



# SET DELAYED MASONRY MORTAR

U. S. A.

1-888-SPECMIX

DIVISION  
MASONRY PRODUCTS **04**



## Longer Board life. Great Workability.

SPEC MIX® Set Delayed Masonry Mortar is a dry preblended set-delayed mortar mix containing either Portland cement and hydrated lime or masonry cement or mortar cement, dried masonry sand and set delaying admixtures formulated for longer board life, superior bond, and water retention. This product meets ASTM C 270 and ASTM C 1384 requirements. In addition to custom mix designs that are available for specific applications or properties, standard Set Delayed Masonry Mortar is

### MATERIALS USED

PORTLAND CEMENT  
MASONRY CEMENT  
MORTAR CEMENT  
HYDRATED LIME  
SAND  
SET DELAYING ADMIXTURES

designed to be compatible with the characteristics of the specified masonry unit. It may be used above or below grade when manufactured to the appropriate specification. It is acceptable for all types of masonry construction with submittals available upon request.

Set Delayed Masonry Mortar is produced under strict manufacturing standards, and complete quality control measures are implemented with each batch. A digital printout displaying the proper proportions per batch may be kept as a permanent record. Each SPEC MIX® manufacturer certifies that SPEC MIX® masonry products are designed to meet the project specifications and applicable ASTM and ACI standards.



TOTAL QUALITY CONTROL WITH EVERY BAG  
MAXIMUM BOARD LIFE IN HOT WEATHER  
LESS RETEMPERING AND WASTED MORTAR  
PREBLENDED WITH ADMIXTURES AND SAND  
ASTM C 270 LABORATORY TESTED MIX DESIGNS  
ASTM C1384 COMPLIANCE  
MINIMIZES LABOR COST  
CONSISTENCY BATCH TO BATCH  
NO SAND PILES OR WASTED MATERIALS LEFT ON SITE

## INSTALLATION/APPLICATION

Mortar type should correlate with the particular masonry unit to be used. The specifier should evaluate the interaction of the mortar type and masonry unit specified. That is, masonry units having a high initial rate of absorption will have greater compatibility with mortar that has a high-water retentivity. The material properties of mortar that influence the structural performance of masonry are compressive strength, bond strength and elasticity. Because the compressive strength of masonry mortar is less important than bond strength, workability and water retentivity, the latter properties should be given principal consideration in mortar selection. Select mortar based on the design requirements and with consideration of code and specification provisions affected by the mortar.

A sample of the proposed product will be provided by the manufacturer for architectural approval and testing, if required. Preparation of a sample panel with all materials and systems employed in the final project is imperative. Retain the mock-up or field sample through the completion of the project.

## MIXING INSTRUCTIONS

When mixing, a mechanical batch mixer best ensures homogeneity, workability and good board life. Use clean, potable water and add the maximum amount consistent with optimum workability. Mixing time is five minutes and should be consistent from batch to batch. Tool mortar joints when the surface is thumb-print hard. Keep tooling time consistent. Do not tool joints too early or too late as the color will not remain consistent with the mock-up panel. Hand mixing mortar should be permitted only with written approval by the specifier who should outline hand-mixing procedures. Mortar should be cured a minimum of 28 days. Clean masonry only with a national proprietary cleaning agent or potable water.

Mortar shall be used and placed in final position within two-and-one-half hours after initial mixing or discarded at that time. Retemper mortar only when mixing water is lost due to evaporation. Do not retemper colored mortar. SPEC MIX products are custom packaged to the specification. They must be kept dry, covered and protected from weather and other damage.

## SIZES AND EQUIPMENT

SPEC MIX Set Delayed Masonry Mortar is available in 80 lb. (36 kg.) or 94 lb. (42 kg.)

## APPLICABLE STANDARDS: ASTM and ACI

**ASTM C 91** Standard Specification for Masonry Cement. **ASTM C 144** Standard Specification for Aggregate for Masonry Mortar. **ASTM C 150** Standard Specification for Portland Cement. **ASTM C 207** Standard Specification for Hydrated Lime for Masonry Purposes. **ASTM C 270** Standard Specification for Mortar for Unit Masonry. **ASTM C 476** Standard Specification for Grout for Masonry. **ASTM C 595** Standard Specification for Blended Hydraulic Cements. **ASTM C 780** Standard Test Method for Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry. **ASTM C 979** Standard Specification for Pigments for Integrally Colored Concrete. **ASTM C 1329** Standard Specification for Mortar Cement. **ASTM C 1384** Standard Specification for Admixtures for Masonry Mortars. **ACI 530.1** Masonry Structures. **IMIAC** Hot and Cold Weather Construction Guide

## MORTAR PROPERTIES

Compressive Strength	Reference Mortar	Set Delay Mortar	ASTM 1384 Requirement
7 Day	1560 psi	1640 psi	70% min of reference
28 Day	1900 psi	1940 psi	80% min of reference

	Reference Mortar	Set Delay Mortar	ASTM 1384 Requirement
Water Retention	86%	86%	Report
Air Content	7.2%	6.4%	Report
Board Life	82min	104min	120% min of reference
Initial Set	4h 13 min	5h 19 min	At least 1:00h later than ref. Not more than 8:00h later than ref.
Final Set	7h 26 min	8h 9 min	Not more than 8:00h later than ref.

packages for easy hand loading or in 3000 lb. (1362 kg.) reusable bulk bags to be used with the various patented SPEC MIX® silo systems. When using the silo system, once the bulk bags of mortar are delivered to the project site, the portable silo is loaded with a jobsite forklift and the product is dispensed into a mechanical batch mixer. (See silo operations manual.)

## WARRANTY

Seller warrants that its Product will conform to and perform in accordance with the product specifications. The foregoing warranty is in lieu of all other warranties, express or implied, including, but not limited to, those concerning merchantability and fitness for a particular purpose. Because of the difficulty in ascertaining and measuring damages hereunder, it is agreed that, except for claims for bodily injury, Seller's liability to the Buyer shall not exceed the total amount billed and billable to the Buyer for the product hereunder.

## LIMITATIONS

SPEC MIX Set Delayed Mortar should be installed in accordance with the provisions of the local building code and applicable to ASTM standards. Good workmanship coupled with proper detailing and design assures durable, functional, watertight construction.

SPEC MIX Set Delayed Masonry Mortar is designed to be used for hot weather construction. When temperatures reach or are

expected to rise above 90° F, proper measures are still required to prevent mortar from drying out too quickly as outlined by the IMIAC Hot and Cold Weather Construction Guide. Set Delayed Masonry Mortar is designed to extend set times in hot weather, but can not keep masonry mortar from drying out too quickly before proper cure.

## PRECAUTIONS

Safety glasses and a dust mask are recommended when handling any mortar mixture containing silica. The cementitious materials mixed onsite are alkaline in nature and on contact with water will irritate the eyes and skin. If contact with eyes occurs, flood eyes repeatedly with clean water and see a physician immediately. Do not rub eyes. Wash hands thoroughly after handling or before eating. Do not take internally. Keep out of reach of children.

## TECHNICAL SUPPORT

- CONTACT YOUR LOCAL SPEC MIX® MANUFACTURER
  - VISIT [WWW.SPECMIX.COM](http://WWW.SPECMIX.COM)
  - CONTACT SPEC MIX®, INC.
- PHONE: 888-SPEC-MIX FAX: 888-FAX-SPEC