TuffTex Materials
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TuffTex Materials
RESTORATION MADE EASY

RepSeal NS Non Sag Hybrid Polyurethane Joint Sealant

100% Solids Joint Sealant for Horizontal and Vertical Applications

DESCRIPTION:

RepSeal NS is a high-performance interior or exterior joint sealant for use in both moving and non-moving joint applications. **RepSeal NS** provides a long lasting weather tight seal to a variety of building substrates. Please use the correct product grade that com- plies with VOC regulations as per federal, state, county and city regulations/codes at the place of installation of product.

USES:

- Parking Garage Joints
- Paving and Expansion Joints
- Pre-Cast Concrete
- Ramps
- Tilt-Up Floors & Walls
- Sealing Metal Nuts and Bolts

FEATURES:

- 100% Solids
- Applies Vertically as well as overhead
- Bonds to Damp Masonry
- Durable Long Lasting Seal
- Excellent Weathering Properties
- Fast Skinning – Resists Dirt Pickup on Construction Sites
- Gun Grade
- Hybrid – Bonds to a Variety of Substrates without Priming
- No Mixing
- No Shrinkage
- No Solvents or Odor
- Non-Sag /Non Slump
- Safe to Use Indoors and in Confined Spaces
- Single Component
- Water Curable

TECHNICAL DATA:

ASTM C-920, Type S, Grade NS, Class 25, use NT,T,M,G,A
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-M87

PACKAGING:

20 oz. (591 ml) Sausages: 12 per case, 45 cases per pallet
2 gallon (7.56 liters): pails

COLOR:

Black, Dark Bronze, Limestone, Stone, Tan, Gray and White
*Custom colors are available upon request. Minimum quantity required and additional costs may apply.

COVERAGE:

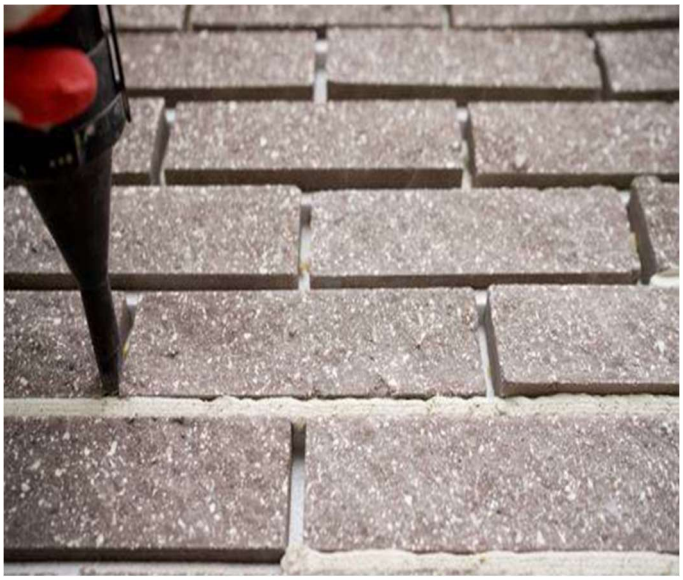
Install all joint applications per ASTM and SWRI recommendations and guidelines. Joints shall be designed with a depth to width ratio of 1:2 (joint depth one-half the width). It is recommended that the joint shall be no less than 1/4" wide by 1/4" deep (6 mm x 6 mm). The maximum depth of sealant shall be 1/2" (13 mm). Control the depth of the sealant by using a backer rod that is 25% larger than the joint opening at standard temperature. Prevention of three-sided adhesion is necessary.

Joint Sealant Coverage Chart (linear feet per gallon)

Depth of Joint (in.) \ Width of Joint (in.)	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1.25"	1.5"	1.75"	2"
3/16"	411	275	205	164							
1/4"	307	205	154	123	103	88	77	62	51	44	38
3/8"			103	82	68	59	51	41	34	29	26
1/2"			77	62	51	44	39	31	26	22	19
5/8"								25	21	18	15
3/4"								21	17	15	13

