

# SECTION B

## Projected Window Hardware

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## 4B Series Friction Hinges Stainless Steel Awning Hinges

A premier range of 4-bar friction hinges (stays) used for the support and frictional control of projected top hung (PTH) sashes. Manufactured from 304 grade austenitic (non-magnetic) stainless steel, the range caters for the sizes and weights of sashes normally associated with residential or light commercial applications.

### Features

- A comprehensive range to cater for most applications
- Manufactured with the unique “pull-in” feature
- No sliding channels
- Factory set friction levels mean no on-site adjustment is required
- Fixed directly through the bearing eyelet as well as through the formed screw or rivet holes
- New Zealand made

### Options

- Available in three sizes, designated by the frame plate length, catering for sashes weighing up to 30kg. The selection of which is determined by the sash weight and height (refer chart below)
- Includes specific function models:
  - Non-friction for use with window control mechanisms
  - Reduced friction

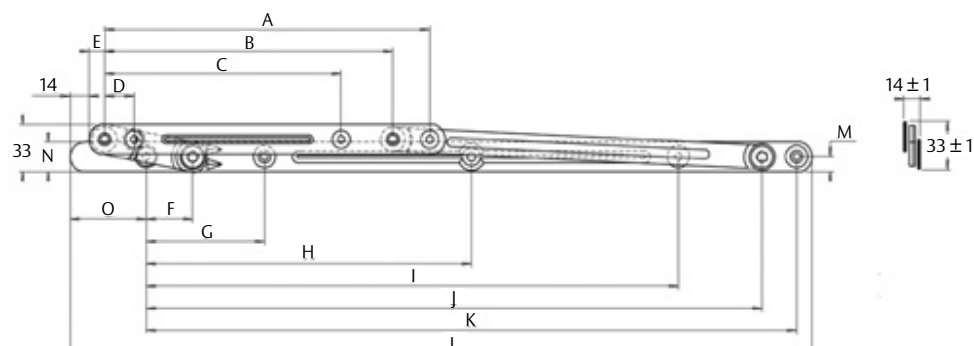


### Specifications

Model	Application	Max. Sash Height	Opening Angle	Max. Sash Weight	Product Number
200 4BV	PTH	300mm	40°	8kg	P1001
200 4B	PTH	600mm	40°	10kg	P1002
200 4B NF	PTH	***	40°	10kg	P1002NF
350 4B	PTH	800mm	30°	20kg	P1003
350 4B NF	PTH	***	30°	20kg	P1003NF
500 4B	PTH	1800mm	25°	30kg	P1004
500 4B NF	PTH	***	25°	30kg	P1004NF

(mm)	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
2004B	80	54.35	-	20	8.5	29.1	-	-	-	134.1	149.7	198.2	8	16	40
3504B	140	113.9	-	20	8.5	28.9	160	-	-	283.9	300	348.5	8	16	40
5004B	220	195	160	20	10.5	31.5	80	220	360	416.6	440	502.5	10	20	52

Note: Letters apply to dimension diagram below.

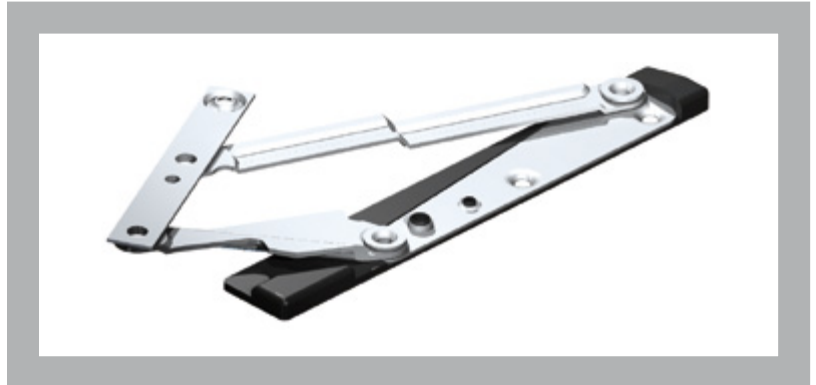


## 4BC Series Friction Hinges Stainless Steel Casement Hinges

A premier range of 4-bar friction hinges (stays) used for the support and frictional control of projecting side hung (PSH) aluminium, timber or uPVC sashes. Manufactured from 304 grade austenitic (non-magnetic) stainless steel, the range caters for the sizes and weights of sashes normally associated with residential or light commercial applications.

### Features

- A comprehensive range to cater for most applications
- Manufactured with the unique “pull-in” feature
- No sliding channels
- Factory set friction levels thus no on-site adjustment necessary
- New Zealand made



### Options

- Available in four sizes, designated by the frame plate length, catering for sashes weighing up to 40kg. The selection of which is determined by the sash weight and width (refer chart below)
- Non-friction model for use with window control mechanisms.

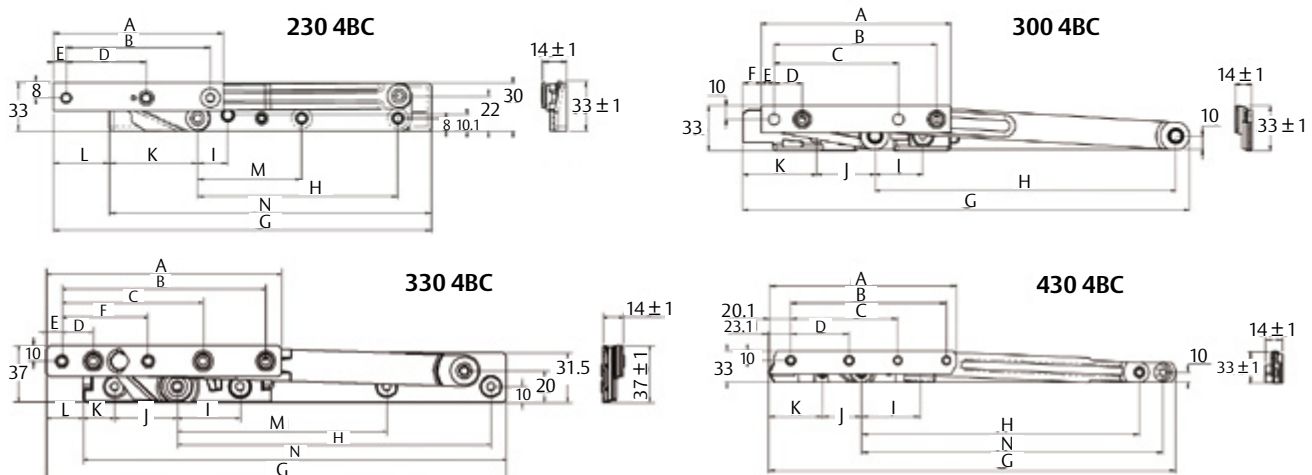
### Specifications

Model	Application	Max. Sash Width	Opening Angle	Max. Sash Weight	Product Number
230 4BC	PSH	800mm	90°	25kg	P1090
230 4BC NF	PSH	***	90°	25kg	P1090NF
230 4BC R	PSH	800mm	77°	25kg	P1090R
300 4BC	PSH	750mm	56°	20kg	P1120
430 4BC	PSH	1000mm	90°	40kg	P1080
430 4BC NF	PSH	***	90°	40kg	P1080NF
430 4BC SH	PSH	***	90°	40kg	P1080SH

Note: Interlock casement stays are only recommended for use on casement windows where the window height is twice the window width.

(mm)	A	B	C	D	E	F	G	H	I	J	K	L	M	N
<b>230 4BC</b>	106	90	-	50	8	-	236	125	18.9	-	55	34	65	201
<b>300 4BC</b>	139	119	91	21	9	11	325	220	35	43	52	-	-	-
<b>330 4BC</b>	150	130	90	20	10	55	293	200	40	40	20	23	133.5	270
<b>430 4BC</b>	193	160	110	60	-	-	420	285.7	60	40	57	-	-	310

Note: Letters apply to dimension diagram below.



# Projected Window Hardware

## DA32 Series Aluminium Hinges

A unique two phase range of 4-bar friction hinges (stays) providing a double operating action for projected top hung (PTH) windows. The first phase allows ventilation whereas the second phase allows the sash to slide into the near horizontal cleaning position. The DA32 double action range is designed to cater for sash heights associated with residential usage up to 18kg.

