# building construction design

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Cover image: Viiu (© Samuel Defourny) See page 16



# WE HAD TO SHOU ABOUT IT

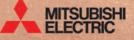
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A MIENER

## Scoil Phadraig wins RIAI Best Educational Building award

The new school in Westport which was installed with a 2,300m<sup>2</sup> Bauder Thermofol roof has been recognised at this year's Royal Institute of the Architects of Ireland (RIAI) award ceremony. The RIAI aims to recognise the quality of work carried out by RIAI members and highlight the



contribution of Irish architects to the society. Scoil Phadraig under the project name of 'New School in Town' was nominated in the Public Choice Award for the best building in Ireland for which it was voted 2<sup>nd</sup> and was awarded Best Educational Building.

The architectural team from Simon J Kelly and Partners was led by Dermot McCabe and Elaine Naughton, who have previously completed the award winning Oughterard National School project in 2014, which also featured a Bauder Thermofol roof. Their strikingly modern and light filled design with 16 classrooms, a general-purpose room and ancillary accommodation provides all the features needed to enhance the children's learning and to allow the teachers to set high standards of education.

Another eye-catching aspect of the building is its 2,300m<sup>2</sup> roof. The Bauder Thermofol PVC system, which was installed by approved contractors Priority Roofing & Cladding Ltd, provides an aesthetical finish to the building



in addition to a strong waterproofing system, resistant to the Irish climate. Following a final inspection, Bauder were able to provide a 20-year guarantee for the entire roof.

01473 257671 www.bauder.co.uk/roof-systems/ waterproofing-systems/single-ply

### Luceco's Lighting Education at Secondary School

uceco has recently supplied Abdul Razzak Al Basir Secondary School in Rumaithiya province in Kuwait with a complete LED lighting solution during a recent refurbishment. In partnership with Musaed Salem Abdul Jader Co, the school is the first establishment for the Ministry of Education in the State of Kuwait, to be completely lit by energy saving, cost effective LED lighting.



Ease of movement around the new school has been enhanced by improved lighting. Attention was given to the lit route between lessons to ensure quick and safe access for both staff and pupils. Uniformity of light and good luminaire choice is a key consideration when lighting educational establishments. The use of LED LuxPanels prevent intrusion from the luminaire helping to create an open space for a large quantity of people to move around in.

IP65 rated Climate LED luminaires were used in Workshops, Plantrooms, and Storage areas with versatile IP65 rated LED Atlas luminaires used on stairwells and entrances. Titan Hibays were installed in sport facility areas to achieve the required lux levels. The High Bay is available in 110W and 200W options offering high efficacy providing instant light unlike traditional HID fittings, also with over 50,000 hours of maintenance free operation. Restrooms were lit with Carbon Downlights.



Abdul Razzak Al Basir Secondary School now benefits from the huge advantages of LED energy efficient luminaries compared to traditional light sourced fittings, providing cost effective, durable, and safe lighting to meet the demands of any educational environment.

01952 238100 www.luceco.uk

# SFS fixings shape



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## Celebrating 170 Years of UK Waterproofing

E stablished in June 1848, Newton Waterproofing Systems are the oldest suppliers of waterproofing and damp proofing products to the UK construction industry, and 2018 sees them celebrate an incredible 170<sup>th</sup> year of trading.

The company is still family owned and family run, and it is this family ethos and independence, coupled with their expertise and willingness to innovate that has allowed them to continually compete and grow.

#### Humble Beginnings

In 1848 the original John Newton recognised an opportunity to supply plasterers hair and ancillary products to the construction industry, collecting his raw materials from the tanneries in Bermondsey, South London.

Such was his success that he supplied high profile projects including the rebuilding of the Houses of Parliament in the 1850s, and John Newton and Company Ltd went from strength to strength.

#### Inventing Damp Proofing

With the introduction of plasterboard in the 20<sup>th</sup> century rapidly eroding demand for plasterers hair, Newton was forced to diversify.

Consequently, in 1937 the company designed and introduced the UK's first physical damp proof membrane, 'Newtonite'. An immensely popular product, Newton sold over five million square metres of the innovative membrane between 1945 and 1983.

#### The New Generation

It was during this time that Christopher Newton, great-grandson of the original John Newton, began his tenure at the family firm. From stoking the boiler in 1963, Christopher rapidly rose to Chairman in the 1970s, where he remains to this day.

With Christopher at the helm, the company recognised the need to exploit new technologies and move with the times, resulting in two major developments:

- 1) Inventing 'Newlath', the first meshed damp proofing membrane that could be directly plastered onto, launched in 1984.
- 2) Utilising protective membranes below ground, resulting in the first Newton System 500 basement waterproofing solution in 1986, consequently installed in thousands of UK properties.

