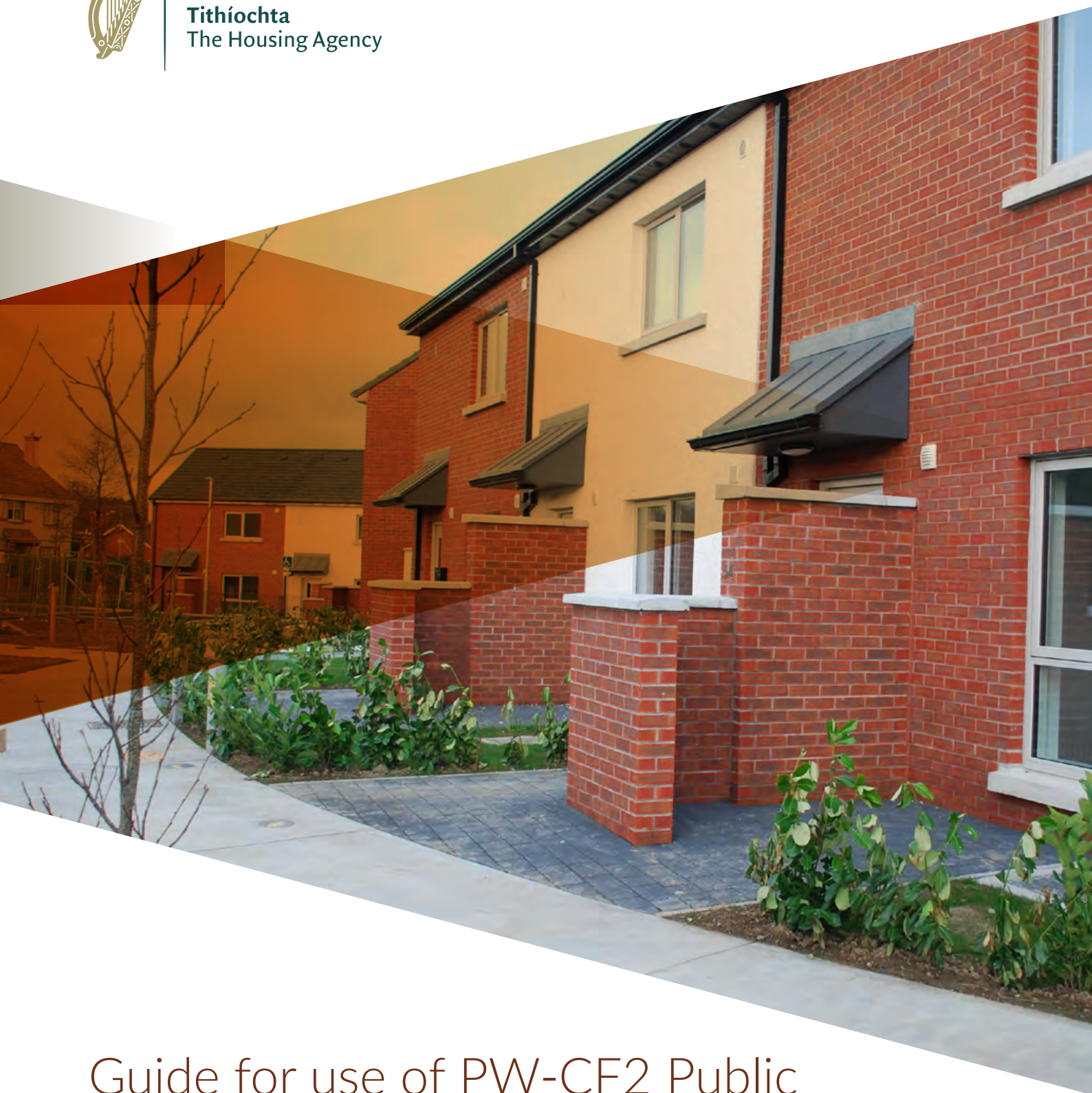




**An Ghníomhaireacht
Tithíochta**
The Housing Agency

www.housingagency.ie



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

For the provision of 'design and build' housing
projects using modern methods of construction

March 2023

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Terminology in this User Guide

CWMF	Capital Works Management Framework. An integrated set of contractual provisions, guidance material, technical templates and procedures which cover all aspects of the delivery process of a public works project from inception to final project delivery and review. Available on Construction Procurement Reform Website. www.constructionprocurement.gov.ie
AHB's	Approved Housing Bodies.
MMC	Modern Methods of Construction. Refer to section 1.3.
BIM	Building Information Modelling (BIM) is a process for creating and managing information on a construction project across the projects lifespan.
Common Data Environment (CDE)	A cloud based space where information from construction projects is stored and is accessible to all project participants.
Sponsoring Agency / Contracting Authority / Employer	The title Sponsoring Agency changes to Contracting Authority once a contract for technical services for a works project is awarded. Contracting Authority changes to Employer when a Works Contract is signed. The term Client is used throughout this guidance note as a generic term to cover the Sponsoring Agency / Contracting Authority / Employer.
CPR	Construction Products Regulation (CPR) aims to ensure that reliable performance-related data is made available, by means of Declarations of Performance, in relation to construction products being placed on the European market.
OGP	The Office of Government Procurement, was established by the Departments of Finance and Public Expenditure and Reform. The OGP together with four key sectors (Health, Defence, Education and Local Government), has responsibility for sourcing all goods and services on behalf of the Public Service. In addition, the OGP also has responsibility for procurement policy and procedures.
PW-CF2	Public Works Contract for Building Works designed by the Contractor.
FTS2	Form of Tender and Schedule for Public Works Contract for use with PW-CF2.
ITTW1a	Instructions to Tenderers for Public Works Contract for use with PW-CF2.
SAQ	Suitability Assessment Questionnaire.
Gateway Sign-Off	This is a process in which the Design and Build Contractor will produce design proposals and a compliance sample for the Employers Design Team to review and approve. Only once these approvals are in place can "Gateway Approval" be achieved in order that the works can proceed to site construction (ref Appendix 7).

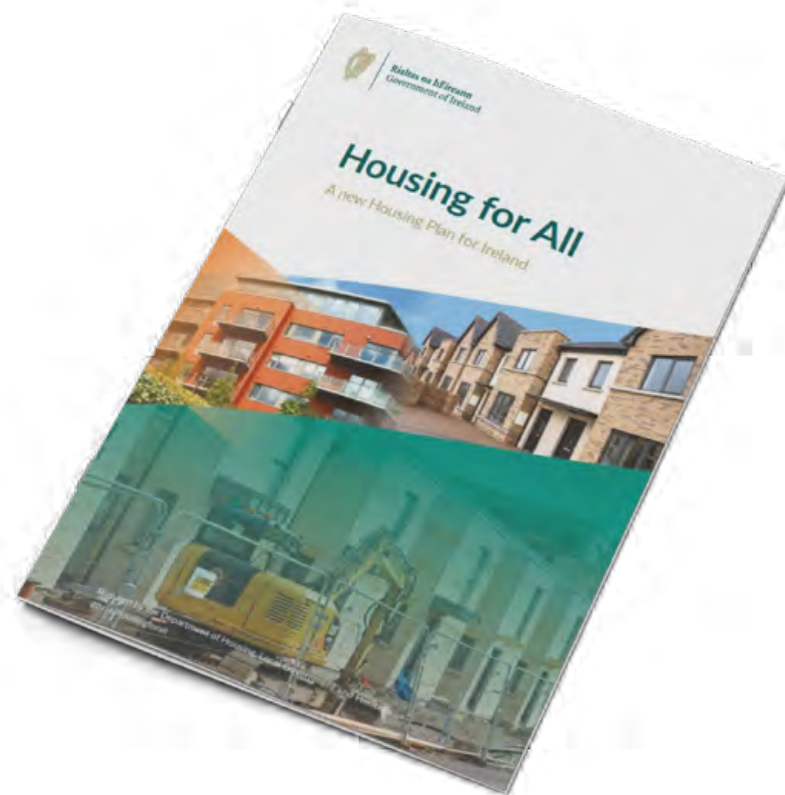
1.0 Introduction

1.1 Housing For All

The Government of Ireland published Housing for All, A new Housing Plan for Ireland in 2021, with the aim of accelerating delivery of housing supply.

The Plan's overall objective is that 'Everyone in the State should have access to a home to purchase or rent at an affordable price, built to a high standard and in the right place, offering a high quality of life.' A key aim of the plan is the accelerated delivery of housing supply.

Housing for All identified Modern Methods of Construction (MMC) as one of the innovative developments that should be encouraged in the delivery of Housing. A number of actions relating to increased use of Modern Methods of Construction are included in the plan.



1.2 Housing Agency

The Housing for All plan makes provision for innovations to improve, support and accelerate delivery of housing. In support of this strategy, the Housing Agency Procurement and Delivery Unit will supply technical services and supports in the area of modern methods of construction.

The Procurement Unit have developed this guidance document as a contractual mechanism for encouraging the use of Modern Methods of Construction through the use of Capital Works Management Framework, PW-CF2 Public Works Contracts for Building Works Designed by the Contractor.

1.3 Modern Methods of Construction

Modern Methods of Construction (MMC) is used to describe a range of offsite manufacturing and innovative onsite techniques that provide alternatives to traditional construction techniques. Examples of MMC being used in the construction of dwellings could include, for instance, panelised components made in a factory and assembled on the construction site (e.g. timber frame, light gauge steel frame or precast concrete) or completed dwelling units or elements of dwellings manufactured in a factory setting and transported to site as completed modules.

The use of the Design and Build form of Public Works contract encourages increased innovation and the use of MMC in the delivery of social housing.

The Design and Build form of contract also transfers the design risk to the Contractor for any specialist design aspects which may be subject to copyright or patent for each specific form of MMC.

Appendix 2 shows the contractual arrangement for a Design and Build form of contract compared to employer design contracts.

BIM is a process used to improve the efficiency of design, construction, and maintenance of buildings. It is a powerful tool that enables better communication and collaboration between stakeholders, including design team members and facility managers. When used for the delivery of housing through use of PW-CF2 form of contract utilising MMC, a BIM process can add efficiencies to information sharing, approvals, and recording of information. It is important that agreed BIM levels and information sharing protocols are put in place at an early stage of the project and accepted by relevant stakeholders. BIM requirements should be clearly identified when tendering for Consultants or Design and Build Contractors. During this process Contracting Authority's should consider project scale, scope and the potential tenderer's capacity.

