



# PRO MBR™ XD

## 2. MANUFACTURER

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## 3. PRODUCT DESCRIPTION

PRO MBR XD is a high-performance integral membrane used for **interior and exterior** waterproofing under tile and stone installations. PRO MBR XD creates a thin continuous barrier that protects against water penetration in wet areas, such as tub and shower surrounds, kitchen and food prep areas, laundry rooms, balconies or terraces over unoccupied spaces. PRO MBR XD is also suitable for submerged applications, such as pools, spas, hot tubs, fountains and water features, and can be used as a high-performance crack isolation membrane with PROMA fiber mesh. PRO MBR XD comes ready to use and applies easily with a trowel, brush or roller.

### Features

- ◆ Use for waterproofing underneath tile or stone in interior and exterior institutional, commercial and residential floor, wall and ceiling installations
- ◆ Use in wet areas, such as tub and shower surrounds, kitchen and food prep areas, laundry rooms, and balconies or terraces over unoccupied spaces
- ◆ Suitable for submerged applications, such as pools, spas, hot tubs, fountains and water features
- ◆ Use in steam rooms, when used in conjunction with a vapor barrier (refer to TCA handbooks section SR613 and SR614)
- ◆ Isolates shrinkage cracks, in plane, up to 3 mm (1/8") wide, when used in combination with PROMA fiber mesh
- ◆ Compatible with all polymer-modified thin-set mortars
- ◆ Premixed ready to use, and applies easily with a trowel, roller or a brush
- ◆ Rapid-drying formula allows for faster installation of tile and stone
- ◆ Rated for Extra-Heavy Duty service
- ◆ Bonds to properly prepared stainless steel, metal and ABS drain assemblies
- ◆ Will not promote mold, mildew or bacteria growth
- ◆ No VOC
- ◆ Low odor, non-flammable



### Features (continued)

- ◆ Exceeds ANSI A118.10 requirements for thin load-bearing waterproofing
- ◆ Exceeds ANSI A118.12 high-performance standards for crack isolation when used with PROMA fiber mesh
- ◆ Contributes to LEED® objectives and requirements



### Packaging

4 L (1.05 US gal) pail

### Suitable Substrates

- ◆ Dry, completely cured concrete (at least 28 days old)
- ◆ Concrete and masonry blocks
- ◆ Cement backer units (CBU)
- ◆ Cementitious screeds, rendering, leveling coats and mortar beds
- ◆ Gypsum wallboard (INTERIOR dry areas only)
- ◆ Coated glass mat backer board
- ◆ Exterior Grade Douglas Fir Plywood, certified CANPLY (SELECT) or (SEL-TF) CSA 121, for INTERIOR Residential Light-Duty Floors in dry areas only\*
- ◆ Cementitious Terrazzo floors\*
- ◆ Existing unglazed ceramic tile\*
- ◆ Stainless steel, metal and ABS drain assemblies\*

\* With adequate prior preparation as indicated in PROMA'S "SURFACE PREPARATION GUIDELINES"



Stainless Steel / Metal

Concrete

Exterior-Grade Plywood



**Limitations**

- ◆ Do not use for roofing.
- ◆ Do not use as an adhesive.
- ◆ Do not use mastics to set tiles over the PRO MBR XD.
- ◆ Should not be left exposed as a resurfacing material.
- ◆ Do not use for exterior pool or fountain applications
- ◆ Do not use over wet surfaces.
- ◆ Not for applications exceeding 3 mm (1/8") in thickness.
- ◆ Do not apply directly over particleboard, chipboard, presswood, Lauan, masonite, OSB and other dimensionally unstable materials.
- ◆ Do not use where high moisture and hydrostatic conditions and/or recurring moisture problems exist.
- ◆ Do not use under VAT, VCT and non-cushioned vinyl sheet goods installations.

**4. TECHNICAL DATA**

**Applicable Standards**

For Additional Information, please refer to the most recent TCNA handbook for ceramic tile installation or the TTMAC Specification Guide 09 30 00 Tile Installation Manual, or visit our website at [www.proma.ca](http://www.proma.ca).

