

finesse

ANNIVERSARY EDITION



Celebrating 160 years

1855 - 2015



Szerelmey

WELCOME

2015 is Szerelmey's 160th anniversary, making it a very special year for us. There are few, if any, companies that have a history as long as ours in the Restoration and New Build fields, and we are proud of our continuing specialism in these areas. A company is as good as its employees, and we have always placed enormous emphasis on the dedication, loyalty and skills of our work force. This has resulted in the best service for our clients, and a family atmosphere within the company.

We will be marking our anniversary with several events including the launch of our new website, and a special evening at the RAC. Our anniversary newsletter Finesse is a bumper edition with a strong restoration focus. Szerelmey was founded as a restoration company and this remains at the heart of our business. In addition we take a look at sustainability, British stone, our Research and Development Department, our RIBA Stirling Prize shortlisted buildings and much more. ■

Q&A



Gordon Verhoef
Chairman

You have worked in the construction industry for 58 years, what are the most significant changes you have seen?

These have been decades of enormous change on so many levels. It could be argued that bar the landmark buildings, London is barely recognisable now from what it was in the 1970s. An appreciable difference is the changing workforce, which has moved from primarily English to largely Continental European. Another is the change in dynamics of the main contractor. They were smaller in size with more emphasis placed on relationships. Today there are fewer, larger and more powerful main contractors, which changes the way business is conducted.

Is there a place for craftsmanship skills in a market place looking increasingly to technology?

Absolutely and it is significant that we are one of very few companies to actively support and encourage these skills. There is a real need for traditional skills, which cannot be replaced by technology, and a danger that, if not supported, they will disappear. We do make full use of technology, but never at the expense of skilled craftsmen.

What are your aspirations for Szerelmey looking to the future?

We will continue to support traditional restoration trades, which have an intrinsic value to the construction industry and should be supported by contractors. Exciting years lie ahead with the ongoing growth of the construction industry. Due to our highly skilled labour force we feel we will remain at the forefront of our market, whilst continuing to emphasise the "people" side of our business and maintaining strong relationships with our clients. ■

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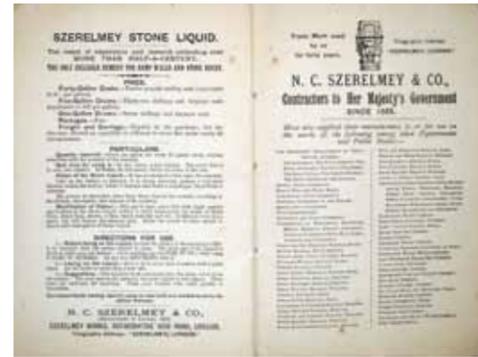
COLONEL NICHOLAS SZERELMEY AND THE ZOPISSA INVENTION

Page top right
Historic Szerelmey literature

Page centre left
Colonel Nicholas Szerelmey

Page centre right
Palace of Westminster

Right page
A selection of historic Szerelmey brochures



RESTORATION SPECIAL

As we celebrate our 160th anniversary, we take a look back at the man who heralded restoration and instilled the spirit of investigation and continual development into the fabric of the company.

The company takes its name from its founder, Charles Nicholas Szerelmey who was born in 1803 in Hungary. He was a talented, charismatic man who travelled widely, spoke a number of languages and spent some years as an engineer serving in the Austrian army. Szerelmey was very interested in archaeology and all things Egyptian and was particularly fascinated by the way their ancient monuments had survived. Today, the company's logo reflects his association with ancient Egypt.

He was also the only Hungarian to fight in the July Revolution in Paris, 1830, and later, while living in Budapest, established a lithography and printing business - he was an illustrator and caricaturist too.

Szerelmey moved to England in 1850 having spent some years researching his restoration treatments and processes. He had discovered the ancient Greeks and Egyptians used a substance they called zopissa to protect their buildings, boats and even for embalming the dead. Zopissa was the pitch scraped from the bottom of ships, which according to the ancients, became indestructible when exposed to salt. Szerelmey refined the process and adopted zopissa as a prefix for his many treatments and inventions. He also went on to design the zopissa board which was a forerunner to modern bonded resin products, and was way ahead of its time, as well as a number of other products.

“The Liquid you supplied us with in May, 1915 and used on the stonework of a Church in Southampton, has proved a great success, and after ten years, the work looks well. It appears to have entirely stopped the decay of the stonework.”

- Geo S Hallum & Sons, Southampton, 10th January, 1925



In 1855, when he established his company, he was approached by the British government to investigate the causes and treatment of decay to the stonework of the Houses of Parliament. Colonel Szerelmey as he was by then, put forward his suggestions and carried out experiments with a treatment he called the “Zopissa Induration Process”. Although recommended by Sir Charles Barry, architect for the Houses of Parliament, changes in government meant Szerelmey's treatment was never completed.

In 1978, Szerelmey was again the company chosen to undertake a feasibility study on the cleaning of the building. This time, a sample was carried out on the terrace overlooking the River Thames and, finally 120 years after the company's initial involvement, the entire Thames facade received the Szerelmey treatment.

