



DUPLUS

OPENING ROOFLIGHT

Installation Instructions Including
Maintenance Manual

Need help? Call us on 0116 2610 710



OPENING ROOFLIGHT OVERVIEW

Duplus opening rooflights are glazed with two panes of 4mm toughened glass on rooflights where both the length and width is less than 1200mm and two panes of 6mm toughened glass thereafter. 28mm double glazed units incorporating the latest Low E coating, warm edge spacer bar and argon filled cavity achieving a centre pane U-value of 1.1 W/m²K.

Our rooflights are suitable (as defined in BS5516-2:2004) up to a maximum height of 13 metres above floor level.

For further clarification on any technical issues, please do not hesitate to contact Duplus.

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1.0 Product Inspection

- 1.1 Upon receipt of your product firstly carry out an inspection of the packaging, if there are any signs of impact damage this should be reported to Duplus Architectural Systems (DAS) with suitable photographs within 24hrs of delivery. If no damage is found carefully remove the packaging, including the perimeter snap in cover clips (which must be retained) and fully inspect the product, again reporting any damage within 24hrs of delivery.
- 1.2 Do not use a knife when removing packaging; this may result in damage to the product.
- 1.3 Do not remove the wooden support feet until you have the rooflight next to the rooflight opening.
- 1.4 Do not attempt to carry the rooflight with the perimeter snap in cover clips in place.

2.0 Standard Installation Hardware

- 2.1 Plastic Horse Shoe packers in varying thicknesses, 5mm, 3mm, 2mm & 1mm
- 2.2 50mm long stainless steel wood screws.

3.0 Kerb Suitability Check

- 3.0 A full inspection of the kerb should be undertaken before the installation begins. Please ensure there is sufficient unobstructed space around the immediate area, ensure all necessary safety systems are in place to enable safe working at height procedures. The kerbs should be surveyed to ensure dimensional accuracy please see accompanying drg SB001 for details.

Please Note:

- 3.2 Water ponding is more likely to occur where our product has been fitted to a shallow sloping kerb or where the builders curb has no fall or slope. However, it is not a sign of any failure within our product. Water will pond where there is an insufficient fall to make it drain away naturally. Easy clean coatings can improve the situation as they tend to smooth out any surface imperfections of the glass.
- 3.3 Our fixed and opening rooflights are designed to accommodate a 10 degree fall where water is less likely to pond.

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Important note.

- 3.3 Kerb must be fully weather tight before installation, external finishes should lap up and on to the top of the kerb before seating the SB Skylight in position. The top of the kerb should be flat with no pronounced level changes particularly at the corners.
- 3.4 To ensure water does not pond on the SB Skylight it is vital the kerb is built in accordance with the parameters set on drg SB001. Please note the kerb should always be formed as a flat annulus at the same pitch as the SB skylight.

4.0 Installation

Dry Run.

- 4.1 A dry run of the following installation guide is recommended to ensure the SB skylight fits on the kerb as expected and is in accordance with the tolerances specified on drg SB001.
- 4.2 Ensure all packaging is removed from the skylight including removing the wooden feet from the product and perimeter snap in cover clips. Lower the unit onto the kerb taking care to position it centrally, the vertical fixing leg should overhang the kerb by approximately 22mm from outside of kerb to outside of SB skylight. (See SB004 for opening vent details).
- 4.3 If you are satisfied the kerb is as expected and the correct tolerances are achieved you can prepare the kerb for the installation.

Rooflight Installation.

- 4.4 As before lower the unit on to the kerb taking care to position it centrally. Note: LIFT do not slide the rooflight as this may dislodge the foam tape and lead to future weathering issues. The vertical fixing leg should overhang the kerb by approximately 22mm from outside of kerb to outside of SB skylight. (See SB004 for opening vent details).
- 4.5 Now the unit is positioned correctly, fix the unit to the kerb using the supplied wood screws through the pre drilled holes, ensuring a suitable amount of supplied horseshoe packers are placed between the kerb and the aluminium skylight to avoid deformation of the aluminium profile when tightening.

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Important Note

- 4.6 If security screws are used, please be aware the security screw cannot be removed, so ensure you have followed the above step carefully before fixing the product to the kerb.
- 4.7 Now the unit is secured to the kerb the perimeter aluminium snap in cover clips which conceal the fixings can be applied, ensure the clip is positioned so that the mitre on the end lines through with the mitre on the frame of the unit. The top section should be engaged first then rotated down and clipped in place, a rubber mallet and clean timber cushioning block may be used to ensure sufficient engagement and care should be taken to avoid distortion of the clip.

