

Walshs Insulated Glass Units (IGU) Technical Guide

Understanding this guide

Nominal Thickness	Identifies the glass thickness. For double-glazed products, the first and last numbers is the thickness of each glass panel, and the middle number is the width of the gap in-between.
Visible Light Transmission	The percentage of visible light that passes directly through the glass. The higher the percentage, the more daylight gets through.
Visible Light Reflection	The percentage of visible light reflected toward the exterior.
Solar Transmission	The percentage of normal incident visible light and solar energy that passes directly through the glazing.
Solar Reflection	The percentage of normal incident visible light and solar energy reflected toward the exterior.
UV Transmission	The percentage of UV light transmitted measured in the light range of wave lengths shorter than 380 nanometres. A lower number is better.
U Value	The measure of the rate of heat gain or loss through glazing caused by environmental differences between indoor and outdoor air. The lower the value the better the insulation.
SHGC – Solar Heat Gain Coefficient	The proportion of total solar radiation that is transferred through glass in normal circumstances. A lower number indicates a better performance.
Shading Coefficient	The ratio of solar heat gain through glass relative to that through 3mm clear glass. A lower number indicates a better performance.
RW – Weighted Sound Reduction Index	Used to measure the effectiveness of the glass as a noise insulator. Measured in decibels (db) the higher the RW value, the greater the reduction in noise.
Coated surface position ie: (#2)	Where # appears next to a product name, i.e. (#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.



TwinSeal™ Performance

Manufactured inhouse using a hard coat Low E glass, Walshs TwinSeal Performance Double Glazing Units (DGUs) can be partnered with a broad range of glass types to enable you to choose a balance that best suits your performance requirements.

Walshs TwinSeal™ Performance DGUs can provide significant benefits to a building including improved acoustic performance, safety, comfort, and a noticeable reduction in energy costs. With the increase in building regulations, the focus on energy efficiency and our carbon footprint means high performance DGUs have become more important than ever before – making Walshs TwinSeal™ Performance the ideal choice when considering performance glass for your next project.

Product Name	Nominal Thickness mm	Visible Light		Solar Energy		UV Trans. %	U Value		SHGC	Shading Co.	RW
		Trans. %	Refl. %	Trans. %	Refl. %		Air	Argon			
Sunergy Float											
Clear (#2)	4+12+6	61	12	44	12	39	2.1	1.9	0.61	0.53	31
	6+12+6	60	12	41	11	34	2.1	1.8	0.50	0.59	33
	10+12+6	55	12	40	11	33	2.1	1.9	0.56	0.49	38
Grey (#2)	6+12+6	30	–	–	–	–	–	1.8	0.32	–	33
Viridian EnergyTech											
Clear (#2)	4+12+4	75	17	57	15	41	1.9	1.6	0.64	0.74	31
	6+12+6	73	16	52	14	36	1.9	1.6	0.62	0.71	33
	8+12+6	72	16	52	13	36	1.9	1.6	0.62	0.68	35
	10+12+6	71	16	48	12	32	1.9	1.6	0.58	0.66	38
Grey (#2)	4+12+4	45	9	38	9	18	1.9	1.6	0.46	0.53	31
	6+12+6	35	8	29	8	13	1.9	1.6	0.39	0.45	33
Viridian SolTech											
Neutral (#2)	4+12+4	55	12	38	10	34	1.9	1.6	0.46	0.53	31
	6+12+6	56	12	36	10	30	1.9	1.6	0.45	0.52	33
	10+12+6	55	11	35	10	29	1.9	1.6	0.44	0.50	38
Grey (#2)	6+12+6	27	6	19	6	10	1.9	1.6	0.28	0.33	33
Viridian Eantage											
Clear (#2)	6+12+6	61	27	47	20	23	2.0	1.7	0.56	0.64	33
Grey (#2)	6+12+6	29	10	24	9	8	2.0	1.7	0.33	0.39	33
SuperGreen (#2)	6+12+6	44	18	21	9	7	2.0	1.7	0.29	0.34	33
SuperBlue (#2)	6+12+6	35	13	19	9	8	1.9	1.7	0.28	0.33	33
Bronze (#2)	6+12+6	32	13	24	11	7	2.0	1.5	0.35	0.44	33
Viridian ComfortPlus											
Clear 82 (#2)	6.38+12+6	73	16	51	12	<1	1.9	1.6	0.60	0.69	34
	8.38+12+6	72	16	49	12	<1	1.9	1.6	0.58	0.67	37
	10.38+12+6	71	16	47	11	<1	1.8	1.6	0.56	0.64	39
	12.38+12+6	70	16	45	11	<1	1.8	1.6	0.54	0.62	39
Neutral 59 (#2)	8.38+12+6	52	9	33	8	<1	1.9	1.6	0.43	0.50	37
	10.38+12+6	51	10	31	7	<1	N/A	1.6	0.41	0.47	39
Grey 37 (#2)	8.38+12+6	32	6	23	5	<1	1.9	1.6	0.33	0.38	37
Grey 40 (#2)	10.38+12+6	34	6	28	7	<1	N/A	1.6	0.38	0.44	39
Performance data with E-Tech used as inner pane											
Viridian EnergyTech											
Clear (#2)	4+12+4	69	19	51	16	34	1.8	1.5	0.61	0.71	31
	6+12+6	67	19	47	15	29	1.8	1.5	0.59	0.68	33
	10+12+6	65	18	43	13	26	1.7	1.5	0.55	0.63	38
Viridian SolTech											
Neutral (#2)	4+12+4	51	13	34	11	28	1.8	1.5	0.44	0.51	31
	6+12+6	52	13	32	11	24	1.7	1.5	0.43	0.50	33
	10+12+6	51	13	31	10	23	N/A	1.5	0.42	0.42	38
Grey (#2)	6+12+6	25	6	17	7	8	1.8	1.5	0.27	0.31	33
Viridian Eantage											
Clear (#2)	6+12+6	57	29	41	21	19	N/A	1.5	0.54	0.64	33
Grey (#2)	6+12+6	27	11	20	9	7	N/A	1.5	0.31	0.39	33
SuperGreen (#2)	6+12+6	41	19	18	10	5	N/A	1.5	0.27	0.34	33
SuperBlue (#2)	6+12+6	33	14	17	9	7	N/A	1.5	0.26	0.33	33
Bronze (#2)	6+12+6	34	13	28	11	9	N/A	1.7	0.37	0.44	33
Viridian ComfortPlus											
Clear 82 (#2)	6.38+12+6	67	18	43	13	<1	1.7	1.5	0.55	0.64	34
	8.38+12+6	67	18	43	13	<1	1.7	1.5	0.55	0.67	37
	10.38+12+6	66	18	42	13	<1	1.7	1.5	0.54	0.60	39
	12.38+12+6	65	18	40	12	<1	1.7	1.5	0.52	0.59	39
Neutral 59 (#2)	8.38+12+6	49	13	30	9	<1	1.7	1.5	0.40	0.46	37

The data is measured using glass only and all care should be taken when evaluating our published data that the same environmental conditions have been used. For the most up-to-date information, please visit our website. All performance data is calculated using LBL Windows 7.4 software. NFRC 100-2001 conditions have been used.