

---

STATUTORY RULES OF NORTHERN IRELAND

---

**2012 No. 192**

**The Building Regulations (Northern Ireland) 2012**

**PART F**

Conservation of fuel and power

**Application and interpretation**

[<sup>F1</sup>38.—(1) Subject to paragraphs (2), (3) and (4) this Part shall apply to any building and where a building contains one or more dwellings to each dwelling separately.

(2) The energy efficiency requirements shall not apply to—

- (a) protected buildings, where compliance with the energy efficiency requirements would unacceptably alter their character or appearance;
- (b) buildings used as places of worship and for religious activities;
- (c) temporary buildings with a planned time of use of 2 years or less, industrial sites, workshops and non-residential agricultural buildings with a low energy demand; and
- (d) stand-alone buildings other than dwellings, with a total useful floor area of less than 50m<sup>2</sup>.

(3) Regulation 40 shall not apply to—

- (a) the extension of a dwelling; and
- (b) the extension of a building other than a dwelling, unless the extension has a total useful floor area that is both—
  - (i) greater than 100m<sup>2</sup>; and
  - (ii) greater than 25% of the total useful floor area of the existing building.

(4) Regulation 45 shall not apply to the provision or extension of any fixed building service where commissioning is not possible.

(5) In this Part, the following terms have the same meaning as in European Parliament and the Council Directive 2010/31/EU of 19 May 2010 on the energy performance of buildings (recast)—

- (i) “industrial sites”;
- (ii) “low energy demand”;
- (iii) “non-residential agricultural buildings”;
- (iv) “places of worship”;
- (v) “religious activities”;
- (vi) “stand-alone”; and
- (vii) “workshops”.

(6) In this Part—

“Building envelope” in relation to a building, means the walls, floor, roof, windows, doors, roof windows and rooflights;

“Change of energy status” means any change which results in a building becoming a building to which the energy efficiency requirements of these Regulations apply, where previously it was not;

“Cogeneration” means simultaneous generation in one process of thermal energy and one or both of the following—

- (a) electrical energy;
- (b) mechanical energy;

“District or block heating or cooling” means the distribution of thermal energy in the form of steam, hot water or chilled liquids, from a central source of production through a network to multiple buildings or sites, for the use of space or process heating or cooling;

“Energy efficiency requirements” means the requirements of regulations 39, 40, 41, 43, 43A, 43B and 47;

“Energy from renewable sources” means energy from renewable non-fossil sources, namely wind, solar, aerothermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases;

“Heat pump” means a machine, device or installation that transfers heat from natural surroundings such as air, water or ground to buildings or industrial applications by reversing the natural flow of heat such that it flows from a lower to higher temperature. (For reversible heat pumps, it may also move heat from the building to the natural surroundings.);

“High-efficiency alternative systems” include—

- (a) decentralised energy supply systems based on energy from renewable sources;
- (b) cogeneration;
- (c) district or block heating or cooling, particularly where it is based entirely or partially on energy from renewable sources; and
- (d) heat pumps;

“Major renovation” means the renovation of a building where more than 25% of the surface area of the building envelope undergoes renovation;

“National calculation methodology” means—

- (a) in relation to a dwelling, the Government’s Standard Assessment Procedure (SAP) for Energy Rating of Dwellings; and
- (b) in relation to a building other than a dwelling—
  - (i) the Simplified Building Energy Model (SBEM); or
  - (ii) a Dynamic Simulation Model (DSM),

that is implemented with Government approved software;

“Nearly zero-energy building” means a building that has a very high energy performance, as determined in accordance with the National calculation methodology, where the nearly zero or very low amount of energy required should be covered to a very significant extent by energy from renewable sources, including energy from renewable sources produced on-site or nearby;

“Pipes, ducts and vessels” means any pipe, any duct and any vessel in a space heating or space cooling system that is intended to carry a heated or chilled liquid or gas and includes any associated fittings;

“Protected building” has the same meaning as in Article 3A(2) of the Building Regulations (Northern Ireland) Order 1979;

“Renovation of a thermal element” means the provision of a new layer to a thermal element or the replacement of an existing layer (other than where a partial replacement layer is provided

solely as a means of patch repair to a flat roof) but does not include thin decorative surface finishes;

“Space cooling system” does not include a system or that part of a system which cools or stores water solely for a commercial or industrial process;

