



# Annual Review 2018

# Executive Director's Message

**The tragic Grenfell disaster of June 2017 stands out as the significant construction industry event of the past year. It will influence all buildings and infrastructure. Just as Ronan Point fifty years ago still impacts every new project today through the changes in building regulations which it caused, so too will Grenfell for decades to come through changes in procurement, responsibilities, application of CDM and building regulations.**



The offsite agenda has also featured heavily over the past year. Government announced in the November 2017 budget that Government departments and agencies in transport, education, health, justice and defence are to favour offsite construction processes. In our discussions with officials this policy is clearly being taken very seriously. We have been here before with offsite: most recently in 2006 and 2007 when Government funding policies that gave preference to offsite methods in the social housing sector, resulted in timber frame being three times more prevalent on Government funded schemes. However, once funding was cut, use of timber reduced. Will the latest initiative be more long lasting?

Other Government departments and devolved national assemblies have been focussed on another issue of direct relevance to the precast and masonry sector; namely timber first. In Westminster, DEFRA is responsible for forestry and commercialising this asset has been on their agenda since 2010. A lazy interpretation of sustainability leads officials towards draft policies that give preference to timber construction. We have seen the same happen in Wales and Scotland, with particularly heightened activity in the last 12 months.

British Precast are working with and through colleagues at The Concrete Centre, and the wider MPA, to address these issues and others, to maximise the opportunities for our Members.

The sustainability credentials of precast and masonry – both in manufacture and use – ensure we have a compelling story to tell. The British Precast Sustainability Charter and, in particular the submission of annual data by Members, means we have the collective evidence base to present to officials. This is the starting point for us defending precast and masonry against unwarranted timber-biased policies.

Eliminating risks of offsite construction is our response to the Government offsite agenda and the resulting media frenzy on the topic. To eliminate the risks, of course the choice of offsite is precast. Furthermore, the risks are equally addressed by choosing masonry construction solutions and, in the housing sector, with the increase in housing numbers being demanded, there is a need for more masonry homes as well as a role for offsite homes. Our petition to Government is to recognise that all solutions will be needed and to focus on performance of housing: the choice of construction method should be left to the construction industry.

Finally, implications for British Precast Members of Grenfell start with the primary implication of fire resilience being readily addressed by masonry and precast. But Grenfell will have implications beyond fire resilience: these include, product certification and evidence of performance; responsibilities and competencies; managing assets in the built environment.



Precast and masonry products have many beneficial inherent properties and are produced locally by a mature sector. These factors make precast and masonry well placed to respond to the current challenges and opportunities as well as future issues of which we are still unaware. As the trade association for precast and masonry manufacturers, together with the Concrete Centre and MPA umbrella, we will represent the membership's interests whenever possible.

I take this opportunity to wish members every success in the coming year.

**Andrew Minson**  
**Executive Director | British Precast**

## Contents

<b>Health &amp; Safety</b>	1	<b>Product Associations</b>	13
<b>Sustainability</b>	3	Aircrete Products Association & Concrete Block Association	13
<b>Environmental Product Declarations (EPDs)</b>	4	British Precast Architectural & Structural	14
<b>Technical &amp; The Concrete Centre</b>	6	British Precast Drainage Association	15
<b>Marketing</b>	7	Interpave & Precast Flooring Federation	16
<b>Outstanding Contribution to Health &amp; Safety</b>	8	<b>Affiliates</b>	17
<b>Best Practice Awards 2017</b>	9	Interlay	17
Health & Safety Award Shortlist	9	Modern Masonry	18
Sustainability Award Shortlist	10	<b>Mineral Products Association, BIBM, CPA</b>	19
Innovation Award Shortlist	11	<b>H &amp; S Charter and Sustainability Charter</b>	20
Project Award Shortlist	12	<b>Full &amp; Associate Members</b>	21



# Health & Safety

The importance of this topic to British Precast is made clear by it being a condition of membership to be a signatory to the Health and Safety Charter. It is part of our overarching "Raising the Bar" philosophy which seeks to encourage and enable best practice in precast manufacturing.



To achieve best practice there are many initiatives that have been progressed in the last year under the oversight of the British Precast Health and Safety Steering Group. All members are welcome to attend or be corresponding participants of this group. We are grateful for the Health and Safety Executive's ongoing contribution to our meetings.

Since the introduction of the new sentencing guidelines, industry has seen a significant increase in the size of fines following successful prosecutions under the Health & Safety at Work Act. It is evident that involvement in a trade association health and safety scheme is a good start in minimising any future fines to which a manufacturer might be subject.

## SAFER BY SHARING

Members are encouraged to share their own initiatives as well as incidents and near misses to promote collective learning. This sharing occurs at meetings of the Health and Safety Steering Group, product associations and annual awards. Use is also made of incident alerts which anonymously report incidents, including near misses, and the corresponding key learnings. These incident alerts are available through [safeprecast.com](http://safeprecast.com), which has an associated app, the British Precast website and British Precast newsletters.

## SAFETY AND HEALTH AWARENESS DAYS (SHADs)

Recent site-based SHAD days for operatives and supervisors were hosted by FPMcCann (March 2016) and Forterra (March 2017). We welcomed over 100 delegates to each of these events where groups of 20 participated in activities at 5 different stations. We are grateful to FPMcCann and Forterra for hosting these events and running many of the training activities. This year the operative SHAD in April focussed on 'Health Awareness & Support' and did not require use of a facility and was held at a conference centre in Stoke-on-Trent.

Leadership SHADs are held each November. A diary date for all members is 29th November 2018 when the next event will be held. The majority of members send senior representatives to this event to obtain the latest updates from industry and the HSE. The theme of the November 2017 leadership SHAD was Health and Wellbeing, including mental health.

## SAFER BY COMPETENCE

The HSE has made clear that a competent workforce is a safe workforce. A Safer by Competence framework was developed and first included in our Annual Review in 2014 and is on our website. It provides a timeframe for when different levels of employees should be engaged in a process of demonstrating competency and by when this should be completed.

Competency is not achieved only through training, and in fact might not require any training whatsoever. Competency is understanding and application of knowledge. The Safer by Competence scheme is about employers having a competent workforce and being able to demonstrate this. We are working with external training providers and providers of competency assessors to increase provision.

## RESPIRABLE CRYSTALLINE SILICA

Respirable Crystalline Silica (RCS) is the subject of the European wide NEPSI work which British Precast administers on behalf of members. During 2017 British Precast and MPA worked to minimise unnecessary escalation of RCS to a different European classification, and to minimise the impact of re-classification on members. In early 2018 British Precast oversaw the two-yearly NepSi reporting process, which gathered data for 2016 and 2017. Thank you to members for their cooperation in this very important reporting process which helps provide evidence to ensure proportionate regulation.



# Health and Safety Continued...

## SAFE TRANSPORT

Guidance on safe transport has been developed over recent years with us serving members' interests on the Building Products Delivery Working Group (BPDWG) whose guidance for palletised products was approved in December 2016. The format of this guidance is simple and pictorial. During 2016 MPA produced a Driver's Handbook, which is a very detailed and comprehensive document. British Precast is at the start of the process to develop guidance on the safe transport of non-palletised products, such as drainage products, flooring and stairs. It is intended that this guidance will be similar in style to the BPDWG document for palletised products. Members can get involved in this, and all our initiatives, to ensure we are representing best practice.

## CODES OF PRACTICE

**Stressing:** All members are required to have an annual audit for compliance with our stressing Code of Practice at each factory with stressing operations. A significant improvement in practice and operations has been observed.

**Installation:** Our flooring product group (PFF) completed the 4th revision of its installation code of practice during 2017 and is now promoting the publication. In addition, a new audit protocol has been devised so that PFF members who install flooring can be assessed for compliance against the updated code of practice. Our architectural and structural product group is currently completing its equivalent document.

**Process:** Precast/Cast Stone has particular production processes and these will be addressed in a new code of practice currently being authored.

