

Water tanks and wastewater treatment with the latest technologies and global standards



Glass Coated Steel Tanks



Tanks made of metal pieces coated with glass at a temperature of 860 degrees Celsius, and they are called "Glass -Fused - to Steel (GFtS) Tanks."



AL HOJUJ CONTRACTING
GLASS FUSED TO STEEL BOLTED TANKS

The existing challenges associated with traditional tanks

- The term 'traditional tanks' refers to concrete or welded iron tanks.
- There are several main problems associated with these traditional tanks:
 - Cracks in concrete tanks.
 - Water leakage in iron and concrete tanks.
 - Growth of bacteria and algae inside iron and concrete tanks.
 - Short lifespan of paint for welded iron tanks.
 - Relatively high costs.



Why are metal tanks coated with glass?

- Are not affected by high salinity of water, such as seawater and sewage water.
- Have high resistance and excellent efficiency in corrosion resistance compared to concrete and welded iron tanks.
- Use a coating that is highly effective in resisting rust and weathering.
- Do not allow algae and bacteria to grow in them.
- Can withstand temperatures ranging from -50 to +100 degrees Celsius according to international standards.
- Have an expected lifespan of 30 years for the reservoir and 40-50 years for operational use.
- Do not react with chemicals, for example, gases like sulfur dioxide produced by sewage water when used to store wastewater.
- Provide high and expandable capacities ranging from 10,000 to 5,000,000 gallons.

The tank components are:

- Metal tank coated with glass at a temperature of 860 degrees Celsius.
- The tank's roof is made of aluminum.
- Maintenance ladder made of iron, coated and galvanized.
- Internal and external stairs.
- Maintenance manhole from the tank body (800 mm).
- Maintenance manhole on the tank roof (500 mm).
- Flanges for tank inlets and outlets according to British specifications.
- Water volume measuring device operating by pressure.



ISO 28765:2016

ISO 9001:2015

ISO 14001:2015



AWWA D103-09



International standards

- Industrial design warranty certificate (thirty years) from PrimaStore.
- World Health and Safety Certificate.
- Quality and Quality Control Certificate.
- Certificate from the World Water Organization issued from London.
- Certificate of experience and efficiency of implementation - Ras Ghurab Tanks Project - United Arab Emirates.
- Technical accreditation certificate from the Ministry of Water - Hashemite Kingdom of Jordan 2017.



A comparison between tanks

		Glass Boted Tanks	Steel (Welded) Tanks	Concrete Tanks
1	Chemical Resistance	High	Average	Low
2	Corrosion	Resistant	Average Resistance	Low Resistance
3	PH Tolerance	1-14	5.5 - 8.5 (Epoxy)	7
4	Life Expectancy of Coating	30 Years	5 - 7 Years	15
5	Hygiene	No growth of moulds & Yeasts	Growth of moulds & yeasts	Growth of moulds & yeasts
6	Building time for 1 Million gallon tank	60 days	180 Days	240 - 300 Days
7	Re-location	Easy to dismantle for relocation	Cannon be dismantled	Cannot be dismantled
8	Cost	50% of concrete	60% of concrete	High Cost
9	Colour Fastenss	30 years	5 - 7 Years	2 - 3 years
10	Roof System	PVC, Alum Deck or Geodeste	Steel Roof	Concrete only

In addition to the aforementioned features of Glass Coated Steel Tanks, there are also other key features, including:

- Low cost compared to traditional tanks.
- Ability to dismantle and reinstall in another location if needed.
- No maintenance required during the first five years.
- Ability to add top sections to increase tank capacity.
- Short installation time.



