



December 2020

31 Building Control Authorities Promoting a Culture of Compliance with the Building Regulations

The CCMA/NBCMP "Framework for Building Control Authorities V1.1 2016"

provides guidance for Building Control Authorities (BCAs) with regard to their roles and functions administering and monitoring compliance with:

- Building Control Act 1990-2014
- Building Control Regulations
- Building Regulations
- S11 Inspections;
- S11 Information requests
- Section 8 Enforcement
- Section 17 prosecutions
- [Statutory Building Register](#).

BCAs are the designated enforcement authorities for:

- Market Surveillance and EU (Construction Products Regulations (SI No. 225 of 2013);
- Building Energy Rating Certificates EU (Energy Performance of Buildings) Regulations (SI No. 243 of 2012);
- Registration of multi-storey -LG (Multi-storey Buildings) Act 1988.



Donegal Building Control Officer, Donna Butler inspecting to ensure compliant buildings.

NBCMP Team

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DUBLIN 2
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National Building Control Office **P.1**

Compliance Support, Part B & Brexit **P.2**

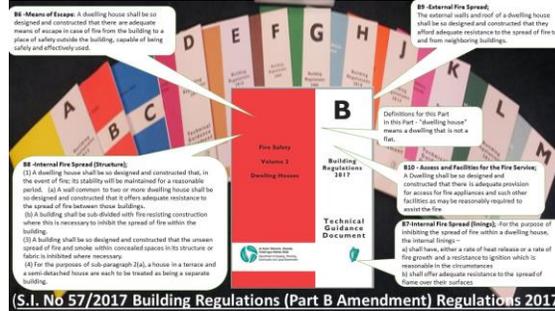
IS-BCMS, Activity **P.3**

Market Surveillance & Climate Action **P.3**

Education & Training **P.4**

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Buildings Regulations and Building Control.



Regulations (Building Regulations) are made for the health, safety and welfare of people in or about buildings Part B Fire- buildings must have a fire detection and alarm systems a safe place of refuge for people to escape, walls with resistance to fire spread and access for fire brigade. Multi-units should have fire doors which must be kept closed and a fire should be contained in a room or the unit where it started for a specified period to allow people to escape.

FIRE SAFETY – Volume 2 , (S.I. No 57/2017 Building Regulations (Part B Amendment) Regulations 2017) Technical Guidance Document B – Dwelling Houses addresses fire safety precautions which must be adhered to, to ensure the safety and escape of occupants, firefighters and those close to the building in the event of a fire.

The **Building Regulations 1997 – 2019** set out the minimum legal requirements to be complied with to ensure the health, safety and welfare of people in and about buildings. The **Building Control Act 1990 - 2014** places a statutory obligation on owners, designers and builders to design and build in accordance with the requirements of the Building Regulations. The **adoption of the Eurocodes** as the appropriate suite of standards for the structural design of buildings/ structural elements inherently means that the fire performance of such works must be demonstrated using **European test standards (EN)**. Where buildings are designed in accordance with the Eurocodes and are required by **Part B of the Building Regulations to have a fire performance then this fire performance, specified under TGD B, 2017 must be demonstrated in accordance with the European test methods.**

Mairéad Phelan

PART B- DWELLING'S COMPLIANCE REQUIREMENTS:

B6 -Means of Escape: A dwelling house shall be so designed and constructed that there are adequate means of escape in case of fire from the building to a place of safety outside the building, capable of being safely and effectively used.

B7-Internal Fire Spread (linings); -For the purpose of inhibiting the spread of fire within a dwelling house, the internal linings –
a) shall have, either a rate of heat release or a rate of fire growth and a resistance to ignition which is reasonable in the circumstances
b) shall offer adequate resistance to the spread of flame over their surfaces

B8 -Internal Fire Spread (Structure);
(1) A dwelling house shall be so designed and constructed that, in the event of fire; its stability will be maintained for a reasonable period. (a) A wall common to two or more dwelling house shall be so designed and constructed that it offers adequate resistance to the spread of fire between those buildings.
(b) A building shall be sub-divided with fire resisting construction where this is necessary to inhibit the spread of fire within the building.

(3) A building shall be so designed and constructed that the unseen spread of fire and smoke within concealed spaces in its structure or fabric is inhibited where necessary.
(4) For the purposes of sub-paragraph 2(a), a house in a terrace and a semi-detached house are each to be treated as being a separate building.

