

FILON® roofscape

Your regular update from the leader in GRP building products

The fragile roof safety revolution



Falls through fragile roofs currently give rise to more fatal accidents in the construction industry than any other cause.

This statistic will soon be history, thanks to FILON's innovative new Fixsafe system.

For the full story, see [page 4](#).

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THIS SPACE**
for sustainability
news in our
next issue of
Roofscape

PLUS: • Supasafe rooflights and DR Double Reinforced sheets
• Roof refurbishment case studies • Industry news

Welcome to **roofscape**



The subject of Health and safety is forever in the news, if not relating to some comical situation where the rules are applied over-zealously, then more seriously where an injury or even death occurs. I have come across both types of situation. Luckily I am still here to relate to those who want to listen. I often refer to my sliding off a wet roof into a hawthorn bush and falling through a fragile roof into a bathroom, to name but two. The downsides however are the stories where I have lost a colleague as well as having quite a few workmates suffering serious injury. Health and Safety has therefore assumed a particular significance in my working life. A sensible attitude to rules and regulations ensures you can achieve results without cutting corners. At Filon, Health and Safety is our first priority when it comes to working procedures. We have played our part in making rooflights safer through our GRP development work over the last decade, resulting in the Supasafe and DR rooflight ranges. Now, in this issue of Roofscape, we are proud to introduce another Health & Safety innovation: our new Fixsafe system, designed to allow old or damaged rooflights and roofing profiles to be replaced safely from below, without needing to gain access to the roof. We believe – as does the HSE – that this will have a significant impact on reducing falls from roofs. Take a look at the article on page 4 to find out more about this important new development.

David Hathaway F.I.o.R.
Director of Sales, FILON Products

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New BBA Certification for V-Flow valley gutters

BBA Certification for FILON's V-Flow range of valley gutters has been renewed following testing of products manufactured at the company's new manufacturing plant at Burntwood, West Midlands.

This provides proof for specifiers and other industry decision-makers that the system has been rigorously assessed and will allow compliance with the Building Regulations.

Suitable for all kinds of pitched roof constructions, V-Flow valley gutters are manufactured from lead grey GRP (Glass Reinforced Polyester),

to provide a very cost-effective alternative to traditional lead roof gutters. Unlike lead, which has become a major target for thieves due to escalating metal costs, V-Flow gutters have no scrap value and will therefore help to combat crime.

Bharat Gandhi, FILON's Quality Manager, commented: "The V-Flow system is subject to all our usual quality procedures, so we were confident of gaining the renewed certification. We're looking forward to further growth in market share in this product category". ♦



Bharat Gandhi, Quality Manager, FILON Products, with the new BBA certificate

New report links poor health to lack of sunshine

Scotland's poor health record could be directly linked to a lack of sunshine, a science expert said.

Dr Oliver Gillie called for a national campaign to urge people to take a daily dose of vitamin D in a bid to help tackle the health problem.

In a new study, the scientist and writer linked the "extreme" Scottish weather to vitamin D deficiency, which is caused by low exposure to sunlight.

Medics have already established a lack of the vitamin as a factor in diseases such as cancer and heart disease, of which Scotland has some of the highest levels in Europe.

Research has also shown that suicide rates are considerably higher in parts of the world where daylight is very limited for significant parts of the year. On a slightly less dramatic but equally significant level, there is also a growing body of evidence to

suggest that buildings enjoying high levels of natural light are literally more successful than those more reliant on artificial light. In all environments the eye and brain functions respond better to natural light, so people perform better, while passive solar gain can reduce energy costs.

For more information about designing buildings with optimum levels of beneficial natural daylight, contact FILON Products or visit www.narm.org.uk. ♦

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Over-roofing 'a no brainer' at the Open University

FILON's Over-roofing system and Supasafe rooflights have been installed as part of a major refurbishment project by BRC Industrial Roofing, on two large Open University warehouses in Wellingborough, Northants.

The first of these had a Cape Monad asbestos cement roof with single skin rooflights and plasterboard overpurlin linings. The second roof comprised Double Six asbestos cement roof sheeting with asbestos cement liner panels and single skin rooflights.

Both of the roofs were leaking and the buildings also suffered from low light levels and poor insulation.

Glenn Curley of BRC Industrial Roofing takes up the story: "FILON Over-roofing had been specified by Summers Inman, the contract administrator. We then consulted with FILON to refine the specification to provide the highest possible performance and to meet Health and Safety requirements. We have worked with FILON many times before and are aware of the great weight advantage that their GRP system has over steel systems. This was the key factor in

its specification for this project and made FILON Over-roofing the obvious choice."

