



GUITING QUARRY
UPPER COSCOMBE, TEMPLE GUITING, CHELTENHAM. GL54 5SB
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GUITING CREAM COTSWOLD LIMESTONE

Petrographic Description and Mineral Examination:

Guiting Cream Limestone is light cream in colour with occasional patches of pale iron oxide colouration. The principal constituents are well rounded ooliths [typically 1mm in size] which are micritic in nature with some showing crystalline seeds. The ooliths are loosely packed showing minimal compaction distortion. Occasional bioclastic fragments are noted, and all constituents were held within a sparite cement.

In thin section the stone was confirmed as a limestone consisting primarily of ooliths, with these comprising more than 25% of the allchems present. The ooliths were mainly micritic in nature and show a concentric structure centered around fragments of intraclast, fibrous bioclast or quartz grain. Rarely, small concentrations of iron minerals are visible with ooliths, giving rise to a very localised orange discolouration. As well as seeds to ooliths, angular quartz grains are present as discrete grains.

The allochems are generally well sorted and loosely packed, showing minimal inter-particle contact and distortion due to compaction. All particles are well cemented within a sparry calcite cement. Only a few pore spaces are apparent. Based on the mineralogy identified the stone has been giving the classification of Oolitic Limestone.

Block Dimensions:

- Bed Height 300mm – 1000mm
- Block Length Upto 2500mm
- Block Width Upto 1200mm
- Block Weight Upto 10 tonnes

Technical Data [BRE Test Report P117499 – 21st December 2020]

*Masonry BSEN 771-6

TEST	STANDARD	RESULT
Petrographic Examination	BS EN 12407	Oolitic Limestone [Oosparite]
Apparent Density	BS EN 1936	1810 kg/m ³
Open Porosity	BS EN 1936	33.2% by volume
Water Absorption by atmospheric pressure	BS EN 13755	14% by weight
Water Absorption by capillarity	BS EN 772-11	143 g/(m ² .s0.5)
Compressive Strength	BS EN 772-11	10.1 MPa
Frost Resistance	BS EN 12371	56 Cycles
Water vapour resistance factor dry	EN ISO 10456	40
Water vapour resistance factor wet	EN ISO 10456	25
Specific heat capacity	BS EN 1745	1000 J/(kg.K)
Thermal Conductivity	BS EN 1745	1.1 W/(m.K)
Reaction to fire	ISO 13501-1	A1



*Cladding BS EN 1469

TEST	STANDARD	RESULT
Petrographic Examination	BS EN 12407	Oolitic Limestone [Oosparite]
Apparent Density	BS EN 1936	1810 kg/m ³
Open Porosity	BS EN 1936	33.2% by volume
Open Porosity after Thermal resistance	BS EN 1936	33.3% by volume
Water Absorption by atmospheric pressure	BS EN 13755	14% by weight
Water Absorption by capillarity	BS EN 772-11	143 g/(m ² .s0.5)
Flexural strength dry tested perpendicular to the edges of the planes of anisotropy	BS EN 12372	2.3 (2.0) MPa
Flexural strength after 14 cycles freeze/thaw resistance	BS EN 12372	2.4 (2.0) MPa
Flexural strength dry after 20 cycles thermal resistance	BS EN 12372	2.1 (1.3) MPa
Breaking load at dowel hole	BS EN 13364	850 N
Water vapour resistance factor dry	BS EN 10456	40
Water vapour resistance factor wet	BS EN 10456	25
Specific heat capacity	BS EN 1745	1000 J/(kg.K)
Thermal Conductivity	BS EN 1745	1.1 W/(m.K)
Reaction to fire	ISO 13501-1	A1
Direct airborne sound insulation	BS EN 1936	1810 kg/m ³

*All comprehensive British and European Standards test data and declaration of performance for CE Marking application are available on request.

To discuss Block Stone or request further information, please contact Guitng Quarry 01451 600670 or visit our website www.jqgroup.co.uk



Disclaimer:

Natural limestone, as the name implies, is a product of nature. Therefore, any variations in texture, color, veining, markings, marbling and patina must be accepted. These differences and disparities are part of what makes natural stone beautiful, and should not be considered as flaws. Over time, many factors influence weathering characteristics of natural stone such as location, degree of exposure, prevailing weather conditions and design. Any product images or photographs shown on our website are in place to provide a general idea about the colour and variations that can appear in our natural stone. All samples provided are to give you an overall idea of the variation in veining and color variation. Any recommendations or suggestions made in the use of stone do not constitute a guarantee.