

PERFORMANCE DATA



SMARTGLASS™

PERFORMANCE DATA

PRODUCT	VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission	ratio	(W/m ²).K	elimination %	ISO rating / STC value	rating (see below)	rating (see below)
COLOURVUE™													
Aquamarine	73	7	28	6	30	64	72	0.83	5.8	98	33	1	1
Deep Aquamarine	51	6	41	6	47	47	59	0.68	5.8	99	34	2	2
Coolblue	74	7	27	6	29	65	73	0.84	5.8	98	33	1	1
Deep Coolblue	62	7	32	6	35	59	68	0.78	5.8	99	34	2	2
Coolbronze	52	6	39	5	46	49	61	0.70	5.8	98	33	1	1
Deep Coolbronze	29	5	50	5	62	33	50	0.57	5.8	99	34	2	2
Coolgrey	44	6	40	6	47	47	60	0.69	5.8	98	33	1	1
Deep Coolgrey	23	5	52	5	64	31	48	0.56	5.8	99	34	2	2
Coral Rose Red	78	7	22	7	21	72	78	0.89	5.8	99	33	1	1
Deep Red	15	6	51	6	61	33	49	0.57	5.8	99	33	1	1
Evening Shadow Black	50	7	39	6	45	49	61	0.70	5.8	99	33	1	1
Regal Blue	54	6	33	6	37	57	67	0.77	5.8	98	33	1	1
Deep Regal Blue	43	5	39	5	46	49	61	0.70	5.8	99	34	2	2
Ruby Red	50	6	29	7	30	63	71	0.82	5.8	99	33	1	1
Sahara Sun Yellow	78	9	29	8	29	63	71	0.81	5.8	99	33	1	1
Sapphire Blue	51	6	35	6	39	55	65	0.75	5.8	99	33	1	1
Shadowlite 50	57	6	38	6	43	51	62	0.72	5.8	98	33	1	1
Shadowlite 25	29	5	51	5	63	32	49	0.56	5.8	99	33	1	1
Shadowlite 10	9	5	64	4	82	14	36	0.41	5.8	99	34	2	2
True Blue	14	5	46	6	55	39	54	0.62	5.8	99	33	1	1

COLOURVUE™

SAFETY AND SECURITY RATINGS: **1.** Normal Strength (NS) for human impact safety (0.38 mm PVB interlayer); **2.** High Penetration Resistant (HPR) for additional security (0.76 mm PVB interlayer); **3.** High Impact (HI) for security in high-risk applications (1.52 mm PVB interlayer). **SABS 1263 compliance:** Ratings 1, 2 and 3: compliance with SABS 1263-1. Rating 3: compliance with SABS 1263-2.

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	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission	ratio	(W/m ²).K	elimination %	ISO rating / STC value	rating (see below)	rating (see below)
COLOURVUE™ TRANSLUCENT													
Aquamarine Translucent	40	13	50	11	53	36	50	0.57	5.8	99	34	2	2
Arctic Snow White	62	14	34	11	32	57	66	0.75	5.8	99	33	1	1
Blue Translucent	49	10	40	9	42	49	60	0.69	5.8	99	34	2	2
Regal Blue Translucent	30	10	54	10	60	30	46	0.53	5.8	99	34	2	2
Bronze Translucent	30	5	50	5	62	33	50	0.57	5.8	99	34	2	2
Grey Translucent	27	5	50	6	61	33	50	0.57	5.8	99	34	2	2

COLOURVUE™ TRANSLUCENT

PRODUCT		VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
		transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission	ratio	(W/m ²).K	elimination %	ISO rating / STC value	rating (see below)	rating (see below)
SOLARVUE™	range													
Aquamarine	HL	37	11	54	10	60	30	46	0.53	5.8	99	33	1	1
	XHL	45	9	48	9	54	37	52	0.60	5.8	98	33	1	1
Blue	HL	38	11	53	11	57	32	47	0.54	5.8	99	33	1	1
	XHL	46	8	47	8	53	39	53	0.61	5.8	98	33	1	1
Bronze	HL	27	8	58	8	68	24	42	0.49	5.8	99	33	1	1
	XHL	33	9	54	8	62	30	46	0.53	5.8	99	33	1	1
Grey	HL	23	7	59	8	70	22	41	0.47	5.8	99	33	1	1
	XHL	28	9	55	9	63	28	45	0.51	5.8	99	33	1	1
Neutral	HL	46	14	50	12	52	36	50	0.57	5.8	98	33	1	1
	XHL	56	9	44	9	47	44	56	0.65	5.8	98	33	1	1
	SHL	61	9	38	8	41	51	62	0.71	5.8	98	33	1	1
	MHL	68	8	34	7	37	56	66	0.76	5.8	98	33	1	1
Regal Blue	HL	31	9	55	10	61	29	45	0.52	5.8	99	33	1	1
	XHL	38	9	49	8	56	36	51	0.58	5.8	98	33	1	1