All proposed works must comply with the Building Regulations. Where works involve systems, products, materials, techniques or equipment, for which published national standards¹ do not yet exist, Framework Members must provide third party certification demonstrating compliance with Irish Building Regulations and durability² requirements. Such certification may include, in part or in total, a European Technical Assessment or Agrément certification (e.g. NSAI Agreement) or equivalent.

1. Includes national standards transposing European standards and any accompanying national guidance, national standards, national specifications or equivalent.
2. All structural elements including system elements (where used) Floors, Walls, Claddings and Roofs are to have a durability in the order of 60 years with a normal level of maintenance.

All new dwellings must comply with the building regulations, building control requirements and achieve a 60-year durability for all key elements. Agrément certification applies to those products and processes which do not fall within the scope of existing construction standards, either because they are innovative (modern methods of construction, modular construction) or because they deviate from established norms. NSAI Agrément assesses, specifies testing, and where appropriate, issues Agrément certificates confirming that new building systems, products, materials, techniques and equipment are safe and fit for purpose in accordance with the Irish Building Regulations and with the terms of the certificate. NSAI has recently published a Guide to Agrément Certification for Modern Methods of Construction (link included in Appendix 8) and can be contacted with regards to obtaining further information on Agrément Certification.

1.4 Purpose of this User Guide

This guide is aimed at those who are working with or advising Local Authorities and AHB's who have a working knowledge and experience of procurement of consultants and Design and Build Contractors using the Capital Works Management Framework. It is intended that this guide will enable accelerated delivery of housing by Local Authorities and AHB's who are intending to engage in housing construction projects and would like to be informed of all the procurement options available within the CWMF for enabling Design and Build contractors.

As a procurement option within the Capital Works Management Framework the PW-CF2 Public Works Contract for Building Works Designed by the Contractor has been used as a delivery mechanism for housing supply by a number of Local Authorities.

In the case of housing provision this guide recommends that the Employer progresses the design and specification further than might normally be the case in non residential Design and Build (D & B) projects, before tendering for a Design and Build Contractor.

Some aspects of this User Guide may be useful to a Sponsoring Agency intending to establish Frameworks of Design Consultants and Design and Build contractors for housing projects, however, it is not intended to specifically deal with tendering from a Framework. Guidance on the establishment of such a Framework is available from the CWMF.

1.5 Disclaimer

This guidance document is not intended to offer legal advice and users should note that the Sponsoring Agency will be responsible for the management of their projects from inception through to completion, including their own documentation.

It is assumed that Sponsoring Agencies are familiar with traditional procurement processes as set out in the CWMF for procurement of Consultancy Services (Technical) and Building Works where the Employer has design responsibility. Therefore, this guide does not go through each step of procurement which would be considered standard practice.

The capacity of each Sponsoring Agency and the scope and scale of each project will differ. While this User Guide offers general suggestion as to a standard approach, all projects should be examined on a case-by-case basis, considering the experience and relevant in-house competency of the Sanctioning Authority, together with the particular demands of the planned project.

CWMF Pillar 4: Guidance, Is the primary guidance for all Capital Works Projects.



2.0 Procurement Strategy

2.1 Alternative Procurement Options under CWMF

The CWMF was first published in 2007 and the PW-CF2 form of contract has been available for Works Contracts since that time. However, the PW-CF2 form of contract has had limited use for construction of social housing. Some of the reasons for this may include the fact that the traditional form of employer design contracts are more familiar 'tried and trusted' forms and the prospective employer wants to have a more active role in the eventual outcome of the project than a standard Design and Build contract would normally offer.

This guide is intended to assist employers in considering all options available for the procurement of housing using the CWMF with particular reference to the use of Design and Build contracts for Building Works Designed by the Contractor. Whilst this guide is intended to promote the use of Modern Methods of Construction, the PW-CF2 form of contract can be used for more traditional construction methods in the delivery of social housing.

2.2 PW-CF2 Form of Contract - Potential Benefits

There is potential for a reduction in time for the delivery of housing units by utilising this form of contract. However, this depends on the approach of the Sponsoring Agency. It is recommended that the Employer brings the project through to planning stage in consultation with their design professionals.

This removes the risk of Design and Build Contractor programme delays during the planning process and therefore risk of claims. A reduction in programme can be achieved in the detailed design stages of the process when the successfully appointed Design and Build Contractor has an opportunity to reduce the programme compared to employer designed contracts in various areas. For example:

- Enabling works, substructures, and site services works can commence before the final design of the roofing is complete and the prefabricated elements are being manufactured, windows and doors can be pre-ordered based on sizes confirmed on fabrication drawings and wet trades can be significantly reduced.
- The Design and Build Contractor has the facility to use materials, labour and methodologies that will enable them to bring the maximum efficiencies to the project.
- The Design and Build Contractor has full responsibility for programming of detailed design and construction allowing them a greater opportunity to achieve reductions in both areas.

The PW-CF2 offers an opportunity to utilise the Design and Build Contractor's expertise in the detailed design stages. The employers requirements and performance specification set the criteria regarding quality and standard required, however the PW-CF2 contract encourages innovation by the Design and Build Contractor and their design team and the use of their expertise in overall constructability of the project. These design benefits may be achieved in all aspects of architectural detailing, engineering and building services design.

For housing projects, it is recommended that the initial design team be retained by the employers after award of the works contract in a technical advisory role for inspection and oversight purposes until issue of the defects certificate. This gives continuity of expertise from initial design through to the completion of the project. As with employer designed building contracts, an independent Assigned Certifier is required to be appointed by the Contracting Authority. It is essential that this role is adequately resourced. Refer to Appendix 2 for proposed contractual arrangements.

Whilst there is potential for increased value for money, this should not be a singular deciding factor. It is expected that through the Design and Build Contractors programming, use of expertise, products and details, the overall construction costs may result in reductions compared with employer designed contracts. However, the engagement of a design team acting on behalf of the employer as technical advisors and also a contractor appointed design team producing detailed design may result in increased consultancy costs. In order to maximise the reductions in the design costs it is important that a clearly defined set of employers requirements are used to reduce over design by the technical advisors acting on behalf of the employer.

After the initial design development from planning to tender stage, the role of the technical advisors is to inspect and comment on the Design and Build Contractors design and construction to ensure it is in line with the employers requirements and performance specification.

The PW-CF2 Form of Contract allows the option of the employer's design team to be novated over to the Design and Build Contractor, however, in housing projects, if this option was to be pursued, the Employer should carefully consider whether or not the Employer has the necessary in-house technical and contractual expertise in all disciplines, and adequate resource capacity to allow for the proper oversight and management of the design and build contract. It may also be the case that the Employer's Design Team would not be willing to accept this arrangement and this may limit interest in providing such a service. Another consideration is that the Design and Build Contractor may have their own specialist designers and such an arrangement would not appeal to them. For these reasons novation of the Employer's Design Team is not recommended.

The steps as set out in Appendix 1 suggest a pathway for progressing a project from initial inception to completion of works. It uses PW-CF2 Public Works Contract for Building Works Designed by the Contractor, while promoting the use of MMC by tendering Design and Build Contractors.

2.3 PW-CF2 Form of Contract - Potential Risks

There are risks associated with every building project and every contract entered into. The specific risks associated with the use of this particular contract may include but are not limited to the following:

- Where the employer's requirements and performance specification are not adequately detailed, Design and Build Contractors are entitled to use products and processes which are unsatisfactory to the Employer and result in Employer changes and subsequent claims. Suggested checklists for both the employer's requirements and performance specification are included within Appendices 5 & 6.
- Where the procurement documentation produced by the Contracting Authority is not consistent throughout the process, this may give rise to delays or claims being generated at implementation stage.
- Contracting Authorities designing the project to such an extent beyond planning application stage that Design and Build Contractors do not have an opportunity to use their experience and innovation to use alternative products and processes. This can result in the programme and costs increasing due to the restricted scope of the Design and Build Contractors design team and limitations imposed by overly prescriptive design options.
- If there is reference to named products in the procurement documentation either in Employer's Requirements, Performance Specifications or drawings, the Design and Build Contractor may have grounds for claims.
- In order to encourage innovation from the Design and Build Contractor, Contracting Authority's need to carefully consider their works requirements. This documentation should clearly identify performance requirements, certification and standards which will be deemed acceptable.



2.4 Procurement Procedure Options

The CWMF offers two differing procedures for procurement of both technical services (initial design team) and Design and Build Contractors, the Restricted Procedure and the Open Procedure. While either procedure can be used for Employer and Contractor designed projects, additional considerations regarding the procedures should be given to contractor design projects.

This guidance recommends the use of a Restricted Procedure for the procurement of Design and Build Contractors. However it is acknowledged that a single-stage Open Procedure may be preferred in some instances.



2.5 Open Procurement Procedure / Single Stage

The Open procedure (single stage) involves tenderers being asked to submit their selection documentation as required in the suitability assessment questionnaires (SAQs) at the same time as the tender documentation as set out in the Instructions to Tenderers. For design team procurement, the volume of documentation required may be limited by the use of declarations and stipulated restrictions on quality criterion responses.

However for Design and Build Contractors the volume of documentation and the costs, both financial and in terms of time to prospective tenderers in producing these submissions is considerable. For this reason prospective tenderers may be unwilling to invest in this process in an open competition where they do not know how many others are tendering.

2.6 Restricted Procurement Procedure/ Two Stage

The restricted procurement process is divided into two separate stages, the selection process and the award process. The first stage is the selection process where the Contracting Authority advertises through the appropriate means for expressions of interest. Suitability Assessment Questionnaires (SAQs) for the main Design and Build Contractor and their associated design team are issued. The responses from applicants are evaluated both on a pass/fail and qualitative basis. A shortlist of applicants is selected, and these are then asked to tender for the proposed project at stage two. The award process at stage two is specific to the proposed project, whereby the tender submissions from the suitably qualified Design and Build Contractors are assessed on a qualitative and most economically advantageous tenderer basis, (both price and technical merit of submission are evaluated).

The shortlisting and selection of a large number of qualifying tenderers may discourage Design and Build Contractors from tendering given the costs involved in preparing a tender submission under a design and build tender competition. The maximum number of tenderers to be shortlisted must be published at the selection stage (stage 1). This number should be carefully considered, depending on the size and complexity of the project (between 4 and 8 would ordinarily be considered reasonable).

