mpa British Precast

Annual Review 2017

Executive Director's Message

British Precast helps members by promoting the use of British made precast concrete. We support members in raising the bar of the industry thereby raising their own reputation. We protect the interests of members in technical standards and industry guidance. We deliver information and support to members operating their businesses. This annual review provides an overview of this activity which is undertaken with the support of members and in collaboration with partner bodies.

Our President Matthew Clay opened our Annual Dinner last year and spoke of unexpected political results, as it was within weeks of the Brexit vote. There is always lots of catching up and things to discuss when the industry gathers, but last year with Brexit there was even more. And this will be true again this year with the annual dinner being 3 weeks after the 2017 general election. It will be an evening to network, entertain, celebrate and solve the world's problems until a very early hour. I hope to welcome many of you to our 2017 dinner, but if not this year, come in 2018, and we'll hope there is not any election or referendum that summer!

Whatever the political landscape, our sector and the broader construction sector continues to evolve. We see in the short listed entrants to our Best Practice awards published in this review, examples of investments made by members to improve their processes and products. In the project category we see how precast products are helping clients achieve their ambitions.

As a trade association we have made progress in the last 12 months on matters of collective interest. Some of these matters are simply more efficiently and effectively done together. Others can only be done by a trade body. We group them under headings of Health and Safety, Technical, Sustainability and Marketing. For activity that is specific to certain products we have our product groups. And for activity that is common across other parts of MPA, or even all construction products, we work across a larger constituency to have more impact. In the brief space available in this review, a flavour of our output is presented.

All of this activity benefits from the input of members. On behalf of all the British Precast team we thank members for their input and look forward to working with you in the coming year so as to continue driving the industry forward.

Andrew Minson
Executive Director | British Precast

Contents

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.

New sentencing guidelines were introduced in February 2016. These have significantly increased the 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 (see image on page 2 for an example of these incident alerts) which anonymously report incidents, including near misses, and the corresponding key learnings. These incident alerts are available through SafePrecast.com, which has an associated app, the British Precast website and British Precast newsletters.

SAFETY AND HEALTH AWARENESS DAYS (SHADs)

Site based SHADs for operatives and supervisors have been hosted by FPMcCann (March 2016) and Forterra (March 2017). We have welcomed over 100 and 130 delegates respectively at these events where groups of 20 participate in activities at 5 or 6 different stations. The 5 or 6 topics can be addressed in tangible and practical ways because the events are held at member facilities. We are grateful to FPMcCann and Forterra for hosting these events and running many of the training activities.

Leadership SHADs are held each November. The majority of members send senior representatives to these events to obtain the latest updates from industry and the HSE. During the most recent leadership SHAD a 'court case' based on a real event was used to show how a criminal prosecution for a breach of H&S legislation may look and feel.

Health and Safety Continued...

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 available 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.

For operative and maintenance level employees British Precast has introduced 4 stages to support members reach the goal of a competent workforce. See table.

STAGE	DEADLINE	SUMMARY
1	Dec 2016	Training needs identified, training provided and training signed off
2	Dec 2017	Training needs reviewed and revised if necessary
3	Dec 2018	External accreditation or validation as appropriate, of training
4	Dec 2019	External validation of the competency of each individual

The four stage process of the Safer by Competence framework for Process Operatives and Maintenance levels

RESPIRABLE CRYSTALLINE SILICA

Respirable Crystalline Silica (RCS) is the subject of the European wide NEPSI work which British Precast administers on behalf of members. Over the last year we have provided guidance to members on developing a policy on RCS for their own manufacturing facilities as well as guidance for customers and contractors when working on project sites with precast products.

SAFE TRANSPORT

Guidance on safe transport has been developed over the last year in several forms 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. British Precast now provides the administrative support to BPDWG. During 2016 MPA produced a Driver's Handbook, which is a very detailed and comprehensive document, and available to all members.

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: The PFF has an installation code of practice, the revision of which should be completed during the first half of 2017. ASPA is currently authoring 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.

STATISTICS

Output from our statistical data collection for 2016, shows a fall in the 12-month lost time injury frequency rate (LTIFR) over a 3-year period from slightly over 12 to slightly less than 7 across all of British Precast. We are on course to meet our 5 year target to 2018 which is to have an LTIFR down to 4. This must be seen in the context of targeting zero harm. Consideration of statistics and the detail behind them - such as types of incidents and root causes - helps British Precast target efforts to further reduce harm.

10 Health and Safety Incident alerts were issued in 2016

Sustainability

Precast products have inherent performance benefits that make them ideal for designers to create a sustainable built environment. These same designers expect the manufacturers to do all they can to minimise impacts throughout the construction process. British Precast members do this through their commitment to our Sustainability Charter.

KPI'S

In 2016 a combined production exceeding 15.1 million tonnes, was 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 one of our 2020 targets already achieved: overall factory waste generation was reduced by 15% compared to 2012, of which only 0.48 kg per tonne of production was sent to landfill in 2015. Carbon emissions from precast factories continue to fall as 12.45 kg CO_2/t was recorded in 2015 compared to 14.31 kg CO_2/t in 2012 (as amended). Energy consumption went down by over 5% since 2012 and almost half of all members' production tonnage is now covered by certified energy management systems (ISO 50001). However, we also experienced some increase in a few of the indicators: for example, factory water consumption was around 4% higher than the 2012 baseline. Setting targets, recording and transparent reporting are the fundamentals to improvement.

This year we developed a firmer link between data collection and auditing to ensure that members benefit as much as possible from the British Precast consultants support and advice on how to achieve the Charter commitments.

