

RISANAMURI gel

HORIZONTAL CHEMICAL GEL BARRIER AGAINST CAPILLARY RISING DAMP

Ideal for old or compact thick masonry



DRACO

RENOVATION and BIOARCHITECTURE

LINE

TECHNOLOGY BY INJECTION
FOR DEHUMIDIFYING
MASONRY



RISANAMURI GEL is a ready-to-use creamy silicone emulsion to create horizontal, water-repellent chemical barriers in both new and older masonry subject to rising damp and salt attack. **RISANAMURI GEL** is solvent-free, non-toxic, easy to apply with cartridges extruder or hand pressure machine and can be used both indoors and outdoors to provide a dehumidifying chemical barrier in brickwork, stone, tuff and concrete even if they are thick.

BENEFITS

Specific product features:

- ✓ **WATERPROOF:** **RISANAMURI GEL** penetrates deeply and permanently blocks the ingress of water and its aggressive agents, thus substantially reducing the causes of masonry degradation.
- ✓ **HIGH PENETRATION:** thanks to its formula based on very small silicone molecules and a mixture of surfactants, **RISANAMURI GEL** penetrates deeply through the surface thus ensuring uniform penetration even in low absorbing materials.
- ✓ **ANTI-SALT:** **RISANAMURI GEL** inhibits salts, thus preventing aggression by chlorides and sulphates.
- ✓ **HYDROPHOBIC AND BREATHABLE:** **RISANAMURI GEL** provides the masonry with a really high level of hydrophobization, thus blocking capillary rising damp and at the same time promoting the migration of water vapour.
- ✓ **ECOFRIENDLY:** **RISANAMURI GEL** has a non-toxic formula, it is solvent-free and odourless.
- ✓ **CHEMICAL RESISTANCE:** **RISANAMURI GEL** is resistant to UV and to permeation by acids, alkalis and salts of groundwater.
- ✓ **EFFECTIVENESS OF MASONRY CONSOLIDATION:** the silicone composition of **RISANAMURI GEL** contributes to restore the stability of the walls impaired by soluble salts dissolved in water.
- ✓ **FAST AND EASY TO APPLY:** **RISANAMURI GEL** is ready to use and can be applied with extruder or manual pressure machine without the need for injection tools. Its thixotropy allows the use of horizontal holes without casting.
- ✓ **LONG-LASTING INTERVENTION:** **RISANAMURI GEL** ensures an effective protective barrier that will last over time.



AREAS OF APPLICATION

- ✓ Dehumidification of masonry by injections.
- ✓ Creation of a chemical barrier to rising damp on brick and stone walls.
- ✓ Ideal for both new and older masonry in historical buildings.
- ✓ Creation of a protective, breathable barrier that is resistant to chlorides and sulphates and will last over time.
- ✓ Water-repellent cortical protection for porous surfaces.

SUBSTRATE PREPARATION

Before performing the intervention, it is necessary to examine the work that needs to be restored in order to establish the level of moisture, the salt content, the masonry type and the possible presence of plaster.

- **Substrate preparation:** Remove the low band of the plaster affected by moisture up to a height of at least 1 m, remove flaking concrete and clean out dust and debris.

HOW TO USE

CHEMICAL BARRIER

- **Arrangement of the holes for subsequent injection:** The holes must be arranged about 15 cm from the planking level between floor and ground level, at the highest point between inside and outside. The holes, which have a base diameter of 14 mm or more depending on the thickness, are made following the horizontal grout lines of bricks or stone segments. As a rule, the drilling depth shall be 4-5 cm less than the thickness of the wall. 10 holes of 14 mm diameter shall be drilled per linear meter of masonry.
- **Operating instructions:** insert **RISANAMURI GEL** with a manual gun for silicone cartridge or with a special manual pressure machine using a rigid prosthesis of 12 mm diameter that will be inserted in the hole up to the bottom; then this will be slowly extracted while continuing to extrude the product up to complete filling of the hole. At this stage, seal the hole with common mortar, and the masonry hydrophobization process will start immediately.

The completion time of the reaction depends on the type of masonry substrate. However, the plaster repair work can be immediately performed if you use breathable, macroporous dehumidifying mortars.

CORTICAL IMPREGNATION

- **Substrate preparation:** Remove all loose and crumbling parts, efflorescences and dust. If significant saline efflorescence occurs, wash with a solution of water and sulfamic acid. After 2 hours rinse with water and let it dry for 48 hours.
- **Operating instructions:** evenly apply **RISANAMURI GEL** on the surface to be treated with a brush, roller or airless. Usually, the consumption varies between 100 and 400 g/m² depending on the porosity of the substrate.

PACKAGING AND STORAGE

RISANAMURI GEL is packaged in:

- 310 ml cartridge
- 600 ml soft cartridges
- 5-10 kg pail

If the product is stored properly in its original packaging, indoors in a dry location, it maintains its original features for one year.

PRODUCT FEATURES

APPEARANCE	Creamy
COLOUR	Milky White
pH	7-8 ± 0.5
SPECIFIC GRAVITY (+ 20°C)	1.00 l/kg ± 0.05
CONSUMPTION	Chemical Barrier: approx. 10 ml/m per cm of masonry thickness. Cortical impregnation: 100 and 400 g/m ² depending on the porosity of the substrate.
PACKAGING	310 ml cartridge 600 ml soft cartridge 5 kg pail
STORAGE	12 months

CHEMICAL BARRIER CONSUMPTIONS

RISANAMURI GEL consumption depends on several factors, such as: type and porosity of the wall, wet weight, presence of cracks and cavities. The following table lists the average indicative dosage relating to the wall thickness and to the hole spacing.

- ▶ **10 holes of 14 mm diameter shall be drilled per linear meter of masonry.**

WALL THICKNESS (cm)	DEPTH OF HOLES (cm)	CONSUMPTION PER CM (cc/cm)	CONSUMPTION PER METRE (cc/m)	NUMBER OF CARTRIDGES (310 ml) PER METRE	NUMBER OF SOFT CARTRIDGES (600 ml) PER METRE
20	17	1.54	262	0.84 pz	0.44 pz
30	25	1.54	385	1.24 pz	0.64 pz
40	35	1.54	539	1.74 pz	0.90 pz
50	45	1.54	693	2.24 pz	1.15 pz
60	55	1.54	847	2.73 pz	1.41 pz
For waterproofing approx. 10 m of a 50-cm-thick masonry : Cartridges: 10 m x 2.24 items = 22.40 items (23 cartridges) Soft cartridges: 10 m x 1.15 items = 11.5 items (12 soft cartridges)					