

FIBERGLASS PIPING SYSTEMS INSTALLATION CHECKLIST FOR UNDERGROUND PETROLEUM PIPE

(Please review the Important Notice Section on page 2 before completing)

- A. Owner / Operator** (please print & sign name)
1. Job Site Address _____
2. Job Site Representative (print) _____ (signature) _____
- B. Installation Contractor**
1. Job Site Foreman (print) _____ (signature) _____
- C. Installation Date(s)** _____
- D. Pipe Manufacturer** _____

	To be initialized by:	
E. PRE-INSTALLATION CHECKLIST (indicate date verified after each item)	Installer's Foreman	Owner/Operator's Representative
1. Installer shall show evidence that he/she is:		
a. Licensed or certified by the state implementing agency, or	_____	_____
b. Trained by the pipe manufacturer.	_____	_____
2. Installer has current manufacturer's installation instructions.	_____	_____
a. Instructions dated _____.		
b. Installation manual number _____.		
3. Pipe & fittings have UL (Underwriters' Laboratories) or ULC (Underwriters' Laboratories of Canada) label.	_____	_____
4. Proper tools and adhesive available per manufacturer's instructions	_____	_____
5. Pipe & fittings inspection:		
a. Impact or puncture . . . Cut out. See footnote (1) for repairs.	_____	_____
b. Damaged tapers . . . Cut off and retaper.	_____	_____
c. Check bonding surfaces for ultraviolet weathering degradation.	_____	_____
6. Trench		
a. Allow for minimum of 6" bedding material	_____	_____
b. Have required slope per owner's specification.	_____	_____
c. Width: Allow for 4" minimum separation between pipes and 6" minimum from trench walls.	_____	_____
7. Approved backfill (<u>no</u> native soil)		
a. Clean washed sand, or	_____	_____
b. Pea gravel - 1/8" to 3/4" particle size, or	_____	_____
c. Refer to footnote (1) for other backfill materials.	_____	_____
F. INSTALLATION PROCEDURES (Indicate date verified after each item)		
1. 6" of approved bedding material.	_____	_____
2. Dry fit system prior to adhesive bonding. See footnote (1)	_____	_____
3. Heat assist required for adhesive curing when temperature is below 50°F (10°C). See footnote (1)	_____	_____
4. Use flexible connector or a minimum 4' straight run of FRP pipe (per API 1615) at FRP terminations. See footnote (1)	_____	_____
5. A minimum separation of 4" between pipe runs, and 2-1/2" on crossovers.	_____	_____
6. Bedding/backfill supports pipe completely on runs and crossovers.	_____	_____
7. Minimum of 6" approved backfill cover material or more as required by local authorities.	_____	_____
8. If surface is unpaved, a minimum of 20" of approved backfill is required.	_____	_____
G. INSPECTION AND TESTING (Indicate date verified after each item)		
1. Joint inspection		
a. Cocked joints (misaligned tapers). See footnote (2)	_____	_____
b. Joint back-off. See footnote (2)	_____	_____
c. Check for proper cure of adhesive bond. See adhesive kit instructions.	_____	_____
2. Test system in accordance with NFPA 30 or local requirements See footnote (3)	_____	_____
3. Secondary containment piping. See footnote (1)	_____	_____

FOOTNOTES:

- (1) See manufacturer’s installation instructions.
- (2) Connections must be removed and replaced.
- (3) It is recommended that after the initial system test has been completed, a low pressure (25 psig maximum) be kept on *tested* pipe during the completion of the installation. If pressure loss occurs, then repairs can be accomplished before system goes into service.

 **CAUTION:** TESTING WITH COMPRESSED AIR IS EXTREMELY DANGEROUS AND IS NOT RECOMMENDED. IF COMPRESSED AIR IS USED, PROCEED WITH EXTREME CAUTION AND FOLLOW SAFETY PRECAUTIONS STATED IN THE MANUFACTURER’S INSTRUCTIONS. ISOLATE PIPING SYSTEM FROM TANK PRIOR TO TESTING.

IMPORTANT NOTICE

I This checklist, published by the Fiberglass Tank and Pipe Institute (“Institute”) addresses subjects of a general nature associated with the installation of fiberglass-reinforced plastic piping as part of underground storage tank (UST) systems. Federal, State and local laws and regulations governing such installations and UST systems should be reviewed. The types of work covered by the checklist should be performed by trained installers.

II Underwriters’ Laboratories listed fiberglass pipe installation, when performed by manufacturer-trained installers in accordance with the manufacturer’s installation instructions, and verified by the installer **and** the owner/operator representative on an installation checklist, is a method to demonstrate compliance with Federal, State and local laws and regulation governing such installations.

III When the installation checklist is complete, one copy should be retained in the installer’s files, and one copy in the owner/operator’s file.

IV The Institute is not undertaking to meet the duties of underground storage tank system owners/operators, employers, manufacturers, or suppliers to warn and properly train and equip their employees, and others exposed or in contact with fiberglass piping and materials, concerning their obligations under Federal, State or local laws or regulations, as well as health and safety risks and precautions.

V Information concerning safety and health risks and proper precautions with respect to particular materials and conditions should be obtained from the manufacturer or supplier of the material, or the applicable material safety data sheet.

VI THE INSTALLATION CHECKLIST MAY BE USED BY ANYONE DESIRING TO DO SO. EVERY EFFORT HAS BEEN MADE BY THE INSTITUTE TO ASSURE THE ACCURACY AND RELIABILITY OF THE INFORMATION IT CONTAINS. HOWEVER, THE INSTITUTE MAKES NO REPRESENTATION, WARRANTY, OR GUARANTEE IN CONNECTION WITH THIS CHECKLIST AND HEREBY EXPRESSLY DISCLAIMS ANY LIABILITY OR RESPONSIBILITY FOR LOSS OR DAMAGE, INCLUDING PERSONAL INJURY OR PROPERTY OR OTHER DAMAGES OF WHATEVER NATURE, RESULTING FROM ITS USE OR FOR THE VIOLATION OF ANY FEDERAL, STATE, OR LOCAL LAW OR REGULATION WITH WHICH THIS CHECKLIST MAY CONFLICT.

VII If you have questions concerning the proper installation of fiberglass piping, contact the manufacturer:

Ameron Fiberglass, Composite Pipe Group
5301 Hollister, Suite 200
Houston, TX 77040
Phone: 713-690-7777
Fax: 713-690-2842

Smith Fibercast
2700 West 65th Street
Little Rock, AR 72209
Phone: 501-618-2222
Fax: 501-568-6836

VIII Comments and suggested revisions to this checklist are invited. Contact:

Sullivan (Sully) D. Curran, Executive Director
Fiberglass Tank & Pipe Institute
11150 S. Wilcrest Dr., Suite 101
Houston, TX 77099-4343
Phone: 281-568-4100
Fax: 281-568-9998