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April/May 2016

Appointments & News	02
Building Products	08
Structural Elements	16
Interiors	20
Exteriors	24



# Decorative casing solutions – the inside story

If it wasn't for column casings and interior wall cladding solutions, building interiors would be considerably less attractive environments. Yet, as they are designed to integrate as part of the fabric of a building, their importance can often be overlooked or taken for granted by the building's occupants.

Very few people stand back to admire a laminated plywood column casing at a school or brushed stainless steel wall cladding in a prestige office building, yet they are key elements in interior design and integral to the aesthetics of countless building environments.

For column casings, at least, their role has been transformed from being a purely functional device for concealing structural steelwork to one of visual and decorative importance. From their initial use by a relatively small number of architects in the mid 1980s, column casings are now commonplace, with their aesthetic values and appeal being a key consideration alongside size and material during the specification process.

The demand for wider choice and increased aesthetics from architects, interior designers and specifiers have been key influences on Peterborough based casing and interior cladding company, Encasement, whose range has continually expanded and diversified during the past ten years to become one of the most comprehensive available in the UK.

Alongside the company's six individual ranges of column casings, its 'Vecta' system provides a



high quality solution for interior wall linings, bulkheads and reveals. Launched just a few years ago, the system has been widely used in retail, education and commercial buildings, such as Tesco, South Bank University and Prêt à Manger, as well as prestigious office developments, including Wellington House and the Carmine building in Paddington, London.

While Vecta has already gathered significant momentum, it is for column casings that Encasement is perhaps best known. The company's extensive range not only includes pre-formed plywood and glass reinforced gypsum (GRG), as well as a specialised fire resistant solution for use

with mezzanine floors, but also aluminium, stainless steel and glass reinforced polymer (GRP) casings for exterior projects due to their inherent weather resistance.

Interestingly, Encasement's 'Forma' metal casings and 'Polyma' GRP range are also widely used in interior applications, where the selection of finishes available, particularly in the Forma range, provides specifiers with an even greater scope of options and can be specified with diameters from 250mm up to 1000mm or as square, rectangular or even hexagonal forms.

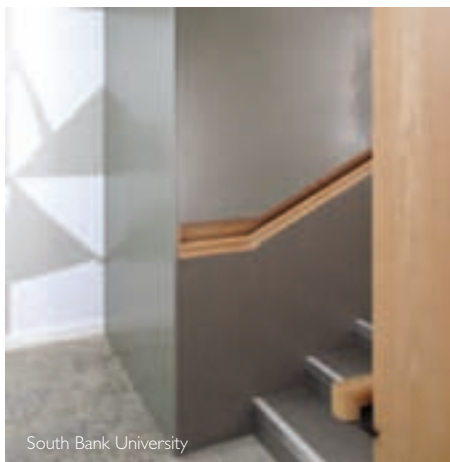
Recent projects, such as Winchester College, Middlesex Northwick Park Hospital, University College London, the extensive Debenhams development at Cheshire Oaks and the restaurant area of the Mondrian Hotel perfectly illustrate the versatility of Forma column casing solutions.

At Winchester College, the casings are circular, at Debenhams, they are square and accommodate LCD display screens, while at The Mondrian Hotel, they are hexagonal and incorporate a perforated skin lined with acoustic foam to reduce noise and reverberation from the restaurant.

Alongside Forma, Encasement's 'Circa' and 'Quadra' pre-formed plywood column casings ranges were the first to be launched by the company and are still arguably the most popular, as they provide specifiers and contractors with an unrivalled selection of finishes, which includes plain, laminated or real wood veneers.







In addition, as Encasement is the UK's only supplier and manufacturer of pre-formed plywood pipe boxing and decorative casing products that holds an FSC® 'Chain of Custody Certification' from the Forest Stewardship Council, both Circa and Quadra are manufactured from FSC® certified plywood. This makes them automatically compliant with sustainability codes and environmental procurement policies.

Designed solely for interior decorative applications, Circa and Quadra casings are used in an extremely diverse range of projects, which underlines their versatility, ease of specification and the immense range of decorative finishes available to complement or contrast with a building's interior design scheme.

While Circa is available from Encasement as a plain casing for on site painting and decoration, by far the most popular casings are those finished with decorative laminates, which not only resist damage, scuffs and scratches, but also provides the specifier with a diverse palette of finishes from plain colours, wood grain and metallic, as well as textured and real wood veneers, to name but a few.

Circa and Quadra are used in almost every

building type from education, retail, hotel, sports and leisure, as well as the health sector and commercial office buildings. As a result the choice of sizes available is also wide, allowing specifiers to choose not only circular and square, but also extended circles and rectangular profiles, which use additional infill panels to give greater flexibility while ensuring they are still easy to install.

Recent Quadra projects include Farnborough's 6th Form Centre and the Dame Kelly Holmes Sports Centre, while among the many Circa installations, Gatwick Airport's South Terminal, Liverpool University and Gateshead International Stadium are major installations.

Encasement's Managing Director, Martin Taylor, commented: "Column casings provide a perfect mix of practicality and aesthetics and we've taken a lot of care to ensure our range meets both of these key criteria while ensuring that we always remain competitive and deliver high quality products. Our products are used in projects all across the UK in just about every sector of the construction industry and building type, often using different products from our range, which underlines the versatility of our casing solutions."

He added: "Our entire range has been configured to provide the widest possible choice as well as being easy to specify, which is why we offer next working day delivery as well as some very specialised solutions, such as the Metza range, which provides up to two hours fire protection for mezzanine floor columns.

"The Vecta interior cladding system enhances our building interiors offer and allows specifiers to source a range of specialised interior finish products from a single company with high levels of expertise and experience in this sector. We also have our own contracting arm, which enables us to offer a full supply and install service to support contractors."

Encasement's latest 'column casing solutions' e-brochure is available for download from the company's website and covers every product in the range as well as providing details on materials, sizes and finishes available alongside an extensive technical information section. Further information is also available from their website.

01733 266889 [www.encasement.co.uk](http://www.encasement.co.uk)

# SE Controls keeps shoppers safe at Johannesburg's new Mall of the South



The smoke ventilation system at Johannesburg's recently opened Mall of the South, shopping centre is using SE Controls' window automation, vents and control panel solutions to ensure it operates perfectly in the event of a fire, allowing smoke-free escape routes to be maintained for shoppers and staff.

Designed by Vivid Architects, the 1.8 billion Rand development provides more than 150 stores and restaurants, covering fashion, jewellery and electronics, as well as a wide range of other luxury goods within the 65,000 m<sup>2</sup> complex, which also car parking for 3,000.

Due to the large open plan areas within the mall and the high volumes of people, effective smoke ventilation is essential to ensure escape routes are kept clear if a fire should occur. As a result, the system uses 62 SE Controls' vents and 20 of the

company's SECO N 24 40 twin chain actuators, as well as twelve 24 Volt dc OS2 controls panels and eight manual control point (MCP) switches.

