

## WEBINAR: AN INTRODUCTION TO INVESTIGATING FAILURE ANALYSIS OF ONSITE HARDENED CONCRETE

THURSDAY 25 OCTOBER AT  
15:00 UK TIME, 10:00 EDT

Hardened concrete can show failures in many ways, from low compressive strength, surface scaling and spalling, through to cracking, exposure of reinforcement and collapse. Failures can be a result of environmental conditions, chemical exposure, and design and/or construction faults.

Visual inspections and testing can be used in conjunction to understand failure mechanisms. Analysing failures enables repair methods to be chosen, establishes the consequences, and apportions responsibility.

During the free-to-attend webinar, we will discuss the analysis process:

- Initial visual examination
- Non-destructive testing
- Physical sampling and sampling techniques
- Destructive testing - laboratory analysis and techniques
- Interpreting reports.

Register to attend at  
[www.lucideon.com/concrete-webinar](http://www.lucideon.com/concrete-webinar)



## JOANNE BOOTH APPOINTED BUSINESS MANAGER FOR CONSTRUCTION



Earlier in the year, Joanne Booth was appointed as the new business manager for construction.

Joanne has both a degree in civil engineering and law, and over 20

years experience in the construction industry. Much of Joanne's career has been at Lucideon, initially as technical manager before moving onto product management.

As technical manager, Joanne developed many customized testing programs to prove the performance of products and systems which fell outside of any recognized standards. Many of these programs and techniques are now recognized by industry as the benchmark standard, and some have been written into European standards or adopted as an industry standard.

## GUIDANCE DOCUMENT CONSTRUCTION PRODUCTS: A ROUTE TO MARKET

There are various routes to market for manufacturers of construction products; this is dictated by the availability of appropriate standards and the category in which the products fall into under the Construction Products Regulations (CPR).

Whether it is mandatory or possible for products to be CE marked will depend upon which category products fall into.

The guidance document looks at the different routes available, including:

- CE marking through European Standards
- CE marking through European Assessment Documents (EADs)
- Third party approval
- BSI Kitemark scheme
- Industry recognized standards

Download the  
free guide at  
[www.lucideon.com/  
construction-papers](http://www.lucideon.com/construction-papers)



## TEST SPECIFICATION FOR PRECAST CONCRETE WALL PANELS FOR USE IN DOMESTIC CONSTRUCTION

The guide defines the test requirements of precast concrete panel construction for volumetric panel built housing. Within the test specification, a structural concrete panel is classified as a concrete sandwich panel containing a mesh or fibre reinforcement with an insulated core.

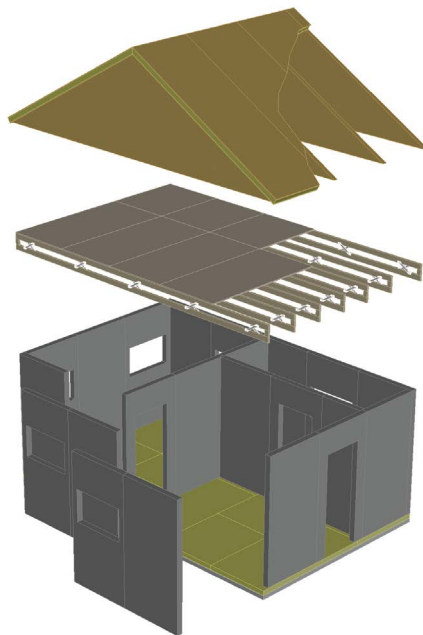
Panels can be designed in conjunction with BS EN 1992, Eurocode 2: Design of concrete structures; however this tends to give a conservative approach and does not take into consideration some of the detailing of the panels which will affect air tightness, water tightness, condensation risk and the design life of the panel finish.

Panels have a variety of finishes; they can be pattern imprinted or have brick slips cast into the outer skin or adhered post curing. The concrete panel guide stresses the importance of proving the performance of the panel finish with respect to aesthetics and the durable bond of the brick slip to the panel. This is of

paramount importance when supplying the panels to site; major insurance organisations will not accept panels onsite without proof of a 60-year design life.

The guide enables manufacturers to budget for both costs and time when in the early stages of developing a new system which will ultimately lead to a more efficient route to market and final sign-off when installed.

Download the test specification at [www.lucideon.com/construction-papers](http://www.lucideon.com/construction-papers)

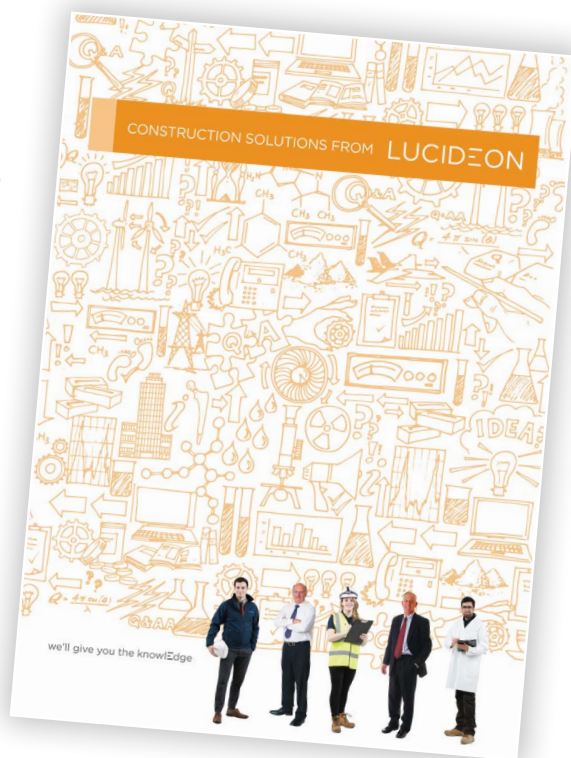


## NEW CONSTRUCTION BROCHURE...

The new construction brochure provides an overview of our key services, facilities, technologies and state-of-the-art equipment for the construction and engineering industries.

The brochure gives a snapshot of what we can do, from raw materials and construction products, to buildings and infrastructure, whether new-build or redevelopment projects.

View the brochure at [www.lucideon.com/construction](http://www.lucideon.com/construction)



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## WHITE PAPER: THE CONCRETING PROCESS AND PETROGRAPHIC EXAMINATION



The white paper provides an overview of the concreting process and discusses how petrographic analysis identifies the root cause of common failures in hardened concrete; low compressive strength, surface scaling and spalling, cracking, alkali-aggregate reactions, and effects of chemical reaction.

The paper is primarily for site cast concrete, however much of the content is also applicable to precast concrete.

Using petrographic analysis to examine concrete can provide many benefits, from assessing the entrained air content and determining the present condition of previously placed concrete, to establishing the water/cement ratio and defining cracks by type and uncovering crack mechanisms.

Download the free white paper at [www.lucideon.com/construction-papers](http://www.lucideon.com/construction-papers)

## INDUSTRY EVENTS

Towards the end of the year, we'll be presenting and exhibiting at, and attending various industry events. To find out which events we'll be at, visit [www.lucideon.com/construction/events](http://www.lucideon.com/construction/events) We look forward to seeing you there!