

FIREPRO

CI/SfB

S605 & S606 DATASHEET -Mar 14

FIRE PROTECTIVE BUILDING PRODUCTS

HEAD OFFICE: AUCKLAND -09-579 0367

CHRISTCHURCH -03- 379 9364

www.firepro.co.nz sales@firepro.co.nz

Product specifications can change. Contact us to ensure you have our latest datasheet

S605 & S606

Nullifire Intumescent Coatings for Fire Protection of Structural Steel

- Easy to Specify
- Easy to Apply
- Versatile

DESCRIPTION

A paint like coating system for the protection of structural steel. The steel is primed and then one or more coats of the S605/S606 intumescent basecoat applied. For external use and some internal applications, such as moist areas, where mechanical damage is possible, and when required for decorative purposes a Topseal is applied.

The intumescent coating S605 or S606 provides the actual fire protection, by expanding (intumescing) in a fire to create a heat insulating layer,

S605 is for internal and external use.

S606 is for internal use only and in some situations will be the more economical fire protective solution.

The S605 / S606 system allows fire protection up to 120 minutes.

SPECIFICATION

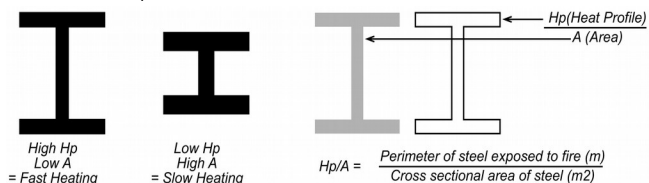
Apply Firepro S605/S606 intumescent coating system to achieve 30, 60, 90 or 120 minutes Fire Resistance.

QUANTITY OF BASECOAT REQUIRED

Hp/A calculations and the correct thickness of the basecoat to use are prepared for you by Firepro Centabuild Ltd.

The Hp/A ratio, sometimes termed the section factor, is a ratio used to quantify the heating rate of a steel member in a fire.

The Hp/A value is a ratio of perimeter length, Hp, to cross section area, A.



To calculate the loadings the following information is required:

1. Time period of Fire rating required.
2. Steel section specification, eg: 310 UB 40kg, 310 UB 46kg
3. Is the steel section used as a beam or column?
4. The number of sides exposed to flame?
5. Does the usual 550°C critical temperature apply to beams & columns and 620°C for beams supporting a concrete floor?
6. Are some sections being used as wind bracing?
7. Is the steel internal. Semi exposed or exposed?

STEEL PREPARATION AND PRIMERS

Firepro intumescent basecoats are applied over primed surfaces that have been suitably prepared.

Primed steel should have grease, oil, other paint coatings and any contaminants removed before basecoat application.

Before priming it is recommended that steel surfaces be blast cleaned to AS1627.4 Class 2½

Where blast cleaning is not practical, millscale, rust and old coatings should be removed by power tools such as power wire brushing to AS1627.2 ST2 taking care not to burnish the steel.

PRIMERS: The recommended primer for non galvanised steel is Firepro C627 High Performance Red Oxide Primer. Other primers may be suitable, but Firepro cannot guarantee their performance.

Primers based on chlorinated rubber, bitumen or epoxy coatings are not suitable.

APPLICATION

Firepro S605 & S606 are universal grade coatings and may be applied by brush, roller or airless spray. They require no thinning. Application by airless spray will give the best standard of finish.

The systems are intended for use by professional applicators of high performance coatings in building construction situations.

Experienced applicators available.

REDECORATION

S605 & S606 can be re-decorated with the appropriate topseal. Any damage to coatings can easily be repaired.

DURABILITY

Firepro intumescent coatings for steel have good resistance to impact and abrasion. Additional durability is provided by the protective topseal.

If S605 is used externally, the external topseal system must be used. This topseal must be re-applied regularly to maintain its protective shield. Any damage to the surface must be repaired immediately. Washdown of covered areas is recommended.

All external surfaces should be inspected annually and maintenance performed as required to any areas worn or damaged.

APPROVALS and TESTING

Fully fire tested to BS476 Part 21 for up to 2 hours fire protection for many universal sections and for the specified range of hollow sections. See Loading Tables for details.

CERTIFICATE OF SUPPLY

Firepro provides a Certificate of Supply.

The Certificate includes confirmation signed by the Applicator that the product has been applied in accordance with specification.

NOTE: The technical information and suggestions for use and application presented herein represent the best information available to us and are believed to be reliable. If used beyond the situations detailed on this datasheet we advise confirming their suitability before installation. All dimensions are nominal.

We reserve the right to make changes or to withdraw designs and products without notice.

S605 & S606 INTUMESCENT COATINGS

1. Product Description

Solvent based thin film intumescent coating with decorative topseal range.

2. Available from:

Firepro Centabuild Ltd, 8 Botha Road, Penrose Auckland.
www.firepro.co.nz

3. Nominal Density (g/m²)

S605 Basecoat: 1.33 to 1.36 (Practical Volume Solids 68%)

S606 Basecoat: 1.34 to 1.37 (Practical Volume Solids 68%)

4. Wet Coverage Rates

Coverage = 0.73l/m² at 0.5mm d.f.t.

Maximum basecoat wet application rates/coat

Airless Spray	1500g/m ²	1.1mm w.f.t.	0.74 d.f.t.
Brush	750g/m ²	0.55mm w.f.t.	0.37 d.f.t.

Relationship between wet application rate (w.f.t.) and dry film thickness (d.f.t)

g/m² - d.f.t x 2015

w.f.t. = d.f.t. X 1.47

5. Appearance

Smooth fibre free basecoats

6. Scope of Use

S605: Suitable for external use with an approved topseal

S605 & S606: May be used in internal situations without a topseal.

For semi-external locations a topseal is required.

7. Durability

Good resistance to impact and abrasion.

Successfully fire tested on structural sections after extensive accelerated and natural ageing.

8. Performance in other tests

Manufactured in accordance with the requirements of ISO 9001:2000
(Certificate No FM01764)

9. Health and Safety

Take all precautions used for application of solvent borne paints.

Wear appropriate PPE gear, including goggles for eye protection and use a carbon filter respirator.