



ARCHITECTURAL PRODUCTS



FLOORING



WALLING



PAVING

Advantages of Welsh // Slate



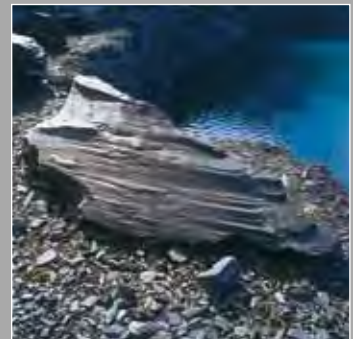
Welsh slate was created over millions of years, evolving into a unique, beautiful and dramatic material used by architects and designers throughout the world.

The textures and subtle colouring perfectly compliment natural materials and it is a truly authentic material for restoration and refurbishment. Yet Welsh slate is equally harmonious in contemporary architecture combined with glass, steel and other man made products.

This multifunctional material strikes a perfect balance of elegance and durability and maintains a constant harmony across increasingly complex environments.

The material has been used as a building material for hundreds of years, so you can be confident of the durability and non fading characteristics.

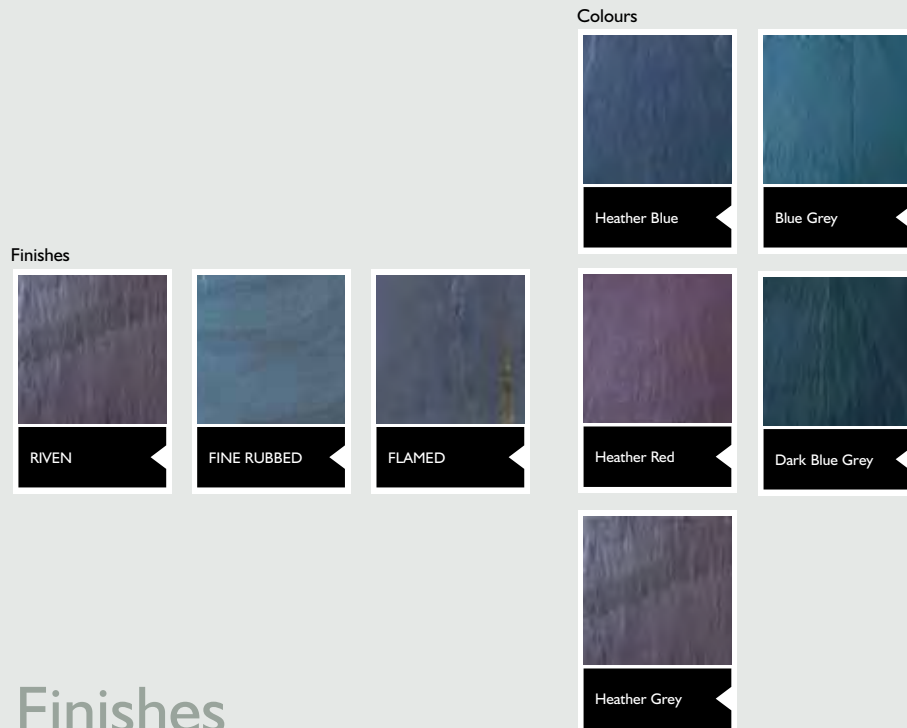
All products are quarried and manufactured in the United Kingdom.



Welsh//Slate's products are available in five colours that reflect the true nature of beauty.

These elegant colours are complemented with exquisite naturally occurring veins and textures that create an added dimension to any application.

Available in a variety of standard finishes: **Fine Rubbed** for a smooth sheen, **Riven** for a natural appearance and **Flamed** for a rough texture. Natural slate's durability and resistance to weather, temperature, mossing and colour erosion, make it a superbly adaptable and flexible material, ideal for almost any environment.



Colours & Finishes

As Welsh//Slate produces only natural products from the finest raw materials each slate has its own unique visual characteristics.

To realise the full potential of slate it is important for the specifier to understand the full range of textures, colours and sizes as well as the physical properties of slate.

Samples are available on request.

Note: Not all products are available in all colours.



WALLING

4

Materials can be provided for traditional or contemporary designs. Walling products are durable and colour fast.



CLADDING

5 6

Welsh slate can be used for internal or external surface coverings which are second to none in terms of aesthetic appeal, durability, flexibility and quality.



FLOORING

7 8

Available in a range of colours and finishes. Natural slate's durability and very low porosity make an ideal internal flooring material.



PAVING

9

Available in a range of colours and finishes. Natural slate's durability and resistance to weather, temperature, mossing and colour fading make it a superbly adaptable and flexible material.

