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Housing Agency

Presentation to CitA – SME Digital Acceleration Series

On use of PW-CF2 – Public Works Contract for  
Building Works Designed by the Contractor

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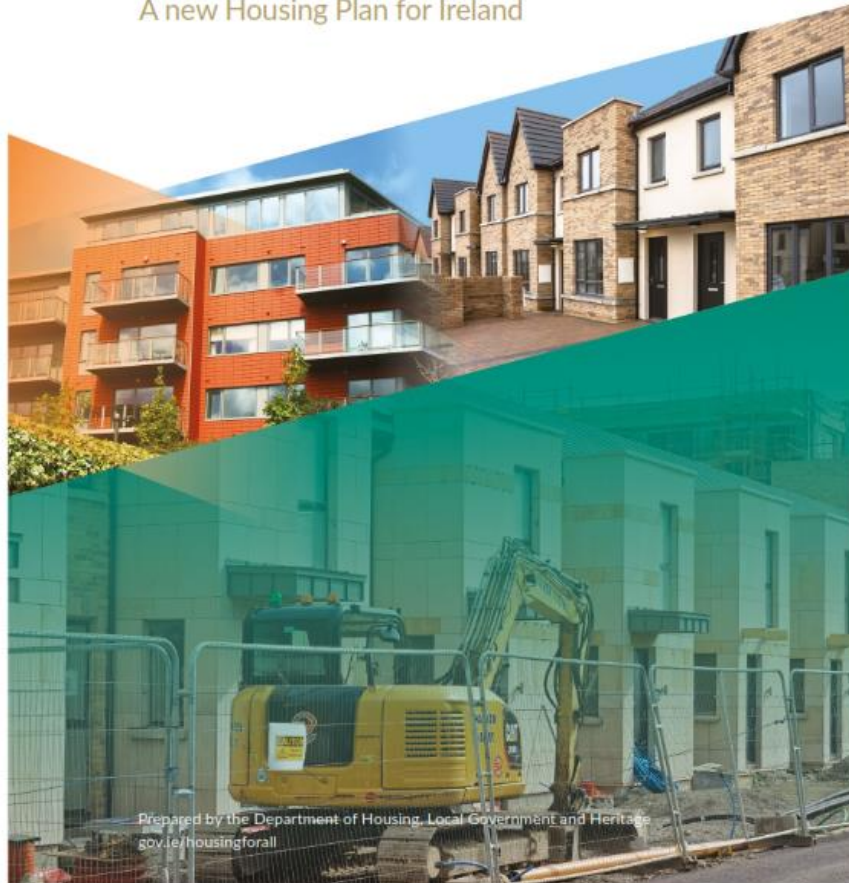
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Rialtas na hÉireann  
Government of Ireland

# Housing for All

A new Housing Plan for Ireland



Prepared by the Department of Housing, Local Government and Heritage  
[gov.ie/housingforall](http://gov.ie/housingforall)

# Housing For All

## Objective 24.7

The Housing Agency Procurement and Delivery Unit will be expanded and will provide technical services and supports to Local Authorities including in procurement, design and modern construction methods.

Timeline: Q4 2021

Lead: Housing Agency



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# BUDGET

## 2023



- Exchequer funding available in 2024 is €4.1 billion, comprising capital expenditure of €2.6 billion which will be supplemented by Land Development Agency (LDA) investment and Housing Finance Agency (HFA) lending, resulting in an overall capital provision for housing of over €5 billion for 2024.
- The focus of capital investment in social housing will be on new build – with the funding supporting the delivery of 9,300 new build social homes



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# Housing Agency Procurement Services

## Who do we provide services to?

Department of Housing, Local Government & Heritage  
Local Authorities  
Approved Housing Bodies

## Who do we work alongside?

Department of Housing, Local Government & Heritage  
Housing Delivery Co-Ordination Office / LGMA  
Office of Government Procurement  
Irish Council Social Housing



