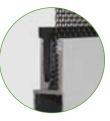




#### 3 Invisi-Gard by Alspec

- 3 Why Choose Invisi-Gard?
- 4 Invisi-Gard Quality Components



#### 6 Product Range

- 8 Security Window Screens
- 10 Security Door Screens
- 12 Enclosures
- 14 Invisi-Scape
- 15 Invisi-Maxx
- 16 Unique Solutions
- 17 Standard Flyscreen vs Invisi-Gard

#### 18 Stainless Steel

19 Why Are Some Products More Likely to Corrode?

#### 20 Rigorous Testing

- 20 Dynamic Impact Test Jemmy Test Knife Shear Test
- 21 Bushfire
  Fire Attenuation
  Child Fall Protection
  Corrosion
  Energy Efficiency



#### 22 Colour

- 24 Popular Colour Range
- 25 Timber Grain Look



#### 26 Add Value to Your Home

How do You Make Your Home Stand Out from the Rest?



#### 28 Applications

Residential and Commercial Solutions

Case Studies

#### 30 Care and Maintenance

Suggested Maintenance Period Table

#### 31 Warranty

15 Year Standard Warranty



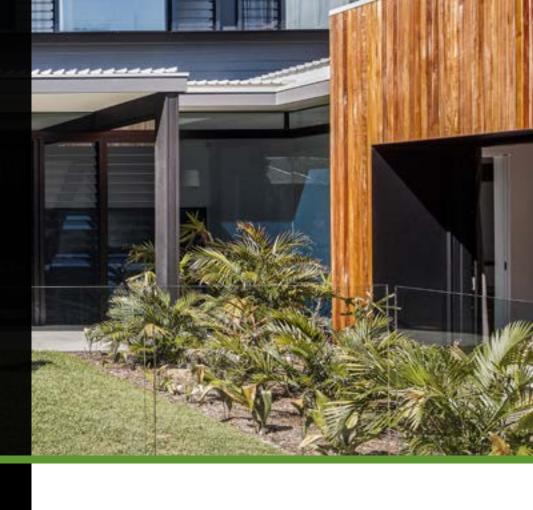
## INVISI-GARD BY ALSPEC



At the heart of every Invisi-Gard security screen and security door is our high tensile 316 marine grade stainless steel mesh. The grade 316 mesh used in Invisi-Gard sets the world standard in terms of its quality, precision and longevity.

This class leading mesh is retained in an aluminium frame using our patented EGP (Extreme Grip Protection) retention system. This unique design ensures maximum strength and durability through an assembly technique that avoids contact between the two dissimilar metals - a major cause of corrosion over time.

Invisi-Gard security doors and screens are without question the best investment for your family's safety. They are also the best investment for the look and value of your home.



# WHY CHOOSE INVISI-GARD?



Heavy duty extruded aluminium perimeter frame for extra strength. 10x the strength of the Australian Standard in terms of absorbed energy.



Invisi-Gard has been designed by Alspec's in-house R&D Team and manufactured in Australia by our Licensed Dealer Network.



Invisi-Gard's 316 Marine Grade Stainless Steel Mesh is a high tensile woven mesh resulting in an exceptionally strong, corrosion resistant product, powder coated in a very tightly controlled, chrome free environment.



With over 400 dealers nationwide, Invisi-Gard is Australia's largest network of licensed fabricators that can manufacture and install security screens to enhance your home.



Invisi-Gard is supported by a 15 year warranty from Alspec, a wholly Australian owned company that has been in business for more than 45 years.

#### **INVISI-GARD**

## QUALITY COMPONENTS



### 316

#### STAINLESS STEEL MESH

316 is regarded as the standard marine grade material for this very reason. In the case of window and door security screens required to be exposed to the elements over long periods of time, it makes sense that corrosion resistance is a fundamental consideration.



