

PB PUSH-FIT PLUMBING SYSTEM CPVC PIPING FOR FIRE FIGHTING SYSTEM

**PB
CPVC**

| **Catalog** |





Company Introduction & Factory Information

Company Introduction

Company Name	Jeongsan Aikang Co., Ltd.
Date Established	January 1990
CEO	Hwang, Kwang Sik
Seoul Office	Namsan Square Building., 17FL., 173, Toegye-ro, Jung-gu, Seoul, Republic of Korea
Factory & Head Office	422, Gieopdosi-ro, Jungangtap-myeon, Chungju-si, Chungcheongbuk-do, Korea

Factory Information

Factory in Chungju



Production facilities



Certificate List

Certificate List

Ever since the company establishment in 1990, JEONGSAN AIKANG has maintained its position as the market leader in Korea's PB plumbing market for the past 30 years through vigorous R&D investment in product development and green technology. Our high qualified PB plumbing system and CPVC firefighting sprinkler system makes customers to recognize "JEONGSAN AIKANG" as a brand name of products in Korea. Rather than satisfying with current status, JEONGSAN AIKANG will become a company that aims to be on top with one step at a time. JEONGSAN AIKANG will not be settled with thinking, we will always move forward and take action. JEONGSAN AIKANG is a company that moves forward while embracing the future. We will not remain and Satisfy with our past accomplishment and achievement. We will always be on our customers' side, listening to customers' every word to lead from satisfying the customers to delighting the customers. Together with our customers! Together with our global standard technology!

JEONGSAN AIKANG will always adapt to changes like the flow of water and will demonstrate efforts and success with innovative and proactive spirit.



KFI Certificate

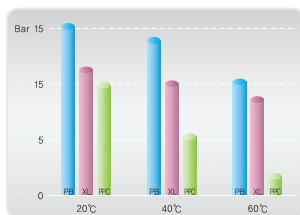


Features of PB

General Characteristic

Endurance

Polybutylene, a raw material of PB Pipe, is considered the best among products of petrochemistry.



Nontoxic Product

Polybutylene is nontoxic verified by WRAS therefore, it can be utilized for reliable potable water pipe.

Corrosion Resistance

Polybutylene IS corrosion and scale-free; therefore, it can be used in Hot Springs.

Flexibility & Lightweight

JEONGSAN AIKANG PB Plumbing system is lighter and more flexible than other plumbing system. In addition, it can be carried and installed in a narrow space.

Resistance to Impact

JEONGSAN AIKANG PB Plumbing system is more resistant to impact than any other plumbing system relatively due to its high elasticity.

The Highest Strength

Under the condition with high temperature, JEONGSAN AIKANG PB Plumbing system has no deterioration in quality and no change no creep.

No Noise

JEONGSAN AIKANG PB Plumbing system is noise-free from Water Hammer Arrestor, water pressure fluctuation, and increased temperature.

Economical Efficiency

Compared with traditional systems, JEONGSAN AIKANG Pipe can be easily handled, installed, and bended due to its high flexibility. In addition, low product defection rate, reduced labor force, high durability, and air reduction can be economical.

Resistance to contagion

JEONGSAN AIKANG PB Plumbing system is resistance to chemical reaction and also prevents the ingress of bacterium into the plumbing system.

Freezing and Heat Resistance

Because of its high elasticity, JEONGSAN AIKANG PB Plumbing system protects against freezing and resistance to heat.

Application



1. Potable hot and cold water system

JEONGSAN AIKANG system is non-toxic, odorless, and highly durable material that is recognized worldwide.



2. Under-floor heating system

JEONGSAN AIKANG system is best for pancoll unit of building and under-floor heating system due to its high heat insulation, ease of installation, and high durability.



3. Industrial Pipe

Since JEONGSAN AIKANG system has a high resistance to chemical factory, a doof manufacturing plant, and a hospital.

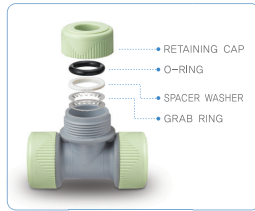


4. Agriculture and Horticulture Pipe

Because of its high chemical resistance, flexibility, and protection against sun, JEONGSAN AIKANG system can be used in irrigation canal, a green sprinkler, underground heating pipe of a farm and spraying chemical.

Features of PB

Structure



Retaining Cap

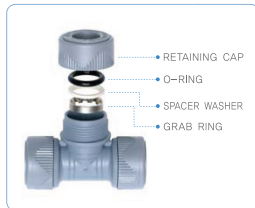
It's a high graded nylon. It's totally safe and highly reliable. The cap is factory fitted part to obtain the right torque and requires no further tightening. If cap becomes loose, it can be easily tighten by use of hand and no tools are required.

Spacer Washer

Separates the O Ring seal from the grab ring and is designed to reduce insertion force.

Grab Ring

It's a high graded stainless steel the grab ring 'barbs' grips the pipe firmly on insertion and prevents release from the fitting.



O-Ring

It is a high performance seal made with elastomer that has an excellent temperature range and is pre-lubricated prior to assembly.

Polybutylene

PB Resin is a chemical compound of butylenes that has high molecule polymer, high crystallization and special density(0.937) like a soft polyethylene isotactic.

The chemical structure of polymer and monomer is on the below table. (To obtain better understand of Resin character, please see the below chart)

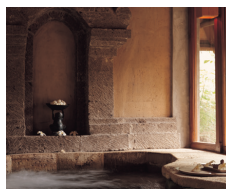
MONOMER		POLYMER		POLY Molecular Weight
ETHYLENE	$\begin{array}{c} \text{H} & \text{H} \\ & \backslash & / \\ & \text{C} = \text{C} \\ & / & \backslash \\ \text{H} & \text{H} \end{array}$	POLYETHYLENE	$\begin{array}{c} \text{H} & \text{H} & \text{H} & \text{H} \\ & & & \\ \text{C} - & \text{C} - & \text{C} - & \text{C} \\ & & & \\ \text{H} & \text{H} & \text{H} & \text{H} \end{array}$	120~130 thousand
PROPYLENE	$\begin{array}{c} \text{H} & \text{H} & \text{H} \\ & & \\ \text{C} = & \text{C} = & \text{C} - \text{H} \\ & & \\ \text{H} & \text{H} & \text{H} \end{array}$	POLYETHYLENE ISOTACIC NOMOPOLYMER	$\begin{array}{c} \text{H} & \text{CH}_3 & \text{H} & \text{CH}_3 & \text{H} & \text{CH}_3 \\ & & & & & \\ \text{C} - & \text{C} - & \text{C} - & \text{C} - & \text{C} - & \text{C} \\ & & & & & \\ \text{H} & \text{H} & \text{H} & \text{H} & \text{H} & \text{H} \end{array}$	250~300 thousand
1-BUTENE	$\begin{array}{c} \text{H} & \text{H} & \text{H} & \text{H} \\ & & & \\ \text{C} = & \text{C} - & \text{C} - & \text{C} - \text{H} \\ & & & \\ \text{H} & \text{H} & \text{H} & \text{H} \end{array}$	POLYETHYLENE ISOTACIC NOMOPOLYMER	$\begin{array}{c} \text{H} & \text{C}_2\text{H}_5 & \text{H} & \text{C}_2\text{H}_5 & \text{H} & \text{C}_2\text{H}_5 \\ & & & & & \\ \text{C} - & \text{C} - & \text{C} - & \text{C} - & \text{C} - & \text{C} \\ & & & & & \\ \text{H} & \text{H} & \text{H} & \text{H} & \text{H} & \text{H} \end{array}$	1,5 million

Application



5. Snow-Removing Pipe (Road Heating)

Because of PB pipe's durability, JEONGSAN AIKANG pipe can be used for snow removal at the road, parking zone and stadium.



