DISPERSED HYDRATED LIME
DIM – INJECTION MORTAR
Product Data Sheet

Description and Use

Dispersed Hydrate Lime Injection Mortar is an engineered repair mortar designed for the repair of nonstructural cracks in stone or masonry units. DHL Injection Mortar is a mineral-based, single component material that does not require mixing with any other material, including water. No synthetic polymer additives are added. Formulated using only natural mineral binders, DHL Injection Mortar exhibits excellent UV, freeze-thaw and salt resistance while maintaining flexibility and vapor permeability.

DHL Injection Mortar is typically installed in-situ to fill and repair nonstructural cracks in existing masonry units. DHL Injection Mortar is applied with a syringe. Skilled restoration masons can easily apply DHL Injection Mortar; training is offered but no special certification is required.

Features and Benefits

- Inhibitive against algae and mildew
- Weatherproof
- Strong adhesion on mineral surfaces
- Highly diffusible and good capillarity
- Matt texture
- Low tension
- Easy to handle
- Sympathetic product formulation ensures compatibility with stone based on key performance measures, resulting in superb long-term repair durability.
- USHG provides unmatched product and project support, for one pail or hundreds, to ensure excellent results for every installation.

Technical Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength (28 Days)</td>
<td>725-1450 psi</td>
</tr>
<tr>
<td>Bond Strength</td>
<td>43-72 psi</td>
</tr>
<tr>
<td>Flexural Strength</td>
<td>290-797 psi</td>
</tr>
<tr>
<td>Modulus of Elasticity</td>
<td>5.8X10^4(5)-1.3X10^6 psi</td>
</tr>
<tr>
<td>Porosity</td>
<td>24-35%</td>
</tr>
<tr>
<td>Absorption</td>
<td>14-25%</td>
</tr>
<tr>
<td>Linear Coefficient of Thermal Expansion:</td>
<td>6.2-6.4X10^(-6)/°F</td>
</tr>
</tbody>
</table>

Packaging and Coverage

<table>
<thead>
<tr>
<th>Packaging</th>
<th>Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-quart plastic jar (2 lbs.)</td>
<td>35 cubic inches of mixed material</td>
</tr>
<tr>
<td>1-gallon plastic pails (9 lbs.)</td>
<td>150 cubic inches of mixed material</td>
</tr>
</tbody>
</table>

Limited Warranty

U.S. Heritage Group, Inc. warrants this product to be of merchantable quality when used or applied in accordance with the manufacturer’s instructions. This product is not warranted as suitable for any purpose or use other than the general purpose for which it is intended. Liability under this warranty is LIMITED to the replacement of the product (as purchased) found to be defective, or at the shipping companies’ option, to refund the purchase price. In the event of a claim under this warranty, notice must be given in writing to U.S. Heritage Group, Inc., 3516 North Kostner Ave., Chicago, IL 60641. THIS LIMITED WARRANTY IS ISSUED AND ACCEPTED IN LIEU OF ALL OTHER EXPRESSED WARRANTIES AND EXPRESSLY EXCLUDES LIABILITY FOR CONSEQUENTIAL DAMAGES.

Sales Product and Project Support

US Heritage Group supports, sells and ships all products directly to ensure we consistently deliver the highest quality results possible. Contact USHG for a variety of support services:

- Specifier education
- Project-specific technical advice
- Specification guides and support
- Installation guides and training

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Surface Preparation
Cracks being repaired with DHL Injection Mortar should be less than 1/4” wide. Cracks larger than 1/4” should be filled using the appropriate corresponding Heritage Masonry Repair Mortar.
1. Cracks should be wide enough to fit the injection syringe (typically 1/16”). If cracks are narrower than syringe needle, drill pilot holes along the path of the cracks in a downward direction. Pilot holes should be drilled every 3-4”.
2. Neutralize any salt deposits (efflorescence and subflorescence) with distilled water.
3. Dampen with clean water 2-4 hours before application.

Mixing
DHL Injection Mortar is a wet mix and is ready for installation straight out of the container. For concrete crack repair, up to 10% Cement by weight and water may be added to the material. Consult US Heritage Group before adding any ingredients to the material.
1. Prior to application, DHL Injection mortar should be mixed by hand with a paint stick or appropriate stirring device.
2. If additional workability is required, clean water may be added to DHL Injection Mortar. The amount of water added to the material should not exceed 10% by weight.
3. Do not add masonry pigments to DHL Injection Mortar, as pigment particle size is significantly larger than the DHL particle size and will interfere with the ability of the material to penetrate cracks.

Application
DHL Injection Mortar can be applied by injection syringe directly into cracks or by brushing the material across the surface of fine cracks. Do not install material bellow 40°F or above 90°F.

Injection Application
1. Fill injection syringe with mixed DHL Injection Mortar.
2. Insert syringe into crack until the tip of the needle reaches the back of the crack.
3. Inject DHL Injection Mortar into the crack, slowly removing the syringe as material fills the back of the crack.
4. When syringe is empty refill it and reinsert into the crack at its previous depth then continue to fill the crack with DHL Injection Mortar.
5. Continue to fill the crack until the DHL Injection Mortar has reached a depth 1/4” from the surface of the masonry unit.

Surface Application
1. Using a brush or gloved hand, apply mixed DHL Injection Mortar over the surface of the cracks.
2. Remove any extra material with a damp cloth after the application is complete, or leave in place as a protective coating.

Cleaning
1. Clean all tools and surfaces with clean water immediately after application before the mortar has time to dry.
2. Remove surface smears/residue gently with a damp cloth, avoiding contact with repaired area.
3. Remove hardened material mechanically.

Curing and Capping
DHL Injection Mortar should be allowed to cure for at least 5 days before capping the opening. During this time, the material should be protected from temperatures below 42°F and above 90°F. After the initial curing is complete, the openings of the cracks should be capped with an application of custom matched DHL Spachtel. Refer to the DHL Spachtel datasheet for application instructions.

Storage
US Heritage Group DHL Injection Mortar has a shelf life of 6 months when stored at a constant temperature and relative humidity in its original sealed container.

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