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5.0 Standard Glass Specification

Units below 1.2m²

Outer Pane	4mm toughened
Cavity	20mm argon with warm edge spacer
Inner Pane	4mm low E coated Toughened
Light transmission	80%
Solar Gain	0.63
Centre Pane U-value	1.1Wm ² K
Weight	20Kg/m ²

Units above 1.2m²

Outer Pane	6mm toughened
Cavity	16mm argon with warm edge spacer
Inner Pane	6mm low E coated Toughened
Light transmission	78%
Solar Gain	0.61
Centre Pane U-value	1.1Wm ² K
Weight	30Kg/m ²

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6.0 Glass Information

Glass Type	Light Transmission (LT)	Total Solar Energy Transmittance (g value)	Centre Pane U-value
4mm Toughened / Argon / 4mm Toughened Soft Coat Low E	80%	63%	1.1 W/m ² K
4mm Toughened Grey Tint / Argon / 4mm Toughened Soft Coat Low E	50%	49%	1.1 W/m ² K
4mm Toughened Blue Tint / Argon / 4mm Toughened Soft Coat Low E	57%	41%	1.1 W/m ² K
6mm Toughened / Argon / 6mm Toughened Soft Coat Low E	78%	61%	1.1 W/m ² K
6mm Toughened Grey Tint / Argon / 6mm Toughened Soft Coat Low E	38%	35%	1.1 W/m ² K
6mm Toughened Blue Tint / Argon / 6mm Toughened Soft Coat Low E	47%	33%	1.1 W/m ² K
6mm Toughened HP Solar Control (Neutral) / Argon / 6mm Toughened	70%	40%	1.1 W/m ² K

Light Transmission (LT) is the proportion of visible light at near normal incidence that is transmitted through the glass.

Total Solar Energy Transmittance (g-value) is the fraction of solar radiation at near normal incidence that is transferred through the glazing by all means.

U-Value is the rate of loss of heat per square metre, under steady state conditions, for a temperature difference of one Kelvin between the inner and outer environments separated by the glass.

HP Solar Control is Guardian Sunguard high selective super neutral coating that gives an excellent solar control performance and also a high light transmission.

Tint is a glass that has a coloured tint which gives excellent solar control, but has reduced light transmission.

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7.0 Glass Breakage

- 6.1 Glass breakages are not covered under warranty. Should you experience a glass break please contact Duplus Architectural Systems Head office to order a replacement rooflight.

8.0 General Cleaning & Maintenance

- 8.1 The appearance, durability and performance of Duplus products, regardless of the material from which they are made, are always dependent on regular cleaning and maintenance. Cleaning therefore contributes considerably to the effective life of the system. All Duplus products should be cleaned regularly and at time intervals depending upon the accumulation of dirt. We should expect a minimum regime of 6 monthly clean and maintenance checks.
- 8.2 Those engaged on maintenance or cleaning work should use suitable equipment (see BS8213). Experienced operatives should be employed particularly in respect to rooflight/high level cleaning.
- 8.3 Note under no circumstance should you attempt to walk on or load Duplus rooflight products regardless of their fragility status.**
- 8.4 The cleaning process is generally uncomplicated, consisting of washing down with warm water and mild detergent. Abrasive, caustic and chemical treatments are unnecessary, and may actually cause damage to the exposed surfaces of our products. A soft cloth or brush may be used to remove persistent contamination. However, care should be taken to avoid rubbing dirt into the system components. In the case of paint or bitumen splashes, white spirit applied with a soft cloth may be used with care, we would recommend a small area is tested first but do not allow white spirit to run onto unaffected areas. A final rinse with clean water will complete the process.
- 8.5 The product should be checked for movement on the kerb, if movement is found remove fixing snap in cover clip and check tightness of screws.

Important Note:

- 8.6 An annual review of perimeter silicone should be made to confirm that the perimeter seal between the glass and frame is intact. If the seal is not intact i.e., if this seal has been removed or degraded, the area should be cleaned and dried and re-sealed with Dow Corning 791 silicone sealant at the earliest opportunity. If water sits against the edge of a double glazed unit because the outer seal is no longer intact, Duplus will accept no responsibility of the glass unit breakdown as a result. Please be aware, although rare, it has been known for birds to peck away at silicone.
- 8.7 An annual review of the glass should be made and in the very rare event there appears to be any signs of glass movement, please contact Duplus at the earliest opportunity.

