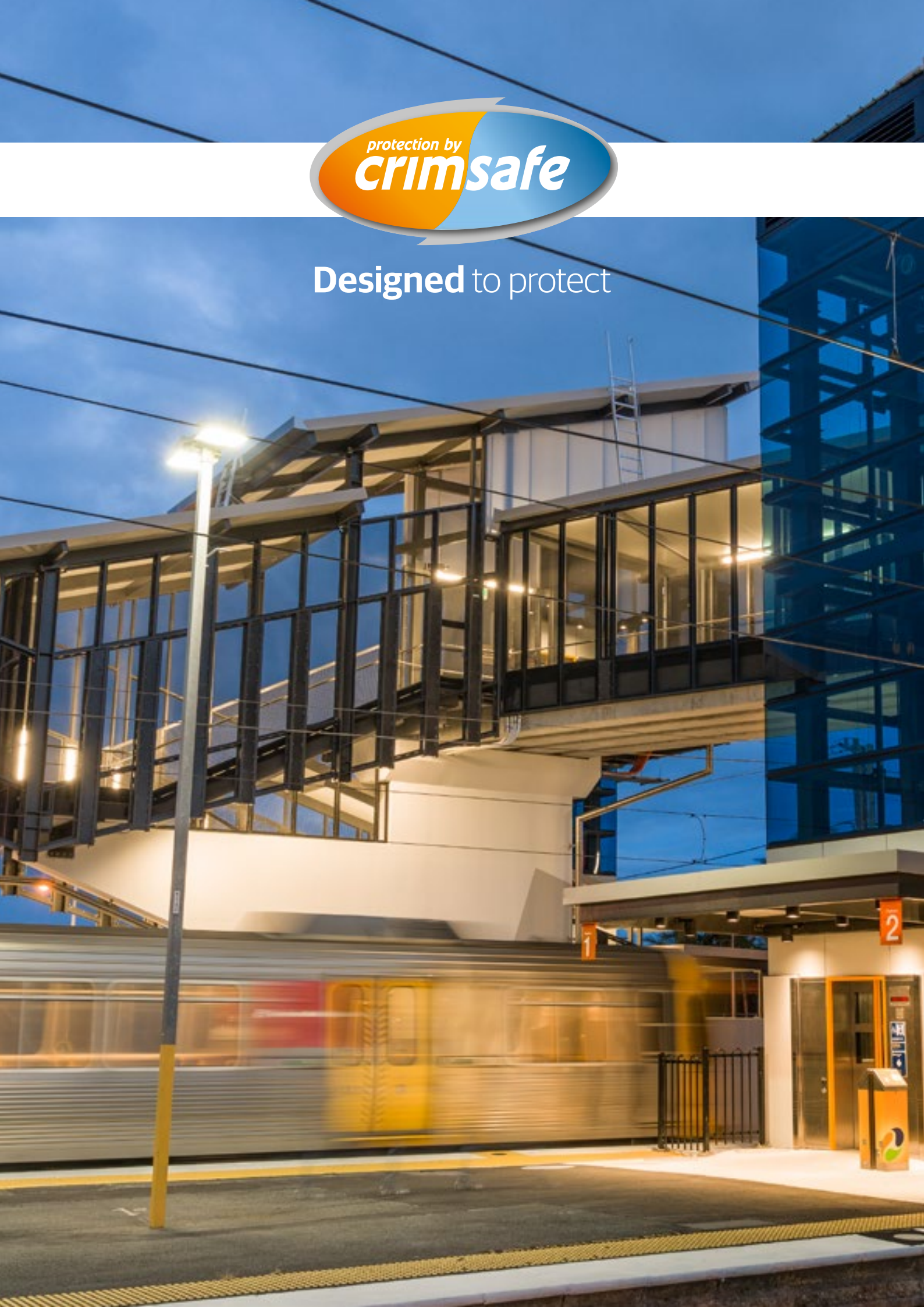
