



Tipperary Fire & Rescue Service



Review of TGD B Vol. 2
2017 & Supp. Guidance

TECHNICAL ADVICE

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Assistant Chief Fire Officer



Fire Resistance EN 1365 (berlin)
 Ability to withstand or contain a fire and still function:
 1. mechanical resistance i.e. an ability to maintain loadbearing capacity,
 2. integrity i.e. an ability to maintain the integrity of the structure,
 3. insulation i.e. an ability to provide insulation from high temperatures

Reaction to Fire (EN 13501-1)
 Materials construction is fire:
 All products, excluding fireproofing, are classified as A1, A2, E, C, D, E or F with class A1 being the highest performance and F being the lowest i.e. A1 - it does not fuel the combustion but the fire
 F - does not meet the criteria and products concerned



Consolidated Guidance on Fire Safety Provisions to Dwelling House Types

Incorporating guidance from:
 Technical Guidance Document B (Fire Safety) Volume 2 Dwelling Houses 2017
 and
 Supplementary Guidance to TGD B (Fire Safety) Volume 2 - Dwelling Houses

Notes:
 This diagrammatic guidance document has been prepared together to assist owners, builders and designers with regards to the early provisions in the 3 most common dwelling house types:

- Bungalow - Page 2
- Dormer Bungalow - Page 3
- Two Storey - Page 4
- Dormer Two Storey - Page 5
- Three Storey - Page 6

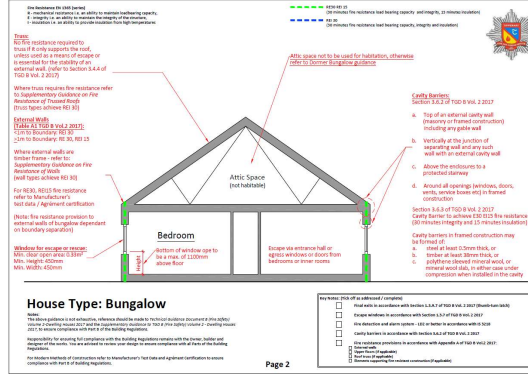
The guidance within this document is not exhaustive, reference should be made to Technical Guidance Document B (Fire Safety) Volume 2 - Dwelling Houses 2017 and the Supplementary Guidance to TGD B (Fire Safety) Volume 2 - Dwelling Houses 2017 to ensure full compliance with Part 6 of the Building Regulations.

Responsibility for ensuring full compliance with the Building Regulations remains with the Owner, builder and designer of the works. You are advised to review your designs to ensure compliance with Part 6 of the Building Regulations.

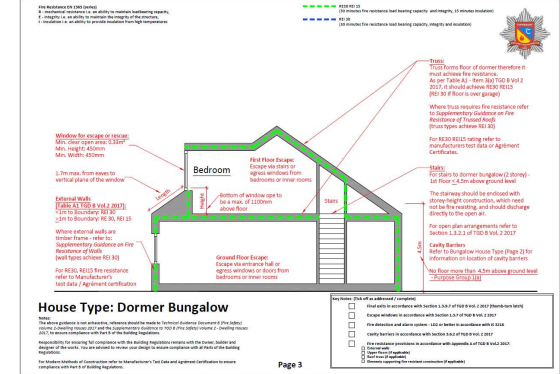
For Modern Methods of Construction refer to Manufacturer's Test Data and Approval Certifications to ensure compliance with Part 6 of Building Regulations.

Page 1

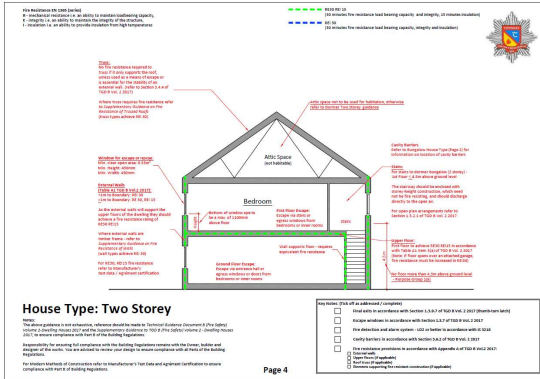
- Common Non-Compliances Found during Building Control Inspections of Dwellings with Regards to Part 6:**
- Installation of smoke alarms on all habitable rooms (TGD B 2017 - Section 3.8.6)
 - Use of optical smoke detectors on ground floor (TGD B 2017 - Section 3.8.6.3)
 - Correct location of detectors from other features (300mm) (TGD B 2017 - Section 3.8.6.3)
 - Height of escape windows / ventilators (TGD B 2017 - Section 3.7.1.1)
 - Fire stopping at top of party walls (non. page 6 of 10mm) (TGD B 2017 - Diagram 10)
 - Spacing of screw fixings to plasterboard on framed construction (refer to manufacturer's test data)
 - Fire resistance provisions to upper floors (refer to manufacturer's test data)
 - Fire stopping to openings in floors with open voids (metal web) (refer to manufacturer's test data)
 - Presence of cavity barriers (TGD B 2017 - Section 3.9.1)
 - Provision of simple handrails to final exits (stairwatches) (TGD B 2017 - Section 3.9.1)
 - Fitment of fire doors (hinges, seals, self-closer) (refer to manufacturer's test data)
 - Isolation switches for PV arrays (TGD B 2017 - Section 3.4.3.1)
- The above list is not exhaustive, reference should be made to Technical Guidance Document B (Fire Safety) Volume 2 - Dwelling Houses 2017 and the Supplementary Guidance to TGD B (Fire Safety) Volume 2 - Dwelling Houses 2017, to ensure full compliance with Part 6 of the building regulations.