CARBON

British Precast was one of the first construction product trade associations to commit to the Infrastructure Carbon Review (ICR) pledge: British Precast was identified as a "leader" in the 2016 ICR Report due to our Sustainability Charter and pledge to reduce carbon emissions (by 20%), energy consumption (by 10%) and factory waste (by 10%).

British Precast has also been a major contributor to the publication of PAS 2080 and continues to participate in the ICR Carbon Practitioners Network. One Product Group within British Precast is currently exploring PAS 2080 implementation as a pilot for all British Precast members.

STANDARDS

British Precast also continues to be active members of British and European standard development committees, such as CEN/ TC229/WG5 which has recently drafted the first concrete EPD rules standard prEN 16757, and a number of groups initiatives, including the Sustainable Concrete Forum's Sustainable Concrete Strategy, CPA Sustainability Policy Group, and the European Concrete Platform (ECP).

INNOVATION

British Precast is involved in research projects such as the Innovate-funded UCL/ City University microwave curing project which endeavours to reduce energy consumption and curing times and is providing promising results.

PUBLICATIONS

In addition to the publication of eight Environmental Product Declarations (EPDs) this year, British Precast is set to launch one of the first verified EPD/ carbon calculators in the sector. This should make our members well equipped to address the challenges of carbon and embodied environmental impact. Our first Performance Report on progress with the Resource Efficiency Action Plan (REAP) was published this year and we now look to link this initiative to the challenge of Circular Economy.

SUSTAINABLE CONCRETE STRATEGY OF THE UK CONCRETE INDUSTRY

British Precast's Sustainability Charter scheme 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 9th Concrete Industry Sustainability Performance report was launched at the industry's Concrete & Masonry Pavilion at Ecobuild in March. The report shows an overall improvement in a number of indicators.

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 first quarter of 2017 will see British Precast begin to publish a set of generic industry average Environmental Product Declarations (EPDs) relating to a wide range of precast and concrete masonry products. An EPD is the output from a Life Cycle Analysis (LCA) carried out and presented in a format compliant with EN15804. The British Precast EPDs will be published through the IBU Verification Scheme. This is currently Europe's most recognised and established scheme for the publication of EPDs in accordance with EN 15804.

Thinkstep's Jane Anderson (centre) presents British Precast's sustainability team, Matt Butcher (left) and Hafiz Elhag (right), with the first verified generic EPD (150mm Hollowcore Flooring) at EcoBuild 2017

Sections of the construction industry are still largely unaware of EPDs but the application of product life cycle analysis is likely to be an important growth area. The benefits are not only in the future: even now having EPDs can provide assistance for projects seeking high BREEAM ratings. They are one of the tools that will help us put data behind our understanding of the whole life impact of the built environment and play a key role in the ability of construction product suppliers to maximise the benefits that BIM offer.

Over the last two years, British Precast worked closely with Sustainability consultants thinkstep on developing a life cycle assessment tool for the purpose of producing verified Environmental Product Declarations (EPDs) in accordance with BS EN15804: 2012 +A1 (2013). The tool created had to be robust and accurate but also usable in a market where the production of EPDs can be cost prohibitive for all but the largest manufacturers. To make the tool stand out from others emerging on the market British Precast has tailored the tool for use by precast concrete, mortar and ready-mix manufacturers. The tool has an extensive list of over 50 material inputs covering all the commonly used aggregates, cements, reinforcements and admixtures. Importantly carbonation calculations are also built into the LCA tool giving a fuller understanding of a products carbon footprint past the factory gate. Providing this information should allow the construction industry to make informed choices about the whole life impact of precast concrete products.

An EPD can be product/company specific or it can be generic and cover data from a number of manufacturers of a standard product or range of products. Using the newly developed EPD tool British Precast has produced a set of generic industry average EPDs utilising data collected from our members through their commitment to our sustainability charter.

When published the generic product EPDs will include aggregate and aircrete blocks, concrete pipes, cladding, ground beams, flooring, paving, box culverts, mortar and ready mixed concrete. There are several purposes for these generic product EPDs. Firstly, at the earliest design stages the supplier is unknown so an industry wide EPD will be helpful. Secondly, generic EPDs will act as a bridge for members of British Precast to represent their products to customers before a move to more companies publishing their own EPDs. Finally, having these EPDs in place will provide a verified source of data to factor into revisions to industry guides and databases.

The British Precast EPD project was originally split into three phases. As we now move to the completion of phase one, it has been decided that the second and third phases of the project will run concurrently. This will allow the product groups to expand the suite of generic EPDs where they see a need whilst enabling individual companies to develop product specific EPDs utilising the verified tool.

This decision means that British Precast is now able to offer an Environmental Product Declaration (EPD) development and verification service for precast concrete products manufactured by full members of British Precast.

Technical

British Precast is the recognised trade association representing precast concrete product manufacturers in the UK. As such, 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.

Technical work on particular products is directly addressed by their product associations, whereas overarching issues for all precast 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 - all of which British Precast is a stakeholder in by mandate.

Our gratitude is extended to all our members who have helped with our technical work in the past year, and appreciation in anticipation of your future contributions.

BREXIT

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

MEMBER ENQUIRIES

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 and marketing. Despite tight resources, British Precast effectively conducts this work. Our work in this area is further enhanced by ensuring our work 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 on building regulations to ensure members are fully represented at all key stages in supply chain specification.

RESEARCH AND ANALYSIS

We have continued to support our members over the past year with work on hazardous waste materials, Building Information Modelling (BIM) and Environmental Product Declarations Standards (EPDs) which will heavily impact on the future environmental competitiveness of our products, and will require significant ongoing effort and input. Understanding the implications of BIM on behalf of members and determining appropriate collective actions have been a key feature of the past year.

