



origin

DOORS AND WINDOWS

OW-70 Window Specification File





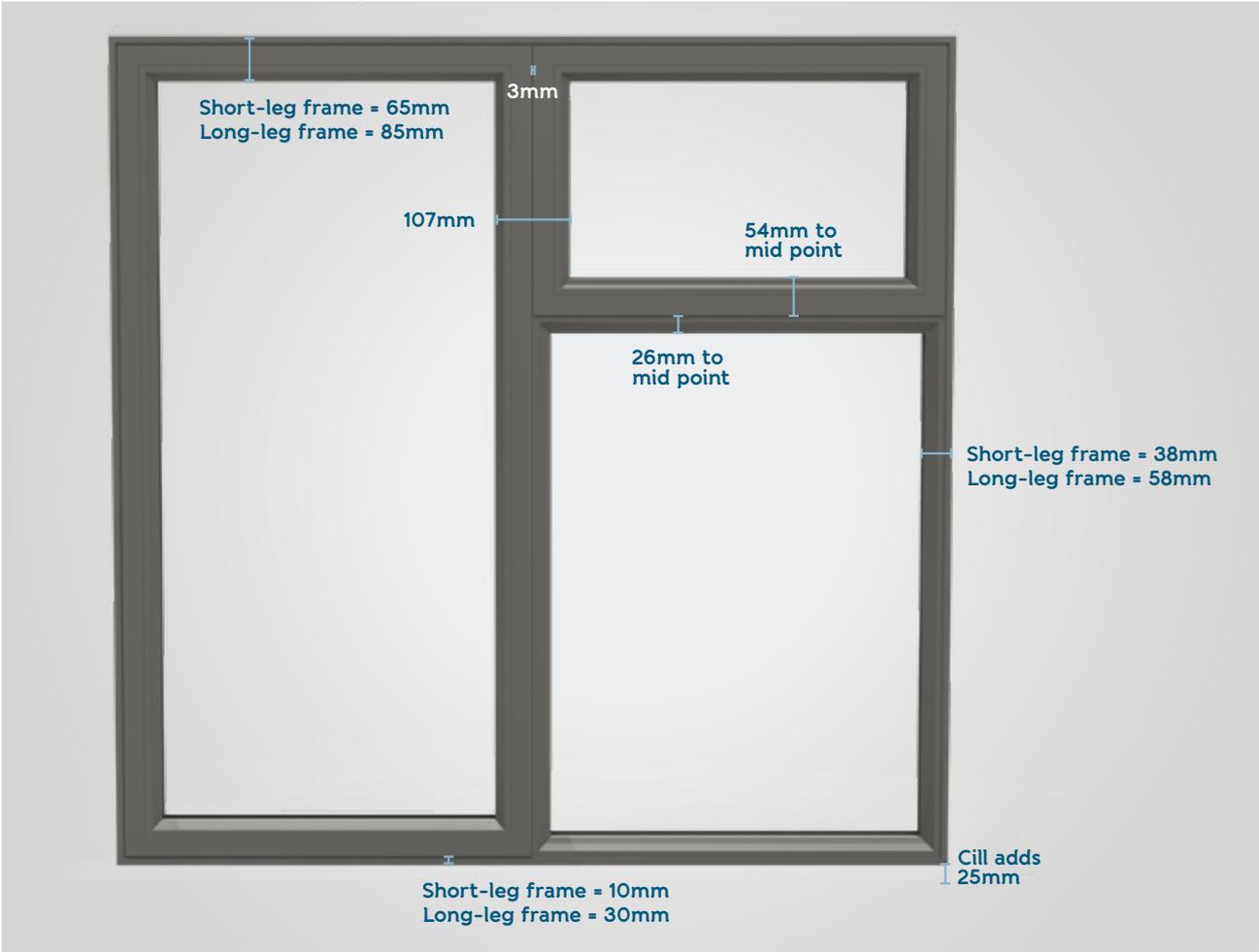
Contents

Specification Overview	04
Security	07
Optional Extras	08
Window Make-Up	10
Performance and Limitations	11
Popular Configurations	28
Egress Application	29
Size Guidelines	30
Technical Drawings	34
Gaskets	53
Installation Guide	56

Specification Overview

Thermally Broken Aluminium Window

External view of the OW-70



Profile Specification

	Short-leg Frame	Long-leg Frame
Frame and Sash Sightline	65mm	85mm

OW-70 Outer Frame Depth: 70mm

OW-70 Sash Depth: 64mm

OW-70 Mullion and Sash Sightline: 80mm

Features

- ▶ Up to a 20-year guarantee*
- ▶ External flush casement
- ▶ Mechanically double crimped corners
- ▶ Nemesis espag locking mechanism

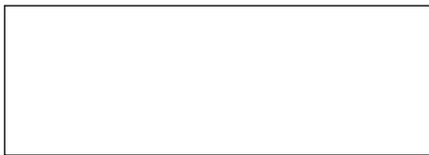
Options and extras

- ▶ Casement and fixed configurations available
- ▶ Accommodates double and triple glazing, with a 28mm unit
- ▶ Open-out, fixed or dummy sash
- ▶ 95, 150, 180 and 225mm cill options
- ▶ Available in over 150 different RAL colours
- ▶ 35mm frame extender
- ▶ Restrictor hooks
- ▶ Egress hardware
- ▶ 2500EA trickle vents available
- ▶ Window-to-window coupling option available

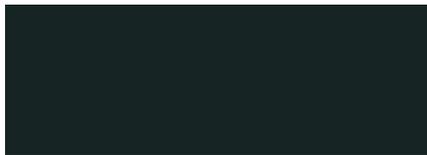
*Guarantee based on location of where the windows will be installed.

Full terms and conditions can be found on the Origin website - origin-global.com/terms-and-conditions.

2 of our popular colours are available on a 1-week lead time.



Hipca White (9910G)



Anthracite Grey (7016M)

Outside of this, any RAL colour can be selected. These are on a 3-week lead time.

For the full range, visit origin-global.com



Dual coloured windows operate on a 3-week lead time

Lead Times

Popular colour casement and fixed windows:	1-week
Special RAL colour casement and fixed windows:	3-weeks
Dual colour casement and fixed windows:	3-weeks

More colours are available on our 24-hour delivery promise, 'Your Lead Time, Not Ours' within the OW-80 range.

Security

The OW-70 has been designed with security in mind. Being PAS 24 certified, we have ensured that despite its slim nature, it still possesses components of the highest quality to ensure its security.

The hinge guards feature anti-slip and lock technology and are fitted as standard along the hinged side of the window. The bespoke Nemesis lock which sits inside the sash, features a robust offset handed die-cast gearbox and bi-directional twin cam locking. It also incorporates stainless steel faceplate drive bars and mushroom cams to enhance both its appearance and longevity.



Optional Extras

Restrictor Hooks

Restrictor hooks limit the sash opening to 70mm, but can be unhooked to allow the window to open fully.



Handle

The inline window handle is available in chrome or satin or you can opt for a colour-coded cranked handle.

Inline colour options



Chrome



Silver

Colour coded option



Cranked handle

Available in any RAL colour to complement your windows.



Trickle vents

Trickle vents can be fitted through the long-leg frame or through a 35mm frame extender.*



Trickle vents

Additional Information

England and Wales:

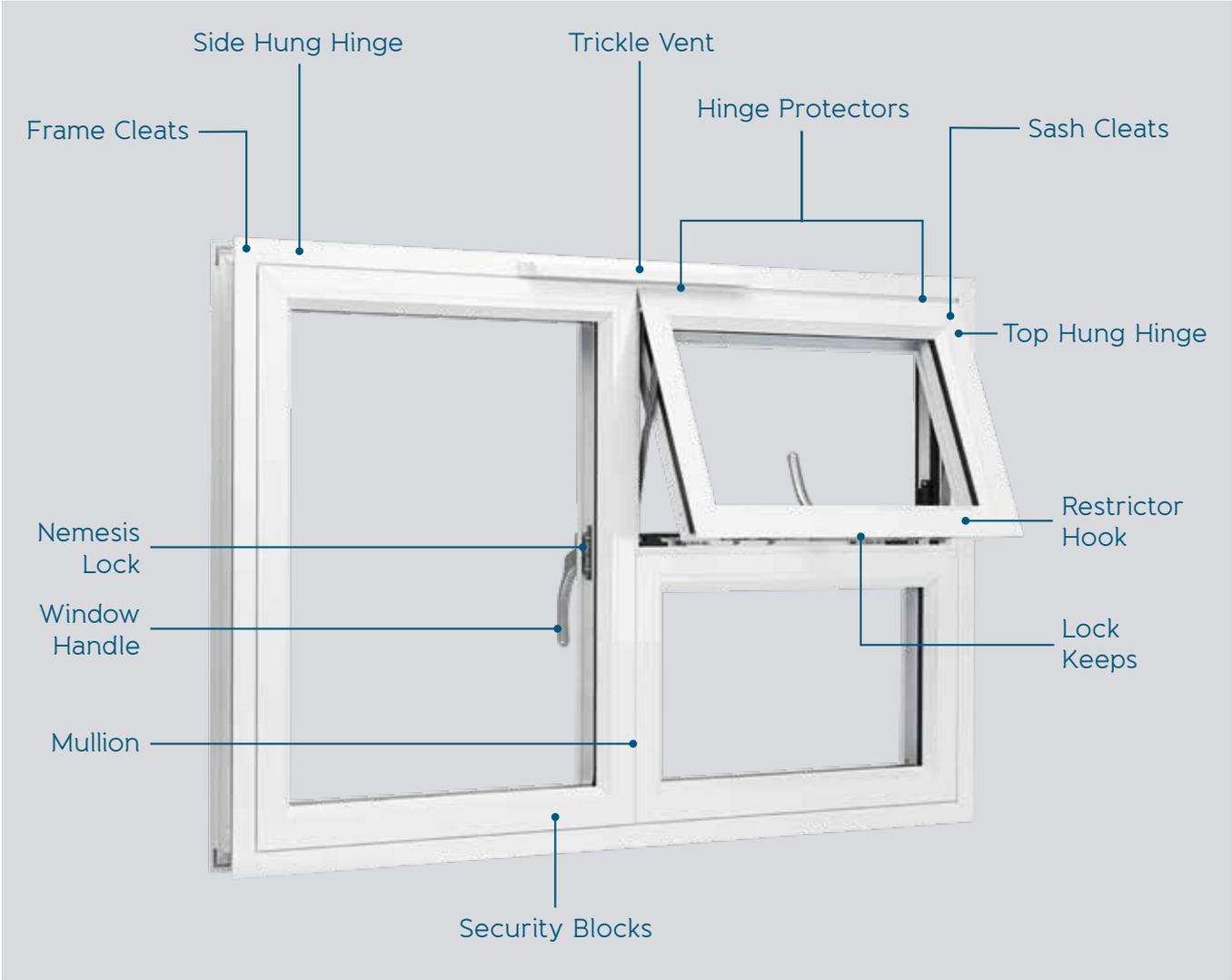
Equivalent Air Rates of 2500EA as required by Approved Document "F" 2006 for England and Wales.

Scotland and Northern Ireland:

2000, 3000, 4000, 6000 and 8000 free air models available for use in Scotland and Northern Ireland.

*minimum sash width applies.

Window Make-Up



Performance and Limitations

Thermal Ratings

u-Value	Short-leg frame:	Long-leg frame:
	up to 1.2W/m ² .K* (See from page 13 for short-leg)	1.2W/m ² .K* (See from page 18 for long-leg)

Weather Rating

Air Permeability	Class 4
Resistance to Wind Load	Class A5
Water Tightness	Class 9A

Performance Testing

PAS 24 Certified (Document Q Compliant)

Size and Weight Limitations

	Width	Height	Weight
Maximum Dimensions:			
Side Hung:	Max: 950mm**	Max: 1400mm**	Max: 35kg***
Maximum Dimensions:			
Top Hung:	Max: 1374mm**	Max: 1474mm**	Max: 50kg***

Please note: the minimum and maximum sizes vary depending on the configuration. See page 30-33 for more information.

Maximum coupling lengths: 3000mm****

Building Regulation Requirements

New Build and Extensions	2.0W/m ² .K
Replacements	1.6W/m ² .K
Energy Rating	B or better

All windows must conform to these requirements.

*Short-leg based on using glass with centre pane of 0.6W/m².K. Long-leg based on using glass with centre pane of 0.6W/m².K.

**Max sizes refer to the maximum overall frame and sash size for an individual window.

***Max weight refers to the maximum glazed sash weight.

****Depends on window size and wind loading.

Thermal Efficiency

In order to improve thermal efficiency, the OW-70 is fitted with a 32mm polyamide thermal break and a bespoke cavity gasket in the internal chamber of the window between the sash and the frame as standard.

The short-leg and long-leg frame have a u-Value of up to 1.2.



Certificate of thermal simulation

PRODUCT:	OW-70 - SHORT-LEG
SIM - SOFTWARE:	WIN ISO 2D PRO
GLASS CENTRE PANE U-VALUE:	0.6W/m ² K
INSULATION:	NONE
PROFILE SPEC:	FRAME: P954, SASH: P955
BEAD:	28mm
GLASS SPEC:	4mm CLEAR - 8mm 90% - 4mm PLANITHERM 4SII - 8mm 90% KRYPTON - 4mm PLANITHERM 4SII
SPACER BAR:	SWISSPACER ULTIMATE

THERMAL TRANSMITTANCE:

1.2W/m²K

TESTED BY: David Ginger (Product Compliance Director)

DATE: 10/07/2018

SIGNED: 

All simulations strictly in accordance with the requirements of ISO 10077-2:2015

Email: enquiry@origin-global.com | Web: www.origin-global.com

Origin Global HQ, Stuart House, Castle Estate, Coronation Road, Cressex Business Park, High Wycombe, Buckinghamshire, HP12 3TA

OFDL18.70.2

origin
DOORS AND WINDOWS

Windows

Certificate of thermal simulation

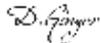
PRODUCT:	OW-70 - SHORT-LEG FRAME
SIM - SOFTWARE:	WIN ISO 2D PRO
GLASS CENTRE PANE U-VALUE:	0.7W/m ² K
INSULATION:	NONE
PROFILE SPEC:	FRAME:P954, SASH: P955
BEAD:	28mm
GLASS SPEC:	4mm CLEAR - 6mm AIR - 4mm PLANITHERM 4SII - 10mm 90% KRYPTON - 4mm PLANITHERM 4SII
SPACER BAR:	SWISSPACER ULTIMATE

THERMAL TRANSMITTANCE:

1.3W/m²K

TESTED BY: David Ginger (Product Compliance Director)

DATE: 10/07/2018

SIGNED: 

All simulations strictly in accordance with the requirements of ISO 10077-2:2015

Email: enquiry@origin-global.com | Web: www.origin-global.com

Origin Global HQ, Stuart House, Castle Estate, Coronation Road,
Cressex Business Park, High Wycombe, Buckinghamshire, HP12 3TA

OFDL_18.92.1

origin
DOORS AND WINDOWS

Certificate of thermal simulation

PRODUCT:	OW-70 - SHORT-LEG
SIM - SOFTWARE:	WIN ISO 2D PRO
GLASS CENTRE PANE U-VALUE:	0.9W/m ² K
INSULATION:	NONE
PROFILE SPEC:	FRAME: P954, SASH: P955
BEAD:	28mm
GLASS SPEC:	4mm CLEAR - 8mm 90% Argon - 4mm Planitherm 4SII - 8mm 90% Argon - 4mm Planitherm 4SII
SPACER BAR:	SWISSPACER ULTIMATE

THERMAL TRANSMITTANCE:

1.4W/m²K

TESTED BY: David Ginger (Product Compliance Director)

DATE: 10/07/2018

SIGNED: 

All simulations strictly in accordance with the requirements of ISO 10077-2:2015

Email: enquiry@origin-global.com | Web: www.origin-global.com

Origin Global HQ, Stuart House, Castle Estate, Coronation Road,
Cressex Business Park, High Wycombe, Buckinghamshire, HP12 3TA

