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FROM THE EDITOR



Milton Keynes. How you feel about it might say quite a lot about your taste, or your general outlook. It's unlikely you'll have no opinion on it, due to the fact it's a shining (literally in terms of many of its buildings) example of the UK's attempts to create bold, futuristic new towns in the heady optimism of the late 1960s. In short, 'MK' is a heroic anomaly.

It's a hard landmark to ignore in the recent history of UK urban masterplanning, a sprawling US-style grid of houses and typically clean-lined steel municipal and commercial buildings. However it's also connected by and integrated with an awful lot of landscaping, so much so that when driving around the multitude of roundabouts, there's a chance that all you might see is trees.

It became a cliche to mock MK for those roundabouts and an alleged artificiality – plonked in picturesque Buckinghamshire – personified by the famous 'concrete cow' statues. Recently however, the town is being seen in a new light, with many of its concepts being seen in the reemergence of 'garden cities' in several district development plans. Milton Keynes has always been feted by architects thanks to not only its fresh thinking on planning, but also its Mies van der Rohe-inspired shopping centre. Designed by Derek Walker in the mid-70s, it's a simultaneously grand and restrained, light-filled steel structure, as elegant as shopping centres get.

The new gallery building which adds to, and greatly enhances the existing MK Gallery, is a great tribute to t he town, emulating the gridded style of the shopping centre in a playful way. The architects 6a also visually connected it to the adjacent park in brilliantly simple ways, cutting a huge circular hole in the side, and aligning openings so you can see right through the building to distant trees.

We proudly present this project as one of our two reports in this issue; it stands out as an optimistic and very British building, at what is undoubtedly a time of consternation and self-examination for the UK.

The other scheme we cover is slightly less of an eye-catcher, but has its own USPs that made it a worthy selection. Quadra in Hackney, designed by PRP, is not quite retirement living, but not quite normal resi either. This smart brick form is for the over 55s with a difference, they don't want to leave the vibrancy of the big smoke just because they are downsizing.

It shares with MK Gallery the architects' keen focus to connect the building with its nearby landscape – in this case the popular east London green space of London Fields. Designed for a housing association, the building has spacious apartments with dual or even triple aspect, keeping residents connected with the outside world.

We are proud to cover buildings like this, that deliver a sense of joy by making the most of their surroundings. They are examples of designers working hard to give users the best experience possible.

James Parker Editor



ON THE COVER...

MK Gallery by 6a Architects is simple, but precisely crafted building. The new building has been clad in vertically corrugated stainless steel, providing a shimmering effect.

For the full report on this project, go to page 29. Cover image © 6a architects







LONDON

The City's 'Tulip' granted planning permission

The Tulip, designed by Foster + Partners has been granted planning permission by the City of London Planning and Transportation Committee. The 305 metre tall tower, which will be sited next to 30 St Mary Axe – also known as 'The Gherkin' – will feature a viewing platform with rotating pods, a restaurant and a sky bar.

The Committee's positive decision follows the recommendation of the City planning officer's report, which noted "the significant public socio-economic and cultural benefits for the City, London, and

the UK".

As part of the planning application process, The Tulip Project submitted an 'Economic Impact Assessment' by Deloitte, which estimated that The Tulip would offer economic benefits to London of nearly £1bn in total monetised value by 2045 and 600 additional permanent full time jobs during 20 years of operations.

According to an independent representative poll of Londoners, conducted by ComRes, two thirds of London adults (65 per cent) think that The Tulip would be

"an attractive addition to the London skyline", while 69 per cent believe that the proposed development would have "a positive impact on the City's attractiveness as a visitor and cultural destination".

During the planning application process, The Tulip Project team engaged with a significant number of local stakeholders including heritage bodies, schools, businesses and residents in the City and neighbouring boroughs. These discussions, together with the views of the planning officers, allowed the team to tailor the proposal to meet their needs and concerns, for example regarding the public realm and the expanded educational facility for free use by 40,000 London state school children per year, as well as community groups.

The proposal will now be subject to review by the Mayor of London, who will consider the City's decision in the wider context of London's role as a leading global capital.

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TRANSPORT

Danjiang Bridge construction begins

Construction has begun on Zaha Hadid Architect's 920 metre Danjiang Bridge in Taiwan, the world's longest single-mast, asymmetric cable-stayed bridge. Spanning the mouth of the Tamsui River, the Danjiang Bridge is "integral to the infrastructure upgrading program of northern Taiwan", says the practice.

The new bridge will reduce throughtraffic on congested local roads by linking Highway 2 on the river's eastern side with Highway 15, the West Coast Expressway (Route 61) and the Bali-Xindian Expressway (Route 64) on the western side.

The bridge has been designed to minimise its visual impact by using a single concrete mast to support its main 450 metre span

with dedicated road, cycle and pedestrian lanes. The design also accommodates future expansion of the Danhai Light Rail network across the Tamsui River.

A Sinotech Engineering Consultants and Leonhardt, Andrä and Partner joint venture with Zaha Hadid Architects, the bridge's 200 metre mast is engineered to be as slender as possible.

Positioned to optimise structural performance as well as views from popular viewing points along the riverbank, the mast's location also avoids impeding the navigability of the river. This single-mast design minimises disruption to the riverbed in accordance with the enhanced protection programmes of the estuary's ecosystem as a nature reserve.

The Tamsui River estuary is an important natural ecosystem flanked by the urban centres of Tamsui to the east and Bali to the west. The estuary is reportedly rapidly growing in popularity with both residents and tourists as a recreational area where people gather each day to watch the sun setting over the Taiwan Strait.

Attending the ground-breaking ceremony, Taiwan's President Tsai Ing-wen explained the new bridge will reduce the journey between Bali and Tamsui on either side of the river by 15 km, saving 25 minutes of travelling time for those crossing the river.

With a construction schedule of 68 months and budget of NT\$12.49bn the Danjiang Bridge is scheduled to open in 2024.

EVENTS

AWARDS

UK Roofing Awards 10 May, London www.nfrc.co.uk

FESTIVALS

London Festival of Architecture 01 - 30 June, London www.londonfestivalofarchitecture.org

FILMS

RIBA Film Night - Doshi: Architecture without adjectives 30 April, Bristol www.architecture.com/whats-on

SEMINARS

Building Regs & Planning Day 24 April, London www.architecture.com/whats-on

Fire Safety for Designers Post-Grenfell 9 May, Chelmsford www.architecture.com/whats-on

TRADE SHOWS

Clerkenwell Design Week 21 - 23 May, London www.clerkenwelldesignweek.com

WORKSHOPS

Wellbeing in the Workplace 29 April, Gloucester www.architecture.com/whats-on

WINNER

Survey Winner

Matthew Kavanagh of MJK Architects in Renfrewshire has been randomly selected as the winner of £250 after completing our survey on windows.

Information from this survey will help industry manufacturers to better serve the needs of architects & specifiers. Congratulations again to Mr Kavanagh!





MIXED USE DISTRICT

HLM wins Sheffield's Heart

HLM Architects have won the tender for the £45 million Sheffield Heart of the City II Block A project, staving off competition from 37 other architecture practices.

The scheme will provide ground floor retail space, office accommodation, a lifestyle hotel and residential accommodation. It forms part of the wider Heart of the City II masterplan, one of Sheffield's key economic projects. Designed to create a dynamic mixed-use district in the heart of the city centre, it will offer Grade A office space, two hotels, residential developments, restaurants and cafes, leisure destinations, parking and a "stunning" public realm.

Block A is the gateway to the Heart of the City II district from the east. It sits within the City Centre Conservation Area and neighbours several historically significant buildings and public spaces, including Barker's Pool, City Hall, the Town Hall and Laycock House. It also has a "commanding presence" over the adjacent Peace Gardens.

HLM Architects' winning design draws on the "romance and heritage" of the site as well as the independent retail culture of the city centre and the "vibrancy associated with Sheffield City of Makers". Described as calm, confident and contemporary, it stitches together different uses to create a vibrant destination within the city centre.

Philip Watson, director and head of design at HLM Architects, said: "As a major UK practice which had its first base in Sheffield, being part of its regeneration is a great honour. It's a unique project with a significance that is affirmed by the 35+ practices that wanted to be considered as part of the competition. Our successful design reflects our own understanding of this great UK city as well a quality of architecture that marries the respect of the old and the potential of the new."

Nalin Seneviratne, director of city centre development at Sheffield City Council, added, "Block A is one of the most prominent blocks within the Heart of the City II masterplan. It was critical for us to bring in an architect with the vision and creativity to help us to realise the true potential of this site. With HLM Architects we are confident we have found this, as they combine international experience and expertise with a detailed local knowledge and respect for Sheffield's heritage."







LEVATO MONO

Porcelain paver system and coordinating internal tiling

The Deck Tile Co's new website www.surface360.co.uk now has +150 colours and finishes in their Levato Mono 20mm porcelain ranges plus co-ordinating internal tiling – enabling seamless visual transition between internal and external spaces.

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AUSTRALIA

'Progressive skills hub' for Melbourne's West

A state of the art simulated learning facility designed by Woods Bagot will offer TAFE courses targeting skills shortages in health, community services and trades in Melbourne's burgeoning west.

Victoria University's new Sunshine Skills Hub is planned to serve the area's developing communities and support workers transitioning from a declining manufacturing-based economy into new jobs. By offering future-oriented vocational training, the new facility also takes vital steps to address the areas youth unemployment rate.

The building's design centres on the practical side of learning that will complement the university's trade training centre (Construction Futures) with courses designed to develop work-ready graduates in construction technologies, advanced manufacturing and health technologies, and health and community services.

Purposefully designed to give students learning opportunities in simulation environments, the facility will be fully equipped with an impressive range of specialised teaching equipment including virtual reality goggles, robots, and computerised mannequins to replicate real-life scenarios. Nursing and community

health labs, learning studios, and simulation hospital wards are provided for students studying paramedics, early childhood care, and counselling.

The university launched a digital technology qualification last year in response to re-skilling the workforce for the changing job market. Specifically supporting this new qualification but accessible across all courses, a series of three innovation spaces will introduce students to agile and contemporary ways of working. Visually connected, the ideation space, software centre and prototyping room allow students to move freely between them as needed.

Kitted out with emerging technology such as large touch screen computers with the latest coding and 3D modelling software, the spaces will support collaboration in scenarios that develop lateral thinking and problem-solving skills to equip students for the future.

The overall design fills the hub with sunlight and employs a spatial planning system that provides spaces and facilities for students to take a 'hands on' approach to their studies. The progressive architectural and interior design of the facility improves and modernises the

The facility will be fully equipped with an impressive range of specialised teaching equipment including virtual reality goggles, robots, and computerised mannequins

quality of learning, educational outcomes, and experience for students and visitors. Natural material in warm, neutral tones set up an intuitively comfortable and inviting learning environment.

The three-storey Hub will also provide a campus cafe with a kitchenette for students, campus student services, staff accommodation for 20 employees, learning commons to house the book collection, IT and research support services, fixed computers and myriad informal learning spaces.

Woods Bagot principal Sarah Ball said the project team drew on the firm's expertise in education, workplace and hospitality design in its design of the Sunshine Skills Hub. She commented: "Teaching methodologies are shifting to problem-based learning and traditional space typologies are being challenged in the design response. The Skills Hub is a series of cross-sector spaces designed to help bridge the gap between education and industry."

Intending to actively contribute to the surrounding neighbourhood, the design team has adopted a community conscious approach. As a result, the new facility will create new and dynamic spaces around the building and improve the surrounding public greenery. Aiming to retain as many significant trees surrounding the site as possible, the design fulfils 5-Star Green Star environmental standards.

The sawtooth concept for the building facade will help maintain internal thermal comfort and reduce the need for air conditioning. It also provides an industrial aesthetic and historical reference to the harvester work factories once characterising the suburb.

Funded by Victoria University, the Victorian Government, and the Ian Potter Foundation, the \$35m learning facility is expected to reinvigorate TAFE delivery. The building is under construction and expected to bring a new face to Ballarat Road by December 2019.



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HOUSING

First homes approved at former airfield



Planning approval to deliver 278 new homes on the site of the former Filton Airfield has been granted by South Gloucestershire Council. The new homes form the first phase in the transformation of the historic airfield site into a thriving new neighbourhood for Bristol, known as Brabazon.

Grant Associates are creating the landscape and public realm strategy for the development, working closely with the architects Feilden Clegg Bradley Studios. This first phase of new properties includes high-quality family homes, private apartments and affordable properties, all set within community gardens and liveable streets.

A public square and sweeping crescent mark the entrance into the neighbourhood, while the homes, ranging from medium-rise apartment buildings to urban terraces and spacious family houses, are designed to foster a diverse and vibrant community.

The neighbourhood is set out on a network of tree-lined streets, with

attractive public spaces and Brabazon Park, a new area of green parkland and play space that will be a community asset open for everyone to enjoy. The homes and apartments all have access to outside space.

Following the grant of planning approval, YTL Developments anticipates that construction will begin before the end of the year. The homes are expected to go on sale during 2020, with the first residents set to move in at Brabazon in 2021.

When complete, Brabazon will be a new urban community, with over 2,600 homes, creative workplaces and a vibrant town centre set among landscaped public squares and parkland.

At the same time, over £100m is being invested to improve local infrastructure. A new railway station will connect to Bristol Temple Meads in less than 15 minutes and a dedicated metrobus will run straight to the city centre.

Keith French, director at landscape architects Grant Associates said: "Our aim is to create a leafy neighbourhood and for it to become part of a rich and varied landscape framework for Filton Airfield which provides a range of opportunities for residents, locals and visitors to use the external spaces, and connect with nature. We want to celebrate the aviation heritage of the site and the proposed sequence of public spaces and community gardens, linked by walkways and cycle routes, will help to create a distinct sense of place and identity. These spaces will connect with Bristol's wider green infrastructure and ecological corridors, helping to promote a green neighbourhood for South Gloucestershire."

Andy Theobald, partner at architects Feilden Clegg Bradley Studios said: "We are very much looking forward to delivering the approved housing designs at Brabazon, which will become a highly sustainable new residential quarter. The family of house types we have created, set within public and private spaces, will deliver contemporary homes in a vibrant new neighbourhood which will not only set the bar for the future development but also for the wider region."









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ROYAL INSTITUTE OF BRITISH ARCHITECTS

RIBA announces Clore Learning Centre

The Royal Institute of British Architects (RIBA) will be opening an "inspiring" new learning space within its central London landmark building on 29 October.

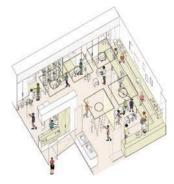
The RIBA Clore Learning Centre, designed by architects Hayhurst & Co, will be a new destination for people of all ages to engage with architecture. It will be a setting for hands-on, creative activities for a range of audiences, from children and families to lifelong learners. The centre has been made possible by a grant from the Clore Duffield Foundation.

The 365 m² space is being created on the fourth floor of RIBA's Grade II* Art Deco building. Including an outside learning terrace, it will feature a studio, showcase space and study, designed as a series of adaptable areas that can be used in different ways. It's designed to enable an "active

learning experience through creative making and sharing".

Speaking about the new centre, RIBA president Ben Derbyshire said: "The RIBA has long understood the importance of helping everyone to engage with architecture and the built environment and the role they can play in shaping it. We are enormously grateful to the Clore Duffield Foundation for their vision and generous grant which are making this possible."

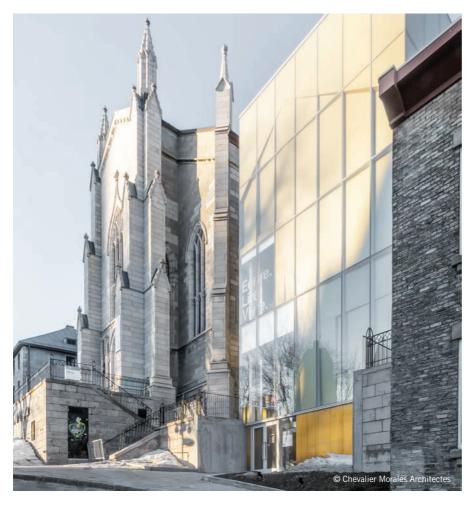
Gillian Wolfe CBE, chair of the RIBA public education committee said: "The new Clore Learning Centre marks a radical enhancement in the RIBA's ability to deliver learning activities to general public. It will enable a huge expansion of its existing programmes of active creative design-based education to intrigue and enrich the understanding of our built environment"



The RIBA learning programme offers opportunities for people to explore, question and celebrate the built environment. It supports learners of all ages and experiences in understanding how the places in which they live, learn, work and play come to be. Inspired by architects past and present and RIBA's collection of more than four million items, the programmes encourage learners to "think critically and test the bounds of their creativity".

RIBA currently delivers approximately 320 learning events each year, including the RIBA National Schools Programme that has engaged over 18,000 children since its launch in 2015. The new centre will increase RIBA's capacity to host learning activities.





PUBLIC LIBRARY

House of Literature opens in Québec

The Maison de la littérature (House of Literature) is located in the historic neighbourhood of Old Québec, a site part of UNESCO's World Heritage List. In this dense urban setting, Chevalier Morales designed a contemporary annex to the Wesley Temple, a neo-Gothic heritage church. Since its opening, the Maison de la littérature has rapidly become a "vibrant" home to Québec literature and a popular tourist destination in Old Québec.

Stemming from an architecture competition, the winning project by Chevalier Morales proposed an unforeseen solution, a response "exceeding the initial commission's expectations". The architects

chose to move part of the program into a new annex outside the church space to provide a more transparent and universal entrance.

This strategy also helped declutter Wesley Temple, allowing the architects to preserve and restore the original spatiality of the overall structure. Along with the library spaces, the Maison de la littérature's unique and innovative program also includes a concert/lecture hall, a cafe, a temporary exhibition space, a permanent exhibition, a resident writer's apartment, creation studios, a projection room, a classroom as well as a multimedia studio.

The Wesley Temple, built in 1848, was

closed in 1931 and transformed in 1944 into a public library and a concert and lecture hall for the Institut Canadien. The latter was closed to the public in 1999. The new Maison de la littérature offered to the Institut the opportunity to pursue its mission, while remaining one of the oldest public libraries in the province of Québec.

An addition with a strangely familiar shape

The partly transparent and "strangely familiar" shape of the new annex gives an open, contemporary feel to the Institut Canadien de Québec, the main entrance of which is now accessed from the bottom of the sloping Chaussée des Écossais where it intersects with Rue St-Stanislas.

The outer shell of the facade is made of glass panels with an underlayer of perforated brass sheets, which compose an intriguing bas-relief. The glass annex also reflects its surroundings, integrating itself carefully, without mimicry, into the historic urban context of Old Québec.

The extension, which in its dialectic relationship with the original temple brings the institution fully into the 21st century houses the main creative spaces in the upper levels. All the necessary mechanical spaces are also found in the basement of the new addition. The idea of putting the creative spaces outside the temple while maintaining a close connection to it "seemed symbolically appropriate". Slightly detached, the annex's views of the river and the old city "offer a great sense of freedom".

The multiple paths of freedom

The institution's interior layout provides greater access via the main door of the temple as well as the car park that also leads into the annex. These various access options all converge at the large circular opening in the library's floor under the hanging contemporary light fixture at the heart of the building, which vertically connects the cafe, two exhibition areas, and the library collections.

Through the annex the architects were able to restore the Salle de l'Institut, a cultural and intellectual hotspot in Québec City for the second half of the 20th century. With its circular shape and multiple levels, the new concert and lecture hall can be isolated through concentric and sliding acoustic panels integrated into the ceiling. The space is technically equipped to host conferences, plays, intimate concerts, and public presentations.

Above, the almost completely white library is filled with light. Accessible through a sculptural white spiral staircase, it embraces the generous space of the original church, including carefully restored elements from previous transformations that highlight the area's rich social and spatial history. Preserved original features like the ogive windows and the ceiling's moldings blend harmoniously with the contemporary furniture.

A permanent exhibition on the theme of freedom in Québec literature had to cover the whole temple area, rather than being confined to a single room. The architects conceived and integrated this immersive exhibition promenade with a variety of other programmatic uses on the three levels of the Maison de la littérature.

A dialogue between past and present

The insertion approach used for the new annex is aimed primarily at showcasing, complementing and preserving the heritage value of the existing building. The extension emerges as a strong symbol of the redeveloped heritage space and avoids altering the architectural composition of the existing structure. The project also included



a significant restoration component for the building's masonry and English gothic church windows.

The glass annex, with its high-quality materials, transparency, and "detailed simplicity", establishes a material and formal dialogue with the existing stone building. The extension's "simple and controlled skin does not compete with the richness and quality of the adjacent historic details and masonry assembly". The Maison de la littérature creates a dialogue between the past and present of the historic neighbourhood of Old Quebec City.



COMMERCIAL

tp bennett completes landmark office in the City

Located on one of the most historic streets in the City of London, the tp bennett designed office development at 30 Lombard Street for McKay Securities PLC has reached completion. The 58,500 ft² landmark building, known as Aurum, is a rare addition to the commercial office buildings of this size in the City.

The building spans 11 floors and will be occupied by FTSE 100 wealth manager, St James Place. The flexible floorplate includes an open, column free space, appealing to occupiers looking for maximum flexibility. The upper floors feature full height windows to maximise daylight and views of the location.

Situated in a Conservation area renowned for its banking history, the design of the building responded to the site's heritage, aligning to the Client's aspirations to "create a timeless piece of architecture" that maximises the potential of its location is aesthetically modern, elegant and nuanced. The highly constrained site, with its narrow streets, and irregular footprint tested tp bennett's experience of realising projects that require complex engineering solutions.

The materials of the office building bridges the traditional and modern, by using an authentic palette of stone, bronze and glass within a contemporary construction that acknowledges its historic neighbours. The Lombard Street facade also features unique artwork by renowned artist Kate Maestri, who created a motif inspired by gold threads, symbolising the history of weaving that in turn evolved into the banking sector.

