SUNG IL GRP WATER TANK

- GRP Building Materials Company -

SUNG IL CO., LTD.

SUNG IL GRP WATER TANK

♦20 million dollars exporting of GRP building materials♦

Excellent in Clean & Hygienic and
Non-leakage. Sectional GRP Water Tank
for Easy to Design and Installation.

Korea Certificate

Korea : KCW-2013-0135
(Korea water and wastwater works Association)

Authority Certificate

U.K : WRAS BS6920

Singapore : PSB SS245 : 1995
SS375 : 2001

Patents Status in Korea

Heat Insulation Panel	: No. 0495287
Water Inspection Panel	: No. 2004-0008395
Elvan Water Tank Panel	: No. 2004-00011977
Water Tank Panel	: No. 2005-0001929
	No. 2005-0001930

Compression Moulding Factory

SUNG IL Sectional GRP Water Tank is designed to
satisfy the basic requirements by using Glassfiber Reinforced Panel

SUNG IL GRP Water Tank always keep water clean.

Various Capacity Design

Various size panels can use limited space for its best using way so can satisfy your needs.

Excellent Hygienic Conditions

No corrosion from panel and prevent bacteria increasing by isolating outside light.

Best Size Stability

Sectional GRP water tank panels size
are changeless from the outside condition so easy to assembly.

Easy to Assembly and Moving

Sectional panels make construction time shorter, standardization panel make easier to moving, carrying in and transfer.

Watertightness

The joints sealed with special sealing tape especially developed for water tank.

Intensity and Durability

Glass fiber Reinforced Panel is mulded under condition of high temperature and pressure to maintain the best endurance.
Since using stainless steel for inside structure, plated steel for outside and zinc hot dip galvanized bolt for outside, it shows best performance against erosion.

Heat Insulation and Dewdrops Prevention

The heat insulation panel with 3 layer structured improves heat insulation effect. Protects water from dewdrops and minimizes temperature variation of the stored water.

GRP Sheet Factory

Antibacterial GRP water tank

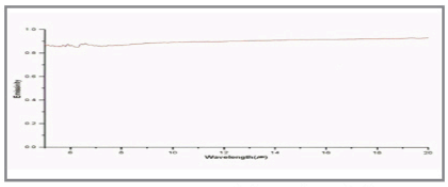
Antibacterial GRP water tank Efficacy

- Heavy metal decomposition
- Cement toxicity neutralization
- Excellent antibacterial
- Infrared radiation
- A gush of more than 40 kinds of minerals

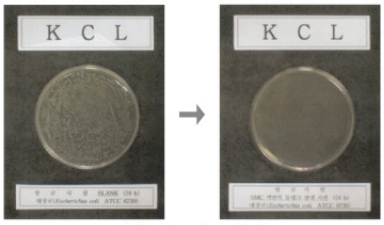
Escherichia coli test (test method : KICM-FIR-1003 : 2009)			
Sample	Initial concentration (CUF/mL)	After 24hr (CUF/mL)	Bacterial reduction
Specimen	3.1×10^5	4.6×10^5	–
Elvan GRP	3.1×10^5	〈10	99.9

staphylococcus aureus (test method : KICM-FIR-1003 : 2009)			
Sample	Initial concentration (CUF/mL)	After 24hr (CUF/mL)	Bacterial reduction
Specimen	2.9×10^5	3.5×10^5	–
Elvan GRP	2.9×10^5	2.7×10^2	99.9

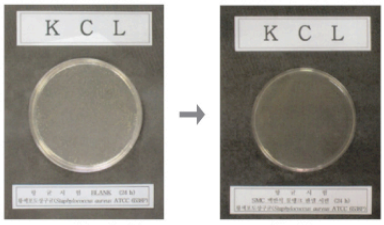
※Test : Korea Comformity Laboratries
※CUF : colony forming unit, ※Escherichia coli ATCC 8739, Staphylococcus aureus ATCC 6538P



Infrared radiation rate



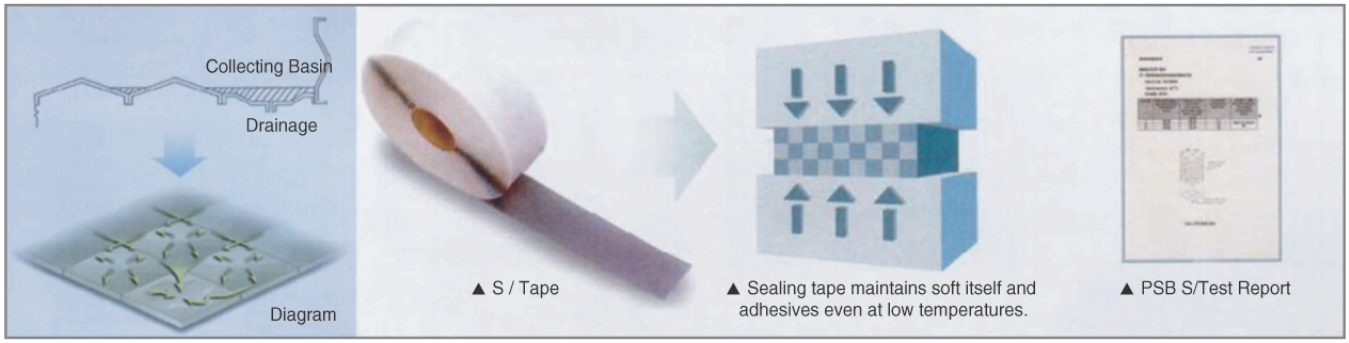
Colon bacillus Test



Staphylococcus aureus Test

Best Watertight - Sealing Tape / Bottom Drain System

- Especially developed sealing tape maintains perfect non-leakage of the Water Tank.
  The dome shaped bottom panel with a concave drain panel facilitates complete and quick drainage



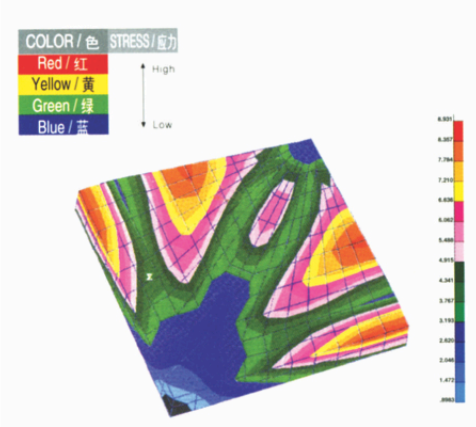
▲ S / Tape

▲ Sealing tape maintains soft itself and adhesives even at low temperatures.

▲ PSB S/Test Report

System design (FEM)

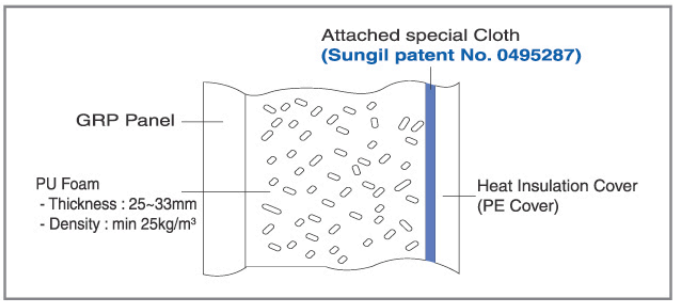
- Safe and robust panel construction is designed considering the stress concentration on the panel when load is applied by FEM. And we always satisfy all safety requirements such as strength, durability and stability with rigid design regulation and quality control.



