



WARRIOR BAL-FZ

BUSHFIRE SHUTTERS

Installation in Accordance
with AS3959





Warrior FZ Shutter Installation in Accordance with AS3959

Are BAL-40 windows required behind Warrior FZ Shutters?

INTRODUCTION

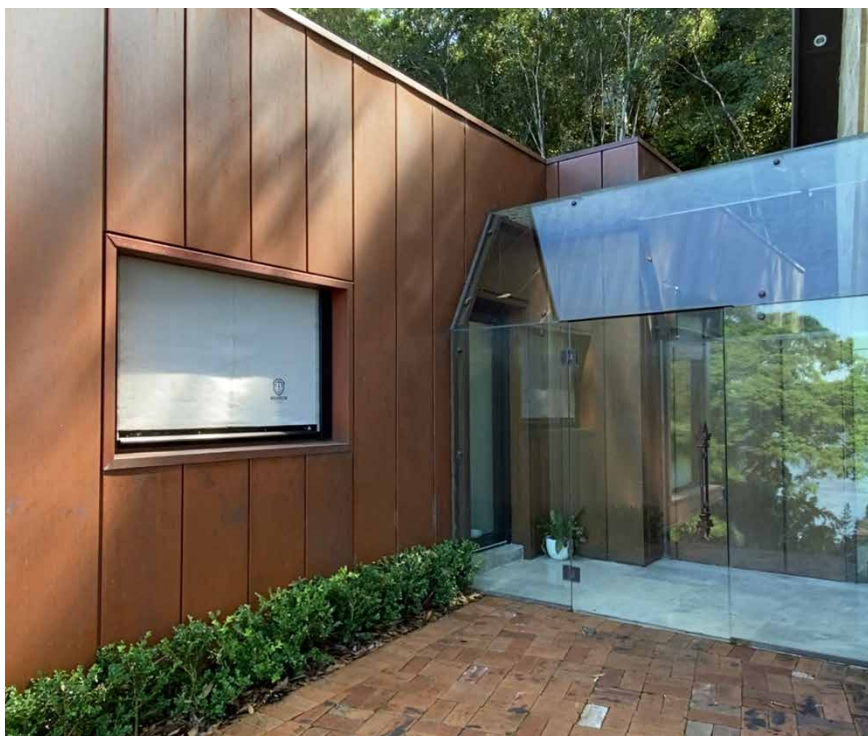
The short answer is no.

The Warrior FZ Shutter has been bushfire tested and passed the requirements of AS1530.8.2 without a window behind it.

On the other hand, a bushfire shutter tested with a window behind it, must be installed with a window of the same specification used in the bushfire test and in the same configuration.

To be a compliant installation, they will have strict parameters to conform. For example:

- a. The gap between the window and the bushfire shutter must be maintained in all applications. Some bushfire shutters sold require a 450mm gap or more between the shutter and the glass.
- b. The distance from the edge of the opening must be maintained in all applications. Some bushfire shutters on the market require a 260mm gap between the top of the window and the underside of the head box, and 70mm from the side of the window to the side guide.
- c. The glass type used in the bushfire test must be the glass type used in the installation in all applications. This is because 5mm and 6mm toughened glass will contribute to the overall bushfire performance, and a system that passes the test with a window, may not necessarily pass the bushfire test without a window.



Warrior FZ Shutters installed at the Hawkesbury Chapel, NSW as featured on Grand Designs Australia, Season 9, 2021

As these parameters can make the bushfire shutter both impractical and unsightly, the Homeowner should check these details with the supplier of the shutter, and if still unsure, request the approval from the supplier. The approval will identify if there are any special requirements for the installation such as an offset to the window opening, materials of construction (some products require additional re-enforcing and/or treatments to pass the bushfire test), offset to the glass, as well as type of glass used in the test (if any).

Warrior FZ Shutters do not have any onerous restrictions on its normal use, and our team is more than happy to discuss this detail with you.



BACKGROUND

Unfortunately, the science behind the AS1530.8.2 (2009) was not so obvious for those without engineering or scientific qualifications.

While the current and previous versions of AS3959 Section 9, Clause 9.5 External glazed elements, assemblies and doors identifies both BAL-FZ bushfire shutters and window assemblies in separate sub clauses, the BAL-FZ test method in AS1530.8.2 (2009) does not differentiate between a BAL-FZ shutter and a window assembly. That is; AS1530.8.2(2009) test method requires both the window and the bushfire shutter to be tested as one system. This led to significant confusion within the industry regarding the compliance pathway for BAL-FZ bushfire shutters.

Technically, bushfire shutter installations for Flame Zone applications in accordance with AS3959 (2009) cannot exist as there is no test method to test the bushfire shutter without a window. However, the latest version of AS1530.8.2 (2018) has clarified what is already known to be true from a scientific perspective, that testing a bushfire shutter without a window behind it is the worse test case scenario, and means that a blank opening or any type of window may be used behind the bushfire shutter provided it is tested without a window.