STANDARDS AND COMMITTEES

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 Environmental and Sustainability specific changes expected. 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.

Building Information Modelling (BIM)

2016 has brought the I in BIM (Information) to the forefront of efforts to increase the digitalisation of the construction products sector.

The focus of collective activity across the membership in 2016 has been centred on forming a consistent approach to providing product data. Such an approach will remove the need to translate information between websites, bespoke forms for tender and software models, while enabling greater use of BIM technologies. This focus on consistent product data will continue throughout 2017 with British Precast utilising its role as a 'Relevant Authority' to give our membership a smooth transition to the use of LEXiCON.

The importance of accurate, consistent product data was championed in a publication by the UK Government's BIM Task Group in April 2016. The methodology outlined in that document resulted in the creation of LEXiCON. LEXiCON defines the language, format, naming conventions and units that should be used when sharing data in the BIM environment. The output of LEXiCON will be Product Data templates (PDTs).

A PDT is a template to help structure information about your product, allowing manufacturers to detail properties of a product in support of the design, construction, operation and maintenance of a building. The technical content of these templates will be 'governed' at a precast concrete sector level by British Precast, as we have been approved as a 'Relevant Authority'. British Precast is currently actively engaged in researching and developing product data templates for use in the sector.

Once the PDT has been populated it becomes a PDS (Product Data Sheet). The new British Precast website has the capacity to host a library for member's products and generic products such as standard block, floor or pipe.

For some products it is expected that a generic PDS will be sufficient for most, if not all, manufacturers. For more bespoke products, proprietary PDS's are expected sooner.

Members should note that to comply with the requirements of BIM level 2 (the level of BIM required for government contracts) simply provision of digital data is sufficient – in any format.

Alongside the provision of data, the design and modelling aspects of BIM should not be ignored. The ability to receive, manipulate and issue BIM model data is of significance now and will grow in importance in the coming years. Across the sector most if not all suppliers who are involved in design are already on the journey to gain BIM capability and in time gain the benefits from the functionality that BIM offers.

If you would like to contribute to our work in this area all members are welcome to be part of the British Precast BIM working group.

Marketing

Promoting the benefits of choosing our members as suppliers of products is a primary aim. British Precast members represent excellence in health and safety, technical and sustainability aspects of precast and masonry production. At the heart of our Construction News supplement magazine (March 2017) we included a hard copy buyer's guide: a document available in interactive form on our website. Our Annual Awards celebrate best practice across 4 categories – health and safety, innovation, projects and sustainability - and also provide marketing content for promoting all our members. We present our annual Creativity in Concrete Award to raise the profile of British Precast and its members to an audience of designers.

Promoting the benefits of precast concrete and masonry – resilient, long lasting, local and low carbon – is a further aim. The main vehicles for doing this are The Concrete Centre, the Modern Masonry Alliance and our product associations, but British Precast also directly communicates these messages.

Promoting UK solutions to protect our member's interests from imported precast concrete and imported alternative materials is a third aim. In the last year we launched a "Buy British Precast" campaign and have used it particularly in the offsite arena where risks from competitors are particularly acute. We took this message to the Autumn Offsite show and the Ecobuild Offsite Zone in the Spring.

Promoting Precast as a means of mitigating the risks of offsite construction is a further campaign launched in March at the Ecobuild offsite zone and in our Construction News Supplement. It is also being 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. It promotes precast as the only option if you want to go offsite, by highlighting the risks of lightweight solutions. It therefore also implicitly promotes traditional masonry construction.

With respect to our three main annual events:

- The **PRECAST2017** exhibition full day event in May gives 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 all on a single day.
- Our **GOLF DAY** has now developed into an opportunity for members to entertain clients and to communicate to these clients the benefits of choosing our members as their suppliers. The next event is on June 6th 2017.
- The **ANNUAL DINNER** is an opportunity to network, celebrate success and generate the content for further marketing of the credentials of British Precast members. The next event is on June 29th 2017.

The Concrete Centre

The Concrete Centre's purpose is to make concrete and masonry the material of choice and protect and increase the use of concrete and masonry over alternative materials.

Fundamental is the function of enabling concrete and masonry to be chosen by designers and specifiers. This includes influencing building regulations and representing the industry in the development of design codes and translating these changes into the latest best practice and training for designers. It includes delivering the concrete industry sustainability strategy and communicating the sustainability credentials of our products, so that adverse perception does not rule out our solutions.

In conjunction, marketing activity to promote why to use concrete and masonry is delivered digitally, through publications and events. The Concrete Centre uses its technical capability and marketing capacity to influence stakeholders making material choices: engineers, architects, repeat clients, contractors and developers.

The Concrete Centre guidance delivers the 'why' and 'how' of using concrete and masonry and this technical expertise has credibility across the industry. By offering expert advice on the full range of concrete and masonry solutions available, The Concrete Centre can positively influence specifiers to choose an optimum concrete and masonry solution for their project over alternative materials.

During the last year, The Concrete Centre had thousands of face-to-face contacts with specifiers, offering expert advice in relation to their current and forthcoming projects.

The Concrete Centre does not work in isolation and, in the last year, collaborations have deepened with staff directly involved in technical/marketing activity of British Precast, most product groups and the Modern Masonry Alliance. For example it delivered the Concrete and Masonry Pavilion at Ecobuild 2017 which included the Aircrete Products Association, Concrete Block Association, Mortar Industry Association, Precast Flooring Federation and UK CARES, among others.

