



**1. Product Name**

- SPEC MIX® PCL Sand
- SPEC MIX® PCL Sand Color

**2. Manufacturer**

SPEC MIX, Inc.  
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**3. Product Description**

**BASIC USE**

SPEC MIX® PCL Sand is a preblended mortar mix containing Portland cement and lime, masonry cement or mortar cement and dried masonry sand. Packaged dry, it offers the end user the complete assurance of laboratory controlled mortar with each batch. It is accepted for all types of masonry construction.

SPEC MIX PCL Sand is manufactured to meet any architectural specification for masonry product construction, including SPEC MIX corefill grout. SPEC MIX PCL Sand may be used above or below grade when manufactured to the appropriate specification.

SPEC MIX PCL Sand Color is packaged dry, by weight, for the integral coloring of mortar. This product requires no field measuring and is environmentally safe. The pigments are finely milled and specially blended to ensure maximum color effect and proper dispersion throughout the batch. The addition of color to a mortar mix does not affect the properties of the original mix.

SPEC MIX PCL Sand Color is designed to match, complement or contrast the brick, stone or other masonry materials being used on the project. They are available in appropriate strengths and proper mix designs.

**COMPOSITION & MATERIALS**

**Mortar Mix**

SPEC MIX PCL Sand is manufactured with the

finest available raw materials. These materials are certified to meet the requirements of ASTM C144, C207, C150, C595, C1329 and C91. The final product is certified to meet the requirements of ASTM C270. Available in Type M, S, N or O, SPEC MIX produces high quality mortar with optimal compressive and tensile bond strengths.

SPEC MIX is produced under strict manufacturing standards, and complete quality control is in effect with each batch. A digital print-out displaying the proper proportions per batch may be kept as a permanent record and produced if requested. Only SPEC MIX offers this lab controlled production system in preblended mortar.

**Colored Mortar**

SPEC MIX PCL Sand Color consists of high quality Portland cement and lime, masonry cement or mortar cement and dry sand to consistently maintain extraordinary color uniformity from batch to batch, every time. SPEC MIX uses the high quality pigments made of finely milled iron oxides, the strongest and most stable colors available. These colors are lime-proof, sunfast, inert, stable and meet or exceed the criteria of ASTM C979. In order to consistently achieve the desired mortar color, SPEC MIX incorporates the pigment into the mortar during the factory blending process. All ratios of the dry components are constant in every batch. Mix times for SPEC MIX colored mortar are 4 - 5 minutes.

**Dispensing Equipment**

SPEC MIX is dispensed in 3000 lb (1362 kg) bulk bags into a patented silo system that charges a contractor's mechanical batch mixer. This product is also available in 80 or 94 lb (36 or 43 kg) bags for hand loading into the same batch mixer.

**TYPES & SIZES**

Portable SPEC MIX silos and bulk bags are delivered to the project site. The silo is loaded and the product dispensed into the mixer as needed. SPEC MIX Mortar and Colored Mortar are available in 3000 lb (1362 kg) bulk bags or 80 and 94 lb (36 and 43 kg) packages for easy hand loading.

**COLORS**

SPEC MIX PCL Sand Color covers the full range of the color spectrum - brown, buff, tan, black, yellow, orange, red and white. Each color match is handled on an individual basis.



Patented Mortar Delivery System

**LIMITATIONS**

Mortar type should be correlated with the particular masonry unit to be used because certain mortars are more compatible with certain masonry units. 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 of high-water retentivity.

The material properties of mortar which 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. Mortar should be selected based on the design requirements and with due consideration of code and specification provisions affected by the mortar selected.

Mortars shall be used and placed in final position within 2 1/2 hours after initial mixing. Retempering colored mortar is not recommended. Colored mortar should be discarded after 2 1/2 hours from the time of initial mixing.

A sample of the proposed product will be provided by the manufacturer for onsite preparation of a sample panel for architectural approval and testing if required. Preparation of this panel with all materials and systems that will be employed in the final project is imperative. Do not mix by hand.



Consistent custom colored mortar, every time

Retain the mock-up or field sample through the completion of the project.

