



SHAZ
ENTERPRISES



KTR
KOREA TESTING &
RESEARCH INSTITUTE



No. 1
GLOBALLY

BK[®]
Bae Kwang

WATER TANK

SMC GRP SECTIONAL PANEL WATER TANK

Hot Press Molded



BK WATER TANK

SPECIFICATIONS AND FEATURES

The Special Feature of BK GRP Sectional Water Tank

Intensity and Durability	Glass fiber Reinforced Panel is molded under condition of high temperature and pressure to maintain the best endurance. Since using stainless steel for inside structure and HDG steel for outside it shows best performance against erosion.
Excellent Hygiene	No panel corrosion and prevents bacteria formation by isolation of outside light.
Watertightness	The joints are sealed with special sealing tape especially developed for water tank.
Heat Insulation and Dewdrops Prevention	The 3 layered structural panels improve the heat insulation effect, protects water dew drops and minimises the temperature variation of the stored water.
Best Size Stability	GRP sectional water tank size remains constant and does not vary against external conditions hence can be assembled accurately.
Various Capacity Design	Available in various sizes hence can be used in limited space & thus meet the customer's design requirements under space constraints.
Easy to Assembly and Transporting	GRP Sectional panels makes construction time shorter. Standardized panels makes it easier to move, carry and transfer.



Design Standards

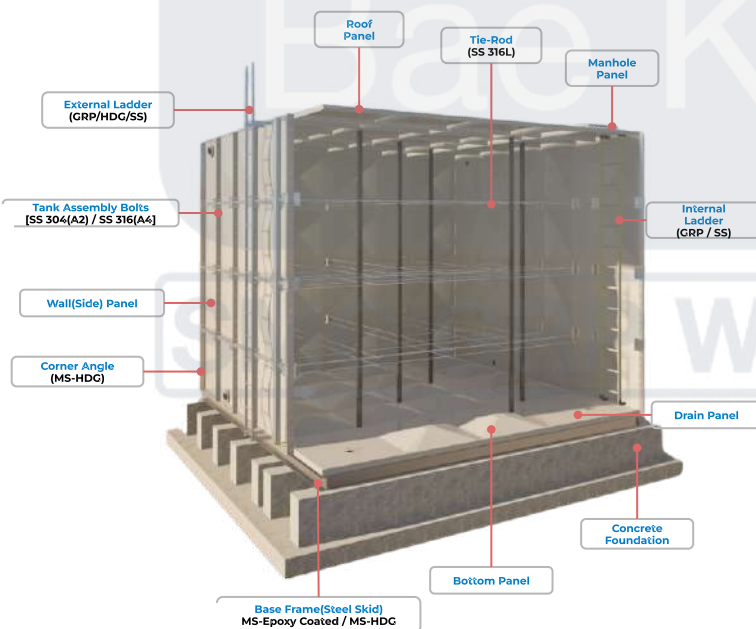
Parameter	Condition Considered
Hydrostatic Pressure	Water Level(Height in Meters)x0.1 kgf/sq.cm (0.01 MPa)
Horizontal Seismic Load	$K_h = \frac{2}{3}$ (Load on BK GRP Tank itself)
Vertical Seismic Load	$K_v = \frac{1}{3}$ (Load on BK GRP Tank itself)
Wind Force	255 kgf/sq.m (2.55x10 ⁻³ MPa)
Wind Load	385 kgf/sq.m.A (3.85x10 ⁻³ MPa.A)
Snow Load	60 kgf/sq.cm
Component Materials	Vertical weight 100 kgf at a point of 35cm between the fitting and the supporting pole.
Water Temperature	Suitable up to 50 deg. Celcius
Dusty Environment	Suitable up to 70 mg/cu.m

Panel Physical (Mechanical) Properties

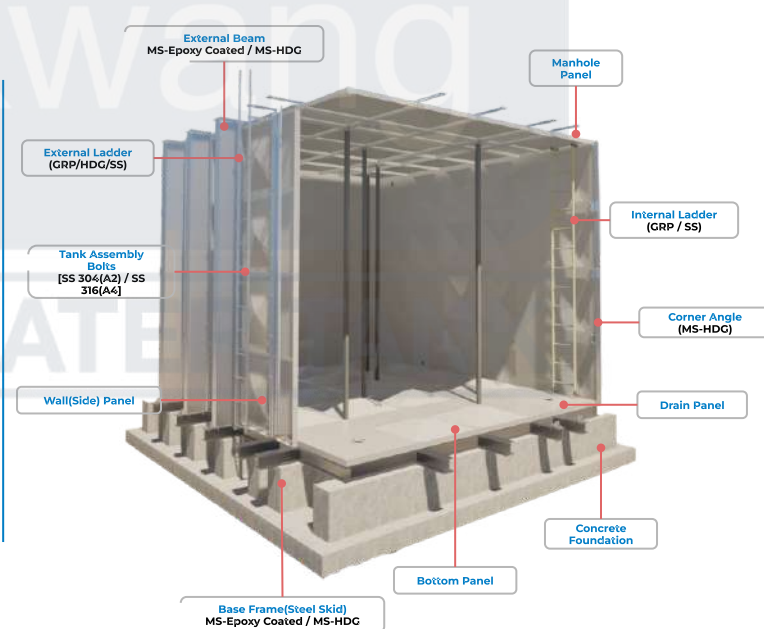
Parameter	Unit	Values	Test Method
Density	kg/cu.m	1800	ISO 1183
Tensile Strength	MPa	108	ISO 3268
Water Absorption Rate	%	>0.01	ISO 62
Impact Strength	kJ/sq.m	80	ISO 179
Coefficient of Thermal Expansion	deg.C	2.1x10 ⁻⁵	ASTM D696
Flexural Strength	MPa	185	ISO 178
Flexural Modulus	GPa	13	ISO 178
Thermal Conductivity	kcal/mh.deg	0.23	
Barcol Hardness	C	55	KS M 4811:2005
Glass Fiber Content		33.1	KS M 4811:2005
Light Transmission	%	0	KS M 4811:2005
Toxicity	%	Nil	KS M 4811:2005
Microbiological Growth		Nil	KS M 4811:2005
Bending Strength		190-200	KS M 4811:2005
Elastic Modulus in Bend	MPa	15.9	KS M 4811:2005
Compression Strength	GPa	100	KS M 4811:2005
Liquefaction Test(Turbidness)	MPa	Below 0.1	KS M 4811:2005
Liquefaction Test(Chromaticity)	Degree	Below 1	KS M 4811:2005
Thermal Expansion Coefficient	Degree	0.000016	KS M 4811:2003
Ultra Violet Ray	1 deg.C	None	

REINFORCEMENT SYSTEMS

Internal Reinforcement(Bracing) System



External Reinforcement (Bracing) System



Excellent strength, durability, water tightness, and appearance. Safe structure design.

The panels are interconnected with stainless steel tie rods in the GRP water tank to guarantee the strength of water tank



Highly durable and sanitary. Easy maintenance

The joint of the side panel is supported with an external reinforcement frame, the upper part, fixed with angles and round bar stays, and the lower part, connected and fixed with brackets using bolts



PARTITION TYPE WATER TANK

PREPARING FOR INSTALLATION

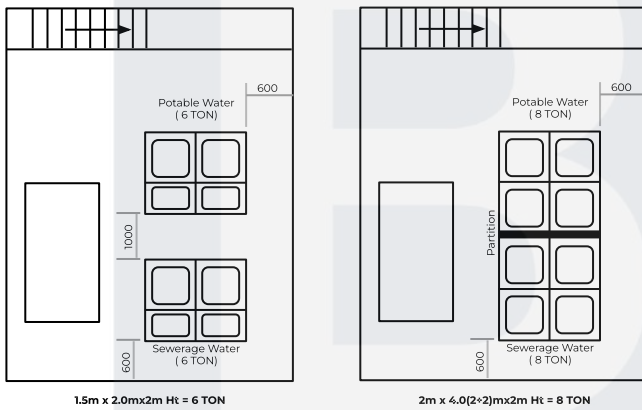
Feature of BK GRP Sectional Water Tank

It is possible to eliminate unusable space, and utilize the maximum space by installing a partition type tank. Economical and effective maintenance.

Utilizing maximum capacity	In the basement or other confined areas, it is possible to eliminate unusable space and utilize the maximum space, by installing a partition type tank.
Various uses	If partition type tanks are installed, one section can be used for drinking water and the other section for service water (fire fighting etc).
Easy Maintenance	It is convenient for maintenance, because two tanks can be installed as one unit.
Cost effectiveness	The cost and installation of 1 partition tank is cheaper than 2 separate tanks.

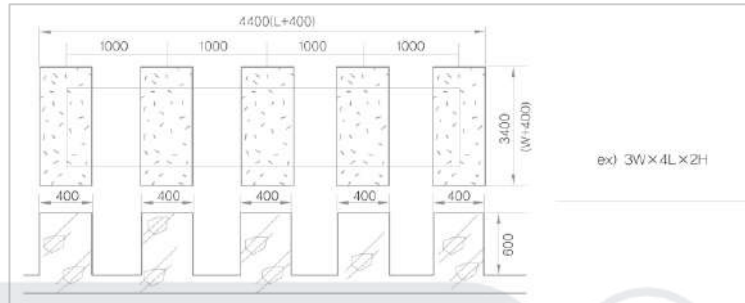
Example for Installation and using

If tanks for two different uses are needed in a confined area or boiler room, a 16 ton partition type tank can be installed to use half for drinking water, and half for service water. If separate tanks are installed, however, you have to installed two tanks with a maximum of 6 tons, because you need to have 1 meter distance between tanks for maintenance and operating space.



