
STORMGUARD®
CYCLONIC SECURITY SCREENS
AMPLIMESH®
Feel safe inside.

Ultimate Strength

The StormGuard® screen system has been specifically designed to provide the ultimate in cyclonic impact performance, security and modern looks.

At the center of every StormGuard® screen, is an ultra high tensile Stainless steel mesh which offers exceptional strength and corrosion resistance, without compromising on natural light and ventilation.

StormGuard® cyclone screens have been rigorously tested to meet and exceed the requirements of cyclonic impact speeds up to 44m/s. The performance of StormGuard® screens exceeds the Australian standard, offering unprecedented levels of security.

The ultimate in strength and corrosion resistance, with a clean architectural look.

TECHNICAL SPECIFICATION

FRAME	6061 T6 Structural Aluminium
MESH	High Tensile Stainless Steel
RETENTION SYSTEM	StormGuard® isolated screw clamp
WIRE DIAMETER	0.8mm / 1.2mm
APERTURE SIZE	1.6mm / 2.4mm
WIRE TENSILE STRENGTH	900MPa
OPEN AREA	41%
VIEW ANGLE	156º
INSECT PROTECTION*	✓
TESTED & CERTIFIED	✓
FALL PREVENTION	✓
DYNAMIC IMPACT TEST	✓
JEMMY TEST	✓
KNIFE SHEAR TEST	✓

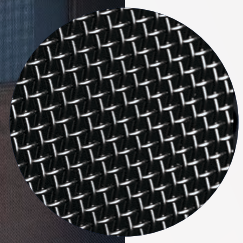
* Insect or security mesh provides an effective barrier to insects larger than the stated aperture of the mesh. Insects smaller than the stated aperture may not be impeded.

STRUCTURAL ALLOY

StormGuard® heavy duty frames are extruded in “Structural Grade” aluminium 6061 T6. This feature allows the screen to absorb significant energy before failure, enabling the highest possible impact performance.

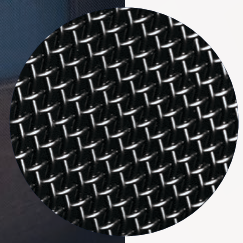
MULTI-POINT LOCKING

With an integrated multi-point locking system, StormGuard® doors offer the ultimate in cyclonic protection and high end security doors and windows.



0.8MM 316 STAINLESS STEEL MESH

Provides excellent corrosion resistance, making it ideal in security screens that are exposed to the elements over long periods.



1.2MM 304 STAINLESS STEEL MESH

Strong and durable, it can absorb and disperse impact without breaking or dislocating from its door frame, perfect for security applications.

STORMGUARD® ISOLATED SCREW CLAMP SYSTEM

The StormGuard® patented* isolated screw clamp mesh retention system combines extreme wedge pressure, high friction materials, and custom engineered screw clamps to efficiently absorb and disperse impact energy equally along the frame ensuring every single mesh strand is secured.

Typical screw clamp systems screw through the mesh directly into an aluminium frame increasing the chance of galvanic corrosion (electrolysis). The StormGuard® isolated screw clamp system uses stainless steel screws which bite into an engineered plastic retainer, completely isolating the screws from the frame for improved longevity and corrosion resistance.

