

WATER STORAGE TANKS

Ensure safe and clean water

Water storage tanks play a vital role in storing water for various purposes—ranging from drinking water to raw water storage. Common tank types include steel tanks, concrete tanks, and fiberglass tanks.

Over time, these tanks may degrade, corrode, or leak due to constant exposure to moisture, heat, chemicals, and fluctuating environmental conditions. As metal tanks corrode, the byproducts, like rust and other metal particles, can leach into the stored water, affecting its quality and potentially introducing harmful substances. This can lead to the introduction of bacteria or other contaminants through leaks. Without proper internal lining, these issues can compromise structural integrity and lead to water contamination.

Enhancing durability of water tanks with GSE HD geomembranes

- **Exceptional durability:** GSE® HD is engineered to resist mechanical stress, punctures, and environmental stress cracking. With outstanding strength and elongation, they provide reliable, long-term containment even under dynamic loading or harsh service conditions.



HDPE geomembranes like GSE HD offer a trusted, high-performance solution for lining water storage tanks. These durable liners create a tough, impermeable barrier that protects against corrosion, chemical damage, and leaks—safeguarding the structural integrity and extending the lifespan of tanks made from steel, concrete, fiberglass, and more.

- **Superior chemical resistance:** GSE HD geomembrane series is widely recognized for its resistance to a broad spectrum of chemicals, including strong acid and base solutions, making it ideal for various industrial and municipal water storage as well as drinking water containment uses.
- **Leak-proof performance:** Designed for impermeability, GSE HD geomembrane liners provide a secure and consistent seal to prevent leakage and protect water quality throughout the tank's service life.
- **Corrosion protection:** GSE HD geomembrane liners provide an impermeable barrier to water or liquids. Geomembranes can be installed in steel and concrete tanks of all sizes to preserve aging tanks and protect tank walls from corrosion.
- **Flexibility:** The flexibility of GSE HD geomembranes allows them to easily adapt to various tank shapes

and sizes, ensuring full coverage even on curved surfaces or complex geometries and suitable for various tank shapes and configurations.

- **Proven records of more than 40 years.**



Applications

- **Raw water storage tanks:** **GSE** geomembranes are used in raw water storage tanks to prevent contamination and ensure water quality.
- **Drinking water storage tanks:** **GSE** geomembranes ensure that no contaminants or sediments from deteriorating structures enter the water.
- **Floating cover and roofing:** the cover or roofing prevents rainwater from entering the water tank and contaminating the stored water. It also facilitates evaporation control, odor suppression, thermal protection and even algae control.

Water is a precious and limited resource—protecting it is essential. Our geomembrane delivers superior waterproofing and exceptional durability, making it the ideal high-performance solution for water storage tanks. It helps ensure every drop is safely contained, today and for years to come.

Advantages

- ✓ High quality manufactured lining solutions
- ✓ Stringent quality-control for the most demanding applications
- ✓ Outstanding chemical resistance and mechanical properties
- ✓ Flexibility allows easy adaptation to various tank shapes and sizes

Certifications and regulatory compliance

In some regions, tank liners are a requirement to ensure safe drinking water.

- **AS/NZS 4020 certified:** **GSE** geomembranes are certified by AS/NZS 4020, testing of products for use in contact with drinking water.
- **SPAN certified:** **GSE** geomembranes are certified by SPAN (Suruhanjaya Perkhidmatan Air Negara) certificate issued by the National Water Services Commission of Malaysia for use in water supply and sewerage services in Malaysia.

Choices of geomembrane

- **GSE HD:** produced using high quality polyethylene resin formulation to ensure long term performance in both covered and exposed applications. It is designed to comply with industry standard specifications, such as GRI-GM13.
- **GSE HDH:** designed as a geomembrane barrier for use at elevated temperatures of up to 100 C for an extended period of time.
- **GSE HDE:** high-performance liner series for applications under extreme conditions.
- Available in various colors.

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