

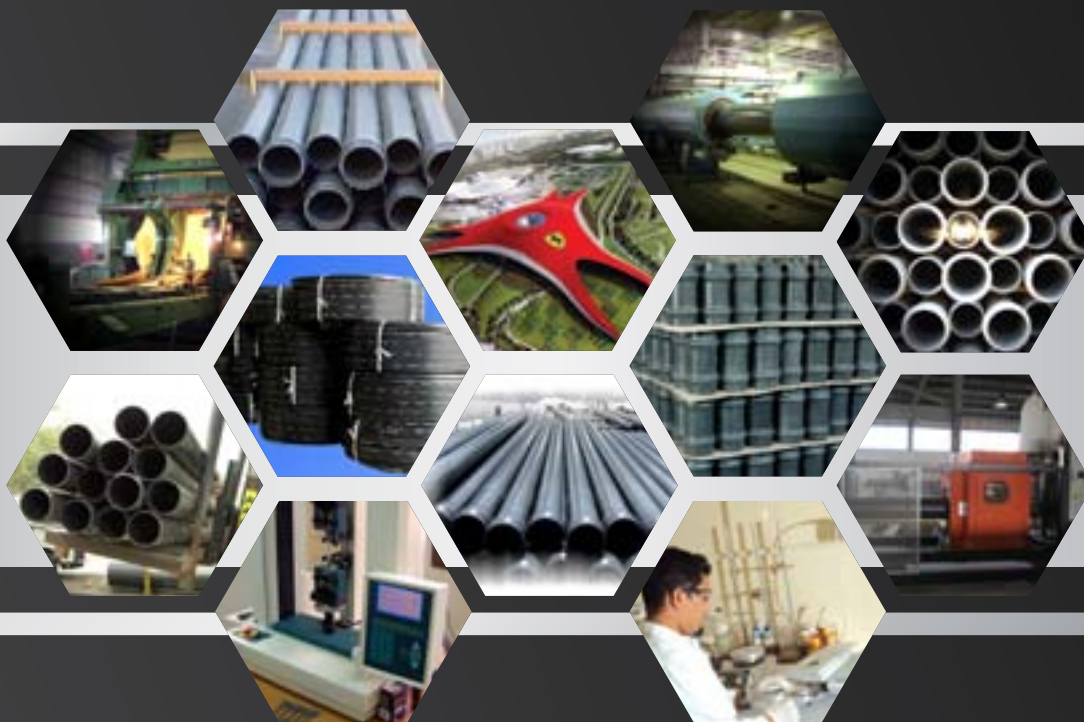
ANABEEB

Pipes Manufacturing Factories
(Formerly NPBF)



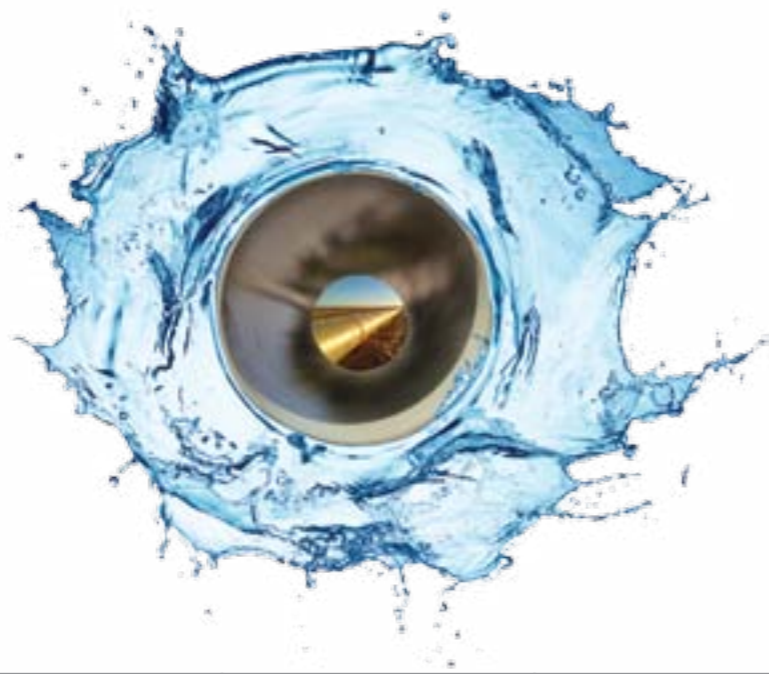
أنابيب

مجمع مصانع الأنابيب
(سابقا NPBF)



