

SUNPLAST
MANUFACTURING EXCELLENCE

MULTILAYER PIPING SYSTEM



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COMPANY BRIEF INTRODUCTIN

NINGBO SUNPLAST PIPE CO.,LTD, which was founded in 1995, is a professional manufacturers of plastic pipes & fittings in China. With the workshop situated in Ningbo city, SUNPLAST Company has over 100 employees and more than 20,000 square meters workshops. Equipped with world advanced pipe extrusion lines and injection machines, the company's annual output of plastics reaches over 10000 tons.

As a modern & hi-tech enterprise, SUNPLAST has mature technique、advanced production machines、professional workers、rich experience, as well as strict quality control system. The company has passed ISO9001:2000 certificate, ISO14001:2004 certificate for our company, and CE certificate, WRAS certificate.etc for our products. Till now, SUNPLAST has extended its business to over 20 countries and areas in the world.

Now, SUNPLAST provides about 150 different products of plastic pipes & fittings for water, gas & heating, comprising four categories: HDPE pipes & fittings for water and gas, PPR pipes & fittings for water, PEX-AL-PEX multilayer pipes & fittings for water and gas, PEX pipes for under-floor heating systems..

Sticking to the managing guideline of "quality is life, technology is leading force, client's satisfaction is ultimate target" all the while, we are getting more and more business opportunity from all over the world. We warmly welcome the customers from abroad to inquire to us, and build a "win-win" business relationship together.



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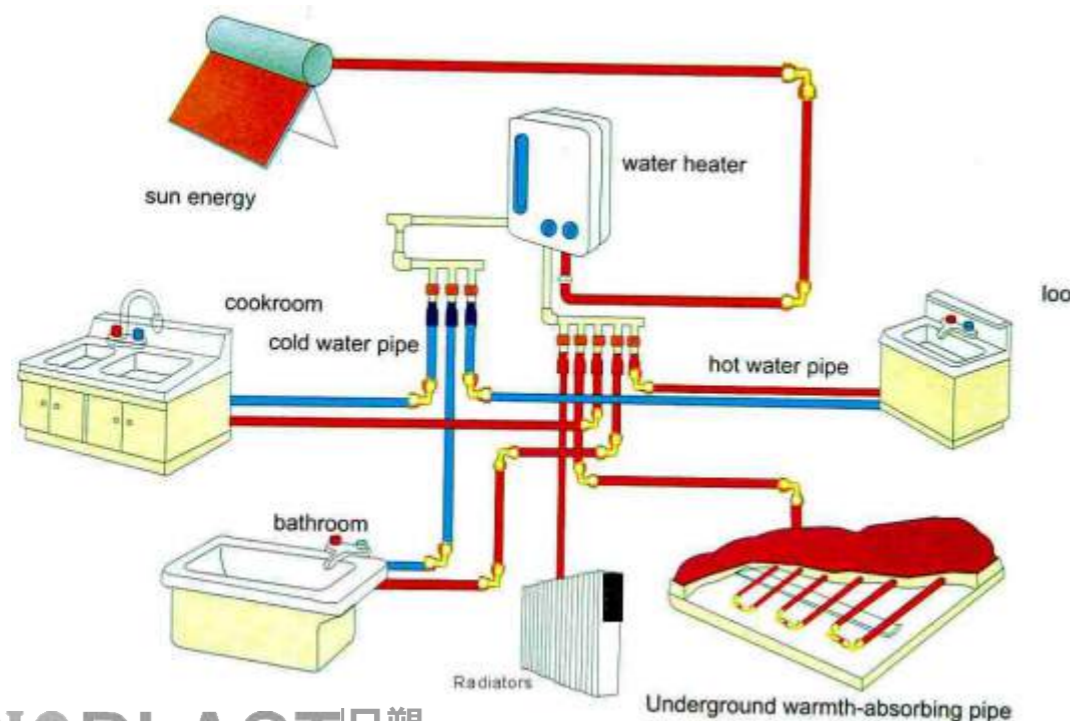
MULTILAYER PIPING SYSTEM

Based on SUNPLAST multilayer pipes, the system is built for safety and reliability, using corrosion-proof components assembly is clean, safe and fast. The smooth inner surface of SUNPLAST pipe prevents deposit accumulation and corrosion, leading up to 30% more flowing than metal pipe. Combining the advantages of plastic and metal, SUNPLAST multilayer pipe is ideal for all common hot and cold water installations. SUNPLAST pipes and fittings carry the CE certificate for the potable water. SUNPLAST multilayer piping system is a complete system including: pipes, brass fittings, installtion tools.



