

JAHN M35

Injection Grout



Cathedral Stone® Products, Inc.
The leader in scientific masonry restoration

jahn
Restoration Mortars

Jahn M35 contains no corrosive constituents, and achieves extraordinary flow capacity, penetration and strong adhesion. To enhance flow, penetration and bonding, a small amount of synthetic material is included. M35 can be applied via low pressure injection into cracks or voids 1/8" (3.0 mm) or greater in width. This product may be utilized in both nonstructural simple void applications and structural load bearing situations. M35 is vapor permeable for compatibility with masonry substrates.

Features and Benefits

- **Single-Component:** Easy to mix correctly, thereby improving quality control at the point of injection.
- **Compatible Formulation:** Compatibility of physical properties ensures that the grout and natural substrate react to the environment in the same way.
- **Tenacious Adhesion:** Strong bonding capabilities.
- **Factory Controlled:** No field chemistry resulting in product variation.
- **Low Viscosity:** Deep, thorough penetration.
- **Simple Application:** Can be applied by low pressure pumping.
- **Water Based:** Environmentally and user safe. No solvent clean-up or disposal problems.
- **Low Leading-Edge Slump:** Leading Edge can be easily controlled during injection to prevent seepage or leakage into undesired depths.

Application Procedures

Preparation

Wash the surface and interior of the crack or void using clean water to remove all dust, loose or deleterious material, which could prevent proper flow and/or adhesion thereby compromising the integrity of the cured injection grout.

Mixing

The mixing ratio is approximately 3 to 3½ parts powder to 1 part water by volume. Mix by hand or mechanically, using a slow speed drill (400 – 600 RPM) equipped with a Jiffler-type mixing paddle. The material should be mixed for a minimum of three minutes, with continued agitation. Additional or

repeated agitation is necessary if the grout is allowed to sit prior to use.

Injection Procedures

Immediately before injection, moisten interior of the crack or void by flushing with water. The contact surface of the stone should be surface saturated with water. If the crack or void is allowed to dry out before the grout is injected, this step must be repeated. This is very important.

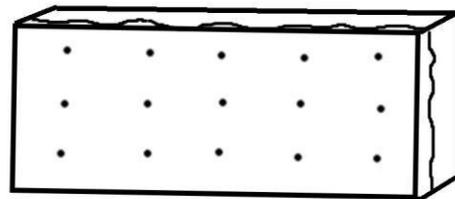
Transverse Cracks



Drill a series of injection ports in the center of the crack. These ports should be drilled in a downward direction. Seal the crack with removable, nonstaining clay, sealant, or caulk.

Inject grout into the lowest port and continue until it flows freely from this port and other ports at the same level. Seal ports using non-staining clay, sealant, or caulk and proceed in identical fashion until the crack is filled. **Clean up overflow and runs immediately with clean water.**

Lateral Cracks (Delaminating Layers)



Drill a series of injection ports in a square configuration (90° angles) on the face of the substrate to create a "drill frame". Ports should be drilled in a downward direction. Wash the surface and interior of the crack using clean water to remove dust and loose debris. Any dust or debris remaining between the layers will impede the flow of the grout. If this is the case, more holes will be required to attempt to fill all hollow areas.

Inject grout into lower left port and proceed until it flows freely from this port and other ports at the same level. Seal ports using non-staining clay, sealant, or caulk. Inject grout into lower right port and proceed in identical fashion. The order of injection is lower left, lower right, upper left, and then upper right. **Clean up overflow and runs immediately with clean water.**

Removal of Sealant

Let the grout set up (approximately 24 hours) and remove all sealant, caulk, or clay. After removing the sealant, repair the crack surface and injection holes with Jahn Mortar that matches the color and type of existing masonry.

Clean Up

While injecting, continually check for grout runs and spills on the surface of the masonry, and clean the surface before the grout has time to set. This is normally done with a clean sponge and water, and may have to be repeated several times, rinsing the sponge with clean water.

Remove uncured grout from tools and equipment with water as soon as possible. Cured grout may only be removed chemically or mechanically.

Safety Requirements

It is recommended that safety goggles, gloves, and a dust mask equipped with P-2 filters (or equivalent) be worn for protection while mixing the grout.

Limitations

- Do not apply Jahn Micro Injection Grout to a frozen or hot substrate. The applied grout must be protected from extreme heat, freezing, excessive wind, direct sunlight, and rain. Ambient temperature range should be 40° F to 90° F with low to average humidity.
- Do not add bonding agents to Jahn Injection Grout or use them as surface preparation materials.

Packaging

A two-gallon plastic pail contains approximately 18 lb. of material. Coverage will vary depending on the type of substrate and the size of the crack.

Storage and Shelf Life

Store material in a dry area away from direct sunlight. Ambient storage conditions should be in the range of 40° F to 90° F with low to average humidity. Average shelf life is 10 years in original, unopened packaging.

Technical Data

Jahn M35 Injection Grout

LIQUID/PLASTIC PHASE	
Volume mixed M35 in fluid oz. per lb. of dry material	14.3 fl oz/lb (approx.)

HARDENED PHASE	
Compressive strength	1500 to 4400 psi
Tensile bending strength	290 to 730 psi
Tensile strength	58 to 100 psi
Ratio in/3 water/lb of dry material	5.3 to 6.0 fl. oz/lb.
Specific gravity	1.3 (approx.)

Warning

Not for internal consumption. Keep out of reach of children and animals. Consult Material Safety Data Sheet (MSDS) for specific information.

Notice: The information contained herein is based on our own research and the research of others, and it is provided solely as a service to help users. It is believed to be accurate to the best of our knowledge. However, no guarantee of its accuracy can be made, and it is not intended to serve as the basis for determining this product's suitability in any particular situation. For this reason, purchasers are responsible to make their own tests and assume all risks associated with using this product.

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