

Effisus Stopper EC/CE Curb

EFFISUS STOPPER EC/CE CURB

DESCRIPTION

The Effisus Stopper replaces old-style metal pitch pans with versatile, precast components and pourable sealants that can usually be installed in under 15 minutes-and never require flashing or mechanical attachment. Designed for use on granulated modified bitumen, and asphalt and coal tar B.U.R. Also specified for PVC, EPDM, PIB and TPO single ply roofing (must use Effisus Coat TP Primer with TPO.) When installed properly, this system forms a durable, waterproof rubber seal around penetrations of any size.

The Effisus Stopper system has three components:

- Effisus Stopper EC/CE Curb exterior forms: rings/straights/corners
- Effisus Stopper M-1 Sealant for bonding/sealing/priming.
- Effisus Stopper 1-P Sealant moisture cure pourable sealer.

Effisus Stopper EC/CE Curb precast forms are composed of gray polyester resin. Round curbs have an inside diameter of 12.5cm and 19cm. 15cm and 30.5cm straight curbs are available to extend the round curbs, and to combine with corner curbs to form rectangular seals. All pieces are 5cm high. The curved outer surfaces are impervious to ice, corrosion, UV (ultraviolet light) and ponding water.

Effisus Stopper M-1 Sealant a durable, self-fixturing, moisture cure mastic.

Effisus Stopper 1-P Sealant is a light gray, highly flexible, self-leveling moisture cure pourable sealer that eliminates mixing. It is also 100% solid rubber, has no V.O.C. (volatile organic content), will not melt or shrink, and is resistant to deterioration. Supplied in 830ml or 2 liter (four to a Field Pack). Unused sealer can be capped and reused.

OTHERS

Installation

Effisus Stopper M-1 Sealant is used to bond Effisus Stopper EC/CE Curb forms firmly in place on the roof surface, to seal the base of the penetration and the outside curb perimeter, and to prime the penetration(s).

Effisus Stopper 1-P Sealant pourable sealer is poured into the curb, forming a 5cm deep waterproof rubber seal. 3.8 liters (or two pouches of 2 liter) fills two19cm or six with 12.5cm Effisus Stopper EC/CE Curb rings.

Caution

Pipes and penetrations should be steel brushed to remove plastic cement and asphalt.

Special Characteristics

Rapid installation-reduces labor significantly.

Excellent adhesion to most roofing materials.

No flashing or mechanical attachment required.

Flexible to minus 40° C. Stable to +93.3° C.

Effisus Stopper 1-P Sealant accommodates movement. Use on all granulated membranes and details with excessive movement.

Restrictions

Do not apply below +1.1°C. Do not use on Hypalon or smooth APP modified bitumen membrane. For smooth APP, melt down an overlay of granulated APP before installation. Must use Effisus Coat TP Primer for TPO.





Effisus Stopper EC/CE Curb

OTHERS

Lengths of Effisus Stopper Curbs

15cm and 30.5cm straight sections used to lengthen Effisus Stopper CE Curb.Fit both curb sizes.19 cm round curbs inside diameter.

Effisus Stopper CE Curb Corners

Corner pieces used with straight sections to make box shapes.



Fig. 1 – Effisus Stopper CE Curb Corners



Fig. 2 – Effisus Stopper EC Curb Aerial View – Corner Curb & Straights

Version V 1.1 – AT – 22/07/2011





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 Limstone 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, 73ºF
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 12ºC pass 0.6cm mandrel	ASTM D-816
Shrinkage	No mesurable shrin	kage after 14 days
Service temperature	-40°C to +93.3°C co	ontinuous service
Shelf life	Cartridges/ Sausage Squeeze tubes: 1ye 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 forloss of damages, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including negligence, warranty or strict liability.