If using an existing framework, stage one as described above has already been completed and therefore only stage two is required, however framework parameters and rules must be considered and complied with.

2.7 Frameworks

A framework is a mechanism for awarding contracts of a repetitive nature without having to advertise each contract individually. A framework agreement can be established between one or more contracting authorities and one [single-operator] or more [multi-operator] contractors for a set stated duration, generally for no longer than 4 years. The establishment of frameworks for works and services is permitted under procurement law in accordance with the prescribed advertising and procedural rules.

Frameworks deliver administrative savings for contracting authorities and contractors arising from reduced duplication of tendering, securing best value for money, assisting programme delivery by reducing time for tendering mini-competitions, and offer contractors a pipeline of future work.

Frameworks are best established where there is a reasonable expectation of a continued flow of work over a period of time. Frameworks can be established where a number of local authorities or approved housing bodies can use the framework. Each contracting authority should be identified in the documents establishing the framework. Estimated total budget for the likely number of projects to be procured during the course of a framework should be carefully considered, as once the advertised budget has been met during the course of the framework contract, the contractual agreement may be deemed complete and a new framework may need to be procured.

The CWMF suite of contract documents includes PW-CF9 Framework Agreement for Construction Work, which can be used for the establishment of the Framework.



3.0 Considerations in selecting PW-CF2 Contract -Design & Build for Housing

3.1 Size of Project

For PW-CF2 in a single Design and Build Contract the project value is suggested to be in excess of five million euro, this is in line with CWMF Guidance document as extracted below. However, as there is no specific form of contract available under CWMF for Contractor Design projects below five million euro the PW-CF2 form of Contract should be used for all Design & Build contracts. The potential advantage in the use of Design and Build for a project is not determined by the value of the works but rather the ability to repeatedly use the same layout for multiple units.

Careful consideration must be given to the capacity of a Design and Build Contractor where projects are expected to be below this threshold. Design and Build Contractors capacity to coordinate design, manage programme and risk allocation needs to be evaluated. Normally only larger contractors have the above capacities, so consideration should be given to Department of Housing circulars Circular 10/10 and 10/14 regarding SME's.

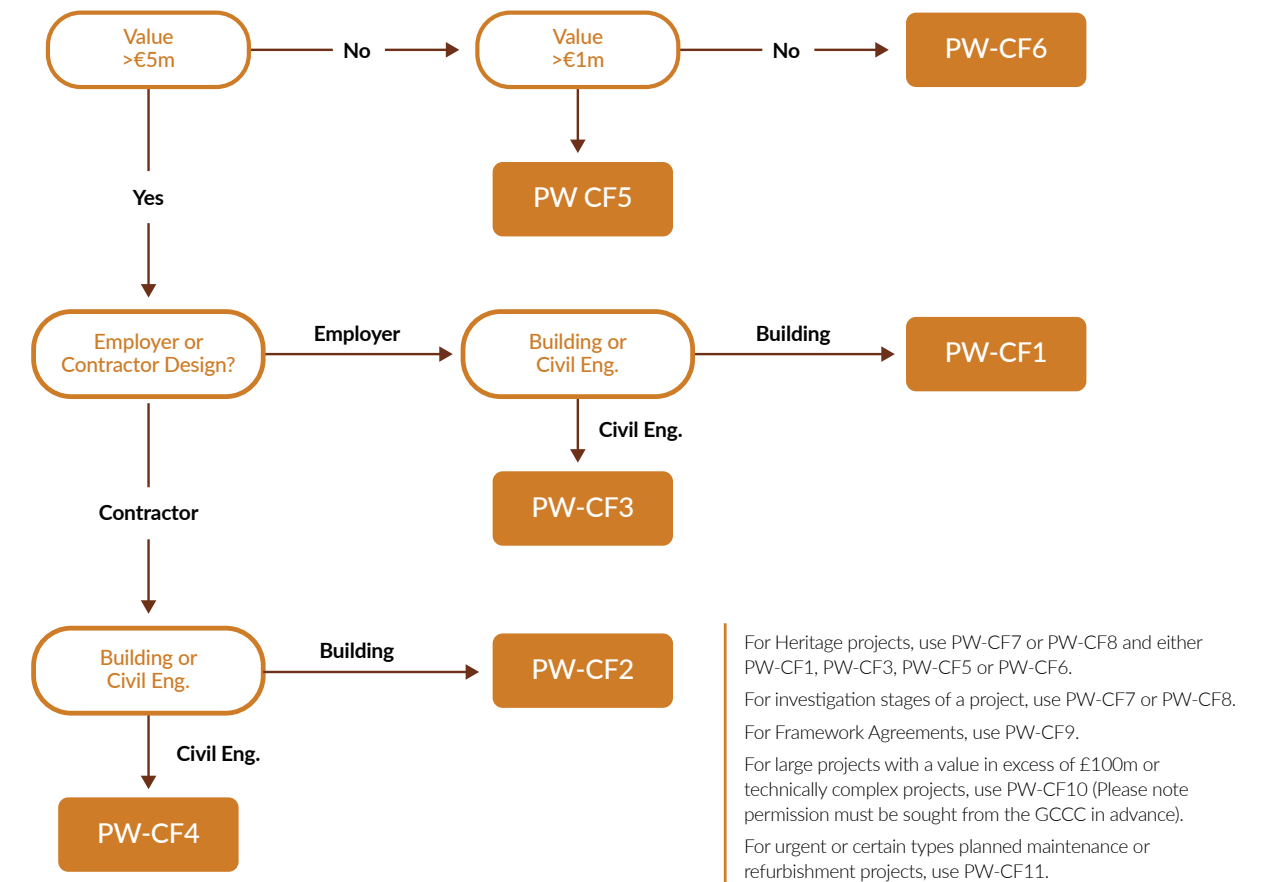
3.2 Nature of Building Type

The PW-CF2 form of contract for use in enabling MMC in the provision of housing is most effective with relatively simple house and/or apartment construction projects. Housing proposals that have a high degree of repetition and standardisation are very suitable for MMC where the requirements can be clearly defined regarding sizes, durability, function and maintenance. This allows contractors and manufacturers to maximise efficiencies in terms of production and ease of assembly. The Employer's Design Team (Technical Advisors) should ensure that

there is a high level of repetition and standardisation in the building layouts and that the layout is suitable for multiple different forms of MMC. Further considerations would include simplification of the design and maximising buildability including potential for delivery to site of off-site manufactured components or elements.

Where the Sponsoring Agency requires a high level of input into all levels of the design of a project this form of contract may not be the most suitable.

Guidance Note 1.4 from CWMF below.



3.3 Nature of site

The conditions and location of the site is also an important factor to be considered. For straightforward greenfield or brownfield sites this form of contract can offer most benefits. Where the site is very constrained, may have archaeology, unidentified existing services, is in an area of significant enabling works, or has potential complexities in terms of site development works, then the traditional employer design contracts may be more suitable in terms of risk, programme, quality, and cost. In such a scenario, employers could also consider the use of enabling works contracts which could be procured and completed under a traditional arrangement to address site issues or constraints prior to the procurement or award of the Design and Build Contract.

Employer's should provide detailed site information such as site investigation reports, archaeological and environmental screening reports, land contamination surveys, topographical surveys, existing services surveys and the like, as part of a robust set of works requirements documents at tender stage to enable the Design and Build Contractors have a clear understanding of the site and ground conditions likely to be encountered, and cost for this accordingly within the tendered bid. This will also remove the potential for claims for delay or compensation due to unforeseen items or lack of information.

4.0 Procurements/Appointments of Employer's Construction Professionals

4.1 Employer's Construction Professionals (Technical Advisors)

As with traditional building contracts, the Contracting Authority will require construction professionals to act on its behalf for Design and Build Contracts in the form of a Design Team. The Design Team's role includes the initial exemplar design, planning approval, preparation of the tender documentation necessary for procurement of a Design and Build Contractor, assessment and evaluation of tender returns, through to contract award, contract administration, inspection of the building works on site and final completion of the contract.

Depending on the particular circumstances of the Contracting Authority, these consultants can be either in-house or independent. All external professional design consultants that are brought in by the Contracting Authority to provide this service need to be procured in accordance with CWMF, refer to chart in Appendix 2 showing contractual arrangements for an external design team with Design & Build Contractor. The services provided by construction professionals will differ to the services normally provided for traditional employer design contracts. These services would be expected to include:

- Project Manager; Should be appointed as soon as possible after the decision is made to pursue this type of contractual arrangement for the delivery of homes. The Project Manager should have a knowledge of MMC and the variety of material options available, together with a knowledge of CWMF and the Design and Build Contract. The Project Manager will be responsible for producing and delivering the programme; coordination of the design team information and tender documentation; ensuring the contractor appointment is progressing and that the design, construction, programme and cost information is being reported to the Contracting Authority on time. The Project Manager may also prepare documentation for the Sponsoring Agency on behalf of the Contracting Authority. The Project Manager may be the Contracting Authority's in-house personnel, a member of the consultancy team or independently appointed, this will depend on the technical capacity and availability of resources within the Contracting Authority and the scale and complexity of the project. A BIM/Information Coordinator may be provided within the scope of Project Manager, or appointed independently depending on the scope of works.
- Employers Representative (ER); Will need to be appointed from the time the contract is awarded to the Design and Build Contractor. The ER may be a member of the original design team retained for the duration of the works contract. However significant experience of administration of works contracts under the CWMF is essential, and it is important that the ER is sufficiently resourced. The role of ER in PW-CF2 works contracts designed by the contractor is a contract administrative role.

The form of contract sets out in detail the duties and obligations of the role of the ER. The ER may delegate powers to named representatives and may subsequently revoke any delegation following the procedures set out in the contract. The Employer may replace the ER at any time following the procedures set out in the contract.

- Designers; It is recommended that at a minimum housing projects would be brought through the planning process by the Contracting Authority's designers before tendering to Design & Build Contractors. This facilitates design input from the Employer while eliminating the contractual risks associated with the planning process. The designers will be required to produce the Employers Requirements, Performance Specification and Works Requirements which allow for options of MMC for the tender process. The designers should also be retained by the Contracting Authority for the duration of the works in an advisory capacity with a dedicated and clearly identified resource for the review of the contractors proposals, compliance sample review and inspection of works (both on site and at off-site manufacturing locations), to ensure that the employers requirements and performance specification are delivered. The designers / advisors will include: Architect, Civil and Structural Engineers and Building Services Engineers, with Fire Engineering Services and Access Consultants also required for some developments.