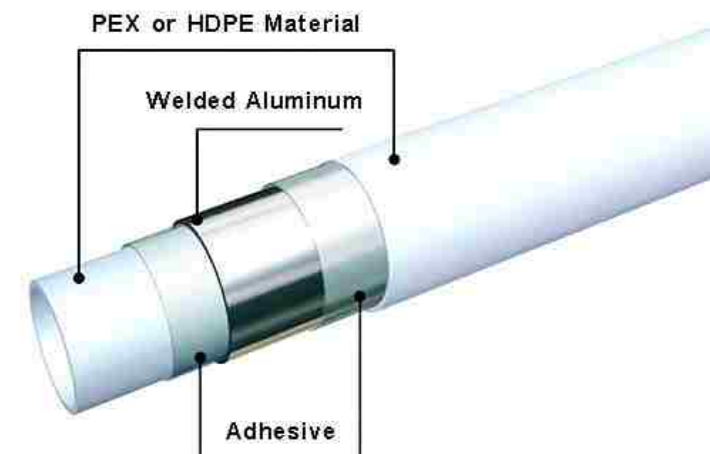
Main applications:

- Tap water, cold and hot water pipe, central air-condition sleeve, water-purified equipments.
- Caliduct, under floor caliduct (save more energy than normal pipe)
- Gas pipe (easy operation, bendable, few junctions, static resistant)
- Compressed oxygen pipage (free from oxygen, no infiltration)



MULTILAYER PIPES

SUNPLAST multilayer pipe is a five-layer composite pipe that combines the advantage of a metal and plastic pipe, and eliminates the disadvantages of both materials at the same time. The aluminum core is absolutely diffusion tight; it reliably prevents oxygen/gases from permeating into pipe. It compensates and reduces snap-back forces and heat expansion with changes of temperature.



※ Overlapped welded pipe is co-extruded with one step with perfect adhesive between inner layer and aluminum, high and stable pressure resistance, of which welding style is ultrasonic.

※ Butt welded pipe is moulding with several steps that is argon-arc welding style.

By comparing with other metal pipes and plastic pipes, SUNPLAST multilayer piping systems have the following advantages:

- ※ Smooth wall leads to a 30% more flow than metal pipe
- ※ High-temperature retardant, low-temperature resistance: the pipe can endure + 110°C and - 40°C temperature.
- ※ Simple installation
- ※ Hygiene: inner layer & outer layer of pipes are made by pure PEX raw material. The middle layer-aluminum core prevents gas/oxygen the invasion inside the pipes.
- ※ Weathering working life: Have a working life of more than 50 years.

ISO9001:2000	16x2.0	PE/AL/PE	Tmax=60°C	Pmax=10BAR	25-03-08	100m
ISO9001:2000	16x2.0	PE/AL/PEX	Tmax=95°C	Pmax=10BAR	25-03-08	100m
ISO9001:2000	16x2.0	PE-X/AL/PE-X	Tmax=95°C	Pmax=10BAR	25-03-08	100m
ISO9001:2000	16x2.0	PE-RT/AL/PE-RT	Tmax=95°C	Pmax=10BAR	25-03-08	100m
ISO9001:2000	16x2.0	PE/AL/PE	Tmax=60°C	Pmax=10BAR	25-03-08	100m

MULTILAYER PIPES FOR WATER

Remark:

- ※Pipe length can be in 50/100/200 meters, other length available as per request.
- ※Colors available: white, red or yellow, or as per request
- ※Both overlapped welded pipes & butt laser welded pipes are available.

Specification		Max. Working Pressure	Max. Working Temperature	Package Length
(mm)	(inch)	(bars)	(°C)	(meter/roll)
0912	3/8"	10	95	50/100/200/500
1216	1/2"	10	95	50/100/200/500
1418	1/2"	10	95	50/100/200
1620	5/8"	10	95	50/100/200
2025	3/4"	10	95	50/100
2026	3/4"	10	95	50/100
2632	1"	10	95	50/100

Code: RS-2002



PEX-AL-PEX Pipe

100% diffusion-resistant multilayer composite (MLCP) pipe, five layers (PEX-adhesive agent-laser weld/overlap weld aluminum-adhesive agent-PEX), for general plumbing, underfloor heating, radiator-connection.,etc. Manufactured to the strictest European & the U.S. standard, approved by CE certificate

