



 JURALCO

# **JURALCO WINTERGLAZE® RETROFIT DOUBLE GLAZING SYSTEM**

ISSUE 3-25 v1

**Juralco Aluminium Building Products Ltd designs and distributes specialist aluminium joinery systems through a national network of franchised fabricators and agents.**

**For more than 25 years we have been at the forefront of specialist aluminium door and window products suitable for New Zealand joinery and building methods. Our comprehensive product range includes security and insect screens, balustrades and gates, shutters and awnings, shower screens, wardrobe doors and organisers and internal doors.**

**The Juralco WinterGlaze® System replaces inefficient single glazed window panels with up to date double glazed units, available in a variety of glass types and thicknesses. The system is extremely versatile and can be custom made in a range of configurations and powder-coat colours to meet most modern architectural requirements.**

## General Description

- Juralco RetroFit Double Glazing is the process of replacing your existing single glazing with insulating glass units.
- Juralco is the supplier of Retrofit components and extrusions to assemble a wide range of retrofit double glazing for NZ window frames.
- Juralco does not supply the Insulated Glazing Units.
- The process is quick and unobtrusive.
- If you have aluminium-framed windows, a Retro-fit may be as simple as replacing the existing exterior glass beads retaining bead and, where necessary, fit new opening sashes.
- The RetroFit systems apply to all Windows and Doors.
- The new beads and sashes are powder coated or anodised to closely match the colour of your existing window frame.
- Fabricators will measure your Windows and Doors; the new units will be made at one of our local fabricator factories.
- Unless you look closely you will probably never notice the change - except the temperature inside your home, the reduction in condensation and your increased comfort.
- With RetroFit double glazing your home is virtually unchanged yet you enjoy all the benefits of double glazing.

## Advantage 1 - Thermal Insulation. Make your home a warmer, drier place

Retrofit double glazing significantly enhances thermal insulation. By incorporating an additional layer of glass, double glazing reduces heat transfer, helping to maintain a consistent indoor temperature. This means less heat is lost during winter and inside is cooler during summer, leading to improved energy efficiency and reduced heating and cooling costs. This thermal performance makes double glazing an excellent choice for creating a comfortable living or working environment year-round.

## Advantage 2 - Sound Insulation. Make your home a quieter place.

Retrofit double glazing provides improvements to sound insulation. The additional glass layer and the air gap between the panes act as a barrier to external noise, effectively reducing the amount of sound that enters the building. This results in a quieter and more peaceful indoor environment, which is particularly beneficial in noisy urban areas or near busy roads. Enhanced sound insulation contributes to overall comfort and can improve the quality of life for occupants.

**Note : This Manual covers the installation of IGU's into Fixed/Awning/Casement Windows with existing Aluminium Joinery. It does not cover any Doors or Windows with Wooden joinery**

Pages	Codes	Description
3	Specs	IGU Design Limitations - an explanation of sizing, glass thicknesses, wind, altitude and various other limitations of Double Glazed units
5 - 9	Extrusions and Components	Shows all Bead and Sash extrusions. Also Wedges, glazing blocks, corner gussets and inserts. Wedge Chart showing IGU Thickness and Wedge combinations.
10 - 20	Bead and Sash Arrangements	Shows range of existing/historical single glazed window frames and the extrusions and components necessary to convert to a double glazed system
21 - 26	Installation Tips	Checklist, Drainage types; also shows how to disassemble an existing Window/Frame, clean and reseal, then install an IGU correctly.
27 - 32	Stays and Handles	Shows a range of suitable Stays and Handles
33 - 36	Doors	Shows existing/historical sliding door frames and appropriate adaptors. New Extrusions and Cutting allowances

## Juralco Winterglaze RetroFit Double Glazing System

Juralco Aluminium Building Products supplies componentry and aluminum extrusion systems for Retrofit Double Glazing, but does not supply Insulating Glass Units (IGU). These must be purchased from a reputable IGU manufacturer.

IGU's come in a variety of options, Juralco publishes basic IGU information, for a full range of options and technical information on IGU's, please contact your local/preferred supplier.

### **IGU Design :**

Consult your IGU supplier in regards to suitability of options for the proposed installation. Some considerations may be, but not limited to; Pressure and temperature effects, wind pressure, deflection and human impact. Depending on the scenario, there may be some maximum size limitations.

It is important to follow best practice for product selection and installation outlined by the Window & Glass Association New Zealand (WGANZ).

WGANZ provides a comprehensive Retro-fitting of Double Glazing guide which pertains to the latest building codes relevant to Retro fit DG.

This is available in their resource directory: [www.wganz.org.nz/resource-directory](http://www.wganz.org.nz/resource-directory)

### **IGU Manufacturers :**

Insulated Glass Unit Manufacturers Association (IGUMA) is a group of IGU manufacturers that has agreed to have independent testing verify their quality and compliance with the latest NZS Glazing in Buildings standards.

WGANZ provides a list of IGUMA manufacturers:  
<https://www.wganz.org.nz/double-glazing-manufacturers/>

## IGU CLEANING AND MAINTENANCE

A few regular maintenance tasks will help ensure the long term durability of your Insulated Glass Units.

### Drainage

Regular checks of the frame drainage system are recommended to ensure drain/weep holes in the joinery are clear and free from obstruction at all times. Insulating Glass Unit failure may occur if free flowing drainage is not present at all times.

### Glazing Gaskets and Flashings

Check that glazing gaskets and flashings remain in place and have not become dislodged or shrunk have excessively. Dislodged gaskets can allow excessive water into the glazing pockets, and allow direct light onto the sealant surface, causing premature Unit failure.

### Cleaning, general

Cleaning agents and chemicals should be compatible with the sealants used in the IGU.

Normal glass cleaning instructions apply, with care taken not to expose the edge seal of the Units to chemicals. The glass surfaces of the unit should be cleaned every three to six months, with more frequent cleaning advisable in dirty/dusty environments, and during construction.

Normal washing or cleaning compounds can be used and these include warm water and mild soap or liquid detergents, and proprietary glass cleaners. Never use solvents, alkaline cleaners or harsh abrasive cleaners. If you have glass staining, consult the Unit manufacturer for advice.

Soak the glass surfaces with clean water and a mild soap or detergent solution to loosen dirt or debris. Use a soft, clean, grit free cloth, sponge or brush to wash the glass with a mild non-abrasive window washing solution. Try not to wash in direct sunlight

After washing, rinse with clean water and use a grit free squeegee or cloth to remove excess water. The glass must be dried, otherwise water droplets may become alkaline or evaporate, leaving dissolved minerals on the glass that can cause surface staining.

### Cleaning, reflective glass

Take special care when cleaning reflective glass surfaces and always try a small area first, using the above procedures.

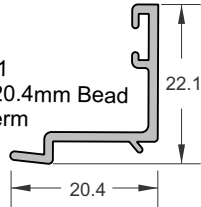
### Cleaning, toughened glass

The cleaning of Units incorporating toughened glass requires special care. The glass surface opposite the Standards compliance stamp may, as a consequence of the manufacturing process, have 'pickup' on the surface. 'Pickup' is a deposit of very small particles of glass which are fused to the glass surface. A cleaning method which does not dislodge these particles should be employed otherwise scratching of the glass surface may result. Blades or scrapers have been known to dislodge 'pickup' from the glass surface. A soft cloth, which will not dislodge 'pickup', should be used.

# Juralco Winterglaze® RetroFit Double Glazing System - General Components

## Bead Extrusions

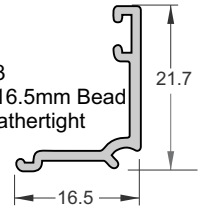
**JWG/B01**  
Retrofit 20.4mm Bead  
Old Altherm



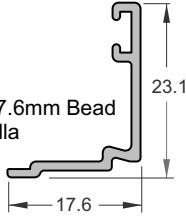
**JWG/B02**  
Retrofit 14.2mm Bead  
Nulook Settler, Homestead



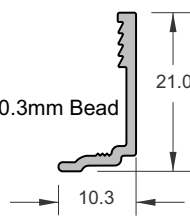
**JWG/B03**  
Retrofit 16.5mm Bead  
Vista, Weathertight



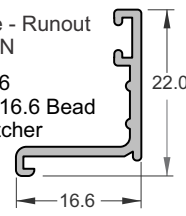
**JWG/B04**  
Retrofit 17.6mm Bead  
Nulook, Villa



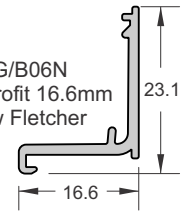
**JWG/B05**  
Retrofit 10.3mm Bead  
Elite



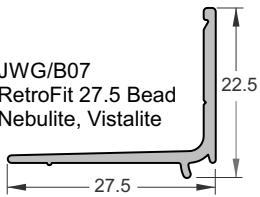
Obsolete - Runout  
Use B06N  
**JWG/B06**  
Retrofit 16.6mm Bead  
New Fletcher



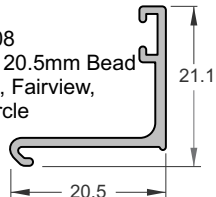
**JWG/B06N**  
Retrofit 16.6mm  
New Fletcher



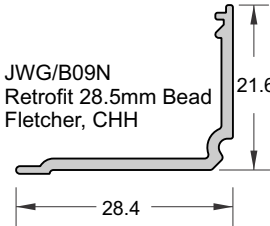
**JWG/B07**  
Retrofit 27.5mm Bead  
Nebulite, Vistalite



**JWG/B08**  
Retrofit 20.5mm Bead  
Vantage, Fairview,  
Elite, Circle

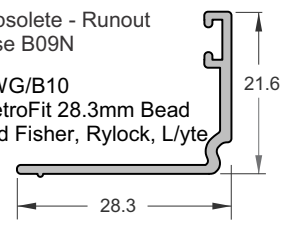


**JWG/B09N**  
Retrofit 28.5mm Bead  
Fletcher, CHH

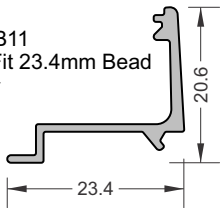


Obsolete - Runout  
Use B09N

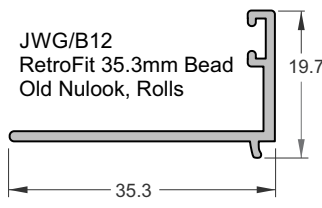
**JWG/B10**  
Retrofit 28.3mm Bead  
Old Fisher, Rylock, L/yte



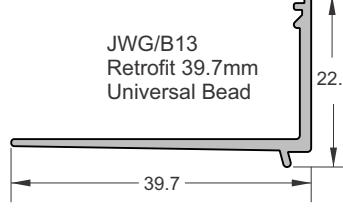
**JWG/B11**  
Retrofit 23.4mm Bead  
Barker



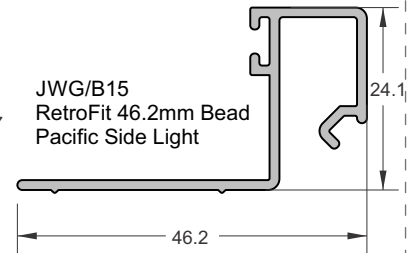
**JWG/B12**  
Retrofit 35.3mm Bead  
Old Nulook, Rolls



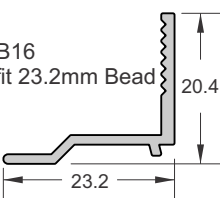
**JWG/B13**  
Retrofit 39.7mm  
Universal Bead



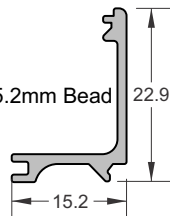
**JWG/B15**  
Retrofit 46.2mm Bead  
Pacific Side Light



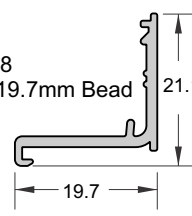
**JWG/B16**  
Retrofit 23.2mm Bead  
Rolls



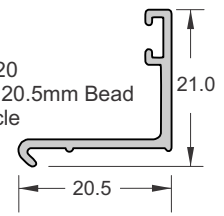
**JWG/B17**  
Retrofit 15.2mm Bead  
Old First



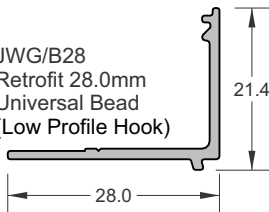
**JWG/B18**  
Retrofit 19.7mm Bead  
Vantage



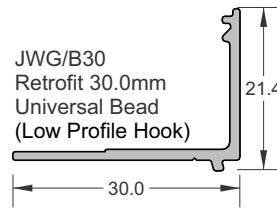
**JWG/B20**  
Retrofit 20.5mm Bead  
Old Circle



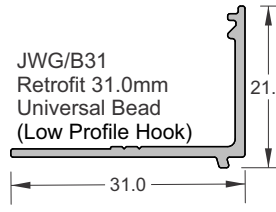
**JWG/B28**  
Retrofit 28.0mm  
Universal Bead  
(Low Profile Hook)



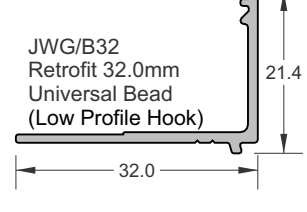
**JWG/B30**  
Retrofit 30.0mm  
Universal Bead  
(Low Profile Hook)



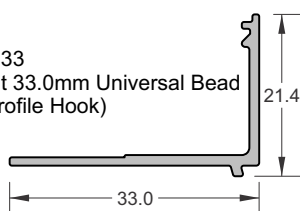
**JWG/B31**  
Retrofit 31.0mm  
Universal Bead  
(Low Profile Hook)



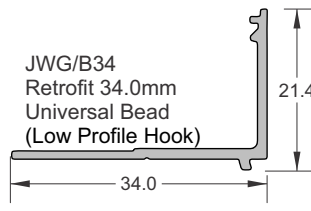
**JWG/B32**  
Retrofit 32.0mm  
Universal Bead  
(Low Profile Hook)



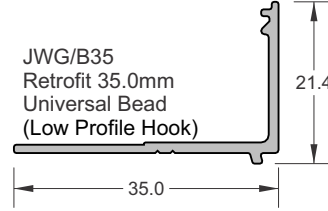
**JWG/B33**  
Retrofit 33.0mm Universal Bead  
(Low Profile Hook)



**JWG/B34**  
Retrofit 34.0mm  
Universal Bead  
(Low Profile Hook)

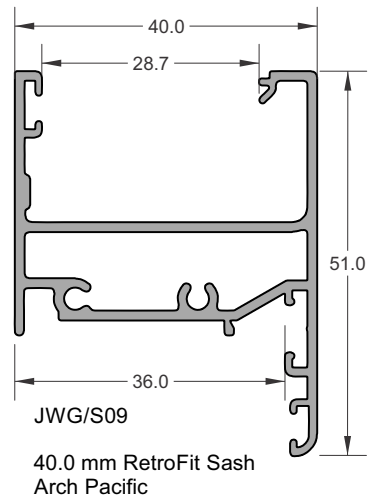
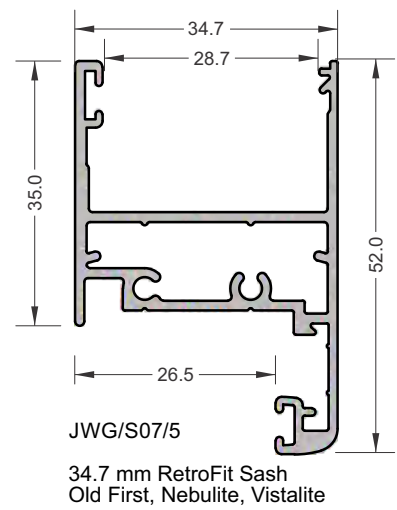
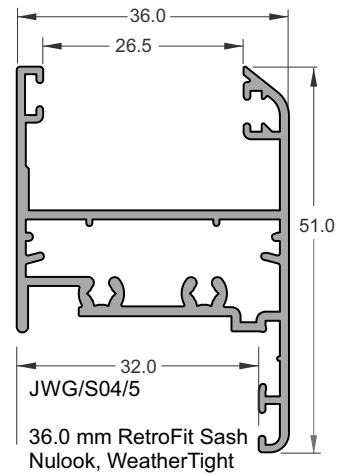
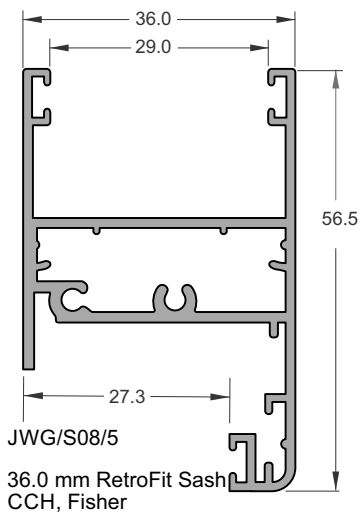
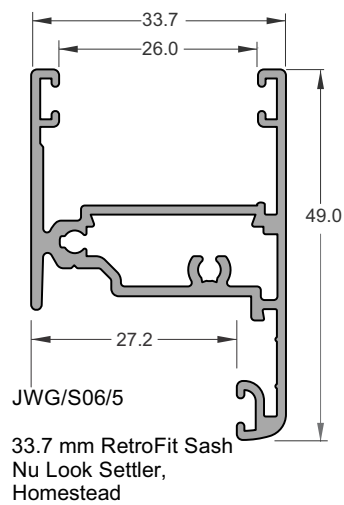
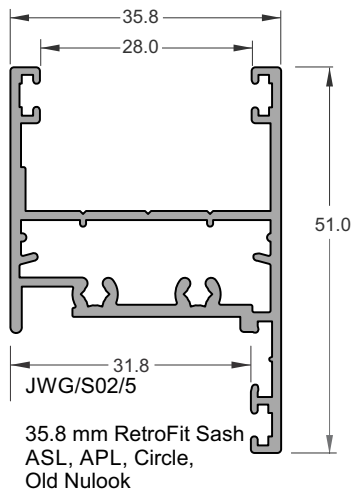


**JWG/B35**  
Retrofit 35.0mm  
Universal Bead  
(Low Profile Hook)



**Sash and Glazing Adaptor Extrusions**

**For Sash Windows**

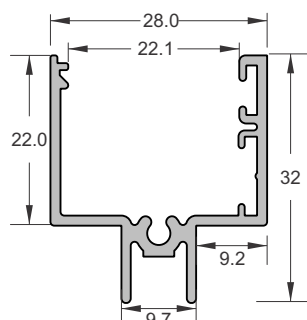




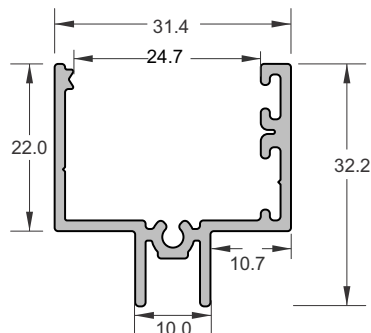
## Juralco Winterglaze RetroFit Double Glazing System - General Components

### Door Glazing Adaptor Extrusions

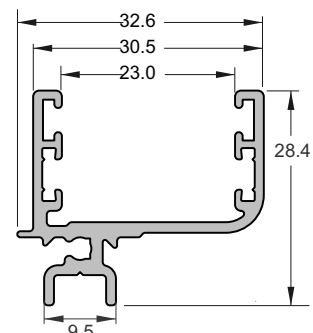
### For Doors



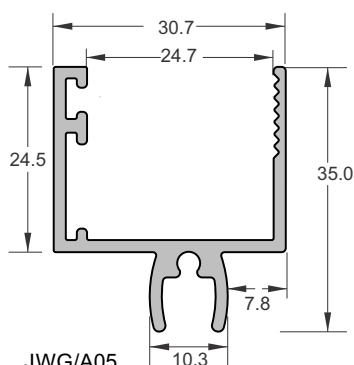
**JWG/A01**  
28mm Centered Retrofit Adapter



