

GF Piping Systems

+GF+

PP-RCT Pipe Systems

Because water is our element



General Information

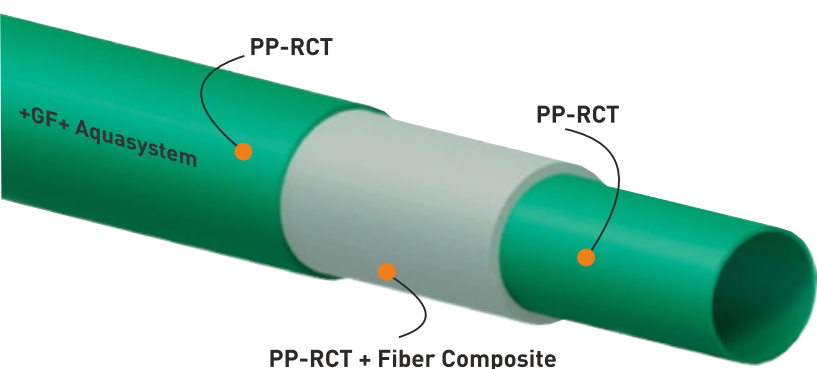
Why PP-RCT?

PP-RCT is a new generation raw material which is developed for polypropylene by using a special “ β -nucleation” process.

Thanks to this enhancement, GF fibre-reinforced PP-RCT pipes withstand higher operating pressures at increased temperatures.

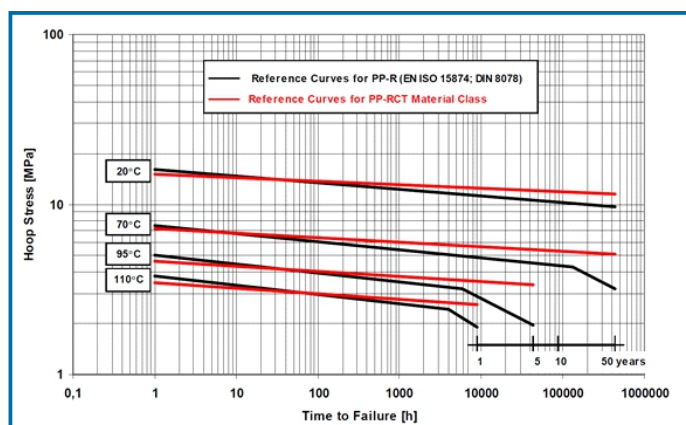
GF Aquasystem Multi-layered Composite PP-RCT pipes have a range of d20 to d160 mm with standard dimension ratios of SDR7,4 and SDR9.

GF Aquasystem Multi-layered Composite PP-RCT pipes are fully compatible with regular GF Aquasystem PP-R fittings and accessories. Even the welding parameters are identical !!



+ Product Benefits

- Higher pressure resistance
- Higher working temperatures
- Reduced wall thickness compared to PP-R
- Better impact resistance
- Improved long-term durability
- Better flow rates



Temperature	Operating Time [years]	S4 (SDR 9)		S3,2 (SDR 7,4)		S2,5 (SDR 6)	
		PP-R	PP-RCT	PP-R	PP-RCT	PP-R	PP-RCT
20°C (68°F)	10	17,2	19,9	21,7	25,1	27,4	31,6
	25	16,6	19,6	21,0	24,6	26,4	31,0
	50	16,2	19,3	20,4	24,3	25,7	30,6
40°C (104°F)	10	12,3	14,7	15,5	18,6	19,6	23,4
	25	11,9	14,4	15,0	18,2	18,8	22,9
	50	11,5	14,2	14,5	17,9	18,3	22,6
60°C (140°F)	10	8,7	10,6	11,0	13,4	13,9	16,8
	25	8,4	10,4	10,5	13,1	13,3	16,5
	50	8,1	10,2	10,2	12,8	12,9	16,2
70°C (158°F)	10	7,3	8,9	9,2	11,2	11,6	14,1
	25	6,3	8,7	8,0	10,9	10,0	13,8
	50	5,3	8,5	6,7	10,7	8,5	13,5
80°C (176°F)	10	5,1	7,4	6,4	9,3	8,1	11,7
	25	4,1	7,2	5,1	9,1	6,5	11,4
95°C (203°F)	5	3,2	5,6	4,1	7,1	5,2	8,9

Comparison of same class of PP-R and PP-RCT of permissible operating pressures in bar (including a safety factor of 1.5)

Higher flow

For same outers diameters, reduced thickness means higher internal diameter which causes a higher flow rate.

Higher stability at higher temperatures

PP-RCT structure provides higher pressure at higher operating temperature.

Lower weight

Reduced wall thickness with PP-RCT leads to a lighter system.