## Extreme GRIP PROTECTION (EGP)

Only Invisi-Gard Stainless Steel Security Products incorporate the Patented EGP Retention Method which locks the 316 Marine Grade Stainless Steel Mesh into the Heavy Duty Extruded Aluminium perimeter framing, passing the Australian Standards requirements.



## 3-Point LOCKING MECHANISM

All our hinged and sliding doors come with 3-Point locking as standard.
3-Point locks are significantly more secure as opposed to a single lock for the simple reason that it locks at three points on the jamb.

WE DO NOT
COMPROMISE ON
THE QUALITY OF
THE MESH, FRAME
OR LOCKING
MECHANISM.











## SECURITY WINDOW SCREENS

Window security screens are becoming more of a requirement for the security conscious home or business owner. New homes and renovations of today often incorporate sliding, double hung or fixed windows as features in the overall design. To cover these windows in conventional security grilles would seriously detract from the visual appeal of the home and as a result of this, security is often not an option.

#### Fixed Window Screens

Invisi-Gard Fixed Window Security Screens combine the proven strength and security of 316 Marine Grade Stainless Steel Mesh with extruded aluminium perimeter framing to create a security window screen that looks great whilst providing excellent security.

Incorporating the unique patented EGP Retention System, Invisi-Gard Fixed Window Security Screens can be custom manufactured to fit many brands and styles of window and can be ordered with or without midrails. 316 Marine Grade Stainless Steel Mesh is used in all Invisi-Gard Stainless Steel Security Products and it is because of this Marine Grade Stainless Steel that Invisi-Gard out performs all other stainless steel security products when it comes to corrosion resistance.







#### Fall Prevention Screens

Invisi-Gard Window Screens also provide the added benefit of a fall prevention screen which enables windows to be opened more than 125mm enhancing air flow and natural ventilation. Invisi-Gard fall prevention screens are tested and complies with the National Construction Code for the Protection of Openable Windows.



Security
+
Fall Prevention
=
Invisi-Gard!



### Screening for Louvres

Louvre windows are fast becoming a popular choice for Australian home owners as they allow you to control the amount of light and airflow into your home. And let's be honest-they look amazing and add a modern, contemporary design to your home.

For those home owners looking for maximum peace of mind and security for their home, adding Invisi-Gard security screens to your louvre window is the perfect choice. Invisi-Gard security screens provide protection against insects and unwanted intruders, without compromising on the look and value of your home.









## Hinged & Sliding Door Screens

Incorporating the unique patented EGP
Retention System. Invisi-Gard Hinged
Security Doors can be ordered as a Standard
Door with or without a midrail. 316 Marine
Grade Stainless Steel Mesh is used in all
Invisi-Gard Stainless Steel Security Products
and it is because of this Marine Grade
Stainless Steel that Invisi-Gard out performs
all other stainless steel security products
when it comes to corrosion resistance.

Product strength and performance are key factors in deciding which security door to purchase. All Invisi-Gard Hinged and Sliding Security Doors have been tested to Australian Standards AS5039-2008 so you can be assured that when choosing Invisi-Gard, you are choosing the finest in Stainless Steel Security Products.





### Pet Doors & Security

Pet doors are a great idea for the comfort of your pets and the pet owner. But how secure are they?

Once a pet door is installed into any security window or door, including Invisi-Gard, it can no longer be classified as a security product. This is because the opening created for your pet to pass in and out of, exceeds the maximum allowable aperture in the infill material (stainless mesh) nominated under AS1539-2008.

It is now classified as a barrier door and the Invisi-Gard 15 year standard warranty still remains for the 316 stainless steel mesh.



## **ENCLOSURES**

The Australian lifestyle of the great outdoors. This is important for today's indoor/outdoor living when it comes to maximising your enjoyment from the outdoor areas of your home.

Invisi-Gard provides an excellent method whereby you can enclose your patio or outdoor area to make it impervious to insects or intruders whilst not limiting the views, breezes or look of your home. Floor to ceiling screening that can incorporate midrails if you wish to create a sight line, or without midrails for that uninterrupted view, nothing performs as well in this application as Invisi-Gard.

