

Brio®



Brio® where ideas unfold

Brio® Weatherfold 4s
Exterior folding hardware for panels up to 150kg

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





Doors designed and made by Steel Window Design, architecture by Ben Callery Architects, photography by Tatjana





Plitt Photography

Brio® Weatherfold 4s

Brio brings a stylish edge to any home or commercial venue when it comes to using space more efficiently.

Exterior folding doors are without doubt the key to indoor/outdoor living. Whether you need to connect or partition an outdoor area; exterior folding doors open and close effortlessly, and stack unobtrusively to create wide open vistas.

Brio's Weatherfold series has long been recognised as the architectural standard in exterior folding door hardware. Designed in Australia, Brio Weatherfold is trusted by major window and door manufacturers worldwide.

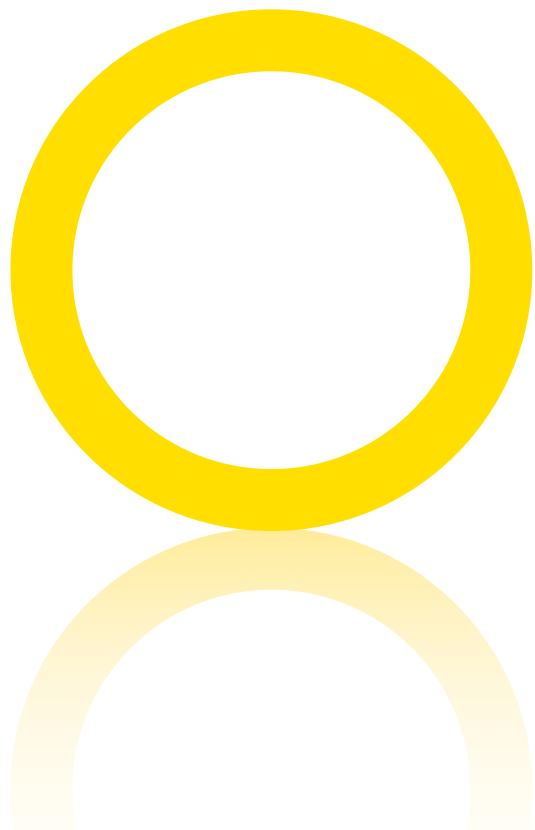
Weatherfold 4s has been developed to handle panels up to 150kg with precision and ease. The impressive hardware can create openings up to 4m high and 19.6m wide.

Up to eight equal size panels can fold seamlessly in each direction with either inward and outward opening functionality.

Suitable for metal and timber doors, there are three panel weight capacities available:

- 50kg
- 100kg
- 150kg

A complete system includes pivot sets, hanger sets, hinge sets, top track, bottom channel, seals, locking options and screening.



Features

The latest in a long line of Brio innovation, Weatherfold 4s brings numerous features, making it the smartest choice for exterior folding door hardware.

Integrated Locking Mechanism

The patented push button locking mechanism is a stand-out element and is consistent across all hangers and pivots. It has no loose parts which can be misplaced during installation.

Easy Adjustment

For faster installation, the locking mechanism provides easy vertical adjustment. Just simply depress the push button and lower or raise the panel using the hex key provided.

Failsafe Design

The "set and forget" locking technology means the system self locks as soon as the push button is released, ensuring that the panel always remains set.

Concealed Design

The locking mechanism is concealed within the track to offer greater visual appeal.

Security

The intermediate hanger hinge, bottom guides and pivot now feature non-removal pin technology for enhanced security. No exterior hardware can be tampered with or removed.

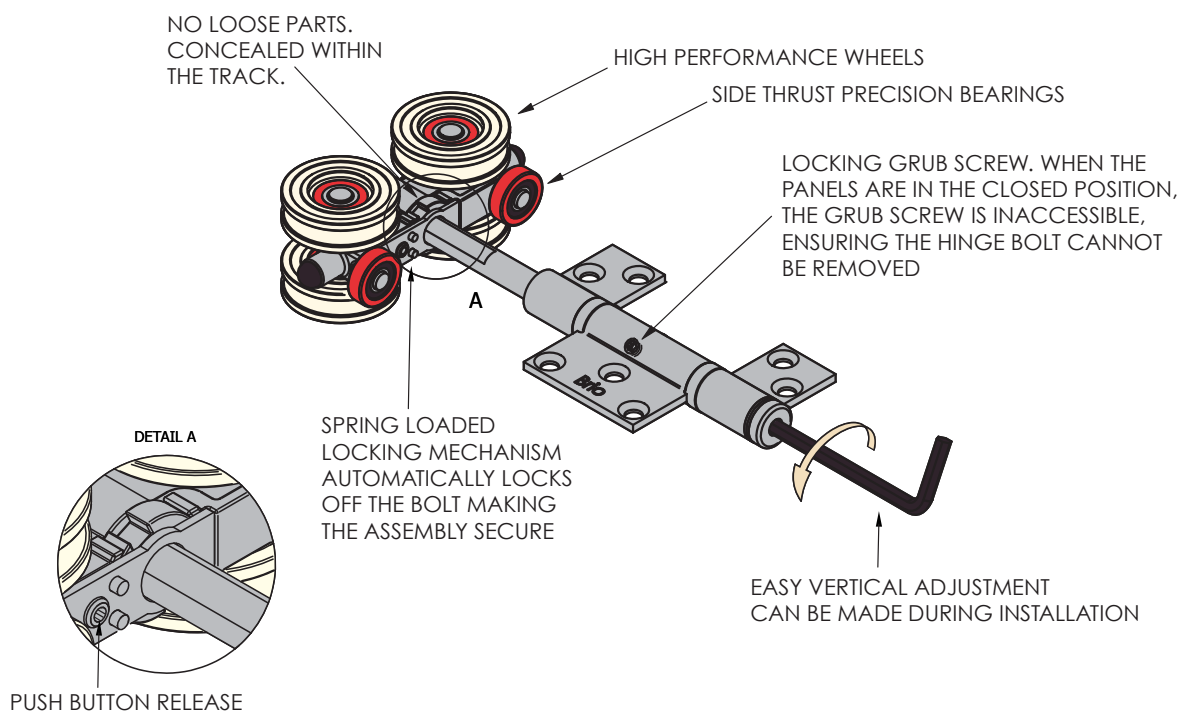
Weight Capacity

Sustainability trends and legislation are changing the way buildings are designed. There has been increased use of double glazing as a means of maximising thermal and acoustic insulation. Impact resistant glass is also being specified as a safety feature. All of this results in heavier panels. Weatherfold 4s has taken this into account with high performance wheels and bearings and side thrust capabilities. As a result of this design, Weatherfold 4s is available in three panel weight capacities including 150kg.

Panel Sizes

Weatherfold 4s 50 and 100 can operate 1m wide panels while Weatherfold 4s 150 can be used with panels 1.2m wide. Maximum panel height is 3m on Weatherfold 4s 50, 3.3m on Weatherfold 4s 100; and 4m on Weatherfold 4s 150.

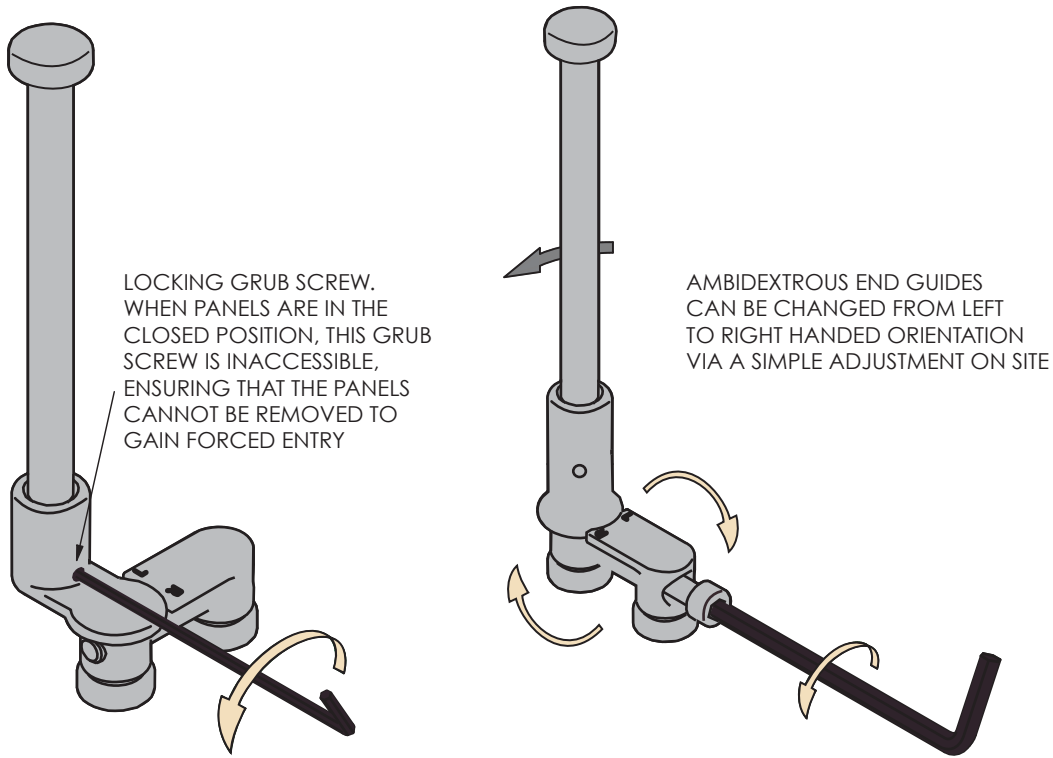
Brio Weatherfold 4s 100 Intermediate Hanger



Ambidextrous End Guides

Brio's ambidextrous end guides put an end to specifying left or right handed components. The end guides can be changed from left to right handed orientation via a simple adjustment on site. A handy feature that prevents installers being stranded with the wrong hardware.

Brio Weatherfold 4s End Guide



Aesthetics

All visible hardware is supplied in a choice of three premium finishes; Polished Stainless Steel, Satin Stainless Steel and PVD Brass. PVD (Physical Vapor Deposition) provides an attractive finish and hard wearing surface that is highly corrosion resistant.

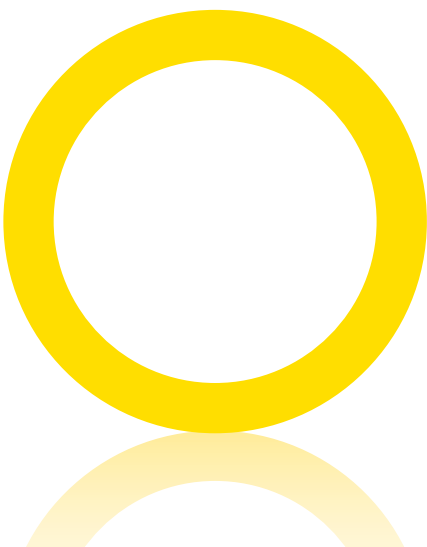
Brio 456 Flush Bolts



Polished Stainless

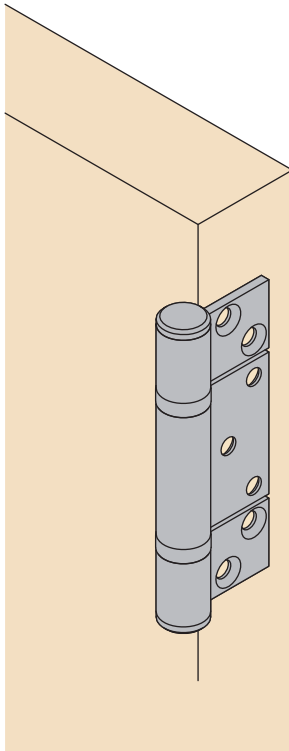
Satin Stainless

PVD Brass



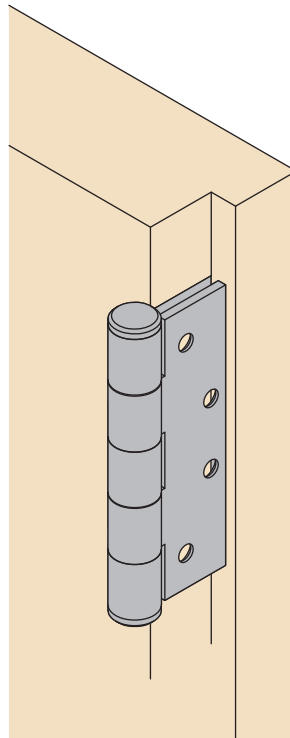
Hinge Options

Brio's hinge options offer versatility to suit a wide spectrum of applications.



