

RISANAMURI W

HORIZONTAL CHEMICAL BARRIER IN WATER EMULSION
AGAINST CAPILLARY RISING DAMP IN MASONRY



DRACO

RENOVATION and
BIOARCHITECTURE
LINE

TECHNOLOGY BY INJECTION
FOR DEHUMIDIFYING
MASONRY



RISANAMURI W is a silicone emulsion in aqueous solution to create horizontal, water-repellent chemical barriers in both new and older masonry subject to rising damp and salt attack.

RISANAMURI W is non-toxic, easy to apply with no need for special pumps and can be used both indoors and outdoors to provide a dehumidifying chemical barrier in brickwork, stone and tuff.

BENEFITS

Features of the product:

- ✓ **ZERO-MOISTURE:** **RISANAMURI W** penetrates deeply and permanently blocks the ingress of water and its aggressive agents, thus substantially reducing the causes of masonry degradation.
- ✓ **ANTI-SALT:** **RISANAMURI W** inhibits salts, thus preventing aggression by chlorides and sulphates.
- ✓ **BREATHABLE:** **RISANAMURI W** promotes the migration of water vapour.
- ✓ **ECOFRIENDLY:** **RISANAMURI W** has a water-based non-toxic formula.
- ✓ **CHEMICAL RESISTANCE:** **RISANAMURI W** is resistant to UV and to permeation by acids, alkalis and salts of groundwater.
- ✓ **EFFECTIVENESS OF MASONRY CONSOLIDATION:** the silicone composition of **RISANAMURI W** contributes to restore the stability of the walls impaired by soluble salts dissolved in water.
- ✓ **FAST AND EASY TO APPLY:** **RISANAMURI W** is ready to use and can be applied without need for injection tools.
- ✓ **LONG-LASTING INTERVENTION:** **RISANAMURI W** 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.



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 mt, remove flaking concrete and clean out dust and debris.

HOW TO USE

- ▶ **Arrangement of the holes for subsequent injection:** The holes must be arranged about 15 cm from the planking level between floor (indoors) and ground level (outdoors). The drilling plan varies depending on the type of structure, composition, state of masonry preservation and constraints given by the shape of the structure. In each case, the holes must be arranged at the highest point between inside and outside. The holes, which have a base diameter of 16 mm or more depending on the thickness, are made following a horizontal line if the face is composed of bricks, while they are made following two lines in the form of quincunx if the face is composed of segments of stone or mixed with other material and strengthened with absorbent mortars. The centre to centre distance between the holes varies from 10 to 15 cm depending on the absorption of constituent materials of the wall face. The holes should be angled downwards by about 45 degrees. The drilling depth shall be calculated according to the size of the masonry, normally around 5 cm are subtracted from the size of the wall thickness. The rest is imbibed by diffusion. At corners, it is recommended to drill 2 superimposed holes: the first one 10 cm above the floor, and the second one 20 cm above the floor.
- ▶ Stone masonry: drill every 8-10 cm in the grout lines staggering the holes with respect to the planking level.
- ▶ Once the drilling is completed, fill the holes with plenty of water. Tuff masonry: let it moist for a whole night.
- ▶ **Operating instructions:** Insert the neck of the bottle or a suitable container into the well-wet holes and drain the product inside the masonry up to saturation. The speed of impregnation varies according to the porosity of the substrate. Check that the product properly flows inside the wall by slightly moving the bottle away from the hole and thus introducing air into the bottle.
- ▶ Wait for the complete drying of the wall and ventilate the interior as appropriate.
- ▶ Fill and close the holes by grouting with lime-modified mortar (on old masonry) or with fibre-reinforced mortar (on concrete). At this stage it is possible to restore plaster by highly breathable products.

DOSAGE

RISANAMURI W dosage 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.

| WALL THICKNESS | HOLE SPACING | HOLE DEPTH | NUMBER OF BOTTLES PER METRE |
|----------------|--------------|------------|-----------------------------|
| 20 cm | 25 cm | 15 cm | 4 |
| 30 cm | 20 cm | 25 cm | 5 |
| 40 cm | 15 cm | 35 cm | 6 |
| 50 cm | 12 cm | 45 cm | 8 |
| 60 cm | 10 cm | 55 cm | 10 |

PACKAGING AND STORAGE

RISANAMURI W è confezionato in:

- 1.35 l Bottles
- 20 l Cans
- 200 l Drums

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 | Liquid |
| COLOUR | Clear |
| pH | 12 ± 0.5 |
| SPECIFIC WEIGHT | 1.014 l/kg ± 0.05 |
| PACKAGING | 1.35 l Bottle 20 l Cans 200 l Drums |
| STORAGE | 12 months |

ITEM SPECIFICATIONS



Type of intervention

Restoration of a masonry which is moist and deteriorated, which shows stains, efflorescence and moulds, and which is decayed, as a result of capillary rising damp diagnosed phenomena.

Technical Specification

Dehumidifying by horizontal barrier, with **RISANAMURI W** of **DRACO Italiana S.p.a.** technology, applied by injections of silicone emulsion in aqueous solution after suitable substrate preparation.