



OUR MISSION

We exist to create products that make construction better, faster and safer. To do so, we foster a culture focused on continuous improvement, leading to superior products and services for our customers. AG paving, flagstones, steps + kerbs are another great example of AG delivering concrete solutions in line with our mission.



FLAGSTONES + PAVING + KERBS + STEPS

AG are one of the largest suppliers of hard landscaping and building products in the UK and Ireland – but staying as a tightly-run family business, with a well-trained and highly-skilled workforce, has allowed us to maintain a firm focus on product innovation and a responsive, customer-driven service.

Everyone within our organisation shares a common focus: to develop products and solutions for a built environment that are both aesthetically pleasing and highly functional. With a proud history of market and manufacturing firsts, our engineering, design and sales teams work in close partnership with architects, designers and contractors to develop products that continue to challenge and lead industry standards to develop products that are Better, Faster and Safer.



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SUSTAINABILITY

Our Path to Carbon Minimisation

Acting on our corporate vision and values.



CARBON SCOPE PERFORMANCE

As a company, we've reduced our Scope 1 + 2 emissions by 40% and our Scope 3 emissions by 10%.

SCOPE 1 + 2
TOTAL TCO₂

40% Decrease
in Emmissions



2021

2022

3,708
TCO₂

2,219
TCO₂

SCOPE 3
TOTAL TCO₂

10% Decrease
in Emmissions



2021

2022

15,103
TCO₂

13,533
TCO₂



TRANSPORT

We've installed electric charge points on all sites and currently run a fleet part comprised of bio-diesel, hybrid and electric vehicles for business and industrial transport.



PRODUCTION

- We now use less, and thinner packaging for our product range.
- We've reduced the cement content in our products.
- Our dust suppression systems use recycled water.

REDUCING WASTE

- We recycle our facing brick waste.
- Our washplant to process and clean materials is on our own site.
- We recycle our packaging.
- Our supply packaging is 100% recyclable and made from 30% recycled materials.
- **Digitisation** We use the Engage App, which eliminates use of paper for over 20,000 audits per year.



ENVIRONMENT

Biodiversity

We protect many species of plants and animals across sites, including falcons, crayfish, sandmartins and hares.



ACCREDITATIONS

BES 6001, ISO 9001, 14001, 45001
HSEQ integrated management system



MANUFACTURING INNOVATION

We were involved in an Innovation programme with Queens University to reduce Carbon Emissions in our manufacturing.

FUTURE

We plan to publish a detailed carbon scope tracker, and publish carbon impact at a product level.



ENERGY

We've switched to energy guaranteed 100% from renewable sources.



USING LESS WATER

Our recycling systems make use of recycled water in our manufacturing processes.





Introducing Enduur

Introducing

Enduur

advanced concrete technology



Introducing Enduur

Enduur. AG's new system of paving and flagstone excellence.

Enduur products are re-imagined and redesigned from the core of the base layer to the top of the surface layer. Perennial problems that follow the installation and upkeep of concrete paving products have been evaluated and improved upon.

BORN IN THE RELENTLESS PURSUIT OF PERFECTION.

Enduur. AG's new system of paving and flagstone excellence.

AG's continuing commitment to the highest level of aesthetic and sustainable concrete engineering is now available across a range of AG paving and flagstone products. **Enduur** is an evolutionary approach to manufacturing and protecting products that includes new, state-of-the-art development, testing and manufacturing processes, cutting-edge material blending techniques that deliver enhanced

performance, superbly refined aesthetics, and environmental innovations that reduce carbon use and enhance sustainability. **Enduur products come in two classification levels.** Each level of Enduur currently contains the features of all levels underneath it, meaning Enduur level 2 products also have Enduur level 1 features.



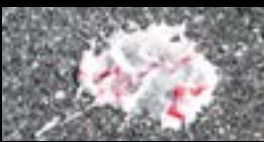
Enduur 
advanced concrete technology



A steadfast commitment to sustainability.



A continuing commitment to the cutting-edge of aesthetic engineering.



A commitment to product longevity and lifecycle management.

Enduur Level Specifications

Enduur Level	Features	Products
Enduur 1	<p>Vapour Curing</p> <ul style="list-style-type: none">• Enhanced surface colour• Greatly reduced efflorescence <p>Enhanced Mix Optimisation</p> <ul style="list-style-type: none">• Increased strength• More resistant to wear and tear• More UV resistant• More vibrant colour <p>Cement Replacement</p> <ul style="list-style-type: none">• Decrease in embodied carbon <p>Advanced Hydrophobics</p> <ul style="list-style-type: none">• Greatly reduces water ingress• Greatly reduces efflorescence• Helps prevent moss and algae growth• Helps prevent deep staining	<p>TerraPave® Plaza Plaza Lineal Plaza Quattro Large Format Plaza Xflo Plaza Long Stone Tri Stone Tavira Canterra® Rosemount TerraKerb®</p>
Enduur 2	<p>Enduur 2 has all the features listed above, plus:</p> <p>Surface Protection Application</p> <ul style="list-style-type: none">• Non-toxic• Environmentally friendly• Added during manufacturing• Repels majority of spills, dirt and debris• Easier and faster to clean• Products stay newer for longer• Improved slip-skid resistance• Matt finish does not detract from the natural granite finish	<p>Fiamma</p>

Introducing

Enduur 1

advanced concrete technology

Enduur 1 products are engineered to deliver an impressive range of product enhancements, from increased strength, durability, and UV resistance to a lower carbon footprint and advanced hydrophobic performance.



Watch Enduur 1 Highlights: www.youtube.com/c/achesonglover

ENDUUR 1 PRODUCTS ARE STRONGER AND SMARTER FROM WITHIN

Enduur products are reimagined and redesigned from the core of the base layer to the top of the surface layer. Perennial problems that follow the installation and upkeep of concrete paving products have been evaluated and improved upon.



NEW, MORE SUSTAINABLE OPC REPLACEMENT

Advanced concrete technology delivers numerous strength and durability benefits, as well as reducing environmental impact by replacing a percentage of the Portland cement content. This lowers the product's overall embodied carbon.



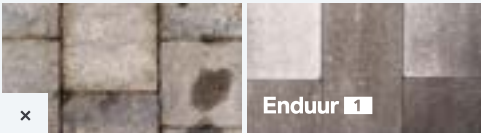
Improved durability



70% Carbon Reduction per % Enduur OPC Replacement



Greatly reduces the potential for efflorescence build up.



Greatly reduces deep staining from dye, pigment and oil.



Greatly reduces water ingress that leads to the build up of moss and algae.

ADVANCED HYDROPHOBICS IN THE BASE AND SURFACE LAYERS

AG's base mix and curing process have been refined to help resist water ingress, significantly reducing the chance of efflorescence. Moss and algae will not ingress into the surface as deeply, and deep staining from pigments and oils will be reduced.

Ongoing maintenance is less of a chore, and the general product lifecycle should be longer than traditional product.

ENHANCED PRODUCT DURABILITY IN THE BASE AND SURFACE LAYERS

Enhanced Mix Optimisation: Delivers an improved surface layer with a dense composition to enhance strength and increase resistance to wear and tear.



Improved UV resistance



Longer-term retention of colour



Better resistance to wear and tear.

Introducing

Enduur 2

advanced concrete technology
plus surface protection

Enduur level 2 adds a unique surface treatment applied as part of the manufacturing process. **This delivers advanced hydrophobic properties without introducing colour distortion and texture changes.** Products have lower maintenance and lifecycle costs, making them perfect for streetscapes and trafficked areas.

Watch Enduur 2 Highlights: www.youtube.com/c/achesonglover

NON TOXIC AND SUSTAINABLE SURFACE PROTECTION

Hydrophobic surface treatments have been a popular concrete treatment solution for over 15 years. Enduur 2 surface protection employs the latest material research to provide a solution that's both non-toxic and sustainable, meaning no harsh chemical additives or environmentally adverse practices are used in manufacturing, or required



perfect for uses in commerical and damp projects.

REPELS ADHESIVES

Enduur 2 surface protection will also limit the sticking ability of most light gums and adhesives, making ongoing maintenance far less costly and time consuming.



FURTHER REDUCES WATER INGRESS TO REPEL MOSS AND ALGAE + IMPROVES FROST RESISTANCE

Enduur 2's surface protection enhances the repellent properties of Enduur 1's hydrophobic material blending. Damp loving green growth will struggle to impregnate an Enduur 2 surface.

INSTALLATION TIMES AND COST ARE LIKELY TO BE REDUCED

Enduur 2 can effectively repel surface embedding of most soils, grouts and sands. Labour time, cleaning equipment and product excess requirements may all be reduced.



Surface dirt and residues left by installation equipment are less likely to penetrate deeply.

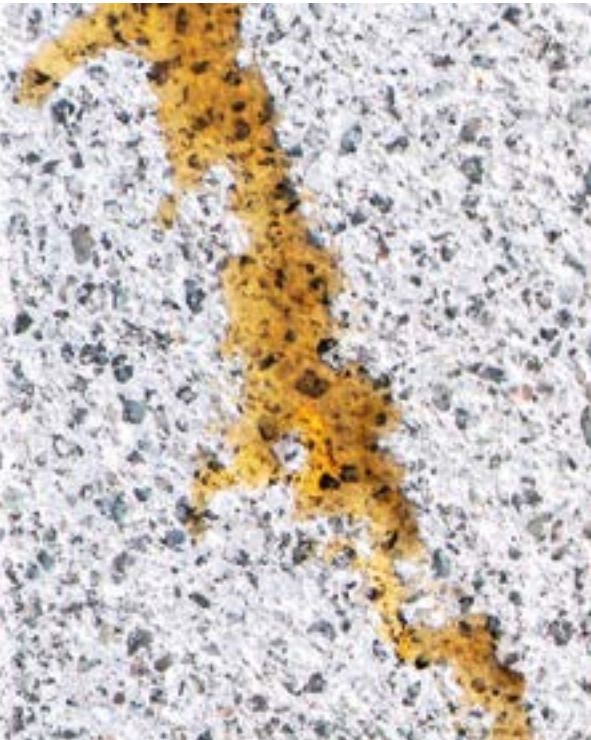


Grouting materials are easier to brush away and wash down.

for installation and upkeep.

REPELS IRRITANTS THAT MAY CAUSE DEEP STAINING

Concrete's porous nature makes it prone to absorbing liquids. Stubborn substances such as dyes, pigments, oil-based liquids and petrochemicals can stain the surface. If severe enough, a spill can lead to a deep stain – or irreparable damage that may require costly maintenance, repairs or replacements. Enduur 2 products are



Flagstones

Flagstones



Fiamma new	16
TerraPave®	24
Plaza	34
Tavira new	44
Manor Stone®	50
Canterra®	58
Rosemount new	66
Tactile	72



HIGH PERFORMANCE, PREMIUM, RECONSTITUTED GRANITE AGGREGATE
FLAGSTONES WITH A 'FLAMED' EFFECT FINISH

Fiamma

Fiamma flamed granite-effect natural aggregate flagstones are the most technologically advanced product produced by AG to date.

The stunning flamed granite-style finish delivers an unparalleled aesthetic with a fine granite aggregate top mix. It comes Enduur level 2 as standard, is tested and classified as 'low to extremely low potential for slip', and receives the highest strength rating in the AG portfolio.

This is a premium flagstone that comes in a range of sizes and subtle, natural colours that offer high performance in all project scenarios.

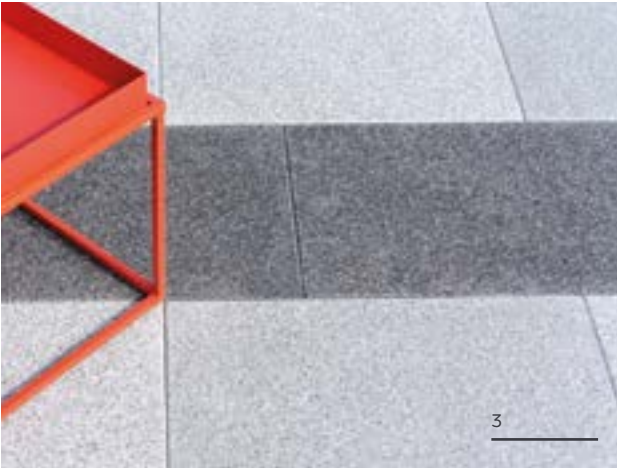
Fiamma has been engineered to replicate the surface of natural flamed granite, and does so using locally sourced aggregates and reclaimed materials. It is readily available from stock and prices are not subject to large fluctuations in comparison to imported granite.

AG's new premium flagstone comes finished with **Enduur Level 2 surface protection** – technology designed to make your project look newer for longer.



Fiamma






1	Fiamma Luce + Milazzo, <i>Keele</i>	6	Fiamma Luce + Milazzo, <i>Keele</i>
2	Fiamma Alba, Luce + Milazzo, <i>Ballygawley</i>	7	Fiamma Milazzo + Luce, <i>Ballygawley</i>
3	Fiamma Alba, Luce + Milazzo, <i>Ballygawley</i>	8	Fiamma Alba, Luce + Milazzo, <i>Ballygawley</i>
4	Fiamma Alba, Luce + Milazzo, <i>Ballygawley</i>	9	Fiamma Luce + Milazzo, <i>Keele</i>
5	Fiamma Alba, Luce + Milazzo, <i>Ballygawley</i>	10	Fiamma Alba, <i>Ballygawley</i>



With factory applied surface protectant Fiamma is perfect for installation and upkeep.

Fiamma

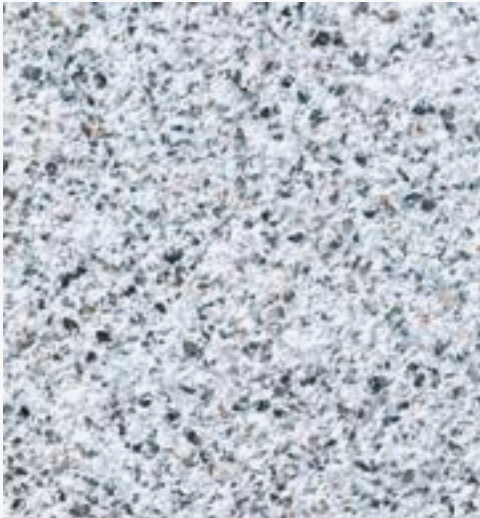
high performance, premium, reconstituted granite aggregate flagstones with a ‘flamed’ effect finish

-  Abrasion Resistant
-  Frost Resistant
-  Pedestrian Use
-  Light Traffic
-  Heavy Traffic when used as part of a bound system

Enduur 2

 Trolley Friendly

COLOURS + FINISHES



ALBA



LUCE

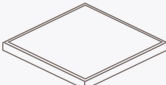


MILAZZO

SPECIFICATION REFERENCE: NBS PLUS: Q25 SLAB/BRICK/SETT/COBBLE PAVINGS: 31, 315 hEN: 1339:2003

EDGES

Fiamma
Supplied with a fine straight chamfer.



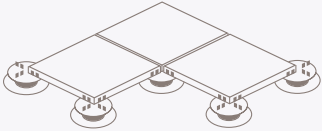
Straight Chamfer

DIMENSIONAL TOLERANCES FOR WIDTH + DEPTH

Calibration before processing ensures strict compliance with hEN 1339:2003 tolerances and a low level of dimensional variance, delivering ease and accuracy of placement during installation, making them ideal for pedestals and much easier to lay on a well screeded bedding layer i.e. level and loose raked.

PEDESTALS

Pedestal systems are designed to support paving products on roof terraces, roof gardens, platforms and other raised areas. They resolve an array of design issues, from protecting waterproof membranes, to disguising exposed surfaces, to providing a usable roof deck. Pedestals are available in heights up to approximately 600mm. Please contact our Technical Specification Department to discuss your plans.



FINISHES

Fiamma is manufactured using advanced processing techniques to create its unique ‘flamed’ effect finish to replicate natural flamed granite. Surface protectant is supplied as standard for easy clean and maintenance

Fiamma’s colour blends have been carefully developed using shades from natural granite aggregates.

SPACER NIBS

No formed spacer.

DEPTHS



40 | 50
70
Millimetres

FINISH

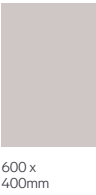
Flamed



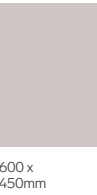
400 x 400mm



450 x 450mm



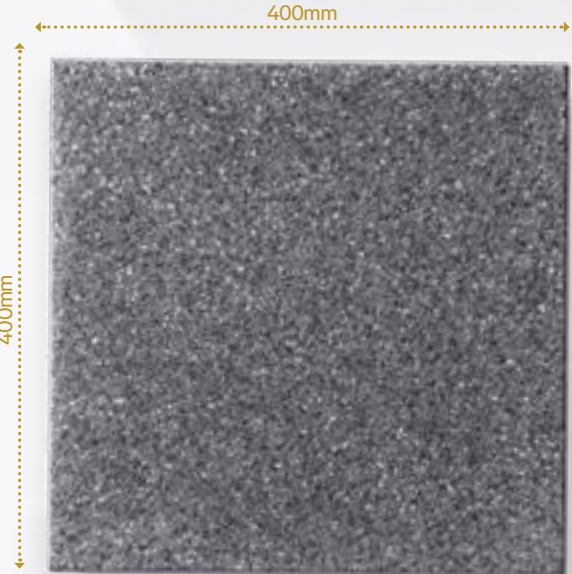
600 x 400mm



600 x 450mm



Alba



Milazzo

See page 192 for complimentary TerraKerb®
See page 226 for complimentary step details and visual contrast strips

Fiamma

high performance, premium, reconstituted granite aggregate flagstones with a ‘flamed’ effect finish



STOCK INFORMATION

Standard product depth	Size (mm)	In Stock	Available Colours	m² per pack	Units per m²	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs units per lorry
40mm	400 x 400	Yes	Alba / Luce / Milazzo	19.2	6.25	120	15.4	1.85	9	15
	450 x 450	MTO	Alba / Luce / Milazzo							
	600 x 400	Yes	Alba / Luce / Milazzo	19.2	4.16	80	23	1.84	9	15
	600 x 450	MTO	Alba / Luce / Milazzo							
50mm	400 x 400	MTO	Alba / Luce / Milazzo	15.36	6.25	96	19.2	1.843	9	IRE 13 / GB 15
	450 x 450	MTO	Alba / Luce / Milazzo	14.58	4.94	72	24.30	1.75	9	IRE 13 / GB 15
	600 x 400	MTO	Alba / Luce / Milazzo	15.36	4.17	64	28.8	1.843	9	IRE 13 / GB 15
	600 x 450	MTO	Alba / Luce / Milazzo	15.12	3.70	56	32.40	1.814	9	IRE 13 / GB 15
70mm	400 x 400	MTO	Alba / Luce / Milazzo	10.56	6.25	66	26.88	1.774	9	IRE 13 / GB 15
	450 x 450	MTO	Alba / Luce / Milazzo	10.94	4.94	54	34.02	1.837	9	IRE 13 / GB 15
	600 x 400	MTO	Alba / Luce / Milazzo	10.56	4.17	44	40.32	1.774	9	IRE 13 / GB 15
	600 x 450	MTO	Alba / Luce / Milazzo	10.80	3.70	40	45.36	1.814	9	IRE 13 / GB 15

MTO: Made To Order (minimum order quantity for MTO is 600m² and lead time is 6-8 weeks).
Information for a specific colour / depth is available on request from our Technical Specification Department

Enduur 1

Enhanced surface colour and reduced efflorescence.
Enhanced mix which increases strength, resistance to wear and tear, longevity and vibrance.
70% less embodied carbon per % of cement replaced.
Helps prevent moss and algae growth and deep staining.

Enduur 2

Enduur 2 has all the features of Enduur 1, plus:
Surface Protection Application
A non-toxic and environmentally friendly application is added during manufacturing. It repels spills dirt and debris, which means it’s easier and faster to clean and products stay looking newer longer.



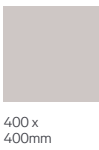
Trolley Friendly

FORMATS, FINISHES + DEPTHS

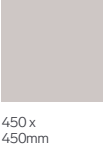


40 | 50
70
Millimetres

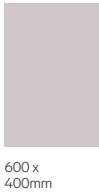
FINISH
Fla
Flamed



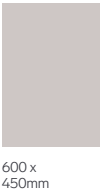
400 x 400mm



450 x 450mm



600 x 400mm



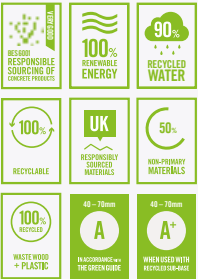
600 x 450mm

STANDARDS + PERFORMANCE

Product Type	High performance, premium, reconstituted granite aggregate flagstones with a ‘flamed’ effect finish
Manufactured to	hEN 1339:2003
Surface Layer	Durable and hard wearing with a minimum surface layer of 8mm. Surface protectant is supplied as standard for easy clean and maintenance
Granite Content	Not less than 90% natural granite aggregate in surface layer
Efflorescence	Advanced concrete technology, plus state-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction
Bending Strength	>5.0Mpa class 3. This pressure applies to all sizes and depths. For specific force performance on a given size or depth please contact our Technical Specification Department
Slip / Skid Resistance	>70 low to extremely low potential for slip. Specific slip / skid resistance test results are available on request from our Technical Specification Department
Frost Resistance	Class 3 in accordance with hEN 1339:2003 Table 4.2
Abrasion Resistance	Class 4 in accordance with hEN 1339:2003 Table 6
Installed to	BS 7533-4:2006
NBS Plus	Q25 315

SUSTAINABILITY

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
Energy Use	100% renewable
Water Used	90% recycled water
Recyclable	100% of this product can be recycled
Manufacturing	Produced in the UK using responsibly sourced materials
Non-Primary Materials	>50%
Waste Wood + Plastic	100% recycled
BREEAM	40 – 70mm: A Rating – according to the Green Guide to Specification 4th edition 2009. A+ Rating can be achieved when used in conjunction with a prepared recycled sub-base.



MANUFACTURING

Fiamma flags are manufactured using advanced processing techniques to create its unique ‘flamed’ effect finish to replicate natural flamed granite. Surface protectant is supplied as standard for easy clean and maintenance. PLANT OF MANUFACTURE: Made at our Toome production plant.

CERTIFICATION

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
ISO 9001	Quality Management.
ISO 14001	Environmental Management.
ISO 45001	Occupational Health and Safety Management.
CE Marking	Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources



PREMIUM RECONSTITUTED GRANITE AGGREGATE FLAGSTONES

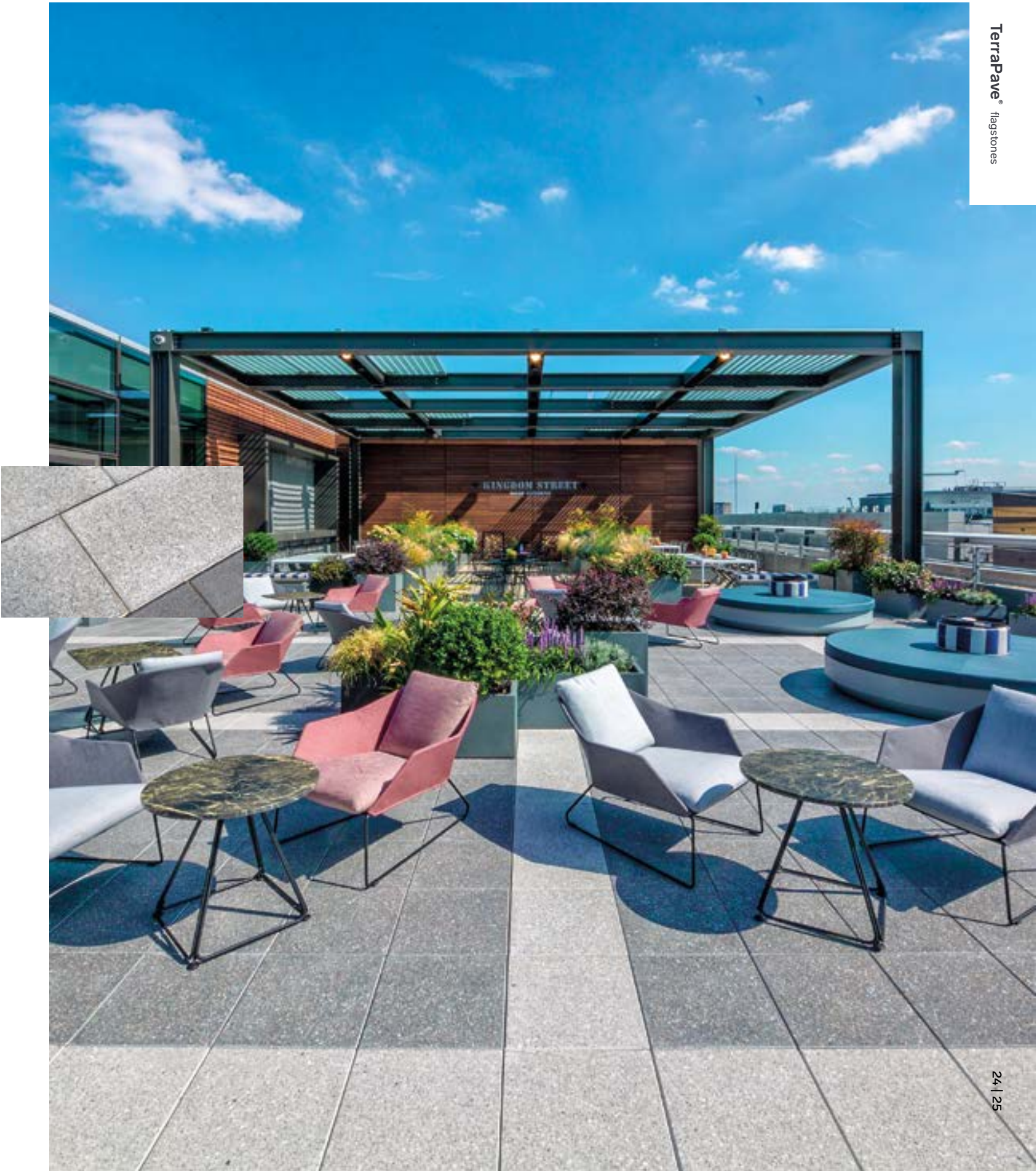
TerraPave®

8 colours | 1 finish | 2 edges |
3 formats | 3 depths

A genuine alternative to natural stone, TerraPave® is AG's best-selling range of premium reconstituted granite flags. Offering an attractive, cost-effective and practical alternative to traditional stone paving, TerraPave® is a favourite choice with architects and specifiers.

TerraPave® is durable, hard wearing and available in a wide range of colours, and can set any project apart with a distinctive and lasting visual impact.

TerraPave® colour blends have been carefully developed using shades from natural granite aggregates. A beautiful solution for highly pedestrianised areas, its exceptional quality, precise size calibration and attractive finish is so good that it is also frequently specified for internal applications.



TerraPave®

- 1

TerraPave® Rimini Ground, *Newport*
- 2

TerraPave® bespoke colours, *DCU Dublin*
- 3

TerraPave® Rimini Ground, *Newport*
- 4

TerraPave® Rimini Ground, *Greystones Marina, Dublin*
- 5

TerraPave® Genoa Ground, *Co. Kildare*
- 6

TerraPave® Sorrento Ground, *Portstewart*
- 7

TerraPave® Genoa Ground + Florento Ground, *Newtownabbey*



TerraPave®

- 1

TerraPave® Rimini Ground, *Belfast*
- 2

TerraPave® Rimini Ground, *Newport*
- 3

TerraPave® Milano + Rimini Ground on Pedestals, *London*
- 4

TerraPave® Genoa Ground, *Laois*
- 5

TerraPave® Arno Ground, *Stillorgan*
- 6

TerraPave® Milano + Rimini Ground on Pedestals, *London*
- 7






TerraPave® Milano + Rimini Ground on Pedestals, *London*
- 8

TerraPave® Genoa + Florento Ground, *Newtownabbey*



TerraPave®

premium reconstituted granite aggregate flagstones

-  Abrasion Resistant
-  Frost Resistant
-  Pedestrian Use
-  Light Traffic
-  Heavy Traffic
when used as part
of a bound system

Enduur 1

 Trolley Friendly

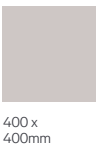


40/50
70
Millimetres

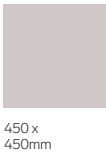
FINISH



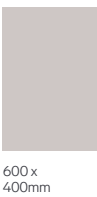
Ground



400 x
400mm



450 x
450mm

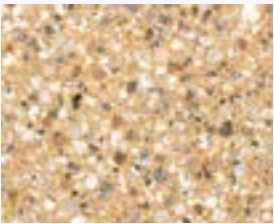


600 x
400mm

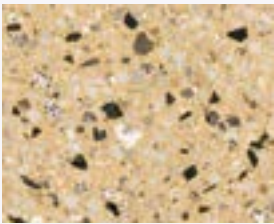
COLOURS



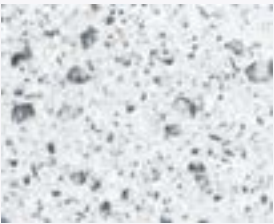
RIMINI GROUND



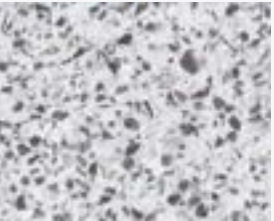
VERONA GROUND



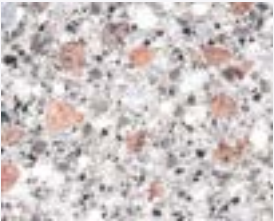
SORRENTO GROUND



GENOA GROUND



COMO GROUND



TUSCANY GROUND



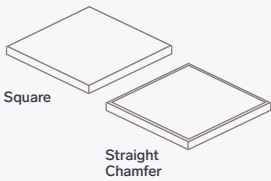
MILANO GROUND



FLORENTO GROUND

EDGES

TerraPave® Ground
Supplied with a straight chamfer edge as standard. However a square edge can be specified for specific projects.

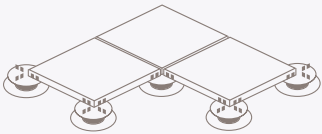


DIMENSIONAL TOLERANCES
FOR WIDTH + DEPTH

Calibration before processing ensures strict compliance with hEN 1339:2003 tolerances and a low level of dimensional variance, delivering ease and accuracy of placement during installation, making them ideal for pedestals and much easier to lay on a well screeded bedding layer i.e. level and loose raked.

PEDESTALS

Pedestal systems are designed to support paving products on roof terraces, roof gardens, platforms and other raised areas. They resolve an array of design issues, from protecting waterproof membranes, to disguising exposed surfaces, to providing a usable roof deck. Pedestals are available in heights up to approximately 600mm. Please contact our Technical Specification Department to discuss your plans.



FINISHES

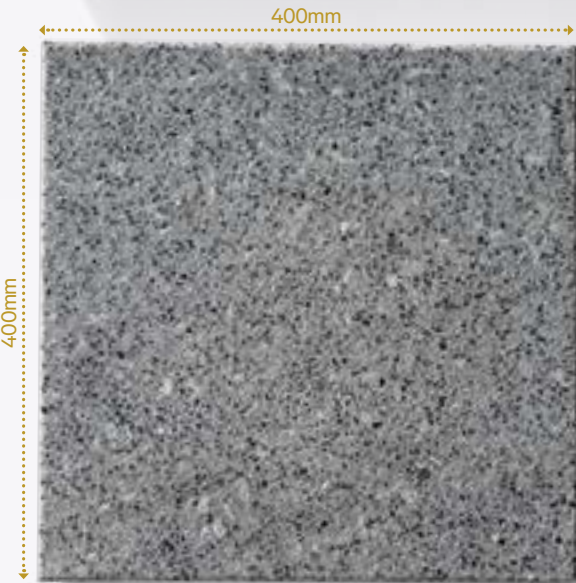
TerraPave® Ground is created using a unique diamond grinding process for a superior finish. **TerraPave®** colour blends have been carefully developed using shades from natural granite aggregates. No pigments are used, so you can be confident that the colours you choose won't fade over time.

SPACER NIBS

No formed spacer.



Rimini Ground



Florento Ground

SPECIFICATION REFERENCE: NBS PLUS: Q25 SLAB/BRICK/SETT/COBBLE PAVINGS: 31, 315 hEN: 1339:2003

See page 192 for complimentary TerraKerb®
See page 226 for complimentary step details and visual contrast strips

TerraPave®
premium reconstituted granite aggregate flagstones



TerraPave®
flagstones

TerraPave®
flagstones

STOCK INFORMATION

Standard product depth	Size (mm)	In Stock	Available Colours (in both finishes)	m² per pack	Units per m²	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs units per lorry
	400 x 400	Yes	Rimini Ground	19.2	6.25	120	15.4	1.84	9	15
		MTO	Verona Ground							
	600 x 400	Yes	Rimini Ground	19.2	4.16	80	23	1.84	9	15
		MTO	Verona Ground							
	400 x 400	MTO	Rimini Ground / Verona Ground / Milano Ground / Florento Ground / Sorrento Ground / Genoa Ground / Como Ground / Tuscany Ground	15.36	6.25	96	19.2	1.843	9	13 / 15
	450 x 450	MTO	Rimini Ground / Verona Ground / Milano Ground / Florento Ground / Sorrento Ground / Genoa Ground / Como Ground / Tuscany Ground	14.58	4.94	72	23.42	1.686	9	13 / 15
	600 x 400	MTO	Rimini Ground / Verona Ground / Milano Ground / Florento Ground / Sorrento Ground / Genoa Ground / Como Ground / Tuscany Ground	15.36	4.16	64	28.8	1.843	9	13 / 15
	400 x 400	MTO	Rimini Ground / Verona Ground / Milano Ground / Florento Ground / Sorrento Ground / Genoa Ground / Como Ground / Tuscany Ground	10.56	6.25	66	26.9	1.775	9	13 / 15
	450 x 450	MTO	Rimini Ground / Verona Ground / Milano Ground / Florento Ground / Sorrento Ground / Genoa Ground / Como Ground / Tuscany Ground	10.94	4.94	54	32.8	1.776	9	13 / 15
	600 x 400	MTO	Rimini Ground / Verona Ground / Milano Ground / Florento Ground / Sorrento Ground / Genoa Ground / Como Ground / Tuscany Ground	10.56	4.16	44	40.3	1.773	9	13 / 15

Fibre reinforcement can now be specified on a MTO basis for the TerraPave® range - contact our Technical Specification Department for more information.
Information for a specific colour / depth is available on request from our Technical Specification Department.
MTO: Made To Order (minimum order quantities is 600m² with a lead time of 6-8 weeks per colour / size. Orders below these quantities should be priced on application).

Enduur 1

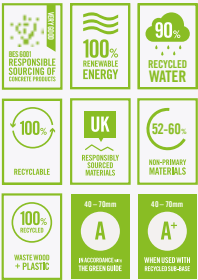
- Enhanced surface colour and reduced efflorescence.
- Enhanced mix which increases strength, resistance to wear and tear, longevity and vibrance.
- 70% less embodied carbon per % of cement replaced.
- Helps prevent moss and algae growth and deep staining.

STANDARDS + PERFORMANCE

Product Type	Premium reconstituted granite aggregate flagstones
Manufactured to	hEN 1339:2003
Surface Layer	Durable and hard wearing with a minimum surface layer of 8mm.
Granite Content	Not less than 90% natural granite and quartz aggregate in surface layer
Efflorescence	State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction
Bending Strength	>5.0Mpa class 3. This pressure applies to all sizes and depths. For specific force performance on a given size or depth please contact our Technical Specification Department
Slip / Skid Resistance	Ground finish: (PTV) >36 low potential for slip. Specific slip / skid resistance test results are available on request from our Technical Specification Department
Frost Resistance	Class 3 in accordance with hEN 1339:2003 Table 4.2
Abrasion Resistance	Class 4 in accordance with hEN 1339:2003 Table 6
Installed to	BS 7533-4:2006
NBS Plus	Q25 315

SUSTAINABILITY

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
Energy Use	100% renewable
Water Used	90% recycled water
Recyclable	100% of this product can be recycled
Manufacturing	Produced in the UK using responsibly sourced materials
Non-Primary Materials	52 – 60% (surface layer)
Waste Wood + Plastic	100% recycled
BREEAM	40 – 70mm: A Rating – according to the Green Guide to Specification 4th edition 2009. A+ Rating can be achieved when used in conjunction with a prepared recycled sub-base.



MANUFACTURING

TerraPave® flags are manufactured from specially selected granite and other natural aggregates. Their exceptional appearance is achieved by using the most up-to-date manufacturing and finishing equipment. PLANT OF MANUFACTURE: Made at our Toome production plant.

CERTIFICATION

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
ISO 9001	Quality Management.
ISO 14001	Environmental Management.
ISO 45001	Occupational Health and Safety Management.
CE Marking	Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources



Trolley Friendly



**PREMIUM WATER-ETCHED, LIGHTLY TEXTURED,
GRANITE AGGREGATE FLAGSTONES**

Plaza flagstones

A vibrant, durable modern classic:
with over 90% of its surface formed
from natural granite aggregates,
Plaza is colourfast and durable.

Plaza is made from the finest
aggregates available and carefully
blended with a unique water-
etching process.

Available in a variety of colours,
intensities, depths and formats,
it's the perfect tool for creating
innovative and inspiring hard
landscaping designs.



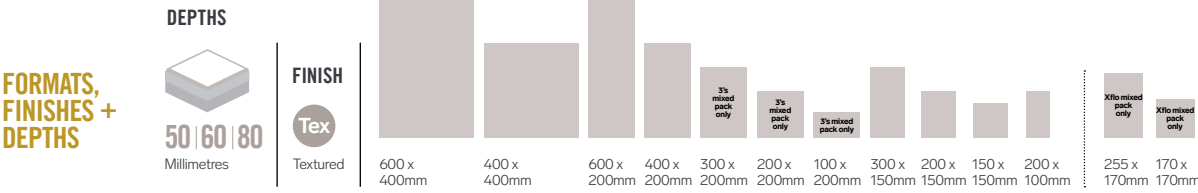
Plaza flagstones

- | | |
|--|--|
| 1 Plaza Salt, <i>Dublin</i> | 5 Plaza Sesam + Pepper, <i>Portstewart</i> |
| 2 Plaza Sinnep, Salt + Pepper, <i>Fivemiletown</i> | 6 Plaza Salt, <i>Ballymena</i> |
| 3 Plaza Pepper, <i>Ballymena</i> | 7 Plaza Salt + Pepper, <i>Cardiff</i> |
| 4 Plaza Salt + Pepper, <i>Dublin</i> | 8 Plaza Pepper, <i>Ballymena</i> |



Plaza flagstones

premium water-etched, lightly textured,
granite aggregate flagstones



COLOURS



SALT



PEPPER



BIRKES



KANEL



LAKRIDS



SAFRAN



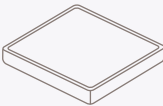
SESAM



FLAXEN **new**

EDGES

Plaza Supplied with medium radius rounded chamfer. Xflo supplied with a medium to large radius round chamfer.



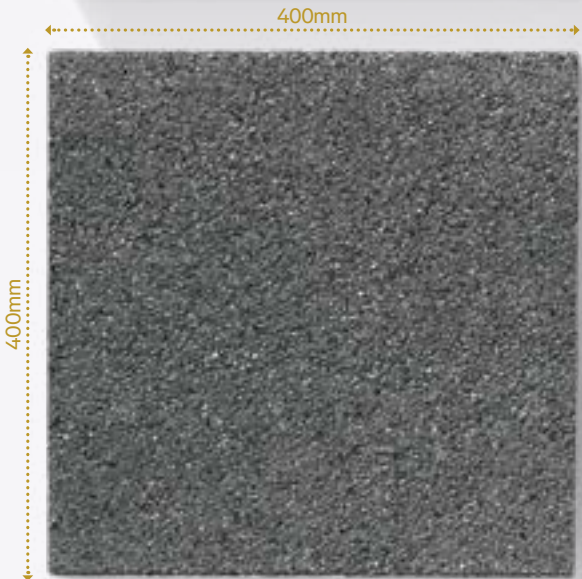
FINISHES

Our unique water etched production process ensures there is over 90% of carefully blended, colourfast natural granite aggregates on the surface of each block, so you can be confident the colours you choose won't fade over time. On the few occasions we pigment our products, these are all completely UV stable and, as are the aggregates, resistant to acid, lime and alkalis.

SPACER NIBS

50mm: 2mm spacers on each paver leaving a 3mm minimum joint when laid.

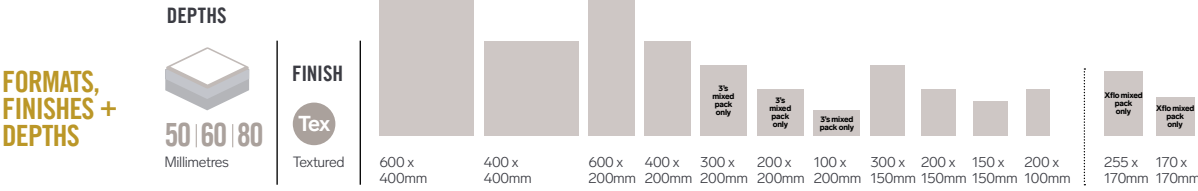
80mm: 2mm spacers on each paver leaving a 3mm minimum joint when laid.

































- Abrasion Resistant
- Frost Resistant
- Pedestrian Use
- Light Traffic
- Heavy Traffic* when used as part of a bound system
- Available in permeable (Xflo)
- Machine Lay available

Plaza flagstones

premium water-etched, lightly textured,
granite aggregate flagstones



STOCK INFORMATION

Standard product depth	Size (mm)	In Stock	Available Colours	m ² per pack	Units per m ²	Units per layer	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
 50mm	 600 x 400	Yes	Salt / Pepper	15.36	4.16	4	64	28.8	1.84	9	IRE 13 / GB 15
	 400 x 400	Yes	Salt / Pepper	15.36	6.25	6	96	19.2	1.84	9	IRE 13 / GB 15
	 200 x 150	Yes	Salt / Pepper	15.12	33.3	–	504	3.45	1.74	9	IRE 13 / GB 15
 60mm	 300 x 150	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	12.96	22.2	20	288	6.25	1.80	9	IRE 13 / GB 15
	 200 x 150	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	12.96	33.3	36	432	4.1	1.75	9	IRE 13 / GB 15
	 150 x 150	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	12.96	44.4	48	576	3.1	1.75	9	IRE 13 / GB 15
 80mm	 600 x 400	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	9.6	4.16	4	40	44	1.844	9	IRE 13 / GB 15
	 600 x 200	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	9.6	8.33	8	80	21	1.8	9	IRE 13 / GB 15
	 *400 x 400	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	9.6	6.25	6	60	29	1.842	9	IRE 13 / GB 15
	 *400 x 200	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	9.6	12.5	15	120	15	1.76	9	IRE 13 / GB 15
	 200 x 100	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	9.72	50	54	486	3.7	1.7	9	IRE 13 / GB 15
3s Mixed Pack (paving blocks not sold individually)											
 50mm	 300 x 200	Yes	Salt / Pepper	15.36	–	4	496	6.9	1.76	9	IRE 13 / GB 15
	 200 x 200				–	9		4.6			
	 100 x 200				–	18		2.3			
 60mm	 300 x 200	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	12.48	–	4	403	8.3	1.75	9	IRE 13 / GB 15
	 200 x 200				–	9		5.5			
	 100 x 200				–	18		2.8			
Xflo Plaza Machine Lay available in 80mm											
 60mm	 200 x 150	MTO	Salt / Pepper			–					
	 200 x 100	MTO	Salt / Pepper	12.48	50	48	624	2.6	1.8	9	15
	 150 x 150	MTO	Salt / Pepper			–					
 80mm	<div>mixed 2 size pack</div> <div> 255 x 170</div> <div> 170 x 170</div>	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	9.75	30	15	270 (135 of each size)	8 5.3	1.75	9	IRE 13 / GB 15
	 200 x 100	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	9.6	50	48	528	3.55	1.8	9	IRE 13 / GB 15

MTO: Made To Order (minimum order quantities: 300m² per colour / size. Orders below these quantities should be priced on application). Information for a specific colour / depth is available on request from our Technical Specification Department.
* The flagstone sizes 400x400 and 400x200 in the 80mm depth are the only units suitable for use with Heavy Traffic (bound / unbound).

Enduur 1

Enhanced surface colour and reduced efflorescence.

Enhanced mix which increases strength, resistance to wear and tear, longevity and vibrance.

70% less embodied carbon per % of cement replaced.

Helps prevent moss and algae growth and deep staining.

Complimentary products

LARGE FORMAT

Large Format Plaza is available.
See [page 82](#).

PAVING SETTS

Plaza Setts are available in mixed sizes.
See [page 146](#).

PAVING BLOCKS

Plaza Paving Blocks are available.
See [page 90](#).

PERMEABLE PAVING

Xflo Plaza permeable paving is available.
See [page 162](#).

PLANK PAVING

Plaza Lineal mixed size plank paving are available.
See [page 102](#).

MIXED SIZE PACK new

Plaza Quattro mixed size paving now available.
See [page 98](#).

