









WINDOW INSTALLATION GUIDE

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SPWIG.100

Window Installation Guide

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Introduction

The Company

Senior Architectural Systems are a group of companies based in the United Kingdom who operate through a network of regional Service Centres.

It's operations include the main business of stockholding in both systemized and standard aluminium extrusions. Mill finish, anodised (natural and bronze), and polyester powder coated sections are all available, along with all of the necessary accessories for manufacture. The incorporation of new or modified sections, system compatible, is carried out when required.

The emphasis is on service to our clients, with response speed being very much of the essence. Deliveries are made on dedicated vehicles in our own livery, into all areas of the country on a regular basis - collections can be easily arranged for direct release (ex. works) to our clients' instructions. Short notice collections can also be arranged in the event of the occasional, and inevitable 'emergency'.

The Product Range

Available from Senior Architectural Systems include:-

The PURe product range comprising: Inward & Outward Opening Doors, Folding Sliding Doors, Inline Sliding Doors, Lift & Slide Doors, Casement and Tilt Turn - Open In Windows.

Also available from Senior Architectural Systems include:-

Curtain Wall Systems, Casement Windows, Tilt Turn - Open In Windows, Reversible Overswing Windows, Horizontal and Vertical Pivot Windows, Mid - Rise Commercial Windows, Patent Glazing, Standard Angles and Square, Rectangular & Round Tubes, Residential Windows, Commercial Doors, Residential Doors and Secondary Glazing.

Also available from Senior Architectural Systems include:-

The HYBRID product range comprising: Casement Windows, Tilt Turn - Open In Windows, Reversible Overswing Windows, Residentail Doors, Lift and Slide Doors, Folding Sliding Doors and a Curtain Wall system.

Quality Assurance

We are committed to the aims of ISO 9001 Quality Assurance.

In the event of questions or queries concerning the contents of this manual or any other product on offer from Senior Architectural Systems, please do not hesitate to contact your Regional Service Centre:

Senior Architectural Systems operate a policy of continuing development and reserve the right to amend and improve their products without notification. Every effort will however be made to ensure that up-dates are circulated to our clients for information as deemed necessary.

All items contained in this manual are subject to our normal terms and conditions, a copy of which is available on request. Whilst we make every effort to ensure the accuracy of the drawings and measurements contained in this manual, we neither warrant nor guarantee the accuracy and you should undertake your own measurements and not place any reliance on or act in consequence of the contents herein.





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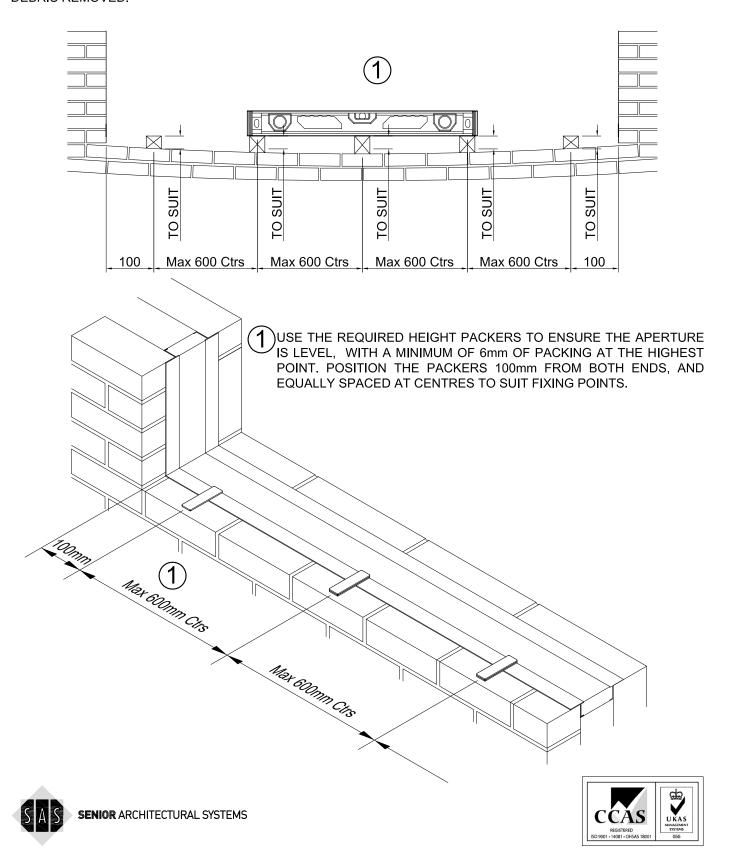
Cill Packing

GENERAL

ALL WINDOWS MUST BE INSTALLED ENSURING THEY ARE LEVEL, PLUMB AND SQUARE AND WITHOUT TWIST, RACKING OR DISTORTION OF ANY SECTION, TO ENSURE THAT THERE ARE NO ISSUES WITH THE WINDOW ONCE INSTALLATION IS COMPLETE.

FAILURE TO ENSURE THE WINDOWS ARE FITTED CORRECTLY CAN CAUSE OPERATION AND DRAINAGE ISSUES AT A LATER STAGE.

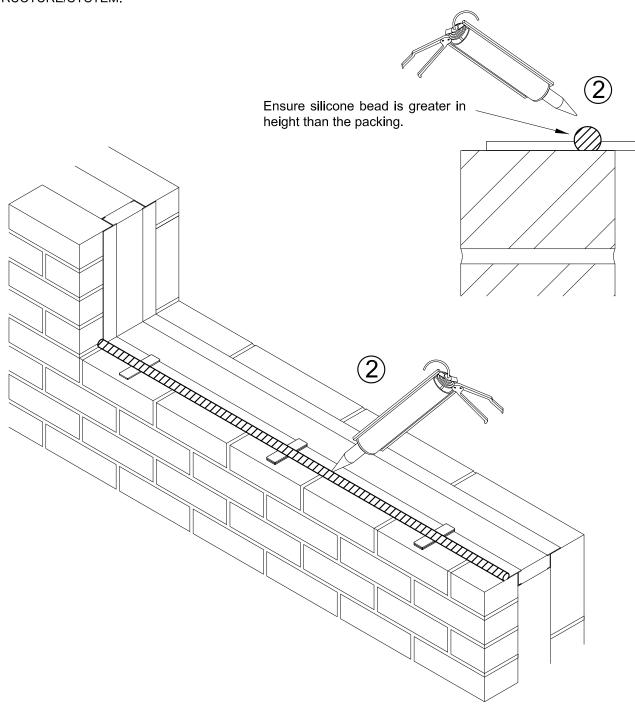
BEFORE PLACING THE WINDOW INTO THE APERTURE, MAKE SURE THE AREA IS CLEAN WITH ALL EXCESS DEBRIS REMOVED.