OFDL_J8.72.2

origin
DOORS AND WINDOWS

Windows

Certificate of thermal simulation

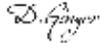
PRODUCT:	OW-70: SHORT-LEG FRAME
SIM - SOFTWARE:	WIN ISO 2D PRO
GLASS CENTRE PANE U-VALUE:	1.0W/m ² K
INSULATION:	NONE
PROFILE SPEC:	FRAME: P954, SASH: P955
BEAD:	28mm
GLASS SPEC:	4mm CLEAR - 20mm 90% ARGON - 4mm PLANITHERM 4SII
SPACER BAR:	SWISSPACER ULTIMATE

THERMAL TRANSMITTANCE:

1.5W/m²K

TESTED BY: David Ginger (Product Compliance Director)

DATE: 10/07/2018

SIGNED: 

All simulations strictly in accordance with the requirements of ISO 10077-2:2015

Email: enquiry@origin-global.com | Web: www.origin-global.com

Origin Global HQ, Stuart House, Castle Estate, Coronation Road,
Cressex Business Park, High Wycombe, Buckinghamshire, HP12 3TA

OFDL_18.59.2

origin
DOORS AND WINDOWS

Certificate of thermal simulation

PRODUCT:	OW-70: SHORT-LEG FRAME
SIM - SOFTWARE:	WIN ISO 2D PRO
GLASS CENTRE PANE U-VALUE:	1.2W/m ² K
INSULATION:	NONE
PROFILE SPEC:	FRAME: P954, SASH: P955
BEAD:	28mm
GLASS SPEC:	4mm CLEAR - 20mm 90% ARGON - 4mm PLANITHERM TOTAL+
SPACER BAR:	SWISSPACER ULTIMATE

THERMAL TRANSMITTANCE:

1.6W/m²K

TESTED BY: David Ginger (Product Compliance Director)

DATE: 10/07/2018

SIGNED: 

All simulations strictly in accordance with the requirements of ISO 10077-2:2015

Email: enquiry@origin-global.com | Web: www.origin-global.com

Origin Global HQ, Stuart House, Castle Estate, Coronation Road,
Cressex Business Park, High Wycombe, Buckinghamshire, HP12 3TA

OFDL_J8.61.2

origin
DOORS AND WINDOWS

Windows

Certificate of thermal simulation

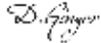
PRODUCT:	OW-70 - LONG-LEG
SIM - SOFTWARE:	WIN ISO 2D PRO
GLASS CENTRE PANE U-VALUE:	0.6W/m ² K
INSULATION:	STANDARD
PROFILE SPEC:	FRAME: P958, SASH: P955
BEAD:	28mm
GLASS SPEC:	4mm CLEAR - 8mm 90% - 4mm PLANITHERM 4SII - 8mm 90% KRYPTON - 4mm PLANITHERM 4SII
SPACER BAR:	SWISSPACER ULTIMATE

THERMAL TRANSMITTANCE:

1.2W/m²K

TESTED BY: David Ginger (Product Compliance Director)

DATE: 10/07/2018

SIGNED: 

All simulations strictly in accordance with the requirements of ISO 10077-2:2015

Email: enquiry@origin-global.com | Web: www.origin-global.com

Origin Global HQ, Stuart House, Castle Estate, Coronation Road,
Cressex Business Park, High Wycombe, Buckinghamshire, HP12 3TA

OFDL_18.91.1

origin
DOORS AND WINDOWS

Certificate of thermal simulation

PRODUCT:	OW-70 - LONG-LEG FRAME
SIM - SOFTWARE:	WIN ISO 2D PRO
GLASS CENTRE PANE U-VALUE:	0.7W/m ² K
INSULATION:	STANDARD
PROFILE SPEC:	FRAME: P958, SASH: P955
BEAD:	28mm
GLASS SPEC:	4mm CLEAR - 6mm AIR - 4mm PLANITHERM 4SII - 10mm 90% KRYPTON - 4mm PLANITHERM 4SII
SPACER BAR:	SWISSPACER ULTIMATE

THERMAL TRANSMITTANCE:

1.3W/m²K

TESTED BY: David Ginger (Product Compliance Director)

DATE: 10/07/2018

SIGNED: 

All simulations strictly in accordance with the requirements of ISO 10077-2:2015

Email: enquiry@origin-global.com | Web: www.origin-global.com

Origin Global HQ, Stuart House, Castle Estate, Coronation Road,
Cressex Business Park, High Wycombe, Buckinghamshire, HP12 3TA

OFDL_18.92.1

origin
DOORS AND WINDOWS

Windows

Certificate of thermal simulation

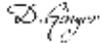
PRODUCT:	OW-70 - LONG-LEG FRAME
SIM - SOFTWARE:	WIN ISO 2D PRO
GLASS CENTRE PANE U-VALUE:	0.9W/m ² K
INSULATION:	STANDARD
PROFILE SPEC:	FRAME: P958, SASH: P955
BEAD:	28mm
GLASS SPEC:	4mm CLEAR - 8mm 90% Argon - 4mm PLANITHERM 4SII - 8mm 90% Argon - 4mm PLANITHERM 4SII
SPACER BAR:	SWISSPACER ULTIMATE

THERMAL TRANSMITTANCE:

1.4W/m²K

TESTED BY: David Ginger (Product Compliance Director)

DATE: 10/07/2018

SIGNED: 

All simulations strictly in accordance with the requirements of ISO 10077-2:2015

Email: enquiry@origin-global.com | Web: www.origin-global.com

Origin Global HQ, Stuart House, Castle Estate, Coronation Road,
Cressex Business Park, High Wycombe, Buckinghamshire, HP12 3TA

OFDL_18.93.1

origin
DOORS AND WINDOWS

Certificate of thermal simulation

PRODUCT:	OW-70: LONG-LEG FRAME
SIM - SOFTWARE:	WIN ISO 2D PRO
GLASS CENTRE PANE U-VALUE:	1.0W/m ² K
INSULATION:	STANDARD
PROFILE SPEC:	FRAME: P958, SASH: P955
BEAD:	28mm
GLASS SPEC:	4mm CLEAR - 20mm 90% ARGON - 4mm PLANITHERM 4SI
SPACER BAR:	SWISSPACER ULTIMATE

THERMAL TRANSMITTANCE:

1.5W/m²K

TESTED BY: David Ginger (Product Compliance Director)

DATE: 10/07/2018

SIGNED: 

All simulations strictly in accordance with the requirements of ISO 10077-2:2015

Email: enquiry@origin-global.com | Web: www.origin-global.com

Origin Global HQ, Stuart House, Castle Estate, Coronation Road,
Cressex Business Park, High Wycombe, Buckinghamshire, HP12 3TA

OFDL18.74.2

origin
DOORS AND WINDOWS

Windows

Certificate of thermal simulation

PRODUCT:	OW-70: LONG-LEG FRAME
SIM - SOFTWARE:	WIN ISO 2D PRO
GLASS CENTRE PANE U-VALUE:	1.0W/m ² K
INSULATION:	NONE
PROFILE SPEC:	FRAME:P958, SASH:P955
BEAD:	28mm
GLASS SPEC:	4mm CLEAR - 20mm 90% ARGON - 4mm PLANITHERM 4SII
SPACER BAR:	SWISSPACER ULTIMATE

THERMAL TRANSMITTANCE:

1.6W/m²K

TESTED BY: David Ginger (Product Compliance Director)

DATE: 10/07/2018

SIGNED: 

All simulations strictly in accordance with the requirements of ISO 10077-2:2015

Email: enquiry@origin-global.com | Web: www.origin-global.com

Origin Global HQ, Stuart House, Castle Estate, Coronation Road,
Cressex Business Park, High Wycombe, Buckinghamshire, HP12 3TA

OFDL_18.85.1

origin
DOORS AND WINDOWS

Windows

Certificate of thermal simulation

PRODUCT:	OW-70: LONG-LEG FRAME
SIM - SOFTWARE:	WIN ISO 2D PRO
GLASS CENTRE PANE U-VALUE:	1.2W/m ² K
INSULATION:	STANDARD
PROFILE SPEC:	FRAME:P958, SASH:P955
BEAD:	28mm
GLASS SPEC:	4mm CLEAR - 20mm 90% ARGON - 4mm PLANITHERM TOTAL+
SPACER BAR:	SWISSPACER ULTIMATE

THERMAL TRANSMITTANCE:

1.6W/m²K

TESTED BY: David Ginger (Product Compliance Director)

DATE: 10/07/2018

SIGNED: 

All simulations strictly in accordance with the requirements of ISO 10077-2:2015

Email: enquiry@origin-global.com | Web: www.origin-global.com

Origin Global HQ, Stuart House, Castle Estate, Coronation Road, Cressex Business Park, High Wycombe, Buckinghamshire, HP12 3TA

OFDL_18.60.2

origin
DOORS AND WINDOWS

origin

OW-70

Windows

Certificate of thermal simulation

PRODUCT:	OW-70: LONG-LEG FRAME
SIM - SOFTWARE:	WIN ISO 2D PRO
GLASS CENTRE PANE U-VALUE:	1.2W/m ² K
INSULATION:	NONE
PROFILE SPEC:	FRAME:P958, SASH:P955
BEAD:	28mm
GLASS SPEC:	4mm CLEAR - 20mm 90% ARGON - 4mm PLANITHERM TOTAL+
SPACER BAR:	SWISSPACER ULTIMATE

THERMAL TRANSMITTANCE:

1.7W/m²K

TESTED BY: David Ginger (Product Compliance Director)

DATE: 10/07/2018

SIGNED: 

All simulations strictly in accordance with the requirements of ISO 10077-2:2015

Email: enquiry@origin-global.com | Web: www.origin-global.com

Origin Global HQ, Stuart House, Castle Estate, Coronation Road,
Cressex Business Park, High Wycombe, Buckinghamshire, HP12 3TA

OFDL_18.86.1

origin
DOORS AND WINDOWS

Windows

Certificate of thermal simulation

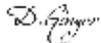
PRODUCT:	OW-70: SHORT-LEG FRAME
SIM - SOFTWARE:	WIN ISO 2D PRO
GLASS CENTRE PANE U-VALUE:	1.2W/m ² K
INSULATION:	NONE
SOLAR FACTOR (G WINDOW)	0.52
AIR PERMIABILITY (@ 50PA)	0.00W/m ² K
PROFILE SPEC:	FRAME:P954, SASH:P955
BEAD:	28mm
GLASS SPEC:	4mm DIAMANT - 20mm 90% ARGON - 4mm PLANITHERM TOTAL+
SPACER BAR:	SWISSPACER ULTIMATE
THERMAL TRANSMITTANCE:	1.6W/m ² K

ENERGY RATING:

A +3

TESTED BY: David Ginger (Product Compliance Director)

DATE: 10/07/2018

SIGNED: 

All simulations strictly in accordance with the requirements of ISO 10077-2:2015

Email: enquiry@origin-global.com | Web: www.origin-global.com

Origin Global HQ, Stuart House, Castle Estate, Coronation Road,
Cressex Business Park, High Wycombe, Buckinghamshire, HP12 3TA

OFDL_18.871

origin
DOORS AND WINDOWS

OW-70

origin

Windows

Certificate of thermal simulation

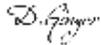
PRODUCT:	OW-70: LONG-LEG FRAME
SIM - SOFTWARE:	WIN ISO 2D PRO
GLASS CENTRE PANE U-VALUE:	1.2W/m ² K
INSULATION:	STANDARD
SOLAR FACTOR (G WINDOW)	0.49
AIR PERMIABILITY (@ 50PA)	0.00W/m ² K
PROFILE SPEC:	FRAME:P958, SASH:P955
BEAD:	28mm
GLASS SPEC:	4MM DIAMANT - 20mm 90% - 4MM PLANITHERM TOTAL+
SPACER BAR:	ARGON SWISSPACER ULTIMATE
THERMAL TRANSMITTANCE:	1.6W/m ² K

ENERGY RATING:

B -2

TESTED BY: David Ginger (Product Compliance Director)

DATE: 10/07/2018

SIGNED: 

All simulations strictly in accordance with the requirements of ISO 10077-2:2015

Email: enquiry@origin-global.com | Web: www.origin-global.com

Origin Global HQ, Stuart House, Castle Estate, Coronation Road,
Cressex Business Park, High Wycombe, Buckinghamshire, HP12 3TA

OFDL_18.89.1

origin
DOORS AND WINDOWS

Windows

Certificate of thermal simulation

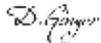
PRODUCT:	OW-70: LONG-LEG FRAME
SIM - SOFTWARE:	WIN ISO 2D PRO
GLASS CENTRE PANE U-VALUE:	1.2W/m ² K
INSULATION:	NONE
SOLAR FACTOR (G WINDOW)	0.49
AIR PERMIABILITY (@ 50PA)	0.00W/m ² K
PROFILE SPEC:	FRAME:P958, SASH:P955
BEAD:	28mm
GLASS SPEC:	4mm DIAMANT - 20mm 90% - 4mm PLANITHERM TOTAL+
SPACER BAR:	ARGON SWISSPACER ULTIMATE
THERMAL TRANSMITTANCE:	1.7W/m ² K

ENERGY RATING:

C -11

TESTED BY: David Ginger (Product Compliance Director)

DATE: 10/07/2018

SIGNED: 

All simulations strictly in accordance with the requirements of ISO 10077-2:2015

Email: enquiry@origin-global.com | Web: www.origin-global.com

Origin Global HQ, Stuart House, Castle Estate, Coronation Road,
Cressex Business Park, High Wycombe, Buckinghamshire, HP12 3TA

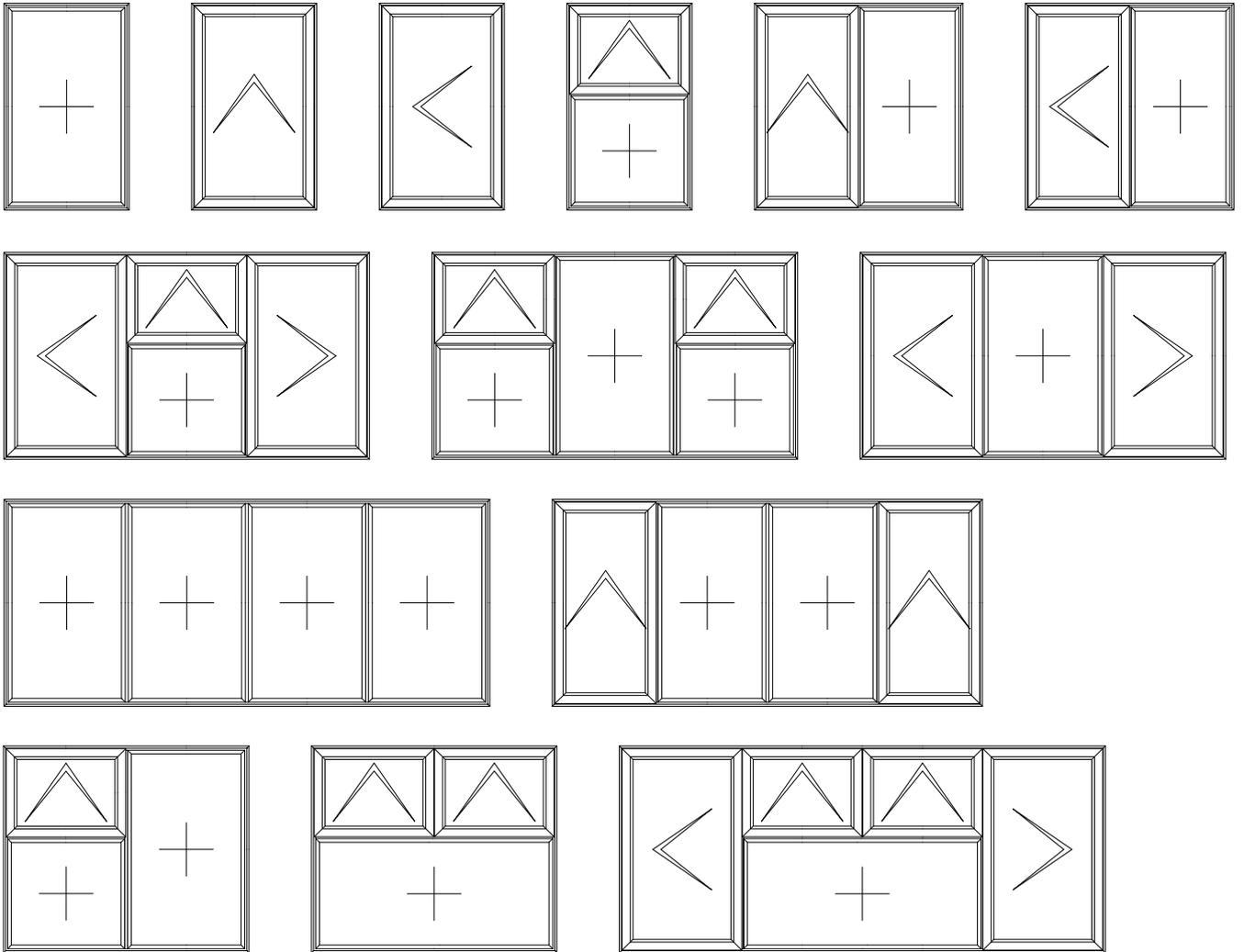
OFDL_18.88.1

origin
DOORS AND WINDOWS

OW-70

origin

Popular Configurations



Key: + Fixed Frame or Dummy Sash ^ Top Hung < Left Hung > Right Hung

**Popular configurations available to specify both Short-leg and Long-leg windows.*

Egress Application

Approved Document B of the Building Regulations 2010 specifies the following provisions with regards egress application:

