

INSULVUE®

double glazed units

InsulVue® double glazed units are manufactured from two or more panes of glass held apart by a metal spacer and bonded with a primary and secondary seal. Dehydrated air is trapped between the glass panes.

InsulVue is available in glass combinations that offer a wide range of performance characteristics and appearances. Clear InsulVue is almost transparent to radiant solar heat, but solar control can be enhanced by replacing the outer glass with a suitable performance glass. InsulVue units incorporating glass from the E Range provide the best thermal insulation.

suggested applications

- Air-conditioned projects in areas with a high diurnal range or with extreme ambient temperatures
- Airport or other control towers to ensure optimum visibility and reduced internal reflection
- Computer rooms for strict atmospheric control
- Special commercial and industrial glazing
- Condensation reduction
- Cold stores and refrigerator doors

edge working

The edges of all heat absorbing glass should be polished to reduce the possibility of thermal breakage. The edges must be free of vented damage. These edges may be produced by a straight line polishing machine. Contact SmartGlass for a detailed thermal stress warranty.

pressure equalisation

When InsulVue units experience a temperature change they will deflect in the centre. This indicates that the seal is effective. The appearance of the unit may change unless the glass is of a high light transmission or the outer layer is sufficiently thick to minimise the deflection. Pressure equalisation is provided for units. This must be sealed off when the unit is installed.

physical properties

Thickness (mm)	Air Space (mm)	Maximum Standard Size (mm)	Approximate Mass (kg/m ²)
19	6	3000 x 1000	32
25	12	3000 x 2000	32

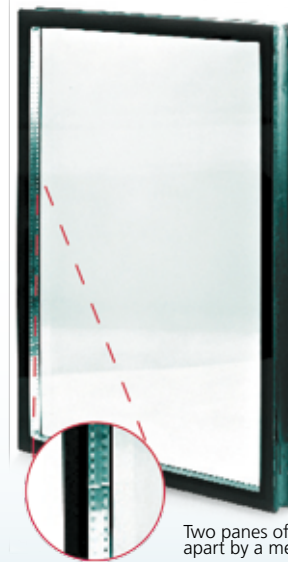
NOTE:

For efficient insulation, a 6 mm air space should not be used where the minor dimension exceeds 1 000 mm.

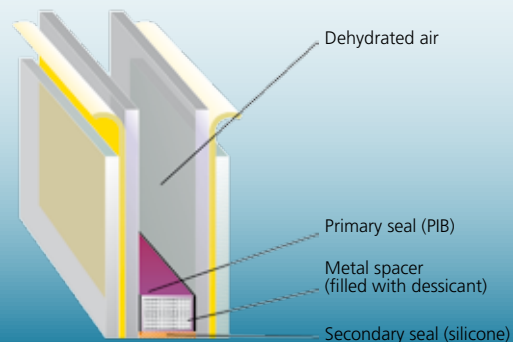
A thermal stress evaluation must be requested when glass with a high heat absorption is utilised in the unit.

Temperature and atmospheric pressure fluctuations are likely to cause distorted reflections when a reflective glass is incorporated in InsulVue.

Sizes in excess of 3000 mm x 2000 mm are available on request.



Two panes of glass held apart by a metal spacer



INSULVUE®

double glazed units

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>ColourVue & ClearVue</i> <small>ColourVue + 12 mm air gap + ClearVue</small>													
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)

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™ <i>SolarVue & ClearVue</i> <small>SolarVue + 12 mm air gap + ClearVue</small>														
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)

INSULVUE®

double glazed units

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>ColourVue & Intruderprufe Low E</i> 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)

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>SolarVue & Intruderprufe Low E</i> SolarVue + 12 mm air gap + Intruderprufe Low E	range													
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)

INSULVUE®

double glazed units

PRODUCT	VISIBLE LIGHT			SOLAR ENERGY					SHADING COEFFICIENT	U VALUE (W/m ² .K)	UV elimination %	NOISE CONTROL ISO rating / STC value	SAFETY rating (see below)	SECURITY rating (see below)
	range	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
INSULVUE™ <i>Solarshield & ClearVue</i> <small>Solarshield + 12 mm air gap + ClearVue</small>														
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)

PRODUCT	VISIBLE LIGHT			SOLAR ENERGY					SHADING COEFFICIENT	U VALUE (W/m ² .K)	UV elimination %	NOISE CONTROL ISO rating / STC value	SAFETY rating (see below)	SECURITY rating (see below)
	range	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission						
INSULVUE™ <i>Solarshield & Intruderprufe Low E</i> <small>Solarshield + 12 mm air gap + Intruderprufe low E</small>														
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	81	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)

INSULVUE®

double glazed units

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>													
<i>CoolVue</i> + 12 mm air gap + <i>ClearVue</i>													
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)

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 & Intruderprufe low E</i>													
<i>CoolVue</i> + 12 mm air gap + <i>Intruderprufe low E</i>													
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 <i>Clear glazing</i>													
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.

INSULVUE®

double glazed units

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 +12mm 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 +12mm 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 +12mm 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)

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 & Intruderprufe Low E SolarVue +12mm air gap + Intruderprufe Low E														
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)

INSULVUE®

double glazed units

PRODUCT	VISIBLE LIGHT			SOLAR ENERGY					SHADING RATIO	U VALUE (W/m ²).K	UV ELIMINATION %	NOISE CONTROL ISO rating / STC value	SAFETY rating (see below)	SECURITY rating (see below)	INSULVUE™ (Solarshield Serene Green & ClearVue)	
	range	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission								
INSULVUE™ Solarshield & ClearVue <small>Solarshield +12mm air gap + ClearVue</small>																
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		

PRODUCT	VISIBLE LIGHT			SOLAR ENERGY					SHADING RATIO	U VALUE (W/m ²).K	UV ELIMINATION %	NOISE CONTROL ISO rating / STC value	SAFETY rating (see below)	SECURITY rating (see below)	INSULVUE™ (Solarshield Serene Green & Intruderprufe Low E)	
	range	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission								
INSULVUE™ Solarshield & Intruderprufe Low E <small>Solarshield +12mm air gap + Intruderprufe Low E</small>																
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		

PRODUCT	VISIBLE LIGHT		SOLAR ENERGY					SHADING COEFFICIENT	U VALUE (W/m ²).K	UV ELIMINATION %	NOISE CONTROL ISO rating / STC value	SAFETY rating (see below)	SECURITY rating (see below)	INSULVUE™ (Serene Green Low E & ClearVue)	
	transmission	reflection	total elimination	reflectance	absorption	direct transmission	total transmission								
INSULVUE™ E Range & ClearVue <small>E Range +12mm air gap + ClearVue</small>															
Serene Green Low E	57	13	63	8	64	28	37	0.43	2.1	99	35	1	2		

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.

INSULVUE®

double glazed units

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 <i>E Range</i> +12mm 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 <i>CoolVue</i> +12mm 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 <i>CoolVue</i> +12mm 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.

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