

Uniclass
L534:P11

CI/SfB

(90.4)

Y3



Natural Stone



Marshalls

Creating Better Spaces



Contents

Introduction To Marshalls.....	2 - 3
Our Values	4 - 7
INSPIRE	
Inspire Me With Colour.....	8 - 21
Inspire Me With Blends.....	22 - 27
Inspire Me With Natural Colour Variation	28 - 33
Inspire Me With Texture	34 - 39
Inspire Me With Sizes	40 - 45
Inspire Me With Pattern.....	46 -51
SERVICES	
Marshalls Design Team.....	52
Case Studies	53 - 55
Marshalls Standards for Stone	56 - 57
PRODUCTS	
Paving	58 - 65
Setts.....	66 - 69
Kerbs	70 - 71
Steps.....	72 - 73
Tactile.....	74 - 75
Linear Drainage.....	76 - 77
Street Furniture	78 - 81
Specials	82 - 87
MATERIALS	
Yorkstone.....	88 - 93
Granite.....	94 - 99
Cambrian	100 - 101
Stonespar	102 - 103
Porphyry	104 - 107
Specialist Stone.....	108 - 109



Marshalls is a member of the Ethical Trading Initiative (ETI).



Marshalls was founded in the 1890's when Solomon Marshall first quarried and produced Cromwell Yorkstone paving from the hillside at Southowram. Over the years Marshalls has developed significantly to become the country's leading supplier of natural stone as well as commercial hard landscape products, linear drainage and street furniture.

The experience gained from those early days has enabled Marshalls to evolve and adapt to meet customer needs, becoming the most innovative and exciting Stone supplier in the country.

Our technical skills and experience gained through involvement in numerous prestigious schemes in the UK and overseas have earned us the market leader status of which we are proud. Using the heritage and knowledge of those combined years of experience, our staff will be delighted to help guide and advise you, from the very smallest project through to iconic developments like Trafalgar Square.





Our Values

The Marshalls Brand Manifesto

We are all influenced by our environments and the better our environment the better we can be.

Marshalls believe that we all need places that make us feel safer, happier and more sociable. Places to be ourselves, where we can live, play, create and grow. That belief drives us to be the best we can be. To design and produce new products which are better than anything else available. To make them from the best materials we can source and to care about the impact that our company and its products have on our society.

Above all, **our belief fuels the passion on which Marshalls is built.**

To architects, town planners, civil engineers, builders merchants, paving installers and home owners, we pledge a passion to bring to life all that you can imagine. A passion that will enable you to breathe new life into those corners of the landscape where potential lies unfulfilled and unchallenged.

Our passion pervades everything we do. We use our expertise to create integrated landscapes which promote wellbeing to the benefit of everyone. So, whether it's through fairly traded stone, providing products which alleviate floods risks, enabling our business partners to share in our success or creating innovative street furniture that protects us from attack, we proudly strive **to make our world a better place.** One stone, patio, pavement, town square or car park at a time.



LEADERSHIP • EXCELLENCE • TRUST • SUSTAINABILITY

The three pillars of sustainability; economic, environmental and social, continue to provide the focus for our activity. Underpinned by the UNGC principles regarding the environment, labour, human rights and anti-corruption.

Marshalls remains focused on being a successful and profitable business whilst minimising our impact on the environment, looking after our people and communities, striving to be innovative and to respond to market challenges and opportunities and to taking the lead in our sector.

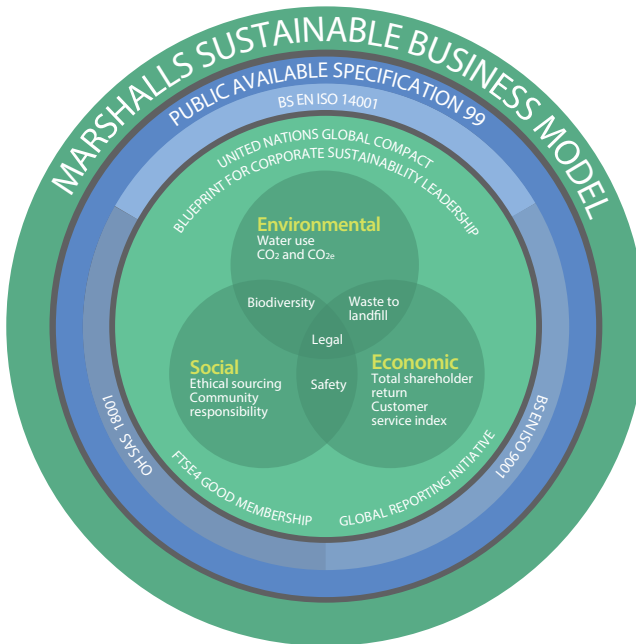
Our purpose as a business is to 'Create Better Spaces' for all of our customers. We do this 'The Marshalls Way' by ensuring that we live our shared values of leadership, excellence, trust and sustainability. These are the values that our business is built on.



Human Rights Information and Education

Marshalls has produced a comprehensive range of booklets regarding its human rights approach and commitments to engage and inform its wide range of stakeholders; including employees, customers, suppliers and NGO partners.

All of these booklets are available in the publications section of the sustainability website and can be accessed at www.marshalls.co.uk/sustainability/publications



Our Values



Martyn Coffey, Marshalls CEO
Driving Business Growth Through Sustainability

I am proud to say without hesitation that Marshalls continues to demonstrate that it is a principled business. We work from micro to macro to strengthen society and build capacity. High level commitment is more than matched throughout the business in all quarters. We go to great lengths to improve, innovate, make progress and report on activity, and we leverage our resources and

influence, ensuring that we act locally in the appropriate manner.

Harnessing our brand values of leadership, trust and sustainability, I have witnessed the entire business work with great integrity to uphold the UNGC pillars of human rights, labour, environment and anti-corruption, and in doing so to drive commercial advantage for our business.

Our business lives and breathes sustainability.

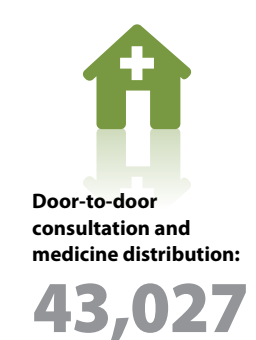
The yearly UNGC Communication on Progress now sits alongside our Annual Report as the main vehicle for sharing our sustainability progress. I hope that if you take the time to read it, you too will see for yourself the actions which so clearly show that sustainability is at the heart of all that we do.



David Bull, Executive Director of UNICEF UK

"I am pleased that we are partnering with Marshalls to tackle the shameful practice of child labour in the quarrying sector in India. This new partnership will enable us to work together for change, so

that children in Rajasthan can be helped to leave behind a life of hard and hazardous work and focus on their educational prospects."



These info-graphics show the impact of Marshalls' work on the ground in Kota. We've worked tirelessly since 2005 with local partners to understand, identify and support issues important to quarry workers in the region.

Moving forward we will work with UNICEF, following the research phase of our partnership, which included living and working conditions of workers & their families across the region, to implement programmes on-the-ground.



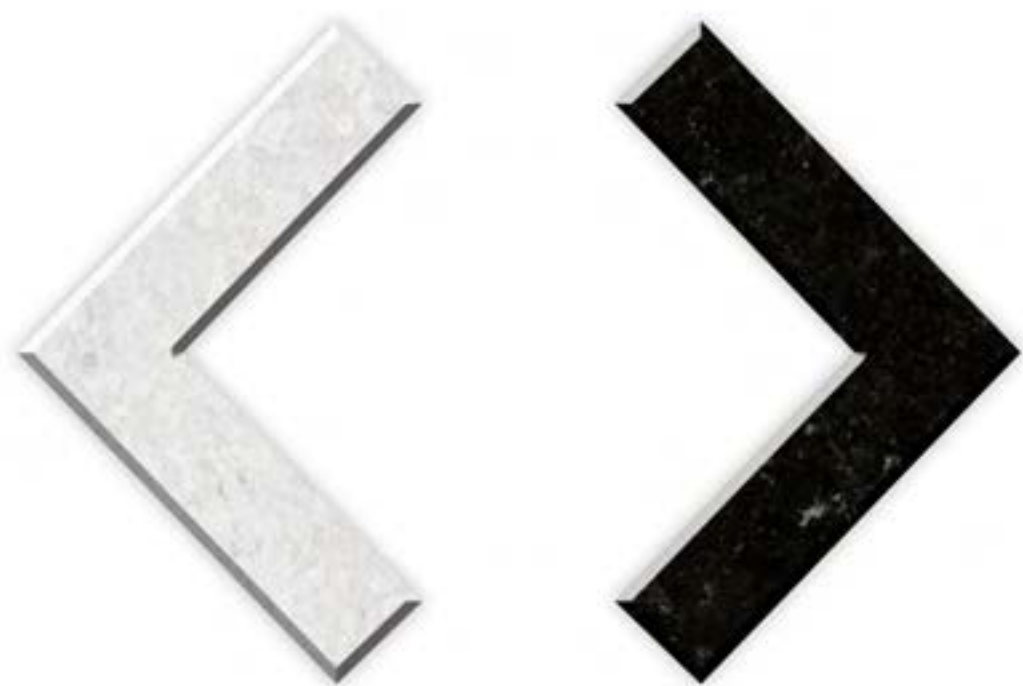
INSPIRE ME WITH COLOUR

DEFINITION: The property possessed by an object of producing different sensations on the eye as a result of the way the object reflects or emits light.

