



Circular Letter BC02-2023

28 March 2023

RE: Summary of the implementation of certain aspects of the Energy Performance of Buildings Directive (Directive 2010/31/EU), consequential amendments to the Building Regulations and related matters

To:

- The Chief Executive of each Local Authority
- The Director of Services for Building Control in each Local Authority
- Building Control Officers
- The National Building Control & Market Surveillance Office

Colleagues,

Directive 2010/31/EU of the European Parliament and of the Council on the energy performance of buildings (commonly known as the Energy Performance of Building Directive or EPBD), sets requirements at an EU level for Member States to improve the energy performance of buildings and to make an important contribution to the reduction of greenhouse gas emissions, including installation of appropriate infrastructure to enable the installation of recharging points for electric vehicles. In 2018, an amending Directive (Directive 2018/844/EU of the European Parliament and of the Council on the energy performance of buildings) was introduced with new elements and sent a strong political signal on the EU's commitment to modernise the building sector in light of technological improvements and to increase building renovations.

There have been a series of Regulations and guidance produced over recent years to transpose the requirements of the EPBD and related EU legislation, in Ireland. In addition some consequential amendments have been made to Building Regulations.

In that context, this circular provides a summary and overview of the Regulations and guidance available. The circular is set out in 6 sections, as follows;

1. Regulations in respect of Dwellings
2. Regulations in respect of Buildings other than Dwellings
3. Building Regulations - Part F & Technical Guidance Document F (Ventilation) 2019



4. Supplementary documents to Part L and Part F of the Building Regulations
5. Regulations in respect of Existing Buildings other than Dwellings not undergoing building works
6. European Union (District Heating) Regulations 2022

The Appendix to this circular refers to the related Technical Guidance Documents and transitional arrangements.

1. Regulations in respect of Dwellings

Directive 2010/31/EU of the European Parliament and of the Council on the energy performance of buildings (EPBD) promotes the improvement of the energy performance of buildings and sets requirements at an EU level for Member States to improve the energy performance of buildings and to make an important contribution to the reduction of greenhouse gas emissions.

1.1. S.I. No. 183 of 2019 & S.I. No. 292 of 2019

S.I. No. 183 of 2019 European Union (Energy Performance of Buildings) Regulations 2019 and S.I. No. 292 of 2019 European Union (Energy Performance of Buildings) (No.2) Regulations 2019 transpose the requirements of Article 7 and Article 9 of the EPBD.

Article 7 of the EPBD requires that where more than 25 % of the surface of the building envelope undergoes renovation, the energy performance of the building, or the renovated part thereof, is upgraded in order to meet minimum energy performance requirements with a view to achieving a cost optimal level in so far as this is technically, functionally and economically feasible.

Article 9 of the EPBD requires that all new buildings are “Nearly Zero Energy Buildings” (NZEB) from 31 December 2020. NZEB means a building that has a very high energy performance, as determined in accordance with the common general framework for the calculation of energy performance of buildings, as defined in Annex I. The calculation methodology for the EPBD is the Dwelling Energy Assessment Procedure (DEAP). 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.

S.I. No. 183 of 2019 and S.I. No. 292 of 2019 came into operation on 1 November 2019.

1.2 S.I. No. 393 of 2021

European Union (Energy Performance of Buildings) Regulations 2021 (S.I. No. 393 of 2021) transposes, among other articles, Article 8(1) and 8(5) of the EPBD.



Article 8(1) requires new buildings, where technically and economically feasible, to be equipped with self-regulating devices for the separate regulation of the temperature in each room or, where justified, in a designated heated zone of the building unit. Where a heat generator is being replaced in an existing building, where technically and economically feasible, self-regulating devices shall also be installed.

Article 8(5) requires a building (containing one, or more than one, dwelling), which has more than 10 car parking spaces, that is new or undergoing major renovation, to have installed ducting infrastructure (consisting of conduits for electric cables) for each car parking space to enable the subsequent installation of recharging points for electric vehicles.

S.I. No. 393 of 2021 came into operation on 27 July 2021.

1.3. S.I. No. 535 of 2022

S.I. No. 535 of 2022 - Building Regulations (Part L Amendment) Regulations 2022 require electric vehicle recharging infrastructure to be installed in new homes to enable future installation of electrical vehicle recharging points. These regulations apply to:

- new dwelling houses with a parking space located within the boundary of the dwelling
- new multi-unit residential buildings
- multi-unit residential buildings undergoing major renovation where the car park is located inside or adjacent to the building, and where renovations include the car park or the electrical infrastructure of the building or car park

These regulations (S.I. No. 535 of 2022) apply where the relevant works or major renovation commence or take place on or after 1 November 2022.

