



PRO BLOCK™ MMS **eco**

2. MANUFACTURER

PROMA ADHESIVES Inc.

9801, Parkway, Anjou, Quebec Canada H1J 1P3
 Tel.: 514.852.8585
 Fax: 514.852.8225
 Toll-free: 1 866.51.PROMA (77662)
 Email: info@proma.ca
 Web: www.proma.ca

3. PRODUCT DESCRIPTION

PRO BLOCK™ MMS ECO is a two-component, **solvent-free, fast-setting, fast-curing**, 100% solids epoxy-based moisture management **one-coat** sealer system that can be applied to damp or new concrete as early as 7 days old (see Suitable Substrates). PRO BLOCK™ MMS ECO protects finished flooring system up to 100% RH as per ASTM F-2170; sustains pH levels up to 14 as per ASTM F-710 and reduces moisture vapor emission rate of a concrete substrate up to 0.12 kg/m² (25 lbs/1,000 ft²) per ASTM F-1869. The PRO BLOCK™ MMS ECO system applies easily with a squeegee or a roller, dries as little as 4 hours with up to a 25-minute working time and emits no VOC making it an environmentally friendly product. PRO BLOCK™ MMS ECO can also be used as a bonding agent for self-leveling toppings and self-leveling underlayments (up to 50 mm [2"] thick) when used with sand broadcasting.

Features

- ◆ Protects finished flooring system up to 100% RH as per ASTM F-2170; sustains pH levels up to 14 as per ASTM F-710 and reduces moisture vapor emission rate of a concrete substrate up to 0.12 kg/m² (25 lbs/1,000 ft²) per ASTM F-1869
- ◆ Creates a high-performance bonding agent for self-leveling toppings and self-leveling underlayments (up to 50 mm [2"] thick) when used with sand broadcast*
- ◆ Product is colored green for easy detection on the surface to help ensure full coverage
- ◆ Up to a Lifetime Limited System warranty. Contact PROMA technical service regarding specific project warranties
- ◆ ZERO VOC
- ◆ Contains materials derived from bio-based renewable sources (up to 20%) an effective contribution to LEED® Objectives and requirements
- ◆ EXCEEDS ASTM E96 requirements (< 0.1 perms)

* PROMA recommends using sand broadcast for self-leveling underlayments above 25 mm (1"). Contact our Technical Service Department for appropriate recommendations.



Features (continued)

- ◆ Meets or exceeds ASTM F3010 requirements for moisture mitigation system
- ◆ Meets or exceeds ASTM D7234 standard test method for pull strength of coatings over concrete
- ◆ Meets or exceeds ASTM D1308-20 standard test method for effect of household chemicals on clear and pigmented coating systems
- ◆ For interior institutional, commercial and residential applications
- ◆ Penetrates to fill gaps
- ◆ Applies easily with a squeegee or roller
- ◆ Only one coat required

Packaging

5.67 L (1.5 US gal) size Kit
 Part A: 3.78 L (1 US gal)
 Part B: 1.89 L (0.5 US gal)

Suitable Substrates

- ◆ New concrete (7 days old)**
- ◆ Existing Concrete

** Contact PROMA's technical department for proper recommendations.



Concrete

Limitations

- ♦ For INTERIOR installations only.
- ♦ Do not install at temperatures below 10°C (50°F) or above 35°C (95°F). **NOTE: Applications at the lower and higher ends of this temperature range will affect curing time.**
- ♦ Do not use directly over gypsum-based leveling and patching compounds, old carpet adhesive left-over, cut-back adhesive residue or over existing hard and soft flooring such as ceramic floor tile, quarry tile, vinyl sheet good, VC tile, linoleum, terrazzo, etc.
- ♦ Do not use if there is a curing agent sealer on the concrete substrate.
- ♦ Do not use this product as a floor finishing primer or surface sealer or without covering it with a floor covering material.
- ♦ Not for use in areas subject to negative hydrostatic pressure.

4. TECHNICAL DATA

Applicable Standards

NOTE: The technical data provided is averaged based on lab testing under controlled conditions (23° C [73° F] and 50% RH), done in accordance with standard industry testing methods (where applicable), and is subject to change without notice. Actual performance may vary depending on jobsite conditions and installation methods used. Please contact our technical services department for additional information.

