

Head Office

Unit 12, 8 Leighton Place
Hornsby
NSW, 2077
Australia

Firefly Office

P.O BOX 52
Laidley
QLD, 4341
Australia

Contact details

Phone: (07) 5411 4209
Fax: + 61 2 9482 7511
Mobile: 0400 966 899
trevor@tbafirefly.com.au

TREVOR KEMPSTER
TBA FIREFLY
BMEE - BUSHFIRE BUILDING
CONFERENCE AND EXPO 2015

TBAFIREFLY.COM.AU

TBA FIREFLY

PASSIVE FIRE PROTECTION

Head Office

Unit 12, 8 Leighton Place
Hornsby
NSW, 2077
Australia

Firefly Office

P.O BOX 52
Laidley
QLD, 4341
Australia

Contact details

Phone: (07) 5411 4209
Fax: + 61 2 9482 7511
Mobile: 0400 966 899
trevor@tbafirefly.com.au

MATERIAL DESCRIPTION

TBA Textiles manufacture a wide range of thermal protection products that are made of a number of high performance fibres (E glass, Kevlar Pre-oxidised acrylic and others). These products are used in many arduous environments and industries that range from general industrial to smelters, foundries and personal protection.

- These fabrics provide a safe working environment and are ideal for use when stringent OHS practices are critical.
- Fabrics are non-itchy and very user friendly
- Fabrics can be used as excellent smoke barriers and curtains, and are ideal as heat and welding curtains and screens.
- They are perfect as general insulation blankets
- All can simply be draped well over machinery and other critical areas

TBA Textile Fyrejacket is made from fibreglass, coated with specially compounded silicon rubber. Fyrejacket sleeves slide on easily over all types of cables and hoses and expand readily to go over fittings and couplings. Fyrejacket is used to protect hoses and hose assemblies, tubing, piping, wires, wire assemblies and cables from exposure up to 260 °C (500F) and from molten splash and welding sparks. The Aerospace grade Fyrejacket will withstand short term flame exposure to 1093 °C (2000 F).

APPLICATIONS

TBA Textiles products can be used in many applications:
Thermal Insulation | Lagging | Gaskets | Hose Protection | Seals and for the fabrication of removable flange covers, expansion joints | Safety and personal protection.

USED EXTENSIVELY IN THE FOLLOWING INDUSTRIES

Steel and Aluminium Smelters | Aerospace Industry | Foundries | Power Stations | Mining | Automotive | Marine

TBA TEXTILES
THERMAL PROTECTION SOLUTIONS



Proximity Suit



Heat Protective Apparel

TBAFIREFLY.COM.AU

OVER THE PAST 8 YEARS, TBA FIREFLY, THE PASSIVE FIRE PROTECTION RANGE OF TBA TEXTILES, HAVE PUSHED FORWARD AND UNDERGONE AN EXTENSIVE TESTING PROGRAM TO AUSTRALIAN STANDARDS FOR THE FULL TBA FIREFLY RANGE OF PRODUCTS.

AFTER THE CATASTROPHIC BLACK SATURDAY FIRES IN VICTORIA, WHEN THE NEW AS1530.8.2 STANDARD WAS INTRODUCED WE EMBARKED ON A MISSION TO PROVIDE A FULLY TESTED FULLY COMPLIANT BAL-FZ ROOF AND BAL-FZ WALL SYSTEM FOR BUILDING FLAME ZONE AREAS.

TO DATE TBA FIREFLY HAVE THE ONLY BAL-FZ ROOF SYSTEM - WHICH MET AND SATISFIED THE FULL AS1530.8.2 TEST CRITERIA WITHOUT THE NEED FOR FURTHER ASSESSMENT .

