

## 4-XLT

DS-80-0724

# Globally Proven Construction Solutions



## 1. PRODUCT NAME

4-XLT

#### 2. MANUFACTURER

LATICRETE International, Inc. 1 LATICRETE Park North Bethany, CT 06524-3423 USA

Telephone: +1.203.393.0010, ext. 1235 Toll Free: 1.800.243.4788, ext. 1235

Fax: +1.203.393.1684 Website: laticrete.com

## 3. PRODUCT DESCRIPTION

4-XLT is a multi-use, polymer fortified adhesive mortar. 4-XLT offers tremendous utility including non-sag wall installations, large heavy tile mortar build-up of up to 3/4" (19 mm) and thin-set applications.

#### Uses

- For floor and wall installations of interior and exterior ceramic tile, porcelain tile and stone
- · Ideal for most thin-set applications

## **Advantages**

- Incredible non-sag performance
- Excellent Large and Heavy Tile Mortar performance used as a bonding mortar from a minimum of 3/32" (2.4mm) up to a ¾" (19mm) without shrinkage
- Smooth and Creamy consistency
- · Large and heavy tile
- "Extra Heavy" rating per ASTM C627
- Exceeds ISO 12004 C2TES2 classification
- Bonds to many suitable substrates

 Exceeds ANSI A118.15HT, ANSI A118.4HT, and ANSI A118.11

## **Suitable Substrates**

- Brick Masonry
- · Cement Backer Board
- · Ceramic Tile and Stone
- · Ceramic Tile and Stone
- Concrete
- Concrete Block
- · Concrete Masonry
- Non-Water Soluble Cut-Back Adhesive
- Non-Water Soluble Cut-Back Adhesive
- Exterior Glue Plywood (Interior Only)
- Gypsum Wallboard
- Vinyl Or Other Resilient Tile (Interior Only)

## **Packaging**

• 50LB (22.7KG) BAG

## **Approximate Coverage**

Trowel Size	ft²	m²
1/4" x 1/4" (6 mm x 6 mm) notched trowel	80 – 95	7.4 – 8.8
1/4" x 3/8" (6 mm x 9 mm) notched trowel	60 – 70	5.6 – 6.5
1/2" x 1/2" (12 mm x 12 mm) notched trowel	40 – 47	3.7 – 4.4

### Limitations

- Not for use directly over OSB, interior glue plywood, particle board, luan, Masonite<sup>®</sup> or hardwood floors.
- For veneer installations using this product, consult local building code requirements regarding limitations and installation system specifications.
- Adhesives/mastics, mortars and grouts for ceramic tile, pavers, brick and stone are not replacements for waterproofing membranes. When a waterproofing membrane is required, use a LATICRETE® waterproofing membrane (see Section 10 FILING SYSTEM).

- Not for use in submerged applications. For these applications, use 254 Platinum.
- Not a remedy to level or flatten substrates. Use a suitable LATICRETE underlayment for this purpose

#### **Cautions**

- Consult SDS for more safety information.
- Some marbles and other stones have low flexural strength and might not be suitable for installation over wood floors.
- Use LATAPOXY<sup>®</sup> 300 Adhesive for installing green marble or
- water sensitive stone and agglomerates, and resin backed tiles and stones.
- During cold weather, protect finished work from traffic until fully cured.
- Contains portland cement and silica sand. Causes severe skin burns and serious eye damage. Wear protective gloves, protective clothing 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.
- For white and light-colored stones, use 4-XLT (white).
- · Keep out of reach of children.

## 4. TECHNICAL DATA

## **Applicable Standard**

- ANSI A118.4
- ANSI A118.11
- ANSI A118.15
- This product currently has a Product Specific (Type III) Environmental Product Declaration (EPD). The PCR review, life cycle assessment and declaration were independently verified by UL Environment in accordance with ISO 14025, ISO 14040 and ISO 14044.

