PRODUCT DATA SHEET

Phoenix 270–120

DESCRIPTION

Phoenix 270-120 waterborne basecoat is a white thin film intumescent coating for the fire protection of internal structural steelwork.

PRODUCT FEATURES AND RECOMMENDED USES

- Provides up to 120 minutes fire resistance to structural steelwork.
- Tested in accordance with BS 476: Part 21: 1987 by Warrington Fire Research and Building Research Establishment.
- Highly competitive loadings for most steel section sizes, giving reduced application costs.
- Easy application properties.
- Minimal VOC's - EPA Compliant and 'environmentally friendly'.
- Topseals are not required in C1 interior environments under the definitions in ISO 12944-2: 1998.
- Can be used externally with all Phoenix Topseals or other compatible topcoats. Consult Phoenix before use to confirm compatibility.
- Recommended for on-site application. Off-site application must be topcoated before being taken outside and carefully handled (see 'Application Notes').

VOLUME SOLIDS	68 ± 2% (Measured in accordance with the method laid down in ISO 3233: 1998.)			
FILM THICKNESS	**WET MICRONS** 300 - 7500		**DRY MICRONS** 200 - 5500	
THEORETICAL COVERAGE	1.05 litres/m2 @ 650 microns DFT			
APPLICATION	Airless spray, Brush, Roller			
DRYING TIMES	**@ 650 microns dft and RH 70%**		**10°C**	**20°C**	**25°C**
	DUST FREE		12hours	4 hour	30 minutes
	HARD DRY		48 hours	24hours	20 hours
	OVERCOATING	**MIN**	48 hours	24 hours	20 hours
		MAX	See below*	See below*	See below*
COLOURS	Off white.			
FINISH	Matt			
POT LIFE AT 23°C	Not applicable			
PRODUCT WEIGHT	1.37 kg/litre			
STORAGE CONDITIONS	Store in dry, cool conditions and protect from frost			
MIXING RATIO	Not applicable			
THINNERS	Water			

PRODUCT NOTES

Drying and overcoating times will vary with film thickness, temperature, relative humidity and ventilation. Do not apply below 5°C, temperature above 10°C is preferred.

@ 650 microns dft (and RH 70%):

	10°C	20°C	25°C
Dust Free:	12 hours	4 hours	3 hours
Min. overcoating:	48 hours	24 hours	20 hours

*** Overcoating:**
Only overcoat with self or approved topseal - consult Phoenix for advice. Maximum overcoating time is indefinite providing the surface is clean and the coating is sound. Coated surfaces must be kept in controlled, dry conditions until topsealed or degradation may occur. Care should be taken if applying solvent based topseals to ensure the basecoat is completely dry before application.

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SURFACE PREPARATION

It should be applied onto a clean, undamaged, dry and primed steel surface.

Certain types of primers can cause adhesion problems and should be avoided. These include:

- Chlorinated rubbers
- Bitumen
- Thermoplastic primers

Phoenix has carried out compatibility testing on a wide range of primers and can be contacted on (852) 2810 6101 for confirmation of compatibility with Phoenix 270-120.

Galvanised surfaces should be prepared by an application of T-wash or mordant solution followed by a compatible non-saponifiable primer. The primer should be applied in accordance with the manufacturer's instructions.

If a zinc rich primer is used, it is advisable to seal this with a suitable tie coat or travel coat prior to shipment to site. If the steel is left exposed to the atmosphere with just a zinc rich primer, surface salts may build up on the steel. These salts, if not adequately removed, may cause adhesion problems for any subsequent coating applied. Removal of the salts can be achieved by high-pressure washing. If adequate removal of the salts cannot be guaranteed, a suitable tie coat may have to be applied prior to the application of the Phoenix 270-120 Waterborne Basecoat.

Phoenix should be consulted for technical advice when zinc rich primers or the overcoating of existing paints are specified for use.

HEALTH AND SAFETY INFORMATION

Refer to Health and Safety data sheets.
At all times observe precautionary notices on containers.
VOC figures are printed on Health and Safety data.

APPLICATION NOTES

METHOD	AIRLESS SPRAY	AUTOMATIC SPRAY	CONVENTIONAL SPRAY	BRUSH	ROLLER
OUTPUT FLUID PRESSURE	Min 3000 psi.	No	No	Yes	Yes
TIP SIZE	21 - 25 thou				

Mix the paint thoroughly before use.

Brush/roller application will typically give up to 500 microns dft for multi-coat application, but up to 1mm can be achieved with poor cosmetic finish. Highest standard of decorative finish is only likely to be achieved with careful airless spray application. Airless spray application will give up to 1600 microns WFT in a single coat dependant on configuration. Avoid exceeding maximum stated film thicknesses.

Off-site applications must be allowed sufficient hardening time before moving. Coated sections should be packed and handled so as to minimise damage to coating and prevent ponding by water, and should be stored and transported under cover. If possible, handling cleats should be attached to the steelwork to minimise lifting damage. Topseal must be applied before leaving the shop. On site, all damage should be repaired to original specification – consult Phoenix for advice.

Please consult Phoenix to confirm topseal compatibility before application.

Only apply in conditions of good ventilation which should be maintained during drying. Do not apply when rain, mist, sleet or snow are imminent. Do not apply or allow to dry below 5°C, temperatures above 10°C are preferred. During application and drying time of the paint coating, the surface should be dry and the Relative Humidity should not exceed 90%, and as with all water borne coatings the RH should be maintained as low as possible. The steel temperature should remain at least 3°C above the dew point.

FLASH POINT	Not applicable
EQUIPMENT CLEANER	Water