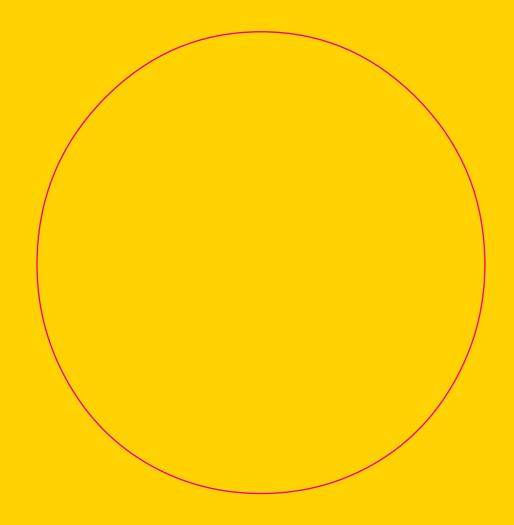




# Brio® Weatherfold™ Window Systems Exterior folding window hardware systems for sashes up to 20kg



# About us

Brio®, based in Australia, is focused on bringing adventurous architectural ideas to life, converting the conceptual thoughts of our customers into exciting reality.

Our aim is that Brio® be seen as the innovative leader in sliding and folding door hardware – a leader in design and quality.

Brio® epitomises our core values. Energy. Spirit. Vitality. It also stands for the way we approach the discovery of new solutions for our customers.

Brio®'s R&D department brings a strong design element to the business, developing and testing new concepts using the latest CAD and modelling software.

The company embraces the concept of generic and private label enterprises and recognises the need for specialisation in certain circumstances and markets.

Brio® has a commitment to the continuous improvement of quality, and is certified to Quality Management System AS/NZS ISO 9001: 2008.

Brio® is a division of RMD Industries®





# Weatherfold<sup>™</sup> Window Systems

## Weatherfold<sup>™</sup> Servery 20

The Brio® Weatherfold Servery 20 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 dinning areas.

Max Sash weight: 20kg Max Sash height: 1500mm Max Sash width: 650mm Sash thickness: 32 – 40mm Max number of sash: 2 each way

Max opening: 2600mm Hinge type: Non mortice

Finishes: Stainless Steel (SS), PVD Brass (PVDB),

Polished Stainless (PS)

#### Weatherfold™ Window 20

Brio® Weatherfold Window 20 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 weigh 20kg by 900mm wide comfortably accommodating a span of 10 metres. This is achieved by a fully integrated bottom guide system hidden behind the rebate stop. The guide system not only provides stability for folding up to 12 window sashes, it is weatherproof and surface mounted making it ideal for drainage on window sills.

Max Sash weight: 20kg
Max Sash height: 1800mm
Max Sash width: 900mm
Sash thickness: 35 or 40mm
Max number of sash: 6 each way
Max opening: 10800mm

Hinge type: Non mortice

Finishes: Stainless Steel (SS), PVD Brass (PVDB),

Polished Stainless (PS)









# Weatherfold<sup>™</sup> Window 20 Systems

Brio® Weatherfold Window 20 and Brio® Weatherfold Servery 20 utilise the same technology as the Weatherfold door systems, but on a smaller scale. High-speed precision bearings, grooved-wheel hangers and 316 cast stainless steel components are all standard features.

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 resistnace.

#### **Built to last**

Tested for durability, Brio® Weatherfold Window systems comfortably exceeded 100,000 cycles. We offer a 10-year warranty on all Weatherfold Window 20 and Weatherfold Servery 20 hardware.

#### **Application**

The Weatherfold Window 20 and Servery 20's clean lines, smooth operation and flexible functionality, makes the systems suitable for many applications with a wide range of configurations. The Weatherfold Window 20 family is most suited for applications that include kitchen serveries, 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 Weatherfold Window 20 can deliver outstanding weatherproofing characteristics.

#### Self draining 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 900mm, a width beyond most servery systems including our own. The guide system had to accommodate variations in height that commonly occur across the opening. Weatherfold Window 20 guide with its unique multiple linkage and triple roller design can accommodate such imperfections.

The sill also had to be surface mounted. Many window sills are not made to accommodate a traditional rebated channel, The Weatherfold Window 20 guide system positions itself discretely into the rebate stop and is totally self draining.

