



With housing and labour shortages, sustainability demands and Covid and Brexit pressures creating a climate for change, could 2021 finally be the year when MMC moves into the mainstream and fulfils its long-held promise? **GILL OLIVER** reports

Move with the times



Sigmat

As budgets and supply chains are slashed, and health and safety issues ratcheted up, there's ever-mounting pressure to build faster but better.

In what seems like the ultimate paradox, modular is emerging as the obvious solution. Not only to help the industry recover from Covid, but also to meet the existing and ever-more-urgent need for new homes that are higher-quality, as well as sustainable.

Right now, though, it's the pressing need for more social housing stock that's the single biggest driver, amplified by a raft of government announcements supporting the offsite sector.

The pandemic has forced councils to pay out vast sums to temporarily house the homeless in often poor-quality B&B accommodation, something that's proving a powerful incentive to find rapid solutions to what are, of course, long-term housing stock problems.

Given the speed with which modular housing can be provided, coupled with sizeable cost savings and the promise of lower utility bills for tenants, it's a no-brainer for a growing number of housing authorities and councils.

Sara Cundill, marketing and brand manager of East Yorkshire-based

Module-AR (M-AR), describes the MMC sector as "picking up pace" as the government, councils and others find themselves in a corner.

"There's a massive need for social housing and modular is a solution – that's why there's such a spotlight on MMC," she says

M-AR opened a second factory at the end of last year to cope with increased demand. Operating alongside the firm's existing plant in Melton, its new 100,000ft² facility in Hull will allow the company to triple its output to reach 750 homes a year, rising to 1,000 homes within two years. M-AR's own expansion plans follow a string of framework and contract wins, including a place on the 15-year £573m Central Housing Investment Consortium (CHIC) housing programme and the £400m Procure Plus off-site housing framework.

It's not all roses, though. The sector is still battling a certain amount of negative perception, especially around quality and longevity: "Because they've seen post-war pre-fabs, that's what they sometimes think of, but it's entirely different now," M-AR's Cundill points out.

The way to counter this, she believes, is to work on demystifying the process:



"We build with a steel frame and all of our materials are exactly the same as you'd find in a builders' merchant or traditional building site," says Cundill. "To those who don't understand modular, it can come across like it's a magical system when it's absolutely not – we're just taking it indoors."

Another obstacle is the reluctance, bordering on hostility, of some legacy housebuilders when it comes to MMC. If that's down to a fear of losing out to MMC upstarts, it's wide of the mark, given that there's more than enough work to go around, Cundill observes.

"There's a solution for every problem and it's not a one-size-fits-all," she adds. "We're not saying modular is





Mark Eburne

the only way to build. With some projects, modular is not the best solution and it's better done as a hybrid, or traditional build.

"Rather than trying to force a square peg into a round hole, our attitude is there's a good solution for everything and that's not necessarily always going to be modular."

Increasingly, though, the naysayers are in the rear-view mirror and even the most cursory of glances shows that most of the big housebuilders are enthusiastic about this new technology and keen to embrace it, if not directly and completely, then by dipping a toe in the water or teaming up with a modular specialist.

Since there is still the need to boost all-important consumer confidence, the sector is sure to benefit from the injection of glamour and brand-recognition brought by IKEA and Skanska owned BoKlok UK. Working with housing association VIVID, BoKlok will deliver 300 new modular homes per year on sites across Hampshire, Surrey, Berkshire and West Sussex, under a five-year agreement.

Citing the advantages of offsite precision-engineered homes that harness sustainable technologies, VIVID's chief executive Mark Perry describes VIVID and BoKlok as being aligned in their "forward-thinking approach" and sees BoKlok as the right partner, particularly when it comes to the drive for net-zero carbon.

The Scandinavian-style homes are also due to land in the heart of Bristol, via the BoKlok on the Brook scheme of 173 units which include one- and two-bedroom apartments plus two- and three-bedroom houses, with prices starting from £150,000. Not only do they benefit from that effortless IKEA chic, they also feature the usual modular attributes such as money-saving enhanced insulation and other sustainable aspects which will become ever-more crucial as we hurtle towards the government's net-zero target.

Delivering good-looking, high-performance and long-lasting modular homes is becoming easier as the

supply chain broadens and becomes more visible.

This includes the likes of Northern Ireland-based Creagh Concrete, which aims to "change the way people think about concrete". It supplies pre-cast concrete frames made offsite and then craned into position, plus concrete panels, stairs, landings and floors. There's the choice of external finishes that can match virtually any build type but, of course, the real trump card is the fact it's made inside a factory. That means production schedules are never delayed by weather conditions, and there are potential cost savings.

Sigmat, which manufactures cold-rolled steel components and structural steel frames from its manufacturing hub in Leeds, is gearing up for what it believes will be a "landmark year" as demand for MMC solutions continues to grow. As one of the early innovators of MMC, it's ploughed investment into R&D and its light gauge steel frame (LGSF) products form a crucial part of residential developments stretching from Bristol to Scarborough and Edinburgh.

Sigmat's chief executive, Mark Eburne, says construction will look very different post-pandemic, and that the events of last year confirmed the urgent need for a new way of building homes.

"With sustainability right at the top of the building agenda, we know LGSF ▶





Louis Allwright,
Ideal Modular Homes



Ideal Modular Homes



Creagh Concrete



Ideal Modular Homes



Sigmat

out-performs traditional methods on every level," he says. "As more developers familiarise themselves with the huge benefits of LGSF construction, we anticipate our market share will continue to strengthen throughout 2021 and beyond."

He adds that where building sites have reopened, just 60% of workers can safely return under social distancing rules. In contrast, MMC tends to need less operatives onsite and is therefore less impacted.

With tighter immigration rules post-Brexit and the fall-out from Covid exacerbating existing labour shortages and the fact that LGSF construction is 30% faster than traditional methods, he sees it as the obvious solution to meeting the increasingly urgent demand for high-quality housing.

The genuinely high standard of MMC products and volumetric modular homes, many of which are winning awards and plaudits in equal measure, is changing perceptions among the trade and the public.

Ever since it burst onto the scene in late 2018/early 2019 and opened its 70,000ft² factory in Liverpool, Ideal Modular Homes has been shaking up the housebuilding industry. Ideal's

modular homes can be manufactured in just four days and installed onsite in eight hours – cutting total delivery programme time by up to 50%.

One of eight modular housing suppliers, along with the likes of Cygnum Timber Frame and ilke Homes, Ideal Modular Homes has been appointed to a new dynamic purchasing system offered as part of Great Places Housing Group's £750m Innovation Chain North (ICN) procurement framework. In August, it scooped a share of a five-year £300m new-build housing contract with the Royal Borough of Greenwich, which will see 750 modular affordable council homes across 60 sites.

To win the bid, Ideal teamed up with award-winning architects shedkm, whose director Alex Flint believes the stylish new homes in Greenwich will "change the perception towards offsite manufacturing, through carefully crafted and long-lasting materials, and considered internal layouts".

And at a recent conference, Ideal Modular Homes' senior project manager Louis Allwright pointed out the practical aspects of modular – although construction time is halved, quality and robustness is maximised. One of his main messages was that by collaborating with top architects, affordable housing can be sustainable as well as beautiful.

He added: "It's important, especially following the pandemic, that we're highlighting the capacity within the industry and the role that modular and offsite construction can play in the drive to build high-quality homes quickly, to meet rising demand in the housing sector."

Maybe, just maybe, 2021 will be the year we truly embrace building faster and smarter. [sh](#)