### Features

- Unique feature allowing easy access for cleaning top hung sashes
- Manufactured with the unique 'pull-in' feature
- A complete range to cater for most applications
- Easy to operate press button – automatically resets on closing
- Designed to provide easy and precise installation
- Black powdercoated finish

### Options

- The DA32 series offers four sizes of double action friction stay: - 250mm, 250mm, 550mm, and 750mm

Stay selection is determined by the sash height and weight (refer chart below).

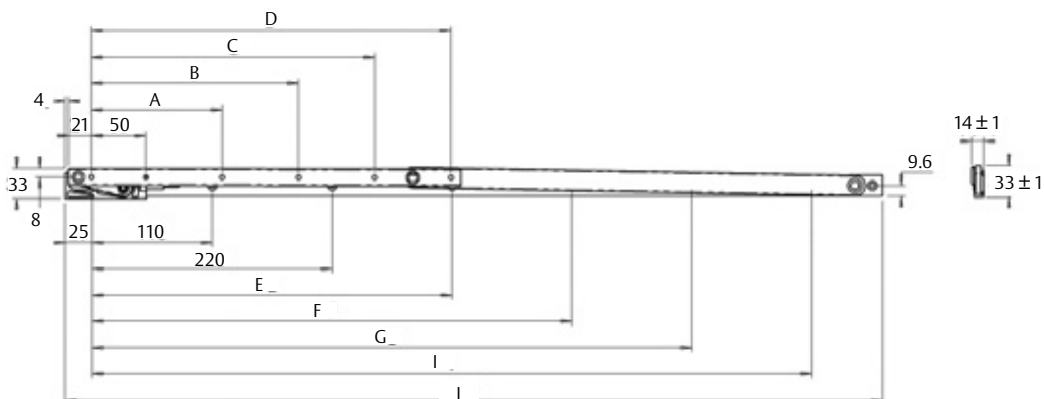


### Specifications

Model	Application	Max. Sash Height	Opening Angle	Max. Sash Weight	Product Number
250 DA32	PTH	375mm	38° / 90°	6kg	P290B
350 DA32	PTH	525mm	30° / 90°	9kg	P291B
550 DA32	PTH	825mm	28° / 90°	14kg	P292B
750 DA32	PTH	1125mm	20° / 90°	18kg	P293B

(mm)	A	B	C	D	E	F	G	H	I	J
250 DA32	-	-	-	100	-	-	-	-	220	253
350 DA32	100	-	-	170	-	-	-	-	322	355
550 DA32	100	-	-	240	330	440	-	-	502	535
750 DA32	120	190	260	330	330	440	550	660	716	750

Note: Letters apply to dimension diagram below.

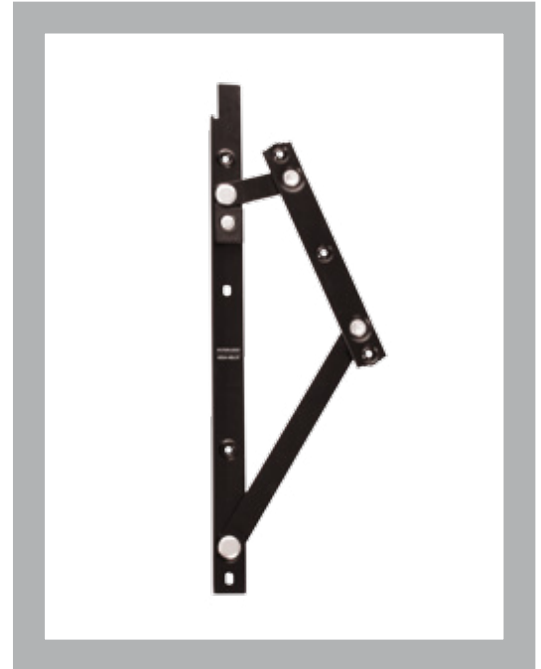


## Nexus High Capacity Aluminium Hinges

Developed in response to changing market requirements for larger window sashes in projected top hung windows, the Nexus range can support window weights of up to 60kg and 2m in height, while still maintaining endurance performance and handle forces, making it the highest capacity aluminium residential window stay on the market.

### Features

- Supports window weights up to 60kg
- For installation in windows up to 2m high
- Patent pending for new innovative integrated friction joint
- Geometry optimized for window range for consistent handle forces
- Manufactured with the unique 'pull-in' feature
- Identification mark for High Friction versions
- For projected top hung windows
- A complete range for residential applications
- Direct replacement for the current A-Stay range
- Made from extruded aluminium with no sliding channels
- Black powdercoat finish



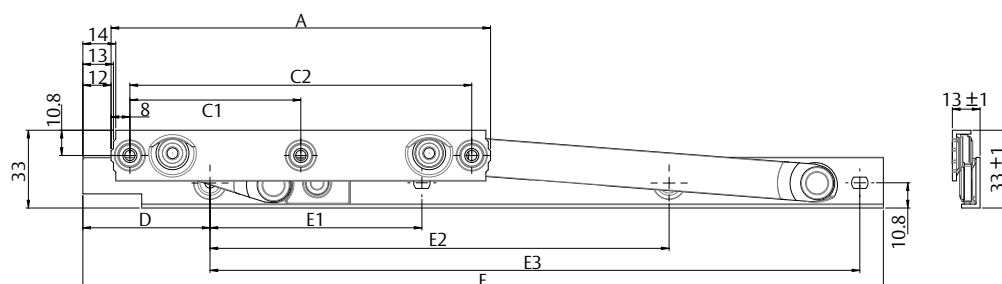
### Options

- Available in four sizes to cater for sash weights up to 60kg
- Includes specific function models: 'A' Standard Friction, 'H' High Friction, 'N' Non Friction

Model	Application	Max. Sash Height	Opening Angle	Max Sash Weight	Product Number
240A HCA	PTH	600mm	34°	10kg	XP240A
240H HCA	PTH	600mm	34°	18kg	XP240H
240N HCA	PTH	600mm	34°	18kg	XP240N
340A HCA	PTH	1000mm	28°	18kg	XP340A
340H HCA	PTH	1000mm	28°	30kg	XP340H
450H HCA	PTH	1500mm	20°	45kg	XP450H
710H HCA	PTH	2000mm	17°	60kg	XP710H

(mm)	A	B	C1	C2	C3	D	E1	E2	E3	E4	F
240 Stay	113	8	48.6	97.2	-	54	90	176	-	-	240
340 Stay	161	8	72.6	145.2	-	54	90	195	276	-	340
450 Stay	231	8	48.6	166.6	215.2	54	90	276	520	646	450

Note: Letters apply to dimension diagram below.

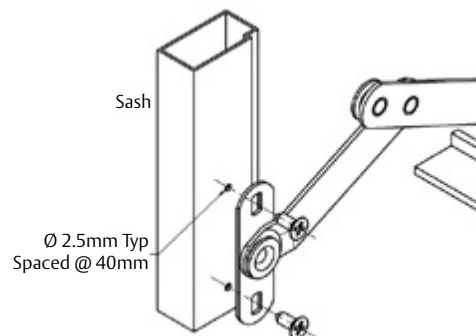
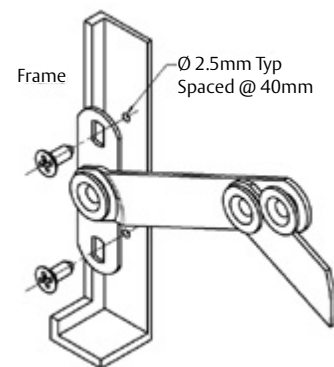
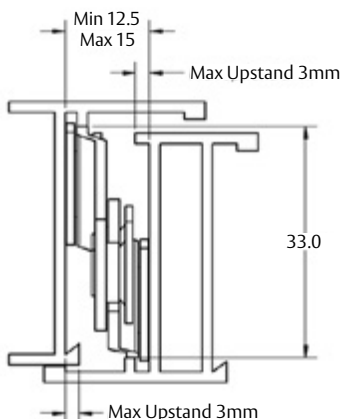
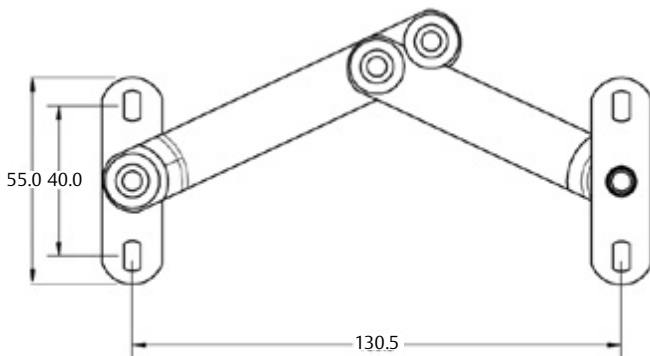


## Safety Stays Stainless Steel Window Restrictor

With operator safety in mind the Safety Stay offers a non-releasable restrictor for awning and casement windows. Fitted unobtrusively into the window cavity, the Safety Stay is not visible when the window is closed. The Safety Stay allows ventilation with a degree of security, plus child safety – particularly in multi-storey situations.