Cill Sealing

RUN A CONTINUOUS BEAD OF SILICONE ALONG THE FULL LENGTH OF THE APERTURE. ENSURE A SUITABLE SILICONE IS USED IN THE CORRECT LOCATION ON THE ABUTTING STRUCTURE/SYSTEM.

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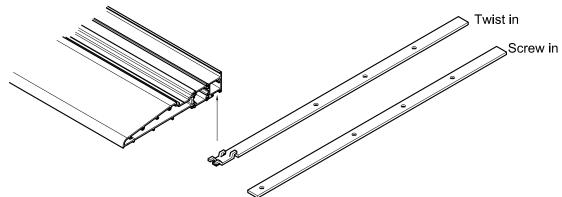




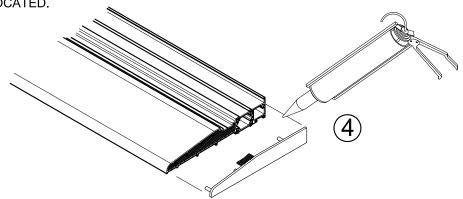


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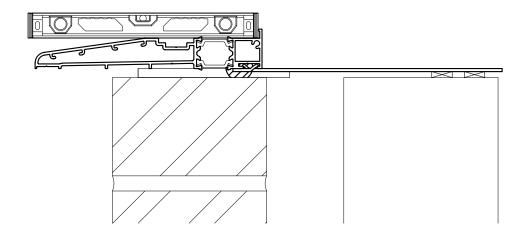
3 IF LUG FIXING METHOD IS BEING USED, SECURE THE APPROPRIATE FIXING LUG ONTO THE CILL, THESE ARE TO BE POSITIONED 150mm FROM EACH END AT CENTRES NO GREATER THAN 600mm OR AS REQUIRED ON THE PROJECT. IF DIRECT FIXING, PLEASE GO TO 4.



PRIOR TO SECURING THE CILL, CHECK THE CILL END CAVITIES ARE SEALED AND THE APPROPRIATE END CAPS ARE LOCATED.



(5)POSITION THE CILL ENSURING ITS LEVEL ACROSS THE APERTURE, AS WELL AS FRONT TO BACK.



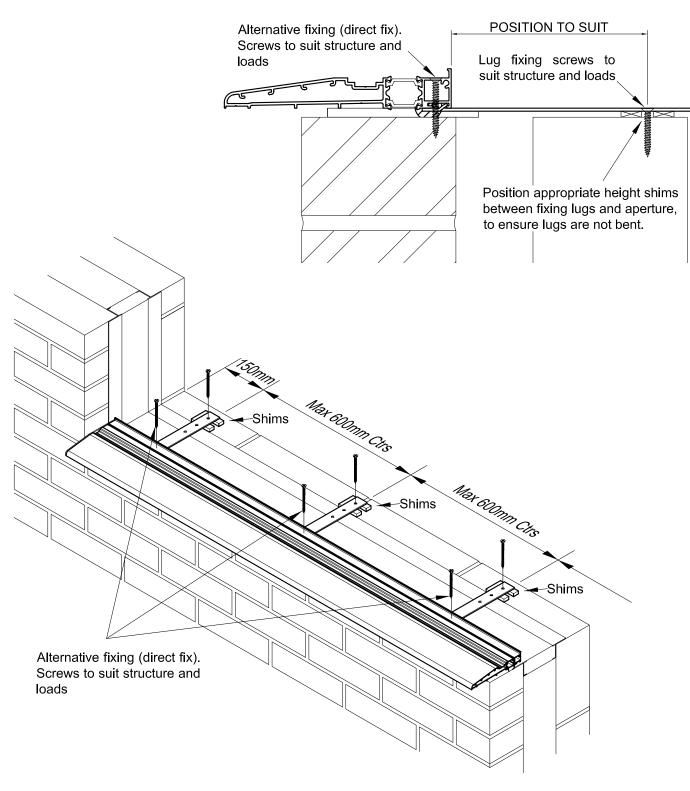




6) SECURE THE FIXING LUGS TO THE STRUCTURE WITH SCREWS TO SUIT THE APPLICATION.

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NOTE: DIRECT FIXING ALSO POSSIBLE, SEE SCREWS SHOWING ALTERNATIVE FIXING BELOW.

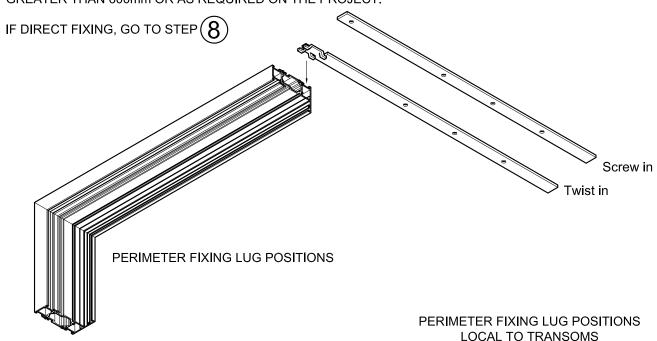


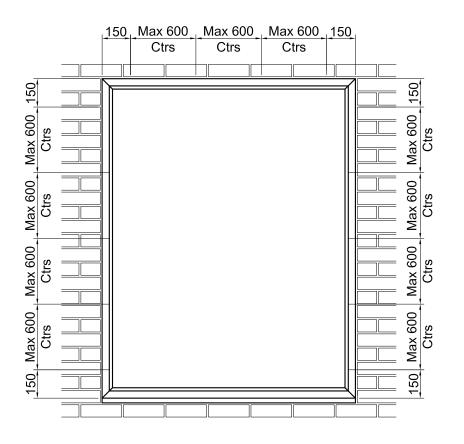


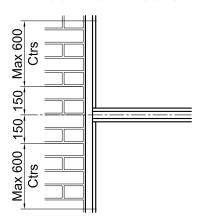


Frame Fixing Onto Cill

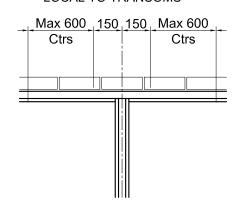
PRIOR TO INSERTING THE WINDOW, SECURE THE APPROPRIATE FIXING LUGS ONTO THE WINDOW. THESE ARE TO BE POSITIONED 150mm FROM BOTH ENDS AND EQUALLY SPACED AT CENTRES NO GREATER THAN 600mm OR AS REQUIRED ON THE PROJECT.







