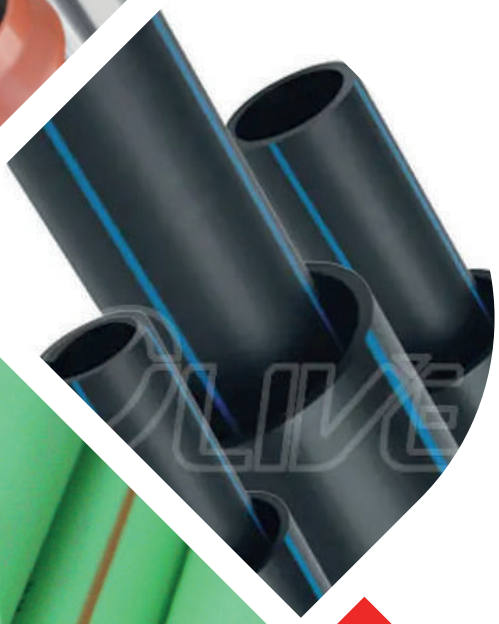
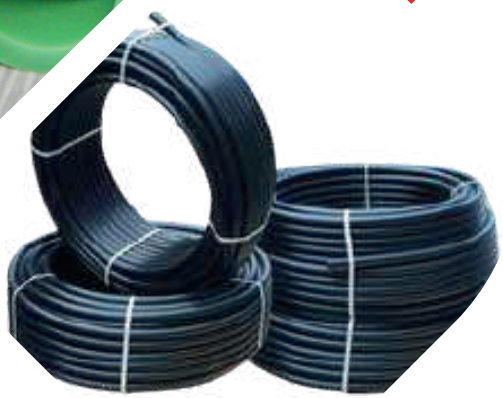
PRODUCT
CATALOGUE

SHAMO PLAST
Industries L.L.C





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Quality is none negotiable!!

www.shamoplast.com

TABLE OF CONTENT

Our Story	04	Drainage System	16
Why Shamo Plast	05	Electrical & Telephone System	20
Key Features	06	Guidelines	22
Quality Control	07	PPR System	26
General Properties	08	Polyethylene System	32
UPVC Standards	09	Projects.	36
Pressure System	10	Limited Warranty	38

OUR STORY

Established in the year 1995, SHAMO PLAST INDUSTRIES LLC, has been a pioneering industry in the United Arab Emirates to manufacturer UPVC pipes and Fittings, BS-EN Standard and DIN Standard for Pressure pipes sewer drain, drainage, water purpose, Telephone Duct, Electrical Conduit Pipe and PPR Pipe for HOT and COLD Water and other international standards in order to become the best afforable alternative, more efficient, easy to transport to site, easy to install and resistant to corrosion and chemicals. It belongs to SHAMO GROUP OF INDUSTRIES, which is one of the largest and most diversified business conglomerates in the Middle East & African countries. UPVC pipes are manufactured from unplasticised polyvinyl chloride polymer which is a thermoplastic material commonly used for potable water distribution, sewer drain, drainage to complete the production lines and find a comprehensive and integrated plant, a modern manufacturing line to produce pipes has recently been launched.

WHY
SHAMO PLAST

High Mechanical strength than any other plastic pipes & fittings

Achieving high degree of production consistency

Continues improvement in both materials, and quality control with the ultimate aim of providing zero defects.

Deliver unmatched quality and disguished from

KEY FEATURES OF SHAMO PLAST PIPES

Here are some of the main features of UPVC pipes that you should know:

Harder than PVC.While manufacturing UPVC pipes, additional plasticizing polymers are not used. This is the reason why UPVC pipes have more rigid consistency than PVC pipes.

Eco-friendly and chemical resistant.
UPVC pipes are manufactured using eco-friendly and virgin unplasticized polyvinyl chloride compounds. Thanks to UPVC's chemical resistance, it has become integral to plumbing.

Lightweight and hassle-free.
These are light in weight, durable, and resilient. Plus, UPVC pipes also ensure low or no maintenance. As these are 1/5th the specific weight of steel pipes, it ensures lower transportation cost and easy installation.

Long-lasting durability.
These pipes are mineral resistant, corrosion-proof, and withstand the effects of hardware conditions. Therefore, these pipes do not corrode or scale. UPVC pipes offer high strength and UV resistance.

Cost effective
Easy to install, these drainage pipes also offer low installation and operational costs. Also, because they are tough and durable, they save the cost of replacement in the long run.

UPVC plastic pipes come along with a number of advantages. Plus, these are cost-effective, light-weight, and durable too. Therefore, you can choose these pipes for your residential and commercial plumbing, draining and ventilation systems.In order to get the most out of UPVC pipes, make sure to choose a reputed and reliable manufacturer like Shamo Plast.

QUALITY CONTROL & INSPECTION

We are proud to have significant investments in the most modern machinery and methods for the production of high quality and bulk output. Consistently meet quick demands of market and speedy delivery within time limit. We are using only the genuine pure raw materials from well known international manufacturers. Our products are manufactured according to various specifications of international standards such as ISO, DIN, BS, BS EN, and ASTM.

OUR QUALITY CONTROL MEASURES

- Daily Round the clock Inspection.
- Well Trained Staff.
- Well Equipped Laboratory.
- Most Modern Machineries.
- High Quality Raw Materials.
- Timely Production.

