

# WHAT'S ON AT THE CONCRETE AND MASONRY PAVILION

## DAY 1

Tuesday 8 March

### 11:00 CPD briefing

#### Whole-life carbon and buildings

*Tom De Saulles*

Material specification and design decisions influence the CO<sub>2</sub> of a building not only in construction, but also in-use and at end-of-life. This presentation will provide guidance on reducing CO<sub>2</sub> over a building's lifecycle.

### 12:00 Lunchtime learning

#### Housing solutions

*Chaired by Guy Thompson*

Concrete and masonry solutions that meet energy performance standards, are resilient to overheating and flooding, and more ...

- High-performance housing solutions – Tom De Saulles, The Concrete Centre
- Case study: The Chocolate Works – Richard Partington, Studio Partington
- Case study: ICF Passivhaus – Alan Brown, IID Architects, and Alex Baines, client

### 14:00 Think tank

#### New generation: Lifecycle analysis

*Chaired by Andrew Minson*

Exploring the new tools for assessing environmental impacts of materials and structures. Are we moving towards efficient assessment of whole-life impacts?

- Understanding lifecycle assessments – Jane Anderson, thinkstep
- Whole-life benefits and lifecycle costs – Anthony Waterman, ADW Developments
- Achieving credits in BREEAM for whole life – Elaine Toogood, The Concrete Centre

### 15.45 Project launch – generic concrete environmental product declarations

Nine generic certified EPDs will be presented for a range of precast concrete products, ready-mixed concrete and mortar.

- Whole-life assessment of projects – Andrew Minson, Mineral Products Association
- EPDs: Why they matter to designers and clients, and what the concrete industry is delivering – Jane Anderson, thinkstep

## DAY 2

Wednesday 9 March

### 11:00 CPD briefing

#### Visual concrete *Elaine Toogood*

Exposed concrete can reduce both the resources required for maintenance and the need for additional finishes. This session gives guidance on both precast and in-situ concrete.

### 12:00 Lunchtime learning

#### Designing for low whole-life impacts

*Chaired by Jenny Burridge*

A holistic approach to sustainability takes into account not only material selection, design and construction solutions, but also in-use performance and end of life.

- Designing for low whole-life carbon – Tom De Saulles, The Concrete Centre
- Case study: Refurbishment of Eastleigh House – Cora Kwiatkowski, Stride Treglown
- Case study: Greenwich University – David Lankester, Alan Baxter Associates

### 14:00 Think tank

#### New-generation housing *Chaired by Guy Thompson*

This session will give both policy and technical context and an update on the future challenges for housebuilders and architects.

- Policy updates: European targets and risks – Rob Pannell, Zero Carbon Hub
- Achieving nearly zero energy buildings and Part L – Tom De Saulles, The Concrete Centre
- Case study: A different approach to housing – Sarah Allan, Solidspace

### 15.45 Cradle to site – the sustainability journey of concrete and masonry products

Ecobuild sees the launch of the eighth Concrete Industry Sustainability Performance Report and the first report of the precast, brick and ready-mixed concrete resource efficiency action plans.

- Enhancing and protecting biodiversity – Nigel Jackson, MPA
- Cradle to gate – Locally, responsibly sourced concrete and masonry – Andy Spencer, CEMEX
- Beyond the gate: BUILD UK – Steve Cook, Willmott Dixon and member of Build UK

## DAY 3

Thursday 10 March

### 11:00 CPD briefing

#### Specifying sustainable concrete

*Elaine Toogood*

Introducing the basics of sustainable concrete, the presentation covers responsible sourcing, use of recycled aggregates and embodied/operational CO<sub>2</sub> information.

### 12:00 Lunchtime learning

#### Designing for material efficiency

*Chaired by Jenny Burridge*

Designers can influence the material efficiency of their project by choosing construction methods that reduce the amount of material required – for example, post-tensioned concrete slabs and precast slabs with void formers. These frame solutions can also use concrete as a finish, reducing the need for other materials.

- Designing for material efficiency – Jenny Burridge, The Concrete Centre
- Case study: Fabroc formwork at Bomnong L'or School, Cambodia – Geoff Morrow, StructureMode
- Case study on the Royal College of Pathologists – Rob Bearyman / Hannah Fothergill, Bennetts Associates

### 14:00 Think tank

#### New generation: Design strategies for resilience *Chaired by Guy Thompson*

Designers need to address issues such as flood resilience and overheating if current developments are to remain appropriate in the future. The impacts extend beyond development sustainability with wider economic and social effects – including those associated with disrupted business activity and with an increasingly old and more vulnerable population.

