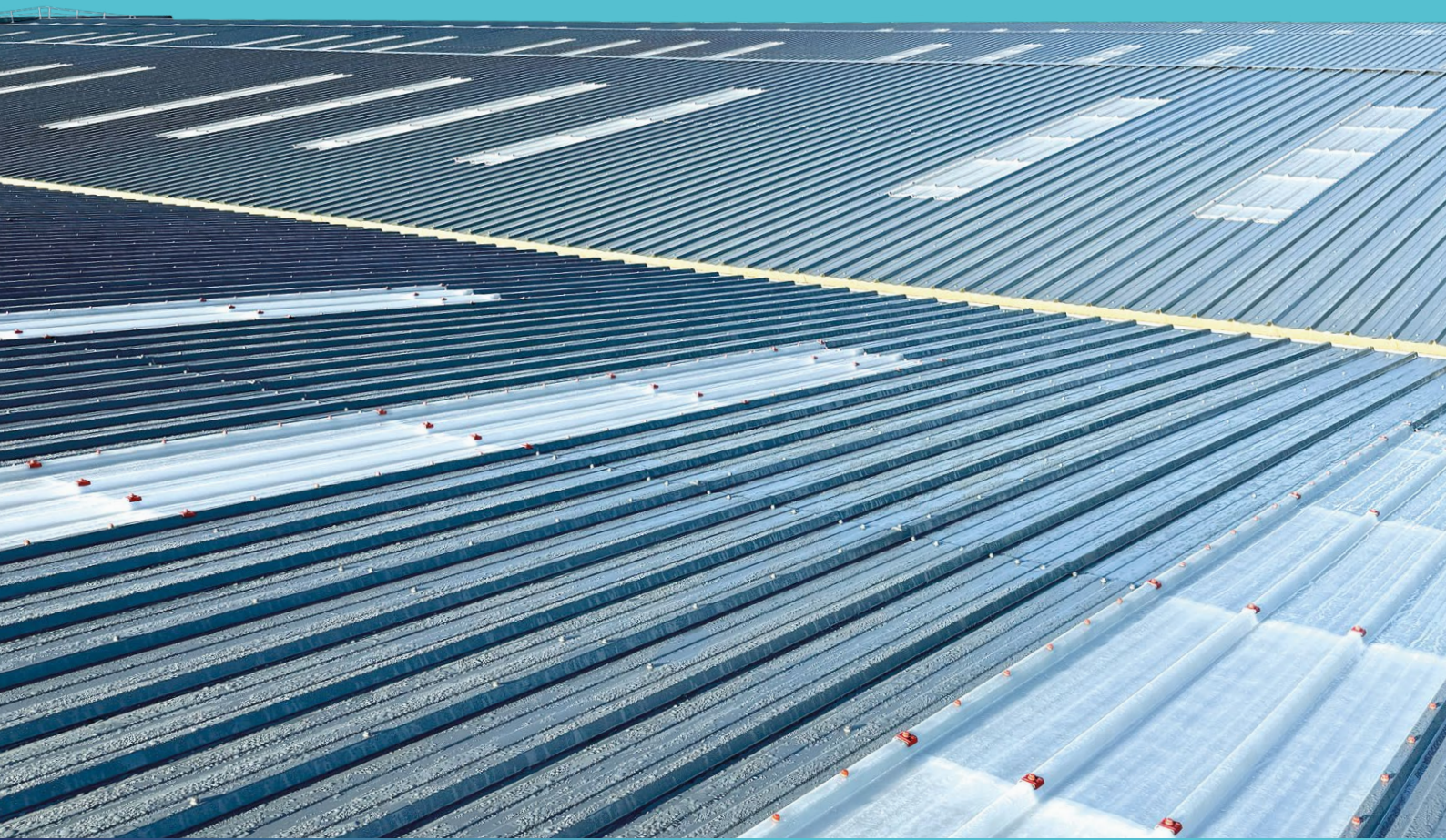


FACTORY-ASSEMBLED **MULTI-LAYER GRP ROOFLIGHTS**



FAIRs | Monarch-F | Filite

Solutions for new build
daylighting, insulation
and refurbishment.

FILON[®]
ON YOUR SIDE

THE **FILON WAY**

WE GO ABOVE AND BEYOND.



