



## GRP/FRP SECTIONAL WATERTANK

The logo for PIPECO INDUSTRIES features a stylized geometric icon above the company name. The word "PIPECO" is in a large, bold, white sans-serif font, and "INDUSTRIES" is in a smaller, white, spaced-out sans-serif font below it.

**PIPECO  
INDUSTRIES**

PIPECO

PIPECO

PIPECO



## Pipeco GRP Sectional Water Tank

PIPECO TANKS (KOREA) is a company that specializes in the development and production of GRP Water tanks. Located in Gimhae, Korea our large-scale plant and research center are dedicated to ongoing development and production to lead the industry.

We are specialized in manufacturing and installing GRP tanks and other GRP Products. Our advanced technology has received ISO, WARAS (UK), PSB (SINGAPORE) quality certificates. we have expanded our presence in more than 35 countries and 1 Tank getting completely installed every 24 hours

In addition, with a corporate ideology rooted in placing our customers first, we base our Management and Product Development upon this the foundation of trust, contributing to technological innovation, quality improvement, and added enhancement.

To carry out such customer-oriented management, we constantly keep in mind the priorities of stringent quality management and environmental protection. In the following, we adopted ISO product quality and environmental management standards from the very beginning, and our efforts to Growth as an environmentally friendly company along with our customers are never-ending.

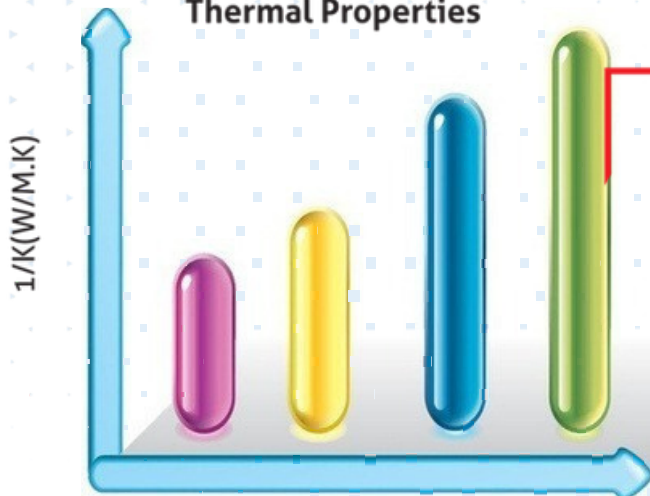
We ask for your continuing interest and support kindly share your requirements via email at [sales@pipecogroup.com](mailto:sales@pipecogroup.com)

## THERMAL CONDUCTIVITY, EXPANSION AND CONTRACTION

Non-insulated panels have 240 times less thermal conductivity than metal, ensuring stable temperature. Modular panels with low thermal coefficient and flexible food grade sealant ensure a leak-free design

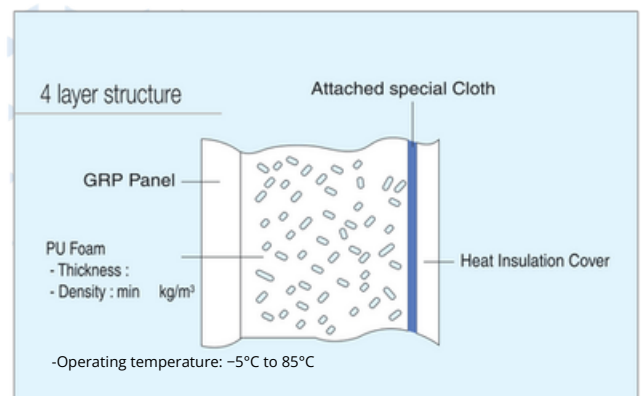


### Thermal Properties



### PROTECTION AGAINST UV RAYS

Excellent ultraviolet (UV) resistant characteristics and performance ensures high mechanical properties and weather resistance even after 35 years of use



During the time when the water temperature decrease from 85°C to -5 °C

# General Specifications

## STANDARD:

BS EN 13280:2001 and British Standard BS 7491 Part 3:1994

01

## MATERIALS:

Sheet Moulding Compound (SMC) consists of below specification Resin - PU Form Conforming to BS 3532 specification Fiber Glass - Low alkali fiberglass conforming to JIS R3411 to R3417 or BS 3396, BS 3496, and BS 3749 specifications.

02

## TESTING METHOD:

BS2782

03

## MANUFACTURING PROCESS:

Hot pressed SMC compression moulding

04

## TANK STRUCTURAL SUPPORT:

External : Hot Dipped Galvanised Steel  
Internal : SS316  
Roof Support : GRP Pipes

05

## SEALANT:

Non-toxic PVC Foam

06

## BOLT, NUTS, WASHERS:

External Standard : SS316 / SS304/HDG  
Internal Standard : SS316  
(In-contact with water)  
Roof : Standard : SS316 / SS304

07

## LADDER :

External Standard : Hot Dipped Galvanised Steel, 300mm width  
Internal : Standard GRP  
Optional : SS 304 and 316, 300mm width

08

## WATER LEVEL INDICATOR :

Standard : Direct Reading Clear Tube Type  
Optional : Reversed Reading Mechanical Ball Float Type (Cat & Mouse)

09

## NOZZLE PANEL :

Flat Panels will be provided on request

10

## EXTERNAL BRACED SYSTEM :

External : Hot Dipped Galvanized Steel Internal None  
(metal free inside, non-partitioned tank only)  
Roof Support : GRP Poles

11



## GRP Panel Type and Size

| Wall Panel |         |         |           |       |       |         |         |         |           |
|------------|---------|---------|-----------|-------|-------|---------|---------|---------|-----------|
|            |         |         |           |       |       |         |         |         |           |
| 1Mx2M      | 0.5Mx2M | 1Mx1.5M | 0.5Mx1.5M | 1Mx1M | 1Mx1M | 0.5Mx1M | 0.5Mx1M | 0.3Mx1M | 0.5Mx0.5M |

| Drain Panel | Base Panel |         |           | Roof Panel |       |         |           | Manway Panel |
|-------------|------------|---------|-----------|------------|-------|---------|-----------|--------------|
|             |            |         |           |            |       |         |           |              |
| 1Mx1M       | 1Mx1M      | 0.5Mx1M | 0.5Mx0.5M | 1Mx2M      | 1Mx1M | 0.5Mx1M | 0.5Mx0.5M | 1Mx1M        |

