Aquathane PUB100

High performance, polyurethane/bitumen liquid waterproofing membrane

DESCRIPTION

Aquathane PUB100 is a liquid cold-applied, one component, bitumen extended polyurethane membrane. Once cured, it produces a hydrophobic and highly elastic waterproofing membrane with excellent adhesion to most types of construction substrates.

Aquathane PUB100 has excellent mechanical properties and chemical resistance, with crack bridging ability and resistance to root penetration, making it highly durable and ideal for a variety of applications. It is also suitable for application on vertical surfaces with no running or bubbling.

APPLICATIONS

Waterproofing and protection of:

- Foundations.
- Wet areas (Bathrooms, kitchens, etc.).
- Shaded roofs (i.e. unexposed to UV).
- Vertical and horizontal substrates.
- Cementitious substrates.
- Irrigation channels.
- Gypsum and cement boards.
- Planters and green roofs.
- Waterproofing under tiles (i.e. podiums, balconies).

ADVANTAGES

- Fast curing.
- Excellent adhesion to almost any surface.
- Excellent thermal resistance and service temperatures.
- Cold Resistance: the film remains elastic down to minus 40°C.
- Excellent mechanical properties, high elongation, high tensile and tear strength, high abrasion resistance.
- Thixotropic consistency, easily applied on vertical surface and complex shapes without running or bubbling.
- Excellent chemical resistance.
- Cures to form a seamless and monolithic membrane without joints.
- Resistant to root penetration, making it ideal for use in planters and green roofs.
- Provides excellent crack-bridging properties.
- One-component, ready to use and easy to apply.

LIMITATIONS

- Aquathane PUB100 should not be applied over unsound substrates.
- Aquathane PUB100 is not recommended for areas exposed to UV rays.

TECHNICAL PROPERTIES @ 23°C & 55% RH:

Colour:	Black
Specific gravity:	1.35 ± 0.05
Tack free time:	4 - 6 hr
Recoatable time:	12 - 24 hr
Light pedestrian traffic time:	48 hr
Final cure:	7 days
Shore A hardness*: ASTM D2240	40 ± 5
Tensile strength*: ASTM D412	≥ 1.8 MPa
Tear strength*: ASTM D624	≥ 9 KN/m
Elongation at break*: ASTM D412	600 ± 50%
Adhesion to concrete*: ASTM D4541	≥ 1.0 MPa
Water vapor transmission (water method)*: ASTM E96	< 1.015 g/h·m²
Resistance to roots: PD CEN/TS 14416:2014	No penetration
Crack bridging*: ASTM C1305	Pass
Hydrolysis resistance*: (KOH 8% 10 days)	Pass
Service temperature:	-40 to 80°C

** Tested after 7 days full cure, under controlled laboratory conditions*

STANDARDS

Aquathane PUB100 complies with the requirements of the Standard Specification for High Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane ASTM C836, and passes the test method for determining the resistance to roots PD CEN/TS 14416:2014.

Aquathane PUB100

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

It is recommended to prime all kinds of substrates using water-based epoxy primer Aquathane Primer W or solvent-based polyurethane primer Aquathane Primer PU.

Aquathane Primer W is designed to significantly improve the adhesion between Aquathane PUB100 and all kinds of non-porous substrates such as steel, glass tiles, and aluminium.

It will also stabilize and fortify weak and porous substrates before the application of Aquathane PUB100. Aquathane Primer W should be applied using a brush or roller at a rate of 0.16 ltr/m² to achieve around 70 - 75 micron DFT.

Alternatively, Aquathane PU Primer can also be used over porous and non-porous surfaces before the application of Aquathane PUB100.

Aquathane Primer PU should be applied at a rate of 0.1 - 0.2 litre/m² (depending on the substrate porosity) to achieve 40 - 80 microns DFT. Leave the primer to cure for 8 - 24 hours before the application of Aquathane PUB100.

APPLICATION

For spraying with airless spray machine, Aquathane PUB100 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 PUB100 is available in 25 kg packs.

STORAGE

Aquathane PUB100 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 PUB100 contains volatile flammable solvents.

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- Tile adhesives and grouts.
- Building products.
- Structural strengthening.