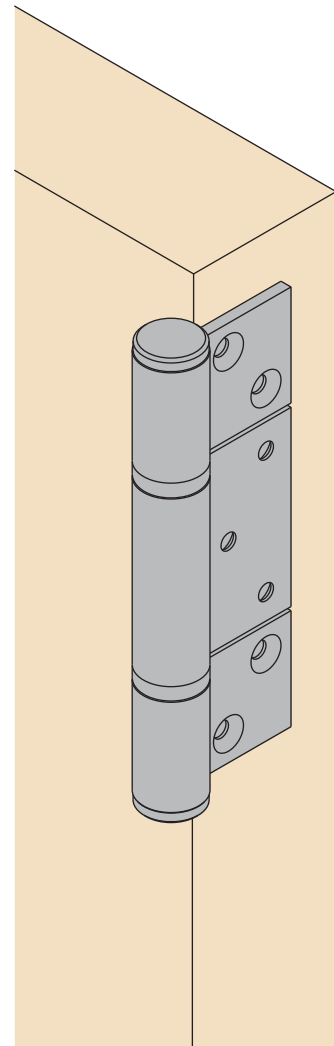
Non Mortice Hinge for Weatherfold 4s 50 & 100

- Surface mounted.
- Highly versatile. Suitable for timber panels and aluminium panels.
- Accommodates panels 35-68mm thick. Shown above on a 40mm thick panel.
- Ideal for Weatherfold 4s 50 timber and aluminium systems.
- Hinge size: 100mm high x 66mm wide x 3mm thick.



Mortice Square Corner Hinge for Weatherfold 4s 50 & 100

- The Classic Look.
- Provides the traditional straight-edge look of timber joinery
- Accommodates panels 35-68mm thick. Shown above on a 40mm thick panel.
- Suitable for rebated panels down to 35mm thickness.
- Ideal for Weatherfold 4s 50 systems for timber.
- Hinge size: 100mm high x 66mm wide x 3mm thick.



Non Mortice Hinge for Weatherfold 4s 150

- Surface mounted.
- Highly versatile. Suitable for timber panels and aluminium panels.
- Accommodates panels 44-68mm thick. Shown above on a 57mm thick panel.
- Used only on Weatherfold 4s 150.
- Hinge size: 152mm high x 92mm wide x 4mm thick.



Accessories

Screening

Brio Weatherfold 4s and the optional integrated Brio 612 Retractable Pleated Insect Screen have been designed to work perfectly in your home and workplace.

The Brio 612 Retractable Pleated Insect Screen is the largest of its kind on the market, offering innovative and functional ways to screen large openings while protecting your home from annoying insects.

A single screen can span 3.2m high x 4.5m wide, accommodating a 5 panel folding unit with each panel up to 900mm in width. While a double screen can span 3.2 m high x 9 m wide.

The Brio 612 screen uses the latest European PVC coated polyester mesh with UV protection technology. Screens come in three powder coat colours - Black, Silver and White, with custom colours also available.

Brio's 612 screen can screen corner openings without the need for a corner post, providing stunning uninterrupted views, as shown above.

To ensure the highest level of quality is maintained, Brio 612 screens are assembled in Brio's Sydney, Australia location. This manufacturing facility has made a significant investment into purpose built equipment that provides exceptional quality control.





Locking

Large, folding doors which connect the outdoors to your living space are a luxury but security is a necessity. Weatherfold 4s has two locking solutions available, Brio's 456 flush bolts for timber panels are available in many variations for all applications (see pages 29 and 30 for details). Brio's 512 flush bolts are specifically designed for aluminium panels and offer an easy solution to locking.

Brio's 286 dual point lock has been designed for timber and aluminium panels to offer a single action handle as a stylish alternative to two flush bolts. Brio's patented design can be used on Weatherfold 4s and single hinged panels (i.e. French doors). The 180° operation throws a shoot 22mm into the head and sill simultaneously for panels up to 3.5m high. Matching lever furniture 288, is also available with or without a built in magnetic catch. For more on Brio's 286 dual point lock visit Brio's website.

Adjustable Hinges

Brio's patented XY hinges are designed for 100kg aluminium and timber panels which are hinged to a jamb as a system or as an individual door. The discreet, surface fix design allows quick and easy installation and simple 2D adjustment of the panel which ensures the panel stays true to its perimeter seal and maintains weather performance.

Brio 286 Dual Point Lock and 288 Lever Furniture



Brio XY Adjustable Hinge



Self Draining Sills

Brio provides two optional self draining sills which suit 38-40mm panels. The 95HS sill operates with Brio's 456 flush bolts and the 94HS operates with Brio's 286 dual point lock. Both have the option to integrate Brio's 612 screen.

Magnetic Catches

The 882 magnetic catch enables the access swing door to be attached to the adjacent panel. The catch is designed to match the size, radii and finishes of Brio flush bolts and pulls.

An alternative to the 882 catches are Brio's 828 catches which are available in satin nickel or powder coat black. These catches use a rubber membrane to cushion their closing action.

Jamb Pivot

The BW189 jamb pivot is an adjustable centre hinge for Weatherfold 4s applications that require additional central support or where panels are taller than 2400mm. Hinging to the jamb provides a robust installation by fixing the panel in three locations.

Security Aligner

An alternative to the BW189 is the 199SS security aligner. This discreet product pulls the pivot door onto the frame to seal as the panel rotates shut. The 199SS is concealed and inaccessible when the doors are closed for additional tamper-proof security.



Durability

Nothing carries the Brio brand without undergoing a rigorous test program. A proven performer, Weatherfold 4s is no exception. All components of Weatherfold 4s have passed endurance tests, so you can rest assured that Weatherfold 4s is built to last.

Corrosion resistance

Weatherfold 4s has completed extensive corrosion resistance tests conducted in an industry standard salt spray chamber.

Weatherfold 4s uses the highest quality corrosion resistant materials. All components are constructed using 300 series stainless steel, with the cast items in 316 grade.

Brio is one of only a few global companies to passivate all visual stainless steel surfaces and electro-polish all cast stainless components. These processes greatly reduce and eliminate surface discoloration often referred to as 'tea-staining'.

The Weatherfold 4s premium finishes of Satin Stainless, Polished Stainless or PVD Brass provide another level of protection from the elements and further enhance the system's durability.

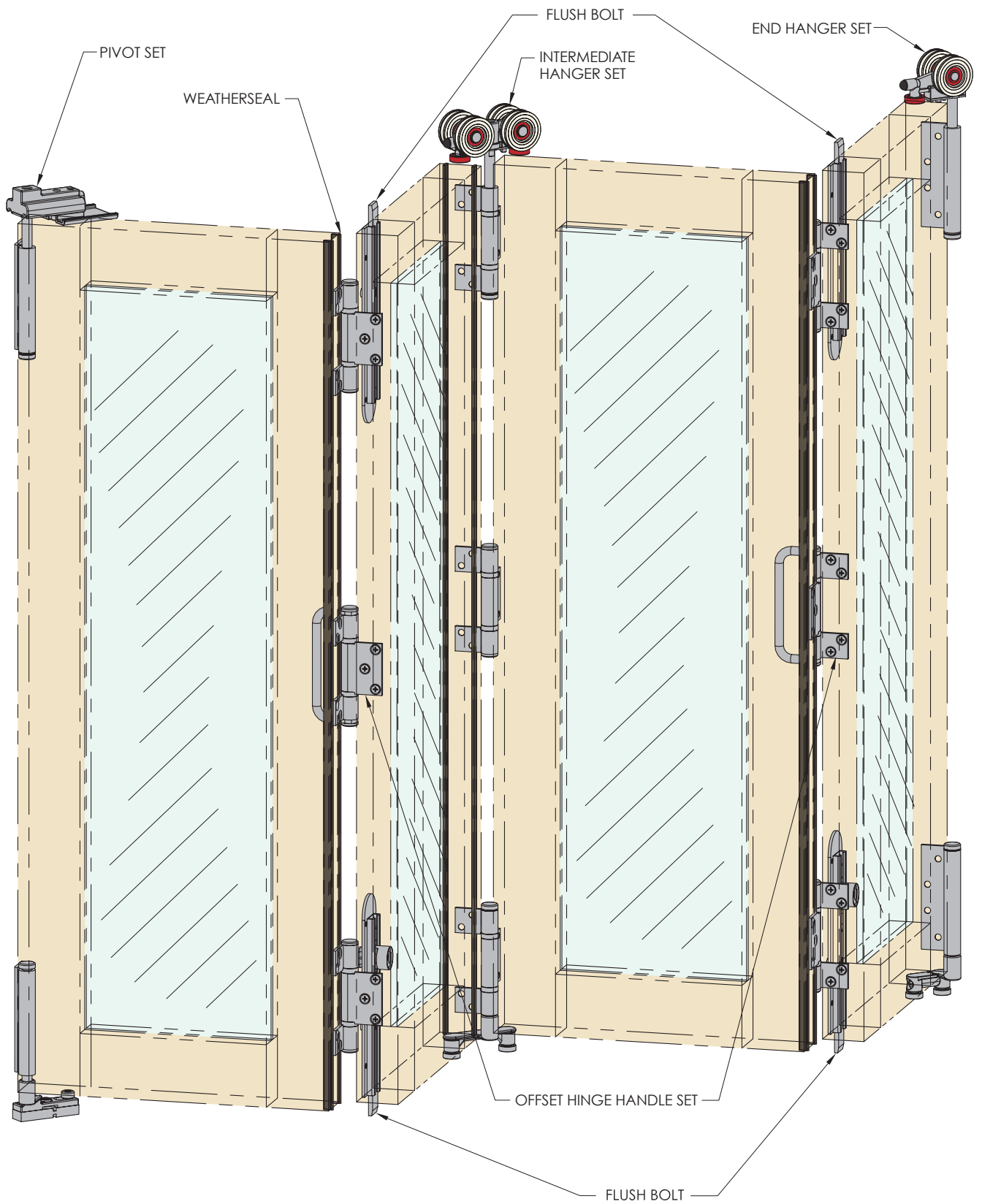
Backed by Brio's 10 Year Warranty

Brio Weatherfold 4s uses only the highest quality materials and is the culmination of countless hours of research and development and rigorous product testing. Therefore Brio is pleased to offer a 10 year warranty on all Weatherfold 4s hardware. Refer to Brio's web site for details.



