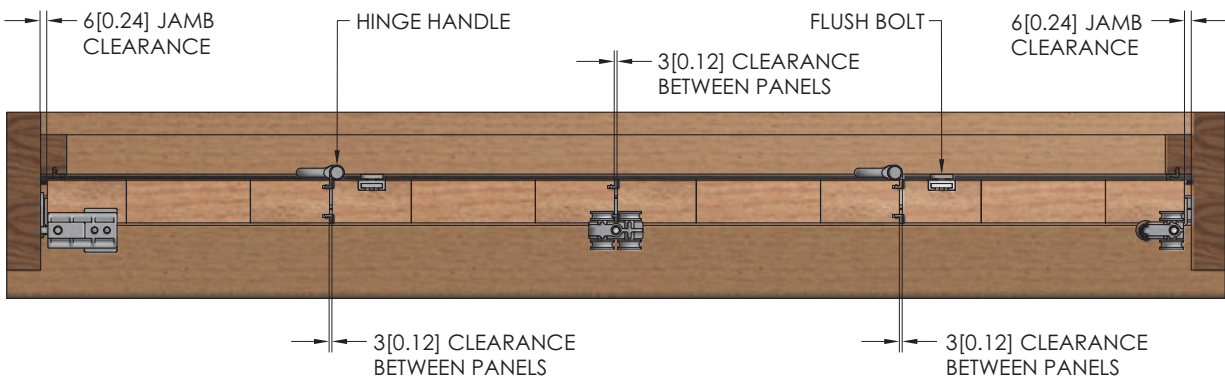
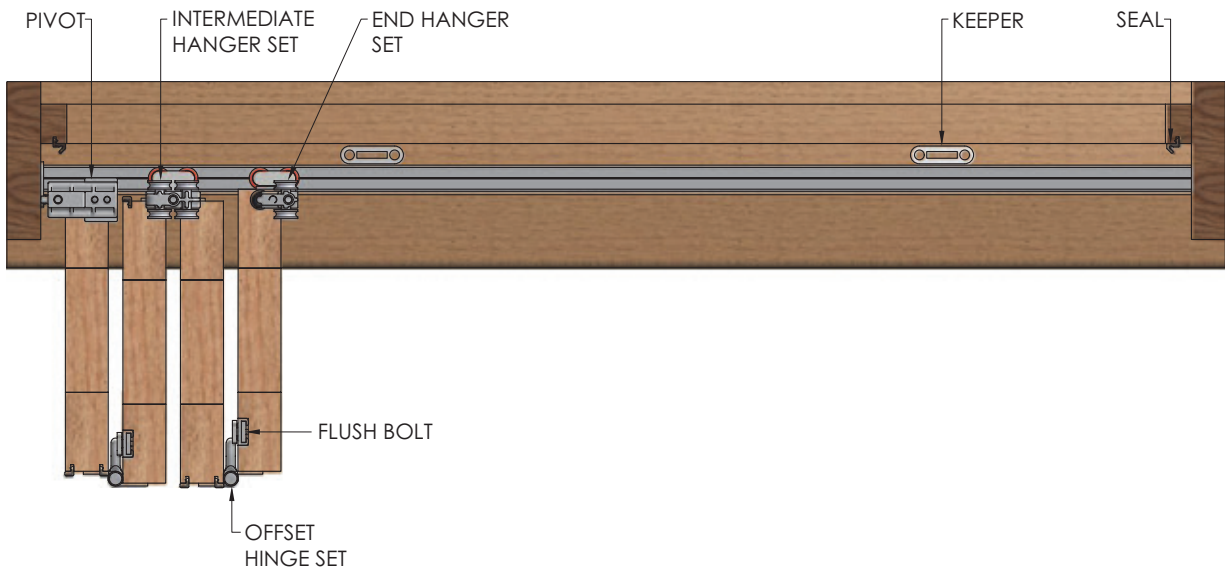
# Weatherfold 4s Window 35

