

Built on Tradition



Highland Tank®



UL-142 Aboveground Horizontal Tanks

HT-1069

Aboveground storage tanks are engineered to meet the demanding needs of many industries, providing sensible and safe solutions for storing petroleum products and chemicals at bulk plants, transportation facilities, industrial sites, military bases and airports.

Highland Tank uses historically-proven steel design and construction to provide secure, dependable storage tanks.

Tanks are manufactured to UL-142 specifications using flat-flanged heads in single-wall, and double-wall configurations. Constructed of mild carbon steel or stainless steel, they are compatible with the full range of petroleum products including those with higher methanol and ethanol contents.

Standard Construction Features

- UL-142 label
- Flat-flanged heads
- Continuous exterior fillet welds on all joints
- Custom-located threaded fittings
- Lifting Lugs
- 5 psi factory air test/seam inspection
- Primer coating

Options

Horizontal tanks are available with an array of options that provide solutions for many applications and your specific needs.

Supports, stabilizers, saddles and skids are available for permanent or temporary tank locating.

Dished heads, compartment bulkheads, manways, pump mounts/platforms, and flanged fittings customize the tank to your requirements.

VOC compliant interior and exterior coatings and linings help ensure safe storage of aviation fuels and chemicals. Enamel, epoxy or urethane exterior coatings, and special interior linings are also available.

Any required access or structural steelwork, such as ladders, stairs, platforms or walkways can be supplied. These custom structural accommodations are factory-fitted to facilitate easier field installation.



Tank Saddles

Tanks Support Systems

Saddles

Saddles are used to support and maintain the tank's position and provide clearance for visual inspection of the underside. Highland manufactures in accordance with the UL 2-saddle per tank standard which facilitates quicker, more trouble-free installations. Standard saddles provide 6" of clearance and are available up to 12" high.

Supports

Structural Steel Supports are also used to maintain the tank's position and elevation and provide clearance for visual inspection of the tank's underside. Standard supports provide 6" of clearance and are available on horizontal tanks up to 4,000 gallons and 54" diameter.

The total square surface area touching the ground is roughly equivalent to that of our skids, which helps minimize the risk of the tank sinking into soft foundations.

Skids

Skids are used to provide portability for empty horizontal tanks. They stabilize the tank and maintain a fixed elevation if being moved by towing. Skids also provide clearance for visual inspection of the tank underside. Highland manufactures two styles of skids: small tank skids for tanks up to 1,500 gallons with runners fabricated from steel angle and large tank skids with runners made from steel pipe.

Stabilizers

Stabilizers are used to maintain the the tank's position. Our simplest support system available, stabilizers do not provide any clearance for visual inspection of the tank's underside. Standard design consists of two stabilizers welded to the tank and are available on tanks up to 4,000 gallons, 54" diameter.

Notes:

Highland recommends that all aboveground horizontal tanks be installed elevated 4-6" to allow for routine visual inspections of the tank's underside.

Do not rely on tack or seal-welded saddles as a means for securing a tank in flood prone areas. A hold down system, connected to an adequately sized anchor pad is recommended.

All Highland UL-142 tanks are supplied with an emergency vent fitting adequately sized to accommodate the intense increase in vapor pressure in the event of fire exposure. Emergency vents are available as an option.



Tank Supports



Heavy duty pipe skids shown here with a Pump Platform



Light duty angle skids



Tank Stabilizers



Highland Tank®

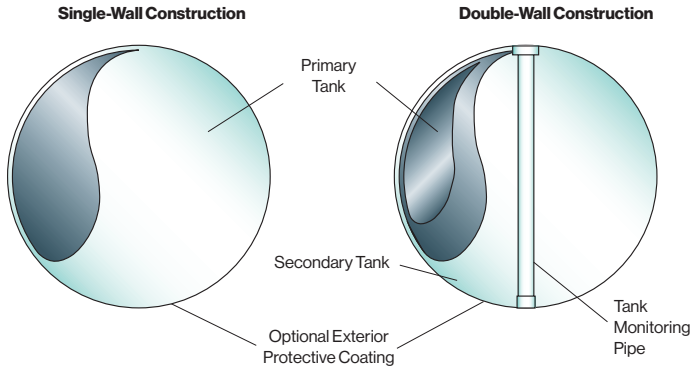


Suitable for indoor and outdoor installation and configured to your specific needs with a wide array of accessories and options including the High-LINK® monitoring system.



