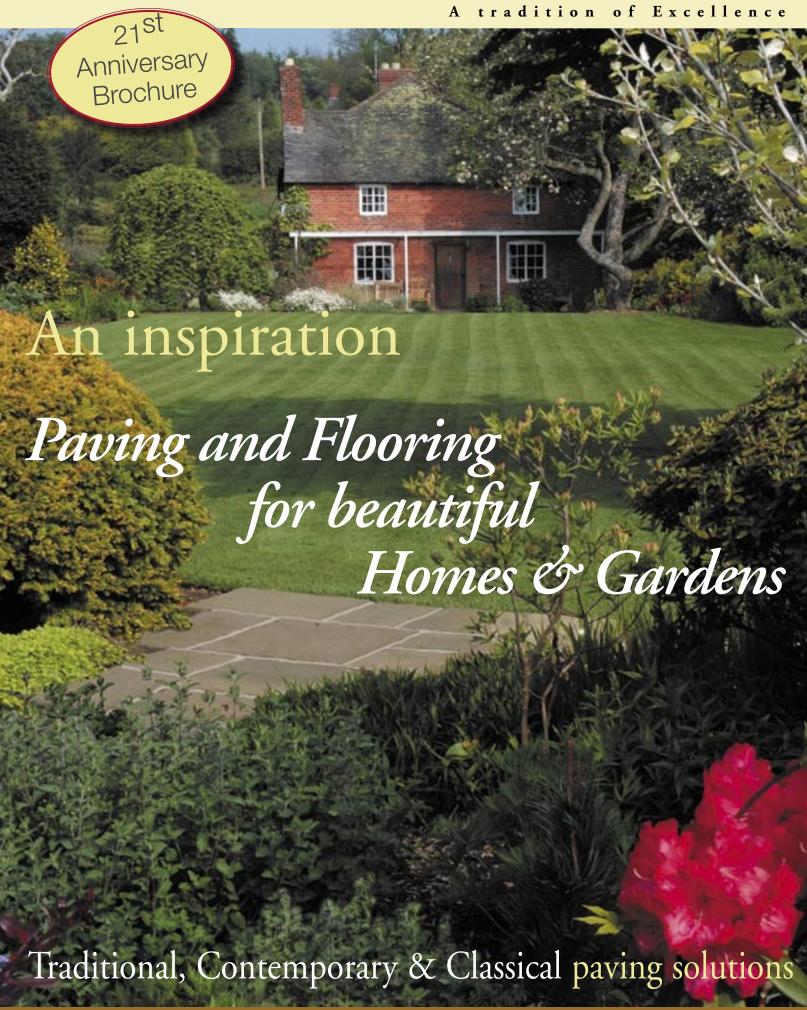
westminsterstone





pages 4 to 9

Traditional timeless style

- terraces
- planters
- water features



pages 10 to 15

Renaissance changing, evolving

- terraces secluded spaces
- interiors
- centre features



pages 17 to 19

Contemporary classics of the future

- open spaces - urban spaces
- minimal interiors
- entertaining alfresco



pages 20 to 25

Classic enduring design

- polygons
- steps - pool edges
- patios



27 to 29

Period - interior flooring

- kitchens
- sitting rooms
- conservatories
- dining rooms



pages 30 to 31

Grand Design a case study

- The Lion Quays



pages 32 to 47

Informative technical info

- dimensions weights

Page 34 & 35 Page 34 & 45

- installation
- techniques
- cross reference

Rectangular Flagstones

- Old Yorkshire Street, Old Lancashire Mil & Chelsea Gold	Page 34
- Yorkstone & Weathered York	Page 38
- HenSlate & Old Cotswold	Page 44
- Natural Stone - LivingStone & PureStone	Page 42
Cobbles, Setts & Bricks	· ·
- Old Castle Cobble Setts	Page 37
- Jacobean Paving Bricks	Page 44
- Natural Stone - LivingStone & PureStone	Page 42-43
Tiles	
- Old Provence Tiles	Page 40-41
- Aegean Cream (Travertine)	Page 43
Circle Features	
- Flagstone Classic Rotarea	Page 36 & 39
- Old Castle Stone	Page 37
- Old Provence Classic Rotarea	Page 41
- Natural Stone - LivingStone & PureStone	Page 43
Octagon Features	
- Flagstone Classic Octagon	Page 35 & 3
- Old Castle Stone	Page 37
- Old Provence Classic Octagon	Page 40

- Grosvenor Accessories - Steps, Gulleys & Kerbstones

- Mill Stones, Troughs, Planters, OakStone & Edgings

"Are you looking to create a sense of harmony and beauty in your home and garden? Perhaps, like me, you're passionate about the quintessential country garden and its untamed charm? It's at the heart of our approach at Westminster Stone and as a third generation family owned business, we're proud to be just a little sentimental about our heritage. However, if you prefer to push the boundaries of traditional design you will find our simple approach to creating the very best authentic reproduction materials will transform your project from the ordinary to the outstanding. Whatever your style, all that's needed is a little inspiration and we are delighted to bring you some of our ideas in the following pages. Take some time to explore the possibilities and discover why Westminster Stone raises the standard in traditional landscaping materials."

John Clifford

Managing Director









- paths leading us ...
- terraces enjoyed on a different level ...
- planters natural focus ...
- water features transparent, reflective...



Traditional: tra-di'shonal. Defined as having roots in

the past. Pertaining to time honoured doctrines. There is no doubt that these materials are heavily influenced by what has gone before but this strong reference to the past provides the garden designer with a varied palate with which to create areas that transcend pure practicality.



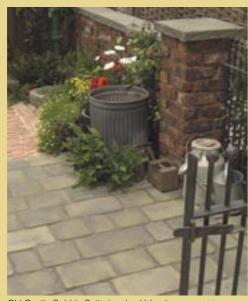
Chelsea Gold flags & Old Castle Cobble setts (see pages 34-37)



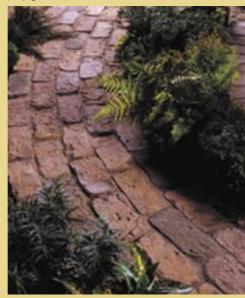
Glendale Setts laid coursed random (see page 42-43)



Old Lancashire Mill flooring in Welsh Oak Frame house (see pages 34-35)



Old Castle Cobble Setts in mixed blend (see page 37)



Jacobean Paving Brick pathway (see page 44)



Jacobean round trough (see page 44)



Jacobean Paving Brick on Edge (see page 44)



Jacobean Paving Brick on Edge (see page 44) & Millstone (see page 45)

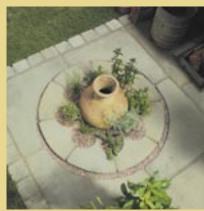


Our thanks to The Dingle Nursery, Welshpool, for location photography.





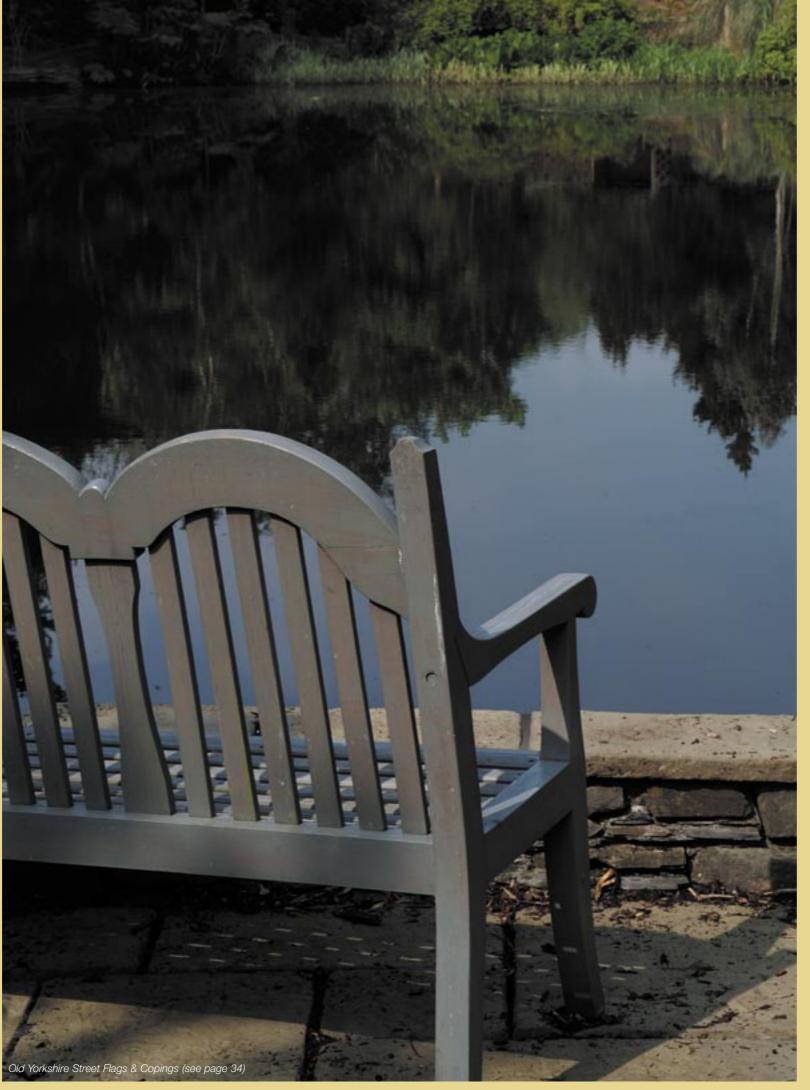
Chelsea Gold Classic Rotarea with random squaring kit (see page 36)