PERIMETER FIXING LUG POSITIONS LOCAL TO TRANSOMS

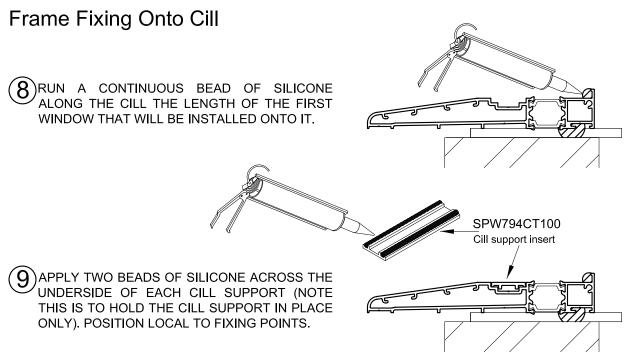




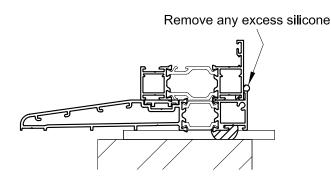


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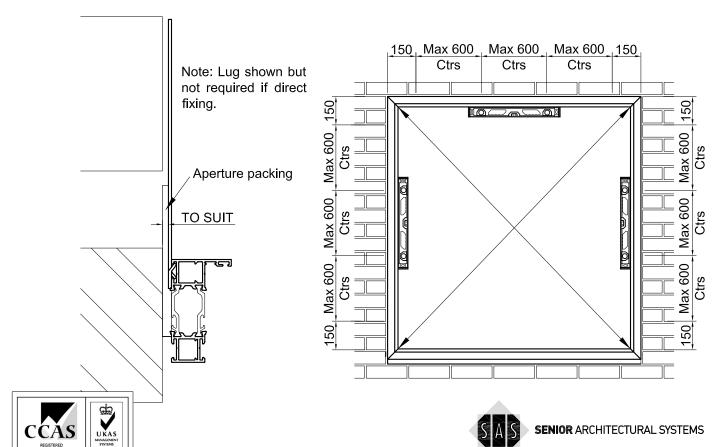
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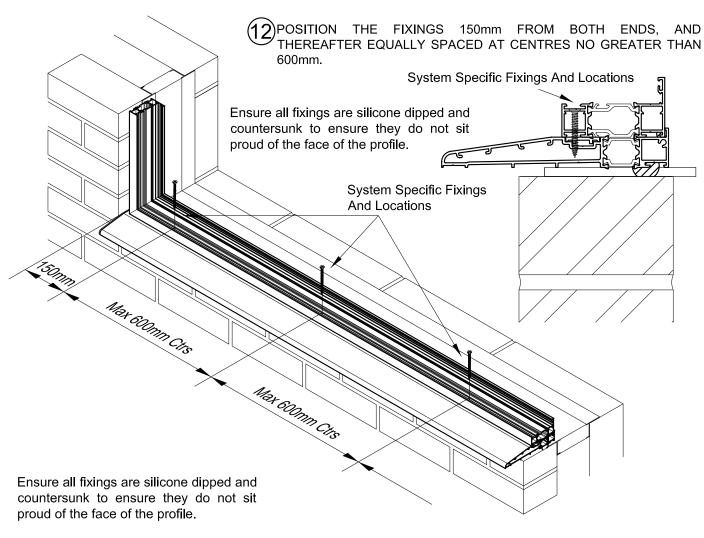
PLACE THE WINDOW ONTO THE CILL. REMOVE ANY EXCESS SILICONE.

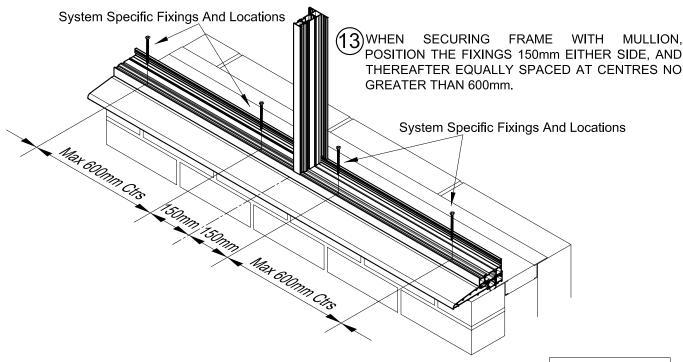


BEFORE SECURING THE FRAME ONTO THE CILL, ENSURE THE FRAME IS SQUARE. THEN POSITION THE PACKERS 150mm FROM CORNERS AND EQUALLY SPACED AT CENTRES LOCAL TO FIXING POINTS.



