Edison Coatings, Inc.

E-NHL 35G/35Gi

Natural Hydraulic Lime (NHL 3.5) Injection Grouts

DESCRIPTION:

E-NHL 35G™ (sanded) and ***E-NHL 35Gi™*** (un-sanded) are a series of custom matched, prepackaged, natural hydraulic lime grouts for use in new construction and restoration. It is produced from ***E-NHL 3.5™ Natural Hydraulic Lime*** which has a CE Certification and is in full compliance with UNI EN 459 1:2010, obtaining a registration mark as NHL 3.5 (Natural Hydraulic Lime 3.5).

WHY NATURAL HYDRAULIC LIME?

For architectural and historical applications, mechanical characteristics such as excellent porosity and low soluble salts ensure full compatibility with traditionally produced building materials (stone, solid brick, etc.). A high permeability to water vapor, ability to prevent bacteria and mold and optimal hygrothermal function ensures the achievement of high performance and durability, making natural hydraulic lime an ideal binder for quality restoration work and Green Building.

NOTE: Test areas should always be installed prior to large scale application to assure compatibility and performance under actual use conditions.

E-NHL 35G/35Gi™ Preparation:

1. Use ***E-NHL 35G/35Gi™*** with water only, unless otherwise instructed. Mix with clean water, free of oils, acids, alkali, salts, organic materials, or any other substance that may be deleterious to grout or metal in the masonry assembly. Admixtures such as color pigments, air entraining agents, accelerators, retarders, water repellents, anti-freeze compounds and other admixtures should not be added to grout unless specified and approved by Edison Coatings Inc.

2. Add the full volume of mixing water required for the desired flow, to the mixing bucket. Water addition level can vary on a project to project basis and can be determined during mock-ups. Add ***E-NHL 35G/35Gi™*** slowly, while mixing with a 200-400 rpm paddle mixer, until the desired working consistency is reached. The total mixing time should be 5 minutes. The water to powder ratio may vary from batch to batch, depending on weather conditions. Use the minimum amount of water required to produce the desired workability. The typical mixing ratio of powder to water for ***E-NHL 35G™*** is 50 lbs of powder to 1.3 gallons of water. The typical mixing ratio of powder to water for ***E-NHL 35Gi™*** is 16 lbs of powder to 1 gallon of water. Flow time at the stated mix ratio is approximately 45 minutes, but may vary based on weather conditions. ***E-NHL 35G™*** is packaged in 50 lb bags. ***E-NHL 35Gi™*** is packaged in 16 lb pails.

APPLICATION:

Grouting procedures can vary considerably from one application to another. The following are some general guidelines:

1. Loose materials, such as unbonded masonry mortar, loose bricks or delaminated concrete must be removed and replaced prior to crack injection.

2. Injection holes should be drilled to enable delivery of grout to the full length and depth of the cavity to be filled. For transverse (perpendicular to surface) crack-filling and for void injection, injection holes are typically drilled into the face of the crack at a downward angle to a depth of ½ the masonry thickness. For filling of lateral cracks (parallel to surface, e.g., delaminating layers of sandstone), holes are generally drilled near the top and bottom of the area to be filled, beginning at the upper and lower and corners and then every 3 to 9 inches along the upper

and lower edges of the cavity, or larger based on crack width or void size. The lower row may be drilled square with the surface (at 90° to the wall surface). The upper row of holes should be drilled at a downward angle. For filling of voids with ***E-NHL 35G/35Gi™***, diameter of the holes drilled may vary with the intended method of grout delivery. When using ***E-NHL 35G™***, typical delivery by grout pump through ½" pressure hose, a ¾" or larger hole is required. When using ***E-NHL 35Gi™***, a ¼" or larger pressure hose and hole are required.

3. Seal the face of the crack with temporary non-staining clay, sealant or mortar.

4. All crack and void cavities must be thoroughly flushed with clean water to remove as much dirt, debris and contaminants as possible and to pre-saturate the areas to be grouted. Continue flushing until clean water runs from the lowest port. A minimum of 20 minutes of pre-wetting should be performed prior to grouting. Repeat pre-wetting if either drying occurs prior to injection or if more than two hours elapse from the time of pre-wetting.

5. ***E-NHL 35Gi™*** should be screened prior to pumping, to prevent any unmixed particles from clogging the grout pump. Typically, a common window screen is placed on the opening to the grout hopper.

6. Some methods of grouting involve injecting from the lowest port, followed by plugging of the injection port once grout flows from the port above. from the port. The ***E-NHL 35G/35Gi™*** product is compatible with a variety of good grouting practices and equipment. Grouting for structural repair should always be performed under the supervision of a licensed structural engineer and an experienced grouting engineer.

Storage and Handling:

Store powder in dry area, off the floor. Avoid skin and eye contact and avoid breathing dust. Observe all safety and handling guidelines as detailed in the Material Safety Data Sheet supplied with this product. Properly stored, closed bags have a shelf life of 12 months from date of production.

Keep tools clean and wet during use, and clean up immediately after use. Keep packages closed when not in use.

For further information or assistance, contact Edison Coatings.

FOR COMMERCIAL AND INDUSTRIAL USE ONLY

Edison Coatings, Inc.

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