SURE SET™ LHT

DS-65451-0425

Globally Proven Construction Solutions

Suitable Substrates

- Concrete (Cured 28 days)
- Cement Backer Board
- Cement Mortar Bed
- HYDRO BAN Board
- Cement Plaster
- Cement Terrazzo
- Non-Water Soluble Cut-Back Adhesive
- Properly Prepared Vinyl Or Other Resilient Tile
- Ceramic Tile and Stone
- Exterior Glue Plywood (Interior Only)
- Gypsum Wallboard (Interior use only, non-wet areas)
- Brick Masonry

1. PRODUCT NAME
SURE SET™ LHT

2. MANUFACTURER

LATICRETE International, Inc.
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Bethany, CT 06524-3423 USA

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Toll Free:	1.800.243.4788, ext. 1235
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3. PRODUCT DESCRIPTION

A polymer modified large and heavy tile, thin-bed, non-slump & non-sag adhesive mortar for installing ceramic tile, porcelain tile, marble and stone on floors and walls. Approved for use over exterior glue plywood for interior installations.

Uses

- For interior and exterior floor and wall installations of ceramic tile, porcelain tile and stone

Advantages

- Acheives ANSI A118.4HT and ANSI A118.11
- Supports heavy tile and stone, reducing lippage problems
- Non-sag performance
- For interior and exterior floor and wall applications
- Build up to 3/4" (19 mm) without shrinkage or set-up time problems

Packaging

- 44LB (20KG) BAG

Approximate Coverage

44 lb (20kg)

Notched Trowel Size	ft²	m²
1/4" x 1/4" (6 mm x 6 mm)	70-86	6.5-8.0
1/4" x 3/8" (6 mm x 9 mm)	53-62	4.9-5.8
1/2" x 1/2" (12 mm x 12 mm)	35-43	3.3-4.0

Shelf Life

Advanced plastic bag provides two (2) year shelf life. (non-rapid versions only) ***High humidity will reduce the shelf life of bagged product.

Limitations

- Do not install tile/stone when surface temperatures are below freezing (32°F [0°C]).
- Adhesives/mastics, mortars and grouts for ceramic tile, pavers brick and stone are not designed as replacements for waterproofing membrane; use a LATICRETE® Waterproofing Membrane (see Section 10 FILING SYSTEMS).
- DO NOT bond to particle board, luan, Masonite® or hardwood surfaces.
- Not for use in submerged applications. For these applications use LATICRETE MULTIMAX™ Lite.

Cautions
- Consult SDS for more safety information.
- Contains cement and silica sand. Causes severe skin burns and serious eye damage. Wear protective gloves and eye protection. In case of contact, flush thoroughly with water.
- Do not take internally. Silica sand may cause cancer, respiratory irritation. or serious lung problems. Do not breathe dust. Wear a respirator in dusty areas.
- Use LATAPOXY® 300 Adhesive for installing green marble, resin backed tile or stone or water sensitive natural stone and agglomerates.
- For light–colored marble and stone use Large and Heavy Tile Non-Sag Adhesive Mortar white.
- Keep out of reach of children.

4. TECHNICAL DATA
VOC/LEED Product Information
Total VOC Content of product in unused form is 0.00 g/L

Applicable Standard
ANSI A118.4HT
ANSI A118.11

Physical Properties

Test	Test Method	Specification	Results
Porcelain Tile Shear Strength 28 day	ANSI A118.4–7.2.5	>200 psi (1.4 MPa)	275-375 psi (1.9-2.6 MPa)
Glazed Wall Tile Shear Strength 7 day	ANSI 118.4-7.1.2	>300 psi (2.1 MPa)	300-375 psi (2.1-2.6 MPa)
Shear Bond, Quarry Tile/Plywood, 28 day	ANSI A118.11 4.1.1.2	>150 psi (1.0 MPa)	150-165 psi (1.0-1.1 MPa)

Working Properties

Open Time	20 minutes
Pot Life	3–4 hours
Time to Heavy Traffic	Minimum 24 hours @ 70°F (24°C)

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

5. INSTALLATION
Surface Preparation
All surfaces should be between 40°F (4°C) and 90°F (32°C) and structurally sound, clean and free of all dirt, oil, grease, paint, concrete sealers or curing compounds. Rough or uneven concrete surfaces should be made smooth with Latex Cement Underlayment to provide a wood float (or better) finish. Dry, dusty concrete slabs or masonry should be dampened and excess water swept off. _Installation may be made on a damp surface._
All slabs must be plumb and true to within 1/4" (6 mm) in 10 ft
(3 m). Expansion joints shall be provided through the tile work from all construction or expansion joints in the substrate. Follow ANSI specification A108.01-3.7 "Requirements for Movement Joints: Preparations by Other Trades" or TCNA detail EJ-171 "Movement Joints—Vertical & Horizontal". Do not cover expansion joints with mortar.

