

# *Lakeland* Block Paving Range

April 2024







*Lakeland Driveway in Autumn on a Thomas Armstrong Washington Homes project in Tallentire, Cumbria*

PAVING THE WAY TO A BETTER HOME...





Situated overlooking the Lake District, the Lakeland Range takes inspiration from the surrounding natural beauty.

Thomas Armstrong (Concrete Blocks) Ltd offers both practical and aesthetically satisfying block paving products that enhance all types of properties.



Above: *Lakeland Derwentstone®* in Autumn on a housing project in Wigton, Cumbria constructed by our own house-building company Washington Homes Ltd

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## DISCLAIMER

The manufacturing process of concrete products may result in variations in colour and texture which are unavoidable. All colour images shown are only representations. Every effort is made to ensure that colour samples match as close as possible to the product. The amount a product is rumbled may vary from batch to batch and product to product.

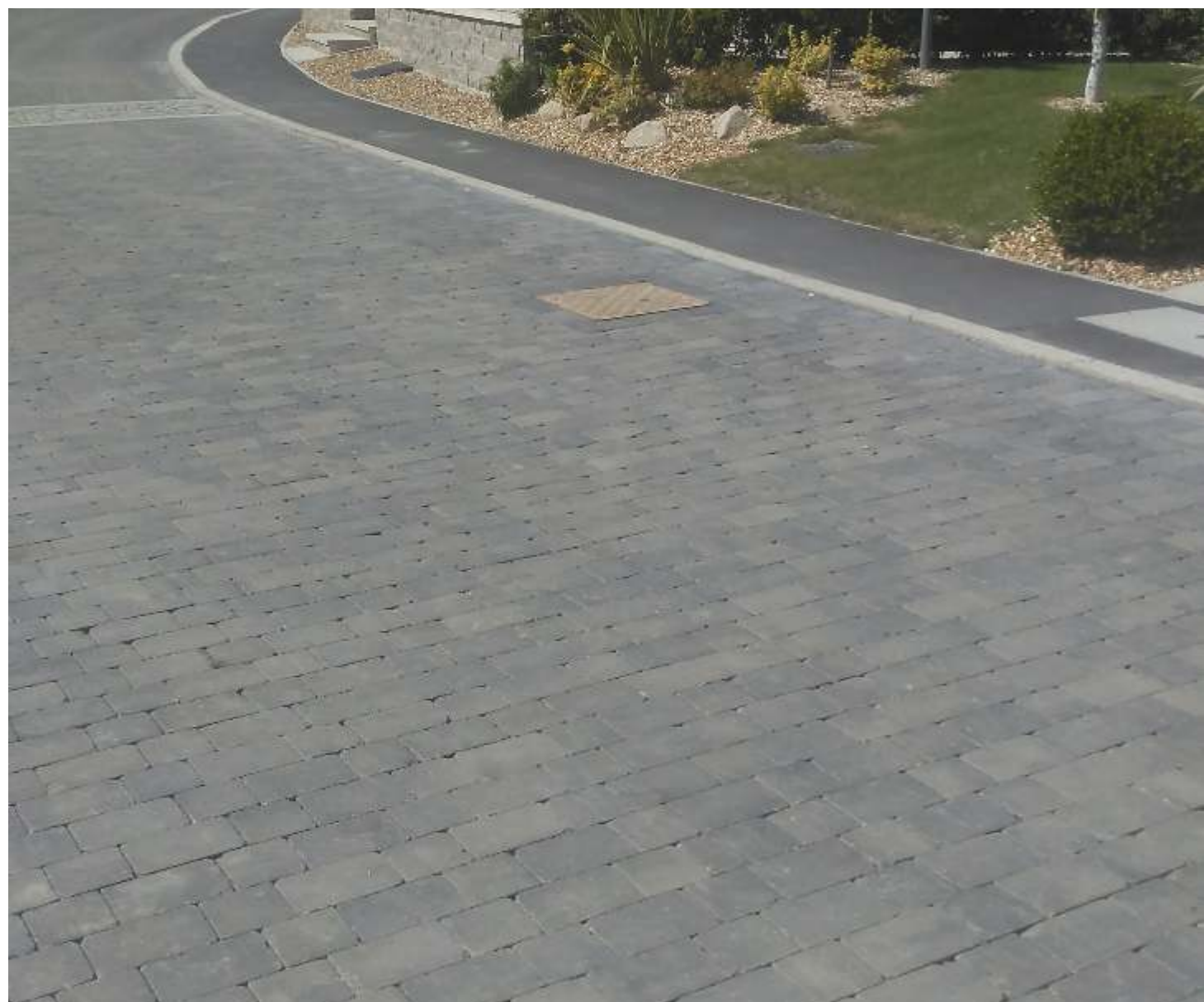
To minimise colour variation, it is recommended that pavers are used from from at least three separate packs when laying. Colour samples shown were taken when the paving blocks were in wet conditions. Every effort is made to ensure that colour samples match as close as possible to the product. Due to print and photographic processes, all colours should be used as a guide only.

# Lakeland Derwentstone® and Cobble

## The Elegant Range

Lakeland Derwentstone® block paving is part of our Elegant range and is a multi-sized paver with a rumbled texture providing an attractive and timeless option that will enhance any property. As a multi-sized paver, you can create either irregular or standard patterns, giving you the ability to produce a unique design.

Single-pack Cobbles are also available to provide complimentary decorative features such as edging to enhance the design and aesthetic.



Above: *Lakeland Derwentstone®* in Ash

<b>Manufactured to</b>	BS EN 1338:2003	<b>Abrasion Resistance</b>	Class 4		
<b>Slip/skid risk</b>	Satisfactory	<b>Durability</b>	Class 3	<b>Packaging</b>	All packs are voided and shrink-wrapped
<b>Splitting strength</b>	3.6MPa (min) typical	<b>End of life</b>	100% recyclable	<b>Block Laying</b>	Use a minimum of three packs when laying to maximise the variation of the natural colours and to avoid colour banding





Above: *Lakeland Derwentstone®* in Autumn

	50mm Dual Pack		60mm Dual Pack		80mm Dual Pack		50mm Single Pack Cobble
<b>Size (L x W) mm</b>	210 x 140	140 x 140	210 x 140	140 x 140	210 x 140	210 x 140	105 x 140
<b>Blocks per pack</b>	194	195	170	170	120	120	672
<b>m² per pack</b>	9.52		8.35		6.23		9.88

**50mm** - suitable for residential drives, paths and patios.

**60mm** - suitable for drives and lightly trafficked roads.

**80mm** - suitable for commercial sites and heavy-duty applications where a practical, hardwearing surface is required.



**Ash**



**Autumn**



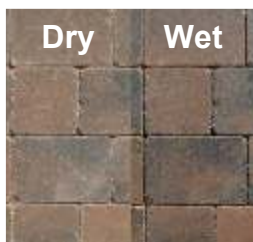
**Brindle**



**Buff**  
Non-stock - made to order



**Charcoal**



**Harvest**



**Original**



**Silver Haze**



**Sunset**

Every effort is made to ensure that colour samples match as close as possible to the product. Due to print and photographic processes, all colours should be used as a guide only.

# Lakeland Kendalstone

## The Desirable Range

Lakeland Kendalstone block paving is part of our Desirable range and offers a distinctive, classy aesthetic for any driveway for patio. The smooth textured surface allows for a smooth running surface along with a neat finish, making it ideal for wheelchairs, prams, trolleys and children's push toys.

