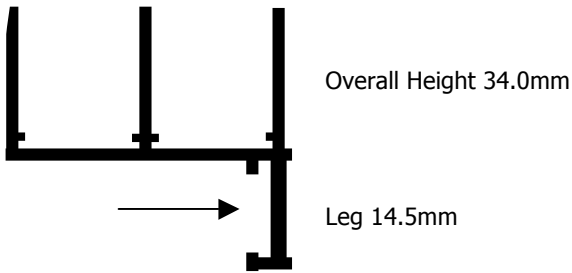


Secondary Dimensions and Drawings

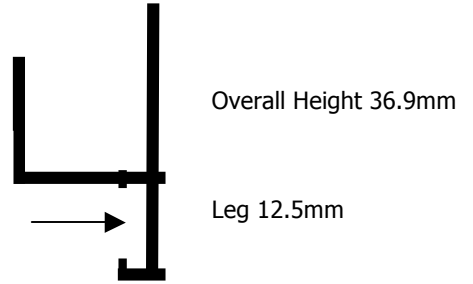
707 Odd Leg Face Fix

Overall Width 38.4mm



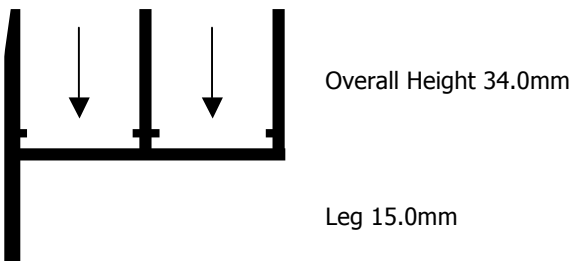
719 Odd Leg Face Fix

Overall Width 19.7mm



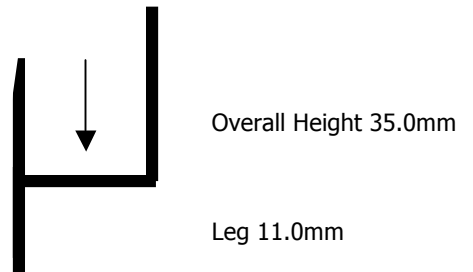
307 Odd Leg Reverse Fix

Overall Width 36.1mm



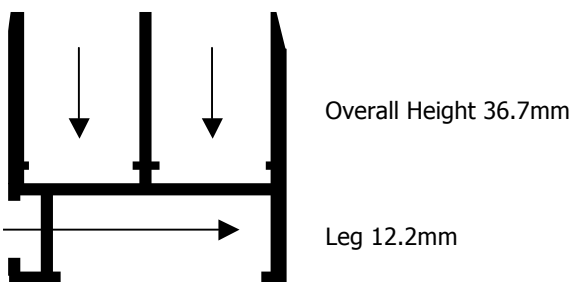
319 Odd Leg Reverse Fix

Overall Width 18.9mm



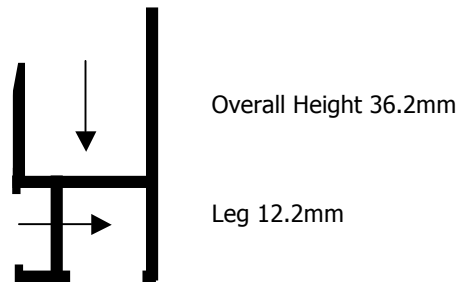
507 Equal Leg Face and Reverse Fix

Overall Width 36.0mm



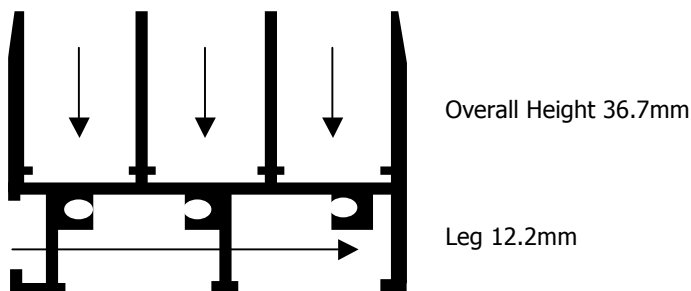
507 Odd Leg Face and Reverse Fix

Overall Width 18.9mm



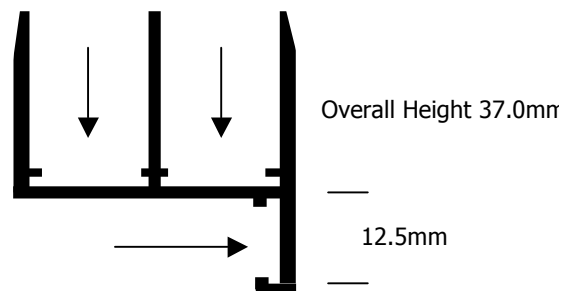
608 Equal Leg Face and Reverse Fix

Overall Width 52.9mm



807 Odd Leg Face and Reverse Fix

Overall Width 36.6mm

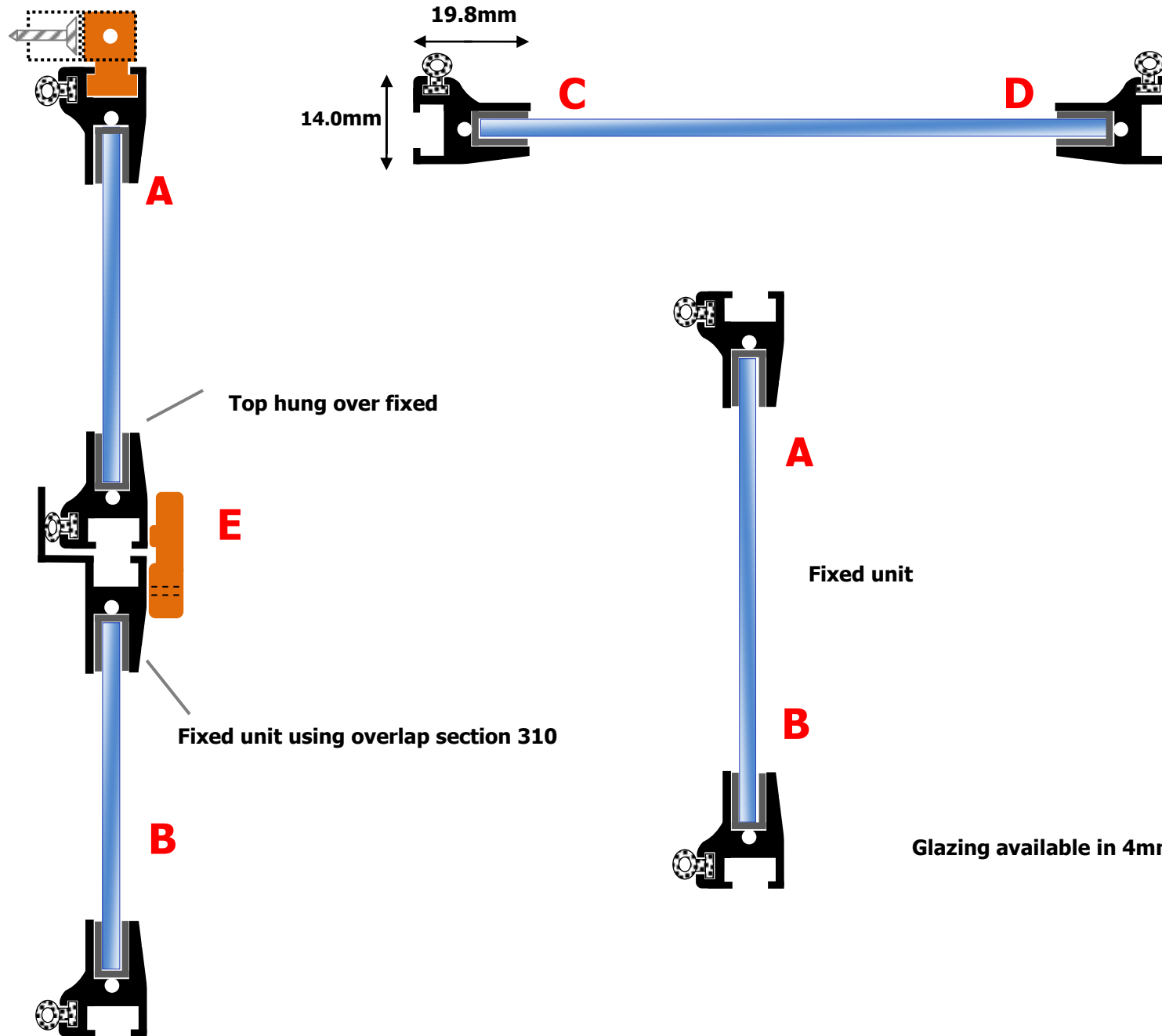
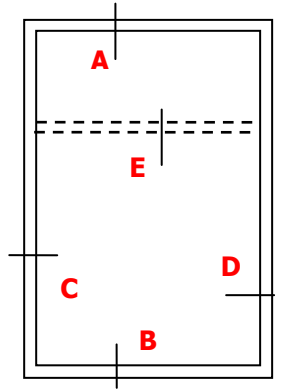


Arrows show direction of fixing screws. Arrows shown in two different directions section can be fitted either way
Drawings are for illustration only. Do not scale

Secondary Glazing Fixed Unit

Frame 301 –Face Fix

Typical Elevation



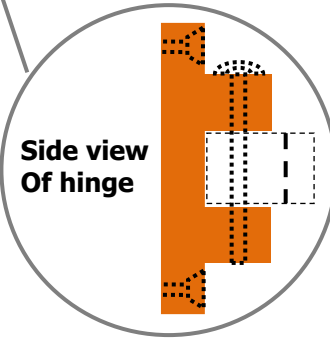
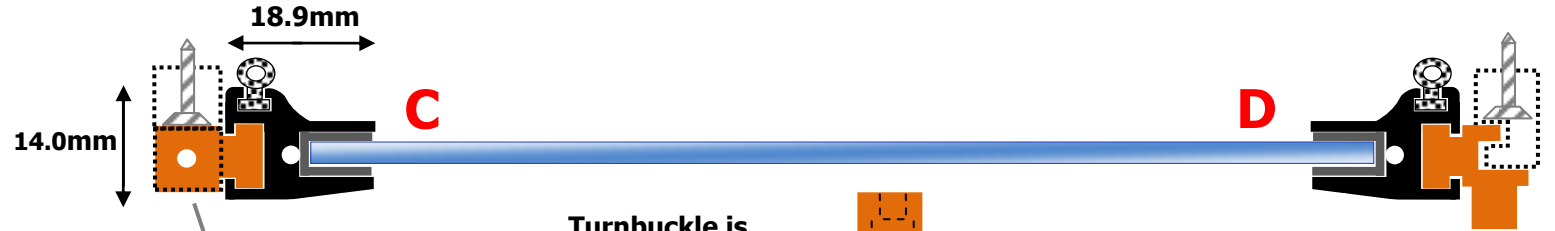
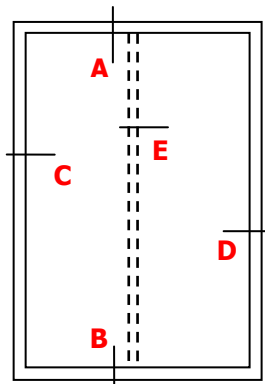
Glazing available in 4mm 6mm and 6.4mm Laminate Glass

