



AL NAJMA AL WATANYA COMPANY

GLASS REINFORCED PLASTIC (GRP) PIPES

2025 Edition



0770 508 5291



العراق - السليمانية-كلار



KEY BENEFITS OF GLASS REINFORCED PLASTIC (GRP)

Corrosion/Abrasion Resistance GRP resists rust and wear, making it ideal for harsh and corrosive environments.			Lightweight Its low weight simplifies transport and reduces structural load.
Long Service Life Durable material ensures decades of reliable performance, even under constant wear and tear.			Fast and Easy Installation Lightweight and easy to cut and maneuver using standard tools, allowing for quick installation and reduction labor costs.
High Load Capacity GRP features an excellent strength-to-weight ratio, enabling it to support heavy loads while remaining lightweight.			High UV Resistance maintains its structural integrity and appearance even with prolonged exposure to sunlight.
High Chemical Resistance GRP is resistant to many chemicals, including acids, alkalis, and solvents, making it ideal for industrial and chemical applications.			Numerous Fittings Compatible with a wide variety of fittings and connectors, allowing for flexible system design.
	Superior Hydraulic Properties Smooth internal resulting in low friction, high flow rates, and excellent hydraulic efficiency. Resulting in reduction of energy costs and prevention of sediment buildup.		

RAW MATERIALS

GRP pipes are manufactured from high-quality composite materials. All raw materials are tested prior to manufacturing to ensure compliance with specified standards. The primary raw materials include:

Fiberglass Reinforcements: Provide strength and structural integrity.

Polyester Resin: Binds the fibres together and offers excellent corrosion resistance.

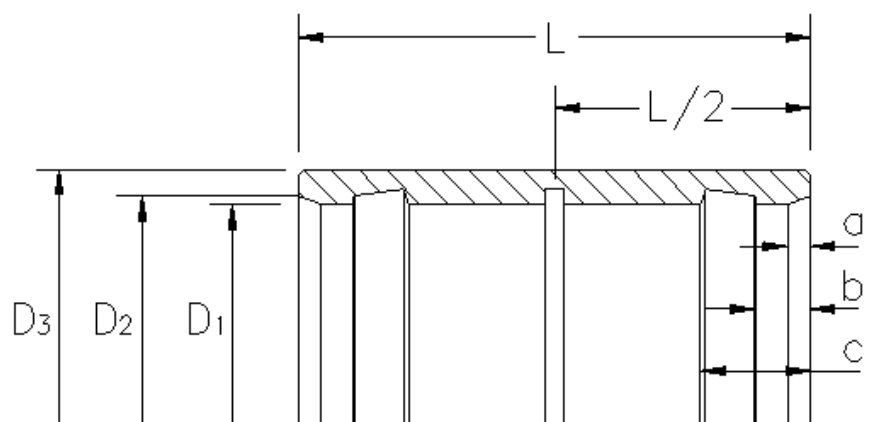
Silica Sand: Used as a core material to enhance stiffness and reduce overall weight.

Catalyst: A precise amount of catalyst is added to the pre-mixed resin to initiate polymerization, which hardens the GRP pipe as it is formed on the rotating mandrel.

Additives: Special additives can be incorporated to enhance the weather resistance of GRP pipes. For example, UV-protection additives safeguard pipes stored outdoors for extended periods before installation, preventing degradation from sunlight. This feature provides superior durability compared to many traditional pipe materials.

