

LOCKWELL FS 470

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

LOCKWELL FS 470 is designed as single pack thin-film fire protection coating for interior use on steel sections. It is water-based intumescent coatings for interior structural steel.
Fire rating: 90 and 120 minutes.

APPLICATION AREAS

Structural steel members as columns, beams, girders

- 1/H-sections
- Also on galvanized members
- Fire resistance rates R30 - R120; for other fire resistance rates request Technical advise
- For interior use

TECHNICAL DATA

Color	White
Base	Water
APEO(alkylphenol ethoxylate)	Free
Halogen	Free
Borate	Free
Plasticizer	Free
VOC	None

CERTIFICATES / APPROVALS

BS476: by Certifire
LEED Approved

PACKAGING

- 25 kg net weight (19 Litres or 5 Gallons)
- Plastic pails
- Other sizes on request

TRANSPORT / STORAGE

- Transport and storage free from frost- preferably at a minimum of +5°C to a maximum of +30°C
- Opened pails must be sealed completely

FEATURES AND BENEFITS

- Water based intumescent coating system, also on galvanized surfaces
- Non-VOC according to LEED 2009
- Extra fine granulated raw materials guarantee a smooth surface
- Maintenance-free
- Easy to handle
- Top coat in RAL, NCS or individual colour shades available

DIRECTION FOR USE:

Recommended conditions

1. LOCKWELL FS 470 Indoor should be preferably applied at a temperature of $\geq 5^{\circ}\text{C}$, humidity $\leq 80\%$ relative humidity. In case of high relative humidity e.g. 80% good ventilation conditions are essential.
2. LOCKWELL FS 470 Indoor should only be applied by trained installers.

Surface preparation

- LOCKWELL FS 470 Indoor are designed to be applied over suitably prepared and primed substrate
- The compatibility between LOCKWELL FS 470 indoor and unknown already applied primers would need to be reviewed; any damage (corrosion, impact etc.) must be repaired carefully e.g. with an approved primer; ask the Fire Security Systems service team for technical support
- For bare profiles sandblasting Sa 2.5 according to EN ISO 12944-4 or manual cleaning St 2 is recommended
- Surface has to be cleaned to remove contamination and to secure adhesion
- Incompatible primer must be removed by acceptable techniques and subsequently primed with an acceptable primer. One technique recommended is commercial blast cleaning as outlined in the Steel Structure Painting Council (SSPC).
- Generally we recommend to record the application data according to EN ISO 12944-7 I -8.

Preparation before application

IMPORTANT: LOCKWELL FS 470 has to be stirred thoroughly before application

Application

Airless spraying:

- A material temperature of about 20°C is recommended for optimal spraying behavior
- If needed thinning with max. 5% of water
- Recommended operating pressure: 200 - 250 bar
- Nozzle sizes: 0.017 " - 0.025 " ; flow rate > 4 L/min
- Machine and gun filters can remain inside
- Up to 1000g/m² can be applied in one layer
- 1st layer on primer: wet film thickness approx. 500 microns - DFT approx. 350 microns
- Typical coverage rate of LOCKWELL FS 470 Indoor applied in one layer depends on the type of steel specimens and the position within the construction

Brushing and rolling:

- Rolling by foam or lambskin roller
- Brushing with long-bristled brushes; Chinex bristles are recommended

Drying

1. At 20°C object temperature and 65% relative humidity at least 24 hours between each coat
2. Lower temperatures, higher relative humidity, insufficient air movement and different fire protection coating thicknesses can prolong drying time

Top coat

Application of topcoat after thorough drying of LOCKWELL FS 470 Indoor, thus after at least 48h

- Thorough drying of LOCKWELL FS 470 Indoor- can be checked by fingernail test
- Topcoat with an approved acrylic or latex based coating
- Available in RAL or NCS colour shades and on request individual shades

SHELF LIFE

When stored at the recommended conditions, unopened pails have a shelf life of 12 months from date of manufacture.

GENERAL INFORMATION

For safe handling information on this product, please refer to the Material Safety Data Sheet (MSDS).

Use LOCKWELL FS 470 in accordance with all applicable local and national regulation.

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

ADDITIONAL INFORMATION

Disclaimer:

The information provided herein, especially recommendations for the usage and the application of our products, is based upon our knowledge and experience. Due to different materials used as well as to varying working conditions beyond our control we strictly recommend to carry out intensive trials to test the suitability of our products with regard to the required processes and applications. We do not accept any liability with regard to the above information or with regard to any verbal recommendation, except for cases where we are liable of gross negligence or false intention.