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Versão V 1.1 – AT – 22/07/2011





EFFISUS STOPPER 1-P SEALANT

DESCRIPTION

Effisus Stopper 1-P Sealant is a moisture curing, pourable, self-leveling sealant designed for use in pitch pans and warranted Effisus Stopper penetration seals. Effisus Stopper 1-P Sealant is suitable for application in damp, dry, or cold climates. Effisus Stopper 1-P Sealant is solvent free, contains no isocyanates and will not shrink upon curing. Effisus Stopper 1-P Sealant will not discolor when exposed to UV light, and will not "outgas" or bubble, on damp surfaces, such as urethane sealants often do. Effisus Stopper 1-P Sealant has resilient "elastomeric" properties and excellent adhesion to most construction materials. Effisus Stopper 1-P Sealant can be used effectively in many difficult construction site conditions and cures in wet or dry climate conditions and at low temperatures (-1.1°C). Effisus Stopper 1-P Sealant's low durometer accommodates greater movement in penetration seals than typical urethane sealants.

TECHNICAL DATA

Polyether Technology

Advantages

Solvent free, 100% solids will not shrink. No outgassing on damp surfaces. Paintable within 24 hours. Self Leveling, no special tools or mixing required. Can be applied at temperatures as low as -1.1° C.

Regulatory Compliance

Conforms to OTC Rule for Sealants and Caulks. Meets requirements of California Regs: CARB and SCAQMD. Conforms to California Proposition 65. Conforms to USDA Requirements for Non-food Contact.

Green Standards

LEED 2.2 for New Construction and Major Renovations: Low Emitting Materials (Section 4.1) 1 Point. NAHB Model Green Home Buildings Guidelines: 5 Global Impact Points. VOC Content at 240°C: less than 25grams/liter (including water), ASTM D2369, EPA Method 24.

OTHERS

Limitations

Do not store in high temperatures.

Please contact customer service for application guidelines for temperatures below 32°F (0°C).

Do not install if rain is anticipated within 4 hours.

Do not use on TPO without TPO primer.

Do not use on Hypalon membranes.

Smooth APP membranes require the prior installation of a granulated target of APP modified bitumen around the penetration.

Do not use in areas subject to continuous immersion.

In areas where prolonged chemical exposure is anticipated, contact Technical Services for recommendations. Do not prime bonding surfaces with asphalt primer.

Test and evaluate all paints before application. Alkyd and oil based paints may dry slowly.

Do not use asphalt cement as a "night sealant" around the base of the penetration. Use Effisus Stopper M-1 Sealant for that purpose.





OTHERS

Packaging -300 ml 24 cartridges/carton, 45 cartons/pallet -825ml 12 cartridges/carton, 40 cartons/pallet -1.89 liter pouch 4 pouches/carton, 48cartons/pallet -7.6, 19 or 190 liters drums available by special order

Application Instructions

Remove all previously applied caulk, mastic, cement, asphalt and other contaminants from penetrations with a wire brush. Brush away all gravel or loose granules. Seal the base of each penetration with Effisus Stopper M-1 Sealant. Coat penetrations with Effisus Stopper M-1 Sealant to 7.5cm above the roofline.

For Effisus Stopper penetration seals, bond the entire base surface of the curb to roof surface and all scarf joint surfaces with Effisus Stopper M-1 Sealant . Apply a bead of Effisus Stopper M-1 Sealant around the outside base of the installed Effisus Stopper, and tool to form a smooth fillet. See the Effisus Stopper system data sheet for more complete installation instructions.

Cut tip off Effisus Stopper 1-P Sealant tube at widest point on plastic nozzle and pierce the foil seal. Insert into quart caulking gun and pump Effisus Stopper full, or remove cap from pouch, pour, squeeze out excess air and reseal.

DO NOT USE petroleum solvents, such as mineral spirits or xylene. Maintain Effisus Stopper 1-P Sealant at room temperature before applying to ensure easy gunning and leveling. Test and evaluate to ensure adequate adhesion. Dry all visible and standing water prior to applying Effisus Stopper 1-P Sealant .

NOTE: It is recommended to fill the ENTIRE Effisus Stopper Curb with Effisus Stopper 1-P Sealant and maintain a one inch distance between the penetration and inside edge of the Effisus Stopper Curb to provide an adequate rubber seal.

Cure Time

Effisus Stopper 1-P Sealant is a moisture cure sealant. Rate of cure is dependent on atmospheric conditions. Curing proceeds at a rate of 0.65cm a week at 22°C and 50% RH. Lower temperature and humidity will inhibit the rate of cure. Higher temperature and humidity will accelerate rate of cure. Depths of more than 5cm cure through in 2 to 3 months.

