



# FROM FOUNDATIONS TO FINAL SIGNOFF

MODULAR BOLTED TANK SYSTEMS ALLOW RAPID,  
COST EFFECTIVE, SITE INSTALLATION.





#### WHO WE ARE

## Our mission: install quality storage solutions nationwide

Our expert teams throughout New Zealand and Australia deliver design and build liquid containment solutions.

From potable water reservoirs to anaerobic digestion tanks – we work with you to deliver quality solutions that stand the test of time.

#### **BENEFITS OF RELIANT SOLUTIONS APPROACH:**

1. One company for the complete project
2. Better control
3. Turnkey services from approval drawings to tank testing
4. Specific tank designs, options and accessories to meet customer needs
5. Control over timelines and budgets
6. Less risk
7. Faster construction
8. Glass Fused to Steel tanks have the lowest total life cycle cost compared to concrete & welded steel

## Delivering Quality Solutions

We pride ourselves on being bolted tank experts – and are passionate about end to end quality in service and delivery – ensuring clients' needs are achieved every time.

We deliver high quality solutions by creating great client experiences, and safe, durable assets our clients are proud of. We are forward thinking and deliver quality solutions that stand the test of time – and anything nature can throw.



Complete Design  
& construction



Foundation  
design



Tank design &  
construct



Full process,  
turnkey solution

| From the ground up;  
one company for your next  
liquid storage tank project.

#### OUR APPROACH

**By being better aligned with you  
– we deliver a better project.**

We manage every aspect of design and build including feasibility, design, project management, foundation construction, tank wall supply and erection: the works.

Our integrated can-do approach and commitment to continuous improvement results in smarter, more cost-effective liquid containment solutions.

The quality of a construction project is determined by the planning process. Because we offer a full service, we have control of every facet, reducing interfacing issues and lowering the projects cost to our clients.

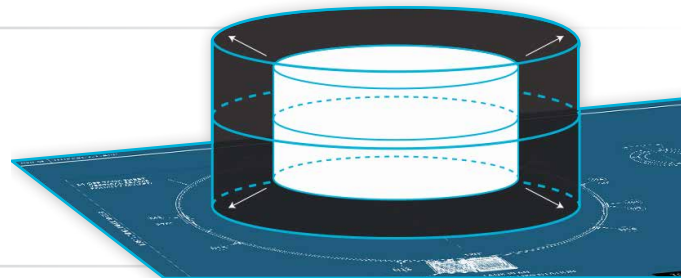
#### OUR PROCESS

- 1** **STAGE ONE**  
**Consultation and Design**
- 2** **STAGE TWO**  
**Specification and Procurement**
- 3** **STAGE THREE**  
**Civil Engineering and Site Works**
- 4** **STAGE FOUR**  
**Tank Construction and Project Management**
- 5** **STAGE FIVE**  
**Quality Assurance and Commissioning**
- 6** **STAGE SIX**  
**Client Support and Maintenance**



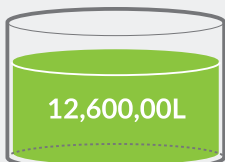
## INSTANT TANK CALCULATOR

Visit [reliant-solutions.co.nz](http://reliant-solutions.co.nz)

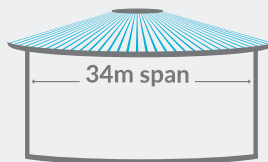


## | Experience you can count on

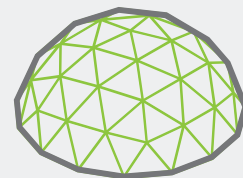
Our experience tells the story, we are installers of:



