



PORTLAND LIME & SAND MASONRY MORTAR (M, S, N)

1-888-SPECMIX

DIVISION **04**
MASONRY PRODUCTS



Great Workability. Increased Productivity.

SPEC MIX® Portland Lime & Sand mortar is a dry preblended mortar mix containing Portland cement, hydrated lime and dried masonry sand formulated for superior bond, water retention and board life. Available in Types M, S and N, each meets ASTM C 270, ASTM C 1714 and CSA A179 requirements. SPEC MIX Portland Lime & Sand is available in standard or custom colors. In addition, custom mix designs are available for specific applications or properties, the standard

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

SPEC MIX Portland Lime & Sand 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, ACI and CSA standards.



TOTAL QUALITY CONTROL WITH EVERY BAG
ASTM C 270 LABORATORY TESTED MIX DESIGNS
PREBLENDED WITH SAND TO MINIMIZE LABOR COST
CONSISTENCY BATCH TO BATCH
GREAT WORKABILITY AND BOARD LIFE
NO SAND PILES OR WASTED MATERIALS LEFT ON SITE
AVAILABLE IN STANDARD & CUSTOM COLORS

AVAILABLE IN COLOR



MATERIALS USED

PORTLAND CEMENT
HYDRATED LIME
SAND

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 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 this 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.

Allow mortar to cure a minimum of 7 days but no more than 28 days before cleaning. Consult manufacturer of the masonry units and cleaning chemicals for further instructions to ensure proper washing procedures.

Clean masonry only with a national proprietary cleaning agent (following the manufacturer's instructions) or potable water. 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 Portland Lime & Sand Mortar is available in 80 lb. (36.3 kg) packages for easy hand loading or in 3,000 lb. (1,360.8 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. (See silo operations manual.)

MIXING INSTRUCTIONS

1. Use a mechanical batch mixer to ensure homogeneity, workability and good board life.
2. Add the minimum amount of clean, potable water for optimum workability.
3. Mix for five minutes consistently from batch to batch.
4. Tool mortar joints when the surface is thumb-print hard. Keep tooling times consistent.
5. Hand mix mortar only with written approval by the specifier who should outline procedures.
6. Use mortar within 2.5 hours after initial mixing.
7. Retemper mortar only when mixing water is lost due to evaporation.
8. Do not retemper colored mortar.

LIMITATIONS

SPEC MIX Portland Lime & Sand Mortar should be installed in accordance with the provisions of the local building code and applicable ASTM or CSA standards. Good workmanship coupled with proper detailing and design assures durable, functional, watertight construction. Follow proper cold-weather masonry procedures at temperatures below 40° F (5° C).

ASTM C 270 PROPERTY SPECIFICATIONS

Type	Average compressive strength at 28 days, minimum psi	Water retention, minimum %	Air content, maximum %
M	2500	75	12
S	1800	75	12
N	750	75	14*

* When structural reinforcement is incorporated in cement-lime mortar, the maximum air content shall be 12%

CSA A179 PROPERTY SPECIFICATIONS

Type	Average compressive strength at 28 days, minimum Mpa	Water retention, minimum %	Air content, maximum %
M	17.5	70	18
S	12.5	70	18
N	10	750	18

ESTIMATED YIELDS

Portland Lime & Sand Mortar M, S, N	80 lb. bags	3,000 lb. bags
4" Block	14 - 16	525 - 600
6" Block	11 - 13	450 - 500
8" Block	10 - 12	400 - 450
10" Block	10 - 12	400 - 450
12" Block	9 - 11	350 - 400
Modular Brick	37 - 39	1,400 - 1,475
Queen Sized Brick	31 - 33	1,175 - 1,250
King Sized Brick	25 - 27	950 - 1,025
Utility Brick	22 - 24	850 - 925

Note: The yields given are approximate and depend on labor practices, site conditions and design of work. Yields include typical waste. Some areas such as FL, CA, OR, and WA experience higher yields. Please contact your local representative for more specific yield information in your area.

LIMITED WARRANTY

SPEC MIX, Inc. warrants this product to be of merchantable quality when used or applied in accordance with the instructions hereon. This product is not warranted as suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is LIMITED to the replacement of its product (as purchased) if found to be defective, or at the shipping company's option, to refund the purchase price. In the event of a claim under this warranty, notice must be given to SPEC MIX, Inc. in writing. THIS LIMITED WARRANTY IS ISSUED AND ACCEPTED IN LIEU OF ALL OTHER EXPRESS WARRANTIES AND EXPRESSLY EXCLUDES LIABILITY FOR CONSEQUENTIAL DAMAGES.

WARNING

IMPORTANT! READ BEFORE USING Wear impervious gloves, such as nitrile. This product contains Portland cement. Contact with freshly mixed product can cause severe burns. Avoid direct contact with skin and eyes. If this product should contact eyes, immediately flush with water for at least 15 minutes and consult a physician. For skin exposure, wash promptly with plenty of soap and water. Remove soaked clothing promptly. If this product burns your skin, see a physician immediately. This product may contain silica. Silica dust if inhaled may cause respiratory or other health problems. Prolonged inhalation may cause delayed



lung injury, including silicosis and possibly cancer. A N95 approved dust mask, eye protection, and rubber boots and gloves are recommended when using this product. Safety Data Sheets can be viewed online at www.specmix.com

KEEP OUT OF REACH OF CHILDREN

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

TECHNICAL SUPPORT

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