Service Temperature

-40°C to +93°C

Compatible Substrates

APP with gran. target Single Ply membranes PVC / PIB Asphalt TPO with TPO primer SBS mod bit / BUR

Clean-Up

Wet adhesive can be removed using a solvent such as alcohol. Cured sealant can be removed by abrading or scraping the substrate.

Storage

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





OTHERS

Shelf Life

Twelve months from date of manufacture when stored at 21°C with 50% relative humidity. High temperature and high relative humidity may significantly reduce shelf life. Pails have a shelf life of six months.

Caution

Avoid prolonged contact with skin. Uncured adhesive irritates eyes. In case of contact with eyes, immediately flush with water and contact a physician. Please refer to the MSDS for First Aid information.

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 +351 252 809 121 prior to starting the project.

KEEP OUT OF REACH OF CHILDREN.

Important Notice

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Limitations of 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 Last Revision: 01/07/16

Version V 1.3 – AP – 01/07/2016





EFFISUS STOPPER SAS SEALANT

DESCRIPTION

Effisus Stopper SAS Sealant is an extremely elastic moisture curing sealant designed for use in metal architecture, curtainwall construction and joints subject to movement. Effisus Stopper SAS Sealant's adhesion to difficult surfaces permits its use on anodized metal, and coatings such as Kynar 500®PVDF. Effisus Stopper SAS Sealant will not stain limestone, marble, or other absorbent stone substrates. Effisus Stopper SAS Sealant 's unique polyether chemistry eliminates outgassing on green concrete and "suntanning" ordiscoloration after exposure to ultraviolet light.

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. SWR Institute Validated (Sealant Waterproofing and Restoration). 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 Sealants and Caulks. Meets requirements of California Regs: BAAQMD, CARB and SCAQMD. Conforms to California Proposition 65. 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 19grams/liter (including water), ASTM D2369, EPA Method 24.

Advantages

Bonds to Kynar 500®PVDF coated metal. Solvent free, 100% solids will not shrink. Non-slump, applies vertically and overhead. 30 minute skin over, no dirt pick up. No outgassing on damp surfaces. Color stability, will not suntan. Paintable within 24 hours (See limitations). +/- 50 joint movement.

Colours

Bronze / Dark Bronze / Black / Forest Green / Stone / Gray / Terracota / Aluminium / Tan / Almond / White *Color matching is available in batch quantity only.

Packaging

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





TECHNICAL DATA

Joint 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 Depth (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	750,000+cps Brookfield RVF, TF spindle, 4 RPM, 73°F
Tack free time	35 minutes ASTM C-679
Odor	Mild mint smell

Elongation at break	750 – 800%	ASTM D-412
Hardness A Shore	20 +/- 3	ASTM C-661
hear Strength	150 PSI	ASTM D-1002
Shear Strength	250 – 300 PSI	ASTM D-2370
ow temperature flex	Minus 12ºC pass 0.6cm mandrel	ASTM D-816
rinkage	No mesurable shrinkage a	fter 14 days
ervice tempertaure	-40°C to +93.3°C continuo	us service
shelf life	Cartridges and sausages: Pails: 3 months	1 year

Compatible Substrates*
Kynar 500® PVDF Coated Metal
Galvanized Metal
Aluminum
Engineered Plastics & PVC
Glass
Fiberglass FRP
EPS Foam
EPDM and SBS Mod Bit
Block and Brick
EPS Foam
Betão e Pedra Natural

*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 betested 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 andloose concrete. Dry all visible and standing water prior to applying Effisus Stopper SAS 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 SAS 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 SAS 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 SAS 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 SAS 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.

KEEPOUTOF 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 09-14-09

Versão V 1.1 – AT – 22/07/2011





EFFISUS STOPPER SAS HT SEALANT

DESCRIPTION

Effisus Stopper SAS HT is a neutral cure (RTV) silicone, adhesive sealant, designed for application on dissimilar materials such as glass, aluminum, steel, copper, masonry and many engineering plastics such as polycarbonate, vinyl (PVC), fiberglass (FRP), and acrylic. **Effisus Stopper SAS HT** is also well suited for difficult to bond surfaces such as Kynar 500[®] PVDF and Tedlar[®] PVF.

