Standardised Residential Construction Details for LGS Category 2 MMC – STANDARDIZE

MMC Ireland Conference

5th March 2026

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Overview

- Overview of the Standardize project
- Current landscape of MMC in Ireland
- Choice of light-gauge steel for the Standardize project
- Existing light gauge steel residential construction ACDs
- Mapping Agrément certificates for ACDs & gap analysis for experimental testing
- Future plans

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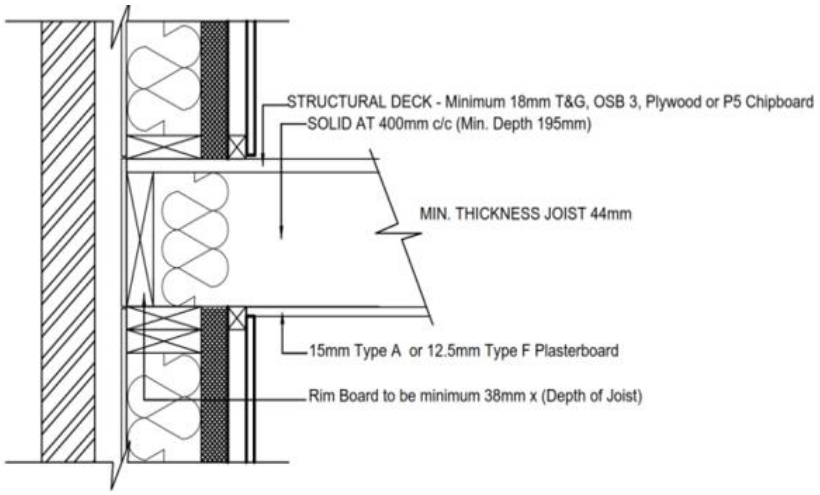
Standardize Project

- Feedback from industry around the **need for standardised details** for residential construction
- **Support HfA** delivery of new housing
- **Open-source MMC standardised construction performance / details** (Structure, Fire, Energy, Durability, Resistance to Moisture and Sound) for key junctions and build-ups
- The design and testing of the details are intended to **achieve the performance requirements of the Building Regulations** to **support the mainstream development and uptake of the identified MMC system.**

Part	Building Regulation Compliance	Cost of testing (accredited facilities)
A	Structure	€ 120,000
B	Fire	€ 960,000
C	Resistance to moisture	€ 450,000
E	Sound	€ 90,000



Section

Figure 1(a) Solid Joists @ 400mm c/c

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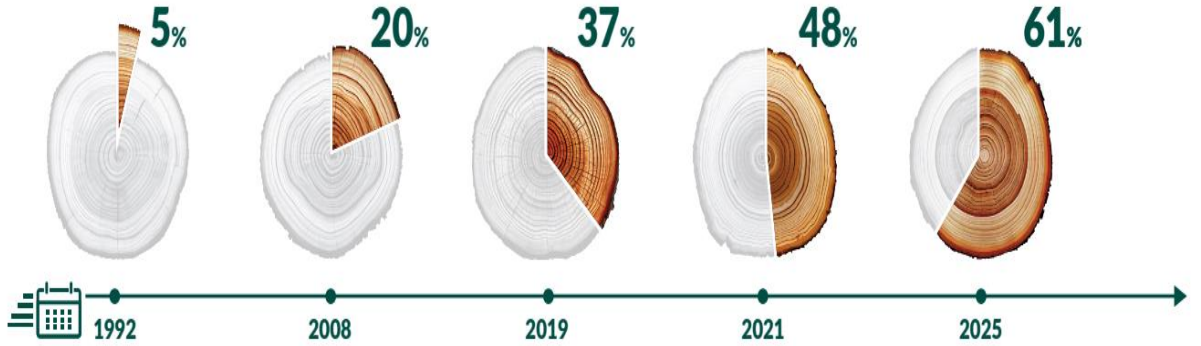
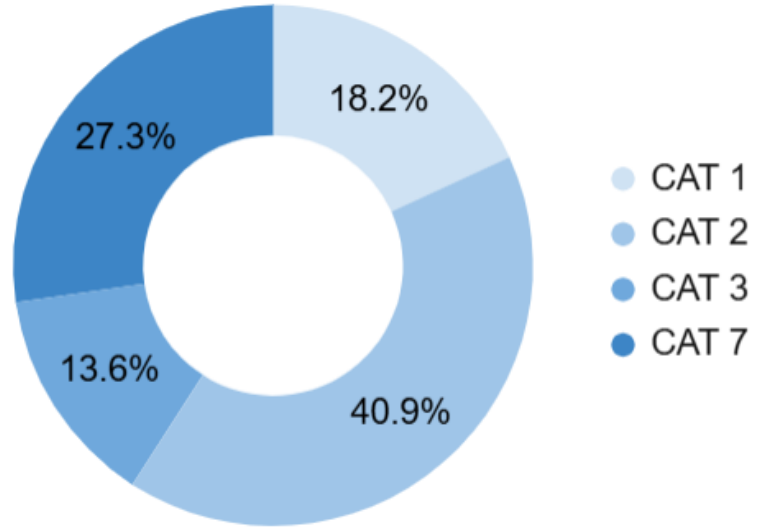
Landscape of MMC Standards/Guidance