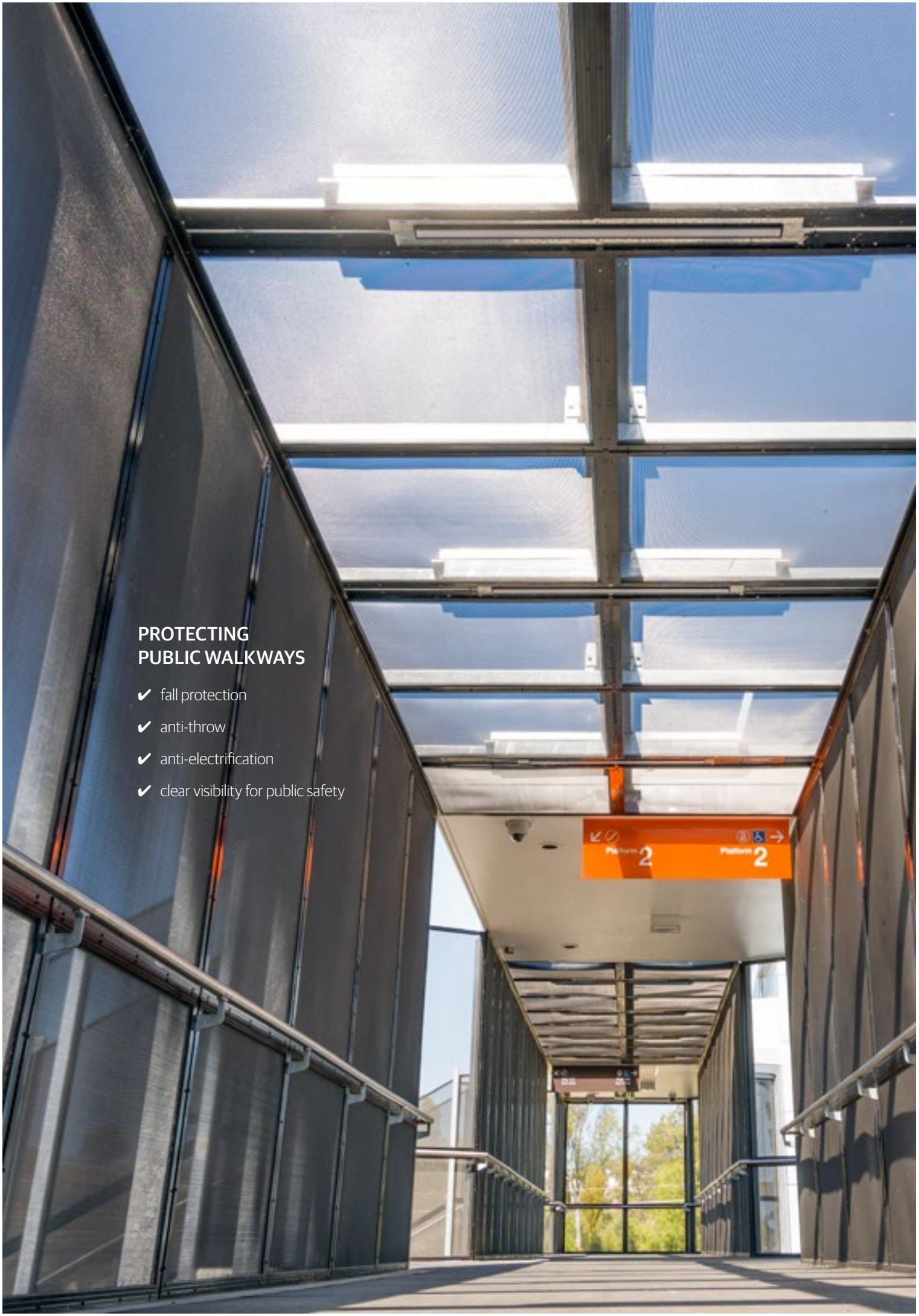
protection by crimsafe

