

ICC-ES Report

ESR-3450

ICC-ES | (800) 423-6587 | (562) 699-0543 | www.icc-es.org

Reissued 05/2018
This report is subject to renewal 05/2019

EVALUATION SUBJECT:

AVM SYSTEM 750 WATERPROOF MEMBRANE

DIVISION:

22 00 00—PLUMBING

SECTION:

22 40 00—PLUMBING FIXTURES (SHOWER PAN LINER)

DIVISION:

09 00 00—FINISHES

SECTION:

09 30 00—TILING

DIVISION:

07 00 00—THERMAL AND MOISTURE PROTECTION

SECTION:

07 14 00—FLUID-APPLIED WATERPROOFING

Report Holder:

AVM INDUSTRIES, INC.

8245 REMMET AVENUE
CANOGA PARK, CA 91304

Look for the ICC-ES marks of Conformity!



ICC-ES Evaluation Report

ESR-3450

Effective Date: May 2018

This report is subject to renewal in one year.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION

Section: 07 14 00—Fluid-Applied Waterproofing

DIVISION: 09 00 00—Finishes

Section: 09 30 00—Tiling

DIVISION: 22 00 00—Plumbing

Section: 22 40 00—Plumbing Fixtures (Shower Pan Liner)

REPORT HOLDER:

**AVM INDUSTRIES, INC.
8245 REMMET AVENUE
CANOGA PARK, CALIFORNIA 91304-4133**

www.avmindustries.com
amir@avmindustries.com

EVALUATION SUBJECT:

AVM SYSTEM 750 WATERPROOF MEMBRANE

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2018, 2015, 2012, 2009, and 2006 *International Building Code*® (IBC)
- 2018, 2015, 2012, 2009, and 2006 *International Residential Code*® (IRC)
- 2018, 2015, 2012, 2009, and 2006 *International Plumbing Code*® (IPC)
- 2018, 2015, 2012, 2009, and 2006 *Uniform Plumbing Code*® (UPC)
- 2015 *National Plumbing Code of Canada*® (NPC)
- **Property evaluated:**
- Water resistance in compliance with ANSI A118.10-2014

2.0 USES

The AVM System 750 is used on concrete or plywood floors as a barrier to liquid water migration in bonded thin-set installations of ceramic tiles and dimension stone under the IBC and IRC and may be used as a shower sub-pan lining material in accordance with the IPC and the UPC.

3.0 DESCRIPTION

The AVM System 750 is a liquid-applied waterproofing membrane that cures to a monolithic, elastomeric

membrane.

AVM Paste 750: The AVM 750 Paste (liquid) is a ready-to-use, water-base paste, packaged in 5-gal. (18.9 L) pails. Shelf life is one year from the date of manufacture when stored unopened at temperatures between 50°F and 90°F (10°C and 32°C). The liquid material must not be allowed to freeze.

AVM Mat 800 Fabric Reinforcement (Optional): The AVM Mat 800 reinforcing fabric is a 3.0 oz/yd² (101.7 g/m²) fabric for use as a reinforcement in the AVM System 750 membrane when needed. The fabric is provided in 40 in. wide by 324 ft. long (1016 mm by 98.7 m), 108 ft.² (99.3 mm²) rolls. Refer to manufacturer's instructions on where and when to use reinforcing fabric.

AVM Mat 800 Reinforcing Tape: The AVM Mat 800 reinforcing tape is a 3.0 oz/yd² (101.7 g/m²) fabric for use in preparing joints, cracks, and corners in the substrate before application of the AVM System 750 membrane. The tape is provided in 6 in. wide by 300 ft. long (152 mm by 91.4 m) rolls.

AVM Crete 6700: The AVM Crete 6700 is a field-mixed cementitious product composed of AVM Aggregate 200 mixed with The AVM Additive 7700.

AVM Additive 7700: The AVM Additive 7700 (liquid) is a ready-to-use, water-based acrylic latex packaged in 5-gal. (18.9 L) pails. Shelf life for the AVM Additive 7700 is one year from the date of manufacture when stored unopened at temperatures between 50°F and 90°F (10°C and 32°C). The liquid material must not be allowed to freeze.

AVM Aggregate 200: The AVM Aggregate 200 is a proprietary mix of cement and sand aggregates, packaged in 50 lbs. (22 kg) bags.

AVM Primer 500: The AVM Primer 500 (Liquid) is a ready-to-use, water based primer packaged in 5 gal. (18.9 L) pails. Shelf life for the AVM Primer 500 is one year from the date of manufacture when stored unopened at temperatures between 50°F and 90°F (10°C and 32°C). The liquid material must not be allowed to freeze.

4.0 INSTALLATION

General:

Installation of the AVM System 750 membrane must comply with this report and the manufacturer's published installation instructions. The manufacturer's installation instructions must be available at the jobsite at all times during installation.

Surface Preparation:

Substrates must be clean and free of all oils, greases and other contaminants. Dry and dusty surfaces must be dampened and swept off. All cracks, joints and corners are treated by covering them with the AVM Mat 800 reinforcing tape embedded into AVM Paste 750. A second layer of AVM 750 reinforcing tape is applied to critical areas subjected to stress or movement. All existing surfaces must be flat or leveled with a minimum slope of one-fourth unit vertical in 12 units horizontal (2 percent slope), and all defects repaired. Newly prepared concrete must be cured 28 days prior to application of the AVM System 750, and the surface must be troweled smooth then textured to a fine broom finish.