Plaza flagstones

premium water-etched, lightly textured,
granite aggregate flagstones



Abrasion Resistant



Frost Resistant



Pedestrian Use



Light Traffic



Heavy Traffic*
when used as part
of a bound system

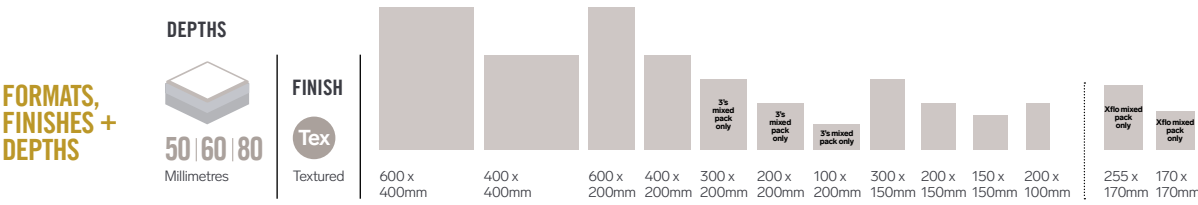


Available in
permeable
(Xflo)



Machine
Lay available

Enduur 1



STANDARDS + PERFORMANCE

Product Type	Premium water-etched, lightly textured, granite aggregate paving + flagstones
Manufactured to Surface Layer	hEN 1338 (paving blocks) / hEN 1339:2003 (flagstones)
Granite Content	Durable and hard wearing with a minimum surface layer of 5mm. Not less than 90% natural granite and quartz aggregate in surface layer
Efflorescence	State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction
Bending Strength (Flagstones)	>5Mpa Class 3. This pressure applies to all flagstones sizes and depths. For specific force performance on a given size or depth please contact our Technical Specification Department
Tensile Splitting Strength (Paving Blocks)	>3.6Mpa. This pressure applies to all paving blocks sizes and depths. For specific force performance on a given size or depth please contact our Technical Specification Department
Slip / Skid Resistance	(USRV) >75 low potential for slip. Specific slip / skid resistance test results are available on request from our Technical Specification Department
Frost Resistance	Class 3 in accordance with hEN 1339:2003 Table 4.2
Abrasion Resistance Installed to NBS Plus	Class 4 in accordance with hEN 1339:2003 Table 6 BS 7533-4:2006 Q24 110

SUSTAINABILITY

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
Energy Use	100% renewable
Water Used	90% recycled water
Recyclable	100% of this product can be recycled
Manufacturing	Produced in the UK using responsibly sourced materials
Non-Primary Materials	52 – 60% (surface layer)
Waste Wood + Plastic BREEAM	100% recycled
	50 - 60mm: A Rating – according to the Green Guide to Specification 4th edition 2009. A+ Rating can be achieved when used in conjunction with a prepared recycled sub-base
	80mm: B Rating – according to the Green Guide to Specification 4th edition 2009. A Rating can be achieved when used in conjunction with a prepared recycled sub-base



MANUFACTURING

Plaza is manufactured from specially selected fine granite aggregates. Its premium stone washed appearance is obtained using computer controlled washing machinery which leaves a uniquely natural finish (coarse texture). Unique aggregate storage methods avoiding aggregate contamination. PLANT OF MANUFACTURE: Made at our Toome production plant.

CERTIFICATION

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
ISO 9001	Quality Management.
ISO 14001	Environmental Management.
ISO 45001	Occupational Health and Safety Management.
CE Marking	Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources



**RECONSTITUTED GRANITE AGGREGATE FLAGSTONES
WITH A LIGHTLY TEXTURED FINISH**

Tavira

Tavira is a beautifully crafted flagstone with an impressive set of performance credentials. It is a product that delivers the best of both worlds, affordable with the highly engineered benefits of Enduur Level 1.

This is a sophisticated, versatile product, created as a more environmentally friendly alternative to natural stone. Mid range or Better (good, better and best)

The subtly textured finish makes them ideal for patios, pathways, balconies and other pedestrian areas.

Tavira is produced in AG's state-of-the-art factory, using 100% renewable energy. It is, itself, completely recyclable. Tavira is manufactured using the finest natural granite aggregates. The raw materials are processed through the wash plant at AG's Fivemiletown site, which facilitates enhanced product consistency for better quality finish products.



Tavira

reconstituted granite aggregate flagstones
with a lightly textured finish

COLOURS



SLATE



SILVER



SAHARA



Abrasion Resistant



Frost Resistant



Pedestrian Use



Low
Potential
for Slip

Enduur 1

SPECIFICATION REFERENCE: NBS PLUS: Q25 SLAB/BRICK/SETT/COBBLE PAVINGS: 31, 315 hEN: 1339:2003

FORMATS, FINISHES + DEPTHS

DEPTH



40 | 50
70

Millimetres

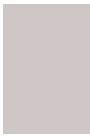
FINISH



Textured



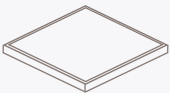
450 x
450mm



600 x
400mm

EDGES

Tavira Supplied with a fine
straight chamfer.



Straight Chamfer

SPACER NIBS

No formed spacer.

FINISHES

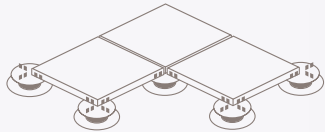
Tavira is manufactured using advanced
processing techniques to create its
lightly textured finish using reconstituted
granite aggregate.

DIMENSIONAL TOLERANCES FOR WIDTH + DEPTH

Calibration before processing ensures strict
compliance with hEN 1339:2003 tolerances and a
low level of dimensional variance, delivering ease
and accuracy of placement during installation,
making them ideal for pedestals and much easier
to lay on a well screeded bedding layer i.e. level
and loose raked.

PEDESTALS

Pedestal systems are designed to support paving
products on roof terraces, roof gardens, platforms
and other raised areas. They resolve an array
of design issues, from protecting waterproof
membranes, to disguising exposed surfaces,
to providing a usable roof deck. Pedestals are
available in heights up to approximately 600mm.
Please contact our Technical Specification
Department to discuss your plans.



For **Jointing Guidance** please refer to
page 272 (Advice + Guidance section).



Profile not to scale

Tavira

reconstituted granite aggregate flagstones
with a lightly textured finish



STOCK INFORMATION

Standard product depth	Size (mm)	In Stock	Available Colours	m² per pack	Units per m²	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs units per lorry
40mm	600 x 400	Yes	Silver / Slate / Sahara	19.2	4.17	80	23	1.84	8	IRE 13 / GB 15
	450 x 450	Yes	Silver / Slate / Sahara	18.22	4.94	90	19.2	1.73	9	IRE 13 / GB 16
50mm	600 x 400	MTO	Silver / Slate / Sahara	15.36	4.17	64	28.8	1.843	9	IRE 13 / GB 15
	450 x 450	MTO	Silver / Slate / Sahara	14.58	4.94	72	24.30	1.75	9	IRE 13 / GB 15
70mm	600 x 400	MTO	Silver / Slate / Sahara	10.56	4.17	44	40.32	1.774	9	IRE 13 / GB 15
	450 x 450	MTO	Silver / Slate / Sahara	10.94	4.94	54	34.02	1.837	9	IRE 13 / GB 15

MTO: Made To Order (minimum order quantity for MTO is 600m² and lead time is 6-8 weeks).
Information for a specific colour / depth is available on request from our Technical Specification Department



Abrasion Resistant



Frost Resistant



Pedestrian Use



Low Potential for Slip

Enduur 1

Enduur 1

Enhanced surface colour and reduced efflorescence.

Enhanced mix which increases strength, resistance to wear and tear, longevity and vibrance.

70% less embodied carbon per % of cement replaced.

Helps prevent moss and algae growth and deep staining.

FORMATS, FINISHES + DEPTHS



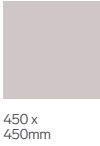
DEPTH

40 | 50
70
Millimetres

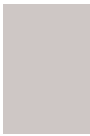
FINISH



Textured



450 x 450mm



600 x 400mm

STANDARDS + PERFORMANCE

Product Type

Reconstituted granite aggregate flagstones with a lightly textured finish

Manufactured to Surface Layer

hEN 1339:2003

Durable and hard wearing with a minimum surface layer of 8mm.

Reclaimed and recycled material not less than 60% in surface layer

Efflorescence

Advanced concrete technology, plus state-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction

Bending Strength

>5.0Mpa class 3. This applies to both sizes.

For specific force performance on a given size or depth please contact our Technical Specification Department

Slip / Skid Resistance

>60 low potential for slip. Specific slip / skid resistance test results are available on request from our Technical Specification Department

Frost Resistance

Class 3 in accordance with hEN 1339:2003 Table 4.2

Abrasion Resistance

Class 3 in accordance with hEN 1339:2003 Table 6

Installed to

BS 7533-4:2006

NBS Plus

Q25 315

SUSTAINABILITY

BES 6001

Responsible Sourcing of Concrete Products (Rating: Very Good)

Energy Use

100% renewable

Water Used

90% recycled water

Recyclable

100% of this product can be recycled

Manufacturing

Produced in the UK using responsibly sourced materials

Non-Primary Materials

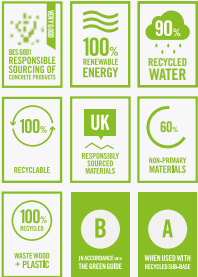
>60%

Waste Wood + Plastic

100% recycled

BREEAM

A Rating – according to the Green Guide to Specification 4th edition 2009. A+ Rating can be achieved when used in conjunction with a prepared recycled sub-base



MANUFACTURING

Tavira flags are manufactured using advanced processing techniques to create its lightly textured finish using reconstituted granite aggregate. PLANT OF MANUFACTURE: Made at our Toome production plant.

CERTIFICATION

BES 6001

Responsible Sourcing of Concrete Products (Rating: Very Good)

ISO 9001

Quality Management.

ISO 14001

Environmental Management.

ISO 45001

Occupational Health and Safety Management.

CE Marking

Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources



UNDULATED, GRANITE AGGREGATE FLAGSTONES

Manor Stone®

Manor Stone® is a reconstituted natural stone flag system with a unique undulating surface and subtle waved edging that perfectly recreates the beauty of natural stone.

Warm rustic earth tones and multiple unit sizes make Manor Stone® ideally suited for public realm and commercial projects in traditional schemes or conservation areas.

Manor Stone® has a hard-wearing, frost-proof surface and can be laid quickly on a Bound or Unbound bedding design.



Manor Stone®

- | | |
|--|--|
| 1 Manor Stone® Blackwater, Londonderry / Derry | 4 Manor Stone® Blackwater, Londonderry / Derry |
| 2 Manor Stone® Blackwater, Dungannon | 5 Manor Stone® Blackwater, Delgany |
| 3 Manor Stone® Blackwater, Irvinestown | 5 Manor Stone® Blackwater, Irvinestown |



Manor Stone®

undulated, granite aggregate flagstones

-  Abrasion Resistant
-  Frost Resistant
-  Pedestrian Use

Enduur 1

COLOURS



BLACKWATER

FORMATS, FINISHES + DEPTHS

DEPTHS



80

Millimetres

FINISH



Embossed

Mixed pack only

315 x 210mm

Mixed pack only

315 x 315mm

Mixed pack only

420 x 315mm

Mixed pack only

525 x 315mm

EDGES

Manor Stone® Supplied with a fettled waved edge to replicate cut natural stone.



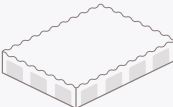
Nib Depth
90% of the height and 52mm wide



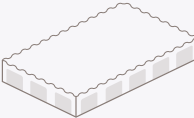
Contoured Edge
315 x 210mm



Contoured Edge
315 x 315mm



Contoured Edge
420 x 315mm



Contoured Edge
525 x 315mm

SPACER NIBS

3mm spacers on each paver leaving a 3-7mm minimum joint between units due to the undulating edge detail.

FINISHES

State-of-the-art production processes result in a flag which has the authentic appearance of sawn natural stone. Subtle waves on the closed surface mixed with a controlled blend of colours and an aged, fettled edge make this a unique choice



Profiles not to scale





Manor Stone®

undulated, granite aggregate flagstones



STOCK INFORMATION

Flagstones not sold individually

Standard product depth	Size (mm)	In Stock	Available Colours	m² per pack	Units per layer	Total units per pack	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
80mm (mixed pack only)	 525 x 315	MTO	Blackwater	9.6	2	80	16	30.42	1.8	9	15
	 420 x 315				3		24	24.35			
	 315 x 315				4		32	18.25			
	 210 x 315				1		8	12.17			

MTO: Made To Order (minimum order quantities apply).
Information for a specific colour / depth is available on request from our Technical Specification Department.
Supplied in a mix of four different sized units in patio packs (unit sizes are not sold individually).
There are 8 layers in a mixed size pack.
An easy-to-follow laying pattern is included.



Abrasion Resistant



Frost Resistant



Pedestrian Use

Enduur 1

Enduur 1

Enhanced surface colour and reduced efflorescence.

Enhanced mix which increases strength, resistance to wear and tear, longevity and vibrance.

70% less embodied carbon per % of cement replaced.

Helps prevent moss and algae growth and deep staining.

FORMATS, FINISHES + DEPTHS



80
Millimetres

FINISH



Embossed

DEPTHS

Mixed pack only

315 x 210mm

DEPTHS

Mixed pack only

315 x 315mm

DEPTHS

Mixed pack only

420 x 315mm

DEPTHS

Mixed pack only

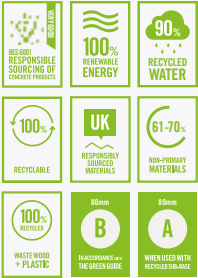
525 x 315mm

STANDARDS + PERFORMANCE

Product Type	Undulated, granite aggregate flagstones
Manufactured to	hEN 1339:2003
Surface Layer	Durable and hard wearing with a minimum surface layer of 8mm.
Granite Content	Not less than 50% natural granite and quartz aggregate in surface layer
Efflorescence	State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction
Bending Strength	>3.5Mpa. This pressure applies to all sizes and depths. For specific force performance on a given size or depth please contact our Technical Specification Department (USRV) >75 extremely low potential for slip.
Slip / Skid Resistance	Specific slip / skid resistance test results are available on request from our Technical Specification Department
Installed to NBS Plus	BS 7533-4:2006 Q25 315

SUSTAINABILITY

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
Energy Use	100% renewable
Water Used	90% recycled water
Recyclable	100% of this product can be recycled
Manufacturing	Produced in the UK using responsibly sourced materials
Non-Primary Materials	61 – 70% (surface layer)
Waste Wood + Plastic	100% recycled
BREEAM	B Rating – according to the Green Guide to Specification 4th edition 2009. A Rating can be achieved when used in conjunction with a prepared recycled sub-base



MANUFACTURING

Manor Stone® is manufactured from specially selected premium aggregates to create a high quality, closed face finish. Its unique undulating finish is obtained by using the most up-to-date manufacturing processes and machinery. PLANT OF MANUFACTURE: Made at our Toome production plant

CERTIFICATION

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
ISO 9001	Quality Management.
ISO 14001	Environmental Management.
ISO 45001	Occupational Health and Safety Management.
CE Marking	Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources



SUBTLY EMBOSSED FLAGSTONES

Canterra®

The lightly embossed surface of Canterra® flagstones provides a close match for natural stone, making them ideal for conservation areas and traditional architectural schemes.

Canterra® flagstones contain granite aggregates to make them extremely durable – it's a product that gives architects all the benefits of natural stone, with none of the downsides.



Canterra®

- 1

Canterra® Slate, *Killarney*
- 2

Canterra® Silver, *Private*
- 3

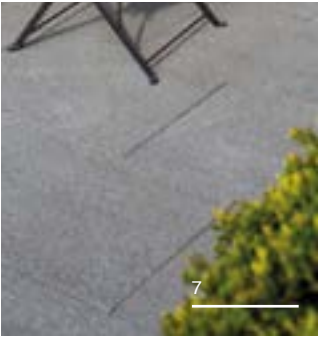
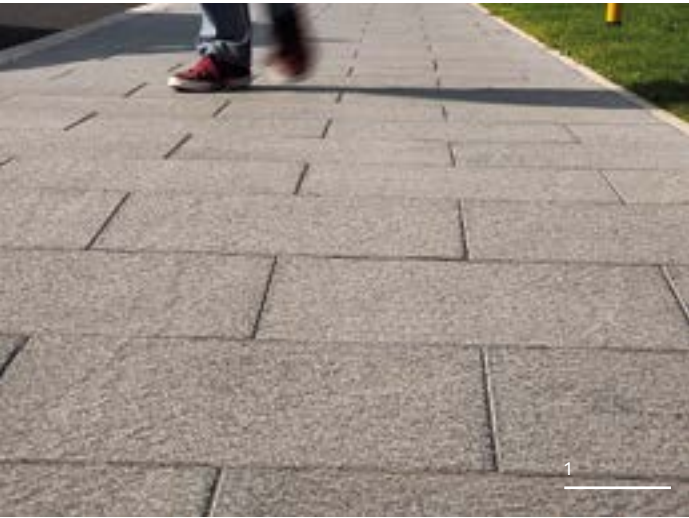
Canterra® Slate, *Killarney*
- 4

Canterra® Silver, *Killarney*
- 5

Canterra® Silver, *Killarney*
- 6

Canterra® Silver, *Killarney*
- 7

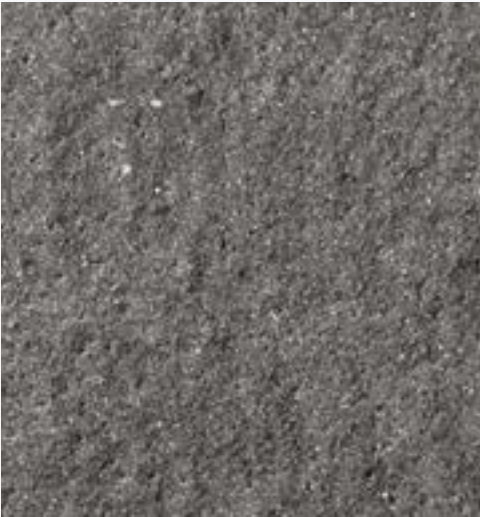
Canterra® Silver, *tbc*



Canterra®

subtly embossed flagstones

COLOURS



SLATE **new**



SILVER **new**



SAHARA



Abrasion Resistant



Frost Resistant



Pedestrian Use

Enduur **1**

FORMATS, FINISHES + DEPTHS



DEPTHS

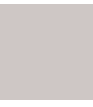
40

Millimetres

FINISH

Em

Embossed



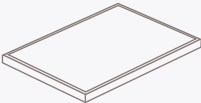
400 x 400mm



600 x 400mm

EDGES

Canterra® Supplied with a less than 3mm straight chamfer edge as standard.



Straight Chamfer

SPACER NIBS

No formed spacer.

FINISHES

The durable and hard-wearing surface of Canterra® is the result of a unique seven stage production process which involves multiple vibrations using a state-of-the-art hermetic press and rotating, diamond tipped curling brushes.

Canterra® has been designed to create a 'naturally undulating old courtyard' effect. This effect replicates the uneven surface of natural stone with a randomly undulating surface. The surface profile varies in height between 0mm and 3mm.

BOUND SYSTEM

AG's preference is that installers use open joints when laying Canterra®, whereby >5mm joints are created and filled with a solid jointing compound. This is the most effective method of laying the product to minimise the visual impact of the variations on the surface of the product. The solid jointing compound enhances the overall appearance and will also help to reduce ongoing maintenance of the product.

UNBOUND SYSTEM

When using an unbound system AG recommend close jointing Canterra®. Joints of between 2mm and 5mm should be created when laying with fine, dry jointing-sand used to fill the joints. This will help to reduce the visual appearance of allowable tolerances. The installer should ensure jointing sands are brushed in to completely fill the joints.

For **Jointing Guidance** please refer to page 272 (Advice + Guidance section).



Profile not to scale

Canterra®

subtly embossed flagstones



STOCK INFORMATION

Standard product depth	Size (mm)	In Stock	Available Colours	m² per pack	Units per m²	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
40mm	 600 x 400	Yes	Silver / Slate / Sahara	12	4.16	50	22.95	1.2	12	GB 23 / IRE 20
	 400 x 400	Yes	Silver / Slate / Sahara	16	6.25	100	16.09	1.609	10	GB 17 / IRE 15

Information for a specific colour / depth is available on request from our Technical Specification Department.



Abrasion Resistant



Frost Resistant



Pedestrian Use

Enduur 1

Enduur 1

Enhanced surface colour and reduced efflorescence.

Enhanced mix which increases strength, resistance to wear and tear, longevity and vibrance.

70% less embodied carbon per % of cement replaced.

Helps prevent moss and algae growth and deep staining.

FORMATS, FINISHES + DEPTHS



DEPTHS

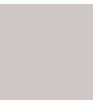
40

Millimetres

FINISH



Embossed



400 x 400mm



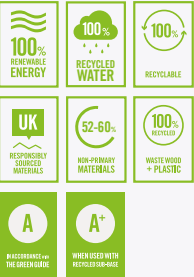
600 x 400mm

STANDARDS + PERFORMANCE

Product Type	Subtly embossed flagstones
Manufactured to	hEN 1339:2003
Surface Layer	Durable and hard wearing with a minimum surface layer of 8mm.
Granite Content	Not less than 50% natural granite and quartz aggregate in surface layer
Efflorescence	State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction
Bending Strength	>3.5Mpa. This pressure applies to all sizes and depths. For specific force performance on a given size or depth please contact our Technical Specification Department
Slip / Skid Resistance	(PTV) >60 low potential for slip. Specific slip / skid resistance test results are available on request from our Technical Specification Department
Installed to NBS Plus	BS 7533-4:2006 Q25 315

SUSTAINABILITY

Energy Use	100% renewable
Water Used	100% recycled water
Recyclable	100% of this product can be recycled
Manufacturing	Produced in the UK using responsibly sourced materials
Non-Primary Materials	52 – 60% (surface layer)
Waste Wood + Plastic BREEAM	100% recycled A Rating – according to the Green Guide to Specification 4th edition 2009. A+ Rating can be achieved when used in conjunction with a prepared recycled sub-base



MANUFACTURING

Canterra® flags are manufactured from specially selected natural granite aggregates. They are wet cast and finished with a subtle embossed surface and brushed finish. PLANT OF MANUFACTURE: Made at our Ballygawley production plant.

CERTIFICATION

ISO 9001	Quality Management.
ISO 14001	Environmental Management.
ISO 45001	Occupational Health and Safety Management.
CE Marking	Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources

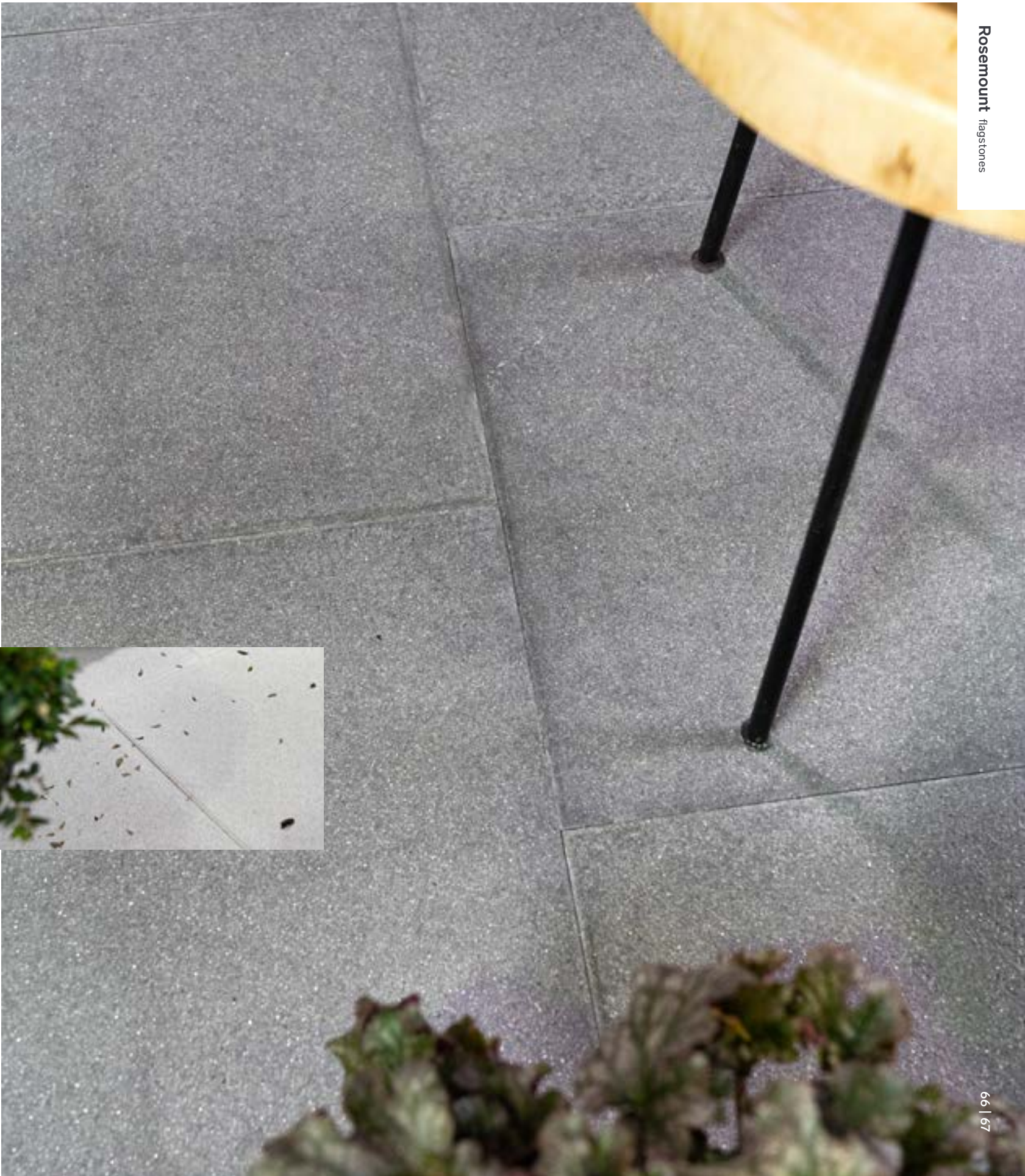


FUNCTIONAL FLAGSTONES WITH A SMOOTH FINISH

Rosemount

Win on cost with our latest range of smooth flagstones.

Our Rosemount Flags are functional, cost effective and feature a bevelled edge. Rosemount Flags are available in a smooth finish in three colours, one depth and one standard size.



Rosemount

functional flagstones with a smooth finish

-  Abrasion Resistant
-  Frost Resistant
-  Pedestrian Use

COLOURS



SILVER



SLATE



BUFF

FORMATS, FINISHES + DEPTHS



DEPTHS

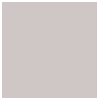
40

Millimetres

FINISH

Smo

Smooth



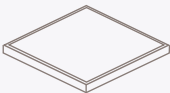
400 x
400mm



600 x
400mm

EDGES

Rosemount is supplied with a nominal 5mm wide x 3mm deep straight chamfer edge as standard.



Straight Chamfer

SPACER NIBS

No formed spacer.

FINISHES

Smooth finish.

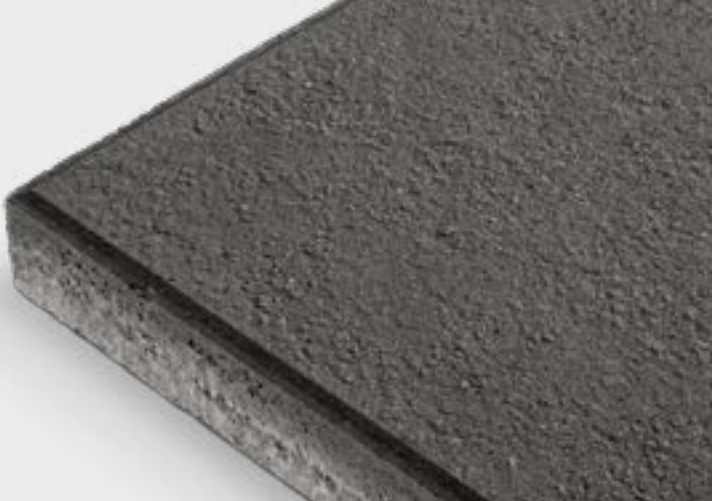


Profile not to scale

SPECIFICATION REFERENCE: NBS PLUS: Q25 SLAB/BRICK/SETT/COBBLE PAVINGS: 31, 315 hEN: 1339:2003

Rosemount

functional flagstones with a smooth finish



STOCK INFORMATION

Standard product depth	Size (mm)	In Stock	Available Colours	m ² per pack	Units per m ²	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
40mm	600 x 600	Yes	Silver / Slate / Buff	9	2.77	25	36	0.9	15	GB 24 / IRE 22
	400 x 400	Yes	Silver / Slate / Buff	16	6.25	100	16.09	1.609	10	GB 17 / IRE 15

Information for a specific colour / depth is available on request from our Technical Specification Department.



Abrasion Resistant



Frost Resistant



Pedestrian Use

STANDARDS + PERFORMANCE

Product Type	Functional flagstones with a smooth finish
Manufactured to	hEN 1339:2003
Surface Layer	Durable and hard wearing with a minimum surface layer of 8mm
Granite / Quartz Content	Not less than 50% natural granite and quartz aggregate in surface layer
Efflorescence	State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction
Bending Strength	>3.5Mpa Class 1
Slip / Skid Resistance	(USRV) >75 extremely low potential for slip. Specific slip / skid resistance test results are available on request from our Technical Specification Department
Installed to	BS 7533-4:2006
NBS Plus	Q25 315

SUSTAINABILITY

Energy Use	100% renewable
Water Used	100% recycled water
Recyclable	100% of this product can be recycled
Manufacturing	Produced in the UK using responsibly sourced materials
Non-Primary Materials	52 – 60% (surface layer)
Waste Wood + Plastic	100% recycled
BREEAM	A Rating – according to the Green Guide to Specification 4th edition 2009. A+ Rating can be achieved when used in conjunction with a prepared recycled sub-base



MANUFACTURING

Rosemount flags are manufactured from quality aggregates – including granite and quartz. PLANT OF MANUFACTURE: Made at our Fivemiletown production plant.

CERTIFICATION

ISO 9001	Quality Management.
ISO 14001	Environmental Management.
ISO 45001	Occupational Health and Safety Management.
CE Marking	Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources



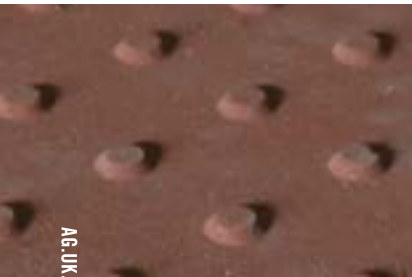
BLISTER, CORDUROY + CYCLEWAY SURFACED FLAGSTONES

Tactile

AG's range of tactile paving slabs are suitable for areas where paving surface indicators are required.

Our Blister and Corduroy tactile flags are designed to be used to give guidance or warning of potential hazards to the visually impaired. Our range includes distinctive surface profiles and colours to enable the recognition of various hazards.

Cycleway Flags are used in conjunction with shared pedestrian and cycle routes to advise visually impaired people of the position of the cycle path. The purpose of the tactile surface is to keep this group of pedestrians safe by providing a detectable underfoot warning.



Tactile

1	Tactile Blister Buff, <i>Armagh</i>	5	Tactile Blister Red, <i>Cookstown</i>
2	Tactile Blister Buff, <i>London</i>	6	Tactile Corduroy Buff, <i>Belfast</i>
3	Tactile Blister Buff, <i>Limerick</i>	7	Tactile Blister Buff, <i>Dún Laoghaire</i>
4	Tactile Blister Red, <i>Armagh</i>	8	Tactile Corduroy Buff, <i>Portadown</i>



Tactile

blister, corduroy + cycleway surfaced flagstones

FORMATS,
FINISHES +
DEPTHS

DEPTHS



50

Millimetres

FINISHES

Bl

Blister

Cr

Corduroy

Cy

Cycleway

(Blister,
Corduroy +
Cycleway)

400 x 400mm

COLOURS + FINISHES



BUFF BLISTER



RED BLISTER



SILVER GRANITE BLISTER



BUFF CORDUROY



BUFF CYCLEWAY

PROFILES

Blister
Blister on Surface:
Diameter: 25mm
Depth: 5mm

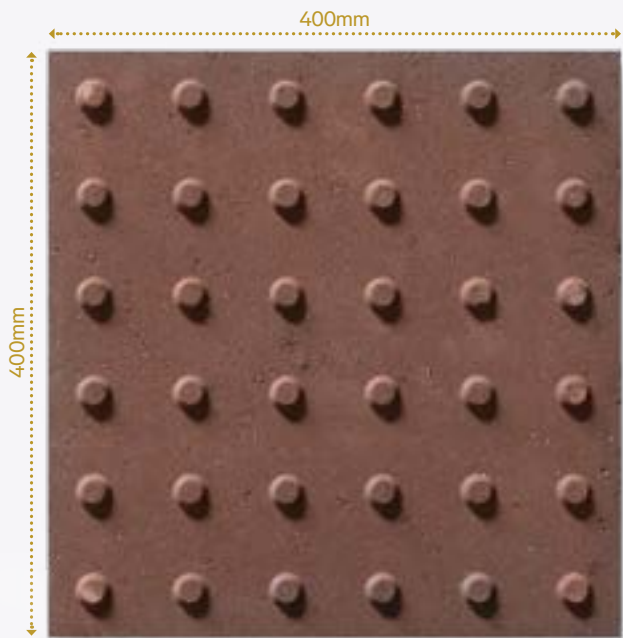


Corduroy
Stripe on Surface:
Width: 22mm
Depth: 6mm



SPACER NIBS

No formed spacer.



Blister



Corduroy

Profiles not to scale



Abrasion Resistant



Frost Resistant



Pedestrian Use









Light Traffic
63mm only

Tactile

blister, corduroy + cycleway surfaced flagstones



STOCK INFORMATION

Standard product depth	Size (mm)	In Stock	Available Colours	m² per pack	Units per m²	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
Blister										
50mm 	 400 x 400	Yes	Buff / Red	12.8	6.25	80	18.75	1.5	10	IRE 16/ GB18
		MTO	Silver Granite							
Corduroy										
50mm 	 400 x 400	Yes	Buff	12.8	6.25	80	18.75	1.5	10	IRE 16/ GB18
Cycleway										
50mm 	 400 x 400	Yes	Buff	12.8	6.25	80	18.75	1.5	10	IRE 16/ GB18

Information for a specific colour / depth is available on request from our Technical Specification Department.
MTO: Made To Order (minimum order quantities: 250m² per colour / size. Orders below these quantities should be priced on application).

- Abrasion Resistant
- Frost Resistant
- Pedestrian Use
- Light Traffic
63mm only

STANDARDS + PERFORMANCE

Product Type Manufactured to Efflorescence	Blister, corduroy, cycleway + deterrent surfaced flagstones hEN 1339:2003 State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction
Bending Strength	>5.0Mpa. This pressure applies to all sizes and depths. For specific force performance on a given size or depth please contact our Technical Specification Department
Slip / Skid Resistance	>60 low potential for slip. Specific slip / skid resistance test results are available on request from our Technical Specification Department
Installed to NBS Plus	BS 7533-4:2006 Q25 315

SUSTAINABILITY

Energy Use	100% renewable
Water Used	100% recycled water
Recyclable	100% of this product can be recycled
Manufacturing	Produced in the UK using responsibly sourced materials
Non-Primary Materials	52 – 60% (surface layer)
Waste Wood + Plastic	100% recycled
BREEAM	A Rating – according to the Green Guide to Specification 4th edition 2009. A+ Rating can be achieved when used in conjunction with a prepared recycled sub-base



DEPTHS



50

Millimetres

FINISHES

Bl

Blister

Cr

Corduroy

Cy

Cycleway

(Blister,
Corduroy +
Cycleway)

400 x 400mm

MANUFACTURING

Manufactured from aggregates from our own quarries. They are pressed in specially designed moulds for a smooth finish. MANUFACTURE: Made at our Fivemiletown production plant.

CERTIFICATION

ISO 9001 ISO 14001 ISO 45001 CE Marking	Quality Management. Environmental Management. Occupational Health and Safety Management. Download our Declaration of Performance (DOP) data at: www.ag.uk.com/cemarking
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LARGE FORMAT PAVING

Large Format Plaza 82



PREMIUM WATER-ETCHED, LIGHTLY TEXTURED,
GRANITE AGGREGATE FLAGSTONE

Large Format Plaza

The scale of Large Format Plaza gives architects and engineers the scope to develop shared space initiatives in high profile public realm and commercial schemes.

It's unique interlocking NIB system transverses the expected weight loads in heavy duty vehicular access areas.







With its large surface area, Large Format Plaza is an excellent value engineered alternative as fewer joints and faster installation times can generate savings of up to thirty five percent.

The vibrant 'top mix' surface finish is comprised of 90% superior granite and quartz aggregates, giving long term durability and aesthetics.



Large Format Plaza

premium water-etched, lightly textured,
granite aggregate flagstone

-  Abrasion Resistant
-  Frost Resistant
-  Pedestrian Use
-  Light Traffic
-  Medium Commercial Vehicle
-  Machine Install

Enduur 1

COLOURS



SALT



PEPPER



BIRKES



KANEL



LAKRIDS



SAFRAN



SESAM



FLAXEN **new**

SPECIFICATION REFERENCE: NBS PLUS: Q24 110 SLAB/BRICK/SETT/COBBLE PAVINGS hEN: 1339:2003

FORMATS, FINISHES + DEPTHS

DEPTH



120
Millimetres

FINISH



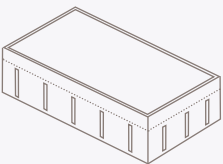
Textured



1000 x
400mm

EDGES

Large Format Plaza
Supplied with a straight
chamfer as standard.



Straight Chamfer

SPACER NIBS

120mm: 4mm spacers on
each paver leaving a 6mm
minimum joint when laid.

INTERLOCKING NIBS

Large Format Plaza has
a unique interlocking nib
design that increases
structural performance in
areas of heavy traffic use.

FINISHES

Our unique water etched production
process ensures that there is over
90% of carefully blended, colourfast
natural granite aggregates in the
surface of each block.



Profiles not to scale

Large Format Plaza

premium water-etched, lightly textured, granite aggregate flagstone



STOCK INFORMATION

Standard product depth	Size (mm)	In Stock	Available Colours	m² per pack	Units per m²	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
120mm	1000 x 400	MTO	Salt / Pepper / Birkes / Lakrids / Saffran / Kanel / Sesam / Flaxen	6	2.5	15	115	1.75	10	15 / 16

MTO: Made To Order (minimum order quantities: 600m² per colour / size. Orders below these quantities should be priced on application). Information for a specific colour / depth is available on request from our Technical Specification Department.



Abrasion Resistant



Frost Resistant



Pedestrian Use



Light Traffic



Medium Commercial Vehicle



Machine Install

Enduur 1

Enduur 1

Enhanced surface colour and reduced efflorescence.

Enhanced mix which increases strength, resistance to wear and tear, longevity and vibrance.

70% less embodied carbon per % of cement replaced.

Helps prevent moss and algae growth and deep staining.

FORMATS, FINISHES + DEPTHS

DEPTH



120
Millimetres

FINISH



Textured



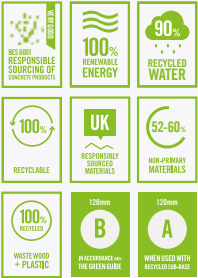
1000 x 400mm

STANDARDS + PERFORMANCE

Product Type	Premium water-etched, lightly textured, granite aggregate flagstone
Manufactured to Surface Layer	hEN 1339:2003 Durable and hard wearing with a minimum surface layer of 8mm.
Granite Content	Not less than 90% natural granite and quartz aggregate in surface layer
Efflorescence	State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction
Bending Strength	>5Mpa (Class 3). This pressure applies to all sizes and depths. For specific force performance on a given size or depth please contact our Technical Specification Department
Slip / Skid Resistance	(USRV) >75 low potential for slip. Specific slip / skid resistance test results are available on request from our Technical Specification Department
Installed to NBS Plus	BS 7533-4:2006 Q24 110

SUSTAINABILITY

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
Energy Use	100% renewable
Water Used	90% recycled water
Recyclable	100% of this product can be recycled
Manufacturing	Produced in the UK using responsibly sourced materials
Non-Primary Materials	52 – 60% (surface layer)
Waste Wood + Plastic	100% recycled
BREEAM	120mm: B Rating – according to the Green Guide to Specification 4th edition 2009. A Rating can be achieved when used in conjunction with a prepared recycled sub-base



MANUFACTURING

Plaza Large Format is manufactured from specially selected fine granite aggregates. Its premium stone washed appearance is obtained using computer controlled washing machinery which leaves a uniquely natural finish (coarse texture). Unique aggregate storage methods avoiding aggregate contamination. PLANT OF MANUFACTURE: Made at our Toome production plant.

CERTIFICATION

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
ISO 9001	Quality Management.
ISO 14001	Environmental Management.
ISO 45001	Occupational Health and Safety Management.
CE Marking	Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources



PAVING BLOCKS

Plaza	90
Plaza Lineal	102
Plaza Quattro new	110
Long Stone	116
Tri Stone new	124
HomePave new	130
Country Cobble®	138
Setts	146
Rectangular	154



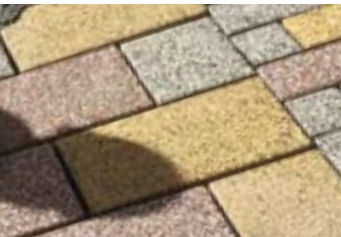
PREMIUM WATER-ETCHED, LIGHTLY TEXTURED,
GRANITE AGGREGATE PAVING BLOCKS

Plaza paving

A vibrant, durable modern classic:
with over 90% of its surface formed
from natural granite aggregates,
Plaza is colourfast and durable.

Plaza is made from the finest
aggregates available and carefully
blended with a unique water-
etching process.

Available in a variety of colours,
intensities, depths and formats,
it's the perfect tool for creating
innovative and inspiring hard
landscaping designs.



Plaza paving

1	Plaza Salt, Pepper + Birkes, <i>Orpington</i>	6	Plaza Salt, Birkes + Pepper, <i>Northwich</i>
2	Plaza Birkes + Pepper, <i>Aberdeen</i>	7	Plaza Salt, Birkes + Pepper, <i>Oxford</i>
3	Plaza Salt + Pepper, <i>Kilmarnock</i>	8	Plaza Lakrids, Safran + Paprika, <i>Manchester</i>
4	Plaza Salt, <i>Dungannon</i>	9	Plaza Salt, Pepper + Birkes, <i>Heywood</i>
5	Plaza Salt + Pepper, <i>London</i>	10	Plaza Salt, Pepper + Birkes, <i>Heywood</i>



Plaza paving

- 1

Plaza Birkes, Lakrids, Salt + Pepper, *Aberdeen*
- 2

Plaza Sinnep, *Nottinghamshire* (Credit - *Andreas von Einsiedel*)
- 3

Plaza Salt, Pepper, Sesam, *Newtownabbey*
- 4

Plaza Salt, Pepper + Kardemom, *Scotland*
- 5

Plaza Pepper + Birkes, *Gloucester*
- 6

Plaza Salt + Pepper, *Glasgow*
- 7

Plaza Sinnep, *Nottinghamshire* (Credit - *Andreas von Einsiedel*)
- 8

Plaza bespoke colours, *Dublin*
- 9


Plaza Salt + Pepper, *Monaghan*
- 10

Plaza Salt, Pepper + Kardemom, *Scotland*



Plaza paving

premium water-etched, lightly textured, granite aggregate paving + flagstones

-  Abrasion Resistant
-  Frost Resistant
-  Pedestrian Use
-  Light Traffic
-  Heavy Traffic 80mm only
-  Available in permeable (Xflo)
-  Machine Lay available

Enduur 1

COLOURS



SALT



PEPPER



BIRKES



KANEL



LAKRIDS



SAFRAN



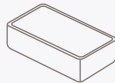
SESAM



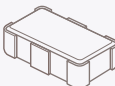
FLAXEN new

EDGES

Plaza Supplied with medium radius rounded chamfer. 3s mixed packs supplied with a small radius rounded chamfer. Xflo supplied with a medium to large radius round chamfer.



Medium Radius Round Chamfer



Medium to Large Radius Round Chamfer (Xflo 200x100x80mm only)

SPACER NIBS

- 50mm:** 2mm spacers on each paver leaving a 3mm minimum joint when laid.
- 60mm:** 1.5mm spacers on each paver leaving a 2mm minimum joint when laid.
- 80mm:** 2mm spacers on each paver leaving a 3mm minimum joint when laid.
- Xflo:** 3.25mm x 2 spacers on each paver leaving a 7mm minimum joint when laid.