Single-pack Cobbles are also available to provide complimentary decorative features such as edging to enhance the design and aesthetic.



Above: *Lakeland* Kendalstone in Ash

<b>Manufactured to</b>	BS EN 1338:2003	<b>Abrasion Resistance</b>	Class 4		
<b>Slip/skid risk</b>	Satisfactory	<b>Durability</b>	Class 3	<b>Packaging</b>	All packs are voided and shrink-wrapped
<b>Splitting strength</b>	3.6MPa (min) typical	<b>End of life</b>	100% recyclable	<b>Block Laying</b>	Use a minimum of three packs when laying to maximise the variation of the natural colours and to avoid colour banding





Above: *Lakeland* Kendalstone in Brindle

	50mm Dual Pack		60mm Dual Pack		80mm Dual Pack		50mm Single Pack Cobble
<b>Size (L x W) mm</b>	210 x 140	140 x 140	210 x 140	140 x 140	210 x 140	140 x 140	105 x 140
<b>Blocks per pack</b>	192	192	168	168	120	120	768
<b>m<sup>2</sup> per pack</b>	9.41		8.23		5.88		11.29

**50mm** - suitable for residential drives, paths and patios.

**60mm** - suitable for drives and lightly trafficked roads.

**80mm** - suitable for commercial sites and heavy-duty applications where a practical, hardwearing surface is required.



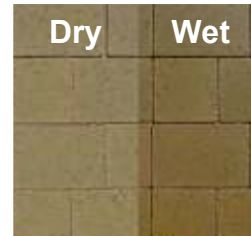
Ash



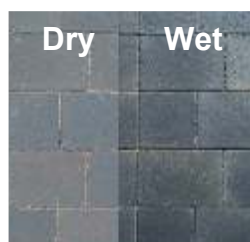
Autumn



Brindle



Buff  
Non-stock - made to order



Charcoal



Harvest



Sunset

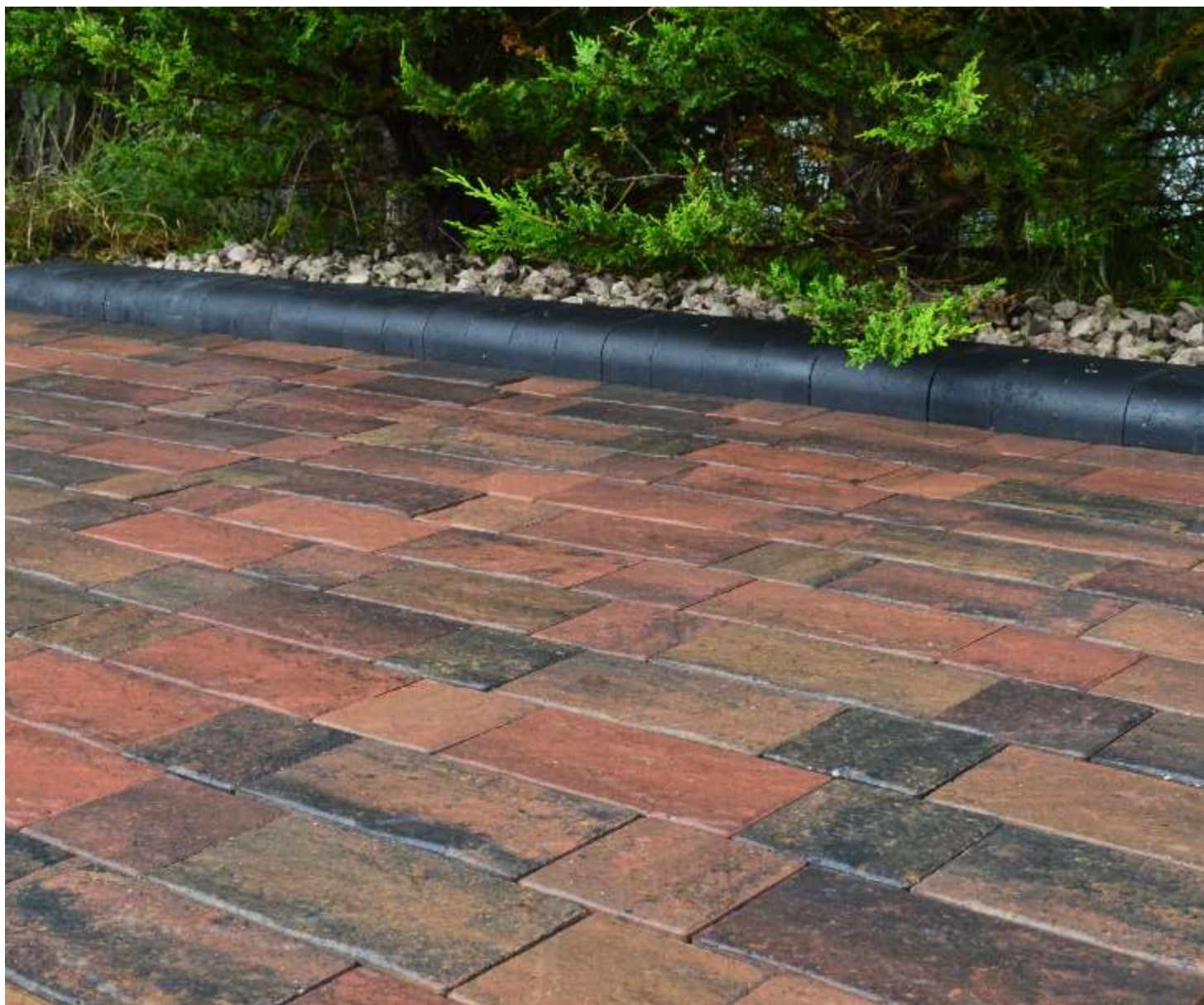
# Lakeland Windermere

## Natural Riven Textured Block Paving

Lakeland Windermere Riven is the new addition to our Lakeland Block Paving range. Part of the new Natural range, this exciting new block paver features a riven surface reflecting the realistic texture of splitting natural stone. This block paving offers a hardwearing, cost effective solution whilst still maintaining a realistic and natural appearance for any driveway or patio.

Windermere Riven is available in a 50mm thickness in a popular range of colours including Ash, Brindle, Charcoal and a new colour Burnt Sunset. This natural block paving is available in dual size packs which includes 280mm x 140mm and 140mm x 140mm sized blocks.

Lakeland WINDERMERE



Above: *Lakeland Windermere Burnt Sunset* with Charcoal Bullnose Kerbs

<b>Manufactured to</b>	BS EN 1338:2003	<b>Abrasion Resistance</b>	Class 4		
<b>Slip/skid risk</b>	Satisfactory	<b>Durability</b>	Class 3	<b>Packaging</b>	All packs are voided and shrink-wrapped
<b>Splitting strength</b>	3.6MPa (min) typical	<b>End of life</b>	100% recyclable	<b>Block Laying</b>	Use a minimum of three packs when laying to maximise the variation of the natural colours and to avoid colour banding





Above: *Lakeland Windermere* in Ash (photographed wet)

50mm Dual Pack		
Size (L x W) mm	280 x 140	140 x 140
Blocks per pack	160	160
m <sup>2</sup> per pack	9.41	

During the installation, it is essential that a cushion pad is used to cover the Wacker plate to prevent any damage. We also recommend with our *Burnt Sunset* to lay it from as many packs as possible.

