

IN THE **FRAME**

EOS NEWSLETTER | ISSUE 7 JUNE 2019



2019 GETS OFF TO AN AWARD-WINNING START!

The year has got off to an outstanding start with the EOS team picking up no less than three trophies at the highly competitive Offsite Awards and the prestigious title of Offsite Project of the Year at the recent Celebrating Construction Awards for the East Midlands!

Held as part of futurebuild at ExCel London, it was a night of celebration at the Offsite Awards where the EOS team were highly commended for the impressive Ram Quarter, a development that sensitively integrates historic Grade II buildings with 650 new exclusive loft style-apartments and the £25million flagship Travelodge project in London. The evening culminated with the ground-breaking Sarah Swift Building at the University of Lincoln winning the award for Healthcare Project of the Year.

More success followed at the Celebrating Construction Awards where the Sarah Swift building was crowned Offsite Project of the Year. Named after the Lincolnshire born Dame Sarah Swift, who founded the Royal College of Nursing – the 5,500m² building has been designed to house the School of Health and Social Care and the School of Psychology at the University of Lincoln.

We are truly honoured. It is a fantastic achievement to win these prestigious awards – especially taking into consideration the calibre of the competition and variety of projects. This is testament to our progressive approach, the dedication of my team and the partnerships we have formed with some of the most forward-thinking companies in the construction industry.

Steve Thompson
Managing Director of EOS

[READ THE FULL SARAH SWIFT CASE STUDY ON PAGE 5](#)



Keep up with our latest news at: www.eos-facades.co.uk/news

Building design and construction is the sum of many parts - some projects demand unique and one-off solutions but for many, rapid and robust systems are required to get buildings on-stream and ready for occupation or commercial use.

As the adoption of offsite technology is gaining momentum, now the transition to more repeatable, DfMA-led and comprehensive solutions is the next logical step. As leading innovators, EOS specialise in the design, manufacture and supply of a wide range of steel solutions for the SFS and offsite markets including volumetric modular - here's just a selection of our recent project wins.

EDUCATION

- **New Road Primary School, Whittlesey** - single storey school expansion - Client: Kier
- **Wootton Park School** - 3 storey school - Client: Taylor Hart
- **Dixons Trinity Academy** - 3 storey school using pre-panelised SFS - Client: Willmott Dixon



Oxted Gas Holder Site

Fulham Boys School



RESIDENTIAL

- **Oxted Gas Holder Site** - 3 block residential scheme - Client: St William
- **Greenwich Design District** - 6 block residential scheme - Client: Ardmore
- **Milbrook Park Phase 5** - 4 block residential scheme - Client: C&G
- **Union House** - 7 floor residential scheme - Client: Ardmore

Greenwich Design District



MIXED USE

- **Fulham Boys School** - integrated campus style development incorporating new police station and nine apartments - Client: Stanmore
- **Greenwich Millennium Village** - high profile development comprising more than 2,700 homes and commercial space - Client: Craft Interiors



Company News...

EOS SITE STUDY TOUR

Following the great success of our 2018 event which featured the award-winning Ram Quarter, EOS are planning a combined technical CPD and Site Study Tour of Gardiner Place, Henley on Thames.

Due for completion in early 2020, Gardiner Place is a multi-million-pound development which involves the transformation of the former Market Place Mews into a prestigious retail, leisure and living destination in the heart of the town centre.

As specialists in bespoke solutions for the SFS and offsite markets, EOS have designed, manufactured and supplied a range of steel framing systems for the project. To demonstrate our latest load-bearing technology and provide a deeper insight into the design, manufacture, installation and project management processes - representatives from EOS, supported by other Etex Building Performance group members from Etex and Siniat, together with our project delivery partners, will host a unique CPD and Offsite Seminar followed by a Site Study Tour.

Taking place on the 12 September 2019, the Gardiner Place Site Study Tour is open to architects, engineers, contractors and specifiers looking for in-depth insight into steel framing systems. We have limited capacity due to the restraints of visiting a live construction site.

If you would like to register your interest or request further information, please email:
eos@insideoffsite.co.uk



OFFSITE EXPO RICOH ARENA, COVENTRY

EOS are proud to announce our participation in this inaugural event as gold sponsors. We will also be presenting in the Explore Offsite Masterclass programme and constructing one of the seminar theatres with our award-winning steel framing system.

Taking place on the 24 & 25 September, Offsite Expo brings together those who are driving change in the construction sector and promises to be a major highlight in the construction calendar.

For more information about Offsite Expo or to register FOC go to: www.offsite-expo.co.uk



£25 MILLION FLAGSHIP TRAVELODGE PROJECT

Highly commended in the Offsite Awards, this prestigious Travelodge development has been created as a declaration of renewed confidence in the brand. The eight storey, 395-room hotel in Central London is set in a vibrant tourism area. Built to BREEAM 'excellent' standard, the design is a striking example of hotel architecture, taking into consideration both responsible building ethics and high-quality aesthetics.