Designed to protect




PROTECTING
PUBLIC WALKWAYS
✔ fall protection
✔ anti-throw
✔ anti-electrification
✔ clear visibility for public safety
Platform 2
Platform 2

Endless design possibilities

With unbeatable strength and versatility, building with Crimsafe opens up an endless array of design possibilities.

It has the flexibility to be shaped in multiple planes without losing strength, while its clean lines and obstruction-free form mean the only design limitation is your creativity.

This combination of form, function and features means Crimsafe is widely specified for commercial and residential projects as a solution to meet specific design requirements, including:

- hospitals
- aged-care centres
- prisons
- universities and schools
- overpasses and walkways
- sports ground enclosures
- rooftop enclosures
- retail outlets
- warehouses
- banks
- high-rise developments.

Ultimate protection

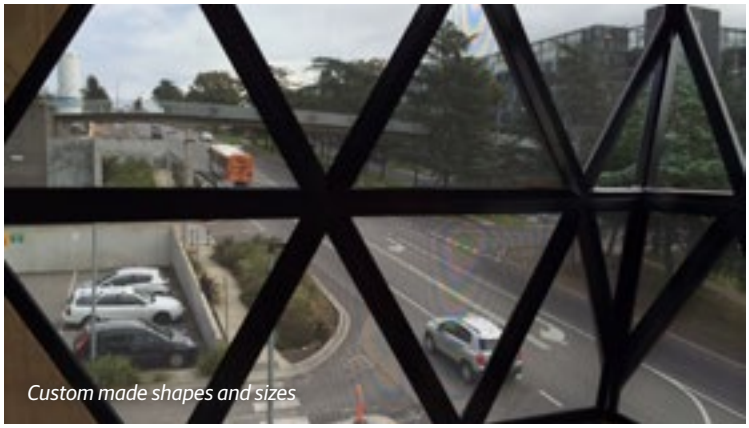
With the ability to protect a property from intruders, insects, heat, fire and cyclones, Crimsafe is so much more than just a security screen.

Crimsafe passes and exceeds more Australian and industry standards than any other stainless steel mesh product.

Its unique blend of properties make it the first choice for a wide range of applications:

- incredible strength suitable for high-risk environments
- fire attenuation
- emergency exits
- energy efficient
- fall protection
- bushfire protection
- balustrading
- anti-throw
- anti-electrification
- cyclone debris protection
- pool fencing
- insect protection.

High-level security for community centres



Custom made shapes and sizes

Fire attenuation for high density living

A new benchmark for **pedestrian safety**

Project: Geebung Railway Pedestrian Overpass
Crimsafe Licensee: Franklyn Blinds, Awnings, Security
Location: Geebung, Queensland

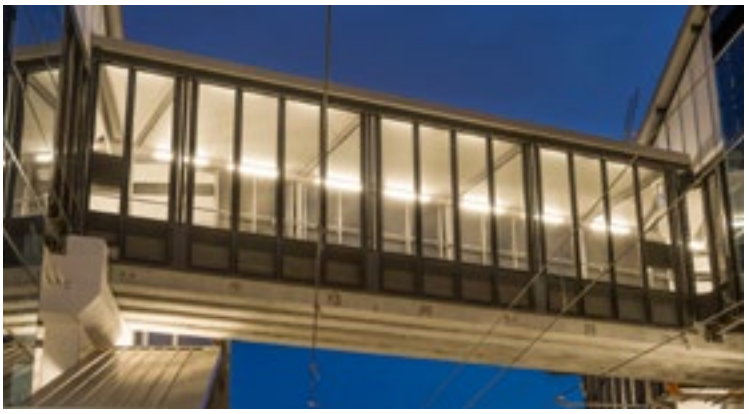
The goal of the Geebung Railway Pedestrian Overpass project was to improve pedestrian safety.

PROJECT OVERVIEW

The Robinson Road Open Level Crossing Replacement Project was created in collaboration with the Geebung Overpass Alliance and Queensland Rail. The $199 million priority project was completed in August 2014 and specified Crimsafe infill panels for the pedestrian overpass.

PROJECT CHALLENGES

- A highly demanding project scope, requiring 300 screens of which 80% of the panels were raked, had cut-outs or involved out-of-square frames.
- Precise installation times and stringent safety requirements were carried out due to installation over a fully operational railway line.