Checking of Finished goods, to ensure the quality. We also produce long radius bends in different degrees with plain & socketed ends, sockets, double socket, repair couplings, spigots, flanges, adaptor, perforated & slotted pipes etc. We also undertake all kinds of mounding and fabrication works. For more detailed information about specifications, standards, production range, size and raw materials, please refer following pages. If any clarification about our products, please contact our technical department.

We look forward to assist you and welcome your valuable suggestions.

GENERAL PROPERTIES

Shamo Plast UPVC pipes & fitting will not damage or deteriorate under the attack from bacteria or other micro-organism and will not provide to micro/microorganism and fungi. These pipes and fitting are also suitable for the harsh climatic conditions of the Gulf Region and also for Chemical Industries as they have chemical resistance to most of acids and alkalis. UPVC are thermoplastic material hence physical properties of this material change with variation in temperature.

SPECIFICATION	U.P.V.C	UNITS
Specific gravity	1.4-1.45	GR/CM3
Specific heat (MAX)	0.25	KCAL/KG/C
Thermal conductivity	0.13	KCALM 4C
Co-officient of linear expantion	5210-5	1C
Vical Softening Temperature	85C	At 1kg Load
Tensile Strength TM 20° C (Min)	500	KG/CM2
Elongation	80	%
Modules Elasticity	1200-1500	MPA
Water Absorption	<4	MG/CM2
Hardness-Shore	80-90	-
Flammability	Self Extinguishing	-

UPVC STANDARDS

The following are international Standards being observed by Shamo Plast:

UPVC PRESSURE PIPE FOR WATER DISTRIBUTION

Specification	Applications	Ratings	Sizes
BS3505	Pressure	Class C, D, E	1/2 - 10"
DIN 8062	Pressure	PN 6, 10, 16	20mm-315mm
ASTM 1785	Pressure	Schedule 40 & 80	1/2 - 10"
ISO 161/1	Pressure	PN 6.3, 10, 16, 20	20mm-315mm
BS 5255	Waste	Drainage	1 1/4 - 2 inch
BS 4514	Soil	Drainage	3, 4 & 6 inch

UPVC PIPE FOR LAND DRAINAGE AND SEWERAGE

Specification	Applications	Ratings	Sizes
BS 5255	Waste	Drainage	1 1/4 - 2 inch
BS 4514	Soil	Drainage	3, 4 & 6 inch
BS 4660	Underground	Drainage	4 & 6 inch
BS 5481	Gravity Sewer	Drainage	12 & 16 inch
EN 1329	Soil & Waste	Drainage	36 - 400 mm
EN 1401	Underground	Drainage	110 - 400 mm

CONDUIT PIPES FOR ELETRICAL SYSTEM

Specification	Applications	Ratings	Sizes
BS 6099	Conduit	Duct	20mm-50mm
DIN 8062	Non Pressure	PN 4	75mm-315mm

DUCT PIPE FOR TELECOMMUNICATION SYSTEMS

Specification	Applications	Ratings	Sizes
BS 6099	Conduit	Duct	20mm-50mm
DIN 8062	Non Pressure	PN 4	75mm-315mm

PRESSURE SYSTEMS

ASTM D 1785

Nominal Size (Inch)	Outside Diameter MM	Nominal (minimum) Wall Thickness MM	
	Min	Schedule 40 mm	Schedule 80 mm
1/2	21.3	2.8	3.7
3/4	26.3	2.9	3.9
1	33.4	3.4	4.5
1 1/4	42.2	3.6	4.8
1 1/2	48.3	3.7	5.1
2	60.3	3.9	5.5
3	88.9	5.5	7.6
4	114.3	6.0	8.6
6	168.3	7.1	11.0
8	219.1	8.2	12.7
10	273.1	9.3	15.1

BS EN 1452 (BS 3505) FOR WATER DISTRIBUTION

Nominal Size	Outside Diameter MM		Nominal (minimum) Wall Thickness MM		
	Min	Max	CLASS C BAR 9	CLASS D BAR 12	CLASS E BAR 15
1/2	21.2	21.5	-	-	1.7
3/4	26.6	26.9	-	-	1.9
1	33.4	33.7	-	-	2.2
1 1/4	42.1	42.4	-	2.2	2.7
1 1/2	48.1	48.4	-	2.5	3.1
2	60.2	60.5	2.5	3.1	3.9
3	88.7	89.7	3.5	4.6	5.7
4	114.1	114.5	4.5	6.0	7.3
6	168.0	168.5	6.6	8.8	10.8
8	218.8	219.4	7.8	10.3	12.6
10	272.6	273.4	9.7	12.8	15.7

