

# TILE INSTALLED OVER CONCRETE IN SWIMMING POOLS OR TANKS

317SP-2009/2010

## SUITABLE SUBSTRATES

- Interior or exterior: cured concrete designed for no deflection when pool or tank is full.

## MATERIALS

- TILE
- SCRATCH COAT  
Flextile 57 Scratch Coat (mixed with 43 Mortar Additive)
- MORTAR BED  
Flextile Dry Pack Mortar (mixed with 43 Mortar Additive) with Flextile 57 Slurry Bond Coat
- BOND COAT  
Flextile 51 / 44 – two component Latex Portland Cement Mortar System (ANSI A118.4/A118.11)  
Flextile 58XT Fast Set two-component Latex Mortar System (ANSI A118.4/A118.11)
- GROUT  
Flextile Rapid Set Grout (1600 series) (ANSI A118.7) for interior or exterior use  
Flextile FlexEpoxy 100 – 100% Solids Epoxy Grout (ANSI A118.3) for interior use only
- Waterproof membrane (ANSI A118.10-1999)  
Flextile WP900 or WP980 Waterproof & Crack Isolation Membrane (ANSI A118.10/A118.12)

## APPLICATION

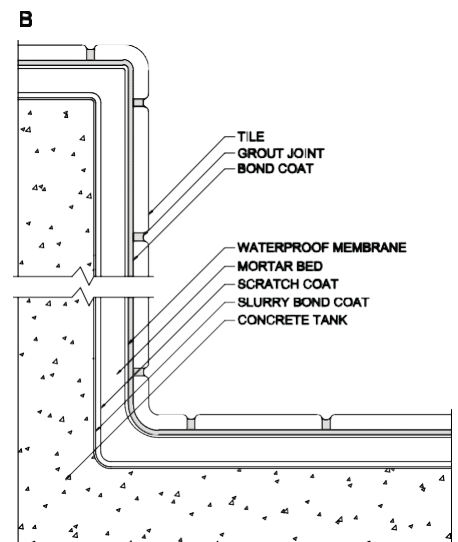
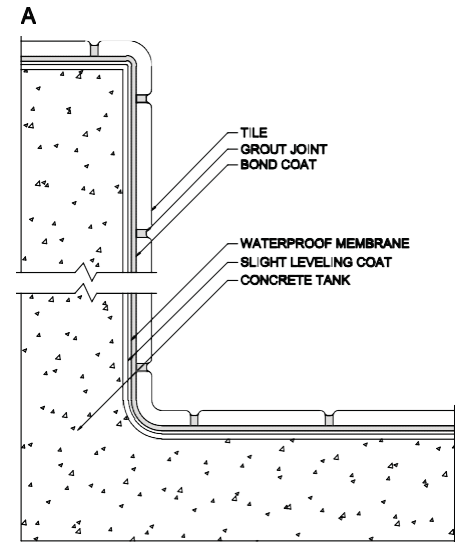
- Apply slight levelling coat as required. Install waterproof membrane over concrete according to manufacturers' recommendations. Installation of fittings and testing for leaks by others prior to tile work. Apply bond coat and grout as per detail 316B-2009/2010. For detail (B), install scratch coat (see Tile Guide Specification Section Mixes 2.5.1) and mortar bed (see Tile Guide Specification Section Mixes 2.5.3 and 2.5.5) in accordance with 302W-2009/2010 and 310F-2009/2010 and cure minimum of seven days. Finished tolerance of mortar bed not to exceed 6 mm in 3049 mm or 2 mm in 305 mm. Apply bond coat in sufficient quantity to provide minimum 95% contact with back of tile. Contact should be evenly distributed to give full support of the tile. Slide tile firmly into position. Beat mosaic tile into position. Allow bond coat to cure minimum of seven days before grouting. Force grout into full depth of joint, remove excess grout and clean.
- It is mandatory to have movement joints provided for both interior and exterior.

## LIMITATIONS

- Ensure bond coat is compatible with waterproof membrane.
- Manufacturer's recommendations must be followed. Exterior tile installations should not be attempted with a temperature of less than 12°C.
- Thin-set application substrate surface variation not to exceed 6 mm in 3049 mm and/or 2 mm in 305 mm. For a slight substrate irregularity, a latex Portland cement mortar or an epoxy mortar levelling coat may be required prior to installation by a thin-set method up to 8 mm thick and allowed to set before application of other materials. A levelling coat in excess of 8 mm should be installed with the mortar bed method. If required, the method must be specified by the consultant.

## OTHER CONSIDERATIONS

- Under conditions of low temperature or high humidity, drying time before grouting can vary from 14 to 60 days. Where job conditions permit, longer drying time is recommended. Swimming pools used in competition must have accurate dimensions, which may require use of detail (B) to meet tolerances. Waterproof membrane may be eliminated if concrete tank is constructed to be watertight or if tank is installed in ground with suitable drainage provided. Provide drains to permit drainage of water at the tile surface and the surface of the waterproof membrane. For drainage see Detail 326DR-2009/2010.
- Tile must be moisture resistant.
- Tile used on exterior applications must be frost resistant.
- Shorter curing times may be achieved with specific products as recommended by the manufacturer.
- Refer to Notes For The Professional and 301MJ- 2009/2010.
- All pipes and protrusions must be treated to ensure waterproof integrity.



The above installation detail is used with the permission of the Terrazzo Tile & Marble Association of Canada. The installation products shown are Flextile's product recommendations for this specific detail, and are not intended to replace TTMAC's original generic specification.