6. Hot spring Pipe

JEONGSAN AIKANG pipe has excellent pressure resistance to hot water. Also, corrosion or scale does not occur which is excellent source for hot spring pipe.



7. Air compressor Pipe

Because of its high flexibility, strength and high durability, JEONGSAN AIKANG system can be used in air compressor pipe.



8. Pipe for Solar Heating System

PB Pipe is capable of Warm-ing and heating water in the Solar Heating House.

Features of PB

▮ Tolerance (KS Standard 0.3mm)

According to Pust-Fit Fitting Standard, all JEONGSAN AIKANG product quality is controlled in tolerance range of 0.1mm. Fitting and all parts are well-fitted and it's a prefect use for plumbing.

Outside Diameter	Outside Diameter(mm)		Wall Thickness(mm)	
	Standard Measure	Tolerance	Standard Measure	Tolerance
12"(3/8")	12.6~12.8	±0.1	1.6~1.8	±0.1
15"(1/2")	15.5~16.0	±0.1	1.6~1.8	±0.1
22"(3/4")	22.1~22.3	±0.1	2.03~2.23	±0.1
28	27.9~28.1	±0.1	2.6~2.8	±0.1
1 1/4"	34.8~35.0	±0.1	3.18~3.43	±0.1

▲ ASTM(KS 1998)

Outside Diameter	Outside Diameter(mm)		Wall Thickness(mm)	
	Standard Measure	Tolerance	Standard Measure	Tolerance
12	12.05~12.25	±0.1	1.3~1.5	±0.1
16	16.05~16.25	±0.1	1.5~1.7	±0.1
20	20.05~20.25	±0.1	1.9~2.1	±0.1
25	25.05~25.25	±0.1	2.3~2.5	±0.1
32	32.05~32.25	±0.1	2.9~3.1	±0.1

▲ ISO (KS2003)

▮ Basic Features

Properties		Unit	Test Method	PB
Physical Properties	Density	g/cm ³	ASTM D1505	0.937
	Hardness	D scale	ASTM D2240	D60
	Absorption	mg/cm ²	JIS K7209	under 0.01
Mechanical Properties	Tensile Strength at Yield	kg f/cm ²	ASTM D638	170(Mpa 17.7)
	Tensile Strength at Break	kg f/cm ²	ASTM D638	340(Mpa 36.5)
	Elongation at Break	%	ISO1184-	340
	Modulus of Elasticity	kg f/cm ²	1983E	2,700
	Possionrate	-	ASTM D638	0.38
	Shock Intensity	kg f/cm ²	-	45
Thermal Properties	Coefficient of Expansion	cm/cm/g	JIS K7110	1.3×10 ⁻⁴
	Specific Heat	cal/g °C	D696	0.5
	Thermal Conductivity	g/m ² · hr/°C/cm	-	19
	Melting Point	°C	C177	124°C~126°C
Electrical Properties	Temperature Bromide	°C	DSC	-18°C
	Cubical Resistivity	Ω · cm	JIS K7216	up 1017
	Voltage	kV/mm	ASTM D257	38

▮ Temperature and Pressure (KS M 3363 : 1998)

Pressure(kg/cm ²)					
20°C(50Years)	40°C(50Years)	60°C(50Years)	70°C(50Years)	80°C(25 Years)	90°C(10 Years)
16.32	13.97	10.71	8.98	7.55	5.00

Features of PB



Physical Features

The rate of Heat Conduction

PB pipe has lower rate of heat conduction and heat loss than do metal pipe ; therefore, it is more effective for hot water to flow through PB pipe than metal pipe. Thermos materials can be used over the pipe if you need to avoid heat loss.

PIPE	Thermal Conduction Factor $\text{kcal/m} \cdot \text{hr}/^\circ\text{C}$	The Proportion to PB Pipe
PB PIPE	0,33	1
STAINLESS PIPE	14	70
STEEL PIPE	50	250
ALUMINIUM PIPE	180	900
COPPER PIPE	340	1,700

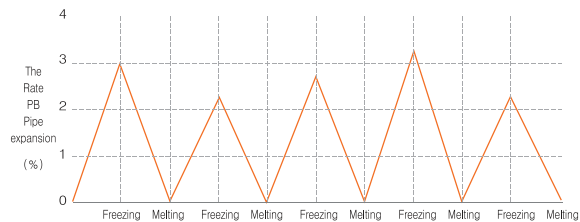
The rate of Linear Expansion

The rate of linear expansion on PB pipe is 1/60 metal pipe. Therefore, when PB pipe is laid on concrete and soil, the friction of concrete is sufficient to hold the expansion of the pipe. For these reasons, heat expansion of the pipe is not an issue

Materials	Coefficient Of Expansion($^\circ\text{C}^{-1}$)	Drawing Elastic Rate(kgf/cm^2)
PB PIPE	1,3~1,5 $\times 10$	4,000
STAINLESS PIPE	0,09~0,1 $\times 10$	2,800,000
STEEL PIPE	0,1~0,11 $\times 10$	2,100,000
COPPER PIPE	0,17~0,18 $\times 10$	1,100,000

The Fusion of freezing

The picture below shows the results of repeating test concerning the fusion of freezing in PB pipe. The method of the test is to fill up the pipe being used for the test with water and repeat freezing and melting in the cycle of 20C, 16hr (> 20C, 8hr. The result of the test is that PB pipe doesn't freeze and burst. It shows that PB pipe elastic enough to absorb cubical expansion to water. But the result can't be applied to plumbing without revision.



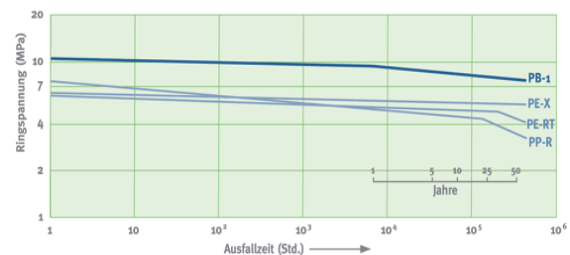
Long-term Burst Performance

These temperature classes are compiled to reflect the likely cross-section of service conditions for a 50-year period for a range of different heating and water supply applications. The internationally accepted temperature classes are stipulated in ISO Standard 10508, and referred to in other systems standards for plastic piping systems.