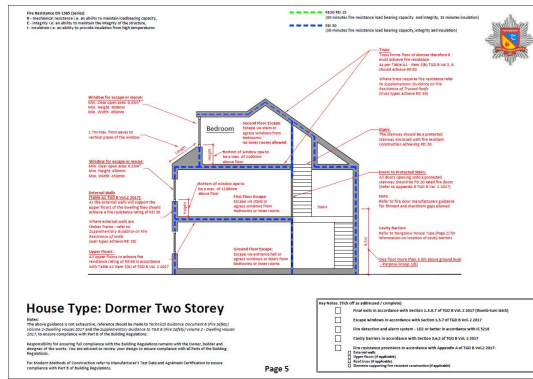
Bungalow



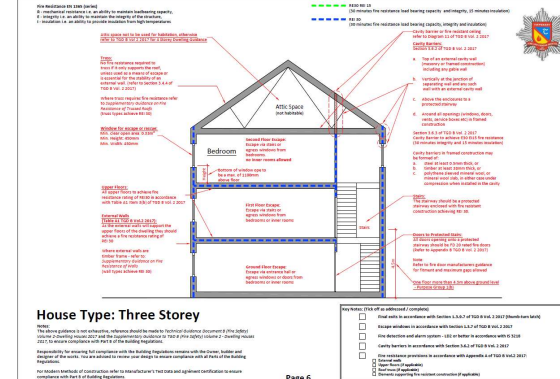
Dormer Bungalow



Two Storey



Dormer Two Storey



Three Storey



Fire Resistance EN 1365 (series)

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

RE30 REI 15
(30 minutes fire resistance load bearing capacity and integrity, 15 minutes insulation)
REI 30
(30 minutes fire resistance load bearing capacity, integrity and insulation)



Truss:

No fire resistance required to truss if it only supports the roof, unless used as a means of escape or is essential for the stability of an external wall. (refer to Section 3.4.4 of TGD B Vol. 2 2017)

Where truss requires fire resistance refer to *Supplementary Guidance on Fire Resistance of Trussed Roofs* (truss types achieve REI 30)

External Walls

(Table A1 TGD B Vol.2 2017):

<1m to Boundary: REI 30
≥1m to Boundary: RE 30, REI 15

Where external walls are timber frame - refer to *Supplementary Guidance on Fire Resistance of Walls* (wall types achieve REI 30)

For RE30, REI15 fire resistance refer to Manufacturer's test data / Agrément certification

(Note: fire resistance provision to external walls of bungalow dependant on boundary separation)

Window for escape or rescue:

Min. clear open area: 0.33m²
Min. Height: 450mm
Min. Width: 450mm

Bedroom

Attic Space
(not habitable)

Escape via entrance hall or egress windows or doors from bedrooms or inner rooms

Attic space not to be used for habitation, otherwise refer to *Dormer Bungalow guidance*

Cavity Barriers:

Section 3.6.2 of TGD B Vol. 2 2017

- a. 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
- c. Above the enclosures to a protected stairway
- d. Around all openings (windows, doors, vents, service boxes etc) in framed construction

Section 3.6.3 of TGD B Vol. 2 2017
Cavity Barrier to achieve E30 EI15 fire resistance (30 minutes integrity and 15 minutes insulation)

Cavity barriers in framed construction may be formed of:

- a. steel at least 0.5mm thick, or
- b. timber at least 38mm thick, or
- c. polythene sleeved mineral wool, or mineral wool slab, in either case under compression when installed in the cavity

House Type: Bungalow

Notes:

The above guidance is not exhaustive, reference should be made to *Technical Guidance Document B (Fire Safety) Volume 2-Dwelling Houses 2017* and the *Supplementary Guidance to TGD B (Fire Safety) Volume 2 - Dwelling Houses 2017*, to ensure compliance with Part B of the Building Regulations.

Responsibility for ensuring full compliance with the Building Regulations remains with the Owner, builder and designer of the works. You are advised to review your design to ensure compliance with all Parts of the Building Regulations.

For Modern Methods of Construction refer to Manufacturer's Test Data and Agrément Certification to ensure compliance with Part B of Building Regulations.

Key Notes: (Tick off as addressed / complete)

- Final exits in accordance with Section 1.3.9.7 of TGD B Vol. 2 2017 (thumb-turn latch)
- Escape windows in accordance with Section 1.3.7 of TGD B Vol. 2 2017
- Fire detection and alarm system - LD2 or better in accordance with IS 3218
- Cavity barriers in accordance with Section 3.6.2 of TGD B Vol. 2 2017
- Fire resistance provisions in accordance with Appendix A of TGD B Vol.2 2017:
 - External walls
 - Upper floors (if applicable)
 - Roof truss (if applicable)
 - Elements supporting fire resistant construction (if applicable)

Fire Resistance EN 1365 (series)

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

- - - - - RE30 REI 15
 (30 minutes fire resistance load bearing capacity and integrity, 15 minutes insulation)
- - - - - REI 30
 (30 minutes fire resistance load bearing capacity, integrity and insulation)



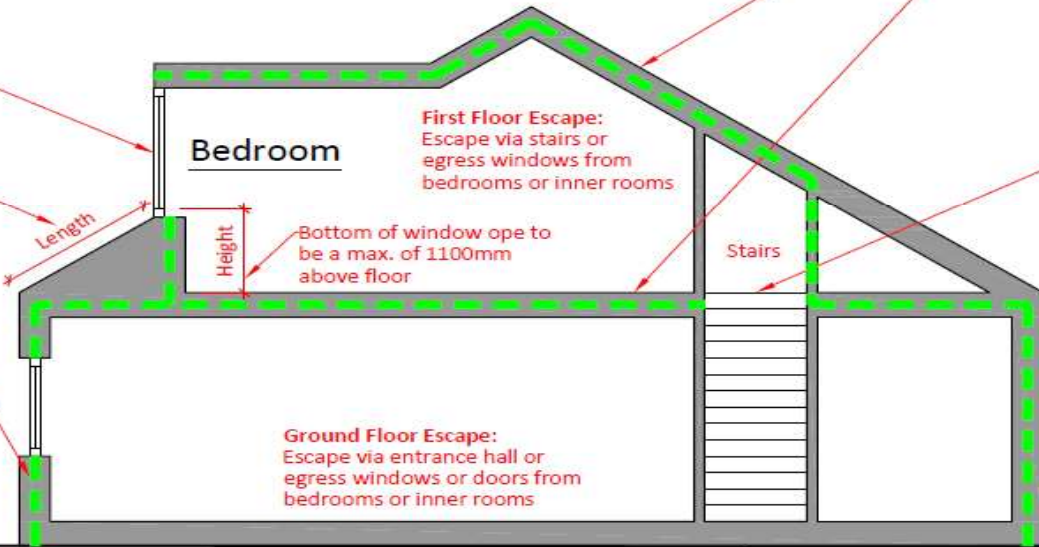
Window for escape or rescue:
 Min. clear open area: 0.33m²
 Min. Height: 450mm
 Min. Width: 450mm

