



TOP FIRESTOP®

Fire Protection Ecologic Paint



2017

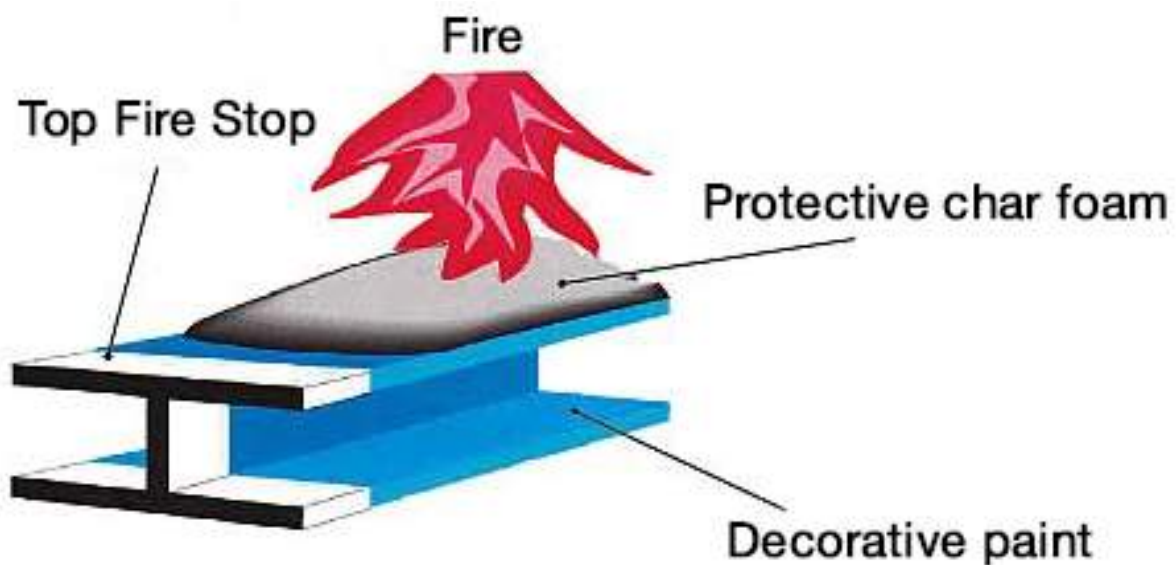


What is Top Firestop®?

TOP FIRESTOP® is an ecologic coating which provides protection against fire.

Also known as intumescent or thermofoaming paint, TOP FIRESTOP® delivers outstanding fire protection to the substrate it is applied on and can also limit, delay or stop the spreading of the flames to the nearby surfaces.

TOP FIRESTOP® is a water-based paint, which makes it an environmentally friendly product.



How does Top Firestop[®] work?

As a result of being exposed to heat, the intumescent paint Top Firestop[®] swells and creates a light char foam, increasing in volume and decreasing in density. The heat transfer from the flames to the substrate is greatly diminished.

Most buildings today are built using steel and wood. In the event of fire, structural steel elements can have their load-bearing capability seriously impaired. The structure may then rapidly collapse, thus impeding evacuation and fire-fighting and endangering personnel.

Under load, steel will start to buckle and move when temperatures reach 550°C and in a steel framed building this will compromise its stability and compartmentation.

When high levels of heat (i.e. the flames) come in contact with TOP FIRESTOP[®], the paint in that area reacts by transforming into a char which looks like a carbonized foam. This foam further expands (swells) and acts like an insulating layer and reduces the transmission of heat into the substrate.

Furthermore, the release of water vapour helps to cool the substrate.



Coating just touched by flame

Flame touch time extends, temperature about 250°C

Flame touch time furtherly extends, temperature about 250°C

Flame touch time furtherly extends, temperature about 650°C

The Efficacy of Top Firestop[®] Paint

Our tests have shown that TOP FIRESTOP[®] offers protection even after 4 hours.

For a good protection against fire, it is sufficient to apply a thin layer of 0.1 – 0.5 mm of TOP FIRESTOP[®].

The thicker the layer of paint, the more char will form and, consequently, the more

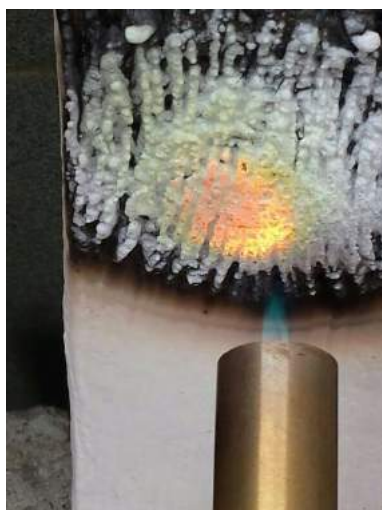
protection it will provide.

