

Aluminium Composite Materials

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What is Aluminium Composite Material (ACM)?

Aluminium Composite Material is a flat panel that consists of two thin aluminium sheets, which are bonded to a non-aluminium core.

When correctly specified; professionally installed and officially certified to perform to code and to regulations, ACM's are a building material that are lightweight and often used to improve the aesthetic appeal of a building along with improving weather resistance.

Aluminium composite panels are often manufactured with various types of cores that should be strictly reviewed and assessed as to their suitability. A key criteria is the height of a structure and the fire resisting capabilities.

What materials are often found in core?

- Mineral fibre - nowadays usually a stone mineral wool rather than a glass fibre
- PUR (polyurethane) foam
- PIR (polyisocyanurate) foam
- Polystyrene
- PF (Phenolic foam)

How to identify ACM Panels?

A useful checklist has been produced by Aviva that highlights key observations when reviewing composite materials:

- Two sheets of metal - one external and one internal
- Evidence of the type of core from joints around doors, damaged sections, holes left from removed services e.g. flues, pipes etc
- Panel identification marks. Some manufacturers print a UV identification code on the internal face - others have printed identification tape on the longitudinal panel edge.
- Labels attached to the panels.
- The panel profile which can provide a pointer to the type of cladding system

What should I do if I have Aluminium Composite Material on my building?

As asset owners and operators, the Department for Communities and Local Government are working closely with the Building Research Digest to enable fire testing of samples of cladding from high rise buildings of concern.

The Department for Communities and Local Government announced on the 20 June 2017, that buildings with a floor over 18m above ground level, where ACM panels are identified, it is necessary to establish whether the panels are of a type that complies with the Building Regulations guidance i.e. the core material should be a material of limited combustibility or Class A2.1.

Check any installation/support documentation to ensure that the installation and the panel is approved by LPS 1500 and LPS 1531, and that the approved panel will perform adequately in a fire.

Ensure your building is insured, each insurer will have their own strategy in respect of underwriting risks containing Aluminium Composite Material and advice should be sought direct.

If you wish to review your portfolio, please get in touch with a member of team to discuss your requirements in detail.

Sources of Further Information

- Association of British Insurers - Technical briefing: Fire Performance of Sandwich Panel Systems - May 2003 and partially revised 2008. This document is from ABI on Tel. No. 0207 600 3333.
- EPIC (Engineered Panels in Construction) - Insulated Panels The Fire Safety Order (2005) at: <http://www.epic.uk.com/rrfso.jsp>
- Loss Prevention Certification Board List of Approved Products and Services at: www.redbooklive.com
- CLG Fire safety law and guidance documents for business at:
 - ❖ www.communities.gov.uk/fire/firesafety/firesafetylaw/
 - ❖ <http://www.rics.org/uk/news/news-insight/news/tower-checks/>
 - ❖ http://www.rics.org/Global/melanie_dawes_letter_210617_rt.pdf

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