

Appendix 1

DFHERIS_26_GDOC_001_C	
For all DFHERIS projects involving the use of Modern Methods of Construction (MMC) June 2026 Rev C	
1.	This Guidance Document has been prepared to assist in the procurement of Modular Accommodation and Modern Methods of Construction (MMC) more generally, noting that this covers all categories of MMC delivery, ranging from full 3D modular builds, 2D assembled units, and specialised site-process improvements. The points scheduled below are intended for issue to Sponsoring Agencies and are to be incorporated into the tendering procedures and scope of services for Design Teams/Design Consultants.
2.	The Modular/MMC delivery methodology shall not reduce the design responsibility, design excellence, or level of detail required from the design team. The building shall be: - Fully designed prior to manufacture, including all FF&E - Coordinated across all disciplines - Compliant with all statutory and output performance requirements - Equivalent in quality, durability, and performance to that of traditional construction - The durability of the building system shall be assessed to have a design life of at least 60 years in accordance with BS 7543. - The Design Team (DT) will develop a complete, coordinated design to the same level as a traditional project and provide the manufacturer with clear employer's requirements and output performance specifications. - The design team will consider the aesthetic of the building, the site, and the context in the same way as any other permanent structure delivered through traditional methods. - Entrances, wayfinding, and external canopies, External fenestration, materials and finishes are all to be carefully considered.
3.	The minimum clear floor-to-ceiling height to be maintained shall be not less than 3,000mm. For specialist spaces, this height may need to be increased, and the DT are to be acutely aware of the spatial requirements for specialist equipment, and safe working dimensions. These factors are to be agreed with the sponsoring agency/Client prior to Stage 1. DT also to allow sufficient space for mechanical ventilation /MVHR systems and ductwork as required, and to ensure minimum headroom is maintained throughout.
4.	The Government has continuously expressed its commitment to support and promote an MMC approach across all facets of the construction industry. There are multiple policy initiatives to promote MMC use and strengthen the ecosystem to support it. DFEHRIS remain committed to this support where appropriate across the tertiary sector. However, the use of MMC in delivery does not release the sponsoring agency from their responsibilities under the Infrastructure Guidelines (IG) and they must verify that proposed capital projects demonstrate strategic alignment with the Estate Strategy and Decarbonisation Plan.
5.	Existing teaching accommodation, of traditional or MMC construction, may be replaced with MMC solutions where the existing building has failed or is approaching end-of-life. MMC space solutions may also arise where the solution may result in consolidation of services or the removal of rented accommodation, where the installation of a modular solution would support consolidation.

6.	In some cases, volumetric 3D MMC solutions (Category 1 MMC) may conflict with the principles of flexibility or adaptability necessary in the Tertiary sector. However, there may be cases where a volumetric solution, or Cat 2/3 MMC Solution, may be appropriate. The approval process for each application for capital funding where MMC is to be employed will be entirely project specific.
7.	Reconditioned/reused modular units will not be accepted.
8.	The replacement building needs to address the current need (as with every other project), comply with expected standards, and be fit for purpose. Where the proposal involves replacing existing accommodation, any increase in floor area must be fully validated by the design and be based on 1. Learner numbers and maximum occupancy. 2. The proposed use of the space and educational requirements. 3. The equipment required in the space, learner group numbers, tutor/instructor numbers, and all educational equipment/spatial requirements, and including adequate safe working zones around equipment to ensure safe operation, maintenance access, and compliance with relevant safety standards. 4. The principles of Universal Design. In order that this can be validated, each room within the MMC solution will require: I. a detailed Room Layout Sheet (RLS) including all plans, sections and elevations of the proposed space, and II. a detailed room data sheet where all performance standards are included, and including all furniture, fittings and equipment (FF&E).
9.	All modular/MMC Units shall be designed, manufactured, delivered, and installed to fully meet the requirements of: • Building Regulations Technical Guidance Documents (TGDs A-M) • Department of Education and Youth (DEY) Design Guidelines as scheduled below • Infrastructure Guidelines & requirements of the CWMF The fact that units are delivered via MMC / off-site construction methodology shall not reduce or alter compliance obligations compared to traditional construction. Units shall be considered permanent buildings unless explicitly designated otherwise.
10.	Primary Structural systems may include steel, light-gauge steel (LGS), timber frame, engineered timber, composite systems, 2D or 3D volumetric modules. All MMC/Modular design will: • Comply with Eurocodes • Allow for transport loads and lifting stresses • Provide equivalent durability and design life to traditional buildings of 60 years+ Where the MMC/Modular Units are to be located on Urban Sites with area constraints, and likely to require further future expansion a Class 2B Robustness is required (disproportionate structural collapse design standards). DT is to ensure alignment with the Modular/MMC supplier in relation to overall structural design.
11.	The contract to be used is PW-CF5 Minor Works (V.2.10 at the time of writing, with most updated version to be used) for Minor Building and Civil Engineering Works designed by the Employer. In exceptional cases, for smaller installations and where the overall contract value is typically under €1.0 Million PW-CF6 (Short Form Contract) may be used.