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Highest Possible Quality

Continuing Development

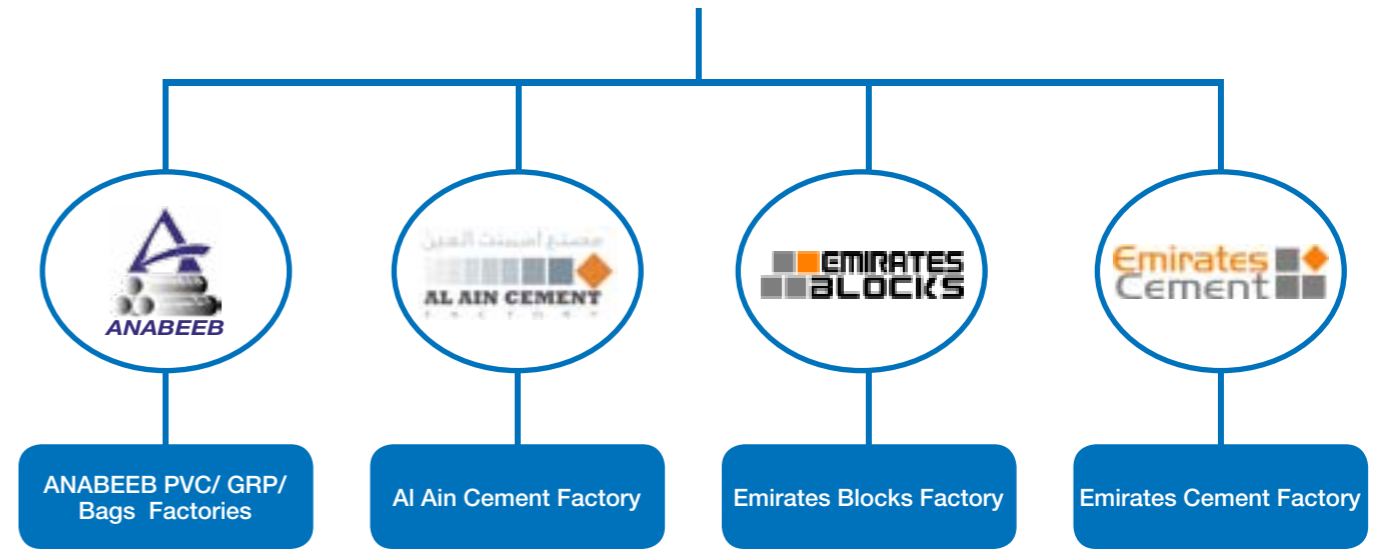
Latest Technologies

Excellent Customer Service



Introduction to ANABEEB

ANABEEB Pipes Manufacturing Factories are fully owned by **Arkan Building Materials Company PJSC**, a public joint stock company specializing in the manufacturing of building and construction products in the UAE. Arkan is majority-owned by **General Holding Corporation (GHC)**, the UAE's largest industrial investment conglomerate backed by the Government of Abu Dhabi. Arkan's portfolio companies include Emirates Blocks Factory, Emirates Cement Factory and Al Ain Cement Factory, two of the UAE's largest producers of high quality cement, and **ANABEEB**, a leading manufacturer of plastic pipes (GRP & PVC) and bags.



