

# FIRETEX® FX6002 CELLULOSIC PASSIVE FIRE PROTECTION ULTRA-FAST DRYING INTUMESCENT

## WHAT PACK SIZES ARE AVAILABLE?

FX6002 is available in 3 pack sizes:

- 36 litre 3 component (20 litre pails of White (Base) and Grey (Additive) and 0.5 litre pack of peroxide)
- 360 litre 3 component (200 litre barrel of White, 10x20 litre pails of Grey and 10x0.5 litre packs of peroxide)
- 6x1 litre packs of Repair Kit material with 6x0.03 litre packs of peroxide

(Note: containers are filled to specific levels to yield the indicated volume of product.)

## IS THERE A CHOICE OF COLOUR?

No. FX6002 is only available in light grey.

The certification and production control for fire safety products such as FIRETEX® FX6002 requires the formulation to be as tested so tinting it to different colours is not possible.

## WHAT IS THE SUPPLY FORMAT?

The 36 and 360 litre packs are supplied as 3 separate components: White (Base) material, Grey (Additive) material and pre-measured peroxide. In use the peroxide is added to the Grey and mixed thoroughly prior to adding to the spray pump hopper. The White is added to the other hopper (or used directly from the barrel where equipment permits) and the White/Grey are mixed at 1:1 by the plural component pump during spraying.

The Repair Kits are supplied as 2 separate components per unit, Grey FX6002 Repair Kit material and pre-measured peroxide. These are mixed together thoroughly immediately before use.

## WHAT EQUIPMENT DO YOU NEED FOR SPRAY APPLICATION?

The FX6002 three component pack is designed for application using a 1:1 ratio plural component pump, advice on suitable pumps can be obtained from Sherwin-Williams Technical Services Department.

## IS APPLICATION TRAINING AVAILABLE?

Due to the unique nature of FX6002, Sherwin-Williams Technical Services Department will provide application training to all customers purchasing the product for the first time. We consider this training essential to help customers get the most from the material.

## CAN THIS BE BRUSH OR ROLLER APPLIED?

Due to the short working time and low viscosity of FX6002 application by roller is not recommended, although surface finishing using a roller may be helpful in some circumstances. Application by brush is possible for small areas but the applied thickness will be significantly lower than by spray making multiple coats necessary. Application of the repair kit may be done by trowel or brush, the choice will influence the finish achieved. During any "hand" application careful attention must be paid to the working time/pot life of the product.

## WHAT IS THE POT LIFE?

This depends on the ambient conditions, details are shown on the product datasheet but in general, the pot life is around 30 minutes.

## WHAT IS THE SHELF LIFE FOR THE PRODUCT?

FX6002 has a shelf life of nine months for the 36 and 360 litre packs and six months for the repair kits.

## CAN FX6002 BE USED ACROSS THE FULL RANGE OF STEEL I.E. COLUMNS, BEAMS, CELLULAR, HOLLOW?

FX6002 has been tested on columns, beams including cellular and hollow sections, the scope of protection within each of these can be found on the ETA, Certifire certificate and product loading tables.

## WHAT ARE THE ENVIRONMENTAL CONDITIONS FOR THIS PRODUCT TO BE APPLIED DIRECT-TO-METAL?

Sherwin-Williams endorse the direct-to-metal application of FX6002 in environments up to and including ISO12944-2; C3. For this the substrate must be abrasive blast cleaned to Sa2½ (ISO8501-1) and the application must take place before the surface degrades.

When applying direct to metal the contractor should consider how they will address any areas which require masking, e.g. connections. It may be decided to apply a minimum thickness layer of FX6002 to these areas or localised application of primer to prevent corrosion during the construction phase.

## HOW FAST DOES IT DRY FOR TOUCH?

This depends on applied thickness and ambient conditions; guidance is given on the product datasheet but as a general rule FX6002 will be touch dry in around one hour.

## HOW LONG WILL IT BE BEFORE I CAN CHAIN AND MOVE THE STEEL WITHIN A SHOP ENVIRONMENT?

This depends on applied thickness and ambient conditions; guidance is given on the product datasheet but as a general rule FX6002 will be ready to handle in around two hours.