To provide a non-fragile roof system, the FILON sheets were supplied in their Supasafe specification. Increasing light levels within the buildings was achieved by replacing the rooflights with FILON Supasafe Factory Assembled Insulated Rooflights (FAIRS). These were also specified as Supasafe units, to maintain the non-fragile specification across all roof areas.

To maintain the required insulation levels, 180mm Knauf cladding roll was installed. FILON FAIRS triple skin rooflights exceed the U-value of 2.2W/m²K as stated in Part L of The Building Regulations.

"The project commenced in May 2008 and warehouses remained occupied during the contract, with a requirement that the work be substantially complete by July", said Mr. Curley. He continued: "This schedule was crucial, as the warehouses hold literature and supplies for Open University students and summer is their busiest time as preparations are

made for the new educational year. Needless to say, FILON delivered on time, with a very high quality product and we were able to complete the project ahead of schedule and substantially within budget. All-in-all a very successful project."

field and has enjoyed a long standing partnership with FILON, having carried out many projects using FILON systems, including roof refurbishment at Royal Doulton's Baddeley Green Pottery and the British Rail Workshops at Crewe. ◆

BRC Industrial Roofing (Midlands) Ltd is a leading specialist in its



Introducing

FILON

Fixsafe



The new internal fixing system for profiled roof sheets and rooflights

Figures published by the Health & Safety Executive show that falls through fragile roof materials caused over one quarter of fatal accidents in the construction sector. The HSE has responded positively to an innovative new fixing system jointly developed by FILON Products and Letchworth Roofing, that is set to dramatically reduce this figure.

Health & Safety Working at Height Regulations 2005 states: 'every employer shall ensure that no person at work passes across or near, or works on, from or near, a fragile surface where it is reasonably practicable to carry out work safely and under appropriate ergonomic conditions without his doing so'.

Removing risk

Ron Allen, FILON's Managing Director, pointed out: "Prior to the development of the Fixsafe system, repairs to fragile roofs have proven very difficult to achieve in line with this particular clause in the regulations and most repairs are carried out externally, requiring scaffold access as well as internal

netting. Erecting access equipment up to and over a fragile roof and carrying out the repair or replacement, can prove to be very dangerous. Employers and building owners leave themselves open to prosecution if they do not comply with Health & Safety Regulations."

Ron continued, to explain that: "Working in partnership with Letchworth Roofing, we are now able to offer a practical and cost effective means of addressing this important issue. Letchworth Roofing has provided invaluable practical expertise, to make the project a reality."

Les Williams, FILON's Research & Development Manager and John Chillman, Letchworth Roofing's Senior Surveyor, have together been instrumental in bringing

Fixsafe to the market. Les Williams said: "Until now, replacing damaged roofing profiles or rooflights has required access to the roof to allow fixings to be installed. This creates the potential for accidents which can be the result of misjudgment of the strength of the roof. The long-term solution to this problem lies with designers and their clients, by eliminating unprotected areas of fragile roofing. However, the problem will remain in the maintenance and refurbishment of existing buildings for many years."

Current Health and Safety legislation prescribes a number of safety measures for working on fragile roofs.

Platforms or stagings to spread loads on roofing materials, safety nets, scaffolding and harness systems are undoubtedly effective when employed. However, in some instances they are not being adhered to for reasons of cost or poor site management - particularly in the case of small maintenance or repair jobs, where there can be a temptation to cut corners on cost grounds. The fact remains that the obvious and most effective way to avoid falls through fragile roofing materials is to eliminate the need for workers to go onto the roof. This approach also reduces the risk of damage to the existing roof which can easily occur during roof repair from the top.

The innovative solution

Les Williams said: "We had been looking at how we could repair or replace rooflights from the underside for a number of years, after Richard Lockwood of the HSE posed the question to us back in 2001."

He continued: "John Chillman had been working on an internal fixing, from which we produced early

prototypes and refined the design. The system was tested on FILON's own factory roof as well as being used on a contract to replace rooflights at a well known oil refinery where the occupier's own safety rules would not allow access onto the fragile roof. It worked well and has proved to be a viable alternative to traditional fixing practices."

The basic concept of the system is to remove the sheet or rooflight to be replaced, by retracting it into the building. This is then used as a template for drilling the new replacement sheet, prior to installing the Fixsafe fittings and securing to the roof structure.