It is desirable that both the Employers Design Team / Technical Advisors and the Design and Build Contractors Design Team have BIM capability. The use of a Common Data Environment as a minimum is strongly recommended to facilitate the sharing of information and collaboration throughout the course of the project. The Employer's Design Team / Technical Advisors should set the appropriate standards that will be compatible with industry norms in delivery of MMC.

- » Architect; responsible for initial site layout, limited number of unit types, with standardised internal layouts, elevation treatment, external and site development works design and all sufficient information to satisfy the planning process. The Architect will also assist with the compilation of Employers Requirements and Performance Specification documentation. In the interest of promoting innovation and contractor engagement, designs should allow for ease of adoption of a number of MMC solutions including 2D panelised, 3D 'volumetric', etc.

- » Engineer, Civil and Structural; responsible for exemplar design and setting minimum standards in the performance specification for all structural and civil engineering components. Civil Engineer to coordinate the mains water and drainage infrastructure design and also make Uisce Éireann connection applications as necessary to reduce risk of delays to contractor programme.
- » Engineer, Building Services; responsible for exemplar mechanical and electrical layouts and performance specification, ensuring that the layouts are compatible for different forms of MMC. Building Services Engineer to co-ordinate site services design drawings and make remaining services connection enquiries (eg Electrical, Telecom, etc) and applications as necessary to reduce the risk of delays to contractor programme. This scope may also include advising on sustainability and renewable energy installations along with lift performance specification where required.
- PSDP; The Project Supervisor Design Process is required to be appointed to coordinate the Health and Safety aspects of the project from an early stage in accordance with the Safety, Health and Welfare at Work (Construction) Regulations 2013. The Contracting Authority will need to make this appointment at the commencement of outline design. There are different approaches to the appointment of PSDP for Contractor Designed projects and employers are advised to carefully consider this before appointment. The PSDP will be appointed by the Employer at an early stage and with the condition that the PW-CF2 form of contract is being used. The appointment of the Employers PSDP terminates following project award to the D & B Contractor. All selected Design and Build Contractors will be informed of the PSDP at tender stage and the PSDP's Provisional Health and Safety Plan and Design Risk Assessments will form part of the Additional Information in the tendered documents. Each

tendering Design and Build Contractor should have a health and safety coordinator appointed who will coordinate the Design and Build Contractors specific design proposals pre-tender. When the Design and Build contractor is appointed, the Contractor takes on the role and responsibility of PSDP as well as PSCS. Both are subject to separate appointments by the Contracting Authority. The project health & safety file will be transferred to the Design and Build Contractors PSDP following contractor appointment.

- Quantity Surveyor; This is required by the Contracting Authority throughout all stages of the project. The QS will be responsible for preparing all cost estimates and reports as required by the Contracting Authority. The QS will not be responsible for the preparation of the detailed Bill of Quantities, as this will be completed by the Design and Build Contractors QS. The QS will however have a role in preparing and assessing the Pricing Document and Design and Build Contractors submissions at award stage. The QS will also have a significant role throughout the construction works with preparation of recommendations for interim payments, evaluation and recommendations of compensation events and final account settlement. It should be noted that in the tender documentation, prior to acceptance of tender, the apparently successful tenderer must submit a full breakdown of the pricing document sufficient for the Employers QS to review and utilise for interim payments and contract administration throughout the project.
- Assigned Certifier; The Assigned Certifier must be appointed by the Employer in accordance with the Building Control Amendment Regulations 2021. Design Certifiers and Ancillary Certifiers will be appointed through the Design and Build Contractor and will submit relevant certificates to the Assigned Certifier as required. It is essential that this role is clearly scoped and the extent of inspections (both on and offsite) are outlined within the briefing documents.

- The Project Board will generally be required to be established when using the PW-CF2 form of contract. Before tender the Contracting Authority states on the Form of Tender Schedule 1A how many members are on the board from each party. This can vary from 1 member to 3 members from each party. Names of members are not disclosed until decision to appoint has been made, but are inserted before appointment. There is guidance as to who these members should be in the CWMF GN 3.1.1. (they should be fully independent of the ER).
- Standing Conciliator; A Standing Conciliator may also be agreed prior to appointment, this is mandatory for projects in excess of ten million euro. The option to appoint a conciliator for each dispute is available for projects below this value. The costs for the Standing Conciliator should be finalised and reserve sum removed from the contract sum and replaced with agreed Standing Conciliator costs prior to appointment, refer to CWMF FTS2. Standing Conciliator to be appointed by joint agreement.

- Employers On-site Agent: Whilst not contractually mandatory the appointment of an on-site agent is recommended in some capacity with particular regard to larger / more complex schemes. This may be a Clerk of Works, Resident Engineer or other employer's personnel. This position will not be involved with certifying, approving or instructing works in any way. They will, however, record works as they are being done and observe that the works are being carried out in accordance with the Works Requirements and agreed design. This agent will report to the Employers Representative, but should not be a delegated approval role from the ER. The authority and role of any employer's on site agent will need to be clearly defined and explained to the ER, Contractor, and on site agent. Experience of various forms of MMC should be a minimum requirement for the site agent.



4.2 Procurement Process for Appointment of Consultants (Technical Advisors):

For the appointment of a full or partial consultancy design team consideration should be given to various procurement options available to Contracting Authorities depending on the nature of the proposed project, the likelihood of similar projects over a four-year period, and the availability of internal resources to manage design teams. The following options may be considered:

- An established framework of consultants may be used where the contracting authority has permission to use it, and where the proposed project is within the scope of the framework parameters.
 - » Contracting Authorities may set up frameworks of consultants and include other interested Contracting Authorities as potential users of the framework, this could include other Local Authorities or Approved Housing Bodies for example.
- An Integrated design team, procured directly by the Contracting Authority or through a framework.
 - » This option provides for a simplified procurement process for the Contracting Authority, however, it also increases the risk for the tendering consultant as they carry responsibility for performance and cost of all sub-consultants as well as themselves. This approach may be best suited to relatively small and straightforward projects.
 - » The integrated design team procurement for use in Design and Build contracts may not suit the Contracting Authority as the performance of all disciplines is critical to the successful delivery of the project. The lead consultant may not be providing the services of Project Manager, Quantity Surveyor and Employers Representative.



- » Collateral Warranties will be required between the Contracting Authority and all sub-consultants.
- Appoint consultants for each discipline separately either through a framework or directly.
 - » This approach will require more intense procurement processes at the initial stages of the project, however once appointed the employer has a direct contractual agreement with each consultant. This approach allocates the risk of consultant performance with each consultant, as each must report directly to the employer. This approach allows the Contracting Authority to have greater control over the selection of each consultant.
- Consideration should be given on the procurement process of consultants. This will depend on complexity of project and scope of service required as above.
- Restricted Procedure: for complex projects where assessment of applicant's suitability at selection stage is required. A shortlist of consultants are formed and requested to make submissions during the consultant award process in terms of price and technical merit. This approach is more suitable where large amounts of detail are required at award stage. Reference CWMF GN 1.6.1.

- Open Procedure; combines both selection and award process into a single procurement. The Selection Criteria is met through minimum qualifying criterion. The contract is then awarded to the most economically advantageous tender (MEAT). Reference CWMF GN 1.6.2

The Contracting Authority should include a comprehensive detailed project brief and scope of service document in each consultant tender to ensure the various consultants are fully aware of the duties and responsibilities expected of them under a Design and Build contract. These documents should clearly identify pre, during and post construction service requirements, remove ambiguity and help avoid claims for increased fees.

For guidance refer to CWMF GN 1.6 Procurement Process for Consultancy Services (Technical).

Refer to Appendix 3 Documents required for Procurement of Design Team. This assumes an open procurement process.

5.0 Procurement and Appointment of Design and Build Contractor

5.1 Selection Process of Design and Build Contractor

Note: Where the Sponsoring Agency does not have an existing Framework for Design and Build Contractors, the following information will be required for the Stage 1 selection process of a restricted procedure.

- Employers Requirements - Design Brief: This document is project specific. It should be sufficiently detailed to allow the Design and Build Contractor to understand the scope of works which will be required of them. Refer to Appendix 5 for a typical checklist of headings.
- Suitability Assessment Questionnaire - The QW1 & QC1 from CWMF should be used to establish the minimum requirement for selecting Contractors and their design team onto a restricted list.
 - » The QW1 is used as the main Suitability Assessment Criteria for the Design and Build Contractor. If there are any Works Specialists that require minimum Suitability Assessment, then the QW3 can be used for these.
 - » For Design and Build contracts where the PW-CF2 is proposed then the Designers should also be assessed. The QC1 should be used for the primary Design Service provider. This would normally be the Architectural services. Sub-consultants can be identified on the QC1 for other services required from the Design and Build Contractor for the design. Typically, this may include but is not limited to: Civil & Structural Engineers, Building Services Engineers, Quantity Surveyors, PSDP.
- Additional QC1 forms may be used for sub-consultant design service providers where more specific detail is required regarding this specific service than can be accommodated as a sub-consultant within the main QC1.
 - » The QW1 Supplements 3.4.1 and 3.4.2 should be used for assessment of Health and Safety Competence of Design and Build and Health and Safety Competence of PSCS.
 - » The economic and financial minimum requirement will include the insurance requirements. Minimum levels of Professional Indemnity Insurance should be specified for both Design and Build Contractor and each design consultant.
 - » Previous experience of the Contractor in Design and Build contracts should be included in the technical criterion of the assessment. Refer to CWMF guidance notes 1.6.3.
- Marking scheme: It is essential that the Contracting Authority considers and finalises the marking scheme for the selection process before it is advertised. The financial and economic standing of the applicants is recommended to be marked on a pass/fail only basis and not qualitatively assessed. Ensure guidance is followed regarding levels of turnover, levels of insurances required and the like. This is detailed within the CWMF Guidance Notes 1.6.3 and 2.3.1.

