

Aquathane E400

One component, water based polyurethane liquid membrane for waterproofing and protection



Description

Aquathane E400 is an environmentally friendly, one component, water based, modified polyurethane fluid, based on pure elastomeric hydrophobic resin.

It produces a tough, rubber – like seamless finish with excellent surface adhesion to most types of substrates and excellent elasticity.

Applications

Waterproofing and protection of:

- ▲ Exposed roofs, balconies and decks.
- ▲ Wet areas, kitchens and bathrooms (under tiles).
- ▲ Basements and retaining walls.
- ▲ Bridge platforms.
- ▲ Internal and external applications.
- ▲ For concrete, wood, metal, gypsum boards, etc.
- ▲ Over bituminous waterproofing membranes.

Advantages

- ▲ Free from solvents, tar, bitumen or any hazardous substance.
- ▲ Low VOC content.
- ▲ Excellent adhesion to almost any surface.
- ▲ Excellent UV Resistance.
- ▲ One component – ready to use.
- ▲ High tensile strength and elongation.
- ▲ Crack bridging capabilities.
- ▲ Good chemical resistance.
- ▲ The white colour reflects much of the solar energy reducing the internal temperature of the building.

Standards

Conforms to the requirements of LEED EQ Credit 4.2: Low - Emitting Materials: Paints & Coatings: VOC < 100 g/l.

Method of Use

Surface Preparation

Surfaces to receive Aquathane E400 should be clean, sound and free from oil, grease, dirt and loose particles. Substrates should be dry, with no standing water. Spalled surfaces, cracks and defected concrete should be repaired. New concrete substrates should be at least 14 days old.

Technical Properties:

Colour:	Grey, white and black
Specific gravity:	1.25 ± 0.05
Solid content:	50 ± 2% by volume 60 ± 2 by weight
Tensile strength: ASTM D412, Die C	> 2 MPa @ 23°C
Elongation: ASTM D412, Die C	> 400%
Shore A hardness: ASTM D2240	60 ± 5
Water permeability*: DIN1048 (5 bars)	No leakage
Adhesion to concrete: ASTM D4541	> 1.9 MPa
Crack bridging: ASTM C1305	3 mm @ 23°C
Service Temperature:	-5 to +70° C

**Tested at 500 microns DFT.*

Priming

Aquathane E400 does not require priming, it can be directly applied to porous and non-porous substrates. For extremely porous surfaces, it is recommended to dilute Aquathane E400 with water 1:1 and apply it as a primer coat @ 5 m² /ltr and allow it to dry.

Application

Aquathane E400 can be applied by brush, roller or airless spray. For airless spray, around 15% dilution with water is recommended. For any mixing done on site, low speed (300 rpm) mixer or electric drill should be used. Apply at least two coats.

The second coat shall be applied in a similar way to the first layer but preferably perpendicular to the previous layer to ensure good bond and coverage.

Aquathane E400

Notes:

- ▲ Aquathane E400 should not be subjected to permanent water immersion.
- ▲ Do not apply Aquathane E400 on substrates that have rising damp.
- ▲ Aquathane E400 should not be applied over green concrete or freshly laid cementitious screed/mortar.
- ▲ For highly trafficable areas, it is recommended to cover Aquathane E400 with a proper topcoat material.
- ▲ Do not apply more than 0.65 kg/ m² per coat for layers without reinforcement.

Consumption

First coat: 0.55 - 0.65 ltr/m².

Second coat: 0.55 - 0.65 ltr/m².

Total consumption 1.1 - 1.3 ltr/m² to give approximately 500 microns dry film thickness.

Cleaning

All tools should be washed and cleaned immediately after use with clean water. Hardened material could only be removed mechanically.

Packaging

Aquathane E400 is available in 20 kg and 25 kg buckets.

Storage

Aquathane E400 has a shelf life of 12 months from date of manufacture if stored in the original unopened pails at temperatures between 5°C and 25°C.

If these conditions are exceeded, DCP Technical Department should be contacted for advise.

Cautions

Health and Safety

As with all construction chemicals products, care should be taken during use and storage to avoid contact with skin, eyes and mouth. Wear suitable protective clothing, gloves and eye/face protection.

Should accidental skin contact occur, remove immediately with plenty of clean water. If swallowed, seek medical attention immediately - do not induce vomiting.

For further information refer to the Material Safety Data Sheet.

Fire

Aquathane E400 is nonflammable.

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A wide range of construction chemical products are manufactured by DCP which include:

- ▲ Concrete admixtures.
- ▲ Surface treatments
- ▲ Grouts and anchors.
- ▲ Concrete repair.
- ▲ Flooring systems.
- ▲ Protective coatings.
- ▲ Sealants.
- ▲ Waterproofing.
- ▲ Adhesives.
- ▲ Tile adhesives and grouts.
- ▲ Building products.
- ▲ Structural strengthening.

Note:

We endeavour to ensure that any information, advice or recommendation we may give in product literature is accurate and correct. However, because we have no control over where and how products are applied, we cannot accept any liability arising from the use of the products.