- Practical considerations for designing resilient buildings – Elaine Toogood, The Concrete Centre
- Case study: Designing resilient landscapes – Nick Gorst, British Precast
- Case study: Overheating mapping of the Joseph Rowntree Red Lodge – Marylis Ramos, PRP

# WHO'S WHO IN THE CONCRETE AND MASONRY PAVILION

## Aircrete Products Association

E5072 / [www.aircrete.co.uk](http://www.aircrete.co.uk)

**We are ...** The product group of British Precast for aircrete block manufacturers, promoting best practice and providing guidance on topics such as Part L.

**Talk to us about ...** our new Constructive Details, and how they can help meet the linear thermal bridging requirements of Part L.

**How we're taking a whole-life approach:** We're supporting designers to maximise energy efficiency by minimising thermal bridging with specific details and calculated psi values, and offer guidance on many other whole-life aspects such as thermal performance and flexibility.

## The Basement Information Centre

E5063 / [www.basements.org.uk](http://www.basements.org.uk)

**We provide ...** technical guidance and assistance to enable the design and construction of quality basements in homes.

**Talk to us about ...** any queries on the design and construction of basements for dwellings. Our members provide products and services including waterproofing, underpinning, design and construction, and our guidance includes how to meet the relevant requirements of Building Regulations.

**How we're taking a whole-life approach:** The construction of a new-build basement provides additional living space within the same footprint. In the case of a retrofit or refurbishment, a basement project can help a homeowner to adapt their property to their lifestyle or needs.

## British Precast

E5072 / [www.britishprecast.org](http://www.britishprecast.org)

**We are ...** the trade association for precast concrete and masonry manufacturers, sharing information to support our members and the wider industry.

**Talk to us about ...** how we're working with other industry bodies to promote efficient construction and design using precast concrete and masonry and minimise operational impacts of the build environment.

**How we're taking a whole-life approach:** We're providing members with a well-established sustainability charter scheme which includes annual audits and data collection to support continuous improvement and reduction of environmental impacts.

## CEMEX

E5071 / [www.cemex.co.uk](http://www.cemex.co.uk)

**We make ...** readymix concrete, cement, aggregates, asphalt, mortar, screed, floor and wall systems, concrete blocks, hard landscaping.

**Talk to us about ...** products including Ready Wallform, our insulated concrete formwork (ICF) system, and how it can create high-performance structures for housing.

**How we're taking a whole-life approach:** Ready Wallform is manufactured at three sites in the UK, making it one of the few locally produced ICF systems on the market. The build process creates very little waste, but any created is completely recyclable. The concrete infill is most often sourced from a local facility, using raw materials mostly sourced from local sites. We

always specify the most sustainable mix possible, which includes replacement cement blends, water reducing agents, reclaimed water and secondary aggregates.

## CHRYSO UK

E5066 / [www.chryso.com](http://www.chryso.com)

**We make ...** chemical additives for concrete, cement and plaster. We design and manufacture solutions for the global cement and concrete industries, across more than 70 countries.

**Talk to us about ...** our new binder for the UK market, Belitex, a cementitious-based screed. Visit us to discover the many benefits it can offer, including the ability to place floor coverings within 2-3 weeks of laying the screed.

**How we take a whole-life approach:** CHRYSO operates zero-effluent manufacturing facilities, where all waste water is recycled. Our Enviromix solutions facilitate greater use of supplementary cementitious materials such as pulverised fly ash or GGBS, which can result in concrete with a lower carbon footprint.

## Concrete Block Association

E5072 / [www.cba-blocks.org.uk](http://www.cba-blocks.org.uk)

**We are ...** the product group of British Precast for manufacturers of aggregate concrete building blocks in various strengths, weights and surface textures. We run a highly respected programme of product development, research and testing to provide new design and construction solutions.

**Come and see ...** the High Performance Housing feature, which will include wall constructions and live build demonstrations. Our technical experts will be available to explain how masonry can deliver sustainable housing to meet and exceed Building Regulations.

**How we're taking a whole-life approach:** We're maximising the material and energy efficiency of our production, and supporting designers to achieve the highest standards of operational energy efficiency with technical guidance including thermal bridging details.