12.	BIM Implementation will be required for all modular units, with as-built geometry and asset model of the modular units being transferred to the Client upon completion of the project in all cases. The information must be in alignment with the Project Information Requirements and Exchange Information Requirements or other agreed format, and the DT is to ensure that the information is made available by the modular supplier. The intellectual property remains in the ownership of the sponsoring agency. The capital investment must comply with the government mandate for BIM implementation in accordance with ISO 19650, and the design & implementation process must follow the ISO 19650 standards, Uniclass, Industry Foundation Classes (IFC), and ICMS3. All Stage submissions for approval are to include all available native 3D files of the design development at that stage. Additionally, IFC file exports of the 3D design files are to be included with each stage submission.
13.	The building MMC system is to have a MINIMUM design life of 60 years: It may be modular, MMC, or offsite in fabrication, delivery and installation, but in every other consideration, this capital investment is considered a permanent building. The building design process and design team scope of services will be subject to all of the requirements expected of the standard design process: The terminology of 'Modular' or 'MMC', doesn't absolve the DT of their responsibilities to understand the end-user requirements and design/execute an appropriate solution and output specification.
14.	Design Guidance: DEY SDG-02-05-06, Modern Methods of Construction Design Guidance for School Buildings, and the requirements of the most updated revision/iteration of this document are to be applied <u>where appropriate</u> . This includes energy performance, space heating, ventilation, air quality, daylight, Floor/Ceiling heights. Where any queries arise, or where a dispensation is required, this can be submitted for approval by the DT and approved by SOLAS.
15.	It shall be the responsibility of the DT to ensure that all necessary surveys of the subject site are undertaken and properly coordinated. The Design Team shall ensure that sufficient information is obtained to identify site constraints and that design development mitigates and, where practicable, eliminates project risks to an acceptable level prior to construction. This includes: 1. Topographical Survey 2. Ground Investigations, bearing capacity 3. Ground Penetrating Radar (GPR Surveys) to identify all underground services DT are to be conscious of overground services and restrictions on height where MMC/Modular units are to be delivered, and where there may be restrictions on lifting capability.
16.	Detailed Room Layouts (RLS) and Room Data Sheets (RDS), inclusive of equipment schedules and operational zones are to be developed by the Design Team and thus included in the scope of services for the DT at the time of tender. The development of the RLS and RDS for each Teaching Space will require workshop sessions between Client and the DT, and these are to be scheduled in advance of Design. A written Client sign-off of the General Arrangement Drawings, RLS and RDS will be required prior to tender. The Client is to ensure that equipment schedules are prepared & available to the DT in a timely manner. The final RDS and RLS layouts are to be submitted to both SOLAS & DFHERIS P&T for commentary as part of the complete suite of information at DG2. All minimum dimensions are to comply with the requirements set out in SDG-02-05-06. Where there is any clarification, dispensation or exemption from this requirement must be applied for in writing by the DT.
17.	A full (traditional) DT Appointment is required for the project. Architect-led single point DT, to oversee Design, Tender, Installation and Certification.
18.	The DT will be responsible for acquiring all required statutory consents, inclusive of Planning Permission, Fire Safety Certification and Disabled Access Certificates.