Designed to adapt to existing patio and screen enclosure structures, or to be engineered as a new addition to your home, the Invisi-Gard Patio and Screen Enclosure System offers ultimate flexibility of design to create an outdoor area that can change the way you live.











## **INVISI-SCAPE**

Invisi-Scape® Emergency Escape Security Screens offer a simple keyless escape method in the event of a fire or an emergency situation.

The need to escape through a window is one that we hope you will never require, however with the Invisi-Scape® System you have confidence in not only additional security but also the peace of mind of egress in an emergency. An additional benefit of Invisi-Scape® screens is the ease of cleaning.

### Hinged Screen for Easy Cleaning

The Invisi-Scape Screen also doubles as a hinged screen for ease of opening and cleaning.

The screens are available as inward or outward opening and either top or side hinged, depending on the window type and opening size.

#### Screen Release Lever

The quick and easy "Press to Release" mechanism allows you to get out quickly in the event of an emergency.

Simply press the lever to unlock and push open the screen in one smooth and easy motion. The handle releases the screen after only 20° of movement, aiding in a speedy escape when required.

Invisi-Scape® is BAL rated to protect your home against bushfires in areas from BAL-LOW up to and including BAL-40.



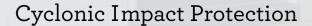




## **INVISI-MAXX**

To protect a home or business from extreme weather events or unwanted intruders, Invisi-Maxx high performance window and door screens are the only product which can provide complete peace of mind.

Specifically designed to withstand the force of windborne items under cyclone conditions and resist knife and impact attack, Invisi-Maxx screens have been developed and tested to both meet and exceed Australian Standards.



Invisi-Maxx window and door screening products are designed to resist windborne debris and projectiles, protecting both people and property from harm in these potentially deadly situations. Made from high tensile stainless steel mesh, Invisi-Maxx is available in 0.8mm mesh (appropriate for most residential applications) and a 1.2mm mesh option when a further level of protection is required such as for commercial applications or extreme cyclone locations.

Independently tested to exceed the performance requirements for cyclone regions C and D, Invisi-Maxx screens have also demonstrated under NATA certified testing to withstand projectiles from debris travelling up to 44m/sec, offering a much higher level of protection than the Australian Standards that require 35.2 m/sec.

### Ultra Security Protection

For those seeking the maximum in security protection, the same qualities which make Invisi-Maxx cyclone compliant make it the ideal screening system to protect homes and business from unwanted intruders.















## STANDARD FLYSCREEN VS INVISI-GARD

COMPARISON CHART	Standard Flyscreen	INVISI-GARD GIGSTAINLESS STEEL SECURITY
Material	Fibreglass	316 Stainless Steel Grade Mesh
Infill/Mesh Thickness (mm)	0.3	0.8
Aperture Size (mm)	1.2 x 1.2	1.6 x 1.6
Ventilation/Open Area	63%	44%
Warranty	2 years	15 years
Exceeds 250N/25kg Force	×	✓
Angle of View	160°	160°
Insect Protection	✓	✓
NATA Tested & Certified	×	$\checkmark$
Protection of Openable Window (AS5203)	×	✓
Child Fall Prevention Screen	×	$\checkmark$
Knife Shear Test (AS5041 & AS5039)	×	✓
Dynamic Impact Test (AS5041 & AS5039)	×	$\checkmark$
Jemmy Test (AS5041 & AS5039)	×	✓
Fire Attenuation (AS1530.4)	×	✓
Bushfire Rated (AS3959)	×	✓
Cyclonic Impact Rated	×	INVISI-MAXX MAXX SECURITY MAXX PROTECTION

## STAINLESS STEEL

GRADE 316 SHOULD BE SELECTED AS A MINIMUM WITHIN FIVE KILOMETRES OF THE SURF. Stainless steel is a generic term for a family of corrosion resistant alloy steels containing 10.5% or more chromium.