The double-height glazed entrance foyer leads to the bronze clad lifts and to the column free floorplates. Reinforcing its



status as an 'HQ' building, at ninth floor a 2,300 ft² roof terrace provides panoramic views of the 17th century Wren designed St Edmunds church opposite, as well as other iconic city buildings.

David Blair, Principal Director of tp bennett said, "The design of this building demonstrates our team's collaborative approach to design. The elegant building is a result of complex engineering, balancing the use of traditional materials and modern construction methods. From the outset, the brief demanded a flagship building for McKay Securities PLC, befitting of the prestigious location in the heart of the financial capital of Europe"

BOOK

RIBA publishes book on 'next generation' workplace design

Despite predictions that the office is on the verge of extinction, it is not only surviving, but also thriving. Digital technologies have spurred this transformation, and with it, the metamorphosis of our entire working environment. The office of today can vary from a sweeping open expanse of ergonomic, futuristic workstations, to a local coffee shop.

Future Office: Next-Generation Workplace Design from RIBA Publishing debates tradition, change, and the future of how we work and where.

The Internet now means we can work anywhere, much to the satisfaction of millions. In fact, the number of self-employed professionals often working remotely has increased from 3.3 million in 2001 to 4.8 million in 2017, according to the Office for National Statistics (ONS), and now account for about 15 per cent of the working population.

However, human interaction and collaboration, the very essence of the workplace, remains key to productive, effective outcomes, and is often recognised as what's missing when working remotely. Further to this, with four generations now working together for the first time, human-centric designs have never been more important for our workspaces.

Nicola Gillen, workplace market sector lead for Europe, Middle East and Africa, AECOM and contributor to the book said: "The digital revolution is reshaping how we live and work every day, yet the role of people – specifically the workforce – is becoming ever more important. Putting people at the centre of design and decision-making is key to delivering the right environment to optimise creativity, innovation and productivity. Too often, their needs are

overlooked in the design process. Human interaction and engagement must remain the focus as future office design evolves to support new ways of working and new concepts for the workplace."

The collaborative work of 12 experts in their fields, led by Gillen, *Future Office* considers everything from graphene to battery powered buildings, and provides an "eye-opening" guide for architects, designers, developers and occupiers to create office spaces that promote wellbeing, innovation and growth for the future.

Dubbed "essential reading for everybody associated with planning and designing the next generation of workplaces," Professor Jeremy Myerson of the Royal College of Art and director of the WORKTECH Academy calls *Future Office* "the first comprehensive picture of what the future might look like."



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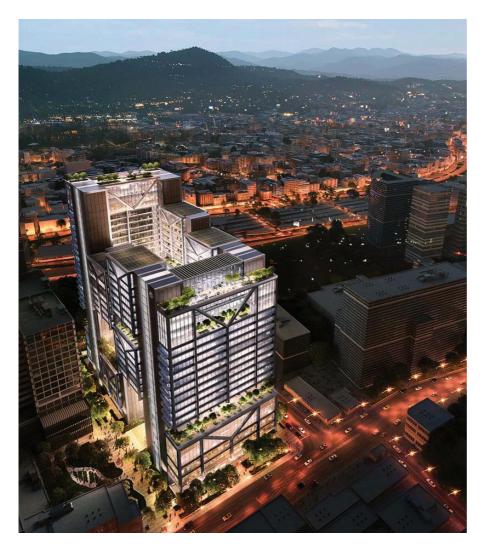
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GOLDSUN HEADQUARTERS, TAIWAN FOSTER + PARTNERS

Foster + Partners have revealed the design for Goldsun Group's new headquarters in Taipei, following a successful 'Urban Design Approval'. Part of the Nangang urban regeneration project, the project seeks to introduce a new mixed-use typology to the area. The complex, which contains office spaces alongside residential and retail areas, is arranged around a central courtyard. Nature played a key role in the design, with skygardens located on various levels. The skygardens will encourage naturally daylit and ventilated spaces throughout the buildings. With rooftop photovoltaic panels and other sustainable measures, the project targets a LEED Gold rating. The building blocks are supported by six cores that combine structure and services. The glazed "floating volumes" are suspended between each of the solid cores using steel mega-trusses forming an "expressed structural system," creating flexible, large-span floorplates.



CASA CELINA, NEW YORK CITY MAGNUSSON

Magnusson Architecture + Planning (MAP) are working on their design for 100 per cent affordable senior housing in the Bronx, New York City. Casa Celina will be a 16-storey building comprising 200 senior units. Amenities will include an exercise/fitness room, laundry room, lounge areas, a ground floor community space, and a landscaped rooftop terrace. The north/south orientation of the site and building provides an opportunity for energy generation through a large solar array. The angled recesses of the windows and articulation of the facade were then added to shade the east/west facing units and mitigate heat gain. The building includes sustainability and resiliency measures intended to achieve LEED Gold Certification, among other standards.



SHANGHAI NATURE PRESERVE, CHINA ENNEAD ARCHITECTS

Ennead Architects has been announced winner of an international design competition for the Shanghai Yangtze River Estuary Chinese Sturgeon Nature Preserve. Led by Ennead Design partner Thomas Wong, in partnership with Andropogon Landscape Architects, the project is an ambitious plan to rescue critically endangered species and restore biodiversity to a habitat beset by pollution and the impact of previous construction. The proposed design features dramatic forms that "take cues from the rippling surface of the river and the landscape of the Upper Yangtze while also evoking biomorphic anatomy and an ark."



BRAINPORT SMART DISTRICT, HELMOND, THE NETHERLANDS UNSTUDIO

UNStudio has designed the "urban vision" for 'The Smartest Neighbourhood in the World', which is currently being developed in Helmond's Brandevoort District in Helmond. Over the next 10 years the 'Brainport Smart District' will develop 1,500 new homes and 12 hectares of business premises. The development will be characterised by the application of the latest technologies and knowledge in order to achieve a sustainable, circular and socially cohesive neighbourhood that benefits from joint energy generation, food production, water management, joint digital data management and revolutionary transport systems. The district "aims to develop a new relationship between buildings and landscape, whereby both strengthen each other qualitatively," said the architects.



TAINAN XINHUA FRUIT AND VEGETABLE MARKET, TAIWAN MVRDV

MVRDV has broken ground on a new wholesale market for fruit and vegetables in Tainan, Taiwan. With its terraced accessible green roof, the open-air market is an important hub for Tainan's food supply chain. The Xinhua Market "takes an often prosaic part of the food industry and elevates it into a place for the public to experience food and appreciate views of the landscape," said the architects. The design comprises a simple, open structure with high undulating ceilings that allow for plenty of natural ventilation, with an undulating terraced green roof that is accessible from its eastern corner, where the terraces step down to ground level. The terraces will house the different products of the area. On one side, a simple four-storey volume punctures the main structure, providing a secondary access to the landscaped roof, the terraces of the roof will each grow a different crop.



MLK PLAZA, NEW YORK CITY MAGNUSSON

Magnusson Architecture + Planning (MAP) has completed MLK Plaza, a 13-storev. 167-unit. affordable residential building in the Mott Haven section of the Bronx. MLK Plaza is one of the first developments to use the new Zoning for Quality Affordability regulation, which allowed for a "rezoning" of the property from manufacturing to residential, MLK Plaza's exterior design embraces the neighbourhood's industrial identity with dark grey brick and metal panels. The gold colour of the panels, however, "provides a bright counterpoint to that aesthetic and reflects both the material quality of this housing and the value of its mission," said the architects. The gold swath at the seventh floor also aligns visually with the adjacent six-storey buildings.

NEW ARRIVALS

Rounding up the latest movers and in-house appointments across the industry



JASON TURNER PERKINS+WILL

The London studio of global architecture and design firm Perkins+Will has announced the appointment of a new associate principal, Jason Turner. With over 25 years experience working in interior design, Jason brings to the firm expertise in strategic advice on workplace, culture and people. With the appointment of a new associate principal specialising in strategic advice, Jason will bolster Perkins+Will's reputation in project delivery, while expanding its expertise and capacity to take on new projects in related sectors. Jason will be joining the interiors team, which has overseen office fitouts for clients such as The Economist, Deloitte, News UK, Microsoft, and Linklaters.



LK2

MARC RHODES LK2

Architecture, sports and leisure specialists, LK2 has welcomed marketing and communications manager Marc Rhodes to raise awareness of its high-profile work. Marc, who has nine years' experience in marketing has taken up the role at LK2 after working to promote businesses and charities in the sports, education and health sectors. Marc said, "I'm so pleased to have joined LK2 during an exciting period of growth and development. It's a business which boasts not only innovative projects, but unique services and a very knowledgeable team." Marc will be working closely with LK2's team of directors to develop a marketing strategy, target key audiences and oversee LK2's marketing collateral, social media.

BRYAN FISH BE DESIGN

BE Design, the multi-disciplinary architecture and engineering practice, has appointed an internationally-based associate to grow the European arm of the business. Bryan Fish joins the company with a wealth of experience in civil and structural engineering governance, with previous roles having seen him operate within the commercial structural engineering sphere. His experience ranges from offices, and residential developments, warehousing and factories. Bryan said: "I'm looking forward to what is shaping up to be a fantastic year for BE Design, which has already started with a number of new projects and opportunities."



NATHAN ANTHONY LEE EVANS PARTNERSHIP

Leading South East architectural and planning practice, Lee Evans Partnership, has promoted senior planning consultant, Nathan Anthony, to partner. Nathan joined the practice in 2008 following a successful career in local authority planning, and has been instrumental in developing Lee Evans Partnership's planning capability. Working alongside partner Jeanne Taylor, Nathan's new role will involve nurturing relationships with Lee Evans Partnership's existing clients while expanding and diversifying the team's portfolio of projects across the residential, education, civic, commercial, and community sectors.



RICHARD FLISHER CPMG ARCHITECTS

London-based CPMG Architects has announced the appointment of Richard Flisher as the firm's new managing director. Richard has more than 30 years' experience as a chartered architect and is responsible for delivering the UK's first Carbon Negative, PassivHaus certified office building located in Leicester, a 15,000 m² corporate office in the City of London and the recently completed headquarters for British Sugar in Peterborough. He will continue to act as an architect on key projects, as well as leading on CPMG's long-term growth strategy, and will head up the 50-strong team of professionals based in London and Nottingham.

VIEW POINT



Michael Barker of Stephen George + Partners discusses why architects need to have a better understanding of the requirements of developers, contractors and tenants

s architects, Stephen George +
Partners has decades of experience
designing offices – sometimes we do
this for developers or contractors as their
design and build architect and sometimes
for occupiers. Imagine, then, working for all
three simultaneously! This is the situation I
found myself in recently when we decided
to design and deliver our own new office
building in Leicester.

Having occupied premises in Leicester city centre for nearly 50 years, the opportunity arose to acquire a site at Grove Park near J21 of the M1, and design and build our own offices. To facilitate this a group of partners and staff established a pension fund to act as developer and Stephen George + Partners entered into a 15-year lease to rent the premises. The pension fund raised the funds and acquired the site. The pension regulations required this be a legitimate arms-length operation with trustees acting in the interests of the pension fund members. Obviously, we needed an architect, so Stephen George + Partners was appointed to carry out the design and obtain planning approval. They were then novated to the design and build contractor during the construction process. We also had to consult ourselves over a complex set of requirements as tenant on the fit-out!

That's four different hats to wear at the same time and, as you can imagine, it wasn't without its challenges. Often the requirements of these differing roles within the process conflict with one another and the project proved to be an interesting learning experience.

Developer insight

As architects working for a developer we want to produce great architecture, maximise space, produce a design that will appeal to occupiers and get through the planning process. We also need to design to



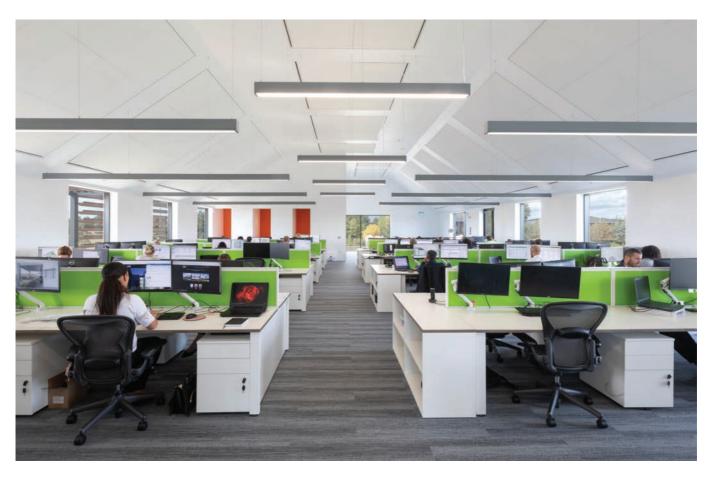
a budget that is usually quite tight and sometimes quite restrictive for the architectural team's design aspirations. Taking on the role of developer, however, gave us quite an insight as to the challenges our clients often face.

For a start, the development had to deliver value for the pension fund under the pension rules, which immediately set some limits in terms of where we could take the building architecturally. Equally, we couldn't just design the offices solely for Stephen George + Partners as the tenant; we also had to have a view on it being marketable if the tenant vacated the building at a future date. In other words, it needed to be a sensible, rational, buildable project.

Conflicted contractor

As architects under a standard design and build contract we work for the contractor who relies on our technical competence, the ability to deliver information to a tight timescale, being flexible in responding to their ideas about alternative solutions and producing a building that meets all the client's expectations at the most economic cost. However, this relationship became a little more opaque during the construction of our own offices as the contractor had difficulty understanding that the client and architect were not the same.

As the contractor also perceived us as their client, they found it difficult to give instructions to our team on site because they felt they were telling the client what to do. This did lead to issues when our architects commented on proposals put forward by the contractor or their subcontractors – the contractor felt that they couldn't disagree when perhaps they should have done, inevitably costing more money and further discussions down the line as to who was going to pay for it.



Tenant demands

Working for the tenant - who was also the architect and, unsurprisingly, very focused on the quality of their working environment - also proved demanding, particularly in regard to cost control. While we went through all the standard procedures during the tenant fit-out, such as space planning to meeting facilities, IT needs to coffee cups, the quality of break out spaces, the finishes in the toilets (always a big issue!), the operation of the plant and the ease of maintenance, we also wanted the new offices to be a showcase for the business and for people to be wowed when they came and visited us - but of course everything costs money and we had to attempt to stick to our budget.

For me, this offered up some really interesting perspectives on the design process. When we're employed solely as architects, we could be working for either the developer or the tenant. The developer will commit us to a certain budget, but the developer is rarely going to be the occupier of the finished building. The tenant, on the other hand, is always going to want to specify certain things that the developer

doesn't want to pay for (and the tenant doesn't want to pay for either). Therefore you need to take both sides into careful consideration and budget accordingly.

Architectural innovation

Perhaps our biggest challenge as the architect on the project was agreeing the design in the first place given the number of architects involved! Nonetheless, acting as a developer willing to explore different possibilities, our architects were allowed to have a little more freedom than would normally be expected and led to some exciting design innovation. In our first-floor studio, for instance, we have a vaulted ceiling that's given us a fantastic space in which to work and is not the kind of space you would normally find in a speculative office development. It is an inspirational place for our employees, clients and visitors, reflecting both our business values and our vision of the future.

Ultimately, the experience has been invigorating and exciting. We have designed and delivered an inspirational place for our employees, clients and visitors, reflecting both our business values and our vision of



As architects it has given us a much better understanding of the needs of developers, of contractors and of tenants

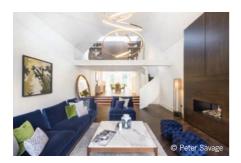
the future. As architects it has given us a much better understanding of the needs of developers, of contractors and of tenants. The need of the architects to make a profit on this project was probably one thing that was not given enough consideration.

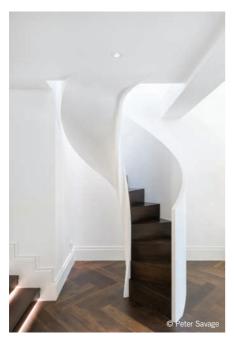
Michael Barker is senior partner at Stephen George + Partners

ASK THE ARCHITECT

Claudia Iannantuoni from fast-growing commercial and residential practice gpad answers *ADF's* questions on what makes her tick







WHY DID YOU BECOME AN ARCHITECT?

I come from Brianza, northern Italy, an area with many interior design and furnishing workshops. My uncle and grandparents were designers, and taught old-style furniture design at an evening school. They used to bring me there as a kid and let me play with pencils, crayons and watercolours while showing me the basics of perspective drawings. Although I didn't know at the time I wanted to be an architect, I had an early introduction to seeing perspective and working in this way was always in the back of my mind.

When I started my training in Milan, I quickly became very passionate about buildings, even more than interiors, and it is the exterior and detailing that I now love working with the most.

WHAT DO YOU MOST LIKE ABOUT THE JOB?

You're always learning because it's never the same. Each building is different and throws new challenges at you. The fact that it's never easy is in some ways the best part. There is always something new to investigate, something to solve, and every time you finish a project you're richer. It just keeps engaging you, and you can never predict how a day will go.

You also have to keep abreast of new developments, as technology and styles keep evolving. In the past we used to go through cycles of 'looks', but these days the industry around the world is much more experimental. There's incredible versatility and scope in the industry.

WHAT IS THE HARDEST PART OF YOUR JOB?

Co-ordination can be hard, however it's also just as intriguing as it is complicated. The challenge is combining the aesthetic you want to achieve with all the technical aspects of the structure. Especially when refurbishing or extending, you tend to uncover surprises that throw you curveballs; you then have to adjust your original thinking to suit what you find.

WHAT IS YOUR PROUDEST ACHIEVEMENT AND WHY?

Being selected among the finalists in the competition for the regeneration of Old Street Roundabout! A small team at gpad created a design in our own time. We sat down together after work, purely for the excitement of the challenge. Don't get me wrong – we invested a lot of time in it, but given the calibre of participants involved we

were very pleased to be among the four winners selected.

WHAT'S YOUR BIGGEST CHALLENGE CURRENTLY?

We recently had a large office project in Leeds where the detailing and design were trickier than expected. We were proposing to extend as well as refurbish, and the exposed aesthetic we wanted was harder to co-ordinate than usual.

Other than that, I'm still learning to combine motherhood with full time work. I'm lucky to be at gpad as it's a really supportive and flexible environment for this.

WHAT INNOVATIONS HAVE RECENTLY MADE THE JOB EASIER?

It's hard to imagine a breakthrough that would have as big an impact as BIM. It's completely transformed working on large-scale projects, making co-ordination so much easier. Not all software is the same, but in general it eliminates manual error; especially working in 3D, you can slice the building and make sure all the junctions and every single corner is working, allowing for quicker turnaround of sections. It's still relatively new and not everyone has a full grasp of it yet, but it will be implemented more and more.

WHAT ARE YOUR FAVOURITE MATERIALS?

I'm really into timber and concrete at the moment. They're both beautiful raw materials that can add warmth to a project. I have a more long-standing love for brick facades though. A brick can be used in so many ways, to create texture and patterns across a surface. You can do anything with it and the results will always be different.

WHAT CAN WE LEARN FROM OVERSEAS ARCHITECTS?

Your background influences so much of what you do; not just where you started your professional career but also where you grew up. Everything you've seen and the environment you live in come through in your work.

You always learn from other architects. Some countries are pushing green building credentials more successfully than others, and countries generally have different responses to the same subjects or challenges, so it's important to keep up to date and see what people around the world are proposing. Even universities across the world teach architecture with different



There is always something new to investigate, something to solve, and every time you finish a project you're richer

emphases. I'm of course speaking from the point of view of an Italian in London, but it is very rare to find a practice here without people from another country.

WHAT WILL THE NEXT "BIG THING" BE IN THE INDUSTRY?

Technology and automation will become more and more integrated into buildings. It's already happening of course, and I see it picking up pace. This will create its own challenges, as I don't think everyone is ready to fully embrace buildings with more and more automation yet. There aren't a lot of people in the industry at the moment who have a full understanding of how to

integrate all the different systems, like security, into a building, but we are definitely on our way there.

HOW CAN YOU SEE AN ARCHITECT'S ROLE CHANGING IN THE NEAR FUTURE?

We'll have to be more like magicians! In all seriousness, our job is increasingly to be the leader, to juggle, to combine and to oversee all the different elements and expertise coming together. It's easy to say you want a certain look, but it's a different thing altogether to ensure that result is achieved.

I think universities should focus on this more, preparing the next generation for the practical challenges. Some courses are more technological than others depending on what you want to do as a professional. You may want to work more on interiors or concept, but having an understanding of construction is invaluable with the transition to the work environment.

HOW BIG AN EMPHASIS DO YOU PUT ON USING TECHNOLOGY WHEN DESIGNING BUILDINGS, OR DO YOU STILL USE A PENCIL?

It all started with pencils and it still goes on

with pencils. I of course now translate my sketches to CAD almost immediately because the detail is amazing, and otherwise you'd have to sit there for hours drawing. But for the initial thinking and coming up with a concept I still need a pencil in my hand.

DO YOU THINK THAT CLIENTS HAVE AN ACCURATE IDEA OF WHAT YOU DO?

Commercial clients more so than private ones. There's a lot more to what we do than just what the client sees. Behind each plan is hours of thinking, drawing, phone calls and meetings. We have to think of the building as an entity, effectively a machine, every part working with the rest. Occasionally a client can't see how changing one thing has bigger knock-on effects.

WHAT ARE YOUR GOALS FOR THIS YEAR AND BEYOND?

I hope to make the next step soon and take the lead on more projects in the not-too-distant future, but that all depends on how the firm reorganises around new projects.

We'll see, but hopefully soon!