## CHARGE – HSE COMMITTEE FOR MANUFACTURING SECTORS INCLUDING GLASS, CERAMICS AND CONCRETE

The HSE CHARGE strategy for the manufacturing sector of which we are a part, includes statistical data collection, sharing of incidents and the concept of Safer by Competence. The only one of these not covered above is statistical data. Our statistical data collection for 2017 shows a fall in the 12-month rolling LTIFR over a 4-year period from slightly over 12 to less than 7 across all of British Precast. Our 5 year target to end of 2018 is to have an LTIFR down to 4; this is in the context of targeting zero harm.

# HELPING TO KEEP BRITAIN'S CONSTRUCTION PROJECTS ON TRACK... NOW AND IN THE FUTURE



At CEMEX we believe in building and building a better future for everyone.

So we ensure that wherever and whenever possible our solutions help to balance the needs of the built environment with a commitment to the natural environment.

By delivering safe and sustainable solutions with first class customer service our customers and the communities in which we live can rely on CEMEX.

For more information visit [www.cemex.co.uk](http://www.cemex.co.uk)

**CEMENT • CONCRETE • AGGREGATES • MORTAR  
SCREED • ASPHALT • BUILDING PRODUCTS • ADMIXTURES**

HELPING TO BUILD A **GREATER BRITAIN**



# Sustainability

**In 2017 a combined production exceeding 15.1 million tonnes, were audited and covered by KPI data collection as part of the British Precast Sustainability Charter.**

Our members made further improvements against the KPI baseline year of 2012 with at least two of our 2020 targets already achieved: overall factory waste generation has gone down by almost 25% compared to 2012, of which only 0.25 kg per tonne of production was sent to landfill, and quality management systems coverage (around 96% of all production). Carbon emissions from precast factories continue to fall as 12.5 kg CO<sub>2</sub> per tonne was recorded in 2017 compared to 14.31 kg CO<sub>2</sub>/t in 2012 (as amended). 2% of our energy consumption was from renewable resources not subject to Feed-In-Tariffs and well over 40% of member companies' production is now covered by a certified energy management system (ISO 50001).

Annual audits were carried out for member companies under the Sustainability Charter programme. Monitoring companies' performance against sector specific KPI's has been an integral part of the 2017 audit visits, and many members have found these visits to be very useful. This feature of auditing will continue to be part of the annual Charter audits.

British Precast continues to be involved with the Infrastructure Carbon Review (ICR) and the ICR Carbon Practitioners Network. Last year, as members of the network, we supported the development of an E-Module on infrastructures Carbon Management under PAS 2080.

With a number of initiatives and major publications on carbon, recycled content and responsible sourcing, we believe that our sector is in a very good position to contribute to the construction industry's sustainability targets and objectives:

- With the publication of seven generic EPDs last year, covering all main precast product groups, most of our member companies are now covered by at least one EPD offering information on their primary precast concrete solution(s) to the market.
- Over 77% of our production in 2017 was covered by BES 6001 responsible sourcing certification, with the majority of member companies achieving 'Very Good' or 'Excellent'.
- With the publication of EN 16757, the standard on category rules for calculation of concrete products EPDs and footprints, our sector is now able to report more accurately on the positive impact of CO<sub>2</sub> removal through surface carbonation throughout the service life of precast concrete products. These requirements have now been incorporated in the newly released RICS professional standard on carbon measurement.

This year we hope that further progress is made with elements associated with our Charter and scheme. A number of factsheets are being prepared to support our members on issues associated with waste, recycling and use of recycled content. A precast-specific sustainable water policy, and calculation methodology, is also in development. British Precast will also continue to develop more generic EPDs covering more precast flooring, wall and cladding options and will work with authors of the new version of the Inventory of Carbon & Energy (ICE) Database to ensure that the new footprints are understood and appropriately used by the industry.

## SUSTAINABLE CONCRETE STRATEGY OF THE UK CONCRETE INDUSTRY

**British Precast's Sustainability Charter is part of a wider initiative run by the Sustainable Concrete Forum (SCF).**

The Forum was set up in 2007 to manage and coordinate efforts carried out by 10 different sectors across the supply chain of concrete. The Forum oversees the data collection, reporting and benchmarking programme for a range of sustainability indicators; initiatives to reduce environmental impacts from transport and water use; and the communication of concrete credentials and how to use concrete to provide a sustainable built environment.

The 10th Concrete Industry Sustainability Performance Data report was published by The Concrete Centre and released at the industry's Concrete & Masonry Pavilion at Ecobuild in March with a 10 year review report and launch to be held later in 2018.

The vision is for the UK concrete industry to be recognised as a leader in sustainable construction by taking a dynamic role in delivering a sustainable, zero carbon built environment in a socially, environmentally and economically responsible manner.



# Environmental Product Declarations (EPDs)

**The precast concrete sector has embraced transparency and reporting on sustainability issues for over a decade now through its Sustainability Charter and Sustainability Matters publication. Alongside this work at a company level, British Precast saw the importance of providing third party verified data on the products that our members produce. To achieve this British Precast has developed a set of Environmental Product Declarations (EPDs) to the recognised EN 15804 standard for a range of precast products.**

British Precast has now published 7 generic Environmental Product Declarations. The initial generic product EPDs include aggregate and Aircrete blocks, concrete pipes, single-leaf cladding, ground beams, hollowcore flooring and paving products. There are several purposes for these generic product EPDs. First, at the earliest design stages, the supplier of product is unknown, so an industry-wide EPD will be helpful to architects and designers. Second, generic EPDs will act as a bridge for members of British Precast to explain the impact of their products to customers before a move to publishing their own EPDs. Finally, having these EPDs in place will provide a verified source of data to factor into revisions of industry guides and databases.

EPDs are widely used within the construction sector to for example provide assistance for projects seeking high BREEAM ratings or in responsible sourcing schemes such as BES 6001. Indeed, reliable Life Cycle Analysis (LCA) data, in the form of EPDs, will play a key role in the ability of construction product manufacturers to maximise the benefits of Building Information Modelling (BIM) and the transition to Industry 4.0 and the circular economy.

EPDs contain data on a wide range of environmental indicators with Global Warming Potential (GWP) (CO<sub>2</sub>e) perhaps the most requested indicator within the construction sector. The published EPDs provide an up-to-date figure for the cradle-to-grave embodied carbon impact of construction products, which also aligns with PAS 2050. For example, a cubic metre of Aircrete blocks has a cradle-to-grave impact of

119.5 kg CO<sub>2</sub>e, however this is not the end of the story: up to the factory gate the impact is 168 kg CO<sub>2</sub>e, but some of this is offset during the product's use and end-of-life phase as the process of carbonation reabsorbs CO<sub>2</sub> from the atmosphere. Examining what contributes to these GWP values can potentially influence future product design and formulation. The embodied carbon in cement accounts for 41.6% of the Aircrete block's impact, with the aggregates and powders accounting for 24.2% of the impact and the utilities 30.5%. Across the other five currently published EPDs, cement's contribution to the embodied carbon impact of the product is always the dominant variable, which can be as much as 85% of the impact for some products. The importance of concrete mix has long been understood but by producing this data we are able to track the impact of innovations in cement replacement.

Of particular interest to British Precast is how the figures in the newly published EPDs compare to historic inventories such as the ICE Bath University database. Direct comparison is difficult because the ICE database does not follow the BS EN 15804 methodology or include full life-cycle modules past delivery to site. As an indicative comparison, the ICE database gives a figure of 186 kg CO<sub>2</sub>e for the cubic metre of Aircrete. This represents a 7.7% lowering of the understood GWP impact of 1m<sup>3</sup> of Aircrete blocks from cradle to site delivery and 35.7% if compared to the EPD's whole-life value. By adding the EPD data to future materials databases, we can gain a truer, more detailed picture of concrete's environmental credentials.

**2018 will see British Precast** produce additional EPDs for products such as T-Beams, Brick Faced Cladding and Crosswall. However, it is also important that members are aware of the opportunities to produce company specific EPDs and capitalise on access to British Precast's streamlined concrete specific, third party verified EPD tool.