Maximum allowable Hoop Stress (MPa) (Design Stress) of Polyolefin Pipes For Hot Water Transportation				
	PB-1	PEX	PE-RT	PP-R
Temperature Class	Polybutene-1 (ISO 15876-2)	Cross-linked Polyethylene (ISO 15875-2)	Raised Temperature Resistance Polyethylene (ISO 22391-2)	Polypropylene Random-Copolymer (ISO 15874-2)
1 (HWS 60°C)	5.73	3.85	3.30	3.09
2 (HWS 70°C)	5.06	3.54	2.70	2.13
4 (UFH and low temperature radiators)	5.46	4.00	3.26	3.30
5 (High temperature radiators)	4.31	3.24	2.4	1.90

Internal pressure resistance

Parallel standards to ISO 12230 exist which present the effect of time and temperature on the expected strength of PE-X (ISO 10146), PP-H, PP-R and PP-B (ISO 3213) and PE-RT (ISO 24033). The following figure shows the performance reference lines for Polybutene-1, PE-X, PP-R and PE-RT at 70° C on an equivalent scale. After 10 years' exposure to continuously applied stress, Polybutene-1 retains 40% more strength than PE-X and almost double that of PP-R and PE-RT.



Features of PB

▮ ASTM(KS 1998 Version) vs ISO (KS 2003 Version)

Classification		ASTM / BS	ISO
Dimension		12(3/8 "), 15(1/2 "), 22(3/4 "), 28, 32(1 1/4 ")mm	12, 16, 20, 25, 32mm
Fitting			 <p>1, Installed lock device at the lower part of outer diameter, 2, Date mark pin (Indicates Date)</p>
Parts	Cap		 <p>PB Fitting Brass Fitting</p> <p>1, Installed lock device at the end of inner diameter 2, Date mark pin is carved on the outer diameter 3, Color: Yellow Green & Yellow</p>
	Washer		 <p>1, Color: Yellow Green <input type="checkbox"/> Only 16mm uses 1/2" washer</p>
	O-Ring	<input type="checkbox"/> Same as existing color (Prohibit using ASTM & ISO O-Rings together)	
	Sleeve		 <p>1, Color: Red 2, Plastic Material: Noryl</p>
	Grab Ring		 <p><input type="checkbox"/> Shape of 25mm is same as existing one</p>

Caution : 1, Prohibit using together with old KS product or other companies' product
2, Prohibit using together with other plastic materials

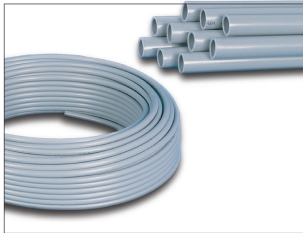
Features of PB



● Occurrence types of field nonconformance, causes, and coping methods

Nonconformance types	Phenomenon	Causes and coping methods
Occurrence of water leakage	1. Water leakage due to the occurrence of flaws on the pipe surface (Minute water leakage occurs with water leakage and stoppage being repeated)	<ul style="list-style-type: none"> • O-ring fails to maintain air-tightness as the pipe is dragged or foreign objects (sand, etc.) are stuck in the surface → Be careful upon handling and transporting to prevent the pipe from being scratched or bent
	2. Foreign objects are lodged between the O-ring and the pipe.	<ul style="list-style-type: none"> • Hair or various contaminants are attached, causing water leakage since lubricant is applied to the O-ring → Clean the operational surroundings and check in advance before operation whether any foreign objects are attached to the connector.
	3. O-ring is torn.	<ul style="list-style-type: none"> • When the pipe is cut using a saw or other tools, rather than a dedicated cutter, the trimmed pipe tip becomes sharp causing damages to the O-ring, and water leakage is likely. • The O-ring is squeezed between the tip part of the connector and the cap upon reverse piping, which causes tearing; pay close attention upon re-assembly.
	4. The direct bending angle of the pipe is large at the connector.	<ul style="list-style-type: none"> • When a direct bending angle is provided, water leakage occurs from the O-ring → Use the connector accurately.
Breakaway of grab ring	1. Eccentricity of the grab ring occurs.	<ul style="list-style-type: none"> • Breakaway of the grab ring due to its reuse; dispose of the grab ring following one use • Breakaway occurs when the pipe is inserted with the cap loosened; insert the pipe after tightening the cap by hand • Breakaway is also due to reverse piping; fasten the cap later after inserting the component first.
	2. Insertion trace of the grab ring does not remain.	<ul style="list-style-type: none"> • Pipe is inserted only up to the O-ring without the 2nd-stage insertion; utilize a pipe insertion mark.
	3. Support sleeve is not inserted	<ul style="list-style-type: none"> • Breakaway occurs by failing to grab the pipe; be sure to check insertion of the support sleeve.
Fracture and rupture of pipe	1. The ruptured part displays a white trace similar to having been pressed.	<ul style="list-style-type: none"> • The pipe is ruptured as steam is generated by abnormal overheating of the boiler (Melting point- 126°C) → Check the boiler and the instantaneous heater (the risk of recurrence is high when the fundamental causes are not removed)
	2. The pipe is fractured as if cut by a knife.	<ul style="list-style-type: none"> • When the pipe is impacted with water pressure being applied, it occurs while diffusion takes place from the water pressure. → Be thoroughly prepared for external shocks upon water pressure test after piping. • The pipe is fractured due to shocks and excessive tothing in the winter season with low outside temperatures (check for freeze and burst) → Be careful about handling, since the pipe is vulnerable to shocks at low temperatures.
	3. The pipe is melted or ruptured.	<ul style="list-style-type: none"> • The pipe is melted or ruptured due to other fires such as welding sparks, cigarette light, etc.
	4. The pipe is fractured as part became swollen.	<ul style="list-style-type: none"> • The pipe is fractured with occurrence of a water hammer by gauge breakdown or abrupt operation of the water pressure motor → Check whether the gauge falls accurately on the "0" point, and, if possible, do not use the motor where instantaneous water hammering can occur (use a pressure gauge with a high capacity). • With PB pipe connectors, the hardening phenomenon (material property change), and the erosion phenomenon (product splitting) when coming into contact with petrochemical substances(diesel oil, kerosene) are possible.
	5. Inner and outer surface cracks occur in piping.	<ul style="list-style-type: none"> • In PB piping materials that come into contact with metal rust, the splitting phenomenon occurs through radical generation due to metallic substances. → Be careful not to construct a system with rust-producing substances (ex: binding wire, etc.) in direct contact with the PB piping materials.
	6. Erosion of piping and connectors	<ul style="list-style-type: none"> • Be careful not to construct a system in direct contact with saltwater (NaCl) (ex: seawater bath).