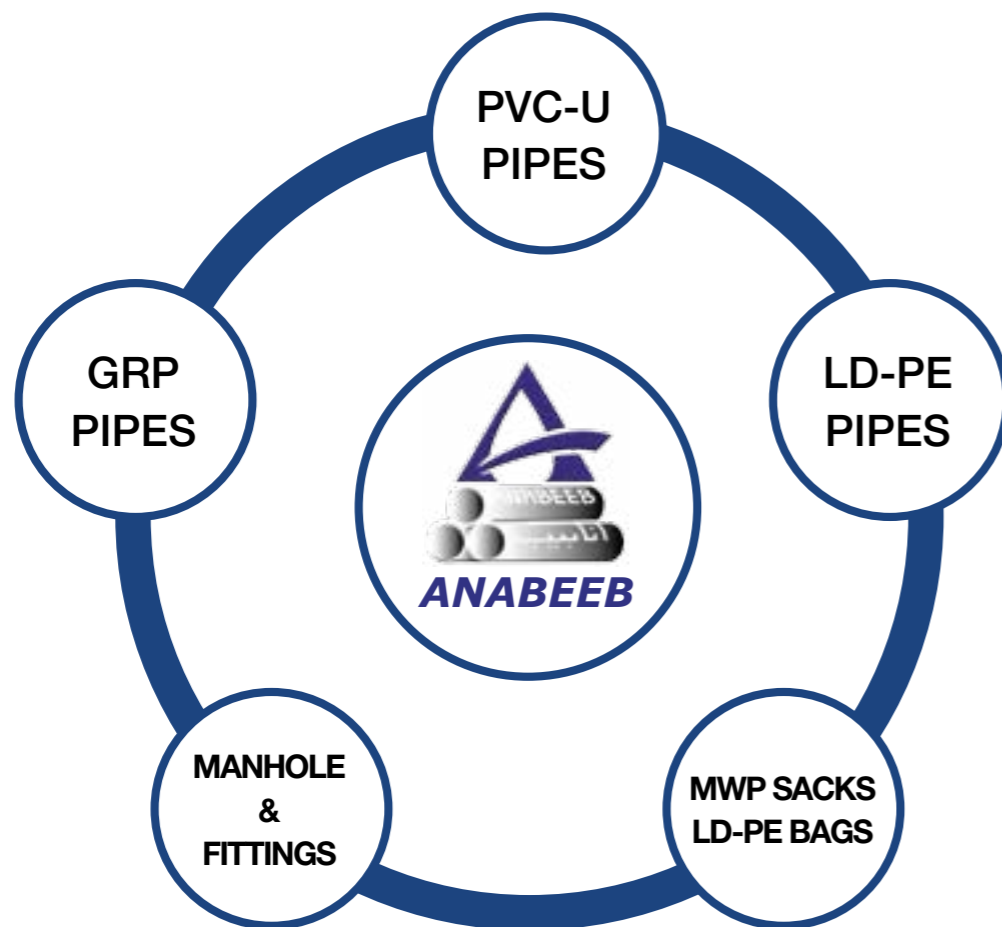


Corporate Profile



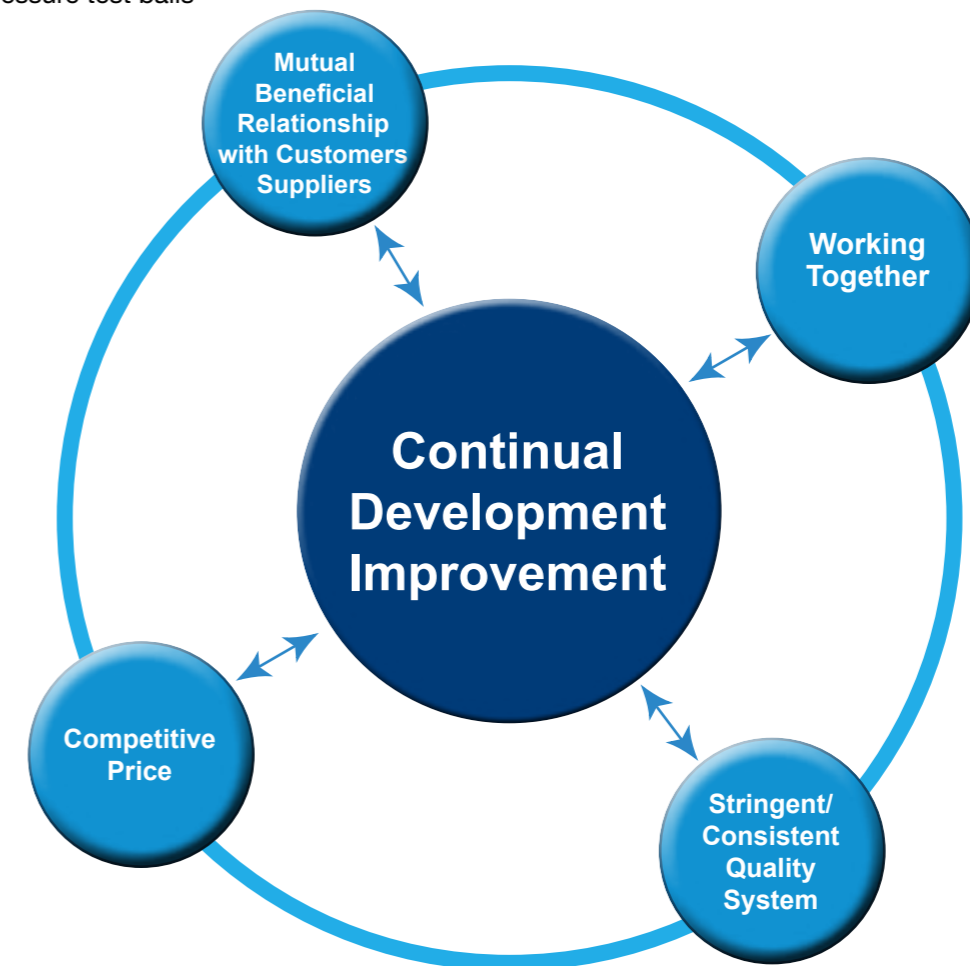
ANABEEB has emerged as the dominant PVC-U Pipe supplier for a number of landmark projects in the U.A.E. This continuing development together with the introduction of the latest techniques and equipment ensures that ANABEEB products are of highest possible quality. Strict quality control through all stages of production is maintained by ANABEEB's dedicated in house Quality control laboratory. The production facility is certified to ISO 9001-2008.