### Features

- The stainless steel scissor arm limits the opening to a maximum of 100mm when installed in the recommended position, helping prevent falling
- Manufactured from non-corrosive 304 austenitic stainless steel
- Designed to be installed within a window cavity of 33mm width and ranging from 12.5mm to 15mm height
- Can be screwed or riveted through the bearing eyelets for strong fixing
- Restricts the sash opening in order to avoid interference with foot traffic in ground level or walk-by situations
- Safety Stays provide a means of controlling open sashes in high windows or when restriction of large or heavy sashes is desired for safety reasons



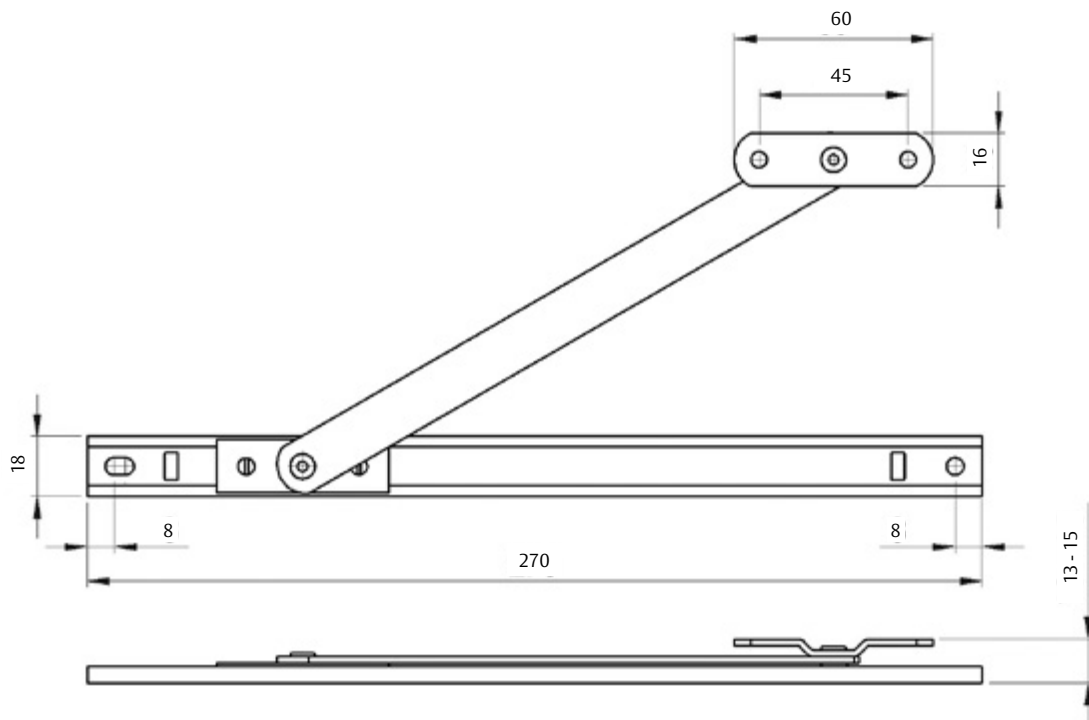


## Casement Restrictor Stays Stainless Steel Window Restrictor

With operator safety in mind, Casement Restrictor Stays offer a non-releasable restrictor for casement windows. The Casement Restrictor Stay allows ventilation with a degree of security – particularly in multi-storey situations.

### Features

- The Casement Restrictor is 270mm in length
- Smooth operation using a plastic carriage manufactured from nylon
- Manufactured from premium grade stainless steel
- Can be used in conjunction with a friction hinge, butt hinge or continuous hinge
- Can also be used as a friction adjustor
- The restrictor is invisible when the window is closed as it is installed in the cavity



## Crest Window fasteners

Inspired by the beauty of the New Zealand environment, the Crest Window Fastener range provides a stylish and contemporary new look to complement modern aluminium joinery.

The Crest Window Fastener range comes in three designs to meet all awning or casement window requirements. The High Profile Fastener is suitable for windows in a range of applications, while the Low Profile Fastener suits a sliding door bypass situation. With two offset opposing tongues, the Venting Fastener provides optional ventilation.

The Crest range of furniture adds a cohesive appearance to the hardware on all doors and windows in the home.

### Application

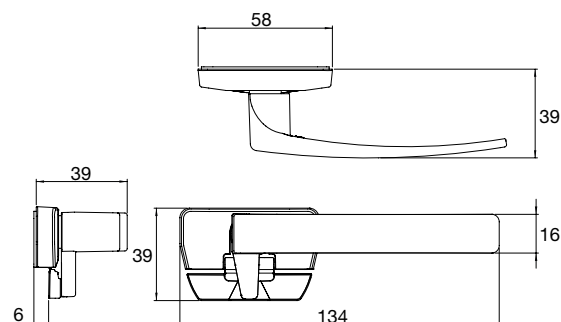
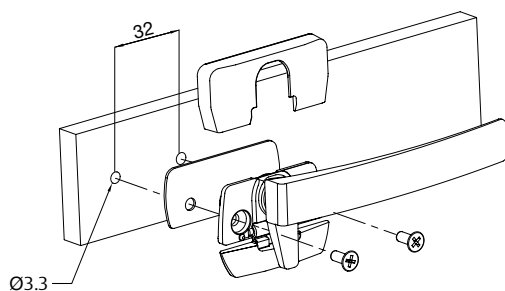
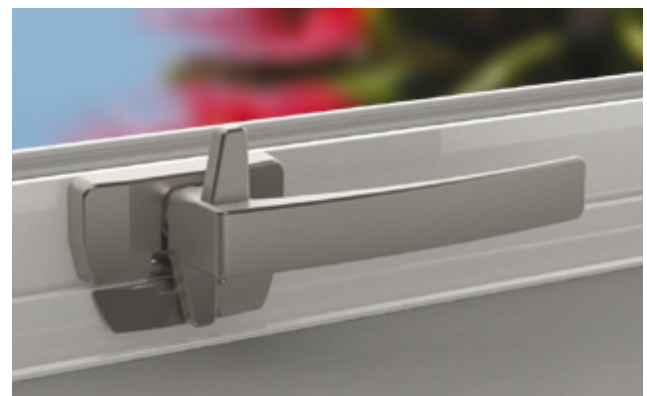
- Suitable for Residential, Architectural and Designer Thermal suites
- Can be used on either casement or awning windows

### Features

- New Zealand designed and made
- Concealed fixing
- Wedgeless design
- Face fixing fastener
- Quality Interlock friction joint providing tested and proven durability
- High quality pressure die-cast main body with colour-matched integrated nylon wedge

### Options

- High profile
- Low profile
- Venting
- Left and right-handed versions
- Available in a wide range of powdercoat colours and satin chrome