“The BAL-FZ test method in AS1530.8.2 (2009) does not differentiate between a BAL-FZ bushfire shutter and a window assembly”



Before & after at the CSIRO Mogo bushfire field test site

Warrior FZ Shutters are the most rigorously tested bushfire shutter on the market, 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.

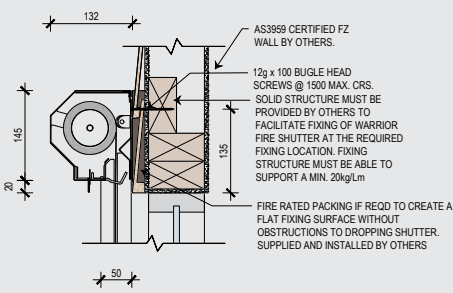


INSTALLATION

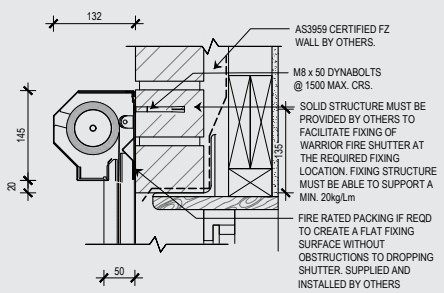
Typical installation configurations for the Warrior FZ Shutter will look like the examples below.

The first step, once an order is placed, is to provide free detail drawings for our Warrior FZ Shutters interfaced with the wall construction to ensure compliance can be achieved and that your Builder understands the subtleties for Flame Zone protection.

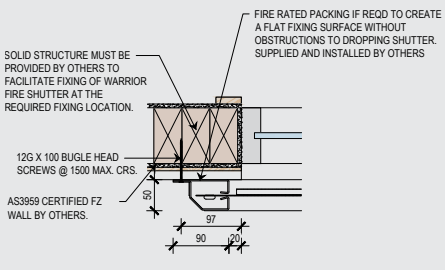
Typical installation details (guide only)



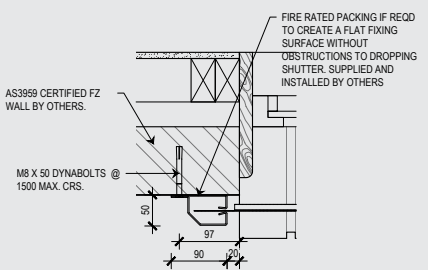
1 TYPICAL HEADBOX DETAIL WEATHERBOARD WALL STRUCTURE
SCALE 1:10 @ A2



1 TYPICAL HEADBOX DETAIL MASONRY WALL STRUCTURE
SCALE 1:10 @ A2



2 TYPICAL SIDE GUIDE DETAIL WEATHERBOARD WALL STRUCTURE
SCALE 1:10 @ A2



2 TYPICAL SIDE GUIDE DETAIL MASONRY WALL STRUCTURE
SCALE 1:10 @ A2

COMPLIANCE

It is important to note that a bushfire shutter supplier's product approval is not automatic compliance for your home, or project.

Compliance for bushfire shutters can only be issued upon completion of the installation, to certify both the product and the installation as a complete system. However, this is not to say the product test approval should not be presented upfront to ensure a compliant installation specific to the product and home can be achieved before orders are placed.

The Certificate of Compliance must state that the shutters supplied have been installed in accordance with the tested system, and therefore meet the requirements of AS3959.

Bushfire Control issues Certificates of Compliance on completion of each installation.

CUSTOMER SERVICE

Our team is happy to receive your inquiries and answer any queries that you may have at any stage during your build.

Our experience has shown that incorporating our Warrior FZ Shutters into your design at the initial stages creates the best results.

Contacting us early will also assist with providing the optimal shutter configurations and minimise costs.

Our offices and showroom are open 5 days a week. Please contact us on 1800 218 258.

**Bushfire Control is certified
Australian Made and Owned**

*Fully integrated Warrior FZ Shutters
installed at the Hawkesbury Chapel, NSW
as featured on Grand Designs Australia.*





A LITTLE MORE ABOUT US...

Incorporated in 2004 in Sydney NSW, Bushfire Control is 100% Australian owned & operated.

Our team has combined experience of over 75 years in fire protection, with systems backed by experienced technical support and a thorough understanding of relevant Australian Standards and Approval processes.

Our main production facility is located in Sydney, warehouse branch network in Brisbane QLD & Melbourne VIC and national distributor partner networks in SA, NT and WA.

Bushfire Control is not just a business to us, it is a passion, an investment. We believe in our products and our service.

OUR BRANDS...

Warrior is a trademark of the Bushfire Control Group



WARRIOR
SHUTTERS



WARRIOR
WINDOWS AND DOORS

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

