

New guidance on the use of combustible materials within the external wall construction of buildings over 18m in height

In light of the recently commissioned Government tests and DCLG advice on whole wall systems, NHBC has reviewed its position taking account of this new test evidence.

What do the Building Regulations require?

The external envelope of a building should not provide a medium for fire spread if it is likely to be a risk to health or safety.

Paragraphs 12.5 – 12.9 of Approved Document B - Volume 2 deal with external wall construction. In particular:

- Paragraph 12.5 says that external walls should either meet the guidance given in paragraphs 12.6 to 12.9 or meet the performance criteria in BR135 for cladding systems using full scale test data from BS 8414-1:2002 or BS 8414-2:2005.
- Paragraph 12.7 (dealing specifically with the use of insulation materials/products) says that in a building with a floor level 18m or more above ground level any insulation product, filler material (not including gaskets, sealants and similar) etc. used in the external wall construction should be of limited combustibility. However this restriction does not apply to masonry cavity wall construction which complies with Diagram 34 in Section 9 of the Approved Document.

What do the NHBC Standards require?

NHBC Standards require compliance with Building Regulations and also that materials provide satisfactory performance.

In addition, Chapter 6.9 'Curtain walling and cladding' of the NHBC Standards advises that reference should be made to BR135.

Demonstrating compliance

The guidance within the Approved Document has not changed and allows for several options to demonstrate compliance. However, the latest test data referred to above provides new information on the performance of tested materials in complete wall systems.

This creates questions over the in-service performance of untested systems. In view of this uncertainty, NHBC will only accept the following as demonstrating compliance:

- The use of materials of limited combustibility as stated in Table A7 of Approved Document B for all elements of the cladding systems both above and below 18m. This includes the insulation, internal lining board and the external facing material.
- External walls should meet the performance criteria given in the BRE Report *Fire Protection of external thermal insulation for walls of multi storey buildings* (BR 135) for cladding systems using full scale test data from BS 8414-1:2002 or BS 8414-2:2005.

For facades that incorporate brickwork (for which there are no established tests) please contact your NHBC Project Manager or Surveyor.

For further information or advice, please contact technicalservicessupport@nhbc.co.uk