

INFRCLEADING ROOFING EXCELLENCE

UK Roofing Awards
Winners Review
Showcasing the best from 2019

The UK Roofing Awards, which has become one of the most important calendar dates in the industry, celebrate the very best projects across all roofing disciplines, recognising outstanding workmanship, problem solving, health and safety and sustainability.

The 2019 Awards were no exception, demonstrating yet again the great work that roofing contractors and suppliers deliver for their clients. The day showcased some excellent projects, from small domestic projects, to large office refurbishments, and also including some well-known national landmarks.

The winning projects presented in this review serve as a reminder that passion and a commitment is alive and well, so too the number companies that have continued to support the awards, over the years, including SIG Roofing, Headline Sponsor of 2019.

I'm certain that the UK Roofing Awards 2020, which is being supported by Headline Sponsor Radmat Building Services, will again underscore the excellent work that our best contractors and suppliers continually demonstrate, which helps to contribute towards an improved built environment.

James Talman

Chief Executive
The National Federation of Roofing Contractors

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Roofing contractors often struggle to maintain a solid reputation in a difficult marketplace. Confidence from consumers in roofing contractors has dropped and the hard work that roofing businesses put in can be undone in an instant.

This means the work of the NFRC and the Roofing Awards in particular is more relevant and important than ever. Celebrating successes in our industry and demonstrating that NFRC members are the right choice for consumers.

As the UK's largest merchant of pitched, flat and industrial roofing and cladding related products and services, we are delighted to be supporting this amazing event.

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- SIGA Heritage reproducing natural beauty, perfectly
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- FIX-R Flat roofing products designed to include everything from traditional techniques to modern product solutions

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Please visit www.sigroofing.co.uk or @SIGRoofing





ECIC are delighted to support the Roofing Awards as they recognise key achievements and best practice within the roofing sector.

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Big School Kitchen Building Clifton College

The roof of this imposing Grade II listed Victorian kitchen and dining hall needed to be completely renovated and the team were tasked with stripping the 1,000sqm roof covering before replacing it like-for-like with 15,000 dark blue-grey rectangular Cwt y Bugail slates and heather blue Penrhyn arrowhead slates.







At a glance

Project

Big School Kitchen, Clifton College

Roofing Awards 2019

Winner of the Roof Slating category

Location

Bristol

Roof Covering

Welsh Slate; Clay ridge tiles

Client

Clifton College

Roofing Contractor

M. Camilleri & Sons Roofing Ltd

Main Contractor

Kitto Construction Ltd

Architect

Nichols Brown Webber LLP

Awards Sponsor

CUPA PIZZARAS



The 'Big School Kitchen' (BSK) at Clifton College in Bristol is a Grade II listed, three-story dining hall and kitchen, built in 1862. The works involved the refurbishment of the whole building, including the roof, which was essential to protect the historic ceiling beneath. The BSK had not been re-roofed since it was built in 1862 so local planners insisted the roof slates be replaced like for like, with Welsh slate.

Complexity

The 1,000sqm roof covering needed to be stripped and renewed in a phased approach to maintain weather tightness and ensure the ceiling inside was not left exposed to the elements. Roof features included 20 dormers, 100m long open rafters, plus pitches of approximately 60° and significant amounts of lead detailing. As many of the original slates as possible were salvaged and some used to re-roof the lower level 'quad' roof as part of a larger project to update the college refectory facilities, which is located within a Conservation Area. The team also repaired the stone chimneys and replaced all the leadwork and introduced 50mm insulation slabs between the rafters to improve the roof's u-value.

Workmanship

A total of 15,000 of Welsh Cwt y Bugail Dark Blue/Grey rectangular slates and Penrhyn Heather Blue Arrowhead slates were fitted on the duo-pitch roof in the distinctive ornamental pattern of four alternating bands of five rows each, which were twice nailed with copper nails.

The ornamental slates were cut by hand to a design and dimension which exactly matched the existing shaped slates. Prior to new felt and battening, the rafters were treated with preservative spray and restraint straps introduced to prevent future lateral movement.

Before commencing on site, the team sorted, graded and drilled the new slates over several weeks, with two and three-hole crested clay ridge tiles also sourced to match the existing ridge tiles as closely as possible. Since 75m of lead parapet gutters had to be renewed before slating could begin, it was vital that the felt and battening work was finished to the highest standard, in order to suitably protect the building during the leadwork.

Build-up

Welsh Cwt y Bugail Dark Blue/Grey natural slates; Natural Welsh Slate Penrhyn Heather Blue Arrowhead slates; Proctor Roofshield breather membrane; BS 747type 5U heavy duty eaves felt; 50 x 25 JB Red battens; Dreadnought two and three-hole crested clay ridge tiles; Rockwool Flexislab insulation; BLM milled lead.

About M. Camilleri & Sons Roofing

M. Camilleri & Sons Roofing Ltd is a specialist slating and tiling contractor, which offer an award-winning service. Other disciplines offered include all leadwork associated with the roof coverings, cedar shingling and singly ply roofing.

www.camilleri.co.uk



Old Leylands

This beautiful country property has a roof made up of 25 intricate slopes. The original peg and nibbed tiles were in poor condition so the team sourced handmade tiles to match. The team also renewed the lead flashings, gutters, waste and down pipes as well as the timber soffits and fascias.







At a glance

Project

Old Leylands

Roofing Awards 2019

Winner of Roof Tiling category

Location

Crowborough

Roof Covering

Handmade clay plain tiles

Client

Private

Roofing Contractor

Richard Soan Roofing Services

Award Sponsor ECIC



Old Leylands house is a stunning five-bedroom character country home dating from approximately 1914, although once the roofs were stripped, it was discovered that the original part of the house, which had a simple four hipped roof, dating from an earlier period, with many extensions added over the years. With the majority of the existing tiles damaged or missing, new hand-made tiles were chosen to replicate the originals.