## Hardware Layout



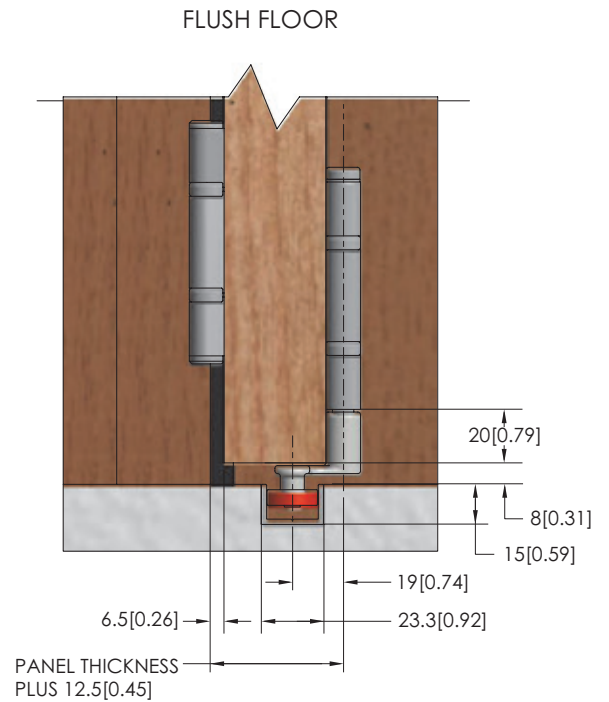
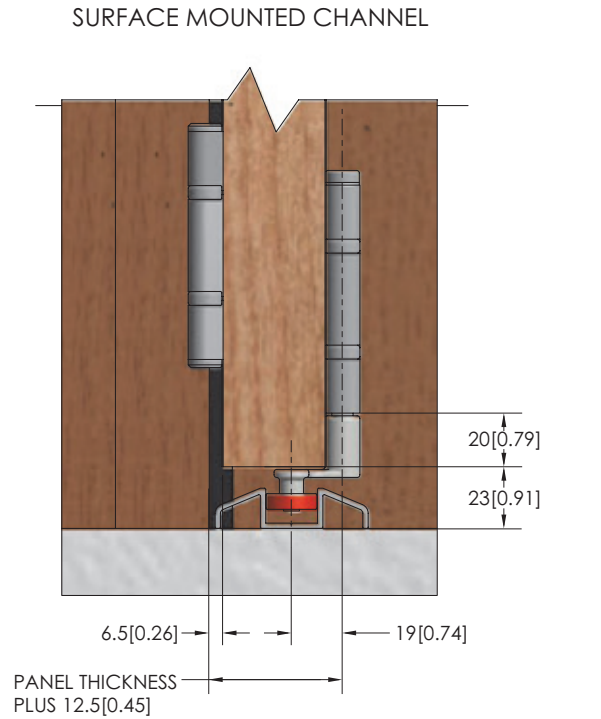