Do not scale 1 to 1

Secondary Glazing Hinged Unit

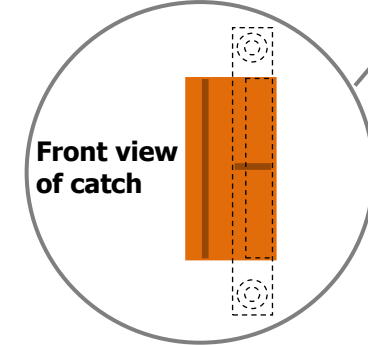
Outerframe 301 –Face Fix

Typical Elevation



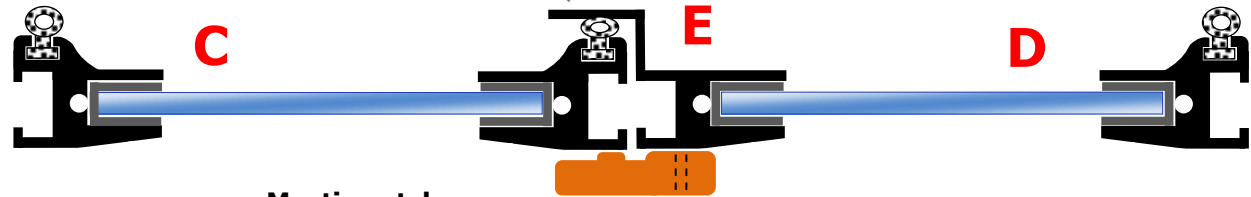
Side view
Of hinge

Turnbuckle is
an alternative
to sliding catch

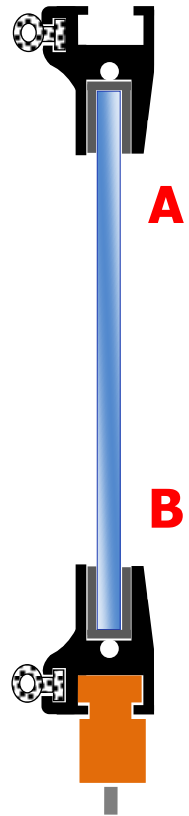


Front view
of catch

Overlap Section 310 is used
to create double hinge window



Meeting style
turnbuckle

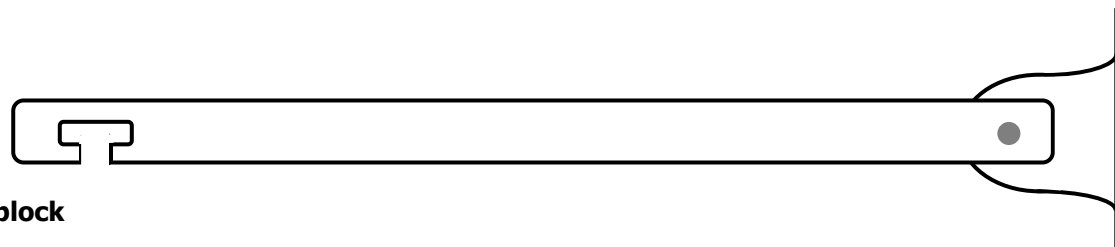


Stay arm and block

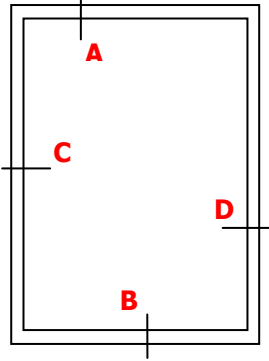
Glazing available in 4mm 6mm and 6.4mm Laminate Glass

Do not scale 1 to 1

SDG Sheet No 2

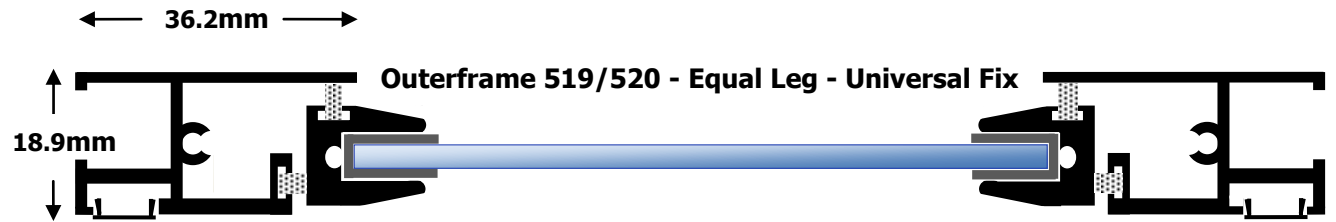
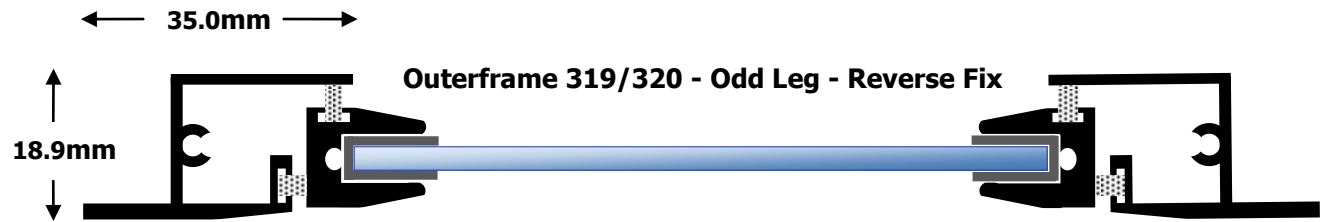
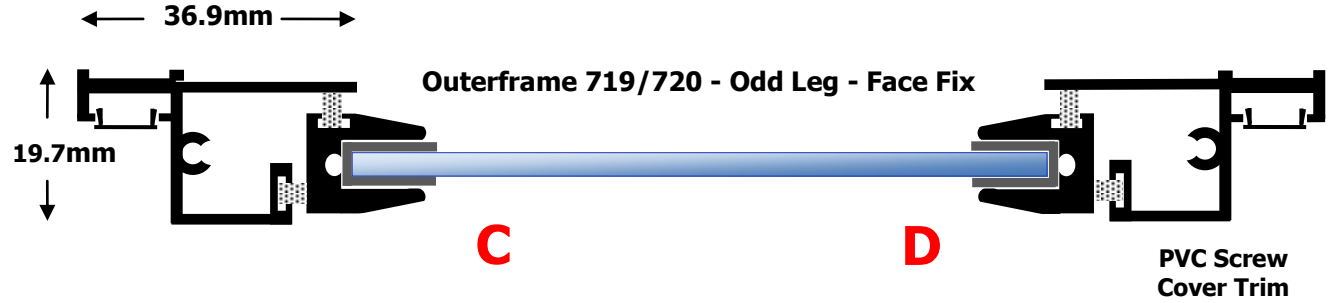
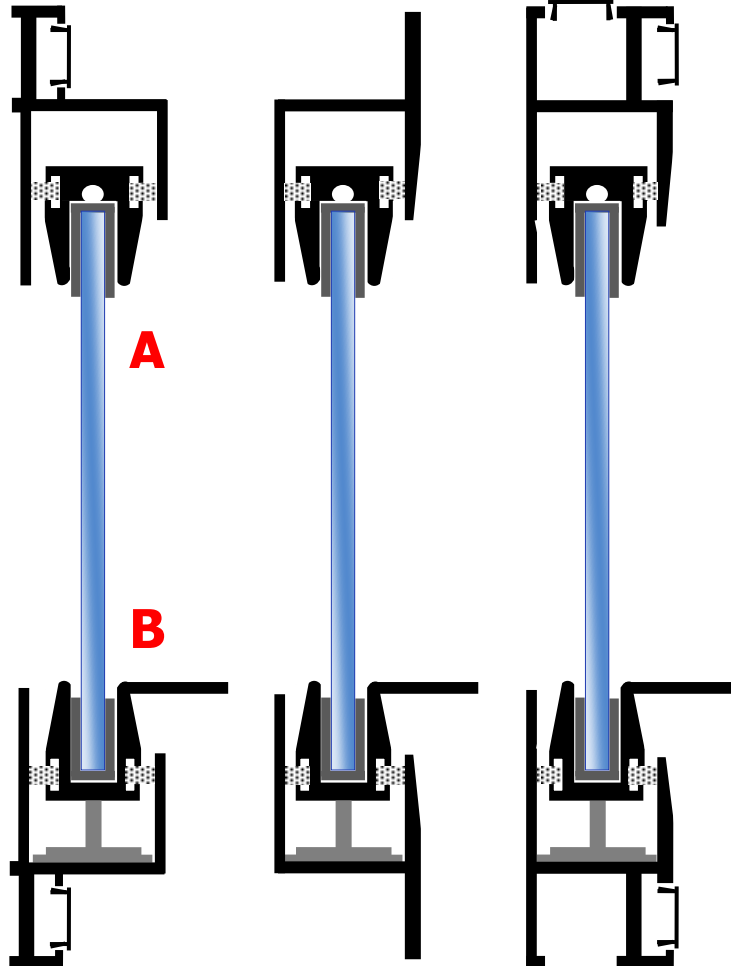


Typical Elevation



Secondary Glazing Lift Outs

Outer Frames 319, 519 and 719



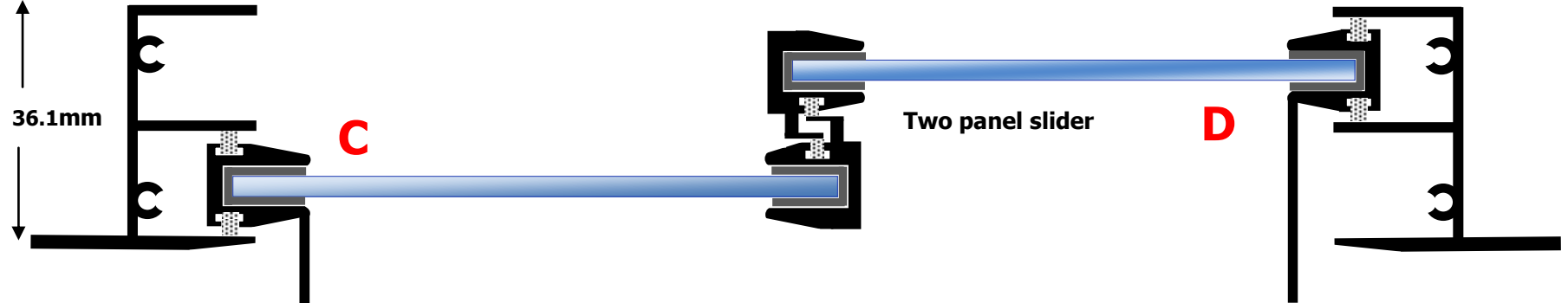
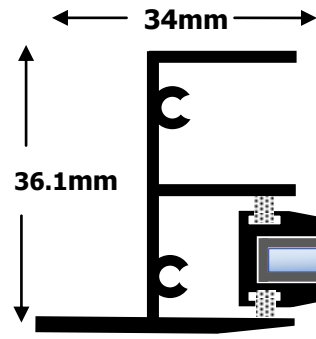
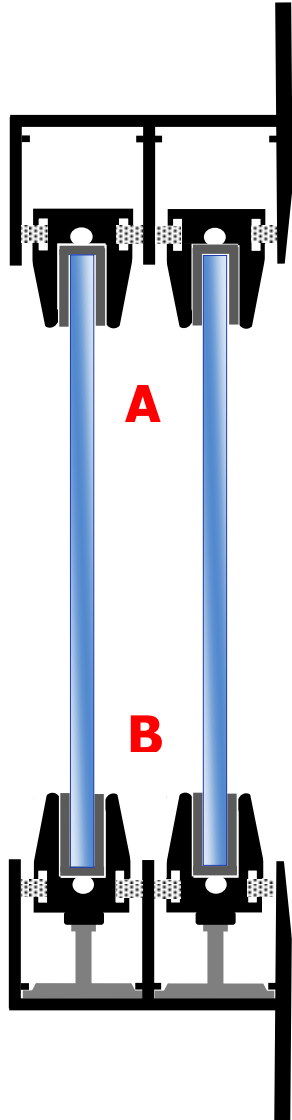
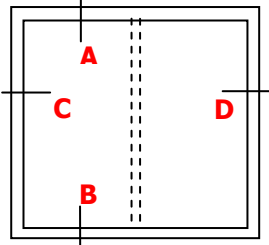
Glazing available in 4mm - 6mm and 6.4mm laminate glass

