

RESCON® EPOXY GROUT

(J-55 H.E.S. EXPOXY GROUT)

PURPOSE

RESCON EPOXY GROUT (J-55 H.E.S.) is formulated for use in applications where a high-performance, dimensionally stable, and chemically-resistant grout is needed. This epoxy grout is 100% solids, non-shrinking and provides exceptional compressive and impact strength compared to conventional cement-based materials. RESCON EPOXY GROUT can be placed from 1 inch to 8 inches (2.54 cm - 20.3 cm) in a single pour.

RESCON EPOXY GROUT is suitable for industrial applications, including:

1. Equipment grouting in processing plants and petrochemical plants.
2. High-impact and vibration resistant conditions.
3. Chemical resistance in corrosive environments.
4. Situations that require minimum downtime.

DESCRIPTION

RESCON EPOXY GROUT (J-55 H.E.S.) is a three component system composed of epoxy resin, hardener and graded aggregate. The blended product is moisture tolerant, high-strength, chemically-resistant and fast-setting for critical grouting applications.

PACKAGING

RESCON EPOXY GROUT is packaged in a 2.0 cubic foot (.056 m³) and 0.5 cubic foot (.014 m³) units.

The standard unit is 0.5 cubic foot which consists of:
Part A = 1 gallon can
Part B = 0.5 gallon can
Component C (aggregate) = one 60 pound bag
Parts A and C are packaged in 5 gallon pails for convenient mixing.

The 2.0 cubic foot unit consists of:
Part A = 5 gallon can (<3 gallon)
Part B = 2 gallon can (>1 gallon)
Component C (aggregate) = four 60 pound bags

PROPERTIES

Bond Strength (ASTM-C-882)
3,500 psi (24.1 MPa)

Modulus of Elasticity (ASTM-C-580)
1,250,000 psi (8,618 MPa)

Compressive Strength (ASTM-C-579)
1 day cure at 75° = 10,000 psi (68.9 MPa)
7 day cure at 75° = 14,500 psi (99.9 MPa)

Flexural Strength (ASTM-C-580)
3,100 psi (21.3 MPa)

Tensile Strength (ASTM-C-307)
2,400 psi (16.5 MPa)

Linear Shrinkage on cure (ASTM-C-531)
0.005%

Coefficient of Thermal Expansion (ASTM-C-531)
18x10⁻⁶in/in/°F

Hardness Shore D Scale (ASTM-D-2240)
95

Density of Cure (ASTM-C-905)
144 lb./ft³ (2,300 kg/m³)

Placement Depth at 75°F
8 inches (20.3 cm) maximum

APPLICATION

Storage: Store product in a dry place between 40°-90°F (5°-32°C). To prevent contamination, containers should be tightly closed and properly stored. Prevent accumulation of water, dirt or other residue on covers or cartons.

Preparation: Surfaces must be clean and structurally sound. Remove all oil, grease, dirt, laitance or other contaminants. Abrasive cleaning and mechanical removal methods are recommended. Grind or sandblast all steel contact surfaces to remove rust, scale and paints. Use clean, oil-free compressed air to remove dust or debris. All forms must be tight and sealed to prevent grout leakage. All forms should be treated with paste wax or wrapped in polyethylene for proper release. Install forms with at least 1-2" (2.5-5.1 cm) liquid head for proper flow and complete contact.

Mixing: Condition all components (A-resin, B-hardener, C-aggregate) to greater than 75°F (24°C) for ease of mixing and maximum flow. Pour hardener and resin (Parts A and B) into the mixing pail container and mix thoroughly with a low speed mixer. Avoid incorporation of air into the mix (spring coil mixers are recommended). Pour mixed liquids into mortar mixer and add bagged material (Component C) while mixer is running. Mix for a minimum of two minutes to thoroughly wet all aggregate. Do not thin or add any solvents or thinners. Working time after mixing is approximately 1.5 hours at 72°F (22°C).

Temperature	Working Time	Curing Time
50°F/10°C	4 hours	42 hours
75°F/24°C	1.5 hours	24 hours
95°F/35°C	45 minutes	8 hours

Installation: Place properly blended material immediately after mixing. Place epoxy grout from one side only to prevent entrapped air or voids under equipment base plates. Use enough epoxy so that it rises up slightly above the underside of the base plates.