New Zealand's  
largest slurry  
tank



The world's  
largest external  
tapered beam  
roof



Australasia's  
largest geodesic  
dome roof





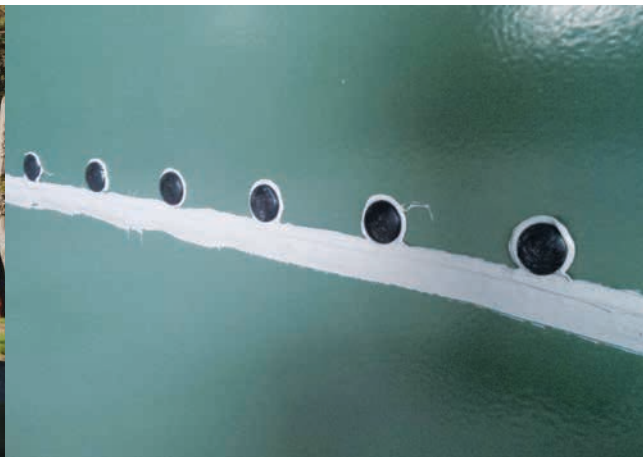
## Glass Fused to Steel

### – the perfect combination of corrosion resistance and strength

With our Glass Fused to Steel bolted steel panel tanks you get the highest engineered quality, best service, longest product life and greatest value available. Our glass coating is designed to produce an extremely strong chemical bond to the steel during the fusion process. Unlike painted surfaces, Glass Fused to Steel coatings are both chemically fused to and physically combined with the steel substrate resulting in an unmatched, tough durable bond.

#### BENEFITS

- Inert Silica Glass: Abrasion & UV stable. Applied on both interior and exterior surfaces
- Lifetime factory applied coating, no reapplication required
- High corrosion resistance of glass combined with the strength and flexibility of steel
- Chemical bond provides resistance against damage, delamination and corrosion
- 300,000 installation worldwide
- 50 year design life. 80 year service life. Proven in their field for over 40 years
- Independently certified and exceeds NZS/AS codes and standards



## Epoxy Coated Fusion® V1100

### – most versatile epoxy coating in the liquid storage tank market

Coatings are the first line of defence in protecting the integrity of your liquid storage assets. Our bolted epoxy steel tanks using the Fusion® V1100 coating process delivers outstanding performance and is the industry standard for epoxy durability, its corrosion resistance and its resistance to UV breakdown and abrasion. The innovative, technologically advanced Fusion Bonded Epoxy product, FUSION® V1100 is most versatile coating for modular, bolted containment systems. The high-tech RESICOAT® R4-ES is used on the internal surface combined with the ultra durable INTERPON® D2525 on the external surface sets the new benchmark in its sector.

#### BENEFITS OF FACTORY-APPLIED COATINGS

- Eliminates the weather factors incurred when applying a coating in the field after constructing a welded tank. With factory-applied coatings, there is no waiting for the weather to be within specific parameters to properly cure the coating
- Each of our panels is subject to a thorough factory inspection and only 100% defect free panels are released to the market
- Completion of the the tank can be performed in as much as 1/3 the time as alternative materials and methods. On-site delays due to weather are greatly eliminated, service can commence earlier and ROI begins sooner

## Geodesic Dome ①

The Aluminium Geodesic Dome Roof is an innovative modular self-supporting structure which perfectly complements any containment structure. Our Geodesic Domes utilise a intelligent sealing system design to allow rapid construction which functions reliably in all weather types.

## Tapered Beam Roof ②

Tapered Beam Roofs can be utilised for an extensive range of application from drinking water to farm biogas. Our Glass Fused to Steel infill panels are highly corrosion resistant making them a viable solution for a range of harsh environments and demanding applications. Our Tapered Beam Roofs are suitable for use on pressurised structures and provide a suitable option for odour control.

## Trough Deck Roof ③

The Trough Deck Roof is both a versatile and economical roof solution. This roof type, made from profiled mill finish aluminium roof panels supported by a galvanised or an epoxy coated steel support structure, is suitable across a wide range of application. Self-supporting Trough Deck Roof structures are also available.

## Double Membrane ④

Double Membrane Roofs are the well-established solution for use in anaerobic-digestion processes. Double Membrane roofs offer a low cost option for a sealed, gas tight roof. The outer membrane remains permanently inflated while the inner membrane inflates and deflates in proportion to the biogas production therefore making them a suitable option for pressurised applications.