### **Physical Properties**

Test	ANSI A118.15 Specification	Results
Vit-Vit Shear Strength: 24 hrs	100 PSI (0.6 MPa)	212 PSI (1.4 MPa)
Vit-Vit Shear Strength: 7 days	300 PSI (2.0 MPa)	478 PSI (3.3 MPa)
Vit-Vit Shear Strength: 7d Water Immersion	200 PSI (1.3 MPa)	250 PSI (1.7 MPa)
Vit-Vit Shear Strength: 28 days	400 PSI (2.7 MPa)	500 PSI (3.4 MPa)
Quarry-Quarry Shear Strength: 28 days	150 PSI (1.0 MPa)	310 PSI (2.1 MPa)
Glazed Wall Tile Shear Strength: 7 days	450 PSI (3.1 MPa)	476 PSI (3.2 MPa)
Glazed Wall Tile Shear Strength: 7 days Water Immersion	250 PSI (1.7 MPa)	382 PSI (2.6 MPa)
Sag	<0.50 mm	0.35mm
Open Time: 20 minutes at 28 days	>0.50 MPa (>72 PSI)	0.92 MPa (133 PSI)

**Working Properties** 

Pot Life	4 hours
Time To Traffic	24 hours

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 a LATICRETE® latex fortified underlayment or leveling mortar to provide a proper finish. Dry, dusty concrete slabs or masonry should be dampened and excess water swept off. Installation may be made on a damp surface. New concrete slabs shall be damp cured and 28 days old before application. 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. Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes.

- 1. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/360 for think bed stone installations where L=span length (except where local building codes specify more stringent deflection requirements).
- 2. Minimum construction for interior plywood floors. **SUBFLOOR**: 5/8" (15 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 sheet edges at the perimeter; all sheet ends must be supported by a framing member; glue sheets to joints with construction adhesive.

UNDERLAYMENT: 5/8" (15 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".

Mixing—50 lb (22.7 kg) bag
For Walls and Large and Heavy Tile Mortar
Applications Place 4.5 – 4.75 qts (4.3 – 4.5 L) of
clean water in a pail and slowly add the entire bag of
4-XLT. (To mix smaller quantities use 2.4 parts
powder to 1 part water.) Mix with slow speed mixer for
one minute. DO NOT temper with water. Allow to
slake for 5 minutes, remix and use.

For Thin Bed Applications Place 5 qts (4.7 L) of clean water in a pail and slowly add the entire bag of 4-XLT. (To mix smaller quantities use 3.6 parts powder to 1 part water.) Mix with slow speed mixer for one minute or until a creamy smooth consistency is reached. Allow to slake for 5 minutes, remix and use.

## Application Walls

Key materials into substrate thoroughly. Comb on additional mortar with the notched side, use 1/4" x 3/8" (6 mm x 9 mm) notched trowel. Back butter all tile and

stone 8" x 8" (200 mm x 200 mm) or larger to provide full bedding of the veneer. Note: Use proper sized notched trowel to ensure full bedding of the tile. Spread only enough mortar that can be covered with tile within 15–20 minutes at 70°F (21°C). Place tile and beat in with rubber mallet to embed. Adjust as necessary. Check mortar for complete coverage by periodically removing a tile and inspecting the transfer onto the back of the tile. The size and weight of the veneer will vary. Conduct a small test area for non-sag performance. Due to job site conditions and differences in finish material types; ledger boards, shims, wedges or spacers may be required to maintain finish levels and heights.

## Large and Heavy Tile Mortar

Key the mortar to the substrate with the flat side of the trowel. Press firmly to work into the surface. Comb on additional mortar with the notched side. Use 1/2" x 1/2" (12 mm x 12 mm) or 3/4" (18 mm) half loop trowel. Note: Use the proper sized notched trowel to ensure full bedding of the tile. Spread as much mortar as can be covered with tile in 15–20 minutes. Back butter large tiles 8" x 8" (200 mm x 200 mm) to provide full bedding and firm support. Place tile into wet sticky mortar and beat in using a beating block and rubber mallet to embed tile and adjust until level. Check mortar for complete coverage by 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®^^^ and PERMACOLOR Select. Cleaning Clean tools with water.

## 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:

- 25 Year System Warranty (US) (English)
- 10 Year System Warranty (US) (English)
- 1 Year Product Warranty (US) (English)
- LATICRETE Lifetime System Warranty (US) (English)

#### 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 <u>laticrete.com</u>. The following is a list of related documents:

- DS 230.13: LATICRETE Product Warranty
- DS 025.0: LATICRETE 25 Year System Warranty (United States and Canada) as a component of HYDRO BAN Pre-Sloped Shower Pan only A component of:
- DS 230.0: LATICRETE 10 Year System Warranty (United States and Canada)