



# AMX 475 PSV Polymer Modified Stone Veneer Mortar

Product # AMX 475 PSV



## 1. PRODUCT NAME

Amerimix Polymer Modified Stone Veneer Mortar - AMX 475 PSV

## 2. PRODUCT DESCRIPTION

Amerimix Polymer Modified Stone Veneer Mortar - AMX 475 PSV is a high performance, polymer modified mortar designed with superior bond strength and ability to grout artificial stone on horizontal and vertical surfaces to concrete or masonry substrates.

### Features and Benefits:

- Superior bond strength
- For use above or below grade
- Bonding of artificial stone or brick

### Uses:

- Interior or exterior applications
- Above or below grade
- Bonding of artificial veneer brick or stone
- For all masonry veneer work

### Suitable Substrates:

- Concrete
- Masonry
- Concrete Masonry Units
- Concrete block

### Packaging:

Available in 80 lb. (36.3 kg) bags and bulk bags.

### Coverage:

One 80 lb (36.3 kg) bag will place approximately 15 ft<sup>2</sup> (1.4 m<sup>3</sup>) of stone.

## 3. TECHNICAL DATA:

### Physical Properties:

Test	Test Method	Specifications	Results
7 Day Porcelain/Mosaic Shear Bond Strength	ANSI A118.4	>200 psi (1.38 MPa)	>200 psi (1.38 MPa)
28 Day Porcelain/Mosaic Shear Bond	ANSI A118.4	>200 psi (1.38 MPa)	>225 psi (1.55 MPa)
28 Day Quarry Tile Shear Bond Strength	ANSI A118.4	>150 psi (1.03 MPa)	>175 psi (1.21 MPa)

### NOTES:

- Mortar is designed to meet the requirements of ASTM C 270 Standard Specification for Mortar for Unit Masonry. This is a Laboratory test procedure.
- Mortar should be tested in the field by ASTM C780 Standard Test Method for Preconstruction and Construction Evaluation of Mortar For Plain and Reinforced Unit Masonry.
- Due to the procedural differences between ASTM C270 and C780, the compressive strength values resulting from field sampled mortars are not required nor expected to meet the compressive strength of the property specification requirements of C270 as tested under laboratory conditions, nor do they represent the compressive strength of the mortar in the wall.

### Applicable Standards:

#### AMERICAN CONCRETE INSTITUTE (ACI)

- ACI 530.1 Specification for Masonry Structures

#### STANDARDS:

- ASTM C 270 Standard Specification for Mortar for Unit Masonry
- ASTM C 387 Standard Specification for Packaged, Dry, Combined Materials for Mortar and Concrete
- ASTM C 780 Standard Test Method for Preconstruction and Construction Evaluation of Mortars for Plain and Reinforced Unit Masonry
- ANSI A118.4 and ANSI A118.11
- ASTM C 1314 Standard Test Method for Compressive Strength of Masonry Prisms
- Conforms to ASO 13007-1
- ASTM C 1586 Standard Guide for Quality Assurance of Mortar

#### INTERNATIONAL MASONRY INDUSTRY ALL-WEATHER COUNCIL (IMIAC)

- Recommended Practices and Guide Specifications for Cold Weather Masonry Construction
- Recommended Practices and Guide Specifications for Hot Weather Masonry Construction

#### NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA)

- NCMA TEK Bulletin #8-2A Removal of Stains from Concrete Masonry
- NCMA TEK Bulletin #8-3A Control and Removal of Efflorescence

## SUSTAINABILITY

Amerimix products generally qualify for LEED Materials and Resources credits. Visit [www.amerimix.com](http://www.amerimix.com) or contact Technical Services for additional information regarding LEED qualifications for your specific product application and project location.

## 4. INSTALLATION

### Preparation

- Clean area and remove all unsound concrete, mortar, grease, oil, dirt, paint, sealers and any other foreign material that will inhibit performance.
- Certain conditions may require the substrate to be SSD (saturated surface dry) conditioned such as dry windy climates, porous substrates, or high temperatures.
- When applying mortar as a scratch coat over concrete, concrete masonry or metal reinforcement (for wood frame construction) as a mechanical bond allow a minimum of 24 hours to cure.
- All surfaces to receive the Amerimix Premium Polymer Modified Stone Veneer Mortar are to be hard dry sound and able to support the weight of the stone or brick. The substrate deflection must be verified that it does not exceed industry standards of L/600 under live, dead or impact loads.
- Mortar selection should be approved based on written specification and local building code requirements.
- Evaluation of the mortar and masonry unit being specified should be tested to assure compatibility prior to the start of construction. A job mock up is recommended as stated below.