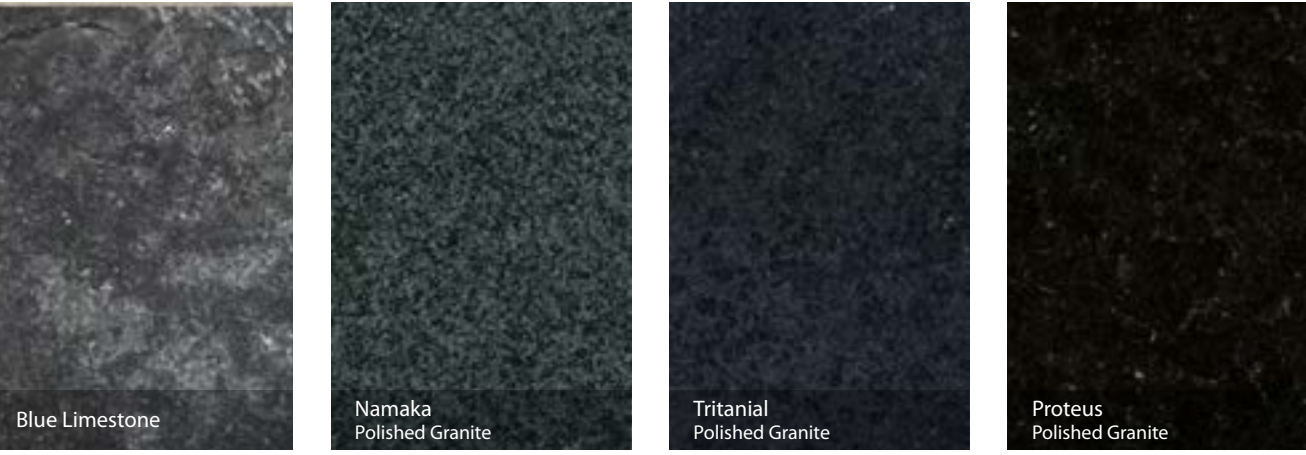
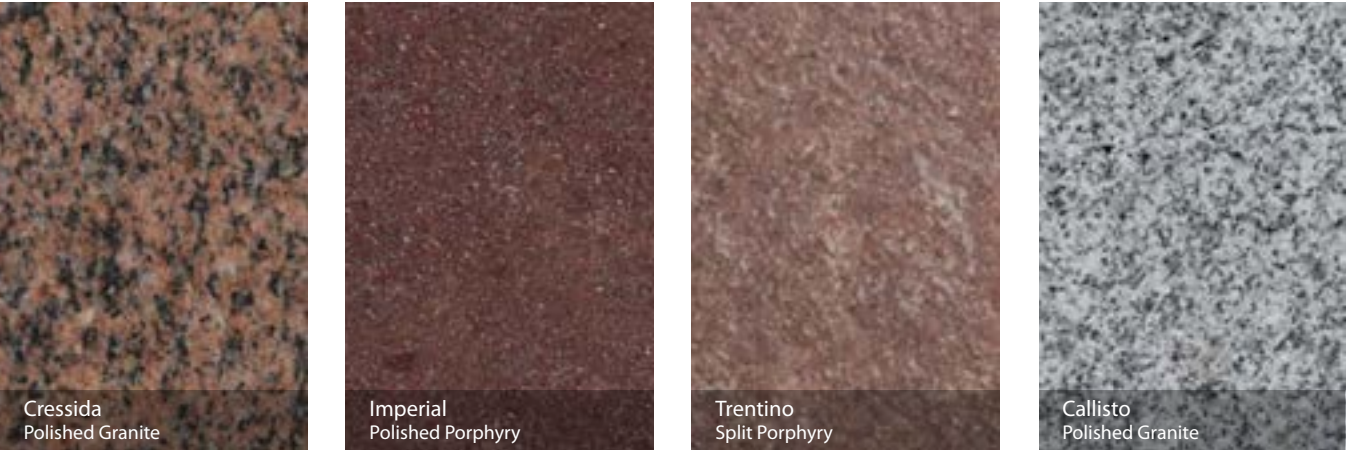
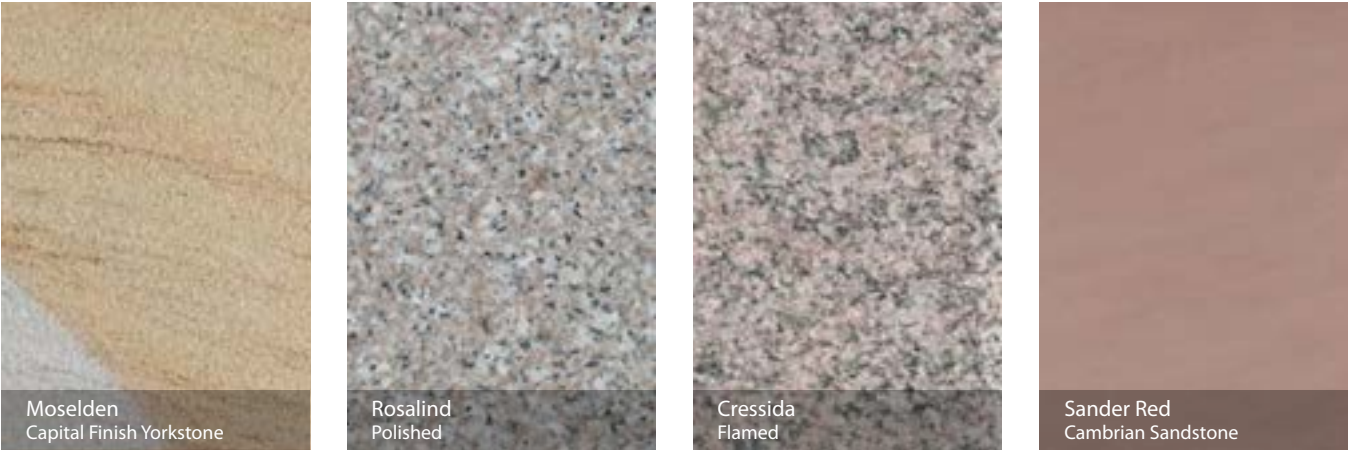
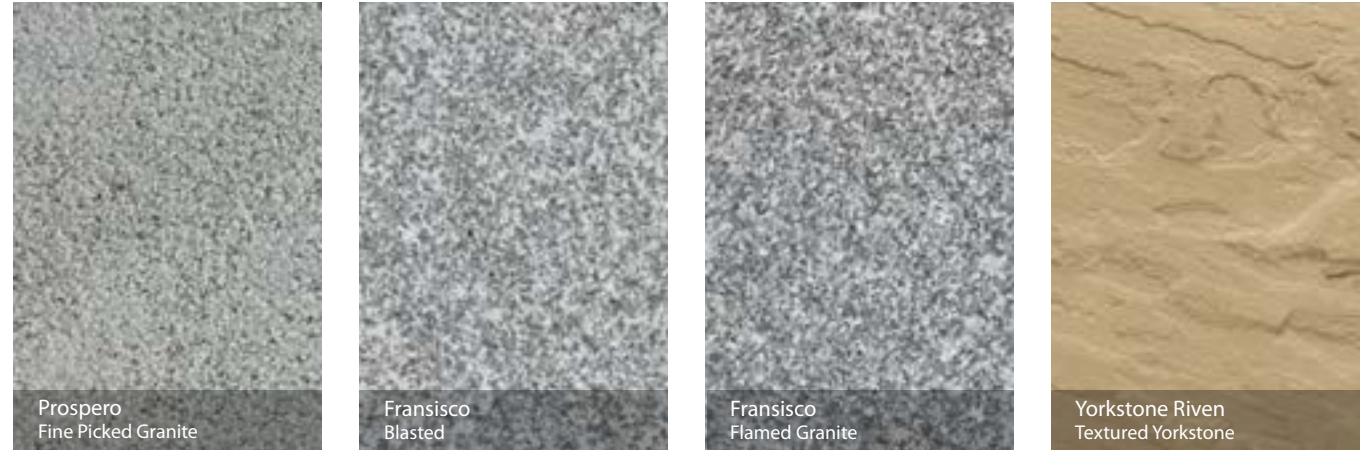
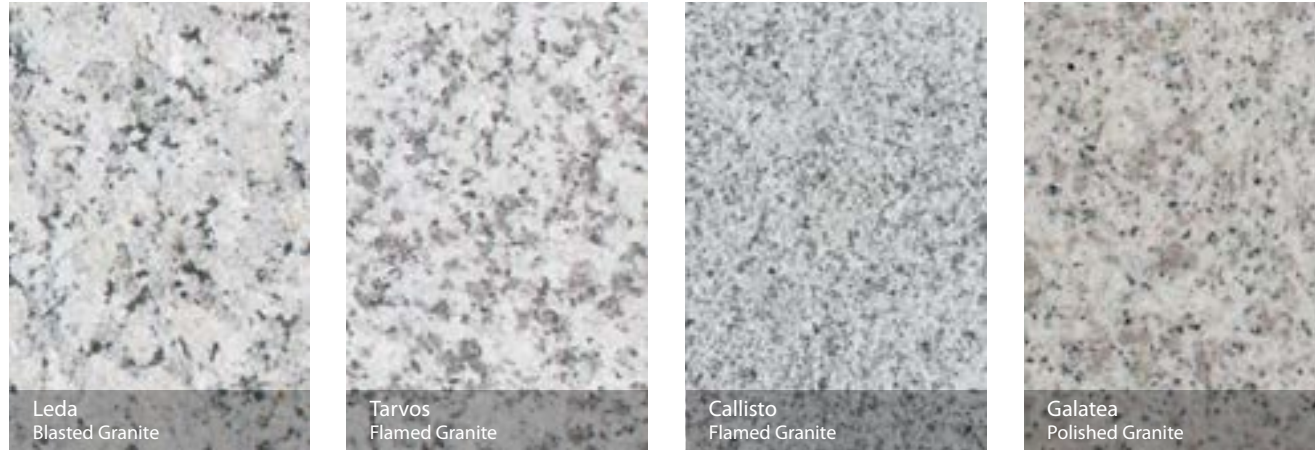
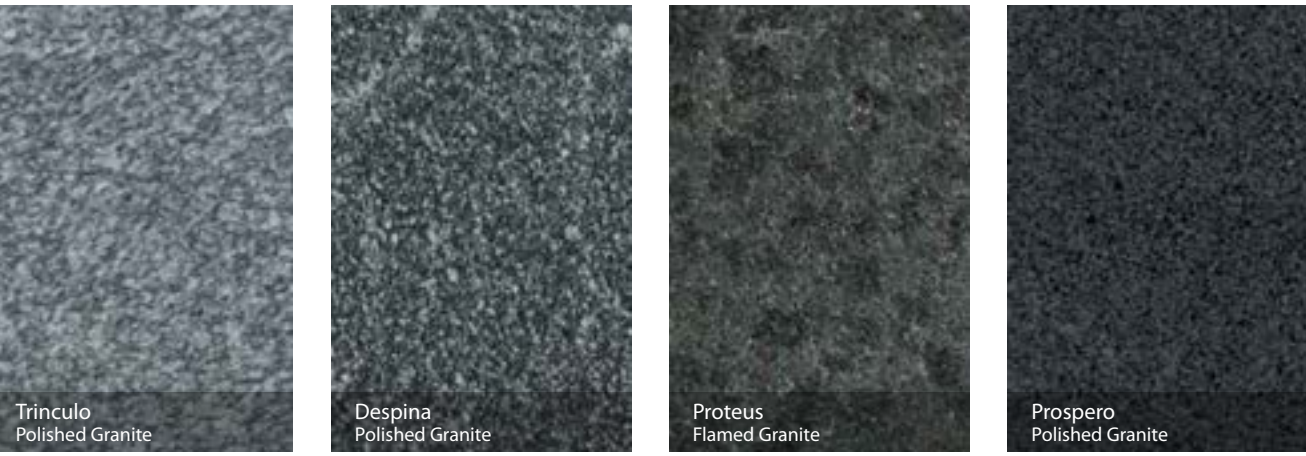
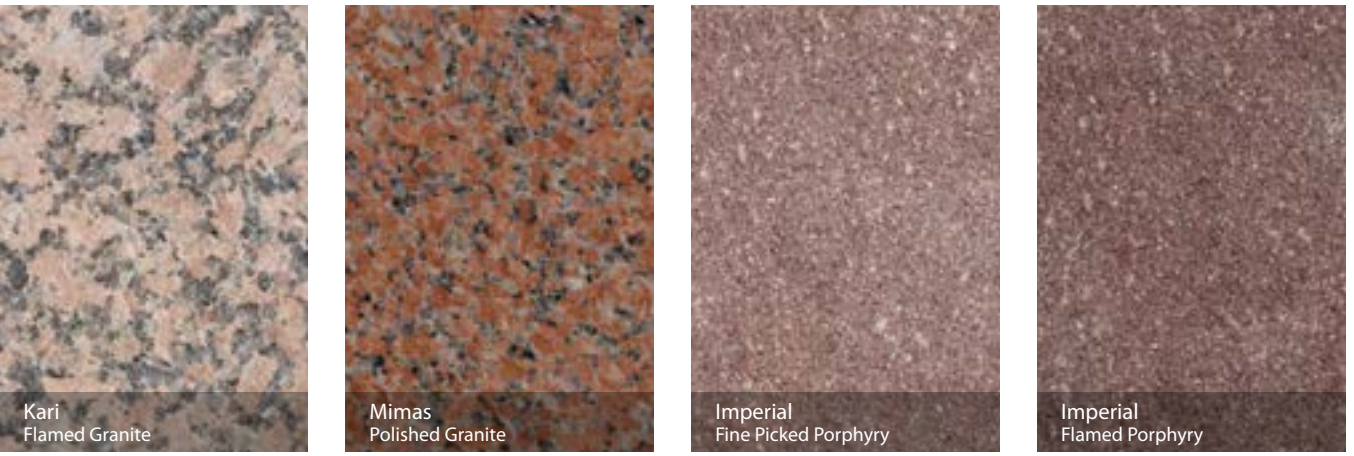
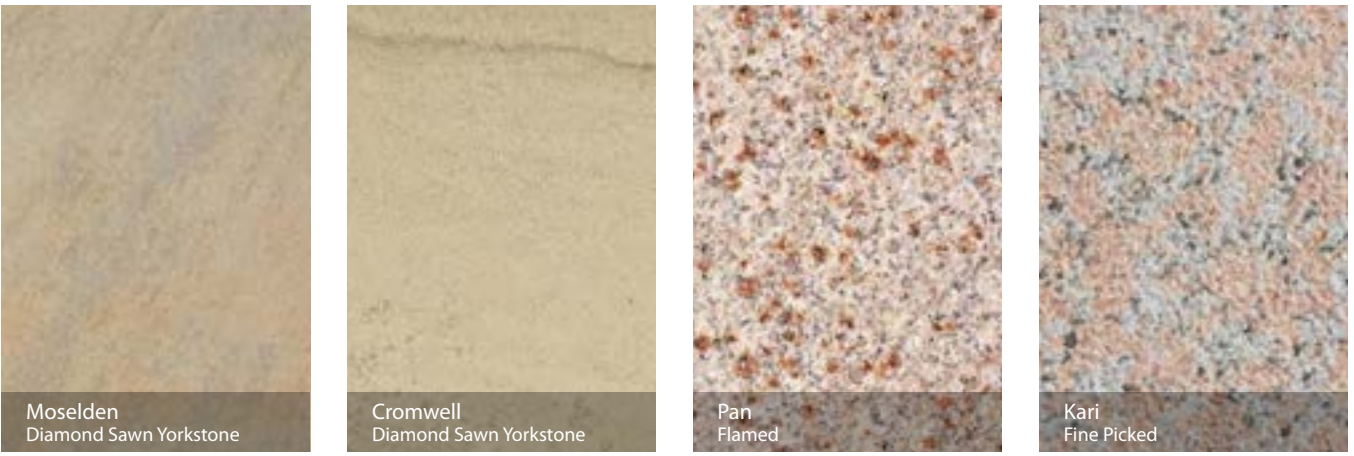
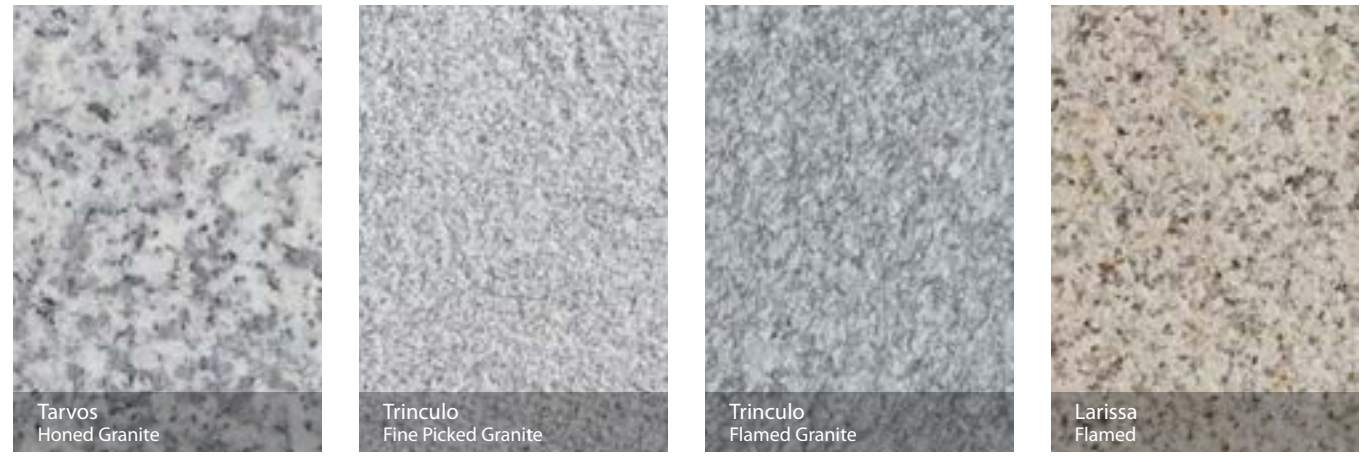
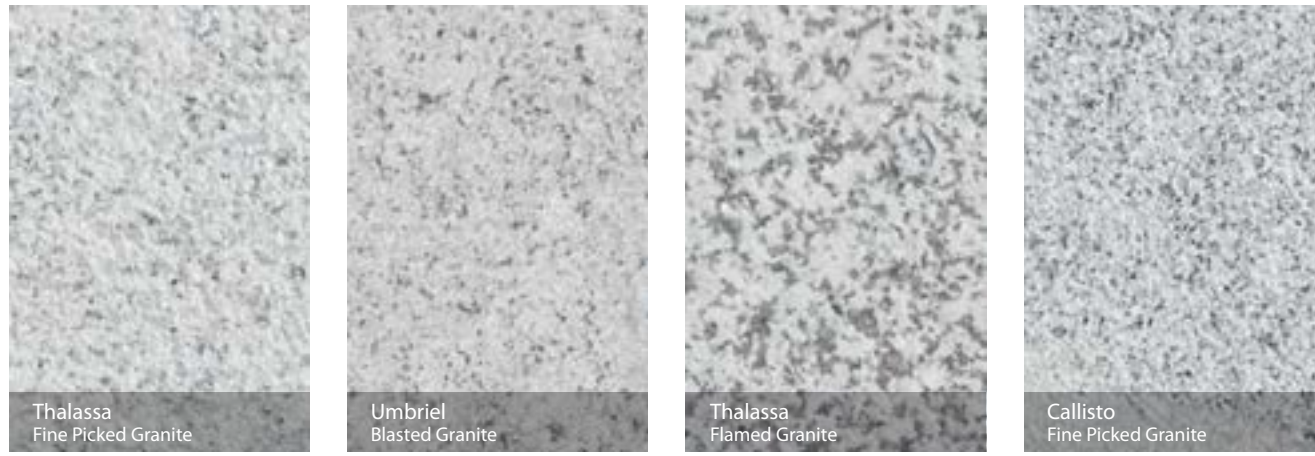
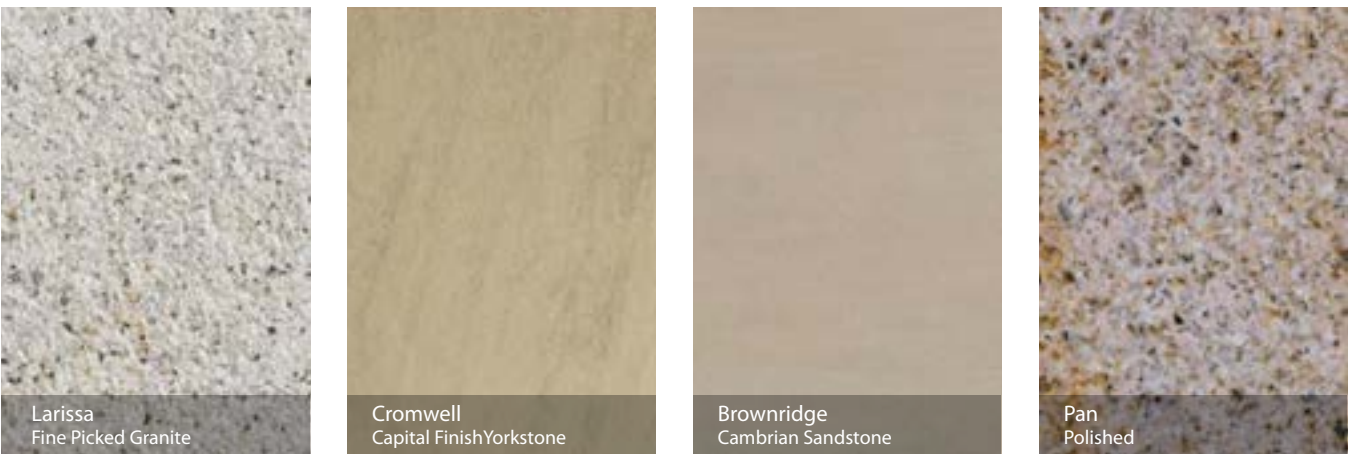
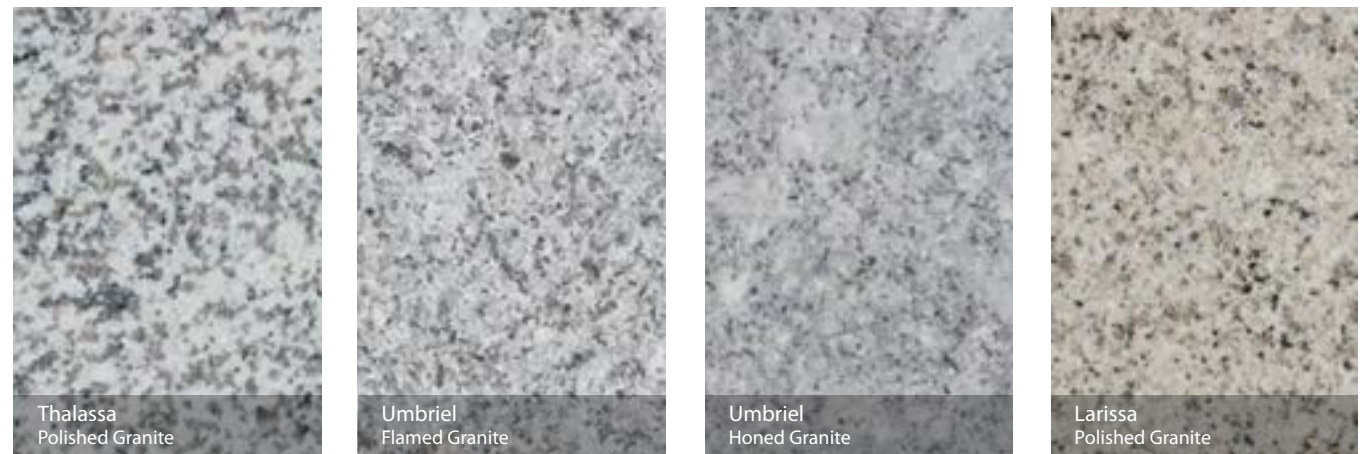
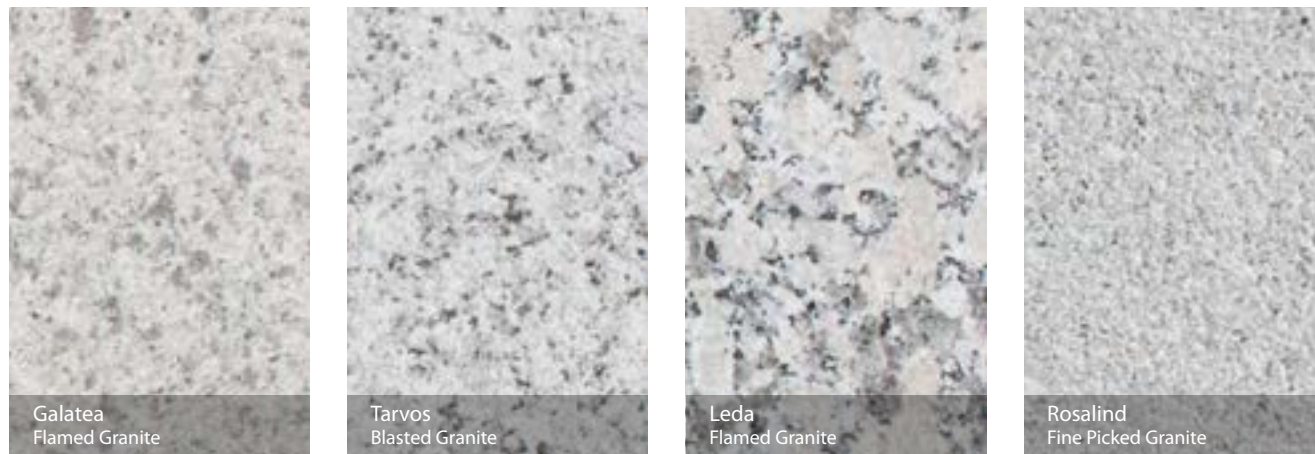
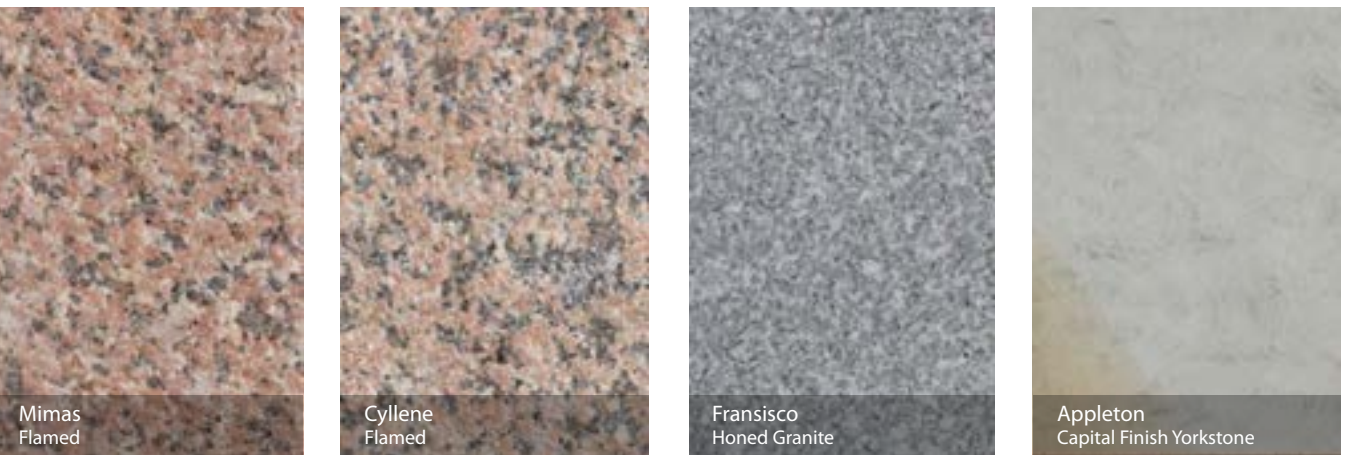
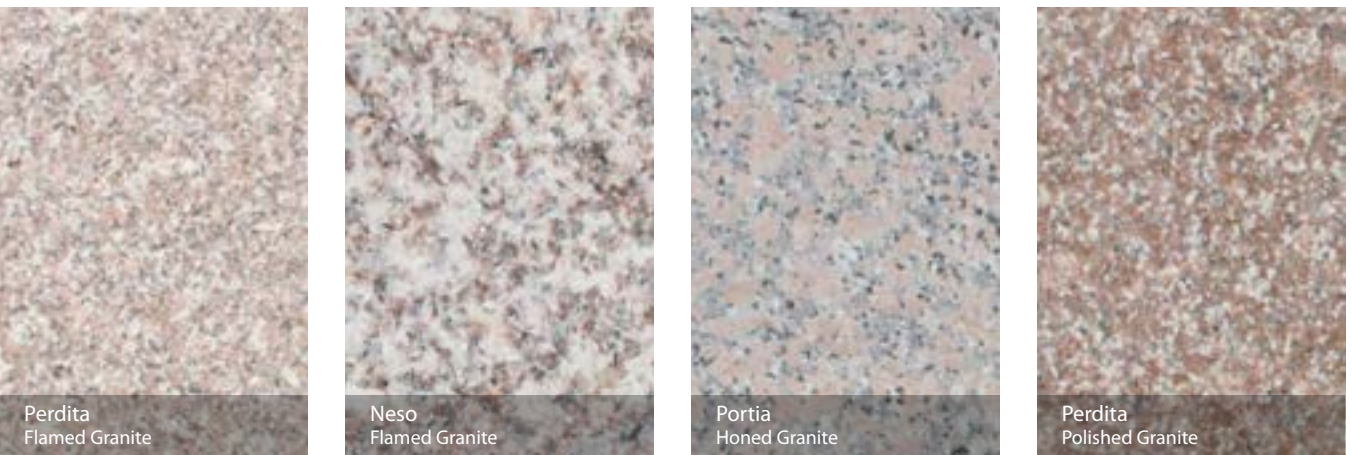
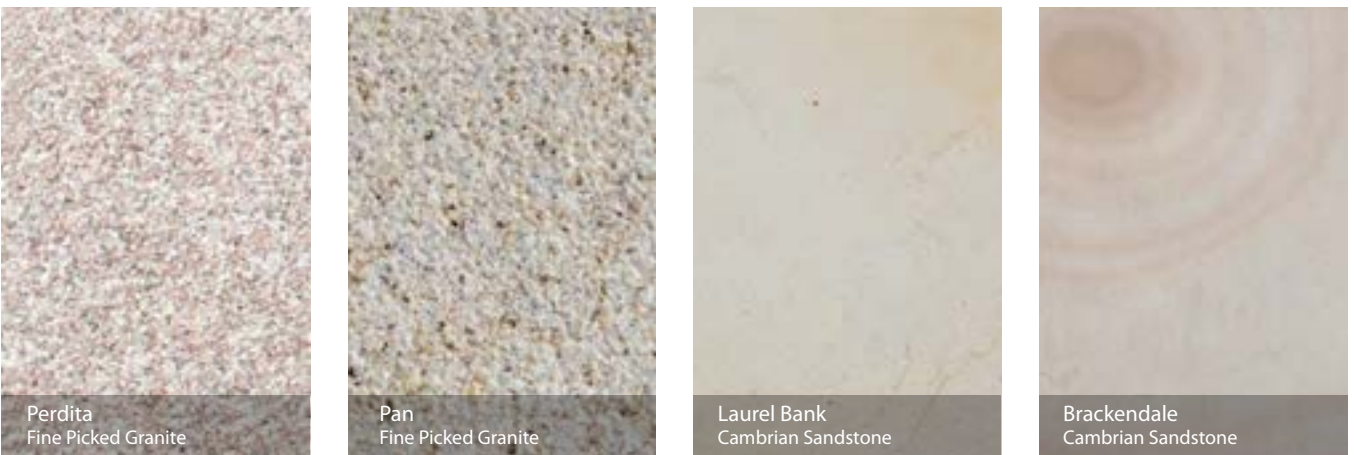
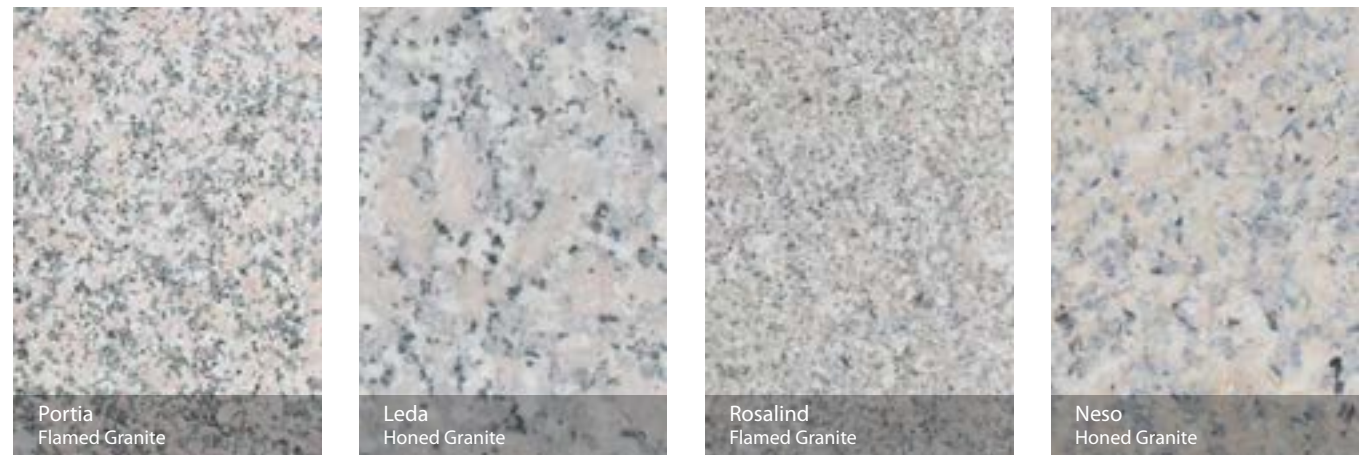