Working closely with smoke control specialist, Curvent international, the system, which also uses roof mounted fans to help vent smoke from the mall, is controlled centrally by a repeater panel located in the main security office to provide additional safety and peace of mind.

In the event of a fire, the mall's smoke sensors trigger SE Controls' EN12101-2:2003 compliant control panels and chain actuators to automatically open the window and ventilators, allowing smoke to be vented to assist escape. Manual Controls Point (MCP) switches are also incorporated within the design to allow manual actuation of the system.

01543 443060 [www.secontrols.com](http://www.secontrols.com)

## CRL becomes an associate member of the Council of Mortgage Lenders



Structural defects insurance provider CRL has become an associate member of the Council of Mortgage Lenders (CML). CRL, which has eight offices throughout the UK and Ireland, elected to join the CML as part of its ongoing commitment to supporting good practice within the UK's property sector. In doing so CRL has become one of 90 associate members who collaborate, collect and share best practice on behalf of members with the organisations, government departments, and commentators who have an interest in the UK's £1.3 trillion mortgage market. Steve Mansour, CEO, CRL Management Limited, said: "CRL elected to join the CML as an associate member as part of its commitment to supporting the property sector generally. We intend to be extremely active associate members as we recognise the good work that the CML do in bringing the industry together, specifically in their role acting as the voice of the mortgage industry in the UK. CRL is committed to working with mortgage lenders to ensure that the best possible structural insurance options are available to all residential mortgage customers in the UK – regardless of the lender they choose. Through the CML, and its lender members, CRL hopes to continue to promote the interests of its customers."

0800 772 3200 [www.c-r-l.com](http://www.c-r-l.com)

## VELUX® hits the road with national tour



A leading roof window manufacturer, the VELUX Group, is on the road to unveil its new white-painted roof window range to customers.

The VELUX 2016 Tour will visit 250 venues across the UK from until late July to give installers and suppliers a first look at the new white-painted roof window range, developed to meet contemporary demand for an alternative to traditional pine. Installers attending the event can win over £75,000 of rewards and prizes on the day including a brand new Vauxhall Vivaro van worth over £20,000, Makita Drill Sets and iPad minis.

Everyone who pre-registers at [www.velux.co.uk/2016tour](http://www.velux.co.uk/2016tour) and attends an event will receive an instant win scratch card with a guaranteed VELUX Reward worth between £5 and £50.

For every VELUX white-painted roof window bought in April and May, customers will receive £25 worth of reward vouchers, redeemable at M&S, Argos, Pizza Express, Thomas Cook and Ticketmaster.

The new white-painted roof window range from VELUX will be available nationwide from April.

01592 778225 [www.velux.co.uk/2016tour](http://www.velux.co.uk/2016tour)



# Thermal bridging calculator available online

In respect of the overall energy efficiency of new buildings, the Approved Document Part L1A and L2A and further BS regulations are becoming more and more stringent. As a result, thermal bridges are becoming an increasingly sensitive area and to meet the specific needs of architects and energy assessors Schöck has launched an internet-based system for real-time calculation of various thermal technology criteria at [www.psi.schoeck.co.uk](http://www.psi.schoeck.co.uk). The calculator enables substantiated thermal bridge analysis in just five simple steps and it can be printed out immediately.

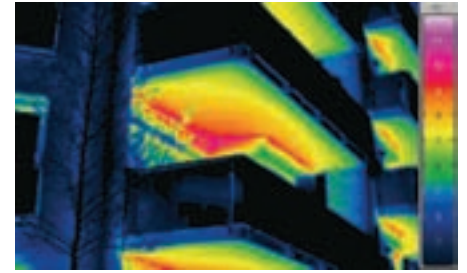
Based on the construction details, the new thermal bridge calculator computes two-dimensional heat flows, isothermals, temperature factors, surface temperatures and psi values ( $\psi$  values). The calculation results provide all the information needed to produce a detailed thermal bridge analysis and the results log contains all relevant properties and notes relating to the building structure. For example, it reveals whether the building structure is at risk and whether mould and condensation prevention has been adequately

considered. If all minimum requirements are met, planners are automatically provided with proof of compliance with the minimum thermal insulation requirements of Approved Document Part L1A, L2A, BS EN 6946 and BS 5250.

Because the simulation program developed in collaboration with Syscon Informatik and Sommer Informatik is internet-based, there is no need for software updates and downloads. Users always work with the latest version. The program runs on any end appliance, irrespective of the operating system.

## The psi value in five easy steps

1. Enter the as-is situation of the balcony connection (e.g.; freely projecting, supported, with height offset)
2. Determine the planned wall structure (monolithic wall structure or classic thermal insulation composite system)
3. Specify the structure of the individual components for the wall, floor and balcony slab



4. Select the matching type of Schöck Isokorb and load-bearing capacity, together with the required insulation material thickness
5. Based on the input, the result is calculated and a log produced. A three-minute tutorial explains the use and functions of the program and information 'help' boxes simplify individual steps

For your free copy of the new Thermal Bridging Guide and / or the Schöck Specifiers Guide – contact the company.

01865 290 890 [www.schoeck.co.uk](http://www.schoeck.co.uk)

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# Is there an easier way to specify your garage door?

Garador introduces EasiQuote, a brand new pricing and specifying garage door service

When specifying a new garage door for an opening, it can be all too easy to make a mistake. So Garador, the UK's leading manufacturer of garage doors, has come up with a solution – a new pricing and specification service called EasiQuote.

Thanks to this brand new service, obtaining quotes for Garador garage doors will be really quick and easy. Garador's Managing Director Simon Hipgrave said the company had been working hard to ensure they led the industry in good service and customer care, and has setup a dedicated EasiQuote team to handle these calls and enquiries.

"We believe creating this EasiQuote system will be of real benefit to merchants, both the larger national chains and also the smaller independents, and are delighted the process is now available and ready for 2016," he said.



So how does it work?

1. The builder visits their local merchant to buy a garage door where they can obtain an EasiQuote form.
2. The builder then fills in the form with the details and returns it to their local merchant.
3. The merchant then sends the form to Garador's EasiQuote team.
4. The Garador team return an updated form via email/ fax to the merchant branch, with an accurate price – It's that simple!

The great thing is the form provides a clear format for the builder to follow, so the merchant has all the information they need to provide the right door, at the best price possible.

Simon Hipgrave argues "We wanted to take all the ambiguity out of ordering a new garage door from your local builder's merchant. We believe EasiQuote will help our customers to get the best possible door size and price for their project"

The Easi Quote service covers all Garador garage doors including: Up & Over garage doors; Side Hinged garage doors; Sectional garage doors and GaraRoll roller doors

The new service will simplify the ordering process and also ensure more accuracy in the specifications required and the final quote. It is a win-win situation for both the merchant and his customer.

