

> VIRIDIAN GLASS GUIDE™

Energy

Designed to provide year-round comfort & reduce your reliance on heating & cooling.

Products: SuperTones™

SmartGlass™ EnergyTech™ SolTech™ EVantage™ ComfortPlus™ ThermoTech™

Viridian ClimaTech™

LightBridge™
LightBridge next™
PerformaTech™
VistaTech™





Energy codes and glass

Reducing energy consumption in every aspect of our lives is high on the national agenda. Buildings in which we live and work consume significant amounts of energy with correlating greenhouse gas emissions. In response to this, the government has developed mandatory minimum Energy Efficiency Measures. These regulations cover both residential and commercial construction types.

Energy use modelling has shown that the selection and placement of glazing is one of the most critical elements in designing for energy efficiency. In large commercial and apartment buildings where the roof is a smaller proportion of the building envelope, treatment of glazing is the most important design consideration. Selecting the right glass allows designers to maximise light, while insulating against heat loss and selectively shielding unwanted heat gain. Choosing the right balance of these factors during the design phase will provide a comfortable, healthy and energy efficient environment for the life of the building.

The code is performance based, offering a number of paths to compliance and sets out the performance that a building has to achieve. In terms of glazing, the key focus is on minimising the rate of summertime heat gain and winter heat loss (the emphasis will shift depending on the climate zone). The requirements will also vary depending on the nature and type of heating and cooling systems employed, if any.

Glazing performance is measured in terms of U Value (for conduction) and solar heat gain coefficient (SHGC), and is based on Australian Fenestration Rating Council (AFRC 100-2001) conditions. All Viridian glass performance data presented in this guide is assessed under AFRC 100-2001 environmental conditions. Care should be exercised when selecting performance data to ensure that it meets these criteria.

The code also allows for a dual approach to calculating glazing system performance – either by reference to published 'window system' (glass plus frame) data, or by aggregation of the glass performance data and a frame adjustment (for conductance). The performance data presented in this guide is for glass only.

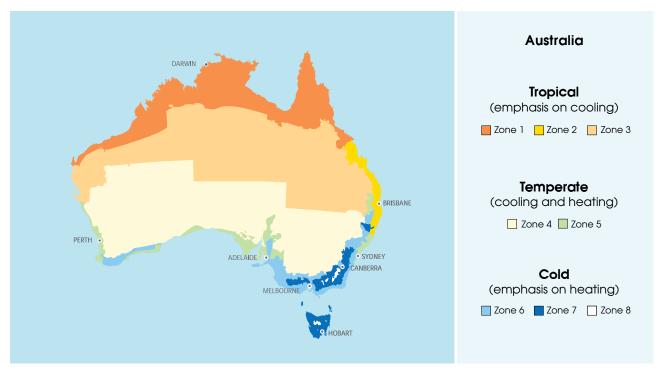
The deem to satisfy provisions of the code are aimed at allowing unlimited mixing of glazing sizes, glass and frame types. Glazing requirements in each climate zone are a function of floor area, conductance and solar radiation of the glazing system, orientation, shading devices and window area. The code recognises high performance glazing through maximising allowable window sizes.

Generally, southern locations will often require products with high performance thermal insulation (lower U Values), while in a northern location, solar radiation (lower SHGC value) will usually be the critical component.

Generally, southern locations will often require products with high performance thermal insulation (lower U Values), while in a northern location, solar radiation (lower SHGC value) will usually be

the critical component. In the more temperate locations, a combination of U Value and or SHGC could be the critical component. Viridian offers a range of products that can meet these various requirements. A simple chart reference indicating the relative performance by product for daylight transmission, thermal insulation (conductance) and solar control is shown in the glass performance data tables.

Climate Zones



The BCA energy efficiency requirements are evolving in stringency and application. The information on glazing requirements has been paraphrased from the ABCB publication.

The National Construction Code (NCC) is now on a three-year update cycle, the latest version of the NCC was released in February 2019 and came into effect in May 2019, except for Section J of the Code which came into effect in May 2020.

The Australian Building Codes Board (ABCB) has worked extensively with industry stakeholders to overhaul the NCC 2019 with the objective being to make it simpler and more flexible to read and use. A copy of the NCC is also freely available as a download from the ABCB website, further workbooks and supporting documents are also available.

The changes are fundamentally designed to encourage a broader use of 'Performance Solutions' methods rather than Deemed to Satisfy (DTS) provisions, one of biggest changes is the withdrawal of the current glazing calculator for use in glazing assessments. Glass, window frames and wall elements play an integral role in the energy efficiency and comfort of a building and these will now be combined and assessed together as a single element.

These changes, along with future increases around energy efficiency, aim to reduce Australia's energy productivity by 40 per cent by 2030.

To better understand these changes please visit the ABCB website www.abcb.gov.au, look out for industry seminars or contact Viridian for further assistance.

The performance data for Viridian glass is derived using the International Glass database and software developed by Lawrence Berkley University. The international standard of measurement used is NFRC 100-2001 conditions. All relevant guidelines of the National Fenestration Council (NFRC) have now been changed to the Technical Protocols and Procedures Manual for the Energy Rating of Fenestration Products by the Australian Fenestration Rating Council (AFRC).

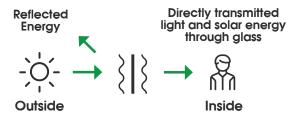
The combination of the SHGC and U Value determines the performance of the glass and its energy contribution. The building structure, glass framing system and orientation will all contribute to determining the overall environmental performance of the facade and the building. It should be noted that performance data presented in this guide is for glass only and a window rating or assessment is required.

Not all manufacturers' data is calculated using NFRC 100-2001 conditions, in particular some countries have different conditions that will impact on the glass performance.



Glass and energy management

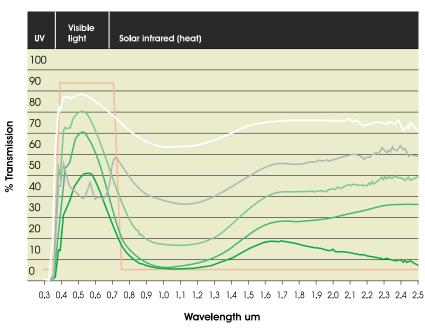
Glass controls solar heat gains through reflection and absorption – the sum of the direct solar heat transmitted and the absorbed heat that is reradiated inside is the total heat transmitted or the SHGC.



The SHGC performance of the example above could be improved by adding a colour tone to the glass or by adding a Low E coating.

The solar energy spectrum and glass

The role of Viridian solar control glass is to minimise infrared light that carries most of the sun's solar energy while maximising visible light. The ideal spectrally selective glass would transmit daylight and eliminate infrared and UV light. The chart below compares some current Viridian products to the theoretical ideal glass.



☐ Clear ☐ Grey ☐ Green ☐ SuperGreen™ ☐ EVantage™ SuperGreen™ ☐ Ideal

How much daylight versus transparency?

For certain applications clear visibility is important, while for others glare control is necessary. The size of the glazed area determines the quantity of daylight, not just the glass daylight transmission percentage. In some cases very low light transmission glass is required.

