Aquathane PUB50

One component, polyurethane - bitumen liquid membrane for waterproofing and protection



Description

Aquathane PUB50 is a, one component, thixotropic, bitumen-extended polyurethane fluid based on pure elastomeric hydrophobic polyurethane resin and is extended with chemically polymerised virgin bitumen.

It produces a hydrophobic, elastic membrane with very strong adhesion to most types of substrate, as well as bituminous, and excellent mechanical and chemical resistance properties.

Applications

Waterproofing and protection of:

- ▲ Foundations.
- ▲ Shaded roofs (i.e. unexposed to UV).
- ▲ Vertical and horizontal substrates.
- ▲ Cementitious substrates.
- ▲ Irrigation channels.
- Gypsum and cement boards.
- ▲ Asphalt membranes (for repair also).

Advantages

- ▲ Fast curing.
- ▲ Easily applied by brush, squeegee blade or airless spray.
- ▲ Excellent adhesion to almost any surface.
- ▲ Excellent thermal resistance and service temperatures.
- ▲ Thixotropic consistency, easily applied on vertical surfaces and complex shapes without running or bubbling.
- ▲ Excellent chemical resistance.
- ▲ Provides a uniform, joint free, seamless membrane.
- ▲ Can be easily repaired if damaged.

Limitations

- ▲ Aquathane PUB50 should not be applied over unsound substrates.
- Aquathane PUB50 is not recommended for areas exposed to UV rays.

Technical Properties @ 23°C & 55% RH:

Colour: Black

Specific gravity: 1.20 ± 0.05

Tack free time: 8 - 10 hr

Skin over time: 6 - 7 hr

Recoatable time: 12 - 24 hr

Final curing time: 7 days

Shore A hardness:

ASTM D2240

40 ± 5 @ 7 days

Tensile strength:

ASTM D412

> 1.2 MPa

Elongation at break:

ASTM D412

≥ 200%

Adhesion to concrete:

ASTM D4541

≥ 1.0 MPa

Service temperature: -40 to 80°C

Method of Use

Surface Preparation

The surface should be clean, dry, sound and free from oil, grease and wax contamination. Cement laitance, loose particles, mould release agent or curing membranes must be removed.

Fill surfaces irregularities with a suitable product. Maximum moisture content should not exceed 5%. New concrete structures need to dry for at least 28 days.

Important: Do not wash surface with water.

Priming

Although the material has excellent adhesion on most common construction substrates, it is recommended to prime all kinds of substrates using Aquathane Primer W.

Aquathane PUB50

The primer is designed to significantly improve the adhesion between Aquathane PUB50 and all kind of non-porous substrates such as steel, glassy tiles and aluminum. It will also stabilize and fortify weak and porous substrates prior to the application of Aquathane PUB50.

Aquathane Primer W should be applied using a brush or roller at a rate of $0.16\ \text{liters/m}^2$ to achieve around 70 - $75\ \text{micron DFT}$.

Leave the primer to cure for 24 hours before the application of Aquathane PUB50.

Note: It is always recommended to test the adhesion between the substrates and Aquathane PUB50 on small area onsite prior to proceeding the works in order to ensure that the substrate is well prepared and compatible with the product.

Application

For spraying with airless spray machine, Aquathane PUB50 can be diluted by 5 - 10% using DCP Solvent PU (consult DCP's technical department for further details). For any mixing done on site, low speed (300 rpm) mixer or electric drill should be used. Apply the material with roller or brush. Apply at least two coats. Do not leave more than 24 hours between coats.

Consumption

- ★ First coat: 0.7 0.9 kg/m².
- ▲ Second coat: 0.7 0.9 kg/m².
- ▲ Total consumption: 1.4 1.8 kg/m² to give 1.0 1.3 mm dry film thickness.

Cleaning

All tools should be cleaned after finishing with paper towels and then wipe by using DCP Solvent PU. Do not try to clean rollers.

Packaging

Aquathane PUB50 is available in 25 kg packs.

Storage

Aquathane PUB50 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

Apply in well ventilated areas. Do not smoke. Do not apply near naked flames. In closed areas use force ventilation and carbon active masks. Keep in mind that solvents are heavier than air so vapour concentration is higher in air closer to floor.

For further information refer to the Material Safety Data Sheet.

Fire

Aquathane PUB50 contains volatile flammable solvents.

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- ▲ 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.