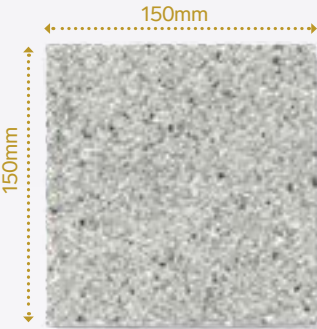
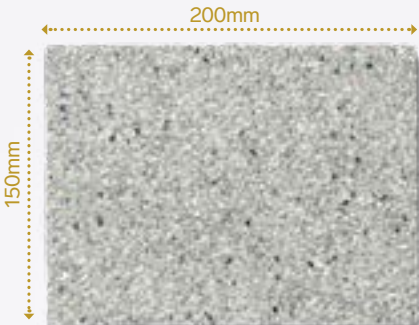
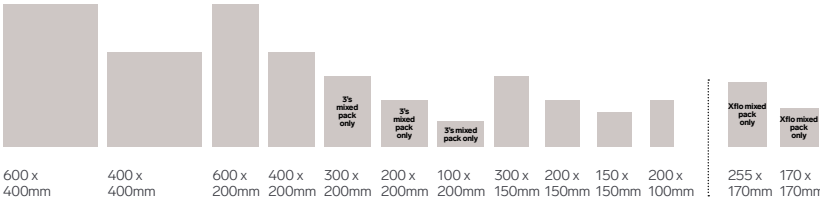
FINISHES

Our unique water etched production process ensures that there is over 90% of carefully blended, colourfast natural granite aggregates in the surface of each block.

DEPTHS



FINISH

































Plaza paving

premium water-etched, lightly textured, granite aggregate paving + flagstones

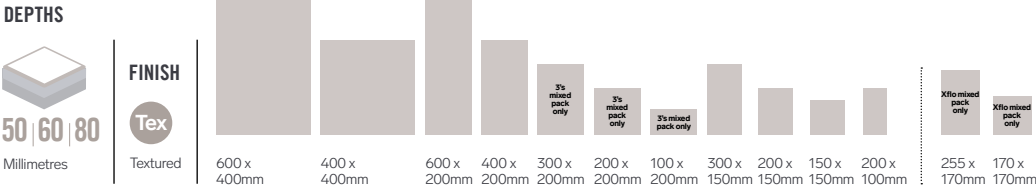


STOCK INFORMATION

standard product depth	Size (mm)	In Stock	Available Colours	m² per pack	Units per m²	Units per layer	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
	 600 x 400	MTO	Salt / Pepper	15.36	4.16	4	64	28.8	1.84	9	IRE 13 / GB 15
	 400 x 400	MTO	Salt / Pepper	15.36	6.25	6	96	19.2	1.84	9	IRE 13 / GB 15
	 200 x 150	Yes	Salt / Pepper	15.12	33.3	–	504	3.45	1.74	9	IRE 13 / GB 15
	 300 x 150	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	12.96	22.2	20	288	6.25	1.80	9	IRE 13 / GB 15
	 200 x 150	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	12.96	33.3	36	432	4.1	1.75	9	IRE 13 / GB 15
	 150 x 150	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	12.96	44.4	48	576	3.1	1.75	9	IRE 13 / GB 15
	 600 x 400	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	9.6	4.16	4	40	44	1.844	9	IRE 13 / GB 15
	 600 x 200	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	9.6	8.33	8	80	21	1.8	9	IRE 13 / GB 15
	 *400 x 400	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	9.6	6.25	6	60	29	1.842	9	IRE 13 / GB 15
	 *400 x 200	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	9.6	12.5	15	120	15	1.76	9	IRE 13 / GB 15
	 200 x 100	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	9.72	50	54	486	3.7	1.7	9	IRE 13 / GB 15
3s Mixed Pack (paving blocks not sold individually)											
	 300 x 200	Yes	Salt / Pepper	15.36	–	4	496	6.9	1.76	9	IRE 13 / GB 15
	 200 x 200				–	9		4.6			
	 100 x 200				–	18		2.3			
	 300 x 200	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	12.48	–	4	403	8.3	1.75	9	IRE 13 / GB 15
	 200 x 200				–	9		5.5			
	 100 x 200				–	18		2.8			
Xflo Plaza Machine Lay available in 80mm											
	 200 x 150	MTO	Salt / Pepper			–					
	 200 x 100	MTO	Salt / Pepper	12.48	50	48	624	2.6	1.8	9	15
	 150 x 150	MTO	Salt / Pepper			–					
	<small>mixed 2 size pack</small>  255 x 170	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	9.75	30	15	270 (135 of each size)	8	1.75	9	IRE 13 / GB 15
	 170 x 170							5.3			
		 200 x 100	MTO	Salt / Pepper / Birkes / Kanel / Lakrids / Safran / Sesam / Flaxen	9.6	50	48	528	3.55	1.8	9

MTO: Made To Order (minimum order quantities: 300m² per colour / size. Orders below these quantities should be priced on application). Information for a specific colour / depth is available on request from our Technical Specification Department.
* The flagstone sizes 400x400 and 400x200 in the 80mm depth are the only units suitable for use with Heavy Traffic (bound / unbound).

FORMATS, FINISHES + DEPTHS



Enduur 1

Enhanced surface colour and reduced efflorescence.

Enhanced mix which increases strength, resistance to wear and tear, longevity and vibrance.

70% less embodied carbon per % of cement replaced.

Helps prevent moss and algae growth and deep staining.

Complimentary products

PAVING FLAGS



Plaza Flagstones are available. See [page 34](#).

LARGE FORMAT



Large Format Plaza is available. See [page 82](#).

PLANK PAVING



Plaza Lineal mixed size plank paving are available. See [page 102](#).

MIXED SIZE PACK new



Plaza Quattro mixed size paving now available. See [page 98](#).

PAVING SETTS



Plaza Setts are available in mixed sizes. See [page 146](#).

PERMEABLE PAVING



Xflo Plaza permeable paving is available. See [page 162](#).

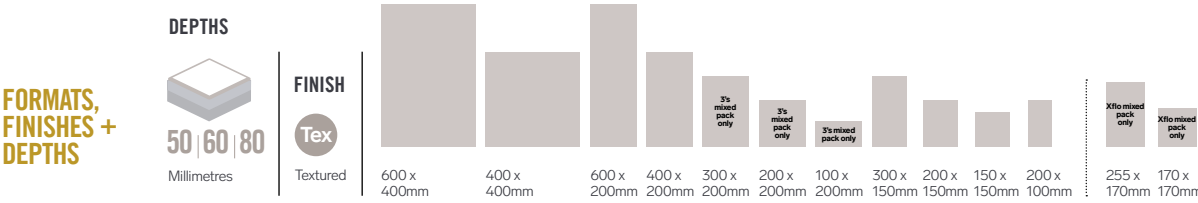
Plaza paving

premium water-etched, lightly textured, granite aggregate paving + flagstones



-  Abrasion Resistant
-  Frost Resistant
-  Pedestrian Use
-  Light Traffic
-  Heavy Traffic 80mm only
-  Available in permeable (Xflo)
-  Machine Lay available

Enduur 1



STANDARDS + PERFORMANCE

Product Type	Premium water-etched, lightly textured, granite aggregate paving + flagstones
Manufactured to Surface Layer	hEN 1338 (paving blocks) / hEN 1339:2003 (flagstones)
Granite Content	Durable and hard wearing with a minimum surface layer of 5mm. Not less than 90% natural granite and quartz aggregate in surface layer
Efflorescence	State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction
Bending Strength (Flagstones)	>5Mpa Class 3. This pressure applies to all flagstones sizes and depths. For specific force performance on a given size or depth please contact our Technical Specification Department
Tensile Splitting Strength (Paving Blocks)	>3.6Mpa. This pressure applies to all paving blocks sizes and depths. For specific force performance on a given size or depth please contact our Technical Specification Department
Slip / Skid Resistance	(USRV) >75 low potential for slip. Specific slip / skid resistance test results are available on request from our Technical Specification Department
Frost Resistance	Class 3 in accordance with hEN 1339:2003 Table 4.2
Abrasion Resistance	Class 4 in accordance with hEN 1339:2003 Table 6
Installed to NBS Plus	BS 7533-4:2006 Q24 110

SUSTAINABILITY

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
Energy Use	100% renewable
Water Used	90% recycled water
Recyclable	100% of this product can be recycled
Manufacturing	Produced in the UK using responsibly sourced materials
Non-Primary Materials	52 – 60% (surface layer)
Waste Wood + Plastic	100% recycled
BREEAM	50 - 60mm: A Rating – according to the Green Guide to Specification 4th edition 2009. A+ Rating can be achieved when used in conjunction with a prepared recycled sub-base 80mm: B Rating – according to the Green Guide to Specification 4th edition 2009. A Rating can be achieved when used in conjunction with a prepared recycled sub-base



MANUFACTURING

Plaza is manufactured from specially selected fine granite aggregates. Its premium stone washed appearance is obtained using computer controlled washing machinery which leaves a uniquely natural finish (coarse texture). Unique aggregate storage methods avoiding aggregate contamination. PLANT OF MANUFACTURE: Made at our Toome production plant.

CERTIFICATION

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
ISO 9001	Quality Management.
ISO 14001	Environmental Management.
ISO 45001	Occupational Health and Safety Management.
CE Marking	Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources



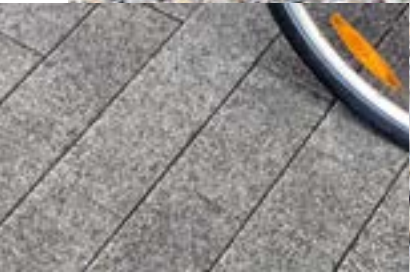
**PREMIUM WATER-ETCHED, LIGHTLY TEXTURED,
GRANITE AGGREGATE PLANK PAVING**

Plaza Lineal

A vibrant, modern classic with a 'top mix' surface finish comprised of 90% superior granite and quartz aggregates. Plaza Lineal delivers not only longevity of aesthetics to your scheme but also optimum slip / skid and freeze / thaw resistance.

Plaza Lineal is a new traffickable plank paving system from AG. Its ultra-linear formats have been designed to deliver maximum performance and versatility - offering almost limitless design possibilities for specifiers and landscapers alike.

Plaza Lineal is second to none in terms of visual appeal and durability. It's made from the finest aggregates available and carefully blended with a unique water-etching process.



Plaza Lineal

- 1

Plaza Lineal Sesam, *Ballygawley*
- 2

Plaza Lineal Lakrids, *Ballygawley*
- 3

Plaza Lineal Pepper, *Ballygawley*
- 7

Plaza Lineal Pepper, Safran + Salt, *Ballygawley*
- 5

Plaza Lineal Pepper, Lakrids + Salt, *Ballygawley*
- 6





Plaza Lineal Kanel, *Ballygawley*
- 7

Plaza Lineal Salt, Pepper + Birkes, *Devon*



Plaza Lineal

premium water-etched, lightly textured,
granite aggregate plank paving

-  Abrasion Resistant
-  Frost Resistant
-  Pedestrian Use
-  Light Commercial Traffic

Enduur 1

COLOURS



SALT



PEPPER



BIRKES



KANEL



LAKRIDS



SAFRAN



SESAM



FLAXEN **new**

FORMATS, FINISHES + DEPTHS

DEPTH

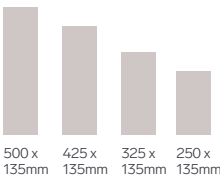


120
Millimetres

FINISH

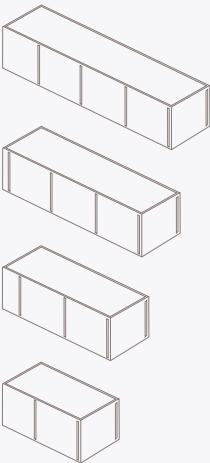


Textured



EDGES

Plaza Lineal Supplied with a
straight chamfer as standard.



Straight Chamfer

SPACER NIBS

120mm: 1.5mm spacers on
each paver leaving a 2mm
minimum joint when laid.

FINISHES

Our unique water etched production
process ensures that there is over
90% of carefully blended, colourfast
natural granite aggregates in the
surface of each block.



Plaza Lineal

premium water-etched, lightly textured, granite aggregate plank paving



STOCK INFORMATION

Paving blocks not sold individually

Standard product depth	Size (mm)	In Stock	Available Colours	m² per pack	Units per layer	Total units per pack	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
120mm	 500 x 135	MTO	Salt / Pepper / Birkes / Lakrids / Kanel / Saffran / Sesam / Flaxen	6.48	N/A	120	48	18.28	1.8	9	GB 15 / IRE 13
	 425 x 135						24	15.52			
	 325 x 135						24	11.85			
	 250 x 135						24	9.10			

MTO: Made To Order (minimum order quantities: 600m² per colour / size. Orders below these quantities should be priced on application). Information for a specific colour / depth is available on request from our Technical Specification Department. Supplied in a mix of four different sized units in patio packs (unit sizes are not sold individually). There are 6 layers in a mixed size patio pack.



Abrasion Resistant



Frost Resistant



Pedestrian Use



Light Commercial Traffic

Enduur 1

Enduur 1

Enhanced surface colour and reduced efflorescence.

Enhanced mix which increases strength, resistance to wear and tear, longevity and vibrance.

70% less embodied carbon per % of cement replaced.

Helps prevent moss and algae growth and deep staining.

FORMATS, FINISHES + DEPTHS

DEPTH



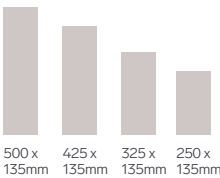
120

Millimetres

FINISH



Textured

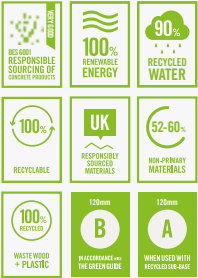


STANDARDS + PERFORMANCE

Product Type	Premium water-etched, lightly textured, granite aggregate paving + flagstones
Manufactured to	hEN 1338/1339:2003
Surface Layer	Durable and hard wearing with a minimum surface layer of 8mm.
Granite Content	Not less than 90% natural granite and quartz aggregate in surface layer
Efflorescence	State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction
Bending Strength	>5Mpa. This pressure applies to all sizes and depths. For specific force performance on a given size or depth please contact our Technical Specification Department
Slip / Skid Resistance	(USRV) >75 low potential for slip. Specific slip / skid resistance test results are available on request from our Technical Specification Department
Installed to	BS 7533-4:2006
NBS Plus	Q24 110

SUSTAINABILITY

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
Energy Use	100% renewable
Water Used	90% recycled water
Recyclable	100% of this product can be recycled
Manufacturing	Produced in the UK using responsibly sourced materials
Non-Primary Materials	52 – 60% (surface layer)
Waste Wood + Plastic	100% recycled
BREEAM	120mm: B Rating – according to the Green Guide to Specification 4th edition 2009. A Rating can be achieved when used in conjunction with a prepared recycled sub-base



MANUFACTURING

Plaza Lineal is manufactured from specially selected fine granite aggregates. Its premium stone washed appearance is obtained using computer controlled washing machinery which leaves a uniquely natural finish (coarse texture). Unique aggregate storage methods avoiding aggregate contamination. PLANT OF MANUFACTURE: Made at our Toome production plant.

CERTIFICATION

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
ISO 9001	Quality Management.
ISO 14001	Environmental Management.
ISO 45001	Occupational Health and Safety Management.
CE Marking	Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources



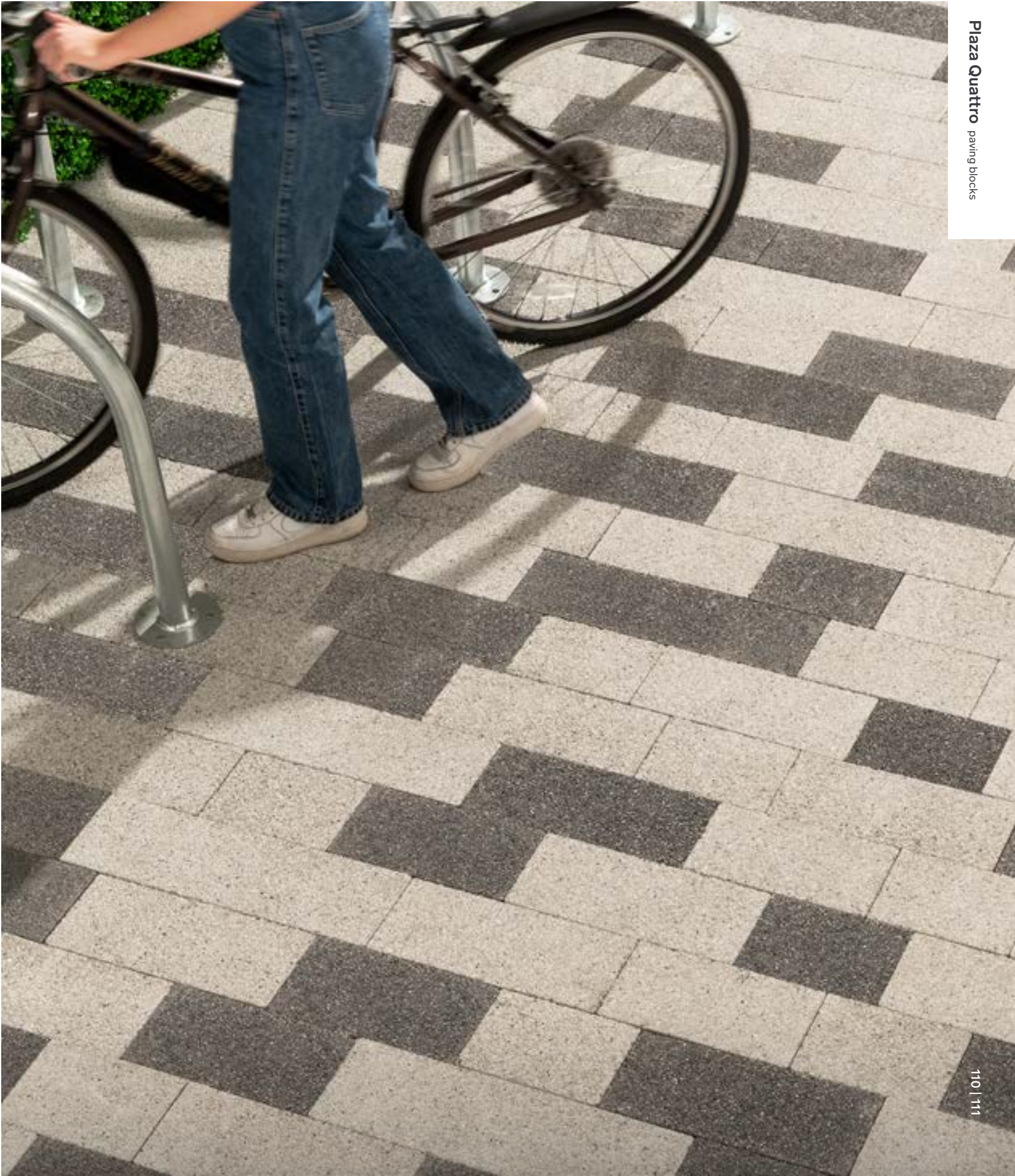
PREMIUM WATER-ETCHED, LIGHTLY TEXTURED,
GRANITE AGGREGATE PLANK-EFFECT PAVING

Plaza Quattro

Premium water-etched, lightly textured, granite aggregate paving blocks that are the perfect solution for designers seeking to create beautiful hard landscaping concepts in projects where style and durability are key requirements.





Plaza Quattro is created using a computer-controlled high pressure water-etching process that delivers a vibrant washed exposed face and a level of aesthetic detail not seen in comparable products. Plaza Quattro incorporates between 50% and 93% secondary and reclaimed materials within the surface finish, as well as incorporating over 56% of supplementary cementitious materials throughout the product to reduce its embodied carbon significantly.

Available in a mixed size pack of four units – a fitting choice for lightly trafficked and pedestrian areas making them ideal for pathways, patios and public spaces.



Plaza Quattro

premium water-etched, lightly textured, granite aggregate plank-effect paving

-  Abrasion Resistant
-  Frost Resistant
-  Pedestrian Use
-  Light Commercial Traffic

Enduur 1

COLOURS



SALT



PEPPER



BIRKES



KANEL



LAKRIDS



SAFRAN



SESAM



FLAXEN **new**

FORMATS, FINISHES + DEPTHS

DEPTHS



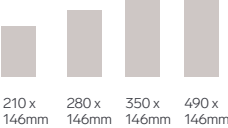
60

Millimetres

FINISH

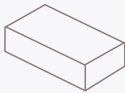


Textured



EDGES

Plaza Quattro Supplied with a square edge as standard.



Square Edge

JOINTS

Manufactured with a straight edge, the chamfer-less unit creates crisp sharp lines which gives the appearance of thin jointed paving.

FINISHES

Our unique water etched production process ensures that there is over 90% of carefully blended, colourfast natural granite aggregates in the surface of each block.

SPACER NIBS

1mm spacer nibs – product to be laid with a minimum 2mm joint.

Suitable for domestic drives (non commercial vehicles) paths and patios when installed in accordance with BS 7533 part 4 Code of practice for the construction of pavements.



Plaza Quattro

premium water-etched, lightly textured, granite aggregate plank-effect paving



STOCK INFORMATION

Paving blocks not sold individually

Standard product depth	Size (mm)	In Stock	Available Colours	m ² per pack	Units per layer	Total units per pack	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry	
<div>60mm</div> <div>(mixed pack only)</div>	<div><div></div>490 x 146</div>	Yes	Salt / Pepper	12.65	5	264	55	9.9	1.76	9	15	
	<div><div></div>350 x 146</div>				6		66	7.1				
	<div><div></div>280 x 146</div>	MTO	Birkes / Kanel / Lakrids / Safran / Sesam		8		88	5.65				
	<div><div></div>210 x 146</div>				5		55	4.23				

Information for a specific colour / depth is available on request from our Technical Specification Department.
Supplied in a mix of four different sized units in patio packs (unit sizes are not sold individually).
There are 11 layers in a mixed size patio pack (11.5m² per layer).
Suitable for domestic drives (non commercial vehicles) paths and patios when installed in accordance with BS 7533 part 4 Code of practice for the construction of pavements.



Abrasion Resistant



Frost Resistant



Pedestrian Use



Light Commercial Traffic

Enduur 1

Enduur 1

Enhanced surface colour and reduced efflorescence.

Enhanced mix which increases strength, resistance to wear and tear, longevity and vibrance.

70% less embodied carbon per % of cement replaced.

Helps prevent moss and algae growth and deep staining.

FORMATS, FINISHES + DEPTHS

DEPTHS



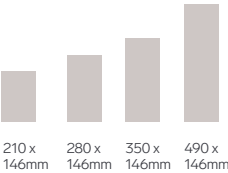
60

Millimetres

FINISH



Textured

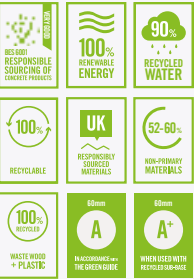


STANDARDS + PERFORMANCE

Product Type	Premium water-etched, lightly textured, granite aggregate plank-effect paving
Manufactured to Surface Layer	hEN 1339:2003 / hEN 1338:2003 Durable and hard wearing with a minimum surface layer of 5mm.
Granite Content	Not less than 90% natural granite and quartz aggregate in surface layer
Efflorescence	State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction
Tensile Splitting Strength	>3.6Mpa. This pressure applies to all paving blocks sizes and depths For specific force performance on a given size or depth please contact our Technical Specification Department
Slip / Skid Resistance	(USRV) >75 low potential for slip. Specific slip / skid resistance test results are available on request from our Technical Specification Department
Frost Resistance	Class 3 in accordance with hEN 1339:2003 Table 4.2
Abrasion Resistance Installed to NBS Plus	Class 4 in accordance with hEN 1339:2003 Table 6 BS 7533 – part 4 2006 Q24 110

SUSTAINABILITY

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
Energy Use	100% renewable
Water Used	90% recycled water
Recyclable	100% of this product can be recycled
Manufacturing	Produced in the UK using responsibly sourced materials
Non-Primary Materials	52 – 60% (surface layer)
Waste Wood + Plastic BREEAM	100% recycled A Rating – according to the Green Guide to Specification 4th edition 2009. A+ Rating can be achieved when used in conjunction with a prepared recycled sub-base



MANUFACTURING

Plaza Quattro is manufactured from specially selected fine granite aggregates. Its premium stone washed appearance is obtained using computer controlled washing machinery which leaves a uniquely natural finish (coarse texture). Unique aggregate storage methods avoiding aggregate contamination. PLANT OF MANUFACTURE: Made at our Toome production plant.

CERTIFICATION

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
ISO 9001	Quality Management.
ISO 14001	Environmental Management.
ISO 45001	Occupational Health and Safety Management.
CE Marking	Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources

PREMIUM, SMOOTH PLANK-EFFECT PAVING

Long Stone

This new range of close-jointed paving has been crafted using the latest advances in mould design techniques. It features straight lines with a straight edge detail and multiple lengths to create a distinctive 'plank floor' effect when laid. The close-jointed finish reduces trolley and wheel noise and also reduces dirt and moss build-up.

The colours are created using top mix multiblending, with carefully selected fine granite aggregates and cement blends to create a high contrast laying pattern which complements contemporary and minimalist design styles.

Long Stone paving blocks

AG.UK.COM

Long Stone paving blocks

116 | 117

Long Stone

- 1

Long Stone Fiammata, *Gilford*
- 2

Long Stone Frassino, *Dungannon*
- 3

Long Stone Frassino, *Portrush*
- 4

Long Stone Fiammata, *Toome*
- 5

Long Stone Frassino, *Toome*
- 6

Long Stone Frassino, *Portrush*
- 7





Long Stone Fiammata, *Tandragee*
- 8

Long Stone Frassino, *Toome*



Long Stone

premium, smooth plank-effect paving

-  Abrasion Resistant
-  Frost Resistant
-  Pedestrian Use
-  Light Traffic

Enduur 1

-  Trolley Friendly

COLOURS



FRASSINO



FIAMMATA



OCRA

SPECIFICATION REFERENCE: hEN: 1339:2003 / 1338:2003

FORMATS, FINISHES + DEPTHS

DEPTHS



60
Millimetres

FINISH

Sm

Smooth



210 x
146mm



280 x
146mm



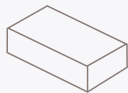
350 x
146mm



490 x
146mm

EDGES

Long Stone Supplied with a square edge as standard.



Square Edge

JOINTS

Manufactured with a straight edge, the chamfer-less unit creates crisp sharp lines which gives the appearance of thin jointed paving.

FINISHES

Long Stone is smooth, close-jointed paving with straight lines and straight edge detail, crafted using the latest advances in mould design techniques.

NB. Suitable for domestic drives (non commercial vehicles) paths and patios when installed in accordance with BS 7533 part 4 Code of practice for the construction of pavements.



Profiles not to scale

Long Stone

premium, smooth plank-effect paving



STOCK INFORMATION

Paving blocks not sold individually

Standard product depth	Size (mm)	In Stock	Available Colours	m ² per pack	Units per layer	Total units per pack	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
<div>60mm</div> <div>(mixed pack only)</div>	490 x 146	Yes	Frassino / Fiammata / Ocra	12.65	5	264	55	9.9	1.76	9	15
	350 x 146				6		66	7.1			
	280 x 146				8		88	5.65			
	210 x 146				5		55	4.23			

Information for a specific colour / depth is available on request from our Technical Specification Department.
Supplied in a mix of four different sized units in patio packs (unit sizes are not sold individually).
There are 11 layers in a mixed size patio pack (1.15m² per layer).
Suitable for domestic drives (non commercial vehicles) paths and patios when installed in accordance with BS 7533 part 4 Code of practice for the construction of pavements.



Abrasion Resistant



Frost Resistant



Pedestrian Use



Light Traffic

Enduur 1



Trolley Friendly

Enduur 1

Enhanced surface colour and reduced efflorescence.

Enhanced mix which increases strength, resistance to wear and tear, longevity and vibrance.

70% less embodied carbon per % of cement replaced.

Helps prevent moss and algae growth and deep staining.

FORMATS, FINISHES + DEPTHS

DEPTHS



60

Millimetres

FINISH



Smooth



210 x 146mm



280 x 146mm



350 x 146mm



490 x 146mm

STANDARDS + PERFORMANCE

Product Type
Manufactured to
Surface Layer

Premium, smooth plank-effect paving
hEN 1339:2003 / hEN 1338:2003
Durable and hard wearing with a minimum surface layer of 5mm.

Granite Content

Not less than 60% natural granite and quartz aggregate in surface layer

Efflorescence

State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction

Tensile Splitting Strength

>3.6Mpa. This applies to all sizes and depths
For specific force performance on a given size or depth please contact our Technical Specification Department (USRV) >60 low potential for slip. Specific slip / skid resistance test results are available on request from our Technical Specification Department

Slip / Skid Resistance

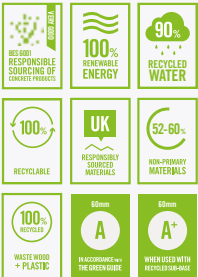
Installed to
NBS Plus

BS 7533 – part 4 2006
Q24 110

SUSTAINABILITY

BES 6001
Energy Use
Water Used
Recyclable
Manufacturing
Non-Primary Materials
Waste Wood + Plastic
BREEAM

Responsible Sourcing of Concrete Products (Rating: Very Good)
100% renewable
90% recycled water
100% of this product can be recycled
Produced in the UK using responsibly sourced materials
52 – 60% (surface layer)
100% recycled
A Rating – according to the Green Guide to Specification 4th edition 2009. **A+ Rating** can be achieved when used in conjunction with a prepared recycled sub-base



MANUFACTURING

Long Stone is manufactured from carefully selected fine granite aggregates and cement blends to create a premium, smooth finish which is obtained by using the most up-to-date manufacturing processes and machinery. Colours created using top mix multiblending. PLANT OF MANUFACTURE: Made at our Toome production plant.

CERTIFICATION

BES 6001
ISO 9001
ISO 14001
ISO 45001
CE Marking

Responsible Sourcing of Concrete Products (Rating: Very Good)
Quality Management.
Environmental Management.
Occupational Health and Safety Management.
Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources



PREMIUM PAVING BLOCKS WITH A SMOOTH FINISH

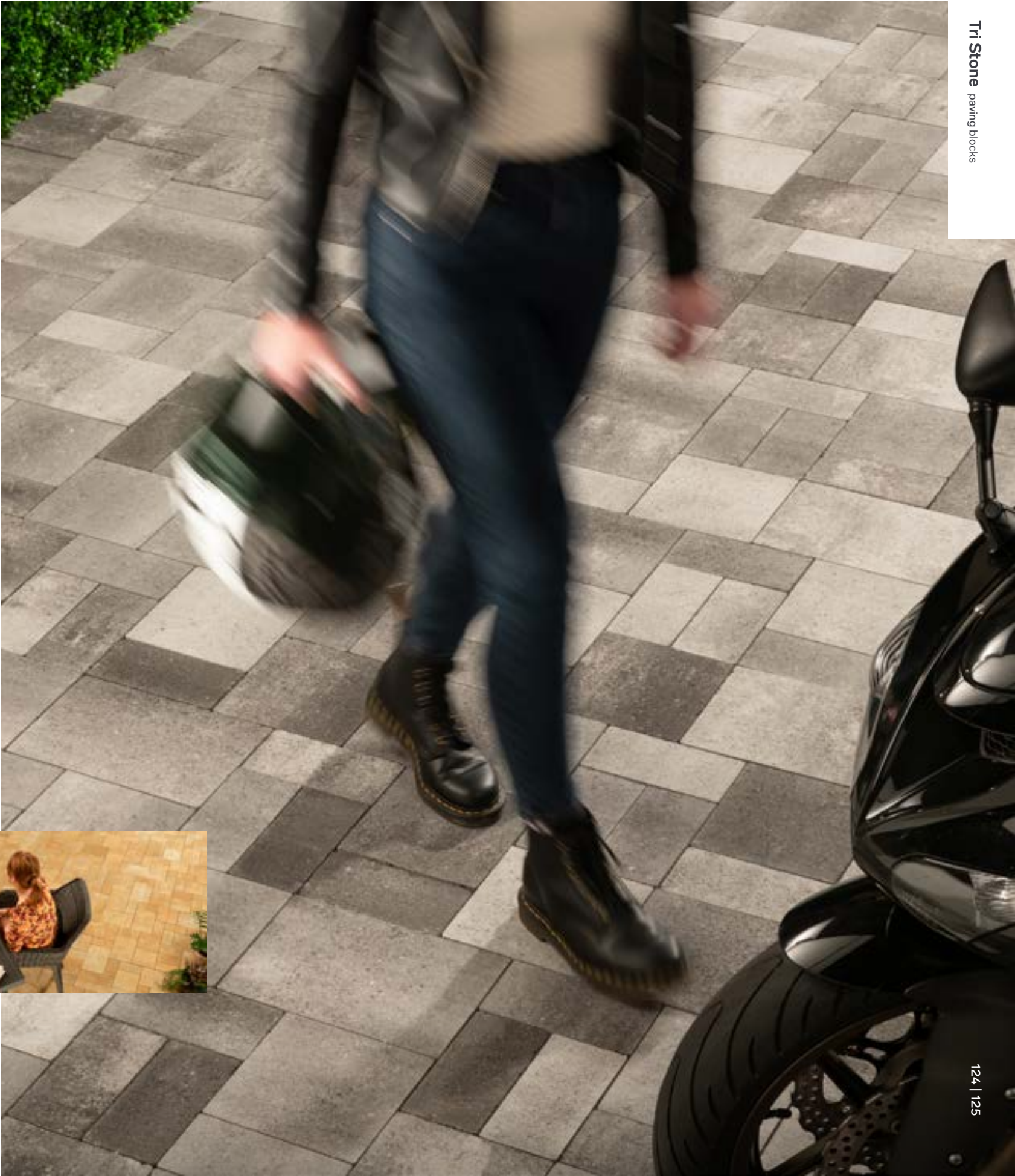
Tri Stone

Specially developed to provide specifiers with a high performing product that does not compromise on aesthetics.

With its porcelain-effect, smooth finish Tri Stone will deliver a sleek finish to any project. Designed with close-jointed straight edges, there is no doubt that this contemporary product will meet the aesthetic and functionality requirements of homeowners and developers looking for a beautiful, low maintenance paving solution.





Tri Stone can withstand domestic and light traffic making them ideal for patios, pathways and driveways.

Tri Stone is produced in AG's state-of-the-art factory, using 100% renewable energy. It is, itself, completely recyclable – manufactured using the finest natural granite aggregates.



Tri Stone

premium paving blocks with a smooth finish

-  Abrasion Resistant
-  Frost Resistant
-  Pedestrian Use
-  Light Traffic

Enduur 1

 Trolley Friendly

COLOURS



FRASSINO



FIAMMATA

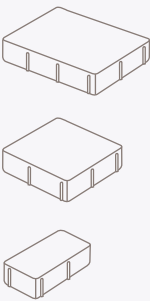


OCRA

SPECIFICATION REFERENCE: NBS PLUS: Q24 110 SLAB/BRICK/SETT/COBBLE PAVINGS hEN: 1339:2003

EDGES

Tri Stone is supplied with a square edge as standard.



Smooth Edge
(No Chamfer)

SPACER NIBS

1.5mm as standard.

FINISHES

Tri Stone is smooth, close-jointed paving with straight lines and straight edge detail, crafted using the latest advances in mould design techniques.

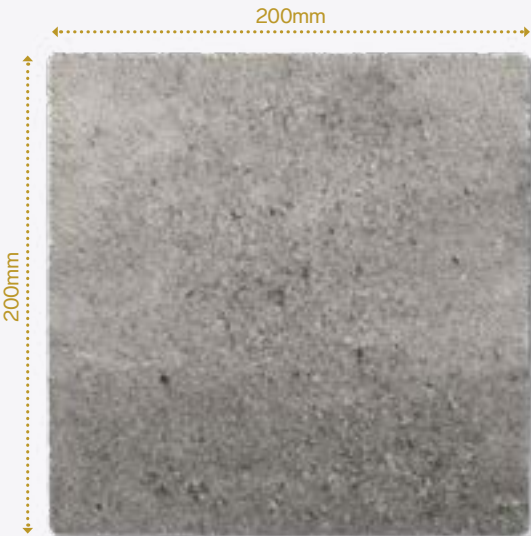
DEPTHS



50
Millimetres

FINISH

Sm
Smooth



Profiles not to scale

Tri Stone

premium paving blocks with a smooth finish



STOCK INFORMATION

Standard product depth	Size (mm)	In Stock	Available Colours	m² per pack	Units per layer	Total units per pack	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
50mm	200 x 150	Yes	Frassino / Fiammata / Ocra	15.12	–	504	–	3.45	1.74	9	IRE 13 / GB 15
3s Mixed Size Pack (paving blocks not sold individually)											
50mm (mixed pack only)	300 x 200	Yes	Frassino / Fiammata / Ocra	15.36	4	496	64	6.9	1.76	9	IRE 13 / GB 15
	200 x 200				9		144	4.6			
	100 x 200				18		288	2.3			

The Mixed Size pack is supplied in a mix of three different sized units (unit sizes are not sold individually). There are 16 layers in the 3's Mixed Size pack (0.96m² per Layer). An easy-to-follow laying pattern is included for the Mixed Size range. Tri Stone 50mm is suitable for driveways with cars, caravans, vans, motorhomes, etc. Information for a specific colour / depth is available on request from our Technical Specification Department.



Abrasion Resistant



Frost Resistant



Pedestrian Use



Light Commercial Traffic

Enduur 1



Trolley Friendly

Enduur 1

Enhanced surface colour and reduced efflorescence.

Enhanced mix which increases strength, resistance to wear and tear, longevity and vibrance.

70% less embodied carbon per % of cement replaced.

Helps prevent moss and algae growth and deep staining.

FORMATS, FINISHES + DEPTHS

DEPTHS



50
Millimetres

FINISH



Smooth



Mixed pack only
300 x 200mm



Mixed pack only
200 x 200mm



Mixed pack only
100 x 200mm



Mixed pack only
200 x 150mm

STANDARDS + PERFORMANCE

Product Type
Manufactured to
Surface Layer
Granite Content

Efflorescence

Tensile Splitting
Strength

Slip / Skid Resistance

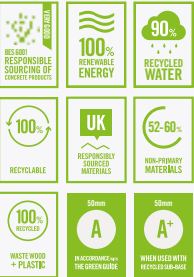
Installed to
NBS Plus

Premium paving blocks with a smooth finish
hEN 1339:2003 / hEN 1338:2003
Durable and hard wearing with a minimum surface layer of 6mm. Not less than 60% natural granite and quartz aggregate in surface layer
State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction
>3.6Mpa. This applies to all sizes and depths. For specific force performance on a given size or depth please contact our Technical Specification Department. Tri Stone 50mm is suitable for driveways with cars, caravans, vans, motorhomes, etc. (USRV) >60 low potential for slip. Specific slip / skid resistance test results are available on request from our Technical Specification Department
BS 7533 – part 4 2006
Q24 110

SUSTAINABILITY

BES 6001
Energy Use
Water Used
Recyclable
Manufacturing
Non-Primary Materials
Waste Wood + Plastic
BREEAM

Responsible Sourcing of Concrete Products (Rating: Very Good)
100% renewable
90% recycled water
100% of this product can be recycled
Produced in the UK using responsibly sourced materials
52 – 60%
100% recycled
A Rating – according to the Green Guide to Specification 4th edition 2009. A+ Rating can be achieved when used in conjunction with a prepared recycled sub-base



MANUFACTURING

Tri Stone is manufactured from carefully selected fine granite aggregates and cement blends to create a premium, smooth finish which is obtained by using the most up-to-date manufacturing processes and machinery. Colours created using top mix multiblending. PLANT OF MANUFACTURE: Made at our Toome production plant.

CERTIFICATION

BES 6001
ISO 9001
ISO 14001
ISO 45001
CE Marking
Responsible Sourcing of Concrete Products (Rating: Very Good)
Quality Management.
Environmental Management.
Occupational Health and Safety Management.
Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources



TRADITIONAL PAVING BLOCKS WITH A SUBTLY COBBLED
SURFACE FINISH AND A SMOOTH FINISH

HomePave

A classic look using modern technology. Add character and maturity to your project with HomePave, our latest range of paving. Available in two distinctive finishes – Cobble and Smooth. The Cobble finish recreates softly aged, rustic paving, whereas the Smooth finish has a more modern appearance.

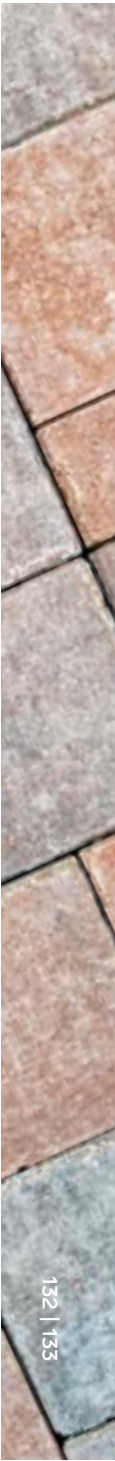
With three unique colour blends to choose from, you can easily add that extra level of sophistication to your project. HomePave is supplied in a mixed pack of three different sizes and is available in three colour blends.

A permeable option is also available – see our Xflo range for more information.









HomePave

1	HomePave 3's Auburn Cobble, <i>Bellaghy</i>	5	HomePave 3's Auburn Cobble, <i>Bellaghy</i>
2	HomePave 3's Cove Smooth, <i>Fivemiletown</i>	6	HomePave 3's Ash Cobble, <i>Dungannon</i>
3	HomePave 3's Cove Cobble, <i>Dungannon</i>	7	HomePave Ash Cobble, <i>Coleraine</i>
4	HomePave Cove Smooth, <i>Edinburgh</i>	8	HomePave 3's Auburn Smooth, <i>Fivemiletown</i>



HomePave

traditional paving blocks with a subtly cobbled surface finish and a smooth finish

-  Abrasion Resistant
-  Frost Resistant
-  Pedestrian Use
-  Light Traffic
-  Heavy Traffic 80mm only
-  Available in permeable (Xflo)

-  Trolley Friendly Smooth only

COLOURS



AUBURN COBBLE (3 MIXED SIZES)



COVE COBBLE (3 MIXED SIZES)



ASH COBBLE (3 MIXED SIZES)



AUBURN SMOOTH (200x150)



COVE SMOOTH (200x150)



ASH SMOOTH (200x150)

SPECIFICATION REFERENCE: NBS PLUS: Q24 110 SLAB/BRICK/SETT/COBBLE PAVINGS: 31, 315; hEN: 1338:2003

FORMATS, FINISHES + DEPTHS

DEPTHS



50 | 60
80
Millimetres

FINISHES

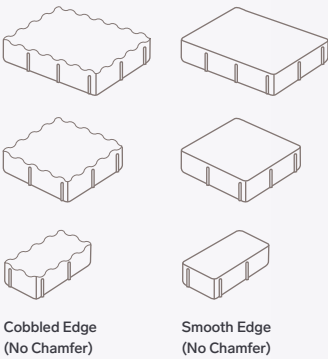
 Cob
Cobble

 Smo
Smooth

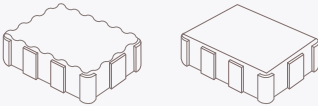


EDGES

HomePave Supplied with either a subtly cobbled edge or a smooth edge.



Xflo HomePave Supplied with either a subtly cobbled edge or a smooth edge.



SPACER NIBS

HomePave 50mm 1.5mm as standard.

Xflo HomePave 60mm / 80mm
Supplied with 'invisible' 3.25mm x 10 spacers nibs on each paver leaving a 7mm minimum joint. The nibs are dropped, so they are invisible on the finished surface.

HIGH SPEED FLOW RATE

Xflo Supports a flow rate of 4000mm/hr/m².

FINISHES

HomePave is made with colourfast UV resistant materials for vibrant, durable and lasting colours. HomePave Cobble has a subtly cobbled finish made using new state-of-the-art manufacturing facilities. HomePave Smooth is an as-cast finish with square edges.










Profiles not to scale

HomePave

traditional paving blocks with a subtly cobbled surface finish and a smooth finish



STOCK INFORMATION

Standard product depth	Size (mm)	In Stock	Available Colours	m ² per pack	Units per layer	Total units per pack	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
50mm	 200 x 150	Yes	Auburn Cobble / Auburn Smooth / Cove Cobble / Cove Smooth / Ash Cobble / Ash Smooth	12.96	36	432	—	3.45	1.49	9	IRE 13 / GB 15
3s Mixed Size Pack (paving blocks not sold individually)											
50mm  (mixed pack only)	 300 x 200	Yes	Auburn Cobble / Auburn Smooth / Cove Cobble / Cove Smooth / Ash Cobble / Ash Smooth	13.44	4	434	56	6.9	1.54	9	IRE 13 / GB 15
	 200 x 200				9		126	4.6			
	 100 x 200				18		252	2.3			
Xflo HomePave											
60mm 	 200 x 150	Yes	Auburn Cobble / Cove Cobble / Ash Cobble	12.6	—	420	—	4.01	1.69	9	IRE 13 / GB 16
		MTO	Auburn Smooth / Cove Smooth / Ash Smooth								
	 150 x 150	Yes	Auburn Cobble / Cove Cobble / Ash Cobble	12.6	—	560	—	3.02	1.69	9	IRE 13 / GB 16
		MTO	Auburn Smooth / Cove Smooth / Ash Smooth								
80mm 	 200 x 150	MTO	Auburn Cobble / Auburn Smooth / Cove Cobble / Cove Smooth / Ash Cobble / Ash Smooth	9	—	300	—	5.33	1.6	10	IRE 14 / GB 16

The Mixed Size pack is supplied in a mix of three different sized units (unit sizes are not sold individually). There are 14 layers in the 3's Mixed Size pack (0.96m² per Layer). An easy-to-follow laying pattern is included for the Mixed Size range. HomePave 50mm is suitable for driveways with cars, caravans, vans, motorhomes, etc. Information for a specific colour / depth is available on request from our Technical Specification Department.

