

Tiling to Polyurethane Waterproofing Membranes

The Reason for the Bulletin:

Frequently, waterproofing manufactures are asked for recommendations on tiling adhesives for direct sticking/adhering tiles to the waterproof membrane. For some Tremco membranes like Vulkem H2 Plus, Tremco recommend our TREMBond UHS or TREMBond Mastic.

However, polyurethane membranes do not like most tile adhesives readily available in Australia. The issue of direct sticking tiles to polyurethane membranes is not new, and is primarily due to two factors:

- 1. Surface** - Once cured, polyurethanes are typically very smooth and have a very even surface profile. This causes most adhesives to not be able to create a mechanical bite like they may with other membrane chemistry.
- 2. Chemistry** - As polyurethanes cure, they create a very tight surface matrix that does not want to receive a chemical bite as readily as other membrane chemistry.

What Tremco Recommends:

These recommends apply to all Tremco Vulkem coatings only. For other membranes manufactured by Tremco, please contact Tremco at (02) 9638 2755 for recommendations.

1. Apply Tremco Vulkem waterproofing membrane per the relevant application instructions and site-specific recommendations by your Tremco representative.
2. After the Vulkem membrane has cured, but no more than 36 hours after application, apply Tremco epoxy primer at the following application rate to the Vulkem polyurethane membrane that is to receive the direct stick tiles:

Product	Coverage Rate		Thickness
Tremco Epoxy Primer	3.26m ² /L	46.84m ² /Kit	0.25mm

3. Immediately after application of the Tremco epoxy primer, broadcast 16/30 silica sand aggregate at a rate of 1.6 kg/m² into the wet epoxy.
4. Allow the Tremco epoxy primer to cure overnight, then vacuum any loose aggregate to ensure the remaining aggregate is well bonded to the epoxy.
5. Proceed with any tile adhesive that is approved for use on a sand filled epoxy bed by the tile adhesive manufacturer.