Excellent Heat Insulation

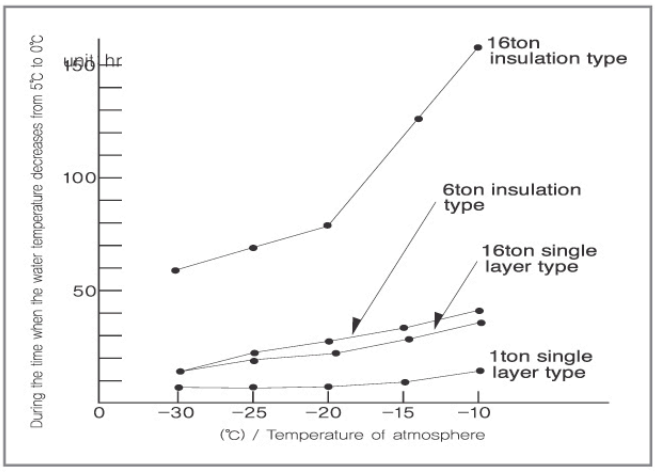
Feature of insulation panels

- The heat insulation panel with 3 layer structure improves heat insulation effect. Protects water condensation on the outside of the tank and minimizes temperature variation of the stored water.



During the time when the water temperature decreases from 5° to 0°

Capacity	Classification	Temperature of Atmosphere		
		−10℃	−20℃	−30℃
16 tons	Single Layer Type	35 hr	20 hr	13.5 hr
	Insulation Type	164 hr	81 hr	58.5 hr
1 tons	Single Layer Type	11 hr	6 hr	4 hr
	Insulation Type	37.5 hr	23 hr	13.5 hr

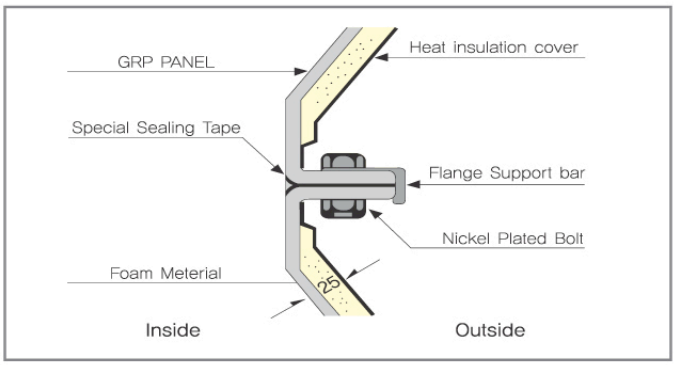


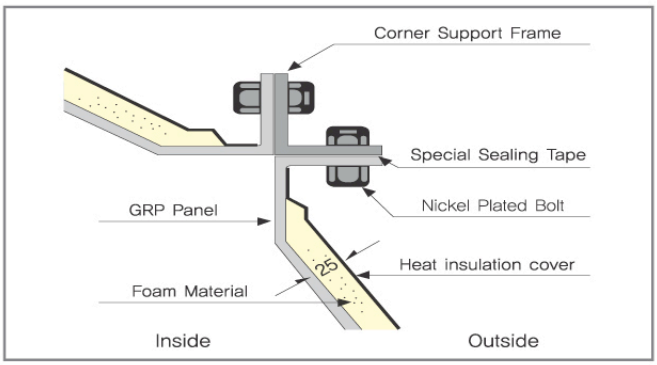
※ Test condition

a. Tank is filled with water

b. No further water supply, or drainage during the test

Drawing of the panel joint part / corner part





- Heat insulation foam core thickness : 25~33mm

S-standard base frame system

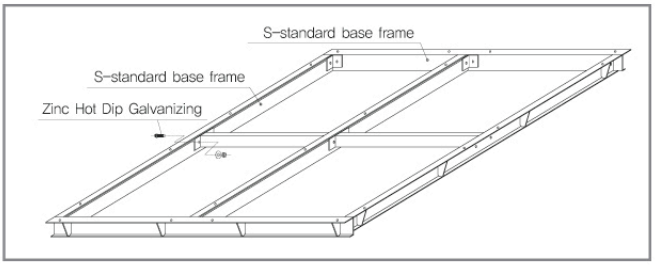
- Water tank height -3M, 5M
- Water level - 85% of water tank height

• Stress intensity of S-standard base frame system : 3M

item	base frame
Banding stress(kg/cm²) σ = Mmax / Z	0.213×100,000 / 20.3 = 1,049
Shearing stress(kg/cm²) τ = S×Q / (b×I)	0.638×1,000×45.6 / (0.4×123.9) = 587

• Stress intensity of S-standard base frame system : 5M

item	base frame
Banding stress(kg/cm²) σ = Mmax / Z	0.354×100,000 / 36.2 = 978
Shearing stress(kg/cm²) τ = S×Q / (b×I)	1,063×1,000×83.9 / (0.45×298.5) = 664



• Result

height	item	S-standard base frame	Result
3m	Banding stress(kg/cm²)	1,049	allowable stress(1,200) ■ O.K
	Shearing stress(kg/cm²)	587	allowable stress(680) ■ O.K
5m	Banding stress(kg/cm²)	978	allowable stress(1,200) ■ O.K
	Banding stress(kg/cm²)	664	allowable stress(680) ■ O.K

Installation Conditions and Design Standard of Sectional GRP Water Tank

Intensity and Endurance

Section	Design Standard
Hydrostatic Pressure	water pressure reinforcement 6 times standard Transformation rate in filled up with water : Less than 1% form Water tank Height
Wind Force	Less than 60m/sec
Earthquake Force	Horizon intensity kh = 1/3G
Snow load	60Kg/㎡, Snow fall less than 30cm
Illumination Rate	Less than 0.1%
Out-fit Force	No leakage under condition of vertical 100Kg after install of 100A Fitting
Water Temperature	Usable temperature : Less than 30℃ / Limited temperature : Max 40℃
water quality	city water, well water : chlorine below 50mg/ℓ seawater : applicantion Externally Reinforced water tank (max 3m height)

Easy Capacity Design

Section	Available Design Conditions
Height	1.0 ~ 6.0 M
Capacity	1 ~ 5,000 ton
Shape	Square, ㄱ Shape, ㄷ Shape, ㅁ Shape etc.

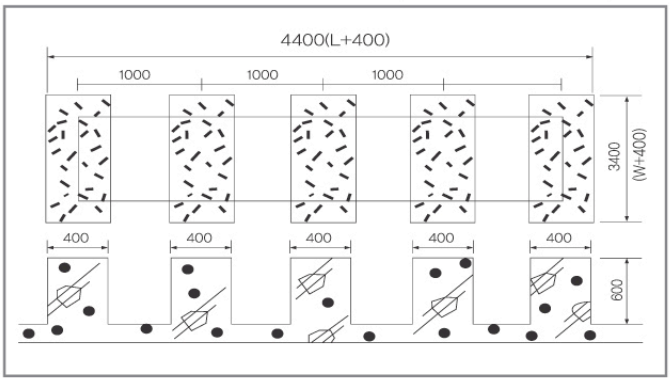
Heat Insulation

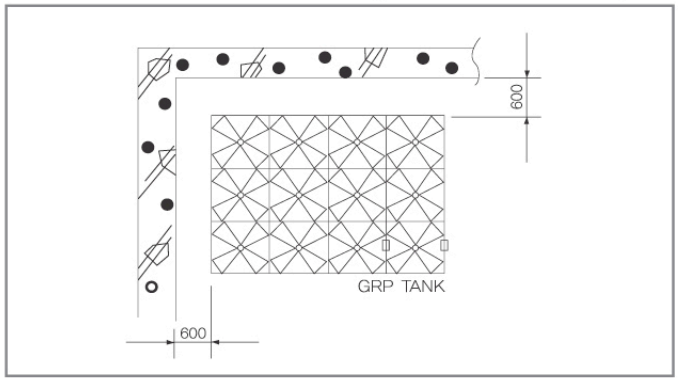
Division	Thermal Conduction Kcal/mhr ℃	
	Single Layer Type	Insulation Type
Steel, STS	37	37
GRP	0.15(Over 370 times)	0.017

Installation Standard(Pad and Space)

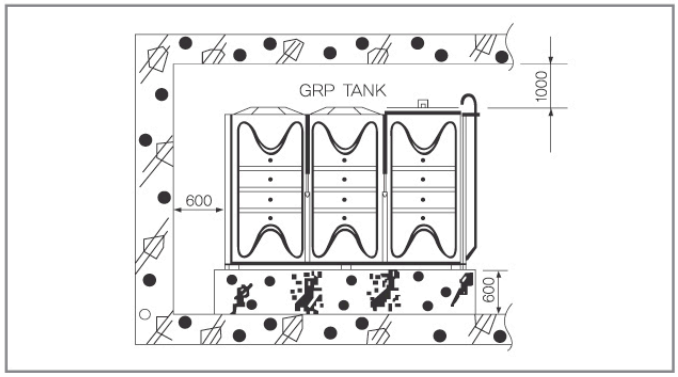
Standard of Base Concrete PAD Installation and Space

- For maintenance of GRP tank, it needs extra space at least 600mm from wall and 1,000mm from ceiling.