STANDARDS + PERFORMANCE

Product Type	Traditional paving blocks with a subtly cobbled surface finish and a smooth finish
Manufactured to Surface Layer	hEN 1338:2003 Durable and hard wearing with a minimum surface layer of 8mm.
Efflorescence	State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction >3.6Mpa. This applies to all sizes and depths. For specific force performance on a given size or depth please contact our Technical Specification Department. HomePave 50mm is suitable for driveways with cars, caravans, vans, motorhomes, etc.
Tensile Splitting Strength	
Installed to NBS Plus	BS 7533-4:2006 Q24 110

SUSTAINABILITY

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
Energy Use	100% renewable
Water Used	90% recycled water
Recyclable	100% of this product can be recycled
Manufacturing	Produced in the UK using responsibly sourced materials
Waste Wood + Plastic	100% recycled
BREEAM	50 – 60mm: A Rating – according to the Green Guide to Specification 4th edition 2009. A+ Rating can be achieved when used in conjunction with a prepared recycled sub-base 80mm: B Rating – according to the Green Guide to Specification 4th edition 2009. A Rating can be achieved when used in conjunction with a prepared recycled sub-base.



MANUFACTURING

HomePave is manufactured from high grade locally sourced aggregates. Its colour blends are obtained by using the latest computerised mixing systems. HomePave Cobble has a subtly cobbled finish made using new state-of-the-art manufacturing facilities. HomePave Smooth is an as-cast finish with square edges. PLANT OF MANUFACTURE: Made at our Toome production plant.

CERTIFICATION

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
ISO 9001	Quality Management.
ISO 14001	Environmental Management.
ISO 45001	Occupational Health and Safety Management.
CE Marking	Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources

TRADITIONAL RUMBLED PAVING BLOCKS

CountryCobble®

Country Cobble® paving is perfect for both contemporary and traditional hard landscaping schemes. Our bespoke rumbling process fully distresses the block, to give a much more authentic reclaimed cobbled effect compared to antiquing systems or products produced without secondary processing.

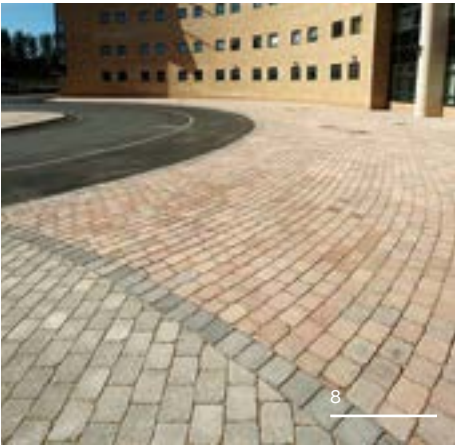
The effect is further enhanced with a subtle colour mix to achieve shade differences between blocks, which works well in both traditional and contemporary settings.

Country Cobble® is available in five colour ranges and various sizes, permitting a range of laying patterns to complement your project.



CountryCobble®

- | | |
|---|---|
| 1 Country Cobble® Killyleagh, <i>Larne</i> | 6 Country Cobble® Slate, <i>Waringstown</i> |
| 2 Country Cobble® Cashel with Slate Setts, <i>Private</i> | 7 Country Cobble® Slate, <i>Worcestershire</i> |
| 3 Country Cobble® Burren + Grey, <i>Enniskillen</i> | 8 Country Cobble® Cashel + Slate, <i>Bangor</i> |
| 4 Country Cobble® Slate, <i>Coleraine</i> | 9 Country Cobble® Killyleagh, <i>Perivale</i> |
| 5 Country Cobble® Slate, <i>Worcestershire</i> | 10 Country Cobble® Burren, <i>Clane</i> |



CountryCobble®

traditional rumbled paving blocks

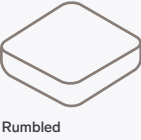
- Abrasion Resistant
- Frost Resistant
- Pedestrian Use
- Light Traffic
- Heavy Traffic 80mm only

COLOURS



EDGES

Country Cobble®
Supplied with a rumbled edge as standard.



SPACER NIBS

No formed spacer which allows for close jointing.

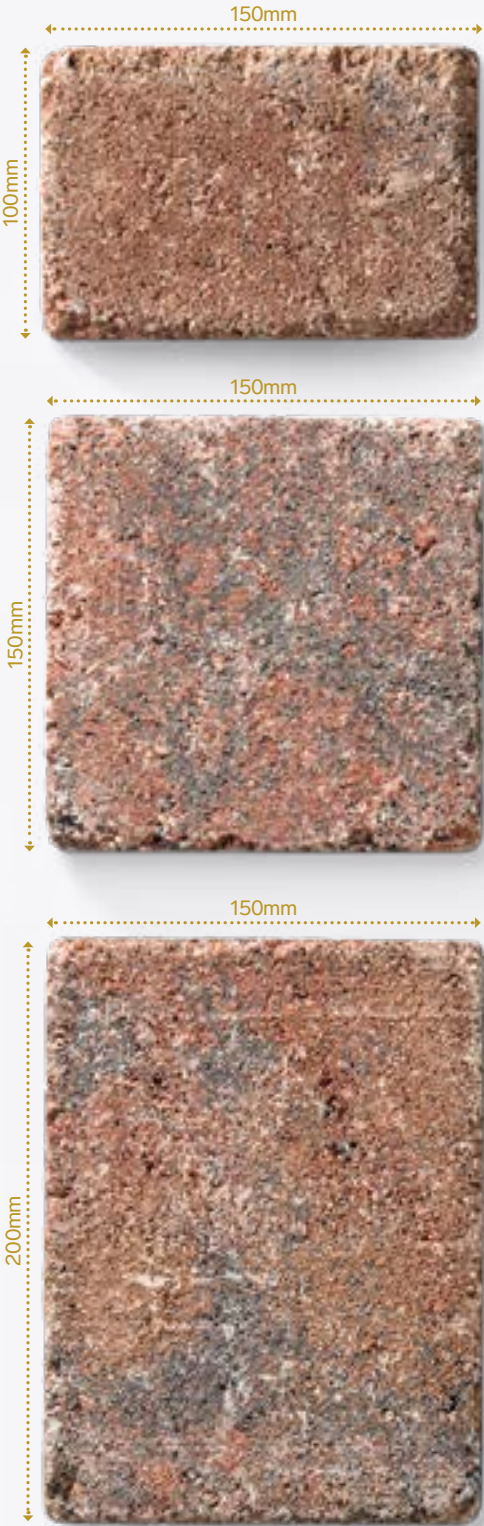
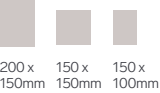
FINISHES

Country Cobble® is made with a colourfast, all-through mix of UV resistant pigments for vibrant, durable, lasting colours. It is rumbled with traditional methods to honour the authentic old cobble effect.

DEPTHS



FINISH



SPECIFICATION REFERENCE: NBS PLUS: Q24 110 SLAB/BRICK/SETT/COBBLE PAVINGS **BS EN:** 1339:2003

Profiles not to scale

CountryCobble®

traditional rumbled paving blocks



STOCK INFORMATION

Standard Product Depth	Size (mm)	In Stock	Available Colours	m² per pack	Units per m²	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
50mm	200 x 150	Yes	Cashel / Killyleagh / Slate / Burren / Corrib	12	33	400	3.2	1.32	14	IRE 20 / GB 21
	150 x 150	Yes	Cashel / Killyleagh / Slate / Burren	11.25	44	500	2.5	1.2	14	IRE 20 / GB 23
	100 x 150	Yes	Cashel / Killyleagh / Slate	12	66	800	1.6	1.32	14	IRE 20 / GB 21
60mm	200 x 150	Yes	Cashel / Slate	9.6	33.3	320	4	1.28	14	IRE 20 / GB 21
		MTO	Killyleagh / Burren							
80mm	200 x 150	Yes	Cashel / Slate	7.2	33.3	240	5.3	1.26	14	IRE 20 / GB 22
		MTO	Killyleagh / Burren							

NB. Items 'in stock' are supplied as patio packs and MTO items are supplied in full packs.
MTO: Made To Order (minimum order quantities: 250m² per colour / size. Orders below these quantities should be priced on application).

- Abrasion Resistant
- Frost Resistant
- Pedestrian Use
- Light Traffic
- Heavy Traffic 80mm only

Complimentary product

SETTS

Country Cobble® Setts are available - see page 146 for more information.



FORMATS, FINISHES + DEPTHS

DEPTHS

50 | 60 | 80
Millimetres

FINISH

Rm
Rumbled

200 x 150mm 150 x 150mm 150 x 100mm

STANDARDS + PERFORMANCE

Product Type
Manufactured to
Through Mix
Efflorescence

Traditional rumbled paving blocks
hEN 1338:2003
Country Cobble® features an all-through mix
State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction
>3.6Mpa. This applies to all sizes and depths
For specific force performance on a given size or depth please contact our Technical Specification Department
BS 7533-4:2006
Q24 110

Tensile Splitting Strength

Installed to NBS Plus

SUSTAINABILITY

Energy Use
Water Used
Recyclable
Manufacturing
Non-Primary Materials
Waste Wood + Plastic
BREEAM

100% renewable
100% recycled water
100% of this product can be recycled
Produced in the UK using responsibly sourced materials
61 – 70%
100% recycled
50 – 60mm: **A Rating** – according to the Green Guide to Specification 4th edition 2009. **A+ Rating** can be achieved when used in conjunction with a prepared recycled sub-base
80mm: **B Rating** – according to the Green Guide to Specification 4th edition 2009. **A Rating** can be achieved when used in conjunction with a prepared recycled sub-base

100% RENEWABLE ENERGY

100% RECYCLED WATER

100% RECYCLABLE

UK RESPONSIBLY SOURCED MATERIALS

61-70% NON-PRIMARY MATERIALS

100% WASTE WOOD + PLASTIC

50 – 60mm **A** RECOMMENDED BY THE GREEN GUIDE

50 – 60mm **A+** WHEN USED WITH RECYCLED SUB-BASE

80mm **B** RECOMMENDED BY THE GREEN GUIDE

80mm **A** WHEN USED WITH RECYCLED SUB-BASE

SPECIFICATION REFERENCE: NBS PLUS: Q24 110 SLAB/BRICK/SETT/COBBLE PAVINGS **BS EN: 1339:2003**

MANUFACTURING

Country Cobble® is manufactured from high grade locally sourced aggregates. Its unique three colour blends are obtained by using the latest computerised mixing systems. Rumbled finish. PLANT OF MANUFACTURE: Made at our Fivemiletown production plant.

CERTIFICATION

ISO 9001
ISO 14001
ISO 45001
CE Marking

Quality Management.
Environmental Management.
Occupational Health and Safety Management.
Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources



**TRADITIONAL RUMBLED PAVING SETTS + PREMIUM WATER-ETCHED,
LIGHTLY TEXTURED, GRANITE AGGREGATE PAVING SETTS**

Setts

Setts are ideal for bordering or detailing any paved or flagged area and can add visual interest and definition to any hard landscaped area.

Colour blended to perfection using the latest computerised mixing systems, Country Cobble® Setts feature an all-through colour mix – making it one of the quickest and easiest products for layers to install. They're suitable for various traffic levels as part of a properly designed layout and have an authentic cobbled appearance thanks to a unique production process.

Plaza Setts are available to further complement our highly specified Plaza paving and flagstones range. Manufactured using the highest quality granite and quartz aggregates, Plaza Setts are created using a water-based process, giving it a more vibrant exposed face and a rich, modern look.



Setts

1	Country Cobble® Setts, Slate, <i>Dungannon</i>	5	Country Cobble® Setts, Slate, <i>Hillsborough</i>
2	Plaza Setts, Pepper, <i>Dungannon</i>	6	Country Cobble® Setts, Slate, <i>Private</i>
3	Plaza Setts, Pepper, <i>Dungannon</i>	7	Country Cobble® Setts, Slate, <i>Private</i>
4	Country Cobble® Setts, Slate, <i>Private</i>	8	Country Cobble® Setts, Slate, <i>Private</i>



Setts

traditional rumbled paving setts + premium water-etched, lightly textured, granite aggregate paving setts





COLOURS



PLAZA SETTS - PEPPER



COUNTRY COBBLE® SETTS - SLATE

-  Abrasion Resistant
-  Frost Resistant
-  Pedestrian Use
-  Light Traffic

EDGES

Country Cobble® Setts Supplied with a rumbled edge as standard.
Plaza Setts Supplied with a textured edge as standard.



Rumbled (Country Cobble® Setts)



Textured (Plaza Setts)

SPACER NIBS

No formed spacer which allows for close jointing.

FINISHES

Country Cobble® Setts are made with a colourfast, all-through mix of UV resistant pigments for vibrant, durable, lasting colours. It is rumbled with traditional methods to honour the authentic old cobble effect.
Plaza Setts Our unique water etched production process ensures that there is over 90% of carefully blended, colourfast natural granite aggregates in the surface of each block.

DEPTHS



50 | 60
Millimetres

FINISHES

Rm

Rumbled

Tex

Textured

110 x

75mm

90 x

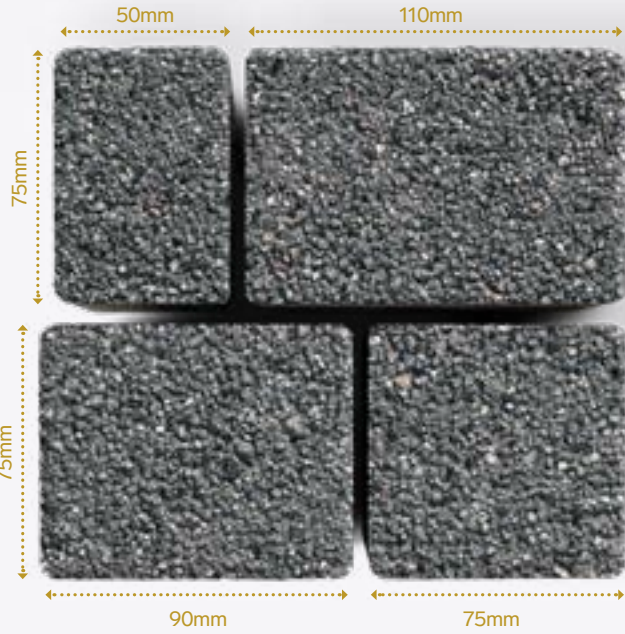
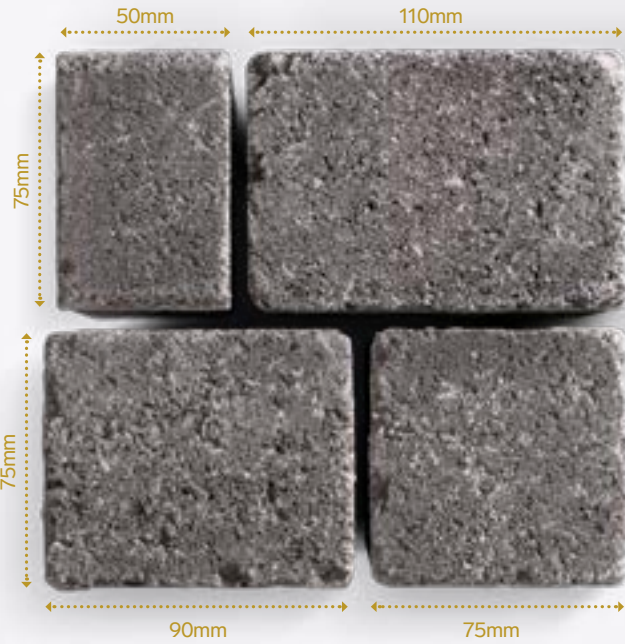
75mm

75 x

75mm

50 x

75mm



Setts


traditional rumbled paving setts + premium water-etched, lightly textured, granite aggregate paving setts





STOCK INFORMATION


Standard Product Depth	Size (mm)	In Stock	Available Colours	m² per pack	Units per m²	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
Country Cobble® Setts (mixed size pack - units not sold individually)										
<div>50mm</div> <div><div></div></div> <div>mixed 4 size tote bag</div>	<div>■</div> 110 x 75	Yes	Slate Rumbled	9	N/A	1476 <small>(approx. equal quantities of each size)</small>	0.425	1.05	14	22
	<div>■</div> 90 x 75						0.625			
	<div>■</div> 75 x 75						0.780			
	<div>■</div> 50 x 75						0.940			
Plaza Setts (mixed size pack - units not sold individually)										
<div>60mm</div> <div><div></div></div> <div>mixed 4 size pallet</div>	<div>■</div> 110 x 75	Yes	Pepper	5.11	N/A	840 <small>(approx. equal quantities of each size)</small>	1128	0.7	20	32
	<div>■</div> 90 x 75						0.936			
	<div>■</div> 75 x 75						0.75			
	<div>■</div> 50 x 75						0.51			

Information for a specific colour / depth is available on request from our Technical Specification Department.

- 

Abrasion Resistant
- 

Frost Resistant
- 

Pedestrian Use
- 

Light Traffic

Enduur 1

Plaza Setts

- Enhanced surface colour and reduced efflorescence.
- Enhanced mix which increases strength, resistance to wear and tear, longevity and vibrance.
- 70% less embodied carbon per % of cement replaced.
- Helps prevent moss and algae growth and deep staining.

FORMATS, FINISHES + DEPTHS

DEPTHS



50 | 60
Millimetres

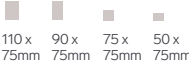
FINISHES



Rumbled



Textured



STANDARDS + PERFORMANCE

- Product Type

Country Cobble® Setts: Traditional rumbled paving setts with an 'all-through' colour mix

Plaza Setts: Premium water-etched, lightly textured, granite aggregate paving setts with a 'top-mix' hEN 1338:2003

Plaza Setts: Durable and hard wearing with a minimum surface layer of 5mm.

Plaza Setts: Not less than 90% natural granite and quartz aggregate in surface layer.

State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction.

>3.6Mpa. This pressure applies to all sizes and depths. For specific force performance on a given size or depth please contact our Technical Specification Department.

BS 7533-4:2006

Q24 110
- Manufactured to Surface Layer
- Granite Content
- Efflorescence
- Tensile Splitting
- Installed to NBS Plus

SUSTAINABILITY

- BES 6001

Responsible Sourcing of Concrete Products (Rating: Very Good) (Plaza Setts)

100% renewable

100% recycled water (Country Cobble® Setts)

90% recycled water (Plaza Setts)

100% of this product can be recycled

Produced in the UK using responsibly sourced materials

61 – 70% (Country Cobble® Setts)

52 – 60% (surface layer) (Plaza Setts)

100% recycled

50 – 60mm: A Rating – according to the Green Guide to Specification 4th edition 2009. A+ Rating can be achieved when used in conjunction with a prepared recycled sub-base
- Energy Use

Water Used
- Recyclable Manufacturing

Non-Primary Materials
- Waste Wood + Plastic

BREEAM



MANUFACTURING

Setts are manufactured from high grade locally sourced aggregates. Its colour blends are obtained by using the latest computerised mixing systems. PLANT OF MANUFACTURE: **Country Cobble® Setts:** Made at our Fivemiletown production plant. **Plaza Setts:** Made at our Toome production plant.

CERTIFICATION

- BES 6001**

Responsible Sourcing of Concrete Products (Rating: Very Good)
- ISO 9001**

Quality Management.
- ISO 14001**

Environmental Management.
- ISO 45001**

Occupational Health and Safety Management.
- CE Marking**

Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources

STANDARD PAVING BLOCKS

Rectangular

Rectangular paving is manufactured with smooth, clean lines to give a distinctive richness of colour.

Designed to deliver lasting durability and high visual impact, Rectangular paving provides the perfect finish to any traditional or contemporary area.

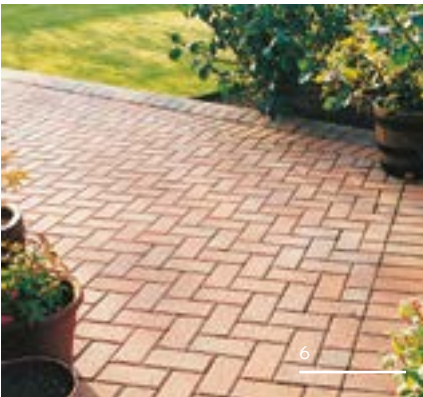
Rectangular paving is available in a selection of carefully-chosen colours and blends, allowing flexibility in laying patterns.

80mm Rectangular paving is also available as an Xflo permeable variant in regular or machine lay.



Rectangular

- | | |
|---|--|
| 1 Rectangular Slate + Bracken, <i>Carrickfergus</i> | 7 Xflo Rectangular Brindle, <i>Portadown</i> |
| 2 Rectangular Slate, <i>Belfast</i> | 8 Rectangular Brindle, <i>Sligo</i> |
| 3 Xflo Rectangular Natural Grey, <i>Newcastle</i> | 9 Rectangular Natural Grey, <i>Sligo</i> |
| 4 Rectangular Brindle, <i>tbc</i> | 10 Rectangular Brindle, <i>Craigavon</i> |
| 5 Xflo Rectangular Slate, <i>Limerick</i> | 11 Rectangular Brindle + Natural Grey, <i>Newtownabbey</i> |
| 6 Rectangular Brindle, <i>Private</i> | |



Rectangular

standard paving blocks

- Abrasion Resistant
- Frost Resistant
- Pedestrian Use
- Light Traffic
- Heavy Traffic 80mm only
- Available in permeable (Xflo)
- Machine Lay available

Enduur 1

Trolley Friendly

DEPTHS



50 | 60 | 80
Millimetres

FINISH



Smooth



200 x
100mm

COLOURS



BRACKEN



BRINDLE



FOREST BLEND



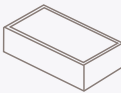
NATURAL GREY



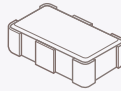
SLATE

EDGES

Rectangular Supplied with standard straight angle chamfer. Xflo supplied with a medium to large radius round chamfer.



Straight Chamfer



Medium to Large Radius Round Chamfer
(Xflo 200x100x80mm only)

SPACER NIBS

80mm: 1.5mm spacers on each paver leaving a 2mm minimum joint when laid.

Xflo®: 3.25mm x 2 spacers on each paver leaving a 7mm minimum joint when laid.

FINISHES

Closed smooth surface which contains a carefully selected blend of UV resistant colours and not less than 350kg/m³ of cement in the top layer, ensuring a durable, hardwearing surface finish.



Rectangular

standard paving blocks



STOCK INFORMATION

Standard product depth	Size (mm)	In Stock	Available Colours	m² per pack	Units per m²	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
<div>50mm</div> <div></div>	<div>200 x 100</div> <div></div>	Yes	Brindle / Slate / Natural Grey / Forest Blend	13.44	50	672	2.29	1.54	9	IRE 15 / GB 18
		MTO	Bracken							
<div>60mm</div> <div></div>	<div>200 x 100</div> <div></div>	MTO	Brindle / Slate / Natural Grey / Bracken	12.48	50	624	2.76	1.722	9	IRE 13 / GB 16
<div>80mm</div> <div></div>	<div>200 x 100</div> <div></div>	Yes	Brindle / Slate / Natural Grey	9.72	50	486	3.7	1.798	9	16
		MTO	Forest Blend / Bracken							
Xflo Rectangular Machine Lay available for 80mm only										
<div>60mm</div> <div></div>	<div>200 x 100</div> <div></div>	MTO	Brindle / Slate / Natural Grey	12.48	50	624	2.66	1.7	9	15
<div>80mm</div> <div></div>	<div>200 x 100</div> <div></div>	MTO	Brindle / Slate / Natural Grey	9.6	50	480	3.55	1.7	10	16

MTO: Made To Order (minimum order quantities: 1,000m² per colour / size. Orders below these quantities should be priced on application). Information for a specific colour / depth is available on request from our Technical Specification Department.
Machine lay available on 80mm depths – please contact our Technical Specification Department for more information.



Abrasion Resistant



Frost Resistant



Pedestrian Use



Light Traffic



Heavy Traffic
80mm only



Available in permeable (Xflo)



Machine Lay available

Enduur 1



Trolley Friendly

Enduur 1

Enhanced surface colour and reduced efflorescence.

Enhanced mix which increases strength, resistance to wear and tear, longevity and vibrance.

70% less embodied carbon per % of cement replaced.

Helps prevent moss and algae growth and deep staining.

FORMATS, FINISHES + DEPTHS

DEPTHS



50 | 60 | 80
Millimetres

FINISH



Smooth



200 x 100mm

STANDARDS + PERFORMANCE

Product Type	Standard paving blocks
Manufactured to	hEN 1338:2003
Surface Layer	Durable and hard wearing with a minimum surface layer of 4mm.
Efflorescence	State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction >3.6Mpa. This pressure applies to all sizes and depths. For specific force performance on a given size or depth please contact our Technical Specification Department
Tensile Splitting Strength	Polished: (PSRV) >45 low potential for slip. Unpolished: (USRV) >60 low potential for slip. Specific slip / skid resistance test results are available on request from our Technical Specification Department
Slip / Skid Resistance	Polished: (PSRV) >45 low potential for slip. Unpolished: (USRV) >60 low potential for slip. Specific slip / skid resistance test results are available on request from our Technical Specification Department
Abrasion Resistance	≤ 23mm (Wide Wheel Abrasion Test)
Durability (Freeze-thaw)	≤ 1.0 kg/m² as a mean with no individual value > 1.5 kg/m²
Material Density	2300 kg/m³ (typically)
Water Absorption (24hr)	6% max
Installed to	BS 7533-4:2006
NBS Plus	Q24 110

SUSTAINABILITY

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
Energy Use	100% renewable
Water Used	90% recycled water
Recyclable	100% of this product can be recycled
Manufacturing	Produced in the UK using responsibly sourced materials
Waste Wood + Plastic BREEAM	100% recycled
	50mm - 60mm: A Rating – according to the Green Guide to Specification 4th edition 2009. A+ Rating can be achieved when used in conjunction with a prepared recycled sub-base.
	80mm: B Rating – according to the Green Guide to Specification 4th edition 2009. A Rating can be achieved when used in conjunction with a prepared recycled sub-base.



MANUFACTURING

Rectangular is manufactured from locally sourced premium aggregates. Its colour blends are achieved by using the latest computerised mixing systems. A closed top surface (smooth finish) is achieved by using the latest face mix manufacturing methods. PLANT OF MANUFACTURE: Made at our Toome production plant.

CERTIFICATION

BES 6001	Responsible Sourcing of Concrete Products (Rating: Very Good)
ISO 9001	Quality Management.
ISO 14001	Environmental Management.
ISO 45001	Occupational Health and Safety Management.
CE Marking	Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources



Permeable Solutions	162
Xflo	180

Xflo

AG'S PERMEABLE PAVING SOLUTION

Xflo

PERMEABLE SOLUTIONS

Assessment + Solution of the Problem

Increasing intensity of rainfall, ever expanding areas of hard landscaping and inadequate infrastructural drainage have all led to increased risk of flooding. The answer is **SuDS or Sustainable Drainage Systems**, a simple concept to allow water through the surface, preventing ponding and reducing the risk of flooding and pollution.

There are several SuDS designs:

- Concrete Permeable Paving
- Filter Strips + Swales
- Green Roofs
- Basin + Wetlands
- Infiltration Devices

By choosing a permeable paving design there is a significant increase in securing planning approval and reducing costs for the entire project. AG offer a full design advice service with our experienced SuDS Engineers, using our unique high speed flow Xflo range of permeable paving which suits any type of project.

The three key elements of permeable paving design.



MEETS DESIGN REQUIREMENTS FOR PERMEABILITY AND DETENTION

AG Xflo Permeable Paving systems meets and exceeds the design requirements for the flow and detention of surface water into the cleaned angular aggregate storage area below.



REMOVING POLLUTANTS

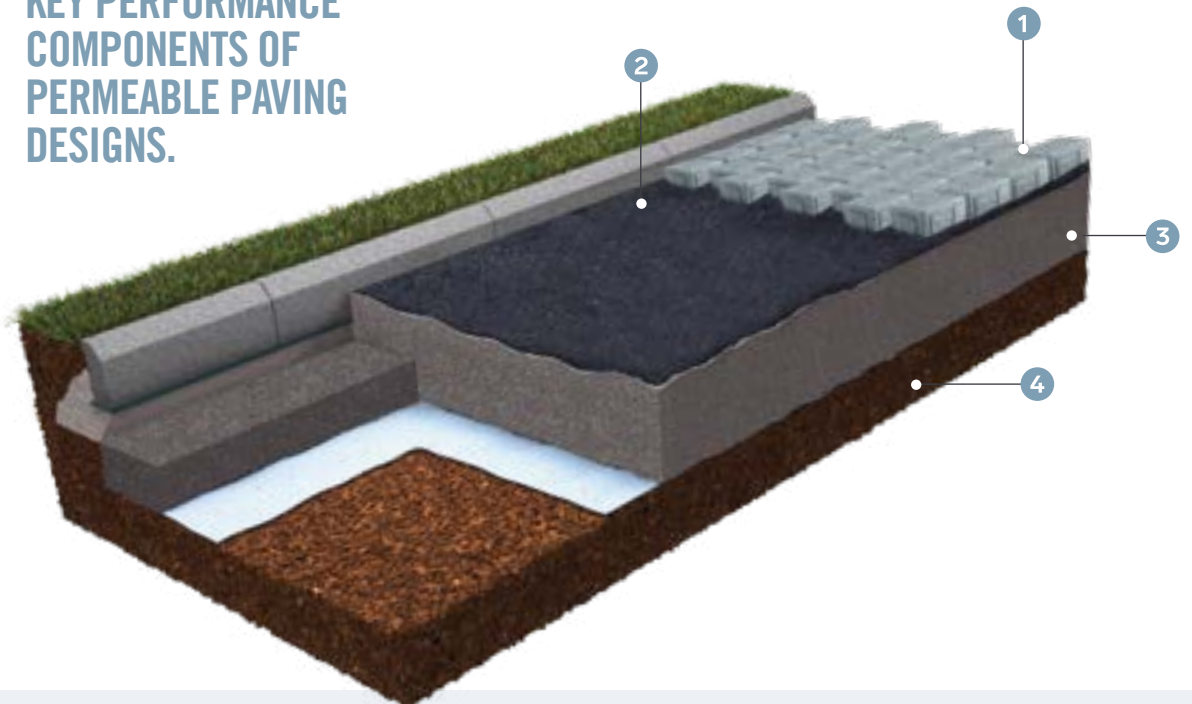
The clean washed angular aggregates are an excellent filtration method causing natural absorption, and aerobic and biodegradable actions. Each layer should allow the movement of water whilst providing structural interlocking of the system.



PERFORMANCE

All permeable paving systems must improve the local environment by ensuring the design is suited to the sub-grade of the location, that it has capacity to store water and finally that it meets the expected traffic loads.

KEY PERFORMANCE COMPONENTS OF PERMEABLE PAVING DESIGNS.



1 Paving Units + Jointing Grit

AG have a wide range of Xflo profiles which have a high speed flow rate of 4000mm/hr/m². The unique high speed flow spacers of Xflo must be fully jointed with BS 7533-101:2021 / hEN 13242:2013 approved 2-6mm grit. Joint widths in permeable paving must be sufficiently wide (7mm) to ensure the grit penetrates top to bottom.

2 Bedding Layer

The bedding layer in most permeable paving designs is generally 50mm of BS 7533-101:2021 / hEN 13242:2013 approved 2-6mm grit identical to the jointing grit. In the majority of designs the depth of this layer is 50mm.

3 Drainage Layer

These layers must be BS 7533-101:2021 / hEN 13242:2013 clean washed angular coarse graded aggregate with the transfer / transition layer being 4/20mm stone. It is essential to the system's performance that all aggregate adheres to the hEN criteria as this ensures sufficient drainage, pollution control and effective interlocking structural performance.

4 Sub-grade

The structural and permeable quality of the sub-grade soil is a key driver of the type of design selected. If full or partial infiltration is possible then designers should look to Systems A or B. If the sub-grade is non-permeable then SuDS engineers will always use System C, which is full attenuation. See the following pages for diagrams and design concepts.

All information provided by AG on permeable paving is in no way site specific and must be verified by a qualified expert in SuDS design. AG will not accept any liability attributed to the information included in this section.

Xflo

DESIGN ADVICE + CONCEPTS

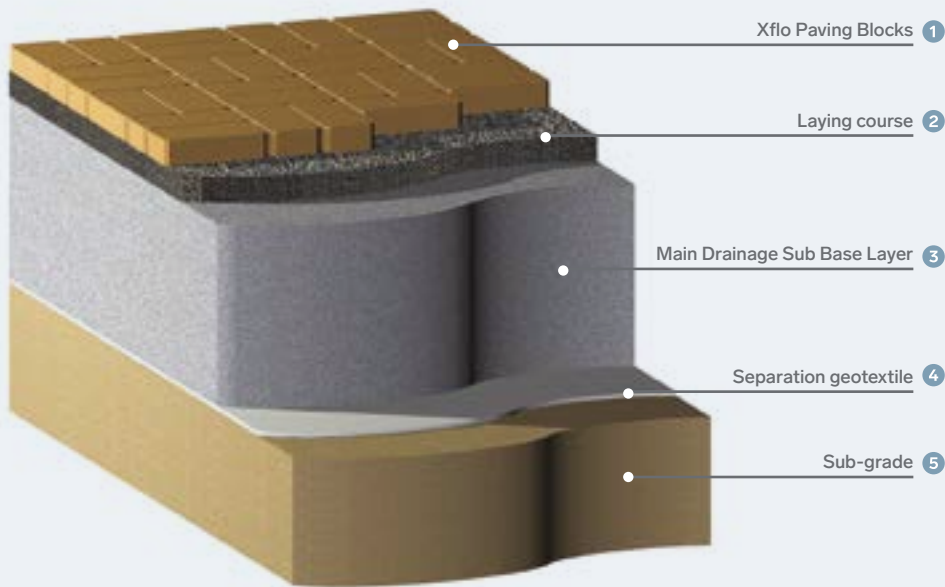
Permeability / strength of sub-grade

There are three common designs which you can choose when assessing the quality of the sub-grade section of the site. To test for permeability and strength engineers look to the results of the CBR (California Bearing Ratio) and the BRE 365 tests.

Please note: the following are concept designs only.

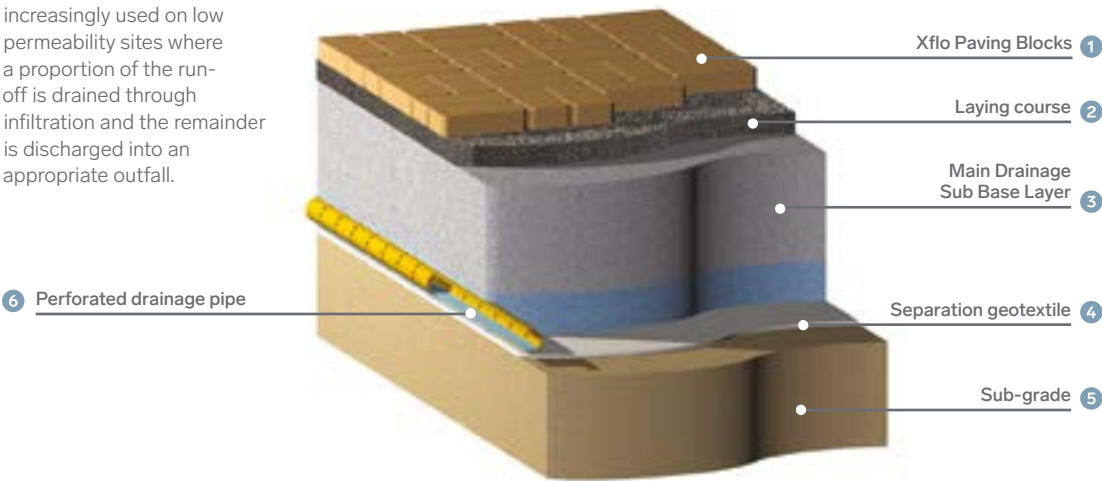
System A Infiltration

It is recognised that total infiltration is generally the preferred design option and should be utilised as a source of control wherever possible.



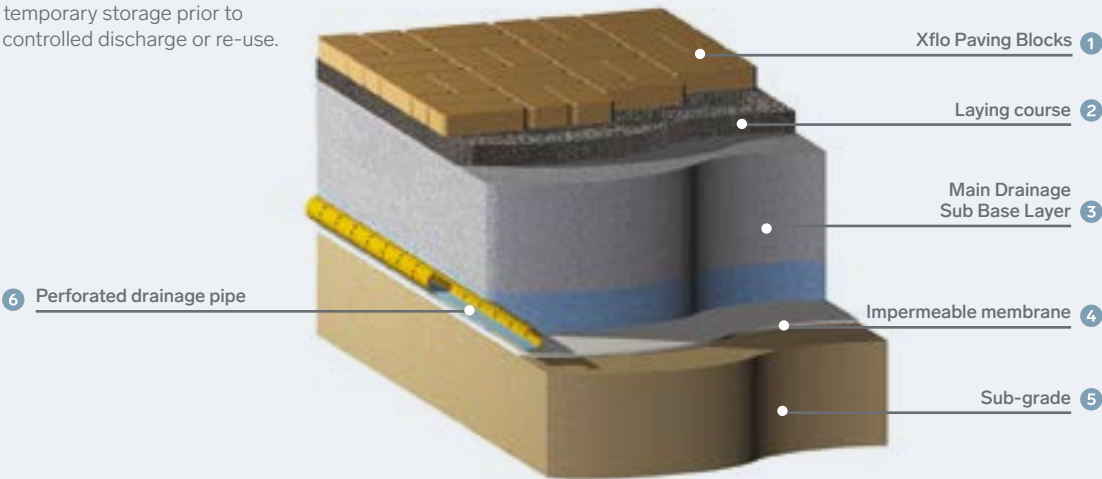
System B Partial Infiltration

This option is being increasingly used on low permeability sites where a proportion of the run-off is drained through infiltration and the remainder is discharged into an appropriate outfall.



System C Attenuation

This assumes no infiltration and utilises an impermeable geomembrane to achieve temporary storage prior to controlled discharge or re-use.

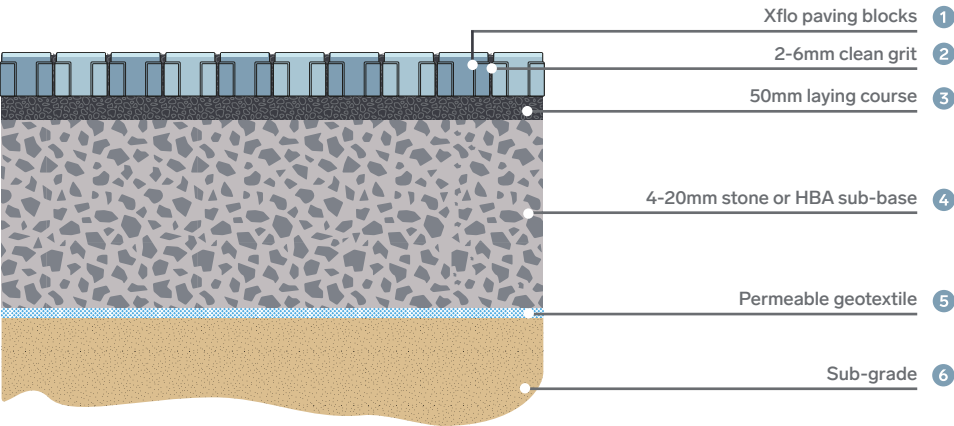


Xflo

DESIGN ADVICE + CONCEPTS

The following are concept designs to be used for guidance when designing a SuDS system at scheme feasibility stage. The total thickness of the pavement construction is determined by both the hydraulic and structural design requirements. AG can provide experienced SuDS design engineer advice on all projects.

Structural Design for System A + System B



Based on CBR ≥ 5% (assessed on site)

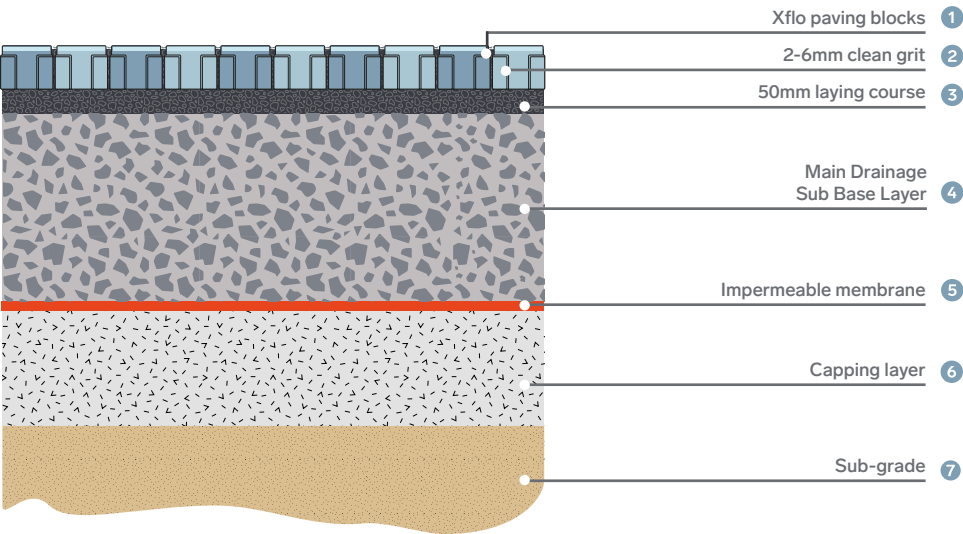
Category / Application	Block	Laying Course	Hydraulically Bound Base (HBA)	4-20mm Clean Coarse/ Crushed Stone
1. Domestic	80	50	N/A	250
2. Car Parking	80	50	N/A	350
3. Pedestrian	80	50	125	150
4. Shopping	80	50	150	150
5. Commercial	80	50	200	150
6. Heavy Traffic	80	50	300	150

Additional thickness of coarse graded material for System A and System B, for site conditions with lower CBR values:

CBR of Sub-grade (%)	Adjustment of coarse graded material (mm)
1	300 (*) (**)
2	175 (*) (**)
3	125 (**)
4	100 (**)
>5	As per above table

*Engineers guidance should be sought
**Sub grades of CBR less than 5% are often too fine to permit sufficient infiltration

Structural Design for System C



Based on CBR ≥ 5% (assessed on site)

Category / Application	Block	Laying Course	Hydraulically Bound Base (HBA)	4-20mm Clean Coarse/ Crushed Stone	Capping Layer
1. Domestic	80	50	N/A	250	150
2. Car Parking	80	50	N/A	350	150
3. Pedestrian	80	50	125	150	150
4. Shopping	80	50	150	150	150
5. Commercial	80	50	200	150	150
6. Heavy Traffic	80	50	300	150	150

Total thickness of capping material for System C:

CBR of Sub-grade (%)	Adjustment of coarse graded material (mm)
1	600 (*)
2	350 (*)
3	250
4	200
>5	As per above table







*Engineers guidance should be sought

Xflo

DESIGN ADVICE + CONCEPTS

Traffic Loading Tables

The chart below lists expected traffic loadings associated with various types of development. Where the CBR of the sub-grade is below 5% then a capping layer needs to be considered to provide a suitable platform. This structural layer can also be used to withstand construction traffic during the build phase and provide a stable surface for the stone. If the CBR is greater than 5% then a capping layer is not required.

 1. Domestic	 2. Car Parking	 3. Pedestrian	 4. Shopping	 5. Commercial	 6. Heavy Traffic
No Large Goods Vehicles	Emergency Large Goods Vehicles Only	1 Large Goods Vehicle per Week	10 Large Goods Vehicles per Week	100 Large Goods Vehicles per Week	1000 Large Goods Vehicles per Week
Zero Standard Axles	100 Standard Axles	0.015 msa*	0.15 msa*	1.5 msa*	15 msa*
Patio	Car Parking Bays + Aisles	Town/City Pedestrian Street	Retail Development Delivery Access Route	Industrial Premises	Main Road
Private Drive	Railway Station Platform	Nursery Access	School College Access Road	Lightly Trafficked Public Road	Distribution Centre
Decorative Feature	External Car Showroom	Parking Area to Residential Development	Office Block Delivery Route	Light Industrial Development	Bus Station (every 5 minutes)
Enclosed Playground	Sports Stadium Pedestrian Route	Garden Centre External Display Area	Deliveries to Small Residential Development	Mixed Retail Industrial Development	Motorway Truckstop
Footway with Zero Vehicle Overrun	Footway with Occasional Overrun	Cemetery/ Crematorium	Garden Centre Delivery Route	Town Square	Bus Stop
	Private Drive/ Footway Crossover	Motel Parking	Fire Station Yard	Footway with Regular Overrun	Roundabout
		Airport Car Park with no Bus Pickup	Airport Carpark with bus to terminal	Airport Landslide Roads	Bus Lane
		Sports Centre	Sports Stadium Access Route/ Forecourt		

*msa = millions of standard 8,000 Kg axles.

IMPROVEMENT LAYERS FOR STRUCTURAL SUPPORT

There are three options of structural improvement layers that can be installed below the permeable paving design.