#### **Screen solutions**

The multi purpose Brio® 612 Retractable Pleated Insect Screen can be integrated into the frame discretely behind the Weatherfold Window 20 quide channel.

#### 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.

## Improved corrosion resistance

Weatherfold Window systems are designed with the elements in mind with extensive use of 316 cast stainless steel, stainless steel bearings and architectural grade stainless steel components. To further safeguard against corrosion, Brio® is one of only a few global companies to passivate all visual stainless steel surfaces and electro-polish all cast stainless components. This removes contaminates and greatly reducing or eliminating 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 containments 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.

To complete the package all aluminium on Weatherfold Window systems is anodised to marine arade 25 microns.

#### Installation and adjustment

The system is provided in convenient kit format that covers a wide range of configurations. Detailed easy to follow instructions are provided with all fixing screws. Both Weatherfold Window 20 and Servery 20 systems allow easy adjustment onsite for those not so perfect frame installations via the 5mm allen key provided for both vertical and horizontal alignment.

#### **Specification**

Both systems are suitable for folding timber and aluminium windows with a maximum panel weight of 20kg. CAD detail is available for download from **www.brio.com.au** or contact Brio® for our free specification service.

#### Software

Brio® Weatherfold Window 20 and Severy 20 software facilitates simple calculation of the sash sizes for any opening or configuration, and is available as a free download from www.brio.com.au.

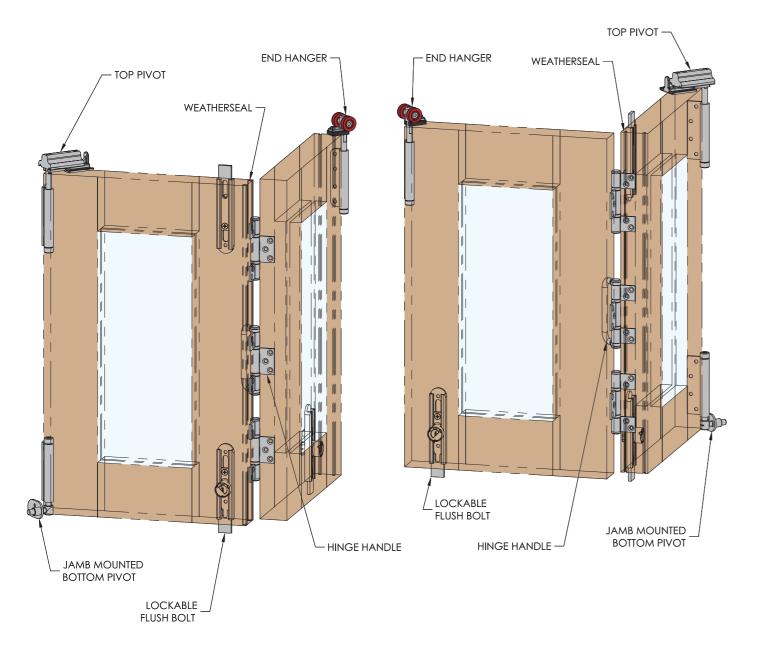
#### Care and maintenance

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.