Application over Concrete Substrate:

After preparation of the concrete substrate, AVM Primer 500 is applied to the concrete surfaces using a brush or roller. After the primer has cured (dry to the touch), AVMS Paste 750 is applied to the concrete in three coats with a brush or roller. The first coat is applied at a coverage rate of 1 gallon per 100 square feet (0.41 L/m²).

After the first coat has cured (the first coat needs to be dry a minimum of two hours and until it's dry to the touch and has changed color from light yellow to orange), the second coat is then applied at a coverage rate of 1 gallon per 100 square feet (0.41 L/m²).

After the second coat has cured (the second coat needs to be dry a minimum of two hours and until it's dry to the touch and has changed color from light yellow to orange), the third coat is then applied at a coverage rate of 1 gallon per 100 square feet (0.41 L/m²).

Continue applying coats as needed until a minimum dry thickness for the membrane of 40 mils [0.40 inch (~1.00 mm)] is achieved.

After the last coat is applied, the membrane must be allowed to dry a minimum of 24-48 hours before performing a water test or prior to the application of ceramic tile, dimension stone or other finished surfaces. Curing time may vary based on temperature, humidity and other factors.

The AVM Crete 6700 protective coating is optional. The protective coating, consisting of Aggregate 200, is field mixed with 1.0 to 1.25 gallons (3.8 to 4.7 L) of AVM Additive 7700 and is applied to the membrane using a trowel. The protective coating must cure a minimum of 24 hours before application of ceramic tile or dimension stone.

The membrane without the protective coating must not be exposed to direct sunlight for more than 30 days. Furthermore, the membrane without the protective coating should have tile, stone, etc. installed over it within 30 days from the membrane installation date. The membrane with the protective coating installed over it must be covered with tile, stone, etc. within 90 days from the membrane installation date. Ceramic tile must comply with ANSI A137.1

Application over Plywood Substrate:

After preparation of the plywood substrates, when the AVM System 750 is applied directly over plywood, the first coat of Paste 750 is applied at a coverage rate of 1 gallon per square feet (0.41L/m²). While the Paste 750 is still wet, AVM Mat 800 reinforcing fabric is embedded into the liquid. The fabric must overlap 2 inches (51 mm) at the seams, the edges, and the ends. Immediately after embedding the

fabric and while the Paste 750 is still wet, apply another coat of the AVM Paste 750 over the fabric to sandwich it in at a coverage rate of 1 gallon per 100 square feet (0.41 L/m²). Allow the membrane to cure for 24 hours prior to applying third coat.

Apply the third coat of AVM Paste 750 at a coverage rate of 1 gallon per 100 square feet (0.41 L/m²) and allow to cure until dry to the touch. Continue applying coats as needed until a minimum dry thickness for the membrane of 40 mils [0.40 inch (~1.00 mm)] is achieved. Once the membrane has reached the needed thickness, it must be allowed to dry a minimum of 12 hours before application of the protective coating. When the AVM System 750 is applied directly to horizontal plywood substrates, AVM Crete 6700 (protective coating) must be applied over the cured membrane to a minimum thickness of 1/16 inch (1.6 mm). The protective coating, consisting of Aggregate 200, is field-mixed with 1.0 to 1.25 gallons (3.8 to 7.4 L) of AVM Additive 7700 and is applied to the cured membrane using a trowel. The protective coating must cure a minimum of 24 hours before application of ceramic tile or dimension stone.

Method of Repair:

The membrane in the area requiring repair must be removed and cleaned. Allow for a minimum 2 inch (51 mm) overlap. The membrane and protective coating (if needed) are applied as described in Application over Concrete Substrate or Application over Plywood Substrate.

5.0 CONDITIONS OF USE

The AVM System 750 Waterproof Membrane described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

- 5.1** The materials are applied in accordance with this report and the manufacturer's published installation instructions. In the event of a conflict between the installation instructions and this report, consult with the manufacturer for the latest updates.
- 5.2** Application is limited to ceramic tile and dimension stone installations on floors, and to use as shower sub-pans or lining.
- 5.3** Application over expansion joints is outside the scope of this report.

6.0 EVIDENCE SUBMITTED

Data in accordance with ANSI A118.10-2014.

7.0 IDENTIFICATION

Each container of AVM Paste 750 and Additive 7700 shall bear a label with the AVM Industries, Inc., name and address, the product name, the date of manufacture and the ICC-ES PMG certification mark.

Each bag of AVM Aggregate 200 shall bear a label with the AVM Industries, Inc., name and address, the product name, a batch number tied to the date of manufacture and the ICC-ES PMG certification mark.

The large rolls (40" wide / 88 C"M wide) of fabric reinforcement shall be identified with the AVM Industries, Inc., name and the words "AVM MAT 800" or will have their respective manufacturers labels on the roll. Small rolls (6" wide / 13 C"M wide) will not have any labeling on the roll.