TheGAW industries

Roof Solutions for Storage Tanks



INTERNAL FLOATING ROOFS

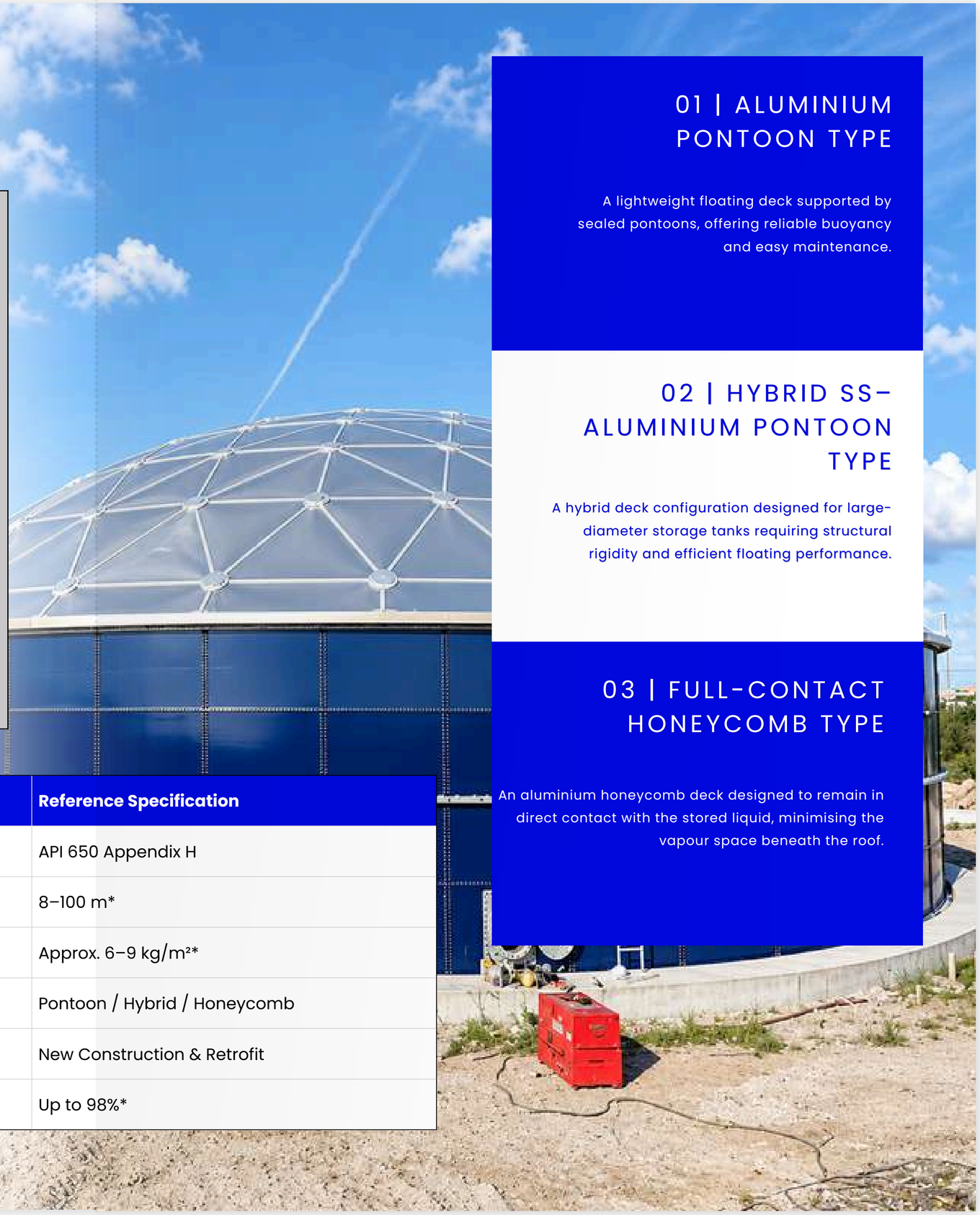
Engineered to Reduce Vapour Loss. Designed for Efficient Storage.

Our Internal Floating Roof (IFR) solutions are designed for installation inside fixed-roof storage tanks. The floating deck moves with the liquid level, minimising vapour space and reducing evaporative product losses.

KEY FEATURES

- Lightweight, corrosion-resistant deck construction
- Designed in accordance with API 650 Appendix H
- Effective vapour-loss reduction
- Compatible primary and secondary sealing arrangements
- Suitable for new tanks and retrofit applications
- Engineered for reliable operation and maintenance

Parameter	Reference Specification
Design Standard	API 650 Appendix H
Tank Diameter	8–100 m*
Deck Weight	Approx. 6–9 kg/m²*
Deck Configurations	Pontoon / Hybrid / Honeycomb
Applications	New Construction & Retrofit
Emission Reduction	Up to 98%*



01 | ALUMINIUM PONTOON TYPE

A lightweight floating deck supported by sealed pontoons, offering reliable buoyancy and easy maintenance.

02 | HYBRID SS–ALUMINIUM PONTOON TYPE

A hybrid deck configuration designed for large-diameter storage tanks requiring structural rigidity and efficient floating performance.

03 | FULL-CONTACT HONEYCOMB TYPE

An aluminium honeycomb deck designed to remain in direct contact with the stored liquid, minimising the vapour space beneath the roof.

ALUMINIUM GEODESIC DOME ROOFS

Lightweight Engineering. Long-Term Protection.