Complexity

The roof is made up of 25 intricate slopes and four projections on the south rear elevation, with run-out gutters in between. The west elevation comes off at an acute angle with the roof pitch changing from approximately 45 degrees at the eaves, increasing to a 70-degree mansard towards the top. The original peg and nibbed tiles were spalling, broken or missing, so the client chose Wienerberger's handmade Goxhill clay plain tiles to ensure the new roof was in keeping with the building's character. To meet the client's requirement for eco-friendly insulation appropriate for old buildings, the team laid sheep's wool to a total depth of 300mm over the horizontal ceilings, with a 50mm air gap was left to the underside of the boarding at the sloping ceilings.

Workmanship

The Goxhill tiles were twice nailed with 40mm alloy nails to all perimeters and local areas, and in every fourth course to general areas. At the verge, gable tiles were laid in alternate courses and bedded on to a plain tile under-cloak, while at the valleys, plain valley tiles were laid in every course, with tiling cut to both sides and Code 4 lead saddles laid at the top of valleys. At the hips, bonnet hip tiles were laid to the slopes of equal pitches, bedded with mortar and fixed with 100mm slab nails. Rotten timber facias and boarding on the triangular flat roof were renewed with treated softwood timber, as were the structural wall plate and ceiling joists. A stone mason was employed to replace the stone copings where they had corroded beyond repair, re-bedding and re-pointing the copings as necessary.

Build-up

Wienerberger Goxhill handmade dark chestnut clay plain tiles; Proctor Roofshield vapour permeable membranes; 25x38mm gold battens graded to BS 5534; Therma-fleece sheeps wool.

About Richard Soan Roofing Services

Established in 1988, Richard Soan Roofing Services is a family roofing contractor, undertaking residential, commercial and industrial roofing. It is also Heritage-Approved by the National Federation of Roofing Contractors.

www.richardsoan.co.uk



This 18th century Grade II listed landmark needed a full restoration, so Richardson Roofing were contracted to strip off and renew the Welsh slates and the sheet copper weathering. Copper to the cupola and the flat roofs were retained, with intricate repairs made at the request of the architect.



At a glance

Project
The Green

The Great Pagoda **Roofing Awards 2019**Winner of Heritage Roofing

category

Location

Royal Botanic Gardens **Client**

Royal Botanic Gardens

Roof Contractor

Richardson Roofing **Main Contractor**

Blue Sky Building

ArchitectAustin Smith Lord

Award Sponsor

Klober







Located in Kew Gardens, the Great Pagoda is a Grade I listed 18th century folly that required full restoration, including to the 80 gilded dragons adorning the roofs. The pagoda is crowned with a Cupola roof entirely covered with sheet copper, below which, nine octagonal canopy roofs are covered with natural Welsh slate and sheet copper capping to each of the hips. Directly above these slated roofs is a flat copper roof which can be accessed through glazed doors on each floor. These roofs originally acted as viewing balconies and were surrounded by wooden balustrades.

Complexity

As a significant heritage landmark, Richardson Roofing worked closely with the client, architect and Historic England to ensure the works met the conservation requirements. This meant having to carry out small localised repairs to cracks in the original copper to the flat roofs and cupola, rather than completely renewing the copper as advised by the team. Richardson Roofing also had to source rare 'red lead' used as putty to seal an old copper sheet patch, from a boatbuilder who imported it from Canada. The team also worked with the architect to design a full-size mock-up of a typical hip section upon which the dragons would be located, to test different copper and slate details and decide the configuration of copper seams and flashing details.

Workmanship

The restoration works included the fixing of new gilded dragons to each of the hips, which meant it was necessary to remove and renew the copper sheet hip cappings to allow the introduction of new bracketry. For the dragons to appear to be standing on the roof coverings, these brackets needed a low profile, and so each one was sunk inside the dragon with copper sheet sleeves soldered to each hip capping. The hip cappings were in turn welded into sheet copper soakers, located between each course of slates. Welsh slates from the Cwt Y Bugail quarry were copper nailed directly to the original close boarding. Slates to the hip abutments were hand cut.

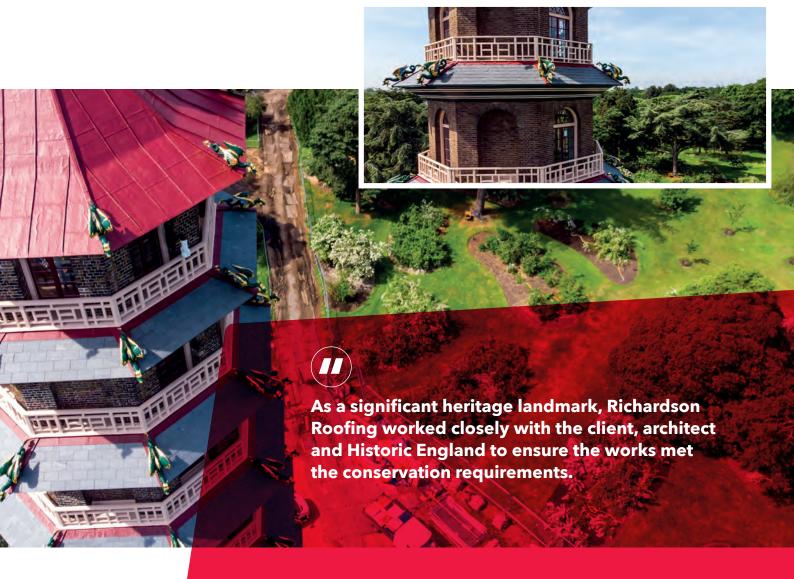
Build-up

Welsh Cwt Y Bugail slates; copper; Clevis-type stainless steel brackets

About Richardson Roofing

Richardson Roofing is a multi-disciplined building envelope commercial industrial roofing contractor, able to take projects from an outline design concept through to a finished installation constructed to the highest standards.

www.richardson-roofing.com



Sheeting and Cladding/Rainscreen Winner No.1 Court at The All England Lawn Tennis Club

The retractable roof was the key feature of this project to make No.1 Court an all-weather tennis arena. Prater installed a 6,500sqm aluminium standing seam metal roofing system plus 3,000sqm of cladding to the outer wall. A phased approach ensured No.1 Court could still host matches.