FUTURE WATCH

Back to the future

Professor Steve Goodhew of the University of Plymouth reports on the CobBauge project, which is seeking to bring a traditional sustainable building material up to date and into line with thermal Building Regulations

Building using earth in its unfired form is not new. The use of straight edged blocks dates back to 6000 BC, and rounded earth blocks in the Middle East and central Asia to possibly 1,000 - 3,000 years before that. In the UK some buildings made from cob – a local form of earth construction using a mixture of earth, water and fibres like straw and hemp – date back to around the 14th century. In the European Union, cob heritage represents at least 200,000 buildings.

In the UK cob buildings are abundant in the south west of England and can be found between Cornwall and some parts of Hampshire, although they are most numerous in parts of north and mid Devon. The use of cob has the potential to bring substantial reductions in carbon dioxide (CO₂) emissions and construction waste compared to conventional masonry materials. While perceived as a building material of the past or for those self-builders that are enthusiastic followers of 'deeper green' environmental construction, cob is becoming a logical choice of construction technique in certain parts of the UK and northern France. Its inherent low carbon credentials and ability to act as a buffer to the increasing internal moisture levels in our ever more sealed buildings, while preserving the cultural linkages to thousands of vernacular buildings, make it a sustainable alternative for designers.

A number of architects have used earth in construction. Examples include rammed earth walls at the Eden Project in Cornwall by Grimshaw Architects, and the Centre for Alternative Technology in Wales by Pat Borer and David Lea Architects, yet such application tends to be specified in small sections of their designs, often in a position where the material forms a thematic influence on the building infill rather than an active part of the structure or facade. This is understandable as more clients look for sustainable buildings but still wish to avoid new materials and the perceived risks associated with them.

With this increasing interest in natural materials, architects and builders have strived to re-interpret historic earth construction techniques. Examples include mudwall construction at Loch Lomond Visitor centre by Richard Shorter and Simpson & Brown Architects, rammed chalk at Pines Calyx by Helionix Designs and light earth construction at Littlecroft House by Gaia Architects and Rebecca Little Construction.

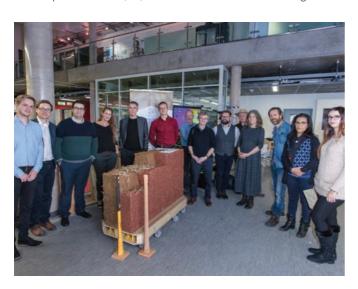


An opening in the thermal layer of the new CobBauge material All Images © University of Plymouth

Alfred Howard helped renew interest in cob, and subsequently Kevin McCabe (Dingle Dell and Keppel Gate), Paul Barclay, Jill Smallcombe and Jackie Abey in the UK and Francois Streiff in France have delivered new constructions built entirely out of cob.



A close up of the thermal (left) and structural elements of a CobBauge wall



CobBauge partners with a demonstration wall in the new material

Yet one of the major limitations to specifying cob is current Building Regulations both in the UK (Part L) and France (RT2012). While there is plenty of evidence that cob buildings are warm in winter and cool in summer, the thermal conductivity of the earthen, fibre composite does not currently comply with the latest U-value prerequisites without using very thick walls or adding insulation.

Our research project CobBauge has now succeeded in bringing this ancient, sustainable building material into line with modern thermal standards. CobBauge is an amalgamation of the English and French words for the material, and the project is a collaboration between researchers at the University of Plymouth and French partners Ecole Supérieure d'ingénieurs des Travaux de la Construction (ESITC), and the University of Caen.

The technique involves two different grades of cob – one lightweight version with greater insulating properties, and one denser, stronger type – that are bonded together to form walls.

The use of cob has the potential to bring substantial reductions in carbon dioxide (CO_2) emissions and construction waste compared to conventional masonry materials

Over the past year we have experimented with different mixes based on English and French soil, and come up with one each of the structural type, and one each of the lightweight thermal kind.

While what we have come up with is without a doubt a modern interpretation of cob, we hope it will satisfy both the traditionalists and those looking for a high-tech, energy-efficient material. As a result of this research, we can say there is no reason why cob cannot be used to build modern houses that meet the latest standards.

While the focus to date has been on using natural fibres, work is ongoing to determine whether other fibres, such as waste paper, could be used to deliver a viable CobBauge mix.

As the material has been researched from a production point of view as well as from a pure 'material properties' perspective, the CobBauge wall will be an easily deployable technology. Limitations tend to be distance from material supply rather than technology – the closer the buildings are constructed to appropriate soils and local fibre suppliers, the more sustainable they will be. Other limitations involve height: new cob buildings of three or more storeys do exist, but currently two storey dwellings are the main focus.

The decision to use cob is one for everyone in the client/designer/ contractor team. It is probably unwise to introduce materials and production methods that are new to a contractor without making the design philosophy clear at tender stage.

The December launch of our CobBauge material saw 100 architects, specialists and industry and local authority representatives hear a series of presentations about the project findings. One of five larger scale demonstration walls was on display, and potential clients and designers could see how the material would be constructed, and the potential of the final product.

The next stage of CobBauge, subject to further EU funding, will see at least two houses built on either side of the Channel. These will be monitored for two heating seasons to benchmark the energy use and general interior air quality, allowing comparisons with other energy efficient dwelling designs/systems.

Dr Jim Carfrae, Lecturer in Environmental Building at the University of Plymouth, explains: "We'll be studying real CobBauge buildings, subject to real environmental conditions over a prolonged period to investigate in-situ thermal performance, humidity, particulates, the presence of volatile organic compounds (VOCs) and related energy use."

"There is a realisation that modern building materials might have all sorts of negative consequences for inhabitants, making this work particularly timely, and creating a new focus on the use of natural materials like cob."

Professor Steve Goodhew is associate head at University of Plymouth



BUILDING

MK GALLERY MILTON KEYNES

Circular economy

The new gallery building for Milton Keynes is a simple but highly effective tribute to the optimistic spirit of a 1960s New Town, reports James Parker

ften architects talk about their projects being site-specific. They are rarely more imbued with their context, and potentially impossible to interpret without it, than the new gallery created in Milton Keynes by 6a Architects.

According to Tom Emerson of 6a, what the practice were "most excited about," was "trying to rediscover the architectural and

social DNA of the city." Milton Keynes was conceived in the 1960s as a large 'New Town,' planned carefully on a grid which carefully integrated landscape with a range of proudly futuristic buildings.

Emerson says that over his six years working on the MK Gallery's refurbishment and extension, he has "become a die-hard fan of Milton Keynes." He says that, having

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PROMINENT

The site (MK Gallery visible near centre of pic) is prominent, marking where the eastern edge of the town centre meets the green space of Campbell Park

The new building is simple, but precisely crafted, with an enormous 11.8 metrewide hole cut in it, its top half glazed to visually connect the building with the landscape

investigated the story of the town, including its 60s 'utopian' ideals, "you realise what it succeeded in doing, and where the vision was compromised."

The town is being seen with fresh eyes, the architect believes. "Its fortunes are changing, from being the subject of ridicule – roundabouts and concrete cows – it's being revisited, people are realising it had fantastic potential, that is still unfulfilled." The recent re-opening of the enlarged and greatly improved gallery, facing the eastern edge of the famous shopping centre, is a key stage in the town's renaissance.

In 2012 the gallery's director Anthony Spira, fresh from another cutting edge contemporary art gallery, The Whitechapel in east London, decided he needed to expand MK for its 20th birthday. Although the gallery already had a strong reputation, its audience was "quite small," says Emerson. "Anthony wanted to create a much broader audience, and a local one," and the means to this end would include bringing in much bigger exhibitions, particularly "historic shows."

6a were appointed to design the publicly funded scheme based on the practice's strong portfolio of gallery projects, including Raven Row, Spitalfields, South London gallery, Sadie Cole's London Gallery, and the fashion galleries at the V&A. The modest £7m budget came via a combination of local council, Arts Council

and SEMLEP local growth fund cash, and competing practices had to present to "quite a big selection panel," says Emerson.

This was then followed by a feasibility study which looked at the client's desired programme, which was "quite fluid for a long time," says Emerson. For example, extended discussions took place around whether more than one cinema would be desirable in a new multi-purpose auditorium/performance space. This changing picture was challenging for the architects, particularly when they had no guarantee they would be chosen to take the scheme to completion, or that it would be given Arts Council funding, until it was officially green-lighted.

"There were big questions around what's the best sort of revenue, and best sort of community outreach," Emerson explains. He continues, "We were looking at lots of options, producing data." This led to a range of models, including physical as well as digital versions. "The building was getting bigger and smaller all the time."

The site is important and highly visible, marking where the eastern edge of the town centre meets the green space of Campbell Park. Right at the end of main central axis Midsummer Boulevard, that runs from the station to the park, it's a location which gave 6a the opportunity to tap into some quintessential Milton Keynes design inspiration.





The building links to the landscape in a variety of ways, "in a very Milton Keynsian way," says Emerson. The idea of a large central window in the main facade overlooking the park was identified as the key means of achieving this, one which also creates a playful, characterful landmark for the town.

It was also a helpful device for ensuring balance in the overall design composition, during the very fluid early stages, as Tom explains: "After we put this big circle in it, we realised it doesn't really matter how the proportions change – as long as that circle stays in the middle the whole thing is balanced. It turned out to be a very useful idea, because it's very flexible."

Forms

The resulting building is a combination of retaining and refurbishing the original two cubic volumes alongside Midsummer Boulevard (and tucked underneath the adjacent MK Theatre's distinctive, oversailing porte cochere). As a result of this, and adding a further, more striking building, the gallery space provided has been doubled.

The set of three joined buildings are arranged parallel to the boulevard, with the public functions ranged along it. The two existing gallery buildings retain their original layout to an extent, with the main entrance and book shop sitting beside two

galleries in the first, and a new cafe and a further gallery behind in the second, slightly lower, blockwork-built form. However the openings have been widened, suspended ceilings have been removed to add height and expose services, and walls have been remade and upgraded to international exhibition standards. Facing onto the boulevard, the cafe benefits from an outdoor terrace which will be very pleasant in good weather.

The addition of a higher rectangular gallery and auditorium building to the east, adjoining the cafe/gallery block, not only delivers the greater space the client wanted, it also provides the setting for some architectural flair using a simple, steel-frame construction. By moving openings between the first two buildings to align with those in the new addition, a wide circulation running between a new window to the front entrance building and a window at the far eastern elevation of the new building has been created. It's possible to see through the entire three adjoining buildings to the trees of Campbell Park.

The new building is simple, but precisely crafted, with an enormous 11.8 metre-wide hole cut in it, its top half glazed to visually connect the building with the landscape. Downstairs there are two galleries, including a large central one, continuing on the line of its counterpart in the adjacent, existing building. To the west is a learning and

SPACE

Openings have been widened, ceilings have been removed to add height and expose services, and walls have been upgraded to international standards

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community hub, connected to an external play area, supporting what Tom says is "a big community outreach and education programme."

On the floor above, the auditorium (the 'Sky Room'), can seat up to 300, and gives spectacular views over the park. It will be the first independent cinema in the town, run in partnership with Curzon Cinemas, as well as hosting performances and lectures, and can be hired out for weddings or corporate functions. To the south, a cylindrical fire escape, also clad in steel, contributes to the "quite constructivist, modernist sense of primary forms assembled together," says the architect.

Coming full circle

The new building is an unashamed tribute to the design thinking that inspired the creation of Milton Keynes, tapping into to a certain strand of 1960s futuristic optimism, says Emerson. "It's a little bit retro future, plays a little bit with 'high-tech,' and the sort of promise that architects in the 1960s and 70s were looking for. It's quite fun."

The volume's somewhat abstract, simple presentation of a circle within a gridded rectangular box is far from accidental; it's highly context-specific. "Campbell Park, which was designed and built with the city, has this kind of spiritual, orbital geometry, with all these circles and cones," says Emerson (they were references to English prehistoric structures). "Our building is essentially the grid of the city meets the circles in the landscape – a very simple idea of reconstituting the meeting of the city and the landscape in one building."

He says in this way it's "a narrative of the city itself," and it also fits into the idiom of clean-lined, modernist buildings which have appeared in the city since its birth. He compares it to the shopping centre – "a cross between Mies van de Rohe and Crystal Palace, essentially, an exquisite, repeating steel framed grid, really beautifully detailed." However unlike that "incredibly expensive" building, similar characteristics were achieved for a far humbler budget here.

Internally, the grid-based layout is also "very Milton Keynsian," says Emerson, "almost replaying the story of the city in the interior." He says the idea was that "the city is also in its internal layout and details."

Exteriors

The outside of the new addition has been clad in vertically corrugated stainless

steel, producing a shimmering effect. A contrasting texture is provided by flat steel sections in the cladding of the great circular 'window's bottom hemisphere, which forms the wall of the main gallery. Cut into this and offset is the square window terminating the axis corridor through all three buildings.

Although rolled steel is an established technology, cutting the Schueco curtain walling to the precise tolerances required placed demands on the UK-based fabricators MB Glass, says Emerson. Their task was made slightly easier by the size of the circle, meaning the radius of each section was not particularly tight.

The challenge, says Emerson, was around "tolerances – the most tricky thing is to get all the bits to fit three-dimensionally into that puzzle." He tells *ADF* that a high level of co-ordination was needed to achieve precise interfaces between primary structure and curtain walling elements. It took "a lot of design work and a lot of discussion with the fabricators to make sure all those bits could come together."

Emerson summarises: "It was stressful and a lot of pressure on everybody, but the kind of pressure that comes from doing big capital projects generally." Adding to this was the need to keep this publicly-funded Design & Build project within budget: "If there had been a huge benefactor behind it, like a Guggenheim, maybe we would have been a bit more relaxed about spending a bit more here, a bit more there."

Interiors

One way in which the architects decided to help the new gallery bring in the public was to add a cafe in a former workshop space in the now central building of the three that comprise the scheme. Emerson explains an important aspect of the new arrangement for visitor comfort: "The ground floor was full of loos, they were all by the entrance, in wrong place, so we put them on the first floors."

The new cafe is a capacious, double-height space, eight metres high, and has been painted in the "quite wild" red colour scheme of Milton Keynes' original central design office. There are now five galleries in total, in a sequence beginning with a nine metre high space, leading through via the axis corridor, with glimpses of the exterior through full-height windows to the north, south and east, to four further six metre high galleries. They are all on the ground floor, making it easier for visitors and the gallery itself, in terms of logistics of staging exhibitions.

Through conforming to strict GIS environmental standards covering heating, cooling, humidity, lighting as well as security, the galleries are now suitable for major exhibitions, such as borrowed public art collections. Power points are concealed behind pristine white walls, reinforced to prevent attempted theft using vehicles such as JCBs. The acoustics, by Max Fordham, are of a high quality, larger spaces and openings mean larger artworks, and the floors are polished concrete.

As Emerson admits, meeting these standards "makes it hard to make many claims for sustainability with galleries – you can't do it with passive ventilation for example." However the energy take to achieve the necessary environmental control is offset somewhat with the roof being covered with solar PVs.

While the galleries are impressive, the star of the show is perhaps the auditorium, with its views over the park framed by the semi-circular window: a "great arc over the landscape," as Emerson describes it. He hopes it "becomes a really significant public room, one that people really associate with Milton Keynes – the 'last room in the city."

Engaging with the past

As well as the range of exhibits on the gallery walls, there are several mementos of Milton Keynes' built heritage included in the front refurbished former gallery building. The black entrance portico is a remade porte cochere that originally provided shelter to one of the town's street crossings. There's also a pink neon heart on the facade (the town's original symbol), original streetlamps, and the curtain in the auditorium – like many other items in the building – is coloured using a palette taken from a 1978 Habitat catalogue.

Tom Emerson sums up the thinking behind this retro, yet forward-thinking, and celebratory project: "We wanted to make a building that's about the future, and a place that's really fun to go to, where people enjoy being with friends, discovering art, but also food, performances, cinema. A real social, civic space." He adds that, in this way, it "will end up being one of the most important cultural buildings in Milton Keynes."

He says that the community is highly engaged, and have given the architects "quite vocal feedback." He concludes: "People seem to be very excited by it in a way we haven't seen on other gallery projects. They have bought into it."





PROJECT FACTFILE

Client: MK Gallery

Architects: 6a Architects **Contractors:** Bowmer & Kirkland

Project management and contract administration: Jackson Coles Structural engineer: Momentum

Environmental Engineer:

Max Fordham

Quantity Surveyor: Gleeds

Artists: Gareth Jones & Nils Norman

Yeoman Shield on Guard at Royal Armouries

The Royal Armouries is the national museum of arms and armour, and the guardian of a unique collection of over 8,500 objects displayed across five themed galleries at its Leeds museum, some of which have transformed the world as we know it.

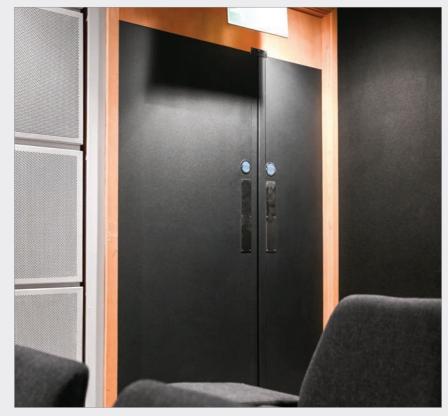
As well as the museum and exhibition spaces, the Royal Armouries also provides conference and theatre facilities to hire for public, theatrical or corporate events.

One such facility, the Bury Theatre, with an audience capacity of 100, was receiving damage to the lobby and entrance doors from the footfall of people, being further exacerbated with the movement of technical and performance equipment.

Stephen Cohen, Building Contract Manager at the Royal Armouries, took time to explain:

"We strive to offer a high-quality visitor experience throughout our organisation and after the floods that affected some of the building in 2015, the Bury Theatre had undergone a minor refurbishment.

"As part of the project we decided to improve the look of the fire doors in the theatre lobby and auditorium area which had suffered some marking and damage. As an organisation that receives funding, sponsorship and public donations it is important we invest stakeholder's money wisely and so we were looking for a product that would also damage-proof the doors for the future, eliminating the need for further



repair and replacement costs."

Yeoman Shield were able to provide such a product in the form of their fire rated door protection systems which were installed by their own directly employed operatives.

Full height, 2.0mm thick FalmouthEx door protection panels were fitted to the outer doors in graphite grey. Door edge protectors were added to the clashing and hinged edges to protect these vulnerable parts from damage that could impede the functioning of the door in the event of a fire.

The theatre's internal doors also received full height protection panels and door edges, this time in black to suit the requirements of the auditorium.

All Yeoman Shield's door protection products are fire rated and have been tested to the current standard required.

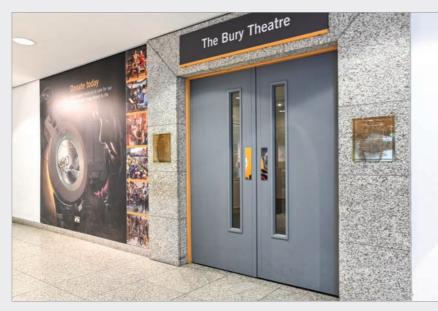
"We are very pleased with the outcome of the Yeoman Shield door protection installed. Having received favourable feedback from members of the team we hope to roll out the product to other areas of the building in due course", commented Mr Cohen.

For more information on Yeoman Shield's wall & door protection products go to their website.

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BUILDING

WOODLANDS COURT SWANLEY, KENT

A sociable spoke

A new later-living scheme in Kent provides additional residential units to a burgeoning retirement community. Sébastien Reed speaks to Pellings' Neil Penfold about the project

The UK's ageing population poses a host of challenges, from pressures on the domestic economy to stress on already strained public services. There is a specific and pressing need to house an increasing number of elderly citizens with ranging abilities, needs, and demands.

Woodlands Court is a new residential build in Swanley, Kent, which follows on from its elder sister, Bonney Court, both having been designed by Pellings for West Kent Housing Association. Bonney Court and the new scheme together form part of a "hub and spoke" community for over 55s, while the nearby White Oak Court provides "hub" facilities to residents which include hairdressing, clinics and dining amenities. Woodlands Court acts as the newest "spoke" to the scheme which altogether aims to provide an enhanced offering, maximising the freedom of residents and their ability to live independently.

The scheme, built by contractor Chartway Group, had as its objective to provide accommodation in one and two-bedroomed apartments and make use of the pre-existing leisure amenities. A total of 31 units have been created to replace the 16 homes previously on the site. A key driver for the scheme was West Kent's "Age – A Positive Experience" strategy, which seeks to provide homes that anticipate people's changing needs and help them live independently for as long as possible.

Design brief

"Woodlands Court provides accommodation for the over-55s on the same basis as our hugely successful Bonney Court development just around the corner," explains West Kent's housing director Deborah White. "That scheme has proved

so popular that we decided to provide more of the same." The design brief for Woodlands Court was, therefore, largely to replicate Bonney Court, which was finished in 2010.

The new development, however, would include more units than its older sister. West Kent Housing Association also demanded that basic later-living principles be adhered to throughout the design, such as the need to accommodate scooters and wheelchairs, as well as being flexible to users' various needs. Bathroom and kitchen facilities were also to be tailored depending on residents' needs.

Given the site's location, directly adjacent to Swanley Park, there were challenges in terms of planning. "The planning policy considered the site an amenity green space due to its open nature, even though it was in private ownership," says Penfold. "After we were able to argue our case successfully, the plot was not in a conservation area so we had relatively free reign."

Plan & provision

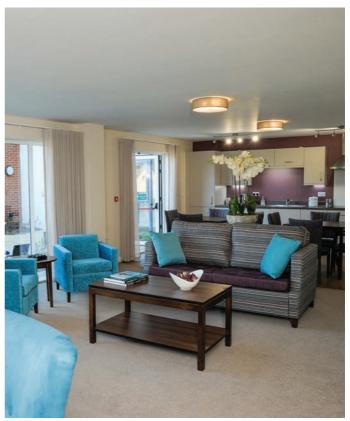
Penfold describes the design intent for the scheme in terms of its context: "We wanted to establish a strong presence on the corner by creating a communal court." Two entrances were created; one on the building's eastern flank at Moreton Close, and one to the south on Northview, both accompanied by private parking facilities. In plan, Woodlands Court takes the shape of a horseshoe. enclosing a central courtyard. Penfold highlights the steep topography of the site as a principal design challenge for the team. However, they took advantage of it and maximised on the views over the adjacent park.