EPDs have been published for the above products.





# Technical

**British Precast is the recognised trade association representing the precast concrete product manufacturing industry in the UK. We maintain a unique position in representing our members and their interests on a wide range of committees, working groups and consultations, as well as placing members' representatives into groups where important collaborative technical and standards' development work can be undertaken.**

As the UK moves closer to formally leaving the European Union, our links with BIM, the Europe-wide Trade Association for precast concrete, and the work through British Standards mirror committees feeding into European standards' committees strengthens our ability to influence changes to both European and British standards.

Technical work on specific products and industry sectors are directly addressed by the product associations, whilst overarching issues for all precast concrete product production, such as the impact of standards for constituent materials, are dealt with by British Precast. This work mainly revolves round British and European standards and Building Regulations in all of which British Precast is a stakeholder by mandate.

We have continued to support our members over the past year developing product specific generic Environmental Product Declarations (EPDs). This is an area which will heavily impact on the future environmental competitiveness of our products and will require significant ongoing effort and input. Work on hazardous waste materials and understanding the implications of BIM on behalf of members determining appropriate collective actions has been undertaken in the past year.

Two further aspects of technical work are responding to technical enquiries and developing an understanding of competitor materials' offerings to enable appropriate responses such as government lobbying, influencing standards' committees or targeted marketing. Despite tight resources, British Precast effectively conducts this work. Our work in this area is further enhanced by ensuring it dovetails with that of The Concrete Centre on concrete performance and design, with the Mineral Products Association on constituent materials and with the Construction Products Association for changes to Building Regulations to ensure members are fully represented at all key stages in supply chain specification.

Technical input to standards and regulations will continue to feature heavily in the near future, with additional requirements to standards resulting from European Commission instructions on Regulated Dangerous Substances (RDS) as well as expected changes concerning the Environment and Sustainability. These changes will need to be communicated to members and their direct and indirect customers and member involvement will ensure changes are accommodated at the appropriate time.

Our continued gratitude is extended to all our members who have helped with our technical work in the past year and for their continued support.



## The Concrete Centre

**The Concrete Centre's purpose is to maximise the use of concrete and masonry compared with alternatives. The strategy is to:**

- promote why to use concrete and masonry
- enable designers to choose concrete and masonry
- influence standards, regulations, policy, construction sector guidance, semi regulatory guidance, sustainability assessment methods, etc, to maximise the competitiveness of our materials.

In 2017, 4,400 specifiers engaged with our seminars, events and webinars and over 21,000 registered users downloaded documents from our website. The biggest annual construction event remains Ecobuild, and in March 2018 over 1,000 attended our programme of 8 seminars comprising of 23 speakers. Furthermore, over 3,000 hard copies of our documents were collected and many more downloaded.

### New or updated publications launched at Ecobuild 2018 included:

Concrete & Fire Safety

Offsite Concrete Construction: The Benefits

Concrete Tall Buildings

Health & Wellbeing: "This is Concrete" Magazine

Sustainable Concrete Performance Summary

Concrete Quarterly including Specifying Sustainable Concrete, Cladding

How to Design Concrete Structures using EC2

For more information on The Concrete Centre, please refer to the 2017 British Precast Annual Review which provides a broader overview. The Concrete Centre technical and marketing specialists provide their expertise and time to the work of Modern Masonry (see separate report), so the strategy and activities are co-ordinated, as well as to British Precast and its product groups.



# Marketing

**The marketing activity of British Precast is dovetailed with that of The Concrete Centre and our own product groups and affiliates. Their activity is also explained in this Annual Review. Within this collaboration, the primary role of British Precast is to promote the reasons to choose British Precast members as suppliers.**

The excellence in health and safety, sustainability and technical matters are all presented as fundamental benefits clients derive from choosing British Precast members. We use our Health and Safety charter and Sustainability charter to help communicate the efforts and credentials of our members. Our annual supplement in Construction News, most recently published in February 2018, was titled "Raising the Bar for Concrete" and communicated how collectively and as companies this is being achieved. This included a hardcopy version of our interactive online buyers guide that provides a route for potential customers to find members. Our Annual Awards provide a showcase of Best Practice from our members across four categories – health and safety, innovation, projects and sustainability. We also present our annual Creativity in Concrete Award to raise the profile of British Precast and its members to an audience of designers.

**British Precast are also championing the following initiatives:**

**Promoting precast as a means of mitigating the risks of offsite construction** is a campaign launched in 2016. This has also been communicated at various events through The Concrete Centre. It is a nuanced campaign. It does not simply promote offsite construction and promote precast as the best option but rather highlights how precast is the best option if you want to go offsite, by demonstrating the risks of timber and steel solutions. It therefore also implicitly, and perhaps overtly, promotes traditional masonry construction over timber.

**Promoting the benefits of precast concrete and masonry** as a resilient, long lasting, local and low carbon product. The main vehicles for doing this are The Concrete Centre, Modern Masonry and our product associations, but British Precast also directly communicates these messages. In raising the profile of British Precast and these messages, the This is Concrete campaign has also been used in a case study focussed advertising campaign with British Precast branding.

**Promoting "Buy British Precast"** to protect our members from alternative materials that are imported as products or made from imported constituents; such as timber, steel and plastic drainage products made from imported resin.

**Annually, we hold the following major events:**

- **PRECAST2018 – 17th May 2018**  
A full day exhibition giving suppliers to the industry a fantastic chance to market their products and services to manufacturers, and for manufacturers to get key briefings and supplier updates.
- **GOLF DAY – 13th June 2018**  
This event has now developed into an opportunity for members to entertain clients and for British Precast to communicate to these clients the benefits of choosing our members as their suppliers.
- **ANNUAL DINNER – 5th July 2018**  
A black tie event offering the opportunity to network and celebrate the success of the industry. Our Best Practice Award winners are announced during the evening.

For further information please visit our website [www.britishprecast.org](http://www.britishprecast.org)



ACME architects receiving the British Precast annual Creativity in Concrete Award. (L-R) Bill Turnbull - British Journalist and Presenter, Catherine Hennessy and Friedrich Ludewig - ACME, Matthew Clay - President.



British Precast Construction News Supplement, 2018.

# Outstanding Contribution to Health & Safety: 2017 Winners

This award is given to individuals and teams in recognition of leadership, special efforts or significant contributions to improvements in health and safety in the business or along the supply chain.

The 2018 winners are announced at the Annual Dinner on 5th July 2018. Here are the 2017 winners:



Chris Taylor from Stanton Bonna.



Glenn Regan from Forticrete.

From design  
to reality



Tekla Structures is intelligent 3D modelling software designed to help you deliver all types of precast concrete elements at the right time to the right place. Integrating design and detailing with manufacture, project management and efficient information sharing Tekla Structures can do it all.

**Together we are shaping a smarter future for construction.**

[www.tekla.com/uk/solutions](http://www.tekla.com/uk/solutions)

