

ES300

SURFACE DPM



KEY BENEFITS SUMMARY

- Can be used as a sandwich damp proof membrane and bonding agent for quick-cure screed
- Allows the early laying of floor coverings to sand/cement and concrete bases
- Cures in approximately ½ the time of conventional epoxy systems
- Approved by major floor covering manufacturers
- Cost effective

PRODUCT INFORMATION

Description

ES300 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

Available in blue and grey

Packaging

Available in 10 kg units consisting of Part A and Part 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.

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 ES300 Fastrak Universal DPM should be carried out and the 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.
- For further information please contact tremco illbruck Technical Services.

Mixing

ES300 hardens by a chemical reaction. It is essential that the mixing instructions are strictly adhered to:

- Unscrew to separate the duo can containers of Part A and Part B.
- 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 propellor (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 units than can be used within the working pot life. Higher temperatures will reduce usable life.

Application

- Take hygrometer readings (BS 8203) and select the appropriate TREMCO System applicable for the prepared base.

METHOD 1 (existing pre 1997)

- Apply an even coating of mixed ES300 with a fluff-free roller, initially pre-wetted with mixed ES300.

METHOD 2 (updated version)

- Apply an even coat of the mixed ES300 by trowel. Whilst the ES300 is still wet, flatten out the serration ridges with a long handled fluff-free roller, initially pre-wetted with mixed ES300.

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 4.0 m²/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.

Typical Specifications

System TR1 (75 to 85% RH):

1. Apply an even, continuous coat of mixed ES300 as per application instructions and allow to cure.
2. Apply SX300 Unitex NA latex underlayment to a thickness of 3 to 6 mm to the cured ES300 as per instructions.
3. Secure the floor covering with the approved TREMCO adhesive.

System TR2 (75 to 97% RH, 99.9% RH theoretically):

1. Apply an even, continuous coat of mixed ES300 as per application instructions and allow to cure.
2. Apply a second coat of ES300 as before, applied at right angles to the first coat and allow to cure.

3. Apply SX300 Unitex NA latex underlayment to a thickness of 3 to 6 mm to the cured ES300 as per instructions.

4. Secure the floor covering with the approved TREMCO adhesive.

System TR3 (Existing substrates with no damp proof membrane) Moisture content of up to 97% RH (99.9% RH theoretically):

1. Prepare the base as before and apply the two coats of ES300 as System TR2. If the existing subfloor (concrete or sand cement) is not sufficiently smooth, apply SX300 Unitex NA latex underlayment prior to the application of the first coat of ES300. Residues of old adhesive and underlayments must be removed mechanically, then proceed as per specification. TREMCO SF600 Multi-Purpose Polyurethane Adhesive can be applied directly to ES300 when SX300 Unitex NA has been used to pre-smooth the substrate. Contact tremco illbruck's Technical Department for advice.

System TR4 (Damp proof membrane and bonding agent):

1. Prepare base.
2. Apply an even, continuous coat of mixed ES300 with a long handled lambs wool roller and allow to cure.
3. Apply a second coat of ES300 as before, applied at right angles to the first coat and allow to cure.
4. Apply a third, thin coat of ES300 and whilst still in the tacky state, blind with limestone aggregate and allow to dry completely. Once dry, remove any loose aggregate.
5. Apply a quick dry screed of suitable thickness, slurry bonded into the third blinded coat of ES300.

System TR5 (75 - 92%RH) Smooth/ Power Floated concrete:

1. Apply an even, continuous coat of mixed ES300 as per application instructions and allow to cure. Ensure a coverage rate of 33 m² per 10 kg unit per coat is not exceeded. This will provide an approximate coating thickness of 300 microns.

2. Apply SX300 Unitex NA latex underlayment to a thickness of 3 to 6 mm to the cured ES300 as per instructions.

3. Secure the floor covering with the approved TREMCO adhesive.

NOTE: Always ask for a written specification

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.

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

TECHNICAL DATA

PROPERTY	RESULT
Composition	ES300 is a two part epoxy system comprising: Part A - A low viscosity, light buff in colour, packed in a larger container to allow for mixing. Part B - A hardener of low viscosity, blue or grey in colour. The colouring of Part B serves as a visual aid for mixing, which is completed when a uniform colour is obtained.
Density (at +25°C)	1.16 - 1.18
Water Resistance	Excellent
Chemical Resistance	Good
Mix Ratio	Mix full kits only
Coverage	4 m ² /kg depending on method of application and condition of substrate to give a dry film thickness of 200 microns per coat
Hardening Time	+20°C - 1 hour 15 min 3 - 4 hours +15°C - 1 hour 30 min 4 - 6 hours +10°C - 2 hour 6 - 9 hours +4 C - 3.5 hour 8 - 13 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



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