

Red Thread™ IIA Riser Pipe Testing and Technical Guidance

For Red Thread™ IIA Riser Pipe



General

The UL Listed Red Thread IIA Riser Pipe has been tested for both torque and bending performance, considering various industry standards and performance requirements.

UL Listing

Red Thread IIA Riser Pipe is now UL-971 Listed.

On April 11, 2019 the Red Thread IIA Riser Pipe assembly became the first and only UL Listed riser pipe on the market. Underwriters Laboratories issued a written statement confirming that Red Thread IIA Riser Pipe and adapters are encompassed by the File MH9162 listing awarded to Fiber Glass Systems.

Torque

Recommended maximum of 500 ft.-lbs. of torque when installing our Red Thread IIA Riser Pipe.

Testing has proven the ability of the Red Thread IIA Riser Pipe to perform well in excess of the 500 ft.-lbs. torque recommendation, without experiencing any damage to the pipe or threads. It's recommended to use a strap wrench for installation. However, it is acceptable to use a chain wrench so long as a protective rubber sleeve is used to protect the adapter surface. Never use a wrench on the pipe wall. The Adapters may be bonded to the riser pipe either before or after threading them into the mating connection.

The maximum torque recommendation for the Red Thread IIA Riser Pipe assembly is well in excess of the highest required torque of any spill containers on the market as of March 2019. See table below.

Spill Container Manufacturer	Manufacturer's Max Torque Requirement for Installation
CNI Manufacturing	350 ft.-lbs.
OPW	250 ft.-lbs.
Franklin Fueling	200 ft.-lbs.
EMCO Wheaton	150 ft.-lbs

Grounding

Red Thread IIA Riser Pipe is constructed of fiberglass materials, making it non-conductive.

When grounding underground equipment, such as spill containers, the Red Thread IIA Riser Pipe cannot be grounded or used as a ground. Consult the respective OEMs for guidance on how to properly ground their equipment.

Bending Tolerance

Red Thread IIA Riser Pipe will withstand a bending moment of 1,990 ft.-lbs.

In order to establish how the Red Thread IIA Riser Pipe will perform when a lateral force is applied, UL-1316 was taken into consideration. UL-1316, "Standard for Fibre Reinforced Underground Tanks for Flammable and Combustible Liquids" dictates that a tank connection must be able to tolerate 1,990 ft.-lbs. of bending moment, as applied by an installed pipe. The Red Thread IIA Riser Pipe has been tested to meet and even exceed this requirement.

Additionally, due to its fiberglass construction, the Red Thread IIA Riser Pipe transmits significantly less bending moment into the tank-top than a comparable steel riser pipe for a given deflection. ie. It takes less force to laterally deflect the top of a Red Thread IIA Riser Pipe than it does a steel riser pipe.