Product Data Sheet

Astro ISS-S Paint

Revision 6 - 25th March 2021
Astro ISS-S Paint
Intumescent Paint for Steel & Cast Iron.

- Intumescent Paint for structural steel and cast iron.
- Conforms to BS476 Part 21.
- Fire resistance for load bearing elements of structure.
- Rated up to 120 minutes.
- Brush, roller or airless spray application.

For certification and compliance with regulations the manufacturer will supply a Certificate of Supply on request.

Product Description

Astro ISS-S Paint is an intumescent paint system providing fire resistance to structural steel and cast iron of up to 120 mins with a minimum number of coats. A compatible decorative overcoat system ensures the system will enhance the building’s architectural and design features. Recommended for external exposed steel not subject to pooling water.
How it works

The heat of a fire triggers a catalytic reaction, causing the expansion of an insulating char layer up to 50 times the paint thickness. This layer keeps the steel below its critical temperature, thus maintaining the structural integrity of the building.

![Intumescent Paint for Structural Steel and Cast Iron]

Fire testing

Product performance assessment is based upon UKAS/EGOLF Fire Test Laboratory Certification to BS 476 Part 21 - Fire Resistance to load bearing elements of structures. For certification and compliance with regulations the manufacturer will supply a Certificate of Supply on request.

Preparation and Pretreatment

Steel and cast iron should be free from rust and millscale and primed with Astro HBP Primer, to 75 microns DFT (or alternative good quality anti-corrosive primer compatible with intumescent paints) in accordance with manufacturers instructions. Treat galvanised surfaces with “T” wash/Mordant solution & prime with zinc phosphate or other primer for steel. Astro HBP Primer, may be left without further overcoating or decorated with appropriate conventional paint where no fire resistance is required.

To Specify

- Dry Internal: Apply Astro ISS-S Paint in accordance with Astroflame film thickness schedule to achieve 30, 60, 90, 120 min
- Visible external exposed during construction or occasional modest damp internal areas: Also apply 1 good coat Astro FR Paint
- Not suitable for areas subject to “pooling” water
- Wet or External Under Cover: Apply 2nd coat Flame Retardant paint
- Full External Exposure - Contact Technical Dept.

We are happy to provide a quote please fill in our structural steel specification form to ensure we cover all aspects of your fire protection and decorative requirements in our quote. We accept any order size

Prior to application the contractor should contact the Astroflame Technical Department (see below) to obtain a basecoat application schedule.

For help please speak to the technical team on: Tel: 01329 844 500 or Email: sales@astroflame.com
Application

• Astro ISS-S Paint may be applied by brush, roller or airless spray. To achieve the best finish in the shortest time, spray application is recommended. Prior to application the contractor should contact the Technical Department and obtain a basecoat application schedule. To assist correct application in accordance with this schedule, a wet film gauge will be supplied with the order. Further wet film gauges will be provided on request.
• Maximum wet film thickness per brush coat – 600 microns
• Maximum wet film thickness per spray coat – 1000 microns

Recoating

Brush/roller application
• Surface touch dry: minimum 2 hours, handle min 24hrs
• Recoat: minimum 6 hours
• Overcoating with Flame Retardant finish: minimum 24 hours

Spray application
• Surface touch dry: minimum 4 hours, handle min 24 hrs
• Recoat: minimum 12 hours
• Overcoating with Flame Retardant finish: minimum 48 hours

Spray Equipment

Airless Spray Pump
Use equipment recommended by manufacturer for the application of high viscosity intumescent paints.
• Filter size 30 mesh. 10mm hose 3/8” diameter with no whip end

Tip Size
• Tip Size 321, 323, 421, 423
Care should be taken to clean filters regularly. Cleaning should be undertaken with xylene / cellulose thinners.

Colours, Finishes & Sizes

A range of hard, high quality, weather resistant decorative finishes matches the decor, architectural or historic features of a building while helping to make it a safer structure.

• Available in BS4800, RAL and metallic colours and a non decorative finish for unexposed areas.
• Eggshell............... BS4800 + RAL.
• One-coat gloss..... BS4800 + RAL.
• Metallic............... Steel, gunmetal, rust, silver, gold.
• Non decorative..... N/A - For dry, hidden areas only.

Sizes: (ISS-S intumescent Steel Coating) 20kg, 5kg and 2.5kg
Colours: (FR Paint) BS4800 or RAL colours
Topcoat: Astro FR Paint Eggshell available in 5kg and 2.5kg
Composition

Intumescent compounds and resin binders, with high opacity pigments.

VoC

The EU VoC limit for structural steel intumescent paints is 500 gm / litre. This product contains 398 gm / litre.

Technical Advisory And Estimating Service

Our in-house estimators provide realistic, confidential guidance on project costings to contractors and quantity surveyors. They also provided expert advice and assistance with all aspects of specification and application.

Application Conditions

- Maximum Relative Humidity 80%
- Minimum ambient temperature 4°C
- Minimum Steel Temperature 3°C above Dew Point

Installation

We have technical representatives who provide assistance in the selection and specification of the products on this site and should be consulted for exact installation and product suitability. Ensure an early engagement with ourselves, designers, main contractor and specialist installers before any installation. Other trades and/or manufacturers may need to be consulted. For in-depth information, specification and technical advice please call our Head Office on tel 01329 844 500 or email sales@astroflame.com

Maintenance

All interested parties, designer, specifier, main contractor and specialist installers should provide access to allow the fire stopping seals to be regularly inspected and maintained, as well as records kept of such maintenance at minimum periods of 12 months, as required by the Regulatory Reform Order, and repaired if necessary. Reference should be made to ASFP TGD 17 – Code of Practice for the Installation and Inspection of Fire Stopping.

Competency

It is vital that those entrusted to design or install a fire stopping product have the necessary levels of competence to undertake the task professionally and thoroughly. The level of competency required will be commensurate with the expected complexity of the building. All designers must eliminate, reduce or control foreseeable risks that may arise during installation, construction or maintenance when preparing or modifying designs. Clients should ensure that the principal designer and principal contractor carry out their duties under CDM regulations. The ASFP foundation course in passive fire protection provides essential knowledge as part of demonstrating competency and understanding in this key fire protection specialism.
Environmental, Health & Safety

Astro ISS-S Paint is a compliant specialist coating. The range of topcoats are either water-based or 2010 compliant and safe to use in accordance with manufacturer’s instructions. The EU & UK VoC limit for this product is 500 gm / litre. Product contains 398 gm / litre.

The product does not present any known health hazards during or after installation. Normal good industrial and personal hygiene practices should be observed. For further information on health and safety please see the Safety Data Sheets (SDS) or please contact the technical team on: T: 01329 844 500 or E: sales@astroflame.com

Additional Notes

This product can only be supplied once the Steel Paint enquiry form has been completed and approved by the manufacturer: Click the following link to go to the Steel Paint Form: Steel & Cast Iron Order Form

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