To find out more, please contact the Garador EasiQuote team.

01935 443794 [www.garador.co.uk](http://www.garador.co.uk)

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or contact us: 01483 271371 or [design@whitesales.co.uk](mailto:design@whitesales.co.uk)



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## Manage rainwater the Anthracite Grey way



**Freefoam Building Products** are delighted to announce the launch of a new range of rainwater products in the contemporary colour Anthracite Grey. With a 45 per cent increase in sales of Anthracite Grey fascia and soffit in 2015 and a growing overall market trend towards grey window frames, doors, fascia and soffit adding an Anthracite Grey Deep gutter range was the next logical step. Freefoam has created a product that allows customers to create a truly co-ordinated roofline with the new rainwater range offering an exact match (Ral No.7016) to the already popular fascia and soffit products. With a 77mm depth and a 116mm width the Deep gutter is designed to manage the increasing levels of rainfall that are being experienced throughout the UK. Available with the full range of matching fittings including Union Bracket, Running Outlet and Hopper and manufactured using co-extruded PVC-U the Freefoam Freeflow range offers a long lasting, leak free, no fade, low maintenance solution all with a 10 year guarantee. Colin St John, UK general manager commented: "The launch of a new colour in our rainwater range offers architects, specifiers, builders and developers the opportunity to create a perfectly coordinated roofline."

01604 591 110 [www.freefoam.com](http://www.freefoam.com)

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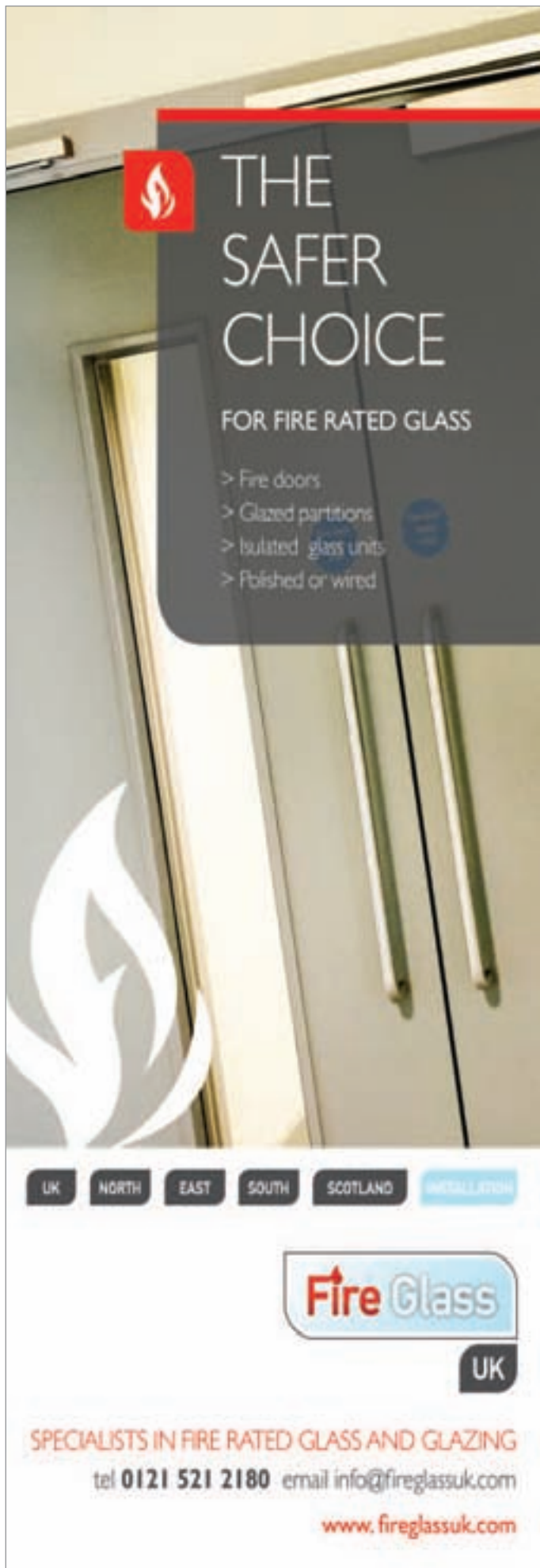
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## Portakabin achieves construction industry first



The Portakabin Group has been awarded the £14 million design and build contract for the UK's first university technical college (UTC) to be built off site. Opening in September 2016, the Global Academy will provide academic and vocational training for 14-19 year olds who want to work in

the broadcast and digital media industries. Advanced off-site technology using a Yorkon building solution from the Portakabin Group will seamlessly integrate both modular and site-based construction. A significant proportion of the work will be completed off site at the Portakabin Group factory in York in order to meet the challenging programme for completion in time for the start of the 2016-17 academic year.

## Sika provides the watertight solution



Forming part of the new £120 million Bond Street retail development on the banks of the River Chelmer in Chelmsford, a major new department store has been assured of a watertight future thanks to a comprehensive range of waterproofing solutions from Sika. Sika was ideally placed to meet

the requirements of this design by providing a dual system of more than 7,000m<sup>2</sup> of the company's innovative Sikaproof A12 membrane system, together with 4,500m<sup>3</sup> of Sika Watertight Concrete. This combination of a membrane system and watertight concrete offers a dual approach to minimise risk and deliver outstanding levels of watertightness.

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### Triton's new online resource for specifiers

Triton has published a new website ([www.groundgasbarriers.co.uk](http://www.groundgasbarriers.co.uk)) dedicated to its new range of ground gas protection systems. The site is designed to help construction professionals fulfill the guidelines set out in the recently revised Code of Practice BS 8485: 2015, which explains how to prevent the entry of carbon dioxide and methane into new buildings, and which has been substantially expanded and revised to reflect changes in good practice and to reference recent guidelines produced by CIRIA and BRE. The new site introduces all Triton's new gas protection products and includes liquid applied and sheet membrane systems. New Triton TGS-GM500 is a sheet membrane designed to prohibit the ingress of Carbon Dioxide, Methane and Radon. Where a barrier against explosive Hydrocarbon gas is also required, new TGS-HCM1000 should be specified. Both membranes are highly puncture resistant and are designed to provide protection for the life of the building. A full range of ancillary products including fans, sumps, primers, tapes and components for sealing service entries is also available, as is training for specifiers and installers, and full back up and technical support.

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# RECYFIX® MONOTEC: A new monolithic drainage system with a high attenuation volume

**H**auraton Limited has introduced into the UK, RECYFIX® MONOTEC, its new high capacity channel system for the surface drainage of pavements, bicycle routes, car/van parks and roadways in and around residential, commercial and light industrial areas where the channels need to have high lateral strength, are capable of withstanding continuous compressive loads and where ease of installation is a major consideration.

