



**TECHNICAL GUIDE
WATER TANKS ONLY**

FREQUENTLY ASKED QUESTIONS

What is the warranty on your water tanks?

Elkhart Plastics warrants that the products sold to the purchaser meet the seller's specifications and are free from defects in materials and workmanship. This warranty lasts for five years from the original purchase date, unless the seller specifies otherwise in writing. However, the warranty can be extended to ten years if the original purchaser or end-user registers the products with the seller within 30 days of the original purchase date. For full details, please refer to the complete warranty statement.

Are your water tanks FDA-compliant?

Elkhart Plastics manufactures water tanks using FDA-compliant resins. Our natural, black, blue, tan, and green colored tanks fully comply with current FDA standards for polyethylene tanks. However, certain colors, such as yellow, may affect compliance when blended into the resin. If FDA compliance is required, please specify this when placing your tank order, and we will assist you in selecting the appropriate color.

Are your tanks FDA-approved and are they safe for water storage?

Elkhart Plastics' above-ground tanks provide a safe solution for water storage. Our polyethylene tanks and polypropylene lids and fittings are manufactured using FDA-compliant materials. For information on additional FDA-approved color options, please contact our factory.

Do your water tanks contain any BPA's?

Elkhart Plastics' water tanks are manufactured using polyethylene, a plastic that does not contain bisphenol A (BPA). BPA is typically found in polycarbonate plastics and the epoxy linings of cans, but it is not used in the production of polyethylene. Polyethylene is a safe, non-leaching material that has been approved for direct food contact applications for decades.

Are your above ground water tanks NSF-approved?

The National Sanitary Foundation (NSF) evaluates multiple factors when granting approval, including the materials used and the final product configuration, such as any fittings and accessories that will be exposed to chemicals. Therefore, it is recommended to consult the manufacturer regarding the NSF approval status.

What materials are used to manufacture your poly water tanks?

Elkhart Plastics manufactures water tanks using high-density polyethylene (HDPE). The specific type of HDPE used depends on the tank size, as HDPE offers greater density, chemical resistance, and impact resistance compared to medium-density polyethylene.

Is there UV protection in the resin you use?

Elkhart Plastics' water tanks are molded from polyethylene compounded with the latest UV light stabilizer technology. These UV stabilizers are designed to mitigate the harmful effects of ultraviolet light exposure, extending the lifespan of the tanks compared to similar materials without stabilizers. Our standard UV rating is "15," meaning the tanks will retain 50% of their UV protection after 15,000 hours of sun exposure. However, this rating can vary based on location and duration of sun exposure, so we recommend consulting the factory for the specific UV rating of the product you intend to use.

Do your water tanks have a UL rating?

The UL 94 standard categorizes materials based on their flammability. Our polyethylene has a UL94HB rating, meaning it must not burn faster than 1.5 inches per minute for thicknesses between 0.120 and 0.500 inches, or 3 inches per minute for thicknesses less than 0.120 inches. Additionally, the specimens must extinguish themselves before the flame reaches 4 inches.

What is the wall thickness of your water tanks?

The tank's wall thickness tapers from top to bottom. We carefully select the appropriate materials and resin grades to achieve the desired specific gravity.

What are witness lines in water tanks?

Witness lines are visible imperfections in the finished product, caused by cracks that develop in the mold. These cracks typically occur in areas of the mold that experience the greatest stress, such as radiuses. When a crack goes undetected, the heat of the molding process allows molten plastic to seep into the crack, creating a witness line that mirrors the original mold defect. Running a fingernail across the witness line reveals that the plastic is protruding, rather than indented. In fact, the witness line can be scraped away, leaving a solid plastic surface. While unsightly, this cosmetic defect does not affect the structural integrity of the product.

Does the color of a water tank give any indication as to the quality of the tank?

Elkhart Plastics water tanks are made from polyethylene blended with ultraviolet (UV) stabilizers, which are designed to extend the tanks' lifespan by mitigating the harmful effects of UV light exposure. The standard tank color is black, but customers can opt for non-standard colors like green or tan. However, the tank color does not impact its UV resistance or longevity. It's important to note that the color may affect FDA compliance.

Does the color of a water tank have an impact on Algae growth?

Black tanks are the most effective at preventing light transmission. While other highly concentrated colors can also eliminate translucence, the pigments act as contaminants when mixed with polyethylene, potentially weakening the tank. Green or tan-tinted tanks (excluding black) typically allow enough light to sustain photosynthesis and promote algae growth. Therefore, one cannot definitively state that colored tanks do not promote algae without evaluating the specific level of light energy transmission. Any amount of light energy can enable algae formation.

Can I store chemicals or fertilizers in Elkhart Plastics Water Only storage tanks?

No, Elkhart Plastics Water Only storage tanks are specifically designed for potable water storage and are not rated to hold chemicals, fertilizers, or any other substances besides clean water.

How heavy a material can polyethylene water tanks hold?

Elkhart Plastics standard vertical water tanks have a specific gravity of 1.0. These tanks are designed to only hold water.

Can I store Deionized water in your tanks?

Elkhart Plastics' polyethylene tanks can store deionized water at temperatures up to 100°F (38°C).

Does the presence of ozone affect a polyethylene water tank?