Base Concrete Installation Standard

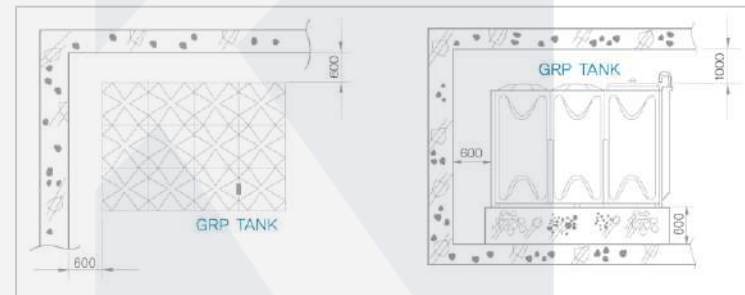
Width : 300~400mm	Outer Dimension : Width, Length +400mm
Height : over 600mm (Base frame included)	Space : less than 1m
Horizontal Degree : less than 1/500 (Surface has to be horizon flat)	



GRP Water Tank Installation Space

For maintenance and repairing, it is recommended to leave at least 600mm and 1,000mm extra space from wall and ceiling.

GRP Water Tank Installation Space



MANUFACTURING PROCESS

Sheet Molding Compound (SMC) Manufacturing	Cutting to Correct weight of SMC Materials
1	2
Placing SMC Materials on to the Heated Mold	Applying Pressure of 800T and Above on the Hydraulic Press
3	4
Drilling of Bolting Holes in High Precision Drill Machine	PU Foam Insulation Process
5	6
Loading the Packed Panel Pallets onto Trucks	Dispatch to Site as per the size required by client.
7	8

INSTALLATION & CAUTION

Base Concrete

Customers are requested to make base concrete according to the designed specifications and the strength of the site.

Anchor bolts are to be fixed by our agents.

The required strength of the base concrete must be at least 180 kg/sq.cm

The thickness of mortar on the base concrete must not exceed 20mm.

The Extent of Installation Work

If the customer designates the size of sockets for plumbing, our agents will install the sockets.

After the sockets are in place, the plumbing and heat insulation must be done by customer.

Transportation

Do not place heavy loads or force on the panels during the transportation. Those parts that are touched with rope or other cargo must be cushioned.

Pipe Installation

Be careful not to put any heavy weight on the pipes that are connected to the fitting.

Pipe installation must be started from the water tank side and be careful not to put unbalanced weight on the fitting.

Take precautions to avoid fire or other occurrences / accidents while welding.

Maintenance

If it is not used for a long time, be sure to drain the water from the tank.

As the tank is a reservoir of water for consumption by people, regular inspection should be done for safety (more than twice a year)

Installation Scope

Caution

GENERAL FEATURES OF BK TANK

Ideal For Clean Potable Water

Long Life

Clean & Hygienic

Non Leakage

Easy Assembly

Perfect strength and Durability

The glass fiber reinforced panels are molded at temperature upto 150 deg. C using isophthalic unsaturated polyester resins and are hot pressed under hot press molding process to realize optimum conditions and maintain best endurance.

Panel Design

BK GRP water tank panels are designed using computer aided design technology and suitable for ambient temperature of 60°C.(dry bulb) and humid condition of up to 31°C saturated. Also BK GRP water tanks are suitable for water temperature up to 60°C.

Hygiene

Using non-toxic materials and stainless steel. So it is suitable for used in contact with potable water.

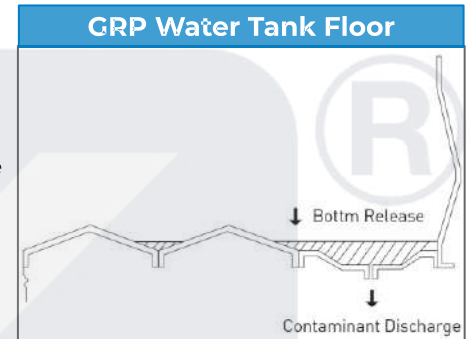
Sizes adaptable to any requirements

For small tanks to large, BK GRP water tank panels can fit any dimensions. Tank dimensions can be selected by the customer to suit their requirements.

Complete drainage

The dome shaped bottom panel with a concave drain panel facilitated complete and fast drainage. The concave drain panel has been designed to ensure the periodic cleaning and inspection of the tank.

Complete drainage

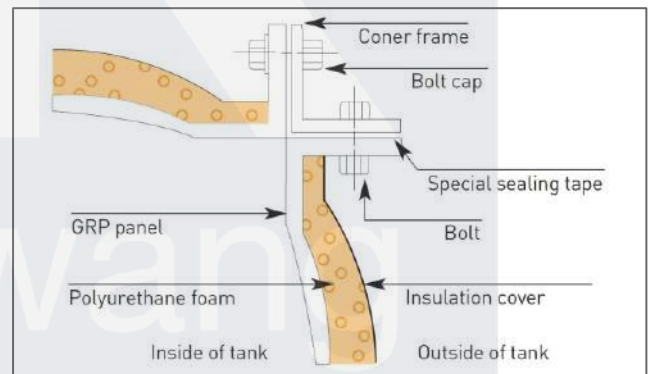


Water tightness

The joints are sealed with special sealing tape specially developed for water tanks.