Highland Tank®

Drawing & Details

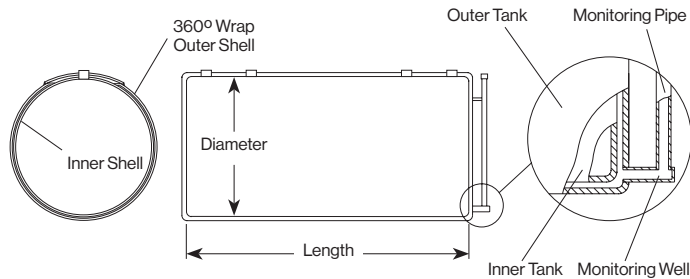


UL-142 Single-wall Construction

Single-wall storage tanks consist of a single sheet of steel meeting ASTM specifications, constructed to UL-142 standards. Material thicknesses range from 12 gauge to 3/8" of mild-carbon or stainless steel. Superior "ribbed" strength is achieved with lap joints employing a minimum 1/2" overlap.

UL-142 Double-wall Construction

Double-wall tanks consist of a primary steel tank wrapped by an exterior steel shell that may be in direct contact with the primary tank creating a full 360° double-wall tank. The interstice can be monitored for an unlikely leak using the 2" monitoring pipe. Both inner and outer tanks are supplied with emergency vent fittings.



Notes:
For Double-wall Type I tanks, add 6" to length and 1" to diameter for outside dimensions (includes monitoring pipe). For Double-wall Type II tanks, add 7" to length and 3" to diameter for outside dimensions.

Two-saddle design available for all horizontal tanks. Tank heads may be fabricated with bracing or 1/16" thicker steel, per UL-142.

Consult Highland Tank for NYC Tank sizing as flanged and dished heads will add to length. Custom sizing with a variety of configurations is available upon request.

Volume Gallons	Tank Dimensions	
	Diameter	Length
185	3'-2"	3'-4"
240	3'-2"	4'-0"
300	3'-2"	5'-0"
500	4'-0"	5'-5"
1,000	4'-0"	10'-8"
1,000	5'-4"	6'-0"
1,500	5'-4"	9'-0"
2,000	5'-4"	12'-0"
2,500	5'-4"	15'-0"
3,000	5'-4"	18'-0"
4,000	5'-4"	24'-0"
4,000	6'-0"	19'-0"
4,000	8'-0"	10'-8"
5,000	6'-0"	23'-10"
5,000	8'-0"	13'-4"
6,000	6'-0"	28'-8"
6,000	8'-0"	16'-0"
8,000	10'-0"	14'-0"
8,000	8'-0"	21'-4"
10,000	10'-0"	17'-1"
10,000	8'-0"	26'-8"
12,000	10'-0"	20'-6"
12,000	8'-0"	32'-0"
15,000	10'-0"	25'-6"
15,000	8'-0"	40'-0"
20,000	10'-0"	34'-1"
20,000	10'-6"	31'-0"
25,000	10'-0"	42'-7"
25,000	10'-6"	38'-9"
30,000	10'-0"	51'-2"
30,000	10'-6"	46'-6"
40,000	11'-6"	51'-6"
50,000	12'-0"	59'-2"
50,000	12'-6"	54'-6"
60,000	12'-0"	71'-0"
60,000	12'-6"	65'-5"
60,000	13'-0"	60'-6"
70,000	13'-0"	72'-0"



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