DIN 8062: 2009

Nominal Outside Diameter MM	Nominal (minimum) Wall Thickness MM Nominal Pressure PN based on safety Factor (SF)=2.5							
	Series 25 SDR 51 PN 4	Series 16.7 SDR 34.4 PN 6	Series 12.5 SDR 26 PN 8	Series 10 SDR21 PN 10	Series 8 SDR 17 PN 12.5	Series 6.3 SDR 13.6 PN 16	Series 5 SDR 11 PN 20	Series 4 SDR 9 PN 25
20	-	-	-	-	-	1.5	1.9	2.3
25	-	-	-	-	1.5	1.9	2.3	2.8
32	-	-	-	1.6	1.9	2.4	2.9	3.6
40	-	-	1.6	1.9	2.4	3.0	3.7	4.5
50	-	1.5	2.0	2.4	3.0	3.7	4.6	5.6
63	-	1.9	2.5	3.0	3.8	4.7	5.8	7.1
75	1.5	2.2	2.9	3.6	4.5	5.6	6.8	8.4
90	1.8	2.7	3.5	4.3	5.4	6.7	8.2	10.1
110	2.2	3.2	4.2	5.3	6.6	8.1	10.0	12.3
125	2.5	3.7	4.8	6.0	7.4	9.2	11.4	14.0
140	2.8	4.1	5.4	6.7	8.3	10.3	12.7	15.7
160	3.2	4.7	6.2	7.7	9.5	11.8	14.6	17.9
200	3.9	5.9	7.7	9.6	11.9	14.7	18.2	22.4
225	4.4	6.6	8.6	10.8	13.4	16.6	20.5	25.2

*Available in Rubber Ring

DIN 8062: 2009

Nominal Outside Diameter MM	Nominal (minimum) Wall Thickness MM Nominal Pressure PN based on safety Factor (SF)=2.5						
	Series 25 SDR 51 PN 5	Series 20 SDR 41 PN 6	Series 12.5 SDR 26 PN 10	Series 10 SDR21 PN 12.5	Series 8 SDR 17 PN 16	Series 6.3 SDR 13.6 PN 20	Series 5 SDR 11 PN 25
20	-	-	-	-	1.2	1.5	1.9
25	-	-	-	-	1.5	1.9	2.3
32	-	-	-	1.6	1.9	2.4	2.9
40	-	-	1.6	1.9	2.4	3.0	3.7
50	-	1.3	2.0	2.4	3.0	3.7	4.6
63	-	1.6	2.5	3.0	3.8	4.7	5.8
75	1.5	1.9	2.9	3.6	4.5	5.6	6.8
90	1.8	2.2	3.5	4.3	5.4	6.7	8.2
110	2.2	2.7	4.2	5.3	6.6	8.1	10.0
125	2.5	3.1	4.8	6.0	7.4	9.2	11.4
140	2.8	3.5	5.4	6.7	8.3	10.3	12.7
160	3.2	4.0	6.2	7.6	9.5	11.8	14.6
200	3.9	4.9	7.7	9.5	11.9	14.7	18.2
225	4.4	5.5	8.6	10.7	13.4	16.6	20.5

*Available in Rubber Ring

ISO 161/1

Nominal Outside Diameter MM	Nominal (minimum) Wall Thickness MM				
	Series 20 SDR 41 PN 6.3	Series 12.5 SDR 26 PN 10	Series 8 SDR 17 PN 16	Series 6.3 SDR 13.6 PN 20	Series 5 SDR 11 PN 25
20	-	-	1.2	1.5	1.9
25	-	-	1.5	1.9	2.3
32	-	-	1.9	2.4	2.9
40	-	1.6	2.4	3.0	3.7
50	1.3	2.0	3.0	3.7	4.6
63	1.6	2.5	3.8	4.7	5.8
75	1.9	2.9	4.5	5.6	6.8
90	2.2	3.5	5.4	6.7	8.2
110	2.7	4.2	6.6	8.1	10.0
125	3.1	4.8	7.4	9.2	11.4
140	3.5	5.4	8.3	10.3	12.7
160	4.0	6.2	9.5	11.8	14.6
200	4.9	7.7	11.9	14.7	18.2
225	5.5	8.6	13.4	16.6	20.5
250	6.2	9.6	14.8	18.4	22.7

*Available in Rubber Ring

DRAINAGE SYSTEMS

BS EN 1329 (BS 5255) UPVC SOIL AND WASTE PIPE WITHIN THE BUILDING STRUCTURE

Nominal Size (Inch)	Outside Diameter	Minimum OD MM	Minimum Wall Thickness MM	Colour
1 1/4	36	36.15	1.8	Light Grey
1 1/2	43	42.75	1.9	Light Grey
2	50	50	2	Light Grey
2	55	55.75	2	Light Grey

BS EN 1329 (BS 4514) UPVC SOIL, WASTE AND VENTILATION PIPE FOR ABOVE GROUND

Nominal Size (Inch)	Outside Diameter	Minimum OD MM	Minimum Wall Thickness MM	Colour
3	82	82.40	3	Light Grey
4	110	110	3.2	Light Grey
6	160	160	3.2	Light Grey

BS EN 1401(BS 4660 & BS 5481) UPVC PIPES FOR UNDERGROUND DRAINAGE AND SEWERAGE

Nominal Size (Inch)	Outside Diameter	Minimum OD MM	Minimum Wall Thickness MM	Colour
3	82	82.40	3.0	Terracotta
4	110	110.00	3.2	Terracotta
6	160	160.00	4.1	Terracotta
8	200	200.00	4.9	Terracotta
10	250	250.00	6.1	Terracotta
12	315	315.00	7.7	Terracotta

General Properties of Shamo Plast Drain Pipes

- Fully compliant to the main International Standards
- Tough, impact resistent
- Rubber rings following Standard
- Can be supplied in Solvent Weld or Rubber Ring Joint (from 3" and above)
- Different lengths available 3m, 2.9m, 6m, 5.8m. Other lengths on request.
- Distinctive colour coded system (ie Light Grey, Terracotta, etc.) with full printing at 1m intervals
- Superior chemical and acid resistance
- Outstanding mechanical properties of tensile strength and resistance to pressure.