## GRP Panel Composition by Height

Height of water tank

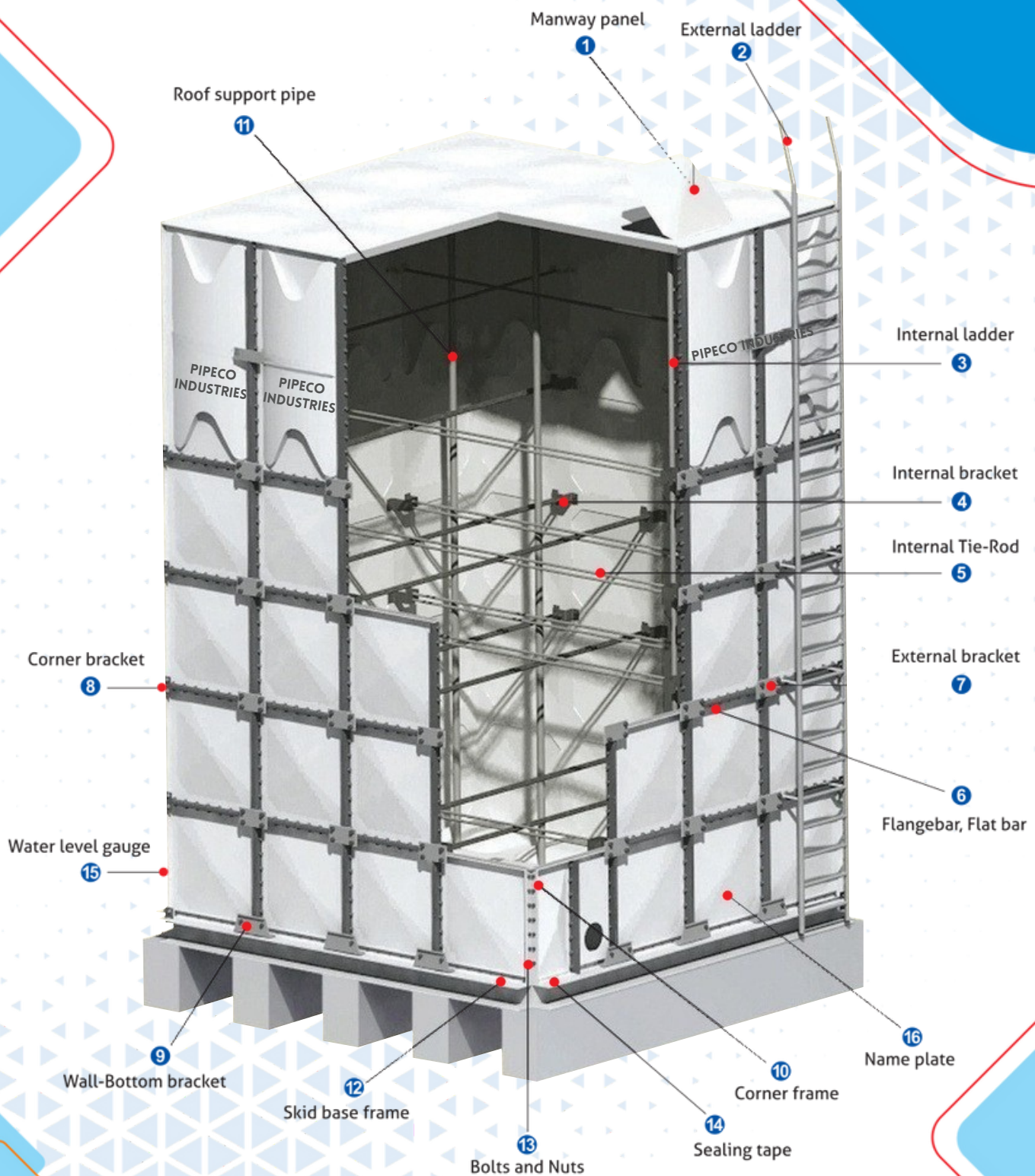
|        |       |        |       |         |       |         |        |         |         |          |          |
|--------|-------|--------|-------|---------|-------|---------|--------|---------|---------|----------|----------|
| 6.0m.H |       |        |       |         |       |         |        |         |         |          |          |
| 5.5m.H |       |        |       |         |       |         |        |         |         |          |          |
| 5.0m.H |       |        |       |         |       |         |        |         |         |          |          |
| 4.5m.H |       |        |       |         |       |         |        |         |         |          |          |
| 4.0m.H |       |        |       |         |       |         |        |         |         |          |          |
| 3.5m.H |       |        |       |         |       |         |        |         |         |          |          |
| 3.0m.H |       |        |       |         |       |         |        |         |         |          |          |
| 2.5m.H |       |        |       |         |       |         |        |         |         |          |          |
| 2.0m.H |       |        |       |         |       |         |        |         |         |          |          |
| 1.5m.H |       |        |       |         |       |         |        |         |         |          |          |
| 1.0m.H |       |        |       |         |       |         |        |         |         |          |          |
| 0.5m.H |       |        |       |         |       |         |        |         |         |          |          |
| 0m.H   |       |        |       |         |       |         |        |         |         |          |          |
|        | 1x1 E | 1x1.5D | 1x2 D | 1x1.5 D | 1x2 D | 1x1.5 D | 1x2 D  | 1x1.5 D | 1x2 D   | 1x1.5 D  | 1x2 D    |
|        |       |        |       | 1x1 C   | 1x1 B | 1x1 C   | 1x1 B  | 1x1 C   | 1x1 B   | 1x1 C    | 1x1 B    |
|        |       |        |       |         |       | 1x1 SA  | 1x1 SA |         |         |          |          |
|        |       |        |       |         |       |         |        | 1x1 IIA | 1x1 IIA | 1x1 IIA  | 1x1 IIA  |
|        |       |        |       |         |       |         |        |         |         | 1x1 IIIA | 1x1 IIIA |

|                          |            |   |   |   |    |    |     |     |      |      |      |
|--------------------------|------------|---|---|---|----|----|-----|-----|------|------|------|
| Grade of base panel      | E          | D | D | C | B  | SA | SA  | IIA | IIA  | IIIA | IIIA |
| Grade of drain panel     | C          | C | C | B | SA | SA | IIA | IIA | IIA  | IIIA | IIIA |
| Grade of wall-base panel | Flat,0.5X1 | D | B | B | B  | SA | SA  | IIA | IIA  | IIIA | IIIA |
|                          | Flat,1X1   | D | B | B | SA | SA | IIA | IIA | IIIA | IIIA | IIIA |

