



ARAIB TRADING GROUP COMPANY

ARAIB UPVC FITTINGS (NON-PRESSURE)

44 Years of Experience and Excellence



1.0 STANDARDS

The ARAIB - UPVC Fittings "Non Pressure Fittings" for Soil, Waste, and Vent meet the following requirements without any issues:

SSA 14&15/1996 DIN 19534

BS 4660, BS 5481

PrEN 1452-1 ISO R161/1

COLOUR : Orange - Brown RAL 8023

RANGE : 40MM - 160MM

MARKING : ARAIB, OD of Pipe, PVC

1.1 ARRANGEMENT QUALITY TEST

Araib's ability to consistently produce goods of the highest grade is certainly due to the dedication and experience of our team. Using the most advanced technological means, a strict, continuous quality control program is maintained.

The most cutting-edge equipment is available in our laboratory to perform both online quality control and laboratory tests that correspond to the majority of international standards, including:

- Check in Three Dimensions
- Testing under pressure (short-term)
- Assessment of Impact and Reversion
- In-Oven Methylene Chloride Test (ISO 580)
- Test for Leak Proof
- Test for elongation and tensile
- Other Tests of Different Types to Maintain Quality

1.2 ADVANTAGES OF MECHANICAL PIPING SYSTEMS USING LIP SEAL RUBBER RING

ARAIB lip seal fittings offer mechanical fastening joints and have a variety of other benefits. Furthermore, there is little question that the polymer industry revolution made a big contribution to the reduction in the cost of water and sewage networks. Following is a summary of these advantages:

1. Be mindful of thermal movement
2. Designed to accommodate ground movement while absorbing settlements up to a certain limit without damaging the joints.
3. Easy installation that happens quickly
4. Resistance to strength loss due to angular and diametric deformation
5. In comparison to cast iron, steel, and copper pipes, the weight of UPVC is around one-tenth, one-fifth, and about half that of other materials.
6. Because of this, handling and transportation are straightforward and easy.
7. Large labor and material cost reductions
8. A variety of substances and chemically inert
9. Encourages combustion but not
10. Unaffected by fungal and bacteria's attacks
11. Protective measures against electrolytic corrosion
12. Low chance of damage occurs during handling or assembly because to high impact resistance.
13. Sound dampening.

Flow coefficient is at its minimum due to UPVC piping systems' smooth interior surfaces. Normal coefficient of pipe wall roughness $k=0,01\text{mm}$

1.3 MATERIAL PROPERTIES

- Density: 1.42 - 1.43 g/cc
- Tensile Strength: 48.3 mpa
- Impact Resistance: : 1.6 ft.lbs / in. of notch at 230° C
- Modulus of Elasticity: 2900 mpa.
- Co-efficient of Elongation: 2.8×10^5 in/in/°F.
- Thermal Conductivity: 0.19w/M.K
- Water Absorption: 0.05 %.
- Surface Resistance: $<10^{12}$ 22 ohm.

1.4 CHEMICAL RESISTANCE

Fixtures made of UPVC are resistant to corrosion from both mineral and untreated groundwater. It is resistant to the majority of salts, oxidizing agents, acids, alkalies, acids dissolved in water, and primary solvents. High abrasion resistance is another important element.

Please get in contact with our Technical Department if you would like the best advice on transporting uncommon liquids. Consult Table 1.4.1.

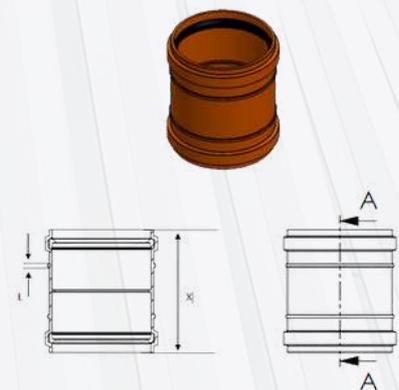
TABLE. 1.4.1 FOR 100 JOINTS USE THE FOLLOWING AMOUNTS OF LUBRICANT: PIPE OUTSIDE KILOGRAM:

Diameter D/N	Dia /mm	Of Lubricant
DN 50	63	0.50
DN 80	90	0.85
DN 100	110	1.10
DN 125	140	1.35
DN150	160	1.80

