# MEMBER .

# **Technical Data and Installation Instructions**

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#### **DESCRIPTION**

RAECO SLT-HS is a self-leveling, structural grade, interior or exterior floor topping mortar containing Portland cement, graded aggregates, polymer and control additives. Mixed only with water, it becomes a free flowing material that achieves a flat and smooth surface. SLT-HS produces a smooth, hard and durable wearing surface or is ready to receive a finish floor. For a wearing surface a quality, high traffic sealer is recommended. SLT-HS is easily applied and offers an economical installation. The mortar can be applied from ¼ " to 1½" in a single lift and up to any depth when mixed with aggregate. For thickness greater than 1½ inches, use ¼"-¾" pea gravel. RAECO R-2000 primer is required prior to installation.

SLT-HS IS A NON-GYPSUM BASED PRODUCT.

FOR EXTERIOR APPLICATIONS, CONTACT RAECO TECHNICAL SUPPORT.

## **APPROXIMATE COVERAGE**

50 lb. bag: 25 sq. ft. @ 1/4"

For Thickness over 1  $\frac{1}{2}$ " inch depth: 1  $\frac{1}{2}$ " & up use  $\frac{1}{4}$ " -  $\frac{3}{4}$ " pea gravel @ 60 lb per bag 50 lb. bag mixed with 60 lb. pea gravel yield 11 SF at 1" depth.

## **PROPERTIES**

COMPRESSIVE STRENGTH, PSI (ASTM C-579)

1 Day: 2950 7 Days: 4500 28 Days: 6200

TENSILE STRENGTH, PSI (ASTM C-307)

28 Days: 750

FLEXURAL STRENGTH, PSI (ASTM C-580)

28 Days: 1500

SHRINKAGE % (ASTM-C-531)

28 Days: - .07%

WET DENSITY, (ASTM C-185)

117 Pounds per Cubic Foot

HARDNESS,

60 Days Mohs Scale rating: 5.0

Shore 'D' Hardness: 85

#### SURFACE PREPARATION

Surfaces to be covered must be structurally sound, clean and free of dust, oil, grease, sealers, curing compounds, laitance, release agents or other surface contaminants. Where possible, cut vertical shoulders at edges to accommodate repair or use foam tape (weather-stripping) as a cold joint. For smooth existing concrete, we recommend mechanical abrasion to achieve an acceptable surface profile. A concrete surface profile (CSP) of 3 to 6 is recommended \*See Intl Concrete Repair Institute for profile details at www.icri.org. The cleaning and preparation method selected depends on both the sub-floor material and its condition. Acid etching is not recommended. All surfaces to be leveled with RAECO SLT-HS must be double primed with R-2000 primer, including additional layers of SLT-HS. Apply primer using a soft bristle brush, or exploded tip push broom. Pour the diluted primer on the floor and sweep thoroughly to ensure that the surface is coated evenly without leaving puddles or bare spots. Seal all cracks, crevices and voids to prevent the SLT-HS from flowing outside your working area. Failure to remove all contaminants that impede the bonding agent may result in adhesion problems.

For **non-porous substrates**, such as ceramic tile, terrazzo, epoxy, metal and other impervious surfaces, use RAECO R-3000 primer. Follow all directions contained in the product data sheets of RAECO R-2000 and R-3000 primers.

## MIXING

RAECO <u>SLT-HS GRAY</u> is mixed by adding clean water at a rate of approximately 5.5 to 5.8 quarts of water for each 50 lb. bag of dry powder. Do not exceed 5.8 quarts (5.4 liters) of water per 50 lb. bag.

For <u>SLT-HS WHITE</u> use 5.8 to 6.1 quarts of water. Do not exceed 6.1 quarts of water (5.7).

For SLT-HS NIKE™ use 4.1 to 4.25 quarts of water.

The water should be added to the mixing barrel first, then pour in the SLT-HS, followed by the appropriate aggregate (if used). No other admixtures are to be used. (Plaster mixers or self-leveling pump systems may be used for larger projects). Using a mixing paddle (an oval shaped type is recommended) with a high-speed drill (600 to 1200 rpm), mix thoroughly (2



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to 3 minutes) until the powder has been completely dispersed and the mix has acquired a smooth homogeneous texture. During the final minute of mixing, avoid plunging the mixing paddle and keep it submerged. This will decrease the entrained air content. For thickness over 1 ½" thick, ½"-¾" pea gravel may be added after the SLT-HS been mixed thoroughly. The addition of the pea gravel will affect the flowability of the mix. It is recommended to mix only the amount of SLT-HS that can be applied within the 10 minute working time. Temperatures and material depth will effect working time. Because the mixed material is rapidly poured and spread, the application must be completed in a continuous operation.

## **APPLICATION**

Apply the RAECO SLT-HS mixture to the prepared surface, by using a gauged spreader tool that can be adjusted to the desired depth. Do not attempt to trowel the wet mortar. The use of a gauged spreader and smoother blade are recommended to improve the surface finish. Rubber or plastic-cleated soccer shoes should be worn when working in fresh mortar. SLT-HS will self-mend during the first 12 minutes at 70° F and will accept light foot traffic 2-3 hours later. Under normal conditions, floors can be sealed or covered in 24 hours.

When RAECO SLT-HS is to be applied on surfaces other than concrete (i.e., wood, metal, terrazzo, etc.), consult RAECO for recommended preparation, bonding, and application procedures. All floor adhesives compatible with normal concrete may be used with SLT-HS. Temperatures in excess of 90° F., ambient or surface, can cause flash set and dehydration, resulting in cracking and debonding.

## **LIMITATIONS**

RAECO SLT-HS should only be applied over substrates that are between 45° and 85° F. (7.2° and 29.4° C.) Do not allow to freeze within 7 days of application. When applying SLT-HS to thickness greater than 1 ½" (35.8 mm), bulk the mix with the appropriate type and amount of aggregate (refer to Coverage Section), or apply in multiple layers.

## WARNING

RAECO SLT-HS contains Portland cement and silica

sand. Use of a dust respirator, safety goggles and rubber gloves are recommended. In case of contact with eyes, immediately flush with water and consult a physician. Avoid hazards by following all precautions found in the Material Safety Data Sheet (MSDS), product labels and technical literature. Please read this information prior to using product.

#### WARRANTY

RAECO Specialty Cements, LLC warrants that if its products prove to have manufacturing defects and RAECO is notified of such within twelve months from the date RAECO shipped the products, RAECO will replace the defective products F.O.B. factory. Such product replacement shall constitute the sole and exclusive remedy for any claim under this warranty. RAECO does not authorize anyone, including RAECO Representatives, to make any statements that supersede, modify or supplement the information provided on its printed literature or package labels without written confirmation from the RAECO Technical Service Department Any installations proceeding without this confirmation, or improper installations of the products will void this warranty. Under no circumstances will RAECO be liable for economic, special, incidental, or consequential damages or losses of any kind whatsoever arising out of or occasioned by selection, use installation or replacement of this product.

GUIDE SPECIFICATIONS: Consult RAECO for SLT-HS Guide Specification (4 pages) latest edition.

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