

Offsite & Modular Buildings

NEWSLETTER

ISSUE 1

WEBINAR: ROUTES TO MARKET FOR OFFSITE AND MODULAR CONSTRUCTION

THURSDAY 08 NOVEMBER 2018
AT 15:00 UK TIME (10:00 EST)

With the absence of recognized standards to ensure the performance of modular buildings, there are no clear routes to achieve end sign-off and handover.

The free-to-attend webinar will discuss various routes to market, including sampling relevant parts from Eurocodes and European Technical Assessments (ETAs), third party certification bodies, specialist test houses, and desk studies.

The options will be put into context with the requirements of proof of performance from insurance bodies such as NHBC, Premier Guarantee and BOPAS.

Register to attend the webinar at www.lucideon.com/offsite-webinar



LUCIDEON

Materials Development and
Commercialization

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UPDATE FROM JOANNE BOOTH BUSINESS MANAGER - CONSTRUCTION



Welcome to the first issue of Lucideon's offsite and modular buildings newsletter. The newsletter enables us to let you know what we've been up to and share our recent developments.

2018 has been a busy and exciting year so far. January saw us officially launch our new services portfolio for offsite and modular building companies - a copy of the portfolio can be seen on page 4.

Back in March, I was promoted from product manager - construction, to business manager - construction. It's been a challenge which I'm very much enjoying!

Myself and colleagues have attended many industry meetings and events in recent months; it's great to see so many individuals and companies wanting to promote quality and best practice within the sector. Quarter four of 2018 will see us present and exhibit at some of the industry's largest events - more information about this can be found on page 2.

We're pleased to inform you that we became an associate member of the Modular and Portable Building Association (MPBA) earlier in the year.



THE MODULAR & PORTABLE BUILDING ASSOCIATION

The voice of the modular industry

As a member of the MPBA, we're enjoying having access to online resources, being kept up-to-date with the latest industry and regulatory news and developments, and attending and networking at meetings and events.

We launched our new construction website at the beginning of the year - don't forget to visit www.lucideon.com/construction to view our latest resources, from white papers and guides, to case studies and videos.

Read on to find out how our people and services can really help you...

Got a question?

Please give me a call on:

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or email:

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EVENTS

UK Construction Week (UKCW)

09 – 11 October 2018, NEC, Birmingham

The UK's largest built environment event, UKCW consists of nine shows: Timber Expo, Build Show, Civils Expo, Plant & Machinery Live, Energy 2018, Building Tech Live, Surface & Materials Show and HVAC 2018.

On 10 October at 15:00 in the Offsite Theatre, our presentation, 'Routes to Market for Modular and Volumetric Housing' will look at how testing and specification of offsite modular housing currently falls outside of recognised European standards and examine the different routes available which allow systems to go to market. These will include third party certification, European Technical Approvals, UKAS-certified testing schemes and LABC and BOPAS sign-off.

Further information about UKCW can be found at www.ukconstructionweek.com

Modular Matters

30 October 2018, NEC, Birmingham

The Modular Matters conference will explore the latest advances in volumetric modular technology.

During the afternoon session, we'll be presenting 'Methodologies for Testing Modular Construction in the Laboratory and Onsite'. The presentation will discuss appropriate laboratory testing regimes and their relationship to subsequent onsite tests, and whether this can form the basis of an industry standard.

To find out more about the conference, visit www.modularmatters.co.uk

The Offsite Construction Show (OSCS)

20 – 21 November 2018, ExCeL, London

The Show will house over 100 exhibitors and stage seminars and masterclass sessions; it provides the perfect opportunity for professionals from across the offsite industry to network and keep up-to-date with the latest developments and innovations.

We'll be both exhibiting and presenting at the OSCS. At 13:00 on 20 November in the OSCS Theatre, we will present 'Offsite Manufacturing: Testing vs Desk Studies'. The presentation will examine laboratory and site-based testing options and what can be achieved from desk studies for modular buildings, as well as the requirements for final sign-off. The pros and cons of each process will also be reviewed. Come and see us on stand C5!

