

FIREFREE 88® Technical Data Sheet

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Last updated 20th March 2019

FF88 – TDS 003



Firefree 88®, a premium quality, water-based, nontoxic, intumescent fire retardant coating.

PRODUCT INFORMATION

Firefree 88® (“Ff88”) is a premium intumescent fire-resistant coating tested to comply with many fire rating performances prescribed under the Australian Building Code as well as many US and international construction codes. These standards involve fire resistant testing which measures a product's ability to prevent fire penetration over a period of time.

Firefree 88 is listed and labelled by FM Approvals, a division of FM Global, listed and inspected by the International Code Council (“ICC”) classified by Underwriters Laboratories (U/L), and accepted by NY Material and Equipment Acceptance Division (MEA).

KEY FEATURES

<ul style="list-style-type: none">• Easy to use and apply• Fully tested and certified• Tintable• Smooth finish	<ul style="list-style-type: none">• Cost efficient• High performance• Eco-friendly• Usable on multiple substrates/assemblies
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RECOMMENDED USES

Use on properly prepared uncoated, primed or previously painted surfaces. Ff88 can be applied to numerous materials, including wood, gypsum board (Gyprock, plasterboard), lathe and plaster, concrete, masonry, embossed/pressed metal tin, thin gauge metal, galvanized steel and aluminium, fibreglass, carbon fibre, plastics and other composite materials for 1 and 2 hour ratings. Can be used on spray polyurethane foam to achieve a 15 minute barrier.

As a result of its' superior fire-resistant performance, Firefree 88® can provide significant material and labour cost reductions that result in significant savings when compared to other construction options in both new, retrofit and defective situations. This includes residential, commercial, industrial and government sectors as well as insulation and transportation industries.

Recommended for historic properties, schools, health care (hospitals, assisted living), apartments, condominium, high-rises, hotels, stores, restaurants, oil and solar facilities, government facilities, military applications and facilities, transportation (aerospace, aviation, light rail, maritime, energy).

Ff88 is a water-based coating designed for interior use. However, Ff88 can be used in some exterior applications if covered by the FfE Exterior Topcoat in strict compliance with Firefree's specifications (contact Fire Defender for more information).

Ff88 comes in a white colour and has a flat finish and can be tinted using any colour chart. If a semi-gloss or gloss finish is desired, Ff88 can be top coated with most premium paints to achieve the desired colour and finish.

TESTING LABORATORIES

AUSTRALIA

All testing is done in NATA accredited laboratories.



TESTING RESULTS

- **AS3837 Group ratings.** Please note that the majority of the AS1530.4 reports below will be accepted by certifiers as alternates for AS3837 Group ratings.
- AS1530.4. Timber Stud, Timber Lined Wall Systems FRL -/30/30
- AS1530.4. Metal stud plasterboard non-load bearing FRL 30/30/30
- AS1530.4. 13mm plasterboard FRL -/60/60
- AS1530.4. Concrete/masonry wall system 120/120/120
- AS1530.4. Pressed metal ceiling tiles to floor FRL 60/60/60
- AS1530.4. Timber density assessment report.
- AS1530.3 for 11mm plywood
- AS3959. Bushfire - currently underway (Watch this space)
- **Many US and international test results are also available. See page 4**

PRODUCT SPECIFICATIONS

Type: Liquid Colour: White

Finish/Sheen: flat 1.9-2.2 @60 .5-1@85

VOC: (test method ASTM D3960) <36 g/L

%Volume Solids: 67%

Viscosity (test method ASTM D-562): 115 @ 25°C (77°F) kU

Specific Gravity/Density, g/ml: (test method ASTM D1475)1.272+ 0.05

Divisions: 099643 Fire retardant coatings, 099600 High performance coatings

Thinning: Not Recommended

Packaging: 15 litre pails containing 11 litres of product.

Shelf-Life: 2 years (unopened)

APPLICATION

Ff88 is a water-based fire-retardant paint and its application is similar to applying a regular water-based paint (except for the recommended thickness which needs to be precisely complied with for adequate performance). Please refer to the “Application Instructions” for important details.

Ff88 can be brushed, rolled or sprayed using an airless spray gun. Additionally, because of its high percentage of solids, it will have an excellent spread rate and coverage. Refer to the Application Instructions for detailed information.

TECHNICAL SERVICES

Many building assemblies require an hourly fire-resistant rating that is tested and rated in accordance to AS1530.4 standard, or the AS1530.3 standard. If your project requires a fire-resistant rating, please contact our Technical Department for advice before applying Firefree 88®. A Fire Defender technical service representative will assist you in evaluating the appropriate dry film thickness of the coating.



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FIRE SAFETY

For various reasons, including: the very different circumstances that may exist from one fire to another and the differences between conditions in an actual fire and laboratory conditions in which testing is conducted and the inherent variability of fire tests, passing a laboratory test or certifying/labelling Ff88 for use in specific assemblies/systems does not mean that the same application of Ff88 will necessarily provide an equivalent protection or the same result in an actual fire or in a new laboratory test.

