

deGruchy's

LIME



WORKS.us<sup>TM</sup>

Makers of

ecologic<sup>®</sup>

Brand  
Mortar & Plaster  
For Historic Restoration  
and Green Building

Phone: 215-536-6706  
Fax: 215-453-1310

3145 State Road, Telford, PA 18969

www.LimeWorks.us

Last Modified: May 6, 2020

## Carmeuse High Calcium (N) Normal Hydrated Lime

Carmeuse High Calcium Lime (Type N- Normal Hydrate) which comes from a pure Calcium Oxide stock. Normal hydrated lime is slaked by one moist level of heat treatment. By definition, High Calcium Lime means that over 95% of the original limestone was Calcium Carbonate ( $\text{CaCO}_3$ ) with only up to 5% impurities. Carmeuse High Calcium Normal Hydrated Lime is not considered volatile Quicklime. Normal Hydrate receives a high moist heat at the time of its initial hydration not allowing the dangerous exothermic reaction to occur. Typical cementing binders gauged in with this product are Hydraulic Limes and Natural Cements. Ordinary Portland Cement can also be added to Carmeuse Type N High Calcium Lime to create modern mortars for laying up concrete block, modern brick, stone and cementitious stucco with mortar strength designations known as Type M,S,N,O,K typically used in modern construction and referenced by ASTM C-270.

### Mixing to make cement based mortar and stucco

Carmeuse High Calcium Normal Hydrated Lime must be dry mixed for five minutes with sand and the additional binder. Typical Cement:Lime:Sand ratio is 1:1:6 for a Type N mortar. Start with small amount of water and slowly add the pre-blended, dry ingredients. 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 and appearance. Judge workability only after five minutes of continuous mixing. Carmeuse High Calcium Lime (Type N- Normal Hydrate) has other uses like making interior plaster, to make inexpensive whitewash, to cut the expense of NHL binders by gauging it in. However performance data is not offered outside the known M,S,N,O,K criteria

### General Application

Mist the substrate and any previous cement 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 any 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.

Wait 24 hours between coats of stucco at 1:1:6 ratios. Protect the new work for 24 hours from wind, direct sun, freezing temperatures, excessive heat and rain.

Do not apply at temperatures below 35°F (1.5°C) or above 95°F (35°C).

### Aiding the curing of the installed material

Protect the work outside by using spring clamps to hold plastic tarps a few inches away from the work and not in contact to avoid staining the work. Wet the work once during the 24 hour initial curing period. Tarps could be used on the outside of the scaffold to protect from hot sun, driving rain and drying winds.

**Disposal:** Sweep bulk material into containers and dispose of in a landfill in accordance with all local, state and federal regulations. The cured product is non-hazardous.

## **Technical Data**

**Working time:** Will vary depending weather and on type of binder and ratio used

**Final Cure time:** Will vary depending weather and on type of binder and ratio used

## **Shelf life**

24 months if kept sealed and away from moisture.

*Note: Soft lumps in the bag can occur and are a natural feature of this product and will not affect its performance.*

## **Safety**

Wear adequate protective clothing to avoid prolonged contact with the mortar. To avoid dust contact with eyes and possible inhalation wear glasses and the appropriate dusk mask especially in areas not properly ventilated.

*All LimeWorks.us publications are offered on a complementary basis and as a general guide for our customers without guarantee to the accuracy or completeness of any information contained in them. The purchaser is solely responsible to determine the suitability of any LimeWorks.us product for any intended use and purpose.*

## **Contact**

LimeWorks.us

3145 State Road, Telford, PA 18969

www.LimeWorks.us

Technical help phone: 215-536-6706

Fax number: 215-453-1310

E-mail: info@LimeWorks.us