

## PP-R HOT & COLD WATER SYSTEM (FUSION WELDING TYPE)



“SUPREME” Indo Green PP-R is designed for Hot & Cold Water application. These are made of Polypropylene Random Copolymer Type-3 (PP-R) supplied by reputed European companies. It has high molecular weight & excellent Creep resistance which is fundamental characteristic for the transportation of hot fluids under pressure. These system is manufactured according to EN ISO 15874 standards. These system is available in the dimensions 16mm to 160mm in PN-16 & PN-20 pressure with UV Stabilized.

### ADVANTAGES & BENEFITS:

- Light weight, Easy & quick to Assemble.
- Resistance to Corrosion & Chemicals attacks.
- Mirror smooth finish-hence High Flow rates.
- High Impact strength & low on sound.
- Operation durability of minimum 50 years.
- Resistant to frost, abrasion & stray current.
- Overall cost effective than GI System.

<b>Coupler (S)</b>	<b>Elbow 90° (S)</b>	<b>*Reducing Elbow (S)</b>	<b>Elbow 45° (S)</b>	<b>Equal Tee (S)</b>
				
<b>*Reducing Tee (S)</b>	<b>*Reducer Male/Female (S)</b>	<b>Cross Tee (S)</b>	<b>Reducer Female/Female (S)</b>	<b>End Cap (S)</b>
				
<b>Female Threaded Elbow 90° (S)</b>	<b>Female Threaded Elbow 90° (S) with supporting device</b>	<b>Male Threaded Elbow 90° (S)</b>	<b>Female Threaded Tee (S)</b>	<b>Male Threaded Tee (S)</b>
				
<b>Female Threaded Joint (FTA) (S)</b>	<b>Male Threaded Joint (MTA) (S)</b>	<b>M.T.A. (Plastic)</b>	<b>Union (NS)</b>	<b>Union - Female Threaded (NS)</b>
				
<b>Union - Male Threaded (NS)</b>	<b>All Plastic Weld in Saddle (S)</b>	<b>Weld in Saddle - Female Threaded (S)</b>	<b>Weld in Saddle - Male Threaded (S)</b>	<b>Adapter with Integral Flange (S)</b>
				
<b>Flange Adapter (S)</b>	<b>Flange</b>	<b>Metal Flange (NS)</b>	<b>Pipe Clip (Plastic) (S)</b>	<b>Metal Clamp with Rubber Seal (NS)</b>
				
<b>Ball Valve (S)</b>	<b>Screw Tap with Handwheel (S)</b>	<b>Concealed Valve</b>	<b>Circuit Testing Plug (Moulded) (NS)</b>	<b>Circuit Testing Plug (F) (NS)</b>
				
<b>Threaded Plug (NS)</b>	<b>Tank Connector (F) (NS)</b>	<b>Hole Repairing Plug (S)</b>	<b>Expansion Loop (F) (NS)</b>	<b>Bend 90°</b>
				
<b>Short Bend (BW)</b>	<b>Bypass Bend (F) (NS)</b>	<b>Short Bypass Bend (F) (NS)</b>	<b>Offset Bend</b>	<b>Polyfusion Device SPD 2600 (NS)</b>
				



# JOINING PROCEDURE



Pipe Dimensions as per EN ISO 15874 specifications

Size (D)	PN 8		PN 10		PN 12.5		PN 16		PN 20	
	Wall Thickness (t)	Internal Diameter (d)	Wall Thickness (t)	Internal Diameter (d)	Wall Thickness (t)	Internal Diameter (d)	Wall Thickness (t)	Internal Diameter (d)	Wall Thickness (t)	Internal Diameter (d)
16	---	---	---	---	---	---	2.3	11.4	2.7	10.6
20	---	---	1.9	16.2	2.3	15.4	2.8	14.4	3.4	13.2
25	---	---	2.8	19.4	2.8	19.4	3.5	18.0	4.2	16.6
32	---	---	3.0	26.0	3.6	24.8	4.5	23.0	5.4	21.2
40	---	---	3.7	32.6	4.5	31.0	5.6	28.8	6.7	26.6
50	3.7	42.6	4.6	40.8	5.6	38.8	6.9	36.2	8.4	33.2
63	4.7	53.6	5.8	51.4	---	---	8.7	45.6	10.5	42.0
75	5.5	64.0	6.9	61.2	---	---	10.4	54.2	12.5	50.0
90	6.70	76.6	8.2	73.6	---	---	12.5	65.0	15.0	60.0
110	8.20	93.6	10.0	90.0	---	---	15.2	79.6	18.4	73.2
160	11.90	136.2	14.6	130.8	---	---	21.9	116.2	---	---

Note : UV-stabilized pipes are offered in all the sizes except 20, 25, 32 mm in PN10 pressure class.

## Operating parameters of PP-R piping for water supply systems

TEMPER- ATURE (°C)	TIME IN OPERATION (YEARS)	PRESSURE LINE				
		MAXIMUM ALLOWABLE OVER PRESSURE				
		PN 8	PN 10	PN 12.5	PN 16	PN 20
10	1	14.1	17.6	22.0	27.8	35.0
	5	13.3	16.6	20.9	26.4	33.2
	10	12.9	16.1	20.2	25.5	32.1
	25	12.5	15.6	19.6	24.7	31.1
	50	12.2	15.2	19.0	24.0	30.3
20	1	12.0	15.0	18.8	23.8	30.0
	5	11.3	14.1	17.7	22.3	28.1
	10	11.0	13.7	17.2	21.7	27.3
	25	10.6	13.3	16.7	21.1	26.5
	50	10.3	12.9	16.2	20.4	25.7
30	1	10.2	12.8	16.0	20.2	25.5
	5	9.6	12.0	15.0	19.0	23.9
	10	9.3	11.6	14.5	18.3	23.1
	25	9.0	11.2	14.0	17.7	22.3
	50	8.7	10.9	13.7	17.3	21.8
40	1	8.6	10.8	13.5	17.1	21.5
	5	8.1	10.1	12.7	16.0	20.2
	10	7.8	9.8	12.3	15.6	19.6
	25	7.5	9.4	11.8	15.0	18.8
	50	7.4	9.2	11.5	14.5	18.3
50	1	7.4	9.2	11.5	14.5	18.3
	5	6.8	8.5	10.7	13.5	17.0
	10	6.6	8.2	10.3	13.1	16.5
	25	6.4	8.0	10.0	12.6	15.9
	50	6.2	7.7	9.7	12.2	15.4
60	1	6.2	7.7	9.7	12.2	15.4
	5	5.8	7.2	9.0	11.4	14.3
	10	5.5	6.9	8.7	11.0	13.8
	25	5.4	6.7	8.4	10.5	13.3
	50	5.1	6.4	8.0	10.1	12.7
70	1	5.2	6.5	8.2	10.3	13.0
	5	4.8	6.0	7.5	9.5	11.9
	10	4.7	5.9	7.4	9.3	11.7
	25	4.1	5.1	6.4	8.0	10.1
	50	3.4	4.3	5.3	6.7	8.5
80	1	4.4	5.5	6.9	8.6	10.9
	5	3.8	4.8	6.0	7.6	9.6
	10	3.2	4.0	5.0	6.3	8.0
	25	2.6	3.2	4.0	5.1	6.4
	50	2.0	2.5	3.2	4.0	5.0
		COLD WATER			HOT WATER	