



Providing a complete bushfire protection range
for building & renovating in flamezones

BAL-FZ SHUTTERS,
BAL-FZ GLAZING
BAL-40 WINDOWS & DOORS





WARRIOR
WINDOWS AND DOORS



WARRIOR
SHUTTERS

The Warrior Flame Zone Windows, Doors & Shutters Bushfire Protection Range

Our unique range has been extensively fire tested with direct flame contact for fire ratings in excess of 30 minutes (-/30/-) in accordance with AS1530.4.

Warrior FZ Shutters are developed to comply with AS3959.



BAL

BUSHFIRE ATTACK LEVEL
Bushfire Rated Systems



BAL-LOW
Insufficient risk to warrant a construction response



BAL-12.5
Concern of a ember attack



BAL-19
Increasing levels of ember attack and airborne burning debris. Increasing danger from radiant heat up to 19kW/m²



BAL-29
Greater risk of damage from airborne burning debris. Further risk from radiant heat exposure up to 29kW/m²



BAL-40
Burning debris ignited by windborne embers and radiant heat exposure up to 40kW/m². Likelihood of direct flame contact.



BAL-FZ
Direct flame contact from fire front & radiant heat exposure greater than 40kW/m²

AS SEEN ON

GRAND
DESIGNS
AUSTRALIA



CONTENTS

BAL-FZ SYSTEMS4

BAL-FZ WINDOWS

FIXED Windows4

OPERABLE Windows5

BAL-FZ DOORS

HINGED Doors6

AN IMPORTANT
NOTE ABOUT GLASS7

BAL-FZ SHUTTERS

MOTORISED Shutters8

MANUAL Shutters9

WHAT'S THE DIFFERENCE
BETWEEN BAL-40 & BAL-FZ?.....10

BAL-40 & BAL-29 SYSTEMS11

BAL-40 & BAL-29 WINDOWS

SLIDING Windows11

AWNING Windows11

DOUBLE HUNG Windows11

BI-FOLD Windows12

LOUVRE Windows12

BAL-40 & BAL-29 DOORS

SLIDING Doors13

BI-FOLD Doors13

HINGED Doors13

ABOUT US14



BAL-FZ SYSTEMS

BAL-FZ WINDOWS

The Warrior Window range is available in fixed and operable options that comply with **AS3959 Section 9**. Our Warrior Windows have been fire tested to AS1530.4 to provide a minimum of 30 minutes fire rating (-/30/-) and are proudly Australian Made. Full certification is issued with installation of all Warrior products.

The Warrior Window range is highly customisable, and framing can be powder coated any colour in the Dulux Duralloy range to match clients tastes and building facade. Made with clear Class A Fire Rated safety glass in accordance with AS1288, Warrior Windows are available in a variety of sizes, energy ratings and glazing options including double glazing (DGU).



FIXED WINDOWS

Made to measure, the Warrior range consist of a propriety cold formed and seam welded steel profile, incorporating beading with concealed fixing and clear Fire Rated Class A safety glass.

MAXIMUM SIZES Single Window

2760mm H x 1290mm W
or 2300mm H x 1560mm W

MAXIMUM SIZES Partition

3.5M H (with transoms) and unlimited width with expansion joints and transoms.

WINDOW FRAME PROFILE

- 50mm deep x 70mm wide

FRAMING TYPES

- Galvanised (standard)
- Stainless steel (optional)

GLAZING WEIGHT

- SGU Nominally 15 kg/m²
- DGU Nominally 30kg/m²

Characteristic	SGU	DGU
Glass thickness (nominal)	6mm	24mm
Sound Reduction (Rw glass only, EN140-3)	32 (-2, -2) dB	30 (-2, -5) dB
Light Transmission (EN140)	89%	60%
U-value (glass only, EN673)	5.7 W/m ² K	1.5 W/m ² K
SHGC (G value, EN410)	0.85	0.34



BAL-FZ WINDOWS

The system incorporates a proprietary slimline steel frame with black glazing gasket and snap on (concealed fix) beading for a modern architectural finish.

The fire resistant glass is a clear Grade A toughened, safety glass in accordance with AS1288 and provides resistance to ember attack in addition to its fire resistance.