Not only was the company founded on the principles of restoration, but significantly, it was also the driving force of Colonel Szerelmey's investigative mind that set the company apart from any rivals. Since its foundation Szerelmey has been a front runner in the design and development of processes, treatments, fixing and installation, thermal engineering and testing. We are one of very few companies to have an extensive in house Design and Technology Department, and are actively involved in ongoing research and development. Although we branched into new build stonework and faience many decades ago, restoration and conservation remains very much at the heart of the business. ■

CRAFTSMANSHIP AND MODERN APPRENTICESHIPS

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Paul Morris Restoration Director

Page left bottom

Richard Smith Head Restorer

Page right top left

George Morris Contracts Supervisor

Page right top right

Richard Smith with apprentice

Page right bottom left

Historic picture of Paul Morris before H&S

Page right bottom right

Specialist restorer at work



Mark Chivers
MD of Szerelmey Restoration

Paul Morris – Restoration Director

SZ: When did you join the company?

PM: I joined in 1981 as an apprentice and was mentored by a number of our top restorers learning all types of restoration techniques.

SZ: So you have been with the company for over 30 years?!

PM: Yes. I moved into management some years ago as a supervisor, moving up to a contracts manager and have recently been fortunate enough to be promoted to a director. There is a real sense of family here, I took my City and Guilds with many of the restorers who are still working with us on the tools, some of whom are training the next generation of apprentices who will hopefully carry on the tradition.

George Ross – Contracts Supervisor

SZ: How old were you when you joined Szerelmey as an apprentice?

GR: I joined when I was 16 years old.

SZ: What was it about the apprenticeship that appealed to you?

GR: I was interested in learning a bespoke trade and an apprenticeship offered the opportunity to learn a vast range of restoration skills. The first project I worked on was Nomura House. I was mentored by Richard Smith throughout my apprenticeship.

SZ: Are you still on the tools?

GR: No, much as I loved working on site, the management side of the business appealed to me more. I was lucky enough to be given the opportunity from Mark Chivers and Paul Morris to move into contracts management. I think having had experience on the tools I have a much better understanding of projects and how sites should be organised.

Richard Smith – Head Restorer

SZ: Richard, you have been with Szerelmey for a while now, when did you join?

RS: I joined in 1976. My dad worked for Szerelmey and I was studying plastering at school. He took a sample of my work to his boss and this resulted in me being sponsored by, and becoming the first restoration apprentice for the company.

SZ: As the Head Restorer, there is not much about restoration you don't know! Do you enjoy training the apprentices?

RS: Yes, I like training a new apprentice who is eager to learn. It makes my job very worthwhile.

SZ: What is it you like about the work?

RS: I like working outdoors and enjoy the variety of work as no two jobs are the same. It is also very rewarding to work as part of a good and dedicated team. ■

RESTORATION SPECIAL

Szerelmey supports apprenticeship programmes to preserve the highly skilled, specialist restoration and conservation professions.

Traditional British restoration skills and crafts are in danger of disappearing altogether, and yet it is these specialist qualities on which the success of British Heritage buildings rely. This country is home to one of the most impressive collections of truly outstanding historic buildings in the world, something to be immensely proud of. In addition a great percentage of them are open to the public with organisations such as the National Trust, English Heritage, Historic England, the Landmark Trust and many more actively supporting and protecting them.

Specialism in restoration and conservation techniques is acquired through years of experience, which is why we support modern apprenticeship schemes. Our goal is to teach people hands on skills using a mentor to nurture their enthusiasm for the trade and to offer full time employment at the end. For Szerelmey there is nothing better than the knowledge that our young specialist restoration and conservation professionals have been taught by our own leading practitioners. In true cyclic fashion and underlining our "family" ethos, our young professionals of today will be the teachers in years to come.



AWARD WINNING STATION

Page left
South Kensington
Underground Station

Page right
Victoria House entrance hall



RESTORATION SPECIAL

South Kensington Underground Station, which was recently completely restored by Szerelmey, has won a Highly Commended in the Heritage Awards.

South Kensington Underground Station was significant in the development of "Albertopolis", a mid-19th century term adopted to describe Prince Albert's vision for the surrounding area to be an education hub promoting science and art. The area was purchased by the Royal Commission for the Exhibition of 1851 with the profits from the Great Exhibition. The Prince's plans were finally realised within several decades of his death, and today this area is noted for being the museum district of London. Forming part of the station is the listed Grade II subway that provides pedestrian access to the Science Museum, Imperial College, Natural History Museum and Victoria and Albert Museum.

The station building is a classic example of Leslie Green's (1875-1908) designs

featuring steel framed buildings - a relatively new construction type at this time. The exterior elevations were clad in non-load bearing ox blood red faience blocks with large semi-circular windows at first floor level. The interior of the large ticket halls were customarily clad in green and white faience tiles.