1.7m max. from eaves to vertical plane of the window

External Walls
 (Table A1 TGD B Vol.2 2017):
 <1m to Boundary: REI 30
 >1m to Boundary: RE 30, REI 15

Where external walls are timber frame - refer to:
Supplementary Guidance on Fire Resistance of Walls
 (wall types achieve REI 30)

For RE30, REI15 fire resistance refer to Manufacturer's test data / Agrément certification



First Floor Escape:
 Escape via stairs or egress windows from bedrooms or inner rooms

Bedroom

Bottom of window open to be a max. of 1100mm above floor

Stairs

Ground Floor Escape:
 Escape via entrance hall or egress windows or doors from bedrooms or inner rooms

Truss:
 Truss forms floor of dormer therefore it must achieve fire resistance. As per Table A1 - Item 3(a) TGD B Vol 2 2017, it should achieve RE30 REI15 (REI 30 if floor is over garage)

Where truss requires fire resistance refer to *Supplementary Guidance on Fire Resistance of Trussed Roofs* (truss types achieve REI 30)

For RE30 REI15 rating refer to manufacturers test data or Agrément Certificates.

Stairs:
 For stairs to dormer bungalow (2 storey) - 1st Floor < 4.5m above ground level.

The stairway should be enclosed with storey-height construction, which need not be fire resisting, and should discharge directly to the open air.

For open plan arrangements refer to Section 1.3.2.1 of TGD B Vol. 2 2017

Cavity Barriers
 Refer to Bungalow House Type (Page 2) for information on location of cavity barriers

No floor more than 4.5m above ground level - Purpose Group 1(a)

House Type: Dormer Bungalow

Notes:
 The above guidance is not exhaustive, reference should be made to *Technical Guidance Document B (Fire Safety) Volume 2 - Dwelling Houses 2017* and the *Supplementary Guidance to TGD B (Fire Safety) Volume 2 - Dwelling Houses 2017*, to ensure compliance with Part B of the Building Regulations.

Responsibility for ensuring full compliance with the Building Regulations remains with the Owner, builder and designer of the works. You are advised to review your design to ensure compliance with all Parts of the Building Regulations.

For Modern Methods of Construction refer to Manufacturer's Test Data and Agrément Certification to ensure compliance with Part B of Building Regulations.

Key Notes: (Tick off as addressed / complete)

- Final exits in accordance with Section 1.3.9.7 of TGD B Vol. 2 2017 (thumb-turn latch)
- Escape windows in accordance with Section 1.3.7 of TGD B Vol. 2 2017
- Fire detection and alarm system - LD2 or better in accordance with IS 3218
- Cavity barriers in accordance with Section 3.6.2 of TGD B Vol. 2 2017
- Fire resistance provisions in accordance with Appendix A of TGD B Vol.2 2017:
 - External walls
 - Upper floors (if applicable)
 - Roof truss (if applicable)
 - Elements supporting fire resistant construction (if applicable)

Fire Resistance EN 1365 (series)

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REI 30
 (30 minutes fire resistance load bearing capacity, integrity and insulation)



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Attic space not to be used for habitation, otherwise refer to *Dormer Two Storey* guidance

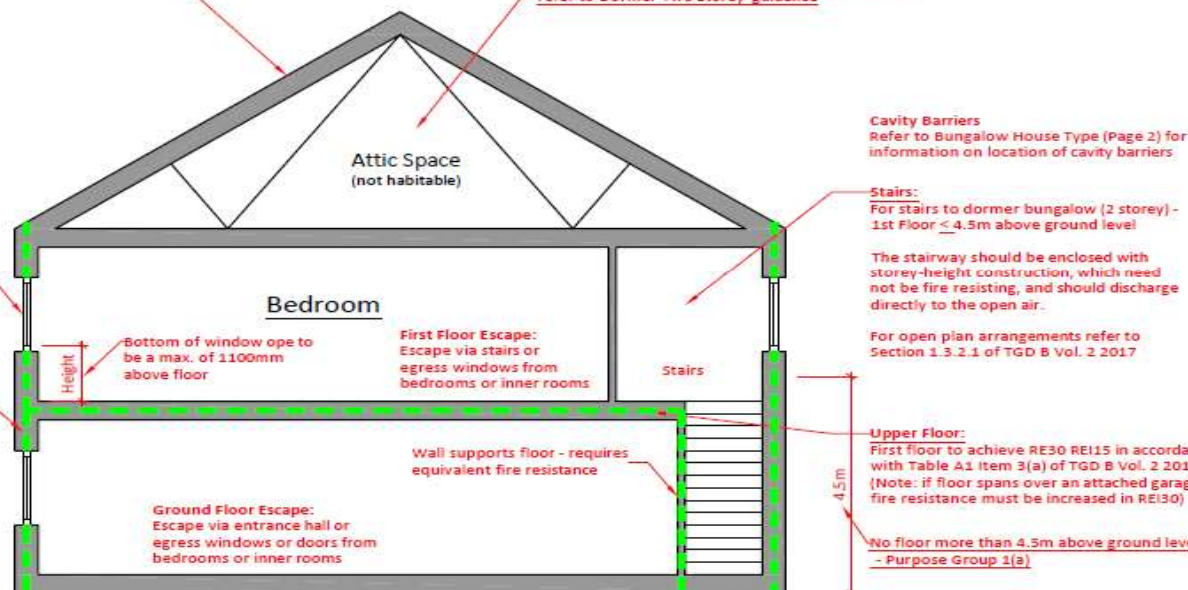
Window for escape or rescue:
 Min. clear open area: 0.33m²
 Min. Height: 450mm
 Min. Width: 450mm