## **Hardware Layout**

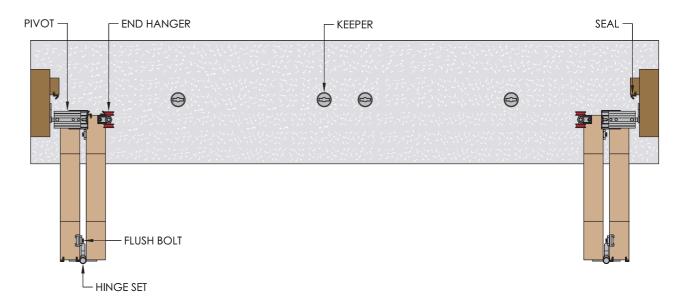
Weatherfold™ Servery 20

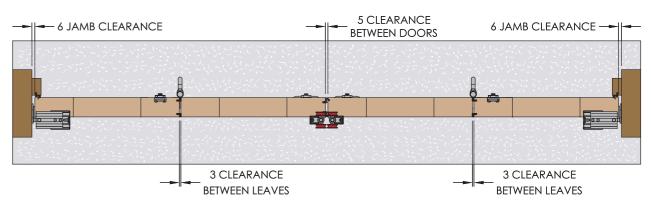


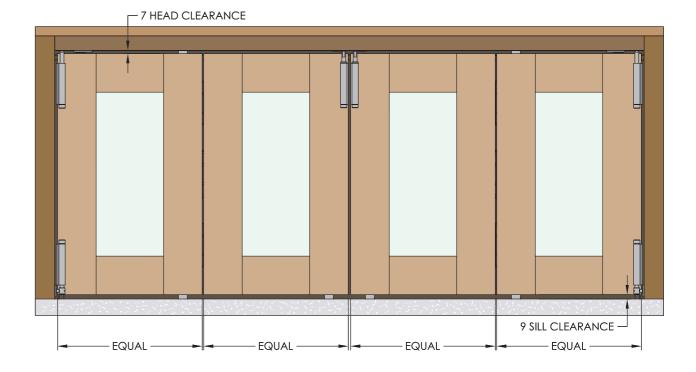
## **Architectural Details**

## Front and Top Views

Weatherfold™ Servery 20

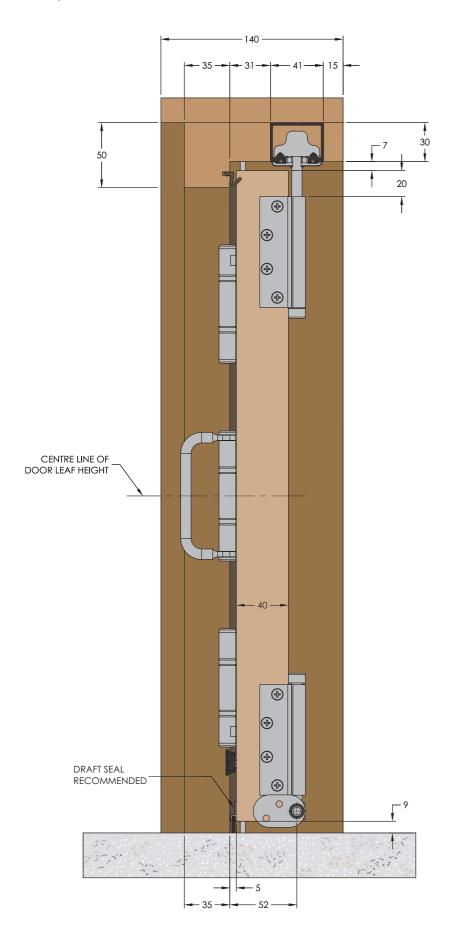






### **End View**

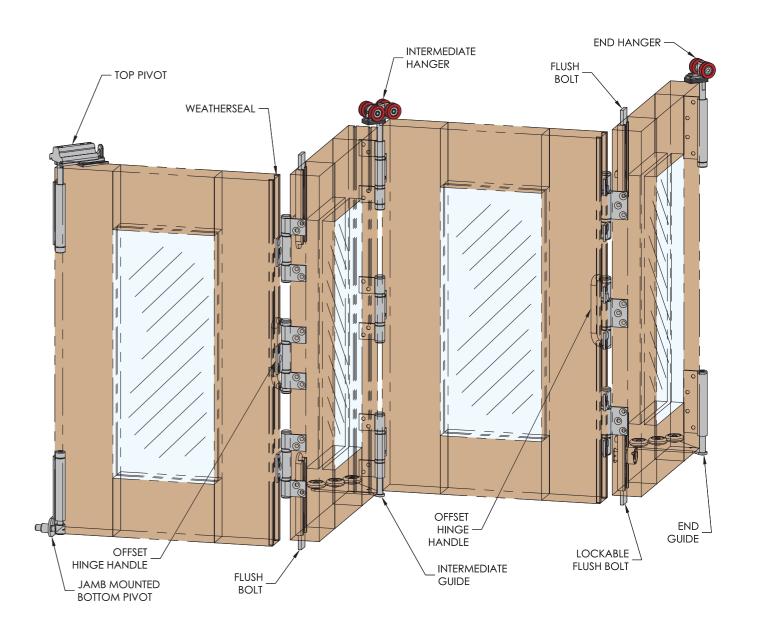
Weatherfold™ Servery 20



## **Architectural Details**

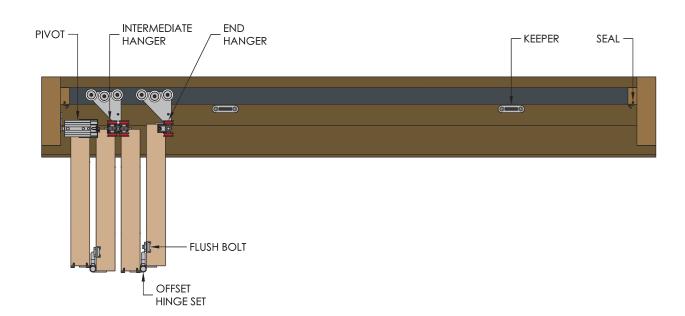
## **Hardware Layout**

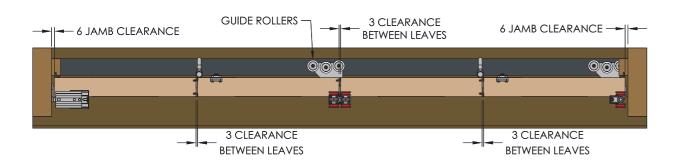
Weatherfold™ Window 20 – with guide system