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Electrical Components.

- 8.7 All electrical components supplied with the rooflight will be guaranteed for a period of 12 months from date of delivery.

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9.0 Emergency Contact Information

Office Hours

Monday – Thursday: 8am – 12.45pm 1.30pm – 5pm

Friday: 8.30am – 1pm

Telephone

0116 2610710

Fax

0116 2610539

Email

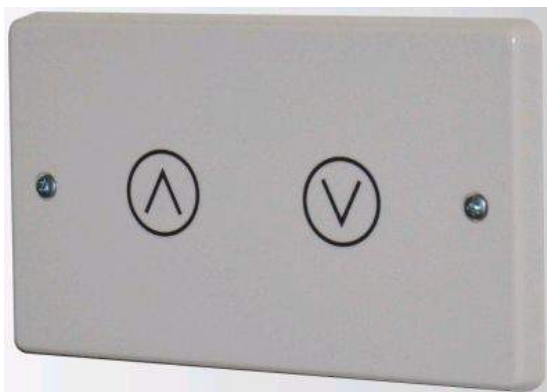
sales@duplus.co.uk

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Wiring Diagram For Switch / Actuator

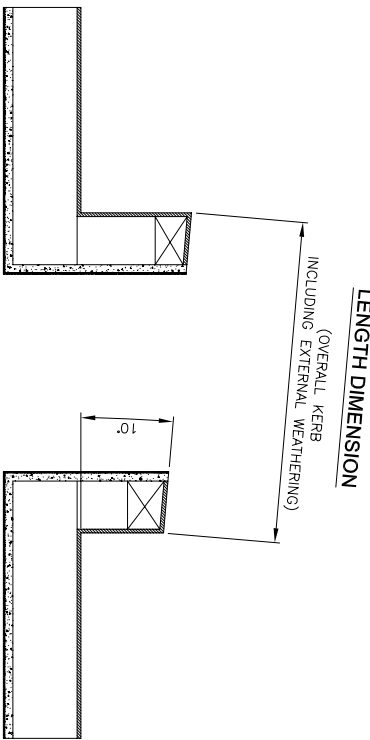
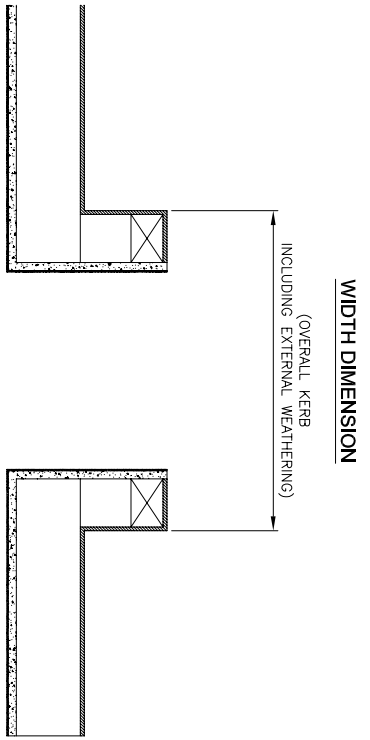
Typical Connection Details:



