Residential glass performance guide

KlymetControl™ Double Glazing – Incorporating Clear Float Backing Glass

Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value	Selectivity
		Trans.	Refl.	Trans.	Refl.			12mm argon	
Float glass									
EnviroClear™	4+12+4	80	15	69	13	51	0.75	2.60	1.07
	5+12+5	79	15	63	12	47	0.72	2.50	1.10
	6+12+6	78	15	62	12	44	0.71	2.50	1.10
	8+12+6	77	14	57	11	42	0.66	2.50	1.17
	10+12+6	76	14	54	10	39	0.64	2.50	1.19
	12+12+6	75	14	51	10	37	0.61	2.50	1.23
EnviroTone™ Grey	4+12+4	50	8	46	8	24	0.55	2.60	0.91
	5+12+5	44	8	42	8	21	0.54	2.50	0.81
	6+12+6	37	7	33	7	15	0.45	2.50	0.82
	10+12+6	23	5	22	5	8	0.36	2.50	0.64
	12+12+6	19	5	20	5	7	0.34	2.50	0.56
EnviroTone™ Green	4+12+4	73	13	49	9	30	0.58	2.60	1.26
	5+12+5	68	12	39	8	17	0.50	2.50	1.36
	6+12+6	66	12	36	8	21	0.47	2.50	1.40
	10+12+6	59	10	27	6	12	0.39	2.50	1.51
EnviroTone™ Bronze	4+12+4	55	10	50	9	23	0.59	2.50	0.93
	5+12+5	48	8	41	7	18	0.53	2.50	0.91
	6+12+6	45	8	41	7	15	0.53	2.50	0.85
	10+12+6	30	6	28	6	7	0.41	2.50	0.73

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Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value	Selectivity
		Trans.	Refl.	Trans.	Refl.			12mm argon	
Laminated glass									
Protekta™ Clear	6.38+12+6	78	15	58	12	<1	0.67	2.50	1.16
Protekta™ Grey	6.38+12+6	37	7	36	7	<1	0.49	2.50	0.76
Protekta™ Bronze	6.38+12+6	46	8	40	8	<1	0.52	2.50	0.88
Protekta™ Translucent	6.38+12+6	60	11	47	9	<1	0.58	2.50	1.03
Protekta™ SuperGreen[1]	6.38+12+6	57	10	25	7	<1	0.37	2.50	1.54
Performance tints									
SuperGreen[1]	6+12+6	59	10	28	6	10	0.40	2.50	1.48
SuperGrey[1]	6+12+6	8	4	6	4	1	0.21	2.50	0.38
SuperBlue[1]	6+12+6	47	8	27	6	16	0.39	2.50	1.21
	10+12+6	36	7	18	5	10	0.32	2.50	1.13

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Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value	Selectivity
		Trans.	Refl.	Trans.	Refl.			12mm argon	
Low E coatings									
EnergyTech[1] Clear (#2)	4+12+4	75	17	57	15	41	0.64	1.60	1.17
	6+12+6	73	16	52	14	36	0.62	1.60	1.18
	8+12+6	72	16	52	13	36	0.62	1.60	1.16
	10+12+6	71	16	48	12	32	0.57	1.60	1.25
EnergyTech[1] Grey (#2)	4+12+4	45	9	38	9	18	0.45	1.60	1.00
	6+12+6	35	8	29	8	13	0.39	1.70	0.90
EnergyTech[1] Green (#2)	4+12+4	68	15	41	10	25	0.49	1.70	1.39
	6+12+6	63	13	33	9	19	0.41	1.60	1.54
EnergyTech[1] SuperGreen[1] (#2)	6+12+6	54	11	24	7	10	0.32	1.60	1.69
SolTech[1] Neutral (#2)	4+12+4	55	12	38	10	34	0.46	1.60	1.20
	6+12+6	56	12	36	10	30	0.45	1.60	1.24
SolTech[1] Grey (#2)	6+12+6	27	6	19	6	11	0.28	1.60	0.96
Sunergy[2] Clear (#2)	4+12+4	60	12	42	12	35	0.50	1.90	1.20
	6+12+6	62	13	41	12	32	0.50	1.80	1.24
	10+12+6	60	12	38	10	29	0.47	1.80	1.28
Sunergy[2] Grey (#2)	6+12+6	30	7	22	7	11	0.32	1.90	0.94
Sunergy[2] Green (#2)	6+12+6	50	10	23	7	11	0.32	1.80	1.56
Sunergy[2] Azur - Blue (#2)	6+12+6	50	10	26	7	12	0.35	1.90	1.43

