

WHICH CLADDING ARE YOU TALKING ABOUT?



The word 'cladding' is widely used as a generic term to reference an element, product, assembly or system used within a wall construction. However, the word currently has very emotive connotations and it is important to ensure that the term 'cladding' is used in the correct context in both the spoken and the written word and that its use is clarified to ensure that it is not misrepresented.

The Metal Cladding and Roofing Manufacturers Association (MCRMA) has produced a guidance document, *GD34 The definition of cladding within the construction sector* which sets out to define the different meanings for the word 'cladding' when used to describe products, materials and systems for a wall within construction projects.

Wall cladding – primarily from metals such as aluminium and steel

A single layer or assembly of various materials which offers a range of functionality that forms a vertical or inclined wall which project horizontally from the internal environment to the external environment of a building. Elements of the cladding assembly or single layer may be used to provide weather resistance, thermal insulation, structural stability and load carrying capacity and may be adopted to enhance the appearance of buildings and colour coated for aesthetic reasons.

Each element of the cladding assembly or single layer may have exclusive functionality or multiple functionality, depending upon its application, material, use and position within the wall. Single layers or an assembly of materials which form products, assemblies and/or systems should comply with current Building Regulations and all relevant standards, test methods or assessment procedures.

Lightweight cladding

Lightweight cladding is a layer or assembly, which has self-weight and may be subjected to external forces i.e., wind, which is supported by and fixed to an inner self-supporting structure. Examples include:

- Sandwich panels
- Rainscreen façade systems
- Timber sheathing or lathes
- Metal profile sheeting
- Tensile fabric coverings
- Brick slips

Examples of the use of the word cladding as defined by the MCRMA are given below. In this context, the examples are used to describe products, materials, systems and assemblies manufactured and supplied by member companies for use within the commercial and domestic sectors which encompass industrial, commercial, office and warehouse buildings; rural and agricultural buildings; residential and domestic buildings.

Single skin

A one-piece element manufactured from metal, which is profiled (shaped) at the factory to produce a self-supporting sheet used for wall applications. The element has inherent structural strength, can be subjected to external imposed loads i.e., wind, provides a degree of weather resistance and can be supplied with a pre-coated finish to provide durability and aesthetics.

Built-up assembly

A multi element assembly incorporating self-supporting metal inner and outer profiles (shaped), which are produced at the factory and are held apart by a site installed structural support system. The space between the inner and outer profiles is filled with thermally efficient Class A1 mineral fibre insulation.

Sandwich panels

An assembly of various components and materials comprising of metal profiled (shaped) outer and inner skins, which are either adhesively or cohesively bonded, at the factory, to a thermally efficient expanded foam or fibrous core material to provide a wall, skin or assembly.

Metal rainscreen façade systems

An outer panel of water-shedding metal or metal laminated material where the associated materials are attached and supported by bracketry on the outside of the existing façade as in the case of refurbishment or a new structural wall as in the case of new build. The through wall construction and assembly, which projects horizontally from the internal environment to the external environment of a building can comprise of various and different layers which are made from diverse materials.

The assembly must include site installed fire stops and cavity barriers at pre-determined vertical and horizontal intervals and at the surrounding positions of through wall penetrations to stop the progression of fire.

Heavyweight wall

This is sometimes referred to as cladding if used in the external leaf of a double skin wall and comprises a self-supporting layer or assembly, which may be subject to external forces i.e., wind, which transfers self-weight and imposed loads, through itself, to the ground. Examples include:

- Brickwork
- Blockwork
- Precast or preformed panels
- Stone
- Light or heavy steel framing systems
- Timber framing systems

MCRMA member companies provide a wide range of building envelope solutions for metal-based roofing and cladding products and services and can advise on the suitability and performance of materials, systems and assemblies.

This guidance document is also available as an online CPD module covering single skin, built-up assemblies, metal rainscreen façade systems and sandwich panels. Visit www.mcrma.co.uk/online-cpds/ for further details.

This article first appeared in RCI magazine, June 2021

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