## Foundation Works

Reliant Solutions engineering team offer a variety of foundation designs for different applications, soil conditions and geographical locations.

Based on the foundation loads generated, Reliant Solutions can provide you with a complete set of foundation calculations and design drawings based on a given set of conservative parameters.

Being so much more than just tank installers, Reliant Solutions also offers professional foundation installation services in the field.



From soil borings to excavation, anchor bolt placement and finishing, we provide the highest quality foundation services available. When you are looking for complete turnkey service, turn to Reliant Solutions.

**48 HOUR**



**BUDGETARY QUOTATION  
TURN AROUND**

Visit [reliant-solutions.co.nz](http://reliant-solutions.co.nz)  
Call 0800 473 762



# Whether it's potable water containment for a dairy factory, effluent storage for a farm or sludge tank for a wastewater treatment plant, Reliant Solutions has the storage solutions for your development.

Liquid storage is crucial and the ability to safely and securely store tank contents, with minimal downtime and reduced maintenance costs, creates cost-effective, long-life tank solutions.

## APPLICATIONS

- + DRINKING WATER
- + SEWAGE TREATMENT
- + ANAEROBIC DIGESTION & BIOGAS
- + INDUSTRIAL EFFLUENT
- + PROCESS WATER
- + BULK SOLID STORAGE
- + SLURRY
- + FARM BIOGAS
- + MINING
- + BIOFUELS

## WATER



The hard, inert and hygienic surface of the Glass-Fused-to-Steel finish makes it simple to clean and disinfect water tanks. Our Glass-Fused-to-Steel tank system has NSF / ANSI 61 certification. A large range of water treatment processes can be accommodated within our factory coated bolted steel panel tanks.

- Potable water
- Borehole water
- Desalination tank
- Permeate tanks
- Settling tanks
- Process water
- Demineralised water
- Aeration tanks
- Chlorine contacts tanks
- Dosing tanks
- Filtration tanks

## SEWAGE TREATMENT



Glass-Fused-to-Steel tanks have a very high resistance to chemical corrosion and have excellent abrasion resistance properties, making them a suitable consideration in your sewage treatment application.

Our tanks have been successfully used for an extensive range of sewage treatment applications.

- Clarifiers
- Aeration tanks
- Membrane batch reactors (MBR Tanks)
- Sequential batch reactors (SBR Tanks)
- Thickener tanks
- Sludge holding tanks
- Sludge mixing tanks
- Sludge treatment tanks
- Equalisation tanks
- Filter media tanks
- Trickling filter tanks
- Settlement tanks
- Grey water tanks
- Storm water tanks

## ANAEROBIC DIGESTION



In the industrial sector using anaerobic digestion to create biogas is increasingly recognised as a valuable method to utilise waste streams to create renewable energy.

Almost any organic waste can be digested, opportunities have developed to utilise food processing waste, domestic waste and restaurant waste. Increasingly, combinations of waste streams are being processed along with co-digestion of municipal sludge effluent and farm waste, such as animal slurry, to generate "green" renewable energy.

Modular design allows the flexibility to accommodate various aspect ratios, process pressures and temperatures to suit a variety of AD processes, designs and applications as specified by your process designer.

Glass-Fused-to-Steel can not only be utilised for the tank walls but also in the roofs on tanks such as digesters. This gives the high degree of protection of Glass-Fused-to-Steel throughout a digester, especially in the highly aggressive gaseous zone.





**WATER**

***Reliant Solutions has worked with clients across New Zealand and Australia to delivery projects for a variety of market sectors.***



**SEWAGE TREATMENT**



**ANAEROBIC DIGESTION**

***You can count on our experience***

**48 HOUR** 

BUDGETARY QUOTATION  
TURN AROUND

Visit [reliant-solutions.co.nz](http://reliant-solutions.co.nz)  
Call 0800 473 762