For more information about the OSCS visit www.offsiteconstructionshow.co.uk

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).

Which category products fall into will determine whether it is mandatory or possible for products to be CE marked.

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

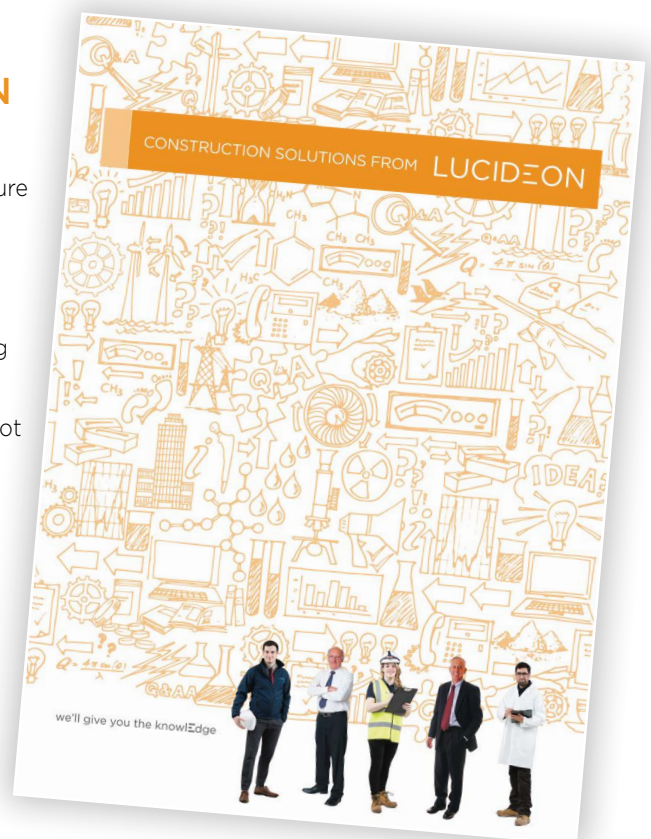


NEW CONSTRUCTION BROCHURE...

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



TEST SPECIFICATIONS

We've recently published several test specifications for manufacturers of offsite components...

Test Specification for Lightweight Steel Frame Wall Panels in Domestic Construction

As there is no standard covering the scope of testing required to simulate the load situations in which lightweight steel frame wall panels will be used, similar standards have been adapted based on loadbearing wall tests. Adopted by industry, these tests provide a standardized test program which enables the performance of individual systems to be compared.

Test Specification for Cross Laminated Timber (CLT) in Offsite Construction

Design using CLT panels falls within the timber code EC 5 but is often considered by many to fall between timber and masonry design; panels act as solid planes and there is no need for an infill. Design by standard will often give a much more conservative answer than design by testing.