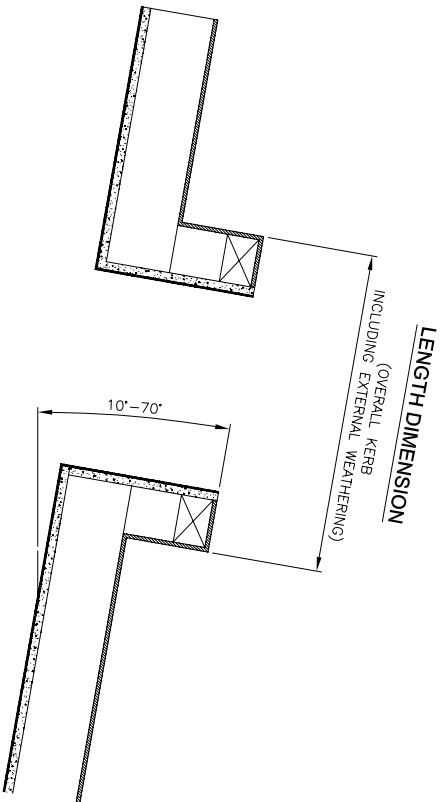
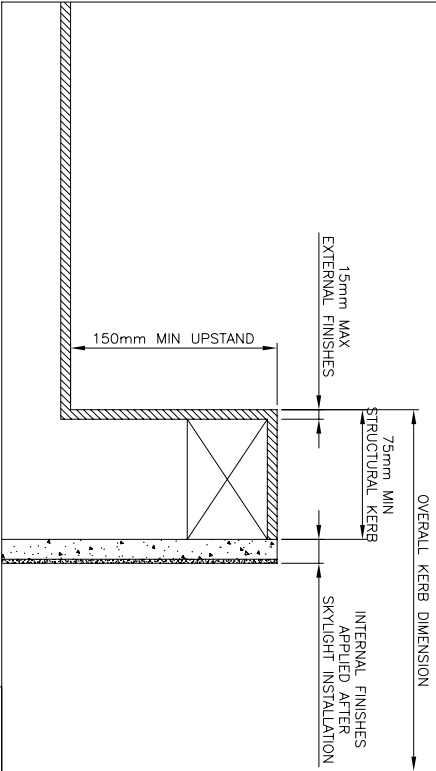
VOLTAGE (all +/-6%)	230V ac / 50/60Hz (+/- 10%)
POWER CONSUMPTION	Max 350mA
FUSES	1AT
VOLTAGE OUTPUT	24V +/-10%
OUTPUT CURRENT	Max. 3A
START UP TIME	1 min on/ 4 min off
INGRESS PROTECTION	IP50 din 40050
HOUSING	plastic, white for surface mounting
DIMENSIONS	approx. 146 x 86 x 40mm (w x h x d)
AMBIENT TEMPERATURE	0-40°C
CONNECTING TERMINAL	230V max. 1.5mm ²
	24V max. 1.5mm ²
USAGE	NATURAL

