

LFT PRO 8870

Polymer-Modified Large-and-Heavy Tile Mortar

ANSI: Exceeds ANSI A118.4HET and ANSI A118.11 requirements
ISO 13007: Classification C2TE

Product Description

LFT Pro 8870 is a contractor grade, non-sag, large-and-heavy-tile mortar and thin-set mortar for tile and stone for interior/exterior installations on floors, walls and countertops. LFT Pro 8870 is designed for use up to 12 mm (1/2") thickness after embedment to give better support under large-format tile. This polymer-modified mortar is formulated for easy trowel properties with excellent adhesion to the substrate and tile.

Features





- Polymer-enriched for high performance
- Non-sag formula for large-format and heavy tile and stone in wall applications
- Nonslump for large-format and heavy tile and stone in floor applications
- For bond coats up to 12 mm (1/2") in embedded thickness
- For use with uncoupling, sound-reduction and waterproofing membranes
- Smooth and creamy consistency for easy application

Uses

- Most interior/exterior residential installations on floors, walls and countertops in dry and wet areas
- Most interior/exterior commercial installations on floors and countertops
- Most interior commercial installations on walls
- Installation of ceramic and porcelain tile, veneer stone, quarry tile, pavers, Saltillo tile, and most types of marble, granite and natural stone
- Install only at temperatures between 4°C and 35°C (40°F and 95°F).
- Do not use for moisture-sensitive stone (green marble; some limestone and granite), agglomerate tiles, cultured marble or resin-backed tiles.

Technical Quick Reference

Recommended Trowel Sizes and Approximate Coverages* Based on 22.7-kg (50-lb.) bag

| | | |
|--|---|---|
| 6 x 6 x 6 mm (1/4" x 1/4" x 1/4") |  | 6.97 to 8.36 m ² (75 to 90 sq. ft.) |
| 6 x 10 x 6 mm (1/4" x 3/8" x 1/4") |  | 5.11 to 6.04 m ² (55 to 65 sq. ft.) |
| 12 x 12 x 12 mm (1/2" x 1/2" x 1/2") |  | 3.53 to 4.18 m ² (38 to 45 sq. ft.) |
| 19 x 14 x 10 mm (3/4" x 9/16" x 3/8") |  | 2.32 to 2.79 m ² (25 to 30 sq. ft.) |

* Coverages are for estimating purposes only. Actual coverage may vary according to substrate conditions, trowel used and setting practices. To ensure adequate contact, proper trowel selection is mandatory (see "Application").

Product Characteristics

(at 23°C [73°F] and 50% relative humidity)

| | |
|--|-------------------------------|
| Pot life* | Less than 2 hours |
| Open Time* | 30 minutes |
| Adjustability | Up to 30 minutes |
| Initial set (before grouting walls)* | 8 to 16 hours |
| Initial set (before grouting floors)* | 24 hours |
| Final set (before light traffic) | 24 to 48 hours after grouting |
| Final set (before heavy traffic) | 7 days |
| VOCs (Rule #1168 of California's SCAQMD) | 0 g per L |
| Application temperature range | 4°C to 35°C (40°F to 95°F) |
| Embedded thickness range | 2.5 to 12 mm (3/32" to 1/2") |

* Actual open time, pot life and time before grouting will vary based on jobsite conditions

Shear strength per ANSI A118.4 tests

(at 28 days)

| | |
|----------------------------|-----------------------------------|
| Impervious ceramic mosaics | 1.90 to 2.76 MPa (275 to 400 psi) |
| Quarry tile to quarry tile | 2.42 to 3.28 MPa (350 to 475 psi) |
| Quarry tile to plywood | 1.03 to 1.38 MPa (150 to 200 psi) |
| Glazed wall tile | 3.11 to 3.97 MPa (450 to 575 psi) |