The minimum thickness for epoxy grout applications is 1" (2.5 cm) and the maximum thickness is 8" (20.3 cm) for each placement.

For final finishing of exposed grout surfaces, apply a light mist of solvent followed by steel troweling.

Unusual applications or conditions may require technical assistance from a Symons representative.

LIMITATIONS

Always test a small amount of RESCON EPOXY GROUT before installation to verify mixing procedures, placing requirements and setting properties.

Do not thin with any solvents. Surface, ambient air, and material temperatures must be 45°F (7°C) or above.

Concrete must be 28 days old.

For application with constant high temperatures above 150°F (66°C), contact Symons Technical Support.

Store in well-ventilated area between 50° and 90°F (10° and 32°C). Resin (Part A) may crystallize if stored below 50°F (10°C). As a general rule, the pot life of epoxy will be cut in half for each 10° to 15° F increase in temperature above 75°F (24°C), and the pot life will double for each 10° to 15°F drop below 75°F (24°C).

Do not expose uncured product to cold or freezing temperatures below 35°F (1°C) for any length of time.

Higher temperatures will decrease and cooler temperatures will increase the setting time. In general, the gel time may be cut in half for each 10°-15°F increase above 75°F (24°C) the pot life will double for each 10° to 15° drop below 75°F (24°C).

WARRANTY

Symons warrants, for 12 months from the date of manufacture, or for the duration of the published product shelf life, whichever is less, that at the time of shipment by Symons, the product is free of manufacturing defects and conforms to Symons' published specifications in force on the date of acceptance by Symons of the order. Symons shall only be liable under this warranty if the material has been applied, used, and stored in accordance with Symons instructions in this technical data sheet.

The purchaser must examine the product when received and promptly notify Symons in writing of any nonconformity before the product is used, or no later than 30 days after such nonconformity is first discovered. If Symons, in its sole discretion, determines that the product breached the above warranty, it will, in its sole discretion, replace the nonconforming product, refund the purchase price or issue a credit. This is the sole and exclusive remedy for breach of this warranty.

Only a Symons officer is authorized to modify this warranty. The sales information on the Symons website and received by the customer during the sales process does not supersede this warranty and the specifications of the product in force on the date of sale. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM, TRADE OR OTHERWISE.

CLEAN-UP

Clean all tools with xylene (xylol), toluene or Citrus Peel (J-48) before the epoxy sets. Mortar mixers may be cleaned using two bags of ¼"-¾" pea gravel with glycol. The glycol may be used several times before disposal. All tools must be cleaned before the grout has set hard.

SHELF LIFE

Shelf life of RESCON EPOXY GROUT in properly stored containers is two years.

PRECAUTIONS

It is mandatory to take the following precautions to protect workers and the public:

1. KEEP OUT OF THE REACH OF CHILDREN.
2. Product may be a strong sensitizer. Protective clothing is recommended.
3. Avoid breathing product vapors. Ensure adequate ventilation.
4. Avoid contact with skin. Contact areas should be thoroughly washed with soap and water.
5. Avoid contact with eyes. Flush eyes with water if contact occurs.
6. Avoid ingestion of material. If ingestion occurs, contact a poison center or physician.

Additional precautions, safety information and first aid treatments are contained in the Material Safety Data Sheet.

LIMITATION OF LIABILITY

Symons shall not be liable, in contract or in tort (including, without limitation, negligence, strict liability or otherwise) for loss of sales, revenues or profits; cost of capital or funds; business interruption or cost of downtime, loss of use, damage to or loss of use of other property (real or personal); failure to realize expected savings; frustration of economic or business expectations; claims by third parties (other than for bodily injuries), or economic losses of any kind; or for any special, incidental, indirect, consequential, special, punitive or exemplary damages arising in any way out of the performance of, or failure to perform, this Agreement, even if Symons could foresee or has been advised of the possibility of such damages. The Parties expressly agree that these limitations on damages are allocations of risk constituting, in part, the consideration for this agreement, and also that such limitations shall survive the determination of any court of competent jurisdiction that any remedy provided in these terms or available at law fails of its essential purpose.

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