- For shopfronts, transparency and clarity are paramount. High daylight transmission glass with low internal and external reflectivity should be specified.
- For commercial building facades, there is a trend to maximise transparency and daylight.
 High daylight transmission often results in work spaces that have too much glare. Very low transmission means more artificial lighting.
 Particular care needs to be taken with east and west elevations.
- For night time viewing, the greater the light transmission, the easier it is to see out. Highly reflective solar control coatings are not advised if night viewing is a priority.
 - For large overhead expanses, glass with relatively low daylight transmission results in well balanced, naturally lit spaces. This is particularly so if a screen printed **Seraphic™ Design** is combined with a solar control glass.

Solar control, thermal insulation and energy management

Energy management is a key decision in determining the performance and appearance of building facades. This section outlines the various attributes and performances of Viridian glass.

Products have been grouped by their key application:

- Solar control
- Solar control with Low E
- Thermal insulation

Terminology

To describe the performance of glass, it is important to understand the following attributes.

- Visible light transmittance the percentage of visible light transmitted through the glass.
 The higher the number, the more light. It does not determine the colour of the glass.
- SHGC (solar heat gain coefficient) the proportion of directly transmitted and absorbed solar energy that enters into the building's interior. The lower the number, the better solar control. For example, if the direct solar energy on a hot day is 785 watts/m2 and SuperGreen™ was used with a SHGC of 0.51, then the solar energy reaching indoors is 785 x 0.51 = 400 watts. Approximately half of the sun's heat is eliminated.
- U Value this is the measurement of air-to-air thermal conductance, or insulation between indoors and outdoors, through the glass. The lower the number, the better the insulation. For example, clear glass has a U Value of 5.8 W/m2 °C. If the indoor temperature was 24°C and the external temperature 34°C (a difference of 10°C) then 10°C multiplied

- by the U Value 5.8 equals 58 watts/m2 of heat that would be transferred between the exterior and interior.
- Selectivity Glass selectivity is an index that reports the relationship between visible light transmission and solar heat gain, it is measured as an index (\$ = Vt/g\$) with a high selectivity more preferable in modern building design. High selective glasses, generally above 1.8 offer exceptional performance which provides some of the best energy savings through the lowest conductance (U Values) and best solar control (SHGC), high visible light transmission assists in the requirement for less artificial lighting during daylight hours.
- **What is Low-Emissivity?** Emissivity measures the rate a product emits absorbed heat. The lower the number, the more efficiently the glass reduces heat gain or heat loss, which means a lower U Value and better insulation. For comparison, normal glass has an emissivity of 0.84 and **EnergyTech™** and SolTech™ is 0.17, which means only 17% of heat absorbed is re-emitted. Likewise, if a solar control glass is used, it acts as a barrier to the absorbed heat in the glass, passing to inside the building. For buildings that require passive heat gains, it allows direct solar radiation to pass through the glass and then traps it inside. So in combination with the right selection of solar control glass or thermal insulating glass, energy use will reduce in cost.
- Low E glass These glasses enhance insulation, and provide additional solar control when combined with a solar control glass, in either a single glass, a laminate, and/ or an insulating glass unit.



Low E glass has either a pyrolytic or sputter coating that reduces the emissivity of the glass surface. This means the glass provides greater insulation by reflecting heat. For improved solar control it is also a second line of defence. Heat absorbed by the solar control glass is reflected back out by the Low-Emissivity coating to provide even better solar control. Low E coatings are useful for reducing solar heat gains and also heat loss.

Performance Comparison

To assist in comparing products, Viridian has developed a chart per product or range that shows the key performance selection criteria: VLT, U Value and SHGC (chart below).

Product*	VLT	U Value	SHGC
VFloat™ Clear	88	5.8	0.82
EVantage™ SuperGreen™	49	3.8	0.38

^{*6}mm glass thickness

This example shows a comparison between **VFloat™** Clear and **EVantage™** SuperGreen™.

The full performance data of all products is shown in the performance data table at the back of this guide.

Solar control products

Solar control – Products that mediate solar heat gain

- VFloat™
- SuperTones™

Solar control with Low E – Products that provide high solar control, with the added insulation of a Low E coating

- SmartGlass™
- EnergyTech™
- SolTech™
- EVantage™
- ComfortPlus™
- ComfortHush™

Thermal insulation – Insulating glass units for cold and hot conditions

- ThermoTech™
- Viridian ClimaTech™
- LightBridge™
- LightBridge next™
- PerformaTech™

Thermal breakage

Thermal breakage refers to annealed glass cracking due to a build up of excessive thermal stress from a differential in temperature gradient across the glass. Viridian recommends that a thermal stress analysis be undertaken for all solar

control glazing.

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This is a free service for all trading Viridian customers only. If a glass is unsafe then it will require heat strengthening or toughening. Normal annealed float glass

can resist a temperature differential of 40°C; **DécorPattern™** glass 30°C; heat strengthened glass 180°C and toughened glass 250°C.

There are many factors that affect thermal stress, the higher the solar absorption of the glass, the more risk. Factors such as shading from frame depth or shading devices, the type and colour of the frame, whether or not there is a back up wall or blinds, the colour of the blinds or wall, the distance of the blinds or wall to the glass and whether or not the gap is ventilated, all affect stress. Modification of any of these factors will impact on the thermal breakage of the glass.

High Performance Spacer

Aluminium is used as the standard spacer option across our range of double glazed units. However, in our LightBridge next™ range we offer a thermally optimized hybrid warm edge spacer as standard, and we also now offer the thermally optimized hybrid warm edge spacer as an optional extra for all other IGU's in the Viridian Glass range.

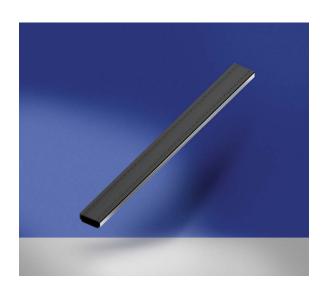
Key benefits:

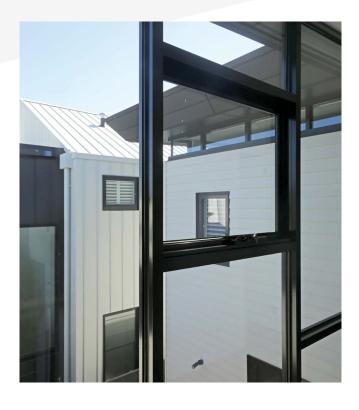
Seamless Look

The matte black finish creates a seamless look inside the double glazed unit. A clean look, where the glass unit blends seamlessly into the window frame.

Sustainability

Our Thermally Optimised Warm Edge Spacer technology is made from sustainable materials.





Better Thermal Quality

This technology creates a better and more durable thermal seal around the double glazed unit, thus reducing moisture penetrating into the space and also preventing filing gases from escaping. This may reduce instance of condensation and create a more efficient thermal barrier when used as part of a high-performance window system.

The thermally optimized hybrid warm edge spacer adds another opportunity for window manufacturers, architects, builders, and homeowners to implement another level of thermal performance to their window systems, creating a more complete level of thermal efficiency to your projects.

Viridian's high performance spacer is proudly supplied by Technoform.





