



TECHNICAL:

Waterproofing of Wet Areas in Buildings

From 1 July 2004 the Building Rules for the waterproofing of wet areas in buildings in South Australia have come under the requirements of BCA 2004. The BCA calls up the new revised Australian Standard publication AS 3740 – 2003 *Waterproofing of wet areas in residential buildings*. Also called up in the State variations to BCA 2004, is Minister's Specification SA F1.7 – 2004 *Waterproofing of wet areas in buildings – Additional requirements*.

These two documents (AS 3740 and SA F1.7), together form the waterproofing requirements in SA and replace the requirements of Minister's Specification SA F1.7 – 1998.

AS 3740 has been the subject of review since 1998 and while the new version provides the requirements for residential buildings, there are a number of historical SA provisions that have been omitted. These have been included in the revised Minister's Specification. A list of requirements included in the Specification (that are not in AS 3740) is given below.

It should be noted that the SA F1.7 – 1998 provision requiring floor drainage in a room containing a sanitary fixture is not included in AS 3740. This is now included in SA F1.7 – 2004 but with a modification to allow the use of sanitary fixtures with in-built overflow protection in lieu of a floor waste. Plumbing fixtures with these overflow protection devices are readily available. It should also be noted that a water closet and a slop hopper are included in the Specification's definition of sanitary fixtures (as they are defined as such in AS 3500). Whilst these are deemed to be sanitary fixtures they cannot hold water as they have a direct connection to the sanitary drainage system by way of a trapped waste. A room containing only a Water Closet or slop hopper is exempt from the requirement to drain a floor to a floor waste as the WC or slop hopper by virtue of its design has a permanent open connection to the drainage system which acts as a built in overflow protection device.

Similarly, it is unnecessary to require a water resistant floor surface material in a room containing only a basin if the basin contains an in-built overflow provision within the unit itself.

Non-residential waterproofing considerations, such as group showers and the provision of urinals, have also been included in SA F1.7.

Examples of the additional requirements to AS 3740 included in the Specification are;

- Floor drainage is required in all rooms containing a sanitary fixture except where all the fixtures within the room are provided with in-built or attached overflow protection, connected to the sanitary fixture drainage.
- A bathroom floor may drain to a shower waste provided the water can drain without ponding.
- Floors to rooms containing a sanitary fixture are required to be water resistant, except that floors containing only a handbasin or vanity basin are not required to have a water resistant floor
- A note indicating the floor drainage to facilities for people with disabilities as contained in AS 1428.1 is included.

- The water resistant floor and wall material – tiles, has been amended to glazed and grouted tiles
- Waterproofing of urinals and group showers.
- Sealing of bench tops and the waterproofing of wall to floor junctions has been clarified
- Kitchen and Bar waterproofing requirements
- Laundry and WC floor to wall junctions have been amended
- The use of a drainage flange is the only method of draining the tile bed in all showers

The whole waterproofing package of AS 3740 and SA F1.7 that was implemented on 1 July 2004 is very similar to the requirements of Minister's Specification SA F 1.7 – 1998.

The following are examples of the new waterproofing rules that vary from the current SA F1.7 requirements that may have immediate implications;

- shower waterproofing details are amended by including a water stop to allow the waterproof membrane to be carried through to the floor surface at the membrane edge;
- waterproof membranes must comply with AS/NZS 4858 Wet area membranes;
- waterproof membranes must be laid with the appropriate bond breaker;
- a shower enclosed by a frameless glass shower screen to be deemed an unenclosed shower for the purposes of waterproofing;
- internal and external corners within a shower area to a height of 1800mm above the floor level must be waterproofed;
- the list of waterproof and water resistant materials is varied and water resistant floor surface materials must be used in conjunction with water resistant substrates;
- timber based flooring substrates outside the shower area are required to be waterproofed for the entire wet area floor.

Examples of the new waterproofing rules that vary from the current SA F1.7 requirements but have little immediate impact are

- the allowed use of fixture overflows in lieu of floor drainage under certain circumstances
- a room that contains only a hand basin with an overflow protection device is exempted from the floor water resistance requirements
- the floor falls are included as recommendations only with the floor required only to drain to a waste without ponding
- In an unenclosed shower, require the 1500mm distance for waterproofing to be measured from the shower water outlet at the wall not from the furthest reach of the shower arm.

Minister's Specification SA F1.7 - 2004 is available on the Planning SA Internet site - www.planning.sa.gov.au and is also available from Planning SA.

Further information

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