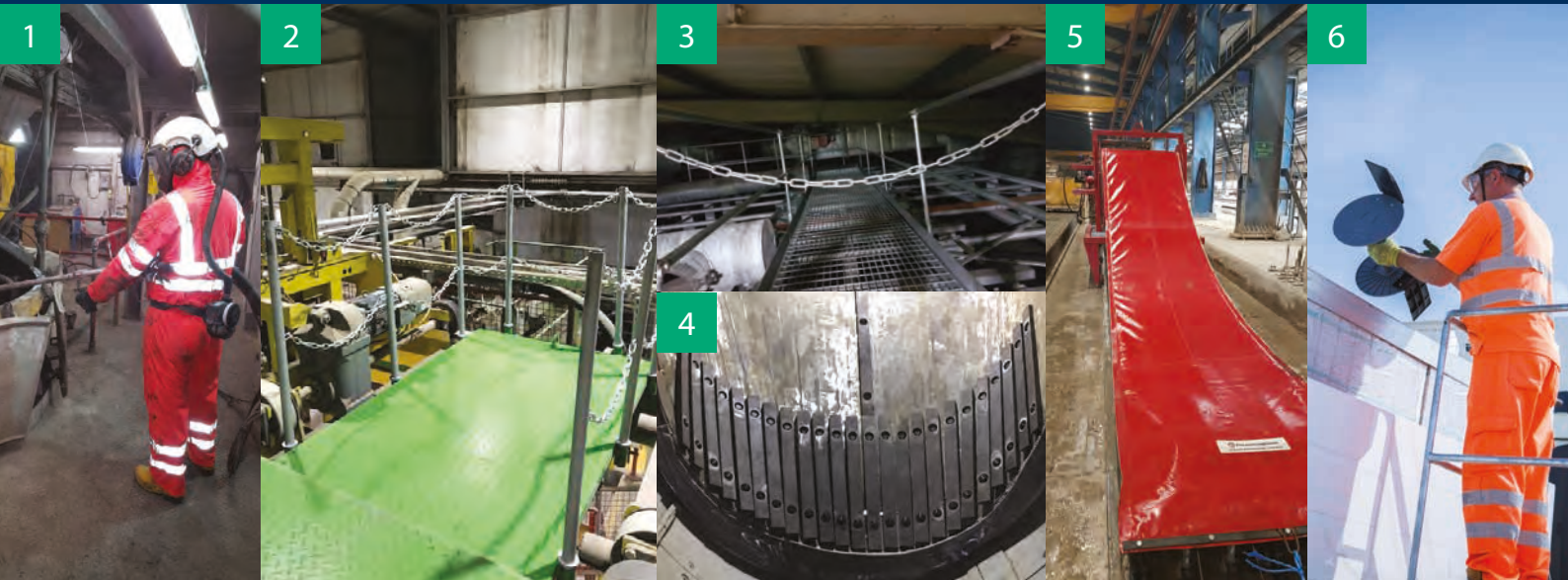
**Tekla**<sup>®</sup>  
Structures

 **Trimble**<sup>®</sup>

TRANSFORMING THE WAY THE WORLD WORKS



# Best Practice Awards: 2018



## Health and Safety

### 1 AGGREGATE INDUSTRIES - THINKING OUTSIDE OF THE CONFINED SPACE

Aggregate Industries were able to use existing Aqua Blast technology to eliminate the need for confined space entry within their concrete mixer and filler box with associated reduction in hand/arm vibration, noise and RCS exposure. The project demonstrates effective workforce engagement generating an impressive increase in productivity. The success of this equipment has been recognised on a global level for Aggregate industries' parent Lafarge Holcim with applicability across the business being considered.

### 2 BRETT LANDSCAPING - SAFE WORK AT HEIGHT ACCESS FOR CUBER MAINTENANCE

The collaborative approach of the Brett Landscaping Cliffe and Barrow site teams has successfully addressed the significant work at height risks associated with maintaining the cubing plant. By working with Rekers GmbH at the design stage of dryside cubing plant upgrades, improvements have been made at minimal cost in comparison to the disruption caused by reliance on temporary scaffolding or other work at height solutions. These work at height mitigation measures can now be freely offered by Rekers GmbH on other plant installations regardless of customer or location.

### 3 BRETT LANDSCAPING - SAFE HIGH-LEVEL ACCESS TO CURING CHAMBER BURNERS

Brett Landscaping undertook a project working with subcontractors, Smart-Energy Ltd, to design and build suitable permanent access platforms / gangways above the racking system. The solution significantly lowered the work at height issues of accessing and servicing the LPG burners and the reduced production downtime means a project payback of only 2 years. The project, developed by a mature engineering apprentice was used as part of an evidence portfolio towards their vocational qualifications.

### 4 BRETT LANDSCAPING - PENTA CHUTE WEAR PLATES

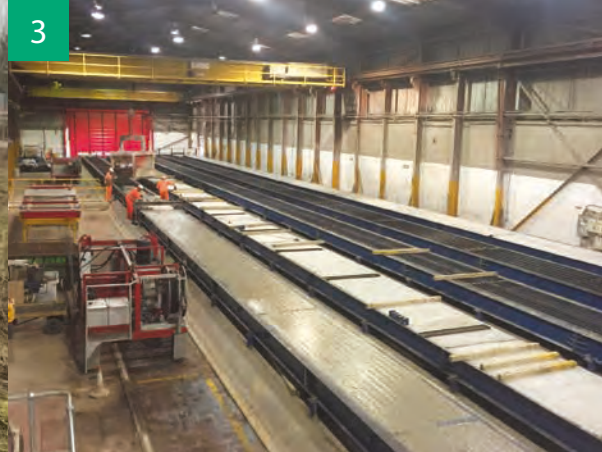
Brett Landscaping's introduction of bolt-in hard wearing plates in the tumbler drum chute has removed the need for grinding, cutting and welding. This new approach to maintenance has removed the impact of hand arm vibration, hot work and work in a restricted or confined space. The change to the maintenance schedule removed the need for weekly production downtime and the project payback is less than 12 months.

### 5 CREAGH CONCRETE - PRESTRESSING OPERATIONS

The project submitted by Creagh Concrete represents a comprehensive review of their stressing operations resulting in an exemplary standard of engineering control over noise and RCS combined with improved visibility and protection for prestressing operations. The improvements to the Roco Multiangle Saws reduce noise at source, removing operator reliance on PPE and the introduction of high visibility bed covers decrease the likelihood of any breach of the exclusion zone while stressing operations are taking place.

### 6 TARMAC - AIRCRETE VOID GUARD

Tarmac in collaboration with a supplier have been able to develop effective void guards for Aircrete transportation. Simple design adaptation enabled remote placement and removal of the void guards, eliminating work at height. As a result of the void guard introduction, there have been zero load shifts and the business has been able to increase the number of packs carried on the vehicles safely.



## Sustainability Award: 2018 Shortlist *sponsored by GCP*

### 1 AGGREGATE INDUSTRIES - BUG HOTELS

The Burton CBP factory has bunds where wild flowers were recently planted. In order to improve the ecosystem within these areas and improve flower pollination, and following advice from a biodiversity expert, the factory team built 12 bug hotels during spare time which were used as a refuge by a range of insects for nesting and winter hibernation. The structures were built using old packaging, used pallets and discarded blocks. Members are monitoring the different species using the structures: in addition to different types of insects, birds (e.g. buzzards) were also detected on or around the structures.

### 2 AGGREGATE INDUSTRIES - MODERN SLAVERY AWARENESS & TRANSPARENCY

AI set up a Modern Slavery awareness campaign, which took place internally and externally, engaging employees, management and the wider supply chain. The main activities included a management level training course; workshops with the

supply chain; and a highly visible poster campaign to raise awareness and provide guidance to any individuals who might pass through AI's sites. A supply chain methodology was also developed (in collaboration with the Supply Chain school) to help enable greater transparency. The key benefits have been the increased education and awareness amongst employees, wider supply chain and visitors to sites.

### 3 FORTERRA - BATCHING SOFTWARE UPGRADE TO REDUCE WASTE

Due to production requirements at Forterra's factory in Somercotes, the existing batching systems were continuously using differing mix designs. The system was only able to provide two different size batches which resulted in generating significant amount of concrete waste per day in 'end of line' waste. This problem was solved by upgrading the batching plant software. This has resulted in a dramatic reduction of over-batched concrete (scrap) totalling 1,610 tonnes per annum, which is a 92% reduction.

### 4 BRETT LANDSCAPING - AGGREGATE RECLAIMER REDUCING WETCAST WASTE

Brett Landscaping's Pocklington factory generates around 400 tonnes of waste concrete slurry annually from mixer, transport pods, manufacturing line wash-down, rejected elements due to colour change and other waste. The cost of reprocessing secondary aggregates using contractors was significantly high so the factory considered aggregates recovery systems and identified the 'ECO Frog' reclaimer system as the most ideal. Since its installation in August 2016, the EcoFrog system recovered 120t of aggregate per annum, reducing waste tanker movements from 27 to 18 and reducing the cost of reclaiming aggregates by £21,600 per annum.







