

SPETEC R-ITS

RE-INJECTABLE TUBE SYSTEM

DESCRIPTION

The SPETEC® RE-INJECTABLE TUBE SYSTEM is a primary waterstop in cold joints and pipe joints. When used with acrylates like SPETEC® AG 200, it can be flushed with water at a pre-determined set time, creating a clean tube ready for subsequent use. It can also function as a standard single-use injection tube system with AP Seal 500 and SPETEC® PUR F400 polyurethane injection resins. The SPETEC® R-ITS is compatible with combination grouting techniques involving microfine cements.

USES

- Primary waterstop system.
- Cold joints.
- Expansion joints.
- Replacement for traditional PVC waterstops.
- Combination grouting techniques.
- Tunnel crowns, slurry walls, and details.
- Stabilization / Permeation combination grouting.

ADVANTAGES

- Monolithic waterstop seal.
- Effective in applications with honeycomb concrete.
- Will not fold or crush with concrete weight.
- Can be injected under flowing water.
- Chemical resistance once injected.
- With NSF approved resin, can be installed in a potable water application.
- Stabilization / Permeation combination grouting
- Re-Injectable functionality

APPLICATION

Note: the following are a few typical application descriptions. In case of other jobsite parameters, please contact our technical department.

PRELIMINARY ANALYSIS

Consult with design team to identify chosen waterstop method and design. Injection Tube Systems can be used as sole waterstop or in conjunction with other PVC and hydrophilic waterstop systems.

PREPARATION OF THE SUBSTRATE

Clean the surface of the hardened concrete on which the SPETEC® R-ITS will be installed. If the surface is too rough, level it out with SPETEC® WT400.

PREPARATION OF THE PRODUCT

- Cut the Alchemy-SPETEC® R-ITS to the required length depending on the actual joint condition.
- The maximum length of the hose should not be more than 30' (10m).
- Fasten R-ITS with hose clamps and nails (5mm drill bit) every 6" (15cm) along hose.
- Make sure the cut edges are smooth.
- Install the supply and venting hoses to the R-ITS via the conical thread.
- Remove plug on the supply hose end, and insert hose-zerk coupler or conical button.

PREPARATION OF THE EQUIPMENT

See technical manual of manufacturer recommended pumping equipment. Equipment will be dependent upon material selection.

APPLICATION

1. Tube to be set in maximum runs of 30' (10m).
2. Tube to set at ½ thickness of substrate.
3. Terminal ends to overlap 6" (15cm), with 1.5" (4cm) gap to avoid discontinuity in coverage.
4. Must have flush connection with substrate free of rubble and large debris.
5. In conditions with uneven substrate profiles, consider use of SPETEC® WT400 to fill in imperfections or used as sole waterstop.
6. S-curve technique to be used at horizontal-vertical transitions.
7. Mounting clips to be installed approximately 6" (15cm) spacing.
8. R-ITS single or dual terminal boxes provide thread for zerk or button head fitting connection.
9. Make a cup test to clearly note reaction time of polyacrylate gel mix.
10. 10-50psi (0.8-3.5bar) will open X-slit perforations.
11. Continue pumping to generate pressure, and achieve penetration through desired profile and substrate. Pump for maximum 75% of reaction time established in cup test, then remove zerk plug, and flush line with water.
12. Reinstall zerk plugs to prevent any unwanted substances in the re-injectable tube.

REQUIRED TOOLS

Tooling to insert hose clamps. Concrete drill. 5mm drill bit. Dispensing equipment to install WT400 as needed.

CLEANING AND MAINTENANCE

After injection, clean all equipment and tools with AP Flush 121. In case of doubt, contact an Alchemy-SPETEC® technician.

COMPLIMENTARY PRODUCTS

Appropriate injection resin: SPETEC® AG200 (re-injectable), SPETEC® PUR F400, AP Seal 500 (single use). Must be ordered separately. See Technical Data Sheets.

ADVICE / FOCAL POINTS

SPETEC® R-ITS can only be installed in lengths of maximum 30' (10m). At the overlaps a distance of 1.5" (3.8cm) has to be observed between the injection hoses to avoid cross contamination during injection.

TECHNICAL DATA

Component	Dims / Weights	Packaging
R-ITS HOSE	26lbs. (12kg)	328' (100m) roll
Venting Hose	1.6'(0.5m) x ¼"(6mm)	Sold Individually
Supply Hose	1.6'(0.5m) x ¼"(6mm)	Sold Individually
Conical Hose-Zerk Coupler	M8 external threads	Sold Individually
Female Zerk	M8 female thread	Box of 100
Mounting Clip	1.75" x 0.8" (44mm x 20mm) (1/2" [13mm] hose)	Box of 100
Mounting Nails	1/5" (5mm) Drill size	Box of 100

OPTIONAL ACCESSORIES		
Dual Terminal Box	4" x 2.75" x 1.5" (102mm x 70mm x 38mm)	Sold Individually
Conical Supply Terminal End	2.2" (55mm) x M8 Thread	Sold Individually
Conical Venting Terminal End	2.2" (55mm) x M8 Thread	Sold Individually
Conical Button Head Coupler	2" (51mm) Long	Sold Individually

ESTIMATING QUANTITIES

R-ITS is installed per foot or per meter of joint or substrate to be treated. Each supply terminal end and venting terminal end requires Venting or Supply Hose. Every Supply terminal requires a Conical Hose-zerk coupler or Conical Button Head Coupler. Each Hose-zerk coupler requires a female zerk fitting. Mounting clips and nails to be spaced approximately 6" (152mm) apart.

PACKAGING

R-ITS sold as bulk system with some individual components. Please see Packaging column in Technical Data table above.

STORAGE AND SHELF LIFE

To be stored in climate-controlled warehouse. Unlimited shelf life.

SAFETY PRECAUTIONS

Avoid contact with eyes and skin, always use personal protective equipment in compliance with local regulations. Read the relevant Safety Data Sheet before use. Safety Data Sheets are available on www.alchemy-SPETEC.com
When in doubt contact Alchemy-SPETEC® Technical Service.

FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. READ SAFETY DATASHEET PRIOR TO EVERY USE.