## WHAT TYPICAL COSTS SAVINGS CAN I EXPECT, COMPARED TO USING ANOTHER FIRE PROTECTION PRODUCT?

Comparing FX6002 to single component intumescent materials you will find benefits in the speed of drying/curing, meaning for example a 120 minute protected hollow section could be coated, reliably dft checked and top coated in a shift then loaded out the following day. Using a solvent or water based single component intumescent by comparison this process could easily take over 1 week!

This greater productivity has obvious benefits in the paint shop and also in a steel fabricator/applicator's production scheduling. Project planning will consider the set completion date and work backwards to determine when steel should be ordered, fabricated and painted, i.e. the lead-in time. One fabricator/applicator, a regular user of FX6002, has stated that this lead-in time can be cut in half for a large project when using FX6002.

Off-site applicators of intumescent coatings typically expend significant resources repairing transport and erection damage of single component intumescent coatings. Experience with the FX6000 Series products has shown a substantial reduction in such damage due to the quicker drying/curing which allows the coating to be fully cured before loading out of the paint shop, typically applicators compromise drying time for shop throughput when using single component intumescent coatings. FX6002 also produces a much tougher film than the single component materials helping it resist mechanical damage.

Sherwin-Williams cannot quantify the cost savings of the above FX6002 benefits as they are within the applicator's scope and any information we might have would be specific to the applicator who provided it. Although FX6002 has a greater per litre price than for example FX2003 and generally requires a higher dft to achieve the same fire protection rating, we have seen astonishing levels of take up for the technology. Most customers who have used FX6002, have, or are in the process of changing other projects to use this product, clearly indicating that they are seeing benefits from this technology.

## WHAT DURABILITY CAN WE EXPECT FROM FX6002 SYSTEMS?

FX6002 has been tested in accordance with the ETAG18-2/EN16623 durability programme which is specifically developed for intumescent coatings and has passed the testing in all environments without the need to top coat. Sherwin-Williams technical team have equated the ETAG18-2/EN16623 results to ISO12944-2 environments as the construction industry does not yet widely recognise the Z2, Z1, Y and X categories.

Additionally Sherwin-Williams has subjected FX6002 systems to the accelerated weathering protocols of ISO12944-6 followed by a fire test as set out in EN16623 to demonstrate that the fire protection performance is not degraded. FX6002 retains its fire protection performance after being exposed to the weathering conditions for ISO12944 C5 High (15-25 years).

## WHAT FIRE TESTING APPROVALS HAS THE PRODUCT ACHIEVED?

FX6002 has the necessary approvals (Certifire Certificate) to be used on projects within the United Kingdom and other countries where BS476-20 and 21 is accepted. It also has an ETA (European Technical Assessment) with CE Mark based on testing to EN13381-8 and cell beam assessment to EN 13381-9.

## HOW DO I OBTAIN THE REQUIRED THICKNESSES FOR MY PROJECT?

Sherwin-Williams FEET (Fire Engineering and Estimation Team) will be able to provide MTO's (Material Take Off's) based on FX6002 allowing clients to compare FX6002 with other FIRETEX® materials.

MTO's are generated using our in-house developed software which itself is third-party certified for the validity of its output.

## IS A REPAIR KIT AVAILABLE?

Yes.

## ANY SPECIAL STORAGE INSTRUCTIONS?

As with all paint materials the customer must evaluate the information provided in the product safety data sheet and consider how this may be interpreted in the context of the applicable (national and/or local) health, safety and environmental legislation.

In most circumstances it is not expected that any specific measures will be necessary for the FX6002 base and additive components beyond those which would be appropriate for a solvent based intumescent coating.

The peroxide catalyst must be stored in accordance with the information given in the product's MSDS, it will need to be stored separately to other paint materials.

## ARE THERE ANY SPECIAL TRANSPORTATION REQUIREMENTS FOR THE PEROXIDE?

All FX6002 components, including the peroxide catalyst will be delivered by our specialist carriers in a safe manner to the customers chosen delivery address. Should it be necessary for the customer to transport the peroxide onwards they will need to consider the safety data sheet information in the context of their local and/or national transportation regulations.

## IS IT ONLY USED IN A SHOP ENVIRONMENT OR CAN I USE IT ON-SITE?

FX6002 may be used in-shop or on-site, in each case bringing advantages of faster processing, resistance to mechanical damage and durability.

## IS THERE A MINIMUM ORDER QUANTITY FOR THE REPAIR KIT?

One box containing six 1 litre repair kits.