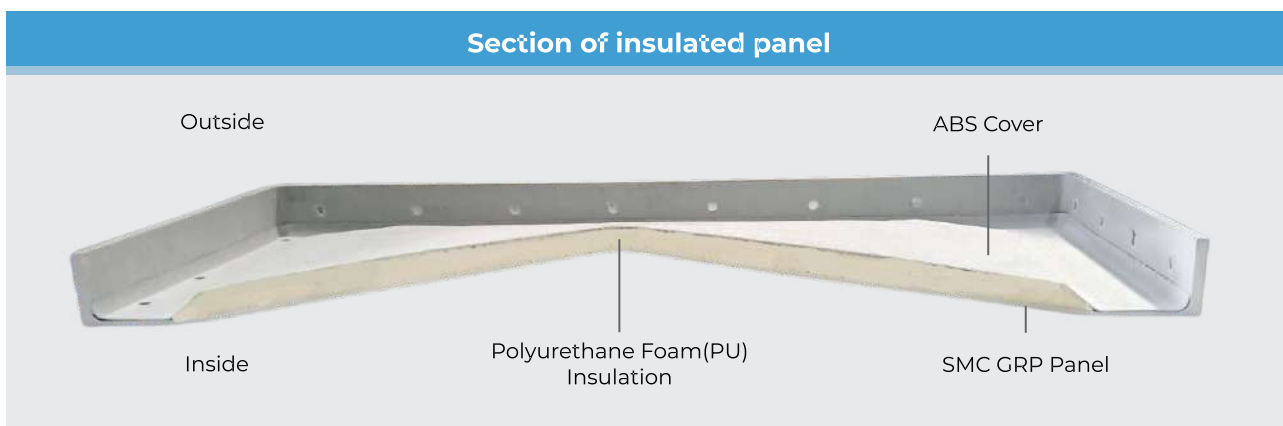


Special sealing tape - Norton by Saint Gobain



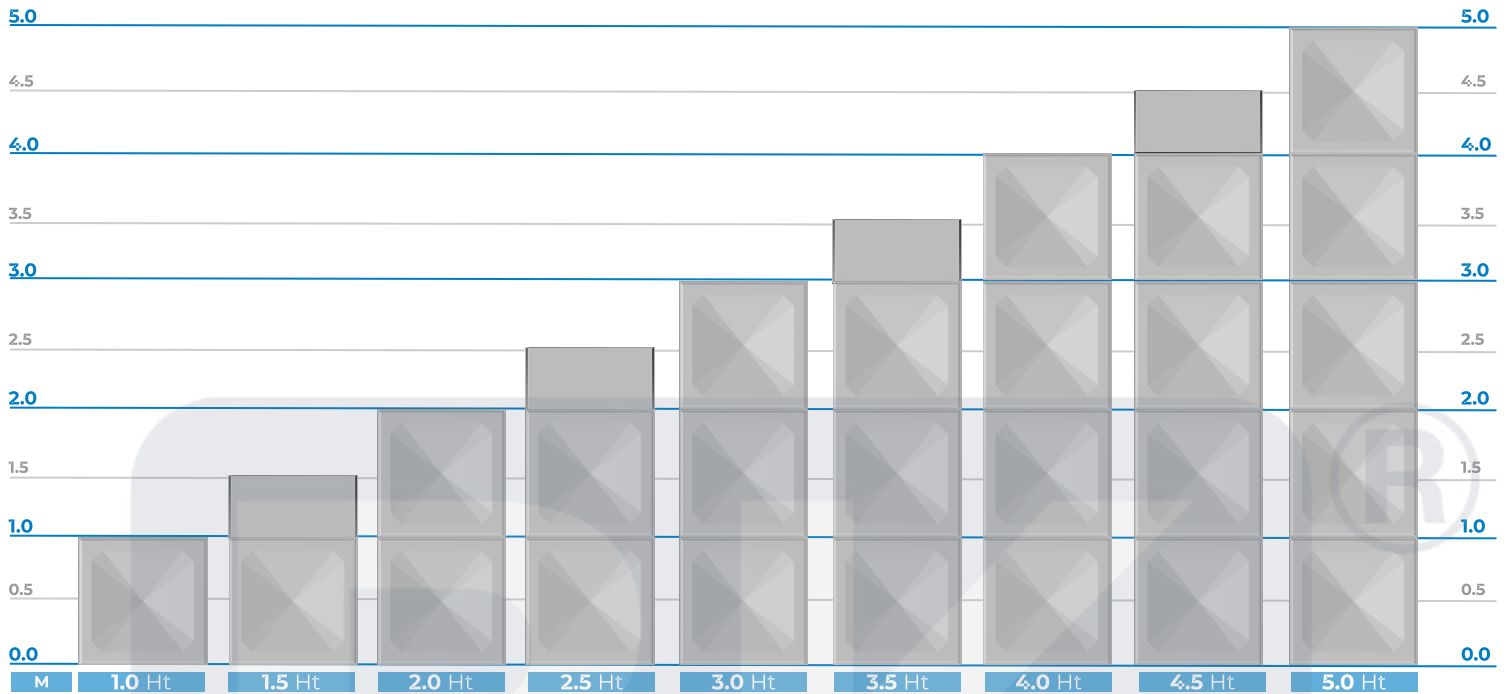
Insulation and Dew-Proofing

Insulation panel with its three-layer structure improves the insulation effect. Maximizes dew-proofing, and minimizes temperature variation of the stored water.