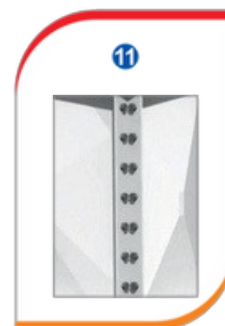
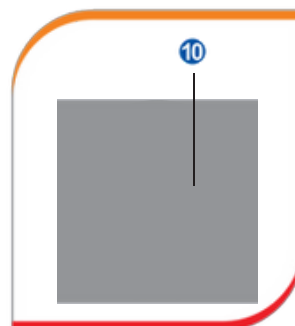
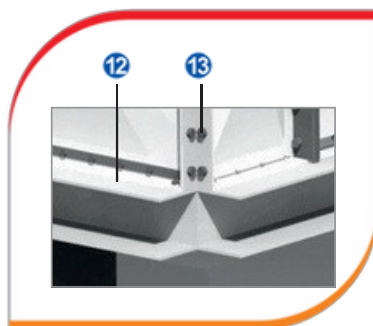
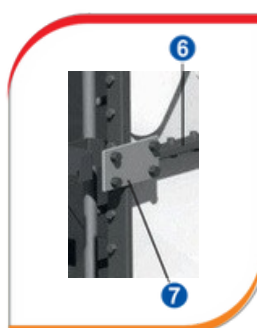
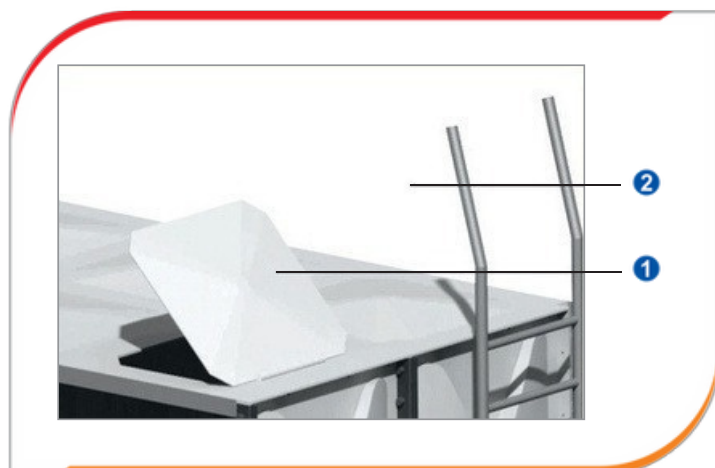
※ Current A grade→Unify to SA grade ※ Current IA grade→Unify to IIA grade

## Internally Reinforced System

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



## Internally Reinforced System

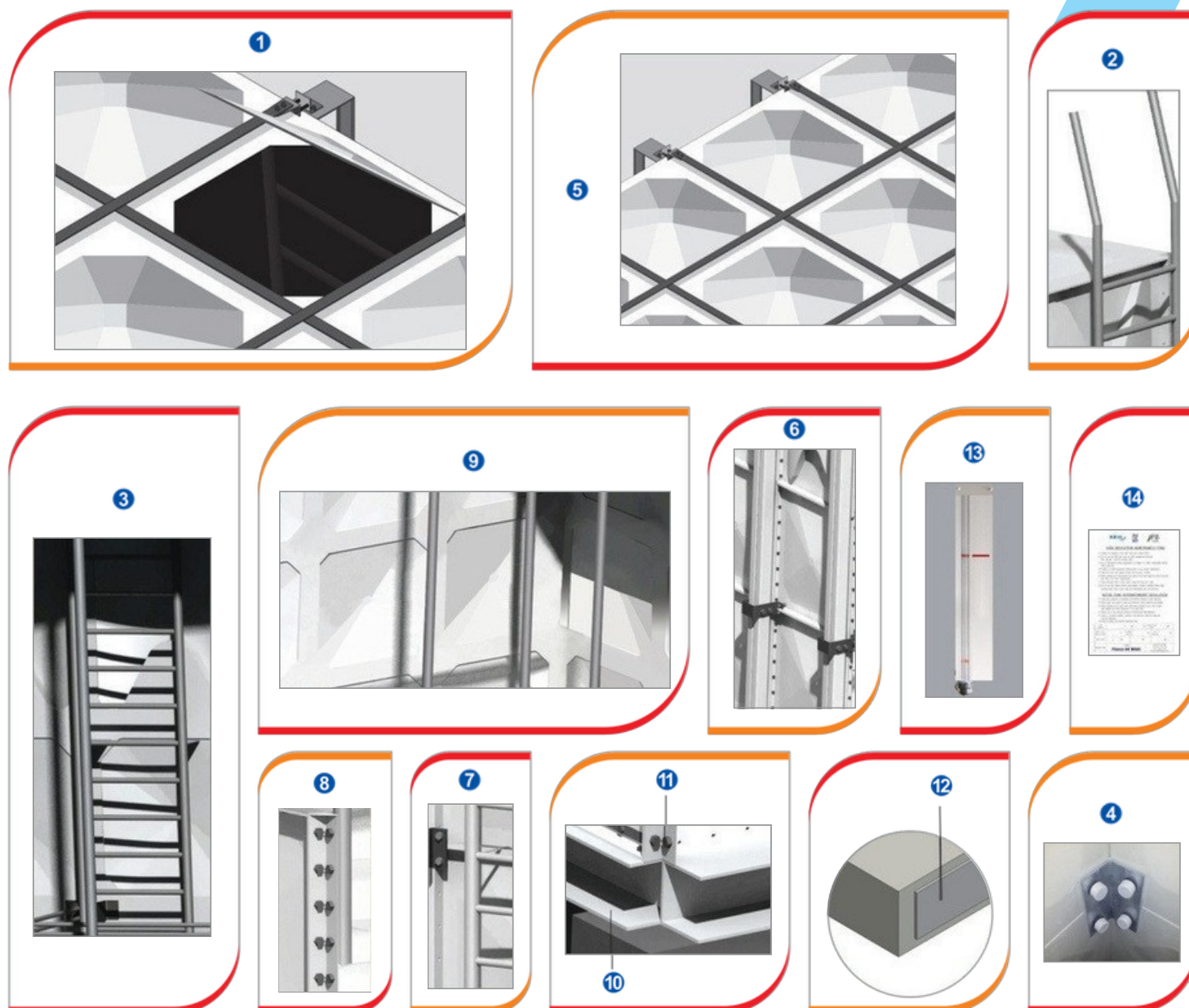


| No. | Name                | Material   | No. | Name              | Material                                             |
|-----|---------------------|------------|-----|-------------------|------------------------------------------------------|
| 1   | Manway panel        |            | 11  | Roof support pipe | GRP (Pultrusion)                                     |
| 2   | External ladder     | SS400(HDG) | 12  | Skid base frame   | SS400(HDG)                                           |
| 3   | Internal ladder     |            |     |                   | Internal : STS 316                                   |
| 4   | Internal bracket    | STS 316    |     |                   | Roof : STS 316                                       |
| 5   | Internal Tie-Rod    |            | 13  | Bolts and Nuts    | External : STS 316 / 304 / HDG                       |
| 6   | Flangebar, Flat bar |            |     |                   | Skid Base : HDG                                      |
| 7   | External bracket    |            | 14  | Sealing tape      | PVC Sealant+Butyl                                    |
| 8   | Corner bracket      | SS400(HDG) | 15  | Water level gauge | Aluminum Case+PC Clear Tube+Socket                   |
| 9   | Wall-Bottom bracket |            | 16  | Name plate        | Aluminum (Water tank safety management instructions) |
| 10  | Corner frame        |            |     |                   |                                                      |

