

Additional Specification Requirement

Thermal Performance, Sustainability and Environmental Requirements

1. Compliance with Building Regulations

All windows supplied and installed under this Contract shall comply with the current Irish Building Regulations, including Technical Guidance Document Part L - Conservation of Fuel and Energy, applicable at the date of manufacture and installation.

2. Thermal Performance Requirements

The completed window assembly, including frame, glazing, spacer bars, thermal breaks, fixings and perimeter sealing, shall achieve a maximum U-value of $1.2 \text{ W/m}^2\text{K}$. The proposed glazing specification shall comprise, as a minimum: a standard 24mm double-glazed unit; at least one pane of soft-coat Low-E glass; Argon gas-filled cavity; and warm-edge spacer bars. Alternative systems may be proposed provided they achieve or exceed the specified thermal performance requirements.

3. Thermal Calculations

Tenderers shall provide thermal transmittance calculations based on the performance of the complete window assembly. Calculations shall be prepared in accordance with the relevant European Standards (EN Standards).

4. Installation Requirements

All replacement windows shall be installed in a manner that minimizes thermal bridging and uncontrolled air leakage at interfaces with the existing building fabric. All windows shall be fitted with airtightness tape to ensure continuity of the building envelope and improve airtightness performance.

5. Environmental Performance

Tenderers shall submit details of the environmental performance characteristics of the proposed window systems. Where aluminium products are proposed, the percentage of recycled content shall be declared and supported by manufacturer documentation where available.

6. Packaging and Waste Management

Packaging associated with materials supplied under this Contract shall be minimised and, where practicable, shall be recyclable. Existing windows, glazing and metal components removed from site shall be segregated and recycled where practicable in accordance with current waste management legislation and best practice.

7. Environmental Management

Tenderers shall submit evidence of certification to ISO 14001 Environmental Management Systems or details of equivalent environmental management procedures implemented within their organisation.