ELECTRICAL & TELEPHONE SYSTEMS

British Standard Telephone Duct (B.P.O.)

Duct No.	Avg. Outside Diameter MM	Wall Thickness	
		Min MM	Max MM
54 - D	96.5	3.25	3.65
56	53.5	1.55	1.70
57	114.5	3.40	3.8

Stocks are available with plain ends or with sockets. Standard Length: 6 meters. Colour available: Black

BS 3506: UPVC PIPES FOR INDUSTRIAL USE

Nominal Size (Inch)	Outside Diameter		Wall Thickness Class 0 (Non Pressure)		
			Average	Individual Value	
	Min. MM	Max. MM	MM	Min MM	Max MM
1 1/2	48.1	48.4	2.2	1.8	2.2
2	60.2	60.5	2.2	1.8	2.2
3	88.7	89.1	2.2	1.8	2.2
4	114.1	114.5	2.8	2.3	2.8
6	168.0	168.5	3.7	3.1	3.7
8	218.8	219.4	3.7	3.1	3.7
10	272.6	273.4	3.7	3.1	3.7
12	323.4	324.3	3.7	3.1	3.7

GUIDELINES

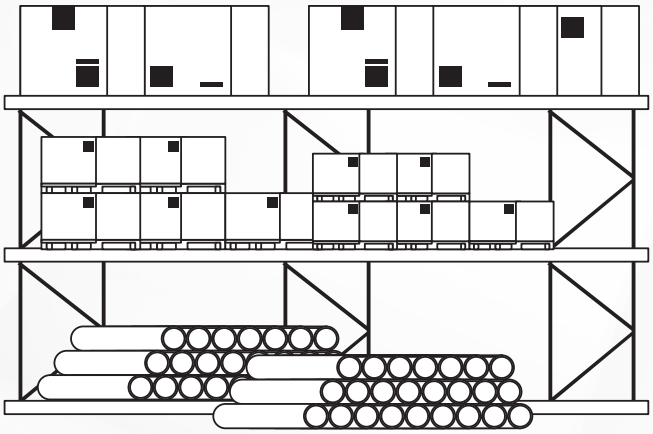
As UPVC is a light weight weight material in comparison to its substitutes like, Ductile lron. The proper handling of this material is the utmost priority otherwise it can seriously affect the quality of the final pipeline structure. So it is important to employ proper care and handlng as outlines in the BSl code of practice LP 312:port

Handling:

The pipes should be handled carefully at all times.Particularly during transportion. It must not be handled roughly, and should neither drop from a height nor drag them from one place to another at hard surfaces as it may damage the pipes and make them unsuitable for use

Storage:

1 Pipes should be stored parallel on flat ground free from sharp tones or open racks.
2 Protect pipe always from direct sunlight by covering wlth a white felt cloth.
3 Do not exceed height of 34 stacking pipes
4 Do not store pipes more than flayers wish.
5 Do not store pipes for more than 2 weeks in open during hot summer days.
6 Do not allow pipe to come in contact with any chemical directly.



Cutting & Chamfering:

Although all the pipes supplied by Shamo Plast are chamfered at one end. however incase of usage of cut length the following method should be applied.

1. In order to cut a pipe uniformly wrap it with a paper mark with a felt pen around the pipe and cut it.
2. 15” chamber can be made with a coarse file up to a depth of about 2/3 of the wall thickness.

Packing

Loading, transport and unloading

1. It is recommended to handle the pipes and fittings in their original sales packaging to protect them and prevent damage during loading and transporting.
2. Load and transport pipes in straight, horizontal position with the full length supported (note that the sockets are unencumbered all around), avoid extreme pressure on the pipes (straps or other heavy materials).
3. Unload and handle pipes carefully and lay them in a straight, horizontal position (pay attention to positioning of the sockets), on a smooth surface.

FOR UPVC SYSTEMS

SOLVENT CEMENT JOINTING FOR UPVC SYSTEMS:

Pipes up to 160mm may be jointed easily with solvent adhesives. Larger sizes require special techniques and two men to make such joints. And in all cases we advise usage of high quality and guaranteed solvent cement adhesives.

JOINTING PROCEDURE:

1. Mark depth of entry pipe into socket and alignment mark.
2. Mark small chamfer on the edge of pipe end with medium file (if not existing).
3. Roughen the outside of pipe and inside of the socket using sand paper or felt cloth up to the safety mark.
4. Clean both surfaces and remove all dust, grease and sand etc. using a dry clean cloth and company recommended chemical cleanser.