Do not scale: 1 to 1

Secondary Glazing Horizontal Sliders 2 to 6 panel configurations

Outerframe 307/308 - Odd Leg - Reverse Fix

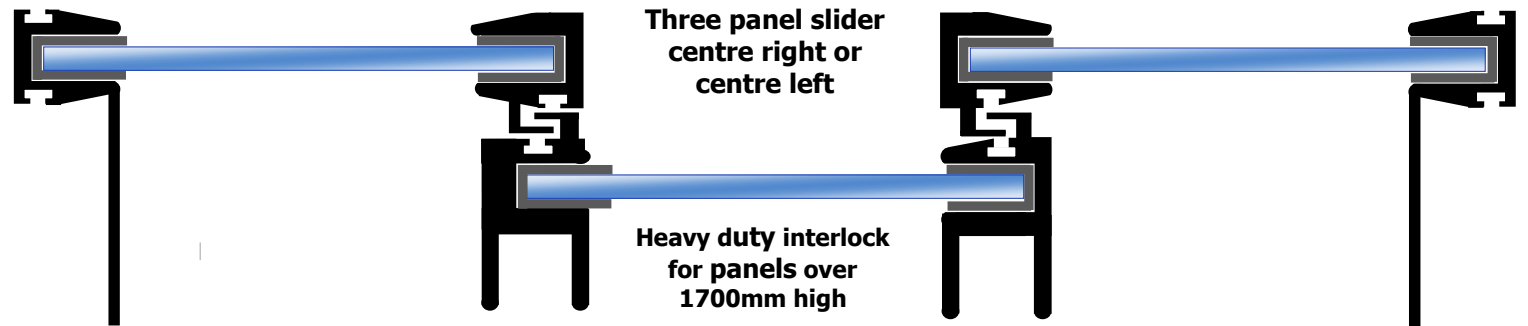
Typical Elevation



Two panel slider





Three panel slider centre fixed

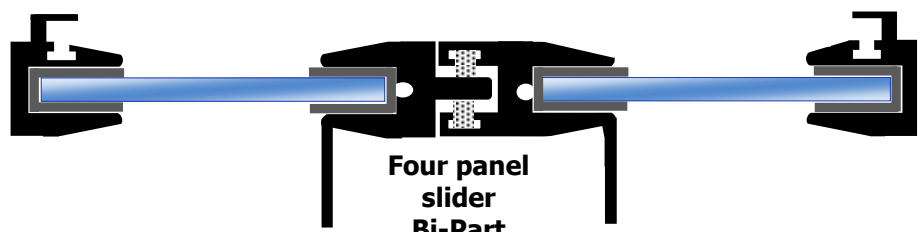


Three panel slider centre right or centre left

Heavy duty interlock for panels over 1700mm high

Panels slide on nylon skids 
or steel rollers 

Glazing available in 4mm - 6mm and 6.4mm laminate glass



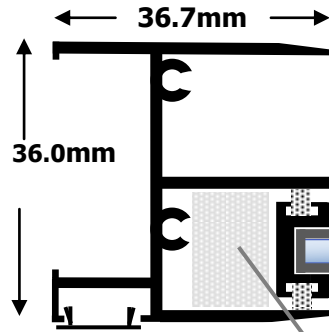
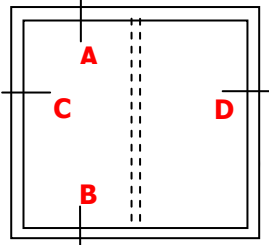
Four panel slider Bi-Part

Do not scale 1 to 1

Secondary Glazing Horizontal Sliders 2 to 6 panel configurations

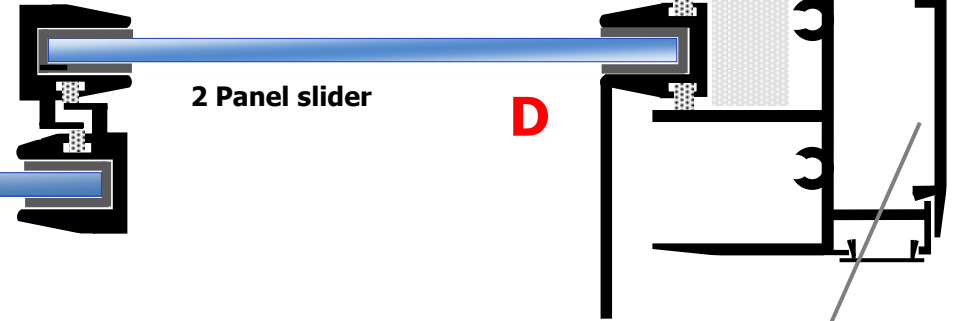
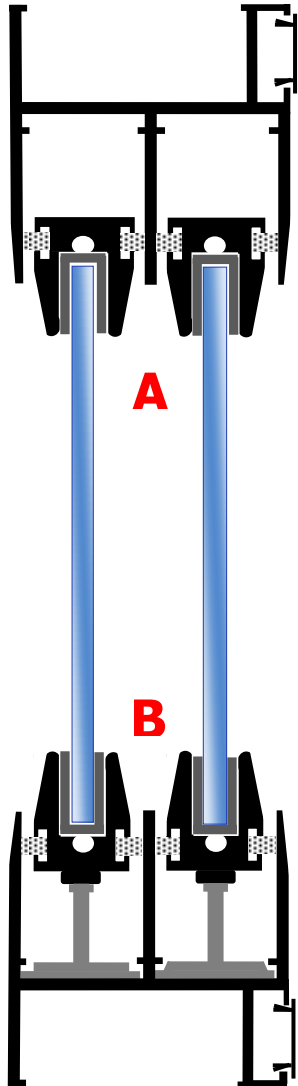
Outerframe 507/508 - Equal Leg - Universal Fix

Typical Elevation



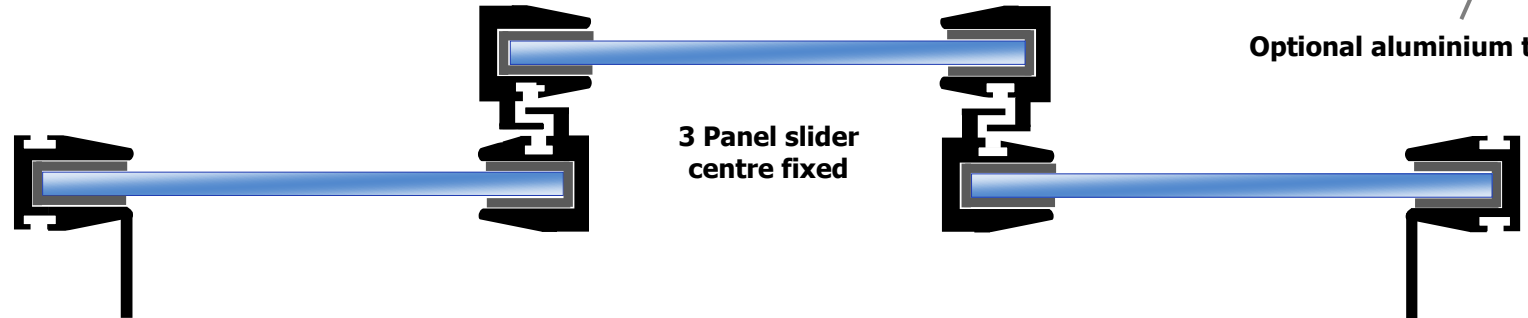
PVC screw cover trim

Panel buffer

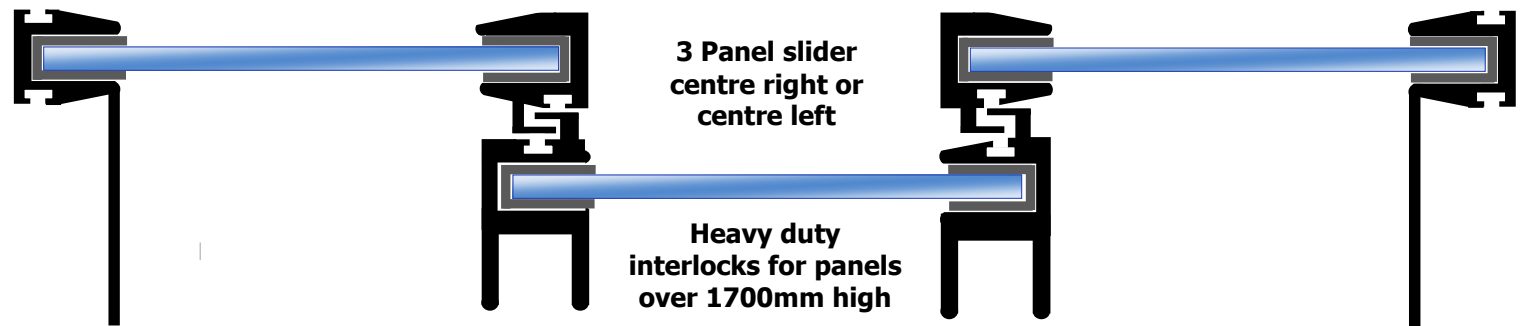


2 Panel slider

Optional aluminium trim



3 Panel slider
centre fixed



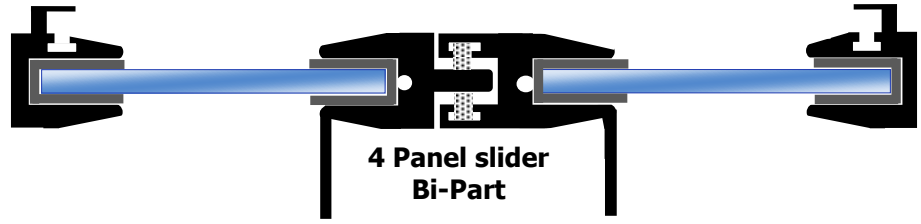
3 Panel slider
centre right or
centre left

Heavy duty
interlocks for panels
over 1700mm high

Panels slide on nylon skids
or steel rollers



Glazing available in 4mm - 6mm and 6.4mm laminate glass



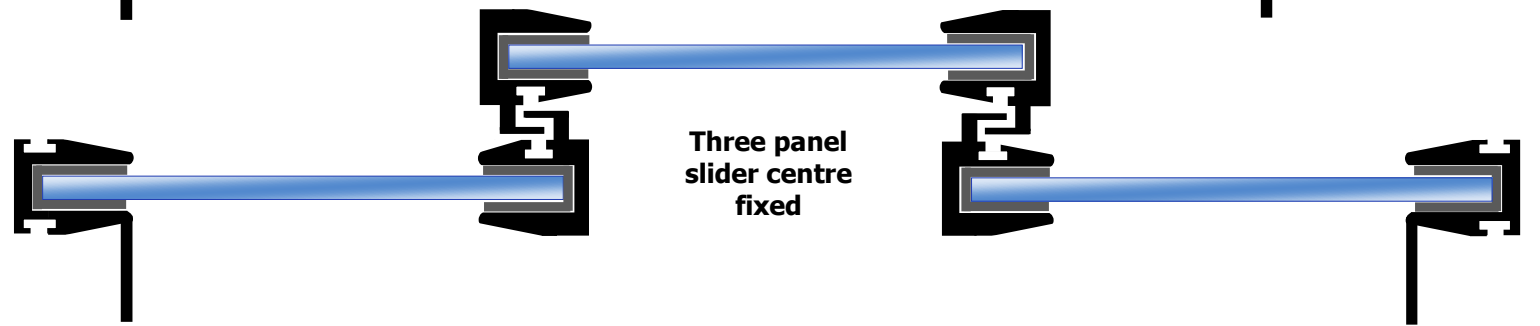
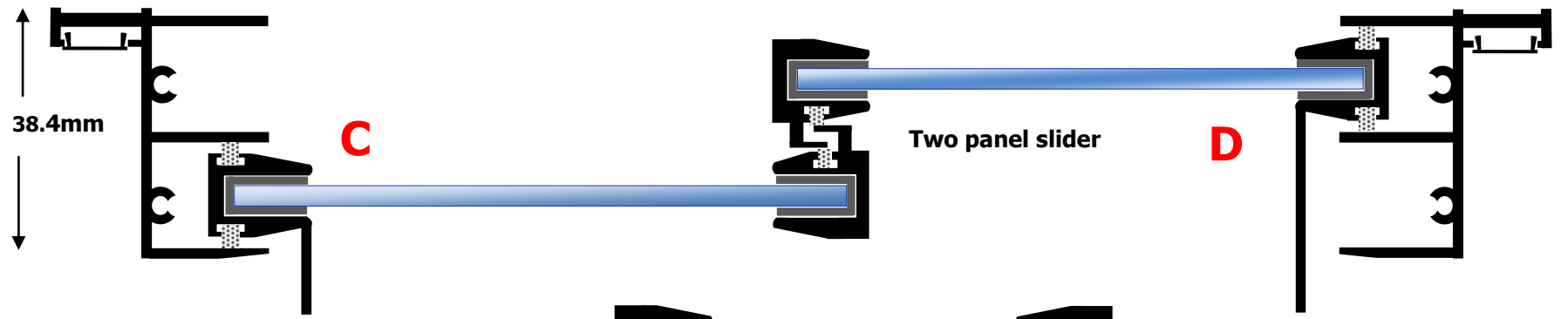
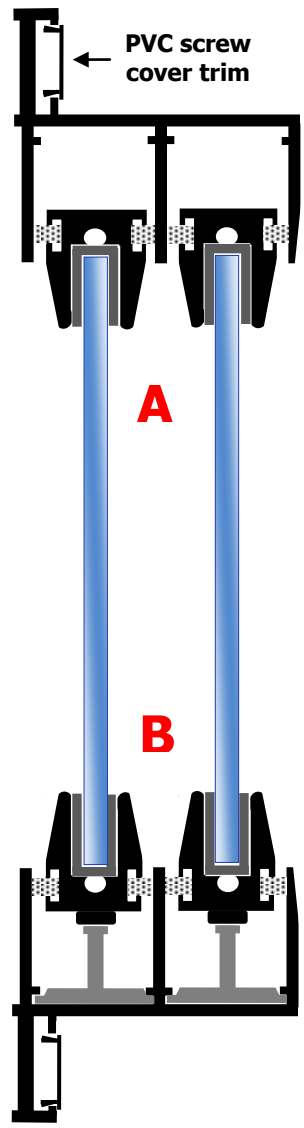
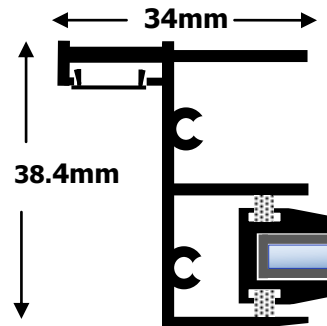
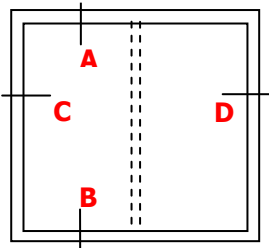
4 Panel slider
Bi-Part

