Delta Membrane Systems Ltd

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CPD Overview

Delta Membrane Systems Limited is a manufacturer and provider of specialist structural waterproofing solutions, covering Types A, B and C waterproofing, combination waterproofing, damp proofing, basement drainage, flood resilience and ground gas protection.

We aim to deliver excellence by putting our customers at the heart of everything we do.

Delta unites innovative products with highly skilled waterproofing design specialists. Our in-house team of technical consultants support our clients in providing comprehensive, reliable, and expert advance, identifying, and mitigating risk and establishing opportunities for added value.

Delta's On-Site Team (DOAS) offer technical solutions to project specifics from technician training to overseeing installation of Delta Systems and troubleshooting.

Our projects include commercial and residential structures, new-build and refurbishment, housing developments and civil infrastructure.

Our technical consultants cater to a diverse client base, including architects, developers, contractors, sub-contractors, engineers, and homeowners all centred on latest industry guidance, current legislation, standards, and best practice.

Our nationwide network of Delta Registered Installers offers a fully guaranteed installation service.

Delta proudly supports the Women of Waterproofing Networking Group. An independent networking group that promotes gender equality in the waterproofing sector, seeking to inspire, retain and attract females.

Delivering world-class solutions, Delta is an impeccable partner on every project.

Our products comply with British Standards 8102:2022, 85500:2015 and 8485:2015+A1:2019, Broof(t4) and are BBA Certified.

Delta provides a full range of solutions for architects, specifiers, designers, developers, civil engineers, contractors, and homeowners.

Our projects range from: commercial/residential developments, new-build and refurbishment, civil infrastructure projects, retail units and warehouses, leisure facilities, archives/libraries/vaults, hospitals, schools, underground rail stations and tunnelling, underground car parking areas, listed buildings, heritage buildings, ICF (insulated formwork construction) and basements.

Delta Services:

Waterproofing Design Service

A Waterproofing Design Specialist provides expertise in structural waterproofing.

A Waterproofing Design Specialist should be appointed as part of the design team at the planning stage or as early as possible so that an integrated waterproofing solution is created. All decision made by others that might have impact on the waterproofing deign should be brought to the attention of the Waterproofing Specialist, Design Team, and Installing Contractors. Final decisions and any recommendations should be approved by those taking overall responsibility for the design of the waterproofing.
Identifying a Waterproofing Design Specialist can be difficult and daunting, Delta has their own in-house Technical Team who are able to offer Waterproofing Design Services. Our Waterproofing Design Consultants have:

Maintainable Designs

Delta's Waterproofing designs are designed and installed as a maintainable water management system. This is highlighted as a key requirement in BS 8102:2022, all components of the system should be accessible for both inspection and maintenance.

Guarantees

Delta Membrane Systems Limited offer a 30-year Product Guarantee on membranes, seals, and fixings when a Delta Registered Installer has installed a Delta, Type C Cavity Drainage System.

Delta MS 500 Fire Retardant, Type C Waterproofing

Delta's new innovative fire-retardant MS 500 membrane gives a unique opportunity to the structural waterproofing sector for Type C systems to be used in reducing the spread of fire or where installation has not previously been possible for fire safety reasons.

Delta's new fire-retardant Type C Cavity Drainage System provides architectural freedom and allows systems to be used in not only deep basements but where national Building Regulations Euroclass B or C are required, meeting building requirements of today, but also that of tomorrow.
Delta MS 500 Fire offers a B-S2, d0 Euroclass fire rating (EN 13501-1:2018) whilst maintaining its strength, durability, functionality and workability.

The first and most important element of a Type C membrane is keeping structures dry. Water ingress will potentially result in a corrosive environment, with structures having a reduced life service. Delta MS 500 Fire Retardant has been manufactured using DELTASAFE, compared to the traditional MS 500 membranes.

In terms of appearance, Delta MS 500 Fire Retardant has the same physical properties to MS 500, a membrane designed from High-Density Polyethylene with 8mm stud.

Flood Testing/Integrity Testing

The integrity of the waterproofing system should be checked and inspected on installation and immediately upon completion. If there

Available CPD Material (10)

NLU -Waterproofing: BS:8102: 2009 The Protection of Below Ground Structures Against Water from the Ground

This seminar aims to cover waterproofing in the refurbishment sector, and how this relates to the code.