OUTCOME AND BENEFITS

- Anti-electrification properties now protect the public from the risk of electrocution from high powered train wiring.
- Anti-throw properties protect people and property below the overpass.
- Fall protection is ensured through exceptional weight-bearing strength.
- Crimsafe exceeds the requirements of Balustrade Standard AS 1170-2002.
- High visibility through Crimsafe mesh provides greater security, ensuring people can be seen within the structure, and any threats to personal safety can be identified.
- A high level of corrosion resistance ensures durability and long-term value for the client.

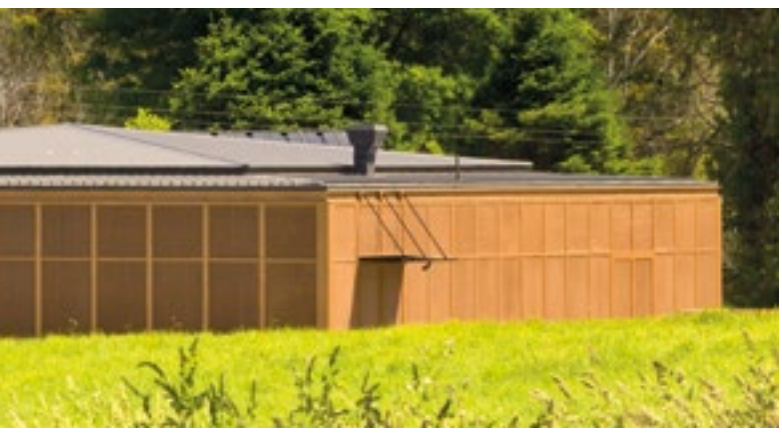
PROJECT FEATURES

- ✔ fall protection
- ✔ impact resistant
- ✔ anti-throw
- ✔ anti-electrification
- ✔ high visibility
- ✔ large spans
- ✔ raked panels

The project has been a resounding success and has resulted in Crimsafe increasingly being specified in similar projects, setting a new benchmark for public safety.

Bushfire **protection**

Project: Narbethong Community Hall
Crimsafe Licensee: Hi-Light
Location: Narbethong, Victoria



After the Black Saturday bushfires of 2009 in Victoria, the Narbethong Community Hall was rebuilt in 2011 to meet stringent bushfire resistance requirements.

PROJECT OVERVIEW

The Narbethong Community Hall was rebuilt in 2011 after the fires of Black Saturday in Victoria 2009. New building regulations established after the devastating bushfires meant that as well as providing security for the building, extra measures were required in order to meet the stringent requirements of the high BAL zone.

PROJECT CHALLENGES

- The requirement to meet Australian Standard AS 3959-2009 bushfire and ember protection guidelines.
- Screens needed to be hinged and operable from the outside of the building.
- A unique screen colour was required to harmonise with the natural surrounds and to meet planning requirements.
- Large window openings required a custom design.

OUTCOME AND BENEFITS

- The Crimsafe screens were fixed to an exterior steel framework over the building, so all screens were hinged and operable from the outside.
- All screens were coated with a non-standard Wet Coat Bronze Finish paint, covering and protecting the glazing while providing an aesthetic the architect was aiming to achieve.

PROJECT FEATURES

- ✔ met AS 3959-2009 for ember protection
- ✔ bushfire protection rated for BAL-FZ
- ✔ security
- ✔ hinged and operable from the outside
- ✔ energy efficient
- ✔ custom made for very large, non-standard window spans
- ✔ custom colour to meet planning and architectural requirements

SECURITY

Crimsafe's Fire-Tuff® mesh and unique Screw-Clamp™ technology were the deciding factors for the client, providing bushfire and ember protection.

Pool enclosure provides safety, light and breeze while reducing solar and UV rays

Reinventing **outdoor spaces**

Crimsafe screens are an ideal option for outdoor spaces, not only for their strength and durability, but because flexible product features integrate well with the architectural intent of a project.

Crimsafe is being used in projects as wide-ranging as patios and balconies, rooftop enclosures, overpasses and walkways, pool fencing and sports ground enclosures.

