

LIGHTWEIGHT ROOF TILE MORTAR FL-15

PRODUCT No. 1140-60

PRODUCT DESCRIPTION

QUIKRETE® Lightweight Roof Tile Mortar FL-15 is a lightweight mortar containing a blend of masonry cement, lightweight filler, graded sand, and other approved ingredients designed to be used in attachment systems for roof tiles.

PRODUCT USE

QUIKRETE® Lightweight Roof Tile Mortar FL-15 is designed for installing flat, low, and high-profile clay and concrete tile on roofs over granular roofing paper or other approved underlayment materials. It is approved by Miami-Dade County (NOA No. 23-1221.04) for use in the HVHZ (High Velocity Hurricane Zone). It provides excellent adhesion for these tiles and is prepackaged in the proper proportions. Just add water and use.

SIZES

QUIKRETE® Lightweight Roof Tile Mortar FL-15 is available in:

- 40 lb (18.1 kg) bags

YIELD

Each 40 lb (18.1 kg) bag of QUIKRETE® Lightweight Roof Tile Mortar FL-15 will yield approximately 0.6 ft³ (17 L) of mixed mortar. For a typical installation, expect to use about 7 to 9 bags of QUIKRETE® Lightweight Roof Tile Mortar FL-15 per 100 ft² (9.3 m²) of roof, depending upon the profile (flat / low, or high).

TECHNICAL DATA

APPLICABLE STANDARDS

- ASTM C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50-mm] Cube Specimens)
- ASTM C138 Standard Test Method for Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
- Florida Building Code TAS 123 Standard Requirements for Mortar Used in Mortar Set Tile Systems
- Florida Building Code TAS 101 Test Procedure for Static Uplift Resistance of Mortar or Adhesive Set Tile Systems
- ACI 305R Guide to Hot Weather Concreting
- ACI 306R Guide to Cold Weather Concreting

PHYSICAL/CHEMICAL

QUIKRETE® Lightweight Roof Tile Mortar FL-15 meets or exceeds the requirements defined under Florida Building Code TAS 123 for a lightweight mortar. A properly handled mix will achieve the typical properties shown in Table 1 when tested in accordance with the appropriate ASTM standards. It is approved by Miami-Dade County (NOA No. 23-1221.04) for use in the HVHZ.

MIAMI-DADE COUNTY
APPROVED

DIVISION 7

07 32 05 Roof Tile Fasteners



TABLE 1 TYPICAL PHYSICAL PROPERTIES

| | | |
|--|--|---|
| Unit Weight, ASTM C138 | | 80-90 lb/ft ³ (1281-1441 kg/m ³) |
| Compressive Strength, ASTM C109 | | |
| Age | | PSI (MPa) |
| 28 days | | ≥750 (5.1) |

INSTALLATION

SURFACE PREPARATION

Cover roof with granular roofing paper in accordance local building code requirements.

MIXING

QUIKRETE® Lightweight Roof Tile Mortar FL-15 can be hand-mixed or can be machine mixed in a paddle-type mortar mixer. Mix only as much material as can be applied in one hour. Under standard conditions, the product will stiffen in about 90 minutes. Use approximately 6 quarts (5.7 L) of potable water per 40 lb (18.1 kg) bag. Place the water in the mixing container then slowly add the QUIKRETE® Lightweight Roof Tile Mortar FL-15. Mix until a firm, workable consistency is achieved. The ideal mortar consistency has been achieved when a 1/2 inch (13 mm) thickness of mortar will not fall off your trowel when held in a near vertical position. If more water is needed, add small amounts at a time and continue to mix until the desired consistency is achieved. Maximum water content is expected to be below 6-1/2 quarts (6.1 L) of water for each 40 lb (18.1 kg) bag. Excessive addition of water will reduce performance of the product. Do not add any additional materials such as portland cement, lime, sand, or admixtures.

APPLICATION

Application

Presoak the tile until saturated with water. Apply mortar to the roof in accordance with local building code requirements for the installation of concrete or clay roof tile. Refer to Florida Building Code RAS (Roofing Application Standard) 120 - *Mortar and Adhesive Set Tile Application* and/or FRSA (Florida Roofing and Sheet Metal Contractors Association, Inc.) *Concrete and Clay Roof Tile Installation Manual for specific application instructions*.

CURING

Provide sufficient moisture by moist or fog curing to permit continuous hydration of cementitious materials. The most effective procedure for curing and time between coats will depend on climatic and job conditions. QUIKRETE® Roof Tile Mortar FL-15 may be water cured with a fine mist once it has achieved final set. During hot and dry conditions, additional precautions may be necessary, including more frequent spraying or the erection of barriers to deflect sunlight and wind. Do not apply when weather is forecast to be above 100 °F (38 °C) or below 40 °F (4 °C) within 24 hours without adopting the recommended hot or cold weather precautions.

PRECAUTIONS

- Mix no more than can be used in 1 hour.
- For best results, do not overwork the material. Retempering the material should be kept to a minimum during the 1 hour.
- During hot weather, work during cool times of the day, and use cold water to slow down the setting time. Keep tile saturated prior to application. Do not apply when temperatures are above 100 °F (38 °C) without adopting the recommended hot weather precautions. Additional recommendations can be found in ACI 305R.
- In cool weather, use warm water to speed the setting time. Do not apply when temperatures are expected to fall below 40 °F (4 °C) within 24 hours without adopting the recommended cold weather precautions. Protect from rain, snow and freezing for 48 hours after application. Additional recommendations can be found in ACI 306R.
- All portland cement-based products can produce efflorescence. This is a natural outcome for any portland cement-based material. All portland cement-based products contain some salt, which will dissolve and migrate to the surface. When the water evaporates, it leaves behind the salt as efflorescence. This is most common shortly after initial placement of the product and results in a white haze on the surface of the cement-based material. This white haze is not detrimental to the performance of the product and may be removed through mechanical means such as power washing.

SAFETY

IMPORTANT: Read Safety Data Sheet carefully before using. **WEAR IMPERVIOUS GLOVES**, such as nitrile, mask, and eye protection.

DANGER: Causes severe skin burns and serious eye damage. Prolonged or repeated inhalation of dust may cause lung damage or cancer.

Keep out of reach of children

WARRANTY

NOTICE: Obtain the applicable **LIMITED WARRANTY** at www.quikrete.com/product-warranty or send a written request to The Quikrete Companies, LLC, Five Concourse Parkway, Atlanta, GA 30328, USA. Manufactured by or under the authority of The Quikrete Companies, LLC. © 2024 Quikrete International, Inc.