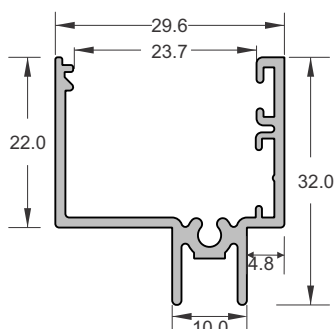
**JWG/A03**  
31.4mm Centered Retrofit Adapter



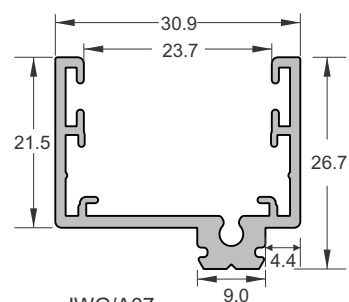
**JWG/A04**  
32.6mm Offset Retrofit Adapter



**JWG/A05**  
30.7mm Offset Retrofit Adapter

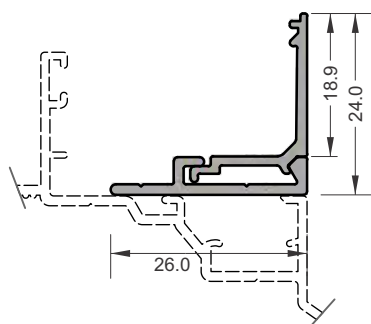


**JWG/A06**  
29.6mm Offset Retrofit Adapter  
Nebulite/Vistalite



**JWG/A07**  
30.9mm Offset Retrofit Adapter

### Window Glazing Adaptor Extrusion



Section through  
Sill - Fixed Window  
JWG/A09 Base,  
G/GCUB Universal Glazing Bead



# Juralco Winterglaze® RetroFit Double Glazing System - General Components

## General Components



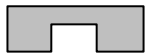
JWG/C02 Sash Glazing Block  
32X6X50



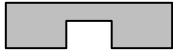
JWG/C04 Sash Glazing Block  
Sanoprene 25X6X50



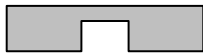
JWG/C06 Adaptor  
Glazing Block 23x7.5x40



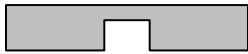
JWG/C08 Fixed Panel  
Glazing Block 18x6x100



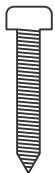
JWG/C10 Fixed Panel  
Glazing Block 22x6x100



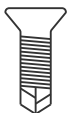
JWG/C12 Fixed Panel  
Glazing Block 26x6x100



JWG/C14 Fixed Panel  
Glazing Block 32x6x100



JWG/Screw/6x20  
Pan Head Self  
Tapping screw



JWG/Screw/4x11  
C/S Head Self  
Drilling screw



JGT050 Glazing Wedge Tool



JWG/W02/400/BLK  
Easy fit Sanoprene  
Composite Backing Seal



JWG/W04/400/BLK  
Push fit PVC  
Backing Seal



JWG/W06/400/BLK  
Push fit Sanoprene  
Composite Backing Seal



JVB/BACKWEDGE/500  
PVC Offset Back Gasket



JWG/W80/80/Black  
PVC Glazing Wedge 8.0mm



JWG/W75/100/Pink  
PVC Glazing Wedge 7.5mm



JWG/W70/150/Black  
PVC Glazing Wedge 7.0mm



JWG/W60/150/Brown  
PVC Glazing Wedge 6.0mm



JWG/W55/150/Green  
PVC Glazing Wedge 5.5mm



JWG/W50/200/White  
PVC Glazing Wedge 5.0mm



JWG/W45/250/Yellow  
PVC Glazing Wedge 4.5mm



JWG/W40/250/Orange  
PVC Glazing Wedge 4.0mm



JWG/W35/250/Red  
PVC Glazing Wedge 3.5mm



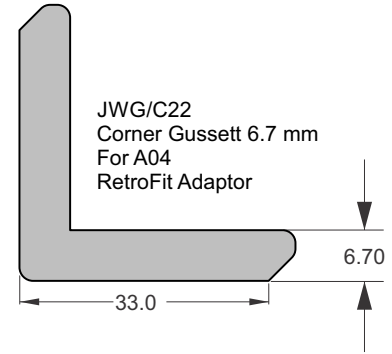
JWG/W30/250/Purple  
PVC Glazing Wedge 3.0mm



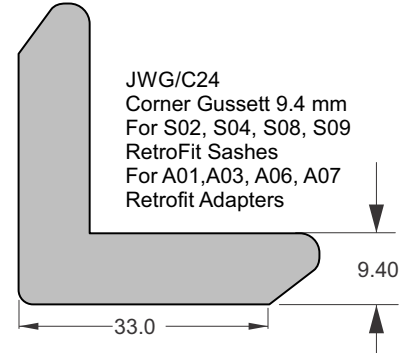
JWG/W25/400/Blue  
PVC Glazing Wedge 2.5mm



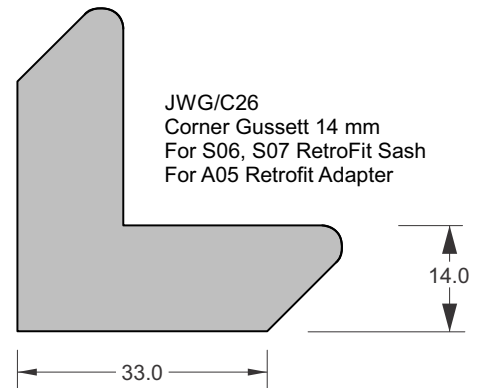
JWG/W20/400/Grey  
PVC Glazing Wedge 2.0mm



JWG/C22  
Corner Gussett 6.7 mm  
For A04  
RetroFit Adaptor



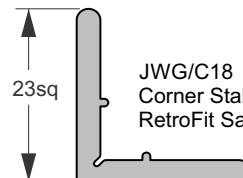
JWG/C24  
Corner Gussett 9.4 mm  
For S02, S04, S08, S09  
RetroFit Sashes  
For A01, A03, A06, A07  
Retrofit Adapters



JWG/C26  
Corner Gussett 14 mm  
For S06, S07 RetroFit Sash  
For A05 Retrofit Adapter



JWG/C16  
Corner Stake for S02, S04, S07, S08  
RetroFit Sashes



JWG/C18  
Corner Stake for S06  
RetroFit Sash



**JURALCO**

www.juralco.co.nz ph (09) 478 8018

**Juralco Winterglaze® RetroFit Double Glazing System**

Issue 3-25 v1

Page 8



## Juralco Winterglaze® RetroFit Double Glazing System - Wedge Chart



**JVB/BACKWEDGE**  
PVC Offset Back Gasket



**JWG/W02**  
Easy fit Sanoprene  
Composite Backing Seal



**JWG/W04**  
Push fit PVC  
Backing Seal



**JWG/W06**  
Push fit Sanoprene  
Composite Backing Seal

Double Glazing Wedge Chart

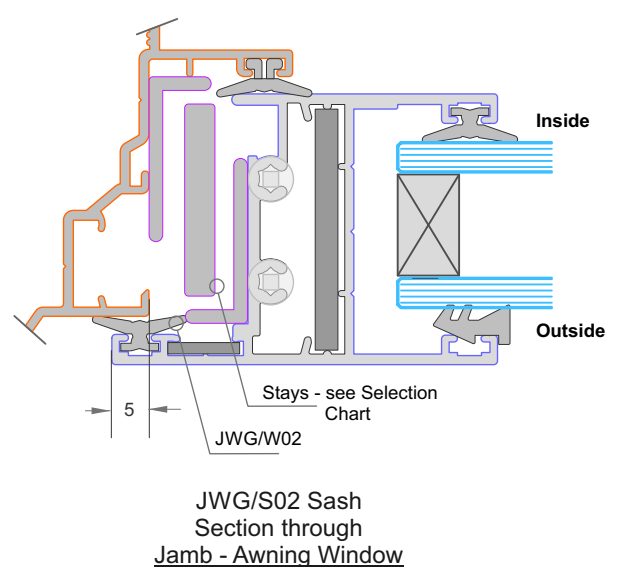
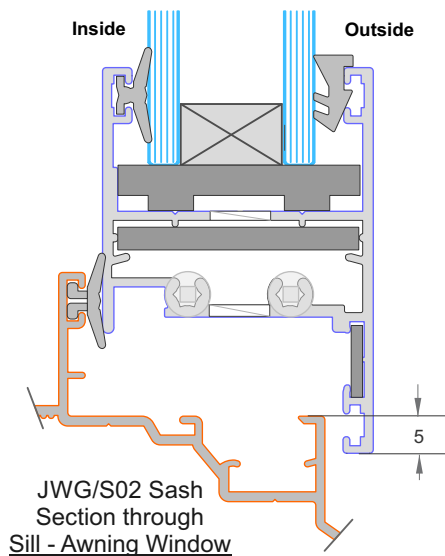
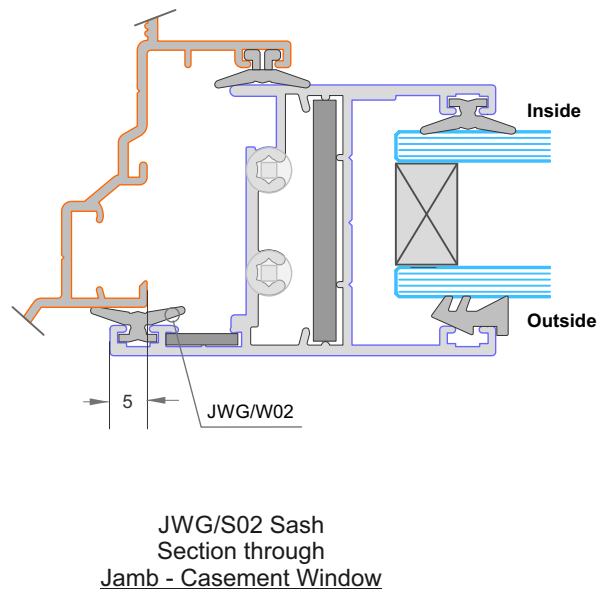
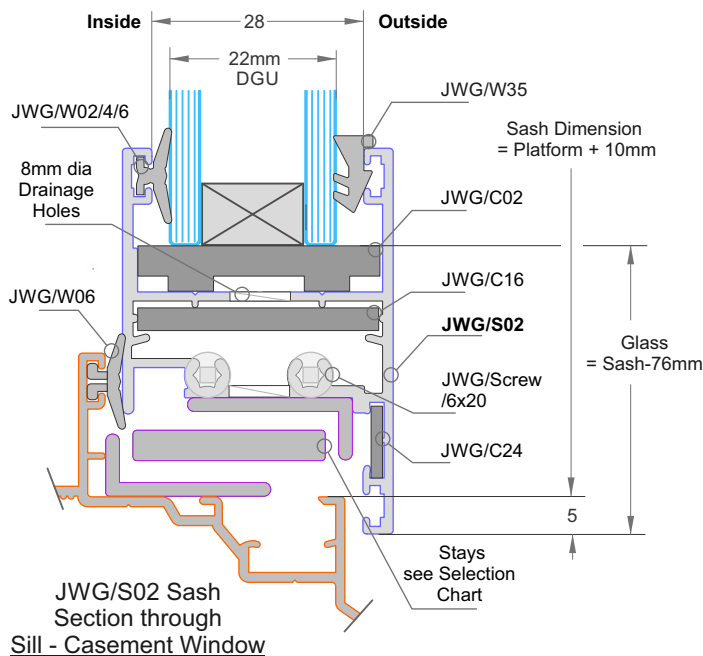
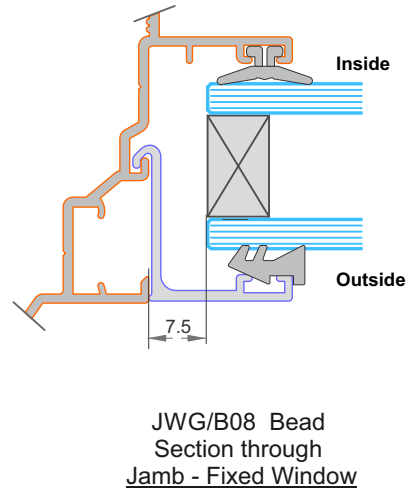
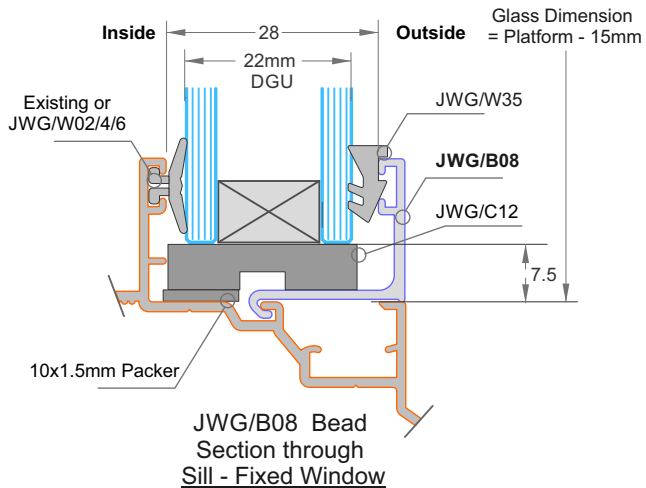
Double Glazing Unit Thickness	22mm Cavity		23mm Cavity		26.5mm Cavity		28mm Cavity		30mm Cavity	
	JVB/Backwedge to Back	JWG/W02 /04/06 To Back	JVB/Backwedge to Back	JWG/W02 /04/06 To Back	JVB/Backwedge to Back	JWG/W02 /04/06 To Back	JVB/Backwedge to Back	JWG/W02 /04/06 To Back	JVB/Backwedge to Back	JWG/W02 /04/06 To Back
16mm	JWG/W50 Wedge	JWG/W40 Wedge	JWG/W55 Wedge	JWG/W45 Wedge	N/A	JWG/W80 Wedge	N/A	N/A	N/A	N/A
18mm	JWG/W30 Wedge	N/A	JWG/W35 Wedge	JWG/W25 Wedge	JWG/W70 Wedge	JWG/W60 Wedge	N/A	JWG/W75 Wedge	N/A	N/A
20mm	N/A	N/A	N/A	N/A	JWG/W50 Wedge	JWG/W40 Wedge	JWG/W65 Wedge	JWG/W55 Wedge	N/A	JWG/W75 Wedge
21mm					JWG/W40 Wedge	JWG/W30 Wedge	JWG/W55 Wedge	JWG/W40 Wedge	N/A	JWG/W65 Wedge
22mm	N/A	N/A	N/A	N/A	JWG/W30 Wedge	JWG/W20 Wedge	JWG/W45 Wedge	JWG/W35 Wedge	JWG/W65 Wedge	JWG/W55 Wedge
24mm	N/A	N/A	N/A	N/A	N/A	N/A	JWG/W25 Wedge	N/A	JWG/W45 Wedge	JWG/W35 Wedge
26mm	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	JWG/W25 Wedge	N/A



# Juralco Winterglaze® RetroFit Double Glazing System - Beads and Sashes

Fairview, Mainland Frame, 1

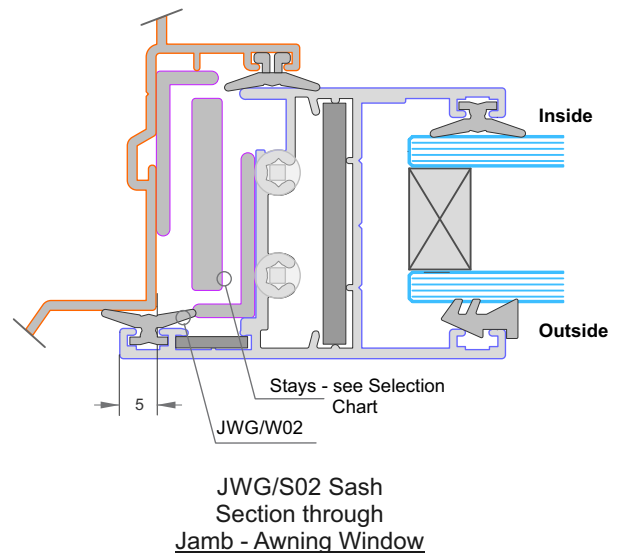
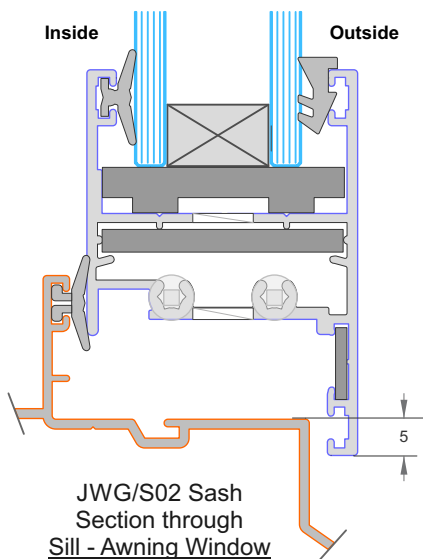
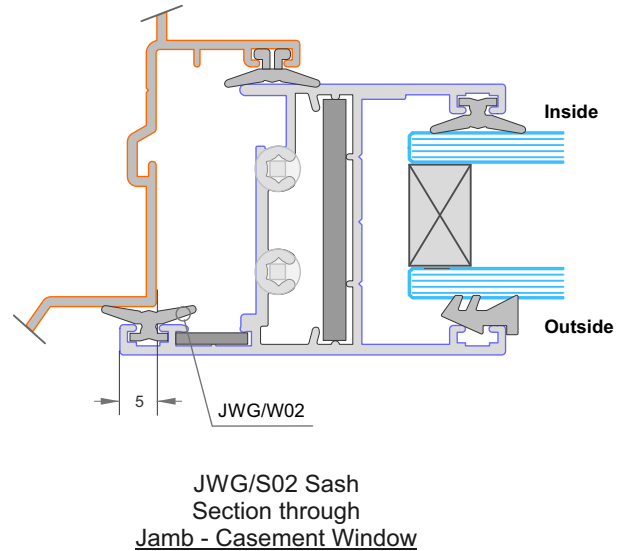
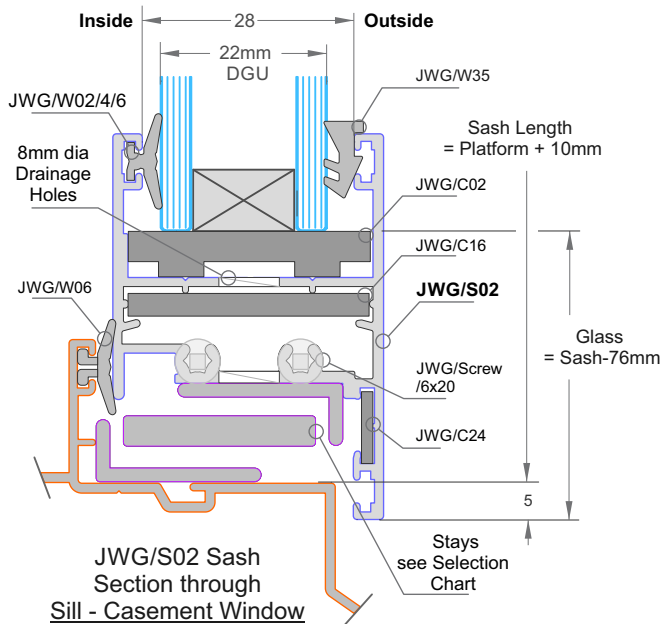
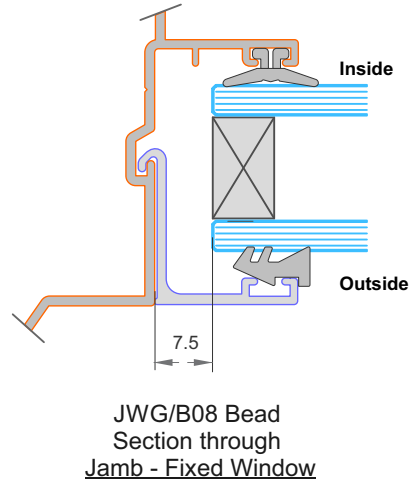
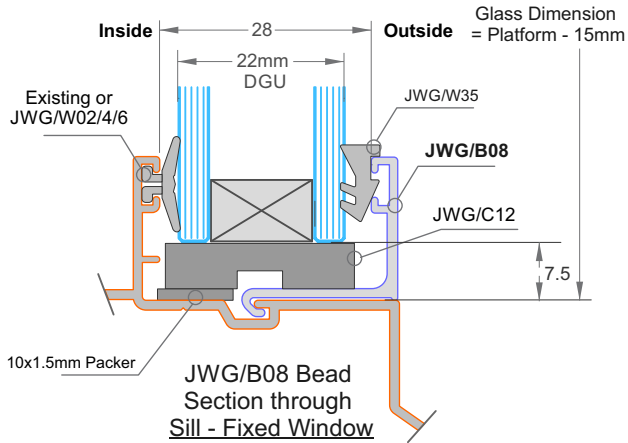
All cutting allowances are symmetrical, ie same deductions/additions for vertical and horizontal