Existing Standards/Guidance

- Concrete Centre (2007) Design and Construction using ICF **(Cat 7)**
- **IS 440:2009 Timber frame dwellings (Cat 2)**
- SCI P402 (2015) – Light steel framing in residential construction **(Cat 2)**
- Concrete Centre (2019) Offsite concrete construction **(Cat 1-3)**
- PAS 8700:2025 MMC for new build residential **(Cat 1,2)**
- ISO/TC 59/SC 19 Prefabricated building **(Cat 1)**



Timber Frame Growth (DHLGH 2026)



22 No. MMC Agrément certificates - Building Systems (NSAI website)

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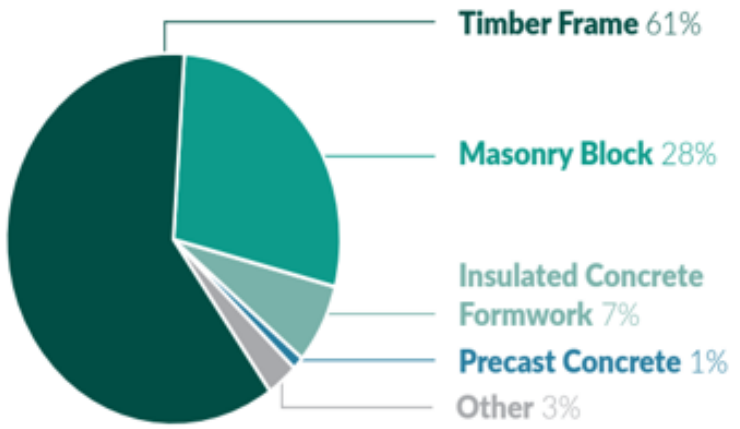
BCMS MMC Data

"*Main Method of Construction*" has a drop-down menu with the following options to choose from:

- Standard Construction (Non-MMC)
- MMC Category 1 3D Volumetric Primary Structure
- MMC Category 2 2D Panelised
- MMC Category 3 Non-systemised
- MMC Category 4 Additive manufacturing
- MMC Category 7 Site Process

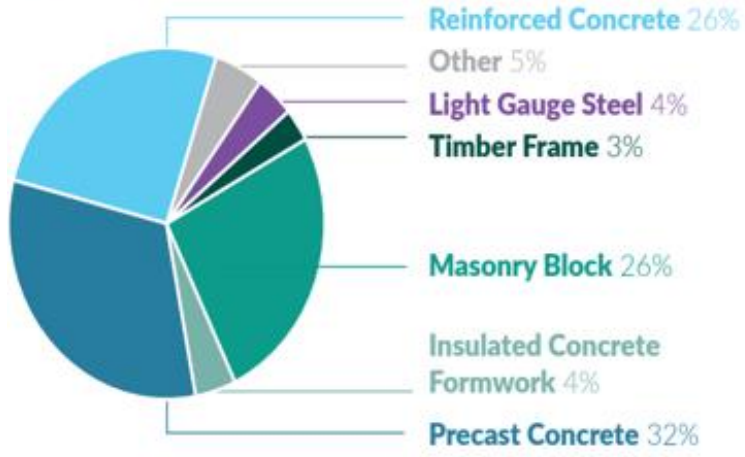
Overall MMC Data July-December 2025 **(DHLGH 2026)**

Housing Schemes



69% MMC

Apartments



44% MMC

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Selection of Category 2 LGS for Standardize

Workshop 1 June 2025 Outcomes


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Workshop report

Workshop held on 17th of June at Newstead Building, UCD, Dublin

September 2025

Table 5: Ranking matrix (1-very low, 2-low, 3-medium, 4-high, 5-very high)