Construction Partners:

Architect: ISA Architects

Main Contractor: Tolent

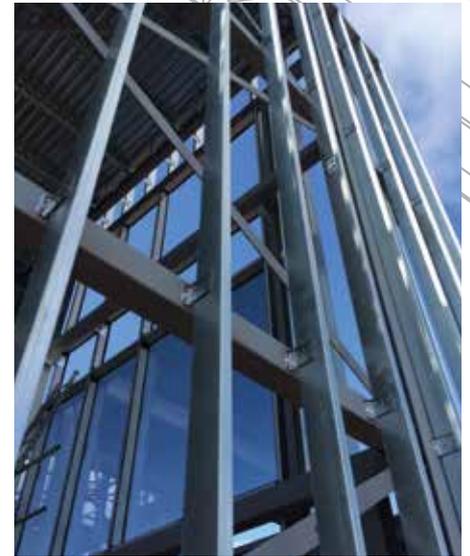
Installer: Cristofoli



The tolerances and high-specification cladding system required all the technical know-how of the EOS team to design and manufacture a fully offsite solution fixed to the main concrete frame by main contractor, Tolent. The aim of the project was to deliver a fully clad panelised system to site, complete with our sub frame infill panels, pre-fixed to the lightweight innovative stone cladding system.

A key part of the construction was achieving a fully flush finish on the external side. The EOS steel sub frame achieved the extreme tolerances required by the cladding manufacturer. We were able to produce a steel framing panel with a completely flush finish, using BIM modelling and CAM processes to engineer a pre-cut assembly, where even 2mm screw heads were required to be countersunk.

The scheme was in part delivered through innovative engineering combined with technically advanced manufacturing capability. The preformed SFS infill panels were delivered to the manufacturer to have the marble finished cladding system pre-installed offsite before being delivered to site as fully formed units. This led to a rapid installation attaining excellent thermal, acoustic and fire properties.



Construction Partners:

Architect: BAM Design
Developer: BAM
Engineer: BuroHappold
Installer: Brebur

THE MULTI AWARD WINNING SARAH SWIFT BUILDING

Voted Offsite Project of the Year and Healthcare Project of the Year – the £19 million Sarah Swift, building houses the School of Health and Social Care and the School of Psychology at the University of Lincoln. The new academic building accommodates a diverse range of learning and research spaces, including teaching areas, offices, laboratories and nurse training facilities.

As the five-storey building houses laboratories that include vibration-sensitive equipment – the main contractor had to meet certain design specifications. A key element of the brief for this specialist building was to create spaces that have the right environmental conditions, vibration levels and acoustic separation for their different functions, whilst ensuring the building remains simple to commission, construct and operate.

EOS designed and manufactured a robust steel framing infill panel solution for the Sarah Swift project to meet the design and engineering brief. Bespoke bars were developed for overhang and intumescent paint clearance. The restrictive site presented access challenges and storage limitations – offsite technology provided the optimum solution. All deliveries were colour coded by floor and craned directly into the correct location.

Offsite construction projects can be delivered in up to half the time compared to traditional methods, delivering radically reduced build programmes, leading to less time onsite and ultimately, a faster return on investment. Through careful design detailing and value engineering, EOS was able to design and offsite manufacture the highest quality steel framing solutions to deliver this environmentally sustainable project on time and to budget.



Introducing the New and Revolutionary Thrubuild® System



Welcome to a faster way of specifying
and constructing your building.

The EOS Thrubuild® loadbearing system uses offsite manufacture and the latest testing to deliver structures faster – with assured performance built-in. Developed in collaboration with Etex Building Performance brands - EOS, Siniat, and Promat, the system makes use of the latest products, technical know-how, and manufacturing excellence of the Etex Building Performance team.

The loadbearing, light steel, 'through the wall' system, has been developed to form the structure of low to medium rise buildings, up to nine-storeys, and fully tested with boarding and insulation for confidence of design performance.

The light steel framework is panelised in the factory and delivered to site for assembly. Partial boarding of these frames can also take place offsite depending on the system and your build process.

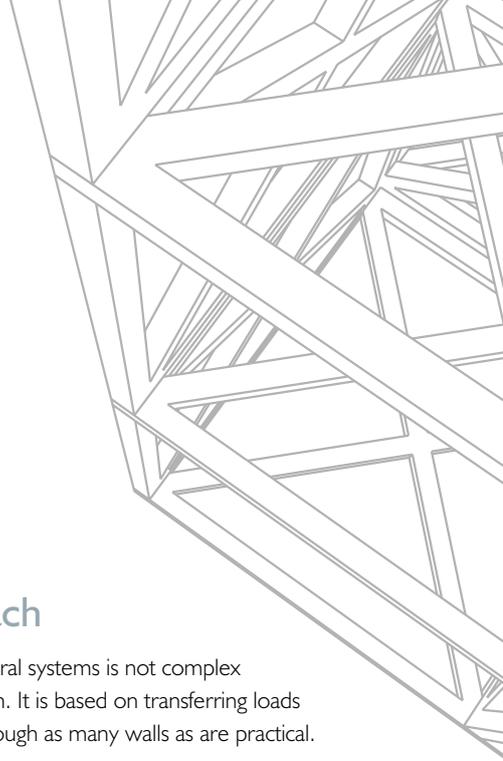
'One stop' specification

By working in collaboration with Etex Building Performance, the EOS loadbearing system allows a one stop specification process. Product, structure and performance are integrated into one package of design information.