Material type: Online Learning, Seminar

RIBA Core Curriculum: Design, construction and technology
Legal, regulatory and statutory compliance

Knowledge level: General Awareness

Waterproofing Below Ground Structures to BS 8102:2022

This CPD presentation introduces Architects/Designers/Specifiers with a technical insight into approaches to structural waterproofing. Introducing designers with the elements and considerations a waterproofing design specialist will use to develop a robust waterproofing solution that meets the criteria of BS 8102:2022, the British Standard for the waterproofing industry.

Topics include: What are Types A, B & C (the different forms of structural waterproofing systems available in the UK market) and how to achieve the environmental grades outlined within British Standard 8102:2022.

A focus on how combination waterproofing systems are specified in below-ground structures in order to achieve the desired environmental grade, along with remedial approaches to design out risk.
By the end of the CPD you should have a greater understanding of:
- The importance of BS 8102:2022 and how to design waterproofing system which meets requirements
- The tools and techniques for understanding types of waterproofing systems - Types A, B & C
- Combination waterproofing
- The techniques for maintaining the continuity of the waterproofing system
- Design Principles.

Material type: Seminar

RIBA Core Curriculum: Design, construction and technology
Legal, regulatory and statutory compliance

Knowledge level: General Awareness

Cold Liquid Applied Waterproofing

This CPD presentation introduces Architects/Designers/Specifiers with a technical insight to approaches to structural waterproofing utilising cold liquid applied systems which are available within the construction industry. The presentation focuses on creating a waterproofing solution which meets British Standard BS 8102:2022, the code of practice for the waterproofing industry and ensuring designs conform. Topics include: the importance of specifying a suitable continuous waterproofing solution, design considerations, build ups suitable for cold applied systems and the associated components and detailing for this. The seminar concludes with some helpful guidance. By the end of the CPD you should have a greater understanding of:
- The different usages of below ground structures
- The importance of BS 8102:2022 and how to design waterproofing system which meets requirements
- The Tools and techniques for understanding types of waterproofing systems
- Why waterproofing failures happen and how to avoid them with correct Product Specification
- Design Principles.

Material type:	Seminar
RIBA Core Curriculum:	Design, construction and technology Legal, regulatory and statutory compliance
Knowledge level:	General Awareness

Structural Waterproofing for Podium Decks and Buried Roofs

There are many common pitfalls when it comes to designing a waterproofing system for podium decks, buried roofs, balconies and terraces. These complex constructions require an in-depth knowledge of construction along with structural waterproofing. From differential movement to drainage, both should be key considerations as part of the building design process. The aim of this CPD presentation is to provide Architects/Designers and Specifiers with a technical approach to the concepts of successful design. By the end of the CPD you should have a greater understanding of:
- What Podium Decks, Buried Roofs and Terraces are and their uses, along with types of structures and approaches to these
- Regulations and requirements
- Why waterproofing systems are specified
- The importance of drainage consideration and components of waterproofing and drainage systems
- Design principles and causes of failed systems when design principles are not applied.

Material type:	Seminar
RIBA Core Curriculum:	Design, construction and technology
Knowledge level:	General Awareness

Waterproofing Existing Basements

This CPD aims provide a technical insight into structural waterproofing existing basements and cellars. It touches on client requirements when designing and specifying waterproofing systems whilst discussing the levels of protection which can be achieved, along with the features, benefits and options available for a robust solution. The presentation focuses on a solution which meets British Standard 8102:2009, the code of practice for the waterproofing industry and ensures designs conform as a minimum. Topics covered include how different levels of protection can be achieved, why some waterproofing systems fail, and what can be done to remedy failed systems whilst remaining compliant with standards. By the end of the CPD you should have a greater understanding of:
- How to recognise different usages of basements and cellars and that different waterproofing systems solve different problems
- The importance of BS 8102:2009 and how to design waterproofing systems which meet requirements
- Tools and techniques for understanding types of waterproofing systems
- Why waterproofing failures happen and how to avoid them with correct Product Specification
- Design Principles

Material type: Seminar

RIBA Core Curriculum: Design, construction and technology

Knowledge level: General Awareness

Multiple formats

Flood Resilience

The aim of this CPD presentation is to provide architects and designers with a deeper understanding of the concepts of flood resistance, resilience and recoverability. Exploring flood resilience, resistance and recoverability and the use of technologies which have been used historically in below ground structural waterproofing in a variety of different situations from domestic to commercial structures. In addition, the CPD covers important insights for architects and designers when designing a robust flood resilient solution. It will help you to understand the following topics:
- What flood resilience is
- Flood risk management
- Assessments of flood water into buildings in relation to British Standard BS85500: 2015
- Flood resilience, resistance and recoverability
- Design principles
- Solutions available

This CPD can be delivered to you live and remotely.

