

## Tiling swimming pools / permanently wet areas

Swimming pool construction is governed by the BS 8007: Code of Practice for Design of Concrete Structures for Retaining Liquids. The standard clarifies how such constructions must be carried out and how to test for water tightness. As far as fixing tiles is concerned, it needs to be confirmed that the construction has been carried out correctly and tested before tiling commences. There are also some basic time frame principles:

The construction itself must have had a minimum 6 weeks to cure and harden

Any further renders or screeds used must have had a minimum of 3 weeks to cure

Tiles should be fixed and allowed to fully cure before grouting; usually a minimum of 3 days

The construction must then be left for a minimum of 3 weeks before water is introduced (no greater than a depth of 750mm per day)

The methods used to create watertight construction can differ. Ensure the surface to be tiled is suitable to receive a cementitious tile adhesive and is prepared correctly. Preparation must include removal of any laitance from the renders or screeds and cleaning off any mould release agents that may have been used when constructing the shell. Power washing is often sufficient to prepare the surface. Although the adhesives and grouts normally used are classified a water-resistant this does not imply that they will prevent water passing through. This only confirms that

they retain their strength and adhesion even when fully immersed. It is critical that the construction is inherently watertight. If a waterproof grout is required, or it is known that aggressive chemicals are to be used for cleaning, or if power wave machines are incorporated then consider using an epoxy grout.

Low absorbency tiles should be selected, ideally less than 0.5% absorption. Absorbent surfaces should be allowed to dry and then primed with UltraTileFix ProPrimer. Dilute the primer 1 part to 3 parts water and then allow to dry. Tiles should be fixed using a highly modified cementitious adhesive, in accordance with EN 12004 – capable of withstanding continual immersion. UltraTileFix recommend ProFlex SP, ProFlex SPES or ProFlex S2. It is critical that a full bed adhesion without any voids is created and to ensure this, a minimum 3mm bed depth is recommended.

There will be a requirement for movement joints (please see BS 5385) which should be considered before tiling commences. A suitable sealant should be selected and used on all wall and floor junctions at least.