

Ecologic Mortar®

MORTAR FOR PROFESSIONAL MASONRY RESTORATION AND SUSTAINABLE BUILDING SYSTEMS

Preliminary Equipment Acquisition - When getting ready to work with ECOLOGIC® NHL mortar it is recommended to have a paddle mixer or a high torque drill with rigid paddle attachment. Obtain rolls of burlap from a farm retail center and a means of fastening it such as hand spring clamps. Acquire regular masonry tools and a pump-up style garden sprayer. Obtain appropriate oxide tinting packs to change the mortar color.

Preliminary Preparation – Optimal Pre-wetting for Controlling Absorption is done before work and at the end of the day before each new day application. The substrate and any previous lime mortar applications should be thoroughly wetted to aid in slow curing and to control absorption of the next day's mixing water going into the substrate from the freshly mixed mortar. Let the work stand damp overnight.

WORK ONLY IN TEMPERATURES BETWEEN 40-85 DEGREES FAHRENHEIT WHEN TEMPERATURES ARE NOT EXPECTED TO FALL BELOW 35 DEGREES FAHRENHEIT FOR 72 HOURS USING ECOLOGIC™ NHL MORTAR.

Application Instructions:

1. Mist the substrate and any previous lime mortar application with water immediately before a new application but only as a slight dampening to control absorption. No standing water should remain during a new application. If substrate is retaining inordinate amounts of moisture due to rising damp, bad flashing or moisture from a chimney cavity, this must be corrected before new work begins. ASTM has reports on normal absorption rates for most building materials not explicitly covered by individual manufacturers.
2. Mixing the NHL Mortar-ECOLOGIC™ NHL must be mixed for five minutes with only clean, potable water. Start with one-half gallon of water per bag and slowly add more water only until the mix contains the minimum amount of mixing water to become workable. Keep water ratios consistent between batches to ensure consistency in material performance. Judge workability only after the five minutes of continuous mixing.
DO NOT ADD ANYTHING ELSE TO THE MIX SUCH AS PORTLAND CEMENT, LIME, FLY ASH, POZZOLANS, ACCELERATORS, RETARDERS. Casein could be added at the rate of 1/8 –1/4 lb. per bag of mortar to increase fluidity when injecting fine (F) or pumping and spraying coarse (G) mortars. Oxide tinting pigments can be added.
3. Protect the work by covering it with burlap. Spring clamp burlap a few inches away from the work and keep the burlap wetted down a few times a day for the cure period of approximately three days. Burlap allows moisture to slowly escape and encourages a slow cure. Burlap should not come in contact with the wall to

- avoid staining. Tarps could be used on the outside of the scaffold to protect from driving rain and wind
4. Wait a minimum of 10 days between coats of stucco (render). Within 24 hours of an installation rub closed any cracks that form before the next coat is installed. NHL mortar can be reworked within 24 hours depending on weather conditions.
 5. Do not build walls with Portland cement based mortars or pour Portland cement concrete and then use ECOLOGIC™ NHL mortars unless the ECOLOGIC™ NHL mortar is being used only for aesthetics in vertical pointing work or to stucco well-scarified or diamond lathed vertical concrete walls. The ability for walls to breathe is greatly reduced when Portland cement mortars are used and water will get trapped behind stucco, mortar joints and in concrete causing devastating effects often requiring complete re-installation. Clear drainage must be engineered under ECOLOGIC™ NHL mortars so that stucco does not come into contact with earth before curing and NHL Lime-Concrete must be used under horizontal brick and stone exterior finish work.

Ecologic Mortar® Contains **NO** Portland Cement, (OPC) **or** Type S Hydrated Lime to make this mortar work for gaining strength or having qualities of plasticity for ease of use.

Use to lay Brick, Stone, Terra Cotta, repointing, parging, plastering and stucco (render)

ECOLOGIC™ NHL MORTAR (17.5 KG) 38.5 LBS 1/2 CU. FT. OF MORTAR

Warning! MAY CAUSE EYE/SKIN BURNS. HARMFUL IF SWALLOWED.

Injurious to eyes and lungs. Use of tight fitting goggles and NIOSH approved respirator is recommended.

FIRST AID: In case of eye contact, flush eyes with plenty of clean water for at least 15 minutes, consult a physician immediately.

All Limes, wet or dry, are **Caustic Materials** and cause skin irritation. Use gloves and adequately protect arms, legs and all exposed skin. Wash thoroughly with clean water after handling.

Avoid breathing in lime mortar dust. Use NIOSH approved respirator and work in a well-ventilated area. Prolonged and repeated inhalation of crystalline silica found in all sanded mortar can cause silicosis, a disabling and potentially fatal lung disease as respirable crystalline silica has been designated as a carcinogenic to human.

Keep out of reach of children and non-professional practitioners.

WORKER AND COMMUNITY RIGHT TO KNOW INFORMATION

Package contains Natural Hydraulic Lime and Sand composed of the following predominant substance ingredients: (MSDS w/first order and at ww.limeworks.us)

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| Calcium Hydroxide | CAS # 1305-62-0 |
| Crystalline Silica | CAS # 14808-60-7 |