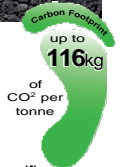


A versatile lightweight aggregate for use in housing, extensions and other buildings.

### General Properties - Table 1

Face Size	440mm x 215mm	
Dimensional Tolerances	Category: D1	
Mean Unit Strength	3.6N/mm <sup>2</sup>	
Net Dry Density	1100 kg/m <sup>3</sup>	
Thermal Conductivity @ 3% moisture content	Internal: 0.39W/mk	External: 0.42W/mk
Moisture Movement	<1.0mm/m	
Reaction to Fire	Class A1	
Configuration	Solid Blocks: Group 1	



Recycled content ..... for specific details please contact the branch.

- Manufactured using selected lightweight aggregates, resulting in a light block for ease of handling and laying
- Suitable for applications above and below ground, including loadbearing and non-loadbearing walls.
- A strong background for applying plaster and render finishes and to secure fixings.

Houseblock 1100 lightweight aggregate concrete blocks are robust and durable and suitable for a range of walling applications. This includes the inner leaf of cavity walls when used with cavity insulation and partition walls.

Houseblock 1100 can also be used externally where rendering or a cladding is to be applied to the wall.

### Appearance

Houseblock 1100 is medium to dark grey in colour and has a granular surface suitable for plastering or rendering. It is available in a face size of 440mm x 215mm in 100mm and 140mm widths. They are produced in solid form only.

### Standards

Houseblock 1100 blocks are BSI Kitemarked certified to BS EN 771-3. They are Category 1 masonry units, manufactured under a BSI approved certified Quality System complying with BS EN 9001.

### Applications

Houseblock 1100 can be considered for use in the following locations:

- The inner and outer leaves of external cavity walls,
- Internal walls including fire break walls
- Internal walls below ground

### Sound Insulation

Houseblock 1100 can provide good levels of sound insulation between rooms in buildings and satisfies Building Regulation E2 for use between rooms in dwelling houses. It is not recommended for use in separating walls in dwellings. However, other products are available to satisfy this requirement.



## Sustainability

**Responsible sourcing** - Lignacite Ltd operates its manufacturing plants to a BSI certified Environmental Management System (EMS) complying with ISO14001. Lignacite Ltd. complies with the requirements of BES 6001 – Framework Standard for the Responsible Sourcing of Construction Products, Certificate No: BES 580823. This independently confirmed Responsible Sourcing Certification provides re-assurance to our customers that they are procuring products responsibly and sustainably. Credits can also be gained under environment assessment schemes such as BREEAM and the Code for Sustainable Homes.

**Environmental ratings** - Summary green guide ratings applicable to Houseblock 1100 blocks can be obtained from the BRE Green Guide to Specific Guide to Specification.

## Design

The design of walls incorporating Houseblock 1100 blocks should be in accordance with BS 8103: Parts 2 and BS EN 1996-1-1.

## Surface Finish Recommendations

**Drylining** - Application to be as manufacturer's recommendations.

**Dense Plaster** - Apply either 1:1:6 cement:lime:sand or 1:4 ½ Masonry cement:sand or 1:5 ½ cement:sand and plasticiser. Alternatively: Thistle Bonding or Thistle Hardwall or Knauf Ultimate backing plaster.

**Finishing Coats** - Thistle plaster finish or Thistle multi-finish or Knauf Multi cover.

**External Rendering** - Rendering to be in accordance with BS EN 13914-1. Avoid over strong mixes. Ensure the first coat of render is applied to a greater thickness than successive coats. Builders considering the use of proprietary single coat render systems must exercise caution to accurately adhere to the render manufacturers' design and specification guides. Furthermore, during application, strictly adhere to the specific and expansive application instructions, paying particular attention to prevailing weather conditions applied thereto. PLEASE NOTE that traditional rendering applications are not so seasonally and conditionally demanding.

## Movement Control

Movement joints should be considered in accordance with PP 6667 at approximately 6.0 metre spacings. In areas of concentrated stress, such as those above and below openings, consideration should be given to the use of bed joint masonry reinforcement.

## Mortar

The mortar type for work above ground level should be designation (iii) / Compressive Class M4. Stronger mixes may be used only with the permission of the designer. Stronger mixes may also be required for work below ground in accordance with PP 6667.

**Block Weights - Table 2**

Width (mm)	Form	Unit Weight (kg)	Laid Weight (kg/m <sup>2</sup> )
100	Solid	10.7	117
140	Solid	15.0	164

Note: Weights are based on 3% moisture content by weight.

**Thermal Resistances - Table 3**

Width (mm)	Form	Thermal Resistance (m <sup>2</sup> K/W)	
		3% m/c	5% m/c
100	Solid	0.256	0.228
140	Solid	0.360	0.333

Note: 3% moisture content (m/c) should be used for protected locations such as the inner leaf, and 5% for exposed locations such as the outer leaf when rendered.

**Sound Reduction - Table 4**

Width (mm)	Form	Sound Reduction Index Rw (dB)	
		L/weight Plaster	Dry Lined
100	Solid	41	40
140	Solid	43	42

Note:

- The above values are based on technical assessments and tests to BS EN ISO 140-3
- Surface finishes are assumed to be applied to both wall faces.

**Fire Resistances - Table 5**

Width (mm)	Form	Fire Resistance (hours)	
		Loadbearing	Non Loadbearing
100	Solid	2	2
140	Solid	3	4

Note: The above values are for single leaf walls with no finish.

## Accreditations