The scheme was inspired by a housing association strategy which seeks to provide homes that anticipate people's changing needs and help them live independently for as long as possible

"We wanted to keep to quite a traditional design," says Penfold; "a pitched roof building, fitting in with the general feel of suburbia – that was the lead." Initially, the design was for a four-storey building, however this was reduced to three – two plus the pitched roofs – to better blend in with surrounding buildings. In terms of materials, the building envelope combines timber cladding, zinc panels, and brick and render which together serve to "form three distinct elements to break the mass up", according to Penfold.

Accessibility, comfort & sociability
According to the architect, "it was essential

that flexibility be designed into the scheme". A percentage of the units are designed for wheelchair accessible shower rooms and each flat has the capability of accommodating a Class 2 mobility scooter, as well as secure space at ground floor level for Class 3 mobility scooters.

"As part of the planning process, we consulted the existing residents living at Bonney Court," explains Penfold. Current tenants were surveyed on their knowledge and use of existing services, the barriers to using them, and which services they valued, as well as what they would like to see provided in the future.

Emerging from this came the clear mandate for a communal lounge, central courtyard, and smaller breakout spaces on each floor with small sofas, as well as spacious rooms in each apartment – compared to NHS accommodation standards. These were all measures taken to make the living environment as welcoming as possible, while instilling a clear sense of sociability into the scheme.

White concludes on the importance of embedding sociability in such projects: "We know that loneliness can be twice as unhealthy as obesity. We must build more than just good quality homes."

Extra Safety for Extra Care



Extra safety has been incorporated into an extra care housing development for over 55s courtesy of GEZE UK.

A natural smoke ventilation system which combines automated smoke and heat extraction has been installed into Lawson House – a new independent living facility in Aylesford, Kent.

A total of 16 GEZE RWA 110 NT window actuators were installed in pairs throughout the corridors of the three-storey building which is managed by Rapport Housing & Care. These incorporate an electric spindle drive which is coupled with a mechanical locking mechanism.

Eight K600 retractable arm drives were installed for the activation of automated smoke shaft doors. The shafts support the ventilation of protected areas in buildings used for multiple occupation. Should fire break out, the smoke vents would activate to efficiently expel accumulating heat and smoke.

All the actuators have been connected to 14 THZ emergency power supplies which link into smoke detection devices around the development.



Lawson House, which was designed by the Essex office of the Tooley & Foster partnership, was developed for affordable rent with 20 of the 74, one-and-two-bedroom apartments made available for military veterans.

Willis Architectural was commissioned to install the ventilation and safety system and identified the GEZE RWA 110 NT solution as being ideal for Lawson House's requirements.

Extra care, which is often referred to as assisted living, enables over 55s to remain in their own homes for as long as possible within the community, whilst providing them with a degree of support, tailored to their individual needs.

A safe and secure environment is assisted with staff on-site 24 hours a day, seven days a week, should an emergency arise. The apartments each have a kitchen, dining room, living room and en-suite accessible wet rooms. They are fitted with a call bell system and have provision for a phone line, terrestrial and satellite television.

Communal facilities include landscaped gardens, a restaurant with sun room and

terrace, lounge and seating areas including quiet areas, an activity room and a hair salon and therapy room.

Said Andy Howland, sales and marketing director for GEZE UK: "It is heartwarming to see good quality social housing being developed for older people in our communities that incorporate great facilities with good practice in respect of safety.

"We would like to welcome the residents of Lawson House to their new homes and hope that they will delight in the amenities and services on offer and enjoy the community which will create a sense of extended family."

Jil Stanley, Housing Officer at Lawson House added: "We are delighted that Lawson House has been so successful since opening its doors in September. The scheme is now full with a waiting list in place and for those that live here, it has proven to be an incredibly positive move, even life changing for some. We are looking forward to echoing this in our new similar developments."

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BUILDING PROJECTS

QUADRA HACKNEY, LONDON

Downsizing but not out

Grabbing views over Hackney's London Fields, PRP's new alternative offering to the early retirement market offers space to Londoners looking to downsize in style, on a tight site. Sébastien Reed speaks to the project architect Stephen Hynds

ow more commonly associated with young professionals, bicycle-bakeries and craft beer pubs, Hackney is perhaps not the most intuitive location for an over 55s residence. The site that now hosts Quadra had been in the possession of Hanover Housing Association since the 1980s, whose former schemes included a sheltered housing scheme – one of 12 'Hanover in Hackney' developments.

Hanover approached PRP in 2012, aware of the architects' rich portfolio of laterliving and retirement schemes, plus the strengths of their 40-strong office in Thames Ditton, who specialise in such typologies. The practice has had a strong presence in this sector since the 1980s, developing so-called 'extra-care' schemes.

The Housing our Ageing Population Panel for Innovation (HAPPI) standard produced by the UK Government was at the core of this project. As Hynds puts it: "The brief was very much HAPPI." The standard is composed of a set of design criteria for spaces for an elder demographic, foregrounding principles such as good light, ventilation, room to move around and good storage.

Hynds comments: "We'd been designing this sort of housing for a long time before the HAPPI report, so spacious flats with good orientation – assisted tech in some cases – we've been doing for a long time." He continues: "But what's good about the report is that it looks at the influence of schemes in Europe and makes this kind of housing more mainstream."

Midway through the briefing process, the second client Hill Homes was brought on board to manage the commercial activity surrounding the 15 private sale apartments in addition to 14 affordable units managed by Hanover, who obtained government funding for their portion.

Rights of light

In plan, Quadra is arranged in a loose arch shape, shielding a secure central courtyard and garden on the southern side of the plot. Pathways through the courtyard are delineated by grey brick paving, providing wayfinding to each of the three wings of the structure, which perforate the east and west wings towards the outer side of the arch and wrap around the building's northern periphery.

Services are located on the ground floor at the north-east and north-west corners of the scheme, while an office, bin store and communal foyer are situated at the end of the western wing. In addition, bin stores are found at the north-west and south-east corners of the plot. The remainder of the ground floor comprises eight residential units, spanning the breadth of the plan's contour.

The first floor features a further six





"The space constraint can also be seen as an opportunity, producing really interesting architecture – a sculpted form which denotes the transition from urban Hackney to London Fields," says Hynds

apartment units; three running down either wing of the complex, leaving a gap in the centre. Hynds explains that the tightness of the plot was further constrained by it being developed on each side except to the south. "There's a tower block on the north boundary which really complicated the rights of light model that we had to keep to." It was essential that the new development didn't obstruct daylight from reaching the balconies on the tower block, as well as other neighbouring properties, to any significant extent. He continues: "The other thing was the row of trees along the edge of the fields, which imposed tree constraints along the southern boundary."

In response to the light and tree constraints, the architects decided to stagger the building's form and distribute the massing towards the park in the south. Replicating this logic, the second floor is void of units along the northern side of the plan, as is the third, while the uppermost fourth floor features just a cluster of three units in the south-east corner of the plan. "The space constraint can also be seen as an opportunity, producing really interesting architecture – a sculpted form which denotes the transition from urban Hackney to London Fields," says Hynds.

Stepping the volume down not only allows it to conform to the strict rights to light, but means that each of the residences benefits from park views. Each residence is also at minimum dual aspect, with a number of flats being triple aspect. Balconies are also fitted throughout the building along with full-height windows, resulting in better ventilation and greater amounts of light to apartments, and allowing Quadra to meet the HAPPI principles. "Full height windows are great for older people," Hynds adds. "Sitting down or bedbound – you get views out."

During the construction phases, the tight plot posed significant challenges in terms of access for deliveries of materials, plant and the like, with access possible from only one point in the south-west corner of the site. As a consequence, the architects had to invest significant energy into negotiating with Transport For London. In addition the architects had to design a double-height space for offloading into the site. This two-storey space now houses the communal lounge.

Aesthetically, the concrete frame produces a clean and simple gridded appearance, enhanced by a series of horizontal decks and vertical bands which spill down the building at intervals along with decorative brick spines. "There's a verticality to the scheme throughout," Hynds notes, adding that the brick design was incorporated because it "adds more shadow to the elevations, breaking them up."

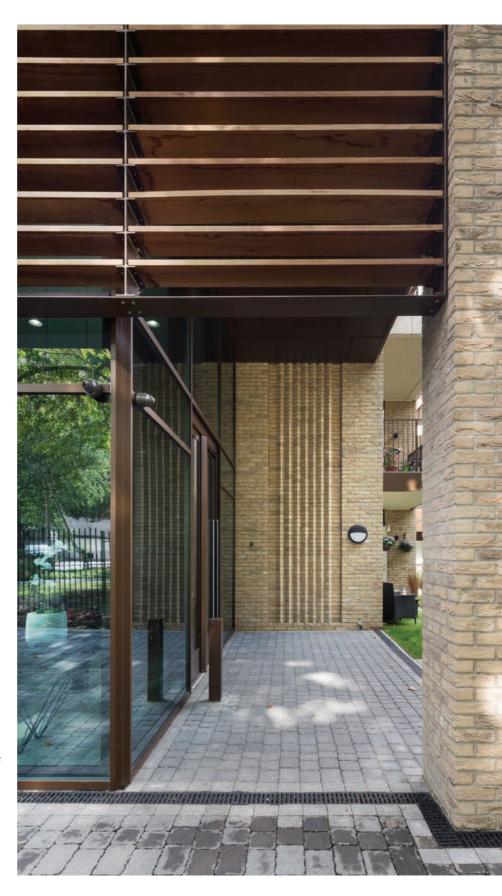
"In terms of materiality, it's inspired by local town houses; light-brown London stock brick with bronze metal windows, copings, and balconies." He continues: "The townhouse is more about the materiality of brick proportions." Decks at the second and fourth floors are clad with a light-grey stone which appears to wrap around the building, breaking it up every two floors and linking together the verticality of the scheme. The top of the fourth floor is also topped off with the same stone detailing.

A different demographic

During the briefing stages, there was a short period of deliberation as to whether over 55s or over 60s would be the target demographic for the scheme, quickly resolving to over 55s early in the briefing process. Hynds comments: "Both clients were interested in providing accommodation for the 'younger-older' population, as well as people in their 70s. That's how it's being marketed. They're spacious flats for over 55s – people who might still be at work, and active in the community."

The tightness of the site and its imposing surroundings to three sides meant that the client's expectations in terms unit quantity had to be readjusted if the HAPPI space standards were to be adhered to. Hynds explains: "When we started looking at the scheme, they were looking for 45 flats. But as we worked through the rights of light issues we realised that the numbers were going to come down to 29 flats in the end, which was still considered to be viable from a commercial perspective."

The architects were very careful in ensuring that the scheme didn't appear institutional in any way, despite catering for an older demographic, as Hynds explains: "The feel of the scheme is more a 'general needs' block of apartments. It definitely doesn't feel like a care home." The building is however designed so it can be easily adapted for people who need assistance in their daily lives. The walls and ceilings are reinforced to cater for grab rails and other assistance equipment, plus there are three wheelchair flats which was part of Hanover Housing Association's requirements. "The other units are adaptable, but





SOCIABILITY

Decks and a communal lounge to allow residents to cross paths and engage with each other

Images © PRP Architects LLP

The secure central courtyard provides a private place of respite that almost flows out into the park

PROJECT FACTFILE

Architects: PRP

Clients: Hanover Housing Association. Hill Homes

Value: £7.45m **Size:** 2,500 m²

not kitted out with those sorts of things," says Hynds.

Sufficient space in the toilets and shower rooms was designed into the scheme in the event that tenants require a carer to assist them with daily tasks, and space under the washing basin to allow wheelchair users to access the sink. In terms of space more generally, the typical two-bed flat is over 70 m² and the smallest is 55 m². "Compared to general needs housing," remarks Hynds, "they are spacious."

Further accessibility is provided by the scheme's level access throughout. Two lifts (one in the east wing and one in the west), level access showers, and wider doors also mean users can easily navigate the building in a wheelchair. Other than a single disabled vehicle parking space that gives access for deliveries and furniture for occupants, substantial onsite parking was not feasible due to space constraints. This is however offset by the extensive public transport that runs through the central London location. Says Hynds: "The location makes it naturally accessible for transport."

A good degree of sociability has also been instilled into the scheme, with the decks and a communal lounge offering a number of spaces for fellow residents to cross paths and engage with each other. The secure central courtyard provides a private place of respite that almost flows out into the park beyond the railings, with the grass on either side establishing a visual connection with lively London Fields. Hynds adds: "There's lots of activity in the park, giving residents the feeling that they're part of it. You can go out and join in with those activities – it brings you into the community."

Forecasting a trend

Hynds admits that situating later-living accommodation in the heart of bustling Hackney appears on the surface to be an unorthodox decision. Recent GLA surveys indicate that over 55s in the Borough compose only 14 per cent of the local population, compared to 45 per cent below the age of 29.

Despite this, Hynds sees a bright future for the demand of typologies nestled into urban contexts that host older occupants: "We are finding it's becoming a lot more common. In the past, over 55s housing might be located out in the country." He continues: "This notion that older people need peace and quiet isn't necessarily true. Some people are used to the city and want to stay."

Altro innovation creates a 'home for life'



A package of Altro products has been fitted in a new £10m dementia-friendly 'super' care home in Scotland, helping to create the ultimate environment of comfort and support for residents. Crosslet House Support Services Manager, Rhona Aitken, assesses the impact of

the Altro products one year on: "The colours and finishes of the floors and walls give a lovely overall ambiance of homely warmth, and help to create a bright, welcoming and stylish interior. The Altro products are certainly delivering the non-clinical feel we wanted to achieve, and it's fantastic to see residents feeling so at home here."

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issue has even been delivered! What's more, the Digital Issue includes interactive links to featured companies. Subscribe for free now.

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FGS UK appoints new CEO



Facade & Glazing Solutions (FGS UK) which specialises in the design and installation of commercial facades and reactive glazing services, has appointed Craig McGilvray, as Chief Executive Officer. Mr McGilvray takes on the role of CEO,

working alongside Dirk Jaspers, Director of Operations Europe at CoBe Capital who is acting Managing Director of FGS following the acquisition. Mr McGilvray said: "I'm joining FGS at an exciting stage in its development. It has been operating for more than 25 years partnering with main contractors, facilities managers and property owners to provide a complete 'glazing' building life cycle solution."

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Signbox raises the bar code



Signbox, the award-winning signage pioneer, has transformed a complex neon bar code wall art concept into a showstopping LED illumination installation at One Bartholomew, an iconic new Grade A office building in Barts Square in the

City of London. Commissioned to deliver a CAT A signage project by architect, Sheppard Robson, on behalf of contractor, Mace Group, Signbox went on to devise a compelling solution for the architect's ambitious bar code scheme that would create an exhilarating visual impact within the building's vast, double-height reception space.

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Eclisse's RIBA accredited CPD seminar 'Pocket Doors: The Future of Doors' outlines the different construction and type of pocket doors that are on the market. It shows the different variations and styles of pocket door including those that require finishing with architrave and styles that are flush without architrave. Single, double, telescopic and curved pocket door systems with timber door leaves are depicted. A variety of frameless glass door finishes are shown. FD30 options are discussed along with testing and certification.

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The Wetroom Design & Specification CPD from CCL Wetrooms, guides Architects through the process of designing and specifying a watertight wetroom. Run free of charge at a time to suit your practice, the 45 minute technical presentation comprehensively covers all aspects of wetroom design and specification. This includes wetroom design & layout, waterproofing, drainage, floor build up and installation. An informative section on how wetrooms can help meet the Lifetime Homes Standard is also covered. 0844 327 6002

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CUPA PIZARRAS LAUNCHES SLATE TRAINING COURSE



Cupa Pizarras has launched its first slate training course in Livingston. Combining hands on training with a RIBA accredited CPD, it aims to provide architects with both the theoretical knowledge and practical experience required to correctly and confidently specify slate. The day will provide architects with in-depth product knowledge as well as advice on grading slate, measuring the roof and the pitch, checking the headlap and selecting the correct slate size for a project. Architects will also receive hands on experience of fixing slates, using specially developed rigs. 07876350244

www.cupapizarras.com/uk

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Coopers Fire offers a range of free Continuing Professional Development (CPD) seminars. Approved by the Royal Institute of British Architects (RIBA), the seminars aim to educate the fire protection industry and wider building industry about application of fire and smoke curtains in buildings. Aimed at construction industry professionals such Architects, Building Control Officers, Building Engineers, Specifiers and the Fire and Rescue Service, the seminars provide an excellent overview of the benefits of specifying such products. 02392 454 405

www.coopersfire.com

NEW CPD: 10 MINUTES OF RESIN BOUND



SureSet UK Ltd offer two types of accredited CPD's, in person at a location of your choice or from the comfort of your own desk via a fully detailed, 10 minute video. The CPD, accredited by CPDUK will explain the differences between resin bound and resin bonded products and their differing characteristics. Permeable build ups including SuDS (sustainable urban drainage system) is mentioned as well as the different SureSet aggregates and SureSet's own naturally sourced two part UV stable polyurethane resin and the applications it's suitable for. 01985 841180

www.sureset.co.uk

RCM LAUNCHES RIBA ACCREDITED CPD



RCM are now offering a new RIBA approved CPD which covers a guide to specifying the components required when delivering a through wall solution; with a focus on fire rated solutions. Developed specifically with architects, specifiers, and developers in mind, participants will receive accredited certificates at the completion of the 40-minute presentation. RIBA is a global professional membership body driving excellence in architecture, with the ultimate aim to deliver better buildings and places as well as a sustainable environment. As an accredited CPD provider, RCM has the expertise, experience, specialism and technical knowledge to deliver an insightful and up-todate presentation. RCM's CPD consists of explaining the components of a through wall solution. Its teaching aims to show individual product performance, how to create your overall solution, how to create a though wall fire rated solution and creates awareness of product compatibility considerations. For those interested in finding out more, RCM provides informative CPD sessions including a guide to materials, applications and specification considerations for building boards, internal and external linings and rainscreen facades, covering: what a specifier needs to consider; board materials and benefits; board applications and; work on site. If you are interested in the RCM CPD presentation, please contact RCM direct. 0800 612 4662

0800 612 4662 info@rcmltd.biz

The latest CPD courses, seminars and documents for architects

WOOD FLOOR FINISHES



The correct specification of wood floor finish will depend upon how your client wants the surface to look and perform. Bona has over 100 years of experience in the development of wood floor treatments and manufactures a comprehensive range of oil and lacquer finishes, colours and ancillary products for the finishing, protection and ongoing maintenance of wood floors in commercial, public and domestic environments. Bona offers a seminar on how to specify the correct finish for the surface and a second seminar on wood floor installation using the latest silane based adhesives.

01908 525 161 www.bona.com

TWO NEW RIBA ASSESSED CPD SEMINARS FROM COMAR



In two RIBA assessed seminars, Comar outlines: 'Stand & Deliver: a Study of Curtain Walling' - the design of curtain walling, it's properties and how it is used by specifiers. This seminar aims to offer an understanding of the points of Hll in the NBS specification system, and how best to make use of it. 'Designing Functions & Reliability into *Entrances*' – the issues that influence the function of main entrance design and technology. This seminar aims to offer an understanding of how user expectation influences door design and links this with hardware selection, entrance configuration and floor finishes. 020 685 9685 www.comar-alu.co.uk

A NEW CPD FROM HORNE: LET'S TALK ABOUT HAND WASHING



Considering the march of antibiotic resistance, rightly described as a global threat that equals climate change in terms of its seriousness, the need to break the chain of infection through effective hand decontamination becomes ever more important. In spite of this, hand hygiene compliance - its frequency and technique – in the healthcare environment remains woefully inadequate. Horne Engineering's new CPD seminar raises the question what are the barriers or disincentives, to achieving effective hand hygiene compliance? And how can engineering help? goo.gl/gvzeDZ www.horne.co.uk

SIMONSWERK SPECIFICATION OF HINGES CPD



SIMONSWERK RIBA approved CPD on the Specification of Hinges will provide Architects with the technical knowledge for specifying the correct hinge for the right application. The presentation offers guidance on Door Specification, Legislation, Building Regulations, Fire & Safety in use, CE marking -MANDEC and the Equality Act. SIMONSWERK have over 35 years' experience in the manufacture of high quality brass, aluminium and stainless steel hinges for doors, windows & conservatories.

0121 522 2848 www.simonswerk.co.uk

WATERPROOFING OF STRUCTURES BELOWGROUND



Triton's newest CPD seminar provides a complete overview of all aspects of structural, below ground waterproofing as covered in BS 8102 (2009), describing each type of waterproofing in the standard in detail and the systems used to achieve them. It presents examples of typical details and good site practice and a variety of project references are included to demonstrate each type. The company also offers further seminars covering specifically waterproofing new build basements, existing basements and waterproofing below ground concrete structures. 01332 318830

www.tritonsystems.co.uk

SPECIFYING HARDWOOD TIMBER EXTERNAL DOORSETS



A RIBA CPD seminar entitled Specifying Hardwood Timber External Doorsets, from Urban Front, has recently been updated and is available to architects and construction professionals. Learning aims include information on fitting into Architectural Glass, challenges with maintenance, accessibility, door security, design features, and various regulations that must be met. The CPD is very visual and offers various opportunities to handle samples and lasts approximately 45 minutes plus questions. 01494778787

01494//8/8/ www.urbanfront.com

SAV'S AIRMASTER SVUS MEET THE LATEST BB101 REQUIREMENTS



Designing schools to accommodate ventilation doesn't need to be difficult. SAV Systems' AirMaster Smart Ventilation Units (SVUs) are decentralised MVHR units which do away with distribution ductwork, so there's no need to design your building around the ventilation. They have high levels of filtration to deal with unwanted pollutants and excellent external noise attenuation, so are very effective when installed in areas with multiple sources of environmental pollution. For more, book a CPD on BB101 compliance. 01483 771910

www.sav-systems.com/airmaster-cpd

'STEP ON IT!' SPECIFICATION OF ENTRANCE MATTING



Quantum Flooring Solutions -RIBA approved CPD seminar 'STEP ON IT!' is a presentation and discussion dealing with the subject of specifying safe and effective entrance matting. The CPD presentation includes: What entrance matting is designed to achieve and how to select the right one; How recent BRE guidelines affect the choices for specifiers; Environmental and health and safety considerations applicable to the manufacture. installation and maintenance of entrance matting. 0161 627 4222

www.quantumprofilesystems.com

Lead-Free Switch is First for Industry

edge Group Galvanizing has completed a unique conversion to lead-free galvanizing.