PB Pipe



ISO (KS 2003)

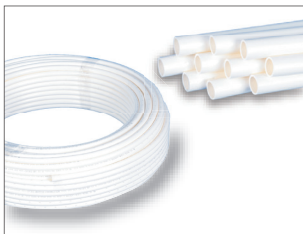
PB Potable Pipe	
Straight	Coil
16mm	16mm
20mm	20mm
25mm	25mm
32mm	

ASTM(KS 1998)

PB Potable Pipe	
Straight	Coil
3/8"	3/8"
1/2"	1/2"
3/4"	3/4"
28mm	28mm
1 1/4"	1 1/4"
2"	2"

BS (U.K Size)

PB Potable Pipe			
Straight		coil	
10mm	15mm	10mm	15mm
22mm	28mm	22mm	28mm
Straight coil			
10mm		15mm	
22mm		28mm	



ISO (KS 2003)

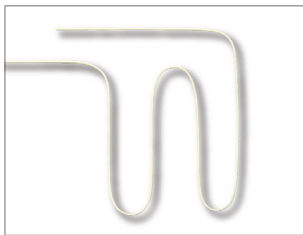
PB Heating Pipe	
Straight	Coil
20mm	16mm
25mm	20mm
32mm	25mm

ASTM(KS 1998)

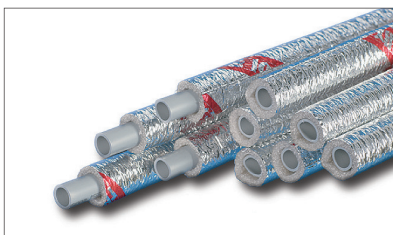
PB Heating Pipe	
Straight	Coil
3/8"	3/8"
1/2"	1/2"
3/4"	3/4"
28mm	28mm
1 1/4"	

BS (U.K Size)

PB Heating Pipe			
Straight		coil	
10mm	15mm	10mm	15mm
22mm	28mm	22mm	28mm
Straight coil			
10mm		15mm	
22mm		28mm	



PB Heating coil for bathroom
Order base



ISO (KS 2003)

Thermos Material Pipe (5T)	
Size	Normal (Blue, Red)
16mm 5T	•
20mm 5T	•
25mm 5T	•
32mm 5T	•

ASTM(KS 1998)

Thermos Material Pipe (5T)	
Size	Normal (Blue, Red)
1/2" 5T	•
3/4" 5T	•
28mm 5T	•
32A · 5T	•

You can distinguish pipe by color of printed cover



ISO (KS 2003)

Thermos Material Pipe (PB, PE-RT 2388)	
Size	Cross linked PE Foam tube of Fire-retardant
16mm 5T	•
20mm 5T	
25mm 5T	
32mm 5T	

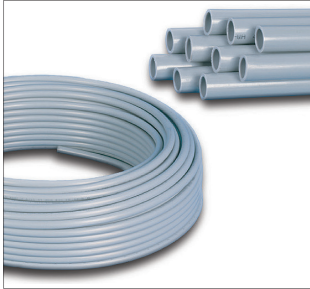
ASTM(KS 1998)

Thermos Material Pipe (PB, PE-RT 2388)	
Size	Cross linked PE Foam tube of Fire-retardant
1/2" 15A · 5T	•
3/4" 20A · 5T	
28mm 25A · 5T	
32A · 5T	

You can distinguish pipe by color of printed cover

PE-RT Pipe

PE-RT I, II Pipe KS M ISO 22391-2

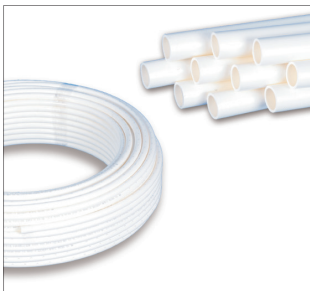


ISO (KS 2003)

PE-RT Potable Pipe	
Straight	Coil
16mm	16mm
20mm	20mm
25mm	25mm

ASTM (KS 1998)

PE-RT Potable Pipe	
Straight	Coil
1/2"	1/2"
3/4"	3/4"
28mm	28mm



ISO (KS 2003)

PE-RT Heating Pipe	
Straight	Coil
16mm	16mm
20mm	20mm
25mm	25mm

ASTM (KS 1998)

PE-RT Heating Pipe	
Straight	Coil
1/2"	1/2"
3/4"	3/4"
28mm	28mm

PE-RT pipe size table

Unit: mm

Nominal size DN/OD	Average outside diameter		Pipe array			
	Minimum average outside diameter	Maximum average outside diameter	S 5.0	S 4.0	S 3.2	S 2.5
			Thickness			
15(1/2")	15.8	16.0	1.6	1.9	2.3	2.7
16	16.0	16.3	1.5	1.8	2.2	2.7
20	20.0	20.3	1.9	2.3	2.8	3.4
22(3/4")	22.1	22.3	2.0	2.6	3.2	3.8
25	25.0	25.3	2.3	2.8	3.5	4.2
28	27.9	28.2	2.6	3.3	4.0	4.8

Notes on handling and construction of PE-RT pipe

- * Please observe that the design pressure of 6Bar is to be leveled at a temperature below 60° C for heating, and a temperature below 70° C for feed water and hot water.
- * Exposure to ultraviolet rays is prohibited, and use of products with flaws such as surface scratches, indentation, etc. is not allowed
- * Since PE-RT PIPE' s have different thicknesses per type, please use S/sleeve after checking.
- * Since there is a risk of crack occurrence due to outside impacts below 5° C, please avoid construction
- * Upon hydraulic test, make sure to apply after discharging the residual air inside the piping.
(Test pressure is less than 1.5 times of the use pressure. Upon pressure application for a long period, the piping life may be shortened.

BS Fitting

U.K Size



• Tap Connector BS
15mm 22mm



• Tank Connector BS
15mm 22mm



• Bant Tap Connector BS
15mm



• Socket BS
10mm 15mm 22mm 28mm



• Elbow BS
10mm 15mm 22mm 28mm



• Equal Tee BS
10mm 15mm 22mm 28mm



• ERT BS
22mm x 15mm x 22mm



• BRT BS
22mm x 22mm x 15mm
28mm x 15mm x 28mm
28mm x 22mm x 28mm



• BORT BS
22mm x 15mm x 15mm



• Air Chamber Cap BS
15mm



• Socket Reducer BS
15 x 10 22 x 15 28 x 22



• MVS BS
15mm 22mm 28mm



• FVS BS
15mm 22mm 28mm



• FVS w/Circle Stud(4p) BS
15mm x 1/2 PF



• WPE(S) BS
15mm



• Aikang Remetech F Ball Valve BS
15mm x 1/2 PF Handle
22mm x 3/4 PF Handle



• Brass Elbow(4p) BS
15mm 22mm



• Long Brass Tee w/Back Stud BS
15mm x 1/2 PF



• CF Adaptor BS
15mm 22mm 28mm



• CM Adaptor BS
15mm 22mm 28mm



• S Sleeve
15mm 22mm 28mm



• Grab Ring
10mm 22mm
15mm 28mm



• O - Ring
10mm 22mm
15mm 28mm



• Cap
10mm 22mm
15mm 28mm














• B. Cap
10mm 22mm
15mm 28mm












• Washer
10mm 22mm
15mm 28mm

Fitting Compatible

ISO (KS 2003)

			
Socket	Elbow	Equal Tee	Socket Reducer
16mm 20mm 25mm 32mm	16mm 20mm 25mm 32mm	16mm 20mm 25mm 32mm	16 x 20mm 20 x 25mm 20mm x 1 1/4"
			
