



**WE STAND BEHIND OUR QUALITY PRODUCTS**

They will meet or exceed the requirements of the New Zealand Building Code.

# Reflect your warmth.

## Double-Glazed Glass

Energy-efficient glass options that provide year round comfort by keeping your home warmer in winter and cooler in summer.

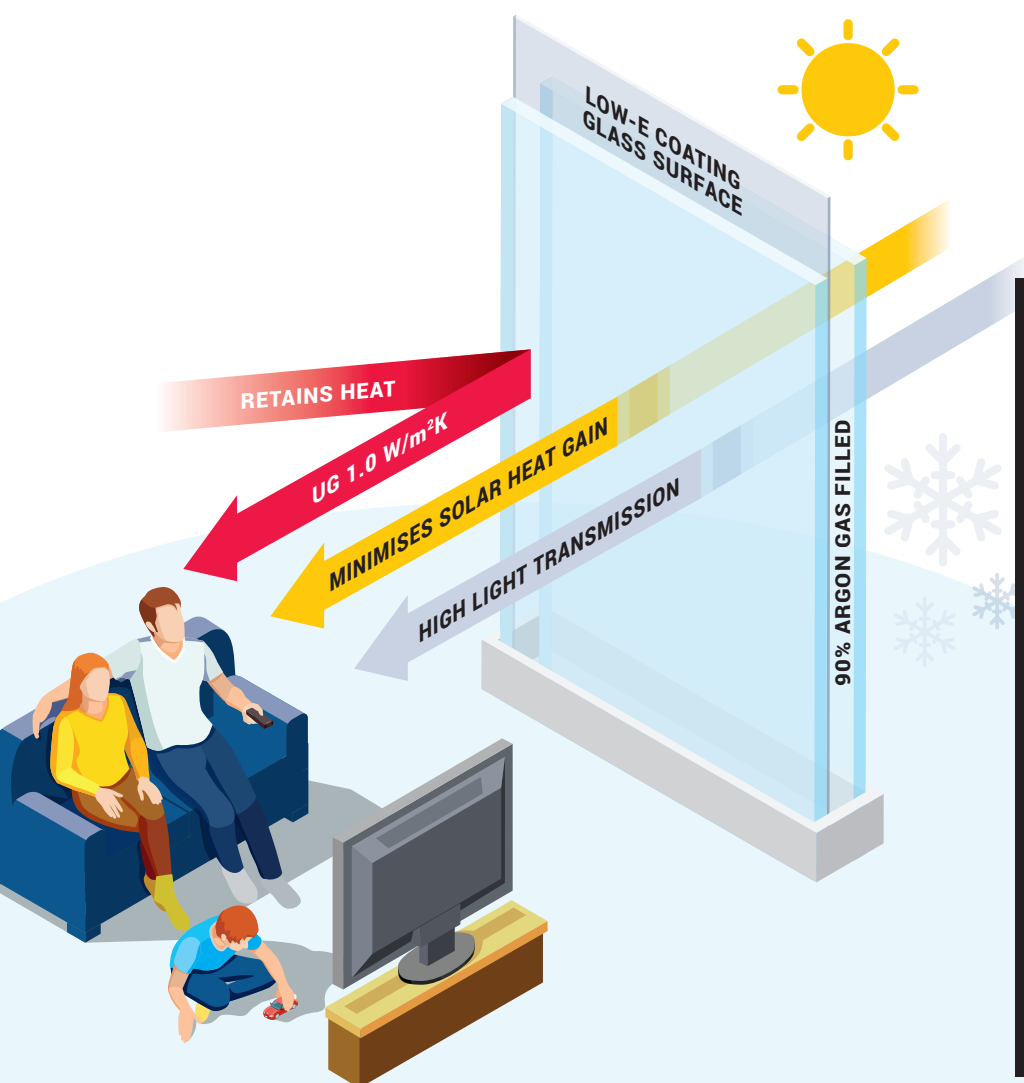


**Glasslines™**  
Clearly Superior

# Comfort from within.

There's glass and then there's Low-E glass. Warmer, drier more comfortable living is here thanks to low-E technology from Glasslines.

The glass within a home is a very critical component given that this is a major source of energy loss. Consequently, this makes the decision of which glass to choose an important one. Energy efficiency in glass can be confusing when researching the options available, so we've provided you with some information to demystify the options and simplify your decision.



## What is Low-E glass?

Low-E glass is an abbreviation for "Low-emissivity". Low-E is glass that has been treated with a specialised coating which is microscopically thin, and is designed to modify the transfer of radiant heat through the glass. This keeps the temperature of the house more consistent by controlling the radiant heat coming in and out of your windows. Warmer in winter, cooler in summer!

## The benefits of Low-E.

- Less heat loss and improved insulation
- Save on heating and cooling requirements in months when they are needed
- Protects against fading
- Reduced condensation
- Reduced heating and cooling costs
- Reduced solar heat gain
- High visibility and glare reduction
- Sustainability; Saint-Gobain Glass products are manufactured using a minimum of 30% recycled content

## The factors used to measure the effectiveness of Low-E coatings.

### VISIBLE LIGHT TRANSMITTANCE (VLT):

The measure of how much visible light passes through the glass. The higher the number, the more light that can pass through the window.

### SOLAR HEAT GAIN COEFFICIENT (SHGC)

This is the amount of solar radiation that is passed through the window. This can be either directly transmitted or absorbed and re-radiated.

The lower the SHGC, the less solar heat it transmits.