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- Do not use over dimensionally unstable substrates such as presswood, hardwood flooring, oriented strand board (OSB), particleboard, chipboard, Masonite, Lauan, gypsum floor-patching compounds or substrates containing asbestos, or metal.
- To use directly over gypsum-based patching or leveling substrates, apply a suitable sealer/primer before use.
- For light-colored and translucent natural stone use white *LFT Pro 8870*.
- Installations of tile over nonporous surfaces, such as waterproofing membranes and existing tile, may require extended setting/curing times. Dimensionally weak stone (limestone and travertine) is limited to thin-set applications only.
- Do not use for installations subject to prolonged water immersion (e.g., pools, fountains, showers, hot tubs and steam rooms).
- *LFT Pro 8870* is not recommended for areas subject to severe freeze/thaw conditions. For the best performance, use a liquid latex additive mortar system.
- Do not use on exterior commercial-building facades such as shopping malls, office buildings or high-rise residential units.
- Gypsum plaster and gypsum wallboard (on properly primed interior walls only).
- Plywood underlayments must be a Group 1 exterior-grade plywood CC-plugged or better, conforming to APA classification and U.S. Product Standard PS 1-95 or a "SELECT" or (SEL-TF) CANPLY classified exterior-grade plywood conforming to CSA-0121 standard for Douglas fir for direct-bond applications (interior, residential and light commercial floors and countertops in dry conditions only).
- Vinyl composition tile (VCT) and cutback residue (interior only)
- Interior installations in dry conditions only over properly prepared and well-bonded unglazed tile, ceramic and porcelain tile, cement terrazzo, quarry tile and pavers
- Waterproofing, crack-isolation, sound-reduction and uncoupling membranes

Note: Consult Chembond's Technical Services Department (1-888-243-6263) for installation recommendations regarding substrates and conditions not listed.

Mixing (for a 22.7-kg [50-lb.] bag)

Before product use, take appropriate safety precautions. Refer to the Safety Data Sheet (SDS) for details.

1. Pour clean, potable water into a clean mixing container.
 - a. For non-sag/nonslump applications: Add about 6.15 to 7.10 L (6.5 to 7.5 U.S. qts.) of water.
 - b. For uncoupling, waterproofing sheet membranes and peel-and-stick membranes: Add about 7.10 to 7.57 L (7.5 to 8 U.S. qts.) of water.
2. Gradually add 22.7 kg (50 lbs.) of *LFT Pro 8870* powder while slowly mixing.
3. Mix thoroughly until the mixture becomes a smooth, homogeneous, lump-free paste. Avoid prolonged mixing.
4. Let the mixture stand ("slake") for 5 minutes.
5. Remix without adding more water or powder.
6. If the mixture becomes heavy or stiff, remix by hand or machine, but do not add more water.
7. Wash tools and hands with water, while the mortar is fresh.

Substrate Requirements

All surfaces must be structurally sound, level and clean of all substances that can impair the adhesive's bond to the substrate. These substances include, but are not limited to, concrete sealers and curing agents, existing adhesives, dirt, wax, tar, paint and loose toppings. If the surface contains these substances, they must be mechanically removed. The use of solvents, adhesive removers and acid etching is not recommended.

Approved Substrates Properly Prepared

(see "Substrate Requirements For Tile" document for preparation details):

- Fully cured concrete (at least 28 days old).
- Masonry cement block, brick, cement mortar beds, render coats and leveling coats.
- Cement backer units (CBUs) – see the manufacturer's installation guidelines
- Foam backer board

Application

Read all installation instructions thoroughly before installation.