1.5 ORANGE DRAINAGE

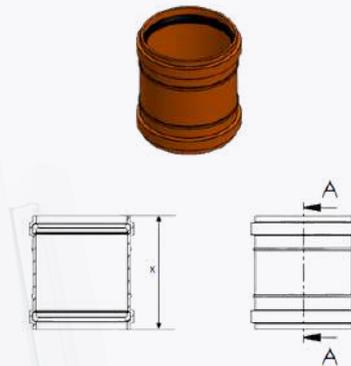
1.5.1 RUBBER COUPLING

S.NO	SIZE mm	Dimensions		WALL THICKNESS mm
		X mm	L mm	
OPVC-01	40	111	3	3.2
OPVC-02	50	108	3	3.2
OPVC-03	75	131	3	3.2
OPVC-04	110	158	3	3.2
OPVC-05	160	200	4	4.7



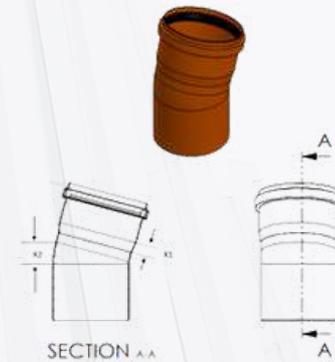
1.5.2 RUBBER REPAIR COUPLING

S.NO	SIZE mm	Dimensions X mm	WALL THICKNESS mm
OPVC-06	40	111	3.2
OPVC-07	50	108	3.2
OPVC-08	75	131	3.2
OPVC-09	110	158	3.2
OPVC-10	160	200	4.7



1.5.3 ELBOW 15°

S.NO	SIZE mm	Dimensions		WALL THICKNESS mm
		X1 mm	X2 mm	
OPVC-11	50	6	9	3.2
OPVC-12	75	6	11	3.2
OPVC-13	110	12	19	3.2
OPVC-14	160	13	19	4.7



1.5.4 ELBOW 30°

S.NO	SIZE mm	Dimensions		WALL THICKNESS mm
		X1 mm	X2 mm	
OPVC-15	50	10	12	3.0
OPVC-16	75	11	15	3.0
OPVC-17	110	17	21	3.0
OPVC-18	160	24	30	3.6



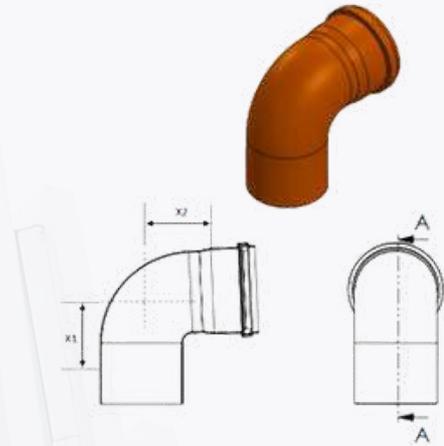
1.5.5 ELBOW 45°

S.NO	SIZE mm	Dimensions		WALL THICKNESS mm
		TOTAL LENGTH	SMALL LENGTH	
OPVC-19	40	15	21	3.2
OPVC-20	50	12	16	3.2
OPVC-21	75	23	29	3.2
OPVC-22	110	25	29	3.2
OPVC-23	160	38	42	4.7



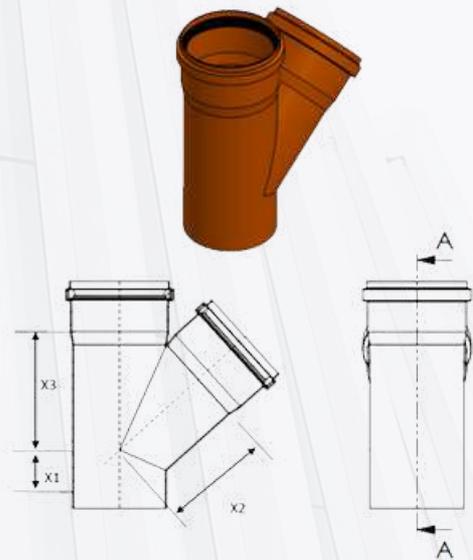
1.5.6 ELBOW 87.5°

S.NO	SIZE mm	Dimension		WALL THICKNESS mm
		X1	X2	
OPVC-24	40	37	39	3.2
OPVC-25	50	36	40	3.2
OPVC-26	75	62	67	3.2
OPVC-27	110	78	86	3.2
OPVC-28	160	132	110	4.7