## Externally Reinforced System



## Externally Reinforced System



| No. | Name                                 | Material         | No. | Name              | Material                                            |
|-----|--------------------------------------|------------------|-----|-------------------|-----------------------------------------------------|
| 1   | Manway panel                         | GRP              | 10  | Base frame        | SS400(HDG)                                          |
| 2   | External ladder                      | SS400(HDG)       | 11  | Bolts and Nuts    | Internal : STS 316                                  |
| 3   | Internal ladder                      | GRP (Pultrusion) |     |                   | Roof : STS 316                                      |
| 4   | Internal bracket                     | STS 316          |     |                   | External : STS 316                                  |
| 5   | Roof bar                             | SS400(HDG)       |     |                   | Skid Base : HDG                                     |
| 6   | External main bar                    | SS400(HDG)       | 12  | Sealing tape      | PVC Sealant+Butyl                                   |
| 7   | External bracket                     |                  | 13  | Water level gauge | Aluminum Case+PC Clear Tube+Socket                  |
| 8   | Corner bracket                       |                  | 14  | Name plate        | Aluminum(Water tank safety management instructions) |
| 9   | Roof support pipe : GRP (Pultrusion) |                  |     |                   |                                                     |

## Panel physical Properties

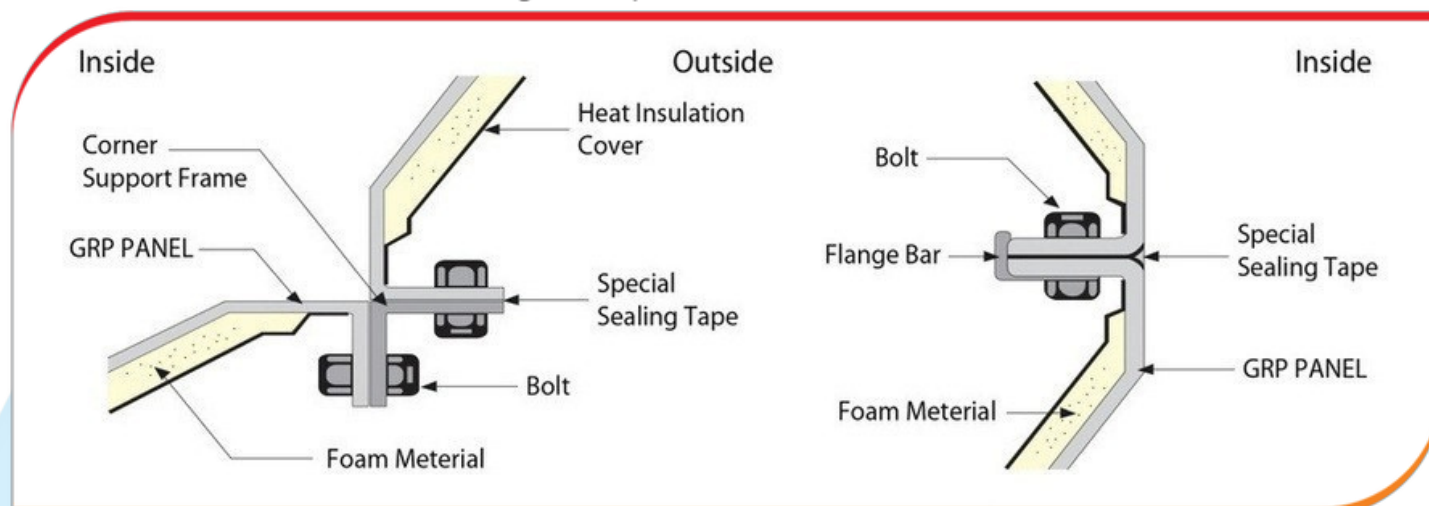
| TEST ITEM                                      | UNIT    | SAMPLE | RESULT     | TEST METHOD                                                     |
|------------------------------------------------|---------|--------|------------|-----------------------------------------------------------------|
| Specific Gravity (23°C/23°C)                   | -       | -      | 1,806      | ASTM D792-13(Test Method A)                                     |
| Water Absorption                               | %       | -      | 0.02       | ASTM D570-98(2010)e1 (24 h Immersion)                           |
| Tensile Strength                               | MPa     | -      | 115        | ASTM D638-14( *)                                                |
| Tensile Elastic Modulus                        | GPa     | -      | 17.5       | ASTM D638-14( *)                                                |
| Flexural Strength                              | MPa     | -      | 213        | ASTM D790-17(Procedure A)                                       |
| Flexural Elastic Modulus                       | GPa     | -      | 15.9       | ASTM D790-17(Procedure A)                                       |
| Shear Strength                                 | MPa     | -      | 114        | ASTM D732-17                                                    |
| Izod Impact Strength                           | J/m     | -      | 923        | ASTM D256-10e1(Test Method A)                                   |
| Compressive Strength                           | MPa     | -      | 234        | ASTM D695-15(**)                                                |
| Thermal Conductivity<br>[Mean Temperature 20°C | W/(m.k) | -      | 0.115      | KS L 9016 : 2010<br>(By means of the Heat Flow Meter Apparatus) |
| Thermal Conductivity<br>[Mean Temperature 20°C | W/(m.k) | -      | 0.024      | KS L 9016 : 2010<br>(By means of the Heat Flow Meter Apparatus) |
| Barcol Hardness                                | -       | -      | 53         | ASTM D2583-13a                                                  |
| Glass content                                  | %       | -      | over 42.9% | ASTM D2584-11                                                   |

## Stress Analysis of GRP Panel

GRP Water Tank panel is designed with special shape for maximizing safety against stress and deformation, so it has better structural strength than normal circle designed panel As GRP Water panel is manufactured by oil-hydraulic press under high temperature and high pressure, it maintains top water pressure strength and there is no dimensional deviation by temperature change.

## Excellent Heat Insulation

Drawing of the panel Joint Part / Corner Part



## Composition of Insulation Panel

Excellent insulation of GRP Material itself with Eco-friendly Polyurethane heat insulating material prevents freeze & water condensation.

There is non-woven fabric with excellent adhesion inside GRP insulated panel, ensuring shape stability of panel throughout longer time periods.

