NUllifireSmart Protection

Product Information

Description

SC601 is a single pack acrylic thin film intumescent base coat for the protection of internal and semi exposed structural steelwork.

Usage / Purpose

SC601 is optimised to provide 60 minutes fire resistance to 'I' section beams and columns, hollow columns and beams, as well as cellular beams, concrete filled hollows and solid steel rods. 90 minute and limited 120 minute protection is also available.

Colour

Off-white

Packaging

25 kg drum

Availability

Available direct from Nullifire (see back of leaflet for address and telephone details).

Usage Guidelines

Specifications

An appropriate specification must be used for the protection of the full system in accordance with the environmental classification for the environment where the building is located. The environment during construction and transport should also be considered, if necessary, and the worst case used. Nullifire can assist with selecting an appropriate specification.

Environmental Resistance

The construction phase environmental conditions may vary from those during the final building classifications. The construction phase may include higher exposure to the environment than the final classification. Each product and specification should be considered for the resistance during this construction phase including the limitations and caveats. During the drying phase, the intumescent must be protected from all forms of water including rain. In all cases, prolonged water contact must be avoided, including condensation, standing water, heavy running water and fresh concrete run-off (including alkaline moisture). Exposure may lead to detrimental damage to the coating system.

Protective Equipment

USE IN WELL VENTILATED CONDITIONS and ensure all recommended protective equipment is worn during handling & use of this product. For full recommendation, refer to safety data sheet.

Application Conditions

- Ensure adequate through ventilation during application
- Application temperature range 5°C to +35°C, relative humidity <85% and a steel surface temperature at least 3°C above the dew point.

Necessary Tools

Airless spray equipment is recommended and should match these quidelines:

Operating Pressure: Min 3100psi (218 kg/

cm²)

Tip Size: 19 – 25 thou Fan Angle: 20° – 40°

Hose Diameter: 10 mm (3/8") (internal

diameter)

Hose Length: Max. 30 metres. Inline filters should not normally be

used

Substrate Preparation

SC601 should only be applied onto a clean, undamaged, dry, blasted Sa 2.5 and primed steel surface.

- For recommended primers and topcoats, please consult the Nullifire Approved Primer or Approved Topcoat list.
- Nullifire has carried out compatibility testing on a wide range of primers and topcoats. Call 01942 251400 for confirmation of compatibility with SC601.
- The primer must be applied in accordance with the manufacturer's instructions.

Pre-Treatment of Substrates

 All mill-scale must be removed and a blast profile of at least 50 microns and a cleanliness of Sa 2.5 must be achieved before application of recommended primer.

Primer

For recommended primers, please











- Nullifire has carried out compatibility testing on various primers, but have no control over primer consistency from other manufacturers.
- The primer system shall not exceed 150 microns DFT total, with an absolute maximum allowable in overlap areas only of 200 microns DFT.
- Primed steel surfaces that are visibly high in gloss must be abraded/sanded to a matt finish.
- The primer must be applied in accordance with the manufacturer's instructions.
- It is recommended as best practice
 that a small test patch or area be
 prepared with the intumescent before
 commencing the full intumescent
 coating application to ensure that
 there are no issues with compatibility,
 adhesion or drying, etc.

Topcoat

For recommended topcoats, please consult Nullifire.

- Nullifire has carried out compatibility testing on various topcoats, but have no control over topcoat consistency from other manufacturers.
- The type, DFT and number of layers of topcoat must be in accordance with the specification. Specifications will be driven by the Nullifire Specification Guidance or the appropriate product ETA.
- The topcoat must be applied in accordance with the manufacturer's instructions.
- It is recommended as best practice that a small test patch or area be prepared before commencing the full application to ensure that there are no issues with compatibility, adhesion or drying, etc.

Mixing and Thinning

Nullifire intumescents are supplied without the need to add thinners for application, and is not recommended, However, if necessary, xylene (FC150) may be added up to a maximum of 2%. Thinning may impact the ability of the coating to hold up at the recommended WFT.

SC601 should be mechanically stirred prior to use until homogeneous

Cleaning

Dried on paint may be removed using a paint scraper. Spray equipment must only be cleaned using xylene (FC150).

Health & Safety Precautions

Safety data sheet must be read and understood before use.
Flammable- keep away from open flames and other ignition sources.

Additional Information

Technical Service

Tremco CPG UK Limited has a team of experienced Technical Sales Representatives who provide assistance in the selection and specification of products. For more detailed information, service and advice, please call Customer Services on 01942 251400.

Guarantee / Warranty

Tremco CPG UK Limited products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with Tremco CPG UK Limited written instructions and (b) in any application recommended by Tremco CPG UK Limited, but which is proved to be defective, will be replaced free of charge.

No liability can be accepted for the information provided in this leaflet although it is published in good faith and believed to be correct.

Tremco CPG UK Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.

Disclaimer

Tremco CPG UK Limited products are manufactured to rigid standards of quality. The remedies available for any product which has been applied (a) in accordance with Tremco CPG UK Limited written instructions and (b) in any application recommended by

Tremco CPG UK Limited, but which is proved to be defective, are set out in the relevant warranty, a copy of which can be provided on request.

Please note the information in this document is intended for guidance only, and it is the responsibility of the Buyer to determine the suitability of the product for its own particular use. Tremco CPG UK Limited has no control over the quality or condition of substrate, or the many factors that can affect the use and application of the product, and as such Tremco CPG UK Limited accept no liability for any loss, injury or damages resulting from such factors. Variations in application conditions, procedures and steelwork environments can cause unsatisfactory results, therefore always refer to the application instructions or Nullifire Technical Services before use for guidance.

Tremco CPG UK Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development, improvement and any regulatory or legal compliance requirements.

The English language version of this document shall prevail over any other translated version.





Technical Data

Property	Result
Certification	Certifire CF5767
	BS476 Part 20/21
	Cellular Beams YB5
	EN13381-6 Concrete Filled HollowTubes
	EN13881-10 Solid Steel Rods
Building Classification	C1, C2, C3 and C4 environments only
	For full details, please consult Nullifire Specification Guidelines.
Construction Phase	6 months with a topcoat once fully dried (see environmental resistance)
Specific Gravity	1.36 ±0.02
Volume Solids	72% ±3%
VOC	317 g/litre
Recommended Thickness Per Coat	DFT: 720 microns- maximum
	WFT: 1000 microns- maximum
	Higher thickness's may be possible, but will impact the drying times. These thickness's are recommended for optimum film build and drying balance.
Consumption	916 g/m² @ 500 µm DFT
Average Drying Times (at 20°C)	To Touch – 30 minutes
	To Re-coat – 4 hours
	To Handle – variable depending on conditions
	These figures are given as guidance only. Other factors such as air movement, temperature and coating thickness must be considered.
Service Temperature	+5°C to +35°C
Application Temperature	+5°C to +35°C - at temperatures above 35°C, thermoplasticity may be observed
Storage	Store in secure, dry warehouse conditions between +0°C and +35°C
Shelf Life	12 months when stored as recommended in original unopened container