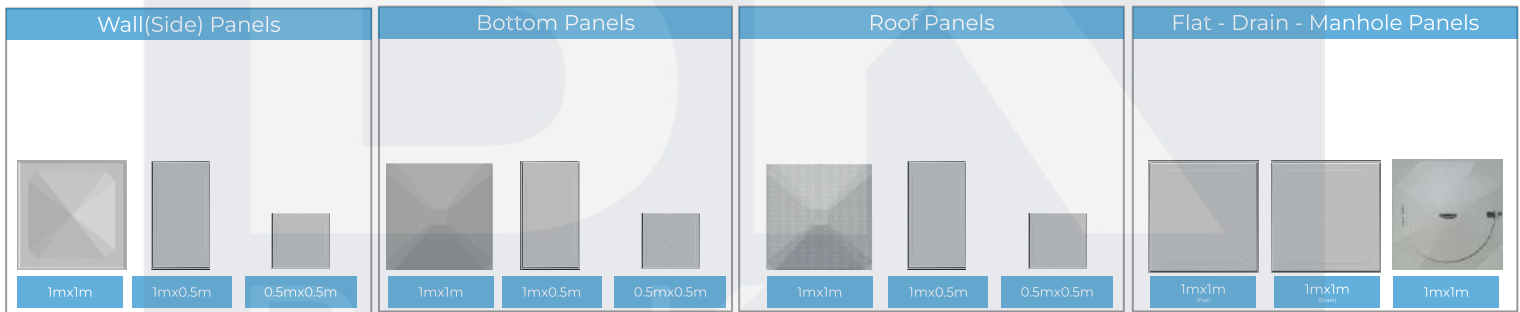


PANEL COMPOSITION

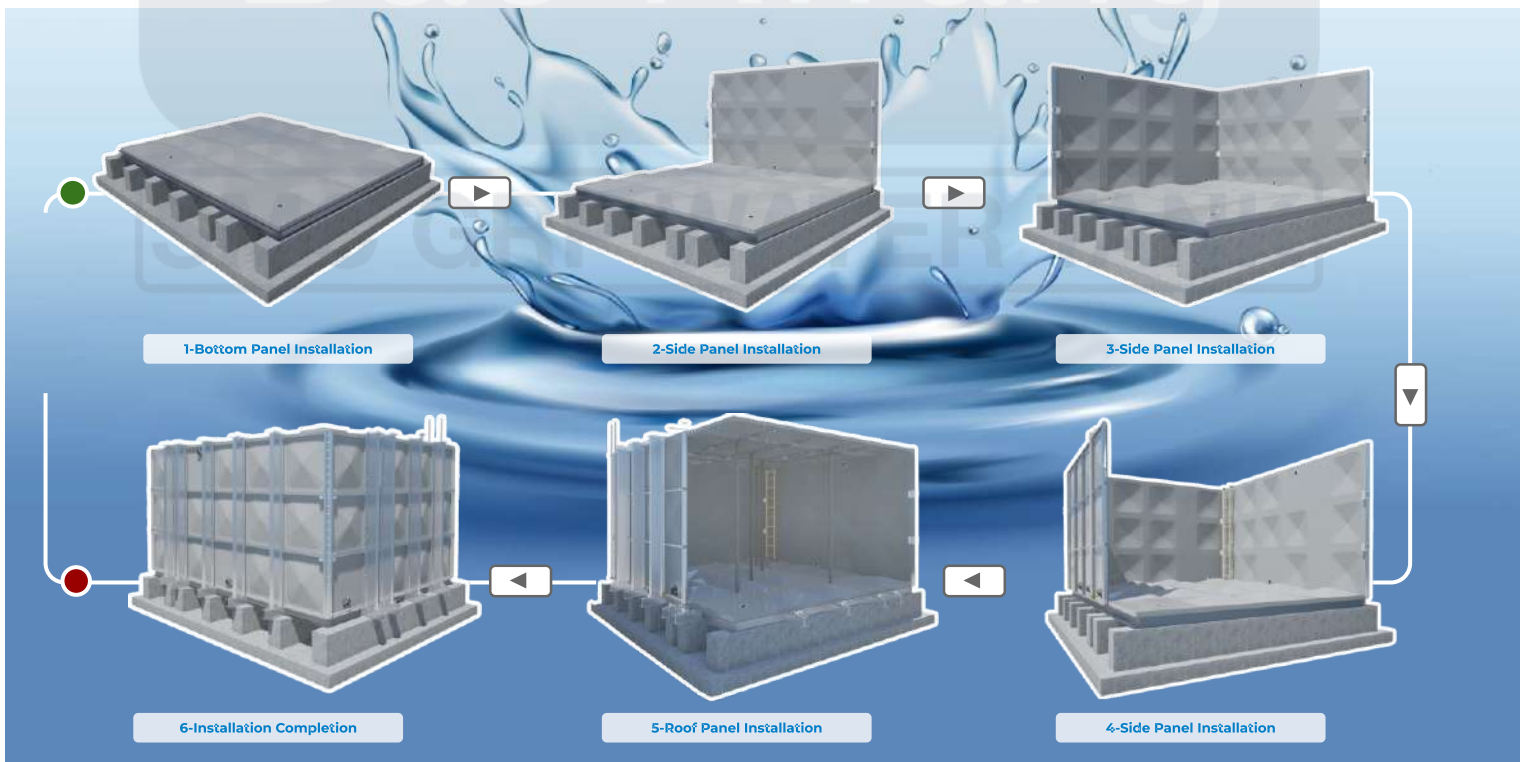
Wall Panel Composition By Height



Types and Shapes



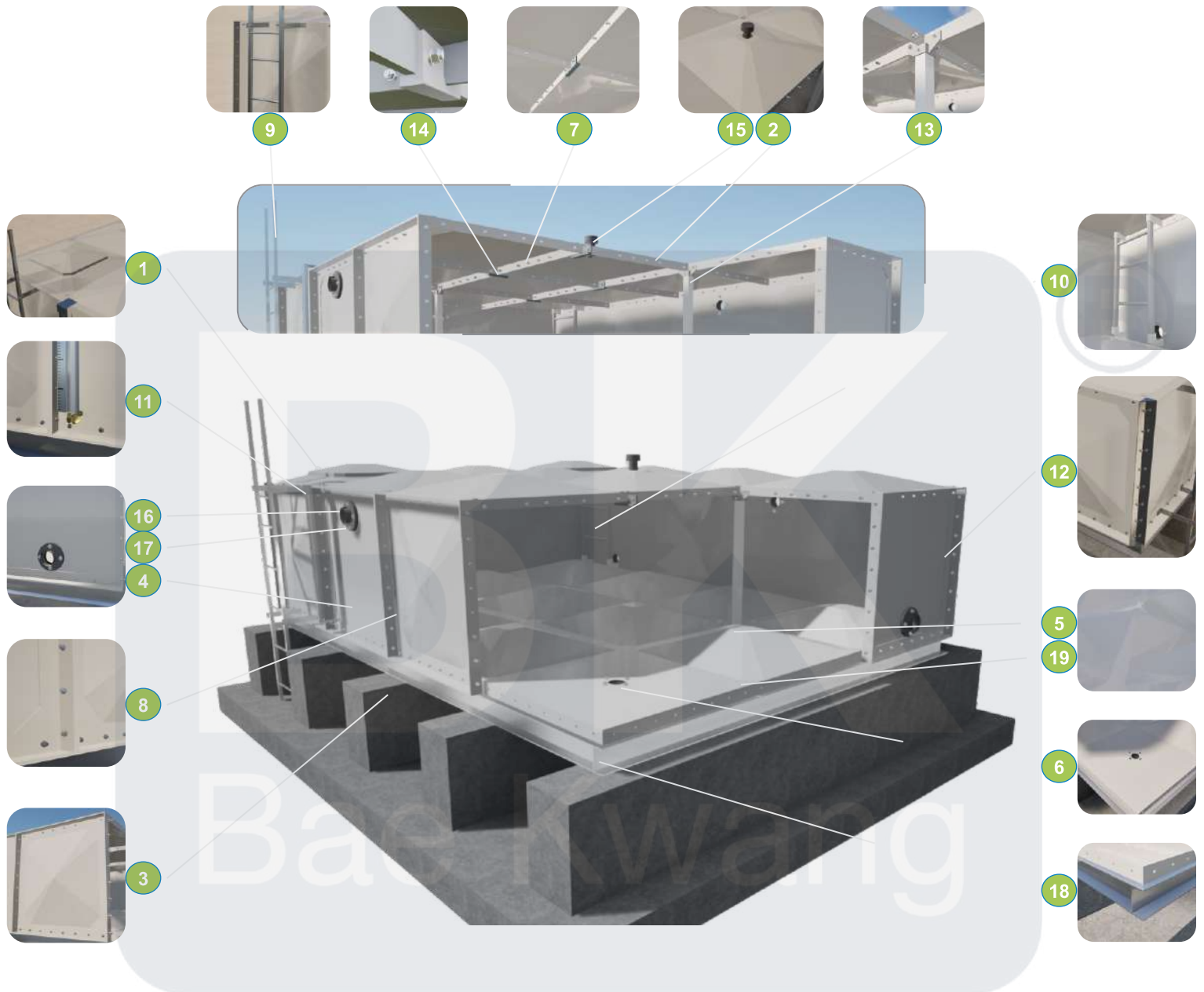
INSTALLATION PROCESS



● SPECIFICATIONS

● SELF SUPPORTED

● 1 m HEIGHT TANK



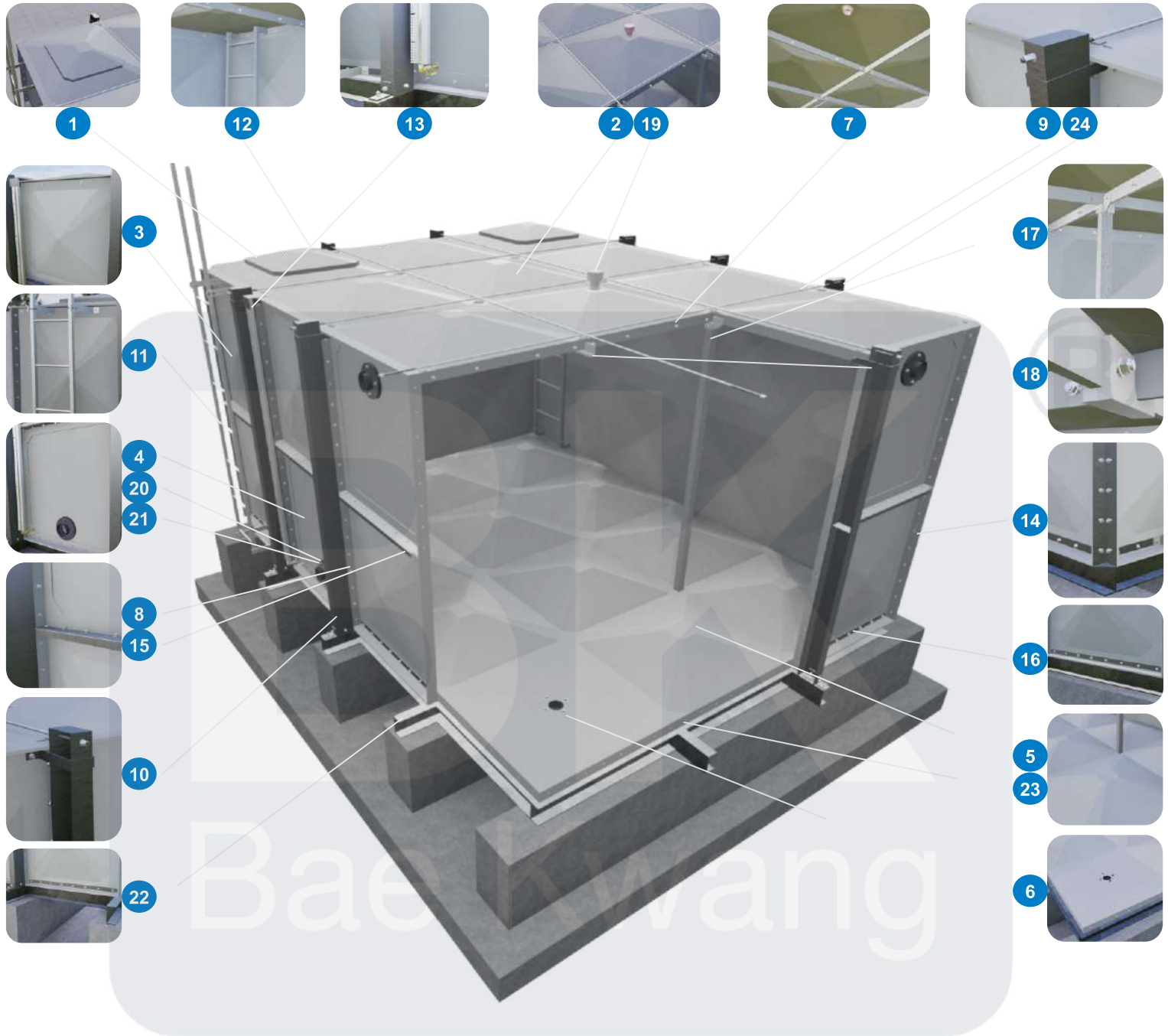
SMC GRP WATER TANK

1	MANHOLE PANEL	700mm Dia - SMC GRP	11	Level Indicator	Tube Type- Aluminium Framed
2	ROOF PANELS	SMC GRP	12	Corner Angles	MS-HDG
3	WALL PANELS	SMC GRP	13	Roof Support Pipes	GRP Pultruded
4	FLAT PANEL-Nozzles	SMC GRP	14	Roof Panel Stiffeners	PPCP
5	BOTTOM PANELS	SMC GRP	15	Air Vent	PPCP
6	FLAT PANELS(Drain)	SMC GRP	16	Nozzles	PVC (Options for MS-HDG/ SS / Brass)
7	Fasteners for Roof	SS 202 (Options for SS 304 and SS 316)	17	Fasteners for Nozzles	Plastic Capped HDG
8	Fasteners-Others	Special Coated 8.8 (Options for SS 304 and SS 316)	18	Base Frame	MS-Epoxy Painted (Options for MS-HDG)
9	External Ladder	MS-HDG	19	Sealant Tapes	Norton(Saint Gobain) (Options for SEBS)
10	Internal Ladder	GRP Pultruded			