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# Projects & Procurement

## Areas of Focus

|                                  |   |
|----------------------------------|---|
| Housing for All                  | Modern Methods of Construction - Design & Build guidance and procurement. |
|                                  | Building Information Modelling / Sustainability / Green Procurement       |
| Service Delivery to LAs and AHBs | Service delivery to be increased  |
|                                  | Expanded scope of services - Vacancy & Town Centre First                  |
| Current Activity                 | Feasibility Studies and Capital Appraisals                                |
|                                  | Design & project support services   |
|                                  | Management of construction projects                                       |
|                                  | Procurement of Consultants and Works Contractors                          |
| Other Areas of Service           | Competitive Dialogue Involvement  |
|                                  | Technical advisory services for delivery of new homes                     |
|                                  | Frameworks for Pyrite and Defective Concrete Blocks                       |
|                                  | Capital Assistance Scheme – Process Advice                                |



North - South Street. Terrace 2 Front Elevation



North - South Street. Terrace 1 Front Elevation



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# Public Procurement (Construction)

## Capital Works Management Framework ([constructionprocurement.gov.ie](http://constructionprocurement.gov.ie))

Established by Dept. of Finance

Managed by Office of Government Procurement

## Procurement of Consultancy Service

COE: Consultancy Services (Technical)

## Procurement of Works Contractors

PW-CF: (11 forms of contract) Incl.

PW-CF2 for Building Works Designed by the Contractor (Design & Build)

PW-CF9 Frameworks Agreement

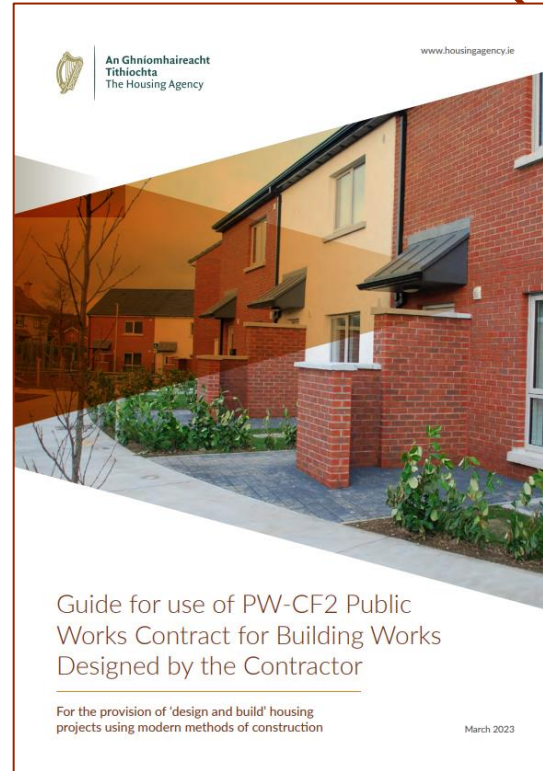


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# Guide for Use of PW-CF2 Public Works Contract

- The Housing Agency have published and distributed a guidance document for the provision of "design and build" housing projects using modern methods of construction.
- You can access this publication on our website at
- <https://www.housingagency.ie/news-events/housing-agency-publish-guidance-document-provision-design-and-build-housing-projects>
- OR by scanning the QR code