Both of these introductions were so





Image 1: Over five million square metres of the revolutionary Newtonite membrane was installed in the UK.

significant that, although the component products are constantly upgraded, the concepts have remained at the heart of damp proofing and waterproofing best practice for the past 40 years.

#### Innovation and Expansion

The turn of the millennium saw more innovation, and in 2003 Newton introduced the industry's first approved contractor network of 'Newton Specialist Basement Contractors'. The network's strict entry criteria maintains the high standards and guarantees required for Newton products, and now includes 40 of the best specialist waterproofing contractors across the UK and Ireland.

The rapid growth that this generated also meant that Newton finally outgrew its original premises, and after 164 years in South Bermondsey the company relocated to Tonbridge, Kent in 2012.

#### **Complete Solutions**

The 21st century Newton Waterproofing Systems continues to grow, with 33

Image 2: Introduced in 1986, Newton System 500 was the basis for modern-day internal basement waterproofing.

employees providing solutions for architects, developers, contractors and homeowners on projects from the smallest domestic basement, to high-end properties, commercial developments and extensive civil infrastructure projects.

However, the company has not lost sight of the values of its family beginnings or its independence, and as Christopher Newton observes, it is this autonomy that allows the company to continually stand out from its competitors:

"I have always been proud to say that Newton is a family-run company, with a strong ethos that provides the foundation for the 21<sup>st</sup> century company. Alongside our independence this grants us complete impartiality and a valuable freedom, allowing us to grow and improve whilst consistently offering the highest levels of service and sourcing new and innovative solutions."

#### 01732 806 963

tech@newtonwaterproofing.co.uk www.newtonwaterproofing.co.uk

# Corian<sup>®</sup> is ahead of the curve with impressive interior and exterior cladding

n undulating ribbon of Corian® forms the high-impact first impression of the magnificent new Menai Science Park (M-SParc) by FaulknerBrowns Architects. The first science park to be developed in Wales, the £15.5million project aims to drive growth in knowledge-based industries, with a focus on clean and sustainable technology. A wholly owned subsidiary of Bangor University, M-SParc is working closely with the university to provide expertise and support to local enterprise.

The 5,000m<sup>2</sup> building features an Open Innovation Space offering conferencing, coworking and hospitality (both for businesses and the wider community) plus incubator and grow-on office space, laboratories, clean workshops and admin facilities. The structure is characterised by a continuous flowing ribbon that forms floor, wall and roof surfaces, wrapping around the space within while also connecting the building to the exterior landscape.

"The architecture is intended to reflect the values of M-SParc," says Leighton Cooksey, Project Director at FaulknerBrowns, "and to create a high quality, unique environment to promote energy and innovation while attracting the best new initiatives and creating a thriving community space."

The form of the building posed a number of challenges as the ribbon needed to contain all building services, structure and waterproofing within a continuous thickness of just 850mm. A seamless finish was desired to create a monolithic appearance with minimal joints. The chosen material had to meet a



variety of orientations, be formed into tight internal radii of 400mm and withstand the worst of the Anglesey weather.

"We investigated a number of alternative cladding systems including glass reinforced concrete, aluminium composites, cassette panels and high-pressure laminate, but very quickly chose Corian<sup>®</sup> as the preferred solution," Leighton continues, "Working with Unique Fabrications, we developed the principle of a Corian<sup>®</sup> rainscreen cladding system over a waterproofed steel frame. Corian<sup>®</sup> proved to be the perfect material to deal with the sinuous form of the ribbon, with the thermoformed curved panels, preformed corners and invisible fixings and thus to meet the architectural design intent."

FaulknerBrowns carried out extensive research together with M-SParc to assess the weathering performance and robustness of





the proposed cladding, confirming that it would withstand the rigours of the exposed site. "The smooth, non-porous nature of Corian<sup>®</sup> and its ease of cleaning and maintenance made it the ideal choice for ensuring the longevity of the pristine white finish," Leighton concludes.

Fabricated and installed by Corian<sup>®</sup> Industrial Partner, Unique Fabrications Ltd, the cladding consists of 1300m<sup>2</sup> of Corian<sup>®</sup> in Glacier White thermoformed into sculptural panels and fitted over 15 weeks using an aluminium support system.

Corian<sup>®</sup> also makes an impressive appearance to the interior of the building, continuing the ribbon motif with cladding around varying levels of the lobby and forming the main reception desk. Both applications make the most of the material's translucency and its compatibility with technology, by smoothly integrating backlit logos for added impact.

Operational Director of M-SParc, Pryderi ap Rhisiart, adds "We did a lot of research ourselves before agreeing to the Corian<sup>®</sup> cladding, and we know we've made the right choice. The impact is exactly what we wanted from this flagship building. The public and businesses alike comment on the external and internal design when they enter, with the Corian<sup>®</sup> creating a clean, professional finish fitting to a building of this stature. It really does have the wow factor."