ANABEEB manufactures PVC-U Pipes, LD-PE for drip irrigation pipes, CC-GRP Pipes & Fittings, GRP Manholes, fittings & Multi-Wall Paper sacks for the past 33 years.



Applications

- Water mains & potable water service
- Cold water plumbing service
- Fire ring mains
- Sewerage main-pumped & gravity feed
- Drainage installations- domestic & industrial
- Factory supply lines
- Slurry lines, effluent lines & corrosive fluid pipe lines
- Handling of non-explosive materials handlings-sand, cement, rock salt plastics compounds
- Pulverized fuel ash (PFA) LINES
- Power station screening plant pipelines & power station chlorination plant fume extraction ducts
- Chilled waterlines for refrigeration and air conditioning planet
- Salt water pipes for small boat engines cooling and ballast tanks
- Emergency repairs to damaged pipes lines
- Down pipe for large rain water systems & storm water culverts
- Surface water drainage
- Sewerage farm stand - pipes
- Ducting for power and communication cables
- Irrigation farm and range of sprinkler systems
- Pressure test balls





Advantages of ANABEEB Pipes

- Lightweight & Easy installation
- Durable & high impact strength
- Suitable for potable water
- Corrosions, biological, abrasion & chemical resistant
- Easy to handle, store & transport
- Low friction loss & transport
- Recyclable & cost effective
- Long term performance & low maintenance
- Non-toxic



Manufacturing Range

PVC-U Pipes are available in metric dimensions that are produced according to international standards. Pipe size ranging from 20 mm to 500 mm with different nominal pressures (PN) are available in a standard length of 6 meters; However, other lengths & Wall Thickness can be produced upon request. PVC-U pipes are suitable for pressure pipeline systems for cold water services, Non-pressure applications, telecommunications ducts, cable conduits, etc. They are available in solvent weld socket joints as well as rubber ring socket joints. Slotted pipes, bends & couplers can be manufactured.



PVC-U Pressure Pipe in accordance With ISO 4422-2:2000

ISO 4422-2:2000				
Nominal Outside Diameter(mm)	PN 6		PN 10	PN 16
	SDR 33	SDR 34.4	SDR 21	SDR 13.6
	Minimum Wall Thickness (mm)			
20	-	-	-	1.50
25	-	-	-	1.90
32	-	-	1.60	2.40
40	1.50	-	1.90	3.00
50	1.60	1.50	2.40	3.70
63	2.00	1.90	3.00	4.70
75	2.30	2.20	3.60	5.60
90	2.80	2.70	4.30	6.70
	SDR 41		SDR 26	SDR 17
110	2.70		4.20	6.60
125	3.10		4.80	7.40
140	3.50		5.40	8.30
160	4.00		6.20	9.50
180	4.40		6.90	10.70
200	4.90		7.70	11.90
225	5.50		8.60	13.40
250	6.20		9.60	14.80
280	6.90		10.70	16.60
315	7.70		12.10	18.70
355	8.70		13.60	21.10
400	9.80		15.30	23.70
450	11.00		17.20	26.70
500	12.30		19.10	29.70