WORKING PROPERTIES (@23° C [73° F] and 50% RH)	
Working Time	20-25 minutes
Drying time (tack-free)	4-5 hours

PHYSICAL PROPERTIES (@23° C [73° F] and 50% RH)	
VOC content	0 g/L
Flash point	>104°C (219°F)
Water vapor permeance (ASTME E96)	< 0.1 perm
Water vapor transmission reduction (ASTM F1869)	>95%
Adhesion (ASTM D7234)	400-500 psi (2.76-3.45 MPa)
Alkaline resistance (ASTM D1308 - 14 days direct contact @ pH 14)	Passed
Shelf life	
24 months if kept in its original unopened packaging and stored in a warm, dry location.	

Approximate coverage	
@ a profile of CSP 3 <i>Note: Greater profile than a CSP 3 will reduce coverages.</i>	14.9 m ² per 3.78 L (150 ft ² per US gal) 22.4 m ² per 5.67 L kit (225 ft ² per 1.5 US gal kit)
@ a profile of CSP 3 using sand broadcasting <i>Note: Greater profile than a CSP 3 will reduce coverages.</i>	10.2 m ² per 3.78 L (110 ft ² per US gal) 15.3 m ² per 5.67 L kit (165 ft ² per 1.5 US gal kit)

5. INSTALLATION

Surface Preparation

(Refer to PROMA Surface Preparation Guidelines for complete details)

- ♦ All concrete substrates must be structurally sound, solid, stable, and must be surface dry, clean, free of dust, oil, grease, paint, tar, wax, curing agent, sealer, form release agent or any deleterious substance and debris which may prevent or reduce adhesion. Concrete must have a direct tensile cohesive strength greater than 1.0 MPa (150 psi) in areas subject to foot traffic, and 1.4 MPa (200 psi) in areas subject to heavy commercial traffic, when tested in accordance with ASTM C1583 methods.
- ♦ Mechanically roughen surface in accordance with an engineer-approved procedure (shot-blasting, scarification, grinding, sand, or water-blasting, etc.) to provide a minimum ICRI concrete surface profile of 3 (CSP #3) for adequate bonding.

- ♦ Acids, concentrated alkaline conditions and cleaning chemical residues must be neutralized or removed.
- ♦ Surface must pass ASTM F3191 Water Drop Test, and be 100% free on any contaminants that could cause or contribute to a flooring system failure.
- ♦ Do not use sweeping compounds. This could leave an oily film on the concrete surface that will prevent a proper bond.
- ♦ Concrete surfaces must be dry prior to the application of PRO BLOCK™ MMS ECO.

NOTE: It is very important that condensation does not occur during application. The concrete substrate must have a surface temperature that is 3°C (5°F) higher and rising than the measured dew point temperature of the surrounding air to avoid condensation. As an example, if the dew point temperature of the air is 18°C (65°F), then the concrete surface temperature must be a minimum of 21°C (70°F) and rising so it does not drop below this threshold.

Mixing

1. Use clean mixing-tools and containers.
2. Pour PART B into PART A. Scrape the wall and bottom of the PART B container to ensure all material is added.
3. Using a mechanical mixer (300-500 rpm) mix for at least 3 minutes or until a homogenous mixture is achieved. Do not over-mix at high speed to minimize the formation of air bubbles.
4. During mixing, scrape the wall and bottom of the container to avoid uneven curing spots.

Application

NOTE: All expansion and control joints must be carried through from substrate to final flooring and filled with an industry-approved flexible sealant in accordance with ANSI A108.01 and TCNA detail EJ171 or TTMAC detail 301MJ. Do not fill or cover expansion and control joints with installation material. PROMA is not responsible for any issues resulting from changes to expansion and control joints, saw cuts, existing cracks, or new cracks that develop after the PROMA system has been installed. Contact PROMA's technical department for additional information.

Surfaces sealed with PRO BLOCK™ MMS ECO must be **primed** with PRO SUPERPRIME™ or PRO SUPERPRIME™ 1C to create an adequate bonding surface for self-leveling underlayments and toppings, cementitious screeds, patching compounds, and most floor covering adhesives (see respective technical data sheets for details). PROMA requires using sand broadcast to create an adequate bonding surface for self-leveling underlayment applications above 25 mm (1") thick when installing over PRO BLOCK™ MMS ECO. Reference the chart below for guidance. Note that coverages given are approximate and can vary with concrete surface profile, porosity, and texture.

