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Scottish House Builders Health & Safety Forum
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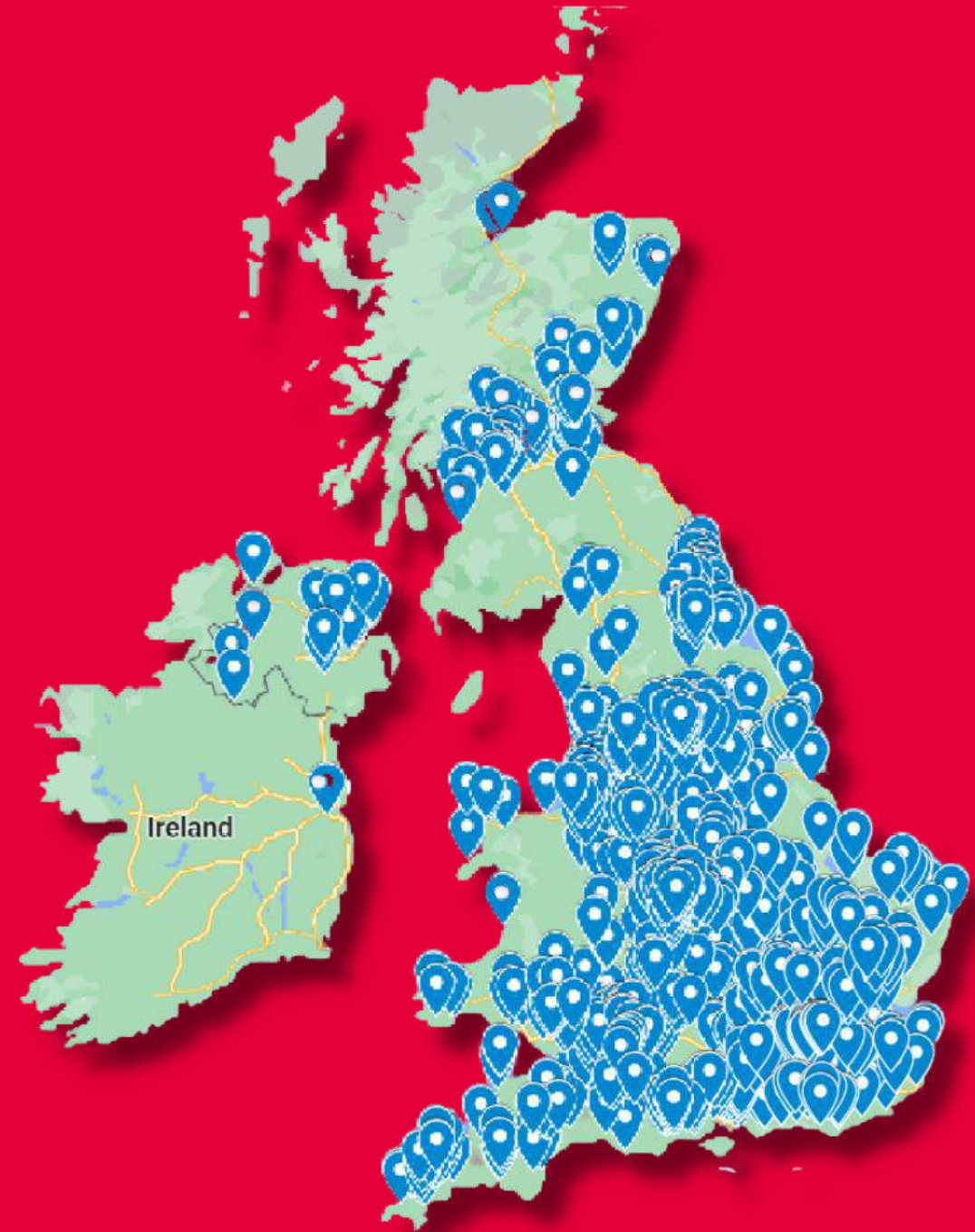
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NFRC overview

