



GLASS BLOCK MORTAR

Excellent handling, high-strength glass block mortar

1. PRODUCT NAME

Akona® Glass Block Mortar

2. MANUFACTURER

Bluestone Products™, a TCC Materials® company
2025 Centre Pointe Blvd., Suite 300
Mendota Heights, MN 55120 USA
Phone: 1.651.688.9116
Web: tccmaterials.com

3. PRODUCT DESCRIPTION

Akona Glass Block Mortar is a specially formulated blend of select white silica sands, white cement, and workability agents which result in an excellent handling, high-strength mortar. It is designed for installing glass block windows, shower and bath walls, or masonry units where a white mortar is desired. This product is suitable for both interior and exterior applications. Mix with water or for improved adhesion and durability on exterior applications, mix with Akona Concrete Bonding Additive (sold separately).

Features and Benefits

- High-strength white mortar
- Easy workability
- Minimize shrinkage in joints
- Multi-purpose mixture
- Mix with water or a concrete bonding additive

When/Where to Use

- Interior and exterior
- Glass block windows
- Glass block shower and bathroom walls
- White mortar or tuckpointing for brick, block, and stone

4. TECHNICAL DATA

Glass Block Mortar exceeds ASTM C 270 and C 1714 property requirements for Type S Mortar achieving a compressive strength in excess of 1,800 psi (12.4 MPA) at 28 days.

Greater than: > Greater than or equal to: ≥ Less than: < Less than or equal to: ≤

Typical Values • Glass Block Mortar		
Initial Set Time	15-20 minutes	
Final Set Time	60-120 minutes	
	Test Results	ASTM C270 Requirements
Compressive Strength @ 28 days	1,800 (12.4 MPA)	750 psi (5.1 MPA)
Water Retention	86%	75% minimum
Air Content	10.5 %	12% maximum

Note: Test results obtained under controlled laboratory conditions at 72°F (22°C) and 50% relative humidity. Reasonable variations can occur due to atmospheric and job site conditions.

Available Size

- 50 lb. (22.7 kg) bag (BOM # 102627)

Coverage

Each 50 lb. bag will yield approximately ½ cu. ft. (14.2 cm³) of wet mortar.

Approximate Quantity Required to Lay 100 sq. ft. (9.3 m ²) of Glass Block	
Glass Block Size	Number of 50 lb. (22.7 kg) bags
12" (300 mm)	6
8" (200 mm)	8
6" (150 mm)	11

5. INSTALLATION

Preparation

Read all directions before starting work.

1. Thoroughly clean all surfaces and substrates of dirt, dust, grease or other contaminants. Follow the glass block manufacturer's cleaning instructions. When repairing mortar joints, remove all loose or unsound materials.
2. When laying glass block, concrete block, or stone, be certain footings and framing are sound and adequate to support the weight load. Coordinate the placement of anchors and glass block reinforcing bars, and mark their positions. Expansion strips placed at the head and jambs should be held in place with a suitable construction adhesive and allowed to dry prior to block installation.
3. ALWAYS PRE-WET GLASS OR MORTAR JOINT SURFACE JUST PRIOR TO APPLICATION.

Note: It is the responsibility of the installer/applicator to ensure the suitability of the product for its intended use.

Mixing

1. Use cool, potable water, clean tools and clean containers.
2. Mix only the amount that can be applied within the 1 hour working time.
3. For best results, mix complete contents of the bag in a wheelbarrow, bucket, mortar box or mechanical mixer. Avoid high-speed mechanical mixing which can entrap air into the mixture.
4. Add dry mix to liquid beginning with a ratio of 7 pt. (3.3 L) per 50 lb. (22.7 kg). Always stir the powder into the liquid for easier blending. Mix product thoroughly to achieve a uniform, lump-free, putty-like consistency, about 5 minutes. Mortar should be firm, but workable to be trowelable, and stiff enough to retain ridges and peaks when troweled on a horizontal or vertical surface. If additional liquid is needed, add sparingly up to a total of 8 pt. (3.8 L). Excess water reduces strength and can cause cracking.
5. **For exterior application:** To gain improved adhesion and durability on exterior applications, it is advisable to dilute 2 parts Akona Concrete Bonding Additive (sold separately) with 1 part water. Use this diluted mixture as the mixing liquid in place of water alone.
6. If the product becomes firm before application, re-mix but do not add additional water. Do not add accelerators or retarders.
7. Warmer temperatures will reduce the working time. The addition of cold water at high temperatures, or warm water in low temperatures will aid in adjusting the mix temperature.