INSPIRE

NATURAL STONE COLLECTION



Inspire Me With Colour



It should be noted that colour variations and markings are characteristic of Natural Stone. Inherent variations cannot be controlled nor the precise shade of stone guaranteed.



The Heartlands world heritage site was the result of the long held ambition to redevelop the site of Robinsons tin mine shaft near Pool in West Cornwall. The site celebrates the 'big three' mined minerals of copper and tin metals and also arsenic which were mined there and also links into other mines around the area at East Pool, King Edward, Geevor, Poldark and Wheal Martyn.

Locally the Red river has been intrinsically linked to the mining industry and even the name comes from the tin mining industry whose waste used to colour the water red. Its water was used both in the separation process of mining and as a source of power. The river has over the past few centuries been diverted, canalised, and altered as required for industry.

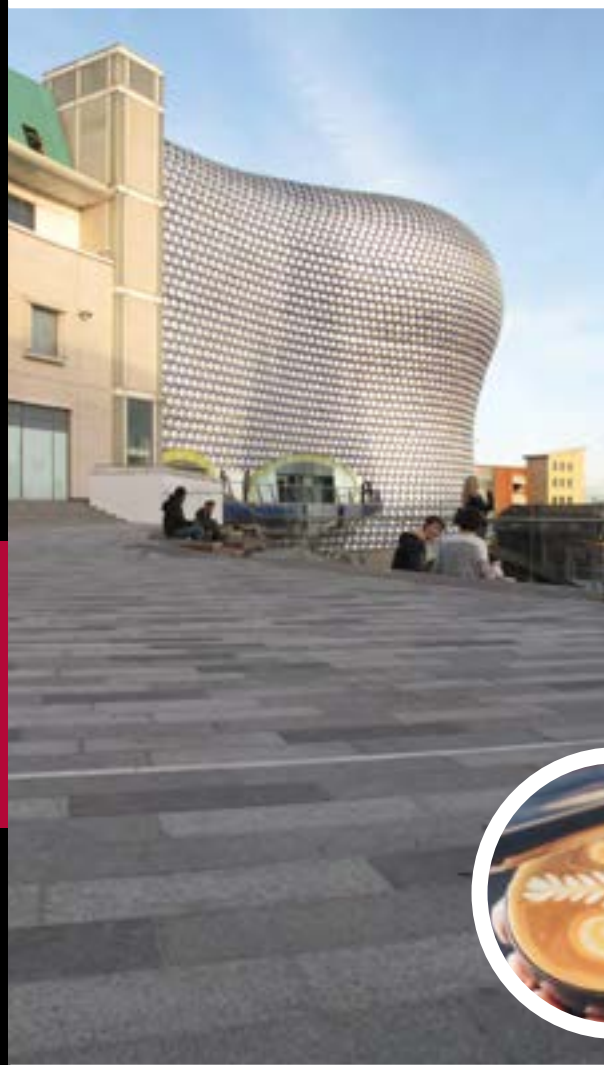


Heartlands, Cornwall

Inspire Me With Colour

The Heartlands red river water feature design by LUC is an acknowledgement of the vital importance of the river to the mining industry. The general geometric shape and angular changes of direction acknowledge the influence that man has had on this river over time.

When choosing materials for this feature the colour choice was obvious. After considering several red options the choice was made to use an specific all red Porphyry. The material is very consistently red and the flame texturing required to make this safe for pedestrians has little effect on the colour. When wet the red stone is further enhanced and becomes a truly red river.



INSPIRE ME WITH **BLENDS**

DEFINITION: The deliberate mixing of different elements to create a positive tapestry of colour and interest across a space.



Inspire Me With Blends

The trend for blending stones together came from looking at older schemes and seeing that often stones had over time been re-used and therefore blended with other materials. The first major scheme of this type was Somerset House late in the last century where a survey of the existing setts led to the blend we see today throughout the square.

Designers are now becoming adept at blending stones together to create innovate and unique palettes which can create either cool or warm spaces or can take a small flavour of the surrounding environment's colours.

Different coloured granite setts are quite commonly blended but we have also seen granite paving being used in the same way. Recently a few schemes have been even more daring by mixing different Yorkstones and even sandstones with Yorkstones. There is even a stone that produces a completely natural blend as it is quarried in its natural form in Italian Porphyry.



Somerset House, London



Burgess Hill



Bull Ring, Birmingham



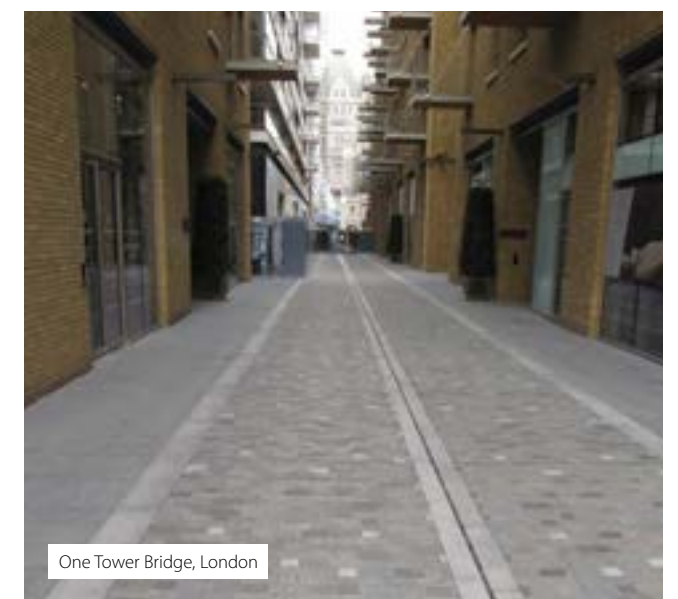
Victoria St, London



Grosvenor Hill, London



Trinity Walk, Wakefield



One Tower Bridge, London



Taff Street, Pontypridd

Inspire Me With Blends

For the regeneration of Taff St, Pontypridd, the designers Capita created two mixes for different areas of the town. A warm blend with reds and pinks for the lower part of the high street and a black, grey and green blend for Market Street and into the famous Peniel Square.

The more central trafficked areas are large deep setts which are generally edged with flush channels instead of upstand kerbs. The footpaths have paving sized slabs continuing the same mixes but making the pedestrian areas quite distinct from the trafficked areas. The very edges of the street at the intersection with the buildings are very small setts in exactly the same mix which allow for the meandering fronts to the buildings and to help take out any variations in levels.



INSPIRE ME WITH NATURAL COLOUR VARIATIONS

DEFINITION: The inclusion of the natural variations of the stone to add character and uniqueness to a landscape.

Inspire Me With Natural Colour Variations

Being instantly recognisable as a natural material is important to designers as stone brings a feeling of value, solidity and quality to a Landscape. One of the ways that stone is identifiable as a natural material is in the many ways it shows its natural variations.

This could be inherent in the minerals that the stone has been formed from. Granite takes its colour from its constituent minerals and when the crystal sizes are large the contrasts become even greater. Most granites have some degree of shade variation especially the beige granites but the variation is relatively minor. Great contrasts are available by using multi coloured stones such as Porphyry which varies from gold through red to purple and brown all in one stone.

More subtle variation can be found with a few inclusions or some light veining but veining can become a much stronger feature of some stones such as quartzites. Banding in stones also varies in intensity and some stones instead of having banding are effectively thought of as two tones such as some Yorkstones.



NATURAL SHADE VARIATION

All stones vary in colour to some degree as they are natural materials, even granites, and help illustrate that this is a natural material.



