CORKJOINT THE FORCE IN JOINTING SOLUTIONS



POLYPROOF X®1 INJEKT

COMBINED HYDROPHILIC WATERSTOP & INJECTION HOSE SYSTEM

PRODUCT DESCRIPTION

Polyproof X[®]1 Injekt is a two part waterstop joint sealing system consisting of two active sealing systems of a hydrophilic rubber waterstop and a multi re-injectable injection hose. The system consists of the Waterproof X[®]100 multi re-injectable hose and Polyproof X[®]1 hydrophilic rubber waterstop. Both systems have been fully tested and certified.

Within the system the hydrophilic rubber waterstop Polyproof $X^{\otimes}1$ is the primary waterstop which swells in contact with water to form a compression seal inside the joint, on all four surfaces assisting in or fully sealing off the water flow.

The combination of the Waterproof $X^{\circ}100$ injection hose, which is assembled in the core of the Polyproof $X^{\circ}1$ hydrophilic waterstop, is available if and when needed, as a secondary waterstop sealing system which is multi re-injectable. The open structure of the Polyproof $X^{\circ}1$ hydrophilic waterstop allows for the Waterproof $X^{\circ}100$ injection hose system to be positioned in full contact with the concrete surface when installed, allowing for an ultimate injection sealing process to take place onto the surface of the joint.

The Polyproof $X^{\odot}1$ hydrophilic rubber waterstop is produced from special synthetic rubbers and special hydrophilic polymers. There is no bentonite present in the rubber of the waterstop which overtime can cause the rubber to break down or fall apart in the presence of water not giving long term durability or integrity to the product or to the joint and structure.

Polyproof X[®]1 Injekt is usually placed in injection lengths of 8 to 12 metres for ultimate and economical injection processes to take place and can also can be laid in major overlength applications of up to 45 metres for certain requirements. Please consult CORKJOINT for installation guidelines and injection processes for short and overlength requirements as special procedures must be applied and followed.

ADVANTAGES

- A perfect waterstop sealing solution.
- Excellent installation features, fast and easy to install.
- Economical handling due to simple, easy connections of accessory pieces.
- Non-biodegradable giving long-term durability and integrity to the joint and structure.
- Non-toxic and can be used in potable water environments.
- Overlengths of up to 45 metres can be achieved.
- Highly economical through rapid laying times and rapid injection processes.
- Polyproof X[®]1 hydrophilic waterstop section comes with an expansion delay mechansim and can be fully submerged in water for 24 hours before it starts to slowly swell.
- Can be used in conjunction with other CORKJOINT waterstop systems as added benefit/protection to the structure and to the system (consult CORKJOINT for product recommendations and suitability.)

AREAS OF APPLICATION

- Basements and below ground structures
- Tunnel structures
- Underground vaults & access shafts
- Water retaining & water excluding structures
- Dams, reservoirs, water treatment and sewage treatment plants
- Pools and water tanks
- · All types of construction joints that require sealing

TECHNICAL FEATURES

INJECTION HOSE COLOUR

HYDROPHILIC WATERSTOP COLOUR

EXTERNAL PROFILE DIMENSION

INTERNAL PROFILE DIMENSION, INJECTION HOSE

INJECTION HOSE MATERIAL

HYDROPHILIC WATERSTOP SWELLING CAPACITY

HYDROPHILIC WATERSTOP MATERIAL

SWELL RETARDATION

Dark Blue

Light Blue

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19mm x 23mm

External 13mm

Internal 8.3mm

Specially formulated thermoplastic

Approximately 300%

Thermoplastic elastomer/SEBS-Polymer with

special hydrophilic polymers

24 hours (fully submerged)

VISUAL DESCRIPTION





SYSTEM COMPONENTS

- Varioclix Injection Points
- Super X®1 Hydrophilic Sealant
- CJ100 Adhesive
- Hose Joiner

- Hose Clamps & Impact plugs
- CJ-PVC Reinforced Hose
- · Injection Materials
- Injection Pumps



INJECTION MATERIALS

• PUR-resin & PUR foam-resin

• Epoxy-resin

• Polymer-gels

Fine cement

NOTE: Polyproof X[®]1 Injekt is only re-injectable if injected with polymer gel or fine cements. The type of acrylic gel and fine cement must be approved and supplied by CORKJOINT.

