



Circular Letter BC 03/2018

1st February 2018

Re: Fire Safety Issues

To: All Building Control Authorities, Fire Safety Cert. Assessors.

The Building Regulations 1997 - 2017 set out the minimum legal requirements that must be complied with to ensure the 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 works or buildings in accordance with the requirements of the Building Regulations.

In this regard, I write in relation to:

- the fire resistance of external and separating walls in timber framed construction and
- wall constructions with cavities.

External and Separating Timber Frame Walls

External Walls

External walls are being designed to achieve lower U-values and give greater air tightness than previous practice. This has resulted in some timber frame walls being constructed using internal insulation or in some cases thicker studs with service voids with or without internal insulation.

In constructions where the internal plasterboard slabs are not fixed directly to the timber frame stud, i.e. where insulation is fitted on the face of the stud, then the construction is not in compliance with I.S. 440:2009 *Timber Frame Construction, Dwellings and Other Buildings* and cannot be assumed as having a given fire resistance.

Fire tests on generic external wall constructions have been commissioned by the Timber Frame Industry in conjunction with the Irish Timber Frame Manufacturers association and carried out in accredited laboratories in accordance with the appropriate European Test method, EN 1365 (series) *Fire resistance tests for load bearing elements*. Constructions which have met the required fire resistance for external walls and separating (party) walls by fire test are detailed in the attached guidance – Appendix 1.

Where constructions that are not in line with the details in the attached guidance are observed /proposed, proof should be requested to show that the walls as proposed/ constructed meet the requirements of the Building Regulations. Such proof should be in the form of fire test certification in accordance with the European test method carried out by an accredited laboratory.

Separating (Party) Walls

In order to improve compliance with the fire requirements of party walls, it has been agreed, in consultation with industry, that the plasterboard build-up of party walls should be carried out in the factory (rather than on-site) before wrapping and transporting to site. In this way, the factory production control process should ensure the proper construction and fixing. Jointing strips may be fixed on site where butt joints (horizontal or vertical) occur.

I.S. 440 is currently under review, and it is intended that both the external and party wall constructions and methods referred to above will be included in the next revision of the document.

Building control officers and fire officers assessing Fire Safety Certificate applications should confirm the construction of the walls of the building where the construction is timber frame.

Wall constructions with Cavities

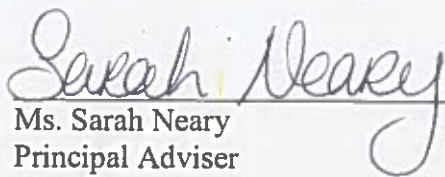
In the interest of clarity, cavity barriers are required in all dwelling houses in accordance with TGD B V2 2017 and in all wall constructions containing a cavity unless the wall construction complies with Diagram 17 of TGD B 2006 for other buildings.

Where cavity barriers are installed they should be installed in accordance with section 3.3 and Diagram 16 of TGD B 2006 in the case of buildings other than dwelling houses and section 3.6 of TGD B V2 2017 for dwelling houses.

It should be noted that the installation should be such that the barrier is not made ineffective by "*failure in a fire of any material or construction which they abut*"¹. Thus materials to which they abut should be of a consistency that maintains the effectiveness of the barrier for the time required. Available evidence would suggest that non-combustible materials or materials of limited combustibility (see Table A7 or A8 of TGD B 2006) may be suitable for this application. Other materials where it is shown by test to give adequate performance may be acceptable.

Further enquires about this circular should be addressed to Mr. Colm Cahalan, Higher Executive Officer {Tel: (01) 888 2386} or Ms. Claire Darragh, Executive Officer {Tel: (01) 888 2893} or by emailing buildingstandards@housing.gov.ie

Yours sincerely,



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To: Director of Services for Building Control
Building Control Officers
Chief Fire Officers

¹ See 3.3.4(d) of TGD B 2006 and /or 3.6.3 (c) of TGD B Volume 2 2017