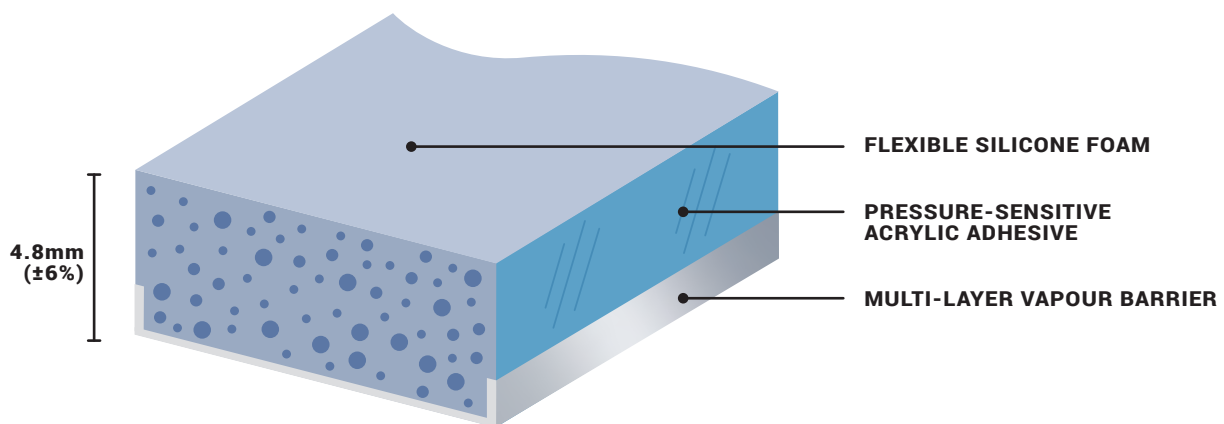
An ideal way to minimise overheating in homes.

### U-VALUE:

This is the rating that is given to a window based on how much heat loss it allows. The lower the number, the more effective the glazing is at preventing heat loss.

### LIGHT TO SOLAR GAIN:

The ratio between the window's visible light transmittance and its Solar Gain Coefficient rating. A great unit to work with when you are wanting to stop heat gain, but preserve as much natural light as possible.



## Super Spacer®. We use warm-edge silicone spacers in all of our double and triple glazing glass.

Super Spacer® Premium Plus spacers are made from all-foam construction, which stops the heat from escaping much more effectively than spacers made from metal. It is a dual-seal spacer system that uses a high-performance acrylic adhesive for its structural seal, and a multi-layer vapour seal backing.

### BENEFITS

- Low thermal conductivity
- Excellent UV resistance and temperature performance control
- Superior Argon gas retention
- Excellent durability for sustainable performance

## Clear Float Double Glazing

Clear Float double glazing will halve the heat loss compared to a single glazed window.

### FEATURES & BENEFITS

- Improved insulation
- Reduced noise
- Lower condensation levels
- Great clarity

## SGG Planitherm® ULTRA N/ULTRA N II



**SGG Planitherm® ULTRA N** is a product designed specifically for houses that want to maximise heat retention within the house particularly from the sun over winter.

The product offers superior insulation properties, very high clarity and amazing neutrality.

### FEATURES & BENEFITS

- Enhanced thermal insulation
- Helps reduce heating requirements
- Reduces incidence of condensation on the inner pane
- High natural appearance in both transmission and reflection of light
- Maximises entry of natural daylight

COMPARE



## See what glass best suits your needs

	Planitherm UN - Low E	Cool-Lite SKN Low E	Toughened Glass	Laminated Safety Glass	Laminated Acoustic Glass	Tinted Glass	Patterned / Opaque Glass
Retain warmth	●	●					
Cooler home in summer		●				●	
Reduce noise				●	●		
Reduce fading furnishings & carpet		●		●	●		
Reduce glare		●				●	
Security			●	●	●		
Improved privacy						●	●

# SGG Cool-Lite® SKN 176 II



**SGG Cool-Lite® SKN 176** is a very high performance glass option designed to give the homeowner advanced thermal insulation and high-performance solar control properties.

This product is great for minimising solar heat gain but maximising light transmittance.

### FEATURES & BENEFITS

- High light transmission - 70%
- Helps reduce heating requirements
- High light transmittance
- High natural appearance in both transmission and reflection of light
- High performing solar heat control properties for homes looking to reduce heat from the sun but not sacrifice natural light

## Key



**HEAT RETENTION** - keeping the warmth in and the cold out



**CONDENSATION AVOIDANCE** - reducing the chance of internal condensation and weeping windows



**REDUCTION IN SOLAR GAIN** - keeping your home cool and comfortable in hot weather



**VISIBLE LIGHT TRANSMISSION** - maintaining natural light levels inside your home



## The Stats

	Clear Float Double Glazing*	SGG Planitherm® ULTRA N/ULTRA N II	SGG Cool-Lite® SKN 176 II
Unit Make Up	5mm Clear   16mm Thermal Spacer   5mm Clear	5mm Clear   16mm Thermal Spacer + Argon   5mm UN	5mm Clear   16mm Thermal Spacer + Argon   5mm UN
Visible Light Transmission (VLT)	81%	79%	69%
Outdoor Reflectance (VLR)	15%	12%	13%
Indoor Reflectance (VLE)	15%	12%	12%
U-Value (Centre Of Glass) (U)	2.6	1.1	1.0
Solar Factor (SF)	0.77	0.61	0.37
Shading Coefficient (SC)	0.89	0.71	0.42
Fading Control (Tdw-ISO)		0.69	0.51
Glazing Position		Surface #3	Surface #2

\* Not H1 Compliant



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