

UNDERGROUND UTILITY MORTAR

Mortar for underground precast structure applications

1. PRODUCT NAME

Spec Mix[®] Underground Utility Mortar

2. MANUFACTURER

TCC Materials 2025 Centre Pointe Blvd., Suite 300 Mendota Heights, MN 55120 USA Phone: 1.651.688.9116 Web: tccmaterials.com

3. PRODUCT DESCRIPTION

Spec Mix[®] Underground Utility Mortar is a dry, preblended, air-entrained mortar mix containing Portland cement, hydrated lime, special additives and dried masonry sand formulated for superior bond and outstanding freeze-thaw resistance in all underground precast concrete structure applications.

Features & Benefits

- Optimal bond with pre-cast concrete
- Excellent freeze-thaw resistance
- · Below or above grade
- Air-entrained, preblended mixture

When/Where to Use

Underground Utility Mortar is designed to be compatible with the characteristics of the specified pre-cast concrete structure or brick used in man-hole and catch basin construction. Underground Utility Mortar is acceptable for the jointing of all types of underground precast concrete utility construction and laying concrete brick in manholes and catch basins. It may be used above or below grade when manufactured to the appropriate specification. Check local codes to determine which formulation to use.

4. TECHNICAL DATA

Available Size

80 lb. (36kg) bags:

- BOM 106516 (MN DOT Version)
- BOM 103725 (WI DOT Stone and Pointing Mortar)
- BOM 105223 (WI DOT Catch Basin/Manhole Mortar)

3000 lb. bags - contact TCC Materials for BOM numbers

Coverage

One 80 lb. (36.3 kg) bag will yield approximately 0.7 cubic feet of wet Underground Utility Mortar

Applicable Standards

- ASTM C270
- ASTM C387
- ASTM C1714
- CSA A179
- MNDOT 2506.2B BOM 106516)
- WI DOT 518.2.3 (BOM 103725)
- WI DOT 519.2.3 (BOM 105223)

5. INSTALLATION Preparation and Application

Read all directions before starting work. Follow all industry standard safety procedures when working with construction and landscape products. Reduce creating dust by keeping the product damp. Concrete surfaces should be clean, sound, and free from any materials that may inhibit bond such as oil, asphalt, curing compounds, acids, dirt and loose debris.

MORTAR PROPORTIONS	BOM #103725	BOM #105223
Type 1 Portland Cement	0.5 parts	0.75 parts
Hydrated Lime	0.5 parts	0.25 parts
Dried Fine Mason Sand	3.0 parts	3.0 parts

MORTAR PROPERTIES (BOM 106516)	ASTM C387	ASTM C270
Compressive Strength (28 days)	3780 psi	5050 psi
Water Demand, lb./ 80 lb. bag	10.7 lbs.	10.8 lbs.
Water Demand, gal./ 80 lb. bag	1.3 gal.	1.3 gal.
Flow %	113	109
Air Content %	9.0%	8.0%
Yield, ft ³ /80 lb. bag	0.76	0.70

Note: It is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use.

Mixing & Application

When mixing, a mechanical batch mixer best ensures homogeneity, workability and good board life. Place the desired number of bags of Underground Utility Mortar into the mixer. Use full bags only. Do not exceed mixer capacity. Use clean, potable water and add approximately 1-11/4 gallons per bag for optimal workability. Mix batch for approximately 5 minutes. For concrete pipe connection, ensure that concrete pipe joints are thoroughly cleaned and dry prior to application of 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 1¹/₂ hours after initial mixing or discarded at that time. Do not retemper Underground Utility Mortar.

Limitations

SPEC MIX Underground Utility Mortar should be installed in accordance with the provisions of the governing building code as well as applicable ASTM, TMS, and CSA standards. Good workmanship coupled with proper detailing and design assures durable, functional, watertight construction. Follow proper cold weather and hot weather masonry procedures at temperatures below 40°F (4°C) or above 100°F (38°C) respectively.

Clean Up

Use soapy water to clean hands and tools immediately after use.

Safety

READ THE SAFETY DATA SHEET (SDS) BEFORE USING THIS PRODUCT. SDS information is available on our website: tccmaterials.com

Warning

This product contains Portland cement. Contact with cement, freshly mixed concrete, or mortar can cause severe burns. The cementitious materials mixed onsite are alkaline in nature and on contact with water may 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. This product may contain silica. Inhaled silica dust may cause respiratory or other health problems.

6. AVAILABILITY

To locate TCC Materials' products in your area, please contact: Phone: 1.651.688.9116 Website: tccmaterials.com

7. 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, expressed 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 Seller's liability to the Buyer shall not exceed the total amount billed and billable to the Buyer for the product hereunder.

WARNING: INJURIOUS TO EYES

KEEP PLASTIC BAG OUT OF REACH OF CHILDREN



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