### Job Mock Ups

Amerimix requires that when Amerimix Polymer Modified Stone Veneer Mortar - AMX 475 PSV is used in any application or as part of any system that includes other manufacturers' products, the contractor and/or design professional shall test all the system components collectively for compatibility, performance and long-term intended use in accordance with pertinent and accepted industry standards prior to any construction. Written documentation of the test performed shall be satisfactory to the design professional and contractor. Test results must include the means and methods of application, products used, project-specific conditions being addressed, and standardized tests performed for each proposed system or variation. Approved mock ups or sample panels should be retained until completion of the project.

### Mixing

1. Use of a mechanical mixer will help ensure a more uniform mix.
2. Use approximately 1.75 gal (6.65 L) of clean potable water per 80 lb (36.3 kg) bag. Pour approximately 3/4 of the required amount into the mixer.
3. With the mixer running, add bags of dry mortar and mix thoroughly.
4. Add additional water in small amounts as necessary to achieve optimum consistency and workability. Mix for a minimum of 5 minutes, adding enough of the remaining water to achieve a workable consistency. Caution: Adding too much water will reduce strength.
5. Let mix stand for 2 minutes to enable absorption of water and re-mix.
6. Mortar should always be mixed to a firm, moist consistency. A mix that is too dry and crumbly will not provide the proper bond. **AVOID A SOUPY MIX.** Mortar that is too wet will be weak and will not provide an adequate bond to the substrate.
7. Addition of cold water at high temperatures or warm water at low temperatures will aid in adjusting the set time.

## Application

1. Determine the amount of stone needed by measuring the length x the height for walls or length x width for horizontal surfaces to find the square footage of the area to be covered.
2. Trowel a thin layer of mortar on the substrate. Apply a thick layer of mortar to the back of each stone.
3. When installing large stone on a vertical surface, apply a thick ring of mortar around the back of each stone, leaving a void in the center to create a vacuum as you press the stone into place. Start at the bottom of the wall and brace each stone as you go up.
4. Allow the mortar to squeeze out around the stone's edges. In wall applications, place temporary shims if needed between the stones until the mortar sets to maintain even spacing between the stone.
5. After placing the stone and the mortar has set to thumbprint hard (about 1 hour), remove the shims. Use a grout bag or pointing trowel to fill in the joints where additional mortar is needed.
6. Use a metal jointing tool, compact and seal edges around the stone and rake out excess mortar.
7. Brush loose mortar from the surface and joints to clean stones.

**NOTE:** Refer to "Installation Guidelines for Adhered Concrete Masonry Veneer"

- Place expansion joints following industry standards and as specified for the project.
- Expansion joints in the substrate must be honored through the veneer.

### Limitations:

1. The optimal temperature range for mortar application is between 40°F and 90°F (4°C and 32°C). Application outside of this range is possible when appropriate precautions for cold or hot weather construction are implemented in compliance with ACI, PCA, ASTM, IMIAC, or Masonry Institute standards.
2. Agitate material as necessary within its working time to maintain workability.
3. Do not add materials other than clean potable water.
4. Water with a high mineral salt content can cause efflorescence. Efflorescence occurs naturally and is beyond the control of Amerimix.
5. Do not overwater. Avoid adding excessive amounts of water that promote segregation or bleeding of the mortar, and loss of strength and durability.
6. Protect uncoated aluminum from direct contact with portland cement based materials.
7. Shelf life not to exceed one year from date of manufacture.
8. Not to be used as grout for traffic bearing surfaces.
9. Concrete and masonry substrates must be cured a minimum of 7 days before artificial stone or brick can be applied.
10. Stone Veneer Mortar can be used for individual man-made stones up to 12 lb (5.4 kg) in weight.
11. Coverage of mortar to adhere stone must be 95% to assure performance.