Old Lancashire Mill Abbey Planter & Squaring off flags (see page 34)

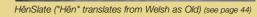
Glendale natural stone flags with Glendale cobble inset panels (see pages 42-43)













Old Grosvenor Chamfered Step in Old Lancashire Mill grey



Flagstones and Old Grosvenor Kerbstones in Old Yorkshire Street (see pages 34-35)



Traditional garden setting using Westminster Stone traditional materials





Old Provence Classic Rotarea with squaring off kit (see pages 40-41)



Old Provence Squares, Rectangles, Diamonds & Triangles (see pages 40-41)





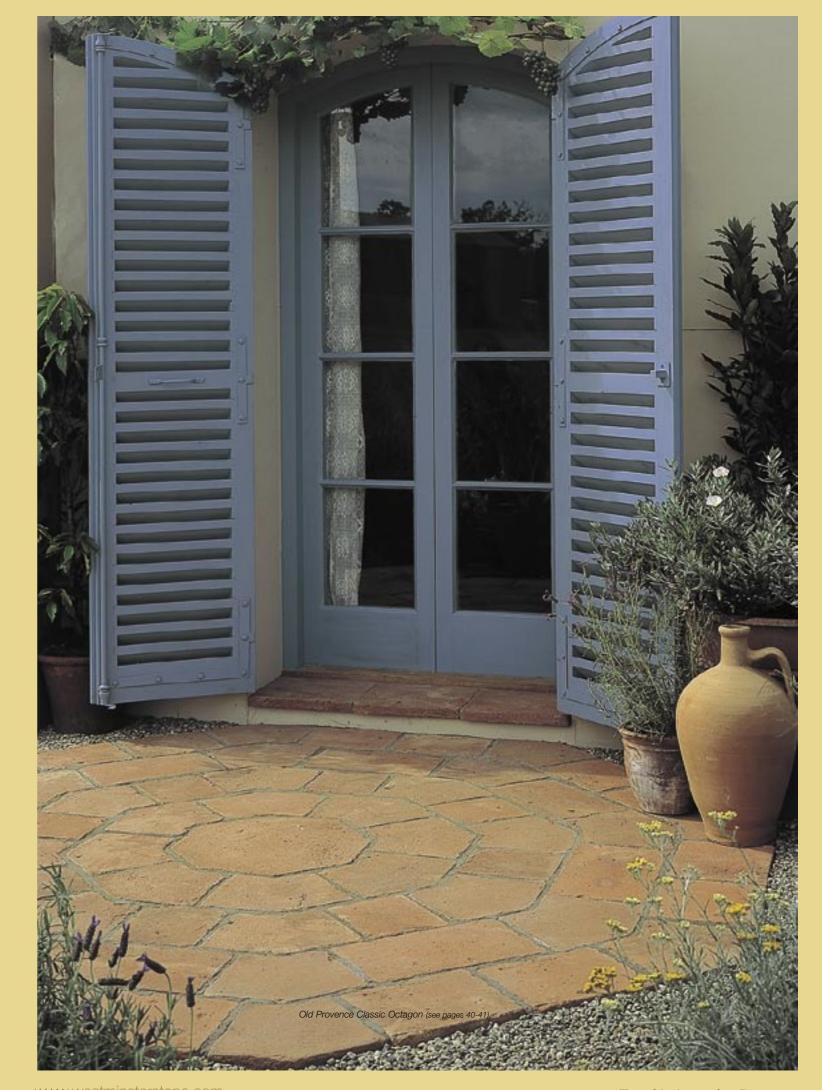


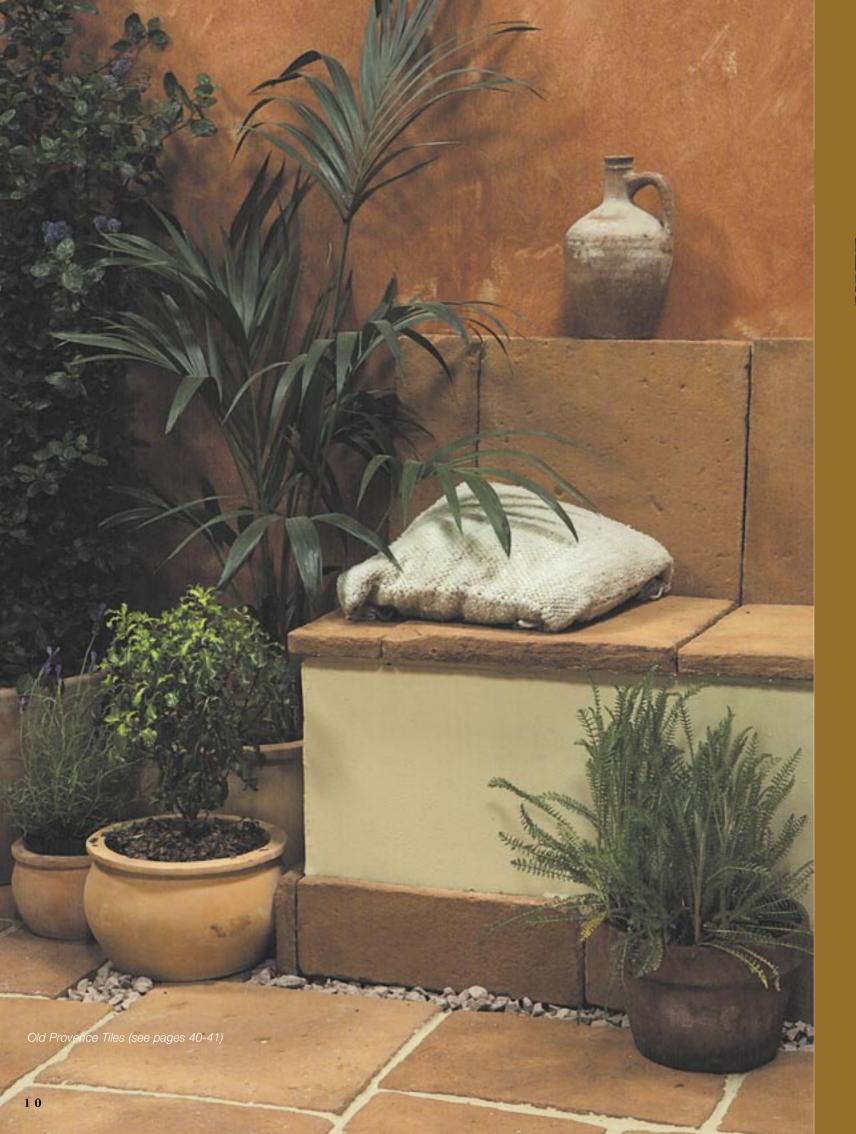
Old Provence random coursed path (see pages 40-41)





Desert Sand Setts (see page 42-43)





Renaissance - changing, evolving



Renaissance: re-na'sans n a Re-birth or revival; the

a Re-birth or revival; the period of transition from medieval to modern times. What could be more appropriate? Time to reflect upon your world around you and influence its shape and character. Our unique range of materials transcends fashion, allowing you to create and define a style of your own. May we suggest a closer look at the Westminster Rotarea? Integrated to your garden design it will provide the perfect focal point for a special feature.

- terraces a different perspective...
- secluded space to think...
- interior kinetic warmth...
- centre features focal point ...





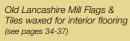


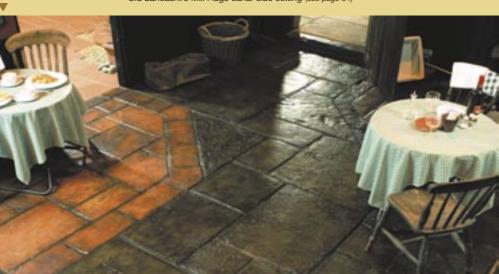


Old Lancashire Mill Flags with Abbey Planter & squaring off kit (see page 34) and Old Welsh Quarry tiles (see page 40)



◀ Glendale natural stone flags (see pages 42-43)

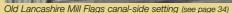






▲ Old Yorkshire Street - Random flags, Classic Rotarea semi-circle, and Old Grosvenor Kerbstones (see pages 34-36)









Yorkstone Flags and half Classic Rotarea



Traditional palladian design with Old Provence Tiles & Castle Tile (see pages 40-41)

Yorkstone 6.4 metre diameter Classic Rotarea (see pages 38-39



Old Yorkshire Street Flags (see pages 34-37)



Yorkstone Classic Octagon (see page 38) with Old Welsh Quarry tiles in foreground (see page 40)



Old Castle (small element) Classic Octagon in Old Lancashire Mill hues (wet) (see page 37)



Planter Squaring off kit used as tree planter within random flags (see page 34)



Abbey Planter (see page 34)









Contemporary: kon-tem' po-ra-ri a The circumstances,

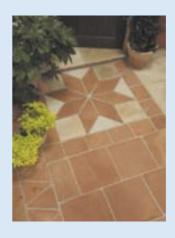
ideas and styles of the present age.

Make way for the new. Be creative and go with the flow; life is for living. If the world is a stage, then create your perfect backdrop with our expansive range of materials, you will find the design permutations are endless. A city garden can become a tranquil haven for meditative reflection or the perfect spot for an evening's entertainment with friends. The choice is yours.

