

MONNELI ELASTOJOINT RHS PLUS

Flexible Re-Injectable Hose Waterstop System

Product Description

A flexible re-injectable hose installed in concrete joints to waterproof and seal any crack or voids in the joint area to prevent leakage. It is specifically designed flexible solid PVC thermoplastic rubber covered by sponge strips.

It offers a complete maintenance program for future leakage. If water test performed and voids in the joint are indicated, the voids should be filled with all type of injecting material, micro fine cements, cement slurry, acrylic & acrylates. These injecting materials are highly compatible with concrete.

Micro fine cement and Portland cement (low viscosity resin) penetrates into micro fine cracks and capillaries to seal them permanently.

Uses

ELASTOJOINT RHS PLUS an advanced re-injectable hose system designed for installation of construction joints, ready for subsequent injection of polyurethane, epoxy resin or acrylic compounds where there's a need for an injection grout in order to waterproof them in areas such as:

- Water retaining structures (canals, dams and reservoirs etc.)
- Water excluding structures (subways, tunnels, retaining wall, and basements etc.)
- Sewage treatment plants
- Buildings, bridge decks and other concrete structures in general

Advantages

- Fast and can easily be installed even to most complicated design
- Proven and predictable performance
- Joints can be tested or verified for water tightness before installation of membrane or backfilling

- No drilling required thus prevents damage to concrete
- Economical and maintenance free
- Appropriate for operation under high or low injection pressure
- Does not depreciate even when exposed to injection materials polyurethane, resin or acrylic
- Suitable for multiple injections to seal working joints against pressing and non-pressing water

Instructions for Use

Surface Preparation

The surface of the concrete shall be flat, dry, smooth, sound, clean and uncontaminated.

This preparation shall be such as to leave a sound exposed concrete surface free from dust, loose particles and any deleterious matter. If the concrete surface is defective or has laitance, it must be cut back to a sound base.

Oil, grease, varnishes, rust, dust and mould on metal surfaces shall be removed by wire or stiff brushing and grit blasting then wiped with SOLVENTE 10 prior to priming.

Moss and lichen must be removed physically followed by treatment with fungicidal wash. After treatment, it must be washed down thoroughly with clean water and allow to dry.

Voids and honeycombs shall be patched with

EPOFINISH C or BETOFINISH C allowing the area to cure before installation.

Installation

The hose shall allow for vacuuming operations, water cleaning and multiple / repeated use. The construction of the hose shall permit free discharge of the specified injected grout into the concrete for the entire length of the hose.

The system should be suitable for multiple re-injections over the whole life of the structure. The contractor shall submit detailed hose layouts to reflect the construction sequence and joint locations.

The hose installation shall be carried out without any cuts and joints when installed at multiple bends, corners or around congested reinforcement. The hose shall be capable of following infinite changes in direction and turn corners with ease.

The hoses shall be fitted with vent ends in lengths to suit field-measured conditions, with a maximum of 10 linear meters for each hose, including vent ends. Inlet and outlet PVC vent ends shall be reinforced, colour-coded (for identification), internally connected to the re-injectable hose and secured to it with shrink-on sleeves or special shutter connectors.

ELASTOJOINT RHS PLUS shall not be fixed at intervals longer than 15cm. Inlet and outlet vents shall terminate in junction boxes that shall be heavy-duty plastic made for embedment in concrete and of adequate size for housing and protection of the injection hose vent ends. Boxes shall be securely fitted with temporary “knock-out” covers to be used during concreting operations. Where exposed, boxes shall be fitted with covers mounted flush with the surrounding area.

Recommendations

- Injection should take place as late as possible when all hydration heat had dissipated. (For pre-injection, kindly contact Colmef Technical Department).
- Any settlement or shrinkage of members should have taken place to a great extent and allow a waiting period of at least 4 weeks.
- The injection hose should not be too close to the concrete surface to be formed or in contact with it under any circumstances. Maintain a concrete cover $\geq 50\text{mm}$.
- The injection hose must not be located outside the wall.
- Use only the injection hose in construction joints and never in the expansion joints unless it is placed on both sides of PVC waterstop (for expansion joints).

- In cases where there's a heavy water outflow from the shutter connectors, screw the conical-head nipples into the shutter connectors in order to prevent them from clogging.
- Whether and where you need to inject at all is largely dependent on the fact whether and where water penetrates. The injection can turn out to be unnecessary if there is no water penetration.

Technical Data

| Properties | Properties |
|----------------------------------|--|
| Material | PVC Nitrile blend (thermoplastic rubber) |
| Typical injection length | 10m |
| Injection material | Polyurethane or acrylic resin |
| Available in Two Versions | |
| Version 1 | |
| Internal diameter | 6mm |
| External diameter | 13mm |
| Version 2 | |
| Internal diameter | 6mm |
| External diameter | 19mm |

All values are subject to 5-10 % tolerance

Packaging

- Packed in 100LM combi-pack

Storage

Keep the product in dry, covered shed and must be stored in place where temperature is above 0°C .

Health & Safety

There are no health hazards in connection with ELASTOJOINT RHS PLUS in normal use.

The information in this Technical Data Sheet is based on Colmef Monnelli's experience. Colmef Monnelli does not accept any liability arising from the use of its products as it has no direct or continuous control over where or how its products are applied. All Colmef Monnelli's Data Sheets are updated on regular basis. It is the user's responsibility to obtain the latest version.

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