Width	Over 400mm
Height	Over 600mm (Base Frame Include)
Space	less than MAX 1M
Outer Dimension	W, L + 400mm
Horizontal Degree	Less than 1/500



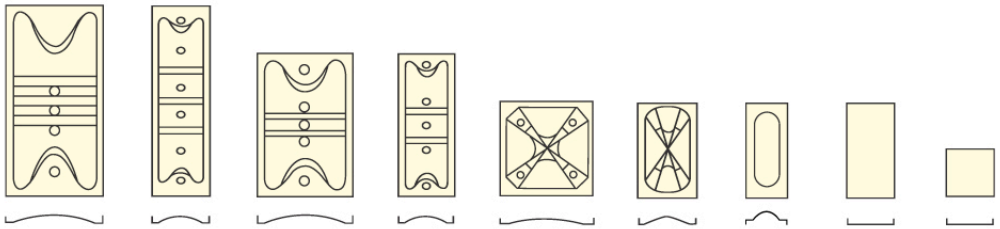
Panel Physical Properties

item	Unit	Physical Properties	Test Method
Specific Gravity (23℃/ 23℃)		1.8	KS M 3016:2006(A)
Tensile Strength	MPa	100~110	KS F 4811:2005
Bending Strength	MPa	190~200	KS F 4811:2005
Elastic Modules in Band	GPa	10~16	KS F 4811:2005
Barcol Hardness	-	50~60	KS F 4811:2005
Compression Strength	MPa	100	KS M 3015:2003
Water Absorption Rate	%	Below 0.05	KS F 4811:2005
Impact Strength (IZOD)	J/m	1,055	KS M 3015:2003
Glass Fiber Content	%	MIN 32.7	KS F 4811:2005

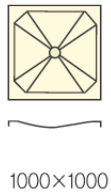
item	Unit	Physical Properties	Test Method
Liquefaction Test (Turbidness)	Degree	Below 0.1	KS F 4811:2005
Liquefaction Test (Chromaticity)	Degree	Below 1	KS F 4811:2005
Thermal Expansion Co - Efficient	1/℃	1.04×10^{-5}/℃	KS M 3015:2003
Thermal Conductivity	Kcal/m.hr.℃	0.017	KS L 9016:1995 (Means of the heat flow meter apparatus)
Light Transmittance		0.00%	KS M 4811:2005
Toxicity		NIL	KS M 4811:2005
Micro Biological Growth		NIL	KS M 4811:2005
PH(25℃)		7.6	KS M 4811:2005

