PRODUCT

The SEMCO Liquid Membrane [™] is a single component waterproofing and anti fracture membrane. The SEMCO Liquid Membrane ™ is a self-contained elastomeric fluid suspended in a copolymer adhesive, this revolutionary blend enables easy application while providing excellent bridging, and waterproofing. When combined with SEMCO's X-Bond Seamless Stone, two-stage waterproofing is achieved, enabling single source protection.

SUBSTRATES Concrete

Stone

COVERAGE

COVERAGE sq ft. / gallon @2 coats at 30 mil

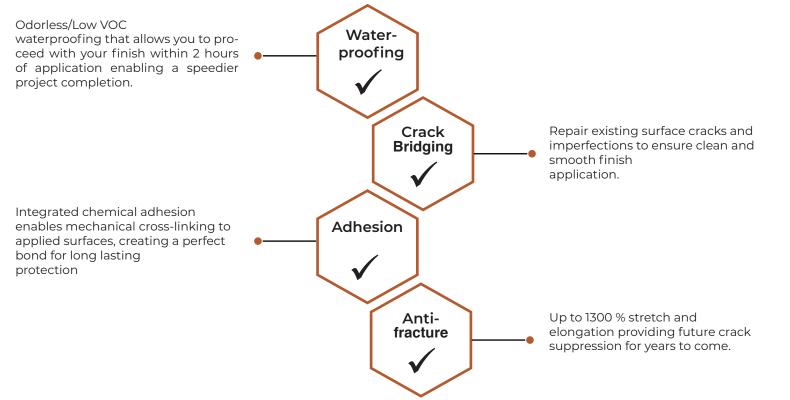
| Open pore substrates | 100 - 150 |
|------------------------|------------------------|
| Closed pore substrates | 200 - 250 |
| X-Bond Scratch Coat | 150 - 200 |
| | Closed pore substrates |

| Exterior/Interior Cladding | X-Bor |
|-----------------------------|-------|
| Residential, Industrial and | Л ВО |
| Commercial | |

Metal / Aluminium

Plywood / Wood

USES



Scan to watch application



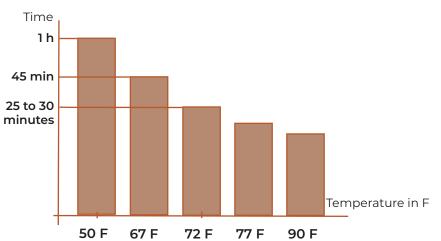




SURFACE ENGINEERING COMPANY

APPLICATION

| Application | 1/2 " nap roller ; Airless sprayer with tip size 21 at 2,500 PSI (minimum 2 coats) |
|-------------------------|--|
| Application environment | Apply at temperatures from 50°F to 90°F |
| Color | Orange (other colors available on request) |
| Chemical type | Latex - crosslink hybrid |
| Clean up | SEMCO Stone Soap with water |
| Shelf life | 2 year in controlled environment (ambient temperature of 60F - 72F) |
| Packaging | 1 gal. 5 gal. 55gal. |



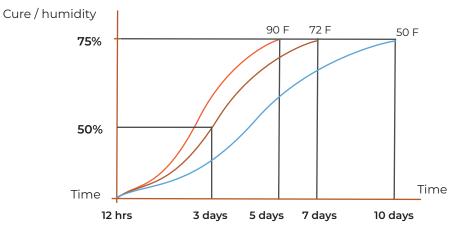
Drying times are affected by temperature and relative humidity. The chart represents guidline values but each project is to be treated individually.

The chart represents the time needed in between coats at specified temperature.

CURE TIME

Curing time is affected by temperature and humidity.

For example at only 50F, a full cure would take 10 days in comparison to at 95 F it would only take 5 days to cure.



ASTM TEST RESULTS

| ANSI 118.10 - Breaking Strength (ASTM D751, Procedure B) | Pass |
|--|-----------------|
| ANSI 118.10 - Dimensional Stability (ASTM D1204) | Pass |
| ANSI 118.10 - 7-Day Shear Strength (ASTM C482-9.8) | 173 PSI / Shear |
| ANSI 118.10 - 7-Day Water Immerseion Shear Strength | 132 PSI |
| ANSI 118.10 - 4-Week Shear Strength | 234 PSI |
| ASTM E96 - Water Vapor Transmission | 1.52 (g/hr-m2) |
| ASTM E96 -Water Vapor Transmission : Permeability | 0.135 (perm-in) |
| ISO 37 - Tensile Strength (ASTM D412) : Maximum Stress | 390 PSI |
| ISO 37 - Tensile Strength (ASTM D412): Ultimate Elongation | 1300 % |

DRYING / RECOAT TIME

PROCEDURE

FRACTURES UP TO 1/16 INCH CRACKS

Apply minium 2 coats of SEMCO Liquid Membrane™ with a 3/8" roller to achieve a thickness of at least 30 mil to retard future reoccurrence of crack. Wait 30 minutes at 70F before applying next coat.