TWO TONAL

Some stones such as Yorkstone have been altered over time to have two distinctive colours which when cut to size can create lovely curved contrasts.



COLOUR VARIATION

Some stones such as hand split Porphyry vary quite wildly so can contain red, brown, grey and golds.



VEINING

A lot of stones, especially quartzites, can have natural veining within the stone which can add character and cannot be replicated in other materials.



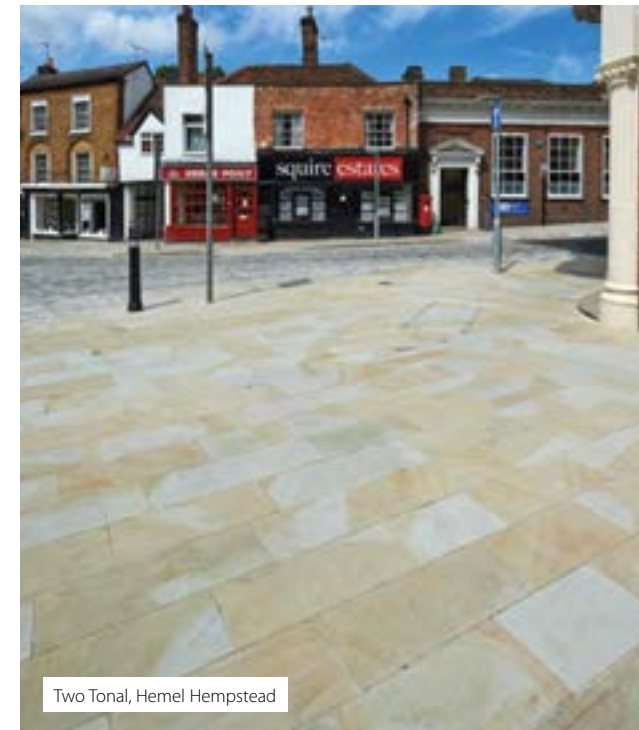
INCLUSIONS

Clusters of minerals can naturally occur in some granites and are not replicable in non natural materials.



MINERAL VARIATION

The minerals within a stone, if large enough, can visually provide a very attractive feature for a scheme.



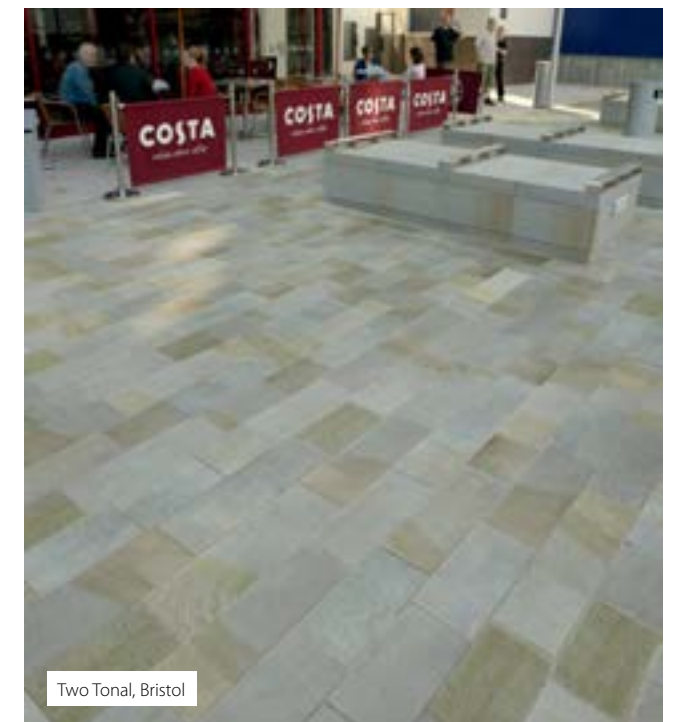
Two Tonal, Hemel Hempstead



Colour Variation, Urmston



Veining & Inclusions, Liverpool



Two Tonal, Bristol



Veining, Bognor Regis



Shade Variation, Bristol



The area immediately outside the South Transept where visitors enter the Minster had been unaltered since the Deansgate traffic which used to thunder past its door had been re-routed in 1991. Since then it had been left as a virtually deserted trunk road without traffic apart from ceremonial occasions. Later a wooden access ramp for disabled visitors had to be added which covered part of the entrance steps and also obscured a good deal of the side of the building.

The colour of any adjacent materials was always going to be a difficult choice as the material had to sympathetic to the light beige limestone Minster but distinct enough not to detract from

the verticality and presence of this historic building. As a beige to grey Yorkstone, Moselden gave a subtle tonal change to highlight the change from horizontal to vertical and with its natural variation throughout this distinction is enhanced.

For the square it was decided to be bold with the pattern of the paving as many people climb the Minster Towers for the view and a monk bond pattern was chosen. This pattern is a linear repeat of two long slabs and then one half size and sets up a series of diagonal jointing lines across the area. To acknowledge the old Deansgate road the carriageway was simulated in smaller sizes.

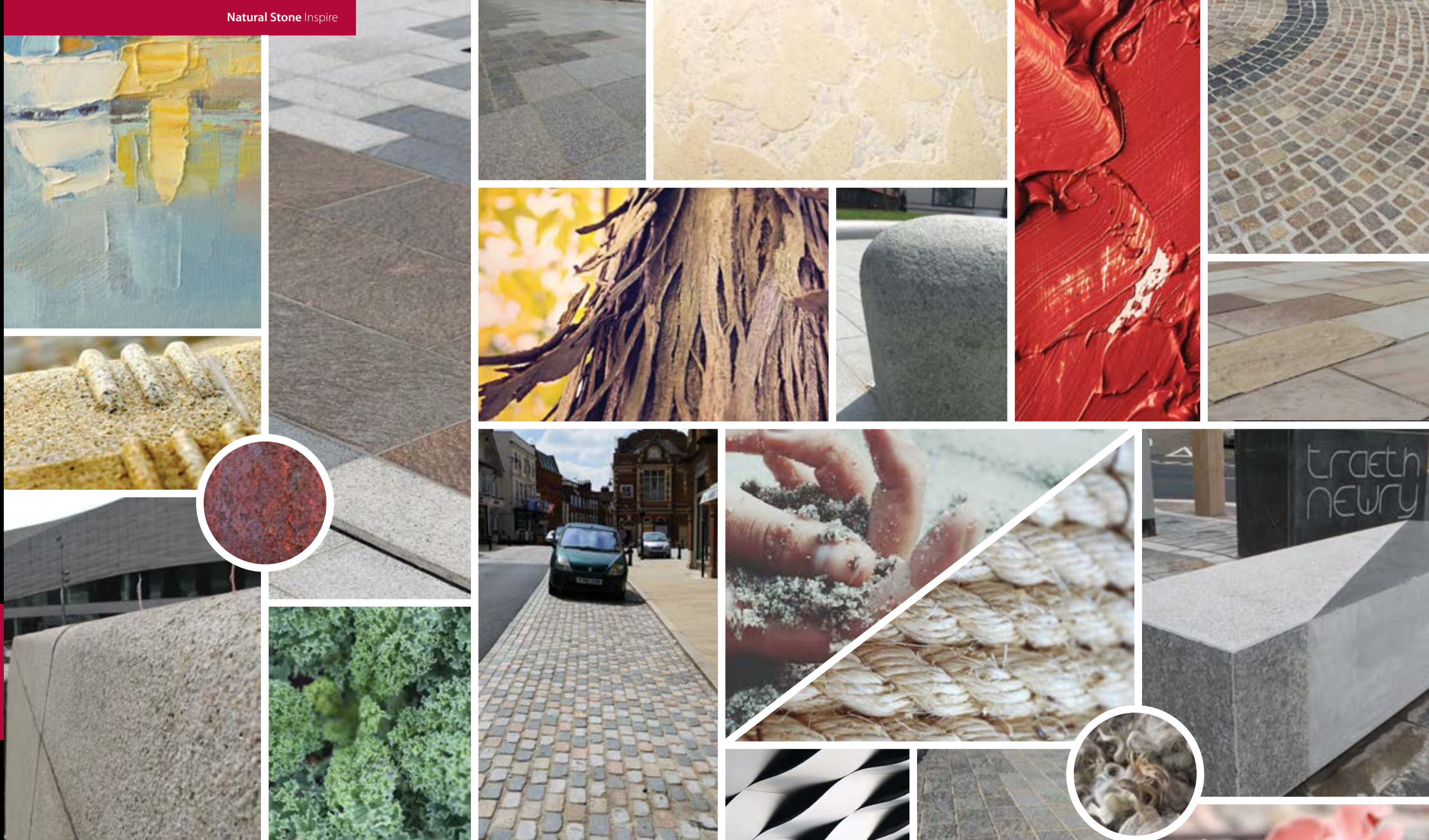


York Minster, York

Inspire Me With Natural Colour Variations

The original access was up a series of light beige Limestone steps which were to be retained but altered to feature in Arroll and Snell's very simple but elegant solution for the disabled access which rotates the ramp within an oval shaped feature thus effectively shortening the length of any ramp required. When the preferred Limestone had quarrying problems due to the large sizes required on the ramp then Moselden was substituted into the feature paving.





INSPIRE ME WITH **TEXTURE**

DEFINITION: The use of an appearance, feel or consistency of a material to create effects or contrasts for a design.



Inspire Me With Texture

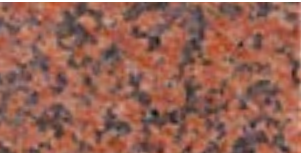
Texture & Colour The texturing of stone affects its colour from the most subtle change in how the light is refracted to the complete change in the colour of stone. The most dramatic changes tend to be on the stronger coloured stones such as blacks and strong reds but then buffs and beiges are significantly altered by flame texturing.

Different textures can also be a way of creating subtle banding within an element without having to try and mould two stones together. Heavier textures could be used to determine walking routes, a warning around ground mounted features such as fountains and rills or even as a deterrent for skateboarders.

Mixing Textures As the natural colour of stone can be altered by the use of texture to create subtle or much more dramatic contrasts, so the general aesthetics of a scheme can be further altered by the mixing of textures within it.

Mixing of textures needs to be done with care as too much can be overwhelming and not enough can make elements of the design appear to be out of place. Textures also need to be compatible in terms of alignment so that they do not create trip hazards in the floor or snag people on more vertical elements.

GRANITE DIFFERENT FINISHES



Polished



Polished



Polished



Polished



Flamed



Flamed



Flamed



Flamed



Fine Picked



Fine Picked



Fine Picked



Fine Picked

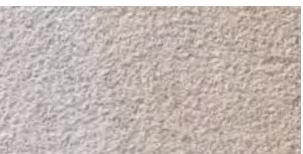
YORKSTONE DIFFERENT FINISHES



Diamond Sawn



Crested



Capital



Flamed

SANDSTONE DIFFERENT FINISHES



Blasted



Flamed



Blasted & Brushed



Flamed & Brushed



Clear Blasted & Brushed



Flamed, Clear Blast & Brushed



Flamed & Shot Blasted



Polished & Shot Blasted



Ribbed & Flamed



Polished & Fine Picked



Tumbled



Cropped



How do you harmonise new stone onto a scheme when you are using a lot of recycled materials of varied colours and finishes? Kinnear Landscape Architects' solution was to combine two very aesthetically different two toned yorkstones and use texture to link the two paving areas.

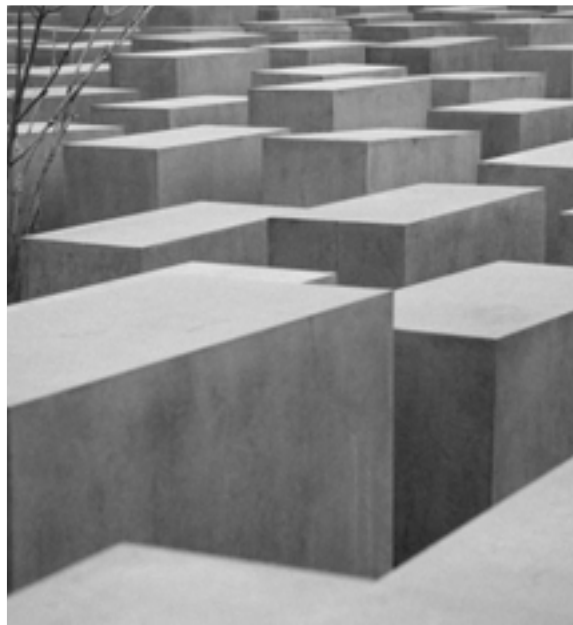
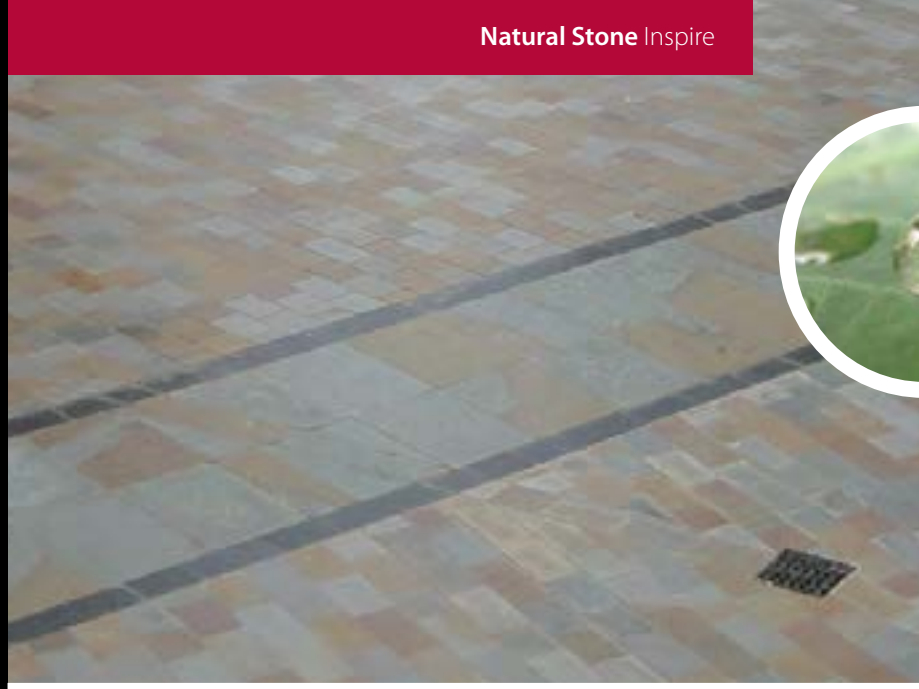
The boldness of the design was to install the stones in irregular shaped patches which run randomly from one texture to another. The change in texture creates a very subtle softening of the patches of the new paving and this contrast of textures creates an extra level of interest in the scheme.



Market Square, Brentford

Inspire Me With Texture





INSPIRE ME WITH **SIZES**

DEFINITION: The use of size or changes in size to emphasise a space or a detail to create interest in a landscape.

Inspire Me With Sizes

The sizing of flags can be used to emphasise the fact that you have chosen a natural product. Random lengths in Yorkstone are prime examples but mixing sizes in any material can achieve a unique aesthetic or a specific pattern. Using mixed sizes together can also create a changing narrative or even emphasise a detail.

People automatically assimilate smaller element sizes for the trafficked areas and larger flag sizes in the pedestrian areas. Generally this works in terms of performance as well but it also gives the opportunity to break the norm and challenge people and usage by using changing sizes or alignment in some way.



Large sizes, Williamson Square, Liverpool



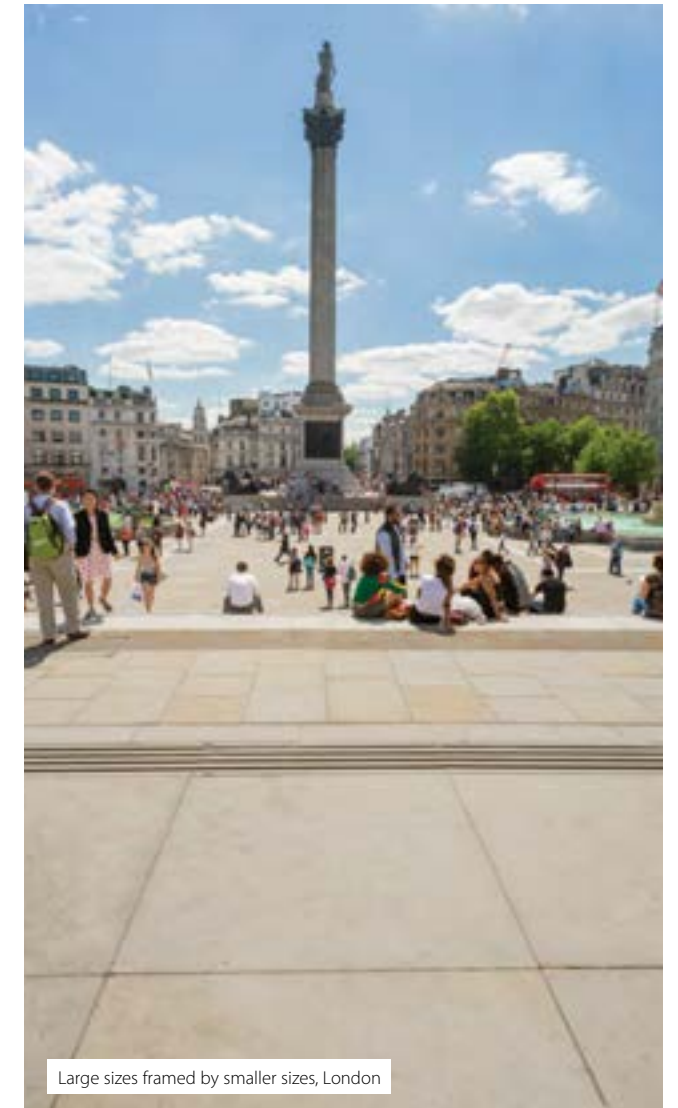
Change sizes for emphasis, Liverpool



Small sizes for level changes, Liverpool



300, 450, 600mm wide and random lengths, Edinburgh



Large sizes framed by smaller sizes, London



Interlocking enlarging sizes, Liverpool

Trafalgar Square is one of the world's most iconic public squares and was originally paved with huge Yorkstone flags of up 1.8m x 1.8m in size. After the successful refurbishment of Trafalgar Square in 1984 directed by Donald Insall and Partners where Marshalls supplied replacements to many of the larger and specially shaped stones, Scoutmoor Yorkstone became the preferred stone for the surrounding environments.