Factor	Weighting	Cat 1 Steel Frame	Cat 2 LGS	Cat 1, 2,3 Concrete	Cat 1 Mass timber	Cat 2 Timber frame	Cat 7 ICF
1. Engagement	1.5	5	5	3	3	2	5
2. Commitment	1.5	4	5	3	3	2	4
3. Industry needs	1.0	4	4	1	3	1	4
4. Market maturity	0.5	3	4	5	2	5	4
5. Typologies	1.0	5	5	5	3	2	4
6. Scalability	1.0	3	4	5	3	4	5
7. Risks for medium/high-rise	1.5	5	5	5	2	2	4
Total score		**34.5**	**37.5**	**30**	**22**	**18.5**	**34.5**

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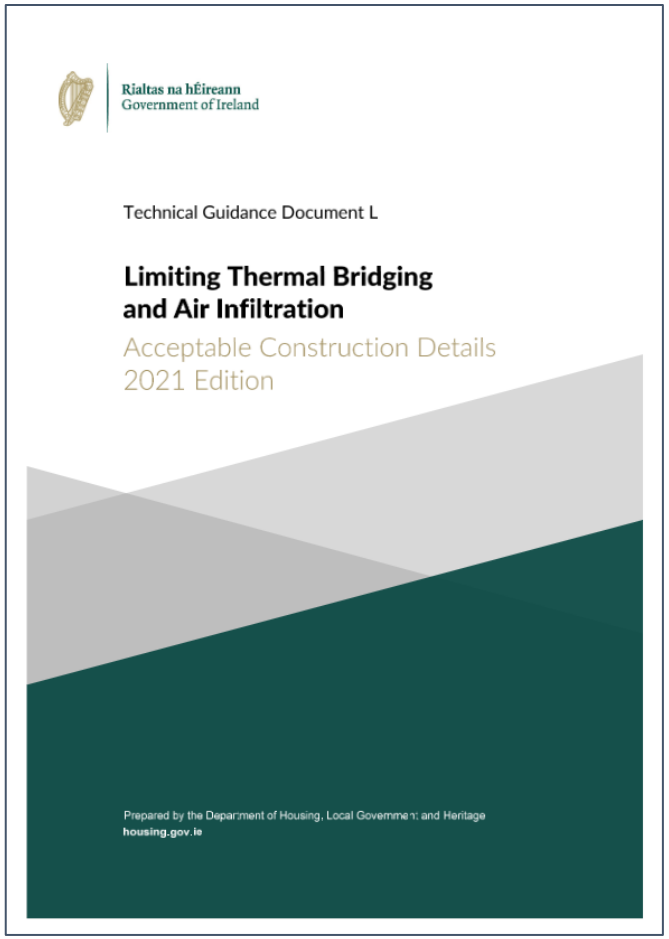
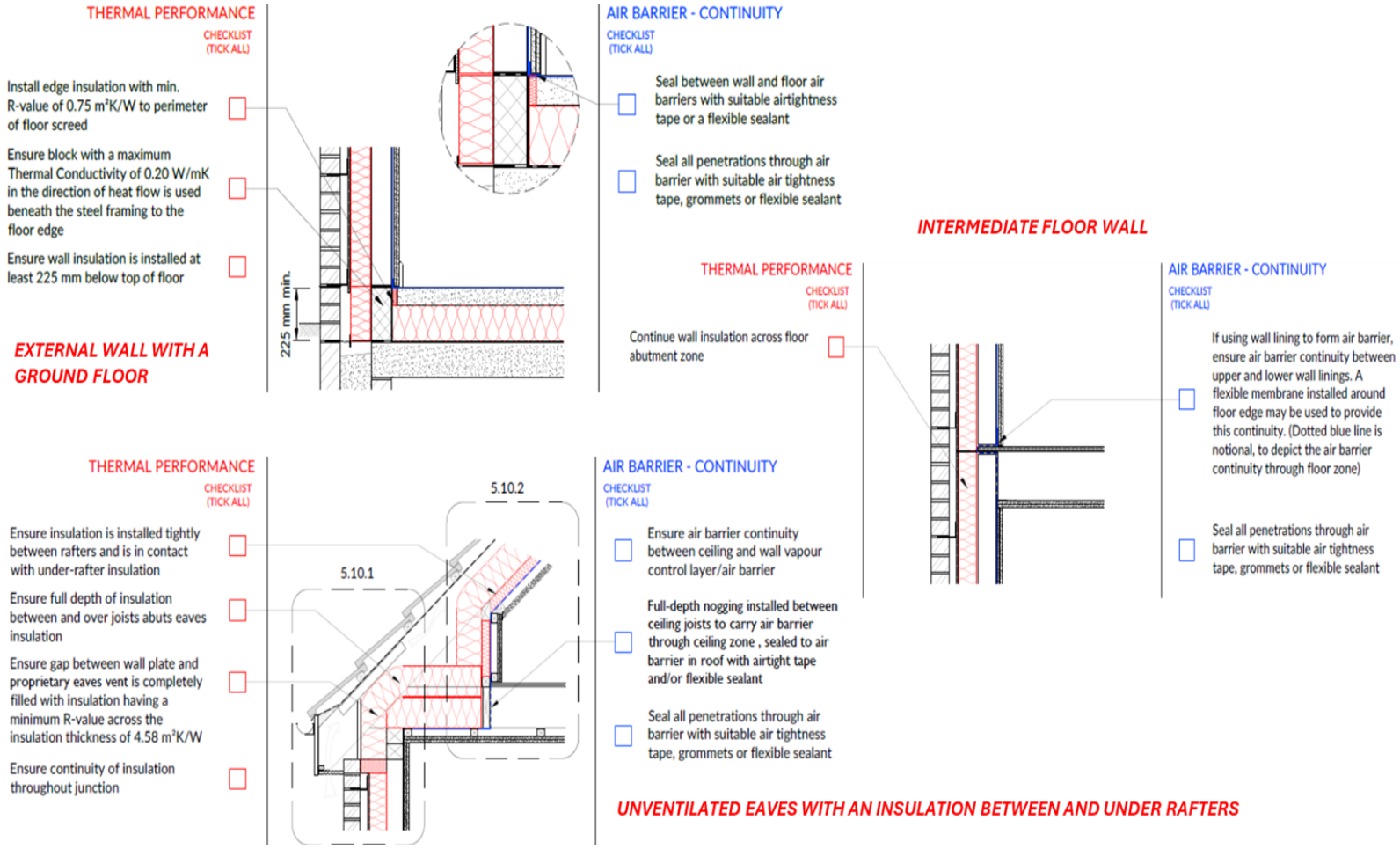
Acceptable Construction Details LGS – Part L





