

# Building newsflash number 474

## Early adoption of Standard for Construction of Buildings in Flood Hazard Areas

## Purpose

To seek comments on early adoption of the Australian Building Codes Board's (ABCB) draft national Standard for Construction of Buildings in Flood Hazard Areas (the draft Standard) in Queensland.

## Background

The ABCB has developed the draft Standard and Information Handbook with the assistance of a reference group made up of representatives from state and local governments, the building and engineering industries, and flood and hydrology experts. A copy of the <u>draft</u> <u>Standard</u> and <u>Information Handbook</u> is attached and <u>available online</u>.

A national regulatory impact statement for the draft Standard is intended to be released in late 2011 by the ABCB and finalised in early 2012. The draft Standard is scheduled to be included in the 2013 version of the Building Code of Australia from 1 May 2013.

In the interim, Queensland is considering early adoption of the draft Standard for new buildings, including new additions.

#### The draft Standard and Information Handbook

The draft Standard provides specific performance requirements and deemed-to-satisfy (DTS) provisions for the design and construction of new buildings in designated flood hazard areas. In Queensland flood hazard areas are designated by local governments.

The draft Standard currently applies to class 1 (houses and townhouses), class 2 (units and flats), class 3 (hotels, motels and backpackers accommodation), class 4 (caretaker's dwellings), class 9a (health care) and class 9c (aged care) buildings.

Some other aspects of the draft Standard are:

- the DTS provisions are limited to cases of likely flooding with a maximum average flow rate of 1.5 metres per second (around 5.4 kilometres per hour)
- floors of habitable rooms must be above the flood hazard level (this includes any freeboard set by local government), while floors of enclosed non-habitable rooms must be no more than one metre below the flood level
- building materials used for structural purposes below the flood hazard level must be capable of resisting damage and deterioration due to contact with flood waters
- utilities and related equipment, including electrical services, plumbing and drainage systems are required to be either located above the flood hazard level or constructed in a flood proof manner.







The Information Handbook is advisory only and provides information to support the application of the draft Standard. It also provides information on measures outside the scope of the draft Standard, for example the use of water resilient materials below the flood hazard level.

### Issues

#### Early adoption of the draft Standard by Queensland

To help address the immediate needs associated with constructing new buildings and additions in flood affected areas, and to generally improve flood resilience of communities across Queensland, it is proposed to adopt the draft Standard as a new mandatory part of the Queensland Development Code (QDC) in late 2011.

#### Application of the proposed QDC

It is proposed that the new QDC will apply to <u>new buildings</u> and <u>additions</u> to existing buildings, but not to other building alterations.

For additions to existing buildings, it is recognised that compliance with the draft Standard could potentially result in situations where the addition is raised to a higher level than the existing part of the building. One potential solution may be for property owners to have the ability to apply to their local government for an exemption from meeting the QDC requirements for building additions where it would be impractical to do so.

#### Proposed Queensland additions to the draft Standard

The Queensland Government is considering including some further aspects in the QDC that are currently outside the scope of the draft Standard. These are expected to include some additions to the <u>mandatory</u> parts of the QDC, as well as some additional <u>non-mandatory</u> parts that will be able to be adopted by local governments on a voluntary basis through a planning scheme, Temporary Local Planning Instrument, or by resolution.

#### Mandatory part

The draft Standard does not set a minimum 'freeboard', i.e. the additional height above the expected flood level to provide a factor of safety, and instead allows the local government to set a freeboard as required. For consistency, it is proposed the new QDC set a uniform minimum freeboard of 300 millimetres, unless otherwise specified by the relevant local government.

#### Non-mandatory part

The draft Standard includes requirements for structural building materials used below the flood hazard level. It is proposed to include non-mandatory provisions in the QDC that expand this requirement to <u>all</u> building materials below the flood hazard level to be flood resilient. If adopted by a local government, this would build flood resilience into buildings built in flood hazard areas and help minimise damage to non-structural materials caused by water, debris and mud. This approach is currently being used by local governments, such as Brisbane City Council and Ipswich City Council, through the introduction of Temporary Local Planning Instruments.









Many commercial buildings and their contents were damaged by the recent Queensland floods. This also highlighted water quality issues, including the clean-up of flood affected buildings, environmental impacts of contaminated floodwaters and concerns for the health of residents, tradespeople and volunteers post floods. It is proposed to expand the types of buildings covered by the draft Standard by including non-mandatory provisions in the QDC that apply to commercial buildings. For example, these buildings could be required to meet the performance requirements of the Standard, and could be required to have a certain part of their gross floor area raised above the flood hazard level to enable potential contaminants to be elevated. This is similar to the approach currently taken by Rockhampton Regional Council, which requires commercial buildings to have 30 per cent of gross floor area 500 millimetres above the designated flood level.

Your comments on the proposal to adopt the draft Standard and additional provisions through a new part to the QDC would be most appreciated. Please provide comments by emailing <u>buildingcodes@dlgp.qld.gov.au</u> (subject: Flood code feedback) by **5pm Thursday 25 August 2011.** 

## **Contact for further information**

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