SuperTones™

High performance toned glass for maximum glare and solar heat control

Our SuperTones™ range offers a cost-effective option for when you want to open up your space to natural light and views, without sacrificing on energy efficiency.

All three colour options in the range offer great solar control, reducing your reliance on heating and cooling – saving you on energy bills.

Meanwhile, the sharp optical clarity allows you to enjoy natural light and the view around you.

SuperTones™ glass provide significant improvements in solar performance compared to VFloat™ and VLam™ toned glass. The colours are deeper, however natural views from the interior are maintained with low exterior reflectance. They can be processed and fabricated similarly to normal float glass to provide an economical choice for reducing air-conditioning costs.

SuperGreen™ provides a deep green, crisp appearance with sharp clean external views and low external reflectance. Designed to provide very high daylight transmission (66%) with solar control (SHGC of 0.51). It offers 20% better solar performance than conventional tones, with reduced glare and UV.

SuperGrey™ provides the highest solar control of any uncoated float glass, with solar control (SHGC of 0.35). Its dark grey colour provides privacy from the outside and reduced seethrough. The glass reduces glare with 9% light transmittance making it appropriate for use in skylights.

SuperBlue[™] has a unique blue colour that is cool and distinctive. It provides solar control similar to that of SuperGreen[™], again with high daylight transmission.

Considerations

The high performance toned glass range absorbs a large proportion of solar radiation. Applications must be checked for thermal stress breakage. We recommend that VFloat™ SuperGrey™ be specified and supplied as a heat strengthened or toughened glass in all situations.

Features and Benefits

- Solar control float glass low cost glass without coatings that optimises light transmission and reduces cooling loads.
- Low external and internal reflectance.
- SuperGreen[™] and SuperBlue[™] provides good daylight transmission.
- Low UV transmittance outperforms other tinted products for reduced fading.
 SuperGrey™ eliminates 99% of UV radiation.
- Can be combined with Low E glass in insulating glass units for enhanced performance.

Applications

- Facades
- Windows
- Overhead Glazing

How to Specify

Select glass name

VFloat™, VLam™, EnergyTech™, EVantage™, ThermoTech™ or ThermoTech™ E

Select thickness - process

6mm to 10mm – Annealed 6mm to 10mm – Toughened 6mm to 10mm – Heat Strengthened 11.52mm to 21.52mm – Toughened/Laminate

Select colour
 Refer to chart below

Performance Comparison

Product*	VLT	U Value	SHGC
SuperGreen™	67	5.8	0.53
SuperGrey™	9	5.8	0.36
SuperBlue™	53	5.8	0.52

^{*6}mm glass thickness

Product Range

	Thickness (mm)		
Product	6	10	
SuperGreen™	•		
SuperGrey™	•		
SuperBlue™	*	•	

 $\textbf{SuperTones}^{\intercal M} \text{ is a trademark of Viridian Glass}$





SmartGlass™

Insulated single-glazing – where superior comfort & natural light begins for your home

We know how expensive it can be to keep a family home cool in summer and warm in winter. SmartGlassTM is energy efficient glass designed for the harsh Australian climate.

SmartGlass™ works like the insulation in your walls and ceiling, protecting you from the summer heat and winter chill. But SmartGlass™ doesn't only help you enjoy the view in comfort – it's also available in a range of enhanced security, noise reduction and UV protection options, for a home which offers greater amenity and peace of mind.

SmartGlass™ is a range of single glazed toughenable Low E products offering insulation and a choice of solar protection, with low reflectivity ideally suited to the demands of Australian residential applications. SmartGlass™ provides excellent performance and versatility for single glazed windows.

SmartGlass™ has been selected for Australian climate conditions to assist in achieving energy Star Ratings for home designs, whilst still capturing natural light and views. Manufactured using hardcoat Low E coating for excellent durability and ease of processing and handling.

- Low E insulation with a choice of solar protection performance for residential applications.
- Provides a straight forward energy efficient alternative to ordinary glass.
- Durable pyrolytic Low E coating ideal for single glazing.
- Low reflectivity.
- Once toughened or laminated to the relevant standard SmartGlass™ is a Grade A safety glass (AS/NZ2208).
- Suitable for most standard single glazed window frames.
- Glass must be installed with Viridian product label facing to the exterior.



As you can see in this actual thermal image, **SmartGlass™** reflects heat back into the room, helping keep occupants warm when it's cold outside. Compare this to the ordinary glass window, where heat freely escapes to the outside.

Applications

- Residential Windows
- Residential Doors
 (Residential application only)

How to Specify

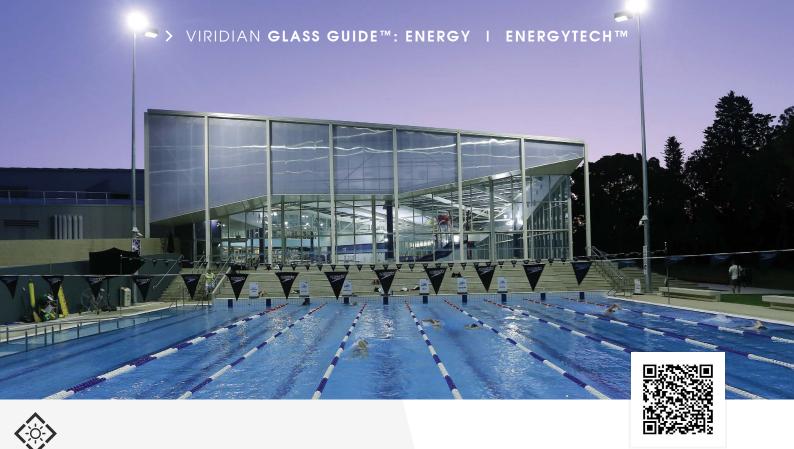
- Select glass name
 SmartGlass™
- Select thickness process
 4mm or 6mm Annealed
 4mm or 6mm Toughened
- Select colour
 Refer to product range chart

Product range

Thickness (mm)				
Product	4	6		
SP10 Clear	•	•		
SP30 Neutral	•	♦		
SP35 Grey	•	•		

Performance Data

Product	Visible trans. %	Visible reflect. % (external)	Visible reflect. % (internal)	Solar trans. %	Solar reflect. %	UV trans. %	U Value (W/m³C)	SHGC
4mm SmartGlass™								
SP10 Clear	83	11	11	68	11	54	3.7	0.72
SP30 Neutral	61	8	10	46	8	44	3.7	0.54
SP35 Grey	50	7	9	45	7	21	3.7	0.54
6mm SmartGlass™								
SP10 Clear	81	11	12	65	10	48	3.6	0.70
SP30 Neutral	63	9	10	45	8	41	3.7	0.54
SP35 Grey	40	6	9	37	7	16	3.7	0.48



EnergyTech™

Insulating glass – the first step in greater thermal control

If you want to bathe your space in natural light but still control the temperature within – then look no further than EnergyTechTM.

Specifically designed for Australian conditions, EnergyTech™'s enhanced solar control keeps buildings cooler in summer and warmer in winter. So you can open your space to natural light without compromising on comfort.

The comprehensive range of **EnergyTech™** Low E products offer improved thermal insulation and a choice of solar control performance with low visible light reflection.