GRP insulated panel with 4 layer structure ensure excellent insulating effect

Thickness of insulated panel : 40 - 50 mm

## Strength & Durability

| Section              | Design Standard                                                                                                                 |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Hydrostatic Pressure | Water pressure reinforcement 6 times standard<br>Transformation rate in filled with water : Less than 1% from water tank height |
| Wind Force           | 60 m / sec                                                                                                                      |
| Earthquake Force     | Stable and safe till magnitude 5.0 (Over magnitude 5.0, it need additional reinforcement)                                       |
| Snow Load            | 60 Kg/m <sup>2</sup> , 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 with 70mm span support                               |
| Water Temperature    | Usable temperature : Less than 30° / Limited temperature : Max 70°                                                              |
| Water Quality        | Tap Water, Well Water : Chlorine below 50mg/L<br>Seawater : application Externally Reinforced water tank (max 3m height)        |
| Man Load             | 120 KGF                                                                                                                         |

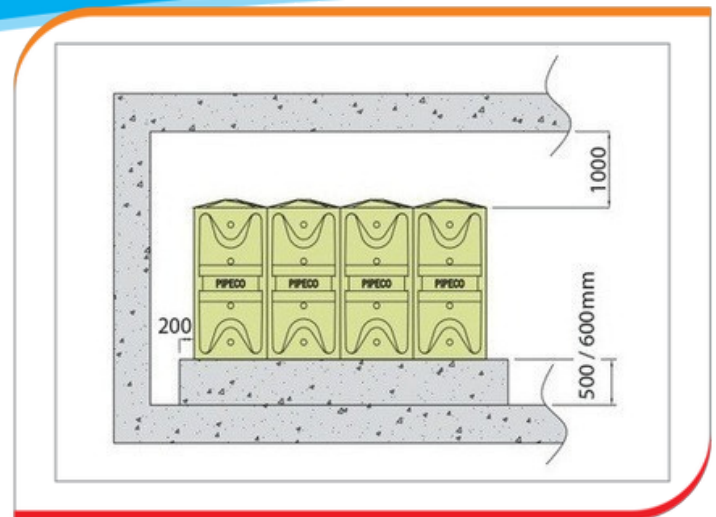
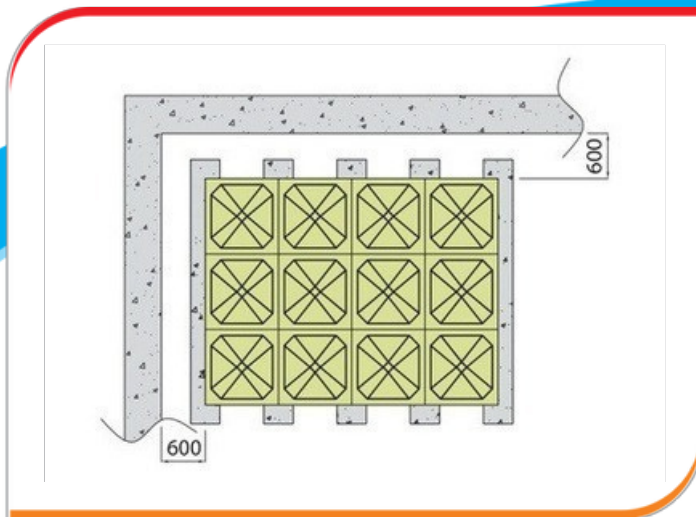
## Comparison with Other Types of Tanks

| Feature                 | GRP       | CONCRETE | PLASTIC | STEEL |
|-------------------------|-----------|----------|---------|-------|
| Hygiene & Water Quality | ✓ ✓       | —        | —       | ✗     |
| Flexibility             | ✓ ✓       | ✗        | ✗       | —     |
| Relocation              | ✓ ✓       | ✗        | ✗       | —     |
| Water Tightness         | ✓ ✓       | ✗        | ✓       | ✓     |
| Strength & Durability   | ✓ ✓       | —        | ✗       | —     |
| Easy & Fast Assembly    | ✓ ✓       | ✗        | —       | —     |
| Easy to Transportation  | ✓ ✓       | ✗        | ✗       | —     |
| Thermal Conductivity    | ✓ ✓       | ✓        | ✓       | ✗     |
| Drainage                | ✓ ✓       | —        | —       | ✓     |
| Value of Parameter      | Excellent | Good     | Average | Poor  |

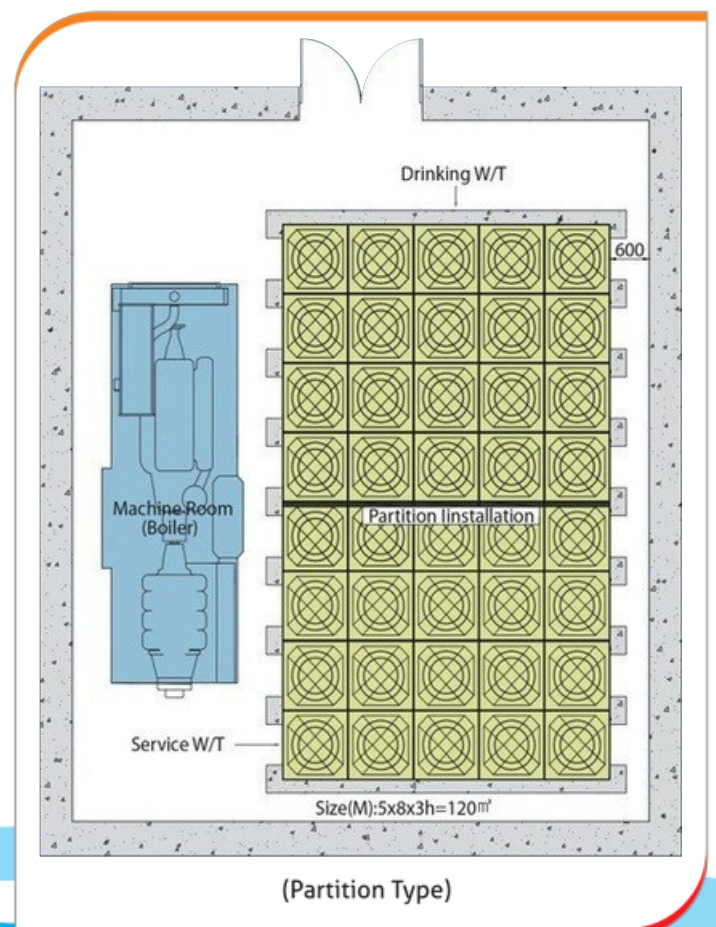
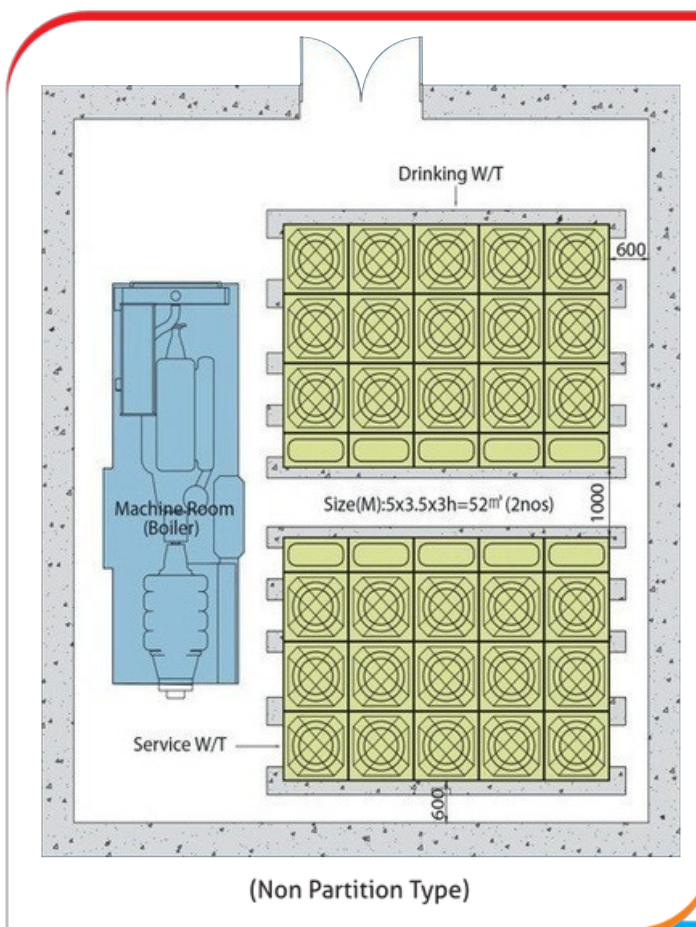
## Installation Space