Section 2.8 Emergency egress windows and external doors

Any window provided for emergency egress purposes and any external door provided for escape should comply with the following conditions:

- a. The window should have an unobstructed openable area that is at least 0.33m² and at least 450mm high and 450mm wide. In practice, this means the opening should be at least 450mm high by 750mm wide or 750mm high and 450mm wide (the route through the window may be at an angle rather than straight through). The bottom of the open-able area should be no more than 1100mm above the floor; and
- b. The window or door should enable the person escaping to reach a place free from danger and free from fire. This is a matter for judgement in each case, but, in general, a courtyard or back garden from which there is no exit other than through other buildings would have to be at least as deep as the dwelling house is high to be acceptable.

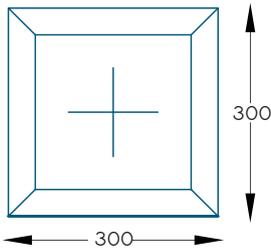
Note 1. Approved Document K protection from falling, collision and impact specifies a minimum guarding height of 800mm, except in the case of a window in a roof where the bottom of the opening may be 600mm above the floor.

Note 2. Locks (with or without removable keys) and stays may be fitted to egress windows, subject to the stay being fitted with a release catch, which may be child resistant.

Note 3. Windows should be designed such that they will remain in the open position without needing to be held by a person making their escape.

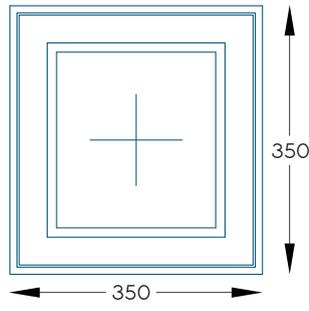
Size Guidelines

Minimum frame dimensions



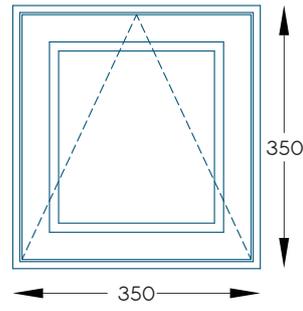
Fixed frame

Min height = 300mm*
Min width = 300mm**



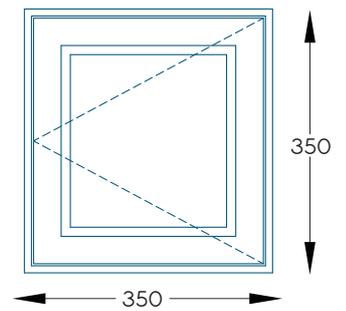
Dummy sash

Min height = 350mm*
Min width = 350mm**



Top hung

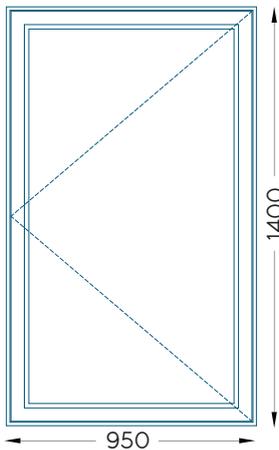
Min height = 350mm*
Min width = 355mm**



Side hung

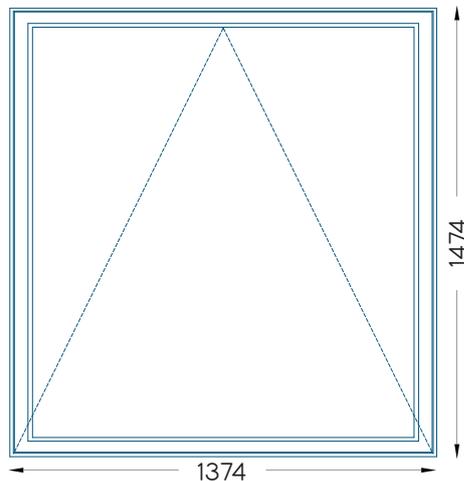
Min height = 350mm*
Min width = 350mm**

Maximum frame dimensions



Side hung

Max height = 1300mm
Max width = 700mm
Maximum glazed sash weight = 28kg***



Top hung

Max height = 1200mm
Max width = 1200mm
Maximum glazed sash weight = 50kg***

*Minimum height will be greater with a cill.

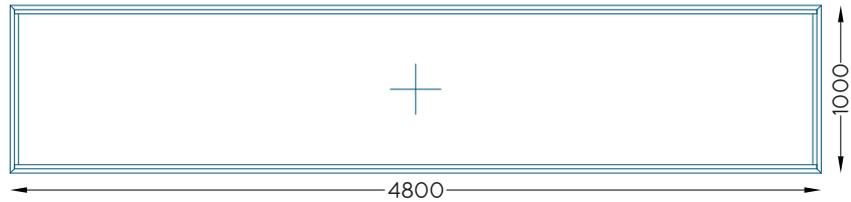
**Minimum width will be greater with a frame extension.

***Max weight refers to the maximum glazed sash weight.

Fixed frame maximum dimensions

Maximum area = 4.8m²
Maximum height/ width = 4.8m

Example 1

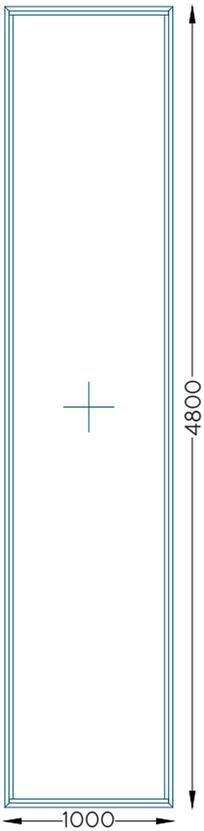


Maximum fixed width and area

Maximum area = 4800mm x 1000mm = 4.8m²

Maximum width = 4800mm

Example 2

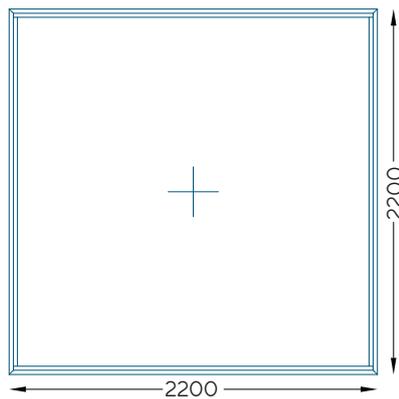


Maximum fixed height and area

Maximum area = 4800mm x 1000mm
= 4.8m²

Maximum height = 4800mm

Example 3



Maximum fixed area

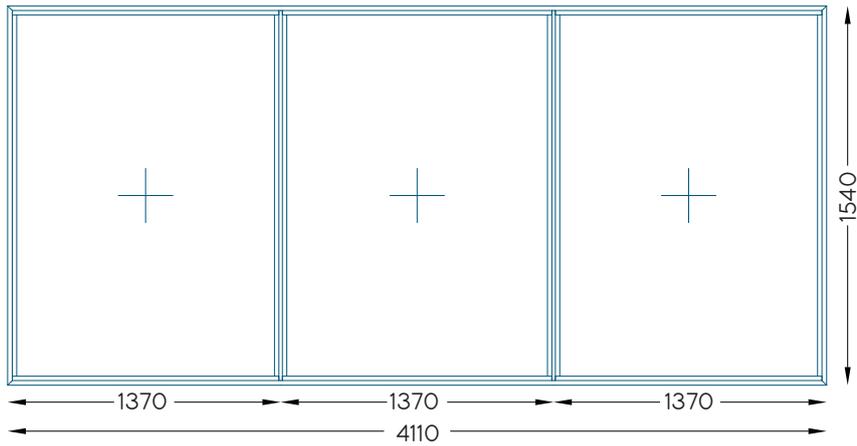
Maximum area = 2200mm x 2200mm
= approx 4.8m²

Fixed windows over 4.8sqm cannot be coupled using Origin couplers.

Maximum mullion/ transom length

Maximum glazed area next to mullion/ transom:
= 2.055m² Maximum height: = 1540mm

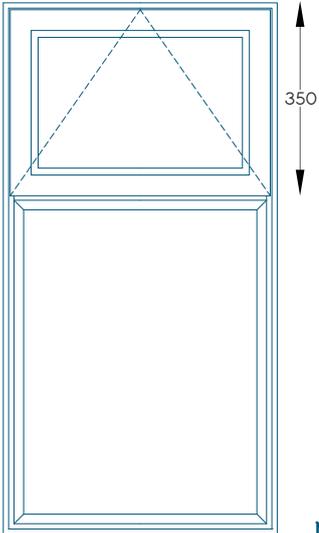
Example 1



Maximum mullion length and glazed area next to a mullion/ transom

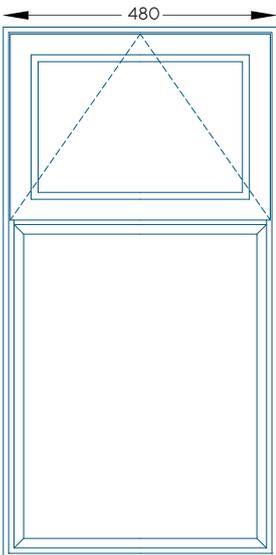
The above sizes are based on Long-leg frame and a wind loading of 1600pa.

Minimum transom drop



Minimum transom drop with 35mm frame extension: 385mm

Minimum frame width with trickle vent

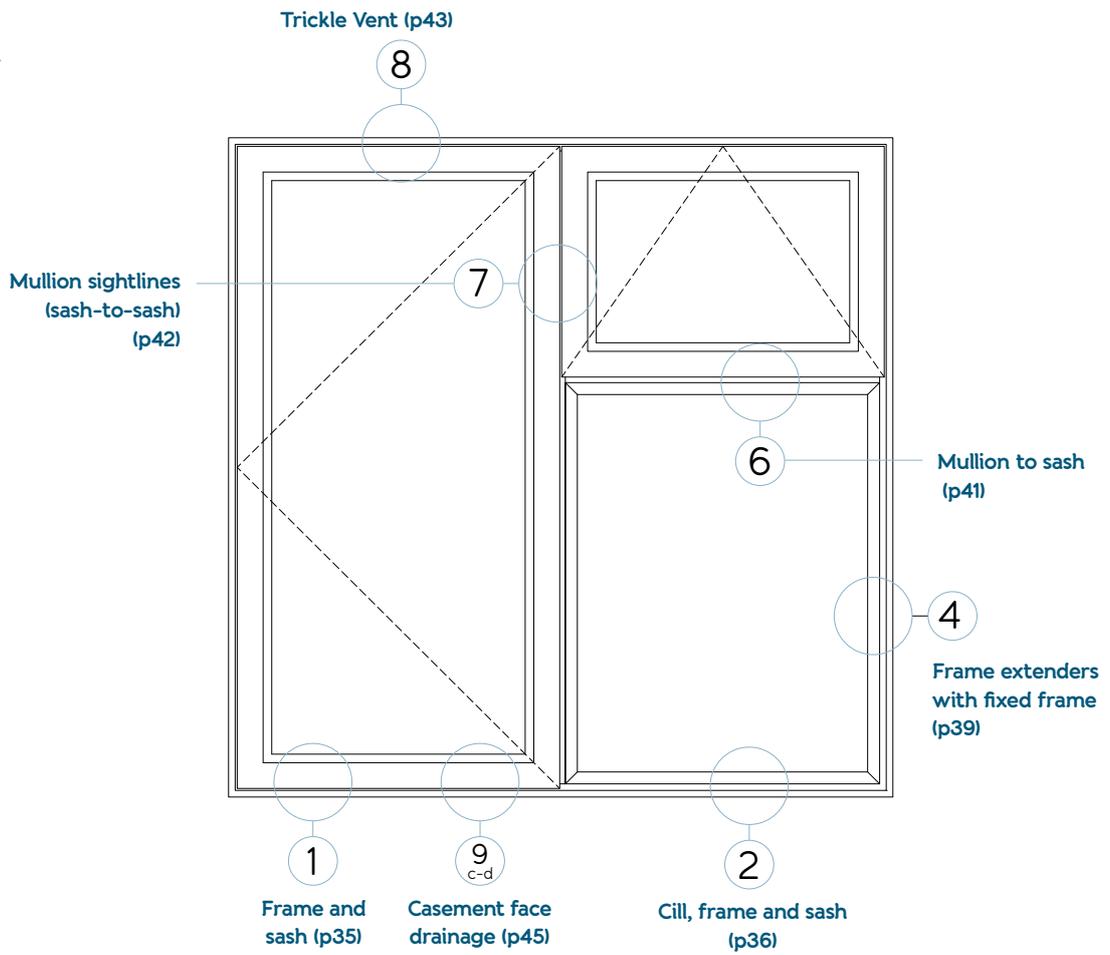


The minimum width for a 2500EA trickle vent to go through a 35mm add-on is 400mm.*

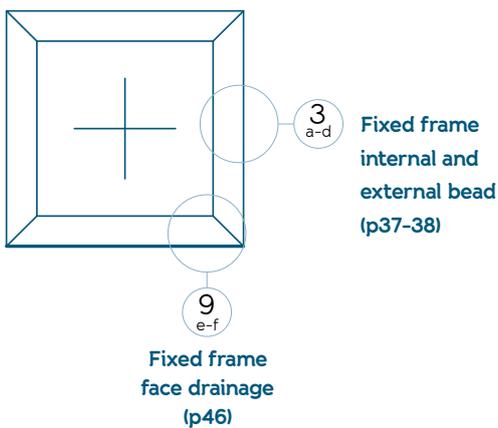
*Minimum airflow requirements to be adhered to as per building regulations.