**50mm** - suitable for residential drives, paths and patios.



Ash



Brindle



Burnt Sunset



Charcoal

# Lakeland Driveway

## The Traditional Range

Lakeland Driveway is part of our standard block paving range. This smooth textured block paving offers the opportunity to provide a practical solution to your needs along with distinctive laying patterns. Each rectangular paver measures 200mm x 100mm and is available in a wide range of colours and thicknesses (50mm, 60mm and 80mm) depending on purpose.



Above: *Lakeland Driveway* in Brindle

<b>Manufactured to</b>	BS EN 1338:2003	<b>Abrasion Resistance</b>	Class 4		
<b>Slip/skid risk</b>	Satisfactory	<b>Durability</b>	Class 3	<b>Packaging</b>	All packs are voided and shrink-wrapped
<b>Splitting strength</b>	3.6MPa (min) typical	<b>End of life</b>	100% recyclable	<b>Block Laying</b>	Use a minimum of three packs when laying to maximise the variation of the natural colours and to avoid colour banding





Above: *Lakeland Driveway* in Ash

	50mm Single Pack	60mm Single Pack	80mm Single Pack	* Note: The m <sup>2</sup> and number per pack may vary depending on manufacturing location; Flusco or Silloth.  Please check details with the sales team before ordering.
Size (L x W) mm	200 x 100	200 x 100	200 x 100	
Blocks per pack *	488 or 520	424 or 470	370	
m <sup>2</sup> per pack *	9.76 or 10.4	8.48 or 9.40	7.4	

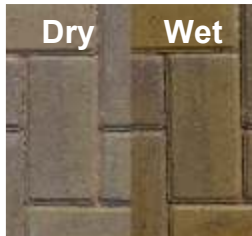
**50mm** - suitable for residential drives, paths and patios.

**60mm** - suitable for drives and lightly trafficked roads.

**80mm** - suitable for commercial sites and heavy-duty applications where a practical, hardwearing surface is required.



Ash



Autumn



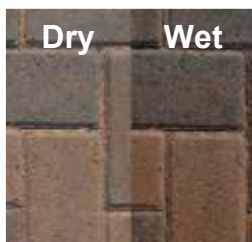
Brindle



Buff



Charcoal



Harvest



Natural



Red



Sunset

Every effort is made to ensure that colour samples match as close as possible to the product. Due to print and photographic processes, all colours should be used as a guide only.

# Lakeland Coniston

## The Permeable Block Paving Range

Coniston is the new addition to our range. This permeable dual block paver has a rustic and rumbled texture but with all of the characteristics of our most popular Lakeland Derwentstone® block paver. A permeable paver allows water to pass through the joints in the paved area and sub base to outflow pipes or infiltration to ground. Lakeland Coniston is available in a 60mm and 80mm thickness in a popular range of colours including Ash, Brindle, Charcoal and Original. Buff is made to order only.

Lakeland CONISTON



Above: *Lakeland Coniston* in Charcoal

<b>Manufactured to</b>	BS EN 1338:2003	<b>Abrasion Resistance</b>	Class 4		
<b>Slip/skid risk</b>	Satisfactory	<b>Durability</b>	Class 3	<b>Packaging</b>	All packs are voided and shrink-wrapped
<b>Splitting strength</b>	3.6MPa (min) typical	<b>End of life</b>	100% recyclable	<b>Block Laying</b>	Use a minimum of three packs when laying to maximise the variation of the natural colours and to avoid colour banding





Left: *Lakeland Coniston* showing larger nibs on all sides to provide the gaps required of a permeable paved surface



Right: *Lakeland Coniston* paving in Charcoal showing enlarged infill gaps compared to standard block paving

	60mm Dual Pack		80mm Dual Pack	
Size (L x W) mm	210 x 140	140 x 140	210 x 140	140 x 140
Blocks per pack	170	170	120	120
m <sup>2</sup> per pack	8.35		6.23	