WE ARE NOW ABLE TO PROVIDE COST EFFECTIVE , BUSHFIRE EFFECTIVE FLEXIBLE AND LIGHTWEIGHT ROOF AND WALL SYSTEMS

TBA FIREFLY
PASSIVE FIRE PROTECTION
TBAFIREFLY.COM.AU

Head Office

Unit 12, 8 Leighton Place
Hornsby
NSW, 2077
Australia

Firefly Office

P.O BOX 52
Laidley
QLD, 4341
Australia

Contact details

Phone: (07) 5411 4209
Fax: + 61 2 9482 7511
Mobile: 0400 966 899
trevor@tbafirefly.com.au



TESTING OF OUR FIRE STOPPING PRODUCTS

TBAFIREFLY.COM.AU

MATERIAL DESCRIPTION

TBA Firefly were the first company to pass the AS1530.8.2 Roof Test which was introduced following the catastrophic Black Saturday Bushfires in 2009 using our BAL-FZ Roof System. Our products make up the lightest and most easily installed system on the market, which has been fully tested to meet the new Flame Zone requirements of AS3959-2009. Our system was used on Callignee 2, which was the first home to be rebuilt following the 2009 Victorian Bushfires and features on the first ever episode of Grand Designs Australia, called The Bushfire House.

CERTIFICATION

Fully tested to AS1530.8.2
By Exova Warringtonfire
Report No EWFA 23990-02
Thermal Rating R5.5
AS/NZS4859.1:2002/Amdt 1(DEC2006)

BAL-FZ ROOF

APPLICATIONS

The Firefly system can be used to protect, roof, fascia, eaves, box gutters, valleys and barge elevations. The flexibility of the Firefly Plus 60 ensures that it can be wrapped around any shaped roof with ease, whilst maintaining the full fire rating. This makes it an ideal solution for architects who like to think and design, outside of the box.

We have a full design/installation manual which is downloadable from our website

BAL-FZ ROOF SYSTEM



RAL Home Roof Wrap NSW



RFS Emergency Services Building, NSW

TBA FIREFLY

PASSIVE FIRE PROTECTION

TBAFIREFLY.COM.AU



TBA FIREFLY

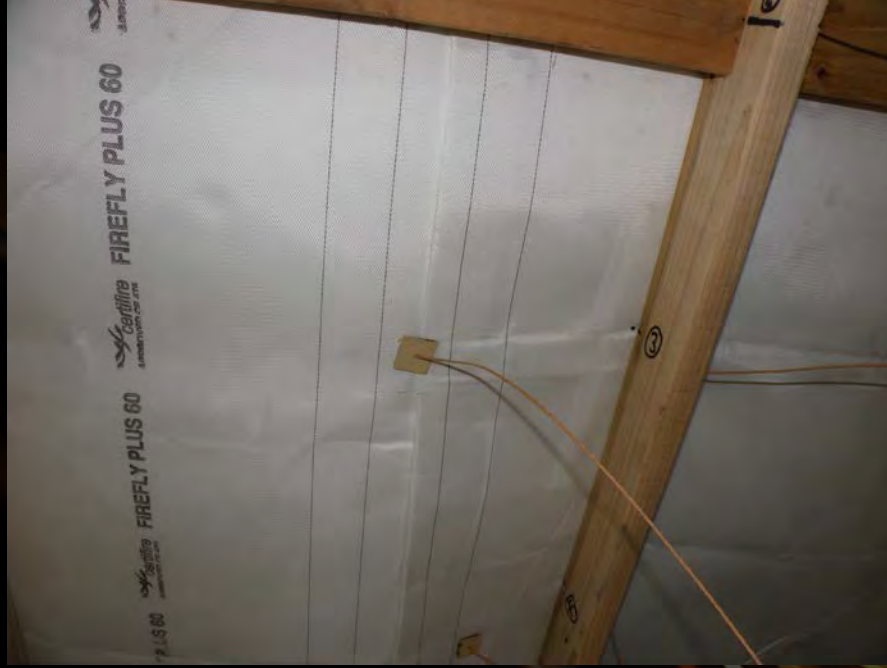
PASSIVE FIRE PROTECTION

TBAFIREFLY.COM.AU



TBA FIREFLY
PASSIVE FIRE PROTECTION
TBAFIREFLY.COM.AU

THERMOCOUPLES PLACED ON SEAMS AND JOINS



TBA FIREFLY
PASSIVE FIRE PROTECTION
TBAFIREFLY.COM.AU



Testing. Advising. Assuring.