Specification		Max. Working Pressure	Max. Working Temperature	Package Length
(mm)	(inch)	(bars)	(°C)	(meter/roll)
0912	3/8"	10	95	50/100/200/500
1216	1/2"	10	95	50/100/200/500
1418	1/2"	10	95	50/100/200
1620	5/8"	10	95	50/100/200
2025	3/4"	10	95	50/100
2026	3/4"	10	95	50/100
2632	1"	10	95	50/100

Code: RS-2003



PERT-AL-PERT Pipe

100% diffusion-resistant multilayer composite (MLCP) pipe, five layers (PERT-adhesive agent-laser weld/overlap weld aluminum-adhesive agent-PERT), for general plumbing, underfloor heating, radiator-connection.,etc.

MULTILAYER PIPES FOR INDOOR GAS

SUNPLAST multilayer pipes for indoor gas can be divided into C(HDPE-AL-HDPE)Pipe and B1(PEX-AL-PEX)Pipe:

C PIPE(HDPE-AL-HDPE)

The max. working temperature is up to 60°C, and the max.working pressure is 4 bars.

The life span is 50 years under regular use condition. The aluminum layer ensures well airproof condition and high corrosion resistance.

B1 Pipe (PEX-AL-PEX)

Both inner and outer layer are PEX (crosslinked Polyethylene), the working temperature

range is between 40°C to 95°C, which is wider than C pipe, the max.working pressure

is up to 10 bars and has better airproof function and corrosion resistance than C pipe

Specification		Max. Working Pressure	Max. Working Temperature	Package Length
(mm)	(inch)	(bars)	(°C)	(meter/roll)
1216	1/2"	4	60	50/100/200/500
1418	1/2"	4	60	50/100/200
1620	5/8"	4	60	50/100/200
2025	3/4"	4	60	50/100
2632	1"	4	60	50/100

Code: RS-2001



C Pipe (HDPE-AL-HDPE)

100% diffusion-resistant multilayer composite (MLCP) pipe, five layers (HDPE-adhesive agent-laser weld aluminum-adhesive agent-HDPE), for indoor gas, which is manufactured to the strictest European & U.S. standard.

Colors: yellow or white

Specification		Max. Working Pressure	Max. Working Temperature	Package Length
(mm)	(inch)	(bars)	(°C)	(meter/roll)
1216	1/2"	10	95	50/100/200/500
1418	1/2"	10	95	50/100/200
1620	5/8"	10	95	50/100/200
2025	3/4"	10	95	50/100
2632	1"	10	95	50/100

Code: RS-2002



B1 Pipe (PEX-AL-PEX)

100% diffusion-resistant multilayer composite (MLCP) pipe, five layers (PEX-adhesive agent-laser weld aluminum-adhesive agent-PEX), for indoor gas, which is manufactured to the strictest European & U.S. standard.


Colors: yellow or white


COMPRESSION TYPE BRASS FITTINGS


Remark:


※The brass fittings are made by high quality brass materials, such as CW617,58-2,CW602N DZR,C48600,etc.


※The colors available: original brass or nickel-paltd


EQUAL ADAPTOR	Code	Specification (mm)	Package pcs/bag
		RS-2004	S16×16
		S18×18	130
		S20×20	100
		S26×26	80
		S32×32	30


REDUCING ADAPTOR	Code	Specification (mm)	Package pcs/bag
		RS-2005	S20×16
		S26×16	90
		S26×20	80
		S32×16	55
		S32×20	50
		S32×26	40


FEMALE ADAPTOR	Code	Specification (mm)	Package pcs/bag
		RS-2006	S16×1/2" F
		S16×3/4" F	160
		S18×1/2" F	200
		S20×1/2" F	150
		S20×3/4" F	150
		S26×1/2" F	120
		S26×3/4" F	100
		S26×1" F	100
		S32×1/2" F	90
		S32×3/4" F	85
		S32×1" F	70


MALE ADAPTOR	Code	Specification (mm)	Package pcs/bag
		RS-2007	S16×1/2" M
		S16×3/4" M	160
		S18×1/2" M	200
		S20×1/2" M	150
		S20×3/4" M	150
		S26×1/2" M	120
		S26×3/4" M	100
		S26×1" M	100
		S32×1/2" M	90
		S32×3/4" M	85
		S32×1" M	70


ELBOW	Code	Specification (mm)	Package pcs/bag
		RS-2008	L16×16
		L18×18	120
		L20×20	100
		L26×26	50
		L32×32	40
		L20×16	100
		L26×20	50


