

# ES100

## ONE COAT UNIVERSAL DPM



### KEY BENEFITS SUMMARY

- Accommodates up to 97% RH
- Solvent free
- Very cost effective single coat application reducing time on site
- Suitable with underfloor heating
- Suitable for heated concrete and sand cement screeds (provided the surface temperature does not exceed 27°C in accordance with BS 8203 and BS 5325)

### PRODUCT INFORMATION

#### Description

ES100 is a two part, epoxy based damp proof membrane.

#### Usage/Purpose

ES100 has been developed specifically for suppressing residual moisture in concrete and sand/cement subfloors and provides a guaranteed surface damp proof membrane with a single coat liquid application.

#### Colour

When mixed: Slate grey

Part A: Black

Part B: Clear amber liquid

#### Packaging

ES100 is supplied in units of 10 kg or 25 kg.

#### 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 ES100 should be carried out and Tremco CPG UK Limited'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

ES100 hardens by a chemical reaction. It is essential that the mixing instructions are strictly adhered to:

- Stir Part A and Part B thoroughly before transferring Part B into the Part A container.
- Using a slow speed drill fitted with a two bladed propeller (NOT A CEMENT PADDLE), mix the contents for 4-5 minutes to obtain uniformity in colour and consistency. Ensure all materials from the base and sides of the containers are mixed in thoroughly to ensure a uniform cure.
- Do not mix more 10 kg units than can be used within the working pot life.

### Application

- ES100 is so easy to apply that it could be over extended; therefore, measure out areas of 24 m<sup>2</sup> (up to 92% RH) or 20 m<sup>2</sup> (up to 97%) to ensure correct coverage for a 1 x 10 kg unit and to give the correct coating thickness of approximately 250-350 microns (dependent on system selected).
- A practical coverage of approximately 20 m<sup>2</sup> - 24 m<sup>2</sup> per 10 kg unit is expected, dependent on application and porosity of the concrete subfloor.
- Apply the mixed ES100 One Coat by means of a 2 mm x 5 mm notched trowel. While the ES100 is still wet, flatten out the serration ridges with a long handled short pile roller, initially pre-wetted in the ES100. Replace or re-notch worn trowels to ensure that the correct thickness of ES100 is maintained.
- The thickness must be no less than 250-350 microns in order to ensure that excess moisture vapour will not permeate the membrane.
- It is essential that the applied coating is continuous and free of pinholes or thin patches, otherwise an additional patching coat will be necessary.
- Allow to cure for 8 to 10 hours at +15°C.
- Check that the correct number of units were used on the area coated.
- ES100 can be used as an effective Radon barrier. For more information, please contact Tremco CPG UK Limited Technical Services.

### Application Notes

Important! SX300 & SX300 NA must be applied within 24 hours (@15°C or 18 hours @18°C) following the application of ES100, ES300 & ES400. Higher temperatures will reduce the overcoat window. (Please refer to our Technical Department in this instance). CS100 Epoxy Primer must be used at all times with TREMCO water-based smoothing compounds.

### TECHNICAL DATA

PROPERTY	RESULT
Composition	ES100 is a flexibilised epoxy, which contains wetting aids and penetrants to maximise adhesion, flow control agents to minimise pinholes and overlapping platelets which provide an extra barrier to moisture vapour
Pot Life	+20°C: 1 hour 25 minutes +15°C: 2 hours +10°C: 2 hours 30 minutes
Water Resistance	Excellent
Chemical Resistance	Good
Mix Ratio	3.4:1 by weight
Coverage	Approximately 20-24 m <sup>2</sup> per 10kg unit depending on method of application and condition of substrate to give a dry film thickness of approximately 250-350 microns per coat
Hardening Time	+20°C: 5 to 6 hours +15°C: 8 to 11 hours +10°C: 14 to 20 hours
Service Temperature Range	-20°C to +80°C
Storage	Store between +5°C and +30°C Rotate stock using old material first
Shelf Life	6 months when stored in its original unopened containers

### 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 CPG UK Limited (see back of leaflet for address and telephone details), or via local and national distributors.

### Technical Service

Tremco CPG UK Limited 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 CPG UK Limited products are manufactured to rigid standards of quality. Any product which has been applied (a) in accordance with Tremco CPG UK Limited written instructions and (b) in any application recommended by Tremco CPG UK Limited, but which is proved to be defective, will be replaced free of charge. No liability can be accepted for the information provided in this leaflet although it is published in good faith and believed to be correct.

Tremco CPG UK Limited Limited reserves the right to alter product specifications without prior notice, in line with Company policy of continuous development and improvement.



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