



General Product Description

Protecta® Service Coating FR-1 is a water-based intumescent coating for the fire protection of cables in a service installation. The coating upgrades the insulation and integrity of the installation. The coating is non-toxic, emission free, durable and can be applied in one coat saving time and money.

Properties & Precautions

- Excellent fire resistance making combustible cables fire-proof.
- Can be used in combination with Protecta® FR Board as a coatback on services to achieve a higher fire classification.
- Non-toxic and emission free with near zero VOC and best possible emission classifications makes the paint perfect for anyone not wanting to breathe toxic chemicals and especially people suffering from asthma, allergies or any other breathing related diseases.
- Durable, robust and designed to last, can be cleaned with a damp cloth without the risk of washing off the paint.
- Excellent coverage by brush or spray. The paint can be applied in one-coat which is cost effective saving paint and especially application time. No topcoat needed.
- Halogen free with added preservatives that resist bacteria and fungal growth providing extra protection to health in addition to the non-harmful emissions.
- The paint is not intended for application on bituminous substrates or substrates that can exude certain oils and plasticizers or solvents, and is not recommended for use in constant humid areas.
- The paint's durability is expected to be at least 12 years making it a cost effective option when compared with normal paints with limited durability.

Application Instructions

PREPARE

Before painting ensure the surface to be painted is clean, dry and free from grease, dirt, dust, and other contaminants.



PAINT

Stir thoroughly before use to ensure the paint is completely mixed. Apply to a small area of substrate to check compatibility before full application is attempted. The paint can be spray applied in one coat using, for example, the Graco X-Force Spray Gun, with a tip size of 17-21 thou. The paint can also be brush applied and can be diluted with up to 10% water for easier application. Do not apply in very damp or humid conditions or extremes of temperature. For fire classifications, please see the loadings in the table below.

CLEAN UP

Follow the manufacturer's instructions for cleaning out the spray gun after it has been used to spray a water based paint. Remove excess paint from the brush on the rim of the paint pot and then wash the brush with water. Store in a cool dry well ventilated area between +20 and +25°C. Don't waste unwanted paint.

Fire Performance

Seal Description	Coatback	Service	Fire Classification
Single Protecta FR Board 50mm 2-S in flexible and rigid walls comprise gypsum, masonry, aerated concrete or concrete ≥ 100 mm thick. Flexible walls with apertures framed and lined.	300µ WFT @ 150mm length both sides	≤ 80mm single or bundled cables on cable ladders and perforated steel trays	EI 60
		Cables ≤ Ø21mm in tied bundles ≤ Ø100mm	EI 90

WFT = wet film thickness = usage in litres per m² = 0.3 litre per m² (1000microns/µ is 1mm).

The service installations were tested according to EN-1366 part 3. For details, see Protecta FR Board Installation Instructions.



TECHNICAL DATA SHEET

Emission Data (indoor air quality)

Compound	Emission rate after 3 days	Emission rate after 4 weeks
TVOC	0.22 mg/m ³	< 0.005 mg/m ³
TSVOC	< 0.005 mg/m ³	< 0.005 mg/m ³
R-value (dimensionless)	0.38	0
Sum w/o NIK	< 0.005 mg/m ³	< 0.005 mg/m ³
Formaldehyde	< 0.003 mg/m ³	< 0.003 mg/m ³
Total carcinogens	< 0.001 mg/m ³	< 0.001 mg/m ³
Acetaldehyde	0.003 mg/m ³	< 0.003 mg/m ³
Propionaldehyde	< 0.003 mg/m ³	< 0.003 mg/m ³
Butyraldehyde	< 0.003 mg/m ³	< 0.003 mg/m ³

Regulation or Protocol	Conclusion
French VOC Regulation	A+
French CMR components	Pass
AgBB	Pass
Belgian Regulation	Pass
Indoor Air Comfort®	Pass
Indoor Air Comfort GOLD®	Pass
EN 717-1§	E1
BREEAM International	Compliant
BREEAM-NOR	Pass
LEED v4 (outside U.S.)	Compliant

Colours

Protecta® Service Coating FR-1 can be supplied either in a white base or in a colour of your choice mixed in our in-house colour tinting machine. White base can be used as white or as base in many colour tinting machines, including but not limited to Colour Genie.

For available in-house colours please refer to our Colour Chart.

Packaging

Protecta® FR Service Coating FR-1 is available in 3 litre plastic pails.

Technical Data

Type	Acrylic based intumescent paint
Cure system	Water loss
Colour	Matt white or base
Health & safety	Non-hazardous
Specific gravity	1.40g/cm ³
VOC	0.0001 g/L
Touch dry	1 hour at ~22°C & 50% RH*
Hard dry	1.5 hour at ~22°C & 50% RH*
Application conditions	Minimum +10°C and humidity lower than 80%
Temperature range	-30°C to +80°C (when hardened)
Durability	Type Z2 internal conditions with humidity lower than 85% R.H, excluding temperatures below 0°C
Shelf life	Up to 6 months when stored in cool dry well ventilated areas between +20 and +25 °C
Work life	12 years

* Drying times are dependent on temperature, RH & film thickness.

Health and Safety

Keep container tightly closed when not in use. Avoid contact with eyes and skin. Eyes and skin should be rinsed immediately with cold water. Dispose of contents and container in accordance with local, regional, national or international regulations. Contains 1,2- Benzisothiazolin-3-one. May produce an allergic reaction. Keep out of reach of children. More detailed information can be found in the relevant Protecta® Service Coating FR-1 Safety Data Sheet.