Corian<sup>®</sup> is distributed in the UK & Ireland exclusively by CD (UK) Ltd. For enquiries about Corian<sup>®</sup>:

0800 962 116 www.corian.uk

### Bauder and E.J. Roberts win Green Roofing Award at the Roofing Awards 2018

Bauder has been recognised at this year's NFRC Roofing Awards. The award ceremony took place at the Park Plaza Westminster Bridge hotel where Bauder and approved contractor, E. J. Roberts, picked up the Green Roofing award. The winning project was a BioSOLAR roof on a Clapham Park residential block.

The refurbishment of the 500m<sup>2</sup> roof, which is part of the wider regeneration at Clapham Park, needed to include a green roof and a renewable energy system to meet the objectives of sustainability and energy efficiency highlighted by the planning committee. Consequently, Bauder's BioSOLAR system which integrates a mounting solution for solar panels with a green roof was specified to meet all the planning requirements. Approved contractor E.J. Roberts Ltd installed the Bauder products on the 500m<sup>2</sup> roof area while M&M Electrical fitted the 116m<sup>2</sup> PV area with the 70 modules.



Bauder's technical director Nigel Blacklock, was in attendance to receive the award and spoke of the company's success: "Bauder is always delighted to be recognised by the NFRC Roofing Awards which serves as an industry benchmark for excellence and best practice. Our success with the Bauder BioSOLAR project on Clapham Park highlights the cohesive stance Bauder embraces in line with today's construction and building market as it calls for rooftop solutions with innovative technologies for environmental advantages in order to maximise the potential of roof areas."

01473 257671 www.bauder.co.uk

#### Fire sprinklers go undercover with Encasement

here fire sprinkler systems are being installed or retro-fitted in tower blocks and flats, Encasement's 'Versa' pipe boxing range provides a cost effective, durable and easy-fit solution for concealing sprinkler pipework.

Manufactured from pre-formed FSC° certified plywood and pre-finished in a durable white melamine, Versa 'L' shaped boxing is available in either 5mm or 8mm thicknesses for use within flats, as well as communal areas, such as corridors and lift lobbies, where sprinklers are required. Versa boxing can be used with standard sprinkler heads or concealed 'pop-out' units with cover caps.



Available in a wide range of sizes, Versa sprinkler pipe boxing helps save on installation time, as there's no need for fabrication or painting on site. All that's required is for the boxing to be cut to length and holes drilled for the sprinkler heads before securing to the wall or ceiling.

Encasement's Managing Director, Martin Taylor, commented "Our fire sprinkler boxing has already been installed on a large number of number of high rise refurbishment projects, where pipework and sprinklers need to be concealed for both aesthetic and practical reasons, as they are cost effective and easy to install.

"From our experience of working with contractors on countless social housing projects where pipework needs to be concealed, Versa boxing solutions can be fitted in less than half the time of site made alternatives. Also, as they're pre-finished with durable white melamine, there's no painting required on site, which also saves time and cost."

He added: "As Encasement holds a full FSC<sup>®</sup> 'Chain of Custody' certification, which certifies that our products are manufactured from sustainable timbers, this helps HAs



and LAs meet their compliance obligations under the UK government's timber procurement guidance."

01733 266 889 www.encasement.co.uk

#### Offsite Solutions' first timber-framed scheme



Offsite Solutions, one of the UK's leading bathroom pod manufacturer, has supplied the final batch of bathroom pods for its first timber-framed residential development. Under construction by the Hackwood Group, the Fleur-de-Lis development in Sandhurst

will provide 42 spacious retirement apartments set in landscaped gardens. The use of an offsite solution for bathroom construction reduces the number of activities and trades on site. This achieves significant programme savings, quality improvements and reductions in waste of up to 50 per cent compared to site-based construction. Offsite Solutions offers a range of bathroom pods to suit different building types and applications.

info@offsitesolutions.com

#### **Remmers showcase at Exhibition**



Environmentally-friendly and sustainable aren't just buzzwords for **Remmers** (UK) Ltd, who will showcase their new LW-722 [eco] stain finish at the W18/Elements Exhibition which starts on 30th September. Replacing fossil fuels with biomass process technology, they have used cutting edge

technology to create a coating that protects both wooden windows and the environment. Remmers (UK) offers options for factory and site application, including state-of-the-art, environmentally- and user-friendly, water-based systems. Remmers' customer-focused approach is backed by a team with decades of experience in the British wood protection industry.

01293 594010 www.remmers.co.uk



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# Stertil Combilok delivers on loading bay safety

The Combilok vehicle restraint system from Stertil Dock Products was developed exclusively to reduce the risk of unintentional vehicle movement on loading bays and offers a 'safety net' against poor communication by holding vehicles in one place until loading or unloading is completed.



