TuffTex Materials
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RepSeal HS

Flexible Header/Sealant "IN ONE" Joint System for Bridges & Parking Structures

DESCRIPTION:
RepSeal HS is a 3 part, catalyzed, hybrid rubber polymer with special aggregates. It offers 100% solids, low modulus, low viscosity flexible polymer joint system designed to accommodate structure movements (+/- 2") while providing a smooth, flexible, watertight seal. **RepSeal HS** combines the use of a CFRP traffic-bearing plate with special rapid setting polymers & fillers, allowing minimal closure times.

FEATURES:
- Time & Labor savings over conventional headers
- Non-slip finish
- Exceptional one day and ultimate physicals
- Chemical resistant
- Extremely durable bonds
- Fast setting
- Pre-measured packaging of components
- No shrinkage upon cure
- Substantial cost savings
- Open to traffic: 1+ Hour
- No heated equipment required
- No special tools or truck applicators required
- Low dead load in suspended structures
- Self-Priming in most conditions
- Rapid strength development in any weather
- Good chemical resistance to icing solutions
- Resistant to automotive fluids
- Zero VOC
- Extends the service life of decks

USES:
- Bridges, Parking Decks, Ramps
- Eliminating cumbersome steel joints
- Repair and maintenance of existing joints
- Asphalt overlay projects

TECHNICAL DATA:
ASTM C-920, Type S, Grade NS, Class 25, 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-M82

COVERAGE GUIDE:
1/4 Cu. Ft. - Pail Kit, 1 Cu. Ft. Bulk Kits

PREPARATION:
The concrete must be sound and free of all foreign material, including oil, grease, dust, laitance or other surface contaminants. Mechanically abrade the surface by grinding, abrasive blasting, water blasting, or **PrepEtch**. All concrete of poor quality that is in contact with any reinforcing steel should be removed. Remove rust from exposed reinforcing steel by brushing or sandblasting. Apply **TuffTex RustRehab** permanent rust converter to any exposed steel. Deeply damaged areas can be repaired with **RepCrete VOH or RepPoxy MB** prior to the joint installation. All surfaces to be repaired should be in a saturated surface dry (SSD), condition with no standing water on the surfaces. Prime all surfaces with **RepPoxy PA Primer** if required.

MIXING:
RepSeal HS is shipped in pre-measured ½ Cu. Ft. units. Mix these products ONLY in complete units. DO NOT THIN or add any solvents or other aggregates prior to mixing. Mix the ½ Cu. Ft. kit per instructions and in the prescribed order on the pail and TDS. Condition material to 75°F(24°C) for easier mixing and optimum flow prior to using. **Add the premeasured aggregate to the A side package and mix thoroughly for 2 minutes. Add the catalyst and mix an additional minute.**

PLACEMENT:
Surface and ambient temperature should be a minimum of 40°F(4°C). The **RepSeal HS** blended batch must be applied to the block out area within 5-10 minutes. Once spread out, working time will be approximately15 minutes depending upon temperature. It is extremely important that the material be thoroughly compacted. Care should be taken to assure good compaction on the vertical face of the joint and along the side of the block out or form. Just smoothing the top with a steel float *is not* compacting the mortar. A small margin trowel, wood block, or other means can be used for compaction.

MINIMUM CLOSURE TIMES:

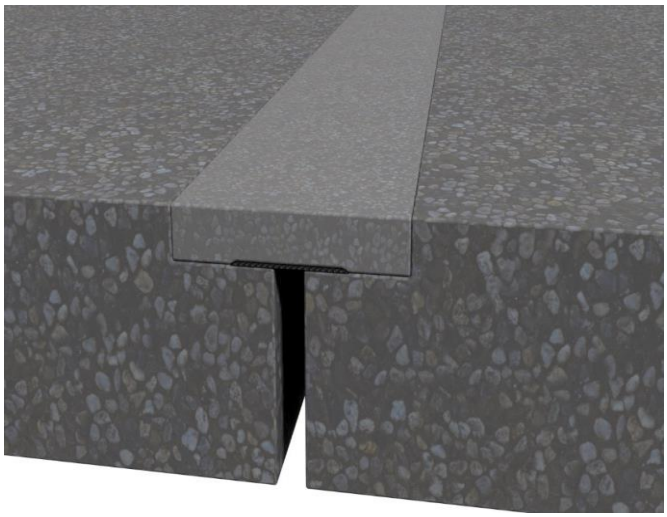
Average Temperature in ˚F (˚C):

