



## Stone Veneer Mortar AMX 470

Product # AMX 470



### 1. PRODUCT NAME

Amerimix AMX 470 Stone Veneer Mortar

### 2. MANUFACTURER

Bonsal American  
8201 Arrowridge Blvd.  
Charlotte, NC 28273-5678 USA  
Telephone: 704-525-1621  
Toll Free: 800-738-1621 ext.27000  
Fax: 704-529-5261  
Internet: [www.amerimix.com](http://www.amerimix.com)

### 3. PRODUCT DESCRIPTION

Amerimix AMX 470 Stone Veneer Mortar is a high performance mortar designed to set and grout artificial stone on horizontal or vertical concrete or concrete masonry substrates.

### FEATURES AND BENEFITS

- Factory blended under controlled conditions for mix consistency
- Extended mortar board life, less re-tempering required
- Increased yield compared to typical field mix mortars
- Available in gray and buff

### USES

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

### PACKAGING

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

### APPROXIMATE COVERAGE

One 80 lb. bag yields approximately 15 sq. ft. of manufactured stone.

### LIMITATIONS

1. The optimal temperature range for mortar application is between 40 and 90 degrees. Application outside of this range is possible when appropriate precautions for cold or hot weather construction are implemented in compliance with ACI, PCA 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 lbs. in weight.
11. Coverage of mortar to adhere stone must be 95% to assure performance.

NOTE: Amerimix AMX 470 Stone Veneer Mortar 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.

### SAFETY

READ THE MATERIAL SAFETY DATA SHEET (MSDS) BEFORE USING THIS PRODUCT. MSDS Sheets are available on our website [www.amerimix.com](http://www.amerimix.com) or contact CHEMTREC (24 hours availability) 800-424-9300 for International inquiries +01-703527-3887, or contact Bonsal American Technical Services at 800-334-0784 (8:00 AM to 5:00 PM Eastern US Time).

## 4. TECHNICAL DATA

### 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 C 780 Standard Test Method for Preconstruction and Construction Evaluation of Mortar for Plain and Reinforced Unit Masonry.
- Due to the procedural differences between ASTM C 270 and C 780, 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 C 270 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

#### ASTM International (ASTM)

- ASTM 1714 Standard Specification for Preblended Dry Mortar Mix for Masonry Units
- ASTM C 91 Standard Specification for Masonry Cement
- ASTM C 270 Standard Specification for Mortar for Unit Masonry

#### 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 for Recycled Materials and Regional Materials. 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.

## 5. INSTALLATION

### PREPARATION

- Clean area and remove all unsound concrete, mortar, grease, oil, paint, and any other foreign materials that will inhibit performance.
- Before applying the mortar, lay stones on flat surface, placing them together to determine the best fit and appearance for your project area.
- User is to do a test area to verify that the mortar will perform for the purpose intended.
- Refer to: ASTM D 4258 Surface Cleaning Concrete for Coating, ASTM D 4259 Abrading Concrete, ASTM D 4260 Acid Etching Concrete.
- Concrete and masonry substrates are to be cured a minimum of 7 days.
- Scratch and brown coats over concrete, concrete masonry or metal reinforcement are to cure a minimum of 24 hours.
- All surfaces to receive the Amerimix Stone Veneer Mortar are to be hard, dry, sound and able to support the brick or stone.

### JOB MOCK UPS

Bonsal American requires that when Amerimix AMX 470 Stone Veneer Mortar 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 better uniform mix.
2. Using clean potable water, approximately 5-6 quarts per 80 lb. bag. Pour approximately 3/4 of the required amount into the mixer. For mixing from a silo, use the same approximate water ratio and follow the same procedures.
3. With the mixer running, add bags of dry mortar or dispense from silo and mix thoroughly.
4. A minimum of 5 minutes mixing time is recommended.
5. 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 fluid workable consistency. Caution: Adding too much water will reduce strength.
6. Let slake for 5 minutes to enable absorption of water and re-mix.
7. 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 adequate bond of the stone to the substrate.
8. Addition of cold water at high temperatures or warm water at low temperatures will aid in adjusting the set time.

### PLACEMENT:

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.

## PERFORMANCE RECOMMENDATIONS

1. Only water lost to evaporation should be replaced by re-tempering, not water lost to hydration. The re-tempering of mortar will alter color and appearance of the mortar joint and may also reduce bond and compressive strength.
2. 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 degrees F (26.6 degrees 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, use the least aggressive solvent required to accomplish the task. Only clean potable water should be used in the cleaning process.

## 6. AVAILABILITY

Amerimix products are available throughout the U.S. and Canada.

For information please contact Amerimix at

Toll Free: 888-313-0755

Email: support@amerimix.com

Website: www.amerimix.com

## 7. TECHNICAL SUPPORT

For technical assistance please contact us

Toll Free: 800-334-0784

Fax: 704-945-0309

## 8. WARRANTY

### LIMITED WARRANTY

**What Does This Warranty Cover?** Bonsal American warrants that this product will (a) be free from defects in material and workmanship, and (b) conform to specifications set forth in Bonsal American'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 Bonsal American Do to Address Problems?** Bonsal American will replace the defective product or refund the purchase price, at its option.

**What Does This Warranty Not Cover?** Bonsal American will not be liable for damage or loss resulting from a failure to store, use, install or maintain the product in strict accordance with Bonsal American's specifications and instructions. In no event will Bonsal American 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 Bonsal American in writing at the following address:

Bonsal American  
Technical Support Group  
8201 Arrowridge Boulevard  
Charlotte, NC 28273

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 Bonsal American's technical or sales literature, please call (800) 738-1621 or visit our web site at [www.bonsalamerican.com](http://www.bonsalamerican.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

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.

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

This product contains a chemical known to the state of California to cause cancer. Consult Material Safety Data Sheet for further information.

**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 Bonsal American at 704-525-1621 or CHEMTREC at 800-424-9300 or 703-527-3887 outside of the USA. Refer to Material Safety Data Sheet (MSDS) 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.



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