

Performance data tables

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
VLam™											
VFloat™ Grey	4	56	6	6	55	6	29	5.9	0.67	10	1.20
▲ 1	▲ 2	▲ 3	▲ 4	▲ 5	▲ 6	▲ 7	▲ 8	▲ 9		▲ 10	

1. 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.

2. 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)

3. 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.

4. Visible light reflection – percentage of visible light reflected toward the exterior.

5. 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.

6. Solar reflection – percentage of normally incident visible light and solar energy reflected toward the exterior.

7. UV transmission – the percentage of Ultra Violet light transmitted measured in the light range of 300–380nm. The lower the number the better.

8. U-Value – Thermal Conductivity – 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.*

9. 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.*

10. Selectivity - Glass selectivity is an index that reports the relationship between visible light transmission and solar heat gain, it is measured as an index ($S = Vt/g$) 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.

Note: Data is based on laboratory spectrophotometric measurements and reduced using Windows software for AFRC 100-2010 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.

Please note: VFloat™, VLam™, VTough™, DecorSatin™, VLam™ Translucent, DecorMirror™, Seraphic™, Seraphic™ Design, DecorPattern™, ColourBack™, DecorPanel™ SB, DecorColour™, PixaGraphic™, EnviroShield Performance™, ClimaTech™, LightBridge™, LightBridge next™, PerformaTech™, ThermoTech™, VLam™ Hush, AssaultGuard™, AssaultGuard Ultra™, Bomb and Blast Guard™, BulletGuard™, IntruderGuard™, JailGuard™, PyroGuard40™, DecorFloor™ are all registered trademarks of Viridian Glass.

SuperClear™, SuperGreen™, SuperGrey™, SuperBlue™, ComfortPlus™, EVantage™, EnergyTech™, SolTech™, SmartGlass™ and ComfortHush™ are all registered trademarks of Oceania Glass.

Glass Performance: Single Glazing

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
VFloat™											
Clear	4	89	8	8	82	8	67	5.9	0.85	10	1.05
	5	89	8	8	79	7	63	5.8	0.83	12.5	1.07
	6	88	8	8	78	7	60	5.8	0.82	15	1.07
	8	86	8	8	71	7	56	5.7	0.78	20	1.10
	10	85	8	8	67	7	52	5.7	0.75	25	1.13
	12	84	8	8	64	7	48	5.6	0.73	30	1.15
	15	84	8	8	65	7	47	5.5	0.76	37.5	1.11
Grey	4	56	6	6	55	6	29	5.9	0.67	10	0.84
	5	50	5	5	47	5	27	5.8	0.66	12.5	0.76
	6	42	5	5	42	5	19	5.8	0.58	15	0.72
	10	26	4	4	28	4	10	5.7	0.50	25	0.52
	12	21	4	4	25	5	9	5.6	0.47	30	0.45
Green	4	82	8	8	58	6	36	5.9	0.69	10	1.19
	5	77	7	7	47	6	20	5.8	0.62	12.5	1.24
	6	75	7	7	44	6	26	5.8	0.59	15	1.27
	10	66	6	6	31	5	15	5.7	0.52	25	1.27
Bronze	4	61	7	7	60	6	28	5.9	0.70	10	0.87
	5	56	6	6	57	6	24	5.8	0.69	12.5	0.81
	6	51	5	5	52	5	19	5.8	0.65	15	0.78
	10	34	5	5	36	5	9	5.7	0.55	25	0.62
12	26	5	5	28	4	6	5.6	0.50	30	0.52	
VFloat SuperClear™											
Super-Clear™	4	91	9	9	90	8	78	5.9	0.90	10	1.01
	5	91	9	9	89	8	72	5.9	0.90	12.5	1.01
	6	91	9	9	88	8	74	5.8	0.89	15	1.02
	10	90	9	9	86	8	66	5.7	0.88	25	1.02
	12	90	9	9	86	8	66	5.6	0.88	30	1.02
	15	90	9	9	83	8	57	5.5	0.86	37.5	1.05
	19	90	9	9	82	8	54	5.4	0.85	47.5	1.06
	19	90	9	9	82	8	54	5.4	0.85	47.5	1.06

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
SuperTones™											
Super-Green™	6	67	6	6	34	5	13	5.8	0.53	15	1.26
Super-Grey™	6	9	4	4	8	4	1	5.8	0.36	15	0.25
SuperBlue™	6	53	6	6	33	5	20	5.8	0.52	15	1.02
	10	41	5	5	22	5	13	5.7	0.45	25	0.91