## Innovation Award: 2018 Shortlist *sponsored by Chryso UK*

### 1 **CREAGH CONCRETE - OFFSITE FASTRACK BUILD, DUNLOY**

A house in Dunloy represents the first precast modular dwelling constructed in Northern Ireland. Spantherm, a pre-insulated precast ground floor system, was installed in six hours and then grouted and sealed ready for the superstructure. This comprised 35 precast wall panels, 40 hollowcore floor units and ten beams, which were erected in eight working days. The concrete sandwich wall panels arrived on site with the M&E first fix within the panels, and windows and doors fitted. Following initial erection, the house was completed in six months, so that the occupants could move into their new, warm, quiet home.

### 2 **MARSHALLS - WET PRESSED FACEMIX**

Recently, there has been a move to form concrete paving products from a base layer and a second decorative face layer to be more cost effective and sustainable. The base layer is chosen for structural considerations, whilst the face layer is chosen for aesthetics and durability purposes. Concrete Facemix technology for semi dry and hermetically produced concrete is established, but for wet

press produced concrete where the water/cement ratio is upwards of 12%, it is more challenging. Having two layers that do not mix together or delaminate is key. Through significant R&D work Marshalls now has an industry leading patented wet press process for Facemix technology which produces a robust two-layer product conforming with BS EN 1339:2003.

### 3 **H+H UK - SIG I-HOUSE INCORPORATING CELCON ELEMENTS**

Collaboration between SIG Offsite and H+H has resulted in a housing system combining the quality, speed and safety of offsite manufacture with the performance attributes of aircrete. Storey-high aircrete panels form the inner leaf of external walls, separating walls and internal partitions. They are craned into place and installed using a fast-setting high strength mortar that forms a 3mm airtight joint. Timber floor cassettes are then lowered into place allowing the second storey of Celcon Elements to be installed immediately. The System also includes all lintels and insulation – fixed to the exterior of the Celcon Element panels and in between separating walls. The result is a watertight shell of a standard house design completed on site in one week.

### 4 **STANTON BONNA - SURREY COUNTY COUNCIL SUPER GULLY**

'Super Gully' is a high capacity road gully, which requires minimal maintenance and rapidly removes standing water on a highway. There was an urgent need to address road flooding in Surrey and the specific need was identified by two county council engineers who developed an early pre-prototype from many components. Stanton Bonna worked with the council to develop a high capacity single precast unit that was easy to install. After some consultation, workshops and development, version 1 of Super Gully was installed at Belmont Roundabout on the A217 and is a huge success. An improved version 2 has now been developed with slimline kerb/chute units and ironwork adjusting units and will be installed at a site near Guildford.



INNOVATION IS OUR CHEMISTRY



# Project Award: 2017 Shortlist

sponsored by UK CARES



1 | BANAGHER PRECAST CONCRETE  
DLR ENCAPSULATION, LONDON



2 | STERLING SERVICES  
LAMBETH CIVIC HALL



3 | CREAGH CONCRETE PRODUCTS  
LIBRARY BUILDING, ROEHAMPTON



4 | MARSHALLS CPM  
FLOOD RELEASE SCHEME, RHYL



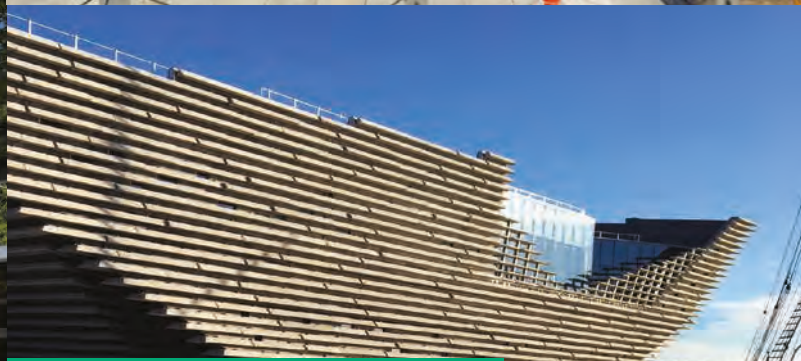
6 | BANAGHER PRECAST CONCRETE  
THE AVENUE MSCP, BRACKNELL



5 | TECHRETE  
2 ST. PETERS SQUARE, MANCHESTER



7 | TECHRETE  
V & A, MUSEUM OF DESIGN, DUNDEE





# Product Associations

British Precast members are eligible to join relevant product associations which provide a forum to address issues for a product or range of products. Their activities over the last year are reviewed in the following pages.

## AIRCRETE PRODUCTS ASSOCIATION



Health and Safety has been a focus and a success for the Aircrete Products Association (APA) over the last year with significant improvement achieved in the metric “Lost Time Injury Frequency Rate”. Whilst most health and safety initiatives are best addressed at a broader umbrella level of British Precast, as detailed elsewhere in this annual review, products are unique and warrant specific consideration. For this reason, APA established its own Health and Safety Working Group in 2016. This Working Group reports to the APA Principal’s Meeting, as do the Technical and Marketing Committees.

The APA Technical Committee is active in protecting the interests of UK aircrete producers in product, sustainability and design standards. This involves work at a European level, often working with and through the European Autoclaved Aerated Concrete Association (EAACA). APA ensures that the UK perspective is presented. Opportunities at a more local level are also being addressed. At a UK level there is a forthcoming revision of the UK British Standards that supplements Eurocode 6. Even more locally, building regulations (which are devolved) are monitored to ensure aircrete is as competitive as possible. For example, work is underway which seeks to extend the allowable length of an unbuttressed wall from 9m to 12m, without increasing the wall thickness for the whole length.

The Marketing Committee has launched new branding, a new responsive website and, with thanks to the Technical Committee, fully updated and rebranded datasheets. APA work with Modern Masonry to promote masonry solutions and were part of the Ecobuild 2018 masonry stand, where messages focussed on the Modern Masonry Consumer Survey (part funded by APA), a technical help point with APA datasheets and masonry being able to deliver all housing aesthetics.



## CONCRETE BLOCK ASSOCIATION



**The Concrete Block Association welcomed Julian Slater of Plasmor as its new Chairman in February 2018 at a time when the marketing activity of CBA is ramping up.**

The CBA initiated the Consumer Survey and was a catalyst to this being more widely funded and hence delivered through Modern Masonry (see separate report). This Survey, and resultant PR, is raising the profile of masonry and, in particular, the demand by homeowners and tenants for long lasting and resilient homes.

The CBA Marketing Committee has completed the new website, branding and publication of all datasheets and is now focussing on dissemination activities. Working with Modern Masonry, CBA provided

technical experts and a technical info point for the Modern Masonry Ecobuild stand. CBA will also have a profile at the National Self Build and Renovation Centre in June and UK Construction Week in October. These events all have slightly different audiences – all of which are a target for our key messages: that concrete blocks offer performance benefits, that CBA provides independent advice and CBA members are suppliers of choice. The final target audience is merchants: for this audience, relevant content is being compiled prior to dissemination.

The work of the Technical Committee underpins all marketing. Work is ongoing on standards (PD 6697), codes (EN 1996), aggressive soils and maintaining the extensive technical information available through the website. A helpline is provided by CBA with a rotation of members handling enquiries. Gerry Pettit provides leadership to the technical committee and also directly represents members at many national and international committees to ensure members’ interests are protected and members are forewarned of future changes.

# Product Associations Continued...

## BRITISH PRECAST ARCHITECTURAL & STRUCTURAL



**British Precast Architectural & Structural has new and ongoing initiatives with marketing, health & safety, standards and product specific technical/sustainability activity.**

The association was rebranded in late 2017 and changed its name from the Architectural & Structural Precast Association to British Precast Architectural & Structural. This product group has now contracted a new PR agency and is targetting the same audience through different sets of media and industry publications. Adverts and articles will now feature in Architects Journal and Construction News amongst others and a revamped newsletter has been launched with the first of four quarterly issues disseminated at Ecobuild 2018. The rebrand will conclude with a new website which will aim to go live in the middle of 2018.

