

EFFISUS STOPPER M-1 SEALANT

DESCRIPTION

Effisus Stopper M-1 Sealant is a moisture curing, polyether adhesive/sealant designed for application in damp, dry, or cold climates. Effisus Stopper M-1 Sealant is solvent free and contains no isocyanates. Effisus Stopper M-1 Sealant will not shrink upon curing, will not discolour when exposed to UV light, and can not “out-gas”, or bubble, on damp surfaces as urethane sealants often do. Effisus Stopper M-1 Sealant has resilient “elastomeric” properties and excellent adhesion to most construction materials. Effisus Stopper M-1 Sealant is capable of joint movement in excess of 25% in both compression and extension. Effisus Stopper M-1 Sealant can be used effectively in many difficult construction site conditions and it cures in wet or dry climate conditions and at low temperatures (-1,1°C).

TECHNICAL DATA

Polyether Technology

Applicable Performance Standards

ASTM C-920, Type S, Grade NS, Class 25, Uses NT, T, M, G, A, and O.
Federal Specifications TT-S-00230-C Type II, Class A.
Corps of Engineers CRD-C-541, Type II, Class A.
Canadian Standards Board CAN 19, 13-M82.
AAMA 802.3-08 Type II, AAMA 803.3-08 Type I, and AAMA 805.2-08 Group C.

Regulatory Compliance

Conforms to OTC Rule for Sealant and Caulks.
Meets requirements of BAAQMD, CARB and SCAQMD.
Conforms to USDA requirements for Non-food contact.

Green Standards

LEED 2009 for New Construction and Major Renovations: Low Emitting Materials.
NAHB Model Green Home Buildings Guidelines: 5 Global Impact Points.
VOC Content at 115°C: less than 20grams/liter (including water), ASTM D2369, EPA Method 24.

Advantages

Solvent free, 100% solids, will not shrink.
Non-slump, applies vertically and overhead 20 minute skin over, resists dirt pick up.
No outgassing on damp surfaces.
Very good color stability, will not suntan.
Paintable within 24 hours (See limitations).
Gun grade, no special tools or mixing required.
Can be applied at temperatures as low as -1.1°C.

Colors

White
Gray
Limestone
Black

*Colour matching is available in batch quantity only.

CARACTERÍSTICAS TÉCNICAS

Packaging

- 300ml
- 24 cartridges/carton, 45cartons/pallet
- 825ml
- 12 sausages/carton, 45 cartons/pallet
- 1650ml
- 24tubes/carton, 94cartons/pallet
- 19liter pails and 190 liter drums available by special order

Preparation

Joint surfaces should be clean, dry and free from all contamination including: dirt, oils, grease, tar, wax, rust and any other substance that may inhibit the sealant’s performance.

Joint Design

Install all joint applications per ASTM and SWRI recommendations and guidelines. Joints shall be designed with a depth to width ratio of 1:2 (joint depth one-half the width). Control the depth of the sealant by using a polyethylene backer rod 25% larger than the joint opening at standard temperature. To prevent three-point adhesion use a backer rod or bond breaker tape to ensure proper joint movement and a long lasting weatherproof seal. Where the joint configuration will not permit a backer rod, Up-Way Systems recommends that an alternative bond breaker be used.

Joint Width (mm)	Joint Depth (mm)
6-13	6
13-19	6-10
19-25	10-13
25-50	13

Basic Uses
Expansion joints
Pre-cast Concrete
Block and Masonry
Curtain Walls
Window and Door frames
Siding
Parapets
Cove joints
Transportation
Weather sealing

TECHNICAL DATA

Typical Uncured Properties	
Gun grade	Zero Slump ASTM C 697
Viscosity	800,000+cps Brookfield RVF, TF spindle, 4 RPM, 73°F
Tack free time	20 minutes ASTM C-679
Odor	Mild mint smell

Typical Cured Properties		
Elongation at break	400 – 550%	ASTM D-412
Hardness Shore A	45 +/- 3	ASTM C-661
Shear strength	400 PSI	ASTM D-1002
Low temperature flex	Minus 12°C pass 0.6cm mandrel	ASTM D-816
Shrinkage	No mesurable shrinkage after 14 days	
Service temperature	-40°C to +93.3°C continuous service	
Shelf life	Cartridges/ Sausages: 1 year Squeeze tubes: 1year Pails: 3 months	

Compatible substrates*
EPDM and Modified Bitumen
Aluminium and Galvanized Metal
Engineered Plastics, PVC
Glass
Fiberglass FRP
Wood
EIFS
Block and Brick
EPS Foam
Concrete and Stone

* Test and evaluate to ensure adequate adhesion.

