

# 4-XLT Rapid

DS-81-0624

# Globally Proven Construction Solutions



### 1. PRODUCT NAME

4-XLT Rapid

### 2. MANUFACTURER

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### 3. PRODUCT DESCRIPTION

4-XLT Rapid is a fast setting, multi-use, polymer fortified adhesive mortar for large format tile installations. 4-XLT Rapid offers tremendous utility for non-sag wall installations, Large and Heavy Tile and thin-set applications on floors. 4-XLT Rapid is built on Water Dispersion Technology™ (WDT) platform. WDT provides for the complete dispersion of water within the mix allowing users to achieve the desired application consistency. 4-XLT Rapid also features DUST LOCK™ Technology, dramatically reducing onsite mess both during transportation of the product as well as while mixing.

### Uses

- For wall installations of interior and exterior ceramic tile, porcelain tile and stone.
- Can be used as a medium bed mortar for flooring installations.
- Ideal for most types of thin-set flooring applications.

# **Advantages**

- Rapid setting, ready for grouting in 3 to 4 hours.
- Excellent Large and Heavy Tile Mortar used as a bonding mortar from a minimum of 3/32" (2.4mm) up to a 3/4" (19mm) without shrinkage.
- Utilizes Water Dispersion Technology allowing for different mortar consistencies.
- Incredible non-sag performance, including large and heavy tile.
- DUST LOCK Technology dramatically reduces mess both during transportation of the product as well as during mixing.
- · Smooth and Creamy consistency
- "Extra Heavy" rating per ASTM C627 (TCNA)
- Exceeds ANSI A118.4 and A118.11 Shear Bond Strength Requirements
- Exceeds ISO 12004 C2FTS2 classification

### **Suitable Substrates**

- Exterior Glue Plywood (Interior Only)
- Concrete
- Concrete Block
- · Ceramic Tile and Stone
- Ceramic Tile and Stone
- Gypsum Wallboard
- · Cement Backer Board
- · Concrete and Brick Masonry

# **Packaging**

50 lb (22.7 kg) bag

### Colors

Grey and White

### Approximate Coverage

50 lb (22.7 kg) bag

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

### **Shelf Life**

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year if stored off the ground in a dry area. High humidity will reduce the shelf life of bagged product.

### Limitations

- Not for use directly over OSB, 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.
- Not for use over VAT, VCT, cutback adhesive, vinyl and plastic laminates.
- 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.
- Note: Surfaces must be structurally sound, stable and rigid enough to support ceramic/stone tile, thin brick and similar finishes. Substrate deflection under all live, dead and impact loads, including concentrated loads, must not exceed L/360 for thin bed ceramic tile/brick installations or, L/480 for thin bed stone installations where L=span length or L/600 for exterior, vertical applications (except where local building codes specify more stringent deflection requirements)

### **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® 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/eye protection/face 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 Rapid (white).
- Keep out of reach of children.

### 4. TECHNICAL DATA

# **Applicable Standard**

• ANSI A118.4, ANSI A118.11

 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**

Mixed with 5.25 qts of [5 ?]

Test	Test Method	Results
Shear Bond, Porcelain Tile,	ANSI AS118.4	300-350 psi
28 day	5.2.4	(2.1-2.4 MPa)
Shear Bond, Quarry	ANSI A118.11	160-180 psi
Tile/Plywood, 28 day	4.1.1.2	(1.0-1.1 MPa)
Sag on Wall	ISO 13007-2 4.2	0.25 mm

4-XLT Rapid is classified as a C1TEF per ISO 13007-2.

**Working Properties** 

Open Time	40 minutes	
Pot Life	30-50 minutes	
Time To Grout	3-4 hours	
Time to Heavy Traffic	5 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' (3 m). Expansion joints shall be

(6 mm) in 10' (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" (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 Medium Bed Applications

Place 5.0-5.5 qts (4.7-5.2 L) of clean water in a pail and slowly add the entire bag of 4-XLT Rapid. (To mix smaller quantities use 2.7 parts powder to 1 part water.) Mix with slow speed mixer for one minute, a noticeable change will occur when the mix transforms from what appears to be dry consistency to a usable consistency. DO NOT temper with water. Allow to slake for 1 minute, remix and use. Job site conditions might vary. Add slightly more water within five (5) minutes of completing second mix only to achieve the desired consistency (if necessary). Prior to the water dispersing action taking affect for wall and medium bed applications, mix may seem dry. Dependent upon the strength of the power mixer being utilized, it may be necessary to mix only 1/2 of a bag (25 lbs / 11.4 kg) at one time.

### For Thin Bed Applications

Place 5.5 – 6.0 qts (5.2 – 5.7 L) of clean water in a pail and slowly add the entire bag of 4-XLT Rapid. (To mix smaller quantities use 3.3 parts powder to 1 part water.) Mix with slow speed mixer for 1 minute or until a creamy smooth

consistency is reached. Allow to slake for 1 minute, 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. 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.

### Medium Bed

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 3-4 hours curing time at 70°F (21°C). Grout with SPECTRALOCK® PRO Premium Grout<sup>†</sup>, SPECTRALOCK PRO Grout<sup>†</sup>, PERMACOLOR®? Grout mixed with water, or 1500 Sanded Grout or 1600 Unsanded Grout gauged with 1776 Grout Enhancer or with water.

# 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:

- 10 Year System Warranty (US) (English)
- 1 Year Product 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 230.0: LATICRETE 10 Year System Warranty (United States and Canada)
- DS 236.0: 9235 Waterproofing Membrane
- DS 250.0: PERMACOLOR? Grout
- DS 256.0: 1500 Sanded Grout
- DS 258.0: 1600 Unsanded Grout
- DS 265.0: 1776 Grout Enhancer
- DS 633.0: LATAPOXY 300 Adhesive
- DS 663.0: HYDRO BAN®
- DS 681.0: SPECTRALOCK PRO Premium Grout†
- DS 685.0: SPECTRALOCK PRO Grout†

 TDS 152: "Bonding Ceramic Tile, Stone or Brick Over Wood Floors"

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