The list of projects in the region

GLASS FUSED TO BOLTED TANKS PROJECTS LIST

NO	PROJECT	CLIENT	LOCATION	CAPACITY
1	Glass Fused Water Tank	Private Dept.	Al Ajban Stables	½ mil gal
2	Glass Fused Water Tank	Private Dept.	Shk Tahanoon Island	1 mil gal
3	Glass Fused Water Tank	President Office	Al Wathba 1	1 mil gal
4	Glass Fused Water Tank	Private Dept.	Al Fujairah	1 mil gal
5	Glass Fused Water Tank	Private Dept.	Al Sederah 1	1 mil gal
6	Glass Fused Water Tank	Private Dept.	Al Thaalip	1 mil gal
7	Glass Fused Water Tank	Private Dept.	Al Salmiya	1 mil gal
8	Glass Fused Water Tank	Private Dept.	Prince Sultan Palace	1 mil gal
9	Glass Fused Water Tank	Private Dept.	Beda Khalifa 1	1 mil gal
10	Glass Fused Water Tank	Private Dept.	Beda Khalifa 2	1 mil gal
11	Glass Fused Water Tank	Private Dept.	Beda Khalifa 3	1 mil gal
12	Glass Fused Water Tank	Private Dept.	Beda Khalifa 4	1 mil gal
13	Glass Fused Water Tank	Private Dept.	Hizam Al Ghabat 1	1 mil gal
14	Glass Fused Water Tank	Private Dept.	Hizam Al Ghabat 2	1 mil gal
15	Glass Fused Water Tank	Private Dept.	Ghantoot 1	1 mil gal
16	Glass Fused Water Tank	Private Dept.	Ghantoot 2	1 mil gal
17	Glass Fused Water Tank	Private Dept.	Al Raha Beach	1 mil gal
18	Glass Fused Water Tank	Private Dept.	Sir Baniyas Island 1	1 mil gal
19	Glass Fused Water Tank	Private Dept.	Sir Baniyas Island 2	1 mil gal
20	Glass Fused Water Tank	Private Dept.	Hizam Al Ghabat	1 mil gal
21	Glass Fused Water Tank	Private Dept.	Al Ajban Palace	1 mil gal
22	Glass Fused Water Tank	Private Dept.	Al Reef Stables	½ mil gal
23	Pump Station	Private Dept.	Al Wathba 2	1 mil gal
24	Pump Station	Private Dept.	Sheik Tahanoon Island	1 mil gal
25	Pipelines	Private Dept.	Sheik Tahanoon Island	Pipeline
26	Glass Fused Water Tank	President Office	Al Wathba	50,000 gal
27	Glass Fused Water Tank	President Office	Al Wathba	1 mil gal

28	Glass Fused Water Tank	Private Dept.	Mohada Oman	½ mil gal
29	Glass Fused Water Tank	Private Dept.	Alsideraa	50,000 gal
30	Glass Fused Water Tank	Abu Dhabi Municipality	Abu Dhabi Airport	1 mil gal
31	Glass Fused Water Tank	Private Dept.	Al Ain Stables	20,000 gal
32	Irrigation	President Office	Al Wathba 3	
33	Glass Fused Water Tank	Private Dept.	Al Asayl	1 mil gal
34	Glass Fused Water Tank	President Office	Al Wathba 4	½ mil gal
35	Pipelines	President Office	Al Wathba	
36	Glass Fused Water Tank	Private Dept.	Al Maha	1 mil gal
37	Glass Fused Water Tank	Private Dept.	Seihan	1 mil gal
38	Glass Fused Water Tank	Private Dept.	Bida Saif	1 mil gal
39	Glass Fused Water Tank	President Office	Wathba 5	3 x 100 000 gal
40	Glass Fused Water Tank with pump station	Abu Dhabi Municipality	Um Al Nar	0.50 mil gal
41	Glass Fused Water Tank	Makkah	Zayed Military city	2x20000 gal
42	Glass Fused Water Tank	A.E.S	Qatar	5x180,000 gal
43	Glass Fused Water Tank with pump station	President Office	Al Ain	0.50 mil gal
44	Tent	President Office	Al Wathba	
45	Road	President Office	Al Wathba	
46	Glass Fused Water Tank	President Office	Al Ain	2x20K+30K
47	Glass Fused Water Tank	Abu Dhabi Municipality	Shahama	1 mil gal
48	Glass Fused Water Tank with pump station	Privet Dept.	Ghantoot	1 mil gal
49	Steel Water tank	Zener	Samha	Installation
50	Steel Water and Oil tank	Euro Mechanical	Iraq	6x100,000 gal
51	Concrete Water Tank	Private Dept.	Al Haleeya	1 mil gal
52	Concrete Water Tank	Private Dept.	Al Haleeya	1 mil gal
53	Supply and installation Steel Water Accessories	Abu Dhabi Municipality	Abu Dhabi	
54	Steel Water Tank	Private Dept.	Abu Dhabi	50,000 gal
55	Caravans	Shk. Hamdan Dept.	Abu Dhabi	
56	Steel Water Tank	Al Mazroui Co	Al Ain	20,000 gal
57	Steel Water Tank	Al Mazroui Co	Al Ain	30,000 gal