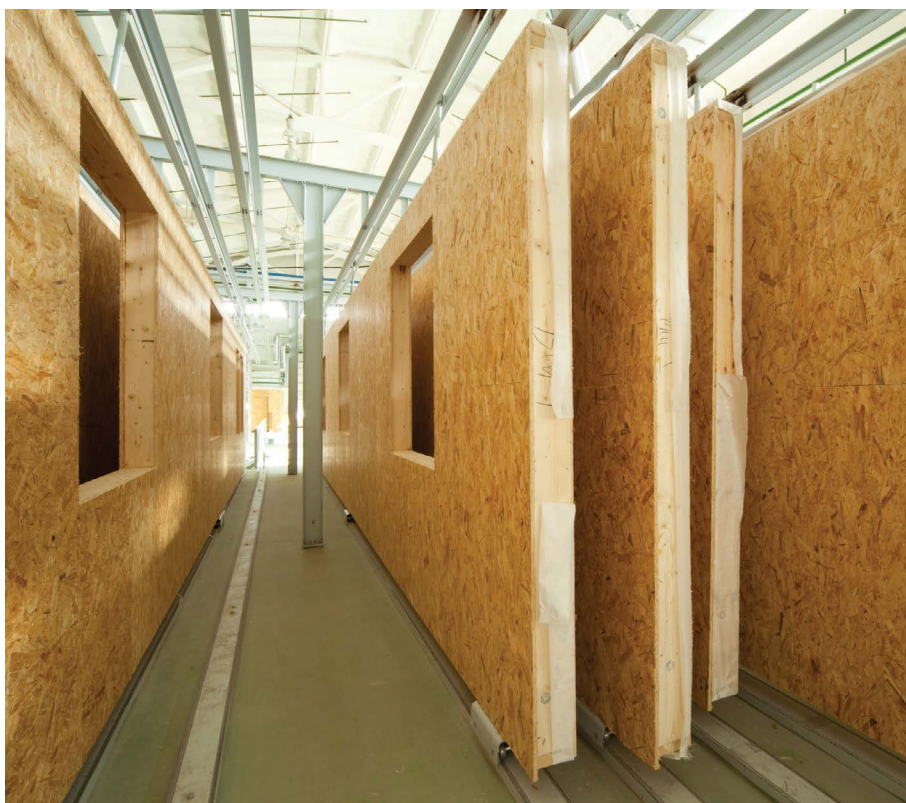
Test Specification for Precast Concrete Wall Panels for Use in Domestic Construction

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.

Test Specification for Structural Insulated Panels (SIPs) in Load Bearing Wall Panels

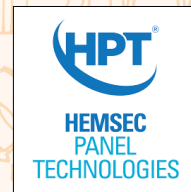
As there is no European or British standard test specification or test methods for SIP systems, the guide provides a standardized test program to ensure that there is a mechanism to compare system performance.

The free specification guides can be downloaded at www.lucideon.com/construction-papers



CASE STUDY

LUCIDEON HELPS HEMSEC GAIN COMPOSITE PANEL ETA ACCREDITATION AND CE CERTIFICATION



Hemsec Manufacturing Ltd (HPT) is one of the UK's largest manufacturers of structural insulated composite panels for use as internal walls and ceilings or external walls, for the refrigeration and construction industries. Hemsec SIPs produces Structured Insulated Panels (SIPs) and is a well-known brand of HPT.

The Challenge

Hemsec was looking to engage an independent laboratory to support its European Technical Assessment (ETA) accreditation in order to CE mark their SIPs.

Under the ETA, there is not a BS EN test standard for Hemsec's products, therefore some of the structural tests needed to follow the protocol in the parallel standard BS EN 14509:2013.

What We Delivered

After the pre-testing consultancy stage, Lucideon carried out a range of tests, including racking, axial and eccentric compressive loading, four-point bending and screw pull-out.

To save time during the testing phase, Lucideon suggested testing at higher levels than previously done; this proved invaluable as the tests achieved far higher results than expected.

Value to the Client

Hemsec SIPs were provided with test reports which enabled them to attain ETA accreditation and CE certification following factory production control auditing.

PUBLISHED ARTICLES

Take a look at our recently published articles...

Overcoming the Hurdles to Offsite Construction in Infrastructure

Buildoffsite Newsletter, August 2018

SIPs: Confirming Quality

Structural Timber Magazine, Spring 2018

Modular Housing: The Performance Gap

Offsite Magazine, March/April 2018, Issue 10

Offsite Systems Performance - An All-encompassing Approach

Offsite Magazine, January/February 2018, Issue 9

To read the articles visit www.lucideon.com/construction-articles

2018 OFFSITE CONSTRUCTION AWARDS



Earlier in the year, at Ecobuild, we sponsored 'Pioneer of the Year' at the 2018 Offsite Construction Awards. We were delighted to present John Fleming from Vision Modular Systems with the award. The evening provided a great opportunity to celebrate the excellence in offsite construction.