GRP Panel Type and Size

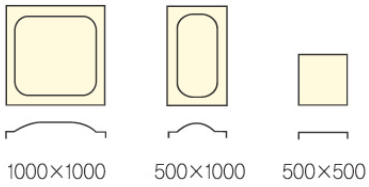
Wall Panel



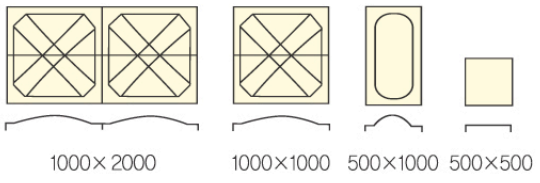
Drain Panel



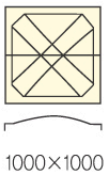
Bottom Panel



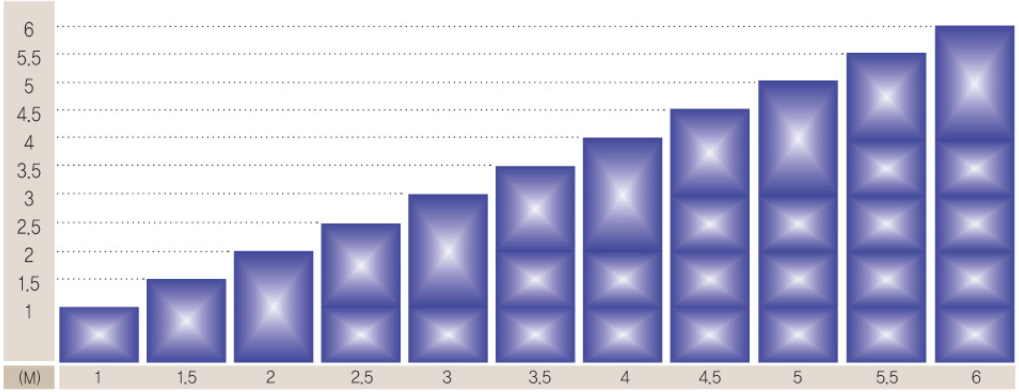
Roof Panel



Manhole Panel



GRP Panel Composition by Height

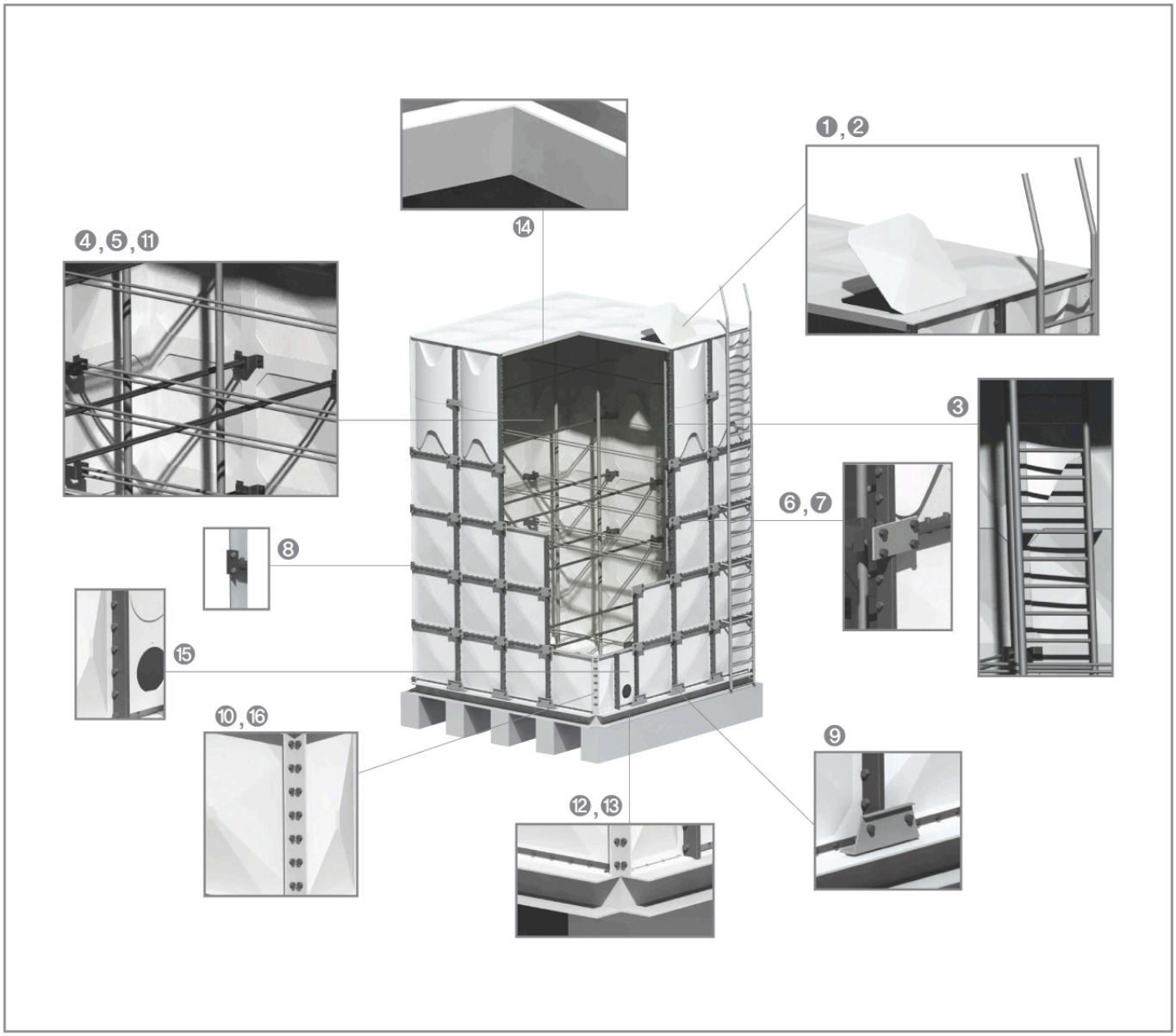


SUNG IL Sectional GRP Water Tank use limited space efficiently with several type and size panels.
Sectional GRP Water Tank can be easily installed even in a confined space.

※Externally Reinforced System : less than 5m

Internally Reinforced System

- It is possible that various capacity' s design and flexible space should be used by GRP panels standardized
- Excellent watertightness, hygienic conditions and non-leakage applied internally reinforced stay(Stainless)



No.	Name	Material
1.	Manhole panel	GRP
2.	External ladder	SS41(HDG)
3.	Internal ladder	Pultrusion (FRP)
4.	Internal Tie Rod	STS (Powder coating) or STS 316
5.	Internal bracket	STS (Powder coating) or STS 316
6.	External reinforced bar	SS41(HDG)
7.	External bracket	SS41(HDG, Fixing cross part)
8.	Corner bracket	SS41(HDG)
9.	Bottom bracket	SS41(HDG)
10.	Corner frame	SS41(HDG)

No.	Name	Material
11.	Roof support pipe	Pultrusion (FRP) (MIN 4.5m height)
12.	Base frame	SS41 (HDG)
13.	Bolts and Nuts	Inside: STS(Powder coating), Zinc Hot Dip Galvanized+PVC cap(Roof Panel)
		Outside: Zinc Hot Dip Galvanized Steel + PVC cap
		Connection : Rubber Cap + Zinc Hot Dip Galvanized
		Size : M10,12,14
14.	Sealing Tape	PVC Foam(Maintain water_proof with flexibility)
15.	Water inspection window	GRP
16.	Panel	GRP

Features of Internally Reinforced System

Excellent Hygienic Conditions

- Minimized rust appearance of roof-sectional stainless parts inner Water Tank in accordance with basical options that are internally reinforced stays and brackets with epoxy coating.
- Prevented rust appearance of Chlorine Gas through the assembly bolts added bolt-caps of roof section inner Water Tank

Outstanding View

- Prevented white peril or rust appearance through external assembly bolts added bolt-caps of Water Tank, and outstanding view

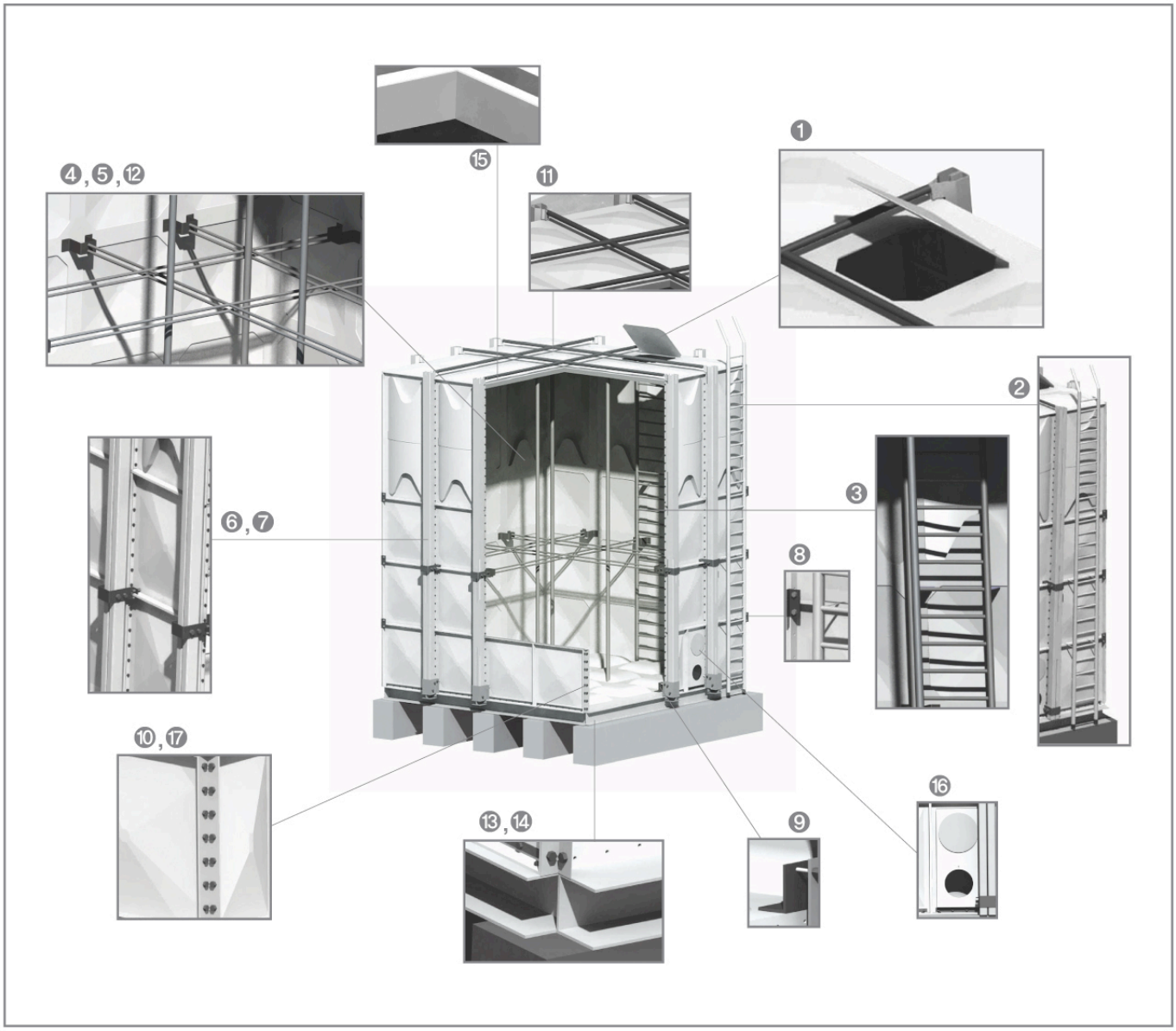
Easy to Assembly

- Easy to assembly through internal and external optimized options of reinforced system.

Best Structure Stability

- SUNG IL CO., LTD's internally Reinforced System is verified structure stability of water tanks which have built in domestic and international sites for years.