### Standard of Base Concrete PAD Installation and Space

For maintenance of GRP tank, it need extra space at least 750mm to 1m from the wall and 1000mm from ceiling.



## Partition Installation





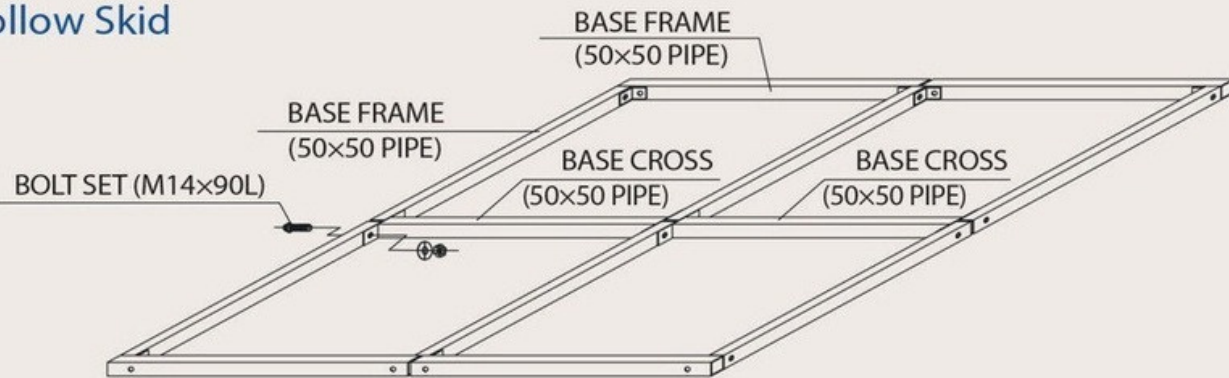
## Earthquake-Proof Skid Base System

Height of water tank 2.5mH

Height of water tank 4m

GRP Sectional Panel, Putting water to 85% of water tank height, Earthquake-Proof Strength 5.0

### Hollow Skid



### Result of skid base strength review (Safety Factor 2.0)

| Height | Contents   |            | Bending Stress(kg/cm <sup>2</sup> ) | Result | Deflection(cm)               | Result |
|--------|------------|------------|-------------------------------------|--------|------------------------------|--------|
| 2.5mH  | Base frame | Long term  | 1170 < 1600(Allowable value)        | O.K    | 0.15 < 0.25(Allowable value) | O.K    |
|        |            | Short term | 1340 < 2400(Allowable value)        | O.K    | 0.17 < 0.33(Allowable value) | O.K    |
|        | Base cross | Long term  | 1590 < 1600(Allowable value)        | O.K    | 0.21 < 0.25(Allowable value) | O.K    |
|        |            | Short term | 1830 < 2400(Allowable value)        | O.K    | 0.25 < 0.33(Allowable value) | O.K    |
| 4mH    | Base frame | Long term  | 790 < 1600(Allowable value)         | O.K    | 0.06 < 0.25(Allowable value) | O.K    |
|        |            | Short term | 900 < 2400(Allowable value)         | O.K    | 0.27 < 0.33(Allowable value) | O.K    |
|        | Base cross | Long term  | 1540 < 1600(Allowable value)        | O.K    | 0.15 < 0.25(Allowable value) | O.K    |
|        |            | Short term | 1750 < 2400(Allowable value)        | O.K    | 0.17 < 0.33(Allowable value) | O.K    |



## Maintenance Control

### User Regulation Maintenance Items

- 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) Keep standard water level at all times. (Uppermost tie rod is soaked in water)

