

## SECTION

09300

### THIN-SET MORTAR

#### Part 1 GENERAL

##### 1.01 DESCRIPTION OF WORK

- A. Work under this section consist of furnishing everything necessary for and incidental to the execution and completion of all Thin-Set mortar and protection course work, as indicated on the drawings and specified herein.
- B. Related work:
  - 1. Tile
  - 2. Stone
  - 3. Mortar Bed
  - 4. Thin-Set Mortar
  - 5. Grout
  - 6. Waterproof / Anti-Fracture Membrane
  - 7.

##### 1.02 QUALITY ASSURANCE

- A. All work performed under this specification shall meet the current standard of care for the items as specified and in conjunction with manufacturers specification and current Tile Council of America guidelines.
- B. Manufacturer of Thin-Set Mortar shall have been regularly engaged in the manufacture of Latex Mortars for the past ten years and submit a list of at least five projects of equal complexity and scope. Installations submitted shall have been in place for the past five years with no sign of failure. Mortar shall meet ANSI A-118.4 requirements.
- C. Acceptable Manufacturers: Mer-Krete Systems, Mer-Krete Systems 501 Van Ness Ave. Torrance California USA 90501. 800/ 851-6303. Fax.310 320-9438 or 757/499-0958 Virginia Beach, Virginia.

- D. Use only materials from a single manufacturer to ensure compatibility or as approved in writing by the membrane manufacturer.
  
- E. Qualification of installers:
  - 1. Use only pre-qualified and approved subcontractors employing skilled and experienced workers.
  
  - 2. Helpers and apprentices used for such work shall be under full and constant supervision at all times by thoroughly skilled installers.
  
  - 3. In the acceptance or rejection of installed work, no allowance will be made for the lack of skill on the part of the installer.

### 1.03 SUBMITTALS

Submit catalog data which includes specification and installation details. Installation instructions and recommendation of manufacturer shall be specified for this application.

### 1.04 PRODUCT DELIVERY, STORAGE AND HANDLING:

- A. Deliver materials to the project site in manufacturer's unopened, undamaged, original packaging.
  
- B. Store materials on site in enclosures or under protective covering that assure materials are kept clean and dry.
  
- C. Store material off ground.

### 1.05 JOB CONDITIONS:

- A. Environmental Conditions: Work shall be performed within range of temperatures, and in climatic conditions recommended by the manufacturer.

## Part 2 PRODUCTS

### 2.01 MATERIALS:

- A. Thin-Set Mortar shall be Mer-Krete 700, 710 720 or 750 as manufactured by Mer-Krete Systems, Torrance California
- B. 800. 851.6303. 310.320.1880
- B. The composition when properly blended and cured should exhibit the following physical characteristics and properties:
  - 1. Compressive Strength : 4,000 psi.
  - 2. Bond Strength : 330 psi.
  - 3. Flammability None.
  - 4. Water Absorption 3% Maximum.
  - 5. Freeze Thaw Cycle 250 cycles No Change.
  - 6. Exceed ANSIA-118.1 or A-118.4
  - 7. Rated Extra Heavy Duty
  - 8. Tensile 450 psi
- C. Joint Backing: Closed cell polyethylene.
- D. Sealant: Single or two component urethane per TCA requirements.
- E. When required all waterproof / anti-fracture membranes shall be as manufactured by Mer-Krete Systems to ensure compatibility. There shall be no substitutions to this requirement.
- F. Tile / Brick / Stone Shall be as manufacturer by \_\_\_\_\_;

### PART 3 EXECUTION:

#### 3.01 VERIFYING SURFACE CONDITIONS

- A. Inspection:
  - 1. Prior to commencement of work, carefully inspect the installed work of other trades and verify that all such work is

complete to the point where this installation may properly commence.

2. Verify that this work may be installed in accordance with all pertinent codes and regulations, the original design, and the referenced standards.

B. Mortar Bed:

1. Mortar bed shall be formed from Mer-Krete Underlay -L or M System in accordance to manufacturers specifications. Install Underlay-L or M material over lath as per drawings and TCA method for the indicated material. Minimum thickness shall be 1 1/4" wire reinforced bed. Verify slope with general contractor prior to installation. Install Expansion joints as per the most current TCA manual and as per method EJ171 and as indicated on the drawings

2. Vertical application of mortar bed as per TCA method W201 With Mer-Krete 150 Latex as additive to the bedding material. Lath as per local codes. Use Mer-Krete Latex 200 with Filler 211 as bonding coat.

C. Grout:

1. Grout color as selected by the architect gauged with Mer-Krete 150 Acrylic / Latex as per manufacturers specifications.

D. Discrepancies:

1. In the event of discrepancy, immediately notify the architect, General Contractor or his agent.

2. Do not proceed with installation in areas of discrepancy until all such discrepancies have been fully resolved.

### 3.02 INSTALLATION

A. Installation of all Tile / Stone / Thin-Brick shall be as per TCA Section A-108.1A, 1B, or 1C as necessary for the proper installation of tile units.

B. Mixing: shall be with a rotating blade type (plaster) mortar mixer. Pour in proper amounts of Mer-Krete Latex 200 and Filler 211 powder. Thoroughly mix material into a creamy consistency. **DO NOT OVER MIX or mix at high speeds.**

1. Install tile / stone units using a notch trowel as recommended by the tile manufacturer.

3. For thin-set application, adhesive shall be Mer-Krete 700, 710, 720 or 750 as indicated on the drawings and as manufactured by Mer-Krete Systems meeting ANSI A-118.1 or A-118.4 Standards. All grout, mortar mixes and fillers shall be approved in writing by the manufacturer or as outlined in manufacturers specifications.

### 3.03 PROTECTION:

A. The prime contractor shall adequately protect the installation against damage or misuse by other trades until final acceptance of the building.

### 3.05 WARRANTY:

A. Warrantee material and workmanship to the owner guaranteeing performance of the system per manufacturers specifications and that all work has been performed in accordance with applicable industry standards. Warranty shall be -5- years material and labor.

## **END OF SECTION**

**Note\*\***The use of Mer-Krete 700, 710, 720 or 750 shall be indicated on the drawings as to the type and location of each tile / stone and corresponding thin-set.