Frame Fixing Onto Cill

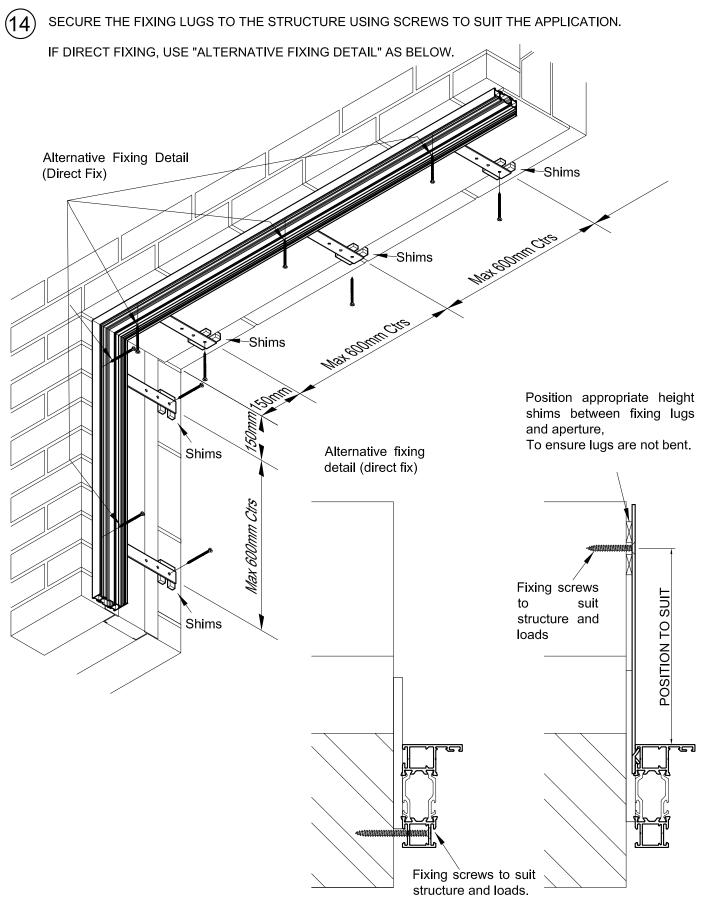








Perimeter Frame Fixing



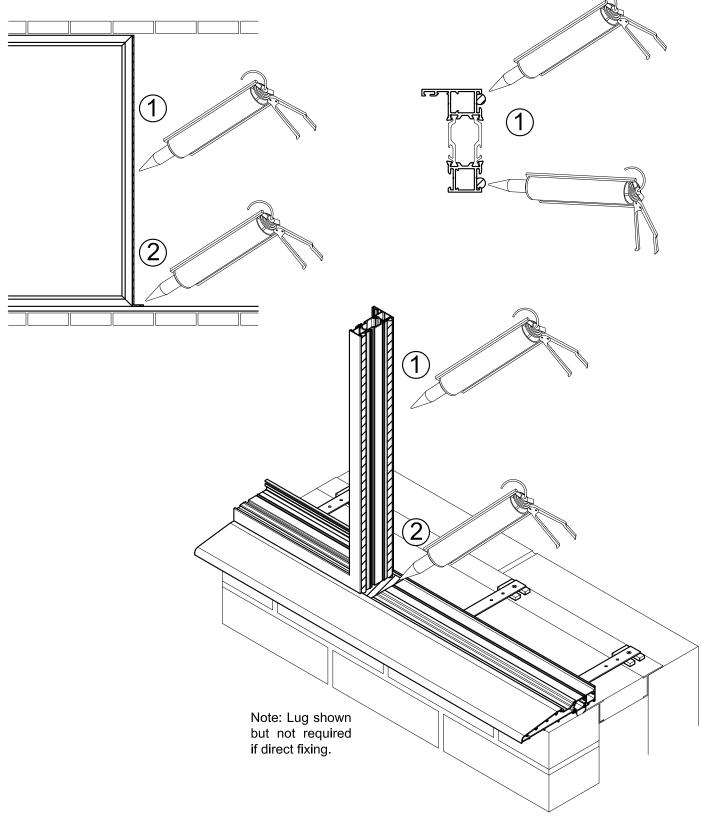




Coupler Fixing

1 RUN 2 CONTINUOUS BEADS OF SILICONE UP THE FULL HEIGHT OF THE WINDOW.







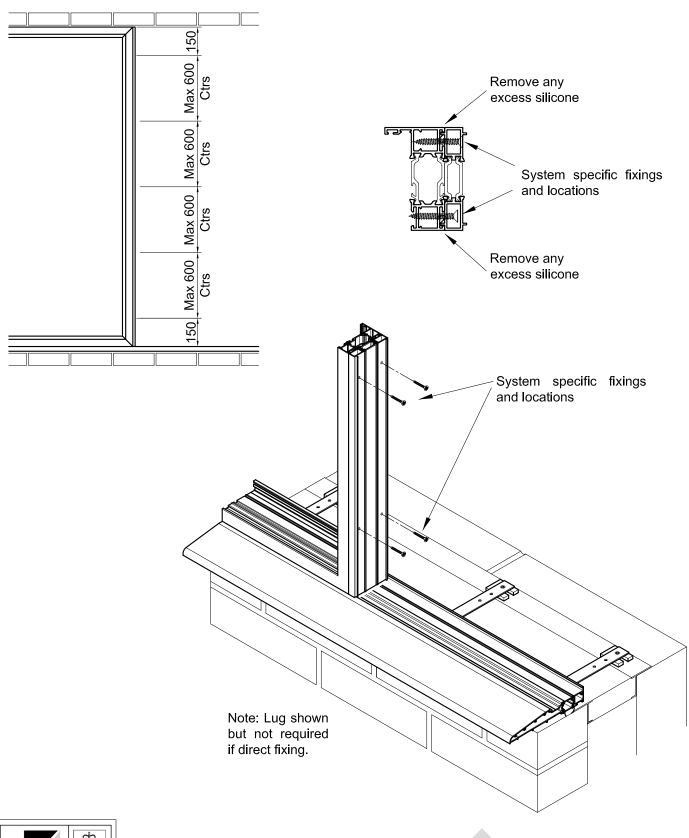


Coupler Fixing

3)PLACE THE COUPLER AGAINST THE FRAME, ENSURING ANY EXCESS SILICONE IS REMOVED.

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POSITION THE FIXINGS 150mm FROM EACH END AND EQUALLY SPACED AT CENTRES NO GREATER THAN 600mm. ENSURE ALL FIXINGS ARE SILICONE DIPPED AND COUNTERSUNK TO ENSURE THEY DO NOT SIT PROUD OF THE FACE OF THE PROFILE.





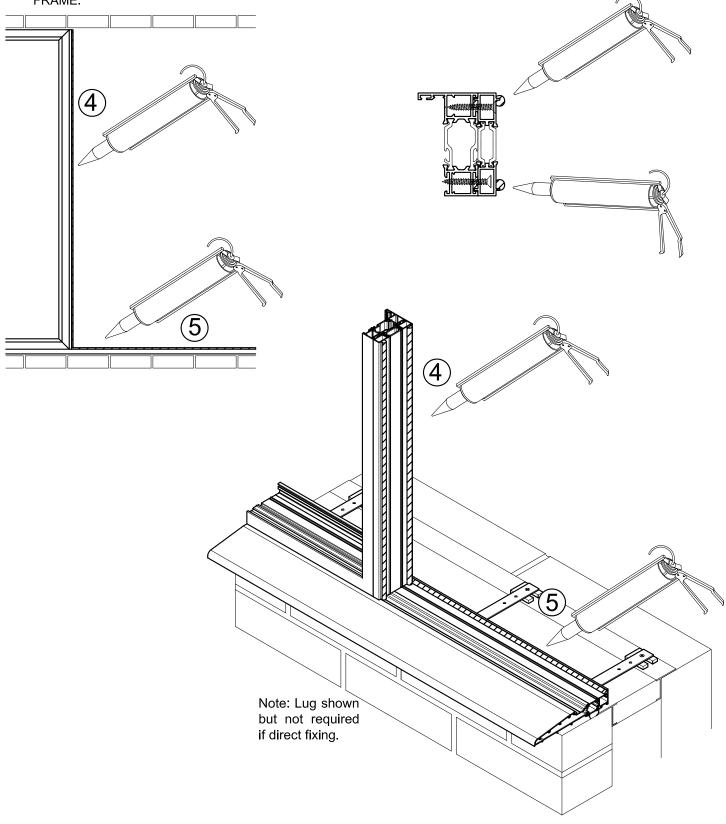


Coupler Fixing

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4)RUN 2 CONTINUOUS BEADS OF SILICONE UP THE FULL HEIGHT OF THE COUPLER.

PRIOR TO PLACING THE ADJOINING WINDOW ON THE CILL/AGAINST THE COUPLER, ENSURE THE SILICONE SEAL ON THE CILL IS SUFFICIENT TO SEAL AGAINST THE FULL WIDTH OF THE WINDOW OUTER FRAME.