SOLARVUE™

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	range	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission	ratio	(W/m ²). K	elimination %	ISO rating / STC value	rating (see below)	rating (see below)
SOLARSHIELD™ Aquamarine	S10	9	27	75	26	67	7	25	0.29	5.8	99	33	1	1
	S20	19	19	67	18	67	15	33	0.38	5.8	99	33	1	1
	S30	29	12	59	13	63	24	41	0.47	5.8	99	33	1	1
Blue	S10	9	30	75	29	63	8	25	0.28	5.8	99	33	1	1
	S20	20	20	67	20	64	16	33	0.38	5.8	99	33	1	1
	S30	30	14	59	14	62	24	41	0.47	5.8	99	33	1	1
Bronze	S10	7	17	74	19	75	6	26	0.30	5.8	99	33	1	1
	S20	14	12	68	13	75	12	32	0.37	5.8	99	33	1	1
	S30	21	9	62	10	71	19	38	0.44	5.8	99	33	1	1
Grey	S10	5	14	74	18	77	5	26	0.30	5.8	99	33	1	1
	S20	12	10	68	13	75	12	32	0.36	5.8	99	33	1	1
	S30	18	8	63	10	73	17	37	0.42	5.8	99	33	1	1
Regal Blue	S10	8	22	75	25	68	7	25	0.29	5.8	99	33	1	1
	S20	14	15	68	17	69	14	32	0.37	5.8	99	33	1	1
	S30	24	11	60	12	66	22	40	0.46	5.8	99	33	1	1
Silver	S10	11	41	77	38	53	9	23	0.26	5.8	99	33	1	1
	S20	24	27	66	23	59	18	34	0.39	5.8	99	33	1	1
	S30	35	18	58	16	57	27	42	0.48	5.8	99	33	1	1

SOLARSHIELD™

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	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
E RANGE™													
TOUGHENED SAFETY GLASS													
Armourplate Low E	82	10	36	9	31	60	64	0.74	3.4	51	29	1	0
Armourplate Solar E	59	6	50	6	51	43	50	0.58	3.4	55	29	1	0
LAMINATED SAFETY GLASS													
Aquamarine Low E	68	8	43	8	41	51	57	0.66	3.4	99	33	1	1
Deep Aquamarine Low E	55	7	49	7	50	43	51	0.58	3.4	99	34	2	2
Intruderpufe Low E	82	10	36	9	31	60	64	0.74	3.4	99	33	1	1
Intruderpufe Solar E	59	6	50	6	51	43	50	0.58	3.4	99	33	1	1
Cool Blue Low E	69	8	42	8	39	53	58	0.67	3.4	99	33	1	1
Deep Cool Blue Low E	57	7	46	7	46	47	54	0.62	3.4	99	34	2	2
Cool Bronze Low E	47	6	53	7	54	39	47	0.54	3.4	99	33	1	1
Deep Cool Bronze Low E	31	5	62	6	66	29	38	0.44	3.4	99	34	2	2
Cool Grey Low E	40	6	55	6	57	37	45	0.52	3.4	99	33	1	1
Deep Cool Grey Low E	23	5	64	5	69	26	36	0.42	3.4	99	34	2	2
Regal Blue Low E	53	7	48	8	47	45	52	0.60	3.4	99	33	1	1
Deep Regal Blue Low E	35	6	56	6	59	35	44	0.50	3.4	99	34	2	2

E RANGE™

PRODUCT	VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
COOLVUE™													
CoolVue Clear	72	8	53	26	37	37	47	0.54	5.8	>99	35	2	2
CoolVue Regal Blue	47	7	61	26	48	26	39	0.45	5.8	>99	35	2	2
CoolVue Grey	35	6	66	25	55	20	34	0.40	5.8	>99	35	2	2

