Double-Wall Steel/FRP Clad Tanks

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 vessel shall be a steel underground storage tank built in accordance with the requirements of Underwriters Laboratories UL58 and tested and labeled accordingly. The tank shall be coated with a 100 mils thick fiberglass reinforced plastic resin mixture.

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 still intact.

The exterior structure shall show no holidays when using a Tinker & Rasor Model AP-W Holiday Detector set at 35,000 volts. By virtue of the UL listing, tank shall be warranted against external corrosion for 30 years without the need for cathodic protection.

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, 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's FRP coating shall be "holiday" tested at the factory using a Tinker and Rasor meter to check the wall thickness.

F. 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.

G. Tank shall be equipped with a 2" Interstitial monitoring fitting to accommodate the use of an electronic leak detection sensor.

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.