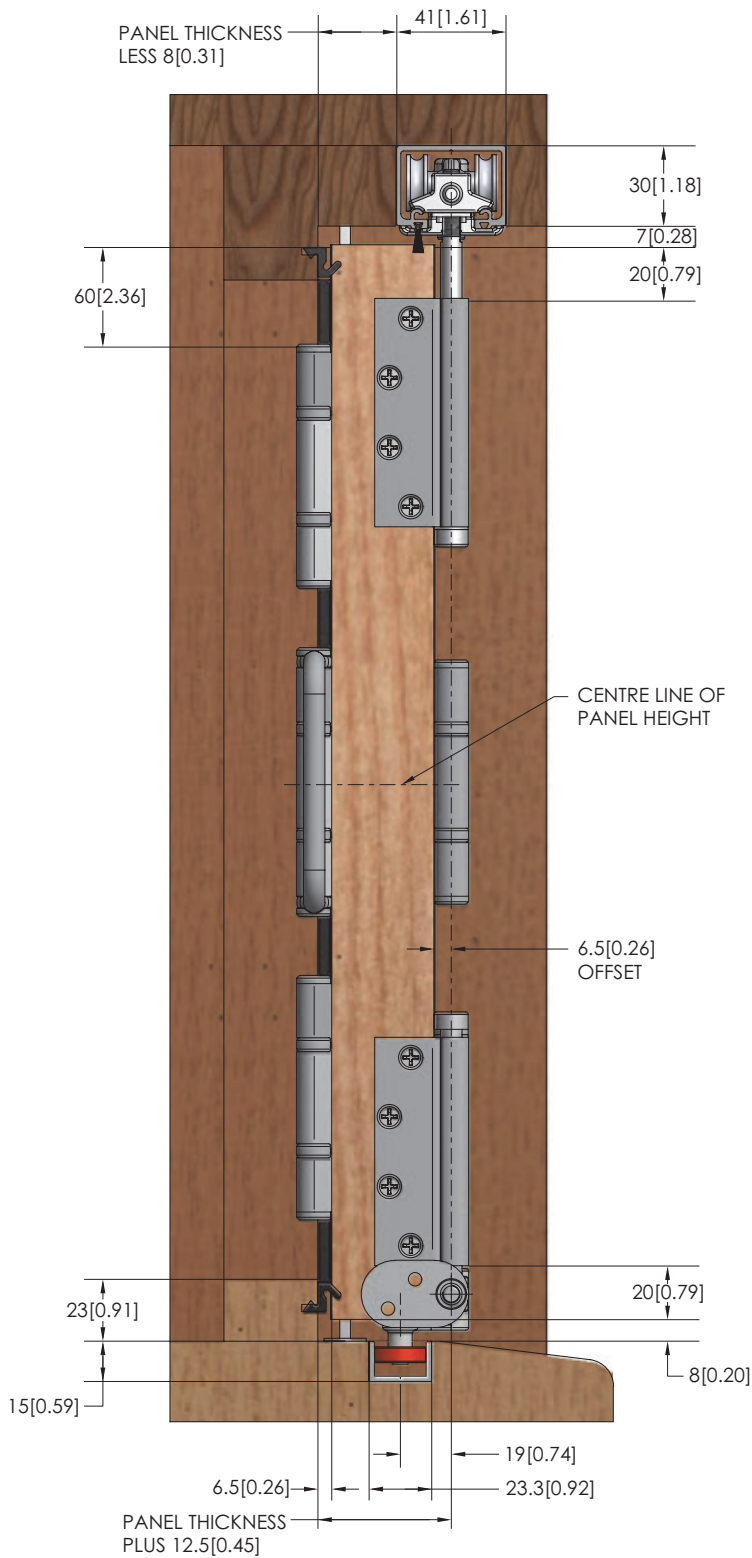
# Weatherfold 4s Window 35

