

Accessible terraces & wet areas with bonded tiling Liquid Applied Waterproofing (LAW):

PARATHANE System - 3

| Substrate & Use of roof | Finishing | Standard warm roof /inverted roof |
|--|----------------------|--------------------------------------|
| Concrete Use: Accessible roof terraces, decks, balconies, balcony walkways, stairways, private or public use, with bonded covering. Wet areas: Intermediate floors and vertical walls with toilets, kitchens, restrooms, rooms with running water, showers, bathrooms with bonded covering for private or public use, poolside decks. | Bounded paving tiles | Without insulation |



• Substrate

The load bearing structure (concrete) must comply with all associated national standards and regulations, ensuring that the load bearing capacity is sufficient for any additional loads imposed upon the construction. It is important to consider the possibility of future deflection of the construction when designing roof drainage.



 Preparation: The bearing elements and substrates must comply with local technical standards. After proper cleaning of the roof area, a complete level control shall be carried out by the Contractor.

Slope and planarity shall be carried out with the following tolerances:

Slope:

Slope: for exterior floors 1.5% to 5 %, for interior wet areas 1 to 5% (depending on the type of terrace, please contact the BMI Technical Department). Making sure of the proper flatness of the substrate, as well as of any slopes and reserved recesses for water drainage.

Levels:

Tolerances for planarity shall be:

- 5 mm with a 2 meters straight edge.
- 2 mm with a 200 mm straight edge.
- Surface:

Prepare substrate surfaces thoroughly prior to application of new roofing materials. This is particularly important for refurbishment applications. Providing a smooth, even, sound, free of dust, grease and oil, foreign chemicals, curing compound, clean and dry substrate minimises the likelihood that underlying deficiencies will cause premature deterioration or even failure of the new roofing system.

Elimination of all non-adherent and/or powdery parts (generally by mechanical abrasive polishing followed by careful vacuuming, and, if necessary, by grit blasting, chemical stripping, high pressure cleaning).

Making sure the substrate is dry when the Liquid Waterproofing System is applied.

Concrete:

Masonry bearing elements and substrates in compliance with local technical standards. <u>Are not accepted:</u> slope screeds of lightweight concrete.

• Primer:

PARATHANE Epoxy Primer: Solvent-free, two-component water-based epoxy primer for coating the surface and ensuring surface adhesion for indoor and outdoor applications. 2 components to be mixed before application (A: epoxy resin and B: amine as hardener). Applied in 1 coat (350g/m²) or 2 coats (2x350g/m²) layers depending on the substrate's porosity. The primer is to be laid with the aid of rollers, rubber spreaders, toothed spreaders, brushes or by airless spray.

Upstands/Parapets

PARATHANE Epoxy Primer: as mentioned above.

PARATHANE Mastic chamfer: one component polyurethane sealant. Use a flashing element sealant for details, angles and cracks by extrusion with a hand or pneumatic gun. **PARATHANE Coating:** as mentioned hereafter



PARATHANE Mat: Polyamide fabric (Nylon jersey) for reinforcement of all details as angles, cracks and gaps.

PARATHANE Coating: as mentioned hereafter Mechanical tack coat as mentioned below.

• Waterproofing

PARATHANE Coating: solvent based one component polyurethane resin. To be applied at 1.5 kg/m², thickness > 1.2mm, in 2 coats minimum ($2x750g/m^2$). 3 colors are available: white, beige and grey.

Coating consumption depends on the local conditions and regulations, please consult the technical department for your specific projects.

<u>Useful Tip:</u> Apply each layer of PARATHANE Coating in 2 different colors in order to easily see the spots that are not covered with the 2nd coat (e.g 1 coat 750 g/m² Parathane Coating White + 1 coat 750 g/m² Parathane Coating Beige).

<u>OPTIONAL</u>: **PARATHANE Accelerator** (catalyst for polymerisation) is mixed with PARATHANE Coating at least for the first layer coating if weather conditions are as follows:

- > dry (HR < 65%) or too humid (HR > 90%)
- ➢ low temperatures (< 15°C)</p>
- > significant variations in temperature and humidity.

The second layer is applied the same way after the necessary drying time of the first layer.

The PARATHANE coating is to be laid according to the desired thickness per coat, with the aid of the following tools: rollers, rubber spreaders, toothed spreaders, brushes or by airless spray.

• Mechanical tack coat:

PARATHANE Silica Medium: Dry silica granules, 0.6/1.6 mm.

Apply 1 coat **PARATHANE Coating** at 300 g/m² as anchorage coat (total Parathane waterproofing coating will be 1,8 kg/m², thickness > 1.5 mm minimum with anchorage coat in order to apply the Silica Medium).

2 to 3 kg/m² of **PARATHANE Silica Medium** to be spread as an anti-skid finishing onto the wet Parathane Coating. After drying, the excess is swept off. The protection at the top and the upstand height comply with the technical standards in force or with the instructions in the professional rules for liquid waterproofing (particularly height of treatment on walls of rooms with running water).

• Finish:

Heavy protection like bonded covering: ceramic or hard stone tiles, bonded with cementitious adhesive mortar class C2S1 or other allowable coverings. Choice of covering depending on



the expected use.

• Details:

PARATHANE STRETCHING: 15cm x 25m roll, flexible composite strip (EPDM/polyester 250-g/m²) for structural expansion joints and cracks.

PARATHANE EPOXY FLASH: Bi-component (B mixed to A), epoxy mastic used for roof crossings and rainwater drainages.