The RECYFIX® MONOTEC one metre long channel component is of a sturdy monolithic design where the grating and the tongue and groove linking system are integral to the channel moulding. The whole unit is made of tough, virtually unbreakable polypropylene (PP) formulated to be very resistant to daily temperature fluctuations from frost conditions to strong sunlight, including the Ultra Violet (UV) spectrum. PP is naturally resistant to de-icing salt.

Complying with the requirements of EN 1433, the PP is given its UV resistance by adding just sufficient carbon black as a stabiliser so that the structural strength of the material is unaffected and a consistent appearance is maintained.

MONOTEC channels are offered in two nominal grating widths of 100 and 200mm, both suitable for a loading category of up to Class D400. The 100mm channels are available in three overall heights; 230, 280 and 380mm and provide channel cross-sections of 190.5cm<sup>2</sup>, 245.5cm<sup>2</sup>, and 355.5cm<sup>2</sup> respectively. The largest 200mm channel, which only weighs 16.2kg, has a cross-section of 746.1cm<sup>2</sup> and so has an attenuation volume in excess of 74 litres per meter.

The three sizes of 100mm channels can be arranged in a step-fall arrangement with different channel heights connected by special transition adaptors that ensure the water drains away smoothly and quietly with the increased flow



velocity playing a considerable role in cleaning the channel run. The step-fall arrangement may be desirable where there is a high risk of silting as the increased flow will help wash debris towards the system's Inspection/Trash Box.

RECYFIX® MONOTEC channels are certified in accordance with EN 1433. The CE symbol, external monitoring and the conformity declaration are the guarantee of a maximum technical and qualitative standard.

01582 501380 [www.hauraton.co.uk](http://www.hauraton.co.uk)

## Colourful acoustics in action

Noise in sports, swimming-pool and leisure centres can often result in unpleasant echoes because it is reflected off hard surfaces and the water and exaggerated by the natural exuberance of the participants. In the new Eura sports complex in Western Finland, architects Heino & Niirainen have solved this problem and created pleasant acoustics by the extensive use of Troldekt ultrafine panels on the ceilings and the walls. The most dramatic is in the large swimming pool which not only has acoustic panels between the ceiling ribs but links a multi-coloured wall of Troldekt panels on one side with a floor to ceiling glazed view on the other. The coloured acoustic panel theme is continued in the entrance hall which is dramatically coloured in red and in the dining area where blue dominates. In addition, the bowling alley has Troldekt acoustic panel ceilings and more highly coloured acoustic walls. In some places the ceilings also house strip lighting which is recessed to create an unbroken ceiling surface. Made from 100 per cent natural wood fibres, Troldekt panels are perfect for use in wet rooms and areas such as this due to their durability and ability to absorb and give off moisture. In addition, Troldekt panels include high sound absorption, natural breathability, low cost life cycle performance and sustainability. Their sustainability was recently recognised with certification at Silver level within the Cradle to Cradle concept. Visit Troldekt's website for more.



## Hauraton drainage channels used at new Cardiff City Stadium and Retail Park



Officially opened in July 2009 the 26,500 seat Cardiff City Stadium is at the heart of a major new infrastructure project in Leckwith, located to the West of the Welsh Capital. The stadium's extensive concourse and car park are drained using 800 metres of Hauraton's fibre reinforced concrete FASERFIX® KS surface water drainage channels. In addition 400 metres of KS units were also installed to provide pitch-side drainage. The Stadium is part of a multi million pound development that also includes the 43,964 m<sup>2</sup> Capital Retail Park, a 5000 capacity, IAAF approved International Athletics and community sports venue and a 70 room hotel. Landscaped roads into the Retail Park incorporate over 600 metres of Hauraton ENVIROKERB kerb-side drainage. Having the appearance of standard concrete kerb, the components are in fact made from 100 per cent recycled material that weighs far less than concrete, allowing units to comply with the maximum 25kg "one-man-lift" legislation. The drainage in the 1500 space retail car park was a tricky problem. Because of its position between the Stadium and Retail development, it was essential that rainwater run-off in this highly used area would be effectively drained. 530 metres of Hauraton RECYFIX® HICAP® high capacity, slotted drainage channel was found to be the answer.

01582 501380 [www.hauraton.co.uk](http://www.hauraton.co.uk)



# Schöck demonstrates its skills with large balconies at Rathbone Market

The Rathbone Market scheme is part of the Canning Town and Custom House regeneration. It is a three-phase development with a new market square at its heart; bordered by around 35,000 sq ft of new shops and cafes; plus offices, community facilities, two public squares and 652 homes. This final phase will deliver 216 new homes in a mix of one, two and three-bed designs in a horse-shoe configured three blocks, ranging in height from six to 14 storeys. The majority of apartments on the upper levels will have balconies finished in a powder-coated gold.

The balconies are an unusually large 2.3 metre cantilever and to meet this demanding specification, the Schöck Isokorb type KS for concrete-to-steel connectivity is incorporated. The units can bear extremely heavy loads, making them ideal in meeting the thermal and structural demands of large cantilever steel balconies. With such a large cantilever, thermally effective insulating elements like the type KS, can make steel balconies prone to vibration. Whereas those connected with simple pads are more rigid and

less susceptible to vibration. Connections, such as the Isokorb type KS, are indeed 'softer' than traditional connections, due to their material properties, but if planned properly, virtually any balcony geometry can be designed using the module. To assess how prone to vibration type KS thermally separated balconies might be, Schöck offers a free service which calculates the Natural Frequency of the steel balconies. This uses geometric and material variables and on this project the Natural Frequency of the balcony constructions was above the recommended limit frequencies.

In addition to concrete-to-steel capability, the Isokorb range provides solutions for concrete-to-concrete and steel-to-steel, meeting full compliance with the relevant UK building regulations and offering BBA Certification and LABC Registration. BRE IP1/06 requires that the temperature factor used to indicate condensation risk for occupants in residential buildings (the fRsi value), must be equal to or greater than 0.75. This is comfortably met by incorporating the Isokorb.



Courtesy of Project Orange

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# Boiler pipe casing – undercover work

With the potential for local authorities and housing associations to save tens of thousands of pounds, just by changing the way heating system and boiler pipework are concealed on site, Encasement's Managing Director, Martin Taylor, provides a detailed insight on where and how the cost can be removed from the process

**I**n any property, whether it's a new build or a refurbishment project, there will inevitably be some exposed pipework that will need covering for reasons of safety, in the case of hot pipes, or purely aesthetics.

However, for local authorities (LA) and housing associations (HA), where they primarily deal with older housing stock, which requires upgrading and annual maintenance, the high volumes of exposed pipework for heating systems, boilers, gas, mains water and waste can present a number of challenges.

Usually, due to the age of the properties and the nature of their construction, which predominantly uses concrete and brick, mechanical and electrical services need to be surface mounted, as they can't easily be concealed during installation.