In summary, the Concrete Centre:

- Promotes why to use concrete and masonry.
- Enables designers to choose concrete and masonry by providing design and construction guidance.
- Influences the design environment in which this guidance is used to maximise choice of our materials.

Web links:

www.concretecentre.com/publications
www.concretecentre.com/events
www.concretecentre.com/CQ
www.concretecentre.com/CQsubscription
www.concretecentre.com/casestudies
www.sustainableconcrete.org.uk

Twitter:

@concretecentre
@thisisconcrete

Outstanding contribution to Health & Safety: 2016 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 2017 winners are announced at the Annual Dinner on June 29th. Here are the 2016 winners:

Dale Brown & Kevin Matthews from Brett Landscaping and Building Products

Representatives from The Tallington Factory Team, Tarmac Building Products

Andrew Dix, former British Precast president

Best Practice Awards: 2017

Health and Safety *sponsored by Forterra*

Companies - 250 or more employees

1 AGGREGATE INDUSTRIES - 'AT HOME WITH A VACUUM' DUST REDUCTION PROGRAM

Existing vacuum systems for the removal of dust were cumbersome and difficult to maintain, which discouraged effective cleaning. Improvements to the vacuum system, its operation and accessibility to otherwise unreached areas have meant that cleaning operations are easier and more effective, reducing exposure to harmful dust.

2 BRETT LANDSCAPING & BUILDING PRODUCTS - IMPROVEMENTS TO SHOT BLAST PALLET TRANSFER CONVEYOR

Creating a combined scrap handling system and improvements to the pallet transfer conveyor have drastically reduced gate access frequencies and exposures in both scrap and pallet areas for Fork lifts and personnel alike. In addition, reduced manual handling and improved posture during work, with reductions in twisting and reaching, have also been recorded.

3 FORTERRA BUILDING PRODUCTS - IMPROVEMENTS TO MIXER AND WEIGH BIN WASH SYSTEM

A new mixer and weigh bin wash system, operating with lower water use than previously practical, has reduced accesses to the mixer and weigh bins. Configurable sprays to ensure complete cleaning of areas normally difficult to access without personnel exposure or confined working conditions have also been adopted.

4 FORTERRA BUILDING PRODUCTS - SLURRY TANK IMPROVEMENT PROJECT

Rethinking the design, siting and orientation of the slurry handling tank, including radar and ultrasonic level monitoring and observation, together with redesigning the agitator operation and access has enabled reduced access and improved maintenance operations. This has reduced exposure risks and to date has eliminated jamming of the system thereby improving productivity.

Companies - fewer than 250 employees

1 BERESFORD FLOORING - BRILLIANT IDEAS – "THE HOLE SYSTEM" FOR MARKING, DRILLING, PLUGGING AND SEALING

With a new lightweight system named 'The Hole System', a number of operations to the underside of Hollowcore floors can now be completed from ground level. This has reduced working at height, repetitive strain risks, exposure to dust and alkaline drilling wash water, and other risks associated with the regular assembly and moving of access equipment.

2 LONGLEY CONCRETE - IMPROVED WIRE DISPENSER EYELET DESIGN

Reduced exposure to the risks associated with the maintenance and operation of traditional designs of eyelets on 'Lobster Pot' wire storage arose from improvements to the existing designs. These now incorporate a pivot action eyelet which has improved wearing of the eyelet and reduced wire snagging and maintenance operations.

3 STANTON BONNA CONCRETE - NEW GULLY LIFTER DESIGN TO REDUCE RISK

Working with their supply chain, Stanton Bonna have designed a Gully lifter that makes lifting, handling and installation of a range of gully units much safer, including the ability to lift from a laid-down position. It was also observed to be quicker and easier than traditional methods.

4 STANTON BONNA CONCRETE - REDUCING INSTALLATION RISKS WITH NEW PIPE PUSHER

After reading of a contractor fatality using traditional installation methods, Stanton Bonna designed a new system that no longer required the presence of installers in the trench. Their new design of Pipe Pusher is attached directly to an excavator via a quick coupling and improves safety and efficiency.

FORTERRA

Sustainability Award: 2017 Shortlist *sponsored by GCP*

1 CEMEX UK - WASTE MINIMISATION AT WASHWOOD HEATH RAIL SOLUTIONS

Whilst reviewing the site for ISO 14001 certification, employees at CEMEX Washwood Heath factory identified an opportunity: instead of sending concrete waste and non-compliant sleeper production to low value recycling, the units were used to build barriers to protect walkways and segregate mobile plant and lorry movement within the factory. The measure eliminated the need to buy plastic barriers and fencing, leading to savings reaching up to £17K.

2 CREAGH CONCRETE - BRACKAGH QUARRY WIND FARM

Three wind turbines and a control building were installed at Creagh Concrete's Brackagh quarry site which supplies its precast works. The turbines replaced two diesel boilers, leading to significant energy savings reaching up to 2000MWh p.a. and 540 tonnes of CO_2 emissions per annum. The project also employed green value engineering leading to further reduction in material use in construction works and up to 22 tonnes of CO_2 emission savings during construction.

3 FORTERRA BUILDING PRODUCTS - WHITTLESEY PLANT CONTINUAL ENERGY IMPROVEMENT

Forterra's Whittlesey factory has been introducing measures to improve efficiency and reduce energy consumption over a number of years. In 2016 the management team increased production by 12% while improving energy efficiency through a number of measures such as investing in new pallets, improved preventative maintenance programmes, loading shovel replacement, new burners, improved curing control systems and increased insulation. This series of relatively small improvements have led to a saving in 2016 of 9% compared in energy consumption to 2015 and almost 18% when compared to 2014 when the project started.

