

### INSTALLATIONS TIPS

*Please note these tips are guides only and should be used in addition to the relevant Australian Standards for trade practices. Note that installation may vary from site to site with varying conditions experienced on that site. The contractor and specifier should decide if these suggestions are suitable for their application or require further adjustment. A site sample of the proposed method of installation should be completed to ensure that this method is appropriate for the site conditions. These tips are given in good faith and to the best of our knowledge and experience at the time of printing. In no way do these tips replace the services of professional contractors and/or consultants.*

#### **Foundations/Substrates**

For an area to be successfully tiled, the substrate or foundation preparation is very important and is the first element to influence the end quality of the wall or floor surface. This is because the subbase or 'laying support' carries out a number of functions in protecting the surface layer of the tiles.

No sealers, crystalline waterproofing additives or curing compounds should be used on the concrete which are to be covered with tile.

Allow new concrete to fully cure before installation of tile or waterproof membrane. Concrete should not have internal moisture content greater than 75% relative humidity as measured with moisture probes.

Areas to be tiled should have a wood float finish or open pored steel float finish, be true to within 1.5mm from the required plane and be pitched to drains where required.

Areas that require filling, patching or levelling, should be prepared, with a suitable mortar mix, such as [Laticrete 3701 Mortar Admix](#)/[Laticrete 226 Thick bed Mortar Mix](#) (or equivalent) in accordance with manufactures' instructions.

#### **Expansion, Movement and Control Joints**

Movement joints should be provided to permit movement between adjacent building components.

Existing joints in substrate must be carried through the tile work, do not tile over construction joints.

Movement joints should be installed where the tile, screed and renders abut restraining surfaces such as perimeter walls, curbs, penetrations, columns, corners etc. Expansion joints should be installed at all 'changes of plane' in the tile work, renders and screeds. Refer to Australian standards for more details.

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## POOL TILE | INSTALLATION TIPS

A soft joint between tile installation and coping is CRITICAL for all glass tile installations in pools.

A soft joint is required between any change of material within the tile installation (tile to tile, tile to metal, tile to coping).

Additional movement provisions may be required based on the conditions of the project and seek expert engineer advice to determine the actual spacing and size of expansion joints.

### Surface Preparation

The nature of a concrete pool shell is that it is often rough, contaminated with debris and uneven.

Before the first stage of installation can occur, the concrete surface should be smooth, level, clean and free of dust, oil, grease, paint, tar, wax, curing agents, primers, sealers, adhesive residue, release agents or any other deleterious substance or debris which may prevent or reduce adhesion to the substrate.

This can be achieved using high-pressure water blasting, shot blasting, grinding, grit blasting, or low-pressure water/scrubbing.

The concrete should present as a sound, clean and open poured surface prior to installing render, waterproofing or adhesives.

Pools or water features should be protected from direct sunlight, excessive heat, wind, precipitation and freezing during substrate preparation, installation and curing.

### Waterproofing

Waterproofing is an essential layer beneath the tiling that will prevent penetration of liquid water into the background. A suitable liquid membrane should be applied to the pool shell or the screed and render, in accordance with the manufacturer's instructions.

Tile and their fixing and grouting mortars do not constitute a waterproof barrier and therefore a suitable membrane liquid should be applied such as [Laticrete Hydro Ban](#) and [Latapoxy moisture shield](#) (or equivalent).

There are many waterproof membranes and/or crack suppression membrane available and we always recommend that you get a site-specific specification from reputable supplier such as [Laticrete](#) or [Mapei](#).

Waterproof membranes in submerged applications must be installed in a manner which creates a continuous "waterproof pan effect" without voids/interruptions.

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Applying waterproofing membranes in limited areas (e.g. solely at the waterline) in submerged applications is not recommended.

Allow membrane to fully cure in line with manufactures recommendations and flood test critical areas, to test for water tightness.

### Adhesives

Selection of the right adhesive to bond the tiles to the surface is very important.

In general, adhesives of at least type C2-S2 with high bond strength must be used in the installation of glass or Technifirma pool tiles. Exact adhesive selection should be based on the final substrate selection and pool type.

Epoxy (R Type) adhesives should also be considered.

We always recommend that you get a site-specific specification from a reputable supplier such as [Laticrete](#) or [Mapei](#).

### Laying Instructions

Always follow adhesive manufacturer's instructions.

Ensure the surface of the tile or glass is clean, free from dust or dirt which may impede adhesion.

1. Adhesive should be applied with a v-notched trowel using a scraping motion to work the material into good contact with the surface to be covered.
2. A trowel having notches of sufficient size to optimize bedding is recommended
3. On site test should be carried out to determine the appropriate trowel size to target no voids in the adhesive bed, full bedding of the tile and the complete adhesive distribution once the tiles are installed.
4. Ensure the adhesive is freshly applied prior to bedding of tile to prevent skim coat developing.
5. Using the flat side of an appropriately sized v-notched trowel, work the adhesive firmly into the substrate.
6. With additional adhesive, comb the adhesive horizontally to the required depth.

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7. Apply the tile or glass sheets to the adhesive, using light and even pressure to establish initial contact.
8. To achieve a uniformly bedded and flat surface, tap in place with the flat face of a wood float.
9. Ensure the tiles are 100% full bedded. This means full contact of adhesive to tile/glass and full contact of adhesive to substrate.
10. Tiles should be aligned to show uniform joints and then allowed to set firm.
11. Excess adhesive must be cleaned from the surface of the tile or glass with a wet cloth or sponge while the adhesive is fresh.

### Grouting

Selection of the grout type and colour is critical both from a performance and aesthetic perspective.

We strongly recommend the use of epoxy grouts (RG Type such as [Latapoxy SP-100](#) or equivalent) as they have a high resistance to chemical products and bacteria. They also have high adhesion and a good resistance to humidity.

We always recommend that you get a site-specific specification from a reputable supplier such as [Laticrete](#) or [Mapei](#).

Following manufacture's specifications for installation.

Prior to installing grout, clean all joints of an alternate coloured adhesive, dirt, tile mounting or anything that may inhibit a full joint.

Ensure adhesive and bedding layers are dry prior to grouting.

Joints should be packed full and free of all voids and pits

Excess grout should be cleaned from the surface with water and nylon pads as the work progresses, while grout is fresh and before it hardens.

The day after installation grout film or haze should be removed using a suitable detergent solution.

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### Care During Installation

During installation of the waterproof membrane, screeds, renders, tiling and grouting, take precautions to protect the work from varying adverse weather conditions.

Ensure the environment is suitable for tile installation. Air temperature should be between 5 and 30 degrees with no rain.

After final grout, allow installation to cure for 7 days before aggressive cleaning

Allow tile work and grout to cure for 14days at 21C before filling the pool (unless materials manufacturers approve otherwise). Cure time can be significantly increased or decreased due to temperature and humidity effects.

It is important to protect the installation during this cure time.

Test water chemistry at fill source (tap or hose bib), and once the tank is full, to verify water is balanced.

Ensure water balance of the pool is checked every week as poorly balanced water will damage the grout and adhesive.

Ensure chemicals and treatments added to the pool water are dispersed randomly to avoid damage to the tiles, grout and adhesive.

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