# Projected Window Hardware

## Aria Venting Wedgeless Window Fastener

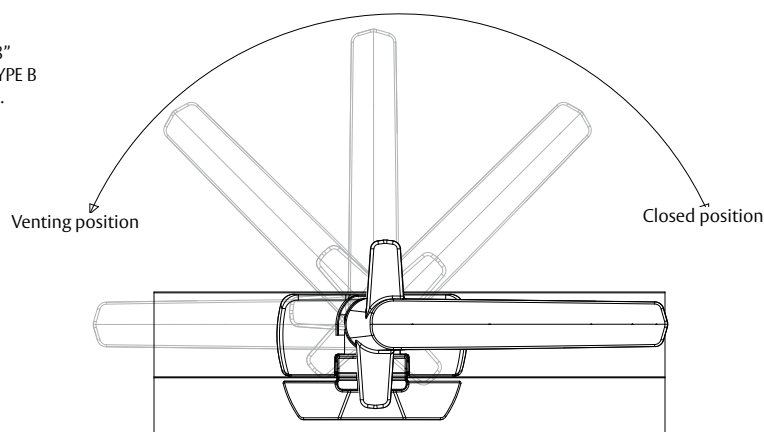
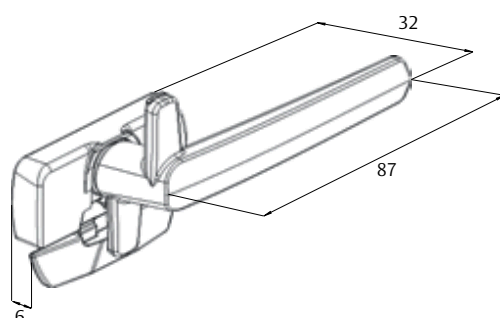
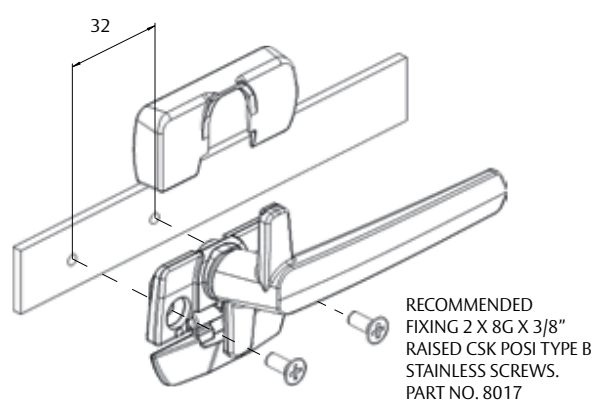
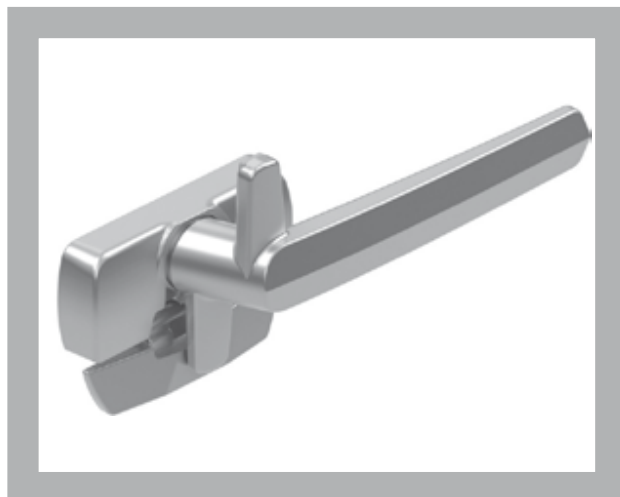
The Aria Venting Wedgeless Fastener is both unique and innovative. Created with opposing tongues, the fastener allows controlled ventilation especially in windy conditions. The wedgeless and concealed fixing design was developed with the end user and fabricator in mind, as it enables easy installation, simple product operation and improves aesthetics. Suitable for use on either aluminium or uPVC, casement or awning windows.

### Features

- Concealed fixing
- Wedgeless design
- High quality pressure die-cast main body with colour-matched integrated nylon wedge
- 6mm, face fixing fastener
- Quality Interlock friction joint providing tested and proven durability
- Opposing tongue allows for one smooth motion from closed to venting position
- New Zealand made

### Options

- Left and right-handed models available
- Available in a wide range of powdercoat colours and satin chrome finish



Right handed fastener example

# Projected Window Hardware

## Aria Low Profile Confix Window Fastener

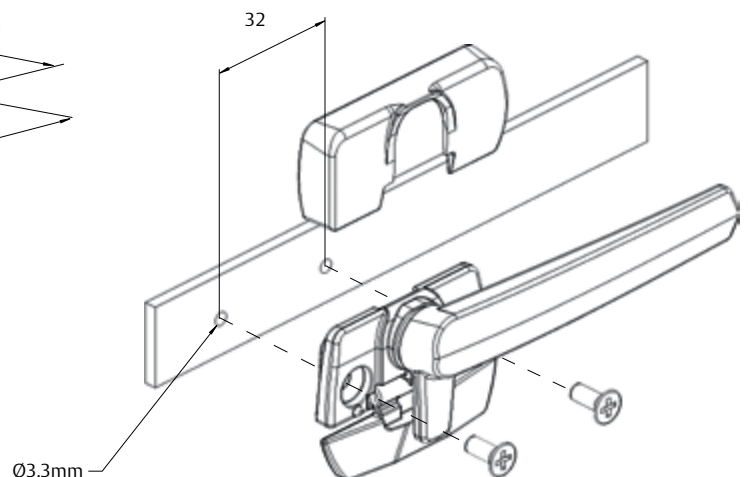
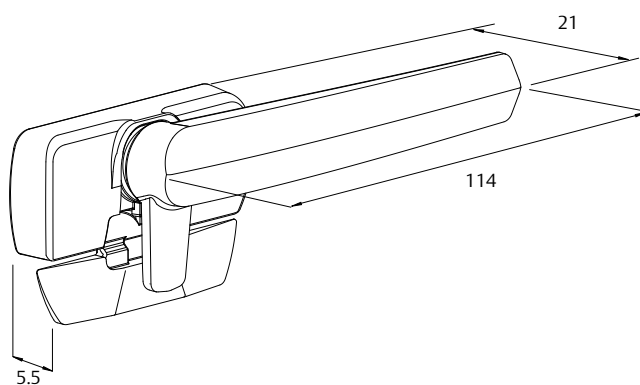
This sleek new handle has a low profile design suited to bi-pass situations, where a sliding door would pass in front of a window. The Confix can also be used as a more subtle alternative throughout the home. It blends seamlessly with the full range of Aria furniture, to create a modern and consistent look. It can be used on either aluminium or uPVC, casement or awning windows.

### Features

- Low profile
- Concealed fixing
- Wedgeless design
- Face fixing
- High quality pressure die-cast main body with colour-matched integrated nylon wedge
- Quality Interlock friction joint providing tested and proven durability
- New Zealand made

### Options

- Left and right-handed models available
- Available in a wide range of powdercoat colours and satin chrome finish



## Aria Wedgeless Window Fastener

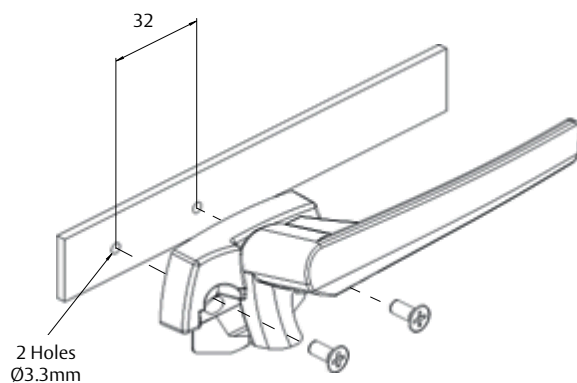
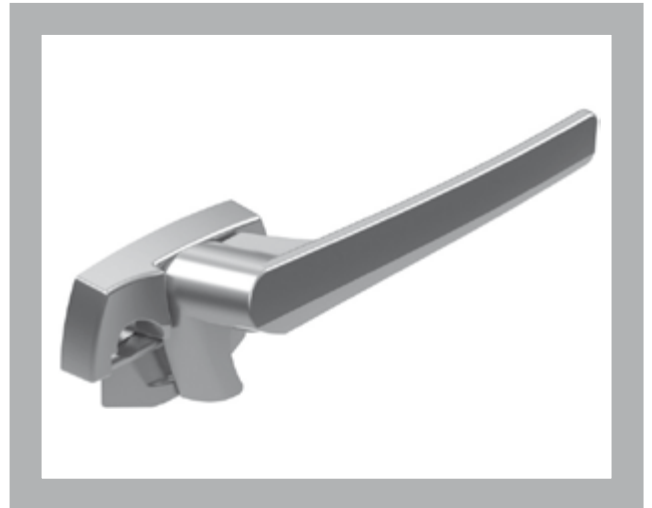
With its innovative wedgeless design this quality window fastener from ASSA ABLOY has the styling features of Aria and complements modern joinery. Designed in high and low profile options, this fastener covers a range of applications, from the awning window in a kitchen to the window that sits behind an open sliding door. This fastener can also be matched to other products throughout your home such as a venting window fastener or even your door handle simply by using the same Aria styled fastener.

