

**PRESIDENT**  
Tanya de Hoog  
CEng, FStructE

**CHIEF EXECUTIVE**  
Yasmin Becker

**EDITORIAL**  
HEAD OF PUBLISHING  
Lee Baldwin

**MANAGING EDITOR**  
Robin Jones  
t: +44 (0) 20 7201 9822  
e: robin.jones@istructe.org

**EDITORIAL ENQUIRIES**  
Will Brown  
t: +44 (0) 20 7201 9121  
e: tse@istructe.org

**ADVERTISING**  
**DISPLAY SALES**  
t: +44 (0) 1223 378008  
e: janette.millan@cplone.co.uk

**RECRUITMENT SALES**  
t: +44 (0) 1223 378047  
e: polena.boutwood@cplone.co.uk

**DESIGN**  
CPL One ART DIRECTOR  
Kevin Reed

**PRODUCTION**  
CPL One PRODUCTION EDITOR  
Amy Bennett

**EDITORIAL ADVISORY GROUP**  
Will Arnold FStructE  
Premma Makanji MStructE  
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**Subscription prices**  
Institutional (online only): £519  
Institutional (print + online): £549  
Personal (print only): £135  
Personal (online only): £120  
Personal (Student Member): £50

Single articles – digital: £10.00  
Single issues – digital: £15.00  
Single issues – print: £25.00

**Printed by**  
Warners Midlands plc  
The Maltings, Manor Lane Bourne,  
Lincolnshire PE10 9PH  
United Kingdom

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*The Structural Engineer* is published by IStructE  
Ltd, a wholly owned subsidiary of The Institution  
of Structural Engineers.

ISSN 1446-5123 (Print)  
ISSN 2753-4421 (Online)

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The Institution of Structural Engineers  
International HQ  
47–58 Bastwick Street  
London EC1V 3PS  
United Kingdom  
t: +44 (0)20 7235 4535  
e: mail@istructe.org

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Incorporated by Royal Charter  
Charity Registered in England and Wales number  
233392 and in Scotland number SC038263



**Patrick Hayes** *Technical Director*

# MMC in the spotlight

## THIS MONTH'S ISSUE FOCUSES ON MODERN METHODS OF CONSTRUCTION

(MMC): a sweeping term that encompasses a range of non-traditional construction methods, but is mainly associated with off-site prefabrication.

There is nothing new about MMC. Many systems evolved in the 1950s and 1960s in response to increased demand within the construction sector, but use fell away after the Ronan Point collapse in 1968.

Over the years, issues with lack of productivity, a shrinking workforce and a housing shortage have led to many strategic reviews of the industry, with reports by Egan, Latham and, more recently, Mark Farmer's dramatically titled *Modernise or die*. In the face of these issues, the UK government has committed to MMC and industry is embracing it.

The 2019 Construction Sector Deal highlights the need for off-site manufacturing to help the industry deliver a 33% reduction in the cost of construction and a 50% reduction in time. Building on this, a £10bn off-site construction framework for use by all government departments was revealed by the Crown Commercial Service at the start of 2022. Housing authorities, in particular, are required to commit to modular under an £11.5bn affordable homes programme to help ease the housing crisis. In other initiatives, the Department for Levelling Up, Housing & Communities is sponsoring a 'kit of parts' guide to MMC and PAS 8700, a standard for MMC in housing. MMC will clearly play a key role in construction going forward.

In this issue, we therefore provide an introduction to MMC and cover the vital issues of

sustainability and safety: our twin objectives as an institution. Nigel Ostime of Hawkins\Brown provides an overview from an architect's perspective on the different forms of MMC, what the drivers of adoption are, the barriers and how to deliver it, with case studies showing how it can be successfully deployed (page 28).

The sustainability credentials of MMC are investigated in two articles. James Morton and Gavin White compare the upfront carbon of various MMC systems with traditional construction (page 34). Drawing on their project experience, Alice Berry, Heleni Pantelidou and Sahil Limbu share tips on how to ensure that modern methods of construction deliver carbon savings (page 39).

As with all new technology, there are risks to be addressed if we are to utilise MMC to deliver our sustainability and productivity objectives. Our partners, G&A, offer an insurer's perspective, with practical advice on where the project risks are and PI considerations for engineers engaged on MMC projects (page 20). This month's CROSS report

demonstrates how one of the key structural risks, lack of robustness, can materialise in practice and highlights the common causal factors of competence and clarity on roles which practitioners need to be aware of (page 22).

Elsewhere, we provide an update on the progress of the second generation of Eurocodes and report on our global work to promote carbon reduction at COP28 (page 6). Members are also invited to engage via the SME conference and Young Structural Engineering Professional Award.

I'm excited to provide the editorial for an issue with such a rich range of topics and hope you enjoy reading it as much as I have.

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**THE UK GOVERNMENT HAS COMMITTED TO MMC AND INDUSTRY IS EMBRACING IT**