

MASTERLITE® PRO ACOUSTIC



Masterlite® Pro Acoustic delivers superior sound insulation and elite fire resistance in a single high-strength block.

These solid blocks have been specifically designed to meet the BB93 acoustic requirements for schools, hospitals, and other public sector and commercial buildings.

FEATURES & BENEFITS

- ▶ Impressive sound-proofing ratings of 45dB (100mm) and 50dB (140mm) are achieved with just a standard mist coat and two layers of emulsion - no plastering is required so money and time savings are significant.
- ▶ Best-in-class fire safety complies with BB100 standards to provide industry-leading 4-hour fire resistance for non load-bearing structures (taken from EC6) and maximum peace of mind.
- ▶ Features a consistent, close-textured face (one end, one face guaranteed) designed for direct decoration that saves time and money.
- ▶ Fully moisture-tolerant to ensure a healthier indoor environment and lower heating and cooling costs.
- ▶ A robust strength of 10.4 N/mm² makes it extremely durable and ready for heavy duty fixings.

APPLICATIONS

- ▶ BB93 compliance makes it perfect for schools, as well as hospitals, retail, commercial, and multi-occupancy residential buildings, such as student accommodation.
- ▶ All units can be used above and below damp proof course, internally and externally.
- ▶ 140mm Masterlite Pro Acoustic is suitable for corridor and partition walls in schools requiring a Rw 50 dB rating.
- ▶ 100mm Masterlite Pro Acoustic is suitable where a Rw 45 dB is required. It's also suitable for the inner leaf of an external cavity wall.

COMPLEMENTARY PRODUCTS

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



TECHNICAL DATA

Block Type		Solid	Solid
Face Size (mm)		440x215	440x215
Thickness (mm)		100	140
Dimensional Tolerances		D1	D1
Mean Unit Strength (N/mm ²)		10.4	10.4
Net Dry Density (kg/m ³)		1450	1450
Thermal Conductivity (W/mK) Based on tabulated values from BS EN 1745	Internal	0.57	0.57
	External	0.61	0.61
Thermal Resistance (m ² K/W)	3% Moisture	0.175	0.246
	5% Moisture	0.164	0.230
Sound Insulation (Rw dB) Based upon mass law calculation, assuming plaster both sides		45	50
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)		<0.8	<0.8
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 10.4 N	Solid 10.4 N
Thickness	100	140
Unit Weight (kg) Based upon 3% moisture content by weight	14.13	19.78
Laid Weight (kg/m ²)	151	212
Pack Size (m ²)	9.0	6.0
Full Load Qty (m ²)	171	114
Available Finishes	Paintgrade	Paintgrade

GENERIC GREEN GUIDE RATING

Partition	Painted Both Sides
Masterlite Pro Acoustic 100mm	A
Masterlite Pro Acoustic 140mm	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 email building.products@holcim.co.uk.

MANUFACTURING STANDARD

The Masterlite Pro Acoustic 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**.

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