British Precast Architectural & Structural is also active in meeting architects and specifiers – taking part in two Concrete Centre roadshows last year (in Glasgow and Manchester) and planning to take part in similar events in 2018.

BS 8297, the main precast cladding standard in the UK, has been revised and published late in 2017. The standard now accounts for a wide range of current practices and places architectural precast solutions at the very top in terms of industry expectations. The product group's next technical issue to consider will be the major revision of Eurocodes standards. Significant progress was also made with the Architectural & Structural Precast Code of Practice. The document is now almost complete and should be ready for publication in the first half of 2018 subject to feedback and approval by HSE.

In the wake of the Grenfell disaster, members of the product group made the decision to pursue a full-scale BS 8414-2 fire test to reassure users and owners of current or future high-rise structures that precast cladding has and will always be the safe option. Members have already completed three desktop studies in March last year (covering 3 different types of insulation). These studies, carried out by BRE in late 2016, were based on actual fire tests carried out on similar cladding systems and were made available on our website in March 2017.

British Precast Architectural & Structural was also the first in the UK to publish two Environmental Product Declarations (EPDs) covering architectural reconstituted white concrete cladding and a precast concrete ground beam. The EPDs initial results show an embodied carbon result for architectural cladding and structural precast which are both significantly lower than values currently quoted in the BRE Green Guide to Specification or Bath University's Inventory of Carbon and Energy. The sustainability team plan to expand the suite of EPDs for architectural and structural precast in 2018.





# Product Associations Continued...

## BRITISH PRECAST DRAINAGE ASSOCIATION



**In October 2017 consolidation of the Concrete Pipeline Systems Association (CPSA) and the Box Culvert Association (BCA) into the British Precast Drainage Association (BPDA) was completed with the launch of a new logo and website.**

The ever-popular Technical Design Guide was completely overhauled and updated with a new layout and up to date information, including useful links and references.

High demand for BPDAs accredited CPD seminars continues with over 96% of delegate feedback consistently rating the sessions good to excellent.

BPDA has maintained a strong presence through trade press advertising and editorial coverage on subjects such as sustainability, high pressure water jetting and the use of structural design to optimise construction cost and carbon emissions.

The new BPDA website is now a single repository for all things precast drainage with a comprehensive library of downloads, case studies, Structural Design and Material Cost calculators, blogs, newsletters and video content for pipes, manholes, box culverts and sustainable drainage systems.

Further work has been undertaken to understand the true carbon footprint of precast drainage systems including the publication of a new 3rd party EPD for concrete pipes and the ability to extend environmental impact profiling using the accredited British Precast EPD calculator. This study shows that the carbon footprint of concrete pipes is now 10% lower than the values calculated from an earlier detailed study in 2011. More research has also been carried out to compare the carbon impacts of concrete drainage with other materials, the results of which will be published in 2018.

Work has begun on revisions to the British Standards for concrete pipes and manholes. Numerous members of the BPDA Technical committee are actively involved in both British and European Standards development work.

BPDA has been involved in the CIRIA project Guidance on the Construction of SuDS C768 and also is actively engaged in a number of initiatives managed through British Water including a forum offering input into the development of Sewers for Adoption 8th edition which will provide details of SuDS components suitable for adoption by water companies in England and Wales.

Other projects underway in 2017 include the development of a new Frequently Asked Questions section for the BPDA website with an enquiry handling system which should go live in 2018.



# Product Associations Continued...

## INTERPAVE



**Interpave is the Precast Concrete Paving and Kerb Association, promoting and developing concrete block paving, paving flags and kerbs - ranging from domestic uses to heavy duty industrial applications, such as ports and harbours.**

Many publications continue to be produced by Interpave in support of concrete block permeable paving, government guidelines and changes to legislation aimed at using Sustainable Drainage Systems (SuDS) to help prevent flooding. During 2017 Interpave exhibited at Floodex UK in Peterborough in May and then at Flood Expo in London in September. As part of its continued commitment to supporting the wider paving industry, Interpave produces regular e-bulletins to ensure that the latest information is available and publicised alongside its website, which

has a wide range of technical, advisory and supportive marketing information. Since the start of the year one new case study has been published discussing the Australia Road scheme, which was 'Winner of Winners' for the Landscape Institute awards. A community of approximately 7000 receives the e-bulletins, whilst a second community of roughly 18,500 is registered to download documents.

The association was actively engaged in helping to create the pervious pavements chapter for the second edition of CIRIA's document The SuDS Manual (2015). Interpave is now close to completing the revision of its own document Design and Construction of Concrete Block Permeable Paving so that this document will be aligned with The SuDS Manual.

The association is currently working on further development of paving design and installation standards with BSI to ensure usability for both specifiers and installers alike. Additionally, Interpave is busy in Europe looking at the revision of European standards for concrete paving blocks, flags and kerb units.

Being fully committed to the effective training of installers and improving the quality of installation of their products, Interpave members contributed to the development of the National Highways Sector Scheme for paving, NHSS 30 - The Quality Management of the Installation, Maintenance and Repair of Modular Paving. This scheme was re-launched during 2017 with support from Interpave and will be further promoted during 2018.



## PRECAST FLOORING FEDERATION



**PFF promotes flooring products across all building sectors, focusing on key benefits such as precast flooring's excellent performance characteristics in terms of acoustics, fire, thermal mass and robustness, as well as speed of construction. In addition, PFF members provide health and safety, quality and sustainability benefits to their clients.**

Members commit to comply with the Codes of Practice for both safe stressing and the safe installation of precast concrete flooring and associated components. This commitment provides a positive differentiator for PFF members working in a marketplace that increasingly recognises the importance of health and safety. In 2017 the PFF completed

its update of the Code of Practice for safe installation and has now turned its attention to a review of the British Precast Code of Practice for safe stressing.

Technical work underpins much of the marketing activity but also addresses issues in product standards, building regulations, queries from designers, contractors, clients and building control, and guidance for designers.

The two specific areas for marketing activity are upper floors in housing and flooring on steel framed structures. At Ecobuild 2018 PFF promoted the benefits of precast flooring for upper floors in housing, i.e., squeak-free flooring which is fire resistant and offers both thermal mass and acoustic separation.

The speed of installation and thermal mass benefits of precast floors on steel frames continue to be the basis for a compelling case in other sectors. The key player in the choice between precast floors and metal deck

is the structural engineer. For this reason three technical articles were submitted and have been accepted for publication in The Structural Engineer journal.





# Affiliates

British Precast host affiliated groups who have a common interest in particular markets or aspects of installation.



## INTERLAY

**Interlay, the Association of Paving Installers, is the only independent trade association for precast concrete modular paving installation contractors in the UK.**

Ongoing work at Interlay, in cooperation with industry installer schemes aims to further raise awareness of the Association and 2018 will see increases in its membership base. Interlay has also amended the description of their activities to the broader 'Association of Paving Installers' in line with the development of the highways sector scheme, and in support of improving the installation of domestic paving reflecting members' increasing range of skills.

Interlay also provides regular support on health and safety issues relevant to the paving industry, technical matters, updates on changes to rules and regulations, as well as other industry news through newsletters and members' meetings. The Association continues to embrace new technologies with their multi-platform website supporting mobile and tablet technologies and also has an active Twitter feed – follow us [@Interlay1](https://twitter.com/Interlay1).

Interlay staff and members have over the past year, contributed to the development of the National Highways Sector Scheme (NHSS) 30.

The scheme aims to continually improve the installation, maintenance and repair quality of modular paving constructions. A dedicated internet hub detailing the training and support available to installers is hosted and maintained by Interlay ([www.interlay.org.uk/nhss30](http://www.interlay.org.uk/nhss30)) and Highways England now require the use of registered installers ahead of non-registered ones wherever available.

