Workshop 2A MMC: A Client's Perspective

Speaker: Trina Chakravarti, Building Better Chaired by: Julian Ransom Room: A

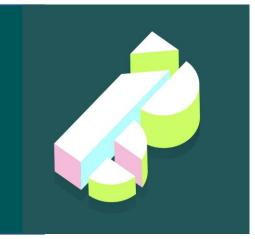


NHMF Maintenance Conference 2023

Building Better: innovation, aggregation, collaboration.

30 housing associations and local authorities working together to increase the use of modern methods of construction (MMC) in the social housing sector, backed by the National Housing Federation.

- In 2021/2, 15.4k modular or panelised homes started or completed on site
- 10.6k MMC homes are currently being assessed for cost viability
- 26k more MMC homes planned over the next four years
- Cost is the most significant barrier to delivering MMC
- Quality uncertainty is the least significant barrier





Reaching in a tipping point

- Quality and resident safety
 - Worsening skills shortage
- Productivity halted during the pandemic
 - Govt targets on sustainability
- Stretched HA budgets: new build vs. remediation & retrofit



Members' drivers

- Climate change Quality
- Skills crisis Control
- Additionality

Assurances / red lines

- Non fossil burning appliances: no gas
- Standard building warranties: NHBC, LABC, Premier etc
- 60/100 year warranty backed assurance: BOPAS or NHBC Accepts
- ISO9001/14001
- Enhanced energy performance: standard product: minimum is EPC B, SAP 81+
- NDSS compliant
- M4(3) Options
- Enhanced UK fire safety standards and legislation





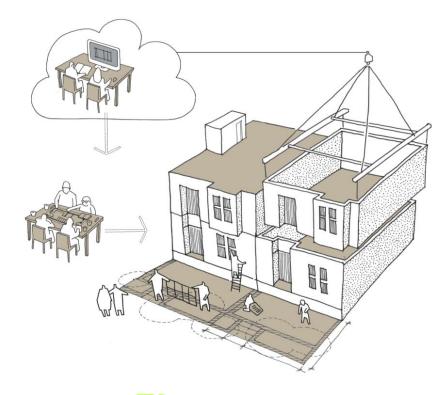
Lessons learnt

- Market has moved on and some myths are busted
 - Financial risk: payment profiles, warranties & mortgageability
 - Design: spec & customization, adaptability
 - Cost: per unit, scheme size
- But the market is still immature and some gaps remain
 - Bungalows, single entry apartments (for Cat 1)
 - Complex sites, demolition principal contractor
- Cost is still an issue





Remaining barriers and opportunities





- Key issues in asset management, maintenance and repairs teams now:
 - Limited resource, pandemic delays and remediation costs
 - Need certainty on heating type
 - Defect resolution feedback loop needs to be shorter
- Data
 - Opportunity sound but not proven
 - POE project



Thank you.

See you at the next conference!



Workshop 2A MMC: A Client's Perspective

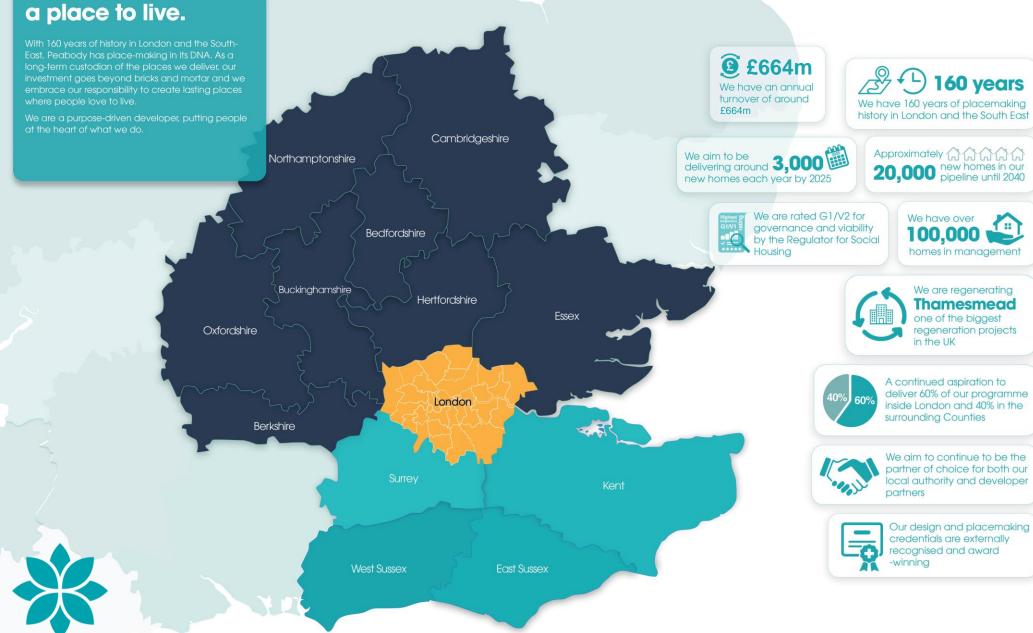
Speaker: Robin Palmer, Peabody Housing Chaired by: Julian Ransom Room: A