SEATED FEMALE ELBOW	Code	Specification (mm)	Package pcs/bag
		RS-2009	ZL16×1/2" F
		ZL16×3/4" F	80
		ZL18×1/2" F	80
		ZL20×1/2" F	80
		ZL20×3/4" F	60


FEMALE ELBOW	Code	Specification (mm)	Package pcs/bag
	RS-2010	L16×1/2"F	160
		L16×3/4"F	120
		L18×1/2"F	140
		L20×1/2"F	120
		L20×3/4"F	100
		L26×3/4"F	70
		L26×1"F	60
		L32×3/4"F	50
		L32×1"F	50

MALE ELBOW	Code	Specification (mm)	Package pcs/bag
	RS-2011	L16×1/2"M	200
		L16×3/4"M	200
		L18×1/2"M	160
		L20×1/2"M	150
		L20×3/4"M	100
		L26×1/2"M	80
		L26×3/4"M	70
		L26×1"M	60
		L32×3/4"M	50
	L32×1"M	50	

EQUAL TEE	Code	Specification (mm)	Package pcs/bag
	RS-2012	T16×16×16	100
		T18×18×18	80
		T20×20×20	70
		T26×26×26	40
		T32×32×32	30

REDUCING TEE	Code	Specification (mm)	Package pcs/bag
	RS-2013	T20×16×20	70
		T26×16×26	40
		T26×20×26	40
		T32×16×32	30
		T32×20×32	20
		T32×26×32	20

FEMALE TEE	Code	Specification (mm)	Package pcs/bag
	RS-2014	T16×1/2"F×16	80
		T16×3/4"F×16	80
		T18×1/2"F×18	70
		T20×1/2"F×20	70
		T20×3/4"F×20	60
		T26×1/2"F×26	50
		T26×3/4"F×26	40
		T26×1"F×26	40
		T32×1/2"F×32	40
		T32×3/4"F×32	30
	T32×1"F×32	30	


MALE TEE	Code	Specification (mm)	Package pcs/bag
	RS-2015	T16×1/2"M×16	100
		T16×3/4"M×16	80
		T18×1/2"M×18	90
		T20×1/2"M×20	80
		T20×3/4"M×20	60
		T26×1/2"M×26	50
		T26×3/4"M×26	40
		T26×1"M×26	30
		T32×1/2"M×32	30
		T32×3/4"M×32	30
	T32×1"M×32	30	


PRESS TYPE BRASS FITTINGS


Remark:


※The brass fittings are made by high quality brass materials, such as CW617,58-2,CW602N DZR,C48600,etc.


※The colors available: original brass or nickel-paltd


EQUAL ADAPTOR	Code	Specification (mm)	Package pcs/bag
		RS-2016	S16×16
		S20×20	100
		S25×25	80
		S32×32	30


REDUCING ADAPTOR	Code	Specification (mm)	Package pcs/bag
		RS-2017	S20×16
		S25×16	100
		S25×20	90
		S32×16	50
		S32×20	40
		S32×25	35


FEMALE ADAPTOR	Code	Specification (mm)	Package pcs/bag
		RS-2018	S16×1/2"F
		S16×3/4"F	220
		S20×1/2"F	150
		S20×3/4"F	150
		S20×1"F	140
		S25×1/2"F	110
		S25×3/4"F	100
		S25×1"F	100
		S32×3/4"F	50
		S32×1"F	50


MALE ADAPTOR	Code	Specification (mm)	Package pcs/bag
		RS-2019	S16×1/2"M
		S16×3/4"M	240
		S20×1/2"M	160
		S20×3/4"M	150
		S20×1"M	150
		S25×1/2"M	160
		S25×3/4"M	160
		S25×1"M	100
		S32×3/4"M	60
		S32×1"M	60


ELBOW	Code	Specification (mm)	Package pcs/bag
		RS-2020	L16×16
		L20×20	100
		L25×25	50
		L32×32	40
		L20×16	110
		L25×16	60
		L25×20	50
		L32×20	50
		L32×25	40


SEATED FEMALE ELBOW	Code	Specification (mm)	Package pcs/bag
		RS-2021	ZL16×1/2"F
		ZL20×1/2"F	150
		ZL20×3/4"F	100
		ZL25×3/4"F	60