Top and Front Views



# Weatherfold 4s Window 35

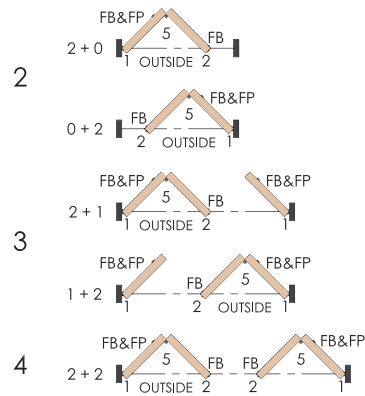
End View



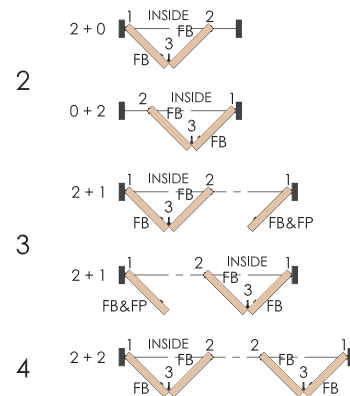
# Weatherfold 4s Servery 35

## Sash Configuration and Hardware Location

### Inward Opening Windows



### Outward Opening Windows



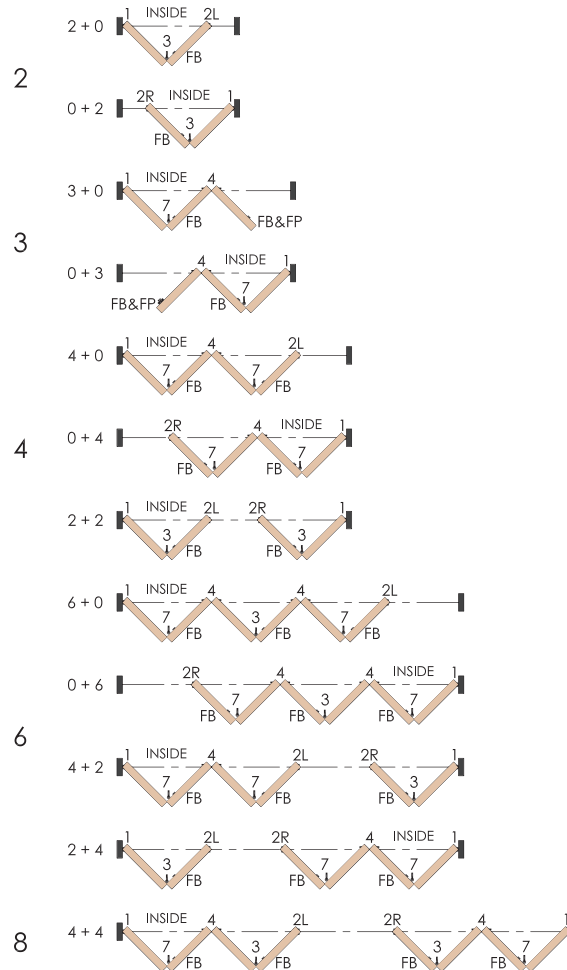
HARDWARE LEGEND		
SYMBOL	REF.	DESCRIPTION
	1	Adjustable pivot kit
	2	End hanger kit without guide
	3	Hinge kit with hinge handle
	4	Intermediate hanger kit without guide
	5	Hinge kit - Inward opening
	6	Offset hinge kit - Inward opening
	7	Offset hinge kit with hinge handle
	FB	Flush bolt - 360
	FP	Flush pull - 401
	FB & FP	Flush bolt and flush pull











The reference number is an abbreviation of the full kit number.

