



General Use Instructions for the WAM® AL II Family of Refractories

Storage

After receipt of your shipment, WAM® products should be stored in a cool, dry place. WAM® AL II refractories are affected by the temperature of the mixed product during placement, so to insure development of the best physical properties and the easiest steam release during dry out, make sure the material is warm prior to a cold weather installation, and cool prior to a hot weather installation. Your Westmoreland Advanced Materials™ sales representative can provide you with guidance for most situations.

Shelf Life

WAM® AL II refractories have an estimated shelf life of 15 months when stored properly. A date stamp can be found on each bag that tells you when the product was manufactured. Material that has exceeded the recommended shelf life can be installed at the user's own risk, however we suggest that a small portion of the old material be cast up to determine if set time still meets the user's expectations.

Mixing

WAM® AL II refractories should be mixed with drinkable water in a clean, contaminant free paddle mixer or other mixer that will provide similar mixing energy. The recommended water addition is printed on the technical data sheet for the product. Several ingredients in WAM® AL II refractories are water soluble, and are critical to the flow characteristics. These ingredients take some time to dissolve in the water added on site, so the recommended mixing time is 2 minutes at minimum, longer when water or material temperatures are below 50 degrees F.

Placement

Water is essential to the bond development process, and any form, existing refractory, or other product the placed material might come in contact with should be sealed or otherwise waterproofed to avoid drawing water from the newly placed material. Use oil, concrete curing compound or something similar. Soaking with water tends to start capillary action and may actual increase the chance of drawing water away from the newly placed refractory.

The placement method should be appropriate to the material (castable, shotcrete, gun mix, etc.) and to industry standards for that installation method.

Curing

Seal exposed surfaces to avoid water loss for the first 24 hours after placement. Ideal ambient temperatures during curing are 70 degrees F or above. Curing at lower ambient temperatures may affect the development of physical properties or the dry out process. **IMPORTANT: The curing process for AL II products is exothermic and some cast bodies will generate enough heat to steam during curing. Caution is recommended.**

Some materials may allow for form removal as quickly as 2 hours after placement. In this case newly exposed surfaces should be sealed to prevent water loss until the dryout procedure begins. Contact your Westmoreland Advanced Materials™ representative for guidance in specific situations.

Dryout Procedures

See a separate document, "Rate of Temperature Increase for Dry Out" available from your Westmoreland Advanced Materials™ sales representative or on the web site www.westadmat.biz.