

Built on Tradition



Highland Tank®



Polyester Hold-Down Straps

HT-1091

Polyester Hold-down Straps are designed to help secure tanks underground in areas having ground water. Strap liners are not needed - when installed correctly, there are not any metallic components in the strap system that can make contact with the tank.

Highland's Polyester Hold-Down Straps are fabricated from 100% polyester webbing with a large reinforced loop at each end for securing the underground cylindrical storage vessel.

Included with each strap is a length of 1/2" diameter wire rope and three cable clamps for attaching the strap to one side of the concrete anchoring system. A turnbuckle is used for attaching the strap to the anchoring on the other side of the tank.

These straps are designed for and must be used in a system that has adequately sized concrete anchoring to counteract the tank's natural buoyant forces. Polyester Straps are intended for underground use ONLY.

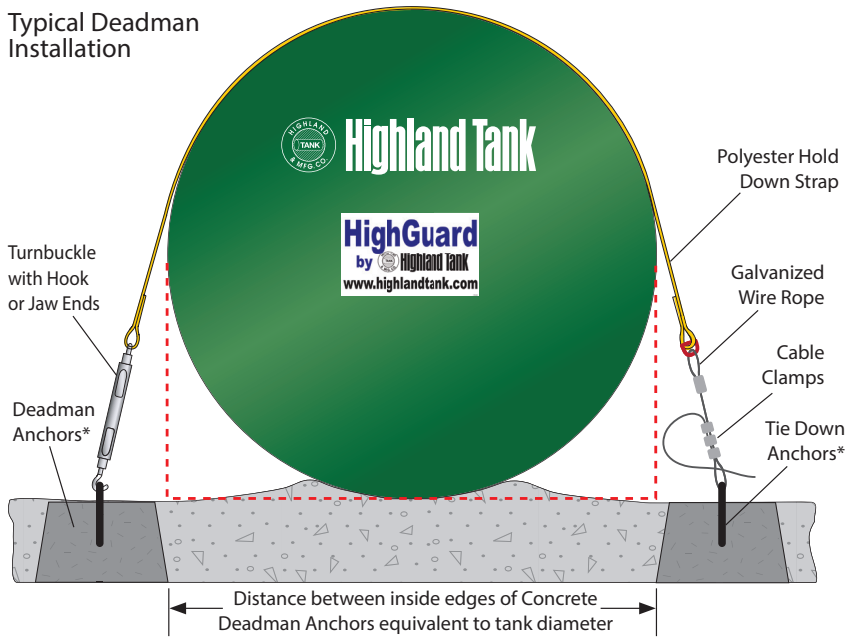
Installation Instructions

- Open turnbuckle completely.
- Lay polyester strap over tank.
- Attach one end of turnbuckle to loop of polyester strap.
- Attach the other end of turn buckle through tie-down anchor in deadman anchor or hold-down pad (by contractor) on one side of tank.
- Go to opposite side of tank.
- Wrap 1/2" wire rope attached to the other end of the polyester strap through the tie-down anchor in deadman anchor or hold-down pad (by contractor).
- Pull rope tight. Insert thimble at wire rope and tie-down juncture.
- Secure wire rope with (3) supplied cable clamps.
- Go back to turnbuckle side of vessel.
- Tighten turnbuckle to secure tank.
- After taking up slack in the polyester strap, tighten turnbuckle to remove any slack/stretch in strap.
- Recheck strap tightness and adjust as needed prior to backfilling.

Strap Install Details

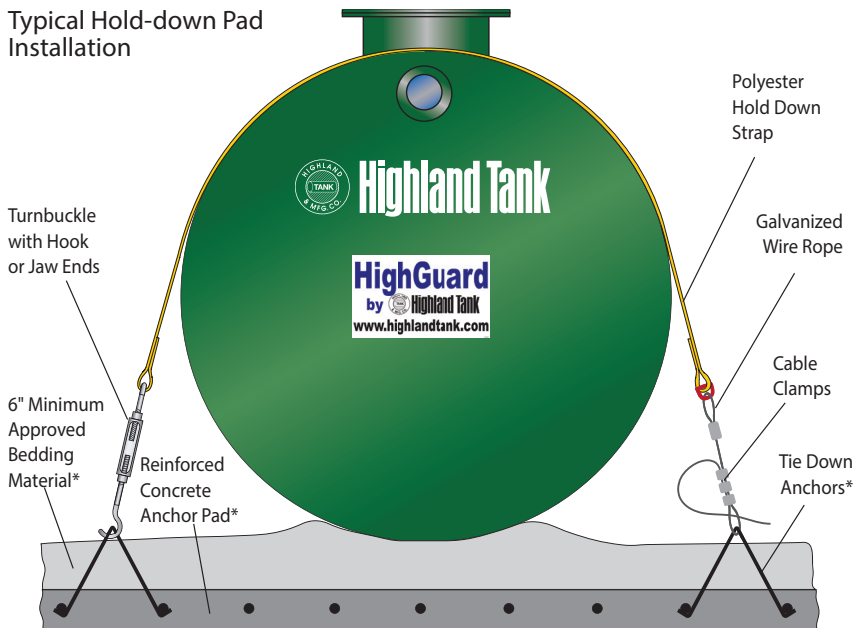
Polyester Hold-down Strap Sizing & Installation Guide

Typical Deadman Installation



Top of deadman anchors level with bottom of tank.
Fill area between deadmen with 12" or 18" approved bedding material*.

Typical Hold-down Pad Installation

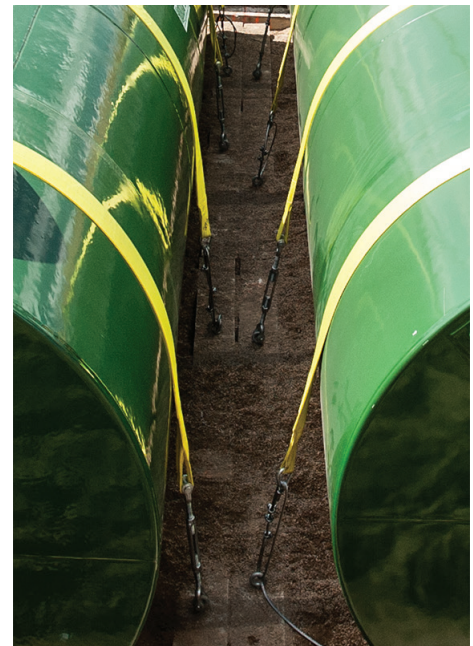


Note: * Contractor Supplied Items

Strong, safe & easy to install

Tank Diameter	Turn-Buckle Diameter	Strap Length
3'2"	3/4"	73"
3'6"	3/4"	73"
4'0"	3/4"	89"
5'4"	1-1/4"	124"
6'0"	1-1/4"	137"
7'0"	1-1/4"	172"
8'0"	1-1/4"	194"
10'0"	1-1/4"	242"
10'6"	1-1/4"	242"

Polyester Hold-Down Straps for tanks larger than 10'6" diameter are NOT available. Please contact Highland for information about our Steel Hold-Down Straps.



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