

Section 2 Scope of Works

2.0 Scope of Works

2.1 General Requirements

The works associated with this contract involves the strip out and replacement of existing science room mechanical services at Scoil Mhuire Secondary School, Buncrana, Co. Donegal, including drainage, heating pipework, radiators, domestic hot and cold-water services, gas and ventilation services.

2.2 Extent of Mechanical Services

The mechanical installation works shall comprise the installation in complete accordance with the pre-performance parameters and technical specification contained herein. The installation works shall include for the supply of all labour, supervision, transportation, materials and supply of equipment necessary to install, test and commission the complete works.

2.3 Description of the Mechanical Services Works

The Mechanical installation works shall include, but shall not be limited to the following:

Element 52:	Drainage and Refuse Disposal
Element 53:	Domestic Water Services
Element 54:	Gas Distribution
Element 56:	Space Heating
Element 57:	Ventilation

It is proposed that all works shall be completed over the summer months when the school is closed. However, if works extend beyond the summer months it is important to note that the school/classrooms **cannot** be left without heat during any period of the heating season (Oct-May).

Summary of the main items are as follows (list not exhaustive):

- Isolation and strip out of existing mechanical services contained within the 2No. Science Rooms
- Installation of above ground soils and wastes including sanitary fixtures
- Installation of domestic water services provision c/w under-sink water heaters as detailed
- Installation of gas services including pipework, manifolds, gas solenoid valves, proving systems
- Installation of radiators, associated pipework, 2 port valve arrangement as detailed on the mechanical drawings
- Supply of extract/supply fans, ductwork and associated controls

2.4 Regulations

The Design Criteria, Standards and General Requirements relating to the Mechanical and Electrical Services Installations shall generally be in accordance with this

Specification read in conjunction with the relevant clauses of the current editions of the following Standards, Regulations, Guides, etc.

- a) The Chartered Institution of Building Services Engineers Design Guides.
 - Volume A: Design Data
 - Volume B: Installation and Equipment Data
 - Volume C: Reference Data
 - Volume G: Public Health Engineering
- b) The Chartered Institution of Building Services Engineers Commissioning Codes
 - Commissioning Code A: Air Distribution Systems
 - Commissioning Code B: Boilers
 - Commissioning Code C: Automatic Controls
 - Commissioning Code W: Water Distribution Systems
- c) Requirements for Electrical Installations (5th Edition with all amendments) issued by the ETCL – IS 10101 2020 - together with all associated Guidance Notes
- d) Regulations and Requirements of the Electricity Supply Board
- e) Requirements of the Local Fire Authority
- f) Equipment and plant manufacturer's stipulations and recommendations for installation and testing
- g) Current edition of the Irish Building Regulations.
- h) All relevant current British Standards together with Specifications and Codes of Practice
(Many British Standards have been harmonised across Europe. Where British Standard references remain within the Specification these shall be taken to mean the equivalent harmonised European Standard or equivalent Standard used in Ireland.)
- i) The requirements of good installation practices and sound engineering principles
- j) All Health and Safety Legislation (H&SW Acts) and recommendations of the Health and Safety Executive
- k) Health and Safety Regulations
- l) Local Authority Byelaws and Regulations

The Mechanical Services Installation shall be installed by an Association Approved Mechanical Engineering Contractor.

2.5 Contractual Information

The Main Contractor shall provide all contractual information.

Where conflict arises between any drawings or specifications these shall be relayed in writing to the Main Contractor.

Information precedence shall follow the following order:

- Main Contractors Documentation
- Ipsum Consulting Engineers Drawings
- Ipsum Consulting Engineers Specification

The Main Contractor is responsible for on-site co-ordination of M&E services and shall appoint and name their M&E coordinator within their tender returns.

The Mechanical Contractor shall include for all required marking out, to facilitate all chases and drilling/coring of penetrations by the Main Contractor.

The Main Contractor shall include for fire stopping all service penetrations, by an accredited specialist. A copy of the fire stopping certificate shall be provided by the Main Contractor to the M&E Contractors for inclusion within their O&M Manuals

2.6 Equipment Selection & Items Specified

The equipment specified herein is based on the performance, features, and quality of the referenced model(s). The specified model(s) (where detailed), set a standard of performance and quality desired by the client and have been used to predetermine Part L and energy compliances. Equivalent products from other manufacturers may be submitted for review and approval, provided they meet or exceed the specified requirements in all respects including, but not limited to, capacity, dimensions, materials, energy efficiency, warranty, controls compatibility, and certifications. Unless otherwise stated, references to any particular makes or models throughout the engineers' drawings and specification documents shall be deemed to be accompanied by the words 'or equivalent'.

The Contractor shall submit complete technical documentation, including performance data, dimensional drawings, and compliance certificates, for any proposed equivalent equipment. The Engineer reserves the right to determine the acceptability of any proposed equivalent. Approval of an equivalent does not relieve the Contractor from complying with all design and performance requirements indicated in the contract documents.