



Fireguard® Tanks

HT-1105

Fireguard® tanks are thermally protected, double-wall steel aboveground tanks. Fireguard® is an alternative for the safe storage of motor fuels and other flammable and combustible liquids aboveground. They are used where a fire-protected tank is needed because of setback limitations or regulatory requirements. These tanks are UL labeled and meet or exceed the requirements of UL-2085 including:

- Two-Hour Full Scale Pool Fire Test
- Hose Stream Test
- Ballistics/Projectile Test
- Vehicle Impact Test
- Interstitial Communication Test

Blast effect analysis proved Fireguard® resists, with limited damage to the primary steel tank, the effects of a 50 lb man-portable explosive device, a 500 lb vehicle-borne improvised explosive device, and a 10 psig vapor cloud explosion. Fireguard® tanks are approved and labeled for service in New York City with the addition of flanged and dished heads and a 15 to 50 psi hydro-test on the inner tank.

Fireguard® Features

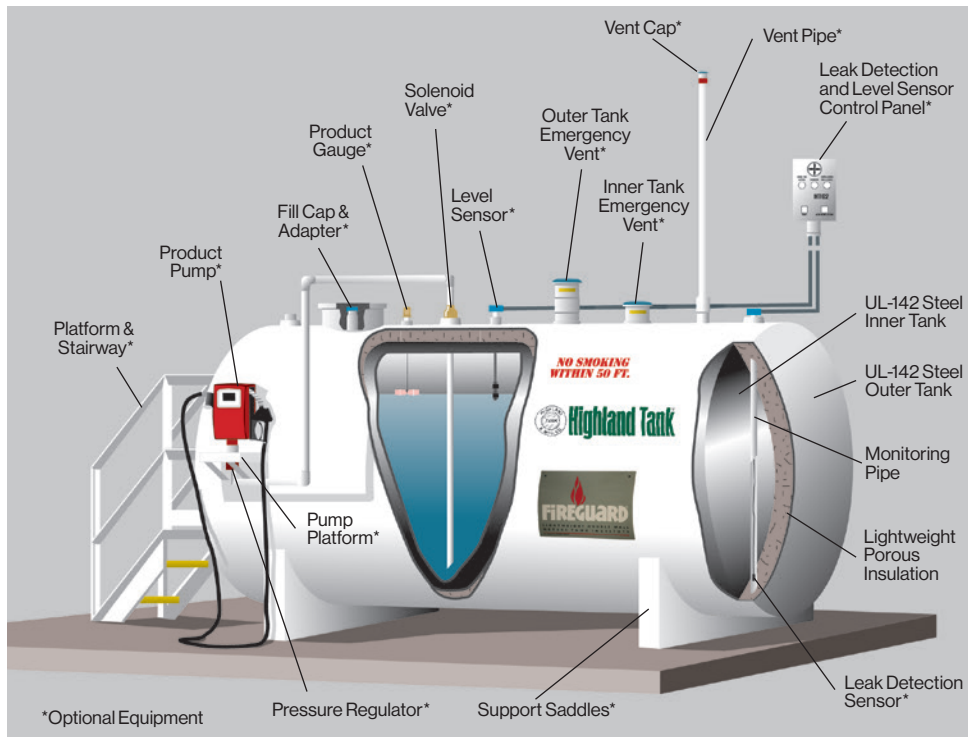
Each tank is constructed with a minimum 3" interstice around the inner tank. The interstice is completely filled with a lightweight, monolithic material. This high efficiency insulation protects the inner tank in the unlikely event of a fire or extreme heat. It is porous to allow fluid migration through the interstice to the monitoring point.

Unlike concrete encased tanks, Fireguard® tanks' steel outer wall protects the insulation, eliminating the problem of cracking and spalling concrete. Because of its unique construction, each tank is pressure-testable in the factory and at the job-site.

With Fireguard®, there is no question of compliance with fire codes; the tank is shipped with factory-installed emergency vents on both the primary and the secondary containment tanks for protection if exposed to fire or excessive pressure.