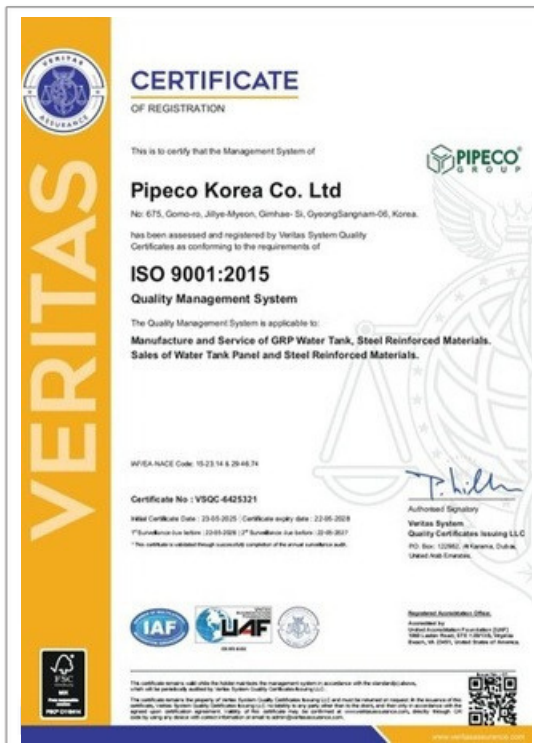
## Installation and Caution

- 1) The water level should be over tie rod position all the time. (Over 85% of tank height)
- 2) Check the flatness of concrete plinth. (Tolerance: 2mm)
- 3) Check water tank panel's crack.
- 4) Check deflection of wall panel. (maximum up to 1% of water tank height)
- 5) Check generally for leaks or drips.
- 6) The interior of the tank should be cleaned two or more times a year: after cleaning, you need to check whether the water quality in the tank is proper or not.
- 7) Organic solvent including thinner, acetone and chlorine bleach cannot be used to clean the exterior or interior of the tank.
- 8) When cleaning once compartment the inside of the tank, keep the water level less than 50% at the other compartment.
- 9) The tank cannot store anything except normal temperature drinking water.
- 10) All internal supports should be checked for corrosion, if corrosion is found it should be rectified immediately.
- 11) Check that all tie rod should be tightened.
- 12) Check that all pipe work connected to tank suitably braced.
- 13) Check that the structural supports under the tank are in good condition.
- 14) Check that overflows are fitted.
- 15) When Cleaning the inside of tank, do not interface with the joint seals.
- 16) If there are ladders fitted to the tanks, ensure that they have not been damaged and are securely fastened to the tank.
- 17) If overflow and / or air inlet screens are fitted, check that they have not become blocked.
- 18) Pipeco Korea will not bear the responsibility for the problems caused by your failure to follow the above mentioned recommendations, inadequate strength or uneven of concrete plinths or natural disasters.

# Certificates of GRP Water Tanks

Getting all international certificates and Test reports for GRP Water tank  
Realization of customer satisfaction through quality management system  
GRP Water tank of best quality with competitive price

## GRP Water Tanks Certificates and Test Reports



**CERTIFICATE OF REGISTRATION**

This is to certify that the Management System of

**Pipeco Korea Co. Ltd**  
No: 675, Gomo-ro, Jilje-Myeon, Gimhae-Si, GyeongSangnam-06, Korea.

has been assessed and registered by Veritas System Quality Certificates as conforming to the requirements of

**ISO 9001:2015**  
Quality Management System

The Quality Management System is applicable to:  
**Manufacture and Service of GRP Water Tank, Steel Reinforced Materials, Sales of Water Tank Panel and Steel Reinforced Materials.**

WFSA/NACE Code: 15.23.14 & 28.46.74

Certificate No: VSQC-4425321

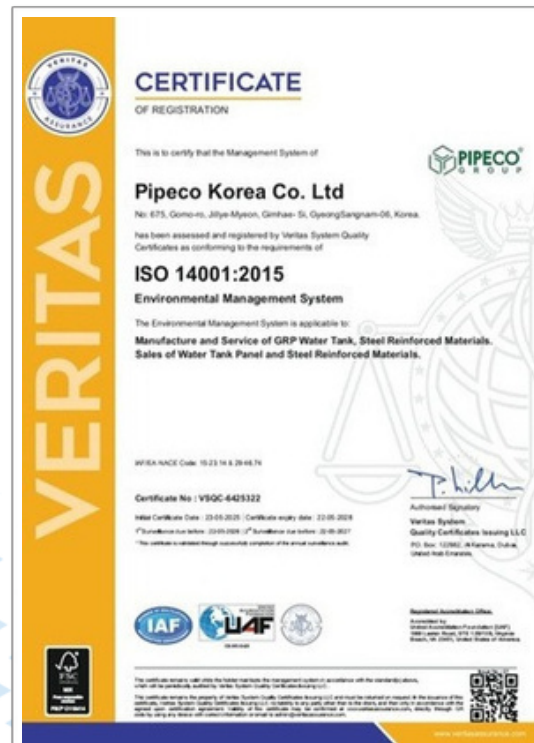
Initial Certificate Date: 23-05-2020 / Certificate expiry date: 23-05-2028  
\*Fundamental due before: 23-05-2024 / \*Fundamental due before: 23-05-2027  
\*This certificate is valid through successful completion of the annual surveillance audit.

Authorized Signatory  
Veritas System  
Quality Certifications Issuing LLC  
PO Box: 123962, Al Khayma, Dubai,  
United Arab Emirates.

Registered Accredited Office:  
Accredited for:  
Veritas System Quality Certificates (VSQC)  
Initial Certificate Date: 23-05-2020 / Certificate expiry date: 23-05-2028  
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**CERTIFICATE OF REGISTRATION**

This is to certify that the Management System of

**Pipeco Korea Co. Ltd**  
No: 675, Gomo-ro, Jilje-Myeon, Gimhae-Si, GyeongSangnam-06, Korea.

has been assessed and registered by Veritas System Quality Certificates as conforming to the requirements of

**ISO 14001:2015**  
Environmental Management System

The Environmental Management System is applicable to:  
**Manufacture and Service of GRP Water Tank, Steel Reinforced Materials, Sales of Water Tank Panel and Steel Reinforced Materials.**

WFSA/NACE Code: 15.23.14 & 28.46.74

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**ISO 45001:2018**  
Occupational Health & Safety Management System

The Occupational Health & Safety Management System is applicable to:  
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WFSA/NACE Code: 15.23.14 & 28.46.74

Certificate No: VSQC-4425323

Initial Certificate Date: 23-05-2020 / Certificate expiry date: 23-05-2028  
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Veritas System Quality Certificates (VSQC)  
Initial Certificate Date: 23-05-2020 / Certificate expiry date: 23-05-2028  
PO Box: 123962, Al Khayma, Dubai,  
United Arab Emirates.

The certificate holder is authorized to use the Veritas System Quality Certificates logo and the Veritas System Quality Certificates logo on its products and services.

The certificate holder is the property of Veritas System Quality Certificates Issuing LLC and must be retained in respect of the duration of the certificate. Veritas System Quality Certificates Issuing LLC reserves the right to audit the holder and the holder is responsible for the audit. The certificate holder is responsible for the audit. The certificate holder is responsible for the audit.



Approval Number: 220565

12th January 2020

Approval Number: 220565  
Test Report: RA17030

12th January 2020

Pipeco Korea  
43, Gimhae-daero 3333beom-gil,  
Haeinsa-myeon,  
Gimhae-si,  
GyeongSangnam-do,  
Korea, Republic of

**WATER REGULATIONS APPROVAL SCHEME LTD. (WRAS)**  
**MATERIAL APPROVAL**

The material referred to in this letter is suitable for contact with wholesome water for domestic purposes having met the requirements of BS6820:1 2014 'Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water'.

