



EPA Region 8 Drinking Water Unit Tech Tips

Sanitary Protection of Drinking Water Storage Tanks: Hatches

Region 8 EPA requires tank hatches to be watertight and secure.

Access hatches must be watertight to exclude surface runoff, debris, insects, birds, other animals. Unless the tank is in a secured area or a building, the hatch must be kept locked to prevent unauthorized access. It must have a neoprene rubber gasket seal on the hatch cover to keep contamination out of the water system. A shoebox-style hatch must be fitted with a solid watertight cover which extends down around the frame at least 2 inches. A non-shoebox-style hatch is allowed if it is watertight with a solid neoprene rubber gasket and is properly elevated above the roof.

Outdoor Tank Hatch Heights:

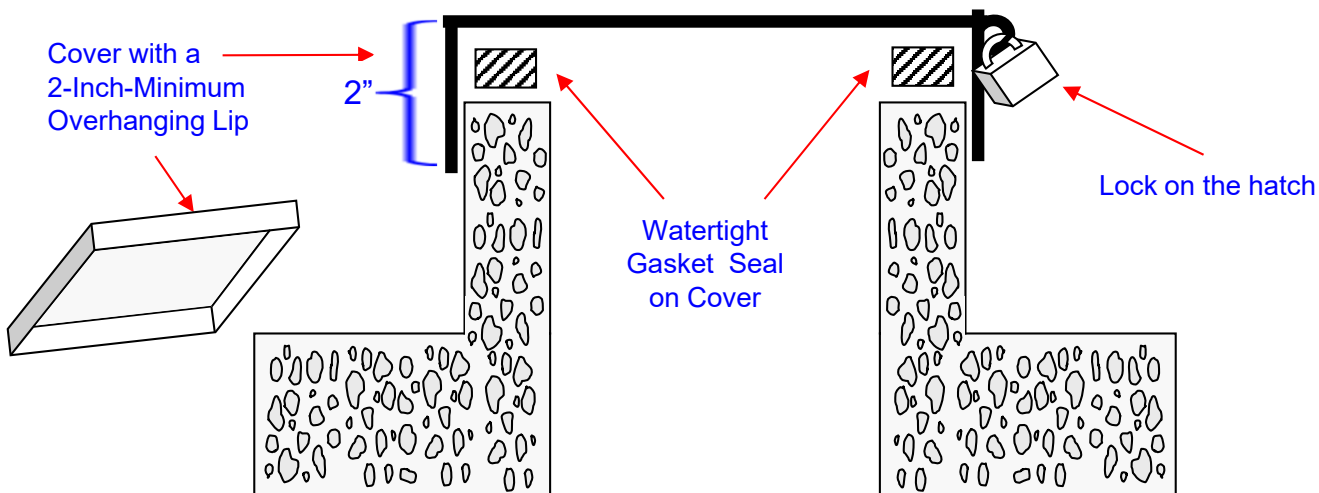
- Ground-level, Elevated, Partially Buried Tanks with roof > 20 inches above ground level: 4-inch Minimum Height
- Buried Tank: 24-inch Minimum Height

Indoor Tank Hatch Heights:

- There is **no minimum height requirement** for a hatch on a tank in a building with no openings in the roof or walls and with no sunlight access to the tank.
- Fully Buried Tank: Hatches on a building floor must be at least 4 inches above that floor.

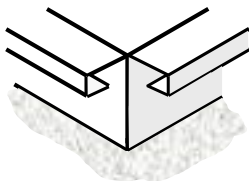
GOOD HATCH DESIGN

Opening is framed above the top of the reservoir



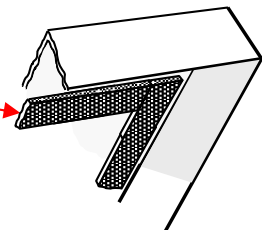
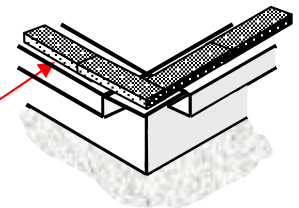
POOR DESIGN

Insects can enter the tank between the frame & cover.