Cylindrical & Rectangular
Aboveground Double-Wall Tanks

Double-wall, fire-protected, aboveground storage



Fireguard® Advantages

- Carries UL-2085 listing as Insulated Secondary Containment for Flammable Liquids
- Lightweight – insulation 75% lighter than concrete – costing less to ship and install
- Reduces tank setback and separation distance requirements by up to 50%
- Fireguard's® secondary containment can be tightness-tested on-site
- Steel outer wall protects insulation
- Available in rectangular or cylindrical design
- Wide range of tank capacities: 300-60,000 gallons
- Subject to strict, three-tier independent third-party quality assurance program
- STI® standard 30-year limited warranty

Pre-engineered design options - solution oriented designs



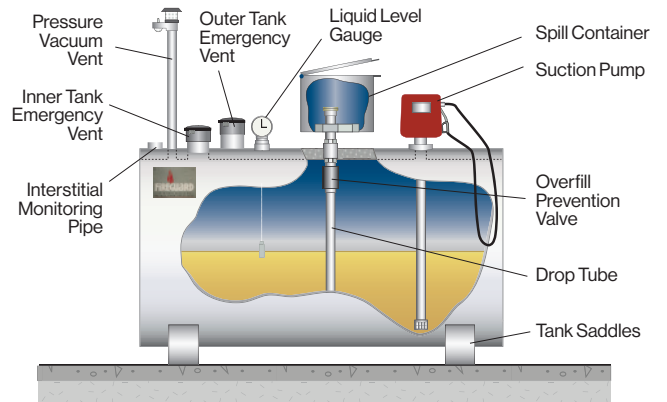
Highland Tank®

Fireguard® Design Options

Highland Tank offers a wide range of accessories and options to configure your tank for your specific application including:

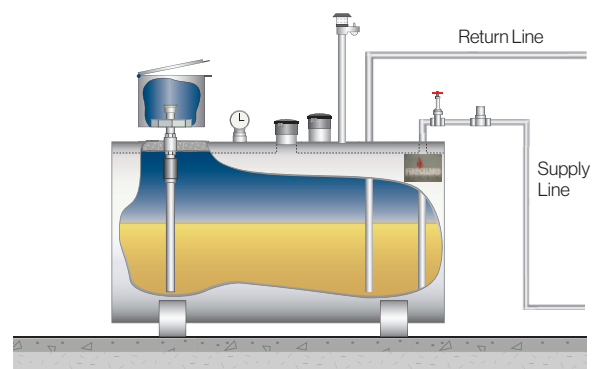
Diesel or Biodiesel Blend :

Top-fill and top-mounted pump suction system. This configuration is popular in many small diesel or biodiesel vehicle fueling applications.



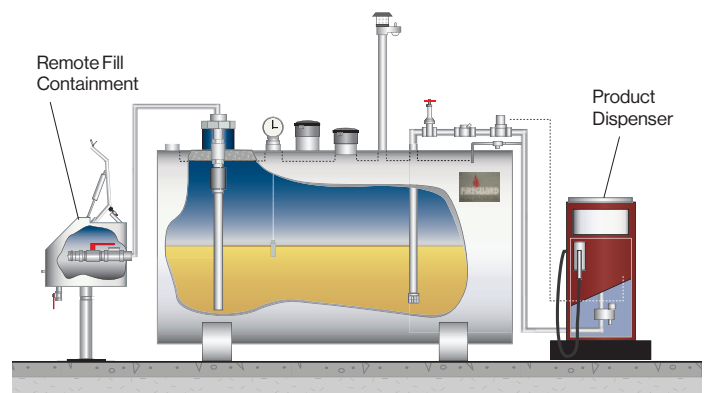
Boiler or Emergency Diesel-Electric Generator :

Suction system with top-fill supply and return lines. This is a typical Fireguard® layout for fuel oil applications or supplying stationary combustion engines used for auxiliary power and emergency generators at first responder or mission critical facilities.



