

## POLYWATER® FST™ BURST PACK DUCT SEALANT (FSTBP-200)



### POLYWATER FST BURST PACK DUCT SEALANT

FST Burst Pack has excellent pressure-blocking properties in tough environments. It has excellent adhesion to metal, concrete, and plastic surfaces. FST Burst Pack seals out methane and other gases and holds 22 feet (6.7 m) water head pressure. The semi-permanent seal is re-enterable and is chemically resistant.

#### **INSTALLATION**

Installation temperature:

40°F to 95°F (4°C to 35°C)

In-service temperature:

Continuous: -20°F to 200°F (-30°C to 95°C) Peak: 40°F to 250°F (-40°C to 120°C)

- Mix well, kneading each chamber 30 times.
- For multiple pouches, inject each 7 minutes apart.

#### **SAFETY**

- Wear eye protection.
- Use protective gloves and protect bare skin.



Clean duct with wire brush and a solvent wipe.

1. If conduit has loose debris or rust, use a wire brush to remove all loose material. Abrade the surfaces with sandpaper or steel wool to increase the effectiveness of the FST Burst Pack.

Clean cable(s) and duct with cleaning wipe provided in kit. This will remove contaminants and any organic residue.

Steel conduit must be sanded and cleaned.



Separate cables, then wrap with foam strip.

2. Create a foam dam by loosely wrapping a foam strip around cable(s) so that it fills the space(s) between the cable(s) and duct. It should be slightly wider than duct and compress slightly when inserted. (If more than one cable is present, separate cables with foam strip.)



Measure foam dam depth.

3. Using the positioning rod, push foam 5 inches (125 mm) into duct for 5-inch (125 mm) duct and 4 inches (100 mm) for 6-inch (150 mm) duct. Make sure there are no voids in the foam dam for FST Burst Pack to flow through.

Conduit size inches (mm)	Foam dam inserted Inches (mm)	Number of burst packs
5 (125)	5 (125)	1
6 (150)	4 (100)	1
8 (200)	5 (125)	2

For multiple burst pouches, apply 7 minutes apart.



**4.** Wrap the second foam strip around cable (If more than one cable is present, separate cables with the foam strip.). The tail end of foam strip should be at top of the wrap. Push second foam strip into the duct until the edge is flush with the duct entrance.

Separate cables with foam.



**5.** Roll FST Burst Pack pouch from the bottom and squeeze to break the middle seal between the two resin chambers.

Burst center seal.



6. Place pouch on flat surface and push 30 times back and forth vigorously with flat palms on each chamber to mix the two resins.

Mix 30 times.



7. Insert nozzle into top wrap of foam dam so that its tip extends into the space between the foam strips. Roll the bag to burst the seal between the resins and nozzle and press to inject the FST Burst Pack. Inject sealant above cables for better coverage. For multiple installations apply 7 minutes apart.

Injecting FST Burst Pack.



**8.** Remove burst pack after all material is injected. Sealant may seep between the crevices of the foam dam as it expands. After cure, excess foam may be trimmed and removed.

Sealant will expand fully in 5 to 7 minutes. Sealant will harden (set) in 15 to 20 minutes.

#### Rising foam.



Use screwdriver to check for

9. After sealant has fully set and cured, use a screwdriver to check for voids in the FSTBP Seal. Foam seal should be solid throughout the duct. If any holes or voids are detected in the inspection, use a screwdriver to cut into top of foam and enlarge a path for new material. Inject additional sealant directly into the void area.

Dispose of any excess material in accordance with local and national regulations.

#### Cleanup

voids.

Unreacted material may be cleaned from surfaces with a solvent wipe such as Polywater's Type HP™ Cleaner/Degreaser. Part A amber resin will react with water if surfaces are washed with soap and water solution. Once reacted, material has strong adhesion, and may be scraped or cut from surface. For skin contamination, wash thoroughly with soap and water. See MSDS for further information.

#### **Water in Duct**

FSTBP Sealant will cure if the duct contains less than 10% water. If water is relatively clean and not flowing, the foam dam will work as a good block. FSTBP Sealant will incorporate any excess water into the body of the cured foam seal. Too much water and/or contamination will weaken the seal.

#### Removal

FSTBP Sealant produces a watertight seal intended for permanent use. It can be mechanically removed with some effort. Use best practices and comply with the NEC by de-energizing equipment before any seal removal is attempted. Use a long screwdriver (7 inches/15 cm) to puncture holes ¼ to ¾ inch (0.5 to 2 cm) throughout the seal. With a hammer, push the screwdriver through the foam; twist it to enlarge cavity; and pull out. Go around the inside duct diameter to remove plug. Once the foam is weakened, material can be chipped away, and the cable should break free. At this time the cable can be removed or the remaining FSTBP can be detached from the cable.

#### **Cold Weather Use**

FSTBP Sealant can be used in temperatures down to 35°F (2°C). Reaction is slower, but the sealant will completely foam and cure with time. At cold temperatures, the FSTBP becomes slightly viscous and pushing FSTBP sealant out through the insertion tube will be harder. Cure times are as follows:

	40° F (4° C)	70° F (21° C)
Foaming, Expansion Complete	10 to 15 minutes	5 to 7 minutes
Hard, Non-Sticky Skin Formation	30 to 40 minutes	15 to 20 minutes

To decrease cure time in cold temperatures, keep FSTBP Sealant warm prior to use.

#### **Urethane Safety**

Irritating and toxic smoke and vapors may form during combustion of cured FSTBP Foam Sealant. Hazardous or irritating decomposition products include oxides of carbon, oxides of nitrogen, and hydrogen cyanide. If possible, remove cured sealant prior to any torch-cutting operations. The sealant can usually be removed from the conduit using chisel-style tool or pick. If burning the sealant material cannot be avoided, provide appropriate ventilation/respiratory protection against decomposition products during flame-cutting operations.

# **Cable Compatibility** FSTBP Foam is compatible with cable jacket materials. The foam is an inert solid that will not harm the jacket material. **CONTACT US** 1-800-328-9384 Toll Free | 1-651-430-2270 Main | 1-651-430-3634 Fax | email: support@polywater.com

IMPORTANT NOTICE: The statements here are made in good faith based on tests and observations we believe to be reliable. However, the completeness and accuracy of the information is not guaranteed. Before using, the end- user should conduct whatever evaluations are necessary to determine that the product is suitable for the intended use.

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