Material type: Online Learning, Seminar

RIBA Core Curriculum: Design, construction and technology

Knowledge level: General Awareness

Water and Water Vapour Management in Sub and Super-Structure Applications

Experience has shown that specifiers and designers could be better informed about the practical operation of drained cavity membranes and particularly the need for mechanical drainage - sump and pump - requirements to complete the installation. This seminar describes the use of drainage membranes in new build and refurbishment applications. It also illustrates how such membranes can be used to reduce the ground water pressure acting upon a basement structure.

Material type:	Seminar
RIBA Core Curriculum:	Design, construction and technology Sustainable architecture
Knowledge level:	General Awareness

Multiple formats

NLU-Waterproofing Below Ground Structures to BS8102:2009

This seminar is designed to help you design and specify waterproofing to British Standard BS8102: 2009. It will help you to understand the following topics:
- The forms or types of waterproofing available covering types A, B and C and their placement
- The correct selection and options for waterproofing applications
- The grades of waterproofing protection
- The importance of using a waterproofing specialist
- Common problems, why they can occur and how to design out risk
- The available technology in the basement protection market

This CPD can be delivered to you live and remotely.

Material type:	Online Learning, Seminar
RIBA Core Curriculum:	Design, construction and technology Legal, regulatory and statutory compliance
Knowledge level:	General Awareness

Multiple formats

NLU - Reducing Risk in Type C Systems Using Predictive Maintenance

The aim of this presentation is to provide architects and designers with a deeper understanding on the concepts of utilizing predictive maintenance and reducing risk within Type C systems. It explores the benefits of using predictive maintenance in below ground applications and the use of technologies. It also covers important insights when designing a robust waterproofing solution. This CPD will help you to understand the following topics:
- What is a Type C cavity drainage system
- Design principles for a Type C cavity drainage system and how to minimise and mitigate risk in the design process
- Definitions of ground and surface water and explanations of ground and surface water behaviour
- Pump and alarm systems and how to minimise and mitigate risk for sump pump failure
- Predictive maintenance and continuous monitoring
- The benefits of using predictive maintenance in below ground applications
- Facts about Big Data and analytic software and its benefits
- Dynamic servicing and its benefits in reducing risk

This CPD can be delivered to you live and remotely.

Material type:	Online Learning, Seminar
RIBA Core Curriculum:	Design, construction and technology
Knowledge level:	General Awareness

Waterproofing - The use of concrete combinations Type A, B and C Systems.

This CPD presentation is designed to equip Architects, Designers, and Specifiers with a comprehensive understanding of the factors a waterproofing design specialist considers, to formulate a robust solution that aligns with the standards of BS 8102:2022 and BS 8500-1:2023.

The seminar is crafted to educate, enrich, and engage delegates, focusing on topics like below ground waterproofing, combined waterproofing (two systems), product compatibility, and how to determine the right waterproofing solution for a structure. The seminar concludes with an interactive Q&A session, allowing attendees to address their queries directly to the presenter.

By the end of this CPD delegates ought to:

1. Be able to identify different types of waterproofing and their placement.
2. Be able to identify the relationships between codes and standards and how waterproofing systems fit into this.
3. Know more about preventing water damage and ensuring the longevity of structures.
4. Know that where applying 2 forms of waterproofing solution, an understanding of these, offering different property characteristics.
5. Have the tools, systems, and information needed to solve problems, and create innovative solutions.

Material type:	Seminar

Classifications

Subject/Product Areas (CI/SfB)

Substructure
Floor beds, ground floors, basements > Proofing services

Structure
External walls > Damp-proof course membranes, cavity trays, flashings

Finishes
Roof finishes > Roof garden systems
Roof finishes > Roof finish underlays and insulation

Services
Drainage > Drainage and sewage pumps
Drainage > Channels, gullies and gratings

General products
Flexible proofing/separating sheet membranes > Foils, building papers, sheet dp membranes
Flexible proofing/separating sheet membranes > Separating membranes, geotextiles

Special activities, requirements
Green applications, resources; sustainability > Flat roofing membranes

Engineering
Disposal systems > Below ground drainage systems
Disposal systems > Above ground foul drainage systems
General engineering services > Pumps

RIBA Core Curriculum areas

Design, construction and technology
Knowledge level: *General Awareness*

Legal, regulatory and statutory compliance
Knowledge level: *General Awareness*

Sustainable architecture
Knowledge level: *General Awareness*