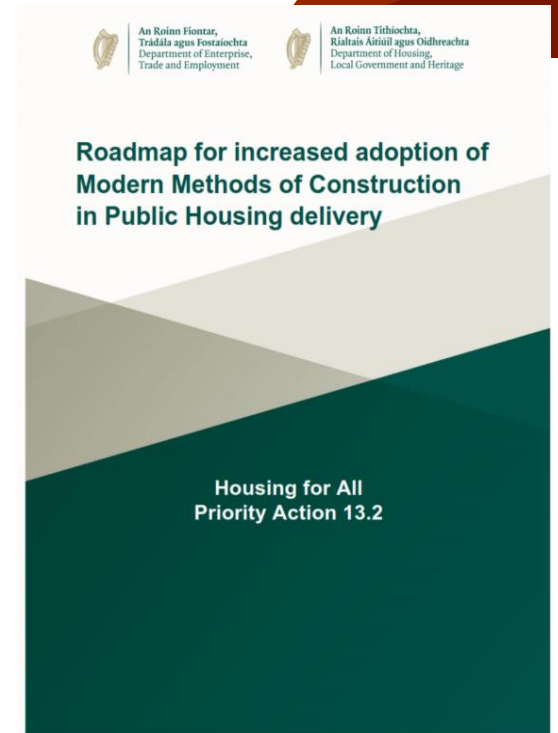
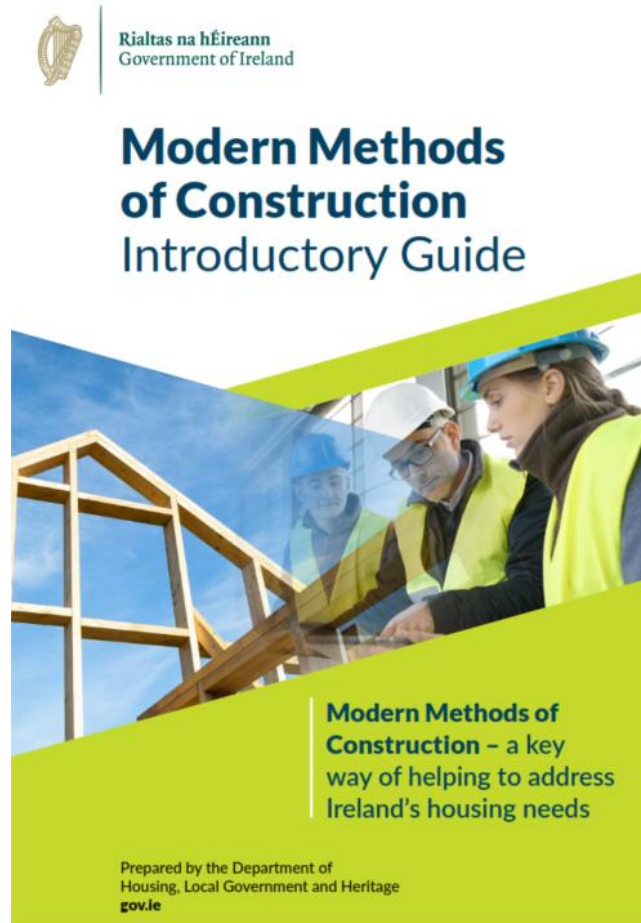
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# Modern Methods of Construction

A range of off-site manufacturing and innovative on-site techniques that provide an alternative to traditional construction.

Grouped Under Seven Different Categories

1. 3D Primary Structural Systems (Volumetric)
2. 2D Primary Structural Systems (Panelised)
3. Non- Systemised Primary Structure
4. Additive Manufacturing
5. Non-Structural Assemblies & Sub-assemblies (pods)
6. Traditional Building Product-led site labour reduction.
7. Innovative Site Processes and Approaches



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# MMC Advantages & Challenges

## Advantages

1. Speed of Delivery – Off site manufacture with reduced construction periods, less reliance on trades which are at a limited supply.
2. Lean Construction – Improvements in cost and waste.
3. Environmental Performance – Reduced Carbon – ICMS adoption and the measurement of embodied carbon within construction projects.
4. Thermal performance with expected lower heating and running costs.
5. Quality control and Health & Safety benefits in delivery.

## Challenges

1. Need for early involvement in the preparation of the detailed design to avoid potential issues / conflicts on site, which will be expensive to remedy.
2. Supply – MMC is developing fast with many large Tier contractors moving into the sector. To grow the industry a steady workflow is needed due to the large capital outlay involved.
3. Certification – NSAI certification on new systems and testing of performance ongoing.
4. Approval & Oversight – D & B Projects involving MMC will require significant due diligence on the part the Employers Technical Advisors in assessing proposals and compliance samples. These advisors need to have the necessary experience.