● SPECIFICATIONS

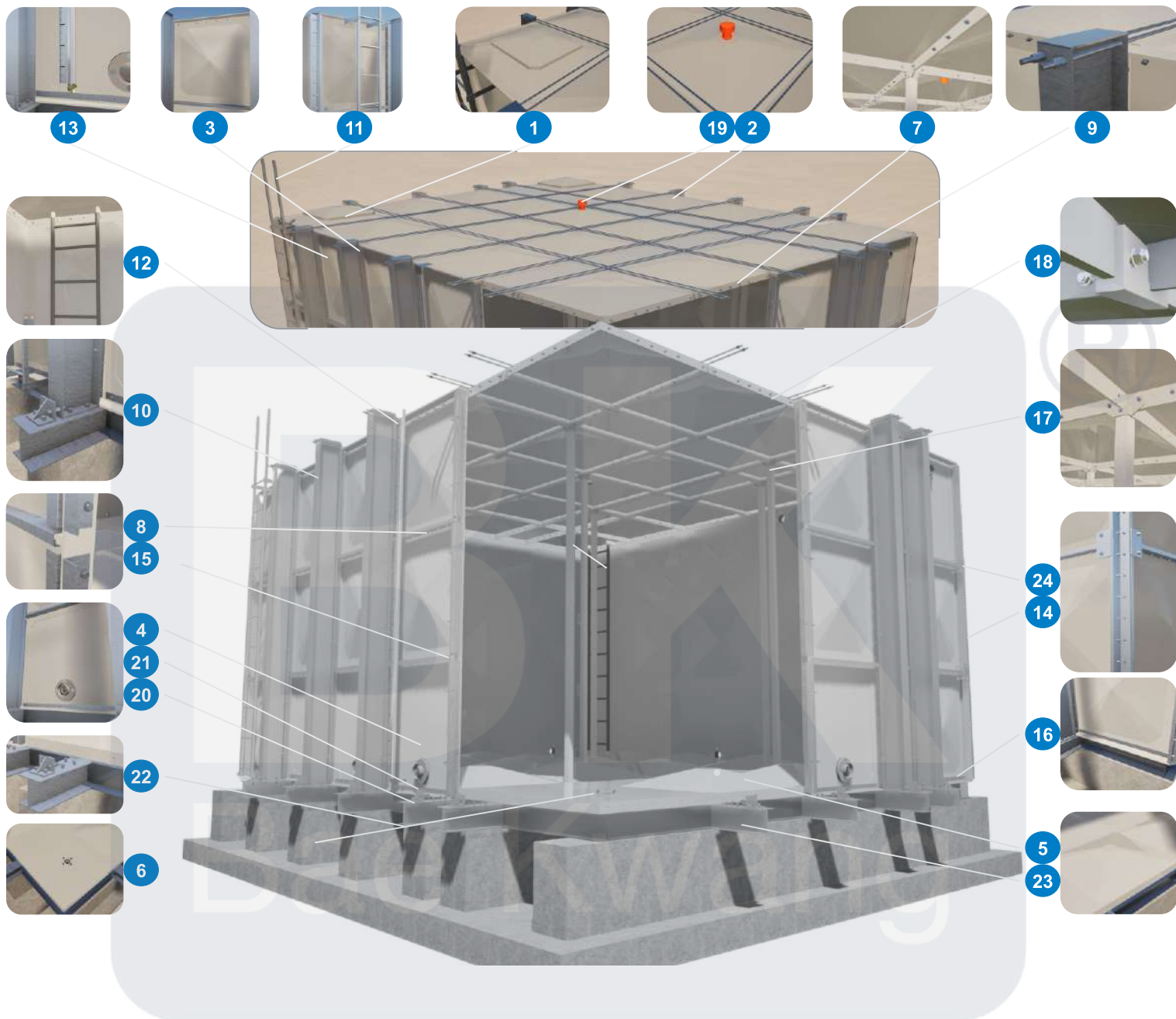
● EXTERNAL BRACING

● 2m HEIGHT TANK



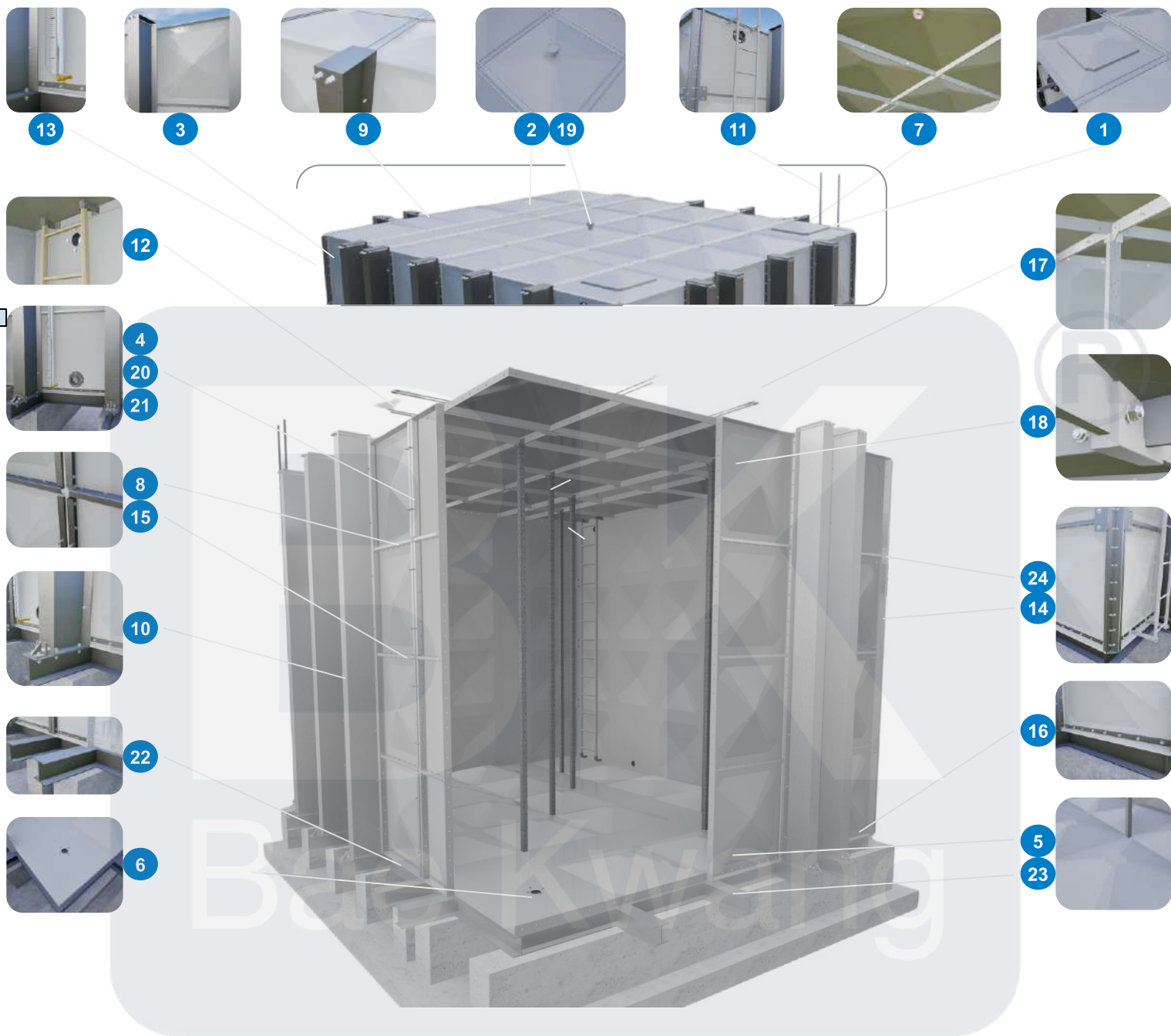
1	MANHOLE PANEL	700mm Dia - SMC GRP	13	Level Indicator	Tube Type- Aluminium Framed
2	ROOF PANELS	SMC GRP	14	Corner Angles	MS-HDG
3	WALL PANELS	SMC GRP	15	Angle Bars	MS-HDG
4	FLAT PANELS(Nozzles)	SMC GRP	16	Flat Bars	MS-HDG
5	BOTTOM PANELS	SMC GRP	17	Roof Support Pipes	GRP Pultruded
6	FLAT PANELS(Drain)	SMC GRP	18	Roof Panel Stiffeners	PPCP
7	Fasteners for Roof	SS 202 (Options for SS 304 and SS 316)	19	Air Vent	PPCP
8	Fasteners-Others	Special Coated 8.8 (Options for SS 304 and SS 316)	20	Nozzles	PVC (Options for MS-HDG/ SS / Brass)
9	Roof Tie Rods (For holding together the vertical beams)	SS 304	21	Fasteners for Nozzles	Plastic Capped HDG
10	Vertical Support Beams	MS-Epoxy Painted (Options for HDG)	22	Base Frame (Customer's Scope until unless its mentioned)	MS-Epoxy Painted (Options for MS-HDG)
11	External Ladder	MS-HDG	23	Sealant Tapes	Norton(Saint Gobain) (Options for SEBS)
12	Internal Ladder	GRP Pultruded	24	Support "U" Bracket (For External Vertical Beams)	MS-HDG

● SPECIFICATIONS ● EXTERNAL BRACING ● 3 m HEIGHT TANK



1	MANHOLE PANEL	700mm Dia - SMC GRP	13	Level Indicator	Tube Type- Aluminium Framed
2	ROOF PANELS	SMC GRP	14	Corner Angles	MS-HDG
3	WALL PANELS	SMC GRP	15	Angle Bars	MS-HDG
4	FLATPANELS-Nozzles	SMC GRP	16	Flat Bars	MS-HDG
5	BOTTOM PANELS	SMC GRP	17	Roof Support Pipes	GRP Pultruded
6	FLAT PANELS(Drain)	SMC GRP	18	Roof Panel Stiffeners	PPCP
7	Fasteners for Roof	SS 202 <small>(Options for SS 304 and SS 316)</small>	19	Air Vent	PPCP
8	Fasteners-Others	Special Coated 8.8 <small>(Options for SS 304 and SS 316)</small>	20	Nozzles	PVC <small>(Options for MS-HDG/ SS / Brass)</small>
9	Roof Tie Rods <small>(For holding together the vertical beams)</small>	SS 304	21	Fasteners for Nozzles	Plastic Capped HDG
10	Vertical Support Beams	MS-Epoxy Painted <small>(Options for HDG)</small>	22	Base Frame <small>(Customer's Scope until unless its mentioned)</small>	MS-Epoxy Painted <small>(Options for MS-HDG)</small>
11	External Ladder	MS-HDG	23	Sealant Tapes	Norton(Saint Gobain) <small>(Options for SEBS)</small>
12	Internal Ladder	GRP Pultruded	24	Corner Bracket <small>(All Corner Junctions)</small>	MS-HDG

