



Knowledge

- ◆ **Daylight** – is the product's visible light transmission as a percentage.
- ◆ **Solar** – is the solar heat gain coefficient (SHGC). The lower the number, the better the performance.
- ◆ **Insulation** – is the product's U Value. The lower the number the better performance.

How to use these tables

Performance comparison chart

To assist with selecting Viridian products we have developed a performance comparison arranged into three tables:

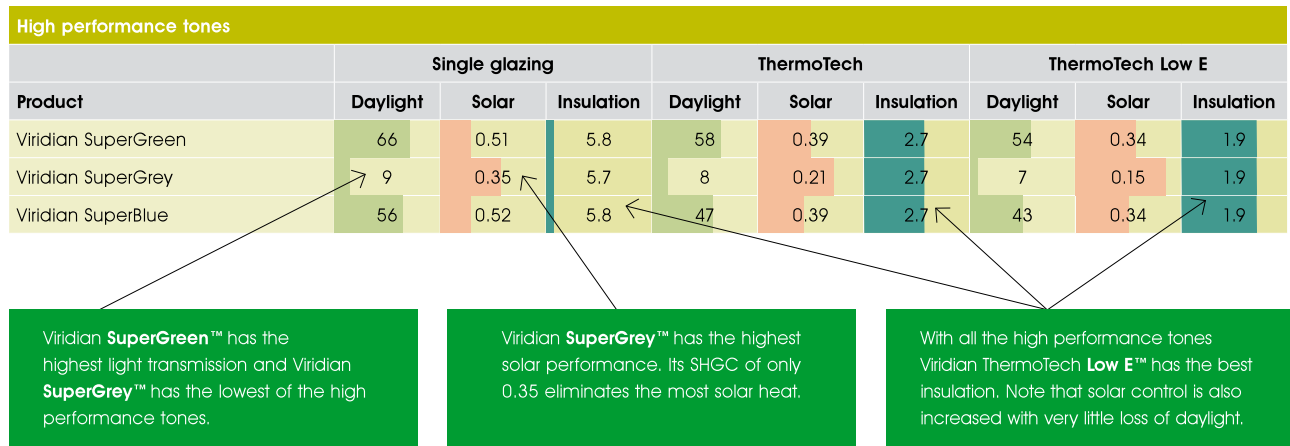
- ◆ Viridian single glazing
- ◆ ThermoTech
- ◆ ThermoTech + Low E

These have been divided into three categories that shows by coloured bars the product's performance in relation to:

- ◆ Daylight transmission
- ◆ Solar control
- ◆ Insulation

These characteristics, along with colour and reflectivity, are the key performance attributes. Additional functions such as safety, security and noise attenuation can also be added to all glass types.

The number in the bar is the actual performance.



Explanation of performance data tables

The following chart is an extract from the performance data table. The information is for the standard stock items in the Viridian Australia range. Not all manufactured or custom options have been included.

Product Name	Nominal Thickness	Visible		Solar		UV Trans.	U Value		Shading Co.	SHGC	Max Size*	Weight m ²
		Trans.	Refl.	Trans.	Refl.		Air	Argon				
SuperBlue	6+12+6	47	8	27	6	17	2.7	2.5	0.46	0.39	4500 x 2700	30
	1	2	3	4	5	6	7	8	9	10	11	

Note Data is based on laboratory spectrophotometric measurements and reduced using Windows software for NFRC 100–2001 conditions, which is the internationally recognised method for describing glass performance. The data is glass only and care should be exercised when evaluating manufacturer's published data that the same environmental conditions have been used.

- Product name** – refer to product for more information. Where (#2) appears, this identifies the glass' coated surface that is glazed to the inside of a building or the inside of a ThermoTech unit.
- Nominal thickness** – the glass thickness or the makeup of a ThermoTech unit. The first number is the outer glass thickness, +12mm gap, then the thickness of the inner panel of the unit. Thickness tolerances are:
3-6mm (±0.2mm) 8-12mm (±0.3mm)
15mm (±0.5mm) 19mm (±1.0mm)
- Visible light transmission** – percentage of visible light passing directly through the glass. The wave length range for visible light is 380 to 780nm. The higher the percentage the more daylight.
- Visible light reflection** – percentage of visible light reflected toward the exterior.
- Solar transmission** – percentage of normally incident visible light and solar energy passing directly through the glazing. The wave lengths measured for solar energy is 300 to 2500nm.
- Solar reflection** – percentage of normally incident visible light and solar energy reflected toward the exterior.
- UV transmission** – the percentage of UV light transmitted measured in the light range of 300–380nm. The lower the number the better .
- U Value** – measurement unit is watts per m² per degree celcius (W/m²°C) and is a measure of the rate of heat gain or loss through glazing due to environmental differences between outdoor and indoor air.
- Shading coefficient** – the ratio of solar heat gain through the glass relative to that through 3mm clear glass. The lower the number the better the performance.
- SHGC (Solar Heat Gain Coefficient)** - the proportion of total solar radiation that is transferred through the glass at normal incidence. It comprises the direct solar transmission (5) and the part of the solar absorption dissipated inwards by radiation and convection. The lower the number the better the solar performance.
- Maximum size** – is the maximum size manufactured and is not the maximum size that can be glazed or available as a further processed product. These sizes may not be stock items and availability should be checked. The weight is in kg/m²