The list of projects

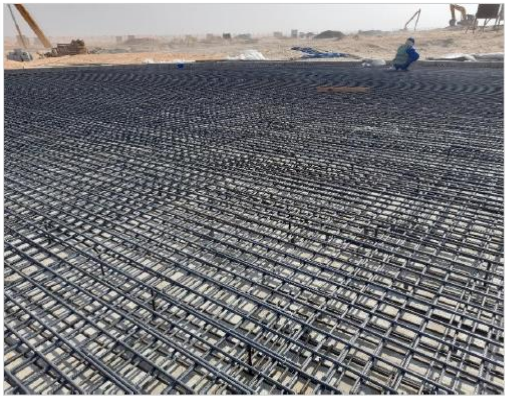
60	Steel Fuel Oil Tank	Liwa Petroleum	Musafha	500,000 gal
61	Steel Bitumen Tank	Liwa Petroleum	Musafha	500,000 gal
62	Pipe Line	Liwa Petroleum	Musafha	
63	Glass Fused Water Tank	Al Jaber	Saadiyat Island	2 x 300,000 gal
64	Steel Water tank	Al Jaber	Abudeep	2 x 1 M. G.
65	Steel Diesel tank	Granite	Asab	100,000 gal
66	Steel Diesel tank	Granite	Asab	15,000 gal
67	Steel day tanks	Granite	Asab	1000L, 500L, 3500L 4500L
68	Pump station with pipeline	Granite	Asab	
69	Glass Fused Water Tank with Pump Station	H.H.Mansoor Beach Palace	Abu Dhabi	1 M.G.
70	Glass Fused Water Tank	Airport	Government of Qatar	100,000 Im G
71	Glass Fused Water Tank	Al Nasrea	Government of Iraq	100,000 Im G
72	Glass Fused Water Tank	Abu Dhabi University	Abu Dhabi University	100,000 Im G
73	Glass Fused Water Tank	Dubai Investment Park	Dubai Investment Park	2 Million Imp G
74	Glass Fused Water Tank	Dubai Investment Park	Dubai Investment Park	100,000 Im G
75	Diesel Storage Tank (2Tanks)	Granite (Asab)	Asab	100,000 Im G
76	Diesel Storage Tank	Granite (Asab)	Asab	50,000 Im G
77	Glass Fused Water Tank	ADFCA/ H.H Sh.M.	Al Wathba	1mill Gal
78	Glass Fused Water Tank	ADFCA/ H.H Sh.M.	Al Ghazalan	1mill Gal
79	Glass Fused Water Tank	AlHram Beverages	Egypt	220000Imp
80	Glass Fused Water Tank	Crown Prince Court-Abu Dhabi	Ras Ghurabe – Sadiyat	2 mil gal
81	Glass Fused Water Tank	Crown Prince Court-Abu Dhabi	Ras Ghurabe – Sadiyat	2 mil gal
82	Glass Fused Water Tank	AlHram Beverages	Egypt	120000 imp g.
83	Chamber Connection	Sheik Ahmed Island	Sheik Ahmed Island - Abudhabi	Chamber Contruction
84	Chamber Connection	Nurai Island	Nurai -Abudhabi	Chamber Contruction
85	Glass fused Water Tank	Ruwian-Private project	Ruwais-Abu Dhabi	3000+1000m ³ Tanks

87	Galss fused water	Liwa –Project -CMW	Liwa –Project -CMW	1million x2 tanks
88	Glass Fused Water Tank	Sharjah –Al bateya -CMW	Sharjah –Maleeha	1560m ³ water tank