All stainless steels have a higher resistance to corrosion than their mild steel counterparts. This resistance to attack is due to the naturally occurring chromium-rich oxide film formed on the surface of the steel. Although extremely thin, this invisible, inert film is tightly adherent to the metal and extremely protective in a wide range of corrosive media. The film is rapidly self-repairing in the presence of oxygen. Damage by abrasion, cutting or machining is quickly repaired.

The less expensive grades (such as 304) will probably become tea stained or even suffer more severe corrosion. Grade 316 has excellent corrosion resistance in a wide range of media. Its main advantage over grade 304 is its increased ability to resist pitting and crevice corrosion. It resists ordinary rusting in virtually all architectural applications, and is often chosen for more aggressive environments such as sea-front buildings and fittings on wharves and piers.

Grade 316 has virtually the same mechanical, physical and fabrication characteristics as 304 with better corrosion resistance, particularly to pitting corrosion. Invisi-Gard Stainless Steel Security Products use only 316 Marine Grade Stainless Steel.

You can rest assured your new security doors and screens will look great for years with only a moderate amount of maintenance. And unlike some other competing products your warranty is not subject to the ongoing use of a proprietary cleaning product.

# Why are some products **MORE LIKELY TO CORRODE?**



WHEN TWO DISSIMILAR METALS ARE CONNECTED OR IN CONTACT AND ARE IN THE PRESENCE OF A CONDUCTING ELECTROLYTE SUCH AS WATER OR EVEN DUST, THE MORE ACTIVE METAL WILL CORRODE AND PROTECT THE LESS ACTIVE METAL.

Aluminium is more active than stainless steel and will preferentially corrode in the vicinity of the contact zone between the metals.

In the case of security screens, the aluminium is more active than the stainless steel mesh or any stainless steel fasteners, and so will corrode first, while the stainless steel will be protected by this galvanic phenomenon.

The rate of galvanic corrosion is governed by the size of the potential difference between the metals in contact, and by the conductivity of the electrolyte.

As a rule of thumb, if the potential difference is less than 0.1 volt, then it is unlikely that galvanic corrosion will be significant.

In the case of Stainless Steel and Aluminium the current difference ranges from between 0.175 and 0.55 Volts depending on the specific alloys concerned. It can be seen that there is a high likelihood that corrosion will occur in any installation where the two metals are allowed to come into contact, either directly, or by way of mechanical fixing.

All Invisi-Gard Stainless Steel
Security Products incorporate the
Patented EGP Retention Method
which locks the 316 Marine Grade
Stainless Steel Mesh into the
Heavy Duty Extruded Aluminium
perimeter framing.

The Pressure Retention Method completely isolates the Stainless Steel from the Aluminium and because it does not rely on screws, or any other form of mechanical fixing, corrosion through dissimilar metals contact is avoided.



316
Marine Grade
Stainless Steel
Mesh







#### AS5039/5041-2008 SECURITY SCREEN DOORS AND SECURITY WINDOW GRILLES

Test numbers: 2012042-5, 2012042-3, 2012042-1, 2011014

Hinged Security Screen Door	✓
Sliding Security Screen Door	✓
Security Window Grille	✓

Security Screen Door x 50 impacts (10x the Australian Standard)

The patented EGP (Extreme Grip Protection) retention system allows Invisi-Gard® to easily absorb the impact energy required by Australian Security Screen Standards.



AS5039/5041-2008 SECURITY SCREEN DOORS AND SECURITY WINDOW GRILLES

Test numbers: 2012042-5, 2012042-3, 2012042-1

Hinged Security Screen Door	✓
Sliding Security Screen Door	✓
Security Window Grille	✓

Invisi-Gard® is tested to withstand jemmy attacks from levers, such as large screwdrivers, used to apply large amounts of torque to locks and hinges.