# Juralco Winterglaze® RetroFit Double Glazing System - Beads and Sashes

Fairview, Mainland Frame, 2

All cutting allowances are symmetrical, ie same deductions/additions for vertical and horizontal



**JURALCO**

www.juralco.co.nz ph (09) 478 8018

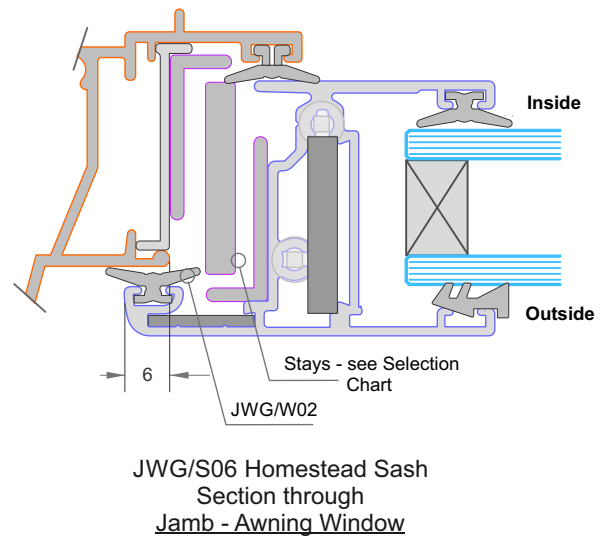
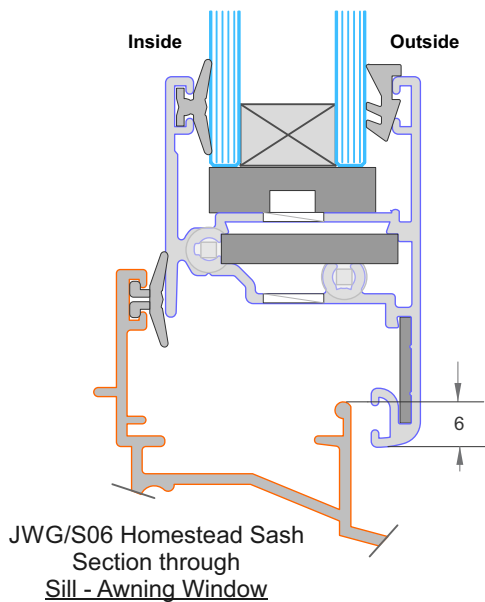
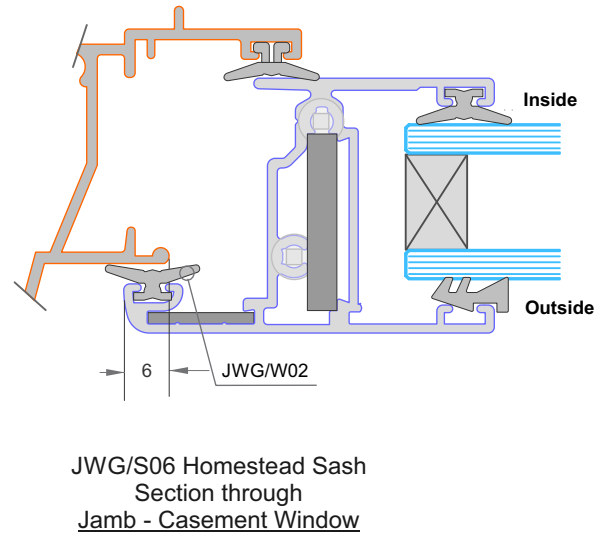
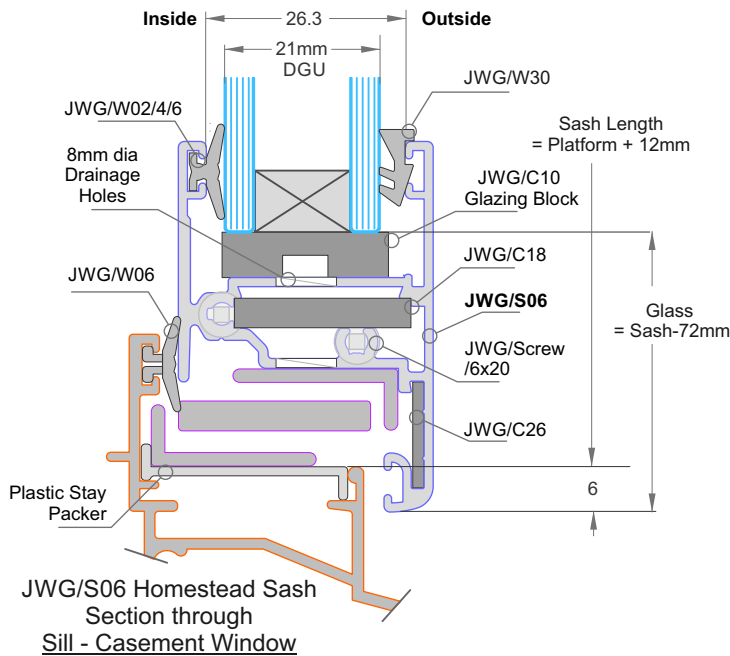
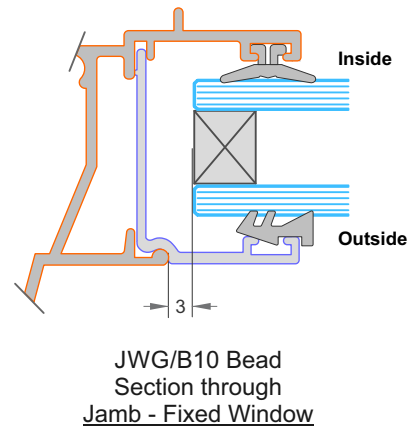
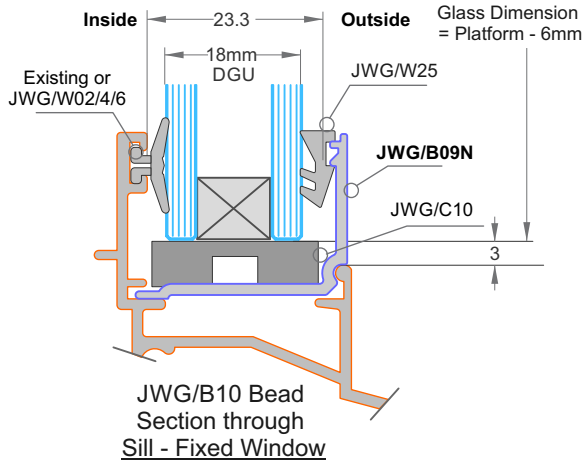
**Juralco Winterglaze® RetroFit Double Glazing System**

Issue 3-25 v1  
Page 11

# Juralco Winterglaze® RetroFit Double Glazing System - Beads and Sashes

Old Fisher, Rylock, Lyte Frames

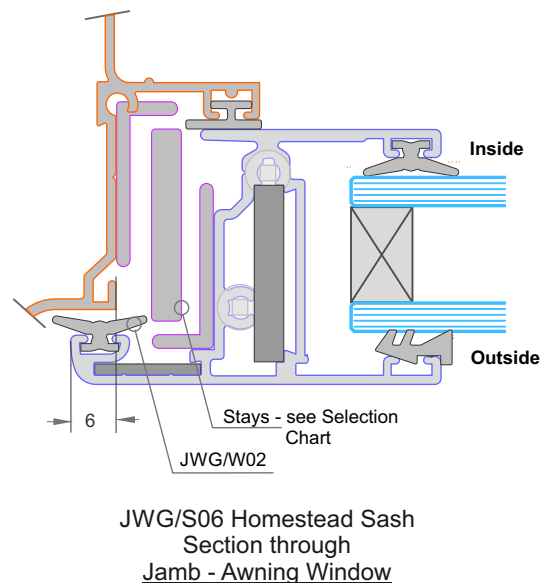
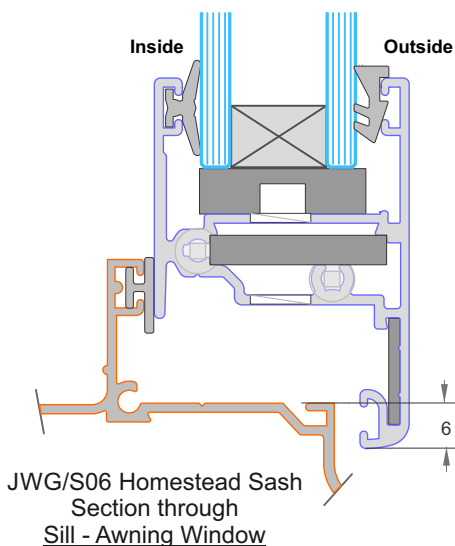
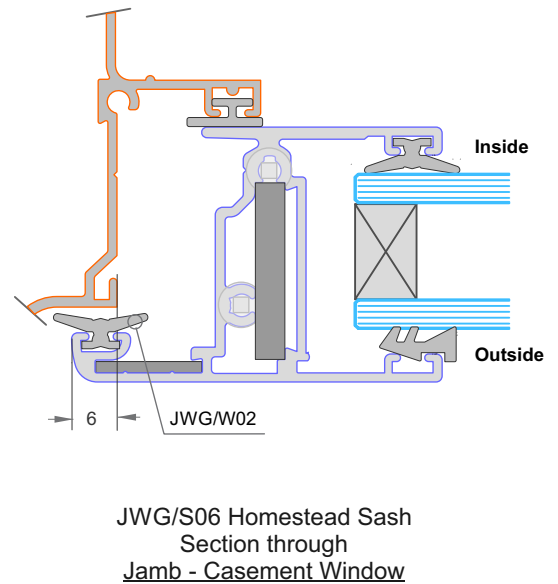
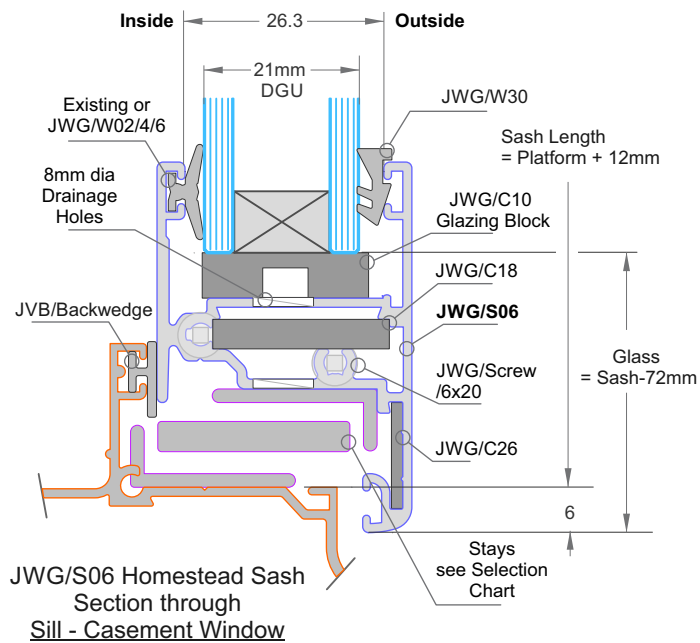
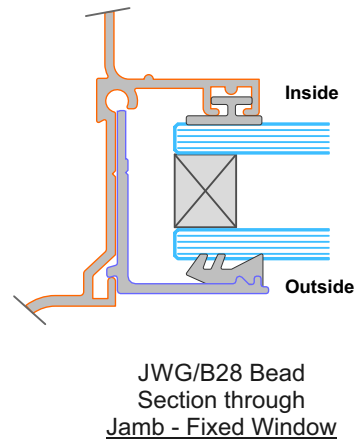
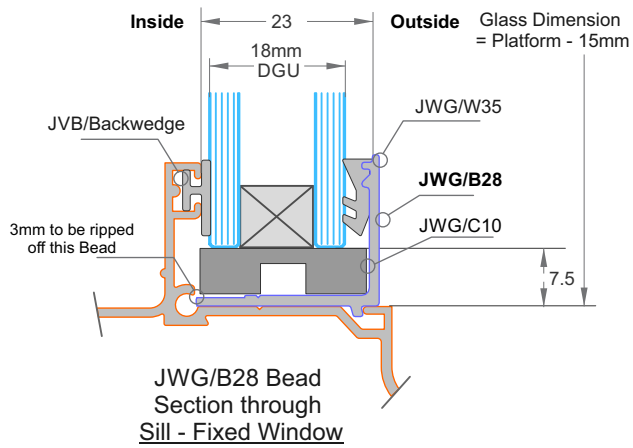
All cutting allowances are symmetrical, ie same deductions/additions for vertical and horizontal



# Juralco Winterglaze® RetroFit Double Glazing System - Beads and Sashes

Old Nulook, Vistalite  
Nebulite Frames

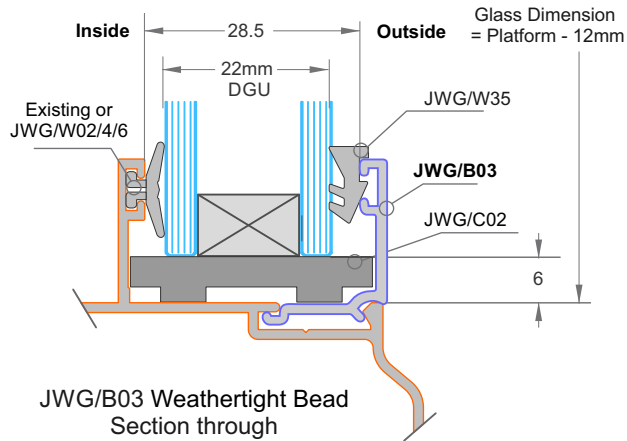
All cutting allowances are symmetrical, ie same deductions/additions for vertical and horizontal



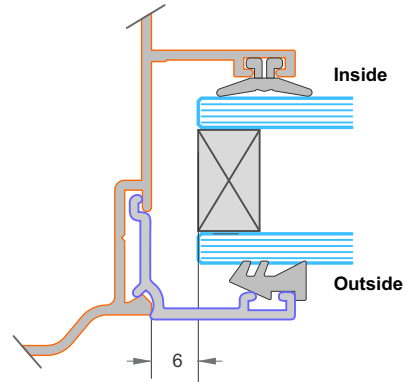
# Juralco Winterglaze® RetroFit Double Glazing System - Beads and Sashes

## First Glazing Platform

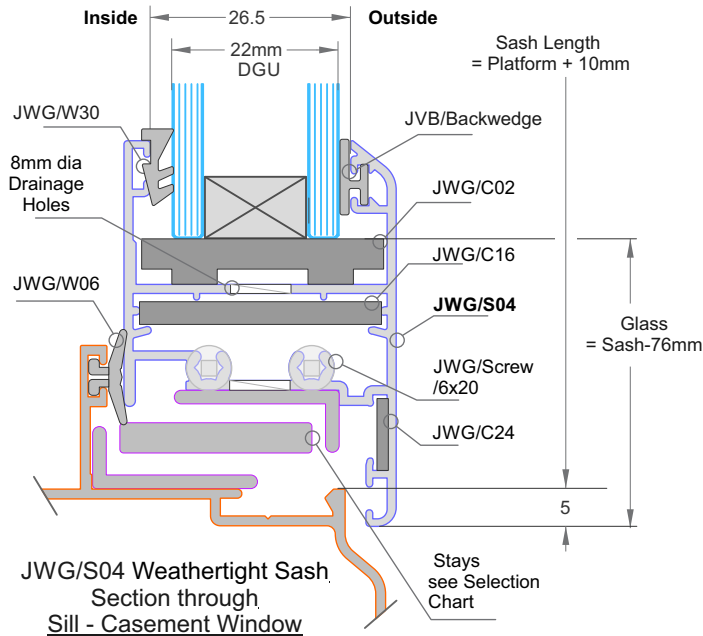
All cutting allowances are symmetrical, ie same deductions/additions for vertical and horizontal



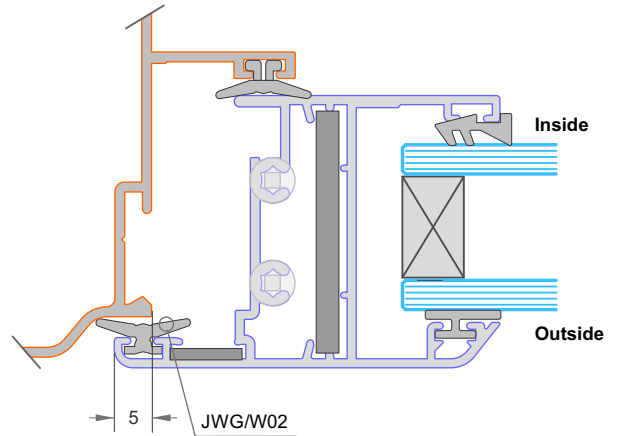
JWG/B03 Weathertight Bead  
Section through  
Sill - Fixed Window



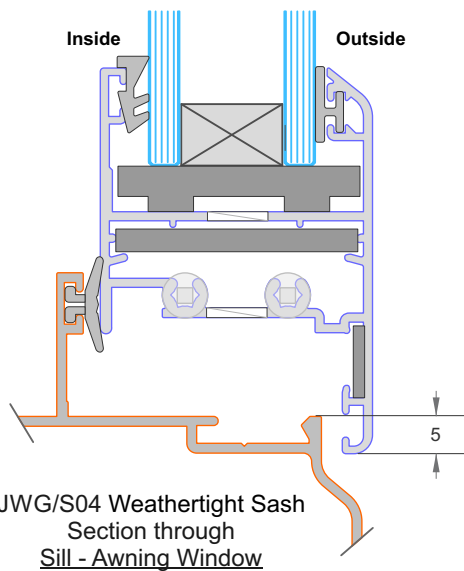
JWG/B03 Weathertight Bead  
Section through  
Jamb - Fixed Window



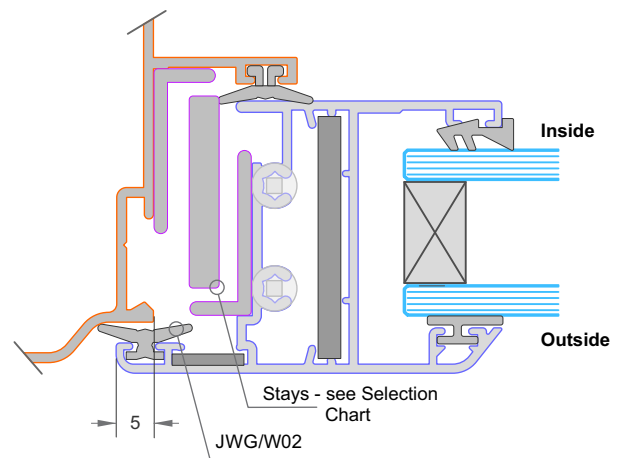
JWG/S04 Weathertight Sash  
Section through  
Sill - Casement Window