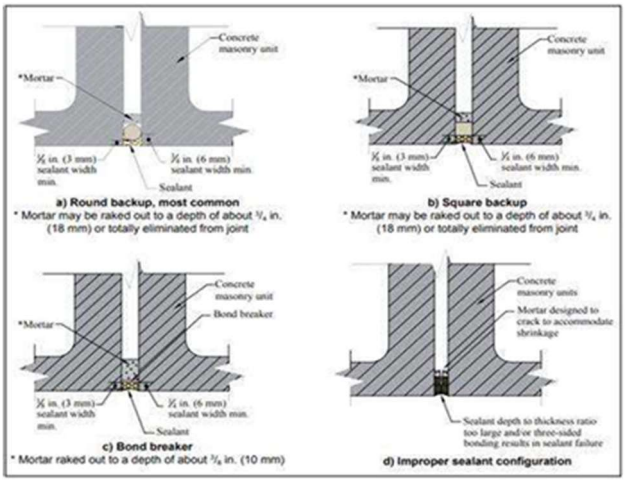
JOINT PREPARATION:

Joints should be cleaned, dry, and free from all contamination including dirt, oils, grease, tar, wax, rust and any other substance that may inhibit the sealant's performance.



PHYSICALS	
Specific Gravity (Depending on Color)	1.60 ± 0.1
Viscosity (Brookfield RVT, TF Spindle, 4RPM, 73ºF [23ºF])	15,000 cps
Odor	Mild Ester Smell
Service Temperature, Continuous Service	-40ºF to 200ºF (-40 to 93.3ºC)
Low Temperature Flex	-10ºF(-23.3ºC) pass 1/4" Mandrel
Slump (Sag), ASTM C-697	Zero Slum
Hardness, ASTM D-2240 Shore A	30 ± 3
Shear Strength, ASTM D-1002	150 ± 15 psi (1.03 ± 0.1 mPa)
Tack-free Time, ASTM C-679	40-50 minutes
Elongation, ASTM D-412	350%
Solids by Weight, ASTM D 1644	100%
Solids by Volume, ASTM D 2697	100%
Tensile Strength, ASTM D 2370	120 psi (0.83 MPa)
Skin Time, ASTM C 679	30 min
Flash Point, ASTM D 56	None
VOC EPA 24	16 gal/1
Shrinkage, after 14 days	None
Thermal Compatibility to Concrete	Good

JOINT DESIGN:
Where the joint configuration will not permit a backer rod, it is recommended that an alternative bond breaker be used. Prevention of three-point adhesion is necessary through the use of a backer rod or bond breaker tape to ensure proper joint movement and a long lasting weather-proof seal.



METAL:
Prepare all metal in a manner to ensure maximum adhesion. Remove all rust, scale and residue. Remove films, coatings and oils with an appropriate solvent such as alcohol. It is recommended that Kynar-coated substrates be tested for adhesion prior to starting the project.

For Sealing nuts and bolts, apply a 360° bead of product to the leading threads of the male fitting, leaving the first thread free. Force the material into the threads to thoroughly fill the voids. For bigger threads and voids, adjust product amount accordingly and apply a 360° bead of product on the female threads also. Assemble and tighten as required.

CONCRETE:
Concrete and masonry substrates shall be fully cured and dry prior to the application of the sealant. Remove any contamination by mechanical abrasion, sand blasting or power washing.

WOOD:
Wood shall be clean, sound and dry prior to sealant application. Treated wood shall be allowed to weather for six 6 months. Coatings and paint shall be removed (or tested for compatibility) to ensure a proper bond.

PRIMING:
In most instances **RepSeal NS** will not require a prime. However, certain applications or substrates, such as Kynar-coated metal, may require a primer to ensure a long lasting bond and weatherproof seal. It is the user's responsibility to determine the need for a primer. It is recommended that, where-ever pro-longed immersion is anticipated, a primer be used for best performance.

