



FS FireCheck™

Ampelite Australia

Extraordinary Performance
Fire Proof Fibreglass Roofing and Cladding

AS/NZS 3837 - Group 2 Classification



PROUDLY AUSTRALIAN OWNED
AND MANUFACTURED

Available Across the Complete Ampelite Fibreglass Range

How does the Ampelite FS FireCheck® work?

The FS FireCheck comprises an intumescent impregnated glass tissue which is manufactured within the Ampelite sheeting. The chemicals are halogen free meaning they are non toxic. The simplicity of the approach to using the tissue and locating it at the surface of the sheet results in no loss of strength or stiffness within the composite section.

On exposure to flame or radiant heat the FS FireCheck will form a carbon char. This char will not support a flame or burning and will insulate against any heat source. Therefore flame spread and smoke development become non-existent.

Traditional methods of fire retardant roofing products include the addition of chemicals, especially Bromine. This chemical is toxic when burnt and degrades the integrity of the fibreglass when exposed to the sun or UV light. FS FireCheck is completely free from Bromine fire retardant chemical, and surpasses any previous fibreglass sheeting fire retardant category. FS FireCheck is now in it's own class of fire proofing protection.

Universal Applications

Ampelite, Australia's most experienced and largest manufacturer of fibreglass roofing now includes FS FireCheck as an optional benefit to all our fibreglass products.

Benefits

- Fire Resistant
- Does Not Contain Bromine
- Will Not Turn Brown under UV Exposure
- Non Toxic Burn Qualities
- Hail Resistant
- Stable Light Transmission
- UV Stable 100 Micron Gel Coating
- Cuts 99% of UV Transmission
- No Surface Erosion
- Can be produced with Chemical Resistant Resin

Testing Summary

Australian Standards Testing Authority: CSIRO Infrastructure Technologies, Sydney

AS/NZS 1530.3:1999

Methods for fire tests on building materials, components and structures – Simultaneous determination of ignitability, flame propagation, heat release and smoke release.

AS/NZS 3837:1998 (GROUP 2 Classification)

Methods of test for heat and smoke release rates for materials and products using oxygen consumption calorimeter.

International Standards Testing Authority: TUVSUD PSB Pty. Ltd. Singapore

BS 476-6:1989 + A1: 2009 (Fire Propagation Index 12.6)

Fire tests on building materials and structures – Part 6: Method of test for fire propagation for products.

BS 476-7:1997 (CLASS 2 Surface Spread of Flame)

Fire tests on building materials and structures – Part 7: Method for classification of the surface spread of flame of products.

ASTM E108: 2001 (CLASS A)

Standard test method for fire tests of roof coverings.

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CSIRO COMPARATIVE TESTING

Performed by the Fire Safety Engineering Team at the CSIRO, Materials Science & Engineering facility at Highett, Melbourne.

This comparative test was conducted to display the difference between Ampelite products when exposed to a 40KW Magnitude Flame Test.

1. Ampelite Standard Industrial Polyester Sheeting. Test stopped at 3.01 minutes.



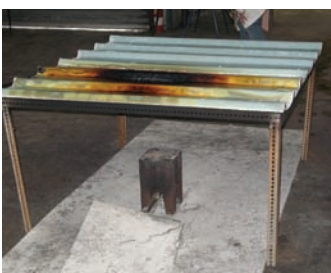
After three minutes, the sheets were doused with water extinguishing the flames. Heavy black smoke was abundant creating a time delay wait for fumes to be exhausted. The result of the fire is evident with the front sheet ready to collapse.

2. Ampelite SL Fire Retardant Sheeting. Test stopped at 4.01 minutes.



The top surface of the SL Fire Retardant achieved a peak temperature of 652.7°C and was reached at 265 seconds as the sheeting became engulfed in flames.