JWG/S04 Weathertight Sash  
Section through  
Jamb - Casement Window



JWG/S04 Weathertight Sash  
Section through  
Sill - Awning Window



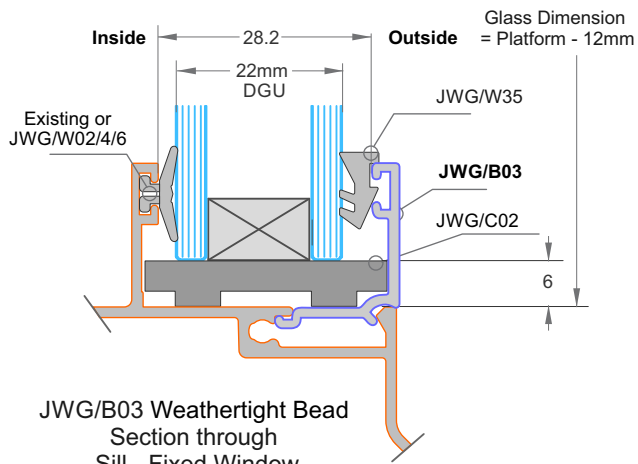
JWG/S04 Weathertight Sash  
Section through  
Jamb - Awning Window



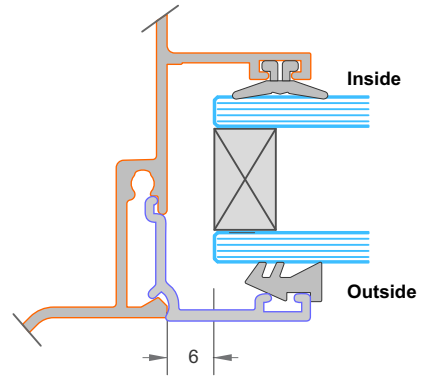
# Juralco Winterglaze® RetroFit Double Glazing System - Beads and Sashes

## Altherm Glazing Platform

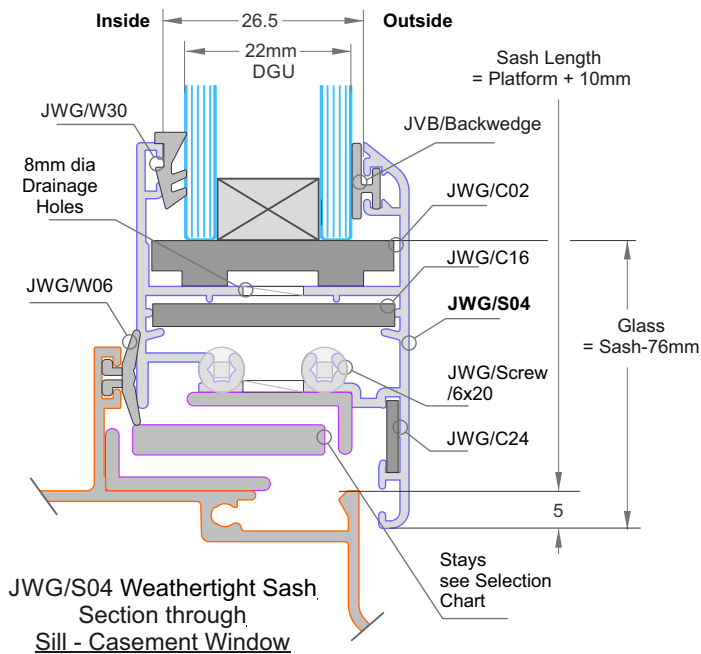
All cutting allowances are symmetrical, ie same deductions/additions for vertical and horizontal



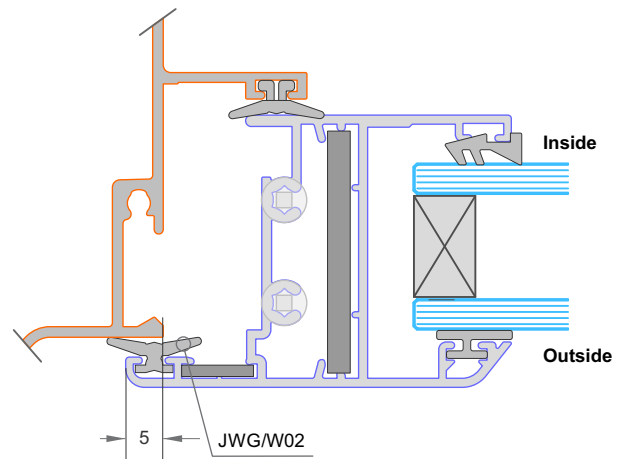
**JWG/B03 Weathertight Bead**  
Section through  
Sill - Fixed Window



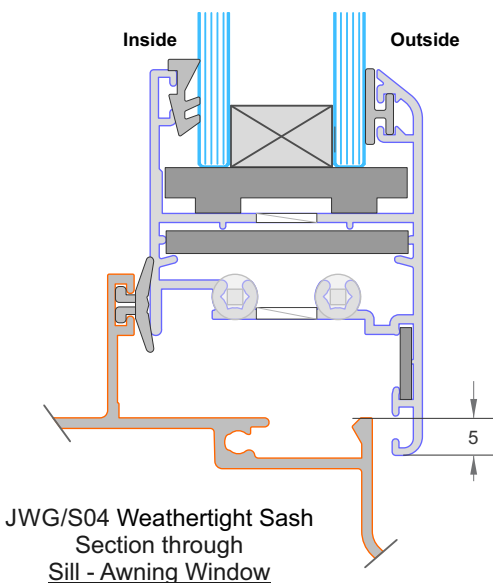
**JWG/B03 Weathertight Bead**  
Section through  
Jamb - Fixed Window



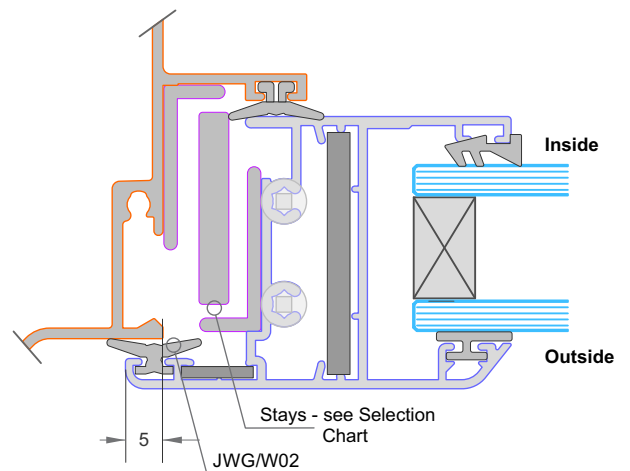
**JWG/S04 Weathertight Sash**  
Section through  
Sill - Casement Window



**JWG/S04 Weathertight Sash**  
Section through  
Jamb - Casement Window



**JWG/S04 Weathertight Sash**  
Section through  
Sill - Awning Window

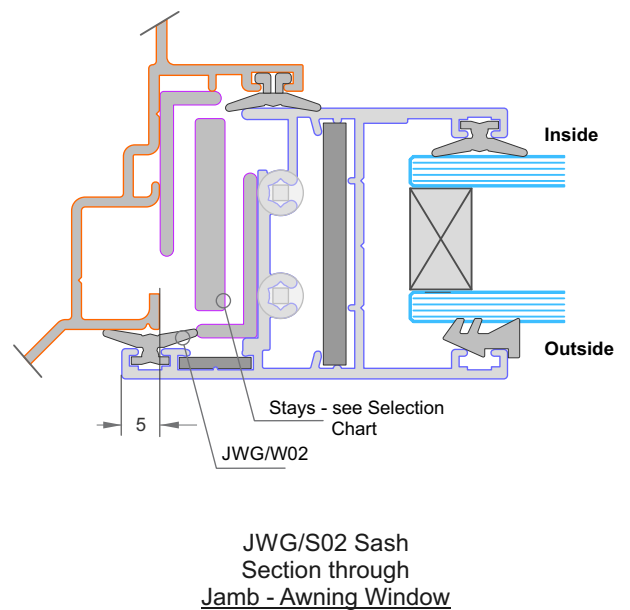
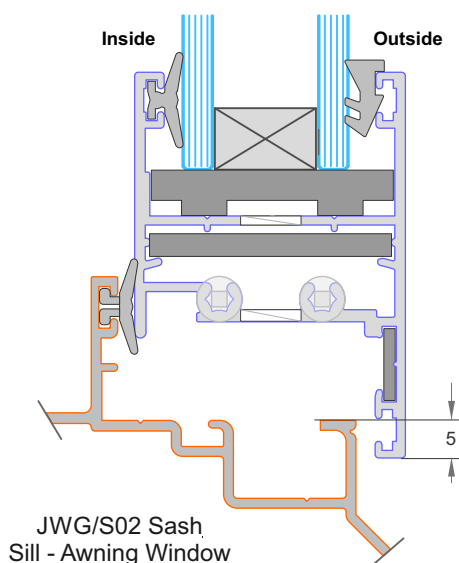
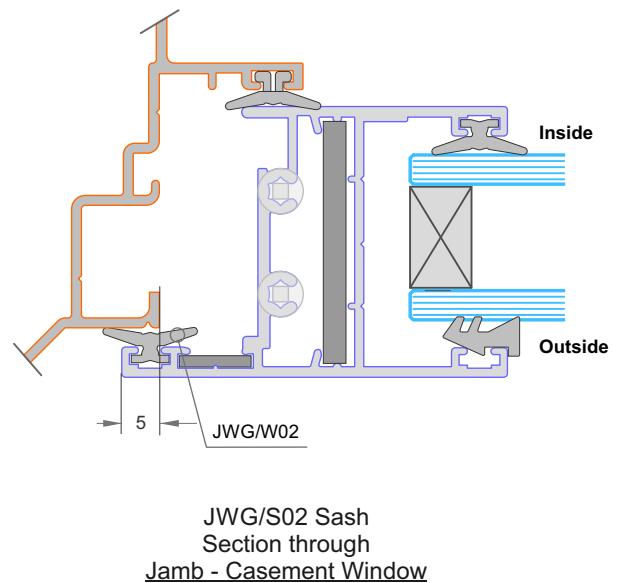
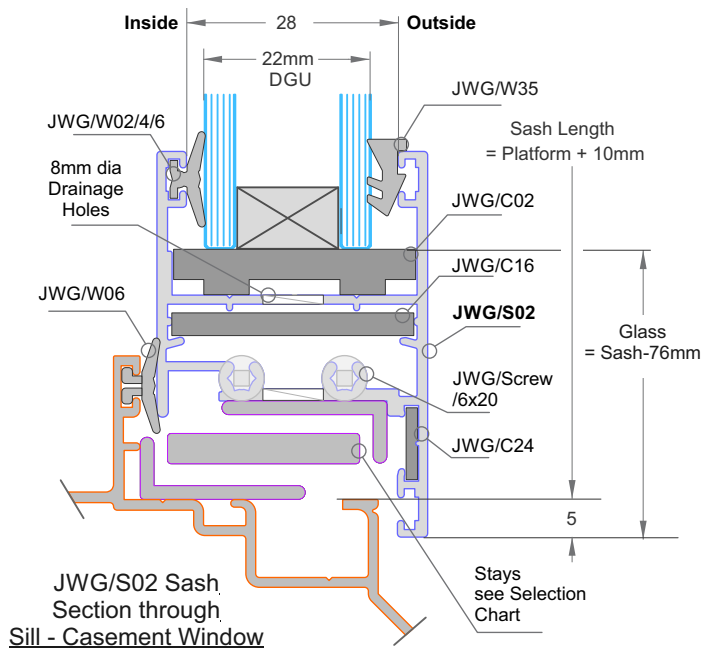
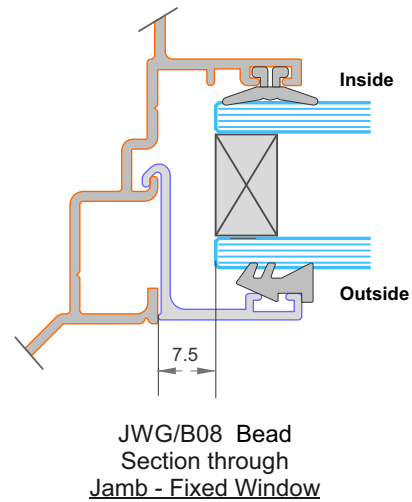
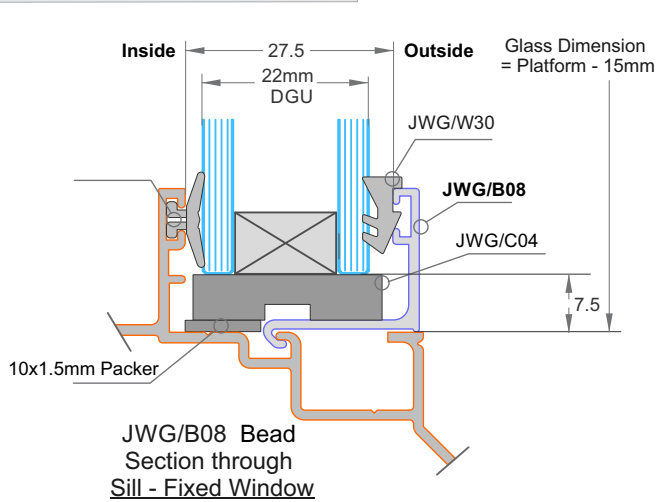


**JWG/S04 Weathertight Sash**  
Section through  
Jamb - Awning Window

# Juralco Winterglaze® RetroFit Double Glazing System - Beads and Sashes

## Vantage Platform

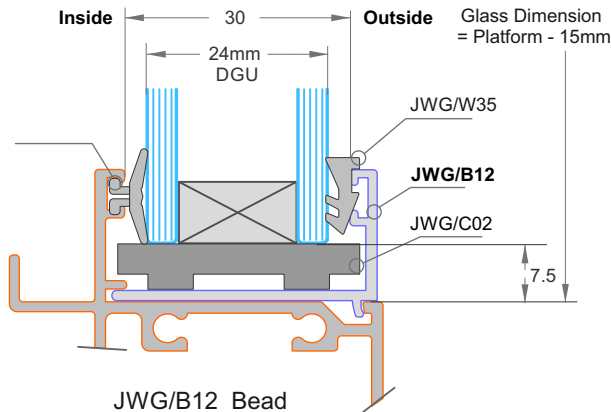
All cutting allowances are symmetrical, ie same deductions/additions for vertical and horizontal



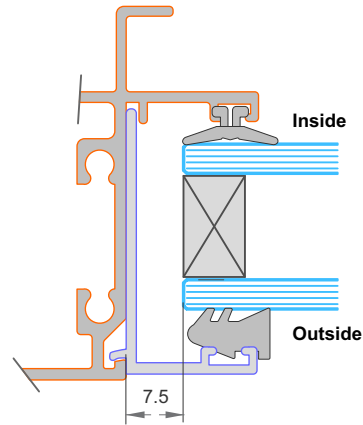
# Juralco Winterglaze® RetroFit Double Glazing System - Beads and Sashes

Old Nulook, Rolls 6171 1986

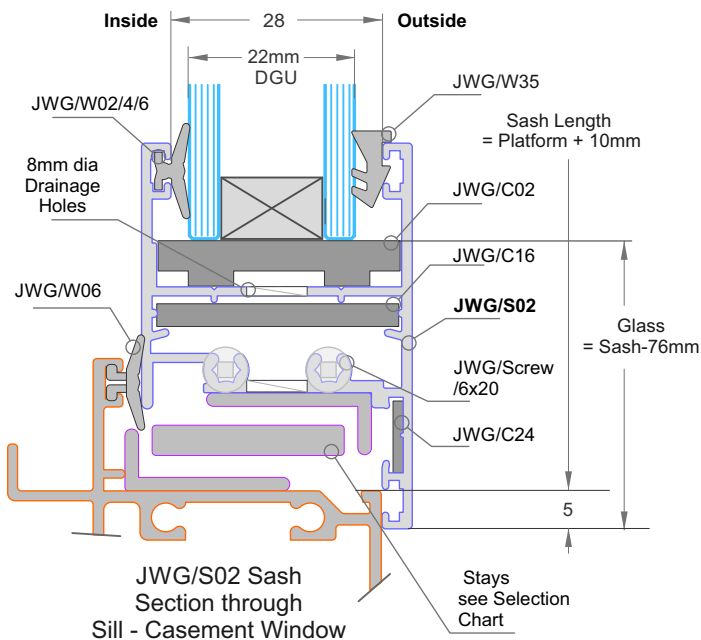
All cutting allowances are symmetrical, ie same deductions/additions for vertical and horizontal



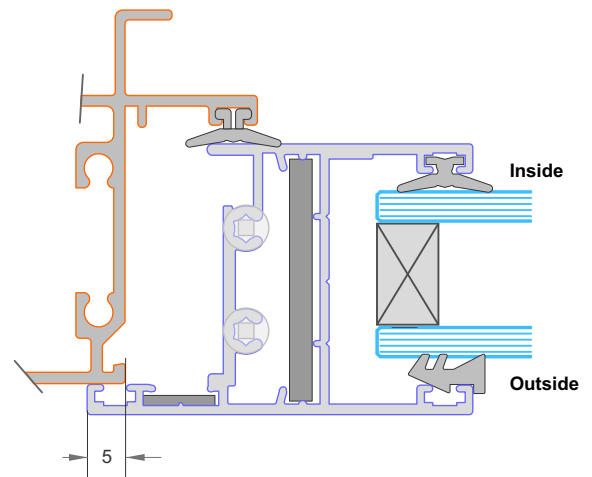
JWG/B12 Bead  
Section through  
Sill - Fixed Window



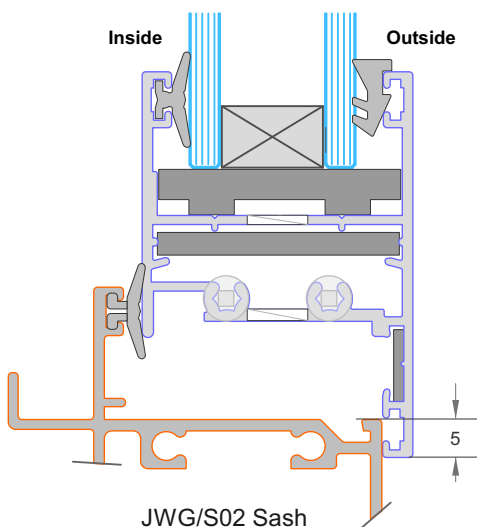
JWG/B12 Bead  
Section through  
Jamb - Fixed Window



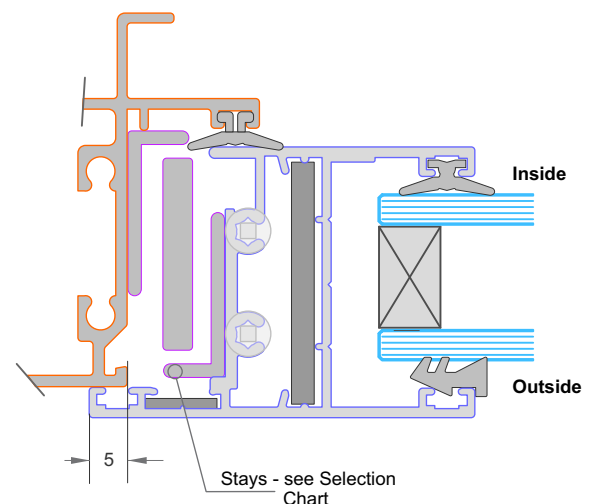
JWG/S02 Sash  
Section through  
Sill - Casement Window



