



APPLICATION GUIDE

pyroplast-ST100

DESCRIPTION

pyroplast-ST100 is a waterborne intumescent coating for the fire protection of internal structural steelwork. pyroplast-ST100 will upgrade the fire resistance of steelwork to up to 120 minutes in accordance with BS476 : Part 21 : 1987. The complete fire protection system comprises:-

Primer: pyroplast-ST120 primer
Intumescent: pyroplast-ST100
Top sealer: pyroplast-ST120 top

SPECIFICATION

Pack size: 25kg
Colour: White
Application method: Brush, roller or airless spray.
Drying time: 8-12 hours between coats.
Density: 1.27g/m³
Volume solids: 67.3%
Flash point: Not flammable.

APPLICATION RATES

The application rate for pyroplast-ST100 depends on the fire resistance period required and the Section Factor for each steel section. Details are published in Certifire Certificate of Approval CF744. For details see www.warringtonfire.net/certifire/products/intumescent-coatings. For assistance in calculating the required rates please contact Coatmaster technical support.

SITE CONDITIONS

pyroplast-ST100 is suitable for internal, weather tight environments only. The product must only be applied in temperatures between 10°C and 30°C and a maximum relative humidity of 80%. Low temperatures and/or high humidity will cause prolonged drying times and may lead to surface defects.

SURFACE PREPARATION

Untreated surfaces should be prepared by blast cleaning to BS 7079:1989. Wire brushing may be acceptable where blast cleaning is not possible. Galvanised surfaces should be degreased before priming. Existing primed surfaces should be prepared by removing

all poorly adhering coatings, touched up as necessary with a suitable primer e.g. pyroplast-ST120 primer and checked for compatibility with pyroplast-ST100

PRIMING

The prepared steel surface must be primed with a suitable primer e.g. pyroplast-ST120 primer. For advice on priming please contact Coatmaster technical support.

METHOD OF APPLICATION

pyroplast-ST100 may be applied by brush, roller or airless spray:-

Brush: 600g/m²/coat.
Roller: 400g/m²/coat.
Airless spray: 1400g/m²/coat.

pyroplast-ST100 does not need to be diluted but should be thoroughly stirred before use.

Airless spray application

Spray pump: Airless spray unit operating at 3000psi.
Tip size: 17-27 thou.
Hose: 3/8" for lengths up to 40m.

For best results the spray gun should be 300mm-400mm from the steel surface.

Film Thickness control

During application a wet film thickness gauge can be used to control film thickness. Before application of the top seal, the dry film thickness should be measured to confirm the correct specification has been achieved.

DRYING

pyroplast-ST100 may be over-coated in 8-12 hours depending on the application conditions but must be thoroughly dry before coating with pyroplast-ST120 top.

MAINTENANCE

Minor mechanical damage may be repaired by removing the damaged coating back to a sound surface and applying fresh material by brush or roller.



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ASFP
ASSOCIATION
FOR SPECIALIST
FIRE PROTECTION



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pyroplast-ST120 primer

DESCRIPTION

pyroplast-ST120 primer is a waterborne, quick drying, zinc phosphate primer for the protection of structural steel against corrosion.

SPECIFICATION

Pack size: 10kg
Colour: Grey
Application method: Brush, roller, spray.
Drying time: 6 hours between coats.
Density: 1.25g/cm³
Flash point: Not flammable

APPLICATION RATE

Apply one coat of pyroplast-ST120 primer at 150g/m² to suitably cleaned steel within 4 hours of cleaning. For structural steel likely to be exposed to the weather for longer than 6 months, apply at least 200g/m². For blast cleaned steel apply a further coat of pyroplast-ST120 primer at 150g/m² before application of the pyroplast-ST100. This action is required to ensure adequate corrosion protection to the blast cleaned surface which may have a surface profile of up to 100 microns.

SITE CONDITIONS

pyroplast-ST120 primer should be applied in temperatures above 5°C and humidity below 80%RH. Low temperatures and/or high humidity will cause prolonged drying and may lead to surface defects.

METHODS OF APPLICATION

pyroplast-ST120 primer may be applied by brush, roller or spray. Stir well before use. For application by brush, roller or airless spray, do not dilute. For application by conventional spray, dilute up to 5% with water and adjust the application rate accordingly. Clean application equipment with water.

pyroplast-ST120 top

DESCRIPTION

pyroplast-ST120 top is a waterborne top sealer for the protection of pyroplast-ST100 against moisture and high humidity.

SPECIFICATION

Pack size: 10kg
Colour: RAL colour range
Application method: Brush, roller, spray.
Drying time: 6 hours between coats.
Density: 1.25g/cm³
Flash point: Not flammable

APPLICATION RATE

Apply one coat of pyroplast-ST120 top at 150g/m².

SITE CONDITIONS

pyroplast-ST120 top should be applied in temperatures above 5°C and humidity below 80%RH. Low temperatures and/or high humidity will cause prolonged drying and may lead to surface defects.

METHODS OF APPLICATION

pyroplast-ST120 top may be applied by brush, roller or spray. Stir well before use. For application by brush, roller or airless spray, do not dilute. For application by conventional spray, dilute up to 5% with water and adjust the application rate accordingly. Clean application equipment with water.

OTHER COATMASTER PRODUCTS

pyroplast-HW100 for the fire retardant protection of timber.
pyroplast-C for the fire protection of cables.

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