

How to Prevent Your Water Tank From Freezing In Winter

It's no secret that freezing temperatures during winter can damage crops, harm livestock, and freeze water tanks. Don't worry, careful planning can prevent a frozen water tank and costly, long-term repairs. Here are crucial steps to combat winter weather and save your water tank from the elements.



A Frozen Water Tank Is A Serious Issue

Colder climates can freeze your water storage tank, potentially ruining your irrigation system, drinking water, or home plumbing. Water is the only molecule known to expand when it freezes. That means your water tank can expand in freezing temperatures and cause cracks in your tank walls. If big enough damage happens, your tank can rupture completely, leaving you with no water and expensive repairs.

Preparing Your Tank For Cold Temperatures

Tank Insulation

An insulated cover is a cheap and low-effort option to protect your water tank. These covers can be made of fiberglass, mineral wool, ceramic fiber, or some other cushioning material. First, measure your tank and buy the appropriately sized cover. Then, wrap your container tightly in the insulated cover. However, one crucial tip to remember is not to wrap the bottom of your tank. Warm air rises from below the tank, which prevents the tank from freezing. Insulating the bottom of the tank can prevent this, putting you back at square one.



Water Heaters

A few different water heating methods prevent ice from forming inside your water tank. For example, heating blankets can wrap around your tank and generate heat from an electrical source. There are also submersible electric water heaters that use a current to warm the water inside the tank. However, these heating methods can only be used if the water is not used for drinking.



See **tank heater blanket options**.

Any water tank that is exposed to the elements is vulnerable to freezing, but taking these steps to reduce the risk of freezing from the get-go can be beneficial in the long run.

Tank Size and Material

Small water tanks or tanks made of metal are more likely to suffer heavy damage in the event of freezing. As water freezes, it expands, making metal tanks more prone to rupture. Plastic tanks are more malleable and can stretch slightly to accommodate the extra width from freezing. Also, larger water tanks hold a larger volume of water, making it harder to freeze through. Simply put, the more water there is, the harder it is to freeze.



Water Tank Maintenance

Any crack, no matter how small, can speed up the freezing process in cold temperatures. This includes cracks in the pipes leading to the water tank and the tank itself. Cracks allow heat to escape the tank and for cold air to enter. Checking your water tank periodically for damages or even getting a professional examination is a great way to ensure your water is ready for winter.

Keeping The Water Moving

Any crack, no matter how small, can speed up the freezing process in cold temperatures. This includes cracks in the pipes leading to the water tank and the tank itself. Cracks allow heat to escape the tank and for cold air to enter. Checking your water tank periodically for damages or even getting a professional examination is a great way to ensure your water is ready for winter.

When water is moving, it creates energy. This means that moving water is more difficult to freeze than standing water. In cold weather conditions, using your water can agitate the water in the tank, preventing it from freezing. This is as simple as running the taps every now and then (if your water tank is connected to a plumbing system) or using an agitator or tank mixer to keep the water in the tank moving.

In short, it's easier to prepare your water tank for winter than it is to defrost a frozen tank. Your best bet to avoid a frozen water tank is to find a tank built to withstand the elements and intelligently made from durable materials.

FLAT-SPOT™ DORMER

This tank is built with extra heavy-duty spots for plumbing extra tank fittings.

**Not available on the 100, 150, 200, 210, 340, 450, or 600 gallon tanks.*

RIBBED-WALL™ STRUCTURE

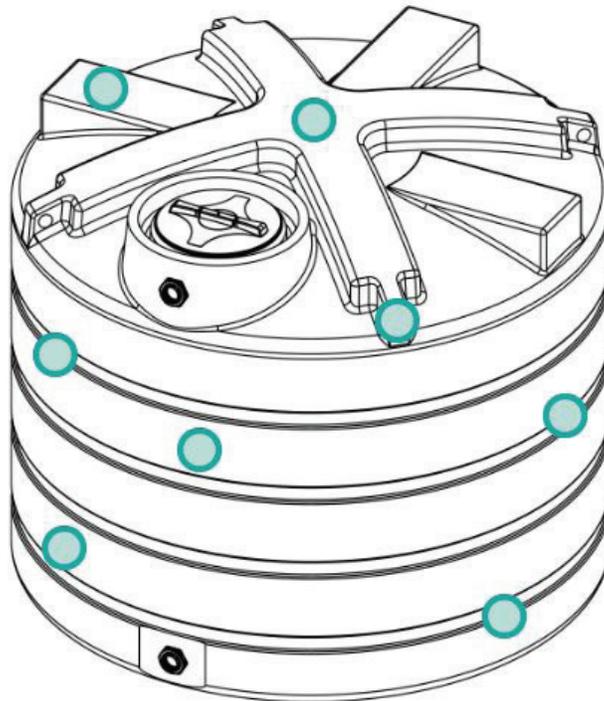
The ribs act like belts around the tank keeping it in shape. This reduces bulging. **Not available on the 210, 340, 450, or 600 gallon tanks.*

COMPOUND-COLOR™ INGREDIENTS

The tank color is mixed with high density polyethylene using a high-pressure extrusion process. This provides the optimum color distribution to allow even lighter colors to stop light penetration. This process reduces the amount of color pigment making the poly stronger.

UV-PROTECT™ EXTERIOR

This UV resistant material stops high rated sun-rays breaking down the tank side-walls.



STRONG-X™ ROOF DESIGN

The beefed-up roof structure with molded-in truss-like supports eliminates collapsing in the heat of the day. **Not available on the 210, 340, 450, or 600 gallon tanks.*

ANCHOR-POINT™ LUGS

Four hefty built-in lifting and tie-down points at each corner make it easy to handle.

LIGHT-BLOCK™ TECHNOLOGY

Algae needs light to grow. This algae-resistant material keeps the sunlight out and the water pure.

DRINK-SAFE™ MATERIAL

The resin used to build the tank is FDA approved keeping the water safe to drink.

