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Independent report

## Fire test report: DCLG BS 8414 test no.6

The report of the result of the large-scale test number 6 which shows how Aluminium Composite material (ACM) cladding with a limited combustibility filler (category 1 in screening tests) with stone wool insulation behaves in a fire.

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Ministry of Housing, Communities & Local Government  
(<https://www.gov.uk/government/organisations/ministry-of-housing-communities-and-local-government>)

Applies to:

England

### Documents

#### Fire test report: DCLG BS 8414 test no.6

([https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/648794/DCLGtest6\\_BS8414\\_Part\\_1\\_test\\_report\\_Issue\\_1.1.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/648794/DCLGtest6_BS8414_Part_1_test_report_Issue_1.1.pdf))

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### Details

This report is part of a series, commissioned by the Department for Communities and Local Government (DCLG) intended to establish how different types of ACM panels in combination with different types of insulation behave in a fire.

Following the fire at Grenfell Tower in London on 14 June 2017, the government established an Independent Expert Advisory Panel (<https://www.gov.uk/government/news/expert-panel-appointed-to-advise-on-immediate-safety-action-following-grenfell-fire>) to advise on immediate measures that should be put in place to help make buildings safe.

On 6 July the Independent Expert Advisory Panel recommended a series (<https://www.gov.uk/government/news/expert-panel-recommends-further-tests-on-cladding-and-insulation>) of large scale, BS 8414 (<https://shop.bsigroup.com/ProductDetail/?pid=000000000030357123>) tests be carried out in order to help building owners make decisions on any further measures that may need to be put in place.

This series of tests initially included 6 combinations of cladding systems. The detailed design of each test specimen has been reviewed by the Expert Panel and other industry bodies to ensure that it is representative of the systems that are in common use including the way it is fixed. These 6 tests incorporate each of the 3 common types of ACM panel, with core filler materials of unmodified polyethylene (PE), fire retardant polyethylene, and limited combustibility mineral. The 2 insulation materials used in the testing are rigid polyisocyanurate foam and non-combustible stone wool.

To further build the evidence available for experts and building owners so they can make informed safety decisions, on 8 August government commissioned a seventh large scale test – testing ACM with fire retardant polyethylene filler (category 2 in screening tests) with phenolic foam insulation.

Today's test report relates to a combination of Aluminium Composite Material (ACM) cladding with a limited combustibility filler (category 1 in screening tests) with stone wool insulation.

The test result shows that this combination of materials does meet the criteria set out in building regulations guidance BR 135 (<https://www.brebookshop.com/details.jsp?id=327137>).

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