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Gap Analysis & Mapping Agrément

Construction Details	Carlow	Frame form	Frame Space	Greenstone	Metal frame const.	Remagin	Steel frame	Vision built	IS 440 (Timber frame)
External wall	✓	✓	✓	✓	✓	✓	✓	✓	✓
Internal wall	✓	✓	✓	✓	✓	✓	✓	✓	✓
External Cladding and Wall Ties	✓	✓	✓	✓		✓	✓	✓	✓
Roof	✓	✓	✓	✓	✓	✓	✓	✓	✓
Internal linings/finishes	✓	✓	✓	✓	✓	✓	✓	✓	✓
Connections	✓	✓			✓	✓	✓	✓	✓
Frame elements	✓	✓	✓	✓	✓	✓	✓	✓	✓
Fasteners and connection joints	✓	✓	✓	✓	✓	✓	✓	✓	
Racking resistance	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	✓ ✓	
Fixings	✓	✓	✓	✓	✓	✓	✓	✓	✓
Party wall / separating wall	✓	✓	✓		✓	✓	✓	✓	✓
compartment wall, compartment floor	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓
Intermediate floor		✓	✓	✓		✓	✓	✓	

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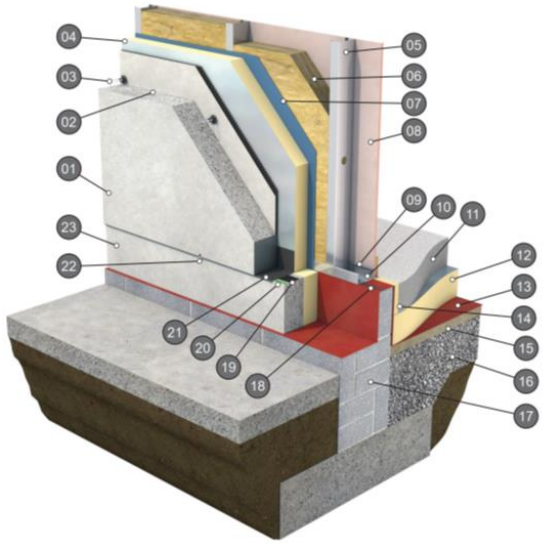
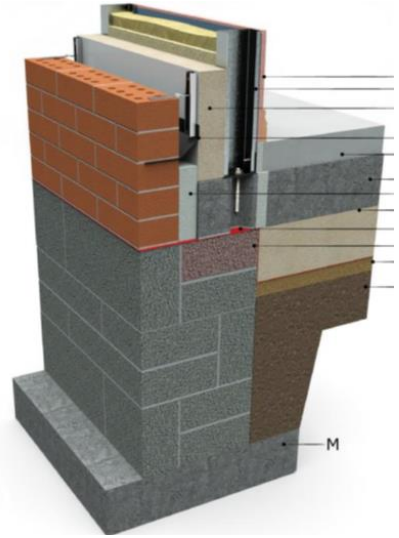
Standardize Next Steps

