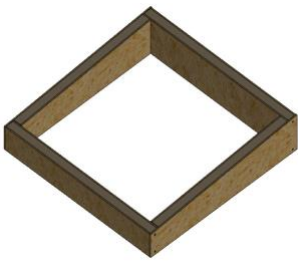
BI Triple Glaze Rooflight Structure



Insulated Upstand

Fitted Rooflight

PATENT APPLICATION No: 2020/0012

Description: The rooflight product design consists of four main elements. The glass (treble glaze for optimal thermal values), the aluminium frame, insulated upstand and fixings. The unique design feature of the aluminium frame contributes to ensuring a *leak proof* unit that is superior to other similar products currently on the market.

Frame: Designed by BI Roofing Ltd, the frame is fabricated by Seamless Aluminium in Ballyshannon, Co.Donegal. The frame is powder coated to provide optimal longevity and performance. The product data sheet is available in the Technical Section.

Glazing: BI Rooflight is manufactured with a triple glaze unit supplied by LG Glass, Castlebar, Co.Mayo. The glazing unit data sheet is available in the Technical Section.

Insulated Upstand: BI Rooflights configure their own upstand where requested. The upstand is made from OSB 3 Board with fully insulated cavity (75mm). Different size insulation can be configured upon request. The lowest size is 75mm and highest size is 100mm.

Fixings: The fixings used in the assembly for the BI Rooflight are supplied by Fixfast which are coated for optimal longevity and performance. The fixings data sheet is available in the Technical Section.

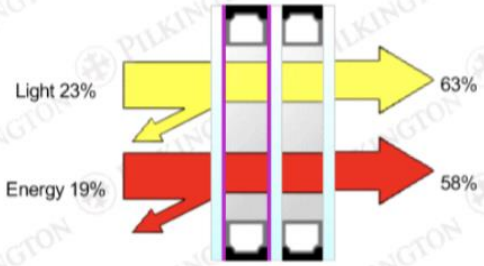
Warranty Details

Glazing: LG Glass & Glazing Ltd. has a 5 year warranty on all its sealed units.

- A Double / Triple Glazed unit FAILURE is indicated by internal condensation.
- If a unit should fail within this period, it will be replaced free of charge.
- The original unit must be returned for inhouse examination.

LG Glass & Glazing

Data Sheet
LG Glass Triple Glazed Unit in 4mm Toughened



DESCRIPTION

Position	Product	Process	Thickness (nominal) mm	Weight kg/m²
Pilkington **Insulight™** Therm Triple				
Glass 1	Pilkington **K Glass™**	Toughened	4.0	
Cavity 1	Argon (90%)		16.0	
Glass 2	Pilkington **K Glass™**	Toughened	4.0	
Cavity 2	Argon (90%)		16.0	
Glass 3	Pilkington **Optifloat™** Clear	Toughened	4.0	
Product Code	4KT-16Ar-K4T-16Ar-4T		44.0	30.00

PERFORMANCE

Light		
Transmittance	LT	63%
	UV %	24%
Reflectance Out	LR out	23%
Reflectance In	LR in	24%

Performance Code	
U_g-value/Light/Energy	1.0 / 63 / 58
Ra	98

The values of some of characteristics are displayed as NPD. This stands for No Performance Determined.

Energy		
Direct Transmittance	ET	47%
Reflectance	ER	19%
Absorptance	EA	34%
Total Transmittance	g	58%
Shading Coefficient Total		0.67
Shading Coefficient Shortwave		0.54
Sound Reduction	R_w (C;C_{tr}) dB	32 (-1; -5)
Thermal Transmittance	W/m²K	1.0