Technical Drawings

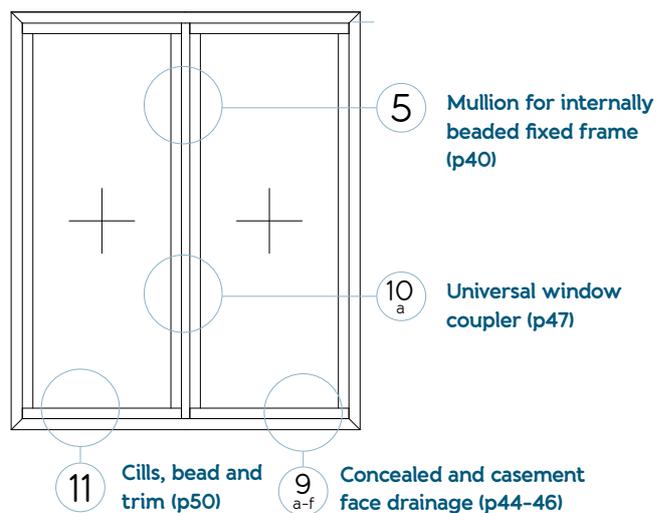
Casement



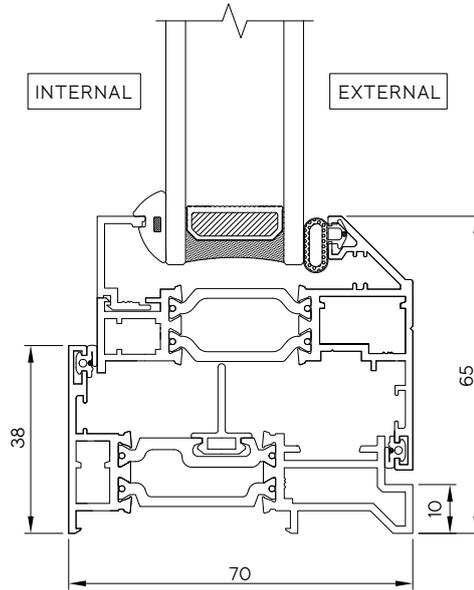
Fixed



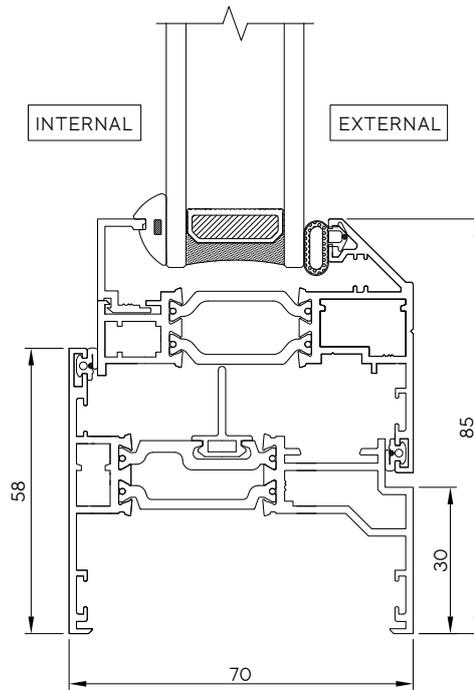
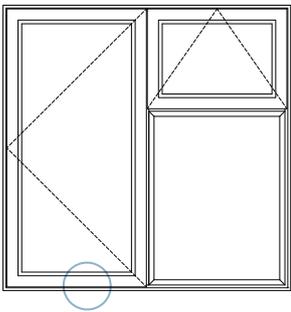
Mullion sightlines for fixed frames



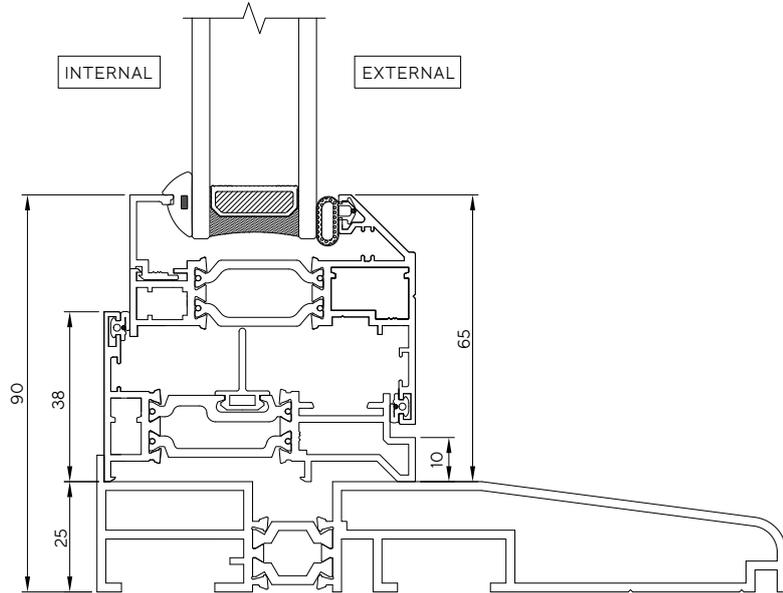
1a Short-leg frame and sash



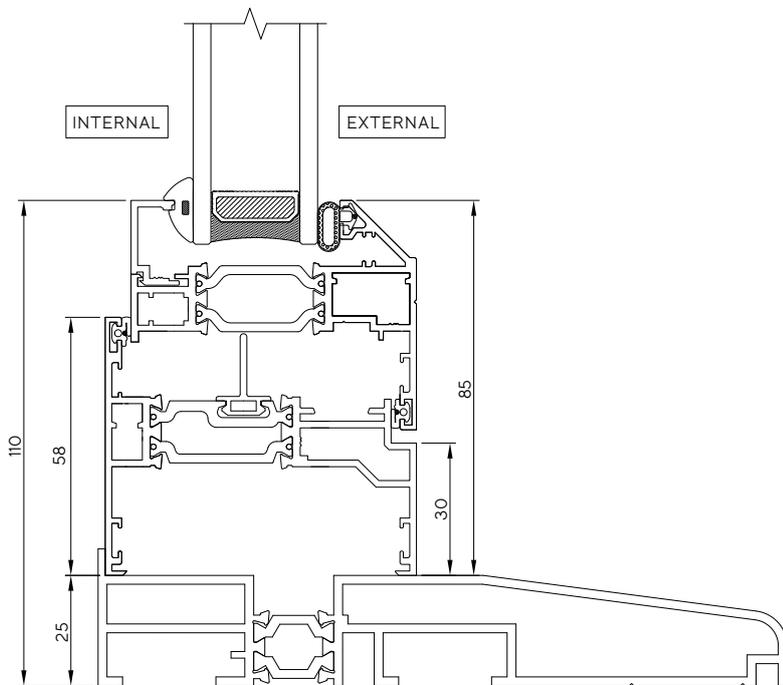
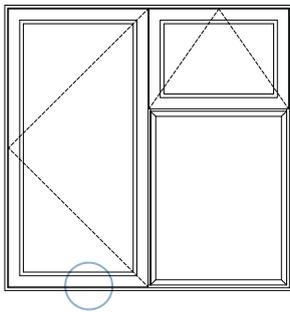
1b Long-leg frame and sash



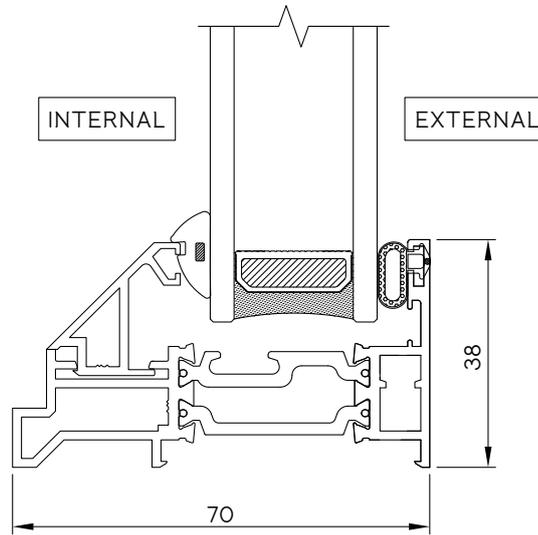
2a Cill short-leg frame and sash



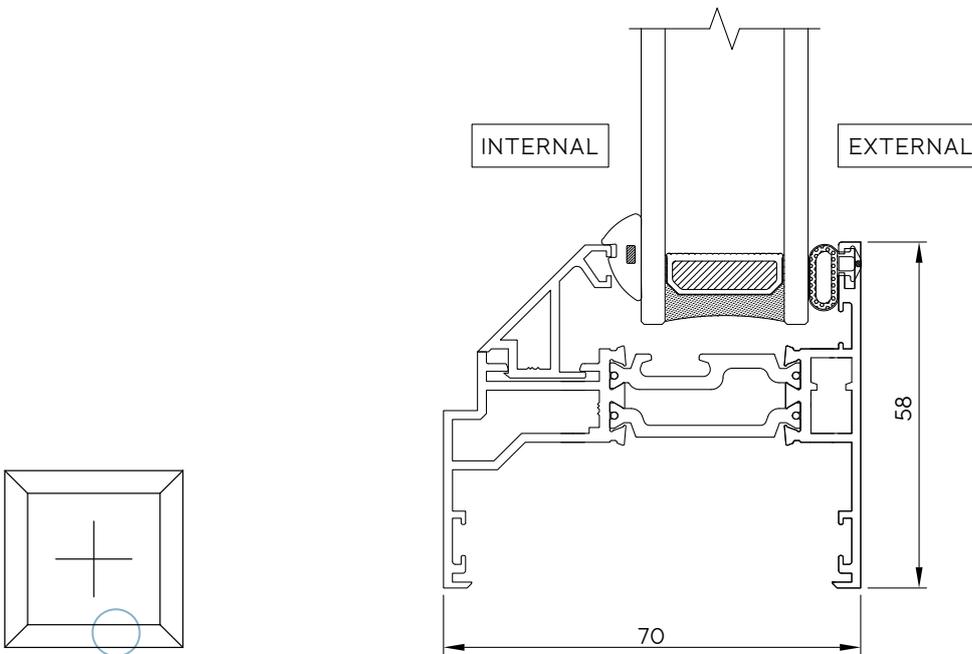
2b Long-leg frame and sash



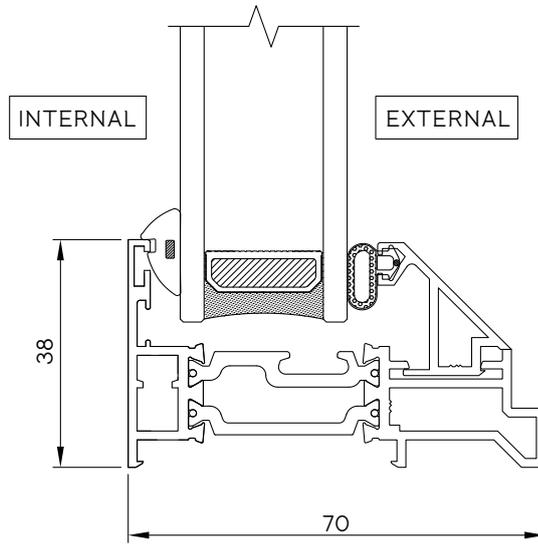
3a Fixed short-leg frame - internal bead



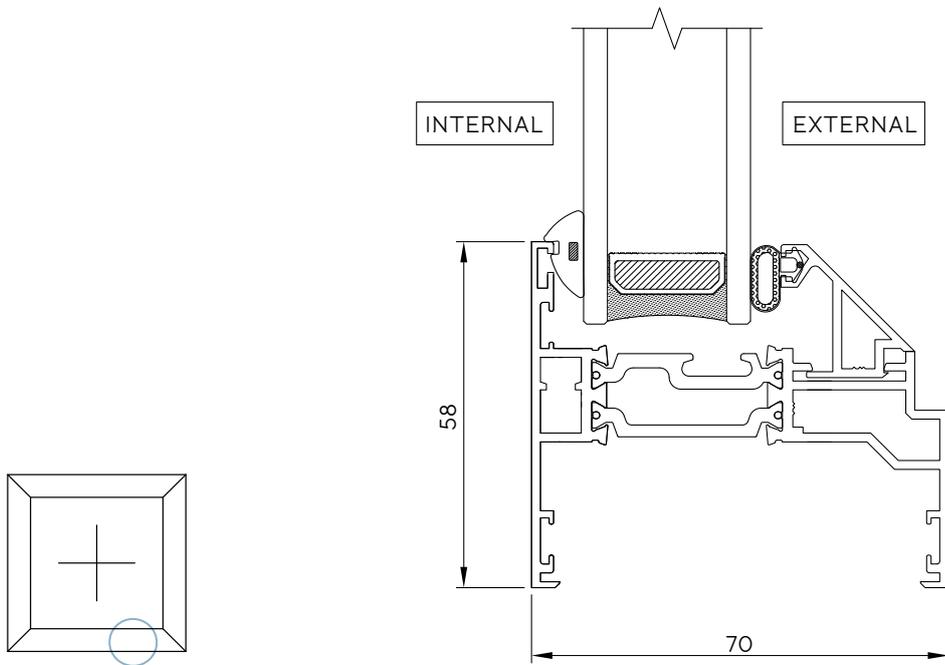
3b Fixed long-leg frame - internal bead



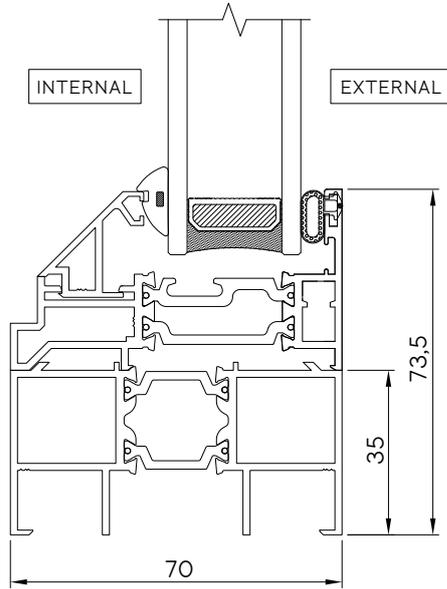
3c Fixed short-leg frame - external bead



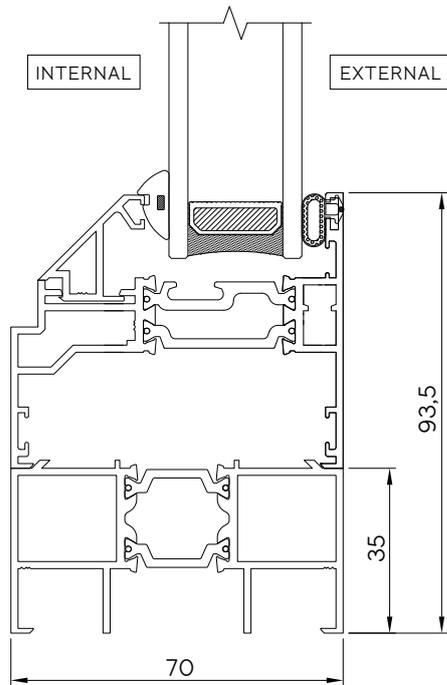
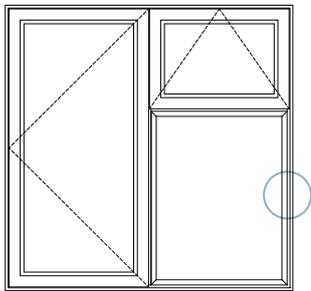
3d Fixed long-leg frame - external bead



