



1800 Liquid Applied Air/Vapor Barrier System Installation, Safety & Procedure Guideline Manual

IMPORTANT INFORMATION:

1800 is 100% rubber polymer. This makes it tougher and stronger than asphalt based competitive products.

1800 membrane meets Federal, State and local VOC emission requirements.

In its cured state on the wall, 1800 is solvent-free, non-toxic and non-carcinogenic. However, in its liquid, uncured form, 1800 contains solvents that are combustible and hazardous.

Therefore, it is important that you do not store, transport or apply the 1800 membrane before reading and understanding the Material Safety Data Sheet (MSDS) and safety/application information presented on the following pages.

If you do not understand any of this information we urge you to call us with your questions, toll free 1.888.498.1411 or direct 513.422.7285.

Note: The information presented here by Marflex Building Solutions, is not able to, or intended to, supplement individual training, responsibility or judgment of the user.

SAFETY INFORMATION:

- DO NOT spray the membrane before reading and understanding the following safety guidelines and the MSDS. If you need additional copies of the MSDS, please contact us and we will forward more immediately.
- DO NOT spray the membrane without being adequately trained in the operation and safety of your company's application equipment.
- DO NOT SPRAY ALONE.
- DO NOT spray indoors or in confined spaces, including cisterns. Spraying or otherwise applying the membrane or its related products in confined spaces is an inherently dangerous activity and could result in a fire, explosion or respiratory failure, causing death or serious injury. Confined space application of a flammable product such as this requires specialized skill, knowledge and safety requirements not provided by Marflex

Basement Products. Any such use done contrary to Marflex's instructions is entirely the responsibility of those who do not follow our explicit warnings. Marflex has neither the resources nor expertise to determine whether or not a jobsite is considered a confined space. Regional fire and other regulatory codes may vary. It is the sole responsibility of the user to be in compliance.

- Approved heated tank, if used, should be vented in accordance with the tank manufacturer's specifications and instructions. The temperature in the tank should be maintained at a level that will give 100°F temperatures at the tip.
- When pouring into heated tanks, ALWAYS ground barrel to tank...tank to truck...truck to ground. Always ground both containers when pouring the membrane. This ground must be attached to link both containers. Transferring the membrane must be done in a well ventilated area away from sparks, flames, and any ignition sources.
- DO NOT heat the membrane above 120°F. Properly vent the top of the barrel by loosening the bungs. If barrel heaters are used, the barrels must be properly vented to the outdoors. This prevents the accumulation of solvent vapors in confined areas while allowing for the expansion of heated materials. Always follow the safety and operational instructions provided by the manufacturers of the barrel heaters.
- Enclosed application trucks or vans must have proper ventilation or air movement to avoid air pocket accumulations of dangerous or explosive fumes or vapors.
- Store and transport 1800 according to Local, State, Federal Fire, DOT and environmental codes. For further information call the appropriate authority in your area. This also applies to storage, transportation and disposal of empty barrels.
- Secure the job site by posting no smoking signs. Keep all sources of ignition away from the material and vapors. DO NOT smoke around the barrels, equipment or on application sites. Be certain other contractors are aware of the flammability of the product and ignition sources on the job site.
- DO NOT spray near pilot lights or active electrical switches or devices.



SAFETY INFORMATION CONTD.:

- DO NOT breathe vapors. Applicators and other subjected to fumes are required to wear NIOSH approved disposable organic vapor respirators. Medical approval must be obtained for each person who will require a mask. Proper individual fit is required. Displacement of air by solvent vapors can lead to oxygen deprivation causing dizziness, unconsciousness or death. High vapor concentration can overwhelm the filters in the masks. If you detect fumes through the mask or feel lightheaded or dizzy, move to fresh air immediately. Make sure your mask filter cartridges are functioning properly, if not, replace them.
- High pressure airless sprayers are potentially dangerous. Direct spray can penetrate skin or eyes and cause serious injury. If accidental penetration occurs seek medical attention immediately.
- Prior to commencement of spray application, properly ground truck to a copper grounding rod. **ALL VEHICLES MUST BE GROUNDED.**
- Wear gloves, cap, and coveralls to prevent skin contact.
- Wear safety goggles with side shields. If the 1800 membrane gets into eyes, flush with clean water. Seek immediate medical attention with a copy of the MSDS.
- OSHA regulations require a working fire extinguisher and first aid kit in the truck cab. Fire extinguisher should also be accessible at the spray site.
- All barrels, whether full or empty, should be stored in protected areas. Keep them away from children. These containers are hazardous when emptied. Emptied containers retain vapors and liquid.
- All hazard precautions must be observed when handling emptied containers. Empty drums are not suitable for use as trash containers, rafts, barbeque pits or any similar use.

LIMITATIONS:

- The 1800 Air/Vapor Barrier membrane is designed to be installed in the cavity wall. It is not intended to be used for interior applications.

- The 1800 is not intended as a permanently exposed membrane. It should be covered within 30 days.
- DO NOT apply over asphalt or tar based products. The 1800 may be applied over self adhering rubberized asphalt membranes, and conversely, may be applied on top of the 1200 VP.
- DO NOT apply the membrane when the ambient temperature is below 15°F.
- DO NOT apply the membrane to frozen surfaces that have not had a chance to cure. Poured concrete walls, mortar, masonry block cores filled with concrete as well as parged surfaces must be cured before applying the membrane.
- DO NOT introduce any material that will enhance or dilute the membrane. This will adversely affect its characteristics. DO NOT thin.
- GROUND THE TRUCK, barrels and all spray equipment to the ground at the jobsite. The rig must always be grounded while spraying, no exceptions.
- Post a no smoking sign, and be sure that no other tradesmen introduce any ignition sources during your time at the jobsite; welding, smoking, electrical equipment, etc.