KNIFE SHEAR TEST

AS5039-2008 SECURITY SCREEN DOORS AND SECURITY WINDOW GRILLES

Test numbers: AZT0230.12

Knife Shear test on Invisi-Gard Mesh

Invisi-Gard® successfully repels intruder attacks using utility knives or similar bladed tools used by a burglar seeking entry into your home.

We put our Invisi-Gard range through tough conditions in independent testing facilities to ensure our products are tested to not just meet, but exceed Australian Standards.



#### **BUSHFIRE**

### AS3959-2009 CONSTRUCTION OF BUILDINGS IN BUSHFIRE-PRONE

Test numbers: EP1210317, FSZ1662A

BAL-40 rating for Invisi-Gard

✓

BAL-40 rating for Invisi-Gard and Breezway Altair Louvres

Invisi-Gard® is bushfire rated and protects your property from floating embers and reduces heat intensity of radiant heat flux.

Invisi-Gard® complies with the mesh aperture for screening of openable parts of windows up to BAL-FZ conditions.



#### AS1530.4-2014 APPENDIX B7 •

Test numbers: 52577300a

Achieves a fire attenuation rating of up to 55% at 40kW/m² incident energy

Provides protection to limit the potential for fire spread to occur between buildings via flames and/or radiant heat. Invisi-Gard® Fixed Window Screens is a deemed to satisfy solution for Fire Attenuation Screens, referred to in section C3 Protection of Openings in the National Construction Code.

Invisi-Gard Fixed Window Screens are also designed to protect window openings that are less than 3m from a property boundary or within 6m of another building in the same allotment. Their purpose is to reduce any radiant heat transmitted from one area to another, helping to prevent the spread of fire between buildings.



#### AS5203 PROTECTION OF OPENABLE WINDOW FALL PREVENTION TEST

Test numbers: Available on request

Resist 250N outward force

Invisi-Gard® window screens provide protection against children falling out of second floor windows.



#### CORROSION

#### AS2331.3.1 METHODS OF TEST FOR METALLIC AND RELATED COATINGS

Test numbers: AZT0139

2,000 hour salt spray test with no sign of corrosion

Invisi-Gard® screens have been tested to withstand over 2,000 hours of exposure in an accelerated corrosion test in a salt spray chamber without any signs of corrosion.



#### WINDOW ENERGY RATING SCHEME (WERS)

WERS rating for a Generic Aluminium Window with 3mm clear glass fitted with an Invisi-Gard screen

SHGC	Improvement
0.38	51%

Fitting Invisi-Gard® security screens over the outside of your window can improve the energy efficiency of your window by up to 51%.





01

02

03

#### **Aluminium Door Frame**



Frame colour forms a key component of your window or door design and will need to balance with both the interior and exterior style of your home.

Whether you decide to contrast or blend, choose modern or heritage, or even a timber-grain look, there are a range of colour options for you to choose from.

Alspec is a Registered Powder Coater of Dulux and Akzo Nobel (Interpon).

#### 316 Marine Grade Stainless Steel Mesh

Invisi-Gard 316 Marine Grade Stainless Steel Mesh is coated with a *black polyester finish only*. This coating cuts down light reflection allowing clearer visibility and is suitable for outdoor applications.

Some competing systems use hybrid epoxy powder coatings which are completely unsuitable to outdoor environments leading to reduced product longevity. Product strength and performance are key factors in making a purchasing decision.

#### **Security Door Hardware**

One of the key considerations needed when choosing an Invisi-Gard Security Door colour is the availability of door lock and hinge colours.

#### **Door Locks**

Available in plated finishes: Satin Chrome, Bright Chrome, Bright Gold.



#### Hinges

Available in stainless steel finish or a range of standard powdercoated colours.



#### Door Closers

Available in a range of standard powdercoated colours.





