



ROOF TILE MORTAR FL-15

PRODUCT NO. 1140-80, -83

PRODUCT DESCRIPTION

QUIKRETE® Roof Tile Mortar FL-15 is a preblended mortar designed to be a primary or secondary attachment system for roof tiles.

PRODUCT USE

QUIKRETE® 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 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. QUIKRETE® Roof Tile Mortar FL-15 is available in gray (1140-80) or white (1140-83).

SIZES

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

- 80 lb (36.2 kg) bags

YIELD

- Each 80 lb (36.2 kg) bag of QUIKRETE® Roof Tile Mortar FL-15 will yield approximately 0.75 ft³ (21 L) of mixed mortar. For a typical installation, expect to use about 5 bags of QUIKRETE® Roof Tile Mortar FL-15 per 100 ft² (9.3 m²) of roof.

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 C270 Standard Specification for Mortar for Unit Masonry
- ASTM C1506 Standard Test Method for Water Retention of Hydraulic Cement-Based Mortars and Plasters
- 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 PROPERTIES

QUIKRETE® Roof Tile Mortar FL-15 complies with the physical property requirements for Type M masonry mortar as defined in ASTM C270. It meets or exceeds the characteristic resistance load requirements of Florida Building Code TAS 123. A properly handled mix will achieve the typical properties shown in Table 1 when tested in accordance with the appropriate ASTM standards.

INSTALLATION

SURFACE PREPARATION

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

DIVISION 7

07 32 05 Roof Tile Fasteners



MIXING

QUIKRETE® 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 5 quarts (4.7 L) of potable water per 80 lb (36.2 kg) bag. Place the water in the mixing container then slowly add the QUIKRETE® 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. Do not exceed a total volume of 6 quarts (5.7 L) of water for each 80 lb (36.2 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.

TABLE 1 TYPICAL PHYSICAL PROPERTIES

Unit Weight			128 lb/ft ³ (2050 kg/m ³)
Compressive Strength, ASTM C109			
Age	Specification PSI (MPa)	Typical Value PSI (MPa)	
7 days	-	2500 (17.2)	
28 days	2500 (17.2)	3500 (24.1)	
Water Retention, ASTM C1506			
	Specification > 75%	Typical Value ≥ 85%	
Static Uplift Resistance, TAS 101			
	Specification lbf (kgf)	Typical Value lbf (kgf)	
Concrete High Profile	30 (13.6)	32 (14.5)	
Concrete Low Profile	26 (11.7)	39 (17.6)	
Clay High Profile	30 (13.6)	119 (53.9)	

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.

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. © 2021 Quikrete International, Inc.