INSTALLATION PROCEDURES:

SURFACE PREP:

1. All surfaces must be structurally sound and free from spalled areas, loose aggregate, sharp protrusions or other matter that will hinder the adhesion or regularity of the 1800 membrane installation.
2. The surface should also be free from frost, dirt, grease, oil or other contaminates.
3. Surface irregularities and voids should be pretreated with the 1800 Mastic.
4. Masonry Substrates: Surfaces should be smooth and free from projections. Fill all voids and holes, particularly mortar joints to a smooth flush finish with a lean mortar mix or non-shrink grout.



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5. Clean and prime substrate joint/connection surfaces to receive transition strip in accordance with manufacturer's instructions

APPLICATION TEMPERATURE:

1800 should be applied within the recommended application temperature range of 100°F (at the spray tip). 1800 membrane may be applied successfully at ambient temperatures as low as 15°F.

MEMBRANE APPLICATION:

1. Use airless spray equipment having a minimum pressure of 3000 psi to apply the 1800.
2. 1800 membrane is to be heated to a temperature range of 100°F (at the spray tip) for installation. The membrane can be heated through a heat exchanger or band heaters applied to the barrels. Product temperature should never exceed 120°F.
3. Interlinking lines between the pump, heat exchanger and the material should be short and have a large diameter to ensure good material flow. Lines should not exceed 4 feet in length, and the diameter should be at least 2 inches.
4. A high pressure spray hose is required, with a diameter of no more than ½" and a length of no more than 200 ft.
5. Spray tip size 631 is recommended for best application rate.
6. Proceed to apply the membrane; application should be in multiple, uniform passes, alternating horizontal and vertical passes to ensure complete coverage of the substrate and transition strip material.
7. The coverage rate of the completed membrane application is 23-30 ft²/gal. The wet mil thickness should be 60-80 as determined by a standard mil gauge. The result will be a 30-40

dry mil thickness. Note: The membrane should be firm within 15-20 minutes.

8. Typically one crew can apply approximately 4000-6000 ft² of area per day. Drying time is approximately one hour, given average conditions and standard thickness.

APPLICATION OF TRANSITION STRIP:

1. Ensure that all surfaces are dry, smooth and regular, free from defects and excessive dust.
2. Concrete surfaces must be smooth and without large voids, spalled areas or sharp protrusions. Concrete must be cured a minimum of 14 days and must be dry before 1800 Primer and EcoFlash Transition Strip is applied.
3. Prime all surfaces to receive the EcoFlash transition strip using the 1800 Primer. Apply primer with a roller, brush or spray equipment at a rate of 100-300 ft²/gallon depending on porosity and texture of the surface. Allow primer to dry prior to membrane installation. Ensure that all primed surfaces receive the EcoFlash in the same day.
4. Use pre-cut, easy to handle lengths for each location.
5. Typically, installation of the transition strip begins at the base of the wall areas.
6. Overlap a minimum of 2" onto both surfaces. When properly aligned, roll back and remove protective film. Place transition strip against surface by pressing firmly with a hand roller. Note: When using the transition strip with brick ties, position strip, press in place and then cut for ties and protrusions. Seal around any openings with the 1800 Mastic.
7. Seal top edge of transition strip with 1800 Mastic.
8. After transition strips are in place, follow the application procedures for the membrane.



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9. Board type cavity wall insulation is then adhered to the 1800 membrane after an initial set time of approximately 1 to 2 hours, to prevent convection currents occurring behind the insulation. Once applied the insulation is firmly and permanently adhered into place and cannot be removed. Wedges or clips, normally used to secure the insulation may be reduced.

PROTECTION AND CLEAN-UP:

1. Remove any masking materials after installation.
2. Clean any stains on materials that would be exposed in the completed work.
3. The 1800 is not intended as a permanently exposed membrane. It should be covered within 30 days.

MAINTENANCE:

1800 membrane does not require any maintenance. Damaged areas are easily repaired by spraying over affected areas. Re-coating and/or Cold joints are not a problem; newly applied material easily blends with existing 1800 material to provide a monolithic membrane.

PRODUCT ONLY WARRANTY:

The information herein is the best available relating to 1800 and the recommendations contained herein are based on tests believed to be reliable.

Marflex Building Solutions warrants the product to be of good quality and manufactured to meet published physical properties and quality control standards and will replace or refund the purchase price of this product if proved defective within one year of date of application. This warranty does not apply if there is no working drainage system.

Except as specifically provided herein, Marflex Building Solutions makes no warranty, express, implied or oral including but not limited to any warranty or merchantability, fitness for a particular

purpose, usage of trade, course of dealing or course of performance in connection with this agreement. In no event shall Marflex be liable on any such warranty with respect to the Marflex 1800 Liquid Air/Barrier Membranes. Marflex shall not be liable for incidental or consequential damages including, but not limited to damages of the structure, its replacement, contents or personal injury. Some states do not allow limitations on how long an implied warranty lasts or allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

TECHNICAL SERVICES:

Technical support is available from Marflex Building Solutions. Call toll free: (888) 498-1411 or Tel: (513) 422-7285

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