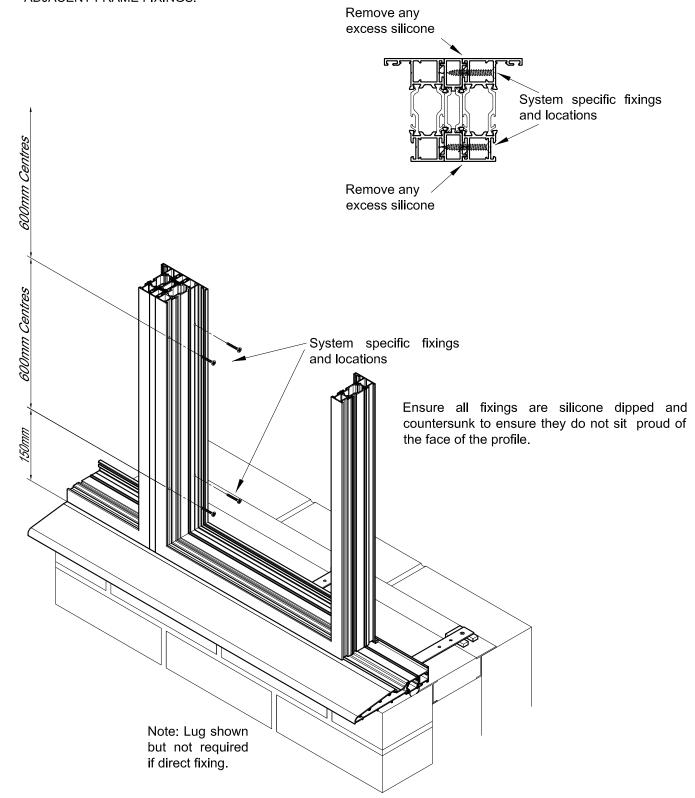






Coupler Fixing

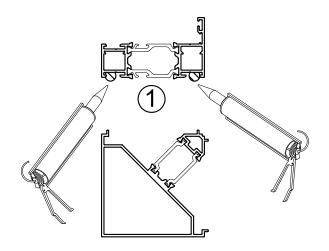
- (6) place the window on to the cill and against the coupler. Remove any excess silicone.
- POSITION THE FIXINGS 150mm EITHER END, AND THEREAFTER EQUALLY SPACED AT CENTRES NO GREATER THAN 600mm. WHEN POSITIONING THE FIXING CENTRES, PLEASE TAKE NOTE TO AVOID ADJACENT FRAME FIXINGS.



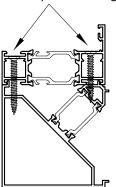




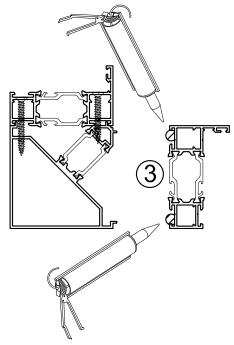
Alternative Coupler Fixing



2 System Specific Fixings And Locations



- 1 RUN 2 CONTINUOUS BEADS OF SILICONE UP THE FULL HEIGHT OF THE WINDOW, THEN PLACE THE FRAME INTO POSITION, ENSURING ANY EXCESS SILICONE IS REMOVED.
- POSITION THE FIXINGS 150mm EITHER END, AND THEREAFTER EQUALLY SPACED AT CENTRES NO GREATER THAN 600mm.



System Specific Fixings

And Locations

- RUN 2 CONTINUOUS BEADS OF SILICONE UP THE FULL HEIGHT OF THE WINDOW. THEN PLACE THE FRAME INTO POSITION, ENSURING ANY EXCESS SILICONE IS REMOVED.
- POSITION THE FIXINGS 150mm EITHER END, AND THEREAFTER EQUALLY SPACED AT CENTRES NO GREATER THAN 600mm. PLEASE TAKE NOTE TO AVOID ADJACENT FRAME FIXINGS.





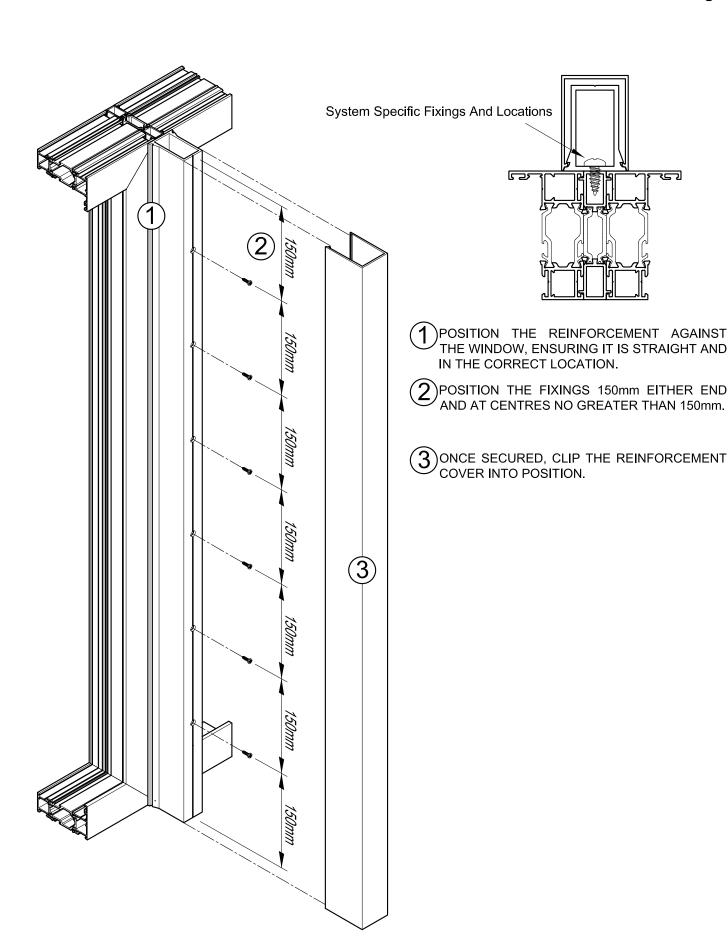
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Reinforcement Fixing







