



# FIRETEX FX1002

## PRODUCT TECHNICAL DATA

Revised 08/2013 Issue 2

### PRODUCT INFORMATION

#### PRODUCT DESCRIPTION

#### FIRETEX FX1002 INTUMESCENT COATING

##### Material Type:

A single pack thin film intumescent coating

#### RECOMMENDED USE

FIRETEX FX1002 is designed for site application by airless spray, to provide fire resistance for up to 120 minutes on structural steel.

**After appropriate drying, FIRETEX FX1002 specifications can be exposed to the weather for up to 6 months provided that the specific use does not lead to ponding water due to rainfall, condensation or other site circumstances.**

#### ENDORSEMENTS

This product has been assessed in accordance with the Criteria of Acceptability given in the ASFP/BCF "Industry Guidance Document".

This product has been tested and assessed in accordance with the ASFP firetesting protocol for cellular beam protection. See Section 6.3 from ASFP "Yellow Book" 4th Edition.

Tested and assessed to EN13381-8.

European Technical Approval ETA – 12/0049

CE Marking Number 1121-CPD-GA5005

#### RECOMMENDED APPLICATION METHODS

Airless Spray

Brush

**Recommended Cleanser/Thinner:** No 2 (for thinning)

#### PRODUCT CHARACTERISTICS

**Flash Point:** 27°C

**% Solids by Volume:** 75± 4% (ASTM-D2697-03)

**Colour Availability:** White

##### VOC

286 gms/litre determined practically in accordance with UK Regulations PG6/23

355 gms/litre calculated from formulation to satisfy EC Solvent Emissions Directive

264 gms/kilo content by weight from formulation, to satisfy EC SED

#### RECOMMENDED THICKNESS

See separate sheet of FX1002 loading requirements.

#### PRACTICAL APPLICATION RATES -

##### MICRONS PER COAT

|     | Airless Spray | Brush |
|-----|---------------|-------|
| Dry | 1400          | 300   |
| Wet | 1867          | 400   |

#### AVERAGE DRYING TIMES

|   | @ 15°C  | @ 23°C     |
|---|---|------------|
| To touch:   | 1 hour  | 30 minutes |
| To recoat:  | 4 hours   | 4 hours    |
| To handle:  | This will depend on the total thickness of FIRETEX FX1002 to be applied |            |
| <b><i>These figures are given as a guide only. Factors such as air movement and humidity must also be considered.</i></b> |   |            |

#### RESISTANCE TO

FIRETEX FX1002 can resist normal weather conditions for up to 6 months without topcoat provided it has had appropriate drying prior to exposure. Once an approved topcoat has been applied as appropriate to the prevailing conditions, then durability will be substantially enhanced. **If the specific use or storage could lead to prolonged contact with water due to rainfall, condensation, or other site/transportation/storage circumstances, then a recommended topcoat must be used to prevent damage to the basecoat.**

#### RECOMMENDED PRIMERS

Several primers have been approved for use under FIRETEX FX1002. Please consult Sherwin-Williams for detailed information

#### RECOMMENDED TOPCOATS

For certain dry, internal situations where the final colour/appearance is not critical, then FIRETEX FX1002 may remain un-topcoated.

**For externally exposed steelwork and severe internal environments Resistex C137V2 or Resistex C237 must be used as a topcoat.** For other internal environments where a topcoat is required then FIRETEX M71V3 or Envirogard M770 should be used.

In all instances for subsequent re-decoration, use FIRETEX M71V3, Envirogard M770, Resistex C137V2 or Resistex C237 as appropriate.

#### PACKAGE

A single component material

**Pack Size:** 20 litre units

**Weight:** 1.32 kg/litre

**Shelf Life:** 2 years from date of manufacture or 'Use By' date where specified.



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#### SURFACE PREPARATION

FIRETEX FX1002 is designed for use over a suitably prepared and primed substrate.

Ensure surfaces to be coated are clean, dry and free from all surface contamination.