Do not scale 1 to 1

Secondary Glazing Horizontal Sliders 2 to 6 panel configurations

Outerframe 707/708 - Odd Leg - Face Fix

Typical Elevation

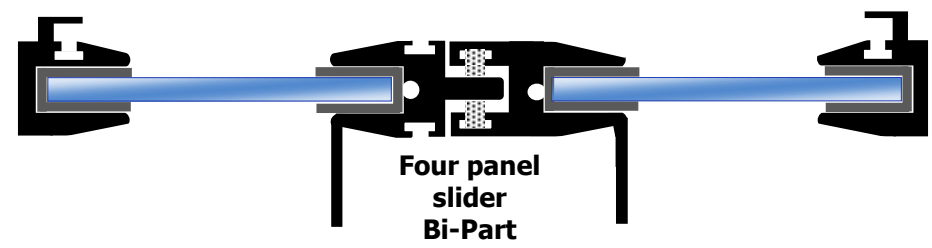


Panels slide on nylon skids 

Or steel rollers 

Heavy duty interlock for panels over 1700mm high

Glazing available in 4mm - 6mm and 6.4mm laminate glass

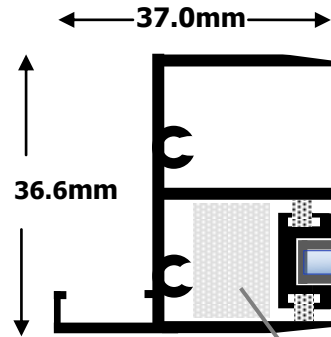
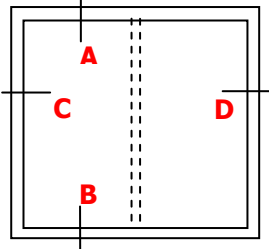


Do not scale 1 to 1

Secondary Glazing Horizontal Sliders 2 to 6 panel configurations

Outerframe 807/808 - Odd Leg - Reverse Fix

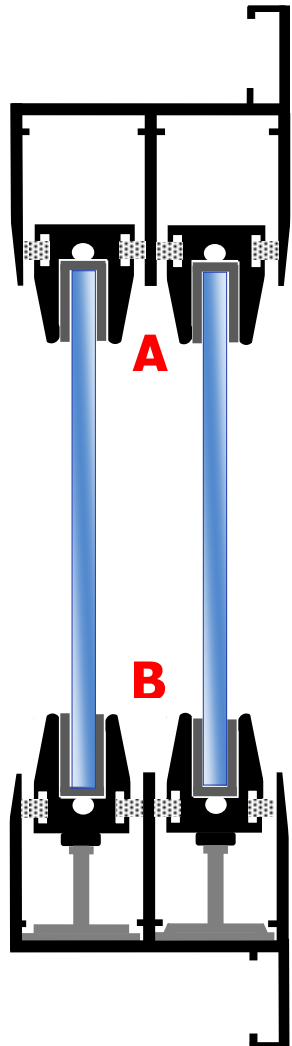
Typical Elevation



36.6mm

37.0mm

Panel buffer



A

B

Panels slide on nylon skids
or steel rollers



C

D

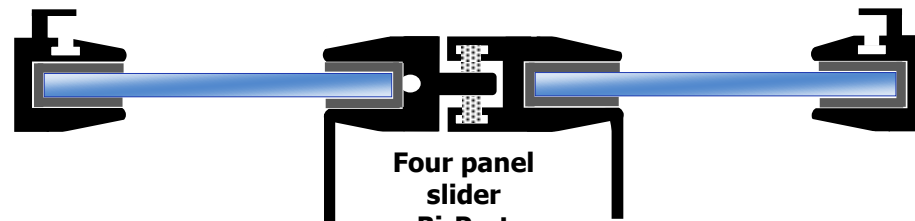
Two panel slider

Three panel
slider centre
fixed

Three panel slider
centre right or
centre left

Heavy duty
interlocks for panels
over 1700mm high

Glazing available in 4mm - 6mm and 6.4mm laminate glass



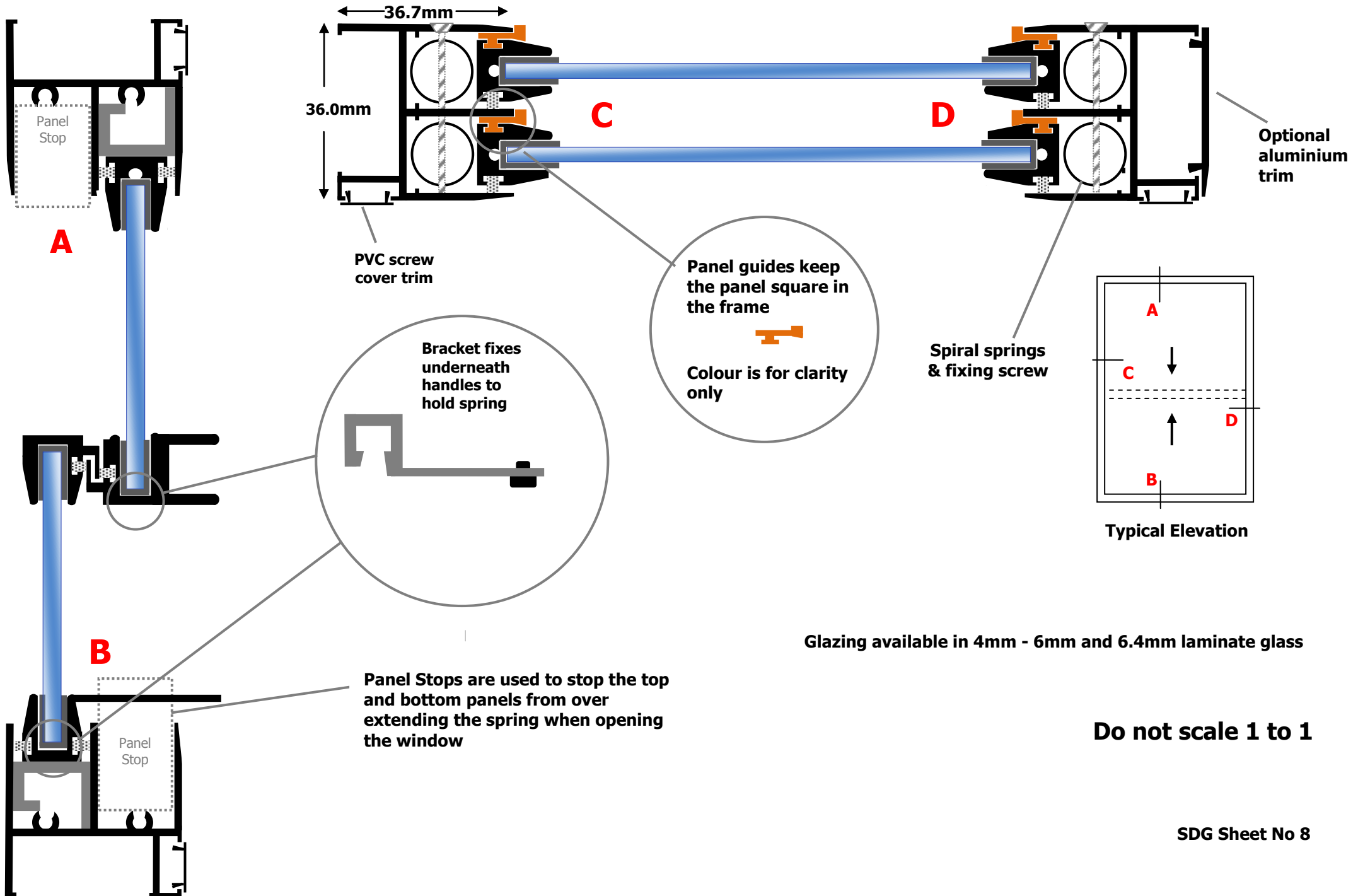
Four panel
slider
Bi-Part

Do not scale 1 to 1

SDG Sheet No 7

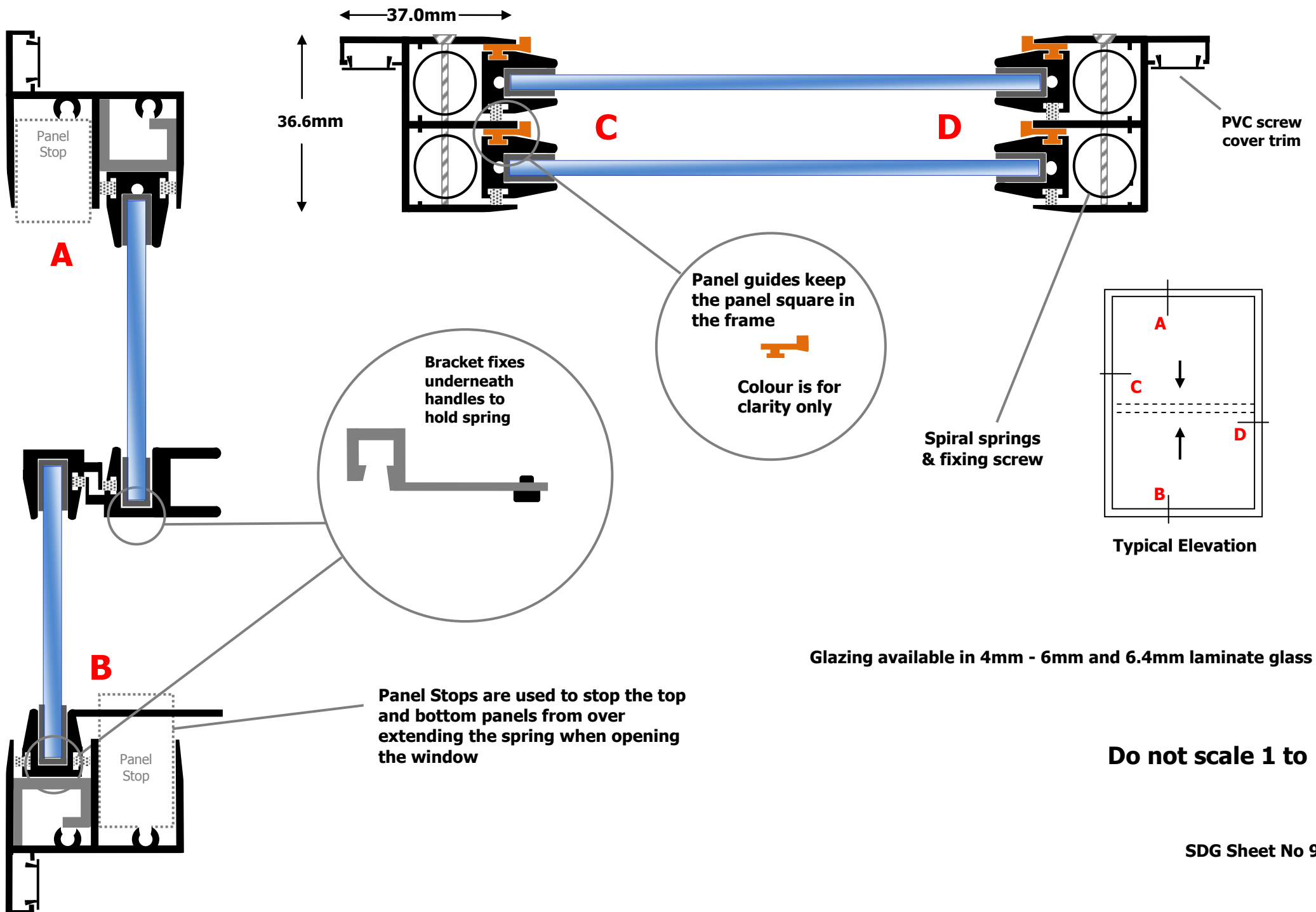
Secondary Glazing Counterbalanced Vertical Slider