COOLVUE™

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	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission	ratio	(W/m ²).K	elimination %	ISO rating / STC value	rating (see below)	rating (see below)
INSULVUE™ ColourVue & ClearVue ColourVue + 12 mm air gap + ClearVue													
Aquamarine	64	11	40	9	41	50	60	0.70	3.2	97	34	1	1
Deep Aquamarine	45	8	52	7	57	36	48	0.55	3.2	99	35	2	2
Coolblue	65	11	39	9	40	51	61	0.71	3.2	95	34	1	1
Deep Coolblue	54	10	43	9	45	46	57	0.65	3.2	99	35	2	2
Coolbronze	45	8	50	7	55	38	50	0.57	3.2	98	34	1	1
Deep Coolbronze	26	6	62	6	68	26	38	0.44	3.2	99	35	2	2
Coolgrey	39	7	52	7	56	37	48	0.56	3.2	98	34	1	1
Deep Coolgrey	20	5	63	6	69	25	37	0.42	3.2	99	35	2	2
Coral Rose Red	68	12	34	11	33	56	66	0.76	3.2	99	34	1	1
Deep Red	13	6	62	7	67	26	38	0.44	3.2	99	34	1	1
Evening Shadow Black	44	9	50	8	54	38	50	0.57	3.2	99	34	1	1
Regal Blue	47	8	45	8	48	44	55	0.63	3.2	98	34	1	1
Deep Regal Blue	37	6	51	7	55	38	49	0.57	3.2	99	35	1	1
Ruby Red	44	8	40	10	41	49	60	0.69	3.2	99	34	1	1
Sahara Sun Yellow	68	14	40	11	40	49	60	0.68	3.2	99	34	1	1
Sapphire Blue	45	6	46	8	49	43	54	0.62	3.2	99	34	1	1
Shadowlite 50	50	9	49	7	53	40	51	0.59	3.2	98	34	1	1
Shadowlite 25	26	5	63	5	70	25	37	0.43	3.2	99	35	1	1
Shadowlite 10	8	5	76	5	84	11	24	0.28	3.2	99	35	2	2
True Blue	12	5	58	7	62	31	42	0.49	3.2	99	34	1	1

INSULVUE™ (ColourVue & ClearVue)

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INSULVUE™ ColourVue & Intruderprufe Low E ColourVue + 12 mm air gap + Intruderprufe Low E													
Aquamarine	60	13	46	12	50	38	54	0.62	2.1	99	35	1	2
Deep Aquamarine	42	8	58	9	63	28	42	0.48	2.1	99	36	2	3
Coolblue	61	13	45	13	48	39	55	0.63	2.1	99	35	1	2
Deep Coolblue	51	11	50	11	54	35	50	0.57	2.1	99	36	2	3
Coolbronze	42	8	57	9	62	29	43	0.50	2.1	99	35	1	2
Deep Coolbronze	24	6	68	7	73	20	32	0.37	2.1	99	36	2	3
Coolgrey	36	8	58	9	63	28	42	0.48	2.1	99	35	1	2
Deep Coolgrey	19	5	69	6	75	19	31	0.36	2.1	99	36	2	3
Coral Rose Red	64	13	41	15	42	43	59	0.68	2.1	99	35	1	2
Deep Red	12	6	68	8	72	20	32	0.37	2.1	99	35	1	2
Evening Shadow Black	41	10	57	10	61	29	43	0.50	2.1	99	35	1	2
Regal Blue	45	9	51	11	55	34	49	0.56	2.1	99	35	1	2
Deep Regal Blue	35	7	57	9	62	29	43	0.50	2.1	99	36	2	3
Ruby Red	41	9	47	13	49	38	53	0.61	2.1	99	35	1	2
Sahara Sun Yellow	64	15	47	14	48	38	53	0.61	2.1	99	35	1	2
Sapphire Blue	42	9	52	11	56	33	48	0.55	2.1	99	35	1	2
Shadowlite 50	47	9	55	9	60	31	45	0.51	2.1	99	35	1	2
Shadowlite 25	24	6	69	6	75	19	31	0.36	2.1	99	35	1	2
Shadowlite 10	8	5	81	5	87	8	19	0.22	2.1	99	36	2	3
True Blue	11	5	64	8	69	23	36	0.42	2.1	99	35	1	2

INSULVUE™ (ColourVue & Intruderprufe Low E)

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	range	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission	ratio	(W/m ²).K	elimination %	ISO rating / STC value	rating (see below)	rating (see below)	
INSULVUE™ SolarVue & ClearVue SolarVue + 12 mm air gap + ClearVue	Aquamarine	HL	32	12	65	11	65	24	35	0.41	3.2	99	34	0	1
		XHL	39	10	59	10	61	29	41	0.47	3.2	99	34	0	1
	Blue	HL	33	12	64	12	63	25	36	0.42	3.2	99	34	0	1
		XHL	40	10	58	9	61	30	42	0.48	3.2	98	34	0	1
	Bronze	HL	24	8	69	8	73	19	31	0.36	3.2	99	34	0	1
		XHL	29	9	65	9	68	23	35	0.41	3.2	99	34	0	1
	Grey	HL	20	7	70	8	75	17	30	0.34	3.2	99	34	0	1
		XHL	24	9	66	9	69	22	34	0.39	3.2	99	34	0	1
	Regal Blue	HL	28	10	65	10	67	23	35	0.40	3.2	99	34	0	1
		XHL	33	10	60	9	63	28	40	0.46	3.2	98	34	0	1
	Neutral	HL	41	16	61	13	59	28	39	0.45	3.2	98	34	0	1
		XHL	49	12	55	10	56	34	45	0.52	3.2	98	34	0	1
		SHL	54	12	49	10	50	40	51	0.58	3.2	98	34	0	1
		MHL	60	12	45	9	47	44	55	0.63	3.2	98	34	0	1