Viridian understands our climate is unlike that of Northern Europe or the United States. That's why we offer a comprehensive choice of Solar Control Low E products to help reduce the extremes of Australia's warmer weather, balanced with opportunities for passive solar heating.

Using the durable pyrolytic hard coat technology enables the durable Low E coating to be single glazed and exposed to the interior of a building to provide improved thermal insulation. The product can also be used as part of a laminated glass or in an insulated glass unit.

The EnergyTech™ Range

EnergyTech™ Low E products offer improved thermal insulation (U Value) to help keep a building warmer in winter and reduced solar heat gain (SHGC) to help keep your building cooler in summer with a choice of solar control performance levels. The range is designed specifically for the Australian climate regions and to help meet energy requirements.

This product complements the **ComfortPlus™** range, it can also be used as part of a bespoke laminated glass solution or as part of an insulated glass unit.

Considerations

Please note the presence of haze may be perceived under certain light conditions (Refer to our website for more information). When single glazed, these products are not designed to prevent surface condensation and their insulating capacity is reduced should this occur. **ThermoTech™** Insulating Glass Units are recommended in these situations. When used in a single glazed application, the coating needs to be exposed to the interior of the building.

Glass must be installed with Viridian product label facing to the exterior.

Key consideration during design is to comply with the energy codes while still maximising visible light transmission (VLT).

How to Specify

- Select glass name
 EnergyTech™
- Select thickness process
 Annealed, toughened, heat strengthened
- Select colour

 Refer to product range below

Features and Benefits

- Durable Low E hard coating bonded to the glass for enhanced thermal insulation by lowering the U Value of the glass.
- A broad range of solar control performance to choose for Australian conditions.
- Low visible light reflectivity to provide good transparency.
- Can be toughened, laminated, curved or used in an insulated glass unit.
- Does not require edge deletion for use in insulated glass units.
- Once toughened or laminated to the relevant standard EnergyTech™ is a Grade A safety glass (AS/NZ2208).

Applications

- Windows
- Doors
- Overhead Glazing
- Facades

Product Range

	Thickness (mm)					
EnergyTech™	4	5	6	8	10	12
Clear	•	•	•	*	•	•
Light Grey			•			
Grey	•		•			
SuperGreen™			♦			

Performance Comparison

		Single Glazing			nsulated Glass Un	its
EnergyTech™	VLT	U Value	SHGC	VLT	U Value	SHGC
Clear	81	3.6	0.70	73	1.6	0.62
Light Grey	57	3.7	0.54	51	1.7	0.45
Grey	40	3.7	0.48	35	1.7	0.39
SuperGreen™	61	3.7	0.41	54	1.6	0.32

^{*6}mm glass thickness





SolTech™

Insulating glass – for a comfortable building with enhanced insulation

SolTech™ provides better insulation and enhanced solar control levels to keep your space comfortable across all seasons by keeping the temperature of your room controlled, lowering your energy consumption and reducing the need for additional heating and cooling.

The **SolTech™** range features a pyrolytic Low Emissivity coating that is fused at extremely high temperature when the glass is being made, producing a durable hard transparent coating on one surface of the glass. Unlike ordinary float glass, the Low E coating provides better insulation and enhanced solar control to help keep a building warmer in winter and cooler in summer.

Available in neutral and grey tones, **SolTech**TM provides good daylighting performance whilst

improving the thermal insulation and reducing the solar heat gain. The products can also be used as part of a laminated glass or in an insulated glass unit for enhanced performance.

The SolTech™ Range

SolTech™ Low E products offer improved thermal insulation (U Value) to help keep a building warmer in winter and reduced solar heat gain (SHGC) to help keep your building cooler in summer with a choice of solar control performances levels. The range is designed specifically for the Australian climate regions and to help meet energy requirements.

Considerations

Please note the presence of haze may be perceived under certain light conditions (refer to our website for more information). When single glazed, these products are not designed to prevent surface condensation and their insulating capacity is reduced should this occur. **ThermoTech™** Insulating Glass Units are recommended in these situations. When used in a single glazed application, the coating needs to be exposed to the interior of building.

Glass must be installed with Viridian product label facing to the exterior.

Features and Benefits

- Low E coating provides enhanced thermal insulation by lowering the U Value of the glass.
- Provides a choice of good visible day lighting to reduce the need for interior lighting.
- Low visible light reflectivity to provide good transparency.
- Can be toughened, laminated, curved or used in an insulated glass unit.
- Does not require edge deletion for use in insulated glass units.
- Once toughened or laminated to the relevant standard SolTech™ is a Grade A safety glass (AS/NZ2208).

Applications

- Windows
- Doors
- Overhead Glazing
- Facades

How to Specify

- Select glass name
 SolTech™
- Select thickness and process
 Annealed, toughened, heat strengthened
- Select colour
 Refer to product range below

Product Range

Thickness (mm)					
SolTech™	4	6	10		
Neutral	*	*	•		
Grey		•			

Performance Comparison

		Single Glazing			Insulated Glass U	nits
SolTech™	VLT	U Value	SHGC	VLT	U Value	SHGC
Neutral	63	3.7	0.54	56	1.6	0.45
Grey	30	3.7	0.37	27	1.6	0.28

^{*6}mm alass thickness





EVantage™

Reflective insulating glass – for thermal control with heat & glare reduction

If you want a comfortable and private space, EVantage™ can deliver just that – and all for a price tag you can afford.

The reflective coating of EVantage $^{\text{TM}}$ delivers greater solar control, keeping your space cooler in summer and warmer and winter.

EVantage™ is a single glass using a Low E coating that provides thermal and solar control enhancement. **EVantage™** is an economical option for project requiring better performance than standard glass. **EVantage™** offers improved thermal insulation (U Value) to help keep a building warmer in winter and reduced solar heat gain (SHGC) to help keep your building cooler in summer with a choice of solar control

performances levels. The range is designed specifically for the Australian climate regions and to help meet energy requirements.

EVantage™ is manufactured by the pyrolytic Low E coating process. In this online chemical vapour deposition process, a gas reacts with the semi molten surface of the float glass to form a reflective coating on Clear or Toned substrates. The result is a product that combines solar and thermal performance, subtle reflectivity and glare control. The base colour of the glass whether Clear, Grey, Bronze, BlueGreen SuperGreen™ or SuperBlue™ is maintained with a significant boost to solar and thermal characteristics through the proprietary of the Low E coating.

EVantage™ can also be used as part of a laminated glass or in an a **ThermoTech™** insulated glazed unit for even better performance.

Considerations

The **EVantage™** Low E coating provides thermal and solar control enhancements. The placement of air-conditioning vents adjacent to and directed on the internal glass surface coating, may reduce the performance of **EVantage™** when used in a single glazed applications.

Glass must be installed with Viridian product label facing to the exterior.

Features and Benefits

- Good solar control.
- Good light transmission.
- Reduce UV transmittance.
- Reduce Glare.
- Can be cut and processed or combined into a double glazed unit (ThermoTech™) for enhanced performance.
- Neutral light transmittance maintains toned glass colour and clarity.
- 10 year Warranty from date of manufacture.