PRODUCT FEATURES

- ✔ fall protection
- ✔ anti-throw
- ✔ anti-electrification
- ✔ raked and angled screens
- ✔ security
- ✔ energy efficiency
- ✔ high visibility
- ✔ allows airflow and light
- ✔ insect protection
- ✔ strong enough for large spans

Light and airflow brings the outdoors inside

Rooftop enclosure required large spans and top panels bent at 45º angles

Crimsafe Ultimate bi-fold doors make the most of outdoor living spaces

Ultimate security and safety, meets balustrade and falls from windows requirements

Why specify **Crimsafe?**

At Crimsafe, we're not just meeting Australian Standards, we're setting the standard. Crimsafe has features that are superior to those of any competing product on the market.

TENSILE-TUFF® MESH

Crimsafe's Tensile-Tuff® mesh provides a wide range of features that make it suitable for almost any application.

Wire: 0.9mm diameter, 304 grade high tensile stainless steel, 800 + 40 Mpa

26% thicker on the cross section than woven mesh products using 0.8mm wire

Mesh: Plain weave, 10 count mesh i.e. 10 strands on the weft and 10 strands on the warp per square inch/ 25.4mm^2 of mesh

Woven to Standards ISO 9044/ ASTM E2016:06

Apertures: 1.5mm x 1.5mm

Open area: 41.6%

EXTRUSION

- Extruded aluminium alloy 6063-T6

CLAMPING SYSTEM

- Tamper-resistant screws, perimeter Screw-Clamp™ system
- Security-head screws penetrate the clamp, mesh and into the screen frame
- Screws spaced every 125mm, 62.5mm or 25mm staggered (Regular, Ultimate or Commercial systems respectively)

INSTALLATION

- Screens fitted as per AS 5040-2003 and the Crimsafe Installation Manual, using Crimsafe 410 stainless steel tamper resistant security head installation screws

SURFACE COATINGS

- Mesh and extrusion - high durability powder coat
- Powder coat application as per AS 4506:2005 Metal Finishing for thermoset powder coatings

EMERGENCY EXITS

- Crimsafe Safe-S-Cape® for emergency exit windows and doors
- Keyless exit system for ease of use, without compromising security requirements

ULTIMATE GOOD LOOKS

Crimsafe Ultimate is the next generation in stainless steel security.

- 40% stronger than Crimsafe Regular
- Withstands single impact of 700J – seven times more than the impact required by Australian Standards
- Tamper-resistant screws spaced every 62.5mm
- Unique clip-on cover provides smooth aesthetic and protects screws from tampering and corrosion
- Greater strength allows wide spans

COMMERCIAL-GRADE STRENGTH

For high-risk environments requiring exceptional strength, Crimsafe commercial-grade is unmatched in the industry:

- Tamper-resistant screws spaced every 25mm
- Screws in a staggered formation
- 60% thicker aluminium frame than Crimsafe Regular
- Withstands single impact of 1200J – 12 times more than the impact required by Australian Standards

Crimsafe **outperforms the rest**

Crimsafe goes above and beyond to set the highest standard for security screens in Australia, passing and exceeding all relevant standards and industry benchmarks.

Australian Standard 5039-2008

- ✔ Dynamic Impact Test
- ✔ Jemmy Test
- ✔ Knife Shear Test
- ✔ Shear Test
- ✔ Pull Test
- ✔ Probe Test

Cyclone Debris Protection (AS 1170.2:2011)

Test conducted at James Cook University and Azuma Design (NATA approved). Crimsafe has tested a range of products that meet cyclonic conditions in Regions C and D

- ✔ Up to 44 m/s
- ✔ Pressure and fatigue tests

Fire protection

Crimsafe is commonly used as an alternative solution to drenching systems and fire shutters to protect buildings in close proximity to bushfire prone areas

- ✔ Patented Fire-Tuff® technology
- ✔ Fire attenuation rating 59%
- ✔ Ember and debris protection
- ✔ Compliant to AS 959-2009
- ✔ BAL-FZ on windows with FRL _/30/_