The company made the decision to eliminate lead from its process at all of its 14 plants across the UK 10 years ago.

The completion of the project means it's thought to be the first galvanizing company in the country to become 'lead-free'.

Small amounts of lead have been used to facilitate the galvanizing process for decades and it continues to be widely used today.

The challenge was to develop the metallurgy and overcome technical challenges while maintaining and improving on the quality of the finish expected.

Chris Woolridge, Managing Director of Wedge Group Galvanizing Ltd, said: "The amount of lead used in a traditional galvanizing process is very small but we wanted to remove it from our processes completely and made a firm commitment to do that 10 years ago."

The initiative was made particularly timely by the 2018 reclassification of lead massive contained in REACH (an EU regulation



for the Registration, Evaluation and Authorisation of Chemicals).

David Nobes, Technical Services Director at Wedge Group Galvanizing Ltd, said: "The reclassification could turn into a major headache for some of our customers, who might have to meet exceptionally tight tolerances or demonstrate exacting procedures. Some might even review the use of any process that involves lead as a result.

"Because of the commitment we made 10

years ago our process doesn't use lead at all and therefore removes any potential issues.

"It takes a very long time for background levels of lead to be removed from existing baths, but levels are monitored regularly and the fact we now achieve indicative levels of less than 50 parts per million (or 0.005 per cent) within the bath melt means we can proudly claim our process is lead-free."

01902 601944 www.wedge-galv.co.uk

The advantages of IoT monitoring technology are fully detailed on linkthru.com



Cistermiser's new website dedicated to IoT water temperature and flow monitoring www.linkthru.com provides full details on the many practical advantages that are delivered by this innovative use of technology. Over 35 years of service to the UK construction industry, the Cistermiser name has become synonymous with proven and reliable products that control water outlets in commercial washroom environments, as well as Combimate limescale prevention devices for domestic applications. Now the company's latest product introduction, LinkThru TMU, sees the Cistermiser brand enter new market sectors with practical and compelling solutions for NHS Estates, University Engineering and Facilities Management professionals. Linkthru.com is designed to provide a full briefing on the benefits of installing LinkThru TMU (Temperature Monitoring Unit) hardware at selected sentinel points across a building's water system, to capture and then access 24/7 remote monitoring data on water temperatures and flow events via a secure cloud-based portal.

0118 969 1611 www.cistermiser.co.uk

Pland Stainless Centenary Attracts Royal Guest



HRH Prince Edward, the Earl of Wessex visited Leeds manufacturer, Pland Stainless, this morning as part of their Centenary celebrations. Established in 1919 on the same site, stainless steel products manufacturer Pland Stainless, invited the Royal Guest to take a tour of their engineering facility and assist in the manufacture of some hospital sinks to mark the occasion. He was accompanied by the Lord Lieutenant, Ed Anderson and the Lord Mayor, Councillor Graham Latty and Lady Mayoress, Councillor Pat Latty on the visit. He was also joined by a number of Pland's customers and suppliers. The event saw HRH Prince Edward meet all 45 staff on the tour of the facility and he was taken around the factory by Alison Harling the Company's Production Manager. "The Event has been a great success." said Steve Duree, Managing Director. "At the end of his tour Prince Edward unveiled a plaque to mark the occasion which will be proudly displayed in our reception area. Everyone enjoyed the event and after he departed, we had a celebratory lunch and all staff have taken the afternoon off. It's not every day a UK manufacturer celebrates 100 years in business with a royal guest."

www.plandstainless.co.uk

Entertainment Spaces, Professionally Designed

part in the modern lifestyle and is something that can be truly astounding when experienced in the correct environment. Dedicated and convertible entertainment spaces need careful thought and professional design to perform well, and ultimately impress the homeowner.

Partnering with a CEDIA member guarantees you peace of mind, and the expertise needed to ensure that not only does the entertainment space perform as required, but that your aesthetic design is not compromised.

CEDIA has released accredited CPD material specifically addressing the design aspects of entertainment spaces: the CPD is tailored to help architects understand how to help clients choose and specify rooms, as well as the design principles needed for a dedicated entertainment space, and the importance of working

together in the early stages of a project. The Designing Home Cinemas and Media Rooms CPD course is available now on request: please contact cpd@cedia.co.uk to request a seminar.

CEDIA is your source for Home Technology Professionals.

We offer a number of accredited courses, as well as other resources to help educate architects about the opportunities that the integrated home can offer, both including and far beyond entertainment spaces. You can learn more about what's possible in the latest articles, blog posts, case studies, and more by visiting our website, or Find a CEDIA Member in your area by visiting our "Find a Professional" search engine at www.cedia.org

01480 213 744 www.cedia.org/find-a-cedia-professional





Kingspan Launches Ocean Plastic Clean-Up Partnership



Kingspan, a global leader in high performance insulation and envelope solutions for low carbon buildings, has committed to recycling 500m plastic bottles each year by 2023 for use in its insulation with a further target of 1bn bottles each year by 2025. This recycling initiative is part of a broader Kingspan programme, together with the company's 2020 Net Zero Energy manufacturing target, to produce its energy-saving products in a low carbon and environmentally responsible way. Kingspan is already manufacturing insulation using recycled plastic but from today will be adding recovered ocean plastic to this manufacturing chain, made with raw materials from its plant near Barcelona, Spain. This plant already recycles 250m bottles each year and has set an ambitious target to quadruple this over six years. To achieve this target, Kingspan has partnered with the EcoAlf Foundation and under a three-year partnership, the company will proactively help to remove up to 150 tonnes of waste from the Mediterranean each year through the EcoAlf Foundation's network of fishermen. Kingspan will reuse as much of the ocean plastic recovered as it can in its production.

01544 387 384 www.kingspaninsulation.co.uk

VinylPlus Sustainability Forum 2019



'Accelerating Innovation' is the theme of the seventh VinylPlus Sustainability Forum which will explore key drivers of innovation that support the PVC industry's targets within the circular

economy when representatives from the entire value chain meet in Prague, Czech Republic on May 9th and 10th 2019. Organised by VinylPlus®, the Voluntary Commitment to sustainable development by the European PVC industry, the 2019 Forum will focus on the role innovation can play in the sector's ability to deliver future economic, social and environmental sustainability. The two-day 2019 Forum is a 'not-to-be-missed' event for VinylPlus members and their stakeholders.

+32 023295105 vinylplus.eu/community/vinyl-sustainability-forum

Vortice welcomes two new team members



Carl Freeman and Kim Ellis have recently been welcomed to the **Vortice** team. Carl has joined as Sales Manager for the London and South East area and brings a wealth of experience from working in both the electrical wholesaler and ventilation

industry for many years. Kim joins as Technical CAD Manager from a building services consultancy where she was Senior AutoCad and Revit Technician. Kim is a key addition to the technical team, the role will include designing and quoting for various ventilation schemes including heat recovery designs for customers. Vortice supplies energy efficient ventilation systems for the domestic and commercial markets.

01283 492949 www.vortice.ltd.uk

WWW.ARCHITECTSDATAFILE.CO.UK

New Country Manager joins Hydro Building Systems

s part of Hydro's continuing growth within the UK, Olivier Vincent joins the company as Country Manager. Bringing with him over twenty years of experience within the fenestration industry, Olivier will be responsible for developing the market as well as driving sales and technical organisation.

Specialising in finance, operations and sales, Olivier brings with him extensive knowledge of Building Systems operations, having previously worked across the Hydro Group as General Manager for Technal France and Chief Operations Officer for Sapa France. Most recently, Olivier has been successfully managing the Technal Export business and specialised Industry applications under the French Askey brand.

Commenting on his new role, Olivier said: "I am looking forward to working with the

UK business to drive our strategic ambitions. This is a challenging time for the business with Brexit imminent, but we are also experiencing exciting innovations within the business, such as our post-consumer scrap initiative."

Hydro Group is a world leader in aluminium solutions that encompasses the brands Sapa, Technal and WICONA. Through its globally renowned Sapa Technology Hubs, the group is shaping a sustainable future, with innovative products that satisfy and surpass customer expectations, in line with demands of CSR and increasing environmental regulations. For more information on Hydro Building Systems, please visit the company's website.

01773 549300 www.hydroextrusions.com



TECTUS® GLASS- Winner at Architectural Ironmongery Specification Awards

SIMONSWERK UK are pleased to announce that the new TECTUS Glass has been awarded 'Best new product design and innovation 2019' at the Architectural Ironmongery Specification Awards.

TECTUS Glass - Flush glass doors in the limelight

The New TECTUS Glass provides aesthetic and functional solution for the minimal, flush-fitting installation of glass doors. The completely concealed hinge system creates a flush door structure for interior rooms. The



design of the hardware solution is elegant and minimalistic. TECTUS TEG 310 2D makes sure that the door leaf lies in the same plane as the hinge and the frame. The hinge system carries load capacities up to 80 kg. The overall installation is extremely easy as no glass preparation is required.

The concealed hinge system gives the glass door unprecedented transparency and lightness, for contemporary interior design concepts. The patented hinge technology is barely visible and provides a reliable and durable function due to the stable hinge properties. The hinge technology is suitable for 8 and 10 mm glass doors in interior constructions for high-quality residential and heavy-duty projects with timber, steel and aluminium frames.

Comprehensive hardware solution for glass doors

The new glass door solution from SIMONSWERK includes not only the



TECTUS Glass hinge system but also a magnetic latch and handles as an alternative to standard components. The closing magnet and the strike plate on the frame provide a contactless and silent closing process which can be adjusted to the desired latching strength of the door. All components of the new solution have a minimalistic design and are therefore suitable for use with modern timber interior doors.

www.tectus-glass.com www.simonswerk.co.uk





FEATURES

- ▶ Solid core
- ► 6mm lippings all around
- ► Closed grain finish
- Crown cut veneer
- ► FSC®-certified

VENEER OPTIONS

- Ash
- ▶ Oak
- Light grey ash
- Walnut
- Dark grey ash

All doors are available in various glazing styles. See our website for more details.

DEANTA ARCHITECTURAL - QUALITY VENEERED FLUSH DOORS

As one of the UK's leading internal door manufacturers, we bring together our expertise in door manufacturing with our creative insights to offer beautifully designed doors of the highest quality.

We strive to provide a superior product, so we only use hand-picked veneers from North America. All of the doors in the Deanta Architectural range are FSC® certified, feature solid cores and are extensively tested to industry standards.

Customer service is at the core of everything we do. We believe in developing long term, trusted relationships with our customers through a dedicated sales team and efficient, well-structured logistics.

CONNECT WITH US

www.deanta-architectural.co.uk

www.deanta.co.uk

01353 698 602

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Sika and Partners celebrate winning project in first-ever AJ Specification Awards

single ply roofing manufacturer Sika Sarnafil, architects Cullinan Studio and Roofing Contractors Cambridge (RCC) are celebrating following a win at the first-ever AJ Specification Awards.

The roof refurbishment of the Central Building at Cambridge University's Fitzwilliam College came out on top in the Roofing and Drainage category.

Announced at a ceremony held at The Principal Hotel in Manchester on Friday 15 February, prizes were taken home across a total of 12 categories for projects demonstrating outstanding working relationships between architects, manufacturers and suppliers.

In what was a skilful collaboration between Sarnafil, Cullinan and RCC, the judges agreed there was something special about the way this unique brutalist building had been beautifully protected.

Comprising protruding 'scalloped' detailing, an innovative waterproofing solution was created to refurbish the highly complex roof, all



without visually altering the original 1960s Denys Lasdun design.

Sika Sarnafil's single ply membrane and Sikalastic 621 – a liquid-applied product typically used for areas with complex detailing – were used across large areas. This pairing of systems was further enhanced by Sika Refurbishment's SikaFloor 420.

Sika Limited's concrete products were also specified for the build by concrete repair contractors Gunite Eastern. Sika's innovative concrete repair system included a steel corrosion inhibitor. Sika® FerroGard®-903+, which penetrates the concrete and forms a protective monomolecular layer on the surface

of the reinforcing steel, was used alongside Sika MonoTop® repair mortars. The concrete was finished with Sikagard®-550W, a high-performance anti-carbonation coating, with crack-bridging capabilities, that protects the concrete, while meeting the aesthetic requirements of the structure.

Sika has a wide range of products available for most applications within the construction industry, which can range from waterproofing, flooring, concrete, sealing and bonding, facade, roofing and refurbishment applications, as well as teams of specialists available to advise on specific projects. Using a combination of systems, while working internally within the company, Sika was able to advise on the most suitable materials for different aspects of the project and ultimately provided a complete building envelope solution, with the client benefitting from having only one supplier to deal with.

01707 394444 gbr.sika.com

Connecting the construction industry



The way we build is changing. From architects to contractors to manufacturers, we are all facing challenges as building norms are evolving like never before. So what are these challenges and how

is the industry responding? This event provides key insight from leading players across a spectrum of specialities within the construction industry. This is an exclusive opportunity to join and network with professionals from across the industry (including David Wigglesworth, managing director of SFS UK) to discuss the next generation of construction, with topics covering the future of architecture, developing and nurturing new talent, diversifying the workforce and construction 4.0.

www.sfsintec.co.uk

Snows Timber takes brand new direction



Snows Timber, previously part of The Bradfords Group, has announced the completion of a Management Buy Out, led by Managing Director, Ian Church. Ian, alongside Craig Willoughby, Supply Chain Director, and Adam Cray, Finance Director

had their bid for a management buyout approved by The Bradford's Group in January 2019 and have since been busy completing the deal. Ian Church, Snows Timber's Managing Director, said: "In our customer service proposition, we aim to be the very best in our sector. What excites us the most is the fact we are now truly independent."

01604 340 380 www.snowstimber.com

Helifix repairs restore failed arches



Hook Norton Brewery in Oxfordshire was suffering from internal and external cracking due to the failure of 15 brick arches. HeliBars were bonded into mortar beds above each opening, forming masonry beams that reinforced the brickwork, supported the wall above and spread the loads. Other cracks were

stitched using single HeliBars bonded across the cracks. These sympathetic repairs efficiently and economically restored integrity while retaining the original materials and aesthetics of this important listed structure. For project-specific technical advice about the use of Helifix structural repair systems, contact the Helifix team.

020 8735 5200 www.helifix.co.uk

Redeveloping Commercial Buildings



When redeveloping buildings for uses such as gyms, coffee shops, mini shopping malls etc, improvements to washroom facilities can often be restricted by the location of gravity drainage. The simple solution is a floor mounted EffluMaxi pumping system from Pump Technology Ltd. Over the past 27 years, these proven units, the most

common commercial wastewater and sewage pumping solution of their kind in the UK, have been successfully installed in thousands of locations. Reliable facilities are a must, that's why these stations are found in operation at Costa Coffee shops throughout the country.

www.pumptechnology.co.uk

AluK shows its strength



A faceted on plan curtain wall completed in AluK's SL52 system is the centrepiece of the two storey community hub known as 'The Curve' in the newly opened Bryn Gaer Place housing development. AluK's technical team worked closely with their commercial fabrication

partners Vellacine to design the curtain walling for the project in Newport, which also required an external canopy to be attached to the system. The challenge was to deliver the faceted on plan design in a practical and cost effective way. This was achieved utilising AluK's SL52 curtain walling system with a variable gasket solution and a single mullion to ensure that the glazing complemented the external facade design.

01291 639739 www.aluk.co.uk

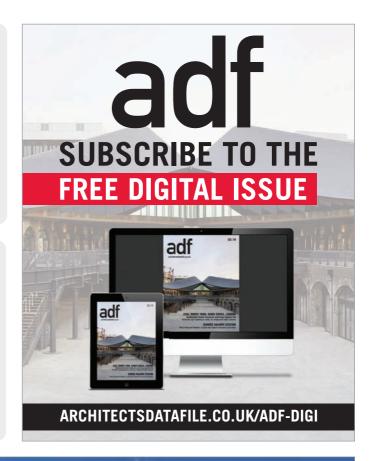
Formica Group brings Scandi-style cladding



Formica Group, a leading global manufacturer of surfacing products continues its innovative approach to rainscreen cladding, with the introduction of new VIVIX® Lap

high performance exterior weatherboard cladding. VIVIX Lap is a modern alternative to wood and fibre cement plank cladding, providing great looks, quick and simple installation and requiring little ongoing maintenance. VIVIX Lap planks can be applied to everything from new build housing and renovation projects, garden offices, sheds and garages, to commercial business parks and retail outlets.

0191 259 3512 www.formica.com





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01952 586580



www.wintechtesting.com



sales@wintechtesting.com





VISIT US AT STAND H3 email sales@wintechtesting.com to book an appointment









Bagot Street, Student Accommodation "City Centre Chic Living"





Birmingham City University can trace its establishment back to 1843 as the Birmingham College of Art. It gained University status in 1992, and has three main campuses serving four faculties, and offers a variety of courses in art and design, business, the built environment, computing, education, engineering, English, healthcare, law, the performing arts, social sciences, and technology. With a growing student population, the University outsources much of its accommodation to Campus Living Villages, which has taken over the management of Bagot Street Blocks D and E in Birmingham – a new development in the heart of the city.

Bagot Street Blocks D and E are high-end properties and home to 492 beds. They add significant student accommodation capacity to the existing blocks (A, B, C) at the older Bagot Street site, as well as hosting significant retail space on the ground floor. Technically, the project is two blocks joined together by a single storey link building – one block is seven storeys and the other 11 storeys in height.

Tim Groom Architects designed a building that was not only modern and innovative, but also sympathetic to the natural 'city-centre' surroundings creating a stunning construction with a 'hotel feel'. The solution was to use less institutional-style fixtures and fittings, along with contemporary furniture design and intelligent storage solutions. However, this more up-market and desirable student destination still had to be achieved at



an affordable price, without compromising important factors such as fire safety, energy efficiency and aesthetics.

To achieve the striking up-market 'City-Centre' feel, the architects, working with main contractor Watkins Jones Group specified ALUCOBOND® A2 for the facade, fixed using rivets – some 11,500 m² across the entire building. Four special RAL colours were also chosen to achieve the up-market appearance, being processed by FGF Limited and installed by Precision Facades.

The many advantages of ALUCOBOND® A2 composite panels contributed to their choice for the project; high-quality, resilient and unique in appearance, they were the ideal choice for a sustainable construction boasting quality whilst also facilitating the highest creative expression. ALUCOBOND® A2 is also distinguished by its outstanding product attributes such as precise flatness, variety of surfaces and colours as well as excellent formability, and with its chosen core - fire-retardant mineral filled core ALUCOBOND® A2, the building is also extremely safe and confidence inspiring for its owners and occupants. In fact, ALUCOBOND® A2 meets the strict requirements of fire regulations and enhances the possibilities for the concept and design of the building. ALUCOBOND® A2, just like all the products of the ALUCOBOND® family, allows simple processing, is impact-resistant, weatherproof, and above all,

non-combustible. ALUCOBOND® A2 panels are also weather resistant and colour fast – essential if the building's appearance is to be maintained over the entire lifetime of the building.

Paul Herbert, Sales Manager 07584 680262 Richard Clough, Business Development Manager 07760 884369 www.alucobond.com

PROJECT DETAILS

Project: Bagot Student Accommodation **Location:** Bagot Street,

Birmingham, UK

Facade material: ALUCOBOND®

A2 special colours

Construction system: Riveted,

Screwed

Architects: Tim Groom Architects **Fabricator / Installer:** FGF /

Precision Facades

Year of construction: 2018
Copyright pictures: Silver Linings

Media



Our superb new thermally broken steel window & door system ingeniously blends style and performance. The T60 stepped profile faithfully replicates traditional steel windows.

Ideal for historic buildings, contemporary or traditional style new build projects.

- Advanced high density thermal barrier technology
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e: info@crittall-fendor.co.uk

Glass Act for High Rise Refurbishment Project

he first tower block to be built in Paisley, West Scotland, has undergone partial refurbishment, using ultra lightweight external cladding from Chromatics Glass Ltd.

The 15-storey, 40 metre high building, comprising 56 flats is a brick-based structure that underwent major refurbishment in the late 1990s, when external balconies were incorporated into interior space, external cladding was applied, new windows installed and a low-pitched roof added.

An examination of the structure identified an issue affecting the curtain walling running the full height of the building at each of the four corners where there are open vents into each living room with spandrel panels below. It was decided to replace the existing aluminium panels using Chromatics Safety Glass. Concrete Repair Ltd was the Main Contractor for the refurbishment of the project.

Not a toughened glass, Chromatics Safety Glass is a unique safety glass that achieves exceptional performance. Its extraordinary resilience is as a result of bonding together, at



a molecular level, glass, a colour layer and metal, transforming them into a laminate that is both light weight and shatterproof, as well as being visually stunning and having a completely smooth surface. An unrivalled depth of colour is achieved with 100 per cent opacity, no pin-holes and no risk of show through or colour variation often inherent with ceramic coatings. At George Court a graphite grey colour scheme was selected. Because the colour is encapsulated between the layers of the laminated product, it is UV stable for at least 25 years and will neither fade nor discolour.

