

# 41

## MORTAR ADDITIVE

### BASIC USES

Flextile 41 Mortar Additive is designed to be added to Portland cement and silica sand, resulting in a thin-set mortar for installation of porcelain tile, marble, slate, quarry tile, pavers, ceramic mosaics and all types of absorptive or non-absorptive ceramic tiles on properly prepared interior or exterior surfaces of concrete, masonry, terrazzo, concrete backer units, or existing surfaces of well-bonded ceramic or marble tile

### LIMITATIONS

Do not use mortars mixed with 41 Mortar Additive over particleboard, Masonite, chipboard, OSB or similar unstable materials. Do not use over resilient flooring, rubber, plastic, paint, or asphalt. Use only on surfaces, which are maintained at a temperature above 10°C (50°F) and below 35°C (100°F) during application and for at least 72 hours after application. On exterior applications, protect from rain until thoroughly dried and protect from freezing for at least 14 days after installation.

### COMPOSITION AND MATERIALS

An SBR latex compounded with water retentive agents for use as an admixture with Portland cement and clean, dry silica sand in preparation of thin-set mortars.

### FEATURES

- Highly water and weather resistant
- Rated as suitable for extra heavy service by ASTM C627-70 on concrete substrates

### TECHNICAL DATA

Mortars mixed with 41 Mortar Additive meet or exceed ANSI A118.4 requirements

#### TYPICAL PHYSICAL PROPERTIES

Appearance	High viscosity, white liquid
Shelf Life	1 year stored in unopened container room temperature
Cleanability	With water while fresh

#### PROPERTIES OF MORTARS PREPARED WITH FLEXITILE 41

Pot Life	1-2 hours
Open Time	20-30 minutes
Initial Cure	24-48 hours
Final Cure	28 days

#### SHEAR STRENGTH ( ANSI A118.4 )

Non-Vitreous Tile	2.9 MPa (420 psi)
Vitreous Tile	2.3 MPa (340 psi)
Porcelain Tile	2.0 MPa (290 psi)
Compressive Strength	21.4 MPa (3100 psi)

## **INSTALLATION**

### *PREPARATORY WORK*

Surfaces must be sound, even, dry and free of grease, oil, dirt, paint, curing compounds or sealers, or other foreign matter.

Surfaces must be true to a tolerance of  $\pm 3$  mm (1/8") in 2.4 meters (8 ft.) for walls and 3mm (1/8") in 3 meters (10 ft.) for floors. Concrete surfaces should have a wood float or steel trowel with broom finish. Roughen smooth concrete surfaces. Refer to current editions of TTMAC 09300 Tile Installation Manual, or TCA Handbook For Ceramic Tile Installation for information regarding placement of expansion or control joints, or for further substrate acceptability information.

### *APPLICATION*

Pre-blend Portland cement and 60 mesh silica sand and add to Flextile 41 Mortar Additive. Use following mix proportions:

50 kg (110 lbs) - Portland cement

50 kg (110 lbs) - dry 60 mesh silica sand

20 L (5.3 U.S. gal) - 41 Mortar Additive

Mix Portland cement/silica sand blend into Flextile 41 Mortar Additive. Avoid use of high-speed mechanical mixers, which can entrap air into mixture, resulting in lower performance. Allow mixed material to slake for 10 minutes, then re-stir without adding further liquid.

Spread a thin layer of mortar with the straight edge of the trowel to wet out the substrate; then re-apply sufficient material to be distributed with a suitable notched trowel that will leave enough mortar to give at least 95% contact with the back of the tile. Back buttering of tile is recommended for all exterior installations, for large-sized tiles, for high-lugged or grooved tiles, or for ungauged slate, etc. Comb that area which can be covered with tile before skinning of mortar occurs. Mortar should be troweled with notches running in straight lines, so as to achieve maximum coverage. Press or beat in tile to achieve a finished thickness of mortar of at least 3 mm (1/8"). Do not adjust tile after they have been set for more than 25 minutes.

## **CURING AND GROUTING**

Protect from all traffic and delay grouting until cured at least 24 hours and preferably 48 hours. On exterior or cold weather applications, extended curing is recommended to ensure that mortar is sufficiently cured prior to grouting. Grout using Flextile Polymer Modified Grout or Flex-Epoxy 100 - 100% Solids Epoxy Grout.

## **SAFETY**

Refer to Flextile Material Safety Data Sheet for health and safety information.

## **AVAILABILITY AND COSTS**

Flextile 41 Mortar Additive is available from Flextile Ltd. and its distributors in 20 L (5.3 U.S. Gallon) and 200 L (53 U.S. Gallon) sizes.

Cost: Data supplied upon request.

## **WARRANTY**

Flextile warrants that this product is of merchantable quality and is suitable for the purpose for which it is intended. Flextile's liability under this warranty shall be limited to replacement of its product found to be defective or, at its option, a refund of the purchase price.

## **MAINTENANCE**

No maintenance is required except where damages result from unforeseen circumstances. Repair procedures shall be directed by Flextile or its distributors.

## **TECHNICAL SERVICES**

Flextile maintains a well-equipped laboratory able to test its products in conjunction with the products with which they are used. Technical assistance for use of Flextile products is available upon request.

## **RELATED REFERENCES**

Current editions of: Ceramic Tile Installation Manual (09300) from the TTMAC & TCA Ceramic Tile Installation Handbook.

**FLEXITILE PRODUCTS COMPLY WITH THE BUY AMERICA PROGRAM AS OUTLINED BY THE UNITED STATES GOVERNMENT, INCLUDING WHEN FEDERAL FUNDS ARE USED.**