External Walls
 [Table A1 TGD B Vol.2 2017]:
 <1m to Boundary: REI 30
 >1m to Boundary: RE 30, REI 15

As the external walls will support the upper floors of the dwelling they should achieve a fire resistance rating of RE30 REI15

Where external walls are timber frame - refer to: *Supplementary Guidance on Fire Resistance of Walls* (wall types achieve REI 30)

For RE30, REI15 fire resistance refer to Manufacturer's test data / Agrément certification



Cavity Barriers
 Refer to *Bungalow House Type* (Page 2) for information on location of cavity barriers

Stairs:
 For stairs to dormer bungalow (2 storey) - 1st Floor < 4.5m above ground level

The stairway should be enclosed with storey-height construction, which need not be fire resisting, and should discharge directly to the open air.

For open plan arrangements refer to Section 1.3.2.1 of TGD B Vol. 2 2017

Upper Floor:
 First floor to achieve RE30 REI15 in accordance with Table A1 item 3(a) of TGD B Vol. 2 2017 (Note: if floor spans over an attached garage, fire resistance must be increased in REI30)

No floor more than 4.5m above ground level - Purpose Group 1(a)

House Type: Two Storey

Notes:

The above guidance is not exhaustive, reference should be made to *Technical Guidance Document B (Fire Safety) Volume 2-Dwelling Houses 2017* and the *Supplementary Guidance to TGD B (Fire Safety) Volume 2 - Dwelling Houses 2017*, to ensure compliance with Part B of the Building Regulations.

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Key Notes: (Tick off as addressed / complete)

- Final exits in accordance with Section 1.3.9.7 of TGD B Vol. 2 2017 (thumb-turn latch)
- Escape windows in accordance with Section 1.3.7 of TGD B Vol. 2 2017
- Fire detection and alarm system - LD2 or better in accordance with IS 3218
- Cavity barriers in accordance with Section 3.6.2 of TGD B Vol. 2 2017
- Fire resistance provisions in accordance with Appendix A of TGD B Vol.2 2017:
 - External walls
 - Upper floors (if applicable)
 - Roof truss (if applicable)
 - Elements supporting fire resistant construction (if applicable)



The Devil is in the detail...

• Junctions

- Type of joint
- Overlapping
- Robustness
- Details, Details, Details

• Fire Stopping

- Expanding foams
- Collars
- Pillows
- Rock wool batt/ other
- Wood and Metal
- Cement/lime mortar
- Intumescent mastics

• Cavity Barriers

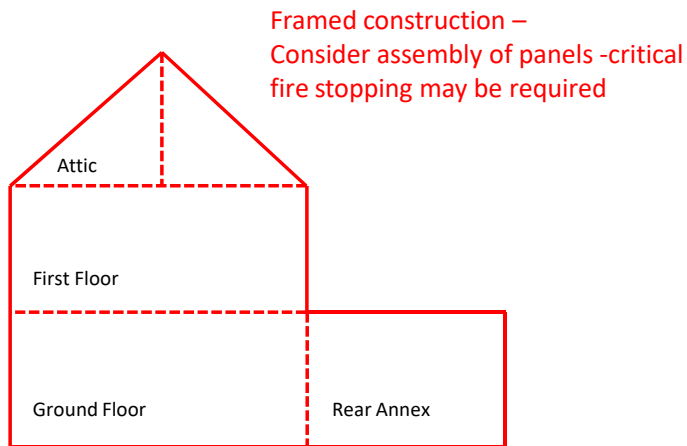
- Size of cavity
- Type of cavity
- Enclosure of cavity
- Cavity barrier type
- Fixing of cavity barrier



Party Wall Junction

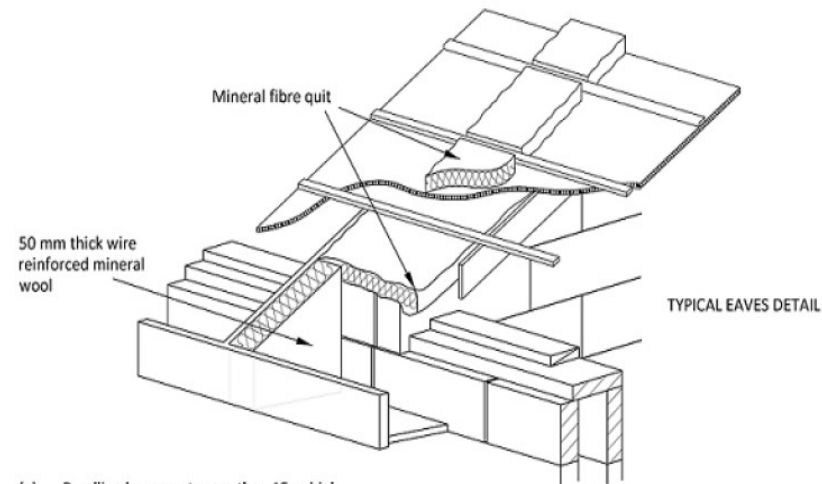
- **Critical Junction**

- Vertical separation between dwellings
- Frame type construction – party wall to be constructed in factory
- Fire break / cavity barrier to be brought to outer leaf