3 Options:

- 1

DBM (Dense Bitumen Macadam)
- 2

Cement stabilised coarse graded aggregate (HBCGA)
- 3

A structural slab
- Options 1 and 2 must be porous and allow water movement whilst providing sufficient structural support. Option 3 requires 75mm holes punctured every 750mm.

Xflo

DESIGN ADVICE + CONCEPTS

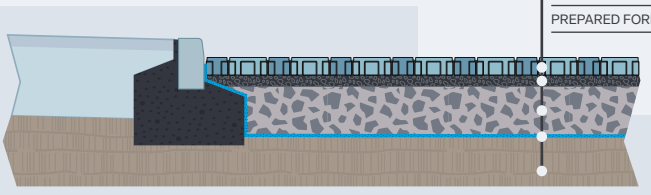
Typical Designs

The following information is provided by way of guidance only and is not site specific: the designs here are designed in conjunction with the Traffic Loading Tables. Please note they do not take into account factors such as the permeability or structural quality of the sub-grade. These concept drawings can be used in early feasibility stage to indicate if permeable paving is required.

Systems A + B Infiltration Designs

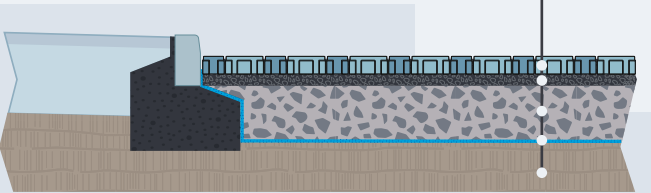
The Infiltration system allows for the rapid evacuation of surface water through the paving joints. The design allows the water to travel slowly through the crushed stone through the filtering permeable geotextile before being released back into the sub-grade. In a partial infiltration system a calculated volume of water may need to be assisted away from site via a perforated drain system.

LOAD CATEGORY 1 380MM DEEP



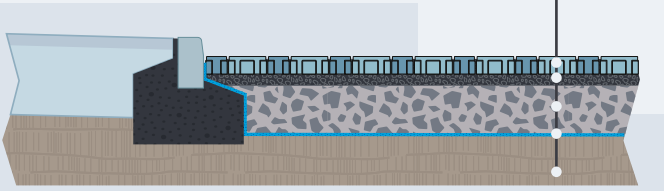
PAVING	Xflo Permeable Paving Block	80mm
BEDDING	Type 2-6.3 Gc 80/20 to hEN 13242:2002	50mm
SUB-BASE	Modified Sub-Base as Type 4-20 Coarse Graded Aggregate to hEN 13242:2002 or similar	250mm
GEOTEXTILE	300 g/m² Non-Woven Needle Punched Geotextile as per specification	
PREPARED FORMATION		

LOAD CATEGORY 2 480MM DEEP



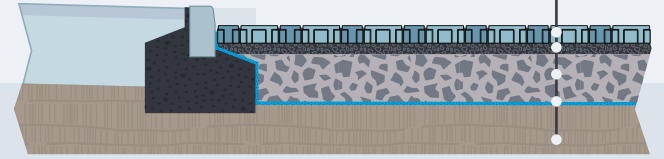
PAVING	Xflo Permeable Paving Block	80mm
BEDDING	Type 2-6.3 Gc 80/20 to hEN 13242:2002	50mm
SUB-BASE	Modified Sub-Base as Type 4-20 Coarse Graded Aggregate to hEN 13242:2002 or similar	400mm
GEOTEXTILE	300 g/m² Non-Woven Needle Punched Geotextile as per specification	
PREPARED FORMATION		

LOAD CATEGORY 3 405MM DEEP



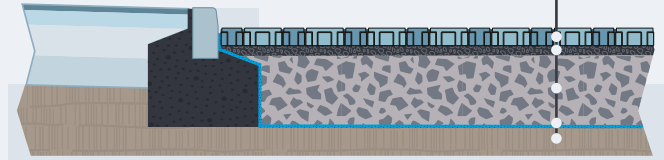
PAVING	Xflo Permeable Paving Block	80mm
BEDDING	Type 2-6.3 Gc 80/20 to hEN 13242:2002	50mm
SUB-BASE	Modified Sub-Base as Type 4-20 Hydraulically Bound Coarse Graded Aggregate to hEN 14227:2004 or similar	275mm
GEOTEXTILE	300 g/m² Non-Woven Needle Punched Geotextile as per Specification	
PREPARED FORMATION		

LOAD CATEGORY 4 430MM DEEP



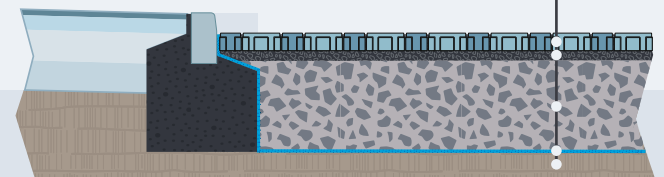
PAVING	Xflo Permeable Paving Block	80mm
BEDDING	Type 2-6.3 Gc 80/20 to hEN 13242:2002	50mm
SUB-BASE	Modified Sub-Base as Type 4-20 Hydraulically Bound Coarse Graded Aggregate to hEN 14227:2004 or similar	300mm
GEOTEXTILE	300 g/m² Non-Woven Needle Punched Geotextile as per Specification	
PREPARED FORMATION		

LOAD CATEGORY 5 480MM DEEP



PAVING	Xflo Permeable Paving Block	80mm
BEDDING	Type 2-6.3 Gc 80/20 to hEN 13242:2002	50mm
SUB-BASE	Modified Sub-Base as Type 4-20 Hydraulically Bound Coarse Graded Aggregate to hEN 14227:2004 or similar	350mm
GEOTEXTILE	300 g/m² Non-Woven Needle Punched Geotextile as per specification	
PREPARED FORMATION		

LOAD CATEGORY 6 580MM DEEP



PAVING	Xflo Permeable Paving Block	80mm
BEDDING	Type 2-6.3 Gc 80/20 to hEN 13242:2002	50mm
SUB-BASE	Modified Sub-Base as Type 4-20 Hydraulically Bound Coarse Graded Aggregate to hEN 14227:2004 or similar	450mm
GEOTEXTILE	300 g/m² Non-Woven Needle Punched Geotextile as per specification	
PREPARED FORMATION		

Xflo

DESIGN ADVICE + CONCEPTS

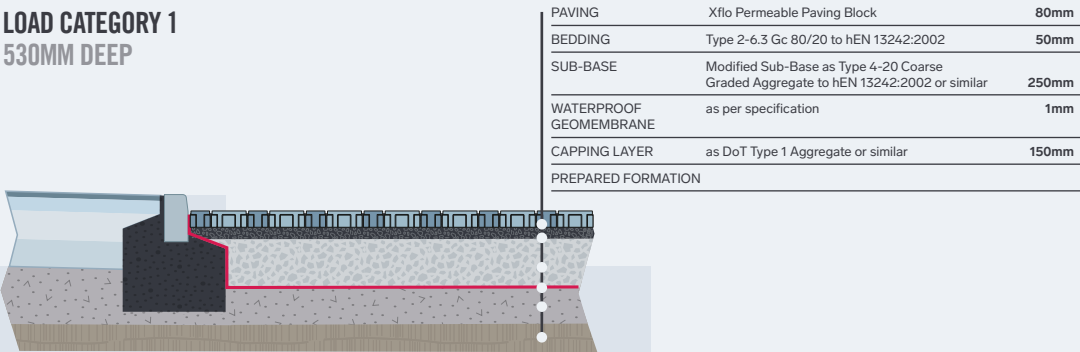
Typical Designs

The following information is provided by way of guidance only and is not site specific: the designs here are designed in conjunction with the Traffic Loading Tables. Please note they do not take into account factors such as the permeability or structural quality of the sub-grade. These concept drawings can be used in early feasibility stage to indicate if permeable paving is required.

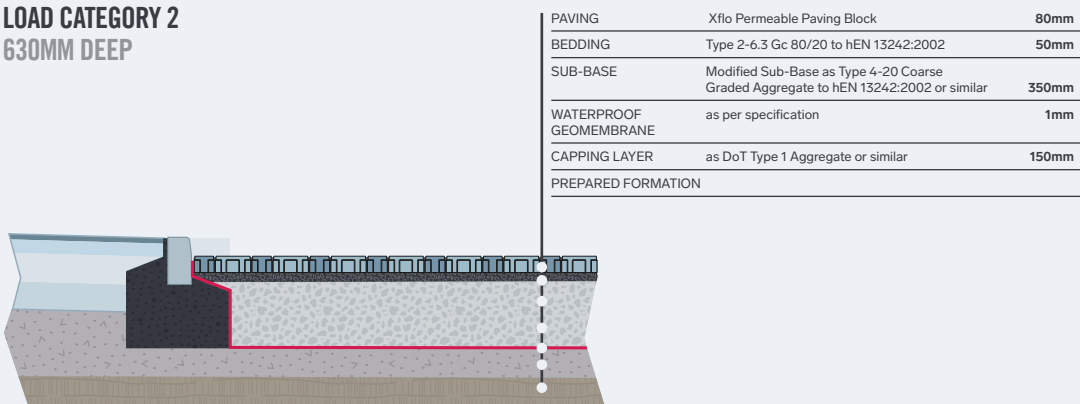
System C Attenuation Designs

The Attenuation system also evacuates surface water rapidly via the wider joints found in permeable paving. The water in this design is then stored, the depth of stone layers are specifically designed to ensure the system has capacity to accept the required volumes. The stored water is then assisted away from site via a pre-designed drainage system. The sub-grade is protected by an impermeable geotextile layer which prevents pollution.

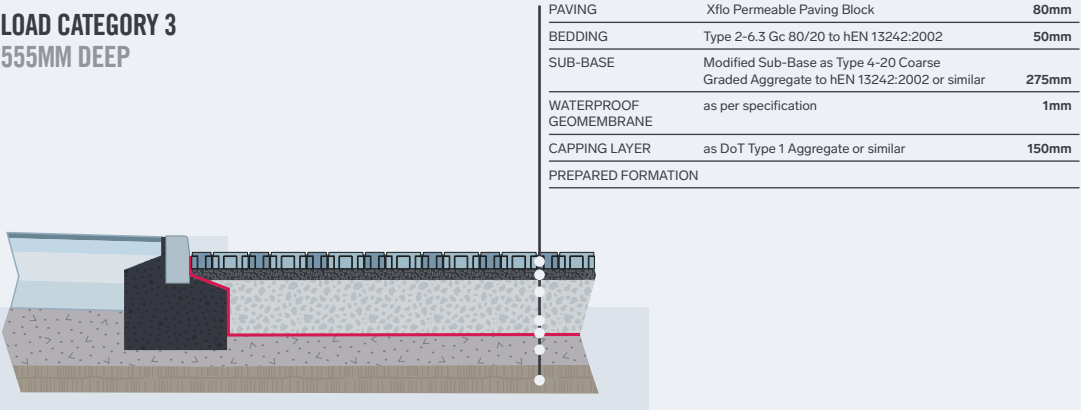
LOAD CATEGORY 1 530MM DEEP



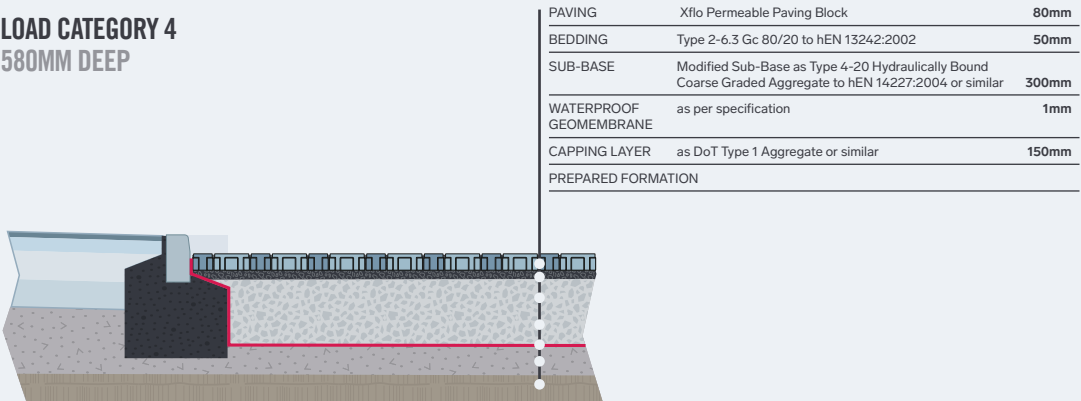
LOAD CATEGORY 2 630MM DEEP



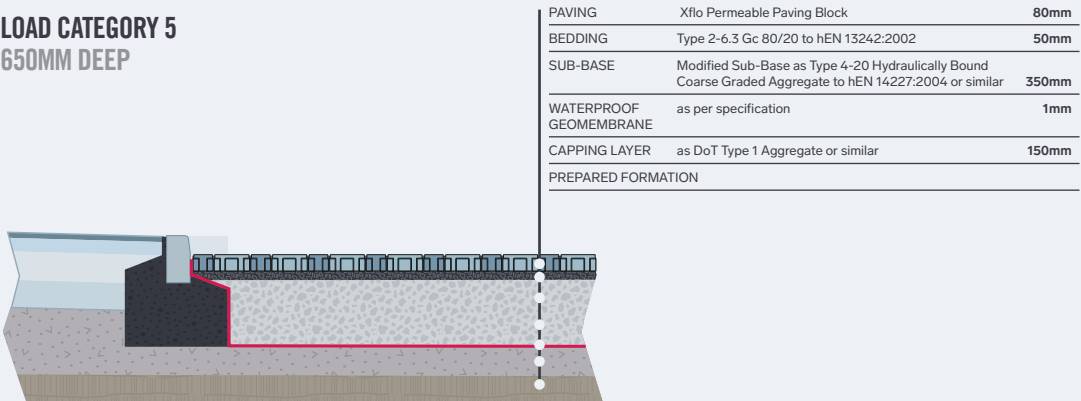
LOAD CATEGORY 3 555MM DEEP



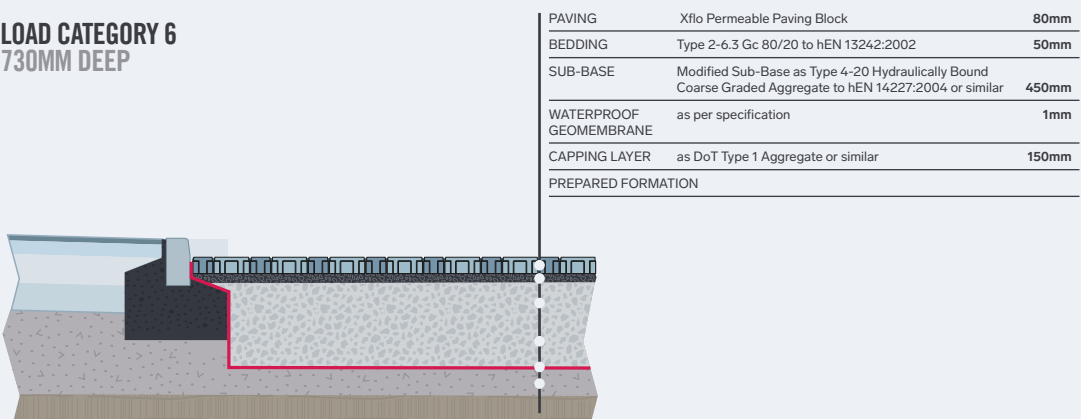
LOAD CATEGORY 4 580MM DEEP



LOAD CATEGORY 5 650MM DEEP



LOAD CATEGORY 6 730MM DEEP



Xflo

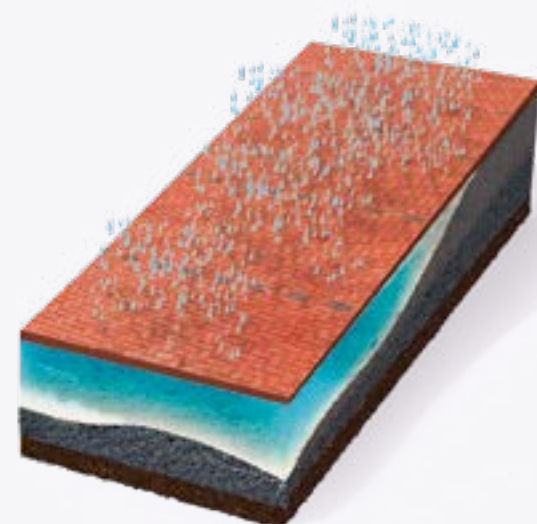
DESIGN ISSUES TO CONSIDER

Impermeable + Permeable Zones

Draining Impermeable Areas

Draining impermeable areas onto permeable areas is common in commercial projects. This would apply in attenuation designs and the sub-base depth should be increased in the ratio of a max 2:1 ratio between impermeable and permeable zones.

In the design phase it is essential to ensure a sunken / flush barrier separates the paving and asphalt to prevent movement of paving caused by the pressure exerted from the stopping motion of vehicles.



Falls on Sites

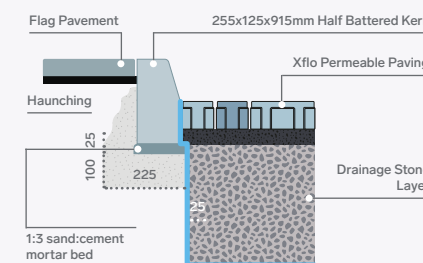
In the majority of projects a fall in levels is a common occurrence – this gradient must be taken into account in the design stage.

Any fall has the potential to allow water to move too quickly to the lowest level on the site and re-appear up through the paving joints. To reduce the effects of any fall the designer will install ballasts within the stone detail.

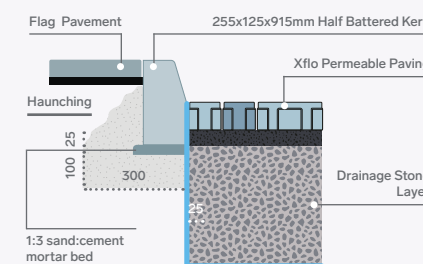


Kerbs to Paving

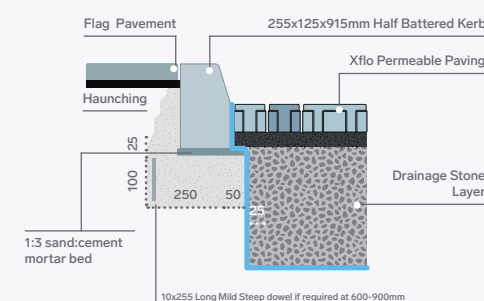
Light Vehicle + Pedestrian Traffic



Estate Roadway/Car Parking Areas

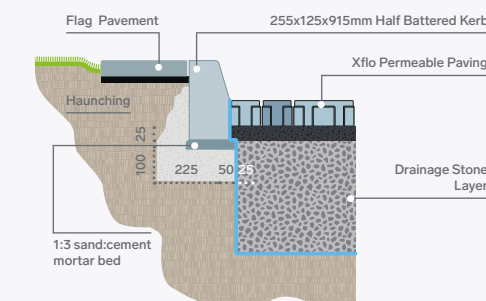


Heavy Industrial Traffic

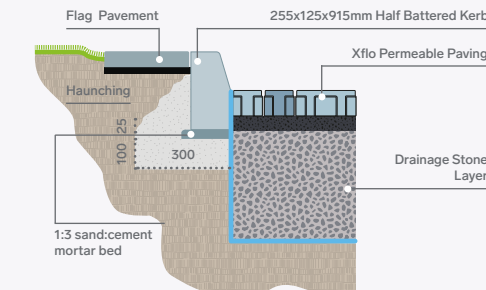


Kerbs to Grass

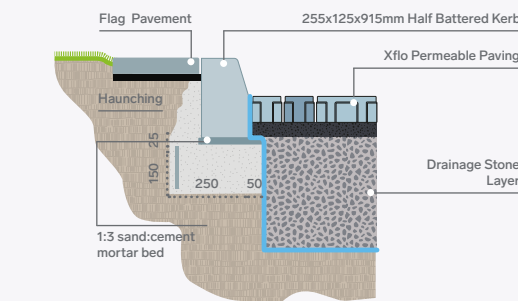
Light Vehicle + Pedestrian Traffic



Estate Roadway/Car Parking Areas



Heavy Industrial Traffic



Turning Areas / Cul De Sacs / Stop Zones

In any of the above areas care must be taken in the design phase to ensure certain critical issues are addressed.

Any location where there is turning or stopping of vehicles has the potential to apply excess pressure on the paving surface from both the front and rear axles. It is essential that the boundary support beneath the paving is sufficient to bear this pressure.

Xflo INSTALLATION ADVICE

Permeable Paving Design

AG recommends that its Xflo products be installed in conjunction with a BS 7533-101:2021 designed permeable paving systems. Independent expert advice should be sought if other designs are considered. Blocks should be plate vibrated before the joints are filled.

AG will design a full permeable specification which will be guaranteed in writing.

Bedding Layer Design

Blocks should be laid on 2-6mm grit to hEN 13242:2002 (1 ton of 6mm grit will cover 10m² at depths of 50mm). The bedding layer should be screeded over the 4/20mm stone layer, an upper geotextile layer can be installed here if required.

Jointing Aggregate

Blocks should be jointed with 2-6mm grit to hEN 13242:2002 (1 ton of grit will joint 100m² of 80mm paving). All joints must be fully filled to ensure structural stability of the paving units.

Sub Base Aggregates

Clean washed 4-20mm coarse graded angular aggregates to hEN 13242:2002 are required in specified depths according to design requirements. This stone should be vibrated or rolled to ensure sufficient compaction rates are achieved (typically in 150mm layers).

Important Aggregate Information

Aggregate should conform to hEN 13242:2002 and categorised as LA20 according to Table 9, SZ18 on Table 10 and MDE15 on Table 11. All permeable paving systems rely heavily on the correct design and aggregate use – design advice is available from AG.

Installation notes

Paving to be installed to BS 7533-101:2021, joints to be filled to top and topped up after several weeks. Care to be taken with soft landscaping to prevent joint blockage.

Maintenance

Initial Cleaning

The paved area needs to be allowed to settle for several weeks – after this time it can be lightly cleaned with a hose or low pressure wash. If required a weed killer suppressant can be applied once a year, ensuring the manufacturer's instructions are followed.

Cleaning Joints

Over time joints may become clogged due to general everyday use, it may be necessary to clean them using the following methods:

1. High pressure water jet to clean any dirt in joint. Examine areas for displaced pavers and reset to line.
2. Brush 2-6mm grit into joints ensuring they are well filled.
3. Vacuum sweepers if used excessively may remove loose jointing grit over time.

General Dirt / Grime

All paving will need a regular maintenance programme to ensure longevity, colour and performance. Regular brushing to reduce the build-up of surface material on the face and the joints is essential. If required, a light powered hose will be sufficient to remove any general dirt and grime. For more aggressive staining such as oil or tyre marks please refer to the AG website for detailed cleaning information.

Xflo PERMEABLE PRODUCTS



STANDARD SURFACE, GRANITE SURFACE AND SUBTLY COBBLED SURFACE
HIGH SPEED FLOW, PERMEABLE PAVING BLOCKS

Xflo

Permeable Paving Solutions®

Xflo is a highly effective, sustainable method of dealing with storm water control.

Increased rainfall and unchecked urban development frequently leave conventional storm water drainage systems unable to cope – resulting in severe surface flooding following periods of intense rainfall. SuDS (sustainable drainage systems) such as AG’s Xflo Permeable Paving Solutions® are designed to mimic the natural movement of storm water and replace conventional storm water drainage systems.

Our Xflo range has been specially developed to provide the construction market with the drainage performance required without compromising on aesthetics – Xflo is available in a selection of paving finishes and unit sizes.



Xflo Permeable Paving Solutions®

- | | | | |
|---|---|---|--|
| 1 | Xflo Plaza Salt + Pepper, <i>Dungannon</i> | 5 | Xflo Plaza, Birkes, Lakrids, Salt + Pepper, <i>South Wales</i> |
| 2 | Xflo Rectangular Crieve Mix, <i>Portadown</i> | 6 | Xflo HomePave Ash Antique, <i>Portadown</i> |
| 3 | Xflo Plaza Slate, <i>Dungannon</i> | 7 | Xflo Plaza Salt + Pepper, <i>Newry</i> |
| 4 | Xflo Plaza Slate, <i>Dungannon</i> | 8 | Xflo Rectangular Slate, <i>Limerick</i> |



Xflo Permeable Paving Solutions®

- | | |
|---|---|
| 1 Xflo Plaza Salt, <i>Dungannon</i> | 5 Xflo Rectangular Natural Grey + Slate, <i>Limerick</i> |
| 2 Xflo Plaza Birkes, Lakrids, Salt + Pepper, <i>South Wales</i> | 6 Xflo HomePave Cove Smooth, <i>Portadown</i> |
| 3 Xflo Plaza Lakrids, Birkes, Salt + Pepper, <i>Bristol</i> | 7 Xflo Plaza Birkes, Lakrids, Salt + Pepper, <i>South Wales</i> |
| 4 Xflo Plaza Pepper (2 size mix), <i>Dungannon</i> | |



- 

Abrasion Resistant
- 

Frost Resistant
- 

Pedestrian Use
- 

Light Traffic
- 

Heavy Traffic (80mm)
- 

Available in permeable (Xflo)
- 

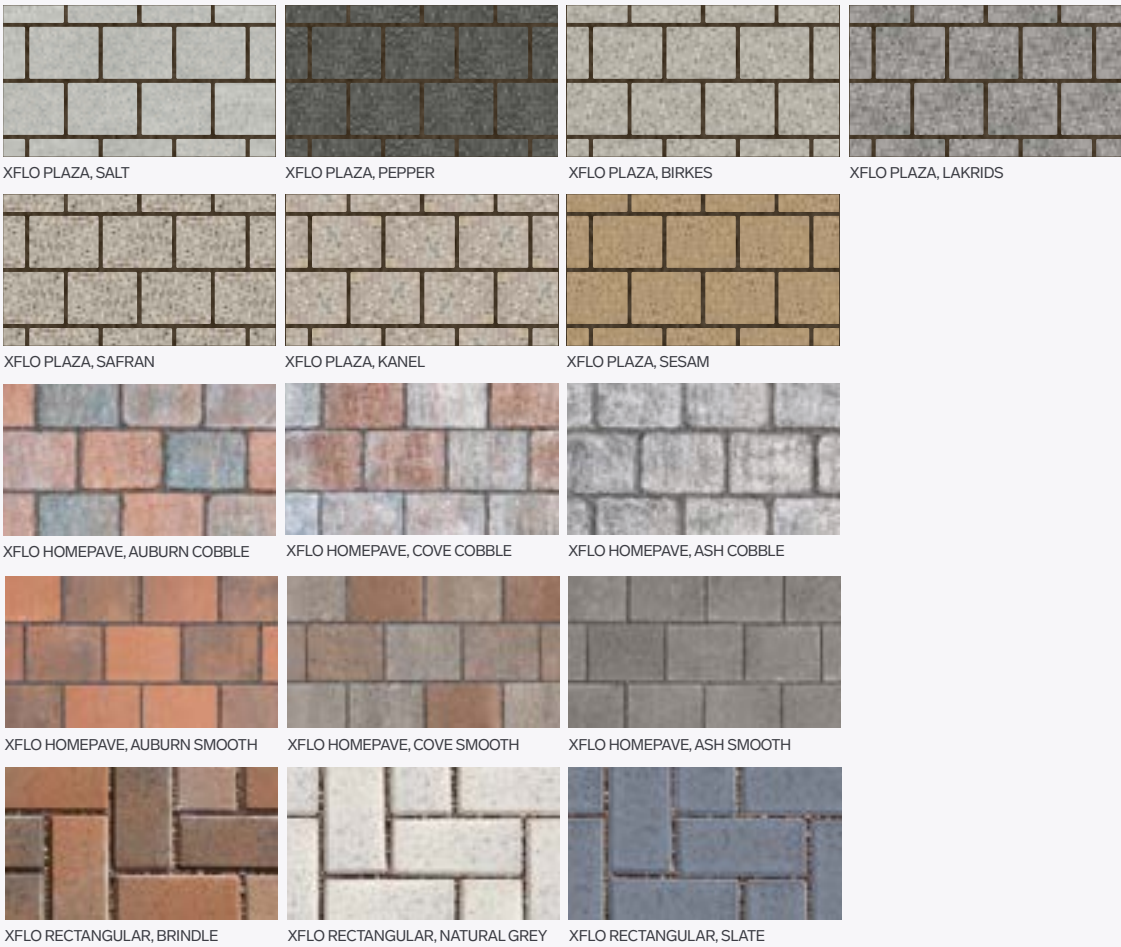
Machine Lay available

Enduur 1
Xflo Plaza

Xflo Permeable Paving Solutions®

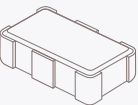
standard surface, granite surface and subtly cobbled surface high speed flow, permeable paving blocks

COLOURS + FINISHES



EDGES

Xflo Supplied with a medium to large radius round chamfer.



Xflo Plaza / Xflo Rectangular / Xflo HomePave Smooth Medium to Large Radius Round Chamfer



Xflo HomePave Cobble Supplied with a cobbled edge detail.

SPACER NIBS

Xflo Plaza/ Xflo Rectangular / Xflo HomePave Smooth Supplied with 3.25mm x 6 spacers on each paver leaving a 7mm minimum joint when laid.

Xflo HomePave Cobble Supplied with 'invisible' 3.25mm x 10 spacers nibs on each paver leaving a 7mm minimum joint. The nibs are dropped, so they are invisible on the finished surface.

HIGH SPEED FLOW RATE

Xflo Supports a flow rate of 4000mm/hr/m².

FINISHES

Xflo Rectangular Closed smooth surface which contains a carefully selected blend of UV resistant colours and not less than 350kg/m³ of cement in the top layer ensuring a durable hardwearing surface finish.

Xflo Plaza Our unique water etched production process ensures that there is over 90% of carefully blended, colourfast natural granite aggregates in the surface of each block, not less than 380kg/m³ of cement in the surface layer ensuring a durable hardwearing surface finish.

Xflo HomePave Cobble Subtly cobbled finish made with colourfast UV resistant materials for vibrant, durable and lasting colours.

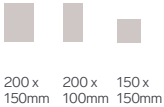
Xflo HomePave Smooth As-cast finish with square edges which is made with colourfast UV resistant materials for vibrant, durable and lasting colours.

DEPTHS



60 | 80
Millimetres

FINISHES



Xflo Plaza 'Salt'

Profiles not to scale

Xflo Permeable Paving Solution

standard surface, granite surface and subtly cobbled surface high speed flow, permeable paving blocks



-  Abrasion Resistant
-  Frost Resistant
-  Pedestrian Use
-  Light Traffic
-  Heavy Traffic (80mm)
-  Available in permeable (Xflo)
-  Machine Lay available

Enduur 1

Xflo Plaza

STOCK INFORMATION

Standard Product Depth	Size (mm)	In Stock	Available colours	m ² per pack	Units per m ²	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry	Machine Lay available
Xflo Plaza Machine Lay available											
<div>60mm</div>	<div></div> 200 x 150	MTO	Salt / Pepper / Birkes / Lakrids / Safran / Kanel / Sesam / Flaxen	12.6	33	420	4.01	1.69	9	IRE 13 / GB 16	No
	<div></div> 200 x 100	MTO	Salt / Pepper / Birkes / Lakrids / Safran / Kanel / Sesam / Flaxen	12.48	50	624	2.6	1.8		15	No
	<div></div> 150 x 150	MTO	Salt / Pepper / Birkes / Lakrids / Safran / Kanel / Sesam / Flaxen	12.6	44	560	3.02	1.69	9	IRE 13 / GB 16	No
<div>80mm</div>	<div></div> 200 x 100	MTO	Salt / Pepper / Birkes / Lakrids / Safran / Kanel / Sesam / Flaxen	9.6	50	480	3.55	1.65	10	16	Yes
	<div><div>mixed 2 size pack</div><div></div> 255 x 170</div>	MTO	Salt / Pepper / Birkes / Lakrids / Safran / Kanel / Sesam / Flaxen	9.75	mixed	270 135 of each size		1.75	9	15	Yes
	<div></div> 170 x 170						5.3				
Xflo HomePave											
<div>60mm</div>	<div></div> 200 x 150	Yes	Auburn Cobble / Cove Cobble / Ash Cobble	12.6	33	420	4.01	1.69	9	IRE 13 / GB 16	No
		MTO	Auburn Smooth / Cove Smooth / Ash Smooth								
	<div></div> 150 x 150	Yes	Auburn Cobble / Cove Cobble / Ash Cobble	12.6	44	560	3.02	1.69	9	IRE 13 / GB 16	No
	MTO	Auburn Smooth / Cove Smooth / Ash Smooth									
<div>80mm</div>	<div></div> 200 x 150	MTO	Auburn Cobble / Auburn Smooth / Cove Cobble / Cove Smooth / Ash Cobble / Ash Smooth	9	32	300	5.33	1.6	10	IRE 14 / GB 16	No
Xflo Rectangular Machine Lay available for 80mm only											
<div>60mm</div>	<div></div> 200 x 100	MTO	Brindle / Slate / Natural Grey	12.48	50	624	2.66	1.7	9	15	No
<div>80mm</div>	<div></div> 200 x 100	MTO	Brindle / Slate / Natural Grey	9.6	50	480	3.55	1.65	10	16	Yes

MTO: Made To Order (minimum order quantities: 250m² per colour / size. Orders below these quantities should be priced on application). Information for a specific colour / depth is available on request from our Technical Specification Department.

Enduur 1

Xflo Plaza

Enhanced surface colour and reduced efflorescence.

Enhanced mix which increases strength, resistance to wear and tear, longevity and vibrance.

70% less embodied carbon per % of cement replaced.

Helps prevent moss and algae growth and deep staining.

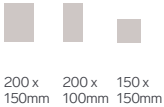
FORMATS, FINISHES + DEPTHS

DEPTHS



60 | 80
Millimetres

FINISHES



STANDARDS + PERFORMANCE

Product Type

Standard surface, granite surface and subtly antiqued surface high speed flow, permeable paving blocks

Manufactured to Surface Layer

Durable and hard wearing with a minimum surface layer of 4mm (Rectangular), 8mm (Plaza / HomePave).

Granite Content Efflorescence

Granite (Plaza) + premium quartz aggregate in surface layer. State-of-the-art factory controlled vapour curing significantly reduces this naturally occurring chemical reaction.

Tensile Splitting Strength

>3.6Mpa. This pressure applies to all sizes and depths For specific force performance on a given size or depth please contact our Technical Specification Department.

Installed to

BS 7533-4:2006 / BS 7533-3:2005 + A1:2009 / BS 7533-13:2009

NBS Plus

Q24 110

SUSTAINABILITY

BES 6001

Responsible Sourcing of Concrete Products (Rating: Very Good)

Energy Use

100% renewable

Water Used

90% recycled water

Recyclable

100% of this product can be recycled

Manufacturing

Produced in the UK using responsibly sourced materials

Non-Primary Materials

61 – 70% (Rectangular)

52 – 60% (Plaza / HomePave)

Waste Wood + Plastic

100% recycled

BREEAM

60mm: A Rating – according to the Green Guide to Specification 4th edition 2009. A+ Rating can be achieved when used in conjunction with a prepared recycled sub-base

80mm: B Rating – according to the Green Guide to Specification 4th edition 2009. A Rating can be achieved when used in conjunction with a prepared recycled sub-base.



MANUFACTURING

Xflo Rectangular (smooth finish) is manufactured from locally sourced premium aggregates. The unique colours are obtained using the latest computerised mixing system, creating a spectrum of 3 and 4 colour blends. Xflo Plaza is manufactured from specially selected granite aggregates. Xflo HomePave is manufactured from high grade locally sourced aggregates. Its colour blends are obtained by using the latest computerised mixing systems. Xflo HomePave Smooth is an as-cast finish with square edges. Xflo HomePave Cobble is made using new state-of-the-art manufacturing facilities which create the subtly cobbled finish. PLANT OF MANUFACTURE: Made at our Toome production plant.

CERTIFICATION

BES 6001

Responsible Sourcing of Concrete Products (Rating: Very Good)

ISO 9001

Quality Management.

ISO 14001

Environmental Management.

ISO 45001

Occupational Health and Safety Management.

CE Marking

Download our Declaration of Performance

(DOP) data at: www.ag.uk.com/resources

Kerbs



ARCHITECTURAL KERBS

Kerbs



TerraKerb®	192
Bullnose Kerb Setts	200
Mile Stone	206



**NEW RECONSTITUTED NATURAL AGGREGATE KERBS +
PREMIUM RECONSTITUTED NATURAL GRANITE KERBS**

TerraKerb®

**AG now has two ranges of
TerraKerb®reconstituted kerbs.**

Our newest TerraKerb® range is made using reconstituted 'natural aggregates' – now available in Silver.

While our premium range of TerraKerb® is made using the finest 'granite aggregates' – available in Pearl and Onyx. TerraKerb® kerbs are a high quality option for both commercial and domestic projects.

With an exposed textured aggregate surface adding a premium appearance to any project, TerraKerb® makes an excellent alternative to natural stone kerbing. It's a great first choice or a cost-effective value engineering option.

TerraKerb® is available as a square edged kerb and perfectly complements our full range of paving and flags.



TerraKerb®

- | | |
|--|---|
| 1 TerraKerb® Premium Pearl, <i>London</i> | 4 TerraKerb® Premium Pearl, <i>Co. Wicklow</i> |
| 2 TerraKerb® Premium Pearl, <i>Killarney</i> | 5 TerraKerb® Premium Pearl (mitred), <i>Ballygawley</i> |
| 3 TerraKerb® Premium Pearl, <i>Enniskillen</i> | 6 TerraKerb® Premium Pearl, <i>Co. Wicklow</i> |



TerraKerb®

premium reconstituted natural granite kerbs



STOCK INFORMATION

Standard Product Length	Height (mm)	Depth (mm)	Length (mm)	Height (in)	Depth (in)	Length (in)	Radius (mm)	Radius (in)	In Stock	Colours Available	Lm. per pack	Units per Lm	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
Square Edge Kerbs																	
<div>900mm</div>	200	100	900	8	4	35.4	N/A	N/A	MTO	Pearl / Onyx	27	1.11	30	41	1.230	12	IRE 18 / GB 22
	255	125	900	10	5	35.4	N/A	N/A	MTO	Pearl / Onyx	21.6	1.11	24	66	1.584	11	IRE 15 / GB 18
	255	203	900	10	8	35.4	N/A	N/A	MTO	Pearl / Onyx	27	1.11	15	107	1.605	12	IRE 18 / GB 22

Information for a specific colour / depth is available on request from our Technical Specification Department.
MTO: Made To Order (minimum order quantities apply).
*The short edge is 150mm in height.

COLOURS



PEARL



ONYX

Enduur 1

Enhanced surface colour and reduced efflorescence.
Enhanced mix which increases strength, resistance to wear and tear, longevity and vibrance.
70% less embodied carbon per % of cement replaced.
Helps prevent moss and algae growth and deep staining.

MANUFACTURING

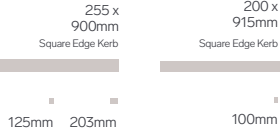
Manufactured in our state-of-the-art dry press system using only premium granite aggregates, the textured surface is exposed by our controlled shot blasting process. PLANT OF MANUFACTURE: Made at our Fivemiletown production plant.

CERTIFICATION

ISO 9001 Quality Management.
ISO 14001 Environmental Management.
ISO 45001 Occupational Health and Safety Management.
CE Marking Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources

FORMATS + DEPTHS

DIMENSIONS



DEPTHS

PROFILES

- Square Edge Kerb 200 x 100mm
- Square Edge Kerb 255 x 125mm
- Square Edge Kerb 255 x 203mm



Square Edge, Pearl

Profile not to scale

STANDARDS + PERFORMANCE

Product Type	Premium reconstituted natural granite kerbs
Manufactured to	hEN 1340:2003
Durability	Through mix provides a durable and hard wearing kerb with ease of maintenance
Granite Content	Not less than 40% natural granite and quartz aggregate
Bending Strength	>3.5Mpa
Slip / Skid Resistance	Extremely Low (>75 USRV Textured)
Installed To	BS7533-101
NBS Plus	Q10 110

SUSTAINABILITY

Energy Use	100% renewable
Water Used	100% recycled water
Recyclable	100% of this product can be recycled
Manufacturing	Produced in the UK using responsibly sourced materials
Waste Wood + Plastic	100% recycled
BREEAM	'A' Rating – in accordance with the BRE Green Guide to Specification. A+ Rating – when used with recycled sub-base.



TerraKerb®

reconstituted natural aggregate kerbs



STOCK INFORMATION

Standard Product Length	Height (mm)	Depth (mm)	Length (mm)	Height (in)	Depth (in)	Length (in)	In Stock	Colours Available	Lm. per pack	Units per Lm	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
Square Edge Kerbs															
914mm	255	125	914	10	5	36	Yes	Silver / Charcoal	14.624	1.094	16	69	1.104	14	22
914mm	150	50	914	6	2	36	Yes	Silver / Charcoal	36.56	1.095	40	16	0.64	25	37
Dropper Kerbs															
Dropped Kerb	150	125	914	6	5	36	MTO	Silver / Charcoal	14.624	1.094	16	40	0.64	25	37
Left Hand Dropper	150	125 x 255	900	6	5 x 10	35	MTO	Silver / Charcoal	14.624	1.094	16	54	0.864	16	29
Right Hand Dropper	150	125 x 255	900	6	5 x 10	35	MTO	Silver / Charcoal	14.624	1.094	16	54	0.864	16	29
Radius Kerbs															
1m	255	125	780	10	5	31	MTO	Silver / Charcoal	N/A	N/A	16	56	0.896	16	26
3m	255	125	780	10	5	31	MTO	Silver / Charcoal	N/A	N/A	16	56	0.896	16	26
6m	255	125	780	10	5	31	MTO	Silver / Charcoal	N/A	N/A	16	56	0.896	16	26
10m	255	125	780	10	5	31	MTO	Silver / Charcoal	N/A	N/A	16	56	0.896	16	26
Corners															
External 90°	305	305	255	12	12	10	MTO	Silver / Charcoal	N/A	N/A	16	41	0.656		
Internal 90°	305	305	255	12	12	10	MTO	Silver / Charcoal	N/A	N/A	16	41	0.656		
Quadrant Kerbs															
305mm Radius	125	305	305	5	12	12	MTO	Silver / Charcoal	N/A	N/A	15	45	0.675		

Information for a specific colour / depth is available on request from our Technical Specification Department.
MTO – Made To Order (minimum order quantities apply).
N/A – Not Applicable

COLOURS



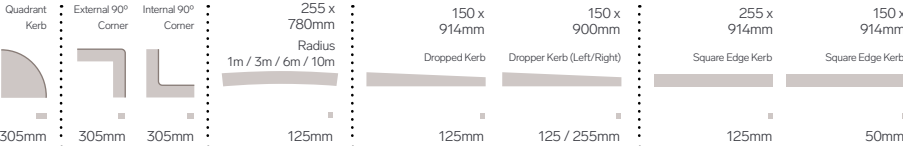
SILVER



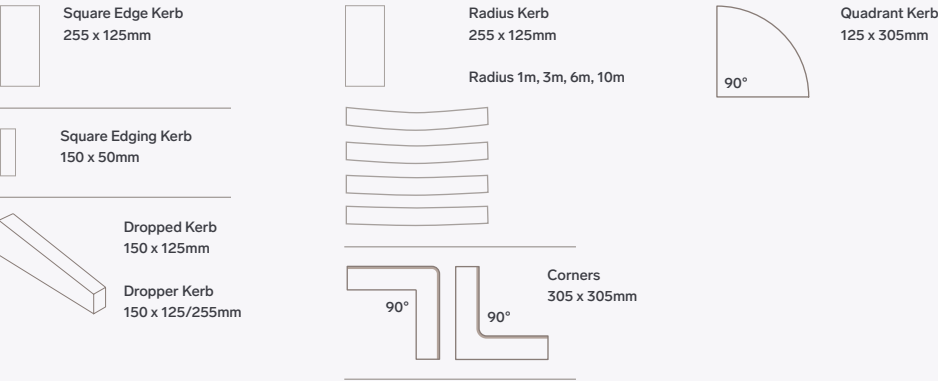
CHARCOAL

FORMATS + DEPTHS

DIMENSIONS
DEPTHS



PROFILES



STANDARDS + PERFORMANCE

Product Types Manufactured to Durability	Reconstituted natural aggregate kerbs hEN 1340:2003 Through mix provides a durable and hard wearing kerb with ease of maintenance
Bending Strength	Class 3 (characteristic bending strength of 6.7 MPa with no individual result less than 4.0 MPa) Class 4 - < 20mm (wide wheel abrasion test)
Abrasion Resistance Slip / Skid Resistance Tolerance on Work Dimensions	Extremely Low (USRV) Class 3 – thickness ± 3mm: plan size ±5mm, max difference on diagonals 2.5mm on < 850mm & 4mm> 850mm Class 2 - < 6.0 as a percentage by mass Class 2 - < 1.0 as a mean with no individual result value > 1.5
Total Water Absorbtion Freeze/ Thaw Resistance	BS7533-101 Q10 110
Installed To NBS Plus	



SMOOTH KERB SETTS

Bullnose Kerb Setts

Bullnose Kerb Setts are available in a Slate colour in a Smooth finish to complement or contrast with our paving and flag products.