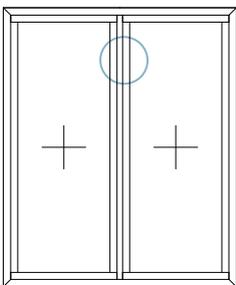
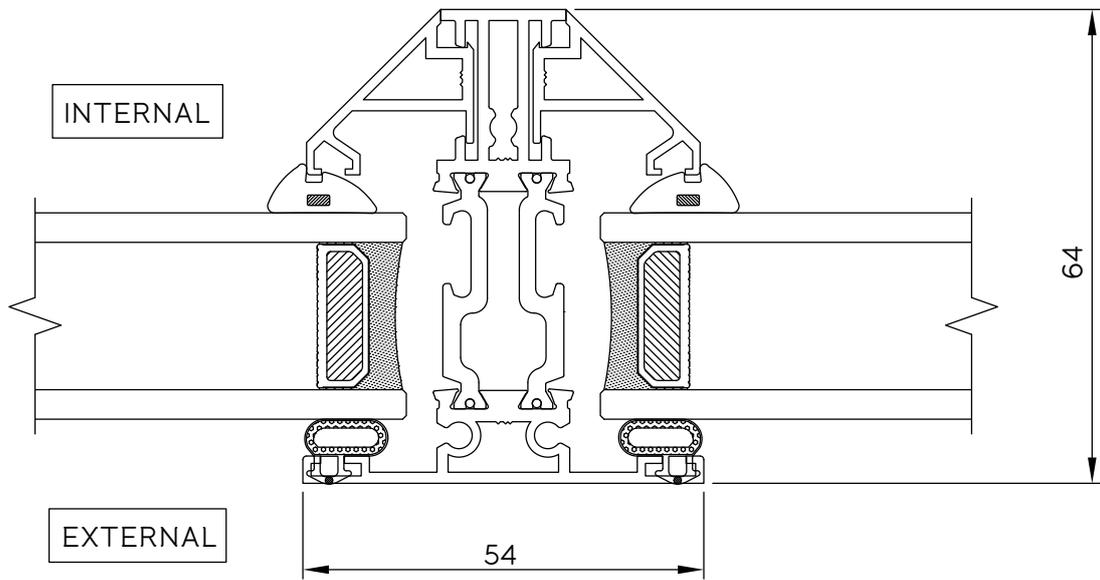
4a 35mm frame extender with short-leg frame



4b 35mm frame extender with long-leg frame

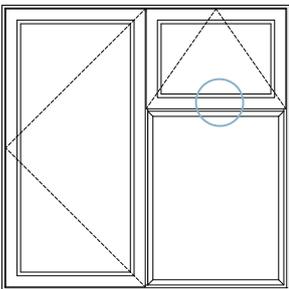
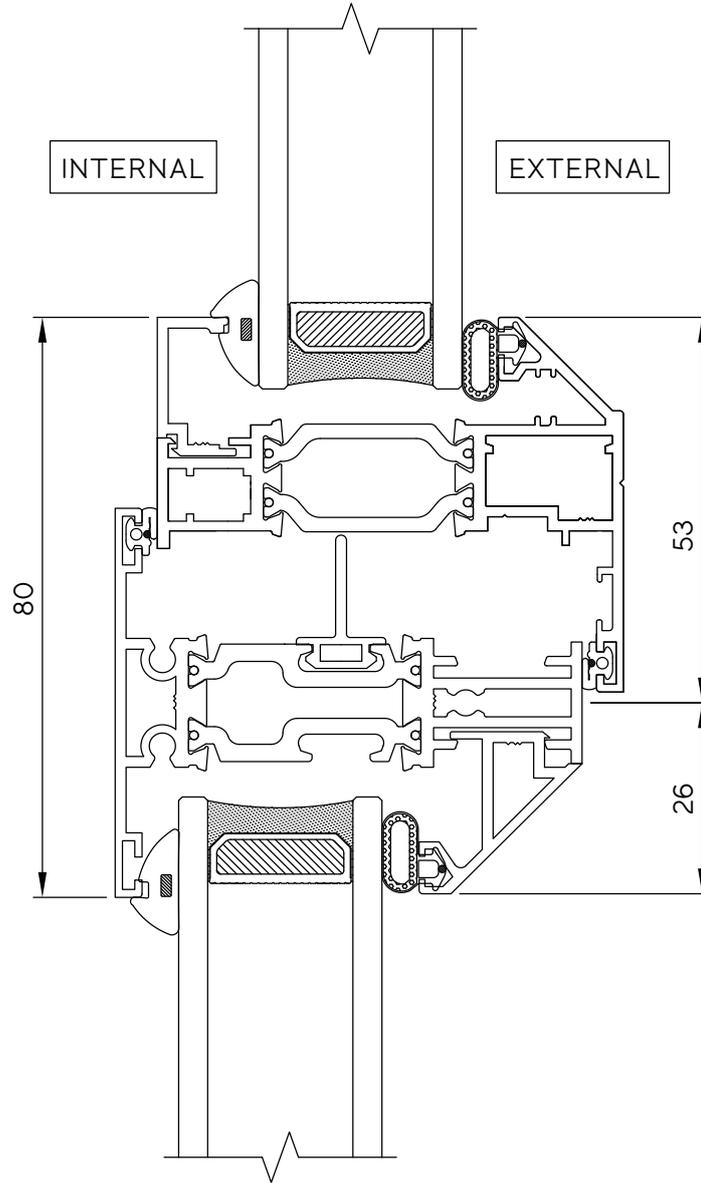


5 Mullion sightlines for internally beaded fixed frames

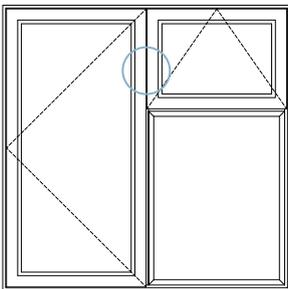
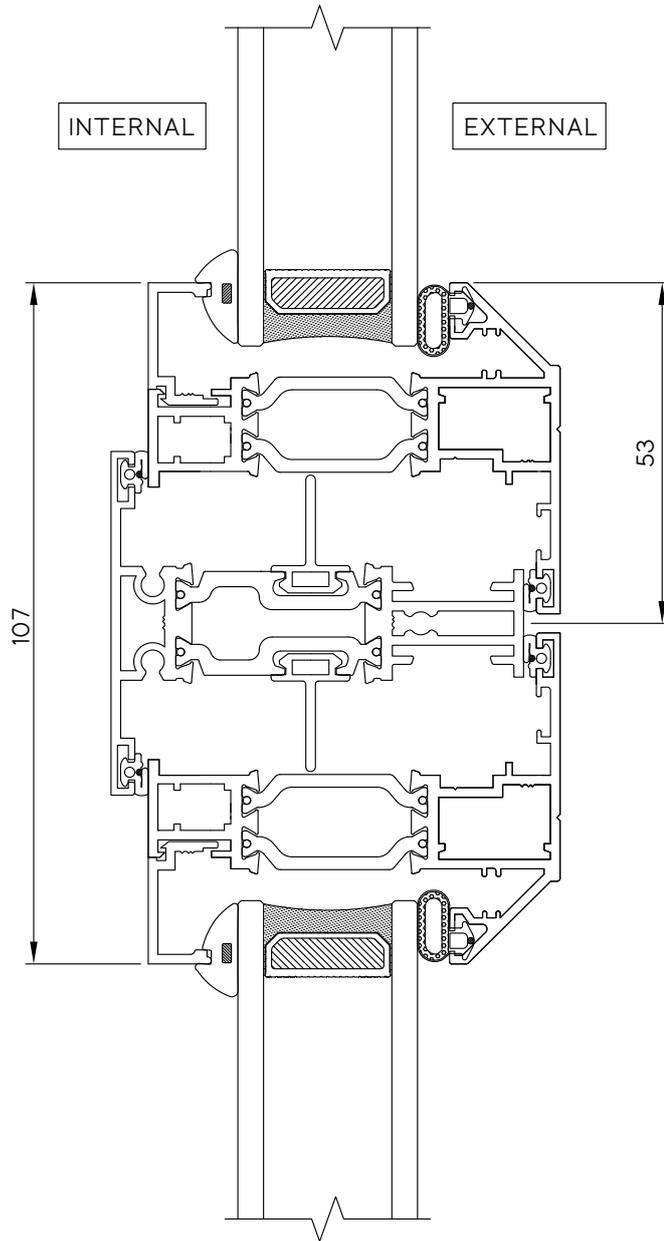