INSTALLATION PROCEDURES

- 1. Polyproof X[®]1 Injekt must be installed with full bearing on to the surface of the joint. The installation area must be clean, dry and free of dust and debri.
- 2. Polyproof X[®]1 Injekt is usually positioned in the middle of the construction joint on top of or onto the first section of the joint placed between the reinforcement and fixed with CORKJOINT's CJ100 Adhesive or with hose clamps and impact plugs or a combination of both. When fixing with clamps, the distance in between the clamps should not be greater than 150mm spacing to ensure that Polyproof X[®]1 Injekt is securely fastened when pouring the concrete. If the surface of the concrete is rough, additional clamps may need to be placed to make sure the system conforms to the irregularities of the surface of the joint.
- 3. When installing Polyproof $X^{\circ}1$ Injekt with the CJ100 Adhesive, the correct position of the system is assured by pressing Polyproof $X^{\circ}1$ hydrophilic waterstop section into the adhesive. Hose clamps should be added to assist in placement and alignment.
- 4. Polyproof X[®]1 Injekt must be used with Varioclix Injection Points by fixing to the formwork or to the reinforcement. The Varioclix Injection Points must be positioned to allow for easy accessibility for future injection requirements.
- 5. Uneven surfaces must be levelled as flat as possible by chipping off any exposed aggregates or a smooth section is applied during the pouring of the 1st pour. CORKJOINT's Super X[®]1 Hydrophilic Sealant can also be used to fill in any major holes or indentations on the surface of the concrete that are greater than 5mm deep.
- 6. Polyproof X[®]1 Injekt must be placed with a minimum cover of 100mm of concrete from any outside edge. In places of overlaps and circuit points, Polyproof X[®]1 Injekt has to be placed parallel with a minimum distance of 100mm between each section of hose.
- 7. All system components are proprietary and must be used and supplied by CORKJOINT. CORKJOINT do not guarantee or warrant the performance of the system if other suppliers products are used or supplied in combination with the system.
- 8. In case of mechanical damage (cuts or holes) or major premature swelling, the system must be cut, removed and replaced with a new section.

NOTE: Also refer to CORKJOINT's "Polyproof X[®]1 Injekt Installation Guideline Procedures Method" brochure.

SERVICE TEMPERATURES

Installation -20°C to +70°C

Injection Process 5°C+ (material and concrete element)

PACKAGING

Roll size: 60 metres

STORAGE & SHELF LIFE

Polyproof X[®]1 Inject must be stored in a cool, dry place out of direct sunlight and protected against mechanical damage.



Where shown in the drawings, the combined hydrophilic waterstop and injection hose system shall be Polyroof $X^{\circ}1$ Injekt, as supplied by Corkjoint. The system must consist of a TPE/SEBS hydrophilic rubber waterstop covering two thirds of the injection hose and a multi-injectable, single channel, PVC injection hose with micro opening injection ports. The combined waterstop and sealing system must have the ability to waterstop and be multi-injectable for the life time of the structure and proof of this must be provided by an independent laboratory test document and be submitted to and accepted by the engineer. All components of the system must be original parts as supplied from the manufacturer. The application/installation of the product must be in accordance with the manufacturer's recommendations.

HEALTH AND SAFETY INFORMATION

For further information or advice on health and safety precautions, safe handling, storage and correct disposal of products, please refer to the most recent product Material Safety Data Sheet (MSDS), which is available upon request.

The information and the recommendations relating to the application and end use of this product are given in good faith and are based on the information provided by the manufacturer of the product and / or the Company's current knowledge and experience in connection with the product when properly stored, handled and applied under normal conditions and no liability of final function at the job site is assumed. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability of or fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written and / or oral recommendations, or from any other advice offered by the Company. No responsibility or liability by the Company will be accepted for misuse, misreading or derivation from the recommended guidelines in respect of this product and the user shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith. The information contained in this brochure may change at any time without notice.

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