

Technical Information Sheet

TIS003-3 Fire – Roof Application

Northern Ireland

(July 2025)



Filon Products Ltd manufacture three Fire Grades to meet the requirements of The Building Regulations (Northern Ireland) 2012, Technical Booklet E: Fire safety.

Filon sheets are tested and classified in accordance with the following standards:

BS EN 13501 Part 5 - Classification using data from external fire exposure to roofs tests.

BS 2782-0 Annex B Method 508A - Classification for TP(a) assessment rating of plastics.

BS 476 Part 3 - Classification and method of test for external fire exposure to roofs.

BS 476 Part 6 - Method of Test for Propagation of Products.

BS 476 Part 7 - Method of test to determine the classification of the surface spread of flame of products.

Filon Fire Grades and test ratings are as follows:

Filon Grade 300 - B_{ROOF} (t4) to BS EN 13501 Part 5

SAB to BS 476 Part 3

Class 3 to BS 476 Part 7

Filon Grade 104 - B_{ROOF} (t4) to BS EN 13501 Part 5

TP(a) to BS 2782-0 Method 508A

SAA to BS 476 Part 3

Class 1 to BS 476 Part 7

Filon Grade 101 - B_{ROOF} (t4) to BS EN 13501 Part 5

TP(a) to BS 2782-0 Method 508A

SAA to BS 476 Part 3

Class 1 to BS 476 Part 7

Class 0 to BS 476 Part 6

Our recommendations are provided in good faith, but approval from the appropriate local government authority may be required in certain circumstances or if there is any uncertainty regarding the correct material to use. The following references are taken from the above document.

Internal Liners and Single Skin

Section 3: *Internal fire spread - linings*, provides classifications to BS 476 Part 7. Table 3.1: *Surface classifications for walls and ceilings*, lists the requirements for various building types and room size. The following recommendations apply:

Type of building	Room or circulation space	Surface class for both walls and ceilings	
		National Class	Filon Grade
Purpose groups 1 and 2	Rooms not exceeding 4m ²	3	300
	Domestic garages not exceeding 40m ²	3	300
	All other rooms (including garages exceeding 40m ²)	1	104
	Circulation spaces (with a dwelling)	1	104
	Circulation spaces (common areas)	0	101
All other purpose groups	Rooms not exceeding 30m ²	3	300
	All other rooms	1	104
	Circulation spaces	0	101

Technical Information Sheet

TIS003-3 Fire – Roof Application

Northern Ireland

(July 2025)



Please note that Building Control approval is strongly recommended for large area applications.

There are limitations stated in Section 3 for a rooflight liner or single skin rooflight that is rated Class 3 and also for certain thermoplastic rooflights, these restrictions do not apply to **Filon Grades 101 & 104**. Table 3.2 and Diagram 3.1 provide the criteria that apply for the use of rooflights with a **Class 3** inner surface as follows:

Each rooflight area or rooflight group must not exceed 5m² area. The minimum space separation in any direction between rooflight areas is 3m. For industrial and other non-residential purpose groups this may be reduced to a minimum of 1.8 metres, but the rooflights should be evenly distributed and not exceed 20% of the floor area of the room.

Note that GRP roof liners and single skin sheets **must not** be used within 1.5m of a compartment wall.

External Roofs

Section 5: *External fire spread*, provides National classifications. Table 5.7: *Limitations on roof coverings*, lists the designation for a roof covering in relation to the minimum distance from any point on a relevant boundary.

The following recommendations apply:

There are no boundary restrictions on the use of **any** Filon Fire Grade roof covering, but the requirements for a liner still apply.

Table 5.8 provides guidance for the permissible use of rooflights that have BS 476 Part 7 Class 3 classification.

For the following applications, **Class 3 – Filon Grade 300** is permitted:

- A balcony, veranda, carport, covered way or loading bay, which has at least one longer side wholly or permanently open.
- Detached swimming pool.
- Conservatory, garage, or outbuilding, with a maximum floor area of 40m².

External Walls

Section 5: *External fire spread*, Table 5.1: *Provisions for external surfaces of walls* lists the classifications for an external wall surface depending on building height and proximity to a relevant boundary.

Using the information listed in Table 5.1 and Diagram 5.1, the below recommendations for walls are based upon current requirements for industrial, storage, other non-residential buildings, and buildings other than purpose group 5. It is strongly recommended that Building Control approval is sought if there is any concern or doubt regarding the correct use of materials.

External Wall Surface		
Distance From Boundary	Building Height	Required Fire Grade
Less than 1m	Less than 18m	Filon Grade 101
Less than 1m	More than 18m	Filon Grade 101
More than 1m	Less than 18m	Filon Grade 300
More than 1m	Ground level to 18m	Filon Grade 104*
More than 1m	From 18m and above	Filon Grade 101

*In practical terms it would be prudent to use **Filon Grade 101** for the complete wall to ensure consistency of appearance and to reduce the risk of site error.