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.

Hold-down Straps are made from 100% polyester webbing.

Highland’s Polyester Straps are fabricated 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 turnbuckle 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.
Polyester Hold-down Strap Sizing
& Installation Guide

<table>
<thead>
<tr>
<th>Tank Diameter</th>
<th>Turn-Buckle Diameter</th>
<th>Strap Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>3'2&quot;</td>
<td>3/4&quot;</td>
<td>73&quot;</td>
</tr>
<tr>
<td>4'0&quot;</td>
<td>3/4&quot;</td>
<td>89&quot;</td>
</tr>
<tr>
<td>5'4&quot;</td>
<td>1-1/4&quot;</td>
<td>124&quot;</td>
</tr>
<tr>
<td>6'0&quot;</td>
<td>1-1/4&quot;</td>
<td>137&quot;</td>
</tr>
<tr>
<td>7'0&quot;</td>
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<tr>
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<td>1-1/4&quot;</td>
<td>194&quot;</td>
</tr>
<tr>
<td>10'0&quot;</td>
<td>1-1/4&quot;</td>
<td>242&quot;</td>
</tr>
</tbody>
</table>

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.

Typical Deadman Installation

Typical Hold-down Pad Installation

Note: * Contractor Supplied Items

strong, safe
& easy to install

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