

Commercial glass performance guide

KlymetControl™ Double Glazing –
Incorporating Clear Float Backing Glass

Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value 12mm argon
		Trans.	Refl.	Trans.	Refl.			
Float glass								
EnviroClear™	4+12+4	80	15	69	13	51	0.75	2.60
	5+12+5	79	15	63	12	47	0.72	2.50
	6+12+6	78	15	62	12	44	0.71	2.50
	8+12+6	77	14	57	11	42	0.66	2.50
	10+12+6	76	14	54	10	39	0.64	2.50
	12+12+6	75	14	51	10	37	0.61	2.50
EnviroTone™ Grey	4+12+4	50	8	46	8	24	0.55	2.60
	5+12+5	44	8	42	8	21	0.54	2.50
	6+12+6	37	7	33	7	15	0.45	2.50
	10+12+6	24	5	22	5	8	0.36	2.50
	12+12+6	19	5	20	5	7	0.34	2.50
EnviroTone™ Green	4+12+4	73	13	49	9	30	0.58	2.60
	5+12+5	68	12	39	8	17	0.50	2.50
	6+12+6	66	12	36	8	21	0.47	2.50
	10+12+6	56	10	27	6	12	0.39	2.50
EnviroTone™ Bronze	4+12+4	55	10	50	9	23	0.59	2.50
	5+12+5	48	8	41	7	18	0.53	2.50
	6+12+6	45	8	41	7	15	0.53	2.50
	10+12+6	30	6	28	6	7	0.41	2.50

Commercial glass performance guide

KlymetControl™ Double Glazing – Incorporating Clear Float Backing Glass

Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value 12mm argon
		Trans.	Refl.	Trans.	Refl.			
Laminated glass								
Protekta™ Clear	6.38+12+6	78	15	58	12	<1	0.67	2.50
Protekta™ Grey	6.38+12+6	37	7	36	7	<1	0.49	2.50
Protekta™ Bronze	6.38+12+6	46	8	40	8	<1	0.52	2.50
Protekta™ Translucent	6.38+12+6	60	11	47	9	<1	0.58	2.50
Protekta™ SuperGreen ¹	6.38+12+6	57	10	25	7	<1	0.37	2.50
Performance tints								
SuperGreen ¹	6+12+6	59	10	28	6	10	0.40	2.50
SuperGrey ¹	6+12+6	8	4	6	4	1	0.21	2.50
SuperBlue ¹	6+12+6	47	8	27	6	16	0.39	2.50
	10+12+6	36	7	18	5	10	0.32	2.50
Reflective coatings								
Stopsol ² Bronze	4+12+4	24	35	32	29	8	0.40	2.60
	6+12+6	19	35	25	28	5	0.35	2.50
Stopsol ² Grey	4+12+4	22	35	30	29	8	0.38	2.60
	6+12+6	17	34	22	28	6	0.32	2.50
Laminated Low E								
ComfortPlus ¹ Clear (#4)	6.38+12+6	73	16	51	12	<1	0.60	1.60
	8.38+12+6	72	16	49	12	<1	0.58	1.60
	10.38+12+6	71	16	47	11	<1	0.55	1.60
	12.38+12+6	70	16	45	11	<1	0.54	1.60
ComfortPlus ¹ Neutral (#4)	8.38+12+6	53	11	33	9	<1	0.42	1.60

Commercial glass performance guide

KlymetControl™ Double Glazing –
Incorporating Clear Float Backing Glass

Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value 12mm argon
		Trans.	Refl.	Trans.	Refl.			
Low E coatings								
EnergyTech ¹ Clear (#2)	4+12+4	75	17	57	15	41	0.64	1.60
	6+12+6	73	16	52	14	36	0.62	1.60
	8+12+6	72	16	52	13	36	0.62	1.60
	10+12+6	71	16	48	12	32	0.57	1.60
EnergyTech ¹ Grey (#2)	4+12+4	45	9	38	9	18	0.45	1.60
	6+12+6	35	8	29	8	13	0.39	1.70
EnergyTech ¹ Green (#2)	4+12+4	68	15	41	10	25	0.49	1.70
	6+12+6	63	13	33	9	19	0.41	1.60
EnergyTech ¹ SuperGreen ¹ (#2)	6+12+6	54	11	24	7	10	0.32	1.60
EVantage ¹ Clear (#2)	6+12+6	61	27	47	20	23	0.56	1.70
EVantage ¹ Grey (#2)	6+12+6	29	10	24	9	8	0.33	1.70
EVantage ¹ Blue-Green ¹ (#2)	6+12+6	51	21	29	12	13	0.38	1.70
EVantage ¹ SuperGreen ¹ (#2)	6+12+6	44	18	21	9	7	0.29	1.70
EVantage ¹ SuperBlue ¹ (#2)	6+12+6	35	13	19	9	8	0.28	1.70
SolTech ¹ Neutral (#2)	4+12+4	55	12	38	10	34	0.46	1.60
	6+12+6	56	12	36	10	30	0.45	1.60
SolTech ¹ Grey (#2)	6+12+6	27	6	19	6	11	0.28	1.60
Sunergy ² Clear (#2)	4+12+4	60	12	42	12	35	0.50	1.90
	6+12+6	62	13	41	12	32	0.50	1.80
	10+12+6	60	12	38	10	29	0.47	1.80
Sunergy ² Grey (#2)	6+12+6	30	7	22	7	11	0.32	1.90
Sunergy ² Green (#2)	6+12+6	50	10	23	7	11	0.32	1.80
Sunergy ² Azur - Blue (#2)	6+12+6	50	10	26	7	12	0.35	1.90