5. Apply adhesive without delay after cleaning, using a flat clean brush, Apply on even unbroken layer brushing axially to the pipe end socket mouth with a heavier layer on the pipe, where loose fits are found the pipe, should be given a second coat.
6. Immediately insert the pipe into the socket up to the entry mark, align pipe and socket hold in position for a few seconds, then wipe off excess cement (do not twist)

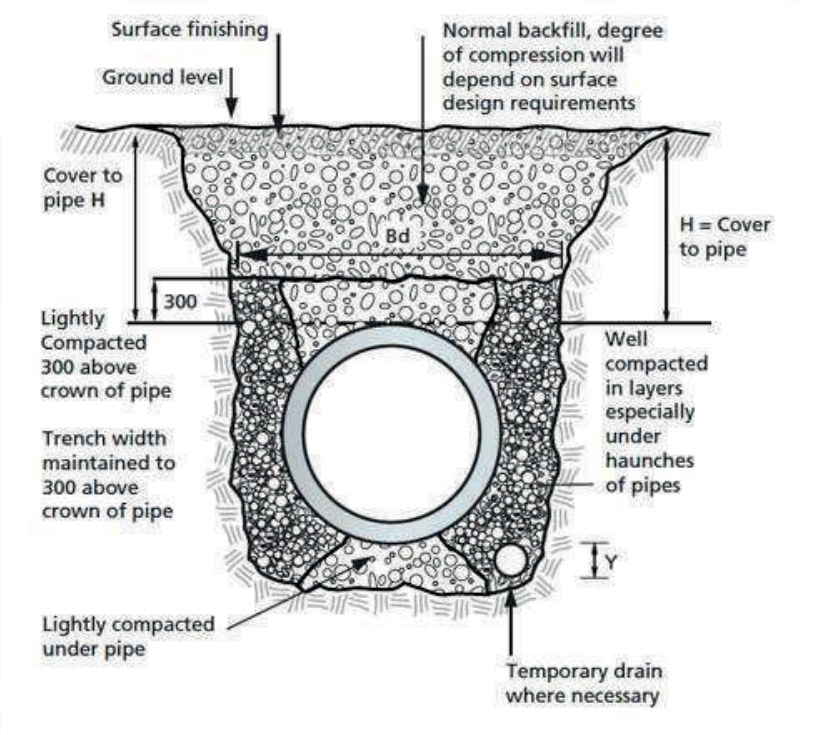
PIPE LAYING

Above ground installation:

The socket joints of the pipe are not rust proof, therefore in case of above ground installation, each joint must be properly supported and at each point where the pipe changes its direction, the pipe line must be secured against axial thirst for instance by using correctly dimensional fixing clamps. Between these fixed pipes clamps at a distance of about 10x diameter of pipe, the pipe is to be supplied with loose pipe clamps which permit only, linear expansion. To protect the surface of the pipe from abrasion, a plastic ribbon or tape is inserted.

Below ground installation:

One must do careful bedding of pipes. First ensure that width & depth of trench of proper size. Width of trench should be more than diameter of pipe + 40cms. Make depth of trench minimum 100cms make sure bottom of trench is stone free. Fill stone free sand up to 15 cms on bottom of trench. First lay complete pipe line on top of trench with help of wooden bearers one after other. Fill stone free sand on both sides and stamp it properly. Fill stone free sand on top of pipe up to 30cms height from pipe. After this rest of trench can be filled with the help of earth moving equipment.



PPR PIPE SYSTEMS

PPR PIPE SYSTEMS

Shamo Plast PP-R pipes & fittings are manufactured according to German DIN standards with sizes ranging from 20mm upto 160mm. Hot and cold potable water piping networks in residential and commercial buildings. The outstanding temperature rating up to 95°C and pressure rating up tp 20 Bar make PP-R system the ideal solution for a variety of applications including Hot and cold potable water piping networks in residential and commercial buildings, Heating systems , Chilled water networks in air conditioning systems, as an effective light weight and corrosion free, subtitute for steel pipes, Transport of wide range of chemicals in the industry and Piping networks for rainwater utilization systems and swimming pools facilities.

Features and Benefits

- Proven hot & cold water performance from -0°C to 95° C
- No scaling. Can withstand higher pH™ values.
- UV resistant triple layered pipes are suitable for outdoor installations that are exposed to direct sunlight.
- Good chemical resistance - suitable for most industrial liquids.
- Heat-fusion jointing results in homogenous plastic system ensuring leak-proof joints.
- Very less coefficient of friction, ensures high flow properties, reduce pumping cost.
- Antimicrobial inside layer of 3 layered pipe adds to safety against bacterial growth ensuring safe drinking water.
- Specially formulated thermax pipes reduce linear expansion / contraction of pipes due to temperature variance, ensuring suitability for outdoor application.

PP-R Pipe Dimensions as per Din 8077/78

Nominal Size	Outside Diameter MM		Nominal (minimum) Wall Thickness MM		
	Min	Max	SDR 11 PN 10	SDR 7.4 PN 16	SDR 6 PN 20
20	20.0	20.3	1.9	2.8	3.4
25	25.0	25.3	2.3	3.5	4.2
32	32.0	32.3	2.9	4.4	5.4
40	40.0	40.4	3.7	5.5	6.7
50	50.0	50.5	4.6	6.9	8.3
63	63.0	63.6	5.8	8.6	10.5
75	75.0	75.7	6.8	10.3	12.5
90	90.0	90.9	8.2	12.3	15.0
110	110.0	110.9	10.0	15.1	18.3

FUSION PROCESS

Four-Step Fusion Process:

Step 1

Cut pipe to the required length using a cutter, mark the welding depth on the pipe, ensure that the indicator light on the welding tool signals that the tool is hot enough (260°C) for welding.

Step 2

The tip of pipe to be welded is shaved by a special shaver to remove outside PP-R layer and aluminium foil (this step is applicable only to the STABI pipes).

Step 3

Push the pipe and fitting into the welding adaptors, applying even strength at both ends. Do not twist or turn the pipe and fitting while pushing. Wait until the heating time is reached.