Branch One End Reduced Tee	Branch End Reduced Tee	End Reduced Tee	Branch End Reduced Tee
20mm x 16mm x 16mm	20mm x 20mm x 16mm 25mm x 25mm x 16mm 25mm x 25mm x 20mm 32mm x 32mm x 16mm 32mm x 32mm x 20mm 32mm x 32mm x 25mm	20mm x 16mm x 20mm	1 1/4" x 1 1/4" x 16mm 1 1/4" x 1 1/4" x 20mm 1 1/4" x 1 1/4" x 25mm
			
Air Chamber Cap	socket to socket reducer	Reduced Elbow	
16mm 20mm	16mm x 1/2" 20mm x 3/4" 25 x 28mm 32mm x 1 1/4" 16x20mm	20mm x 16mm	

ASTM(KS 1998)

			
Socket	Elbow	Equal Tee	Socket Reducer
3/8" 1/2" 3/4"	3/8" 1/2" 3/4"	3/8" 1/2" 3/4"	1/2" x 3/8" 1/2" x 3/4"
28mm 1 1/4"	28mm 1 1/4"	28mm 1 1/4"	28mm x 3/4" 1 1/4" x 28mm
			
Branch One End Reduced Tee	Branch End Reduced Tee	End Reduced Tee	Socket to Socket Reducer
3/4" x 1/2" x 1/2"	3/4" x 3/4" x 1/2" 28mm x 28mm x 1/2" 28mm x 28mm x 3/4" 1 1/4" x 1 1/4" x 28mm 1 1/4" x 1 1/4" x 1/2" 1 1/4" x 1 1/4" x 3/4"	3/4" x 1/2" x 3/4"	3/8" x 1/2" 1/2" x 3/4"
			
Air Chamber Cap			
1/2"			

Brass Fitting

≡ ISO (KS 2003)



• Male Valve Socket
16mm | 20mm | 25mm | 32mm



• Female Valve Socket
16mm | 20mm | 25mm | 32mm



• Female Valve Socket w/Front Stud
16mm



• Reduced Female Valve Socket
20mm x 1/2 PT | 25mm x 3/4 PT



• Reduced Male Valve Socket
20mm x 1/2 PT | 25mm x 3/4 PT



• Male Brass Elbow
16mm | 20mm | 25mm



• Brass Elbow
16mm | 20mm | 25mm



• Long Brass Elbow
16mm



• Reduced Brass Elbow
20mm x 1/2 PT



• Long Brass Elbow w/Front Stud
16mm



• Brass Elbow w/Front Stud
16mm



• Male Brass Tee
16mm



• Brass Tee
16mm



• Brass Tee w/Front Stud
16mm



• Long Brass Tee w/Front Stud
16mm



• Long Brass Tee
16mm



• Brass Tee w/Back Stud
16mm



• Brass BRT
20mm x 20mm x 1/2 PT



• M Ball Valve (butterfly)
16mm | 20mm



• F Ball Valve
16mm | 20mm



• M Ball Valve (butterfly)
16mm | 20mm



• Brass Elbow (4p)
16mm
































• W.P.E-short
16mm



• Ring joint socker
16mm

Brass Fitting

ASTM(KS 1998)

				
<div>Long Brass Elbow</div> <div>3/8"1/2"</div>	<div>Long Brass Elbow w/Front Stud</div> <div>1/2"</div>	<div>Brass Elbow</div> <div>1/2"</div>	<div>Male Brass Elbow</div> <div>1/2"3/4"28mm</div>	
				
<div>Reduced Brass Elbow</div> <div>1/2" x 3/4"</div>	<div>Brass Elbow (4p)</div> <div>1/2"</div>	<div>UBR Brass Elbow</div> <div>1/2"</div>	<div>W.P.E - Short</div> <div>1/2"</div>	
				
<div>Brass Tee</div> <div>3/8"1/2"1/2" (M)</div>	<div>Male Brass Tee</div> <div>1/2"</div>	<div>Brass BRT</div> <div>3/4" x 3/4" x 1/2"</div>	<div>Brass Tee w/Front Stud</div> <div>1/2"</div>	
				
<div>Brass Tee w/Back Stud</div> <div>1/2"</div>	<div>Long Brass Tee</div> <div>3/8"1/2"</div>	<div>Reduced Brass Tee</div> <div>3/4" x 1/2"</div>	<div>Long Brass Tee w/Front Stud</div> <div>1/2"</div>	
				
<div>Long Brass Tee w/Back Stud</div> <div>1/2"</div>	<div>Aikang Remetech F Ball Valve</div> <div>1/2" Handle1/2" Portable Ball Valve3/4" Handle3/4" Portable Ball Valve</div>	<div>Aikang Remetech M Ball Valve</div> <div>1/2" Handle1/2" Portable Ball Valve3/4" Handle3/4" Portable Ball Valve</div>	<div>Both Side Elbow Brass 60°</div> <div>1/2"</div>	
				
<div>CF Adaptor</div> <div>3/8"1/2"3/4"28mm1 1/4"</div>	<div>CM Adaptor</div> <div>3/8"1/2"3/4"28mm</div>	<div>CF Adaptor for Copper Tube</div> <div>1/2"3/4"28mm</div>	<div>Female Valve Socket</div> <div>3/8"1/2"3/4"28mm1 1/4"</div>	
				
<div>Female Valve Socket w / Stud</div> <div>1/2"</div>	<div>Reduced Female Valve Socket</div> <div>3/4" x 1/2" PT28mm x 3/4" PT1 1/4" x 28mm PT1 1/4" x 3/4" PT</div>	<div>Female Valve Socket w / Circle Stud (4p)</div> <div>1/2"</div>	<div>Male Valve Socket</div> <div>3/8"1/2"3/4"28mm1 1/4"</div>	<div>Reduced Male Valve Socket</div> <div>3/4" x 1/2" PT28mm x 3/4" PT1 1/4" x 28mm PT1 1/4" x 3/4" PT</div>

Fitting List for Pipe in Pipe

≧ ISO (KS 2003)



Brass Elbow for Pipe in Pipe 15°, 40° (K)	
15°	16mm (Standard, 15mm, 25mm)
40°	16mm (Standard, 15mm, 25mm)



Circle Service Box 15°, 40° (K)	
15°	16mm (Standard, 15mm, 25mm)
40°	16mm (Standard, 15mm, 25mm)



Circle Service Box 15°, 40° (K) PC	
15°	16mm (Standard, 15mm, 25mm)
40°	16mm (Standard, 15mm, 25mm)



Brass Elbow for Pipe in Pipe 15°	
	16mm
	16mm(25mm)



Brass Elbow for Pipe in Pipe 15° (EX)	
	16mm(15mm-EX)
	16mm(30mm-EX)



Brass Elbow for Pipe in Pipe 45° (EX)	
	16mm(5mm-EX)
	16mm(5mm Long-EX)
	16mm(30mm-EX)



Circle Service Box 15°	
	Standard, 25mm



Circle Service Box 15° 40°	
	15mm, 30mm



Circle Service Box 45° 40°	
	5mm, 15mm, 5mm Long, 30mm



Valve Socket 4P F (w/Stud)	
	16mm



Circle Service Box (Mansony)	
------------------------------	--



Circle Short Service Box	
--------------------------	--



Brass Elbow 15° for Pipe in Pipe	
	20mm



Circle Service Box 15°	
	20mm



AJ Circle service box	
15°	16mm (Standard, 15mm, 25mm)
40°	16mm (Standard, 15mm, 25mm)