3. Ampelite Standard Industrial Sheeting with FS Firecheck addition. Test concluded after 31.00 minutes.



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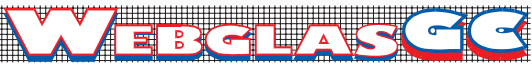
This photo displays the extent of heat damage to the front sheet that was positioned directly over the flame. The adjacent sheet had no visual sign of heat damage.

The temperature on the flame face rose and fell between 540°C and 570°C, taken from 180 seconds to 510 seconds of exposure. From there until the conclusion of the test, the exposed flame temperatures experienced by the FS Firecheck sheeting averaged at 520°C.

The top side of the FS FireCheck sheeting experienced a peak temperature of 411.2°C after 475 seconds of flame exposure. From that point of time, the average temperature of the top surface of the sheeting was 350°C.

The difference in mean temperatures from the exposed surface of the sheeting was therefore an incredible 170°C. Put in context, this is even more impressive when measuring the average thickness of the sheeting at just 2.0mm.

Ampelite FS Firecheck can be utilised with all the well-known Ampelite Fibreglass Products.

	<p>Wonderglas GC – Gel coated fibreglass sheeting that defeats weathering.</p>
	<p>Cool-Lite GC – Solar Heat Gain reducing fibreglass sheeting.</p>
	<p>Webglas GC – Trafficable fibreglass sheeting designed for architectural aesthetics as well as corrosive resistant roofing.</p>

Light Transmission Table		
Colour	Series	Light
Ice Clear	2400	72.0%
Opal	2400	70.0%
Cool-Lite	2400	38.0%

Provided by Ampelite Australia Pty Ltd an Australian owned and operated company

25 Year Warranty

The following benefits are in addition to any rights conveyed by Government regulations and the Trade Practices

Ampelite Australia Pty Ltd warrant 'Wonderglas GC' glass reinforced polyester sheeting over:

(A) a period of 25 years (pro-rata cover) for the following:

1. The product will not allow water penetration through the actual sheet.
2. The product will not de-laminate or allow protrusion of reinforcing fibres through the sheet surface.

(B) a period of 10 years (pro-rata cover) for the following:

1. Remain structurally sound and shatter resistant under normal conditions. This includes fracturing of sheet by hailstones up to 20 mm in diameter accompanied by winds up to 100 km/hr.
2. Excessive yellowing of sheets leading to loss of light transmission exceeding 10% of the original light value when installed below a latitude of 26° South of the equator. Installations above this latitude will be covered by individual warranty based on known climatic conditions.

Warranty conditions:

- (a) The product must be installed strictly in accordance with AS1562.3:2006 Design and installation of sheet roofing and wall cladding Part 3: Plastic, and with the Manufacturer's recommendations and specifications which are available from Ampelite offices.
- (b) The product must not be affected by failure to remove debris, or failure to keep the surface clean or to provide free drainage of water from the product's surfaces.

(c) The sheet shall not be directly exposed to the range of chemicals known to cause deterioration of polyester materials.

(d) Sheet failure or damage due to vandalism, fire or natural disasters, improper storage or installation is not covered.

Replacement or refinishing

From the date of installations in latitudes below 26° South, and during the applicable warranty period, Ampelite Australia Pty. Ltd. will, upon verification and acceptance of a claim supply a replacement panel at a cost to the user calculated as follows: 1/300th warranted for 25 years for each month of service obtained prior to the submission of the claim, or refinish the defective panel to restore minimum surface integrity.

DISCLAIMER

While the contents of this brochure are believed to be correct at the time of printing, revisions to the colour range, procedures or data may be made without notice. All recommendations are made in good faith but without warranty.

The colour representations of WonderGlas GC in this brochure are as accurate as the nature of the material and commercial photographic and printing processes allow. It is probable that colours may vary between those shown in this brochure, sample pieces and the delivered product.

For further information and full technical data, contact:

Ampelite is a proudly Australian owned manufacturing company. Profits remain in Australia and taxes paid benefit our community.



Ampelite Australia Pty Ltd
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Plumbing Merchants Association
Supplier Of The Year for
2006, 2007, 2008, 2009, 2011 & 2014



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