The smooth variant has a contemporary appearance that pairs well with our smooth and ground finish paving and flagstones.

Tough enough for both commercial and domestic settings, Bullnose Kerb Setts are dimensionally accurate and easily maintained. They can be used as a surround and riser for steps, and are suitable for curved areas. A full range of matching corner units are also available.



Bullnose Kerb Setts

smooth kerb setts

COLOUR



SLATE SMOOTH

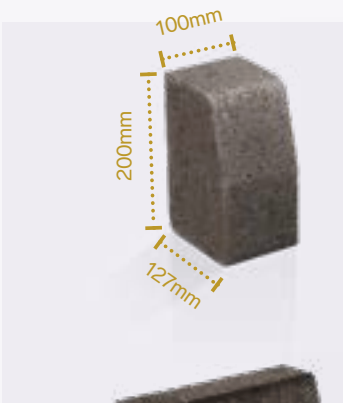
- Frost Resistant
- Pedestrian Use
- Light Traffic
- Heavy Traffic

FORMATS, FINISHES + DEPTHS

DEPTHS	FINISH	DIMENSIONS
 200 ^{HIGH} Millimetres	 Sm Smooth	 200 x 100mm  200 x 100mm  200 x 100mm

PROFILES

HIGH RISE
BULLNOSE
KERB SETT
200x127x100mm



UNIVERSAL
HIGH RISE
BULLNOSE CORNER
200x127x127mm



External



Internal

Turn the unit
upside down for
each alternate
profile



Bullnose Kerb Setts

smooth kerb setts



STOCK INFORMATION

Standard Product Length	Height (mm)	Depth (mm)	Length (mm)	Height (in)	Depth (in)	Length (in)	In Stock	Available colours + finishes	Lm. per pack	Units per Lm	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
Bullnose Kerb Sett	200	127	100	8	5	4	Yes	Slate Smooth	24	10	240	5.2	1.3	14	IRE 20 / GB 21
Universal High Rise Bullnose Corner	200	127	127	8	5	5	Yes	Slate Smooth	-	-	-	6	-	-	-

Information for a specific colour / depth is available on request from our Technical Specification Department.

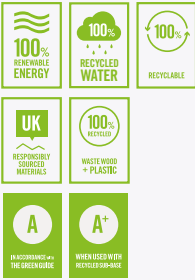
- Frost Resistant
- Pedestrian Use
- Light Traffic
- Heavy Traffic

STANDARDS + PERFORMANCE

Product Type	Smooth kerb setts
Manufactured to	hEN 1340:2003
Durability	Through mix provides a durable and hard wearing kerb with ease of maintenance.
Granite Content	Not less than 40% natural granite and quartz aggregate
Installed To	BS7533-101
NBS Plus	Q10 150

SUSTAINABILITY

Energy Use	100% renewable
Water Used	100% recycled water
Recyclable	100% of this product can be recycled
Manufacturing	Produced in the UK using responsibly sourced materials
Waste Wood + Plastic	100% recycled
BREEAM	'A' Rating – in accordance with the BRE Green Guide to Specification. (A+ Rating – when used with recycled sub-base)



MANUFACTURING

Manufactured from high grade locally sourced aggregates. Colour blends are obtained by using the latest computerised mixing systems. PLANT OF MANUFACTURE: Made at our Fivemiletown production plant.

CERTIFICATION

ISO 9001	Quality Management.
ISO 14001	Environmental Management.
ISO 45001	Occupational Health and Safety Management.
CE Marking	Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources



TRADITIONAL RUMBLED UNITS FOR KERBING + WALLING

Mile Stone

Mile Stone has a charming weathered appearance and is ideal when forming steps, small walls and raised areas.


Available in Cashel and Slate colours that will complement or contrast our full range of paving and flags, Mile Stone is an ideal choice when building small walls up to 0.56m (1.8ft) in height when laid flat.

Mile Stone is extremely popular with layers and building contractors – it can be used for decorative kerbing around driveways, paths and as dwarf walls and upstands to give definition to planted areas. It's also perfect as a surround and riser for steps.



Mile Stone

traditional rumbled units for kerbing + walling

-  Frost Resistant
-  Pedestrian Use
-  Light Traffic
-  Heavy Traffic

COLOURS



CASHEL



SLATE

FORMATS, FINISHES + DEPTHS

DEPTHS



80
Millimetres

FINISH



Rumbled

DIMENSIONS



200 x
150mm

PROFILES

Mile Stone Supplied with a rumbled edge as standard.

KERBING



FLAT:
L 200 x D 150 x H 80mm



UPRIGHT:
L 200 x D 80 x H 150mm

WALLING

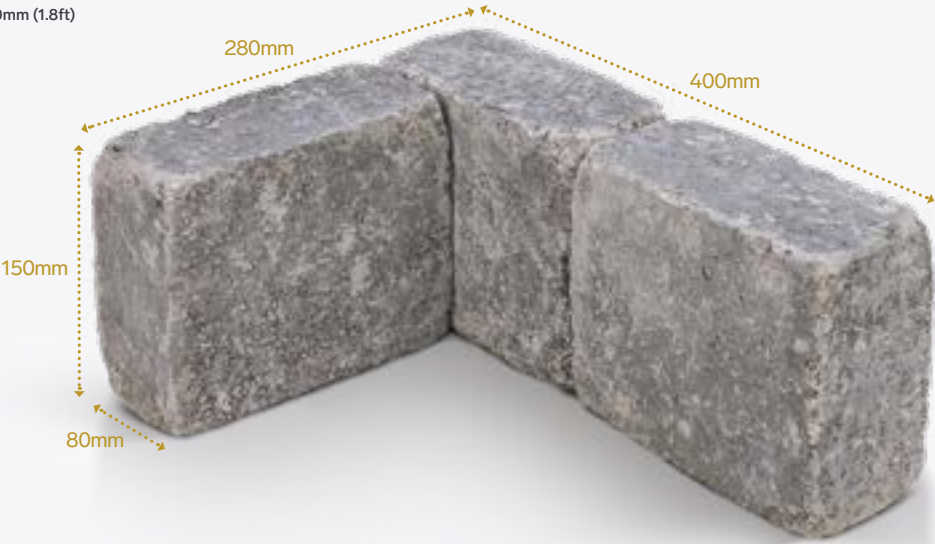
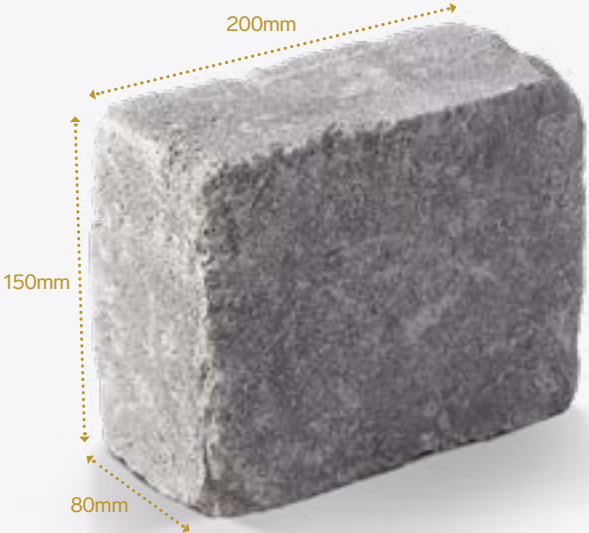


FLAT ONLY:
L 200 x D 150 x H 80mm

We recommend that Mile Stone is not laid upright for walling as it might not be structurally sound.

A suitable concrete adhesive should be used to affix Mile Stone units together.

Maximum wall height when laid flat with 200 x 80mm front face = 7 courses / 560mm (1.8ft)




Mile Stone

traditional rumbled units for kerbing + walling



STOCK INFORMATION

Standard Product Depth	Length (mm)	Depth (mm)	Height (mm)	Length (in)	Depth (in)	Height (in)	In Stock	Available colours	m² per pack (wall)*	Lm per pack (kerb)**	Units per m² (wall)*	Units per Lm (kerb)	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
80mm 	200	80	150	8	3	6	Yes	Cashel / Slate	FLAT ONLY 3.84	48	FLAT ONLY 62.5	5	240	5.3	1.26	8	IRE 20 / GB 22

*Mile Stone walling can only be laid flat: L 200 x D 150 x H 80mm.
** Based on a single row when used as kerbing. Mile Stone kerbing can be laid flat or upright: UPRIGHT: L 200 x D 80 x H 150mm / FLAT: L 200 x D 150 x H 80mm.
Maximum wall height when laid flat with 200 x 80mm front face = 7 courses / 0.56m.
A suitable concrete adhesive should be used to affix Mile Stone units together.

- 
Frost Resistant
- 
Pedestrian Use
- 
Light Traffic
- 
Heavy Traffic

FORMATS, FINISHES + DEPTHS

DEPTHS



80
Millimetres

FINISH



Rm
Rumbled

DIMENSIONS



200 x
150mm

STANDARDS + PERFORMANCE

Product Type	Traditional rumbled units for kerbing + walling
Manufactured to	hEN 1338:2003
Durability	Through mix provides a durable and hard wearing kerb / walling unit
Tensile Splitting Strength	>3.6Mpa
Installed To	BS7533-101
NBS Plus	Q10 150

SUSTAINABILITY

Energy Use	100% renewable
Water Used	100% recycled water
Recyclable	100% of this product can be recycled
Manufacturing	Produced in the UK using responsibly sourced materials
Waste Wood + Plastic BREEAM	100% recycled 'A' Rating – in accordance with the BRE Green Guide to Specification. (A+Rating – when used with recycled sub-base)



MANUFACTURING

Manufactured from high grade locally sourced aggregates. Its unique three colour blends are obtained by using the latest computerised mixing systems. PLANT OF MANUFACTURE: Made at our Fivemiletown production plant.

CERTIFICATION

ISO 9001	Quality Management.
ISO 14001	Environmental Management.
ISO 45001	Occupational Health and Safety Management.
CE Marking	Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources



Standard Kerbs

STANDARD KERBS

AG.UK.COM

Road Kerbs	214
Channel Kerbs	216
Radius + Quadrant Kerbs	218
Tall Wall Kerbs + Edging Kerbs	220

Standard Kerbs

212 | 213

Road Kerbs

hydraulically pressed kerb units

STOCK INFORMATION

Standard Product Length	Height (mm)	Depth (mm)	Length (mm)	Height (in)	Depth (in)	Length (in)	In Stock	Lm. per pack	Units per Lm.	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per wheeler	Packs per unit lorry
Bullnose Kerbs (Hydraulically Pressed)														
<div>915mm</div> <div>per kerb (half cut and third cuts also available)</div>	150	125	915	6	5	36		21.96	1.09	24	40	0.96	18	26
	150	150	915	6	6	36	Yes	19.2	1.09	21	48	1.008	18	26
	255	125	915	10	5	36		14.14	1.09	16	66	1.008	17	25
Half Battered Kerbs (Hydraulically Pressed)														
<div>915mm</div> <div>full kerb</div>	200	100	915	8	4	36	Yes	27.45	1.09	30	44	1.32	15	22
	150	125	915	6	5	36	Yes	21.9	1.09	24	40	0.96	18	26
	150	150	915	6	6	36		19.2	1.09	21	48	1.008	18	26
	255	125	915	10	5	36		14.6	1.09	16	66	1.008	17	25
	255	150	915	10	6	36		12.8	1.09	14	76	1.064	17	24
	300	150	915	12	6	36	MTO	12.8	1.09	14	96	1.344	12	18
<div>450mm</div> <div>half cut</div>	150	125	450	6	5	18	Yes	21.9	2.2	48	20	0.96	18	26
	150	150	450	6	6	18		19.2	2.2	42	24	1.008	18	26
	255	125	450	10	5	18		14.6	2.2	32	33	1.008	17	25
	255	150	450	10	6	18		12.8	2.2	28	30	1.064	17	24
	300	150	450	12	6	18	MTO	12.8	2.2	28	48	1.344	12	18
<div>305mm</div> <div>third cut</div>	150	125	300	6	5	12	Yes	21.9	3.3	72	13	0.96	18	26
	150	150	300	6	6	12		19.2	3.3	63	16	1.008	18	26
	255	125	300	10	5	12		14.6	3.3	48	22	1.008	17	25
	255	150	300	10	6	12		12.8	3.3	42	25.3	1.064	17	24
	300	150	300	12	6	12	MTO	12.8	3.3	42	32	1.344	12	18
Full Battered Kerbs (Hydraulically Pressed)														
<div>915mm</div> <div>full kerb</div>	255	125	915	10	5	36	Yes	14.6	1.09	16	63	1.008	19	28
	255	150	915	10	6	36		12.8	1.09	14	76	1.064	17	24
<div>450mm</div> <div>half cut</div>	255	125	450	10	5	18	Yes	14.6	2.2	32	31.5	1.008	19	28
	255	150	450	10	6	18		12.8	2.2	28	30	1.064	17	24
<div>300mm</div> <div>third cut</div>	255	125	300	10	5	12	Yes	14.6	3.3	48	21	1.008	19	28
	255	150	300	10	6	12		12.8	3.3	42	25.3	1.064	17	24
Left Hand Dropper Kerbs (Hydraulically Pressed)														
<div>915mm</div>	255	125	915	10	5	36	Yes	14.6	1.1	16	54	0.864	17	25
	255	150	915	10	6	36		12.8	1.1	14	65	0.910	17	24
Right Hand Dropper Kerbs (Hydraulically Pressed)														
<div>915mm</div>	255	125	915	10	5	36	Yes	14.6	1.1	16	54	0.864	17	25
	255	150	915	10	6	36		12.8	1.1	14	65	0.910	17	24

MANUFACTURING

Manufactured in our state-of-the-art production facilities using our own quarried aggregates. PLANT OF MANUFACTURE: Made at our Carryduff production plant.

CERTIFICATION

ISO 9001
ISO 14001
ISO 45001
CE Marking

Quality Management.
Environmental Management.
Occupational Health and Safety Management.
Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources

PROFILES

- 

Bullnose Kerb 150 x 125mm
- 

Bullnose Kerb 150 x 150mm
- 

Bullnose Kerb 255 x 125mm
- 

Half Batter Kerb 200 x 100mm
Gradient 13°
- 

Half Batter Kerb 150 x 125mm
Gradient 13°
- 

Half Batter Kerb 150 x 150mm
Gradient 13°
- 

Half Batter Kerb 255 x 125mm
Gradient 13°
- 

Half Batter Kerb 255 x 150mm
Gradient 13°
- 

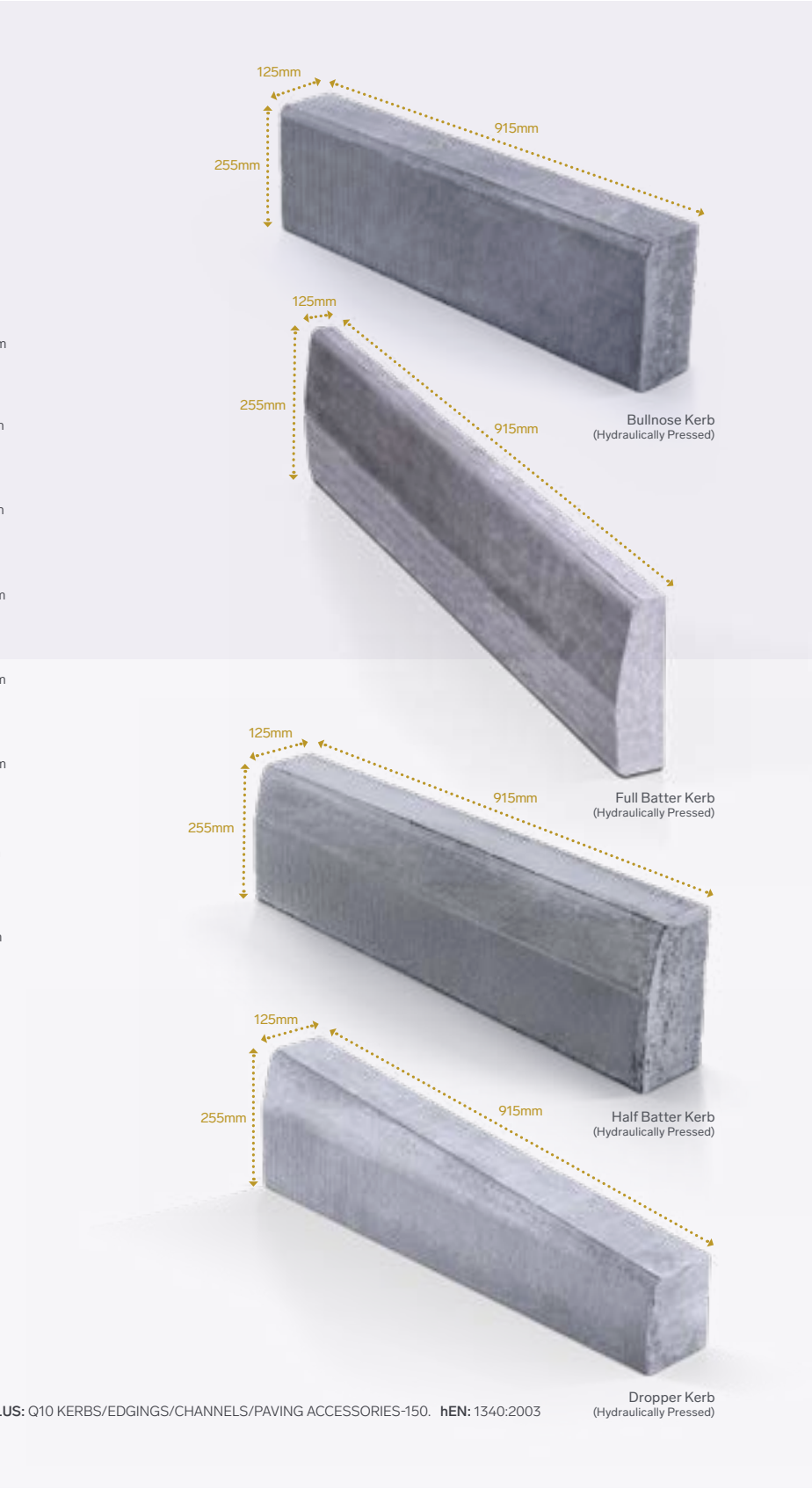
Half Batter Kerb 300 x 150mm
Gradient 13°
- 

Full Batter Kerb 255 x 125mm
Gradient 45°
- 

Full Batter Kerb 255 x 150mm
Gradient 45°
- 

Left Hand Dropper Kerb
- 

Right Hand Dropper Kerb



SPECIFICATION REFERENCE: NBS PLUS: Q10 KERBS/EDGINGS/CHANNELS/PAVING ACCESSORIES-150. hEN: 1340:2003

Channel Kerbs

water channel kerb units

FORMATS,
FINISHES +
DEPTHS

FINISH

Sm

Smooth

DIMENSIONS

255 x

915mm

heavy duty

DEPTHS

125mm

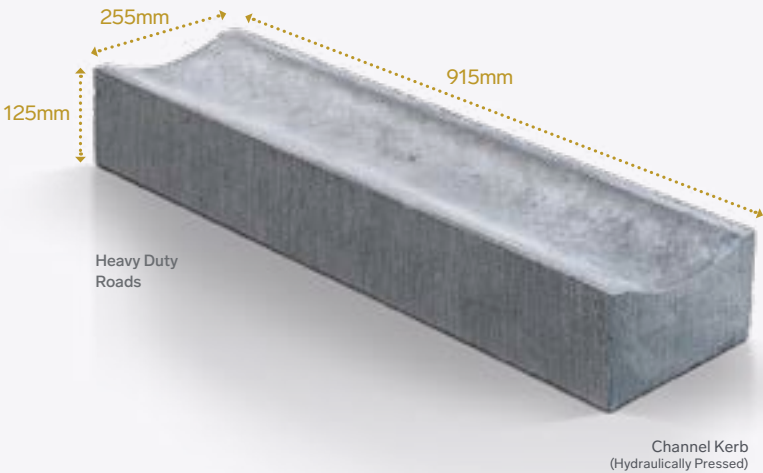
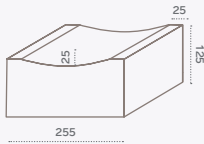
STOCK INFORMATION

Standard Product Length	Height (mm)	Depth (mm)	Length (mm)	Height (in)	Depth (in)	Length (in)	In Stock	Colours Available	Lm. per pack	Units per Lm.	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
915mm Heavy duty (roads)	255	125	915	10	5	36	Yes	Grey	12.8	1.1	14	65	0.910	19	28

MTO: Made To Order (minimum order quantities apply).

PROFILES

Heavy Duty Drainage Kerb



Frost Resistant



Pedestrian Use



Light Traffic



Heavy Traffic

SPECIFICATION REFERENCE: NBS PLUS: Q10 KERBS/EDGINGS/CHANNELS/PAVING ACCESSORIES -150 hEN: 1340:2003

MANUFACTURING

Manufactured in our state-of-the-art system using locally based quarried aggregates and is hydraulically pressed.
PLANT OF MANUFACTURE: Made at our Carryduff production plant.

CERTIFICATION

ISO 9001 Quality Management.
ISO 14001 Environmental Management.
ISO 45001 Occupational Health and Safety Management.
CE Marking Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources

Radius + Quadrant Kerbs

wet cast radius + quadrant kerb units

STOCK INFORMATION

Standard Product Length		Height (mm)	Depth (mm)	Length (mm)	Radius (mm)	Height (in)	Depth (in)	Length (in)	Radius (ft)	In Stock	Available Colours	Lm. per pack	Units per Lm.	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
Quadrant Kerbs																		
External 180° Double Solid Quadrant half circle		255	305	610	715	10	12	24	2.3	Yes	Grey	N/A	-	-	86	-	-	-
External 90° Solid Quadrant quarter circle		255	305	305	358	10	12	12	1.2	Yes	Grey	N/A	-	-	43	-	-	-
Radius Kerbs																		
External Radius Quadrant 90°		255	125	450	450	10	5	18	1.5	Yes	Grey	-	-	-	48	-	-	-

MTQ: Made To Order (minimum order quantities apply).

SPECIFICATION REFERENCE: NBS PLUS: Q10 KERBS/EDGINGS/CHANNELS/PAVING ACCESSORIES -150 BS EN: 1340:2003

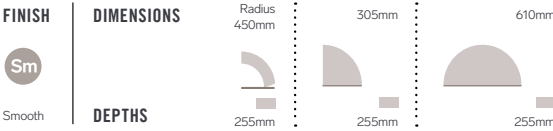
MANUFACTURING

Manufactured using locally based quarried aggregates.
Wet cast. PLANT OF MANUFACTURE: Made at our Carryduff Production Plant.

CERTIFICATION

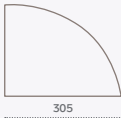
ISO 9001 Quality Management.
ISO 14001 Environmental Management.
ISO 45001 Occupational Health and Safety Management.
CE Marking Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources

FORMATS, FINISHES + DEPTHS



PROFILES

Plan



Elevation



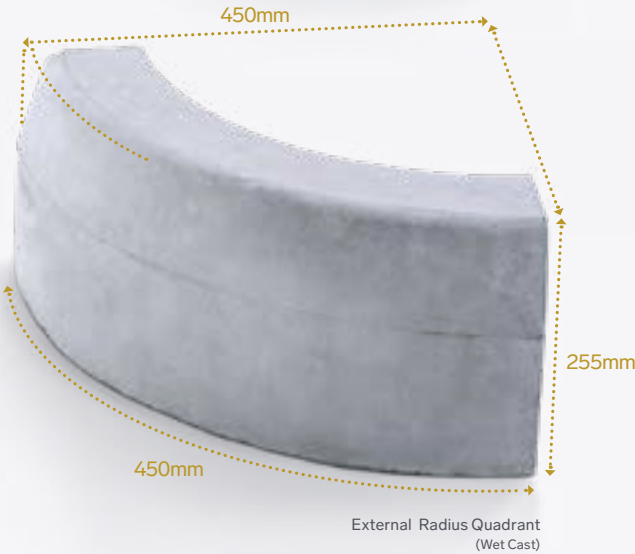
Solid Quadrant



Double Solid Quadrant






Radius Kerb



Tall Wall + Edging Kerbs

decorative wet cast + hydraulically pressed
moulded edging kerb units

STOCK INFORMATION

Standard Product Length	Height (mm)	Depth (mm)	Length (mm)	Height (in)	Depth (in)	Length (in)	In Stock	Colours Available	Lm. per pack	Units per Lm.	Units per pack	Unit weight (kg)	Weight per pack (t)	Packs per 8 wheeler	Packs per unit lorry
Flat Top Kerbs															
	150	50	915	6	2	36	Yes	Grey	54.9	1.1	60	17	1.008	18	26
	150	75	915	6	3	36		Grey	30.5	1.1	42	24	1.024	21	30
	200	75	915	8	3	36		Grey	38.4	1.1	42	32	1.344	13	19
Round Top Kerbs															
	150	50	915	6	2	36	MTO	Grey	54.9	1.1	60	17	1.008	18	26
	150	75	915	6	3	36		Grey	30.5	1.1	42	24	1.024	21	30
Tall Wall Kerbs															
	600	70	900	23.6	2.7	36	Yes	Grey (Pressed)	13.5	1.1	15	90	1.320	14	20
	380	90	915	15	3.6	36		Grey (Wet Cast)	11	1.1	12	66	0.792	20	30

MTO: Made To Order (minimum order quantities apply).

SPECIFICATION REFERENCE: NBS PLUS: Q10 KERBS/EDGINGS/CHANNELS/PAVING ACCESSORIES -150 hEN: 1340:2003

MANUFACTURING

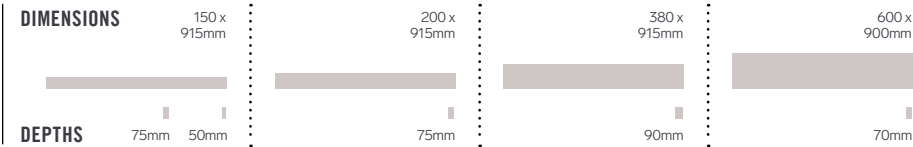
Manufactured from locally based quarried aggregates.
Wet cast: Flat Top / Round Top / 380mm Tall Wall Kerbs. Hydraulically Pressed: 600mm Tall Wall Kerbs
PLANT OF MANUFACTURE: Made at our Carryduff production plant.

CERTIFICATION

ISO 9001
ISO 14001
ISO 45001
CE Marking

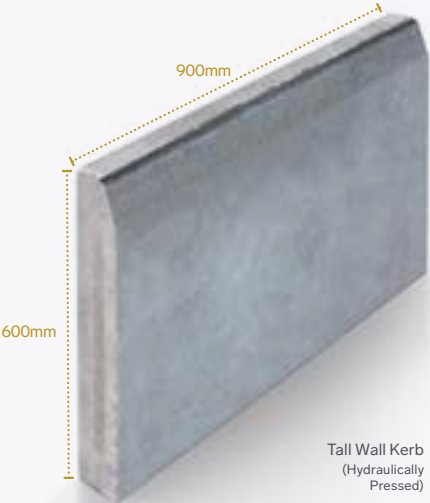
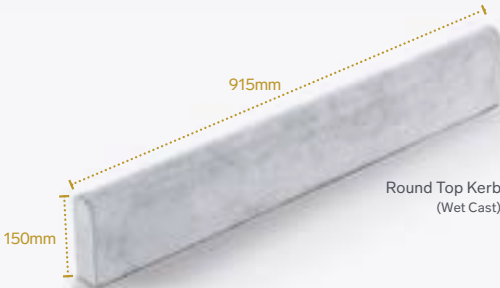
Quality Management.
Environmental Management.
Occupational Health and Safety Management.
Download our Declaration of Performance (DOP) data at: www.ag.uk.com/resources

FORMATS, FINISHES + DEPTHS



PROFILES

- Round Top Kerb
- Square Top Kerb
- Tall Wall Kerb 380 x 90mm Gradient 24°
- Tall Wall Kerb 600 x 70mm Gradient 24°



- Frost Resistant
- Pedestrian Use
- Light Traffic
- Heavy Traffic

STEPS + RAMPS

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STEP TECHNICAL GUIDANCE

Designing Steps

Step details are fast becoming more important in all projects, both in terms of visual appeal and, more importantly, safety. AG have been supplying step products for many years and through investment continue to find new and innovative concrete solutions in this area.

When designing external step details designers need to refer to UK Building Regulations Part M 2004 or Ireland Building Regulations TGD M 2010, Part M Access and Use which detail what is required for compliance. Additional guidance may be taken from the **Design of an accessible and inclusive built environment BS 8300:2018**:

“Those involved in the design and construction of a building may be required by the relevant building authority to provide such evidence as is necessary to establish that the requirements of the Building Regulations are being complied with”.

1 Hazard Warning Locations

Part M of the Building Regulations gives guidance on the use of hazard warning flags to facilitate the safety of persons with impaired vision when approaching changing levels in stepped areas.

The use of a corduroy hazard warning surface is a requirement that must be installed at both the top and bottom landing areas to provide advance notice of a change in levels. The hazard warning landing area when approached straight must be 800mm and set-back 400mm from the front edge of the steps whilst extending 400mm either side of the actual step width.

2 Step Dimensions of Tread + Riser

In line with Part M, the dimensions of step details are generally consistent with the rise of each step measuring between 150mm and 170mm whilst the tread is between 280mm and 450mm. These dimensions give consistency to all users thereby reducing the injury risks associated with step details.

3 Visual Contrast Strips

Part M of Building Regulations states that “all nosings are made apparent by means of a permanent contrasting material 55mm wide on both tread and rise”. When ascending or descending a flight of stairs the ability to distinguish between the individual treads and risers is essential, particularly for those who are partially sighted. Contrasting strips of a slip resistant material must be inserted along the full width of the steps both on the tread and riser. The inserted strips should ideally measure between 50-65mm in width from the front of the step on the tread and 30-55mm from the top of the riser. In accordance with Building Control technical booklet ‘H’ October 2012.

4 Slip / Skid Resistance

Safety underfoot and reducing the risk of slip / skid is as important for step details as it is for paved areas. AG provide a range of step details which have a low slip / skid resistance and comply with all the various testing procedures including PTV, USRV and R rating. Flags are available within the range for use in locations of changing levels. Contact AG Specification Department for further information. See slip / skid information for more detail.

5 LRV – Light Reflective Values

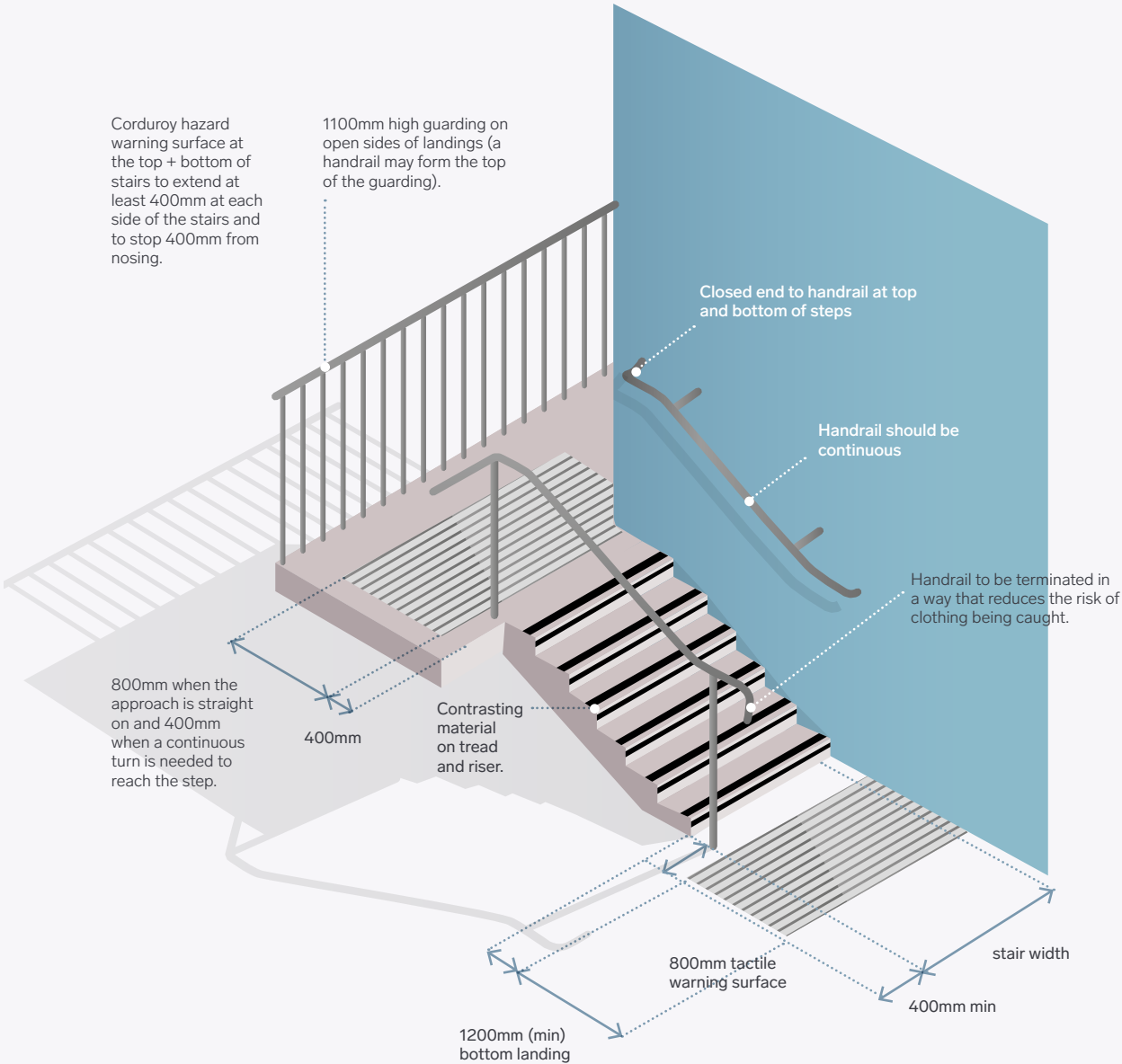
LRV is the total quantity of visible light reflected by a surface at all wavelengths and directions when illuminated by a visible light source. For persons with adequate vision, differences in the nature or the intensity of colour provide enough visual contrast. Unfortunately this is not the case for all people who are visually impaired. The main feature of a surface which appears to be strongly correlated with the ability of visually impaired people to identify differences in colour is the LRV. Differences in LRV can be used to assess the degree of visual contrast between surfaces of paving, walling, masonry and any surrounding surface.

LRV is scaled from 0, which is deemed absorbing and could be assumed to be totally black, up to 100 which may be reflective and perfectly white. For the purposes of practical influence in any application black is always greater than 0 and white never equals 100. To comply, in most cases, a difference of more than 30 points or more allows a degree of variability to provide reasonable visual contrast. This visual contrast and compliance with Part M is achieved when the difference in LRV is greater than 30 points. AG have a large selection of paving units and step details tested which comply with Part M of Building Regulations.

6 Solar Reflectance Values

Solar reflectance is becoming increasingly common in paving specification and AG can provide information in request. Contact the specification technical department for more information.

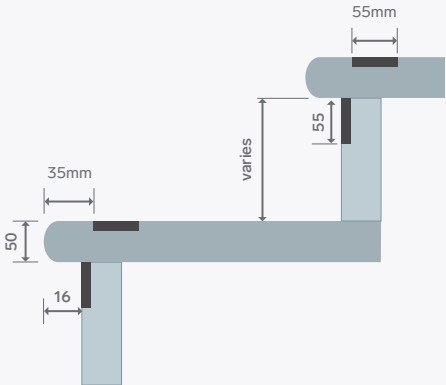
KEY PERFORMANCE COMPONENTS + DESIGN CONSIDERATIONS.



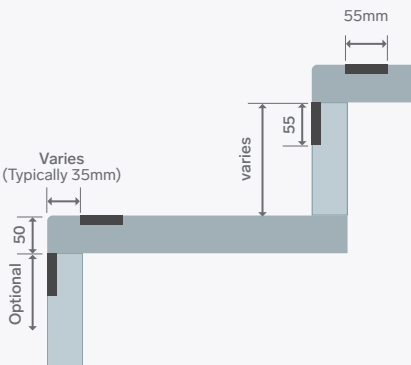
STEP PROFILES

There are multiple profile options available using a large selection of products from the TerraPave® flagstone range. Additionally you can consider our TerraKerb® or small block kerb formats.

BULLNOSE STEPS



SQUARE EDGE STEPS



Frost Resistant



Pedestrian Use

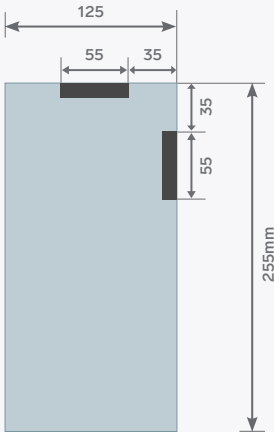
FIAMMA FLAGSTONES

Premium flamed effect, granite aggregate flagstones.
See page 20 for colours.



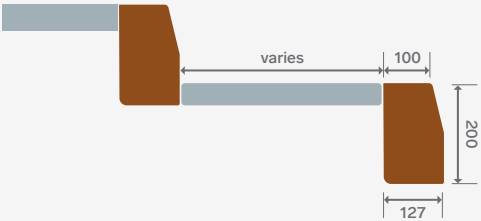
STEP PROFILES

TERRAKERB® HIGH STEP UNIT



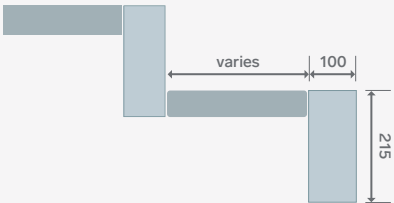
SMALL BLOCK BULLNOSE KERB EDGE

Bullnose Kerb Sett finish



SMALL BLOCK SQUARE KERB EDGE

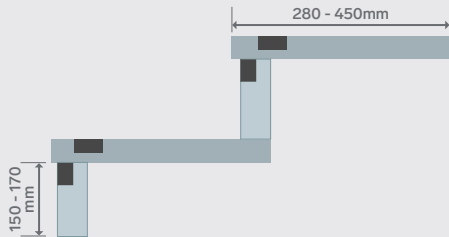
Mile Stone® finish



TERRAKERB® LOW STEP UNIT



VISUAL CONTRAST STRIPS



Frost Resistant



Pedestrian Use

Steps

surface finish options

BULLNOSE STEPS + VISUAL CONTRAST STRIPS



FIAMMA
See page 20 for colours

SQUARE EDGE + VISUAL CONTRAST STRIPS



FIAMMA
See page 20 for colours

-  Frost Resistant
-  Pedestrian Use
-  Light Traffic
-  Heavy Traffic

TERRAKERB®



TERRAKERB®
See page 192 for more information

SMALL BLOCK BULLNOSE



BULLNOSE KERB SETTS
See page 200 for more information

SMALL BLOCK SQUARE



MILE STONE KERBS
See page 206 for more information

Custom made step units

Incorporating contrast strips to your requirements

Please contact our Technical Specification Department if you are interested in specifying such products.

Steps

- 1

Tread: Country Cobble® Cashel paving + Setts Slate.
Riser: Mile Stone Slate kerbing, *Private*
- 2

Tread: Canterra® Silver flagstones with Plaza Pepper edging.
Riser: Bullnose Kerb Setts Slate Smooth, *Private*
- 3

Tread: TerraPave® Sorrento Ground flagstones with Country Cobble® Slate edging. Riser: Bullnose Kerb Setts Slate Smooth,, *Private*
- 4

Tread: Country Cobble® Burren + Slate paving.
Riser: Anchor® Bayfield® corner block, Canelletto, *Private*
- 5

Steps: Fiamma Alba flagstones with Milazzo strips, *Co Cork*
- 6

Tread: Long Stone paving, Fiammata with Plaza Pepper edging. Riser: Mile Stone Slate kerbing, *Gilford*
- 7

Steps: Plaza Salt flagstones with Pepper strips, *Belfast*
- 8

Tread: TerraPave® Verona Ground flagstones, *Private*



ADDITIONAL PRODUCTS + INFORMATION

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BEDDING DESIGN

Today's paving is not just about the performance of the surface material – it's a system, and the correct bedding and grout material are key to ensuring appearance, durability and longevity for a successful project. To ensure AG paving meets expectations we are delighted to offer concept design advice and solutions on high performance bedding and joint detail. Please note all information must be approved by a qualified engineer before use on site.

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BOUND / RIGID BEDDING CONSTRUCTION

AG Plaza 80mm paving installed on a Type B bedding mortar on a porous asphalt structural layer.

Bound / Rigid Construction

As the name implies, a Bound construction is where all elements from surface paving to the structural slab are bonded / bound together. Projects having to cope with high volumes of traffic, both vehicular and pedestrian, as well as needing to remain easy to maintain and clean, should consider this design. The paving should only be laid in an engineer- designed specification using high performance BS 7533-101:2021 compliant bedding and grouting mortars.

Bedding Mortars Suitable for Bound Design

The bedding layer should be a natural polymer and additive-free dry Type B mortar which mixes with specially selected aggregate and water. The mortar is a mix of specialist bedding powder and minimum 70% crushed igneous rock to comply with BS 7533-101:2021.

The unique angular and interlocking structure of the aggregate creates strength, flexibility and elasticity, thereby meeting BS 7533-101:2021 compliance requirements, allowing water to pass through and ensuring it is not prone to frost attack after curing. To assist the bond process it is advisable to prime both the paving and structural slab with a recommended primer. Type B bedding mortar has a minimum >30N strength. There are also Type A mortars which have a lower performance and may not suit all performance criteria. Both the slab and flags will need to be primed using a quality primer to ensure a complete bond across all layers.



AG paving unit with 8mm cured grout mortar

1

BS 7533-101:2021 approved porous bedding mortar

2

Structural slab

3



Correctly cured Bound bedding design

The mortar is clearly porous and allows water movement.



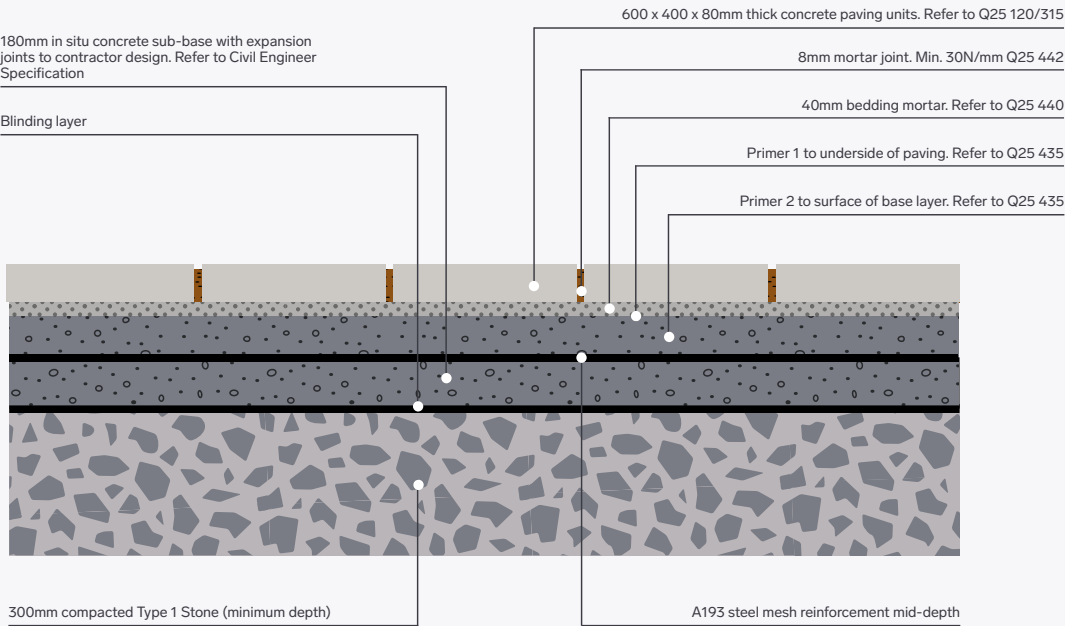
Incorrectly cured Bound bedding design

Here the water cannot move and will be absorbed leaving the design and system prone to frost attack.



