How to Build a Water Tank Stand in 7 Simple Steps

Bases like concrete, sand, and pea gravel are familiar favorites for setting up your water tank. However, tank stands have several benefits for your water operation if engineered correctly. Here's what you need to know before building your water tank stand.



Water Tank Stand Basics

Tank stands can protect your water tank from contaminants and improve the drainage of your tank, not to mention the aesthetic appeal. However, a water tank filled to its capacity is extremely heavy. A gallon of water weighs about 8.34 lbs, meaning that even a small 150-gallon water tank can weigh close to half a ton! Your stand needs to be able to withstand an extreme amount of weight to work for your water tank. It also helps to have a durable water tank that is sturdy enough to not topple over.



A filled water tank resting on top of a poorly constructed tank stand is a recipe for disaster. If your tank stand malfunctions, your water tank could fall, ruining much more than your investment. Falling tanks can gravely injure people and flood properties.

How to Build a Water Tank Stand

What You Need:

- 4x4 or 6x6 pressure-treated lumber for the legs
- 2x4 or 2x6 pressure-treated lumber or the frame
- · Soil, gravel, concrete or something for leveling the ground
- Circular saw or handsaw
- Galvanized screws
- Measuring tape
- Level
- Metal brackets
- Wrench set
- Drill
- Hammer
- Shovel
- Pencil



Step-by-Step Construction

Step 1: Choose a location and prepare a base

The first step in building a water tank stand is to choose a location. Regardless of where you put your tank stand, every location must have a level and stable ground that can support the weight of the water tank when it is full. It's also essential to consider accessibility to the water tank stand when it comes to filling and maintenance. For more information on preparing a proper base for your tank stand read our informative article from our water storage blog.



Step 2: Measure the dimensions of your tank

Measure the dimensions of your water tank to determine the size of the stand you need to build. Measuring your tank will also help determine the size of the top platform of your stand. However, the height of your tank stand should be based on the location you choose and the amount of water pressure that you are looking for. Make sure to account for the weight of the tank and water when choosing the dimensions of your water tank stand.

Step 3: Build the frame

Once you have the accurate dimensions of your tank stand, start building the base. Use pressure-treated 4×4 or 6×6 lumber to construct a rectangular frame. Use galvanized screws to add support beams with pressure-treated 2×4 or 2×6 lumber. Make sure the frame is level by using a level tool.

Step 4: Build the Legs

Construct the legs using pressure-treated 4 x 4 lumber and attach them to the corners of the base frame. Then, add diagonal cross braces to each corner to provide extra support and stability to the stand. Use pressure-treated 2 x 4 lumber to make the cross braces. Cut the lumber to the desired length and use galvanized screws and metal brackets to secure them into place.

Step 5: Install the Top Platform

Once the frame and legs are constructed, use the pressure-treated lumber to make a decking pattern with gaps no greater than two inches apart. This ensures equal weight distribution along the platform. Use the level to ensure the platform is level.

Step 6: Test the Stability

Once the frame is assembled, check for stability. You should be able to stand on the frame without it wobbling or tipping. If it is unstable, adjust the placement of the posts until it is level and secure.

Step 7: Secure the Tank to The Stand

Place the empty water tank on top of the stand, ensuring it is level. You can secure the tank to the stand using bolts or straps, depending on the tank's shape and size. Make sure to follow the tank manufacturer's recommendations for securing the tank.

