

## Product Data

## Lignacite Fibo 800

Ultra lightweight, loadbearing units, suitable for general purpose walling applications. Ideal for use in housing and extensions.



### Technical Properties

Face Size	440mm x 215mm
Dimensional Tolerances	Category: D1
Mean Unit Strength	3.6N/mm <sup>2</sup>
Net Dry Density	890 kg/m <sup>3</sup>
Thermal Conductivity (W/mK)	Internal: 0.31 External: 0.38
Moisture Movement	<0.8mm/m
Reaction to Fire	Class A1

- High thermal insulation reducing the amount of added insulation required to be energy efficiency standards
- Lightweight , making Fibo 800 an easy to handle - one-hand lift - and quick to lay.
- Good background for direct application of plasters and renders – no bonding agents required. Fixings can be easily made and held securely. Ideal for direct nailing
- Excellent levels of fire protection - up to 2 hours for 100mm loadbearing walls

Fibo 800 is an ultra lightweight concrete block manufactured from expanded clay aggregates and a mixture of other naturally occurring raw materials and cement. The clay aggregate is produced from carefully selected clays which through heat expansion are bloated to create a low density porous aggregate with numerous cavities. This is what makes Fibo 800 so incredibly light and thermally efficient.

### Appearance

Fibo 800 has an open textured surface which is ideal for applying plaster and render. It has a face size of 440m x 215mm and is available in solid form.

### Standards

Fibo 800 is BSI Kitemarked approved to BS EN 771-3. They are Category 1 masonry units manufactured under a BSI certified Quality System complying with BS EN 9001.

### Applications

Fibo 800 is suitable for use in housing and extension projects. It can also be used to construct walls in other buildings where there is a requirement to use walls with low self-weight , e.g. , partition walls. Fibo 800 can be considered for use in the following locations:

- Inner and outer leaves of external cavity walls
- Internal walls, including fire break walls
- Internal walls below ground, such as the inner leaf of external cavity walls and interior walls.

### Sustainability

**Responsible sourcing**  
Lignacite Ltd. operates its manufacturing plants to a BSI certified Environmental Management System (EMS) complying with ISO14001.

An EMS is also held by its key supply chain processes, as specified in the *Responsible sourcing* assessment criteria of BREEAM and the Code for Sustainable Homes. This assured level of responsible sourcing can contribute towards the required BREEAM rating or Code assessment.

### Environmental ratings

Summary green guide ratings applicable to Fibo 800 can be obtained from the BRE Green Guide to Specification.

Block weights - Table 1

Width (mm)	Form	Unit weight (kg)	Laid weight (kg/m <sup>2</sup> )
100	Solid	8.7	98
140	Solid	12.2	143

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

Thermal Resistances - Table 2

Width (mm)	Form	Thermal Resistance (m <sup>2</sup> K/W)	
		3%	5%
100	Solid	0.32	0.29
140	Solid	0.45	0.41

**Note:** 3% moisture 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 3

Width (mm)	Form	Sound Reduction Index, Rw (dB)	
		L/weight Plaster	Dry Lined
100	Solid	39	38
140	Solid	41	40

**Note:** The above values are for single leaf walls and the surface finishes are applied to both wall faces.

Fire Resistances - Table 4

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.

### Design

The design of walls incorporating Fibo 800 should be in accordance with BS 5628-Parts 1 and 2 or relevant European design standards and the requirements of the Building Regulations.

### 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.

### Movement Control

Movement joints should be considered in accordance with BS 5628-3 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 BS 5628-3.

### Lignacite Ltd.

High Street	Meadgate Works
Brandon	Nazeing
Suffolk IP27 0AX	Waltham Abbey
Tel: 01842 810678	Essex EN9 2PD
Fax: 01842 814602	Tel: 01992 464441
E-mail: info@lignacite.co.uk	Fax:01992 445713

