

# SPORTS STADIA

looking ahead to London 2012 - see page 3

# **PLUS:**

**The new Part L:** Design guidance for rooflight specifiers **Over-roofing** A failing factory roof gets the full FILON over-roof remedy Flat roofing TecnaFlex system solves flat roof problems

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**Innovations** New products galore in this issue...

# Welcome to 100 SCape



**Once again, welcome to Roofscape.** In the last issue we covered the new Building Regulations Part L, so, to date what impact has this new Regulation had? To be frank it seems very little at present and in a lot of instances confusion reigns. The legislation in place is quite specific and will provide a good basis for saving energy and reducing carbon emissions. To date it seems that little notice is being taken of the Regulations and they

don't appear to be being policed. The concept of rooflights having a U-value of 2.20 and the roof 0.25 is straightforward but still we have no indication of clients, specifiers or contractors actually ordering the new rooflights designed to comply with these Regulations. So, what is

going on? For more information about rooflights and Part L, see page 5 of this issue of Roofscape, or visit our website (www.filon.co.uk) where our comprehensive brochure covering the Part L Regulations regarding rooflights is available.

Davis Hillmary

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

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Draw on FILON expertise at one of our nationwide CPD seminars

# **Canopies UK builds on success**

Canopies UK has moved to new premises at Darwen, near Blackburn in Lancashire, to facilitate the company's ongoing plans for expansion and diversification.

FILON Products supplies profiled GRP sheets and other GRP components for Canopies UK's wide range of self-supporting canopies.

Canopies UK undertakes supplyonly contracts in association with Housing Developers and the public sector. The company offers a broad standard product range as well as a comprehensive bespoke manufacturing service.

In addition to its range of canopies, the company also provides a nationwide supply and fix service for FILON's innovative Tecnaflex flat roofing system.



David Hathaway, Director of Sales at FILON Products, commented "We're delighted to be working with Canopies UK and we wish them well with the move and future expansion plans"

Above: Canopies UK's new premises in Darwen, Lancashire



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## FILON supports Roof Shop show

South Coast Roofing Supplies, part of the SIG Roofing Supplies Group, recently held an exhibition and customer event at its premises in Lewes, East Sussex.

This was part of SIG's launch of its 'Roof Shop' re-branding scheme for trade counters across the UK.

FILON was present at the show with displays of the company's rooflighting, roof refurbishment and flat roofing products. The show also provided the first opportunity for customers to see SIG's new range GRP Flashings which are manufactured by FILON (See p6).

The re-branding reflects SIG's commitment to creating new shopstyle formats at trade counters, making an even wider range of products available off-the -shelf.



# **FILON** meets the sporting challenge...

Major stadia and sports facilities across the UK feature FILON rooflights. What makes them a winner with stadia specifiers?

The 2012 Olympic Games in London will see the construction of many new buildings and stadia.

Architects and designers, tasked with meeting the challenge of this large-scale development of landmarks for and beyond the Olympics, will be considering the longevity of their designs.

One of the vital considerations for stadia will be getting the rooflighting correct from the outset, to ensure that effective, even lighting is provided to all playing areas, allowing good visibility for spectators and suitable light levels to support healthy turf growth.

Rooflight materials must transmit light, satisfy all durability, thermal, safety and fire requirements and complement the roof covering materials and/or the glazing system being used. This is where FILON can help with its extremely broad

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range of GRP (the most commonly used profiled glazing material) rooflights, as well as polycarbonate barrel lights and a polycarbonate structural glazing system.

During its 50 year history, FILON has supplied GRP profiled sheets to many of the UK's best-known stadia, including Twickenham, Birmingham City Football Club, Tottenham Hotspur and Chelsea to name but a few.

#### **GRP Rooflights**

Sporting, industrial and commercial buildings generally require diffused light which minimises glare and shadows. GRP provides high levels of diffused light, in a versatile, costeffective and durable material. FILON GRP profiled sheeting is available to match virtually any metal or fibre cement sheet profile and is also ideal for barrel vault design. The sheets incorporate FILON's specially developed UV absorbing surface protection which virtually eliminates long term discolouration. In fact, longevity is a key advantage of good quality GRP rooflights. Correctly installed, these provide a non-fragile service life in excess of 25 years.

FILON will work with designers and architects from the initial concept stages to ensure that the correct material and specifications are utilised from the outset

#### **Polycarbonate Rooflights**

Polycarbonate is an extremely versatile material that is used extensively in roof glazing.