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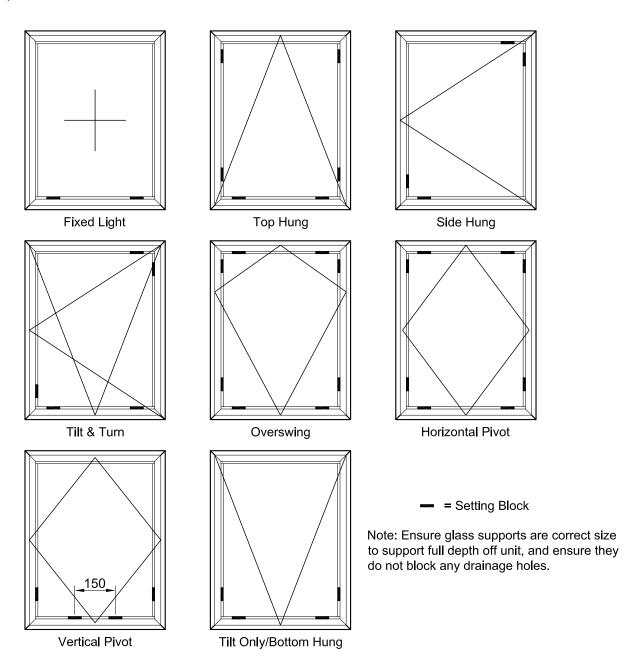
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GLAZING METHODS VARY DEPENDENT ON WINDOW AND FRAME TYPE/STYLE. IT IS IMPORTANT TO REFER TO THE INFORMATION CONTAINED WITHIN THE RELEVANT TECHNICAL MANUALS FOR SPECIFIC GUIDANCE, HOWEVER, THE FOLLOWING STEPS ARE A GUIDELINE PROCEDURE, WHICH COVER THE MAJOR STEPS.

- ENSURE YOU HAVE THE CORRECT GASKETS, BEAD AND FRAME FOR THE UNIT USED ON THE PROJECT.
- ENSURE ALL GLAZING GASKETS ARE CORRECTLY SEATED AND ALL THE JOINTS ARE TIGHT.
- THE UNIT WILL NEED TO BE PACKED TO SUIT THE OPERATION AND WINDOW TYPE. PLEASE REFER TO ELEVATION DRAWINGS BELOW, AND THE RELEVANT TECHNICAL MANUALS FOR SYSTEM SPECIFIC REQUIREMENTS.
- PLEASE NOTE, IF THE WINDOW IS TO MEET THE REQUIREMENTS OF PAS24, ADDITIONAL PACKING MAY BE REQUIRED. PLEASE REFER TO THE RELEVANT TECHNICAL MANUALS FOR MORE INFORMATION.



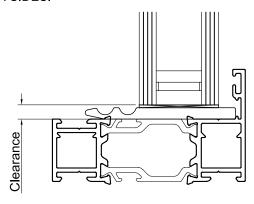


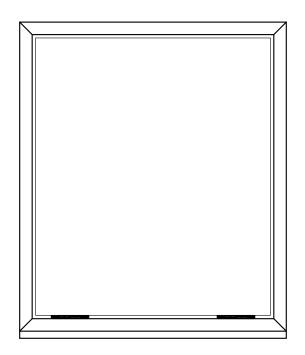


Glazing

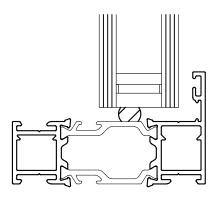
PLACE UNIT WITHIN FRAME AND ENSURE IT IS CORRECTLY POSITIONED, WITH THE CORRECT CLEARANCE BETWEEN GLASS AND FRAME ON ALL FOUR SIDES.

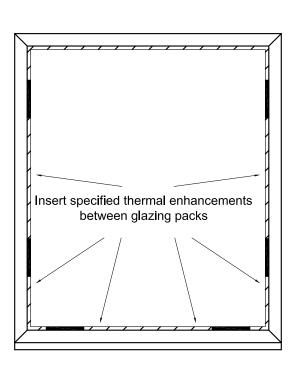
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PRIOR TO INSTALLING THE BEADS, CHECK IF ANY THERMAL ENHANCEMENTS ARE SPECIFIED ON THIS PROJECT AND INSERT THEM AT THIS POINT.



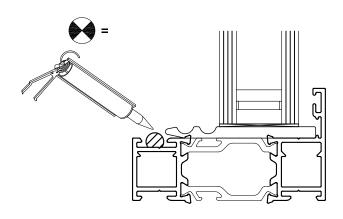


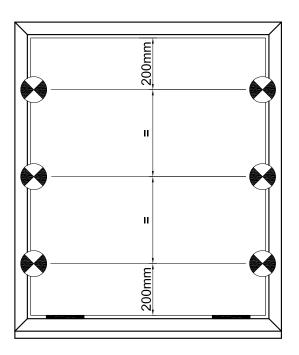




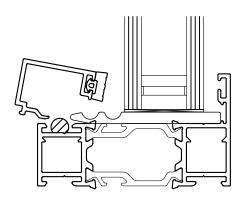
Glazing

3 APPLY A SMALL SILICONE BEAD IN THE GASKET RACE AS INDICATED.

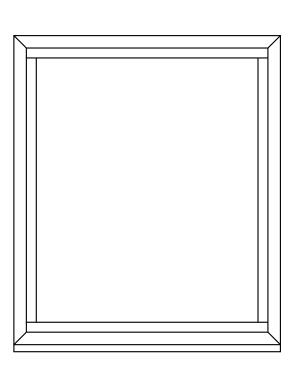




INSERT THE TOP AND BOTTOM HORIZONTAL BEADS FIRST, THEN INSERT THE VERTICALS BETWEEN.



EXERCISE CAUTION WHEN FITTING BEADS TO ENSURE PAINTWORK ON FRAMES AND BEADS IS NOT DAMAGED DURING INSTALLATION.





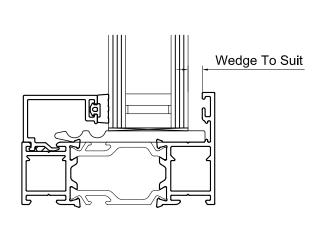


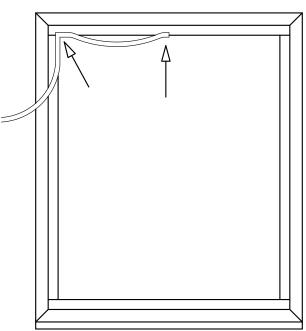
Glazing

SELECT THE CORRECT GLAZING WEDGE GASKET TO SUIT THE SPECIFIED GLASS THICKNESS.

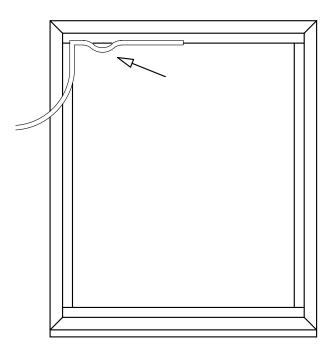
REFER TO THE RELEVANT TECHNICAL MANUALS FOR THE FULL RANGE OF WEDGE GASKET.