19.	The requirement for a Lightning Protection system is to be included in the works requirements for all modular/MMC buildings. It is the responsibility of the Design Team to ensure that the BC(A)R ancillary certification for the design, installation and commissioning of the system is provided.
20.	Finishes: All floor finishes, maintenance, life-cycle costing, and drainage requirements are to be carefully considered by the design team. All outlets from modular structures to be included and confirmed at Stage 2B, including all drainage outlets and ventilation requirements in specialist teaching spaces where detailed coordination will be required.
21.	All external finishes to the modular structures will be included in the Stage 2A report, agreed with the Planning Authority and included in the subsequent planning permission application. All external finishes are to be specified to ensure durability, weather resistance, aesthetics, and compliance with the building regulations. All external finishes must also be sufficiently robust to withstand handling, lifting, transport, and environmental exposure during transport and installation.
22.	In every case, the installation of modular structures on the site is to align with the site masterplan. Where a masterplan does not exist as part of the Building File, the design team is obligated to prepare a site masterplan to ensure proper and sustainable planning. This should indicate that the design has been well considered (including delivery/installation) and the location will not affect the future development of the site. Rationale: To ensure that the current scope of works complies with a sustainable and long-term development strategy of the subject site and allows for future flexibility.
23.	Form Factor: Where a number of individual teaching spaces are required, these are to be designed and supplied as a completed conjoined system, minimising the external envelope, providing the most efficient form factor, minimising junctions and heat loss. Double-loaded corridors are to be used and designed/located to allow for future expansion where site conditions allow. Single/disconnected teaching spaces distributed throughout the site will not be accepted. Finished floor levels are to match throughout, including any sheltered links to the existing structures on site.
24.	The MMC Structures will need to incorporate Universal Design principles and finished floor levels are to match those of the external environment. Ramps or steps are to be avoided unless site-specific conditions require them.
25.	All roofs are to be designed, specified, constructed and installed in accordance with the requirements of section 30 of DEY's SDG-02-05-06 'Design Guidance for Modular and Modern Methods of Construction for School Buildings. All roof area to be suitable for walk on access to carry out essential maintenance. All roof finishes will be capable of the installation of PV at a future date.
26.	Radon: Should there be no evidence of radon testing in the existing buildings on the subject site, then this should be carried out during the design phase, allowing a minimum survey period of approximately 6 months. Irrespective of the outcome of this testing, a suitably robust radon barrier will be specified and installed under the proposed modular units.
27.	The Design Team will be required to undertake a Whole Life Carbon Assessment (WLCA) for the design, manufacture, installation, operation, and end-of-life stages of modular structures, in accordance with relevant standards (e.g. RICS Whole Life Carbon Assessment (2nd edition), EN 15978, and ISO 14040/44).

28.	The embodied carbon (EC) per square metre of space is to be confirmed by the manufacturer/supplier of the modular units. This is to be calculated using verified EPDs to support an EN 15978 compliant result. This is intended for addition to the data set only; and/or a reasonable minimum standard is set currently at the RIAI 2030 Climate Challenge target for schools of 540 kg CO ₂ e/m ² .
29.	For all groundworks connected to the building installation, the requirements of the DEY SDG-SDG 02 TN-04 Low Carbon Concrete Design Guidance Technical Note 04, in particular Section 2.6 are to be applied.' Concrete products procured by public bodies, or used in publicly produced construction projects, including poured or pre-cast products, should in general specify a minimum of 30% clinker replacement, consistent with IS EN 206, except where a technical justification is made by a suitably qualified professional'. The requirement to specify low-carbon cement products applies to both the building structure and all elements the site works, inclusive of any paths or retaining structures.
30.	The Design Team (DT) shall assess available electrical capacity on the site (including maximum demand and spare capacity) and design the full integration of the Modular/MMC building into the existing electrical infrastructure. Any required upgrades shall be identified at Stage 1 and the DT shall assist the sponsoring agency with any applications to utility networks for connection upgrades.
31.	The DT shall size, coordinate, and route all sub-mains cabling to the modular building, including allowance for voltage drop, installation method, and future expansion.
32.	A detailed electrical load assessment shall be carried out based on teaching equipment, building services systems, ICT, and general services power requirements, with clearly stated diversity assumptions. The DT should identify all specialist equipment prior to Stage 1 in order for timely completion of the load assessment.
33.	The DT shall define the quantity and extent of all building services (mechanical, electrical, ICT, and specialist systems) to inform the performance specification and tender documentation. The DT will allow for suitably weathered penetrations in the Modular Replacement for waste connections, water connections, SVP's and all electrical tie-in connections not limited to power, intruder alarm, ICT, BMS, Fire Alarm, Universal Access (Part M Compliant) toilet alarm, Intruder alarm, Earthing and Lightning protection.
34.	Where site-wide systems exist (including intruder alarm, access control, ICT, and BMS), the DT shall ensure full integration of the modular building. Standalone systems will not be accepted unless expressly agreed in writing, except emergency lighting which must be supplied with an integral battery. The DT shall verify capacity and design any required upgrades.
35.	The modular building shall be fully integrated into the existing Fire Detection and Alarm System, including panel capacity, loop configuration, and cause-and-effect strategy. Where CCTV has been installed on the site, this system shall also be extended to cover the Modular/MMC Units, particularly where specialist equipment is to be installed.
36.	The DT is to allow for appropriate locations, sufficient access and safe working area for maintenance of all electrical and mechanical equipment especially electrical distribution boards, fire alarm panels and ICT panels. A minimum of 1200mm clear access is required in front of all electrical panels for safe maintenance and replacement works.
37.	Heating systems shall comply with Public Sector Climate Action Mandate. Fossil fuel systems should not be installed. The Design Team to allow for suitable external plant area for ASHP outdoor condensers, air conditioning unit external condensers etc. Access and maintenance requirements should be considered. The DT is to refer to the DEY SDG 03 -TN02 Heat Pumps, published May 2025.