We have been producing high-quality GRP rooflighting and roofing systems **since the 1950s.**

Our manufacturing hub in Burntwood, Staffordshire **carries ISO 14001 environmental certification** and **our whole company is ISO 9001 certified.**

Every Filon rooflight, sheet and valley trough is made by a team that takes **pride in its work and understands the pressures on yours.**

OUR 'ON YOUR SIDE' APPROACH:

ON TIME

Delivering when it matters with fair lead times and technical advice that saves time. All with a flexible approach and can-do attitude to meet your needs wherever possible.

ON SPEC

Products that meet every detail. Designed and tested for long-term service, with traceable evidence behind every claim.

ON POINT

Expertise that solves problems fast, with over 60 years of UK manufacturing and continuous improvement behind us.

ASSOCIATIONS

Filon is an **active member of a number of recognised trade and industry bodies** that promote best practice, safety and quality across the construction sector:



THE ROOFLIGHT ASSOCIATION

The Rooflight Association (RA)



LEADING ROOFING EXCELLENCE

National Federation of Roofing Contractors (NFRC)



Liquid Roofing & Waterproofing Association

Liquid Roofing & Waterproofing Association (LRWA)



Rural & Industrial Design & Building Association

Rural & Industrial Design & Building Association (RIDBA)



Composites UK Trade Association



Metal Cladding & Roofing Manufacturers Association (MCRMA)



The NBS (The National Building Specification)

These memberships reflect Filon's commitment to product integrity, industry collaboration and continuous improvement.

INTRODUCTION

WHY CHOOSE FILON MULTI-LAYER ROOFLIGHTS?

Filon GRP multi-layer systems are engineered to provide consistent natural light and thermal performance through controlled factory assembly.

DESIGNED FOR COMPATIBILITY

Manufactured to suit a wide range of current and obsolete profiles, supporting new build and refurbishment and minimising compromise at junctions and interfaces.

PERFORMANCE AND CONFIDENCE

Clear configuration options and guidance from the Filon team so thermal performance and light transmission can easily be determined and controlled.

ROOF SAFETY OPTIONS

Configurations and sheet selections that meet and exceed safety standards.

SYSTEMS COVERED IN THIS BROCHURE

FAIRs

Factory-assembled insulating rooflights for composite panel roof systems, manufactured to suit common and obsolete profiles.

Monarch-F

Factory-assembled barrel vault rooflights for ridge, flat and low-pitch applications, with standard sizes to suit standing seam and secret-fix systems, up to 2600mm wide.

Filite

Factory-assembled internal lining box rooflights for within suspended ceilings and purlin lining systems; designed to enhance rooflight thermal performance and maintain daylight levels.

FAIRs

FACTORY ASSEMBLED INSULATING ROOFLIGHTS

Factory-assembled insulated GRP rooflights for use with composite panel roofing systems. Manufactured to match all common current and many obsolete panel profiles, making them suitable for both refurbishment and new-build projects.



TYPICAL APPLICATIONS

- Insulated composite panel roof systems
- Some built-up twin-skin roofs
- Replacement of existing insulated rooflights

KEY CHARACTERISTICS

- Factory-assembled insulated rooflight units
- Double- and triple-skin configurations available
- Profiled to suit composite and non-composite roof systems
- Box depths up to 150mm to match all common composite roof panels
- Optional weather sheet weight types and reinforcement technologies for improved durability and safety
- Typical life expectancy of 25–30 years
- Designed to support compliance with UK Building Regulations for fire performance



FAIRs PERFORMANCE

FAIRs PERFORMANCE

Filon FAIRs are specified where insulated daylighting is required within composite panel roof systems and there is a need to maintain defined levels of thermal performance, roof safety, and long-term durability.



THERMAL PERFORMANCE

FAIRs units are available in a range of factory-assembled configurations, allowing thermal performance to be selected to suit the requirements of the building rather than forcing a fixed solution.

U-Values are available down to 0.87 W/m²K, depending on the insulating core type selected. This allows thermal performance and daylight transmission to be balanced according to the demands of the occupied space.

DAYLIGHT PERFORMANCE

Manufactured from translucent GRP, Filon FAIRs provide diffused natural daylight rather than direct sunlight. Evenly distributed light is spread across the space below, helping to maintain consistent internal lighting conditions across large industrial and commercial floor areas.

