



INFORMATION SHEET

Building Services (National)

Ref: NAT BCA 12-20

BCA 2012 – Changes to stair handrails and wet area provisions

The Building Code of Australia (BCA) 2012 has been published and takes effect from 1 May 2012 (subject to state legislation that provides for any transitional periods).

An overview of the changes have been provided through the HIA Information Sheet '[Overview of changes to BCA 2012 – Housing Provisions](#)' but how will the changes to this year's code affect housing design and construction? This information sheet explains what reference standards have changed, along with providing more information on the new requirement for handrails and changes for wet areas.

Changes to Reference Standards

The main changes for 2012 relate to the removal of design and construction information from the BCA (being the 'Acceptable Construction Practice' (ACP)) in relation to the wet area provisions and masonry construction which will create reliance on the Australian Standards for the technical construction information.

Both Standards are relatively new - the wet area standard (AS 3740 – 2010) is a newly referenced standard in BCA 2012. The masonry standard that relates to masonry in small buildings (AS 4773 – 2010) was first introduced into the BCA in 2011.

As the industry may not be familiar with the new provisions it is important that members are aware of requirements under the new Standards. Members should also note that an Australian Standard can provide more complex and potentially onerous provisions. The technical provisions provided in the BCA are generally simplified or an abridged version of a Standard, making them easier to use.

Another change to the referenced standards in 2012 is the updated standard for residential slabs and footings (AS 2870 – 2011). The construction information on slabs and footings will remain in the BCA and will be based on the previous 1996 version of the Standard. However HIA envisages that most engineers will adopt the new standard and not acknowledge the previous version.

The other main change relates to safe movement and access in a Class 1 building where a handrail will now need to be provided on at least one side of a stairway in habitable areas if the handrail is not provided via the balustrade.

Below are the details on the changes for handrails and the wet area provisions. For [details on the changes to masonry construction and slabs and footings](#) click here.)

DISCLAIMER - 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.

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New requirement for Handrails to Stairs

There is a new requirement in BCA 2012 that relates to safe movement and access to provide a handrail to all stairs and ramps that serve habitable areas in Class 1 buildings.

A handrail will need to be provided along at least one side of a stair or ramp but can be provided via a balustrade with a handrail at a minimum height of 865mm above the stair nosing or floor of the ramp. The height is consistent with the current provisions for balustrades and barriers for stairs and ramps.

The provisions do not apply to stairs or ramps serving non-habitable areas such as attics or storerooms or Class 10 buildings or on landings that are provided with barriers. It is also not required to fit a handrail on stairs and ramps that provide a change in elevation of less than 1m.

The handrail cannot have obstructions that will break a handhold except for newel posts or the like; a winder in a stair can rely on the newel post to provide the handhold without the need to make the handrail continuous around the change of direction.

Application

The most common application for the new requirements will be where the stair is bounded by solid walls without a balustrade incorporating a handrail. In this instance a handrail is now required.

For glass balustrades the requirements under the glazing standard (AS 1288) requires a glass balustrade that serves levels over 1m to incorporate a handrail, so this will satisfy the new provision.

The required height of the handrail is consistent with the balustrade provisions in relation to stairs or ramps, in that the height of the top surface of the handrail must not be less than 865mm measured vertically above the nosing on the stair or floor surface of the ramp. The shape or size of the handrail is not regulated.

The explanatory note provided in relation to the new provisions explains that in the situation where a balustrade terminates a few treads from the bottom, as would be the case in a designer or bullnose type stair, the handrail can terminate where the balustrade is allowed to finish and not continue to the bottom of the stair.

This is an important note as it has in the past been interpreted that the balustrade needs to be continuous to the bottom of the stair which is not the case.

Changes to Wet Area Provisions

The BCA will now only list the areas within a bathroom, laundry or WC that are required to be waterproof or water resistant via a table. This section will also have a few definitions of items that relate to the table.

The technical provisions for installation will be provided through the revised Australian Standard AS 3740 – 2010 *Waterproofing of domestic wet areas* which will introduce some new requirements.

Enclosed and unenclosed shower areas

The definitions for 'enclosed' and 'unenclosed' showers in the Standard vary from the previous BCA definitions in that the current definitions in the standard do not prescribe a distance from the shower connection at the wall as was the case in the BCA. The definitions also relax the requirements for shower screens. Where previously the BCA would not allow a semi-frameless

screen in an enclosed shower, the standard allows this as long as the spread of water from the shower is controlled within the enclosure.

Two types of unenclosed showers are now defined in the standard:

- Type 1 provides for unenclosed showers where a screen or panel is provided and requires a waterstop to be installed to restrict the passage of moisture through the floor.
- Type 2 provides for an unenclosed shower where no screen is provided and the shower is completely open in the room. This requires a waterstop at a distance of 1500mm from the shower connection or shower rose at the wall. Previously a waterstop was required at this distance despite whether a screen was installed or not in an unenclosed shower.

Screens for showers over baths

Showers over baths have been problematic in the past as it is generally difficult to provide adequate screening to avoid the shower over the bath being considered unenclosed which then triggers the requirement to provide a floor waste to accommodate the wet area floor beyond the bath.

The new Standard has addressed this issue in that it only considers a frameless shower screen over a bath is when the screen is less than 900mm long. If a screen is provided over a bath 900mm long or more it will be considered an enclosed shower screen that will prevent the spread of water and would satisfy the definition of an enclosed shower.

The other changes in relation to shower enclosures relate to step down showers. The minimum step down is now 15mm rather than 25mm under the previous provisions. It is also made clear in the relevant diagram that for showers with a hob the hob cannot be or autoclave concrete if the membrane is external or the hob is inside the shower area and not separated by a membrane.

Falls to wet area floors

There are some minor changes to fall ratios in wet area floors.

If the shower enclosure has a vertical separation such as a shower screen, step-down or hob, the ratio can be at least 1:100 where previously the recommended fall ratio was 1:60 to 1:80 for all shower floors. All other showers need a minimum 1:80 fall ratio.

Another important change to this provision is the recognition of residual water remaining on the floor surface due to water tension and noting that this does not affect the drainage performance of the shower.

Sealing junctions

The Standard has introduced more detailed information in relation to the treatment of floor and wall junctions and provides options to seal the junctions depending on whether surfaces are waterproof or water resistant, or non-water resistant. The standard provides clarification that a bead of sealant can be used in certain circumstances to seal junctions.

Bath hobs, where a bath is inserted on a shelf, no longer need a rigid waterstop angle placed under the lip to terminate a waterproof membrane. A new detailed diagram allows a support that can include using sealant to form a ridge where the membrane is terminated to prevent moisture entering the bath frame and below the bath.

New information

The other major changes to the standard include information on drainage channels and a new option to construct a bathroom hob using a ridged metal angle. There are also detailed provisions on recessed built in soap holders and waterproofing requirements.