

CI/SfB		Yu4	(K2)
CAW G12			
Uniclass JM61:L68116			

Product Information

Description

SC604 is a single pack, fast dry solvent-based acrylic thin film intumescent basecoat for the protection of structural steelwork.

Usage / Purpose

SC604 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 rods. Limited 90 minute is also available. SC604 can be used on steel, cast iron and galvanised steel.

Colour

Off-white

Packaging

25 kg drum

Availability

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

Usage Guidelines

Application Instructions

Detailed application instructions are available for SC600, SC800 and SC900 series that must be consulted prior to commencing application. Please visit https://www.nullifire.com/en_GB/technical-zone/download-centre/

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 build classifications, as during this phase the structure may be subject to higher exposure. 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 guidelines:

Operating Pressure: Min. 3100 psi (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

SC604 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 020 3917 1776 for confirmation of compatibility with SC604.
- The primer must be applied in accordance with the manufacturer's instructions.

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SC604

Intumescent Steel Coating

Solvent Based, Fast Dry



Key Benefits Summary

- Competitive loadings
- Compatible with various primers and topcoats
- Easy to apply
- Fast dry
- Off-site (in-shop) grade
- Optifire®+ unique traceability identifier



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Primer

For recommended primers, please consult Nullifire.

- 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 manufacturers' instructions.
- It is recommended that a small test patch or area is prepared with the intumescent before commencing the full application. This is to ensure that no issues occur 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 the 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 intumescent is 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. SC604 should be mechanically stirred prior to use until homogeneous.

Cleaning

Fresh paint can be removed using xylene (FC150). 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.

Disclaimer

Tremco CPG UK Limited products are manufactured to rigid standards of quality.

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 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.



SC604

Intumescent Steel Coating

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Technical Data

Property	Result
Composition	A solvent based formulation
Certification	EN 13381-6 Protection of Concrete Filled Hollow Sections EN 13381-8 Protection of Structural Steel EN 13381-9 Protection of Cellular Beams EN 13381-10 Protection of Solid Steel Rods
Building Classification	C1, C2, C3 and C4 environments only If SC605 is to be exposed externally, it should be top coated as soon as possible, and ensure that no standing or pooling water is allowed to accumulate. For full details, please consult Nullifire Specification Guidelines.
Specific Gravity	1.33 ±0.02
Volume Solids	72% ±3%
VOC	317 g/litre
Consumption	923 g/m ² @ 500 µm DFT
Average Drying Times (at 20°C)	To Touch – 30 minutes To Recoat – 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.
Application Temperature	+5°C to +35°C
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