Certification

- The EOS loadbearing system is Stage 1 NHBC certified by SCI, certificate number 20180325.
- EOS and Siniat manufacturing facilities are certified to ISO 9001 and ISO 14001.
- Products are CE Marked to the requirements of products and steel structures standards.





BENEFITS OF LIGHT STEEL STRUCTURES FOR DEVELOPERS

- **High Strength to Weight Ratio:** Reducing total load by up to 60% compared to timber and concrete saves on foundations and is suitable for construction on brown field sites, or pre-existing buildings.
- **Panelisation:** Offsite panels reduce site labour costs, reduce construction waste, cut the project cycle time, and improve quality with external boards factory fitted.
- **Reduced Project Programmes:** Shorter construction time reduces financing costs and narrows period of construction liability. On larger schemes you can be shaving months from programmes compared to concrete builds.
- **Winter Builds:** Panelised factory assembled products are not weather dependent and combined with fast installing products such as Siniat Weather Defence means the site can be made weathertight earlier, allowing internal trades to commence.
- **Earlier Completion and Budget Savings:** A light steel structural system's shorter construction cycle means equipment can move on and off site more quickly lowering crane and scaffold costs and site prelims and labour costs.
- **Lower Insurance:** Light steel is non-combustible.



A different structural approach

Designing with light steel structural systems is not complex but requires a different approach. It is based on transferring loads throughout the building and through as many walls as are practical.

Internal and external walls become fundamental parts of the primary structure, rather than just infill pieces that only carry their own weight and directly applied loads. As a result, fire resistance requirements often increase compared to non-loadbearing steel as each element must be protected for the structures' period of resistance, rather than solely as fire compartments.

System Overview

The EOS Thrubuild® loadbearing system has been developed as an integrated solution, using our range of light steel framing, Siniat Weather Defence external sheathing board, and Siniat Frameboard, an internal plasterboard exclusively developed for EOS loadbearing systems by Siniat, a world leader in plasterboard materials. These integrated systems have been tested and assessed for compliance with the latest regulations and standards to ensure robust and reliable design performance.

EOS light steel framing features cold-rolled galvanised light steel sections in a range of depths and gauges. C-sections are swaged for a flat surface finish.

By considering all components, systems can be relied upon to offer excellent fire, acoustic and thermal capabilities to suit the needs of UK single and multi-residential construction. All systems have also been engineered for structural performance to the latest Eurocodes.

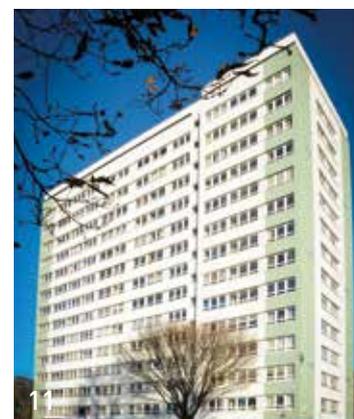
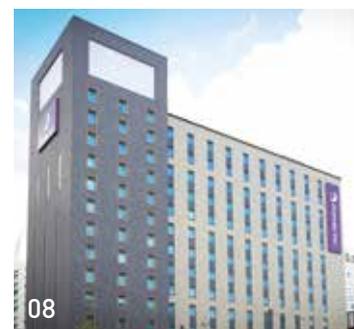
The loadbearing system range comprises:

- Internal separating walls, between units, using twin 65mm studs or deeper
- Internal dividing walls, within a unit, using 100mm studs or deeper
- External walls, using 100mm studs or deeper
- Internal dividing floors, within a unit, using 150mm steel joists or deeper
- Internal separating floors, between units, using 150mm steel joists or deeper

Design performance is achieved using combinations of boarding and insulation. Almost all building arrangements can be achieved, and non-loadbearing drywall systems can also be used to sub-divide space following initial construction of the loadbearing building system.

PROJECT GALLERY

From residential and mixed use schemes through to education, commercial and healthcare projects, EOS has a wealth of experience across all construction sectors and our image gallery offers an insight in to some of our work...



01 Capital Towers 02 Heathside and Lethbridge 03 Albemarle House 04 Lincoln Gateway 05 Hendon Police Training Centre 06 Kings Cross Station
07 Advanced Manufacturing Building, Nottingham 08 Premier Inn, Wembley 09 Bessemer Place 10 Y Pant School 11 Vita Ruskin Square

VIEW OUR ONLINE CASE STUDIES AT: www.eos-facades.co.uk/case-studies