Operable sections are top hung / side hung and are closed via a window winder. The windows should be closed upon knowledge of a bush fire event occurring in the vicinity of the property. Stainless steel ember mesh is required on operable parts of window systems and is provided for full compliance with AS3959.



OPERABLE WINDOWS

The Warrior Operable Window range consists of a winder & mesh system.

Our BAL-FZ windows can also easily be matched with your existing windows, and/or our other BAL systems.

- Striking minimal architectural lines
- 70mm Steel frame
- Can hold single and double glazed units
- Standard window hardware included
- Black chain winder
- Installation included
- Optional tinting or privacy films available

MAXIMUM SIZES Single Window

1070mm H x 850mm W
or 820 H x 1100mm W

WINDOW FRAME PROFILE

- 50mm deep x 70mm wide

FRAMING TYPES

- Galvanised (standard)
- Stainless steel (optional)



BAL-FZ SYSTEMS

BAL-FZ DOORS

The Warrior FZ hinged door is approved for fire ratings of 30 minutes (-/30/-) and has been full scale fire tested in accordance with AS1530.4 without the need for fire shutter. Made with Fire Rated clear Class A safety glass in accordance with AS1288 and provides resistance to ember attack in addition to its fire resistance. Warrior Doors incorporate a proprietary slimline steel frame with black glazing gasket and snap on (concealed fix) beading for a modern architectural finish. Available in a variety of sizes, energy ratings and glazing options including double glazing (DGU).



HINGED DOORS

The Warrior range complies to AS3959 Section 9, approved to provide 30 minutes of fire protection (-/30/-) and is designed & manufactured in Australia. Standard door hardware included (satin chrome finish).

MAXIMUM DOOR SIZES

- Single – 2700mm H x 1250mm W or 2450mm H x 1400mm W
- Double – 2540mm H x 1340mm W per leaf (total 2680mm W)

DOOR FRAME PROFILE (single & double)

- 50mm deep x 70mm wide

FRAMING TYPES

- Galvanised (standard)
- Stainless steel (optional)

DOOR WEIGHT (2400mm H x 1200mm W)

- Nominally 80kg

Characteristic	SGU	DGU
Glass thickness (nominal)	6mm	24mm
Sound Reduction (Rw glass only, EN140-3)	32 (-2, -2) dB	30 (-2, -5) dB
Light Transmission (EN140)	89%	60%
U-value (glass only, EN673)	5.7 W/m ² K	1.5 W/m ² K
SHGC (G value, EN410)	0.85	0.34





WARRIOR
WINDOWS AND DOORS

AN IMPORTANT NOTE ABOUT GLASS

*All Warrior Window and door systems use Fire Rated Clear Grade A Safety Glass and are deemed to provide ember protection in addition to the BAL-FZ rating. **Toughened safety glass cannot be cut to size and is ordered on a project by project basis.** Monolithic toughened safety glass is not to be confused with laminated safety glass.*

Laminated safety glass does not meet the requirements for ember protection even though they may achieve a BAL-FZ rating.

A tell-tale sign is that the offer will promote a shorter lead time for the glass. Laminated safety glass is cuttable and which is why it may be available at a shorter lead time than toughened safety glass - which is made to order.

*Ember attack in a bushfire typically occurs ahead of the fire front. **Laminated glasses are susceptible to breakage from ember attack** (hence why they are not permitted for BAL-40 and BAL-29 ratings) and may not be in place to protect your home when the fire front reaches it.*

BAL-FZ SYSTEMS

BAL-FZ SHUTTERS

Warrior FZ Shutters are the most rigorously tested bushfire shutters available, with the first tests conducted in 2009. The Warrior FZ Shutter is the only bushfire shutter tested at the CSIRO Mogo Bushfire Field Test site on a full-size house, and is currently also **the largest bushfire shutter available on the market.**

Warrior FZ Shutters have been tested in various configurations and wall types with, and without windows to ensure the largest range of applications for our customers.



MOTORISED SHUTTERS

Engineered as a neat solution to meet requirements of AS3959:2018 for the highest Bushfire Attack Level of FlameZone (BAL-FZ). The unit is motorized and can also be manually deployed via a wall mounted switch. A gravity failsafe system, the shutter will deploy on loss of power without the need for battery back up.