We'll also be sponsoring the same award at the 2019 ceremony at Futurebuild (formerly Ecobuild).

VIDEO CUSTOMIZED TEST PROGRAM FOR A NOVEL EWI SYSTEM

Mauer UK Ltd has developed and designed a unique External Wall Insulation (EWI) system to address the challenges and obstacles faced in the current solid wall insulation market.

Our engineers designed a customized testing program which enabled Mauer's product to achieve third party certification and enter the market quickly.

Watch a time lapse video of the Mauer EWI system installation at www.lucideon.com/mauer

SERVICES PORTFOLIO FOR OFFSITE & MODULAR BUILDING COMPANIES

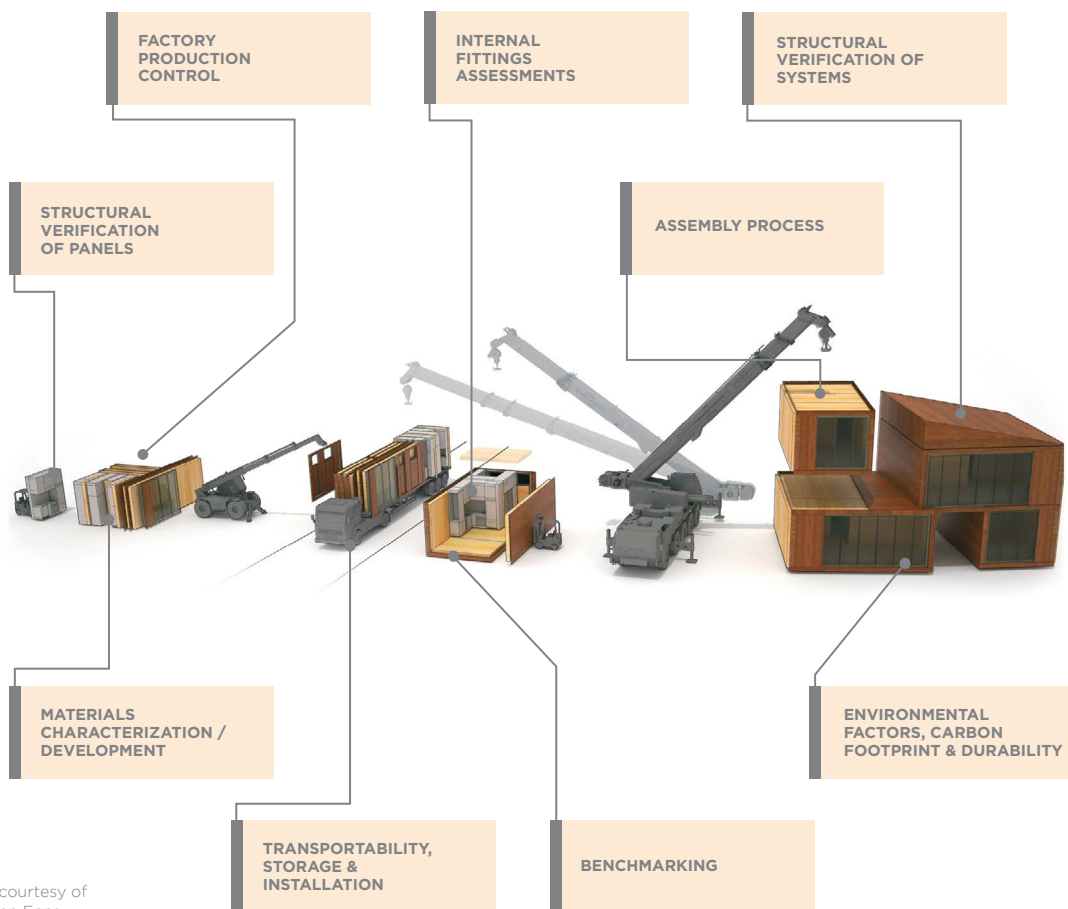


Image courtesy of Jonathan Enns, www.jonathanenns.com

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