



CONCRETE REQUIREMENTS

- 1.** Concrete must conform to ACI 302 standards, be dry, fully cured (28 days), a minimum density of 100 lbs per ft³ as well as having a compressive strength greater than 3000 psi for residential installations and 4350 psi for commercial installations.
- 2.** The substrate must be dry, structurally sound, and dimensionally stable. It should be free of any substance or condition that may reduce or prevent the adhesive bond to substrate. This includes, but is not limited to, concrete sealers, curing agents, dirt, wax, tar, paint, and loose toppings. If the surface contains these substances they must be mechanically removed. The use of solvents (with the exception of acetone), adhesive remover or acid etching is not recommended.
- 3.** If waterproofing is needed for an application, then it should be specified and addressed prior to the Life Floor application. Life Floor tiles should only be bonded to approved surfaces (Please refer to appropriate adhesive guideline).
- 4.** Measure pH of any concrete slab before installing Life Floor. The pH of the slab must be within the suggested range of the adhesive (contact adhesive manufacturer for exact range). If the pH is not within the suggested range, do not install until it fits adhesive manufacturer's requirements. Failure to do so can result in a permanent bond.

Note: A high alkali slab (with a 10 to 14 pH) can signify a moisture problem. If a pH problem is found, the slab should be tested for moisture and remedied according to adhesive specifications.

- 5.** Concrete porosity should be noted. It is always a good practice to perform bond tests before large scale installations. Excessively absorbent (porous) or rough concrete surfaces can cause an increase in adhesive usage. Surface grinding can be used to smooth an excessively porous or rough surface.
- 6.** Concrete surface prep: Remove protrusions, bumps and ridges by grinding or chipping. Repair, fill & level cracks, holes, depressions, rough or chipped areas of substrate.
- 7.** For new slabs a steel troweled finish should be specified and is required. Where a troweled finish is specified, finish the surface first with power floats, where applicable; then with power trowels and finally with hand trowels. The first troweling after power floating shall be done by a power trowel and shall produce a smooth surface which is relatively free from defects, but which may still contain some trowel marks. Additional troweling shall be done when a ringing sound is produced as the trowel is moved over the surface. The surface shall be thoroughly consolidated by the hand troweling operations. The finished surface shall be free from any trowel marks, uniform in texture and appearance, and shall be placed to the required tolerance. (See Tolerances below)

Note: Damage due to burnishing will not be accepted.

On surfaces intended to support floor coverings or membranes, any defects of sufficient magnitude to show through the floor coverings shall be removed by grinding.

- 8.** Substrate should be sloped properly towards drains to allow for proper drainage. Refer to the Model Aquatic Health Code (MAHC) for sloping requirements for your application and facility.

9. If planning on recessing slabs to accommodate for the 3/8” tile depth, then you should aim for 1/4” max recess. This will help to avoid raised drains/floor jets that require “in-field” adjustments by installation teams. On-site teams can grind concrete down around the fixture to balance out height if needed, but raising the level of the concrete can incur additional costs.

Tolerances

Planeness: When a straightedge 3m or 9.84ft (to the nearest foot) long is placed on the surface at any position, no part of the surface shall be more than 3mm or 1/8in below the straightedge.

Smoothness: When a straightedge 150mm or 6in long is placed on the surface at any position, no part of the surface shall be more than 1mm or 1/32in below the straightedge.

Note: To determine if you are within defined tolerances one must place a straight edge anywhere onto the surface in any direction.