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
VLam™											
Clear	6.38	87	8	8	72	7	<1	5.7	0.79	15.4	1.10
	8.38	87	8	8	72	7	<1	5.7	0.78	20.4	1.12
	10.38	86	8	8	66	7	<1	5.6	0.74	25.4	1.16
	12.38	85	8	8	65	7	<1	5.6	0.74	30.4	1.15
Grey	6.38	42	5	5	47	6	<1	5.7	0.62	15.4	0.68
	8.38	42	5	5	46	5	<1	5.7	0.62	20.4	0.68
	10.38	41	5	5	42	5	<1	5.6	0.59	25.4	0.69
	12.38	41	5	5	41	5	<1	5.6	0.58	30.4	0.71
Bronze	6.38	52	6	6	51	6	<1	5.7	0.64	15.4	0.81
	8.38	52	6	6	50	6	<1	5.7	0.64	20.4	0.81
	10.38	51	6	6	46	5	<1	5.7	0.61	25.4	0.84
	12.38	51	6	6	45	5	<1	5.6	0.61	30.4	0.84
Green	6.38	71	7	7	63	6	<1	5.7	0.72	15.4	0.99
	8.38	71	7	7	62	6	<1	5.7	0.72	20.4	0.99
	10.38	70	7	7	57	6	<1	5.6	0.69	25.4	1.01
	12.38	69	7	7	56	6	<1	5.6	0.68	30.4	1.01
Cool Blue	6.38	73	7	7	66	7	<1	5.7	0.74	15.4	0.99
	12.38	71	7	7	58	6	<1	5.6	0.70	30.4	1.01
Super-Green™	6.38	64	6	6	30	5	<1	5.7	0.50	15.4	1.28
	10.38	65	6	6	31	5	<1	5.6	0.51	25.4	1.27
	12.38	64	6	6	30	5	<1	5.6	0.51	30.4	1.25

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
VLam™ Translucent											
Translucent™	6.38	68	7	7	59	6	<1	5.7	0.70	15.4	0.97
	8.38	67	7	7	59	6	<1	5.7	0.70	20.4	0.96
	10.38	66	7	7	54	6	<1	5.6	0.67	25.4	0.99
	12.38	66	7	7	53	6	<1	5.6	0.66	30.4	1.00
Translucent™ SuperClear™	10.38	70	7	7	69	7	<1	5.6	0.77	25.4	0.91
	12.38	70	7	7	68	7	<1	5.6	0.76	30.4	0.92
Translucent™ Grey	6.76	32	5	5	38	5	<1	5.7	0.56	15.8	0.57

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
EVantage™											
Grey (#2)	6	32	10	27	29	8	10	3.8	0.42	15	0.76
Bronze (#2)	6	38	11	27	35	10	11	3.8	0.46	15	0.83
Blue-Green (#2)	6	56	19	27	35	11	16	3.8	0.46	15	1.22
Clear (#2)	6	68	23	26	59	17	30	3.8	0.63	15	1.08
SuperGreen (#2)	6	49	16	27	24	9	8	3.8	0.38	15	1.29
Super Blue (#2)	6	39	12	27	23	8	10	3.8	0.37	15	1.05

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
SmartGlass™											
SP 10 Clear - Polaris (#2)	4	83	11	11	68	11	54	3.7	0.72	10	1.15
	6	81	11	12	65	10	48	3.6	0.70	15	1.16
SP 30 Neutral - Panoramic (#2)	4	61	8	10	46	8	44	3.7	0.54	10	1.13
	6	63	9	10	45	8	41	3.7	0.54	15	1.17
SP 35 Grey - Dusk (#2)	4	50	7	9	45	7	21	3.7	0.54	10	0.93
	6	40	6	9	37	7	16	3.7	0.48	15	0.83

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
EnergyTech™											
Clear (#2)	4	83	11	11	68	11	54	3.7	0.72	10	1.15
	5	82	11	12	67	11	52	3.7	0.71	12.5	1.15
	6	81	11	12	65	10	48	3.6	0.70	15	1.16
	8	81	10	11	66	10	50	3.6	0.70	20	1.16
	10	79	11	12	60	9	43	3.6	0.66	25	1.20
	12	79	10	11	56	8	42	3.6	0.63	31	1.25
Super-Clear(#2)	6	83	11	12	75	12	68	3.7	0.77	15	1.08
Super-Green(#2)	6	61	8	10	28	6	12	3.7	0.41	15	1.49
Grey(#2)	4	50	7	9	45	7	21	3.7	0.54	10	0.93
	6	40	6	9	37	7	16	3.7	0.48	15	0.83

