



Energy

EnergyTech™
SolTech™

Viridian EnergyTech™ and SolTech™ Low E

The foundation for better insulation and solar control

The comprehensive range of Viridian **EnergyTech™** and Viridian **SolTech™** Low E products offer improved thermal insulation and a choice of solar control performance with low visible light reflection. The range is designed for Australian climate regions and to help meet energy requirements. Being a local manufacturer, 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.

Our range has been expanded to include a choice of performance and colours, including greys, greens, neutral and clear to satisfy different designs objectives. Using the durable pyrolytic hard coat technology enables the Low E coating to be single glazed and exposed to the interior of a building to provide improved thermal insulation. The products can also be used as part of a laminated glass or in an insulated glass unit.

Description

The Viridian SolTech and EnergyTech range feature 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. The application of the SolTech and EnergyTech Low Emissivity coating to the glass improves their thermal insulation (U-Value) and also further reduces the solar heat gain (SHGC) by inhibiting inward transmission of the solar energy absorbed by the glass, whilst still providing good daylighting performance.

The range also offers low internal and external visible reflectivity, typically desirable in residential buildings and commercial buildings when transparency is valued. If higher visible light reflectivity is desired then the Viridian EVantage pyrolytic Low E products offers a range of choices.

Considerations

Please note the presence of haze may be perceived under certain light conditions. When single glazed these products are not designed to prevent surface condensation and their insulating capacity is reduced should this occur. Viridian ThermoTech Insulating Glass Units are recommended in these situations.



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Performance Comparison Chart

The comparison illustrates the performance of the product range in relation to:

- Insulation – the product's U-Value
- Solar Control – the product's solar heat gain coefficient
- Daylight – visible light transmission as a percentage

The chart helps to show the breadth of the range, with products that offer passive solar heating in cooler climates; a balance of solar control and insulation in mixed climates or higher solar control for hotter climates and demanding orientations.

For example EnergyTech Clear, which has the lowest solar control (highest SHGC), is designed



to assist with passive solar heating by enabling the sun's warmth to enter a building, capturing it inside and then reducing heat loss. In contrast SolTech Grey which has a low SHGC is designed to reduce solar gain by providing the highest solar control of the range. The range of products whilst providing improved insulation and a choice of solar control, continue to offer good daylight transmission to encourage natural lighting of buildings.

Features & Benefits

Thermal insulation: Low E coating provides enhanced thermal insulation by lowering the U Value of the glass

Solar Control: A broad range of solar control performance to choose from for Australian conditions

Daylighting: Provides a choice of good visible day lighting to reduce the need for interior lighting

Low Visible Reflectivity: Low visible light reflectivity to provide good transparency

Pyrolytic coating: Durable hard coating bonded to the glass to provide excellent shelf life and can be used single glazed with the coating exposed to the interior of building

Easy processing: Can be toughened, laminated, curved or used in an insulated glass unit

No edge deletion: Does not require edge deletion for use in insulated glass units

Applications

- ◆ Single glazing
- ◆ Can be laminated
- ◆ Used in IGU's to enhance performance
- ◆ Residential & commercial buildings
- ◆ Retrofit glazing

Maximum size

EnergyTech SuperClear	5180x3302mm
EnergyTech Clear	5100 x 3210mm
EnergyTech Green	5100 x 3210mm
EnergyTech Grey	5100 x 3210mm
EnergyTech SuperGreen	5100 x3210mm
SolTech Neutral	5180 x 3302mm
SolTech Grey	5100 x 3210mm

How to specify

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

Product	Single Glazing			Insulated Glass Units		
	Insulation	Solar	Daylight	Insulation	Solar	Daylight
EnergyTech SuperClear	3.7	0.78	84	1.6	0.68	74
EnergyTech Clear	3.6	0.69	81	1.6	0.61	73
SolTech Neutral	3.7	0.53	63	1.6	0.45	56
EnergyTech Green	3.7	0.49	71	1.6	0.41	63
EnergyTech Grey	3.7	0.47	40	1.7	0.39	35
EnergyTech SuperGreen	3.7	0.40	60	1.6	0.32	54
SolTech Grey	3.7	0.36	30	1.6	0.28	27

Performance data is for glass only and not suitable for NCC Section J calculations. Data compares performance of 6mm thickness for single glazed and IGU's are argon gas filled with 12mm width.

The bar chart diagram is for indication only, for performance data please refer to the glass performance data tables at the end of this document.

Product	Thickness (mm)					
	3	4	5	6	8	10 12.4
EnergyTech SuperClear				◆		
EnergyTech Clear	◆	◆	◆	◆	◆	◆
EnergyTech Green				◆		
EnergyTech Grey		◆		◆		
EnergyTech SuperGreen				◆		
SolTech Neutral	◆	◆		◆		◆
SolTech Grey				◆		