Technical Guidance Document L (Conservation of Fuel and Energy) (TGD L) Dwellings has been amended in order to provide guidance on how to comply with the requirements of the Regulations above. The TGD includes compliance examples also. Appendix 1 of this document sets out the various versions of TGD L (Dwellings) and when they apply.

2. Regulations in respect of Buildings other than Dwellings

2.1 S.I. No. 538 of 2017

S.I. No. 538 of 2017 Building Regulations (Part L Amendment) Regulations 2017 transpose into Irish law the requirements of Articles 7 and 9 as they relate to buildings other than dwellings.

Article 7 of the EPBD requires that where more than 25 % of the surface of the building envelope undergoes renovation, the energy performance of the building, or the renovated part thereof, is upgraded in order to meet minimum energy performance requirements with a view to achieving a cost optimal level in so far as this is technically, functionally and economically feasible.



Article 9 of the EPBD requires that all new buildings are NZEB from 31 December 2020. NZEB means a building that has a very high energy performance, as determined in accordance with the common general framework for the calculation of energy performance of buildings. 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.

S.I. No. 538 of 2017 came into operation on 1 January 2019.

2.2 S.I. No. 393 of 2021

European Union (Energy Performance of Buildings) Regulations 2021 (S.I. No. 393 of 2021) transpose Article 8 (1 in part, 2, 3 and 5), Article 14(4), and Article 15(4) of amending Directive 2018/844 of the European Parliament and of the Council on the energy performance of buildings.

Article 8(1) requires a new building, where technically and economically feasible, to be equipped with self-regulating devices for the separate regulation of the temperature in each room or, where justified, in a designated heated zone of the building unit. Where a heat generator is being replaced in an existing building, where technically and economically feasible, self-regulating devices shall also be installed.

Article 8(2) requires a building which has more than 10 car parking spaces, that is new, or undergoing major renovation, to have installed at least one recharging point and ducting infrastructure (consisting of conduits for electric cables) for at least one in every 5 car parking spaces to enable the subsequent installation of recharging points for electric vehicles.

The Regulations avail of the exemption for electric vehicle recharging infrastructure for small and medium-sized enterprises (SMEs) for eligible buildings set out in the Directive in order to minimise burden on enterprise. SMEs are defined as enterprises which employ fewer than 250 persons and which have an annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million.

Technical Guidance Document L (Conservation of Fuel and Energy) (TGD L) Buildings Other than Dwellings has been amended in order to provide guidance on how to comply with the requirements of the Regulations above. Appendix 1 of this document sets out the various versions of TGD L (Buildings Other than Dwellings) and when they apply.

3. Building Regulations - Part F & Technical Guidance Document F (Ventilation) 2019.

Part F of the Building Regulations have been amended by S.I. No. 263 of 2019 - Building Regulations (Part F Amendment) Regulations 2019 as a consequence of the changes to the energy performance standards for buildings set out in Sections 1 and 2 above.

The following updates have been made to Technical Guidance Document F:



- Updated Mechanical Ventilation guidance for air permeability $\leq 3 \text{ m}^3 /(\text{hr.m}^2)$;
- Additional section providing guidance for continuous mechanical extract ventilation;
- Introduction of validation of ventilation systems installation by a person certified by an independent third party to carry out this work, e.g. Irish National Accreditation Board (INAB), National Standards Authority of Ireland (NSAI) certified or equivalent;
- New examples for apartments;

S.I. No. 263 of 2019 came into operation on 1 November 2019.

4. Supplementary documents to Part L and Part F of the Building Regulations

4.1. Heating and Domestic Hot Water Systems for Dwellings – Achieving Compliance with Part L & Energy Performance of Buildings Regulations 2019.

The Heating and Domestic Hot Water Systems for Dwellings guide covers conventional means of providing primary and secondary space heating and domestic hot water for dwellings in Ireland.

The guide is the supporting document referred to in Technical Guidance Document L 2022 Paragraph 1.4.2.4. It provides guidance on the means of complying with the requirements of the Building Regulations for space heating systems and hot water systems and is underpinned by S.I. No. 183 of 2019 European Union (Energy Performance of Buildings) Regulations 2019.