Step 4

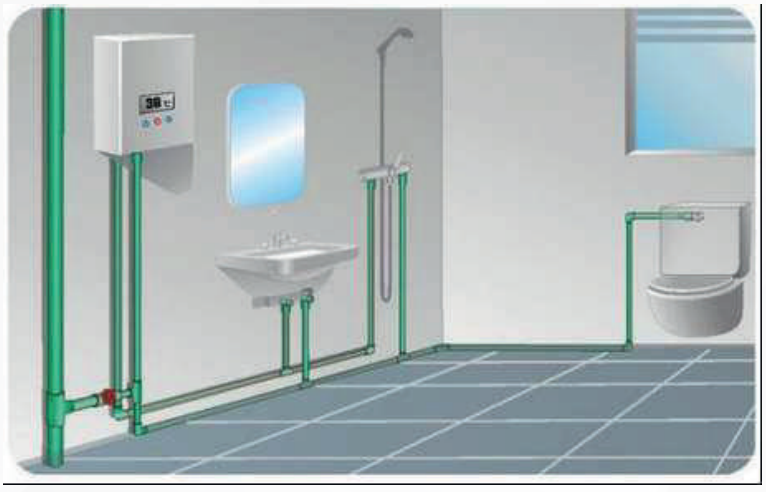
When the welding heating time is reached, remove both the pipe and the fitting together, again without twisting or turning while pulling out of the welding adaptor. Almost immediately, push both pipe and fitting together until the depth is reached. It is possible to adjust the joints for more than 5 degrees during this time. Joint is now complete.

Welding Depth, Heating, Welding and Cooling Time

The table below provides the necessary information for a good welding joint for various Shamo Plastpipe and fitting sizes.

PIPE DIAMETER (MM)	Wielding Depth (MM)	Heating Time (MM)	Wielding Time (MM)	Cooking Time (MM)
20	14.0	5	4	2
25	15	7	4	2
32	16.5	8	6	4
40	18	12	6	4
50	20	18	6	4
63	24	24	8	6
75	26	30	8	8
90	29	40	8	8
110	32.5	50	10	8

Note: Heating time starts when both pipe and fitting are pushed into correct depth. Welding time begins when joints are connected. Cooling time is the time taken for the joint to be completely cured. Never reduce cooling time by pouring water or by other means.



Polyethylene Pipe System

POLYETHYLENE SYSTEMS

Polyethylene (PE) is a thermoplastic material produced from the polymerization of ethylene. PE plastic pipe is manufactured by extrusion in sizes ranging from 16mm to 225mm. PE is available in rolled coils of various lengths or in straight lengths up to 40 feet. Generally small diameters are coiled and large diameters (>6" OD) are in straight lengths. PE pipe is available in many varieties of wall thicknesses, based on three distinct dimensioning systems:

Uses & Applications

PE pipe offers distinct advantages as a piping material:

- Light weight
- Flexibility
- Chemical resistance
- Overall toughness
- Longevity

These benefits make it an ideal piping material for a broad variety of applications such as potable water service or distribution lines, natural gas distribution, lawn sprinklers, sewers, waste disposal, and drainage lines. PE materials are generally resistant to most ordinary chemicals. Pipes are produced in HDPE, LLDPE and LDPE material. HDPE pipes are produced in a number of design stresses against the standards ISO, DIN, EN.

PHYSICAL & MECHANICAL PROPERTIES OF HDPE MATERIAL

Elongation Break	Test Method	Units	PE 80	PE 100
Density (Compound)	1SO 1183	Kg/M	956	959
Melt Flow Rate (190 C /5kg	ISO 1133	g/10 min	0.3	0.25
Tensil Stress at Yield (50mm/min)	ISO 527-	MPa	22	25
Elongation Break	ISO2527-	%	> 600	> 600
Charpy Impact Strength	ISO 2179/1eA	kj/m²	14	16
Carbbon Black Content	ASTM D 1603	%	2-2.5	2.25
Vicat Softening Point	ASTM D 1525	℃	118	122
Brittleness Temperature	ASTM D 746	℃	< -70	< -70
ESCR (10% Igepal), 50	ASTM D 1693A	Hrs.	> 10.000	> 10.000
Thermal Conductivity	DIN 52612	W/m°K	0.4	0.4
Linear Thermal Expansion	ASTM D 696	mm/mm/k	1.5x10 4	1.5x10 4

DIN 8074 High Density Polyethylene (HDPE) - PE100

Nominal Outside Diameter MM	Nominal (minimum) Wall Thickness MM		
	Series 8 SDR 17 PN 10	Series 6.3 SDR 13.6 PN 12.5	Series 5 SDR 11 PN 16
32	-	-	3.0
40	-	-	3.7
50	-	-	4.6
63	-	4.7	5.8
75	4.5	5.6	6.8
90	5.4	6.7	8.2
110	6.6	8.1	10.0
125	7.4	9.2	11.4
140	8.3	10.3	12.7
160	9.5	11.8	14.6
180	10.7	13.3	16.4
200	11.9	14.7	18.2
225	13.4	16.6	20.5