Corrosion resistance

Crimsafe withstands tough environmental conditions

Salt Spray Test (AS 2331:3.1)

- ✔ 10.000 hours (Tensile-Tuff® mesh)
- ✔ 1,000 hours (Crimsafe security screens)

Prohesion Accelerated Test (ATSM G85)

- ✔ 3,000 hours (Crimsafe security screens)

Balustrade Testing (AS/NZS 1170-2002)

Crimsafe screens can be utilised as infill panels in balustrade and enclosure applications

- ✔ 1.4 tonne type C5 (areas susceptible to overcrowding)
- ✔ Exceeds standard by three times, load tested to 4.2 tonnes

Energy Efficiency

Crimsafe improves the energy rating of glass windows and doors, thus improving the energy efficiency of the property

- ✔ Solar heat gain reduction up to 53%
- ✔ Filters up to 62% of UV radiation
- ✔ WERS rated up to 4.5 stars cooling*
- ✔ WERS rated up to 3 stars heating*

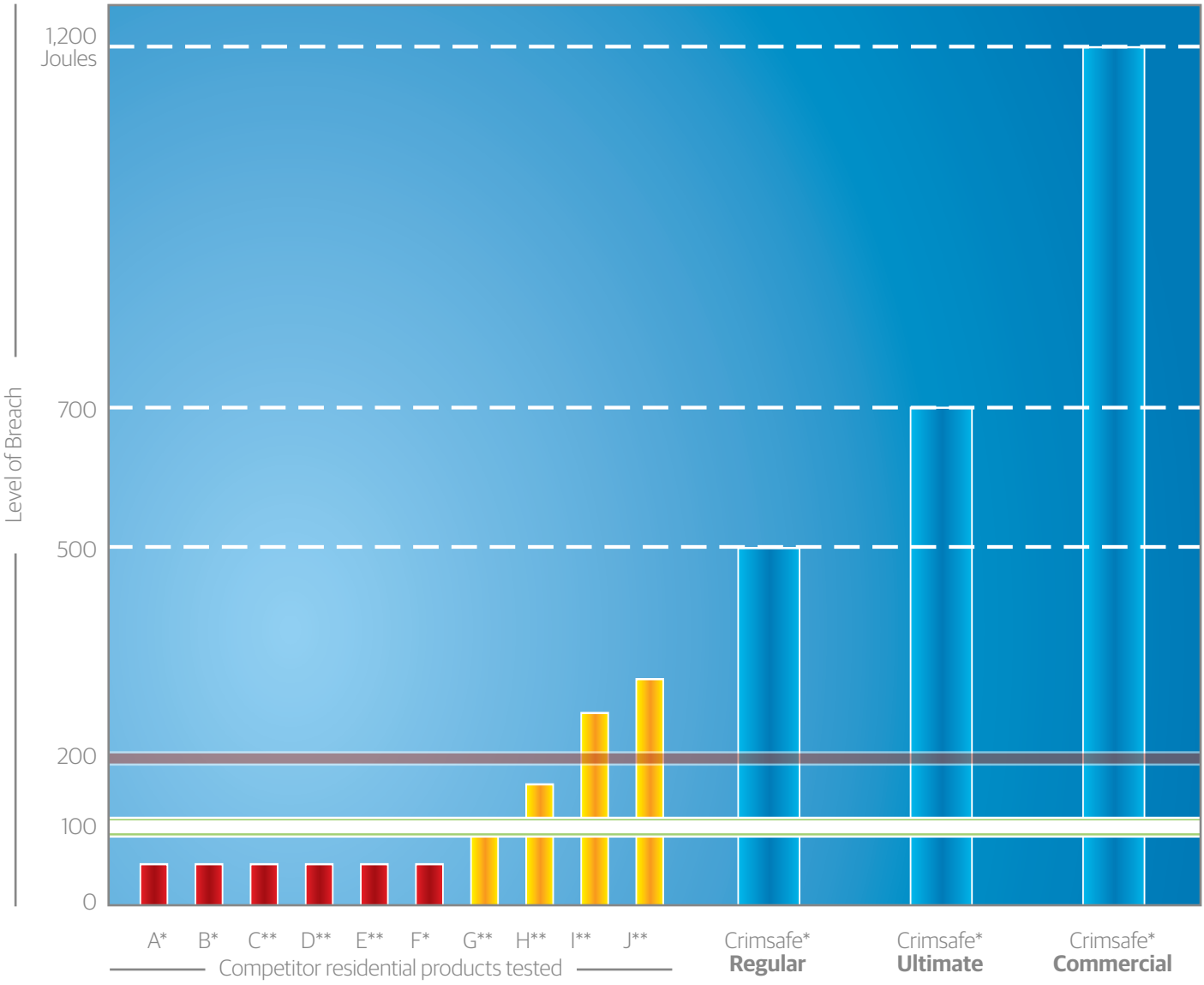
** Refer table below*

Window ID	Glazing	Cooling Stars	Heating Stars	%	%	Total Window System Values - WERS			
						Uw	SHGCw	Tvw	Air Inf.
WERS Generic Standard Industry Typical Aluminium Window - Single Glazed with Crimsafe Security Screen on Exterior									
CRS-001-01	3Clr	★★★	★☆	46%	5%	5.7	0.36	0.32	5.00
CRS-001-02	6.38 LE	★★★★	★★☆	56%	15%	4.6	0.29	0.29	5.00
CRS-001-03	5Toned	★★★	★☆	50%	2%	5.7	0.31	0.18	5.00
CRS-001-04	5SuperToned	★★★☆	★☆	51%	1%	5.7	0.29	0.08	5.00
WERS Generic Standard Industry Typical Aluminium Window - Double Glazed with Crimsafe Security Screen on Exterior									
CRS-002-01	3Clr/6/3Clr	★★★☆	★★☆	55%	16%	4.5	0.31	0.28	5.00
CRS-002-02	3Clr/12/3Clr	★★★★	★★☆	56%	18%	4.4	0.31	0.28	5.00
CRS-002-03	3Clr/12/4LE	★★★★☆	★★★	60%	23%	3.9	0.28	0.26	5.00
CRS-002-04	5SuperToned/6/5 Clr	★★★★☆	★★	64%	7%	4.5	0.18	0.04	5.00

Superior strength against impact

