ZCL®
COMPOSITES INC.

XERXES®
a ZCL company

Aboveground Fiberglass Storage Tanks for Water

One company. Two trusted brands.

Xerxes and ZCL are the most recognized and well-respected brands in the fiberglass storage tank market. Xerxes, with its distinct red color, is our US brand identity, while ZCL, with a well-established green tank color, is our Canadian brand. Together, we are one organization, ZCL Composites, a publicly traded company with decades of experience manufacturing fiberglass tanks for below grade and aboveground applications.

While we are most widely known as North America's leading supplier of underground storage tanks, ZCL also has extensive experience designing and manufacturing tanks for the aboveground storage of a wide range of liquids. Whether it is a Xerxes or a ZCL tank, fabricated for an aboveground or below grade installation, customers can be assured that they have selected the highest-quality product supplied by a dedicated, experienced team of professionals.

Why choose a fiberglass abovegound water tank?

When it comes to selecting a water storage tank for an aboveground application, facility designers and owners have many choices in terms of materials of construction, tank models and manufacturers. Underground storage tank options tend to be more limited and present a different set of considerations. So, why choose a fiberglass storage tank? There are several important factors to evaluate — corrosion resistance, weight, installation costs, structural reliability and, of course, price, among others. Our water storage tank is the superior choice when each of these elements is evaluated.

Corrosion resistance is a clear advantage that composite materials offer. Fiberglass has been the material of choice for decades for many tank applications with very corrosive environments, both for stored corrosive contents and corrosive installation environments. While typical water tank needs may not present the same harsh corrosive environment as a sodium hypochlorite tank at a wastewater treatment plant, rust and corrosion are real concerns for many tanks used for long-term storage of water and wastewater.

Horizontal and Vertical Tank Models

Horizontal aboveground water tanks

Some storage tank installations have certain limitations, such as ceiling height or visibility restrictions, that require use of a lower profile tank. In other cases, space is not a concern and the project designer prefers a long horizontal tank over a tall vertical model. Xerxes and ZCL offer a wide range of horizontal tank models for these situations, with installation either on a concrete pad or a well-compacted, level gravel base if used outdoors.

Models in the 4-, 6- and 8-foot-diameter sizes have strong fiberglass saddles which are properly positioned and bonded to the cylinder. Larger 10-foot-diameter models utilize a unique structural steel saddle for support. These saddles are properly positioned under the tank at the time of installation. In either case, the tank cylinder is the same proven design, incorporating structural ribs with support saddles specifically engineered to accommodate the loading conditions of each tank size.

Vertical aboveground water tanks

Vertical profile tanks are the most common type of aboveground storage tank. They allow for the greatest capacity utilizing the smallest footprint. Different applications require different types of top covers, for example, integral domes or flat tops if overall height is a limitation. In certain applications and geographic locations, facility designers require that the tanks be designed for seismic load conditions. ZCL's and Xerxes vertical water tanks can be designed for these situations.

Vertical tanks are also generally the most cost-effective model when viewed from a cost-per-gallon-stored basis. No support saddles are required with a vertical aboveground tank and the support pad is smaller, therefore, less expensive.

ZCL an Xerxes offer a greater range of vertical water capacities as compared to the horizontal models. In addition to 4-, 6-, 8-, and 10-foot-diameters, we also fabricate 12-foot-diameter tanks.

Features and benefits of a fiberglass storage tank

A fiberglass tank, by virtue of its materials and design, is the superior choice for reliable, long-term storage of water and wastewater, in a wide range of applications, including fire-protection, potable water (NSF 61), rainwater collection, stormwater retention, as well as storage of other liquids, such as grease and chemicals.

- **Shop-Fabricated, Watertight Design –** Fabricated in our manufacturing facilities with extensive quality control-oversight, our fiberglass tanks offer distinct watertight performance advantages over products that require field assembly with gaskets and liners. Another advantage is that unlike field-assembled tanks our tanks offer quick and easy installation.

- **Corrosion Resistance** – Fiberglass is widely recognized for its superior corrosion-resistant properties. No other material provides better long-term protection against premature failure and leaks.

- **Custom-Design Flexibility** – Fiberglass tanks offer project designers a wide-range of design flexibility as well as accessories that meet a variety of site specific needs, whether the tank is installed inside or outside of a building.

Tank Accessories/Options

As with most aboveground storage tanks, a standard menu of accessories are available, such as threaded fittings, flanged nozzles and access manways. Depending on the particular tank application — and whether the installation will be indoors or outdoors — project designers often require a broader range of custom tank options. Xerxes and ZCL tanks offer many custom design options , a few of which are described below:

- **Color/UV Protection** – Our standard color options are red with Xerxes-branded products and green for ZCL products. Optional colors are available in a limited range of choices. Additionally, ultraviolet (UV) protection is available (additive to the resin) when a tank is located outdoors.

- **Insulation** – Depending on location, climate and the product being stored, tanks installed outdoors often require insulation. Different methods of insulating water tanks are available, depending on the tank model selected.

- **Seismic Design** – In some jurisdictions and for some products stored, regulations may require that aboveground water storage tanks be designed for seismic zones. Seismic calculations and tank designs are available for our vertical tank models for most rating requirements.

Insulated aluminum clad fiberglass tank

- **Ladders/Walkways** – Particularly with larger tanks, steel and aluminum ladders installed on the tank are necessary in order to access tank-top equipment or manways. Additional walkway structures with railings are also an option.

- **Vertical Tank Tops –** Unique to vertical tanks, designers often deal with height limitations, particularly in the case of an indoor installation. Our standard tank comes with a dome top integral to the tank cylinder. An aluminum flat-top option is also available.

North American Manufacturing Facilities

ZCL Manufacturing Facilities

Edmonton, AB
Drummondville, QC

Xerxes Manufacturing Facilities

Anaheim, CA
Hagerstown, MD
Seguin, TX
Tipton, IA

ZCL® COMPOSITES INC.

ZCL Composites Inc.
1420 Parsons Road SW
Edmonton, AB , Canada T6X 1M5
780-466-6648 or 800-661-8265
www.zcl.com

XERXES® a ZCL company

Xerxes Corporation
7901 Xerxes Avenue South
Minneapolis, MN 55431 USA
952-887-1890
www.xerxes.com

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