Applications

- Windows
- Doors
- Overhead Glazing
- Facades

How to Specify

- Select glass name
 EVantage™
- Select thickness and process

6mm – Annealed 6mm – Toughened 6mm – Heat Strengthened 11.52mm to 17.52mm – Toughened/ Laminate

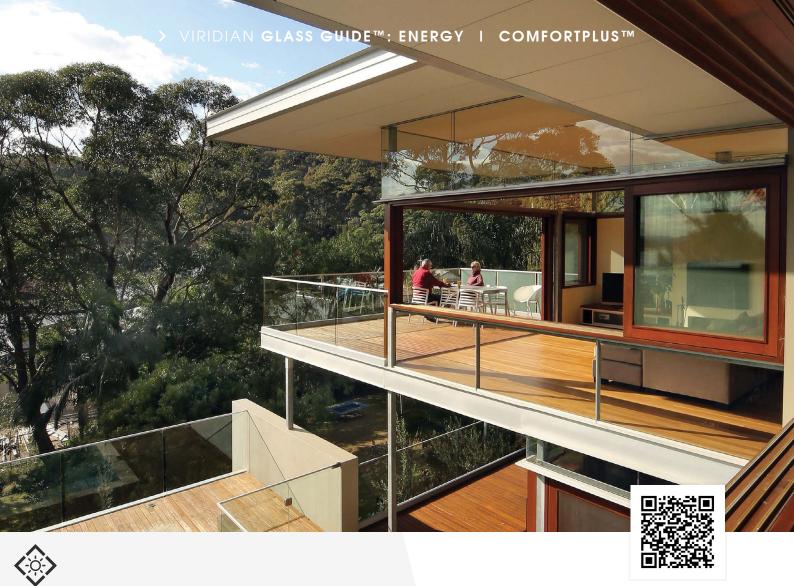
Select colour

Refer to performance chart below

Performance Comparison

EVantage™	VLT	U Value	SHGC
Clear	68	3.8	0.63
Bronze	38	3.8	0.46
Grey	32	3.8	0.42
SuperGreen™	49	3.8	0.38
SuperBlue™	39	3.8	0.37
BlueGreen	56	3.8	0.46

^{*6}mm glass thickness



ComfortPlus™

Laminated insulating glass in a range of tones – creating a sanctuary from the elements

Whatever the weather outside, you should be able to enjoy the view without feeling the summer heat or winter chill.

The **ComfortPlus™** range of laminated glass has been developed to meet objectives of transparency and high performance solar control with low reflection. It incorporates a solar control component that in summer reduces the sun's heating, glare and UV fading of interior furnishings. In winter, the **ComfortPlus™** coating

provides thermal insulation and reduces heat loss through the glass by 40% when compared to standard glass, without heavy tinting or reflective mirror-like coatings that reduce natural light.

Where acoustic comfort is required consider **ComfortHush™**. Our **ComfortHush™** range contains a Low E coating as well as a specially formulated acoustic interlayer.

Glass must be installed with Viridian product label facing to the exterior.

- ComfortPlus™ is available in Clear, Neutral, Bronze, Grey, Light Grey, Green or Translucent.
- Summer and winter performance through the unique combination of solar control glass and coating.
- High daylight transmission up to 76%.
- Solar control up to 70% of solar heat transmission is eliminated.
- Thermal insulation a 40% improvement in U Value over standard glass means less heat is transmitted.
- Reduces UV radiation by 99% reducing fading up to 8.5 times over normal glass.
- ComfortPlus™ is a laminated Grade A safety glass (AS/NZ2208).
- The interlayer in ComfortPlus[™] reduces voice noise by 13% and traffic noise by 24% when compared to standard 3mm glass.
- Thicker interlayers are available for increased resistance to physical attack.
- ComfortPlus™ Translucent addresses the concerns for privacy of homeowners, providing a solution for overlooking.

Applications

- Windows
- Doors
- Facades
- Overhead Glazing

How to Specify

- Select glass name ComfortPlus™
- Select thickness process
 6.38mm to 12.38mm Laminated
 9.52mm to 21.52mm Toughened/Laminate
- Select colour
 Refer to product range chart below

Performance Comparison

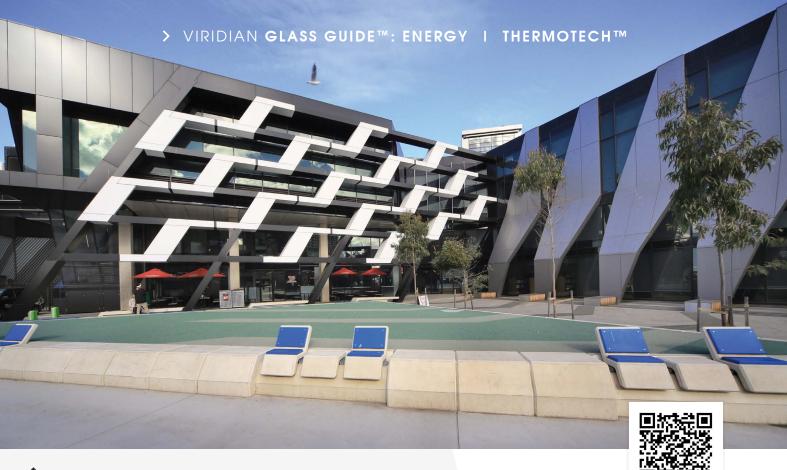
ComfortPlus™	VLT	U Value	SHGC
Clear	82	3.6	0.69
Green	71	3.6	0.51
Neutral	59	3.6	0.52
Light Grey	54	3.6	0.56
Bronze	49	3.6	0.53
Grey	39	3.6	0.50
Translucent	63	3.6	0.59

^{*6.38}mm glass thickness

Product Range

		Thickness (mm)				
ComfortPlus™	6.38	8.38	10.38	12.38		
Clear	*	*	♦	♦		
Green	*		♦			
Neutral	*	•	•	•		
Light Grey	*		♦			
Bronze	*		•			
Grey	*	•	*	*		
Translucent	*		*			

^{*}Note: Colour variation may be apparent in differing thicknesses. Thermal assessment may be required for ComfortPlus™





ThermoTech™

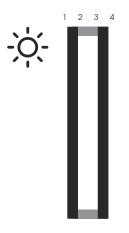
Double glazing – for enhanced comfort and design flexibility

Today's building regulations call for adhering to strict energy efficiency requirements. But this doesn't need to restrict the comfort of your space. The ThermoTech™ range offers plenty of glass combinations and spacer options within double glazed units – helping you create the perfect product to keep your space comfortable and energy efficient.

Suitable for hot and cold climates, products in the ThermoTech™ range are capable of keeping your space naturally lit without increasing your energy consumption or power bills.

ThermoTech™ is a range of sealed double glazed units that offers improved insulation.

ThermoTech™ uses 2 pieces of ordinary or laminated glass separated by a spacer and sealed together. ThermoTech™ will integrate products such as VFloat™, VLam™, SuperTones™, VLam™ Hush or DécorColour™ in the unit.



