



Atlas Minerals & Chemicals, Inc.



## AFM-WM Water Proofing Membrane

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### AFM-WM WATER PROOFING MEMBRANE

#### DESCRIPTION AND TYPICAL USES

AFM-WM Anti Fracture Membrane is a 40 mil thick reinforced peel-n-stick anti fracture sheet waterproofing membrane specifically designed for use under ceramic tile, masonry and natural stone as a waterproofing, stress relieving, sound control and radon barrier material in conjunction with thin set methods.

The membrane has the flexibility and strength to withstand structural movement and natural concrete shrinkage cracks up to 1/4" without transferring the stress load to the finished tile topping.

AFM-WM can keep unsightly reflective cracks from surfacing in expensive tile floor finishes by expanding and contracting with shrinkage cracks. Areas of application include concrete slabs, plywood, precast floor panels, gypcrete, OSB, radiant heated floors, ceramic tile, terrazzo, marble, slate, stone, leveling and patching compounds, radon conditions, backer board, existing VAT and VCT and vinyl floors.

AFM-WM can be used in airports, shopping malls, office buildings, restaurants, department stores, commercial buildings, apartments, condominiums, residential homes, entryways, convention centers, breezeways or anywhere sub-floor cracking in floors can cause problems with the performance of tile floors.

AFM-WM can be used in an interior or exterior installation.

#### COMPOSITION AND MATERIALS

AFM-WM consists of a tough fabric reinforcement laminated to an aggressive adhesive membrane. The membrane is tacky on the bottom providing for superior adhesion to concrete, steel and wood substrates. The top fabric makes an excellent bonding surface for latex modified thin set mortars or thin set tile adhesives. AFM-WM has a 2" overlap guide, which provides an adhesive-to-adhesive cohesive bond on the side laps.

AFM-WM is used as a full floor covering beneath the tile setting systems and is thin enough to be utilized in localized movement or cracking areas without causing bumps in thin set tile finishes. AFM-WM system contains no VOCs and is environmentally safe which allows its use in confined areas. The aggressive rubberized adhesive retains its flexibility throughout the floor's life span and will not dry out or decay with time.

AFM-WM is available in 36" x 75' rolls for full floor anti-fracture, waterproofing, sound control and radon blocking. P.W. #6000 water based interior primer concentrate comes in 16 oz. bottles, or a 1-gallon plastic

container. #80 Exterior Primer is available in one-gallon cans or five-gallon pails (a VOC compliant formula is available upon request). AFM500 Detail Tape is available in 6" x 50' or 12" x 50' rolls. JS160H Mastic is available in 10.5 oz tubes, one-gallon cans or five gallon pails.

#### TEMPERATURE DURING APPLICATION

Store all materials in a dry space at temperatures between 50°F and 90°F (10°C and 32°C) for 24 hours prior to use. Do not store in direct sunlight. Do not remove from box until ready to use. Apply when the temperature of the substrate, air and AMF-WM materials are between 45°F (7°C) and 120° (45°C).

#### SURFACE PREPARATION

The surface to receive AFM-WM must be clean, dry and free of any foreign matter that may adversely affect the membrane's adhesion.

#### Detailing

Protrusions and Drains: Areas around pipes, conduits or any protrusions through the sub floor should be primed and taped with a 6" piece of AFM500 Detail Tape. The Detail Tape should be forced and formed to fit tightly to the protrusion and the sub floor. At drain openings, apply a light coat of primer and allow to fully cure. Cover drain at least 6" past all perimeters with AFM500 Detail Tape. Remove the release paper, apply the membrane over the drain hole, make an X cut in the center of the hole and form the Detail Tape into the drain. Be sure the membrane has 100% contact to the primed metal drain surface. Remove the top release film. Double ply with a full sheet of AFM-WM over the Detail Tape, cut and form around or into the protrusion or drain. This should be followed with a troweled bead of JS1 60H mastic at the membrane terminations. The drain clamping ring should then be tightly secured over the AFM-WM membrane.

#### Inside Corners of Floors and Walls

After priming the floor and wall, apply a 6" strip of AFM500 Detail Tape tight into the corner. Begin by removing the release paper and install the Detail Tape 3" on the floor and 3" up the wall. Care should be taken to press the Detail Tape tight into the corner, being sure to keep any voids from occurring behind the Detail Tape. Remove the release film from the face of the Detail Tape and install AFM-WM (see instructions below) up the wall extending 3" past the Detail Tape. A 1 " troweled bead of JS1 60H mastic should be placed at all AFM-WM terminations. On inside corner seams at the vertical to horizontal

transitions, apply a troweled bead of JS1 60H mastic to the overlap. Mastic should be troweled 3" up and 3" out from the transition on the seam. Mastic must be allowed to cure for a minimum of 24 hours prior to flood testing.

