

Masterdenz Fairfaced product information



BES6001:2008



An economical solution to undecorated masonry walls.

- Available in solid and hollow format for ultimate versatility with a standard strength of 7.3N/mm²
- High strength blocks are available subject to order to your specification
- Manufactured from carefully selected aggregates to give both a close texture and a natural colour
- Masterblock's quality assured manufacture provides a one face and one end guarantee
- For use internally and externally (solid units only) both above and below dpc

Applications

Suitable for use above and below dpc.

Note: only one face and one end guaranteed.

Performance

Dimensional tolerances

Category D1

Mean unit strength:

Solid: 7.3 N/mm²
Cellular/Hollow: 7.3 N/mm²

Net dry density:

All strengths 1900 kg/m³

Thermal conductivity (W/mK):

All strengths Internal 1.22
External 1.31

Based on tabulated values from BS EN 1745

Water vapour diffusion coefficient:

All strengths 5/15

Based on tabulated values from BS EN 1745

Moisture movement:

All strengths <0.6mm/m

Reaction to fire:

Classification to EN 13501-1 A1

Durability:

Based on tabulated values from BS 56283 table 12 (frost resistant)

Bond strengths:

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

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Size (mm)	440x215	440x215	440x215	440x215	440x215	440x215	440x215
Thickness (mm)	75	100	140	140 Holl	140 Cell	140 M/Cell	190
Density	1900	1900	1900	1900	1900	1900	1900
Weight	13.7	18.3	25.6	19.8	17.6	18.2	34.7
Units/m ²	9.88	9.88	9.88	9.88	9.88	9.88	9.88
No per pack	88/96	72	48	48	48	48	40
M ² /pack	8.8/9.6	7.2	4.8	4.8	4.8	4.8	4.0
Pack weight (T)	1.25	1.32	1.23	0.95	0.85	0.88	1.39
Colour	Natural	Natural	Natural	Natural	Natural	Natural	Natural
Finish	Fairfaced	Fairfaced	Fairfaced	Fairfaced	Fairfaced	Fairfaced	Fairfaced

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Table 1 - Thermal resistance

Width (mm)	Density	Thermal resistance (m ² K/W)	
		3%	5%
75	Solid	0.061	0.57
100	Solid	0.082	0.076
140	Solid	0.115	0.107
140	Hollow	0.183	0.175
140	Cellular	0.171	0.163
140	Multi cellular	0.223	0.212
190	Solid	0.156	0.145

Table 2 - Unit weights

Width (mm)	Form	Unit weight*	Built weight
		(kg)	(kg/m ²)
75	Solid	13.7	144
100	Solid	18.3	193
140	Solid	25.6	269
140	Hollow	19.8	212
140	Cellular	17.6	190
140	Multi cellular	18.2	196
190	Solid	34.7	365

Based upon 3% moisture content by volume.

Table 3 - Fire resistance (hours)

Width	Form	Load bearing	Non load bearing
75	Solid	N/A	1
100	Solid	2	2
140	Solid	2	3
140	Hollow	N/A	3
140	Cellular	N/A	3
140	Multi cellular	N/A	3
190	Solid	2	4

Above values assume worst case, class 2 aggregate, single leaf, no finishes (based upon BS5628 - 3).

Table 4 - Sound insulation*

Width	Form	Rw dB
75	Solid	41*
100	Solid	43*
140	Solid	45*
140	Hollow	49
140	Cellular	49
140	Multi cellular	49
190	Solid	47*

*Based upon mass law calculation assuming plastered or painted both sides.

Table 5 - Characteristic strength f_k factors (N/mm²)

Width	Form	Compressive strength of units			
		7.30	10.50	17.50	22.50
75	Solid	6.40	8.20	10.10	12.00
100	Solid	6.40	8.20	10.10	12.00
100	Cellular	6.10	7.10	N/A	N/A
140	Solid	5.34	6.84	8.44	10.01
140	Multi cellular	5.14	6.10	N/A	N/A
190	Solid	4.41	5.66	7.00	8.28

Values based upon BS5628 - 1, assuming M4/type III mortar.

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Manufacturing standards

The Masterdenz range is manufactured using a semi-dry process and is compliant to European Standard BS 771-3 and complies with Category 1 masonry units.

All Aggregate Industries' products are manufactured in accordance with ISO 9001 with factory compliance to ISO 14001.

Sustainability and local sourcing

Energy use: Aggregate Industries is at the forefront of sustainability and has committed to reduce carbon emissions by 20% by 2012 based on a base line.

Recyclable: 100% of the product can be recycled thus reducing the amount of material that is sent to landfill.

Manufacturing location: produced in the UK, with locally sourced materials under strict environmental and social legislation, for local supply.

Responsible sourcing: Aggregate Industries is the first company in the world to achieve a BES 6001:2008 Responsible Sourcing Certificate from BRE Global. Products are assessed on:

- quality management
- environmental management
- health and safety management
- greenhouse gas emissions

- minimising raw material usage
- labour practise
- biodiversity
- community engagement.

Key aggregates and recycled content

Locally sourced aggregates.

Generic Green Guide Rating*

100mm Fairfaced internal partition wall - A*.

Policies

Aggregate Industries' policies on the environment and community, health and safety and sustainable solutions for different product applications can be viewed on our website www.aggregate.com

Installation standard

Plastering/Rendering: Masterdenz blocks provide a moderate to low suction background and require the joints to be raked back and a spatter dash coat applied prior to rendering. When plastering, either Carlite Bonding or Hardwall Plaster or similar should be used.

Health and safety: Manual handling legislation and guidance given in construction sheet number 37, for repetitive manual handling recommend

units below 20kg should be considered.

Masterdenz fairfaced blocks are available in 140mm hollow, cellular and multicell, which are below 20kg.

Maintenance and cleaning

Masterblock can supply on request advice on general maintenance.

COSHH data

Full COSHH data on Masterblock products is available on request. Please call the technical helpline on 01285 646800.

Technical support

Detailed guidance and assistance with the preparation of specification and use of Masterblock products is available through the sales office. A free technical design service is also available.

For further information, please refer to Masterblock technical services on 01285 646800.

*Ratings based upon generic green guide values (2009) supplied by BRE Global Ltd, www.thegreenguide.co.uk

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