Considerations

- Glazing compounds, sealants and gaskets need to be approved by Viridian for suitability.
- Frame design the Viridian Warranty relies on frame design in accordance with AS/4666. Do not expose ThermoTech™ edges to standing water and moisture as this can result in seal failure. The frames must incorporate impervious weather seals or an efficient self-draining system.
- Wind load and safety determine the type and thickness of glass required – refer Australian Standard AS1288 or New Zealand Standard N7S4223.
- Refer to the Viridian website for specification and installation information, including distortion and reflection from changes in exterior and interior pressure and temperature.
- Special handling is required. When transporting and installing at altitudes of 800m and above, special requirements apply. This must be brought to the attention of Viridian.
- Units must be installed with Viridian product label facing to the exterior.

Features and Benefits

- Increased insulation and reduced energy cost.
- Suitable for hot and cold climates.
- Can be incorporated with a Low E coated product for additional insulation.
- Reduced condensation.
- Argon gas as standard.
- Available with aluminium spacer as standard, this product can be supplied with a warm edge thermal spacer at additional cost.

Applications

- Windows
- Facades
- Overhead glazing
- Curtain wall
- Spandrels

Maximum Size

Maximum Size: 4900mm x 2600mm*
 *subject to glass type and material thickness

How to Specify

- Select glass name ThermoTech™
- Select product make-up
 Refer to performance comparison table for

glass options e.g. 6mm **VFloat™** Clear + 12 + 6mm Clear

Select colour

Subject to product make-up – Refer to performance comparison table

Select spacer type

Aluminium spacer supplied as standard

Performance Comparison

ThermoTech™ make-up	VLT	U Value	SHGC
6mm Clear + 12mm Argon + 6mm Clear	78	2.5	0.71
6mm Grey + 12mm Argon + 6mm Clear	37	2.5	0.45
6mm SuperGreen™ + 12mm Argon + 6mm Clear	59	2.5	0.40

ThermoTech™ is a trademark of Viridian Glass





Viridian ClimaTech™

Entry level performance double glazing – for added comfort.

Viridian ClimaTech™ offers quality entry level double glazing for spaces which require additional insulation.

The built environment is demanding more thermally efficient building envelopes, and it is becoming more challenging to achieve local regulations with standard single glazing.

Suitable for hot and cold climates, Viridian ClimaTech™ provides increased thermal performance in residential and commercial window applications.

Viridian ClimaTech™ is a limited range of clear or toned double glazed units for applications which require a better performing window glass.

Viridian ClimaTech™ uses two pieces of glass, one coated with a spectrally controlled Low E coating and the other an ordinary clear or toned glass. Viridian ClimaTech™ is supplied in either heat strengthened or toughened only glass, which is separated by an aluminium spacer and sealed together using argon gas.

The product is available in 4mm, 5mm or 6mm clear options, and 6mm additional toned options for ease of choice and selection.

Considerations

- Glazing compounds, sealants and gaskets need to be approved by Viridian for suitability.
- Frame design the Viridian Warranty relies on frame design in accordance with AS/4666.
- Do not expose Viridian ClimaTech™ edges to standing water and moisture as this can result in seal failure. The frames must incorporate impervious weather seals or an efficient selfdraining system.
- Wind load and safety determine the type and thickness of glass required – refer Australian Standard AS1288 or New Zealand Standard N7S4223.
- Special handling is required. When transporting and installing at altitudes of 800m and above, special requirements apply. This must be brought to the attention of Viridian.
- For higher thermal performance, and other additional benefits like acoustic or privacy consider upgrading to the PerformaTech™ or LightBridge next™ products.
- Thermal assessment may be required for lower SHGC variants.
- Units must be installed with Viridian product label facing to the exterior.

- Increased insulation and reduced energy cost.
- Suitable for hot and cold climates.
- Argon gas as standard.
- Covered by Viridian Glass Warranty.
- Available with aluminium spacer as standard, this product can be supplied with a warm edge thermal spacer at additional cost.
- Can be ordered with DécorSatin[™] or DécorPattern[™] for privacy requirements.

Applications

 Commercial and Residential Windows and Doors

Size Limits

- Minimum Size*: 350mm x 250mm
- Maximum Size*: 4500mm x 2700mm

How to Specify

- Select glass name
 Viridian ClimaTech™
- Select limiting tone

Colours: Clear, Light Grey*, Grey*, Bronze*, Green*, SuperBlue™*, SuperGreen™*
*6mm only

- Select thickness 4mm, 5mm, 6mm
- Select spacer width 8mm to 20mm
- Select spacer type
 Aluminium spacer supplied as standard.
- Available in toughened only.

Product Range

- Residential
 - 4mm and 5mm available in Clear only. 6mm available in Clear, Light Grey and Grey Tones.
- Commercial

6mm available in Clear, Light Grey, Grey, Bronze, Green, SuperBlue™ and SuperGreen™ Tones.

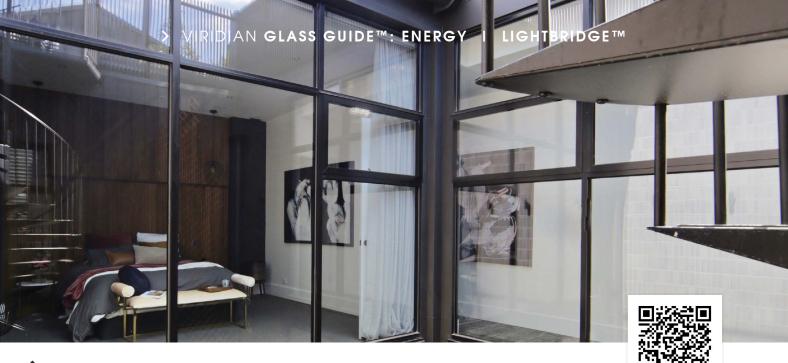
 Available with aluminium spacer as standard.

Performance Comparison

Outside Glass	Inside Glass	Nominal Thickness (mm)	VLT	U Value	SHGC	Application Suitability
4mm VFloat™ Clear	4mm Viridian ClimaTech™	4+12+4	77	1.5	0.64	Residential
5mm VFloat™ Clear	5mm Viridian ClimaTech™	5+12+5	75	1.5	0.61	Residential
6mm VFloat™ Clear	6mm Viridian ClimaTech™	6+12+6	74	1.5	0.60	Residential
6mm VFloat™ Light Grey	5mm Viridian ClimaTech™	6+12+5	53	1.5	0.45	Residential
6mm VFloat™ Grey	5mm Viridian ClimaTech™	6+12+5	35	1.5	0.35	Residential
6mm ClimaTech™	6mm VFloat™ Clear	6+12+6	74	1.5	0.54	Commercial
6mm VFloat™ Light Grey	6mm Viridian ClimaTech™	6+12+6	53	1.5	0.45	Commercial
6mm VFloat™ Grey	6mm Viridian ClimaTech™	6+12+6	35	1.5	0.35	Commercial
6mm VFloat™ Bronze	6mm Viridian ClimaTech™	6+12+6	43	1.5	0.42	Commercial
6mm VFloat™ Green	6mm Viridian ClimaTech™	6+12+6	63	1.5	0.40	Commercial
6mm VFloat™ SuperGreen™	6mm Viridian ClimaTech™	6+12+6	56	1.5	0.33	Commercial
6mm VFloat™ SuperBlue™	6mm Viridian ClimaTech™	6+12+6	44	1.5	0.32	Commercial

 $\textbf{Viridian ClimaTech}^{\text{TM}} \text{ is a trademark of Viridian Glass}$

^{**}The maximum unit area permissible under AS1288 needs to be taken into consideration too. Sizes outside of these limits may be available as a special order on request **





LightBridge™

LightBridge™ high performance double glazing – for the ultimate comfort & natural light in your home

Natural light is the key ingredient for making a comfortable and healthy home. That's why we designed our award-winning LightBridge $^{\text{TM}}$ range, so you can bathe in natural light and reconnect with your surroundings.