B9 -External Fire Spread;
The external walls and roof of a dwelling house shall be so designed and constructed that they afford adequate resistance to the spread of fire to and from neighboring buildings.
B10 - Access and Facilities for the Fire Service;
A Dwelling shall be so designed and constructed that there is adequate provision for access for fire appliances and such other facilities as may be reasonably required to assist the fire
Definitions for this Part
in this Part - "dwelling house" means a dwelling that is not a flat.

Supplementary Guidance to TGD B (Fire Safety) Volume 2 - Dwelling Houses 2017

TGD B – Part B – Fire Safety 2017

Guidance on Fire Resistance of Walls, Intermediate floors and Trussed Roofs in Dwellings

Introduction

The adoption of the Eurocodes as the appropriate suite of standards for the structural design of buildings/ structural elements inherently means that the fire performance of such works must be demonstrated using European test standards (EN).

Where buildings are designed in accordance with the Eurocodes and are required by Part B of the Building Regulations to have a fire performance then this fire performance, specified under TGD B, 2017 must be demonstrated in accordance with the European test methods.

Purpose

The purpose of this supplementary guidance document is to support compliance with the fire resistance provisions as specified in Technical Guidance Document B Volume 2 - Dwelling houses (TGD B - Fire Safety Volume - 2 Dwelling houses 2017).

Fire Resistance

There is often confusion between Fire Resistance and Reaction to Fire. Fire resistance is the measurement of the ability of a material or system to resist, and ideally prevent, the passage of fire from one distinct area to another. Reaction to fire is the measurement of how a material or system will contribute to the fire development and spread. While individual products used in construction e.g. plasterboard, timber, steel, aluminum, etc. will have a "Reaction to Fire" designation based on various tests carried out, this does not mean that the construction has a fire resistance.

Constructions requiring fire resistance must be considered against various criteria in relation to their fire resistance for standard fire exposure. These are: R – mechanical resistance i.e. an ability to maintain loadbearing capacity, E – integrity i.e. an ability to maintain the integrity of the structure, I – insulation i.e. an ability to provide insulation from high temperatures. Therefore, the fire resistance of any construction is a result of the combination of the materials used, including their thickness, spacing and fixing of the materials (see Appendix A), together with the workmanship employed during assembly. In order to claim a specific fire resistance for a load bearing construction, it must be proven by test to the European test method, EN 1365 (series) Fire resistance tests for load bearing elements https://www.housing.gov.ie/sites/default/files/publications/files/supplementary_guidance_to_tgd_b_fire_safety_volume_2_-_dwellings_houses_final_-_copy.pdf

Donegal County Council Team-Promoting a Culture of Compliance - P Mullen, D Butler Building Control



TGD A – Structures (2012)

Floor Joists for Dwellings –Metal web joist.

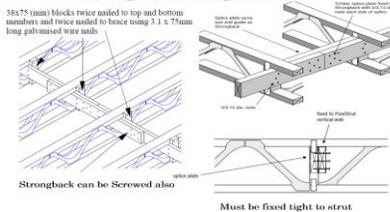


StrongBack are required to minimise Damping (i.e. Reduce vibrations and Deflection of the Floor).

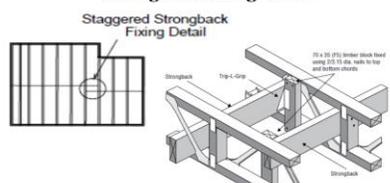


Strongback required were Span Greater than 4.0 Metres (or were specified by the Metal Joist manufacture).

Strongback Fixing Detail



Strongback Fixing Detail



Things to Check:

- The Joists are correct way up.
- The strongback is fixed correctly.
- The Lateral Restraints are installed as per the building designer requirements and in accordance with Part A.
- Multiply Joist (2 or 3 Ply Joist are Fixed as per Manufactures design)
- Fire Requirements, noggings, Plaster board Type, thickness, fixing.
- Floorboard Thickness, Board Edge Support.
- Fire Stopping of penetrations through floor assembly

Meath County Council Team-Promoting a Culture of Compliance

John Sweeney Building Control Officer with NBCO Éanna Ó Conghaile



Click below to go to NSAI website

[Webinar Series | NSAI](#)

[How your Supply Chain could be impacted by Brexit](#) With Mary White, NSAI and Neil McDonnell, ISME; [Brexit Readiness for the Construction Sector](#) With Michael Smith, NSAI and John Wickham, Department of Housing; [CE Marking Products post-Brexit](#) With Mary White, NSAI and Marcella Rudden, Local Enterprise Offices. [Brexit Readiness Action Plan](#) gov.ie

The Brexit Readiness Action Plan sets out the steps that businesses and individuals need to take now, to be ready for the end of the Transition Period on 31 December 2020.