At a glance

Project

No.1 Court at The All England Lawn Tennis Club

Roofing Awards 2019

Winner of the Sheeting and Cladding/Rainscreen category

Location

Wimbledon

Roof Covering

Aluminium standing seam and rainscreen cladding

Client

The All England Lawn Tennis Club

Roofing Contractor

Prater Ltd

Main Contractor

Sir Robert McAlpine

Cladding Consultant

Thornton Tomasetti

Architect

Grimshaw, KSS Architects

Supplier

BEMO and Bailey

Award Sponsor

Kingspan Insulated Panels



Prater's scope of works was to deliver an extensive roofing package for the iconic No.1 Court at Wimbledon, making it an all-weather tennis arena. The project, which was divided into three phases to enable the venue to carry on functioning, also sought to increase overall seating capacity to 12,4000 by adding two new seating tiers. This required significant supporting structural steel frames.

Working alongside Bailey, BEMO, Sika Sarnafil, Radmat and other key supply chain partners, Prater installed a 6,500sqm BEMO aluminium standing seam metal roofing system along with an extensive waterproof hot melt package. The team also delivered a 3,000sqm cladding package to the outer wall Kingspan façade with Bailey rainscreen cladding, soffits and bullnoses installed to both the inner and outer bowl.

Complexity

To meet the architect's vision for a curved bowl, the complex roof design required detailed analysis of the structural and surface models generated by KSS Architects and Thornton Tomasetti. The steel structure provided a facetted surface, while the design intent required a smooth external roof surface. In order to overcome the varying distances between the structure and external surface, the roof was constructed using the BEMOFlex system, designed and built specifically for this project by BEMO.

Workmanship

Tapered insulation, rooflights, outlets and drainage calculations were manufactured based on the assumptions from one block. A rolling programme was introduced with communication from Mears Plc and Opus paramount to the success of the project by allowing inspections on the original roof to be undertaken the day it was exposed, allowing any changes to design to be implemented immediately.

Build-up

BEMOFlex aluminium standing seam metal roofing system; Bailey rainscreen cladding, soffits and bullnoses.

About Prater

Prater is the UK's leading specialist building envelope contractor, a single source supplier capable of providing complete solutions from design and planning to manufacture and installation.

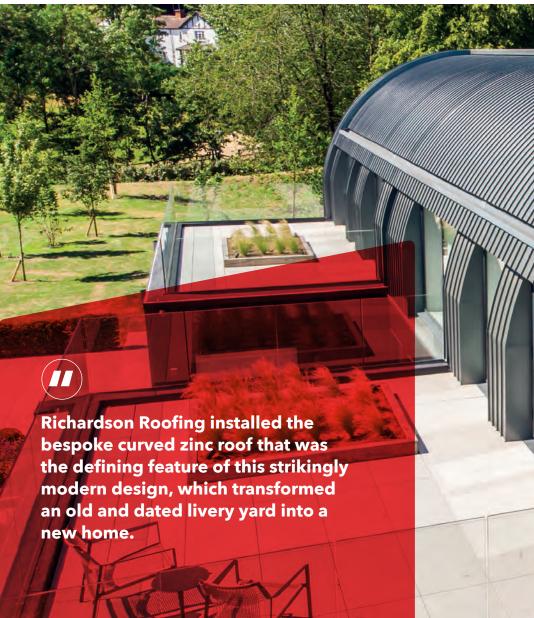
www.prater.co.uk





Richardson Roofing installed the bespoke curved zinc roof that was the defining feature of this strikingly modern design, which transformed an old and dated livery yard into a new home.







At a glance

Project

Ludgate House

Roofing Awards 2019

Winner of the Fully Supported Metal category

Location

Hertfordshire

Roof Covering

Zinc

Client

Private

Roofing Contractor

Richardson Roofing

Main Contractor

Islandbridge Properties

Architect

Clear Architects

Award Sponsor

ALM

Ludgate House is a high-quality development whose design references an existing corrugated 'Dutch' barn building it replaced. This agricultural building was converted into a contemporary home, whose stand-out feature is barreled zinc roof. The building also features timber cladding and soffits positioned on the first floor.

Complexity

Central to the overall design is the floor-to-ceiling curved zinc roof, with standing seam that emulates the corrugated rhythm of the previous barn's external skin.

Workmanship

There were many special bespoke non-standard zinc details to satisfy client requirements. The contractor created the barreled roof on site, demonstrating excellent detailing on all the elements to deliver a standing seam.

Build-up

Linetherm substrate, zinc.

About Richardson Roofing

Richardson Roofing is a multi-disciplined building envelope commercial industrial roofing contractor, able to take projects from an outline design concept through to a finished installation constructed to the highest standards.

www.richardson-roofing.com



The roof of this Grade B1 listed building needed a complete overhaul as part of extensive renovation, including a faithful renewal of the lead detailing on the College's distinctive tower, and the re-use of roof slates to bring the building back to its former glory.