Product List for Pipe in Pipe Manifold Manifold for Under Floor Heating

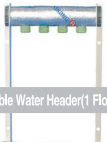








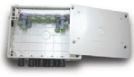
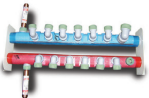



Product List for Pipe in Pipe

☞ ISO (KS 2003) / ASTM(KS 1998)



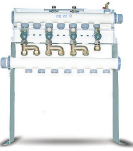

			
Pipe in Pipe Cap 16C 22C 28C	Trumpet Tube for Pipe in Pipe 16C(Blue/Red) 22C(Blue/Red) 28C(Blue/Red) 32C(Blue/Red)	End cover 22C 28C	Guide Ball for Pipe in Pipe 16mm 20mm 25mm
			
Anti-Noise Ring 16C 22C 28C	CD Connector 16C 22C 28C	CD Socket (Coupling) 16C 22C 28C	CD Tube for Pipe in Pipe (Normal) 16C(Blue/Red) 22C(Blue/Red) 28C(Blue/Red) 36C(Ivory/Black)

Manifold

☞ ISO (KS 2003) / ASTM(KS 1998)




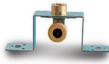




				
Potable Water Header(1 Floor)	Potable Water Header(2 Floor)	Lying Type Header (6 Outlets) 465mm x 410mm x 120mm	Lying Type Header (8 Outlets) 567mm x 410mm x 120mm	Lying Type Header (T-Type Header-12/9 Outlets) 465mm x 410mm x 120mm
				
Potable Water Header (8/8 Outlets) 400mm x 400mm x 95mm	Potable Water Header (4/3 Outlets) 400mm 230mm x 280mm x 90mm	E.Z Box Header (5/4 Outlets, 8/6 Outlets, 7/6 Outlets) 256mm x 244mm x 93mm	Lying Type Header (8/8 Outlets) 350mm both side 300mm x 300mm x 90mm	Lying Type Header (5 Outlets) 430mm x 320mm x 110mm
				
Ceiling Type Header Order Base	Closing Cover Lying Type Header 6 Outlets 465mm x 430mm	Closing Cover Lying Type Header 8 Outlets 587mm x 430mm	Joint Box Lying Type Header 6 Outlets, 8 Outlets	Header T (3 outlets, 4 outlets)

Manifold for Under Floor Heating

			
Under Floor Heating Header(PB, PP, XL)	Under Floor Heating Header(Box Type)(PB, PP, XL)	TRV Header	TRV Header for Heating Control System

Tap Plate / Manifold Fitting List

▷ Tap Plate - ISO (KS 2003) / ASTM(KS 1998)

			
Tap Plate A2 Type Brass Tee / Brass Elbow / Female Valve Socket Adaptor : 17mm, 32mm	Tap Plate B2 Type Brass Tee / Brass Elbow / Female Valve Socket Adaptor : 17mm, 32mm	Tap Plate A1 Type Brass Tee / Brass Elbow / Female Valve Socket Adaptor : 17mm, 32mm	Tap Plate B1 Type Brass Tee / Brass Elbow / Female Valve Socket Adaptor : 17mm, 32mm
			
Tap Plate A2C Type 15° (K) PC 15° / 40° / 45°	Tap Plate B2C Type 15° (K) 25mm 15° / 40° / 45°	Tap Plate A1C Type 15° (K) 25mm 15° / 40° / 45°	Tap Plate B1C Type 15° (K) 15° / 40° / 45°

▷ Mainfold Fitting List - ISO (KS 2003) / ASTM(KS 1998)

			
PB Elbow Adaptor 16mm x 16mm SPT 20mm x 25mm SPT 25mm x 25mm SPT	Spigot Tee 16mm x 16mm x 16mm SPT 20mm x 16mm x 20mm SPT	Spigot H Distributor 16mm x 16mm x 16mm	
			
Elbow Adaptor for Copper Tube 3/4" x 28mm SPT 28mm SPT 1/2" x 25mm SPT 28mm x 25mm SPT 3/4" x 25mm SPT	Elbow Adaptor (PPC, X-L) 3/4" x 28mm PT	Adaptor for Stainless Steel Pipe 3/4" SPT x 20A 28mm SPT x 20A	Elbow Adaptor for Stainless Steel Pipe 28mm SPT x 20A
			
Angle Ball Valve (Left/Right) 3/4" x 28mm SPT 28mm x 28mm SPT 1 1/4" x 28mm SPT	Elbow Adaptor 3/4" x 28mm SPT 28mm x 28mm SPT 1 1/4" x 28mm SPT	Ring Joint Angle Ball (Left/Right) 3/4" x 28mm SPT 28mm x 28mm SPT	Ring Joint Elbow Adaptor 3/4" x 28mm SPT 28mm x 28mm SPT 20mm x 25mm SPT 25mm x 25mm SPT
			
Header Support	Water Flow Control Ball Valve 16mm SPT	Water Flow Control M Ball Valve (Plating Butterfly) 16mm	Water Flow Control PB Ball Valve (Butterfly) 16mm SPT

Miscellaneous



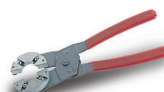





ISO (KS 2003)

															
Support Sleeve				Grab Ring				O-Ring				Washer			
16mm	20mm	25mm		16mm	20mm	32mm		16mm	20mm	25mm	32mm	16mm(white)	20mm		
32mm(only STS)				25mm(One Grab Ring)								25mm 32mm			
															
Cap				B.Cap											
16mm	20mm	25mm	32mm	16mm	20mm			16mm	20mm						
				25mm 32mm(brass)											

ASTM(KS 1998)

																							
<div>• Support Sleeve</div>	<div>• Grab Ring</div>	<div>• O-Ring</div>	<div>• Washer</div>																				
<table><tr><td>3/8"</td><td>1/2"</td><td>3/4"</td><td>28mm</td><td>1 1/4"</td></tr></table>	3/8"	1/2"	3/4"	28mm	1 1/4"	<table><tr><td>3/8"</td><td>1/2"</td><td>3/4"</td><td>28mm</td><td>1 1/4"</td></tr></table>	3/8"	1/2"	3/4"	28mm	1 1/4"	<table><tr><td>3/8"</td><td>1/2"</td><td>3/4"</td><td>28mm</td><td>1 1/4"(in/out)</td></tr></table>	3/8"	1/2"	3/4"	28mm	1 1/4"(in/out)	<table><tr><td>3/8"</td><td>1/2"</td><td>3/4"</td><td>28mm</td><td>1 1/4"</td></tr></table>	3/8"	1/2"	3/4"	28mm	1 1/4"
3/8"	1/2"	3/4"	28mm	1 1/4"																			
3/8"	1/2"	3/4"	28mm	1 1/4"																			
3/8"	1/2"	3/4"	28mm	1 1/4"(in/out)																			
3/8"	1/2"	3/4"	28mm	1 1/4"																			
																							