- Technical Capability can be marked qualitatively. Table 4 of the QW1 should be completed regarding the total amount of marks being awarded for each criterion for the Design and Build Contractor, Specialist Services (construction professionals/design team) and Specialist Design and Build Contractor. Ensure that the marks given for Specialist Services and Specialist Works are transferred to the appropriate QC1 and QW3 Suitability Assessment Form. If the marks given in Table 4 are intended to be further subdivided in marking specific criterion, this subdivision needs to be stated in the detail of that criterion. It should be noted that all criterion requiring applicant submission should be in relation to their current or past Financial, Economic or Technical Capability. This Selection process should not ask for information regarding the proposed or other future projects.
- Selection assessment panel: The Contracting Authority will need to have a selection panel in place for assessing and marking the applicant submissions. It is recommended that this panel is selected prior to invitations being published and certainly prior to the return of submissions. It would be ideal that the selection assessment panel would have an input into the marking scheme prior to its completion. The selection assessment panel should be made up of no fewer than 3 members and have at least one member independent from the Employer or their agents. The selection panel should keep records of the assessment and its results. The reasoning for particular marking with reference to the required criterion should be recorded for feedback in letters to applicants. The selection panel should ideally include at least one member with appropriate technical expertise in the design and delivery of MMC and Design & Build projects.



5.2 Tender Stage 2- Award process for Design and Build Works Contract

Documentation required in Tender Stage 2 - Award Process include the following:

- Invitation to Tender - from CWMF ITTW1
- Instructions to Tenderer, ITTW1a: Ensure the most recent versions available on the Construction Procurement Reform website are being used for all documentation. The Particulars section should be completed with care, sufficient time should be given to candidates to complete their tender documentation, as this will include project specific qualitative documentation. Interviews are not recommended, however, if this is included by the Contracting Authority care must be taken to ensure all applicants are treated equally and full records are maintained. In accordance with CWMF the marking scheme and qualitative questions are identified within the particulars section of ITTW1a. This would include award criteria for both the Design and Build Contractor and their Design Team. Refer to section 5.4 below for further guidance.

Appendix 4 of ITTW1a should be completed for the appointment of the Health and Safety Coordinator and Appendix 5 to calculate the comparative cost of tenders.

- Works Requirements - Volumes A:
 - » Outline Design documentation: 'Exemplar Design'. All completed design information should form part of the Works Requirements; this would include the planning documentation which may be developed to include any specific employer requirements. The risk of employer over-design at this stage has previously been noted. However, the Employer may wish to add additional information over and above the planning drawings to set parameters for the required project. Examples of additional information might include cross-section drawings, indicative floor levels, minimum floor to ceiling heights, indicative site levels and preliminary services layouts. This listing is indicative only and not intended to be complete. As previously noted these outline design documents should not be over designed or specified and should allow scope for the contractor to innovate and bring their own expertise to the construction process.
 - » Employers Requirements - Refer to Appendix 5 for a suggested checklist of information to be provided.
 - » Detailed Performance Specification: This document should give performance detail of every aspect of the project. Material specification should only be included where the Contracting Authority specifically requires a particular finish within the Employers Requirements document. Performance specification may include, durability, energy rating, life duration, end of life disposal and replacement, heat and sound insulation, etc., or any other specific aspect beyond current European Union harmonised technical specifications 'EN' and Building Regulation

requirements. The Employer is not permitted to specify named products, or to so narrowly define the specification that only one product may be used. Refer to Appendix 6 Performance Specification outline checklist.

- » A Preliminaries section of Works Requirement is also required. This will be as per the Pricing Documents Preliminaries but without the pricing element. Some of these elements may also be included in the Performance Specification.
- Form of Tender and Schedule FTS2 - Volume B: The Schedule 1 should be completed by the Employer before tender documents are issued.
 - » Schedule 1B Documents, requires schedules of documents to be included in the Works Requirements, those that will be novated to the Design and Build Contractor, the Pricing Documents and the Works Proposals. In the PW-CF2 form of contract Works Proposals are of utmost importance.
- The Works Proposals should consist of a complete schedule of all documentation that is expected from the Design and Build Contractor. The schedule should specify when the documentation is to be submitted for example, as part of the tender documentation for assessment, as part of tender documentation for review, as part of submissions before award of contract or as part of submissions after award of contract with a duration for submission attached. The Works Proposals should include:
 - » Schedule of all drawings and specifications to be produced by the Design and Build Contractor.
 - » Contractors Programme which clearly details the contractors detail design period, client review and approval process, suppliers manufacturing leads, production of 'Compliance Sample', Gateway Sign-Off (Refer to Appendix 7), and on site works.
- » Proposed Contractor Design Team for this project, the structure and the lines of communication.
- » Bills of Quantities / Pricing Documents.
- » Required certification / reports / documentation in support of the contractors design proposals.
- » Contractors technical submittals on materials proposed including clearly identified items which do not comply or deviate from the employers performance specification. Such items are to be presented in such a manner that comparisons with the performance specification are provided to enable a balanced assessment of the submission to be made.
- » Cashflow projections sufficiently detailed to allow for employer assessment and budgetary management.
- Only documentation submitted at tender stage can be used for evaluation purposes. Only documentation submitted before the award of contract can be used as a contract document. These are included in the contract documents as Volume D. Documentation required as a Works Proposal after award of contract should be provided in sufficient time before works commence to allow the Employers Technical Advisors time to assess and comment on the proposals.
- Schedule 1F(i) Collateral Warranties, should include a listing of all Design and Build Contractors design professionals. Collateral Warranties should also be considered for offsite fabricators of MMC; vesting certificates for the materials fabricated; insurances on the storage and transport of offsite materials should also be considered.

- Schedule 1G Dates for Substantial Completion, Sections, Liquidated Damages, Retention; if programme is one of the evaluation criteria for the award of contract the 'Date for Substantial Completion' should not be completed here by the Contracting Authority. Rates for liquidated damages should be proportionate to potential costs or losses to the employer.
- Pricing Documents - Volume C: Prepared by the Contracting Authority's QS. This document will not be in the form of Bills of Quantities measured in accordance with the latest revision of the Agreed Rules of Measurement. It is envisaged that this document will consist of elemental summary costs for the dwellings and associated site works. This document will also include a detailed preliminaries section which takes into consideration the employers requirements and a section in which professional fees for the contractors design team can be submitted. The Pricing Document should be sufficiently detailed to allow the pricing be assessed in terms of being balanced, and not abnormally low. The percentage of fees to be paid at the various stages of the project can also be included. Employer should consider how the Design Team is to be paid. Design fees may be paid on a pro-rata basis as a percentage of the works completed. However, since the majority of the design works should be completed at the early stages of the works, it may be more appropriate to specify in the pricing documents what maximum percentage will be paid at each stage. A more detailed breakdown of Contractors Pricing Document should be provided by the apparently successful contractor prior to appointment as the tendered Pricing Document will not be sufficient for a Contracting Authority's QS to assess interim claims for payment.

- Additional Information - Specific site information may be included as Additional Information where this has not been prepared for the purpose of the project eg. utility layouts, site surveys, site investigation reports, preliminary traffic management plans, ecological screening reports, preliminary health and safety plan, design risk assessments etc. Model form documentation intended for use i.e. collateral warranty (MF1.12) / vesting certs (MF1.14) / copy of the contract (PW-CF2) etc. should be included in this Additional Information.

5.3 Tender Period for Design and Build Contractor

The normal rules of tender apply in respect of design and build contracts, but it would be prudent to give sufficient time so that the applicants can properly and fully prepare a competitive tender for the works. The time allowed will depend on the size and scope of project and the quality and detail of the tender documentation issued and the detail of the required response. If detailed design documents are required specific to the project, then additional time should be given for this preparation. When using eTenders for notice and documentation and where no Prior Identification Notice is given for a Restricted Procedure a minimum of 37 days should be allowed for the Selection process and thereafter for Award process a minimum of 40 days for the shortlisted tenderers, all assuming that Official Journal of EU will be used.

5.4 Procurement Documentation - Considerations

- Risk allocation: The general principle of risk allocation is that risk should be allocated to the party best placed to manage that risk. Risks should not be transferred in order to reduce workload or with the intention to reduce possibility of claims. The key principles behind using the PW-CF2 form of contract, in achieving value for money and reducing programme should be considered when allocating risk. While Schedule 1K details the allocation of risk regarding delay events and compensation events there are only two options for the Employer to change risk regarding compensation events and no option regarding delay events. In both options Schedule 1K18 and 1K21 the events relate to underground archaeology and utilities that are unforeseeable. If these risks are at all 'foreseeable' the Employer cannot transfer these risks. Contracting Authorities are advised to review the risks as allocated in Schedule 1K with a view of ensuring that they reduce these risks insofar as possible for the project.
- Programme: When using PW-CF2 form of contract for Design and Build Contractors in housing, project programme should be considered as a qualitative criterion as opposed to prescriptive. If programme is qualitative then marks will be allocated to the best programme. This should not necessarily be on the shortest programme, but the most comprehensive and demonstratively achievable programme. The Design and Build Contractors Programme should show design, off-site manufacture and construction processes. It should also allow for production of 'Compliance Sample' and Gateway Sign-Off (Refer to Appendix 7). Allocation of marks for programme detail and duration must be objective and explained in the ITTW1a whereby the best programme receives

the most marks. The successful Design and Build Contractor should be made aware before entering the contract that the Employer is obligated under the contract to deduct liquidated damages should they become due. Programme Contingency should be administered in accordance with Clause 9.4 of PW-CF2 conditions. The completion FTS Schedule 1K 'first and second threshold, of site working days for delay caused by Compensation Events should be carefully considered. The contingency thresholds where shown on tenderers programme submission should receive specific marks.

- The MEAT (Most Economically Advantageous Tenderer) evaluation process is used for award of contracts using the PW-CF2 form of contract, with the addition of the tendering contractors submitting responses to Technical Merit criterion. Programme can be assessed as both MEAT and Technical Merit, for MEAT evaluation provision will be made for the benefits accruing to the Contracting Authority from the early delivery of the completed project. A worked example of the mechanism that could be used to calculate the MEAT score for Programme is set out in the document 'Employer's Requirements for Detail Design of Quality Housing' - 'Appendix 4'. Link below in Appendix 8, Guidance Documents, Regulations and Standards for reference.
- Indicative Award Criteria Breakdown:
 - » Price.
 - » Programme.
 - » Design / Innovation.
 - » Methodology.
 - » Design Team.