Externally Reinforced System



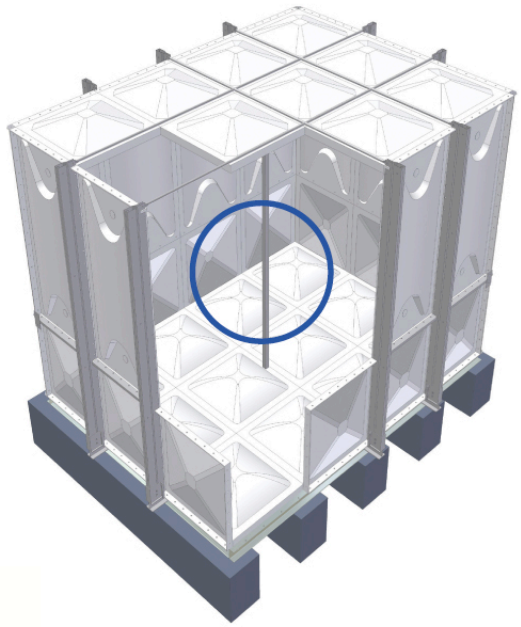
No.	Name	Material
1.	Manhole panel	GRP
2.	External ladder	SS41 (HDG)
3.	Internal ladder	Pultrusion (FRP)
4.	Internal Tie Rod	STS (Powder coating) or STS 316
5.	Internal bracket	STS (Powder coating) or STS 316
6.	External Pair Frame	SS41 (HDG)
7.	External bracket	SS41 (HDG, Fixing cross part)
8.	Corner bracket	SS41 (HDG)
9.	Bottom bracket	SS41 (HDG)
10.	Corner frame	SS41 (HDG)

No.	Name	Material
11.	External support pipe	SS41 (HDG)
12.	Roof support pipe	Pultrusion (FRP) (MIN 4.5m height)
13.	Base frame	SS41 (HDG)
14.	Bolts and Nuts	Inside: STS(Powder coating), Zinc Hot Dip Galvanized+PVC cap(Roof Panel)
		Outside: Zinc Hot Dip Galvanized Steel + PVC cap
		Connection : Rubber Cap + Zinc Hot Dip Galvanized
		Size : M10,12,14
15.	Sealing Tape	PVC Foam(Maintain water_proof with flexibility)
16.	Water inspection window	GRP
17.	Panel	GRP

Features of Externally Reinforced System

Externally Reinforced System

No existense internal
Tie Rod
(water tank height : 1.5~4m)



Installed Internal Tie Rod
in 2m height
(water tank height : 4.5m ~ 5m)

Outstanding of Externally Reinforced Water Tank

- To minimize rust appearance inner Water Tank
  (No metalic parts inside of water tank less than 4mH)

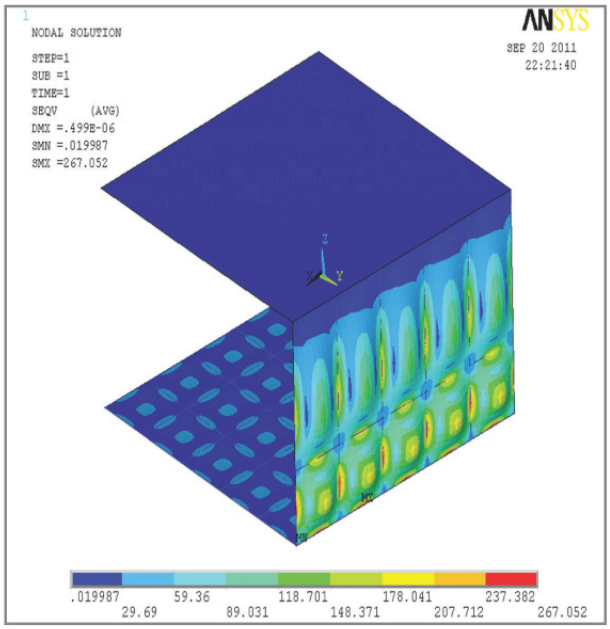
- 4.5~5m Roof section(Chlorine GAS stay)
  Removing the reason for rust appearance

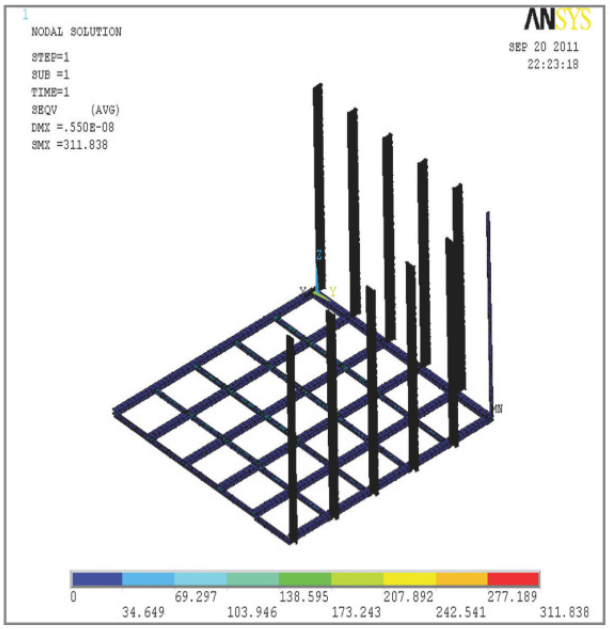
- Easy to maintenance cleaning, through
  optimization of inside parts

• Location : Head office water tank
• Size(M) : 3 X 4 X 5h

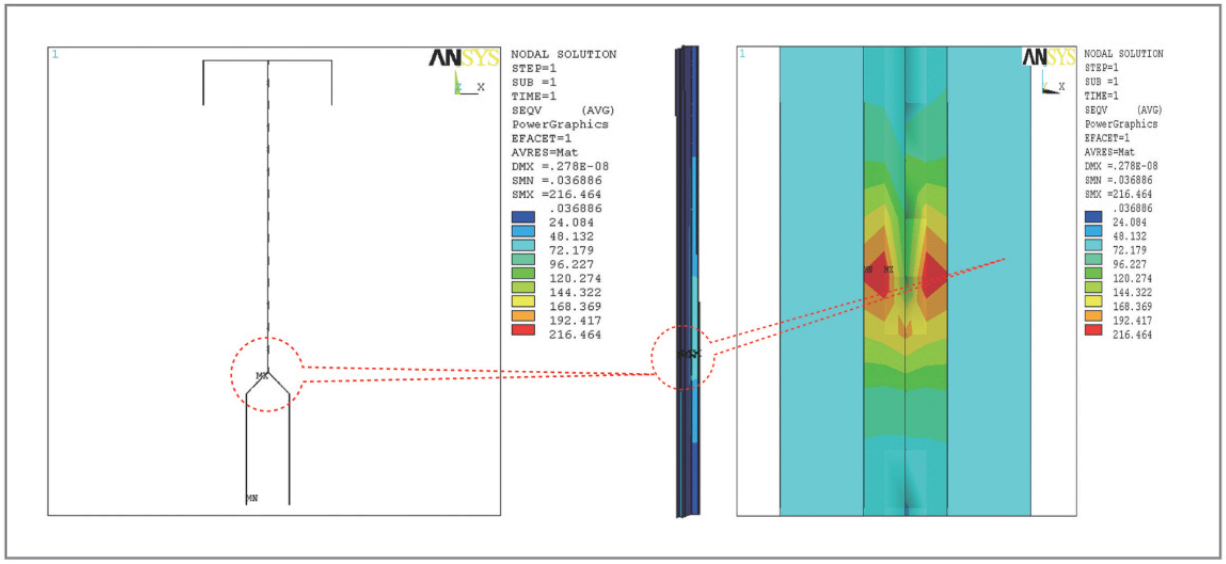
Externally Reinforced System Structural Analysis

FEM - Water Tank Height (3M-75m³)





FEM - External Pair Frame (3M-75m³)



MODEL	MATERIAL	STRESS(MPa)	YIELD STRESS(MPa)	SAFETY FACTOR	RESULT
Pair Frame	SS41(HDG)	216	240	0.9	OK

Externally Reinforced System

Externally Reinforced System for Partition Type

Externally Reinforced Water Tank

Partition Type Water Tank

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

Special feature

- 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 (Ex. fire fighting).