CRACKS BETWEEN 1/16 - 1/4 INCH

Apply X-Bond Liquid with brush as a primer coat into the crack. Do not allow to dry. Apply mixture of X-Bond 1 part X-Bond Liquid to 2 1/2 parts of X-Bond Stone to fill up the crack. Allow mixture to dry, ONCE DRY roll 2 coats of SEMCO Liquid Membrane™ to achieve a thickness of at least 30 mil to retard future reoccurrence of crack. 30 min at 70 F between coats.

CRACKS OR OPENINGS EXCEEDING 1/4 INCH

- Roll X-Bond Liquid as a primer coat. Do not Allow to dry. Apply mixture of X-Bond 1 part X-Bond Liquid to 2 1/2 parts of X-Bond Stone into the crack. Allow mixture to dry, ONCE DRY roll 1 coat of SEMCO Liquid Membrane[™], while still wet embed Reinforcement Fabric 6" to surface, and immediately roll an additional 2 coats of SEMCO Liquid Membrane[™] to fully encapsulate the Fabric Membrane
- When applying the next line of Reinforcement Fabric overlap the new sheet over the existing sheet a minimum of 2"
- · Allow surface to dry and proceed to X-Bond Brown Coat in the SEMCO SIP Manual

SEMCO LIQUID MEMBRANE™ PROCEDURE

- Sweep debris off of surface
- Use a 1/2 " roller. Allow any pre-treated areas to dry to the touch. Apply a coat of SEMCO Liquid Membrane™ with brush or roller over substrate including pre-treated areas. Apply second coat of SEMCO Liquid Membrane™ over the first coat of SEMCO Liquid Membrane™. Let topcoat dry to the touch, approximately 1–2 hours at 70°F (21°C) and 50% RH. When last coat has dried to the touch, inspect final surface for pinholes, voids, thin spots or other defects. SEMCO Liquid Membrane will dry to bright orange color when it's dry to touch. Use additional X-Bond Membrane to seal the defects. Required thickness is 30 mil

SEMCO LIQUID MEMBRANE SPRAY APPLICATION

- Sweep debris off of surface
- The sprayer being used for the application of SEMCO Liquid Membrane[™] should be capable of producing a minimum of 2,500 psi (17.2), maximum of 3,300 psi (22.8 MPa) with a flow rate of 0.95 to 1.6 GPM (3.6 to 6.0 LPM) using a 0.521 or a 0.631 reversible tip. Keep the unit filled with SEMCO Liquid Membrane[™] to ensure continuous application of liquid. The hose length should not exceed 100' (30 m) in length and 3/8" (9 mm) in diameter. Required thickness is 30 mil

NOTES

- Extended application procedures can be found in the SEMCO SIP Manual.
- Procedures for cleaning of the flooring system during operations can be found in the SEMCO SIP Manual or upon request
- Safety Data Sheets for SEMCO Liquid Membrane™ are available upon request.

WARRANTY 5 year standard limited warranty, 10 year for non-traffic surfaces

PRECAUTIONS

Always test a small area first to determine ease of application and desired results. When performing a flood test remove all excess water if test is performed prior to 100% curing. Not for use on humans or animals. Be sure to read container label and Safety Data Sheet for additional handling requirements before using this product.

LIMITED WARRANTY NOTICE

SEMCO Modern Seamless Surface warrants that its products will meet their specifications. There are no other warranties, expressed or implied of merchantability or fitness of use. The only obligation of the seller-manufacturer shall be to replace material found to be defective. SEMCO Modern Seamless Surface will not be liable for labor or consequential damage of any kind. The information contained herein is, to the best of our knowledge and belief, true and accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by use of this material. It is the responsibility of the user to comply with all applicable federal, state and local laws and regulations. All chemicals may present unknown health hazards and should be used with caution.



