



*Piyush Chheda Group*

**PRINCE**

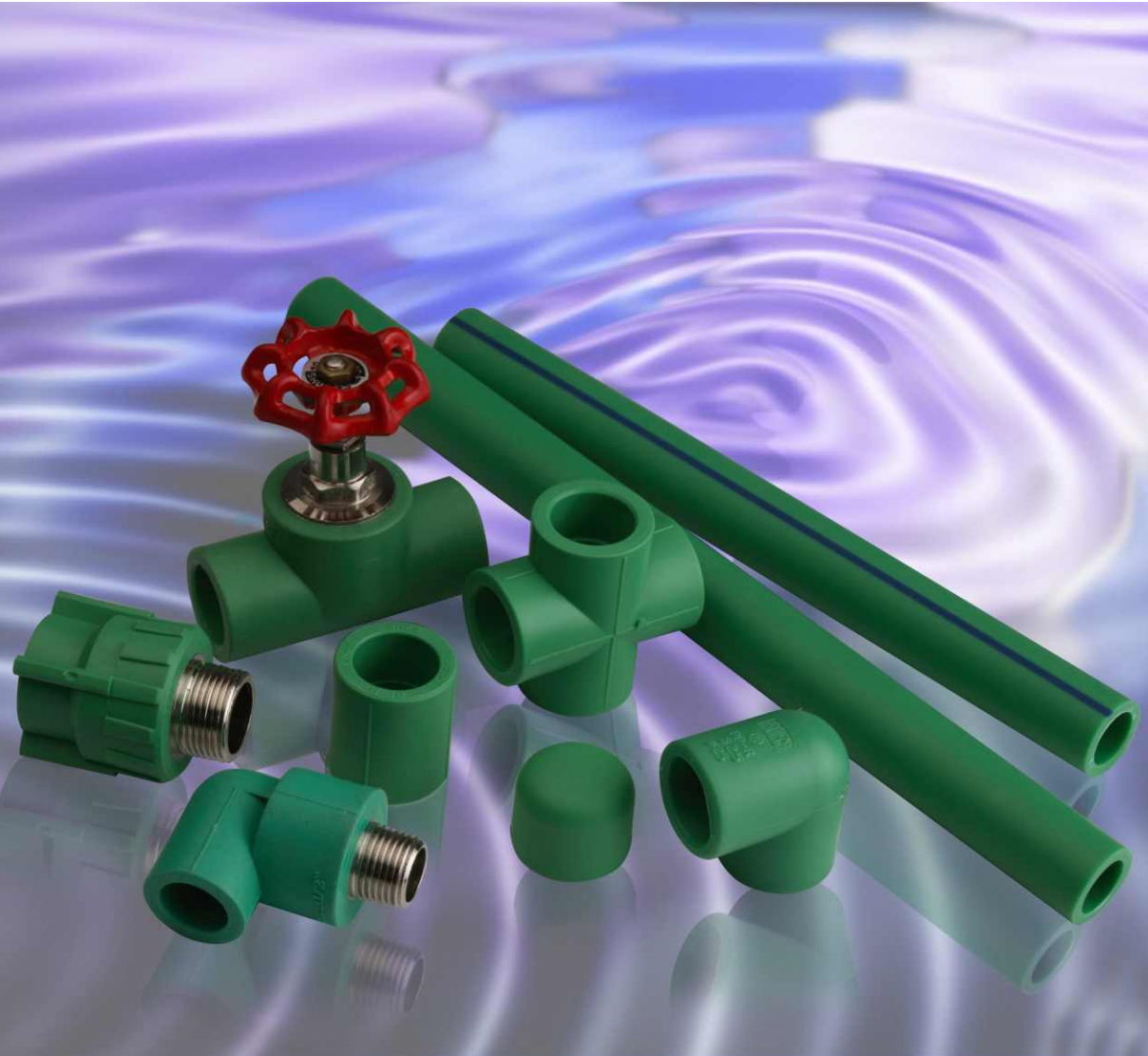
AN ISO 9001 COMPANY

PPR PLUMBING SYSTEMS

Three green PPR (Polypropylene Random Copolymer) plumbing fittings are shown against a background of splashing water. The fittings include a Tee fitting at the top left, a Coupling fitting in the middle left with a brass threaded insert, and an Elbow fitting at the bottom right.

