1. PRODUCT NAME
Amerimix Water Repellent Mortar - AMX 410 WRM with RainBloc® GP

2. PRODUCT DESCRIPTION
AMX 410 WRM with RainBloc® GP is a factory blend of portland cement, hydrated lime, dried sand, RainBloc® GP and proprietary admixtures, which meets and exceeds not only ASTM 1384-06 Standard Specifications for Admixtures for Masonry Mortars, but more importantly, Amerimix Water Repellent Mortar AMX 410 WRM with the addition of RainBloc® GP meets and exceeds ASTM 1403-12a Standard Test Method for Rate of Water Absorption of Masonry Mortars. This unique formulation is currently, the only water repelling agent that contains a tracer, which allows for quantitative analysis of the harden mortar and is designed for applications where a water repellent mortar is required in combination with water repellent masonry units. AMX 410 WRM with RainBloc® GP is engineered to provide long water retention, exceptional workability and superior bond strength over masonry substrates.

Features & Benefits
• AMX 410 WRM with RainBloc® GP is the only water repellent mortar produced, at the time of this publication, that can quantify and qualify the amount of water repelling agent in the harden mortar and;
• May qualify for a water repellent, warranted wall system, signed between the owner and the manufacturer, when used in conjunction with approved masonry units, containing RainBloc® water repellent admixture. Ask your local representative about this warranty,
• AMX 410 WRM with RainBloc® GP assures uniform dispersion of admixtures and finished product quality verses job-site addition of raw materials and liquid water-repellant admixtures.
• Available in pre-mixed, factory controlled colors.

Uses
• Interior or exterior applications
• Above or below grade
• Laying or resetting brick, block and stone
• For all masonry veneer work

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

Coverage
One 80 lb (36.3 kg) bag yields approximately .78 ft³ (0.02 m³) and will lay up to 12 concrete blocks or 36 standard bricks with 3/8” (9.5 mm) mortar joints, or 17 ft² (1.6 m²) of manufactured stone. One 3,000 lb (1,361 kg) bulk bag will lay up to 450 concrete blocks or 1350 standard bricks.

Limitations
1. The type of mortar selected should be coordinated with the type of application, type of masonry units and intended use. Mortars with lesser compressive strength should be used with softer masonry units or tuck pointing applications.
2. 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.
3. Agitate material as necessary within its working time to maintain workability.
4. Do not add materials other than clean potable water.
5. Water with a high mineral salt content can cause efflorescence. Efflorescence occurs naturally and is beyond the control of Amerimix.
6. Do not overwater. Avoid adding excessive amounts of water that promote segregation or bleeding of the mortar, and loss of strength and durability.
7. Protect uncoated aluminum from direct contact with portland cement-based materials.
8. Shelf life not to exceed one year from date of manufacture.
9. Not to be used as grout for traffic bearing surfaces.
10. Type N to be used for above grade applications.

NOTE:
Amerimix Water Repellent Mortar - AMX 410 WRM with RainBloc® GP 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.
3. TECHNICAL DATA

Meets or exceeds the following:

A. ASTM C270 Property Specification Requirements

1. Compressive Test Results - ASTM C109

<table>
<thead>
<tr>
<th>PSI</th>
<th>No RainBloc® GP</th>
<th>RainBloc® GP at 0.21%</th>
<th>RainBloc® GP at 0.23%</th>
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7 Day Compressive Strength

28 Day Compressive Strength

ASTM C 270 Specification

NOTES:

• Mortar is designed to meet the requirements of ASTM C270 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 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 C270 as tested under laboratory conditions, nor do they represent the compressive strength of the mortar in the wall.

2. Air Content: <=12%

<table>
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<tr>
<th>% Air with RainBloc® GP</th>
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B. ASTM 1384-06 Standard Specifications for Admixture for Masonry Mortars

1. Water Uptake: <=50%

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<td>28 Day</td>
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2. Compressive Strength: >= 80% at 7 & 28 Days

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<td>28 Day</td>
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Applicable Standards

American Concrete Institute (ACI)
• ACI 530.1 Specification for Masonry Structures

ASTM International (ASTM)
• 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 C1384 Standard Specification for Admixtures for Masonry Mortars
• ASTM C1714 Standard Specification for Preblended Dry Mortar Mix for Unit Masonry

Sustainability

Amerimix products generally qualify for LEED Materials and Resources credits for Recycled Materials and Regional Materials. Visit amerimix.com or contact Technical Services for additional information regarding LEED qualifications for your specific product application and project location.

4. INSTALLATION

Preparation

1. Remove all loose particles, dirt, dust, or any foreign materials that would inhibit proper bond to brick, block, stone or masonry substrate.

2. Certain conditions may require the substrate to be SSD (saturated surface dry) conditioned such as dry windy climates, porous substrates, or high temperatures.

Job Mock Ups

Amerimix requires that when Amerimix Water Repellent Mortar - AMX 410 WRM with RainBloc® GP 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 1.5 gal (5.7 L) of clean potable water per 80 lb (36.3 kg) 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 same procedures.

3. With the mixer running, add bags of dry mortar or dispense from the silo 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 fluid workable consistency. Caution: Adding too much water will reduce strength.

5. Let mix stand for 2 minutes to enable the absorption of water and re-mix.

6. Addition of cold water at high temperatures or warm water at low temperatures will aid in adjusting the set time.

**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.

**5. AVAILABILITY**

Amerimix products are available throughout the U.S. and Canada. For 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
LIMITED 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 Bonsal American's product literature at the time of manufacture.

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
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 web site 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.