

TECHNICAL

WATERPROOFING

VINYL MEMBRANE INSTALLATION ON CONCRETE

CURING TIMES FOR CONCRETE

Consult concrete curing tables to verify the time required for any new concrete to cure fully. The cure times will vary depending upon the thickness of the slab, the type of concrete (lightweight or regular). Installing vinyl over uncured concrete may result in bubbling or delamination due to trapped moisture. Normally, a reasonable period of time to wait for concrete to cure (hydrate) completely is 28 days, and lightweight concrete 14 days.

SURFACE CONDITION OF CONCRETE

The slab must be free of curing compounds, loose paint, plaster and all other foreign matter. Fill minor imperfections with Deck patch. It may be necessary to mechanically remove all foreign matter or raised areas. The surface to be covered must be relatively smooth steel trowel finish with proper slope for drainage.



TEST FOR SEALED SURFACE

Some concrete will have sealers applied that are not visibly evident. To test for sealer presence, pour one cup of water on the surface. If it beads or is not absorbed into the concrete after 20 minutes then a sealer has most likely been used. Tuff membranes should not be installed over any existing sealants to avoid issues of compatibility.



INSIDE WALL TERMINATIONS:

Running the Tuff vinyl membranes up intersecting walls is a critical detail for effective waterproofing. When working on concrete surfaces, the upturn areas will often have very uneven sections left over from the concrete forming. These areas must be ground and cleaned to get a proper waterproof seal and avoid punctures from the backside. On upturn walls where brick is used, a counter flashing and reglet should be incorporated into the finished details.



OUTSIDE DECK EDGE TERMINATIONS:

Terminating at the outside deck edge on concrete requires pre-construction planning, the most common method is to have a wood board cast in the concrete during construction giving something to nail your Tuff-clad flashing to. Another option is to have the general contractor fasten a piece of lumber to the outside edge after the concrete is placed creating the same mounting area. If these options are not made available you could adhere your flashing to the concrete with a high quality construction adhesive or use a mechanical fastener and fasten the membrane to the deck edge. If the balcony area is higher than five stories we advise you to confirm wind loads in case mechanically fastening the deck edge may be the only option to avoid the membrane from lifting during high winds.

CONCRETE CONDITIONS TO AVOID:

- Uncured concrete
- Slab on or below grade that has any hydrostatic pressure. This condition would also occur around cast in place planters, ramps or stairs built into sloped grades.
- Suspended concrete slabs that have an existing waterproofing membrane or steel deck or pan installed under the slab.
- Slabs that have questionable integrity. Evident by slab deflection, large, irregular or radiating cracks.
- Poorly finished or very rough concrete