<b>WORKING PROPERTIES</b> (@23° C [73° F] and 50% RH)	
<b>Time before applying mortar</b>	3 hours minimum or when material is dry
<b>Time before Flood testing</b>	24 hours
<b>Time before water immersion</b>	7 days minimum



<b>PHYSICAL PROPERTIES</b> (@23° C [73° F] and 50% RH)	
<b>Flammability</b>	Non-flammable
<b>Toxicity</b>	Non-toxic
<b>Color of paste</b>	Blue
<b>Color of paste when dry</b>	Black
<b>Paste density</b>	1.12 g/mL
<b>VOC Content</b>	0 g/L
<b>Approximate coverage per 4L 1.05 gal</b>	
<b>Thickness</b>	<b>Coverage</b>
0.7 mm (1/32")	8.4 m <sup>2</sup> (90 ft <sup>2</sup> )
1.5 mm (1/16")	4.2 m <sup>2</sup> (45 ft <sup>2</sup> )
<b>Shelf life</b>	
12 months if kept in its original unopened packaging and stored in a dry location.	

<b>PHYSICAL PROPERTIES</b> (@23° C [73° F] and 50% RH)		
<b>PRO MBR XD</b>		
<b>ANSI 118.10 waterproof membrane for tile and stone installation</b>		
(PRO P-151 was used to bond tiles to membrane in some tests)		
Section	Test description	Evaluation
4.1	Mold Growth	Pass
4.2	Seam Strength	Pass
4.3	Breaking Strength	Exceed
4.4	Dimensional Stability	Pass
4.5	Waterproofness	Pass
5.3	7-day shear strength	Exceed
5.4	7-day water immersion shear strength	Exceed
5.5	4-week shear strength	Exceed
5.6	12-week shear strength	Exceed
5.7	100-day water immersion shear strength	Exceed

<b>PRO MBR XD + Fiberglass Mesh</b>		
<b>ANSI 118.12 crack isolation membrane for tile and stone installation</b>		
(PRO P-151 was used to bond tiles to membrane in some tests)		
Section	Test description	Evaluation
4.1	Mold Growth	Pass
5.1.3	7-day shear strength	Exceed
5.1.4	7-day water immersion shear strength	Exceed
5.1.5	4-week shear strength	Exceed
5.1.6	Accelerated aging shear	Exceed
5.2	Point load test	Exceed
5.4	System crack resistance	Pass



## 5. INSTALLATION

### Surface Preparation

(Refer to PROMA Surface Preparation Guidelines for complete details)

- ◆ All supporting surfaces must be structurally sound, solid and stable.
- ◆ Surfaces must be clean and free of dust, oil, grease, paint, tar, wax, curing agent, primer, sealer, form release agent or any deleterious substance and debris which may prevent or reduce adhesion.
- ◆ Acids, concentrated alkaline conditions and cleaning chemical residues must be neutralized or removed.
- ◆ All concrete substrates must be completely cured (at least 28 days old), solid, sound, slightly textured and have a direct tensile cohesive strength greater than 1.2 MPa (175 psi) when tested in accordance with ACI 503 R – (Appendix A) procedure.
- ◆ On grade or below grade concrete slabs must be installed over an effective vapor barrier.
- ◆ All concrete substrates must be dry and free of hydrostatic conditions and/or extreme moisture problems. Perform a calcium chloride moisture emission test (ASTM F-1869) on the concrete substrate before proceeding with the installation of the floor.
- ◆ Smooth concrete substrate surfaces must be mechanically roughened in accordance with an engineer-approved procedure (Shot-blasting, scarification, grinding, sand or water-blasting, etc) to completely remove all paint, loosely bonded toppings, loose particles and contaminants and to provide sufficient surface texture and profile for the adequate bonding of the waterproofing membrane.

### Mixing

The membrane is ready for use as-is. No mixing is required.

### Application

#### PRO MBR XD as a Waterproofing Membrane

Note: PRO MBR XD can be applied with a trowel, roller or paint brush.

#### Cracks, corners and coves (floor and wall intersections)

Note: Use PROMA fiber mesh with PRO MBR XD when applying around corners, coves, drains, seams and for perimeter wall transitions to ensure 100% waterproofing results.

1. Fill all cracks, gaps in corners and coves greater than 1 mm (1/32") with a PROMA polymer-modified mortar. Fill space completely, then smooth with a trowel and allow to dry.
2. Apply a coat of PRO MBR XD over filled cracks, gaps in corners and coves using a paint brush or roller, spanning crack with a little over 30 cm (12") wide of material.
3. Embed PROMA fiber mesh (cut from a 30 cm [12"] size roll) into wet membrane, using the brush or roller to press mesh until the liquid comes completely through. Remove any bubbles or wrinkles and ensure corners and edges are flat. For coves, use mesh 50 mm (2") on to the floor and 100 mm (4") up the wall; and for corners, use mesh 75 mm (3") on each side around corners.
4. Allow membrane to dry (turn black), then apply a second coat.