- **Marking scheme:** The marking scheme should be set out in the ITTW1a Particulars. Technical Merit criteria should be carefully considered. Clearly defined objective criteria should be used here together with the means of evaluation clearly described. In order to promote MMC, programme and innovation should attract the highest marks. Innovation can include areas of design, manufacturing and construction. Other technical merit criteria may include; architectural proposals and details; structural civil engineering proposals; building services proposals; Health and Safety proposals, detailed designs, or calculations may also be requested. These submissions become part of the contract documents and are binding on the Design and Build Contractor. As referred to above the marking formula for qualitative assessments may be extracted from the services ITTW1a as required. Additional marks should not be given for named products which may be perceived to be superior to other named products which meet the specification of the works requirements.
- **Award assessment panel;** the award assessment panel members should be carefully selected and may be the same people as the selection assessment panel. The panel should have input into the Criteria being set and should have a competence to assess and mark the submissions. Ideally, members of the panel will have experience in procurement, contract administration, MMC and design. Records of marks and reasons for marking with references to specific criterion should be maintained as these will be used in letters to non-successful tenderers.

5.5 Before Entering into Contract

It is recommended that a formal minuted meeting is held with the apparently successful Design and Build Contractor in advance of entering into a contract. Items to note:

- The purpose of this meeting is to confirm the common understanding of both parties and to clarify any outstanding issues.
- The pre-contract meeting is not to be used for re-negotiation of the tender.
- It is important to note that any proposal in relation to product or material suggested by the apparently successful Design and Build Contractor at the pre-contract meeting may not be subsequently enforced in the event that at construction stage the Design and Build Contractor proposes an alternative which meets the requirements of the issued works requirements documentation.
- Programme and implications of delay and application of liquidated damages should be stated.



The Letter of Acceptance, which forms the contract should not be issued until the following are complete:

- Letters to all tenderers should be issued in accordance with CWMF MF 1.2 with the required standstill period prior to issuing of Letter of Acceptance.
- All insurances must be in place.
- **Funding available:** The Contracting Authority should not under any circumstance's award a contract through issuance of a Letter of Acceptance until it has written approval from the Funding Authority to award the contract with assurance that funds will be made available to complete the project.
- The performance bond has been received in the required format from an approved surety. Reference CWMF MF 1.6 Performance Bond

The Contracting Authority / Employer must allocate resources to do the following:

- The issue of a letter of acceptance with supporting documentation, this defines the date on which a contract is formed.
- **Availability to review / approve design change proposals:** The Contracting Authority should retain their design team professionals in a Technical Advisory role to assess and advise on possible changes proposed by the Design and Build Contractor. The Design and Build Contractor has a right to propose alternatives and value engineering solutions provided the quality or performance meets that required in the Performance Specification. The Employer has an obligation to assess these proposals objectively and approve or otherwise, which is communicated through the Employers Representative.

- The Contracting Authority must appoint an Employers Representative to administer the contract. However, in the FTS2 the Contracting Authority should have a named person who has authority to approve changes or additional funding should it be required where it is outside the limit of the ER's authority as set out in the FTS2 document.
- Ability to accept completed project at Substantial Completion stage: On completion of the project the Contracting Authority should have made provision to take possession of the completed works, this will include the insurance and maintenance of the works. Where early or phased completion is a selected option available to the Design and Build Contractor in the FTS2, the Contracting Authority should be able to accept any such early completion or part thereof.

It is advisable in housing projects that the houses are occupied as soon as practicable after substantial completion is reached. Contract documents should reflect this where it is an option and provision should be made in the Design and Build Contractor's construction programme which should clearly detail the site development works and services needed in order to achieve this.



5.6 Contract Management

The management of the design and construction stages need to be adequately resourced. The Employers Representative role in administering the PW-CF2 contract in accordance with the conditions is critical, and the employer, technical advisors and site agent must all ensure that communications are correctly channelled through the ER. Similarly the Design and Build Contractors engagement with the Employer's Technical Advisors with regard to compliance and approvals etc, should be through the ER.

- The process during the design stage of the works is set out in Appendix 1 and in more detail in Appendix 7.
- The employer and technical advisors must ensure they can assess and respond to contractors proposals in a timely manner as set out within the Preliminaries. All approvals or requests for information must be clearly communicated. Clear Gateway stage approval and sign off is critical. Interim payments at these early stages must be in accordance with the pricing documents.
- During construction stage the contractor will continue to produce detailed design proposals for the Employer's Technical Advisory team to assess. Regular inspections will be required on site to ensure the Works Requirements and the works as demonstrated on the accepted compliance sample are being delivered on site. Regular site meetings must be held and recorded by the Employers Representative.
- Programme should be monitored by the Employers Representative on a regular basis and any deviation on the programme highlighted to both contractor and employer, noting the effects of liquidated damages from an early stage where appropriate.
- Payment certificates must be issued in accordance with the contract, and care should be taken that bonds are in place as appropriate for payment for any goods or materials off-site or on-site prior to inclusion in the works. Regular cost reports should be prepared for the employer highlighting any potential claims or risks of dispute. The employer is obliged under the contract to pay for work certified by the Employers Representative.
- The employer must ensure that technical advisors and site agent are adequately resourced to properly carry out and report on on-site and off-site inspections to ensure the quality of the housing delivery at all stages.
- The duties of the Assigned Certifier must be fulfilled in submission of documents for Building Control prior to commencement notice and in collating documentation to enable Building Control approval upon completion. Inspections should be ongoing throughout the course of the project.

5.7 Defects Period and Handover

Upon reaching Substantial Completion the contractor is entitled to be issued with a Certificate of Substantial Completion. After the Defects Period as defined in the Schedule 1 of the Form of Tender, the Defects Certificate will be issued. The contractor will be obliged to produce the following documents prior to those certificates.

Prior to Substantial Completion the Contractor should submit the following in the required format:

- Health and Safety File, including all ‘as constructed’ drawings.
- All documentation required by the Assigned Certifier to complete the requirement of Building Control.
- Within the period of time stated, submit a Final Statement.
- All other documents required by the employer in the preliminaries which may include operation and maintenance manuals and simple user guides for residents.

Prior to Defects Certificate the Contractor should submit the following in the required format:

- Confirmation that all defects have been completed as identified in the Employers Defections Register.
- Any servicing or maintenance items as required within the contract documents.
- All adjustments to the Health and Safety File.

The employer should maintain all project files and archive.

Appendix

Appendix 1 - Project Process Pathway using Design & Build Contractor

Appendix 2 - Design and Build v Typical Employer Designed Contractual Arrangement

Appendix 3 - Documents for Procurement of Design Team (Stage 1, 2, and onward monitoring to Completion of D&B Contract on behalf of Employer) Assuming Open Procedure

Appendix 4 - Documents for Procurement of Design & Build Contractor (Assuming Restricted Process)

Appendix 5 - Employers Requirements Checklist

Appendix 6 - Performance Specification Checklist

Appendix 7 - Gateway Sign Off Procedure

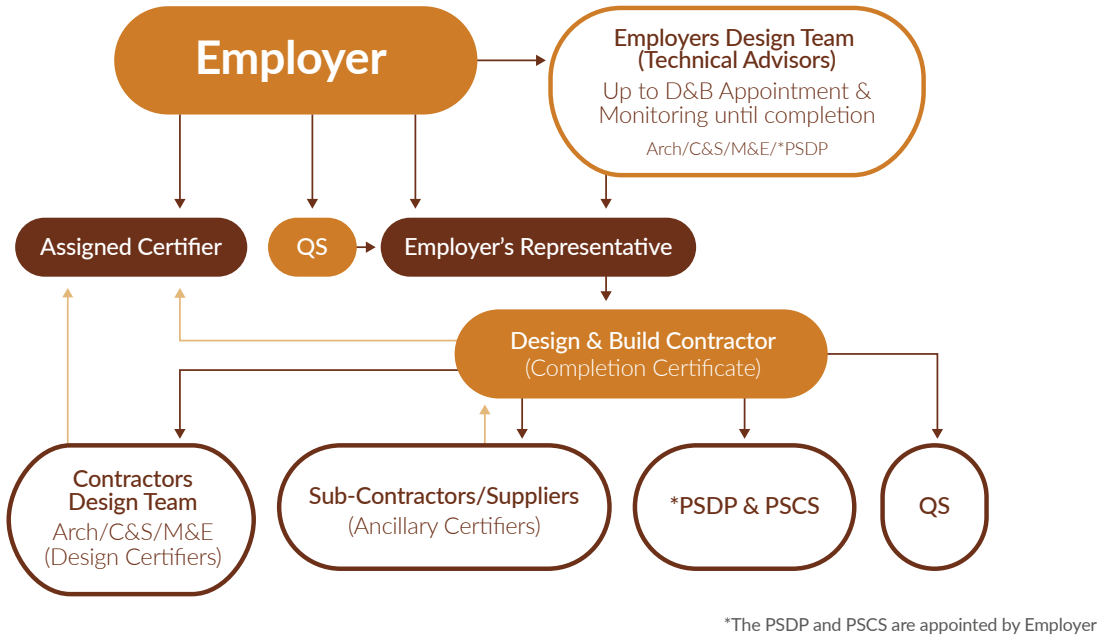
Appendix 8 - Guidance Documents, Regulations and Standards for reference