At Invisi-Gard we are always being asked what the top powder coat colours are. To make it easy for consideration with your next project, here is the list of our top 20 Invisi-Gard powder coat colours.

Alspec is a Registered Powder Coater of Dulux and Akzo Nobel (Interpon) and can offer an extensive range of colours all powder coated from our inhouse paintlines.

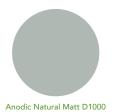




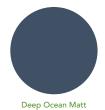
#### Colour Disclaimer

Colour representations in this brochure are for illustrative purposes only. You should request actual samples before placing your order.



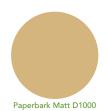














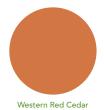














Vivica Ultra Silver Gloss D1000









Dune Satin D1000



Surfmist Matt

Clear Anodised

24



## like timber

The natural beauty and timeless appeal of wood with the capabilities of aluminium.

From traditional warm woody hues to dark modern ashes, Invisi-Gard security screens can be powder coated with the most extensive range inspired from the natural world.

Enjoy the natural beauty of timber combined with the ease and durability of aluminium for a textured woodgrain finish for Invisi-Gard security screens.

Timber grain look is a two-step photo imaging process. First, the aluminium is covered in a luxuriously textured super durable powder coating. Then images of timber grain are sublimated into the powder coating, ensuring absolute photographic precision.

### Reasons to have a timber grain look

#### **Beautiful**

Just like timber, creates an environment of warmth and style.

#### **Durable**

50% more durable than standard powder coating and will never peel or rub off. Unlike timber, aluminium is resistant to termite attack and it will never warp or rot.

#### Sustainable

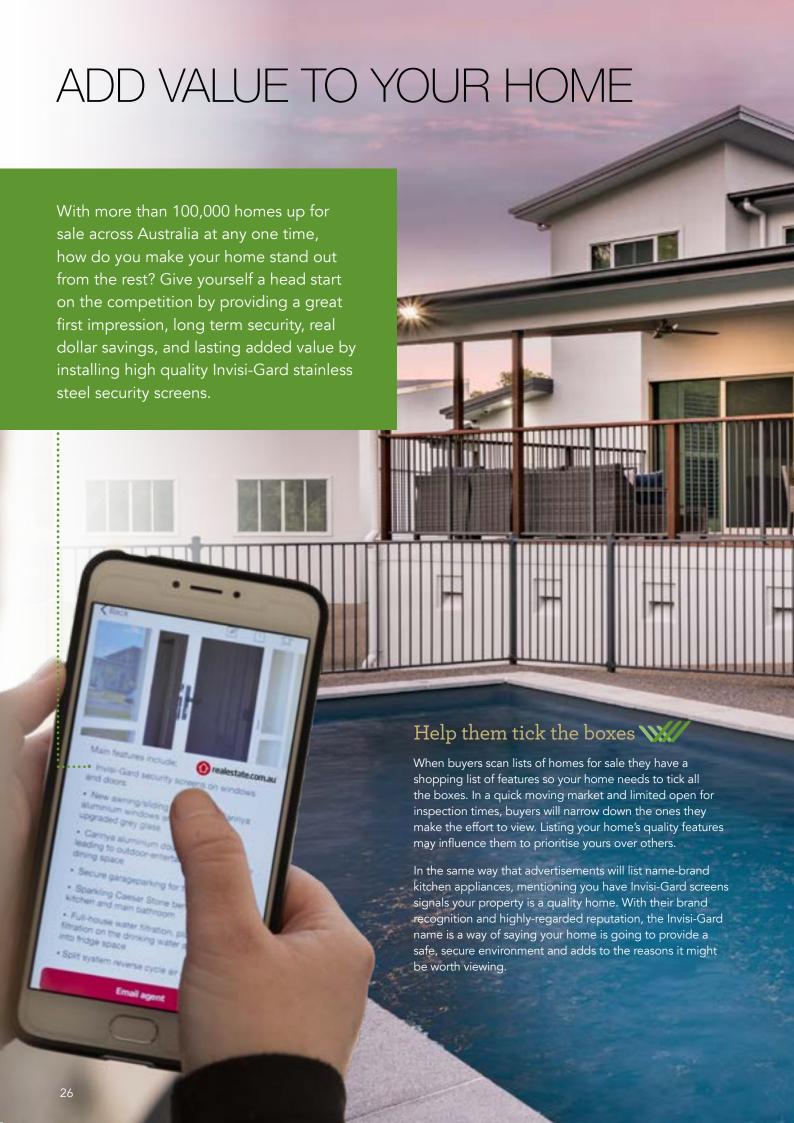
No logging, no harmful greenhouse gases from paints and stains and no worries recycling it at the end of its life.