PVC-U Pressure Pipe in accordance With BS EN ISO 1452:2009

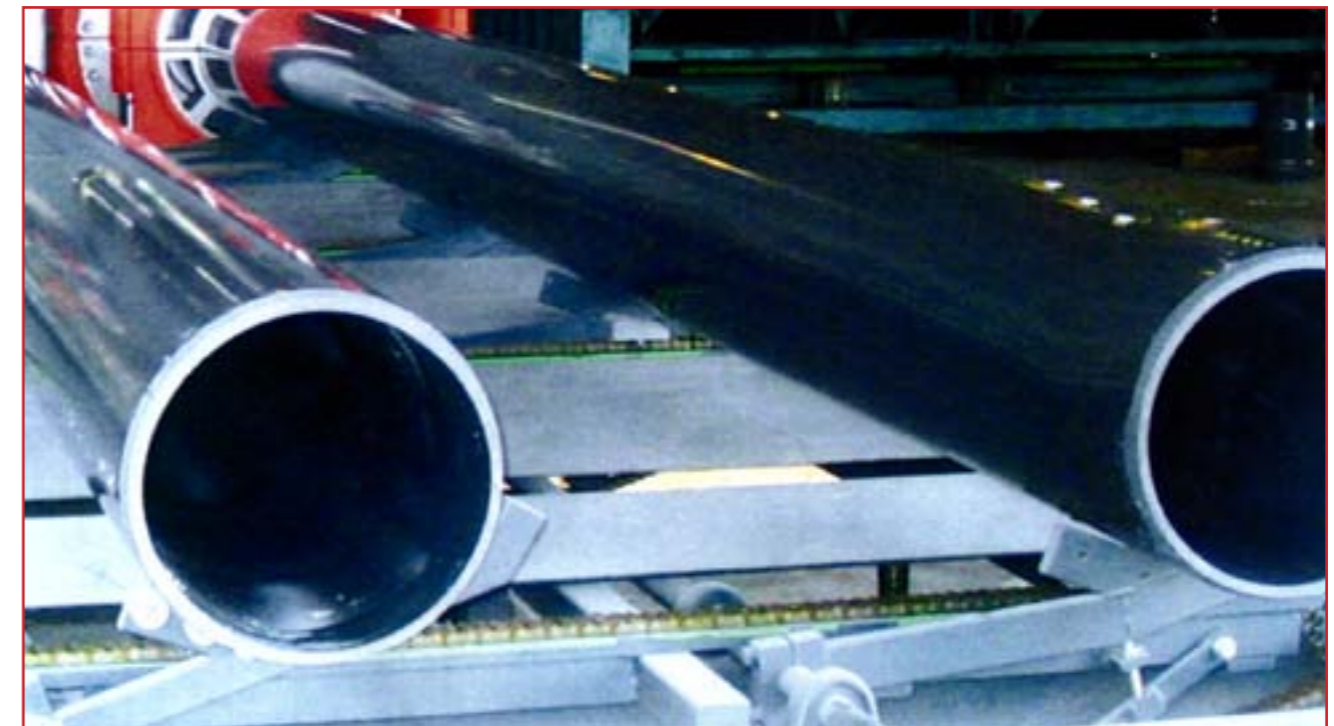


BS EN ISO 1452 : 2009				
Nominal Outside Diameter(mm)	Pipe series S			
	Nominal (minimum) wall thickness			
	PN 6	PN 10	PN 12,5	PN 16
Nominal pressure PN based on design coefficient C=2,5				
20	--	--	--	1.50
25	--	--	--	1.90
32	--	1.60	--	2.40
40	1.50	1.90	--	3.00
50	1.60	2.40	--	3.70
63	2.00	3.00	--	4.70
75	2.30	3.60	--	5.60
90	2.80	4.30	--	6.70
Nominal pressure PN based on design coefficient C=2,0a				
110	2.70	4.20	5.30	6.60
125	3.10	4.80	6.00	7.40
140	3.50	5.40	6.70	8.30
160	4.00	6.20	7.70	9.50
180	4.40	6.90	8.60	10.70
200	4.90	7.70	9.60	11.90
225	5.50	8.60	10.80	13.40
250	6.20	9.60	11.90	14.80
280	6.90	10.70	13.40	16.60
315	7.70	12.10	15.00	18.70
355	8.70	13.60	16.90	21.10
400	9.80	15.30	19.10	23.70
450	11.00	17.20	21.50	26.70
500	12.30	19.10	23.90	29.70