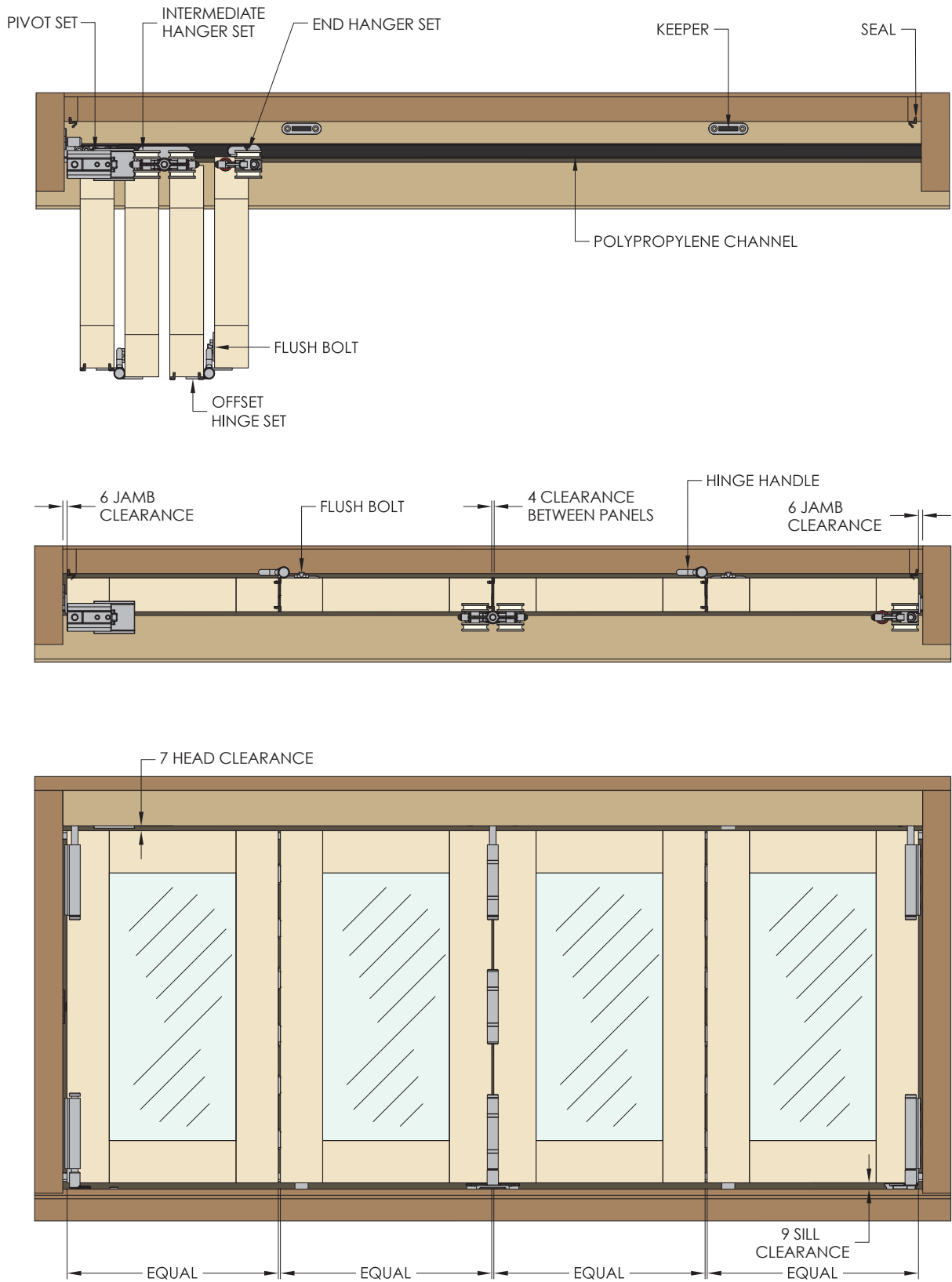
Weatherfold 4s 100

Hardware Layout – Non Mortise Hinges



Weatherfold 4s 100

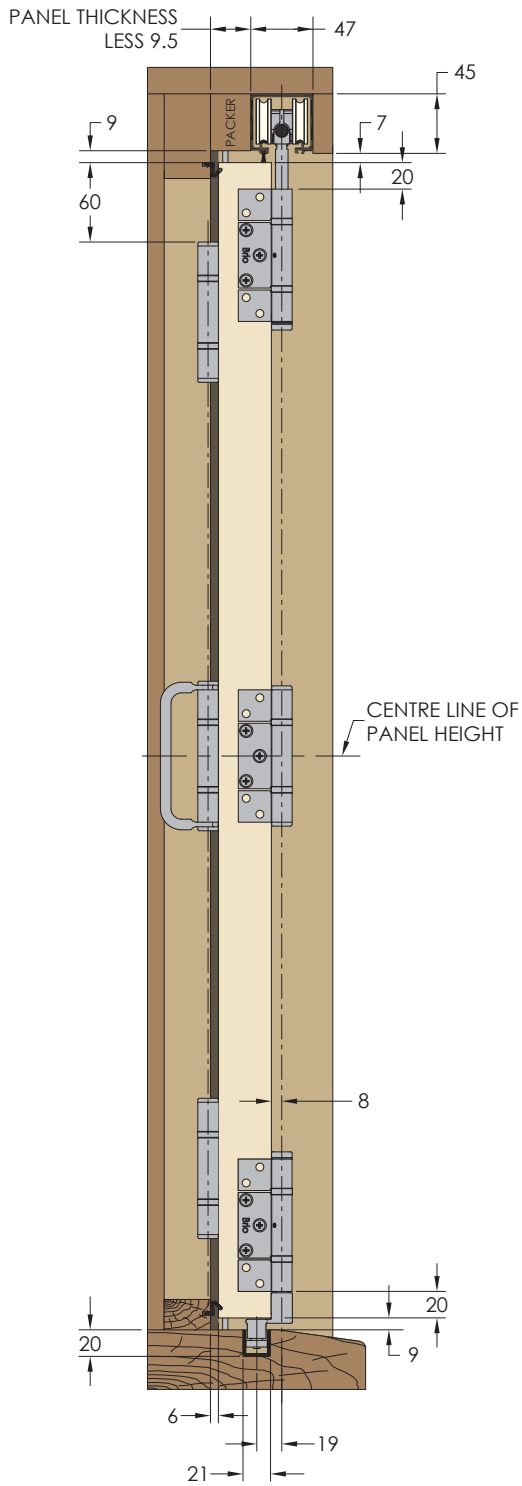
Top and Front Views – Non Mortise Hinges



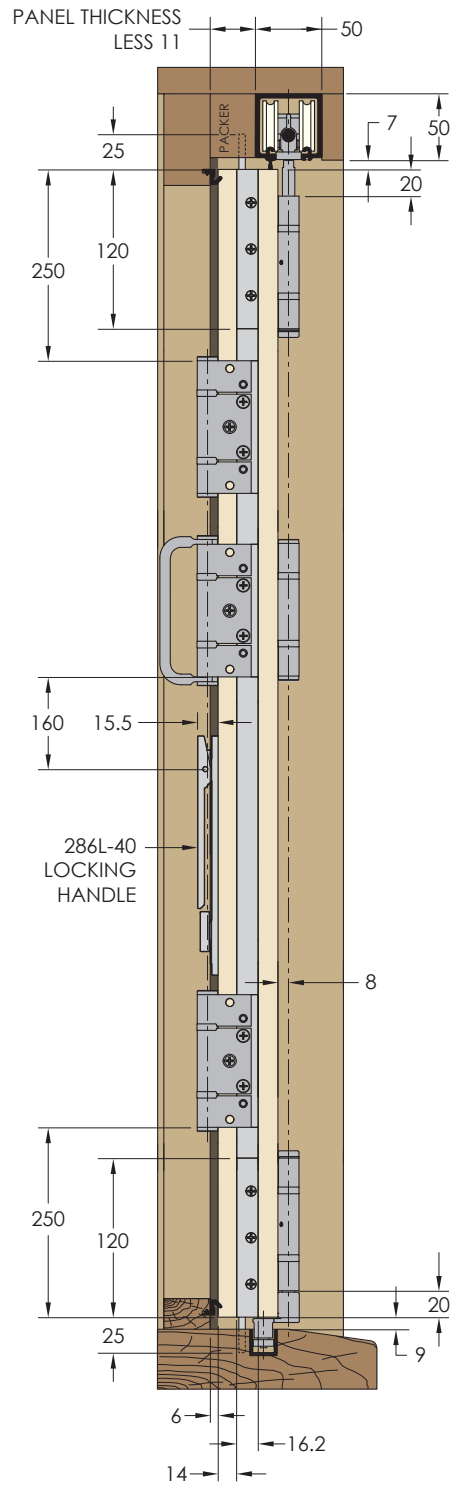
Weatherfold 4s 50 and 100

End View – Non Mortise Hinges

BRIO WEATHERFOLD 4s 50
SHOWN WITH 456 FLUSH BOLTS



BRIO WEATHERFOLD 4s 100
SHOWN WITH 286 DUAL POINT LOCK



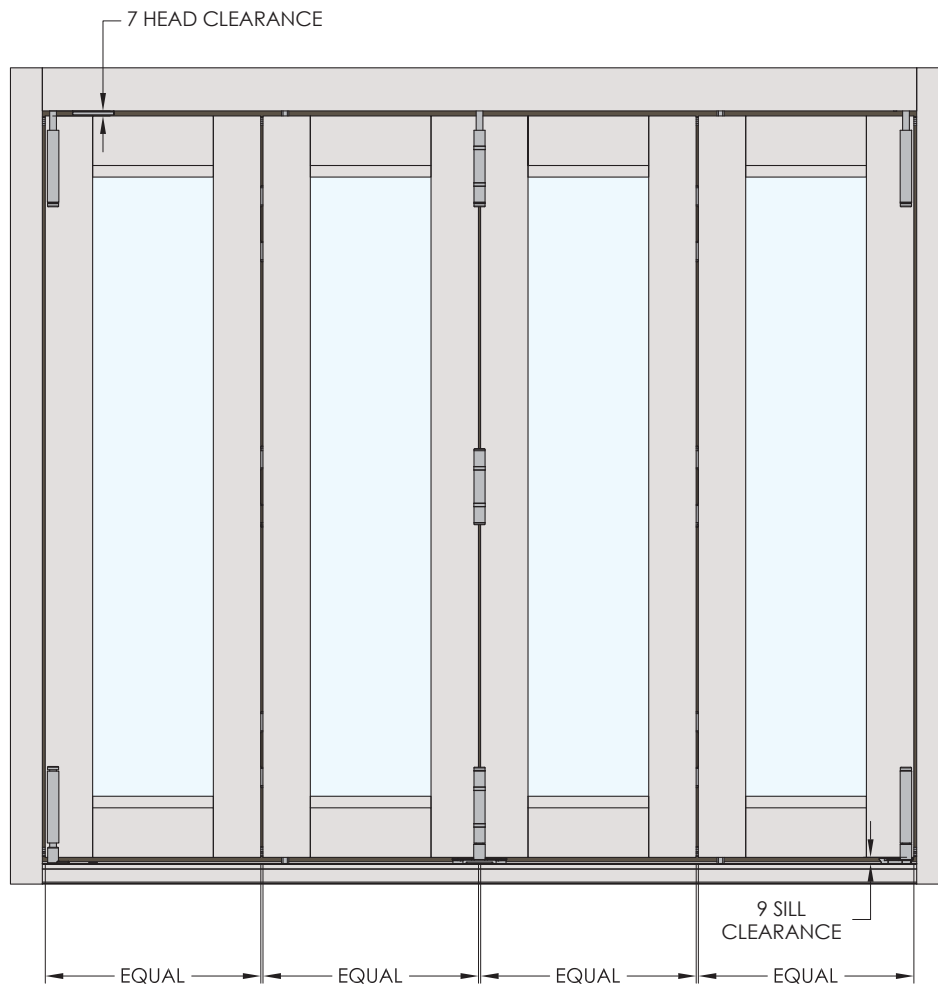
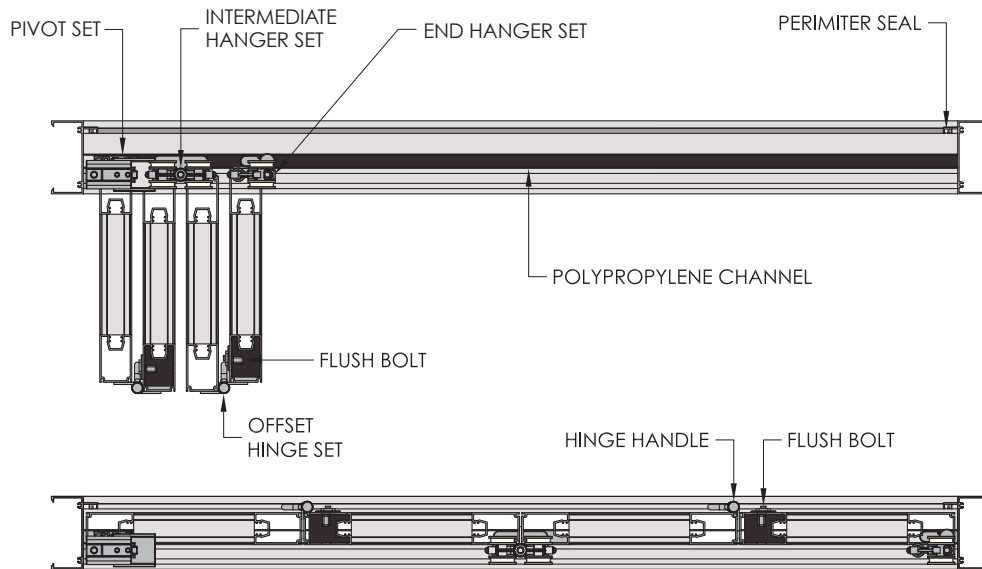
Weatherfold 4s 100