NHMF Maintenance Conference 2023



Who is Peabody...



We create more than

NHMF Maintenance Conference 2023



Westwood

aines

ALLFORD HALL

MONAGHAN MORRIS

> Love Living Homes Poorhole Lane, Westwood, Broadstairs CT10 2PP Priced from £29,500 for a 10 per cent share of a two-bedroom house



Evening Standard

NEW HOMES 2022





Understanding MMC

PANELISED



Pre-manufacturing (3D primary structural systems)

VOLUMETRIC



Pre-manufacturing (2D primary structural systems)



components (non-systemised primary structure)

STRUCTURAL COMPONENTS



3D PRINTING

Additive manufacturing (structural and non-structural)

(non structural assemblies & sub-assemblies)

Pre-manufacturing

NON-STRUCTURAL 'PODS'



LARGE PRE-CUT PRODUCTS



Site process led site labour reduction / productivity / assurance improvements

PROCESS LED PRODUCTIVITY



The definition framework spans all types of pre-manufacturing, site base materials and process innovation.

This definition framework is an output of the MHCG.G. John fluctury Working Group on MMC which is tasked with prevorsal state-holder education and understanding of MMC with particular reference to enabling better access to mortgage finance, insurance and assurance. Particular thanks go to the Working Group members, Buildoffstin, homes England, NHBC and RICS who all provided input to this definition framework.



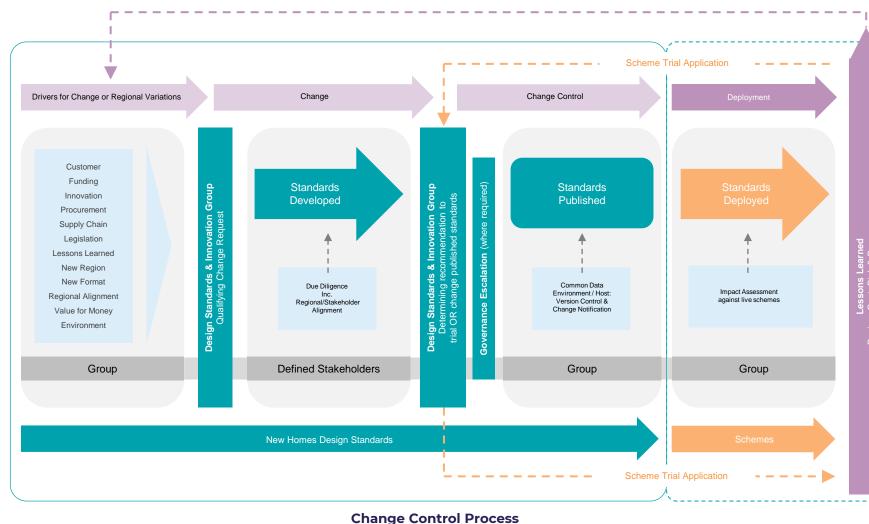
"The definition framework is an output of the MHCLG Joint Industry Working Group on MMC ... enabling better access to mortgage finance, insurance and assurance."

"Before the categories can be examined and applied it is important to define the type of building and the material genre. The material genre is only applied to the structural categories 1-4a."



Evolving At Scale with MMC





- Qualify the need for creation/change of approved design standards.
- Consider and evaluate the benefits and costs (including life cycle cost-in-use).
- Agree the purpose, scope and rules of engagement for any proposals to trial or prototype.
- Make recommendation to approve or reject publication of any proposals.



Thank you.

See you at the next conference!