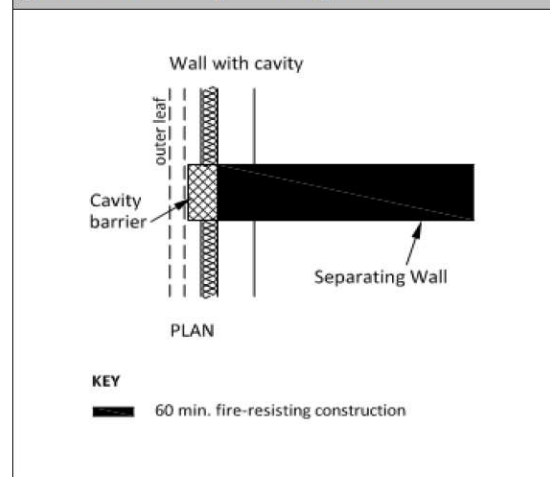
Framed construction –
Consider assembly of panels -critical
fire stopping may be required

Section Thru 2 Storey Dwelling

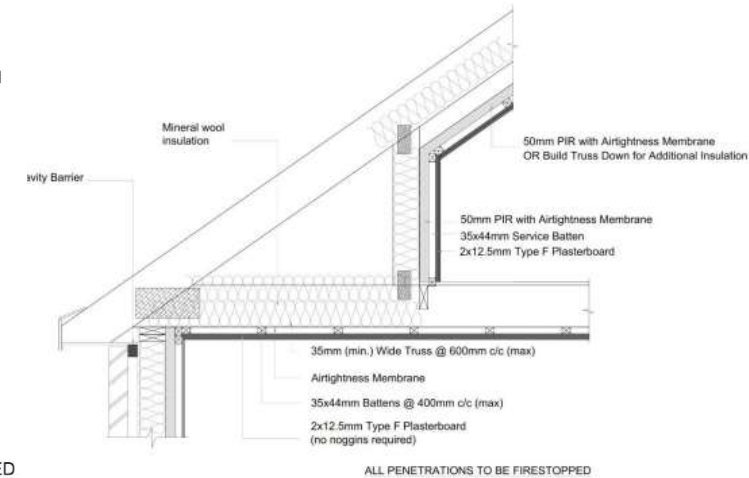
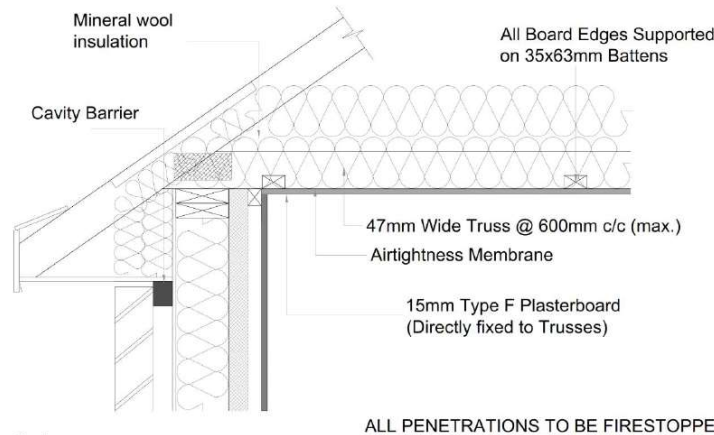


(a) Dwelling house not more than 15 m high

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



Roof Truss Fire Resistance



- **4 Typical Scenarios for Fire Resistance to Truss**

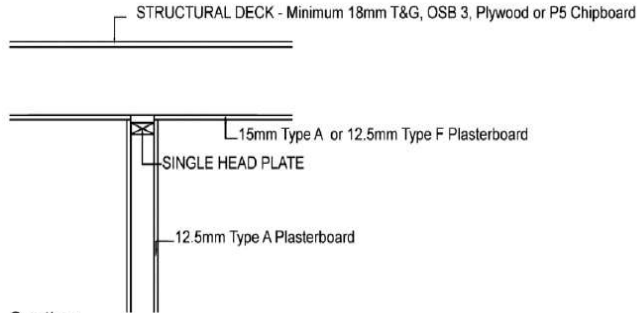
- Fire resistance to protected stairs
- Dormer roof truss
- Where the roof serves an escape route
- Where the roof structure supports the external walls