At a glance

Project

McArthur Hall Tower, Methodist College

Roofing Awards 2019
Winner of Lead Roofing

Category

Location

Belfast

Client

Methodist College

Roofing Contractor

D Harkin & Co Roofing

Main Contractor

Woodvale Construction **Architect**

PRP

Award Sponsor ALM



This Grade B1 listed building on the Methodist College Belfast site was designed by Sir Thomas Newenham Deane for girl school boarders and completed in 1891. Following the closure of the building to boarders in 2010, extensive repair and remedial work was required to stabilise and address health and safety risks in order to prolong the life of the building and bring it back to life as a functioning part of the College. The team reused as much of the original building material as possible, including roof slates, gutters and downpipes, with some lead work features to the spire salvaged and fitted back to the original timber finials.

Complexity

The tower and its intricate detailing had been heavily exposed to the elements so that most of the lead was missing. What remained was rippled, which can result in cracking, had sagged and torn away from the nail holes, and was generally in very poor condition.

Workmanship

Experienced heritage craft lead workers painstakingly recreated the original intricate lead designs to the tower.

Build-up

Lead detailing

About D Harkin & Co Roofing

D Harkin & Co Roofing has over 30 years' experience offering roofing services across the UK, Ireland and Northern Ireland. The company specialises in lead and heritage roofing, slating and tiling for both new build and refurbishment projects.

www.dharkinroofing.co.uk



Situated just 10 short metres from the beach at Perranporth in Cornwall, **Progressive Systems had to contend with** unforgiving coastal weather to deliver an attractive, yet robust roof to this luxury development.







At a glance

Project

The Dunes

Roofing Awards 2019

Winner of the Single Ply Roofing category

Location

Perranporth

Roof Covering

Single Ply

Client / Developer

Acorn Blue Property

Roofing Contractor

Progressive Systems

Supplier

Sika

Architect

Stride Treglown

Award Sponsor

EJOT

The Dunes, made up of 36 luxury beachfront properties, features unobstructed views to the Atlantic Ocean and is set amongst three miles of golden sands. The roofing system needed to be able to withstand the difficult coastal conditions and guarantee a long-lasting solution. The project also required waterproofing across a combination of different balconies with complex details. Both the roof and balconies had to be completed to a high standard, while also matching the luxury aesthetic of the build.

Complexity

One of the most prominent design features on the roof was Sarnafil Decor Profiles, which was used on the steeper pitched roofs to mimic a standing seam roof. The team specified Sika Sarnafil S327 18 EL Lead Grey single ply membrane, and wind uplift calculations provided by Sika Sarnafil suggested the product should be mechanically fixed to ensure the roof could resist the formidable weather. The windy conditions together with the pitched roof presented an installation challenge for the team. However, Progressive Systems worked closely with Sika Sarnafil and main contractor Acorn Blue to deliver a roofing system robust enough to endure the demanding weather, while providing a look to match the prestigious coastal location.

Workmanship

Progressive Systems usually use a polyethylene-based vapour control layer as part of the build-up, however, the team specified Sarnavap 5000E SA, a multi-layer self-adhesive vapour control layer to improve the efficiency of installation in the tough weather conditions. Due to its high adhesion strength, it was able to withstand high wind loads, leaving the client with a robust, high-quality roof suitable for its wet and windy location.

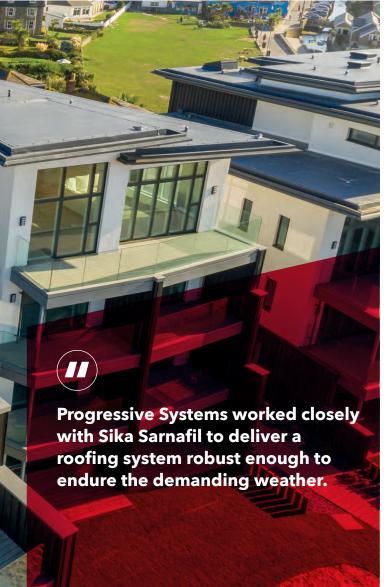
Build-up

Sika Sarnafil S327 18 EL Lead Grey single ply membrane; Sarnafil Decor Profiles, Sarnavap 5000E SA vapour control layer; Sarnartherm insulation.

About Progressive Systems

Established in 1988, Progressive Systems Ltd has become a leading contractor of roofing and cladding systems and their associated fabrications in the South West. The company specialises in single ply, green roofs, flat roofs, waterproofing and sheeting and cladding.

www.progressivesystemsltd.co.uk





Pools on the rooftop terrace of this concrete residential block had been leaking into the basement car park, so Makers Construction had to drain the 148,000 litres of water, plus accumulated silt before installing robust waterproofing.





At a glance

Project

The Water Gardens

Roofing Awards 2019

Winner of Liquid Applied Waterproofing & Hot Melt category

Location

London

Roof Covering

Liquid Applied Waterproofing

Roofing Contractor

Makers Construction

Supplier

Triflex

Project Manager

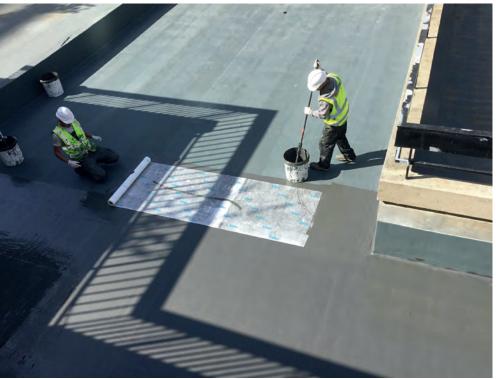
Colliers

Landscape Architect

Refolo

Consulting Engineers

Cundalls



The central features of the Water Gardens, which comprises three 12-story residential blocks and two podium decks over a basement car park, are the four pools and nine planters, constructed with reinforced and precast concrete. However, almost immediately after its completion in 1968, the basement carpark started suffering from leaks and water penetrations and after periodic repairs to prevent damage to the structure and parked vehicles, the car park was finally closed in 2017. Makers Construction were contracted to repair the roof so that the car park could be converted into storage units.

