Product Data

Sahara Facing Masonry

Description

Sahara medium density Facing Masonry blocks, 440x215mm face size,* are designed for internal or external situations combining inherent decorative appeal with strength and durability.

Manufactured from cement, sand, lightweight aggregates and coloured with pigments, in a choice of two colours, they are available in an extensive range of widths and strengths, in solid, hollow and cellular forms.

These units are particularly close textured, providing a very close grained surface similar to that of natural sandstone or bathstone.

Uses

Suitable for use below DPC both internally and externally.

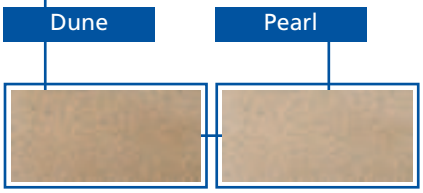
Standards

Sahara blocks are kitemarked as conforming to BS EN 771-3 Aggregate Concrete Masonry Units. They comply to Category 1 Masonry Units and are manufactured under a comprehensive Quality Assurance Scheme assessed and certified to BS EN 9001:2002 by the BSI.

Fire

Sahara Facing Masonry units provide excellent fire resistant properties.

**Metric Modular (390x190mm) blocks are available to special order in 90mm, 140mm solid form, and 190mm widths in both solid & hollow form. These units are available in natural finish only.*



Dimensional Tolerances

Category	D1
(Closer tolerances are available on request)	
Flatness of surface:	<2mm
(only applicable to natural facing units)	

Mean Unit Strength

Sahara Facing Masonry:	7.3N/mm² (Solid form)

Net Dry Density

Sahara Facing Masonry:	1700kg/m³

Thermal Conductivity (W/mK)

Sahara Facing Masonry:	Internally 1.08
Based on tabulated values from BS EN 1745	Externally 1.15

Water Vapour Diffusion Coefficient μ

Sahara Facing Masonry:	5/15
Based on tabulated values from BS EN 1745	

Moisture Movement

Sahara Facing Masonry:	<0.8mm/m

Water Absorption by Capillarity

Sahara Facing Masonry:	<100g/m²/S$^{0.5}$

Reaction to Fire

Classification to EN 13501-1:	A1

Durability

Based on tabulated values from BS 5628-3 table 12	Frost resistant

Bond Strengths

Based on tabulated values from BS EN 998-2 Annex C	0.15N/mm²

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.

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Thermal Resistance - Table 1

Width (mm)	Form	Thermal Resistance (m^2K/W) 3%	5%
75	Solid	0.069	0.065
90	Solid	0.083	0.078
100	Cellular	0.144	0.137
100	Solid	0.093	0.087
140	C/H	0.187	0.179
140	Solid	0.130	0.122
150	Solid	0.139	0.130
190	Hollow	0.220	0.211
190	Solid	0.176	0.165
200	Solid	0.185	0.156
215	Hollow	0.232	0.224
215	Solid	0.200	0.187

Fire Resistances (hrs) - Table 3*

Width (mm)	Form	Loadbearing	Non Loadbearing
75	Solid	-	1
90	Solid	1	1.5
100	Cellular	-	0.5
100	Solid	2	2
140	C/H	-	3
140	Solid	2	3
150	Solid	2	4
190	Hollow	-	4
190	Solid	2	4
200	Solid	2	6
215	Hollow	-	6
215	Solid	2	6

**Based upon single leaf with no finish*
Key: C/H=Cellular and Hollow.

Sound Absorption - Table 5

Frequency (Hz)	Sound absorption coefficient a_p
125	0.15
250	0.25
500	0.35
1000	0.40
2000	0.45
4000	0.45
Weighted Sound Absorption Coefficient a_w	0.40
Classification of Sound Absorption	Class D

Sound Absorption coefficient (a_s) measurements of 100mm thicknesses of Lignacite were made in the AIRO acoustics Laboratory. The measurements were made in 1/3 octave bands from 100Hz to 5000Hz in accordance with BS EN 20354: 1993.

From the results of the measurements the octave band Practical Sound Absorption Coefficient (a_p), single figure Weighted Sound Absorption Coefficient (a_w) and Sound Absorption Class have been determined in accordance with BS EN ISO 211654: 1997.

Unit Weights - Table 2

Width (mm)	Form	Unit Weight (kg)	Weight laid inc Mortar (kg/m^2)
75	Solid	12.1	128
90	Solid	14.5	154
100	Cellular	13.2	142
100	Solid	16.1	171
140	C/H	17.0	184
140	Solid	22.5	239
150	Solid	24.1	256
190	Hollow	20.3	223
190	Solid	30.6	325
200	Solid	32.2	342
215	Hollow	22.3	246
215	Solid	34.6	367

Surface Finish Recommendations

- **Fair faced work**
  Sahara blocks are supplied having one face and one end finished. As with all fairfaced work, care is required at both the design and construction stages to plan the blockwork, to avoid cutting and to maintain block bond, producing a clean, consistent finish. The use of handcast shaped blocks, such as quoins is recommended for high quality results.
- **Cleaning**
  Sahara blocks are naturally durable and maintain their appearance with simple cleaning techniques, even in conditions of hard use. Contact Lignacite Ltd for information about specific cleaning recommendations, should this be necessary. See also SW4 from the Sitework section.

Where back of block is to be treated

- **Drylining**
  Application to be as manufacturer's recommendations.
- **Dense Plaster**
  Rake-back joints and apply stipple coat.
  Apply either 1:1:6 cement:lime:sand or 1:4½ masonry cement:sand or 1:5½ cement:sand & plasticiser or designation Class III render.
  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**
  To be In accordance with BS 5262: 1991.

Sound Insulation $Rw^{(C;Ctr)}$dB - Table 4

Width (mm)	Form	Lightweight Plaster	Dense Plaster	Dry lined	Fair faced
75	Solid	-	-	-	$39^{(-1;-6)}$
90	Solid	-	-	-	$43^{(-1;-6)}$
100	Cellular	-	-	-	$43^{(-1;-6)}$
100	Solid	-	-	-	$46^{(-1;-6)}$
140	C/H	-	-	-	$47^{(-1;-6)}$
140	Solid	-	-	-	$50^{(-1;-6)}$
150	Solid	-	-	-	$51^{(-1;-6)}$
190	Hollow	-	-	-	$49^{(-1;-6)}$
190	Solid	-	-	-	$53^{(-1;-6)}$
200	Solid	-	-	-	$53^{(-1;-6)}$
215	Hollow	-	-	-	$50^{(-1;-6)}$
215	Solid	-	-	-	$54^{(-1;-6)}$