LightBridge[™] double glazing units curb the flow of heat in and out of your home to an unparalleled degree. This allows you to have expansive glazing whilst still achieving an energy efficient home.

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

LightBridge™ double glazed 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 makeup of **LightBridge™** is 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.

Considerations

- Selected glass types available in limiting glass thickness of 4mm, 5mm, 6mm or 8mm, which are available in annealed or toughened.
- Square and rectangle shapes only.

- 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 being seen into by neighbours or passers-by.
- For added acoustic performance, consider upgrading to LightBridge next™.
- Units must be installed with Viridian product label facing to the exterior.

- Exceptionally low U Value (high insulation factor) for a residential glazing product.
- Balance of high light transmission with midrange solar control.
- Fully supported by the Viridian product Warranty Program.
- All components locally stocked, and units locally manufactured for short lead times and reliable supply.
- Five standard colour / privacy combinations are available: Clear, Light Grey, Grey,
 DécorSatin™ and DécorSatin™ Grey.

 Available with aluminium spacer as standard, this product can be supplied with a warm edge thermal spacer at additional cost.

Applications

- Residential Windows
- Residential Doors

(Residential application only)

Size limits

- Minimum size* 350mm x 250mm
- Maximum size* 4500mm x 2700mm
- Maximum unit sizes will vary subject to final application, glass type and material thickness.

How to Specify

- Select glass name LightBridge™
- Select limiting colour and translucency Colours: Clear, Light Grey, Grey, DécorSatin™, DécorSatin™ Grey
- Select thickness process
 4mm, 5mm, 6mm or 8mm annealed or toughened
- Select spacer width 8mm to 20mm
- Select spacer type
 Aluminium spacer supplied as standard.

Performance Comparison

LightBridge™	VLT	U Value	SHGC
Clear	78	1.4	0.55
Light Grey	56	1.4	0.43
Grey	37	1.4	0.32
DécorSatin™	78	1.4	0.55
DécorSatin™ Grey	37	1.4	0.33

*6+6mm glass thickness

LightBridge™ is a trademark of Viridian Glass

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



LightBridge next™

LightBridge next™ superior performance double glazing – for access to natural light, and ultimate thermal and acoustic comfort in your home.

The way Australians build is changing. There is growing demand for sustainability and amenity more than ever before. This is why we created the next evolution of our LightBridge $^{\text{TM}}$ double glazing product, LightBridge next $^{\text{TM}}$.

LightBridge next™ double glazed units control the flow of heat in and out of your home. The thermally efficient spacer technology and addition of an acoustic performance interlayer brings performance to the next level. Allowing you to have larger spans of seamless glazing for optimal natural light, without compromising on thermal or noise comfort.

LightBridge next™ has improved thermal edge performance due to its non-conductive spacer that outperforms traditional materials. This spacer minimises energy loss and there is also a greater reduction in the potential for condensation to form at the edge. When it comes to building sustainable windows, **LightBridge next™** offers enhanced thermal performance whilst being aesthetically pleasing and offering the same width options between 8 and 24mm.

LightBridge next™ contains a specially formulated glass to dampen noise, providing enhanced sound insulation performance.

Lightbridge next™ offers improved acoustic performance by reducing outside sound by 29% in comparison to ordinary 4mm LightBridge™.

LightBridge next™ has been tested to Grade A safety glass standards and offers high UV protection, reducing the rate of fading for furnishes and finishes.

Considerations

- The limiting glass thickness is 4mm, 5mm, 6mm or 8mm.
- Available in simple shapes. Complex shapes on application.
- The width of the spacer and the glass type selected will influence the U Value achieved.
- Grey and Light Grey variants should be considered for windows in hot climates, sun-exposed elevations, and applications subject to high glare. Thermal assessment recommended.
- Thermal assessment may be required for lower SHGC variants.
- Units must be installed with Viridian product label facing to the exterior.

- Includes a warm edge non-conductive spacer as standard, this spacer outperforms traditional materials minimising energy loss and finished in matte black for a seamless look.
- The non-conductive spacer leads to greater reduction in condensation forming at the edge.
- Contains a specially formulated glass to dampen noise, providing enhanced sound insulation performance.
- High UV protection, reducing the rate of fading for furnishing and finishes.
- Exceptionally low U Value (high insulation factor) for a residential glazing product.
- Balance of high light transmission with superior solar control.
- Tested to Grade A safety standards.
- Resists penetration from accidental or deliberate impact if glass is broken.⁺
- Fully supported by the Viridian product Warranty Program.
- All components locally stocked, and units locally manufactured for short lead times and reliable supply.
- Standard tones available are Clear, Light Grey and Grey.

 DécorSatin™ privacy option as standard, other privacy options available on application. Outside glass only.

Applications

Residential windows and doors

Size Limits

- Minimum size* 350mm x 250mm
- Maximum size* 4500mm x 2700mm.
- Maximum unit sizes will vary subject to final application, glass type and material thickness.
 - * Sizes outside of these limits may be available as a special order, on request.

How to Specify

- Select glass name
 LightBridge next™
- Select limiting colour
 Clear, Light Grey or Grey
- Select thickness process 4mm, 5mm, 6mm or 8mm toughened. Annealed only offered in 4mm options.
- Select spacer width 8mm to 24mm.

Performance Data

Glass Type	VLT	U Value	SHGC	RW		
LightBridge next™ Clear						
4mm	79	1.4	0.54	36		
5mm	79	1.4	0.54	37		
6mm	78	1.4	0.54	38		
8mm	78	1.4	0.54	41		
LightBridge next™ Light Grey						
4mm	53	1.4	0.41	36		
5mm	53	1.4	0.41	37		
6mm	52	1.4	0.41	38		
8mm	52	1.4	0.41	41		
LightBridge next™ Grey						
4mm	38	1.4	0.35	36		
5mm	38	1.4	0.35	37		
6mm	38	1.4	0.35	38		
8mm	37	1.4	0.35	41		

LightBridge next™ is a trademark of Viridian Glass

⁺ Outer glass only



PerformaTech™

High performance double glazing – for top-tier thermal performance & light transmission

We believe that light and comfort should go hand-in-hand. That's why we created PerformaTech™ – giving you the opportunity to design beautiful, affordable and sustainable buildings.

PerformaTech™ balances high levels of light transmission with very low levels of solar heat gain to provide you with a brighter and more comfortable space.

The **PerformaTech™** range uses a high performance coating that restricts UV and infrared radiation from passing through but importantly provides exceptional levels of natural appearance.

The high levels of performance associated with **PerformaTech™**, affords the opportunity to create economically viable, aesthetically pleasing and environmentally sustainable buildings. This in turn enables the increasingly stringent demands of regulatory requirements and prospective owners or tenants to be easily met.