INSULVUE™ (SolarVue & ClearVue)

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INSULVUE™ SolarVue & Intruderprufe Low E <i>SolarVue + 12 mm air gap + Intruderprufe Low E</i>														
Aquamarine	HL	30	12	70	12	70	18	30	0.34	2.1	99	35	1	2
	XHL	37	11	65	11	66	23	35	0.40	2.1	99	35	1	2
Blue	HL	31	12	69	12	69	19	31	0.35	2.1	99	35	1	2
	XHL	38	11	64	10	67	23	36	0.41	2.1	99	35	1	2
Bronze	HL	22	8	76	9	76	15	26	0.30	2.1	99	35	1	2
	XHL	27	10	70	10	72	18	30	0.34	2.1	99	35	1	2
Grey	HL	19	8	76	9	78	13	24	0.28	2.1	99	35	1	2
	XHL	23	9	72	10	73	17	28	0.32	2.1	99	35	1	2
Neutral	HL	38	16	66	14	64	22	34	0.39	2.1	99	35	1	2
	XHL	46	12	61	12	62	26	39	0.45	2.1	99	35	1	2
	SHL	51	13	56	12	58	30	44	0.51	2.1	99	35	1	2
	MHL	56	13	52	13	54	34	48	0.55	2.1	99	35	1	2
Regal Blue	HL	26	10	71	11	71	18	29	0.33	2.1	99	35	1	2
	XHL	31	9	66	10	68	22	34	0.39	2.1	99	35	1	2

INSULVUE™ (SolarVue & Intruderprufe Low E)

SAFETY AND SECURITY RATINGS: **1.** Normal Strength (NS) for human impact safety (0.38 mm PVB interlayer); **2.** High Penetration Resistant (HPR) for additional security (0.76 mm PVB interlayer); **3.** High Impact (HI) for security in high-risk applications (1.52 mm PVB interlayer). **SABS 1263 compliance:** Ratings 1, 2 and 3: compliance with SABS 1263-1. Rating 3: compliance with SABS 1263-2.

NOTES: **1.** This data is based on tests conducted on 6.38 mm thick laminated glass. **2.** To avoid the possibility of thermal stress fracture, it is always advisable to request that a thermal stress evaluation be conducted by SmartGlass. **3.** Shading coefficients and U-Values are calculated using ASHRAE summer daytime conditions. **4.** All values are given as an indication. Slight variations may occur due to the manufacturing tolerances.

PERFORMANCE DATA

PRODUCT	VISIBLE LIGHT			SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY	
	range	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission	ratio	(W/m ²).K	elimination %	ISO rating / STC value	rating (see below)	rating (see below)	
INSULVUE™ Solarshield & ClearVue <i>Solarshield + 12 mm air gap + ClearVue</i>	Aquamarine	S10	8	27	84	26	68	6	16	0.19	3.2	99	34	0	1
		S20	17	19	77	18	70	12	23	0.27	3.2	99	34	0	1
		S30	26	13	70	13	68	19	30	0.35	3.2	99	34	0	1
Blue		S10	8	30	84	29	65	6	16	0.19	3.2	99	34	0	1
		S20	18	20	76	20	67	13	24	0.27	3.2	99	34	0	1
		S30	26	15	69	14	67	19	31	0.35	3.2	99	34	0	1
Bronze		S10	6	17	84	19	76	5	16	0.19	3.2	99	34	0	1
		S20	12	12	78	13	77	10	22	0.25	3.2	99	34	0	1
		S30	19	9	73	10	75	15	27	0.31	3.2	99	34	0	1
Grey		S10	5	14	84	18	78	4	16	0.19	3.2	99	34	0	1
		S20	11	10	79	13	78	9	21	0.25	3.2	99	34	0	1
		S30	16	8	74	10	76	14	26	0.30	3.2	99	34	0	1
Regal Blue		S10	7	22	84	25	69	6	16	0.18	3.2	99	34	0	1
		S20	13	15	78	17	72	11	22	0.26	3.2	99	34	0	1
		S30	21	11	71	13	70	17	29	0.34	3.2	99	34	0	1
Silver		S10	10	41	85	38	55	7	15	0.18	3.2	99	34	0	1
		S20	21	27	75	23	63	14	25	0.29	3.2	99	34	0	1
		S30	31	19	68	16	63	21	32	0.37	3.2	99	34	0	1

