



concrete deadman anchors

economical & effective anchoring

HT-1112

PRODUCT DETAILS

Now you can get prefabricated Concrete Deadmen Anchors (CDA) at the same time we deliver our high-quality, steel, storage and process vessels.

Highland Tank's CDAs are beams of reinforced concrete used to counteract the buoyant forces acting on an underground vessel. Placed alongside the tank in the bottom of an excavation, they are secured in place using hold-down straps. The weight of the backfill on the CDAs provides additional resistance to those buoyant forces.

CDAs, when used exclusively with Highland's Polyester Hold-Down Straps and supplied hardware, typically cost less than a concrete bottom hold-down pad. Best of all, there is no delivery charge for CDAs when they are shipped on the

same truck along with a Highland Tank product. Highland Tank's CDAs work with our standard horizontal underground tank products ranging from 500 to 60,000 gallons.

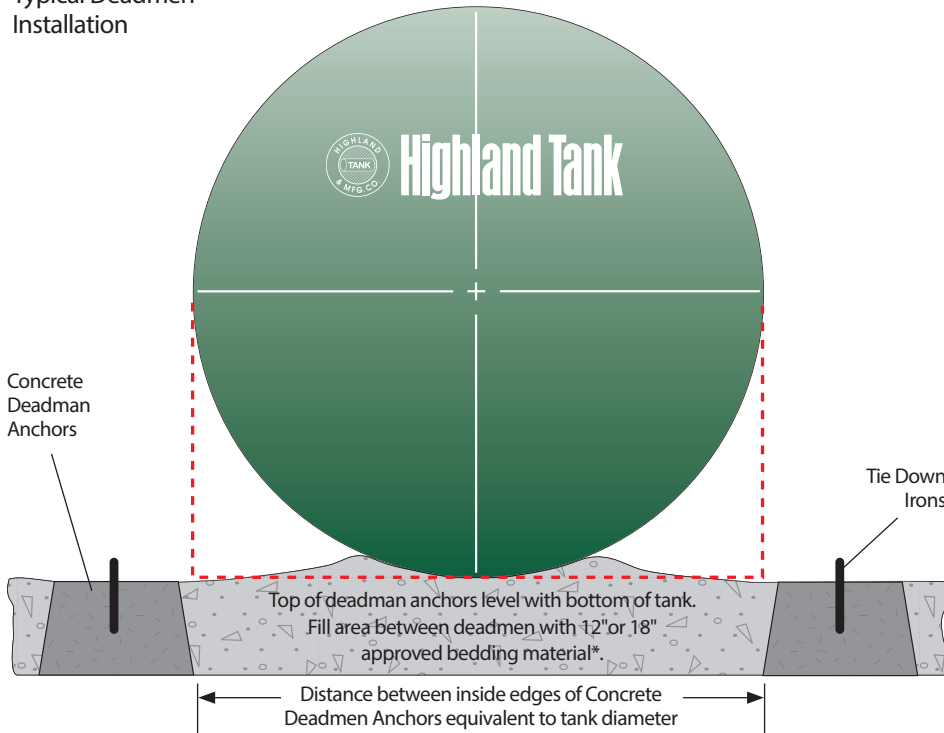
CDA recommendations assume that vessels are buried at least 36" deep and have only one tank top sump installed. Some installations may also require the installation of a grade-level reinforced concrete pad (Refer to PEI/RP 100).

Information supplied here is for planning purposes. Hold-down systems should be specified by a licensed professional engineer. Other hold-down methods are readily available.

CDA Specifications

- Utilize a 4,000 psi concrete mix reinforced with #4 rebar.
- Dimensions:
 - CDA-15: 120" L, 18" W, 12" H
 - CDA-45: 120" L, 36" W, 18" H
- Volume:
 - CDA-15: 15 cubic feet (approx.)
 - CDA-45: 45 cubic feet (approx.)
- Weight Each:
 - CDA-15: 2,200 pounds (approx.)
 - CDA-45: 6,500 pounds (approx.)

