



## Aussie Gas-Lock 420-FC®

**Epoxy Two-Component, Heavy Duty, High-Adhesion,  
Moisture, Methane and VOC Barrier**

Sections 071800 / 071813 Fluid  
Applied Waterproofing

### Product Name

Aussie Gas-Lock 420-FC®  
Epoxy Two-Component, Heavy Duty, High-  
Adhesion, Moisture, Methane and VOC Barrier

### By

AVM Industries, Inc. 8245 Remmet Ave,  
Canoga Park, CA 91304 888.414.1041  
818.888.0050 [www.avmindustries.com](http://www.avmindustries.com)

### Product Description

(Now the single, consolidated epoxy primer,  
vapor barrier, gas barrier & adhesion system)

Aussie Gas/Vapor Lock™ 420-FC is AVM's  
next-generation, all-in-one epoxy primer  
system. This advanced two component, 100%  
solids, fast-cure epoxy technology combines  
**moisture vapor mitigation, methane and  
VOC suppression, deep substrate  
penetration, and universal adhesion** into one  
high-performance product suitable for  
virtually all construction environments.

Designed for both **new construction and  
demanding retrofit applications**, Aussie  
Gas/Vapor Lock 420-FC creates a seamless,  
chemically resistant barrier that protects  
flooring systems—including resinous flooring,  
rubber, vinyl, tile, carpet, engineered wood,  
and elastomeric coatings—from moisture-  
driven failures, gas intrusion, and poor  
substrate adhesion. Tested performance  
includes **moisture vapor tolerance up to 24  
lbs/1000 ft² (ASTM F1869) and 100% RH  
(ASTM F2170), with verified 100% methane  
suppression at ≥30 mils DFT.**

With its **fast-cure formulation**, 420-FC allows  
for light foot traffic in approximately four  
hours, rapid recoating, and accelerated  
construction schedules. Its low viscosity and  
penetrating epoxy-polyamine characteristics  
provide exceptional adhesion to concrete,  
metal flashings, plywood, plastics, acrylic  
coatings, polyurethane membranes, and  
previously coated or marginal substrates.

The product can be applied to **damp or  
green concrete as early as 14 days** after  
placement. With **zero VOC emissions**, no  
solvents or fillers, and pH resistance up to  
**>14**, 420-FC is ideal for sensitive  
environments such as hospitals, food and  
beverage facilities, pharmaceutical plants,  
industrial processing areas, and repurposed  
commercial spaces

**Aussie Gas/Vapor Lock 420-FC is now the  
single AVM primer solution for projects  
requiring:**

- **Moisture Vapor Mitigation**
- **Methane and VOC Barrier Protection**
- **Substrate Consolidation and Deep Penetration**
- **Universal Primer Functionality**
- **Fast Cure & Schedule Acceleration**
- **Compatibility with All AVM Membranes & Fluid Applied Coatings**

### Warranty

AVM industries will warrant the installed  
membrane for up to fifteen (15) years. For  
complete warranty details, contact AVM  
industries or consult with your applicator.

### Delivery, Storage, and Handling

a. Delivery of the Aussie Gas-Lock 420®/420-  
FC materials to the job site must be in their  
original sealed containers, with  
manufacturer's name and label intact.

b. Handle and store containers and bags in  
accordance with printed instructions.

c. Store at temperatures between 50°F and  
90°F. Do not store materials in direct sunlight  
or where they may be damaged by water or  
rain.

d. Keep all materials out of the reach of  
children.

e. If irritation occurs during use, liberally flush  
affected areas with water. IF irritation  
continues, see a physician immediately.