EWFA CERTIFICATE OF ASSESSMENT	CERTIFICATE No : SFC 23990-04	Page 1 of 1
---------------------------------------	--------------------------------------	--------------------

Report Sponsor	Certificate Issue Date	Product Name
TBA Textiles P/L Unit 12, 8 Leighton Place Hornsby, NSW 2077, Australia	18/03/15	TBA BAL-FZ Roofing System

Assessment Report Reference	Test Methods	Report Issue Date	Report Validity Date
EWFA 23990-03	AS1530.8.2-2007	6/2/14	28/2/19

Introduction

The element of construction described below was assessed by this laboratory on behalf of the report sponsor in accordance with the stated test standard and achieved the results stated below. Refer to the referenced test report(s) for more information.

Assessed Roof System Description and Performance	
Roof System Description	BAL
The sheet metal sheet and tile roof system protected with TBA Firefly 60 Plus and Firefly Intubatt. The Firefly Plus 60 blanket lining consists of woven e-glass, 60 micron foil and e-glass wadding and is installed over the roof framing. The Firefly Intubatt consists of mineral fibre boards with a 1mm thick Firefly Intucoat mastic coat on the exposed side and is installed to the eaves, fascia and nominally 150mm up the raked face of the roof, directly on top of the Firefly Plus 60. Refer the referenced report for a complete description of the assessed construction.	BAL-FZ

Conditions/Validity

- THIS CERTIFICATE IS PROVIDED FOR GENERAL INFORMATION ONLY AND DOES NOT COMPLY WITH THE REGULATORY REQUIREMENTS FOR EVIDENCE OF COMPLIANCE.
- Reference should be made to the relevant test report or regulatory information report to determine the applicability of the test result to a proposed installation. Full details of the constructions and justification for the conclusions given, along with the validity statements, are given in the assessment reports.
- The results of these fire tests may be used to assess fire hazard, but it should be recognized that a single test method will not provide a full assessment of fire hazard under all conditions.

TESTING AUTHORITY	
Address	Exova Warringtonfire Aus Pty Ltd Suite 2002a, Level 20, 44 Market Street, Sydney NSW 2000, Australia
Phone / Fax	+61 (0)2 9270 7600 / +61 (0)2 9299 6076
ABN	81 050 241 524
Email / Home Page	www.exova.com
Authorisation	Prepared By: Reviewed By:
	D. Nicholson K. G. Nicholls

TBA FIREFLY
PASSIVE FIRE PROTECTION
TBAFIREFLY.COM-AU

25mm x 0.6mm Galvanised Strap
(Hoop Iron) fixed at 100mm centres
using 32mm Drywall screws

50mm overlap around
corners and on joints

Fibre Cement sheet or steel sheet
cladding for weather protection

Timber or Steel Frame

90mm non-combustible
wall batts

Plus 60 Fire Barrier
10mm THICK and 2.2kg m²

Sarking

CERTIFICATION

Tested both horizontally and vertically.
Tested in accordance with AS1530.4
Meets BAL-FZ requirements for Walls.
Meets BAL-FZ requirements for Underfloor

FRL-/60/30
TESTED FROM OUTSIDE IN

APPLICATIONS

Our Plus 60 fire blanket allows "Lightweight Constructed Buildings-Kit Homes/Commercial Sheds" to be built in bushfire areas which have been designated as being in the highest Bushfire Attack Level of Flame Zone (BAL-FZ). Simply wrap the external timber or steel framed walls and underfloor sections with our lightweight Plus 60 fabric and over clad using a product deemed to be non-combustible under the BCA for example, fibre cement sheeting or custom orb steel to weather proof the building. In accordance with AS3959-2009, the wall system must be either tested to AS1530.8.2 or alternatively a system with an FRL-/30/30 **when tested from outside in.**

PLUS 60
BAL-FZ WALL SYSTEM



RFS BUILDING BAL-FZ WALL
INSTALL NSW



EASILY WRAPPED AROUND
ARCHITECTURAL FEATURES -
CALLIGNEE 2 VICTORIA



WINDOW REVEAL FIXING DETAIL

TBA FIREFLY

PASSIVE FIRE PROTECTION

TBAFIREFLY.COM.AU

Head Office

Unit 12, 8 Leighton Place
Hornsby
NSW, 2077
Australia

Firefly Office

P.O BOX 52
Laidley
QLD, 4341
Australia

Contact details

Phone: (07) 5411 4209
Fax: + 61 2 9482 7511
Mobile: 0400 966 899
trevor@tbafirefly.com.au



In accordance with AS3959-2009, homes that are to be built in areas designated as BAL-40 the Fascia element of construction needs to have passed AS1530.8.1 or alternatively a product that has passed the higher test standard AS 1530.8.2 may be used to satisfy all lower BAL's

BAL-40 FASCIA SYSTEM

MATERIAL DESCRIPTION

Phoenix EA is a lightweight, waterproof sarking, foil faced on one side.

