



*Project Managers
Chartered Civil, Structural
& Building Services Engineers*

TIPPERARY COUNTY COUNCIL

CAHIR MARKET CENTRE

A.5.1.5 MECHANICAL BUILDING CONTROL (AMENDMENT) REGULATIONS (BCAR) REQUIREMENTS

TENDER

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1 BCAR REQUIREMENTS

1.1 PI Insurance Requirements

All specialists supplying design products & ancillary design certificates, to the works, are to carry Professional Indemnity insurance to the value of €6.5millions.

1.2 Ancillary Mechanical Design Certificates to be provided to the M&E Consultant by the Contractor:

Mechanical Design Certificate for all necessary design work for the installed systems not explicitly designed (as presented in the tender documentation) by the consultant, consultant design altered in any way or initial design impacted by final equipment selection, this includes but is not limited to:

- Pipe Sizing
- Utilities Related Design
- Fuel System Design
- Heating System Design
- Cooling System Design
- Ventilation System Design
- Water System Design
- Medical Gases System Design
- Vacuum System Design
- Soils and Wastes Design
- All Fire-Stopping Design
- All Temporary Designs

Note: It is the contractor's responsibility to ensure all design work and certification is carried out by competent persons.

1.3 Mechanical Completion Certificates:

The contractor will provide a completion certificate for all mechanical works, that they have been completed in compliance with the tender package and where there is any degree of interpretation that the contractor has completed the works in accordance with building regulations.

The contractor will support this certification with the following non-exhaustive list of data:

- 2 no hard copies and 1 no electronic copy of the O&M manuals are required which shall include the following information as a minimum.
- As Built drawings including copies of all valve charts and all control panel wiring diagrams
- Installation Description
- Systems operations
- All relevant suppliers, sub-contractors names, addresses and contact nos.
- Manufacturers maintenance recommendations
- Full Spare parts lists
- Daily, weekly, monthly, seasonal, annual and other periodic maintenance duties
- Comprehensive access recommendations for all relevant plant and equipment.
- Safety file and any relevant health and safety information
- All commissioning certificates
- Pipe-work Pressure test sheets – gas, oil, medical gas, vacuum, refrigerant, LPHW, Water, Soils & Wastes
- Confirm all exposed heating system metal temperatures are below 43°C
- Medical gases commissioning tests (full list in mechanical specification)
- Vacuum commissioning tests – (full list in mechanical specification)
- Air balancing details and airflows at all grilles & diffusers
- Water balancing details including all flow rates
- Controls commissioning details including valve & damper settings
- Hot water system commissioning and testing
 - Hot Water Generator commissioning details and temperature settings Stat. Settings
 - Hot water flow & return temps. (Return temps verified at each outlet)
 - Protective devices (for each wash hand basin)
- Boiler commissioning, Flue Gas and combustion reports
- All ventilation commissioning reports
- Gas Leak Detection Commissioning Certificate
- Gas pressure Proving Commissioning Certificate
- Fire Extinguisher Commissioning Certificate
- Extinguishers-Schedule to include type & location
- Fire stopping certified

- Water Systems Sterilization Certificates
- Pump & Pressure Vessel Settings
- Signed Client Demonstration & Handover Acceptance Sheets
- Thermal overload settings
- Clinical Cleaning certification for all installed ductwork for extract/supply.
- All manufacturers' specification sheets and installation, commissioning & maintenance recommendations.
- Any other relevant testing and commissioning certificates / results
- Demonstration of all services and of access to all services for maintenance.