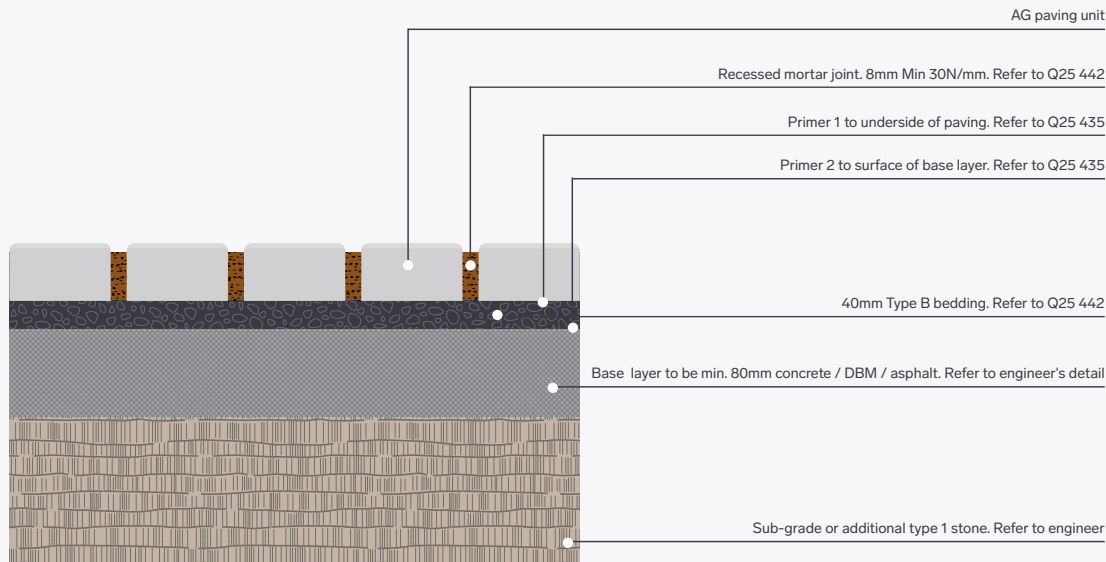
Typical Bound Concept Designs for Pedestrian + Vehicular Traffic

Pedestrian Footways + Vehicular Trafficked Areas
80-120mm Block / Flag Paving in Bound Design with Solid Joint



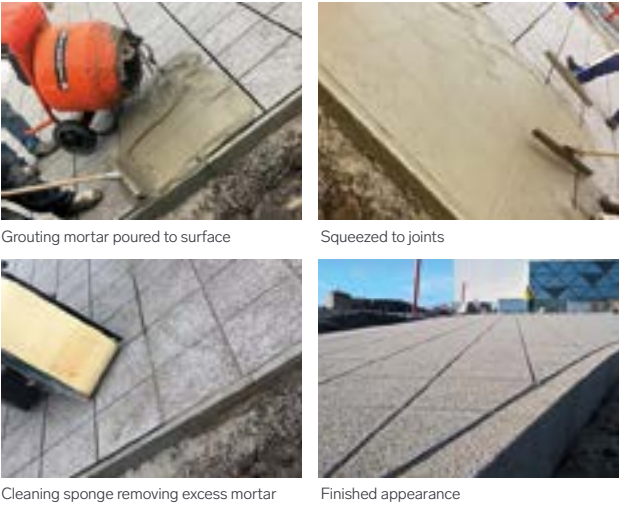
Paving Details

Pedestrian + Vehicular Trafficked Areas
80-120mm Block / Flag Paving in Bound Design with Solid Joint



Grouting of Joints in a Bound Design

A key requirement of any bound design is to ensure the joints are of the correct width and are filled top to bottom. All joints must be a minimum of 8 to 10mm to ensure the grout mortar can penetrate the full depth of the paving. This is a crucial part of the finished design as it ensures structural stability to the paving units by allowing the fine aggregates within the bedding mortar to fill the entire joint. Additionally, the quality of grout mortar should also be considered. It is advisable to use a polymer free mortar to minimise staining to the surface of the paving after application. Grout mortars are a 'slurry mix' which is squeezed into the joint - i.e. the use of poor quality mortars or incorrect application creates a risk of staining.



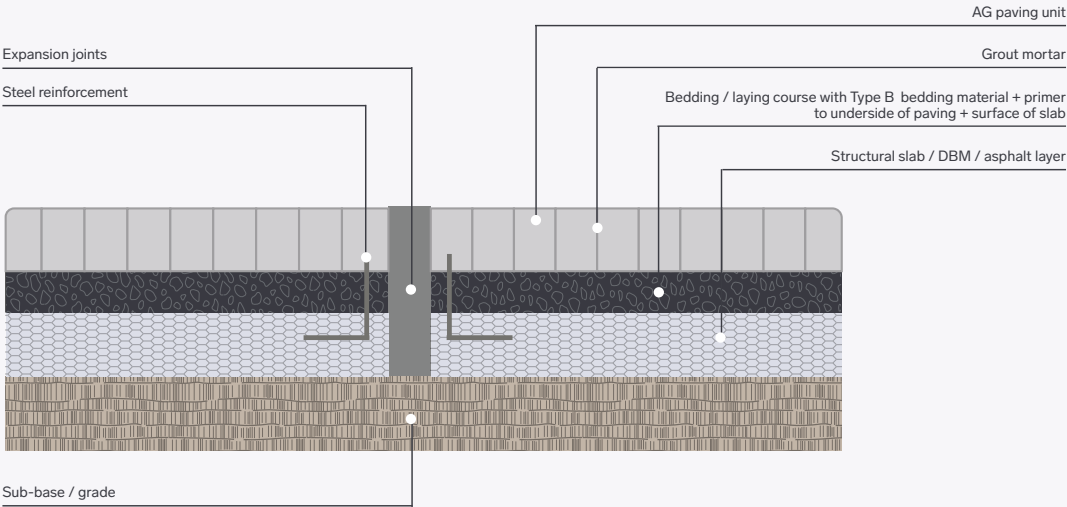


BOUND/RIGID KEY REQUIREMENTS

Expansion Joints in the Entire System

Within most bound designs the allowance for expansion joints will be key to long term performance. A bonded system of different materials will have different expansion and contraction rates and this

must be accounted for. The structural slab would normally be poured in 5m x 5m runs, and the expansion joints between each section must carry to the surface to ensure all sections interact together. So where there is an expansion joint in the slab this must be evident in the bedding layer and the paved surface. These areas / gaps are generally filled with a suitable water-proof silicone filler of similar colour to the grout. Additionally, consider expansion joints for areas where paving meets the building to minimise failure at a later stage.

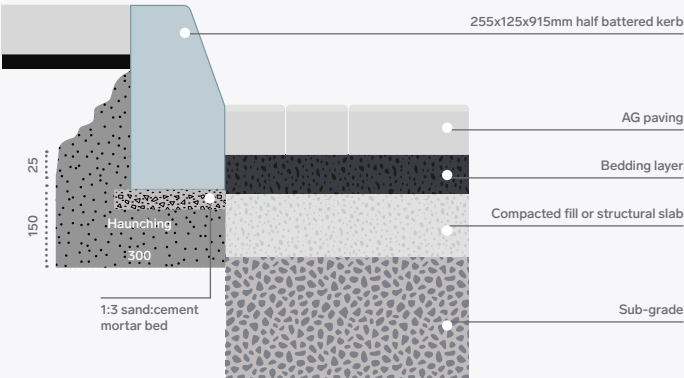


Edge Restraints in High Risk Locations

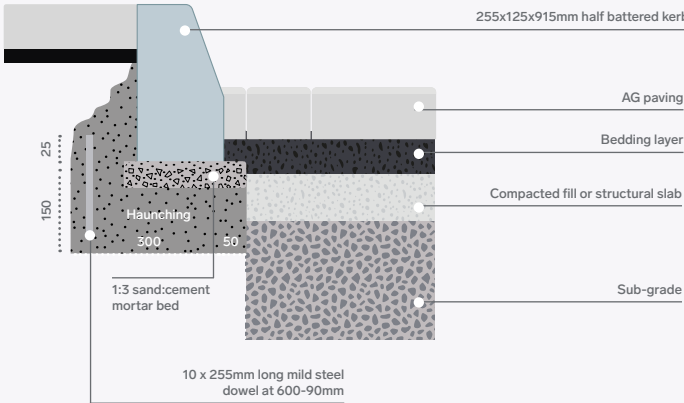
Locations where vehicles turn or brake are considered high risk and have the potential to move paving units, thereby causing gaps to appear. This includes cul de sacs, turning areas, roundabouts, T junctions or areas where asphalt / tarmac meets paving. Ensuring the

paving in all these locations is restrained is crucial to long term performance. The restraints can be either hidden concrete haunching, borders or sunken kerb details. Alternatively you can consider raised kerb details as shown in the diagrams on the following page. Additionally, locations where Bound designs meet Unbound or other construction designs also require specific attention.

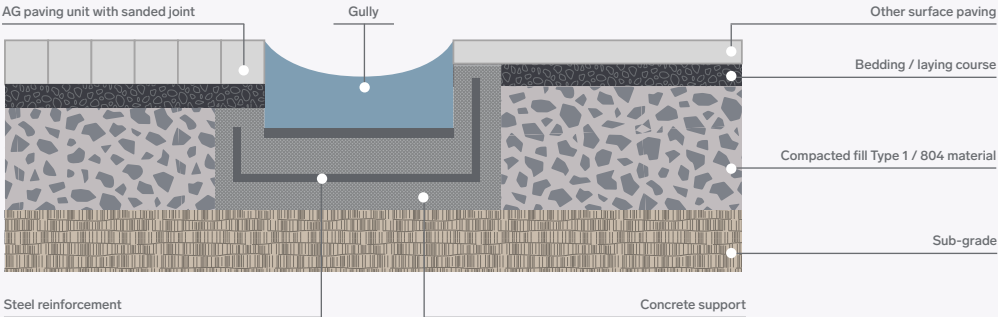
Estate Roadway / Car Parking Areas



Heavy Industrial Traffic



Edge Restraint Between Unbound + Other Construction





UNBOUND / FLEXIBLE BEDDING CONSTRUCTION

An Unbound construction is essentially a dry laid installation and can be used for both pedestrian and vehicular traffic. Each layer sits independently on top of each other and must be compacted correctly to ensure no soft spots affect the long term performance. Soft spots occur where one of the components of the bedding design fall away, thereby causing a collapse or break of the paving unit.

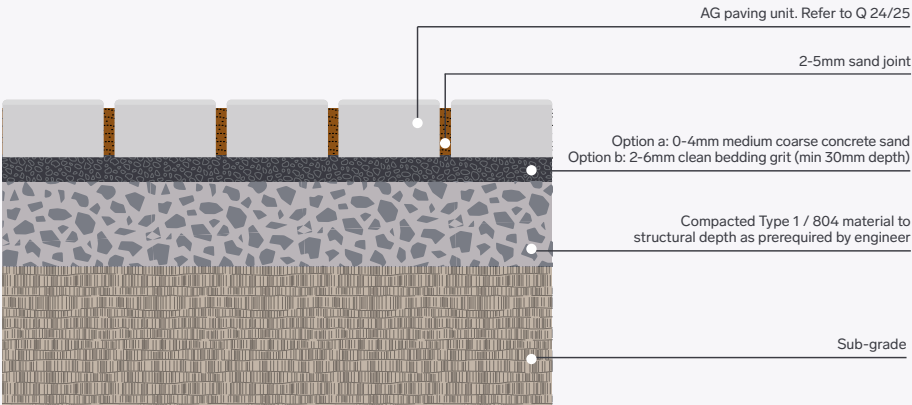
As with a Bound construction, the bedding detail below can be designed to be just as structurally strong. Where the CBR of the sub-grade is below regulation you need to insert granular fill compacted to sufficient depth to withstand the expected weight load. As with the Bound system there is a need to ensure that the paving is restrained at the boundaries and correctly supported where there are vehicular turning movements, cul de sacs or stopping vehicles.

The joint in an Unbound design must be filled and vibrated correctly to ensure the material has filled the depth top to bottom – this is key to ensuring the paving will not move during use. Loss of surface sand in the joints is common and need not cause concern once what's below is sufficient.

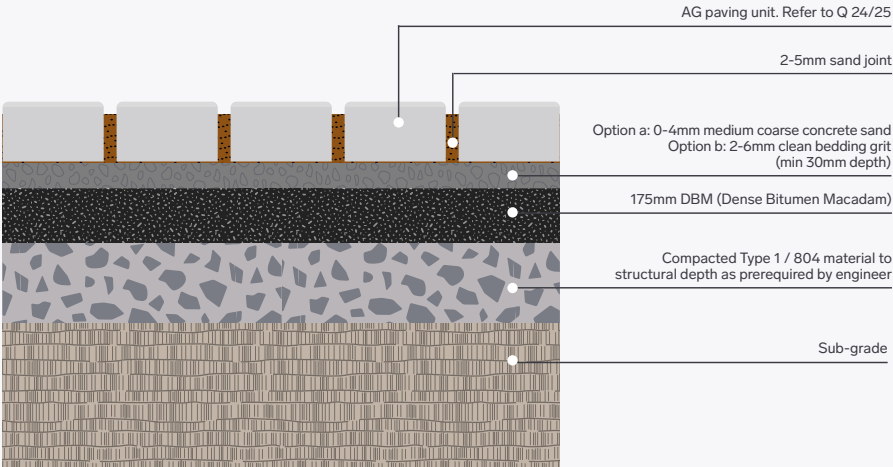
The preferred bedding material in an Unbound construction is bedding grit or quarry dust; a material which has some form of angular properties is required to prevent loss through water movements. Depth can vary from 30 to 50mm depending on expected usage and guidance from the project engineer should be sought on this.

UNBOUND / FLEXIBLE DESIGN CONCEPTS

Pedestrian Footways
50-60mm Block / Flag Paving in Unbound Design with Sand Joint



Pedestrian + Vehicular Traffic
80-120mm Block / Flag Paving in Unbound Design with Sand Joint



- NOTES**
- 1. Depth of compacted layer designed by engineer.
 - 2. Drainage to be designed by engineer.
 - 3. Soft spots, turning or breaking zones may need additional support.



Grouting using Kiln Dried Sand or Specialist Aggregate

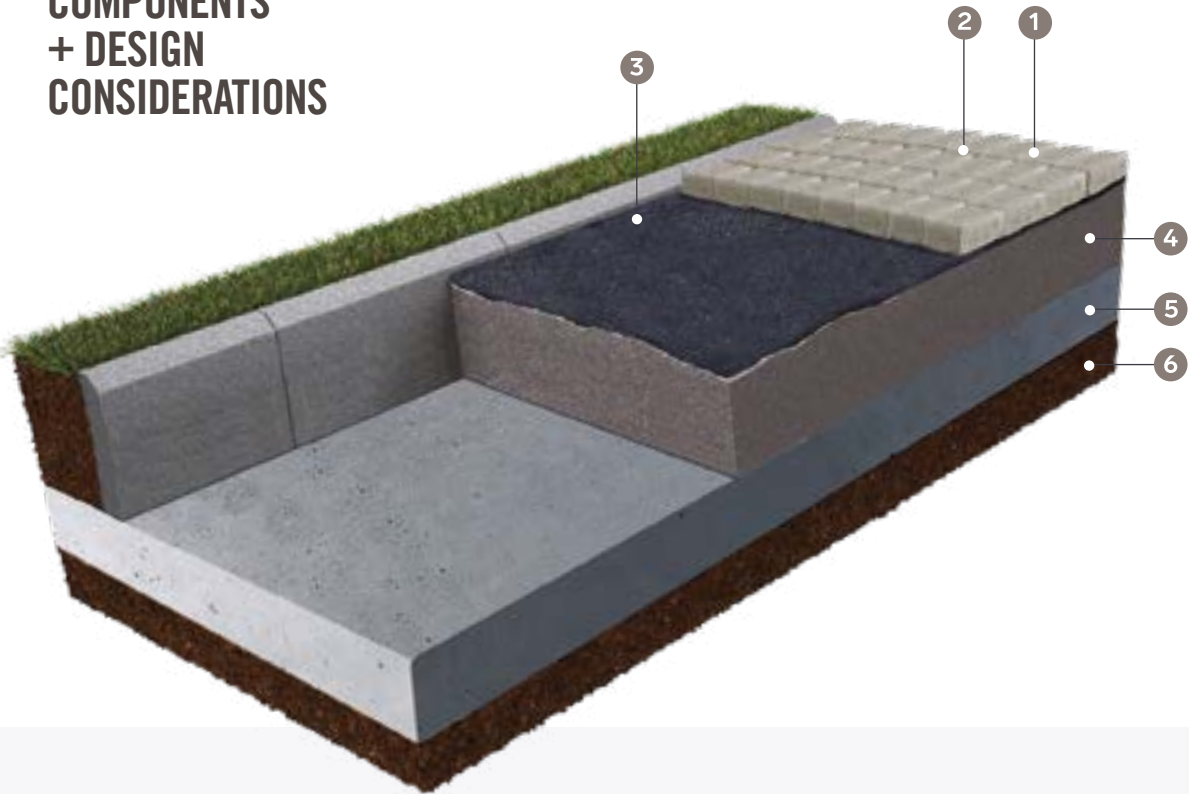
In the majority of projects the material to fill the joints is kiln dried sand, which has small angular properties to help 'lock' the paving together. The sand should be applied and paving vibrated to ensure it penetrates the joints top to bottom. Once complete, another application of sand is recommended to top up low spots. Joint widths in Unbound designs can vary according to expected usage and size of paving.

Small format block paving and flags can have 'thin joint technology' where the joint width may be less than 2mm. However it is advisable to always create a joint with flags to allow for expansion and contraction,

thereby avoiding 'spalling' of the edges. In the majority of cases there should be a joint in all paving of at least 4mm minimum.

In specialist applications consideration can be given to using a selected 6-2mm clean washed aggregate as the jointing material. This design is selective and replicates upper sections of a permeable design. In this situation the designer would need to ensure the sub-grade has some form of permeability to assist in the removal of both surface and lateral water. Additionally, the use of spacers between the paving is recommended to improve structural stability and long term performance.

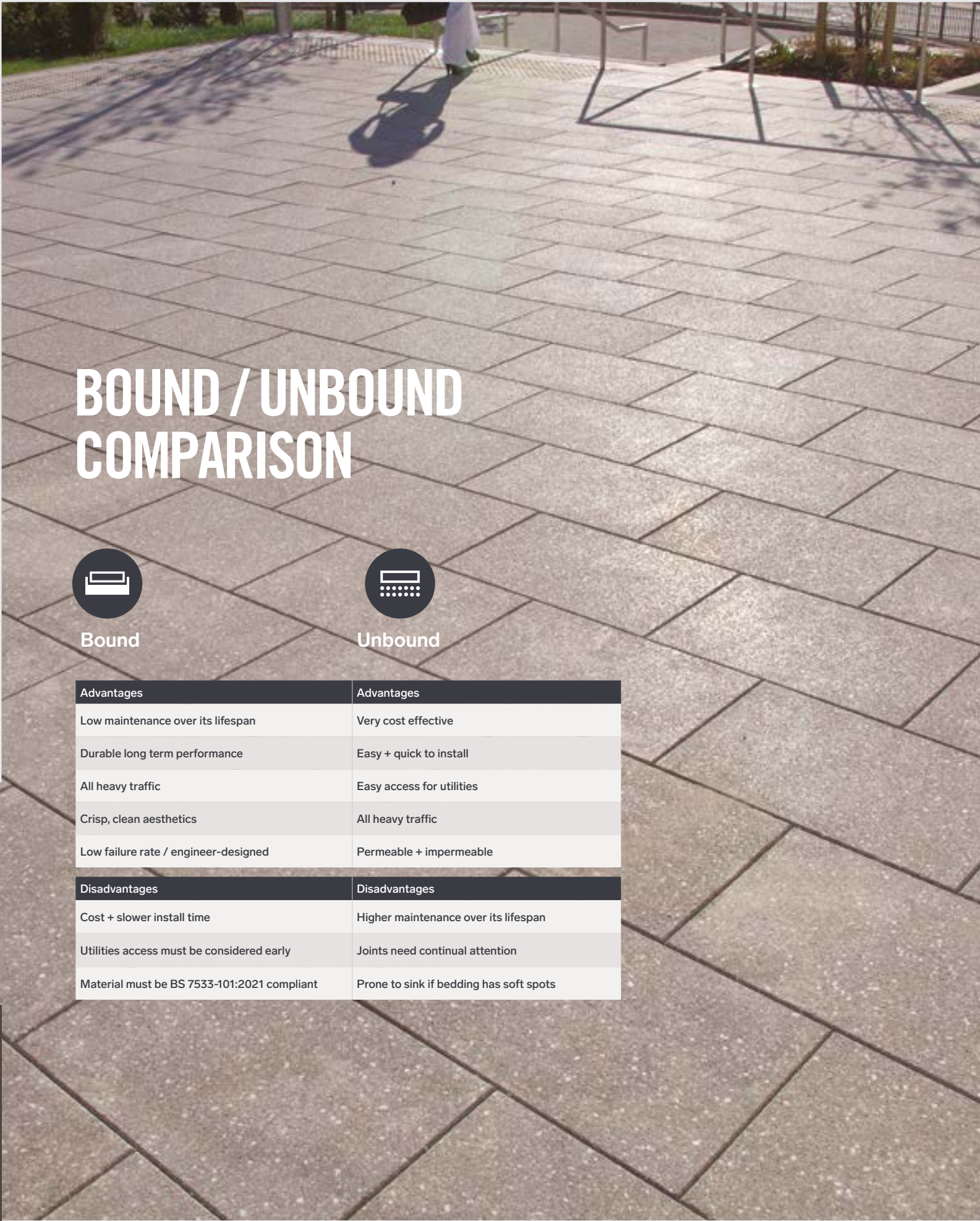
KEY PERFORMANCE COMPONENTS + DESIGN CONSIDERATIONS



- 1 Paving units
- 2 Jointing
- 3 Laying course
- 4 Main Sub Base Layer
- 5 Sub-grade improvement layer (capping layer) (if required)
- 6 Sub-grade

Additional Design Considerations

- Units (slabs, flags, setts, blocks, pavers, large format)
- Permeable / impermeable
- Bound / Unbound (rigid or flexible)
- Use / trafficking / traffic speed
- Slip / skid potential
- Laying patterns
- Surface drainage
- Sub-surface drainage
- Foundations layers; stiffness
- British and European Standards



BOUND / UNBOUND COMPARISON



Bound

Advantages	Advantages
Low maintenance over its lifespan	Very cost effective
Durable long term performance	Easy + quick to install
All heavy traffic	Easy access for utilities
Crisp, clean aesthetics	All heavy traffic
Low failure rate / engineer-designed	Permeable + impermeable
Disadvantages	Disadvantages
Cost + slower install time	Higher maintenance over its lifespan
Utilities access must be considered early	Joints need continual attention
Material must be BS 7533-101:2021 compliant	Prone to sink if bedding has soft spots



Unbound

PEDESTALS ROOF DECKS + BALCONIES



PEDESTALS ROOF DECKS + BALCONIES

Installation + Design Considerations

Modern construction is an opportunity to reclaim functional spaces and turn them into usable locations. Installing flags on roof decks and in balconies is now a common occurrence. Most applications require some consideration to be given to the following: use of space, expected maximum weight loads (including persons), size and depth of flag and strength of pedestal.

AG flags are manufactured to the requirements laid down in the current British Standard BS EN 1339:2003. This specifies the test methods to be adhered to. The particularly relevant tests for this application being product tolerances and a bending strength test which assigns product to classes according to mean bending strength.

In addition, the product is manufactured in one of the most advanced factories of its kind in Europe. Our fully calibrated flags will aid pedestal installation as the dimensional accuracy is second to none!

This must at all times be tempered with the understanding that good site practice will contribute to the success or otherwise of such an application, and it is suggested that an accomplished laying contractor must be sought to achieve the required level of finish.

All testing should be based on the understanding that the slab would be equally supported on all support pedestals, as uneven distribution of loadings would materially affect the performance of the flag. This will have little effect with foot traffic other than rocking flags, but where heavier loadings are expected this may be significant. In all situations slope correctors and / or shims should be used to ensure even support on each pedestal.

AG flagstones (with or without spacers) are suitable on pedestals, as they create a fixed joint width.

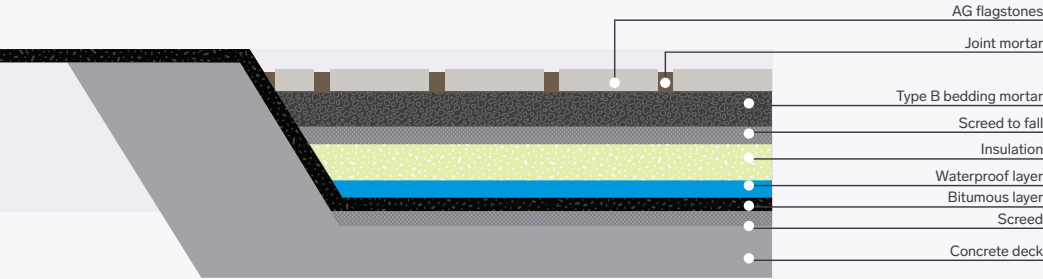


Adjusting levels

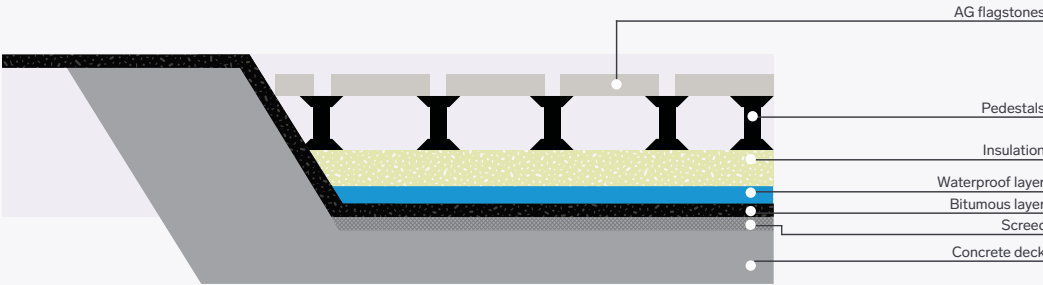


DESIGN CONCEPTS

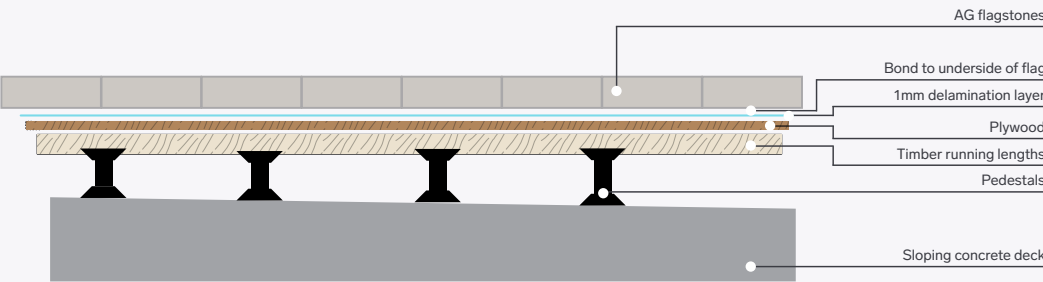
Inverted Roof with no Pedestals



Inverted Roof with Pedestals



Sloping Pedestal Detail

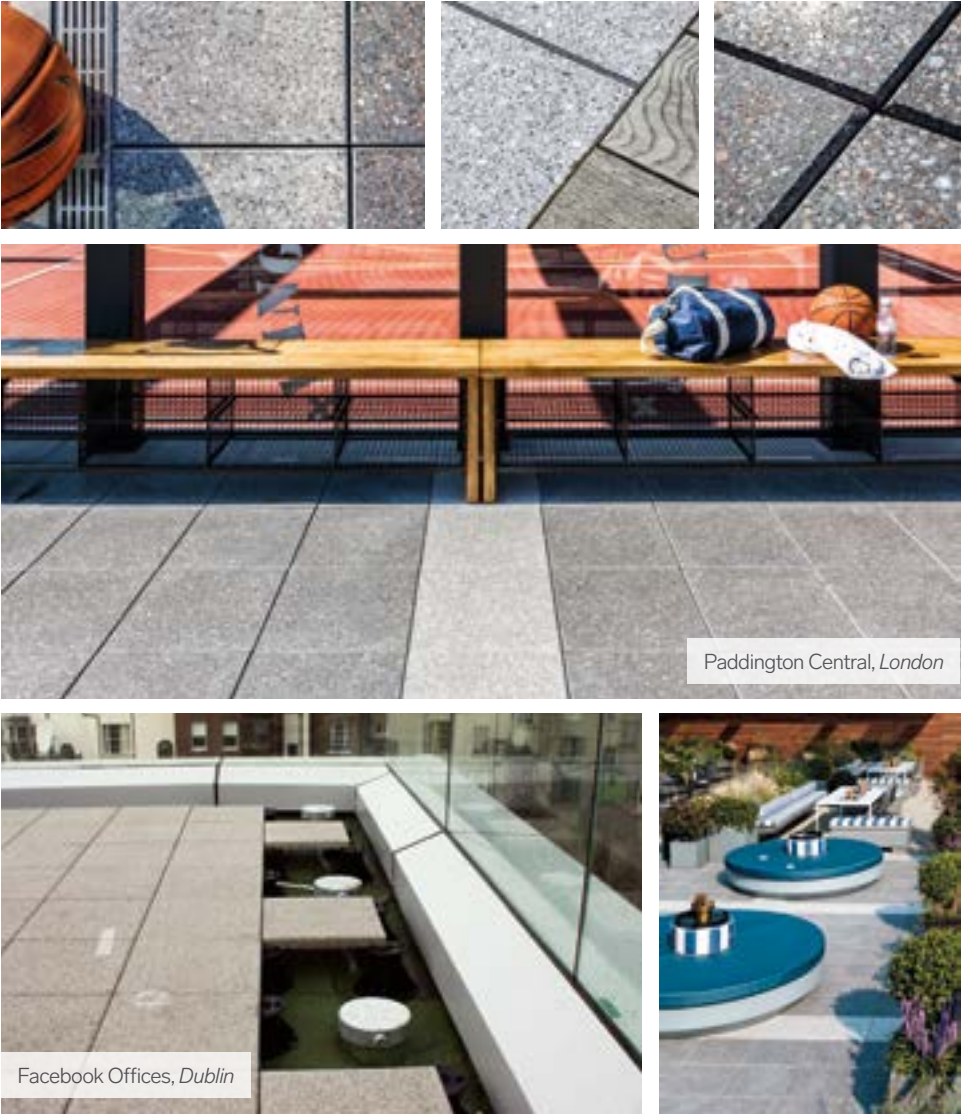




TerraPave® is perfect for
PEDESTALS

For full details on standards and performance of
TerraPave® natural aggregate flags see page 24.

Pedestal + TerraPave® Installation Examples



COMPLEMENTARY PRODUCTS



AG can provide some complementary paving products for the industry, which include jointing sand and jointing grout.

Jointing Sand

AG provide two types of jointing sands for a flexible bedding and jointing design.

Specially selected for its quality grading, Standard Kiln Dried Sand is provided in 25kg bags and is suitable for all products.

Silver Granite Kiln Dried Sand is designed specifically for products containing silver and dark granite aggregates (e.g. Plaza and TerraPave®). Use of this sand lessens the risk of staining the paving products when brushing in the sand.



Standard
Kiln Dried Sand



Silver Granite
Kiln Dried Sand

Emtek Premjoint Brush-in pave jointing solutions

PremJoint is ideal for jointing paving and flagstones using a brush-in method and can be used in all weather conditions. Premjoint is recommended on a flexible bedding installation.

- Fast and easy application - walk on: 24-48 hours
- Solid durable joint and permeable
- Reduced weed growth
- Reduces damp retention at joint lines
- Suitable for open joints 5-20mm
- Can be used in all weather conditions



Emtek Pro-Prime Slurry Primer

Ultrascape Pro-Prime is used to provide an exceptional bond between your paving element and fine bedding mortar.

- User-friendly - requires only the addition of water on site
- Quick and easy application
- Part of the UltraScape mortar paving system, which guarantees compatibility and reduces split liability.



Emtek Flowpoint Rapid Set Flowable Grout

Ultrascape Flowpoint has been in use for over 20 years in a variety of project environments including public realm, landscaping and domestic.

- Open to foot traffic in 1 hour
- Open to vehicular traffic in 4 hours
- Rapid setting
- Exceptional bond strength
 - Shrinkage compensated
 - Mixes quickly on-site with water
- Initial set after 15 minutes at 20°C.



MACHINE LAY

Lay from 300-600m² per machine per day

Within the industry there's growing pressure on contract programmes. More than ever, speed is of the essence. As a result, the safe, effective, streamlining of paving operations is now a real priority.

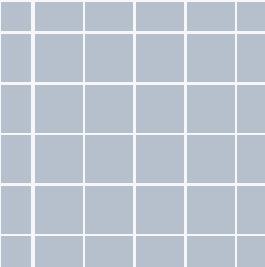
Due to recent major advances in machine laying, this method is now becoming widely used. In fact, machine laying has now demonstrated its competitive advantages in terms of cost and productivity. As only dry construction components are involved, installation can take place in almost all weather conditions. Completed areas are ready for immediate use, with no curing times.

- Typical laying rates of 300m² per machine per day can be achieved depending on site conditions, rising to exceptionally high rates when several machines are working in unison.
- Cost effective with a highly durable finish.
- Area available immediately after completion with no curing times.
- Suitable for straightforward runs over 600m².
- Retrospective services can be put into a paved area and paving re-instated without 'scarring' the aesthetics of the surface area.

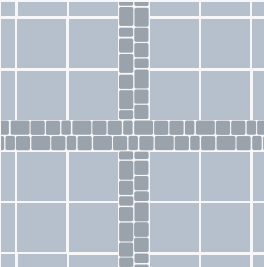


LAYING PATTERNS

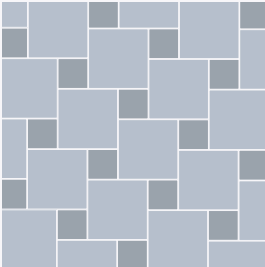
Plaza



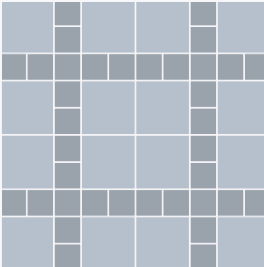
STACK BOND (1 SIZE)
400x400mm
6.25 no. per m²
Ratio per m²: 100% 400x400



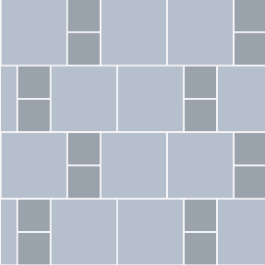
BROKEN STACK BOND
(1 FLAG SIZE + SETTS)
400x400mm + Setts



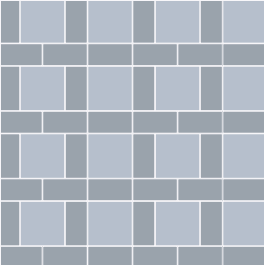
PATTERN 1
400x400mm / 200x200mm



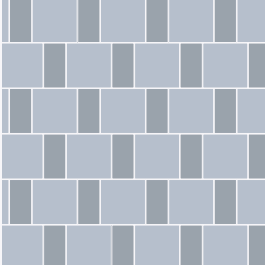
PATTERN 2
400x400mm / 200x200mm



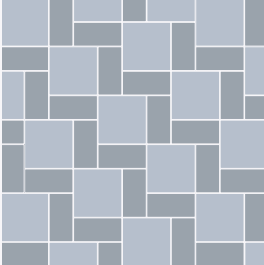
PATTERN 3
400x400mm / 200x200mm



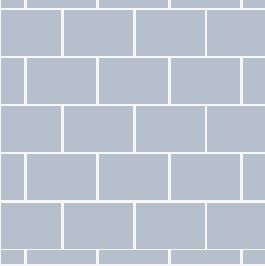
PATTERN 4
400x400mm / 400x200mm



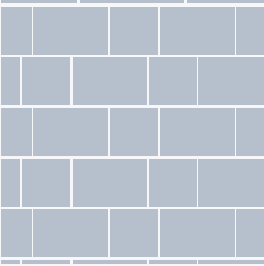
PATTERN 5
400x400mm / 400x200mm



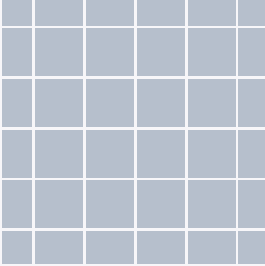
PATTERN 6
400x400mm / 400x200mm



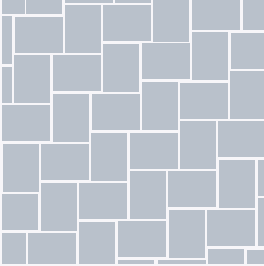
STRETCHER BOND (1 SIZE)
200x150mm
33 no. per m²
Ratio per m²: 100% 200x150



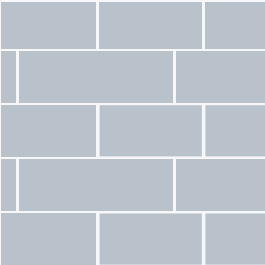
STRETCHER BOND (2 SIZES)
200x150mm / 150x150mm
19 no. of each size per m²
Ratio per m²: 57% 200x150, 43% 150x150



STACK BOND (1 SIZE)
150x150mm
45 no. per m²
Ratio per m²: 100% 150x150

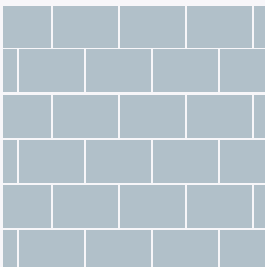


90° HERRINGBONE (1 SIZE)
200x150mm
34 per m²
Ratio per m²: 100% 200x150

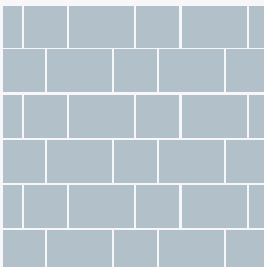


STRETCHER BOND (2 SIZES)
600x200mm / 400x200mm
5 no. of each size per m²
Ratio per m²: 60% 600x200, 40% 400x200

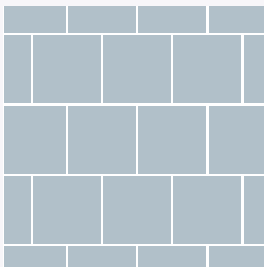
TerraPave® / Fiamma / Canterra® / Plaza / Tavira / Rosemount



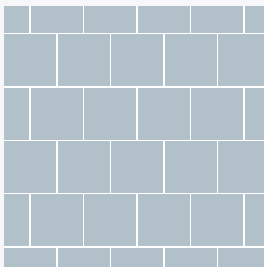
STRETCHER BOND (1 SIZE)
600x400mm
4.17 no. per m²
Ratio per m²: 100% 600x400
NB. Not suitable for Rosemount.



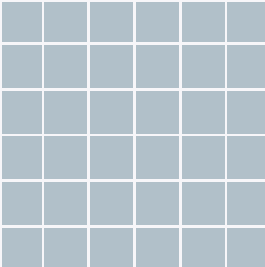
STRETCHER BOND (2 SIZES)
400x400mm / 600x400mm
2.5 no. of each size per m²
Ratio per m²: 60% 600x400, 40% 400x400
NB. Not suitable for Tavira and Rosemount.



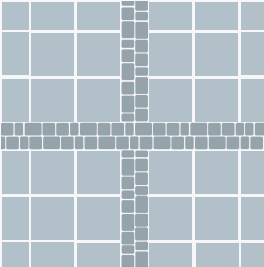
STRETCHER BOND (1 SIZE)
Uses 600x600mm.
2.78no. per m²
Ratio per m²: 100% 600x600
NB. Only suitable for Rosemount.



STRETCHER BOND (1 SIZE)
Uses 450x450mm.
4.94no. per m²
Ratio per m²: 100% 450x450
NB. Only suitable for Tavira.

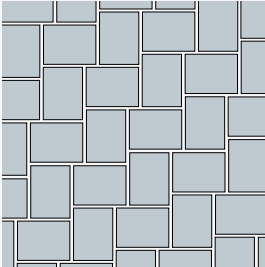


STACK BOND (1 SIZE)
400x400mm
6.25 no. per m²
Ratio per m²: 100% 400x400
NB. Not suitable for Tavira.

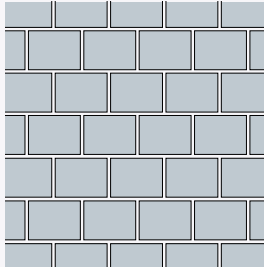


BROKEN STACK BOND
(1 FLAG SIZE + SETTS)
400x400mm + Setts
Approx. 6 no. flags / 0.3 no. setts per m²
NB. Not suitable for Tavira.