### Features

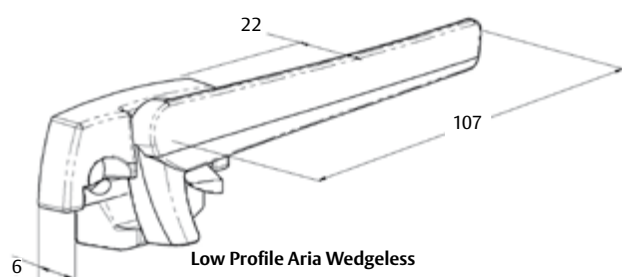
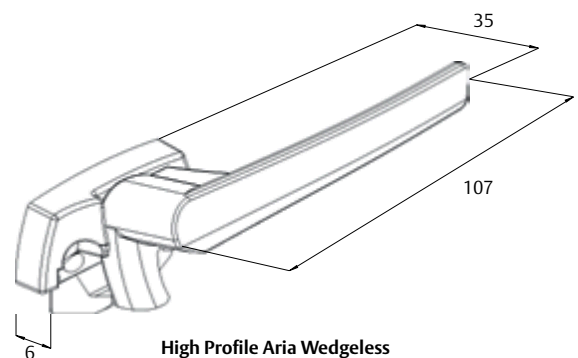
- This easy to install and operate window fastener combines innovation and simplicity with style
- High quality pressure die-cast main body with colour-matched integrated nylon wedge
- Quality Interlock friction joint providing tested and proven durability
- Smooth solid handle with modern styling
- Available with 6mm offset (frame upstand to sash face)
- New Zealand made

### Options

- High profile and low profile available (for use in by-pass situations)
- Left and right-handed models available
- Available in a wide range of powdercoat colours and satin chrome finish



RECOMMENDED FIXING  
2 X 8G X 3/8" RAISED CSK POSI  
TYPE B STAINLESS SCREWS  
PART NO 8017



# Projected Window Hardware

## Wedgeless Deluxe Window Fastener

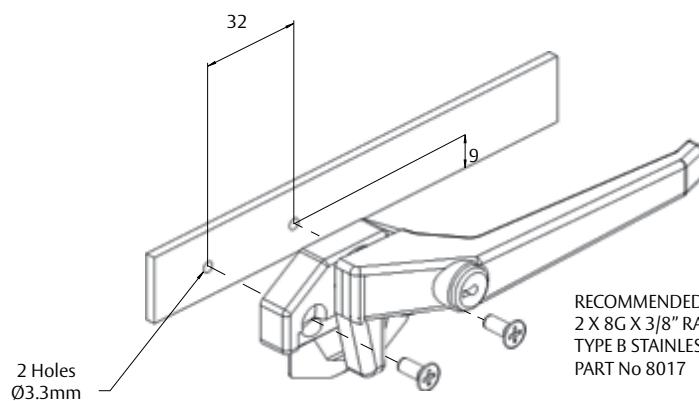
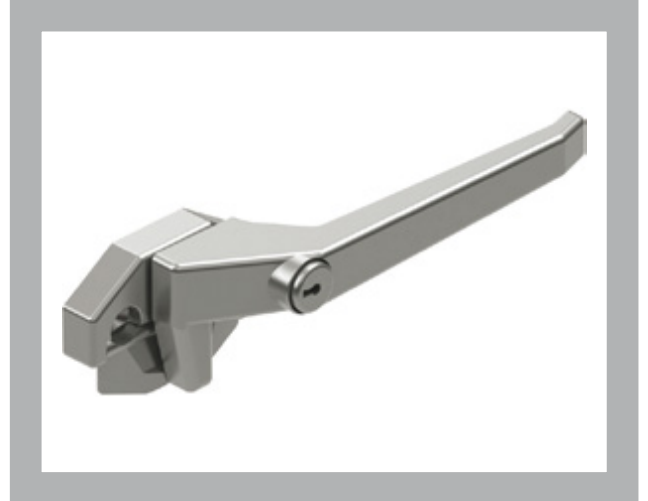
A unique window fastener that has the 'wedge' incorporated as a folding flap attached to the base of the handle and incorporates a push button locking option. This innovative quality window fastener from ASSA ABLOY is for use with aluminium or uPVC windows.

### Features

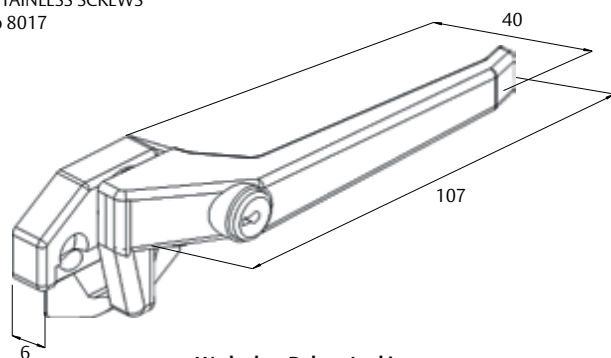
- This easy to install and operate window fastener combines innovation with simplicity
- Wedgeless Deluxe utilises a push button, cylinder locking option
- High quality pressure die-cast main body with colour-matched integrated nylon wedge
- Wedgeless Deluxe has a longer handle length of 107mm
- New Zealand made

### Options

- Left and right-handed models available
- Available in a wide range of powdercoat colours



RECOMMENDED FIXING  
2 X 8G X 3/8" RAISED CSK POSI  
TYPE B STAINLESS SCREWS  
PART No 8017



Wedgeless Deluxe Locking

# Projected Window Hardware

## Avon Window Fastener

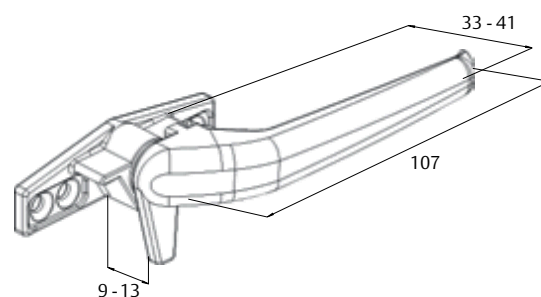
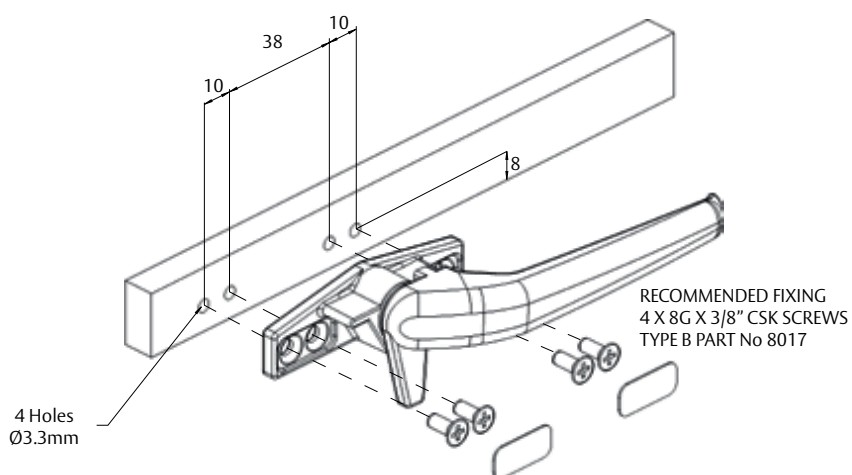
A stylish window fastener available in locking or non-locking design. For use with aluminium or uPVC windows. The popular fastener incorporates smooth contemporary styling, and offers extra security with locking option.