● SPECIFICATIONS ● EXTERNAL BRACING ● 4m HEIGHT TANK

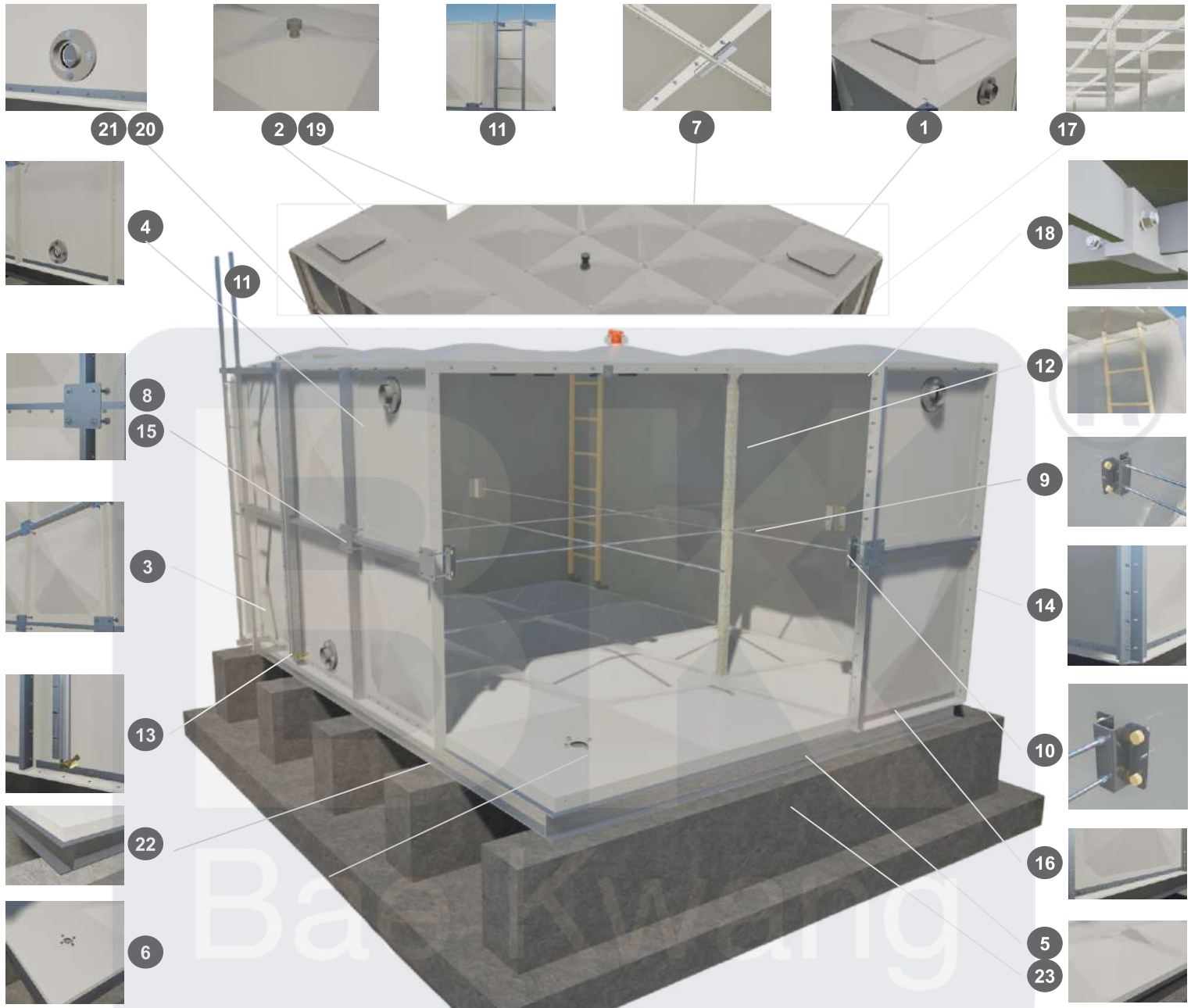


1	MANHOLE PANEL	700mm Dia - SMC GRP	13	Level Indicator	Tube Type- Aluminium Framed
2	ROOF PANELS	SMC GRP	14	Corner Angles	MS-HDG
3	WALL PANELS	SMC GRP	15	Angle Bars	MS-HDG
4	FLATPANELS-Nozzles	SMC GRP	16	Flat Bars	MS-HDG
5	BOTTOM PANELS	SMC GRP	17	Roof Support Pipes	GRP Pultruded
6	FLAT PANELS(Drain)	SMC GRP	18	Roof Panel Stiffeners	PPCP
7	Fasteners for Roof	SS 202 <small>(Options for SS 304 and SS 316)</small>	19	Air Vent	PPCP
8	Fasteners-Others	Special Coated 8.8 <small>(Options for SS 304 and SS 316)</small>	20	Nozzles	PVC <small>(Options for MS-HDG/ SS / Brass)</small>
9	Roof Tie Rods <small>(For holding together the vertical beams)</small>	SS 304	21	Fasteners for Nozzles	Plastic Capped HDG
10	Vertical Support Beams	MS-Epoxy Painted <small>(Options for HDG)</small>	22	Base Frame <small>(Customer's Scope until unless its mentioned)</small>	MS-Epoxy Painted <small>(Options for MS-HDG)</small>
11	External Ladder	MS-HDG	23	Sealant Tapes	Norton(Saint Gobain) <small>(Options for SEBS)</small>
12	Internal Ladder	GRP Pultruded	24	Corner Bracket <small>(All Corner Junctions)</small>	MS-HDG

● SPECIFICATIONS

● INTERNAL BRACING

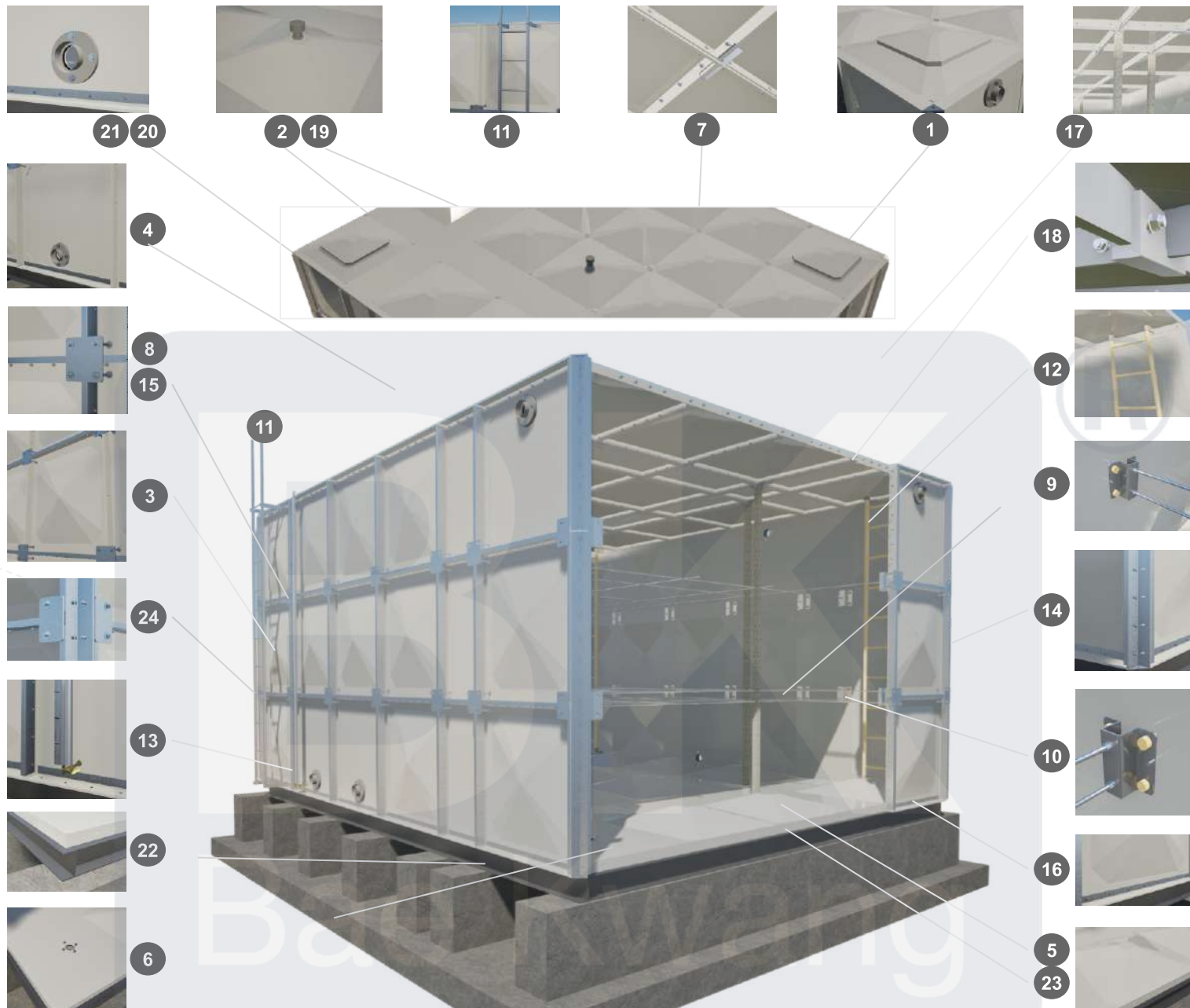
● 2m HEIGHT TANK



1	MANHOLE PANEL	700mm Dia - SMC GRP
2	ROOF PANELS	SMC Hot Pressed GRP
3	WALL PANELS	SMC Hot Pressed GRP
4	FLATPANELS-Nozzles	SMC Hot Pressed GRP
5	BOTTOM PANELS	SMC Hot Pressed GRP
6	FLAT PANELS(Drain)	SMC Hot Pressed GRP
7	Fasteners for Roof	SS 202/ SS 304/SS 316
8	Fasteners-Others	Special Coated 8.8 Grade (Options for SS 304 and SS 316)
9	Internal Tie Rods	SS 316 L
10	Internal Plates	SS 304 / SS 316
11	External Ladder	MS-HDG
12	Internal Ladder	GRP Pultruded