DIN 8074 High Density Polyethylene (HDPE) - PE80

Nominal Outside Diameter MM	Nominal (minimum) Wall Thickness MM				
	Series 10 SDR 21 PN 6.3	Series 8 SDR 17 PN 8	Series 6.3 SDR 13.6 PN 10	Series 5 SDR 11 PN 12.5	Series 4 SDR 9 PN 16
16	-	-	-	-	1.9
20	-	-	-	-	2.3
25	-	-	-	2.3	2.9
32	-	-	-	3.0	3.7
40	-	-	-	3.7	4.5
50	-	-	-	4.6	5.6
63	-	-	4.7	5.8	7.1
75	-	4.5	5.6	6.8	8.4
90	4.3	5.4	6.7	8.2	10.1
110	5.3	6.6	8.1	10.0	12.3
125	6.0	7.4	9.2	11.4	14.0
140	6.7	8.3	10.3	12.7	15.7
160	7.7	9.5	11.8	14.6	17.9
180	8.6	10.7	13.3	16.4	20.1
200	9.6	11.9	14.7	18.2	22.4
225	10.8	13.4	16.6	20.5	25.2

DIN 8072 Pipes of Low Density Polyethylene LLDPE

Nominal Outside Diameter MM	Nominal (minimum) Wall Thickness MM		
	2.5 BAR MM	6 BAR MM	10 BAR MM
20	-	2.2	3.4
25	2.0	2.7	4.2
32	2.0	3.5	5.4
40	2.0	4.3	6.7
50	2.4	5.4	8.4
63	3.0	6.8	10.5
75	3.6	8.1	12.5
90	4.3	9.7	15.0
110			18.4

PROJECT & DISTRIBUTION

Distribution in 15 countries

Middle East

Bahrain
Iraq
Kuwait
Oman
Qatar
Saudi Arabia
UAE

Africa

Congo
Djibouti
Ghana
Senegal
Tanzania
Zambia

Europe

Russia

Contracted Projects

Aden Adde International Airport, Somalia
Djibouti Infrastructure Project in Djibouti
Fibre Optic Project in Bosaso, Somalia
Fibre Optic Project in Hargeisa, Somalia

Subcontracted Project

Via Trading Companies

Emaar Burj Khalifa (Dubai)
Nakheel Palm Jumeirah (Dubai)
Jumeirah Villas (Dubai)
SEWA (Sharjah)
Al Qasba Canal (Sharjah)
FEWA (Fujairah)
ADNOC (Abu Dhabi)

LIMITED WARRANTY

Where it is included as part of the sale contract Shamo Plast Industries LLC warrants its products to be free of defects in material and workmanship for a period of 12 months from date of oroginal sale.

Where it is not included as part of the sales contract or is confirmed by Shamo Plast, no warranty is given or implied.
This warranty does not apply to loss or damage to the product due to damage occurring in shipment, improper installation, mishandling, installers negligence, non adherance to applicable codes of practice, modification, alteration, normal wear and tear or exterior appearance and color.

If the defect is discovered during the applicable warranty period, Shamo Plast will repair or replace at its option The product or deffective part. This is the only obligation as set forth in this warrenty, which is restricted to the Immediate buyer.

There are no other warranties expressed or implied including merchantability and fitness for a particular purpose. Shamo Plast will not be liable for any loss or incidental or consequential damages or any nature. Shamo Plast will detemine whether any claim is covered by this warranty.

This warrenty does not extent to product which are not manufactured by Shamo Plast even though such product may besold by Shamo Plast or used in conjuction with Shamo Plas products.

If you have any questions concerning the warrenty or its application, Please write to Shamo Plast Industries LLC at POBox NO: 24089,Ajman,United Arab Emirates

CERTIFICATION

BQSR

CERTIFICATE

This is to certify that the
Occupational Health & Safety Management System of

SHAMO PLAST INDUSTRIES L.L.C
P.O. Box 24089, Al Jurf Industrial Area No. 3, Ajman, United Arab Emirates

has been assessed and found to conform to the requirements of

ISO 45001:2018

This Certificate is valid for the following scope:

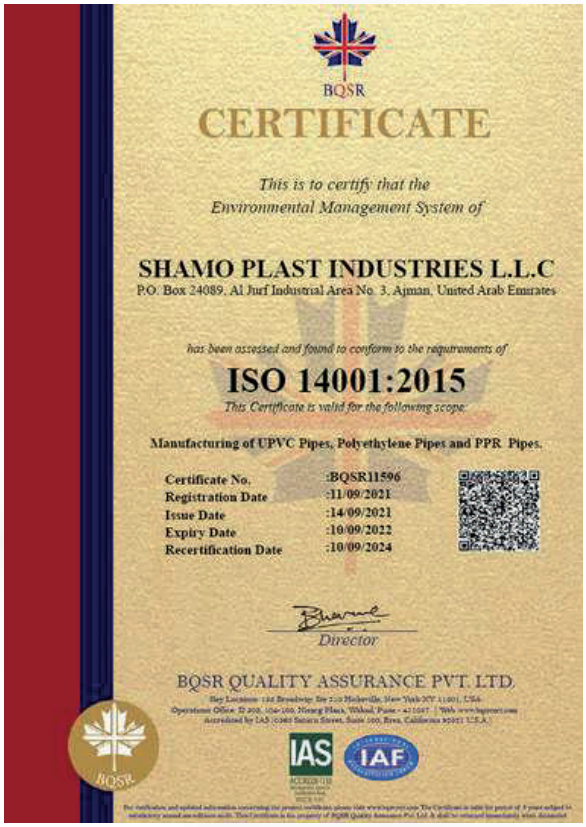
Manufacturing of UPVC Pipes, Polyethylene Pipes and PPR Pipes.