)FEED A CLEAN, SQUARE CUT END INTO THE TOP CENTRE OF THE TOPRAIL AND THEN THE CORNER. ENSURE THE GASKET IS 1% - 2% OVER LENGTH AND DO NOT STRETCH THE GASKET WHEN INSTALLING.

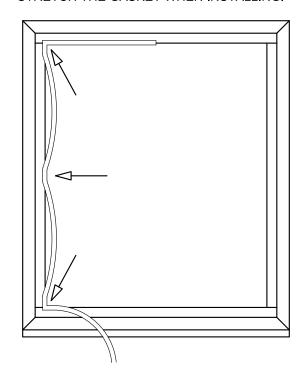




THEN FEED THE WEDGE GASKET INTO PLACE, FROM THE CENTRE TOWARDS CORNER.



FEED THE WEDGE INTO THE NEXT CORNER, AND THEN CENTRE AGAIN ENSURE THE GASKET IS 1% - 2% OVER LENGTH AND DO NOT STRETCH THE GASKET WHEN INSTALLING.

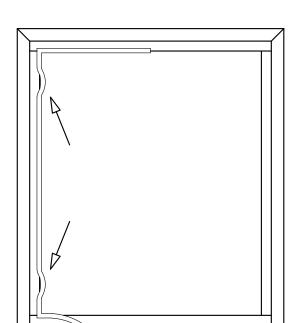




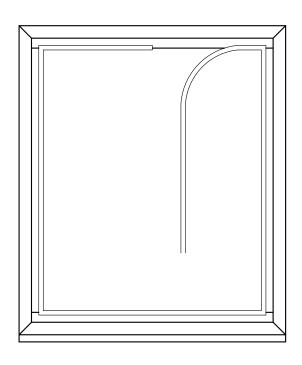


Glazing

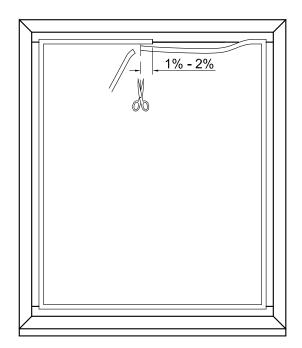
9 FEED THE WEDGE GASKET INTO PLACE, FROM THE CENTRE TOWARDS CORNERS.



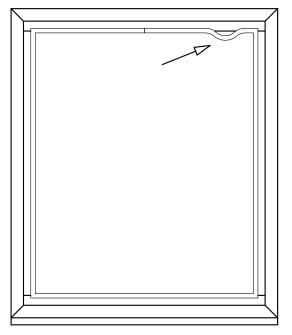
FEED THE WEDGE INTO POSITION ON THE REMAINING SIDES FOLLOWING THE SAME STEPS AS SHOWN ON DETAILS 7 & 8.



OFFER UP THE GASKET TO THE ORIGINAL CUT. CUT THE GASKET 1% - 2% OVER LENGTH ENSURING THE CUT IS CLEAN AND SQUARE.



FEED THE LAST PART OF THE WEDGE GASKET INTO PLACE, FROM THE CENTRE TOWARDS CORNER.







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Perimeter Sealing

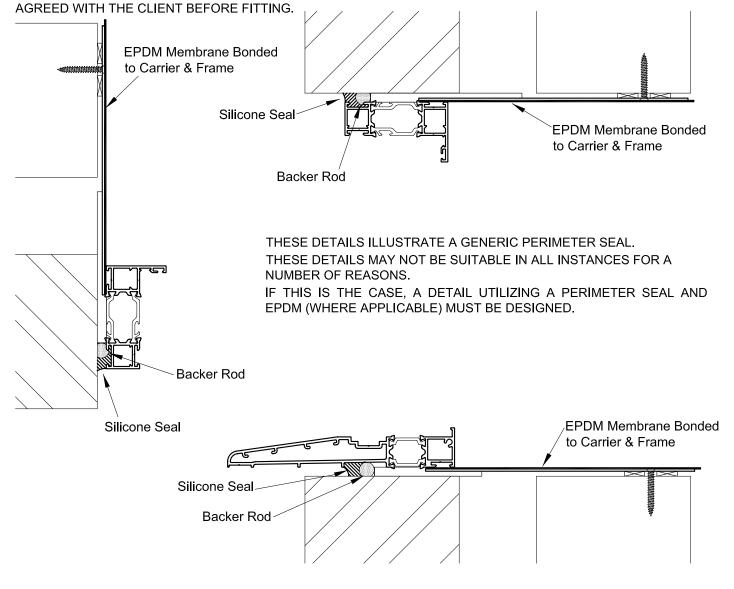
SEALING BETWEEN THE WINDOW AND EXTERNAL STRUCTURE WILL BE REQUIRED IN ORDER TO CREATE A WEATHER PROOF SEAL AT THE PERIMETER.

PERIMETER SEALS MUST BE SEALED FROM THE OUTSIDE USING AN APPROPRIATE SEALANT TO SUIT:

- THE FRAMING SURFACE/FINISH/MATERIAL
- THE STRUCTURE SURFACE/FINISH/MATERIAL
- JOINT SIZE
- ANTICIPATED MOVEMENT OF FRAMES AND STRUCTURE
- ANTICIPATED EXPOSURE TO WEATHER

SEALS SHOULD BE APPLIED ON TOP OF A BACKER ROD, OR SIMILAR, WHERE POSSIBLE AND SHOULD BE APPLIED TO A CLEAN DRY SURFACE AND AS OUTLINED WITHIN THE SEALANT MANUFACTURER'S GUIDELINES. IT IS IMPORTANT TO ENSURE THAT THERE IS NO PROTECTIVE TAPE IS ON THE SECTION WHICH THE SEAL IS BEING APPLIED TO.

IF AN EPDM IS REQUIRED. IT IS IMPORTANT TO ENSURE THE EPDM IS CORRECTLY LOCATED AND SEALED SUFFICIENTLY TO BOTH THE FRAME AND STRUCTURE IN THE CORRECT LOCATIONS. SEALANTS USED SHOULD BE SUITABLE FOR THE MATERIALS/STRUCTURE TO WHICH THEY ARE BONDED. THIS SHOULD BE







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Checking

OPERATION

WHEN ALL FRAMES ARE FIXED AND GLAZING IS INSTALLED, THE OPERATION OF ANY OPENING VENTS SHOULD BE CHECKED.

IT IS GOOD PRACTICE TO ENSURE THAT ALL WINDOWS OPERATE SMOOTHLY AND GEARING IS NOT TOO TIGHT/LOOSE WHEN LOCKING THE WINDOWS AND THERE IS NO CATCHING. PLEASE REFER TO THE RELEVANT TECHNICAL MANUALS FOR ANY ADJUSTMENTS WHICH CAN BE MADE ON SITE, TO EASE ANY OF THESE ISSUES.

