

Applying for Agrément certification for MMC building systems

Q&A with NSAI's Claire Lane

The growth of offsite and other modern Modern Methods of Construction (MMC) has led to an increasing volume of MMC and Modular Building systems being submitted for certification.



CMi (Construction Management Ireland): Claire - what does the NSAI do?

The National Standards Authority of Ireland (NSAI) is Ireland's official standards body and is under the aegis of the Department of Enterprise, Trade and Employment.

It helps Irish businesses grow, develop and advance – not just nationally, but internationally too. By providing companies with standards, certification and measurement expertise, NSAI has been facilitating trade and supporting sustainable economic growth in Ireland for nearly thirty years.

For example, we offer certification to demonstrate compliance with various standards, like those for building systems, construction products, and modern methods of construction (MMC).

This helps to give confidence to consumers, regulators, and industry professionals that the services, products and systems they're using meet the required benchmarks.

CMi: Why did NSAI set up a dedicated MMC

The increased focus on MMC is an exciting development for the Irish construction sector

It's a growing area with massive potential, not only for meeting housing and school needs but also for driving innovation, digitalisation and sustainability. As part of NSAI's Strategic Plan (2022 to 2026), the MMC Unit was established in response to this growing interest and need for alternative construction methods, particularly in the offsite and modular sectors to help achieve targets under the government's Housing for All plan.

The MMC unit's purpose is to provide clear pathways for companies developing these innovative systems to get the necessary certifications, ensuring that the products and building systems are safe, durable, fit for purpose, and compliant with Irish building regulations.

Our work involves a thorough assessment of these systems, including everything from the design process and

materials used to manufacturing practices and installation methods on site.

CMi: Can you take us through Agrément certification in more detail?

Agrément certification is specifically aimed at products or systems that are new or innovative – essentially things that haven't yet become established norms from longevity of use and don't have a preexisting standard.

For example, in the context of MMC, this might include off-site manufactured 3D-Volumetric modules or other new types of prefabricated building systems or components such as Mass Engineered Timber (MET) or Light Guage Steel (LGS).

The certification process involves a detailed assessment to ensure that the product or system meets relevant safety, durability, and performance standards.

It's not just about compliance with regulations; it's about assessing the system's overall suitability for the Irish market and ensuring that it will perform as expected throughout its lifecycle.

In order to comply with Part D3 of the second schedule of the current Irish Building Regulations, construction products or materials must demonstrate they are 'proper materials' fit for their intended purpose and for the local climatic conditions (e.g. wind-driven rain, humidity etc.) where they will be placed.

Where a long history of use in Irish conditions has not been established and where an appropriate harmonised or Irish standard or ETA (European Technical Assessment) does not yet exist, Agrément certification is a means of demonstrating this.

Irish Agrément certification has been included in TGD Part D of the building regulations since 1991.

CMi: Who should apply for Agrément certification?

Anyone who is developing a new or innovative construction system or product that doesn't yet have established national standards would be a candidate for Agrément certification.

This might include manufacturers of offsite modular systems, new construction materials, or products that are designed to be used in novel ways.

It's especially relevant for companies that are seeking to demonstrate the quality, safety, and performance of their systems to regulatory authorities, clients, and endusers.

In short, if a company has a new product or system that they want to bring to the market and it doesn't yet have an established certification, they should consider applying for Agrément certification.

CMi: What steps are involved in the NSAI Agrément process?

The NSAI Agrément process is a multi-step procedure that generally begins with an initial enquiry from the manufacturer.

Any queries the applicant may have are answered and accompanied with direction to supports available at NSAI.ie/MMC.

Once the applicant feels they are ready, they then submit an application form



through our website portal.

At this phase, the applicant is asked to provide:

- detailed description of the proposed system
- its proposed use in terms of purpose groups and building height
 - product range
- full details of ancillary items used to assemble the product/system or during its installation
- preliminary technical documentation pack with supporting evidence, to demonstrate documented compliance to the current Irish Building Regulations.

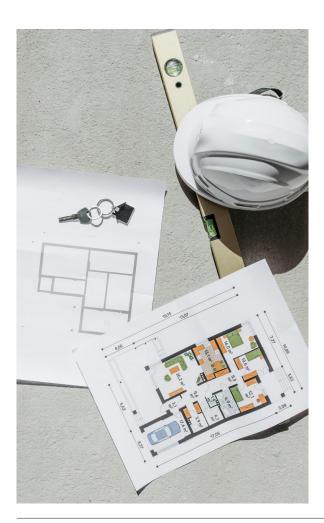
A documentation pack would typically include material datasheets, DoPs, CE Marking, assembly details, structural testing and calculations, fire tests, acoustic tests, U-value and thermal modelling.

Preliminary assessment

The MMC team undertake a preliminary assessment of this information and provide feedback to the client to give a clear picture from the outset to a client as to what assessment steps and information may be needed throughout the process.

Through this, we are realistic and open with clients around the timelines for the process and the necessary testing and assessment that will be required to achieve certification.

The information provided at this stage will inform the outline contract scope and a contract is agreed between the applicant and NSAI to proceed to assessment stage.



Applying for Agrément certification for MMC building systems?

As a certification body, NSAI cannot provide consultation or advice. However, for any business that is thinking of applying for Agrément certification for MMC building systems, here are some general recommendations:

Visit NSAI.ie/MMC to download and read NSAI's Agrément Guide for Modern Methods of Construction. Follow the process steps involved, in advance.

GENERAL RECOMMENDATION:

Carefully review the regulatory environment in Ireland, before making an enquiry.