When the decision was made to pedestrianise the North side of the square in front of the National Gallery one of the main choices

was the size of the slabs to be installed. This area was above the level of the original square and so the two areas were partially separated. Should the sizes be as large as the square below or should this area have its own sizes perhaps reflecting perhaps the size of paving stones adjacent to the square or a building element such as the cladding of the National Gallery.

Foster and Partners decision was to use larger slabs in the centre of the terrace to link with the square but to use the more standard sizes in distinct areas thus linking it in some way to all the surrounding areas.



Trafalgar Square

Inspire Me With Sizes



The redevelopment of the Pier Head area of Liverpool is now a multi-award winning space which acknowledges the excellence of the overall design by AECOM. This design has some very ingenious and well designed details as well as some very subtle design elements. One of the more subtle elements in the midst of the blended paving palette is the way that sizes have been used to emphasise the spaces between the vertical features.

Furthest away from the vertical elements that form steps and seats are the very largest flag sizes creating a huge gauged paving effect. As the paving then starts to approach the vertical elements it then breaks down to quarter size, then quarter size again and finally to a sixth size which is a 100x100mm sett. The majority of these smaller setts also change texture from flamed to cropped enhancing the size difference.

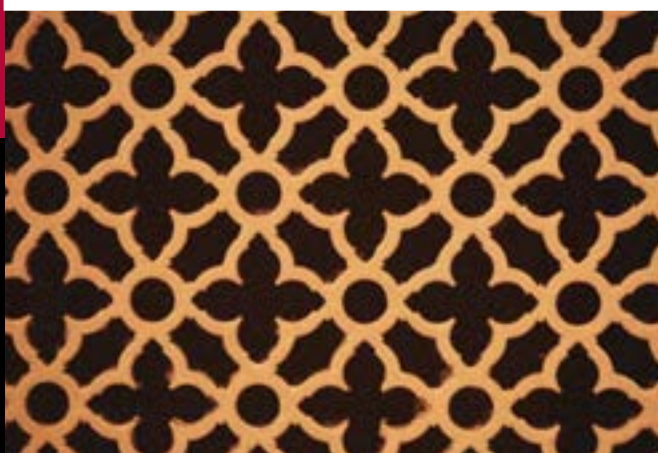
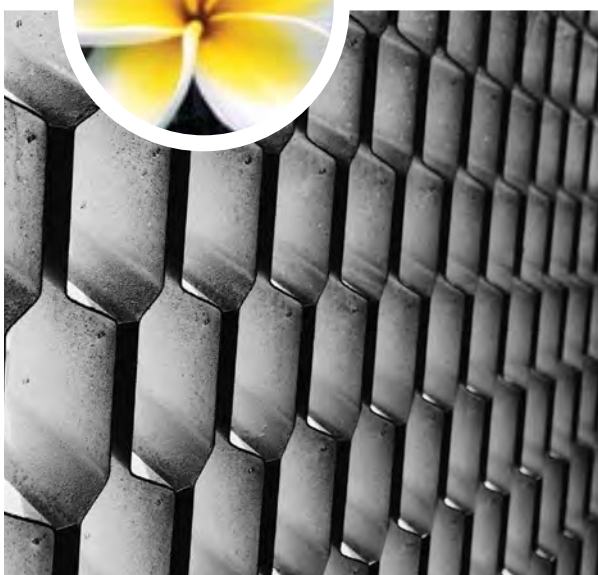
The clever use of the paving in this way mirrors the adjacent River Mersey which moves in waves down the estuary. The calmer waters in the centre becoming more choppy towards the shore with finally the waters frothing against the Pier Head.



Liverpool Pier Head

Inspire Me With Sizes





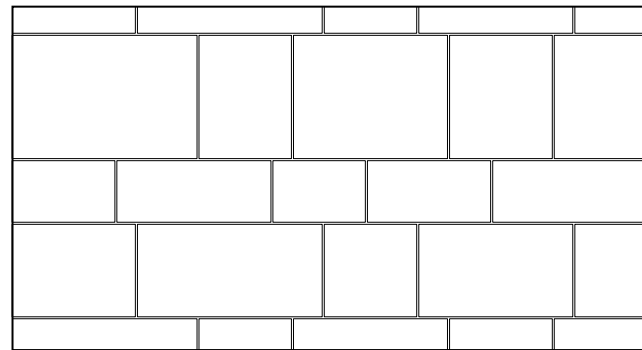
INSPIRE ME WITH **PATTERN**

DEFINITION: A repeated decorative design.

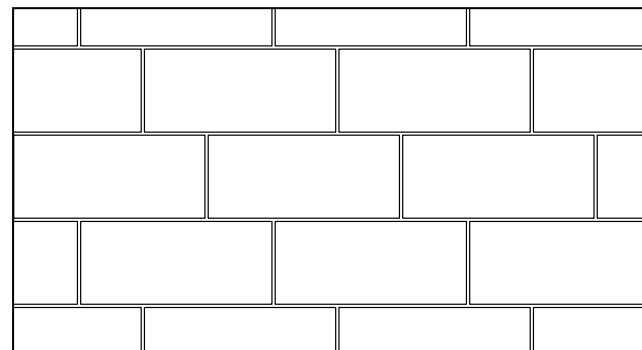
Inspire Me With Pattern

Patterns can be easily emphasised by using colour banding or size or orientation changes. When creating patterns or shapes time needs to be given to how the elements fit together as the longevity for any scheme comes from the details.

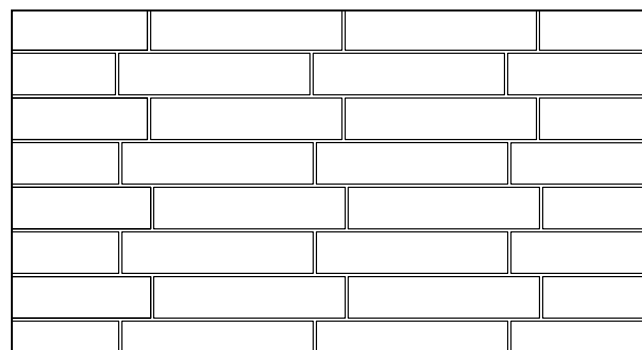
Good design avoids excessive cutting, the inclusion of thin slithers of stone and as little angled cut stone as possible. Mitred corners should be avoided whenever possible and especially on vulnerable vertical elements such as kerbs, steps and copings.



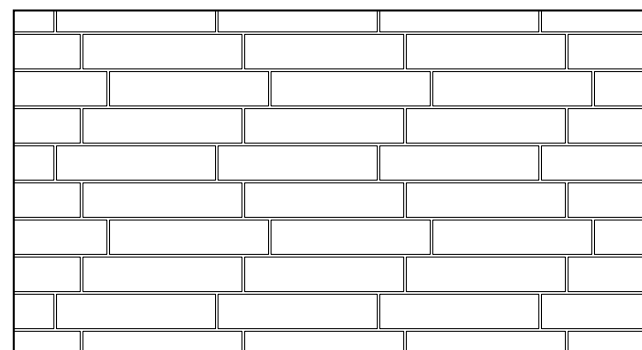
GAUGED WIDTHS RANDOM LENGTHS



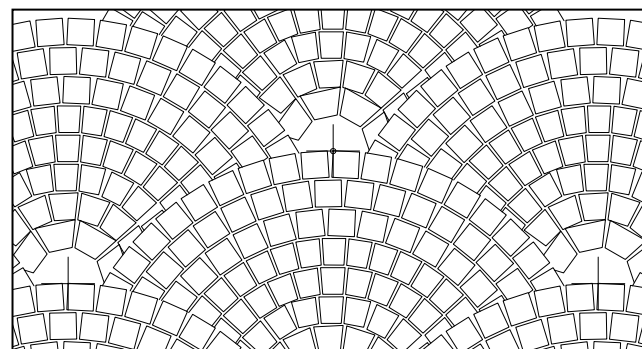
THIRD BOND



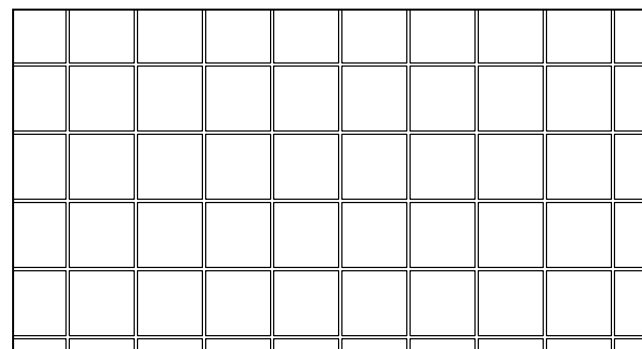
STITCH BOND



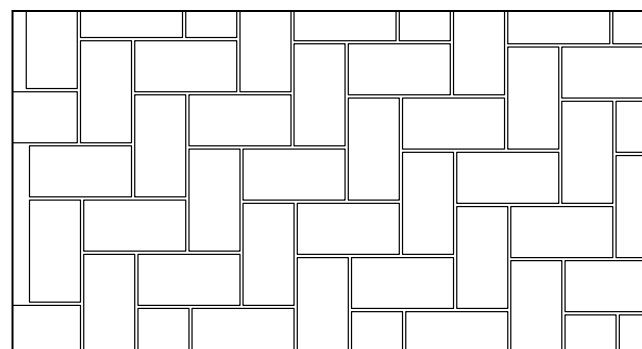
ELONGATED STITCH BOND



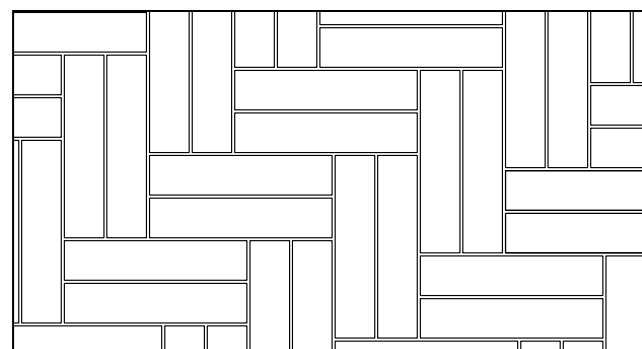
FAN TALES



STACKER BOND



HERRINGBONE



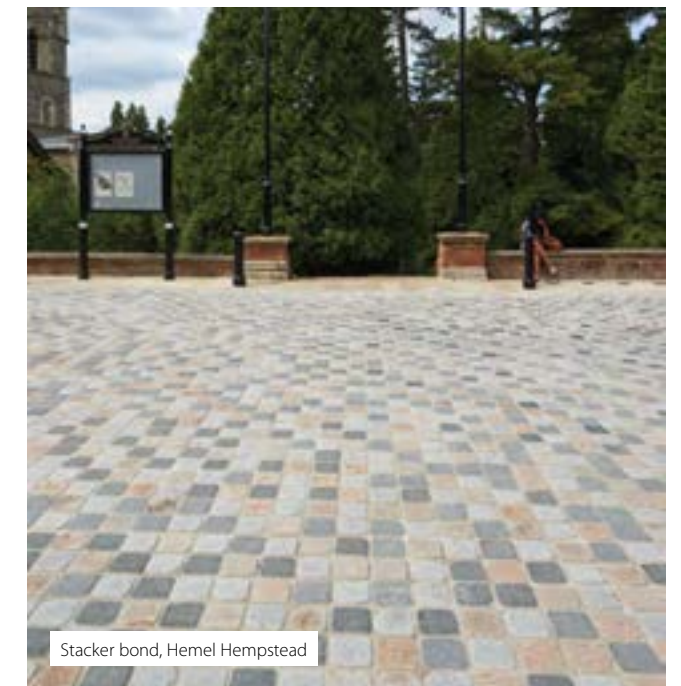
DOUBLE HERRINGBONE



Stretcher and herringbone bonds, Bromsgrove



Interlocking pattern without cutting, Exhibition Road



Stacker bond, Hemel Hempstead



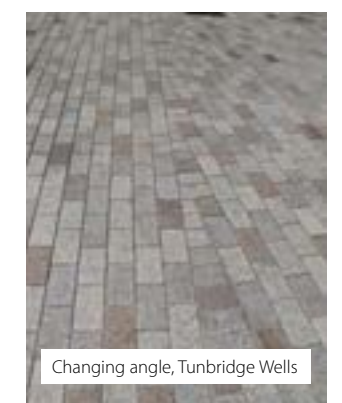
Diagonal banding, Eastleigh



Stitch bond, Hemel Hempstead



Crossing in coloured setts, Tunbridge Wells

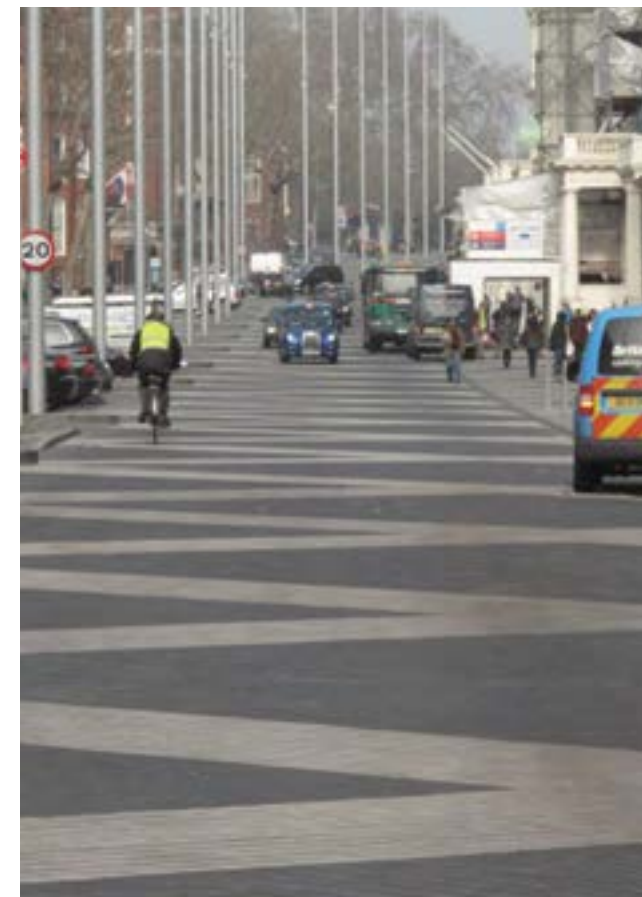


Changing angle, Tunbridge Wells



With over 11 million visitors each year Exhibition Road is Britain's most used shared space as well as a busy link between Hyde Park to Brompton Road through to South Kensington Tube Station and is also a bus route. It is home to the V&A, Natural History Museum, Science Museum, Imperial College, the Royal College of Music and the Royal Albert Hall.

Dixon Jones were tasked with creating a design which was seamless across the space but might address some of the issues of shared spaces such as driving speeds and keeping pedestrians safe. Their very simple but innovative design solution was the result of using the norms of driving and then changing them to make drivers feel less comfortable.



Exhibition Road

Inspire Me With Pattern

The simple chequered pattern created by the use of banding was then rotated diagonally and the space is flush from threshold to threshold without any directional upstand kerbs. This diagonal form upsets the norms of driving which are very straight line for go with perpendicular lines for stop. Without the more obvious road indicators drivers are less sure of how the space works. They slow down and concentrate on other users of the space.

