



# Building newsflash number 483

## Fixing of concrete and terracotta tiles on roofs in cyclonic regions

### Purpose

To provide advice on fixing concrete and terracotta tiles to roofs of buildings located in categories 2 (C2) and 3 (C3) cyclonic wind regions.

### Background

In February 2011, Cyclone Yasi crossed the coast near Mission Beach, Queensland. A subsequent investigation carried out by the James Cook Cyclone Testing Station (CTS) into the damage caused by Cyclone Yasi found that buildings constructed since the 1980s generally performed well. However, the investigation found that damage occurred to some buildings as a result of, among other things, terracotta and concrete hip and ridge roof tiles being dislodged.

The [CTS report](#) has been published to inform future design and construction standards and consideration of community safety issues. The report recommends the performance of building products, Australian Standards and the cyclone construction requirements of the National Construction Code (NCC) be reviewed to reduce the likelihood of this damage occurring in the future.

The Australian Building Codes Board (ABCB) is responsible for the development of the NCC on behalf of all states and territories. The ABCB is currently considering the CTS report and liaising with government, industry and Standards Australia on the implications the recommendations may have on work it already has underway on the adequacy of existing cyclone construction standards. If amendments to Australian Standards referenced in the NCC (in particular AS2050) are proposed, it is unlikely they will be included before May 2013.

The Roofing Tile Association of Australia has been proactive in addressing this issue. It has released a [guidance note](#), on behalf of the roofing tile industry, on

the recommended practice that should be adopted for installing terracotta and concrete roof tiles in cyclone categories C2 and C3 until AS2050 is amended. The association advises that tiles in C2 or C3 rated sites must be fixed with an approved clip or screw, or another method advised as being appropriate by the tile manufacturer and all cut tiles should be similarly fixed. Flexible pointing material should not be relied upon as the sole means of fixing ridge and hip tiles, even where the materials are labelled as being a mechanical fixing product.

For categories C4 and C5, the Association recommends contacting your tile supplier for guidance on the correct installation of tiles in these areas.

## Legislation

- National Construction Code 2011:
  - Volume 2 of the BCA refer to 3.5.1.0 and 3.5.1.2
  - Volume 1 of the BCA refer to Part A2, B1.4 and F1.5

## Recommendation

It is recommended that all terracotta and concrete tiled roofs in C2 and C3 wind regions be fixed in accordance with the attached guideline dated October 2011 and endorsed by the Roofing Tile Association of Australia until such time as the NCC is amended to address the issue.

## Contact for further information

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