- **Supplementary Guidance Examples**

- Tested to REI 30
- Different build ups depending on thickness of roof trusses

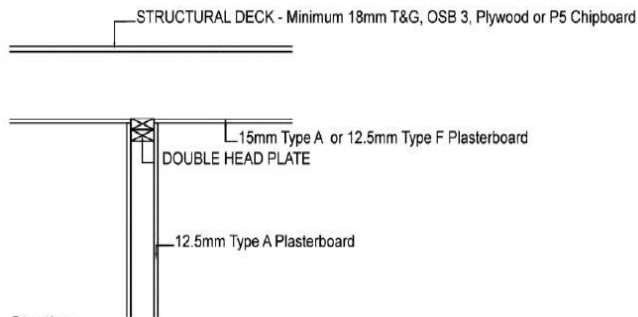


Protected Stairs



Section

Figure 4(a) Non Load Bearing



Section

Figure 4(b) Load Bearing

- **REI – 30 minute enclosure**

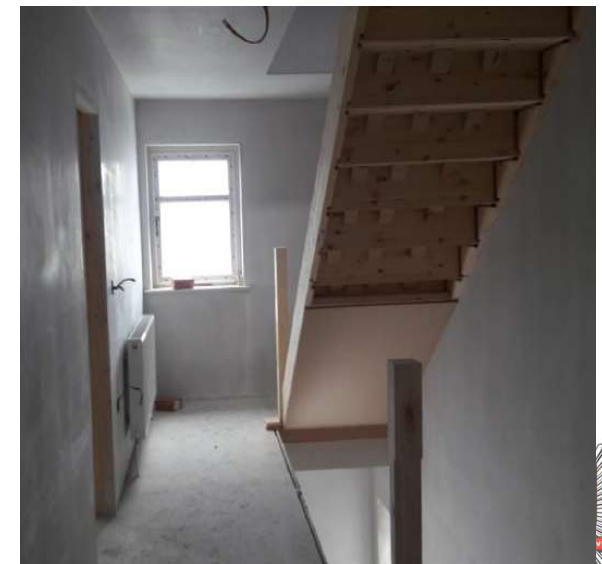
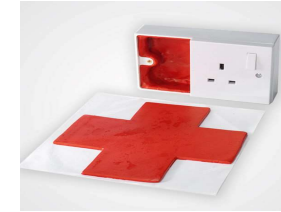
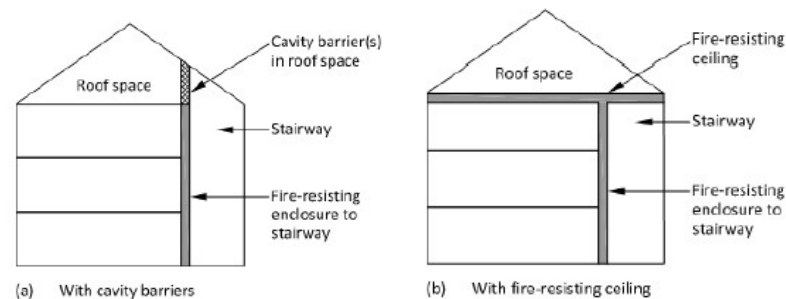
- Refer to Supp. Guidance for Timber Frame
- Refer to Manufacturer's guidance for Metal Frame

- **E20 / FD20 doors**

- must have self closers!
- Full assembly – not just the panel

- **Fire resistant ceiling or cavity barrier**

- If ceiling – must be throughout first floor
- Be mindful of openings – may need to be firestopped



Fire Doors

- **FD20 vs FD30**
 - FD20 to enclosure of protected stairs
 - FD30S between dwelling and attached garage
- FD20 typically not for sale anymore – only FD30's
- Remember TGD B is setting the minimum standard

- **Domestic Fire Door Requirements**
 - Panel at least 44mm thick (timber)
 - Softwood frame adequate for FD30 if tested
 - 3 fire rated hinges with all screws in place
 - Door closer....



DORAS

Internal 1/2hr Fire Check Door 6'6" x 2'6"

Item Code: 23590

Norma Range

€105.48 Inc.VAT


- 1 +

ADD TO BASKET

FEATURES AND BENEFITS

- Fire rated Flush Door

SUPPORTING DOCUMENTS

 11249_1_5f10439b54fb0.pdf
1018.63 KB



Remember: A fire door is an “assembly” or “doorset” and must have certification demonstrating it is tested as such

Get certification from manufacturer or supplier

BS 8214 - *Code of practice for fire door assemblies*



Fire Doors – Test Documentation

Type Nr	Frame description
	<p>For type 1 (block wall)The set is fixed to the wall, using 8 metric 6 x 112 mm steel fixing and 10 mm diameter wall plugs, distributed 4 on the side of the hinges and 4 on the side of the strike.</p> <p>The arrangement of the metal fixings on each side is 100 mm from the top and 100 mm from the bottom, at max 600 mm centres</p> <p>The gap at the back of the frame is filled with fire-resistant polyurethane foam, reference:</p> <ul style="list-style-type: none"> • Blue 60 manufactured by EXITEX, or • Orbafoam Fire-Stop , Quilosa
	<p>For type 2 (wooden subframe) The wooden subframe is fixed to the supporting construction by means of a total of 8 pairs of steel crossed nails, 3 mm thick and dimensions of 13 x 90 mm.</p> <p>The arrangement of the metal fixings on each side is 100 mm from the top and 100 mm from the bottom, at max 600 mm centres</p> <p>The set is fixed to the wooden sub-frame, using 40 mm steel staples distributed 4 on the side of the hinges and 4 on the side of the strike.</p> <p>The arrangement of the metal fixings on each side is 100 mm from the top and 100 mm from the bottom, at max 600 mm centres</p> <p>The gap at the back of the frame is filled with fire-resistant polyurethane foam, reference:</p> <ul style="list-style-type: none"> • Blue 60 manufactured by EXITEX, or • Orbafoam Fire-Stop , Quilosa

3.11 TESTED HARDWARE

The following hardware has been tested or assessed for the doorset designs covered in this assessment:

Element	Manufacturer and Product Reference	Intumescent protection
<i>Locks and latches</i>	<ul style="list-style-type: none"> • One-point lock. ARNONE, Ref. AR910-R-60-SSS • One-point lock. ARNONE, Ref. AR8004-63-SC • One-point lock. LINCE, Ref. 5470 NP-60-323 • One-point lock. LINCE, Ref. 5470 F • One-point lock. TOVER SECURITY SYSTEMS, Ref. 310 RF • Three-point lock. MCM, Ref. 701RF-3 	<ul style="list-style-type: none"> • 1mm AR/INT-DIN_LOCK-60, ARNONE • 1 mm Interdens, ODICE <p>Not needed at strike plate</p>
<i>Hinges</i>	<ul style="list-style-type: none"> • ARNONE, Ref. AR8182-SSS-A1 • Harrayma, Ref. BRI-3 • MHA. Ref. 474 	Not needed
<i>Door Closers</i>	<ul style="list-style-type: none"> • ARNONE, Ref. AR1500-SE/SE • ARNONE, Ref. AR6800-SE • GEZE, Ref. TS 1000C • LINCE, Ref. CPA 23 • TELESKO, DELTA 1300 	Not needed
<i>Concealed door closer</i>	<ul style="list-style-type: none"> • ARNONE, Ref. AR7383 • RUTLAND , ref. ITS 11204 	As manufacturer specifications
<i>Furniture</i>	<ul style="list-style-type: none"> • Handle AT, Ref. Siena • Handle. AT ARTE TOSCANA, Ref. R071 venice handle & escutcheon PCSC • Handle. HERRAYMA, Ref. Brasilia Ri-403 • Handle. SENELLI, Ref. Pesaro • Handle. TOVER SECURITY SYSTEMS, Ref. MADF • Digital handle (electronic shield). MCM, Ref. easyKEY Adapt • Knob. HERRAYMA, Ref. PI-13 • Panic bars. UCEM, Ref. Exit Combi B150 (active leaf) • Panic bars. UCEM, Ref. Exit Combi BP120C (passive leaf) 	Not needed
<i>Eye viewer</i>	<ul style="list-style-type: none"> • AMIG, Ref. 30-50 UL • FRELAN, Ref. JV942PC 	ODICE Flexilodice 8 mm BIFIRE Sealbifire
<i>Threshold Seal</i>	<ul style="list-style-type: none"> • CCE Ref. TREND • CCE, Series EASY Ref. ASGSFI • EXITEX, Ref. Concealex A8100 	As manufacturer specifications
<i>Closer selector</i>	<ul style="list-style-type: none"> • JUSTOR, Ref. SP 81 	Not needed
<i>Flush bolts</i>	<ul style="list-style-type: none"> • MONVADO, Ref. 382 HN 	15 X 2 MM Palusol strip