The National Highways Sector Scheme 30, 'The Quality Management of the Installation, Maintenance and Repair of Modular Paving', seeks to improve the installed quality of all types of modular paving including concrete blocks, flags, kerbs and ancillary products used in road construction. The Scheme aims to provide an industry benchmark, ensuring project processes are planned well and use properly trained and competent installers, verified by vocational qualifications and supported by the introduction of a CSCS card provided by the LISS industry skills scheme. Focusing on continuous improvement, quality of installation and reduced ongoing costs for both clients and suppliers, the scheme was developed by a dedicated technical advisory committee. This includes representatives from across the paving sector - including clients, contractors, manufacturers, suppliers, trade associations, training organisations and certification bodies, with Interlay providing the Secretariat and logistical support.

# Affiliates Continued...

## MODERN MASONRY

**Maximising the use of masonry in the face of timber and lightweight steel solutions is the purpose of Modern Masonry.**

Members and their respective product groups who seek to maximise the use of masonry construction have combined forces under the umbrella of Modern Masonry. This includes Concrete Block Association and Aircrete Products Association and product groups beyond the British Precast family: Brick Development Association and Mortar Industry Association.

The key messages are that masonry can and is delivering a resilient and sustainable built environment cost effectively, and that in the housing market UK plc needs the masonry sector to continue delivering the majority of our new homes.

To maximise the use of masonry, Modern Masonry's work includes Influencing government and reaching specifiers. A recent new initiative is based on a consumer survey of 2000 homeowners and tenants.

## INFLUENCING GOVERNMENT

An indicator of the extent of lobbying is that in 2017, responses were submitted to 15 consultations, inquiries or reviews including "Fixing our broken housing market. The housing white paper", "Housing - State of the Nation by Public Accounts Committee" and "Fire Safety - call for evidence. Response to Consultation on the Scope of the Public Inquiry into The Grenfell Tower Tragedy". Consultations at the beginning of 2018 include the "House of Commons Environmental Audit Committee on Heatwaves: Adapting to Climate Change inquiry" and "House of Lords review into modular construction".

Modern Masonry champions masonry in the face of "Timber First" Initiatives. Having successfully resisted "timber first" initiatives previously, most notably in the London Borough of Hackney, three further instances in the past year have been and are being addressed. Using evidence of relative performance and sustainability credentials we are trying to address this timber bias in the Welsh Assembly, Holyrood and in Westminster, particularly in DEFRA. Two fundamentals make this a challenge: The perception that because it grows, it is sustainable; The governments have a vested commercial interest in forestry products. Modern Masonry is making progress despite this and now has a role in a Welsh sustainability forum and reinvigorated dialogue with DEFRA.

## CONSUMER SURVEY

**A consumer survey of 2000 homeowners and tenants was completed in January. The findings are being used in PR activity and advertising. The first purpose is to raise the profile of Modern Masonry, and thereby masonry, through simply providing useful insights from such a large survey. The second purpose is to draw out conclusions from the survey in relation to longevity, quality and performance and demonstrate that masonry can meet these needs and desires. The final and simplest purpose is to communicate that the vast majority of respondents see masonry as the material of choice for their homes.**

## REACHING SPECIFIERS

The major annual event is our housing conference. It was held in the Building Centre, London on October 30th. The purpose is to reach beyond our membership and with an attendance of over 120 mainly architects, engineers, developers and technical organisations, this was achieved.



Resilient Housing Conference – 30th October 2017.

Throughout the year Modern Masonry exhibits and presents across the country. 4 examples from the first two months of 2018 are:

- Social Housing Conference, Salford; January 25th
- Self Build Show NSBRC, Swindon; January 26th to 28th
- BRE Flood Resilience Summit, Watford; February 8th
- Nth Ireland Concrete & Masonry Half day seminars; Feb 19th & 20th.

The largest event of the year is Ecobuild held in March. In 2018 Modern Masonry launched its consumer survey (see bottom left) at the London event at its prominent stand.

Modern Masonry also reaches its audience through digital media, print articles and advertising. This is mainly in the construction and house building media, but the consumer audience was also reached with extensive articles in the Guardian housing supplement in September 2017 and April 2018.



Modern Masonry had a prominent stand at Ecobuild 2018.



# Mineral Products Association

**Since its formation in 2009, the Mineral Products Association (MPA) has established itself as the sectoral voice of the mineral products and quarrying industry, representing over 500 companies throughout the UK including 11 international businesses and 490 independent SMEs. This 'family' of common interests relies on close working relationships with MPA's affiliated members in QPA Northern Ireland, MPA Scotland, British Precast, the British Association of Reinforcement, Eurobitume UK and the British Calcium Carbonate Federation.**

A strength of the MPA model is the union of thinking and dialogue which enables a common approach to strategic issues to be taken, whilst accommodating local approaches within the devolved administrations. Key issues such as Health & Safety, Resource use, Legislation and Regulation, Taxation, Technical Standards, Carbon Reduction and Biodiversity require a common response if the industry is to be recognised as being coherent, competent and contemporary.

For a sector with an annual turnover of £20Bn to the UK economy each year with a GVA of £6.4Bn, employing 78,000 people directly and supporting 3.4m in the supply chain, the construction industry's biggest supplier, it is important that we are well organised,

engaged and delivering. As we improve our understanding of the significance of our sector we have to communicate that message effectively to key stakeholders using conventional publications, advocacy and social media.

Ensuring that we are evidence based and able to provide reliable and quality data and information covering all of our key issues is vital. Passionate assertion has a role to play in 'catching attention', but without hard evidence there is no opportunity to significantly influence public policy. There is strong evidence to suggest that the role and significance of the sector is being recognised, but the process is not made any easier with so much change and loss of expertise within and across the face of Government and its agencies. MPA data and evidence becomes ever more important as funding for many of the traditional sources of data is cut. We are therefore increasing our capacity and capabilities to ensure that we are well-placed to protect members' interests as best we can.

MPA has developed its ambitions and vision for 2025 as part of the publication of its Charter. This will be the vehicle that helps shape how the industry wants to be perceived and do justice to a great industry which needs to be attractive to the brightest and best of the current and next generation of young people looking to invest their

careers. We are living in an era where skills shortages are becoming increasingly evident and the presumption is that all work is inside and electronically based! This is an important agenda which affects all members to some degree across the UK, particularly once we have left the EU. As the largest production industry in the UK involving 'all the talents' and 'all the sciences' we have so much to offer. Being ubiquitous, local, and covering so many disciplines, how can we not be attractive!

As MPA has grown it has developed a clear and shared agenda to protect its members' interests with an unambiguous, aligned and stronger voice. British Precast is a dynamic and active player in the MPA family and the views of its members add real value to the development of the industry and its relationships with key stakeholders. The union we are privileged to work with reflects the inherent diversity of its membership which when harnessed for the common good is a powerful force.



## BIBM

British Precast's membership of BIBM, the pan-European precast federation, allows us to liaise on legislative and policy issues common to the wider cement and concrete industry with the other member countries and members of the European Concrete Platform. British Precast are active in the BIBM technical and sustainability commission and keep a close eye on activities of the marketing commission. Our President, Matthew Clay, is on the BIBM Board.



## CONSTRUCTION PRODUCTS ASSOCIATION

All members, both Full and Associate, are able to access full membership benefits from the CPA with their own login details for the CPA website. These include emailed weekly notes, economic and industry updates, construction forecasts and priority bookings for CPA lunches and other events. Two current workstreams, in which British Precast are very active, are the two working groups on Building Information Modelling and post-Grenfell.



# Health & Safety Charter

All members of British Precast are signatories of our Health & Safety Charter. Members pledge to reduce accidents, both in terms of number and severity, to improve the overall health and safety of all those involved in our industry and to work towards the long-term aim of causing zero harm. Charter commitments are as follows:

- An expectation of 'ZERO HARM' to all.
- 65% reduction in LTIFR for direct employees by 2018 (Baseline 2013).
- 65% reduction in LTI for contractors by 2018 (Baseline 2013).
- Continuous improvement in accident severity ratio.
- Development, implementation or maintenance of a strategy for Health and Safety initiatives and related training, and to manage our Health and Safety needs with competent staff appropriate to the needs of the organisation.
- Implementation of maintenance of structured, inclusive Health and Safety meetings, with effective and appropriate consultation in line with our organisational needs.
- Submission of quarterly statistics to British Precast.



