

FIRE RATING REQUIREMENTS FOR USE OF ROOFLIGHTS IN BUILDINGS - SCOTLAND

The Non-domestic & Domestic Technical Handbooks 2023 define the fire safety requirements for buildings in Scotland. These are the tier one guidance documents to prove compliance with the statutory requirements, although alternative routes to compliance are also available.

With respect to Rooflights, Sections 2.3, 2.5 & 2.8 apply.

Guidance of the technical handbook may not apply for buildings over 60m high and enclosed shopping centres with 3 storeys or more. In addition, for mixed use developments combining both domestic and non-domestic elements, the domestic regulations may be more applicable.

The following is a brief overview of the technical requirements, however there may be more considerations pertinent to any project and therefore the designer should refer to the current version of the relevant Technical Handbook.

Please note: it is the responsibility of the designer to ensure that the rooflight products specified meet full compliance with the fire rating requirements outlined in the Technical Handbook.

Section 2.3 - Internal Fire Spread (Structure)

The guidance in this section is to ensure buildings will remain stable for a reasonable amount of time in the event of a fire.

Of particular relevance to rooflights is the junction of compartment walls where they meet a roof, the concern being that a fire could breach the wall or cause the wall to collapse if the rooflights are too close or have insufficient performance.

The guidance states that within 1700mm of the compartment wall the roof substrate (lining) should achieve a European Classification of A1 or A2 and the roof covering should be low vulnerability. It is therefore recommended that rooflights should not be used within the 1700mm zone of a compartment wall.



Section 2.5 – Internal Linings

This Section covers the internal lining of the roof and walls of buildings to ensure that spread of fire within the building is inhibited.

The surface linings of walls and ceilings should meet the classification requirements in accordance with BS EN 13501-1 as set out in Section 2.5.1: Internal linings, and are summarised in the table below:

Classification of linings				
Dwellings	Residential care buildings and hospitals	Shops	All other buildings	Classification
A room (other than a kitchen) not more than 4m ²	Room not more than 4m ²	Room not more than 30m ²	Room not more than 30m ²	D / Class 3**
A room Unprotected zone	Room not more than 30m ²	Room more than 30m ²	Room more than 30m ² Unprotected zones	C / Class 1**
A protected zone*	Room more than 30m ² Unprotected zones Protected zones and fire-fighting shaft	Unprotected zones Protected zones and fire-fighting shaft	Protected zones and fire-fighting shaft	B / Class 0**

All types of rooflights should meet the relevant classification defined in the appropriate *Classification of linings* table.

There are certain restrictions for thermoplastic rooflights TP(a) and TP(b), these can be found in Section 2.5.4 Thermoplastic Material – Table 2.5.

**Appendix A Defined Terms, defines a protected zone as: ‘part of an escape route which is within a building, but not within a room, and to which access is only by way of a protected door and from which there is an exit directly to a place of safety.’*

***Please refer to Composites UK Technical Advice Note CUK TAN 2021/001, August 2023: Use of British Standard spread of flame tests to demonstrate compliance with Scottish Building Standards Regulatory Requirement for fire spread on thermoset plastic rooflights.*

Section 2.8 - External Fire Spread

This section covers spread from neighbouring buildings, and provides guidance for protecting a building from the risk of fire spread.

Section 2.8.1: Roof Coverings, defines the fire classification for roof coverings as either a National Class (to BS 476-3) or European class (to BS EN 13501-5), and the requirement is summarised in the table below as a vulnerability rating per application:

Classification for roof / roof coverings exposed to external fire			
Vulnerability	National Class	European Class	Application
LOW	AA, AB or AC	B _{ROOF} (t4)	Not more than 6m from boundary
MEDIUM	BA, BB or BC CA, CB, or CC	C _{ROOF} (t4) D _{ROOF} (t4)	More than 6m but not more than 24m from boundary
HIGH	Any designation other than low or medium vulnerability	E _{ROOF} (t4) F _{ROOF} (t4)	More than 24m from boundary

All types of rooflights should meet the relevant classification defined in appropriate *Classification for roof coverings* table.

AA & AB may be used for an external roof covering that is within 6m to a boundary and any distance beyond that. For a single skin roof covering the requirements for liners also applies.

When used in rooflights, unwired glass at least 4mm thick can be regarded as having a B_{ROOF}(t4) classification.