<div>• Cap</div>	<div>• B.Cap</div>	<div>• Sun Adaptor</div>																					
<table><tr><td>3/8"</td><td>1/2"</td><td>3/4"</td><td>28mm</td><td>1 1/4"</td></tr></table>	3/8"	1/2"	3/4"	28mm	1 1/4"	<table><tr><td>3/8"</td><td>1/2"</td><td>3/4"</td><td>28mm</td><td>1 1/4"</td></tr></table>	3/8"	1/2"	3/4"	28mm	1 1/4"	<table><tr><td colspan="5">M 1/2" x F 1/2"</td></tr></table>	M 1/2" x F 1/2"										
3/8"	1/2"	3/4"	28mm	1 1/4"																			
3/8"	1/2"	3/4"	28mm	1 1/4"																			
M 1/2" x F 1/2"																							

ISO (KS 2003) / ASTM(KS 1998)

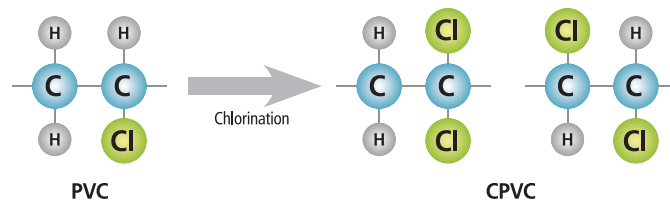
												
<div>• Cutter</div>	<div>• Marking Cutter</div>		<div>• CD Pipe Cutter</div> <table><tr><td>16C</td><td>22C</td><td>28C</td></tr></table>	16C	22C	28C	<div>• Water Hammer Arrest(M,F)</div> <table><tr><td>AA 16mm(SPT)</td><td>1/2 "(SPT)</td></tr></table>		AA 16mm(SPT)	1/2 "(SPT)		
16C	22C	28C										
AA 16mm(SPT)	1/2 "(SPT)											
												
<div>• Air Chamber for Brass Tee</div> <table><tr><td>16mm</td><td>1/2"</td></tr></table>	16mm	1/2"	<div>• Water Hammer for Brass Tee</div> <table><tr><td>AA 16mm</td><td>1/2"</td></tr></table>		AA 16mm	1/2"	<div>• Blanking Cap for water Fecting</div> <table><tr><td>Long 25mm</td><td>Short 15mm</td></tr></table>	Long 25mm	Short 15mm	<div>• AJ bracket</div> <table><tr><td>15mm</td><td>35mm</td></tr></table>	15mm	35mm
16mm	1/2"											
AA 16mm	1/2"											
Long 25mm	Short 15mm											
15mm	35mm											

CPVC Synthetic Resin Utilized Sprinkler Facility Technology

Property of CPVC

1) What's CPVC (Chlorinated Polyvinyl Chloride)?

– CPVC is kind of chloride synthetic resin that marks an epoch in reinforcing thermal resistance, bar tolerance, impact resistance, mechanical strength and corrosion resistance, compared to the existing PVC.



* CPVC is made from ethylene generated from petroleum or natural gas and chloride salt.

2) Utility of CPVC

– Sprinkler Plumbing System (For firefighting) : Wet plumbing of light fire breaking area

– Plumbing System for Industrial Chemistry (For industrial utility)

: Various kinds of acid and sewage discharging plumbing

– Plumbing System for cold & hot water (For construction) : Piping materials for drinking water

* CPVC has been applied to fire fighting field, construction field and other fields since CPVC used in the USA in 1959.

3) Basic Property of Matter

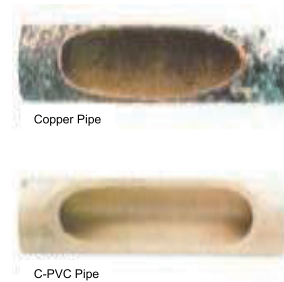
Property			Method of Test	PB	C-PVC
Physical Property	Specific Gravity	-	ASTM D1505	0.937	1.53
	Stiffness	D scale	ASTM D2240	60	140
	Absorption rate	mg/cm ²	JIS K7209	Below 0.01	0.04~0.06
Mechanical Property	Tensile Strength	kgf/cm ²	ASTM D638	170	500~550
	Modulus of Elasticity	kgf/cm ²	ASTM D638	2700	30000
	Ratio of Poisson	-	-	0.38	0.38
	Impact Strength	kgf/cm ²	JIS K7110	4.5	8.0
Thermal Property	Rate of Expansion	cm/cm℃	D696	1.3 x 10 ⁻⁴	6.2 x 10 ⁻⁵
	Specific Heat	cal/(g.℃)	-	0.5	0.2~0.3
	Thermal Conductivity	kcal/(m.h℃)	C177	0.33	0.095 x 0.12
	Melting Point	℃	DTA	124~126	150~160
Electrical Property	Bulk Specific Resistance	Ω.cm	ASTM D257	Above 10 ¹⁷	Above 10 ¹⁵
	Withstanding Voltage	kV/mm	ASTM D149	38	Below 40

CPVC Synthetic Resin Utilized Sprinkler Facility Technology

ㄴ Characteristic of CPVC Plumbing

1) Corrosion Resistance and Hygiene

- No corrosion and scale: No rust and pipe clogging (Corrosion resistance is proved against various chemical environment such as acid, alkali, salt and halogen)
- CPVC material and conjugating adhesive are harmless to human body and ecology (It's used as plumbing for drinking water : Acknowledged by NSF)
- Bacteria is refrained from generating with antibacterial material



2) When CPVC is revealed to fire,

- Function of self-fire extinction is procured. (If CPVC burns, three times as much as the amount of oxygen is necessary at the present earth.)
 - In case applying heat, CPVC never spreads fire and becomes ash.
 - The toxicity of smoke occurs rarely more than common architectural materials
- (From the test result of burning from Pittsburgh University and environment)

Materials	limited oxygen rate	Remarks
CPVC	60	oxygen content in the air 21%
cotton	16~17	
PE	17	
PP	18	
PS	18	
PB	18	

* Firing Test of CPVC Plumbing KFITI (Korea Fire Industry Technology Institute)



- Initial temperature of Flame : 878°C (1600°F)
- Head of sprinkler is operated after 1 minute.



Inspection after firing test

- No damage occurred except that the surface of outer wall changed like charcoal.
- No change occurred on the inner wall of pipe and water passage.
- No error has occurred in giving some inner pressure under 12 bar (about 12kgf/cm²) since test for 5 minutes.

CPVC Synthetic Resin Utilized Sprinkler Facility Technology

Low Rate of Friction Loss

- As CPVC plumbing has a greater fluid flowing coefficient(C), loss amount by friction is little.