85 °F + (29 °C+)	1 Hour
84-75 °F (29-24 °C)	1 1/2 Hours
74-65 °F (23-18 °C)	2 Hour
64-55 °F (18-13 °C)	2 1/2 Hours
54-45 °F (12-7 °C)	3 Hours
*44- °F (7°C -)	3+ Hours

***SPECIAL NOTE:**

It is highly recommended that all components be conditioned in advance of use to 75°F (24°C). This may take 48 hrs. It is to the contactors benefit to maintain the components at elevated temperatures prior to installation.

At lower temperatures, the polymer can become difficult to move, and mix properly.



CLEAN UP:

Tools and Equipment: Clean before the **RepSeal HS** sets up using **RepSolv 100** cleaner, soap & water, or Acetone.

PACKAGING:

1/4 Cu.Ft. kit is made up of 1-gallon Hybrid rubber polymer, 4-ounce bottle of catalyst, 30 pounds of aggregate. The entire contents come in a 6-gallon pail in which the material can be mixed with the **TuffTex Quickie Pail Mixer** or a ½ hp heavy-duty drill.

COLOR:

Black or Gray

STORAGE:

The material should be stored between 40°-90°F (5°-33°C) in a cool, dry area away from direct sunlight.

SHELF LIFE:

The shelf life of safely stored unopened containers is 12 months (one year). An excessive temperature differential and/or high humidity can shorten the shelf-life expectancy.

PHYSICALS:

Finished Components

Pot Life	20 min.
Compressive Strength, ASTM C579, B 24 Hours 7 Days 28 Days	 1710 psi 2420 psi 2780 psi
Tear Resistance, Die C, ASTM D1002	150 ± 10 psi (21 ± 3.5kN/m)
Elongation at Break, ASTM D412	350-400 50 %
Low Temperature Flex- pas ¼" Mandrel	-10º F (23ºC)
Resilience	Pass
Hardness, ASTM D2240 Shore A	55 ± 3
Slump (Sag), ASTM C693	Self Leveling
Viscosity, ASTM D2196	100,000 cps
Total Solids by Volume, ASTM D2697	100 %
Total Solids by Weight, ASTM D1644	100 %
Odor	None
Tensile Strength, ASTM D2370	180 psi
Tensile Adhesion, ASTM D5329	700% minimum
Shrinkage, after 14 days	No measurable
Skin Time, ASTM C 679	25 minutes
Tack-free Time, ASTM C679	1 hour
Shear Strength, ASTM D1002	150 ± 15 psi (1.03 ± 0.1 mPa)
Specific Gravity	A-Side: 1.6 ± 0.1
Service Temperature, Continuous Service	-40ºF to 200ºF
Weight Per Gallon, ASTM D1475	13 lbs.
Flash Point, ASTM D56	None
VOC, EPA 24	8 g/l / < 1.5%

LIMITATIONS:

Surface and ambient temperature must be a minimum of 40°F (4°C). **Do not thin with any solvents.**

Avoid hazards by following all precautions found in the Safety Data Sheets (SDS), product labels, and technical literature.

CAUTION:

READ SDS PRIOR TO USING PRODUCT

Use with adequate ventilation. Wear protective clothing, gloves and eye protection. (Goggles, Safety Glasses and/or Face Shield) Keep out of the reach of children.

Do not take internally. In case of ingestion, seek medical help immediately. May cause skin irritation upon contact, especially if prolonged or repeated exposure. If skin contact occurs, wash immediately with soap and water and seek medical help as needed. If eye contact occurs, flush immediately with clean water and seek medical help as needed. Dispose of waste material in accordance with federal, state and local requirements. Cured resins are Innocuous. Dispose of waste material in accordance with federal, state and local requirements.

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** 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 MSDS 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. 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 distributor or technical representative for additional technical data and instructions.

OSHA Status: This Material Safety Data Sheet (MSDS) has been prepared in compliance with the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. This product is not considered to be a hazardous chemical under that standard.