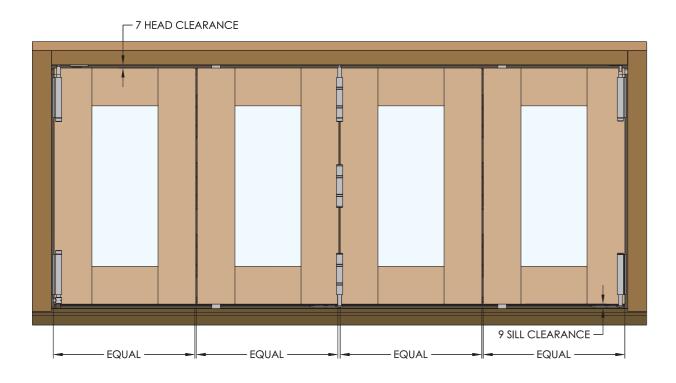


## Front and Top Views

Weatherfold™ Window 20 – with guide system



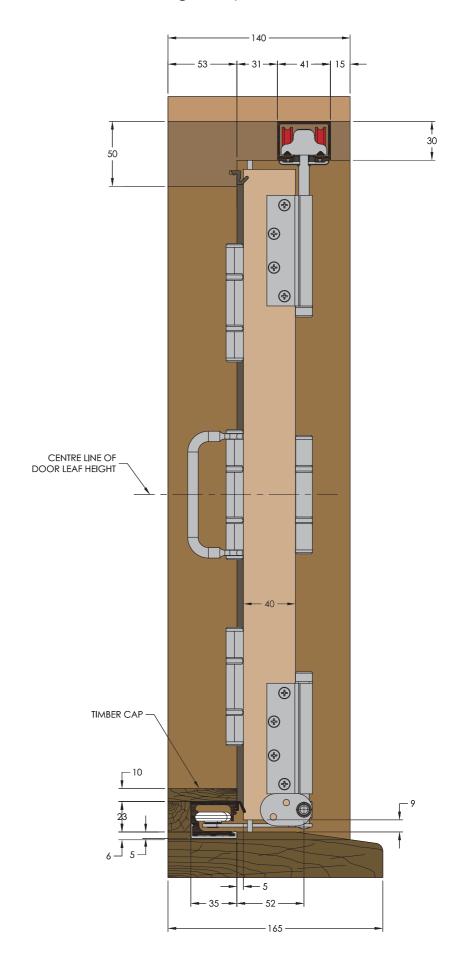




## **Architectural Details**

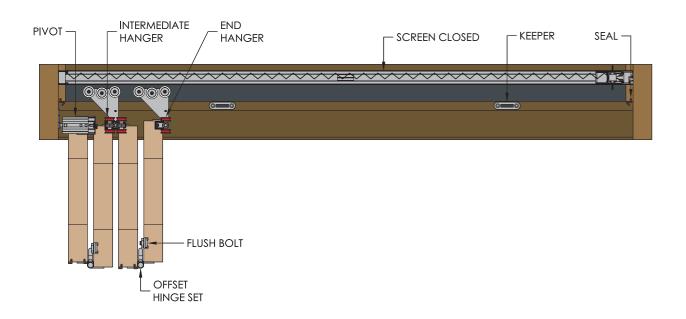
#### **End View**

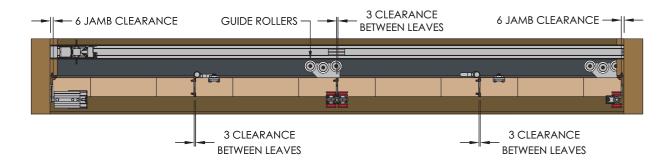
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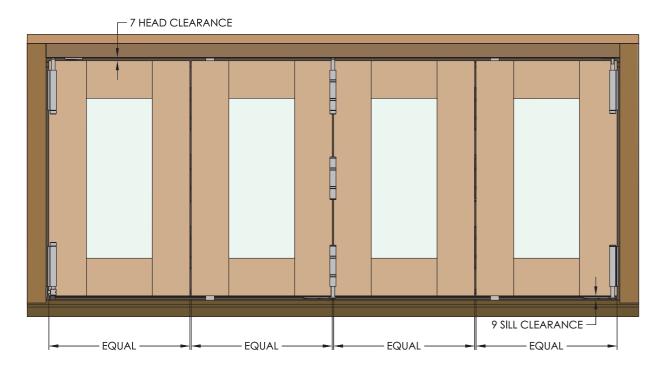


## Front and Top Views

Weatherfold™ Window 20 – with Brio 612 Integrated Retractable Pleated Insect Screen



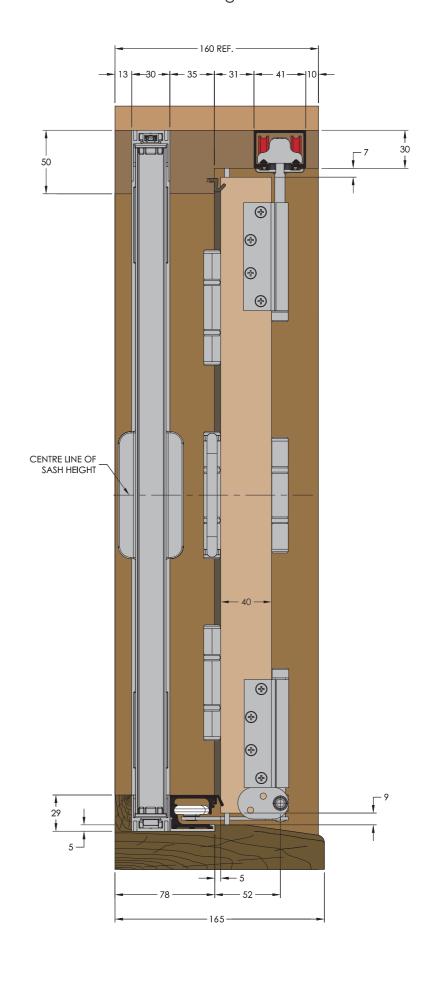




## **Architectural Details**

#### **End View**

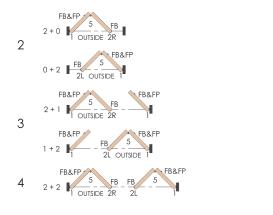
Weatherfold™ Window 20 – with Brio 612 Integrated Retractable Pleated Insect Screen



### **Sash Configurations**

Weatherfold<sup>™</sup> Servery 20

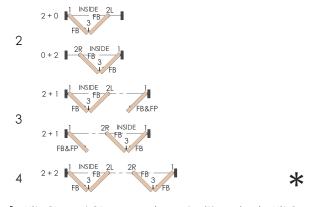
#### **Inward Opening Windows**



HARDWARE LEGEND				
SYMBOL REF.		DESCRIPTION		
	1	Adjustable pivot kit		
Let'	2L or 2R	End hanger kit (left or right) with guide		
-	3	Hinge kit with hinge handle		
and the same	4	Intermediate hanger kit with guide		
•	5	Hinge kit - Inward opening		
•	6	Offset hinge kit - Inward opening Offset hinge kit with hinge handle		
0-	7			
	8	Meeting door kit for rebated doors		
-	FB	Flush bolt 456 or 512		
and the second	FP	Flush pull - 401		
	FB & FP	Flush bolt and flush pull		

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

#### **Outward Opening Windows**



\* Kits 2L and 2R are replaced with a single Kit 8.