Daylight performance will vary depending on rooflight area, spacing, layout, orientation, any storage racking, and internal finishes.



COMPATIBILITY & LIMITATIONS

Filon FAIRs are manufactured to match all common current composite panel profiles and many obsolete systems, supporting refurbishment without wider roof alteration.

STRENGTH, DURABILITY AND ROOF SAFETY

FAIRs are designed for long-term service in industrial and commercial roofing environments.

Fabricated from high quality Filon Glass Reinforced Polymer sheeting (GRP) which is **robust, shatter resistant** and **unaffected by extremes of temperature**. External sheets are finished, to the outer surface, with Filon Protect, a UV absorbing film which provides UV protection and resistance to degradation caused by weathering.

Weather sheet weights can be selected to support defined roof safety expectations, with Supasafe top sheet options available for applications where there may be an increased risk of accidental foot traffic or mechanical damage. Rooflights are not designed to be walked on.

FIRE PERFORMANCE

To meet the typical requirements of Building Regulations, the standard fire ratings for Filon FAIRs are:

Outer skin:

Filon Grade 300

Inner skin:

Filon Grade 104

Filon Grade 101:

Available when a higher fire performance is required.

Filon Grade 300 is rated $B_{ROOF}(t4)$ to BS EN 13501 Part 5; SAB to BS 476 Part 3; Class 3 to BS 476 Part 7.

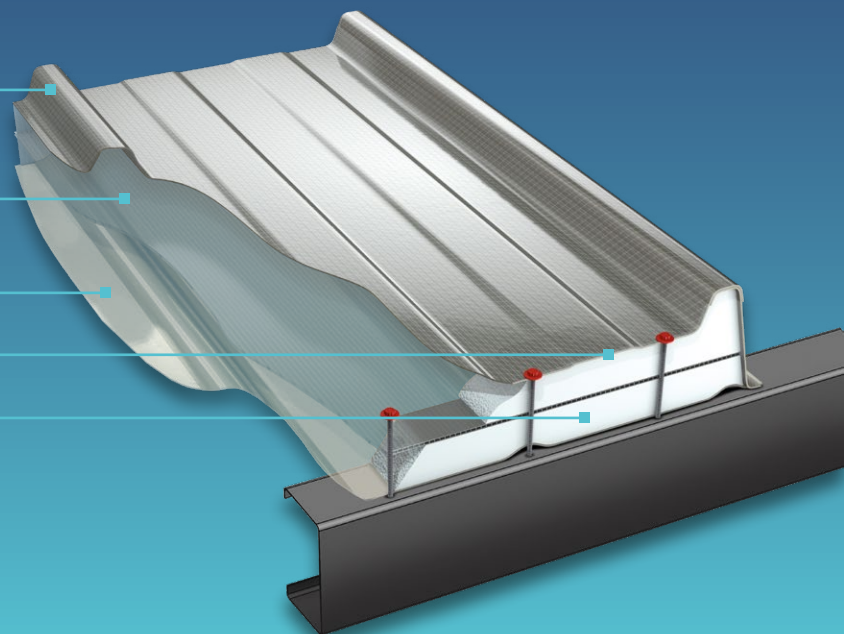
Filon Grade 104 is rated $B_{ROOF}(t4)$ to BS EN 13501 Part 5; TP(a) to BS 2782-0 Method 508A; SAA to BS 476 Part 3; Class 1 to BS 476 Part 7.

Filon Grade 101 is rated $B_{ROOF}(t4)$ 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.

For further information, please refer to the Filon Technical Department; Filon Technical Information Sheets TIS003 England; TIS003-1 Wales; TIS003-2 Scotland; and TIS003-3 Northern Ireland; and your Local Building Control Office.

TYPICAL FILON FAIRS ROOFLIGHT INTEGRATION

- UV protected GRP top sheet - huge range of profiles and options available
- Film or multiwall polycarbonate core
- Profiled GRP liner
- Bonded construction
- Rigid foam spacer



Monarch-F

FACTORY-ASSEMBLED BARREL VAULT ROOFLIGHTS

Monarch-F is a tough and durable factory-assembled GRP barrel vault rooflight system designed for applications where continuous daylight is required across ridges, roof junctions or wide roof spans.

