MANUFACTURED STONE MORTAR is a select blend of aggregates, Portland cement, dry polymers and special additives designed to provide optimum bond when installing a variety of lightweight, manufactured stone veneers over properly prepared substrates (interior or exterior applications).

- Polymer modified
- Superior bonding & flexural strengths
- Water resistant
- Exterior or interior use
- Pre-blended for quality consistency from batch to batch
- Reduces labor cost associated with set up and clean up
- Helps minimize cost of wasted materials left on job site

<table>
<thead>
<tr>
<th>Mortar/Adhesive</th>
<th>Apply by trowel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging</td>
<td>50 lb bag (49/pallet)</td>
</tr>
<tr>
<td>Coverage per 50 lb bag</td>
<td>12-15 ft² (when applying 1/2” layer on entire back of each stone)</td>
</tr>
<tr>
<td>Application Temperature</td>
<td>Ambient &amp; surface temperature must be 40°F or above and will not fall below that for 48 hours</td>
</tr>
<tr>
<td>Mixing per 50 lb bag</td>
<td>4 quarts of water</td>
</tr>
<tr>
<td>Working Time</td>
<td>15-30 minutes at 70°F</td>
</tr>
<tr>
<td>Set Time</td>
<td>24 hours at 70°F</td>
</tr>
<tr>
<td>Color</td>
<td>Gray</td>
</tr>
</tbody>
</table>

Phone: 800-442-5535
Fax: 978-453-2416
www.umaco.com
MANUFACTURED STONE MORTAR is a select blend of aggregates, Portland cement, dry-polymers and special additives designed to provide optimum bond, exceptional sag resistance and Durability when installing a variety of lightweight, manufactured stone veneers over properly prepared substrates.

USES and ADVANTAGES
- Ready to use, just add water
- Polymer-modified
- Superior bonding and flexural strengths
- Exceptional sag resistance
- Water-resistant
- Exterior or interior use
- Pre-blended for quality consistency from batch to batch

SURFACE PREPARATION
Surface preparation should be made in accordance with the instructions and requirements provided by the specific stone manufacturer.

Masonry and Concrete Surfaces
Masonry and concrete substrates must be structurally sound and clean. Remove all dirt, dust, spalling or loose concrete, oil, grease, wax, mildew, efflorescence, curing compounds, form release agents, paint or any other foreign material which might effect the bond. SEE WARNING ON BACK PAGE REGARDING PAINT REMOVAL. If after cleaning, the surface is extremely dusty, porous or if there is any question of bonding, prime the area with Bond All Exterior. Verify that the surface is flat, free of defects or planar irregularities. Uneven or pitted concrete and masonry joints must be struck flush with Umaco U-Trowel Basecoat to produce a smooth level surface. U-Trowel Basecoat must cure for a minimum of 24 hours before installing thin-stone veneers.

Exterior-Grade Plywood Sheathing
Manufactured stone veneers may be applied over properly fastened, exterior-grade plywood sheathing which has been covered with two layers of a water resistant building paper and self-furring 3.4 lb galvanized metal lath (diamond mesh) which has been embedded in Umaco U-Trowel Basecoat. Read U-Trowel Basecoat data sheet for full instructions. U-Trowel Basecoat must cure for a minimum of 24 hours before installing thin-stone veneers.

Cement Board
Cement board must be properly attached. Follow cement board manufacturer's instructions regarding proper installation. Cement board must be primed with Bond All Exterior.

MIXING
In a clean container or mixer, add 50 pounds of Manufactured Stone Mortar to approximately four quarts of water. Mix thoroughly to a thick and creamy consistency. Avoid over mixing as this will entrain air thus reducing compressive and adhesive strengths as well as shorten the pot life. Allow the mixture to soak for 5-10 minutes, remix, then apply. If the mixture needs to be adjusted, add up to one pint of water. Manufactured Stone Veneer Mortar should be placed within approximately 30 minutes after the initial mixing.

APPLICATION
Installations should be made in accordance with the instructions and requirements provided by the specific stone manufacturer.

