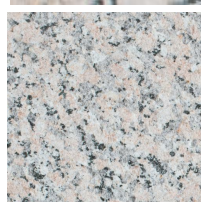


Portia Granite

Date Created: 01/08/19



Portia - Blasted



Portia - Flamed



Portia - Honed

*It should be noted that colour variations and markings are characteristic of Natural Stone. Inherent variations cannot be controlled nor the precise shade of stone guaranteed.

Portia Granite is a hard-wearing, strong and durable landscaping material. Grey with pinkish tones, it is suitable for paving both pedestrian and vehicular trafficked areas.

Available in a flamed, blasted or honed finish, it is available across a wide range of product areas including paving, tactile, steps, setts, water management, kerbs, and street furniture. Bespoke and specialised masonry options may be available on request.

Marshall's granites are all tested to UK standards and CE marked in line with the most recent legislation. Portia Granite is quarried and produced in Europe to ISO9001 quality assurance standards.

DESCRIPTION

Appearance	Pink Granite with Large grey and small black and white inclusions
Manufacturing Process	Sawn
Geological Type	Granite
Quarry of Origin	Pontevedra, Spain
Governing Manufacturing Standards	All data where relevant to be established in accordance with BS EN 1341 : 2012, BS EN 1342 : 2012 & BS EN 1343 : 2012
Petrographical Description	Pink coarse to very coarse grained Granite
CE Marking/DOP	https://www.marshalls.co.uk/dop

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PHYSICAL PROPERTIES

Work Dimensions (mm)	450 x 450 x 50 450 x 450 x 60 450 x 450 x 70 900 x 450 x 50 900 x 450 x 60 900 x 450 x 70 600 x 600 x 50 600 x 600 x 60 600 x 600 x 70 900 x 600 x 50 900 x 600 x 60 900 x 600 x 70 200 x 100 x 50 200 x 100 x 60 200 x 100 x 70 300 x 100 x 50 300 x 100 x 60 300 x 100 x 70 300 x 150 x 50 300 x 150 x 60 300 x 150 x 70 300 x 200 x 50 300 x 200 x 60 300 x 200 x 70
Tolerances on Work Dimensions (mm)	Paving Class 1 tolerances to all dimensions as standard Setts Class 2 tolerances to all dimensions as standard Kerbs Class 2 tolerances to all dimensions as standard Others by agreement
Abrasion Resistance (mm)	17 mm (Mean value to EN 14157 : 2004 (Hev = 17.8 mm))
Durability (Freeze-thaw)	12.6/11.8 MPa (Mean values to EN 12371 : 2006)
Material Density	2614 kg/m ³ (Mean value to EN 1936 : 2006)
Open Porosity (%)	0.68% (Mean value to EN 1936 : 2006)
Compressive Strength (MPa)	207 MPa (Mean value to EN 1926 : 2006 (Lev = 179 MPa))
Water Absorption (%)	0.29% (Mean value to EN 13755 : 2008 (Hev = 0.54%))
Transverse/FlexuralSplit/Breaking	11.3 MPa (Mean value to EN 12372 : 2006 (Lev = 8.7 MPa))

TEXTURE SPECIFIC PROPERTIES

MANUFACTURING

Materials Control	CE Marked to BS EN 1341 Paving, 1342 Setts, 1343 Kerbs
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SUSTAINABILITY

ERI Score	Our Score: 4.2 Cluster Score: 3.6
Carbon Footprint	
Portia Granite Paving 300 x RL x 50	81.5 kg CO2 m ²
Portia Granite Paving 300 x RL x 63	114.1 kg CO2 m ²
Portia Granite Paving 300 x RL x 75	97.8 kg CO2 m ²
Portia Granite Paving 450 x 450 x 50	81.5 kg CO2 m ²
Portia Granite Paving 450 x 450 x 63	114.1 kg CO2 m ²
Portia Granite Paving 450 x 450 x 75	97.8 kg CO2 m ²
Portia Granite Paving 450 x 900 x 50	81.5 kg CO2 m ²
Portia Granite Paving 450 x 900 x 63	114.1 kg CO2 m ²
Portia Granite Paving 450 x 900 x 75	97.8 kg CO2 m ²
Portia Granite Paving 450 x RL x 50	81.5 kg CO2 m ²
Portia Granite Paving 450 x RL x 63	114.1 kg CO2 m ²
Portia Granite Paving 450 x RL x 75	97.8 kg CO2 m ²
Portia Granite Paving 600 x 600 x 50	81.5 kg CO2 m ²
Portia Granite Paving 600 x 600 x 63	114.1 kg CO2 m ²
Portia Granite Paving 600 x 600 x 75	97.8 kg CO2 m ²
Portia Granite Paving 600 x 900 x 50	81.5 kg CO2 m ²
Portia Granite Paving 600 x 900 x 63	114.1 kg CO2 m ²
Portia Granite Paving 600 x 900 x 75	97.8 kg CO2 m ²

