

## **Product Data Sheet**

## Megaacrete Power Floor

Lightweight Rigid Sub-Flooring

Division 03 Autoclaved Aerated Concrete Thin Reinforced Panels

#### **1. DISTRIBUTOR**

Megaacrete AAC Plant, LLC 310 Peterson Farm Rd. Kerrville, TX 78028 www.megaacrete.com support@megaacrete.com (210) 402-3223

#### 2. PRODUCT DESCRIPTION

Power Floor is an autoclaved aerated concrete (AAC) thin reinforced panel used as a lightweight, rigid sub-flooring for both wood-frame and metal-frame construction. The system replaces conventional tongue-and-groove plywood decking, with or without cast-in-place gypcrete or concrete floor topping, and provides a long-lasting, resilient, comfortable, and quiet sub-flooring solution.

#### Product Sizes:

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

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

#### **3. TECHNICAL DATA**

#### **Composition and Materials:**

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

| AAC Class*  | AAC-4                             |
|---|-----------------------------------|
| Dry bulk density  | 31 lb/ft <sup>3</sup>             |
| Design weight   | 37 lb/ft <sup>3</sup>             |
| Compressive Strength  | 580 psi                           |
| Thermal conductivity (K)  | 0.9124 BTU-in/ft <sup>2</sup> h°F |
| Thermal resistance (R-Value)  | 3.24 ft <sup>2</sup> h°F/BTU      |
| Sound Transmission ** ** Only material without finishes                                     | STC 36 to 60                      |
| Fire Resistance Rating<br>ASTM E119 / ANSI UL 263<br>Unrestrained Assembly on wood supports | Up to 1.5 hr<br>UL Design M560    |
| * Manufactured according C1693 y C1694  |                                   |

#### **Applicable Standards:**

The Power Floor system has been evaluated by the International Association of Plumbing & Mechanical Officials, Uniform Evaluation Services (IAPMO UES), and is listed in the evaluation report ER-350. 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. Panels can be cut using rotary saws with diamond blades suitable for cutting the internal steel reinforcement. The panels may be installed on either wood or steel trusses or joists as specified by a structural engineer. Floor framing members must be a maximum of 24 inches on-center. Panels will be installed in a running bond pattern with a minimum 24-inch overlap. Panels can be cut to a minimum width of 12 inches and must contact at least three support members (32 or 48 inches minimum).

Fastening requires three screws per support member on each panel (see Megaacrete approved fastener Technical Bulletin), approximately 8 inches on-center. Fasteners must penetrate a minimum of 1-1/2 inches into wood supports and 3/4 inch into steel supports.

Megaacrete Thin-bed Mortar must be used to adhere AAC panels to each other, striking down any excess adhesive to keep the surface relatively flat. Application of a construction adhesive (Liquid Nails® or similar) to the top of wood trusses or joists is highly recommended.

A final floor finish must be installed over the panels to provide a complete system. Typical finishes include luxury vinyl tile, carpet, wood, and ceramic tile flooring. Consult complete installation procedures.

#### Materials Required:

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

- Power Floor AAC panels
- Megaacrete Thin Mortar
- Megaacrete Patching Mortar
- Approved Fasteners
- Sub-floor Construction Adhesive

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## 5. HANDLING AND STORAGE

Power Floor products are durable and longlasting building materials once installed. However, due to 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; instead, lift them from the supplied pallet. Chips can be patched with Megaacrete Patching Mortar; however, cut off and discard sections of panels that have cracked completely through. Pallets can be stacked, but they must be stored on flat, level, and firm ground.

#### 6. WARRANTY

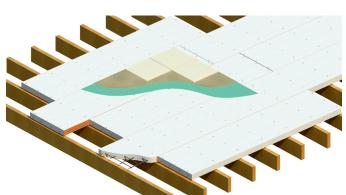
Megaacrete provides a limited product warranty for its manufactured products. However, the company does not warrant or guarantee the installation of these products or the results obtained from their use by others, as well as other factors affecting product performance beyond the company's control. A 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.

| Megaacrete Power Floor   |                              |  |
|--------------------------|------------------------------|--|
| Item number              | PH9595007001                 |  |
| AAC Class                | AAC-4                        |  |
| Dimensions               | 3″x24″x96″<br>75×610×2440 mm |  |
| Panel area               | 16.0 ft <sup>2</sup>         |  |
| AAC Design weight        | 9.22 lb/ft <sup>2</sup>      |  |
| Panel weight             | 148 lb                       |  |
| Panels per pallet        | 10                           |  |
| Area per pallet          | 160 ft <sup>2</sup>          |  |
| Weight per pallet        | 1,783 lb                     |  |
| Pallets per truck (est.) | 24                           |  |







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