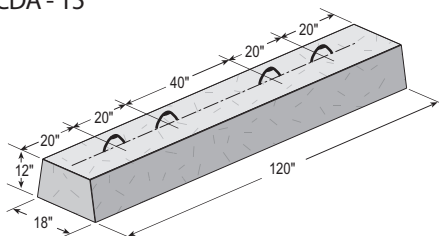
Typical Deadmen Installation



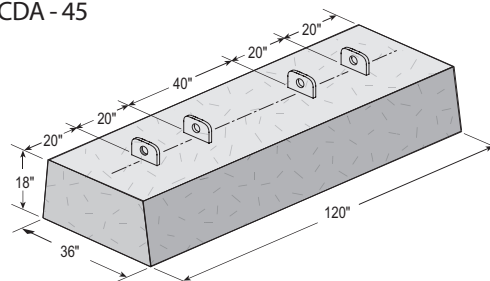
Concrete Deadmen Anchors can be used with all of Highland Tank's standard underground vessels such as Oil/Water Separators, Oil/Sand Interceptors, Passive Grease Interceptors and High-DRO® Water Tanks.

Deadmen Anchors must be installed on both sides and along the full length of the tank. They must be positioned so the edges of the deadmen are aligned outside the tank diameter and below the tank bottom.

CDA - 15



CDA - 45



| Highland Tank Vessel Information | | | Required Deadmen |
|----------------------------------|--------|---------|------------------|
| Gallons | Dia. | Len. | |
| 240 | 4'-0" | 5'-5" | 2 |
| 300 | 4'-0" | 10'-9" | 2 |
| 350 | 4'-0" | 10'-9" | 2 |
| 500 | 4'-0" | 5'-5" | 2 |
| 550 | 4'-0" | 10'-9" | 2 |
| 750 | 4'-0" | 10'-9" | 2 |
| 1,000 | 4'-0" | 10'-9" | 2 |
| 1,000 | 5'-4" | 6'-0" | 2 |
| 1,500 | 5'-4" | 9'-0" | 2 |
| 2,000 | 5'-4" | 12'-0" | 2 |
| 2,500 | 5'-4" | 15'-0" | 2 |
| 3,000 | 5'-4" | 18'-0" | 2 |
| 4,000 | 5'-4" | 24'-0" | 2 |
| 4,000 | 6'-0" | 19'-0" | 4 |
| 4,000 | 8'-0" | 10'-8" | 2 |
| 5,000 | 6'-0" | 23'-10" | 4 |
| 5,000 | 8'-0" | 13'-4" | 2 |
| 6,000 | 6'-0" | 28'-8" | 6 |
| 6,000 | 8'-0" | 16'-0" | 2 |
| 7,000 | 7'-0" | 24'-4" | 2 |
| 8,000 | 8'-0" | 21'-4" | 4 |
| 8,000 | 10'-0" | 14'-0" | 2 |
| 9,000 | 8'-0" | 24'-0" | 2 |
| 10,000 | 8'-0" | 26'-8" | 6 |
| 10,000 | 10'-0" | 17'-0" | 4 |
| 12,000 | 8'-0" | 32'-0" | 6 |
| 12,000 | 10'-0" | 20'-6" | 4 |
| 15,000 | 8'-0" | 40'-0" | 8 |
| 15,000 | 10'-0" | 25'-6" | 4 |
| 20,000 | 10'-0" | 34'-0" | 6 |
| 20,000 | 10'-6" | 31'-0" | 6 |
| 25,000 | 10'-6" | 38'-9" | 8 |
| 30,000 | 10'-6" | 46'-6" | 10 |
| 40,000 | 12'-0" | 47'-6" | 10 |
| 50,000 | 12'-0" | 59'-6" | 12 |
| 60,000 | 13'-0" | 60'-6" | 12 |

Information supplied here is for planning purposes. Hold-down systems should be specified by a licensed professional engineer.



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