Szerelmey has worked on many of London's stations including carrying out extensive restoration at South Kensington in 2014. Due to damage, 1800 red faience blocks were removed and the underlying corroded steelwork cleaned and treated. The original faience formed part of the external wall structure. This imposed certain difficulties and each unit had to be removed extremely carefully. Szerelmey designed a system of tying the new faience units to the backing structure using custom designed stainless steel fixings. The replacement units were manufactured and colour-matched by Shaws of Darwen and bedded and repointed by our specialist team. Other units were repaired in situ, and the entire façade was carefully cleaned by hand. ■

ART DECO GLAMOUR



The stunning neoclassical building Victoria House is well known to Szerelmey. We first worked on the building in 2003 before being invited back to continue restoration works in 2014.

Victoria House was designed and built in the 1920s by the architect Charles William Long who was instructed to create something that would, "add to the dignity and beauty of the metropolis". Built in stages, the first part was officially opened in 1926 by the Lord Mayor of London. The building was noted for its halls, which had specially sprung floors for dancing. The South Hall, now called the Ballroom still exists. When the building was completely finished in 1932 it was the largest office block in the country apart from Whitehall and had over 125 miles of electrical wiring.

In 2003 Victoria House, which is Grade II listed, underwent extensive remodelling to turn it into a state-of-the-art contemporary space for commercial, retail and leisure

purposes. At this time Szerelmey carried out extensive cleaning to the external facades of the building, in addition to creating new openings and repairing stonework and lead work, as well as restoring large areas of the interior marble.

More recently Szerelmey have undertaken a complete cleaning package to the main public interior areas including all the reception spaces and staircases. All the floors were hand cleaned and sealed. The team carried out complete interior decoration and painting to the public areas, French polishing all the wood work and polishing all the bronze elements including staircase hand rails. All the interior polished plaster was cleaned and re-waxed, and isolated stone repairs were also carried out. Once all the cleaning and repairs were completed a survey was carried out to assess the existing stone work and structural elements for soundness. In addition isolated asphalt repairs were carried out to the external aspects of the building's balconies. ■

BEFORE AND AFTER

Page left top
Sutherland House
before restoration

Page right image
Installing stone work
at Poundbury

Page left bottom
Sutherland House after
restoration



RESTORATION SPECIAL

It is true that a picture is worth a 1000 words! **Szerelmey undertook extensive cleaning and repair works to this property to return it to its Victorian splendour.**

The magnificent residential brick building on Sutherland Avenue had its exterior completely cleaned, restored and repaired by the Szerelmey Restoration team. The entire façade was carefully cleaned using a gentle nebulous water spray system suitable for historic masonry and the high temperature, steam based DOFF system for tougher stains. Extensive brick repairs and replacements were made and complicated York stone slab replacements made to the cantilevered balcony entailing the use of specialist lifting equipment.

Further repairs were made to the roof, lead coverings were installed to the main cornice and the metal railings repaired. Szerelmey installed an ornamental, metal spiral staircase to the rear, garden elevation and new stone steps to the front entrance. ■

“The true character of this Victorian end of terrace house has now been revealed thanks to the exemplary clean and repair work carried out by Szerelmey.”

~ Chris Sargeson, Architect

A VERY PROPER PUBLIC HOUSE

SZERELMEY CONSERVATION

Szerelmey Conservation are currently involved in two new buildings, in classic traditional style, that are being built in Poundbury, Dorchester. Poundbury is an ongoing development that **reflects HRH Prince of Wales’ vision for urban planning and design.** One of the buildings has been bought by local brewery Hall and Woodhouse and will be the town’s newest public house and hotel, named the **Duchess of Cornwall – rumour has it Prince Charles will be pulling the first pint.**

Pints aside, this project encompassing both large buildings is particularly significant to us. Firstly, Zero C Holdings, a company that strives for sustainable practice, is the main contractor. Zero C have been building low carbon developments for over a decade, and it is a practice that we thoroughly endorse. Secondly, Szerelmey Conservation, in collaboration with nearby Weymouth College, are supporting two graduates through the build, to further their construction experience. Weymouth College and its Dorset Skills Centre, teach traditional skills such as stone masonry, which we naturally feel very strongly about. These are skills that are in danger of disappearing, to enormous detriment, and are irreplaceable even in the light of new stone cutting technology. Both students have graduated from their stone masonry courses and are now benefitting from on site, hands on, construction experience and being mentored by the Szerelmey Conservation team.

The two buildings (buildings 3 and 4) are located on the east side of the grand Queen Mother Square, at the heart of Poundbury. To the west and south are existing residential and commercial properties, while to the north there will be a landmark building with a lantern feature.



All the buildings have been designed to be distinctive and architecturally noteworthy. Buildings 3 and 4 are steel framed with metsec channels and external non-load bearing masonry of varying thickness installed by Szerelmey Conservation. The buildings are overtly classical in style with traditional architectural features including a stone plinth, rusticated low-level ashlar, pilaster columns, Corinthian capitals, decorated cornice, pediment and high level balustrades with Greek style urns. These elements are all intricately detailed with finishing work and some stone detailing being carried out on site by our graduates with their experienced mentors.

