



Masterdenz® Eco is an environmentally friendlier range of high strength and robust, load-bearing units, suitable for internal and external walls.

Through improvements in the manufacturing and mix design, Masterdenz Eco blocks are produced using a 30% reduction in embodied CO₂ and a minimum of 20% non-primary materials.

FEATURES & BENEFITS

- ▶ A paintgrade option offers a close-textured surface that can be directly decorated to save time and money.
- ▶ 30% reduction in embedded carbon (compared to standard blocks) helps buildings meet government targets for more sustainable domestic and commercial buildings.
- ▶ 20% minimum non-primary material (compared to standard dense blocks) contributes to circularity and reduces waste, ready to be documented in Material Passports.
- ▶ Flexibility of applications for standard finish means efficiencies for buying, delivery, and on-site use.

APPLICATIONS

- ▶ Standard finish is suitable for use above and below damp proof course in external and internal walls.
- ▶ Standard units can be used in block and beam floors.
- ▶ Paintgrade finish can be used for locations where a consistent close textured face is required, suitable for direct decoration (note only one face and one end guaranteed).

COMPLEMENTARY PRODUCTS

- ▶ Masterdenz Coursing Bricks
- ▶ Holcim Cement
- ▶ Holcim Mortar

Environmental Product Declarations are available. Speak to your sales representative or call our technical department for details.

TECHNICAL DATA

Block Type		Solid 100	Solid 140
Face Size (mm)		440x215	440x215
Thickness (mm)		100	140
Dimensional Tolerances		D1	D1
Mean Unit Strength (N/mm ²)		7.3	7.3
Net Dry Density (kg/m ³)		1960	1960
Thermal Conductivity (W/mK) Based on tabulated values from BS EN 1745	Internal	1.08	1.08
	External	1.15	1.15
Thermal Resistance (m ² K/W)	3% Moisture	0.093	0.132
	5% Moisture	0.087	0.123
Sound Insulation (Rw dB) Based upon mass law calculation, assuming plaster both sides		43	45
Fire Resistance (hrs) Based on data from NA to EC6 Part 1-2, single leaf walls with no finishes. Assumed <1.0 of the permitted load capacity is being used	Load-bearing	2	3
	Non load-bearing	4	>4
Reaction to Fire Classification to EN 13501-1		Class A1	Class A1
Moisture Movement (mm/m)		<0.6	<0.6
Water Vapour Diffusion Coefficient μ Based on tabulated values from BS EN 1745		5/15	5/15
Durability Based on tabulated values in accordance with table 15, PD 6697:2010		Frost Resistant	Frost Resistant
Bond Strengths (N/mm ²) Based on tabulated values from BS EN 998-2 Annex C		0.15	0.15
Mortar Designation	Class iii for walls above DPC	1:1:6 Cement:Lime:Sand 1:5 to 6 Cement:Sand	1:1:6 Cement:Lime:Sand 1:5 to 6 Cement:Sand
	Class ii for walls below DPC	1:1/2:4 Cement:Lime:Sand 1:3 to 4 Cement:Sand	1:1/2:4 Cement:Lime:Sand 1:3 to 4 Cement:Sand

Product Data	Solid 7.3 N	Solid 7.3 N
Thickness	100	140
Unit Weight (kg) Based upon 3% moisture content by weight	19.10	26.74
Laid Weight (kg/m ²)	198	277
Pack Size (m ²)	7.2	4.8
Full Load Qty (m ²)	136.8	91.2
Available Finishes	Standard Paintgrade	Standard Paintgrade

GENERIC GREEN GUIDE RATING

Outer Leaf	Inner Leaf	Plaster & Paint	Plasterboard & Paint
Brick	Masterdenz Eco	A+	A+
Render on Masterdenz Eco	Masterlite Pro Eco	A+	A+
Render on Masterlite Pro Eco	Masterdenz Eco	A+	A+

Ratings based upon generic Green Guide values supplied by BRE Global Ltd. <https://bregroup.com/products/green-guide>.

SUSTAINABILITY & LOCAL SOURCING

Energy use and greenhouse gas emissions

Holcim UK is at the forefront of sustainability and has committed to reducing both energy and greenhouse gas intensity 5% year-on-year.

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.

Circular economy

We will maximise reuse and recycle, with zero waste to landfill. We improve resource efficiency through reuse, recovery and/or recycling of waste materials in our production processes. Plus, we minimise the generation of both hazardous and non-hazardous waste.

Responsible sourcing

Holcim UK was the first UK construction company to achieve accreditation to the BES 6001 Framework Standard for the Responsible Sourcing of Construction Products.

Holcim UK has achieved a 'Very Good' rating for major product groups. The BES 6001 standard assesses:

- ▶ Quality Management
- ▶ Environmental Management
- ▶ Health and Safety Management
- ▶ Greenhouse Gas Emissions
- ▶ Minimising Raw Material Usage
- ▶ Labour Practice
- ▶ Biodiversity
- ▶ Community Engagement.

POLICIES

Holcim UK policies on the environment and community, health and safety and sustainable solutions for different product applications can be viewed on our website www.holcim.co.uk.

COSHH DATA

Full COSHH data on the Holcim range of products is available on request. Please call the Technical helpline on **01285 646900**.

MANUFACTURING STANDARD

The Masterdenz Eco range is manufactured using a semi-dry process and is compliant to European Standard BS EN 771-3 and complies with Assessment and Verification of Constancy of Performance (AVCP) system 4, Category II masonry units. All Holcim products are manufactured in accordance with ISO 9001 with factory compliance to ISO 14001.

TECHNICAL SUPPORT

For technical support, including assistance with the preparation of specifications, speak with your sales representative or contact our technical services team via: building.products@holcim.co.uk or call **01285 646900**.

The information contained within this publication was accurate at time of production. However, Holcim UK reserves the right to introduce modifications or changes to detail at any time without notice. No charge is levied for this publication or advice therein, and accordingly the company, its employees and authorised agents can accept no liability whatsoever, either indirectly or directly arising from the use of its products.