

MCRMA on-line CPD courses

MCRMA's online CPD programme is open to anyone seeking to develop their knowledge and skills within the metal building envelope sector. Each module also offers members of professional institutions an opportunity to earn credit towards their annual CPD requirement.

MCRMA provides informative self-study training, delivering good learning value with an online assessment to check knowledge. The course material is studied offline with an online assessment component to verify knowledge. It is a training with learning and CPD value accredited by the CPD Certification Service.

To earn CPD credits, first select your chosen document below and study carefully. When you are ready to take the CPD, click the link opposite to select the CPD of your choice and answer the questions. You will receive your results instantly, and if all the questions are correctly answered, you will be able to download your CPD certificate straight away. There are no restrictions on how many times you can take a CPD.

GD10 WORKING AT HEIGHT: A FALL PREVENTION AND SAFETY CHECKLIST

Roofing technologies, material guarantees and the growth in the use of renewable energy technology systems for example, photovoltaic panels (PVs) make it important to understand specific requirements for access, inspection and maintenance at roof level.

This CPD introduces the key issues that need to be taken into account to ensure that these requirements are fully understood and that safe work at height must be considered from the outset on any project. Click on the link opposite to take the CPD.

(CPD value 60 minutes or equivalent)

GD15 GUIDANCE FOR WIND LOADINGS ON ROOF AND WALL CLADDING

Buildings and their cladding are expected to withstand the worst that the weather can throw at them without risk of failure or loss of function.

This CPD introduces the reader to the key issues that need to be taken into account when calculating wind loadings on both the roof and walls of industrial and commercial buildings. The CPD explains the factors which can influence the wind loading and the zonal changes around the building envelope. Click on the link opposite to take the CPD.

(CPD value 60 minutes or equivalent)

GD16 GUIDANCE FOR SNOW LOADING ON CLADDING

Heavy snow falls can result in damage to roofs and their supporting structures. Good building design in terms of resistance to snow loading starts with the correct specification of the roof cladding and its supporting structure.

This CPD distinguishes between types of snow load, the factors affecting snow loading and snow loading calculations. By following the recommended calculation procedures, building designers can ensure that the roofs of their buildings do not collapse. Click on the link opposite to take the CPD.

(CPD value 60 minutes or equivalent)

GD17 A GUIDE TO SITE INSTALLATION OF INSULATED ROOF PANELS

The performance of any building envelope is highly dependent on a number of factors; not least of all the correct installation of the roof.

This CPD outlines the key issues that need to be taken into account when installing an insulated roof panel system. Insulated panels include through fixed and secret fixed panels where the fasteners are not visible. It is imperative that the work is carefully planned to ensure that it can be done in a safe manner and in line with good site practice. Method statements and risk assessments need to be prepared. Click on the link opposite to take the CPD.

(CPD value 60 minutes or equivalent)

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GD19 EFFECTIVE SEALING OF END LAP DETAILS IN METAL ROOFING CONSTRUCTIONS

This CPD introduces the user to key issues that need to be addressed to ensure the effective sealing of end laps in metal roofing constructions. The CPD covers the following combinations – profiled metal to metal; profiled metal to rooflight; sandwich panel to panel and sandwich panel to factory assembled rooflight. Click on the link opposite to take the CPD.

(CPD value 60 minutes or equivalent)

GD20 SERVICEABILITY STATES AND DEFLECTIONS CRITERIA

In structural engineering, serviceability refers to the conditions under which a building is still considered useful.

This CPD sets out an overview of the issues that need to be addressed in order to meet the performance criteria identified by the building designer. The CPD explains the importance of setting the deflection criteria at the design stage and implementing them at the construction stage to ensure that all elements of the construction perform as expected. The CPD also includes guidance on installation tolerances for purlins and rails supporting profile metal roof sheeting and wall cladding. Click on the link opposite to take the CPD.

(CPD value 60 minutes or equivalent)

GD24 INSTALLATION OF SIDE RAILS AND PURLINS

The ability of a steel framed building to perform adequately depends on good interaction between the secondary steelwork and the cladding; and crucial to this interaction is the correct installation of the purlins and side rails.

This CPD illustrates how deviation from the correct tolerances can affect the performance of not only the cladding system and its fixings but also of associated components such as gutters and flashings. Click on the link opposite to take the CPD.

(CPD value 60 minutes or equivalent)

GD26: ALUMINIUM FABRICATIONS: A GUIDE TO GOOD PRACTICE

This CPD provides the user with theoretical and practical guidance in the design and specification of aluminium fabrication, including fasteners and sealants. The CPD discusses the principal approaches of the widely used fabrication fixing methodologies of dead fix and floating fix, examines the effects of thermal movement and provides guidance on correct fastener specification.

It is an informative self-study with an online evaluation to test knowledge. Click on the link opposite to take the CPD.

(CPD value 120 minutes or equivalent)

GD27 INSTALLED TOLERANCES: BEST PRACTICE

The purpose of this CPD is to make the cladding sub-contractor aware of the relevant tolerances that are allowed in the fabrication and erection of the main steel frame. It is important that the installation and deflection criteria are set at the design stage and implemented at the construction stage to ensure that all elements of the construction perform as expected and also that the interface, interaction and fit between components and systems meet with expectations.