### Priming

Begin the priming process by mixing the #6000 water based primer concentrate with clean tap water in a separate container (see below for Exterior Applications). The #6000 concentrate is mixed at a ratio of 1 part concentrate to 2 parts water for horizontal applications. On vertical and porous or weathered surfaces the concentrate should be used full strength. Be careful to thoroughly mix the primer. Should the primer be left to sit for any extended period of time, thoroughly re-mix before use. Only mix enough primer that can be used in half of a day. Begin priming by brushing or rolling the #6000 water based primer onto the surface at a rate of 500-600sf per gallon. Coverage may vary depending upon the porosity of the surface being covered. The primer must be allowed to dry fully before installing the AFM. When fully cured, the primer will feel tacky to the touch but will not come off the surface. Note: Do not install AFM over wet primer. For Exterior Applications: Use #80 Primer (a VOC compliant #80 Primer is available upon request). Prior to installing AFM-WM, apply #80 Primer onto the surface with a brush or roller at an application rate of 150 to 200 square feet per gallon and allow to dry (coverage may vary depending on the porosity of the surface).

### AFM-WM Installation

Always apply AFM-WM in a manner with the zip-strip overlap guide as your leading edge for the proper seam. Roll out the AFM-WM membrane (do not remove the release paper at this point), and cut to the appropriate length. Pull one half of the membrane on top of the other half. Lightly score the paper at the halfway point, taking care not to cut through the adhesive. Begin pulling the release paper off of the upper section and apply the exposed adhesive bottom to the primed surface, smoothing the membrane as the adhesive comes into contact with the surface. Smoothing AFM-WM as it comes into contact with the primed surface is essential to minimize air beneath the membrane. Once completed, pull the other half of the AFM-WM membrane on top of the applied AFM-WM membrane. Pull the remaining release paper off the membrane while smoothing the AFM-WM into place. Pre-cut a new sheet of AFM-WM and align the new membrane 2" over the overlap guide on the installed AFM-WM membrane. Remove the overlap release film from the installed AFM-WM membrane 2" overlap guide. Continue to install the new membrane sheet as described above. Firmly roll the two membrane sheets together, forming a cohesive bond at the overlap. For maximum performance, 100% contact to the primed substrate must be achieved. Note: Should air get trapped beneath the membrane, puncture with a sharp instrument and press the sheet flat. For maximum performance, 100% surface contact to the primed substrate must be achieved.

### End Laps

End laps must be a minimum of 6". Place (2) 1" trowled beads of JS160H Mastic 1" apart, beneath all end laps and firmly roll the seam. A 1" bead of JS 160H Mastic should then be trowled onto the edge of the end lap, extending on both layers of AFM-WM. All end laps and "T" joints must have a 1" troweled bead of JS 160H Mastic applied 6" in both directions. All mastic must be allowed to cure for a minimum of 24 hours prior to flood testing if required.

### Limitations

AFM-WM is not recommended for use on concrete floors when hydrostatic head pressure or water vapor transmission is present. AFM-WM is not recommended for use where horizontal floor movement is greater than 1/4" or to cover cracks larger than 3/8". It is also not recommended for use where vertical floor movement is present. For installations over plywood sub floors, please refer to TCA Handbook F147-99. For expansion joints, reference TCA Method EJ171.

Service temperature should be between -20°F and 180°F (-28°C to 82°C).

### MAINTENANCE

AFM-WM requires no maintenance if installed in accordance with the manufacturer's instructions. When properly applied, AFM-WM should last the life of the structure.

### TECHNICAL SERVICE

ATLAS maintains a staff of Technical Service Representatives who are available to assist you with the use of ATLAS products. In the event of difficulties with the application of ATLAS materials, the installation should be stopped immediately and ATLAS' Technical Service Department consulted for assistance.

### WARRANTY

ATLAS warrants that its products will be free from defects in workmanship and materials under normal use for a period of one (1) year from the date of shipment by ATLAS (provided the products are installed before the expiration of the shelf life). THERE ARE NOT EXPRESSED OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR THE PURPOSE FOR THIS PRODUCT WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. ATLAS' LIABILITY FOR ALLEGED BREACH OF THIS WARRANTY SHALL BE LIMITED TO REPAIR OR REPLACEMENT OF THE DEFECTIVE PRODUCT (BUT NOT INCLUDING REMOVAL OF THE DEFECTIVE PRODUCT OR INSTALLATION OF REPLACEMENT PRODUCTS). ATLAS SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES DURING THE WARRANTY PERIOD OR THEREAFTER. **ATLAS' WARRANTY IS VOIDED IF PAYMENT FOR PRODUCT IS NOT RECEIVED IN FULL.**