Established
1892



Currently

121

17

84

5

18

4

49

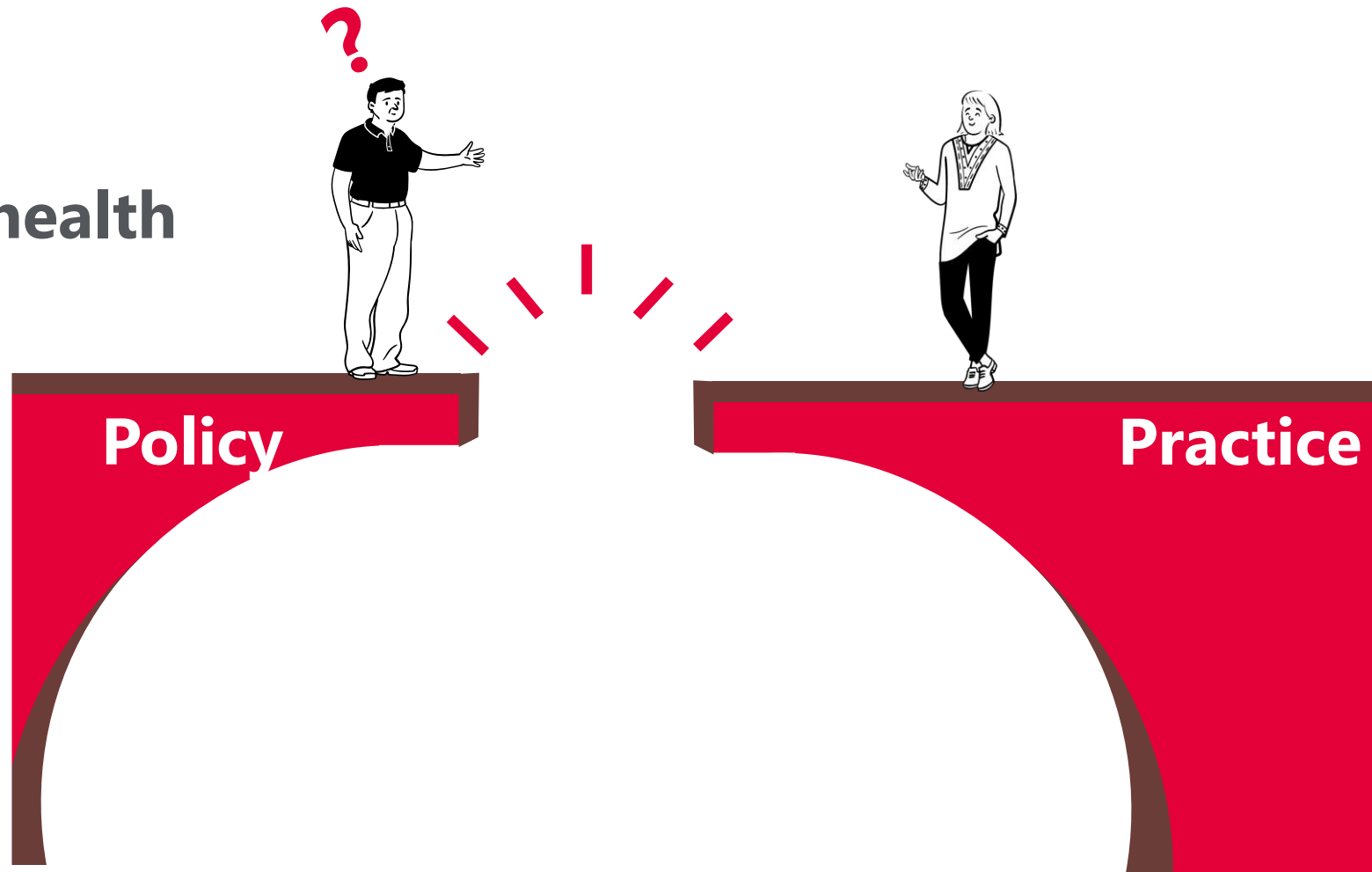
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518

