

PRODUCT DESCRIPTION

Akona® Medium-Duty Refractory Mortar is a dry, preblended mortar ideally suited for setting masonry units in fireplaces, inside of fire pit rings, barbecues, pizza ovens, or chimney applications such as setting clay flue liners and parging a smoke chimney chamber. This specially-engineered blend of specific cements and aggregates gives the mortar unique heat-resistance and thermal characteristics for use in high-temperature applications. Medium Duty Refractory Mortar is also used to bond fire brick or clay flues to each other. Ordinary mortars can be destroyed or deteriorate under such high-heat conditions. Passes ASTM C199 for mortar temperature limits to resist 2,550°F (1399°C) for a minimum of 6 hours without melting out of the joints of a firebrick and refractory mortar assembly. Required by most building codes for installation of firebrick and flues in chimneys, masonry fireplaces and similar applications.

Specification

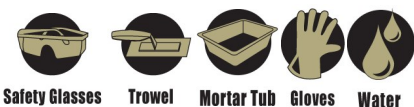
- Passed ASTM C199 *Standard Test Method for Pier Test for Refractory Mortars* for medium-duty
- ASTM C 1283 *Standard Practice for Installing Clay Flue Lining*
- ASTM E 136 *Test Method for Behavior of Materials in a Vertical Tube Furnace*

WHEN/WHERE TO USE

- Laying fire brick or clay masonry in high heat applications
- Interior or exterior
- Use for constructing or tuck pointing fireplaces, barbecues, and chimneys
- Outdoor fireplaces and fire pits



Helpful Items:



- Setting clay flue liners
- Set or parging of smoke chambers

ADVANTAGES

- Medium-Duty Hydraulic Mortar
- Good for applications up to 2550°F (1399°C)
- Non water soluble
- Just add water, mix, and use
- Air entrained for freeze-thaw resistance
- One hour working time
- Great workability and high strength

AVAILABLE SIZE

- 50 lb. (22.7 kg) bag (BOM #104319)

YIELD

One 50 lb. bag will yield approximately a ½ cu. ft. (0.014 m³) of wet mortar. This will lay up about 80-100 standard fire bricks at ½ in. (3 mm) joint thickness.

PREPARATION

Read all instructions before starting work. All materials should be conditioned to 40° F-75°F (4°C-24°C) 24 hours prior to installation. Remove all loose or unsound materials. Thoroughly clean all surfaces and substrates of dirt, dust, grease or other contaminants. Do not apply to painted surfaces. Paint must be removed to ensure proper adhesion to the substrate.

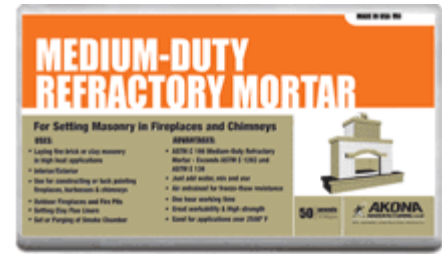
MIXING

To mix a 50 lb. bag of Medium-Duty Refractory Mortar in a mortar tub, pour the full bag into the tub. Create a trough in the powder and add approximately 3.5-4.5 qt. (3.3-4.2 L) of potable water. Mix with a shovel or hoe to the desired consistency. Mix for 2 minutes, let rest for 3 minutes, then mix again for 2 minutes. Add additional water in small increments. The use of warm water will accelerate set time, cool water will help to slow set-time. Do not mix more mortar than can be applied in 60 minutes.

A mechanical mixer or a 5 gal. (18.9 L) bucket with a mixing drill attachment is a suitable alternative method to mixing this product.

APPLICATION

For best results, do not apply when temperatures drop below 40°F (4°C) within 48 hours of application. Do not



WARNING: INJURIOUS TO EYES

KEEP OUT OF REACH OF CHILDREN

apply to frozen or frost-filled surfaces. Do not apply in direct sunlight on hot, windy days or when rain is forecasted within 24 hours.

For fire or clay brick, a ½ in. (3 mm) to ¾ in. (9.5 mm) joint thickness is fairly common. For clay flue tile, a ½ in. joint thickness is common. Always check with brick manufacturer for their joint thickness recommendations and installation guidelines since this may vary depending on what product is being used.

FOR BEST RESULTS

- Allow 7-10 days before heat is applied
- If mortar becomes unworkable, dispose of the unused product. Do not retemper
- Protect from rain within 24 hours of application (i.e., cover the project)
- Cure times can vary with temperatures and exposure to sunlight

CLEAN UP

Typically water will satisfactorily clean tools after using this product. If the





MEDIUM-DUTY REFRACTORY MORTAR

Dry, medium-duty refractory mortar for setting masonry in fireplaces and chimneys

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material has begun to harden, warm soapy water may be helpful for cleaning hands and tools. Dried material requires mechanical removal.

CURING

No special curing is required under normal installation conditions. Temperatures should remain above 40°F (4°C) for a minimum of 7 days. If temperatures are expected to drop below freezing during these 7 days, thermal insulation blankets or plastic sheeting should be used.

The mortar needs to dry out completely prior to exposure to fire. If not cured completely, the material will crack due to the pressure caused by water evaporating within in the mortar. Allow a minimum of 7 to 10 days before heat is applied. Full curing times will vary with individual job conditions, sunlight, temperatures, and humidity.

Proper application and installation of all AKONA products are the responsibility of the end user.

WARNING

Always read the product SDS and cautionary statements on product container prior to application. Wear proper protective gear as advised on the label and/or SDS. Wash hands thoroughly with warm, soapy water after handling or before eating. Do not take internally. KEEP OUT OF REACH OF CHILDREN.

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.