13	Level Indicator	Tube Type- Aluminium Framed
14	Corner Angles	MS-HDG
15	Angle Bars	MS-HDG
16	Flat Bars	MS-HDG
17	Roof Support Pipes	GRP Pultruded
18	Roof Panel Stiffeners	PPCP
19	Air Vent	PPCP
20	Nozzles	PVC (Options for MS-HDG/ SS / Brass)
21	Fasteners for Nozzles	Plastic Capped HDG
22	Base Frame <small>(Customer's Scope until unless its mentioned)</small>	MS-Epoxy Painted (Options for MS-HDG)
23	Sealant Tapes	Norton(Saint Gobain) (Options for SEBS)

SPECIFICATIONS **INTERNAL BRACING** **3m HEIGHT TANK**



1	MANHOLE PANEL	700mm Dia - SMC GRP	13	Level Indicator	Tube Type- Aluminium Framed
2	ROOF PANELS	SMC Hot Pressed GRP	14	Corner Angles	MS-HDG
3	WALL PANELS	SMC Hot Pressed GRP	15	Angle Bars	MS-HDG
4	FLATPANELS-Nozzles	SMC Hot Pressed GRP	16	Flat Bars	MS-HDG
5	BOTTOM PANELS	SMC Hot Pressed GRP	17	Roof Support Pipes	GRP Pultruded
6	FLAT PANELS(Drain)	SMC Hot Pressed GRP	18	Roof Panel Stiffeners	PPCP
7	Fasteners for Roof	SS 202/ SS 304/SS 316	19	Air Vent	PPCP
8	Fasteners-Others	Special Coated 8.8 Grade (Options for SS 304 and SS 316)	20	Nozzles	PVC (Options for MS-HDG/ SS / Brass)
9	Internal Tie Rods	SS 316 L	21	Fasteners for Nozzles	Plastic Capped HDG
10	Internal Plates	SS 304 / SS 316	22	Base Frame <small>(Customer's Scope until unless its mentioned)</small>	MS-Epoxy Painted (Options for MS-HDG)
11	External Ladder	MS-HDG	23	Sealant Tapes	Norton(Saint Gobain) (Options for SEBS)
12	Internal Ladder	GRP Pultruded	24	Corner Bracket <small>(All Corner Junctions)</small>	MS-HDG

SPECIFICATIONS

INTERNAL BRACING

4m HEIGHT TANK

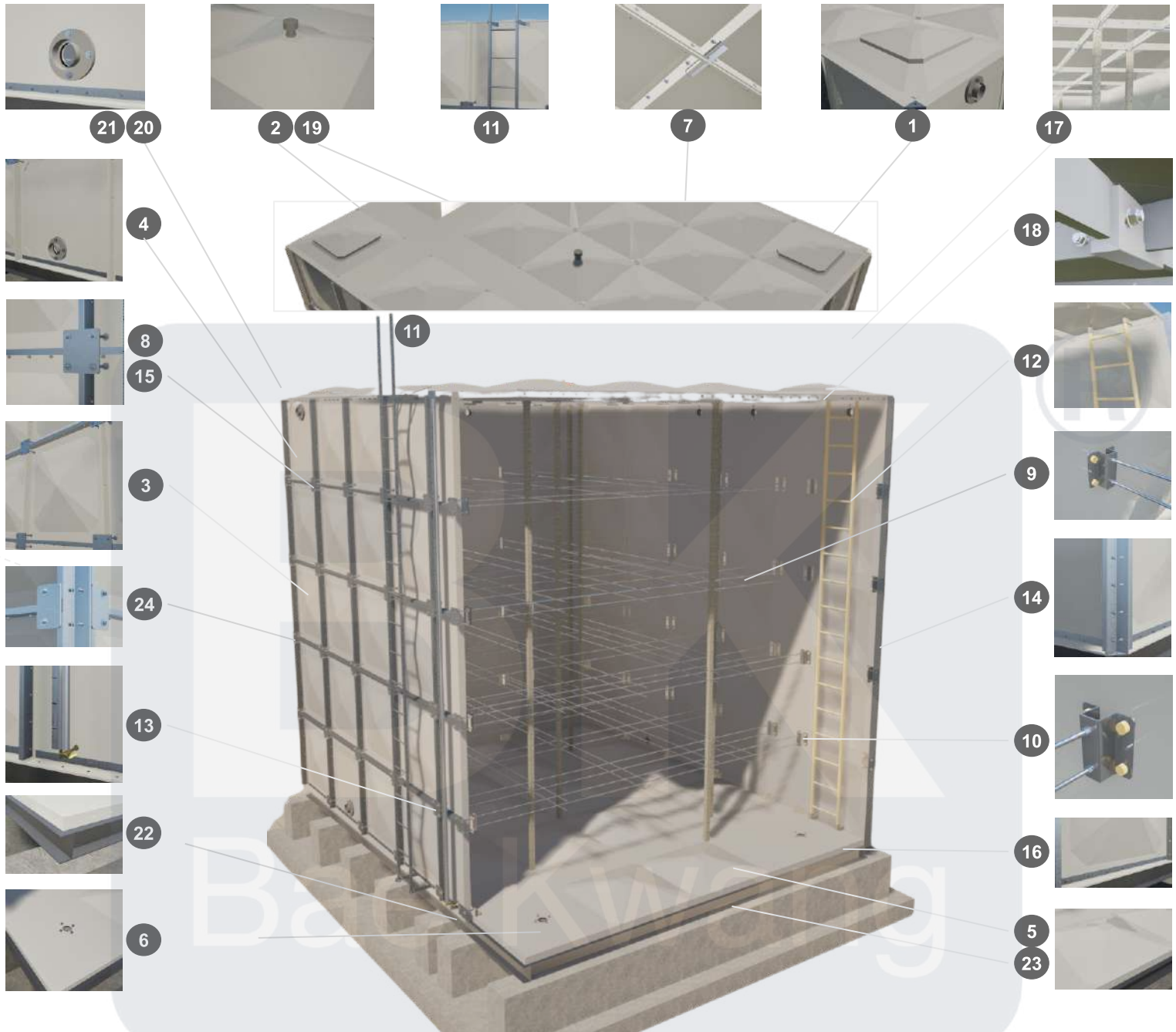


1	MANHOLE PANEL	700mm Dia - SMC GRP	13	Level Indicator	Tube Type- Aluminium Framed
2	ROOF PANELS	SMC Hot Pressed GRP	14	Corner Angles	MS-HDG
3	WALL PANELS	SMC Hot Pressed GRP	15	Angle Bars	MS-HDG
4	FLATPANELS-Nozzles	SMC Hot Pressed GRP	16	Flat Bars	MS-HDG
5	BOTTOM PANELS	SMC Hot Pressed GRP	17	Roof Support Pipes	GRP Pultruded
6	FLAT PANELS(Drain)	SMC Hot Pressed GRP	18	Roof Panel Stiffeners	PPCP
7	Fasteners for Roof	SS 202/ SS 304/SS 316	19	Air Vent	PPCP
8	Fasteners-Others	Special Coated 8.8 Grade (Options for SS 304 and SS 316)	20	Nozzles	PVC (Options for MS-HDG/ SS / Brass)
9	Internal Tie Rods	SS 316 L	21	Fasteners for Nozzles	Plastic Capped HDG
10	Internal Plates	SS 304 / SS 316	22	Base Frame <small>(Customer's Scope until unless its mentioned)</small>	MS-Epoxy Painted (Options for MS-HDG)
11	External Ladder	MS-HDG	23	Sealant Tapes	Norton(Saint Gobain) (Options for SEBS)
12	Internal Ladder	GRP Pultruded	24	Corner Bracket <small>(All Corner Junctions)</small>	MS-HDG

● SPECIFICATIONS

● INTERNAL BRACING

● 5m HEIGHT TANK



1	MANHOLE PANEL	700mm Dia - SMC GRP	13	Level Indicator	Tube Type- Aluminium Framed
2	ROOF PANELS	SMC Hot Pressed GRP	14	Corner Angles	MS-HDG
3	WALL PANELS	SMC Hot Pressed GRP	15	Angle Bars	MS-HDG
4	FLATPANELS-Nozzles	SMC Hot Pressed GRP	16	Flat Bars	MS-HDG
5	BOTTOM PANELS	SMC Hot Pressed GRP	17	Roof Support Pipes	GRP Pultruded
6	FLAT PANELS(Drain)	SMC Hot Pressed GRP	18	Roof Panel Stiffeners	PPCP
7	Fasteners for Roof	SS 202/ SS 304/SS 316	19	Air Vent	PPCP
8	Fasteners-Others	Special Coated 8.8 Grade (Options for SS 304 and SS 316)	20	Nozzles	PVC (Options for MS-HDG/ SS / Brass)
9	Internal Tie Rods	SS 316 L	21	Fasteners for Nozzles	Plastic Capped HDG
10	Internal Plates	SS 304 / SS 316	22	Base Frame <small>(Customer's Scope until unless its mentioned)</small>	MS-Epoxy Painted (Options for MS-HDG)
11	External Ladder	MS-HDG	23	Sealant Tapes	Norton(Saint Gobain) (Options for SEBS)
12	Internal Ladder	GRP Pultruded	24	Corner Bracket <small>(All Corner Junctions)</small>	MS-HDG