Hardware Layout – Non Mortice Hinges Aluminium Panels



Weatherfold 4s 100

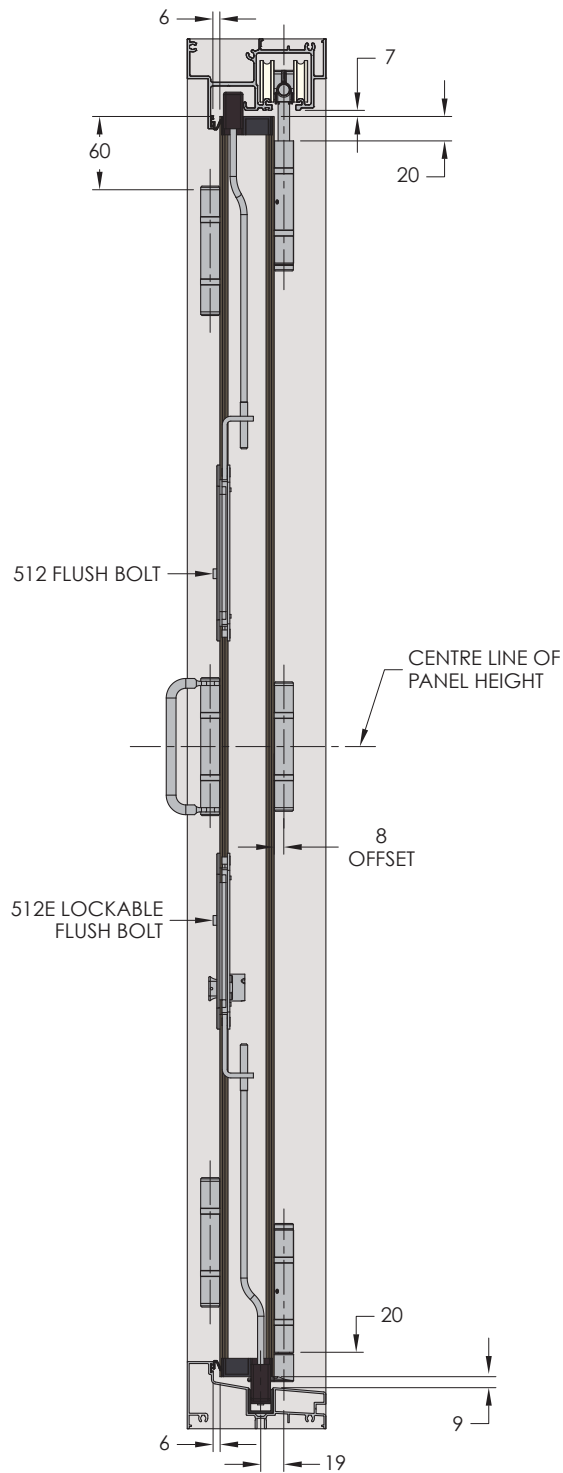
Top and Front View – Non Mortise Hinges Aluminium Panels