Workshop 2A

MMC: A Client's Perspective

Speaker: Stephanie Lloyd-Foxe, Magna Housing

Chaired by: Julian Ransom

Room: A







Creating Great Homes Together - #MagnaBuilds



It was a fantastic session Ben Lowndes & great to be working with you again. Sonry I missed the photol Ateammagna ...see more



Les Rélations (Les anund aux obles in #Deset MagnaBuilde #uffordationousny



AcCrevery Road, Sherborne - Rollakong: UK Adular Offsite Construction Initial could - 4 mm mail

Magna Housing Ltd here at #housing2022 with Craig Demanuele - find out how we developed the robust financial ...see more



...for our customers and communities in the #southwest #teamwork #futureofconstruction #MagnaBuilds #constructionjobs



A unique partnership has come together to address the housing crisis in the South West and build 1,000 new modular homes over the next three years.



...how it has helped Magna Housing Ltd to build a solid business case for adopting #MMC #MagnaBuilds



...comments are all positive as we push forwards from proof of concept in site delivery to business as usual # ...see more



...what Stephanie Lloyd-Foxe MBA MCMI MSc MCIArb and Paul Read had to say: https:// loom.ly/MxjU4E4 #TeamMagna ...see more



...by Rollalong Ltd and delivering #affordablehomes #MagnaBuilds #GreatHomesTogether



It's fantastic to be working with DrewSmithVistry on this DorsetCouncil / MagnaHousing project benefittisee more





reflections:

5 years of transformation

House Type Portfolio

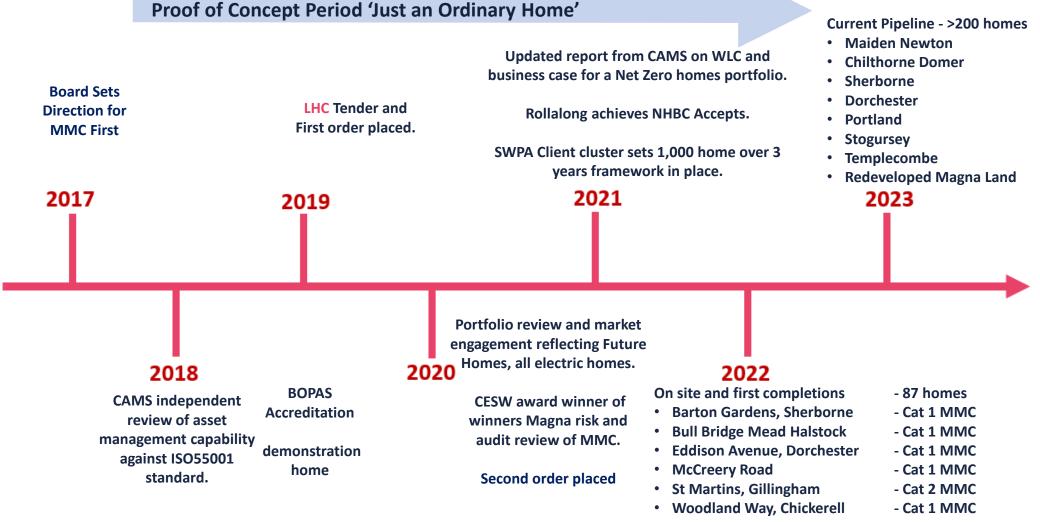


2023 – Net Zero The Future of Homes Now





BAU 100% MMC First 'Net Zero No Ordinary Home'



magna

#tean





Magna has 4 strategic priorities and the business case for MMC is made across each member of the executive.

- **Customer** feedback so far backs the move to MMC to deliver the quality we want and use of a portfolio we already knew people loved.
- Capability Having consistent process and product allows continuous improvement and digital integration in the homes, between homes and into design and from factory to Magna. MMC is an enabler to a digital revolution.
- **Performance and Results** Our mission to our customers, communities, people and partners are better served through a product development mindset. Our future is Net Zero and for now Cat 1 and 2 are nudging ahead being the cheapest and best route to deliver this future.
- Supply and Investment To get to MMC first you have to change your mindset and reengineer your processes. Once done your productivity increases per person and for us it best enables delivering Right homes, right quality, right place.

Customer Experience

magnc



Supply and Investment

Organisational Capability

Performance and Results





BUILD HOMES, BUILD JOBS, BUILD INNOVATION: A BLUEPRINT FOR A HOUSING LED INDUSTRIAL STRATEGY

Mike Da'Ath Mark Former







Large enough to influence small enough to care

#tean

Thank you.

See you at the next conference!