Given that upgrading heating systems with more energy efficient solutions in older social housing stock is important to reduce emissions and energy consumption, while improving comfort for occupants, there is also a need to ensure that the updated system is safe and looks good too.

And it's at this point where LAs and HAs have the opportunity of either saving or wasting thousands of pounds on their annual repair, maintenance and improvement (RMI) budget, just by deciding which method to use when boxing in heating system and boiler pipework after installation.

## Suffering from exposure

So how exactly can something as simple as covering exposed pipe work with pipe boxing and boiler casings have such a potentially dramatic impact on RMI budgets?

Essentially, this can be broken down into four sections:

- **Manufacture** – How will the boxing be made?
- **Materials** – What materials will be used to make the boxing?
- **Methods** – How will the boxing be installed and secured?
- **Maintenance** – How easily can the boxing be removed and replaced for servicing?

Clearly, in each of the above processes, if costs can be removed or if time can be saved, then they will have a positive effect on reducing the overall budget required to achieve the end result.

Encasement's approach to product design has always been to develop more cost effective solutions that can save time and money on site, although in recent years, the company has also taken a more holistic view, as it became clear that often, the installation processes for traditional boxing can also be



time consuming and inevitably costly.

Furthermore, when maintenance, servicing or routine boiler inspections are required, this can also incur further costs as the boxing needs replacing or re-manufacturing after it has been removed. This issue has again influenced our thinking to develop a better and more cost effective solution.

To get a better understanding of each element, let's explore them in a little more detail.

## Manufacture

The traditional and still widely used approach for concealing pipework, is for boxing to be fabricated on site using wood or MDF together with nails, screws or adhesive, followed by a couple of coats of paint. Inevitably, this is a time intensive and costly solution, as escalating materials cost and labour rates are constantly increasing the overall cost of manufacture for each piece of boxing.

In 2011, Encasement initiated an ongoing study to quantify how much it costs to make a typical boiler pipework casing and the cost five years ago was £38. Today, this figure can regularly exceed £50, which seems excessive just to cover up some pipes. Also, there are issues with inconsistency of paint finish and

fabrication quality, which can easily detract from an otherwise professional heating system installation.

The Encasement solution is a whole lot simpler, quicker and delivers a cost saving of around £20 on every casing installed, as it is manufactured from pre-formed plywood to exact boiler dimensions. They are also pre-finished with durable melamine or laminate, so there's no painting required, which provides a consistent finish and saves even more time.

While a £20 cost reduction on its own is a decent saving, it makes even more financial sense when you consider that the savings reach £10,000 for every 500 properties where pre-formed casings are used.

## Materials

Often the materials used to manufacture pipe boxing and boiler casings aren't a major consideration, particularly for on-site fabrication, yet they should be.

Apart from the health & safety considerations when cutting and fabricating MDF, there's also the question of





compliance with sustainable procurement policies that many local authorities and public sector bodies now have in place.

Has that piece of timber being cut, been sourced from sustainable forests? Has it been purchased in accordance with the EU Timber Regulations for illegal supply? Can the approval certification be easily accessed?

To meet this growing requirement, Encasement has already addressed the issue, as it is the UK's only manufacturer and supplier of pre-formed plywood boxing and casings that holds an FSC® 'Chain of Custody' certification from the Forest Stewardship Council.

Only FSC® certified timber is used in the manufacture of our boxing and boiler casings. In addition, every order despatched is accompanied with its FSC® certification, which means that the issue of compliance is automatically taken care of for users of Encasement's products. Also, as the company supplies so much FSC® boxing, it can purchase cost effectively, so there's no price premium for using FSC® compliant products.

## Methods

Clearly, the choice of 'Manufacture' and 'Material' have a direct impact on the 'Method' of installation and again this is an area where the use of site made boxing and boiler casings has a negative cost implication compared to pre-formed solutions.

Typically, once a plumber or heating engineer has completed a boiler installation, they will move on to the next flat while a joiner will set about the fabrication and fitting of a wood or MDF 'site-made' casing. Obviously, due to the different skills required, two different people are required to complete the job, which takes time, as mentioned earlier.

If, however, a pre-formed boiler casing is used, which has already been supplied to the correct dimensions, which only requires on-site trimming to height, then there's no need for fabrication and the freestanding casing just slides into place underneath the boiler, which can be done by the heating engineer.

Also, the use of moulded rubber edge strips on the base of the casing means that it removes the need for mastic sealant, which save even more time and money, while also having an influence on the final category – 'Maintenance'.

## Maintenance

The 'whole life' costs for site made casings escalate significantly, when routine maintenance visits are factored in to the equation.

In the majority of cases, site made casings are damaged or destroyed during their removal, as the screw heads are filled and painted over, making them impossible or extremely time consuming to dismantle, while mastic sealant around the edges also needs to be removed.

As pre-formed casings are self-supporting and have no screws to hold them together, they can be easily removed and replaced in just a matter of seconds, dramatically decreasing the time that maintenance engineers need to be on site, with a corresponding reduction in



associated cost.

Also, the complexities of managing routine maintenance and inspection increases when site made casings are used. In some cases a joiner is required to remove site made boxing in advance of the maintenance work being carried out by a service engineer. The joiner then has to revisit the property after the maintenance is complete to refit the casing or construct a new one.

## Case closed!

Apart from the disruption for the tenant and the extended time period to complete a simple process, the cost associated with transport and

labour for three site visits by skilled staff are considerable. Alongside this, the task of scheduling and co-ordinating such an operation on multiple properties is extremely complex.

As a result it's a 'no-contest' when assessing pre-formed boiler pipe casings against site made alternatives. The comparative fitting costs alone should ensure that the decision to use pre-formed casings is an easy one to make. Yet, when the FSC® compliance and maintenance aspects are factored in too, it becomes, to quote one of Encasement's customers, "...a no-brainer."

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# Looking for a whitewashed floor?

**B**ona White is a new wood floor primer designed to produce an on-trend bleached look when used in conjunction with a Bona polyurethane lacquer. The intensity of 'whiteness' is dependent on how many coats are applied. This client wanted a whitewashed look to their original Victorian floor boards to tie in with the soft greys of the kitchen. This was achieved by the application of two coats of Bona White under two coats of Bona Traffic HD lacquer.

The works were part of a complete renovation of a Victorian town house in Bath and were carried out by Bona Certified Contractor, TWf Bath Ltd, who specialise in the restoration and fitting of traditional wood floors. Before treatment, the TWf team filled large gaps using reclaimed pine wedges and then sanded the floor to 100 grit abrasives. Smaller gaps were filled using Bona Mix & Fill, which is mixed with sanding dust from the floor to ensure the filled areas blend in with the rest of the surface. The floor was then sanded using 120 grit abrasives before the application of the first coat of Bona White. The floor was then abraded using a Bona Scrad Pad to remove



any grain raising from the surface before the application of the second coat.

