

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.

Standards - Hand cast in accordance with BS EN 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.

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.



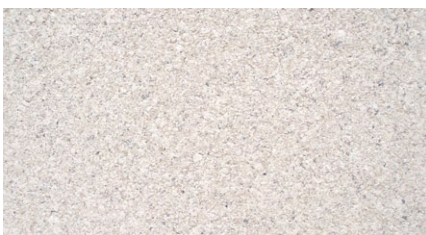
Belstead Care Home

Recycled content for specific details please contact the branch.

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.



Lignastone Swatches



Portland



Bathstone



Sandstone

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.

Cleaning - Facing Masonry is naturally durable and maintains it's appearance with simple cleaning techniques, even in conditions of hard use. Contact Lignacite for information about specific cleaning recommendations, should this be necessary. See also SW4 from the site-work section of our technical literature.

General Physical Properties - Table 1

| | | |
|---------------------------------|--|--|
| Dimensional Tolerance | Category: Flatness of surface: | D2 <(0.1√Ld*)mm or 2mm whichever the greater |
| Mean Cube Strength | | 35.0 N/mm ² Solid |
| Net Dry Density | | 2250kg/m ³ |
| Thermal Conductivity | Based on tabulated values from EN 1745 | Internally 1.67 W/mK Externally 1.79 W/mK |
| Water Vapour Diffusion | Based on tabulated values from EN 1745 | 30/100 μ |
| Moisture Movement | | <0.6mm/m |
| Water Absorption by Capillarity | | <3g/m ² /S ^{0.5} |
| Reaction to Fire | Classification to EN 13501-1 | A1 |
| Durability | Based on tabulated values from PD 6697 | Frost resistant |
| Shear Bond Strength | Based on tabulated values from EN 998-2 Annex C | 0.15N/mm ² |
| Configuration | To EN 1996-1-1: Solid units: Group 1, Cellular/Hollow units: Group 2 | |

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

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 Resistances - Table 2

| Width (mm) | Form | Thermal Resistance (m ² K/W) | |
|------------|-------|---|--------|
| | | 3% m/c | 5% m/c |
| 90 | Solid | 0.054 | 0.050 |
| 100 | Solid | 0.060 | 0.056 |

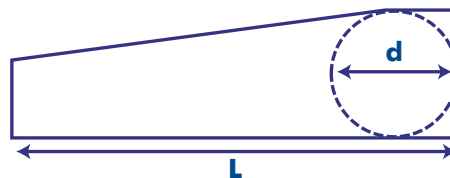
Slenderness Ratio - A Slenderness ratio is calculated by using the diameter of either an inscribed or superscribed circle on the section of the product determined by the supported plane, and the length of the product.

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.



Weathered section showing typical inscribed circle

Accreditations