Applications

OTHER APPLICATIONS

- WORKTOPS
- FIRE HEARTHES
- LINTELS
- COPINGS
- ARCHITECTURAL FEATURES
- SLATE MULCH





WALLING

Welsh **Slate** uses only natural materials extracted from some of the world's finest deposits. Formed up to 590 million years ago each piece of slate has its own unique fingerprint, reflecting the power and presence of the landscape from which it was hewn.

RUSTIC WALLING

Quarried from a naturally exposed face, rustic walling gives a striking and rugged appearance, adding power to traditional and innovative designs alike.

PILLARED WALLING

This provides a smoother and more contemporary appeal, pillared walling is a traditional material which ensures elegance and natural beauty to urban and rural locations.







CLADDING

Welsh slate is recognised as one of the most versatile, durable and desirable cladding materials available.

Slate is exceptionally uniform and inert. It is extremely resistant to weathering and chemical attack, whilst the negligible water absorption (<0.3%) protects it from frost damage. Welsh slate is in fact arguably the most durable slate in the world and is ideally suited for external and internal cladding of prestigious buildings.

Welsh//Slate's comprehensive range is available in sizes to suit and in a selection of colours and finishes.

External cladding or internal lining can be held by metal fixings, frames or fixed to precast concrete panels. Masonry units, in course heights of up to 180mm and to random or specified lengths with pillared and sawn faces give the designer extensive flexibility and potential for creative expression.



7





FLOORING

The practical qualities of Welsh slate as a flooring material hardly need to be emphasized. It is the hardest wearing slate in the world and has a life expectancy well in excess of 100 years. It is impervious to sunlight, water staining, fire and heavy wear. It often proves to be the most durable part of any building.

These outstanding practical qualities combined with its natural beauty make Welsh slate ideal for any environment, particularly where a hard wearing, low maintenance yet attractive floor covering is required.

TYPICAL DIMENSIONS OF TILES AND SLABS

SIZE mm	THICKNESS mm	WEIGHT PER UNIT Kg	NO. OF UNITS PER m ²
250 x 250	20	3.38 kg	16
300 x 300	12	2.92 kg	11.11
500 x 250	20	6.75 kg	8
500 x 500	20	13.5 kg	4
600 x 300	12	5.84 kg	5.55

Weight per m² at 12mm thick: 32kg
 Weight per m² at 20mm thick: 54kg
 All weights given are approximate.

Alternatively, flooring units can be cut to size and thickness.



PAVING

Welsh slate is an inspired choice for paths, patios and hard landscaping. It is extremely durable and slip resistant and provides a beautiful natural appearance for contemporary and traditional designs.

Welsh slate does not fade even in uv light. It is impermeable to water and highly resistant to chemical attack and mossing.

Welsh **//Slate** provides paving in a range of widths, lengths and thicknesses with a selection of finishes.



WHY WELSH SLATE?

FEATURES & BENEFITS

- UK manufacturer** - low carbon footprint.
- Traditional UK building material** - performance guaranteed, you know what you are getting.
- Chemically inert** - resistant to acids and alkali's, colours will not fade.
- Relatively dense material** - very hard, durable and frost resistant.
- Silky finish (when fine rubbed)** - attractive tactile material.
- Choice of colours** - visually attractive.
- Strong in tension and compression** - allows for a wide range of uses.
- Negligible water absorption** - frost and stain resistant.
- High thermal capacity** - absorbs and radiates heat slowly.
- Low life cycle costs**

SUMMARY OF TYPICAL TECHNICAL PERFORMANCE

Density	2797 KG/M ³	
Unpolished slip resistance	BS EN 1341:2001	65 Dry
	BS EN 14231:2003	51 Wet
Flexural strength	BS EN 12372:1999	55.7 Mpa
Calcium carbonate content	BS EN 12326-1:2004	0.3%
Compressive strength	BS EN 1926:1999	53 Mpa
Water absorption	BS EN 13755:2002	0.2%

COMPARISON OF TYPICAL TECHNICAL PERFORMANCE

	Limestone	Welsh Slate	Granite
Density Kg/m ³	1950-2400	2750	2560-3200
Compressive strength N/mm ²	20-40	53	105-335
Water absorption %	4-8	0.2	0.08-0.22

Quality Assurance

Welsh//Slate products are produced by one of the worlds largest manufacturer of natural slate who are accredited with the highest international standards including ISO 9001:2008. You can be assured that the most stringent quality control measures are taken at every stage from extraction through to delivery.

Environmentally Responsible

Welsh//Slate have received ISO 14001 Environmental Management Systems accreditation and are totally committed to restoring and remodeling landscapes effected by quarrying.



Welsh Slate Limited
Penrhyn Quarry,
Bethesda,
Bangor,
Gwynedd.
LL57 4YG
United Kingdom

Telephone: +44 (0) 1248 600 656
Fax: +44 (0) 1248 601 171
Website: www.welshslate.com
e-mail: enquiries@welshslate.com