“Space heating system” does not include a system or that part of a system which heats or stores water solely for a commercial or industrial process;

“Target carbon dioxide emission rate” means the rate of carbon dioxide emission measured in kilograms of carbon dioxide per square metre of total useful floor area per year;

“Thermal element” means a wall, floor or roof (but does not include windows, doors, roof windows or rooflights) which separates a thermally conditioned space from—

- (a) the external environment including the ground; or
- (b) in the case of floors and walls, another part of the building which is —
  - (i) thermally unconditioned;
  - (ii) an extension falling within Class 8 of Schedule 2; or
  - (iii) in the case of a building other than a dwelling, conditioned to a different temperature,

and includes all parts of the element between the surface bounding the conditioned space and the external environment or other part of the building as the case may be; and

“Total useful floor area” means the total area of all enclosed spaces measured to the inside face of the external walls, that is, the gross floor area, and in the case of sloping surfaces such as staircases, galleries, raked auditoria and tiered terraces shall be taken as their area on plan but shall exclude areas that are not enclosed such as open floors, covered ways and balconies.]

**F1** Reg. 38 substituted (25.2.2014) by [The Building \(Amendment\) Regulations \(Northern Ireland\) 2014 \(S.R. 2014/44\)](#), regs. 1, **6(1)** (with reg. 3)

### Conservation measures

**39.** Reasonable provision shall be made for the conservation of fuel and power in any building by—

- (a) limiting heat gains and losses—
  - (i) through thermal elements and other parts of the building fabric; and
  - (ii) from pipes, ducts and vessels;
- (b) providing energy efficient fixed building services with effective controls; and
- (c) commissioning the fixed building services.

### Target carbon dioxide emission rate

**40.**—(1) Without prejudice to the requirements of regulation 39, where a building is to be erected, or a building other than a dwelling is extended as described in regulation [F238(3)(b)] , [F3minimum energy performance requirements in the form of] a target carbon dioxide emission rate for that building shall be calculated [F4and expressed] using a national calculation methodology.

(2) The building, or extension as described in regulation [F538(3)(b)] , shall be so designed and constructed as not to exceed its calculated target carbon dioxide emission rate [F6, with all carbon dioxide emission rates calculated and expressed using a national calculation methodology] .

- F2** Word in reg. 40(1) substituted (25.2.2014) by [The Building \(Amendment\) Regulations \(Northern Ireland\) 2014 \(S.R. 2014/44\)](#), regs. 1, **6(2)** (with reg. 3)
- F3** Words in reg. 40(1) inserted (28.11.2016) by [The Building \(Amendment\) Regulations \(Northern Ireland\) 2016 \(S.R. 2016/412\)](#), regs. 1, **6(1)(a)** (with reg. 3)
- F4** Words in reg. 40(1) inserted (28.11.2016) by [The Building \(Amendment\) Regulations \(Northern Ireland\) 2016 \(S.R. 2016/412\)](#), regs. 1, **6(1)(b)** (with reg. 3)
- F5** Word in reg. 40(2) substituted (25.2.2014) by [The Building \(Amendment\) Regulations \(Northern Ireland\) 2014 \(S.R. 2014/44\)](#), regs. 1, **6(2)** (with reg. 3)
- F6** Words in reg. 40(2) inserted (28.11.2016) by [The Building \(Amendment\) Regulations \(Northern Ireland\) 2016 \(S.R. 2016/412\)](#), regs. 1, **6(1)(c)** (with reg. 3)

### Consequential improvements

**41.** Where it is proposed to execute building work in relation to any existing building with a total useful floor area greater than 1000 m<sup>2</sup> and that work consists of or includes—

- (a) an extension;
- (b) the initial provision of any fixed building service; or
- (c) an increase in the capacity of any fixed building service,

consequential improvements to the existing building shall be carried out to ensure that the building complies with the requirements of regulation 39 so far as this is technically, functionally and economically feasible.

### Change of energy status

**42.** Where there is a change of energy status such work shall be carried out as is necessary to ensure that the building complies with the requirements of regulation 39.

### Renovation of thermal elements

[<sup>F7</sup>**43.**—(1) Where the renovation of an individual thermal element—

- (a) constitutes a major renovation; or
- (b) amounts to the renovation of more than 50% of the surface area of the thermal element,

the renovation shall be carried out so as to ensure that the whole of the thermal element complies with the requirement of regulation 39(a)(i) in so far that it is technically, functionally and economically feasible.

