

Alpha Flow Permeable Paving Technical Data Sheet



Brindle & Autumn Gold



Autumn Gold



Brindle



Charcoal

Description

Brett Alpha Flow permeable paving with tumbled edges features an interlocking spacer nibs, ensuring that correct joint spacing and high permeability are achieved, while also providing an aesthetically pleasing solution for a wide variety of environments.

Application

Alpha Flow is suitable for most permeable paving applications, ranging from small domestic and residential projects, to large urban and commercial installations.

Product Type	Aged/distressed precast concrete modular block paving.
Manufacturing Process	Semi Dry pressed and vibrated concrete.
Manufacturing Standard	BS EN 1338: 2003
Design Standard	BS 7533-101: 2025 & BS 7533-103: 2026
Installation Standard	BS 7533-102: 2025
UKCA/DOP	<i>Contact Brett for more information</i>
NBS Specification	45-20-64/400 Precast concrete paving blocks Q24 110 112 113, Q25 335

Product Performance

Nominal Dimensions (mm)	Working Dimensions (mm)	No.per pack	m2 per pack	No.per m2	Pack wt max kg
105x140x60	105x140x60	702	10.32	68	1260
140x140x60	140x140x60	528	10.35	51	1260
210x140x60	210x140x60	352	10.35	34	1260
105x140x80	105x140x80	510	7.50	68	1200
140x140x80	140x140x80	384	7.53	51	1220
210x140x80	210x140x80	256	7.53	34	1220

Tolerances on Working Dimensions	Class 2 tolerances on dimensions, Plan Size \pm 2mm; Thickness \pm 3mm
Tensile Strength	Characteristic tensile splitting strength \geq 3.6 Mpa; Failing load \geq 250 N/mm
Abrasion Resistance	Class 4 - \leq 20mm - Determined by Wide Wheel Abrasion Test
Durability (Freeze Thaw)	Class 3 \leq 1,0kg/m ² with no individual result > 1,5kg/m ²
Slip / Skid Resistance	PTV Unpolished Slip Resistance Value \geq 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
Surface Permeability	3386 mm/h when tested to BS DD 229: 1996

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.
Brett 5-Star Sustainability Rating	=4

Nominal Dimensions (mm)	kg CO2-eq per m2		
	50mm	60mm	80mm
105x140	-	12.75	15.61
140x140	-	12.93	15.78
210x140	-	12.93	15.78

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 a number of 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. Whilst this happens and usually during its initial life, a level of porosity may exist where some product retains water, giving a damp appearance. This will diminish as the concrete continues to harden as 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. This will weather away.
Differential Curing	Dark patches occasionally appear on the surface of concrete products. This may be differential curing and is caused by varying moisture levels within the flag drying at different rates. Like efflorescence, given time and the natural weathering process, these patches will become less visible.