Once the building work is finished the paved square will be completed with the unveiling of a bronze statue of the Queen Mother by eminent sculptor Philip Jackson. ■

MAKING WAVES IN WRABNESS

“Given the extraordinary nature and ambition of the House for Essex project, we were very pleased, and relieved, to have the right contractor in Szerelmey to undertake this prestigious project. Their extensive knowledge and experience in this field led to a carefully managed process from the outset, and ensured the result was beyond everyone’s expectation.”

- Mark Robinson, Director of Living Architecture

and are interspersed with smaller triangular tiles, some green and some white. These smaller tiles feature “iconic” type symbols such as hearts, safety pins, tape cassettes, a decorative J, swirls and the Essex shield. In all there are 2300 faience units, custom made by Shaws of Darwen. All of the tiles were individually, hand fixed onto block work using bespoke stainless steel tie-backs and expanding bolts by the Szerelmey specialist team.

In addition to the cladding on the facades, Szerelmey also installed faience tiles to the complicated 2.5 meter high chimney, fixing them to a metal

substructure. The result is a beautiful and highly sculptural, vaguely elliptical structure covered in a geometric pattern of green and white triangular tiles. The chimney alone accounts for 90 faience units.

The house has already been called the “Gingerbread House” by the press, some might call it the “Marmite House”. Certainly it has made waves amongst the local population both on its bold exterior, and on the increased traffic congestion caused by sightseers. For Szerelmey it is a testament to the power of creative thinking and we are delighted to have been involved. ■

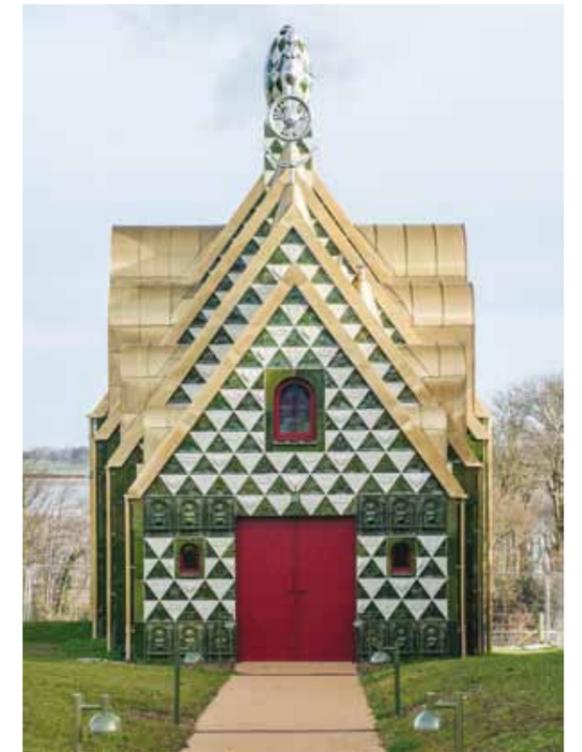
FAIENCE

Not long ago architect Eric Parry’s building One Eagle Place on Piccadilly raised eyebrows due to the exuberance of the faience façade and cornice – all of which Szerelmey were heavily involved in. Now it is happening again, only this time the combination is FAT architects, artist Grayson Perry, a go ahead client, Szerelmey and rural Wrabness.

Faience is a construction material that offers limitless scope in colour, texture and design, so it is a real pleasure to see architects beginning to thoroughly exploit its potential, and planning committees supporting them.

Grayson Perry needs little introduction, and Szerelmey were aware that any project with him on the design team, would be an interesting one. And it was. The House for Essex, as the building has been named, (though some Essex residents would prefer it not to be), is in Perry’s words, a homage to an ordinary girl called Julie. It is part shrine, part fairy tale in concept underlined throughout by Perry’s dry, ironic humour. It is quite possibly one of the most daring and certainly controversial new homes of recent times, and from Szerelmey’s perspective we hope it demonstrates just what can be achieved with faience.

The exterior of the house is entirely clad in faience tiles – a large portion of which feature a stylized design of a naked Julie, leaving nothing to the imagination. She features on the largest of the tiles (450 x 620mm) which are a Victorian pub green



BESPOKE NEW PUBLIC SPACES IN CANARY WHARF

Not just pretty paving ... Szerelmey's hard landscaping team design and install complex paving, steps, ramps, arches, retaining walls, custom stone water features, benches, planters, feature walls and most hard body materials.



HARD LANDSCAPING

Often the perceived simplicity of a feature can belie the complexity of its design, and this is no more applicable than in the case of Adam's Place, Canary Wharf. Szerelmey undertook all the hard landscaping to create this stunning new public space, and facilitated a number of special features that were only made possible through the skills of our in house Design and Technology Department.

A covered, elevated walkway traverses Adam's Place providing pedestrian access to the station shopping mall entrance. The walkway is supported on three giant Y shaped structures that dominate the planning at ground level. The base of each support is incorporated into three substantial water features or 'mirror pools', custom designed by Szerelmey. Two of the water features are 20m long, the third

is 10m, and all are clad in 50mm thick Nero Assoluto granite with 160mm thick bull nose coping. They are designed to produce the effect of a continuous mirror-like sheet of water. The windy location of these features was a great problem in design terms, given the side winds and resulting disruption to the water. Extremely complex engineering went into their final design.