4 FORTICRETE - LEIGHTON BUZZARD STOCKYARD DEVELOPMENT

In 2016 Forticrete started a major redevelopment of the roof tile making facility at Leighton Buzzard. The required doubling of the existing stockyard was implemented in the most sustainable manner possible. The project included flood protection measures and was undertaken at half-term, ensuring reduced disruption to community. A significant amount of the factory's own waste and crushed concrete (over 5,000m3) from existing structures within the new area was used to provide the hardcore and blinding for the ground. Therefore saving cost and reducing carbon due to reduction of virgin aggregates use and transport.

5 ROBESLEE CONCRETE - HYDRAULIC FILTER PRESS

Robeslee Concrete has tried a number of solutions to handle the problem of concrete sludge and waste water. After using builder bags to separate the water from the filter cake, Robeslee decided to install a hydraulic filter press which came fitted inside a container which was fixed at the top of another container with skips to collect the pressed cake falling from the upper container. Savings from the system and reduced labour is expected to £26,000 per annum.

gcp applied technologies
GRACE CONSTRUCTION & PACKAGING

Innovation Award: 2017 Shortlist *sponsored by Chryso UK*

1 BRILLIANT IDEAS, BERESFORD'S FLOORING - CONCRETE CARRIAGE

When pumping concrete the placing boom cannot always reach as far as needed and it is often necessary to attach additional rubber piping. Moving the pipe to different locations on the floor is strenuous work as the concrete filled pipe drags on the floor. In addition the metal pipe joiners dig into the floor like an anchor. The concrete carriage is a simple aluminium plate with four large inbuilt all-direction castor wheels and a pop up pipe cup and strap that keeps both the pipe and the metal joiner off the ground. If each joiner is supported by a single carriage this will allow several pipes to be moved by a single operative. This simple innovation not only saves physical injury and strain to the concreting operative but it also speeds up the concreting process as the pipe moves easily and quickly across the floor.

2 BRILLIANT IDEAS, BERESFORD'S FLOORING - TOWER TRUCK

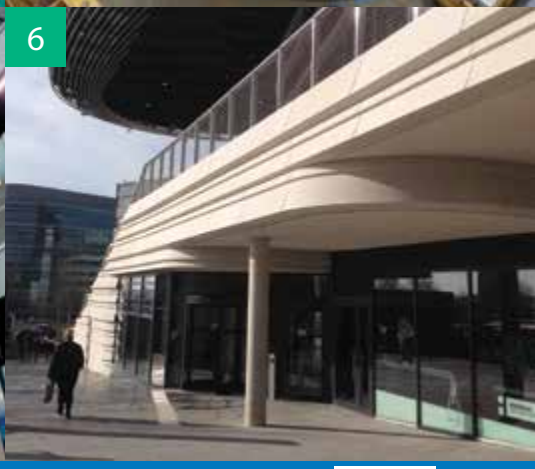
There are numerous accidents each year when operatives try to pull themselves along whilst standing on top of a tower scaffold and the tower has toppled over. To reduce accidents on site many Principal Contractors insist that the towers are built with only two wheels and have two fixed plates so it is impossible to move the tower without lifting it. Tall tower scaffolds can be very heavy and the Tower Truck was developed to take the strain out of moving tower scaffolds. It comprises a fully adjustable clamp that can be attached to any type of tower and a wheeled handle with an inbuilt tow ball. The handle is long enough to create a 10:1 ratio of leverage so that tall towers can be easily lifted and moved with little effort. Feedback from operatives and site management about the Tower Truck has been very positive.

3 FORTERRA BUILDING PRODUCTS - ACCELERATED CURING OF PRE-STRESSED BEAMS

Forterra wanted to increase its production of pre-stressed T-beams without investing in either land or additional moulds. It also wanted to mitigate risks of cold weather affecting production output. Following laboratory trials investigating admixtures, cement contents and heating profiles a bed heating system was installed and commissioned. A mini-kaizen project was then launched in order to reduce the strip, setup and cast activities from 5.5 hours to 4 hours. The overall result is that for limited capital investment Forterra has achieved double-casting within a 24 hour period for 40% of its T-beam moulds and has reduced cement usage for the remaining 60%. Production output of T-beams, in tonnes, has increased by 27% over previous capacities with minimal impact to fixed costs.

4 MARSHALLS - KEYDRAIN

'Keydrain' is a single piece concrete drainage unit with a central core specifically designed to drain surface water away. Dual slots pressed into the surface of the unit transfer water to the core via a perpendicular slot at each end face when placed adjacent to one another. Any required length can be achieved by simply adding more units.
The product enters an arena which is traditionally filled with non-concrete solutions such as linear channel systems with a plastic or steel grate.
A key benefit of Keydrain is its aesthetic appeal as it is manufactured in a variety of concrete colours, which compliment the surrounding concrete or natural stone paving products. Additionally, the shape and weight of Keydrain enables simple installation.



Project Award: 2017 Shortlist *sponsored by UK CARES*

1 STERLING SERVICES - HANOVER SQUARE, LONDON

Contrasting elevations were delivered by Sterling Services to suit planning and architectural requirements. The Oxford Street elevation, has a highly decorative handmade tile exterior cast onto precast panels. The scale of the tiles raised potential issues of relative movement which were addressed through testing and fixing design. The Hanover Square elevation comprises panels with handmade charcoal bricks from Denmark, which were fixed between timber beading rails, together with Portland stone borders and a CNC cut natural stone frieze at first and sixth floors.

