

| | | |
|---|---|------------------------------------|
| IMPORTANT INFORMATION | FIBER GLASS SYSTEMS RED THREAD® IIA INSTALLATION CHECKLIST | FOLLOW ALL INSTRUCTIONS |
| For Underground Petroleum Piping for Motor Vehicle Fuels, Concentrated Fuels, High Blend Fuels, Aviation and Marine Fuels (Please review the <i>Important Notice Section</i> on page 2 before completing.) | | |

RED THREAD IIA UL/ULC Listed primary and secondary piping systems are rated to the following maximum operating ratings:

Primary: 2" @250 psig, 3" @175 psig, 4" @125 psig, Secondary: 3" and 4" @50 psig, 6" @20 psig

| | | |
|--|------------------------|------------------------------------|
| A. Owner/Operator (Please print and sign name) | | |
| 1. Job Site Address _____ | | |
| 2. Job Site Representative (print) _____ | | (sign) |
| B. Installation Contractor | | |
| 1. Job Site Foreman (print) _____ | | (sign) |
| C. Installation Date(s) _____ | | |
| To be initialized by: | | |
| D. 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 (Underwriter's Laboratories) or ULC (Underwriters' Laboratories of Canada) label. | | |
| 4. Proper tools/adhesives available per manufacturer's instructions | | |
| 5. Pipe & fittings inspections: | | |
| 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" min. separation between pipes and 6" min. From trench walls. | | |
| 7. Approved backfill (no 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. | | |
| E. 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. A minimum separation of 4" between pipe runs and 2 1/2" on crossovers. | | |
| 5. Bedding/backfill supports pipe completely on runs/crossovers. | | |
| 6. Minimum of 6" approved backfill cover material or more as required by authorities. | | |
| 7. If surface is unpaved, a minimum of 20" of approved backfill is required. | | |
| F. INSPECTION/TESTING (Indicate date verified alter 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 Fiber Glass Systems' Installation Manual No. B2160. Available at www.smithfibercast.com/pdf/B2160/pdf.
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

The Fiber Glass Systems checklist addresses subjects of a general nature associated with the installation of RED THREAD IIA 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.

RED THREAD IIA UL/ULC 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 regulations governing such installations. The use of non-qualified personnel or any deviation from the recommended procedures could result in damage or leakage of the system.

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

FGS 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.

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.

THE INSTALLATION CHECKLIST MAY BE USED BY ANYONE. EVERY EFFORT HAS BEEN MADE BY FIBER GLASS SYSTEMS TO ASSURE THE ACCURACY AND RELIABILITY OF THE INFORMATION IT CONTAINS; HOWEVER, FGS 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.

Please direct questions concerning the proper installation of RED THREAD IIA fiberglass piping to:



2700 West 65th Street
Little Rock, AR 72209
Tel: 501-618-2243
Fax: 501-568-4465