Services

Marshalls Design Team

Marshalls Natural Stone has led design and innovation in the stone landscaping industry, constantly updating and increasing the services we can offer to our customers. If involved at an early stage, we are confident that we can add value by offering sound design advice which could reduce costs and potential construction problems and also help design in durability and longevity to any scheme. With stone specialists in all areas of the country Marshalls will be delighted to visit and discuss your scheme requirements at any time. Our multi-talented design team can also help with Drainage designs and other solutions for your hard landscaped areas. We are leaders in SUDS designs, with a range of solutions and products which are second to none. Our designers can also produce structural designs based on the strengths of our stone and the loading criteria. We can also help with layouts, designs and schematics.

For more information or assistance please contact our Natural Stone sales office on 03704 112266 or e-mail us at natstone.sales@marshalls.co.uk



marshalls.co.uk/360

THE BESPOKE NATURAL STONE OPTION

DESIGN

SOURCING

Marshalls has the largest range of indigenous and imported stones from around the world but it doesn't end there. There is much more than we could show in this brochure so if you have more specialist requirements then just call us to discuss.

CPDS & PRESENTATIONS

We have a wide range of CPDs on natural stone, highlighting issues associated with its use, and can produce bespoke presentations tailored to your needs. We can also help with public consultations and bids using our vast library of images and product knowledge.

DESIGN THICKNESSES AND LAYING

Marshalls specialists can provide details of thickness in relation to the individual stone strengths and give advice on how to lay stone to achieve the best results.

SAMPLES

Marshalls can provide samples for your design submissions so that your work is brought to life by the materials being able to be touched and visually assessed.

PHOTOGRAPHY

Marshalls has a wealth of photography which will help enhance mood boards or help clients understand features, designs or materials.

DURABLE DETAILING

Marshalls has a wealth of experience in how to design features to incorporate durable details. Whatever you design we can advise of the best layout, fixing or detailing to bring durability to any scheme.

> TENDER

GENERAL DESIGNS

Marshalls often help designers to make their designs more durable, economical or easier to construct. We can help you with your design or in the most complex cases do the designs for you. You don't need to be a stone expert - that's where we come in with our own in house design team and stone specialists who know our stones and what they can do. Marshalls can also check any designs in our stone for compliance with the British standards for selection and installation.

3D MODELLING

In some cases it is essential for a scheme or stone element to be modelled in 3 dimensions to ensure its accuracy or assess the design properly. If this does prove necessary then Marshalls has the design team capacity and capability to do this complex work on just about any scheme our stone is used on.

SPECIFICATIONS

Stones cannot be re-engineered so their suitability for any application needs to be carefully considered. We can help ensure that stones used in your specification are fit for purpose and correctly specified.

BILLS OF QUANTITIES

If the Bill of Quantities is not clear, pricing becomes difficult and may lead to pricing of an inappropriate stone for the scheme. Marshalls can also provide help with Bill of Quantity clauses.

> ON SITE

COMPONENT DESIGN

When the general design is finished then that's when the detailing begins. Our design team knows how stone is manufactured and how to produce the best results. We can detail our stones for all the individual elements to ensure efficient production and quality components.

PRODUCTION SERVICES

Time on site is money - when timescales are tight, Marshalls can help with lead times, prioritising production and stocking to match short construction periods or quick start dates.

CDM REGULATIONS

Stone is very often made to bespoke designs, and pieces may be heavy or eccentric in weight and profiling, making conventional handling techniques impossible. We can advise on weights, help with handling techniques and package units in a construction-friendly way.



Pier Head Liverpool Services

A unique scheme made up of 32 individually designed irregularly shaped walls and staircases, forming an amphitheatre and also seating areas in one of Britain's largest and most recognisable public squares. Incorporating the Leeds Liverpool canal extension through to the Albert Dock, this remarkable space boasts canal walls with a specially selected hand tooled finish, specialist designed and profiled copings and clever wraparound curved bridge parapet cladding.

Generally with just plan and level drawings Marshalls designed, detailed and scheduled the components on one of the most intricate landscape schemes ever undertaken in the UK, all to the approval of the architect and engineer and all shipped in order of construction sequence for the contractor.

The designs had to incorporate embossed anti-skate details and flush fit lighting features, with solid pieces turning seamlessly into cladding and coping pieces. Seats transition into steps and walls curve up or down to run seamlessly into the constantly changing ground levels.

This is an incredibly complex and ambitious scheme which challenged all those involved through its inception, design and construction. It is simply one of the best pieces of modern landscape architecture to be seen in the UK.

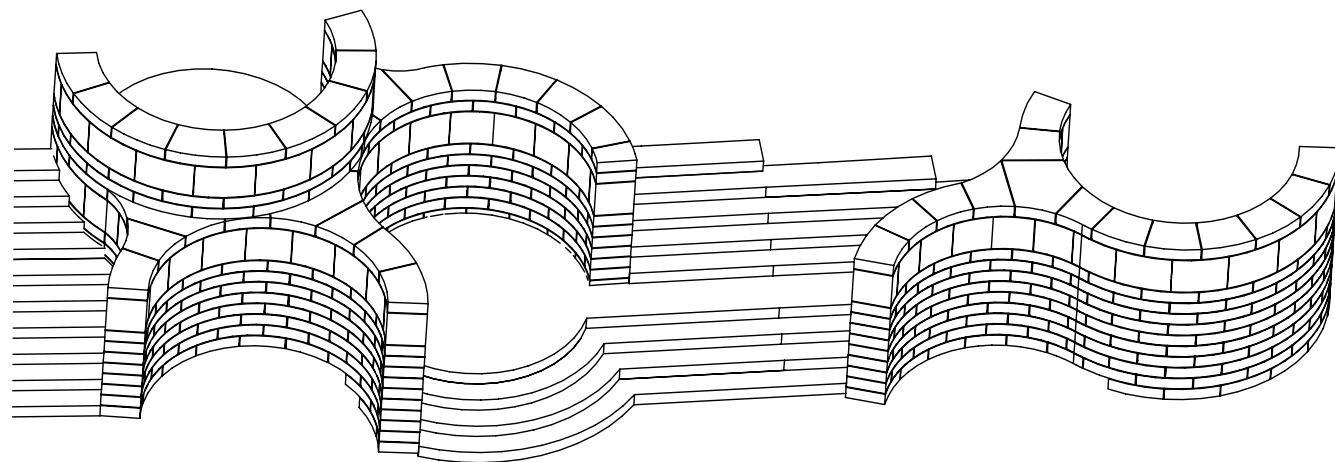


The historic town of Chepstow wanted to create a focal point for their square which had to accommodate large changes in topography across the area.

The resulting design was this stunning interlocking sequence of circular turrets and redoubts which also cleverly allows the flow of movement through the centre of the structure. Ornately carved to reflect the various trades which had brought and do bring prosperity to the area, this beautiful structure is both stunning and unique.

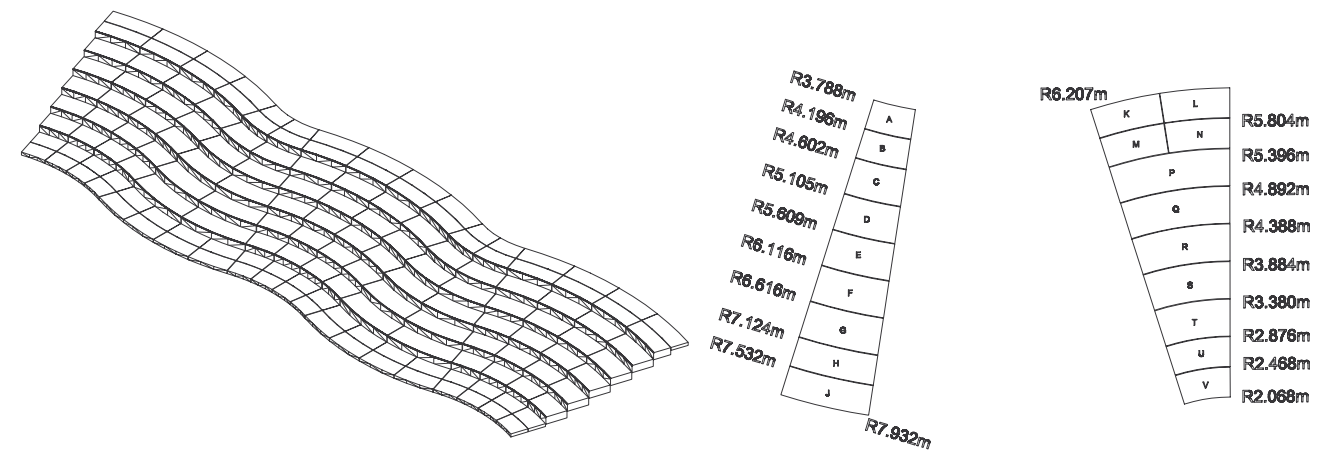
Marshalls modelled the structure in 3-D to assess the more general requirements and to be able to produce individual component drawings for the production of this completely bespoke structure. The results are truly stunning.

Chepstow Services



These elegant, wave-like Yorkstone steps were designed by the client to enhance a local riverside area providing access to the river and also a seating area for the many river-based public events. The symmetrical design allowed a repetition of the pieces required, which speeded up production by allowing the batching of shapes on our profiling saws. The shape was first broken down into the individual step requirements and then single component drawings which made allowance for joints and construction method. Landscape design which not only looks great but was also relatively easy to produce. Elegance and simplicity achieved through good design.

Hebden Bridge Services



Marshalls Standards for Stone

At Marshalls we are committed to continually supply the very best in terms of the quality of stone and production and to set the highest environmental and ethical standards within the stone industry which is demonstrated by the following reports, accreditations and endorsements.

QUALITY

At Marshalls all our own quarries and stone production facilities carry not only the international mark of Quality ISO9001 but also the International Environmental ISO14001 accreditation and the ISO18001 accreditation for Health & Safety. Our commitment to these combined values has meant a total commitment to an integrated management system which we believe means that we are the only stone producer in the world to hold the PAS 99 standard which commits us to all three standards.

From our other stone suppliers we demand a commitment to the quality of both production and also of materials. Marshalls has its own locally based inspectors on the ground who ensure that consistency and quality are at the heart of everything we do.



CE CERTIFIED PRODUCTS

As an active member of the Stone Federation of Great Britain we adhere to the requirements of the standards and the guidance from the Stone Federation. We fully test and constantly monitor all our stone both from the UK and those imported. Our commitment to CE marking does not allow us to take anything on trust and all the stones featured in this brochure have been tested in the UK in both ISO9001 and UKAS accredited laboratories. Marshalls complies with all the CE marking legislation and if we agree to supply you something more individual we are committed to CE mark that as well.



ETHICAL

Our commitment to the ethical sourcing of natural stone from abroad is regarded as exemplary. Not only have key people from Marshalls provided leadership at the ETI but we are the only construction sector signatory to the UN Global Compact which relates to ethical standards. We have BES6001 certification for our indigenous products and are working with the accreditation bodies to extend this to all imported materials. To see our progress please access the sustainability part of our website where we report this in our UN Global Compact report.



UNICEF

Our work on eliminating child labour, the promotion of women's rights and the protection of all workers' rights has been acknowledged as exemplary and now Marshalls work in India has led to a full partnership with Unicef to promote the education and welfare of children. Marshalls provides school opportunities as well as health clinics, immunisation and health insurance for workers and their families. This work is now being rolled out into other areas of the world such as Vietnam and China.



ENVIRONMENTAL

All Marshalls own quarries and production facilities have environmental accreditation to ISO14001. Further to that we have undertaken the largest single carbon footprinting of construction products in the world with over 3,000 Individual products being carbon footprinted. All our Yorkstones, our Indian sandstones and Chinese granite are all carbon footprinted so that any choices of material can be understood and assessed in regards to the effect on the environment.



PEOPLE

Nothing in the process of selecting and using natural stone happens without the interaction of people and information. Marshalls is committed to providing you with the best people with the industry and with over 120 years of experience and with industry leading figures in our organisation we are confident that you will find the most design led, cost effective, durable and practical solutions to any scheme or detail you may have.



WORKING WITH OUR SUPPLY CHAIN

At Marshalls we work with our suppliers to improve the standards of materials, production and workers conditions continually. Our partnership with Unicef is testament to our commitment to achieving the highest standards with all our suppliers. Our suppliers are chosen for their commitment to quality, consistency and ethics as well as their knowledge and versatility. Designers and contractors need confidence in their supplier and we are committed to achieving a seamless service regardless of where the materials come from.

Marshalls Standards for Stone



Strength Testing



CE Marking



Quality Inspection



Scoutmoor, Covent Garden

Paving



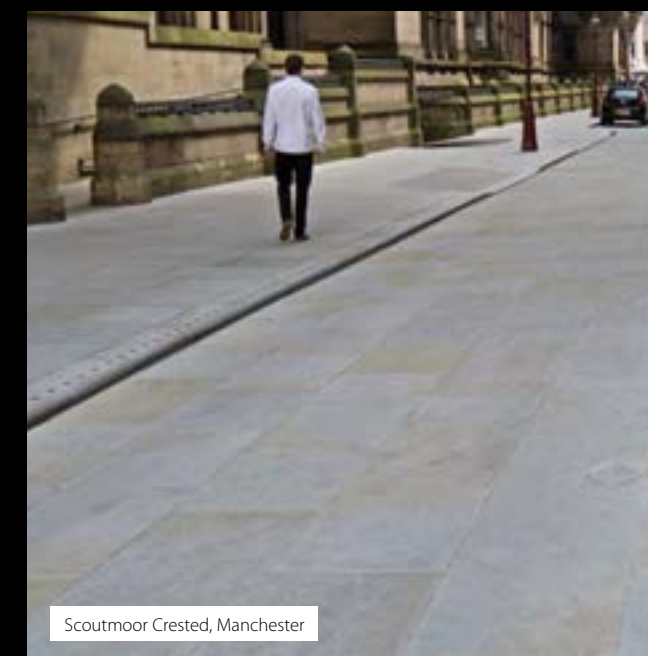
Moselden, Southampton



Scoutmoor Flamed, Doncaster

All Marshalls natural stone paving is strong, hard wearing and both slip and frost resistant and will provide a very durable and aesthetically pleasing surface for both pedestrian and vehicles alike. Generally stone is much stronger than other surfacing materials and so can provide a good solution especially in areas subject to overrun by vehicles, mixed use spaces or delivery areas.

Finishes vary within most stone types and different textures will affect the colour of each stone in an individual manner and details of all the stones can be found on pages 88 - 109.



Scoutmoor Crested, Manchester



Cromwell, Olympic Village

YORKSTONE

Paving



Callisto, Birmingham



Tritanial, Doncaster

Paving



Prospero, London



Various, Leicester

GRANITE

Paving

CAMBRIAN SANDSTONE



Hawks View, Lawley Green



Brackendale, Coventry



Hawks View, Liverpool



Marple Edge, London

Paving



Laurel Bank, London



Hawks View, Liverpool



Mix includes Riven Sandstone, Doncaster

Paving



Moselden, London

Paving



Pan, Leeds



Mixed Granite, Ayr



Moselden, London



Granite, London



Tumbled, Sawn Moselden & Scoutmoor, Brentford

Setts



Tumbled Scoutmoor, Boston



Diamond Sawn Scoutmoor, Leicester



Appleton Flamed, Barnsley

All Marshalls natural stone setts are strong, hard wearing and frost resistant and will provide a very durable and aesthetically pleasing surfacing material. It is important when starting the design of any areas for vehicular overrun that size and frequency of all traffic is known.

Finishes vary within most stone types and different textures will affect the colour of each stone in an individual manner and details of all the stones can be found on pages 70-82

YORKSTONE

Setts



Mixed Granite, London



Mixed Granite, Hemel Hempstead

GRANITE

Setts



Mixed Granite, Pontypridd



Mixed Granite, Derby



Pan Granite, Barnsley



Tritanial Granite, Annan

Kerbs

Kerbs and channels are used as restraints for paved areas as well as for the collecting and directing of rainwater. The detailing of kerbs and channels is often overlooked which can lead to durability issues a scheme as the restraint to other areas is lost. Kerbs should not be used at less than 500mm long and external corners should never be mitred.