Controlled from within the safety of the warehouse or distribution centre, the Stertil Combilok is fully interlocked: the loading bay door cannot be opened until the Combilok is in position and the Combilok cannot be released until the door is closed again and it is safe to drive away. The totally automatic Combilok also overcomes any language difficulties that may arise with drivers delivering from all over the world.

Featuring a wheel block that is impressively strong, the Combilok is suitable for lorries of almost every type and size. There are also few restrictions when it comes to the installation process, as the entire system is installed above ground.

"We've designed the Combilok to offer the highest standards of safety, performance and reliability," says Andy Georgiou, General Manager of Stertil Dock Products. "This has been recognised by a growing number of leading high street names and logistics companies. In fact, the UK's most prominent



online retail specialist purchased its first Combilok vehicle restraint system in 2013. Unsurprisingly, it was an instant success and the company now has almost 1000 Combiloks working around the clock to provide safety and peace of mind to drivers and warehouse staff alike."

0870 770 0471 www.stertil-dockproducts.co.uk



#### www.scotframe.co.uk

#### Wonderful Washrooms at Walthamstow Wetlands



Walthamstow Wetlands is the capital's newest and largest urban wetland nature reserve and increases public access to nature in an area of London deficient in open space. As part of the scheme Architects Witherford Watson Mann designed a visitor centre within a decommissioned Victorian pumping station. When it came to the washrooms they wanted to continue with the use of raw steel featured elsewhere in the building and an online search brought them to a **Relcross** project featuring Hadrian steel toilet cubicles at the Oaks Restaurant, Nottingham. While available to match almost any RAL colour, Hadrian Steel cubicles can be supplied in a plain galvanneal finish for a natural, industrial look. At Walthamstow they have been combined with Staffordshire quarry tiles to the walls and floors for an overall effect that evokes the functional industrial design of the original engine house but with immense practicality for public washrooms at a popular new facility. Privacy is ensured by the use of continuous stop and hinge sight line fillers together with a minimal 150mm gap from the floor to the underside of the door and panels.

01380 729600 www.hadrian-cubicles.co.uk

#### Living with quiet



One of the most unusual locations for **Troldtekt** acoustic ceiling tiles has to be found inside a fascinating new house in Sai Kung, Hong Kong. This remarkable and exciting project by Millimeter Interior Design has transformed an impractical and cramped split level into a four-storey home incorporating a large living room, family room, four bedrooms, den, open roof top sitting area and a unique approach to garaging! The design is minimalist to the extreme with a simple but beautiful and ambient simplicity. The full ground floor stretches from the entrance out to the backyard deck. A cleverly designed sunken kitchen creates a clutter-free experience while perfectly fitting out all the essentials. The dining table is hidden at the floor level and can be elevated when required to further enhance space usage. With so many hard surfaces, reverberated sound is controlled by the use of Troldtekt acoustic ceiling panels throughout the main living space and interior garage. The benefits of 100 per cent Troldtekt natural wood wool panels include high sound absorption, high durability, natural breathability, low cost life cycle performance and sustainability.

www.troldtekt.co.uk



#### Morgeous design use Bushboard options for community centre kitchen



In a hard working environment such as a community kitchen, practicality combined with style are essentials. When the Ladybarn Community Centre in Manchester recently secured funding to give their kitchen a much-needed makeover they wanted a wow factor look that would be easy to maintain. Team, Morgeous Design took on the challenge which was made extra difficult because there was a time slot of just four days to complete the project. Morgeous chose Turin Marble – a décor that makes a luxury statement in any kitchen. The distinctive design is printed in life-like proportion to truly echo nature. The end result is a striking kitchen with laminate featured on both the worktops and on matching splashbacks to give a sleek, easy to clean finish. Turn Marble provides a bold contrast to the black kitchen units. "Everyone who uses the kitchen loves the new look," explained Sian. "Bushboard laminate lets the customer go for a luxury look at a sensible price. With such a choice of decors choosing Bushboard means great design is always possible whatever the budget." To order samples, visit their website.

www.bushboard.co.uk

#### Flowcrete UK Expands BIM Content Library



Flowcrete UK has expanded its BIM (Building Information Modelling) Content Library to encompass a wide selection of resin floors, screeds, damp proof membranes and underfloor heating systems – everything an architect needs to create an accurate 3D representation of a high-performance floor area. The resin flooring manufacturer is committed to providing the resources required by today's high-tech construction industry professionals, which are increasingly embracing digital building modelling as a day-to-day practise. Available from the NBS National BIM Library, Flowcrete UK's new BIM Content allows its flooring systems to be easily incorporated into a 3D building model and its associated component database. The BIM objects are available in a variety of formats, including Autodesk Revit, IFC, ArchiCAD, Vectorworks and AECOsim, so the designer can easily pick and choose the product in the preferred format. Flowcrete UK's Managing Director, Kevin Potter, said: "BIM has revolutionised the construction industry, helping to provide more consistent, accurate project documentation and a more transparent project delivery process."