The reference relates solely to its effect on the quality of the water with which it may come into contact and does not signify the approval of its mechanical or physical properties for any use.

**GLASS REINFORCED PLASTICS (GRP) COMPONENTS** **5120**

PIPECO KOREA 2025 Premium Tank Panel. Grey (single) coloured, compression moulded GRP panel. For use with water up to 50°C.

**APPROVAL NUMBER: 220565**  
**APPROVAL HOLDER: PIPECO KOREA**

The Scheme reserves the right to review approval.  
Approval 220565 is valid between October 2022 and October 2027.  
An entry, as above, will accordingly be included in the Water Filings Directory on-line under the section headed, 'Materials which have passed full tests of effect on water quality'.  
The Directory may be found at: [www.wrasapprovals.co.uk/approvals-directory/](http://www.wrasapprovals.co.uk/approvals-directory/)

Yours Faithfully

Ian Hughes  
WRAS Approvals Manager

The Water Regulations Approval Scheme Ltd. Registered in England No. 1830384 Registered office: 40 Leach Close, Hove, Sussex, BN1 9SD  
01424 834000 Fax: 01424 834001 Email: [enquiries@wrasapprovals.co.uk](mailto:enquiries@wrasapprovals.co.uk) Website: [www.wrasapprovals.co.uk](http://www.wrasapprovals.co.uk)  
WRAS, April 2017 v2.0 Page 2 of 2

## Certificates of GRP Water Tanks

Getting all international certificates and Test reports for GRP Water tank  
Realization of customer satisfaction through quality management system  
GRP Water tank of best quality with competitive price

## GRP Water Tanks Certificates and Test Reports



**ENVIRONMENTAL MANAGEMENT SYSTEM CERTIFICATE**

Pipeco Korea Co., Ltd.

675, Gomo-ro, Jillye-myeon, Gimhae-si,  
Gyeongsangnam-do, Korea

KCR Registrars, Inc. certifies that the Environmental Management System of the above organization has been assessed and found to be in accordance with the requirements of the Environmental Standard and scope of certification detailed below.

Environmental Standard  
KS I ISO 14001 : 2015 / ISO 14001 : 2015

Scope of Certification  
The Sale of Water Tank Panel and Steel Reinforced Materials

Original Certification Date: 20/02/2019 Certificate Number: EMS-30228  
Current Certification Date: 20/02/2025 Certificate Expiration Date: 19/02/2028

This certificate is valid only if the organization meets the requirement continually

Gabjin Jeong  
KCR Registrars, Inc.  
President

Accredited for Member of the IAF MLA for EMS  
The use of Accreditation mark in relation to certification is subject to the Accreditation Certificate No. K10-01-01  
Kor-001, 4th, 5th Floor, 4111 Digital-ro 36-gil, Gyeongju, South Korea www.kcr.or.kr



**QUALITY MANAGEMENT SYSTEM CERTIFICATE**

Pipeco Korea Co., Ltd.

675, Gomo-ro, Jillye-myeon, Gimhae-si,  
Gyeongsangnam-do, Korea

KCR Registrars, Inc. certifies that the Quality Management System of the above organization has been assessed and found to be in accordance with the requirements of the Quality Standard and scope of certification detailed below.

Quality Standard  
KS Q ISO 9001 : 2015 / ISO 9001 : 2015

Scope of Certification  
The Sale of Water Tank Panel and Steel Reinforced Materials

Original Certification Date: 20/02/2019 Certificate Number: QMS-30625  
Current Certification Date: 20/02/2025 Certificate Expiration Date: 19/02/2028

This certificate is valid only if the organization meets the requirement continually

Gabjin Jeong  
KCR Registrars, Inc.  
President

Accredited for Member of the IAF MLA for QMS  
The use of Accreditation mark in relation to certification is subject to the Accreditation Certificate No. K10-01-01  
Kor-001, 4th, 5th Floor, 4111 Digital-ro 36-gil, Gyeongju, South Korea www.kcr.or.kr



**LESEN PENSIJILAN BARANGAN**  
Product Certification Licence

No Lesen : PC004441  
Licence No :

SIRIM QAS International Sdn. Bhd. dengan ini menganugerahkan kepada  
SIRIM QAS International Sdn. Bhd. hereby grants to

PIPECO KOREA CO., LTD.  
20, GIMHAE-DAERO 1021 BEON-GI  
HALLIM-MYEON, GIMHAE-SI  
GYEONGSANGNAM-DO  
621-873, KOREA

Lesen untuk menggunakan Tanda Pensijilan di atas barangan  
a licence to use the Certification Mark on

FIBREGLASS REINFORCED POLYESTER (FRP) SECTIONAL WATER TANKS

Please refer to detail in the SCHEDULE

sebagai mematuhi keperluan  
as complying with

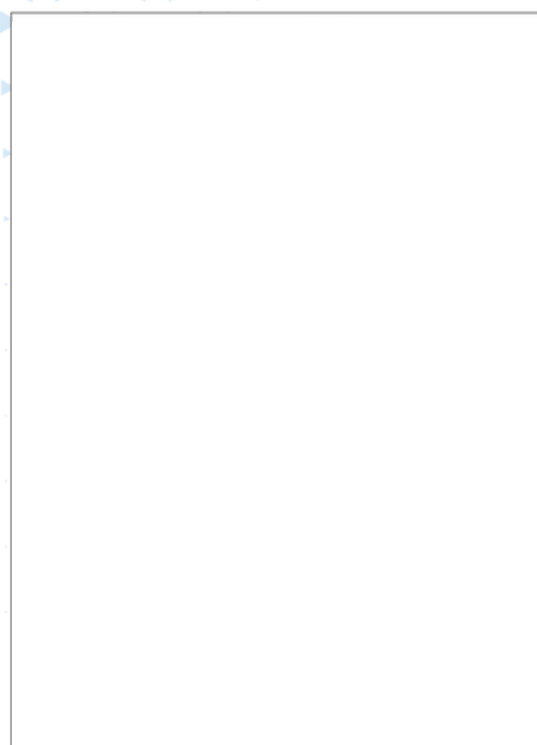
BS EN 13280 : 2001

Ta. Md. Adha bin Katni @ Rahmat  
Pernangku Ketua Pegawai Eksekutif  
Acting Chief Executive Officer  
SIRIM QAS International Sdn. Bhd.

Tarikh Mula Pensijilan : 21 June 2019  
Certified Since  
Bek Sehyung : 21 June 2026  
Signat (Date)

Tarikh Dikeluarkan : 04 July 2025  
Issue Date  
No Siri : 113172  
Signat No

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