Another key aspect of the area is the addition of five planters clad in terracotta /faience and including state-of-the-art light emitting bricks. The material used to manufacture these has tiny fibre optic strands embedded into it that transmit a flood of light when illuminated from behind. These light bricks were custom made for the client and the planters are totally unique.

In addition Szerelmey undertook all the paving, dock edging, staircase cladding, treads and risers and stone features in the area and all the paving to Fisherman's Walk and the North and South Boardwalks of the new station. ■

A SENSE OF MODERN DAY LUTYENS

Page left
Adam's Place, Canary Wharf

Page right
7-8 St James's Square

EXTERNAL

Architect Eric Parry's recently completed new building at 7-8 St James's Square has all the qualities of an award winning construction. This is an outstanding modern design with more than a little feel of the late, great Edwin Lutyens about it. Szerelmey supplied and installed all the exterior stonework including the imposing sculpture by RA artist Stephen Cox.

In 1913, the architect Edwin Lutyens moved his offices to Apple Tree Yard, which forms part of the new Parry design. It was here that Lutyens worked on his ground breaking designs for New Delhi, the new seat of the British Indian Government. Parry has evoked a palpable sense of Lutyens through his design of 7-8 St James, particularly on the Apple Tree Yard façade. A further interesting parallel is the totemic male sculpture by Stephen Cox that Szerelmey installed on the Apple Tree Yard façade. The sculpture was carved from Charnockite stone found in India. This imposing figural piece weighs five tonnes and measures 2.5m tall x 2m wide. We also installed one of Cox's evocative pieces to the 5th floor level of Parry's building on One Eagle Place, and the two pieces face each other, albeit across a small sea of London buildings.

Szerelmey undertook the external stone cladding of this mixed use building installing Impala black granite from ground to second level and granite window surrounds with additional Cabeça Veada limestone window surrounds and horizontal limestone banding and copings and cladding from floors 2-5. On the south elevation Szerelmey installed 7 columns of purple flamed and brushed porphyry granite to the first floor level. In addition Szerelmey installed a custom designed low Charnockite stone feature wall with inscribed lettering that serves as both a homage to Lutyens and a protective barrier to the light well behind. ■



STONE THE ORIGINAL SUSTAINABLE OPTION

Page left
Portland stone entrance to award winning building 10 New Burlington Street

Page right
St Helen's/Leathersellers Hall faience facade



NATURALLY SOURCED MATERIALS



SUSTAINABLE MATERIAL

Stone is one of the earliest building materials and some of our greatest and most iconic buildings, hundreds of years old, are built from stone. It instantly lends quality and timelessness to a design; it is arguable, the Rolls Royce of building materials. It is also one of the most sustainable materials, a fact that is being increasingly recognised.

There are few, if any, materials that can match stone in durability and longevity, it is completely natural and typically involves almost no chemically driven manufacture; it has no VOCs and is non-toxic. It is recyclable, reusable, has solar reflectance and high thermal mass. The production process is simple; cut it, tool it, install it. A survey by the University of Bath revealed natural stone has a 90% smaller carbon footprint than facing bricks and a 75% smaller carbon footprint than prefabricated concrete. Stone suppliers are, as with the rest of the construction industry, making continuous improvements to the “greenness” of their production, and as

a company Szerelmey strives to work with those using the most sustainable practices.

One such is Albion Stone, located on the Island of Portland, and suppliers of Portland stone, who are listed with the BRE Green Guide. We are currently working with Land Securities and Flanagan Lawrence architects on a high-end residential building that forms part of the ongoing development of Victoria. The exterior will be clad with Fancy Beach Whitbed stone which has a lively and very natural appearance. The architect and client specifically wanted the stone to appear as if just extracted from the ground, and it has therefore undergone the minimum amount of processing possible. This means it is very environmentally friendly and the wastage is dramatically reduced. In addition to being clad with British stone, the building features stunning “flying walls” to the north and south ends, which are also clad in Portland and are 6m wide by 9 storeys high. The structural engineering and fabrication of these, managed by us and installed by us, was extremely complicated given their great weight. Despite their size, however, they appear elegant and weightless. ■

Faience (glazed terracotta) and terracotta are simply clay that has been fired, they come directly from the earth – like stone, they are an “earth” based construction material. Given the entirely natural origins of faience/terracotta, it is surprising that they offer such scope in terms of colour, finish and shape – more so than stone. Szerelmey are a leading specialist in the design, supply and installation of this eco-friendly material.

Clay is relatively easy to extract and does not require intense post-processing, it has the lowest radon rating of all building products and does not release any gaseous compounds. It has excellent thermal and durable qualities and is manufactured to last a life time.