Available only as part of an insulating glass unit (IGU). **PerformaTech™** is available in either heat strengthened or toughened form. Our standard range includes 8 products. However, any performance characteristics can be matched using **PerformaTech™**.

Units must be installed with Viridian product label facing to the exterior.

- Exceptional balance of high light transmission, low solar heat gain and low U Values.
- Fully supported by the Viridian product Warranty Program.
- Local range of product combinations.
- Available only as part of an insulating glass unit (IGU) for maximum performance.
- Available with aluminium spacer as standard, this product can be supplied with a warm edge thermal spacer at additional cost.

Applications

- Windows
- Facades
- Overhead glazing
- Curtain wall

Maximum Size

- 4500mm x 2700mm
 - * Subject to glass type and material thickness

How to Specify

- Select glass name
 Refer to performance comparison table
- Select thickness process 6+12+6 IGU
- Select spacer type

 Available with aluminium spacer as standard

Performance Comparison

Outside Glass	Inside Glass	Nominal Thickness	VLT	U Value	SHGC
PerformaTech™ PH08	VFloat™ Clear	6+12+6	68	1.3	0.33
PerformaTech™ PH20	VFloat™ Clear	6+12+6	46	1.3	0.19
PerformaTech™ PH25	VFloat™ Clear	6+12+6	59	1.3	0.25
PerformaTech™ PH30	VFloat™ Clear	6+12+6	68	1.3	0.29
VFloat™ Light Grey	PerformaTech™ PH30	6+12+6	47	1.3	0.29
VFloat™ Grey	PerformaTech™ PH30	6+12+6	32	1.3	0.23
VFloat™ Green	PerformaTech™ PH30	6+12+6	58	1.3	0.31
VFloat™ Bronze	PerformaTech™ PH30	6+12+6	39	1.3	0.26

PerformaTech™ is a trademark of Viridian Glass





VistaTech™

Ultimate performance triple glazing – for optimal thermal performance & light transmission

For the ultimate glass experience, VistaTech™ is the latest trend of glass technology in Australia, designed to provide optimal thermal performance and natural acoustics compared to standard glazing.

With increased demand for better insulated products and the rise of sustainable building measures, **VistaTech™** triple glazed units provide unwavering performance benefits that align with the passive house movement and 7 Star building standards in Australia.

Increased Comfort

The three-pane technology is five times more efficient than double glazed units, providing the most thermally efficient residential window and door systems currently available in Australia.

Natural Acoustics

Triple glazed makeups provide an acoustic solution without the use of interlayers, creating a natural sound barrier that not only maintains comfort levels felt within but keeps unwanted noise out.

Safety and Protection

VistaTech™ triple glazing has an added layer of

protection to assist in the prevention of unwanted intruder entry, ensuring your home is secure.

Considerations

- Suitability of glazing compounds, sealants and gaskets need to be approved by Viridian
- The Viridian Warranty relies on frame design in accordance with AS2047
- Perimeter seals must be concealed inside glazing rebates and not exposed to radiant ultra violet light or extended exposure to natural sunlight
- Do not store units externally or expose to prolonged moisture prior to installation into window frames
- Do not expose VistaTech™ edges to standing water and moisture as this can result in seal failure
- The frames must incorporate impervious weather seals or an efficient self-draining system
- Wind load and safety determine the type and thickness of glass required, refer AS1288 or AS1170.1
- When transporting and/or installing at altitudes of 800m and above, special air pressure equalisation requirements may apply and must be brought to the attention of Viridian

- Superior insulation with the inclusion of a soft coat Low E coating
- Allows you to better manage window to wall ratio to balance thermal and daylight requirements
- A range of toned options available to meet aesthetic requirements
- Can be customised to support design or additional acoustic requirements
- Very high performance available in clear options
- Processed in Australia
- 10 year Warranty from date of manufacture

Applications

- Residential windows and doors*
 *Specifically suited to thermally broken aluminium, uPVC and timber systems
- Façade
- Office buildings
- Health

Performance Comparison

Size Limits

- Minimum Size*: 600mm x 400mm
 *Minimum size charge of 1m2
- Maximum Size**: 5000mm x 3100mm
 **Subject to component, spacer and weight limitations
- The maximum unit area permissible under AS1288 needs to be considered.

How to Specify

- Select glass name
 VistaTechTM or VistaTechTM XP
- Annealed tones available Clear
- Toughened tones available Clear, Green, Grey, Light Grey
- Thicknesses available 4mm, 5mm, 6mm, 8mm
- **Spacer width available** 10mm to 20mm
 - Available as Warm Edge Tri Seal Spacer only
 - Spacer types can only be supplied in equal thicknesses per unit
 - Maximum unit width must equal 60mm
- Low E glass types available as toughened only
- Other glass types available upon request
- **Shapes available -** Simple square and rectangular, complex shapes on application
- VistaTech™ can be incorporated with other products from our Energy, Safety and Security ranges for further benefits

Product Name	Outside Glass	Centre Glass	Inside Glass	Nominal Thickness (mm)	VLT	U Value	SHGC
VistaTech™ Ultimate Performance							
VistaTech™ Clear	VFloat™ Clear	LightBridge™	VFloat™ Clear	4+12Ar+4+12Ar+4	73	1.07	0.53
VistaTech™ Green	VFloat™ Green	LightBridge™	VFloat™ Clear	5+12Ar+4+12Ar+4	64	1.07	0.37
VistaTech™ Grey	VFloat™ Grey	LightBridge™	VFloat™ Clear	5+12Ar+4+12Ar+4	38	1.07	0.32
VistaTech™ Light Grey	VFloat™ Light Grey	LightBridge™	VFloat™ Clear	5+12Ar+4+12Ar+4	55	1.07	0.40
VistaTech™ PH08	PerformaTech™ PH08	VFloat™ Clear	VFloat™ Clear	6+12Ar+4+12Ar+4	64	1.02	0.30
VistaTech™ PH30	PerformaTech™ PH30	VFloat™ Clear	VFloat™ Clear	6+12Ar+4+12Ar+4	64	1.03	0.27
VistaTech XP™ Xtreme	Performance						
VistaTech™ Clear	VFloat™ Clear	LightBridge™	LightBridge™	4+12Ar+4+12Ar+4	72	0.74	0.50
VistaTech™ Green	VFloat™ Green	LightBridge™	LightBridge™	5+12Ar+4+12Ar+4	63	0.74	0.35
VistaTech™ Grey	VFloat™ Grey	LightBridge™	LightBridge™	5+12Ar+4+12Ar+4	38	0.74	0.28
VistaTech™ Light Grey	VFloat™ Light Grey	LightBridge™	LightBridge™	5+12Ar+4+12Ar+4	54	0.74	0.36
VistaTech™ PH08	PerformaTech™ PH08	LightBridge™	VFloat™ Clear	6+12Ar+4+12Ar+4	62	0.71	0.29
VistaTech™ PH30	PerformaTech™ PH30	LightBridge™	VFloat™ Clear	6+12Ar+4+12Ar+4	62	0.71	0.29

VistaTech™ is a trademark of Viridian Glass