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	Blasted	Flamed	Honed
Light Reflectance Value (LRV)	38.58	--	35.46
Surface Roughness (Rz-µm)	>75	--	21
Slip Resistance (BS 14231) (Dry)	95.3	73.8	73.8
Slip Resistance (BS 14231) (Wet)	72.6	47.5	47.5

SUSTAINABILITY

Portia Granite Paving 600 x RL x 50	81.5 kg CO2 m ²
Portia Granite Paving 600 x RL x 63	114.1 kg CO2 m ²
Portia Granite Paving 600 x RL x 75	97.8 kg CO2 m ²
Portia Granite Setts 200 x 100 x 50	81.5 kg CO2 m ²
Portia Granite Setts 200 x 100 x 63	114.1 kg CO2 m ²
Portia Granite Setts 200 x 100 x 75	97.8 kg CO2 m ²
Portia Granite Setts 300 x 100 x 50	81.5 kg CO2 m ²
Portia Granite Setts 300 x 100 x 63	114.1 kg CO2 m ²
Portia Granite Setts 300 x 100 x 75	97.8 kg CO2 m ²
Portia Granite Setts 300 x 150 x 50	81.5 kg CO2 m ²
Portia Granite Setts 300 x 150 x 63	114.1 kg CO2 m ²
Portia Granite Setts 300 x 150 x 75	97.8 kg CO2 m ²
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Portia Granite Setts 300 x 200 x 63	114.1 kg CO2 m ²
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FURTHER INFORMATION

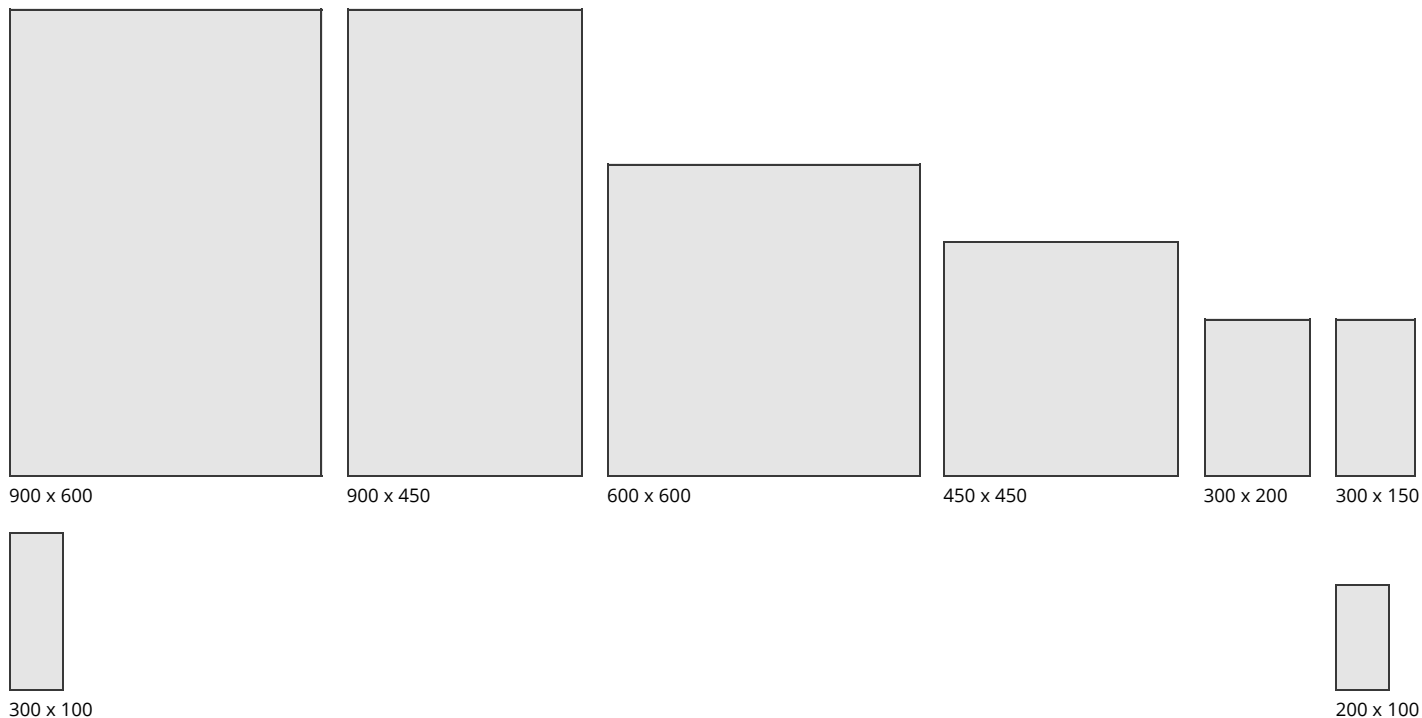
Contact Us	For technical information on the design, specification and construction when utilising the product, contact the Technical Advisory Services Department on 0370 411 2233
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Suggested Plan Sizes



The plan sizes shown above illustrate popular sizes of our Natural Stone. Bespoke sizes are available upon request.