**60mm** - suitable for drives and lightly trafficked roads.

**80mm** - suitable for commercial sites and heavy-duty applications where a practical, hardwearing surface is required.



**Ash**



**Brindle**



**Buff**  
Non-stock, made to order



**Charcoal**



**Original**

See pages 19 & 20 for further details on permeable block paving

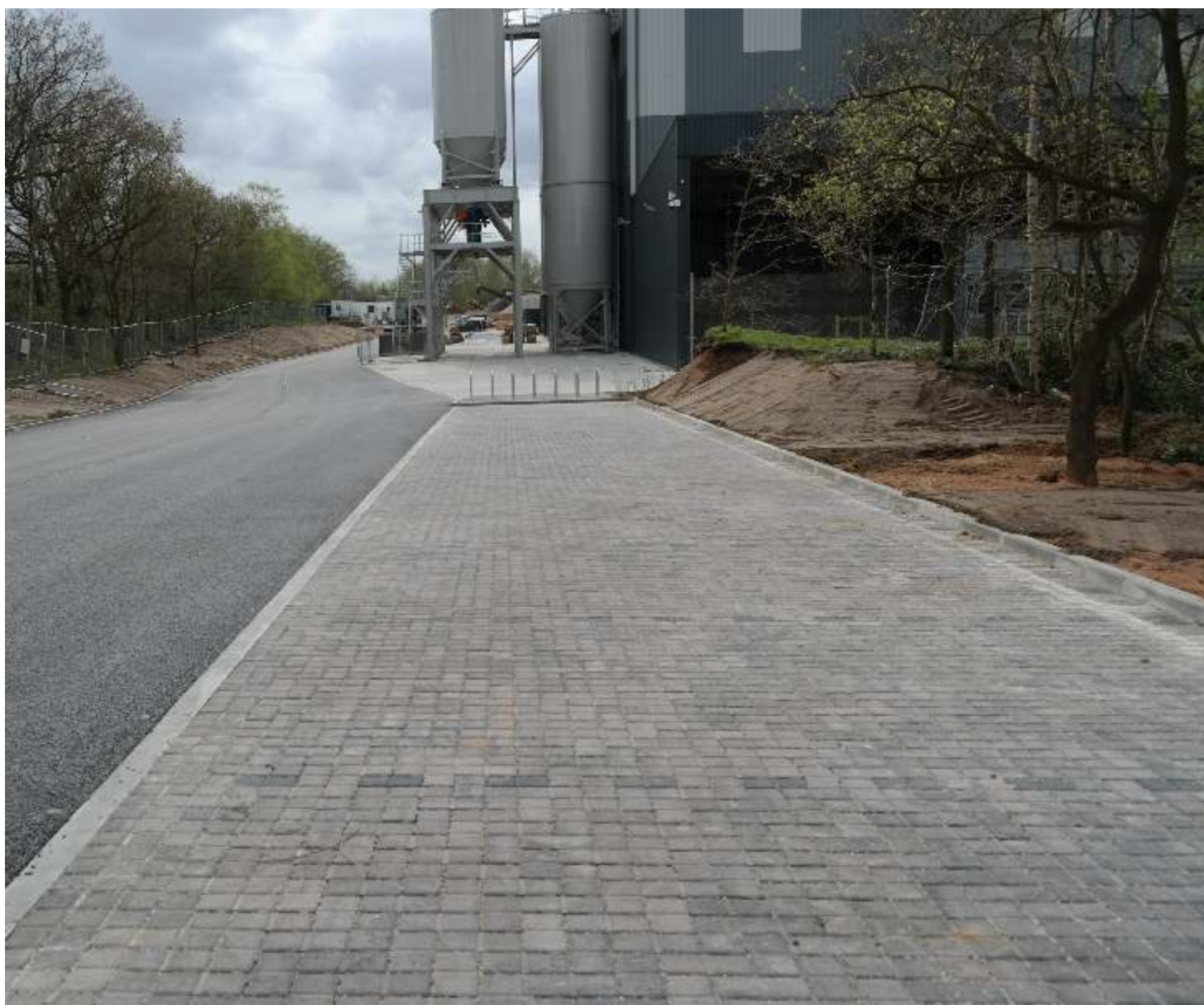
# Lakeland Inglestone

## The Permeable Block Paving Range

Lakeland Inglestone is a Permeable Paver which allows water to pass through the paved area and sub base to outflow pipes or infiltration to ground. Suitable for a wide variety of residential, commercial and industrial applications.

Permeable paving provides an aesthetic solution to drainage problems in residential, commercial and industrial applications. Planners should be requesting CBPP and other SUDS systems for all types of developments.

Lakeland INGLESTONE



Above & opposite top right: *Lakeland Inglestone* in Ash with Charcoal parking bay markers at our brand new facility under construction

<b>Manufactured to</b>	BS EN 1338:2003	<b>Abrasion Resistance</b>	Class 4		
<b>Slip/skid risk</b>	Satisfactory	<b>Durability</b>	Class 3	<b>Packaging</b>	All packs are voided and shrink-wrapped
<b>Splitting strength</b>	3.6MPa (min) typical	<b>End of life</b>	100% recyclable	<b>Block Laying</b>	Use a minimum of three packs when laying to maximise the variation of the natural colours and to avoid colour banding





	60mm Single Pack	80mm Single Pack
Size (L x W) mm	214 x 107	214 x 107
Blocks per pack	448	320
m <sup>2</sup> per pack	10.26	7.33

**60mm** - suitable for drives and lightly trafficked roads.

**80mm** - suitable for commercial sites and heavy-duty applications where a practical, hardwearing surface is required.



Ash



Brindle



Charcoal

See pages 19 & 20 for further details on permeable block paving

Below: *Lakeland* Inglestone in Brindle



Every effort is made to ensure that colour samples match as close as possible to the product. Due to print and photographic processes, all colours should be used as a guide only.

## ACCESSORIES

## KERBS &amp; CHANNELS

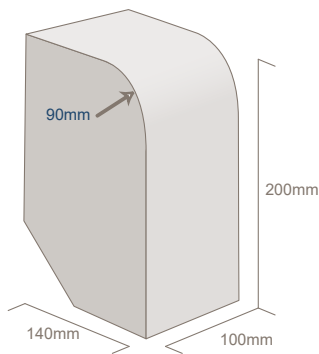
## Q KERBS &amp; B KERBS

## The Q Kerb (or Quad Kerb)

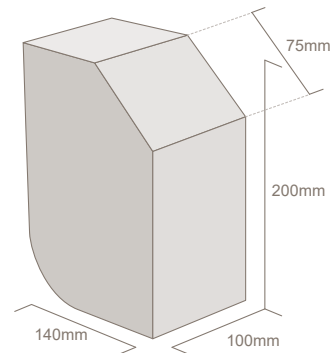
The Q Kerb is designed to have the necessary edging to support a paved area. It is available in 3 colours - Brindle, Charcoal and Red. Each pack contains 24 linear metres (10 pieces per metre - 240 pieces per pack).

As the name suggests it can be used in 4 ways - High or Low - Bullnose (rounded) or Chamfered (bevelled).

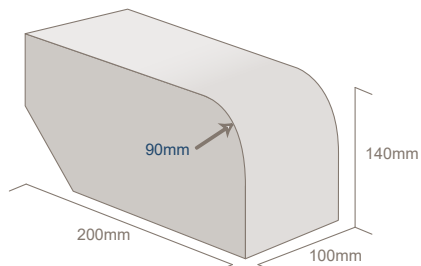
It is also possible to make steps from Q Kerbs.



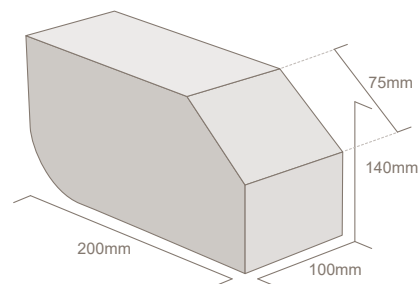
Q Kerb High Bullnose Position



Q Kerb High Chamfered Position



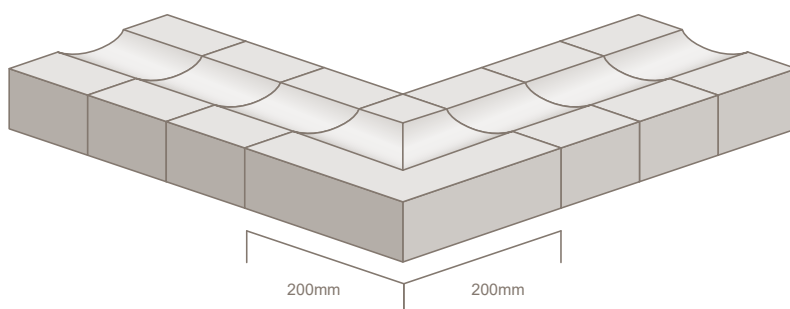
Q Kerb Low Bullnose Position



Q Kerb Low Chamfered Position

## Channels

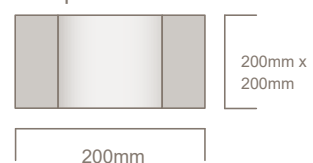
A dished channel is available to remove excess water from a paved or any other area. Available in Charcoal. Each channel is 200mm x 200mm and the channel corners measuring 200mm x 200mm allow a 90° turn.