**NOTE:** Amerimix Polymer Modified Stone Veneer Mortar - AMX 475 PSV should be installed in accordance with the provisions of applicable ASTM standards and the local building code. Always follow traditional industry best practices appropriate for the application and weather conditions. Good workmanship in conjunction with proper design and detailing assures durable, efficient, watertight construction.

## Performance Recommendations

Concave tooling of joints should be performed when mortar joint is thumbprint hard. For consistency of finish and color, joints should be struck with consistent timing, avoiding early or late tooling.

## Curing

Under conditions of temperatures >80°F (27°C) low humidity and wind, loss of surface water occurs quickly. Fog spray as needed, depending upon conditions. Protect from rain and freezing for 24 hours.

## Cleaning

Use water to clean all tools immediately after use. Dried material must be mechanically removed. For cleaning mortar joints or excess mortar from brick or block use a masonry cleaner.

## 5. AVAILABILITY

Amerimix products are available throughout the U.S. For more information please contact Amerimix at:

Toll Free: 888-313-0755

Website: Amerimix.com

## 6. TECHNICAL SUPPORT

For technical assistance please contact us

Toll Free: 888-313-0755

## 7. WARRANTY

**What Does This Warranty Cover?** Amerimix warrants that this product will (a) be free from defects in material and workmanship, and (b) conform to specifications set forth in Amerimix's product literature at the time of manufacturer.

**How Long Does Coverage Last?** This warranty lasts for a period of one (1) year from the date of purchase. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS LIMITED TO THE DURATION OF THIS EXPRESS WARRANTY. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

**What Will Amerimix Do to Address Problems?** Amerimix will replace the defective product or refund the purchase price, at its option.

**What Does This Warranty Not Cover?** Amerimix will not be liable for damage or loss resulting from a failure to store, use, install or maintain the product in strict accordance with Amerimix's specifications and instructions. In no event will Amerimix be liable for damages in excess of the purchase price for the product. CONSEQUENTIAL, SPECIAL AND INCIDENTAL DAMAGES ARE NOT RECOVERABLE UNDER THIS WARRANTY. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

**How Do I Get Warranty Service?** Within thirty (30) days after discovering a defect in the product, contact Amerimix in writing at the following address:

Amerimix  
Technical Support Group  
625 Griffith Road - Suite 100  
Charlotte, NC 28217

Include with your letter a brief description of the problem and any sales receipt, invoice or other proof of the date of purchase. To obtain Amerimix's technical or sales literature, please call (888) 313-0755 or visit our website at Amerimix.com

**How Does State Law Relate to This Warranty?** This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

## WARNING

**INJURIOUS TO EYES. CAUSES SKIN IRRITATION.** This product contains portland cement and silica sand. Avoid contact with eyes and skin. Do not take internally. Crystalline silica sand may cause serious lung problems. Avoid breathing dust and wear a respirator in dusty areas. Contact with wet unhardened concrete, mortar, cement or cement mixtures can cause skin irritation, severe chemical burns or serious eye damage. Wear waterproof gloves, a fully buttoned long-sleeved shirt, full-length trousers and tight fitting safety goggles. If you have to stand in wet product, wear waterproof boots high enough to keep product from getting inside. If working on hands and knees, wear kneepads. Indirect contact through clothing can be as serious as direct contact. Promptly, rinse out wet product from clothing.

**California Proposition 65:** This product contains Crystalline Silica, Quartz and may also contain trace amounts of other chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

## KEEP OUT OF THE REACH OF CHILDREN AND ANIMALS.

**FIRST AID:** Eye Contact: Flood eyes with water for at least 15 minutes and consult a physician immediately. DO NOT RUB EYES. Skin Contact: Wash exposed skin area with soap and water. Consult a physician if irritation persists. Inhalation: Remove to fresh air. Ingestion: Immediately consult a physician.

For additional information, call Amerimix at 888-313-0755 or CHEMTREC at 800-424-9300 or 703-527-3887 outside of the USA. Refer to Safety Data Sheet (SDS) for further information.

**ENVIRONMENTAL ADVISORY:** Uncured or crushed cured cement is an environmental hazard, which may adversely affect fish and wildlife. Dispose of construction debris containing cement, including empty bags, at a permitted municipal disposal firm. Do not use crushed concrete as a fill near an aquatic habitat.