Outerframe 507/508 - Equal Leg - Universal Fix



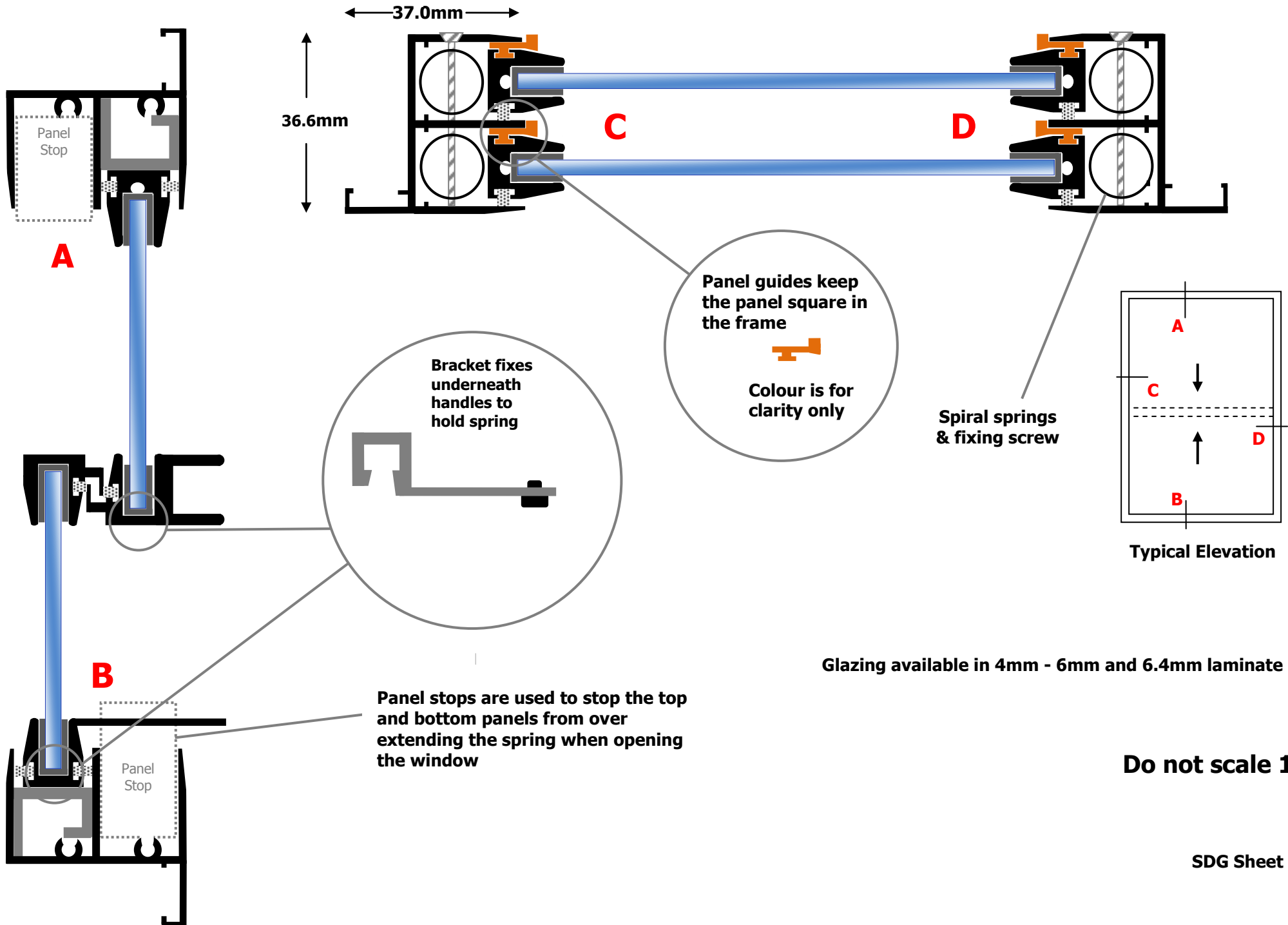
Secondary Glazing Counterbalanced Vertical Slider

Outerframe 807/808 - Odd Leg - Face Fix



Secondary Glazing Counterbalanced Vertical Slider

Outerframe 807/808 - Odd Leg - Reverse Fix

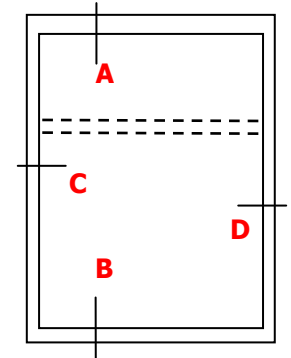
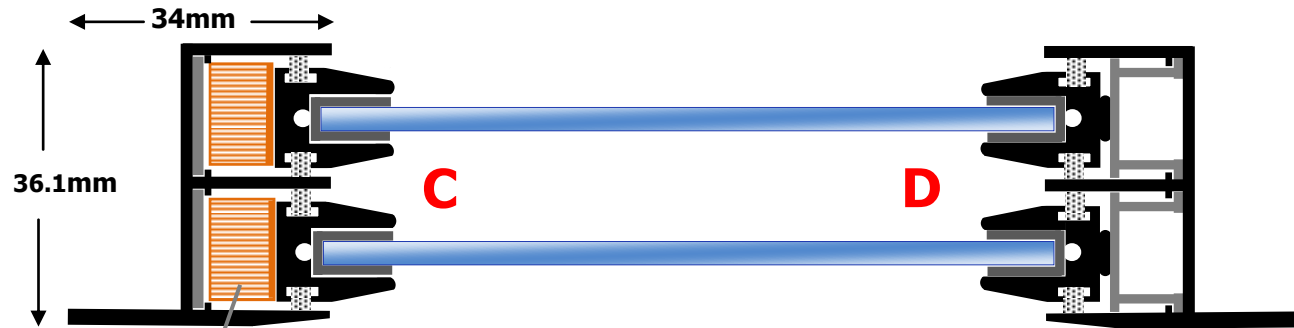
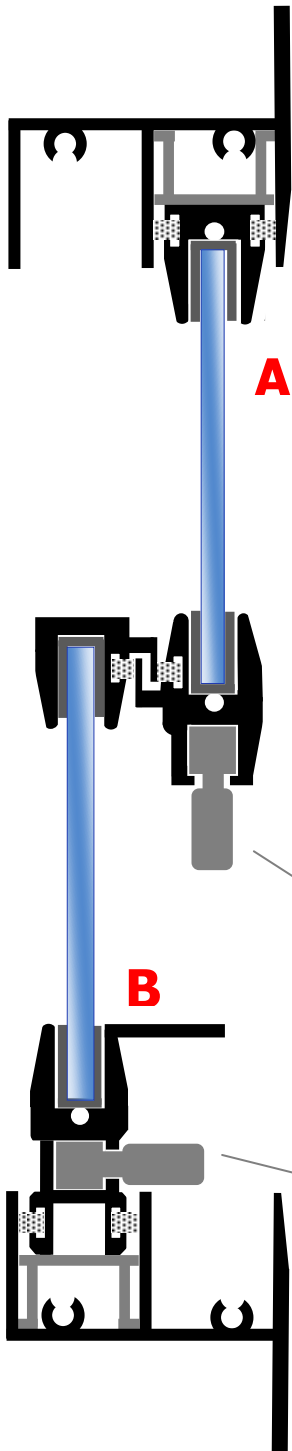


Glazing available in 4mm - 6mm and 6.4mm laminate glass

Do not scale 1 to 1

Secondary Glazing Friction Vertical Sliders

Outerframe 307/308 - Odd Leg - Reverse Fix



Typical Elevation



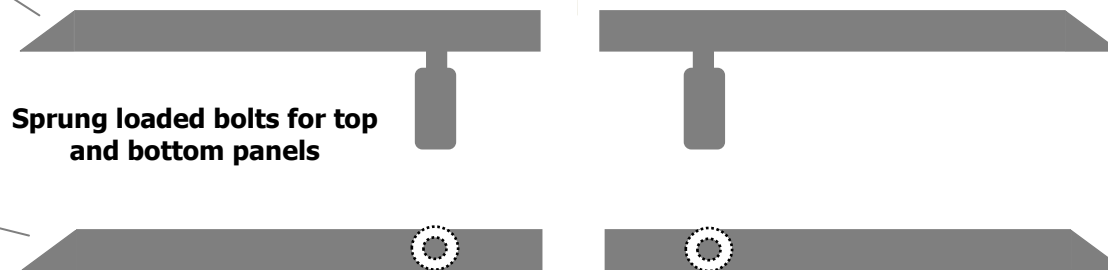
Four leaf springs fitted on left hand side allow panels to be removed

To operate friction sliders the user pulls the two sprung loaded bolts located each side in towards the centre. When the window nears its desired opening the bolts should be released and the bolts will locate in pre-punched holes in the outer frame plastics.

The whole weight of the panel is in the user's hands when opening and closing the window, therefore the overall window size is restricted to dimensions shown below.

800 Wide x 900 High 3.6Kgs per panel

A maximum thickness of 4mm glass only.

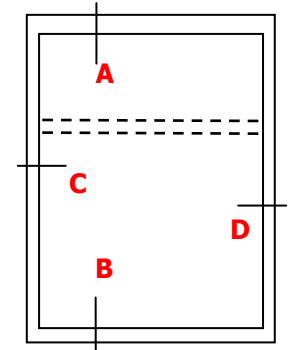
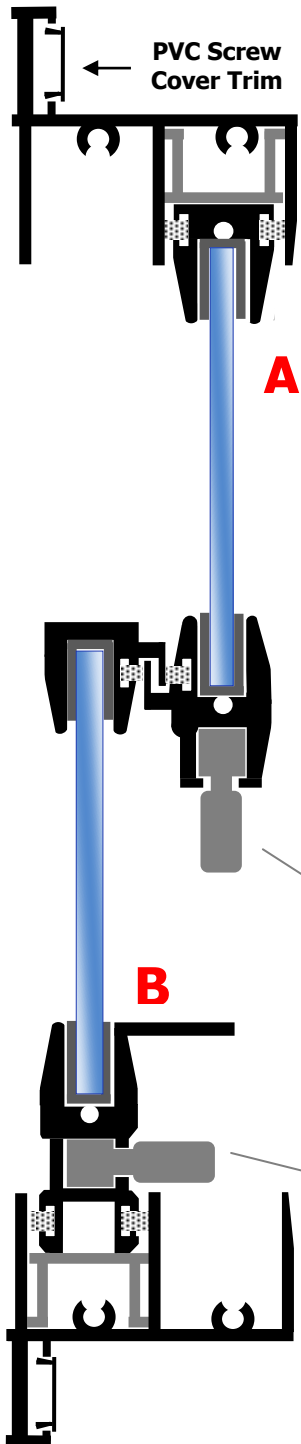


Glazing available in 4mm

Do not scale 1 to 1

Secondary Glazing Friction Vertical Sliders

Outerframe 707/708 - Odd Leg - Face Fix



Typical Elevation

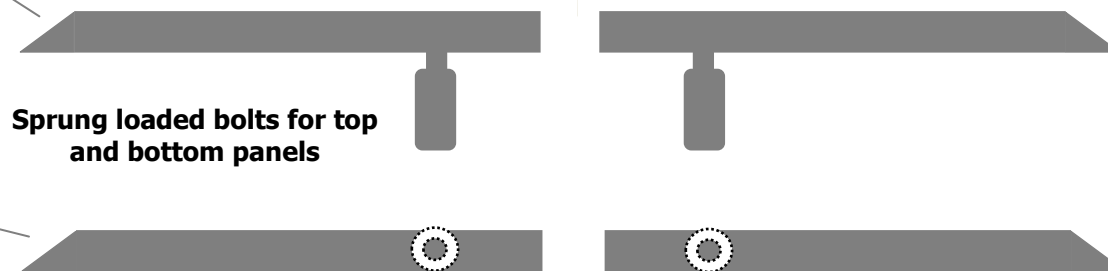


Four leaf springs fitted on left hand side allow panels to be removed

To operate friction sliders the user pulls the two sprung loaded bolts located each side in towards the centre. When the window nears its desired opening the bolts should be released and the bolts will locate in pre-punched holes in the outer frame plastics. **The whole weight of the panel is in the user's hands when opening and closing the window, therefore the overall window size is restricted to dimensions shown below.**