Replacing one cladding system with another can have implications in terms of load bearing but one of the principal advantages of Chromatics Safety Glass is its lightweight quality. The 6mm thick panels specified for the George Court contract weigh just 15.32kg per square metre, making them easier to handle, transport and install, thereby offering huge savings on installation costs. By using Chromatics Safety Glass, the weight of the cladding it replaced was reduced by more than half. The contract also involved replacing existing Styrofoam insulation with a noncombustible Rockwool product

Chromatics Safety Glass is highly versatile allowing architects and designers complete creative freedom to bring style and resilience to a host of applications. Available in the full range of RAL colours for use either externally as rainscreen, architectural cladding, curtain walling, or signage, as well as a range of internal uses that include feature walls, counter tops, balustrading and partitioning. It is also possible to replicate any traditional finishes, for example natural stone, wood, terracotta, porcelain, marble, ceramic, brick and metal surfaces.

Chromatics Safety Glass achieves A2-s1,d0 fire certification.

01904 439187 www.chromaticsglass.com



OVER THE LAST 7 YEARS OR SO, CAPRICORN ECO TIMBER HAVE BEEN SUPPLYING AND DEVELOPING TIGA WOOD BURNT LARCH, AN INNOVATIVE BLACK CLADDING WHICH IS MAINTENANCE FREE, HAS A VERY LOW CARBON IMPRINT. IS VERY DURABLE AND ECO-FRIENDLY.

It is produced from locally grown FSC certified British Larch and has a direct benefit to the economy and helps to minimise the UK trade deficit by utilising our own countries timber resources instead of importing from other countries.

Tiga Wood cladding is a bespoke product made to order here at our Stafford factory and sawmill to suit the customers specification, with either a charred and oiled or charred, brushed and oiled finish.

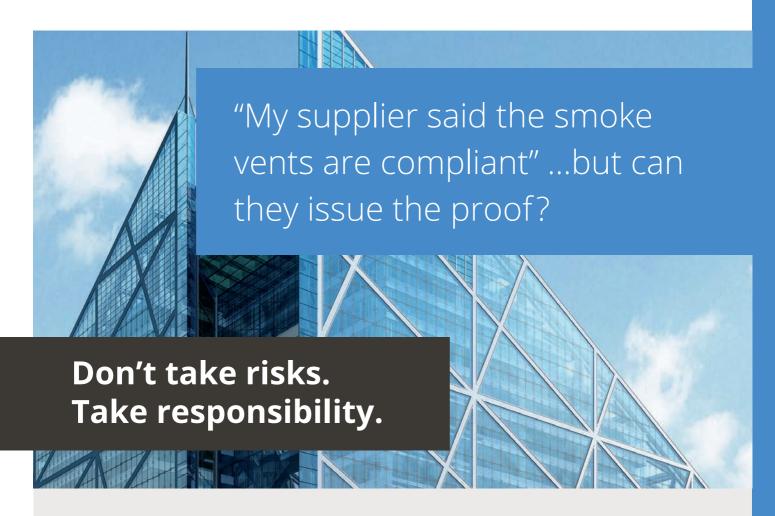
It is coated and sealed with one coat of natural oil which acts as a base and topcoat, the number of coats are dependent on the customers aspirations regarding the longevity of the black colour or whether the cladding is preferred to gradually weather and age-gracefully over the years, if it is the latter no further coats are needed on site after delivery.

The durability of the Larch itself is impressive and it will last 80 years or more in cladding form assuming the usual guidelines for fitting are followed by the installer.









SE Controls actuators are tested to the EN12101-2 smoke ventilation standard, in combination with leading façade systems, to ensure correct functionality in an emergency.

The proof of compliance is the issuing of the Declaration of Performance (DoP), which will be required by the contract team, client and authority signing off the building.

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High rise not high risk!

Danny Birrel of Kawneer advises on how to design curtain wall facades to accommodate building movement

and-pressed developers are increasingly turning to high-rise buildings to deliver best footprint value but the interaction between the facade of a building, particularly a tall one, and its structure is, sadly, frequently ignored in the design phase.

Analysis of the architectural intent, structural movements and specified glazing system is required during the early stages of a project design so that glazing and cladding systems can be designed to allow for building movement without compromising the performance or safety of the system.

Failure to provide sufficient allowance for in-service building movement in the connections between facade and structure may result in one or more issues, such as leaks, cracks, failure of connections, buckling of mullions or breakage of glass.

Due to the extension of structural spans seen in contemporary building designs, slab deflection is increasingly placing additional demands on the facade design team to accommodate this differential movement between slab and facade.

The solution to this is simple – early engagement with system specialists. While analysis of the structural movements, architectural intent and specified glazing system is usually carried out by the system supplier or specialist facade contractor, it is imperative that main contractors and building designers also engage with the system specialists during the early planning stages to ensure the proposed facade system can accommodate the associated building movements and is in line with the proposed site installation methodology.

If the specified glazing system is not aligned with the building structure and installation plan at the early stages of a project, it can cause unforeseen delays and costs when it is aligned at a later stage.

Accommodating building movement and the resulting interaction between the facade and structure is complex and there are many factors to consider. These include temperature, moisture, floor loading, wind loading, snow loading, live loads, dead loads, settlement, creep and seismic sway.

Selecting the most appropriate glazing system at the early stages in a project is vital as it can have a major impact on the intended appearance, and more importantly, lifetime performance. For example, wider framing members can accommodate more building movement, and in some instances double transom details are required at floor slabs for the accommodation of differential building movement.

One of the main complexities is designing the facade to accommodate differential slab deflection. These movements caused by post-installation dead and live loads are commonly found in the structural engineer's report, which are typically defined by a span ratio.

Due to a desire to extend structural spans in modern structures, slab deflection figures based on the span ratio are increasing significantly, making facade design and movement accommodation even more challenging.

Arguably, floor slabs do not deflect anywhere near the figures being documented but it is essential to design facades as if they do, including an allowance for manufacturing tolerances and thermal movement.

Determining the limitations of a particular system or offered solution must be understood before complete alignment can take place. Failure to provide sufficient allowance within the system, or to design and/or specify a system with serious limitations, and failure to correctly design/detail the critical connections between the facade and structure may result in the issues mentioned earlier.

Evaluating the various curtain walling options should be a first-case scenario as although conventional stick curtain walling is widely specified in the UK and can offer a cost-effective solution, compared to a unitised curtain wall it is very limited in terms of accommodating differential slab deflections.

Kawneer has recently developed a movement/expansion joint for 'stick' curtain wall systems that can accommodate up to +/- 15 mm of differential slab movement, so mimicking the ability of unitised solutions



Determining the limitations of a particular system or offered solution must be understood before complete alignment can take place



to accommodate movement while offering the cost-effectiveness of a 'stick' solution.

This expansion joint solution comprises a specialised engineered foam, which expands and contracts in the mullion with the movement of the structure. A transom profile is used at each floor level which allows the spandrel glass/panel to slide within the glazing rebate while maintaining airtightness, ventilation and weather tightness of the system.

A breather membrane is used on the floor transom, which is designed to allow any excess water in the glazing rebate to escape. It is also designed to expand and contract with the racking movements of the glass when subjected to the 15 mm slab deflection.

A key aspect of the development was the performance test methodology to ensure the system would perform when subjected to this level of movement. The supplier worked with the Centre for Window and Cladding Technology (CWCT) to develop the method, which was an enhanced version of the sequence B. This included a structural movement regime comprising three cycles of +/- 15 mm deflection of the structural beams supporting the test specimen.

To complement this systemised solution the supplier is launching a no-obligation facade workshop comprising a team of facade specialists who will work collaboratively with developers, architects and engineers during the early stages of a project.

The aim is to provide a unique design and consultancy service working across every aspect of the facade to ensure the design intent and every detail is realised, help refine the design, ensure the scheme is 'value engineered' and can be built on site safely.

The thinking behind this is that early involvement leads to a successful outcome, whether it relates to building movement or facade selection and key design issues in general. The holistic approach is set up to classify facades by function, materials, mullion type, glass type, key components, structural safety, thermal performance and future maintenance.

These consultants understand that architectural trends and features are a key part of a building's identity and are committed to turning these features and daring concepts into safe reality.

Danny Birrel, MSc MCIBSE, is technical director of Kawneer

Traditional aesthetic delivered in Lincoln

urability, safety and aesthetics needed to work together for the Viking House project. With the refurbishment nestled among conventionally built brick buildings there was a need for a contemporary look that mirrored the local vernacular. MechSlip has a design that allows specifiers and architects to create distinctive facades thanks to the flexibility of different sizes of brick slips and choice of multiple colours and textures, allowing the development to fit seamlessly into its traditional surrounding; Ibstock's Leicester Red was the brick of choice.

Viking House is a managed student accommodation development at the University of Lincoln. Converted from several repurposed properties, the design of the buildings was in contrast to others in the largely traditional of area of Brayford Wharf.

One of the main challenges was the University's desire to complete the project within only six months in order to accommodate the new intake of students at the start of the 2018/19 term, but without compromising on safety.



Working in partnership with the Globe Consultants, Ash & Lacy proposed the use of its exclusive MechSlip facade. Developed in conjunction with Ibstock Kevington, MechSlip is a lightweight, mechanically fixed system that offers significant advantages including reduced installation times and associated costs, as well as being completely non-combustible.

One of its biggest advantages is the speed and ease at which MechSlip can be installed, which leads to significant time and cost savings over traditional brickwork.

The system works with slip-cutting technology that allows the vast majority of stock and wire cut bricks to be mechanically

fixed into horizontal rails at flexible heights, making the entire design and installation process simple, from concept to completion. This allows architects and specifiers to use brick to maintain the integrity of their design, whilst the efficiency and versatility of the mechanical fixed system opens up a whole raft of options for integration with modern methods of construction.

As well as offering the reassurance provided by a mechanically-fixed design, MechSlip has been rigorously tested to the Centre for Window & Cladding Technology (CWCT) standards, for wind resistance, water tightness and impact resistance. The result is that it eliminates the weather dependency of traditional building methods without compromising on the choice of brick finish. And it also benefits from non-combustible system components making it the ideal choice for a modern high-rise structure like Viking House.

0121 525 1444

www.ashandlacy.com/construction/products/mechslip/





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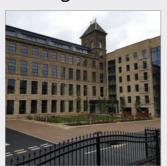
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Stunning £11m transformation of Edwardian mill into luxury apartments in Leeds



A former Edwardian mill in Leeds has been sensitively restored and turned into a stunning development of luxury apartments by Leeds based ALPHA Aluminium.

Each of the 89 spacious flats at Horsforth Mill, bursting with character and craftsmanship, have received a unique new look thanks to Jack Aluminium Systems.

The £11m project used the JCW curtain walling system to create cutting-edge style without losing the building's local heritage. Specially-engineered, the TW70 thermally-efficient window system was also commissioned throughout the two-year restoration.

To complete the project, the TD68 thermal door that is designed to be a reliable high-traffic commercial aluminium door, also featured.

Jack Aluminium and ALPHA have a long-standing and successful relationship and have worked on several projects together. The excellent partnership continued at Horsforth Mill.

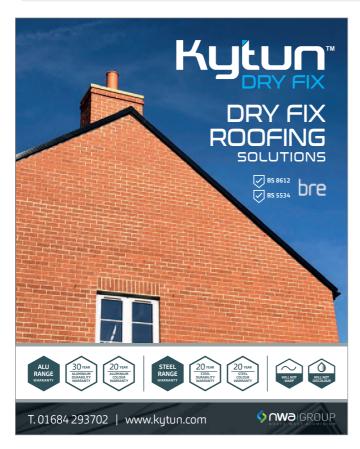
024 7646 7449 www.jackaluminium.co.uk

RCM and SPSenvirowall cement their collaboration at Futurebuild 2019



The closer collaboration between RCM and SPSenvirowall has been evidenced in a successful joint exhibition at Futurebuild 2019 where both companies shared a brand new stand showcasing their vast range of compatible products offering a one-stop shop to customers. RCM and their sister company SPSenvirowall are happy to announce a successful show at Futurebuild 2019 in London. Both part of the Benx Group, the companies shared a large and visually exciting new stand showcasing their joint product offerings. Greater depth and diversity of products on offer demonstrated integration capability and successful one-stop solutions. The prime position at the show together with the very clean and slick white design of the new stand allowed the samples on display to virtually present themselves. Various ranges of colourful facades and brick finishes compelled visitors to take a closer look. Suspended 360-degree rotating interactive displays of RCM's 'complete through wall solutions' and SPS's 'system build-ups' allowed visitors to get a much better understanding of how the different products integrate with each other to form a solution.

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KALVEBOD FÆLLED SCHOOL

Perforated facade decorates innovative school building

When constructing Kalvebod Fælled School, the objective was to create a balanced atmosphere of school and leisure time for both children and adults, with the focus on learning and activities. This ambition has been achieved by a stunning circular construction with a gymnasium at the heart of the building. The glistening facade encapsulating the building is made from 1200 m2 of perforated sheets from RMIG. The perforation gives a flow of light and shadow, providing protection from the sun, yet still ensuring a view of the beautiful surrounding areas. RMIG's City Emotion philosophy exists to capture the passion for creative and exciting urban design by offering innovative technologies and materials.

We can help realise the most ambitious architectural projects, the projects that will give the city innovative visual statement and emotional appeal. As the world's largest manufacturer and supplier of perforated metal with manufacturing units throughout Europe, we have over 100 years of industry experience with a wealth of tooling and engineering expertise to help make your ideas come to life.

If you are interested in booking a CPD presentation or require further information, please contact wgw@rmig.com. Alternatively, please see our CPD Focus on page 44 of this issue of ADF for more information.

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Bespoke service from Capricorn Eco Timber



Capricorn Eco Timber are an innovative, specialist, eco-friendly Stafford based timber merchant, machinist and sawmiller delivering a bespoke service for claddings, beams, and decking to all parts of the UK and abroad.

Capricorn's forte is the supply of locally grown, naturally durable, sustainable, FSC certified timber species which can be used for exterior applications without the addition of potentially toxic preservative treatments normally needed to enhance their longevity. As part of this ethos we are producing our own version of burnt timber cladding, "Tiga Wood" using FSC certified British timber species.

roger@capricornecotimber.co.uk

Fireshield® receives LABC certification



A Proctor Group's Fireshield® vapour permeable membrane has been awarded certification from both LABC and LABSS confirming that the product meets Building Regulation approval in England, Wales and Scotland. Fireshield complies with BS5250, BS4016 and NHBC requirements for

vapour permeable walling underlays. It is installed and fixed to the substrate in the same manner as standard breather membranes using mechanical fixings. Applications include both commercial and residential buildings including apartments and student accommodation, as well as Rainscreen cladding and applications over 18m high.

01250 872261 www.proctorgroup.com

Senior makes its Everyman Cinema debut



Senior Architectural Systems has successfully completed its first contract for Everyman Cinemas after supplying a range of aluminium fenestration solutions for the boutique cinema chain's new theatre in Greater Manchester. The new four-screen

cinema has been enclosed in a striking building envelope that features Senior's SF52 aluminium curtain walling. The SF52 system has helped create a welcoming entrance to the venue and a bright and pleasant interior for the first-floor bar and restaurant. The new cinema also features Senior's robust SPW501 commercial aluminium doors.

www.seniorarchitectural.co.uk

Comar 9P.i High Performance System



After extensive research and consultation with key supply partners, Comar Architectural Aluminium Systems deliver the Comar 9P.i High Performance Window, Door and Framing System. Research indicated that a thermally efficient

future-proof facade system was required, with off-site manufacture and value engineering solutions that actively seek to reduce material content. Comar 9P.i High Performance framing offers two options of construction, ladder frame or mitre frame. Comar 9P.i windows and 9P.i doors can be hung directly from the frame, reducing the need for additional outer frames, creating a truly integrated solution.

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Spectus deliver heritage authenticity



Spectus Vertical Sliders have been used in the refurbishment of University of Sussex student accommodation in Brighton. The University of Sussex Kings Road student accommodation in Brighton has a prominent position in a conservation area on the seafront. As part of a wider programme of refurbishment of the building, which houses 124 students, new windows were specified. Spectus

Vertical Sliders were identified as the windows that would deliver the aesthetics required for a building in a conservation area as well as provide more thermally efficient and secure accommodation.

info@spectus.co.uk

ALU Top brings together old and new



When the British Small Animal Veterinary Association decided to expand its Gloucester headquarters, the contractor on the project – Lancer Scott – advised on the installation of REHAU's GENEO ALU Top windows to replace the existing aluminium profiles and

complete the scheme's contemporary aesthetics. GENEO windows are REHAU's most thermally efficient window profiles. Manufactured from RAU-FIPRO, the profiles are certified by the Passivhaus Institute and awarded the highest thermal performance standard in the world with a U value of up to 0.73 W/m²K.

01989 762600 www.rehau.uk

Wraptite enhances thermal performance



An impressive new contemporary award-winning Eco House in Perthshire is set to benefit from the superior airtightness performance qualities of Wraptite from the A. Proctor Group. Wraptite, the only self-adhering external vapour permeable air barrier certified by the BBA, was installed as

part of the Structural Insulated Panel (SIPs) construction of the home. The use of Wraptite in the construction makes a significant contribution to a building's thermal performance by preventing lateral air movement. It also provides high vapour permeability in a continuously sealed, self-adhered, airtight membrane.

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Neaco's balconies are fully compliant

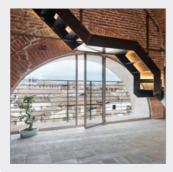


McCarthy & Stone's development of luxury retirement apartments is demonstrating how Neaco's modular balconies are ready-made to modern standards in every respect, from aesthetic style to compliance with the new Building Regulations. Designed by Stephen George + Partners (SGP), Scholars Place features Neaco's

Clearview balconies including aluminium decking which is Euroclass A1 rated. Kiran Parmar, Principal Architectural Technician at SGP, said: "Neaco offer really good, cost-effective products. They are also very helpful with technical support – they responded quickly in providing key information and design detailing, which was a definite plus point."

sales@neaco.co.uk

Crittall launch innovative thermally broken steel window



Crittall has launched T60 – a highly innovative thermally broken steel window and door system. T60's slim profiles replicate original Crittall steel windows, combining traditional aesthetics with 21st Century levels of performance. T60 features an advanced high density polyurethane isolator as a thermal barrier. This, together with housing high performance double or triple glazing up to 37mm wide, ensures the system surpasses the requirements of current regulations while at the same time providing contemporary levels of comfort, particularly in harsher weather conditions where traditional steel windows may not have previously been sufficient. Market-leading weathertightness performance has been tested to European and ASTM Standards. As with all Crittall products, T60 is corrosion protected and finished with Duralife, an architectural grade polyester powder coating. Its slim sightlines maximize the benefit of natural daylight thereby reducing reliance on artificial lighting. Each frame is fully welded enhancing strength and durability. The inherent strength of steel gives peace of mind in respect of robustness and security, boosted by optional multi-locking.

01376 530800 www.crittall-windows.co.uk

Renderplas PVC beads contribute to the sweet smell of success for British Sugar HQ



Early in 2018 work started on the construction of a new multi million pound Head Office for British Sugar in Peterborough, based on the Architect's simple concept of a white box. To complement the contemporary glass exterior, 368 linear meters of Renderplas PVC shadow gap profiles have been installed. The shadow gaps are an integral design element of the building; sleek minimalist shadow gaps between the walls, skirting boards and door frames create clean, internal lines unimpeded by the traditional use of skirting boards, architraves and cornicing. Renderplas PVC profiles are the perfect choice for any commercial building as they are impact resistant, an essential feature at skirting level where there is a large amount of footfall and cleaning equipment may be in regular contact with the profiles. Renderplas Managing Director Daniel Leedham-Green said: "Renderplas have stocked two different shadow gap profiles for many years, they are still a relatively under-utilised profile which is why it is great to see them being specified for installation on such a large scale throughout this building. I can't think of a better way to complement the Architect's concept."

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When the founder of the Complete Energy Consultancy set about designing a brand new home for himself and his family, he identified **Marmox** Thermoblock as the ideal means of tackling thermal bridging around the floor/wall

junction of the near-to-zero carbon construction solution. As a loadbearing composite product, Thermoblock has been developed to be incorporated into various wall constructions as a horizontal layer, equivalent to a course of bricks, in order to address a critical area of heat loss, thereby reducing energy bills and making a significant contribution to SAP (Standard Assessment Procedure) calculations.

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0800 588 4444 www.promat-industry.co.uk

The hidden costs of 'cheap' insulation



New research has shown that by using premium performance phenolic insulation over cheaper, thicker mineral fibre insulation, developers can reduce construction thicknesses and actually save on total upfront costs. The analysis, carried out by an experienced quantity surveyor, considered

several variables including the cost of the insulation materials, length of wall ties, area of roof and wall layers and the foundation width. The results showed that by using the Kingspan Kooltherm K106 Cavity Board specification, overall construction costs were reduced by £161 and £420 in the large and small detached houses respectively.

01544 387 384 www.kingspaninsulation.co.uk

Solid floor refurbishment research released



Kingspan Insulation has published a new white paper assessing how different floor insulation specifications can impact cost and floor-to-ceiling height in home refurbishments. The report is based on research from leading consultants – Currie & Brown. It shows that Kingspan Kooltherm K103 Floorboard can provide a cost-effective option for insulating solid floors without

reducing headroom. The research looked at Kingspan Kooltherm K103 Floorboard, which has the lowest thermal conductivity of any commonly used insulation (0.018 W/m·K), and expanded polystyrene (EPS) insulation with a thermal conductivity of 0.038 W/m·K.

01544 387 384 www.kingspaninsulation.co.uk



Domus Ventilation appoints Sales Manager



Domus Ventilation, part of the Polypipe group, is pleased to announce the appointment of Shane Leather as National Specification Sales Manager. Shane's appointment to this post forms part of Domus Ventilation's well structured strategy to return to the specification sector following the launch of a range of high performance mechanical

ventilation systems over the past six months. These include the HRXE Mechanical Ventilation with Heat Recovery (MVHR) unit and the highly energy-efficient CMX Mechanical Extract Ventilation (MEV) units, which boasts the best Specific Fan Power (SFP) on the market.

vent.info@domusventilation.co.uk www.domusventilation.co.uk

UfAC for fabulous Benjamin Street build



One Benjamin Street is a fabulous new build with mixed use accommodation comprising retail and commercial space as well as residential penthouse apartments. The new build offers 1692m² of high quality, sustainable office space with highly flexible, column free

floor plates and BCO recommended floor to ceiling height of 1.8m on the first to third floors. The overall design brief was to provide optimum flexibility when adding or re-arranging fittings for incoming tenant requirements, and the AET Flexible Space underfloor air conditioning system specified fits this brief perfectly.