Complexity

The whole structure was in a very poor condition requiring significant remedial work. The biggest challenge were the planters and the pool, which had to be emptied before waterproofing could begin. Unfortunately, the drainage valves to the pools had seized, so the team had to core through each pool base and transfer the water through a series of hosepipes directly into the basement storm system. However, because the pool had not been drained in 50 years, a huge amount of sludge and silt had accumulated, requiring over 200 soil grabs, which needed to be removed via only one access road. The asymmetrical planters, which needed to be protected from damage, also posed a challenge in terms of access, leading to some having to be dug out by hand.

Workmanship

Repairs to the concrete were carried out using Triflex's repair system with the entire area then being coated with a Triflex Pro-Tect system. Triflex, which is cold applied and has fast curing for rapid installation, was chosen because of its versatility and durability. Because the pools and planters posed a huge challenge in any future repairs, the team doubled up the system, which was built-up with a basecoat, fleece and topcoat, to significantly reduce the danger of any future leaks. This meant curing the first installation before carrying out the same process to provide an exceptionally strong membrane.

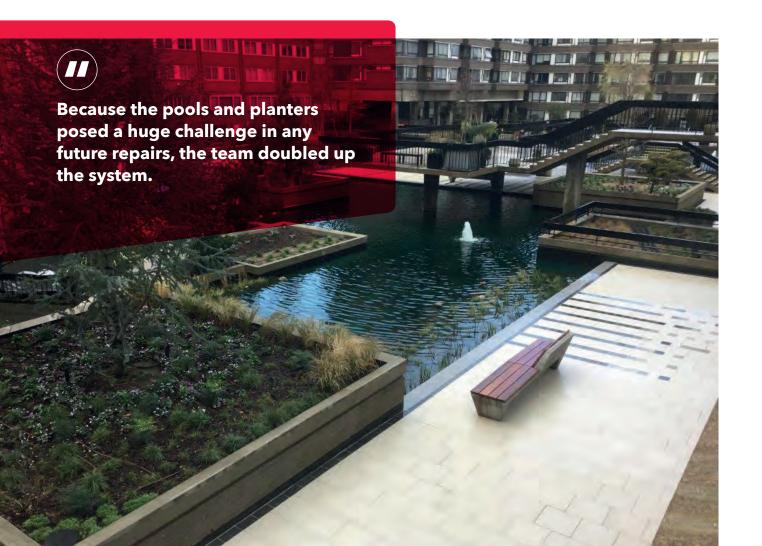
Build-up

Triflex Cryl Paste Mortar, Triflex ProFloor and Triflex Cryl RS 240, Triflex Pro-Tect.

About Makers Construction

Makers operates as both a main contractor and specialist subcontractor, offering concrete repairs, liquid roofing and coatings, structural remediation, movement and expansion joints.

www.makers.biz



North Courtyard, St Paul's Cathedral

Sussex Asphalte recycled 100-year-old asphalt salvaged from a previous project to renew the North Courtyard, which had started leaking water into the Cathedral's workshops and storage facilities. The team overcame numerous changes in height and falls and tight intricate areas to deliver high quality workmanship.





At a glance

Project

North Courtyard, St Paul's Cathedral

Roofing Awards 2019

Winner of Mastic Asphalt category

Location

London

Roof covering

Asphalt

Client

St Paul's Cathedral

Roofing Contractor

Sussex Asphalte



Sussex Asphalte renewed the existing asphalt to the North Courtyard, replacing the 500sqm of existing asphalt, due to water ingress affecting the Cathedral's workshops and storage facilities. By recycling the 100-year-old asphalt, stripped from a previous project on the Stone Gallery, the team saved St Paul's Cathedral, over £11,000 in costs.

Complexity

The project consisted of numerous changes in height and falls, tight intricate areas with many changes in direction to upstands, which made it difficult to remove the existing asphalt. Where previous design details were not adequate, Sussex Asphalte worked with the St Paul's Cathedrals Clerk of The Works, to raise upstand heights and improved falls to ensure there was no ponding water.

Workmanship

Approximately 20 tonnes of asphalt had been saved from the Stone Gallery project, which was stored on site for nine months before being re-melted, sieved and used as the first layer of waterproofing to the North Courtyard. This was then overlaid with 15mm of IKO recreational duty mastic asphalt with added granite. The intricate nature of the courtyard with its numerous protrusions, lights, changes in height and directions, created a challenge to ensure all falls were adequate and no water ponded as this is a busy storage yard for the Cathedral.

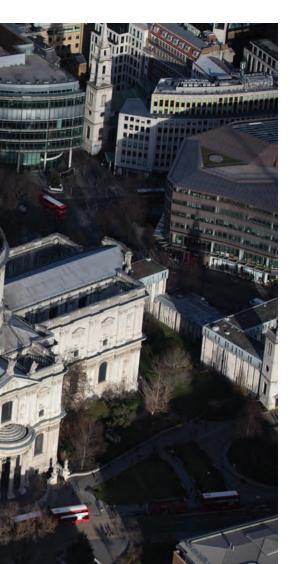
Build-up

In addition to the recycled asphalt, IKO supplied recreational duty mastic asphalt with added granite

About Sussex Asphalte

Established and continuously trading since 1948, Sussex Asphalte is a third-generation family owned professional flat roofing specialist in mastic asphalt, reinforced bitumen membranes (RBM), cold applied liquids and single ply.

www.sussexasphalte.co.uk







Consisting of a series of multi-level octagons, this complex roof needed a long-lasting covering. Following a laborious strip-out, the team had to cut and detail-in multiple mitred hips, along with numerous sumps for outlets, as well as re-clad the building perimeter and five staircases.