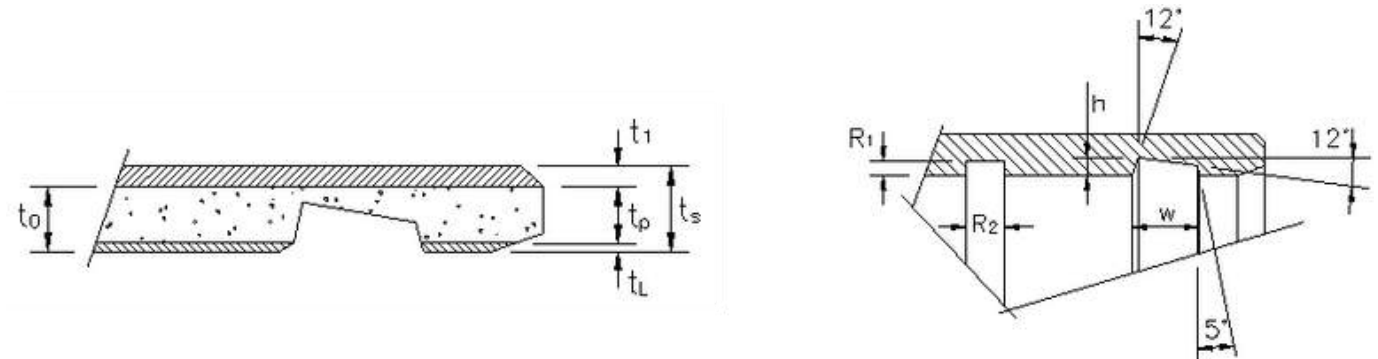
This combination results in durable, lightweight, and highly resistant pipes suitable for a wide range of applications.

COUPLING DIMENSIONS



ND (mm)	D1 (mm)	D2 (mm)	a (mm)	b (mm)	c (mm)	L (mm)
300	313	320.3	10	30	54	270
350	364	371.3	10	30	54	270
400	415	422.3	10	30	54	270
450	466	473.3	10	30	54	270
500	517	524.3	10	30	54	270
600	619	626.3	10	40	74	330
700	721	728.3	10	40	74	330
800	823	830.3	10	40	74	330
900	927	934.3	10	40	74	330
1000	1029	1036.3	10	40	74	330
1100	1131	1138.3	10	40	74	330
1200	1232	1239.3	10	40	74	330
1300	1335	1342.3	10	40	74	330
1400	1437	1444.3	10	40	74	330
1500	1539	1546.3	10	40	74	330
1600	1641	1648.3	10	40	74	330
1700	1743	1750.3	10	40	74	330
1800	1845	1852.3	10	40	74	330
1900	1947	1954.3	10	40	74	330
2000	2049	2056.3	10	40	74	330
2100	2151	2158.3	10	40	74	330
2200	2253	2260.3	10	40	74	330
2300	2355	2362.3	10	40	74	330
2400	2456	2463.3	10	40	74	330
2500	2559	2566.3	10	40	74	330
2600	2661	2668.3	10	40	74	330
2700	2763	2770.3	10	40	74	330
2800	2864	2871.3	10	40	74	330
2900	2967	2974.3	10	40	74	330
3000	3069	3076.3	10	40	74	330

COUPLING DIMENSIONS



ND	tp (mm)	tL (mm)	t0 (mm)	w (mm)	h (mm)	R1xR2 (mm)
300	9	1.1	10.1	24	11.5	9x16
350	9	1.1	10.1	24	11.5	9x16
400	9	1.1	10.1	24	11.5	9x16
450	9	1.1	10.1	24	11.5	9x16
500	9	1.1	10.1	24	11.5	9x16
600	12	1.1	13.1	34	14.5	9x16
700	12	1.1	13.1	34	14.5	9x16
800	12	1.1	13.1	34	14.5	9x16
900	12	1.1	13.1	34	14.5	9x16
1000	12	1.1	13.1	34	14.5	9x16
1100	12	1.1	13.1	34	14.5	9x16
1200	12	1.1	13.1	34	14.5	9x16
1300	12	1.1	13.1	34	14.5	9x16
1400	12	1.1	13.1	34	14.5	9x16
1500	12	1.1	13.1	34	14.5	9x16
1600	12	1.1	13.1	34	14.5	9x16
1700	12	1.1	13.1	34	14.5	9x16
1800	12	1.1	13.1	34	14.5	9x16
1900	12	1.1	13.1	34	14.5	9x16
2000	12	1.1	13.1	34	14.5	9x16
2100	12	1.1	13.1	34	14.5	9x16
2200	12	1.1	13.1	34	14.5	9x16
2300	12	1.1	13.1	34	14.5	9x16
2400	12	1.1	13.1	34	14.5	9x16
2500	12	1.1	13.1	34	14.5	9x16
2600	12	1.1	13.1	34	14.5	9x16
2900	12	1.1	13.1	34	14.5	9x16
3000	12	1.1	13.1	34	14.5	9x16