### Features

- The Avon handle incorporates a 4-hole fixed base with screw covers to conceal fixing for aesthetics
- Stylish design
- Strong zinc die-cast construction
- New Zealand made

### Options

- Left and right-handed models available
- Locking or non-locking design
- Available with 9mm or 13mm offset
- Available in a wide range of powdercoat colours and satin chrome finish





# Projected Window Hardware

INTERLOCK™

ASSA ABLOY

## Avon Timber Window Fastener

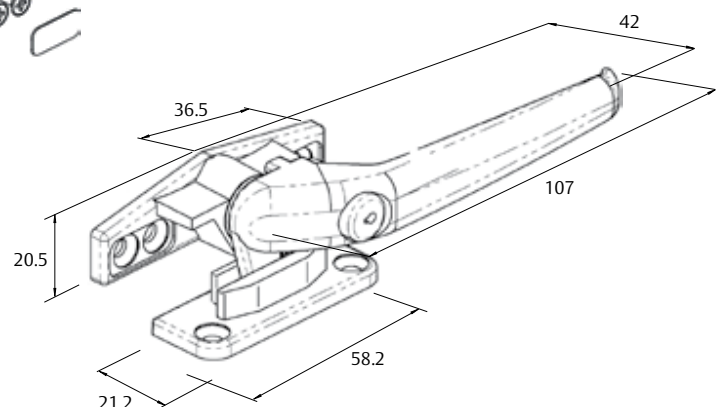
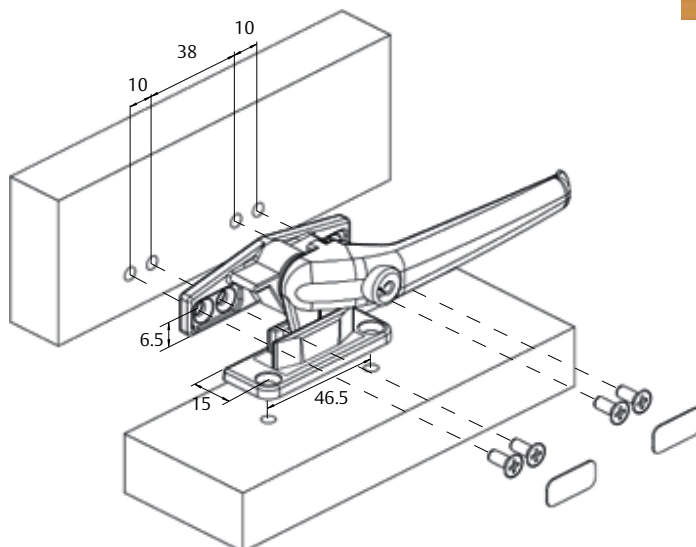
The Avon Window Fastener has been designed for use with timber framing. A strong fastener that offers extra security with its unique lockable option. The Avon is supplied complete with a tongue and keeper arrangement specifically designed to allow ventilation through the split-rail wedge.

### Features

- Robust design
- Split-rail wedge allows for safer ventilation
- Offset fixing screw location helps avoid splitting of the timber
- Strong zinc die-cast construction
- Pushbutton locking option for added security
- Available with 17mm offset
- New Zealand made

### Options

- Left and right-handed models available
- Locking or non-locking design
- Different plating options
- Available in a wide range of powdercoat colours and plated finishes





# Projected Window Hardware

## Styleline 2 / Slimline 2 Window Fastener

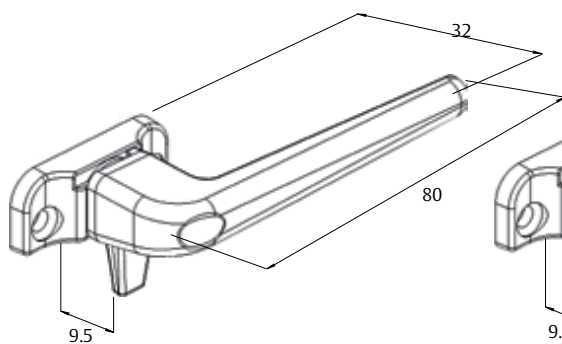
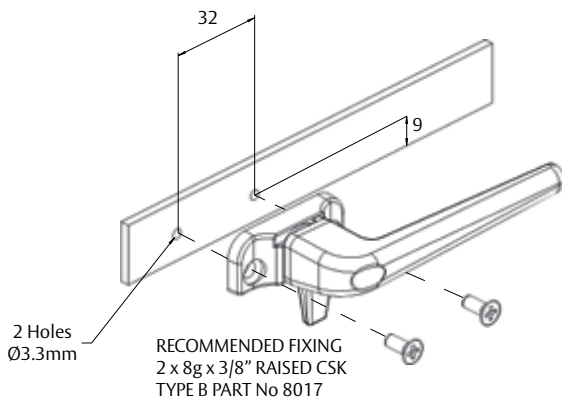
Designed specifically in line with leading architectural innovations, ASSA ABLOY offers a range of reliable and robust window fasteners. The simple styling and unobtrusive lines of the Styleline 2 and Slimline 2 make an attractive range of fasteners.

### Features

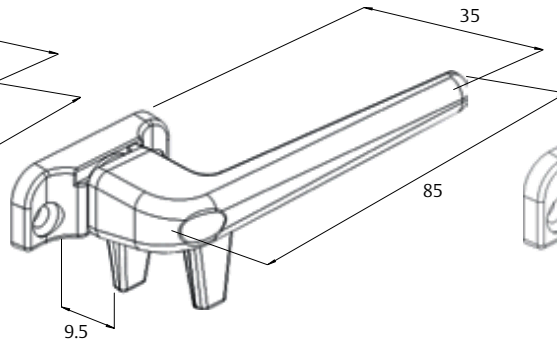
- Designed for use with either aluminium, uPVC or timber, awning or casement windows
- Slimline 2 is a low profile fastener for use in by-pass situations
- New Zealand made

### Options

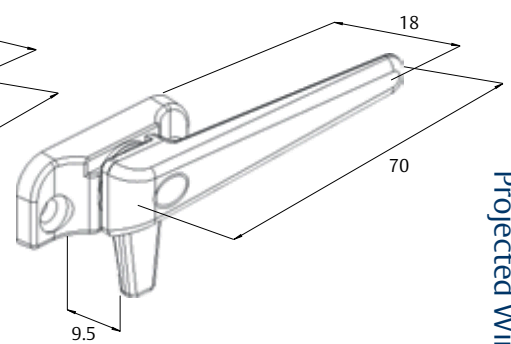
- Left and right-handed models available
- Styleline 2 is available in single or double tongue models
- Available in a wide range of powdercoat colours



Styleline 2 - Standard



Styleline 2 - Double Tongue



Slimline 2

## Wedges Additional Fastener Components

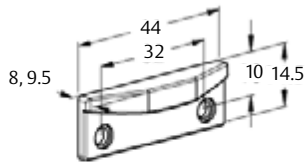
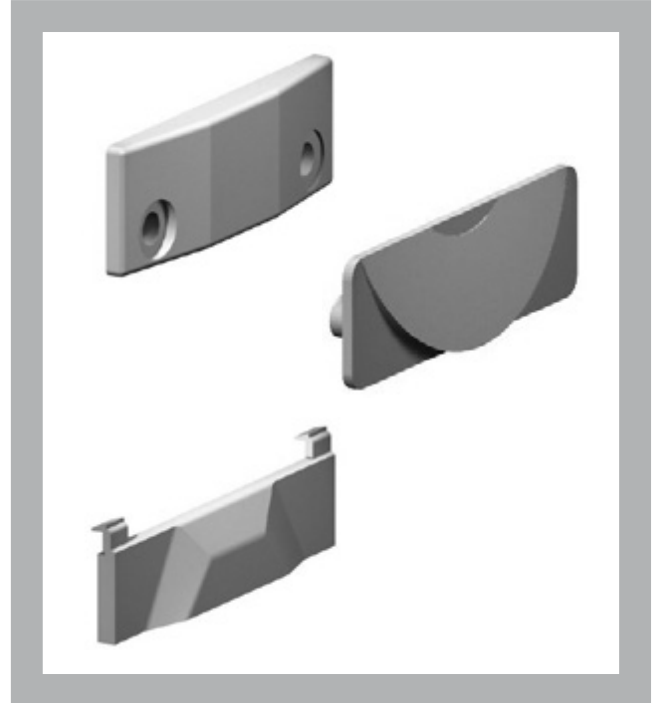
ASSA ABLOY's wide range of wedges work in conjunction with the window fasteners to ensure a tight seal between the window sash and the window frame. All conventional window fasteners require a wedge to be fitted to the window frame, providing a surface for the tongue of the window fastener to compress and seal for a watertight window.

