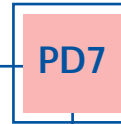


Uniclass L322	EPIC F611
CI/SFB (2-)	Ff5
2006	



# Product Data

# Lignastone

## Description

Lignastone is an extremely durable 'cast stone' product of the highest quality. Inherent high strength is achieved using a finely textured mix, providing the capacity to replicate intricate details.

Lignastone is hand cast, which means that a wide variety of shapes and dressings can be produced to meet individual design requirements.

Lignastone is a material that closely resembles natural stone, with a significant cost advantage. It may be used both internally and externally.

All fine textured products, by their very nature, need careful handling on site.

## BS EN Standards

Hand cast in accordance with 771-5 from a homogeneous and carefully controlled mix of graded natural aggregates, additives and cement. Note this standard only covers units upto 650mm in any co-ordinated dimension.

## Fire

Lignastone cast masonry units provide excellent fire resistant properties.

## Colour

A basic range of colours is available, as indicated here, but Lignastone can be produced to match most natural building stones, terracotta and faience.



Portland



Bathstone



Sandstone

<b>Dimensional Tolerances</b>	
Category:	D2
Flatness of surface: (only applicable to natural facing units)	<(0.1√ <sup>L</sup> d*)mm or 2mm whichever the greater
<b>Mean Cube Strength</b>	
Lignastone:	35.0N/mm <sup>2</sup> (Solid form)
<b>Net Dry Density</b>	
Lignastone:	2250kg/m <sup>3</sup>
<b>Thermal Conductivity (W/mK)</b>	
Lignastone:	Internally 1.67
Based on tabulated values from BS EN 1745	Externally 1.79
<b>Water Vapour Diffusion Coefficient μ</b>	
Lignastone:	30/100
Based on tabulated values from BS EN 1745	
<b>Moisture Movement</b>	
Lignastone:	<0.6mm/m
<b>Water Absorption by Capillarity</b>	
Lignastone:	<3.0g/m <sup>2</sup> /S <sup>0.5</sup>
<b>Reaction to Fire</b>	
Classification:	A1
<b>Durability</b>	
Based on tabulated values from BS 5628-3 table 12	Frost resistant
<b>Bond Strengths</b>	
Based on tabulated values from BS EN 998-2 Annex C	0.15N/mm <sup>2</sup>

\*Ld - Length of the diagonal of the surface declared plain.

For information about shapes, see section PD10. For details of Hollow and Cellular blocks, see fig DC7 in Design Section. For information about the characteristic compressive strength of masonry fk, see section DC8.

## Slenderness Ratio

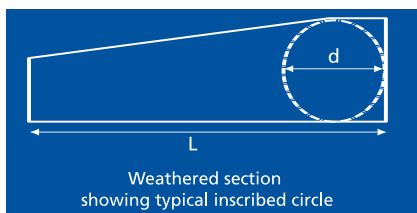
A Slenderness ratio is equated by using the diameter of either an inscribed or superscribed circle on the section of the product determined by the supported plane, and the length of the product.

A slenderness ratio S is given by the equation:  $S = \frac{L}{d}$

where L is the product length in mm and d is the diameter of the circle.

The slenderness ratio should be less than or equal to 12 (up to a maximum span of 3.0m).

Alternative ratios may be used subject to agreement between manufacturer and purchaser.



## Reinforcement

Reinforcement may be required either for structural or handling purposes only. Other metal components may be required for fixing or restraint purposes. These may or may not be considered as part of the reinforcement.

Untreated low carbon high yield steels shall have a minimum cover of 40mm when measured from any installed exposed face and 30mm from any protected face.

## Thermal Resistance - Table 1

Width (mm)	Form	Thermal Resistance (m <sup>2</sup> K/W)	
		3%	5%
90	Solid	0.054	0.050
100	Solid	0.060	0.056