

# TYPE O (Portland : Lime : Sand)

### 1. PRODUCT NAME

SPEC MIX® Type O– P&L Mortar

### 2. MANUFACTURER



#### Packaged Concrete, Inc.

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Elburn, IL 60119  
Phone: (630) 557-8252  
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### 3. PRODUCT DESCRIPTION

#### General

-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 the MSJC Code and specification provisions affected by the mortar selected.

#### Basic Use

-Type O mortar may be used for loadbearing walls of solid masonry where compressive stresses do not exceed 100psi provided that the exposure is not severe. It is relatively low compressive strength mortar suitable for limited exterior use and general interior use in loadbearing and non-loadbearing masonry. Type O mortar should not be used where it will be subject to freezing in the presence of moisture.

#### Composition and Materials

-Type I Portland Cement (ASTM C 150) "Standard Specification for Portland Cement"  
-Type S Hydrated Lime (ASTM C 207) "Standard Specification for Hydrated Lime for Masonry Purposes"

Masonry Aggregate (ASTM C 144) "Standard Specification for Aggregate for Masonry Mortar

#### Colored Mortar

-PCI uses only the highest quality pigments available providing the strongest and most stable colors. In order to consistently achieve the desired mortar color, PCI incorporates the pigment into the mortar during the factory blending process. All ratios of the dry components remain constant in every batch.  
-Custom matching can be performed to attain a match to a specific sample.  
-Colored mortar is to be discarded two hours after initial mixing.  
-Do not retemper colored mortar.

### 4. INSTALLATION

#### Mixing For Tuckpointing

-Add sufficient water to produce a damp mix that will retain its shape when pressed into a ball by hand. Mix from 3 to 7 min, preferably with a mechanical mixer.  
-Let mortar stand for not less than 1 hour and no more than 1½ hours for prehydration.  
-Add sufficient water to bring the mortar to the proper consistency for tuckpointing, somewhat drier than mortar used for laying the units.  
-Use the mortar within 2½ hours of its initial mixing. Permit tempering of the mortar within this time interval.

#### Mixing For New Construction

-All cementitious materials and aggregate shall be mixed between 3 and 5 minutes in a mechanical batch mixer with the maximum amount of water to produce a workable consistency.  
-Hand mixing of the mortar is permitted with the written approval of the specifier outlining hand-mixing procedures.

#### 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 high initial rate of absorption will have greater compatibility with mortar of high-water retentivity.  
-Cover packaged material at all times.

### 5. LEED INFORMATION

#### Applicable Credits:

- MR Credit 4.1
- MR Credit 4.2
- MR Credit 5.1
- MR Credit 5.2
- Pre Consumer Recycled Content ..... 4.3%
- Local Harvest Content..... 77%
- Production Location
  - City..... Elburn
  - State..... Illinois
  - Zip.....60119
- 100% harvested w/in 500 miles

**TYPE O** (Portland : Lime : Sand)**6. TECHNICAL DATA****Applicable Standards**

- ASTM C 270, "Standard Specification For Mortar For Unit Masonry"
- ACI 530 "Building Code Requirements for Masonry Structures"
- ACI 530.1 "Specification for Masonry Structure"

**ASTM C 270 Test results for PCI****Type O- P&L Mortar**

28 day strength .....	1,078 psi
Water retention.....	95.60 %
Initial Flow .....	114 %
Final Flow.....	109 %
Air Content.....	3.10 %
May 31, 2005	

**ACI 530****-Mortar References**

- Part 1 (General)
  - Section 1.5 Compressive Strength of Masonry (f' m)
  - Table 1 and table 2
- See PCI Compressive Strength of Masonry Tests**
- Part 2 (Products)
  - References ASTM C 270
- See PCI Mortar Data Sheet**

**7. TECHNICAL SERVICES****Brian Petty, PCI**

1S950 South Lorang Road  
Elburn, IL 60119  
(630) 557-8252

**8. SAFETY/HEALTH**

- Refer to M.S.D.S. for safety/health info.

**9. 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 the product (as purchased) if found to be defective, or at the shipping companies' option, to refund the purchase price. All claims under this warranty must be written and submitted to SPEC MIX, Inc.