

FloorBond™ 8400

Dry-Set Floor Tile Mortar

Product Description

FloorBond 8400 is a single-component, Portland-cement mortar for installing low-absorption ceramic floor tile, quarry tile and pavers.

Feature

- An economical, dry-set mortar.
- No need to soak tiles before installation.

Uses



- For setting vitreous floor, quarry and paver tiles with a water-absorption factor of less than 6%.
- For interior residential concrete floors only when mixed with water.
- For increased performance, for exterior residential floor-tile installation and when setting nonvitreous floor tiles over concrete or cement backer units, mix *FloorBond 8400* with undiluted *Chemlastic™ 7400*.
- Exterior-grade plywood as described under the “Approved Substrates Properly Prepared” section is acceptable as a substrate only when used in a dry area for residential-duty floor or countertop installation. Do not apply over single-layer wood floors. (See “Substrate Requirements for Tile” document.)
- Use when the ambient and/or substrate temperature is between 10°C and 38°C (50°F and 100°F).
- Do not use over presswood, oriented strand board (OSB), particleboard, chipboard, Masonite, Luan, gypsum floor-patching or gypsum leveling compounds, metal or other dimensionally unstable materials.
- Do not use for projects subject to prolonged water immersion (e.g., pools, fountains, steam rooms).
- Do not use on walls or vertical surfaces.
- Do not use on exterior commercial-building facades (e.g., malls, office buildings, high-rise residential units)
- Do not use to set porcelain tile, marble or agglomerated marble.
- Do not use for setting moisture-sensitive natural stone (green marble, green granite or their agglomerates, or for Rosso Levanto or Negro Marquina marble).
- Maximum substrate deflection must not exceed L/360 under live and dead loads.

Substrate Requirements

All surfaces must be structurally sound, level and clean of all substances than can weaken the adhesive’s bond to the substrate. These include, but are not limited to, concrete sealers or curing agents, existing adhesive, dirt, wax, tar, paint and loose toppings. If the surface contains these substances, they must be mechanically removed.

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 ft ²)
6 x 10 x 6 mm (1/4" x 3/8" x 1/4")		5,11 to 6,04 m ² (55 to 65 ft ²)

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

Product Characteristics

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

Pot life	.....About 4 hours
Open time	.....15 to 30 minutes
Adjustability	.....30 to 45 minutes
Initial set (before grouting)	.....48 hours
Final set (before general traffic)	.....72 hours after installation

Shear strength per ANSI A118.1 test (at 7 days)

Impervious mosaics	.....1,34 MPa (195 psi)
Quarry tile	.....1,4 MPa (203 psi)

Shear strength per ANSI A118.1 test (at 28 days)

Impervious mosaics	.....1,44 MPa (209 psi)
Quarry tile	.....1,62 MPa (235 psi)

Shear strength per CSA 0121 plywood when mixed with undiluted *Chemlastic 7400*

7 days1,23 MPa (179 psi)
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pHAbout 12
PackagingBag: 22,7 kg (50 lbs.)
ColorsGray, white
Shelf life12 months when stored in original sealed container at room temperature in a dry, heated area. Protect from moisture, freezing and excessive heat.
Cleanup	.....With clean water while fresh
Health and safety	.....Consult the Material Safety Data Sheet (MSDS) for safe-handling instructions.

Meets or exceeds ANSI A118.1 requirements when mixed with water and ANSI A118.4 when mixed with *Chemlastic 7400*

We proudly support the following industry organization:



Approved Substrates Properly Prepared (see "Substrate Requirements for Tile" document for preparation details)

Floors only

1. Fully cured concrete (at least 28 days old; wood-floated or light broom-finished).
2. Cement backer units (only when mixed with undiluted *Chemlastic™ 7400*)
3. Cement mortars and cement leveling coats.

Residential floors and countertops in dry areas only (when mixed with *Chemlastic 7400*)

COFI-classified SELECT or (SEL-TF) exterior-grade plywood conforming to the CSA-0121 standard for Douglas fir.

See ANSI A-N-3.4.3 "Requirements for Carpentry" guidelines.

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

Mixing (for a 22,7-kg [50-lb.] bag)

1. Mix only as much *FloorBond™ 8400* as can be used in 4 hours.
2. Add 5,68 L (1-1/2 U.S. gals.) of cool, clean water (or 7,57 L [2 U.S. gals.] of *Chemlastic 7400*) to a clean mixing container.
3. Gradually add 22,7 kg (50 lbs.) of *FloorBond 8400* powder while slowly mixing (at 300 rpm or less).
4. Mix thoroughly to a homogenous and smooth consistency. (Avoid prolonged mixing, which will trap air and shorten pot life.)
5. Wait 10 to 15 minutes.
6. Remix without adding more powder or water.
7. Some stiffening may occur before all material is used (about 1-1/2 to 2 hours). If so, stir by hand or machine, but do not add any more water.
8. Wash hands and tools with water.

Application

1. Pick a notched trowel (see chart) with enough depth to achieve at least 80% contact of *FloorBond 8400* to the back of the tile or stone. For exterior applications, back-buttering each tile (with flat edge of trowel) may be needed to achieve 100% mortar contact and a void-free installation. Trowel selection depends on tile size, tile thickness and substrate condition.
Note: When required, back-butter while applying the mortar to the substrate (see ANSI 108.5 specifications).
2. Apply a thin coat of *FloorBond 8400* into substrate with trowel's flat side.
3. Apply second coat of *FloorBond 8400* and use trowel's notched side to comb *FloorBond 8400* in a single direction for an even-setting bed. (Troweling in a "swirl" pattern is not recommended.)
4. Spread only as much *FloorBond 8400* as can be covered with tile in 15 to 20 minutes (about 1,86 m² [20 ft.²]).

5. In hot or dry conditions, ensure that *FloorBond 8400* does not flash-set. Cooling a concrete substrate with water before installation may be beneficial, but remove all excess water before applying mortar. Any *FloorBond 8400* that has "skinned over" should be removed and replaced with fresh material.
6. Do not soak tiles before installation.
7. Place tile into the wet *FloorBond 8400* with a slight twisting motion to ensure good contact.
8. Follow immediately with thorough beat-in to flatten ridges and embed tiles at least 1/3 of their thickness into a continuous bed. Check pieces periodically to ensure sufficient mortar contact with the reverse side of tile.
9. Make alignments and adjustments no later than 30 to 45 minutes after beat-in.
10. Clean joints and tile face with damp towel before material hardens.
11. Wash hands and tools with water.

Expansion and Control Joints

1. Provide for expansion and control joints where specified.
2. Do not cover or bridge any expansion joints with *FloorBond 8400* or surfacing material.
3. Cut tiles on both sides along the edges of expansion joints.
4. Protect tilework with metal strips along both edges of structural building expansion joints.
5. Install the specified compressible bead and sealant in all expansion and control joints.

Grouting

1. Do not disturb, grout or walk over tiles for at least 48 hours after installation.
2. Grout joints with appropriate Chembond grout. At cooler floor temperatures, a longer curing 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. Protect tilework from adverse weather, freezing, and continuous-water conditions or immersion during installation and for at least 21 days after completion of the tilework.
3. Floors: Protect from light traffic for at least 48 hours and from general traffic for at least 72 hours after installation. Stepping boards may be used after 24 hours when occasional stepping on the floor is unavoidable.
4. Because temperature and humidity (during and after installation of tile) affect the curing time of cement-based materials, allow extra time for curing and protection when job-site temperatures drop below 16°C (60°F) and/or when relative humidity is higher than 70%.

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.

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