The nominal wall thicknesses conform to ISO 4065⁽⁴⁾

ISO 4422:1990

Nominal Outside Diameter(mm)	S 16.7 PN 6	S 16 PN 6.3	S 10 PN 10	S 6.3 PN 16
20	-	-	-	1.50
25	-	-	-	1.90
32	-	-	1.60	2.40
40	-	1.50	1.90	3.00
50	-	1.60	2.40	3.70
63	1.90	2.00	3.00	4.70
75	2.20	2.30	3.60	5.50
90	2.70	2.80	4.30	6.60
110	3.20	3.40	5.30	8.10
140	4.10	4.30	6.70	10.30
160	4.70	4.90	7.70	11.80
200	5.90	6.20	9.60	14.70
225	6.60	6.90	10.80	16.60
280	8.20	8.60	13.40	20.60
315	9.20	9.70	15.00	23.20
355	10.40	10.90	16.90	26.10
400	11.70	12.30	19.10	29.40
450	13.20	13.80	21.50	-
500	14.60	15.30	23.90	-





DIN 8062				
Outside Diameter <i>mm</i>	Wall Thickness			
	DIN 8062, Series 2 4 Bar Rating (PN4) <i>mm</i>	DIN 8062, Series 3 6 Bar Rating (PN6) <i>mm</i>	DIN 8062, Series 4 10 Bar Rating (PN10) <i>mm</i>	DIN 8062, Series 4 16 Bar Rating (PN16) <i>mm</i>
20		-	-	1.5
25		-	1.5	1.9
32		-	1.8	2.4
40		1.8	1.9	3.0
50		1.8	2.4	3.7
63		1.9	3.0	4.7
75	1.8	2.2	3.6	5.6
90	1.8	2.7	4.3	6.7
110	2.2	3.2	5.3	8.2
125	2.5	3.7	6.0	9.3
140	2.8	4.1	6.7	10.4
160	3.2	4.7	7.7	11.9
200	4.0	5.9	9.6	14.9
225	4.5	6.6	10.8	16.7
250	4.9	7.3	11.9	18.6
280	5.5	8.2	13.4	20.8
315	6.2	9.2	15.0	23.4
500	7.9	11.7	19.10	29.7



Telephone Duct				
Size <i>(mm)</i>	Minimum		Overall Length <i>(m)</i>	Effective Length <i>(m)</i>
	OD <i>(mm)</i>	Wall <i>(mm)</i>		
Duct 50	50	1.6	6.07	6.00
Duct 54D	96.50	3.25	6.10	6.00

Electrical Conduit Equivalent to NEMA TC-2

Nominal Outside Diameter (mm)	Minimum Wall Thickness (mm)
20	1.8
25	1.9
32	2.5
40	2.5
50	3.2
63	4.7
110	6.0
160	7.1
200	8.2





ISO 161/1

Outside Diameter <i>mm</i>	Wall Thickness		
	S 20 SDR 41 PN 6.3 <i>mm</i>	S 12.5, SDR26 PN 10 <i>mm</i>	S 8 SDR 17 PN16 <i>mm</i>
20	-	-	1.2
25	-	-	1.5
32	-	-	1.9
40	-	1.6	2.4
50	1.3	2.0	3.0
63	1.6	2.9	3.8
75	1.9	2.5	4.5
90	2.2	3.5	5.4
110	2.7	4.2	6.6
125	3.1	4.8	7.4
160	4.0	6.2	9.5
200	4.9	7.7	11.9
225	5.5	8.6	13.4
250	6.2	9.6	14.8
280	6.9	10.7	16.6
315	7.7	12.1	18.7
400	9.8	15.3	23.7