Monarch-F is commonly specified where in-plane rooflights would be unsuitable.



TYPICAL APPLICATIONS

- Standing seam roofing systems
- Secret-fix roof systems
- Continuous ridge details
- Low-pitch and flat roofs

The barrel vault form helps distribute daylight more evenly across the internal space, reducing contrast across large industrial and commercial floor areas.

CONSTRUCTION, DURABILITY AND ROOF SAFETY

Monarch-F units are factory-assembled to provide consistent build quality and long-term service in industrial and commercial roofing environments.

The outer weather sheet supplied as standard is Filon CEDR24E.

- **Classified Class B non-fragile to ACR[M]001**
- **Expected period of performance: 25 years**

Non-fragility classification applies to the roof system configuration and should be confirmed at specification stage. Please contact the Filon Technical Department for further information.



MONARCH-F SIZE RANGE AND SYSTEM COMPATIBILITY

Monarch-F rooflights are available in the sizes shown and may be used for flat roof applications. Certain types may also be used with the roof systems outlined below.

Monarch-F 500	Suitable for 500mm module standing seam systems and 500mm and 508mm cover width secret-fix systems.
Monarch-F 800	Suitable for 400mm module standing seam systems.
Monarch-F 1000	Suitable for 500mm module standing seam systems and 500mm, 508mm and 1000mm cover width secret-fix systems.
Monarch-F 1200	Suitable for 300mm and 400mm module standing seam systems and 600mm and 1200mm cover width secret-fix systems.
Monarch-F 1300	May be used with most of the above systems for new-build or refurbishment projects where the Monarch-F rooflight is required to extend further out to accommodate existing curb supports or wider insulated curb details.
Monarch F-1275	A modified design suited for wider applications. Widths start at 1400mm and can increase in 100mm increments up to a maximum of 2600mm.

Full dimensional drawings and fixing details are available in the Monarch-F technical literature.

FIRE PERFORMANCE

To meet the typical requirements of Building Regulations, the standard fire ratings for Filon Monarch-F and Monarch-F 1275 are:

Outer skin:	Filon Grade 300
Inner skin:	Filon Grade 104 if it is to be the lowest sheet in the system, i.e. the roof liner.
Alternatively:	
Inner skin:	Filon Grade 300 if there is a separate rooflight liner beneath the Monarch-F units.
Filon Grade 101:	Available when a higher fire performance is required.

Filon Grade 300 is rated $B_{ROOF}(t4)$ to BS EN 13501 Part 5; SAB to BS 476 Part 3; Class 3 to BS 476 Part 7.

Filon Grade 104 is rated $B_{ROOF}(t4)$ 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 is rated $B_{ROOF}(t4)$ 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.

For further information, please refer to the Filon Technical Department; Filon Technical Information Sheets TIS003 England; TIS003-1 Wales; TIS003-2 Scotland; and TIS003-3 Northern Ireland; and your Local Building Control Office.

Filite

DOUBLE-SKIN GRP BOX ROOFLIGHTS FOR INTERNAL LININGS

Filite units are factory-assembled double-skin GRP box rooflights designed for use beneath external roof coverings. They are suitable for use with most suspended ceilings, over and under purlin linings.



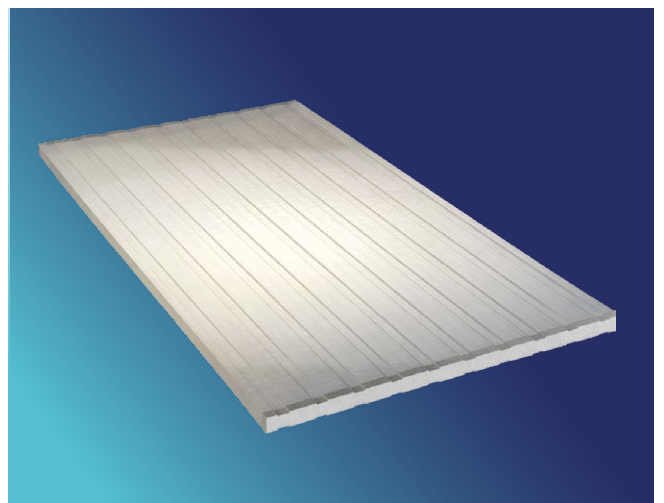
TYPICAL APPLICATIONS

- Buildings with **suspended ceilings**
- **Purlin lining systems**
- Refurbishment projects **requiring daylight at ceiling level**

CONSTRUCTION, DURABILITY AND ROOF SAFETY

Filite units use a box construction to provide rigidity and stability in service. They are unaffected by temperature changes from -20°C to 100°C. They will not become brittle at low temperatures and will not soften, or warp at high temperatures. Filon factory assembly supports consistent quality suitable for industrial and commercial environments.