E5061 GRCA	E5062 CORNISH CONCRETE PRODUCTS	CAFE
E5063 THE BASEMENT INFORMATION CENTRE	E5064 LITECAST	
E5066 CHRYSO	E5067 GRANGWOOD BRICKWORK SERVICES	
E5068 TARMAC		E5069 LONGLEY CONCRETE

E5071 CEMEX	E5072 HIGH-PERFORMANCE HOUSING	E5073 UK CARES
E5070 THE CONCRETE CENTRE		E5074 MINERAL PRODUCTS ASSOCIATION
E5080 SEMINAR AREA		E5075 HANSON

**The Concrete Centre**

**E5070 / [www.concretecentre.com](http://www.concretecentre.com)**

**We provide ...** best-practice guidance and a programme of seminars and short courses including the Concrete Elegance lecture series, as well as Concrete Quarterly magazine.

**Talk to us about ...** new-generation housing, whole-life carbon, material efficiency, lifecycle analysis and resilience. Our seminar programme will provide up-to-date information, best-practice guidance and topical discussions to enable designers to use the sustainable credentials of concrete on building, housing and infrastructure projects. You can pick up a copy of our new publications, "Whole-life Carbon and Buildings" and "Material Efficiency" too.

**How we're taking a whole-life approach:**

Generic EPDs will be launched for a range of precast-concrete products, ready-mixed concrete and mortar. We'll also unveil the industry's eighth Sustainability Performance Report, and a progress report on the Resource Efficiency Action Plans for brick and concrete.

**Cornish Concrete Products**

**E5062 / [www.cornishconcrete.co.uk](http://www.cornishconcrete.co.uk)**

**We make ...** architectural and structural precast

concrete products, including cladding, columns, staircases, twin-wall and whole-building solutions, using our considerable knowledge base and experience to meet the varied demands of the construction industry.

**Come and see ...** physical samples of materials, and an array of case studies showcasing the myriad possibilities of precast concrete.

**How we're taking a whole-life approach:**

CCP is unique in offering "ecocrete", which has 80% secondary content material, as standard. This is verified with registration to BES 6001, the code for responsible sourcing, as well as the environmental standard ISO 14001.

**Grangewood Brickwork Services**

**E5067 / [www.grangewoodbrickwork.co.uk](http://www.grangewoodbrickwork.co.uk)**

**We are ...** a supplier and fixer of all types of brick and blockwork. Since 1997, we have formed strong relationships with clients throughout London and the south-east, and worked on a range of projects in the public and private sectors.

**Come and see ...** our apprentices at work on the stand or have a chat with our representatives. You can also pick up our capability brochure and view examples of recently completed projects.

**How we take a whole-life approach:** We are proud to be training the new generation of skilled tradespeople. We currently employ four apprentices, who are studying for NVQs. Our quality management system is also ISO 9001-certified, part of our commitment to providing a long-lasting product.

**Hanson**

**E5075 / [www.hanson.co.uk](http://www.hanson.co.uk)**

**We make ...** aggregates, ready-mixed concrete, asphalt, cement and cement-related materials. We have sites UK-wide so we can efficiently supply contracts of all sizes while minimising transport costs.

**Talk to us about ...** our innovative concrete products. EcoPlus is a low-carbon concrete that can improve overall project sustainability, Colourcrete is a range of high-quality coloured concretes, and Watertight offers a simpler alternative to conventional methods of meeting British Standard BS 8102:2009 on protecting below-ground structures.

**How we're taking a whole-life approach:** We hold ISO 9001, 14001 and 18001 certifications, as well as BES 6001. In 2015, we became the first heavy-side building materials manufacturer to achieve the ISO 50001 energy management



standard across all business lines. Our concrete can be designed to include up to 70% low-carbon cement replacement.

**International Glassfibre Reinforced Concrete Association**  
E5061 / [www.grca.org.uk](http://www.grca.org.uk)

**We are ...** a trade association of manufacturers, consultants and equipment and material suppliers in the glassfibre reinforced concrete (GRC) industry from more than 20 countries.  
**Talk to us about ...** all aspects of GRC – how it can be used to create the most ambitious futuristic designs or to replicate traditional historical features, how it can reduce loadings and therefore superstructure and foundation costs, and how it is environmentally friendly. We can discuss membership of the GRCA too.  
**How we're taking a whole-life approach:** GRC is a robust but lightweight product that is material efficient and enables the reduction of transport emissions and costs, lowering a building's overall environmental impact.