* Innovation Patent No. 2021102984

WEDGE

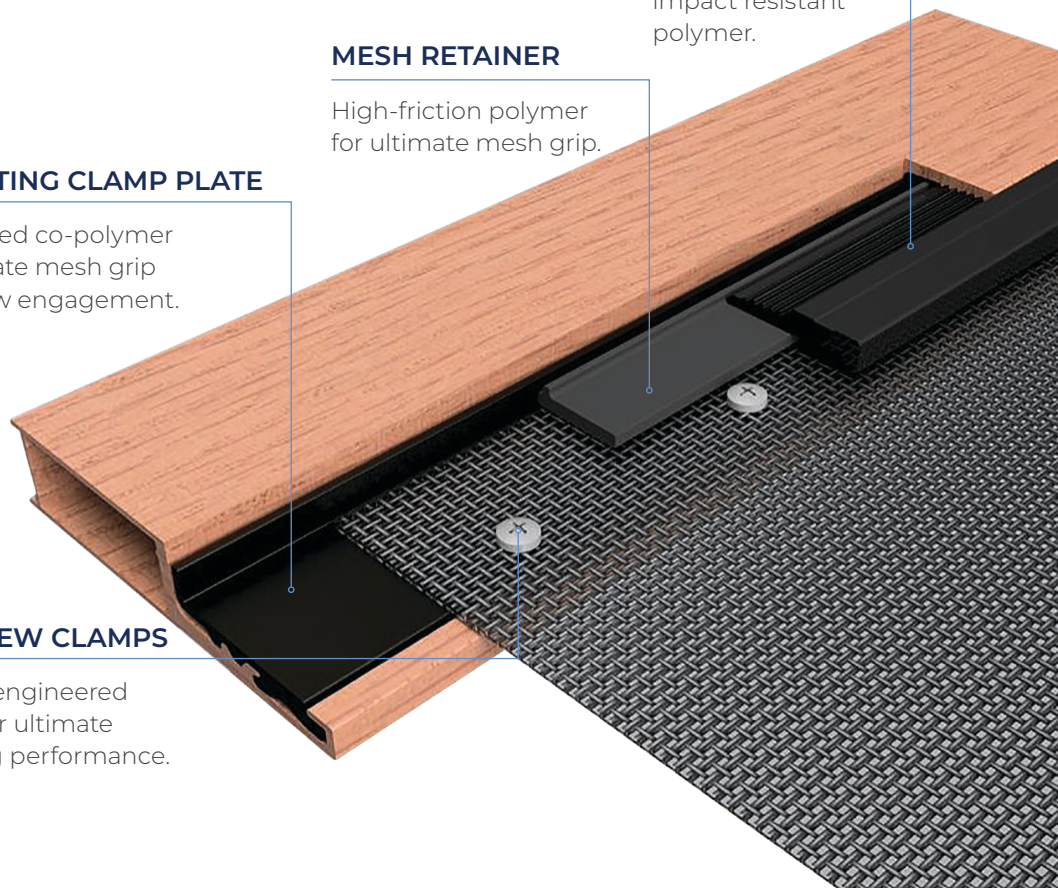
High performance impact resistant polymer.

MESH RETAINER

High-friction polymer for ultimate mesh grip.

INSULATING CLAMP PLATE

Engineered co-polymer for ultimate mesh grip and screw engagement.



316 SCREW CLAMPS

Custom engineered thread for ultimate clamping performance.

Testing and Compliance

StormGuard® has been extensively engineered and tested to meet and exceed all of the relevant security and cyclonic testing requirements.

SECURITY TESTING

DYNAMIC IMPACT TEST
AS5039/5041-2008: SECURITY SCREEN DOORS & SECURITY WINDOW GRILLES

The dynamic impact test was created to imitate an intruder attempting to kick, shoulder or otherwise force their way through the screen. The accepted and standardised test to replicate this is five 100 joule impacts (energy).

JEMMY TEST
AS5039/5041-2008: SECURITY SCREEN DOORS & SECURITY WINDOW GRILLES

StormGuard® is tested to withstand jemmy attacks from levers, such as large screwdrivers, used to apply large amounts of torque to locks and hinges. StormGuard® passes thanks to the rigid nature of the heavy duty frame extruded in T6 tempered structural alloy.

CORROSION TEST
AS2331.3.1: METHODS OF TEST FOR METALLIC & RELATED COATINGS

To help prevent corrosion, StormGuard® uses an isolated screw clamp retention system that is completely isolated from all other metal types. This eliminates the chance of galvanic corrosion, a common flaw with standard screw clamp systems.

KNIFE SHEAR TEST
AS5039-2008: SECURITY SCREEN DOORS & SECURITY WINDOW GRILLES

The premium high tensile stainless steel mesh used by StormGuard® passes the test. The test simulates a utility knife attack on the mesh or similar bladed tools used by a burglar seeking entry into your home.