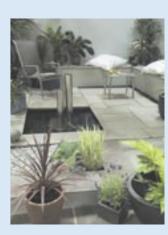
Contemporary-

of the future

open spacesurban spacesminimal interiorentertaining alfresco









Planter Squaring off kit (see page 34) and Granary Millstone (see page 45)





Old Provence Classic Octagon and pathway (see pages 40-41)





Old Provence square tiles (see page 40)

Desert Sand Circle (see page 42)





Greyfell flags (see pages 42-43)



◆ Old Provence Tiles (see pages 40-41)



Classic enduring design

- polygons
- steps
- pool edge
- patio







Classic: klas'ik a Having lasting significance or worth, enduring. The great garden designers of Persia cherished their outdoor living space as a source of great beauty and sought to create their own paradise within. Nature was tamed with formal planting of trees and flowers, harmonised with the presence of water features – a heavenly place to be. Westminster Stone's dedication to authenticity will ensure your project carries a heritage which lies far beyond its true years.



Old Provence Square Tiles (see pages 40-41)

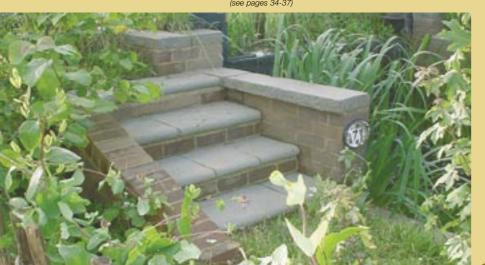


Old Grosvenor Drainage Gulleys (see page 35)





Old Yorkshire Street Flags & Old Castle Cobble Setts (see pages 34-37)



Award winning garden at Hampton Court Palace Flower Show, Old Lancashire Mill Bullnosed Flags (see page 34)









Old Lancashire Mill Flags and Bullnoses used as swimming pool surround and copings (see page 34)



Chelsea Gold Old Castle Cobble Setts waxed for interior flooring (see page 37)



Wildlife Table (see page 45)



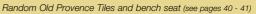
Cragside natural stone flags (see pages 42 - 43)



Old Lancashire Mill Flags and Jacobean Paving Brick soldier course (see pages 34 & 44)



Old Welsh Quarry Tiles sealed for conservatory (see page 40)











- living room

- conservatory

- kitchen

- dining room

- bathroom

Period-

farmhouse, classic or penthouse.

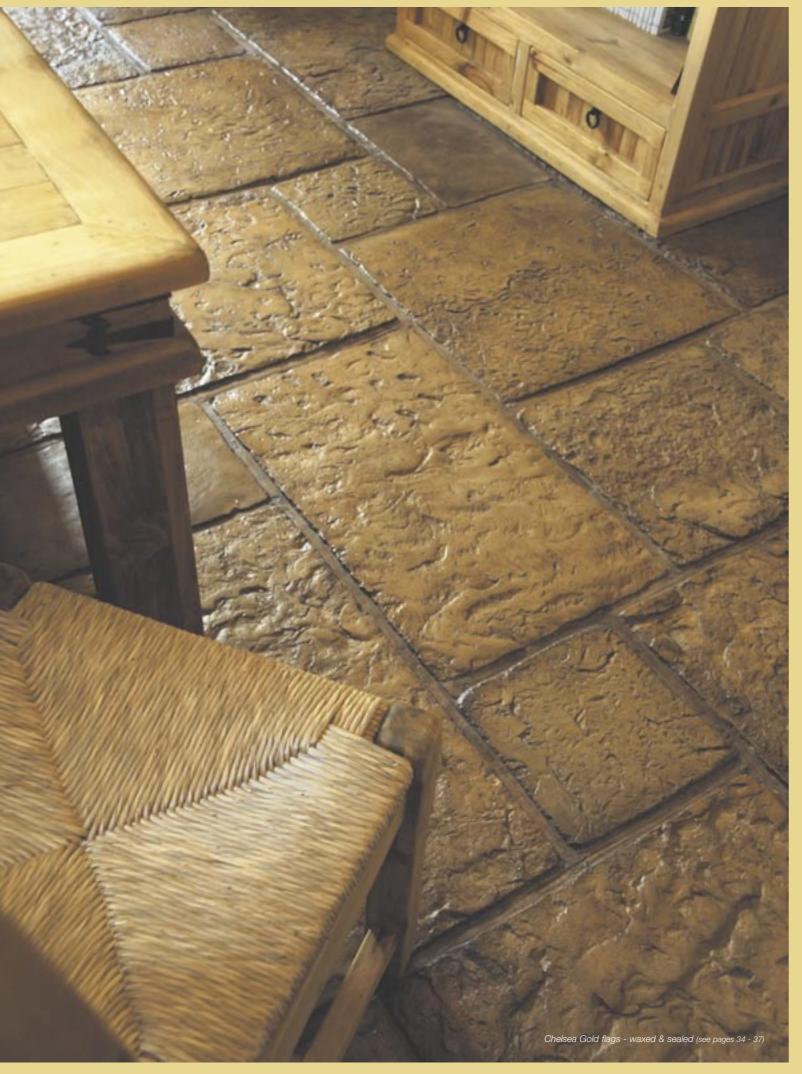
flooring

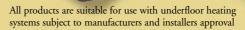






All products are suitable for use with underfloor heating systems







Greyfell Flags (see page 42)



Old Provence waxed tiles (see pages 40 - 41)



Old Yorkshire Street Flags (waxed) (see pages 34-37)



Old Yorkshire Street flags (see pages 34 - 37)



Desert Sand Flags (see pages 42 - 43)



Livingstone Travertine flooring and Desert Sand Circle (external) (se pages 42 - 43)

28 www.westminsterstone.com Period interiors Page 29

Grand Design - Case Study The Lion Quays - Hotel, restaurant & conference centre- Shropshire



It was vital that the gardens of this newly built

canal-side hotel contained an abundance of character and heritage, all in a very short space of time. The Ability Garden Company, who undertook this prestigious project, chose to work with Westminster Stone in the supply of sympathetic Street Flags and Mill Flags. "A period feel had to be achieved quickly in our Walled Garden area; careful herbaceous border planting, well chosen tree specimens and Westminster Stone's Street Flags worked together to give a finished impression of natural period charm", the



Yorkstone Classic Rotarea

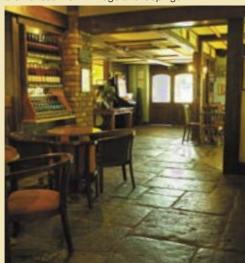
Old Lancashire Mill Flags shown here as internal window sills



designers explained. "The newly built quayside carries unquestionable authenticity with its random coursing and the irregular mouldings found in the Flags. Without



Old Lancashire Mill Flags and Copings



Old Lancashire Mill Flags sealed for use in



Chessboard using natural stone squares in Desert Sand and Cragside

doubt, the instantly weathered appearance of the landscaping materials provided the right framing upon which we could design and create these beautiful gardens."



Classic Rotarea and Octagon feature



Yorkstone flags



Random Yorkstone Flags



Old Yorkshire Street Flags in pub terrace garden



General Notes



Old Provence squares, rectangles, triangles and

Westminster Stone integrity

All products within the range are manufactured from through-pigmented, high specification, fibre reinforced reconstructed stone. Only raw materials of the highest quality, sourced wherever possible from the United Kingdom, are used to enable Westminster Stone to present authentically reproduced products second to none. All products are frost resistant.

Dimensions and Weights

All Westminster Stone products are reproduced from natural materials enabling the finest detail to be accurately and authentically reproduced and consequently there will be a slight variation, (within tried and tested tolerances), in dimensions; this variation will enhance the overall natural effect. All dimensions quoted for reproduction materials and natural stones are approximate. Products are shown first in metric, with imperial following. Sizes quoted are nominal, and therefore show the area covered, including the recommended pointing gap, and not the actual size of the item.

Colour variation

All products within the range are manufactured to look as natural as possible and, with this in mind, Westminster Stone have set out to achieve colour and tonal variation within accepted parametres. It is recommended that for projects requiring more than one pack, several packs are opened at once to enable you to benefit from the most natural intended variation available. Natural curing and weathering can also affect the colour of materials, this too will enhance the overall natural effect. The LivingStone and Purestone natural stone products have a slightly wider colour variation which again will enhance the overall effect. They may also carry some attractive veining marks and a variation in texture.



Old Yorkshire Street Flags & Old Welsh Quarry Tiles waxed for interior use



Old Provence Star Feature in 'Old Terracotta' and 'pale honey straw' hue.

Surface drainage

Paved areas should be gently sloping away from any building to allow excess water to be directed away. Any base or ground preparation should also allow for drainage. Poor drainage may result in water retention and may affect the weathering characteristics of materials.

For best results, a strong semi-dry mix is recommended (with sufficient water content to bind, but not so much as to stain product when used). Sufficient pointing material should be mixed to be used within around thirty minutes, less in warmer weather conditions, after this time it may become too dry to bind. Dry mix or sand for pointing may hold moisture for excessive periods, and staining may occur.

Natural stone in particular will benefit from a PVA type bonding agent to be added to the mortar when laying. Natural stone products, materials less than 35 mm (1 3/8") thick, and high traffic areas should be laid on a strong full mortar bed.

Efflorescence

Westminster Stone cannot be held responsible for efflorescence, a naturally occurring phenomenon inherent in all highly cementitious products; this may temporarily affect the colour or tone, but will not affect the structural properties, performance or durability of the product. Efflorescence may manifest itself in the form of a deposit or an apparent fading of colour either in patches, runs, or covering the surface. The effects will gradually disappear with time, usage and once natural weathering takes over.

