

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

Product Information

Description

SC804 Intumescent Basecoat is a water-based, white, thin film intumescent coating for the protection of internal structural steelwork. It was developed to give optimised loadings for 90 minutes, and up to 120 minutes fire resistance.

Usage / Purpose

SC804 is a water based intumescent coating used for internal structural steel to C1 and C2 environments. The coating can then be top coated with a suitable topcoat for decorative and durability purposes. If SC804 is to be used on exterior exposed steelwork, it must be top coated prior to exposure, and care taken that no standing or pooling water is allowed to accumulate.

Finish

SC804 can be applied to a smooth matt finish. A compatible top seal can be applied if a decorative finish is required.

Colour

White

Packaging

Supplied in 25 kg drums

Environmental Considerations

Ultra low VOC. Contains no substances of very high concern.

Availability

Only available via specialist fire protection contractors or direct from tremco illbruck (see back of leaflet for address and telephone details).

Usage Guidelines

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.

Substrate Preparation

- SC804 should be applied onto a clean, undamaged and dry primed surface.
- Nullifire recommended primers are listed on the ETA and Nullifire's website
- Nullifire have carried out compatibility testing on a wide range of primers and topcoats and can be contacted on +44 (0)203 917177 for confirmation of compatibility with SC804.
- The primer must be applied in accordance with the manufacturer's instructions.

Application Conditions

- SC804 is recommended for application and use on dry protected structural steel only.
- If the basecoat is allowed to get wet, it is likely to be damaged – blistering and wrinkling may occur.
- SC804 should only be applied when the air and steel temperatures are above 5°C. Relative humidity should be below 80% for successful application. Steel surface temperature should be a minimum of 3°C above the dew point.
- Ensure the steel is dry and free from contact with rain or condensation during the application and drying of SC804.

Application Equipment

Airless spray equipment is recommended and should match these guidelines:
 Operating Pressure: 2500- 3000 psi (175-210 kg/cm²)
 Tip Size: 17 – 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.

Mixing

SC804 is supplied ready for use and must not be thinned prior to use. Mechanical agitation is not necessary prior to use.

Application

AIRLESS SPRAYING

- SC804 may be applied up to a maximum wet film thickness (WFT) of 1.0 mm in a single spray coat comprising of several quick passes. Achieving maximum loadings will depend on site conditions.
- The vast majority of 60 minute loadings can be applied in single coat.

BRUSH/ROLLER APPLICATION

- For brush application use a "laying on" technique to avoid heavy brush marking.
- Maximum wet film per coat when applied using a brush or roller is 0.6 mm. A short piled roller will produce a light textured finish.
- During application, measure the wet film thickness frequently with a WFT gauge to ensure the correct thickness is being applied.
- To use the gauge, insert the teeth into the wet basecoat. The last tooth to be coated indicates the wet film thickness achieved.
- In the event of over or under applications, adjustments to the loading rates of subsequent coats will be required.

Nullifire
Smart Protection

SC804

Intumescent Basecoat

On-Site, Water-Based



Key Benefits Summary

- Ultra Low VOC
- Competitive loadings
- Compatible with a wide range of primers and topcoats
- Excellent aesthetics



SC804

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Drying Times

WFT	Temperature		
	10°C	20°C	30°C
0.2 mm	3 h	2 h	1 h
0.5 mm	4 h	3 h	2 h
1.0 mm	6 h	4 h	3 h

These are times for a typical mid-range humidity and good air flow. Higher humidity, poor airflow or overnight condensation will all lengthen these times. Recommended overcoat time is 16 hours. Do not over coat if the surface is not touch dry. Check web-flange joints.

Application Advice

The following instructions are for on-site application only. For off-site application, refer to Nullifire. Ensure that:

- The primer is compatible with SC804 and has been applied correctly.
- The overcoating period for the primer has not been exceeded.
- The correct primer is used for galvanised steel.
- All damage to the primer has been repaired & re-primed.
- Site and weather conditions are within specification.
- SC804 has been stored correctly.
- Surface is clean, dry and free from contamination.
- Correct spray equipment is available, if appropriate.
- Application instructions have been read prior to commencement of work.
- Ensure different basecoats are not applied on the same section of steel.
- Equipment should be clean and free from contaminants or dried material.
- Wet film gauges are available for use.

Cleaning

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

Technical Data

Property	Result
Composition	An ultra low VOC, water-based formulation
Certification	BS476 Pt 20/21 ETAG 018- up to Y exposure without topcoat (for other certification requirements, contact Nullifire)
Building Classification	C1 and C2 environments If SC804 is to be used on exterior exposed steelwork during the construction phase, it must be top coated prior to exposure, and care taken that no standing or pooling water is allowed to accumulate. For full details, please consult Nullifire Specification Guidelines
Properties (Typical Values)	
Specific Gravity	1.38 ±0.02
Volume Solids	69% ±3%
VOC	0.5 g/l
Theoretical Coverage	1,000 g/m ² based on an applied 0.5 mm dry film thickness
Application Temperature	+5°C and +40°C
Storage	Store in secure, dry warehouse conditions between +5°C and +35°C
Shelf Life	6 months when stored as recommended in original unopened container

Top Seal Requirements

Once DFT's have been achieved as specified, a Nullifire top seal can be applied: TS134 (acrylic polymer), TS815 (modified acrylic) or TS816 (water-based acrylic), can be applied. Ensure the SC804 is completely dry before applying top seal.

Maintenance & Repair

Damaged areas should be abraded back to a sound surface. The surface should then be clean and dry before re-applying. FC101 Filler may be used for repairing scratches and chips. Once repaired topseal should be re-applied. Refer to Nullifire Maintenance Instructions.

Specification

A tremco illbruck Representative will provide a specification for each project. tremco illbruck accepts no responsibility for defects arising from failure to follow the specification.

Health & Safety Precautions

Safety data sheet must be read and understood before use.

Technical Service

tremco illbruck 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 0322 551010.

Guarantee / Warranty

tremco illbruck products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with tremco illbruck written instructions and (b) in any application recommended by tremco illbruck, 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.

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