CYCLONIC TESTING

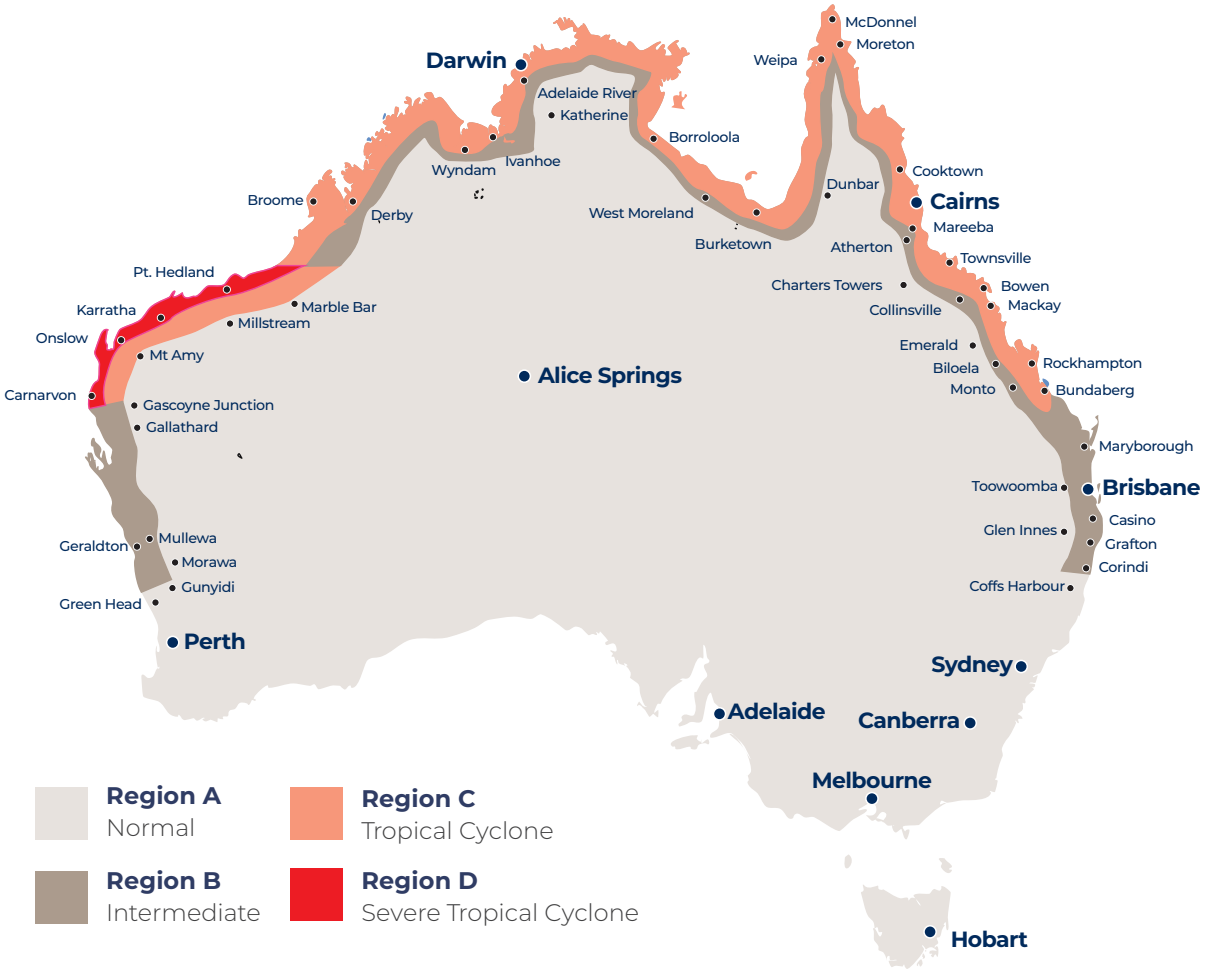
CYCLONIC DEBRIS IMPACT TEST
AS2047 & AS1170.2: DEBRIS IMPACT TESTING REQUIREMENTS

Cyclonic impact is the toughest test for any screening product, and StormGuard® achieves the maximum rating of 44m/s. This equates to 3870 Joules, exceeding the 100 joule security impact by nearly 40 times!

MESH	FIXED SCREEN	ESCAPE SCREEN	SLIDING DOOR	HINGED DOOR
0.8mm 316 Stainless Steel	40m/s	40m/s	36m/s	Site Specific
1.2mm 304 Stainless Steel	44m/s	44m/s	36m/s	Site Specific

Wind Regions of Australia

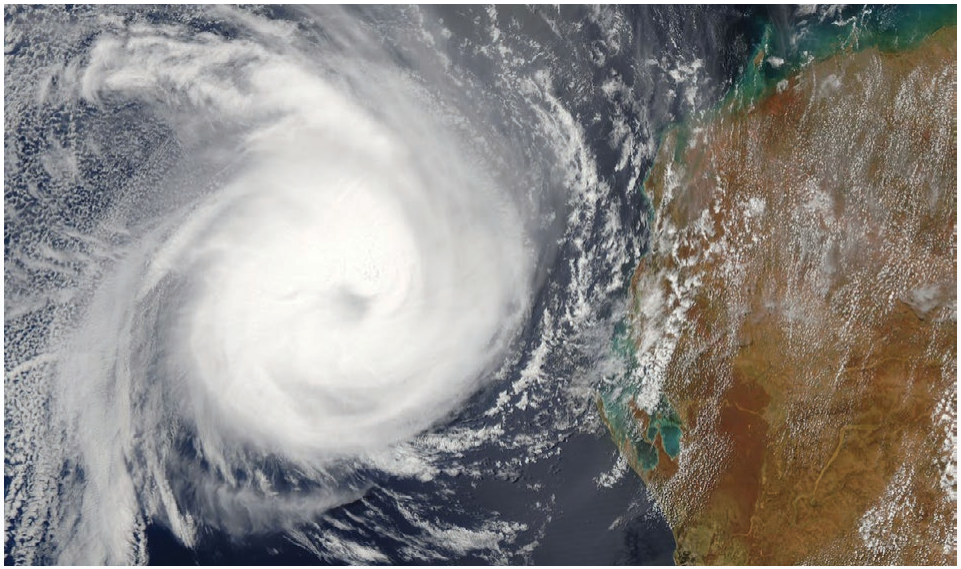
Wind speed is an important factor in the planning and building of any new structure as it influences design and engineering specifications. StormGuard® cyclone security screens have been tested to AS1170.2 Debris Impact Testing, achieving the maximum rating of 44m/s. This equates to 3870 Joules, exceeding the 100 joule security impact almost 40 times!