**Litecast**  
E5064 / [www.litecast.co.uk](http://www.litecast.co.uk)

**We make ...** a wide range of precast flooring solutions and concrete products, as well as an extensive variety of ancillaries.  
**Talk to us about ...** how we have just commissioned a 25% increase in production capacity.  
**How we're taking a whole-life approach:** By producing highly efficient and cost-effective flooring to achieve low U-values in homes.

**Longley Concrete Group**  
E5069 / [www.longley.uk.com](http://www.longley.uk.com)

**We make ...** precast concrete products and supply beam-and-block, hollowcore and insulated flooring systems, precast staircases and lift shafts, from our three UK manufacturing plants.  
**Come and see ...** a mock-up of our new over-beam insulated flooring system – a cost-effective and flexible approach to achieving U-values.  
**How we're taking a whole-life approach:** We use a high percentage of recycled water in production, and we substitute pulverised fly ash in place of non-renewable materials.

**Mineral Products Association**  
E5074 / [www.mineralproducts.org](http://www.mineralproducts.org)

**We are ...** the trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar and silica sand industries. With a growing membership of 480 companies, the MPA is the sectoral voice for mineral products.  
**Talk to us about ...** our National Nature Park, and the often unrecognised contribution that our industry makes to enhancing biodiversity. We also welcome discussion on any aspect of our activities and the opportunity to explore partnerships.  
**How we're taking a whole-life approach:** The mineral products industry is one of relatively few UK industries with a legacy of evidence-based data on sustainability performance. This enables stakeholders to understand the environmental impacts and benefits of our extraction and production processes and inform the specification of sustainable concrete, masonry and constituent materials.

**Mortar Industry Association**  
E5072 / [www.mortar.org.uk](http://www.mortar.org.uk)

**We are ...** the trade association for producers of factory-made mortars, renders and screeds.  
**Come and see...** daily demonstrations of block-laying and standard construction details, and pick up our updated data sheets on all aspects of mortar and masonry.  
**How we're taking a whole life approach:** As part of the Concrete Industry Sustainable Construction Strategy, we're helping to minimise impacts through production as well as communicating the whole-life performance benefits of masonry construction.

**Precast Flooring Federation**  
E5072 / [www.precastfloors.info](http://www.precastfloors.info)

**We are ...** a product group within British Precast, promoting the structural and commercial benefits of precast flooring.  
**Talk to us about ...** how precast flooring solutions for upper floors can help deliver premium housing performance.  
**How we're taking a whole-life approach:** We're producing flooring with minimum environmental impacts and ensuring the

whole-life benefits of durability, fire, resistance and acoustic performance for upper floors are understood by designers.

**Tarmac**  
E5068 / [www.tarmac.com/readymix](http://www.tarmac.com/readymix)

**We are ...** thousands of different concrete formulations for virtually any application, from self-compacting and fibre-reinforced mixes to decorative or permeable concrete.  
**Come and see ...** our 30-minute product demonstrations running throughout the day, at 11.30am, 1.30pm and 3.30pm. Participants will be able to mix their own concrete and explore different aesthetic finishes, as well as discover the benefits of concrete in context from tall building construction to flooring screeds.  
**How we're taking a whole-life approach:** We consider not only the extraction, manufacture and transport of our products but their performance in use and opportunities for reuse and recycling at end of life. We use management systems certified to ISO 9001, ISO 14001 and OHSAS 18001 across our operations, and our product range is certified to BES 6001.

**UK CARES**  
E5073 / [www.ukcares.com](http://www.ukcares.com)

**We are ...** an independent, not-for-profit certification body, established to provide confidence to the users, purchasers and specifiers of constructional steels.  
**Talk to us about ...** our new product conformity scheme for nuclear and mega-projects and our Sustainable Constructional Steel Scheme revision and the rating mechanism we're introducing for steel mills and fabricators. CARES will be announcing both in the pavilion's Gallery room at 2pm on Wednesday 9 March.  
**How we're taking a whole-life approach:** Constructional steel products manufactured by CARES-approved companies are fully traceable throughout the entire supply chain. All companies have an environmental management system certified to ISO 14001, a quality management system certified to ISO 9001 and an independently verified EPD or validated carbon footprint data.