



UNDERGROUND UTILITY MORTAR

1-888-SPECMIX

DIVISION
MASONRY PRODUCTS **04**

High Bond Strength/Freeze-Thaw Resistance

SPEC MIX® Underground Utility Mortar is a dry preblended mortar mix containing Portland cement and hydrated lime, masonry cement or mortar cement and dried masonry sand formulated for superior bond and outstanding freeze-thaw resistance in all underground pre-cast concrete structure applications. Meets ASTM C 270 requirements. In addition to custom mix designs that are available for specific applications or properties, the standard underground utility mortar is designed to be compatible with the characteristics of the

MATERIALS USED

PORTLAND CEMENT
MASONRY CEMENT
MORTAR CEMENT
HYDRATED LIME
SAND

specified pre-cast concrete structure, or brick used in manhole and catch basin construction. SPEC MIX Underground Utility Mortar is acceptable for the jointing of all types of underground pre-cast concrete utility construction and laying concrete brick in manholes and catch basins with submittals available upon request. It may be used above or below grade when manufactured to the appropriate specification. Underground Utility 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® utility products are designed to meet the project specifications and applicable ASTM standards.



OPTIMAL BOND WITH PRECAST CONCRETE STRUCTURES
EXCELLENT FREEZE-THAW RESISTANCE FOR BELOW
GRADE APPLICATIONS

TOTAL QUALITY CONTROL WITH EVERY BAG
PREBLENDED WITH SAND ALREADY ADDED
ASTM C 270 LABORATORY TESTED MIX DESIGNS
MINIMIZES LABOR COST
CONSISTENCY BATCH TO BATCH
NO SAND PILES OR WASTED MATERIALS LEFT ON SITE

INSTALLATION/APPLICATION

For concrete pipe connection, ensure that concrete pipe joints are thoroughly cleaned and dry prior to application of SPEC MIX Underground Utility Mortar. Pack the mortar into the annular space on the concrete pipe and finish smooth and flush inside while leaving a smooth mortar layer over the exterior connection. Lay concrete brick in manholes or catch basins following standard masonry practices. Underground Utility Mortar can be used as a parge coat over the brick in the manhole or catch basin. Mortar shall be used and placed in final position within one-and-one-half hours after initial mixing or discarded at that time. Do not retemper underground utility mortar. SPEC MIX products are custom packaged to the specification. They must be kept dry, covered and protected from weather and other damage.

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. 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.

SIZES AND EQUIPMENT

SPEC MIX Underground Utility Mortar is available in 80 lb. (36 kg.) or 94 lb. (42 kg.) 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

APPLICABLE STANDARDS: ASTM

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 C387** Standard Specification for Packaged, Dry, Combined Materials for Mortar and Concrete. **ASTM C 595** Standard Specification for Blended Hydraulic Cements. **ASTM C 1329** Standard Specification for Mortar Cement. **ASTM C 1384** Standard Specification for Admixtures for Masonry Mortars.

MORTAR PROPERTIES

	ASTM C387	ASTM C270
Compressive Strength - 28 Days	3780 psi	5050 psi
Water Demand, lb/90 lb bag	19.7 lbs	19.9 lbs
Water Demand, gallons/80 bag	1.3 gal	1.3 gal
Flow%	113	109
Air Content	9.0%	9.0%
Yield, ft ³ /94 lb bag	.70	.70

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 Underground Utility 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.

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
- CONTACT SPEC MIX®, INC.
- PHONE: 888-SPEC-MIX FAX: 888-FAX-SPEC