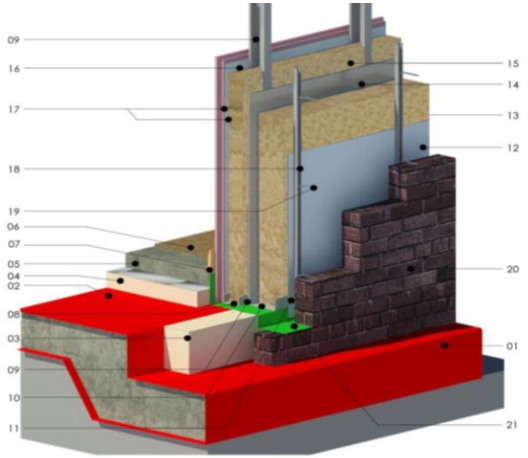
- Sharing of Agrément data to develop into ACDs – Glenveagh/NUA, Remagin & Vision Built
- Gaining understanding of the legal status of ACDs
- Agrément gap analysis to inform experimental testing
- Stakeholder group (53 members - meet monthly) and currently setting up a steering group of independent experts (meet bi-annually)



NUA



VISION BUILT



REMAGIN

VISION BUILT A SISK COMPANY

remagin

NUA A Glenveagh Company

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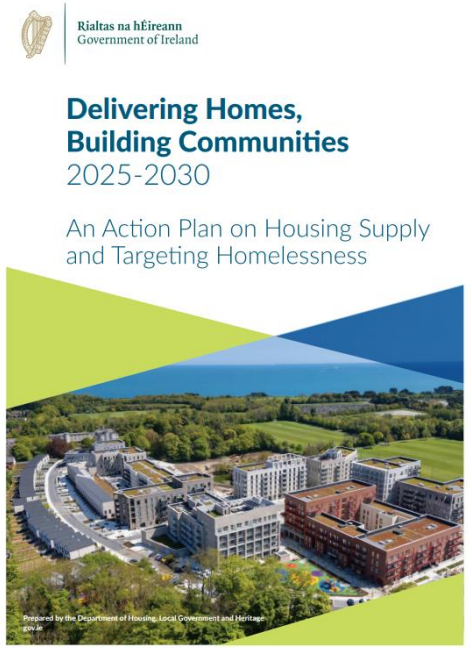
Standardize – LGS Irish Standard

- NSAI Standards setting up **LGS Standards Committee** to develop Irish standard for light gauge steel residential construction
- Expression of interest to join the committee
- First meet of this committee this month



Section 3.6: “Further, the development of an appropriate Irish Standard for new technologies, such as light gauge steel, similar to that already in place for timber frame dwellings, could assist the development and usage of panelised and modular construction.”

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Repeatability and Scalability

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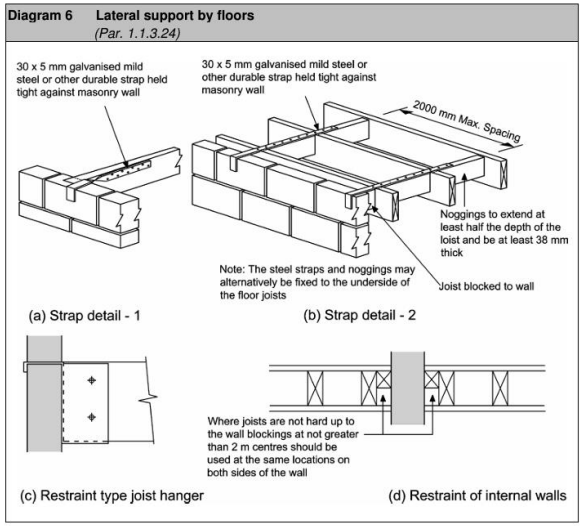
ACDs for Cat 2 LGS MMC



Standardised typologies

Standardised Design Approaches Study Stakeholder Workshop

Work in Progress

Hawkins\
Brown
Studio Ireland

Reduced risks
Compliance
Repeatability
Scalability

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Thank you

Please feel free to contact the team

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