1.	Installer must verify that deflection under all live, dead and impact loads of interior plywood floors does not exceed
	industry standards of L/360 for ceramic tile and brick or L/480 for stone installations where L=span length.

2.	Minimum construction for interior plywood floors.
	SUBFLOOR: 5/8" (16 mm) thick exterior glue plywood, either plain with all sheet edges blocked or tongue and groove, over bridged joints spaced 16" (400 mm) o.c. maximum; fasten plywood 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. along intermediate supports with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) between sheet ends and 1/4" (6 mm) between sheets edges; all sheet ends must be supported by a framing member; glue sheets to joints with construction adhesive.
	UNDERLAYMENT: 5/8" (16 mm) thick exterior glue plywood fastened 6" (150 mm) o.c. along sheet ends and 8" (200 mm) o.c. in the panel field (both directions) with 8d ring-shank, coated or hot dip galvanized nails (or screws); allow 1/8" (3 mm) to 1/4" (6 mm) between sheets and 1/4" (6 mm) between sheet edges and any abutting surfaces; offset underlayment joints from joints in subfloor and stagger joints between sheet ends; glue underlayment to subfloor with construction adhesive. Refer to Technical Data Sheet 152 Bonding Ceramic Tile, Stone or Brick Over Wood Floors for complete details.

Mixing
Mixing: Place clean, potable water into a clean pail. For walls and Large Heavy Tile applications: Use approximately 4.1-4.3 quarts (3.9-4.1 L) of water for 44 lbs (20 kg) of powder. For Thin Bed applications: Use approximately 4.8-5.0 quarts (4.5-4.7 L) of water for 44 lbs (20kg) of powder. Slowly add SURE SET LHT™ Mortar. Mix with a mixer to a smooth, trowelable consistency. Allow mortar to slake for 5 minutes. Remix without adding any more water or powder. During use, stir occasionally to keep mix fluffy. DO NOT temper with water.

Application

Apply mortar to substrate with flat side of trowel, pressing firmly to work into surface. Comb on additional mortar with the notched side of the trowel. Spread as much mortar as can be covered with tile in 15–20 minutes. Back butter large > 8" x 8" (>200 mm x 200 mm) irregular backed tiles to provide full bedding and firm support. Place tiles into wet, sticky adhesive and move them perpendicularly, across the ridges, forward and back to flatten the ridges, embed tile and adjust levelPlace tiles into wet, sticky mortar Check mortar for complete coverage periodically removing a tile and inspecting bedding mortar transfer onto back of tile. If mortar is skinned over (not sticky) remove and replace with fresh mortar.

Grouting
Grout installation after a minimum of 24 hours curing time at 70°F (21°C). Grout with SPECTRALOCK® PRO Premium Grout†, SPECTRALOCK® PRO Grout†, PERMACOLOR® SELECT, PERMACOLOR Select NS or PERMACOLOR Grout?.
Cold Weather Note: The setting of cement mortars and grouts are retarded by low temperatures. Protect finished work for an extended period when installing in cold weather. Do not set tile when surface temperature is below freezing or when substrate is frozen.

Hot Weather Note: The evaporation of moisture in cement mortars is accelerated by hot, dry conditions. Apply to dampened surfaces and protect freshly spread mortar and finished work when installing in hot temperatures.

Cleaning
Clean tools and tile work with water while mortar is fresh.

6. AVAILABILITY AND COST
Availability
LATICRETE materials are available worldwide.

For Distributor Information, Call:
   Toll Free: 1.800.243.4788
   Telephone: +1.203.393.0010
For on-line distributor information, visit LATICRETE at
laticrete.com

Cost
Contact a LATICRETE Distributor in your area.

7. WARRANTY
See 10. FILING SYSTEM:

8. MAINTENANCE
LATICRETE and LATAPOXY grouts require routine cleaning with a neutral pH soap and water. All other LATICRETE and LATAPOXY materials require no maintenance but installation performance and durability may depend on properly maintaining products supplied by other manufacturers.

9. TECHNICAL SERVICES
Technical Assistance
Information is available by calling the LATICRETE Technical Service Hotline:
   Toll Free: 1.800.243.4788, ext. 1235
   Telephone: +1.203.393.0010, ext. 1235
   Fax: +1.203.393.1948

Technical and Safety Literature
To acquire technical and safety literature, please visit our website at **laticrete.com.**

10. FILING SYSTEM
Additional product information is available on our website at laticrete.com. The following is a list of related documents:
- DS 230.13: LATICRETE Product Warranty
- DS 230.05: LATICRETE 5 Year System Warranty