

Waterproofing of Wet areas

The requirements for waterproofing have changed significantly over time. The regulations however have taken the building Act and Regulations 1971 as the minimum. Due to the consequential damage and ongoing number of failures a Minister's specification was written to overcome the issues. This was subsequently upgraded several times, particularly in relation to showers. The most recent Minister's specification is not a stand alone document but rather specified requirements in addition to AS 3740. The reason for the upgrade was based on inservice failures of shower areas. It was found that some of the detailing, particularly at the base of the shower failed. A lot of the failures were attributed to the difficulties of carrying out the construction perfectly and also to sealant types and their installation. SAHT experience has indicated that these issues were more significant in brick veneer than in solid construction. The Australian standard AS 3740 which is called up by the BCA has and is undergoing constant minor changes. Part of the reason for that is that the construction details were fundamentally different in different states and reaching an appropriate common situation has been difficult; That said in SA the changes to what will be visible to an inspector are not very great, as most of the changes relate to the provision of a waterproofing membrane under the floor finish connected to the plumbing system. As this is not visible the area will need to be inspected based on the appropriate finishes and visible signs of moisture either causing damage or being detectable on the wall surface in the adjoining room(s)

1881 to Dec 1923`

The Building Act 1881 applied
Rules not applicable

Dec 1923 to April 1973

The Building Act 1923 to 1953 applied
Rules not applicable

April 1973 to 19 July 1991

Transition period for class 1 as defined by BCA 19 July 1991 to 9 October 1995
Transition period for all other classes 19 July 1991 to 30 June 1992

The Building Act and Regulations of 1971 applied to July 1991 and from then until the end of the transition period either the Building Regulations or the BCA could be used.

NB The buildings were classified in the transition period based on the BCA definitions.

Minister's Specification SA F1.7 of the SA Building Regulations 1991 Water Proofing of Wet Areas in Buildings is the relevant document as it was produced at the time of the repeal of the Act and that is the time position in the regulations

Transition period to Present

Building Code of Australia called up by the Building Act and subsequently by the Development Act 1993

Minister's Specification SA F1.7 of the SA Building Regulations 1998 Water Proofing of Wet Areas in Buildings.

Minister's Specification SA F1.7 of the SA Building Regulations 2004 Water Proofing of Wet Areas in Buildings – additional requirements

HIB Regulation Summary

Minister's Specification SA F1.7 of the SA Building Regulations 2004 Water Proofing of Wet Areas in Buildings – additional requirements (Amended May 2005)
AS3740 – 2004 Waterproofing of wet areas within residential buildings.

The following table is an abbreviated summary of the items that are generally visible and have changed. For full details the relevant Minister's Specification must be checked.

Item	Building Regs 1973/ Minister's Specification SA F1.7 1991	Requirements since July 2005
Impervious floor surfaces	Ceramic tiles Concrete Terrazzo Prefinished shower base	Glazed and grouted tiles Water- resistant flexible sheet flooring with sealed joints (sheet vinyl, linoleum) Note: water proof floors must have a water proof membrane under the floor finish. And a drainage flange is required with the membrane drained into the flange)
Impervious wall surfaces general	Cement render Cement render plus plaster with a 100 mm high cover of cement render or tiling Water resistant lining with 100 mm high skirting of ceramic tiles	Thermosetting laminated sheet Pre-decorated fibre cement sheet Sanitary grade acrylic wall linings Glazed and grouted tiles Water- resistant flexible sheet wall lining with sealed joints (sheet vinyl, linoleum
Impervious wall finishes in showers	Prefinished impervious lining Smooth cement render Ceramic tiles Terrazzo	As above
Falls	General floor 1 in 80 Shower area 1 in 60	Water is not to pond Recommended falls are for showers between 1 in 60 and 1 in 80 and general floors between 1 in 80 and 1 in 100
Drainage outlets	Floors to be drained to a waste gully	Floors are to be drained to an outlet. (a dry waste can now be used for overflow drainage.)
Wall wall and wall floor junctions	Flexible sealant (3 mm min wide)	Flexible sealant (3 mm min wide)
Dispensations	Bathroom floor can be drained into shower No falls or drainage required for a WC	Bathroom floor can be drained into shower. Drainage is not required where all fixtures have in built over flow provisions The floor to rooms containing only a hand basin or vanity, with an inbuilt overflow does not need to be water resistant.