Certificate No.	**:BQSR11597**
Registration Date	**:11/09/2021**
Issue Date	**:14/09/2021**
Expiry Date	**:10/09/2022**
Recertification Date	**:10/09/2024**

Director

BQSR QUALITY ASSURANCE PVT. LTD.

IAS IAF



BQSR

CERTIFICATE

This is to certify that the
Environmental Management System of

SHAMO PLAST INDUSTRIES L.L.C
P.O. Box 24089, Al Jurf Industrial Area No. 3, Ajman, United Arab Emirates

has been assessed and found to conform to the requirements of

ISO 14001:2015

This Certificate is valid for the following scope:

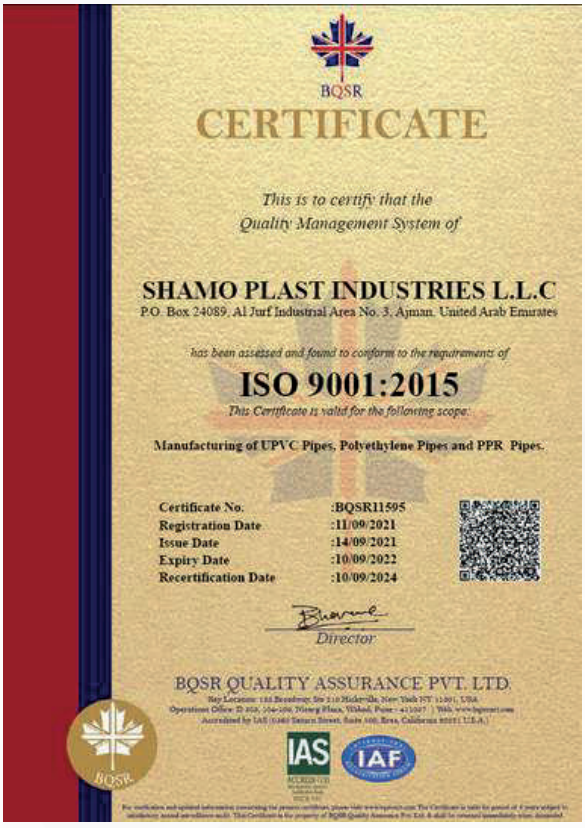
Manufacturing of UPVC Pipes, Polyethylene Pipes and PPR Pipes.

Certificate No.	**:BQSR11596**
Registration Date	**:11/09/2021**
Issue Date	**:14/09/2021**
Expiry Date	**:10/09/2022**
Recertification Date	**:10/09/2024**

Director

BQSR QUALITY ASSURANCE PVT. LTD.

IAS IAF



BQSR

CERTIFICATE

This is to certify that the
Quality Management System of

SHAMO PLAST INDUSTRIES L.L.C
P.O. Box 24089, Al Jurf Industrial Area No. 3, Ajman, United Arab Emirates

has been assessed and found to conform to the requirements of

ISO 9001:2015

This Certificate is valid for the following scope:

Manufacturing of UPVC Pipes, Polyethylene Pipes and PPR Pipes.

Certificate No.	**:BQSR11595**
Registration Date	**:11/09/2021**
Issue Date	**:14/09/2021**
Expiry Date	**:10/09/2022**
Recertification Date	**:10/09/2024**

Director

BQSR QUALITY ASSURANCE PVT. LTD.

IAS IAF

HSE Policy

Shamo Group is committed to provide and maintain safe and healthy working environment in compliance with good business practices and to provide a safe work place for employees and interested parties and to protect the environment.

Shamo Group is committed for continuous efforts to identify and eliminate or manage safety and environmental risk associated with its activities.

Shamo Group requires all employees and interested parties to comply with the following:

1. Take all necessary steps to safeguard the health, safety and welfare of all employees and others who may be affected by the Shamo Group activities.

2. Assess all work and implement the necessary controls to avoid injuries and ill health and to continually improve the HSE Management and HSE performance.

3. Provide such information, instruction, training and supervision as is necessary to prevent accidents.

4. Comply with Shamo Group systems and procedures and immediately report any defects, unsafe acts or conditions.

5. In all instances, Shamo Group will comply with all applicable Legal and other requirements in which
Shamo Group subscribes that relates to OH&S hazards and to its Environmental aspects.

6. Apply our technical skills to all HSE aspects in organization activities.

7. Continue to operate a pro-active stance towards Health and Safety matters and continue to maintain our liaison with the HSE and other relevant bodies.

8. Minimize our impact on the environment through pollution prevention, reduction of natural resources consumption and emissions, and the reduction and recycling of waste.

9. This policy will be reviewed and developed periodically to ensure it remains relevant, effective and appropriate to the organization and necessary amendments are communicated to all employees.

10. To continually improve its HSE performance through monitoring, audit and review activities and systems and by setting the objectives and targets.

*** Reference Material:**

OHSAS 18001 Standard, Clause 4.2

ISO 14001 Standard, Clause 4.2

SHAMO PLAST
Industries L.L.C

Industrial Area 3, Al Jurf, Ajman, U.A.E
Tel No: 06-7490688/299, Fax No 06-7490662
Mob No: +971506465726, P.O Box 24089 Ajman, U.A.E
www.shamoplast.com