FEMALE ELBOW	Code	Specification (mm)	Package pcs/bag
	RS-2022	L16×1/2"F	160
		L16×3/4"F	120
		L20×1/2"F	120
		L20×3/4"F	100
		L25×3/4"F	70
		L25×1"F	60
		L32×3/4"F	50
		L32×1"F	50

MALE ELBOW	Code	Specification (mm)	Package pcs/bag
	RS-2023	L16×1/2"M	200
		L16×3/4"M	200
		L20×1/2"M	150
		L20×3/4"M	100
		L25×1/2"M	80
		L25×3/4"M	70
		L25×1"M	60
		L32×3/4"M	50
	L32×1"M	50	


FEMALE TEE	Code	Specification (mm)	Package pcs/bag
	RS-2024	T16×1/2"F×16	80
		T16×3/4"F×16	80
		T20×1/2"F×20	70
		T20×3/4"F×20	60
		T25×1/2"F×25	50
		T25×3/4"F×25	40
		T25×1"F×25	40
		T32×1/2"F×32	40
		T32×3/4"F×32	30
		T32×1"F×32	30


EQUAL TEE	Code	Specification (mm)	Package pcs/bag
	RS-2025	T16×16×16	100
		T20×20×20	70
		T25×25×25	40
		T32×32×32	30


REDUCING TEE	Code	Specification (mm)	Package pcs/bag
	RS-2026	T20×16×20	70
		T25×16×25	40
		T25×20×25	40
		T32×16×32	30
		T32×20×32	30
		T32×25×32	30


MALE TEE	Code	Specification (mm)	Package pcs/bag
	RS-2027	T16×1/2"M×16	100
		T16×3/4"M×16	80
		T20×1/2"M×20	80
		T20×3/4"M×20	60
		T25×1/2"M×25	50
		T25×3/4"M×25	40
		T25×1"M×25	30
		T32×1/2"M×32	30
		T32×3/4"M×32	30
		T32×1"M×32	30


INSTALLATION TOOLS


PIPE CUTTER	Code	Specification (mm)	Package pcs/bag
	RS-1028	14-42	50


PIPE CUTTER	Code	Specification (mm)	Package pcs/bag
	RS-1029	14-42	50


PLASTIC REAMER	Code	Specification (mm)	Package pcs/bag
	RS-1030	16×20×26×32	100


PLASTIC REAMER	Code	Specification (mm)	Package pcs/bag
	RS-1031	16×20×26	100
		20×26×32	100

T REAMER	Code	Specification (mm)	Package pcs/bag
	RS-1032	16×20×26×32	100

EXTERNAL BENDING SPRING	Code	Specification (mm)	Package pcs/bag
	RS-1033	16	100
		20	100
		26	50
		32	50

INTERNAL BENDING SPRING	Code	Specification (mm)	Package pcs/bag
	RS-10334	16	100
		20	100
		26	50
		32	50

PRESS TOOL	Code	Specification (mm)	Package pcs/bag
	RS-1035	16-32	5

PRESS JAWS	Code	Specification (mm)	Package pcs/bag
	RS-1036	16	50
		20	50
		25	20
		32	20

For Compression Type Brass Fittings:



Step 1: Pipe cutting

Cut the pipe vertically and precisely with SUNPLAST pipe cutter



Step 2: Rounding and beveling

Round and bevel the end holes with SUNPLAST reamer.



Step 3: Sleeving

1. Choose the right size fitting according to the pipe, put the nut over the pipe, inside the compression ring over the pipe, make sure the mouth of the nut and the pipe faces the same direction.



2. Push the inserts into the pipe up to the shoulder, take care not to damage the O-ring.



Step 4: Tightening

Screw-tighten the fitting with the spanner

For Press Type Brass Fittings:



Step 1: Pipe cutting

Cut the pipe vertically and precisely with SUNPLAST pipe cutter



Step 2: Rounding and beveling

Round and bevel the end holes with SUNPLAST reamer.



Step 3: Sleeving

Choose the right size sleeved-fitting according to the pipe, then aim the pipe end at the ring-shape hole of the fitting integrated with sleeve and slide the fitting insert into the pipe until it reaches the plastic block.



Step 4: Pressing

1. Selecting jaw.
2. Installing jaw on to the tool
3. Adjusting the pressure tool
4. Open the pressing tool and position the tool ring onto the sleeve.



5. Close the handles until the two touch points on the handles touch each other.
6. While the jaw is completely closed, the handles will be self-locked. Open the handle and remove the pressing tool from the fitting and installation is accomplished.