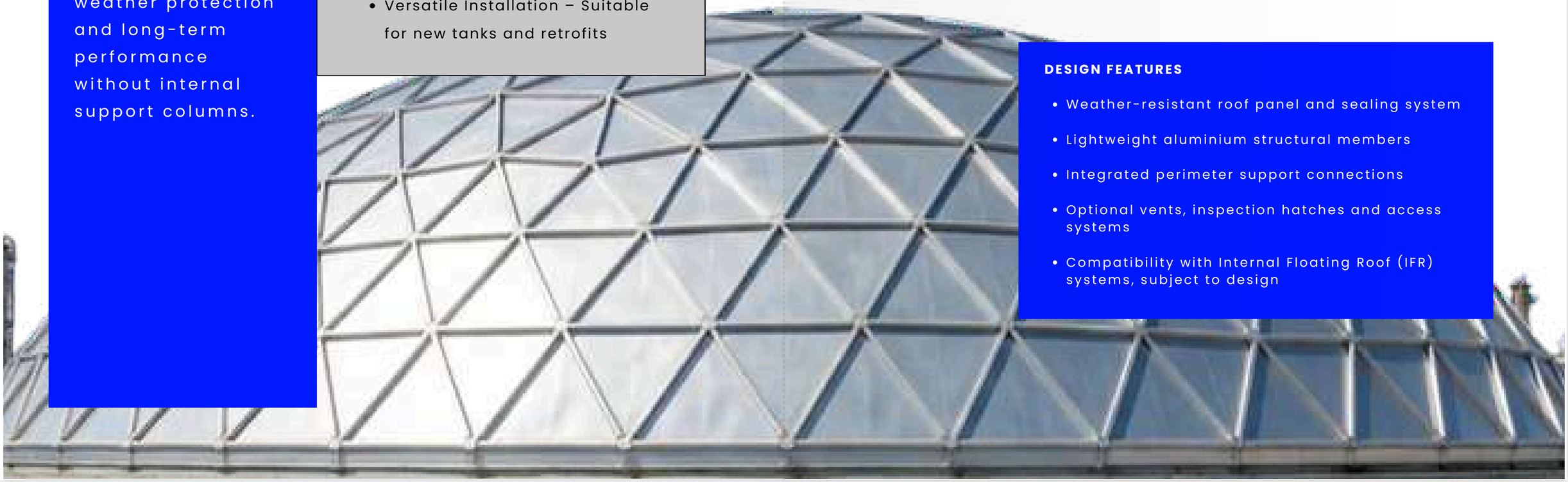
Our Aluminium Geodesic Dome Roofs provide a lightweight, corrosion-resistant covering solution for industrial storage tanks. Featuring a self-supporting, triangulated structure, these roofs deliver structural stability, weather protection and long-term performance without internal support columns.

KEY ADVANTAGES

- Lightweight Structure – High strength-to-weight ratio
- Corrosion Resistance – Durable aluminium construction
- Self-Supporting Design – Column-free internal space
- Modular Assembly – Prefabricated, bolted components
- Low Maintenance – Reduced coating and upkeep requirements
- Versatile Installation – Suitable for new tanks and retrofits

TECHNICAL SPECIFICATIONS

Parameter	Specification
Roof Type	Self-Supporting Geodesic Dome
Construction	Aluminium Alloy Structure
Design Standard	API 650 Annex G
Roof Panels	Aluminium Sheet Panels
Structural System	Triangulated Space Frame
Assembly	Modular Bolted Connections
Support	Tank Perimeter
Design Loads	Wind, Seismic, Snow & Live Loads
Installation	New Tanks & Retrofit Projects



DESIGN FEATURES

- Weather-resistant roof panel and sealing system
- Lightweight aluminium structural members
- Integrated perimeter support connections
- Optional vents, inspection hatches and access systems
- Compatibility with Internal Floating Roof (IFR) systems, subject to design

FLOATING ROOF SEAL SYSTEMS

Precision Sealing. Reduced Emissions. Enhanced Protection.

Our Floating Roof Seal Systems are designed to minimise vapour losses by sealing the annular gap between the floating roof and tank shell. Engineered for reliable performance, these systems accommodate roof movement while enhancing product conservation and operational efficiency.

01 | PRIMARY SEALS

Provide the main vapour barrier between the floating roof and tank shell. Available configurations include mechanical shoe, resilient-filled and flexible wiper seals.

02 | SECONDARY SEALS

Installed above the primary seal to provide an additional vapour barrier, improve emission control and protect the primary sealing arrangement.



TECHNICAL COMPARISON OF TANK ROOF & SEALING SOLUTIONS

Parameter	TheGAW IFR	Aluminum Dome	Floating Roof Seals
Primary Standard	API 650 H	API 650 G · AWWA D103	API 2517 / 2519
Best For	Refinery crude/petrol, emissions control	Water utilities, large-diameter tanks	Seal replacement / upgrade / retrofit
Material	Aluminum 5052 / 6061	Aluminum 6061-T6 (clear span)	Wiper, foam-filled, mech-shoe
Diameter Range	8–100 m	10–80 m (clear span)	Any tank diameter
Retrofit-Friendly	Yes, for fixed-roof tanks	Yes (replaces cone/fixed roof)	Full replacement or upgrade
Lead Time (Weeks)	6–10 weeks	8–12 weeks	4–6 weeks
Lifespan	20+ years	30+ years	10–15 years (wear parts)
Service Compatibility	Crude, gasoline, jet fuel, chemicals	Water, crude, chemical, waste	All floating roof tanks (IFR/EFR)
Emission Reduction	**Up to 98% VOC reduction**	Weather protection / vapour seal	Prevents fugitive emissions
Installation Type	Panel assembly inside tank	Bolted aluminum structure	Field retrofitted

"Engineered for Strength. Designed for Protection. Built for Sustainable Storage."

TheGAW industries

WE DESIGN, DEVELOP & DELIVER
“WE SHIP WORLDWIDE”

For more information

www.gawindustries.com

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