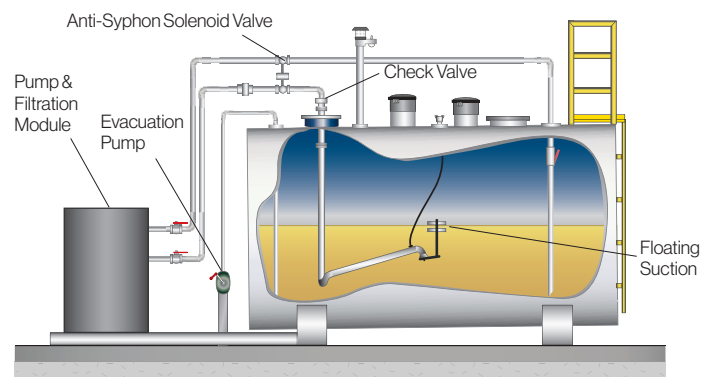
Gasoline or E85 Ethanol:

Suction system with remote fill and pump. This arrangement is common at many fleet vehicle maintenance facilities for diesel, biodiesel, gasoline or E85 fuel ethanol dispensing.



Aviation Refueling:

Fireguard® Tank as part of a modular system with pump and filtration module. This arrangement would include an additional module(s) for direct-to-plane, truck load or remote dispensing. A specific application at a military or commercial installation would dictate engineered fueling systems.



Sizing Schedules

Cylindrical

Volume Gallons	Inner Tank Nominal Dimensions		Outer Tank Nominal Dimensions		
	Diameter	Length	Diameter	Overall Height	Length
300	3'-2"	5'-0"	4'-2"	5'-0"	6'-0"
500	4'-0"	5'-5"	4'-6"	5'-4"	6'-0"
1,000	4'-0"	10'-8"	4'-6"	5'-4"	11'-3"
1,000	5'-4"	6'-0"	5'-10"	6'-7"	6'-7"
2,000	5'-4"	12'-0"	5'-10"	6'-8"	12'-7"
3,000	5'-4"	18'-0"	5'-10"	6'-8"	18'-7"
4,000	5'-4"	24'-0"	5'-10"	6'-8"	24'-7"
4,000	8'-0"	10'-8"	8'-6"	9'-4"	11'-3"
5,000	8'-0"	13'-4"	8'-6"	9'-4"	13'-11"
6,000	8'-0"	16'-0"	8'-6"	9'-4"	16'-7"
8,000	8'-0"	21'-4"	8'-6"	9'-4"	21'-11"
10,000	8'-0"	26'-8"	8'-6"	9'-4"	27'-3"
10,000	10'-0"	17'-1"	10'-6"	11'-4"	17'-8"
12,000	8'-0"	32'-0"	8'-6"	9'-4"	32'-7"
12,000	10'-0"	20'-6"	10'-6"	11'-4"	21'-1"
15,000	10'-0"	25'-6"	10'-6"	11'-4"	26'-1"
20,000	10'-0"	34'-1"	10'-6"	11'-4"	34'-8"
25,000	10'-0"	42'-7"	10'-6"	11'-4"	43'-2"
30,000	10'-0"	51'-1"	10'-6"	11'-4"	51'-8"
40,000	11'-6"	51'-6"	12'-0"	13'-0"	52'-1"
50,000	12'-0"	59'-2"	12'-6"	13'-6"	59'-9"
60,000	13'-0"	62'-2"	13'-6"	14'-6"	62'-8"

Rectangular

Volume Gallons	Inner Tank Nominal Dimensions			Outer Tank Nominal Dimensions		
	Width	Height	Length	Width	Overall Height	Length
300	3'-0"	3'-0"	4'-6"	4'-0"	4'-3"	5'-6"
500	3'-0"	3'-0"	7'-6"	4'-0"	4'-3"	8'-6"
1,000	4'-8"	3'-0"	9'-8"	5'-2"	3'-7"	10'-3"
2,000	6'-4"	4'-0"	10'-8"	6'-10"	4'-7"	11'-3"
3,000	5'-5"	5'-5"	13'-9"	6'-0"	6'-0"	14'-4"
4,000	5'-5"	5'-5"	18'-3"	6'-0"	6'-0"	18'-10"
5,000	5'-5"	5'-5"	22'-10"	6'-0"	6'-0"	23'-5"
6,000	10'-10"	5'-5"	13'-9"	11'-4"	6'-0"	14'-4"
8,000	10'-10"	5'-5"	18'-3"	11'-4"	6'-0"	18'-10"
10,000	10'-10"	5'-5"	22'-10"	11'-4"	6'-0"	23'-5"
12,000	10'-10"	5'-5"	27'-5"	11'-4"	6'-0"	28'-0"



Highland Tank®



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