6

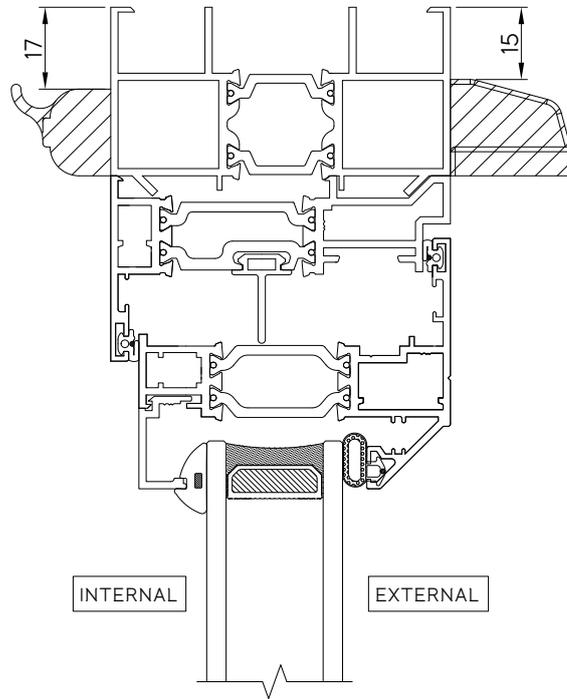
Mullion and sash



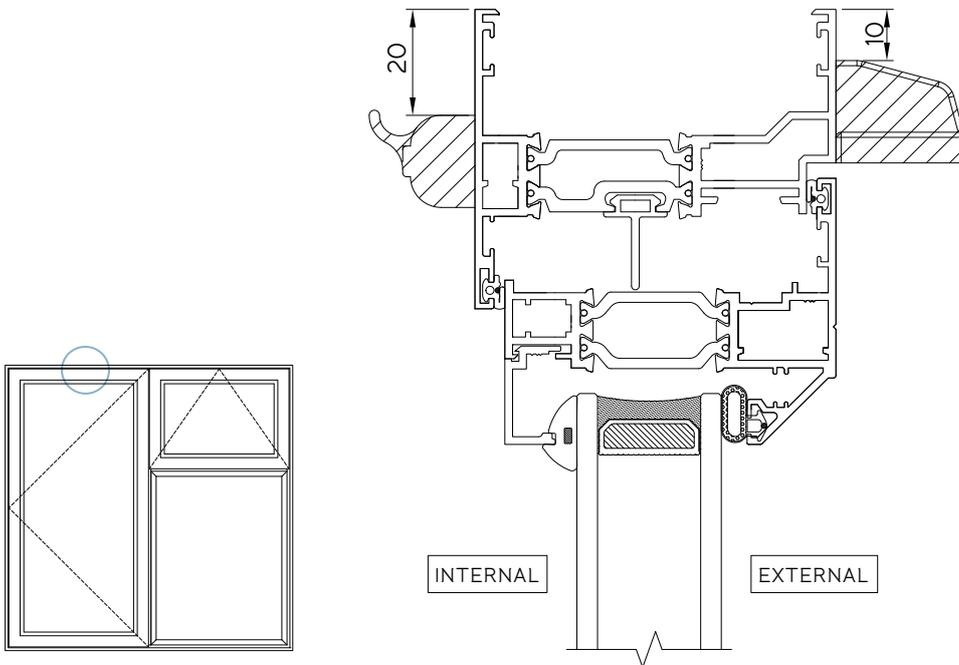
7 Mullion and double sash



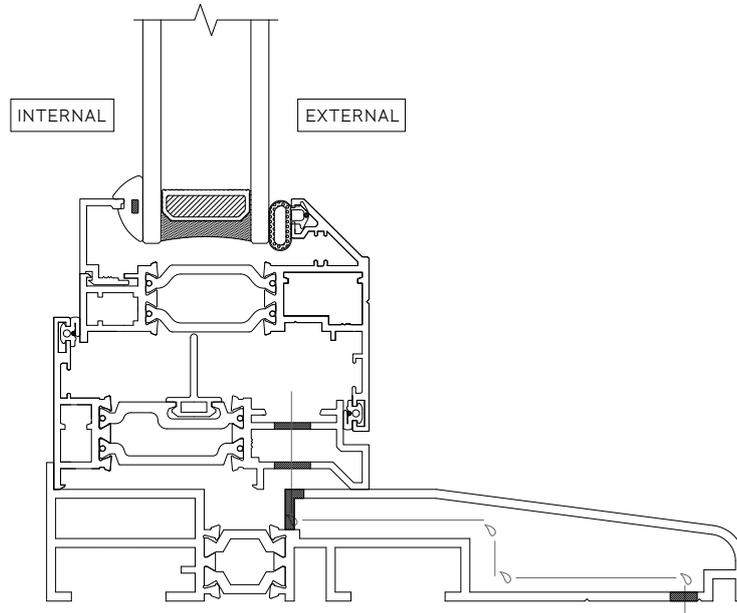
8a Trickle vent through 35mm add-on



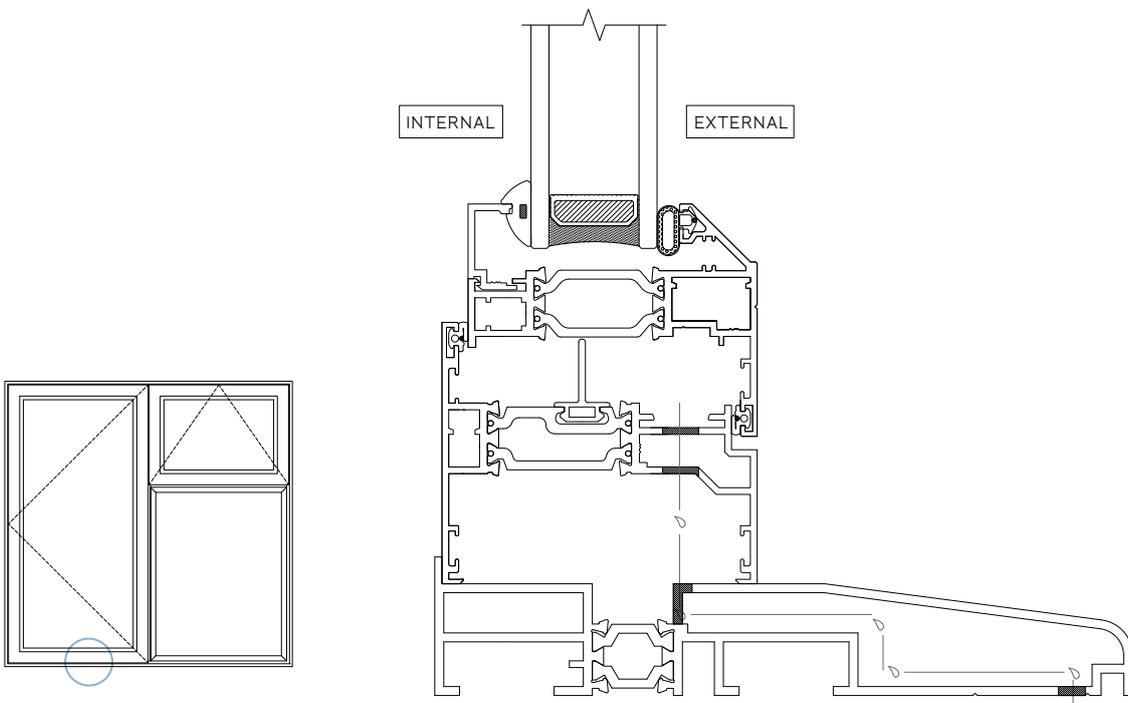
8b Trickle vent through long-leg frame



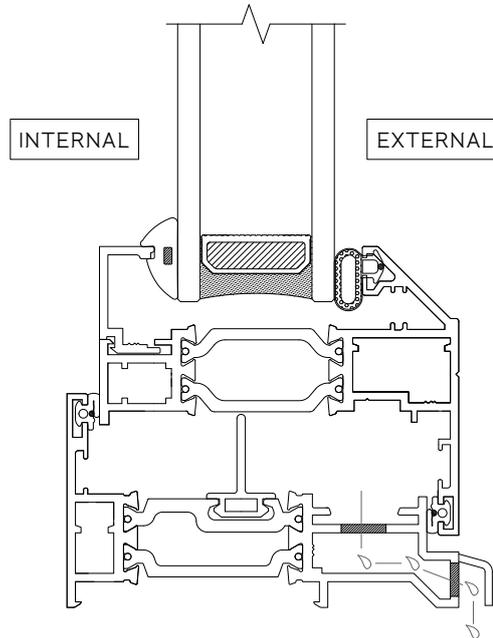
9a Short-leg concealed drainage



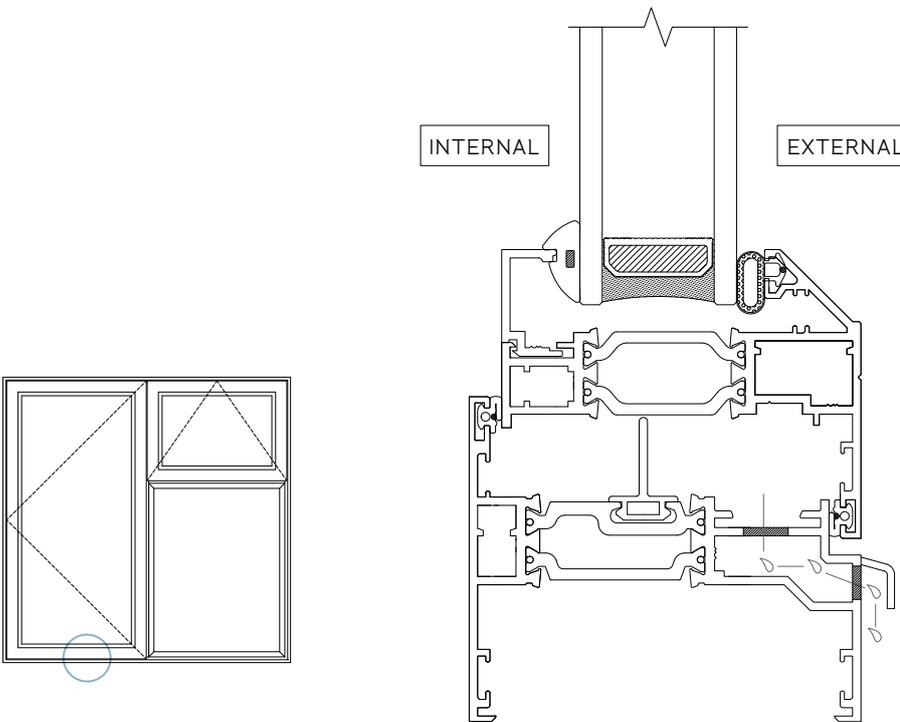
9b Long-leg concealed drainage



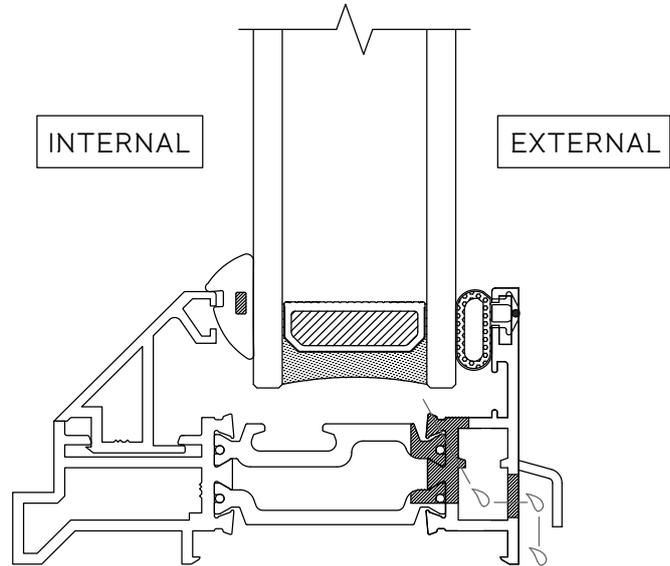
9c Short-leg casement face drainage



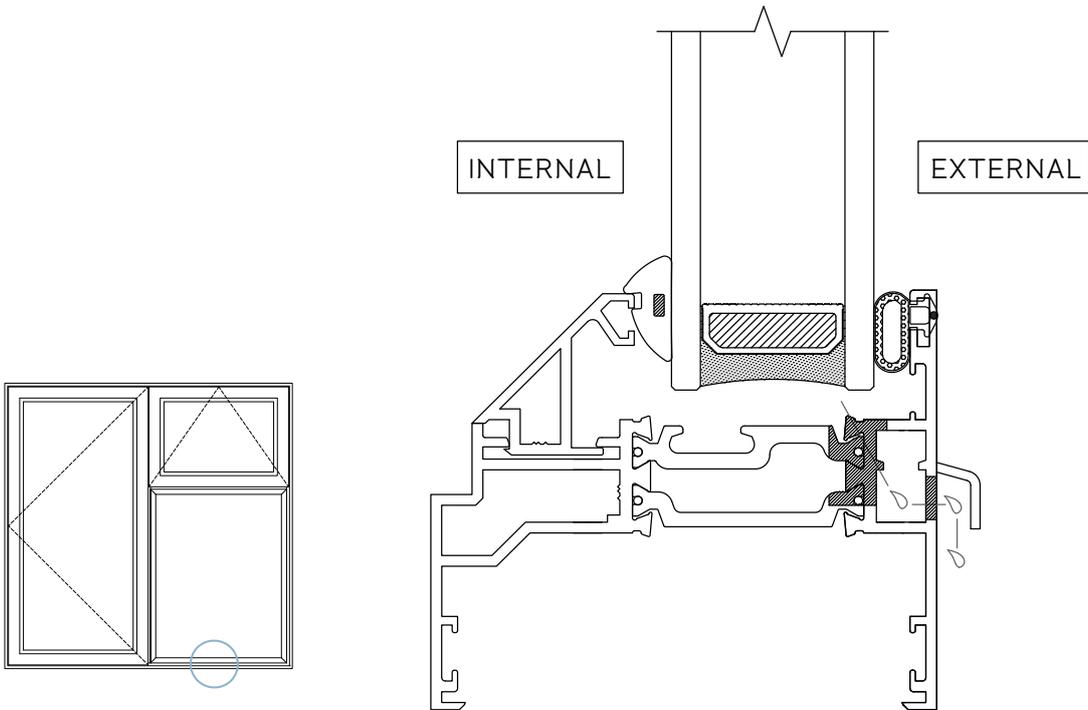
9d Long-leg casement face drainage



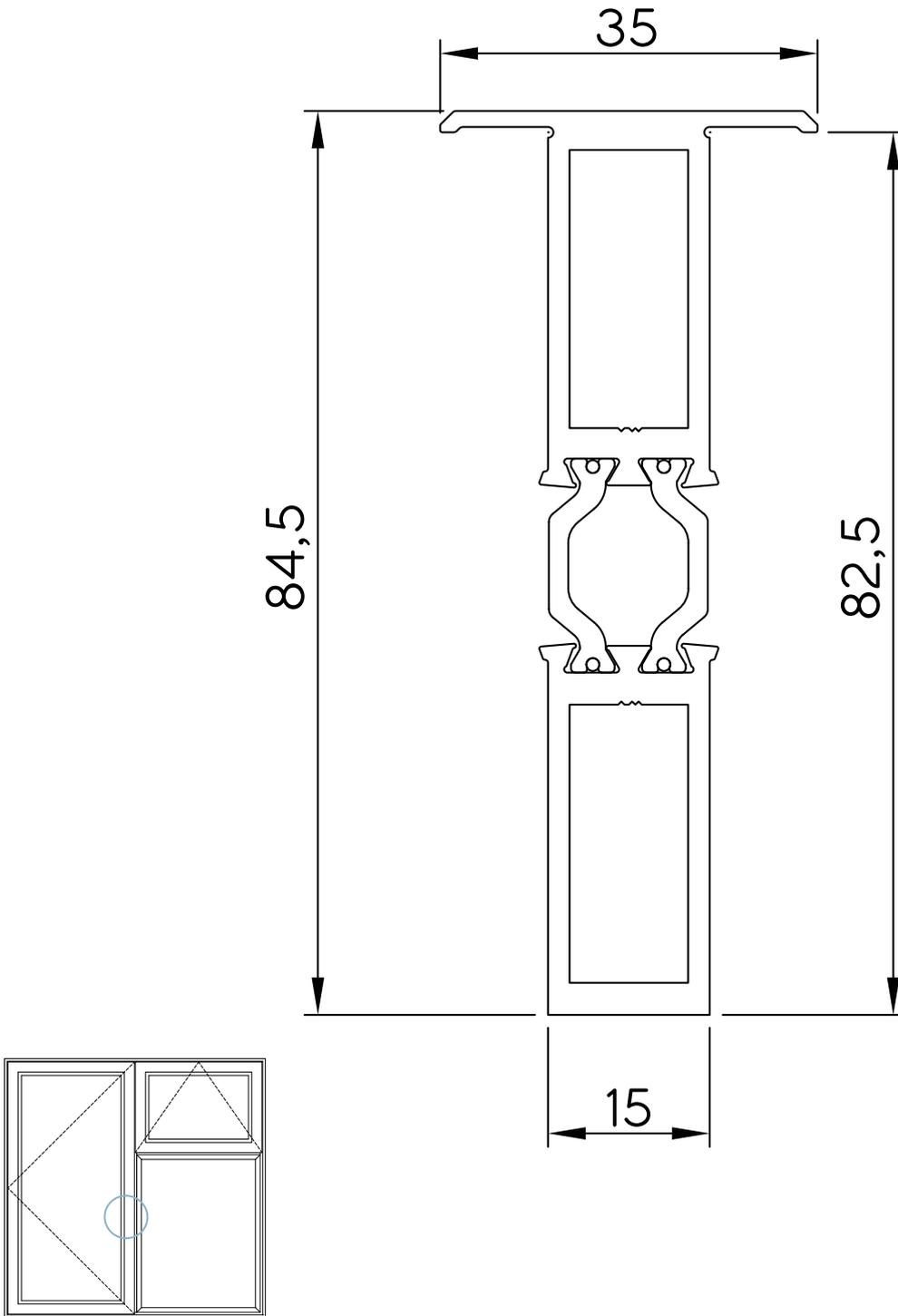
9e Short-leg fixed frame face drainage



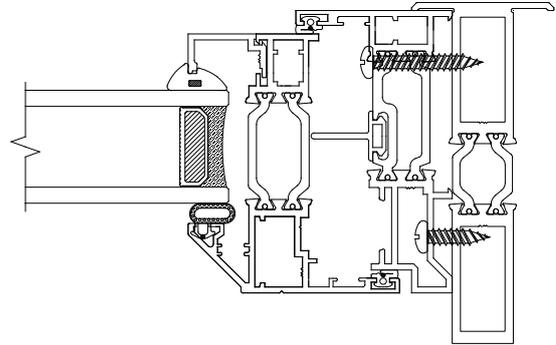
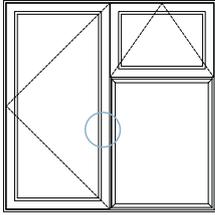
9f Long-leg fixed frame face drainage



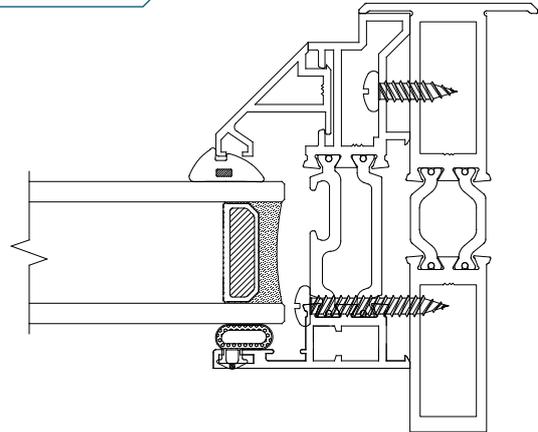
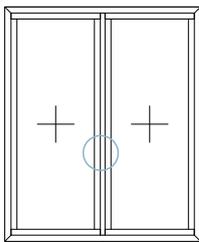
10a Window coupler



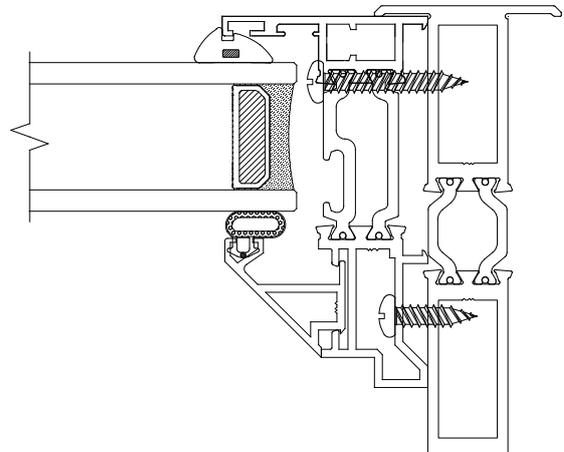
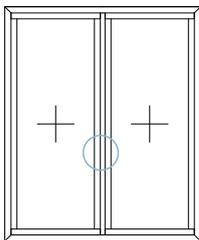
10b Short-leg - casement window coupling



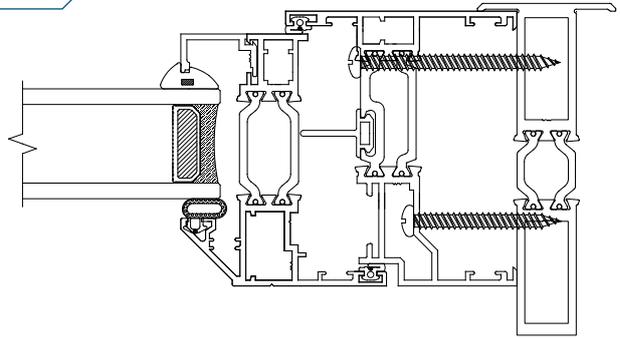
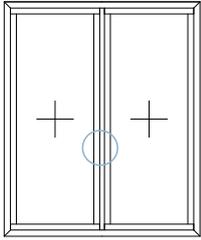
10c Short-leg coupling - fixed internally glazed



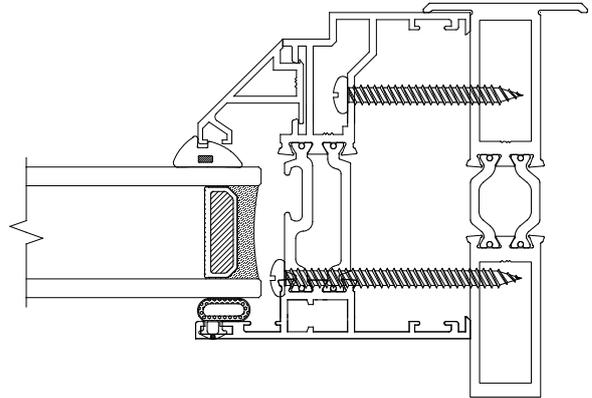
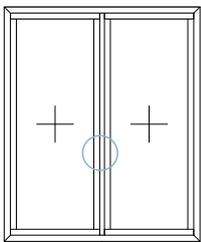
10d Short-leg coupling - fixed externally glazed



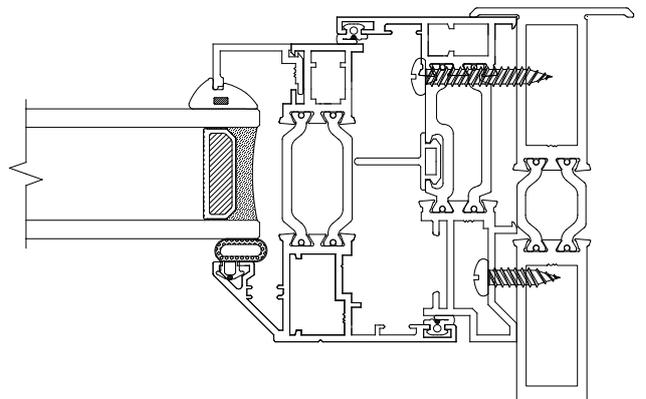
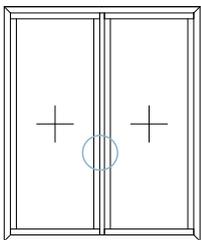
10e Long-leg coupling - casement window



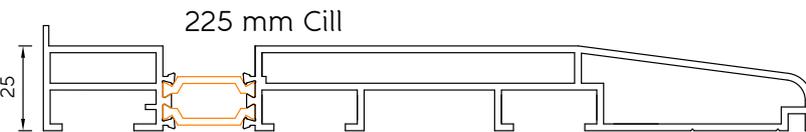
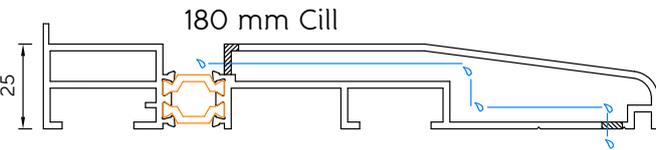
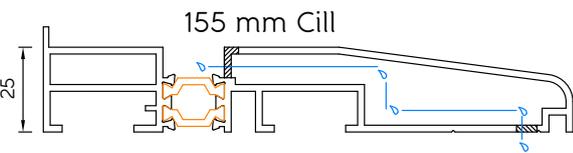
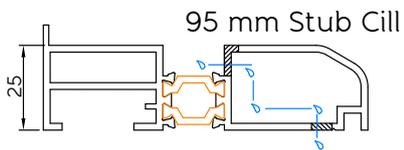
10f Long-leg coupling - fixed internally glazed



10g Long-leg coupling - fixed externally glazed



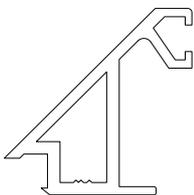
11 Cills, bead and trim



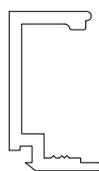
The 95mm stub cill can only be prepared with concealed drainage if the water can drain away towards the outside of the reveal. There must be a gap of at least 20mm between the drainage hole and the substrate in order to ensure the water can drain effectively. The substrate must be sloped to ensure the water doesn't drain back into the building. It is the installers responsibility to ensure the drainage outlets are clear and free to drain water away from the substrate.