### Features

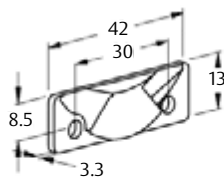
- Manufactured from high quality nylon to provide a long life and low friction wedging action
- Design options offer ease of installation along with neat appearance

### Options

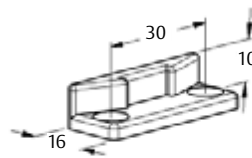
- Rivet fix
- Pin fix
- Adhesive fix
- A range of colours (in some models) available to suit the joinery
- Various thicknesses available
- New Zealand made



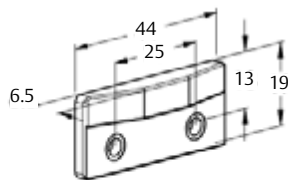
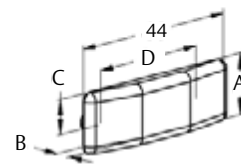
Product No.'s  
2651, 2671



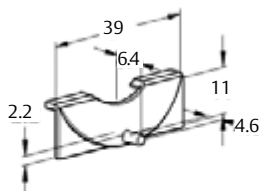
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8712



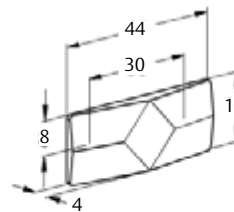
Product No.  
505



Product No.  
2694

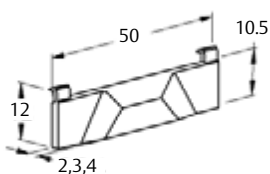


Product No.  
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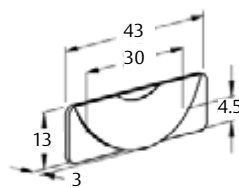


Product No.  
2631

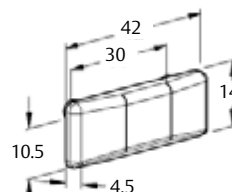
Product No.'s	A	B	C	D
2611	13	3.5	5.5	30
2612	11	3.5	5.5	30
2661	14	4.2	6.0	30
2692	15	7.8	4.0	25



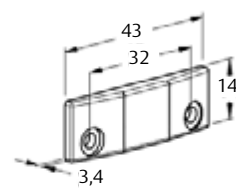
Product No.'s  
8714, 8713, 2695



Product No.  
8711



Product No.'s  
2693, 2641



Product No.'s  
2682, 2621

## Elevation Electric Window Operator

The Elevation Window Control System offers the perfect combination of convenience, flexibility and safety with the ability to control up to 30 windows through a simple touch screen.

Through the use of zones, the Elevation can be configured to reflect the unique layout of any home or commercial building, making it the ideal system for hard to reach windows. The Elevation makes opening or closing all windows, or windows within a specified area, effortless.

With a built in chain release feature, installing the Elevation actuator is easy and can be completed without being connected to power.

### Features

- Intuitive touch screen keypad controls up to 30 windows with pre-set options 'closed', 'vent', 'half' and 'full'
- Actuators operate simultaneously (with 24VDC motor) and can be grouped into zones
- Synchronise two actuators to cater for wide windows
- 9kg closing force per actuator ensuring a tight window seal when closed
- Strong, corrosion resistant stainless steel chain (grade 302)
- Chain length is adjustable in 10mm increments to limit window opening
- Release key allows chain to move freely for ease of installation
- Programme in a pin code to restrict access to keypad
- Suitable for awning or casement windows
- Can be fixed to timber or aluminium
- Elevation actuator made in New Zealand

### Options

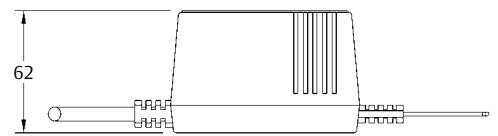
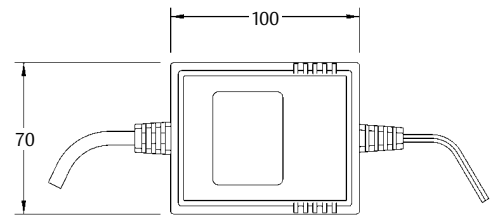
- Touch screen or wall switch control option
- Actuators are available in a range of colours to complement any window design and/or finish
- Add 1 or 2 keypads per Elevation system
- Rain sensor option (add up to 4). Rain sensors can be allocated to a specific zone and be configured to either vent or close upon rain detection, as well as re-open when dry
- Standalone Operator – designed to control a single remote window with a simple on/off switch
- Able to be used where there is an electronic control system
- The stroke length of the standalone model can be set to either 150mm or 250mm combined with an electronic control system



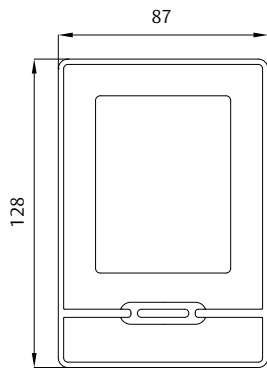
# Projected Window Hardware

## Elevation

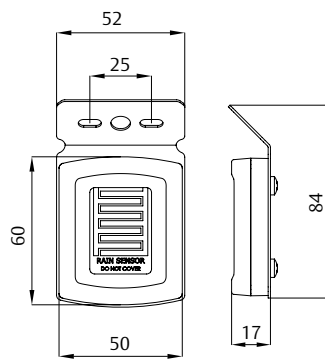
### Electric Window Operator



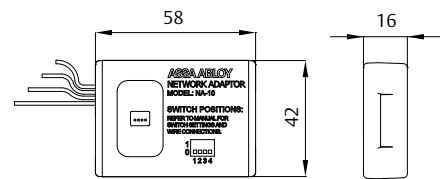
Power Supply



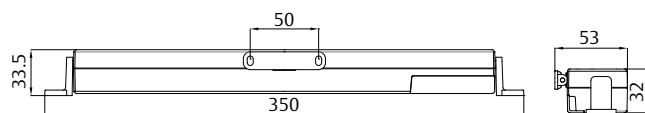
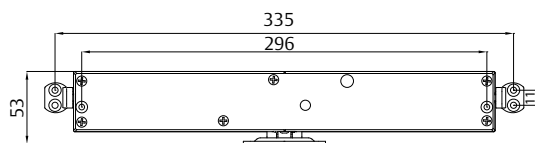
Touch Screen



Rain Sensor



Network Adaptor



Actuator

## Ultimate One Multi-Point

The Ultimate One has been developed for commercial applications, providing an unmovable resistance to suction from negative pressure. Perfect in extreme weather or high pressure situations, the Ultimate One provides a safe, secure and reliable aluminium window locking option.

The components of the Ultimate One curtain walling system have been developed to support each other in controlling opening vents weighing up to 150kg.

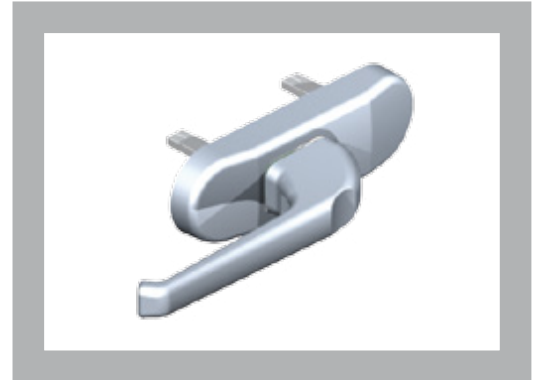
### Features

- With just one control handle, the vent is secured on three sides through the bi-parting rack and pinion mechanism operating the multi-point lock
- Designed to suit industry standard C-Groove
- New Zealand made