### Drains

1. Use a clamping ring-type drain with weep holes for thin-set applications.
2. Apply a coat of PRO MBR XD to the bottom of the flange (making sure it is in plane and fully supported), then apply around the drain.
3. Embed PROMA fiber mesh (cut to fit from a 100 cm [39"] size roll) into wet membrane, using the brush or roller to press mesh until the liquid comes completely through. Remove any bubbles or wrinkles and ensure corners and edges are flat.
3. Allow membrane to dry (turn black), then apply a second coat.
4. After curing, clamp the upper flange onto the membrane and securely tighten. Apply a bead of silicone caulk where the membrane and the flange make contact.

### Spaces around pipes and other penetrations

1. Completely fill/pack all spaces between pipes, drains, and other penetrations and the substrate with a PROMA polymer-modified mortar.
2. Apply a coat of PRO MBR XD around the base and up on to the penetration.
3. Allow membrane to dry (turn black), then apply a second coat.

### Main area

1. Ensure all pre-treated areas are dry to the touch (black in color).
2. Apply a continuous coat of PRO MBR XD at least 0.76 mm (1/32") thick over surface using a brush or roller, including the pre-treated areas.
3. In order to better control thickness, comb the first application of PRO MBR XD with the notched side of a 4 mm (5/32") v-notched trowel, then smooth over uniformly with the flat edge of the same trowel.
4. Allow membrane to dry (turn black), then inspect surface for any voids or air bubbles. Fill any voids, pinholes or air bubbles with a second coat, if needed.
5. Avoid any water contact while drying. Should this occur, apply a second coat to the affected area after 12 hours.

### Flood testing (per ASTM D5957)

Allow membrane to fully cure before flood testing, typically 24 hours at 21° C (70° F) and 50% RH. Curing times may vary due to temperature, humidity and substrate porosity.

### PRO MBR XD as a Crack Isolation Membrane

1. Apply a coat of PRO MBR XD over cracks using a paint brush or roller, spanning crack with a little over 30 cm (12") wide of material.
2. Embed PROMA fiber mesh (cut from a 30 cm [12"] size roll) into wet membrane, using the brush or roller to press until liquid comes through the mesh. Remove any bubbles or wrinkles and ensure corners and edges are flat, then IMMEDIATELY apply a second coat of PRO MBR XD.



### Expansion and Control Joints

- ♦ Install control joints where tiles abut restraining surfaces, around the perimeter of the work and at the base of columns and curbs.
- ♦ Install and space expansion and control joints in all directions in accordance with TCNA HANDBOOK FOR CERAMIC TILE INSTALLATION Detail #EJ-171 recommendations, or TTMAC Specification Guide 09 30 00 Detail #301-MJ recommendations. CAUTION: DO NOT cut EXPANSION JOINTS in after the tiles have been installed. Install tiles normally and stop when the control joint location is reached. Cut the tile if required and resume setting from the opposite side of the joint. Before proceeding further, rake the joint and leave the tile and joint space clean.
- ♦ DO NOT FILL EXPANSION JOINT SPACE UNTIL GROUTING IS COMPLETED on the remainder of the job.
- ♦ Install a suitable industry-approved compressible bead and flexible sealant to caulk expansion and control joints. Follow the sealant manufacturer's installation instructions.

### Curing and Protection

- ♦ PRO MBR XD is dry when it turns from blue to solid black, and cured typically after 24 hours at 21°C (70°F) and 50% RH. Drying and curing times may vary due to temperature, humidity and substrate porosity.
- ♦ Protect membrane from job site traffic, perforation, dust, dirt, deflections, damage and stains until final coating, flooring or tile is completely installed.

### Cleaning

Clean tools and hands with water while the product is still fresh.

### Health and Safety

Refer to the Material Safety Data Sheet (MSDS) for complete details.

## 6. AVAILABILITY AND COST

PROMA products are widely available in Canada and the Northeast United States. To find a distributor of PROMA products, call **toll-free: 1.866.51.PROMA (77662)**.

## 7. WARRANTY

PROMA warrants that this product is manufactured using quality raw materials and is of merchantable quality and suitable for the purpose for which it was intended. PROMA's liability under this warranty shall be limited to the replacement of its product proven to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising from the use of/or the inability to use this product.

## 8. MAINTENANCE

Product requires no special maintenance. Do not leave without tile, stone or permanent floor covering or exposed as a wear surface.

## 9. TECHNICAL SERVICE

For more detailed information on this product, please contact our technical department for proper recommendations and job field assistance. **Toll-free: 1.866.51.PROMA (77662)**.

## 10. FILING SYSTEM

Additional information is available upon request, or by visiting [www.proma.ca](http://www.proma.ca).

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