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10.0 DRAWING REFERENCE




KERB DETAILS

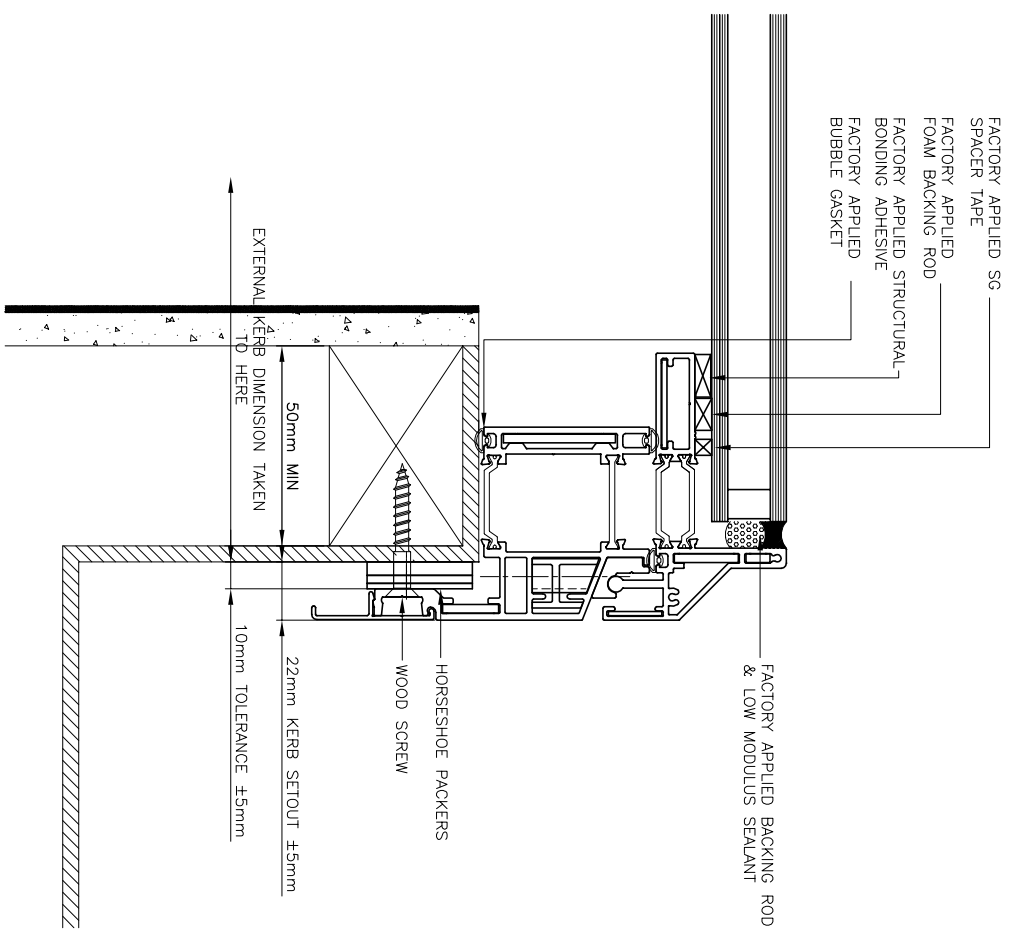


CRITICAL DIMENSIONS WHEN ORDERING YOUR FIXED ROOFLIGHT.

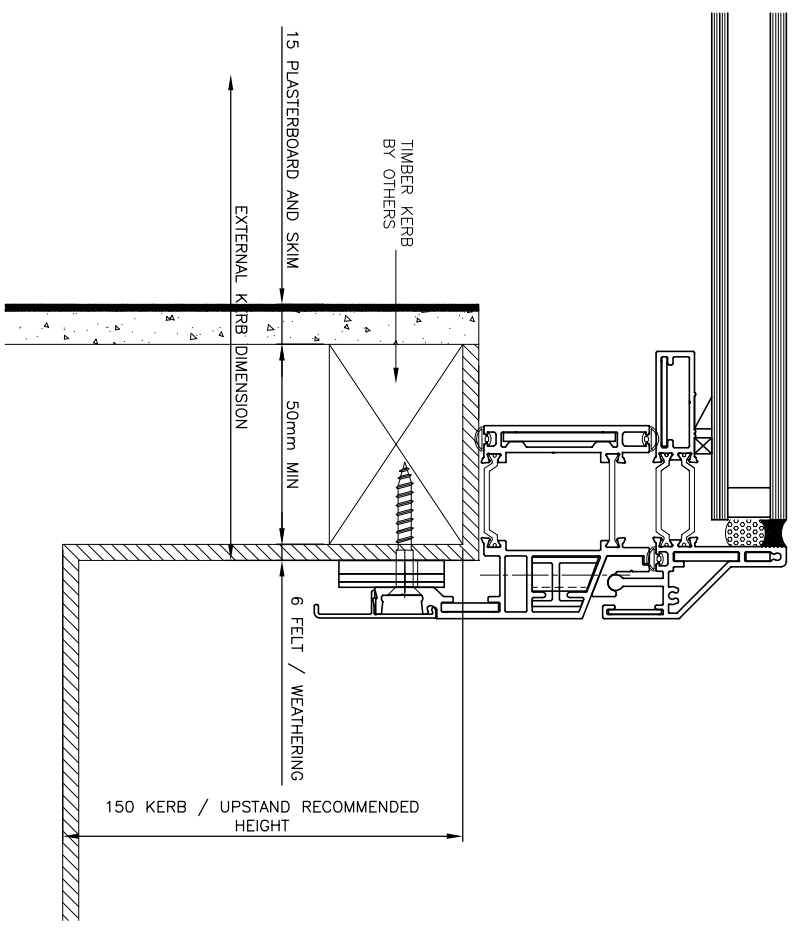
WIDTH DIMENSION & EITHER OF THE LENGTH DIMENSIONS AS ILLUSTRATED ABOVE DEPENDING ON YOUR ROOF DESIGN (FLAT ROOF OR PITCHED ROOF) ARE REQUIRED IN ORDER FOR DUPUS TO PROCEED.
 AN OVERALL EXTERNAL KERB TOLERANCE OF $\pm 10\text{mm}$ CAN BE ACCOMMODATED.
 IF KERB DIMENSIONS ARE OUTSIDE THE SPECIFIED TOLERANCE THE SKYLIGHT FRAME MAY NOT FIT OVER THE KERB AS DESIGNED.
 STRUCTURAL KERB THICKNESS.
 75mm MIN KERB THICKNESS IS CRUCIAL TO ENSURE THE ROOFLIGHT IS SUITABLY SUPPORTED.