Appendix 1 - Project Process Pathway using Design & Build Contractor

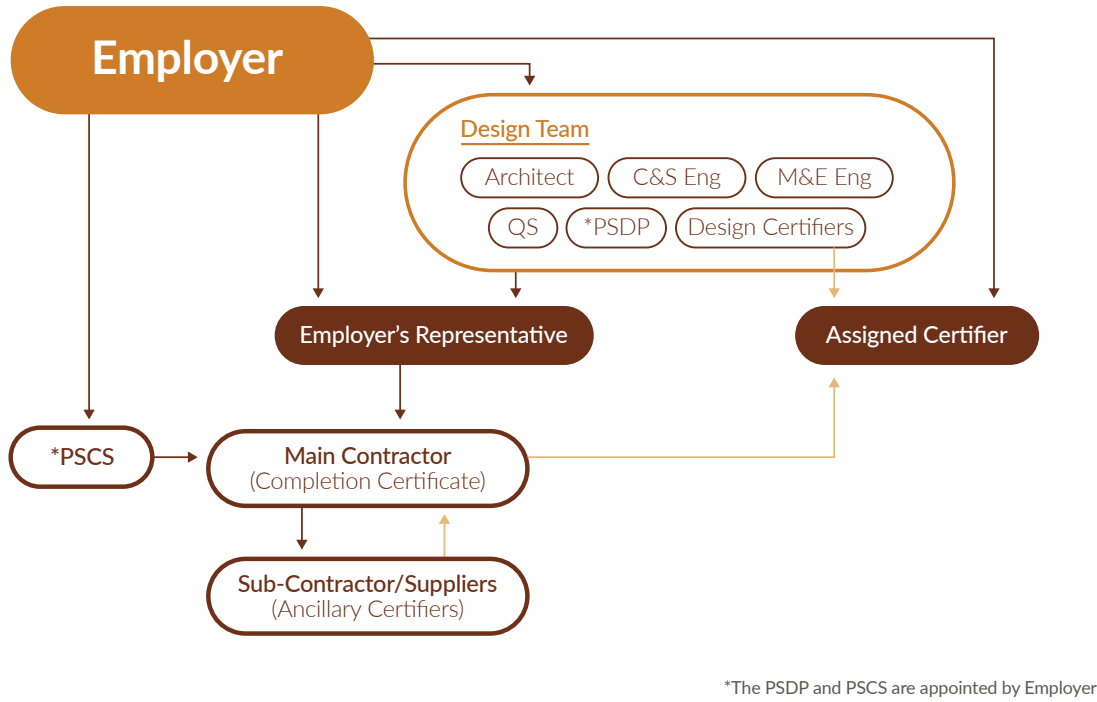


Appendix 2 - Design and Build v Typical Employer Designed Contractual Arrangement

Design & Build Contractual Arrangement



Typical Employer Designed Contractual Arrangement



Appendix 3 - Documents for Procurement of Design Team (Stage 1, 2, and onward monitoring to Completion of D&B Contract on behalf of Employer) Assuming Open Procedure

Selection and Award process

1. Invitation to Tender.

2. ITTS Instruction to Tenderers - (latest version for Appointment of Consultants).

3. Suitability Assessment Questionnaires (required unless using a framework).

- QC2 - Part 1 & 2 for Design Consultants.
- QC Appendices.

4. FTS9 Tender & Schedule - (latest version when using ‘Standard Conditions of Engagement for Consultancy Services (Technical)').

5. Project Brief and Description of Service.

- Contracting Authority name and status, general information.
- Description of proposed project- number of units, accommodation requirements, other - known requirements.
- Location of site, overall size, brief description of topography, boundaries, special features etc. Maps can be appended.
- Description of Service required of Consultant, through the 5 stages of the project (Stage 1 - Preliminary; Stage 2 - Planning & Design; Stage 3 - Tender; Stage 4 - Construction; Stage 5 - Defects.
- Timeline to Planning (Stage 2), and timeline for onward advisory/support service to Employer through stages 3, 4 and 5 of the Design & Build Contract.
- Details of the intention to procure D&B Contractor (PW-CF2) and using Modern Methods of Construction (MMC).

6. Pricing Schedule - Consultant Requirements through Stage 1 - 5 for fee breakdown.

7. Health and Safety Compliance.

- Health & Safety Compliance Declaration by General Service Providers (MF-2.4).
- Health & Safety Compliance Declaration by PSDP/ HSC (MF-2.5).

8. Additional Information: Reference documents, information on the site or proposal.

Documentation for appointing Design Team consultants.

- Letter of Intent & Acceptance - MF 2.2 (latest version).
- Form of Tender and Schedules (Signed) - FTS9 (latest version).
- Conditions of Engagement for Consultancy Services Technical COE1 (latest version).
- Pricing Schedule - Consultant Fee Breakdown Stage 1 - 5.
- Instructions to Tenderers - (As issued at Tender Stage).
- Project Brief and Description of Services - as per document at selection stage.

Appendix 4 - Documents for Procurement of Design & Build Contractor (Assuming Restricted Process)

Stage 1 Invitation for Expressions of Interest - Selection Process

1. Invitation to Tender (not standard letter, inviting candidates to apply to be shortlisted).

2. Suitability Assessment Questionnaires.

- QW1 - Works Contractor Suitability Assessment Questionnaire.
- To Include QW1 Supplements 3.4.1 and 3.4.2.
- QW3 - Contractors Specialists SAQ - if required.
- QC1 - Contractors lead design consultants SAQ.
- QC1 - Contractors additional design consultants SAQ.

3. Project Brief Checklist.

- Contracting Authority name and status, general information.
- Description of proposed project: number of units, accommodation requirements, other known requirements.
- Site: Location, overall size, brief description of topography, boundaries, special features etc. Maps can be appended.
- Works Requirements - All information available at time of tender.
- Contractual information - Design & Build Contract (PW-CF2).
- Project Management - Contract Monitoring.
- Timeline (proposed) for Delivery of works, with disclaimer regarding funding availability and Contracting Authority right to cancel or prolong process.

4. Preliminary Health and Safety plan by Employer PSDP.

Documentation for Award of Contract to Design and Build Contractor

- Letter of Acceptance - MF 1.4.
- PW-CF2 Public Works Contract Designed by the Contractor.
- Works Requirements as per above issued - (Volume A).

Stage 2 - Tender Stage - Award Process (tender from Restricted List)

1. Invitation to Tender - ITTW1a (latest version).

2 Instruction to Tenderers - ITTW1a (latest version).

- A. Particulars.
- B. Quality criteria details.
- C. MEAT evaluation details.

3. Supplemental details of Quality Criteria and Marking Process (may be added to assist tenderers).

4. Works Requirements - Volume A.

- A. Up-to-Date Project Information - Planning Drawings and Reports, Surveys/Investigation Reports, etc.
- B. Project Brief - Employers Works Requirements, Detailed Performance Specification, Exemplar Document.
- C. Preliminaries.

5. Form of Tender & Schedule - FTS2 - Volume B.

6. Pricing Schedule - Volume C.

- Preliminaries.
- Pricing Document - Schedule.
- Design Fee Breakdown.
- General Summary.

7. Additional Information: Model Forms, Planning application documents together with approvals and conditions / restrictions; other information not generated for this process, but which may assist in assessment of works.

- Form of Tender and Schedules (Signed) - FTS2 (Volume B).
- Pricing Schedule as per above issued - (Volume C).
- Works Proposals - Contractors tendered works proposals (Volume D).

Appendix 5 - Employers Requirements Checklist

Section	Description
Outline of the project	Introduction, Nature of the works, Accommodation brief to include the total number of and type of units required, General Description of the works to include the Standards, Regulations and Guidelines which require compliance (as suggested in Appendix 8).
	Site Details - Location, Ecological, Archaeological, Conservation, Topography, Site Investigation works, existing services, arrangements for viewing and any site working restrictions.
Scope of Work	Details on what is to be constructed, the Proposed Contract, Bonds and Insurance requirements, Collateral Warranties, Certification of Products (CE, NASI, DoP's), Building Energy rating required, Compliance Samples (if required) and Client sign off.
	Project Information - Details on drawings and surveys already prepared, planning information. Proposed timeframe for the works including Programme requirements expected from the tenderer detailing the expected timeframes for design, review, compliance sample provision if required, client sign off and the construction phase. Emphasis on fast-track project delivery.
Design Team requirements	Details on the information the tenderer is expected to provide and when, taking into consideration design phases and timeframes including client review and sign off. This could include. Design & Construction drawings, details and specifications from the - Architect - Civil / Structural Engineer - Services Engineer - Fire & DAC Consultant - BER Consultant Other information to be provided could include. The priced BoQ / Schedule of Works.
	H & S Legislation requirements including the role of the PSDP and PSCS, Risk Assessments, Health & Safety Plans, Temporary Works Design if required.
Design & Construction	Expected number and type of units including storey height, site layout, minimum design requirements with regards open spaces, amenity areas, dwelling critical dimensions, Reference to the design standards requiring compliance (as suggested in Appendix 8).
	Expected lifespan of the development including the various elements of the building fabric, Building Regulation Compliance.
	Materials, Finishes and Fittings guidance on preferred finishes and materials for items such as roof finishes, windows and external doors, flooring, internal doors and screens, internal wall performance, stairs, fittings and fixtures and storage provision. (Performance Specification Checklist included in Appendix 6)
	Certification required, DAC, Fire Safety, BC(a)R, Air tightness, Acoustic performance, Sustainability and Energy performance including U values.

Section	Description
Building Services	Mechanical standards and regulations to be complied with, location of meters, service runs, access provision, ducting and casing requirements, water storage, isolation and cut off valve requirements. Preferred heating option, type and finish of radiators where required, Heat pump lifespan, minimum warranty, performance, location, and servicing arrangements.
	Electrical standards and regulations to be complied with, the desired fire detection system, internal and external lighting requirements including switching arrangements, location of consumer panel and meter cabinet, expected number of power and data points per room including desired location, renewable installations desired, provision for future lifetime homes installations where required.
	Communication Services - Desired broadband requirements, infrastructure and ducting required within the building and externally to facilitate the technology expected to be used in the dwelling. Provisions required to future lifetime homes installations where required.
Site Development & External Works	Taking in charge requirements, Road and paths design and construction standards to be met, site levels taking into consideration gradients, Building Regulation compliance, Parking and footpath requirements, Existing utilities and services, connection applications and charges, stormwater attenuation and SUDS, external landscaping, site boundary treatments, amenity spaces, waste management provision, renewable installations if required such as car charging ports.
Handover and Commissioning	Testing and Commissioning regimes and certification required to safely handover the dwellings, the handover file and what is to be included therein, BC(a)R sign off and certification. Details on spare parts to be provided if required.