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
SolTech™											
Neutral (#2)	4	61	8	10	46	8	44	3.7	0.54	10	1.13
	6	63	9	10	45	8	41	3.7	0.54	15	1.17
	10	62	8	10	43	8	39	3.6	0.53	36	1.17
Grey(#2)	6	30	6	8	24	6	13	3.7	0.37	15	0.81

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
ComfortHush™											
Clear (#4)	6.5	81	11	11	62	9	<1	3.6	0.67	15.5	1.21
	10.5	80	10	11	57	9	<1	3.6	0.64	25.5	1.25
Neutral (#4)	6.5	60	8	10	42	7	<1	3.6	0.52	15.5	1.15
	10.5	59	8	10	38	7	<1	3.6	0.49	25.5	1.20
Grey (#4)	6.88	39	6	9	39	6	<1	3.6	0.50	15.9	0.78
	10.88	38	6	9	35	6	<1	3.5	0.47	25.9	0.81
Translucent (#4)	6.88	63	8	10	51	7	<1	3.6	0.59	15.9	1.07
	10.88	62	8	10	46	7	<1	3.6	0.56	25.9	1.11

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
ComfortPlus™											
Clear 82 (#4)	6.38	82	10	11	64	9	<1	3.6	0.69	15.4	1.19
	8.38	81	11	11	61	9	<1	3.6	0.66	20.4	1.23
	10.38	79	11	12	57	9	<1	3.6	0.63	25.4	1.25
	12.38	79	10	11	55	8	<1	3.5	0.62	30.4	1.27
Grey 40 (#4)	6.38	39	6	9	40	7	<1	3.6	0.50	15.4	0.78
	8.38	39	6	9	38	7	<1	3.6	0.49	20.4	0.80
	10.38	38	6	9	35	6	<1	3.6	0.47	25.4	0.81
Light Grey 54 (#4)	6.38	54	7	9	47	7	<1	3.6	0.56	15.4	0.96
	10.38	53	7	9	43	7	<1	3.6	0.53	25.4	1.00
	12.38	53	7	9	43	7	<1	3.6	0.53	25.4	1.00
Green 71 (#4)	6.38	71	9	11	41	7	<1	3.6	0.51	15.4	1.39
	12.38	59	8	10	26	5	<1	3.5	0.40	30.4	1.48
Neutral 59 (#4)	6.38	59	7	9	42	7	<1	3.6	0.52	15.4	1.13
	8.38	60	8	10	41	7	<1	3.6	0.51	20.4	1.18
	10.38	62	8	10	40	7	<1	3.6	0.51	25.4	1.22
Bronze 49 (#4)	6.38	49	7	9	43	7	<1	3.6	0.53	15.4	0.92
	10.38	47	7	9	40	7	<1	3.6	0.50	25.4	0.94
Translucent (#4)	6.38	63	8	10	51	8	<1	3.6	0.59	15.4	1.07
	10.38	62	8	10	47	7	<1	3.6	0.56	15.4	1.11

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
VLam Hush™											
Clear	6.5	87	8	8	71	7	<1	5.7	0.78	15.5	1.12
	8.5	87	8	8	71	7	<1	5.7	0.76	20.5	1.14
	10.5	85	8	8	65	7	<1	5.6	0.74	25.5	1.15
	12.5	85	8	8	64	6	<1	5.5	0.73	30.5	1.16
Grey	6.88	42	5	5	45	5	<1	5.7	0.61	15.9	0.69
	10.88	41	5	5	42	5	<1	5.5	0.58	20.9	0.71
	12.88	41	5	5	40	5	<1	5.5	0.58	30.9	0.71
Translucent	6.88	68	7	7	58	6	<1	5.7	0.69	15.9	0.99
	10.88	66	7	7	53	6	<1	5.5	0.66	20.9	1.00
	12.88	66	7	7	52	6	<1	5.5	0.65	30.9	1.02

