# Medium Density Concrete Blocks FACE DIMENSIONS: 440 x 215mm

Thickness (mm)	Form	Paint grade	Metres per pack	Approx density (Kg/m³)	Approx weight (Kg)	Standard strength (N/mm²)	Approx drying shrinkage (1%)	λ (W/mK) at 3%m.c	λ (W/mK) at 5%m.c	R (m <sup>2</sup> K/W) at 3%m.c	R (m <sup>2</sup> K/W) at 5%m.c	Approx built weight (Kg/m²)	Notional fire resistance (HRS)	Sound reduction value (dB)
75	S	*	11.0	1350/1400	9.93	7.3	0.035	0.48	N/A	0.153	N/A	108	N/A	49
100	S	<b>✓</b>	9.0	1350/1400	13.25	3.6 / 7.3	0.035	0.48	N/A	0.205	N/A	145	2	51
140	S	<b>✓</b>	6.0	1350/1400	18.55	7.3	0.035	0.48	N/A	0.286	N/A	202	3	54
	Н	*	6.0	950/1000	12.90	7.3	0.035	0.48	N/A	0.331	N/A	141	2	51
150	S	*	6.0	1350/1400	19.85	7.3	0.035	0.48	N/A	0.306	N/A	216	6	55
190	S	*	5.0	1350/1400	25.15	7.3	0.035	0.48	N/A	0.388	N/A	273	6	57
215	S	*	4.0	1350/1400	28.47	7.3	0.035	0.48	N/A	0.439	N/A	309	6	58
	Н	*	4.0	950/1000	19.85	7.3	0.035	0.48	N/A	0.427	N/A	216	2	55

<sup>\*</sup> TO ORDER ONLY

# **SUITABLE FOR USE**

Further information refer to BS 5628: Part 1:2005 Code of Practice for the structure use of masonry.

## **BLOCK COMPOSITION**

Medium density blocks are manufactured using more than 75% by volume of recycled by-product material from the generating and steel making processes. The properties of the aggregates used by Gryphonn Concrete Products in this range of blocks are strictly in accordance with relevant British Standards BS EN: 13055-1:2002 & BS EN: 1744-1:1998.

# **STRENGTHS**

Standard quality medium density blocks are available from stock with a minimum average compressive strength of 3.6N/mm<sup>2</sup> and 7.3N/mm<sup>2</sup>. Higher strengths of 10.4N/mm<sup>2</sup> are available but would generally require to be specially ordered.

It should be noted that the higher strength blocks could vary slightly in colour and texture along with a marginal increase in block weight and density.

Further information on high strength dense concrete blocks is available from our sales department.

# THERMAL PROPERTIES

The thermal resistance (m<sup>2</sup>K/W) of the various medium density concrete blocks is tabulated to provide component values that can be combined with similar information on other components forming external wall construction thus enabling the calculation and comparison of the overall thermal conductivity of different constructional solutions. The K values (W/mK) are based on the standard values of lightweight blocks given in the CIBSE guide A : Environmental Design.

# MOISTURE MOVEMENT

Drying shrinkage will not exceed the limiting values specified in BS EN 772-14:2002 when measured in accordance with that specification. Drying shrinkage may not occur if the product is used in permanently damp conditions.

# **Medium Density Concrete Brickettes**

Size	Form	No/Pack	Approx weight (Kg)
100 x 215 x 65	No frogs or holes	416	2.1

#### **BUILT IN WEIGHT**

The figures given are for single leaf construction excluding wall finishes

## **NOTIONAL PERIODS OF FIRE RESISTANCE**

Figures given above are for load bearing single leaf, unplastered construction. Medium density blocks are non combustible and conform to Class 0 rating for the surface spread of flame. For further information refer to BS 5628: Part 3:2005.

# **PAINTGRADE QUALITY**

In addition to our standard quality medium density blocks range, we have available a range of blocks manufactured for the purpose of receiving direct decoration systems. This block should not be used for rendered finishes and it should be noted that it is not intended for fair faced work as the product may be subject to shade and texture variations.

The general properties of this range of blocks is as given for standard quality medium density blocks.

# **BRICKETTES**

Medium density brickettes are available for use in areas of block work where closure or coursing details are required to be carried out in similar density materials.

Brickettes enable this work to be accomplished neatly and provides the sensible alternative to cutting full blocks.