1. Choose a notched trowel (see chart) with sufficient depth to achieve more than 80% contact of *LFT Pro 8870* to both the tile and substrate for all interior applications, and more than 95% for exterior or wet applications. It may be necessary to back-butter the tile in order to meet these requirements. (Refer to ANSI A108.5 specifications and TCNA or TTMAC guidelines.)
2. Apply a thin coat of *LFT Pro 8870* onto substrate with the trowel's flat side.
3. Apply a second coat and use trowel's notched side to comb *LFT Pro 8870*, combing it in a single direction parallel to the tile's shortest dimension for an even-setting bed.
4. Do not spread more mortar than can be covered with tile before the product skins over. Open time can vary with jobsite conditions.
5. Before *LFT Pro 8870* surface "skins over" on substrate, place tiles firmly into position. Push the tiles back and forth in a direction perpendicular to trowel lines, to collapse mortar ridges to ensure good contact with *LFT Pro 8870*. Remove any skinned-over *LFT Pro 8870* and replace with fresh material.
6. Follow immediately with thorough beat-in to flatten ridges or notches into a continuous bed. Allow at least 25% of tile thickness to be embedded into *LFT Pro 8870*.
7. Make alignments and adjustments within 20 minutes of beat-in procedure.
8. Clean tile surface with damp towel.
9. Do not disturb, grout or walk on tiles for at least 24 hours after installation.
10. Wash tools and hands with water while mortar is still fresh.

ANSI Specifications

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|--|------|
| ANSI A118.4H Mortar for large and heavy tile (Robinson Floor Test) | Pass |
| ANSI A118.4E Extended open time (at 30 minutes) | Pass |
| ANSI A118.4T Sag on vertical surfaces (at 20 minutes) | Pass |

ISO 13007 Classifications

| Classification Code | Classification Requirement | Test Characteristic |
|---|---|--------------------------------|
| C2 (cementitious, improved adhesive) | ≥ 1 MPa (145 psi) after standard aging, heat aging, water immersion and freeze/ thaw cycles | Using porcelain tile |
| T (vertical slip resistance) | ≤ 0.5 mm (0.019") | Using porcelain tile |
| E (extended open time) | ≥ 0.5 MPa (72.5 psi) after 30 minutes | Using glazed ceramic wall tile |

| | |
|-------------------|--|
| Packaging | Bag: 22.7 kg (50 lbs.) |
| Color | White, Gray |
| Shelf life | 12 months in original unopened packaging, when stored at 23°C (73°F) and 50% relative humidity |
| Cleanup | With clean water while fresh |
| Health and safety | Consult the SDS for safe-handling instructions. |

LFT PRO
8870

We proudly support the following industry organizations:



Expansion and Control Joints

1. Provide for expansion and control joints within the tile work where specified or where necessary. Refer to the TTMAC handbook.
2. Do not cover any expansion joints with *LFT Pro 8870*.
3. Cut tiles on both sides along the edges of expansion joints or control joints.
4. Protect tilework with metal strips along both edges of structural building expansion joints.
5. Install specified compressible bead and sealant in all expansion and control joints.

Grouting

Allow tiles to reach initial set (about 24 to 48 hours after installation) before walking on or grouting with appropriate grout. At cooler floor temperatures, a longer set time may be required before grouting.

Protection

1. Provide for dry, heated storage on site and deliver materials at least 24 hours before tilework begins.
2. Floors: Keep from general traffic for a minimum of 72 hours, and from heavy traffic for at least 7 days after installation. Plywood or stepping boards may be used after 24 hours when occasional stepping on the floor is unavoidable.
3. Walls: Protect from impact, vibration and heavy hammering on adjacent and opposite walls for at least 14 days after installation.
4. Protect the installation from rain for 72 hours, and from freezing for 21 days.

Important Notice

Before using, user shall determine the suitability of the product for its intended use, and user alone assumes all risks and liability whatsoever in connection therewith. Any claim shall be deemed waived unless made in writing to us within fifteen (15) days from date it was, or reasonably should have been, discovered.

LEGAL NOTICE

The contents of this Product Data Sheet ("PDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the PDS in effect at the time of the Chembond product installation. For the most up-to-date PDS and warranty information, visit our Website at www.chembond.com. ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS PDS SHALL VOID ALL RELATED CHEMBOND WARRANTIES.

Before using, the user must determine the suitability of our products for the intended use, and the user alone assumes all risks and liability. ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.

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