#### Flush Bolt

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 Bolt

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

Track Height Above Floor	Upper Flush Bolt Length	
2100 < 'H' < 2400	300	
'H' <= 2100	110	

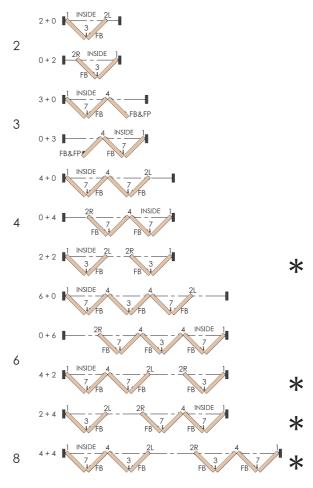
#### **Lower Flush Bolts**

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.

#### **Architectural Details**

## **Sash Configurations**

Weatherfold™ Window 20



HARDWARE LEGEND				
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#### Upper Flush Bolts

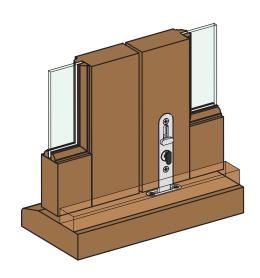
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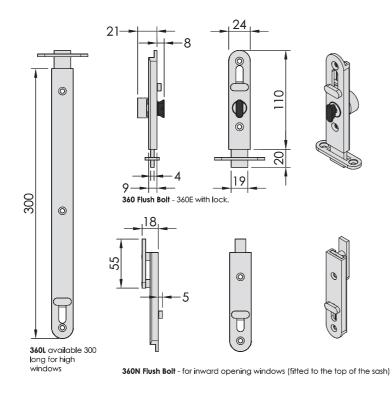
	Sash Height	Upper Flush Bolt Length	
2100 < 'H' < 2400		300	
	'H' <= 2100	110	

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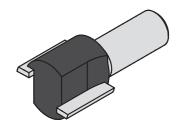
#### 360 and 360E Flush Bolts





## **Accessories**

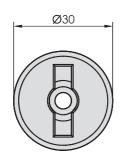
### 360 Router

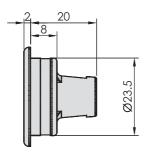


360 Router Bit - For timber windows

## 360RKSS Masonry Keeper







## Weatherfold<sup>™</sup> Window Systems Specifications

	Window 20	Servery 20	
	with Guide System	Servery 20	
Max Sash weight	20kg	20kg	
Max Sash height	1800mm	1500mm	
Max Sash width	900mm	650mm	
Sash thickness	35 or 40mm	30-40mm	
Max number of sash	6 each way	2 each way	
Max opening	10800mm	2600mm	
Track	120	120	
Standard sizes:	2000, 3000, 4000, & 6000mm Aluminium, Mill or 25 microns clear anodised		
Bottom Guide channel	145C No channel required		
Standard sizes:	2000, 3000, 4000, & 6000mm Black anodised		
Hangers	Precision ground stainless steel bearing wheels with nylon tyres are standard. Hanger bodies are cast 316 marine grade stainless steel.		
Pivots	Jamb mounted pivot constructed from 316 marine and architectural grade stainless steel.		
Hinge type	Non mortice 2.5mm thick architectural grade stainless steel for durability with 2 bearings per hinge for smooth operation.		
Finishes	Stainless Steel (SS), PVD Brass (PVDB), Polished Stainless (PS)		
Security – Flush bolts	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	
Testing - Endurance	100,000 Cycles	100,000 Cycles	
Weatherseals	PS13B track seal, AQ21 frame seal, AQ48 sash seal, AQ437B48 bottom guide frame seal	PS13B track seal, AQ21 frame seal, AQ48 window sash seal.	
Accessories	Router 360	Router 360 360RKSS	
Applications	Residential houses and apartments, Commercial – Café, restaurants, hotel, bars	Residential and commercial kitchen serveries	



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