Importance of a closed door.....

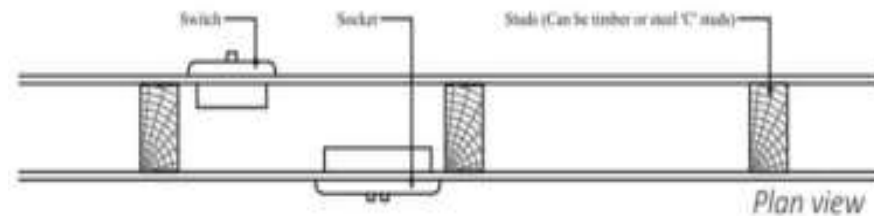


Openings – Metal Web Floors

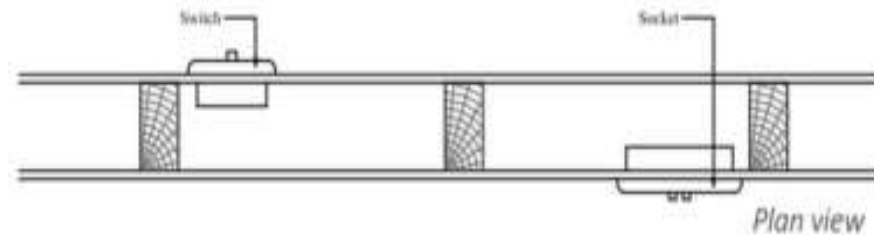


Socket Outlets

- **Sockets in Framed Construction**
 - BS 8313 – Accommodation of building services in ducts
 - Avoid back to back in same void
 - REI 30 for walls to protected stairs
 - Review socket locations
 - Provide fire stopping putty (if required)



Example of accessories being back-to-back in the same cavity space (can be at different heights)



Example of accessories not being back-to-back in the same cavity

Back to Back Sockets in Same Void

- Wall to protected stairs failed – fire broke through multiple penetrations



Fire Stopping Limitations - “Fire Rated” products



Fire Resistance Period: 120 minutes

Insulation/integrity: Insulation and Integrity

Test Standard: EN 1366-4 and BS 476: Part 20:22

Approval Type: Certifire TS40, Certifire CF828

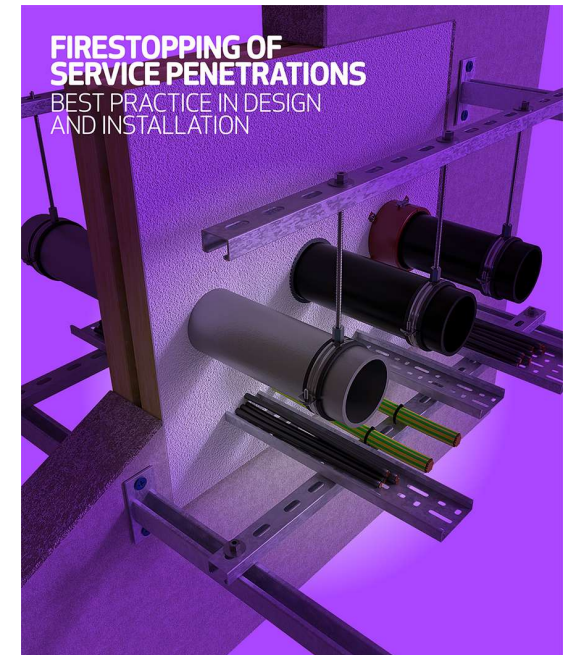
The fire foam is suitable for sealing joints and service gaps around doors, window frames, as well as general service penetration

May not be suitable for large gaps – review alternatives:

- Cement/lime mortar
- Gypsum based plaster
- Glass fibre, mineral wool (reinforced)



- Construction details – services openings



This guide is the result of a collaboration between these not-for-profit associations:



Cavity Barriers

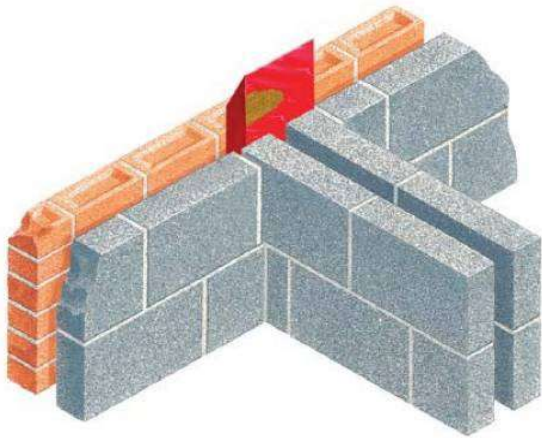
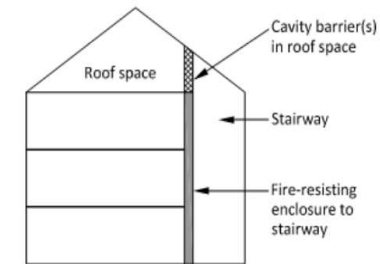
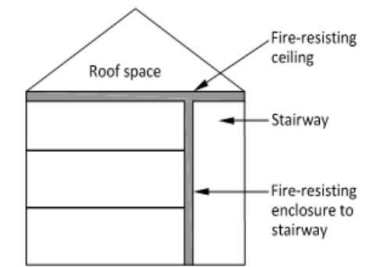