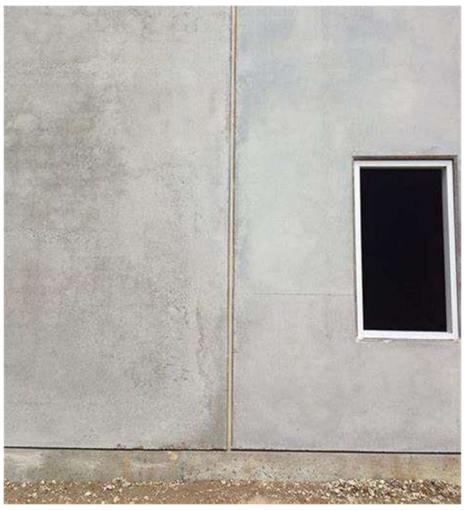
APPLICATION:
RepSeal NS is a one component, ready-to-use material that requires no mixing. **RepSeal NS** may be water cured by hand or drill mixing 4 ounces of water/gallon for faster curing (approximately 2 hours). It is recommended that a quality caulking gun be used to ensure ease of application. Apply when temperatures are above 40°F (4.4°C). When all the joint preparation is complete, cut the plastic nozzle at a 45-degree angle to approximately the size of the joint opening. Begin gunning to fill the joint from the bottom to the surface, ensuring there are no voids or air pockets. Dry tooling is recommended to create a strong mechanical bond against the joint faces.

Do not use **RepSeal NS** in temperatures below 40°F (4.4°C). It can be painted after 24 hours. **RepSeal NS** can be used in vertical or overhead working conditions.

FINISHING:
Wet sealant can be removed using a solvent such as alcohol, or soap and water. Cured **RepSeal NS** can be removed by abrading or scraping the substrate. Equipment should be cleaned with an environmentally-safe solvent, as permitted under local regulations, immediately after use.

CURING:
RepSeal NS typically skins over within 15-45 minutes and cures through in 3 to 7 days depending upon temperature, humidity and thickness. Water curing is the preferred method when caulking in low temperatures. Lower temperatures and humidity prolong cure time. Higher temperatures accelerate cure time.

STORAGE AND SHELF LIFE:
Store in original, unopened containers in a cool, dry area at a temperature between 60-95°F (15-35°C). Protect unopened containers from heat and direct sunlight. Elevated temperatures will reduce shelf life. **RepSeal NS** has a shelf life of one year from the date of manufacture; when stored indoors at a temperature between 60-95°F (15-35°C) and in the original factory sealed containers.



LIMITATIONS:
RepSeal NS should not be used in direct contact with single component, moisture-cured-urethane coatings without use of an epoxy primer. Sealant shall be cured for 3-5 days prior to any direct coating.

Avoid prolonged contact with skin. Uncured adhesive irritates eyes. In case of contact with eyes, immediately flush with water. Call a physician.

In areas of prolonged chemical expo-sure contact Technical Services for recommendations. Do not allow uncured **RepSeal NS** to come into contact with uncured silicone sealants.
Allow treated wood to “cure” for six months prior to application per APA guidelines. Do not use in areas subject to continuous immersion without a primer.

Horizontal applications will require tooling. Do not store in elevated temperatures. **RepSeal NS** will not freeze during storage. To ensure easy gunning, bring to room temperature before application.

Read and ensure that the most up-to-date SDS and technical guidelines are being followed. Proper use and application are the responsibility of the applicator.

Chemical Resistance ASTM D1308	
Acetic Acid, 10%	No effect
Alcohol, 10%	No effect
Ammonium Hydroxide, 10%	No effect
Brake Fluid	Swelled, Softened
Hydroxide, 10%	No effect
Toluene	No effect
Diesel Fuel	Discolored
Ethylene Glycol (antifreeze)	No effect
Gasoline	Stained
Hydrochloric Acid, 20%	Slight swelling
JP-4 Jet Fuel	No effect
Used Motor Oil	Stained
Salt Water	No effect
Sodium Hydroxide, 10%	Slightly discolored
Sulfuric Acid, 10%	No effect
Xylene	No effect

WARRANTY*:*
Due to the use of this product beyond our control, we assume no liability for damages of any kind, and the user accepts the product "as is" and without warranties, expressed or implied, from either **TuffTex Materials, Inc.** or its agents. The suitability of the product for an intended use shall be solely up to the user. Our only obligation shall be to replace or pay for any material proved defective, with our liability limited to the purchase price of materials supplied by us.

DISCLAIMER:
Refer to the SDS sheet before use. The information and recommendations set forth in this Product Data Sheet are based upon tests conducted by or on behalf of **TuffTex Materials, Inc**. Such information and recommendations set forth herein are subject to change and pertain to the product offered at the time of publication. Published technical data and instructions are subject to change without notice. Contact your local **TuffTex Materials, Inc.** distributor or technical representative for additional technical data and instructions.