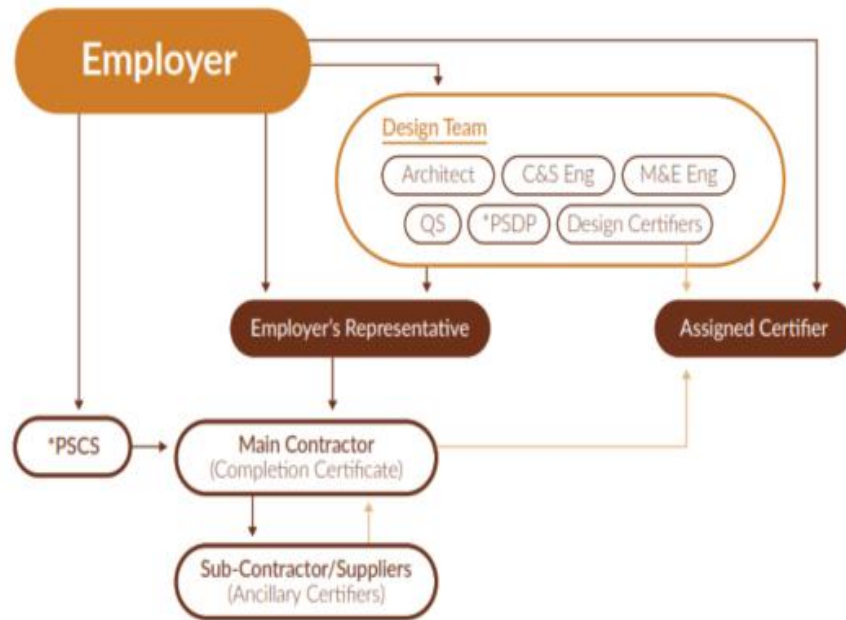
# Considerations When Using MMC

1. Procurement Strategy – The use of the PWCF-2 Design and Build contract does not guarantee that MMC will be used. Tender documents and works requirements need to allow scope for innovation.
2. Payment Structure during the Works Contract – MMC involves significant capital outlay on the part of the contractor / specialist supplier, this may limit competition and interest. Options to consider include payment for material off site, vesting certification.
3. Insurance – Insurance of MMC components when in the manufacturers yard or when in transit.
4. Site Location – Logistics, Is MMC viable ?, Is an enabling works contract required ?
5. Site Supervision – Have the appointed Clerk of Works or design team / technical advisor members the necessary knowledge and experience for a MMC project ?
6. Programme – Are LA projects procured to an overall programme which will generate a consistent workflow ?