JWG/S02 Sash  
Section through  
Jamb - Casement Window



JWG/S02 Sash  
Section through  
Sill - Awning Window

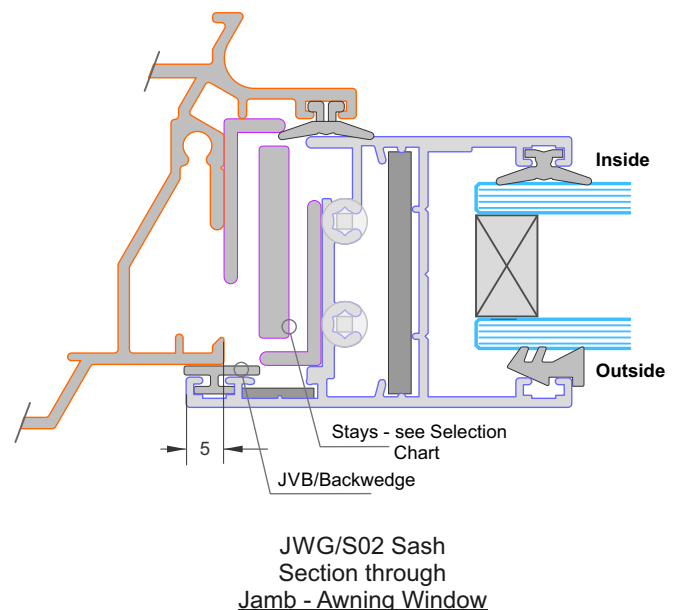
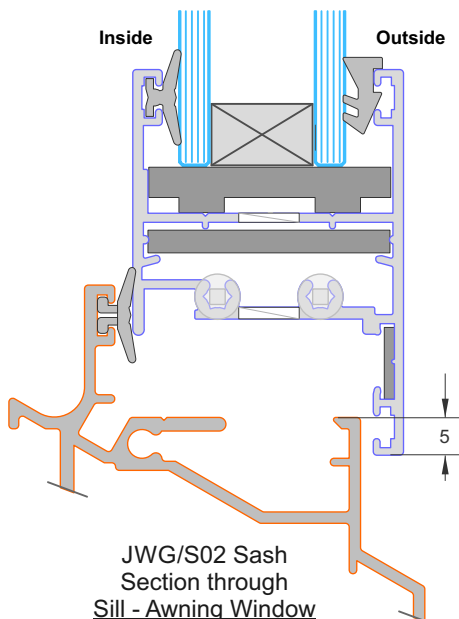
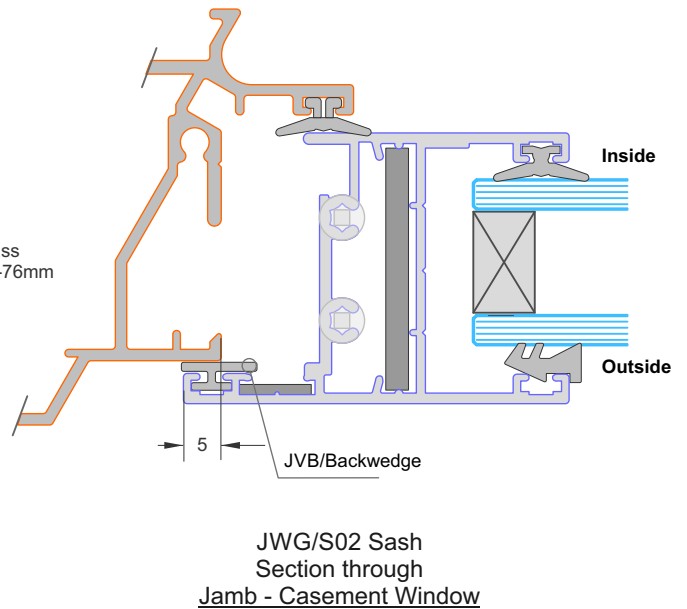
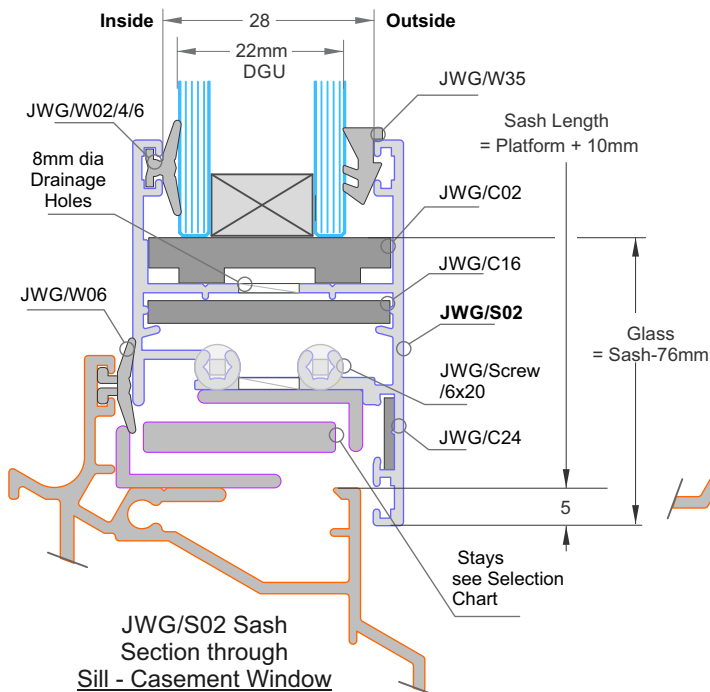
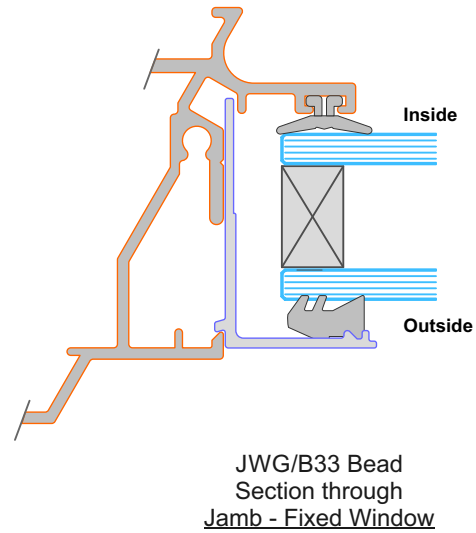
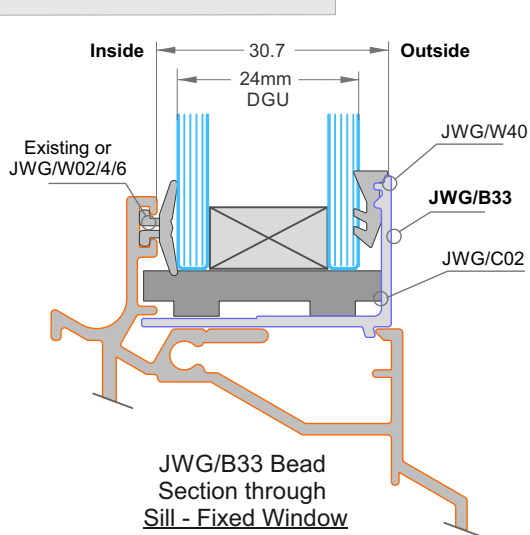


JWG/S02 Sash  
Section through  
Jamb - Awning Window

# Juralco Winterglaze® RetroFit Double Glazing System - Beads and Sashes

Old Nulook, Nuron 6534 1989

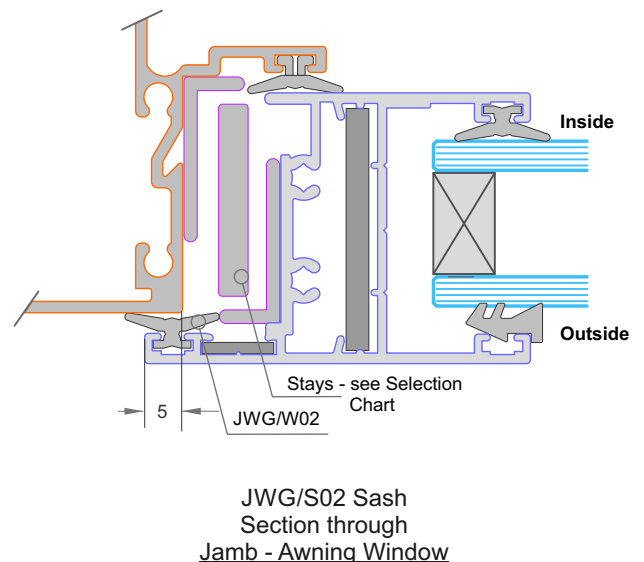
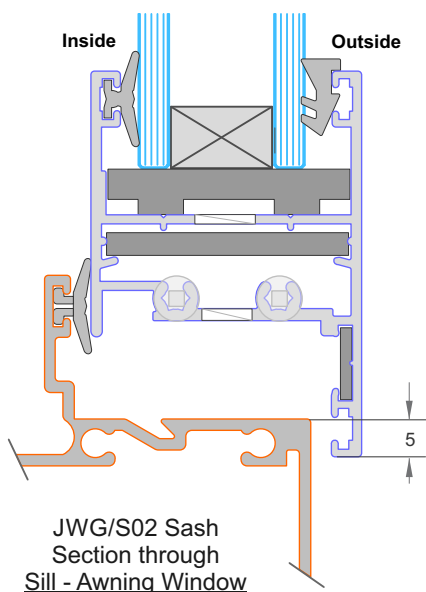
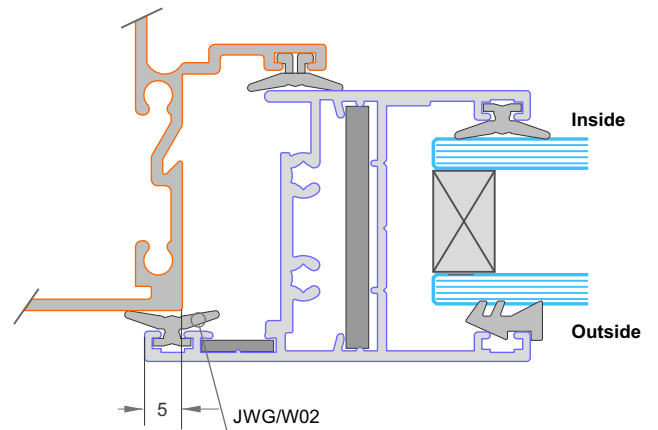
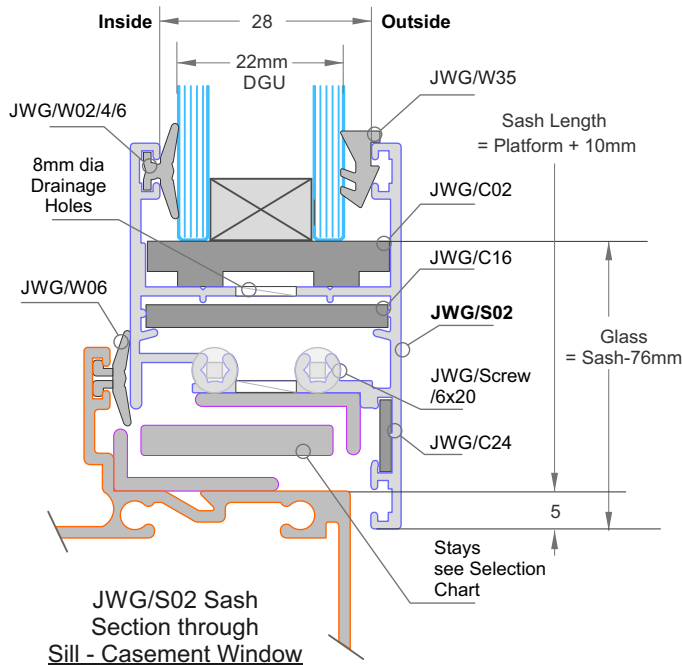
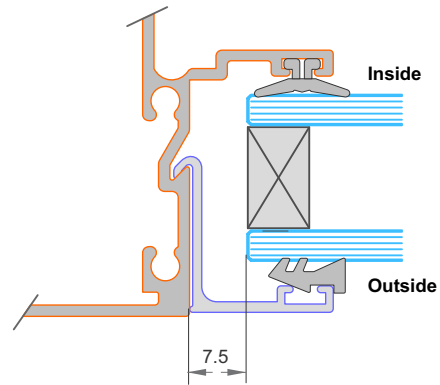
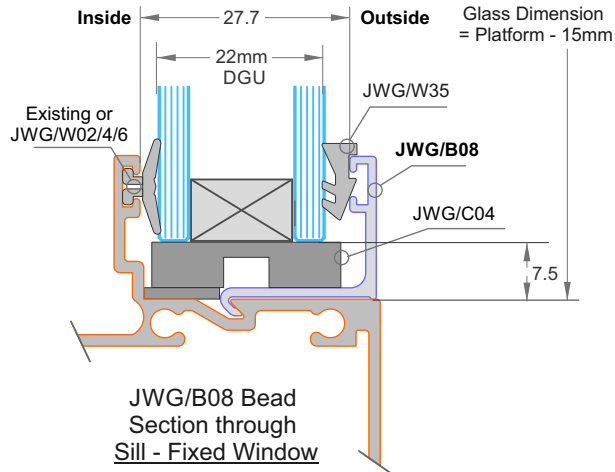
All cutting allowances are symmetrical, ie same deductions/additions for vertical and horizontal



# Juralco Winterglaze® RetroFit Double Glazing System - Beads and Sashes

Circle 5980 1987

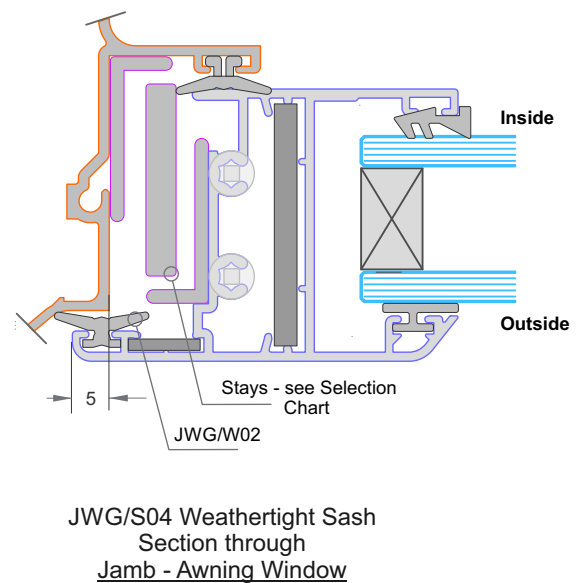
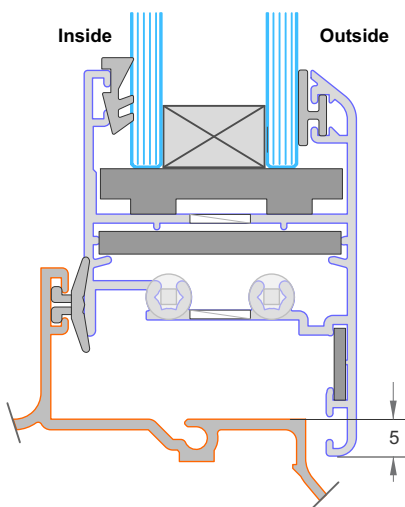
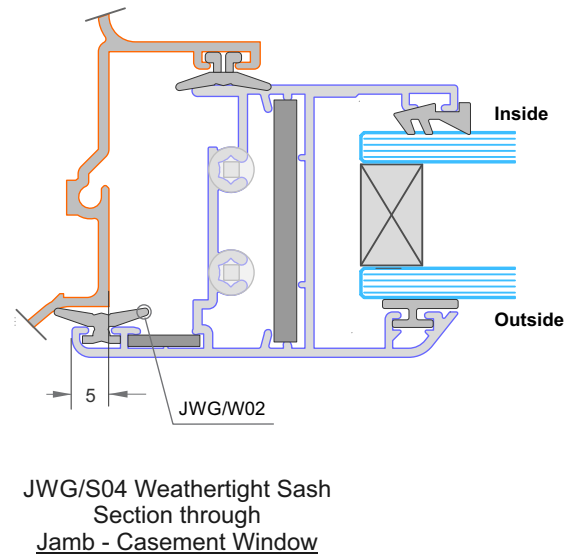
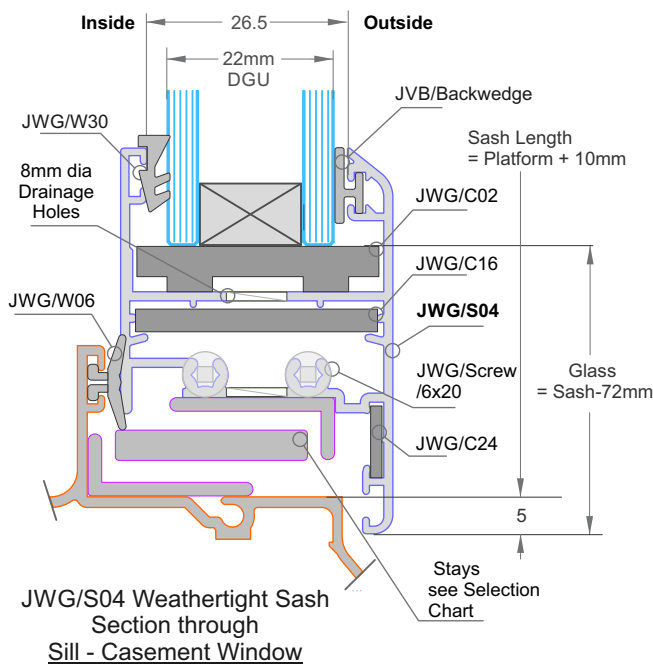
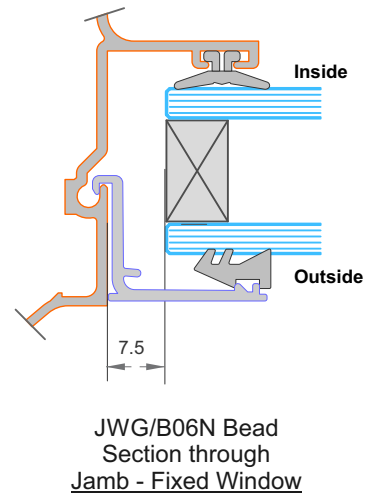
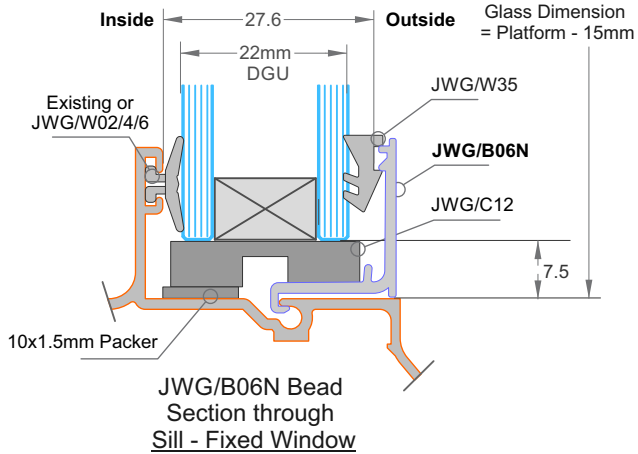
All cutting allowances are symmetrical, ie same deductions/additions for vertical and horizontal



# Juralco Winterglaze® RetroFit Double Glazing System - Beads and Sashes

Fletcher 35mm Pacific Suite

All cutting allowances are symmetrical, ie same deductions/additions for vertical and horizontal





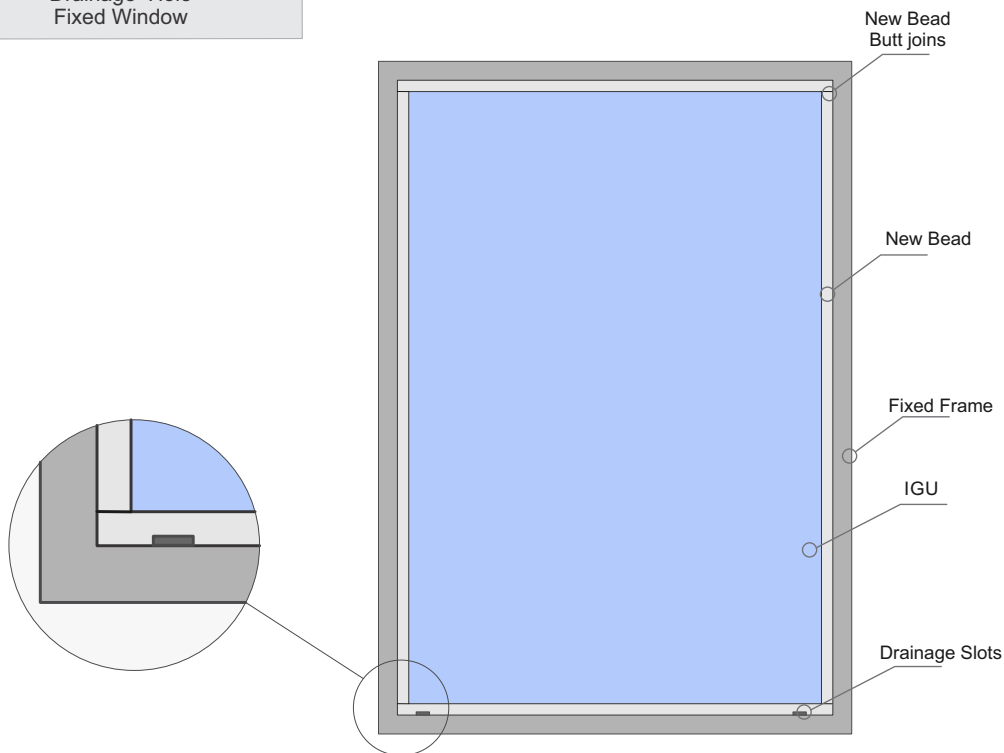
## Juralco Winterglaze® RetroFit Double Glazing System - Checklist

