

## PRODUCT DESCRIPTION

PlekoLime IG is a high-performance, pre-blended injection grout based on Natural Hydraulic Lime (NHL 3.5) and specially selected ultra-fine mineral fillers. It is designed for the consolidation of masonry, stone, or heritage structures with fine cracks or voids, allowing structural bonding without compromising breathability. The product offers excellent injectability, controlled expansion, and durable mechanical strength suitable for historic preservation and restoration work. It is easy to use by just adding water, improving on-site quality control.

## USES

PlekoLime IG is used for injection grouting of voids in double-wall masonry systems, consolidation of stone facades, historical columns, and delaminated brickwork. It is ideal for heritage restoration and archaeological conservation projects where material compatibility and breathability are critical. The product is also suitable for stabilizing structures affected by rising damp or moisture-related degradation by effectively filling internal gaps and restoring structural integrity without compromising the original fabric of the structure.

## PACKAGING

20 kg in multiply paper bag

## COVERAGE

1.8-1.9 kg/m<sup>2</sup>/mm depending on the substrate and application method. Recommended thickness between 4-10 mm. A 25K bag will yield approx. 16.7 liters of mortar. Manufacturer does not warrant square meter coverage, which can vary greatly according to application techniques.

## PROPERTIES

- **High fluidity and low viscosity for effective injection into fine cracks**
- **Compatible with historic masonry (lime-based, low-strength, breathable)**
- **Slightly expansive, minimizing shrinkage and ensuring full void filling**
- **No need for bonding agents – adheres to internal surfaces**
- **Suitable for hot and tropical climates**
- **Non-corrosive and alkali-safe for steel reinforcement**
- **Sulfate-resistant, chloride-free**

## TECHNICAL DATA

Appearance	Free-flowing beige powder
Binder	NHL 3.5
Wet Specific Gravity (kg/L ± 0.05)	2.0
Water Ratio (%)	29-31
Pot Life @ 25C	≥ 25min
Flowability (ASTM C939) at T0 and T30	≤25 sec
Initial Setting Time (hrs) ASTM C953	2-4
Final Setting Time (hrs) ASTM C953	8-10
Compressive Strength (N/mm <sup>2</sup> ) after 28 days / ASTM C109	≥ 1.8

## INSTALLATION

### SUBSTRATE PREPARATION

Surface must be sound, clean, dry, free of bond-inhibiting materials such as paint, grease, oil, efflorescence, form release agents and curing compounds. Clean surfaces mechanically and flush voids with water or compressed air to remove debris. Moisten slightly the substrate with clean water prior to application. Surface should appear damp with no water running.

### MIXING

Use a clean container free of all foreign substances for preparing and mixing material. Use a heavy duty electric drill and mixing paddle. Add 5.8-6.2 L (for 20Kg bag) of potable water to container, add PlekoLime IG in small increments while mixing thoroughly to achieve lump-free consistency. Let mixture set for 5 minutes and re-temper. Small amount of clean water may be added if necessary to improve workability, but do not add water once the mixed mortar starts to harden. At high temperatures, use chilled (15-30°C) water for mixing and keep mixed grout temperature below 30 °C.

### INJECTION

Ensure grout inlets and outlets are unobstructed. Inject continuously at low pressure to avoid air entrapment. Begin injection from the lowest point and work upward. Close each outlet once consistent grout is observed. Maintain consistency checks throughout the process.

### LIMITATIONS

Substrate temperature: 4 - 35°C

Ambient temperature: 4 - 35°C.

Maintain minimum 4 °C (40°F) ambient temperature for 24 hours after application.

Do not apply to frozen surfaces or in extreme heat without shading. Protect from direct sunlight, wind and rain during application. Protect from rain or frost for 48 hours after application.

Do not mix with any additive or product unless recommended by Pleko.

Pleko bears no responsibility for the defects due to the improper or non-recommended use of the product.

### CLEANING

While still fresh, soluble in water. Clean all equipment with water immediately after use. After hardening, tools should be cleaned mechanically.

### STORAGE

Store in cool, dry, well-ventilated area, protected from freeze, heat and direct sunlight and at a temperature between 4°C (40°F) and 38°C (100°F), in tightly sealed original container off the ground. Storage time must not exceed one year.

## HEALTH AND SAFETY

Avoid contact with eyes and skin. Prevent inhalation of dust.

The product contains hydraulic lime, which can be irritating to the skin and eyes. It is preferable that the application be done in a ventilated area, and to wear protective gear for hands, eyes and respiratory system and to avoid breathing of the dust. Splashes on the skin should be washed away by cleaning with soap and water. In case of contact with eyes, wash thoroughly with clean water. If swallowed, do not induce vomiting, in both cases seek medical attention. The product is non-flammable

#### Attention

This product is intended for use by qualified professional contractors, as a component of a larger construction system and specification. It should be installed in accordance with given instructions and specifications. Information listed above reflects the criteria for our internal quality test and practical experience. Results depend on listed instructions and consumer skills and are therefore out of our responsibility whether expressed or implied. All values are valid for the product when dispatched from the plant. Technical data are generated under laboratory conditions, some variations are expected due to weather, site, and application conditions which are beyond the control of the manufacturer. We reserve the right to change any given specification without notice.