UPVC PRESSURE FITTINGS

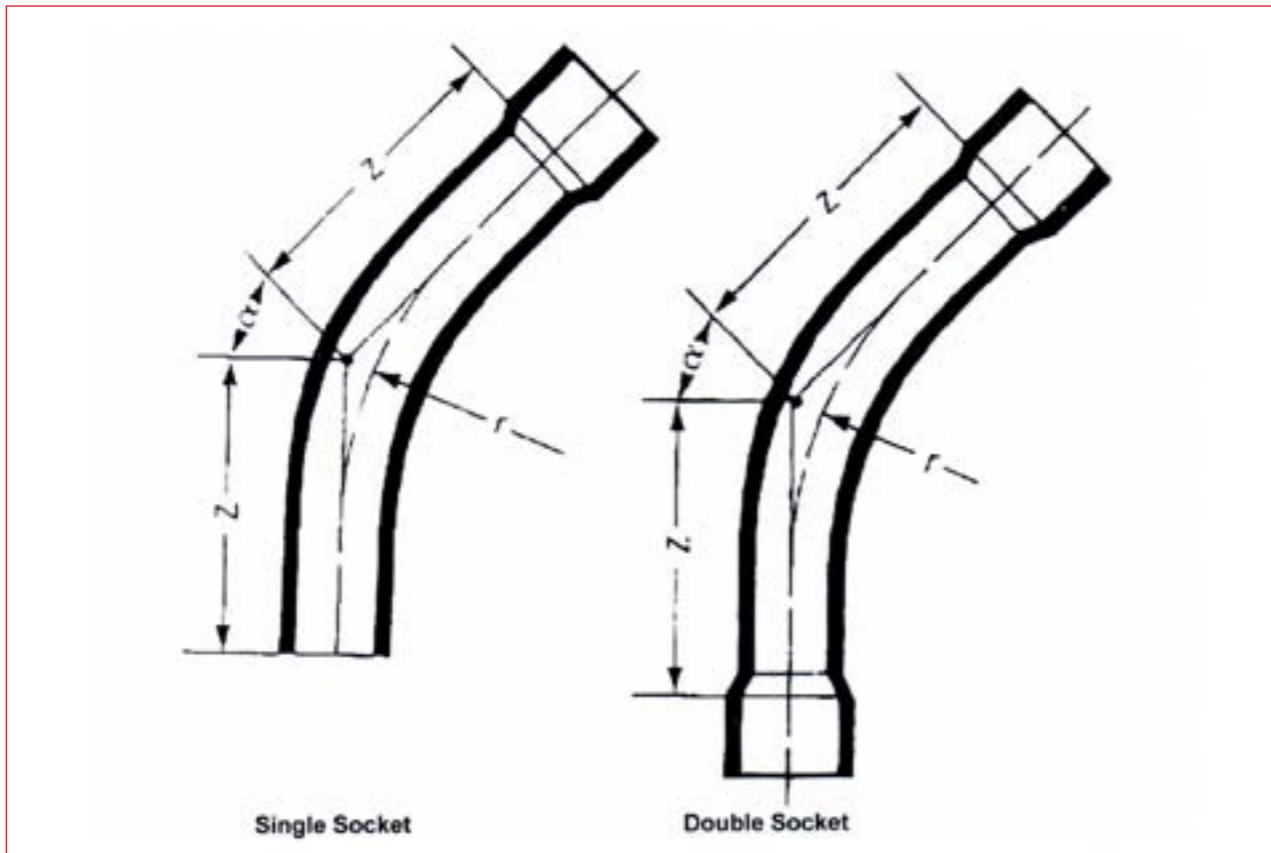
DIN 8063 / ISO 727

Description	Range
 Elbow 90°	20mm ~ 315mm
 Elbow 45°	20mm ~ 315mm
 Tee 90°	20mm ~ 315mm
 Socket Union	12mm ~ 110mm
 Double Socket	20mm ~ 315mm
 Reducing Bush	16 x 12 ~ 160 x 140
 End Cap	12mm ~ 225mm
 Backing Ring	63mm ~ 110mm
 Flat Stub	63mm ~ 110mm
 Reinforced Elbow 90°	16x ³ / ₈ ~ 110 x 4



Solvent Weld (S/W) Socket Bend (Fabricated)

Outside Diameter (mm)	R (mm)	Z (Minimum)			
		α			
		11 1/2°	22 1/2°	45°	90°
315	1103	398	509	746	1392
280	980	365	463	674	1248
225	788	313	392	562	1023
200	700	280	360	510	920
160	560	252	308	428	756
140	560	252	308	428	756
110	385	204	243	326	551
90	315	185	217	285	469
75	263	176	198	254	408
63	221	169	182	230	359
50	221	169	230	230	359
D-54	385	204	326	326	551