Cleaning and de-icing salts

Westminster Stone will not be held responsible for



Old Castle Cobbles, Old Lancashire Mill Flags & Jacobean Brick on Edge.

the effects of chemical cleaners, pressure washers or de-icing salts which may have a detrimental effect on the surface of all concrete. Avoid the use of metal snow clearing tools too, which may also damage the surface of any wet cast concrete product surface.

New products & Designs

At Westminster Stone, the policy is one of continuous improvement, and as such they reserve the right to change specification without notice. Applications have been made for name and design registration, and Westminster Stone claim copyright on all of their

Many products within the Westminster Stone range are heavy. It is suggested that items over 25 kg, or those that are awkward in shape should be handled by more than one person, or using suitable lifting

It is recommended that work gloves are used to prevent abrasion to hands, and lime burns from wet mortar. Eye protection should also be used when cutting with either chisels or disc cutters.

Westminster Stone or their appointed agents are able to give details of preparations, sealants and waxes for use when laying products out doors, or for interior

There is an intended variation within the Westminster Stone range, and photographs within this brochure are intended as a guide only. Colours within the brochure are as accurate as photographic and printing processes allow and where possible materials should be selected from actual material.



All of the essential information necessary to enable you to design and create your dream

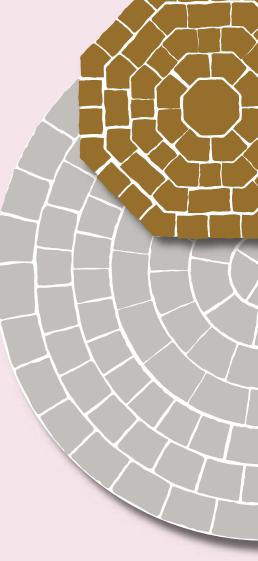
garden, is laid out clearly on the following pages. Sections show clearly what is available in each range, but a cross reference index inside the back cover shows clearly what features and accessories are available.

PROJECT PACKS (clearly marked throughout in blue), provide classic design solutions in easy to calculate and order kit packs. BESPOKE solutions can also be achieved, tailoring Westminster Stone materials to your own individual requirements; for instance you may only require a part of a circle or octagon, or may wish to limit the size or weight of flagstones that you are using.

Whatever your approach, our friendly Sales and Technical support staff are on hand to answer any queries that you may have, and may also be able to offer further design inspiration.

- dimensions

- weights
- installation
- techniques
- cross reference index



Intormativ







Old Yorkshire Street, Old Lancashire Mill & Che Isea Gold

Old Yorkshire Street Flags Footworn and magnificent; these flagstones add an incomparable charm and maturity to any environment, both indoors and out, with subtle hues of green and grey.

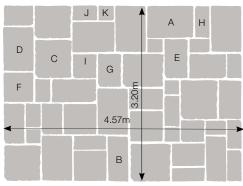
Old Lancashire Mill Flags

Reproduced from hand selected masters from the floors of

19th century textile mills, we believe our Lancashire Mill flags carry a special integrity; assured to add character and

Rectangular Flags

(units in mm)	A 915 x 610 36 x 24	B 915 x 457 36 x 18	C 762 x 762 30 x 30	D 762 x 610 30 x 24	E 762 x 457 30 x 18	F 610 x 610 24 x 24	G 610 x 457 24 x 18	H 610 x 305 24 x 12	I 457 x 457 18 x 18	J 457 x 305 18 x 12	K 305 x 305 12 x 12
weight per flag kg	51.28	38.46	53.42	42.74	32.05	34.19	25.64	17.09	19.23	12.82	8.55
No. per sq metre	1.79	2.39	1.72	2.15	2.87	2.69	3.59	5.38	4.78	7.18	10.76
No. per sq yard	1.50	2.00	1.44	1.80	2.40	2.25	3.00	4.50	4.00	6.00	9.00
*Project Pack (10sc	7 M) 3	3	-	3	3	3	4	4	4	4	3

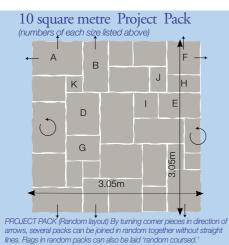


Random Flags (use approximately equal numbers of each size)

Copings & Fillers

Bullnosed Flags

mm	152x610	152x457	152x305	152x152
Inches	6x24	6x18	6x12	6x6
weight per flag kg	8.55	6.41	4.27	2.14
No. per sq metre	10.76	14.35	21.53	43.06
No. per sq yard	9.00	12.00	18.00	36.00
1 17				

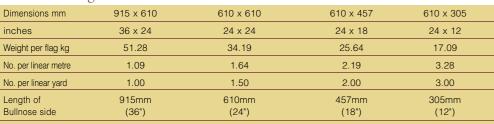


Traditional Copings & Pier Caps

	1 0	
	Coping	Pier Caps
Dimensions metric	915x305x65	450x450x65
Dimensions imperial	36x12x2.5	18x18x2.5
Weight per flag kg	50.00	37.50

	大元 -	-
		06.9
	SX	144
5	STATE OF THE PARTY	
	NAME OF THE PARTY	-

Old Lancashire Mill



The following three sizes available to special order: 915x457mm, 610x457mm, 610x305mm.

Furniture

	Stone Table	Table/Bench	StoneBench			
Metric size mm	1220x762x75	1220x610x75	1220x457x75	915x457x75		
Imperial size "	48 x 30 x 3	48 x 24 x 3	48 x 18 x 3	36 x 18 x 3		
weight per flag kg	170	136	102	77		



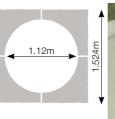
Bullnosed Flags & traditional coping stone

Abbey Planter & Planter Squaring off Kit

Abbey Planter	Squaring off Kit
14kg (x8)	33.2kg (x4)
	2.32 sq M
	2.78 sq yd



Squaring off kit Can be used as tree or feature surround or to square off Abbey Planter



Abbey Planter and Planter Squaring off Kit in Lancashire Mill with square filler edging

<u>Chelsea Gold</u> Add the warmth of a golden era to your interior flooring or garden landscape with the gentle glow and ambience of our Chelsea flags

Old Yorkshire Street

Old Grosvenor Range

	Kerbs	tone	Chamfer	ed Step	Drainage Gulley		
	Straight	Corner					
Metric size mm	610x100x130	305x100x130	915x255x65	610x255x65	610x305x100	457x305x100	
Imperial size "	24 x 4 x 5	12 x 4 x 5	36 x 10 x 2.5	24 x 10 x 2.5	24 x 12 x 4	18 x 12 x 4	
weight per piece kg	16.00	8.00	36.00	24.00	36.00	27.00	
No. per sq metre	-	-	4.29	6.43	5.37	7.17	
No. per sq yard	-	-	3.58	5.38	4.49	6.00	



Old Grosvenor Kerbstones + flags in Old Yorkshire Street

Old Grosvenor Chamfered Step + flags in Old Lancashire Mill



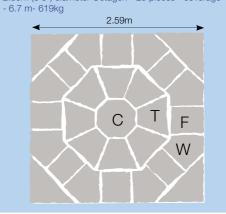
Old Grosvenor Drainage Gulley + flags - Old Yorkshire Street

Reconstructed stone, fibre reinforced

Classic Octagon Project Pack 2.59m (8'6") diameter Octagon - 25 pieces coverage



Squared Classic Octagon Project Pack 2.59m (8'6") diameter Octagon - 29 pieces - coverage



Classic Octagon (bespoke) individual pieces can be ordered to achieve any design permutation.

	, <u> </u>						
To further extend the	Project Pack, add the fo	ollowing components to	reach the required dia	meter.			
		18W	18F	18DF			
		Wings	Fillers	Double Filler			
		457mm	457mm x 380mm	457mm x 760mm			
Metric	Imperial	18"	18"x15"	18"x30"			
2590mm	8' 6	Use Octagon Project F	Pack 1 (above)				
to 3510mm	11' 6	add 8	0	8			
to 4420mm	14' 6"	add 16	8	16			
to 5640mm	18' 6"	add 24	8	32			
to 6250mm	20' 6"	add 32	8	48			
Weight of each FLAG 21kg 16.00kg 32.00kg							
Failor your Octagon to	your specification usin	a the components above	VA.				

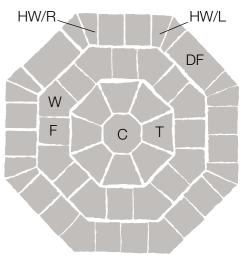




reproductions. Standard thickness approximately 40mm (1¹/2"+) (25mm (1") manufactured to order). Recommended pointing gap 10 - 25mm (3/8 - 1"). Average weight approx 92kg/square metre (77kg/square yard). Average weight approx 10.8 square metres/tonne (13 square yards tonne). Suitable for use as external paving and interior flooring material. Chelsea Gold, Old Yorkshire Street and Old Lancashire Mill Flags and are reproduction reclaimed flags:

See specifications on page 42

Centre circle can be ordered with 50mm hole for use with a parasol or washing line.



