

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

Description

SC804 Intumescent Basecoat is a very low VOC, borate free, APEO free, water-based, thin film intumescent coating for the protection of structural steelwork. SC804 contains no substances of very high concern.

Usage / Purpose

SC804 is optimised to provide up to 90 minutes fire resistance to 'I' section beams, columns, hollow section columns and cellular beams. Limited 120-minute protection is also available. SC804 can be used on steel, cast iron and galvanised steel.

Colour

White

Packaging

Supplied in 25 kg drums

Availability

Only available via specialist fire protection contractors or direct from Tremco CPG UK Limited (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 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 guidelines: Operating Pressure: 2500-3000psi (175-210 kg/cm²)
Tip Size: 19 – 21 thou
Fan Angle: 20° – 40°
Hose Diameter: 10 mm (3/8") (internal diameter)
Hose Length: Max. 60 metres, in-line filters should not normally be used.

Substrate Preparation

SC804 should only be used on substrates which have had all mill-scale removed and blasted to an average blast profile of 75 microns, with a minimum of 40 microns, and a cleanliness of Sa 2.5 must be achieved before application of recommended primer. All surfaces must be clean, dry and free from contamination before coating application.

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.

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SC804

Intumescent Basecoat

On-Site, Water-Based



optifire+



Key Benefits Summary

- Ultra Low VOC
- Competitive loadings
- Compatible with a wide range of primers and topcoats
- Excellent aesthetics
- Optifire+® unique traceability identifier



APPROVAL N° CF5929



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- 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

SC804 is supplied ready for use and must not be thinned but should be mechanically stirred prior to use until homogenous.

Cleaning

Fresh paint can be removed using water immediately after use. Dried on paint may be removed using a paint scraper. Spray equipment must only be cleaned using water immediately after use.

Health & Safety Precautions

Safety data sheet must be read and understood before use.

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.



SC804

Intumescent Basecoat

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Technical Data

Property	Result
Certification	Certifire CF5929 BS476 Part 20-21 Cellular Beams YB5 ETAG 018-02-Y exposure without topcoat (for other certification requirements, contact Nullifire)
Building Classification	C1, C2 and C3 environments. For full details, please consult Nullifire Specification Guidelines.
Construction Phase	3 months without topcoat once fully dried (see Environmental resistance section)
Properties (Typical Values)	
Specific Gravity	1.38 ±0.02
Volume Solids	69% ±3%
VOC	< 0.1 g/l
Recommended Thickness Per Coat	DFT: 690 microns- maximum WFT: 1000 microns – maximum Higher thicknesses may be possible, but will impact the drying times. These thicknesses are recommended for optimum film build and drying balance.
Consumption	2,000 g/m ² @ 1000 µm DFT To Touch – 60 minutes To Recoat – 16 hours
Average Drying Times (1000 microns WFT at 20°C)	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 and +40°C
Storage	Store in secure, dry warehouse conditions between +5°C and +35°C
Shelf Life (at 20°C)	9 months when stored as recommended in original unopened container