The guide was prepared with the support of the Sustainable Energy Authority of Ireland (SEAI). This document may be accessed at the following link:

https://www.housing.gov.ie/sites/default/files/publications/files/heating_and_domestic_hot_water_systems_for_dwellings.pdf

4.2. Installation and commissioning of ventilation systems for dwellings – achieving compliance with Part F

This guide provides detailed guidance for persons installing fixed ventilation systems in new and existing dwellings to help them comply with installation and commissioning requirements of the Building Regulations. This guide is referenced in Technical Guidance Document F. It provides installation guidance for ventilation systems as defined by Technical Guidance Document F. This document may be accessed at the following link:

<https://www.gov.ie/en/publication/62f06-technical-guidance-document-f-ventilation/>



4.3. Acceptable Construction Details for compliance with Part L (Dwellings) of the Building Regulations

Updated Acceptable Construction Details (ACDs) have been published with a focus on thermal bridging and airtightness to take account of guidance previously provided for and current industry practice. They will help appropriate persons to achieve the performance standards in the Technical Guidance Document (TGD) L 2022 – Conservation of Fuel and Energy – Dwellings.

The 2021 edition of the ACDs updates drawings to take account of internal insulation, which was previously provided for in text of 2011 ACDs and some editorial updates. It does not change the thermal performance of the details from the 2011 edition.

The ACDs are presented in 2 Parts. Part 1 discusses the general theory of insulation continuity and airtightness in construction. Part 2, in seven separate sections, provides indicative detail drawings of thermal insulation and airtightness provisions for specific construction interfaces.

The 2021 ACDs are available at the following link:

<https://www.gov.ie/en/publication/d82ea-technical-guidance-document-l-conservation-of-fuel-and-energy-dwellings/#acceptable-construction-details>

5. Regulations in respect of Existing Buildings other than Dwellings not undergoing building works

European Union (Energy Performance of Buildings) Regulations 2021 (S.I. No. 393 of 2021) includes requirements of Article 8 (3), Article 14(4), and Article 15(4) of amending Directive 2018/844 of the European Parliament and of the Council on the energy performance of buildings, in respect of existing buildings other than dwellings, in addition to the provisions set out in section 2 of this circular.

Articles 14(4) and 15(4) require the installation of Building Automation and Control systems (BACs) in an existing non-residential buildings with heating, ventilation and air-conditioning systems, which have an effective rated output above a threshold of 290 kilowatts, by 31 December 2025, where it is technically and economically feasible.

Article 8(3) requires an existing non-residential building with more than 20 car parking spaces to install before 1 January 2025, one, or more, recharging points.

These requirements must be fulfilled for existing buildings (other than dwellings) even where the building is not undergoing building works, and will therefore require action to be taken in advance of the 2025 deadlines.

To provide guidance on how these requirements may be achieved in practice, a new technical guidance document was published: European Union (Energy Performance of Buildings) Regulations 2021 - Technical Guidance - (Energy Performance of Buildings Directive Articles



8(3), 14(4) and 15(4) - Electric Vehicle Recharging Points and Building Automation and Control) which is available at the following link:

<https://www.gov.ie/en/publication/83fdc-energy-performance-of-buildings-regulations-2021-technical-guidance/>

6. European Union (District Heating) Regulations 2022

S.I. No. 534/2022 - European Union (District Heating) Regulations 2022 transposes part of Article 15(4) of Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast), known as The Renewable Energy Directive. The regulations permit the Building Regulation minimum requirements for renewable energy in Nearly Zero Energy Buildings to be fulfilled through efficient district heating and cooling using a significant share of renewable energy and waste heat and cold.

General

While the transitional arrangements as appropriate are provided within each of the Regulations referred to above, the Appendix to this circular provides the transitional arrangements for the associated TGDs.

The Regulations referred to above are enforceable through the Building Control Act.

Further Information and Enquiries

Further enquires about this circular should be addressed to Ms. Margaret Power, Assistant Principal (Tel: 01 888 2363) or to Mr Colm Cahalan, Higher Executive Officer (Tel: 01 888 2386), or alternatively by e-mail to buildingstandards@housing.gov.ie

Yours sincerely,

A rectangular box containing a handwritten signature in blue ink that reads "Seán Armstrong".

Seán Armstrong

Senior Advisor

Climate Action Policy and Construction Industry Regulation





Appendix - Transitional arrangements for Regulations and Technical Guidance Documents

Technical Guidance Document L 2019 (Conservation of Fuel and Energy) Dwellings

In general, this document applies to works, or dwellings in which a material alteration or change of use or major renovation commences or takes place, as the case may be, on or after 1 November 2019. Insofar as the guidance contained therein relates to dwellings, Technical Guidance Document L - Conservation of Fuel and Energy –Dwellings 2011 (Amended 2017) ceases to have effect from 31 October 2019.

However, the foregoing document may continue to be used in the case of dwellings:

- where the works, material alteration, change of use or major renovation commences or takes place, as the case may be, on or before 31 October 2019, or

- where:

a) planning approval or permission has been applied for on or before 31 October 2019 and substantial work has been completed by 31 October 2020 or;

b) a notice pursuant to the provisions of Part 8 of the Planning and Development Regulations 2001 (S.I. No. 600 of 2001) has been published on or before 31 October 2019 and where substantial work has been completed by 31 October 2020. “Substantial work has been completed” means that the structure of the external walls of the dwelling has been erected.