- 165mm x 165mm motorised headbox
- Covers up to 8m system width
- Easily retrofit over existing windows
- Economical option for medium span openings
- Cover multiple openings & reduce costs
- Integrated descent speed controller
- Powder coated to match any colour in the Dulux Duralloy range
- 5-10 years conditional warranty with Service & Maintenance plan
- Australian Made & Owned

MAXIMUM SHUTTER SIZE

- 8000mm W x 3000mm H or
- 6000mm W x 4000mm H



BAL-FZ SYSTEMS

BAL-FZ SHUTTERS

Bushfire Control has been supplying BAL-FZ Shutters since the introduction of the FZ Shutter requirement in 2009. The Warrior FZ Shutter is designed and engineered as a neat solution to meet requirements of AS3959:2018 for the highest Bushfire Attack Level of FlameZone (BAL-FZ).

The Warrior range is approved to AS1530.8.2:2018 as the sole means of protecting any opening and is one of the only units on the market which also achieves a Fire Resistance Level (FRL) of -/30/- in accordance with AS1530.4:2014, proving reliable fire performance and peace of mind protection.



MANUAL SHUTTERS

Compact in design, the Warrior FZ Manual Shutter can be designed into new, or retrofitted to existing buildings.

The system is activated manually by a roller and cord and should be deployed upon knowledge of a bush fire event. Designed to suit smaller windows and doors of up to 2.75m W x 2.5m H and also utilises the most compact head box on the market.

- 145mm x 145mm manually operable head box
- Economical
- Complies with AS1905.2 Fire Shutters
- Ultra slim unobtrusive design
- Easily retrofit over existing windows
- Powder coated to match any colour in the Dulux Duralloy range
- High quality product
- 5-10 years conditional warranty with Service & Maintenance plan
- Australian Made & Owned

MAXIMUM SHUTTER SIZE

- 2750mm W x 2500mm H

YOUR PERFECT HOME, YOUR PERFECT VIEW, YOUR PEACE OF MIND

WHAT'S THE DIFFERENCE BETWEEN BAL-40 & BAL-FZ?

A rating between a BAL-40 product (or lower) and a BAL-FZ product is determined by distance and how your project is rated. BAL-FZ indicates direct exposure to flames from fire front, in addition to heat flux and ember attack. BAL-40 reflects the need for increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux with the increased likelihood of exposure to flames. It is the highest stringency level outside BAL-FZ.

From a product perspective, generally an FZ product has a steel frame, and a BAL-40 (or lower) has an aluminium frame – with some glazing differences.

Bushfire Control's unique offering to builders, designers and homeowners includes a full product range of BAL-FZ Shutters, BAL-FZ Glazing and BAL-40 Windows & Doors which have been rigorously and exclusively tested at the CSIRO Mogo Bushfire Field Test Site on a full sized dwelling.



Warrior FZ Bushfire shutters are the only shutter available that have passed the AS1530.8.2 test without a window behind it. Typically, a shutter with a toughened safety glass window or door behind the shutter will contribute to the fire resistance of the shutter in the test.

Bushfire control issues Certificates of Compliance on completion of each and every installation.

BAL-40 & BAL-29 SYSTEMS

BAL-40 & BAL-29 WINDOWS

If your project has several applications, combining our Bushfire shutters with a lower rated BAL-40 product will save money in less visible areas, allowing you to invest more in your overall street appeal and adding value to your property while remaining fully compliant. A window/shutter combination utilising BAL 40 windows, is a great option if you are managing a budget conscious project. Ember Mesh may also need to be included in your window/door system to achieve compliance.



SLIDING WINDOWS

Combining form and function with many aesthetic advantages, sliding windows with handle location on the mullion gives ease of access and cleaner lines. In-built weather flaps reduce air and water infiltration, cover drain slots and minimise insect intrusion. The proprietary adjustable, non-corrosive roller system - provides an effortless gliding motion, with anti-lift blockfitted above the sash to prevent manipulation and increase security.



AWNING WINDOWS

A mainstay range featuring two frame widths and multiple sash options. A modern designer look, packed with a multitude of performance features including designer bevelled edged framing as standard and a wide sash for high-end residential applications is also available. The integrated hinge is incorporated entirely within the frame to achieve a clean designer finish.