Stakeholders should be aware of the implications, and be ready for the changes, which will arise regardless of the outcome of negotiations between the EU and the UK. There is no room or time for complacency.

1. manufacturers, distributors, importers and authorised representatives must comply with their obligations and responsibilities under Regulation (EU) 305/2011 when placing a construction product on the EU market. (i.e. **either** • arrange for a transfer of their files and the corresponding certificates from the UK 'notified body' (a 'notified body' registered in the UK) to an EU-27 'notified body', **or** • apply for a new certificate with an EU-27 'notified body'; on/or before the end of the transition period on 31st December 2020.)
2. both authorised representatives and importers must be established in the EU-27.
3. UK Notified Bodies will lose their status as EU Notified bodies the end of the transition period.
4. the UK Accreditation Service will cease to be a national accreditation body within the meaning and for the purposes of Regulation No 765/2008

For Northern Ireland to Protocol on Ireland/Ni (Article 185 of the Withdrawal Agreement). Builders, specifiers, designers, certifiers etc., should ensure that the CE Marking/ Declaration of Performance and relevant product-related documentation is appropriate to demonstrate and ensure compliance with the Building Regulations. <https://www.housing.gov.ie/housing/building-standards/construction-products-regulation/construction-products-regulation>

CORK BUILDING CONTROL MARTIN RYAN PROMOTING COMPLIANCE THROUGH INSPECTIONS



LOUTH BUILDING CONTROL AND FIRE EAMONN WOLFE & CONOR KING PROMOTING COMPLIANCE THROUGH INSPECTIONS



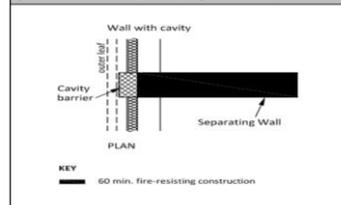
TGD B – Fire Safety Vol. 2 Dwelling Houses 2017 Cavity Barriers



3.6.2 Provision of Cavity Barriers

Cavity barriers should be provided in accordance with the following: (a) At the top of an external cavity wall (masonry or framed construction) including any gable wall. (b) Vertically at the junction of separating wall and any such wall with an external cavity wall (see Diagram 12). (c) Above the enclosures to a protected stairway (see Diagram 11). (d) Around all openings (windows, doors, vents, service boxes etc.) in framed construction.

Diagram 12 Vertical cavity barrier at junction of separating wall Par. 3.6.2.



Non – Compliant Examples



Construction Activity to end of October 2020

Commencement Notice Type- from 1 st January 2020	End Aug. 2020	End of Sep. 2020	End Oct. 2020
Commencement Notice with Opt Out Declaration	3983	4652	5,233
Commencement Notice Without Compliance Documentation	1372	1638	1,905
7 Day Notice	460	535	627
Commencement Notice with Compliance Documentation	1993	2310	2,596
Total Commencement Notices All types	7808	9135	10,361
CRM stakeholder cases/queries - closed- i.e. phone, info@localgov.ie	3217- Closed	3772 - Closed	4318 - Closed
From Inception (2014)	End Aug. 2020	End of Sep. 2020	End Oct. 2020
Customers-Registered users	123,426	124,889	126,174
Compliance Documents	1,556,591	1,591,173	1,628,271
Certificate of Compliance of Completion	27,024	27,570	28,180
Application Type- Valid/Invalid - from 1 st January 2020	End Aug. 2020	End of Sep. 2020	End Oct. 2020
Fire Safety Certificates FSC, FSC-RV, FSC-RG	86	67	137
Disability Access Certificates DAC, DAC-RV	67	27	87
Dispensation / Relaxation	3	1	3
Application Type- RI/FI/TA	End Aug. 2020	End of Sep. 2020	End Oct. 2020
Fire Safety Certificates FSC, FSC-RV, FSC-RG	27	46	79
Disability Access Certificates DAC, DAC-RV	12	13	21
Dispensation / Relaxation	0	1	1
Application Type- Granted/Refused/Granted with Conditions/Recommended	End Aug. 2020	End of Sep. 2020	End Oct. 2020
Fire Safety Certificates FSC, FSC-RV, FSC-RG	41	268	322
Disability Access Certificates DAC, DAC-RV	38	214	264
Dispensation / Relaxation	2	15	15
Total Application All Types	276	652	929