Faience and terracotta can be recycled and crushed for hard core, the plaster moulds used to create individual elements are recycled, crushed and used in the manufacture of plasterboard, and left over clay from any job is recycled and reused. Szerelmey use suppliers in the UK including those that obtain their clay from one of the leading quarries in terms of energy efficiency and carbon management; their clay comes from north and south Devon. Glazes for faience are being designed to fire at lower temperatures and are created from naturally occurring raw materials. In addition, kilns and firing, which is the least “green” part of the process are continually being upgraded to make them more efficient, and are always run fully loaded to maximise their efficiency. Finally, a CNC cutting machine is used which shapes polystyrene to create some of their moulds; the waste from this production method is 100% recycled. ■

BUY BRITISH STONE

Page left
One Eagle Place, Piccadilly

Page right
Kings Cross Public Square

PROMOTING BRITAIN

As specialists in the supply of stone **Szerelmey has excellent connections with a trusted network of quarries and suppliers** all over the world. Despite this there is something particularly special about putting **British stone on the great British buildings of the future. Whenever possible, we will advocate or facilitate the use of British stone, but this does come at a premium.**

Cost underlines virtually every project and unfortunately the bottom line is that there are European and Asian stones that are similar in appearance to some of our British ones, and come at a lower cost. This has been particularly highlighted of late in view of the low euro to GBP exchange rate.

However, on the other side of the coin, buying British, though sometimes more costly on the pocket, has the advantage of reducing the carbon footprint significantly – particularly relevant for the increasing emphasis on sustainability and “green” projects. British stones in all their variety are, written with no bias (!), some of the best in the world and offer tremendous range in aesthetics and scope in function from granites through limestones, sandstones, Yorkstones and slate.

Historically, and still today, certain areas of England are identified by the stone of their buildings, local stone which was accessible for building in times gone by. Cities such as Bath, noted for its mellow Bath stone buildings or the grey slates used in the Lake and Peak Districts for example. London is often associated with Portland stone from the isle of Portland in Dorset. Although approximately 150 miles from the Capital, stone from Portland was shipped straight up the river Thames into the centre of the city, where, it was hauled by donkeys to building sites. Nearly all of London’s most historic buildings utilise British stone including St Paul’s Cathedral (Portland), Buckingham Palace (Portland) and the Palace of Westminster (Bath and Ancaster).



Szerelmey is a great proponent of British stone and has used it on a great many buildings across London and the UK. ■