INSULVUE™ (Solarshield & ClearVue)

SAFETY AND SECURITY RATINGS: **1.** Normal Strength (NS) for human impact safety (0.38 mm PVB interlayer); **2.** High Penetration Resistant (HPR) for additional security (0.76 mm PVB interlayer); **3.** High Impact (HI) for security in high-risk applications (1.52 mm PVB interlayer). **SABS 1263 compliance:** Ratings 1, 2 and 3: compliance with SABS 1263-1. Rating 3: compliance with SABS 1263-2.

NOTES: **1.** This data is based on tests conducted on 6.38 mm thick laminated glass. **2.** To avoid the possibility of thermal stress fracture, it is always advisable to request that a thermal stress evaluation be conducted by SmartGlass. **3.** Shading coefficients and U-Values are calculated using ASHRAE summer daytime conditions. **4.** All values are given as an indication. Slight variations may occur due to the manufacturing tolerances.

PERFORMANCE DATA

PRODUCT	VISIBLE LIGHT			SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY	
	range	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission	ratio	(W/m ²). K	elimination %	ISO rating / STC value	rating (see below)	rating (see below)	
INSULVUE™ Solarshield & Intruderprufe Low E <i>Solarshield + 12 mm air gap + Intruderprufe low E</i>	Aquamarine	S10	8	27	88	26	69	5	12	0.14	2.1	99	35	1	2
		S20	16	19	81	18	72	10	19	0.22	2.1	99	35	1	2
		S30	24	13	75	14	72	14	25	0.29	2.1	99	35	1	2
	Blue	S10	8	30	88	29	66	5	12	0.14	2.1	99	35	1	2
		S20	17	20	81	20	70	10	19	0.22	2.1	99	35	1	2
		S30	25	15	75	15	70	15	25	0.29	2.1	99	35	1	2
	Bronze	S10	6	17	88	19	77	4	12	0.13	2.1	99	35	1	2
		S20	12	12	83	14	78	8	17	0.19	2.1	99	35	1	2
		S30	18	9	78	10	79	11	22	0.25	2.1	99	35	1	2
	Grey	S10	5	14	88	18	79	3	12	0.13	2.1	99	35	1	2
		S20	10	10	84	13	80	7	16	0.19	2.1	99	35	1	2
		S30	15	8	79	10	79	11	21	0.24	2.1	99	35	1	2
	Regal Blue	S10	6	22	88	25	71	4	12	0.14	2.1	99	35	1	2
		S20	12	15	22	17	75	8	18	0.20	2.1	99	35	1	2
		S30	20	11	76	13	74	13	24	0.28	2.1	99	35	1	2
Silver	S10	9	41	88	38	57	5	12	0.14	2.1	99	35	1	2	
	S20	20	27	80	25	64	11	20	0.23	2.1	99	35	1	2	
	S30	29	19	73	18	66	16	27	0.31	2.1	99	53	1	2	

INSULVUE™ (Solarshield & Intruderprufe Low E)

SAFETY AND SECURITY RATINGS: **1.** Normal Strength (NS) for human impact safety (0.38 mm PVB interlayer); **2.** High Penetration Resistant (HPR) for additional security (0.76 mm PVB interlayer); **3.** High Impact (HI) for security in high-risk applications (1.52 mm PVB interlayer). **SABS 1263 compliance:** Ratings 1, 2 and 3: compliance with SABS 1263-1. Rating 3: compliance with SABS 1263-2.

NOTES: **1.** This data is based on tests conducted on 6.38 mm thick laminated glass. **2.** To avoid the possibility of thermal stress fracture, it is always advisable to request that a thermal stress evaluation be conducted by SmartGlass. **3.** Shading coefficients and U-Values are calculated using ASHRAE summer daytime conditions. **4.** All values are given as an indication. Slight variations may occur due to the manufacturing tolerances.