Workshop 2A MMC: A Client's Perspective

Speaker: Richard Bennion, iON Consultants Chaired by: Julian Ransom Room: A



NHMF Maintenance Conference 2023



Who is iON...

iON Consultants are an independent health, safety and environmental consultancy specialising in:

- CDM Services
- Asbestos Assurance
- ISO Management Systems

We use our experience of working in partnership with customers to identify and implement **sustainable** and **balanced** compliance measures designed to promote a robust safety culture, protect reputation and support ethical business. We are **forensic** in everything we do.

With a multi-disciplinary consultancy approach, we work locally and nationally to deliver compliance solutions to a wide range of sectors.





A reminder of some key legal obligations:

Construction (Design & Management) Regulations 2015

Building Safety Act 2022

Fire Regulations (England) 2023 (come into force 23rd January 2023 – Fire information and door inspections)

Building Regulations

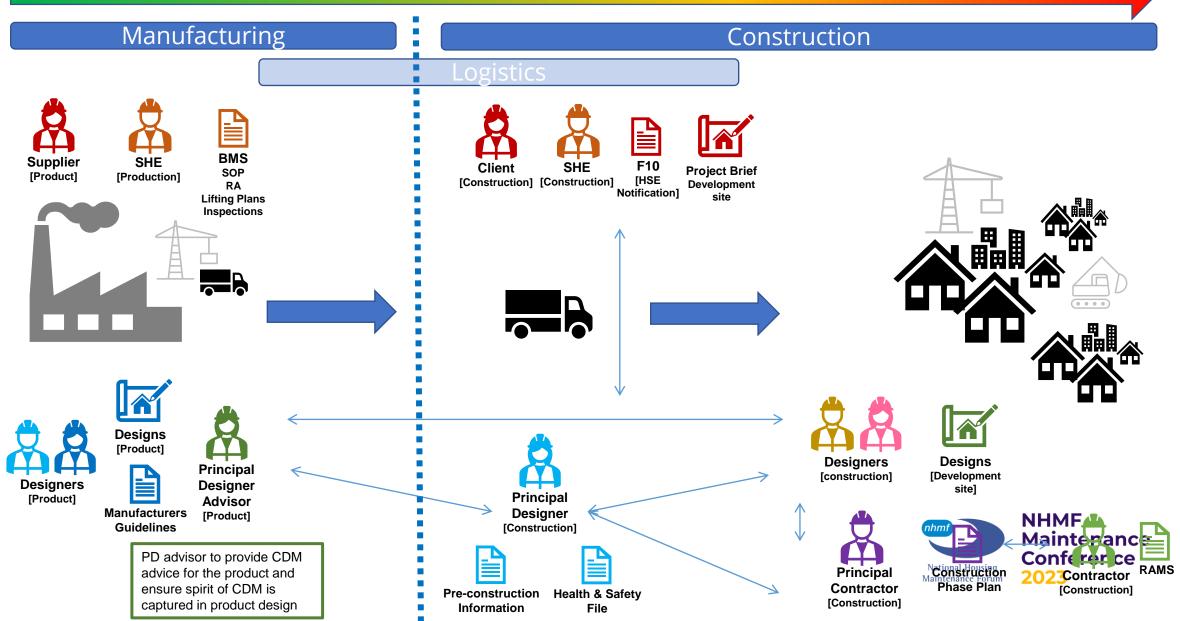
Legal Obligations





Application & Interactions

Potential Risks





Food for Thought.....

Logistics – Product preservation, side loading during transportation, weather damage. Traffic management requires close attention (Hinckley C fatality)

Contract Exclusions – may include preparatory works, scaffolding and cladding, as well as permits, licenses and structural warranty management

Programme & Schedule With the majority of building materials arriving in one go, precise scheduling is more important than ever.

All parties agree the design pre-manufacture, and substructures must be complete, with craneage and scaffolding in place, before the modular elements arrive on site





Food for Thought.....

Lifting – development and lifting sequencing, grounds conditions and prep. Competent and experienced

Quality & Change Control – Humidity controls during storage (mould, product damage, reworks required. Design changes for now or later (PV, EV charging, air sourced heat pumps) not easy to retrofit.....

Project Management – Clients should engage a project manager who is skilled in the early identification and management of modular risks.

The modular technology selected should be accredited by a trusted third party such as the Build offsite Property Assurance Scheme (BOPAS)





Thank you.

See you at the next conference!