At a glance

Project

Unit 800 Aztec West

Roofing Awards 2019

Winner of Reinforced Bitumen Membranes category

Location

Bristol

Client

London & Scottish Property Asset Management

Roofing Contractor

Mitie Tilley Roofing

Main Contractor

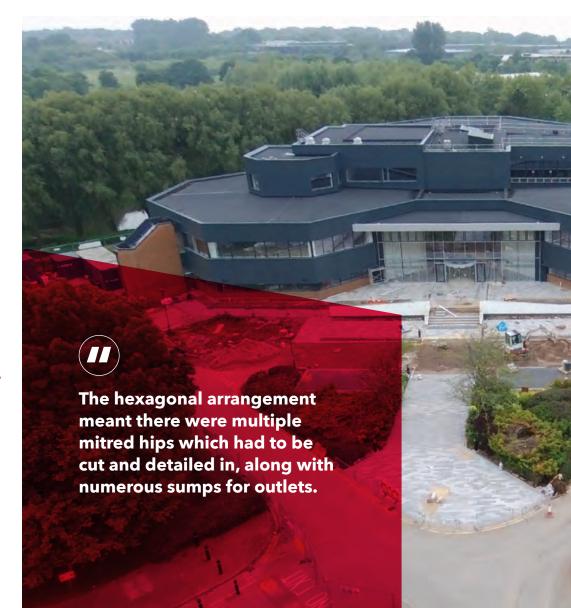
Trident Building Consultancy

Product Suppliers

BMI, Icopal and Kingspan

Award Sponsor

Sika



Unit 800 at Aztec West is a multi- level office block, offering nearly 7,000sqm of lettable office space over three floors. The existing 4,250sqm roof had reached the end of its useable life so required full replacement. A high performance felt membrane was chosen for its hardwearing properties, needed because the roofs would be regularly accessed for maintenance. Mitie Tilley was contracted to carry out the roof works and the external wall cladding.

Complexity

The office block's complicated hexagonal shape and multi-level roof layout presented many logistical problems requiring detailed planning and co-ordination to achieve a high standard of work. The team had to deal with numerous penetrations, including lightening conductor posts, and a laborious strip out of the existing roof, which in places had a build-up of two layers of insulation and cork boarding.

Workmanship

The hexagonal arrangement meant there were multiple mitred hips which had to be cut and detailed in, along with numerous sumps for outlets. Numerous lightning conductor posts that penetrated the roofing membrane, so the team decided to detail these tricky areas with Icopal's liquid coating sprinkled with mineral granules to replicate the rest of the roof.

A tapered scheme also needed to be designed and installed to replace tapered insulation that had been discovered in some areas during the strip-out. Meanwhile, five complicated staircases with leaking brick parapet walls had to be detailed in plywood, before being felted with external GRP trims to form a full encapsulation.

Build-up

- Roof: BMI Icopal Products (Total Torch VPL; 120mm Thermazone; Torch-on insulation boards; Total Torch vapour dispersion layer; and charcoal Thermaweld Firesmart mineral cap sheet.
- Wall cladding: Kingspan Products (KS900 Optimo; 120mm insulated Quadcore panels with a Spectrum Onyx colour).

About Mitie Tilly

An award winning industrial and commercial roofing company, Mitie Tilly is the UK's largest roofing refurbishment contractor with over 30 years of experience.

www.mitie.com







The Flower Bowl intertainment Centre

The owners of this garden centre and leisure venue wanted a scheme with the curved green roof that reflected the local landscape, with a robust roofing system that offers good thermal performance.





Project

The Flower Bowl Entertainment Centre

Roofing Awards 2019

Winner of Green Roofing category

Location

Lancashire

Roof Covering

Green Roof

Client

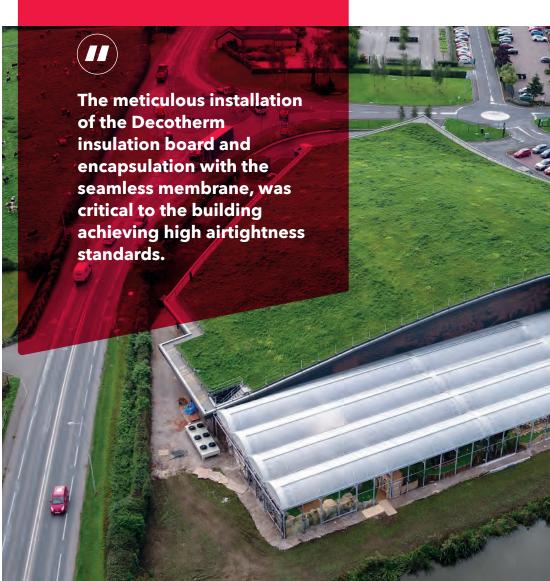
Barton Grange Garden Centre

Roofing Contractor

W Hughes & Son

Product Supplier

Sika



The Flower Bowl Entertainment Centre is a large, new leisure complex, including sports facilities, a cinema and restaurant, which was built next to an existing garden centre. The project is in a semi-rural Lancashire location and the client wanted a green roof to meet its sustainability aspirations, with minimal impact to the surroundings. They therefore chose a curved green roof that would blend into the local landscape, with a robust 'fit-and-forget' system beneath the green roof growing medium that has a good thermal performance.

Complexity

W Hughes & Son worked with the fabricator to design and construct a curved steel deck, which because of construction restraints, was faceted. This and the complex shape of the roof meant there where many interfaces within the structural deck where the fall of the roof had multiple changes in direction. It was critical, therefore, that the team create a smooth substrate for the green roof. For example, in order to follow the roof contours, the Decotherm insulation layer had to be cut into complex shapes in order to achieve the required falls, often in three directions for the same area of the roof

Workmanship

The Flower Bowl Entertainment Centre was designed to high airtightness standards, so this requirement needed to be built into the roof finishes. The meticulous installation of the Decotherm insulation board and encapsulation with the seamless membrane, was critical to the building achieving this aspiration. The W Hughes & Son team also used Sika Liquid Plastics products to enhance the airtightness of other building envelope elements, including the use of S-VAP 5000e SA and Sika sealants on cladding and decking detailing. The multi-directional falls on the curved roof and perimeter guttering required a high skill level, particularly as the insulation board had to be cut at roof level in extremely windy conditions on the exposed site.

