

### KEY BENEFITS SUMMARY

- Suppresses residual constructional moisture in concrete and sand/cement floors
- Provides a guaranteed surface damp proof membrane
- Allows the early laying of floor coverings to sand/cement and concrete bases
- Tremco ES300 Surface DPM will provide a sandwich damp proof membrane and bonding agent for quick-cure screeds
- Guarantees the satisfactory laying of all floor coverings in any of the above conditions
- Hygrometer readings of up to 97% RH (measurable) can be accommodated (99.9% theoretically)
- Cures in approximately 1/2 the time of conventional epoxy systems
- Easy to apply
- Cost effective
- Approved by major floor covering manufacturers
- A free of charge specification service is provided which includes all stages from the preparatory work, to the fixing of the floor covering, which guarantees compatibility of the complete system
- Over 20 years of trouble-free history
- The Tremco application method (trowel and roller) assists in obtaining the correct coating thickness

### PRODUCT INFORMATION

#### Description

Tremco ES300 Surface DPM is a two part epoxy moisture vapour suppressant and surface damp proof membrane.

#### Usage / Purpose

Tremco ES300 Surface DPM has been developed specifically for suppressing residual moisture on concrete and sand/cement subfloors and provides a surface damp proof membrane.

#### Colours

Available in blue and grey.

#### Packaging

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

#### Availability

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

### TECHNICAL INFORMATION

#### Composition

Tremco ES300 Surface DPM is a two part epoxy system comprising:

Part 1 Low viscosity, light buff in colour, packed in a larger container to allow for mixing.

Part 2 A hardener of low viscosity, blue or grey in colour. The colouring of Part 2 serves as a visual aid for mixing, which is completed when a uniform colour is obtained.

#### Characteristics (Typical Values)

DENSITY (at +25°C)

1.16 - 1.18

MIXING RATIO

Mix full kits only

WORKING

POT LIFE

(Approx.)

+20°C - 1 h 15 min

+15°C - 1 h 30 min

+10°C - 2 h

+4 C - 3.5 h

HARDENING

TIME

3 - 4 h

4 - 6 h

6 - 9 h

8 - 13 h

SERVICE TEMPERATURE RANGE

-20°C to +80°C

WATER RESISTANCE

Excellent

CHEMICAL RESISTANCE

Good

# ES300

## USAGE GUIDELINES

### Standards

All aspects of the installation must be in accordance with the requirements of BS8204, BS8203 (Installation of Resilient floorcoverings) or BS5325 (Installation of Textile floorcoverings) and supplementary specifications.

### Moisture Testing

(In Accordance With BS 8203)

- Hygrometer readings must be taken and recorded so that the correct Tremco ES300 Surface DPM 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).

### Surface 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 Tremco ES300 Surface DPM should be carried out, and the Technical Department must be consulted.

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

### Mixing

Tremco ES300 Surface DPM 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 1 and Part 2.
- Stir Part 1 and Part 2 thoroughly before transferring Part 2 into the Part 1 container.
- Using a slow speed drill fitted with a Tremco 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.

### Method of 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 Tremco ES300 Surface DPM with a Tremco fluff-free roller, initially pre-wetted with mixed Tremco ES300 Surface DPM.

#### METHOD 2 (updated version)

- Apply an even coat of the mixed Tremco ES300 Surface DPM by means of a 2mm x 5mm notched trowel. Whilst the Tremco ES300 Surface DPM is still wet, flatten out the serration ridges with a long handled Tremco fluff-free roller, initially pre-wetted with mixed Tremco ES300 Surface DPM.

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 m<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.

### Typical Specifications

#### System TR1 (75 to 85% RH)

1. Apply an even, continuous coat of mixed Tremco ES300 Surface DPM as per application instructions and allow to cure.
2. Apply Tremco SX300 Unitex NA latex underlayment to a thickness of 3 to 6 mm to the cured Tremco ES300 Surface DPM 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 Tremco ES300 Surface DPM as per application instructions and allow to cure.
2. Apply a second coat of Tremco ES300 Surface DPM as before, applied at right angles to the first coat and allow to cure.
3. Apply Tremco SX300 Unitex NA latex underlayment to a thickness of 3 to 6 mm to the cured Tremco ES300 Surface DPM 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 Tremco ES300 Surface DPM as System TR2.

If the existing subfloor (concrete or sand cement) is not sufficiently smooth, apply Tremco SX300 Unitex NA latex underlayment prior to the application of the first coat of Tremco ES300 Surface DPM. 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 Tremco ES300 Surface DPM when Tremco SX300 Unitex NA has been used to pre-smooth the substrate. Contact Tremco illbruck's Technical Department in for advice.

**System TR4** (Damp proof membrane and bonding agent)

1. Prepare base.
2. Apply an even, continuous coat of mixed Tremco ES300 Surface DPM with a long handled lambswool roller and allow to cure.
3. Apply a second coat of Tremco ES300 Surface DPM as before, applied at right angles to the first coat and allow to cure.
4. Apply a third, thin coat of Tremco ES300 Surface DPM 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 Tremco ES300 Surface DPM.

**NOTE:**

**Always ask for a written specification.**

## Application Notes

1. Important! Tremco SX300 Unitex NA underlayment must be applied within 24 hours (@ 15°C) following the application of Tremco ES300 Surface DPM. Higher temperatures will reduce the overcoat window (Please refer to our Technical Department in this instance). Tremco CS100 Epoxy Primer must be used with Tremco SX200 Unismooth Px-2 and Tremco SX301 Unispec. Site overshoes are recommended to prevent contamination of the Surface DPM /Primer system.
2. Specification Service: The above systems are given as a general guide only. Always consult Tremco's Technical Department who will submit a written specification, tailor made to suit specific job requirements, complete with the recommended adhesives for the floor coverings.
3. Subfloors of terrazzo and quarry tiles can be accommodated by a modification of the TR4 System. Refer to the Technical Department.
4. Structural Joints/Crack Inducement Joints: Structural joints must not be bridged with Tremco ES300 Surface DPM. These must be sealed with a suitable impervious, flexible jointing compound after the Tremco ES300 Surface DPM has been applied. Any other joints in the concrete base, where differential movement is anticipated should be treated in the same way.
5. Tremco SX200 Unismooth Px-2 and Tremco SX301 Unispec self levelling underlayments can be used in place of the Tremco SX300 Unitex NA in special circumstances. Always Contact Tremco illbruck's Technical Department for advice and amended specification.

## Coverage Rate

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.

## Cleaning

Clean tools, etc., with Tremco AW421 Heavy Duty Cleaner.

## Health & Safety Precautions

Product Health and Safety Data Sheet must be read and understood before use.

## Storage

- Store between +5°C and +25°C.
- Rotate stock using oldest material first.

## Shelf Life

6 months when stored as recommended in unopened containers.

## 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.

# ES300

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