BUILDING IMPORTANCE LEVEL & DESCRIPTION		INCIDENCE	IMPACT SPEED	
			REGION	(m/s)
1	Buildings presenting a low degree of hazard to life and other property in the case of failure. *e.g. Sheds, Barns, etc.*	V200	C	25.6
			D	31.7
2	Buildings containing a low density of people. (Not included in importance levels 1, 3 and 4). *e.g. Housing, Apartments, Commercial and Industrial Buildings, etc.*	V500	C	27.7
			D	35.2
3	Buildings that are designed to contain a large number of people. *e.g. Schools, Aged Care Facilities, etc.*	V1000	C	29.4
			D	37.4
4	Buildings that are essential to post-disaster recovery or associated with hazardous facilities. *e.g. Hospitals, Emergency Shelters, etc.*	V2000	C	30.1
			D	39.6
5	Buildings that have special functions or whose failure poses catastrophic risk. *e.g. Major Dams, Nuclear Reactors, Extreme Hazard Facilities, etc.*	V10000	C	34
			D	43.6

Frequently Asked Questions

- **When is 44m/s applicable?**
  It is applicable to buildings of special importance after a catastrophic event (importance level 5) such as nuclear reactors, flight control towers, dams, etc. It is not relevant to housing unless there are extremely special circumstances.
- **Cyclone shelters, are these 44m/s?**
  No, shelters are classified as importance level 4 buildings; In Region D, this equates to 40m/s, and in Region C it is 32m/s.
- **What impact speeds are applicable for my house**
  In region C: 28m/s
  In region D: 36m/s
- **Is woven mesh better than perforated sheet?**
  Whilst both products are excellent at absorbing impacts, woven mesh typically has clearer views, allows more light in, and offers better ventilation.
- **What is Galvanic Corrosion, or Electrolysis?**
  This type of corrosion occurs as a result of different metals making contact with each other. Some systems use screws which penetrate through stainless steel mesh and into the aluminium frame. This creates the conditions for corrosion to take place. StormGuard® cyclone screens have screws that are completely isolated from any other metal, so this type of corrosion does not take place.
- **Where is region D?**
  Region D is located in the north west of WA and has the highest performance criteria of any region.
- **What is structural grade aluminium?**
  StormGuard® heavy duty security door and cyclone screens are extruded in “Structural grade” aluminium for ultimate performance, and offers nearly double the strength of typical “architectural grade” alloys.
- **What is a dominant opening?**
  Smashed windows and doors from debris impact during cyclonic events can create a dominant opening in a building. Dominant openings allow large internal pressures to develop within the building structure, leading to catastrophic failure and ripping the roof off the building. This is why cyclone screens are a fantastic option to protect the building and, more importantly, the occupants within.



Warranty & Care

StormGuard® has been designed to cope with the harsh Australian climate using materials which offer high levels of corrosion resistance. With a moderate cleaning routine, your StormGuard® screens will look great and perform for years to come.

StormGuard® product warranty is **16 years** from the date of product installation. This warranty is to the original purchaser providing always that the product care and maintenance recommendations have been complied with during that period.

Like all external fixtures on your home, StormGuard® security screens will require a small degree of maintenance to keep them looking their best. Maintenance intervals will depend on location as per the table on the right.

StormGuard® screens should only ever be washed with a soft bristle brush using warm mains water and a mild detergent, then rinsed down well to flush away excess soap and contaminants.

Recycled water, bore water, or tank water is not acceptable for cleaning due to uncontrolled levels of chemicals, or minerals, which can lead to corrosion issues. Only mains water shall be used for cleaning.

Strong detergents, abrasive cleaners, high pressure washers, should never be used to clean your StormGuard® screen.

SUGGESTED MAINTENANCE PERIOD

ENVIRONMENT	DISTANCE FROM SEA/OCEANFRONT	RECOMMENDED CLEANING INTERVAL
Mild	> 10km	Every 6 months
Moderate	1km to 10km	Every 2 to 3 months
Marine	500m to 1km	Every 2 to 4 weeks
Severe Marine	< 500m	Every 1 to 2 weeks.

AMPLIMESH®

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QUALITY • SERVICE • VALUE