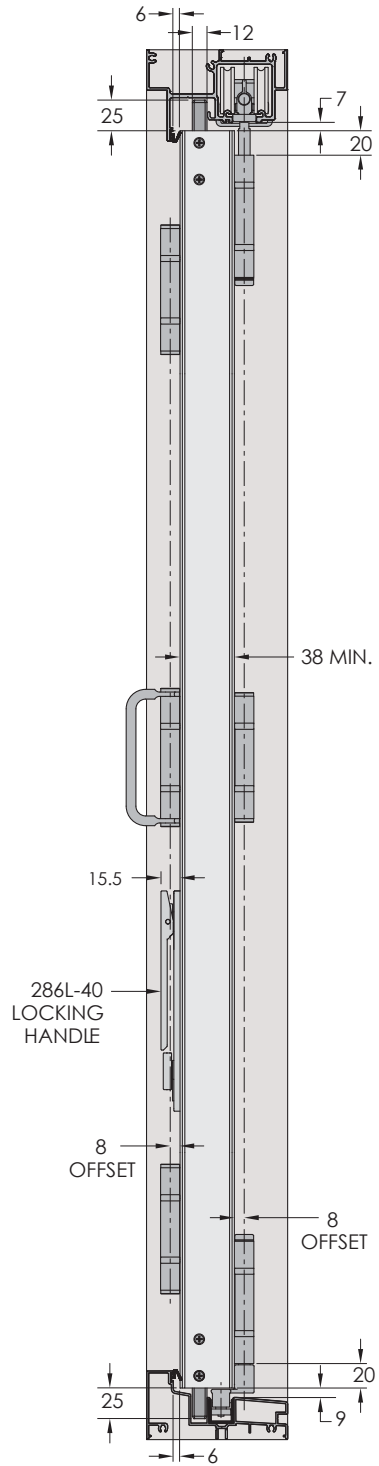
Weatherfold 4s 50 and 100

End View – Non Mortise Hinges Aluminium Panels

BRIO WEATHERFOLD 4s 50
SHOWN WITH 456 FLUSH BOLTS

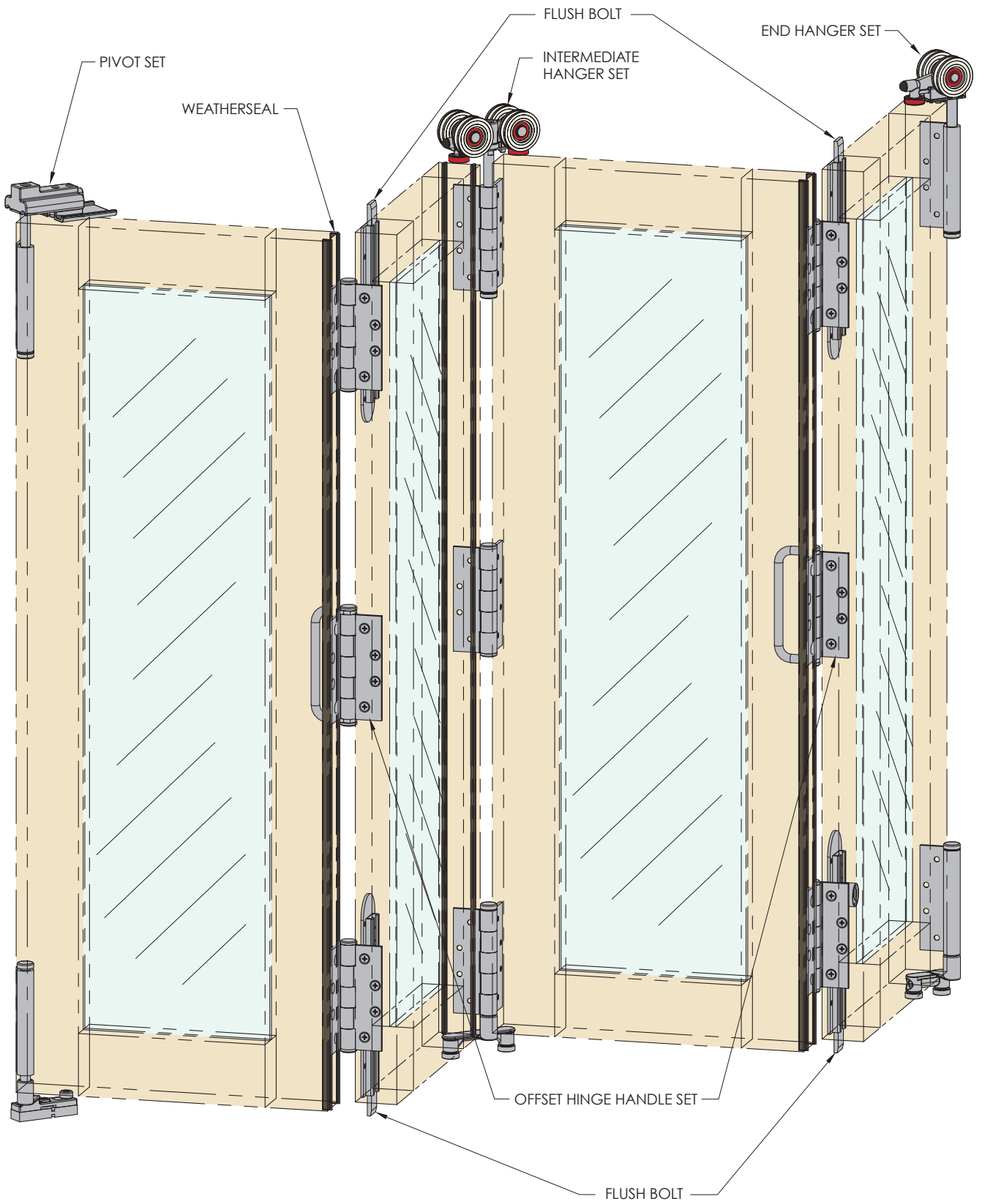


BRIO WEATHERFOLD 4s 100
SHOWN WITH 286 DUAL POINT LOCK



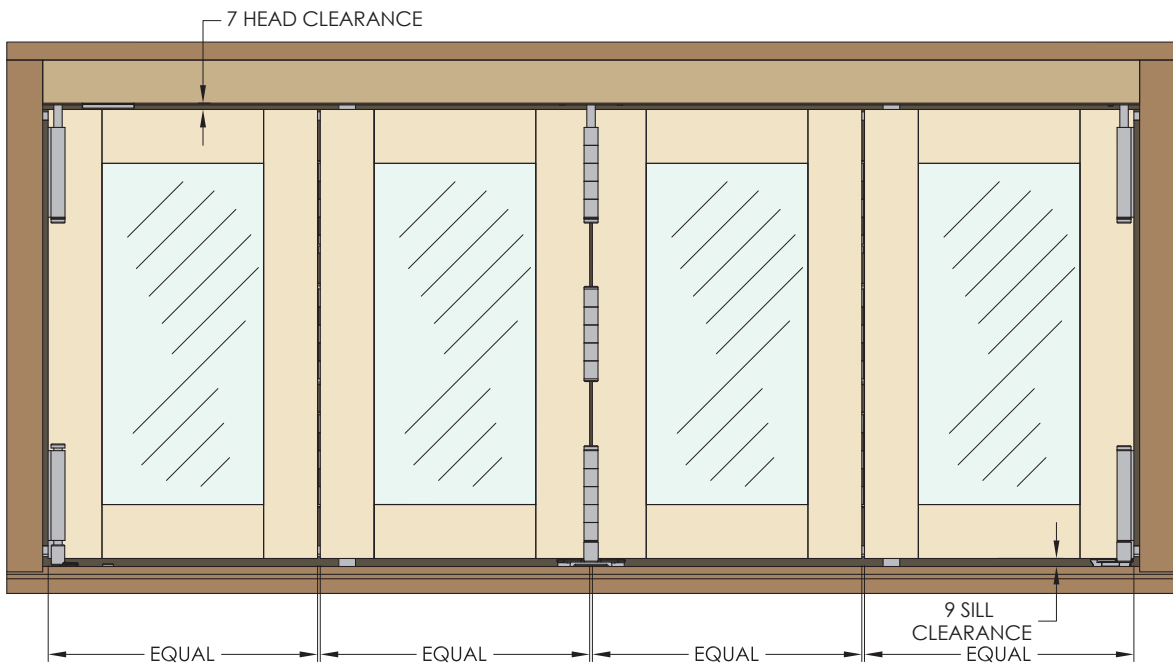
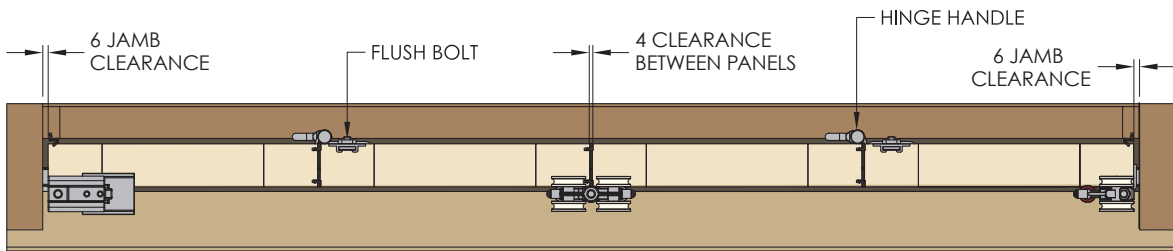
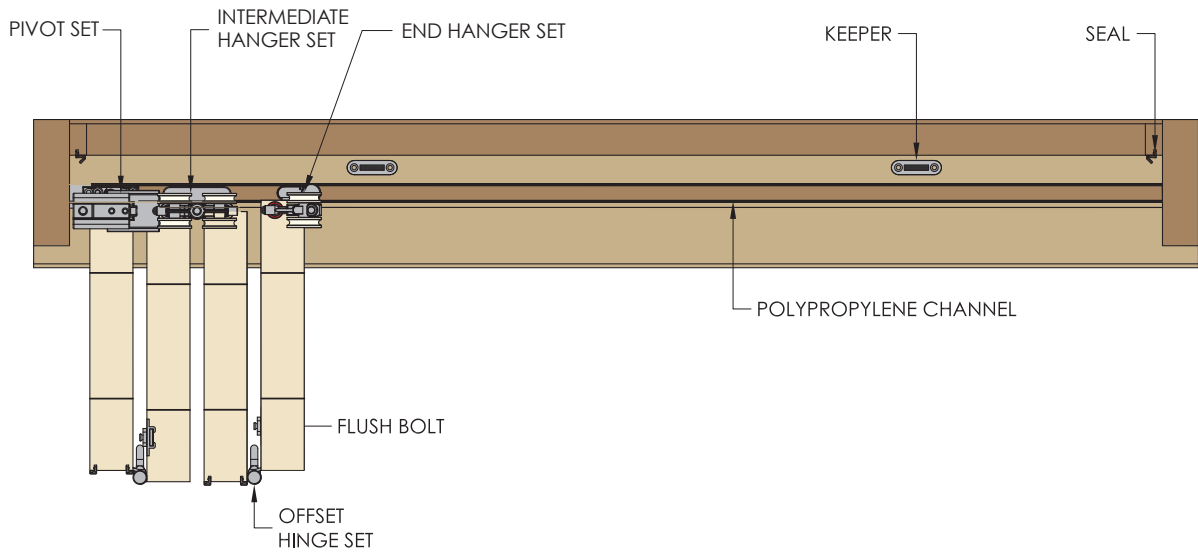
Weatherfold 4s 100

Hardware Layout – Mortise Square Corner Hinges



Weatherfold 4s 100

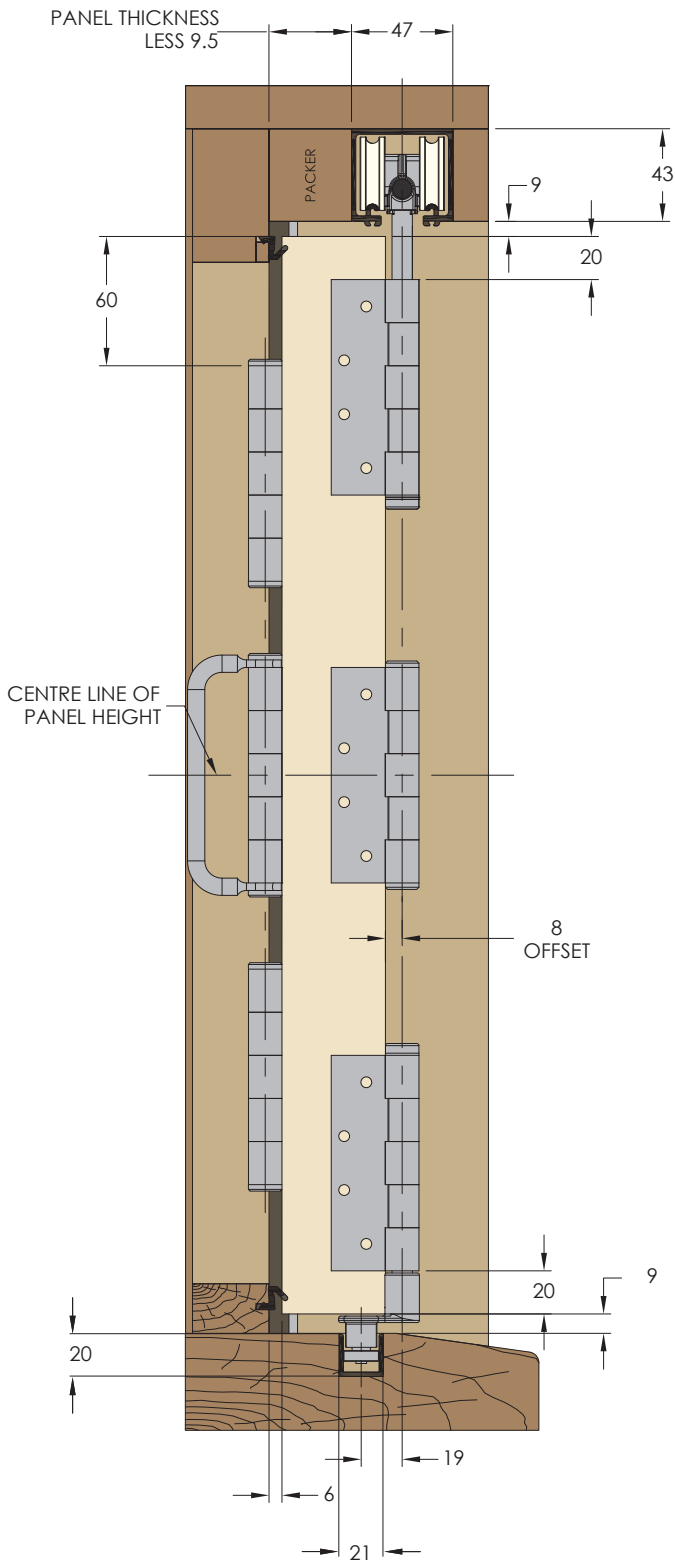
Top and Front View – Mortise Square Corner Hinges