To produce a highly durable, easy to maintain finish, two coats of Bona Traffic HD lacquer were applied. Traffic HD is Bona's toughest lacquer. The very low VOC content and low odour mean there is no need for homeowners to vacate their property while the works are being carried out and there is no lingering smell.

Its fast cure time means the floor can be in full use just 12 hours after treatment – making it an ideal choice for commercial floors too where

there is little available downtime for renovation. TWf's clients chose the Matt version of Traffic HD for their kitchen floor. Silkmat and Extramat sheens are also available.

As a Bona Certified Contractor, TWf Bath is part of Bona's network of highly trained wood floor specialists – independent wood floor companies who have received extra in-depth training in the use of Bona's wood floor finishing products.

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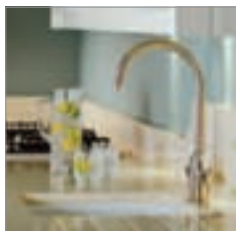
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boiling water function can only be accessed with the unique, child safe Abode Hotkey, for added safety. Whatever style or finish, the PRONTEAU range of taps offers the same impressive functionality.

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## Worldwide House remodelled with APLs help



Worldwide House on the Western Estate in Bracknell stood unoccupied for a long time. Clearly in need of a facelift, architects Cube Interiors specified Architectural Profile Limited's products and systems to set about the remodelling process which centered around the provision of a stunning new entrance feature. The result is exceptional and the

building is now occupied. The system used was an APL Slimwall™ Aluminium Rainscreen produced in a robust and totally weather resistant Alucobond flat panel composite material. Slimwall™ brings many system performance benefits to the project which not only encompasses budget but energy performance, speed of construction and maximisation of internal working area.

0118 927 2424 [www.archprof.co.uk](http://www.archprof.co.uk)

## Making the grade in the USA



The new Essex Technical High School in Massachusetts, USA harnesses the latest building technology, including a striking external Infiniti Fin solar shading solution from Levolux, to deliver a first class environment for students and teachers alike. To create the optimum environment for occupants, balancing light and shade, Levolux was approached to design

and supply a custom solar shading solution for the new school. By leveraging its unrivalled experience and expertise, Levolux developed a solution based on its popular Infiniti Fin system, with unique concealed fixings. The Infiniti Fin solution comprises horizontal aerofoil-shaped aluminium fins that are secured above and across glazed areas. A 400mm wide Fin has been used on the largest of four school buildings, which incorporates the school's main entrance.

## VS-I curtain walling part of cutting edge vision



A new structural glazing system from GLASSOLUTIONS has been specified for Hiscox's new landmark underwriting and customer experience centre in York, part of the insurance company's £19 million investment to create its largest office outside London. The VS-1 mullion-only system from GLASSOLUTIONS eliminates the need for

horizontal framing members, enabling Make Architects to achieve the clean viewing lines on the curved atrium screen which forms a key feature of the new building. The building will house up to 500 employees in a dynamic working environment with open, flexible floor space. The light airy interior effect is created by the extensive use of the VS-1 curtain walling.

0247 654 7400 [www.glassolutions.co.uk](http://www.glassolutions.co.uk)

## New impact resistant film launched



RENOLIT is pleased to announce RENOLIT ARMouREN, an innovative and robust PVC film developed to provide superior impact protection to furniture components and interior fittings. The new product is launched as a 12 item stock range that includes 8 realistic woodgrain prints and 4 contemporary solid colours. It is targeted to meet the requirement for a decorative surface film suited to furniture and interior applications in areas of high traffic. Typical areas of use include for example, shop fitting, hotel & hospitality, healthcare, or public buildings. Benefits of RENOLIT ARMouREN include small minimum order quantities and short lead times which are essential for markets that rely on fast turnaround times for contracts. RENOLIT ARMouREN is a 0.7mm thick material ideal for either flat lamination or thermoforming. It can be processed on a wide range of substrate materials such as MDF and chip board. The product can be manufactured using typical conditions on all standard industry equipment. This means that anyone with experience working with products from the company's 2D offer or 3D global stock ranges RENOLIT COVAREN or RENOLIT ALKOREN can confidently use RENOLIT ARMouREN.

01670 718222 [www.renolit.com/design](http://www.renolit.com/design)

## Relcross is number 1 at No. 1 Watson Street



The first thing that customers come into contact with at No. 1 Watson Street is the front door – operated by Relcross LCN 9000 door openers. No. 1 is Manchester's newest, specialist beer bar with 60 different beers on offer – 12 draught and 48 bottled beers.

The bar was purchased by VCP Taverns in June 2014 and refurbishment started straight away with the main door controls being installed in February 2015 to replace controls that could not cope with the heavy winds frequently occurring in Watson Street.

In these circumstances the REL 9140 can be an ideal door control. The door can be used as a fully automatic door with the opening cycle initiated by wall mounted push buttons. When not operated in this way the door can be set to "Push 'N Go" where an attempted manual opening leads to the automatic controller taking over to firstly open the door and then, after a set time delay, fully closing the door and holding it closed until it is next required. Should power be lost for any reason the unit simply operates as a manual closer. The unit has been tested successfully to over three million cycles.

01380 729600 [www.relcross.co.uk](http://www.relcross.co.uk)



# RENSON® Sun control

## Comfort tailored to each season

To save energy is one of the key challenges in new construction and renovation. And windows play a vital role in this process. Thanks to large glass panels, a low sun ensures pleasant warmth during winter, which means there is less need to use heating. However, the sun can also influence the indoor climate less positively. Excessive sunlight can cause overheating, disruptive reflections on screens and discoloration of the furniture and decor.

An efficient outdoor sunscreen – sun control blades in front of or a brise-soleil above the window, sliding panels and wind-resistant screens – enables the occupants to enjoy the sun at any time. These systems stop sun rays from heating the indoor air, without disturbing the view of the garden. In fact, all Renson outside sun control products guarantee comfort at 3 levels: thermal, visual and aesthetic comfort.

Horizontal shading offers the ideal solution for

managing heat entry through sunlight. Mounted above windows, they do not disturb the outside view. Renson's brise soleils with aluminium blades type Icarus or Sunclips (pictured) provide a good source of shade when the sun is high during summer months. In winter – when the sun is low – they allow solar warmth entering the house, limiting energy use by heating systems.

Where disturbing light should be avoided during the whole year in addition to overheating during summer, vertical sun control blades in front of windows however provide the best solution. In places where visibility is of minor importance, one can opt for a fixed version of the Renson Icarus or Sunclips blades. But several movable systems are available as well to open and close when more or less shading, light and transparency is required.

In reply to the growing demand for aesthetic, multifunctional facade elements, Renson also offers a range of sliding panels, called Loggia.