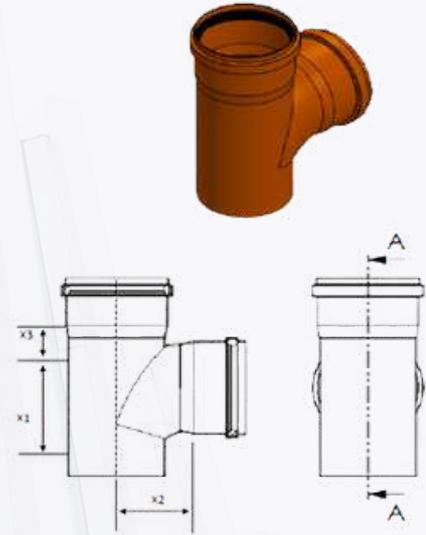
1.5.7 RUBBER WHY TEE 45°

S.NO	SIZE mm	Dimension			WALL THICKNESS mm
		X1 mm	X2 mm	X3 mm	
OPVC-29	40X40	10	49	49	3.2
OPVC-30	50X50	14	62	62	3.2
OPVC-31	75X75	23	95	95	3.2
OPVC-32	110X110	25	136	136	3.2
OPVC-33	110X75	0	107	95	3.2
OPVC-34	110X50	4	120	112	3.2
OPVC-35	160X160	38	198	198	4.7
OPVC-36	160X110	7	172	163	4.7



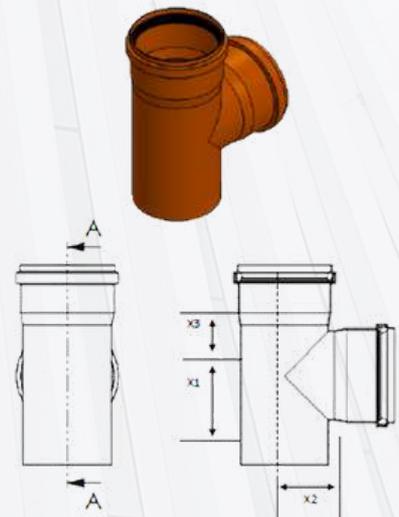
1.5.8 RUBBER SANITARY TEE 87.5°

S.NO	SIZE mm	Dimensions			WALL THICKNESS mm
		X1 mm	X2 mm	X3 mm	
OPVC-37	40X40	37	39	25	3.2
OPVC-38	50X50	46	50	31	3.2
OPVC-39	75X75	62	67	44	3.2
OPVC-40	110X110	83	87	62	3.2
OPVC-41	110X75	52	80	45	3.2
OPVC-42	110X50	28	60	32	3.2
OPVC-43	160X160	80	93	93	4.7
OPVC-44	160X110	60	87	65	3.6



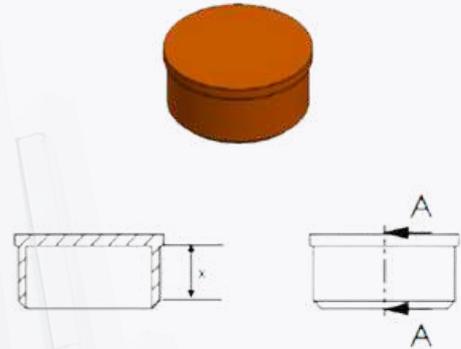
1.5.9 RUBBER TEE

S.NO	SIZE mm	Dimensions			WALL THICKNESS mm
		K1 mm	K2 mm	K3 mm	
OPVC-45	40X40	37	39	25	3.2
OPVC-46	50X50	46	50	31	3.2
OPVC-47	75X75	62	67	44	3.2
OPVC-48	110X110	83	87	62	3.2
OPVC-49	110X75	52	80	45	3.2
OPVC-50	110X50	28	60	32	3.2
OPVC-51	160X160	80	93	93	4.7
OPVC-52	160X110	60	87	65	3.6



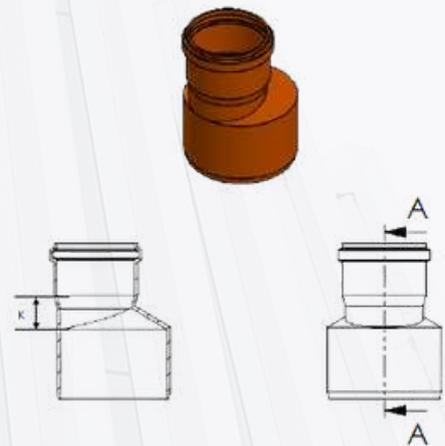
1.5.10 SOCKET PLUG

S.NO	SIZE mm	Dimensions		WALL THICKNESS mm
		X mm		
OPVC-53	40	43		2.0
OPVC-54	50	45		2.0
OPVC-55	75	59		3.0
OPVC-56	110	41		3.0
OPVC-57	160	53		3.6