2 TECHCRETE - JOHN LEWIS, VICTORIA GATE, LEEDS

For the flagship John Lewis store in Leeds, the diagrid pattern was deconstructed by Techrete engineers to panelise a façade to enable production. Innumerable intricate details regarding the geometry, the engineering and the manufacturing were combined in 3D BIM, from which over 600 drawings were generated. Many challenges were successfully overcome: accuracy of facetted corners, contrasting finishes within single units, installation of unusually shaped units of up to 14 tonnes in weight and the requirement for unique permanent fixing methods.

3 CPM GROUP - ERITH PARK DEVELOPMENT, KENT

The UK's largest circular precast weir wall chamber was supplied by the CPM group as part of a £60m programme of drainage and enabling works. The design requirements of almost 5m head of water and 174 litres per second necessitated the 3.7m diameter chamber. Concrete was the only option given the pressures on the hydro-brake inside the chamber. Precast gave offsite advantages highlighted by O'Keefe Construction's Project Manager. He commended the CPM team for the quality of manufacture and addressing complexities arising from the depth of excavation and the proximity of neighbours.

4 THORP - VICTORIA GATE ARCADE, LEEDS

The 6000m2 distinctive brick façade comprising 550 panels were supplied and installed by Thorp together with recon stone column supports. The architecture is a modern reference to Leeds rich Victorian legacy of corbelled and highly decorative brickwork, and was best delivered with modern precast due to speed, quality and not requiring scaffolding. Thorp solved the problem of sourcing bricks with guaranteed quality of multiple faces, and developed a special positive key for casting. Traditional mould making methods were replaced with computer generated hot wire cutting of polystyrene to address the lack of repetition in units.

5 CORNISH CONCRETE PRODUCTS - BP SUNBURY

A feature staircase for a prestigious four storey office building was designed, supplied and installed by Cornish Concrete Products. The staircase was conceived as an insitu concrete solution but for finish and quality, precast became the choice. The mix was white Portland cement with white dolomite coarse and fine aggregates. Acid etching brought up the sparkle from the mica content. All the precast elements are cantilevering from the curved central spine beam. The design process utilised both Solidworks and AutoCad as independent 3D checks on a complex structural, manufacturing and installation challenge.

6 STERLING SERVICES - WATERMARK WESTQUAY, SOUTHAMPTON

Watermark Westquay forms a new entertainment complex and urban precinct. To reflect the location the architecture echoes a traditional ships hull. Sterling Services were contracted to design, manufacture and install the highly complex external precast concrete staircases and cladding that delivers the saw tooth aesthetic. The range of elements led to a spectrum of mould manufacturing methods being adopted, but all were cast in Sterlings Portland concrete and etched by hand to ensure quality and consistency. In specific locations, bespoke rigs were used to ensure safe installation without damaging the units.

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 (APA)

The Aircrete Products Association (APA) operates through three committees; Principals, Marketing and Technical. They work to promote the use of aircrete and ensure that the sector is leading technical developments. A working group on Health and Safety has recently been established to identify measures specific to aircrete that can be instigated to reduce harm.

APA work with Modern Masonry Alliance to promote masonry solutions in the UK market and were part of the high performance housing stand at Ecobuild 2017 where messages focussed on local skills and materials, thermal bridging details and masonry being able to deliver all housing aesthetics.

The APA website is being updated with a new responsive platform and all new content. The technical committee have revised technical information and data sheets to ensure the new look and better performing website will be as useful to visitors as possible.

APA are members of the European Autoclaved Aerated Concrete Association (EAACA). This provides a forum for discussion and activity on common issues. In the past year technical issues have included ensuring the UK's robust means of demonstrating aircrete's durability is not compromised or confused by new measures, and political issues have included liaison with MEPs and Officials on whole life aspects of performance being more critical than simply reducing "U" values to achieve lower energy targets.

The APA technical committee have an active role protecting the interests of UK aircrete producers in product, sustainability and design standards. This recently involved commissioning concentrated load spread test work, the results of which were successfully used to counter a German proposal which would have made masonry design less economic in Eurocode 6. The committee is also involved more broadly, for example in contributing to a positive outcome for aircrete in render guidance by NHBC and working to include aircrete in course material at Derby University.

APA and CBA collaborated with the Mortar Industry Association to deliver a high performance housing stand at Ecobuild 2017

CONCRETE BLOCK ASSOCIATION (CBA)

CBA Technical Committee, under the leadership of Gerry Pettit continues to do sterling work on behalf of members. There is a wide range of technical solutions at our disposal to support specifiers of our products and these are now showcased in a revamped website.

Updating the website is the first step of a more proactive marketing approach being developed by newly formed marketing committee, under the leadership of Matt Rushton. Council has agreed to double the marketing budget for 2017 to get across the message of the positive role of concrete blocks, their local availability, the range of products and their robustness.

CBA were excellently represented at Ecobuild with a stand shared with the Aircrete and Mortar Associations demonstrating the high performance of masonry wall solutions. Grangewood Bricks apprentices once again demonstrated their block-laying skills to draw in the crowds. The smoothness of this blockwork demonstration was only possible because of the work of Alan Peters of Tarmac in ensuring all the materials and logistics were in place.

The Modern Masonry Alliance continues to play a very important part in the CBA strategy, not only delivering the Ecobuild stand but being a presence throughout the year at public events, presenting in offices and lobbying government, quangos and industry bodies. The purpose is to maximise masonry market share. Two key issues are resilience and the need for masonry solutions despite the hype around offsite.

Jeremy Lee of AI completed his successful term as Chairman and passes on the reigns to Mark Randall of Tarmac.