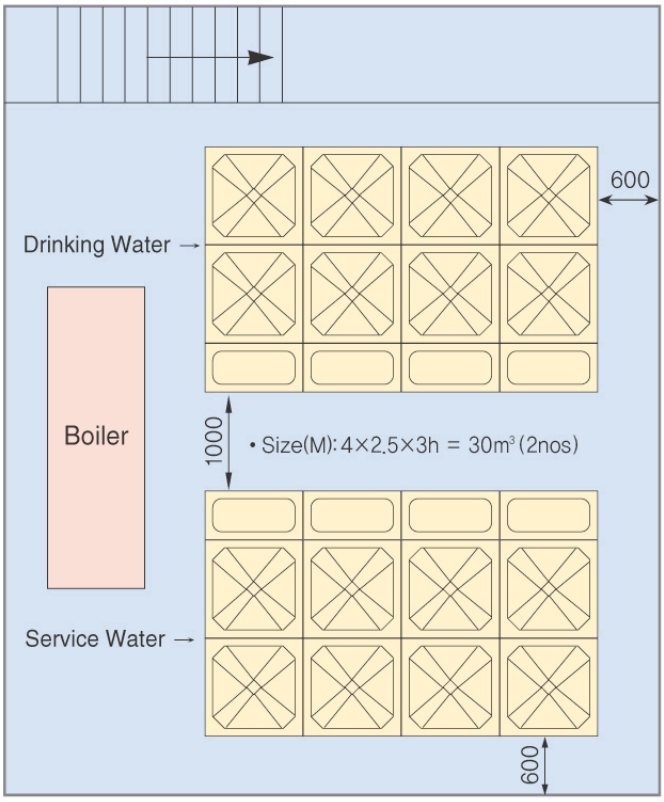
- Easy Maintenance

It is convenient for maintenance, because two tanks can be installed as one unit.

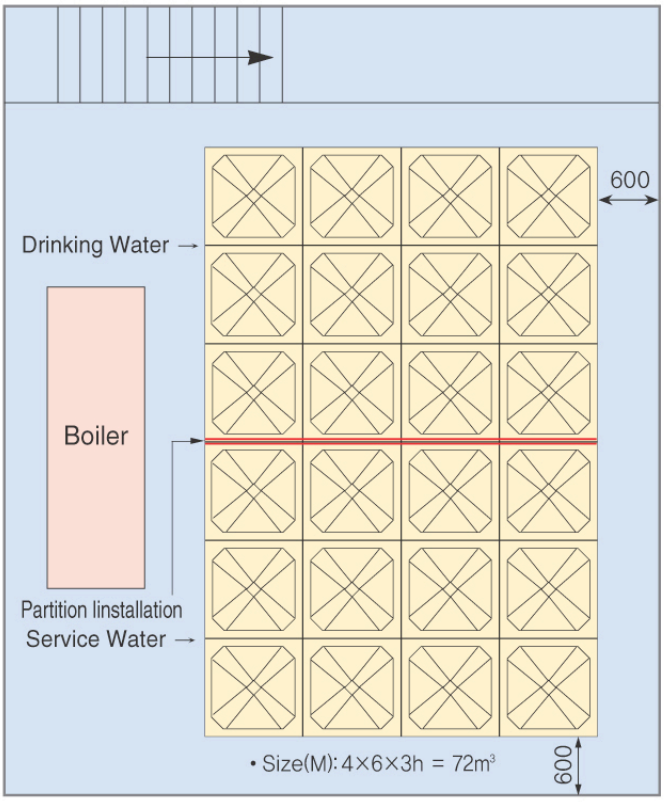
- Cost effectiveness

The cost and installation of 1 partition tank is cheaper than 2 separate tanks.

Partition Installation



(Without Partition Type)



(Partition Type)

Effect for Partition Water Tank System

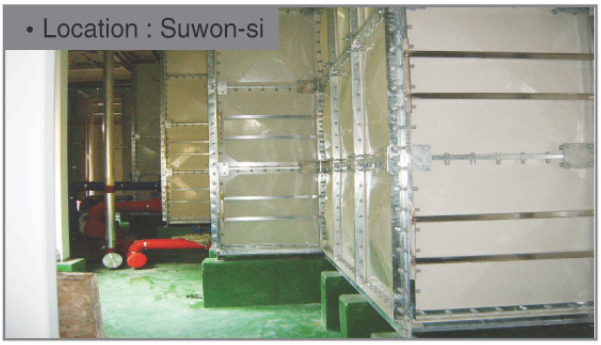
- If tanks for two different uses are needed in a confined area or boiler room, a 72 ton partition type tank can be installed to use half for drinking water, and half for service water. If separate tanks are installed, however, you have to installed two tanks with a maximum of 30 tons, because you need to have 1 meter distance between tanks for maintenance and operating space.

Korea

• Location : Mt. Geumgang Golf Course

• Location : Cheonan Industrial Complex Reservoir

• Location : Suwon-si



• Location : Gimhae-si Hyundai I-Park

Overseas

• Location : Vladivostok

• Location : Iran

• Location : Abu Dhabi

• Location : Australia

Sectional GRP Water Tank Installation Processing

- Low installation cost and easy to install by several type and size panels


Base Concrete PAD


Bottom Panel Assembly


Wall Panel Assembly1


Wall Panel Assembly2


Roof Panel Assembly


GRP Water Tank

Installation and Caution

1) Customers are requested to make foundation pad construction according to the designed specifications and the strength of the side.
2) Check the evenness of foundation pad and the flatness of base material.
3) Check rust of the external reinforced material and any bolts and nuts, their tightness.
4) Check installed state of the external ladders and water level gauge.
5) Check bending of the water tank wall panel(maximum up to 1% of water tank height) and check skewness of the water tank.
6) Check a corrosion inhibitor coating on the internal reinforced material and bolts tightness.
7) Check drooping the internal reinforced stay and check assembled state the internal bracket.
8) Check assembled state of the internal ladder and roof supports(PVC pipe)
9) Check the size of socket for plumbing will be installed.
10) Check assembled state of a socket for plumbing.
11) After the socket for plumbing are in place, the plumbing and heat insulation must be done by customer.

Maintenance Control

- To keep the tank clean and ensure its safe use, please perform the following inspection and maintenance work.
- SUNG IL GRP Panel tanks are designed and manufactured for long-term service. Maintenance and inspection must be conducted to secure hygienic and long life.To facilitate easy and safe maintenance and inspection, a proper space must be secured around water tanks.

Maintenance Control

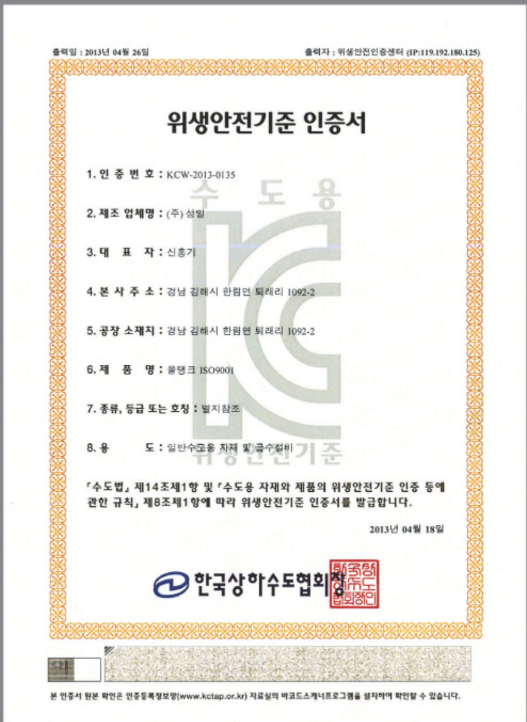
1) Caution the damage to the water tank from outside shock.
2) Do not use the GRP water tank for other unapproved purpose.
   (For example ″chemical storage tank″)
3) Do not dismantle internal components or change it to other components without official approval.
4) Prohibit to install unapproved components or non-consent equipment.
5) Check the water level gage at least one time per a month.
6) Keep the 80% water level of the water tank height.
7) Clean the inner side of water tank at least two time per a year.
8) In case of partition water tank system, keep the 50% water level of the water tank height in the opposite side, as cleaning.
9) Do not use any organic solvent such thinner, acetone, chlorine bleach when cleaning inner side of water tank and recommend with soft material.