GENERAL CHECKS

GENERAL CHECKS SHOULD BE CARRIED OUT TO ENSURE THE FOLLOWING IS SUFFICIENT:-

- DRAINAGE IS ADEQUATE AND IS NOT BLOCKED (SEE RELEVANT TECHNICAL MANUAL)
- ALL MITRED CORNERS ARE STILL TIGHT AND SUFFICIENTLY SEALED. FIXING TOO CLOSE TO THE MITRES OR OVER TIGHTENED FIXINGS CAN OPEN MITRES. IF THIS IS THE CASE THESE FIXINGS NEED TO BE RE-LOCATED OR SUFFICIENTLY LOOSENED WHILST ENSURING THE WINDOW IS SECURELY FIXED.
- OPERATION OF ALL WINDOWS (HANDLES, HINGES, EGRESS/EASY CLEAN OPERATIONS WHERE UTILIZED AND RESTRICTORS).
- ENSURE ALL BEADS ARE FITTED CORRECTLY AND SQUARE.
- CHECK ALL FACES ARE FREE FROM DAMAGE AND DEBRIS AND THAT PROTECTIVE TAPE IS REMOVED FROM FRAMES.
- CHECK COMPRESSION OF GASKETS WHEN WINDOW IS IN LOCKED POSITION AND BETWEEN GLASS AND BEADS/FRAME.
- CHECK ALL PERIMETER SEALS ARE SMOOTH AND CONTINUOUS.

CHECK SUB CILL END CAPS ARE FITTED AND SEALED.

A CHECK LIST IS AVAILABLE IN THE ANNEX OF THIS DOCUMENT. IT IS ADVISED THAT ALL CHECKS ARE PERFORMED WITH THE PURCHASER.

FINALISING

THE FOLLOWING STEPS SHOULD BE THE FINAL CHECKS & STEPS TAKEN TO COMPLETE THE PROJECT AND GENERALLY INCLUDE THINGS LIKE HAND OVER OF ANY RELEVANT PAPERWORK AND ENSUING ANY ISSUES HAVE BEEN RESOLVED BEFORE LEAVING SITE.

TO ENSURE THE PROJECT IS COMPLETE AND THE INSTALLATION IS INLINE WITH ALL REQUIREMENTS, IT IS ADVISED THE FOLLOWING STEPS ARE TAKEN WHERE RELEVANT/REQUIRED:-

- THE PURCHASER SHOULD BE SHOWN HOW TO USE ALL OPERABLE COMPONENTS, ESPECIALLY THINGS SUCH AS EGRESS HARDWARE AND RESTRICTORS - OPERATION OF THESE PARTS MAY BE REQUIRED TO ALLOW MEANS OF ESCAPE IN AN EMERGENCY.
- THE OPERATION AND MAINTENANCE MANUALS FOR THE RELEVANT PRODUCTS SHOULD BE HANDED OVER.
- ANY ISSUES RAISED SHOULD BE RESOLVED SUITABLY AND/OR TO THE CUSTOMERS SATISFACTION

AFTER GENERAL CHECKS AND FINALISING HAS BEEN COMPLETED IT IS GOOD PRACTICE TO ENSURE THAT THE PURCHASER OR RELEVANT PARTY SIGN OFF THE COMPLETED WORKS. IT IS THEN THE PURCHASER'S RESPONSIBILITY TO ENSURE THAT THE RELEVANT PAPERWORK IS HANDED OVER TO THE END USER AND THAT THE END USER IS AWARE OF HOW TO CORRECTLY OPERATE ANY OPERABLE COMPONENTS.

FOR FURTHER GUIDANCE ON SURVEYING & INSTALLATION PLEASE SEE "CODE OF PRACTICE FOR SURVEY & INSTALLATION OF WINDOWS AND EXTERNAL DOOR SETS" & BS 8213-4.





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Checking

AFTER INSTALLATION CHECK LIST

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THE CHECK LIST IS A GUIDELINE ONLY, FURTHER CONSIDERATIONS MAY NEED TO BE MADE AND THEREFORE ADDED TO THIS LIST DEPENDANT ON THE PROJECT.

	IS THE FRAME INSTALLED PLUM AND SQUARE	Y/N	ACTION
HECKS	IS THE FRAME INSTALLED PLUM, SQUARE & LEVEL		
	ARE THE BEADS FITTED CORRECTLY		
	ARE EXPOSED SURFACES FREE FROM DAMAGE		
	HAS PROTECTIVE TAPE BEEN REMOVED		
	HAS THE LEVEL OF MAKING GOOD BEEN PERFORMED AS PREVIOUSLY AGREED		
Ж	HAVE ALL END CAPS ETC. BEEN FITTED CORRECTLY		
VISUAL APPEARANCE CHECKS	AS ALL DEBRIS CREATED DURING INSTALLATION BEEN REMOVED		
	ARE ALL DRAINAGE HOLES CORRECTLY LOCATED AT SUFFICIENT CENTRES & HAVE DRAIN HOLE COVER CAPS BEEN FITTED		
	ARE ALL DRAINAGE PATHS AND SLOTS FREE FROM DEBRIS AND FREE OF ANY OBSTRUCTION		
	ARE ALL GASKETS CORRECTLY FITTED AND ARE ALL JOINTS TIGHT AND IN THE CORRECT LOCATIONS		
	ARE THE GASKET COMPRESSIONS CORRECT (BOTH GLASS AND VENT GASKET)		
GLAZING	IS ALL GLAZING AS SPECIFIED		
	ARE UNITS FREE FROM SCRATCHES, DAMAGE AND OTHER SIGNS OF POTENTIAL FAILURE		
	IS GLASS ORIENTATED CORRECTLY (WITH COATS FACING CORRECT DIRECTION)		
	DOES GLASS LOOK SQUARE WITHIN FRAMING (SPACER BAR CAN BE USED AS A ROUGH GUIDE)		
_	DO ALL OPENING VENTS OPERATE AS REQUIRED		
TION	DO ALL OPENING VENTS LOCK AS REQUIRED		
OPERA	IS ALL GEAR LUBRICATED AS REQUIRED		
	IS ALL HARDWARE CORRECTLY FIXED ENSURING ALL FIXING HOLES ARE SECURED		
SEALING	ARE ALL SEALS SMOOTH		
	ARE ALL SEALS CONTINUOUS WITHOUT SPLITTING, GAPS OR SPACERS		
	ARE ALL SEALS IN CONTINUOUS CONTACT WITH FRAMING AND STRUCTURE WHERE REQUIRED		
	ARE ALL FRAME FACES FREE FROM EXCESSIVE SEALANT		
	ARE ALL DRAINAGE HOLES/PATHS CLEAR OF SILICONE		



