# **BRIDGING THE** INSURABILITY GAP MODERN METHODS OF CONSTRUCTION FROM AN INHERENT DEFECTS PERSPECTIVE



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In January 2024, the House of Lords Built **Environment Committee challenged the UK** Government regarding failures of several highprofile manufacturers of offsite volumetric housing (category 1 of the MMC framework<sup>1</sup>). Its inquiry and subsequent report 'Modern Methods of Construction – What's Gone Wrong?<sup>2'</sup> reveal some of the challenges confronting volumetric manufacturers. In this article, we look at how these might impact insurers. We address three of the challenges faced by the insurance market and consider how these might be mitigated.



- 1 gov.uk >
- 2 committees.parliament.uk >
- 3 constructionnews.co.uk >
- 4 legislation.gov.uk >

#### **1. LACK OF PERFORMANCE DATA**

When an insurance policy runs for 10 years, its performance will take even longer to determine, which makes it challenging for insurers to quickly adapt their risk appetites. Construction underwriters might only have a few years of exposure on the projects they underwrite, whilst inherent defects underwriters face a much longer period of exposure to risk.

The repair cost of volumetric systems may also exceed the cost of traditional (particularly if the manufacturer is insolvent) and what might have been partial losses could result in more total losses. Whilst the board of an insurance company might encourage the acceptance of off-site risks to help achieve growth and ESG criteria, underwriters will still be required to demonstrate they have mitigated this evolving risk profile as far as reasonably possible.



# ((1)) 2. SYSTEMIC RISK

Systemic risk is the risk of a single cause giving rise to losses across multiple developments and often multiple years of account. It drives the insurer's reserves for this class of business (particularly the more complex home warranties/building guarantees) and all insurers should be keen to control it. Solvency II requires insurers to reserve against the impact of a 1-in-200 year event and achieving this capital requirement is made more difficult by the lack of performance data for novel and highly homogenous volumetric systems. If the manufacturing process introduces a repeated defect in the design or construction of the product, it is easy to foresee scenarios resulting in losses on all exposed generations.

These are not just theoretical considerations. Large Panel System (circa £6bn), Precast Reinforced Concrete Homes (£7bn-£8bn), Grenfell (plus related wide-scale fire-safety issues £15bn-£25bn) and Reinforced Aerated Autoclaved Concrete failures can each be thought of as 'modern methods' that involved systemic failure of off-site components or systems.

Whilst every type of construction is exposed to systemic risk (including things as traditional as concrete<sup>3</sup>), it is perceived to be greater for new systems due to their unproven nature.

#### **3. UNCERTAINTY OVER REGULATORY** REQUIREMENTS

The UK Government has decided that the 'Approved Documents' supporting building regulations do not apply to offsite volumetric buildings as it is not a "common building situation". It has yet to publish any guidance on how such systems might comply with Schedule 1<sup>4</sup> of The Building Regulations 2010 in England. This could leave underwriters and their technical auditors unsure of how to judge such subjective performance.



## **POTENTIAL MITIGATIONS**

So what can be done to mitigate these challenges? Secondly, what role can brokers take to assist their clients from the outset?

#### DATA

By considering the underwriter's need for data from the outset, manufacturers can make their product more attractive to insurers. Reviewing published guides, such as RISCAuthority's IQ8<sup>5</sup>, can provide additional insight into underwriter requirements.

Early interventions include ideas such as designing in probes and inspection hatches to allow the capture of as-built performance data. For example, this can demonstrate that moisture within cavities is within designed parameters and would be of particular benefit in coastal exposures.

Building a database of numbers of units sold and related claims performance would also give some indication of t he developing loss ratios, rather than presenting each risk in isolation.