When it comes to impact resistance, Crimsafe has an outstanding reputation that's backed up by solid research. In independent university tests our screens stood up not just against an Australian Standard of 5 x 100 joule impact, but also against singular impact levels reaching 500J (Crimsafe Regular), 700J (Crimsafe Ultimate) and 1200J (Crimsafe Commercial).

DYNAMIC IMPACT TESTING UNSW@ADFA



UNSW@ADFA
CANBERRA • AUSTRALIA

Tests conducted by UNSW@ADFA Nov 2011

** Single impact ** Multiple impacts*

For copies of our test results, please contact projects@crimsafe.com.au

SPECIFY CRIMSAFE

Use our online program to obtain detailed Crimsafe specifications for any project.
Go to **crimsafe.com.au/professionals** or speak with one of our Commercial Project Managers on **1800 274 672**
or email **projects@crimsafe.com.au**


protection by
crimsafe

protection by crimsafe

Specify Crimsafe for your next project

crimsafe.com.au

projects@crimsafe.com.au

1800 274 672

Unparalleled protection meets design freedom

Clean lines, unobstructed views and bespoke fabrication means building with Crimsafe gives you limitless flexibility to marry style and functionality.

The combination of form, function and features means Crimsafe is widely specified for commercial projects as a solution to meet specific design requirements, including:

- incredible strength suitable for high-risk environments
- fire attenuation
- emergency exits
- energy efficient
- fall protection
- bushfire protection
- balustrading
- anti-throw
- anti-electrification
- cyclone debris protection
- pool fencing
- insect protection.

Crimsafe proudly partners with:

Kids Don't Fly
UNSW@ADFA CANBERRA • AUSTRALIA
AWA
ASSDA ACCREDITED
HIA