01270 753000 www.flowcrete.co.uk

#### Colour your thinking with Crown's guide



Paint manufacturer Crown has it covered thanks to the launch of a new product guide for its innovative Fastflow range. The new literature provides specifiers with a useful overview of the key product details and benefits of Crown Trade's Quick Drying Fastflow System, which

includes gloss, satin and a primer undercoat. The range benefits from Crown's innovative Breatheasy<sup>®</sup> technology, which helps to eliminate any strong odours and makes it ideally suited to projects where a quick turnaround and high quality finish is required.

info@crownpaintspec.co.uk

#### Crown unveils new product & colour guide



**Crown Paints** has launched a comprehensive new Product & Colour Guide to make it even easier for specifiers to choose from the company's extensive range of Crown Trade paints, specialist coatings and colour options. The new guide includes key information for Crown Trade's complete

product offering, from interior and exterior paints to protective floor coatings and specialists solutions such as the Crown Trade Timonox flame retardant range – all grouped into clearly defined sections for ease of reference. The new Product & Colour Guide also provides specifiers with access to the company's most popular colours and BS and RAL colour options.

info@crownpaintspec.co.uk



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#### Garador's retractable up & over doors

Delivering safety, security and years of trouble free service, **Garador's** steel Up & Over garage doors have long been a top favourite across the UK. Unlike canopy Up & Over garage doors, retractable doors are designed in such a way that they are really easy to automate with an electric operator.

Retractable gearing means the door panel opens on horizontal tracks running back into the garage. They can be easily automated with a GaraMatic electric operator so the homeowner can open their garage door by pressing a button on a hand transmitter.

GaraMatic operators are expertly engineered to ensure fast and smooth opening and the hand transmitters incorporate bi-directional radio signals which are heavily encrypted for high security. Garador's retractable Up & Over doors also come in a wide choice, of designs, colours and finishes. A video explaining the advantages of Garador's retractable Up and Over doors is available on Garador's YouTube channel or you can find out more information by calling.

01935 443795 www.youtube.com/garador



#### Wide soffit just got woodgrained!

Freefoam Building Products are delighted to announce the addition of four beautiful woodgrain finishes to its Wide 605mm Soffit Range. The wide General Purpose Board is becoming a popular choice on many contemporary house styles, and has been added to the range as part of Freefoam's continuing support of our customers servicing the Housebuilder. Available in a choice of Rosewood, Light Oak, Black Ash and Anthracite Grey the woodgrain finish allows for a fully coordinated roofline. The Freefoam woodgrain range is manufactured to last using Renolit Exofol MX foil that features Solar Shield Technology, a technology to provide built in UV protection, to reduce heat absorption, temperature build up and expansion. These properties allow Freefoam to offer a ten year guarantee on all woodgrain fascia and soffit. House builders are increasingly using colour to bring style and definition to developments and utilising colour elements as a cost effective way to add a contemporary feel to house and apartment developments. Freefoam made a commitment to colour right at the start of this trend embracing new ways of manufacture and ensuring that colour and woodgrain facia and soffit are available across the entire range.

01604 591110 www.freefoam.com

# Rainwater System to Blend with Stonework

N ewdigate Builders are a successful building company, who have been in business for over 30 years and is owned by Dave Coventry.

Dave has always had a dream to buy some land a build his dream home. His dream became a reality when he purchased some land and built and expansive six bedroomed property, complete with basement, garage and sun rooms.

Dave is an existing customer of ARP, so was aware of the quality of products ARP have in their portfolio. Dave has seen first-hand how UPVC can fail and wanted the best possible materials for the rainwater system on his new home, so he got in touch with Nigel Hancock, Area Sales Manager for ARP.

Nigel visited site and carried out a full site measure, taking into account the roof size and material to ensure that

red

the system selected would deliver the desired result. Nigel then quoted for 125 x 100 Sentinel Deepflow Gutter and 76 mm Colonnade Swaged Rainwater Pipes.

As this was a new build, Dave wanted the gutter and downpipes to blend in with the stone accents used in the building of the property. ARP have their own in-house polyester powder coating facility and matched the colour to the stone being used in the build.

Dave Coventry Managing Director of Newdigate Builders said: "ARP provides a quality product at an affordable price"

Aluminium products are ideal for self-build properties such as this, as aluminium is one of the most widely available elements in the world, it is non-corrosive, long lasting and requires little maintenance. Being fully recyclable, it can be further recycled



once it reaches the end of its useful life and unlike the plastic alternative, will last for many years, giving homeowners the peace of mind of a quality product.

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# Introducing Viiu – the market-leading slimline sliding door

Unterstand the product of the moment – inheriting the crown from the onceinescapable bifold – and the latest model to hit the market seeks to perfect the elements that have made them so popular.