**SOLUTION FOR  
HOT AND COLD WATER SYSTEM**

WIDEST RANGE OF ANY PIPING SYSTEM AVAILABLE UNDER ONE ROOF



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## **PRINCE** PPR Plumbing systems, Solution for Hot and Cold water

### **PRODUCT SPECIFICATIONS:**

<b>Material</b>	: POLYPROPYLENE RANDOM COPOLYMER (PP-R)
<b>Colour</b>	: Green (Signal Layer) Indoor/Outdoor Application Black & Green (Double Layer) Outdoor Application – UV Resistance
<b>Standards</b>	: IS 15801: 2008 DIN 8077 for Pipes – Dimension DIN 8078 for Pipes – General Quality requirement & testing DIN 16962 for Pipe joint assemblies and fittings DIN 1988 for drinking water pipes.

**Working Temp** : -20°C to 95°C

**Working Pressure:** PPR PIPES – 10kg, 16kg & 20kg/ cm<sup>2</sup>  
PPR FITTINGS - 25kg/cm<sup>2</sup>

**Range** : Singal Layer PPR Pipes & Double Layer PPR Pipes (UV Res.)  
PN 10 – 32mm to 110mm (for cold application)  
PN 16 – 20mm to 110mm (higher pressure Hot and cold water)  
PN 20 – 20mm to 110mm(Higher Pressure with Higher Temperature)  
& all relevant Plain & Threaded Fittings

**Basic properties & features**

- Better Corrosion Resistance
- Nontoxic, Hygienic “Green” Product
- High Vicat Softening Temperature
- Good Thermal Insulating Property
- Good Chemical Resistance
- Better impact strength
- Heat fusion Joining (No use of solvent)
- Better Noise Insulation
- Extremely long life (i.e more than 50 years)
- 100% Leak Proof System

**PPR application areas**

- Hot and Cold Water Plumbing Systems – Solar Applications
- Drinking water transportation
- Heating Systems inside building including floor, wall & radiator heating
- Air conditioning systems
- Compress air supply systems
- Liquid food transportation
- Piping systems for transportation aggressive fluids in industries such as ammonia plants, Breweries, Petroleum and Gas Plants, Mineral water plants, etc.

## PPR PIPE DIMENSION DETAILS

Diameter	PN 10		PN 16		PN 20	
	Wall Thickness	Internal Diameter	Wall Thickness	Internal Diameter	Wall Thickness	Internal Diameter
20	1.9	16.2	2.8	14.4	3.4	13.2
25	2.3	20.4	3.5	18.0	4.2	16.6
32	2.9	26.1	4.4	23.2	5.4	21.2
40	3.7	32.6	5.5	29.0	6.7	26.6
50	4.6	40.8	6.9	36.2	8.3	33.4
63	5.8	51.4	8.6	45.8	10.5	42.0
75	6.8	61.2	10.3	54.2	12.5	50.0
90	8.2	73.6	12.3	65.4	15.0	60.0
110	10.0	90.0	15.1	79.8	18.3	73.4





## JOINTING METHOD OF PRINCE PPR SYSTEMS

### CUTTING

- 1) Cut the pipe right angle to its axis using burr-free cutter.
- 2) Ensure that pipe is free from burrs or cutting chips.
- 3) Clean the pipe & fitting perfectly before welding.
- 4) Mark welding depth at the end of pipe.



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### HEATING

- 1) Mount the suitable dies on heating element of welding machine according to the diameter of pipe and fitting to be welded.
- 2) Connect the welding machine to 220/230 volts A.C. power supply.
- 3) Select 260°C temperature on the welding machine thermostat.
- 4) Wait for reaching the required working temperature.
- 5) Insert the pipe and the fitting in the dies by exerting light pressure.
- 6) For heating time, refer the table given for different sizes of pipes.



### WELDING

- 1) After heating, quickly insert pipe into the fitting by exerting light pressure.
- 2) Any misalignment should be corrected immediately after insertion to avoid any stress in the weld.
- 3) Allow the joint to cool as per cooling time given in table.



This type of connection ensures perfect sealing even under the severe working conditions.

## RECOMMENDED TIME FOR PPR FUSION JOINTS

PIPE DIA. (mm)	WELDING DEPTH (mm)	HEATING TIME (sec)	WELDING TIME (Sec)	COOLING TIME (Min.)
20	14.50	6	4	2
25	16.00	7	4	2
32	18.00	8	6	4
40	20.50	12	6	4
50	23.50	18	6	4
63	27.50	24	8	6
75	30.00	30	8	6
90	33.00	40	8	6
110	37.00	50	10	8
160	55.00	60	15	10

● Any specification can change without prior notice.

● All information contained in this literature is given in good faith and believed to be accurate and reliable. But because of many factors which may be outside our knowledge and control and affect the use of the product, no warranty is given or is to be implied with respect to such information, nor do we offer any warranty of immunity against patent infringement. No responsibility can be accepted for any error, omissions or incorrect assumptions.

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