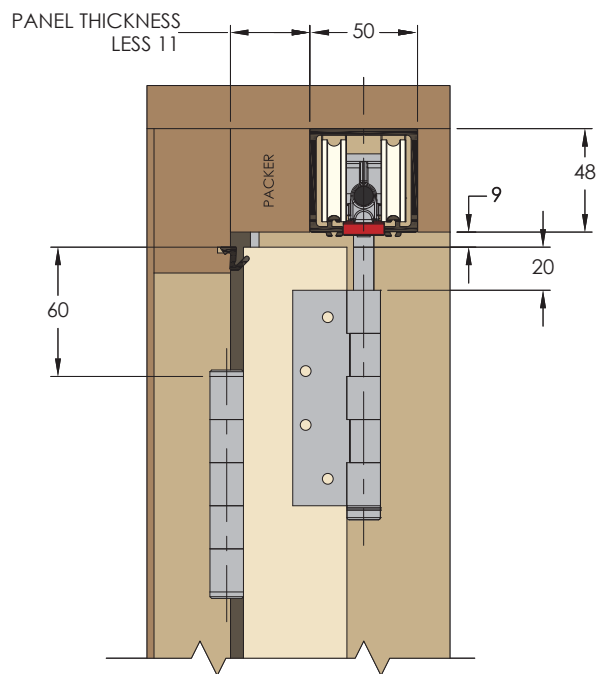
Weatherfold 4s 50 and 100

End View – Mortise Square Corner Hinges

BRIO WEATHERFOLD 4s 50
SHOWN WITH 456 FLUSH BOLTS

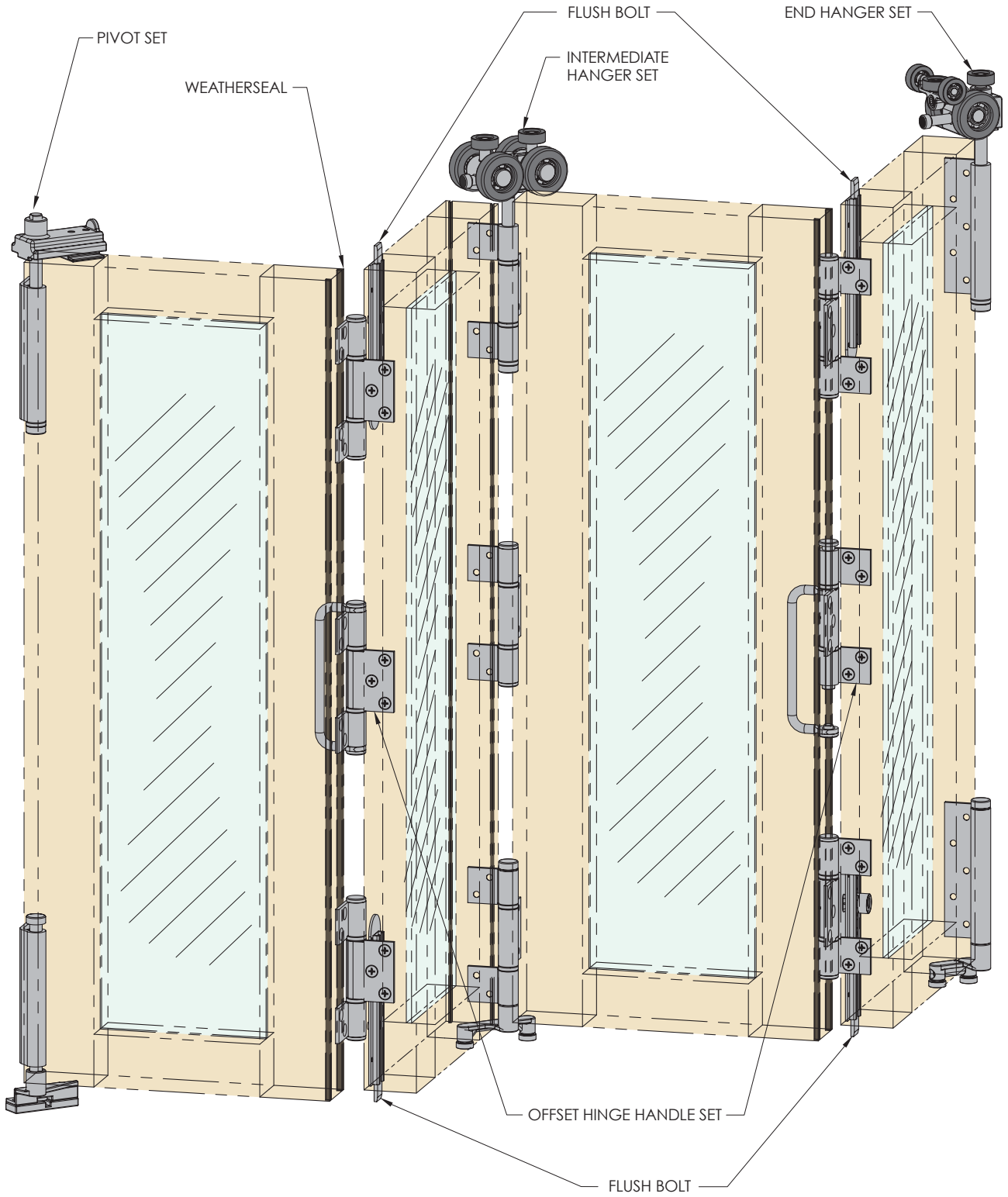


BRIO WEATHERFOLD 4s 100
SHOWN WITH 456 FLUSH BOLTS



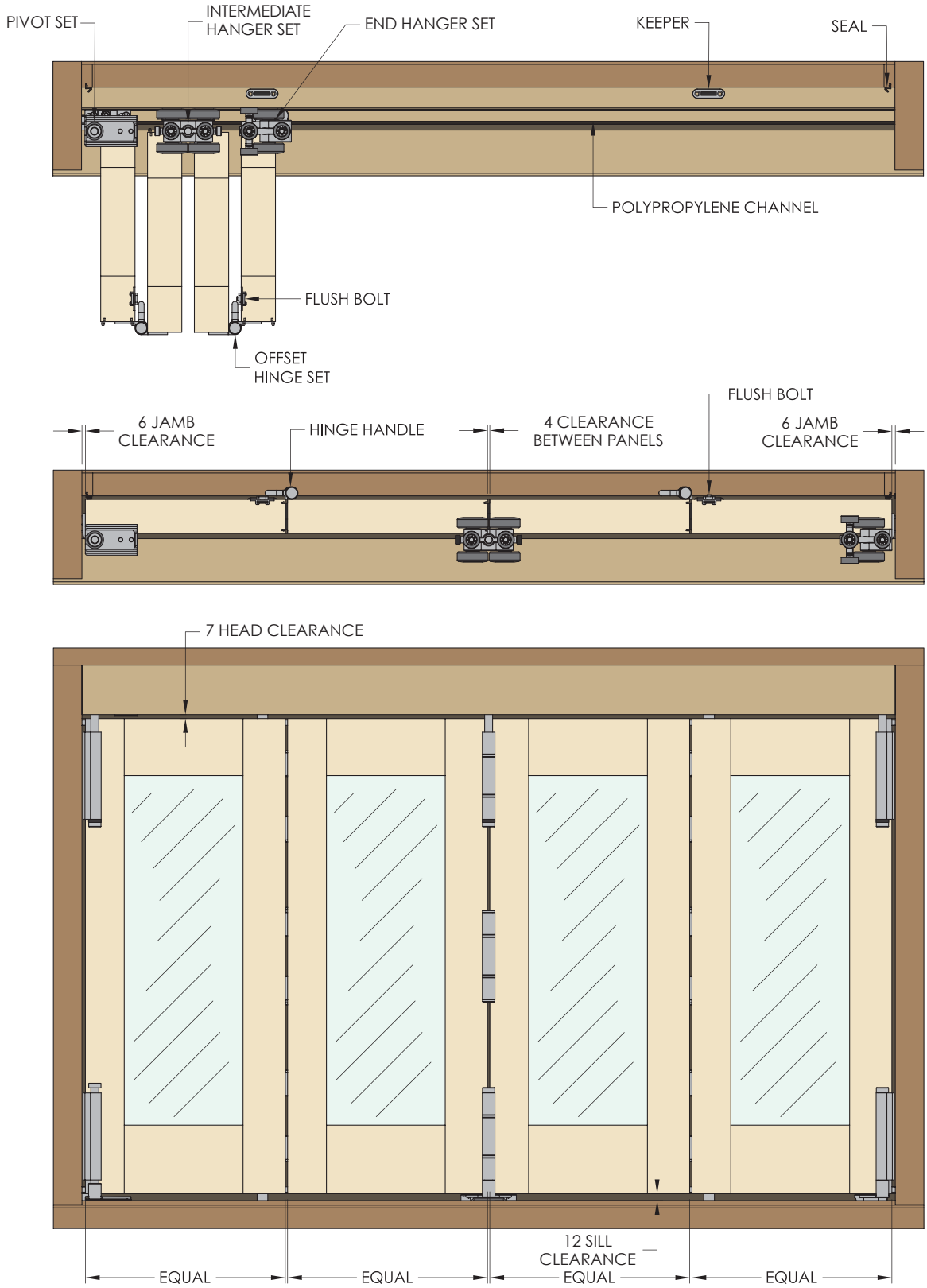
Weatherfold 4s 150

Hardware Layout – Non Mortice Hinges



Weatherfold 4s 150

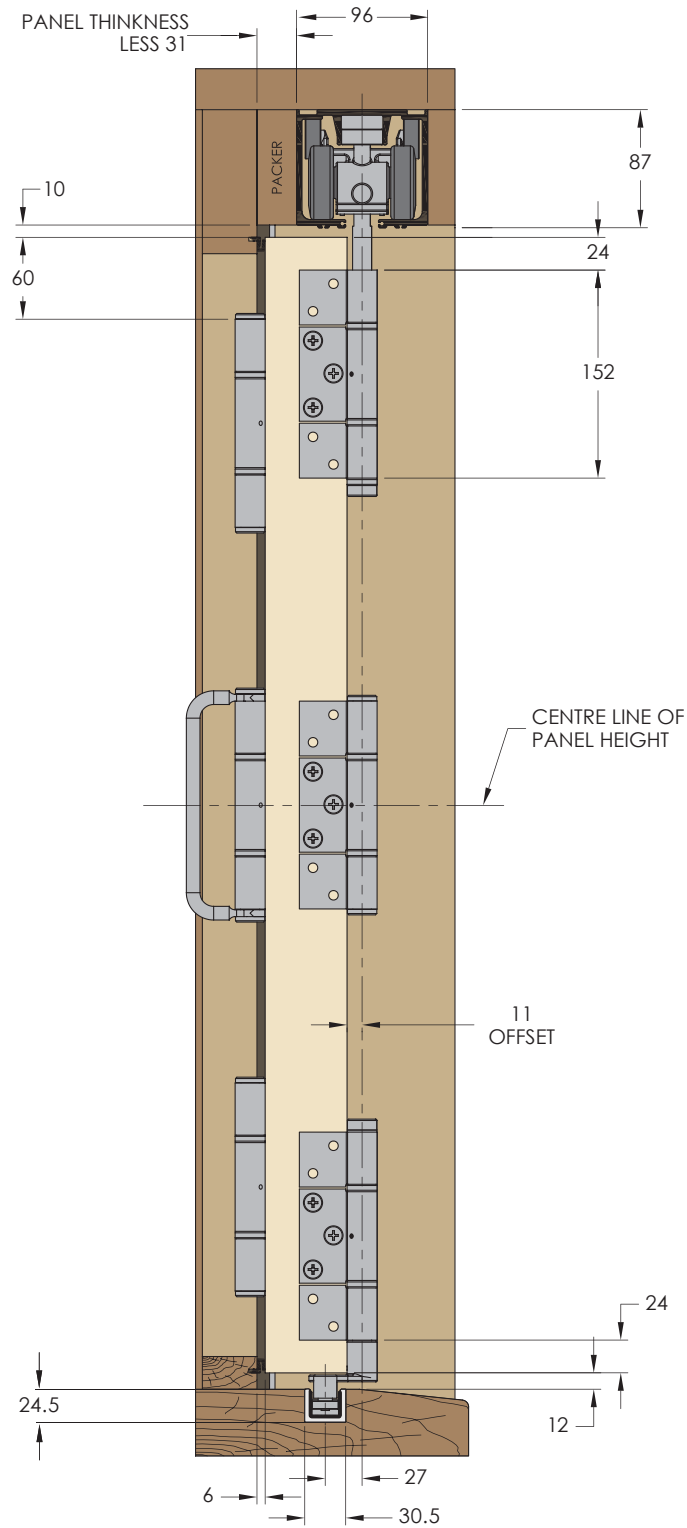
Top and Front View – Non Mortise Hinges



Weatherfold 4s 150

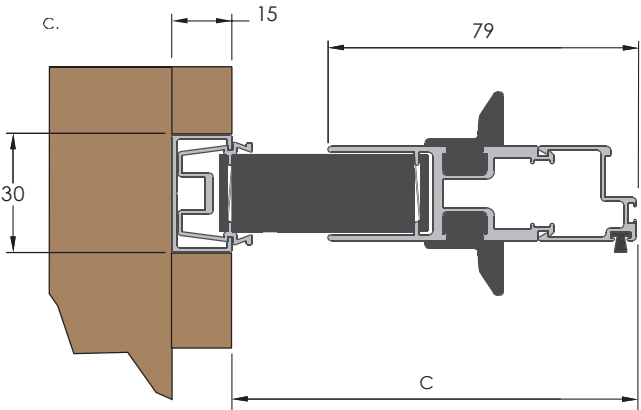
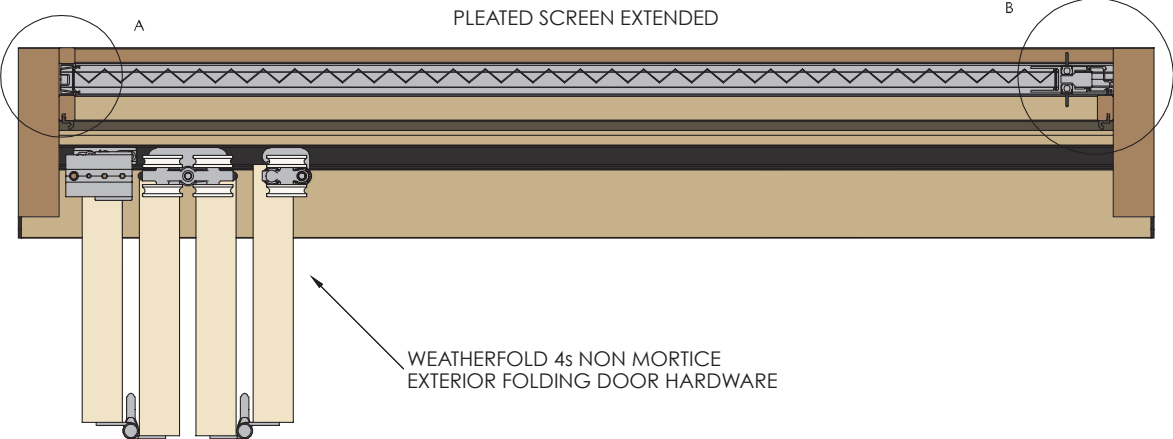
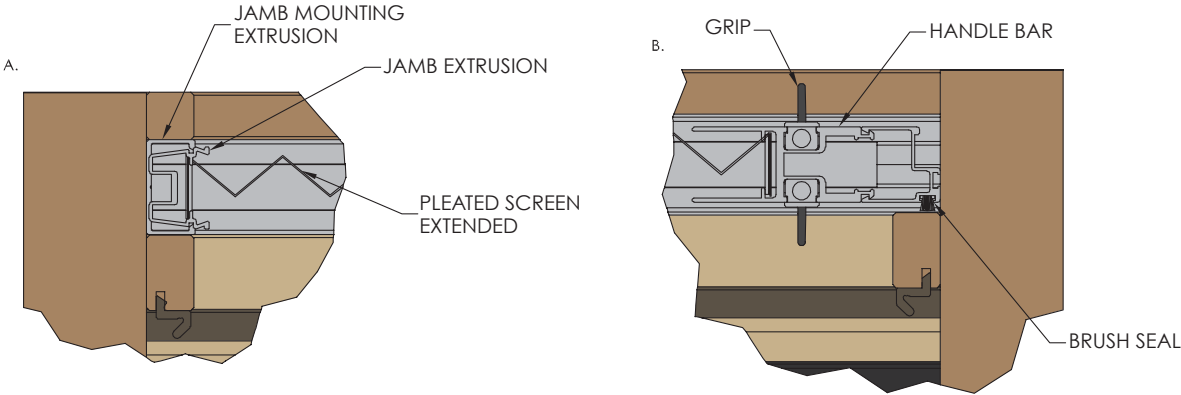
End View – Non Mortise Hinges