Save lives, save costs

The whole procedure is very quick and simple to carry out and in addition to increased safety, provides a further important secondary benefit. By removing the requirement for roof staging, safety netting or external scaffolding, the Fixsafe system can bring significant cost savings.

What the HSE says

Richard Lockwood of the Health & Safety Executive, said: "The new Fixsafe system avoids the need to access a fragile surface, or work near a fragile surface, removing the risk of falling through during a repair operation. The HSE is looking to revise the present guidance, to take this new development into account."

A complete system

The Fixsafe system will be available to order from FILON Distributor outlets. For rooflight replacement, the system comprises GRP translucent rooflights with all appropriate fixings required to fix the size of sheet required. For sheet repairs, FILON's DR (Double Reinforced) opaque GRP sheet will be supplied, again with the relevant



number of fixings required to fix the size of sheet required" FILON is able to match all Asbestos and Fibre cement profiles in the UK today.

Partners in improving safety

David Hathaway, FILON's Director of Sales, commented: "All of us at Filon are committed to providing innovative new products and our record over the years has been spectacular (as you will have read in previous issues of Roofscape). This breakthrough gives us all particular pleasure as we are playing such a major part in improving safety."

He continued: "Naturally a patent application has been filed on the Fixsafe system to protect the interests of all those concerned, but both FILON Products and Letchworth Roofing will ensure that the system is easily available to all those who are involved in this type of repair. Having worked with Letchworth Roofing on this and many other major projects, we are sure that this coming together of two major players in roofing will prove to be a milestone in roof safety."

Keith Crofton, Chairman of Letchworth Roofing commented: "We're extremely proud of the part we've played in this important joint development, which I believe will come to be seen as a major contributor to reducing site accidents. Our team along with technical staff from FILON, will be soon presenting a series of seminars designed to bring attendees up to speed on the latest Health & Safety developments and to introduce the Fixsafe system. The seminars will take place in the Midlands and the South of England over the coming months".

For further information, visit:

www.filon.co.uk

www.letchworthroofing.co.uk ◆



Now, virtually any profiled roof repairs and rooflight replacement can be carried out from below, with no costly roof staging, safety netting or external scaffolding

Supasafe success at Cambridge Assessment



FILON Products' Supasafe GRP rooflights have been installed at the Cambridgeshire Warehouse of Cambridge Assessment, one of the UK's leading examination organisations, as part of a major roof refurbishment project by Letchworth Roofing.

The existing roof consisted of two different sheeting types, with insufficient insulation, and 1,200 old and fragile rooflights which were a safety hazard in undertaking roof maintenance.

Letchworth Roofing installed new FILON single-skin Supasafe rooflights and over-clad the existing sheeting with Kingspan composite panels incorporating FILON factory assembled double-skin rooflights. Kingspan Soft Liners with a stucco

white aluminium underside were specially produced for this project to take account of the existing roof situation and reduce the weight on the building.

The project also involved the raising of the existing smoke vents to the higher roof level and the installation of a comprehensive mansafe system to facilitate safe maintenance.

FILON Supasafe rooflights are manufactured from polyester resins and glassfibre and incorporate two additional reinforced woven glass mats compared with conventional FILON rooflights.

These reinforcement layers provide an extremely strong and durable material. The method by which the reinforcement layers are incorporated into the rooflights follows a technique used to increase the strength and impact resistance of the hulls of naval vessels.

Letchworth Roofing has also been closely involved in the development of FILON's new Fixsafe system for safe replacement of damaged roofing sheets or rooflights. ◆

Class B Certification for Canopies

Canopies UK Limited, based in Darwen in Lancashire, can achieve a Class B certification under the ACRM Drop Test Stipulations on their commercial and industrial canopies.

Canopies UK carry out a lot of Local Authority work where a Class B classification is the required standard.

Canopies UK Managing Director Elaine Morris, stated "We are delighted to confirm to Local Authority specifiers, that our

Canopies will achieve the Class B certification under the ACRM tests. Working with FILON Products Limited, which we have done for many years, provides the confidence that many designers and clients are looking for.

We offer a highly competitive product and can point to the fact that by complying with the CDM Regulations, designers can enjoy peace of mind that lives will not be put at unnecessary risk". ◆





The UK's leading rooflight manufacturers – working as one

FILON is a founder member of NARM, the National Association of Rooflight Manufacturers, a body that represents many of the UK's recognised producers of rooflights as well as companies associated with the rooflighting industry.