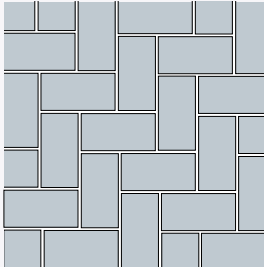
HomePave / Tri Stone / Plaza Rectangular



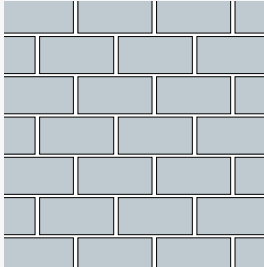
90° HERRINGBONE (1 SIZE)
200x150mm
34 per m²
Ratio per m²: 100% 200x150



STRETCHER BOND (1 SIZE)
200x150mm
33.3 per m²
Ratio per m²: 100% 200x150



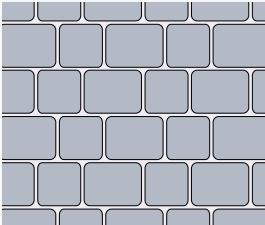
90° HERRINGBONE
200x100mm
On a square of rectangular area, a 90° herringbone pattern can be used to keep cutting to a minimum.
50 no. per m²
Ratio per m²: 100% 200x100



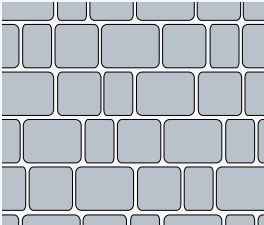
90° STRETCHER BOND
Uses 200x100mm.
50 no. per m²
Ratio per m²: 100% 200x100

LAYING PATTERNS

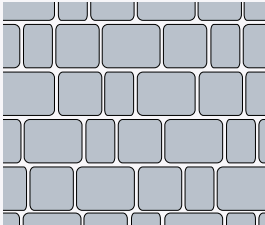
Country Cobble®



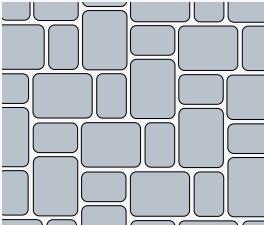
RANDOM COURSED (2 SIZES)
200x150mm / 150x150mm
19 no. of each size per m²
Ratio per m²: 57% 200x150, 43% 150x150



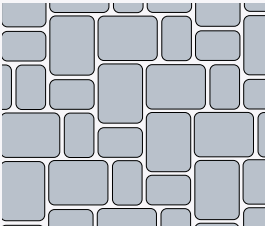
RANDOM COURSED (3 SIZES)
200x150 / 150x150 / 100x150mm
15 no. of each size per m²
Ratio per m²: 44% 200x150, 34% 150x150, 22% 100x150



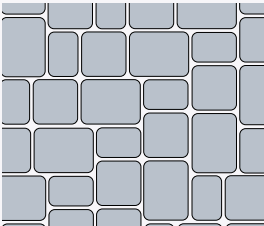
90° HERRINGBONE (1 SIZE)
200x150mm
34 per m²
Ratio per m²: 100% 200x150



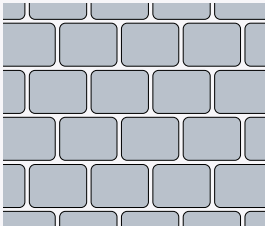
COURTYARD PATTERN A (2 SIZES)
200x150mm / 100x150mm
22 no. of each size per m²
Ratio per m²: 67% 200x150, 33% 100x150



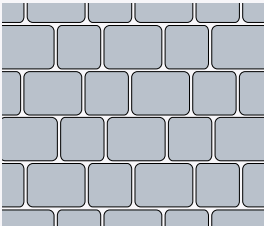
COURTYARD PATTERN B (2 SIZES)
200x150mm / 100x150mm
22 no. of each size per m²
Ratio per m²: 67% 200x150, 33% 100x150



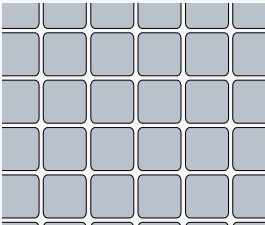
COURTYARD PATTERN C (3 SIZES)
200x150 / 150x150 / 100x150mm
15 no. of each size per m²
Ratio per m²: 44% 200x150, 34% 150x150, 22% 100x150



STRETCHER BOND (1 SIZE)
200x150mm
33.3 per m²
Ratio per m²: 100% 200x150

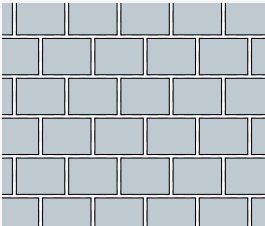


STRETCHER BOND (2 SIZES)
200x150mm / 150x150mm
19 no. of each size per m²
Ratio per m²: 57% 200x150, 43% 150x150

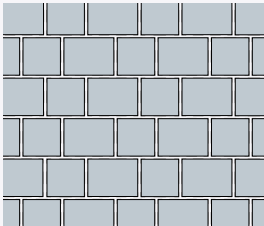


STACK BOND (1 SIZE)
150x150mm 45 no. per m²
Ratio per m²: 100% 150x150

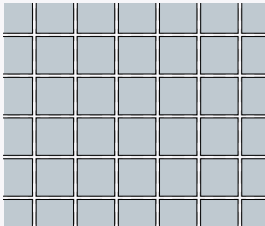
Xflo HomePave



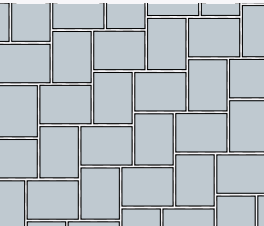
STRETCHER BOND (1 SIZE)
200x150mm
33 no. per m²
Ratio per m²: 100% 200x150



STRETCHER BOND (2 SIZES)
200x150mm / 150x150mm
19 no. of each size per m²
Ratio per m²: 57% 200x150, 43% 150x150

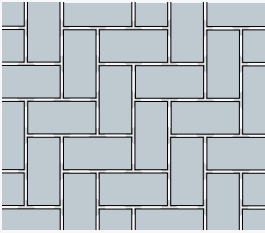


STACK BOND (1 SIZE)
150x150mm
45 no. per m²
Ratio per m²: 100% 150x150

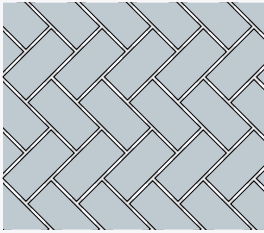


90° HERRINGBONE (1 SIZE)
200x150mm
34 per m²
Ratio per m²: 100% 200x150

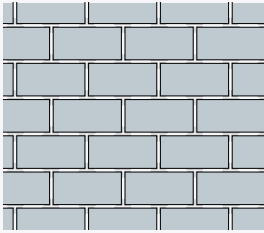
Xflo Rectangular



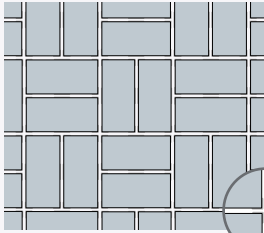
90° HERRINGBONE
On a square of rectangular area, a 90° herringbone pattern can be used to keep cutting to a minimum.
This pattern can be used to lay Machine Lay Rectangular paving blocks.
50 no. per m²
Ratio per m²: 100% 200x100



45° HERRINGBONE
50 no. per m²
Ratio per m²: 100% 200x100



90° STRETCHER BOND
50 no. per m²
Ratio per m²: 100% 200x100

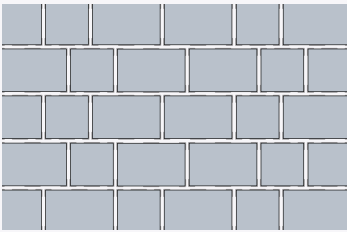


BASKET WEAVE
50 no. per m²
Ratio per m²: 100% 200x100



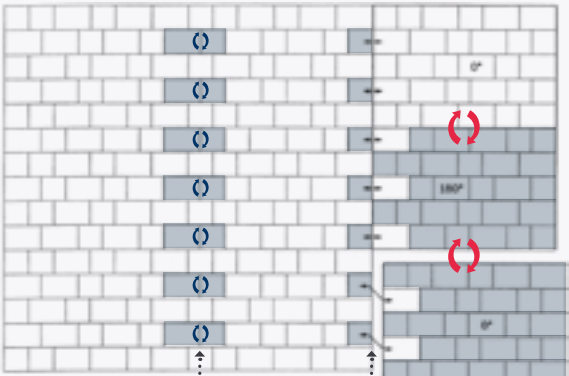
Xflo Rectangular with spacer nibs

Xflo Plaza

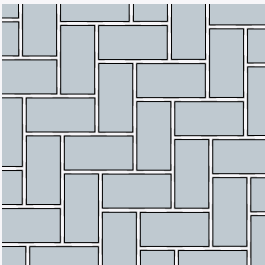


STRETCHER BOND (2 SIZES)
New hand and machine lay pattern
255x170mm / 170x170mm
14 no. per m²
Ratio per m²: 60% 255x170mm, 40% 170x170mm

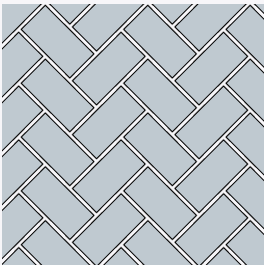
Machine lay detail 3 layers wide and deep machine pattern



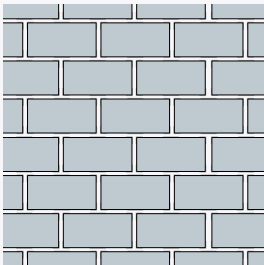
After paving units have been swapped
Before paving units have been swapped
Bond pattern 180° rotation



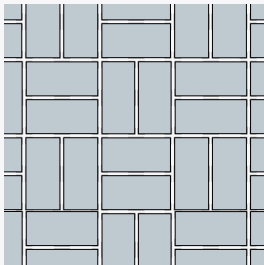
90° HERRINGBONE
On a square of rectangular area, a 90° herringbone pattern can be used to keep cutting to a minimum.
This pattern can be used to lay Machine Lay Rectangular paving blocks.
50 no. per m²
Ratio per m²: 100% 200x100



45° HERRINGBONE
50 no. per m²
Ratio per m²: 100% 200x100



90° STRETCHER BOND
50 no. per m²
Ratio per m²: 100% 200x100



BASKET WEAVE
50 no. per m²
Ratio per m²: 100% 200x100

LAYING PATTERNS

Plaza 3's / HomePave 3's / Tri Stone 3's mixed size packs

Courtyard Pattern

(uses all 3 sizes)

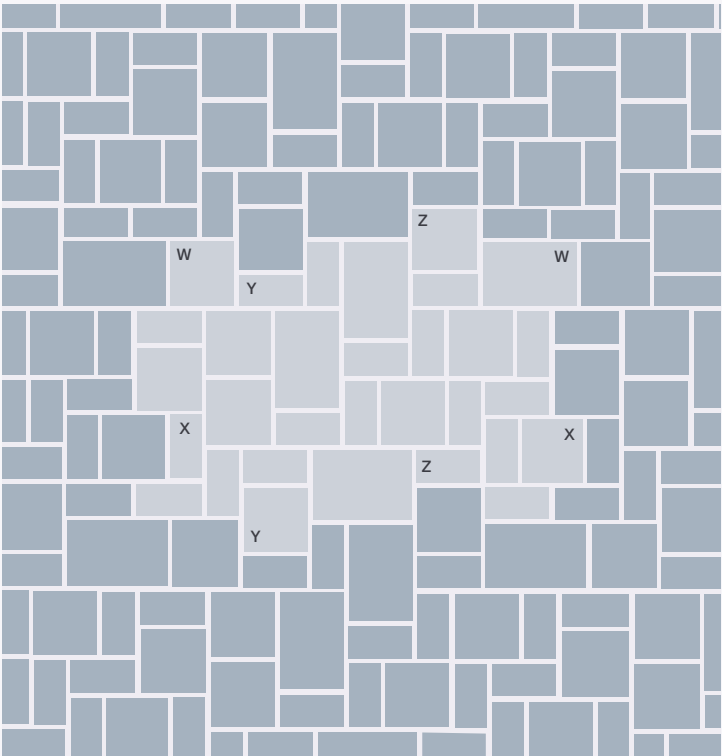
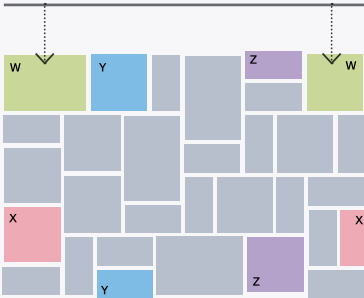
To achieve the Courtyard pattern, just switch around the appropriate units from each layer (as shown using the colours and letters below).

Each 3's mixed size pack contains:

Sizes	3's No. per Layer	3's No. per Pack
300x200mm	4	56
200x200mm	9	126
100x200mm	18	252
Total per pack		434

14 layers per 3's mixed size pack (0.96m² per layer).

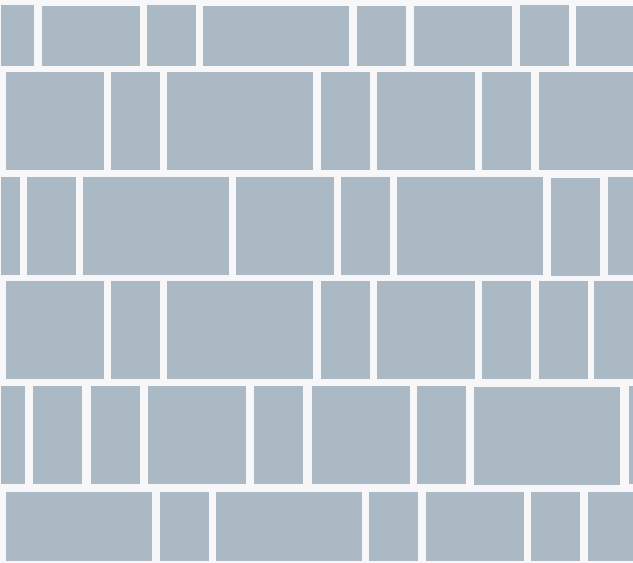
Each layer is stacked as below.
Switch the highlighted units around:



Plaza 3's / HomePave 3's / Tri Stone 3's mixed size packs

Stretcher Bond Pattern

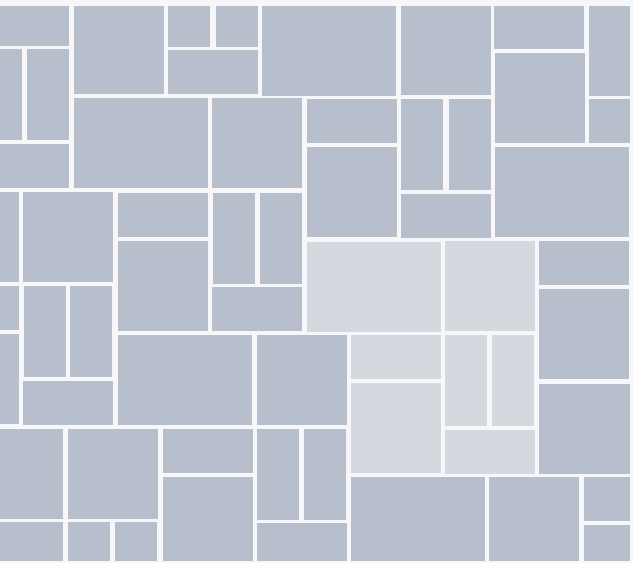
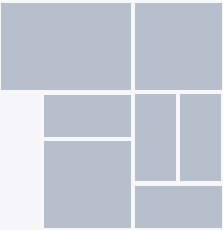
(uses all 3 sizes)



Mixed Size Motif Pattern

(uses all 3 sizes)

This pattern works with a 7 piece module, creating and interlocking L shaped herringbone structure. Within each project pack layer, four of these modules can be created, leaving over three pieces which can be used for cuts or additional units. An ideal pattern for smaller or curved areas where cuts are more frequent.



NB. WHEN LAYING MIXED SIZES PLEASE ENSURE YOU ALTERNATE BETWEEN PACKS FOR EACH LAYER TO ENSURE AN EVENLY DISTRIBUTED COLOUR BLEND. I.E. THEY SHOULD NOT BE LAID LAYER-BY-LAYER FROM THE SAME PACK.

NB. WHEN LAYING MIXED SIZES PLEASE ENSURE YOU ALTERNATE BETWEEN PACKS FOR EACH LAYER TO ENSURE AN EVENLY DISTRIBUTED COLOUR BLEND. I.E. THEY SHOULD NOT BE LAID LAYER-BY-LAYER FROM THE SAME PACK.

LAYING PATTERNS

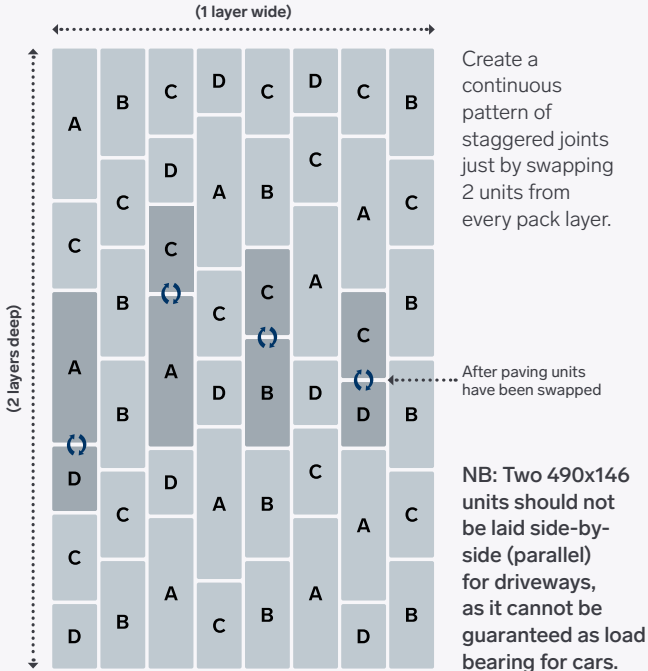
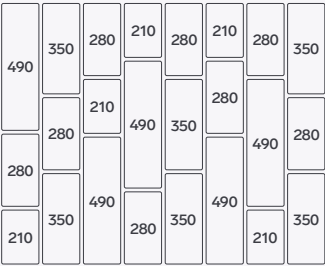
Plaza Quattro / Long Stone mixed packs

STRETCHER BOND (4 SIZES)
490 x 146 / 350 x 146 / 280 x 146 / 210 x 146mm

Each pack contains 264 flag units
of assorted sizes (11 layers per pack) (1.15m² per layer)

	Size	No. per pack	No. per layer
A	490x146mm	55	5
B	350x146mm	66	6
C	280x146mm	88	8
D	210x146mm	55	5

Each pack is stacked in layers

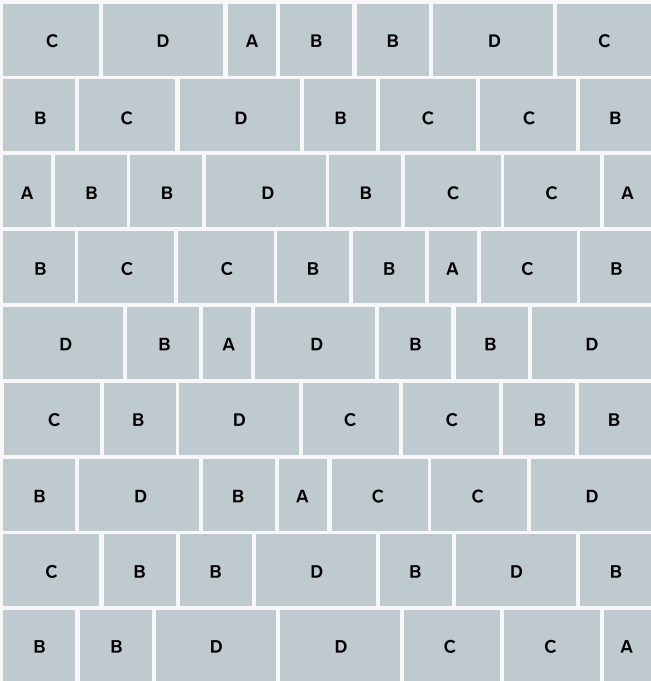
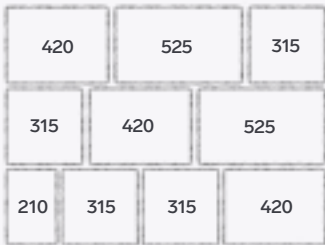


Manor Stone[®] mixed packs

Each pack contains 80 flag units
of assorted sizes (8 layers per pack) (1.2m² per layer)

	Size	No. per pack	No. per layer
A	210x315mm	16	2
B	315x315mm	24	3
C	420x315mm	32	4
D	525x315mm	8	1

Each pack is stacked in layers

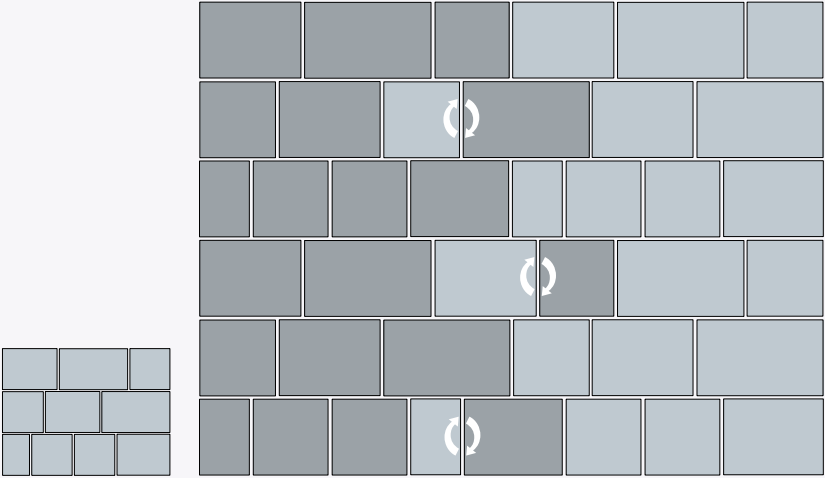


Manor Stone[®] mixed packs

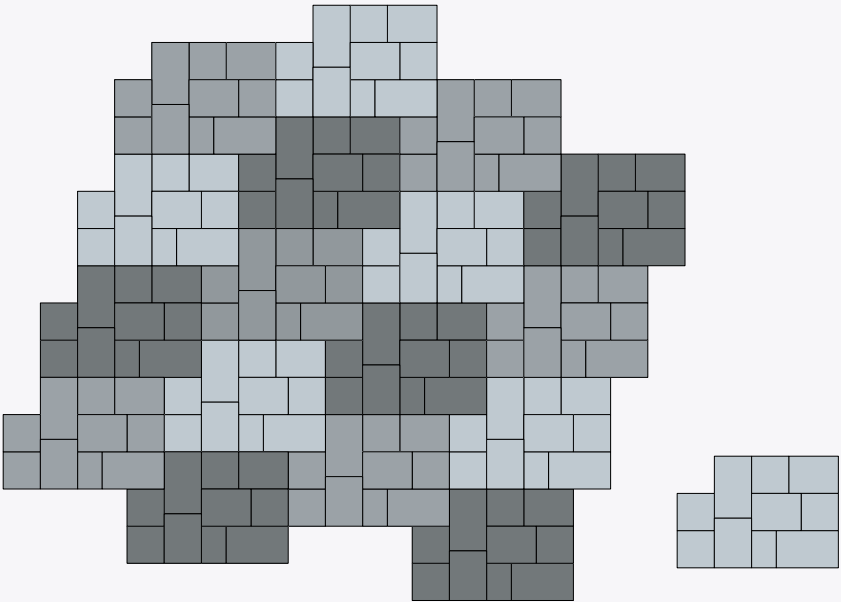
Stretcher Bond Pattern (uses all 4 sizes)

To ensure the vertical joints between flags don't line up with those in the row above / below, swap two flags from each layer as shown (white arrows). This will create a continuous pattern of staggered joints – as shown on the diagram.

Each pack is stacked in layers



Courtyard Pattern (uses all 4 sizes)



NB. WHEN LAYING MIXED SIZES PLEASE ENSURE YOU ALTERNATE BETWEEN PACKS FOR EACH LAYER TO ENSURE AN EVENLY DISTRIBUTED COLOUR BLEND. I.E. THEY SHOULD NOT BE LAID LAYER-BY-LAYER FROM THE SAME PACK.

SLIP / SKID RESISTANCE

Manufacture

AG paving and flags are manufactured, tested and compliant to hEN 1338/1339: 2003 **Concrete Paving Flags / Units – Requirements and Test Methods**.

We are independently audited and accredited to ISO 9001:2015 (certificates available upon request).

Test Criteria

The slip test is completed as stated in hEN 1339: 2003 Annex I and BS 7976 Pendulum testers Part 2, under the following guidelines:

- “The slip resistance value relates to flags as manufactured and helps to ensure adequate slip / skid resistance on installation”.

Reference Bodies / Guidelines

When determining slip potential for flags / units we reference the following guidelines:

- UK – Slip Resistance Guidelines Issue 3 2005.
- H.S.E. – “Guidelines for Assessing Slip Resistance”

The results when tested in accordance with the above guidelines give the following slip potential classification for flags tested using a 96 or four ‘S’ rubber in saturated wet conditions to simulate (standard simulated shoe sole) for a typical pedestrian.

AG use the PTV test method as it is the preferred result of the H.S.E.

- High Slip Potential 0 – 24 PTV
- Moderate Potential 25 – 35 PTV
- Low Potential 36 + PTV

The guidelines state that a slope of five degrees, will require the following increase in PTV.

- High Slip Potential 0 – 33 PTV
- Moderate Potential 34 – 44 PTV
- Low Potential 45 + PTV (USRV >75)

Slip / Skid Resistance Chart of Ratings

Flat

HSE Rating	PTV	Risk/Potential	USRV
Low Risk Potential	36+	11/12/13	>60
Moderate Potential	25-35	9/10	>50-60
High Potential	0-24	9/10	>0-49

Slope up to 5 degrees

HSE Rating	PTV	Risk/Potential	USRV
Low Potential	45+	12	>75
Moderate Potential	34-44	11/12	>60-75
High Potential	0-33	11	>0-59

Additional slip resistance guidance is offered by the Health and Safety Laboratory from a report on “**The predictions of friction requirements for pedestrians for level walking made by the BRE guidelines**” as per the table below:

Risk 1 in:	Minimum PTV	Slip potential
1,000,000	36	Low
100,000	34	Moderate
10,000	29	Moderate
200	27	Moderate
20	24	High
2	19	High

The Health and Safety Executive quote on the subject of “Pedestrian Slip Risks” – a combination of the following are the main factors, which effects slip resistance:

- Contamination (oils, rubber etc.).
- Type of footwear (rubber, leather).
- Pedestrian factors (e.g. volume, mobility).
- Cleaning and maintenance (regular chemical cleaning).
- External environment (algae, leaves etc.).
- Gradient – ramps and slopes.

The above factors are outside AG’s control, and we cannot accept liability for these factors.

It is the responsibility of the engineer / architect or customer to do a risk assessment of the specific site conditions before deciding on the suitability of a product.

Results

AG under our product certification, regularly test our flags to the above standard, to which we comply with the following:

- Competent trained personnel: our technicians are trained by Pendulum test equipment manufacturers in UK. Certificates are available on request.
- Pendulum test machine is calibrated by Wessex Engineering annually (certification available).
- Test rubbers are certified for use by Wessex Engineering. (certification available)

Ground Flags

Low Slip / Skid Resistance

Where AG TerraPave® flags are recommended on level ground with standard rain water runoff up to slope ratio of 1:40, they are classified as low potential for slip >36 (PTV).

Regular testing indicates we achieve an average PTV value for wet conditions ranging between 36 and 45 for flags on installation.

This is commensurate with flags achieving a high degree of finish.

Textured / Smooth Paving + Flags

Low Slip / Skid Resistance

AG TerraPave® Textured concrete block paving units and flags are suitable for level ground and ramps, they are also specified as low to extremely low potential. However it should be noted that regular testing indicates a much higher value when compared to Ground products:

A PTV value for textured products in wet conditions ranging 55 – 80 is achieved for / units on installation.

Flags / units not under wet conditions show a significant increase in PTV value.



CHAMFERS + SAFETY UNDERFOOT

Safety concerns are covered by our chamfer design

Manufacture

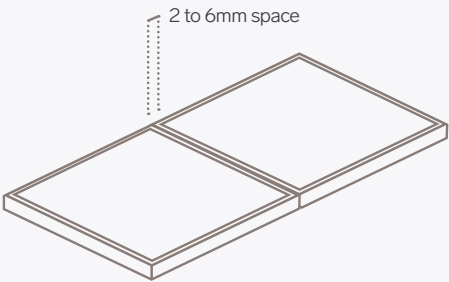
In line with safe specification, AG are consistently updating our product range to ensure that all paving and flagstones meet required standards for slip / skid resistance, trolley noise reduction and chamfer widths under high heeled footwear.

In line with industry standards we ensure the joint widths of our paving and flags are well documented and within tolerance. Where paving has a wider than normal joint (permeable paving) or a particular fettled edge, then AG will stress this point in the specification.

In most circumstances, AG paving and flags will have chamfers creating close joint widths ranging between 2 and 5mm on all products. This ensures there is safe footing for thin heeled shoes which normally have minimum widths of 10mm square.

In the following photo example we used three different variations of thin heel shoes above the chamfer and joint of an AG flag. All heels cover and exceed the distance created by the chamfer.

AG flagstones chamfer width creates a 2 to 6mm space, thin heel shoes usually measure minimum 5 to 10mm.



Based on this, AG are happy that the chamfer and space created when the paving and flags are placed using close jointing will be safe underfoot for most shoe types. If in the event this is still an issue, AG can offer a select range of flags which will not have a chamfer and therefore will create a thin line joint. However such products may create additional waste on site as chipping can occasionally occur if flags are knocked together during installation.



Trolley Friendly

HomePave 'Smooth' paving is particularly suitable for retail developments – due to its minimal pencil rounded edge detail – combined with minimal joint width – providing a significant noise reduction creating a trolley friendly surface that requires minimal maintenance. It's a great way of delivering a high-quality solution at a surprisingly affordable price point.



BRITISH + EUROPEAN STANDARDS

Design + Detailing

Concrete block and flag pavements should be designed in accordance with the relevant section in BS 7533-101:2021.

Structural Design	Block Paving	Flags
Light Traffic (<0.5msa)	BS 7533-101:2021	BS 7533-101:2021 Flexible Base BS 7533-101:2021 Bound Base
Heavy Traffic (0.5 – 12 msa)	BS 7533-101:2021	N/A
Ports	BS 7533-101:2021	N/A
Airports	C.A.A	N/A

Manufacturing Standards + Testing Requirements

	Block Paving	Flags	Kerbs
European Standard	hEN 1338:2003	hEN 1339:2003	hEN 1340:2003

Code of Practices for Construction

Block Paving	Flags	Kerbs
hEN 1338:2003	hEN 1339:2003	hEN 1340:2003

Laying Course Sand + Application

Sand Category	Application
IA	Aircraft pavements / Bus stations / Pavements with severely channelised traffic.
IB	Industrial pavements / Loading bays.
II	Adopted Highways / Roads / Pedestrianisation schemes with regular heavy traffic / Car parks with some heavy vehicles.
III	Pedestrian schemes receiving only occasional heavy traffic / Car parks with no heavy vehicles.
IV	Private drives / Pedestrian footways with occasional vehicle overrun.

Typical Grading For Laying Course Sand +Jointing Material

Percentage by mass passing

Bs Sieve Size	IA	IB	II	III	IV
5.00mm	90 to 100	90 to 100	90 to 100	89 to 100	89 to 100
2.36mm	75 to 100	75 to 100	75 to 100	65 to 100	65 to 100
1.18mm	55 to 90	55 to 90	55 to 90	45 to 100	45 to 100
600um	35 to 65	35 to 65	35 to 65	25 to 80	25 to 80
300um	10 to 45	10 to 45	10 to 45	5 to 48	5 to 48
150um	0 to 10	0 to 10	0 to 10	0 to 15	0 to 15
75um	0 to 0.3	0 to 0.5	0 to 1.5	0 to 3	0 to 5

UKCA / CE Marking

In line with legislation requirements, all AG paving and flag products are UKCA / CE marked. A Declaration of Performance (DOP) for each product can be downloaded from our website: www.ag.uk.com/resources

Be Up To Standard

To be confident your pavement design meets the most stringent quality standards, before choosing products consult the design information available in BS 7533-101:2021 Parts 1 and 2 for block paving; Parts 8 and 12 for flags; Part 13 for permeable pavements, which refers to the design of pavements for heavy and light duty traffic.

These codes of practice have been written using information derived from extensive research and cover pavement design for all situations.

All AG products are manufactured to fulfil industry standards and we can advise you on the best choices.

Passes All The Tests

AG’s paving and flagstones are produced and tested to the relevant and current British Standards. Testing is carried out both in-house and at accredited independent testing laboratories. For copies of all test results, please speak to one of our specification managers.

With all products, tolerances are allowed within the manufacturing standards. Please refer to the relevant standard when assessing permissible tolerances.

Suitable Laying Course Material

As our experience of paving has increased, our understanding of the requirements for laying course materials has been honed. Laying course materials should be naturally occurring sands/angular stone. Other materials including crushed rock should be used only for Category IV applications.

BREEAM – Building Research Establishment’s Environmental Assessment Method is the most widely used environmental assessment method for buildings. It sets the standard for best practice in sustainable design and has become the de facto measure used to describe a building’s environmental performance. Every building is assessed in nine different categories evaluating the design, materials used and construction methods, giving a comprehensive record of any building’s environmental credentials.

The Code for Sustainable Homes covers domestic buildings, while there are BREEAM guides for all other building categories, courts, education, industrial, healthcare, offices, retail, prisons.

Code for Sustainable Homes

Specifying Xflo as part of a sustainable drainage system can help maximise credits in the following areas:

Example

Category:	Issue Id	Description	Available Credits	How Xflo Helps
2:Water	Wat 1	Indoor Water Use	5	Facilitates the collection of rainwater for use in the home. 89 to 100
2:Water	Wat 2	External Water Use	1	Facilitates the collection of rainwater for use in irrigation. 65 to 100
4: Surface water run-off	Sur 1	55 to 90	2	Prevents excessive run-off from the site keeping run-off into water courses at pre-development levels.

BREEAM ratings are specific to individual buildings. The above section provides an indication of areas where Xflo may help to achieve additional credits. It is up to the designer to assess the building under consideration and satisfy themselves that Xflo will help to improve the rating in that situation.

AG’s concrete paving and flagstones are rated ‘A’ under the BRE Green Guide to specification.

Aims of BREEAM:

- To mitigate the impact of buildings on the environment;
- To enable buildings to be recognised according to their environmental benefits;
- To provide a credible environmental label for buildings;
- To stimulate demand for sustainable buildings.

AG’s concrete pavers at ‘A’ exceed most natural stone products and when used in conjunction with the relevant recycled granular bedding and jointing mediums can achieve an A+ rating.

To learn more on BREEAM visit:

www.breeam.org
www.thegreenguide.org.uk

MAINTENANCE GUIDANCE



Paving and flagstones should be regularly brushed with a stiff non-metal brush to prevent a build-up of dirt. We also advise a more substantial clean two or three times a year, especially during spring and autumn.

General Wear

Newly completed areas of paving or flagstones should only receive a light brushing in the first few months to allow joints to settle naturally. From then on, general maintenance should be carried out regularly.

Maintenance of Joints

Jointing material may be lost during the early life of the pavement in both dry and wet weather, being blown away in dry conditions or washed away from the surface during heavy rain. It is therefore important to inspect areas of new paving regularly in their early life and top up joints where needed.

General Dirt + Grime

To remove general dirt, a cyclic maintenance regime should be considered based on expected traffic and use. If detritus dulls the colour of the paving, it can be re-established by mild controlled pressure washing or scrubbing with proprietary solutions following the manufacturer's guidelines. This can be carried out by hand or by using industrial cleaning equipment. Using a bristle brush with mild detergent and hot water is normally all you need to remove any build-up of dirt and grime.

Mechanical sweepers or scrubber drier machines can be used to assist cleaning regimes long term however, it is advisable to avoid this cleaning process in the early life of the pavement to allow detritus to have sealed the joints.

Lichen, Moss + Algae

Moss, lichen and algae may grow on paving in areas which are heavily shaded or under trees or are not laid to an adequate fall, leading either to slow running off or ponding of surface water. If such growths do occur, the areas should be treated with an appropriate proprietary weed killer, used in accordance with the manufacturer's instructions.

Rust Stains – Effects of Other Landscape Products

If rust stains occur on the paving, the first requirement is to eliminate the source of the staining. To remove rust stains, the surface should be wetted and the affected area treated with a prop solution. After cleaning, the paving should be well washed down to remove all traces of the acid. It is common to find that rust stains can be sourced to the spreading of weed killer on green areas close to the paving. The chemicals in the weed-killer react with the pigments in the paving and rust coloured stains result. If there are locations where green areas and paving meet then consider using a block paving which has low pigment content.

Beverage + Food Stains

Most stains associated with everyday life such as mineral / alcohol and food can be removed easily. These can normally be removed by scrubbing with a strong detergent and hot water solution. If the stain is persistent, apply a bleach solution and then rinse the area well with clean water.

Chewing Gum

Chewing gum is difficult to remove from all paving surfaces. Newly discarded gum can be scraped off using a scraper, but hardened gum can only be removed by freezing / heating or chiselling it from the surface of the paving, or by using a high pressure water jet. If persistent then consideration should be given to a quality sealant to put a protective coating on the paving.

Rubber Tyre / Footwear Scuff Marks

Scuff marks are common in locations where vehicles are used. These can normally be removed by mild power washing / steam cleaning, or by scrubbing the area with a strong detergent and hot water solution.

Grease + Oil Stains

Oil does not penetrate readily into the body of paving, but if oil is spilt on the paving the spillage should be removed promptly with an absorbent material. After soaking up the majority of small spills, prompt washing with a prop solution should remove the stain.

Tar + Bitumen Stains

The best method of removal is to leave the bitumen until it has cooled and remove it with a paint scraper or similar mechanical device. If it is particularly resistant, the use of ice to make the bitumen even more brittle may be required prior to scraping it from the paving. Any residue should be removed with an abrasive powder and finally the whole area rinsed with clean water.

Paint + Graffiti

Both paint and graffiti are difficult to remove. Wet paint should be soaked up with an absorbent material. The area should not be wiped, as this will spread the paint. The spillage should then be treated with a suitable solvent, such as white spirit and the area washed with a strong detergent and hot water solution. Steam cleaning can also be employed. When paint has dried, it should be scraped off as far as possible and an appropriate paint stripper applied. This should be used in accordance with the manufacturer's instructions.

Once the paint has been removed by the chemical, the area again should be washed with a strong detergent and hot water solution. Paint manufacturers may often be able to give more detailed advice on the removal of their own products. There are companies specialising in the removal of graffiti and it may be necessary to consult them if there are large areas affected by the accident or as a result of vandalism.

Epoxy + Polyester Stains

Solidified epoxy or polyester resin can be removed by carefully burning the spillage with a blow torch or other heat source. Care must be taken not to inhale the fumes given off during the process. If after burning, a black stain remains on the paving, this can normally be removed by scrubbing the paving with a strong detergent and hot water solution. A small area should be tested before any large scale cleaning is undertaken.

Smoke + Scorch Stains

Normally these stains can be removed by scrubbing with a strong detergent and hot water solution. Where the stains persist, a mixture of scouring powder and household bleach can be used, but this should only be used in very well ventilated areas. When using bleach, it is important that the affected area is thoroughly washed once cleaning is completed.

Winter Cleaning Programme

All paved areas may be treated with de-icing materials. Normal de-icing salts can be applied without any risk of damage to the pavement. Once the pavement has dried out after any thaw, however, the paving may be temporarily discoloured by the de-icing salts, as is the case for any other surfacing material. This may or may not happen depending on the product and paving however normal weathering should soon remove such discolouration after a short period.

Protecting Your Paving

Currently there are various high quality and effective sealant products available from local merchants and specialist companies. These can be either impregnators or sealants to help with stain removal or to provide some benefit in stabilising the sand in the joints in the short and longer term. If a surface sealant is used on paving, it must be applied in strict accordance with the manufacturer's instructions. Sealants may affect the colour of the pavement and its slip / skid resistance and may require ongoing maintenance during the life of the paving. AG recommend the use, where possible, of sealants which have proven organic materials and less chemical properties.

Where new services are to be installed or access is required to existing services under the paved area, the paving should be lifted carefully, cleaned and stockpiled for later use. Once the initial paving has been removed, it should be relatively straightforward to uplift the area of paving. During re-laying a slight surcharge should be created in the sand bedding course to allow for settlement of the paving following initial compaction and early trafficking. Typically, reinstated areas of paving should have a surcharge of 2-3mm over the surrounding paved area.

ADVICE + GUIDANCE

Product Inspection

All products should be carefully inspected for defects or damage upon delivery and prior to being installed. Delivery documentation is required to be signed and should include a record of such defects, which will need to be notified to an AG Sales representative within five working days of delivery.

AG are hEN ISO 9001:2015 registered and use an integrated quality management system.

Colour Blending

All products are manufactured from natural materials. Although we strive to provide consistency of colour, slight colour variations are inevitable with all concrete product manufacturing processes.

When purchasing products, AG recommend that packs are selected from the same date of production (DOP). Products should then be mixed on site from a minimum of three packs to help reduce the effect of banding.

Products which have been installed for a period will weather naturally, so the colour of any new products, when compared, will inevitably vary.

Efflorescence

Efflorescence is a white crystalline deposit that can occur naturally on the surface of all concrete materials. AG use market leading technologies to significantly reduce the frequency and occurrence of efflorescence but these cannot totally prevent the phenomenon in all instances.

Where it does occur, efflorescence may mask the colour of the product for a period of time but this tends to gradually weather off naturally with rainfall given time. AG will not replace products affected by efflorescence.

AG recommend that customers ensure that packs of products which have had their packaging removed should be recovered to prevent secondary efflorescence.

Waste

AG recommend that customers can expect that up to 5% of delivered product may be damaged due to loading, unloading, transport and site handling. Any product damaged should be set aside and reused for cutting or detailing and AG will not be held liable for such waste.

Where the customer experiences waste of greater than 5% of the total quantity ordered, an AG Sales Representative should be informed without delay.

AG recommend that customers ensure that their contractor accurately measures the area on site before ordering products. Dimensions taken from a product plan can vary significantly from the final layout. When ordering, customers should allow for an additional 5% to cater for detailing, cutting and acceptable waste. This quantity may need to be greater in the case of curved or circular designs.

Jointing widths

Butt Jointing – AG do not recommend “Butt jointing” as this removes the ability to adjust alignment and can also cause shear failure on the edges of adjacent units.

Close Jointing – a joint width of between 2-5mm in accordance with the installation code is recommended for a flexible bedding design.

Open Jointing – a joint width of 6mm + is deemed an open joint and applies to a minimum width requirement for use with a structural joint compound within a bound bedding and jointing system.

Canterra® jointing guidance

Butt Jointing - AG do not recommend “Butt jointing” Canterra flagstones.

Close Jointing – AG recommend close jointing. Joints of between 2mm and 5mm should be created when laying with fine, dry jointing-sand used to fill the joints.

Open Jointing – AG's preference is that installers use open joints when laying Canterra, whereby >5mm joints are created and filled with a solid jointing compound.

Jointing sands

AG provide two types of jointing sands for a flexible bedding and jointing design.

Standard jointing sand – suitable for all products.

Granite jointing sand – designed specifically for products containing silver and dark granite aggregates (e.g. Plaza and TerraPave). Use of this sand lessens the risk of staining the paving products when brushing in the sand.

Surface marks

Minor surface scuff and scratch marks can occur during installation when using plate vibration compaction. AG's experience is that these marks weather off.

AG strongly recommend using a rubber vibration plate when compacting embossed or riven surfaces to further reduce the risk of scuff or scratch marks.

Installation

AG recommend that all products should be installed in accordance with the latest and relevant British or European Standard.

Ordering

Minimum order quantities are required for certain colours and sizes. Before placing an order, please speak to one of our sales team members – they will be happy to advise on this and any other product questions you may have.

AG operate a no returns policy. This does not affect your statutory rights.

Questions + Complaints

If you have any queries or complaints, please contact our Sales office on +44 (0) 121 747 0202 in UK and on +44 (0)28 8778 8112 in Ireland.

We recommend that you contact our sales staff for further information at the design stage of your project for the most up-to-date information. AG reserves the right to discontinue products if necessary. The colours shown on this website are as accurate as your screens calibration will allow. Whilst every effort is made to match colours and represent textures, we recommend that colours and textures are chosen from actual samples of the products.

HEALTH, SAFETY + THE ENVIRONMENT

AG recognise that the activities of the organisation could potentially have a significant impact on the environment.

In order to minimise this impact, we take a proactive rather than reactive stance on environmental issues. In recognition of these efforts, we have won a number of environmental awards.

‘Green’ Facts for AG

- AG have an internal environmental management system.
- We use renewable energy across our sites with 100% electricity from renewable sources.
- We also use Bio-LPG which is a renewable energy source compared to traditional LPG.
- Concrete paving and flags are rated ‘A’ under the Green Guide.
- Xflo can be used as part of a SuDS system.
- 75% of the water used to grind TerraPave® is recycled.
- Our Toome plant uses environmentally friendly mixes which use re-cycled water in the mixing process.

Certification

BES 6001 has been developed by BRE Global as a Framework Standard for Responsible Sourcing, certification is completed along with an associated independent third-party certification scheme, we are proud to announce that AG has recently achieved compliance with this standard.

In line with their core business values, this standard and audit process reinforces AG’s ongoing commitment to sustainable manufacturing.

ISO 14001 is a comprehensive tool that provides industry with a way of controlling environmental impacts. AG were awarded certification for a multi-site management system (across five

Northern Ireland manufacturing sites and two quarries) that documents environmental impacts including: energy waste, production waste and carbon emissions.

ISO 45001 is an international occupational health and safety management system that provides a framework to control health and safety risks and improve the health and safety of employees. AG was awarded certification because of the high standards of safety awareness across all of its operations. You can trust that AG will always apply best practice in terms of health and safety.

ISO 9001 is a quality management standard that covers all aspects of the business including customer service, production, sales and marketing.

Good Practice Commitments

- Water management and recycling.
- Recycling ancillary production waste and use of re-cycled waste aggregates.
- Dust suppression in operation for plant movement, production processes including crushing and screening.
- Developing markets for by-products.
- Adoption of noise suppression and reduction techniques.
- Implementation of waste management systems in place across all locations.
- Energy conservation projects.
- Site restoration and aftercare.
- Landscaping and improved visual amenity.
- Environmental audits take place monthly at all locations. This encompasses all aspects of the environment, ensuring that the company is adhering to our in house procedures and legislative requirements.
- A HSEQ Manager is dedicated to improving the environment at all our facilities.

Corporate Social Responsibility

A comprehensive social responsibility policy illustrates AG’s commitment to operating to the highest standards in every aspect of its business. We aim to run our business ethically, co-ordinating environmental stewardship with industry best practice, striving to manage activities in a safe manner, protecting the health and safety of everyone involved and encouraging social inclusion in the communities in which we operate.

Sustainability

AG is one of the most innovative and progressive concrete manufacturing companies in the UK and Ireland and has invested significantly in modern ‘green’ technology.

Our commitment to positive environmental, social and economic performance is visible through the continuous assessment of our products and their environmental impact.

Restoration

Waste material that cannot be recycled back into the production process is used as an aid to restoration at our sites. It helps to re-landscape and restore parts of our sites no longer used for production purposes. We have joined together with several partners to develop micro habitats to enhance the flora and fauna on our sites:-

- All-Ireland Pollinator Plan 2025: in conjunction with the National Biodiversity Programme.
- RSPB NI : Work on protecting bank faces for Sand Martins
- Ballinderry River Management Scheme: Protecting White-Crayfish
- Northern Ireland Raptor Study Group: Protecting the Peregrine Falcon at Fivemiletown

Environmental

AG have designated ‘Care of the Environment’ as an essential part of the business strategy. We would seek to support the government’s environmental aims by adopting, where possible, Best Available Techniques Not Entailing Excessive Cost (BATNEEC).

We will take into account environmental issues when designing management systems, organisational structures and communication systems.

Control of the Working Environment

Any industrial process can lead to pollution of the surrounding environment and atmosphere. In the quarrying and concrete product manufacturing industry, our processes involve blasting raw aggregate, crushing, screening, washing and finally the various production processes to create our extensive product ranges. Dust is the main environmental hazard within our plants.

In recognition of this the company has developed an environmental policy, which outlines the company’s commitment to the environment.

- A dedicated environmental operative on each of our manufacturing sites, responsible for dust control, monitoring silt discharge and ensuring company meets requirements of IPC (Industrial Pollution Control) licence requirements.
- Staff training to ensure that the workforce understands the environmental impact of both the individual and company activities, and environmental policy commitments.
- Actively promote the communication of issues concerning the environment to staff, suppliers and customers.



DESIGN + SPECIFICATION SERVICES



AG is a member of the RIBA and RIAI CPD Providers Network and in-house presentations can be undertaken, by prior arrangement.

AG is a member of the NBS Service. See each product page for NBS specifications.



BIM objects are now available on our website at www.ag.uk.com/BIM or available upon request – contact us for more information.

AG can offer a design and advice service for all our paving and flag products. Our Technical Department works closely with strategic partners to provide specific expertise in designing permeable pavements and retaining walls. We can offer levels of support from concept design and advice right up to fully indemnified engineered designs.

To learn more, please call **GB** +44 (0) 121 747 0202 / **IRE** +44 (0)28 8778 8112 and ask to speak to one of our Specification Technical Department or email: specifications@ag.uk.com.

Full technical specifications for all paving and flags products are available to download from our website www.ag.uk.com/resources

All information contained in this brochure is correct at the time of going to print. We recommend that you contact our sales staff for further information at the design stage of your project for the most up-to-date information. AG reserves the right to discontinue products if necessary. The colours shown in this literature are as accurate as the printing process will allow. Whilst every effort is made to match colours and represent textures, we recommend that colours and textures are chosen from actual samples of the products.

SPECIFICATION GUIDE

Flagstones + Paving + Kerbs + Steps



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