**Note : This Manual covers the installation of IGU's into Fixed/Awning/Casement Windows and Sliding/Hinged Fixed Glass Doors,with existing Aluminium Joinery.  
It does not cover any Doors or Windows with Wooden joinery**

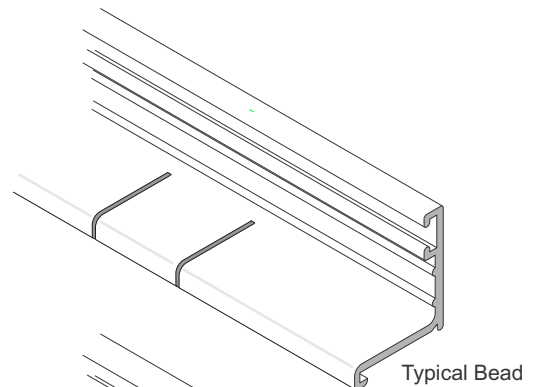
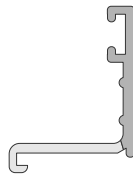
- ☐ 1 - Check state of Aluminium joinery. Is in good condition? Is the supporting structure in good condition? If not do not proceed
- ☐ 2 - Check thickness of current fixed glazing. The existing Joinery was designed for a single glazing system. The IGU, if too heavy will place undue strains, with possible moisture leakages compromising the building structure. It is very important this is prevented.  
The most important part of the fixed frame (attached to the building) is the Sill. The heavier IGU has the potential to stress the sill and the miter corner joins, leading to moisture ingress.  
- For Fixed windows up to say 1200mm wide x 1200mm high a heavier IGU should not be a problem  
- For Awning Windows the stays transfer the load down to the bottom miter joins.  
For 'HD A' Stays the maximums are, 1800mm high sash = 15kg to a 1200mm high sash = 43kg  
- For Casement Windows (the worst case scenario) the bottom stay is producing a twisting moment adjacent to one of the sill corner miters. Be very sure the sill fixed frame extrusion is very secure.  
For '4BC' Stays the maximums are, 750mm wide sash = 20kg to a 1000mm high sash = 40kg
- ☐ 3 - Check on requirements for Human Impact Areas. These minimum toughened glass thickness requirements may preclude the fitting of an IGU to existing joinery on weight considerations
- 4 - Assuming the project complies with all relevant standards.....
- ☐ 5 - Check with the customer on IGU construction type, Glass type selection and glass thicknesses
- ☐ 6 - Check on the existing Joinery type with samples supplied. Check on stay and handle requirements.  
Accurately measure Bead lengths (fixed) or Sash sizes (Awning/Casement)
- ☐ 7 - Order the necessary extrusions, stays and handles. Order IGU's
- ☐ 8 - Manufacture, cut beads to length for Fixed Windows. Cut extrusions to length for Sash Windows, assemble  
On ALL sill lengths, cut or drill the appropriate drainage holes.  
IGU's will fail prematurely if the seals are exposed to standing water.
- 9 - For Manufacture/Installation information - see following pages.



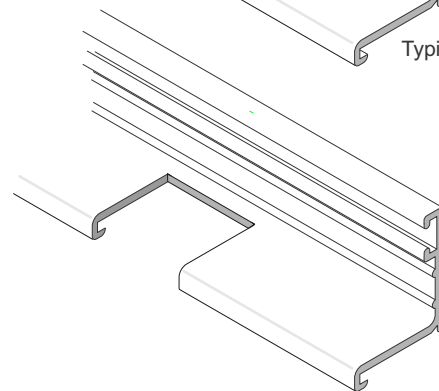
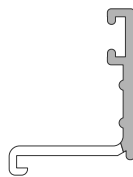
Drainage Hole  
Fixed Window



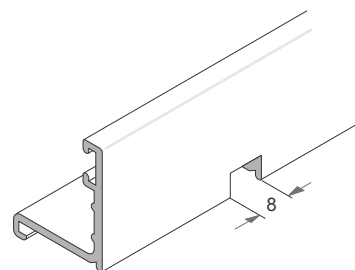
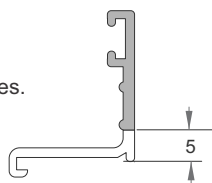
1 - About 50mm in from each Sill length  
Hacksaw cuts x 2 neatly to the front face,  
about 15-20mm apart



2 - Grip with pliers and break tab off.  
File edges clean

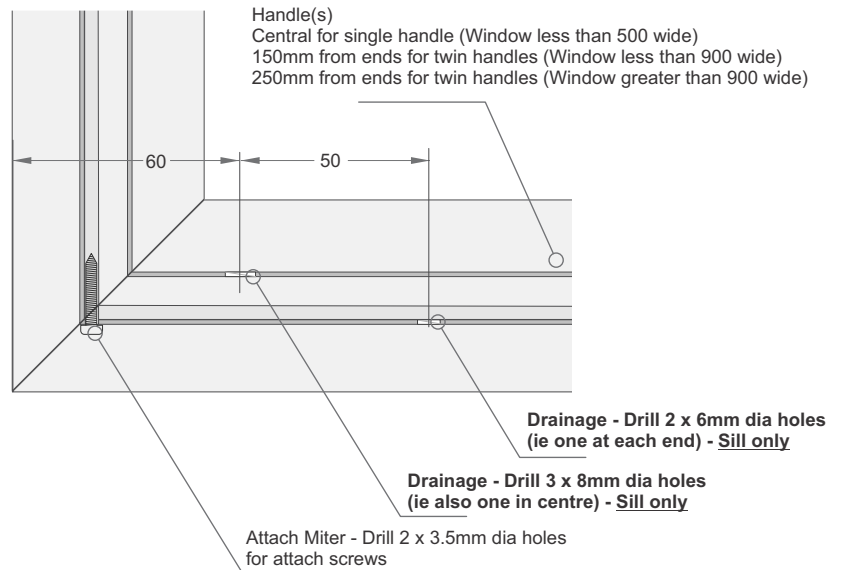
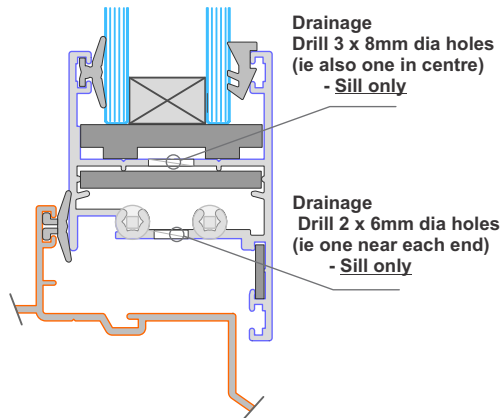


3 - With router or special tool . Cut/rout/punch  
drainage hole on front Face, This must be clean,  
neat, tidy and for optimal drainage have sharp edges.  
Vertical height 5mm. Length 8 mm

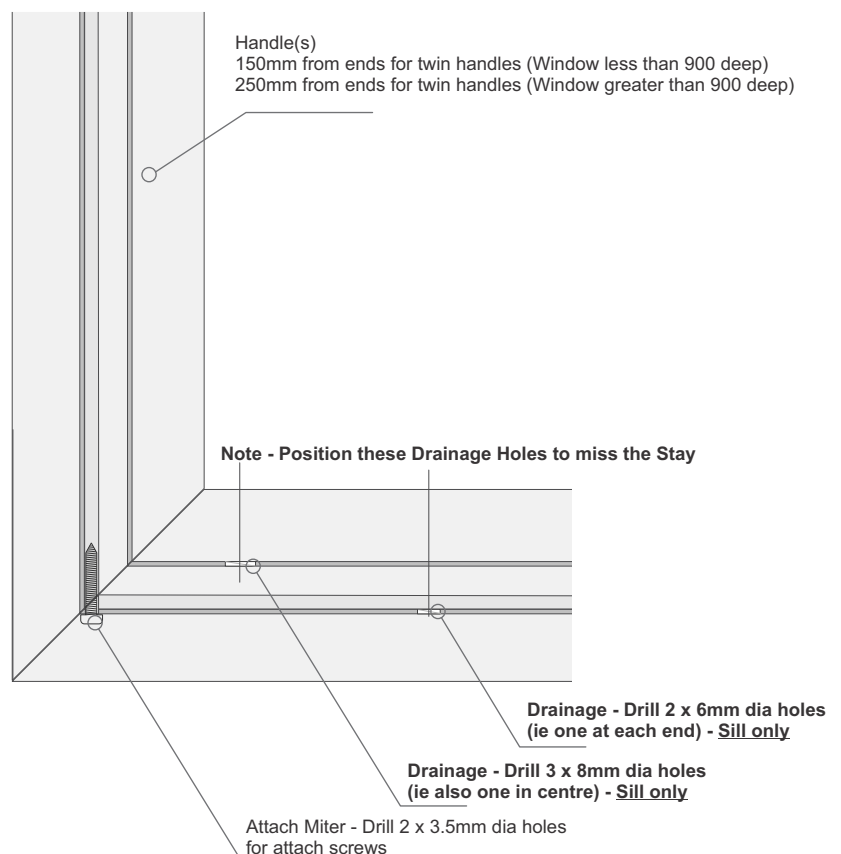
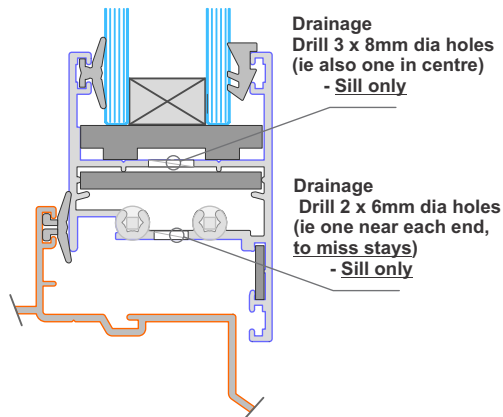


## Juralco Winterglaze® RetroFit Double Glazing System - Manufacture

### Drainage, Handle Holes Awning Window



### Drainage, Handle Holes Casement Window



**JURALCO**

www.juralco.co.nz ph (09) 478 8018

**Juralco Winterglaze® RetroFit Double Glazing System**

Issue 3-25 v1  
Page 23

## Juralco Winterglaze® RetroFit Double Glazing System - Manufacture

### Backing Seal



Fixed Window - Replace old seal if necessary  
Awning/Casement Window - Place in position on the completed Sash before IGU insertion

### Glazing Wedges Exterior compression Wedge



Note : Glazing Wedge lengths = IGU length +7%.  
DO NOT Stretch when positioning. Use Glazing Wedge Tool  
Install Horizontal Wedges first, then verticals

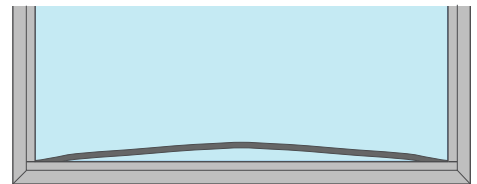
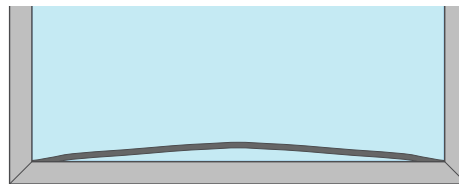


Glazing Wedge Tool

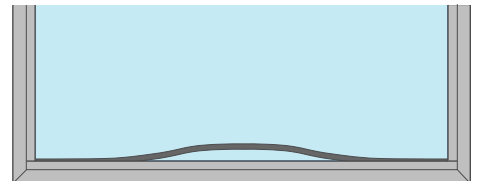
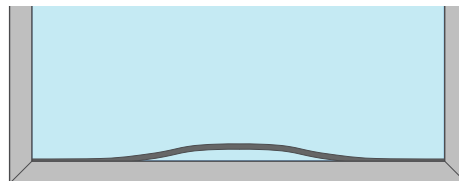
1 - Cut selected Wedge to length  
(Bottom bead first)



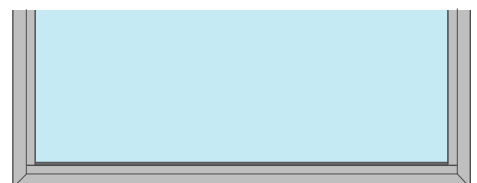
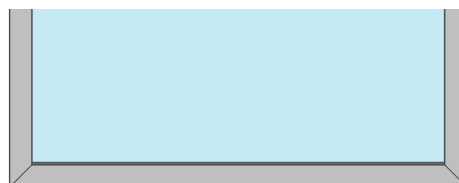
2 - Press neatly into each corner



3 - Using the Glazing Wedge Tool  
roll evenly from each end  
towards the centre.



4 - Finally roll the centre area down.



Awning/Casement Window

Fixed Window

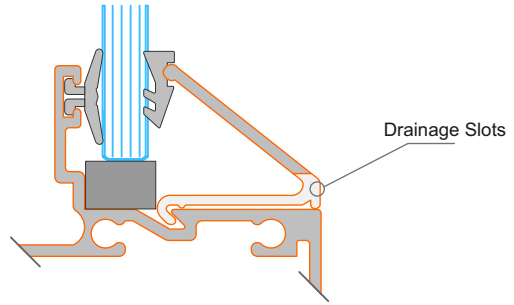
5 - Repeat for Top Bead, then two Vertical beads

# Juralco Winterglaze® RetroFit Double Glazing System - Installation

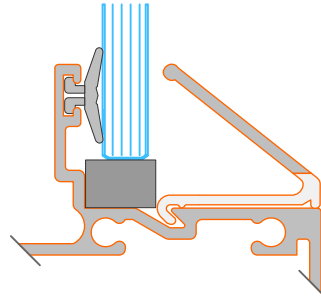
## Fixed Windows IGU Installation

### 1 - Existing Single Glazed Fixed Window

Select new bead , measure up  
Order all Extrusions, Wedges and IGU.

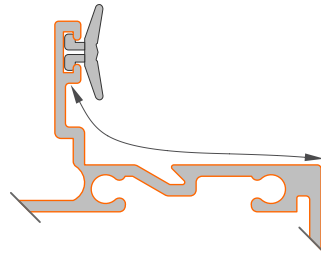


### 2 - Remove Vertical Exterior Wedges first, (with putty knife) then Horizontal ones

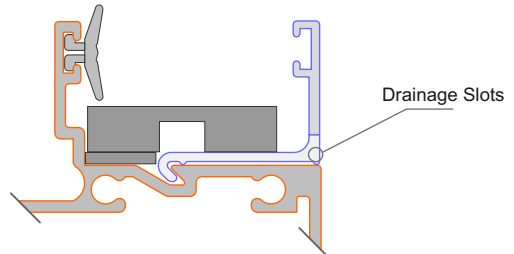


### 3 - Remove all beads, remove Glass, remove Spacers.

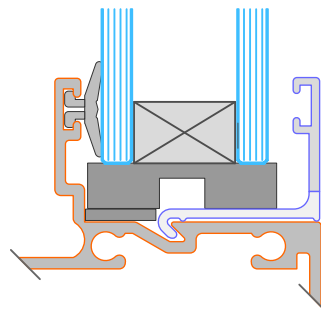
4 - Thoroughly clean the inside of the Frame, all round, but especially the sill and evenly more importantly the bottom corners. Scrape all corners clean, dry off and apply fresh sealant beads. Sealant needs to be a compatible small joint type. Inspect backing seal. Replace if necessary



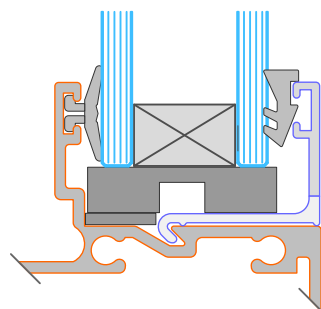
### 5 - Insert New Bottom Bead and Spacers at quarter points. (ie 25% IGU width in from each edge)



### 6 - Insert IGU, ensuring even spacing all round. Insert remaining Beads



### 7 - Insert Glazing Wedges using Glazing Wedge Tool Bottom first, then top, then verticals

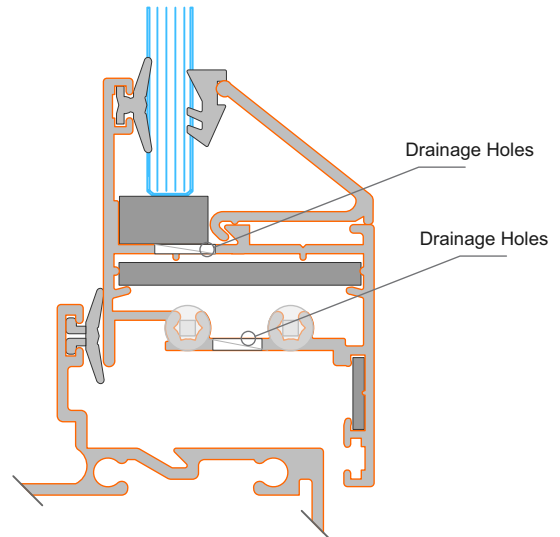


# Juralco Winterglaze® RetroFit Double Glazing System - Installation

## Sash Windows IGU Installation

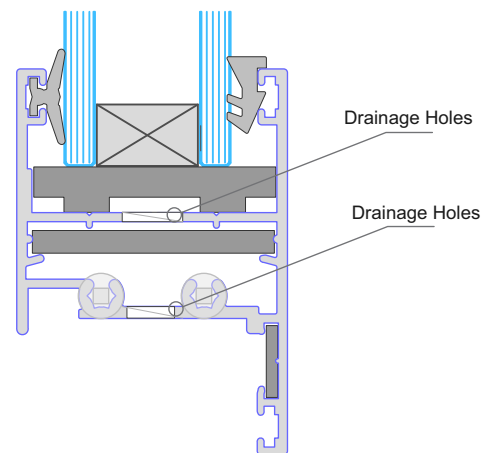
### 1 - Existing Single Glazed Sash Window.

Select new extrusion, measure up  
Order all Extrusions, Wedges and IGU.



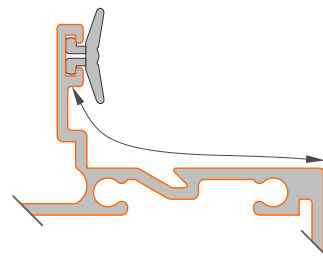
### 2 - Build New Window Sash. Insert the IGU before completing the Frame. Attach the selected Stays to the Window Frame, taking care that the stay may be for a 33mm x 13mm cavity (Awning) or a 33mm x 14mm cavity (Casement).