PERFORMANCE DATA

PRODUCT	VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
INSULVUE™ <i>E Range & ClearVue</i>													
TOUGHENED SAFETY GLASS													
Armourplate Low E	72	16	46	16	37	47	64	0.73	2.1	66	32	0	0
Armourplate Solar E	54	9	57	7	59	34	43	0.50	2.1	64	32	0	0
LAMINATED SAFETY GLASS													
Intruderprufe Low E	72	16	46	16	37	47	64	0.73	2.1	99	34	0	1
Intruderprufe Solar E	54	9	57	7	59	34	43	0.50	2.1	99	34	0	1

INSULVUE™ (E Range & ClearVue)

PRODUCT	VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
INSULVUE™ <i>CoolVue & ClearVue</i> CoolVue + 12 mm air gap + ClearVue													
CoolVue Clear	63	12	62	27	44	29	38	0.44	3.2	>99	36	0	2
CoolVue Grey	31	7	74	26	58	16	26	0.29	3.2	>99	36	0	2
CoolVue Regal Blue	41	9	70	26	53	21	30	0.35	3.2	>99	36	0	2

INSULVUE™ (CoolVue & ClearVue)

SAFETY AND SECURITY RATINGS: **1.** Normal Strength (NS) for human impact safety (0.38 mm PVB interlayer); **2.** High Penetration Resistant (HPR) for additional security (0.76 mm PVB interlayer); **3.** High Impact (HI) for security in high-risk applications (1.52 mm PVB interlayer). **SABS 1263 compliance:** Ratings 1,2 and 3: compliance with SABS 1263-1. Rating 3: compliance with SABS 1263-2.

NOTES: **1.** This data is based on tests conducted on 6.38 mm thick laminated glass. **2.** To avoid the possibility of thermal stress fracture, it is always advisable to request that a thermal stress evaluation be conducted by SmartGlass. **3.** Shading coefficients and U-Values are calculated using ASHRAE summer daytime conditions. **4.** All values are given as an indication. Slight variations may occur due to the manufacturing tolerances.

PERFORMANCE DATA

PRODUCT	VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
INSULVUE™ CoolVue & Intruderprufe low E CoolVue + 12 mm air gap + Intruderprufe low E													
CoolVue Clear	59	13	66	28	49	23	34	0.39	2	99	37	2	2
CoolVue Grey	29	7	79	26	62	12	21	0.24	2	99	37	2	2
CoolVue Regal Blue	38	9	74	27	57	16	26	0.30	2	99	37	2	2

INSULVUE™
(CoolVue & Intruderprufe Low E)

PRODUCT	VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
COMPARISON TABLE Clear glazing													
Intruderprufe NS	90	8	22	7	20	73	78	0.90	5.8	96	33	1	1
InsulVue Intruderprufe Intruderprufe + 12 mm air gap + Intruderprufe	82	15	34	11	35	54	66	0.75	3.2	99	34	1	2

Comparison table

SAFETY AND SECURITY RATINGS: **1.** Normal Strength (NS) for human impact safety (0.38 mm PVB interlayer); **2.** High Penetration Resistant (HPR) for additional security (0.76 mm PVB interlayer); **3.** High Impact (HI) for security in high-risk applications (1.52 mm PVB interlayer). **SABS 1263 compliance:** Ratings 1, 2 and 3: compliance with SABS 1263-1. Rating 3: compliance with SABS 1263-2.

NOTES: **1.** This data is based on tests conducted on 6.38 mm thick laminated glass. **2.** To avoid the possibility of thermal stress fracture, it is always advisable to request that a thermal stress evaluation be conducted by SmartGlass. **3.** Shading coefficients and U-Values are calculated using ASHRAE summer daytime conditions. **4.** All values are given as an indication. Slight variations may occur due to the manufacturing tolerances.

SERENE GREEN PERFORMANCE DATA

PRODUCT	VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY	COLOURVUE™	
	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission								
COLOURVUE™															
Serene Green	77	7	41	5	48	47	59	0.68	5.8	98	33	1	1		
Deep Serene Green	69	6	50	4	62	34	50	0.58	5.8	99	33	1	1		

PRODUCT	range	VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY	SOLARVUE™	
		transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission								
SOLARVUE™																
SolarVue Serene Green	HL	42	11	57	8	67	25	43	0.49	5.8	99	33	1	1		
SolarVue Serene Green	XHL	53	9	51	7	61	32	49	0.56	5.8	99	33	1	1		
SolarVue Serene Green	SHL	59	8	49	6	58	36	51	0.59	5.8	99	33	1	1		
SolarVue Serene Green	MHL	67	7	44	6	52	42	56	0.64	5.8	99	33	1	1		

SAFETY AND SECURITY RATINGS: **1.** Normal Strength (NS) for human impact safety (0.38 mm PVB interlayer); **2.** High Penetration Resistant (HPR) for additional security (0.76 mm PVB interlayer); **3.** High Impact (HI) for security in high-risk applications (1.52 mm PVB interlayer). **SABS 1263 compliance:** Ratings 1, 2 and 3: compliance with SABS 1263-1. Rating 3: compliance with SABS 1263-2.