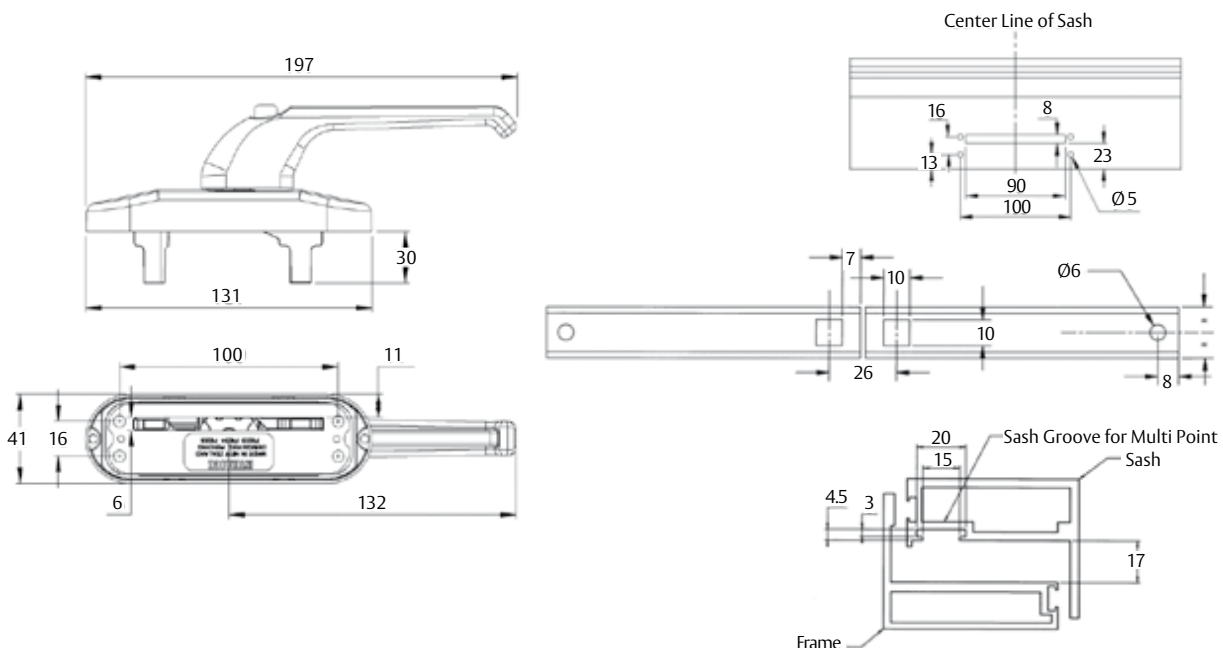
### Options

- Locking, non-locking and removable handle options are all available
- Locking can be 2 or 3-point on one window edge or 4 to 6-point for three edges
- Ultimate One can be used as just a multi-point locking kit or a complete curtain walling hardware package when combined with pivot and restrictor kit
- Snubber kits are available for high pressure applications
- Note: Actuator bars are required but not included in the Ultimate One system supplied

**Note:** Due to the nature of the Ultimate One curtain walling hardware, and the vast number of variables that need to be considered when recommending hardware for use with such large heavy sashes, ASSA ABLOY wishes to treat each enquiry on a case-by-case basis. Upon receipt of the project specification, ASSA ABLOY will provide a product recommendation and a customer installation drawing for each project.



### Typical Section Detail





# Projected Window Hardware

## Resolute One Multi-Point

The concealed multiple locking system which offers an effective and appealing window locking solution where more than one locking point is required. The versatile design enables the Resolute One to be adapted to window sash designs whether structurally glazed or constructed with the use of an external glazing bead.

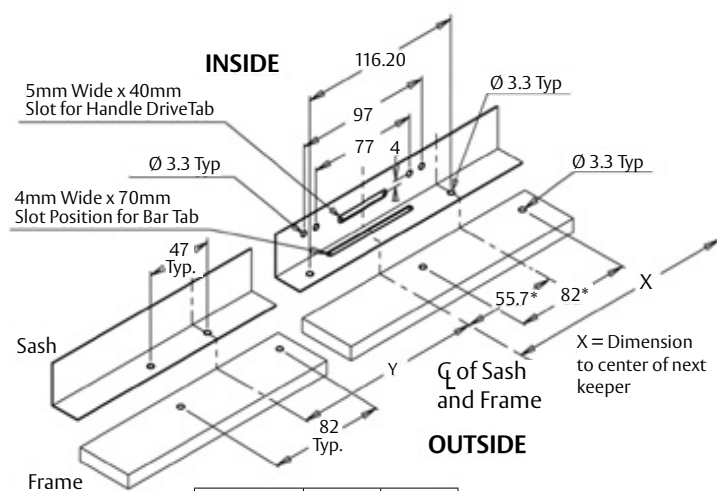
### Features

- The Resolute One handle incorporates a 4-hole fixed base with screw covers to enhance its aesthetic appeal
- With minimal routing required, the design of Resolute One is easily installed
- The keeper and raised retainer arrangement creates a unique self-alignment feature which insures that the sash is in the correct position before locking
- The solid stainless steel lock pin offers a high resistance to external negative pressure
- The locking bar is manufactured from 304 grade austenitic (non-magnetic) stainless steel
- New Zealand made

### Options

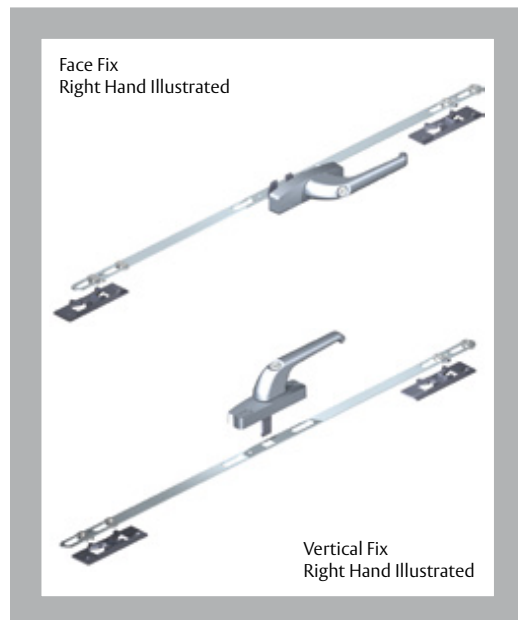
- Locking, non-locking and removable handle options are all available
- Locking bar options:
  - 300mm 2-Point Locking
  - 600mm 2-Point Locking
  - 900mm 3-Point Locking
  - 1300mm 3-Point Locking
- One Handle (Tongue length: max 25mm, min 15mm)
- One Locking Bar (Includes retainers and screws. Tab length: max 19mm, min 0mm)
- Keepers (2 required for 300mm and 600mm locking bars; 3 required for 900mm and 1300mm locking bars)

**Note:** When ordering Resolute One, each window requires:



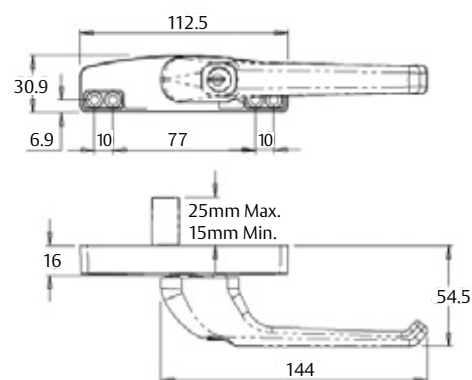
	X	Y
300mm Bar	171.3	128.7
600mm Bar	321.3	278.7
900mm Bar	471.5	428.5
1300mm Bar	671.5	628.5

\* These Details are not required for 300 and 600mm bars

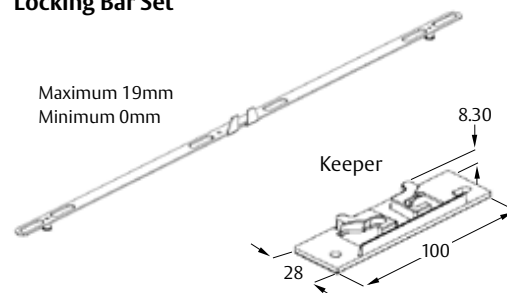


Due to the nature of the Resolute One and the vast number of variables, ASSA ABLOY recommends that the customer discuss the application prior to ordering.

### Handle Set



### Locking Bar Set





## Blade Multi-Point

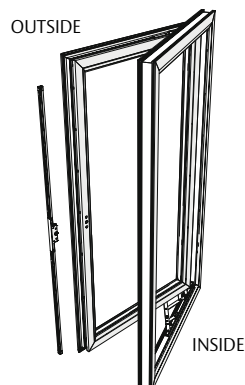
The Blade is the revolutionary new window lock. Redefining expectations of performance and delivering additional new benefits to fabricators, installers and consumers. The Blade offers greater lock engagement for additional security as it connects along the full length of the keep. And, unlike other window locks, the Blade's aluminum channel uses the full depth of the eurogroove to enhance the strength of the window. This means some systems can reach PAS24 without the need for additional re-enforcement.

### Features

- Outstanding anti-corrosion performance
- Uses full eurogroove to enhance window strength
- Unique 20mm or 22mm retractable gearbox patented design allows for easy maintenance
- Reversible gearbox
- Keeps can be fitted at any time and do not need marking to ensure greater manufacturing efficiencies
- Fewer fixings than other window locks for faster fitting
- One Blade height suits all applications, reducing stock holding for multi-system users
- A fully retracting blade delivers greater clearances
- The unique geometry and precision engineering eliminates cam clash
- The rotating action and keep engagement eliminates wear and the need for adjustability; speeding up installation and reducing call backs
- Available in an offset variant where lower placed handles are necessary
- Eliminates loss of compression performance
- Gives lock engagement along the full length of the window
- Suitable for sash sizes from 220mm to 1629mm
- Tested to BS EN 1670 Grade 4 (240 hours NSS) and endurance tested to 30,000 cycles



PROJECTING SIDE HUNG (PSH)



PROJECTING TOP HUNG (PTH)

