



Energy

LightBridge™



Creating a seamless bridge between inside and out

Viridian **LightBridge™** double glazing creates a seamless bridge between inside and out, allowing us to bring into our daily lives the light, space and colours of nature. LightBridge offers a market-leading combination of insulation, security and noise reduction properties for domestic windows, which means we can easily achieve the expansive glazing we desire to bathe our homes in natural light and reconnect with the world around us.

Description

LightBridge is a range of high performance insulating glass units (IGU) developed specifically for residential building applications. Constructed with low-e glass and inert gas fill as standard, a high insulating factor is assured, whilst maintaining a very high level of visual clarity and visible light transmission levels. It is configured for three standard make-ups:

- ◆ **Base Product** – an IGU with two monolithic lites (toughened or annealed).
- ◆ **Sanctuary Level 1** – one lite replaced with a standard laminate.
- ◆ **Sanctuary Level 2** – one lite replaced with an acoustic laminate.

*Spacer width can vary between 8mm and 20mm to meet the needs of the frame / specification.

Applications

LightBridge insulated glass units are for use in fully framed windows and doors in detached residential and low-rise multi-residential building projects. The product is specifically designed to improve energy efficiency and/or increase the permissible glazed area of the design, thereby increasing access to natural light within the property.

The standard makeups of LightBridge are suitable for most common configurations of residential windows and doors capable of taking a double-glazed unit.

The product may also be suitable for fully framed roof, skylight and other elevated or sloped glazing, provided that the selected makeup is compliant with AS1288.



Applications

- ◆ Residential windows and doors
- ◆ Residential overhead and sloped glazing (subject to compliance with AS1288)

Size Limits

- ◆ **Minimum size*** 350mm x 250mm
- ◆ **Maximum size*** 2500mm x 2000mm
- ◆ Note that the limiting glass thickness is 5mm toughened, hence the maximum unit area permissible under AS1288 is 4.5m²

*Sizes outside of these limits may be available as a special order, on request.

Glass Options

- ◆ LightBridge is available in base makeup, and two levels of Sanctuary upgrade
- ◆ Four standard colour / privacy combinations are available: Clear, Grey, Translucent, Translucent Grey
- ◆ The limiting glass width is 4mm or 5mm, available in annealed or toughened, which is paired with various glass thicknesses depending on colour and Sanctuary level selected



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Considerations

- ◆ The width of the spacer and the glass type selected will influence the U-value achieved
- ◆ Grey variants should be considered for windows in hot climates, sun-exposed elevations, and applications subject to high glare
- ◆ Thermal assessment may be required for lower SHGC variants
- ◆ Privacy variants should be considered for bathrooms, bedrooms, windows adjacent to public areas and those subject to overlooking

Features and benefits

- ◆ Exceptionally low U-value (high insulation factor) for a residential glazing product
- ◆ Balance of high light transmission with mid-range solar control. Solar control can be stepped-up through the use of grey or translucent outer lites in the make-up, making the product suitable for all Australian climates
- ◆ Fully supported by the Viridian product warranty program
- ◆ All components locally stocked, and IGUs locally manufactured for short lead times and reliable supply
- ◆ Available in several levels of enhanced security, UV, and noise control

How to specify

- ◆ **Select glass name**
LightBridge
- ◆ **Select the Sanctuary level**
Base (no acoustic security enhancement);
S1 (UV control plus mid-range security and acoustic control);
S2 (UV control plus highest security and acoustic control)
- ◆ **Select limiting colour and translucency**
for solar control and privacy –
Clear, Grey, Translucent Clear,
Translucent Grey
- ◆ **Select thickness – process**
4mm or 5mm, annealed or toughened
- ◆ **Select spacer width** – 8mm to 20mm
- ◆ **Specify the makeup**
e.g. LightBridge S2 Clear - 4T:12:6.5

Performance comparison chart

LightBridge Base Level	VT	U-Value	SHGC
LightBridge Clear	79	1.37	0.58
LightBridge Grey	49	1.37	0.40
LightBridge DecorSatin	79	1.37	0.58
LightBridge DecorSatin Grey	49	1.37	0.40
LightBridge Sanctuary 1			
LightBridge Clear +S1	78	1.36	0.53
LightBridge Grey + S1	37	1.36	0.34
LightBridge Translucent + S1	59	1.36	0.43
LightBridge Translucent Grey + S1	37	1.36	0.32
LightBridge Sanctuary 2			
LightBridge Clear +S2	77	1.35	0.53
LightBridge Grey + S2	48	1.36	0.37

*Above performance data applicable to Low E glass on surface #3

*Above performance data is based on 4mm Low E glass with 12mm Argon in all cases