

## **NBCMP** National Building Control Management Project

# TGD B – Fire Safety Vol. 2 Dwelling Houses 2017

### **Photovoltaic Panels on Dwellings**

Date 25<sup>th</sup> February 2020



#### TGD B - The Requirement<sup>i</sup>

#### **External fire spread. B9**

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 neighbouring buildings.

#### Access and facilities for the fire service. B10

A dwelling house 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 service in the protection of life and property.

#### Section 4

External fire spread.

#### 4.6.4 Separation Distances

The separation distance is the minimum distance from the roof (or part of the roof) in question to the nearest boundary, which may be a notional boundary.

Table 4.3 sets out separation distances according to the type of roof covering and the size and use of the building. However, there are no restrictions on the use of roof coverings designated class  $B_{ROOF}(t4)$  (European class) or AA, AB or AC (National class).

(The Photovoltaic panels should have a designated class)

Table 4.3 Limitations on roof coverings*					Par. 4.6
Designation of covering of roof, or part of roof		Minimum distance from any point on relevant boundary			
European	National	Less than	At least	At least	At least
Class	Class	6 m	6 m	12 m	20 m
$B_{ROOF}(t4)$	AA, AB or AC	~	~	~	~
$C_{ROOF}(t4)$	BA, BB or BC	x	✓	~	✓
D <sub>ROOF</sub> (t4)	CA, CB or CC	x	<b>√</b> (1)	<b>√</b> (2)	✓
$E_{ROOF}(t4)$	AD, BD or CD	×	<b>√</b> (1)	✓(2)	<b>√</b> (2)
F <sub>ROOF</sub> (t4)	DA, DB, DC or DD	×	×	×	✓(1)
	thatch or wood shingles (3)	×	<b>√</b> (1)	✓(2)	<b>√</b> (2)

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#### Section 5 Access and facilities for the fire service 5.4.5 Requirements for switches

**5.4.5.1 Photovoltaic Panels.** *"Where Photovoltaic (P.V.) panels are provided on buildings, provision should be made for the isolation of the panel array externally and in accordance with ET101, 2008".* 

Additional Guidance can be found in SEAI "<u>DOMESTIC SOLAR PHOTOVOLTAIC CODE OF PRACTICE</u> <u>FOR INSTALLERS</u>" Version 1.2 (March 2019), and **Section 4.7** Emergency Isolation - shows how to comply with Section 5.4.5.1 **Photovoltaic Panels** of TGD B.

**Also:** Photovoltaic Panels with a "IRISH AGRÉMENT BOARD CERTIFICATE" have been assessed to show compliance with the Building Regulations 1997 to 2017.

(Subject to The Building Regulations 1997 to 2017 and any other regulation or standard applicable to the product/process, its use or installation remains unchanged)

(Photovoltaic Panels should comply with Part A, Part B, Part C, Part D and Part L of the Building Regulations)

ET101, 2008 is currently under review, and should be published later this year. (*Standard I.S. 10101:20xx*)

https://www.seai.ie/publications/Code-of-Practice-Solar-PV-Grant.pdf

<sup>1</sup> Means of warning and escape in case of fire. B6 A dwelling house shall be so designed and constructed that there are appropriate provisions for the early warning of fire and there are adequate means of escape in case of fire from the dwelling house to a place of safety outside the building, capable of being safely and effectively used.

*Internal fire spread (linings).* **B7** 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; and
- (b) shall offer adequate resistance to the spread of flame over their surfaces.

#### Internal fire spread (structure). B8

(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.

(2) (a) A wall common to a dwelling house and to one or more adjoining buildings shall be so designed and constructed that it offers adequate resistance to the spread of fire between those buildings.

(b) A dwelling house shall be sub-divided with fire resisting construction where this is necessary to inhibit the spread of fire within the dwelling house.

(3) A dwelling house 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 dwelling house in a terrace and a semi-detached dwelling house are each to be treated as being a separate building.

**External fire spread.** *B9* 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 neighbouring buildings.

**Access and facilities for the fire service. B10** A dwelling house 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 service in the protection of life and property.

Definitions for this Part. B11 In this Part -a "dwelling house" means a dwelling that is not a flat.

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