Side Elevation



Top Elevation

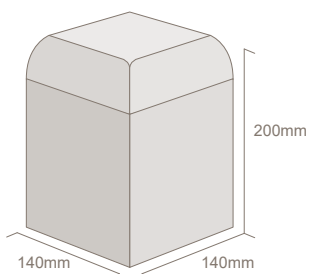




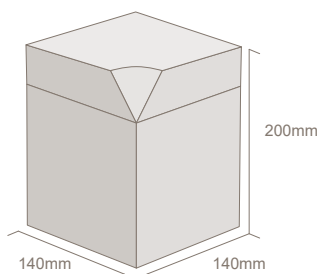
# ACCESSORIES

## CORNERS

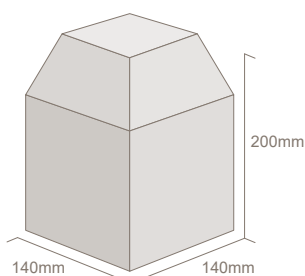
### Q Kerbs



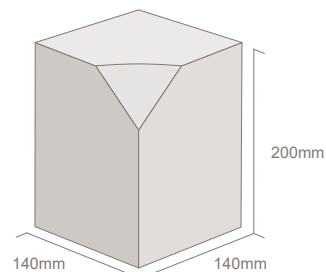
Q Kerb High External Bullnose Corner



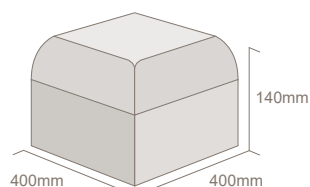
Q Kerb High Internal Bullnose Corner



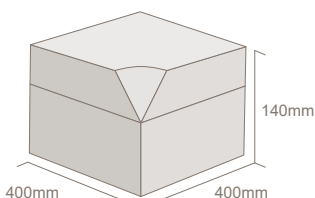
Q Kerb High External Chamfered Corner



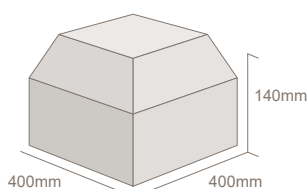
Q Kerb High Internal Chamfered Corner



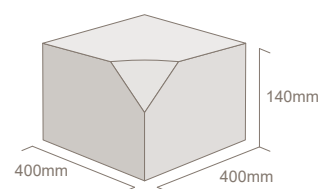
Q Kerb Low External Bullnose Corner



Q Kerb Low Internal Bullnose Corner



Q Kerb Low External Chamfered Corner

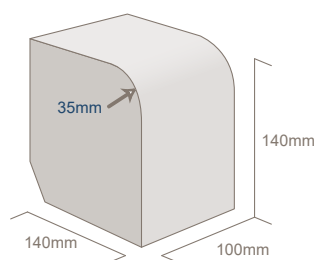


Q Kerb Low Internal Chamfered Corner

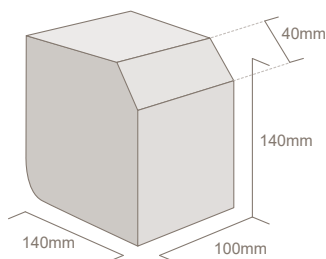
### The B Kerb (or Bi Kerb)

The B Kerb is designed to have the necessary edging to support a paved area. It is available in 4 colours - Autumn, Brindle, Charcoal and Red. Each pack contains 33.6 linear metres (10 pieces per metre - 336 pieces per pack).

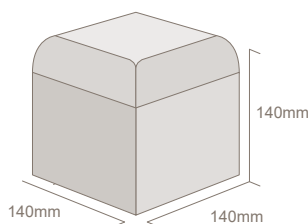
As the name suggests it can be used in 2 ways - Bullnose (rounded) or Chamfered (bevelled). It is also possible to make steps from B and Q Kerbs.



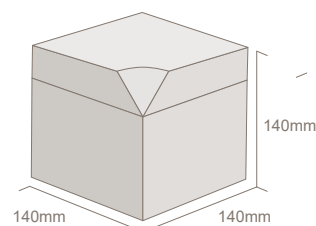
B Kerb Bullnose Position



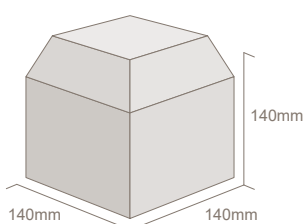
B Kerb Chamfered Position



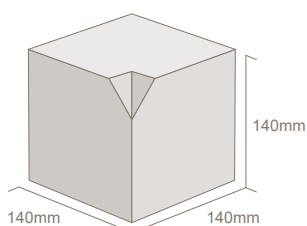
B Kerb Small External Bullnose Corner



B Kerb Small Internal Bullnose Corner



B Kerb Small External Chamfered Corner



B Kerb Small Internal Chamfered Corner

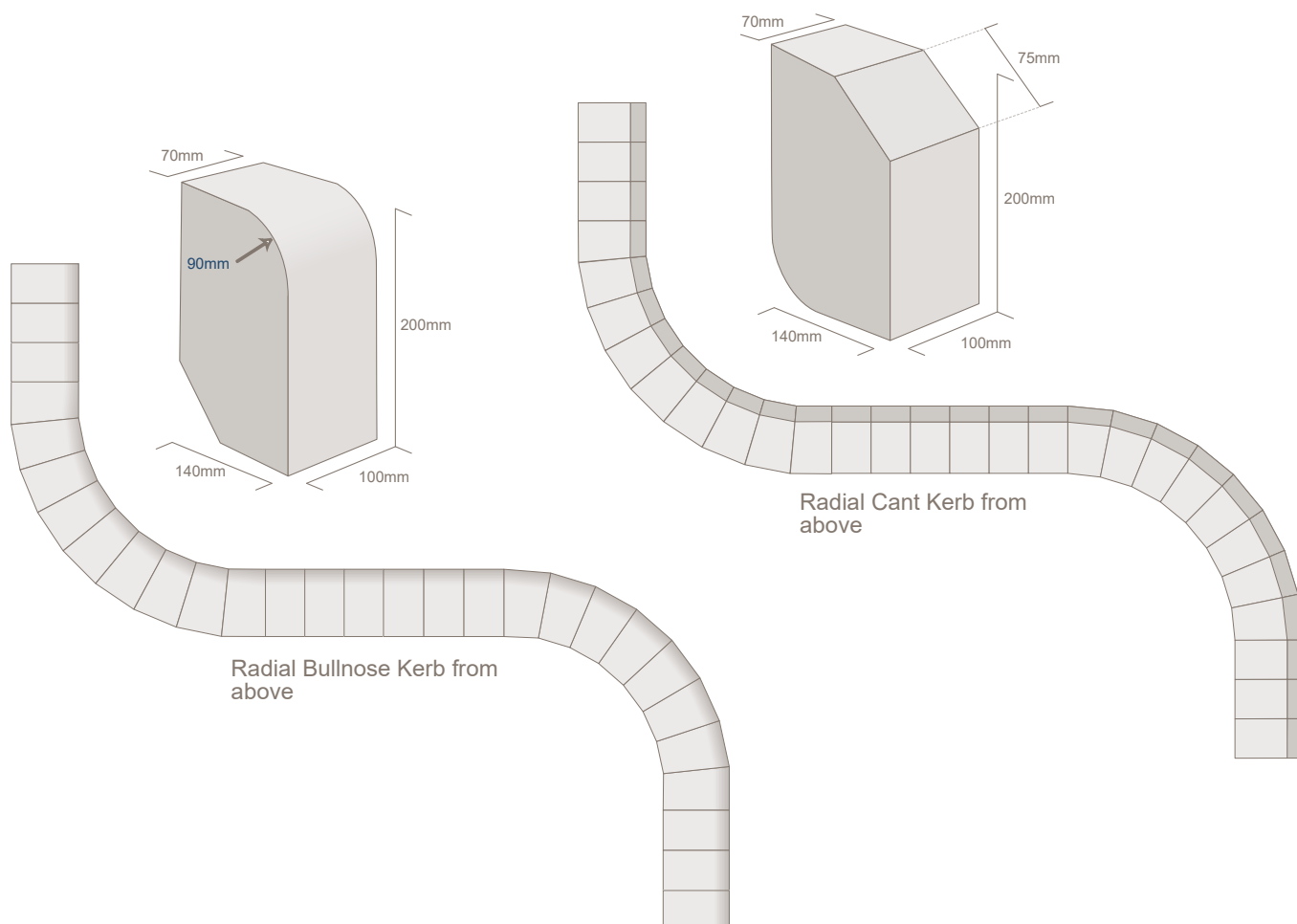
### Rumbled Q and B Kerbs

Also available are the Rumbled Q and B Kerbs to complement our range of Rumbled Pavers.