Viiu offers ultra-slim sightlines, secure laminated glass throughout and an ingenious, unobtrusive design. With the outer-frame entirely built into the facade, it gives the appearance of a wall of glass, strong enough to support moving glass sections of up to 750kg, and fixed glass sections up to 1200kg.

For added security, and to maximise the amount of transparent space, Viiu's unique electric locking mechanism is cleverly concealed in the head of the outer frame. This unique feature allows its jambs to have a symmetrical appearance. A patented adjustable interlock section allows perfect alignment to maximise performance and aesthetics.

A motorised option is also available -



and its drive gear is discreetly housed in the unit's 100m head profile, which itself is hidden behind the building's facade. Most competitor products, by contrast, require chunky head profiles up to 300mm in height. The motor can be easily accessed from below for maintenance or repair without the need for ugly internal access panels inside the home.

Viiu comes with automatic obstruction detection on motorised models, and a choice of wall-mounted or key fob operation.

0800 877 0077 www.viiu.co.uk



#### New look website for Freefoam

Freefoam Building Products has just given its website in the UK a completely new and dynamic look. The new site has users at the heart of every page, and reflects Freefoam's confidence in its product range, company credentials and well established brands. Access to information online has led to the continual fragmentation of traditional business and consumer markets. Freefoam has embraced these challenges and developed their new site to address these issues by providing separate areas for both building Professionals and Homeowners – with targeted content and specialist tools to enhance the customer experience for every visitor. With clear imagery to show-case the range and detailed information on every product the site has been designed to help support visitors through every stage of their decision making process. From case studies and design tools to help visualise product colours and finishes to support with scheduling and access to CAD images the site helps to illustrate the options available.

#### Neatdek chosen for outstanding project



An urban regeneration project in Longford is the latest of a series of outstanding bridge projects to use **Neaco's** Neatdek aluminium decking. Almost 20m long and 4.7m wide at its widest point, the Camlin River Bridge is a footbridge featuring a unique curved 'bow'

design by Kenny Lyons architects. Neatdek features a contact area of 74 per cent on the surface yet drains water efficiently and its swagelocked construction enables high structural efficiency. The system has an anti-slip surface for increased safety and aluminium has an A1 Fire Rating – the highest achievable score for non-combustibility.

sales@neaco.co.uk

#### Balustrade has enduring appeal



A lakeside retreat in North Wales is exemplifying the lasting appeal of Neaco's balustrade systems, almost ten years after they were installed. In 2009 Neaco's aluminium balustrade was specified for the external terraces, using glass infills to

maximise the spectacular views over Llyn Tegid. This year the property was converted from a B&B into Glan Y Gro comprising four selfcatering suites featuring a host of new fittings. Much has changed but Neaco's balustrade – renowned for maintenance-free durability and enduring aesthetic quality – has been retained as an integral feature.

sales@neaco.co.uk

01604 591110 www.freefoam.com

# Hauraton Service Channels keep cables safe but accessible

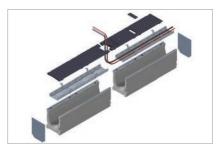
auraton Limited, well known for their surface water drainage products, also offer three ranges of Service Channel suitable for use as sub-surface cable ducting for both indoor or outdoor locations including; sports venues, major stadiums, exhibition halls, factories, warehousing and container depots. The channels provide safe yet accessible installation of electrical and data cables.

Two ranges are based on the company's one metre long fibre reinforced concrete



channels, FASERFIX<sup>®</sup> SUPER and KS. The SUPER models incorporate a 40mm deep galvanised angled housings on their top edges allowing Class E600 ductile iron covers to be fitted. The KS models have a 20mm deep galvanised angled housing and are available for Class C250 or where necessary E600. The third range is based on Hauraton's RECYFIX<sup>®</sup> PRO channel made from 100 per cent recycled polypropylene. These have a 20mm galvanised housing allowing Class C250 covers to be fitted. Weighing less than 25kg the PRO channels are suitable where easy handling is desirable.

With SUPER and KS models, the ductile iron covers are securely located into the housings by the company's SIDELOCK fixing system. To access the cables, covers are easily removed using a large screwdriver at the appropriate leverage points. In practice, the SIDELOCK system has proved to be 90 per cent quicker than any other fixing method available. Where necessary, covers can be



bolted down. PRO models have bolt down covers as standard.

The popular nominal widths offered with Hauraton Service Channels are 200mm and 300mm. These models incorporate a perforated steel galvanised cable tray that is suspended within the channel keeping the cables clear of any water that may access the channel. The water can then be safely drained away.

01582 501380 www.hauraton.co.uk

# Kemper System delivers roof refurbishment to Art Deco Gem

The roof of an occupied 1930s art deco municipal office building, situated in the busy town centre of Blackpool, Lancashire, required urgent repair.

