Glass-Block Mortar

Pre-Blended Mortar for Glass-Block Installations

DESCRIPTION
Glass-Block Mortar is a premixed blend of Portland cement, sand and chemicals specifically designed for glass-block installation. This white mortar can be used for both setting of the blocks and tooling of the block joints.

FEATURES AND BENEFITS
• Setting and joint-filling mortar
• Interior/exterior use (for commercial installations, check with specifier regarding suitability)

INDUSTRY STANDARDS AND APPROVALS
LEED v3 Points Contribution LEED Points
MR Credit 5, Regional Materials* .................................................... Up to 2 points
IEQ Credit 4.1, Low-Emitting Materials – Adhesives & Sealants ................................................................................. 1 point
IEQ Credit 4.3, Low-Emitting Materials – Flooring Systems ................................................................................................. 1 point
* Using this product may help contribute to LEED certification of projects in the categories shown above. Points are awarded based on contributions of all project materials.

WHERE TO USE
• Most interior/exterior residential and commercial installations
• Installation of glass block

LIMITATIONS
• Install only at temperatures between 40°F and 95°F (4°C and 35°C).
• Do not use over dimensionally unstable substrates such as hardwood flooring, oriented strand board (OSB), substrates containing asbestos, or metal. See the “Suitable Substrates” section below.
• Do not use to install glass tiles.

SUITEABLE SUBSTRATES
• Concrete (cured at least 28 days)
• Masonry cement block, brick, cement mortar beds and leveling coats
• Cement backer units (CBUs) – see manufacturer’s installation guidelines
Consult MAPEI Technical Services Department for installation recommendations regarding substrates and conditions not listed.

SURFACE PREPARATION
• All substrates should be structurally sound, stable, dry, clean and free of any substance or condition that may reduce or prevent proper adhesion.
• Supporting base, framing and recesses must be structurally sound, solid, accurately positioned, properly dimensioned, plumb, level and true to industry tolerances. Supporting concrete surfaces must be cured, sound and stable.
See the glass-block manufacturer’s instructions for details and recommendations regarding use and installation of glass-block units, as well as installation, placement and spacing of expansion strips and other accessories. Also, see MAPEI’s “Surface Preparation Requirements” document in the Reference & Installation Guides section of the Tile & Stone Installation Systems page on MAPEI’s Website.
MIXING

Choose all appropriate safety equipment before use. Refer to the Safety Data Sheet for details.

1. Into a clean mixing container, pour about 4 to 5 U.S. qts. (3.79 to 4.73 L) of clean, cool potable water.
2. Gradually add 50 lbs. (22.7 kg) of powder while slowly mixing.
3. Use a low-speed mixing drill (at about 300 rpm), with an angled cross-blade mixer or double-box mixer. Mix thoroughly until mixture becomes a consistency that will allow it to stick vertically to the side of the glass block when the block is turned 90 degrees. For best results, test the mortar on the block, adding water or mortar to the mix as needed. Avoid prolonged mixing.
4. Let mixture stand (“slake”) for 5 to 10 minutes.
5. Remix.
6. If mixture becomes heavy or stiff, remix without adding more liquid or powder.

PRODUCT APPLICATION

1. Wipe dust and dirt from the sides of the glass block for proper adhesion with the mortar.
2. Apply a full bed (3/8” to 1/2” [10 to 12 mm] in depth) of mortar on the base (saddle). Do not groove or steel-tool the mortar bed.
3. Set the first glass block firmly into the mortar to form a 1/4” (6 mm) mortar joint. Be sure there is no mortar on the side of the glass block that butts against an expansion joint.
4. Take another glass block and apply 3/8” to 1/2” (10 to 12 mm) of mortar directly to the side of the block.
5. Firmly embed the second glass block into the mortar on the base. Use a rubber mallet to gently tap the block toward the glass block previously set, forming a 1/4” (6 mm) joint. Complete the first course of glass blocks following this procedure.
6. While adjusting and aligning each glass block, do not use steel tools, which will damage the blocks.
7. To begin subsequent courses of blocks, apply a 3/8” to 1/2” (10 to 12 mm) mortar bed on top of the previous course. Set each additional block into a full bed of mortar, following the same procedure as above.
8. Do not use partially set mortar or install over dried-out or skinned-over mortar. If such conditions occur, discard these portions of the mortar, replacing it with fresh material.
9. Tool and dress the joints to the desired, uniform appearance as work progresses. Be sure that all joints are full of mortar and without voids. If tooling the joints is desired, use moderate pressure to tool horizontal joints first and then vertical joints.
10. Follow any additional setting instructions from the glass-block manufacturer.

CLEANUP

- Remove excess mortar from the face of glass blocks with a damp sponge or towel before the mortar hardens. Wash hands and tools with water while the mortar is fresh.
- The dry film that remains on the face of the glass block can be removed later using a soft, dry cloth.

PROTECTION

- Protect the installation from impact, vibration, and hammering on adjacent and back walls for at least 14 days.
- Protect from freezing for at least 21 days, and from rain for at least 7 days.
- For stain resistance, Glass-Block Mortar may be sealed with a grout sealer according to the sealer manufacturer’s instructions.
Shelf Life and Application Properties* at 73°F (23°C) and 50% relative humidity

<table>
<thead>
<tr>
<th>Laboratory Tests</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOCs (Rule #1168 of California's SCAQMD)</td>
<td>0 g per L</td>
</tr>
<tr>
<td>Shelf life</td>
<td>1 year when stored in original, unopened packaging</td>
</tr>
<tr>
<td>Open time*</td>
<td>90 minutes</td>
</tr>
<tr>
<td>Pot life*</td>
<td>&gt; 1 hour</td>
</tr>
<tr>
<td>Consistency after mixing</td>
<td>Stiff and plastic-like</td>
</tr>
</tbody>
</table>

* Open time and pot life may vary based on jobsite conditions.

Packaging

<table>
<thead>
<tr>
<th>Size and Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bag: 50 lbs. (22.7 kg), white</td>
</tr>
</tbody>
</table>

Glass-Block Sizes and Approximate Coverage** per 50-lb. (22.7-kg) bag

<table>
<thead>
<tr>
<th>Glass-Block Sizes and Coverage</th>
<th>Approximate Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-3/4&quot; x 7-3/4&quot; x 3-1/8&quot; (20 x20 x 8 cm)</td>
<td>17 to 23 sq. ft. (1.58 to 2.14 m²)</td>
</tr>
<tr>
<td>7-3/4&quot; x 7-3/4&quot; x 4&quot; (20 x 20 x 10 cm)</td>
<td>14 to 18 sq. ft. (1.30 to 1.67 m²)</td>
</tr>
</tbody>
</table>

** Actual coverage will vary according to setting practices, size of glass blocks and joint widths.
We proudly support the following industry organizations:

MAPEI Headquarters of North America
1144 East Newport Center Drive
Deerfield Beach, Florida 33442
1-888-US-MAPEI (1-888-876-2734) / (954) 246-8888

Technical Services
1-800-992-6273 (U.S. and Puerto Rico)
1-800-361-9309 (Canada)

Customer Service
1-800-42-MAPEI (1-800-426-2734)

Services in Mexico
0-1-800-MX-MAPEI (0-1-800-696-2734)

Edition Date: September 27, 2017
PR: 4209 MKT: 17-2302

For the most current BEST-BACKED™ product data and warranty information, visit www.mapei.com.
All Rights Reserved. Printed in the USA. © 2017 MAPEI Corporation.

LEGAL NOTICE
The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at www.mapei.com. ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.

Before using, the user must determine the suitability of our products for the intended use, and the user alone assumes all risks and liability. ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.