PROTEGA

Technical Data Sheet
Art. no: 1160-00
Art. no: 1160-25

PROTEGA STEEL 1001

Structural steel intumescent coating

ETA

CE

PRODUCT DESCRIPTION

Protega Steel 1001 is a waterborne, thin film intumescent coating with a matt white finish, designed for use on interior structural steel, I/H and hollow sections providing 30 to 60 minutes FRR.

COATING REQUIREMENTS

For interior dry zone installation (concealed steel):

1. Protega approved primer coat.
2. Protega Steel 1001

For interior zone exposed to view, in areas where RH can be over 85%, or when a washable surface is required:

1. Protega approved primer coat
2. Protega Steel 1001
3. Protega approved top coat

NOTE: The dry film thickness should be measured during application to ensure that specified thickness have been achieved before any topcoat is applied.
All steel sections must be coated with the correct film thick-ness as specified to achieve the required fire rating. Installed product shall not be exposed to free water.

MAXIMUM FILM THICKNESS/DRYING TIMES

At +23°C air temperature and 50% relative humidity the recommended maximum wet film thickness is 1000µm per coat. Applying too thick or more than 1000µm in one coat may cause:

- Cracking
- Poor adhesion
- Delay in drying time

Drying times

- Re-coat time: 8 hours
- Topcoating: 48 hours

Note: The maximum film thickness may be reduced by poor air flow and environmental conditions differing from those listed above, which are a guide only. Contact Protega for more information.

PRIMERS AND TOPCOAT

Steel 1001 can only be applied to a primed surface. For the list of Protega approved primers list got to www.protega.se

Limitations

- Do not let water pool on the coated surface.
- For interior use only. Do not use on steel structure exposed to weather.

ESTIMATING

Estimation of PROTEGA STEEL 1001 for stuctural steel according to EN-standard can be done in our free software - "STEEL CALCULATOR", which is found on our website: www.protega.se

PROTEGA STEEL 1001 is also registered in: STEELCALC, www.steelcalc.co.uk, for standards according to BS and EN. We are also providing estimations free of charge by contacting: teknisksupport@protega.se.

TECHNICAL DATA

Vicosity:	Viscous
Flashpoint:	Non-combustible
Specific gravity:	1,4
Non volatile content:	68%
Film thickness:	2000 g/m^2 = 1440 µm wet and 980 µm dry film.
Thinning:	Do not thin
Cleaning:	Water
Storage:	12 months for unopened packaging
Packaging:	Plastic pail 12,5 kg, 44 pails/pallet Plastic pail 25 kg, 24 pails/pallet

STORAGE

Recommended storage conditions:

- Store at a temperature above +5°C and below +35°C
- Store indoors in temperate conditions.
- Store away from direct sunlight, do not expose to extreme heat.
- Do not allow to freeze.
- Keep containers closed when not in use.

APPROVALS & EPD

European Technical Assessment, ETA 20/1123 according to EAD 350402-00-1106.

Certifire Certification CF5719, BS assessment according to UK ASFB Yellow Book. Fire Rating of 30-60 minutes for load-bearing steel.

Environmental Product Declaration, EPD registration number: S-P-05708.

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APPLICATION NOTES

In particular the applicator should ensure:

- Any steel surface that is to be coated is at a temperature above +5°C and below +35°C and is at least +3°C above the dew point.
- The surface to be coated must be completely clean and dry, remove all rust, dust, oil, grease and loose materials.
- Check compatibility with any previous applied product before application.

Application Environment

During application and drying period, day or night, ensure that:

- The air temperature is between +5°C minimum to a maximum 35°C.
- The relative air humidity level is between 20% to 85%.
- During application and drying, protect from direct wetting/ moisture/windblown rain and water pooling on or around the coated steel section.

Quantity	Wet film	Dry film	**Quantity**	Wet film	Dry film
g/m²	µm	µm	g/m²	µm	µm
500	360	245	**1500**	1080	735
750	545	370	**1750**	1260	885
1000	720	490	**2000**	1440	980
1250	900	610			

PROTECTIVE MEASURES

Avoid inhalation of spray mist and prolonged skin contact. When spraying, use half or full mask with dust filter II b (St) against spray mist.

See the product's safety data sheet.

APPLICATION METHOD

Airless Spray

Airless spray is the recommended method of application and gives the best result. Airless spray with an in-line heater /heated hose (maximum temperature +35°C) can be used to assist application in the minimum environmental temperature range.

Airless Equipment Recommendations

Pump flow rate	5 litres per minute minimum
Spray Gun	Heavy Duty Texture Gun or similar
Spray Tip	Switch tip and guard or similar. Orifice size range of .014" - .021". Choose appropriate fan width depending upon structure(s) to be coated.
Atomising Pressure	2,200 - 3,000 P.S.I
Material Hose	Up to 30 m of 3/8" material line and 3 m of 1/4" whip line.

Brush and roller

Brush/roller application only suitable for small areas or touch-up and may result in a textured finish.

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