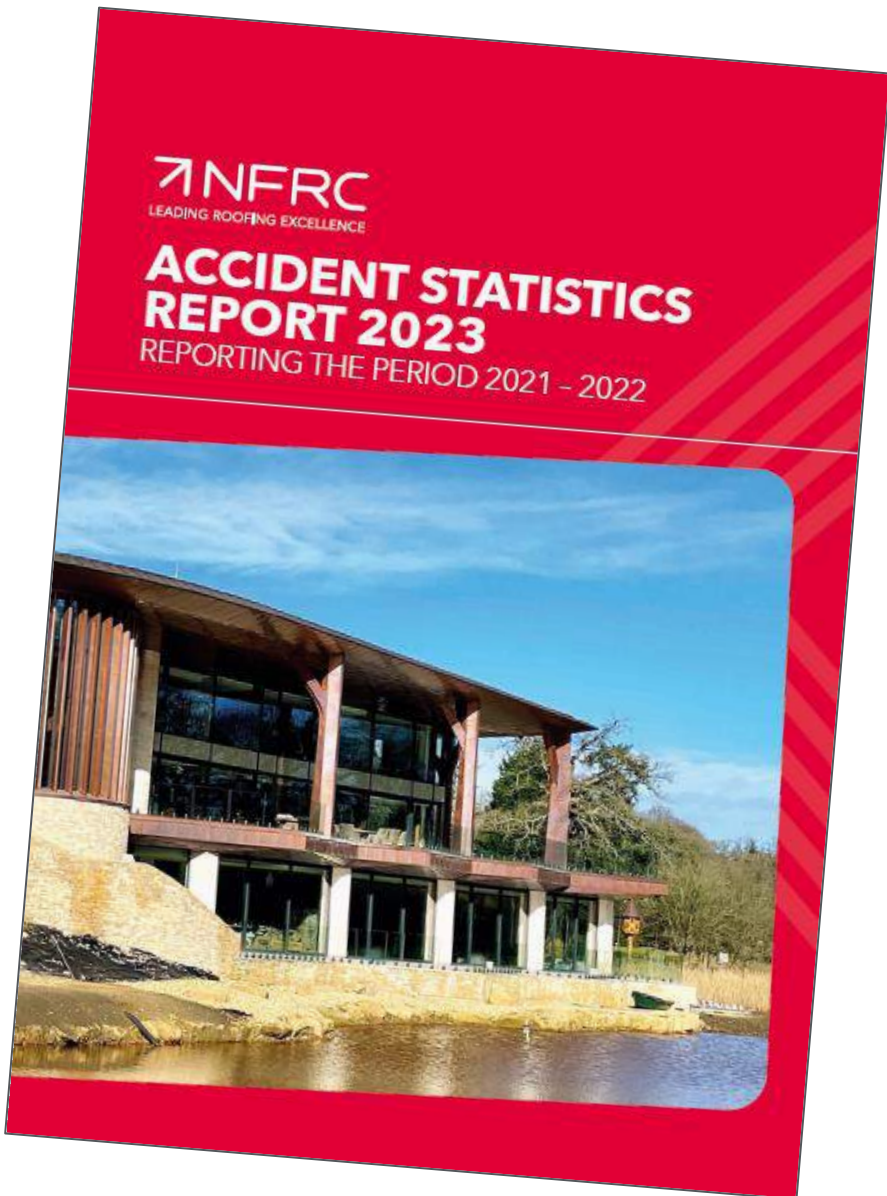
- **121** Technical & safety publications
- **17** New technical publications currently being formulated
- **49** External committees attended
- **14** BS committees NFRC are members of
- **84** British Standards
- **5** NRC Technical committees and working groups
- **18**
- **4** National Occupational Standards reviewed
- **518** Technical enquiries in 2023

Technical support and advice

- Technical **support** and **advice** for **all roofing disciplines**
- **Health, Safety** and **Environmental** support
- **Signposting** for **mental health** and **wellbeing** support



What an achievement...