(2) Where the whole or any part of an individual thermal element is to be replaced and such work—

- (a) constitutes a major renovation; or
- (b) in the case of part replacement, amounts to the renovation of more than 50% of the surface area of the thermal element,

the whole of the thermal element shall be replaced to comply with the requirement of regulation 39(a)(i) in so far that it is technically, functionally and economically feasible.]

- F7** Reg. 43 substituted (25.2.2014) by [The Building \(Amendment\) Regulations \(Northern Ireland\) 2014 \(S.R. 2014/44\)](#), regs. 1, **6(3)** (with reg. 3)

### [<sup>F8</sup>Consideration of high-efficiency alternative systems

**43A.**—(1) Where a building is to be erected, the person carrying out the work shall, before construction begins, undertake an analysis of and give consideration to the use of available high-efficiency alternative systems in the work. Such systems include—

- (a) decentralised energy supply systems based on energy from renewable sources;
  - (b) cogeneration;
  - (c) district or block heating or cooling, particularly where it is based entirely or partially on energy from renewable sources; and
  - (d) heat pumps.
- (2) The analysis referred to in paragraph (1)—
- (a) shall be documented and take into account the technical, environmental and economic feasibility of using high-efficiency alternative systems;
  - (b) may be carried out for individual buildings or for groups of similar buildings or for common typologies of buildings in the same area; and
  - (c) in so far as it relates to collective heating and cooling systems, may be carried out for all buildings connected to the system in the same area.

**F8** Regs. 43A, 43B inserted (25.2.2014) by [The Building \(Amendment\) Regulations \(Northern Ireland\) 2014 \(S.R. 2014/44\)](#), regs. 1, **6(4)** (with reg. 3)

### Nearly zero-energy requirements for new buildings

**43B.**—(1) Where a building is erected, it must be a nearly zero-energy building.

(2) For the purposes of paragraph (1)—

- (a) in respect of new buildings occupied [<sup>F9</sup>and owned] by public authorities, this regulation shall apply from 1<sup>st</sup> January 2019; and
- (b) in respect of all new buildings, this regulation shall apply from 31<sup>st</sup> December 2020.]

**F8** Regs. 43A, 43B inserted (25.2.2014) by [The Building \(Amendment\) Regulations \(Northern Ireland\) 2014 \(S.R. 2014/44\)](#), regs. 1, **6(4)** (with reg. 3)

**F9** Words in reg. 43B(2)(a) inserted (28.11.2016) by [The Building \(Amendment\) Regulations \(Northern Ireland\) 2016 \(S.R. 2016/412\)](#), regs. 1, **6(2)** (with reg. 3)

### Notice of air pressure test

**44.** Where an air pressure test is undertaken for the purposes of demonstrating compliance with regulation 40(2), the person carrying out the work shall give, not more than 5 days after completion of the testing, a notice in writing to the district council stating the result of the air pressure test.

### Notice of commissioning

**45.** Where this regulation applies, the person carrying out the work, for the purpose of ensuring compliance with regulation 39(b) and (c), shall give, not more than 5 days after completion of the commissioning, a notice in writing to—

- (a) the building owner stating that the fixed building services have been commissioned; and
- (b) the district council stating that the requirements of sub-paragraph (a) have been met.

### **Notice of emission rate**

**46.** Where a calculation is carried out for the purpose of demonstrating compliance with regulation 40(2), a notice in writing that states—

- (a) the target carbon dioxide emission rate for the building;
- (b) the calculated carbon dioxide emission rate for the building as constructed; and
- (c) the list of specifications to which the building is constructed where these differ significantly from the design specifications used for the calculation of the design-stage carbon dioxide emission rate,

shall be given to the district council not more than 5 days after completion of the building work, by the person carrying out the work.

### **Provision of information**

**47.** Where regulation 39 applies, the person carrying out the work shall give, not more than 5 days after completion of the work, a notice in writing to—

- (a) the building owner giving sufficient information about the building, its fixed building services, and their ongoing maintenance requirements, so that the building can be operated and maintained to conserve fuel and power; and
- (b) the district council stating that the requirements of sub-paragraph (a) have been met.

**Changes to legislation:**

There are currently no known outstanding effects for the The Building Regulations (Northern Ireland) 2012, PART F.