AFM-W/M® MEMBRANE

INTERNAL WET AREA ANTI FRACTURE SHEET MEMBRANE



AFM-WM® MEMBRANE is a peel and stick crack isolation sheet membrane specifically designed for interior use under ceramic tile, porcelain and natural stone as a waterproof, stress relieving material used in conjunction with thin set methods.

THE FOLLOWING MATERIALS ARE NEEDED TO COMPLETE THE AFM-WM® SYSTEM:

AFM-WM®

Waterproofing membrane specially designed for interior use under ceramic tile, porcelain and natural stone.

PROTECTOPRIME™

High tack solvent based primer.

ATECHPROOF® WET ROOM MEMBRANE

A Class III waterproof membrane specially formulated for bathrooms, laundries and other wet areas.

FABTAPE™

Used as a reinforcing layer at wall to floor transitions and at inside and outside corners in conjunction with the ATECHPROOF® WET ROOM MEMBRANE to create a seamless waterproof barrier.

USES

- For interior waterproofing and crack isolation protection under thin set ceramic, porcelain and dimensional stone tile installations.
- All interior wet areas including kitchens, bathrooms, shower pan liners and walls.

SOLE DISTRIBUTOR OF





PACKAGING

0.914m x 22.86m.

COVERAGE

Approximate 19.7m² with 50mm overlap per roll.

SHELF LIFE

Maintains optimum initial adhesion to substrates when used within one year from the date of manufacture.

ADVANTAGES

- Rated as a shower pan liner, meets AS 4858 Standards for a waterproof membrane
- Has the flexibility and strength to withstand structural movement and concrete shrinkage cracks up to 9.5mm without transferring stress load to finished tile
- Can be installed with radiant heat floor systems
- Provides an Extra Heavy Load Rating
- Anti-microbial coating.

SUITABLE SUBSTRATES

- Fibre cement sheet
- Mortar beds
- Concrete
- Cement backer board
- Terrazzo
- Ceramic tile
- Stained concrete
- Radiant heated subfloors
- Metal
- Portland based leveling and patching compounds

LIMITATIONS

- Do not install over wet primer.
- Not recommended for use on concrete floors when hydrostatic head pressure or excessive water vapor transmission exceeds 1.8kg (tested by "Calcium Chloride Test" method), where constant water vapor transmission is present or an RH level of more than 75% of slab, these conditions must be mitigated prior to AFM-WM® installation.
- Not recommended for use where horizontal floor movement is greater than 9.5 mm.
- Cracks larger than 4.8mm should be prepared with proper backing material and treated in accordance with BCA guidelines.
- Do not use over cracks or control joints larger than 9.5mm.
- Not recommended for use where vertical floor movement is present.
- Do not apply over marine-grade plywood, timber flooring, particle board, plaster or laminate surfaces.
- Not for use under gypsum or cement based self-leveling underlayments or decorative wear surfaces.
- When installing tile over AFM-WM®, it is required to maintain a thin-set thickness of 9.5 mm or less after the tile is embedded, even if the mortar manufacturer allows for thicker installations. Thicker mortar beds can potentially provide sufficient moisture to cause some natural stones to warp or crown.
- Not recommended for vertical applications exceeding 2.4m in height.
- For vertical exterior applications, contact Atech Products to confirm design includes adequate mechanical fastening and movement joints for application.

Technical Data		
Property	Test Method	Result
Color		Grey Top / Black Adhesive
Thickness		1mm
Application Temp.		45°F to 120°F (7°C to 49°C)
Operating Temp.		-20°F to 180°F (-29°C to 82°C)
Robinson Floor Test	ASTM C627	Extra Heavy
Waterproof	ANSI 118.10	Load bearing, bonded, waterproof membrane for thin set tile installations

INSTALLATION

SURFACE PREPARATION

Substrate must conform to BCA requirements. Assemblies over which **AFM-WM® MEMBRANE** will be installed shall be in conformance with the Building Code for commercial applications or applicable building codes. Flooring and membrane must acclimate to jobsite conditions before installation. Substrates must be dry, clean and free of dirt, grease, wax, paint, oil or loose foreign matter that would adversely affect adhesion of the **AFM-WM®** Anti Fracture Waterproof Membrane.

Check substrate for excessive moisture.

PRIMING

Apply PROTECTOPRIME™ to the substrate and allow to dry before installing the **AFM-WM®** Anti Fracture Waterproof Membrane to ensure a good bond.

DETAILING OPTIONS

Liquid Method:

- ATECHPROOF® WET ROOM MEMBRANE
- FABTAPE™

ATECHPROOF® WET ROOM MEMBRANE may be applied by brush or roller and should be applied at a minimum wet thickness of 2 mm directly to the **AFM-WM®** membrane and the adjoining substrate.

Apply **AFM-WM®** to the primed substrate and detail using the following steps:

- Apply a generous coat of ATECHPROOF® WET ROOM MEMBRANE 100mm onto the AFM-WM® MEMBRANE and 150mm minimum up shower walls.
- 2. While the base coat is still wet, embed the 200mm wide FABTAPE™ into the center of the wet liquid so that half of the fabric is on the membrane and the adjoining vertical surface.
- 3. Use a roller or brush to smooth out any wrinkles in the fabric and force it into the wet ATECHPROOF® WET ROOM so that it bleeds through fabric.
- On long runs or at inside and outside corners or where the fabric must be cut, the fabric must be overlapped by at least 50mm.
- 5. Apply another generous coat of ATECHPROOF® WET ROOM on top of fabric so that fabric is completely covered while base coat is still wet.
- Apply a generous coat of ATECHPROOF® WET ROOM MEMBRANE approximately 100mm wide over all factory over lap seams and terminations of the AFM-WM® MEMBRANE.
- 7. Once dry, visually inspect the transition areas, if there are any areas that the fabric is exposed through the ATECHPROOF® WET ROOM MEMBRANE or that appear to be sparsely coated, re-apply a coat to completely cover the areas.