Residential glass performance guide

OptEma™ Double Glazing – Incorporating OptEma™ Low E Backing Glass (#3)

Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value	Selectivity
		Trans.	Refl.	Trans.	Refl.			12mm argon	
Float glass									
EnviroClear™	4+12+4	80	13	53	27	43	0.59	1.37	1.36
	5+12+5	79	12	51	26	41	0.58	1.37	1.36
	6+12+6	79	12	50	25	39	0.57	1.36	1.39
EnviroTone™ Grey	4+12+4	51	8	36	17	21	0.43	1.37	1.19
	5+12+5	45	7	32	15	17	0.39	1.37	1.15
	6+12+6	39	6	28	13	14	0.35	1.36	1.11
EnviroTone™ Green	6+12+6	64	10	29	8	14	0.36	1.36	1.78
EnviroTone™ Bronze	6+12+6	44	7	30	13	12	0.37	1.36	1.19
Matlucent™	4+12+4	80	12	52	21	47	0.60	1.37	1.33
	6+12+5	79	12	51	23	41	0.58	1.36	1.36
	6+12+6	79	12	48	18	41	0.58	1.36	1.36
Silencia™	6.5+12+5	80	11	49	20	<0.1	0.55	1.36	1.45
	6.5+12+6	78	12	48	19	<0.1	0.55	1.36	1.42
Performance tints									
SuperGreen[1]	6+12+6	58	9	24	7	10	0.31	1.36	1.87
SuperGrey[1]	6+12+6	7	4	5	4	1	0.12	1.36	0.58
SuperBlue[1]	6+12+6	48	8	24	8	15	0.31	1.36	1.55
Laminated glass									
Protekta™ Clear	6.38+12+5	78	11	49	20	<0.1	0.56	1.36	1.39
	6.38+12+6	78	12	47	20	<0.1	0.55	1.36	1.42
Protekta™ Translucent	6.38+12+5	61	10	39	16	<0.1	0.46	1.36	1.33
	6.38+12+6	61	10	39	16	<0.1	0.46	1.36	1.33

Residential glass performance guide

KlymetControl™ Double Glazing – Incorporating EnergyTech[1] Clear Low E Backing Glass (#3)

Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value	Selectivity
		Trans.	Refl.	Trans.	Refl.			12mm argon	
Float glass									
EnviroClear™	4+12+4	74	18	57	16	41	0.71	1.60	1.04
	5+12+4	74	17	55	15	40	0.68	1.60	1.09
	6+12+6	73	17	52	15	35	0.67	1.60	1.09
	8+12+6	71	17	48	13	34	0.62	1.60	1.15
	10+12+6	70	17	46	13	32	0.59	1.60	1.19
	12+12+6	69	16	44	12	30	0.57	1.60	1.21
EnviroTone™ Grey	4+12+4	46	9	38	10	20	0.50	1.60	0.92
	5+12+4	42	8	36	9	18	0.48	1.60	0.88
	6+12+6	34	7	27	8	12	0.40	1.60	0.85
	10+12+6	21	5	18	6	6	0.30	1.60	0.70
	12+12+6	17	5	16	6	6	0.28	1.60	0.61
EnviroTone™ Green	4+12+4	68	15	41	11	24	0.52	1.60	1.31
	5+12+4	64	14	34	9	14	0.44	1.60	1.45
	6+12+6	61	14	31	9	17	0.42	1.60	1.45
	10+12+6	52	11	21	7	7	0.31	1.60	1.68
EnviroTone™ Bronze	4+12+4	51	11	41	11	19	0.54	1.60	0.94
	5+12+4	45	9	35	9	15	0.47	1.60	0.96
	6+12+6	41	8	34	9	12	0.48	1.60	0.85
	10+12+6	28	6	23	7	6	0.36	1.60	0.78
Performance tints									
SuperGrey[1]	6+12+6	7	4	5	4	1	0.14	1.60	0.50
SuperGreen[1]	6+12+6	55	12	24	7	8	0.34	1.60	1.62
SuperBlue[1]	6+12+6	43	9	23	7	13	0.33	1.60	1.30
	10+12+6	34	7	16	6	8	0.25	1.60	1.36

Residential glass performance guide

KlymetControl™ Double Glazing – Incorporating EnergyTech[1] Clear Low E Backing Glass (#3)

Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value	Selectivity
		Trans.	Refl.	Trans.	Refl.			12mm argon	
Laminated glass									
Protekta™ Clear	6.38+12+6	72	17	50	13	<1	0.74	1.60	0.97
Protekta™ Grey	6.38+12+6	34	7	30	8	<1	0.44	1.60	0.77
Protekta™ Bronze	6.38+12+6	43	9	34	9	<1	0.47	1.60	0.91
Protekta™ Green	6.38+12+6	59	13	42	11	<1	0.56	1.60	1.05
Protekta™ Translucent	6.38+12+6	56	12	40	10	<1	0.54	1.60	1.04
Protekta™ SuperGreen[1]	6.38+12+6	54	11	23	7	<1	0.33	1.60	1.64

Residential glass performance guide

Single Glass – Monolithic and Laminated

Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value	Selectivity
		Trans.	Refl.	Trans.	Refl.				
Toughened and annealed									
EnviroClear™	4	89	8	82	8	67	0.85	5.90	1.05
	5	89	8	79	7	63	0.83	5.80	1.07
	6	88	8	78	7	60	0.82	5.80	1.07
	8	86	8	71	7	56	0.78	5.70	1.10
	10	85	8	67	7	52	0.75	5.70	1.13
	12	84	8	64	7	48	0.73	5.60	1.15
	15	84	8	65	7	47	0.76	5.50	1.11
	19	82	8	61	6	43	0.72	5.40	1.14
EnviroTone™ Grey	4	56	6	55	6	29	0.67	5.90	0.84
	5	50	5	47	5	27	0.66	5.80	0.76
	6	42	5	42	5	19	0.58	5.80	0.72
	10	26	4	28	4	10	0.50	5.70	0.52
	12	21	4	25	5	9	0.47	5.60	0.45
EnviroTone™ Green	4	82	8	58	6	36	0.69	5.90	1.19
	5	77	7	47	6	20	0.62	5.80	1.24
	6	75	7	44	6	26	0.59	5.80	1.27
	10	66	6	31	5	15	0.52	5.70	1.27
EnviroTone™ Bronze	4	61	7	60	6	28	0.70	5.90	0.87
	5	56	6	57	6	24	0.69	5.80	0.81
	6	51	5	52	5	19	0.65	5.80	0.78
	10	34	5	36	5	9	0.55	5.70	0.62
Performance tints									
SuperGreen[1]	6	67	6	34	5	13	0.53	5.80	1.26
SuperGrey[1]	6	9	4	8	4	1	0.36	5.80	0.25
SuperBlue[1]	6	53	6	33	5	20	0.52	5.80	1.02

Residential glass performance guide

Single Glass – Monolithic and Laminated

Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value	Selectivity
		Trans.	Refl.	Trans.	Refl.				
Low Iron									
KristalClear™	4	91	9	90	8	78	0.90	5.90	1.01
	5	91	9	89	8	72	0.90	5.90	1.01
	6	91	9	88	8	74	0.89	5.80	1.02
	10	90	9	86	8	66	0.88	5.70	1.02
	12	90	9	86	8	66	0.88	5.60	1.02
	15	90	9	83	8	57	0.86	5.50	1.05
	19	90	9	82	8	54	0.85	5.40	1.06

Residential glass performance guide

Single Glass – Monolithic and Laminated

Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value	Selectivity
		Trans.	Refl.	Trans.	Refl.				
Low E coatings									
EnergyTech[1] Clear (#2)	4	83	11	68	11	54	0.72	3.70	1.15
	5	82	11	67	11	52	0.71	3.70	1.15
	6	81	11	65	10	48	0.70	3.60	1.16
	10	79	11	60	9	43	0.66	3.60	1.20
EnergyTech[1] Grey (#2)	4	50	7	45	7	21	0.54	3.70	0.93
	6	40	6	37	7	16	0.48	3.70	0.83
EnergyTech[1] Green (#2)	4	75	10	49	9	30	0.57	3.70	1.32
	6	71	9	39	7	23	0.49	3.70	1.45
EnergyTech[1] SuperGreen[1] (#2)	6	61	8	28	6	12	0.41	3.70	1.49
EVantage[1] Clear (#2)	6	68	23	59	17	30	0.63	3.80	1.08
EVantage[1] Grey (#2)	6	32	10	29	8	10	0.42	3.80	0.76
EVantage[1] Blue-Green[1] (#2)	6	56	19	35	11	16	0.46	3.80	1.22
EVantage[1] SuperBlue[1] (#2)	6	39	12	23	8	10	0.37	3.80	1.05
EVantage[1] SuperGreen[1] (#2)	6	49	16	24	9	8	0.38	3.80	1.29
SolTech[1] Neutral (#2)	4	61	8	46	8	44	0.54	3.70	1.13
	6	63	9	45	8	41	0.54	3.70	1.17
SolTech[1] Grey (#2)	6	30	6	24	6	13	0.37	3.70	0.81
Sunergy[2] Clear (#2)	6	69	9	51	9	44	0.59	4.00	1.17
	10	68	9	47	8	38	0.56	3.90	1.21
Sunergy[2] Grey (#2)	6	34	6	27	6	13	0.41	4.10	0.83
Sunergy[2] Green (#2)	6	56	7	27	6	14	0.42	4.00	1.33
Sunergy[2] Azur - Blue (#2)	6	56	7	31	6	25	0.45	4.10	1.24