# Weatherfold 4s Window 35

## Sash Configuration and Hardware Location

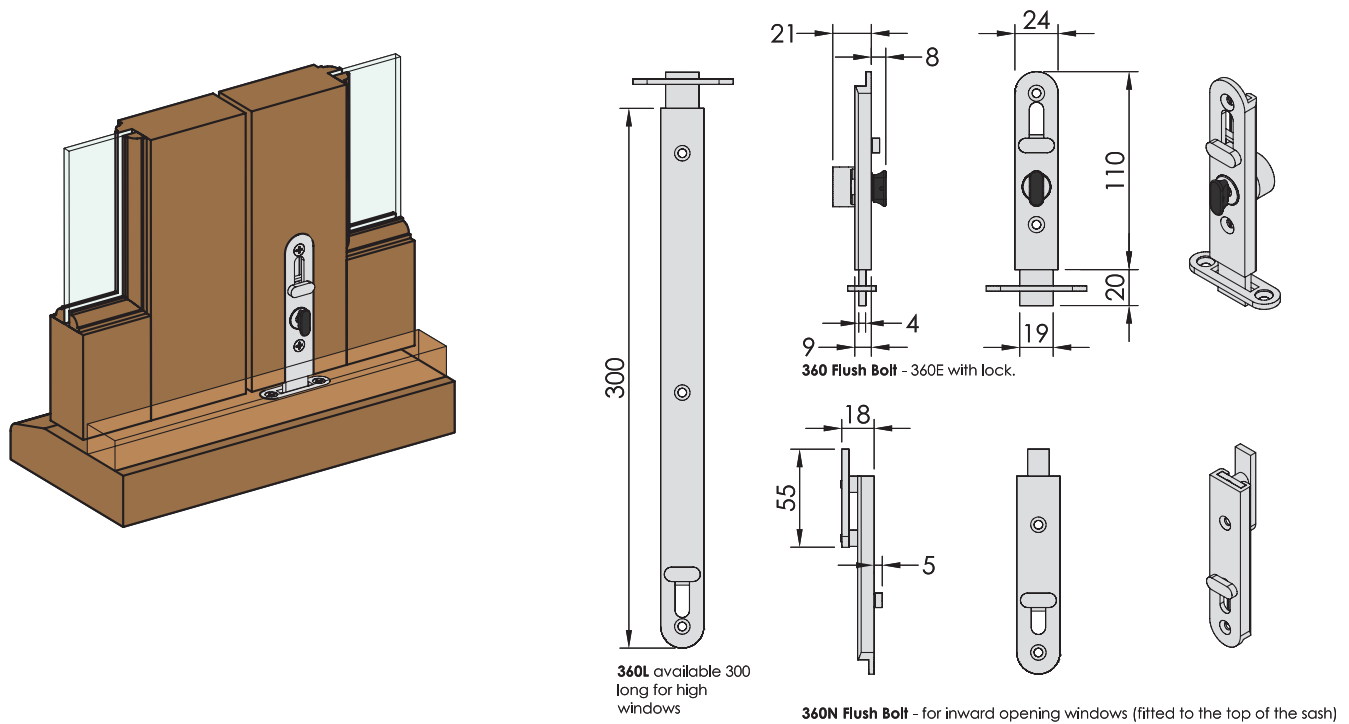
### Outward Opening Windows



HARDWARE LEGEND		
SYMBOL	REF.	DESCRIPTION
	1	Adjustable pivot kit
	2	End hanger kit with guide
	3	Hinge kit with hinge handle
	4	Intermediate hanger kit with guide
	5	Hinge kit - Inward opening
	6	Offset hinge kit - Inward opening
	7	Offset hinge kit with hinge handle
	FB	Flush bolt - 360
	FP	Flush pull - 401
	FB & FP	Flush bolt and flush pull

The reference number is an abbreviation of the full kit number.

## 360 and 360E Flush Bolts



### Flush Bolts

These are an aid in obtaining an even perimeter seal pressure as well as extra security for the window. Available with round end in the same finishes as the hinges.

### Upper Flush Bolts

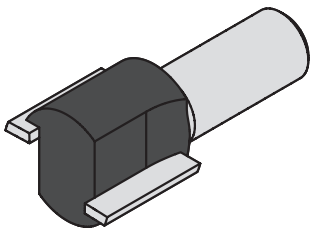
Fitted to each pair of sashes. They are also available in a longer length for high set windows.

Sash Height	Upper Flush Bolt Length
$2100 < 'H' < 2400$	300
$'H' \leq 2100$	110

### Lower Flush Bolts

Fitted to each pair of sashes, at least one 'E' type (Lockable) flush bolt is usually fitted to the bottom of each set of sashes closest to the opening.

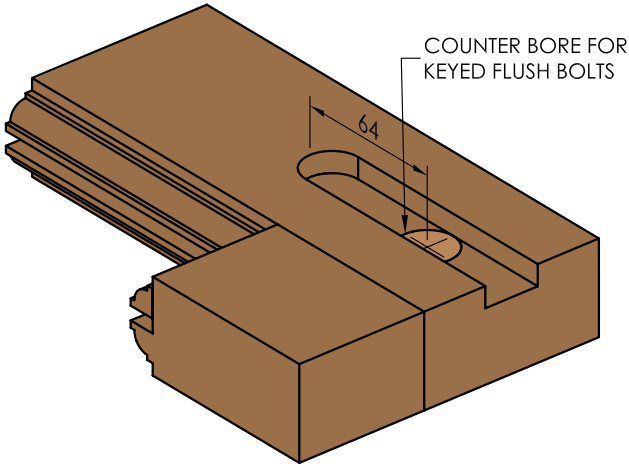
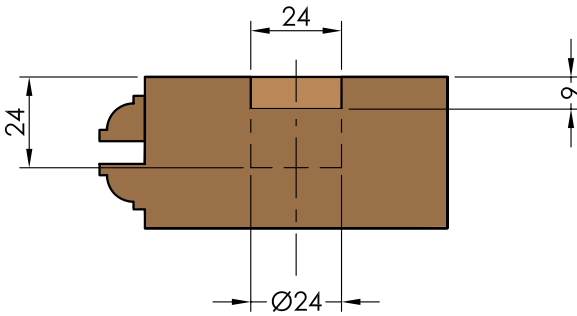