Classic Octagon (bespoke)

www.westminsterstone.com

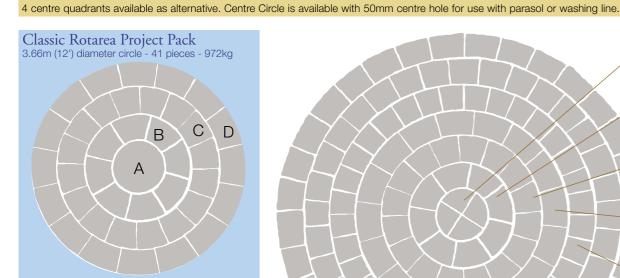
Old Yorkshire Street, Old Lancashire Mill & Chel sea Gold continued

Old Castle Cobbles
Rich in every detail, Old Castle Cobble Setts are full of character and old-world charm and can be used in an

extensive range of applications with complementary Octagons and Circles to complete your project.

Classic Rotarea (bespoke) individual pieces can be ordered to achieve any design permutation.

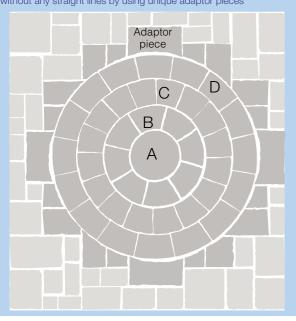
Approx. D)iameter	Approx.	Radius	Flags required for each _ complete full circle	36A 910mm/36"	18B 457mm/18"	18C 457mm/18*		Sq off kit	18E 457mm/18*	18F 457mm/18"	18G 457mm/18*	Weight of complete circle kg
Metric	Imperial	Metric	Imperial						nber in ea	ach ring			
915mm	3'0"	457mm	1'6"	18A (Centre)	1	_	_	_	_	-	_	-	61
1830mm	6'0"	915mm	3'0"	18AB	1	8	-	-	_	-	-	-	243
2745mm	9'0"	1373mm	4'6"	18ABC	1	8	16	-	-	-	-	-	547
3660mm	12'0"	1830mm	6'0"	18ABCD	1	8	16	16	-	-	-	-	972
3965mm	13'0"	square		ABCD (Squared off)	1	8	16	16	4	-	-	-	1456
4575mm	15'0"	2288mm	7'6"	18ABCDE	1	8	16	16	-	32	-	-	1519
5490mm	18'0"	2748mm	9'0"	18ABCDEF	1	8	16	16	-	32	32	-	2187
6400mm	21'0"	3200mm	10'6"	18ABCDEFG	1	8	16	16	-	32	32	32	2977
				Weight of each FLAG kg	60.74	22.78	18.99	26.58	120.90	17.09	20.88	24.68	
				Weight of each RING kg	61	182	304	425	484	547	668	790	



Classic Rotarea to Random Project Pack

3.66m (12') diameter circle - 61 pieces coverage - 15.36 sq m - 1422kg

Enables circle feature to be squared off into a random area of flags without any straight lines by using unique adaptor pieces



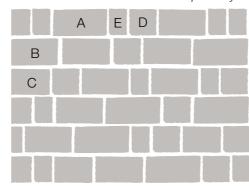
Classic Rotarea & Squaring off Kit Project Pack

3.66m (12') diameter circle squared off to 3.96m sq coverage 15.68 sq m - 69 pieces - 1452kg

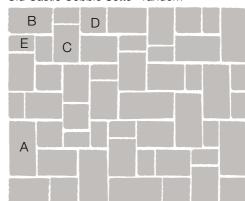
Old Castle Stone individual pieces can be ordered to achieve any design permutation.

Old Castle Cobble Setts		Α	В	С	D	Е
mm	Random (5 sizes)	228 x 457	228 x 380	228 x 305	228 x 228	228 x 152
Inches	one of each	9 x 18	9 x 15	9 x 12	9 x 9	9 x 6
weight per flag kg	-	9.62	8.01	6.41	4.81	3.21
No. per sq metre	2.87	9.57	11.48	14.35	19.14	28.70
No. per sq yard	2.40	8.00	9.60	12.00	16.00	24.00

Old Castle Cobble Setts - coursed pathway



Old Castle Cobble Setts - random



Reconstructed stone, fibre reinforced reproductions. Standard thickness approximately 40mm (1¹/2"+) (25mm (1") manufactured to order). Recommended pointing gap 10 - 25mm (3/8 - 1"). Average weight approx 92kg/square metre (77kg/square yard). Average weight approx 10.8 square metres/tonne (13 square yards tonne). Suitable for use as external paving and interior flooring material. Old Yorkshire Street, Old Lancashire Mill Flags and Chelsea Gold are reproduction reclaimed flags.

Whether laid random or coursed, for ease of calculation and pleasing results we suggest using equal numbers of each size.

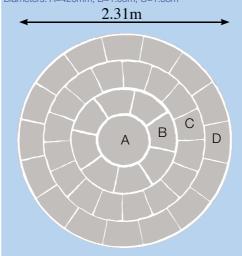
See notes on page 32/46.

Old Castle Classic Rotarea Project Pack

pieces - 41 - 388kg

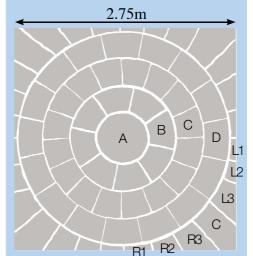
Available in Old Yorkshire Street Flags, Old Lancashire Mill Flags and Chelsea Gold.

Diameters: A=420mm, B=1.05m, C=1.68m



Old Castle Classic Rotarea & Square off kit Project Pack

square = pieces - 69 - coverage - 7.54sqm - 698kg compatable with Old Castle Cobble Setts and random flag stones. Diameters: A=420mm, B=1.05m, C=1.68m







Reproduction circular feature using smaller flags & cobbles - for use with Old Castle Cobble Setts or Old Yorkshire Street, Old Lancashire Mill Flags, Chelsea Gold or as a stand alone.

Old Castle Classic Octagon Project Pack

	Recommende	ed Design	C	OCtr 9W* Centre Wings		V*	9	SF*	91	LF	
Row	Approxi	mate	С			ngs	Filler		Filler		Weight of
Number	Nominal Di	iameter	76	32mm	228	mm	228 x	190mm	228 x	380mm	complete
	Metric	Imperial		30"	9)"	9" :	x 7.5"	9" x	15"	Octagon (kg)
			Total	Per row	Total	Per row	Total	Per row	Total	Per row	
Centre	762mm	2'6"	1	1	-	-	-	-	-	-	44
1	1219mm	4'0"	1	-	8	8	-	-	-	-	113
2	1676mm	5'6"	1	-	16	8	8	8	-	-	212
3	2124mm	7'0"	1	-	24	8	8	-	8	8	342
4	2591mm	8'6"	1	-	32	8	16	8	16	8	500
	Weight of ea	ach Flag	4	l4kg	8.6	5kg	3.7	75kg	7.5	ikg	-
				Squarin	na off pied	ces availab	ole to orde	er.			

www.westminsterstone.com

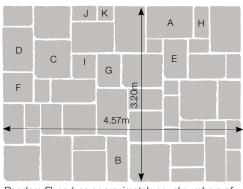
Yorkstone & Weathered York

Yorkstone Flags With a natural warm buff, their inherent strength and durability will provide timeless, traditional ambience.

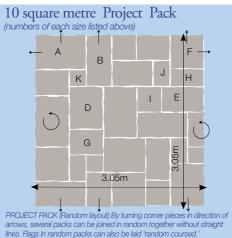
Rectangular Flags

<u>Weathered York Flags</u> Carrying the same detail as our Yorkstone flags but reproduced in tonal greys and varying hues to add an instant aged appearance to any area.

(units in mm)	A 915 x 610 36 x 24	B 915 x 457 36 x 18	C 762 x 762 30 x 30	D 762 x 610 30 x 24	E 762 x 457 30 x 18	F 610 x 610 24 x 24	G 610 x 457 24 x 18	H 610 x 305 24 x 12	I 457 x 457 18 x 18	J 457 x 305 18 x 12	K 305 x 305 12 x 12
weight per flag kg	51.28	38.46	53.42	42.74	32.05	34.19	25.64	17.09	19.23	12.82	8.55
No. per sq metre	1.79	2.39	1.72	2.15	2.87	2.69	3.59	5.38	4.78	7.18	10.76
No. per sq yard	1.50	2.00	1.44	1.80	2.40	2.25	3.00	4.50	4.00	6.00	9.00
*Project Pack (10sc	(M) 3	3	-	3	3	3	4	4	4	4	3



Random Flags (use approximately equal numbers of

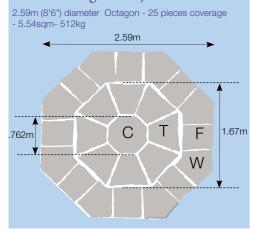


Classic Octagon (bespoke) individual pieces can be ordered to achieve any design permutation

To further extend the Project Pack, add the following components to reach the required diameter.								
		18W	18F	18DF				
		Wings	Fillers	Double Filler				
		457mm	457mm x 380mm	457mm x 760mm				
Metric	Imperial	18"	18"x15"	18"x30"				
2590mm	8' 6	Use Octagon Project Pack 1 (below)						
to 3510mm	11' 6	add 8	0	8				
to 4420mm	14' 6"	add 16	8	16				
to 5640mm	18' 6"	add 24	8	32				
to 6250mm	20' 6"	add 32	8	48				
Weight of each FLAG	ì	21kg	16.00kg	32.00kg				

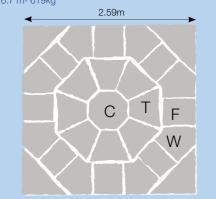
Tailor your Octagon to your specification using the components above