Beads

Frame Bead

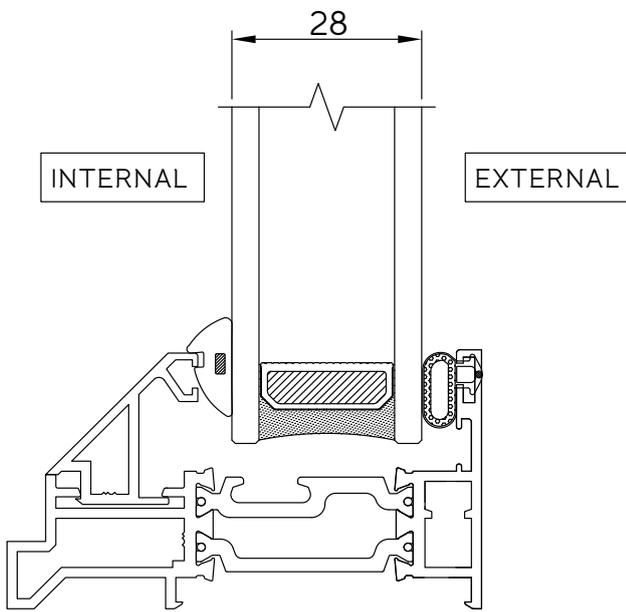


Sash Bead

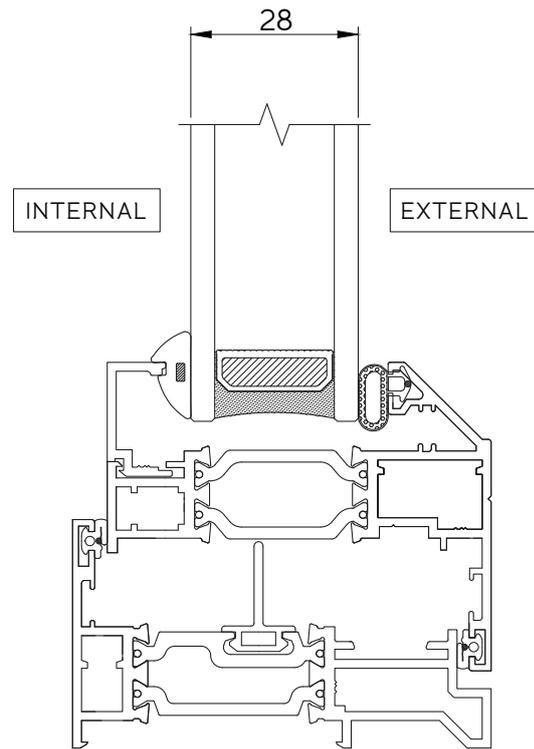


Short-leg glazing options

Fixed frame

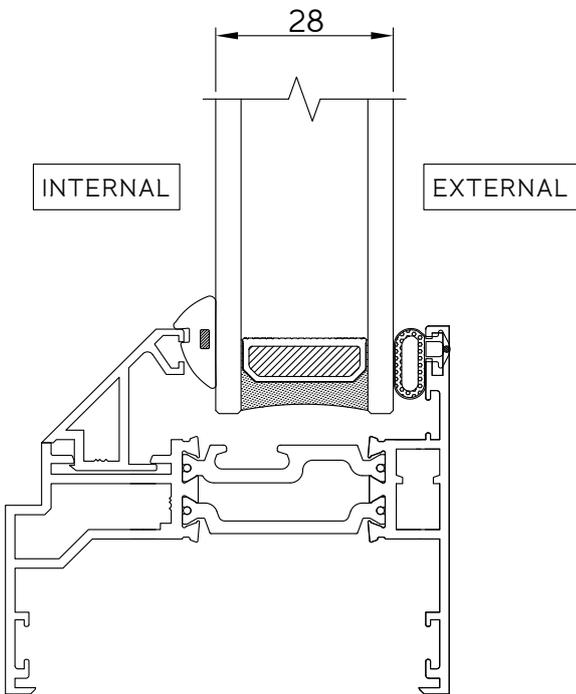


Frame and sash

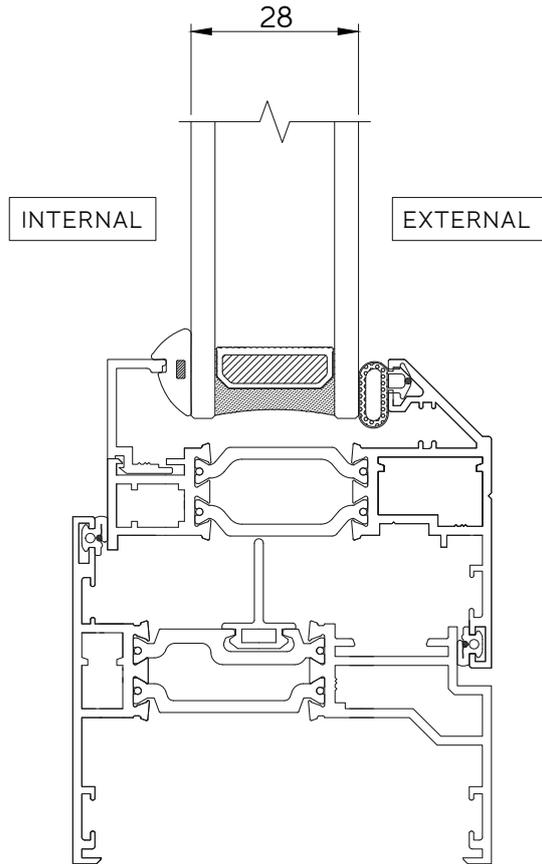


Long-leg glazing options

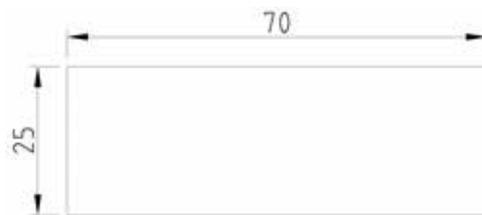
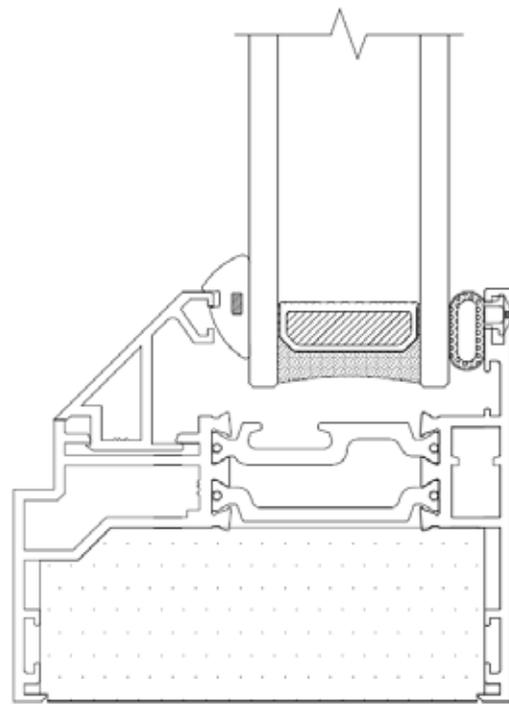
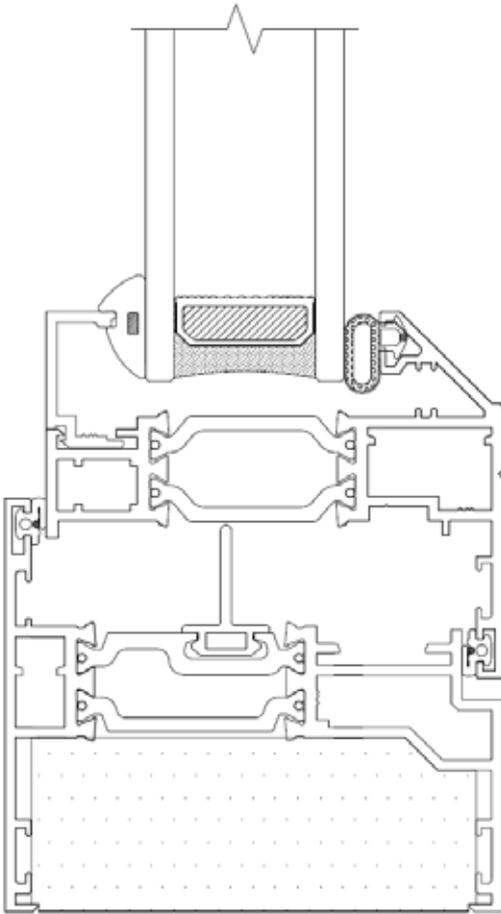
Fixed frame



Frame and sash



Long-leg frame foam



(Foam)

A grey expanded polyether foam (25mm x 70mm) adhesive backed that is installed in the cavity of the OW-70 Long-leg frame

