



## TECHNICAL DATA

# Manus Bond Perm-Flash Liquid Membrane

### 1. PRODUCT DESCRIPTION:

Manus Bond Perm-Flash Liquid Membrane by Manus Products, Inc is the latest advancement in liquid applied building envelope membranes. A hybrid elastomeric adhesive/sealant that forms a permanently flexible barrier preventing undesirable water and air through building envelopes. Perm-Flash is breathable—allowing damp surfaces to dry.

A virtual living skin for buildings that bonds to a wide variety of building envelope substrates including, gypsum board, OSB, plywood, concrete, CMU, cement board, steel, aluminum, Kynar®, Galvalume®, painted surfaces and many vinyls and plastics. Perm-Flash liquid membrane is used to seal rough openings, flash windows and doors and as a complete building membrane. Perm-Flash's unique moisture cure formulation cures fast and can be applied over a wide temperature range. It cures in the presence of water and remains flexible, is non-sag and has exceptional resistance to weathering, UV light and temperature extremes. Perm-Flash will not tear and remain durable when exposed to weather during construction.

Perm-Flash is an environmentally compliant coating that is classified as very low VOC, does not contain water, solvents or isocyanates and is mildew resistant when fully cured. USDA accepted.

### 2. TECHNICAL DATA:

<b>Specific Gravity</b>	1.5-1.7
<b>Color</b>	Teal Green (Custom colors available)
<b>Skin Time @ 75°F &amp; 50%RH</b>	30 minutes
<b>Cure Rate @ 75°F &amp; 50%RH</b>	3/16" thickness / 24 hours
<b>VOC Content</b>	30 grams/liter maximum
<b>Total Solids</b>	99%
<b>Hardness, Shore A</b>	40-45
<b>Sag</b>	Nil
<b>Tensile Strength</b> ASTM D412	180 psi
<b>Water Vapor Transmission</b>	14 perms @ 12 mils
<b>% Elongation</b>	400%
<b>Peel Strength</b> ASTM C794	25 pli
<b>Service Temperature Range</b>	-75°F to 300°F
<b>Movement Capability</b>	±25%
<b>Corrosive Properties</b>	Non-corrosive

<b>Staining</b>	Passes
<b>UV Resistance</b>	Excellent
<b>Surface Burning</b> ASTM E84	Flame Spread: 0 Smoke Developed: 15 NFPA and ICC Class A Building Material

\*Above values are typical values for the material, but not intended for use in specifications. Field conditions may yield different results.

3. **PACKAGING:**  
Bulk packaged in 1, 5 and 55 gallon containers. Convenience packaged per order in 10.1 and 28fl.oz. cartridges or 20 fl.oz. sausage packs
4. **APPLICATION:**  
Perm-Flash will produce an opaque membrane when applied at the recommended 12-15 wet mils to simplify quality control and inspection. At 12-15 mils the estimated coverage is 1 square foot per 0.85 fl.oz. Bonds to damp substrates and cures in wet weather. Before use read Surface Preparation and review MSDS.
5. **SURFACE PREPARATION:**  
Apply to clean surfaces free of contaminants that can adversely affect adhesion. Remove all old sealant before applying product. Some substrate materials may not be compatible with this product. Testing substrate compatibility with this product before full application is recommended. Ensure positive drainage at all rough openings.
6. **PAINTING:**  
Cured product may be painted with most industrial & consumer paints. Testing prior to painting is recommended.
7. **STORAGE LIFE:**  
For maximum shelf life, store unopened product at or below 80°F.  
12 months = cartridges and sausage packs  
6 months = 1, 5 and 55 gallon containers
8. **PRECAUTIONS:**  
Some applications may not be compatible with this product. Some cleaners, solvents may not be compatible with this product. Testing suitability for intended application before proceeding with full application is recommended. Use with adequate ventilation. Inhalation of vapor during application and cure may cause slight eye or throat irritation. In case of contact with eyes, lips, or mouth, flush thoroughly with water. If irritation persists, consult a physician. Avoid repeated, prolonged contact with skin. See MSDS for additional information. **KEEP OUT OF REACH FROM CHILDREN.**
9. **TECHNICAL SERVICE:**  
Manus technical representatives are always available to provide assistance. Please contact our Technical Service Department with your questions or requests for specific applications.
10. **LIMITED WARRANTY:**  
Any goods prove defective will be replaced or the purchase price refunded. The limited warranty described herein is in lieu of any other warranty, expressed or implied, including any implied warranty of merchantability or fitness for a particular use. The user shall determine suitability of the product for its intended use. Liability for any incidental or consequential damage or loss is excluded. The user assumes all risks of the product's use, handling and storage.

## **MANUS PRODUCTS INC.**

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