The key properties of polycarbonate are exceptional impact resistance, high levels of light transmission, good workability and excellent fire rating. FILON can supply flat or domed systems using the long established Akraplast SunModul Finesse System. This is available in clear and tinted options with the clear option and most of the tints providing direct light.

For more information about FILON glazing and rooflight systems for stadia, please call our hotline, or visit www.filon.co.uk



Main picture: The Den, Millwall; top right: Municipal swimming Pool Villefranche de Lauragais, France; top left: Twickenham Stadium

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Fosseway Farm Nursery, Moreton-in-Marsh, Gloucestershire

# Growing market...

#### FILON is creating the perfect indoor environment for nurseries and garden centres

FILON Products has developed its Fotolite GRP sheets to provide the perfect glazing material for commercial greenhouses and garden centres.

The Fotolite profiles are manufactured from specially developed GRP and polyester resins containing a high percentage of UV stabilisation to prevent yellowing. Additional UV and weathering protection is provided by a special polyester filled surface incorporated during manufacture.

Fotolite profiles provide excellent light diffusion to reduce glare, hotspots and shadows, ensuring plants are evenly illuminated. Light transmission is high, particularly the photosynthetic wavebands which are essential for plant growth – hence the 'Fotolite' name.

An additional advantage is that the sheets are virtually opaque to UV light which, if not controlled, can cause leaf burn.

FILON Fotolite is available in lengths to meet individual project requirements. It's ideal for multispan, tunnel and pitched roof greenhouses. It's also ideal for upgrading film covered tunnels.

For details, call 01543 687300.





FILON Fotolite profiles are used by horticulturalists all over the UK



John Sifford with his amazing, worldrecord breaking 16lb 8oz onion.

### Record-breaking onion grower uses FILON cloches

John Sifford of Halesowen in the West Midlands, has grown a massive 16lb 8oz onion which he displayed at one of the country's top horticultural shows.

John, who has been a top grower of huge leeks and onions for the past 20 years, has used FILON products for his cloches and tunnels, to create various conditions for his record-breaking vegetables.

# Fotolite Fact sheet now available

FILON Fotolite is the effective, long term solution for all kinds of greenhouse glazing.

If you'd like more information, this detailed new fact sheet is available, giving practical advice on installation and applications, plus technical specifications and dimensions. For your free copy, please call 01543 687300.



# Part L guidance – FILON has the answers...

### New Part L Guidance Documents reveal important data

FILON Products' new Part L Design Guidance documents reveal the results of new research into the effects of rooflights on energy saving.

The new 2006 Building Regulations make a fundamental change to the method of compliance. The old regulations were based on thermal values of the fabric of the building. The new regulations consider not only the fabric of the building, but also the energy efficiency of all the mechanical services - boilers, hot water and artificial lighting. The thermal values and energy requirements are converted into a carbon dioxide (CO2) emission calculation known as the carbon footprint. To be compliant under the new regulations, the proposed building must achieve a prescribed level of CO2 savings over the same 'notional' building designed to the 2002 regulations.

#### **ROOFLIGHTS SAVE ENERGY**

Recent research carried out by De Montfort University for NARM (The National Association of Rooflight Manufacturers), has established that rooflights play a significant role in achieving the prescribed Target Emission Rate (TER). Previously, designers considered reducing rooflight area to minimise heat loss, resulting in high use of artificial lighting. The De Montfort research shows that the total energy demand for a building will reduce as

the rooflight area is increased – with the optimum at around 20% of the floor area.

For a detailed explanation of the role of rooflights in achieving part L

Effect of Rooflight Area on Total CO<sub>2</sub> Emissions – 9am to 5pm

compliance, you can download our Guidance Documents from our website – www.filon.co.uk.

#### 30 Total 600 LUX Total CO₂ Emissions (Kg/CO2/m<sup>²</sup> 25 Lighting 600 LUX 20 15 Total 300 LUX Lighting 300 LUX 10 Gas heating 5 0 2 0 4 6 8 10 12 14 16 18 20 Rooflight Area (% Of Floor Area)



## FILON Monarch F rooflights at naval dockyard

FILON's Monarch F barrel vault rooflights have been installed at one of the country's major naval dockyards.

Monarch F rooflights are fabricated from robust, shatter resistant FILON GRP sheeting. They are out -of-plane rooflights mounted above the plane of the roof – a Health and Safety Executive recommendation, to reduce risks of people falling through. When fixed, they fully comply with the HSE non-fragile impact test specifications. Where roofs are subject to extensive foot traffic, FILON's exceptionally strong SupaSafe GRP glazing sheet is recommended for the outer glazing.