Radius Cromwell, Bradford



Rosalind Granite, Selby



Callisto Granite, London



Prospero Quadrant, Southampton



Galatea Angled, London

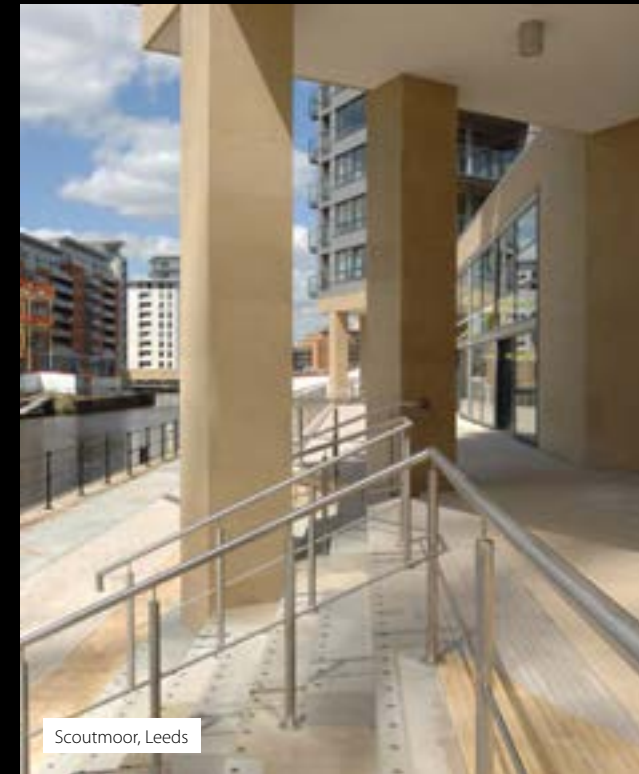


Galatea Angled, London



Porphyry, Bristol

Steps



Scoutmoor, Leeds

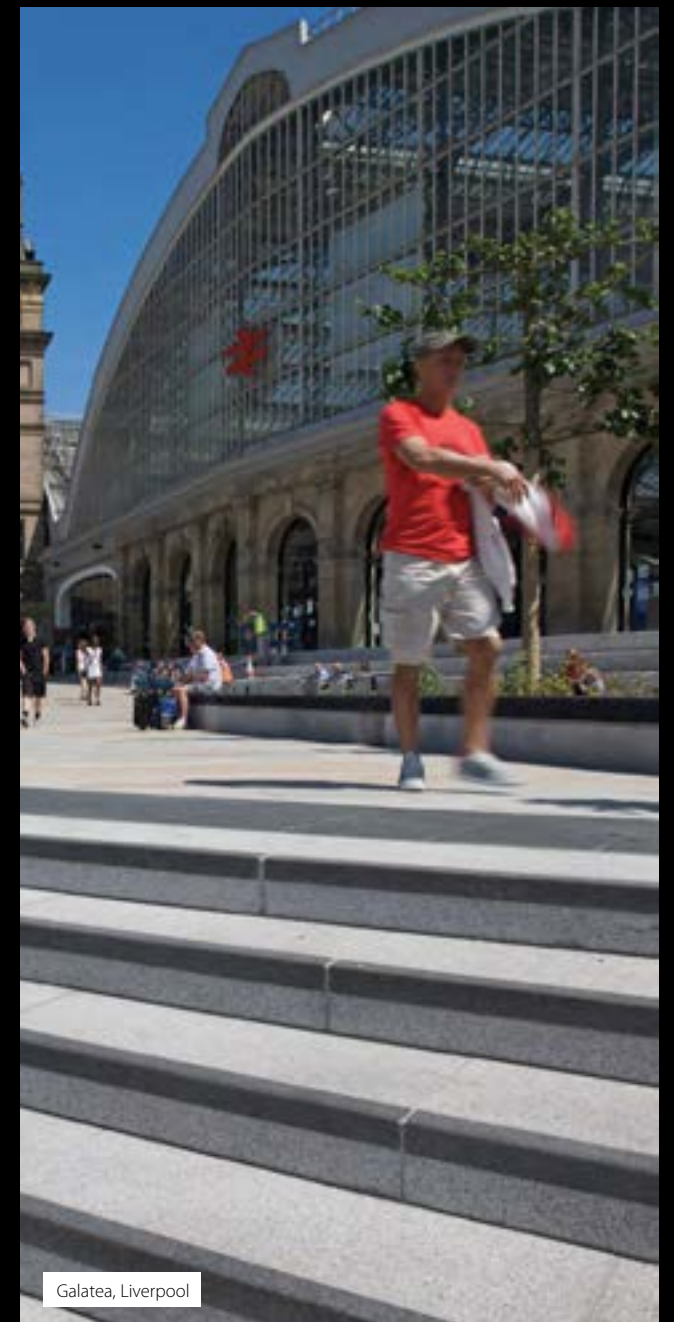


Scoutmoor, Barnsley

Steps can be constructed using treads and risers or alternatively in solid units. They often have either a visibility strip or a nosing of some kind which can either be a hard rubberised insert or even a contrasting stone.



Scoutmoor, Caerphilly



Galatea, Liverpool



Tritanial & Rosalind Hazard Warning, London

Tactile



Scoutmoor Blister, London



Scoutmoor Hazard Warning, London



Scoutmoor Blister & Directional, Leek

Tactile paving is available in a variety of different profiles and in all stone types on pages 12 - 17. The main profiles are blister, hazard warning, platform edge, lozenge, directional and cycleway.



Galatea Hazard Warning, Aberdeen



Callisto Lozenge, Selby



Scoutmoor Pave Drain, London

Linear Drainage



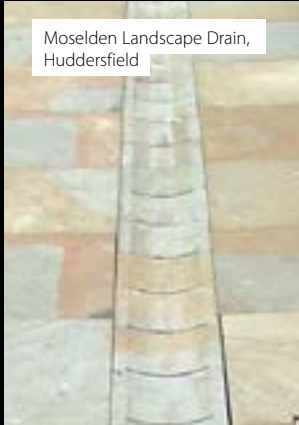
Moselden Fluted,
Hemel Hempstead



Trinculo, Hartlepool



Scoutmoor Dished Channel,
Lincoln



Moselden Landscape Drain,
Huddersfield



Duo Slot Drain with Hawks View, Liverpool



Mono Slot Drain

Marshalls can offer a range of drainage solutions from simple dished channels to discreet slot drains to manage surface water efficiently. Marshalls standard range of linear drainage can be found at www.marshalls.co.uk/commercial/water-management/linear-drainage and most have a natural stone top option. If you require something outside of this range we would be delighted to collaborate with you to find the right solution.



GRA979 Granite, Max-E Channel, Cardiff

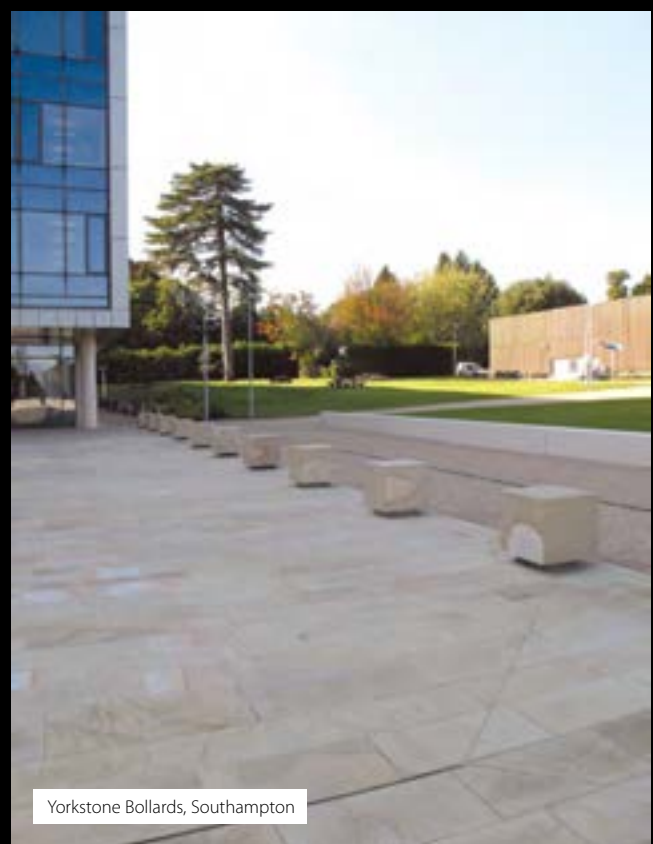


Granite Bench, Leeds

Street Furniture

Benches, seats, planters and even litter bins can be produced to individual scheme requirements and in a wide variety of materials. We would be delighted to collaborate on your design to deliver elements to your specific requirements.

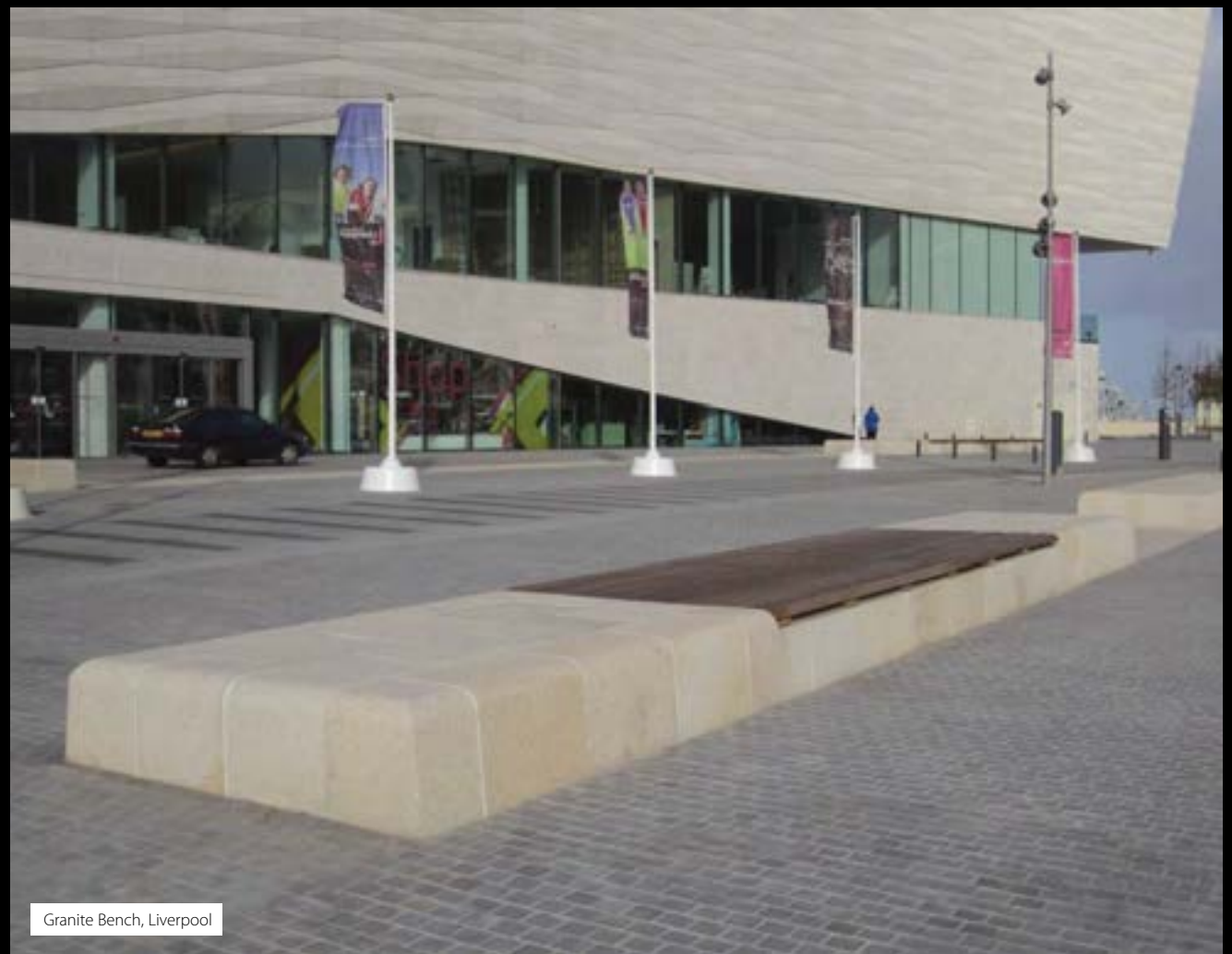
Marshall's also has a range of standard natural stone street furniture on stock which can be found at www.marshalls.co.uk/commercial/street-furniture/natural-stone



Yorkstone Bollards, Southampton



Yorkstone Seats, Leeds



Granite Bench, Liverpool

Street Furniture



Granite Planter, Bognor Regis



Granite Planter, Leek



Granite Benches, Halifax

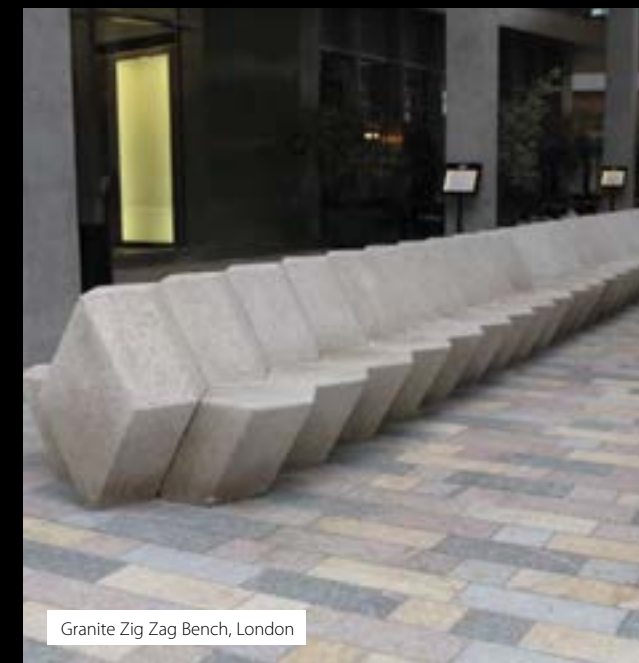


Granite Bench, Birmingham

Street Furniture



Granite Lettered Bench, Leeds



Granite Zig Zag Bench, London



Granite Seats, Sunderland



Granite Bench, Nottingham



Granite Bench, Manchester



Granite Bench, Olympic Village



Water Feature, Nottingham

Specials



Regimental Crest, Alrewas



Hadrian's Wall Monument, Carlisle

Marshall's has a huge capacity for producing specialised masonry tailor-made to your scheme's requirements. It can be as functional as a visibility strip in a step to as complex as ground breaking innovative design.

With the latest generation of 5 axial profiling saws, water jet cutting facilities and our team of highly skilled masons we believe that we have the capacity to produce almost anything you might need. We are only limited by the size of the blocks of stone and your imagination.

Marshall's has specialist stone experts in all parts of the country so call our Natural Stone sales office and we will be happy to come and discuss all your requirements.

Specials



Edgings, Bournemouth



Steps/Seats, Liverpool



Patterned Wall, London

Specials



Engraved Feature, Peterborough



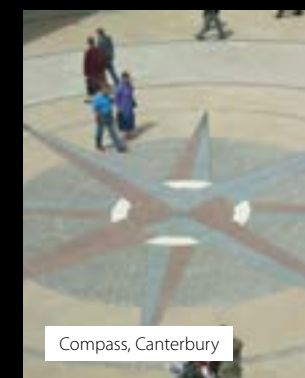
Inlaid Stone, Birmingham



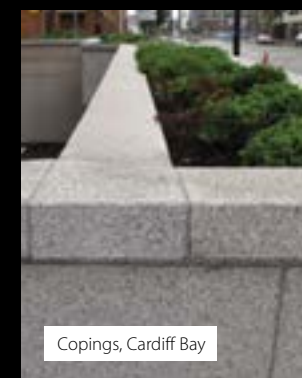
Granite Sign, Manchester



Feature, Chepstow



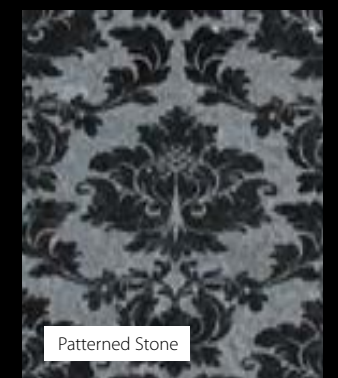
Compass, Canterbury



Copings, Cardiff Bay



Sculpture, Hartlepool



Patterned Stone

Specials



Steps, Wembley



Memorial, Byker

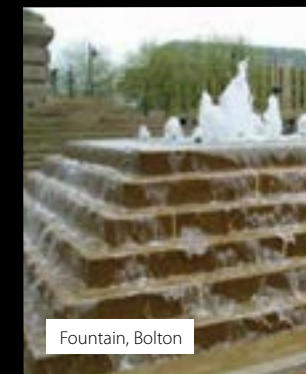
Specials



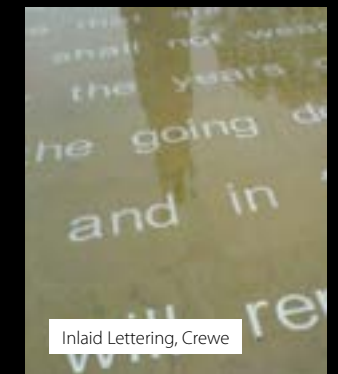
Planter, London



Signage, Saltaire



Fountain, Bolton



Inlaid Lettering, Crewe



Ramp Access, London



Detail, Leeds



Scoutmoor Diamond Sawn, Trafalgar Square

Yorkstone

For almost 200 years Yorkstone has been the nation's favourite choice of paving stone. With its outstanding technical properties this stone was originally supplied as a hand split riven paving but now with modern techniques it is mainly supplied in either Diamond Sawn, Flamed or other textured finishes. With a proven record of durability, longevity, strength and slip resistance, Marshalls Yorkstones have no equal in terms of range or quality.