Gaskets

G00114 - AF032

Closing Gasket



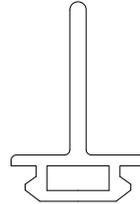
G00001 - B2018

Glazing Rebate



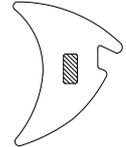
G00113 - OG03

Central Gasket



G00040 - W474

Glazing Wedge



Cross sectional gasket diagrams

External

Internal

G00001 - B2018
Glazing Rebate

G00040 - W474
Glazing Wedge

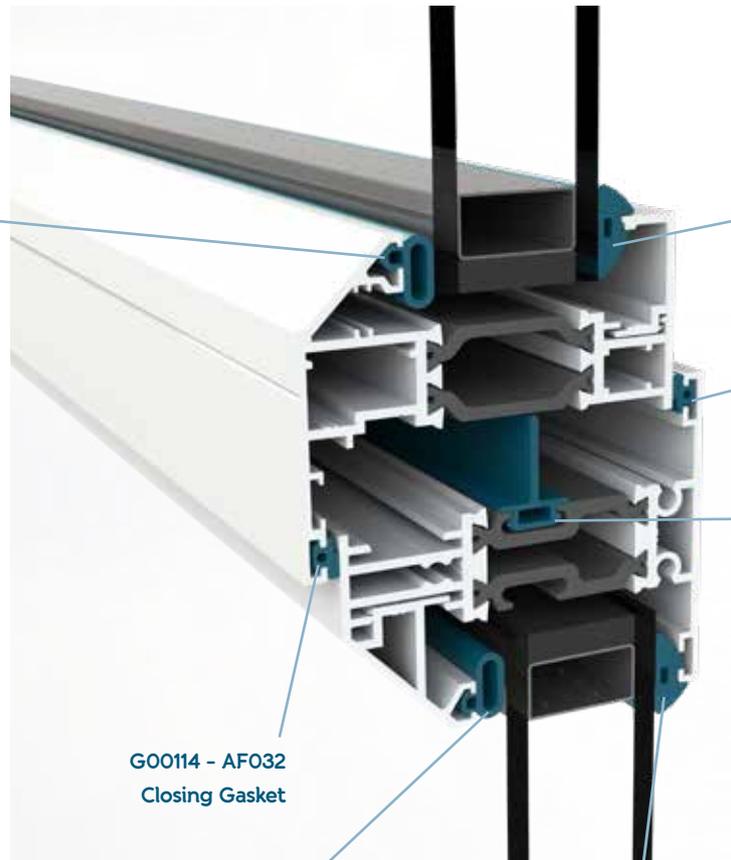
G00114 - AF032
Closing Gasket

G00113 - OG03
Central Gasket

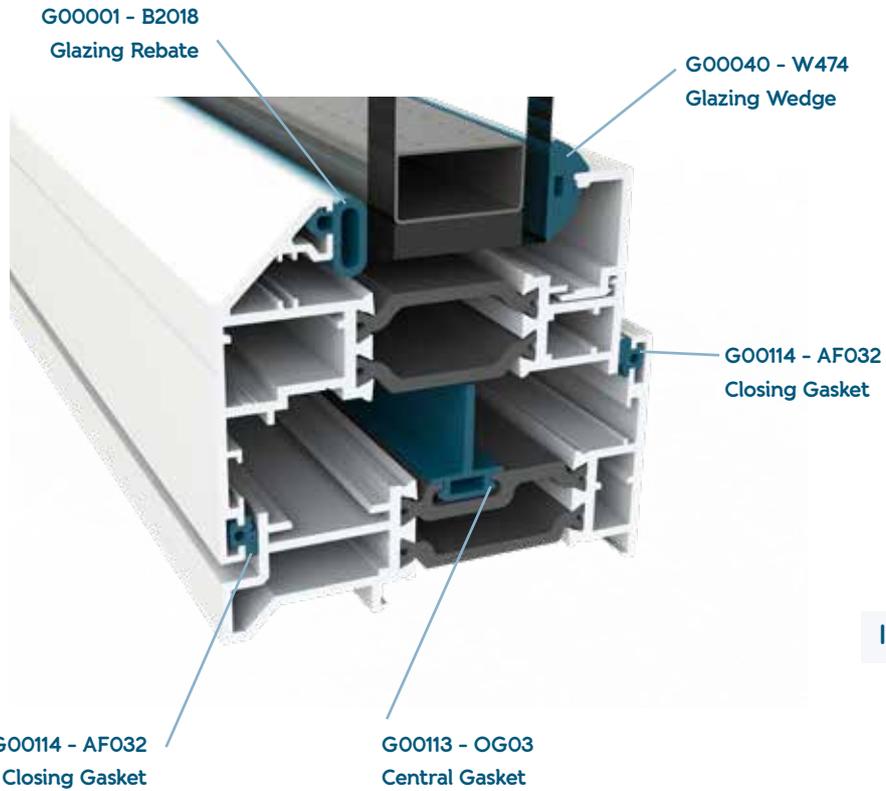
G00114 - AF032
Closing Gasket

G00001 - B2018
Glazing Rebate

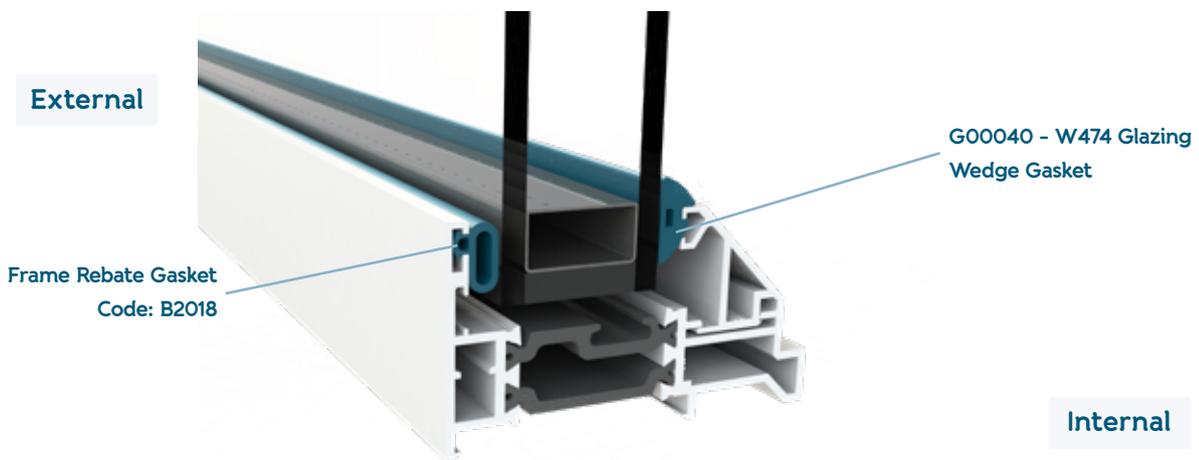
G00040 - W474
Glazing Wedge



Cross sectional gasket diagrams

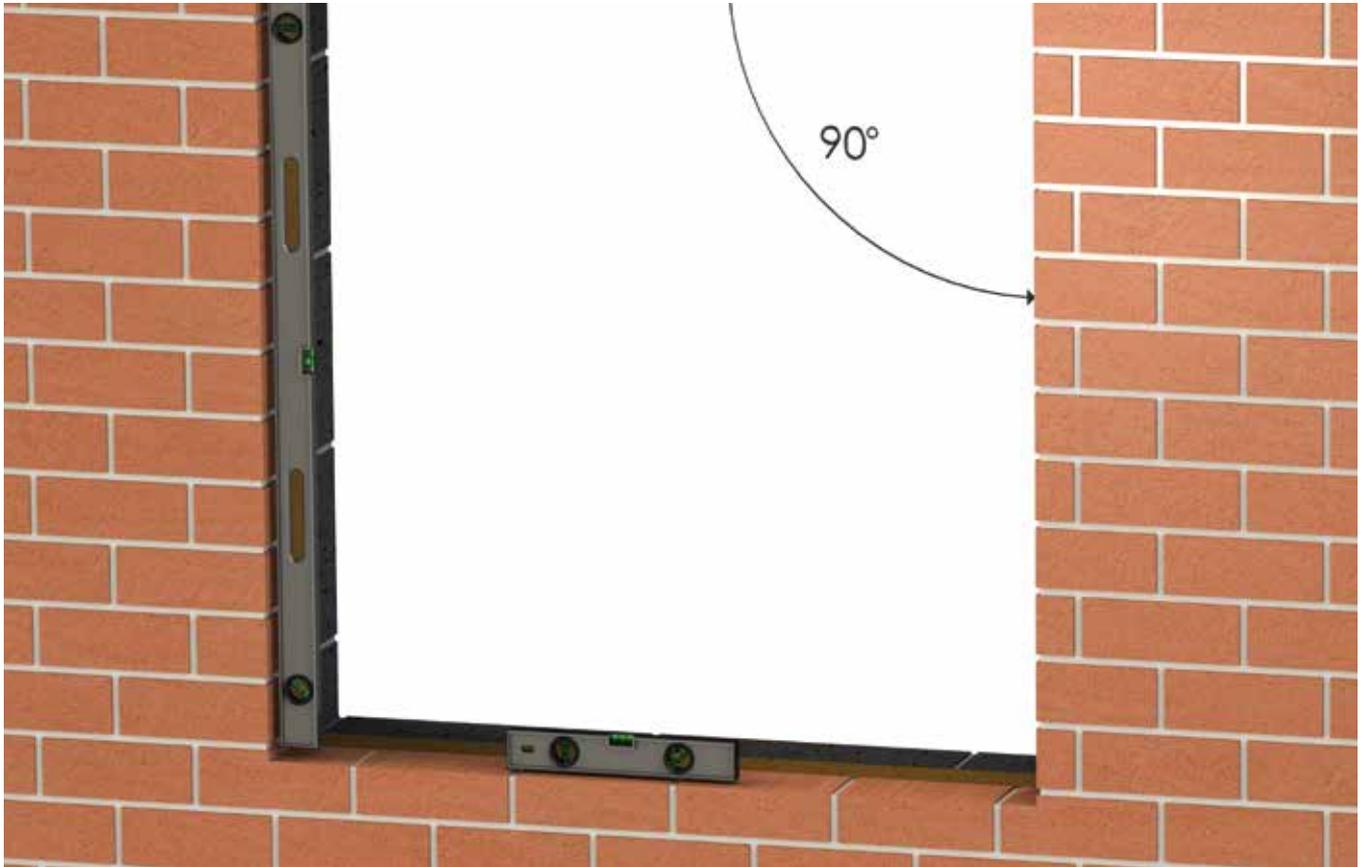


Fixed frame



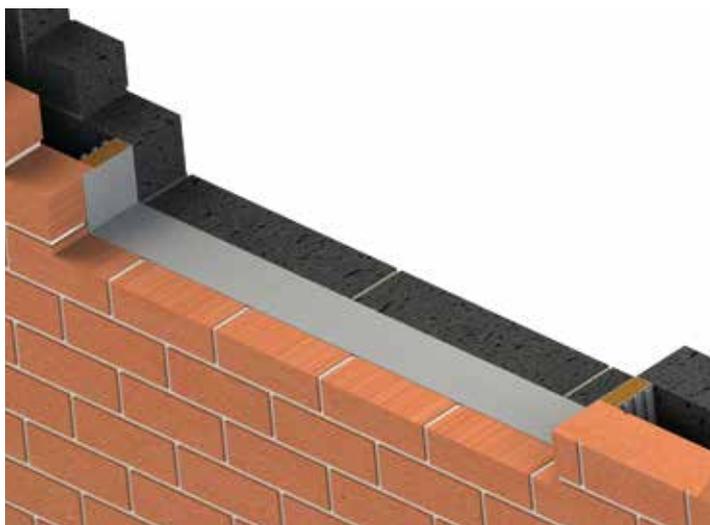
Installation Guide

Apertures



Open cavities discovered between the inner and outer skins of brick or block work should be bridged or closed with an insulation material in accordance with the local building authority.

Windows should be installed in the aperture without twisting, racking or distorting.



1. Frame Fixing



FIG 1

Measure the opening, checking it fits with all measurements on your Origin paperwork.

- ▶ **1.1.** Place the correct frame packers spaced at a maximum of 500mm apart along the length of the opening to create a level, well supported platform for the track/ cill to sit. (Fig.1)

1. Frame Fixing (continued)



FIG 2

- ▶ **1.2.** Using an appropriate silicone sealant, fill the ends of the cill section and install the end caps. (Fig.2)
- ▶ **1.3.** Place the cill on the pre-prepared frame packers and re-check for level. Adjust if necessary. (Fig.2)
- ▶ **1.4.** Using a silicone sealant, seal the drainage channels adjacent to the brickwork. (Fig.2)
- ▶ **1.5.** Run a bead of sealant along the up-stand of the cill. (Fig.2)

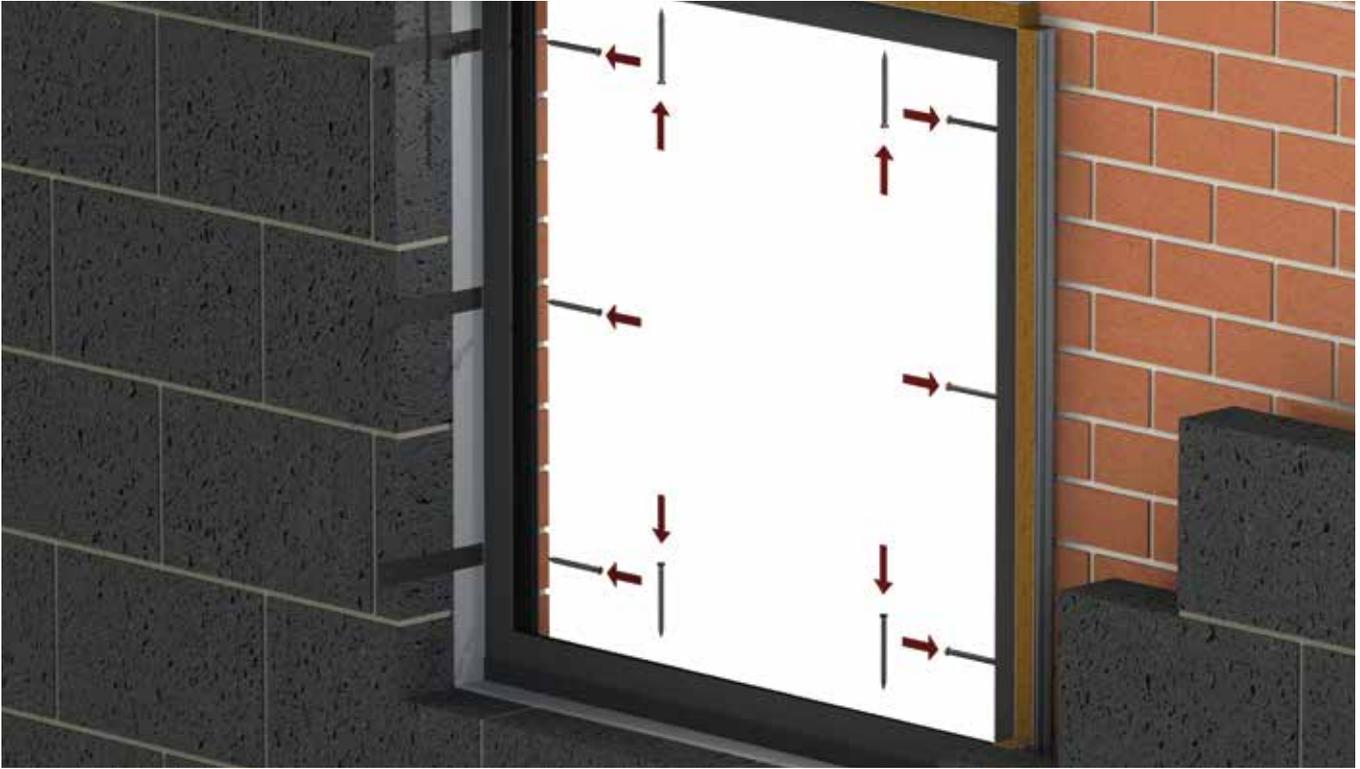


FIG 3

If using fixing straps, please skip to 1.7.

- ▶ **1.6.** Place the window on the cill and secure into position. Wherever practical, all four corners of the frame should be secured as follows:
- Frame fixing should be between 100mm to 150mm from the external corners.
 - Fixings should be at no greater than 600mm apart and there should be the minimum of two fixings on each side. On windows over 1800mm wide, central head and cill fixings should be provided. (Fig.3)

Please move to 2.1.

- ▶ **1.7.** Secure the fixing strap into the rebate of the window with the screws provided. All four corners of the frame should be secured wherever practical.

2. Glazing



FIG 4

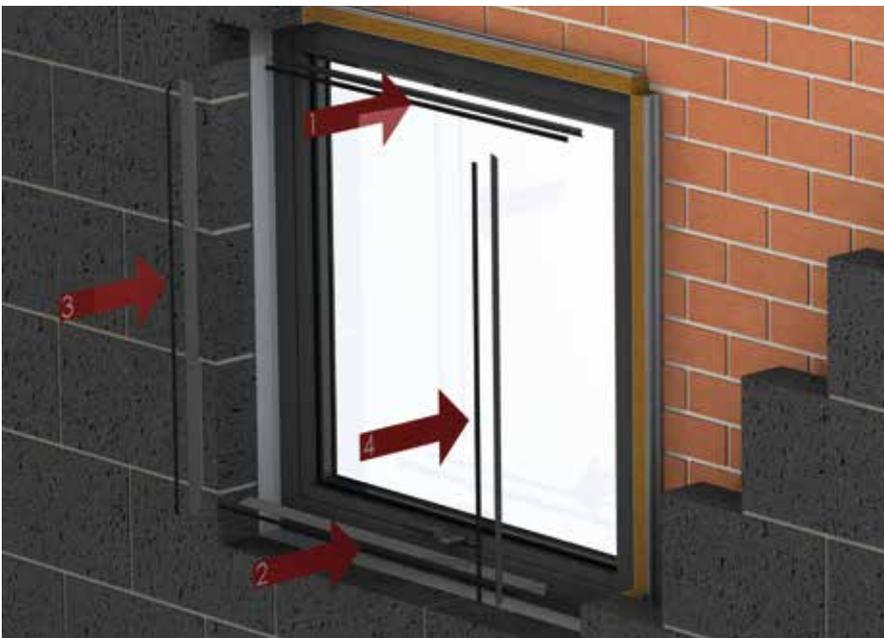


FIG 5

- ▶ **2.1.** All insulated glass units should be examined for damages and defects before installation. (Fig.4)
- ▶ **2.2.** Close the window and fully engage the lock. (Fig.4)
- ▶ **2.3.** Remove the 4 glazing beads. (Fig.4)
- ▶ **2.4.** Place the required packers in the bottom of the glazing chamber spaced approximately 50mm in from each corner at 90° to the window. (Fig.4)
- ▶ **2.5.** Install the glass on the packers, taking care not to pinch the gasket on the outside. (Fig.4)
- ▶ **2.6.** For safety, always ensure the top bead is installed first, followed by the bottom and then the side beads. (Fig.5)
- ▶ **2.7.** Cut the glazing wedge gasket to length and insert between the glass unit and the glazing bead. (Fig.5)



FIG 6

- ▶ **3.1.** Wherever practical, gaps around the window should be foam filled to stop air flow around the window and the surrounding aperture. (Fig.6)
- ▶ **3.2.** If required, use trims to bridge the gap between the window and the aperture. All trim should be compatible with the material of the frame and should be colour matched where specified. (Fig.6)
- ▶ **3.3.** The sealant should be applied against a firm backing so that it is forced against the sides of the joint during application. The best practice is to have insulating foam fill inserted wherever practical. (Fig.6)

Contact

Accounts

t 08448 802 371 or 01494 416 895 **e** Finance@origin-global.com

Marketing

t 08448 802 374 or 01494 416 897 **e** Marketing@origin-global.com

Sales Operations

t 0808 168 5816 or 01494 686 868 **e** OrdersNorth@origin-global.com
e OrdersSouth@origin-global.com

Solutions

t 08448 802 373 or 01494 416 896 **e** Solutions@origin-global.com

Fleet and Logistics

t 08448 802 378 or 01494 416 898 **e** Logistics@origin-global.com



FS 584084



Origin Global HQ, Stuart House, Castle Estate,
Coronation Road, High Wycombe
Buckinghamshire, HP12 3TA

t 0808 168 5816
e enquiry@origin-global.com
w www.origin-global.com

Origin Northern Centre of Excellence,
Taurus Park, Europa Boulevard, Westbrook,
Warrington, Cheshire, WA5 7ZT

t 01925 907 907
e enquiry@origin-global.com
w www.origin-global.com