

# MASONS ENVIRO AAC PANEL FLOOR SYSTEM

## BUILDING PRODUCT INFORMATION SHEET



**MASONS**  
Designed Smart, Built Tough.

V2.0 April 2025

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### PRODUCT NAME

Masons Enviro AAC 75mm Panel Floor System

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### PRODUCT LINE

Enviro 75mm AAC lightweight floor panel system

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### PRODUCT DESCRIPTION AND USE:

Masons Enviro 75mm AAC Floor System comprises of 75mm thick autoclaved aerated concrete (AAC) panels with corrosion resistant reinforced mesh embedment. It is suitable for residential and light commercial buildings.

The AAC Floor Panels are designed for use with timber or lightweight steel framing or with specifically designed subfloor or mid floor structures.

The panels are 2200mm long x 600mm wide with a tongue and groove long edge joint and panel density of 600kg/m<sup>3</sup>, approximately 25% of the weight of standard concrete.

The system is designed to be overlayed with a suitable flooring system such as solid timber, engineered hardwood floating floor, vinyl, tiles or carpet.

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### SCOPE & LIMITATIONS

Used in conjunction with a primary structure that complies with the NZ Building Code or existing buildings where the designer and/or installer have satisfied themselves that the existing building is suitable for the intended work.

As a flooring substrate for a subfloor or mid floor the flooring panels must be:

- Supported on a structural subfloor in accordance with NASH Standard Part 2:2019, NZS 3604:2011, or specifically designed in accordance with NZS 3603:1993.
- Suitable up to a maximum ultimate uniformly distributed load (UDL) of 3.0 kPa
- When the Enviro™ Floor System panels are used in wet areas, a waterproof membrane must be installed according to the manufacturer's specifications.
- Installed in accordance with the Masons 75 mm AAC Enviro™ Floor System installation instructions and details.
- The cutting of Masons 75 mm AAC Enviro™ Floor panels must strictly follow the Masons installation requirements.

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### PLACE OF MANUFACTURE

China

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### MANUFACTURER: Legal And Trading Name

Refer to Masons NZ Ltd

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## IMPORTER: Legal And Trading Name

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| Company       | Masons NZ Ltd                                  |
| Address       | 18A David McCathie Place, Silverdale, Auckland |
| Phone number  | 0800 522 533                                   |
| Email Address | info@mpb.co.nz                                 |
| Website       | mpb.co.nz                                      |
| NZBN          | 9429031171090                                  |

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## PERFORMANCE CLAIMS / RELEVANT BUILDING CLAUSE

If designed, installed and maintained in accordance with all Masons NZ Ltd requirements, the Masons 75mm AAC Enviro Floor System will comply with or contribute to compliance with the following performance claims:

### B1 Structure

B1.3.1, B1.3.2, B1.1.3 (a, h, j, k, q) B1.3.4

VERIFICATION METHOD B1/VM1

- › Engineering design and PS1 for floor system design parameters for 1.5 kPa – 3.0 kPa UDL floor load for timber framing and hyJOISTS, including diaphragm design and engineering basis to AS/NZS 1170:2002 [set] for span tables and AS 5146.2:2018 [Redco NZ Ltd, 05/07/2024; MiTex, n.d.; Masons NZ Ltd, 07/2023].
- › Load testing in accordance with Q/320114NJXJ001-2023 (JIS A 5416) and engineering bending-strength check at allowable load and span [Redco NZ Ltd, 05/07/2024].
- › Enviro™ floor material properties: compressive strength of 4.0 MPa [Masons NZ Ltd, 07/2024].

### B2 Durability B2.3.1 (a), B2.3.2

ALTERNATIVE SOLUTION

- › Manufactured from cement, silica sand, lime, water and corrosion-resistant reinforcing. Material properties of Masons Enviro™ AAC panels: dry density 525 kg/m<sup>3</sup>, in service density 600 kg/m<sup>3</sup>, dry shrinkage 0.03 – 0.05 %, water absorption up to 30 – 35 % [Masons NZ Ltd, 07/2024].

### F2 Hazardous Building Materials F2.3.1

ALTERNATIVE SOLUTION

- › Masons AAC Enviro™ panels are preformed and do not emit harmful materials in finished form.
- › Use of panels in accordance with manufacturer's safety and usage instructions.

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## SOURCES OF INFORMATION:

Redco NZ Ltd. [05/07/2024] Structural Report. Project 24894. Issue No. 1.

Mitek. [n.d.] Posi-Strut Span Tables for AAC Floor Panel Up to 1.0 kPa Permanent Load. Masons NZ Ltd. [07/2023] Enviro™ AAC Floor Panel System Typical Details. V2.

Masons NZ Ltd. [07/2024] Enviro™ AAC Floor Panel System Design and Installation Guide. V2.0.

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## COMPLIANCE

The system has a reviewed opinion for its structural performance, the relevant opinions may be requested. A product assurance supplier statement is also available.

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## INSTALLATION REQUIREMENTS

Refer to the Design & Installation Guide for Masons Enviro 75mm AAC Panel Floor System

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## MAINTENANCE REQUIREMENTS

None.

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## IS THE BUILDING PRODUCT/BUILDING PRODUCT LINE SUBJECT TO WARNING OR BAN UNDER SECTION 26 OF THE NEW ZEALAND BUILDING CODE?

No.

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