0.26%
accident rate

15
times lower than
national average

0.44%
average accident
rate for last 5 years

Leading
the way in identifying
trends and acting
accordingly

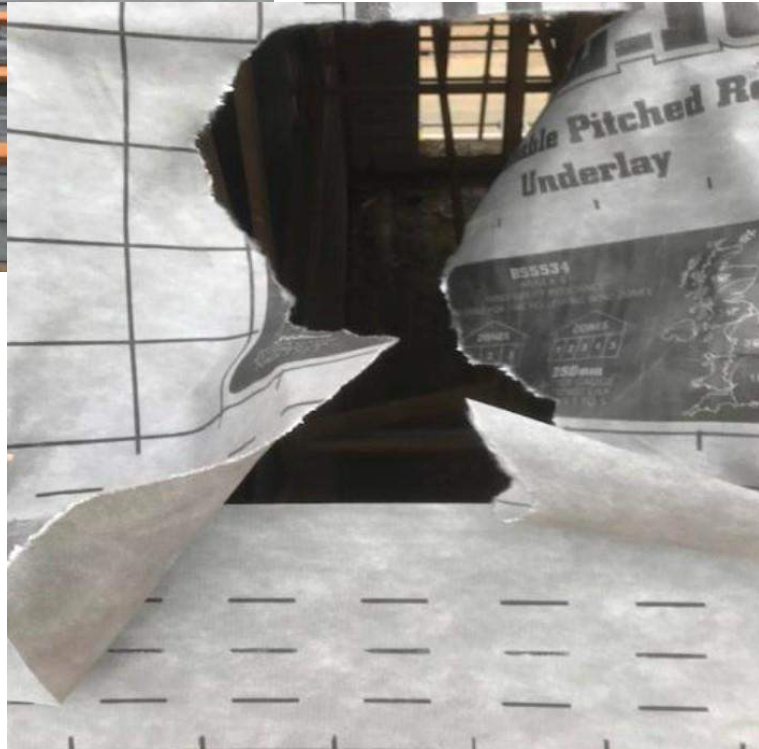
Health & Safety

Battens

Table 3 BS 5534 stipulates a minimum depth of batten for spans up to a maximum of 600mm is 25mm



Internal Fall Prevention (IFP)



 **NFRC**
Health & Safety Guidance (HSGS15)  **NFRC**
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Internal fall protection requirements for pitched roofs on new build homes

Falls from height remain one of the biggest causes of accidents and fatalities in construction, therefore it is important that the hierarchy of fall protection set out in the Work at Height Regulations 2005 is followed at all times.

Home builders constructing new homes should install internal fall protection to protect the workers installing roof coverings from injuring themselves while working above open roof trusses. Types of internal fall protection include proprietary decking systems or air bags/bear bags as soft-landing systems.

Following an investigation with our members, it was noted that some UK House Builders allow internal fall arrest systems to be removed once the roof is felted and battened; unfortunately though this only addresses one aspect of the risk involved.

Although operatives are instructed and trained to only walk where the tile battens are attached and to place their feet mid-span of the truss to prevent them from falling over. This risk increases further when the roof is being loaded out with roof tiles, because the operative is stood in the upright position along the truss line, while walking up the roof carrying the roof coverings.

In the event that a roof batten broke under the weight of an operative, there is only the strength of the underfelt membrane to prevent the operative falling through into the roof void, and as such the potential risk of injury remains high.

The NFRC therefore recommends that the internal fall protection is not removed by the home builder or main contractor until it is safe to do so; ideally when the roofing works have been completed, but as a minimum when the roof has been felted, battened and completely loaded out.

At no point would we advocate that the internal fall protection be removed before this point, unless the risk assessment deems that it is safe to do so.

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MP1163-1-12/2020

Roofing battens Safety Alert and Toolbox Talk

Batten Safety
BS 5534 graded battens may be used as an alternative to roof ladders in line with current guidance in the Health and Safety Executive's HSG 33 "Health and Safety in Roof work" and INDG 284 "Working on Roofs".

