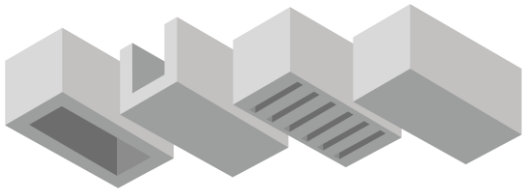
HAUGHLEY BLOCK PLANT



HBP MEDIUM DENSE BLOCKS DATASHEET

A range of fair-face, paint grade and standard medium dense concrete blocks, suitable for all masonry applications, including load-bearing and non-loadbearing walls and beam and block floors.

Appearance and Configuration

The blocks are manufactured from local, specially selected and prepared aggregates, giving a buff-grey finish.

Authority

The block range conforms to BS EN 771-3 and is manufactured under a Quality Management System complying with ISO 9001 and ISO 45001. The blocks meet Category I, Manufacturing Control, as specified in BS EN 1996-1-1: 2005.

BLOCK PROPERTIES		
Dimensions (mm):	L: 440mm, H: 215mm W: 100mm, 140mm W: 190mm, 215mm	
Dimensional tolerances:	Category: Flatness: Parallelism:	D1 NPD NPD
Configuration:	Group 1 Solid	
Dimensional stability:	Moisture movement <=0.6mm/m	
Shear bond:	0.15N/mm² (fixed value)	
Flexural bond strength:	NPD	
Characteristic compressive strength:	3.6 N/mm², 7.3N/mm², 10.4N/mm² (⊥ bed face)	
Net Dry Density:	1400-1600 kg/m³	
Reaction to fire:	Euroclass A1	
Water absorption:	NPD	
Water Vapour Diffusion:	5/15μ (fixed value)	
Thermal conductivity:	P = 50% 0.57 W/(m.K) [λ10,dry]	
Durability against freeze-thaw:	Not to be left exposed	

UKCA

Technical Properties

Properties	**100**	**140**	**190**	**215**
Mean compressive strength	3.6, 7.3, 10.4 N/mm²			
Net dry density of concrete	1400-1600 kg/m³			
Unit weight (kg)	14.7	19.6	27.3	29.9
Laid weight (kg/m²)	157	209	292	319
Reaction to fire	Classification to EN 13501-1: A1			

Note: unit and laid weights are approximate and calculated based on the specified dry density and moisture content.

Technical Performance

Typical fire resistances for the HBP Blocks are based on the National Annexe to BS EN 1996: (Parts 1 & 2)

Block Size	**Single leaf no applied finish**	
	Loadbearing wall	**Non-loadbearing wall**
100	2 hrs	4 hrs
140	3 hrs	4 hrs
190	6 hrs	6 hrs
215	6 hrs	6 hrs

Note: the application of plaster will extend the period of fire resistance.

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Estimated Sound Reduction

The sound reduction of HBP Blocks has been assessed and indicated in the table below:

Block Size	No finish other than paint	Drylined Both sides	Plastered Both sides
	Decibels (dB)		
100	47	49	50
140	50	51	52
190	53	54	55
215	54	55	56

Design

The design of loadbearing and non-loadbearing walls should be in accordance with the recommendations of BS 8103: Part 2, BS EN 1996:1-1: 2005 and the relevant requirements of the Building Regulations.

Installation

The construction of walls should be in accordance with BS EN 1996: (1-1: 2005, 1-2: 2005) and 2: 2006) and normal good practice. For use above DPC, the blocks should be laid using mortar strength class M4. Below DPC level strength class M4, or M6, can be used depending on the risk of saturation and freezing.

Control joints

Accommodation of movement due to material shrinkage, and ambient conditions should be assessed and considered in accordance with BS EN 1996:1-1: 2005 and PD 6697. For unreinforced walls, control joints should normally be provided at 6.0m centres.

Pack details

Pack Size (no. of blocks)			
100	140	190	215
90	60	40	40

Sustainability and Environment

Haughley Block Plant Bury St Edmunds is the first zero-carbon block factory in the UK; all electricity to the block machine, batching plant, cuber, kilns etc is solar or wind, all ancillary machinery is electric lithium powered battery. This factory gives us licence to manufacture/deliver the most environmentally friendly blocks of every kind/type, density/weight (factory visits on request).

Haughley Block Plant Ltd is ISO 9001, ISO 14001, ISO 45001and UKCA certified.

Special requests

Haughley Block Plant is privately-owned, this allows us to produce cost-effective, special-order blocks, quickly and efficiently. Please contact us to discuss your requirements and we will endeavour to fulfil your request in a friendly, professional and confidential manner.

HAUGHLEY BLOCK PLANT

Contact:

HAUGHLEY BLOCK PLANT LTD
STATION ROAD, HAUGHLEY
SUFFOLK, IP14 3QP

0203 150 0613

office@haughleyblockplant.co.uk