Product Associations Continued...

ARCHITECTURAL & STRUCTURAL PRECAST ASSOCIATION (ASPA)

ASPA has been very active over the last 12 months: marketing, safe installation, standards and product specific technical/sustainability activity.

The group continued its PR campaign with a wide range of articles and features in industry magazines covering a wide range of projects. A further issue of the main Association newsletter ASPANEWS was published in late 2016/ early 2017. ASPA plans to make a further push on marketing and PR in 2017, with a new website and participation in The Concrete Centre roadshows to reach architects and specifiers about the advantages and potential of architectural and structural precast.

Members of ASPA are developing the final and most crucial chapters of the Code of Practice (CoP) for Safe Installation of Structural and Architectural Precast, which merges two earlier Codes of Practice originally developed over 15 years ago. A workshop on cranage for members, installers and crane operators was held to develop best practice in this critical area and help develop the most challenging chapter of the Code.

The revision of the main architectural precast cladding standard BS 8297 has also progressed significantly and will move to the public consultation stage in Spring 2017.

ASPA commissioned BRE to complete three desktop studies assessing a number of precast cladding details to the BR135 acceptance criteria on fire performance and protection to thermal insulation. Reports on these studies will be published soon by ASPA.

ASPA also expects to publish two Environmental Product Declarations (EPDs) covering architectural cladding and structural precast products. 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 Green Guide to Specification or Bath University's Inventory of Carbon and Energy.

ASPA carbon footprint factsheets published in 2016

PRECAST FLOORING FEDERATION (PFF)

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.

Precast upper floors was the key message at Ecobuild 2017

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 will complete its update of the Code of Practice for safe installation before turning its attention to a review of the 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. Further work has commenced with Glasgow Caledonian University to determine additional thermal bridge parameters for precast concrete upper floors in homes constructed using masonry.

The two specific areas for marketing activity are upper floors in housing and flooring on steel framed structures. At Ecobuild 2017 PFF was part of the Concrete and Masonry pavilion and promoted the benefits of precast flooring for upper floors in housing.

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. Three Technical Guidance Notes have been authored and peer reviewed and will be published in The Structural Engineer magazine during 2017.

Product Associations Continued...

BRITISH PRECAST DRAINAGE ASSOCIATION

The common interests, market segments and supply chains of the Concrete Pipeline Systems Association (CPSA) and the Box Culvert Association (BCA) have been recognised by members and the decision taken to combine the two groups. The integration of the newly formed entity, the British Precast Drainage Association will take place during the first part of 2017 and the new entity will be launched with a new logo, web site and a programme to update all branded collateral over the transition period.

In 2016 CPSA launched a "Heavyweight champion" media campaign to promote the weight benefits of concrete vs lighter options using boxing as an artistic metaphor. This included trade press advertising, a new web site landing page and a new Heavyweight sales brochure, social media, blog and email promotion. A competition ran to win tickets to two separate World Heavyweight boxing events.

Such was the interest generated by the campaign, the Concrete Pipe Association of Australasia adopted the Heavyweight campaign and plaudits were received from other Concrete Pipe Associations including USA, Canada and Norway. A new CPSA member sub-campaign was also introduced to augment the CPSA Heavyweight campaign, targeted to a different audience with a more direct message and approach.

CPSA continued provision of guidance to designers. The Technical Guide was completely redesigned, updated and a downloadable pdf version launched. It includes easier navigation, new and improved illustrations and hyperlinks to more detailed information.

Updated and improved online Structural Design and Material Cost calculators were launched to introduce new functionality for improved customer experience and added value. A new web App was launched on Apple and Android platforms.

To help disseminate this guidance 20 CPD seminars and lectures were delivered with 96% of delegate feedback rating these as Good or Excellent.

CPSA contributed as a member of the Project Steering Group for the publication of the updated CIRIA SuDS Construction Guide.

CPSA were finalists in two categories for the Ground Engineering Awards 2016: Concrete Pipe Lifter (Health & Safety) and Precast Manhole Systems (Sustainability).

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 will exhibit at both Floodex UK and Flood Expo. 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. A community of approximately 7000 receives e-bulletins, whilst a second community of roughly 17,500 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.

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 will be re-launched in the Spring of 2017 with support from Interpave.

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 uniquely placed as the only independent trade association for precast concrete modular paving installation contractors in the UK.

As well as awarding the Interlay 'seal of approval' to members who satisfy the detailed vetting process, Interlay also provides regular support on technical matters, updates on changes to rules and regulations, as well as other industry news, through newsletters and members' meetings. The Association has a multi-platform website supporting mobile and tablet technologies and also have an active Twitter feed – follow us ***@Interlay1***.

Ongoing work at Interlay aims to raise awareness of the Association and increase its membership base. Interlay amended the description of their activities last year to the broader 'Association of Paving Installers' in line with the development of the highways sector scheme, in support of the good installation of domestic paving and to reflect members' increasing range of skills.

Interlay staff and members have over the past year, with support from Construction Skills, Interpave and other industry leads, contributed to the development of the National Highways Sector Scheme (NHSS) 30.

The scheme is aimed at improving the installation, maintenance and repair quality of modular paving constructions. A web based dedicated hub detailing the training and support available to installers is hosted and maintained by Interlay (***www.interlay.org.uk/nhss30***) and Highways England now require the use of registered installers ahead of non-registered ones wherever they are 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. 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.

MODERN MASONRY ALLIANCE (MMA)

The vision of Modern Masonry Alliance is to maximise the market share of masonry construction.