FILON takes an active part in all aspects of the association's activities. At present, Chris Pearce, former Managing Director of FILON is Chairman of NARM and David Hathaway, FILON's Director of Sales, heads up the NARM PR and Marketing Committee. Steve Vickers, FILON's Technical Manager, sits on NARM's influential Technical Committee.

NARM's new web site, which is about to be launched, will not only put you in touch with NARM's membership but also allow you to download many technical documents and general information guides on the use of rooflights.

The UK rooflight industry is very diverse and quite a large number of products are imported into the UK. Issues have arisen about claims regarding the compliance of some of these products with UK regulations. NARM is very keen to ensure that today's specifiers receive the correct information and specification relating to the projects they are involved with and the

association encourages specifiers to visit their website at www.narm.org.uk ◆



Steve Vickers, FILON's Technical Manager, sits on NARM's Technical Committee

Extra-strong GRP mansafe roofing systems

FILON Supasafe sheets are manufactured from polyester resins and glassfibre and incorporate two additional reinforced woven glass mats compared with conventional FILON rooflights.

'Strong as steel'

FILON Supasafe sheets have been assessed in accordance with ACR(M)001-2000 'Test for Fragility of roofing assemblies. Under this classification, they are rated Class B Non-Fragile Assembly. This is equivalent to 0.7mm steel sheet.

Non-fragile for the life of the roof

FILON Supasafe sheets are supplied with a highly durable Melinex film to the weather surface. This extends sheet life and reduces yellowing.

Very high light transmission

FILON Supasafe rooflights provide excellent 85% light transmission, compared to 90% light transmission for standard weight GRP rooflights.

Accurate profile matching to steel sheet

FILON Supasafe sheets provide high strength in a relatively thin sheet, with highly accurate profile match for excellent sealing and aesthetics.

Fire resistance

FILON Supasafe rooflights are manufactured in three fire retardant grades, allowing the most cost-effective solution relative to building regulations.

Wide range of profiles and options

FILON Supasafe rooflights are available in a wide range of commonly used roofing profiles. Special colour rooflights can be supplied to special order.



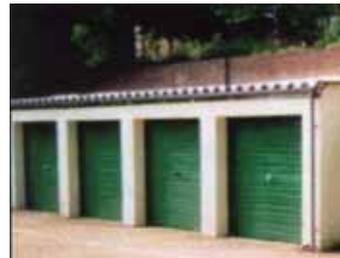
Bath Fire Station plays it safe with FILON

FILON's Supasafe non-fragile rooflights have been specified for a new fire engine wash canopy at the Fire Station in Bath, Avon.

Following a structural investigation by Hyder Consulting, a decision was made to carry out alterations to the steelwork of the canopy and to replace the existing georgian wired glazing panels which had become unstable. The canopy was in generally poor condition and there was evidence of movement in the supporting Bath stone wall.

FILON's Supasafe rooflights were selected as the appropriate replacement due to their high strength and light weight. Weight was an important consideration, to reduce the load on the structure and avoid further movement.

The contract was undertaken by NRS Roofing of Calne in Wiltshire. NRS' Managing Director Eric Davies commented: "We've worked with FILON for many years and this contract achieved the high standards we've come to expect." ◆



Safer new roof for garage block

FILON's DR (double reinforced) sheets, can be used as a direct replacement for asbestos cement profiles which are no longer manufactured.

DR sheets were used to refurbish a block of garages in the South East of England where the existing Double Six profile sheets were damaged and no longer available in their original format. FILON were able to manufacture the sheets in one length, to match the existing Double Six sheets and by using the FILON DR sheet not only were the garages made watertight but also the roof was made stronger.

FILON DR sheets have been tested in accordance with HSE Drop Test (Health & Safety Executive, Specialist Inspectors Report No.30 "Fragile and Non-Fragile Roofing Materials"). This test simulates a human body falling against a flexible material, and uses a 300mm diameter bag containing 45kg of dry sand, which is dropped 1.2m onto the centre of an assembled test area. ◆

roo**FILON**lights and Part L:

Compliance is easy
when you specify
FILON rooflights

Draw on FILON's experience and technical knowledge for a rooflight specification that will help your building achieve the CO₂ emissions targets set in the new Part L2A Building Regulations.

- Rooflight areas up to 20% make a positive contribution to compliance
- Triple skin rooflights with U-values of 2.2W/m²K or better
- Rooflights available to match virtually any profiled sheet - even discontinued profiles

For product information or technical support, call us now on 01543 687 300

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