

Foam insulation

BRANZ has suspended further investigation into the performance of Urea Formaldehyde Foam Insulation (UFFI) after the DBH clarified that installation of these products requires a building consent.

BRANZ and EECA started researching the effects of retrofitting Urea Formaldehyde Foam Insulation into homes in late 2009, following Department of Building and Housing (DBH) Determination 2008/35 and many queries from industry. The results of this investigation were published in BRANZ Study Reports SR233 and SR234 and in *Build* 119 (August/September 2010, page 78).

Performance issues found

The research found issues with the performance of UFFI products within most, if not all, properties where it had been used. This ranged from poor installation and areas that have been missed by the applicator, through to shrinkage of the foam. These all significantly affect the thermal performance of the product and the building.

Laboratory research and site visits have also shown that the installation of the foam can compromise the performance and function of the water management cavities behind the cladding – UFFI can potentially provide drainage paths to the wall wrap. Because of this, UFFI does not meet New Zealand Building Code criteria that there should be no systemic water bridging from the back of the cladding to the wall wrap position.

Building consent needed

In December 2010, the DBH issued Determination 2010/130 on the use of foam insulation within a brick veneer-clad house in Dunedin. This confirmed the decision of Dunedin City Council to issue a notice to fix requiring a building consent for the installation of foam insulation.

The DBH has also recently updated information about building work that does not require a building consent under the Building Act 2004. A *guide to building work that does not require a building consent* from the DBH is targeted at building practitioners, architects, engineers, building surveyors, building consultants and building owners who are considering undertaking or providing advice about building work. Guidance in this publication on Exemption (jg) of Schedule 1 for installing thermal insulation in an existing building, states that there is no exemption where the external walls of a house are to be injected with expanding insulating foam, that is, a building consent is required.

For more information, get free downloads of BRANZ Study Reports from the BRANZ Shop at www.branz.co.nz. The Department of Building and Housing publications are available from www.dbh.govt.nz. ◀