GOOD DESIGN

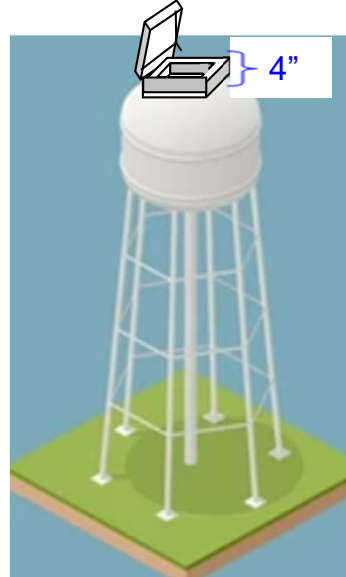
Adding a neoprene rubber seal strip creates sanitary protection. The gasket must not have any gaps. *Shown here on the hatch itself for illustration, but the gasket should preferably be inside the cover.*



Tank Hatch Design

GOOD DESIGN: Ground-level & Elevated Tanks

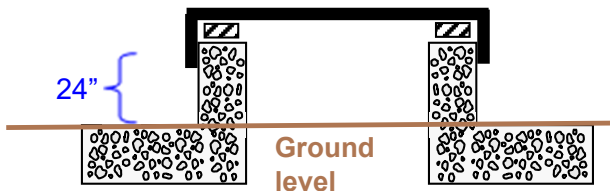
On ground-level and elevated tanks, the hatch must be at least 4" above the tank roof.



GOOD DESIGN: Buried Tanks

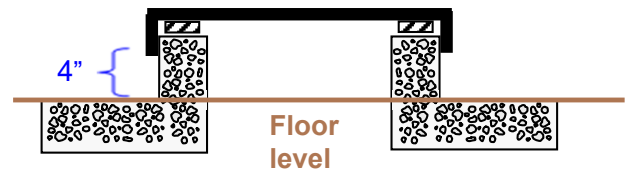
OUTDOOR BURIED TANK:

The hatch must be at least 24" above the ground surface.



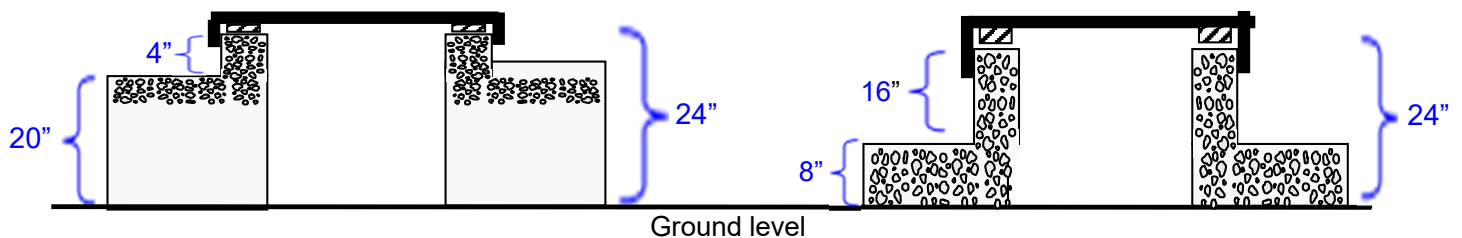
INDOOR BURIED TANK:

The hatch must be at least 4" above the floor.



GOOD DESIGN: Partially Buried Tanks

OUTDOOR BURIED TANK: The hatch must be $\geq 24"$ above the ground surface & 4" above the tank roof. There are no height requirements for an indoor partially buried or ground-level tank.



Indoor tanks: A tank that is inside a building which has no openings in the roof or walls that could allow organisms, rain, snow, or wind to enter, and has no sunlight access to the tank through windows or other openings.