How to Comply with Building Regulations in the context of Photovoltaic (PV) Systems & Green Roofs with regards to Climate Action Policy.

Local Authorities are promoting Climate Action Policy (Article 44 for Built Environment) with designers using Green roof to meet the requirement of Sustainable Urban Drainage Systems (SuDS) where water infiltrates at a slower rate to the drainage system and ultimately to water courses. A green roof is a layer of vegetation planted over a waterproofing system that is installed on top of a flat or gently sloping roof. (Note roof should be C4 compliance with Building Regulations).

Green roofs can give a wide range of benefits including surface water management, urban cooling and combating the urban heat island effect, biodiversity, air quality, health and wellbeing, noise reduction, and potential for carbon sequestration. Green Roofs also provide excellent pollutant removal ability which is circa 70-90% for heavy metals and suspended solids. The installation of PV Systems directly above a green roof containing vegetation could result in a fire or fire spread if not considered by designers at design stage and the vegetation may be combustible depending on weather conditions.

The green roof may meet the requirements of B4 of the Building Regulations (i.e. due to space separation in accordance with Table 4.3 Part B 2006). A Fire risk assessment should be undertaken to ensure that PV system does not create a fire risk to the building or adjoining building. The roof must have adequate resistance to the external spread of fire as required by Part B4 of the Building Regulations. The roof covering or decking under the Photovoltaic system arrays shall be of non-combustible materials (such as pavers or pebbles or other proprietary fire-retardant products) and shall include a fire break between the arrays and any green roof, if provided, to reduce the likelihood of fire spread from the PV installation to the roof insulation or vegetation if such a fault occurs.

Shane Harding Executive Engineer Fingal County Council



BCMS building activity data is accessed and used in over 20 countries daily 365/24/7. The Public, Media, CSO, Business, Government, Development and Investment Agencies; Professions, Banks, etc. use this information. The NBCO has developed with the aid of a DPER Innovation grant a transparent data sharing tool of building commencement and completion data i.e. the NBCO Open Data Portal in line with the eGovernment Strategy. Further datasets from Fire Safety/Disability Access Certificates; Relaxations and Dispensations & Enforcement will be added.



Dermot Brannigan Fire & Building Control Monaghan County Council promoting compliance through training (Above)

Dublin City Council Building Control - checking construction products @ Dublin Port with Customs (Below)



Market Surveillance

European Union (Construction Products) Regulations 2013 (S.I. No.225 of 2013 (link is external) provides for the establishment of Building Control Authorities as the Market Surveillance Authorities for construction products; who with Revenue/Customs have enforcement powers for dealing with counterfeit or fraudulent construction products. Construction works as a whole and in their separate parts must be fit for their intended use, taking into account the health and safety of persons involved throughout the life cycle of the works. Subject to normal maintenance, construction works (i.e. dwellings) must satisfy these basic requirements for an economically reasonable working life of 50-60 years. For Brexit readiness the NBCO are taking on a National Market Surveillance Role to support the sector and the 31 Building Control Authorities.



TGD F – Part F - Ventilation 2019

Ventilation Testing Requirements

Date 01st November 2020



Note: From the 1st November 2020, all new dwellings commencing construction must be designed in accordance with the Requirements of Part F 2019. The transitional arrangements of Part F 2019 regulations of the building regulations allowed dwellings which applied for planning permissions before Nov 2019 to use the old 2009 Part F, but only if the dwelling got to wallplate by November 2020.

TGD F - The Requirement¹

Means of Ventilation F1

T Adequate and effective means of ventilation shall be provided for people in buildings. This shall be achieved by:
(a) limiting the moisture content of the air within the building so that it does not contribute to condensation and mould growth, and
(b) limiting the concentration of harmful pollutants in the air within the building.

