SELECTION & SPECIFICATION DATA

Generic Type	A single package, water based intumescent coating designed for the protection of internal structural steel.
Description	A decorative white thin film intumescent coating designed for the fire protection of internal structural steel up to 90 minutes.
Features	• Smooth, decorative finish • Dust free Surface • Fast recoat, increased production • Ultra low VOC content
Color	White
Finish	Flat
Primer	Firefilm A6 must be applied over a compatible primer. The primer must be applied in accordance with the manufacturer's instructions. If the steel has already been coated with an existing primer, refer to Carboline Technical Service for advice before applying. Contact Carboline Technical Service for a complete list of approved primers.
Wet Film Thickness	Excessive film build beyond recommended thickness per coat will result in extended drying time and potential sagging of applied material. During the drying process, the coating will shrink due to the evaporation of water.
Dry Film Thickness	Must be applied to the specified DFT and be dry before applying a topcoat. The dry film thickness shall be checked using an electronic or magnetic thickness gauge.
Solid(s) Content	69% ± 3%
Theoretical Coverage Rates	1 kg/m2 based on an applied at 0,5 mm dry film thickness.
VOC Value(s)	0,5 g/l
Topcoats	No topcoats is required for protection C1 and C2 environments. However, the enamel application of compatible finish will extend the service life and protect the applied coat from aging, obtaining a superior expected durability of the applied passive fire protection system, as well as being able to obtain a decorative finish. The product must be applied in the appropriate thickness and be dry before proceeding with the application of the topcoat. Contact Carboline Technical Service for a complete list of approved topcoats.
Density	1,38 ± 0,02

SUBSTRATES & SURFACE PREPARATION

General	All surfaces must be primed with compatible primer and be clean, dry and free of oil, grease, loose mill scale, dirt, dust or other materials which would impair the bond of material to the substrate. Surface preparation must meet the requirements of the primer being used.

MIXING & THINNING

Mixing	Mix using an electric or air driven drill to stir material prior to use. Mix material for a minimum of 5 minutes to achieve the necessary texture required before spraying.
Thinning	Do not thin.

APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Airless Spray	Use Graco Mark V or equivalent 1,35 gal. (5,1 l) per minute electric airless (minimum) with ability to provide an operating pressure of 228 bar (3.300 psi). Inline filter should not normally be used.
Spray Gun	Silver Gun with gun swivel, Silver Plus, Graco XHF, WIWA 500F, WIWA PFP 500F or equivalent contractor gun (with filter removed).
Spray Tips	0,017" - 0,021"
Fan Size	20 - 40 °.
Hose Length	Maximum hose length 60 m (200') when using a single hose.
Material Hose	10 mm (3/8") I.D. minimum.

APPLICATION PROCEDURES

General	May be applied by spray, brush or roller. Spray application is recommended for the optimum production, coverage and finish. When applying by brush or roller, work from a small container and mix material frequently. The original pail should be kept tightly closed.
Airless Spray	A single coat, built up with a number of quick passes, allows greater control over quantities,thickness and finish. In most conditions, it is advantageous to apply two thin coats rather than one thick coat.
Application Rates	At an ambient temperature of 21 °C and 50% relative humidity, the following application rates are applicable: Spray: no more than 1,0 mm per coat (wet) Brush/roll: no more than 0,60 mm per coat (wet)
Wet Film Thickness	Frequent thickness measurements with a wet film gauge are recommended during the application process to ensure uniform thickness.

CURING SCHEDULE

Surface Temp.	Cure Time
10°C (50°F)	4 Hours
20°C (68°F)	3 Hours
30°C (86°F)	2 Hours

These are times for a typical mid-range humidity and good air with an applied dry film thickness of 500 microns. Higher humidity, poor airflow or overnight condensation will all lengthen these times. Increased dry film thickness will result in longer drying times. Firefilm A6 should only be applied when the air and steel temperatures are above 5 °C. Relative humidity should be below 80 % for successful application. Steel surface temperature should be a minimum of 3 °C above the dew point. Application temperature range is between 5 °C and 40 °C.
The product is sensitive to moisture and must be protected at all times from exposure to water and moisture contamination, which would cause damage to the product, leading to the development of blisters, wrinkles and detachment after application. Protect from freezing.

CLEANUP & SAFETY

Cleanup | Fresh paint can be removed using water. Dried on paint may be removed using a paint scraper. Spray equipment must only be cleaned using water.
Pump, Gun, Tips and Hoses and mixer should be cleaned at least once per day with water.

Safety | Read, understand and follow all caution statements on this product data sheet and on the SDS for this product and employ normal workmanlike safety precautions.

Overspray | All adjacent and finished surfaces shall be protected from damage and overspray.

Ventilation | When used in enclosed areas, thorough air circulation must be used during and after application until the coating is dried.

MAINTENANCE

General | If coating becomes damaged, rebuild required thickness by spray or trowel. When dry, smooth and finish with approved topcoat to match. Damaged areas must be abraded back to a firm edge by sanding or scraping. The topcoat should be abraded back by 30 mm (1 1/8") from the damaged area.
The surface must be clean and dry before re-applying. The coating shall then be built back to the original thickness, allowed to dry, then overcoated with the specified topcoat or system.

TESTING / CERTIFICATION / LISTING

General | Element Materials Technology Rotterdam B.V. ETA 20/1200

PACKAGING, HANDLING & STORAGE

Shelf Life | 9 months (when kept at recommended storage conditions and in original unopened container).

Storage | Store indoors in a dry environment between 5ºC and 35ºC. Protect from freezing.

Packaging | 25 kg drums.

WARRANTY

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