Photos of the construction and installation stages

FOUNDATION PROCESS



WATER PROOFING PROCESS



WATER TANK LAYER SHEET INSTALLATION

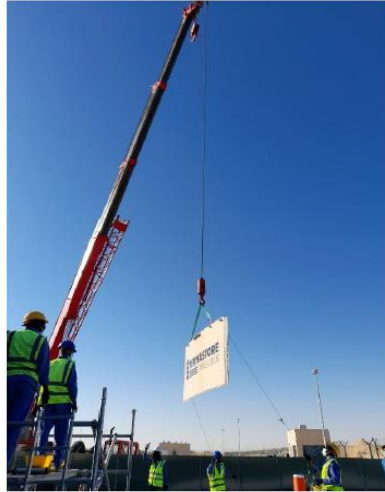




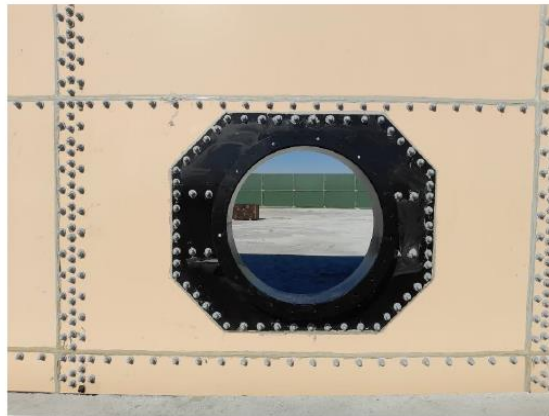
WATER TANK LAYER SHEET INSTALLATION



WATER TANK LAYER SHEET INSTALLATION WATER TANK LAYER SHEET INSTALLATION



WATER TANK LAYER SHEET INSTALLATION WATER TANK LAYER SHEET INSTALLATION



WATER TANK COLUMNS INSTALLATION



WATER TANK ROOF STRUCTURE INSTALLATION



WATER TANK INSPECTION PROCESS



WATER TANK FINAL INSTALLATION



WATER TANK FINAL INSTALLATION

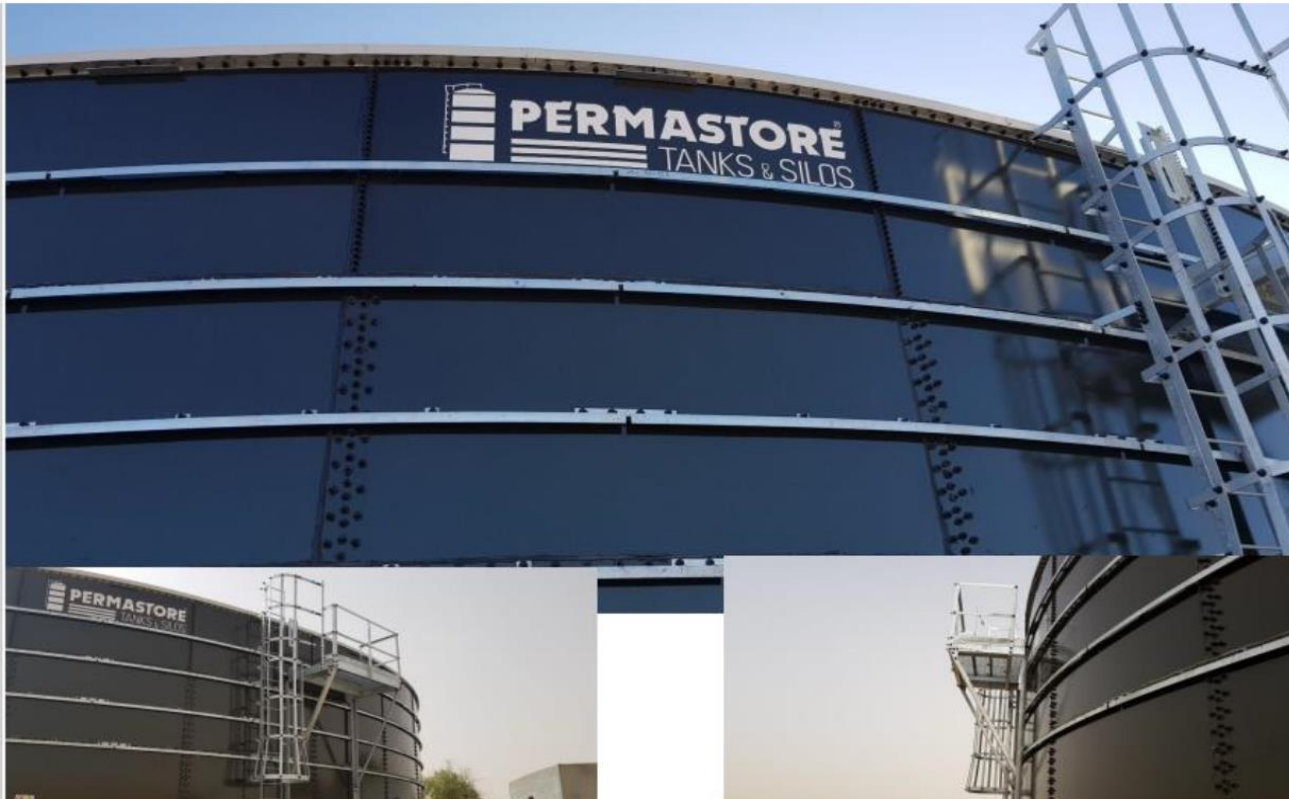


DIFFERENT WATER TANK FINAL INSTALLATION



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DIFFERENT WATER TANK FINAL INSTALLATION



Thanks and Regards