These are available in Brindle, Charcoal, Red and Original (Rumbled only).

# RADIAL KERBS

Radial Kerbs are available to complement the Q Kerbs. These enable the kerb line to follow the contour of the paved area.



Left: *Lakeland* Kendalstone Ash, high external bullnose kerb charcoal, Q Kerb high external bullnose corner charcoal, with a charcoal cobble border.



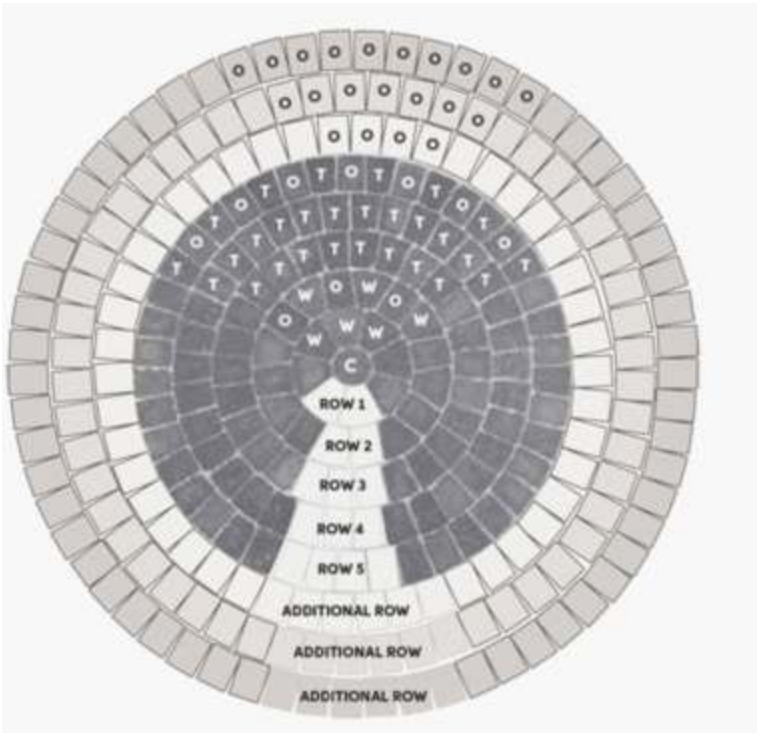
ACCESSORIES

# CIRCLES

The Lakeland Castlerigg Circle is available either rumbled or non-rumbled. Each circle comprises a centre piece and five rows covering an area of 1.89m<sup>2</sup> with a diameter of 1.55m. If the circle needs to be bigger additional pieces may be purchased on a special order.

Available in Finishes: Smooth and Rumbled.

Available in Colours: Silver Haze, Ash, Autumn, Brindle, Buff, Harvest, Charcoal and Sunset



### Block Shapes

The following instructions have been prepared to assist in the laying of the Lakeland Castlerigg Circle. The circle is made up using the following pieces.



C - Centre



W - Wedge



T - Taper



O - Oblong

Castlerigg Circle diagram for illustration purposes only.

BLOCK TYPE	DIAMETER (m)	AREA (m <sup>2</sup> )	CENTRE (C)	WEDGE (W)	OBLONG (O)	TAPER (T)
Centre	0.14	0.12	1	—	—	—
Row 1	0.43	0.14	—	8	—	—
Row 2	0.70	0.39	—	8	8	—
Row 3	0.99	0.76	—	—	—	26
Row 4	1.27	1.26	—	—	—	34
Row 5	1.55	1.89	—	—	21	21







# LAYOUT PATTERNS

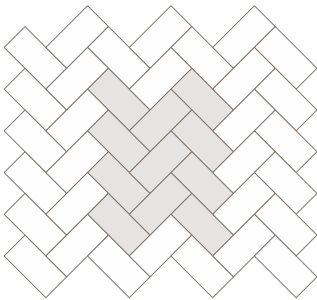
## Patterns

The pattern used can have a considerable effect on whether the end product is a functional feature or striking addition to the property.

## Imagination

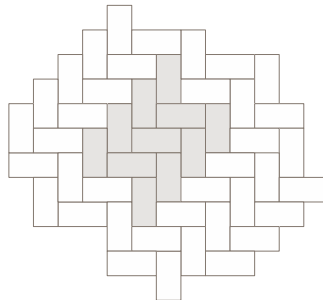
Combine different colours, or even products to create a drive, path or feature that has your own personality.

### 45° Herringbone



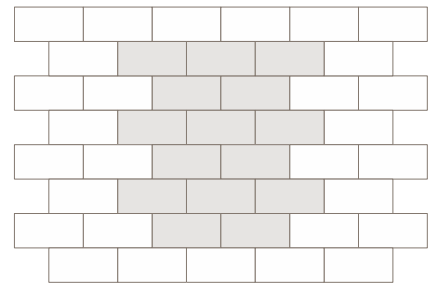
For the above use:  
*Lakeland Driveway,*  
*Lakeland Inglestone.*

### 90° Herringbone



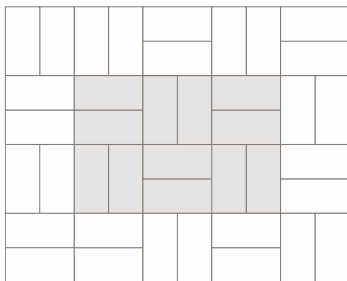
For the above use:  
*Lakeland Driveway,*  
*Lakeland Inglestone.*

### Stretcher Bond



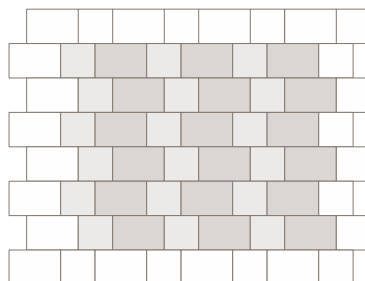
For the above use:  
*Lakeland Driveway,*  
*Lakeland Inglestone.*

### Basket Weave



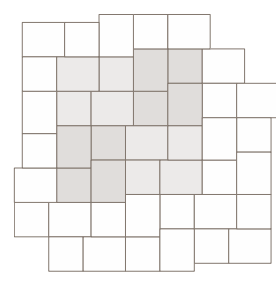
For the above use:  
*Lakeland Driveway,*  
*Lakeland Inglestone.*

### Dual Size Stretcher Bond



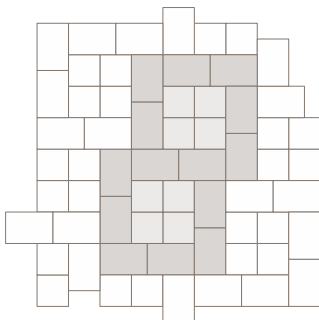
For the above use:  
*Lakeland Derwentstone®,*  
*Lakeland Kendalstone.*

### Dual Size Offset Herringbone



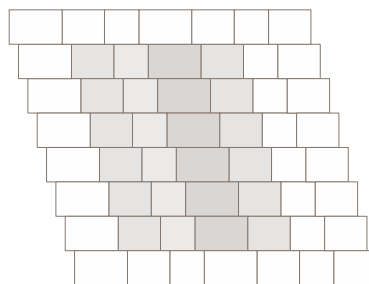
For the above use:  
*Lakeland Derwentstone®,*  
*Lakeland Kendalstone.*

