

Product Description

Uretech TM is a single component, zero VOC, solvent free, moisture curing, polyurethane coating. Specially formulated for fixing pedestals used in access flooring Uretech PA1 Ultra has excellent adhesion to concrete, metal and other materials likely to be used in the access flooring industry. Uretech TM cures by reaction with atmospheric moisture to produce a flexible and elastomeric waterproofing membrane with good adhesion to a variety of substrates including concrete and asphalt. Uretech TM has been developed specifically for use as a tanking membrane and is compatible with our full range of access flooring pedestal adhesives including PA1, PA2, TG1, KPA1, GPA1 and BPA1.

Application

In all instances the floor surface, and a minimum up stand of 100mm, should be clean, dry, and free of contamination. Any breaches of the floor to accommodate cables or pipe work etc. must be sealed with suitable mastic sealant or expanding foam. The product can be stirred with a drill & paddle to slightly reduce the viscosity in order to facilitate application, but the high viscosity is necessary in order that an adequate membrane thickness is applied.

It is recommended that the membrane is applied to a height of 100mm up all vertical surfaces within and bordering the area, such as peripheral walls, columns, and pedestals if they have already been fixed. The specification may call for this up stand application to be higher. If circumstances dictate that the up stands are applied prior to the floor area generally, it is recommended that the membrane is carried down onto the horizontal for 100mm. The membrane should be applied over the whole of the floor surface, paying particular attention to the pedestal bases, if they have already been fixed, to ensure that the membrane is continuous over the bases and that any mechanical fixing heads are properly encapsulated. If the up stands have been previously applied, carry this application onto the overlap to the base of the vertical.

It is important to bear in mind from the outset that the object of the exercise is to provide a continuous waterproof membrane across the structural floor surface and for some distance up all the vertical surfaces (typically 100mm) associated with the area, i.e. perimeter walls, columns, and any fixtures such as pedestals, struts, pipes and cables etc. This then creates a waterproof 'tray' with no breaches, to contain water from such instances as sprinkler activation, and prevent it penetrating to the floor below. In a new build situations the membrane can be installed either before, or after, the pedestals are fixed, and there are pros and cons for each:-

Tanking prior to pedestal fixing

This means that the floor area will generally be a clear and unobstructed space making for ease of cleaning and membrane application without obstruction. Operatives must then traffic the membrane in order to both mark out the grid pattern for positioning pedestals and then install the pedestals. If mechanical fixing is required, the membrane will be breached by these fixings and therefore membrane must subsequently be applied locally over the pedestal bases to encapsulate the mechanical fixing heads.

Tanking after pedestal fixing

Overall application will be hampered by the presence of the pedestals. If panel installation follows closely behind pedestal fixing, access to the structural floor surface can only be achieved by subsequent removal (and replacement) of the panels which will probably be inconvenient. Due consideration must be given as to which of the above options is more appropriate or logistically achievable. When a tanking membrane is to be installed, a coloured emulsion dust sealer is inappropriate as the membrane itself acts as a far more effective dust sealer.

If tanking is to be applied under an existing access floor

Detailing potentially becomes more complex as fixtures and fittings may have to be accommodated, in addition to the pedestals. Close attention must be paid to the following:-

Remove any firebreaks and raise and suspend all cables to provide sufficient access underneath to apply membrane. Those which breach the floor acutely should be raised as much as possible adjacent to the breach point to allow membrane to be applied under the cables up to the breach point.

Ensure that filler/mastic around the cable breaches is sound and replace if necessary or apply if none has previously been used. Clean the floor area, and fixtures up to 100mm from floor level (higher if the specification requires) to ensure there is no dust or contamination which might affect membrane adhesion.

If there are fixtures such as struts, which cannot be removed, fill the channel section with gap-filler PU foam, and when cured (this will take several hours) trim excess foam from the tops and ends of the channels.

Any hairline cracks in the concrete floor are likely to have been caused by slight shrinkage during initial cure and drying out of the concrete slab, and therefore will not penetrate far into the slab, and certainly not to the full depth of the slab enabling water to penetrate to the floor below. The waterproofing membrane will in any case seal these hairline cracks.

General application of Uretech TM Membrane should be as follows:-

- ▶ To a height of 100mm (or higher) up the walls, ensuring that the floor to wall angle is well covered.
- ▶ To a height of 100mm (or higher) up the pedestals, ensuring that the bases are properly covered and 100mm onto the horizontal of the adjacent floor.
- ▶ Any strut bases and pipe supports to a height of 100mm (or higher) ensuring that a continuous coating of membrane is applied to the intimate details and perforations of the channel sections etc. and for 100mm onto the horizontal of the adjacent floor.
- ▶ Over any cables where they breach the floor ensuring that the membrane reaches between and around the cables, over all the hole filler, under the cables at the point where they immediately breach the floor, and for 100mm onto the floor immediately around the breach. 12 to 24 hours after this, when the membrane is superficially cured but still retains surface tack, apply membrane to the floor area generally, lapping onto the horizontal patches of the previously applied membrane.

Related documentation

- ▶ Uretech TM Safety Data Sheet (GHS)
- ▶ Uretech TM Technical Data Sheet
- ▶ Uretech TM and BREEAM Certification
- ▶ Uretech TM and LEED Compliance
- ▶ Technical Bulletin – Disposal of packaging
- ▶ Technical Bulletin – Isocyanates & VOC's

Contact details

Star Uretech
Enterprise House
Hollin Bridge Street
Blackburn, Lancashire
BB2 4AY

Tel: +44 (0)1254 663444
Fax: +44 (0)1254 681886
Email: info@star-uretech.com
Web: www.star-uretech.com