Elutron®

Fuel Storage Tanks

Double-wall underground fuel storage tanks.

Fuel storage tank:

The Elutron® tanks furnished for this project were built to store fuel oil to power a standby generator system. The fittings within the containment sumps along the top of the tank should be inspected on a periodic basis to ensure that there are not any leaking pipe connections. Any leaks should be repaired immediately, as leaking fuel is a safety and environmental hazard.

Containment System:

The containment system of the tank is built to provide secondary containment of the primary tank volume. The tank should be monitored on a periodic basis for liquids that may enter as a result of a leaking primary tank or possibly from a leaking monitor pipe connection fitting. The liquid can be removed by the use of a properly rated suction pump and drop tube. Should this occur, the integrity of the primary and secondary tank should be confirmed per the testing procedure included in the installation instructions.

Access:

Access manways are provided. An access manway at the top of the tank provides access to the tank interior. **CAUTION SHOULD BE TAKEN WHEN ENTERING THE CONFINED SPACE OF THE FUEL TANK.** OSHA requirements for ventilation should be taken in ensure proper air availability and a safety harness should be used to assist in personnel removal should it be needed. Anyone entering the tank should be assisted and monitored by at least one other person on the exterior of the tank within a safe distance so as to provide quick assistance in the event of an accident. See OSHA requirements for more details.

Vents:

Each tank is furnished with numerous fittings, one of which should be used as a tank vent. Periodic inspection of the vent should be performed to insure that it is working properly. The standard vent located on a pipe extending into the air is the operating vent allowing the tank to breathe during discharge and filling.

Warranty:

See attached warranty for details.

GENERAL

A. Tanks shall be equipped with openings, fittings, and accessories, as specified hereinafter and/or indicated on the drawings.

B. Tanks shall have capacities indicated on the drawings.

C. Fuel oil and gasoline tanks shall be manufactured and installed in accordance with NFPA 30, 30A and 31.

TANKS

A. Construction:
Tanks shall be double wall type. The Primary vessel shall be a steel underground storage tank built in accordance with the requirements of Underwriters Laboratories and tested and labeled accordingly. The Secondary containment shall be constructed using a foil wrap around the primary vessel, which shall be coated with a 100 mils thick fiberglass reinforced plastic resin mixture. See attached drawing for tank sizes and details.

B. Integrity Testing:
The Primary Vessel shall be tested at the factory with a 5 psi. pressure and soap test to test its integrity. If required, a 5 psi air pressure test may be performed after installation, before back-filling. The Secondary Containment Vessel shall be vacuum tested to 10" Hg. The tank shall be shipped and back-filled to the top of the tank with the vacuum. After installation, before back-filling to grade, an air pressure test may performed no greater than 2 psi.

Construct so as to pass the UL 58 and UL 1746 anti-buckling test. (Tank shall withstand submerging in 5' of water with no backfill for support).

C. Product Compatibility:
Both the primary storage vessel and the secondary containment vessel shall be compatible with gasoline, gasohol, 100% ethanol, methanol, jet fuel, av-gas, kerosene, diesel fuel, motor oil at ambient underground temperatures, or used for fuel oil not to exceed 150° F.

D. Interstitial Fluid Migration:
There shall be an interstitial space between the primary storage vessel and secondary containment vessel created by the foil wrap, which shall allow 100% fluid migration, under maximum loads, between walls.

E. Corrosion Protection:
The primary storage vessel (steel) shall provide striker plates under each fitting. The secondary containment vessel shall totally isolate the primary storage vessel from stray electrical currents as well as the environment. The tanks outer wall shall be "holiday" tested at the factory using a Tinker and Rasor meter to check the wall thickness. As an additional feature, the interstitial space of the tank shall be equipped with an anodic

material to protect the inner tank vessel from potential corrosion should water moisture enter the interstice.

F. Monitoring Access:
The secondary containment vessel shall provide a monitoring access fitting for insertion of a continuous monitoring probe. This fitting shall be located along the top center- line of tank. The fitting shall connect to a tube extending to the bottom centerline of the tank. The tank shall have a hole through the wall of the tank in the center of the monitoring tube. This shall allow for the migration of liquid from a leak in either the primary or secondary tank to result in a detectable liquid level in the monitoring tube.

G. Tank fittings shall be steel half-couplings with NPT threads and double-tapped reducer bushing to match pipe size. Tank fittings shall be shipped with cast iron plugs. As per its UL 1746 listing, the tank will not require nylon dielectric bushings.

H. Hold-Down Straps shall be supplied as specified to the manufacturer's recommendations.

I. Installation:
Tanks shall be installed per suggested manufacturer's installation instructions.
Tanks shall be: Elutron®.