

**DIVISION** MORTAR

# UNDERGROUND UTILITY MORTAR



# **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, ASTM C 1714, and CSA A179 requirements. In addition to custom mix designs that are available for specific applications or properties, SPEC MIX Underground Utility Mortar is designed to be compatible with the characteristics of the specified pre-cast concrete structure or brick used in manhole and catch basin construction. SPEC MIX Underground Utility Mortar is acceptable for use above or below grade, for the jointing of all types of underground pre-cast concrete utility construction, and laying concrete brick in manholes and catch basins.

SPEC MIX 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. Submittals are available upon request for certification to applicable ASTM, TMS, and CSA standards.





# **UNDERGROUND UTILITY MORTAR**

#### 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. SPEC MIX Underground Utility Mortar can be used as a parge coat over the brick in the manhole or catch basin. SPEC MIX products must be kept dry, covered, and protected from weather and other damage.

### **SIZES AND EQUIPMENT**

SPEC MIX Underground Utility Mortar is available in 80 lb (36.2 kg) packages for easy hand loading or in 3,000 lb (1,360.7 kg) reusable bulk bags to be used with the various 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.

# **MIXING INSTRUCTIONS**

WEAR IMPERVIOUS GLOVES, such as nitrile.

- Mixing is best accomplished by using a mechanical mixer to ensure optimal workability and performance.
- Use clean, potable water; add the amount of water consistent with optimum workability which provides adequate water to satisfy the initial rate of absorption of the masonry units.
- Mixing times are four to five minutes when using a mechanical batch mixer and should be held consistent from batch to batch.
- Maintain the same mixing procedures to maintain consistency throughout the project.
- Tool mortar joints when the surface is thumb-print hard. Keep tooling times consistent.
- Hand mix mortar only with written approval by the specifier who should outline procedures.

# TYPICAL MORTAR PROPERTIES (laboratory tested per ASTM C 270)

Compressive Strength - 28 Days

2500 PSI (17.2 MPa)

**Water Retention** 

75%

Note: The yields given above are approximate and depend on labor practices, site conditions and design of work. Yields include typical waste. Please contact your local representative for more specific yield information in your area.

- Use mortar within 2.5 hours after initial mixing.
- Retemper mortar only when mixing water is lost due to evaporation.

# **ESTIMATED YIELDS**

Each 80 lb (36.2 kg) bag of SPEC MIX Underground Utility Mortar will produce approximately 0.7 cu ft (19.8 L) of wet masonry mortar while a 3,000 lb (1,360.7 kg) bulk bag will yield approximately 26.2 cu ft (742 L) of wet masonry mortar.

## **LIMITATIONS**

SPEC MIX Underground Utility Mortar should be installed in accordance with the provisions of the local building code and 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.

# LIMITED PRODUCT WARRANTY IN THE UNITED STATES

NOTICE: Obtain the applicable LIMITED WARRANTY at www.specmix.com/product-warranty or send a written request to SPEC MIX, LLC, Five Concourse Parkway, Atlanta, GA 30328, USA. Manufactured under the authority of SPEC MIX, LLC.

AVISO: Obtenga la GARANTÍA LIMITADA correspondiente en www.specmix.com/product-warranty o envíe una solicitud por escrito a SPEC MIX, LLC, Five Concourse Parkway, Atlanta, GA 30328, USA. Fabricado bajo la autoridad de SPEC MIX, LLC.



#### **IN CANADA**

NOTICE: Obtain the applicable LIMITED WARRANTY at www.specmix.com/product-warranty. Or send a written request to SPEC MIX, LLC, Five Concourse Parkway, Atlanta, GA 30328, USA.

**AVIS:** Obtenez la GARANTIE LIMITÉE applicable sur www.specmix.com/produit-garantie/. Ou envoyez une demande écrite à SPEC MIX, LLC, Five Concourse Parkway, Atlanta, GA 30328, USA.

# **TECHNICAL SUPPORT**

- CONTACT YOUR LOCAL SPEC MIX® MANUFACTURER
- VISIT WWW.SPECMIX.COM
- CONTACT SPEC MIX® PHONE: 888-773-2649 FAX: 651-454-5315