Maintenance item

Maintenance item	Interval	Remarks
Water leakage and deformation of the tank	Once a month	If the water tank leaks or deformed immediately contact the local sales representatives.
Turbid water	Once a month	Check the inner parts of the tank, the outlet and the other places for turbid water.
Manhole cover	Once a month	Make sure that the manhole cover is completely shut. Always keep it locked.
Looseness of the bolts and nuts	Once every six month	Retighten any loose bolts and nuts.
Internal & external pressure other than hydrostatic pressure	Once a month	If any pressure other than hydrostatic pressure applied to the tank, immediately return the tank to its normal state.

Certificates for GRP Water Tank

GRP water tank certificates and test reports



출력일 : 2013년 04월 26일　　출력자 : 위생안전인증센터 (IP:119.192.180.125)

위생안전기준 인증서

1. 인 증 번 호 : KCW-2013-0135
2. 제조 업체명 : (주) 성일
3. 대 표 자 : 신홍기
4. 본 사 주 소 : 경남 김해시 한림면 퇴래리 1092-2
5. 공장 소재지 : 경남 김해시 한림면 퇴래리 1092-2
6. 제 품 명 : 물탱크 ISO9001
7. 종류, 등급 또는 호칭 : 별지참조
8. 용 도 : 일반수도용 자재 및 급수설비

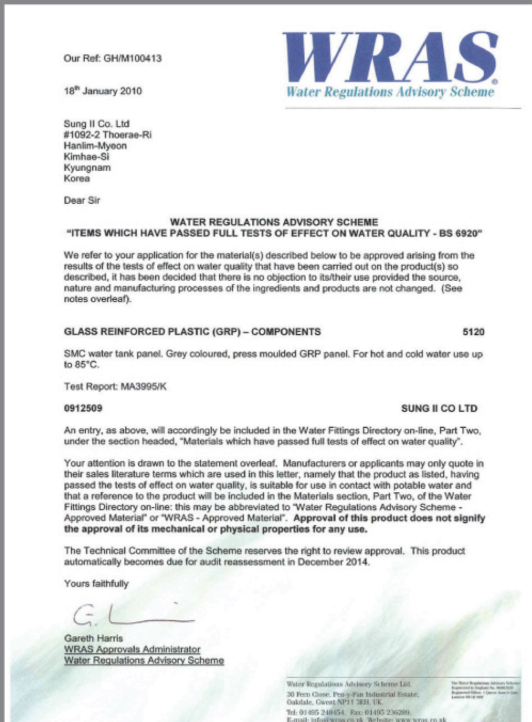
「수도법」 제14조제1항 및 「수도용 자재와 제품의 위생안전기준 인증 등에 관한 규칙」 제8조제1항에 따라 위생안전기준 인증서를 발급합니다.

2013년 04월 18일

한국상하수도협회장

본 인증서 원본 확인은 인증등록정보망(www.kctap.or.kr) 자료실의 바코드스캐너프로그램을 설치하여 확인할 수 있습니다.

Korea Certificate for water tank



WRAS
Water Regulations Advisory Scheme

Our Ref: GH/M100413

18th January 2010

Sung Il Co. Ltd
#1092-2 Thoerae-Ri
Hanlim-Myeon
Kimhae-Si
Kyungnam
Korea

Dear Sir

WATER REGULATIONS ADVISORY SCHEME
"ITEMS WHICH HAVE PASSED FULL TESTS OF EFFECT ON WATER QUALITY - BS 6920"

We refer to your application for the material(s) described below to be approved arising from the results of the tests of effect on water quality that have been carried out on the product(s) so described, it has been decided that there is no objection to its/their use provided the source, nature and manufacturing processes of the ingredients and products are not changed. (See notes overleaf).

GLASS REINFORCED PLASTIC (GRP) – COMPONENTS　　5120

SMC water tank panel. Grey coloured, press moulded GRP panel. For hot and cold water use up to 85°C.

Test Report: MA3995/K

0912509　　SUNG Il CO LTD

An entry, as above, will accordingly be included in the Water Fittings Directory on-line, Part Two, under the section headed, "Materials which have passed full tests of effect on water quality".

Your attention is drawn to the statement overleaf. Manufacturers or applicants may only quote in their sales literature terms which are used in this letter, namely that the product as listed, having passed the tests of effect on water quality, is suitable for use in contact with potable water and that a reference to the product will be included in the Materials section, Part Two, of the Water Fittings Directory on-line: this may be abbreviated to "Water Regulations Advisory Scheme - Approved Material" or "WRAS - Approved Material". **Approval of this product does not signify the approval of its mechanical or physical properties for any use.**

The Technical Committee of the Scheme reserves the right to review approval. This product automatically becomes due for audit reassessment in December 2014.

Yours faithfully

Gareth Harris
WRAS Approvals Administrator
Water Regulations Advisory Scheme

Water Regulations Advisory Scheme Ltd.
30 Fern Close, Pen-y-Fan Industrial Estate,
Oakdale, Gwent NP11 3EH, UK.
Tel: 01495 248454. Fax: 01495 236289.
E-mail: info@wras.co.uk Website: www.wras.co.uk

WRAS Certificate(U.K)

ZERTIFIKAT ◆ CERTIFICATE ◆ 認証書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

TÜV SÜD
PSB Singapore

TEST CERTIFICATE

This Certificate is issued to

Hydro Dynamic Engineering Pte Ltd
Blk 209, New Upper Changi Road
#04-631
Singapore 460209

FOR

Product: "GRP" Water Tank

Brand/Model: SUNGIL

Detail: -

Specification: SS 245 : 1995, SS 375 : 2001, AS/NZS 4020 : 2005 (Appendix H)

Test Report: 54S071737corr1/1/KSY,57S072105-01-SLE,57S074614-01-SLE, 57S074614-02-SLE,54S071696/OKB,57S076171-EO,OM004168(NMC) & S08MEC05438/OKB

Summary

A sample of product submitted was tested and found to comply with the Test requirements of the above standard(s).

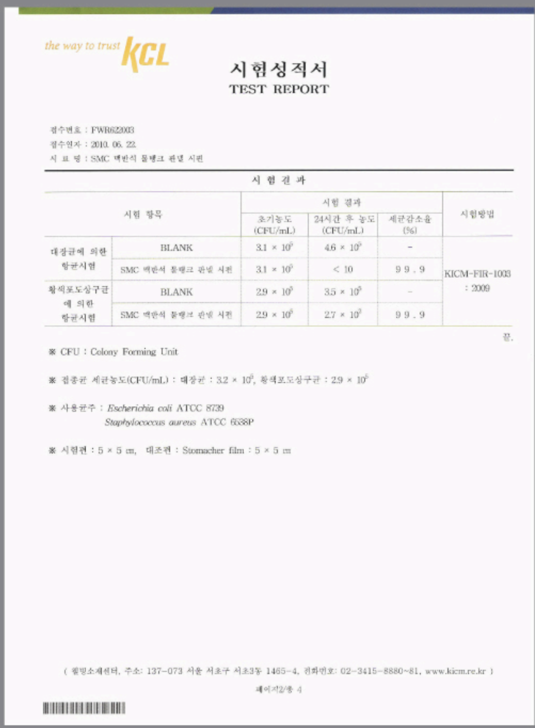
Vice President (MEC)
TÜV SÜD PSB Pte Ltd

Certificate No:	Date of Original Issue:	Date of Last Revision:	Date of Expiry:
02156	01 Oct 2008	-	31 Oct 2010

This Certificate is part of a full report and should be read in conjunction with it. This Certificate remains the property of TÜV SÜD PSB Pte Ltd and shall be returned upon request. The use of this Certificate is subjected to the terms and conditions of the Test Certification Scheme.
Note: This Certificate is not a Certificate of Conformity.

