



# NAFFCO PSV-ISS-120

## FIRE PROTECTION COATING FOR STRUCTURAL STEEL SECTIONS

### TECHNICAL DATA SHEET

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- **Solvent-based.**
- **For indoor & outdoor use.**
- Approved according to BS 476, Certifire No. CF 5628.  
(refer to the test report for minimum required thickness)
- Free from borates and silicones.
- Top Coat free from halogens.
- Fire resistance rating: R30 - R120.
- Suitable for shop application.



## TECHNICAL PERFORMANCE

- Smooth surface and low coating thickness.
- Assessed also for use on galvanized profiles.
- Top coat in RAL / NCS or individual colour shades available.
- Maintenance-free.
- Suitable for shop application (contact us for more information).

## QUALITY MARK



## TECHNICAL INFORMATION

Fire resistance rating: 30 minutes; 1 hour; 1½ hours; 2 hours (Tests according International Standards).

NAFFCO PSV-ISS-120 is a white single pack thin film coating that foams up under the effect of fire/heat (Intumescent) to form an insulating layer. NAFFCO PSV-ISS-120 fire protection system for structural steel is available in two different grades for, internal and external use.

### 1. APPLICATION

NAFFCO PSV-ISS-120 is supplied ready for use and must not be thinned, but should be thoroughly & mechanically stirred with slow speed prior to use. Immediately clean the equipment after use by means of suitable thinner.

#### • AIRLESS SPRAYING

- ▶ A material temperature of about +20°C is recommended for achieving an optimal spraying behaviour and result.
- ▶ If needed thinning, mix with max. 5% thinner.
- ▶ Recommended operating pressure 200bar - 250bar.
- ▶ Nozzle size 0.017" - 0.025"; flow rate > 4 l/min; spray distance > approx. 30cm.
- ▶ All filters should be removed.
- ▶ Recommended coverage rate for the 1<sup>st</sup> layer on a primed surface 500g/m<sup>2</sup> (approx. 275µm dry film thickness).
- ▶ Up to 1000g/m<sup>2</sup> (approx. 550µm dry film thickness) can be applied in one layer.
- ▶ The typical coverage rate of NAFFCO PSV-ISS-120 applied in one layer depends on the type of steel profile and the position within the construction.

#### • BRUSHING AND ROLLING

- ▶ Use suitable brush and roller.

### 2. SURFACE PREPARATION

NAFFCO PSV-ISS-120 should be applied onto a clean, undamaged, dry and primed steel surface only. Following Primers are not compatible with NAFFCO PSV-ISS-120, Bitumen and Thermoplastic Primers.

***If you intend to use different Primer, please contact us for the compatibility of other Primers.***

### 3. APPLICATION METHODS

NAFFCO PSV-ISS-120 is supplied ready for use and must not be thinned, but should be thoroughly & mechanically stirred with slow speed prior to use.

## TECHNICAL INFORMATION

### 4. THICKNESS REQUIREMENTS

During application, measure the wet film thickness (WFT) frequently with the WFT gauge provided to ensure the correct thickness 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.

### 5. DRYING TIME

Drying of NAFFCO PSV-ISS-120 is dependent upon a number of factors including:

- Temperature.
- Air movement.
- Thickness of coating.
- Humidity.
- Method of application.

High humidity and low air movement or low steel temperature will increase drying time and low ambient temperature. Thicker coats will also take longer to dry as compared to thin coats.

Once the total loading of NAFFCO PSV-ISS-120 has been applied, the coating must be completely dry before application of the Topseal. This typically can be between 5 days for lower loading and up to 15 days for maximum loadings. Brush or roller application may take up to 20% longer to dry as compared to spraying.

### 6. FINAL THICKNESS CHECK

The dry film thickness (DFT) readings as soon as the coating is sufficiently hard to allow a reading to be made without indenting the surface. DFT's may be taken using equipment such as permanent magnetic type or an electromagnetic type recorder.

Ensure that the DFT of the primer is deducted from the reading of the basecoat. Do not apply topseal until the readings are in accordance with the specified thickness.

### 7. TOP COAT

#### • INTERIOR

- ▶ For decorative reasons and additional long-term protection of the Intumescent coating, a top coat is compatible for Intumescent paint, application quantity should be used: 1 x approx. 60µm.

#### • EXTERIOR

## TECHNICAL INFORMATION

- ▶ Application of 2 x 60µm is necessary for structural steelwork exposed to weathering and for use in rooms with wet or humid ambient conditions.

### 8. MAINTENANCE

Damaged areas should be abraded back to a sound surface, preferably by wet abrasion. The surface should then be clean and dry before re-applying. NAFFCO PSV-ISS-120 repair filler may be used for repairing scratches and chips, once repaired topseal should be re-applied.

### 9. GENERAL REMARKS

Cleaning of apparatus immediately after use with thinner. The coating may only be applied to dry and clean surfaces.

### 10. STORAGE

NAFFCO PSV-ISS-120 should be stored between +5°C and +30°C and protected from direct sunlight. If stored below +5°C, material should be warmed slowly. The shelf life is 18 months from date of manufacture, subject to re-inspection thereafter. The containers should remain unopened until needed. Shelf life may be reduced at higher storage temperature.

### 11. PACKAGING

25 kg tin plate pails.

### 12. PRECAUTIONS FOR SAFETY USE

- Use NAFFCO PSV-ISS-120 in accordance with all applicable local and national regulations.
- Giscode: BS60.

### 13. ENVIRONMENT, HEALTH AND SAFETY

As regulations are often revised please request for the actual safety data sheet before using the product.

FIRE PROTECTION COATINGS & MATERIALS SECTION  
PASSIVE FIRE (PF) DIVISION, R&D DEPARTMENT  
NAFFCO Flow Control.

In case of any questions please contact our technical support team.  
For full product documentation and other information please visit our website [www.naffcoflow.com](http://www.naffcoflow.com)

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