TOP FIRESTOP[®] can also stop the spreading of the fire, since the char doesn't burn. The increased volume and decreased density slow down the heating of the surface below the paint.

Unprotected wood burns in just a few seconds



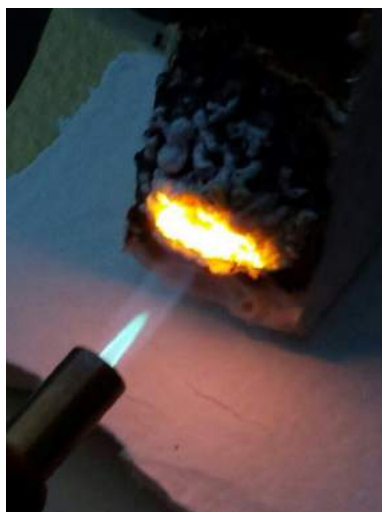
Wood protected with Top Firestop[®] after 1 hour



Polyurethane foam insulation protected with Top Firestop[®] after 1 hour



Polyurethane foam insulation protected with Top Firestop[®] after 3 hours



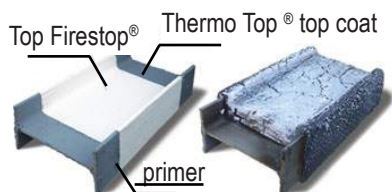
Application of Top Firestop® Paint

TOP FIRESTOP® is destined to be used on surfaces including, but not limited to: steel (metallic surfaces), wood, spray polyurethane foam insulation, cables etc.

TOP FIRESTOP® can be used indoors and outdoors for industrial, commercial, residential buildings, schools, hospitals, marine and aviation applications etc.

The surface must be prepared using a primer and the application of a protective coating on top of the intumescent paint is recommended, such as THERMO TOP® or HYDRO TOP®.

Top Firestop on steel before and after fire exposure:



Technical Data Sheet

Placement of TOP FIRE STOP® shall be performed by trained applicators for such works, with respect to the specific technical regulations. Application of the paint shall be done only in favourable atmospheric conditions: ambient temperature min. 10°C, acceptable aeration, relative humidity of max. 80%.

Surface preparation

The surfaces on which TOP FIRE STOP® will be applied must be clean, dry and dust-free.

Priming the surface

The primer can be applied on the prepared surface by using the brush, roller brush, lime brush or by airless spray gun. The primer layer dries in 1-2 hours, function of the ambient temperature and humidity.

Product consumption for primer: 50 - 100 g/m².

Application of TOP FIRE STOP® is carried out after the primer has completely dried. Before application, the product must be homogenized well by stirring. Application of the product can be done by brush, roller or by air-less spray gun.

Minimum application temperature: 10°C. The fire protection is achieved by applying two or more successive layers of paint. The layers shall be applied only after the previous one has dried.

Product consumption for one layer is 500 g/m² - 800 g/m².

Thickness of the protection layer (wet product) for wood, spray polyurethane foam: 0.5 - 1.5 mm.

Thickness of the protection layer (wet product) for metals: must check massivity factor.

Complete drying of one layer occurs in 1 - 24 hours or more, depending on humidity and temperature.

Fire protection duration: between 1 hour and over 3 hours.

For indoor surfaces or half-exposed to rain, supplementary protection is not necessary, but recommended. Outdoor surfaces coated with TOP FIRE STOP® and exposed to rain will be protected with a top coat of HYDRO TOP® or any other protective coating. Wash tools with water after usage.

Technical Data Sheet

PRODUCT	monocomponent
ASPECT	homogeneous, paste-like
COLOUR	white or other colours
DENSITY (g/cm ³)	1.35 ± 0.10
VISCOSITY (cP)	25,000 ± 5,000
DRIED SUBSTANCE CONTENT (%)	70 ± 5
APPLIED PRODUCT (MEMBRANE)	Membrane appearance uniform, continuous, elastic
DRYING TIME	max. 24 hours
SPECIFIC MASS FOR THE THICKNESS OF 0.5 mm (kg/m ²)	0.45-0.55



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