Waterproofing Requirements for Wet Areas (Nat)

HIA receives many enquiries in relation to waterproofing wet areas especially in Class 1 single dwellings. The minimum performance requirements that must be met to comply with the regulations are contained in the Building Code of Australia (BCA) Volume Two.

The simplest way of meeting the performance requirements is by complying with the Deemed-to-Satisfy (DTS) provisions in Part 3 which gives two basic options to follow:

- Acceptable construction practice (ACP) outlined in Part 3.8.1 of the BCA; or

Defining a wet area

Many waterproofing problems encountered relate to how the bathroom area and its components are defined. The BCA sets out the following definitions:

**Wet Areas**: An area within a building supplied with water from a water supply system. This includes: bathrooms, showers, laundries and sanitary compartments. It excludes kitchens, bar areas, kitchenettes or domestic food and beverage preparation areas.

**Waterproofing system**: means a combination of elements that are required to achieve a waterproof barrier, including, substrate, membrane, bond breakers, sealants, finishes and the like. The following are materials which are deemed to be waterproof:

- Stainless steel
- Cooper – material not less than 99.9% copper
- Waterproof flexible sheet flooring material with sealed joints
- Membranes meeting the requirements of AS/NZS 4858

**Water resistant (WR)**: means the property of a system or material that restricts moisture movement and will not degrade under conditions of moisture.

**Shower area, enclosed**: The area enclosed by walls or screens including a hinged or sliding doors that control the spread of water to within the enclosure. Note: A shower fitted with a frameless or semi-frameless glass door, shower curtains and the like are not considered to be an enclosed. A screen over a bath less than 1500 mm long is not considered an enclosed shower.

**Shower area, unenclosed**: The area that is open on one or more sides, extending in an arc on the open sides, 1500 mm from the shower connection at the wall (see figure below).

**Requirements for waterproofing a wet area**

**Enclosed shower with a hob** – See Figure 1

- The entire floor of the enclosed shower area including the hob must be waterproofed.
- The walls must be waterproofed to not less than 150 mm above the shower floor substrate or not less than 25 mm above the maximum retained water level whichever is the greater with the remainder being water resistant to a height of not less than 1800 mm above the finished floor level.
- Internal and external corners and horizontal joints must be waterproof within a height of 1800 mm above the floor level with not less than 40 mm width either side of the junction.

Ref No. NAT BCA 10-06

The above is intended to provide general information in summary form. The contents do not constitute specific advice and should not be relied upon as such. Formal specific advice should be sought by members with respect to particular matters before taking action. ABN 99 004 631 752
The above is intended to provide general information in summary form. The contents do not constitute specific advice and should not be relied upon as such. Formal specific advice should be sought by members with respect to particular matters before taking action. ABN 99 004 631 752

**Figure 1 – Enclosed shower**

**Unenclosed shower area** – See Figure 2

- The entire unenclosed shower area must be waterproofed.
- Walls and joints must be waterproofed similar to the requirements of an enclosed shower area.

**Figure 2 – Unenclosed shower on concrete or compressed fibre cement sheet floor**
Floors outside the shower area and adjacent to baths:
- Concrete & Compressed fibre cement sheet flooring
  The entire floor must be water resistant.
- Timber, particleboard, plywood and other timber based flooring materials
  The entire floor must be waterproofed.

Wall junctions and joints – See Figure 3
- **Areas outside shower areas** - The wall / floor junctions must be waterproofed and where a flashing is used, the horizontal leg must be not less than 40mm.
- **Areas adjacent to baths** – Edges of the vessel and junction of bath enclosure with floor to be waterproofed.
  Where the lip of the bath is supported by a horizontal surface, this area must be:
  - Waterproof for showers over a bath; and
  - Water resistant in all other situations.

![Figure 3 – Unenclosed showers above baths](image-url)
**Inserted baths** – See *Figure 4*

- No need to do anything to floor or the wall under the bath
- Waterproof the entire shelf area, incorporating the waterstop under the bath lip and project not less than 5mm above the tile surface.
- The wall needs to be waterproofed to not less than 150mm above the lip of the bath.
- Waterproof all tap and spout penetrations (see *Figure 3 above*).

![Diagram of bath junction](image)

*Figure 4 – Typical bath junction – Bath / shelf junction*

For other conditions of building elements in wet areas, Table 3.8.1.1 of the BCA Volume 2 provides all the necessary details.

All figures shown in this information sheet are taken from BCA 2009 Volume Two.

**For further information** HIA members can contact HIA’s Building Services staff on 1300 650 620 or hia_technical@hia.com.au.

If you would like to become a HIA member, contact 1300 650 620 or enquiry@hia.com.au