Our procurement guide promotes the benefits of using British Precast members as suppliers, and this includes the important role of our Charter schemes.

# Sustainability Charter

The British Precast Sustainability Charter is a mandatory requirement of membership of British Precast. Member companies of British Precast commit to go beyond legislation and take voluntary actions to make their products and operations more sustainable.

A set of sustainability principles has been developed based on the key sustainability issues facing the precast industry. Member companies' sites are audited annually to ensure that all the principles are being adhered to.

The scheme was first launched in 2007 with 17 companies taking part. The number of companies participating continued to grow until 2014 when the Charter and Auditing programme became a mandatory requirement of British Precast membership as part of British Precast's Raising the Bar initiative.

- Develop products that improve the quality and sustainability of the built environment.
- Measure, report and improve performance on sustainability issues.
- Manage all waste streams effectively and minimise waste disposal to landfill.
- Minimise pollution and emissions associated with production and production and transportation.
- Use energy more efficiently and minimise demand on mains water supplies.
- Use primary materials more efficiently and promote the use of secondary materials.

- Use water more efficiently and minimise demand on mains water supplies.
- Operate in a responsible manner to protect employees, contractors and visitors.
- Operate in an efficient and financially sustainable manner without comprising legal, quality or sustainability principles.
- Operate to the highest ethical standards necessary to develop a skilled and competent workforce.
- Operate to the highest quality standards necessary to satisfy customers and consumers.
- Protect and enhance the natural environment adjacent to or satisfy customers and consumers.
- Liaise effectively with local communities to foster mutual understanding and respect.
- Recognise that competition encourages the development of more sustainable products and practices.
- Work constructively with other organisations to deliver sustainable policies and practices.



# Full Members List

ABM Precast Solutions Limited	Decomo UK Limited	Patersons of Greenoakhill Ltd
Acheson + Glover	Delta Bloc UK Limited	Plasmor Limited
ACP (Concrete) Limited	E & JW Glendinning Limited	Premium Concrete Products Ltd
Aggregate Industries (UK) Limited	Ebor Concretes Limited	Quinn Building Products Limited
Amber Precast Limited	Elite Precast Concrete Limited	Robeslee Concrete Company Limited
Banagher Precast Concrete Ltd	Evans by Shay Murtagh Precast	S Morris Limited
Barcon Systems Limited	F P McCann Limited	Sellite Blocks Limited
Besblock Limited	Forterra Building Products Ltd	Skene Group Construction Services Ltd
Bison Precast	Forticrete Limited	Specialist Precast Products
Blanc de Bierges	H+H UK Limited	Stanton Bonna Concrete Limited
Breedon Northern Ltd	Hillhouse Quarry Group Ltd	Sterling Services Limited
Brett Landscaping & Building Products	Interfuse Limited	Stocks Blocks Limited
Broome Bros (Doncaster) Limited	Jordan Concrete Ltd	Supreme Concrete Limited
Castle Construction Products Ltd	Laird Bros (Forfar) Ltd	Tarmac Building Products Ltd
CEMEX	Lignacite (Brandon) Ltd	Techrete Limited
Charcon Construction Solutions	Litecast Limited	Thakeham Tiles Limited
CCP Building Products Ltd	Longley Concrete Ltd	Thomas Armstrong Group
Collier & Henry Concrete (Floors) Limited	Marshalls CPM	Thorp Precast Limited
Collier Quarrying & Recycling Ltd	Marshalls plc	Topflight Precast
Cornish Concrete Products Limited	Milton Precast	Townscape Products Limited
Craven Concrete	Mona Precast (Anglesey) Limited	TT Concrete Products Limited
Creagh Concrete Products Limited	Naylor Concrete Products Limited	WDL (Concrete Products) Ltd
Cross Concrete Flooring Ltd	Newlay Concrete	William Rainford (Holdings) Limited

## Associate Members List

Adomast Manufacturing Ltd	Erico Europe BV (Pentair Group)	Peikko UK Ltd
Arcelor Mittal Sheffield Ltd	Euro Accessories Limited	PERI Ltd
BASF Construction Chemicals	Fosroc Limited	Polarmatic Oy
B+B Attachments	GCP Applied Technologies Ltd	Precast Concrete Structures Limited
BDS Marketing Research Ltd	Graceland Fixing Ltd	Precast Construction Technology Ltd
Beresford's Flooring Ltd	Halfen Limited	Precast New Zealand Incorporated
Besser Company	Hanson Cement Limited	Precast/Prestressed Concrete Institute
Bianchi Casseforme SRL	Havsko Ltd	Probst Handling Equipment
BRE	Hendriks Precon B.V	Procter Johnson
Breedon Cement Ltd	Hickman & Love (Tipton) Ltd	Progress Group
Cambrian Services Limited	Huntsman Pigments	PUK Ltd
Canadian Precast Institute	Inform UK Ltd	Resiblock Ltd
Carbon8 Aggregates Ltd	Inter-Minerals	RFA-Tech Ltd
Caswick Ltd	Invisible Connections	Roche Manufacturing
Cathay Industries (UK) Ltd	Isedio Ltd	Schöck Ltd
CDS Curing T/A Ceramic Drying Systems Ltd	J & P Building Systems Limited	Search Consultancy
Cement and Concrete Association of New Zealand	Kingston University	Sicoma S.V.R.
Cenin Limited	KVM Industrimaskiner A/S	SIKA Ltd
Christeys UK Ltd	Lanxess Ltd	Simply Precast Accessories Ltd
Chryso UK Ltd	Larsen Building Products	Spiroll Precast Services Ltd
ClarkeConsult	Leading Edge Management	Strusoft UK
Command Alkon UK Ltd	Leca Danmark A/S	Styrene Packaging & Insulation Ltd
Concrete Manufacturers Association - South Africa	Leeds Oil + Grease Co. Ltd (LOGCO)	Tarmac Cement & Lime Limited
Concrete Technology Ltd	Longrake Spar Co Ltd	Tarmac Trading Limited
Conspare Ltd	Loughborough University	The CPD Certification Service
Construction Fixing Systems Ltd	Low & Bonar Hull Ltd	Trelleborg Pipe Seals
Construx	Lyttag Ltd	Trimble Solutions (UK) Ltd
Cooper Research Technology	Mapei UK Ltd	UK Certification authority for Reinforcing Steels (Cares)
Coote Engineering Ltd	Martek Industries Ltd	University College London
Cordek Limited	Max Frank Ltd	University of Brighton
CPI Worldwide	Megasteel Ltd	University of Dundee
CSM Thermomass	Mentor Training Solutions Ltd	University of Nottingham
Doncaster College	Miers Construction Products Ltd	University of Sheffield
Dundee College	Moulded Foams Ltd	University of Surrey
Dywidag-Systems International	N R Richards Associates Ltd	University of Teesside
E3 Recruitment	National Precast Concrete Association Australia	University of the West of England
Ecocem Ireland Ltd	National Precast Concrete Association USA	University of the West of Scotland
Ecoratio Ltd	Net-Temps Ltd	Wincanton
EKC Systems Ltd	Parex Ltd	Yara UK Ltd
Elematic Oyj	Patterns and Moulds Ltd	
Elkem Materials Ltd	PCE Limited	



Members' briefings at our annual PRECAST event are a popular way to keep up to date.

Published 2018 © British Precast

British Precast is the trade association for precast concrete manufacturers and members of the supply chain.

British Precast is part of the Mineral Products Association, the trade association for the aggregates, asphalt, cement, concrete, dimension stone, lime, mortar and silica sand industries.

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



**British Precast**

The Old Rectory  
Main Street  
Glenfield  
Leicestershire  
LE3 8DG

**Tel:** 0116 232 5170

**Email:** [info@britishprecast.org](mailto:info@britishprecast.org)

**Web:** [www.britishprecast.org](http://www.britishprecast.org)