Effisus Stopper SAS HT's low odor, non corrosive, and neutral cure chemistry will not damage unprotected metals. Effisus Stopper SAS HT is highly elastic and low modulus with mechanical properties capable of low temperature flexibility and 50% joint movement. Effisus Stopper SAS HT is recommended for metal architecture, windows and doors, curtain wall construction, and glass block.

Effisus Stopper SAS HT develops properties rapidly and is effective in many industrial applications where strength, elasticity, adhesion, and speed of set are required.

TECHNICAL DATA

Applicable Performance Standards

ASTM C920, Type S, Grade NS, Class 50, Uses NT, T_2 , M, G, A & O Federal Specification 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

Regulatory Compliance

Conforms to OTC Rule for Sealants Meets requirements of California Regs: CARB, BAAQMD and SCAQMD Conforms to California Proposition 65 Conforms to USDA Requirements for Non-food Contact

Green Standards

LEED 2.2 for New Construction and Major Renovations: Low Emitting Materials (Section 4.1) 1 Point NAHB Model Green Home Building Guidelines: 5 Global Impact Points VOC Content: less than 33 grams / liter ASTM D2369 EPA Method 24 (tested at 240°F / 115°C)

Advantages

Neutral Cure. Will not promote corrosion of metal Bonds to Kynar 500[®] PVDF coated metal Solvent free, 100% solids will not shrink Non-slump, applies vertically and overhead 10 minute skin over Color stability, will not suntan +/- 50% joint movement

Colours

Grey / White / Black / Translucent *Color matching is available in batch quantity only.

Packaging

10.1 oz (300 ml)24 cartridges/carton, 45 cartons/pallet2 and 5 gallon pails or 50 gallon drums available by special order





TECHNICAL DATA

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

Basic Uses
Windows and door frames
Metal flashing
Roofing
Curtain walls
Expansion joints
Siding
Weather sealing
Cove joints
Parapets
Transportation





TECHNICAL DATA

Typical Physical Properties		
Gun Grade	Zero Slump	
Viscosity	550,000 cp ± 150,000 cp	Brookfield RVF TF Spindle, 4 RPM 23°C
Density	8.1 ± 0.2 lbs per gallon	ASTM D1475
Tack free time	10 min \pm 5 min	$45\pm5~\%~RH$
Elongation at break	600%	ASTM D412
Hardness Shore A	10 ± 3	ASTM C661
Shear strenth	75 ± 5 psi	ASTM D1002
Tensile strength	135 psi	ASTM D412
Low temperature flexibility	Pass -10°F (-23°C) ¼ inch mandrel	ASTM D816
Shrinkage	No visible shrinkage after 14 days	
Service temperature	-62°C to 204°C	

Compatible Substrates*	
Kynar 500® PVDF Coated Metal	
Galvanized Metal	
Aluminum	
Copper	
Stainless Steel	
Tedlar PVF	
Glass	
EPS Foam	
Fiberglass FRP	
Engineered Plastics & PVC	

*Test and evaluate to ensure adequate adhesion.





OTHERS – APPLICATION GUIDELINES

Glass

Prior to application remove any residual contamination by mechanical abrasion, sand blasting or power washing. Remove all release agents and old caulk. Dry all visible and standing water prior to applying **Effisus Stopper SAS HT**.

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.

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 SAS HT** will not require a primer. However, certain applications or substrates may require a primer to ensure a long lasting bond and weatherproof 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 SAS HT** will not freeze.

Shelf Life

Twelve months from date of manufacture when stored at 70°F / 21°C with 50% relative humidity. High temperature and high relative humidity may significantly reduce shelf life. Pails have a shelf life of six 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 SAS HT** at room temperature before applying to ensure easy gunning and tooling. 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 SAS HT** 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 SDS for first aid information. 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.

Please contact customer service for application guidelines with temperatures below 32°F (0°C).

Do not use on surfaces to be painted.

Do not use on TPO without Up-Way Systems TPO primer.

Do not use on tub and tile applications.

Accompanying Document

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Versão