NOTES: **1.** This data is based on tests conducted on 6.38 mm thick laminated glass. **2.** To avoid the possibility of thermal stress fracture, it is always advisable to request that a thermal stress evaluation be conducted by SmartGlass. **3.** Shading coefficients and U-Values are calculated using ASHRAE summer daytime conditions. **4.** All values are given as an indication. Slight variations may occur due to the manufacturing tolerances.

SERENE GREEN PERFORMANCE DATA

PRODUCT		VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
SOLARSHIELD™		transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission	ratio	(W/m²).K	elimination %	ISO rating / STC value	rating (see below)	rating (see below)
	range													
Solarshield Serene Green	S10	11	34	74	19	74	7	26	0.30	5.8	99	33	1	1
Solarshield Serene Green	S20	23	22	67	13	73	14	33	0.38	5.8	99	33	1	1
Solarshield Serene Green	S30	36	14	60	10	69	21	40	0.46	5.8	99	33	1	1

SOLARSHIELD™

PRODUCT		VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
E RANGE™		transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission	ratio	(W/m²).K	elimination %	ISO rating / STC value	rating (see below)	rating (see below)
Serene Green Low E		65	9	56	7	57	36	44	0.51	3.4	99	33	1	1

E RANGE™

PRODUCT		VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
COOLVUE™		transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission	ratio	(W/m²).K	elimination %	ISO rating / STC value	rating (see below)	rating (see below)
CoolVue Serene Green		63	7	59	23	50	28	41	0.48	5.8	>99	35	2	2

COOLVUE™

SAFETY AND SECURITY RATINGS: **1.** Normal Strength (NS) for human impact safety (0.38 mm PVB interlayer); **2.** High Penetration Resistant (HPR) for additional security (0.76 mm PVB interlayer); **3.** High Impact (HI) for security in high-risk applications (1.52 mm PVB interlayer). **SABS 1263 compliance:** Ratings 1, 2 and 3: compliance with SABS 1263-1. Rating 3: compliance with SABS 1263-2.

NOTES: **1.** This data is based on tests conducted on 6.38 mm thick laminated glass. **2.** To avoid the possibility of thermal stress fracture, it is always advisable to request that a thermal stress evaluation be conducted by SmartGlass. **3.** Shading coefficients and U-Values are calculated using ASHRAE summer daytime conditions. **4.** All values are given as an indication. Slight variations may occur due to the manufacturing tolerances.

SERENE GREEN PERFORMANCE DATA

PRODUCT	VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
INSULVUE™ ColourVue & ClearVue ColourVue + 12 mm air gap + ClearVue													
Serene Green	68	12	52	7	57	36	48	0.55	3.2	98	34	1	1
Deep Serene Green	60	11	61	6	67	27	39	0.45	3.2	99	34	1	1

INSULVUE™
(ColourVue Serene Green & ClearVue)

PRODUCT	VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
INSULVUE™ ColourVue & Intruderprufe Low E ColourVue + 12 mm air gap + Intruderprufe Low E													
Serene Green	64	14	58	9	63	28	42	0.48	2.1	99	35	1	2
Deep Serene Green	57	12	67	7	73	20	33	0.38	2.1	99	35	1	2

INSULVUE™
(Serene Green & Intruderprufe Low E)

PRODUCT	range	VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
		transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
INSULVUE™ SolarVue & ClearVue SolarVue + 12 mm air gap + ClearVue														
SolarVue Serene Green	HL	37	13	68	8	72	20	32	0.37	3.2	99	34	0	1
SolarVue Serene Green	XHL	47	11	63	7	68	25	37	0.43	3.2	99	34	0	1
SolarVue Serene Green	SHL	51	8	60	7	65	28	40	0.46	3.2	99	34	0	1
SolarVue Serene Green	MHL	59	11	56	7	60	33	44	0.51	3.2	99	34	0	1

INSULVUE™
(SolarVue Serene Green & ClearVue)

SAFETY AND SECURITY RATINGS: **1.** Normal Strength (NS) for human impact safety (0.38 mm PVB interlayer); **2.** High Penetration Resistant (HPR) for additional security (0.76 mm PVB interlayer); **3.** High Impact (HI) for security in high-risk applications (1.52 mm PVB interlayer). **SABS 1263 compliance:** Ratings 1, 2 and 3: compliance with SABS 1263-1. Rating 3: compliance with SABS 1263-2.