This is an informative self-study course with an online assessment component to verify knowledge. It is a training with learning and CPD value. Click on the link opposite to take the CPD.

(CPD value 60 minutes or equivalent)

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GD28 MINERAL WOOL INSULATION INSTALLATION: BEST PRACTICE GUIDE

Insulating a building is one of the most cost-effective ways of saving energy and reducing heating and cooling bills. Installation practices at the construction phase must ensure that the insulation of the building fabric meets with design stage calculations, manufacturer's guidance and Building Regulations.

This CPD sets out an overview of the factors that need to be taken into account in the storage, handling and installation of mineral wool insulation in built-up metal roof and wall cladding systems. The CPD examines design factors and also includes guidance on both roof and wall installation and standards of workmanship. Click on the link opposite to take the CPD.

(CPD value 60 minutes or equivalent)

GD29 MANUFACTURING TOLERANCES FOR PROFILED METAL ROOF AND WALL CLADDING

This CPD introduces the user to the key requirements that need to be taken into account when assessing manufacturing tolerances for profiled metal roof and wall cladding. Click on the link opposite to take the CPD.

(CPD value 30 minutes or equivalent)

GD31 PRE-LAMINATED MEMBRANE AND FACTORY ASSEMBLED INSULATED PRE-LAMINATED MEMBRANE GUTTERS

This CPD provides the user with best practice advice on the specification of pre-laminated and factory assembled insulated pre-laminated membrane gutters associated with metal-based roofing systems for industrial, commercial and warehouse applications.

The CPD defines terminology used and provides advice about structural design, design capacity and thermal performance. It deals with the thermal welding of the polymeric membrane and the importance of carrying out sample QA peel tests to set welding parameters during the installation process. Click on the link opposite to take the CPD.

(CPD value 60 minutes or equivalent)

GD33: FASTENERS FOR METAL ROOF AND WALL CLADDING: DESIGN, DETAILING AND INSTALLATION GUIDE

This CPD provides the user with a comprehensive best practice guide on the selection, use and performance of fasteners designed for use within the popular metal roofing and cladding systems selected by the UK market for modern industrial, commercial and residential buildings.

The CPD defines the terminology used, the different types of fasteners available, performance criteria, detailing, installation and tooling. Click on the link opposite to take the CPD.

(CPD value 120 minutes or equivalent)

GD34: THE DEFINITION OF CLADDING WITHIN THE CONSTRUCTION SECTOR

The word 'cladding' is widely used as a generic term to reference an element, product, assembly or system used within a wall construction. This CPD 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 and to ensure that the term is used in the correct context.

The CPD covers single skin, built-up assemblies, metal rainscreen façade systems, sandwich panels. It is an informative self-study training which can increase participants' knowledge and offer CPD and learning value. Click on the link opposite to take the CPD.

(CPD value 30 minutes or equivalent)

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GD35: AESTHETICS: ASSESSMENT AND EVALUATION OF COSMETIC IMPERFECTIONS OR DAMAGE

'Aesthetics' within the context of building is used to describe the positive appearance of colour, form and details used within the area of the roof and façade. However, it can also be used to describe imperfections which may require visual improvement.

This CPD provides advice about how to assess and evaluate an aesthetic or cosmetic imperfection and explains possible reasons for the flaw and offers advice about how the subject can be resolved or rectified. Click on the link opposite to take the CPD.

(CPD value 120 minutes or equivalent)

GD36 CAVITY BARRIERS FOR VENTILATED RAINSCREEN FAÇADES

Most modern buildings contain a multitude of concealed cavities and voids within or passing through walls, floors, ceilings and roofs. Effective fire stopping and cavity barriers are essential to restrict the spread of smoke or flames, and to maintain compartmentation. Cavity fire barriers are an essential element of fire protection.

This CPD sets out to consider the key questions about cavity barriers and offers guidance for their correct specification. It is a useful self-study training with an online assessment component to verify knowledge. It is a training with learning and CPD value.

(CPD value 60 minutes or equivalent)

GD38 OVER-ROOFING GUIDANCE DOCUMENT

Roofs which are underperforming can be refurbished to meet current performance standards. Roofs are overlaid for a variety of reasons, including water ingress, sheet failure, poor performance or to extend the life of the building. Leased buildings would offer a better return on investment.

This CPD provides guidance about the structural and performance parameters which should be considered at the design phase, statutory considerations for compliance, provides information about the various products, materials and systems which can be used and details performance specifications for individual components. The CPD also addresses site safety, supervision at the installation phase and future maintenance.

(CPD value 90 minutes or equivalent)

GD39 SUSTAINABILITY AND DURABILITY OF METAL ROOFING AND CLADDING SYSTEMS

SECTION 1: INTRODUCTION AND OVERVIEW

Metal roofing and cladding systems and their associated components can significantly contribute to achieving a sustainable building envelope solution to meet both current and future needs and requirements, thanks to their low maintenance, durability, high recycled content, recyclability and energy efficiency.