END LAPS AND NON-FACTORY OVERLAPS

End laps and non-factory overlaps must be a minimum of 150mm and sealed with ATECHPROOF® WET ROOM MEMBRANE using the following steps:

- Coat the fabric surface of the base layer of AFM-WM® with a 300mm wide strip of ATECHPROOF® WET ROOM MEMBRANE and allow to cure.
- Once the membrane has cured (turned to dark gray color), apply primer and allow to cure prior to installing the top layer of AFM-WM® MEMBRANE in a 150mm wide shingling overlap fashion.
- Coat around the perimeter of the overlap with a 300mm wide strip of ATECHPROOF® WET ROOM MEMBRANE, extending 150mm on both layers of AFM-WM®.
- While the base coat is still wet, lay in and saturate the ATECH®
 Fabric and apply a top coat of the ATECHPROOF® WET ROOM
 MEMBRANE.
- Allow to cure prior to flood testing.

WATERPROOFING SHOWERS WITH AFM-WM

After installing **AFM-WM®** to shower pan, apply a generous coat of ATECHPROOF® WET ROOM approximately 100mm on each side of wall corners, coves and seams.

Embed a 200mm sheet of reinforcing fabric into the wet liquid so that it bleeds through fabric. Next, apply another coat on top of fabric so that fabric is completely covered. Allow to dry to the touch. Apply ATECHPROOF® WET ROOM to the entire wall surface, including pre-treated joints, corners and coves membrane overlaps. Each coat may be applied by brush or heavy nap paint roller to a 2 mm thickness (wet) and allow to dry to the touch, apply final coat of ATECHPROOF® WET ROOM to entire surface within 24 hours to seal the installation.

APPLYING AFM-WM® MEMBRANE

Always apply **AFM-WM® MEMBRANE** with the Zip Strip overlap guide as the 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. Do not cut through the adhesive. Begin pulling the release paper off the upper section and apply the exposed adhesive bottom to the primed surface. Smooth out the membrane as the adhesive comes into contact with the surface. This 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 50mm over the overlap guide on the installed AFM-WM® MEMBRANE.

Remove the overlap release film from the installed **AFM-WM® MEMBRANE** 50mm past the 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% surface contact to the primed substrate must be achieved.

NOTE: Should air get trapped beneath the membrane, puncture it with a sharp instrument and press the sheet flat. Repair any punctures per guidelines cited in Repairs section.

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APPLICATION

Pull release liner away from membrane where scored. As the release liner is pulled away, hand-smooth the membrane to contact the primed substrate. Keep the release liner material close to the floor while pulling away; this will allow for a more controlled application of the membrane.

NOTE: There will be an immediate and aggressive bond of the membrane to the primed substrate. Realignment of the membrane can be difficult once adherence to the substrate begins.

REPAIRS

Carefully inspect the applied membrane before flood testing to ensure that it is free of large blisters, fish mouths or any damage. If membrane is damaged and requires repair, clean the affected area at least 300mm beyond the area of damage to prepare for patching. Cut an **AFM-WM® MEMBRANE** patch large enough to cover the damaged area at least 150mm on all sides. Apply the patch to the membrane by using accessory materials described for either detailing option shown below and apply patch using the same method described for end lap conditions:

• Detailing Option - Liquid Applied Method

FLOOD TESTING

AFM-WM® system must be installed at least 24 hours prior to flood testing. Perform flood test with a minimum of 50mm and a maximum of 100mm of water for 24 hours. Drains should be plugged and barriers placed to contain the water. All leaks shall be located and repaired (see "Repairs") prior to covering the membrane. There shall be a minimum 24 hour wait period after repairs are made prior to re-testing **AFM-WM®** system. The mastic must cure at least 24 hours prior to flood testing. Perform a flood test with a minimum of 20mm and a maximum of 100mm of water for 24 hours. Plug all drains and position barriers to contain the water. Repair any leaks prior to covering the membrane. Upon completion of repairs,re-flood the affected area to ensure that repaired leaks are sound.

After **AFM-WM®** is installed, ceramic or stone tiles can be installed in 9.5mm or less bed of mortar that meets the relevant standards.

WARRANTY

AFM-WM® is warranted to be free of defects in manufacture for a period of 10 years. Atech Products assumes no warranty as to the installation of its products.

MAINTENANCE

None required. If installed in accordance with manufacturer's recommendations, **AFM-WM®** should last the life of the structure.

TECHNICAL SERVICES

Complete technical assistance and information are available from Atech Products.

Field Support

Field support where provided, does not constitute supervisory responsibility. Suggestions made by **ATECH®** either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they and not **ATECH®** are responsible for carrying out procedures appropriate to a specific application.

Customer Responsibility

The technical information and application advice given in this publication is based on the best information available at time of print. As the information herein is of a general nature, no assumption can be made as to the products suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.

Safety Precautions

These products may cause allergic reactions through skin contact, goggles, protective gloves and overalls must be worn. Ensure that there is adequate ventilation and avoid breathing the vapour.

Exclusion Clause

- The information contained in this data sheet is based on many years experience and is correct to the best of our knowledge. ATECH® will be under no liability whatsoever whether in:
 - a) Contract or tort (including, without limitation, negligence)
 - b) Breach of statute
 - Any other legal or equitable obligation other than the quality of the product at the time of despatch.
- 2. Any queries about specification use or application should be directed to our technical service department immediately.
- This exclusion clause does not operate to exclude any warranty that by law may not be excluded.