### Project Conditions

a. Do not apply materials at temperatures  
below 50°F, or if precipitation is imminent, or  
above 90°F if applying in direct sunlight.

b. Provide adequate ventilation during  
installation.

c. Warn personnel against hazards of  
materials to skin and eyes.

d. Protect adjacent surfaces which could be  
damaged during the application.

e. Concrete substrate must cure for a  
minimum of 7 days, be dry to the touch, and  
have a moisture content of no more than 15%  
prior to installation

### System Application

Preparation: The substrate surfaces must be  
structurally sound, clean, dry, and free of  
efflorescence, dust, dirt, silicone, oil and other  
contaminants that would prevent the proper  
penetration and/or bonding of the AVM Gas-  
Lock 420-FC to the substrate. Joints or  
cracks should be sealed or filled prior to the  
application of the AVM Gas-Lock 420-FC.  
AVM Gas-Lock 420-FC may be applied  
directly over other coatings as long as they  
are in good condition and properly attached  
to their substrates. For improved bonding  
and long-lasting adhesion, it is recommended  
to remove all existing coatings, paints, etc.,  
prior to the application. Depending on  
existing conditions, additional preparation  
such as sandblasting or water-blasting might  
be required, especially when bonding to older  
cementitious surfaces (Concrete, blocks,  
slabs, bricks, etc).



If you intend to apply the AVM Gas-Lock 420-FC  
over an existing coating or sealer, make sure it's  
clean (Pressure washing is highly recommended)  
and then do a test in a small area to ensure  
proper bonding. Metal flashings and other sheet  
metal-based surfaces need to be thoroughly  
cleaned and have all oils, grease, etc. removed.  
Lightly sanding these surfaces is highly  
recommended since it will significantly increase  
bonding.

### Installation

**Mixing:** Mix part A separately for 60 seconds  
using a drill and clean paddle. Mix part B  
separately for 60 seconds using a drill and clean  
paddle. Then combine Part A and Part B into a  
single container and thoroughly mix for 2  
additional minutes using a drill and clean paddle.  
(Product is supplied in kits, so no pre-measuring  
is required. Make sure to use the entire contents  
of both Part A and Part B) AVM Primer 401 is now  
ready to be applied. Do not mix more material  
than can be used within 20 minutes.

The **AVM Gas-Lock 420-FC** can be applied using  
a sprayer, a brush, squeegee, or roller. Do not  
overapply material. (Apply a thin coat). If  
necessary, after the first coat has cured, apply a  
second coat. Apply in an even and puddle-free  
application at the approximate rate of 300 sq.ft.  
per gallon. Where pinholes and small cavities are  
present in the concrete, these voids should be  
filled with primer and allowed to dry to prevent  
outgassing in succeeding coats of deck coating.  
Highly porous or difficult to paint substrates, such  
as split face or routed blocks, raked joints, etc.,  
may need a second coat to ensure complete and  
proper coverage and protection. A second  
application can be made any time after the first  
coat has sufficiently cured.

### Quality Control

a. Visually inspect all coated surfaces to ensure a  
full and proper coating application, especially at  
the corners, drainage scuppers and other hard-  
to-reach areas.

b. All unsatisfactory areas shall be re-coated  
before proceeding with other coatings

### Technical Services

Technical services are available by contacting our  
offices at: 888.414.1041 or 818.888.0050 or visit  
[www.avmindustries.com](http://www.avmindustries.com)

### System Specifications

See next page.

## Product Specifications

The following coverages are based on controlled tests. Actual coverages may vary.

### Packaging:

| Item / Component            | Packaging | Approx Shipping Weights | VOC   |
|-----------------------------|-----------|-------------------------|-------|
| AVM Epoxy Primer 420-FC Kit | 3 Gal Kit | 26 Pounds               | 0 g/L |