Classic Octagon Project Pack



Reconstructed stone, fibre reinforcedre productions. Standard thickness approximately 40mm (1¹/2"+) (25mm (1") manufactured to order). Recommended pointing gap 10 - 25mm (3/8 - 1"). Average weight approx 92kg/square metre (77kg/square yard). Average weight approx 10.8 square metres/tonne (13 square yards tonne). Suitable for use as external paving and interior flooring material. Chelsea

Squared Classic Octagon Project Pack 2.59m (8'6") diameter Octagon - 29 pieces - coverage - 6.7 m- 619kg

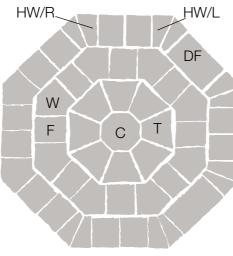


Gold, Old Yorkshire Street and Old Lancashire Mill Flags are reproduction reclaimed flags, Yorkstone and Weathered York are reproduction newly quarried flags. Whether laid random or coursed, for ease of calculation and pleasing results we suggest using equal numbers of each size. In smaller areas use equal numbers of sizes from 762 x 610mm (30" x 24") down. See notes on page 32/46



Weathered York Flags

Classic Octagon (bespoke)





Yorkstone Octagon Feature

Copings & Fillers

	152 x 610	152 x 457	152 x 305
	6 x 24	6 x 18	6 x 12
weight per flag kg	8.55	6.41	4.27
No. per sq metre	10.76	14.35	21.53
No. per sq yard	9.00	12.00	18.00



Classic Rotarea (bespoke) individual pieces can be ordered to achieve any design permutation.

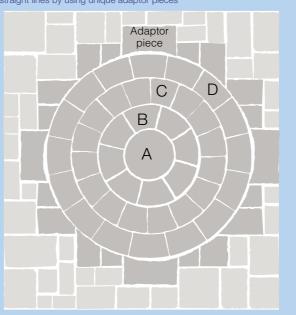
Approx. D	iameter	Approx.	Radius	Flags required for each complete full circle	36A 910mm/36"	18B 457mm/18"	18C 457mm/18"	18D 457mm/18"	Sq off kit 3.96m/13'	18E 457mm/18"	18F 457mm/18"	18G 457mm/18"	Weight of complete circle kg
Metric	Imperial	Metric	Imperial					Nur	nber in ea	ach ring			
915mm	3'0"	457mm	1'6"	18A (Centre)	1	-	-	-	-	-	-	_	61
1830mm	6'0"	915mm	3'0"	18AB	1	8	-	-	_	-	-	-	243
2745mm	9'0"	1373mm	4'6"	18ABC	1	8	16	-	-	-	-	-	547
3660mm	12'0"	1830mm	6'0"	18ABCD	1	8	16	16	-	-	-	-	972
3965mm	13'0"	square		ABCD (Squared off)	1	8	16	16	4	-	-	-	1456
4575mm	15'0"	2288mm	7'6"	18ABCDE	1	8	16	16	_	32	-	-	1519
5490mm	18'0"	2748mm	9'0"	18ABCDEF	1	8	16	16	_	32	32	_	2187
6400mm	21'0"	3200mm	10'6"	18ABCDEFG	1	8	16	16	_	32	32	32	2977
				Weight of each FLAG kg	60.74	22.78	18.99	26.58	120.90	17.09	20.88	24.68	
				Weight of each RING kg		61182	304	425	484	547	668	790	

4 centre quadrants available as alternative. Centre Circle is available with 50mm centre hole for use with parasol or washing line.



Classic Rotarea to Random Project Pack

3.66m (12") diameter circle
- 61 pieces coverage - 15.36 sq m - 1422kg
Enables circle feature to be squared of into a random area of flags without any straight lines by using unique adaptor pieces



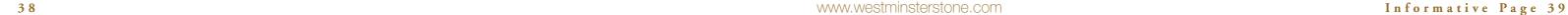


half Classic Rotarea

Classic Rotarea & Squaring off Kit Project Pack

3.66m (12') diameter circle squared off to 3.96m sq coverage 15.68 sq m - 69 pieces - 1452kg

SR MR LR



Old Provence Tiles and Features

Old Provence Terracotta Tiles
We provide what we believe to be the most comprehensive range of reproduction Reclaimed Antique Terracotta Tiles

from any one manufacturer. Capturing the essence of Provence in square, rectangular, octagonal, lozenge and diamond shapes in two natural terracotta colour hues,

offering more design potential from antique materials than could ever be dreamed possible.

Old Provence squares + rectangles as surround

reproductions. Standard thickness approximately 26mm

- 5/8"). Average weight approx 67kg/square metre (56kg/

tonne (18 square yards/tonne). Suitable for use as external

square yard). Average weight approx 15 square metres/

paving and interior flooring material. Complementary

octagonal & circle feature available. Lozenge:- When using Old Provence Tile or Old Castle Flooring Tile

centre, 2 lozenges are required to 1 centre tile (see

Whether laid random or coursed, for ease of calculation and pleasing results we suggest using equal numbers of

(1"+). Recommended pointing gap 10 - 15mm (3/8

Reconstructed stone, fibre reinforced

separate drawing).

See notes on page 32/46.

Old Provence Tiles

mm	420 x 420	420 x 210	420 x 140	315 x 315	565 x 165	565 x 255	280 x 255
Inches	16.5 x 16.5	16.5 x 8.25	16.5 x 5.5	12.5 x 12.5	22.5 x 7	22 x 10	11 x 10
Name	Large Prov.	Half Prov.	Third Prov.	Sm. Square	Lozenge	Diamond	Triangle
weight per tile kg	11.76	5.88	3.92	6.75	6.05	4.75	2.38
No. per sq metre	5.69	11.39	17.08	9.92	11.06	14.09	28.18
No. per sq yard	4.76	9.52	14.28	8.29	9.25	11.78	23.56



Old Provence rectangles



280 x 255mm (11" x 10") Area 23.35 per sq. yd.



420x140mm

Antique Tiles

40

_		
mm	240 x 240	230 x 230
Inches	9.5 x 9.5	9 x 9
Name	Old English	Old Welsh
Farn	nhouse Pamme	ts Quarry Tiles
weight per tile kg	3.90	3.50
No. per sq metre	17.17	19.14
No. per sq yard	14.36	16.00

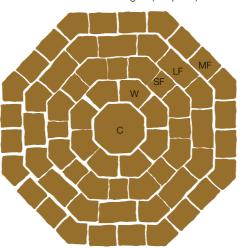


Old English Farmhouse



Old Welsh Quarry Tiles

Old Provence Classic Octagon (bespoke)

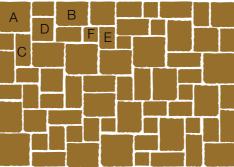


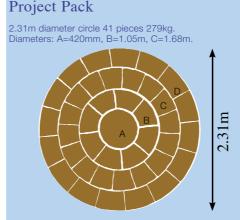
Old Provence Random Tiles

	А	В	С	D	Е	F	
Dimensions mm	420 x 420	420 x 315	420 x 210	315 x 315	315 x 210	210 x 210	Random
inches	16.5 x 16.5	16.5 x 12.5	16.5 x 8.25	12.5 x 12.5	12.5 x 8.25	8.25 x 8.25	1 of each size
Weight per flag kg	11.76	8.82	5.88	6.75	4.5	2.94	40.65
No per sq. metre	5.69	7.58	11.39	9.92	15.16	22.76	1.64
No. per sq. yard	4.76	6.33	9.52	8.29	12.67	19.03	1.37



Old Provence Random Tiles





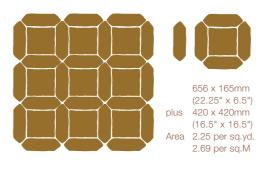
All pieces can be ordered seperately for bespoke designs

www.westminsterstone.com

Petite Lozenge

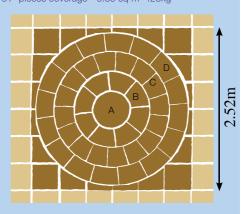


insert - Old Provence Lozenge with Castle Tile inset





2.31m diameter circle squared off to 2.52m square 61- pieces coverage - 6.35 sq m 423kg



Lozenge Infill Flooring Tiles Old Lancashire Mill and Desert Sand

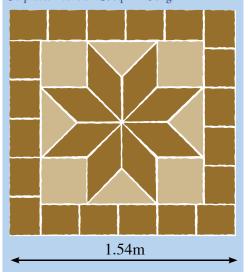
Dimensions mm	420 x 420	
inches	16.5 x 16.5	
Weight per flag kg	10.77	
No per sq. metre	5.69	
No. per sq. yard	4.76	

Old Provence Star Feature Project Pack



Old Provence Star Feature Project Pack: (old terracotta with pale honey straw contrast).

- 2 alternative square & triangle options:
- LivingStone Desert Sand (natural stone).
- Old Provence (old terracotta colour)
- 36 pieces covers 2.37sqm 158kg.





