

# GLASS

As a Matter of Fact.



## Bringing Clarity to Aquastore® Glass-Fused-to-Steel Tanks

Glass-Fused-to-Steel is the premium tank coating technology. Its physical properties are specifically suited for municipal and industrial liquid storage applications. While other tank companies claim that their factory painted organic coatings are as good or better than glass, when you look at the clear cut Facts you know there simply is not a better tank coating than glass-fused-to-steel.

When evaluating your tank storage needs, know the Facts about Aquastore glass-fused-to-steel tanks.

**AQUASTORE**<sup>®</sup>  
Tanks & Domes  
Glass Tanks with a Heart of Steel™  
[www.aquastore.com](http://www.aquastore.com)

# Glass-Fused-to-Steel (Porcelain Enamel) Vs. Paints (Epoxy)

An inert, inorganic coating that NEVER needs painting and is still performing with the original glass coating after 60+ years of service.

Vs

Organic coatings and Field applied paints will begin to slowly deteriorate upon installation and will need to be repainted in order to remain in service.

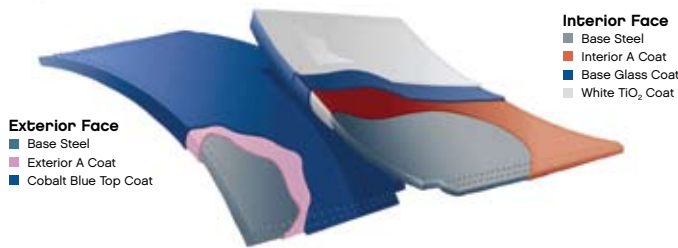


A single, strong, integrated glass and steel material fused together at 1,500° F in a controlled process Furnace. We don't "bake" our coating to get it to stick, we chemically alter it to yield its proven strength and long-term endurance. Proven performance of porcelain enamel coatings is evident in a wide range of products including tanks, silos, containment structures, appliances, medical equipment and many others.

Vs

Generic powder coating is sprayed and mechanically bonded (by melting) onto steel at 400° F. The particles in the two-component system bond to each other to form the final coating. There is NO molecular linking or fusing between the coating/paint and steel.

## Physical Properties - Proprietary Vitrium™ Technology



Most epoxy coatings and paint are mechanically bonded to the steel in thicknesses of 7-11 mil on the interior of the tank. The exterior thicknesses are even less, in the 6-10 mil range.

Vs

Proprietary Vitrium™ technology exceeds all other internal coatings, and at 10-18 mil range averaging 16 mils, is unmatched by any other coatings in the market. Vitrium technology combines the outstanding chemical and physical resistant properties of titanium-enhanced (TiO<sub>2</sub>) glass with a highly engineered, ultra-fine glass bubble structure. The exterior layer of glass ranges from 7-15 mils in thickness.



Our proprietary Edgecoat™ protection process involves thermally applying a stainless steel alloy to mechanically rounded sheet edges. Stringent plant quality control procedures ensure the Edgecoat™ remains in place throughout the life of the tank.

Vs

The powder coating process deposits paint powder on sheet edges and bolt holes. However, unless that sheet is mechanically rounded prior to coating, it will not adhere properly. Organic coatings and paints begin to deteriorate from the first day they are put into service and will require repainting.

Glass is impermeable to liquids and vapors, it eliminates corrosion undercutting and offers excellent impact and abrasion resistance.

Vs

Organic coating and paint can suffer corrosion and undercutting due to lower coating bonding strength with the steel substrate.

# AQUASTORE® Vs. Coated/Painted Tanks



All design and engineering for Aquastore glass-fused-to-steel tanks is done in-house for quality control and cost efficiency. All erection is performed by authorized Aquastore tank dealers only.

**Vs**

Design and engineering is often performed by outside contractors, not the people actually manufacturing the tanks. Erection of many pre-fabricated tanks is performed by non-tank specific contractors without factory personnel.



Aquastore tanks utilize a unique web truss system that was developed by Engineered Storage Products Company decades ago. This structural design component provides optimal wind stiffness for your tank application. An Aquastore tank with or without the unique web truss system will always meet the design code specified.

**Vs**

Painted tanks need higher steel thickness to withstand the blasting required to re-coat. Field repainting the joints, nuts, bolts and washers of a bolted tank is difficult to do with any consistent level of quality, causing shorter periods of operation between repainting cycles.



Authorized Aquastore Dealers offer a turnkey system for the life of the tank from specification to construction to service. No other tank company has the 60+ years of experience and history of service that you get from the Aquastore Dealer network.

**Vs**

Most other coated or painted tank suppliers want to just build the tank and leave. Will they be around when it's time to repaint, make modifications, perform periodic inspections and provide prompt service needs? A promise of longevity of any product is only as good as the company that stands behind it. Ask for a reference list of tanks they have manufactured and built that are more than 10 years old.



# AQUASTORE®

# The Best Tanks.

Aquastore glass-fused-to-steel tanks are always constructed by Authorized Dealers who know the people in the markets they serve. They are the most knowledgeable and experienced resource for information on tank coatings.



## You can't substitute experience.

Glass-fused-to-steel tanks have been manufactured, constructed and proven in the field for over 60 years. The technology is so robust that a service expiration date has yet to be determined. Don't be misled by claims that paint-like coatings are better than glass. Paint by any other name is still paint.

## Ask the tough questions and get the facts, not the fiction.

Specify quality, experience and low maintenance based on the facts. Specify Aquastore® glass-fused-to-steel tanks.



For more information, call 815-756-1551 or visit [www.Aquastore.com](http://www.Aquastore.com) to find the Authorized Dealer nearest you.

ENGINEERED STORAGE  
PRODUCTS COMPANY



A Division of CST Industries

Engineered Storage Products Company  
345 Harvestore Drive • DeKalb, IL 60115  
815-756-1551 • [www.aquastore.com](http://www.aquastore.com)

# AQUASTORE®

Tanks & Domes

Glass Tanks with a Heart of Steel™



© 2009. Aquastore is a registered trademark of Engineered Storage Products Company.