CERTIFICATION

Tested for both vertical and horizontal applications

AS1530.4
BRANZ Report Number FAR2701

AS1530.2-1993 Flammability Test
AWTA Report Number 7-576926-CN

AS4200.1-1994 Clause 6.1.3
AS1301.448s -1991
AS/NZS 4200.1-1994 Table 1 (Extra Heavy Duty)
Number: 7-577747-CN
AS/NZS4201.4-1994 (PASS)
AS/NZS4200.1-1994 CLAUSE 6-4 (High)
AWTA Report

Full compliance to AS3959-2009 Extra Heavy
Duty Sarking for BAL-12.5<BAL40

APPLICATIONS

Phoenix EA extra heavy duty sarking is used to wrap the outside of timber or steel roof and wall frames to provide superior protection against mild to severe ember attack during bush fires. In addition to its flammability index of 1 it has a Fire Rating Level of -/90/- when tested to AS1530.4 (Method for fire tests on building materials, components and structures).

UNIT OF MEASURE ROLL

SIZE 25m x 1m = 25m²

WEIGHT

560g per m2 THICKNESS 1mm

FRL- /90/-

PHOENIX EA SARKING



Sarking Under Eave Protection



Starting Roof Wrap



Completed Roof Sark

TBA FIREFLY

PASSIVE FIRE PROTECTION

TBAFIREFLY.COM.AU



FIREFLY DROP DOWN CURTAINS

Used to protect the cab and occupants from extreme radiant heat and flame passing through the window glass.



FIREFLY FYREJACKET®

Used to protect the fuel and hydraulic lines from extreme heat and flame

FIRE TRUCK FIRE PROTECTION

TBA FIREFLY

PASSIVE FIRE PROTECTION

TBAFIREFLY.COM.AU

MATERIAL DESCRIPTION

Firefly Intusil is an atmospheric moisture curing one part silicon sealant, which is available in white or grey. Intusil will form a skin in around 30 minutes depending on moisture conditions (the more moisture the faster the cure). It should be tooled within 5 minutes and will continue to cure at 2mm per day.

CERTIFICATION

Tested in both vertical and horizontal applications.
Tested in accordance with AS1530.4-2005.
Assessed in accordance with AS4072.1-2005.
Tested in accordance with AS1530.8.2-2009
IMO A653 (16)/MSC 61 (67) Pt5.
Lloyds Register.
RINA.

UNIT OF MEASURE EACH

SIZE 310ml Tube
(25 in a box)
600ml Sausage foil pack
(12 in a box)

FRL-/240/240

APPLICATIONS

Used to provide a highly flexible (low modulus) water proof fire seal to gaps and joints up to 25mm requiring up to 50% movement accommodation. Particularly suitable for use on non-porous surfaces, such as metal, glass and many polished surfaces, including curtain walling. Intusil contains no halogens and produces very low smoke emissions during fire attack making it extremely suitable for use in confined spaces, underground or in marine environments. Whereas some polyurethane based waterproof fire rated sealants, may not be suitable for enclosed spaces as polyurethane has been known to emit extremely toxic gases when exposed to fire. Intusil is also used for sealing up external joints on roofing, barge and eave linings, where buildings are constructed in areas designated as BAL-FZ or lower. Bushfire Attack Level - Flame Zone is the highest level of Bushfire Attack.

