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Waterproofing tiled showers

Recent media reports have drawn attention to damage from leaking showers. Although tiles may be impervious to water, cement-based grout is not, so the waterproofing in tiled showers is crucial.

A LEAK IN A TILED SHOWER can be difficult to discover and may result in severe damage and costly repairs. The key to a tiled shower that won't leak is in the substrate and waterproofing installation.

Performance requirements

New Zealand Building Code clause E3 *Internal moisture* requires that surfaces likely to be splashed must be impervious and easily cleaned and prevent water from penetrating behind linings or into concealed spaces.

The Acceptable Solution E3/AS1 provides a range of options for linings and finishes in showers that meet the performance requirements of clause E3. These include that ceramic or stone tiles have 6% maximum water absorption, have waterproof grouted joints and are bedded with an adhesive suitable for the tiles, substrate and wet area environment. It also states that ceramic or stone tiles must be laid over a continuous impervious substrate or membrane (see Figure 1).

Information on installing tiled showers can be found in BRANZ Good Practice Guide *Tiling* 3rd edition. AS 3740-2010 *Waterproofing of domestic wet areas* also provides useful advice.

Waterproofing requirements

For enclosed showers, impervious linings and finishes such as walls must:

- be continuous
- be at least 1,800 mm high from the floor or top of an upstand
- extend at least 300 mm above the shower head. ➤

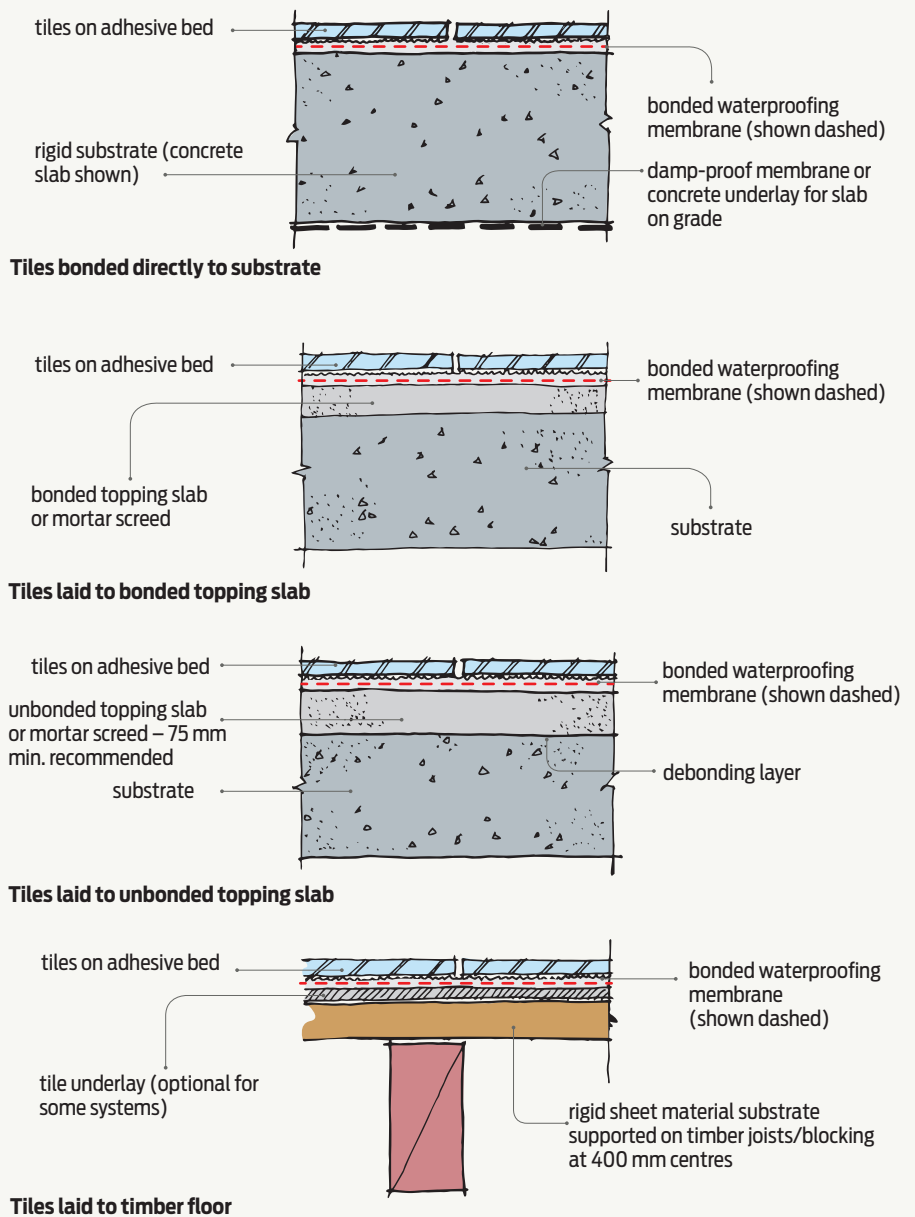


Figure 1 Locating the waterproofing membrane.