38.	The performance specification should include the following for the modular unit: overheating analysis, daylighting analysis, Part L compliance check and a Building Energy Rating.
39.	The DT shall agree the building services strategy for the modular unit within the performance specification.
40.	All switches and controls should be hard wired. Wireless light switches and wireless controls are not acceptable. In addition to roof readiness for PV, the electrical and services design shall allow for future integration of renewable technologies (including capacity within switchgear and distribution systems).
41.	Sub-metering should be included so that the energy usage of the modular unit can be monitored.
42.	The DT is to refer to the DEY SDG 03-TN01 Mechanical Ventilation Heat Recovery (MVHR) for the potential to incorporate mechanical heat recovery and achieve air tightness in the building. MVHR equipment, ducting and outlets are to be carefully considered to maintain minimum floor/ceiling heights and alignment with external finishes. All vents should ideally be wall mounted, minimising roof penetrations, and the DT should consider introducing spandrel panels to incorporate duct penetrations. MVHR units are substantially heavy; the main supporting structure and mounting detail must be carefully considered at design stage.
43.	The Design Team to consider the structure and internal height to allow for indirect cold-water storage at high level internally (potentially over the toilet areas) and note that a connection to an existing mains water connection must be in line with current Irish Water Guidelines.
44.	All lighting to be LED type designed to give the uniform room lighting levels to comply with the current CIBSE guidance and in line with the current DEY Technical Guidance Documents TGD-30, TGD-031 and TGD-033. All lighting to be complete with intelligent lighting features to include daylight factor correction and PIR control.
45.	All emergency lighting to be designed and commissioned to the current IS3217 standards complete with standalone battery pack to give the minimum emergency lighting levels for the required time. The fire alarm to be designed to IS3218 to include ceiling and void protection to all areas and to interface with the existing site wide fire alarm where possible.
46.	Hot water generation to be designed as gravity supply instantaneous under sink system or wall mounted system where there is a storage or multiple user requirement. All hot water generation to have intelligent controls, including timers, thermostats and Legionella prevention. A mains water survey to be completed to confirm the water quality and the requirement for local water treatment for equipment protection. Hot and cold-water storage capacity to be designed to comply with the current CIBSE guidance and DEY TGD standards and requirements.
47.	Stage submissions for approval must be submitted either using the DEY's cost plan template or CWMF CC1 (Cost Planning & Cost Control) template. The Cost Plan, including embodied carbon must be submitted in excel format.
48.	Embodied Carbon must be broken down in accordance with the required breakdown on the Cost/Carbon template. Modular Manufacturers are obliged to break down the cost/carbon content of their proposed solution into the sections as specified in the Cost/Carbon templates to provide for Cost/Carbon comparison.