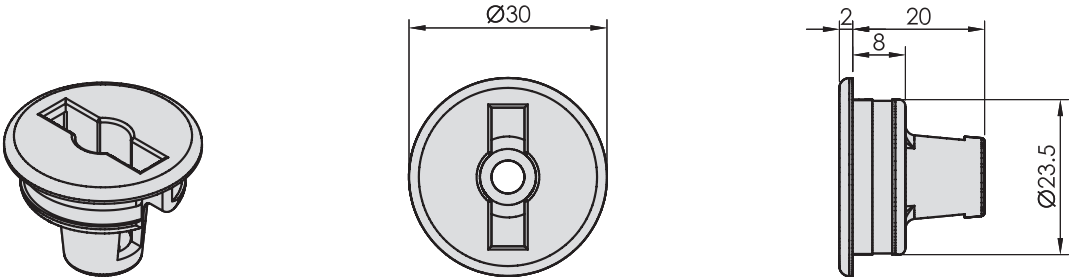
360 Router Bit - For timber windows

**INSTALLATION**

1. Cut slot with router bit.
2. Cut counter bore if keyed type.
3. Fit flush bolt to sash.
4. Fit keeper plate.



**360RKSS Masonry Keeper**



360RKSS Masonry Keeper - Cast 316 Stainless Steel - in Satin or Polished Stainless.  
 For Windows Servery applications closing on Stone Kitchen Bench Tops.



## Specifications

	Window 35 with Guide System	Servery 35 without Guide System
<b>Max Sash weight</b>	35kg	35kg
<b>Max Sash height</b>	1800mm	1800mm
<b>Max Sash width</b>	1000mm	650mm
<b>Max Panel height</b>	2600mm	–
<b>Max Panel width</b>	820mm	–
<b>Min Sash thickness</b>	35mm	35mm
<b>Max number of sash</b>	6 each way	2 each way
<b>Max opening</b>	12000mm	2600mm
<b>Track</b>	120	120
<b>Standard sizes</b>	2000, 3000, 4000, & 6000mm Aluminium, Mill or 25 microns clear anodised	
<b>Bottom Guide channel</b>	96W	No channel required
<b>Standard sizes</b>	2000, 3000, 4000, & 6000mm Aluminium, 25 microns clear anodised Precision	
<b>Hangers</b>	ground stainless steel bearing wheels with nylon tyres are standard. Hanger bodies are nickel plated alloy.	
<b>Pivots</b>	Nickel plated alloy	
<b>Guides</b>	304 cast stainless steel	
<b>Bolts</b>	304 stainless steel	
<b>Hinge type</b>	Non mortice 2.5mm thick architectural grade stainless steel for durability with 2 bearings per hinge for smooth operation.	
<b>Finishes</b>	Stainless Steel (SS), Polished Stainless (PS)	
<b>Security Flush bolts</b>	Outward opening Bottom Locking – 360E Top Non Locking – 360, 360L	Outward opening Bottom Locking – 360E Top Non Locking – 360, 360L
		Inward opening Bottom Locking – 360E Top Non Locking – 360N
<b>Testing Endurance</b>	100,000 Cycles	100,000 Cycles
<b>Weatherseals</b>	PS13B track seal, AQ21 frame seal, AQ48 window sash seal	PS13B track seal, AQ21 frame seal, AQ48 window sash seal.
<b>Accessories</b>	Router 360	Router 360 360RKSS
<b>Applications</b>	Residential houses and apartments, Commercial – Café, restaurants, hotel, bars	Residential and commercial kitchen serveries

# Brio®

Brio – Australia

PO Box 604, Chester Hill, 2162  
C5 - C7, Regents Park Estate, 391 Park Road,  
Regents Park, NSW 2143, Australia  
Phone +61 2 8718 6718 Fax +61 2 8718 6719  
[www.brio.com.au](http://www.brio.com.au)  
email: [brío.sales@allegion.com](mailto:brío.sales@allegion.com)

Brio – UK

Unit 30 Gateway West, Kingfisher Boulevard, Newburn Riverside,  
Newcastle Upon Tyne, NE15 8NZ, United Kingdom  
Phone +44 (0) 191 2291224 Fax +44 (0) 191 2677891  
[www.briouk.com](http://www.briouk.com)  
email: [brío.sales.uk@allegion.com](mailto:brío.sales.uk@allegion.com)

Brio – USA

85 Mushroom Blvd  
Rochester, NY 14623-3201  
Toll Free +1 855 586 6251 Phone +1 585 319 5599 Fax +1 585 319 5741  
[www.briousa.com](http://www.briousa.com)  
email: [brío.sales.usa@allegion.com](mailto:brío.sales.usa@allegion.com)

## About Allegion

Allegion (NYSE: ALLE) is a global pioneer in the field of safety and security. We keep people and their property safe, wherever they are, bringing together simple solutions and advanced technology. Allegion is a \$2 billion company, with products sold in almost 130 countries. For more, visit [www.brio.com.au](http://www.brio.com.au)