#### **Effortless**

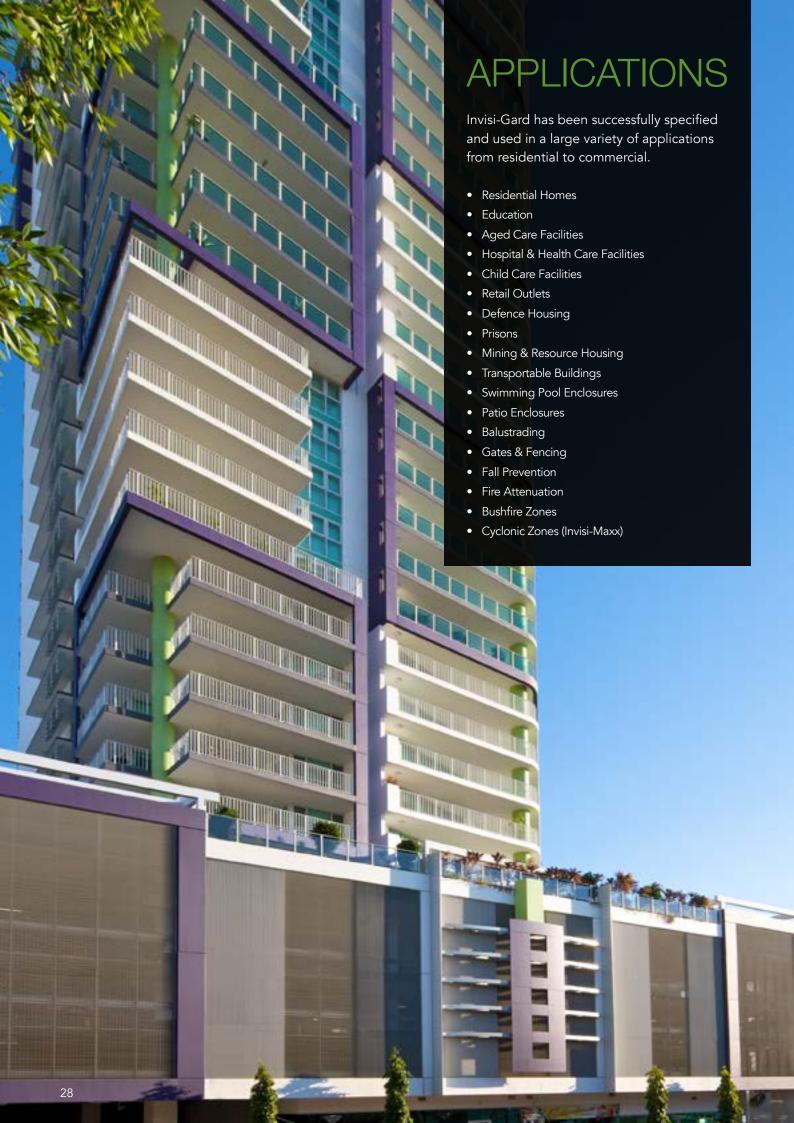
No sanding, painting, staining or oiling required. Lightweight aluminium is quick and easy to install.