REFERENCES



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CERTIFICATIONS

अनुसूची
SCHEDULE
लाइसेंस से सीएम एल
LICENCE NO. CML - 7100106483

नाम : ओन्निनस इन्डस्ट्रिएस
फैक्ट्री एड्रेस : प्लॉट नो. ७२०, पोर तो कायवरोहन रोड, दभोई, मेन्पुरा, वदोदर, गुजरात, दभोई
विधिमान्यता : चार मई दो हजार पच्चीस से तीन मई दो हजार छब्बीस

Name : Continus Industries
Factory Address : Plot No. 720, Por To Kayavrohan Road, Dabhoi, Menpura, Vadodara, Gujarat, DABHOI - 391220, Gujarat, India
Validity From Fourth May Two Thousand Twenty Five to Third May Two Thousand Twenty Six

मानक चिह्न STANDARD MARK	भारतीय मानक INDIAN STANDARD(S)	अनुसूचित कर्म विषय क्षेत्र SCOPE OF LICENCE	चिह्नकरण शुल्क MARKING FEE
(1)	(2)	(3)	(4)
IS 14399 PART 1 AND 2 CML- 7100106483	IS 14399 : PART 1 AND 2 : 1896 Hot Press Moulded Thermosetting Glass Fibre Reinforced Polyester Resin (GRP) Sectional Water Storage Tanks. Type of Panel: A,B,C and Depth of Water Tank From 2 m upto and including 3 m.	Hot Press Moulded Thermosetting Glass Fibre Reinforced Polyester Resin (GRP) Sectional Water Storage Tanks. Type of Panel: A,B,C and Depth of Water Tank From 2 m upto and including 3 m.	एक वर्ष की प्रचालन अवधि के दौरान सूचना मुद्रांकन फीस ₹ 53000.00 के साथ सभी इकाईयों के लिए ₹ 0.36 प्रति इकाई इकाई: 1 KG ₹ 0.36 per unit for all units with a Minimum Marking Fee of ₹ 53000.00 during an operative period of one year Unit: 1 KG एक प्रचालन वर्ष के लिए सूचना चिह्नकरण शुल्क अग्रिम में देय होगी जो अग्रलेख सूचीकरण में अग्रनीत होगी। Minimum marking fee for one operative year payable in advance

सेन्ट्रल इंस्टिट्यूट ऑफ पेट्रोकेमिकल इंजीनियरिंग एण्ड टेक्नोलॉजी
(राज्य एवं पेट्रोकेमिकल विभाग, गुजरात एवं उद्योग विभाग, भारत सरकार)
एच.सी.एन. पोस्ट. ऑफिस. के.एम. - २, वेरावलली, वेरावल - ३९० ०१६.
CIPET
CENTRAL INSTITUTE OF PETROCHEMICALS ENGINEERING & TECHNOLOGY
(Department of Chemicals & Petrochemicals, Ministry of Chemicals & Fertilizers, Govt. of India)
H.C.N. Post, KA - Phase - II, Chertapaty, Hyderabad - 509 051.
Phone : 065-2728388, 2728316, Fax : 81-46-27284051
Email : testing-hyderabad@cipet.gov.in / hyderabad@cipet.gov.in / Web : www.cipet.gov

Plastics Testing Centre
Test Certificate

No.: 0135307
Page 1 of 2
Date: 09.11.2022

Issued to: M/s Continus Industries,
201 Harendra Complex, Muzamhuda,
Vishwamitry Road,
Vadodara - 390 020, Gujarat

Ref: Your Letter No. Nil & Date 07.11.2022
TEST REPORT AS PER - IS: 14399 -1996(Part-1)
PART A - PARTICULARS OF SAMPLE SUBMITTED REPORT NO - 2387076

a) Name of the Sample	Hot Pressed Moulded Thermosetting Glass Fibre Reinforced Resin (GRP) Sectional Water Storage Tank as stated by party
b) Grade/Variety/Type/Size/Class	Nil
c) Declared values, if any	SMC Glass Fibre Reinforced Polyester Resin
d) Code No.	Nil
e) Batch No. and Date of Manufacture	Nil
f) Quantity	30 Nos. of Panels
g) Mode of Packing	Loose
h) Seal	Nil
i) Any other information	Samples received on 07.11.2022
j) Date of initiation of testing	07.11.2022
k) Date of completion of testing	09.11.2022

PART B: SUPPLEMENTARY INFORMATION

a) Reference to sampling Procedure	Nil
b) Supporting documents for the measurement taken and result observed	Nil
c) Deviation from the test method as prescribed in relevant work instructions, if any	Nil
d) Statement of conformity as per the test result obtained	As per Part-C
e) Decision Rule applicable or not	Nil

BIS Certification - ISI MARK

CIPET Test Report

BEYOND ASIAN RISE, TOWARD GLOBAL WORLD

TEST REPORT

16, Jongga-ro, Jung-gu, Ulsan, 44112, Korea
TEL 82-42-211-6144 FAX 82-42-211-6148

Report No : TAK-2022-18210
Representative : M. Sarinosh Mathew
Company name : BK WATER TANKS PRIVATE LIMITED
Address : 416, 4th FLOOR, NEPTUNE EDGE, SARABHAI CAMPUS, VADODARA, 390027, GUJARAT, INDIA

Sample name : Glass Fiber Reinforced Plastic(GRP) water tank-(SMC)

Report Date : 2025.10.21
Test Completion Date : 2025.11.11.

TEST ITEM	UNIT	SAMPLE	RESULT	TEST METHOD
Specific Gravity(23 °C/23 °C)Test Method A1	-	-	1.87	ASTM D792-20
Water Absorption(24 h immersion) %	-	-	0.94	ASTM D570-22
Tensile Strength(1")	MPa	-	86.6	ASTM D308-22
Tensile Elastic Modulus(1")	GPa	-	14.9	ASTM D308-22
Flexural Strength(Procedure A1) (2)	MPa	-	236	ASTM D790-17
Flexural Modulus of Elasticity(Procedure A1) (2)	GPa	-	14.5	ASTM D790-17
Shear Strength	MPa	-	106	ASTM D732-24
Izod Impact Resistance(Iast Method A1) (3)	J/m	-	424	ASTM D256-24
Compressive Strength(4)	MPa	-	286	applied ASTM D695-23
Barcol Hardness	-	-	55	ASTM D2583-13a
Glass content(625 °C)(Method B)	%	-	30	KS M ISO 1172 : 1996
Thermal Conductivity(20 °C) (5)	W/(m · K)	-	0.13	applied KS L 8810 : 2010 (Means of the Heat Flow Meter apparatus)
Visible Transmittance	%	-	0.0	Applied KS L 2514 : 2011

- Next Page -

Kim Jeong Myun
Prepared by Kim Jeongmyun
Tel : 82-220-0767

Kim Minho
Reviewed by Kim Minho
Tel : 82-40917495 (0-48)

2025.11.11

Korea Testing & Research Institute
President

QR Code for largery

Page : 1 of 2

MANAGEMENT SYSTEM CERTIFICATE
This is to certify that

CONTINUS INDUSTRIES
REG OFFICE: 201 HARENDRA COMPLEX, MUJAMHUDA VISHWAMITRY ROAD, VADODARA - 390020, GUJARAT, INDIA.
CORP OFFICE: 416, NEPTUNE EDGE, SARABHAI CAMPUS, GENDA CIRCLE VADODARA - 390007, GUJARAT, INDIA.
FACTORY: 720, MENPURA, POR-KAYAVAROHAN ROAD, VADODARA - 391220, GUJARAT, INDIA.

has been assessed by RAPL and found to comply with the requirements of

ISO 9001 : 2015
Quality Management Systems

For the following activities:
DESIGN, ENGINEERING, MANUFACTURING AND INSTALLATION OF SMC GRP HOTPRESSED PANEL WATER TANKS AND ALUZIN ZINCALUME CORRUGATED STEEL WATER TANKS

Certificate Number: E20240812844
Date of certification: 07/08/2024
1st Surveillance on or before: 06/08/2025
2nd Surveillance on or before: 06/08/2026
Certification Valid Until: 06/08/2027

Accredited
QMS Certification CABR 119012

Arshad
Director (Certification)
Royal Assessments Pvt. Ltd.
623 A, Tower B, 11th Fl, Plot No. A - 40, Sector - 62, Noida - 201301, India.
www.royalapl.com, info@royalapl.com
Phone : +91 120 4261328
This Certificate can be verified at www.iafconform.org

Korea Testing & Research Institute - Report

ISO 9001 : 2015 Certification



The **World Leader** in
GRP Water Tank

GSTIN: 29BXRPS4960E1ZR



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Call : +91 63620 66963