### Dual Size Chequer



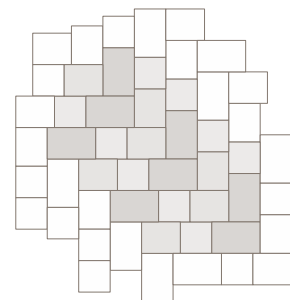
For the above use:  
*Lakeland Derwentstone®,*  
*Lakeland Kendalstone.*

### 3 Size Stretcher Bond



For the above use:  
*Lakeland Derwentstone®,* including  
*Lakeland Derwentstone® cobble,*  
*Lakeland Kendalstone* including  
*Lakeland Kendalstone cobble.*

### 3 Size 90° Herringbone



For the above use:  
*Lakeland Derwentstone®,* including  
*Lakeland Derwentstone® cobble,*  
*Lakeland Kendalstone* including  
*Lakeland Kendalstone cobble.*

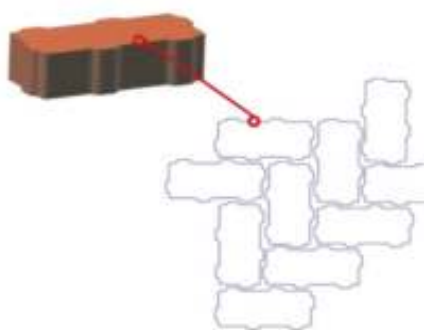
## TECHNICAL INFORMATION

# PERMEABLE PAVING

Recent extreme weather events have highlighted the need to manage water flow. It has been recognised that impermeable surfaces contribute to the accelerated water flow into the drains, and a solution to this problem has been the development of CBPP (Concrete Block Permeable Paving).

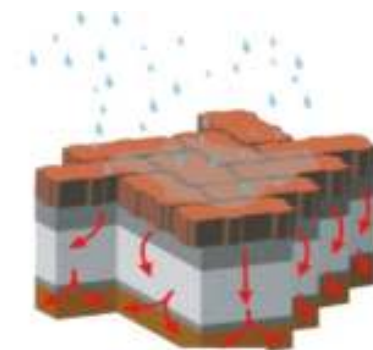
Permeable paving is suitable for a wide variety of residential, commercial and industrial applications. Planners should be requesting CBPP and other SUDS systems for all types of developments. Permeable paving, when used in conjunction with a properly constructed SUDS system offers a range of benefits:

- Allows rainfall to filter through the paved area, without weakening the structural integrity.
- Retention of rainfall, allowing it to gradually be absorbed into either the ground or through outflow pipes.
- Cost effective, when taking into account the absence of pipework, gulley's and inspection chambers, etc.
- Compliance with planning guidance (PPG25) 'Development and flood risks'.
- Improved water amenity achieved as the paving system acts as a filter of pollutants.



Permeable Paving diagram showing layout and space between each paver.  
Permeable Block Paving illustration showing the flow of water through the blocks and infiltration into the sub-bases.

The water is then steadily drained away without overwhelming local drainage systems.



## ADVANTAGES OF PERMEABLE PAVING

- Lower peak flows to the watercourse, which reduces risk of flooding downstream.
- Compliance with PPG25 'Development and Flood Risks'.
- Cost effective, compared to gulley's, pipework and associated products that are required for conventional drainage systems.
- Maintenance is minimal.
- Like standard paving, they can be uplifted and re-instated without any detrimental effect. This means it can be re-laid leaving the area without any ugly scarring. Also giving a saving in using the existing materials and not having to dispose of the old surface and purchase further surfacing materials.
- Improved water quality, filters the waterflow, removing heavy metal and hydrocarbons at source.



Block laying in general should be carried out in accordance with BS 7533 - 101:2021 and for permeable paving BS 7533-13:2009. Constructing permeable driveways on sloping sites is permissible. The maximum gradient of the paver surface should be about 5% (1 in 20) to avoid water running over the surface and failing to enter the pavement.

When designing for sloping sites, the relationship between pavement surface and subgrade levels is key. Without design measures, the water within the permeable construction could simply run to and collect at the lowest point, reducing the available storage.



Above: *Lakeland* Inglestone in Brindle

## General Site Practice

- Segregation of sub base materials during transport and during construction can occur and should be avoided.
- Soil and mud must be prevented from mixing into the sub-base material during construction which will lessen its ability to store rainwater until it soaks away.
- Keep muddy equipment away from the area when laying the sub base and laying base.
- If necessary, create temporary drainage swales to divert away from the area run-off from surrounding areas, contaminants and mud during the construction phase.
- The aggregates must be kept clean and contaminant-free during construction.

## The Sub-Base and Laying Base:

- For 60mm Permeable Paving, use 200mm deep sub-base, for 80mm Permeable Paving, use 275mm deep sub-base.
- The sub-base is 10 - 20mm angular clean Type 3 material.
- A 50mm layer of Type 3 6mm open graded (no fines) gravel is used as the laying surface for the blocks.
- The Permeable Paving blocks are then laid in situ and an angular 2 - 4mm grit is then brushed across the surface and into the voids between the blocks. As with conventional paving, the jointing used between the individual blocks is critical to the stability and strength of the driveway as a whole.
- Do not use dry kiln sand in between the blocks as this will severely restrict the rainwater flow into the sub-base. A course of 2 - 4mm angular no-fines aggregate is used as a jointing medium which is supplied by Thomas Armstrong Limited.

# Lakeland

## INSTALLATION & CARE

### INSTALLING BLOCK PAVING

Each new paving and patio project is unique and have their own challenges to overcome. This is a simple description of the key stages of installing concrete block paving and does not address all possible on site issues and scenarios. The stages here apply to both non-permeable and permeable paving although there are differences in the materials to be used - refer to our website for further details.

#### Stage 1 Preparation

Before work commences it is a good idea for the householder to make a simple design sketch of how they would like the paving to be laid out. This will help the contractor fulfil their clients' expectations and make an accurate assessment of material quantities. The areas can be marked out with string or a line of sand. A significant quantity of excavation spoil and waste will be generated during the installation which will need removing to a licensed disposal site and provision for this must be planned for.

#### Stage 2 Excavation

The area is cleared and dug out to 200 - 250mm depth below the final paving level. Any weeds or roots should be dug out and removed at this stage and the application of weed killer considered if the problem is particularly bad. The underlying ground (often referred to as the 'sub-grade' or the 'formation level') should be assessed for solidity and firmness. This will usually be consolidated by the compacted sub-base material but for a particularly poor conditions (soft, clay-like or patchy), a geotextile membrane can be laid which will help prevent the subsequent sub-base material from sinking when it is compacted down.

#### Stage 3 Edge restraints

At this point the edging courses (blocks or kerbs) should be installed on a 100mm bed of concrete and set to the final height of the finished paving. Edging blocks perform the critical task of restraining the paving and preventing spreading when loaded by vehicles for example. The edging blocks should be sturdily haunched with concrete at their rear to keep them in position. If the edging blocks are butted against a wall then it is acceptable just to lay them on the 100mm concrete base without the haunching.