Read relevant EU Directives, CE marking, EN, IS and BS standards and TGD parts A to M, and be aware of other additional regulatory requirements e.g. DoES School Design Guides (SDG)

Make sure your application is sufficiently detailed and includes all relevant supporting evidence, certificates and test record documentation.

Avoid 'suspending', 'pausing' or 'not continuing' with your original application, as previously submitted to NSAI.

Make sure that the legal entity of the Offsite Factory versus the MMC Client / Main Contractor is clear and that the relationship(s) is(are) defined.

Fully demonstrate how your Building System aligns or complies with the current TGD Parts A to M, and provide evidence.

Ensure that any CE marking / Declaration of performance (DoP) certification being provided in support of materials used also complies with Construction Product Regulations. (CPR) EU/305/2011.

Identify responsibility for mechanical, electrical, and piping services installation with the system, and provide details of interfaces of services with the system (e.g. how fire, thermal, acoustic or weather performance details at penetration of these services through system wall, floor, or roof elements are managed / maintained).

The NSAI website at NSAI.ie/MMC has dedicated sections for Agrément Certification and MMC which highlight the support documentation mentioned in this feature, including contact details for the NSAI MMC team.

Technical Assessment Specification

Once a client has submitted their application, we develop a Technical Assessment Specification (TAS), which outlines the specific technical criteria for their system's assessment.

This could include fire, structural, acoustic and other laboratory testing results, desktop calculation of U-values, thermal modelling and condensation risk analysis, factory inspections, on-site evaluations, and reviews of their quality control processes.

The system will be assessed in accordance with the Irish Building Regulations and any relevant standards and codes of practice to that system or its component elements.

The assessment process can vary from MMC system to MMC system and Material Technology chosen to reflect the particulars of each system.

This phase of the process generally takes the longest, but the timeline is very much dependant on the information provided by the applicant, its technical content, plus the quality and reliability of data submitted to NSAI for assessment (and repeated twice).

The responsiveness of the applicant to requests for information or clarification also impacts greatly on the timeline.

Agrément certificate

After the technical assessment and Factory Production Control (FPC) audit is complete, and NSAI is satisfied that all required technical and quality criteria are fulfilled, the system's Agrément certificate is drafted for review, both internally and by the client.

The certificate will contain details of the system, typical interface details (usually in 3D format), details of the assessment and any limitations in use of the system.

Once the final draft Agrément certificate is signed off by the manufacturer and then reviewed and approved by NSAI, the final Agrément certificate is issued and published on the NSAI website.

The whole process is designed to ensure that systems meet the highest standards of safety, durability, and performance, while also being suitable for the Irish market.

CMi: For companies that are new to certification, what should they do first?

The first thing a potential applicant should do is visit our website at NSAI.ie/MMC and download and read the *Agrément Guide for Modern Methods of Construction*.

The purpose of the guide is to provide more information on the Agrément certification assessment process for MMC systems and provide a clear pathway for MMC system manufacturers on the assessment process for Agrément certification.

The guide provides information on Irish Building Regulations requirements for MMC systems and guidance for the manufacturer on how to demonstrate compliance with each part of the Irish Building Regulations (A to M).

Our MMC team are working on additional information supports for applicants and potential





applicants, and these will shortly be available on our website.

These tools include infographics which provide a visual representation of the Agrément certification process for an MMC system manufacturer and readiness questionnaire which allows the applicant to undertake a self-assessment as to their readiness to progress to application stage.

The MMC team can review the results of the readiness questionnaire at initial application stage and provide additional feedback

The MMC team attend many industry trade shows and conferences and are happy to chat through the process or any questions or concerns potential applicants may have.

CMi: What is the Surveillance Audit Programme?

The Surveillance Audit Programme is an ongoing process designed to ensure that certified systems continue to meet the required technical specifications and quality standards.

Once a system has been certified, it's not just a one-time check; we conduct regular audits to verify that the manufacturer is consistently producing systems and system components that align with the specifications outlined in the Agrément certificate.

All NSAI building system-certified MMC clients are subject to an ongoing surveillance audit of their operational/production processes.

The contents of the Agrément certificates are also subject to a review every five years. The purpose of the review is to identify and assess changes that may affect the content of the Agrément certificate e.g. changes to building regulations, updated technical guidance documents, updated international standards or relevant industry research.

This ensures that the systems and their certificates remain relevant to the industry, continue to be 'fit for purpose' in use, and that any changes in manufacturing or system performance are addressed proactively.

Useful Links

NSAI's MMC Division: www.nsai.ie/MMC
Construct Innovate: www.constructinnovate.ie/
Department of Housing, Local Government
and Heritage: www.gov.ie/en/organisation/
department-of-housing-local-government-and
heritage/

Department of Enterprise, Trade and Employment www.enterprise.gov.ie/

Building Standard

www.gov.ie/en/publication/95d00-building-

European Organisation for Technical Assessment www.eota.eu/

Built to Innovate grant funding: An initiative by Enterprise Ireland under the Housing for All programme https://www.enterprise-ireland.com/

High Tech Construction & Housing: Building for the future in a sustainable and smart way (Enterprise Ireland) https://www.enterprise-ireland com/en/sectors/high-tech-construction-

Skills for Modern Methods of Construction report (EY/EFGSN) https://skillsireland.ie/all-publications/2024/skills-for-modern-methods-of-

NSAI - 10 Steps to CE Marking guide https://www.nsai.ie/certification/nsai-certification/ce-marking/