DOUBLE-HUNG WINDOWS

A slimline design to complement heritage houses and new homes aiming for a classic look. Boasting obvious aesthetic qualities, these are specifically designed to accommodate screening within the head and sill to deliver a clean professional finish. Attention to detail highlights bump stops top and bottom to prevent frame damage, along with full perimeter weather piles to reduce air and water infiltration.

BAL-40 & BAL-29 SYSTEMS

BAL-40 & BAL-29 WINDOWS CONTINUED



BI-FOLD WINDOWS

A premium solution for those seeking superior functionality and style in the alfresco area of their home.

The top or bottom Bi-Fold System features flat sill options for smooth accessibility and optional mid rails with multi-point locking in a range of opening configurations. Combined with quality hardware, these panels are superior in strength and performance.



LOUVRE WINDOWS

Available in two glass blade sizes, this quality window system has been developed to maximise light, air and space. Energy efficiency is key - allowing you to turn off air conditioning and artificial lights. Extensively tested in accredited facilities for water penetration, wind, and bushfires – proven in real-world everyday life and extreme weather conditions. Ember mesh is required with this window type to comply - ask us for further information.



BAL-40 & BAL-29 SYSTEMS

BAL-40 & BAL-29 DOORS

From a product perspective, our FZ doors are made utilising a steel frame, and a BAL-40 (or lower) has an aluminium frame – with some glazing differences. BAL-40 doors are available in a wide range of configurations and are compliant with AS3959. A single Warrior shutter can be used to protect multiple openings, of widths up to 8 metres.



SLIDING DOORS

Rather than unsightly exposed tracks found in most residential doors, sliding doors are available in a range of threshold and jamb in-fills as well as end caps to conceal all cavities, minimising opportunities for insects, dirt and grit to gather. An internally concealed weather flap also reduces air and water infiltration and minimises insect intrusion through the drain holes.



BI-FOLD DOORS

A premium solution for those seeking superior functionality and style in the alfresco area of their home. The top or bottom Bi-Fold System features flat sill options for smooth accessibility and optional mid rails with multi-point locking in a range of opening configurations. Combined with quality hardware, these door panels are superior in strength and performance.



HINGED DOORS

Functionality and style as a grand entry to your home. With a modern designer look, doors are available in a range of sizes. Combined with optional hardware, these door panels are superior in strength and performance, with attention to detail such as reduced visible fixings, as well as custom extrusion design allowing for clean interaction with door hardware.



BUSHFIRE CONTROL PROUDLY AUSTRALIAN

EXPERIENCE & INNOVATION

Fire performance is not the only requirement for our products. Energy efficiency, noise reduction, light transmission, durability and other technical requirements are also important for every day use. The Warrior range is supported by all of the necessary data to provide confidence.

Since 2009, constant research and development continues to enhance our offering of fire windows, fire doors, and fire shutters bringing the most innovative technology to both regular and unique project challenges.

Call us now for an obligation free discussion regarding your project, we are happy to provide you as many options as you think you need to realise your dream home.

"It is hard to believe that a thin piece of mesh can protect a property from the searing heat of a bushfire..."

However the material is made from woven fibreglass & stainless steel. It can withstand temperatures of up to 1100°C for up to 2 hours & will prevent heat from transferring through the glass into the house, stopping items inside from catching alight. And it's all tucked neatly away in a small headbox out of sight."

PETER MADDISON, GRAND DESIGNS AUSTRALIA

A fully integrated installation of our Warrior FZ Motorsied Shuttters at The Hawkesbury Chapel as seen on Grand Designs Australia, Season 9, 2021



OUR MISSION

*We believe people deserve
to work & live in safe
& beautiful buildings.*

We demonstrate this by
partnering with industry to
leverage our knowledge &
expertise, offering high quality
life preserving products &
services, with a value-driven
solution-oriented approach.



BUSHFIRE
CONTROL

Warrior Windows is a trademark
of the Bushfire Control Group



BAL-FZ & BAL-40 WINDOWS, DOORS & SHUTTERS



WARRIOR WINDOWS IS A TRADEMARK OF THE BUSHFIRE CONTROL GROUP



1800 218 258 | info@bushfirecontrol.com.au