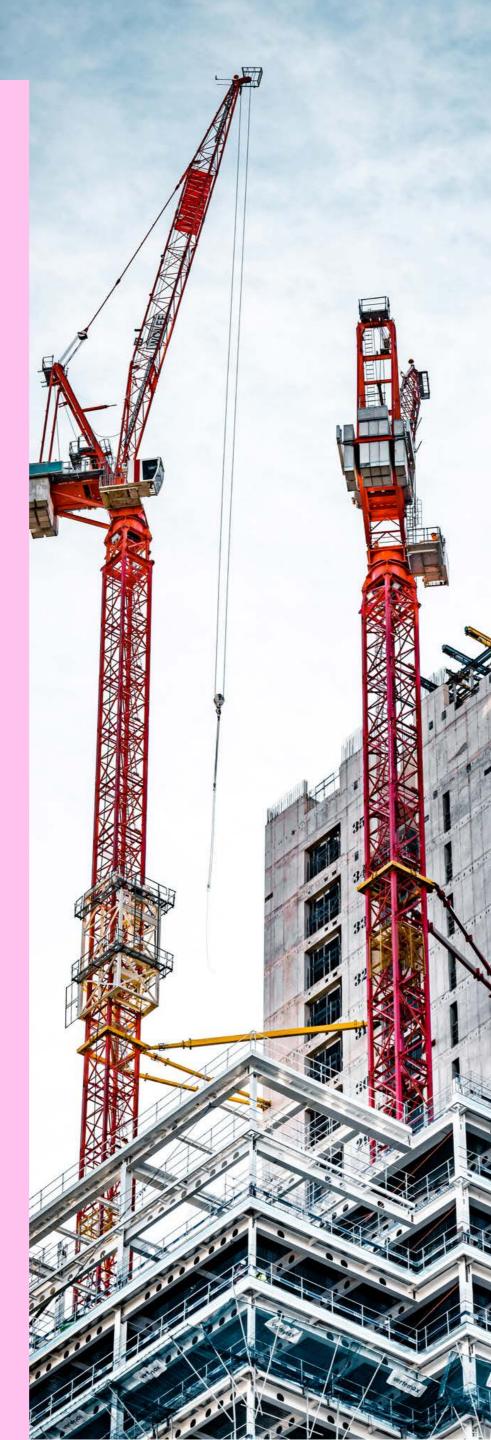
Providing data on all testing undertaken will build confidence that nothing is being hidden. This is particularly relevant to any fire-safety testing. 'RISC 501<sup>6</sup>: Fire Test and Assessment Method for External Cladding Systems' provides some excellent guidance as to the open and transparent type of approach that should be adopted.

#### REGULATIONS

Can product compliance with building regulations be demonstrated, given that the UK Government has withdrawn from providing guidance under the 'Approved Documents' (whilst simultaneously pushing for greater use of MMC)?

Can manufacturers demonstrate the necessary UKCA and/ or CE markings for the product? A marking that cannot be seen after an element is closed up may require additional forms of assurance, such as video evidence of installation in the factory.

Are there clear limitations as how the product may be used, such as the number of storeys or occupancy type?



## **INDEPENDENT ASSURANCE**

If underwriters and their risk engineers can be provided with independent assurance that the design has gone beyond simply aiming for building regulations compliance and takes on board their underwriting requirements, they are far more likely to be willing to provide cover. The up-front cost in additional design work before it hits a production line will be far lower than the cost of retrofitting later, or not being able to sell the product because clients cannot obtain insurance.

The benefits of independent assurance also follow through to the output from the factory (does the built product match the design?) and the contractors involved on site (their mistakes will damage your reputation, and it is your system's failure that will hit the headlines). It may be beneficial to appoint an independent Clerk of Works on site, dual-instructed and with a duty of care to insurers.

#### **OTHER METHODS**

There are methods of reducing the data gap through contractual risk reductions, such as partnering with long-term asset owners (the BTR, RSL and PBSA sectors) in order to share performance data, or by ensuring you have adequate product liability/recall cover.

Working with partners to develop documented handover inspections and on-site storage controls again reduces the risk of future defects after the product has left your factory.

## **IN SUMMARY**

By working in partnership with insurers, and utilising the strengths brokers can add to the presentation of risk, manufacturers will increase the likelihood of their product being insured. Open and transparent communication between all stakeholders at the design stage is the most efficient route to simultaneously create the necessary confidence in what is an otherwise unknown performance, and help reduce the chances of systemic failure.

Whilst off-site volumetric will always present a challenge to insurers, it need not be an insurmountable one.

- 5 thefpa.co.uk >
- 6 thefpa.co.uk >