#### Stage 4 The laying course

Having determined the slopes and falls using the sub-base, a laying course of sharp sand is formed by compacting down to approximately 35mm. A final layer of sharp sand 25mm thick provides the final laying course which is carefully levelled and formed using screed rails and boards and smoothing trowels. This final layer is not compacted down until the blocks have been laid.





## Stage 5 Block laying

Ideally commence laying full blocks off a solid edge, typically the building and continue from one corner or right angle in the pattern of choice. Any doorsteps or decorative features are commenced at this point.

Blocks should be carefully butted up to one another to hand-tightness. Place the blocks vertically downwards and avoid 'dragging' the blocks together as this will disturb the laying course and partially fill the joints with sharp sand. This will lead to problems when finally vibrating down the blocks. At this point the blocks should be around 5mm proud of the final desired height.

Regardless of block type or shade, blocks from at least 3 packs should be selected and mixed to avoid 'banding' of colours and provide a better finished effect.



## Stage 6 Cutting in

The use of cutting saws or block splitters will generate dust so eye protection, gloves and a suitable dust mask should be worn throughout throughout this stage of the operation. A hosepipe or sprinkler to suppress the dust is recommended good practice.

Careful planning should help avoid the need to cut thin slivers of block and the use of as full a block as possible is always the best option for optimum performance and aesthetics.



## Stage 7 Jointing & compaction

This operation should only be carried out in fair weather when the paving surfaces and joints are dry. Kiln dried silica sand is spread across the paving using a broom to get into the joints. This helps the blocks to move against one another when being 'whacked down' using the vibrating plate and therefore avoid chipping and spalling blocks.

The final compaction is carried out using a vibrating plate compactor in several passes using alternating directions. The area must be swept before compaction to remove any stones and debris which could be pressed onto the blocks and cause damage. A rubber mat should be placed between the plate compactor and the paving to avoid damage to the blocks.

Following this stage the paving is now ready for use and kiln dried sand is again spread across the surfaces and brushed into all of the joints to top them up.





## Ongoing maintenance and care

### Settlement and topping up of jointing sand:

Over the following 4 - 6 weeks, the paving will settle and the joints will need topping up again with kiln dried sand and seasonally thereafter.

### Efflorescence:

Efflorescence or 'lime bloom' appearing on the surface of concrete pavers is very commonplace but is harmless and will disappear over time. Regular dry brushing of the surface will help remove these salts. Use pressure washers carefully and only when necessary. Frequent vigorous pressure washing will remove the jointing sand and can gradually wear the block surfaces. Once all efflorescence has disappeared, which can be up to a year after laying, a paving sealant can be applied to preserve the paving, repel stains and enhance the finished appearance.



### General cleaning and care:

No matter how well constructed a driveway is if it is neglected then detritus will build up and weeds, moss, algae and lichen is likely to establish itself. Therefore routine cleaning on a seasonal basis is recommended as follows:

- On dry paving use a stiff bristled brush to remove any dirt or build up from the surface.
- Pull out, scrape off any weeds and moss.
- Using soapy water (basic washing-up liquid or a non-acid based detergent will suffice) and a stiff bristled yard brush, scrub the paving surfaces and hose down with clean water.
- Unless the paving is heavily stained or soiled, a pressure washer should not be required.
- Some of the jointing sand may be inadvertently removed during the cleaning which will need replacing by brushing in new sand once the paving has been allowed to dry out.





### Acid-based chemical cleaners:

These products can etch the paving surfaces and affect the pigmentation of the blocks permanently ruining the paving. We recommend that these cleaning products are avoided wherever possible and only used if absolutely necessary!

### Power washers:

Power washers are an excellent cleaning aid but should be used sparingly as repeated exposure to powerful jets can deteriorate the surface of the blocks over time. The jets can remove the jointing sand from between the blocks which must then be refilled and pointed after each use. Our preferred cleaning method is for sweeping and general cleaning as little and often and the careful use of a power washer only when necessary on a seasonal basis.

### Sealing:

Sealants are available for block paving which can be sprayed or brushed on to seal the paving and joints thereby prolonging the life and appearance of the paving. This skin provides an effective barrier to weeds and stains and can enhance the appearance of the paving by bringing out the colours and giving the paving surface a pleasing sheen.

Sealants should be applied by specialists and only after the paving has fully settled and the joints topped up. It is important to ensure that all instances of efflorescence have been exhausted otherwise there is a risk of 'trapping' the visible efflorescence under the sealant with no chance of removing it.

The paving must be completely clean and dry (including the jointing sand) before sealing commences. It is therefore essential to only consider sealing during a long hot and dry spell of weather. The quality and longevity of finish will be determined by the quality of the sealant used and the care in application.





## General Information

### Development

Thomas Armstrong (Concrete Blocks) Ltd is continually developing its range of products and thus the contents of this brochure are subject to change without notice.

### Efflorescence

In common with our other concrete products made with a high cement content our products may exhibit the temporary surface phenomenon of efflorescence. This may appear as a milky white stain on the face of the product or the appearance of the paver may be such that the colour has faded. This is in no way detrimental to the performance of the product and responsibility cannot be accepted for its occurrence.

### Colour and Texture Variations

The manufacturing process of concrete products may result in variations in colour and texture which are unavoidable. The degree to which a product is rumbled may vary from batch to batch and product to product.

To minimise variation it is recommended that products are ordered from the same batch and that products are mixed from at least three different packs where possible. The process of producing Rumbled Products may result in them being covered with a light dust. The dust will naturally weather off, alternatively pressure washing them will have a more instant effect. This should be done prior to filling the joints with dry sand. It is recommended that the appearance be judged by viewing established sites rather than individual samples.

### Conditions of Sale

In the unlikely event that the products reach you in a less than satisfactory condition you should notify the retailer immediately. In addition to this, responsibility for costs incurred for uplifting and relaying unsatisfactory products may be prejudiced if, upon reasonable inspection, the defect ought to have been apparent before laying.

For further information call

**01900 68114**

or visit us at

**[www.thomasarmstrongconcreteblocks.co.uk](http://www.thomasarmstrongconcreteblocks.co.uk)**









Sales and Head Office:  
Workington Road, Flimby  
Maryport, Cumbria. CA15 8RY



*Lakeland*

Thomas Armstrong Concrete Blocks Ltd (formerly Lakeland Pavers)  
North Lakes Industrial Park, Flusco, Penrith, Cumbria CA11 0JB  
Tel: 01900 68114 Fax: 01900 66136 Sales mobile: 07826 060001

Product details and availability may vary between manufacturing locations. Please contact your nearest regional sales office for sales, product and technical advice.

North East Region:	Tel: 01207 544214	Fax: 01207 541800	blocks@thomasarmstrong.co.uk
Cumbria, North Lancashire and Borders Region:	Tel: 01900 68114	Fax: 01900 66136	cumbriablocksales@thomasarmstrong.co.uk
Yorkshire, Humber and Lincolnshire Region:	Tel: 0113 2320022	Fax: 0113 2870839	leedsblocksales@thomasarmstrong.co.uk
North West, Cheshire, Staffordshire and West Midlands Region:	Tel: 0151 5255991	Fax: 0151 5301676	aintreesales@thomasarmstrong.co.uk

[www.thomasarmstrongconcreteblocks.co.uk](http://www.thomasarmstrongconcreteblocks.co.uk)