	Priming Required with PRO SUPERPRIME™ or PRO SUPERPRIME™ 1C	Sand Broadcast Required	Approximate Coverage per 5.67 L (1.5 US gal) unit
Self-Leveling Underlayments below 25 mm (1") thick	YES	NO	22.4 m ² (225 ft ²)
Self-Leveling Underlayments above 25 mm (1") thick	NO	YES	15.3 m ² (165 ft ²)
Self-Leveling Toppings below 13 mm (1/2") thick	YES	NO	22.4 m ² (225 ft ²)
Self-Leveling Toppings above 13 mm (1/2") thick	NO	YES	15.3 m ² (165 ft ²)
Patching Compounds	YES	NO	22.4 m ² (225 ft ²)
Cementitious Screeds	YES	NO	22.4 m ² (225 ft ²)
Floor Covering Adhesives	YES	NO	22.4 m ² (225 ft ²)
Floating or Non-Adhered Flooring Systems	NO	NO	22.4 m ² (225 ft ²)



Application without Sand Broadcast

Apply PRO BLOCK™ MMS ECO with a squeegee to cover surface evenly leaving no gaps, and then back roll leaving a consistent smooth and flat film. A thickness of approximately 14.9 m² (150 ft² per US gal) / 22.4 m² per 5.67 L (225 ft² per 1.5 US gal) kit is recommended to achieve desired performance.

Ambient environmental temperature must be between 10°C (50°F) and 35°C (95°F) to ensure adequate working and application time (20-25 minutes). Temperatures below this range will result in a longer working time and a slower curing time; and above this range will result in a shorter working time and faster curing time. Allow the product to cure a minimum of 4 hours before application of PRO SUPERPRIME™ or PRO SUPERPRIME™ 1C primer, which is required for the installation of self-leveling underlayments and toppings, cementitious screeds, patching compounds, and most floor covering adhesives. **NOTE: Temperatures can affect the drying time of the product.**

Priming is not required for applications using sand broadcast or for direct installations of floating or non-adhered flooring systems, provided the surface meets flooring manufacturer's specifications (reference flooring system manufacturer's instructions for details).

Application with Sand Broadcast

Apply PRO BLOCK™ MMS ECO with a squeegee or a roller to cover surface evenly leaving no gaps. A thickness of approximately 10.2 m² (110 ft² per US gal) / 15.3 m² per 5.67 L (165 ft² per 1.5 US gal) kit is recommended to achieve desired performance.

While PRO BLOCK™ MMS ECO is still fresh (under 20-25 minutes), broadcast a clean, oven-dried sand (mesh size from 20 to 35 free of fines) consistently over the entire area. Apply approximately 5 kg/1 m² (1 lb/1 ft²) of sand. Ambient environmental temperature must be between 10°C (50°F) and 35°C (90°F) to ensure adequate working and application time (20-25 minutes). Temperatures below this range will result in a longer working time and a slower curing time; and above this range will result in a shorter working time and faster curing time.

Once the sand broadcast is complete, avoid all general traffic over the surface for a minimum of 4 hours. After that time, broom sweep and vacuum the surface to remove all loose sand. Check for any bare spots and re-apply product plus sand to those areas.

Drying Time

- Allow the product to cure until there is no tack (as little as 4 hours) before application of PRO SUPERPRIME™ or PRO SUPERPRIME™ 1C primer prior to the installation of self-leveling underlayments and toppings, cementitious screeds, patching compounds, and most floor covering adhesives, or the installation of a floating or non-adhered flooring system (reference flooring system manufacturer's instructions for details).
- Protect product from job site traffic, perforation, dust, dirt, deflections, damage and stains until final coating, flooring or tile is completely installed.
- When using sand broadcast, avoid general traffic over the surface until there is no tack (as little as 4 hours). Installation of a self-leveling underlayment and topping can be done after this time provided all loose sand has been properly removed and any bare spots have been rectified. **There is no time limit for how long the sanded surface can remain before application of a self-leveling underlayment or topping, but it must be protected from job site traffic, perforation, dust, dirt, deflections, damage and stains during this time to retain its integrity. Contact PROMA technical service department for proper recommendations.**

Cleaning

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

Health and Safety

Refer to the Safety Data Sheet (SDS) 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 floor covering or exposed as a resurfacing material.

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.

PROMA ADHESIVES Inc.

9801, Parkway, Anjou, Quebec Canada H1J 1P3

Tel.: 514.852.8585

Fax: 514.852.8225

Toll-free: 1 866.51.PROMA (77662)

Email: info@proma.ca

© 2023 PROMA ADHESIVES Inc.