800 Wide x 900 High 3.6Kgs per panel

A maximum thickness of 4mm glass only

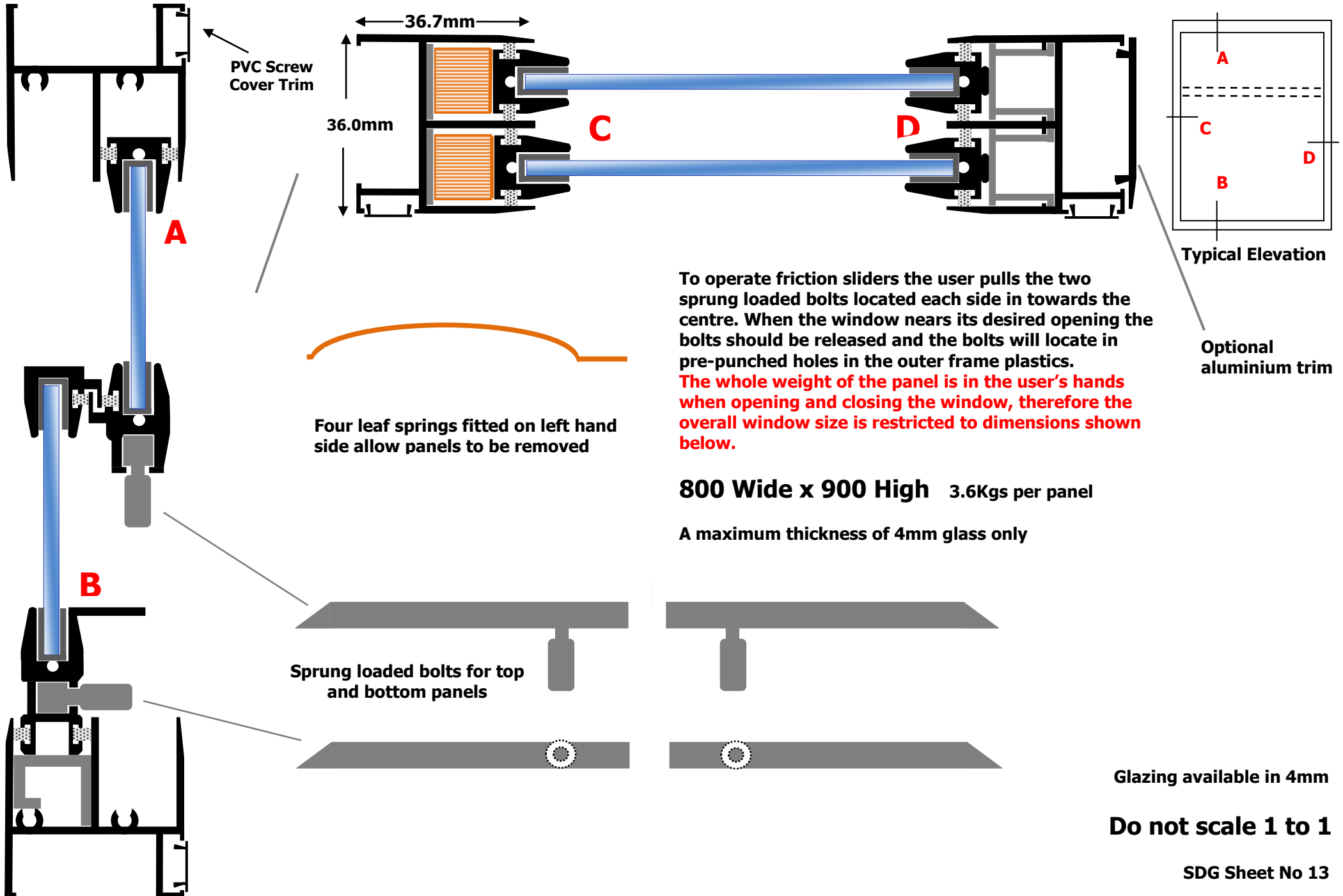


Glazing available in 4mm

Do not scale 1 to 1

Secondary Glazing Friction Vertical Sliders

Outerframe 507/508 - Equal Leg - Universal Fix



To operate friction sliders the user pulls the two sprung loaded bolts located each side in towards the centre. When the window nears its desired opening the bolts should be released and the bolts will locate in pre-punched holes in the outer frame plastics. **The whole weight of the panel is in the user's hands when opening and closing the window, therefore the overall window size is restricted to dimensions shown below.**

800 Wide x 900 High 3.6Kgs per panel

A maximum thickness of 4mm glass only

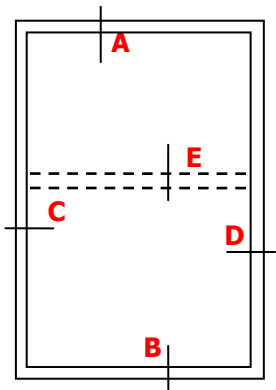
Glazing available in 4mm

Do not scale 1 to 1

Secondary Glazing Tilt to Clean Counterbalanced Vertical Slider

Sheet 1 of 2

Outer Frame 908 Universal Fix

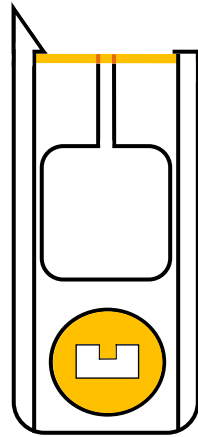


Typical Elevation

Tilt latch with grub screw locking designed to stop the accidental tilting of the panel by children and hotel guests for example.



Pivot shoe

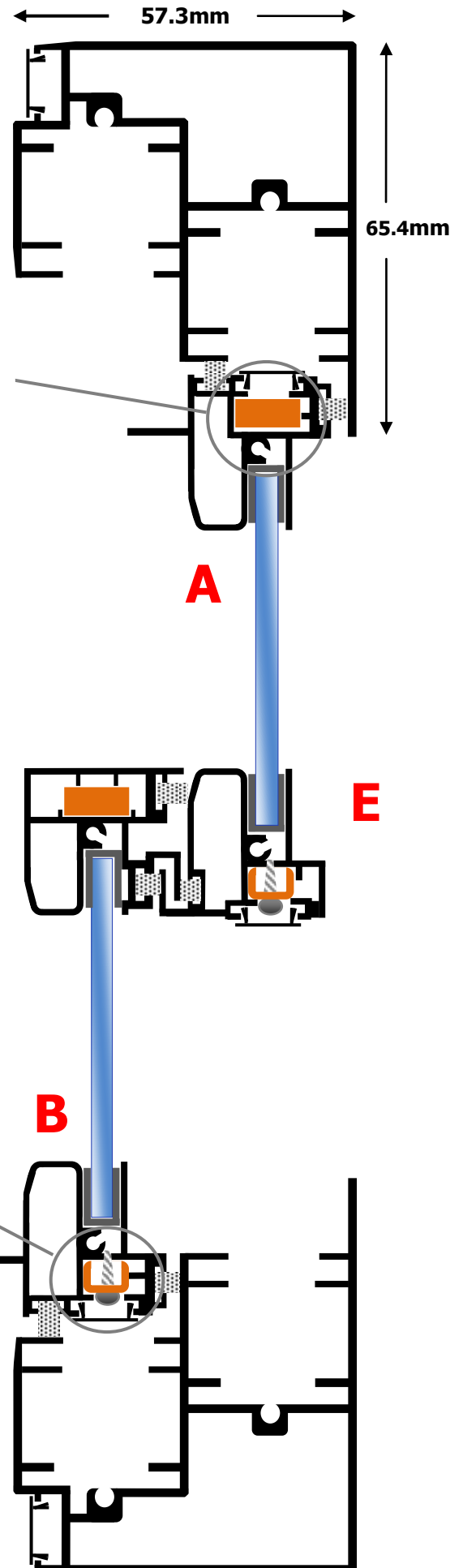


The pivot bar is inserted into the pivot shoe shown above. This allows the panel to tilt in.