Monarch F GRP factory assembled barrel vault rooflights can be used along roof ridges, on slopes (ideally ridge down), on curved roofs greater than 25m radius and on flat roofing, in continuous runs if required. They are ideal for very low pitched roofs and for use with standing seam and secret fix roofing systems.

For details, visit www.filon.co.uk.

## **Crossflight approaches take-off**

FILON Products' Product Development Manager, Les Williams and his team have developed a new concept for rooflights to be used on standing seam roofs.

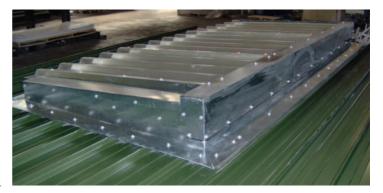
The new 'Crossflight' system has been designed to work with any standing seam construction and will span openings up to 2.5m wide.

The system can provide U values similar to composite rooflights,

without the need for under liners.

The system has been assembled and successfully tested at FILON's Staffordshire factory. The first Crossflight rooflights are already scheduled for installation.

Ron Allen, Managing Director of FILON Products, commented: "Crossflight is just one of a host of exciting new FILON Products – watch this space."



FILON INFORMATION & SUPPORT HOTLINE: 01543 687 300 WWW.FILON.CO.UK

## TecnaFlex roofing – a better solution to an age old problem

FILON's Tecnaflex flat roofing system has allowed a flat roof in Bury, Lancashire, to be costeffectively refurbished without the time and expense of removing the old roof.

This domestic garage and extension was the first contract carried out by Canopies UK using the Tecnaflex system.

The original roof had been constructed using chipboard with a felt covering. This had deteriorated after 6 years and water had penetrated causing the chipboard to become damp and warped.

On the initial survey of the roof it was noted that although the chipboard was still structurally sound, the warping had caused dips in which puddles formed. With its factory made base sheet which sits above existing roofs (allowing venting) the Tecnaflex flat roofing system provides an ideal way of rectifying this problem without the need to remove the old roof. With the unique patented MAP (mobile anchor plate) fixings in place, any movement as the old roof dries out is taken up. The result is a very cost effective, long life GRP roof system, which has been installed in one day with no disturbance to the client.

Jason Eastwood, Canopies Sales Director commented, "The Tecnaflex system fits well into our existing portfolio of canopies, porches and roofing products and can only strengthen our market position. We're looking forward to continued growth in this area of our business over the coming years".





## Stay up to date with Metal Matters

A new journal, Metal Matters, has been issued this Summer by the Metal Cladding and Roofing Manufacturers Association Limited (MCRMA).

This comprehensive quarterly journal will keep specifiers, clients and contractors abreast of the latest developments in the use of metal in the construction of building envelopes.

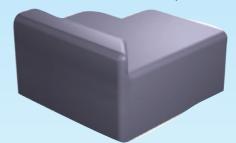
The journal can be downloaded from the MCRMA web site (www.mcrma.co.uk), or email mcrma@compuserve.com for a free copy.

FILON Products is pleased to be an Associate Member of the Metal Cladding and Roofing Manufacturers Association Limited.

## **New SIG Flashings hit the roofs!**

SIG Roofing have launched their range of GRP Flashings designed to suit three separate roofing systems.

The flashings are an easy to use accessory which compliments the Sealoflex Liquid Seamless System, Single Ply Systems and are a crucial part of a wet laid GRP system which SIG are also able to supply. The range has been developed to complement all the above systems as well as being able to bond them together, giving a complete roof seal which becomes chemically bonded as one. The flashings are available from most SIG Roofing branches and with over 140 branches covering the United Kingdom the range is readily available for contractors. For further information about SIG Flashings please contact your local SIG Roofing depot.



New Flashings Technical Brochure, available from SIG Roofing depots



## **Bespoke solution for factory roof refurb**

Tripp Batt & Co Ltd, a Con Mech Group company, were appointed to undertake roof refurbishment at Henry Williams Group's 10,000m2 factory in Darlington.

The building houses offices and workshops with engineering facilities for transport infrastructure products and systems.

The factory was originally built in the 30's and the asbestos cement roof had not undergone upgrades or refurbishment for many years.

Prior to Tripp Batt being appointed, part of the roof above the offices had been sprayed externally with a urethane foam, in an attempt to cure water ingress problems. This course of action exacerbated the problem, as the foam reacted with the asbestos cement profiles, causing them to break down



further, leading to increased water ingress.

Trevor Crack of Tripp Batt takes up the story: "Following inspection, it became clear that the best option was to over-roof the factory, using FILON GRP profiles. We cut into the foam, fixed bespoke galvanised steel spacers and laid rails for overcladding the roof, leaving space for 80mm quilt insulation."