| Application Properties                                            |                                                           |
|-------------------------------------------------------------------|-----------------------------------------------------------|
| Pot Life (45°F/75°F/90°F)                                         | 20 mins/15 mins/7 mins                                    |
| Curing Time / Light Foot Traffic (45°F/60°F/75°F/90°F)            | 12 hours/8 hours/4 hours/-3 hours                         |
| Minimum Recoat Time (45°F/60°F/75°F/90°F)                         | 12 hours/8 hours/4 hours/-3 hours                         |
| Maximum Recoat Time (without light sanding) (45°F/60°F/75°F/90°F) | 72 hours or by manufacturers guidelines on recoat windows |
| Full Cure - Full Chemical Resistance and Supports Heavy/Rolling   | 5-7 Days                                                  |
| Substrate Temperature                                             | 40°F-90°F                                                 |
| Application Humidity Dew Point                                    | Slab Temperature + 5°F Above Dewpoint                     |
| Concrete Surface Profile (Consult ICRI 310.2R.I3)                 | CSP-3 (New Concrete); CSP-4 (Existing Concrete)           |
| Shore D Hardness                                                  | 82 at 48 Hours                                            |
| Mold Resistance                                                   | Does not Promote Mold Growth per ASTM G21                 |

| Technical Data                          | Results                                   | Test Criteria                                                            |
|-----------------------------------------|-------------------------------------------|--------------------------------------------------------------------------|
| Mixing Ratio (A:B byVolume)             | 2.43:1                                    |                                                                          |
| Density (75°F)                          | 1.10 g/cm <sup>3</sup>                    |                                                                          |
| Volume solids                           | 100%                                      |                                                                          |
| VOC Emissions                           | 0.000 g/l                                 | CA Department of Public Health CDPH/EHLB/<br>Standard Method Version 1.1 |
| VOC Content                             | 0.000 g/l                                 | Calculated                                                               |
| Bond Strength to Concrete               | >480 psi                                  | ASTM D7234                                                               |
| Compressive Strength                    | 14,500 PSI                                | ASTM D-1621                                                              |
| Tensile Strength                        | 4300 PSI                                  | ASTM D 412                                                               |
| Flash Point                             | >212°F                                    | Calculated                                                               |
| Shore D Hardness                        | 82 at 48 hours                            | Calculated                                                               |
| Alkalinity Tolerance                    | >PH of 14                                 | ASTM F1869                                                               |
| Mold Resistance                         | Does not Promote Mold Growth per ASTM G21 | ASTM G21                                                                 |
| Vapor Mitigation                        | 0.02 perms                                | ASTM E96-10                                                              |
| Vapor Barrier MVER @ 12 Mils            | 0.02 Perms                                | ASTM F3010                                                               |
| Methane Gas Transmission Rate @ 18 mils | 21 mL/day*m <sup>2</sup> *atm             | ASTM D1434                                                               |
| Methane Gas Transmission Rate @ 30 mils | 10 mL/day*m <sup>2</sup> *atm             | ASTM D1434                                                               |
| PCE Diffusion Coefficient @ 30 mils     | 5.89E-14                                  | ASTM E96 Modified Procedure B                                            |

| Approximate Coverage Rates           |                  | Standard 3 Gallon Kit |
|--------------------------------------|------------------|-----------------------|
| First thin coat to control pinholing | 200 sq ft/gallon | 480 sq ft per unit    |
| 10 mils                              | 160 sq ft/gallon | 384 sq ft per kit     |
| 12 mils                              | 133 sq ft/gallon | 320 sq ft per kit     |
| 15 mils                              | 120 sq ft/gallon | 288 sq ft per kit     |
| 20 mils                              | 80 sq ft/gallon  | 192 sq ft per kit     |
| 30 mils                              | 55 sq ft/gallon  | 132 sq ft per kit     |
| 40 mils                              | 40 sq ft/gallon  | 96 sq ft per kit      |

For a complete list of details in BIM (revit), CAD or PDF, please visit our website at [www.avmindustries.com](http://www.avmindustries.com).

Approval(s): <https://www.avmindustries.com/approvals/>  
Learn more about the detailed standards our products meet for approvals by various US or International Agencies or Code Councils

Patent(s): <https://www.avmindustries.com/patents/>  
Some features of our product or assembly may be protected under one or more US or International Patent(s)

**AVM Industries, Inc.**  
**8245 Remmet Ave, Canoga Park, CA 91304**  
**888.414.1041 818.888.0050**

**Quality Waterproofing Products**

**[www.avmindustries.com](http://www.avmindustries.com)**