BRIO WEATHERFOLD 4s 150

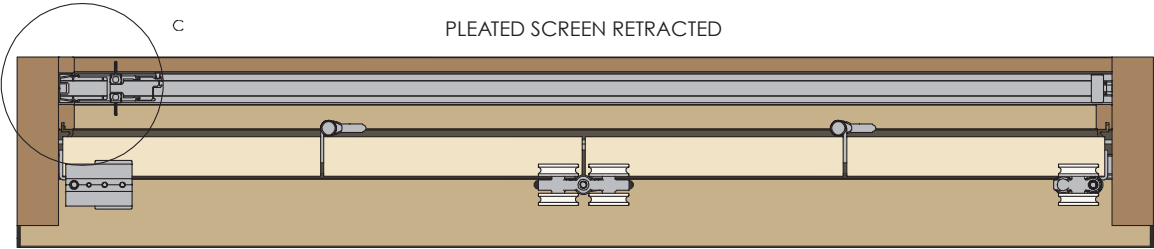


612 Integrated Retractable Pleated Insect Screen

Top View – Brio Weatherfold 4s 50 & 100

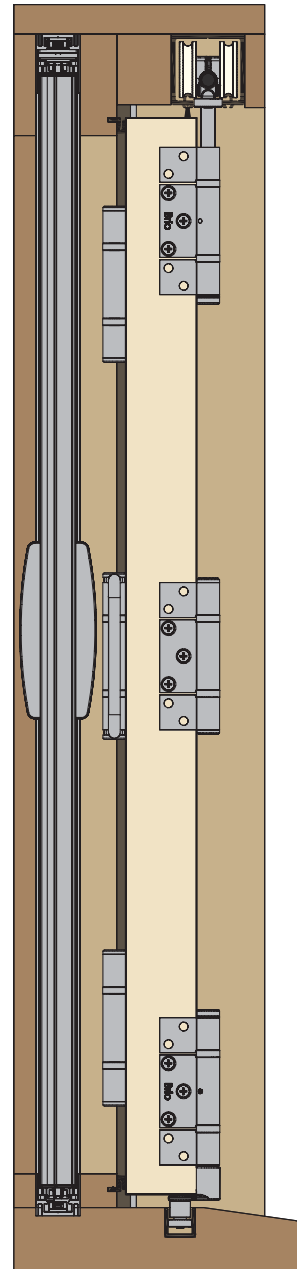
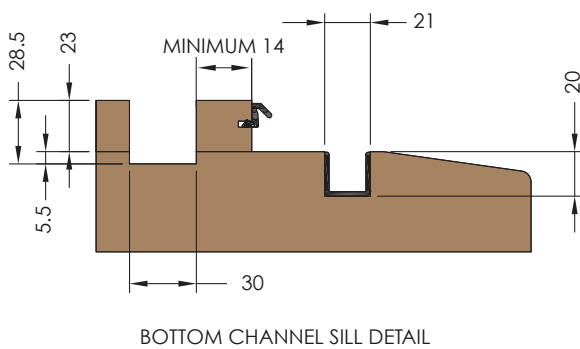
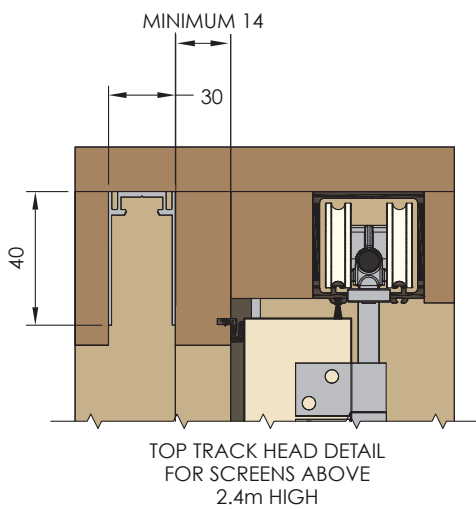
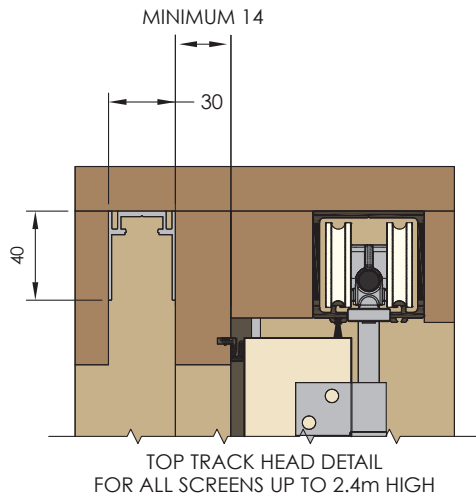


SCREEN WIDTH (mm)	DIMENSION C (OVERALL)
1100	85
1500	95
2000	110
2700	130
3600	155
4500	180

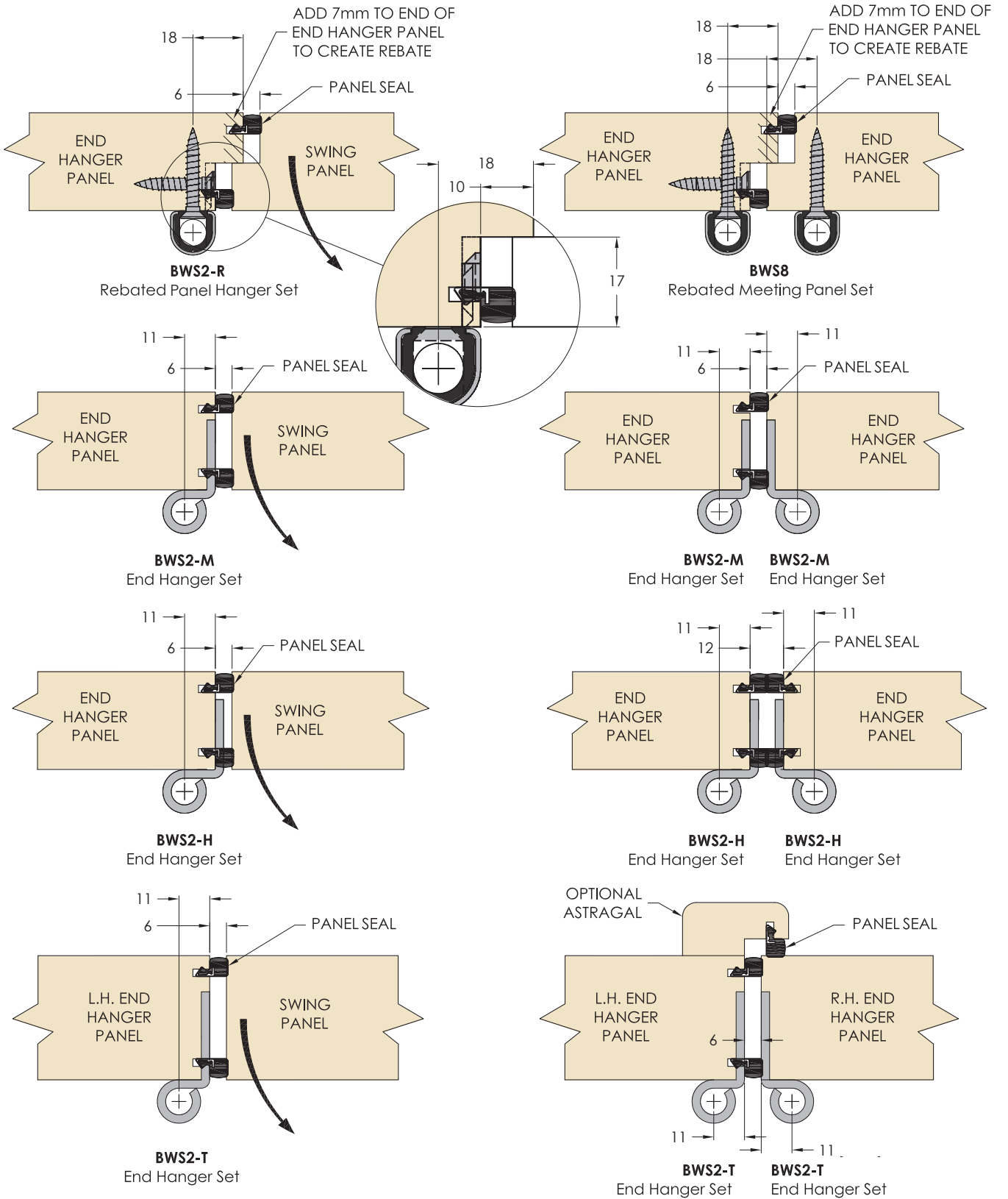


612 Integrated Retractable Pleated Insect Screen

End View – Brio Weatherfold 4s 50 & 100

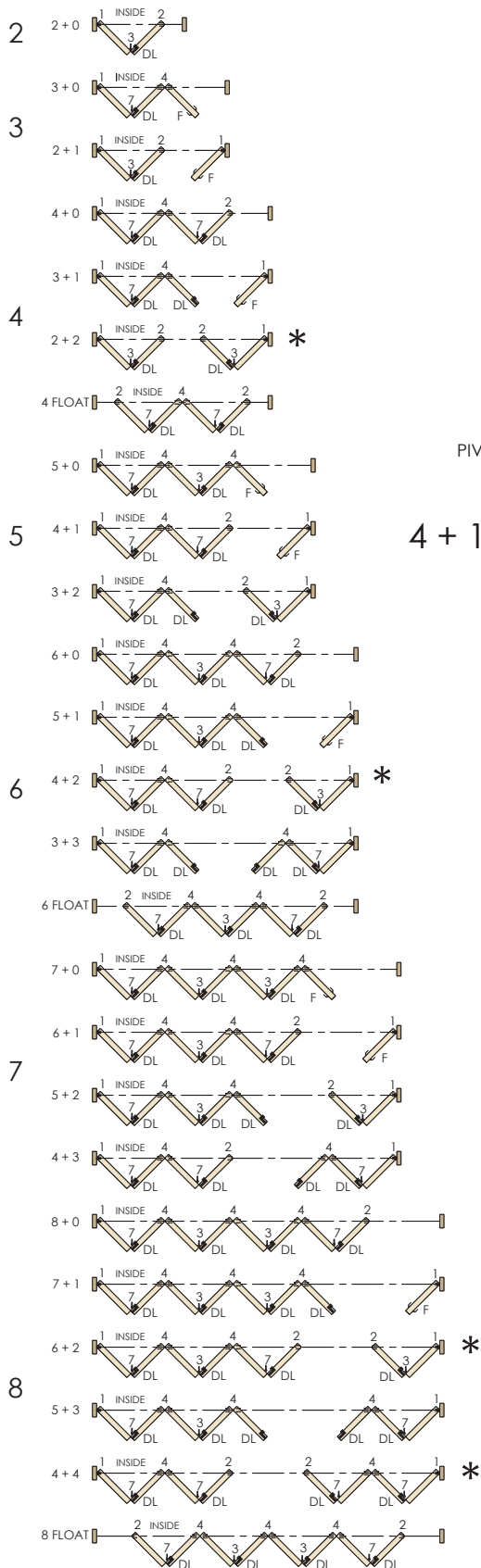


Meeting Panel Configurations



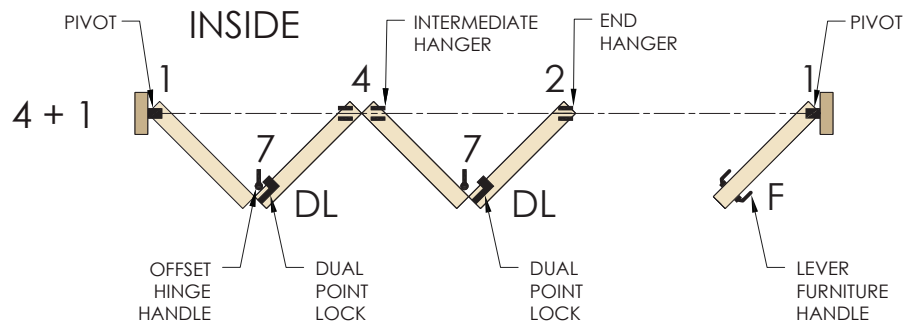
Panel Configuration and Hardware Location

