



Energy Shield
Systems

ESS PF-111

PRODUCT DESCRIPTION

ESS PF-111 is a two-component 100% solids polyurethane primer for the ESS waterproofing membrane. It can be used as a high performance elastomeric primer on concrete as well as on steel.

PRODUCT FEATURES

- No induction time
- 100 % solids
- Excellent adhesion to blasted steel or concrete
- Low viscosity orderless
- Fresh and salt water resistant
- Pin hole and bubble free surface
- Applied by spray, roller, squeegee, or brush
- Surface tolerant
- Long working time
- Can be recoated with itself

TYPICAL USES

- Bridge deck
- Concrete and steel primer
- Industrial flooring
- Wood decks
- Chemical plants and refineries
- Water and wastewater treatment plants
- Mining and fertilizer plants

TECHNICAL DATA

Solids By Volume:	100%	Reduction solvent:	If necessary
Solids By Weight:	100%	Catalyst:	10% by volume
Dry film thickness:		Mixing ratio:	ESS 111C Catalyst
Concrete: 8 - 10 mil		Pot life:	1:1 by volume 30
Steel: 3 - 5 mil			min @ 25°C
	Depending upon application		(77°F)
V.O.C:	None	Shelf life:	12 months
Drying times		Packaging:	25°C unopened 1
Touch:	2 hrs		gallon
To recoat:	2 hrs		5 gallon
Hard:	16 hrs		

SURFACE PREPARATION

Remove all detrimental foreign matter such as oil, grease, dirt, salt in accordance with approved cleaning method. Remove any loose paint. For new and existing steel surfaces: direct to metal coatings achieve maximum performance over near white blasted surfaces. If the surface remains very rusty use one component moisture cure polyurethane primer. Concrete: 28 days of cure time is required for all freshly placed concrete.



APPLICATION PROCESS

Can be applied by spray, squeegee, roller or brush. Apply at a rate of 150 to 200 square feet per gallon on concrete.

Plural component pump mix: Use a 1:1 plural component pump with impingement spray gun or with a static mixer.

Mixing and Thinning: Measure and mix only the quantity of material you will have the time to install in 20 minutes.

Reduction Solvent: 10% by volume
Dilution: not required

Catalyst: ESS PF-111C
Mixing Ratio: 1:1

Mix component A and B together with mechanical mixer for 2 minutes until homogeneous mix.

<u>Substrate Temperature</u>	<u>Dust free</u>	<u>Hard</u>	Recoating Time		<u>Normal</u>
			<u>Minimum</u>	<u>Maximum</u>	
10°C– 20°C (50°F-68°F)	3-6 hrs	24-32 hrs	2 hrs	24 hrs	3 hrs
20°C– 35°C (69°F-95°F)	2-3 hrs	12-16 hrs	1 hr	24 hrs	2 hrs

SPECIAL INSTUCTIONS

Thinner can be added depending on local voc and air quality regulations.

Minimum curing temperatures limited to 5°C (41°F).

Chalking occurs under ultraviolet conditions.

Surface temperature must be at 3°C (5°F) above the dew point during application.

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your local ESS representative or visit our website for current technical data and instructions.

DISCLAIMER

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