Rev	Date	Description	Rev By
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<p>370 Melton Road, Leicester LE4 7SL Tel: 0116 2610710 Fax: 0116 2610539</p>		<p>DUPUS WORKS-EACH MANUFACTURED COMPONENT $\pm 1\text{ mm}$ SITE INSTALLED COMPOSITE FRAMES $\pm 10\text{ mm}$</p>	
		<p>Scale: N/A Title: Kerb details Job No: Dwg No: SB001</p>	
<p>Drawn:</p>		<p>REV</p>	

ENLARGED SECTION DETAIL

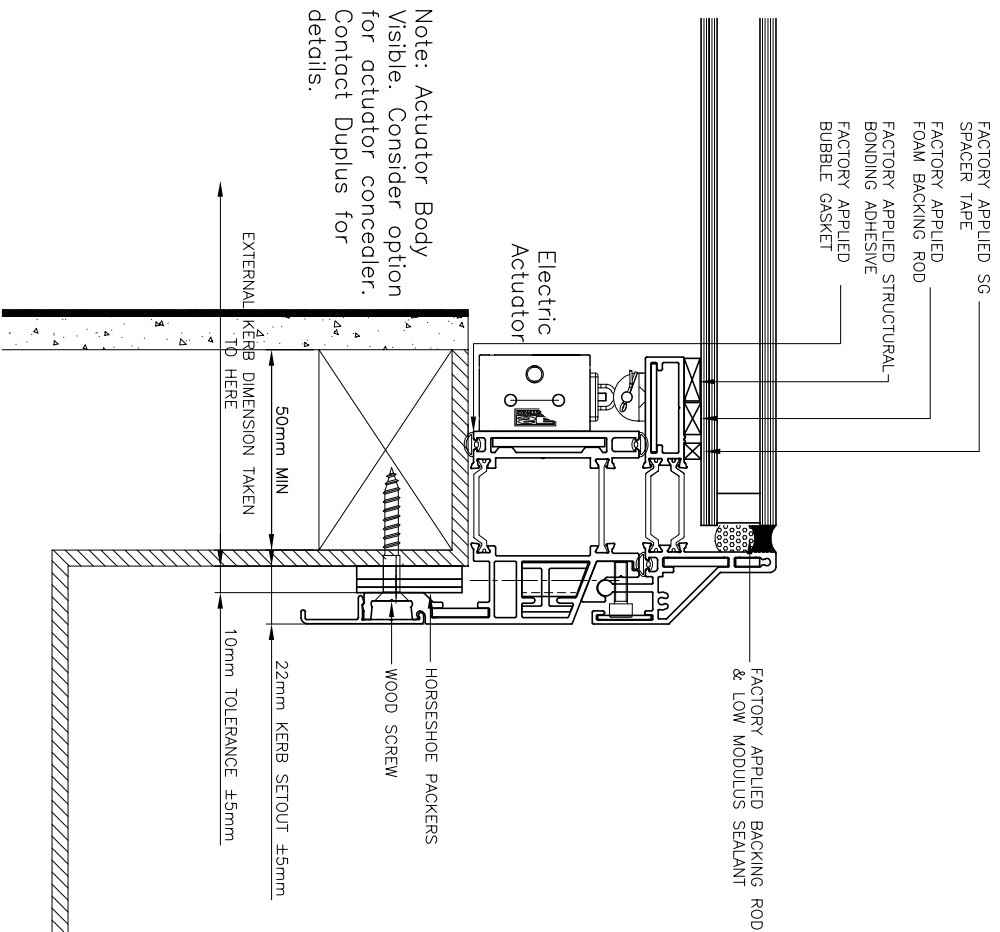


DIMENSIONAL KERB DETAIL




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<p>370 Melton Road Leicester LE4 7SL Tel: 0116 2610710 Fax: 0116 2610539</p>		<p>DUPUS WORKS - EACH MANUFACTURED COMPONENT ± 1 mm SITE INSTALLED COMPOSITE FRAMES ± 10 mm Scale: N/A Drawn:</p>	
		<p>Title: Section through kerb</p>	
<p>Drawn:</p>		<p>Proj No: SB004</p>	
<p> </p>		<p>REV</p>	

ENLARGED SECTION DETAIL



Note: Actuator Body Visible. Consider option for actuator concealer. Contact Duplus for details.

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	Rev By		[Signature]	[Signature]	[Signature]	[Signature]