RIBA REGIONAL AWARD WINNERS

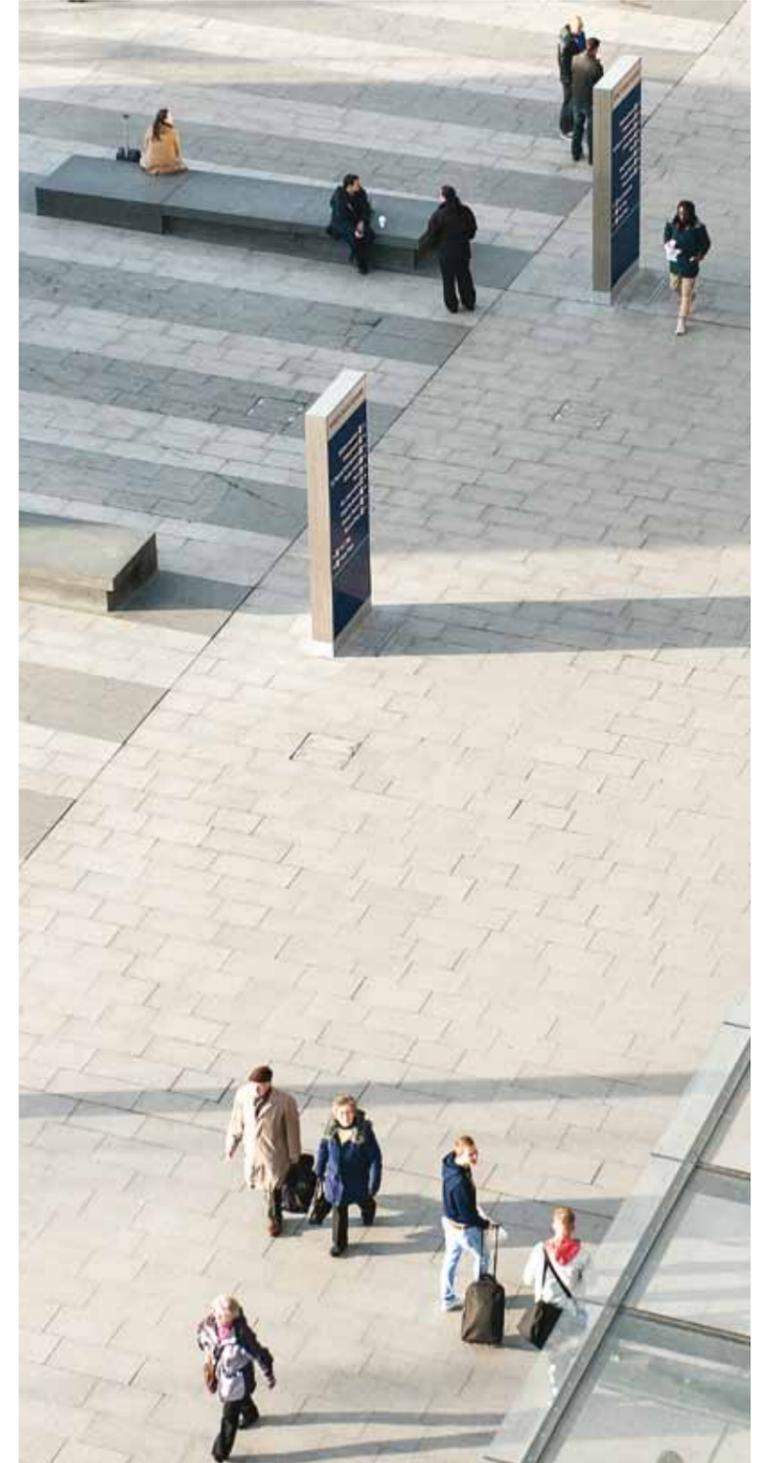
PROMOTING BRITAIN

Szerelmey are delighted to have **three winning buildings included in the RIBA Regional Awards (London region), and of those, two involve British stone or faience.**

These winning buildings were chosen from the nominated shortlist, which included five of our buildings. Winners of Regional and National RIBA Awards will be considered for the most prestigious prize for architecture in the UK, the RIBA Stirling Prize. The winner will be announced in October 2015.

Two of our five shortlisted projects, One Eagle Place (Eric Parry Architects) and 10 New Burlington Street (AHMM) feature both British stone and faience on the facades. The Piccadilly façade of One Eagle Place has an exuberant, multi-coloured faience cornice and white and red faience cladding, with the faience produced by UK based Shaws of Darwen, whose clay is also British sourced. The Jermyn Street/Eagle Place façade of the same building is clad in pristine Portland stone from the Isle of Portland, off the Dorset coast.

We installed faience from the same supplier to the interior and one exterior façade of 10 New Burlington Street (one of the Regional winners), together with Portland stone grand entrances and soffits. Another of our “British” buildings on the shortlist was the Black Cultural Archives designed by Pringle Richards Sharratt, which is clad entirely in Ancaster stone, quarried in Lincolnshire. We also undertook all the hard landscaping and external cladding for Stanton Williams to create a new public square at Kings Cross station, a Regional winner, where we incorporated Crosland Hill Yorkstone, alongside Portuguese and Chinese granite. Our final building, a Regional winner, is the stunning University of Greenwich designed by Heneghan Peng Architects with German Jura limestone cladding. We are very pleased that four out of our five buildings on the shortlist were clad with British materials, and two out of our three winning ones were as well. ■



MARK WALDEN LOOKS BACK

Page centre

Skilled craftsman at work

Page left left

Mark Walden

Page left right

Work in progress Freemasons' Hall

Page right left

Mason working on Freemasons' Hall,

Great Queen's Street

Page right right

Freemasons' Hall, Great Queen's Street



Mark Walden
Design Manager



DESIGN AND TECHNOLOGY

Mark Walden, who leads our Design and Technology Department, has been in the industry for over 30 years with much of this time spent at Szerelmey. As the company celebrates 160 years of business, Mark takes a look back at some of the significant changes in the industry as he has known it.

"Looking back over time, and not just my years in the business, what strikes me most is how despite, massive leaps in technology and progress, there are a number of things that have stayed the same. To me, the best example of this is stone masonry. I, along with many of the employees at Szerelmey, started out as a stone mason, learning the trade hands on. Stone carving was all hand done back then, and a labour intensive process of sweat, blood and tears (only occasionally). Today, there have been huge advances in technology and stone can be cut and carved using machinery and laser programming. But, to achieve high detail and finely carved pieces, there is no better way than at the hand of the skilled craftsmen. And, for hand carving, the tools and process has remained virtually unchanged throughout history.

When I started out as a designer everything was drafted with a pencil and paper, and although I have been dragged into the 21st century and the world of BIM, a piece of paper and a pencil is still my "go to". The whole concept of BIM traces back to 1975 and a paper written by Charles Eastman, "The use of computers instead of drawings in building design". Although the term BIM is not thought to have been



adopted until the early 1990s. A significant development came with AutoCAD, which hit our shelves in 1982 and Revit which came out in 1997, but was not in widespread use until the early 2000s. Szerelmey uses both programmes with most focus on Revit which provides a great interface with other trade contractors.

Health & Safety is one area of huge change - just looking back at historic photographs of men on scaffolding compared to today brings a smile. There is black and white video footage of Szerelmey cleaning St Paul's Cathedral in 1962 available on the British Pathe website that is interesting on two counts. Firstly the lack of safety measures and secondly how some aspects of cleaning and restoration have remained the same. The Construction (Health, Safety and Welfare) Regulations were not actually brought in until 1996.