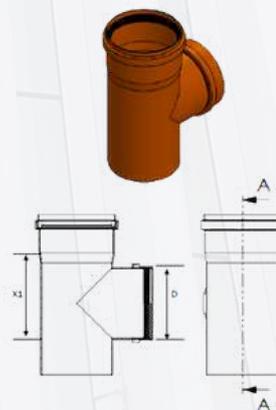
1.5.11 LEVEL INVER REDUCER

S.NO	SIZE mm	Dimensions		WALL THICKNESS mm
		K mm		
OPVC-58	40X32	28		2.0
OPVC-59	50X32	26		2.0
OPVC-60	50X40	21		2.0
OPVC-61	75X50	45		3.2
OPVC-62	110X50	50		3.2
OPVC-63	110X75	35		3.2
OPVC-64	160X110	34		3.6



1.5.12 ACCESS PIPE

ORDERING CODE	SIZE mm	Dimensions		WALL THICKNESS mm
		X1 mm	X2 mm	
OPVC-65	110	137	96	3.2
OPVC-66	160	251	114	4.7



1.6 STORAGE

Fittings are stored in their original packaging. Place them in a geometrical kind and size of order if they must be removed from their boxes. Never mix metal parts with the plastic fittings you have on hand. PVC fittings should not be kept near open flames or other sources of extreme heat.

1.7 INSTALLATION

The procedures below must be taken in order to build a push-fit joint pipeline:

1. Using a guided saw, cut the pipe at a right angle to the axis when necessary.
2. To chamfer the shorter pipe end, use a rough file or chamfering tool and make the angle about 15°.
3. Trim the chamfered ends.
4. Clean the spigot end's outside and the socket's inside, and then inspect the ring seal's location.
5. The greater of 3 mm per meter of pipe length or 110 mm overall should be subtracted after marking the socket depth on the spigot end.
6. Avoid using oil or grease; instead, thinly lubricate the spigot end's chamfered surface.
7. The marking line will be achieved by pushing the pipe spigot all the way into the socket.
8. Support the pipe with care and add bedding material to the trench gradually.

1.8 TESTING

Controlled air pressure or Water test can be used to test drainage systems.

1.8.1 Testing of installations

- Water Test
- Air Tightness test

1.8.2 Water Test

All outlets should be closed, with the exception of the top level. Use a regular pipe and plan for a 1.2m water head. Water should be added to the stand, and it should be left for a while. The figures in the following table 1.8.2.1 indicate the permitted drop, which is 50 mm.

TABLE 1.8.2.1

DURATION OF WATER TEST (MINS) FOR 50 MM WATER DROPS							
2.5	5.0	7.5	10	15	20	25	40
MINIMUM LENGTH OF PIPE UNDER TEST (METER)							
60	30	20	15	10	7.5	6.0	5
80	40	27	20	13	10.0	8	6.5
120	60	40	30	20	15.0	12	10.0
-	90	50	40	25	20.0	15	12.5
-	120	60	45	30	25.0	18	15
-	-	80	60	40	30.0	24	30
-	-	100	75	50	37.0	30	25

All the above figures are given in good faith and would not be part of any contract or any warranty

1.9 QUALITY CONTROL

Utilizing the most cutting-edge tools and practices, ARAIB maintains a strict quality control program. Regular testing in labs and online quality control inspections are also carried out. In terms of dimensional precision, mechanical strength, and surface polish, ARAIB's high-tech molding equipment and sophisticated automated tooling allow for volume production fits with extraordinarily high consistency.

1.10 INSTALLATION

1.10.1 Apparatus

A.1.10.1.1 It is necessary to have a device that the assembly can connect to in order to provide regulated air pressure. Figure TAFAT1 depicts a suitable device.

A.1.10.1.2 Another requirement is for a precision pressure gauge or manometer.

- **Effort assembly**

It is required to employ couplings, fittings, and pipes that adhere to international standards.

A pipe specimen placed in two clamped blocks makes up the test assembly. (Use a plug with a combined water and air intake to seal the pipe's open end. Then, plugs with one having a water outlet and shut-off valve located centrally in the sealing plug must be used to seal all fittings at all open ends.)