01342 310400 www.flexiblespace.com

Developing integrated HVAC&R solutions



Panasonic Corporation, a worldwide leader in the development of HVAC&R along with Systemair, a global specialist in ventilation and applied air conditioning technology, has announced a strategic partnership to develop integrated and sustainable

solutions for the commercial and residential sectors. The Panasonic/Systemair collaboration will leverage existing technology and expertise from both parties, setting new trends within the European HVAC&R market. In the first phase, Panasonic will introduce a highly efficient and environmentally friendly new Heat Pump Chiller series, featuring Systemair's innovative air source reversible chiller technology.

aircon.panasonic.com

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Fusing efficient ventilation



Effective, compliant ventilation of multi-occupancy rooms is simplified with an innovative concept from Gilberts of Blackpool. The air movement specialist's Mistrale Fusion (MFS) Terminal delivers optimum internal air control for less than £5.00/room/annum. The initial single-sided through-structure unit provides a one box, stand-alone solution, requiring no additional ductwork or plant. The Mistrale MFS is, says Gilberts, the first in a new series that revolutionises energy-efficient ventilation in non-domestic buildings. Installed through the external facade or window, Mistrale MFS mixes internal and external air to ventilate the internal space. A mixing damper within modulates airflow to allow the new, fresh air to mix with the warm exhaust air, thus extracting its heat without the need for an exchanger. The integrated low energy fan energises to blend the internal air, ensuring an even distribution of airflow, with control over temperature and CO_2 levels within, and maintenance of a comfortable internal environment for occupants. As with all Gilberts' ventilation solutions, it delivers efficient weather performance via its bespoke louvre system.

01253 766911 info@gilbertsblackpool.com

New Stratos-MAXO launched



Wilo has launched its new Stratos-MAXO pump. It's the pump offering the highest system efficiency on the market, thanks to the optimised and innovative energy efficiency functions such as 'Multi-Flow Adaptation' and 'No-Flow Stop' along with an outstanding EEI

≤ 0.17. It can automatically adapt its output to the varying system requirements via 'Dynamic Adapt Plus' without setting a target value.

01283 523000 www.wilo.co.uk

Latest news, views and more

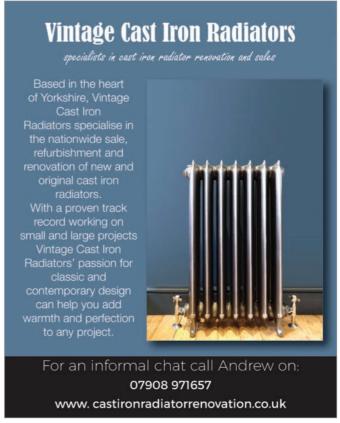


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A breath of fresh air

Eliot Warrington of Solarcrest explains how airtightness will affect any building, whether clients want to build a certified Passivhaus or just meet Building Regulations

K Building Regulations are really promoting airtightness and it's now mandatory to pressure test every new home as it has clear benefits for energy efficiency, heat conservation and therefore carbon reduction, the underlying driver of change.

But this march towards airtightness has come at a cost to those properties with poor ventilation beyond unsightly damp and mould patches. With black mould now linked to triggering and exacerbating asthma in children, it's not just the health of the home that is under threat.

In terms of minimum ventilation requirements, the inclusion of window 'trickle vents' and extract-only fans in bathrooms and kitchens is still permitted. The problem is, in an average three-bed property the total 'free area' of these vents is equivalent to around one square foot. It's like having a window wide open all year round. Close the vents to stop cold draughts, odours, outdoor pollution or street noise and you stop your ventilation. Leave the vents open and what's the point of building an airtight house? Trickle vents and extract fans are not compatible with low energy, healthy housing.

MVHR is a simple concept. Working as a central extractor fan to draw damp air out from every wet room, an MVHR recovers over 90 per cent of the heat from that stale air and uses it to warm fresh air, which it supplies to every habitable room. That way, in a well-sealed property the heating only needs to lift the air temp from maybe 19°C to 21°C, instead of from zero to 21°C. Best of all, with all incoming air passing through a single duct instead of dozens of trickle vents, filtration can be incorporated to clean the supply air to stop outdoor pollutants from entering the home.

Every year in the UK around 40,000 early deaths are attributed to poor air quality. Opening windows to let in 'fresh air' is a myth if you live in a town or city as the air outside is anything but fresh. Even in

the countryside the outdoor air is dusty, pollinated, damp and more often than not cold. With every other kind of ventilation, whatever's outside gets dragged inside. Only MVHR can clean, warm and dehumidify it. Sadly, Building Regulations allow developers to 'get away' with unfiltered trickle vents, even on busy roads, regardless of the associated health problems. Not every local authority has a pro-active Environmental Health Officer with the power to overrule building control and planning when needed, although the trend is changing now the lawsuits are starting to come through.

But no matter how bad outdoor air quality gets, indoor air quality is always worse with carpets, furniture and manufactured timber products all off-gassing Volatile Organic Compounds. Taking indoor air pollutants out is as important as stopping outdoor pollutants from coming in. MVHR takes it out without replacing it with outdoor pollution.

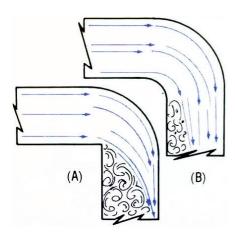
So, an MVHR provides quality air at near room temperature for no more energy cost than running a fridge, forever. In fact, the running costs are less than zero when you deduct the value of the warm air it recovers. MVHR in a three-bed home will typically save over £100 pa on the heating bills. But what else can it do? In two words... "acoustic attenuation."

More and more councils are imposing sound mitigation conditions on planning applications, particularly in towns and cities or for properties by busy roads. Approved Document E 'Resistance To Sound' is the official regulation. Typically, flanking sound from the road enters the property through gaps and cracks in the fabric, through window trickle vents and in particular, through the eaves then into the roof space and then through the ceiling of top floor rooms. Mitigating unwanted sound ingress is another good reason to aim for airtightness.

MVHR ducting can contribute towards



There is certainly a big difference between a budget system designed to get through the regulations and a premier league system designed to get through the next 20 years, quietly without failure



PICTURED

The effect of elbow throat on turbulence within a duct system. The sharp throat of (A) created more turbulence than the rounded throat of (B)

sound issues or it can attenuate them depending on the system. Branch ducting is the cheapest and therefore the most common type of ducting, but it's also the least effective when it comes to attenuation. It's almost impossible to clean and is the most difficult to hide given its size, especially if you need to include inline silencers which can be 250 mm diameter or more. Branch ducting tends to be full of 90° bends, which cause turbulence in the air, creating an unwanted low pitch hum, especially in the rooms closest to the MVHR plant where air velocity is greatest. Sharp bends also add static pressure to the system, meaning the fan unit needs to work harder to force air through the pipes. Another acoustic drawback with a branch system is that each room tee's off a single branch pipe, which allows crosstalk between rooms. Fortunately, there is a solution and it's called radial ducting.

Radial 'semi-rigid' ducting has a much smaller diameter, typically 75 mm, so is easy to hide. Silencers are not necessary. Each room has its own dedicated pipe rather than teeing off a branch, thus preventing crosstalk. Each pipe connects to

a manifold normally located close to the MVHR unit, ideally an attenuating manifold. Turbulence is eliminated by the avoidance of sharp 90° bends, instead radial bends tend to sweep around corners. Air movement noise is avoided too because the air velocity in each pipe is much lower, just enough to serve the room at the end of the pipe and not the whole building. Static pressure on a radial system is typically around half the equivalent branch system, meaning the MVHR unit can more easily circulate air. Finally, the best radial ducting has an anti-static anti-bacterial lining to prevent dust and grime building up.

As with anything, with ventilation you get what you pay for. There is certainly a big difference between a budget system designed to get through the regulations and a premier league system designed to get through the next 20 years, quietly without failure. You wouldn't think about cutting corners on the aesthetics of a building, so why cut corners on something as important as air quality?

Eliot Warrington is managing director at Solarcrest









ADF APRIL 2019 WWW.ARCHITECTSDATAFILE.CO.UK

Surface appeal



James Latham has announced the addition of three new collections to its popular high-end range of decorative panels, Xylocleaf.

The inspirational new collections include; Mosaico, which offers a weaved leather surface, Duna, comprising a registered, embossed stone surface and Alpaca, featuring a soft cotton texture.

In addition, three new products have also been added to the Fusion collection. Fusion is totally unique in that it has linen textile bonded to its surface, with a thin layer of protecting resin, thus combining a natural surface – the fabric, with the industrial process of creating a decorative panel. Fusion surfaces were developed in Italy by XyloCleaf and it is the only manufacturer worldwide that can create them.

Paul Morson, James Latham's Group Product Champion for Melamine commented, "These latest additions offer even greater choice to architects, interior designers and furniture makers who are looking to add dimension, depth and texture to their projects."

www.lathamtimber.co.uk

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www.architectsdatafile.co.uk/adf-ereader-survey

Why destroy perfectly good cabinets?



If existing cabinets and drawers are undamaged, then why not simply replace the doors and worktops at the very least? This is the message from Granite & TREND Transformations with their new website which lets the homeowner know how to get the look without the

hassle, time, cost and environmental impact of a complete refit. With showrooms all over the UK, customers can touch and feel an impressive range of doors; there is a choice of over 200 solid wood and laminate doors in an array of colours to whet the appetite. The replacement doors and drawer fronts are manufactured to the highest quality standards and personalised handles and fittings are made to measure.

www.granitetransformations.co.uk

EnCore Rigid Loc added to Expona Family



Polyflor is pleased to announce the launch of a brand new product format, the Expona EnCore Rigid Loc collection. This exciting new hybrid product has an expertly engineered premium rigid SPC (Stone Polymer Composite) construction

with exceptional stability making it ideal for installation over existing subfloors. Expona EnCore Rigid Loc offers a flooring solution that caters for both commercial and residential interiors. The rigid construction gives the floor exceptional stability and it's acoustic foam layer reduces impact sound by 19dB, exceeding UK building regulations while also providing comfort and warmth underfoot.

0161 767 1111 www.polyflor.com

Cost savings with BAL Flexbone 2Easy



Preparation time was reduced dramatically with the use of BAL's new floating uncoupling mat – Flexbone 2Easy – on a prime redevelopment in County Durham. The 200m² problem screed to be tiled had two days of preparatory work

scheduled before installation could even begin, but this was reduced to just half a day using BAL Flexbone 2Easy. The use of BAL Flexbone 2Easy floating uncoupling mat alleviated the need to abrade and prime the screed, as the only preparation required was a quick sweep of the surface. BAL Flexbone 2Easy is a unique mat to the UK market which is truly uncoupled, protecting floor tiles from lateral movement.

01782 591100 www.bal-adhesives.com

A splash of colour in this SITY VIU



The new SITY sink and VIU mixer tap from BLANCO UK leads the style and innovation stakes for 2019. The large sink is joined by accessories, the SITYPad, a cool chopping board, and SITYBox, a caddy that hangs inside the sink. The SILGRANIT® PuraDur® sink's

draining ledge has been specifically designed with a raised square ridge to allow for the SITYPad to easily fit alongside it and sit firmly in place. The SITY sink itself is available in Anthracite, Rock Grey, Alumetallic and White. The whole sink, including the draining board, is 1000mm long, making it the perfect centre point in the kitchen unit.

www.blanco.co.uk

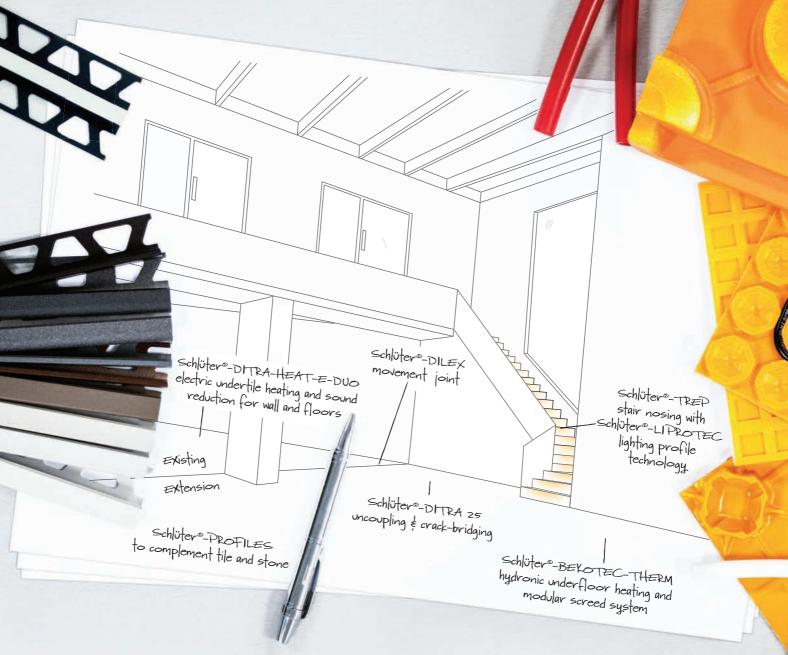
Polysafe provides swift quick turnaround



Muddy wellies will no longer be a problem with the installation of Polysafe QuickLay at Cotswold Farm Park. The new flooring collection from Polyflor was specified and installed by LK Flooring across the farm shop, restaurant, toilets and stairs alongside Polysafe

Apex which made the perfect solution for their busy commercial kitchen. QuickLay, designed for adhesive free installation, can be laid over a variety of existing subfloors including new concrete substrates of up to 97 per cent RH. Polysafe Apex was used in the commercial kitchen area. With enhanced slip resistance, the range features a concentrated level of safety aggregates in the vinyl to ensure underfoot safety.

0161 767 1111 www.polyflor.com/safety



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To find out more call 01530 813396 or visit www.schluterspecifier.co.uk









Encore RIGID LOC

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EASY TO INSTALL

The rigid construction, acoustic layer and use of 5G-i locking technology provides superior performance in a quick to install floor covering, all in a stunning collection of 12 faithfully replicated wood designs.



Acoustic Backing

The acoustic backing reduces impact sound by 19dB.

See the full collection www.polyflor.com

That's a wrap

With eco-friendly materials fast becoming rising stars in the world of interiors, Lindsay Appleton of Architextural discusses the many benefits of using architectural films and how they can refurbish existing surfaces

one are the days when wrapping was exclusive to vehicles; architectural films have opened up a wealth of design possibilities.

In a world where businesses need to keep up with the latest trends, refurbs are always high on the agenda, but contrary to popular belief, a renovation project doesn't have to break the bank.

Transforming a building's interior has never been easier. From walls to partitions and even lifts, doors, columns and ceilings, thanks to architectural finishes you can wrap any surface.

Many of us may not realise it, but we are surrounded by architectural films. Commonly found on intricate structures, self-adhesive films can be used in both domestic and commercial environments, including bars, restaurants, offices and more.

More architects and interior designers have turned to wrapping films for a number of reasons. Not only are they durable, 3D-conformable, they can be quickly and easily installed with little noise, mess or waste and because they are lightweight, they can also be applied in situ.

Wrap it, don't rip it

The last decade has highlighted the importance of looking after our environment and architectural finishes can help tick that box too.

The traditional rip out and replace refurb methods result in existing interiors and materials being sent to landfill. Architectural finishes solve this problem. With a durability of 10 years plus, cost-conscious businesses have the option to renovate their walls and partitions on a budget by simply wrapping the existing surfaces and upcycling instead.

With sustainability set to be a key trend

in 2019, surface finishes can be used to make high-impact, sophisticated designs, in a variety of realistic finishes, ranging from textiles, concrete, marble, wood grain and more.

On trend

With thousands of patterns to choose from, the possibilities really are unlimited, making in-vogue design more than achievable with architectural finishes.

Mimicking the aesthetics of natural materials, architectural films offer unrivalled choice of on-trend patterns and an alternative method to upcycle existing substrates in an affordable, high-quality finish.

Believe it or not, concrete is increasingly becoming the go-to material for bathrooms. Replicating this trend using film can be achieved, without having to build a wall of concrete. Giving a robust, industrial feel, the tough yet stylish look can offer a focal point for wall design.

Ever pined for interior design that replicates the outdoors? Then a realistic wood finish should be high on your list. You may be thinking that the look, feel and touch of wood would be impossible to replicate; however, with the new dry wood collection from 3M DI-NOC architectural finishes, it is possible to look and feel like the real deal.

Feature walls are also a must-have in numerous commercial spaces. We are starting to see more and more distinctive feature walls or partitions and vinyls can provide businesses with a creative way to stand out from the crowd as a more durable alternative to wallpapers and painted effects. It's important to maximise feature wall opportunities as it can help to create a strong, dynamic impression within an interior space.



ARNVF

Distinctive feature walls or partitions and vinyls can provide businesses with a creative way to stand out from the crowd





Cost benefits

The market opportunity for refurbishment projects is huge. Market growth is a key indicator that shows commercial businesses are keen to invest to improve their spaces, to not only enhance branding, employee satisfaction and also customers experience.

It typically costs seven times more to rip out and buy new interiors, rather than refurbishing existing surfaces, architectural finishes offer a great way of keeping within a manageable budget

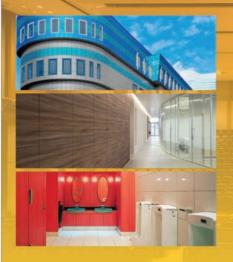
As it typically costs seven times more to rip out and buy new interiors, rather than refurbishing existing surfaces, architectural finishes offer a great way of keeping within a manageable budget.

Companies looking to reduce costs and improve their environmental sustainability should perhaps consider upcycling the building's doors, structures, partitions and furniture with self-adhesive finishes to refresh spaces without the loss of revenue or disruption to the business.

Lindsay Appleton is marketing manager of Architextural







Our architectural vinyl coverings can be used on almost any surface or substrate... in fact, not only will they enhance the look of your fixtures, windows, doors or walls but they have the potential to improve the integrity of their very structure. Being washable, durable, UV resistant and fire resistant, vinyl coverings can significantly extend the lifetime of any surface they are applied to.



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Sanwell Walls with integrated niche

Robust wall elements with a thickness of 100mm and a width of 900 or 1200mm are ideal for use as free-standing walls. wedi Sanwell Wall elements are not only waterproof to the core but are also fully customiseable: the height and width are easy to adjust to required dimensions and the size of the integrated niche can also be modified to suit. Simply bond to floor & wall with wedi 610 adhesive sealant and after reinforcement of joints it's ready to tile or plaster.





NBS Plus





Final height can be shortened during tiling



in many different sizes



Supports shower doors, radiators & shelving











wedi's 100% waterproof tile backer boards from 50mm thickness are approved for use as shower partitions. They can be used for creating up to 1200mm long separation walls when attached on 2 sides, but once attached to a wall, floor and a solid cementitious ceiling structure the length becomes limitless. Besides standard sizes (2500x600mm), there are XL (2500x900mm) and XXL (2500x1200mm) formats especially developed for this purpose - by reducing the number of joints, they simplify the installation process enormously.







Over 300,000m² of high quality laminated products produced each week

With industry beating lead times and a range of over 300 surface finishes suitable for domestic and commercial use, you need look no further than Decorative Panels Lamination.

Contact us for more information.

Barbour Fit Out chooses CaberWood MDF



Barbour Fit Out combines a mix of modern techniques and traditional craftsmanship to produce quality shopfittings and, at the heart of many creations is Norbord's CaberWood MDF portfolio. Designing innovative displays

for prestigious retailers such as Fossil, The White Company, Beaverbrooks and The National Trust for Scotland, Barbour Fit Out also uses CaberWood MDF in restaurants, healthcare practices and educational establishments. One particular benefit Barbour noticed with CaberWood MDF Pro is that the core maintains its stability when turned into mouldings which they then spray paint.

www.norbord.co.uk

Self-adhesive transparent window fabric



Architextural, part of William Smith Group 1832, has announced it is the chosen UK supplier of a revolutionary self-adhesive window fabric, Squid. Squid, a brand owned by highly-respected Belgian textile company Lampe Textiles NV, is the very first transparent fabric that also acts as a self-adhesive

curtain, and a popular non-PVC alternative to traditional decorative window films. The innovative window solution has a five-year durability, as well as helping to retain privacy, and let in natural light. Its unique texture offers a realistic feel and minimalistic design.

lindsay@architextural.co.uk www.architextural.co.uk

Salice and Michael Farrell Furniture are the perfect partners



Salice UK are delighted to have teamed up with Michael Farrell Furniture, supplying their Eclipse pocket door system for installation within their kitchen ranges. Michael Farrell Furniture is a family business established in 1979 committed to the design, manufacture and installation of the highest quality custom kitchens and furniture. Michael Farrell Furniture had total confidence in choosing Salice's Eclipse pocket door system, as they were aware that it is the premier system available today. Designed to optimise space in a host of applications from larder units for kitchens, to hide away appliances like washing machines, freezers or even sinks, Eclipse is suitable for individual door weights up to 30kg and offers versatility and performance combined with movement that features soft opening and closing, cam-assisted opening action and cushion door insertion. Furthermore, Eclipse can be installed, adjusted and inspected in situ, as all three movements are adjusted from the front of the cabinet in a simple, intuitive way. If so required, the complete mechanism can be removed from the front without dismantling the cabinet side.

www.saliceuk.co.uk

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Hunter Douglas introduces Tavola™ ceiling



Hunter Douglas Architectural has introduced the Tavola Baffle Series to its portfolio, a range that provides architects and interior designers with the ultimate freedom to create a stunning ceiling in any large or small space. Tavola is a robust and bold system that

comes in three designs: Straight, Levels and Divergent. The three designs are all available in widths of 20, 30, 40 and 50mm, heights between 50mm-300mm and profiles of up to 5000mm. Each of the Tavola systems come in a huge range of colours, as well as wood look and stainless steel look, enabling designers to design a bespoke look.