In hot weather or when the stone is being applied to a very dry wall surface, dampen the wall surface prior to application to prevent excessive absorption of moisture from the mortar. Allow the surface to dry for a few minutes to eliminate excess water. Apply the stone from the top working down. This helps the stone stay clean. Using a mason trowel, apply a 1/2” thick even layer of Manufactured Stone Mortar to the entire back of each stone. Press the stone firmly in place onto the properly prepared wall surface using a twisting motion, squeezing the mortar out around the edges. Do not work the joints too soon or the mortar will smear. After working the joints, use a whisk broom to clean any loose mortar from the joints and stone face.

Do not use wet brushes or sponges to wipe or clean mortar off the face of the stone as this will smear and stain the stone. Allow the mortar to set until dry and crumbly and then brush it off with a dry whisk broom. Never use wire brushes or acid on the stone surface.

COVERAGE
A 50 lb. bag of Manufactured Stone Mortar will cover approximately 12 to 15 square feet.

PRECAUTIONS
- Surface preparation and installation should be made in accordance with the instructions and requirements provided by the stone manufacturer
- Manufactured Stone Mortar should be installed in accordance with the provisions of the local building code and applicable to ASTM standards
- Surface and ambient temperatures must be at least 50°F during application and must remain so for a minimum of 48 hours after application
- Do not use where cool and damp conditions exist for prolonged periods of time since these conditions will retard the setting and curing times
• Protect from rain and freezing until completely dry
• Clean hands and all tools with water immediately after use

**Applicable ASTM Standards:**

**ASTM C-91**  
Standard specification for masonry cement.

**ASTM C-109**  
Standard test method for compressive strength of hydraulic cement mortars

**ASTM C-144**  
Standard specification for aggregate for masonry mortar.

**ASTM C-150**  
Standard specification for Portland cement.

**ASTM C-207**  
Standard specification for hydrated lime for masonry purposes.

**ASTM C-270**  
Standard specification for mortar for unit masonry.

**ASTM C-595**  
Standard specification for blended hydraulic cements.

**ASTM C-1329**  
Standard specification for mortar cement.

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**WARNING!**
Do not take internally. Contains Portland cement and Silica sand. May be irritating to the eyes and nose. Prolonged inhalation may cause lung injury. Avoid eye contact or prolonged contact with skin. Wash hands thoroughly with water after handling. In case of eye contact, flush with plenty of water for at least fifteen minutes. If irritation persists, consult a physician immediately. Dust masks, eye protection and gloves are recommended when using this product. Read Material Safety Data Sheet (MSDS) before using this product which may be obtained from your retailer or by calling 978-453-8881.

24 Hour Emergency Medical/Spill Information (Chemtrec): 800-424-9300

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**KEEP OUT OF THE REACH OF CHILDREN!**

**WARNING!** If you scrape, sand or remove old paint, you may release lead dust or fumes. **LEAD IS TOXIC. EXPOSURE TO LEAD DUST OR FUMES CAN CAUSE SERIOUS ILLNESS, SUCH AS BRAIN DAMAGE, ESPECIALLY IN CHILDREN. PREGNANT WOMEN SHOULD ALSO AVOID EXPOSURE.**

Before you start, find out how to protect yourself and your family by contacting the USEPA National Lead Information Hotline at 1-800-424-LEAD or log onto www.epa.gov/lead. Wear a properly fitted respirator and prevent skin contact to control lead exposure. Clean up carefully with a HEPA vacuum and a wet mop. Follow these instructions to control exposure to other hazardous substances that may be released during surface preparation.

For technical assistance call 978-453-8881

www.umaco.com

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**LIMITED WARRANTY**

The manufacturer guarantees its products to be free of defects and the extent of its liability is limited to the purchase price of the materials only, if proved to be defective. Improper mixing, incorrect application or other factors beyond the control of the manufacturer or its dealers may produce unsatisfactory results and cannot be held to be the manufacturers or its dealers responsibility. There are no other guarantees either expressed or implied.

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**Made in U.S.A.**  
2018

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