Glazing available in 4mm 6mm and 6.4mm Laminate Glass

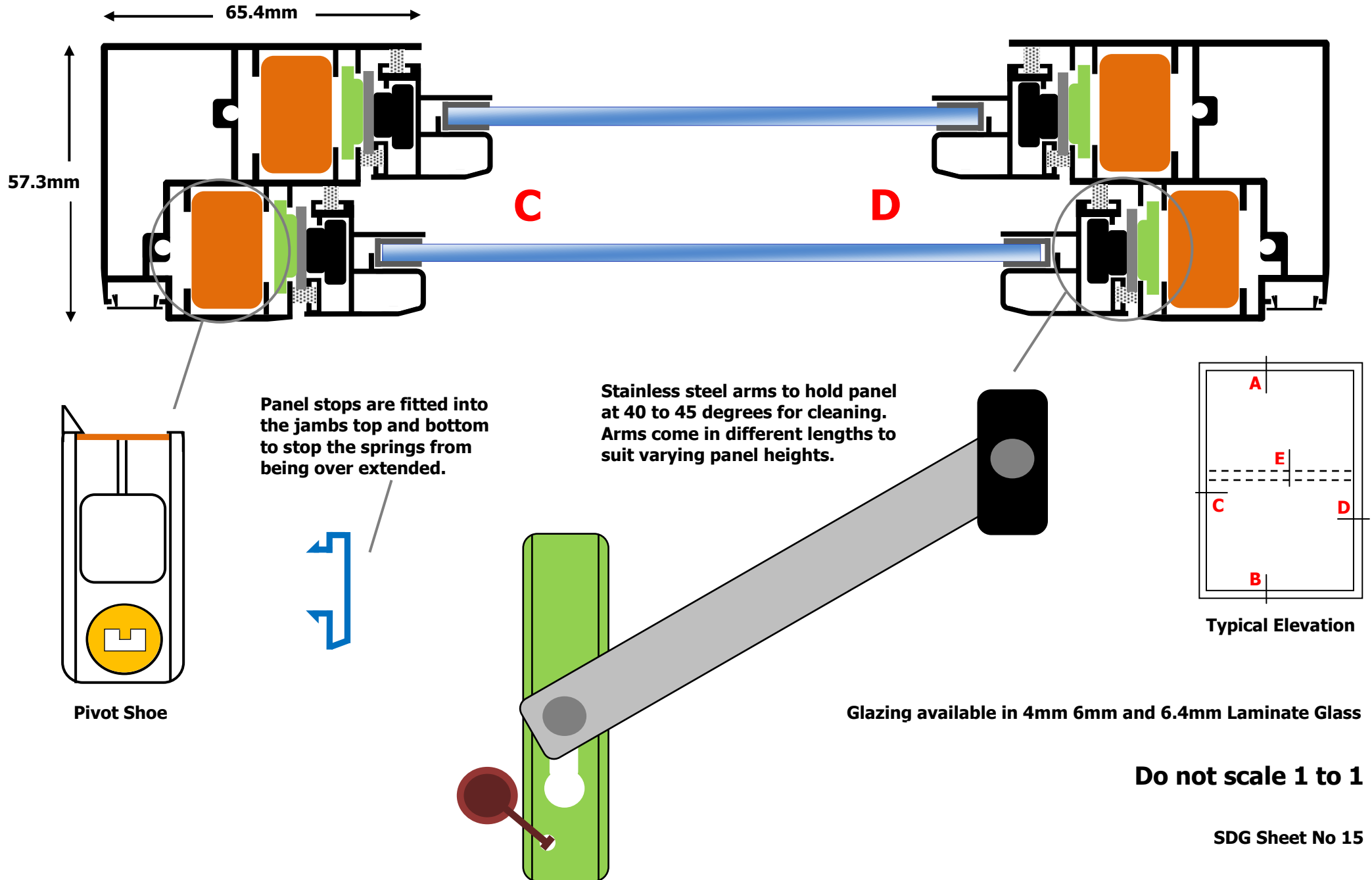
Do not scale 1 to 1



Secondary Glazing Tilt to Clean Counterbalanced Vertical Slider

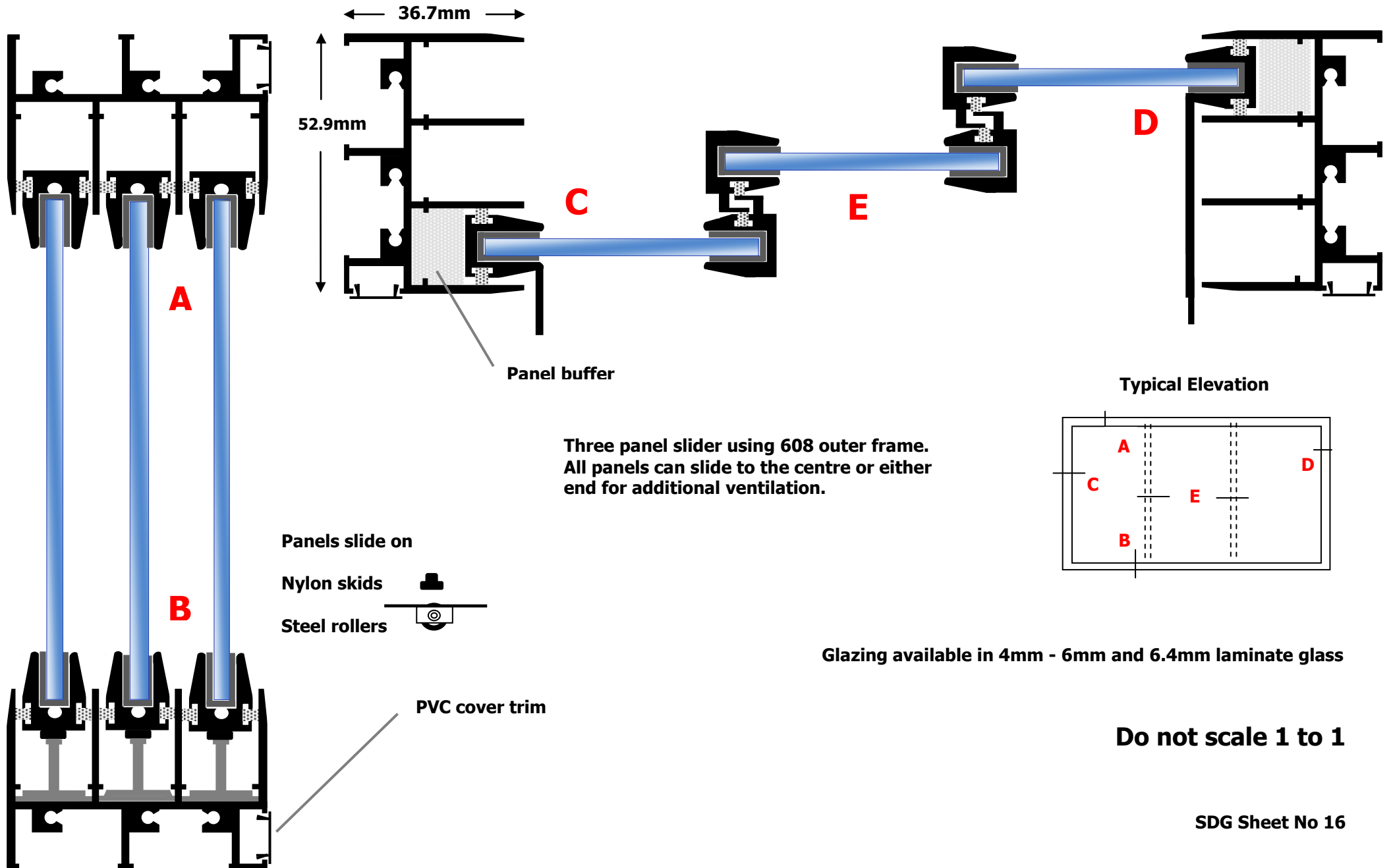
Outer Frame 908 Universal Fix

Sheet 2 of 2



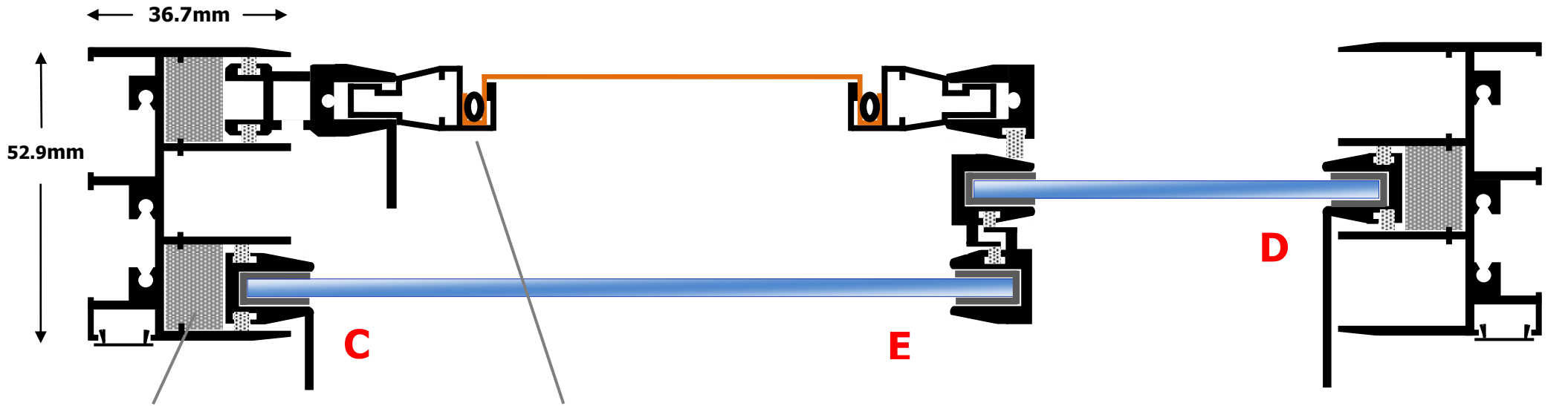
Secondary Glazing Horizontal Slider Triple Track

Outerframe 608/608 - Equal Leg - Universal Fix



Secondary Glazing Horizontal Slider with Fly Screen

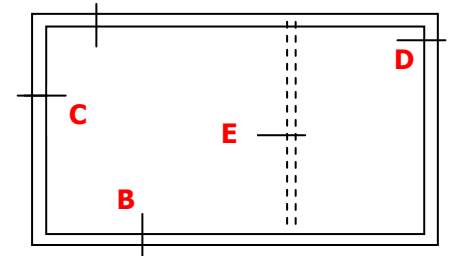
Outerframe 608/608 - Equal Leg - Universal Fix



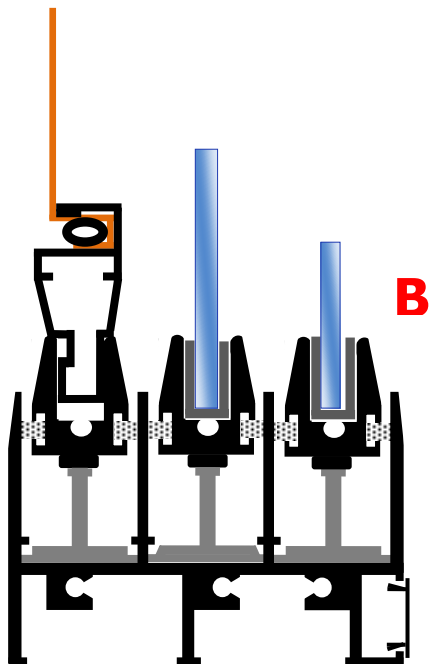
Panel buffer

Fly screen adaptor fits all panel types.
Can be used as a full fly screen or behind selected panels

Typical Elevation



Fly screen mesh is 18 x 16 weave per square inch.

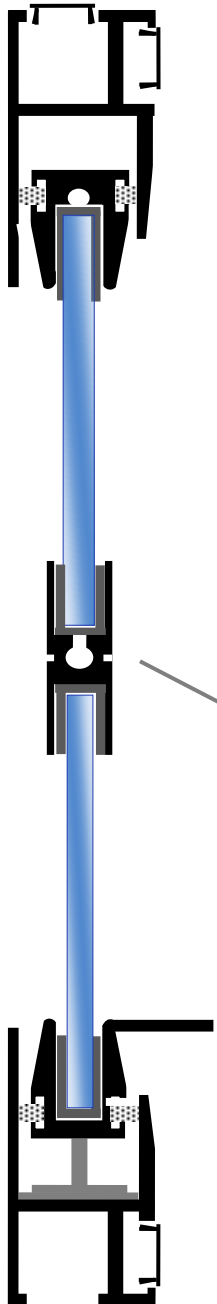


Panels slide on nylon skids 

Glazing available in 4mm - 6mm and 6.4mm laminate glass

Do not scale 1 to 1

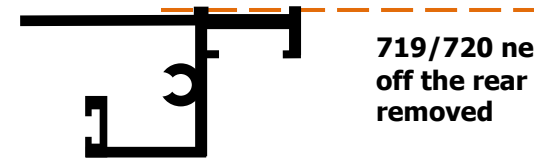
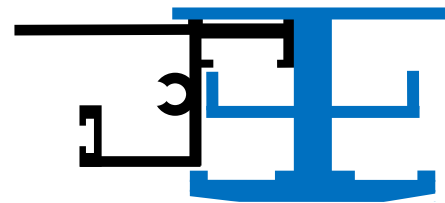
Secondary Glazing Additional Extrusions 303 and 805



Universal midrail 303
can be used in the
vertical or horizontal
position



Coupling mullion 805 can be used to
couple together all lift out outer frames.
319/320 519/520 and 719/720



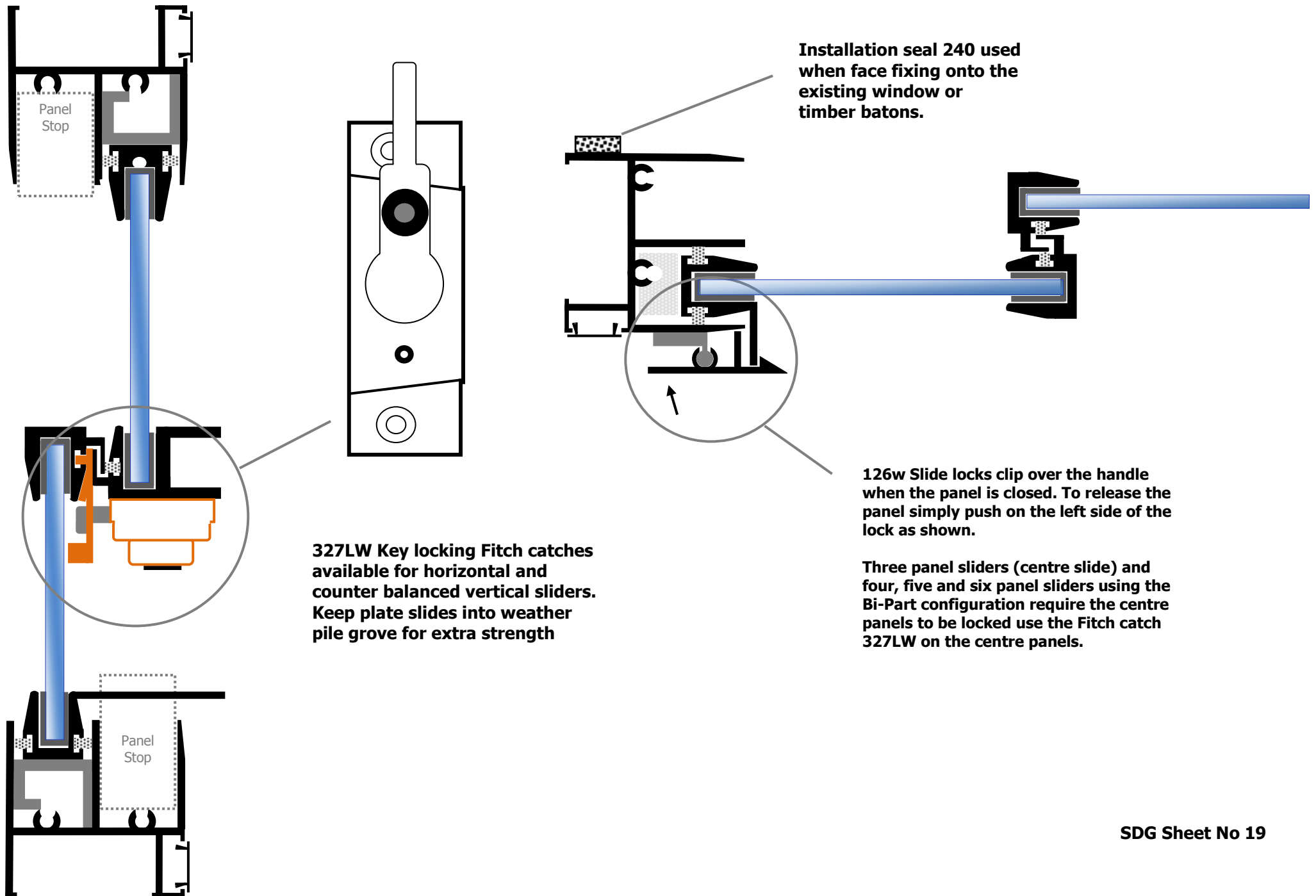
719/720 needs 1.0mm
off the rear pips
removed

Glazing available in 4mm - 6mm and 6.4mm laminate glass

Do not scale: 1 to 1

Secondary Glazing Horizontal and Vertical Slider Locks and Insulation Seal

Slide locks fit all outerframes



Installation seal 240 used when face fixing onto the existing window or timber batons.