OTHERS – APPLICATION GUIDELINES**Metal**

Prepare all metal to ensure maximum adhesion. Remove all rust, scale and residue by wire brushing to a bright metal sheen. Remove films, loose or inappropriate coatings and oils with an appropriate solvent such as alcohol.*

**Up-Way Systems recommends that coated substrates be tested for adhesion prior to starting a project. Please contact Technical Services for specific application guidelines and recommendations.*

Concrete

Prior to application remove any residual contamination by mechanical abrasion, sand blasting or power washing. On green concrete, remove all release agents, friable and loose concrete. Dry all visible and standing water prior to applying Effisus Stopper M-1 Sealant. Install an appropriate backer rod to avoid three-point bonding.

Wood

Wood should be clean, sound and dry prior to sealant application. Allow treated wood to weather for six months prior to application. Remove all coatings and paint (or test for compatibility) to ensure proper bonding. Do not use on fire retardant lumber.

Priming

In most instances Effisus Stopper M-1 Sealant will not require a primer. However, certain applications or substrates may require a primer to ensure a long lasting bond and weather proof seal. It is the applicator's responsibility to determine the need for a primer. Up-Way Systems recommends a primer be used for any application where prolonged immersion is anticipated.

Storage

Store original, unopened containers in a cool, dry area. Protect unopened containers from water, heat and direct sunlight. Elevated temperatures will reduce shelf life. Effisus Stopper M-1 Sealant will not freeze.

Shelf Life

One year from date of manufacture when stored in normal environments. High temperature and high relative humidity may significantly reduce shelf life. Pails and special orders have a shelf life of three months.

Application Instructions

Remove all dirt, oil, loose paint, frost and other contamination from all working surfaces with alcohol. DO NOT USE petroleum solvents such as mineral spirits or xylene. Maintain Effisus Stopper M-1 Sealant at room temperature before applying to ensure easy gunning and leveling. Test and evaluate to ensure adequate adhesion. Carefully gun the sealant with a smooth, continuous bead. If tooling is needed, do so within fifteen minutes of application.

Clean-Up

Wet sealant can be removed using a solvent such as alcohol. Cured Effisus Stopper M-1 Sealant can be removed by abrading or scraping the substrate.

Caution

Avoid prolonged contact with skin. Uncured adhesive irritates eyes. In case of contact with eyes, immediately flush with water. Call a physician. Please refer to the MSDS for First Aid information. Most current MSDS by Up-Way Systems.

KEEP OUT OF REACH OF CHILDREN.

Limitations

In areas where prolonged chemical exposure is anticipated, contact Technical Services for recommendations.

Allow treated wood to "cure" for six months prior to application per APA guidelines.

Do not use in areas subject to continuous immersion.

Do not store in elevated temperatures.

Remove all coatings and sealers before application.

Do not apply at temperatures below -1.1°C.

Test and evaluate all paints before applying.

Alkyd and oil based paints may dry slowly.

Do not use on TPO without Effisus Coat TP Primer.

OTHERS – APPLICATION GUIDELINES

A complete product line of adhesives, sealants and waterproofing

High performance.
Zero Solvents.
Odor Free.
Non Flammable.
Non Toxic.
Non Polluting.

Notice

Read and ensure that the most up-to-date MSDS and technical guidelines are being followed. Proper use and application are the responsibility of the applicator. Direct any questions to Technical Services at +351 525 800 121 prior to starting the project.

Important Notice

Except where prohibited by law, Up-Way Systems makes no warranties, expressed or implied, statutory or otherwise, including but not limited to, any implied condition or warranty of merchantability or fitness for a particular purpose. User is responsible for determining whether this Up-Way Systems product is fit for a particular purpose and suitable for user's method of application.

Limitations and remedies and liability

If this Up-Way Systems product is proved to be defective, the exclusive remedy at Up-Way Systems' option shall be to refund the purchase price of or to repair or replace the defective Up-Way Systems product. Up-Way Systems shall not otherwise be liable for loss of damages, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including negligence, warranty or strict liability.

Accompanying Document

Edition 08-09-10

Versão

V 1.1 – AT – 22/07/2011