These systems consist of a solid aluminium frame, fitted with aluminium (Loggialu) or wooden (Loggiawood) blades or an integrated wind tight screen (LoggiaScreen4Fix). Manually moving blades can be opened or closed according to the desired level of shading and privacy.

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# Play the light: Trespa® Meteon® range extended with Lumen

Trespa has announced the launch of its new Trespa® Meteon® Lumen range. Architects and designers can now play with the composition of light reflection on exterior facades, allowing natural light to be creatively introduced as a design element. It can be reflected, scattered, enhanced or muted according to architects' and clients' wishes.

"Trespa® Meteon® Lumen changes the way designs are perceived, it changes how people interact with structures and how buildings interact with their surroundings," says Lucas Stevens, design expert at Trespa. "With Trespa® Meteon® Lumen, you can play with the compositions of light reflection on your facade, within a single colour. This new diversity of finishes enhances design creativity and ensures facades will truly stand out."

Trespa® Meteon® Lumen is available in three variations across eight colours. Each of the three

Lumen variations is available in grey, black and white and several terracotta tones.

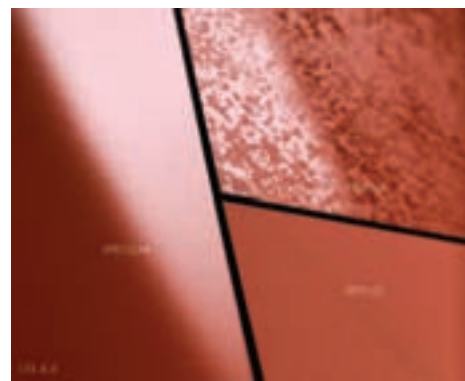
'Diffuse' removes glossiness, reflection and texture, resulting in instant tranquillity. Scattered light gives facades a smooth, subdued appearance.

'Oblique' has a pleasantly uneven matt-and-gloss surface that brings a natural, weathered look to any facade.

'Specular' reflects its surroundings, adding liveliness with deep colours and gloss. Buildings become seamlessly integrated into their environment.

Based on decades of leadership and setting new trends in facade solution design and aesthetics, Trespa® Meteon® Lumen represents a logical next step for the Trespa® Meteon® family. Trespa is the first choice of exterior panelling for many leading architects, who insist on quality, reliability and durability.

Trespa® Meteon® is a decorative high-pressure



compact laminate (HPL) with an integral surface manufactured using Trespa's unique in-house technology, Electron Beam Curing (EBC).

The blend of up to 70 per cent natural fibres and thermosetting resins, manufactured under high pressures and temperatures, yields a highly stable, dense panel with good strength-to-weight ratios.

Trespa® Meteon® stands out in vertical exterior wall coverings such as facade cladding, balcony panelling and sunblinds.

See what Trespa® Meteon® Lumen can do: order your samples today.

0808 234 0268 [new.trespa.com](http://new.trespa.com)

## Is there an easier way to specify your garage door?



Garador introduces EasiQuote, a brand new pricing and specifying garage door service. When specifying a new garage door for an opening, it can be all too easy to make a mistake. So Garador, the UK's leading manufacturer of garage doors, has come up with a solution – a new pricing and specification service called EasiQuote. Thanks to this brand new service, obtaining quotes for Garador garage doors will be really quick and easy. So how does it work?

1. The builder visits their local merchant to buy a garage door where they can obtain an EasiQuote form.
  2. The builder then fills in the form with the details and returns it to their local merchant.
  3. The merchant then sends the form to Garador's EasiQuote team.
  4. The Garador team return an updated form via email/ fax to the merchant branch, with an accurate price – It's that simple!
- The great thing is the form provides a clear format for the builder to follow, so the merchant has all the information they need to provide the right door, at the best price possible. The Easi Quote service covers all Garador garage doors. To find out more, please contact the Garador EasiQuote team

01935 443709 [www.garador.co.uk](http://www.garador.co.uk)

## Bespoke louvres are a perfect match



Few brise soleil products can be supplied in a bespoke colour to match the design scheme of a building, but manufacturer neaco provided a rare exception for a new classroom at Fulford School in York as part of a £4 million upgrade designed by City of York Council and built by William Birch and Son.

neaco's advanced powder coating facilities are normally utilised in the manufacture of its balustrade products, but in this case they enabled the company to apply a precisely formulated colour finish to its louvres. neaco also supplied internal balustrade in the building's two stairwells.

Alan Thomas, senior architect at York City Council, said: "It was important to provide a design for the brise soleil that complimented the external appearance of the new building and this has been achieved. We supplied the specific RAL colour reference of the window frames and neaco were able to match the grey finish that has been used throughout the school. The end result is excellent, being attractive, functional and robust."



# Innovation at Ecobuild – BioSOLAR launched

Flat roof manufacturer Bauder officially launched its innovative, combined green roof and PV system offering BioSOLAR at Ecobuild. Designed primarily for new build applications where this synergy of solutions is often required to meet planning and BREEAM requirements; the biosolar system can also be retrofitted on many existing roofs without the need for any structural modification to the building.

Ecobuild well and truly lived up to its billing of being the world's leading event for sustainable design, construction and the built environment – attracting over 40,000 industry professionals during the three day event at ExCeL London. Bauder, one of a handful of companies that have been ever-present at Ecobuild since its inception in 2005, also delivered an exclusive new seminar at the event on biosolar roofs and how they can help boost your project's sustainability credentials, as well as the potential design and installation pitfalls to be aware of.

Designs that do not perform optimally for both technologies are often as a result of people

assuming the solar panels require more technical input than the green roof; however getting the green roof element wrong can mean the vegetation is forced to grow around the panels, resulting in shadowing and therefore reduced energy generation. The integration of PV and green roof technologies requires skill, expert understanding and ultimately a collaborative approach throughout the survey, design and installation process from all project stakeholders to ensure the maximum benefit for the building owner. With Bauder able to perform a free survey of your roof area and supply all of the waterproofing, green roof and PV elements, it gives you total confidence that this energy efficient and cohesive solution is the right one for your project.

Bauder's BioSOLAR system uses the substrate and vegetation to provide the ballasted installation mechanism, removing the need to penetrate the waterproofing to secure the mounting units to the roof and simultaneously making the most of the available area for vegetation, enabling the entire roof to qualify as a biodiverse green roof. Another



key feature of this unique system is that the front edge of the polycrystalline PV panel is raised 300mm above the finished green roof level, allowing light and moisture to reach beneath the modules whilst ensuring the mature vegetation will not shade the panels and can be easily maintained. The mixture of sunny, shaded and sheltered areas together with a variable depth of FLL compliant extensive substrate gives a matrix of different habitats that allow a broader range of plant species to thrive, and a rich foraging environment for bees and insects.