01604 648229 www.hunterdouglas.co.uk

dormakaba launches new sliding door



Manufacturer of security and access solutions, dormakaba, has launched its newest addition to the MUTO range; the MUTO M 60 sliding door system. This innovative manual sliding door system offers simple installation, versatility and exceptional longevity, with a variety of options

to create customised solutions. The new MUTO M 60 has now extended the MUTO range to accommodate smaller door widths, available in standard set sizes or bespoke made to order solutions. This addition offers design scope for smaller passageways, ideal for installation in apartments, hotels, restaurants and hospitality premises.

01462 477600 www.dormakaba.co.uk

Altro flooring helps transform fire station



Barry Fire Station recently underwent an interior refurbishment that has transformed the space and improved wellbeing for all who use it. It was one of the first sites in the UK to use new **Altro** Ensemble modular flooring – a stylish solution that has delivered on

comfort and sound reduction too. Altro Ensemble modular flooring system is the next generation of luxury vinyl tiles. Altro Ensemble gives design freedom to create luxurious floors for commercial interior spaces. With 57 options to mix and match, the modular flooring system has natural wood and stone designs and bloc colours too.

01462 489 516 www.altro.co.uk

Setting imagination alight with My Taraflex



Be inspired by the latest innovation from Gerflor, the launch of digital printing technology to make your sports halls completely unique. My Taraflex® is the first integrated customisation service for sports flooring projects, combining the latest and newest digital printing technology with the

exceptional comfort, safety, performance and resistance of Gerflor's world-renowned Taraflex® sports flooring. Designed for architects and designers who want to unleash their creativity and deliver a unique floor to their client, while at the same time respecting the technical constraints related to sport flooring installations.

01926 622600 www.gerflor.co.uk

DRU announces updates to Spartherm wood fire inserts range

RU is the official UK distributor for the German designed and made Spartherm range of wood stoves and wood fire inserts.

To support the marketing and distribution of the Spartherm brand in the UK, DRU has announced a streamlining of the inserts range, to be followed by a new UK brochure and promotional campaign from April 2019.

Spartherm wood fire inserts are available in front view, 2-sided, 3-sided and tunnel versions. They are all Eco Design ready, with high energy efficiency and many sophisticated functions that make them suitable for traditional or contemporary homes. They are of particular interest to architects and interior designers, who are looking for high end, high specification fires and stoves.

One of the principle distinguishing features of Spartherm wood fires is their manual or automatic vertically sliding door mechanisms, which provide easy access to the interiors of the fires in order to replace the logs and for cleaning and maintenance.

The new wood fire inserts range is now divided into the Linear series, which has door handles that are an integral part of the frame and the Design series, in which the handle is a separate, detachable component for a more seamless finish.

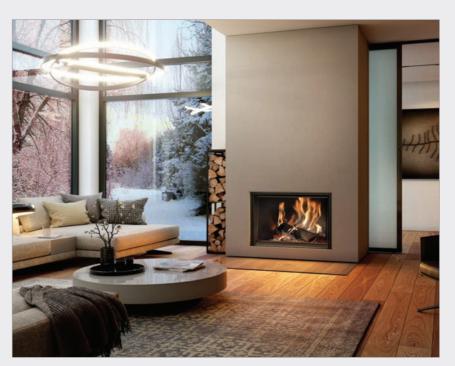
Another unique feature of the Spartherm inserts range is the exclusive S-Thermatik NEO app for smartphones and tablets. When combined with the fire's operating system, the app enables the user to remotely control the air flow in the fire and the temperature in the home using a simple graphic display.

Other features of the range include an air wash system to keep the glass clean, a soft-close concealed door-locking mechanism, a user-friendly air slide and a simple hinged ash tray.

The new Spartherm inserts brochure will be available in both printed and interactive digital versions, along with informative videos to use in dealer showrooms.

In addition, selected Spartherm wood stoves and fires will be displayed on the DRU stand C35 at Hearth & Home, the UK's premier fireplace trade show in Harrogate, 9 – 11 June 2019.

0161 793 8700 www.drufire.com





All angles covered with Heradesign

urchison House, a building steeped in history since its construction in 1977, has received a significant refurbishment, giving the University of Edinburgh a stunning new purpose-designed venue on its King's Buildings Campus. Reconfigured to provide light-filled, comfortable spaces for students and staff to work, relax and study, architects Reiach & Hall turned to Knauf AMF Heradesign to create a first-class acoustic solution that would also align with the university's contemporary design brief.

Reiach & Hall specified Knauf AMF Heradesign to deliver a suspended raft system in the café and breakout areas. Cut to create a series of triangular rafts, the 80m² floating ceiling solution offered the illusion of height above the system and provided excellent acoustic performance. Meanwhile in the study areas, 100m² of Heradesign wall absorbers were installed throughout the study zones continuing the geometric theme.

Speaking about the complex design, Wynne McLeish of Reiach & Hall comments: "Working within the constraints of an existing 1970s building with low ceilings and limited wall space, we looked to design a suspended raft system. This not only allowed us to achieve the required acoustic rating but also detract focus away from the new exposed services. The triangular forms were used to echo the unusual geometric plan of the building and the colour white to reflect light into the space. The versatility and texture of the Knauf AMF Heradesign allowed us to create a fun, bespoke feature for the café, which was light enough to be quickly installed by the contractor."

The ceiling contractors, D V McColl, were instructed by Kier to complete the complex installation. David McColl comments: "This was a challenging project as we had to ensure each triangle was cut and installed with absolute precision. Thanks to the rigidity of Heradesign, we found the product very easy



to cut and achieve accuracy. This, combined with the swift fixing process, meant there were no delays along the way."

Senior Project Manager at Kier Construction, Neil Kemp adds: "Having a reliable and responsive supply chain is critical to ensure projects are carried out as smoothly and efficiently as possible. As a key manufacturer on this refurbishment, Knauf AMF continually impressed us with how it conducted itself on-site and met the tight schedule of the project."

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Schlüter warms the floors of a unique housing project

n Essex-based project centring on the provision of a much-needed National Autistic Society (NAS) school has seen the installation of electric underfloor heating system Schlüter®-DITRA-HEAT-E-DUO into the 60 houses built to off-set its costs.

At the centre of the project was the idea to build the school without using public funds. As a result, a carefully considered gated community of three, four and five-bed luxury houses – Chigwell Grove – was planned to enable its construction.

INSIGHT

AREA: Bathrooms and Ensuites ACTION: Protecting and Heating Floors

DITRA-HEAT-E-DUO was installed across the bathrooms and ensuites of the houses in the development, beneath 900 x 450mm and 600 x 600mm porcelain tiles. Three different sized kits were used according



to the size of the rooms, minimising any waste product.

"We found the DITRA-HEAT-E-DUO system very easy to install – much easier than mesh-based systems", says Paul Clough, owner of tiling contractor PJ Ceramics, "In fact as a company we have recently switched completely to membrane-based systems – they're far more versatile as you can route the cable around features rather than heating entire floors at additional expense".

The DITRA-HEAT-E-DUO system features a studded uncoupling membrane into which

heating cables are clipped and securely held in place, ensuring an even and consistent heating experience. It also offers reductions in height build-up and installation time in comparison to mesh-based systems, which require an uncoupling membrane to be installed as an additional layer in the flooring assembly.

The DITRA-HEAT-DUO membrane features a 2.5mm fleece layer that reduces heat loss to the substrate, accelerating the warm-up process by up to 70 per cent in comparison to conventional underfloor heating systems. This layer also provides impact sound reduction of up to 13dB (which translates to a reduction of 50 per cent by reckoning of the human ear).

Schlüter-Systems are attending the inaugural Hard Surfaces Show from

30th April - 2nd May 2019; find them on Stand J16.

01530 813396 www.schluterspecifier.co.uk

DAF Trucks choose Hadrian for quality and environmental performance



Hadrian Elite steel toilet cubicles have been installed in all the washrooms at the DAF Trucks UK headquarters at Haddenham in Buckinghamshire. It wasn't just the superb durability and practicality of Hadrian cubicles that DAF found attractive, but also their green credentials. Hadrian's products feature a high recycled content with the powder coated cubicles made from 50 per cent recycled material. For stainless steel that figure rises to 91 per cent. Thirty Hadrian Elite powder coated, floor mounted, steel toilet cubicles and six matching urinal screens were installed across the six washrooms. These serve the DAF headquarters that were officially opened in September 2018. Packed with design features, the Hadrian Elite range includes an ingenious honeycomb core, laminated under pressure to a sheet-steel envelope. This envelope is coated with a dry powder coating which is cured at high temperature to provide a smooth, continuous finish that is attractive, durable and easy to clean and maintain. At DAF Trucks a light grey finish was chosen (RAL 7035). For further information on Hadrian Toilet Cubicles and Lockers, contact Relcross.

01380 729600 www.hadrian-cubicles.co.uk

Order bespoke wetroom shower tray



A new pioneering facility on Abacus' website allows a trade customer to create, design and order a bespoke wetroom shower tray in minutes. This can be done by logging into the dealer log-in portal's home page in the usual way. Delays over CAD design are

an old, painful memory and customers will receive a quote instantly. The process involves choosing a drain type, a tray depth and size, and then the location. A quote is produced immediately; this can be saved or orders can be placed then and there. With super quick delivery, the new system is designed for today's customer demands.

www.abacus-bathrooms.co.uk

New shower tray ranges for all sectors



Saniflo has introduced a comprehensive collection of shower trays to its Kinedo portfolio of trays, enclosures and shower cubicles. The new ranges will complement the Kinerock tray which was successfully launched last year. Some four further collections are now available to suit all styles,

tastes and budgets. These come in a range of sizes and colours; some are cuttable and there is a range of surfaces from a luxurious stone finish to smooth white. Each carries a 10 year warranty. All the new trays can be installed in raised, recessed or flat installations. A brand new Kinedo Shower Tray brochure is now available for download.

020 8842 0033 www.kinedo.co.uk

Bringing back brass



Give steel windows or doors a brand new personality with a handle from Steel Window Association member Steel Window Fittings (SWF) in Antique Brass. Finishes on steel window fixtures and fittings can have as much of an impact on the visual aesthetics

of the home as the steel windows or doors themselves. With a range of products available, homeowners can really add to the stunning design of steel windows. The finish is available in most of Steel Window Fittings' handle range, including curved and straight Classic, Duplex and Triplex options with matching accessories.

www.steel-window-association.co.uk

Benif Interior Film on the menu at Carluccio's



Italian restaurant chain Carluccio's environmental policy includes refurbishing equipment rather than replacing it, if practicable. To refurbish the surfaces of their chill cabinets and storage units, Benif Interior Film from **David Clouting** was seen as the perfect solution. Benif, manufactured by

LG Hausys, is a self-adhesive, architectural film that can be quickly and easily applied to most interior surfaces. For this project specialist contractors Distinct Decorators used Benif solid graphite Interior Film to cover the surfaces, the work being carried out with minimal disruption to the business.

www.davidclouting.co.uk

Cembrit HD is in the Wings at Twickenham



Cembrit HD (heavy duty) board has recently been installed in the newly redeveloped East Stand at Twickenham, the home of England Rugby. Resilient, hard wearing and with an impressive fire rating, HD is an ideal multi-use board for high traffic areas in sports stadia such

as Twickenham, which on match days sees 82,000 fans descend on the stadium. Cembrit HD (Heavy Duty) is a Class A2-s2, d0 fire rated high density building board comprising cement, cellulose and mineral fillers. It is ideal for 'sealing' buildings under construction as it is impact resistant and can be left exposed without additional treatment.

sales@cembrit.co.uk

Introducing Diesel Living



Inspired by the industrial and metropolitan world, CTD Architectural Tiles introduces the Diesel Living collection to its growing portfolio. Exploring a variety of materials, colours and unique finishes, Diesel Living combines the iconic urban aesthetic associated with the infamous brand with

trend-led designs to deliver truly eye-catching tile solutions for contemporary spaces. CTD Architectural Tiles specialises in the supply of high quality ceramic tile finishes and tiling solutions across all sectors in the UK commercial specification market.

0800 021 4835 www.ctdarchitecturaltiles.co.uk

Luceco lights Manchester Central Car Park



Manchester Central Convention Complex is an award-winning venue in the heart of Manchester, an iconic city feature for over 130 years. The complex was originally Manchester Central Railway Station, one of the city's main railway terminals. With the capacity to handle large-scale conferences and exhibitions, good car parking and traffic management is of great importance. Luceco has recently supplied over 550 Climate luminaires to relight the parking facilities. With cost effectiveness in mind as well as striving to improve the complex's carbon footprint, ageing T8 fluorescent fittings were removed and replaced with energy efficient 6ft twin output LED luminaires. Luceco was chosen above other lighting manufactures due to the performance of the Climate luminaire and the significant energy savings that could be achieved. Climate Extra is a robust LED IP65 rated luminaire offering an efficacy of 140 Llm/cW with increased performance for improved energy efficiency. Available with integral microwave sensors in on /off or 10 per cent corridor function or batten fit PIR sensors, Climate Extra is also available with DALI drivers and emergency back-up variants including Self-Test.

01952 238100 www.luceco.uk

Osmo protects premium shepherd huts



When Norfolk-based hut builder, The English Shepherds Hut Co, was looking for a product that would enhance the exterior of their bespoke huts, they turned to Osmo UK to provide them with a hardwearing, weather

resistant, and aesthetically pleasing wood finish. Protection of exterior wood is of the upmost importance as the colour can fade after harmful UV rays damage the lining within the wood. With this in mind, The English Shepherds Hut Co applies Osmo UV-Protection-Oil Extra 420 to the huts. This finish delays the greying process by shielding the wood against harmful UV rays, algae and fungal decay.

www.osmouk.com

Resiblock and Huddersfield Uni celebrate



Resiblock and Huddersfield University have recently celebrated the fifth anniversary of successful sealing works of Resiblock '22'. Back in the Spring of 2014 nearly 1,000m² of Clay Block Paving was installed at the University's main

campus. With the university now able to handle 24,000 students per year, concerns were raised over the possibility of sand erosion caused by the trafficking of pedestrians. Resiblock beat off competition thanks to the simple yet durable one coat application of Resiblock '22'. In the five years since the first application, the clay block paving at remains strong and stable, with the sand joints fully intact.

mail@resiblock.com



Decking decisions

Laura Keily of Accsys Group summarises three of the most common materials when planning an outdoor deck and discusses some of the factors that need to be taken into consideration when choosing your preferred route

In January 2019, the Global Decking Market 2018-2022 predicted a compound annual growth rate (CAGR) of over six per cent by 2022. Its projected market growth has been attributed to a variety of influences, from the rise of prefabricated construction solutions, to a change in lifestyle trends and increasing use of outdoor living spaces.

When it comes to planning an outdoor deck, one of the biggest decisions lies in the choice of construction material. Those investing in decking need to take solidity, weight, rot and installation into consideration.

Wood

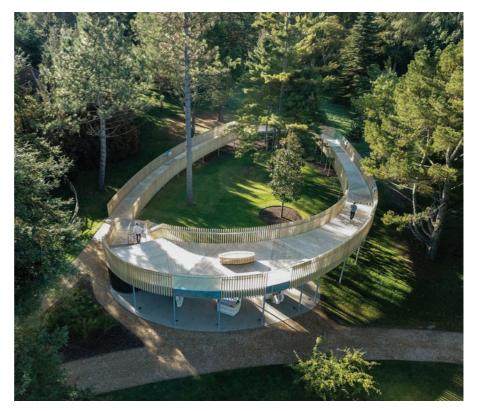
Wood continues to be the most popular choice for decking material. It offers the most natural look of all the materials and has a natural warmth that can't always be achieved with other materials. The additional beauty of a timber deck is that you can completely customise it to your outside space and needs.

Timber decking can often be high-maintenance though; it can require regular painting and staining, and some of the boards may need to be replaced if weather-damaged. Having said this, modified wood can tackle this problem, and can offer a maintenance-free option while offering a natural look.

Broadly speaking, timber is categorised as either softwood, hardwood or modified.

Sourced from broad-leaved trees, hardwoods tend to be slower growing and are usually denser than softwoods. As a result of their condensed and more complex structure, hardwoods generally offer a superior level of strength and durability. On the other hand, softwoods derive from conifers and are more readily available, easily manipulated and develop at a quicker pace, leading to lower cost levels. It is flexible, lighter in weight and less dense than most hardwoods.

For those who don't want to compromise on aesthetics, longevity and performance,



there is an opportunity to get the best of both worlds with a modified wood.

Modified Wood is ranked among the top products on Google's Healthy Materials Portal Portico for good reason. Take chemically modified softwood wood, it has all of the key qualities associated with a hardwood – superior durability, stability and reliability – but is in essence, a softwood sourced from sustainably managed FSC® certified forests. Accoya for example boast outstanding environmental credentials including Platinum Standard status for cradle-to-cradle (C2C) Material Health.

Modified options dramatically increase your decking's lifespan – typically a wooden decking's lifespan is 15-20 years, whereas some modified woods can offer up to a 50-year guarantee.

PICTURED

Cambridge University Gardens
© Smith & Wallwork Engineers

Those investing in decking need to take solidity, weight, rot and installation into consideration

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Wood-composite

Composite wood is a man-made building product made up of a mix of wood fibres, plastics and a small amount of bonding agents. While they often cost more than wood, composite materials offer the promise of great durability as well as minimal maintenance.

Generally speaking, composite materials require less maintenance than wood, which requires the periodic staining, painting and replacing sections that have begun to decay. They also come in a variety of colours and don't need to be painted or stained to match your home's exterior. Those who are environmentally-conscious will be pleased to hear that there are some composite options that use recycled materials.

However, they are often an expensive alternative to timber, and it requires quite a lot of homework. There are a number of varieties and manufacturers, so you need to be sure you are choosing the right option for you. And despite all measures taken to create a natural look, the only way to get the full soughtafter beauty of a wood deck is to use the real thing.

PVCu

When it comes to plastic decking, there is no risk of splintering or rotting and it doesn't require polish, finish or any sort of treatment. It is also one of the most affordable decking materials available on the market, so it doesn't need to be a financial strain.

There are options that are made of 100 per cent recycled plastic – making it a potential material for those who are trying to be eco-friendly – but many plastic options are not sustainable, due to the use of fossil-fuel energy that goes into its production.

Unfortunately, it isn't easy to repair a PVC deck. If a section gets damaged, you'll be compelled to replace the entire deck, which adds to home improvement costs. Heat retention is also a common problem with PVC decks. Under the hot summer sun, they can grow uncomfortably hot to walk on with bare feet. On the other end of the spectrum, plastic has been known to become brittle in the cold weather.

Laura Keily is head of product marketing at Access Group



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Hand-moulded from natural timbers



Millboard decking is virtually indistinguishable from real wood, but outperforms it on every level. Unlike conventional composite boards, Millboard decking resists the elements, requires minimal maintenance, is slip

and stain resistant, and will not rot or warp like timber. The proof of the product's success is its inclusion in some of the most iconic and diverse builds over the past decade. Millboard's portfolio includes the ground-breaking 'Republic' in the East India Docs, Channel 4 Studios and the Floating Pocket Park at London's Garden Club.

www.millboard.co.uk



Designed for use on flat roofs and balconies for the installation of decking and porcelain tiles. The beams are available in three sizes to accommodate different threshold restrictions and span requirements. Fasteners are available to secure the decking or porcelain paving to the aluminium

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Hauraton drainage systems installed at Plant

The Margam Green Energy Biomass Plant is a 40MW electricity power station utilising chipped wood waste as fuel otherwise destined for landfill. When fully operational the project will use around 300,000 tonnes of waste wood from nearby regions. The plant is located on land off Harbour Way (A4241), near Margam in South Wales, in an area designated for commercial and industrial development. Built on a 3.98 hectares site the buildings are surrounded by a 6209m² (66,834ft²) concreted yard plus asphalt access roads and car park.

Hauraton supplied three types of channel to meet the rigorous specifications for surface drainage of the main concreted yard surrounding the plant, weighbridges and car park.

Three sizes of RECYFIX® HICAP® high capacity channels were installed in the yard. 3 metres of HICAP® 1000, 303 metres of HICAP® 2000 and 255 metre of HICAP® 3000. The total water capacity of the HICAP® channels was just over 20,390 litres. By installing this system, the channel runs were kept to a minimum so saving on installation



costs and future maintenance.

42 metres of FASERFIX® SUPER 150 channels with Class F900 ductile iron 20mm gratings were installed around the two weighbridges. The FASERFIX® channel component is made from the company's Fibre Reinforced Concrete with galvanised steel angle housings moulded into the top edges of the channel during production. This

specification is highly resistant to extreme loads and constant dynamic forces and was found to be ideal for the weighbridge application. The FASERFIX® gratings are secured by SIDE-LOCK® patented boltless system. The system allows gratings to be installed and later, removed quickly. Once a grating is positioned over the channel, foot pressure is simply applied. A loud click is then heard which confirms it is securely locked onto the channel. The grating is removed using a large screwdriver inserted into a discreet leverage point. This feature is particularly useful where channels need to be cleaned out at regularly.

Finally, 39 metres of RECYFIX® PRO 100 Type 75mm factory fitted with FIBRETEC® heel-safe gratings were installed in the car park. The FIBRETEC® grating, moulded from a fibre strengthened Polyamide (PA-GF) and allows loadings up to Class C250 (BSEN 1433)

All the RECYFIX® channel components specified for the project are made from 100 per cent recycled Polypropylene (PP) derived from post consumer and post industrial sources.

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