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
Enviroshield™ Performance											
ITO Clear 74 (#4)	8.76	76	10	11	46	7	<1	3.6	0.55	20.8	1.38
	10.76	74	10	11	44	7	<1	3.5	0.53	25.8	1.40
	12.76	73	10	11	42	7	<1	3.5	0.52	30.8	1.40
ITO Green 67 (#4)	8.76	69	9	10	34	6	<1	3.6	0.46	20.8	1.50
	10.76	68	9	11	33	6	<1	3.5	0.45	25.8	1.51
	12.76	62	8	10	27	6	<1	3.5	0.41	30.8	1.51
ITO Neutral 54 (#4)	8.76	56	8	10	32	6	<1	3.6	0.44	20.8	1.27
	10.76	58	8	9	32	6	<1	3.5	0.45	25.8	1.29
	12.76	57	8	9	31	6	<1	3.5	0.44	30.8	1.30
ITO Grey 33 (#4)	8.76	35	6	9	21	5	<1	3.6	0.36	20.8	0.97
	10.76	36	6	8	21	5	<1	3.5	0.36	25.8	1.00
	12.76	27	5	8	16	5	<1	3.5	0.32	30.8	0.84
ITO Super-Blue 40 (#4)	12.76	34	6	8	15	5	<1	3.5	0.32	30.8	1.06
XIR Clear 71	8.76	73	7	7	39	23	<1	5.7	0.51	15.8	1.43
XIR Clear 70	12.76	71	7	7	37	21	<1	5.5	0.50	30.8	1.42
XIR Energy-Tech 62 (#4)	12.76	65	9	10	32	21	<1	3.5	0.42	30.8	1.55

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
IntruderGuard™											
Clear	6.52	88	8	8	72	7	<1	5.6	0.78	13.9	1.13
	7.52	86	7	7	69	6	<1	5.6	0.77	16.6	1.12
Grey	6.52	42	5	5	46	5	<1	5.6	0.61	13.9	0.69
	7.52	42	5	5	44	5	<1	5.6	0.60	16.6	0.70

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
AssaultGuard™											
Clear	9.52	87	8	8	69	7	<1	5.5	0.77	21.6	1.13
	11.52	86	8	8	63	6	<1	5.5	0.73	26.6	1.18
	13.52	84	7	7	61	6	<1	5.4	0.72	31.6	1.17
AssaultGuard Ultra™											
Clear	10	86	8	8	67	7	<1	5.4	0.75	22.2	1.15
	12	85	8	8	63	7	<1	5.3	0.73	27.2	1.16
	14	84	8	8	60	6	<1	5.3	0.71	32.2	1.18

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
AssaultGuard Ultra™ - LowE											
Clear	10	81	11	11	60	9	<1	3.5	0.67	22.2	1.21
Neutral	10	60	8	10	41	7	<1	3.5	0.51	22.2	1.18
Green	10	73	9	10	42	6	<1	3.5	0.53	22.2	1.38
Grey	10	49	7	9	38	6	<1	3.5	0.50	22.2	0.98
Clear	12	79	11	12	58	9	<1	3.4	0.64	27.2	1.23
Neutral	12	62	9	10	40	7	<1	3.4	0.51	27.2	1.22
Green	12	71	9	11	41	6	<1	3.4	0.51	27.2	1.39
Grey	12	49	7	9	37	6	<1	3.4	0.48	27.2	1.02
Clear	14	77	10	11	53	8	<1	3.4	0.61	32.2	1.26
Neutral	14	60	8	9	37	6	<1	3.4	0.49	32.2	1.22
Green	14	67	9	10	34	6	<1	3.4	0.46	32.2	1.46
Grey	14	36	6	9	28	5	<1	3.4	0.42	32.2	0.86

Product Name	Nominal Thickness	Visible			Solar		UV Trans	U-Value	SHGC	Weight kg/m ²	Selectivity
		Trans.	Refl. Out	Refl. In	Trans.	Refl.					
JailGuard™											
Clear	14.6	83	8	8	59	6	<1	5.0	0.70	29.3	1.19
	16.5	86	8	8	65	7	<1	5.3	0.74	29.8	1.16
	22	79	8	8	49	6	<1	4.7	0.65	44.0	1.22

Typical measured values of Viridian production are provided

All performance data is determined using LBL window 7.5 software, NFRC 100 - 2010 conditions have been used

Product Name – Where # appears, ie (#2), this identifies the position of the coated surface of the glass. Glass surfaces are counted from the exterior to the interior of the building.

Nominal Thickness – The glass thickness or the make-up of a Viridian ThermoTech™ unit. The first number is the outer glass thickness, + 12 is the width of the gap between the glass components, then the thickness of the inner panel of the unit.

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 Ultra Violet light transmitted measured in the light range of 300-380nm. The lower the number the smaller the transmission.

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.

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.