Outward opening panels



HARDWARE LEGEND		
SYMBOL	REF.	DESCRIPTION
■	1	Adjustable pivot set
▬	2	End hanger set with guide
●	3	Hinge set with hinge handle
▬▬	4	Intermediate hanger set with guide
●	5	Hinge set
●	6	Offset hinge set
●	7	Offset hinge set with hinge handle
DL	DL	286 Dual Point lock
F	F	288 Lever Furniture handle set

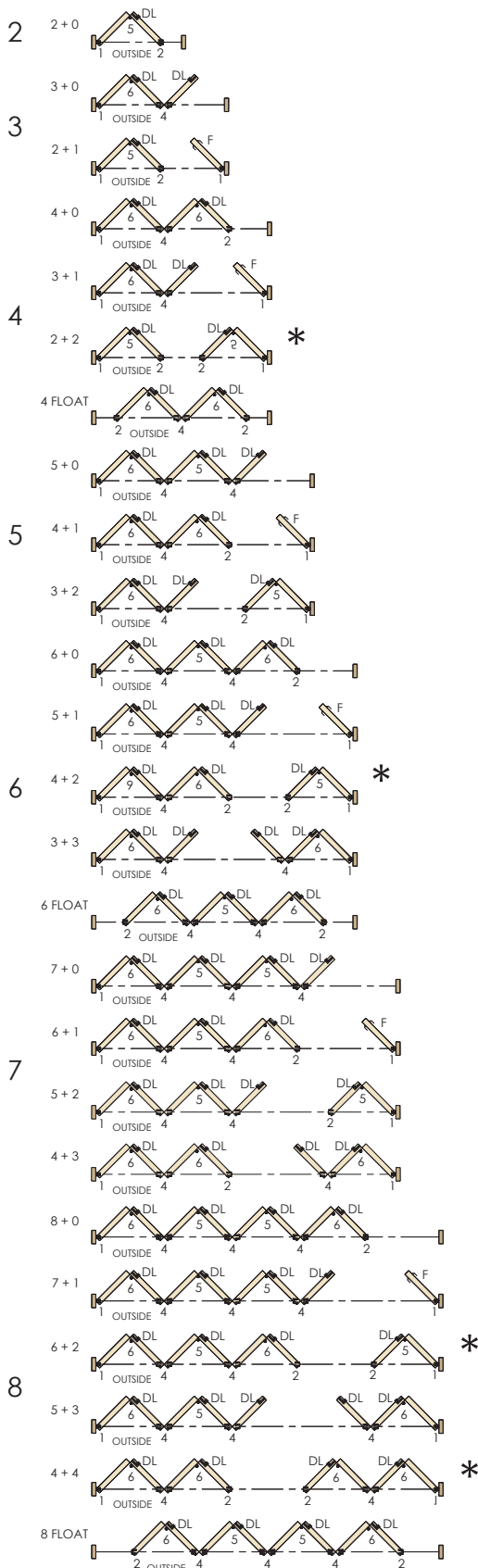
The reference number is an abbreviation of the full set number



* Two Set 2s mounted left and right are replaced with a single Set 8 if panels are rebated.

Panel Configuration and Hardware Location

Inward opening panels



Brio flush bolts and flush pulls can be used where 286 dual point locks, DL are indicated.

Flush Bolts are fitted in pairs, one lower and one upper. Upper flush bolts are supplied in different lengths depending on panel height, see table below:

Panel Height	Upper Flush Bolt Length
Panels up to 2100	190
2100 to 2400	450
2400 to 2600	600
Above 2600	1000

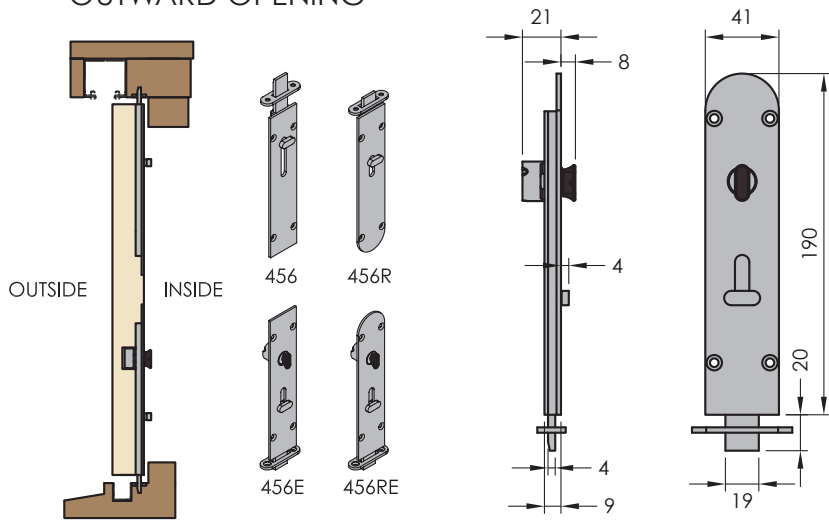
'N' type (cranked) flush bolts are used for inward opening panels and are also available in longer lengths for taller panels.

* Two Set 2s mounted left and right are replaced with a single Set 8 if panels are rebated.

Flush Bolts

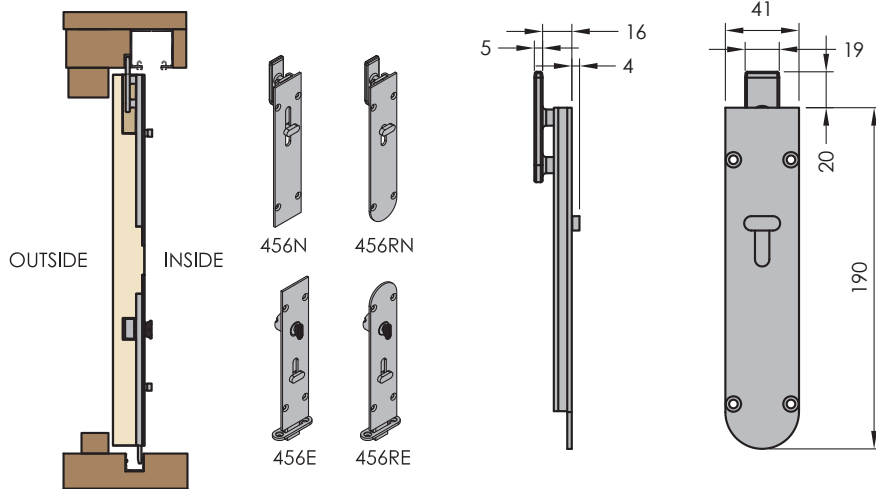
Timber Panels

OUTWARD OPENING

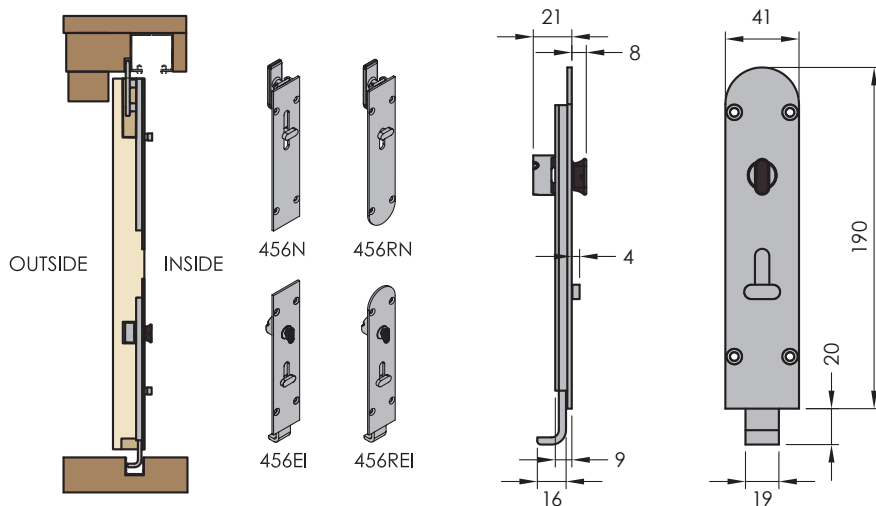


INWARD OPENING

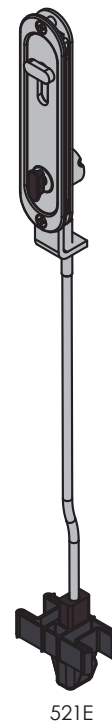
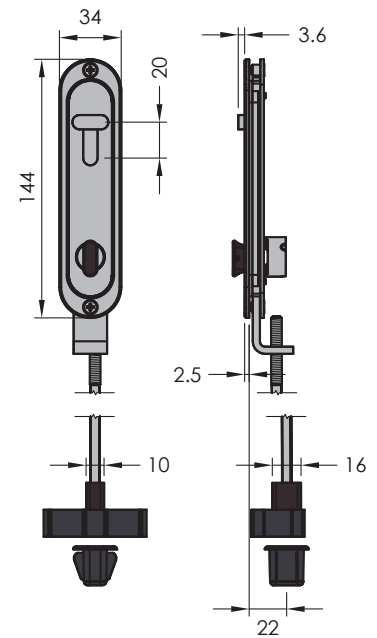
456N Flush Bolts for timber panels closing against a rebate.



456REI Flush Bolts for flush floor timber panels.



Aluminium Panels



Specifications

	Weatherfold 4s 50	Weatherfold 4s 100	Weatherfold 4s 150
Maximum panel weight	50kg	100kg	150kg
Maximum panel height	3m	3.3m	4m
Maximum panel width	1m	1m	1.2m
Maximum number of panels	16 (8 left and 8 right)	16 (8 left and 8 right)	16 (8 left and 8 right)
Maximum opening width	16m	16m	19.2m
Panel thickness Non mortice Mortice (square corner)	35 to 68mm 35 to 68mm	35 to 68mm 35 to 68mm	44 to 68mm
Hardware finishes	SS – Satin Stainless, PB – PVD Brass, PS – Polished Stainless,	SS – Satin Stainless, PB – PVD Brass, PS – Polished Stainless,	SS – Satin Stainless,
Hanger bearing options	Stainless Steel or Chrome precision bearings	Stainless Steel or Chrome precision bearings	Stainless Steel precision bearings
Track profile	180 Series	250 Series	700 Series
Locking options Dual point lock Flush bolts (timber) Flush bolts (aluminium)	286 Series 456 Series 512 Series	286 Series 456 Series 512 Series	456 Series
Self draining sills for 286 dual point lock for 456 ush bolt	94HS Series 95HS Series	94HS Series 95HS Series	
Screening	612 Retractable Insect Screen	612 Retractable Insect Screen	612 Retractable Insect Screen

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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