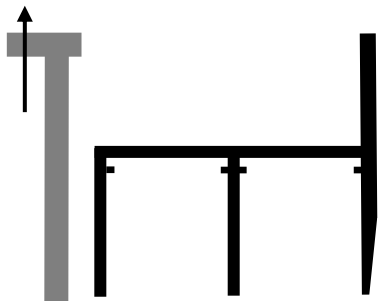
327LW Key locking Fitch catches available for horizontal and counter balanced vertical sliders. Keep plate slides into weather pile groove for extra strength

126w Slide locks clip over the handle when the panel is closed. To release the panel simply push on the left side of the lock as shown.

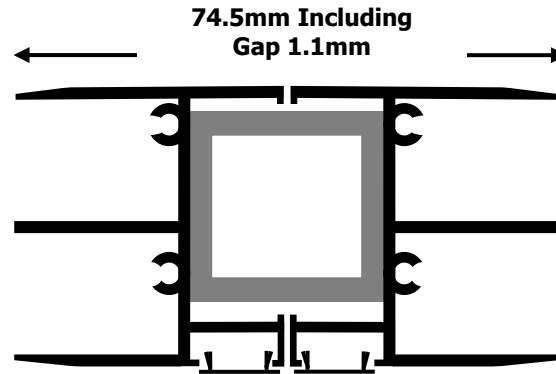
Three panel sliders (centre slide) and four, five and six panel sliders using the Bi-Part configuration require the centre panels to be locked use the Fitch catch 327LW on the centre panels.

Secondary Glazing Horizontal and Vertical Coupling Mullion or Transom

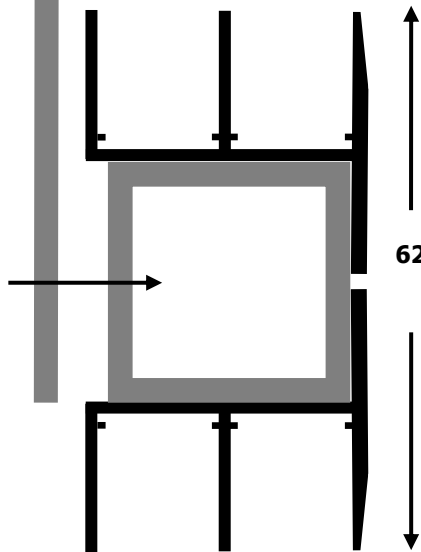
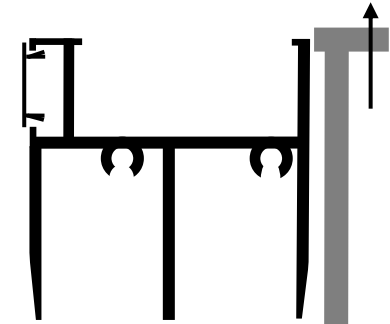
507/508 and 307/308



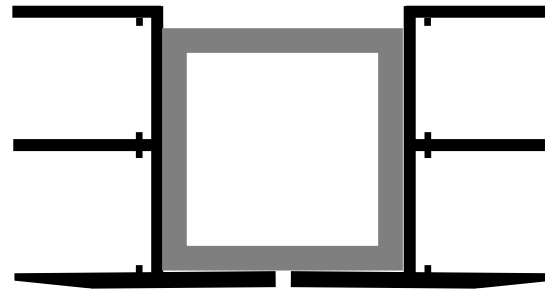
When coupling wide horizontal sliding secondary's together additional strapping as shown may be needed to support the coupling. This can be fitted in line with the secondary glazing mullions.



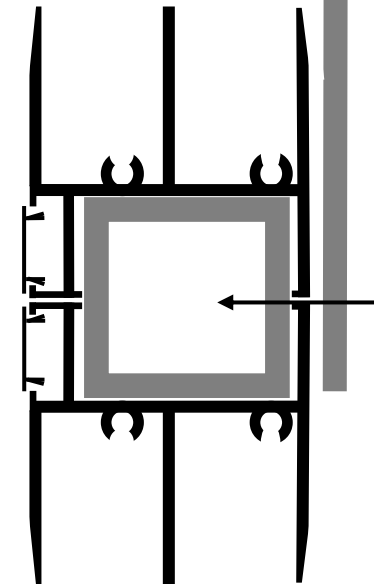
Coupling mullion for 507/508 equal leg outer frame.



62.0mm Including Gap 2.0mm



Coupling mullion for 307/308 odd leg outer frame.



Do not scale 1 to 1

Specification - Season Master Secondary Glazing

- Material:** Metal sections are manufactured from 6063T6 extruded aluminium to BS1474.
- Finish:** Sections are finished Silver Anodised AA10,
White powder coated – SA098E,
Van Dyke Brown Powder Coated BS 08 B 29
All to BS6496 produced in a factory controlled by BS5750 part 2 (EN29002),
ISO9002 and QUICOAT registered.
- Weather seal:** Sealed with twin polypropylene - products tested to draft standards -
windows with seal tested for performance to BS6375 and BS5358.
- Glazing:** Glazing can be with 4, 6 & 6.4mm glass or with appropriate substitute of
similar thickness.
- Fabrication:** Windows are fabricated in accordance with Season Master's fabrication
guide.

Season Master Windows have been used extensively for local authority contracts.
The following have been supplied with secondary glazing.

Enfield, Greenwich, Islington, Birmingham, British Airport Authorities for Heathrow,
and the Ministry of Defence.

'U' Values for Season Master secondary glazing



Pane **A** 4mm float glass Pane **B** 4mm ekologik hard coat glass

Standards

Luminous and solar characteristics of glazing : EN 410 (1998)
Determination of UV, light and total solar transmittance :ISO 9050 (1990)
Determination of thermal transmittance: EN 673 (1997)

Light Factor

Transmittance LT	69%
Outdoor reflectance LRE	18%
Indoor reflectance	16%

U V Factor

UV Transmittance TUV	27%
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Energy Factors CEN (EN410)

Transmittance TE	53%
Outdoor reflectance RE	17%
Absorption A1	11%
Absorption A2	20%

Solar factor g	0.69
Shading coefficient SC	0.79

Solar factor g DIN 67507 (m1) 0.68

The figures given are estimated using software on a computer prior to Hot Box Testing.

Air gap between secondary glazing and existing window

Estimated U value

25mm	1.8 W/(m ² .K)
50mm	1.8 W/(m ² .K)
75mm	1.9 W/(m ² .K)
100mm	1.9 W/(m ² .K)

The U values achieved combined with Season Master secondary glazings unique draft proofing properties offer an excellent reduction in heat loss. With air infiltration kept to an absolute minimum.

Energy Efficiency

Get the low-down on U values...

What do we mean by U value?

U value is a means of comparing the heat lost through various parts of a building. A part of a building with a U value of 4.0 W/m²K will lose twice as much heat as one with a U value of 2.0 W/m²K.

The lower the U value the less heat you lose

A single glazed window has a U value of 5.6, with secondary glazing this can be reduced to 1.8 - 1.9.

Low E glass in secondary glazing reflects most of the heat back into the room.

Eliminating Draughts



Living with your windows is easy...

Draughts through your windows can create cold spots around the room, particularly around the legs and feet, as a result heating is normally turned up higher to compensate. The tight tolerances designed into our secondary glazing system keeps cold air and dust out whilst retaining the warm air in the building.

Air permeability test

This defines the ability of the window to resist air penetration when it is subjected to differential pressure and is a measure of the air which seeps through the test window at given test pressures.

The secondary met the stringent test results of Pressure Class 300Pa, and was tested by BSI to the following standards.

BS 5368: Part 1

BS 6375: Part 1

Air-conditioning

Extensive use is made of air-conditioning in today's busy offices, shops and at home. Installing secondary glazing will help to reduce the energy used in cooling the building and stops cool air escaping out through your windows.

Sound Reduction

Sound doesn't have to be complicated...

How does sound travel?

Sound travels through the air like ripples on a pond surface. The sound radiates outwards in all directions from the source, gradually reducing in intensity or until an object stops its progress.

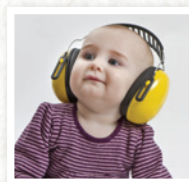
Sound (dB Decibels)

Sound is described in different ways but primarily in terms of intensity and frequency. The sound intensity is described in dB. A low dB indicates a soft sound; a high dB value indicates a loud sound. Frequency describes how high or low pitched the sound is (Hz).

Sound Reduction

A sound's volume at 60dB decreased by...

- **3dB** is just perceptible
- **5dB** clearly noticeable
- **10dB** half the original volume



Recommended Indoor Ambient Noise Levels In Dwellings:

Bedrooms 30-35dB

Living rooms 30-40dB

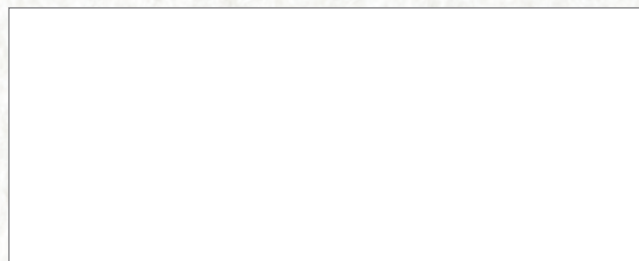
Test results carried out at BRE

At the Building Research Establishment in Watford, a primary window with 4mm glass was tested with our secondary glazing installed behind and achieved the following results.

The Existing Window Achieved a Reduction of 26 dB

With secondary glazing installed with a 100mm air gap between the two, the following results were achieved:

4mm Glass	39 dB	Estimated reduction in sound through the window	65%
6mm Glass	39 dB		65%
Laminated	40 dB		70%
Acoustic Glass	45 dB		75%



All information is given in good faith and the company will not be responsible for any errors or omissions.



Secondary Glazing



Have you become a radiator hugger?

Is local noise a major distraction to your daily routine?



Would you prefer life to be a little more comfortable?

Do you suffer from cold rooms and draughts?



Secondary Glazing
Improving your life style for the better

Secondary glazing has stood the test of time and remains the best form of insulation for homes, offices, public and private sector buildings against heat loss, draughts and noise intrusion.



Easy Installation With No Mess

All windows in our range are aesthetically designed to integrate seamlessly with your existing décor, and are available in a full range of colours.



**Unsurpassed Quality...
Effective Simplicity**

- Up to 45dB reduction in sound through your windows depending on glass choice
- Draught free
- Low E glass available to help reduce heat loss
- Reduced energy consumption in winter and summer
- Keeps cool air in when using air conditioning
- Fly screens to keep insects out



A number of window designs are available to choose from to help suit existing window and door styles.

Excellence Through Design



Tailor-made units are manufactured to exact specifications. Combined with our highly efficient sealing qualities, this makes our system the obvious choice for the discerning buyer.



Fly screens can also be installed behind a glazed panel to offer additional protection throughout the year against airborne and crawling insects.

Window Styles available

Fixed, Hinged, Lift Outs, Horizontal Sliders, Friction & Counter Balanced Vertical Sliders, Easy Clean Tilt-in Counter Balanced Verticals.