

Brick Technical Data Sheet - Dense Concrete Common Bricks

BTDS 4

Marshalls' Dense Common Bricks are designed to be used for all types of construction above and below dpc level, independently or in conjunction with dense aggregate concrete blocks.

The specially selected dense aggregates used in the manufacturing process provide density, strength and thermal conductivity values, which are compatible with the majority of dense concrete blocks.

In addition to their ability to withstand repeated cycles of attack from rain and frost, good quality dense concrete bricks age harden, and throughout independently controlled laboratory experiments, the bricks passed the most rigorous freeze-thaw tests designed to establish the durability classification for masonry.

The bricks, which may be solid, frogged, or perforated, are manufactured and tested in accordance with BS EN 771-3: 2011; Specification for Masonry Units: Aggregate Concrete Masonry Units.

As stated in this Standard they can be defined as common masonry units normally intended for use with no faces left visible.

	Solid Facing	Frogged Facing	Perforated Facing
Appearance	Colour and finish may vary depending on the supplying works.		
Dimensions	215 x 100 x 65mm	215 x 100 x 65mm 215 x 100 x 73mm	215 x 100x 65mm
Tolerances	Category D1 (+3-5mm in all directions)		
Configuration	Solid, no voids or frogs	Frogged, one bed face	3 vertical perforations
Composition	Dense aggregates, recycled materials and Portland Cement		
Dry Density	1850kg/m ³ – 2150kg/m ³	1850kg/m ³ – 2000kg/m ³	1900kg/m ³ – 2000kg/m ³
Dry Weight	2.7kg – 3.1kg	2.5kg – 2.7kg	2.3kg – 2.5kg
Compressive Strength	>22N/mm ² mean. Air dry.		
Thermal Conductivity	1.24 W/mK @ 3% - 1.33 W/mK @ 5%		
Durability	Based on Table 15 of PD 6697:2010 common bricks are classed as frost resistant and suitable for use below or near external ground level with a high risk of saturation and freezing		
Water Absorption by Capillarity	<150g/m ² /s ^{0.5}		
Water Absorption by Weight	6-10% after 24 hours		
Moisture Movement	<0.60mm/m		
Water Vapour	5/15μ (Tabulated from EN 1745)		
Reaction to Fire	Euroclass A1		
Shear Bond Strength	0.15N/mm ² (Tabulated from EN 998-2: 2003, Annex C)		
Built Wall Weight (100mm Wide)	190kg/m ² Unplastered Single Leaf Wall	180kg/m ² Unplastered Single Leaf Wall	175kg/m ² Unplastered Single Leaf Wall
Green Guide Rating	A+		
Presentation	Self contained packs, shrinkwrapped in most instances to non-returnable pallets, or void packed and shrinkwrapped, depending on supplying works.		

All products are manufactured and supplied in accordance with the relevant Standard with the exception of Regrade/Mixed Commons that carry no warranty on their performance or suitability