The key messages are:

- Masonry construction is the best solution based on criteria of cost, time, quality, performance and sustainability. A key differentiator and focus of output is fire resilience. With reference to "It's The Economy Stupid", "Timber Burns Stupid".
- Comparison with timber and steel solutions, whether they be labelled "off-site" or "modern methods" shows masonry to be the best solution.
- The masonry sector has the required capacity to deliver the demand from the forecast increase in housing and is investing further.

To maximise market share, material decision makers and those that influence them need to be reached with these messages through marketing and lobbying.

Marketing

In addition to events, advertising and PR, three specific initiatives of note are described below.

The annual autumn housing conference was moved to a London location and attracted a large audience of specifiers for the first time. The subject of resilience included fire, overheating and flood and showed our benefits compared with timber solutions.

A series of internal briefings have been published for members to widen the understanding of the technical benefits of masonry over timber. This will increase the effectiveness of all ambassadors for masonry.

The MMA team were instrumental in working with members to deliver the High Performance Housing stand at Ecobuild in London. They present MMA messages at other public events throughout the year across the country.

Lobbying

The February 2017 Housing white paper signals the most significant government policy activity in housing since the downturn. MMA has compiled a detailed response which welcomes the ambition of more housing, welcomes the consultation question on overheating resilience but warns against the focus on offsite solutions. The MMA message is that masonry delivers the vast majority of housing now, and will do so for the foreseeable future: government should present a balanced approach or risk dis-incentivising investment in traditional build.

MMA has been active in the Property Level Resilience initiative by DEFRA and the environment agency and has commissioned production of design details.

Fire is a key topic of lobbying with ongoing activity with relevant government departments and the insurance industry. MMA was a guest speaker at an Institution of Fire Engineers 1 day event titled "Timber Frame Fires Post Construction": enough said!

Obituaries

Over the past 12 months, it is with deep sadness that we have lost two highly respected and dedicated individuals from our industry.

HOWARD PETER JOHN TAYLOR (1940-2016)

In November, Howard Taylor, a champion for our industry for decades passed away. His commitment continued for many years into his "retirement" with active involvement in codes and standards work, education activity and his own consultancy endeavours. For example, he was chairman of BSI Committee B/524 head committee for Precast Concrete Products, and was due to retire from this role in December 2016.

Howard wrote well over 60 publications during and following his employment with the C&CA, Dow Mac, Costain and Tarmac. Three examples give an idea of breadth and timeframe:

- An Investigation of The Crack Control Characteristics of Various Types of Bar in Reinforced Concrete Beams; Cement & Concrete Association, 1967.
- Stability Design of Long Precast Concrete Beams; Proc ICE, Structures and Buildings, 1999.
- Structural Design and the Eurocodes – a Historical Review; The Structural Engineer, 2008.

Howard's expertise was highly respected. He continued to run his own consultancy and, at the time of his death, clients and associates were corresponding from 47 countries.

Howard Taylor was active in supporting the next generation, pictured here as head judge of The Concrete Centre student competition from 2007 - 2016

Andrew Dix, former British Precast president

ANDREW ROBERT DIX (1960 - 2017)

In February we announced the sudden passing of Andrew Dix. Andy was both President of British Precast from 2012 – 2016 and Chairman of the Precast Flooring Federation until May last year.

During his time with Marshalls, Charcon and Aggregate Industries he developed his entrepreneurial style and became an instrumental figure within the concrete industry. He will be remembered for his passion for health and safety and spoke clearly from his own experiences of incidents, helping industry colleagues whenever possible. He received an award for Outstanding Contribution to Health and Safety in 2016. He was an enthusiast for a more integrated industry working together better and represented British Precast on the board of the Mineral Products Association and of BIBM.

He was active outside work and was always ready with a story from his other interests of flying and racing super bikes. Andrew had become chairman of BuildOffsite in 2016. In only a short period he had begun to implement some impressive changes to put the organisation in the right shape. He was a rare talent and will be much missed.

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 480 companies throughout the UK including 11 international businesses and 470 independent SMEs. This 'family' of common interests relies on close working relationships with MPAs affiliated members in QPA Northern Ireland, MPA Scotland, British Precast, the British Association of Reinforcement and the Refined Bitumen Association.

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, 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.

However, Government is listening and it is heartening to see that it has 'got the message' about the 'cumulative costs and impacts' of 'red tape'. The current review of mineral extraction which started in 2015 is advancing and whilst we recognise that it may not be easy to actually 'cut red tape', the opportunities the industry has identified to employ it better and in a less burdensome way may yield results. Positive outcomes may also resonate across the devolved administrations as the process from mineral discovery to product delivery is broadly similar.

MPA has now developed its ambitions and new vision for 2025 as part of the publication of its new 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.

mpa
essential materials
sustainable solutions

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. Within the BIBM programme we have started direct lobbying of the European Parliament and Commission, initially on the sustainability credentials of concrete products.

bibm

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. Through the CPA we have access to, and influence with, the Strategic Forum for Construction.

construction products association

Health & Safety Charter

BRITISH PRECAST MEMBER DECLARATION ON HEALTH AND SAFETY

All full 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:

- An expectation of 'ZERO HARM' to all.
- 65% reduction in LTIFR for direct employees by 2018 (Baseline 2013).
- 50% 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.

Sustainability Charter

BRITISH PRECAST MEMBER DECLARATION ON SUSTAINABILITY

All full members acknowledge the needs to go beyond legislation and take voluntary actions to make its products and operations more sustainable, and commits that from this date it will do this by working towards the adoption of the following principles:

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

Associate Members List

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

British Precast Annual Dinner 2016

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

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