Section 1 - Mean of Ventilation

1.2.1.10 Ventilation systems should be designed by competent designers. Systems should be installed, balanced and commissioned by competent installers e.g. Quality and Qualifications Ireland accredited or Education Training Board or equivalent. Systems, when commissioned and balanced, should then be validated by a competent person to ensure that they achieve the design flow rates. **The validation should be carried out 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. *Detailed information on the installation and commissioning of ventilation systems is provided in Installation and Commissioning of Ventilation Systems for Dwellings Achieving Compliance with Part F*

Guidance is given in I.S. EN 14134: 2019: Ventilation for buildings – Performance testing and installation checks of residential ventilation systems. The **Tester Register** is operated by The National Standard Authority of Ireland **NSAI**.
<https://www.nsa.ie/certification/agreement-certification/ventilation-validation-registration>

Riailtas na hÉireann
Government of Ireland

Installation and Commissioning of Ventilation Systems for Dwellings - Achieving Compliance with Part F 2019

Prepared by the Department of Housing, Planning and Local Government
Housing.gov.ie

Installation and Commissioning of Ventilation Systems for Dwellings Achieving Compliance with Part F.

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

There are three types of ventilation system outlined in the Building Regulations:

- Centralized Continuous Mechanical Extract Ventilation
- Centralized Mechanical Ventilation with Heat Recovery
- Natural Ventilation

See Section 4 of the NSAI "Ventilation Validation Registration Scheme Master Document" for further guidance.

All measuring instruments need to present a valid annual calibration certificate annually.

The Tester will need to pass an air flow proficiency test (clause 8.3) of the NSAI "Ventilation Validation Registration Scheme Master Document".

- The Tester will need to demonstrate that they can correctly configure the dwelling prior to measuring the flow rate in the ventilation system.
- The Tester retains adequate documentary evidence when carrying out a validation check.
- The Tester must issue third party "Ventilation validation Certificates".

Further information and examples are available in the NSAI "Ventilation Validation Registration Scheme Master Document".

https://www.nsa.ie/images/uploads/general/D-IAB-009_Ventilation_Validation_Reg_Scheme_Master_Doc_Rev_1.pdf

Education & Training

IT Carlow- LEVEL 7 CERTIFICATE IN BUILDING CONTROL MANAGEMENT

@itcarlow 98 students graduating academic year 2019/2020, 76 students commenced in September for academic year 2020/21.

<https://www.itcarlow.ie/study/lifelong-learning/extended-campus/extended-campus-application-form.htm>



Galway County Council (Above) Kevin Mulrennan and Galway City Council (Below) Raymond O Reilly, promoting compliance through visibility on sites



National Building Control Office, 3 Palace Street, 31 Building Control Authorities working together to "Promote a Culture of Compliance with the Building Regulations"



TGD A – Structures (2012)

Floor Joists for Dwellings – Lateral Restraints for Metal web joist.

Locations of Lateral Restraints by Building Designer (Note: This is not covered by the Metal Web Joist Designer)

1.1.3.24 Walls should be strapped to floors at first floor level at intervals not exceeding 2000 mm as shown in Diagram 6 (a) and (b) by 30mm x 5 mm galvanised mild steel or stainless steel tension straps which have a minimum 30 mm x 5 mm section conforming to I.S. EN 845-1. For corrosion resistance purposes, the tension steel straps should be material reference 14, 16.1 or 16.2 (galvanised steel) or other more resistant specifications including reference 1 or 3 (austenitic stainless steel). The declared tensile strength of tension straps should not be less than 8kN.

Straps need not be provided -

- (a) in the longitudinal direction of joists, if the joists are at not more than 800 mm centres and have at least
 - (i) 90 mm bearing on the supported walls, or
 - (ii) 75 mm bearing on a timber wall plate at each end,
- (b) in the longitudinal direction of joists where the joists are carried on the supported wall by joist hangers in accordance with I.S. EN 845-1 of the restraint type shown in Diagram 6 (c), at not more than 800 mm centres,
- (c) where floors are at or about the same level on each side of a supported wall as shown in **Diagram 6**
- (d) and contact between floors and wall is either continuous or at intervals not exceeding 2000 mm. Where contact is intermittent, the point of contact should be in line or nearly in line on plan.

(Note: Metal web Joists have specific details and guidance on Lateral Restraints– Always refer to manufactures design guidance)

