Edison Coatings, Inc.

ROSENDALE

NATURAL CEMENT PRODUCTS®

Whitewash 15W

Natural Cement-Based Coatings for Historic Masonry

DESCRIPTION

Rosendale Whitewash 15W is a series of custom-matched, pre-packaged coatings based on natural cement or natural cement-gauged lime. The coatings formulations incorporate traditional paint and whitewash recipes specified in 19th and early 20th Century U. S. Government specifications for durable whitewash. They are prepared as fully formulated, ready-to-use coatings for historic masonry substrates such as brick, stucco, stone and natural cement concrete. **Rosendale Whitewash 15W** features high vapor permeability, tenacious adhesion and low modulus of elasticity.

Rosendale Whitewash 15W is available in two standard formulations and in a wide range of custom colors and formulas. The standard formulas include a tan-grey color, typical of unmodified natural cement, and an off-white-buff color, typical of natural cement-gauged lime and similar to a light buff limestone. Typical 19th Century color formulations incorporating red, yellow, and black iron oxide pigments are offered, and additional cement-stable colors can be produced upon request.

FEATURES

Rosendale Whitewash 15W offers performance features which are unique to natural cement products, including:

- **Fast Initial Set:** Typical initial set time is 30-60 minutes, and final set time is 45-120 minutes. Setting time is prolonged in mixtures containing higher proportions of lime.
- **Moderate Strength:** Compressive strengths are similar to traditional masonry mortar strengths. Unlike non-hydraulic limewash products, which require multiple applications, long periods of time for reaction with atmospheric carbon dioxide, and frequent reapplication, natural cement achieves full-depth set at any thickness within minutes or hours. Because natural cement is produced by firing at the same relatively low temperatures used in building lime production, it is free of tricalcium silicates and aluminates which have been linked to incompatibility with historic masonry.

- **Water Resistance:** Natural cement-gauged whitewashes withstand rain exposure within a short time of application, facilitating installation. They are also suitable for use at lower temperatures than ordinary lime and natural hydraulic limes.
- **Early Freeze Resistance:** Natural cement washes that will not be subjected to saturated conditions while frozen require only a relatively short period of protection from freezing. This facilitates installation over the course of a much-extended working season in northern climates, as compared with lime and hydraulic lime products. For applications involving exposure to freezing while saturated, consult Edison Coatings for mix design guidance.
- **Low Modulus:** Unlike Portland cement-lime coatings which tend to embrittle with time, natural cements continue to relieve stress and remain mechanically compatible with masonry substrates. **Rosendale Whitewash 15W** can provide long service life without cracking or delamination from masonry units.
- **High Permeability: Rosendale Whitewash 15W** provides high rates of moisture vapor transmission, assuring that buildings and structures will "breathe", and avoiding moisture entrapment.
- **Customization:** Natural cement whitewashes were historically formulated in a wide range of colors and proportions. **Rosendale Whitewash 15W** is offered in a wide range of custom colors to match historic finishes.

APPLICATIONS

- **Rosendale Whitewash 15W** may be used as a stand-alone masonry coating system, or as a final finish over natural cement and lime-based stuccos.
- **Rosendale Whitewash 15W** may be formulated and used as authentic duplicates of original, historic whitewashes for buildings and structures originally built using natural cement coatings.
- **Rosendale Whitewash 15W** may also be used in applications where original mortars or stuccos were entirely lime-based, in situations where adverse weather, reduced curing requirements and faster resistance to rain and frost are required.

FORMULATION

- **Rosendale Natural Cement Products®** are produced from argillaceous limestones conforming to the requirements of *ASTM C10 Standard Specification for Natural Cement*.
- **Lime** incorporated in **Rosendale 15W** can be customized to meet individual project requirements. Hydrated dolomitic building lime meeting the specifications of ASTM C207 Type S or SA, or high calcium limes meeting the requirements of ASTM C207 Type N may be incorporated. Lime can also be omitted in order to allow on-site addition of lime paste (putty) or field-hydrated quicklime.

INSTALLATION

Rosendale 15W whitewashes are applied in accordance with traditional masonry practices. These practices are taught to masons and restoration contractors in the course of hands-on training workshops, which are offered on a regular basis. On-site training services are also available. Applicators meeting the performance requirements of the training workshop are individually certified. Alternate provisions are made for acceptance of experienced masons who have demonstrated their knowledge and abilities in traditional masonry practices.

General installation guidelines are typical of all traditional whitewashes. Substrates must be sound, clean, roughened and properly prepared. Thorough pre-wetting of masonry is required to assure that the whitewash will not dry too quickly. **Rosendale Whitewash 15W** must be mixed with clean water in accordance with printed mixing instructions, and water addition levels must be controlled in order to obtain optimum color uniformity and best performance.

Mixing Ratio: 4.5 to 5.5 gallons of Water per 35 lb bag of 15W Whitewash

Mixed whitewash must be used before initial set, so mix only as much material as will be used within 30 minutes. Once material has begun to set, it should not be re-tempered or adjusted with additional water, but should be discarded. If multiple coats are to be applied, they should be installed in rapid succession, before the prior application has completely set. Generally, two to three applications will be sufficient.

Once the coating has been applied, it must be maintained in a damp condition throughout its curing period. Generally, this period of wet curing will be from 1 to 3 days, depending on formulation and conditions. Formulations without lime can be covered with polyethylene or otherwise maintained in a continuously wet condition. Formulations incorporating lime should be cured by misting several times per day, allowing the surface to dry between each misting. Consult Edison Coatings for curing guidelines for your specific project conditions and formulation.

Edison Coatings, Inc.

Revised: 06/2023

3 Northwest Drive, Plainville, CT 06062

Phone: (860) 747-2220 or (800) 341-6621 **Fax: (860) 747-2280 or (866) 658-1189**

E-mail: chad@edisoncoatings.com **Internet:** www.edisoncoatings.com