Informative Page 41

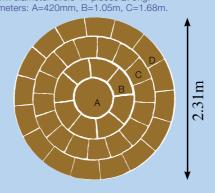
Old Provence Classic Octagon (bespoke)

		OCtr	W	SF	MF	LF	
		Centre	Wings	Small Filler	Med. Filler	Large Filler	Complete
Diameter of	Octagon	420mm	210mm	210 x 180mm	10 x 180mm 210 x 265mm		Octagon
Metric	Imperial	16.5"	8.25"	8.25 x 7"	8.25 x 10.5"	8.25 x 14"	Weight kg
420mm	1'4"	1	-	-	-	-	11
840mm	2'9"	1	8	-	-	-	55
1260mm	4'1"	1	16	8	-	-	120
1680mm	5'6"	1	24	8	-	8	205
2100mm	6'10"	1	32	8	16	8	310
2520mm	8'3"	1	40	24	16	16	435
2940mm	9'8"	1	48	40	32	16	579
3360mm	11'0"	1	56	40	32	40	744
Weight of each	Tile	10.65kg	5.60kg	2.50kg	3.75kg	5.00kg	-
No. per sq metre		6.29	11.96	26.84	26.84 20.13		-
No. per sq yard		5.26	10.00	22.44	22.44 16.83		-



Old Provence Petite Lozenge tiles

Old Provence Classic Rotarea Project Pack



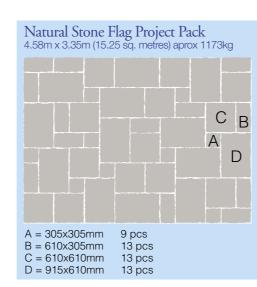
Circle can be extended to 2.94 m diameter if required

Natural Stone

Newly riven stone in an authentic range of colours will harmonise and enhance your natural surroundings.

LivingStone & Purestone rectangular natural stone flags

0		C					
mm		915 x 610	610 x 610	610 x 305	305 x 305		
Inches		36 x 24	24 x 24	24 x 12	12 x 12		
	No. per sq. metre	1.79	2.69	5.38	11.11		
	No. per sq. yard	1.50	2.25	4.50	9.29		
Product Name	Weight in kg	43.08	31.40	14.74	7.23		
Glendale	Yellow, Buff, Tan, Grey	V	✓	V	V		
Fieldmoor	Green, Brown	V	✓	V	✓		
Greyfell	Light to Mid Grey	✓	✓	✓	✓		
Desert Sand	Grey, Buff, Yellow, Rose	✓	✓	✓	✓		
Cragside	Dark Grey/Black/Olive	✓	✓	V	✓		
Merside Sunset	Golden Camel Brown	/	✓	✓	✓		
Rosemount	Yellow, Buff, Tan Rose Pink hues	· •	✓	✓	✓		
Welsh Midnight	Blue/Black, Charcoal Grey	v	v	v	V		
Thickness 25-35r	mm approximately						
All available as Proje	ect Pack 15.25 sq m (mixed packs)	13	13	13	9		





Glendale - Yellow, Buff, Tan, Grey



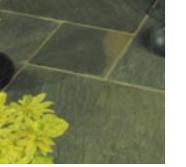
Fieldmoor - Green, Brown



Greyfell - Light to Mid Grey



Desert Sand - Grey, Buff, Yellow, Rose



Cragside - Dark Grey, Black, Olive



Mereside Sunset -Golden Camel Brown



Rosemount - Yellow, buff, tan with rose pink hues



Welsh Midnight - Blue/black, charcoal grey



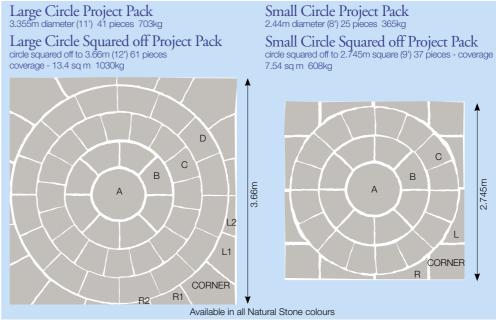
Greyfell Flags



Rosemount circle & squaring off kit and flags

Natural Stone Circle

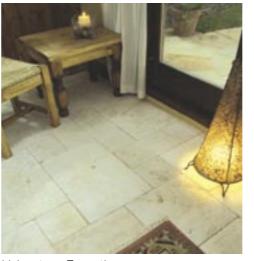
Glendale, Field	moor, Greyfell and D	esert San	nd.		24A	18B		Weight of
Diameter	Radius	Flags red	quired for each		600mm/24"	457mm/18"	457mm/18"	complete
MetricImperialMet	ricNumber in each ring	compl	ete full circle					
2440mm 8'0"	1220mm 4'0" ABC		1		8	16	-	364
2745mm 9'0"	Square ABC Squa	ared Off	1		8	16	-	608
3355mm 11'0"	1678mm 5'6" ABC	D	1		8	16	16	703
3660mm 12'0"	Square ABCD Squ	uared Off	1		8	16	16	908
Weight of each FLAG kg 23 15 14 21								21
Weight of each RING kg					23	120	224	336



Livingstone Travertine & Aegean Cream (reproduction) Tiles Available in Aegean Cream colour

	1 of each size	600 x 400	400 x 400	400 x 200	200 x 200
30mm (1 1/4inches) thick		А	В	С	D
Weight per tile kg	40.13	18.48	12.33	6.16	3.08
No. per sq. m	1.92	4.17	6.25	12.50	25.00
No. per sq. yd	1.61	3.49	5.23	10.45	20.90

Aegean Cream



Livingstone Travertine

Cobble Setts

Sizes	Colours	Approx. No. per Sq.M
100 x 100 x 45mm		85
240 x 160 x 45mm	Purestone, Fieldmoor,	24
160 x 160 x 45mm	Glendale and Desert Sand	35
120 x 160 x 45mm	Desert Sand	45



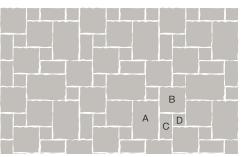
Greyfell Flags and Setts



Desert Sand Flags and Circle Feature



Aegean Cream



Natural Travertine is cut from white rock. It has a wonderful warm worn appearance, unique character and distinctive veining. Our Aegean Cream reproduction has the same character, and is available in the same four sizes. Laid both externally, and as interior flooring, they make a stylish statement.

Old Cotswold, HênSlate & Jacobean Paving Brick

HênSlate Flags
With a heritage that's as old as the hills, our reclaimed and faithfully reproduced Welsh slate flags bring timeless

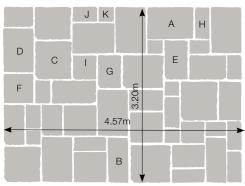
Old Cotswold Flags

Almost lost to the passage of time, we have reclaimed and

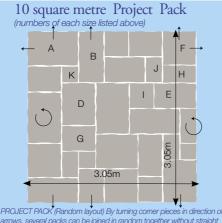
reproduced in fine detail these wonderful old flags from the heart of England. Rich in character and old-world charm they can also be used effectively in a contemporary setting.

Rectangular Flags

(units in mm)	A 915 x 610 36 x 24	B 915 x 457 36 x 18	C 762 x 762 30 x 30	D 762 x 610 30 x 24	E 762 x 457 30 x 18	F 610 x 610 24 x 24	G 610 x 457 24 x 18	H 610 x 305 24 x 12	I 457 x 457 18 x 18	J 457 x 305 18 x 12	K 305 x 305 12 x 12
weight per flag kg	51.28	38.46	53.42	42.74	32.05	34.19	25.64	17.09	19.23	12.82	8.55
No. per sq metre	1.79	2.39	1.72	2.15	2.87	2.69	3.59	5.38	4.78	7.18	10.76
No. per sq yard	1.50	2.00	1.44	1.80	2.40	2.25	3.00	4.50	4.00	6.00	9.00
*Project Pack (10so	(M) 3	3	-	3	3	3	4	4	4	4	3



Random Flags (use approximately equal numbers of



lines. Flags in random packs can also be laid 'random coursed.'









Old Cotswold Flags



Jacobean Brick on Edge

Accessories & finishing touches

Baths & Troughs

		Old	Old
	Wildlife	Tudor	Jacobean
	Table	Trough	Trough
Metric mm	800x600x75	970x330x255	375diamx300
Imperial inc	32x24x3	38x13x10	15diamx12
Weight in kg	115.00	65.00	40.50







Mill Stones

	Small	Granary	Flat	Angled
Metric mm	370x75	480x100	635x125	635x280/75
Imperial inc	14.5 x 3	19 x 4	25 x 5	25 x 11/3
Weight in kg	18	38	90	130



Complimentary Features

	Cheshire Edgings	Oakstone (Old Rustic Oak Timbers)
Metric size mm	305 x 150 x 40	915 x 150 x 100
Imperial size "	12 x 6 x 1.5	36 x 6 x 4
weight in kg	4.28	34.00
No. per sq metre	21.86	7.18
No. per sq yard	18.28	6.00



Flagstone Troughs

	Flagstone Water Trough	Flagstone Planter		
Height front	600mm	600mm		
Height back	750mm	600mm		
Depth	600mm	600mm		
Length	1200mm	1200mm		
Total weight	400kg	365kg		
Citation and a state of a selection	1 14/ 1 1 1			

Fixing bolts included. Water tank and pump not included

Oakstone Planter







Mill Stone as water feature in planter squaring off kit



Jacobean Bricks

weight per brick kg

No. per sq metre

No. per sq yard

260 x 125 x 40 260 x 65 x 40 10 x 5 x 1.5 10 x 2.5 x 1.5 Brick Paving Brick-on-Edge

33.49

28.00

"These traditional bricks and brick on edge paving materials will create a wealth of character and maturity

1.73

55.81

46.67

Laying Advice

All Westminster Stone flagstones are manufactured to the highest standards but to ensure maximum service life and best effects, it's critically important that they are laid in a proper manner. Using the services of a competent, professional paving contractor will often ensure your paving is installed correctly and with a minimum of fuss. However, we understand that for one reason or another, many people choose to lay their own paving, and so the following guidance is intended to illustrate and illuminate the key techniques that should be used.