Ozone is sometimes used for water purification. According to Ozone Solutions (<http://www.ozoneapplications.com/>), High Density Polyethylene (HDPE) has excellent compatibility with ozone, while polypropylene fittings are only rated as "fair" for ozone compatibility. As a result, polypropylene fittings are not recommended for continuous ozone exposure, as softening, loss of strength, and/or swelling may occur. However, the specific ozone concentrations used in the compatibility testing are not specified. Additionally, 100% ozone is not recommended for use in our tanks. To ensure safe operation, tanks should be inspected on a semi-annual basis.

Can your Water Tanks be pressurized?

Our water tanks cannot be pressurized or exposed to vacuum.

Can your Water Tanks be buried?

Our water tanks are not suitable for burial, as they are not engineered to withstand the pressure exerted by the surrounding soil.

What is the maximum temperature that your water tanks can withstand?

Elkhart Plastics tanks can withstand sustained temperatures up to 120°F (49°C) and intermittent temperatures up to 140°F (60°C). However, exposure to higher service temperatures will lower the tank's specific gravity rating.

How many years will my water tank last?

The life expectancy of a polyethylene tank is influenced by numerous factors, such as the stored material, indoor/outdoor placement, stationary or mobile use, and UV exposure, among other variables.

Will freezing temperatures hurt my poly tank?

Polyethylene tanks are not affected by freezing temperatures. However, if you plan to store a liquid in the tank that may freeze, be sure to leave enough room for expansion. Keep in mind that polyethylene tanks have a greater risk of cracking during transport in cold weather.

Is there some way to tell when my water tank was made?

All Elkhart Plastics water tanks are embossed with a date stamp in the month/year format.

Are these tanks repairable through plastic welding?

Polyethylene tanks can be repaired by qualified personnel through welding.

How tight can I tighten a bulkhead fitting?

To avoid damaging and leaking poly fittings, tighten the nut only to hand-tight plus a half-turn. Over-tightening can crack the fittings. If using thread sealant, ensure it is compatible with both the fittings and the chemicals they will contain.

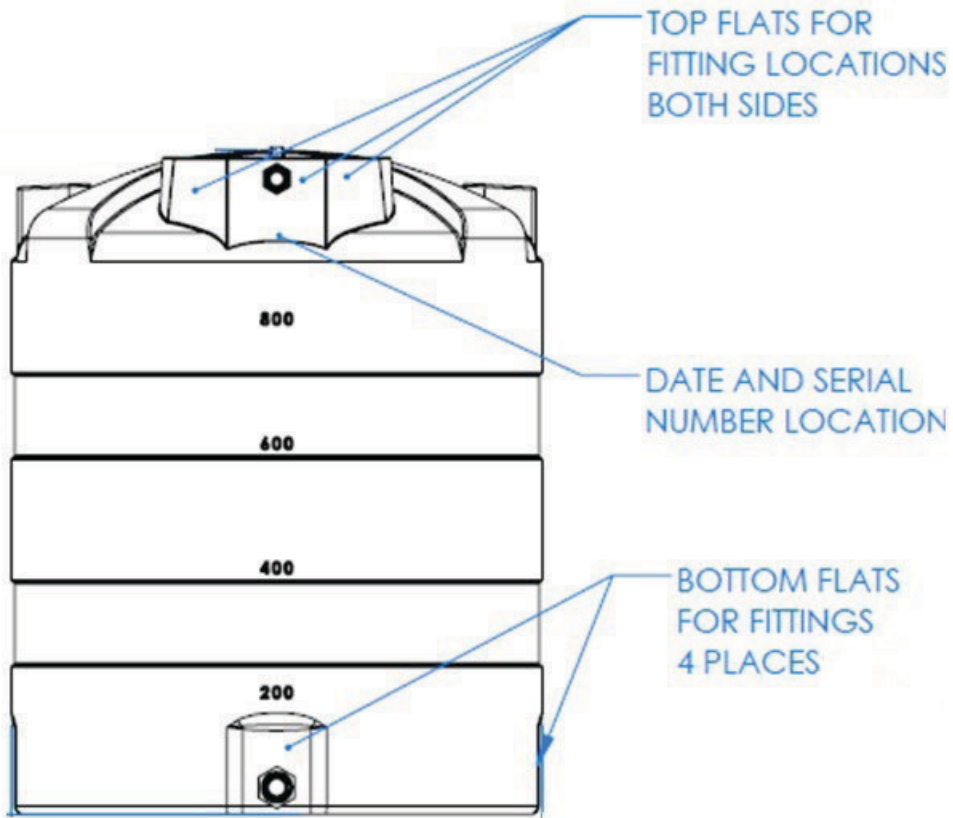
What type of surface is required for placement of a vertical water tank?

When selecting the tank site, ensure the area is level and has adequate drainage for water runoff. The tank bottom must be fully supported. For tanks over 1,000 gallons (3,785 liters), reinforced concrete support pads are recommended. Regardless of size, the base material must be designed to support the tank's bearing capacity, including seismic and wind loads. If the tank is on a stand or skid, the concrete or soil's bearing capacity requirements will increase. Always anchor the tank according to seismic or wind load zone requirements for the site. Consult applicable building codes for the specific support and anchoring requirements.

Can I paint my tank?

Elkhart Plastics does not endorse the use of products claiming successful adhesion to polyethylene. While paints with adhesion promoters may initially adhere, they will eventually peel due to polyethylene's high thermal expansion and contraction. This thermal instability inherent to polyethylene leads to long-term adhesion failure, undermining the effectiveness of such paint products.

Date Stamp Location





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