NFRC
Toolbox Talk

NFRC
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Checking for Substandard Roofing Battens

Purpose
This toolbox talk highlights what you need to do, and think about, before and during the installation of roofing battens.

Hazards and Risks

- A sub-standard batten may not take the weight of an operative whilst using as a roof ladder which could result in an injury to the operative or a third party. *Please note that walking mid-span between rafters is not advised.*
- Sub-standard battens which have been incorrectly graded or treated may rot prematurely, which reduces the effectiveness of any fixings and increases the risk of tiles/slates coming off the roof.

Introduction
Due to the high demand for treated timber, compounded by shortages and supply chain issues. There are now large quantities of sub-standard roofing battens within the UK market that are being marked, coloured and sold as conforming to BS 5534 when in fact they are an inferior product and highly likely to impact performance and longevity of a roof should they be used. These sub-standard, inferior battens are becoming an increasingly serious issue for merchants, roofing contractors and their clients.

Health and Safety
The use of inferior battens that do not conform to BS 5534 has the potential to cause roof failures and accidents. HSE guidance, HSG33 *Health and Safety in Roof Work*, states that battens must be a minimum size of 50 mm x 25 mm (maximum span 600 mm) or 38 mm x 25 mm (maximum span 450 mm) and meet the grading requirements specified in BS 5534: Code of practice for slating and tiling, also noted in NFRC Technical bulletin 33-Graded battens for slating and tiling. Non-compliant battens should not be installed. Ungraded or part-graded battens may prove weak and vulnerable to failure should the roofer inadvertently walk on these areas whilst covering the roof.

What to look out for
Graded BS 5534 roofing battens should be stamped with the following:

Supplier Details Relevant Standard

XXXXX 25x38 XXXX ≡ BS5534 (XXXXX)*

Size Species (for example PNY for Pine or WPCA for Spruce) *Third-party Certification (Note: This is not a requirement of BS 5534, but observed as industry best practice and acknowledged by NFRC, TDUK, NABC and LABC)

Figure 1: Elements marked on a compliant batten

However, marking alone is not proof that the batten has been graded correctly or that it is of the correct standard.

FIVE SIMPLE STEPS THAT CAN BE TAKEN

Step 1
Check the thickness of the battens. 25 mm thick batten should be 25 - 28 mm thick but never less than 25 mm.

Checks can be visual where discrepancies in thicknesses are obvious, or the batten can be measured with a tape measure, ruler or measuring gauge.

Unequal thickness of roofing battens visible in a stack is a sign of substandard battens, which should not be bought or used.

Roofing battens

Check the documentation with each delivery of batten, it should state at least the following:

- Name of supplier (*the company that graded the roofing battens NOT the distributor*)
- Origin (*imported and/or the timber species code*)
- Graded in accordance with BS 5534
- Basic size
- Type of preservative (*where applicable*)



Sequence

- Not roofing contractors
- Not trained for working at height
- Delay in installation contrary to BS 5534 and BS 8000 part 6



HSG33 Update: Slated and Tiled (pitched) Roofs

- Walking on the laid roof covering should be avoided;
- Reduce foot traffic on the finished roof;
- On most sloping roofs, suitable roof ladders or crawling boards will be essential;



