PCI Training Manual

Testable Penetration Fittings (TPT)

⚠️ **IMPORTANT**
Please read all warnings and follow the installation instructions completely and carefully. Failure to do so may cause product failure, or result in environmental contamination due to liquid leakage into the soil, creating hazardous spill conditions.

🔥 **WARNING - DANGER**
Using electrically-operated equipment near gasoline or gasoline vapors may result in fire or explosion, causing personal injury and property damage. Be sure that the working area is free from such hazards and always use proper precautions.

1 Drill Holes

Identify location of penetration; at the center of that location, drill a hole in the sump wall (see hole sizing chart below).

Primary Pipe Size	Hole Size
2" RTII/LCX	4.75"
3" RTII/LCX	5.75"
4" RTII/LCX	7.5"

2 Abrade Surfaces

Scuff the surfaces to be bonded. On the inside and outside of the sump wall, the bonding area, approximately 2.0" wide, should be roughed with 80# sand paper, all the way around the hole. The outside of the TPT body, inside of the FRP rings, and sump wall should be roughed with 40# sand paper.

3 Cut and Dry Fit Piping

Piping should be cut length so that the TPT fitting is inserted half way through the sump wall when fitted to mating pipe. Slide FRP rings over inside and outside piping. Dry fit the penetration fitting and all piping before applying any adhesive to pipe or penetration fitting. Install piping per pipe manufacturer's instructions. Test all piping BEFORE proceeding to Step #4.

4 Final Surface Prep

Dry fit the penetration fitting and ensure that all points of contact between the sump wall and fitting are properly scuffed. If any area has been missed, be sure to correct the issue before applying adhesive. Wipe all surfaces with acetone.

5a Inner FRP Installation

Apply a generous amount of adhesive to the outside surface of the TPT body and sump wall. Also apply adhesive to the bottom and inner surface of the FRP ring. Push the FRP ring up to the sump wall until adhesive begins to squeeze out. There should be excess adhesive squeezed out of the inside and outside of the FRP ring when this process is done properly. Tighten set screws to hold fitting in place while the epoxy cures (WARNING—DO NOT over tighten).

5b

Wipe Excess Adhesive & Leave Test Ports Open
Wipe the excess adhesive around the fitting to ensure that the epoxy grooves around the sump wall and TPT body are completely filled with epoxy. Wipe lightly to prevent removing all of the adhesive. Ensure that the entire seam between the FRP ring and sump wall, and FRP ring and TPT body are entirely covered by adhesive. Apply additional adhesive over set screws and as necessary to fill any remaining voids. Leaving Test Ports open will allow excess gases to escape.

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5c

Outer FRP Installation
Repeat Step #5a for the entry fitting on the outside of the sump wall.

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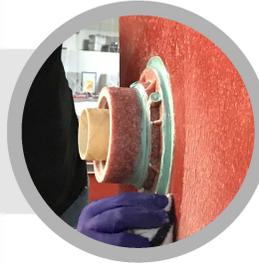
6

Cure
Allow adhesive to fully cure before disturbing the fitting or conducting any type of testing. Thread an approved PCI test kit into each port.
DO NOT EXCEED 10LB-FT OF TORQUE.

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PCI PETROLEUM CONTAINMENT, INC.

Questions? Visit us at **www.petroleum-containment.com** or call us at **(904) 358-1700**

PEI MEMBER