Commercial 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 12mm argon
		Trans.	Refl.	Trans.	Refl.			
Float glass								
EnviroClear™	6+12+6	79	12	50	25	39	0.57	1.40
EnviroTone™ Grey	6+12+6	39	6	28	13	14	0.35	1.40
EnviroTone™ Green	6+12+6	64	10	29	8	14	0.36	1.40
EnviroTone™ Bronze	6+12+6	44	7	30	13	12	0.37	1.40
Matlucent™	6+12+6	79	12	48	18	41	0.58	1.40
Performance tints								
SuperGreen ¹	6+12+6	58	9	24	7	10	0.31	1.40
SuperGrey ¹	6+12+6	7	4	5	4	1	0.12	1.40
SuperBlue ¹	6+12+6	48	8	24	8	15	0.31	1.40
Laminated glass								
Protekta™ Clear	6.38+12+5	78	11	49	20	<0.1	0.56	1.40
	6.38+12+6	78	12	47	20	<0.1	0.55	1.40
Protekta™ Translucent	6.38+12+5	61	10	39	16	<0.1	0.46	1.40
	6.38+12+6	61	10	39	16	<0.1	0.46	1.40

Commercial glass performance guide

CoolRay™ Double Glazing – Incorporating Solar Control Low E Backing Glass

Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value 12mm argon
		Trans.	Refl.	Trans.	Refl.			
Low E (#2) Clear (#3)								
CoolRay™ 70 (#2)	6+12+6	68	13	29	38	22	0.33	1.30
CoolRay™ 60 (#2)	6+12+6	60	16	26	37	27	0.31	1.40
CoolRay™ 50 (#2)	6+12+6	50	18	21	32	19	0.25	1.30
CoolRay™ 40 (#2)	6+12+6	41	20	17	33	19	0.21	1.40
CoolRay™ 60TS (#2)	6+12+6	59	14	23	45	11	0.26	1.30
CoolRay™ 50TS (#2)	6+12+6	49	11	19	42	8	0.22	1.30
Low E (#3) Grey (#2)								
CoolRay™ 70 (#3)	6+12+6	32	7	15	14	8	0.26	1.40
CoolRay™ 60 (#3)	6+12+6	28	8	13	14	9	0.25	1.40
CoolRay™ 50 (#3)	6+12+6	24	8	10	15	7	0.22	1.30
CoolRay™ 40 (#3)	6+12+6	19	6	8	13	6	0.26	1.40

Commercial glass performance guide

Triple Glazing –
Combinations of OptEma™ and CoolRay™
Incorporating Clear Float Backing Glass

Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value 12mm argon
		Trans.	Refl.	Trans.	Refl.			
EnviroClear™	4+12+4+12+4	70	21	58	17	41	0.67	1.60
OptEma™ (#4)	4+12+4+12+4	72	19	46	27	36	0.53	1.00
OptEma™ (#3), OptEma™ (#5)	4+12+4+12+4	72	16	42	30	32	0.51	0.70
CoolRay™ 70 (#2), OptEma™ (#4)	6+12+4+12+4	62	16	26	40	17	0.30	0.70
CoolRay™ 60 (#2), OptEma™ (#4)	6+12+4+12+4	54	19	24	38	21	0.27	0.70
CoolRay™ 50 (#2), OptEma™ (#4)	6+12+4+12+4	46	19	19	33	15	0.22	0.70
CoolRay™ 40 (#2), OptEma™ (#4)	6+12+4+12+4	37	22	15	33	15	0.18	0.70

Commercial glass performance guide

KlymetControl™ Double Glazing –
Incorporating EnergyTech¹ Clear Low E
Backing Glass (#3)

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

Commercial glass performance guide

KlymetControl™ Double Glazing –
Incorporating EnergyTech¹ Clear Low E
Backing Glass (#3)

Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value 12mm argon
		Trans.	Refl.	Trans.	Refl.			
Laminated glass								
Protekta™ Clear	6.38+12+6	72	17	50	13	<1	0.74	1.60
Protekta™ Grey	6.38+12+6	34	7	30	8	<1	0.44	1.60
Protekta™ Bronze	6.38+12+6	43	9	34	9	<1	0.47	1.60
Protekta™ Green	6.38+12+6	59	13	42	11	<1	0.56	1.60
Protekta™ Translucent	6.38+12+6	56	12	40	10	<1	0.54	1.60
Protekta™ SuperGreen ¹	6.38+12+6	54	11	23	7	<1	0.33	1.60
Reflective coatings								
Stopsol ² Bronze	4+12+4	22	35	25	30	6	0.35	1.70
	6+12+6	18	34	19	29	4	0.30	1.60
Stopsol ² Grey	4+12+4	20	35	23	30	7	0.33	1.70
	6+12+6	15	34	17	28	5	0.28	1.60

Commercial glass performance guide

Single Glass – Monolithic and Laminated

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

Commercial glass performance guide

Single Glass – Monolithic and Laminated

Product name	Nominal thickness	Visible Light (%)		Solar Energy (%)		UV Trans. (%)	SHGC	U Value
		Trans.	Refl.	Trans.	Refl.			
Low Iron								
KristalClear™	4	91	9	90	8	78	0.90	5.90
	5	91	9	89	8	72	0.90	5.90
	6	91	9	88	8	74	0.89	5.80
	10	90	9	86	8	66	0.88	5.70
	12	90	9	86	8	66	0.88	5.60
	15	90	9	83	8	57	0.86	5.50
	19	90	9	82	8	54	0.85	5.40
Reflective coatings								
Stopsol ² Bronze	6	21	34	32	27	6	0.44	5.80
Stopsol ² Grey	6	19	34	29	27	7	0.43	5.80

Commercial glass performance guide

Single Glass – Monolithic and Laminated

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

Commercial glass performance guide

Single Glass – Monolithic and Laminated

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

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 building. 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