In terms of restoration and cleaning, historically this involved water and hard graft, and for many projects this is still the best approach and one that we use on fragile buildings. There are also more advanced methods now that are time/labour efficient and suitable for less delicate structures, and there have been developments in terms of poultices and cleaning applications that can deal with tougher stains. Szerelmey was built around the restoration invention of its founder Colonel Szerelmey, a process that was marketed some years later as Szerelmey Stone Liquid. As an indicator of the spread and popularity of this product, there is an archived newspaper advertisement for it in The West Australian, dated January 10th 1900 and distributed by Henry Brooks & Co.

A big change has been the increasing use of "new" materials for building seen particularly in the preponderance of sheet glazing. As a traditional stone person I recognise the need for the stone industry to work hard to keep promoting stone, the original building block. As increasing emphasis is placed on sustainability, stone (and terracotta), once again comes to the fore, a fact people are now realising. Above all else though, in my opinion there just isn't a material that comes close to the elegance and timeless quality of stone, whether in traditional or contemporary design.

In conclusion, despite technology there are still some things that cannot be improved on, the pencil, the skills of the craftsman and stone itself. I wonder what changes will have occurred in another 30 years although by then, I expect to have my feet up!!" ■

CLEVER DRAWING NAILING IT WITH REVIT

Page left
Design team

Page right
Portico of the Royal
Horticultural Society

DESIGN AND TECHNOLOGY

The Szerelmey in house Design and Technology Department lies at the heart of our business, and allows us to facilitate the complex projects we are presented with; **our reputation is based on this level of knowledge.** Recently the design team have moved from using the drafting platform AutoCAD to Revit and Inventor software, and according to Head of Department, Mark Walden, there is no comparison in terms of “clever” drawing.

AutoCAD has been the long staple drafting platform for the architectural/construction industry and is one of the most widely used computer aided design software programs. It was first released in 1982 by Autodesk and has been continually improved and updated since. Revit was purchased by Autodesk in 2002 and has also been subjected to significant upgrading and improvement. The major difference between the two, and the one most appreciated by our Design Team is that AutoCAD was developed to use in 2D, although it can be used in 3D. Revit was actually developed to be used in 3D, which enables a more accurate, higher quality design.

We are able to annotate the model with 2D drafting elements, or take a 2D cross section through a 3D model. It also allows us access to building information from the building model's database. It provides us with an easier interface with other trade contractors particularly with regard to clash detection. Revit enables a host of other functions including scheduling facilities and cost analysis and from a practical perspective these functions have proved invaluable to us, particularly in speeding up the drawing process.

It is the access to Building Information Models or BIM as it is better known that is key to Revit. There are increasing BIM requirements which speed up the process of companies like ours taking



on this software. Significantly, the use of BIM (facilitated through Revit by us) will become part of government legislation by 2016 for all public buildings. So anyone hoping to be involved in any public building project, will need to be up to date in using BIM. This is not just another layer of irritating policy, using BIM and the concept of sharable asset information is held to improve costs, value, carbon performance, efficiency and more collaborative ways of working through the life cycle of a project.

Inventor, also an Autodesk software product, is another program that we have recently adopted and use for developing fixing details. This software allows us to draw details in 3D producing the fabrication detailing and perform static analysis reports such as yield and deflections. ■

How we can help you.

Our Design team is on hand to solve issues/concerns with our clients' designs. This extends from the cladding design to the fixings and fittings for the cladding, the structural build up, thermal engineering, weathering, fire protection and workability of the design. Our early involvement can save time later on in projects.

We make designs work.

RESEARCH & DEVELOPMENT THE “BOFFINS” AT WORK



Our specialist Design and Technology Department sets us apart from many of our contemporaries. We have a continual program of research and development ongoing in relation to specific projects, with our knowledge base extending far beyond bespoke fixings into backing structures, thermal engineering, material testing and sourcing, water feature development and a great deal beside.

We carry out full stone and faience impact testing at our offices and yard, and also manage full material testing including a myriad of tests such as petrographic testing, testing for compressive strengths, flexural strengths and slip resistance. We develop and test all our bespoke fixing systems and are developing ways of fixing to facilitate increasing U values – we carry out extensive thermal engineering in relation to U value requirements driven to making buildings more efficient and increasing our green credentials. We also advise on water management and DPC. The D and T department produce detailed drawings of all relevant aspects of a project and undertake the scheduling for manufacturing.

The sort of R&D we do is not always very glamorous, recently for example we researched into the impact of higher than normal acidity levels in the local environment on durability of a stone façade and the fixings for Southampton University. Through extensive testing and trialling we developed a zinc based coating for the unique fixing systems which has a theoretically proven life span of 60 years. A more tangible recent project in the D&T department has resulted in the stunning new water features in Adam's Place, Canary Wharf, that deflect the strong crosswinds to create a “mirror” surface to the water. (see p14), and on the same project we designed the “light emitting” terracotta bricks installed within the planters.

Virtually all of our projects, given their complex nature, require the design of bespoke fixing and fitting systems, which often extend to the lifting and installation equipment, which we also custom design. One such case, the restoration of the grand entrance of the Royal Horticultural Society, required special structural designed scaffold to accommodate extremely heavy lifting equipment and take account of a restricted weight limit due to a basement below. ■