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SERENE GREEN PERFORMANCE DATA

PRODUCT	VISIBLE LIGHT			SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
	range	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
INSULVUE™ SolarVue & Intruderprufe Low E <i>SolarVue + 12 mm air gap + Intruderprufe Low E</i>														
SolarVue Serene Green	HL	35	13	74	9	76	15	26	0.30	2.1	99	35	1	2
SolarVue Serene Green	XHL	44	12	68	8	73	19	32	0.36	2.1	99	35	1	2
SolarVue Serene Green	SHL	48	11	66	8	70	22	34	0.39	2.1	99	35	1	2
SolarVue Serene Green	MHL	55	12	62	8	67	25	38	0.44	2.1	99	35	1	2

INSULVUE™

(SolarVue Serene Green & Intruderprufe Low E)

PRODUCT	VISIBLE LIGHT			SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
	range	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
INSULVUE™ Solarshield & ClearVue <i>Solarshield + 12 mm air gap + ClearVue</i>														
Solarshield Serene Green	S10	10	34	84	19	76	5	17	0.19	3.2	99	34	0	1
Solarshield Serene Green	S20	21	22	77	13	76	13	23	0.26	3.2	99	34	0	1
Solarshield Serene Green	S30	31	15	71	10	73	17	29	0.33	3.2	99	34	0	1

INSULVUE™

(Solarshield Serene Green & ClearVue)

PRODUCT	VISIBLE LIGHT			SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
	range	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
INSULVUE™ Solarshield & Intruderprufe Low E <i>Solarshield + 12 mm air gap + Intruderprufe Low E</i>														
Solarshield Serene Green	S10	9	34	88	19	77	4	12	0.14	2.1	99	35	1	2
Solarshield Serene Green	S20	20	23	82	14	78	8	18	0.21	2.1	99	35	1	2
Solarshield Serene Green	S30	30	16	77	10	77	13	23	0.27	2.1	99	35	1	2

INSULVUE™

(Solarshield Serene Green & Intruderprufe Low E)

SAFETY AND SECURITY RATINGS: **1.** Normal Strength (NS) for human impact safety (0.38 mm PVB interlayer); **2.** High Penetration Resistant (HPR) for additional security (0.76 mm PVB interlayer); **3.** High Impact (HI) for security in high-risk applications (1.52 mm PVB interlayer). **SABS 1263 compliance:** Ratings 1, 2 and 3: compliance with SABS 1263-1. Rating 3: compliance with SABS 1263-2.

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SERENE GREEN PERFORMANCE DATA

PRODUCT	VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
INSULVUE™ E Range & ClearVue E Range + 12 mm air gap + ClearVue													
Serene Green Low E	57	13	63	8	64	28	37	0.43	2.1	99	35	1	2
INSULVUE™ (Serene Green Low E & ClearVue)													

PRODUCT	VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
INSULVUE™ E Range & Intruderprufe Low E E Range + 12 mm air gap + Intruderprufe Low E													
Serene Green Low E	54	14	66	9	69	22	34	0.39	1.8	99	34	0	1
INSULVUE™ (Serene Green Low E & Intruderprufe Low E)													

PRODUCT	VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
INSULVUE™ CoolVue & ClearVue CoolVue + 12 mm air gap + ClearVue													
CoolVue Serene Green	55	10	68	24	54	22	32	0.37	3.2	>99	36	0	2
INSULVUE™ (CoolVue Serene Green & ClearVue)													

PRODUCT	VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE	UV	NOISE CONTROL	SAFETY	SECURITY
	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
INSULVUE™ CoolVue & Intruderprufe Low E CoolVue + 12 mm air gap + Intruderprufe Low E													
CoolVue Serene Green	52	11	73	24	59	24	27	0.31	2.0	99	37	2	2
INSULVUE™ (CoolVue Serene Green & Intruderprufe Low E)													

SAFETY AND SECURITY RATINGS: **1.** Normal Strength (NS) for human impact safety (0.38 mm PVB interlayer); **2.** High Penetration Resistant (HPR) for additional security (0.76 mm PVB interlayer); **3.** High Impact (HI) for security in high-risk applications (1.52 mm PVB interlayer). **SABS 1263 compliance:** Ratings 1, 2 and 3: compliance with SABS 1263-1. Rating 3: compliance with SABS 1263-2.

NOTES: **1.** This data is based on tests conducted on 6.38 mm thick laminated glass. **2.** To avoid the possibility of thermal stress fracture, it is always advisable to request that a thermal stress evaluation be conducted by SmartGlass. **3.** Shading coefficients and U-Values are calculated using ASHRAE summer daytime conditions. **4.** All values are given as an indication. Slight variations may occur due to the manufacturing tolerances.