Performance comparison chart									
Product	Single Glazing			ThermoTech			ThermoTech Low E		
	Daylight	Solar	Insulation	Daylight	Solar	Insulation	Daylight	Solar	Insulation
VFloat™									
Clear	87	0.81	5.8	78	0.70	2.7	73	0.66	1.9
Grey	42	0.60	5.8	37	0.48	2.7	35	0.43	1.9
Green	76	0.60	5.8	68	0.48	2.7	63	0.43	1.9
Bronze	50	0.62	5.8	45	0.49	2.7	41	0.44	1.9
High Performance Tones									
SuperGreen	66	0.51	5.8	58	0.39	2.7	54	0.34	1.9
SuperGrey	9	0.35	5.7	8	0.21	2.7	7	0.15	1.9
SuperBlue	53	0.52	5.8	47	0.39	2.7	43	0.34	1.9
ComfortPlus™									
Grey 40	40	0.50	3.6	–	–	–	–	–	–
Green 71	71	0.50	3.6	–	–	–	–	–	–
Clear 82	82	0.68	3.6	–	–	–	–	–	–
Neutral 59	59	0.51	3.6	52	0.43	1.9	49	0.41	1.7
Grey 37	37	0.41	3.6	32	0.33	1.9	30	0.31	1.7
SuperGreen 49	49	0.37	3.6	43	0.29	1.8	41	0.28	1.7
SuperBlue 44	44	0.38	3.6	39	0.30	1.9	36	0.28	1.7
EnviroShield Reflective™									
TS21 on Clear	20	0.30	4.9	18	0.22	2.4	17	0.19	1.9
TS30 on Clear	29	0.38	5.3	26	0.28	2.5	25	0.25	1.9
SS22 on Clear	20	0.32	5.0	18	0.23	2.4	17	0.20	1.9
SS08 on Clear	8	0.20	4.5	7	0.14	2.3	7	0.11	1.8
TS21 on Green	18	0.29	4.9	16	0.20	2.4	15	0.16	1.9
TS30 on Green	25	0.36	5.3	23	0.24	2.5	22	0.20	1.9
SS22 on Green	17	0.30	5.0	16	0.20	2.4	15	0.17	1.9
TS21 on Grey	10	0.29	4.9	9	0.18	2.4	8	0.15	1.9
TS30 on Grey	14	0.33	5.3	12	0.22	2.6	12	0.18	1.9
SS22 on Grey	9	0.30	5.0	8	0.19	2.4	8	0.16	1.9
SL20 Grey	13	0.35	5.8	8	0.22	2.7	8	0.17	1.9
SL20 Bronze	15	0.36	5.8	11	0.23	2.7	10	0.18	1.9
SL20 Green	23	0.38	5.8	15	0.24	2.7	14	0.20	1.9
SL20 Coolblue	24	0.38	5.8	15	0.25	2.7	14	0.21	1.9
SL20 Silver	26	0.37	5.8	18	0.25	2.7	17	0.21	1.9
EVantage™									
Grey	32	0.41	3.8	29	0.33	1.9	27	0.31	1.7
Bronze	38	0.45	3.8	34	0.38	1.9	32	0.36	1.7
BlueGreen	56	0.45	3.8	51	0.38	1.9	48	0.36	1.7
Clear	67	0.62	3.8	60	0.55	1.9	56	0.53	1.7
SuperGreen	48	0.36	3.8	43	0.29	1.9	40	0.27	1.7
SuperBlue	39	0.36	3.8	35	0.29	1.9	33	0.27	1.7
EnviroShield Performance™									
ITO Clear 74	74	0.53	3.6	66	0.45	1.8	61	0.43	1.7
ITO Green 67	67	0.44	3.6	60	0.37	1.8	56	0.35	1.7
ITO Neutral 54	54	0.43	3.6	48	0.35	1.8	45	0.33	1.7
ITO Grey 33	33	0.35	3.6	30	0.27	1.8	28	0.26	1.7
ITO SuperGreen 45	45	0.33	3.6	40	0.26	1.8	37	0.24	1.7
ITO SuperBlue 40	40	0.34	3.6	36	0.26	1.8	33	0.24	1.7
Sunergy™									
Clear	69	0.61	4.2	61	0.53	2.1	57	0.50	1.8
Clear	68	0.59	4.1	60	0.51	2.1	56	0.49	1.8
Clear	67	0.58	4.1	59	0.45	2.1	55	0.47	1.8
Clear	66	0.57	4.1	55	0.49	2.1	55	0.46	1.8
Green	56	0.42	4.1	49	0.33	2.1	46	0.31	1.8
Azur	56	0.44	4.1	49	0.35	2.1	46	0.33	1.8