This CPD sets out to consider a range of sustainable building design solutions and offers guidance for the correct specification of a range of sustainable high performance complementary components and systems. It is a useful self-study training with an online assessment component to verify knowledge. It is a training with learning and CPD value.

(CPD value 90 minutes or equivalent)

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GD39 SUSTAINABILITY AND DURABILITY OF METAL ROOFING AND CLADDING SYSTEMS

SECTION 3: ENVIRONMENTAL ASSESSMENT METHODS

Assessment methods and rating systems for buildings can help encourage clients, developers, and design teams to provide sustainable buildings which are energy efficient, material and resource efficient, offer healthier internal environments with limited waste emissions and pollution. These can provide benchmarks, introduce minimum standards, and encourage better levels of practice.

This CPD compares the two main assessment methods namely BREEAM (Building Research Establishment Environmental Assessment Method) and LEED (Leadership in Energy and Environmental Design) Green Building Rating System, which are used internationally. It describes how assessment credits are allocated and the points system to establish an overall rating system.

(CPD value 60 minutes or equivalent)

GD39 SUSTAINABILITY AND DURABILITY OF METAL ROOFING AND CLADDING SYSTEMS

SECTION 4: DURABILITY OF METAL ROOFING AND CLADDING SYSTEMS

The aim of current UK government policy is to achieve net zero by 2050 and one way that can assist in this is through having buildings built for durability with long design lives and utilising materials, products and systems to construct them that can match the desired design life.

This CPD examines how Life Cycle Costing can be used to consider all relevant costs to ensure value for money over the life of a building. It is a useful self-study training with an online assessment component to verify knowledge. It is a training with learning and CPD value.

(CPD value 60 minutes or equivalent)

GD39 SUSTAINABILITY AND DURABILITY OF METAL ROOFING AND CLADDING SYSTEMS

SECTION 5: METALS: STEEL AND ALUMINIUM

Metal roofing and cladding systems and their associated components can significantly contribute to achieving a sustainable building envelope solution to meet both current and future needs and requirements, thanks to their low maintenance, durability, high recycled content, recyclability and energy efficiency.

This CPD examines in detail the two most common metals used for manufacturing profiled roofing and cladding sheets are mild steel, especially in a colour coated format, and aluminium. It is a useful self-study training with an online assessment component to verify knowledge. It is a training with learning and CPD value.

(CPD value 60 minutes or equivalent)

GD39 SUSTAINABILITY AND DURABILITY OF METAL ROOFING AND CLADDING SYSTEMS

SECTION 6: METALS – OTHER METALS

Metal roofing and cladding systems and their associated components can significantly contribute to achieving a sustainable building envelope solution to meet both current and future needs and requirements, thanks to their low maintenance, durability, high recycled content, recyclability, and energy efficiency.

This CPD focuses on the durability and performance of metals other than steel and aluminium which are commonly used for roofing and cladding. It compares material composition and performance, and it also highlights suitable applications and limitations in use in various atmospheric environments and avoidance of contact with other metals and materials.

(CPD value 60 minutes or equivalent)

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GD39 SUSTAINABILITY AND DURABILITY OF METAL ROOFING AND CLADDING SYSTEMS

SECTION 8: COMPONENTS

Metal roofing and cladding systems can offer total sustainable building design solutions thanks to a range of complementary components and systems which include sustainable high performance thermal and acoustic insulation products; high durability fixings, fillers, sealants and membranes; daylight options, flexible solar PV options and fastening systems; and 'green' and 'brown' roof options.

This CPD gives an overview of these components, commenting on their durability and use within a metal roofing, cladding or façade system. It is a useful self-study training with an online assessment component to verify knowledge. It is a training with learning and CPD value.

(CPD value 90 minutes or equivalent)

GD 40 UNDERSTANDING MEMBRANES IN VENTILATED RAINSCREEN FACADES

Rainscreen facades offer an aesthetic exterior and a technical solution for both new and refurbishment projects. However, detailing at the design stage and the installation stage can present challenges which require input from manufacturers and suppliers of systems and components.

This CPD takes a holistic approach to the key elements of design around airtightness, water ingress, condensation control (vapour permeability), and fire protection to achieve the optimum performance and long-term durability in ventilated rainscreen facades. The document covers terminology of membranes including main functions, placement within the envelope, airtightness, analysis and regulations plus detailing and installation.

(CPD value 60 minutes or equivalent)

GD 41 WIND LOADING FOR METAL ROOFING & CLADDING – PROTOCOL FOR CALCULATIONS

A key factor in the design of roof and wall cladding systems is the resistance to wind loading. This must be calculated for each building and correlated with the specified profile load/span tables and specified fastener capacity, type, location and spacing.

This CPD gives guidance to the person undertaking a wind load calculation using specialist software and assists with the interpretation of results. In addition, it details the relevant standards, the essential input data for building type, shape, size and location plus references the key size and shape of wind loading zonal areas on the building and appropriate safety factors.

(CPD value 60 minutes or equivalent)