Drill handle holes for selected handles  
Insert Exterior Wedges using Glazing Wedge Tool



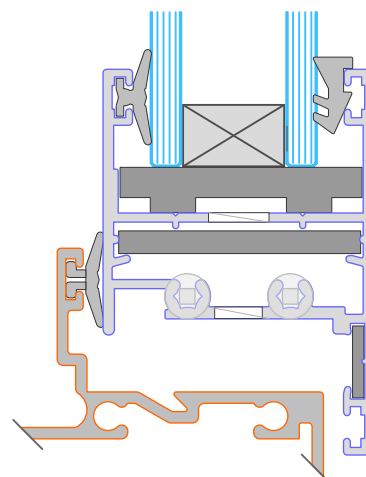
### 3 - Remove Stays, Remove Sash

4 - Thoroughly clean the inside of the Fixed Frame, all round, but especially the sill and evenly more importantly the **bottom corners**. Scrape all corners clean, dry off and apply fresh sealant beads. Sealant needs to be a compatible small joint type. Seal up all old stay holes. Take special care with Casement stay holes in the Sill. Inspect backing seal. Replace if necessary



### 5 - Present Window Frame incl Stays to Fixed Frame. Screw stays in place. Screw Handles in place.

Check for satisfactory operation, Clean and Polish





**INTERLOCK FRICTION STAYS****'A' SERIES**

33mm x 13mm Cavity

**Awning Windows**

This complete range of 4-bar friction stays provides support and control of standard weight projected top hung (PTH) sashes. The A-Series friction hinges (stays) are manufactured from extruded aluminium and has no sliding channels.

**Features**

- A complete range to cater for most residential applications
- Manufactured with the unique "pull-in" feature
- Black powdercoated finish

**Options**

- Available in four sizes to cater for sashes weighing up to 43kg
- Includes specific function models:- 'A' Full friction- 'V' Low friction - 'NF' Non-friction - 'HD A' Heavy Duty
- Non-friction model for use with window control mechanisms

Specification	Colour	Code
235MM A SERIES STAY LOW FRICTION (45°/750MM/6KG)	BLACK	<b>JP1560B</b>
235MM A SERIES STAY LOW FRICTION (45°/400MM/4KG)	BLACK	<b>JP509B</b>
330MM A SERIES STAY (35°/1000MM/9KG)	BLACK	<b>JP1561B</b>
420MM A SERIES STAY HD (20°/1800MM/15KG) (20°/1500MM/20KG) (20°/1200MM/43KG)	BLACK	<b>JP1553B</b>
512MM A SERIES STAY (27°/1300MM/12KG)	BLACK	<b>JP1530B</b>

(Opening Angle/ Max Sash Height/Max Sash Weight)

**JURALCO**

www.juralco.co.nz ph (09) 478 8018

## INTERLOCK FRICTION STAYS

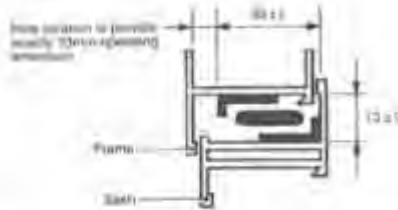
### 'A' SERIES

33mm x 13mm Cavity

### Installation

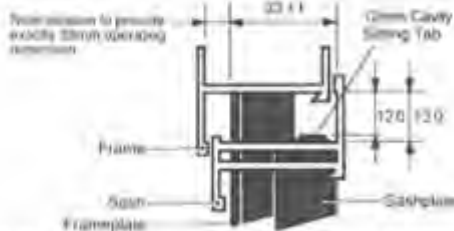
#### INSTALLATION INSTRUCTIONS

FIGURE 1



**FIGURE 1:** The width of sash members to frame members should be set to provide a stay cavity height of 13mm. Where the 'front-to-back' dimension of the jamb cavity exceeds 33mm one baseplate (usually the frameplate) must be located away from the 'hard-back' position as in Figs 1 and 2.

FIGURE 2

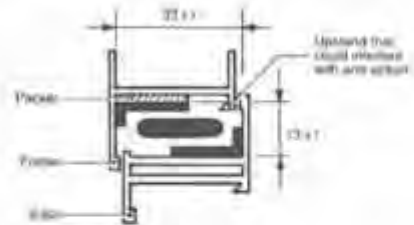


**FIGURE 2:** The frameplate is fixed hard up to underside of the frame cavity and parallel with the vertical plane of the frame. The two tier sashplate should be fixed flush with the top surface of the sash for a 12mm cavity and flush with the tabs shoulders for a 13mm cavity.

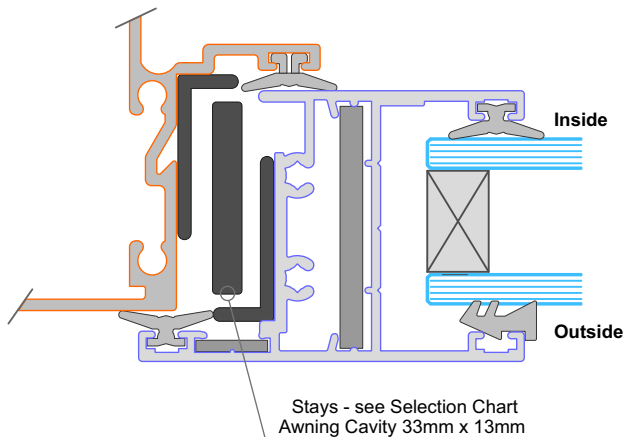
Recommended stay cavity height.

The 420 HD A (P1553) model use a thicker, heavy duty short arm and therefore the cavity MUST be cut to no less than the nominal 13mm.

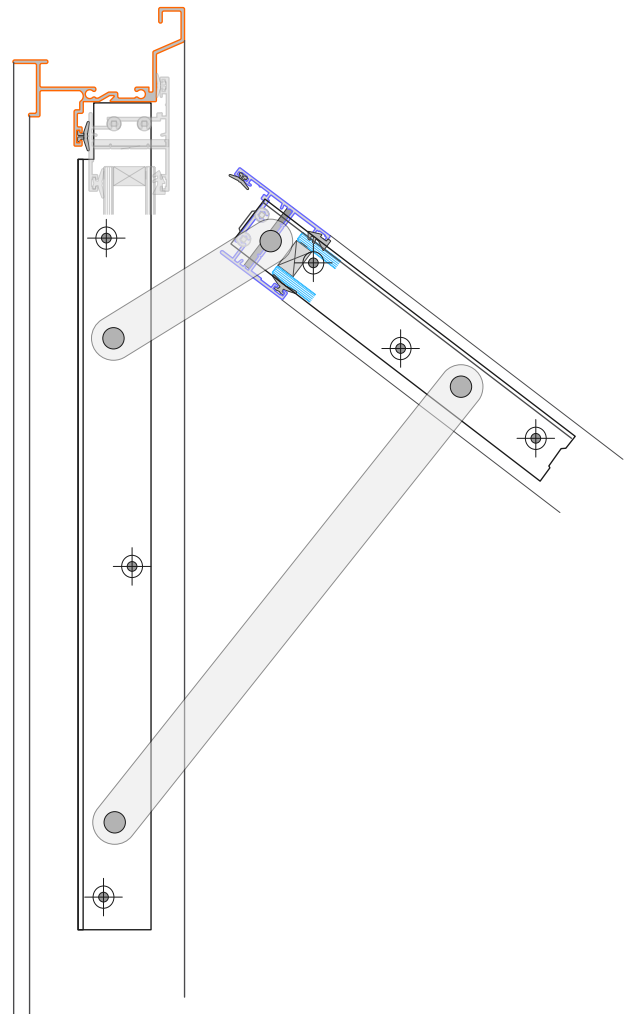
FIGURE 3



**FIGURE 3:** Where upstands protrude into the stay cavity by more than 2.5mm it may be necessary to use packers or shims to ensure that the stay arms can operate freely.



Stay Attach - M4x11 self drive/drill C/S square drive



## FRICION STAYS

### 'NEXUS' SERIES

#### Awning Windows

33mm x 13mm Cavity



Developed in response to changing market requirements for larger window sashes in projected top hung (PTH) 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
- 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
- Complies with requirements in NZ:4211
- Provides compression for weather seal
- Made from extruded aluminium with no sliding channels
- Tested to 36,000 cycles
- Black powdercoat finish

#### Options

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

Specification	Colour	Code
240MM NEXUS STAY STANDARD FRICION BLACK (34°/600MM/10KG)*	BLACK	<b>JP240A</b>
240MM NEXUS STAY HIGH FRICION BLACK (34°/600MM/18KG)*	BLACK	<b>JP240H</b>
240MM NEXUS STAY NON FRICION BLACK (34°/600MM/18KG)*	BLACK	<b>JP240N</b>
340MM NEXUS STAY STANDARD FRICION BLACK (28°/1000MM/18KG)*	BLACK	<b>JP340A</b>
340MM NEXUS STAY HIGH FRICION BLACK (28°/1000MM/30KG)*	BLACK	<b>JP340H</b>
450MM NEXUS STAY HIGH FRICION BLACK (20°/1000MM/45KG)*	BLACK	<b>JP450H</b>
450MM NEXUS STAY HIGH FRICION BLACK (18°/2000MM/60KG)*	BLACK	<b>JP710H</b>

(Opening Angle/ Max Sash Height/Max Sash Weight)



## FRICITION STAYS 'CHH' SERIES.

For old CHH, Fisher Extrusions

35mm x 20.5mm Cavity



A complete range of 4-bar friction stays manufactured from extruded Aluminium. Used for residential applications, the CHH Stays have four sizes suitable for sashes up to 16kg.

### Features

- For retrofit applications
- Manufactured with the unique inch pull-inch feature
- No sliding channels
- Factory set friction levels thus no on-site adjustment needed
- Supplied in trade pack as a pair

Available in 4 sizes, designated by the frame plate length, catering for top hung sashes up to 1200mm in height and weighing up to 16kg. Designed to fit cavity 30 ±1mm X 20 ±1mm

### Suitability

Overall length 240mm  
Maximum sash height 800mm  
Opening angle 40°  
Maximum sash weight 8kg

### Fixing Surfaces

Timber  
Metal

### Finish

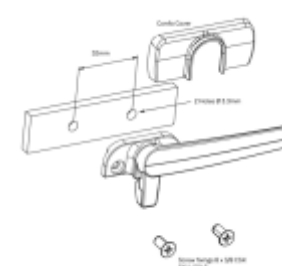
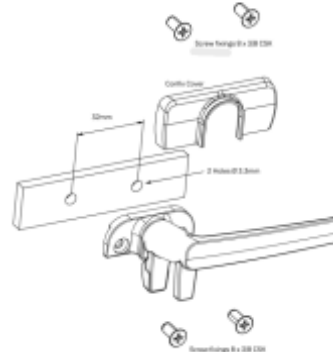
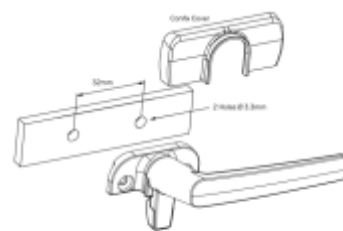
Black Powder coated Aluminium

Specification	Colour	Code
240MM CHH STAY (40°/800MM/8KG)	BLACK	JP362B
330MM CHH STAY (38°/1000MM/10KG)	BLACK	JP363B
430MM CHH STAY (28°/1200MM/16KG)	BLACK	JP364B
440MM CHH STAY (20°/800MM/16KG)	BLACK	JP568B

(Opening Angle/ Max Sash Height/Max Sash Weight)

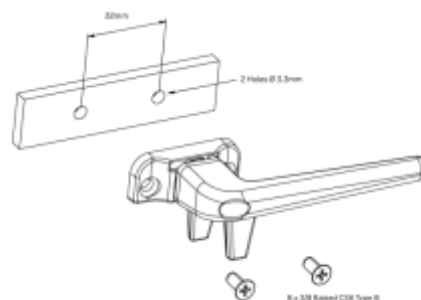
**YALE ARIA HELIX SEAL CONCEALED FIXINGS WINDOW FASTNERS**

YALE ARIA HELIX SEAL CONFIX STANDARD RIGHT HAND	BLACK	<b>JP630B</b>
YALE ARIA HELIX SEAL CONFIX STANDARD RIGHT HAND	SCC*	<b>JP630SCC</b>
YALE ARIA HELIX SEAL CONFIX STANDARD LEFT HAND	BLACK	<b>JP631B</b>
YALE ARIA HELIX SEAL CONFIX STANDARD LEFT HAND	SCC*	<b>JP631SCC</b>
YALE ARIA HELIX SEAL CONFIX DBLE TOUGUE RIGHT HAND	Black	<b>JP640B</b>
YALE ARIA HELIX SEAL CONFIX DBLE TOUGUE RIGHT HAND	SCC*	<b>JP640SCC</b>
YALE ARIA HELIX SEAL CONFIX DBLE TOUGUE LEFT HAND	Black	<b>JP641B</b>
YALE ARIA HELIX SEAL CONFIX DBLE TOUGUE LEFT HAND	SCC*	<b>JP641SCC</b>
YALE ARIA HELIX SEAL LOW PROFILE RIGHT HAND	BLACK	<b>JP650B</b>
YALE ARIA HELIX SEAL LOW PROFILE RIGHT HAND	SCC*	<b>JP650SCC</b>
YALE ARIA HELIX SEAL LOW PROFILE LEFT HAND	BLACK	<b>JP651B</b>
YALE ARIA HELIX SEAL LOW PROFILE LEFT HAND	SCC*	<b>JP651SCC</b>



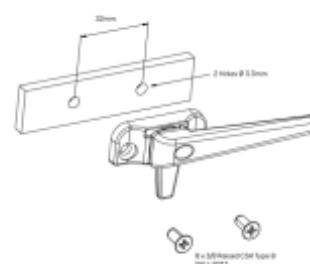
**YALE STYLELINE 2 WINDOW FASTNERS**

YALE STYLELINE 2 DBLE TOUGUE RIGHT HAND	BLACK	<b>JP240B</b>
YALE STYLELINE 2 DBLE TOUGUE RIGHT HAND	SCC*	<b>JP240SCC</b>
YALE STYLELINE 2 DBLE TOUGUE LEFT HAND	BLACK	<b>JP241B</b>
YALE STYLELINE 2 DBLE TOUGUE LEFT HAND	SCC*	<b>JP241SCC</b>



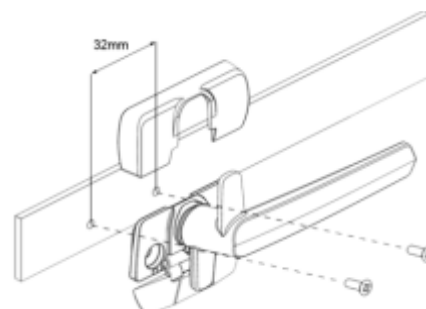
**YALE SLIMLINE 2 WINDOW FASTNERS**

YALE SLIMLINE 2 LOW PROFILE RIGHT HAND	BLACK	<b>JP242B</b>
YALE SLIMLINE 2 LOW PROFILE RIGHT HAND	SCC*	<b>JP242SCC</b>
YALE SLIMLINE 2 LOW PROFILE LEFT HAND	BLACK	<b>JP243B</b>
YALE SLIMLINE 2 LOW PROFILE LEFT HAND	SCC*	<b>JP243SCC</b>



**YALE ARIA VENTING WINDOW FASTNERS**

YALE ARIA VENTING WEDGELESS 6MM RIGHT HAND	BLACK	<b>JP540B</b>
YALE ARIA VENTING WEDGELESS 6MM RIGHT HAND	SCC*	<b>JP540SCC</b>
YALE ARIA VENTING WEDGELESS 6MM LEFT HAND	BLACK	<b>JP541B</b>
YALE ARIA VENTING WEDGELESS 6MM LEFT HAND	SCC*	<b>JP541SCC</b>



## Juralco Winterglaze® RetroFit Double Glazing System - Handles

### YALE ARIA WITH FLAP WINDOW FASTNERS

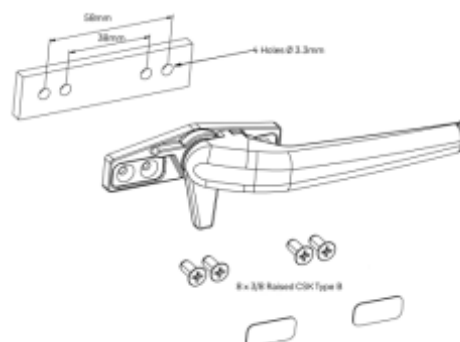
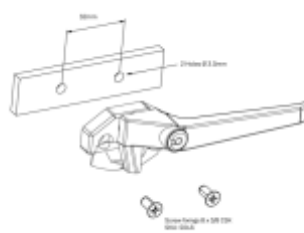
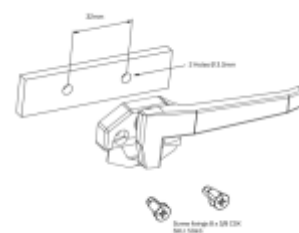
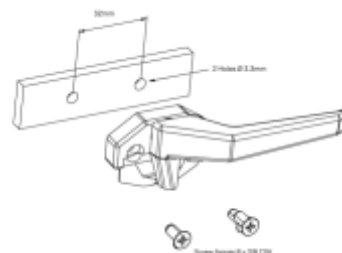
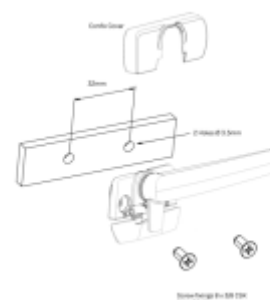
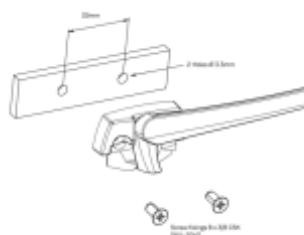
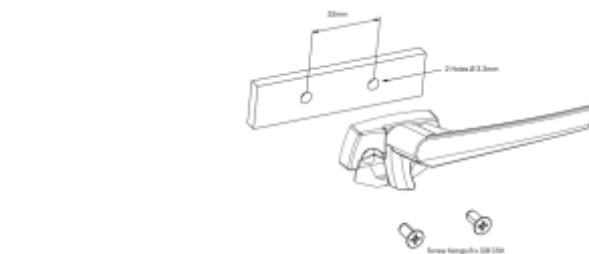
YALE ARIA WITH FLAP STANDARD RIGHT HAND	BLACK	<b>JP530B</b>
YALE ARIA WITH FLAP STANDARD RIGHT HAND	SCC*	<b>JP530SCC</b>
YALE ARIA WITH FLAP STANDARD LEFT HAND	BLACK	<b>JP531B</b>
YALE ARIA WITH FLAP STANDARD LEFT HAND	SCC*	<b>JP531SCC</b>
YALE ARIA WITH FLAP 6MM LOW PROFILE RIGHT HAND	BLACK	<b>JP520B</b>
YALE ARIA WITH FLAP 6MM LOW PROFILE RIGHT HAND	SCC*	<b>JP520SCC</b>
YALE ARIA WITH FLAP 6MM LOW PROFILE LEFT HAND	BLACK	<b>JP521B</b>
YALE ARIA WITH FLAP 6MM LOW PROFILE LEFT HAND	SCC*	<b>JP521SCC</b>
YALE ARIA CONFIX WITH FLAP LOW PROFILE RIGHT HAND	BLACK	<b>JP550B</b>
YALE ARIA CONFIX WITH FLAP LOW PROFILE RIGHT HAND	SCC*	<b>JP550SCC</b>
YALE ARIA CONFIX WITH FLAP LOW PROFILE LEFT HAND	BLACK	<b>JP551B</b>
YALE ARIA CONFIX WITH FLAP LOW PROFILE LEFT HAND	SCC*	<b>JP551SCC</b>