The building was experiencing standing water on a largely zero falls roof with only four drainage outlets, meaning water had started to leak into the occupied offices below.

Kemper System's Stratex Warm Roof system using its Kemperol V210 was specified



for the  $1,200m^2$  roof area – offering exceptional performance and supplied as a complete integrated system of matched components.

The roof was extremely complex with detailing around air-conditioning units, raised steelwork and cable trays in close proximity. Contractors also removed and replaced eight rooflights and boxed-in others that were no longer required. All existing steel work on the roof was treated and encapsulated with plywood and waterproofed with Kemperol to ensure additional life span.

The cold-applied Kemperol V210 liquid resin saturates a non-woven reinforcement fleece that is tailored to the exact contours and details of the roof. The waterproofing is installed in a single process and cures to provide a robust waterproof membrane that cannot delaminate and is UV stable.

Mark Atherton, managing director at Castle Contractors, said: "There were three main challenges to overcome on this project



- the safe removal of the existing ballast, cleaning of the roof prior to application, and the creation of drainage channels to carry water to the outlets."

The project was shortlisted for the Liquid Roofing and Waterproofing Awards due to the complexity of the roof which made this an ideal project for a liquid applied membrane, the technical solution offered, and the difficulties experienced with site preparation and logistics.

01925 445532 www.kempersystem.co.uk

### Tilt & Turn Juliet Balcony from MACO -More Glass, Less Frame



ur systems utilises our MACO MULTI Matic tilt & turn allowing for Juliet Balcony door sets to be produced with slim line sash and frame profiles which increases the amount of glass compared to standard Juliet balconies. Due to the increase of glass the amount of light that enters through slimmer doors is greatly increased as is the thermal efficiency when using this system.

The hinges for this system are concealed meaning no unsightly flag hinges on both sashes. This benefits not only the design, which is further enhanced by the internal handles but also ensures easy installation as there plaster lines will not interfere with the hinges, further reducing the need for a larger outer frame of add on profiles for installation. The functional benefits of the MACO hinges used in this system are that they are designed to hold weights up to 180kg when steel reinforcements are used and run right into the corners. This enables big and heavy sashes to be utilised, the use of triple glazing and acoustic glass possible.

This systems benefits also extend into the security standards it achieves. Utilising our MACO i.S. Security Cam Technology the Tilt & Turn Juliet Balcony meets PAS24=2016 and EN 1627 - 1630 RC-2.

Security is further enhanced as the system does not require an external handle sets and profile cylinders, this also adds to the appeal of these doors by maintaining the slimline sight lines.

Further features of the MACO i.S. Security Cam are:

• No adjustments needed. Adapts

material and a slide coating.

automatically to the air gap (± 2 mm).Smooth-running due to highly rigid

- Can be combined with standard striker plates for non security applications or security striker plates for vulnerable applications.
- This system also meets Secure by Design approval and Doc Q requirements.

MACO Juliet Balconies also offer the added advantage the master door be tilted, allowing for a safe ventilation of the room. The master door can be left in the tilt mode allowing fresh air to enter whilst ensuring that the access to the balcony balustrade is blocked. When rooms are occupied both sashes can be fully turned to open in the turn mode as a traditional Juliet balcony door set. Perimeter locking of both sashes of the Juliet Balcony ensure that the systems performs to the highest standards for both air and water permeability, further enhancing the energy saving that are possible through a slimline elegant design using modern materials. MACO Juliet Balcony fittings are suitable for PVCu and Timber, Timber/Aluminium Clad door systems and Aluminium profiles that contain a 16 mm wide Eurogroove.

01795433900 enquiry@MACOUK.net

# **Rockpanel A2 facade cladding**

Where aesthetics and fire safety meet





#### **Designing out Risk**

Because the facade cladding boards are produced from the volcanic rock basalt, they can withstand particularly high temperatures and are classified as limited combustible: European fire class A2-s1, d0.

Rockpanel FS-Xtra facade cladding in combination with ROCKWOOL® non-combustible stonewool insulation offers the ultimate fire-safe solution for the building envelope.

The unique and extensive product range of Rockpanel guarantees no design compromise is needed for your building.

rockpanel.co.uk rockwool.co.uk



Part of the ROCKWOOL Group

## One handle multiple openings. The fanlight may never be the same.

ne handle, multiple openings. This is the latest innovative window system designed by MACO to revolutionise the traditional fanlight systems found in buildings such as schools.

Gone are the days when you would need to go and find a rod to open a fanlight window, use a complex and unsightly drive rod system or stretch and strain to reach the opening handle. This system allows all users to achieve ventilation via a top level tilting sash. Full operation of the remaining system is controlled by keyed locking points meaning security and full opening is still limited by the key holder but the key holder is not required to achieve ventilation.

