## **DESIGN RIGHT**

## WET AREA TIPS Here are 26 good practice tips from BRANZ for the design of wet areas such as bathrooms, kitchens and laundries.

Specify a waterproof membrane to tiled floors in bathrooms, kitchens and laundries where the substrate is absorbent. The durability of particleboard, plywood and fibrecement will be affected if it becomes wet. Tiles may be laid directly over a steel-trowelled concrete finish as that is deemed impervious by E3/AS1.

Always specify a waterproof membrane behind tiles in showers.

When there is a detachable showerhead, measure the potentially wetted area for both open showers and open showers over baths from the extended showerhead plus the 1,500 mm specified in E3/AS1. Providing a lining suitable for use within showers up to the ceiling level rather than the 300 mm above the showerhead position is recommended.

Specify a floor waste to all bathrooms (particularly with an open shower), laundries and kitchens because overflows and spills will occur.



It is important to specify a floor waste to all bathrooms as overflows will occur.

Allow time in the construction programme for the curing of liquid-applied waterproofing membranes – typically at least 2 days when conditions are favourable. See BRANZ Bulletin 518 *Wet area tile waterproofing.*  When enclosing a shower, specify a fixed screen with a door to better contain the water within the shower. It is recommended that owners are advised against relying on a shower curtain to provide enclosure. Where a shower curtain is used, following the waterproofing requirements for an open shower is recommended.

Specify mechanical ventilation to remove moist air at source in bathrooms and kitchens – typically New Zealand homeowners do not open windows enough to remove moist air, particularly from bathrooms. Adding trickle passive ventilators will assist in moisture removal while maintaining security.

When specifying mechanical ventilation, ensure it is automatically controlled, for example, a humidity sensor switch that controls the operation of the extractor when the moisture levels rise. This removes the need for human intervention. Mechanical ventilation must extract the moist air to the outside.

Specify toughened Grade A safety glass in all areas subject to hot water splash – using toughened Grade A safety glass is a requirement for shower screens under NZS 4223.3:1999 Code of practice for glazing in buildings – Human impact safety requirements. →



Ensure the threshold at the door is high enough to contain the water within the shower and that the floor has a slope to the outlet.

Do not locate fixtures and pipework that might generate noise on walls between bedrooms and bathrooms or other spaces where the noise may be generated. Installing noise control insulation will help reduce bathroom noise transmission.

Consider the potentially detrimental effect of moisture and odours where a bathroom or en suite is open to adjacent bedrooms or clothes storage areas.

Avoid situations that necessitate the installation of a shower over a bath – they can create difficulties in terms of accessibility and safety for users.

Specify fixtures with inbuilt overflows that have sufficient capacity to deal with the incoming maximum water flow.



Fixtures with inbuilt overflows should have sufficient capacity to deal with the incoming maximum water flow.

Specify hose burst valves to high water use appliances such as washing machines and dishwashers.



Detail a fall to all showers (and to bathrooms that are open to the shower).



For enclosed showers, locate the screen or door on the wet side of the hob to minimise the wetting of



Location of screen or door

Specify a brick or concrete block unit to form a hob to a shower - do not specify timber.

Specify under-mounted, rather than surface-mounted, insert sinks as it makes draining the water (and cleaning the surface) easier because there is no lip around the sink.

Specify that concealed wall and floor surfaces (such as under or behind a bath, vanity or kitchen cabinets) be sealed or waterproofed before the units are installed.

Specify the sealing of penetrations through an impervious finish to walls and floors, for example, around a bath waste. An alternative for wall penetrations is to specify an in-wall caddy system.

For kitchen benches, specify anti-spill edges with a back upstand or impervious splashback.

Identify clearly on the drawings and/or specifications the specific waterproofing system adhesives and tiles to be used in wet areas. Using the term selected or approved does not give the Building Consent Authority the information it requires to issue the consent.



Clearly show the extent of the tile waterproofing on the drawings.



Specify that all shower floor waterproofing be flood tested and signed off as impervious before any tiles are laid.



Specify that any mould found within framing cavities is treated as toxic until the genus of the mould can be determined by testing.



Treat any mould within framing cavities as toxic until tested.



Specify wet area floor finishes that are not slippery when dry or wet. **4**