To give the refurbished roof a more modern appearance, FILON's 32/1000 profile was specified, however FILON over-roofing profiles are available to match virtually any profile.

For details visit www.filon.co.uk

## FILON DSP makes light work!

The excellent light diffusing characteristics of GRP sheeting have been further enhanced with special additives, to produce FILON's DSP (Diffused Sign Plate) sheets.

These opal sheets are designed for use with fluorescent tubes, to provide maximum light scatter.

DSP has been successfully used in a wide variety of applications, from concealed lighting, to feature 'light walls' and in suspended ceilings.

DSP is also ideal for use with backlit displays and graphics.

The high impact resistance and durability of GRP makes it suitable for use in areas where there may be a risk of damage or vandalism.

2mm thick DSP sheets are available in standard 1220mm widths, in lengths of 2440mm or 3050mm.

For more information, please visit www.filon.co.uk



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FILON Products Limited has launched a new GRP sign substrate, Supaplate F.

Following the company's move to the new premises two years ago FILON had the opportunity to redevelop their original FILON Plate sign substrate.

GRP has long been regarded as an excellent material for traffic signs, due to its *high strength and durability – and minimal scrap value, which deters thieves.* 

Supaplate F has been developed to

meet new regulations appertaining to the traffic signs market.

Supaplate F is only available via specialist distributors throughout the UK and comes in a standard 3.2mm thick grey/grey sheet, either 2440mm (8'0") x 1220mm (4'0") or 3050mm (10'0") x 1525mm (5'0").

Supaplate F is also available in white and other colours to minimum orders.

For further information, please visit www.filon.co.uk or telephone 01543 687 300.



## **CPD Seminars**

To book or receive further details on the following seminars please contact Marie at FILON Products Ltd on 01543 687300.

#### TECNAFLEX FLAT ROOFING -THE WAY FORWARD

This seminar covers the history of flat roofing along with remedies to overcome flat roofing problems. The seminar goes on to explain the unique patented Tecnaflex System, with case studies of the system and its benefits.

#### ASBESTOS REGULATION AND THE BUILDING REGULATIONS PART L IN RESPECT OF REFURBISHMENT

This seminar will bring you up to speed on the current Asbestos Regulations relating to the removal / encapsulation of fibre cement or asbestos sheets. It also explains how the new Building Regulations Part L affect refurbishment work. Case studies will be presented, demonstrating FILON's unique Over-Roofing system.

#### ROOFLIGHTS - THE NEW BUILDING REGULATIONS PART L, PLUS THE CDM REGULATIONS AND HOW THEY AFFECT ROOFLIGHTS

This seminar explains how the new Building Regulations Part L affect the design process with regard to rooflights. It covers solar overheating and carbon emissions. It also explains how the CDM Regulations relating to rooflights have moved on and endeavours to give the listener a full picture of their options in relation to using natural light in buildings.

## New Filotherm insulated profiled rooflight

FILON Products has undertaken further development on its FAIRS (Factory Assembled Insulated Rooflight) system, to provide a profiled in-plane rooflight which enables specifiers to gain compliance with the new Part L 2006 Building Regulations.

The new 'Filotherm' units are assembled using a unique inner core developed to provide improved U-values with high light transmission, as well as allowing for thermal movement.

Product Development Manager Les Williams commented: "The FILON development team has worked well together to ensure that this important new product was made available as the new regulations came into force."

For more details about Filotherm and the new Part L regulations, please visit www.filon.co.uk



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# rooFlights



# **roo**Flights

Filon offers a vast range of high quality GRP rooflights to match virtually all UK and European profiles

# supasare

As strong as steel, these rooflights remain non-fragile for the life of the roof and fully meet HS(G)33 and CDM regulations



Factory assembled insulated Rooflights, made to measure & available to match most UK and European profiles.



Modular rooflight system with multiwall polycarbonate glazing for curved barrel vaults spanning up to 8m or conventional glazing

# monarch-F

A range of GRP Barrel Vault Rooflights designed for use with shallow roof pitches, standing seams and secret fix system

...and now, NEW

Strong, long-lasting easy-fix translucent roof sheets in two standard profiles...

### IDEAL FOR HOUSEHOLDERS, BUILDE FARMERS, HORTICULTURISTS

For advice about compliance with the revised Building Regulations, call us now on

01543 687300 or email technical@filon.co.uk

We have a large product range to meet most applications and we match most of the 900 plus metal and fibre cement sheet profiles in the UK.

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