Application

For best results, apply only to surfaces that are frost free and above 40°F (4°C) and below 100°F (38°C) within 24 hours of application and 72 hours thereafter. For exterior use, do not apply in direct sunlight on hot, windy days or when rain is expected within 24 hours. Protect the surface from use until mortar is completely hard and set.

Glass Block: For placing and setting glass block, follow the installation instructions provided by the block manufacturer. Use a damp cloth to remove all excess mortar from the surface of the glass blocks before the mortar hardens. Gently polish off any remaining mortar residue with a clean, dry, soft cloth.

Stone: For placing and setting natural and manufactured stone, follow the installation instructions provided by the stone supplier.

Brick & Block: This product can be used as a white mortar to set masonry units. When laying block or brick, apply a bed of mortar onto the base/footing at approximately ½ in. (13 mm) to ¾ in. (19 mm) thick with a trowel. Apply mortar to units. Install the masonry units in a running bond pattern. Push masonry unit into the mortar bed and press against the previously laid unit to ensure full contact and adhesion. Follow brick or block manufacturer's instructions for further details.

Curing

Masonry mortars require damp curing only if conditions are hot, dry, or windy. Use a gentle mist of water or light fogging of the surface to prevent premature drying in those conditions.

Clean Up

Use soapy water to clean hands and tools immediately after use. Dried material must be mechanically removed. Use a waste water hardener (e.g. Congelz® or similar product) for cementitious waste disposal.

Limitations

- Follow all industry standard safety procedures when handling, such as gloves and eye protection. Wear gloves at all times, failure to do so can result in severe burns.
- Ideal application temperatures are between 50°F-90°F (10°-90°C).
- Mix with clean potable water or a liquid bonding additive
- Do not use more than the recommended amount of liquid. Overwatering may cause excessive shrinkage, cracking, reduce adhesion, and long term durability.
- Use only clean mixing containers and tools.
- Temperature and humidity may cause the set time to vary slightly. Cooler weather will slightly retard set time – hot weather will slightly accelerate set time.

Safety

READ THE SAFETY DATA SHEET (SDS) BEFORE USING THIS PRODUCT. SDS information is available on our website: tccmaterials.com

Cautions

Read complete cautionary information printed on product container prior to use.

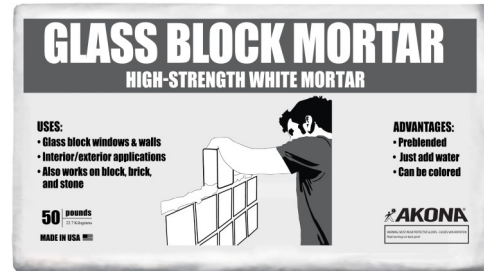
This Product Data Sheet has been prepared in good faith on the basis of information available at the time of publication. It is intended to provide users with information about and guidelines for the proper use and application of the covered Akona brand product(s) under normal environmental and working conditions. Because each project is different, TCC Materials cannot be responsible for the consequences of variations in such conditions, or for unforeseen conditions.

6. AVAILABILITY

To locate Akona products in your area, please contact:
 Phone: 1.651.688.9116
 Email: infotccmaterials.com

7. WARRANTY

Seller warrants that its product will conform to and perform in accordance with the product specifications. The foregoing warranty is in lieu of all other warranties, expressed or implied, including, but not limited to those concerning merchantability and fitness for a particular purpose. Because of the difficulty in ascertaining and measuring damages hereunder, it is agreed that Seller's liability to the Buyer shall not exceed the total amount billed and billable to the Buyer for the product hereunder.



Shelf Life	Best when used within one year in original, unopened bags
Storage Conditions	Store dry, cool, out of direct sunlight. Best to condition material to 50-80°F (10°-27°C) before using.
Color	White

WARNING: INJURIOUS TO EYES

KEEP OUT OF REACH OF CHILDREN

©Copyright 2020 TCC Materials®



2025 Centre Pointe Blvd, Suite
 300, Mendota Heights, MN 55120

REV 10/20