Build-up

Sika Liquid Plastics: Decothane root-resistant cold-applied liquid system; S-VAP 500e vapour barrier; Decotherm insulation; Decothane detail coat.

About W Hughes & Son

Established in 1967. W Hughes & Son has over 40 years of experience and has developed into one of the leading installers of high-performance roofing and coating systems in the country.

www.whughes.co.uk





This project involved the conversion of a flat-roofed bay window into an eightsided shingle-pitched tower. Emerton Roofing's operatives demonstrated a multitude of skills, from laying the shingles to handcrafting each piece of soffit from a section of oak.







At a glance

Project

Octagonal Tower

Roofing Awards 2019

Winner of the Small Scale Project (Under £25,000) category

Location

Chelford

Roof covering

Cedar shingles

Client

Private

Roofing Contractor

Emerton Roofing

Supplier

Marley, John Brash, Calder Lead

As part of wider renovation works to a part-timbered Grade II* listed 17th century country estate, the new owners wanted to create a statement by replacing the failing lead flat roof of a two-story bay window into an eight-sided tower roofed in Cedar shingles.

Complexity

This project involved stripping off the bay's existing flat roof and the installation of an octagonal wallplate/ring beam on top of the existing structure. The team then had to cut and fix rafters onto each of the eight sides at an equal pitch to a point, therefore creating the tower, before fixing the fascia, soffits, guttering, insulation and ventilation. The team then had to repair a slate roof to the rear, before finally creating a roof covering on the new tower using Cedar shingles.

Workmanship

Emerton Roofing's operatives demonstrated a multitude of skills. The facing timber was the highest quality European Oak, while the rafters consisted of treated softwood. Each length of timber was precisely measured and cut to provide tight joints, and then fixed using long lasting fixings. Each piece of soffit was a hand-crafted bespoke section of oak, tightly cut and fixed to allow for a seamless change in shape. A combination of blue and red BS 5534 battens was used, over which the Cedar shingles were fixed. The joints were staggered over three courses, each shingle fixed with silicone bronzed nails. At each hip, the tiles received a tight mitre to the centre line, with a gap between the two tiles of less that 10mm.

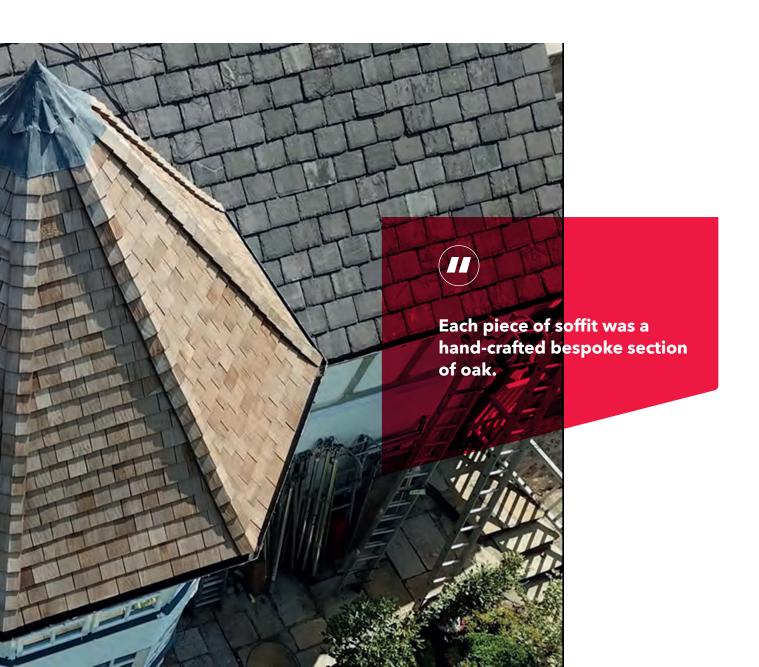
Build-up

Cedar shingles; BS 5534 battens; European Oak fascia and soffits; lead.

About Emerton Roofing

Since being founded in 1996, With its roots going back to 1925, Emerton Roofing demonstrates thorough workmanship in all its projects, which include flat roofs, roofing leadwork, heritage roofs and roof restorations.

www.emertonroof.co.uk



Stephenson Building
Abbey Hill Academy

The roof of this school for 11-16 yearolds with learning difficulties needed to be completely replaced. However, the scale of the project and the need to avoid disrupting classes meant that work could only be carried out during school holidays.







At a glance

Project

Stephenson Building, Abbey Hill Academy

Roofing Awards 2019

Large Scale Project (Over £250,000) category

Location

Stockton-on-Tees

Roof covering

Composite Roof Tile

Client

Abbey Hill Academy

Roofing Contractor

Barclay Roofing

Supplier

IKO Plc

Award Sponsor

Marley



The 30-year-old roof was failing in many areas and there were signs of numerous repairs, some of which had been poorly completed, while other areas had been subject to vandalism. The felt beneath the slates was an old 1F bitumen-based sarking felt, which had seriously deteriorated in areas due to heat and gasses, causing it to break down and cause condensation issues within the building. The structural glazing housed on the ridge line of the roofs was originally installed at the same time as the original roof, so was single- glazed, offering little heat retention.

Complexity

The size and scale of the project meant that it had to be delivered during the summer holidays of 2017 and 2018 so that it would not disturb the pupil's education. Within that time scaffold was erected, work carried out and scaffold dropped ready for the children to return and carry on their education.

