

Invicta Block Paving

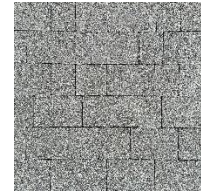
Technical Data Sheet



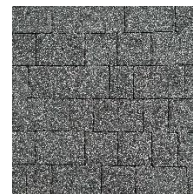
Pearl, Moonstone & Onyx



Citrine



Moonstone



Onyx



Pearl

Description

Invicta premium block paving, our innovative flagship product, uses a unique combination of natural aggregates on the top surface to create a hard-wearing, long-lasting paving solution whilst offering a stunning, vibrant finish with a hint of sparkle. Invicta is available in four complementary colours and traditional and contemporary plan sizes, making this versatile product suitable for most projects.

Application

Brett's Invicta block paving is suitable for domestic and commercial use; pedestrian pavements, including footpaths, cycle tracks, roof terraces, podium decks and various vehicular trafficking applications subject to design within the BS 7533 suite of standards.

Product Type	Textured precast concrete modular block paving.
Manufacturing Process	Agg-Tech, Semi Dry pressed and vibrated concrete.
Manufacturing Standard	BS EN 1338: 2003
Design Standard	BS 7533-101: 2021
Installation Standard	BS 7533-102: 2025
UKCA/DOP	<i>Please contact Brett for more information.</i>
NBS Specification	45-20-64/400 Precast concrete paving blocks / Q24 110 112 113

Product Performance

Nominal Dimensions (mm)	Working Dimensions (mm)	No.per pack	m2 per pack	No.per m2	Pack wt max kg
Single Pack:					
200x100x60	200x100x60	432	8.64	50	1300
210x140x60	210x140x60	288	8.46	34	1200
300x100x60	300x100x60	288	8.64	33.3	1300
200x100x80	200x100x80	336	-----	5.	1327
200x200x80	200x200x80	168		25	1327
300x200x80	300x200x80	112	6.72	16.66	1328
300x100x80	300x100x80	224	-----	33.33	1327
Mixed Trio Pack:					
105x140x60	105x140x60	108		68	
140x140x60	140x140x60	162	9.53	51	1410
210x140x60	210x140x60	162	-----	34	
105x140x80	105x140x80	84		68	
140x140x80	140x140x80	126	7.41	51	1460
210x140x80	210x140x80	126	-----	34	

Tolerances on Working Dimensions	Class 2 tolerances on dimensions, Plan Size $\pm 2\text{mm}$; Thickness $\pm 3\text{mm}$
Tensile Strength	Characteristic tensile splitting strength $\geq 3.6\text{ Mpa}$; Failing load $\geq 250\text{ N/mm}$
Abrasion Resistance	Class 4 - $\leq 20\text{mm}$ - Determined by Wide Wheel Abrasion Test
Durability (Freeze Thaw)	Class 3 $\leq 1,0\text{kg/m}^2$ with no individual result $> 1,5\text{kg/m}^2$
Slip / Skid Resistance	PTV Unpolished Slip Resistance Value ≥ 55 - Potential for slip - Low
Thermal Conductivity	1.2 W/(mK)
External Fire Performance	Deemed to satisfy, see commission decision 2000/553/EC
Reaction to Fire	Class A1, see commission decision 2000/605/EC

Sustainability

BREEAM	Concrete Block Paving 60mm: A rating, as per the BRE Green Guide, 4th Edition 2009, A+ rating can be achieved when used in conjunction with a prepared recycled sub-base. Concrete Block Paving 80mm: B rating, as per the BRE Green Guide, 4th Edition 2009, A rating can be achieved when used in conjunction with a prepared recycled sub-base.
BES 6001	Responsible Sourcing of Concrete Products (Rating: Excellent)
Recyclable	100% of this product can be recycled. Invicta contains 15% recycled content in backing
Brett 5-Star Sustainability Rating	=5

Embodied Carbon

Nominal Dimensions (mm)	kg CO2-eq per m2		
	50mm	60mm	80mm
200x100 Onyx	-	14.19	18.92
200x100 Pearl	-	14.24	18.99
200x100 Moonstone	-	14.27	19.02
200x100 Citrine	-	14.27	19.03

Early Life and Maintenance

Once your paving has been installed, you may notice some changes to its appearance in the first few days and weeks. These visual changes can be due to several reasons originating from the concrete and/or the manufacturing or installation method. Many of these will simply weather away, including:

Efflorescence	The ongoing chemical reaction within the concrete, which provides its strength, can produce calcium carbonate (a white powdery residue), which may appear on the surface of products. This temporarily lightens the product but will typically weather away without reoccurrence.
Porosity	Concrete continues to cure for many years after manufacture. While this happens, and usually during its initial life, a porosity level may exist where some product retains water, giving it a damp appearance. This will diminish as the concrete hardens and the product dries out.
Aged and distressed products	For certain products, we distress the edges to offer an aged appearance and enhance the character of the paving. A dusty residue can be left on the blocks, which will weather away.
Differential Curing	Dark patches occasionally appear on the surface of concrete products. This may be differential curing caused by varying moisture levels within the flag drying at different rates. Like efflorescence, these patches will become less visible given time and the natural weathering process.