### YALE WEDGELESS WINDOW FASTNERS

YALE HIGH PROFILE WEDGELESS 6MM RIGHT HAND	BLACK	<b>JP330B</b>
YALE HIGH PROFILE WEDGELESS 6MM RIGHT HAND	SCC*	<b>JP330SCC</b>
YALE HIGH PROFILE WEDGELESS 6MM LEFT HAND	BLACK	<b>JP331B</b>
YALE HIGH PROFILE WEDGELESS 6MM LEFT HAND	SCC*	<b>JP331SCC</b>
YALE LOW PROFILE WEDGELESS 6MM RIGHT HAND	BLACK	<b>JP320B</b>
YALE LOW PROFILE WEDGELESS 6MM RIGHT HAND	SCC*	<b>JP320SCC</b>
YALE LOW PROFILE WEDGELESS 6MM LEFT HAND	BLACK	<b>JP321B</b>
YALE LOW PROFILE WEDGELESS 6MM LEFT HAND	SCC*	<b>JP321SCC</b>
YALE WEDGELESS LOCKING DELUX RIGHT HAND	BLACK	<b>JP345B</b>
YALE WEDGELESS LOCKING DELUX RIGHT HAND	SCC*	<b>JP345SCC</b>
YALE WEDGELESS LOCKING DELUX LEFT HAND	BLACK	<b>JP346B</b>
YALE WEDGELESS LOCKING DELUX LEFT HAND	SCC*	<b>JP346SCC</b>

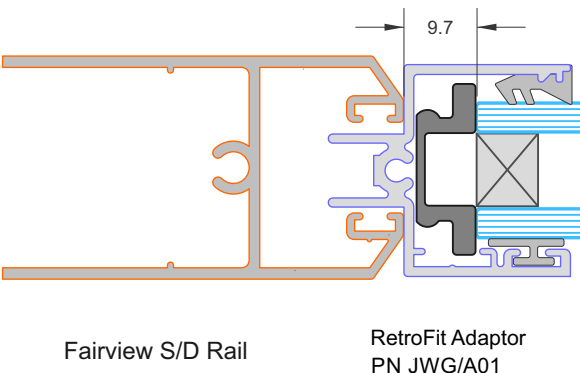
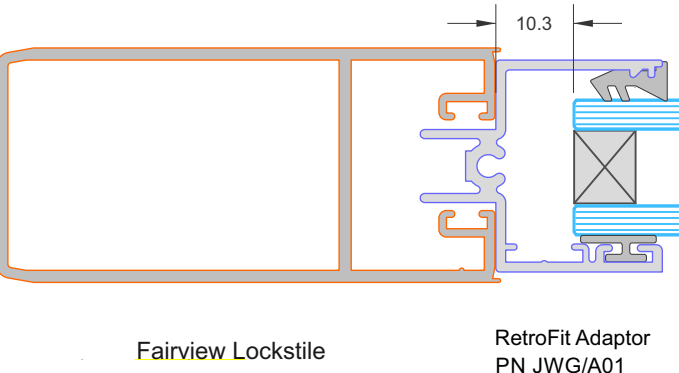
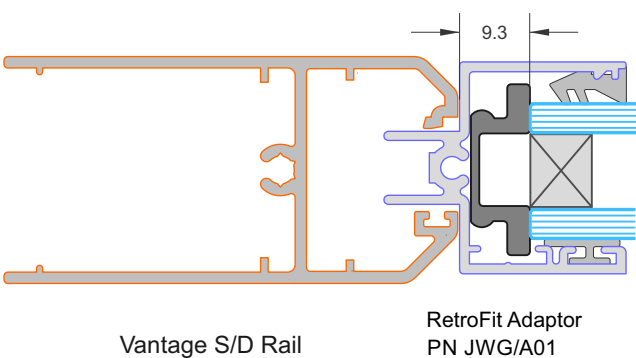
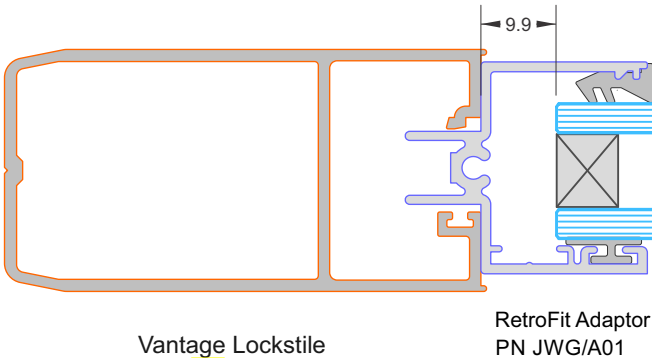
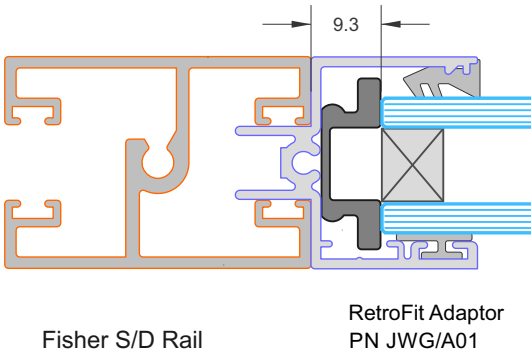
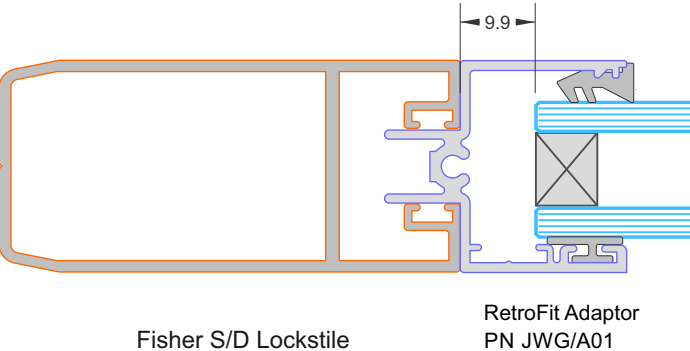
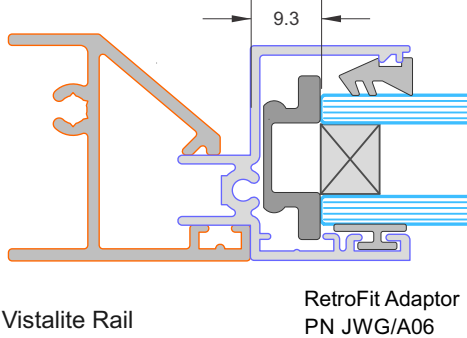
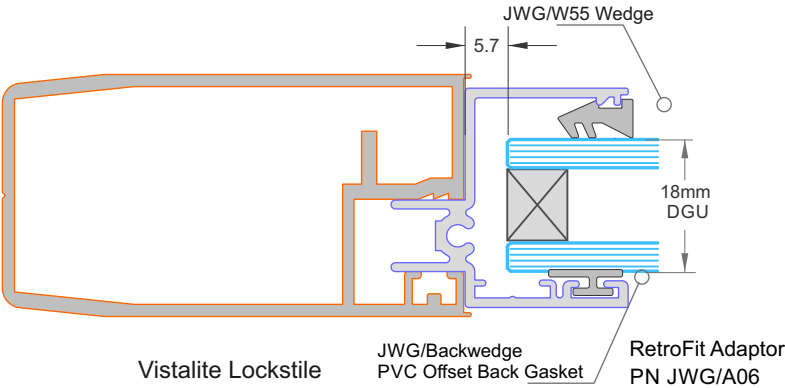
### YALE AVON WINDOW FASTNERS

YALE AVON NON LOCKING 9MM RIGHT HAND	BLACK	<b>JP8601B</b>
YALE AVON NON LOCKING 9MM RIGHT HAND	SCC*	<b>JP8601SCC</b>
YALE AVON NON LOCKING 9MM LEFT HAND	BLACK	<b>JP8611B</b>
YALE AVON NON LOCKING 9MM LEFT HAND	SCC*	<b>JP8611SCC</b>
YALE AVON LOCKING 9MM RIGHT HAND	BLACK	<b>JP860B</b>
YALE AVON LOCKING 9MM RIGHT HAND	SCC*	<b>JP860SCC</b>
YALE AVON LOCKING 9MM LEFT HAND	BLACK	<b>JP860B</b>
YALE AVON LOCKING 9MM LEFT HAND	SCC*	<b>JP860SCC</b>

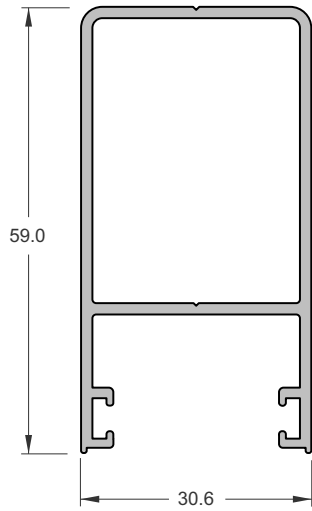




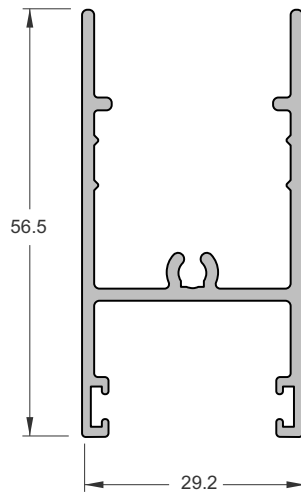
Juralco Winterglaze® RetroFit Double Glazing System - Doors



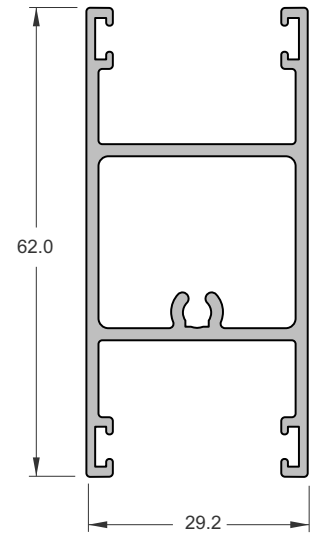
# Juralco Winterglaze® RetroFit Double Glazing System - Sliding Door Extrusions



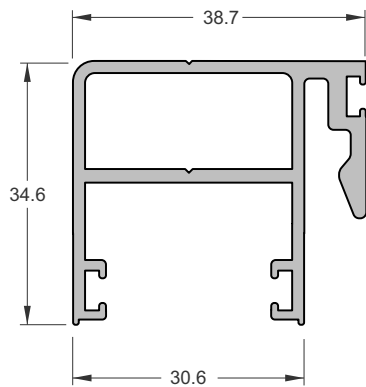
JWG/SD01  
Sliding Door  
Stile



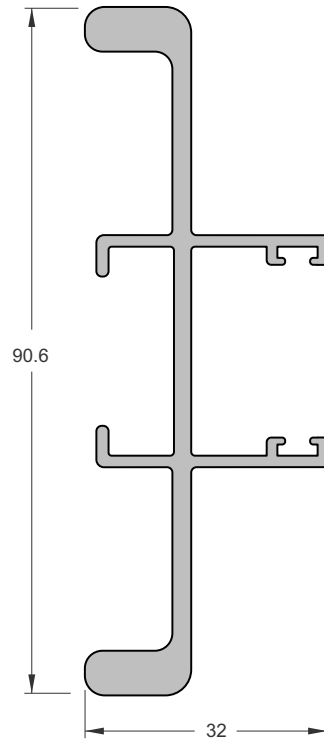
JWG/SD02  
Sliding Door Top,  
Bottom Rail



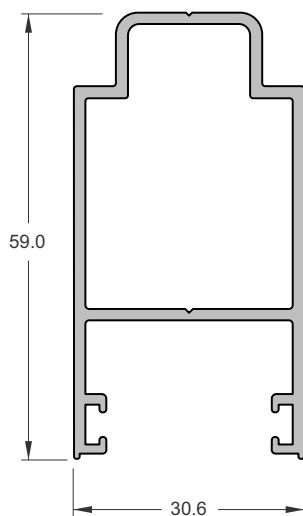
JWG/SD03  
Sliding Door  
Mid Rail



JWG/SD04  
Sliding Door  
Interlock



JWG/SD06  
Sliding Door  
Bi Parting  
Door Junction



JWG/SD05  
Sliding Door  
Bi Parting  
Door Stile

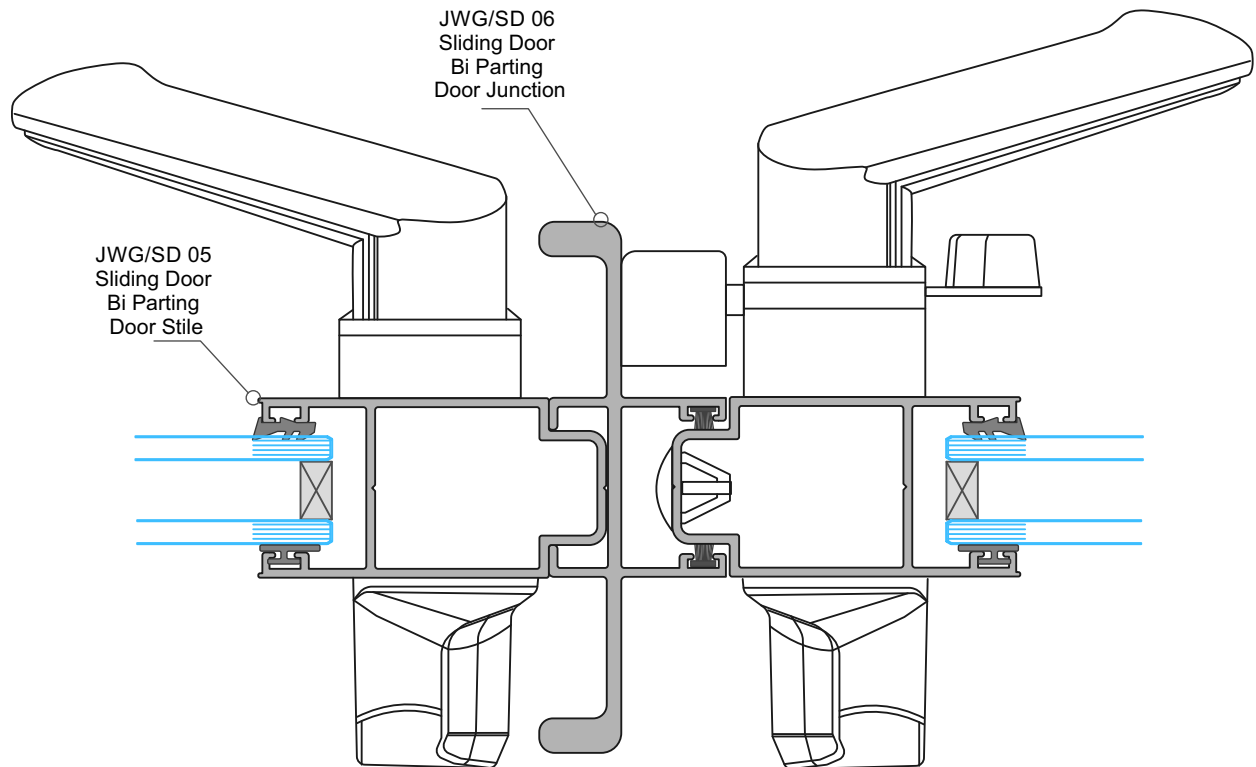


**JURALCO**

www.juralco.co.nz ph (09) 478 8018

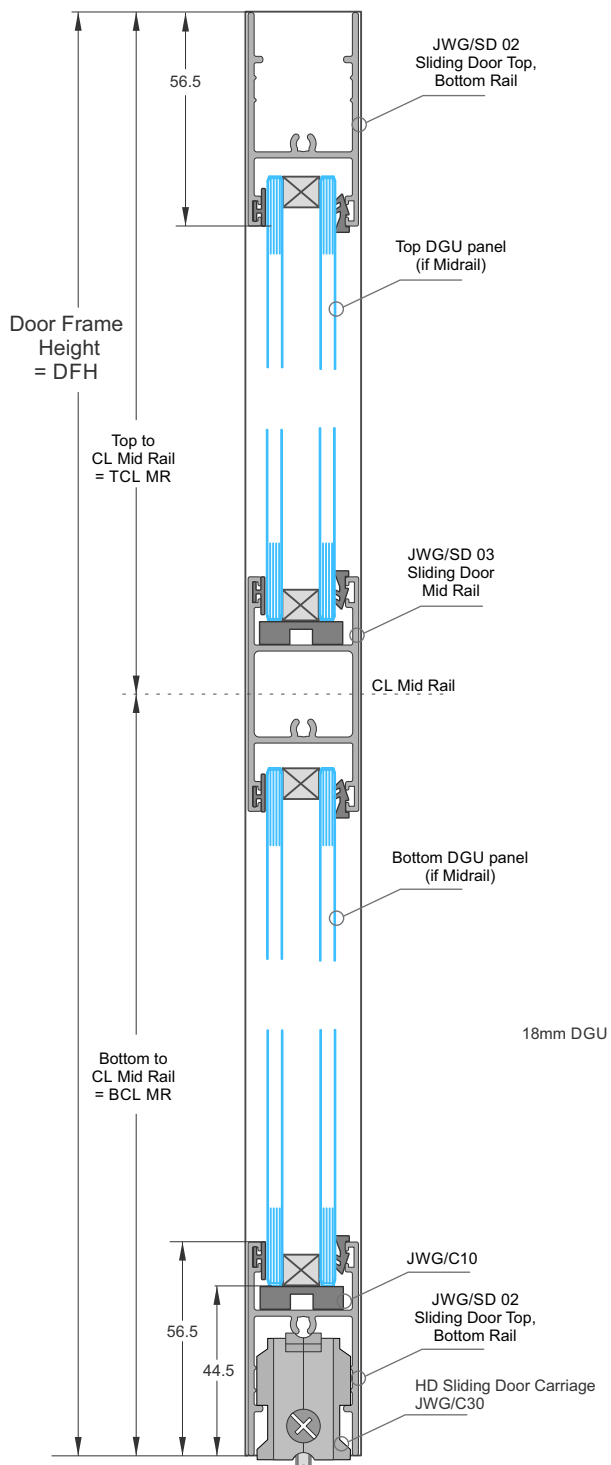
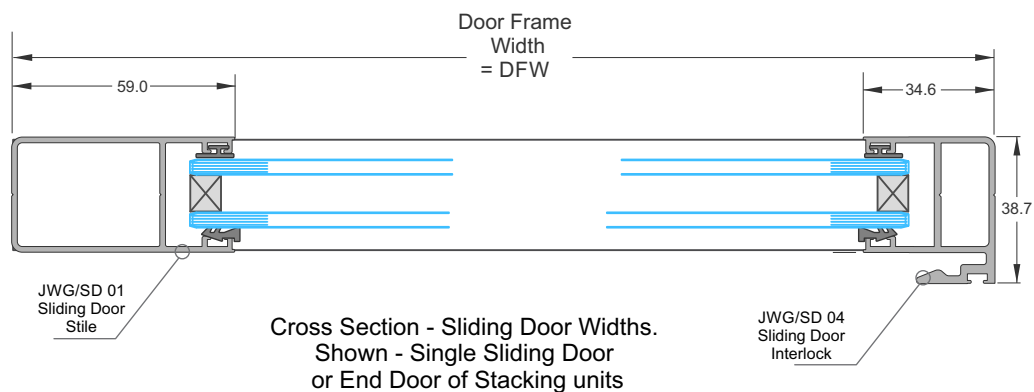
**Juralco Winterglaze® RetroFit Double Glazing System**

Issue 3-25 v1  
Page 34



Bi Parting Sliding Door Stiles

# Juralco Winterglaze® RetroFit Double Glazing System - Sliding Door Cutting Deductions



## Single/End Slider, Single Interlock

### DGU WIDTHS

18mm DGU Width = DFW - 67

### DGU HEIGHT - No Mid Rail

18mm DGU Height = DFH-43-43 = DFW - 86

### DGU HEIGHTS - Mid Rail - Equal Panel Heights

18mm DGU Height = DFH/2-62

## Multiple Slider, Two Interlocks

### DGU WIDTHS

18mm DGU Width = DFW - 42

### DGU HEIGHT - No Mid Rail

18mm DGU Height = DFH-43-43 = DFW - 86

### DGU HEIGHTS - Mid Rail - Equal Panel Heights

18mm DGU Height = DFH/2-62



**JURALCO**

www.juralco.co.nz ph (09) 478 8018

**Juralco Winterglaze® RetroFit Double Glazing System**

Issue 3-25 v1  
Page 36