1.10.2 Procedure

A.1.10.2.1 Use a strong solution of soapy water or detergent to clean the angle between the fitting's mouth and the pipe.

A.1.10.1.4 Turn the pipe shut-off's air input valve off while opening the water exit valve.

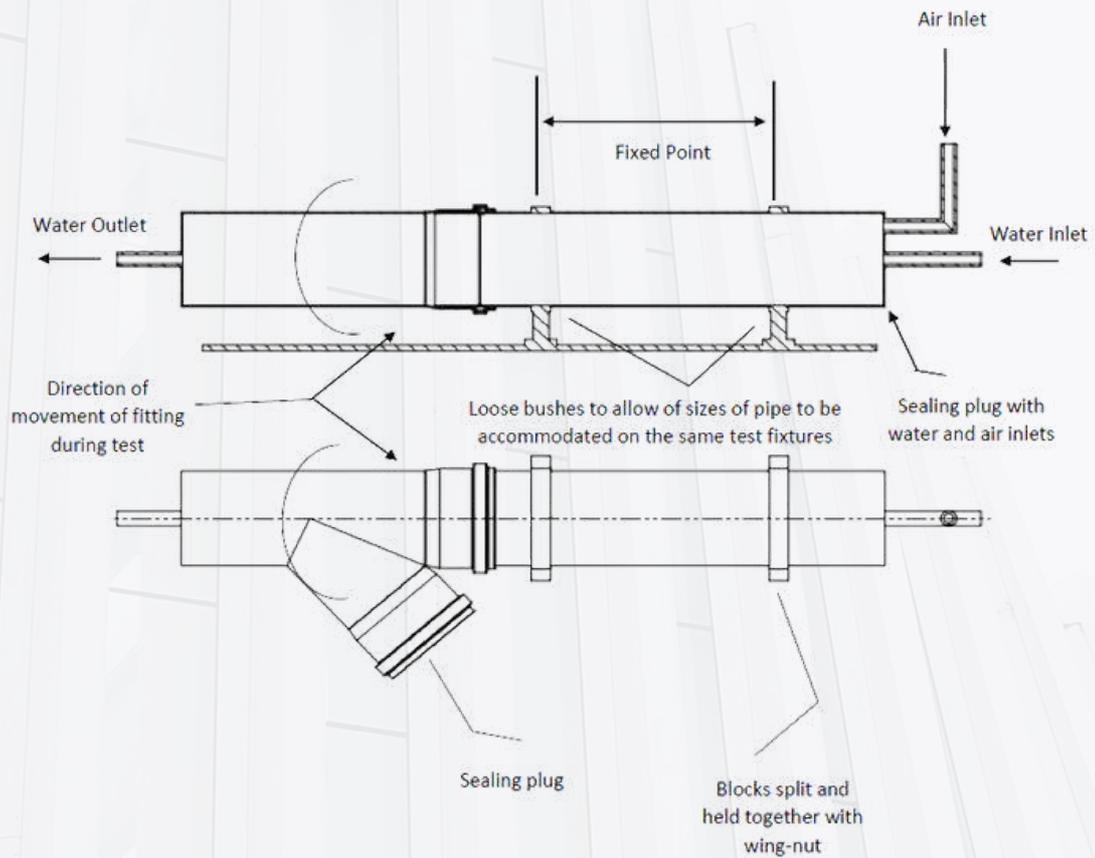
A.1.10.2.2 Close the water inlet and outlet valves once the water inlet valve is opened and the assembly is halfway filled, at which point water begins to flow from the outlet.

A.1.10.2.3 To achieve 0.01 MPa (0.1 bar + 0.01 bar) of internal air pressure at room temperature, open the air input valve. For five minutes, maintain this pressure.

A.1.10.2.4 Any leaks between the fitting's mouth and the pipe that are visible by the production of bubbles should be noted during this five-minute period.

A.1.10.2.5 Up to the maximum permitted deflection for the specific joint under test, manually deflect the pipe in the fitting's socket. Perform this deflection at 00,900, 8000, and 2700 (see figure TAFAT1) and sustain it for 1 minute in each of these directions.

FIGURE TAFAT 1: TEST ASSEMBLY FOR AIRTIGHTNESS TEST



ARAIB TRADING GROUP COMPANY TRADING AND MARKETING

CONTACT US ::::



920020714



info@araibsgroup.com



Taif Street, Dhahrat Laban, Riyadh 12564



www.araibsgroup.com