These days home owners are spending big money on timber entry doors. Now you don't have to compromise on the look of these entry doors. You can add an Invisi-Gard Entry Door in a timber grain look to match.













## Commercial Solutions

#### Student Accommodation, JCU QLD

#### **CYCLONIC IMPACT RATED & FALL PREVENTION**

Invisi-Maxx Security Screening has been used in a practical, creative manner to turn a safety product into a striking design feature at James Cook University in Cairns.

By enclosing the balconies in Invisi-Maxx High Performance Stainless Steel Security Screening, students can safely enjoy unimpeded rainforest views in all directions, while benefiting from natural cooling breezes and insect protection. In the event of cyclonic conditions, the Invisi-Maxx screening, with its heavy duty frame and mesh retention system, will also protect the inhabitants from any windborne debris.

#### Mater Child Care, Brisbane

#### **FALL PREVENTION**

Providing a safe outdoor play space for a child care centre on the fourth and fifth levels of a building, incorporating the building's balconies, was the challenge faced by the Mater Hospital in Brisbane.

Invisi-Gard security screens addressed these factors by creating a secure barrier which could not be climbed or fallen through, did not impede the views or natural airflow and was low maintenance and non corrosive.

This child safety application using Invisi-Gard to enclose an outdoor play area further demonstrates the versatility of this security screening product.

#### Ascot Apartments, QLD

#### FIRE ATTENUATION

Fire attenuation relates to a building's proximity to other buildings, and details of where it applies are set out in the Building Code of Australia (BCA). The Code states that any openings (i.e. doors or windows) which are within 3m of a fire source must be protected. Any openings which are within 6m of another building on the same allotment also need protection.

This apartment block in Ascot QLD installed Invisi-Gard screens to address the fire attenuation specifications. In doing so, both builders and occupants have peace of mind that if and when a fire occurs, everything possible has been done to help minimise its potential spread and damage to a neighbouring building.

## CARE AND MAINTENANCE

Your Invisi-Gard® Stainless Steel Security Screen should only ever need to be washed down with a soft brush using warm water and a mild detergent. Rinse well with fresh water to remove any detergent residue. Do not use strong detergents or abrasive cleaners as they may scratch or damage the surface finish.

The frequency of this maintenance is determined by the location of the product. Refer to the suggested maintenance table.

Only mains water is to be used as recycled, bore or tank water is unacceptable and may lead to detrimental corrosion effects.

Care should be taken to avoid excessive amounts of water entering the main lock and auxiliary 3 point locks. Periodic lubrication of the main lock and auxiliary lock components should only ever be done using graphite powder. Liquid or aerosol lubricants can cause corrosion and damage the locking mechanism.

External contaminants that come into contact with the Invisi-Gard screens such as bird and bat droppings are very acidic and can quickly burn and damage the powdercoat finish of the frame and the mesh coating.

To ensure the Invisi-Gard warranty is maintained, it is essential that these external contaminants are cleaned immediately with a mild detergent, soft bristled brush and rinsed thoroughly with mains water.

#### SUGGESTED MAINTENANCE PERIOD TABLE

ENVIRONMENT	RECOMMENDED MAXIMUM MAINTENANCE INTERVAL Indicative maintenance schedule only.
MILD Greater than 10km radius from oceanfront or saline bay	EVERY 6 MONTHS
MODERATE Within 1km to 10km radius of an oceanfront or saline bay	EVERY 2 TO 3 MONTHS
MARINE Within 500m to 1km radius of an oceanfront or saline bay	EVERY 2 TO 4 WEEKS
SEVERE MARINE Within 500m radius of an oceanfront or saline bay	EVERY 1 TO 2 WEEKS



# **15 YEAR**STANDARD WARRANTY

Alspec provides a 15 year standard warranty when you invest in our Invisi-Gard window and door security screens.

Refer to the detailed Warranty Terms & Conditions on the Invisi-Gard website for further information.