Hazen – Williams Rule

$$f = 0.2038 \left(\frac{100}{C} \right)^{1.852} \frac{g^{1.852}}{d^{4.8855}}$$

f: Loss by friction per 100ft of pipe

d: Inner diameter of pipe(inch)

g: Flux(gal/min)

c: Fluid flowing coefficient (degree of smoothness for the inner wall of pipe,
no change occurs for the coefficient according to lapse (of time)

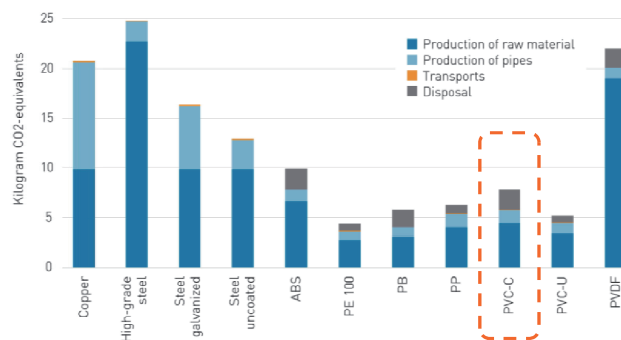
Quality of Material	Flux (ℓ)	Loss amount by Pressure (m)				C (fluid flowing coefficient)
		3.78	18.92	37.85	75.70	
CPVC Pipe		0.10	1.94	6.99	25.24	150
Coper Pipe		0.13	2.52	9.11	32.90	130
Zinc Alloy Pipe		0.17	3.44	12.42	44.83	120
Cast Iron Pipe		0.21	4.10	14.81	53.48	100

※ Loss amount by pressure means fluidal pressure reduced amount per 1" 30m.

Reduction of Loss of Heat and Greenhouse Gases

- As CPVC pipe has low thermal conductivity, it has excellent heat insulation effect and no dew condensation phenomenon.
- The noise in flowing water through CPVC pipe is rare and pressure occurred by water hammer is approximately 1/3 of steel pipe.
- As CPVC pipe has low discharging rate of CO₂, this pipe contributes to the reduction of greenhouse gases

Quality of Material	Thermal Conductivity (W/mk)
Steel Pipe	42.74
Copper Pipe	320
PB	0.22
PP-R	0.24
PE-X	0.41
CPVC	0.14



CO₂ Discharged Amount

CPVC PIPE SYSTEM for FIRE FIGHTING

CPVC Products

CPVC PIPE SYSTEM for FIRE FIGHTING

▮ Tolerance(ASTM)



Nominal diameter	external diameter (mm)	internal diameter (mm)	thickness (mm)
1" (25)	33.40 ~ 33.50	28.02	2.46 ~ 2.97
1-1/4" (32)	42.20 ~ 42.30	35.50	3.12 ~ 3.63
1-1/2" (40)	48.25 ~ 48.35	40.63	3.58 ~ 4.09
2" (50)	60.30 ~ 60.40	50.88	4.47 ~ 5.00
2-2/1" (65)	73.08 ~ 73.18	61.65	5.41 ~ 6.07
3" (80)	89.00 ~ 89.10	75.10	6.58 ~ 7.37
4" (100)	114.40 ~ 114.50	96.51	8.46 ~ 9.48

CPVC Products



Equal Tee

Size	
25mm	32mm
40mm	50mm
65mm	80mm
	100mm



Elbow

Size	
25mm	32mm
40mm	50mm
65mm	80mm
	100mm



Socket

Size	
25mm	32mm
40mm	50mm
65mm	80mm
	100mm



Reducer

Size	
32x25mm	40x25mm
40x32mm	50x25mm
50x40mm	65x40mm
65x50mm	80x40mm
80x50mm	80x65mm
100x80mm	



BRT

Size		
32x25mm	40x25mm	40x32mm
50x25mm	50x32mm	50x40mm
65x25mm	65x32mm	65x40mm
65x50mm	80x25mm	80x40mm
80x50mm	80x65mm	100x80mm



45° Elbow

Size	
25mm	32mm
40mm	50mm
65mm	80mm



30° Elbow / 60° Elbow

Size	
50mm	



Cap

Size	
25mm	32mm
40mm	50mm



Groove Adaptor

Size	
65mm	



M, F Valve Socket, F Elbow

Size	
25mm	



Fittings for PT

Size	
Socket	25mmX1/2" (15mm)
Elbow	25mmX1/2" (15mm)
Tee	25mmX1/2" (15mm)



BORT

Size	
32 x 25 x 25mm	40 x 32 x 25mm
50 x 40 x 25mm	



Flange

Size	
40mm	50mm
65mm	80mm
	100mm



Gasket

Size	
40mm	50mm
65mm	80mm



Solvent Cement

Size	
500g	1kg
USA-550	USA-550



Insert M Valve Socket(STS)

Size	
25mm	50mm
32mm	42mm
65mm	



Insert M Valve Socket
(for connecting SP Joint)

Size	
25mm	



Elbow for connecting
sprinkler head

Size	
H150, 130, 110, 90	



CPVC Integrated
Flexible Joint

Size	
25mm / L700, L1000	



Insert M valve socket

Size	
25mm	32mm
40mm	50mm
65mm	80mm

CPVC Synthetic Resin Utilized Sprinkler Facility Technology

Plumbing Installation

Assembling & Connecting Method of CPVC Pipe



1) Cut the pipe.

- Don't use the pipe or connect fittings having grooves or scratches.
- Don't cut the cut part at an angle.



2) Remove burrs.

- Remove the inside or outside part of the pipe and impurities.



3) Apply adhesive.(Pipe)

- Apply the adhesive on the area of 1/2 of pipe.
- Apply the adhesive on the end of pipe thickly.
- Apply the adhesive on the pipe with the brush 2 or 3 times.



4) Apply adhesive. (Connecting fittings)

- Apply the adhesive on the inside of fittings thinly and evenly.
- Apply the adhesive on the fittings with the brush 2 or 3 times.



5) Assemble the pipes.

- When inserting the pipe into the fittings, insert and turn the pipe 1/4 circle, and leave the pipe for 10~15 seconds.
- Confirm if bubbles exist on the assembled parts.
- In case of assembling nut/bolt, wind teflon tape on the bolt enough.



6) Observe hardening period.

- Observe the initial Hardening and full hardening time by all means.
- In case of applying any treatment and pressure, any breakage may occur.

How to Treat exclusive CPVC Adhesive

- Keeping the pipes and fittings, clean, apply the adhesive after removing any moisture.
- Don't use the adhesive excessively. (Resistance of flowing)
- Don't use the solid or jelly type adhesive.
- Be careful of sparks and flames.
- Close the cap after using the adhesive.
- Avoid contact from eyes/skin from the adhesive.
- Observe the minimum lapse time after connecting the pipe to the fittings.

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▷ Example of CPVC Piping



Sprinkler Pipes of Apartment



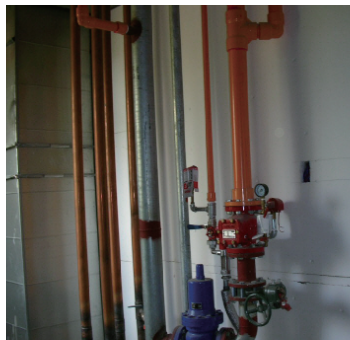
Sprinkler Pipes of Apartment



Sprinkler Pipes of Apartment



Sprinkler Pipes of Apartment



Sprinkler Pipes of Apartment
(Alarm Valve)



Connecting of Other Materials
(Valve Socket Type)



Connecting of Other Materials
(Valve Socket Type)



Connecting of Other Materials
(Flange Type)



Connecting of Other Materials
(Angle Ball Valve)



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*As the dimension of these products can be changed without any notice, contact us if there are any questions. Nov 2020

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