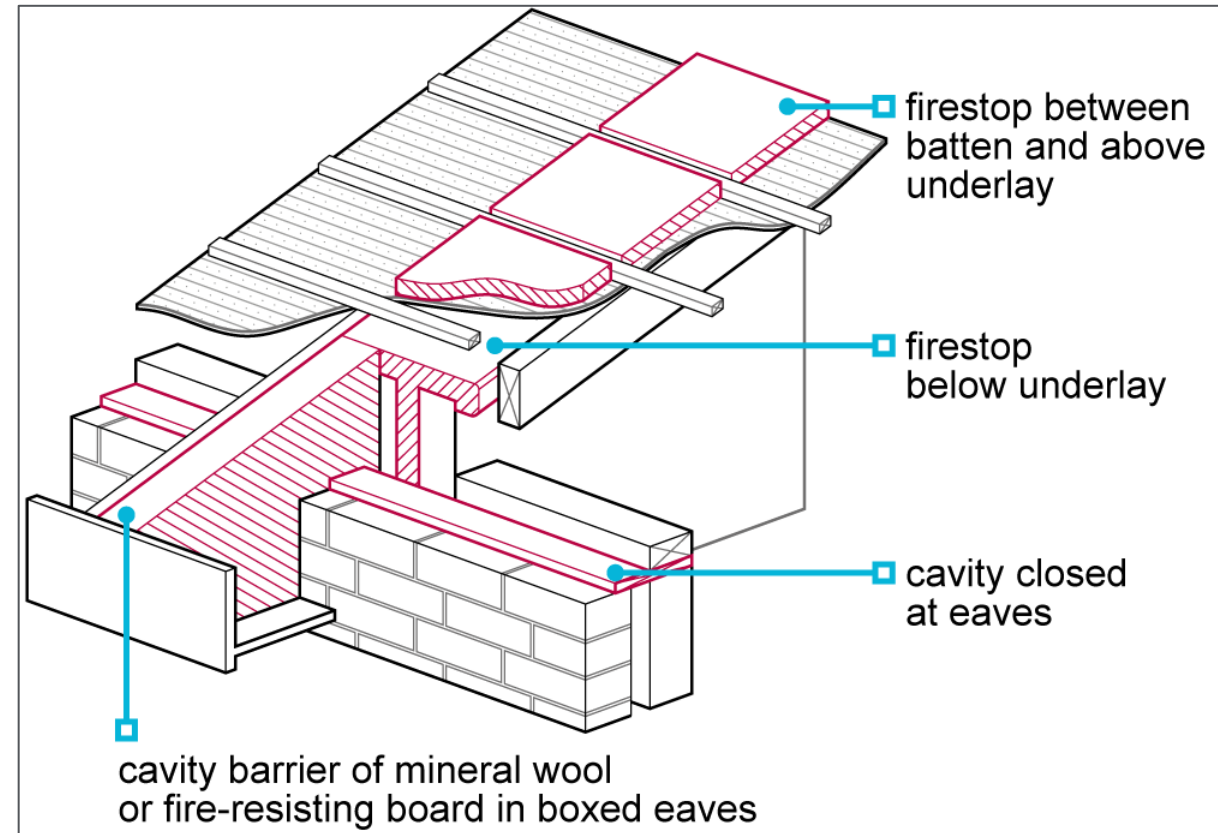
Hazards during and post construction



Fire Stopping

Firestop to Party and Compartment Walls

- The space between the top of a party or compartmental wall and the slates or tiles should be completely filled with a fire topping material above and below the underlay to fill all gaps.
- Packing should be compressed by the slates or tiles.
- There should be no path for smoke or flame to penetrate from one side of the wall to the other.
- Fire protection should extend into any void, such as boxed eaves.



Domestic Technical Handbook Section 2 Fire

- 2.2.1 Dwellings in different occupations
- 2.2.2 Dwellings with common occupation
- 2.2.3 Separation between domestic and non-domestic buildings
- 2.2.4 Domestic Garages

Table 2.9 Fire Resistance Duration

1	2	3	4	5	6	7
Construction	Fire resistance duration	British Standards Load bearing capacity (mins)	British Standards Integrity (mins)	British Standards Insulation (mins)	European Standards	Test exposure
1. Structural frame, column or beam	Short	30	None	None	R 30	Faces exposed on the inside
	Medium	60	None	None	R 60	
	Long	120	None	None	R 120	
2. Separating floor or any other floor, used as a protected route of escape (2.0.6)	Short	30	30	30	REI 30	From the underside
	Medium	60	60	60	REI 60	
	Long	120	120	120	REI 120	

Thank you

