

# ES400

## BULK DPM



### KEY BENEFITS SUMMARY

- Designed as a primer for new concrete and sand/cement screed floors
- Easy to apply
- Packaged in bulk 1000 kg IBC units to reduce packaging waste on site
- Hygrometer readings of up to 97% RH (measurable) can be accommodated (99.9% theoretically)
- Cost effective

### PRODUCT INFORMATION

#### Description

ES400 is a two part epoxy moisture vapour suppressant and surface damp proof membrane.

#### Usage/Purpose

Developed specifically for suppressing residual moisture on concrete and sand/cement subfloors and provides a surface damp proof membrane.

#### Colour

Clear

#### Packaging

1000 kg IBC Bulk Containers for both ES400 Component A and Component B.

#### Standards

All aspects of the installation must be in accordance with the requirements of BS 8204, BS 8203 (Installation of Resilient Floor Coverings) or BS 5325 (Installation of Textile Floor Coverings) and supplementary specifications.

#### Moisture Testing

(in accordance with British Standards 8203)

- Hygrometer readings must be taken and recorded so that the correct system can be selected.
- Concrete curing compounds and over-trowelled concrete will extend the time taken for the hygrometer to reach equilibrium.
- Subfloor measurement readings of up to 97% RH (measurable) can be accommodated with the system (99.9% theoretically).

#### Conditioning

Condition the contents by storing for 24 hours at +15°C to +25°C as cooler temperatures will increase viscosity and make application more difficult. Higher temperatures will speed the chemical reaction and therefore reduce working pot life.

#### Protective Equipment

USE IN WELL VENTILATED CONDITIONS and ensure all recommended protective equipment is worn during handling & use of this product. For full recommendation, refer to safety data sheet.

#### Preparation

- The surface must be firm, sound, clean, dry and free of any other contaminants liable to prevent penetration into the substrate or adhesion to the surface.

N.B. Concrete curing agents and admixtures and the misuse of these products can impair adhesion. Where doubt exists, or compatibility is unknown, a trial adhesion test with ES400 should be carried out and tremco illbruck's Technical Department must be consulted.

- Remove all surface dust, etc., by industrial vacuum cleaning. Machine scarifying or shot blasting will be necessary for removal of incompatible curing agents, admixtures or other stubborn surface contamination. Shot blasting is also recommended on lightly polished surfaces.

#### Priming

- In most circumstances no priming is required.

#### Mixing

ES400 hardens by a chemical reaction. It is essential that mixing instructions are strictly adhered to:

- Although supplied in equal 1000 kg IBC quantities, it is essential that the two components are only mixed in the following ratio:

Component A decant 6.25 kg  
Component B decant 3.75 kg

This will provide 10 kg of mixed material.

- 1) Decant the components as above into suitable containers, with sufficient volume to mix the two together in one container.

2) Using a suitable slow speed drill fitted with a suitable two bladed mixer paddle, mix the contents for three to five minutes to ensure adequate mixing. Ensure all materials from the base and sides of the containers are mixed in thoroughly to ensure a uniform cure.

3) Higher temperatures will reduce usable life.

### Application

- Take hygrometer readings (BS 8203) and select the appropriate TREMCO System applicable for the prepared base.
- Apply an even coat of the mixed ES400 by means of a 2 mm x 5 mm notched trowel. Whilst the ES400 is still wet, flatten out the serration ridges with a long handled fluff-free roller, initially pre-wetted with mixed ES400.

Note: This method provides further control of film thickness by helping to ensure that the coverage is not over extended.

- Do not exceed a coverage of 4.0m<sup>2</sup>/kg
- It is essential that the applied coating is continuous and free from pinholes or weak spots, otherwise an additional application will be necessary.
- The coating thickness must not be less than 200 microns per coat.
- Allow to cure for 3 to 4.5 hours minimum at a preferred ambient temperature of no less than +18°C, before the application of TREMCO underlayments or specified TREMCO adhesives.

### TECHNICAL DATA

PROPERTY	RESULT
Composition	Two part epoxy coating system
Pot Life	45 minutes
Density (at +25°C)	1.16 - 1.18
Water Resistance	Excellent
Chemical Resistance	Good
Mix Ratio	A:B 1.7:1 by weight
Coverage	4 m <sup>2</sup> /kg depending on method of application and condition of substrate to give a dry film thickness of 200 microns per coat
Hardening Time	5-6 hours
Service Temperature Range	-20°C to +80°C
Storage	Store between +5°C and +25°C Rotate stock using oldest material first
Shelf Life	6 months when stored in its original unopened containers

### Typical Specifications

For project specific specifications please contact the tremco illbruck Technical Sales team who will be pleased to assist. One coat may be used on subfloors which have between 75% and 85% relative humidity. Two coats should be used with readings of 85% - 97% or alternatively use ES100.

### Cleaning

Clean tools, etc., with AW421 Heavy Duty Cleaner (flammable).

### Health & Safety Precautions

Safety data sheet must be read and understood before use.

### Availability

Direct from tremco illbruck (see back of leaflet for address and telephone details), or via local and national distributors.

### Technical Service

tremco illbruck has a team of experienced Technical Sales Representatives who provide assistance in the selection and specification of products. For more detailed information, service and advice, please call Customer Services on 01942 251400.

### Guarantee/Warranty

tremco illbruck products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with tremco illbruck written instructions and (b) in any application recommended by tremco illbruck, but which is proved to be defective, will be replaced free of charge.

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