**4. Technical Data**

**APPLICABLE STANDARDS**

ASTM International

- ASTM C91 Standard Specification for Masonry Cement
- ASTM C144 Standard Specification for Aggregate for Masonry Mortar
- ASTM C150 Standard Specification for Portland Cement
- ASTM C207 Standard Specification for Hydrated Lime for Masonry Purposes
- ASTM C270 Standard Specification for Mortar For Unit Masonry
- ASTM C476 Standard Specification for Grout for Masonry
- ASTM C595 Standard Specification for Blended Hydraulic Cements
- ASTM C780 Standard Test Method for Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry
- ASTM C979 Standard Specification for Pigments for Integrally Colored Concrete

- ASTM C1329 Standard Specification for Mortar Cement

**Notes**

- Test method C780 is acceptable for pre-construction and construction evaluation of mortars for plain and reinforced unit masonry
- There is no ASTM method for determining the conformance or nonconformance of a field prepared mortar to the property specification of ASTM C270
- Compressive strength values resulting from field tested mortars do not represent the compressive strength of mortar as tested in the laboratory or that of the mortar in the wall. Physical properties of field sample mortars should not be used to determine compliance with ASTM C270 intended as criteria to determine the acceptance or rejection of the mortar

**ENVIRONMENTAL ASPECTS**

Empty bags and wooden pallets are returned to the plant for reuse. The system eliminates the use of disposable paper bags, thus reducing landfill impact.



Computerized batching for quality assurance

**PHYSICAL/CHEMICAL PROPERTIES**

Test reports and additional product information from each licensed manufacturer are available upon request. SPEC MIX mortar mix designs are proprietary information due to competition.

**5. Installation**

**PREPARATORY WORK**

Handle and store product according to SPEC MIX recommendations. SPEC MIX products are custom packaged to the specification. They must be kept dry, covered and protected from weather and other damage. Under these conditions, they have a 9 month shelf life.

**METHODS**

Mixing must be accomplished by using a mechanical mortar mixer to ensure homogeneity and workability. Using clean, potable water, add the maximum amount consistent with optimum workability. Mixing times are 4 - 5 minutes and should be held consistent from batch to batch.

Rinse out mixer following each batch. Continue with normal washout procedures.

**PRECAUTIONS**

For best results, the use of a batch type mixer is required as well as a mixing time of 4 - 5 minutes. The finished color should not be analyzed until the addition and full mixing of the cementitious materials, and water and a mechanical mixer are used to obtain full mixing of the colored mortar mixture. Uniform color requires consistent material proportioning. Do not mix less than full batches.



Aesthetic and structural performance, every project

Maintain a uniform water/cement ratio. Maintain uniform mix times. Tool mortar joints when surface is thumbprint hard. Keep tooling time consistent. Do not strike joints too early or too late as the color will not remain consistent with the mock-up panel. Do not retemper colored mortar by adding additional water.

Hand mixing of the mortar should be permitted only with the written approval of the specifier who should outline hand-mixing procedures.

Mortar should be cured a minimum of 28 days. Clean mortar only with potable water. Colored mortar should not be cleaned with muriatic acid. Safety glasses and a dust mask are recommended when handling any mortar mixture containing silica. The cementitious materials mixed onsite are highly alkaline in nature and, on contact with water, are irritating to eyes and skin. In case of eye contact, 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 the reach of children.

**BUILDING CODES**

Current data on building code requirements and product compliance may be obtained from SPEC MIX technical support specialists. Installation and use of these products must comply with the requirements of applicable local, state and national code jurisdictions.

**6. Availability & Cost**

**AVAILABILITY**

SPEC MIX materials and the patented silo distribution system are available through a network of local manufacturers. Contact SPEC MIX for more information.

**COST**

Budget installed cost information may be obtained from a local SPEC MIX manufacturer or through SPEC MIX, Inc.

**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, 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 or any third party, arising out of the purchases of the Product from Seller by Buyer shall not exceed the total amount billed and billable to the Buyer for the Product hereunder.

**8. Maintenance**

Properly mixed and installed masonry units and mortar require little maintenance. Depending on service conditions, masonry walls may require periodic cleaning and tuck-pointing.

**9. Technical Services**

Contact SPEC MIX, Inc., or the local SPEC MIX manufacturer.

**10. Filing Systems**

- First Source™
- MANU-SPEC®
- Additional product information is available from the manufacturer upon request.
- [www.specmix.com](http://www.specmix.com) for information, manufacturer locator and MSDS