Spade or Shovel for digging out, spreading laying materials and levelling the bed. A Rake may also be useful, as may a Lute, but

A Mallet or Maul is used to tap down the flags once they're in position. A Mallet is a small hammer-like tool made of a rubber-type material. A Maul is the bigger version used by

A Bricklaying Trowel is used to spread mortar and to 'fine tune' the bedding. A smaller Pointing Trowel is used for fine detail work and, of course, for pointing the joints.

A Spirit Level is used to check that flags are level, and, more importantly, that they are "falling" or sloping in a particular direction to aid drainage. The longer the Spirit Level, the more accurate they tend to be. A 1200mm long Spirit Level is a useful tool as it will span two or three flags at once, and so check the overall levelling, and not just the individual level of

A String Line is stretched between Line Pins as a guide to level and alignment. Special Mason's or Bricklaying String is preferred to, say, parcel twine, as it is less 'bitty' and less likely to be 'snagged' by flags when they're laid. Line Pins are usually 10-12mm (half-inch) diameter steel bars that can be knocked into the ground and to which the String Line can be fastened. Garden canes or any other stout and firm bars, poles or roads

A Tape Measure is used to mark flags for cutting, to check the depth of excavation, and occasionally, to stir a mug of tea.

A Lump or Club Hammer is used to knock in the Line Pins. It can also be used to break off the discard section of any flags

A Power Saw or Angle Grinder is used to cut flags to fit around obstructions or where a full flag is too large to fit. These are dangerous tools and require a great deal of care, along with suitable safety equipment including Safety Goggles, a Dust Mask and Protective Gloves.

Tools must be professional contractors tools, not gardeners



www.pavingexpert.com

For more tips and in depth advice, visit www.pavingexpert.com - probably the UK's most comprehensive and easy to use paving reference points for the trade and DIY.

Falls, Levels and Drainage

As mentioned, paving needs to be laid to falls to ensure that surface water is led away to some suitable drainage point, which may be a gully, a linear channel, a free-draining area of garden, etc. Paving that is laid without falls will retain water on the surface for longer than necessary and this can accelerate weathering of the surface as well as presenting a safety hazard. Paving laid to haphazard falls will result in areas where surface water collects, known as 'ponding'. Consequently, paving is best laid to regular falls that need to be considered and planned

Just as too little fall can be detrimental to good paving, too much fall can result in a path or patio that feels uncomfortable and which is not suitable for patio furniture. For the vast majority of residential paving projects, a fall of between 1:60 and 1:30 has been found to be 'about right'. 1:60 means 1 centimetre of fall over 60 centimetres of paving. It could be 1 inch of fall in 60 inches of paving, 1 foot of fall over 60 feet of paving, or 1 metre of fall over 60 metres of paving.

In practice, a fall of 1:40 is the target. This means that for each metre of paving there needs to be 25mm of fall. So, for a 4 metre wide (or long) patio, there would need to be 100mm of fall. Paving should be laid to a level that is at least 150mm lower than the Damp Proof Course (DPC) of any wall or building. The DPC can usually be identified by a change in type of brickwork or even as a visible 'band' of impermeable material running along the brickwork coursing at a level roughly the same as internal floor level. Paving is kept below this level to prevent problems with damp, and the figure of 150mm is used because that distance eliminates most of the potential problem

Paving may be raised to floor level to create access for disabled persons at doorways. There are special drainage structures that can be used at such thresholds to eliminate any risk of surface water penetrating the house or the brickwork, and further advice on this subject is available on the Pavingexpert website.

Drainage for the paving should be planned in advance. To where will the surface water drain? For most patios and small paths, draining onto a garden area is the most obvious option, but where the garden is notoriously wet, or where ground levels are such that drainage in that direction is not possible, surface water needs to be directed to a drainage point such as a gully or linear channel. There may be suitable drainage points available most homes have rainwater pick-up points that take the water collected from the roof, and there may be other gullies attached to the system that could be used. In other instances, new or additional drainage fittings may need to be installed, and this work needs to be done before any paving is laid.

The level of any drainage fittings need to be lower than the paving. It's standard practice for linear channel, gullies, hoppers and other fittings are set to a level 6mm (quarter-inch) below the adjacent paving. Bear this in mind when establishing new drainage or calculating paving levels.

All paving is a series of layers. The ground, known as the sub-grade, is the lowest level, and this is overlain with one or more intermediary layers, and completed with the surface layer, which will be the Westminster flagstones.

The sub-grade is not simply the earth, the garden or whatever is there before the paving is laid. A sub-grade has to be prepared; it has to be excavated, it has to have any vegetation stripped off and soft spots removed. The depth of dig can be estimated in advance: it has to be equal to the thickness of the flagstones plus the thickness of the intermediary layer(s). And this estimate is a minimum figure. It may be necessary to excavate more material to eliminate any bad ground or

The sub-grade is prepared by excavation and the depth of that excavation can be checked by using taut string lines established at paving level and measuring down using a tape measure.

For most patios, the next layer would be the laying course, also known as the bed. However, the bed should never be more than 50mm (2") deep, so, if the levels need to be built-up, then another layer, known as the sub-base is used. This is usually constructed from crushed stone, what is sometimes referred to as 'hardcore'. It is laid over the sub-base and consolidated using a vibrating plate compactor (aka a "Wacker Plate"). Most Builders' Merchants and many of the larger branches of the DIY sheds sell a suitable crushed stone or crushed concrete

that will be ideal for preparing a sub-base. 1 Tonne of this subbase material covers approximately 16 square metres at a depth of 25mm, so at 50mm depth, 1 tonne would cover 8m2, 6m2 at 75mm depth and 4m2 at 100mm depth.

The laying course is usually formed from a coarse, grit sand. The flags could be laid directly onto a prepared bed of grit sand, but many contractors like to lay onto a bed with a sprinkling of cement mixed in with the sand. This helps 'bind' the sand, ensuring it carries the flags firmly and securely, and that it is less liable to movement by groundwater, ants, worms or anything else. Adding 10%-15% (10:1 to 6:1) cement to the sand is ample, and it should be mixed through so it is evenly

There's sufficient moisture in most sands to wet the cement content enough to allow it to harden, but some people find that by adding more water, and making a wetter mortar, the flags are easier to tap down to level using the mallet or the maul. However, if the mortar is too wet, flags can sink in and there's a potential problem of any excess water carrying cement to the surface of the flags, and there's increased risk of

Driveways impose heavier loads on flags. Westminster flags are specifically designed to be stronger than many other similar products, but even so, the flags must be laid onto a full bed of concrete if they are to carry the weight of a car. The flags could be laid directly onto a bed of concrete that's 100mm thick, or a concrete base could be prepared in advance and the flags laid onto a 25mm mortar bed over the concrete base. The concrete needs to be reasonably strong, what is known as an ST4 mix, or 1:2:4. A semi-dry mix (no added water) is usually best if the flags are being laid directly, but a wetter mix can be used if a base is being formed in advance.

When tapping down the flags, use medium-weight blows from the mallet or maul: too hard could break the flags, while too light makes no progress. Aim the blows at imaginary points halfway between the edges of the flags and the centre: too near the edge can result in uneven consolidation, while too near the centre allows the force of the blows to be spread over too wide

Use the spirit level to check the accuracy of flags when they've been tapped down. Check against the string lines and adjust the levels while the bed is still fresh. If flags are too low, lift and add more material to the bed, but, if flags are too high, it's better to lift and scrape out some of the excess bedding as repeatedly hitting the flags is more likely to break them than to persuade them down to the required level.

Good jointing is essential to the construction of a patio, path or driveway. Mortar pointing is the traditional method with flagstones, although this is known to strike fear into the heart of many DIYers, who are terrified of staining the flags at this last, critical stage. There are ways and means of working around this, though. Where a mortar joint is preferred, the flag edges can be 'buttered' with mortar during the laying process and topped up with additional mortar once the joints have been re-spaced. However, if the flags edges are buttered with a wet mortar, a dry or almost dry mix of sand and cement can be brushed into the joint while the mortar is still damp, and pressed down with the blade of a trowel or a pointing bar. The dry (ish) powder will draw up sufficient moisture from the mortar to ensure it hardens properly, and there's almost no risk of staining the surface of the flags.

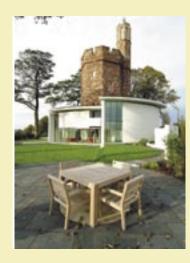
Alternatively, one of the "Polymeric Compounds" could be used. These are considerably more expensive than traditional sand and cement mortar, but for small patios, they can be a worthwhile expense if the threat of mortar staining is significant. These products are supplied as dry powders that are simply swept into the empty joints whereupon the draw in moisture from the ground and the atmosphere which then triggers a 'curing' process that results in a hardening of the powder.

Regardless of which methods are used, the real key to success with DIY paving projects is patience. Accept that DIY work can never be as quick or pain-free as a professional contractor; accept that it may take a couple of weekends or longer to complete the work, and accept that mistakes will be made, but nothing that can't be put right. The finished project will bring an enormous sense of achievement and, done properly, using the right materials and top quality products such as those from Westminster Stone, will help create a patio or driveway that will give pleasure and service for years and years.

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"Let your thoughts meander towards a sea of ideas."





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