## HOW LONG CAN I STORE IT OUTSIDE WITHOUT A TOP COAT?

FX6002 is suitable for exposure up to and including ISO12944-2 C3 environments without a top coat.

## WHAT IS THE LIFE TO FIRST MAJOR MAINTENANCE?

C1 - Life of building.

C2 - Life of building with a top coat, up to 20 years without.

C3 - Over 25 years.

C4 - Over 25 years..

C5 - Up to 25 years.

See Sherwin-Williams FX6002 specification selector document for further details.

## WHICH APPROVED PRIMERS AND TOP COATS CAN I USE?

FIRETEX® C69; Macropoxy™ C400V3; Acrolon™ 7300; Acrolon™ C137V2; Acrolon™ C237; Envirolastic™ 2500. Please contact Sherwin-Williams Technical Customer Support Team for further information.

## CAN I USE A COMPETITOR PRIMER/TOP COAT?

Competitor primers can be over coated with FX6002 subject to the same guidance we have for the other FIRETEX® materials, i.e. on-site trial for project specific approval or lab testing for a general product approval. Top coats can have a direct impact on the performance of intumescent coatings in the event of a fire and so only approved top coats should be used.

## DO I NEED A TIE COAT?

Not normally, if in doubt please contact Sherwin-Williams Technical Customer Support Team.

## ARE THERE ANY MAXIMUM PRIMER DFT'S THAT FX6002 CAN BE APPLIED OVER?

Where a primer has been applied above its normal datasheet thickness please consult Sherwin-Williams' Technical Customer Support Team for advice. In general Sherwin-Williams see no reason for primer DFT's in excess of 250 um and would want to consider any such cases on an individual basis. Unless there is going to be an extended period between primer and intumescent application the primer thickness should normally be 25-50 um for a blast primer (e.g. C69) or 75-125 um for a normal epoxy primer (e.g. C400V3).

**DOES FX6002 HAVE EN 13381-8 AND EN 13381-9 CERTIFICATION?**

Yes.

**DOES IT SMELL?**

FX6002 has a characteristic smell of methacrylate.

**DO I NEED SPECIALIST PPE?**

PPE requirements must be evaluated by the application contractor as part of the risk assessment process. Sherwin-Williams does not consider the requirements to be “specialist” but from the applicator’s point of view this will depend on what they are used to applying.

**CAN I USE FX6002 WITH OTHER FIRETEX® PRODUCTS?**

In the same way as the other FIRETEX® products FX6002 may be used alongside other FX materials on a project where there is benefit in doing so.

Sherwin-Williams prefer that a single product is used to protect each individual element of a structure but have test evidence to confirm compatibility with other FIRETEX® materials in certain circumstances.

**DO ANY OTHER FIRETEX® OR INTUMESCENT PRODUCTS DRY AS QUICKLY AS FX6002?**

No. This is a feature unique to FX6002.

**WHAT PERIODS OF FIRE DURATION CAN I USE FX6002?**

FX6002 can be used for protection periods of up to 120 minutes. A limited set of data is available for longer periods, please consult Sherwin-Williams for details.

**WHAT IS THE ANTICIPATED SERVICE LIFE OF FX6002?**

In most environments FX6002 will be expected to last the lifetime of the building, this however relies on the building owner/operator following an inspection and maintenance programme.

**DOES IT HAVE ANY UN HSE RESTRICTIONS? (LABELLING ON CANS).**

Please consult Sherwin-Williams Safety Datasheet.

**IS THERE ARE A MAXIMUM OVERCOATING TIME FOR FX6002?**

FX6002 can be self-overcoated or topcoated with approved topcoats up to 28 days after the previous coat. After this time, surface roughening will be required prior to applying further coats.

**DISCLAIMER**

The information and recommendations set forth in this document are based upon tests conducted by or on behalf of The Sherwin-Williams Company. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication.

Consult [www.sherwin-williams.com](http://www.sherwin-williams.com) to obtain the most recent product data information and application instructions.

**WARRANTY**

The Sherwin-Williams Company warrants our products to be free of manufacturing defects in accord with applicable Sherwin-Williams quality control procedures. Liability for products proven defective, if any, is limited to replacement of the defective product or the refund of the purchase price paid for the defective product as determined by Sherwin-Williams.

No warranty or guarantee of any kind is made by Sherwin-Williams, expressed or implied, statutory, by operation of law or otherwise including merchantability and fitness for a particular purpose.