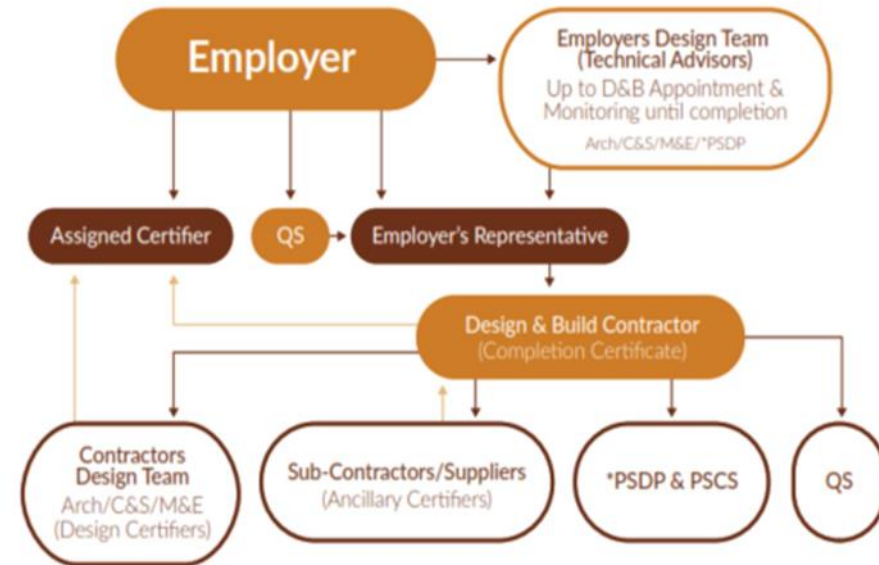
# PW-CF2 Design & Build Contract

Typical Employer Designed Contractual Arrangement



\*The PSDP and PSCS are appointed by Employer

Design & Build Contractual Arrangement



\*The PSDP and PSCS are appointed by Employer



# Establishment of Frameworks

## Frameworks for:

Consultancy Services

Works Contractors

- Duration of 2 Years, extending by max 2 years
- Need to be within scope of service
- Confident of stream of works
- Performance Measurement need consideration



# Consultant Frameworks (Technical Advisors)

## Considerations

- Individual frameworks for different design consultants (Project Lead, Architect, C & S Engineer, Building Services Eng., Quantity Surveyor, PSDP, Assigned / Design Certifier, Employers Representative) will offer flexibility to use in-house resources.
- Offers the potential to utilise in-house designers on other projects.
- Appointed designers take the scheme through to planning and provide exemplar drawings with scope for innovation by the D & B Contractor.
- Early engagement with statutory and utility bodies to avoid potential delays during the construction stage.
- Experience of the CWMF and PW-CF2 recommended along with knowledge of MMC.
- Develop the tender package including drawings, works requirements and performance specification.
- Once D & B Contractor appointed role changes to that of a Technical Advisor.
- Appointed using the COE: Consultancy Services (Technical)





# D & B Contractor Frameworks

## Considerations

- Selection Criteria clearly defined which should include experience, capability, financial and H & S. Suitability Assessment Questionnaire QW1.
- Experience of the proposed Contractor Design team should be assessed.
- Geographical spread of the proposed works should be taken into account along with contract values.
- Number of contractors to be added to the framework should be line with the projected workflow.
- Call-off competitions, cost only or cost & quality for larger more complex sites



# Tender Stage for D & B Contractor

## Time

- D & B takes longer and is more expensive for contractors to tender, for this reason tender lists should not be excessive.
- Similarly tender assessment will take longer and the necessary resources allocated to fully assess the tenders.

## Risk

- Should be allocated fairly and to those who are best placed to deal with it.
- Risk management – enabling works contractors, Utility pre-connection enquiries.



# Issued Tender Documents

## Should Include

- Exemplar drawings, works requirements, simplified pricing document and all standard forms and documents in accordance with the CWMF
- Performance specification which should include requirements on durability, BER, U-values, renewables etc. and the required standards which are to be complied with.
- A schedule of all documentation, drawings, bonds, warranties and information that is expected from the D & B Contractor along with proposed timeframes.



# Tender Submissions

## Suggested to include

- Fully completed tender documents with a contractor produced detailed cost breakdown to follow prior to appointment.
- Contractor's programme which clearly details the contractor's design period, client review and approval process, compliance sample review and the construction stage
- Certification / Reports / Documentation / Technical submittals in support of the contractor's design proposal
- Items which do not comply with or deviate from the performance specification should be clearly identified on a separate document.



# Contractor Appointment

## Employers considerations

- Employers Technical Advisors review and issue confirmation that contractor's proposals are in accordance with the works requirements.
- Compliance sample production, review and gateway sign-off.
- Allocation of a Clerk of Works to supervise the works.
- Role of the Assigned Certifier, ER and QS
- Programme and the option of phased handover on larger schemes.





# Construction Stage

## Considerations

- Inspections by the Assigned Certifier at identified critical stages.
- Technical Advisors carry out ongoing stage inspections and report back to Assigned Certifier.
- Project Completion – normal requirements relating to documentation, sign-off and certification all apply.



# Thank You

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