Diagram 11 Roofspaces over protected stairway in dwelling houses (alternative arrangements) Par 3.6.2



(a) With cavity barriers

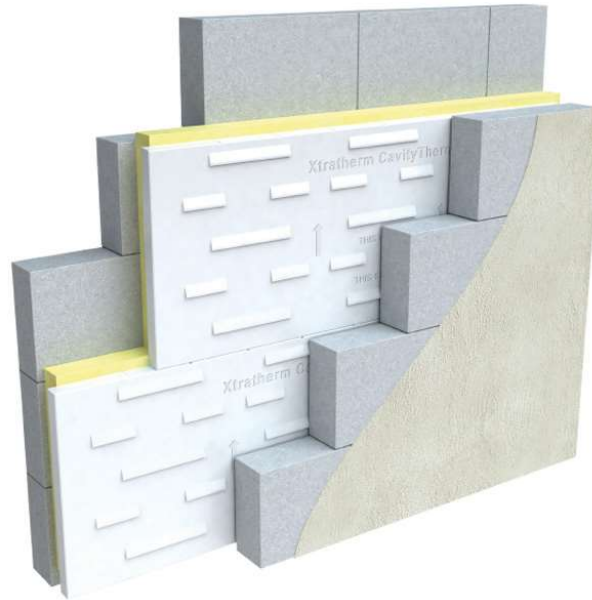


(b) With fire-resisting ceiling

KEY
 30 min. fire-resisting construction



Cavity Barriers – Full-Fill Insulation?



Extract from Bead Insulation Agrément Certificate

Prior to application of the ~~XXXXXX~~ Cavity Wall Insulation System, cavity barriers shall be installed in new buildings, or confirmed to have been installed in existing buildings, as required, to meet the requirements of TGD to Part B Volume 1, Clause 3.3 and TGD to Part B Vol 2, Clause 3.6 of the Building Regulations.



Extract from Board Insulation Agrément Certificate

- (iv) Cavity walls should always have a cavity closure at the top of the cavity and around openings. The materials must not be taken past fire stops. If fire does penetrate into an unventilated cavity the amount of air will be insufficient to support combustion and flame spread will be minimal.

3.2 FIRE SAFETY

Cavity Barriers shall be installed as necessary to meet the requirements of TGD Part B, Volume 1, Cl. 3.3 and TGD Part B, Volume 2, Cl. 3.6.

Cavity walls should always have a fire stop closure at the top of the cavity and around openings. The materials must not be taken past fire stops. If fire does penetrate into an unventilated cavity the amount of air will be insufficient to support combustion and flame spread will be minimal.



Cavity Barriers

- Key Details in framed construction
 - Corner windows
 - Vent openings

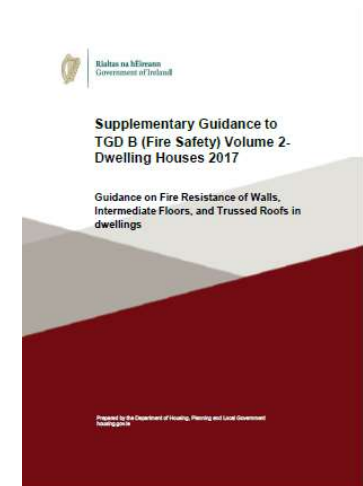


Fixings

- Plasterboard to EN 520 Gypsum plasterboards – Definitions, requirements and test methods forms a critical part of any fire resisting build up. The following table provides details of the **fixings required to achieve the specified fire resistances.**

Fixings					
Element		Description	Plasterboard Type	Screw length	Max Centres (Perimeter / Internal)
Walls	WT1, WT2, WT3, WT4	External Walls (REI 30) (600mm c/c)	15mm Type A	42mm	200mm / 300mm ⁽¹⁾
	SWT1	Separating Walls (REI 60)	15mm Type A & 15mm Type F	50mm (Type A) Board 65mm (Type F) Board	200mm / 300mm
	Figure 4b, 5b, 6b	Loadbearing Stud (REI 30) (400mm c/c)	12.5mm Type A	42mm	300mm / 300mm
Floors	Figure 1	Solid Joist Floor	15mm Type A or 12.5mm Type F	42mm	150mm ⁽³⁾
	Figure 2	Metal Web Joist	15mm Type A	55mm	150mm ⁽³⁾
	Figure 3	I-Joist	15mm Type A	42mm	150mm ⁽³⁾
Trusses	RT1, RT2, RT3, RT6	Truss Roof / Dormer Roof	15mm Type F	42mm	150mm ⁽¹⁾
	RT4, RT5	Truss Roof / Dormer Roof	2 x 12.5mm Type F	42mm / 60mm	150mm ⁽²⁾

- (1) All edges supported by timber and fixed
- (2) Edges fixed only where backed by timber
- (3) Where backed by joists





Part B - Dwellings

Date: 24th of November 2022

Time: 09:00 – 16:45

Venue: Horse and Jockey, Thurles, Tipperary



An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreachta
Department of Housing,
Local Government and Heritage



Comhairle Contae Chorcaí
Cork County Council

MPLAA
Michael P. Lyons & Associates

<https://www.eventbrite.ie/e/part-b-for-dwellings-remote-tickets-424113925167>



Questions?



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