Under certain circumstances it may be possible to apply FIRETEX FX1002 directly to steel blast cleaned to a minimum standard of Sa2½ BS EN ISO 8501-1:2007, surface profile in the range 50-100 microns. Consult Sherwin-Williams for further details.

#### APPLICATION EQUIPMENT

##### Airless Spray

Nozzle Size: 21 – 27 thou ( 0.53 – 0.69mm ) depending on application requirements

Fan Angle: 30°

Operating Pressure: 210kg/cm² (3000 psi)

The details of airless spray tip orifice size, fan angle and pressure are given as a guide. Smaller fan angles should be used where the size of the work to be sprayed makes this appropriate. It may be found that slight variation in tip orifice size or pressure will provide optimum atomisation in some circumstances. In general, the operating pressure should be the lowest possible consistent with satisfactory atomisation. Recommended Equipment : Use 56:1 or 68:1 Graco King or equivalent. Use 3/8" (9.53mm) ID fluid lines where lengths in excess of 3 metres are required. In-line gun or pump filters should not normally be used. Maximum length of fluid line should not exceed 60 metres.

##### Brush

The material is suitable for brush application, but due to the nature of the material a ribbed appearance may result. Application of more than one coat may be necessary to give equivalent dry film thickness of a single spray applied coat.

#### APPLICATION CONDITIONS AND OVERCOATING

This material should preferably be applied at temperatures in excess of 5°C. In conditions of high relative humidity, ie 80-85% good ventilation conditions are essential. Substrate temperature should be at least 3°C above the dew point and always above 0°C.

The application of FIRETEX FX1002 at elevated temperatures may reduce the sag resistance of the product. It is the responsibility of the applicator to determine what thickness of material can successfully be applied at the prevailing ambient temperature.

**The material must be protected from moisture during the drying period. Moisture ingress prior to drying may affect the integrity and fire protective properties of the coating.**

No more than 2 coats by airless spray should be applied within any 24 hour period.

**If the maximum recommended thickness per coat is exceeded or high film thicknesses are overcoated prematurely, cracking may occur.**

FIRETEX FX1002 is capable of withstanding external exposure without topcoat providing:

- The product is allowed to dry for at least 24 hours at 15°C in dry conditions with good air movement and ventilation. These conditions are based on a total dry film thickness of up to 800 microns. The drying time required will be increased if the film thickness is greater than 800 microns.
- The substrate temperature is at least 3°C above the dew point at the time of application and during the drying period.

#### ADDITIONAL NOTES

Maximum service temperature is 70°C. At temperatures greater than 40°C thermoplasticity may be observed.

##### Dry Film Thickness Measurement

All dft specifications quoted are mean values, measurements should be taken for I-Sections to the following recommendations:

Web – 2 per 100cm length

Flange – (upper, lower, inside and outside) – 1 per 100cm length

High dft's and/or reduced temperatures will extend the drying time and hence the period when dft measurement can be carried out accurately.

Should you need further information please contact Sherwin-Williams.

##### Maintenance

Small areas of mechanical damage can be repaired using FIRETEX M72, FX1002 or FX2002CE as preferred.

Larger areas of mechanical damage should be repaired using FIRETEX FX1002 or FX2002CE as preferred, applied by brush or spray.

All repairs should then have the original topcoat reinstated by brush or spray as required.

Numerical values quoted for physical data may vary slightly from batch to batch.

#### HEALTH AND SAFETY

Consult Product Health and Safety Data Sheet for information on safe storage, handling and application of this product.

#### WARRANTY

Any person or company using the product without first making further enquiries as to the suitability of the product for the intended purpose does so at their own risk, and Sherwin-Williams can accept no liability for the performance of the product, or for any loss or damage arising out of such use.

The information detailed in this Data Sheet is liable to modification from time to time in the light of experience and of normal product development, and before using, customers are advised to check with Sherwin-Williams, quoting the reference number, to ensure that they possess the latest issue.