Workmanship

Barclay re-roofed the school with IKOslate, a composite tile made with 99% recycled and reengineered materials. Manufactured to look like natural slate, the tile is stronger than natural slate and can be fixed with power tools, enabling the team to install the new roof more quickly.

Build-up

IKOslate, IKO Rubershield Pro-IKO Eaves Protection Strips, IKO Armourvent, IKOflash, Marley Dry Ridge System.

About Barclay Roofing

For 30 years Barclay Roofing has been recognised as one of the north's leading suppliers of high-quality roofing services. Established in 1986, its reputation and consistent growth comes as a result of its commitment to quality and excellent service, as well as its ability to blend cutting edge techniques with traditional craftsmanship.

www.barclayroofing.co.uk



Turkey Street
Flat to Pitched Roofing System

When it came to replacing the flat roof of this residential block, the client chose Langley Structures' Flat to Pitched System in order to significantly extend the lifespan of the roof, while reducing the maintenance cycles.







At a glance

Project

Turkey Street

Roofing Awards 2019

Product Innovation category

Location

London

Roof covering

Flat to Pitched Roofing System

Roofing Contractor

Engie Regeneration

Product Supplier

Langley Structures

Award Sponsor

EagleView

The client was looking to upgrade this residential building for its tenants and was aware that the flat roof was at the end of its lifespan. After considering the options, they chose Langley Structures' Flat to Pitched system which extends the life cycle of the roof as well as reducing the maintenance cycles.

Solution

The Langley Structures Flat-to-Pitched system uses cold rolled steel sections on which profiled metal, clay or slate tiles are fixed, subject to load capacity. The newly created roof is designed to both generate electricity and reduce tenant energy dependency and consumption, by providing a suitable roofscape for the installation of PV panels and battery storage systems within the void.

Workmanship

Before work could start, the contractor Engie Regeneration had to extend five brick party walls upwards to reach the height of the existing flat roof level. In order to do

this, they had to cut back the existing waterproofing and structural deck. Langley Waterproofing Systems' synthetic primer and Parevapo SBS ADH self-adhesive flame free membrane was utilised in line with the NFRC Safe2Torch guidelines. The Langley Structures team inspected the products on site, ensuring that installation was carried out to the specification.

Build-up

Langley Structures' Flat to Pitched Frame System, Langley Waterproofing's synthetic primer and Parevapo SBS ADH

About Langley Structures

Langley Structures helps private and social housing providers to convert existing flat roof structures to new pitched ones, or the erection of new habitable dwellings on top of existing flat roof buildings.

www.langleystructures.co.uk







Radmat uilding Services









Radmat Building Products are delighted to become Headline Sponsors of the Roofing Awards, an event that provides our industry with the opportunity to recognise best practice and excellence in all forms of roofing.

Since the Grenfell Tragedy and subsequent Hackitt report most sectors of the roofing market have and will be impacted by a number of factors, the changes in Building Regulations, far greater scrutiny by building control officers of proposed systems and the demand of insurers and clients to demonstrate compliance for each system through documentation and testing. Never before has our industry for both suppliers and installers seen a faster changing market.

Radmat Building Products welcome this long overdue review and reform. Increasing standards and awareness of the performance of materials herald a new chapter in the industry and the reverberations will be felt for many years to come and those companies not looking to innovate and adapt will struggle to compete.

The Roofing Awards provide us with the opportunity to celebrate and welcome innovation, and never has the flat roof been asked to work so hard or meet so many design challenges. Not only do all roofing systems have to meet the minimum legal requirements of the Building Regulations they are required to do so whilst providing ever greater thermal efficiency without impacting on other construction elements such as door thresholds and upstand heights.

The past decade has also seen increasing demand for all types of roofs to be used in the fight against our reliance

on traditional forms of energy generation by utilizing the vast unencumbered space on the rooftops of the UK and either retrofit or incorporate into new developments photovoltaic panels. And with the cost reducing and performance increasing these will become commonplace on all schemes in the future.

During this time the London Plan has helped drive the increased share of green roofs, either for environmental, aesthetic or amenity benefit. Today over 40% of all UK green roofs are installed in London, with the City of London having $5.82m^2$ of green roof per person. With the establishment of new Mayor Offices around the UK, all of which are looking at the achievements of the London Plan, we can expect increased demand for Green Roof's across the length and breadth of the UK in the years to come.

The latest need is for roofing systems to help manage the issues that climate change, increasing populations and hard landscaping have on rainwater management and subsequent flood risk. Correctly designed and installed Blue Roof's provide a sustainable drainage solution that significantly contributes to the management of rainwater, particularly in cities where land is at a premium.

Radmat Building Products are at the forefront of all of these innovations in roofing, and during 2020 and beyond will be supplying many of these roofing systems on projects for household names such as Amazon, Facebook and Google.

Radmat Building Products brands include:

- ProTherm Quantum; the world's thinnest certified inverted roof insulation
- MedO; biodiverse, sedum and inverted roof solutions
- Geocell; rooftop rainwater attenuation system
- PermaQuik; hot melt monolithic waterproofing
- EshaFlex; Reinforced Bitumen Membranes
- ParaFlex FD; cold applied liquid waterproofing
- EshaPlan; PVC single ply membrane

To find out more

Please visit www.radmat.com













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UK Roofing Awards 2020

Join us again at this glittering afternoon awards ceremony on Friday 1 May at the InterContinental London at the O2.

To find out more and book your place

Visit www.roofingawards.co.uk

Sponsorship opportunities

With around 800 guests attending the UK Roofing Awards 2019 and coverage in the trade press, the event is the perfect way to raise your brand awareness.

To learn more about sponsorship opportunities for 2020.

Contact janelenny@nfrc.co.uk