

# STORMSAFE

## CYCLONE RESISTANT GLASS SYSTEMS



Stormsafe is a specially constructed laminated glass, designed to resist and absorb the impact of objects, debris, and projectiles. During cyclones and severe storms, ordinary window glass and frames can fail under such pressures. This can lead to buildings having significant internal damage and even structural failure. Because of this, and glass being an integral part of the framing system, National Glass have developed and tested a range of Stormsafe products to lessen the impact of such events.

Stormsafe is manufactured to AS/NZS 2208: 1996 Safety glazing materials in buildings and is a certified Grade A Safety Glass. It provides added strength against natural forces such as high winds and is available in 14mm and 17mm thicknesses. In order to meet energy efficiency requirements for residential and commercial buildings, Stormsafe can be incorporated with energy efficient glass such as SOL-R™ and Sunergy® Low-E coated glass.

Stormsafe has undergone and successfully passed debris impact testing as per AS/NZS1170.2 Section 2.5.8. This test simulates the effect of impact on glass and frame, and involves firing a 4kg timber projectile from a cannon at a specified speed and velocity. The objective is to test the integral strength by preventing the projectile from penetrating through the glass.

Stormsafe products are primarily designed for cyclonic regions of Australia, which includes the Queensland, Northern Territory and Western Australia coastlines. These areas are categorised under regional wind speeds; A, B, C & D. Wind regions C & D are classified as cyclonic areas and may require protection from flying debris and projectiles. Regions A & B are classified as non-cyclonic areas and do not require specific cyclonic rated glass.

For more information on Stormsafe systems, contact our technical team.

### STORMSAFE TECHNICAL INFORMATION

PRODUCT NAME	THICKNESS MM	WIND REGION	IMPACT SPEED TEST RESULT	SIZE TESTED	GRADE A SAFETY GLASS
Stormsafe 14	13.80	Region C	Passed at 31 metres / second	2380mm x 1180mm	Yes
Stormsafe 17	16.56	Region D	Passed at 36 metres / second	2380mm x 1180mm	Yes

### COLOUR OPTIONS



Clear



Green



Neutral



Blue



Grey

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### ENERGY PERFORMANCE VALUES - SINGLE GLASS

	MM	VLT VISIBLE LIGHT TRANSMISSION	VLR VISIBLE LIGHT REFLECTANCE	VLRI VISIBLE LIGHT REFLECTANCE	SHGC	U-VALUE
COLOUR AND TYPE		%	EXTERNAL %	INTERNAL %		W/M2K
<b>STORMSAFE 14</b>						
Clear	13.80	85	8	8	0.73	5.1
Grey	13.80	42	5	5	0.55	5.1
Sol-R Clear Low-E	13.80	78	9	10	0.65	3.4
Sunergy Neutral Low-E	13.80	63	8	10	0.53	3.7
Sol-R Neutral Low-E	13.80	58	8	9	0.49	3.4
Sol-R Grey Low-E	13.80	39	5	8	0.46	3.4
<b>STORMSAFE 17</b>						
Clear	16.56	85	7	7	0.71	5.0
Grey	16.56	42	5	5	0.55	5.0
Sol-R Clear Low-E	16.56	77	10	11	0.61	3.3
Sunergy Neutral Low-E	16.56	66	8	10	0.54	3.6
Sunergy Grey Low-E	16.56	32	5	9	0.40	3.6
Sol-R Neutral Low-E	16.56	60	8	9	0.49	3.3
Sol-R Grey Low-E	16.56	37	6	9	0.43	3.3

### ENERGY PERFORMANCE VALUES - INSULATED GLASS UNITS

	MM	VLT VISIBLE LIGHT TRANSMISSION	VLR VISIBLE LIGHT REFLECTANCE	VLRI VISIBLE LIGHT REFLECTANCE	SHGC	U-VALUE
COLOUR AND TYPE		%	EXTERNAL %	INTERNAL %		W/M2K
<b>STORMSAFE 14</b>						
Clear /12mm /6mm Clear	31.80	76	14	14	0.61	2.4
Grey / 12mm /6mm Clear	31.80	38	6	12	0.43	2.4
Sol-R Clear Low-E / 12mm / 6mm Clear	31.80	70	15	16	0.56	1.6
Sunergy Neutral Low-E / 12mm / 6mm Clear	31.80	56	11	16	0.44	1.8
Sol-R Neutral Low-E / 12mm / 6mm Clear	31.80	52	10	16	0.40	1.6
Sol-R Grey Low-E / 12mm / 6mm Clear	31.80	35	7	15	0.37	1.6
<b>STORMSAFE 17</b>						
Clear /12mm /6mm Clear	34.56	75	13	14	0.59	2.4
Grey 12mm / 6mm Clear	34.56	37	6	12	0.42	2.4
Sol-R Clear Low-E / 12mm / 6mm Clear	34.56	68	15	17	0.52	1.6
Sunergy Neutral Low-E / 12mm / 6mm Clear	34.56	58	12	16	0.44	1.7
Sol-R Neutral Low-E / 12mm / 6mm Clear	34.56	54	11	16	0.40	1.6
Sunergy Grey Low-E / 12mm / 6mm Clear	34.56	28	6	15	0.30	1.7
Sol-R Grey Low-E / 12mm / 6mm Clear	34.56	33	7	15	0.34	1.6