TÜV SÜD PSB Pte Ltd • 1 Science Park Drive • Singapore 118221

PSB Test Certificate(Singapore)



the way to trust KCL

시험성적서
TEST REPORT

접수번호 : FWR622003
접수일자 : 2010. 06. 22.
시 료 명 : SMC 백반식 물탱크 판넬 시편

시 험 결 과

시험 항목		초기농도 (CFU/mL)	24시간 후 농도 (CFU/mL)	세균감소율 (%)	시험방법
대장균에 의한 항균시험	BLANK	3.1×10^5	4.6×10^5	-	KICM-FIR-1003 : 2009
	SMC 백반식 물탱크 판넬 시편	3.1×10^5	< 10	99.9	
황색포도상구균에 의한 항균시험	BLANK	2.9×10^5	3.5×10^5	-	
	SMC 백반식 물탱크 판넬 시편	2.9×10^5	2.7×10^2	99.9	

끝.

※ CFU : Colony Forming Unit

※ 접종균 세균농도(CFU/mL) : 대장균 : 3.2×10^5, 황색포도상구균 : 2.9×10^5

※ 사용균주 : *Escherichia coli* ATCC 8739
Staphylococcus aureus ATCC 6538P

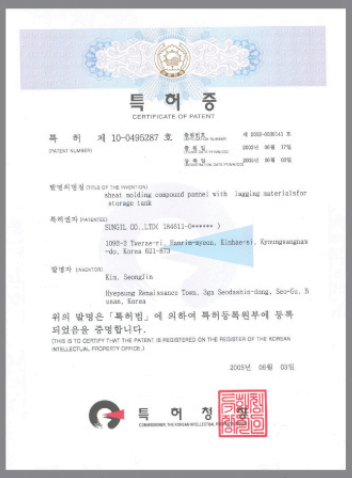
※ 시험편 : 5 × 5 cm, 대조편 : Stomacher film : 5 × 5 cm

(생활소재센터, 주소: 137-073 서울 서초구 서초3동 1465-4, 전화번호: 02-3415-8880~81, www.kicm.re.kr)

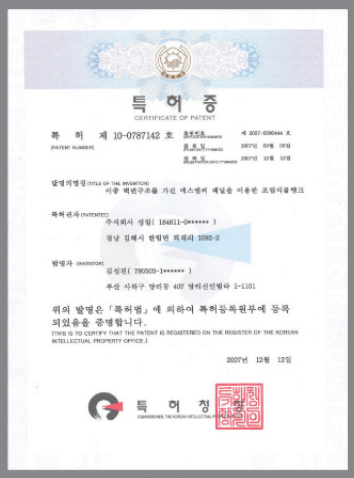
페이지2/총 4

Elvan Test report(Korea)

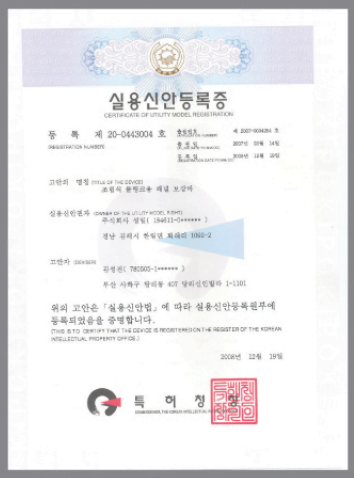
Petents for GRP Water Tank Related in Korea



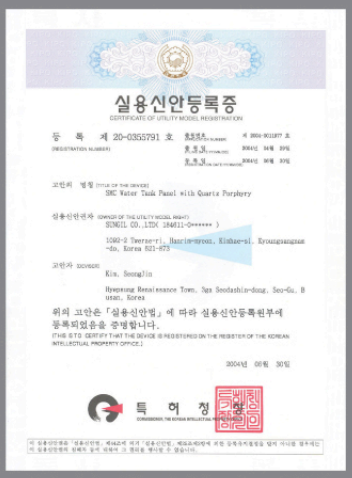
Patent for Heat Insulation GRP Panel



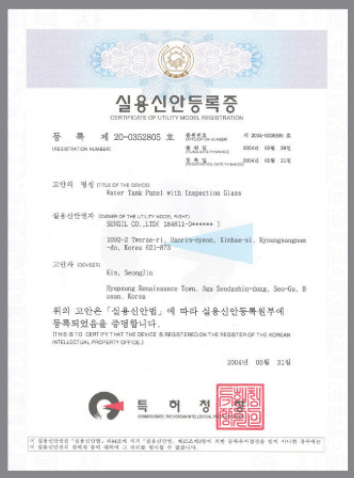
Patent for GRP Panel with a Double plate structure



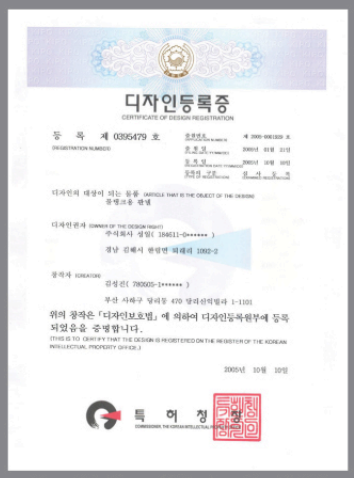
Patent for a Strengthening Bar of Water Tank



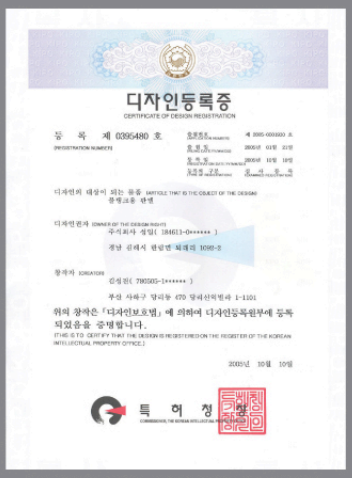
Patent for Quartz Prophyry GRP Panel



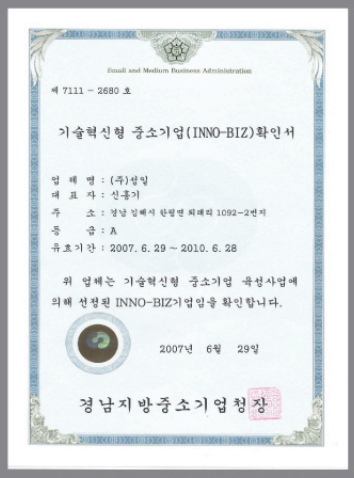
Patent for Inspection Window GRP Panel



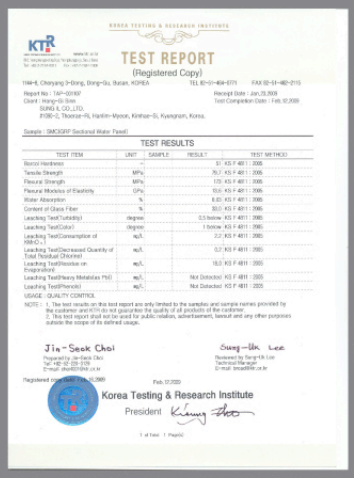
Registration of Design for GRP 1X1 Wall Panel



Registration of Design for GRP 2X1 Wall Panel



Confirmation of INNO-BIZ from kyungnam SMBA



GRP PANEL Physical Test Report

Head Office View

SUNG IL

– GRP Building Materials Company –

SUNG IL CO., LTD.

20, Gimhae-daero 1031 Beon-gil, Hallim-myeon,
Gimhae-si, Gyeongsangnam-do, Korea
Tel.82-55-346-1490~6 Fax.82-55-346-1498
Homepage : www.sungilgrp.co.kr
E-mail : sungil@sungilgrp.co.kr

PRIENTED 2014. 12.15