0845 271 8800

[www.bauder.co.uk/renewables/biosolar-system](http://www.bauder.co.uk/renewables/biosolar-system)

## CMS delivers for engineering giant's new Scottish facility



CMS Window Systems has played a key role in the manufacture and installation of thermally-efficient curtain walling, windows and doors for Emerson Process Management's new facility at the new D2 business park, Aberdeen. CMS was appointed by main contractor Bowmer & Kirkland to design, manufacture and install curtain walling, windows and doors for the facility. The £20 million development, built to replace Emerson's existing Aberdeen headquarters in nearby Kirkhill, comprises 2,600m<sup>2</sup> of office space, as well as a 3,065m<sup>2</sup> service centre with meeting facilities and a customer collaboration suite, and can accommodate up to 200 Emerson personnel. The solutions delivered by CMS were chosen to enhance the efficiency of the building's envelope, reducing heat transfer while allowing the entry of natural light. Aluminium curtain walling created using Metal Technology's System 17 ensures the building adheres to exacting thermal performance standards. With a continuous thermal isolator providing a thermal break throughout the system, as well as 6mm toughened Planitherm Ultra N glass used in conjunction with 16mm Swisspacer V warm edge spacer, the system is compliant with the latest thermal requirements of current building regulations.

01324 841398 [www.cmswindows.com](http://www.cmswindows.com)

## CMS Window Systems appointed on new £270 million Dumfries Hospital development



CMS Window Systems has won a comprehensive building envelope contract valued circa £5 million to manufacture and install Kawneer curtain walling for the prestigious new 350-bed Dumfries & Galloway Hospital. CMS will manufacture Kawneer AA100 curtain walling for the main hospital building plus its three annexes, incorporating Kawneer AA720 system doors and a mix of pivot and casement windows. High performance sealed units manufactured by GLASSOLUTIONS will combine with the Kawneer aluminium systems to blend superb aesthetics with thermal and acoustic insulation, plus reliable solar control. Key to achieving this is the specification of COOL-LITE SKN 165 by Saint-Gobain Glass. CMS will also install around 500 sealed units featuring integral blinds, which represent an ideal solution for privacy in hospitals where cleanliness is vital but long term maintenance is a key consideration. The company has partnered with integral blinds specialist Morley Glass & Glazing who will supply the sealed units complete with Pellini interstitial blinds. Wards will be created on a 28 single room model, all of which will have en-suite facilities. This will provide improved privacy, dignity and confidentiality for patients, while reducing the risk of cross infection.

01324 841398 [www.cmswindows.com](http://www.cmswindows.com)

# RENSON® Invisivent®EVO HR: Self-regulating window vent for wind-impacted applications

As a specialist in natural ventilation Renson® provides window vents that ventilate buildings and at the same time meet the acoustic requirements. Renson® Fabrications in Maidstone provides these solutions to the UK construction market.

The Invisivent®EVO HR is a self-regulating thermally broken overframe flap ventilator, which offers a maximum airflow of 15.9 l/s/m at 2 Pa and a sound reduction in open position up to 42 dB. This solution provides the ideal solution for wind-impacted applications such as high-rise buildings (up to 1200 Pa) and apartment buildings on the coast. It contains acoustic material, that muffles external noises as much as possible (e.g. wind, seagulls, traffic), which increases user comfort. The presence of various types of sound-damping foam

in the interior profile provides 3 possible levels of sound insulation (Basic, High or Ultra). In addition, the rain cap, which is mounted as standard, ensures perfect water-resistance in even the most extreme conditions. Extra mounting screws and clips guarantee satisfactory stability and sturdiness of the entire window.

RENSON® Sonovent® is a thermally broken acoustic vent which can be installed on glass or at transom. Sixteen options are on offer though as there are four types, each with four different free area possibilities. This acoustic vent offers a maximum airflow of 26.7 l/m/s at 2 Pa. Equipped with non-combustible mineral wool as noise-damping material, it provides an excellent sound attenuation figure while in open position: up to 56 dB.



01622 754 123 [www.rensonuk.net](http://www.rensonuk.net)



## Why choose Dryseal over 'wet-lay' GRP?

Fast becoming the specification choice of a growing number of Housing Associations, Dryseal is the unique component based fibreglass or glass reinforced polyester (GRP) roofing system from **Hambleside Danelaw**. Unlike 'wet lay' systems, the Dryseal system is supplied pre-cured and ready to install. All Dryseal GRP trims and membrane are manufactured under strict BS EN ISO 9001 and 14001 quality and environmental controls and then supplied via our network of fully trained Approved Contractors for installation on site. Dryseal should not be confused with 'wet lay' systems, which comprise fibreglass reinforcement saturated with liquid resin hand laid on site. Wet lay systems have greater potential for error as the process relies on fair weather from the outset. Dryseal is one of the most advanced GRP roofing systems available and comes with an insured guarantee which covers the water tightness of the system for 20 years.

01327 701 900 [www.dryseal.org](http://www.dryseal.org)



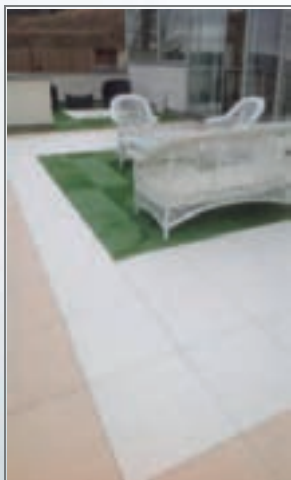
## The translucent link

The Equinix UK flagship centre in Slough now has a new 8,000m<sup>2</sup> LD6 data warehousing facility. This connects the two sister data centres via hundreds of dark fibre links and has become the fastest-growing data centre campus, including one of the world's largest Internet Exchanges. **Structura UK Ltd** was commissioned to install Kalwall translucent cladding to form the link between two buildings. The Kalwall not only diffuses attractive natural daylight into the interior but its 0.56 W/m<sup>2</sup>K U-value optimises thermal performance and prevents solar heat gain. It also helps to obscure vision and retain privacy in some parts of the facility. This use of Kalwall is part of Equinix's commitment to reduce energy consumption and enjoy a smaller carbon footprint than other data facilities of its kind. Kalwall eliminates shadows and glare and the stark contrasts of light and shade. The system also enhances simplicity by eliminating the need for blinds, curtains or solar control. Even on cloudy days, the interior is bathed with natural daylight, which means less artificial lighting and, because Kalwall is highly insulating, energy costs are reduced.



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A total of more than 130 metres of Q-railing Easy Glass® Slim and 3kN were installed throughout the recently refurbished Stourbridge Campus, part of the Birmingham Metropolitan College, including balustrade and staircases. For further information, to request a visit or to arrange a CPD presentation, please call: 01782 711 676 / 0800 781 4245 or email to [sales.uk@q-railing.com](mailto:sales.uk@q-railing.com).