Furthermore, Ff88 is to be used only as a component of complete fire retardation systems for the whole structure. It will only contribute to slowing fire spread for the area where it has been applied and will not, by itself, prevent a fire from starting or continuing.

The amount by which Ff88 retards a particular fire will depend, among other things:

- on the amount of Ff88 applied
- the conditions of the other elements of the assembly incorporating Ff88, and
- the conditions of the actual fire itself. Ff88 will not make a fire any less dangerous to persons or property.

Firefree cannot guarantee that loss or injury will not be suffered by persons or property. It is the sole responsibility of the applicator to ensure that Ff88 has been applied in accordance with the application directions. It is the responsibility of the occupier to ensure the paint is not cracked, chipped or peeling.

LIMITED WARRANTY

Firefree Coatings, Inc. ("Firefree") provides the following limited warranty for Firefree 88 Topcoat ("Ff88" or "Product"). Please read the warranty below carefully as it contains important information from the manufacturer.

For a period of ten (10) years from purchase, Ff88 will not crack, peel, or chip if properly applied to a properly prepared and approved surface and if properly maintained. If Ff88 fails to meet the terms set forth above, Firefree will provide, at no charge, a quantity of Ff88 sufficient to repaint the surface affected. This is the exclusive remedy for all warranty claims.

This warranty specifically excludes labour or costs of labour or incidental or consequential damages associated with the use of this product.

WARRANTY CONTINUED

In the event of a warranty claim, the claimant must notify Firefree in writing of the defect promptly following discovery and must submit proof of purchase,

including the date of purchase, proof that the recommended thickness was applied, and proof of the defect, including the date of discovery.

Firefree reserves the right to inspect any painted surface to which the warranty claim applies.

This warranty will be void if the surface is:

- treated by any abrasive process or material (other than normal sanding before application of the Product),
- exposed to any biological solvent or caustic chemical or agent
- altered or repaired, or
- exposed to exterior weathering unless, and only if, it is covered by the Ff Exterior Topcoat in strict compliance with Firefree's specifications.

The warranty will also be void if the Product is;

- diluted or adulterated,
- mixed with any other product
- not stored per Firefree's instructions,
- not applied in the required uniform thickness per Firefree's specifications,
- or used after two (2) years from the date of purchase.

The manufacturer expressly disclaims any and all warranties, expressed or implied, of merchantability or fitness for any particular use. For further information, please call 1300 347 374 or 07 3102 1111.

SAFE HANDLING AND STORAGE

Refer to Safety Data Sheet (SDS) for further safety and handling information.



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ABOUT THE COMPANY

FIREFREE Coatings, Inc is a privately-owned company based in California USA. All products have been tested at accredited third-party IAS www.iasonline.org fire testing laboratories. Ff88 is approved by FM Approvals www.fmapprovals.com, certified & tested by ICC and classified by the Underwriters Laboratories, and accepted by NY Material and Equipment Acceptance (MEA) Division. Firefree Coatings, Inc. is a member of NFPA, ICC and ASTM.



This information is provided “as is” by Firefree® Coatings, Inc. and no representation or expressed or implied warranties or merchantability, fitness for a particular use or of any other nature are made with respect to this information or to any product referred to in this written information. Adding colour may increase the VOC limits. For SDS or to consult with a Firefree® Coating Professional, call Fire Defender on 1300 347 374. To the best of our knowledge, the technical data contained herein is true and accurate on the date of publication and is subject to change without prior notice. FIREFREE-88 and Ff88 are registered trademarks of FIREFREE Coatings, Inc. © 2019 Firefree

US AND INTERNATIONAL COMPLIANCE TESTING

Qualifies for LEED v4 Credit	CDPH/EHLB Standard Method v1.2, 2017 Emissions	Meets VOC regulations (OTC, SCAQMD CARB)	Master Painters Institute® (MPI) Green Performance® GPS1/GPS2
YES	YES	YES	YES

Firefree coatings may contribute up to five LEED points

- Tested by Independent ISO/IEC 17025 Accredited Laboratory
- MEA # 320-99 City of New York
- UL # R14654 Classified on OSB, Douglas fir
- FM Approved, per FM 4975
- ICC listed, ESR4271
- Class O, per BS 476 Part 6 & 7
- Class 1-S, per NZBC Verification Method

tested to comply with fire ratings performance prescribed under the International Building Code (IBC). These standards involve (i) fire resistant testing which measures a product's ability to prevent fire penetration over a period of time, such as ASTM E 119, FM 4975, ASTM E 662-97, ASTM E 3675-98, ASTM E 162-98, ASTM E 1354-94, ASTM E 814, BS 476, AS 1530.3 AS 1530.4. EN 13501-1, and (ii) fire retardant testing such as ASTM E 84 and Room Corner Test standards including UBC 8-2, NFPA 286, UBC 26-3, measuring a product's ability to limit flashover.

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SOLD IN AUSTRALIA BY



Australian supplier of fire retardants for use in commercial, multi-dwelling and domestic buildings. All products have been tested and comply with multiple Australian standards

- AS1530.3
- AS1530.4 including load bearing walls
- FRL ratings

Fire Defender

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