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Product Data Sheet

Megaacrete Power Panel

Resilient Insulated Wall Cladding

Division 03
Autoclaved Aerated Concrete Thin Reinforced Panels

1. DISTRIBUTOR

Megaacrete AAC Plant, LLC
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(210) 402-3223

2. PRODUCT DESCRIPTION

Power Floor is an autoclaved aerated concrete (AAC) thin, reinforced panel used as resilient and insulated exterior wall cladding for both wood-frame and metal-frame construction. The system replaces conventional wood or gypsum sheathing, provides continuous insulation, and serves as a solid substrate for the application of stucco or direct-adhered masonry veneers, eliminating the need for a metal lath.

Product Sizes:

Power Floor is available in 2-inch (nominal 50 mm) and 3-inch (nominal 75 mm) thick, 24-inch wide, and 96-inch length configuration:

- 2×24×96 in (50 × 610 × 2,440 mm)
- 3×24×96 in (75 × 610 × 2,440 mm)

3. TECHNICAL DATA

Composition and Materials:

Power Panel is a lightweight, manufactured autoclaved aerated concrete panel internally reinforced with a single layer of welded wire mesh.

AAC Class*	AAC-4
Dry Bulk Density	31 lb/ft^3
Design Weight	37 lb/ft^3
Compressive Strength	580 psi
Thermal Conductivity (K)	0.9124 BTU-in/ft^{2}h°F
Thermal Resistance (R-Value) - 2-inch - 3-inch	 2.16 ft^{2}h°F/BTU 3.24 ft^{2}h°F/BTU
Sound Transmission Class** - 2-inch - 3-inch	 STC 33 STC 36
Fire Resistance Rating ASTM E119 / ANSI UL 263 Bearing Walls & Non-Load Bearing Walls	Up to 2.0 hr UL Design U214

* Manufactured according C1693 y C1694 / ** Only material without finishes

Applicable Standards:

The Power Panel wall cladding system has been evaluated by the International Association of Plumbing & Mechanical Officials Uniform Evaluation Services (IAPMO UES) and is listed in evaluation report ER-381. Thin reinforced AAC panels are covered in the American Concrete Institute (ACI) publication ACI 523.4R-09 – Guide for Design and Construction with Autoclaved Aerated Concrete Panels.

4. INSTALLATION PROCEDURE

The system can be installed using conventional construction tools, means, and methods. A primary air and moisture control system must be installed between the framing and the panels. This can be a drainable building wrap or a closed-cell rigid foam insulation board specifically installed for this purpose.

The panels can be installed either on the foundation, a masonry ledge, or a steel support angle attached to the foundation. Framing members must be spaced a maximum of 24 inches on center. Panels should be configured in a running bond pattern, with overlapping corners on alternate courses. Panels can be cut using rotary saws with diamond blades suitable for cutting through the internal steel reinforcement.

Fastening requires three screws per stud on each panel and one screw into the bottom and top plates between every stud member. Megaacrete Thin-bed Mortar must be used to adhere panels to each other, with excess mortar struck down to keep the surface relatively flat.

A final architectural finish must be applied over the panels to complete the system. Typical finishes include direct-adhered stucco and adhered thin veneer masonry systems. Consult a Megaacrete technical representative for additional finishing options.

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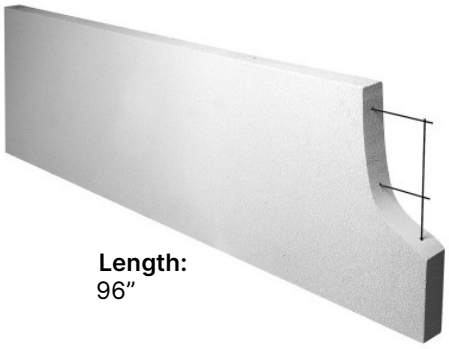
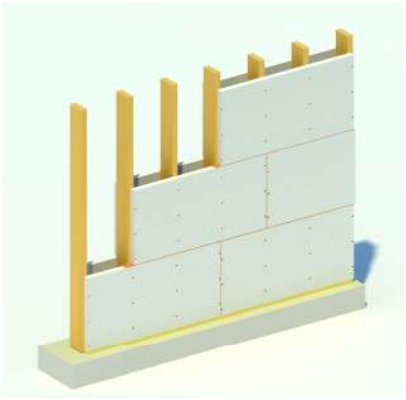
Materials Required:

To complete the installation of Power Panel, the following materials are needed:

- Power Panel AAC panels
- Megaacrete Thinset Mortar
- Megaacrete Patching Mortar
- Approved fasteners
- Weather barrier system





5. HANDLING AND STORAGE

Power Panel products are durable and long-lasting building materials once installed. However, being up to 75% lighter and having lower compressive strength than standard concrete, AAC products can be chipped or cracked if not handled, transported, and stored correctly. Never lift panels directly with a forklift; always lift them from the supplied pallet. Do not tilt the panel, keep it in a vertical position. Chips can be patched with Megaacrete Patching Mortar; however, discard sections of panels that have cracked completely through. Pallets can be stacked but must be stored on flat, level, and firm ground.

6. WARRANTY

Megaacrete provides a limited product warranty for its manufactured products. However, the company does not warrant or guarantee the installation of these products, the results obtained from their use by others, or other factors affecting product performance beyond the company’s control. A sample of the Megaacrete Limited Warranty Statement is available upon request.

7. TECHNICAL SUPPORT

Megaacrete offers technical assistance with design and engineering specifications, technical information, installation manuals, performance test data, and construction support. To request assistance, email support@megaacrete.com or call (210) 402-3223.

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Item number	PD4720002002	PH9595007001
AAC Class	AAC-4	AAC-4
Dimensions	2”x24”x96” 50×610×2440 mm	3”x24”x96” 75×610×2440 mm
Panel area	16 ft^2	16 ft^2
Design weight	6.14 lb/ft^2	9.22 lb/ft^2
Panel weight	98 lb	148 lb
Panels per pallet	15	10
Area per pallet	240 ft^2	160 ft^2
Weight per pallet	1,783 lb	1,783 lb
Pallets per truck	24	24

2024.09 Rev.2