Technical Guidance Document L 2021 (Conservation of Fuel and Energy) Dwellings

In general, this document applies to works, or dwellings in which a material alteration or change of use or major renovation commences or takes place, as the case may be, on or after 27 July 2021. Insofar as the guidance contained therein relates to dwellings, Technical Guidance Document L 2019 Conservation of Fuel and Energy – Dwellings ceases to have effect from 26 July 2021. However, the requirement set out in Regulation 5(f) shall not apply to a building where the submission of a notice has been made in respect of the building work concerned on or before 10 March 2021. Where the submission of a notice has been made on or after 11 March 2021 then the requirements of Regulation 5(f) apply.

Technical Guidance Document L 2022 (Conservation of Fuel and Energy) Dwellings

In general, this document applies to works, or dwellings in which a material alteration or change of use or major renovation commences or takes place, as the case may be, on or after 25 October 2022. Insofar as the guidance contained therein relates to dwellings, Technical Guidance Document L 2019 Conservation of Fuel and Energy –Dwellings ceases to have effect from 25 October 2022.

The European Union (District Heating) Regulations 2022 (S.I. No. 534 of 2022) applies from 25 October 2022. Paragraphs 1.2.11-1.2.15 of this document provide guidance for these regulations.



However, the Building Regulations (Part L Amendment) Regulations 2022 (S.I. No. 535 of 2022) apply to dwellings where the relevant works or major renovation commences or takes place, as the case may be, on or after 1 November 2022. Paragraphs 1.4.6 and 2.3.9 of this document provide guidance for these regulations.

Technical Guidance Document L 2017 (Conservation of Fuel and Energy) Buildings Other than Dwellings

In general, this document applies to works, or buildings in which a material alteration or change of use or major renovation commences or takes place, as the case may be, on or after 1 January 2019. Technical Guidance Document L - Conservation of Fuel and Energy (2008 edition) ceases to have effect from 31 December 2018. However, these documents may continue to be used in the case of buildings:

- where the work, material alteration or the change of use commences or takes place, as the case may be, on or before 31 December 2018, or
- where planning approval or permission for buildings has been applied for on or before 31 December 2018, and substantial work has been completed by 1 January 2020.

“Substantial work has been completed” means that the structure of the external walls has been erected.

Technical Guidance Document L 2021 (Conservation of Fuel and Energy) Buildings Other than Dwellings

In general, this document applies to works, or buildings in which a material alteration or change of use or major renovation takes place, where the work, material alteration or the change of use commences or takes place, as the case may be, on or after 27 July 2021. Technical Guidance Document L - Conservation of Fuel and Energy (2017 edition) ceases to have effect from 26 July 2021. However, the requirement set out in Regulation 5(e) of S.I. No. 393 of 2021 shall not apply to a building:

- where the submission of a notice has been made in respect of the building work concerned on or before 10 March 2021, or
- that is owned and occupied by, as the case may be, a small or medium-sized enterprise.

Technical Guidance Document L 2022 (Conservation of Fuel and Energy) Buildings Other than Dwellings



In general, this document applies to works, or buildings in which a material alteration or change of use or major renovation takes place, where the work, material alteration or the change of use commences or takes place, as the case may be, on or after 25 October 2022.

Technical Guidance Document L - Conservation of Fuel and Energy (2021 edition) ceases to have effect from 25 October 2022.

However, the requirement set out in Regulation 5(e) of S.I. No. 393 of 2021 does not apply to a building that is owned and occupied by, as the case may be, a small or medium-sized enterprise.

The European Union (District Heating) Regulations 2022 (S.I. No. 534 of 2022) applies from 25 October 2022. Paragraphs 1.2.10-1.2.13 of this document provide guidance for these regulations.

Technical Guidance Document F (Ventilation) 2019

These Regulations apply to works, to a building in which a material change of use takes place or to a building which undergoes a major renovation, where the relevant works, change of use or major renovation commence or take place, as the case may be, on or after 1st November 2019 except where –

- (a) a planning application is made on or before 31st October 2019 for planning permission or approval pursuant to the Planning and Development Act 2000 (No. 30 of 2000) and where substantial work has been completed by 31st October 2020; or
- (b) a notice pursuant to the provisions of Part 8 of the Planning and Development Regulations 2001 (S.I. No. 600 of 2001) has been published on or before 31st October 2019 and where substantial work has been completed by 31st October 2020.

All Technical Guidance Documents may be viewed or downloaded at the following link:

<https://www.gov.ie/en/collection/d9729-technical-guidance-documents/>