Moselden Diamond Sawn, Whitehall



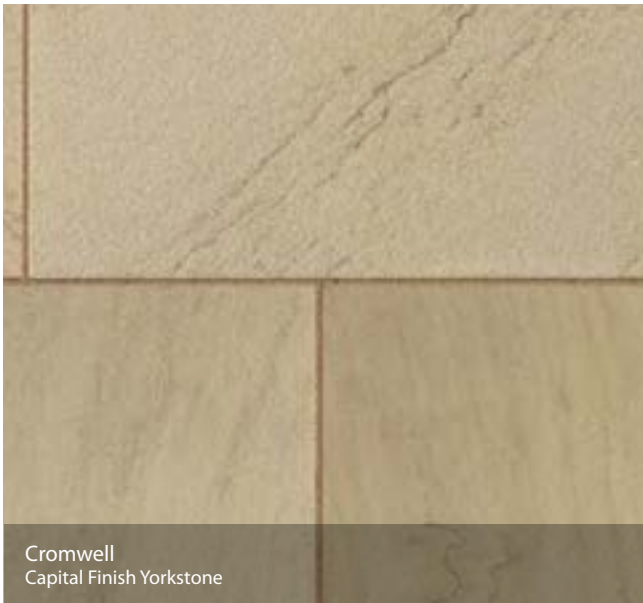
Scoutmoor Linear, Bristol



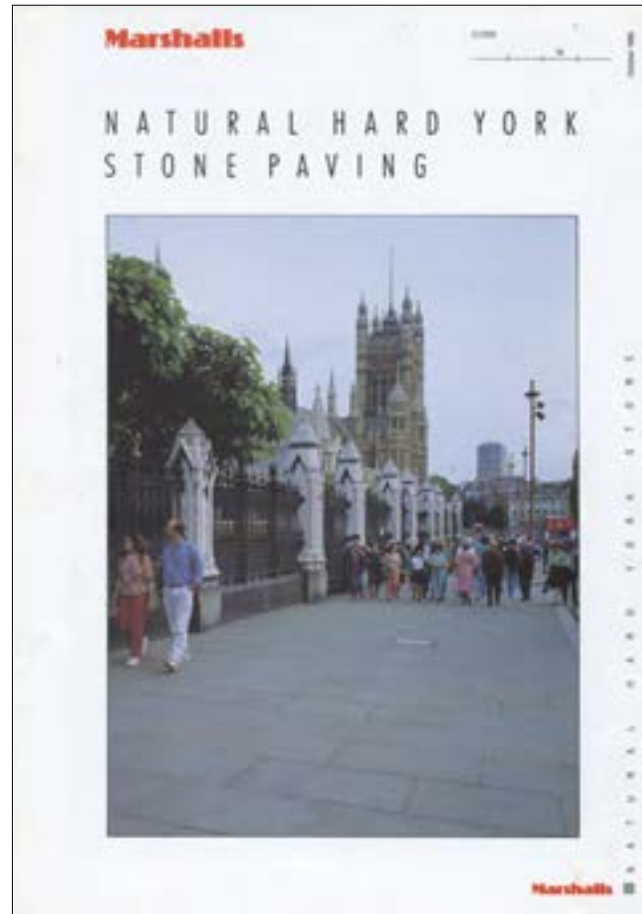
Scoutmoor Crested, Manchester

Stone Type	Finish	Paving	Linear Paving	Setts	Kerbs	Tactile	Specials
Scoutmoor	Diamond Sawn	•	•	•	•	•	•
	Capital	•	•	•			Limited
	Flamed	•	•	•			Limited
	Crested	•	•				Limited
Moselden	Diamond Sawn	•		•	•	•	•
	Capital	•		•			Limited
Appleton	Diamond Sawn	•		•	•	•	•
	Capital	•		•			Limited
	Flamed	•		•			Limited
Cromwell	Diamond Sawn	50mm only		50mm only		50mm only	Limited
	Capital	50mm only		50mm only			Limited
Riven	Riven	•					Limited

Yorkstone Swatches



It should be noted that colour variations and markings are characteristic of Natural Stone. Inherent variations cannot be controlled nor the precise shade of stone guaranteed.



Parliament Square was first designed by Sir Charles Barry, the architect for the Houses of Parliament, in 1852 as part of the rebuilding works after a fire and was completed in 1868. In 1948 and in an age of austerity after the war the square was re-designed by Architect Grey Wornum as a garden island.



In 1987 as part of the Houses of Parliament being granted UNESCO world heritage status, Marshalls were selected to supply their Appleton Stone to the street in front of the Houses of Parliament in traditional gauged widths and random lengths. Marshalls were delighted to have this as the front page photograph on their 1989 natural stone brochure.

Today after millions of visitors have walked across it, the stone remains as beautiful, strong and slip resistant as the day it went down. More recently outside the Supreme Court at the opposite side of the square Marshalls were asked to supply Appleton Flamed and Scoutmoor for large new areas of footpaths.

Yorkstone Durability Study

Parliament Square, London



The various spaces making up Batley Market Place host a weekly market, a car park and an important road artery for the town, all in Appleton Yorkstone in various finishes.

Records appear to show a market in Batley way before the (Mechanics Institute) Town Hall building which was erected overlooking the formal Market Square in 1853. The first refurbishment of the square took place in 1905 under local architect Arthur Hanstock with Yorkstone setts and paving. Over the years macadam was introduced to the marketplace as a quick surfacing material and the market lost some of its inherent character. Brilliantly refurbished in the late 1987 in the spirit of Arthur Hanstock the only choice for Batley Market Place was Yorkstone setts and paving.

The market place actually consists of three parts as it sits on a relatively steep slope. The lower level hosts a weekly market and is the reception and delivery area for the Town Hall. It is surfaced with flexibly laid Tumbled Appleton Yorkstone setts throughout. An upper parking area which is one of the most used parking spaces in the town centre is again surfaced in Tumbled Appleton Yorkstone setts but with Yorkstone kerbs and Appleton Flamed Paving. Finally there is a key town centre link road which falls quite steeply across the full length of the area and again is laid flexibly.

At over 25 years old this market place functions well, has lots of character and the materials still look superb.

Yorkstone Durability Study

Market Place, Batley





Callisto Granite, Birmingham

Granite

Granite is a tough durable material which can be fashioned into a wide range of Landscape products and provides a very modern aesthetic. Marshalls supply a comprehensive range of granites in different finishes from standard silver grey through to more exotic colours.



Mixed Granite, Leicester



Tritanial & Rosalind Granite, London



Mixed Granite, Liverpool

Granite Swatches

 Galatea Fine Picked	 Tarvos Flamed	 Galatea Flamed	 Leda Blasted	 Thalassa Flamed
 Tarvos Blasted	 Leda Flamed	 Neso Blasted	 Tarvos Honed	 Portia Flamed
 Thalassa Polished	 Umbriel Blasted	 Neso Honed	 Callisto Fine Picked	 Larissa Fine Picked
 Rosalind Fine Picked	 Thalassa Fine Picked	 Trinculo Fine Picked	 Arche Flamed	 Portia Honed
 Callisto Flamed	 Umbriel Flamed	 Despina Fine Picked	 Pan Fine Picked	 Cressida Flamed
 Trinculo Flamed	 Umbriel Honed	 Galatea Polished	 Larissa Polished	 Cyllene Flamed
 Francisco Blasted	 Prospero Fine Picked	 Cressida Fine Picked	 Mimas Polished	 Cressida Polished

It should be noted that colour variations and markings are characteristic of Natural Stone. Inherent variations cannot be controlled nor the precise shade of stone guaranteed.

 Portia Blasted	 Neso Flamed	 Perdita Fine Picked	 Larissa Flamed	 Rosalind Polished
 Leda Honed	 Perdita Flamed	 Pan Polished	 Perdita Polished	 Francisco Flamed
 Rosalind Flamed	 Pan Flamed	 Kari Fine Picked	 Despina Flamed	 Callisto Polished
 Cyllene Fine Picked	 Mimas Fine Picked	 Kari Flamed	 Francisco Honed	 Trinculo Polished
 Mimas Flamed	 Kari Polished	 Proteus Fine Picked	 Prospero Flamed	 Tritanial Flamed
 Cyllene Fine Picked	 Namaka Fine Picked	 Tritanial Fine Picked	 Proteus Flamed	 Prospero Polished
 Namaka Flamed	 Despina Polished	 Namaka Polished	 Tritanial Polished	 Proteus Polished



Granite Durability Study

Dynamic Earth, Edinburgh

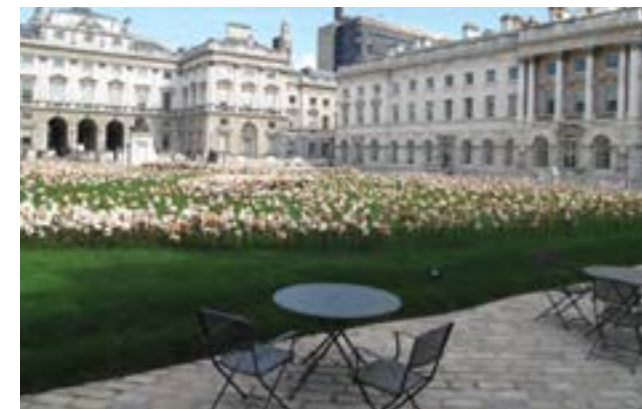
The Dynamic Earth building sits next to the Scottish Parliament and by Holyrood House in Edinburgh with building work starting in 1997 and finally opening in 1999. The courtyard amphitheatre is also at the end of the street so is used as a turnaround for vehicles as well as being on a bus route and part of the City's tour bus route.

It is paved with 120mm cropped all sided cubes laid rigidly on a mortar bed with mortar joints. The cubes are laid in a fan tail or 'bogen' pattern in a circular arrangement. The stone is Marshalls Umbriel granite which is a Portuguese stone.



The new Somerset House courtyard opened in 2000 was the first new fountain feature in London since 1845 but being surface mounted it creates a versatile space so that when turned off this space can host arts installations, London Fashion Week, ice rinks, and so much more.

Somerset House was originally built for the Duke of Somerset but over the years has been the original home of the Royal Academy, The Royal Society of Arts, and for many years the home of the offices for Tax and Births Deaths and Marriages. In 1997 with the relocation of the government offices a trust was set up to look at the use of the buildings and courtyard. Designed by Donald Insall & Partners and Jeremy Dixon and Edward Jones this award winning space has proved to be a major attraction as did the surrounding buildings and Somerset House is now a major destination.



Granite Durability Study

Somerset House, London





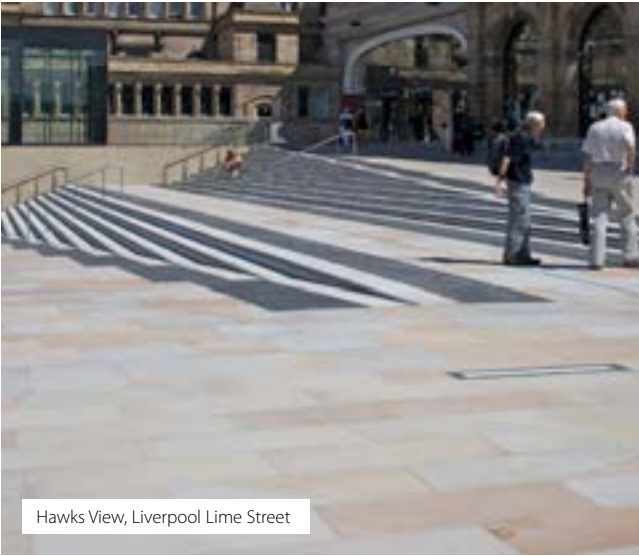
Marpal Edge, London

Cambrian Sandstone

Marshalls supplies only the most superior quality imported sandstone for paving and setts. Tested to the most rigorous standards both technically and ethically these imported materials are a completely unique offer which will safeguard the reputation of any specifier.



Brackendale, Coventry



Hawks View, Liverpool Lime Street



Laurel Bank



Brackendale



Hawks View



Brownridge



Sander Red



Thornlake



Marpal Edge

	Paving	Setts	Kerbs	Tactile	Specials
Laurel Bank	•	•	•	•	Limited
Brackendale	•	•	•	•	Limited
Hawks View	•	•	•	•	Limited
Brownridge	•	•	•	•	Limited
Sander Red	•	•	•	•	Limited
Thornlake	•	•	•	•	Limited
Marpal Edge	•	•	•	•	Limited



Vasanta, Burgess Hill

Stonespar

600 x 130 x 65 thick

Stonespar is a one size blended sandstone paving range.

Class 4 Loading

Extremely strong it is capable of carrying a market place loading and comes in 6 pre-designed blends which are inspired by the four seasons.

Pre Blended

Supplied with a top surface which has a blasted and brushed finish to enhance both slip and colour, it comes pre-blended in the crates to speed up installation and reduce space on site. It is Marshalls ethical commercial stone range.

COLOURS



Laurel Bank



Brackendale



Brownridge



Sander Red



Marpal Edge



Thornlake

MIXES



Vasanta Blend



Grishma Blend



Sharad Blend



Hemant Blend



Nisha Blend



Dava Blend

Chinese Porphyry



Bristol

Our Chinese Porphyry is formed in larger blocks which allows us to process it more like granite products. It is therefore a little bit more versatile in terms of range but is more constrained in terms of colour variation.



Heartlands, Cornwall

Italian Porphyry

Since Roman times Porphyry has been a highly regarded landscape material. Hardwearing, tough and virtually stain resistant, the beauty and warmth of this magnificent material makes it a favourite throughout the world.



Urmston



Trentino



Liverpool



Eden Square, Urmston

Porphyry

Eden Square was part of a £43m transformation of Urmston Town Centre, which was carried out to breathe new life into the area. The client's brief to landscape architects Planit was to create a thriving retail centre that brought new jobs and encouraged shoppers to return to the town centre.

The quality of public realm and artwork has been a key component in the success of the project and the choice of paving and landscaping materials was therefore vitally important to create a welcome ambience where visitors would be encouraged to shop and that would be desirable to live.

Marshall's Porphyry cube paving was specified, which is a continental-style cube-like paving that is hardwearing, tough and virtually stain resistant.

These cubes have strong aesthetics, which is due to their decorative effect and appealing texture and are ideal for pedestrian areas. Their natural hues of beige, orange, buff and grey add a warm and welcoming feel to the exterior of the shopping centre, whilst their smooth finish complements the modern style of the build.

This project clearly demonstrates the importance of paving products to create a perfect fusion of new and old styles within a town centre. Landscapes such as this, which incorporate a variety of paving styles to stunning effect, give people a passion for where they live and breathe new life into town centres.



Porphyry

Durability Study

Funicular Railway, Cairngorm

Opened in 2001 the Cairngorm Mountain funicular railway is Britain's highest railway of this type and is a major visitor attraction for walkers, bikers and skiers. For the outer terraces of the top station Marshall's Trentino Porphyry was selected as it is used widely through Europe in the most exposed settings. Subjected to the very harshest weather in the UK, the paving to the terraces remains unaltered with time and continues to perform well in this harsh environment.



Specialist Stone

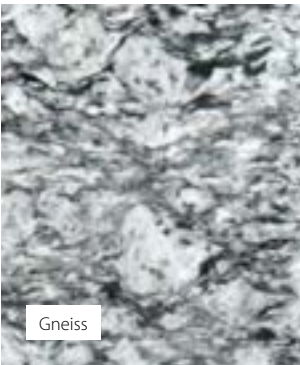
In any brochure featuring Marshalls Natural Stone it is only possible to give a small snapshot of the massive amounts of stone sourced by the group and this brochure features the most popular stones we supply. If you don't see exactly what you need or you wish to explore other stone types and their potential then please, just come and talk to us. We are convinced that you will be amazed at what we can do to meet your aspirations.



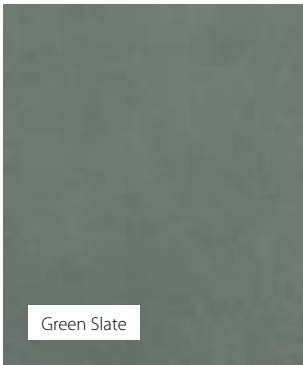
White Quartzite



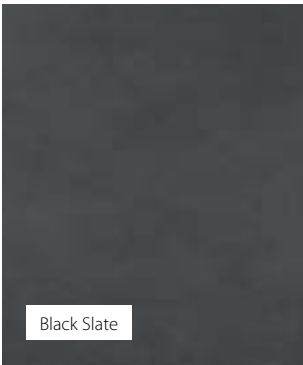
Metatuff



Gneiss



Green Slate



Black Slate



Unusual Granites, Cardiff

Specialist Stone



Blue Limestone, Colchester



Alta Quartzite, Paddington



Black Quartzite



Selected Porphyry, Woking



Marshall's

Creating Better Spaces

Landscape House, Premier Way,
Lowfields Business Park,
Elland HX5 9HT
www.marshall's.co.uk/natural-stone
Tel: 03704 11 22 66

Registered Office:
Marshall's plc,
Landscape House, Premier Way,
Lowfields Business Park,
Elland, HX5 9HT