Filite is intended for use beneath external rooflights and is not directly exposed to external weathering.



Filite PERFORMANCE

Filite units provide supplementary insulation and daylight beneath external roof coverings.

THERMAL PERFORMANCE

Double-skin units achieve a U-Value of 3.22 W/m²K

U-Values relate to the Filite unit only and should be considered as part of the overall roof and ceiling build-up. The insulation values will therefore improve as an installed system.

DAYLIGHT PERFORMANCE

Typical light transmission up to 60%, depending on configuration, providing diffused light to minimise glare.

DESIGN INTENT & LIMITATIONS

Filite is intended to enhance insulation levels, not replace, external weather sheets although this could be carried out at the same time.

Units are manufactured to standard lengths of 3000mm, with specially shaped re-entrant upstands bonded to the long side of each sheet and a large bonding surface area between top and bottom panels to ensure rigidity.

SIZES AVAILABLE

30mm depth:	Up to 1000mm wide; 3000mm long
35mm depth:	Up to 1200mm wide; 3000mm long
40mm depth:	Up to 1000mm wide; 3000mm long

To meet the typical requirements of Building Regulations, the standard fire ratings for Filon Filites are:

Outer skin:	Filon Grade 300
Inner skin:	Filon Grade 104
Filon Grade 101:	Available when a higher fire performance is required.

Filon Grade 300 is rated 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 is rated 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 is rated 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.

For further information, please refer to the Filon Technical Department; Filon Technical Information Sheets TIS003 England; TIS003-1 Wales; TIS003-2 Scotland; and TIS003-3 Northern Ireland; and your Local Building Control Office.

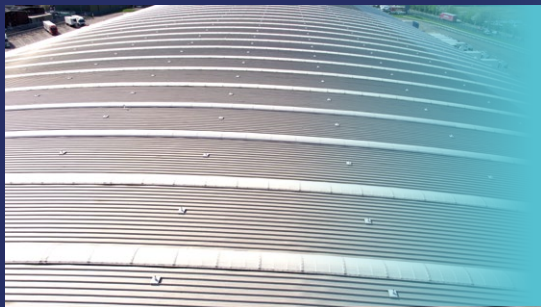
CHOOSING THE RIGHT SYSTEM

Every project places different demands on daylight, insulation, roof geometry and construction constraints. Filon's factory-assembled rooflight systems are designed to address these differences directly.

Filon's technical team can support profile matching, configuration selection and system suitability, helping to identify the most appropriate solution based on the existing roof construction, daylight strategy and required performance. Where standard configurations are not suitable, alternative approaches can be explored to achieve the best possible solution.

FAIRs

Factory assembled insulated rooflights for composite panel roof systems, where thermal performance, profile accuracy and long-term consistency must be controlled at manufacture.

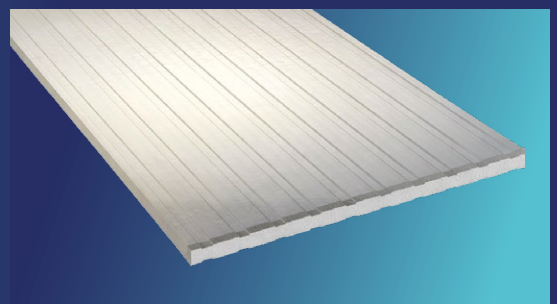


Monarch-F

Factory assembled barrel vault rooflights for ridges, flat roofs and wide spans, providing continuous daylight across roof geometries where profiled rooflights are unsuitable.

Filite

Factory assembled internal lining rooflights for improving daylight beneath existing roof coverings, without altering the external roof structure.



FILON[®]

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