Appendix 6 - Performance Specification checklist

Section	Item	Description
A	Preliminaries / General Conditions	Project Particulars. Management of the Works. Contractors general cost items. Temporary Works. Site Security. Plant and Machinery. Work by Statutory Authorities. Provisional Works (may be issued as a separate document).
B	MMC Specification	Performance requirements with respect to lifespan, thermal and acoustic performance, air tightness, structural performance and BER. Compliance sample provision for review and sign off. Requirements in respect of fabrication and erection on site.
C	Demolition / Alteration	Demolishing Structures. Shoring. Alteration Works.
D	Ground Works	Ground Investigation Works. Site Clearance. Excavation and Filling. Piling.
E	Concrete work	In-Situ Concrete. Formwork. Joints and Sundries. Reinforcement. Worked Finishes. Precast Concrete. Large Precast Concrete Units.
F	Masonry	Brickwork & Blockwork. Ancillaries / Sundries to Brick/Blockwork. Stonework. Cills / Lintels / Copings.
G	Structural / Carcassing Metal / Timber	Structural Steel Framing. Structural Aluminium framing. Isolated Structural Members. Carpentry / Timber Framing / First Fixing. Metal Profiled Sheet Decking. Prefabricated Timber Unit Decking.
H	Cladding / Covering	Curtain Walling / Patent Glazing. Rigid Sheet Cladding. Fibre Cement Profiled Sheet Cladding / Covering. Metal Profiled / Flat Sheet Cladding / Covering. Plastic Profiled Sheet Cladding / Covering. Natural Stone Cladding / Covering. Concrete Roof Tiling. Fibre Cement Slating. Lead Sheet Coverings / Flashings. Zinc Sheet Coverings / Flashings.

Section	Item	Description
J	Waterproofing	Mastic Asphalt Tanking / Damp Proof Membranes. Flexible Sheet Tanking / Damp Proof Membranes. Gas Retardant Membranes. Built Up Felt Roof Coverings. Single Layer Plastic Roof Coverings. Proprietary Roof Decking.
K	Lining / Sheathing / Dry Partitioning	Plasterboard Dry Linings / Sheeting / Linings. Rigid Sheet Flooring / Decking / Linings / Casings. Timber Board Flooring / Linings / Casings. Demountable Partitions. Plasterboard Fixed Partitions / Inner Walls / Linings. Framed Panel Cubicle Partitions. Suspended Ceilings.
L	Windows / Doors / Stairs	Windows / Rooflights / Screens / Louvres. Doors / Shutters / Hatches. Stairs / Walkways /Balustrades. General Glazing.
M	Surface Finishes	Sand / Cement Screeds / Flooring. Trowelled Latex Levelling Screeds. Plastered / Rendered / Roughcast Coatings. Metal Mesh Lathing / Reinforcement for Plastered Coatings. Insulation with Rendered Finish. Sprayed Mineral Fibre Coatings. Stone / Concrete / Quarry / Ceramic Tiling. Wood Block / Composition Block Flooring. Rubber / Plastic / Linoleum / Carpet Flooring. Painting and Finishing.
N	Furniture	General Fixings / Furnishings / Equipment. Domestic Kitchen Fittings. Sanitary Appliances / Equipment. Signs / Notices.
P	Building Fabric Sundries	Sundry Insulation. Foamed / Fibre / Bead Cavity Wall Insulation. Fire Stopping Systems. Unframed Isolated Trims / Skirtings / Sundry Items. Ironmongery. Builders work in connection with services / Trenching / Ducting / Attendances.

Section	Item	Description
Q	Paving / Planting / Fencing / Site Furniture	Stone / Concrete / Brick Kerbs, Edgings, and Channels. Hardcore / Crushed Rock Bases / Sub-Bases to Roads and Paths. In-Situ Concrete Roads and Paths. Coated Macadam / Asphalt Roads and Paths. Interlocking Brick / Block Roads and Paths. Slab / Sett / Cobble Paving's. Special Surfaces / Paving's for Sport. Landscaping / Seeding / Turfing / Planting. Fencing, Railings, Gates, Bin Storage. Site / Street Furniture / Equipment.
R	Disposal Systems	Rainwater Pipework / Gutters. Above Ground Drainage Systems. Below Ground Drainage Systems. Sewage Treatment / Pumping / Maceration Systems.
S	Mechanical Installations (spec prepared by Building Services Engineer)	Piped Water Supplies. Fire Protection Systems. Ventilation / Air Conditioning Installations. Heating Installations. Renewable Energy Installations. Plant And Equipment. Insulation.
V	Electrical Installations (spec prepared by Building Services Engineer)	General and Emergency Lighting. Power and Telecon Installations. Fire Detection and Alarms. Equipment and Control Gear. Renewable Energy Installations. External Services and Lighting. Access Control and Automation. Security / Cctv Installations. Earthing and Lightning Protection Installations.
X	Lift Installations	Lifts.

Appendix 7 Gateway Sign Off Procedure

Employers Design Stage

Client ("Gateway") Sign-Off Procedure

- Employers Requirements set out the procedure for client sign off, this will include the production of detailed design submittals by the D & B Contractor, the production of a compliance sample and the client review / approval process.
- The proposed programme / timeframe for this process should be identified within the Employers Requirements.
- Note: Under no circumstances should the D & B Contractor be allowed to proceed to the Construction Stage without the approval by the Employer / Design Team of the D & B Contractors Design Proposals and Compliance Sample. This should be clearly stated within the Employers Requirements.

- The D & B Contractors quality submission as part of their tender should include a detailed programme which clearly identifies all stages of their design process allowing time for client review and approval. D & B contractors tender submittal should also include details on the materials proposed and clearly identify items which deviate or do not comply with the performance specification.
- The development and production of the compliance sample should also be clearly identified within the tender submission.

- D & B Contractor produces design proposals.
- Suggested timeframe 4 weeks.

- Employers Technical Advisors Review and Issue approval of proposals in accordance with the Works Requirements.
- Design Certifier role will be carried out by the Contractors DT and certification issued accordingly to the Employers Representative and Assigned Certifier.
- Suggested timeframe for review procedure 2 weeks.
- Note: The design proposals must be deemed to be in accordance with the Works Requirements by the Employers Technical Advisors / ER prior to being approved to progress with compliance sample.

Approval of Design Proposals Proceed to Compliance Sample Stage

- Following approval of the contractors design proposals, the manufacture and erection of the compliance sample can begin. This can be done off site on the Contractors premises.
- During this process critical inspection stages shall be identified by the Assigned Certifier and detailed inspections carried out by the Employers DT to verify compliance of the detailing and construction methods as proposed by the contractor and approved by the Design Certifier.
- Suggested timeframe 4 weeks.

- Upon completion of the Compliance Sample the Contractor and their DT shall provide certification to the ER and Assigned Certifier confirming the sample has been constructed in accordance with the approved design proposals.
- The Employers DT shall then carry out a detailed inspection of the completed sample and if satisfied confirm acceptance of same to allow the works to proceed to construction stage.
- Note: The Compliance Sample must be approved and deemed to be in accordance with the Works Requirements by the Employers Technical Advisors prior to the D & B contractor progressing to construction stage.

Approval of Compliance Sample Proceed to Construction Stage

- Following Approval and Certification of the D & B Contractors Design proposals and Compliance samples, works can proceed to site.
- Note: The approved compliance sample shall remain in place on the contractors property for the duration of the works.

D & B Contractor Design Stage following tender competition and identification of the successful bid

Construction Stage

Gateway 1

Gateway 2

Appendix 8 - Guidance Documents, Regulations and Standards for reference

Housing for All - a New Housing Plan for Ireland 2021 published by the Department of Housing, Local Government and Heritage: - [gov.ie](https://www.gov.ie/en/publication/b3e02-design-manual-for-quality-housing/) - [Housing for All - a New Housing Plan for Ireland \(www.gov.ie\)](https://www.gov.ie/en/publication/b3e02-design-manual-for-quality-housing/)

Capital Works Management Framework: -
[Capital Works Management Framework | Construction Procurement Reform](#)

Technical Guidance Documents: - [gov.ie](https://www.gov.ie/en/publication/b3e02-design-manual-for-quality-housing/) - [Technical Guidance Documents \(www.gov.ie\)](https://www.gov.ie/en/publication/b3e02-design-manual-for-quality-housing/)

Energy Performance of Buildings, published by the Department of Housing, Local Government and Heritage: - [gov.ie](https://www.gov.ie/en/publication/b3e02-design-manual-for-quality-housing/) - [Energy Performance of Buildings \(www.gov.ie\)](https://www.gov.ie/en/publication/b3e02-design-manual-for-quality-housing/)

Design Manual for Quality Housing published by the Dept of the Housing, Local Government and Heritage: -
<https://www.gov.ie/en/publication/b3e02-design-manual-for-quality-housing/>

Quality Housing for Sustainable Communities Design Guidelines 2007 published by the Dept of the Housing, Local Government and Heritage: -
[2007-Quality-Hsing-for-Sustainable-Communities-1.pdf \(opr.ie\)](#)

Employer's Requirements for Detail Design of Quality Housing - General Quality of Materials, Fittings and Finishes for Social and Affordable Housing and Apartment Developments, including Guidance on Preliminary Items" Revision 1 - September 2020: - [gov.ie](https://www.gov.ie/en/publication/b3e02-design-manual-for-quality-housing/) - [Employer's Requirements for Detail Design of Quality Housing \(Revision 1 September 2020\) \(www.gov.ie\)](https://www.gov.ie/en/publication/b3e02-design-manual-for-quality-housing/)

Building for Everyone, A Universal Design Approach 2012: -
[Building for everyone: A universal design approach](#)

The Department of Housing Code of Practice "Fire Safety in Community Dwelling Houses" Sept 2017: -
[gov.ie](https://www.gov.ie/en/publication/b3e02-design-manual-for-quality-housing/) - [Code of Practice for Fire Safety in New and Existing Community Dwelling Houses \(www.gov.ie\)](https://www.gov.ie/en/publication/b3e02-design-manual-for-quality-housing/)

The Design and Public Realm Code and Design Manual for Urban Roads and Streets Version 1.1: -
[gov.ie](https://www.gov.ie/en/publication/b3e02-design-manual-for-quality-housing/) - [Design manual for Urban Roads and Streets \(www.gov.ie\)](https://www.gov.ie/en/publication/b3e02-design-manual-for-quality-housing/)

Modern Methods of Construction report published by the CIF 2021: -
[1271-CIF-Modern-Methods-of-Construction-Report-v4.pdf](#)

RIAI Design for Manufacture and Assembly (DfMA) Guidance 2022: -
[RIAI__DFMA_Report_2022_v5_04Oct22.pdf](#)

NSAI Guide to Agrément Certification for Modern Methods of Construction (MMC): -
<https://www.nsai.ie/certification/agrement-certification/modern-methods-of-construction-certification/>

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