INTUSIL



High Movement Seal



Intusil Tubes and Sausage Foil packs



Sealing External Gaps On Our
BAL-FZ Test Rig Prior To
AS1530.8.2 Roof Test

TBA FIREFLY

PASSIVE FIRE PROTECTION

TBAFIREFLY.COM.AU

MATERIAL DESCRIPTION

Firefly Intumastic is a water based acrylic sealant, which is available in either white or grey. It can be over-painted with oil or water based paints. For small linear gap seals we would recommend the use of polythene backing rods to ensure maximum economy in use and to form the correct profile to the seal to allow movement without forcing the seal out of the gap. In addition to its building approvals, Intumastic has full IMO and Lloyds Certification for a range of marine applications.

CERTIFICATION

Tested in both vertical and horizontal applications.

Tested in accordance with AS1530.4-2005
Assessed in accordance with AS4072.1-2005
IMO A653 (16)/MSC 61 (67) Pt5.
Lloyds Register

UNIT OF MEASURE EACH SIZE

310ml Tube (25 in a box)
600ml Sausage foil pack (12 in a box)
5 litre Tub Brush Grade

FRL-/240/240

APPLICATIONS

The tubes and sausages can be used to provide a flexible seal to joints up to 25mm, requiring movement of +/- 10%. It is applied against a polythene backing rod to a width to depth ratio of 1:1 (so a 20mm gap requires a 20mm depth of sealant). The 5 litre tubs of Intumastic brush grade are used to butter up the cut edges of our Intubatt prior to re joining them around service penetrations. Once the Intubatts are installed, the tubes and sausages are used to fill any small gaps and holes between the Intubatt and services to create a neat and tidy seal. For use in Concrete floors, Plasterboard, Speedpanel, Powerscape, block walls and our Intubatt.

INTUMASTIC



Available in Tube, Sausage or Tub



Intumastic Seal With Backing Rod



Buttering Up The Edges of The Intubatt

TBA FIREFLY

PASSIVE FIRE PROTECTION

TBAFIREFLY.COM.AU

ANCILLARY ITEMS



GREEN COLLAR ROLL

Used as part of the Firefly Timber Penowrap System, and also to wrap the services which penetrate the Phoenix, Plus 60 and Titan barrier. It comes in a roll which unwraps to 10m long x 300mm wide with a sewn in concertinaed skirt. The skirt can be moulded to shape to seal it nicely to the upright barrier which is usually at 90 degrees to the Collar Roll and glued into place using the Intumastic fire rated mastic. The R31 Staple Gun and Staples are used to staple the Collar Roll to itself tightly around the penetration.



PARTY WALL MASTIC

Used to seal the head of fire/smoke and compartment walls, also used to seal the head of the Phoenix, Plus 60 and Titan barriers where they meet the underside of the non-combustible roof covering. Also used to seal gaps and junctions in roof systems and roof penetrations in Bushfire areas. They come in a pack measuring 1.2m x 800mm x 100mm, this gives you 5 No pre-cut strips 1.2m x 100mm x 160mm (6 linear m).



UV OPTIFIRE TORCH

Used by fire protection professionals to check that our Intubatt and Intumastic are the installed products on site if that is what they have specified for the contract. Our Intubatt and Intumastic products have a unique tracer built in to them called Optifire, when the UV Optifire Torch is shone onto their surface a colour is revealed. Assurance of product and system integrity in terms of supply, usage and maintenance. Guarantees to installers that distributors are delivering the specified Firefly Product they have requested. Helps Fire Risk Assessors to ensure the correct fire stopping has been installed hence reducing risks and liabilities taken.



ANCILLARY ITEMS



R31 STAPLE GUN

Used to staple together the joints/seams and edges of the Firefly Phoenix, Plus 60 and Titan barriers and also the Nautilus Smokebar, MFB30 and MFA60SB Marine Barriers.



R11 HAMMER TACKER

Used to temporarily fix the Firefly Phoenix, Plus 60 and Titan barriers, prior to the mechanical fix using 25mm x 25mm x 0.5mm galvanised angle or 25mm x 0.5mm galvanised Hoop Iron and 32mm drywall screws.



R31 STAINLESS STEEL STAPLES

These stainless steel staples are to be used with the R31 Staple Gun, they come 8mm and 12mm long and are part of the tested systems.



R11 HAMMER TACKER STAPLES

These 10mm staples are to be used with the R11 Hammer Tacker.

TBA FiREFLY

PASSIVE FIRE PROTECTION

TBAFiREFLY.COM.AU