Advice on external wall systems that do not incorporate Aluminium Composite Material

This Advice Note is for the attention of anyone responsible for, or advising on, the fire safety of external wall systems of residential buildings 18m or above in height. It addresses concerns about the fire safety implications of such systems that do not incorporate Aluminium Composite Material (which is covered in separate advice)\(^1\). It has been developed in consultation with MHCLG’s Independent Expert Advisory Panel.

**Independent Expert Advisory Panel advice**

- Building owners are responsible for the safety of their buildings\(^2\).
- Building owners or their appointed competent professional advisors(s)\(^3\) should check that the external wall systems on their buildings are safe.
- For existing buildings this means only materials that are of limited combustibility (class A2 or higher) should have been used, unless the system has achieved BR135 classification via a BS 8414 test.
- The owner or their appointed competent professional advisors(s) should ensure that the system has been installed and maintained appropriately.
- It is a legal requirement for a responsible person as defined within the Regulatory Reform (Fire Safety) Order 2005 to have an up to date fire risk assessments and to take general fire precautions for buildings within the scope of the Regulatory Reform (Fire Safety) Order 2005.
- Class 0 rating (for surface spread of flame) alone is not evidence a system is safe.
- If the system does not pass these simple requirements, then the owner should seek professional advice and consider remediation measures.
- The clearest way to ensure safety is to remove unsafe materials.

**Decision Tree**

1. **Are all the materials (including facing panel and insulation) in the external wall system limited combustibility?**
   - Yes
   - No

2. **Has the system achieved BR135 classification by passing a BS 8414 test?**
   - Yes
   - No

   - Ensure the system has been installed as per the BS 8414 test.
   - Ensure it has been maintained appropriately.
   - Review wider fire safety measures.

   External wall systems rely upon design detailing such as cavity barriers and fire stopping to inhibit fire spread. Building owners should seek professional advice on whether the external wall system has been installed and maintained as recommended by the manufacturer/supplier.

   - Seek immediate professional advice and consider remediation measures.
   
   To assist building owners in assessing what measures they should consider taking to make their buildings safe the Government published a step by step guide to remediating buildings with unsafe ACM cladding\(^*\); it is also relevant for buildings with other external wall systems.

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\(^1\) [https://www.gov.uk/guidance/building-safety-programme](https://www.gov.uk/guidance/building-safety-programme)

\(^2\) For buildings that fall within the scope of the Regulatory Reform (Fire Safety) Order 2005, ensuring fire safety falls to the ‘Responsible Person’, who could be an employer of a work place or a person with control of the premises who may not be a building owner.

\(^3\) Guidance on professional advisors and where to find them is available in [the information note](#).
Background and further advice

1. Since the Grenfell Tower fire tragedy, the government’s Building Safety Programme has focussed on identifying and advising on interim and remedial measures for high-rise buildings with Aluminium Composite Material (ACM) cladding systems, because of its particularly significant hazardous nature.

2. For new residential buildings of 18 metres or more (or where building work is carried out on existing buildings of 18 metres or more)\(^4\), the government has introduced a ban on the use of combustible materials in external walls. The ban limits materials to products achieving a European classification of Class A1 or A2-s1,d0, which is in line with classifications applied in many other EU member states.

3. However other external wall systems are known to have been used on existing buildings which incorporate combustible material (including insulation and facing panels). These include but are not limited to: Metal Composite Materials (MCM) faced with other metals such as zinc, copper, and stainless steel; High Pressure Laminates (HPL); and rendered insulation systems. All will perform differently when exposed to a fire\(^5\).

4. For these buildings the Independent Expert Advisory Panel’s advice is that the systems should have completed a BS 8414 test and successfully attained BR 135 classification – see decision tree above.

5. Where an Assessment In Lieu of Test (sometimes referred to as a desktop study or technical assessment) of the likely performance of external wall systems has been undertaken, the technical basis of such assessments should be checked to ensure that all assumptions are technically robust. The assumptions should be based on established scientific and engineering principles and supported by reference to relevant BS 8414 fire test data. The assessment and tests should have been undertaken by competent professionals.

6. The government has issued new guidance on undertaking Assessments In Lieu of Tests which reinforces this and states that assessments should not be regarded as a way to avoid a test where one is necessary. Building owners should consider this in assessing the robustness of any assessments which have been undertaken.

7. Following the ban on the use of combustible material in external walls\(^4\) in certain high-rise buildings which comes into effect on 21 December 2018, it will no longer be possible to demonstrate compliance with Building Regulations by conducting a BS8414 test or assessments in lieu of tests for buildings falling within the scope of the ban. Building owners and those providing professional advice should also consider the holistic fire strategy to ensure that the performance of the wall system achieves the functional requirements of the Building Regulations.

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\(^4\) The ban applies to all new buildings (or where building work is carried out on a building) which have a storey 18 metres or more above ground level and which contain flats, a hospital, residential care premises, student accommodation and dormitories in boarding schools.

\(^5\) The Government has commissioned research to support further understanding in the industry of the fire performance of external wall systems. The panel will review this advice again when results of this testing are available.
8. Spandrel panels (including window and infill panels) are also part of the external wall of the building and should be checked. Specific advice on spandrel panels is available on gov.uk.

9. It is also a legal requirement for a responsible person to undertake a fire risk assessment for buildings within the scope of the Regulatory Reform (Fire Safety) Order 2005. Local authorities and fire and rescue services may take enforcement action where responsible persons have not addressed fire hazards. The Government has issued guidance for local authorities on the assessment of high-rise residential buildings with unsafe cladding.

10. Building owners should be aware that Government has committed to reform the regulatory system and agreed with the principles outlined within the Building a Safer Future, Independent Review of Building Regulations and Fire Safety. Under the proposed reforms, a new category of duty holder is proposed to be required to review the safety of their existing buildings, remediating them where necessary. Our strong advice is that building owners should already be taking this approach.

11. Helpful advice on how to manage fire safety in blocks of flats is set out in fire safety in purpose built blocks of flats published by the Local Government Association.

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