Residential glass performance guide

Single Glass – Monolithic and Laminated

Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value	Selectivity
		Trans.	Refl.	Trans.	Refl.				
Laminated glass									
ComfortPlus[1] Clear (#4)	6.38	82	10	64	9	<1	0.69	3.60	1.19
	10.38	79	11	57	9	<1	0.63	3.60	1.25
ComfortPlus[1] Neutral (#4)	6.38	59	7	42	7	<1	0.52	3.60	1.13
	10.38	62	8	40	7	<1	0.51	3.60	1.22
ComfortPlus[1] Grey (#4)	6.38	39	6	40	7	<1	0.50	3.60	0.78
	10.38	38	6	35	6	<1	0.47	3.60	0.81
Protekta™ Clear	6.38	87	8	72	7	<1	0.79	5.70	1.10
	10.38	86	8	66	7	<1	0.74	5.60	1.16
Protekta™ Grey	6.38	42	5	47	6	<1	0.62	5.70	0.68
	10.38	41	5	42	5	<1	0.59	5.60	0.69
	12.38	41	5	41	5	<1	0.58	5.60	0.71
Protekta™ Green	6.38	71	7	63	6	<1	0.72	5.70	0.99
	10.38	70	7	57	6	<1	0.69	5.60	1.01
	12.38	69	7	56	6	<1	0.68	5.60	1.01
Protekta™ Translucent	6.38	68	7	59	6	<1	0.70	5.70	0.97
	10.38	66	7	54	6	<1	0.67	5.60	0.99
Protekta™ SuperGreen[1]	6.38	64	6	30	5	<1	0.50	5.70	1.28
	10.38	65	6	31	5	<1	0.51	5.60	1.27
	12.38	64	6	30	5	<1	0.51	5.60	1.25
Sunergy[2] Neutral (#4)	6.38	67	9	51	9	<1	0.57	4.00	1.18
	10.38	65	9	46	8	<1	0.55	4.00	1.18
Sunergy[2] Grey (#4)	6.38	34	6	30	6	<1	0.44	4.00	0.77

Notes

1. Data is based on laboratory spectrophotometric measurements and produced 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.
2. The values given are centre of glass values. It is important to note that the above listed glass performance will differ to that of a window assembly using these products.
3. Glass surfaces are counted from the exterior face of the building.
4. Where # appears next to the product name, this indicates the position of the coated surface of the glass.
5. The above information is accurate to the best of our knowledge. SOLOS Glass Pty Limited disclaims any liability for loss or damage arising from the use of such data.
6. It is recommended that a thermal assessment be carried out prior to specifying any type of performance glass to determine any risk of thermal breakage.

Definitions of values

1. Visible Light Transmittance (Trans.) is the percentage of visible light that can pass directly through the glass. The higher the value the more visible light that will pass through.
2. Visible Light Reflectance (Refl.) is the percentage of visible light that is reflected off the exterior.
3. Solar Energy Transmittance (Trans.) is the percentage of solar energy and normal incident light passing through the glass.
4. Solar Energy Reflectance (Refl.) is the percentage of solar energy and normal incident light reflected out.
5. UV Transmittance (Trans.) is the percentage of UV light transmitted measured in the light range of 300 – 380nm. The lower the number the better.
6. Solar Heat Gain Coefficient (SHGC) is the total amount of heat transmitted through the glass into the inside of the buildling. The lower the number the better the solar control performance of that particular glass product.
7. U Value is a measure of the rate of heat gain or loss through the glass. It is measured in watts over m2 per degree Celsius (w/m2°C).

[1] - are trademarks of Viridian
[2] - are trademarks of AGC