The one handle on the lower window allows the top sash to be tilted using MACO's Tilt and Turn hardware, however in contrast to conventional fanlights the fanlight sash can still also be fully opened. Due to this innovative design not only does it maximise air exchange for ventilation when tilted by allowing the warm air under the ceiling to escape. The Multi Sky system also allows the cleaning of the outside glass to be made easier and safer when the windows are fully open. With cleaning in mind the system also has no protruding visible surface mounted parts making the maintenance of this system easy durable.

Of course being MACO this system is not only creative in design and implementation, security is still paramount thanks to the systems multipoint locking system with MACO i.S. security cams and striker plates. The multipoint locking system closes and seals all points on MACO MULTI SKY. This enables better security as well as weather performance, air permeability and acoustic resistance unlike traditional single point fanlight locking systems.

The advantages to this system continue beyond its design and security features too, the system can be applied to timber as well as PVC profiles. No widening of the frame is



needed either as no space is required for the surface mounted operating elements making fabrication simpler too, as well as this the system is made of familiar components allowing fabricators and the end user to have an easy understanding of system operation.

01795 433933 www.macouk.net

## **RECYFIX® GREEN grass reinforcement** modules installed at Banovallum School

The Hauraton RECYFIX® GREEN STANDARD surface reinforcement grid system was used extensively in the grassed pathways, where a high footfall was expected, and the grassed areas surrounding Banovallum School, Horncastle .The system helped to prevent erosion and improve surface drainage. Once installed,



the RECYFIX<sup>®</sup> GREEN modules were discreet, yet provided a permanent surface reinforcement to the grassed areas with a loading capacity of 200 tonne/m<sup>2</sup>.

Manufactured from 100 per cent recycled polypropylene (PP), two sizes of module were installed; size  $1 - 387 \times 344 \times 38$ mm at 0.7kg and size  $2 - 387 \times 555 \times 38$ mm at 1.2kg. The modules were simply held in position with 250mm ABS pegs.

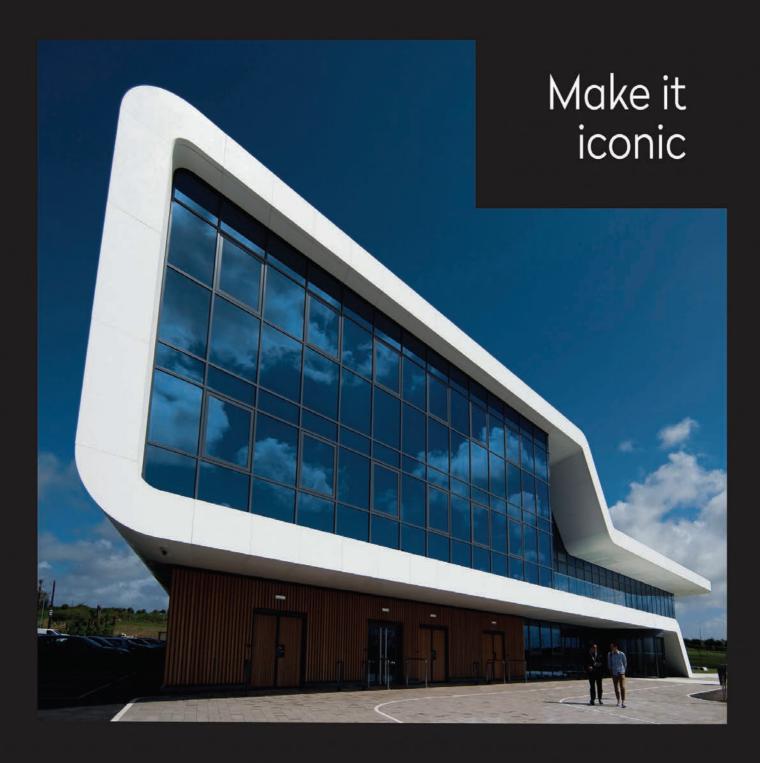
The pathways and area to be grassed were excavated, covered with a granular sub-base, a layer of sharp sand applied and then rolled. The RECYFIX® GREEN modules were then secured on top of the rolled surface and their apertures filled with top soil which was compacted then grass seeded. The grass was left to grow over several weeks before access was allowed.

Colin Taff, Hauraton's Project Engineer comments "The RECYFIX® GREEN modules can also be specified for grassed areas with occasional vehicular usage such as car



parking spaces also bridleways, roof terraces, urban green spaces, around trees and lawns. They can also be used in sports grounds, golf course pathways, camping places, holiday parks and reinforcements for rail and road embankments and river banks."

01582 501380 www.hauraton.co.uk



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Menai Science Park. 1,300m<sup>2</sup> of Corian<sup>\*</sup> cladding in Glacier White. Specified by FaulknerBrowns Architects. The façade was created by expert Corian<sup>\*</sup> Industrial Partners, Unique Fabrications.