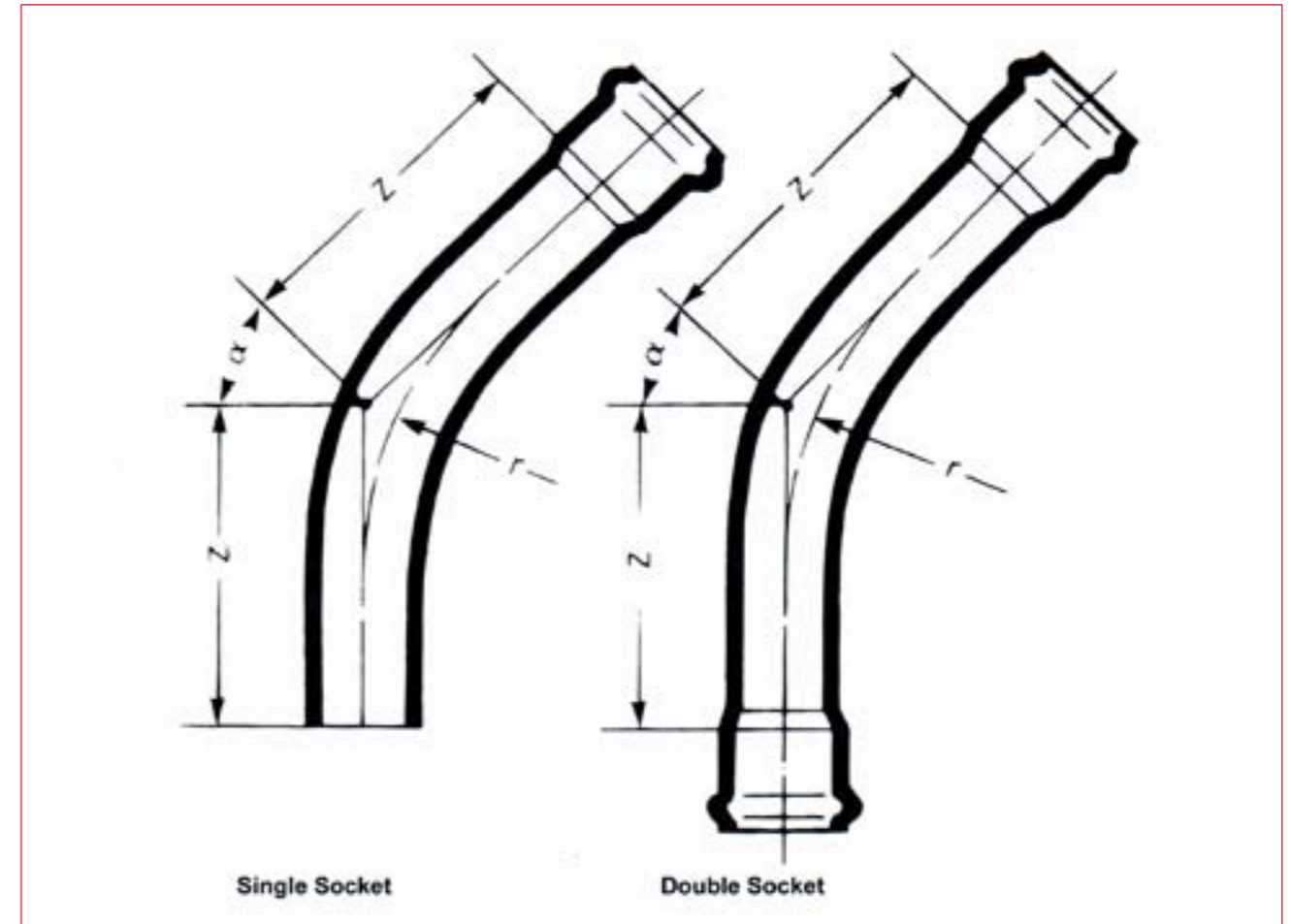


Note: Other fabrications are also available upon request



Rubber Ring (R/R) Sealing Bend (Fabricated)

Outside Diameter (mm)	R (mm)	Z (Minimum)			
		α			
		11 1/2°	22 1/2°	45°	90°
315	1103	523	624	846	1442
280	980	490	578	774	1298
225	788	413	507	662	1073
200	700	332	437	576	1015
160	560	327	383	528	806
140	560	294	378	495	785
110	385	279	318	401	601
90	315	260	273	373	576
75	263	248	264	321	509
63	221	218	227	259	468



Note: Other fabrications are also available upon request

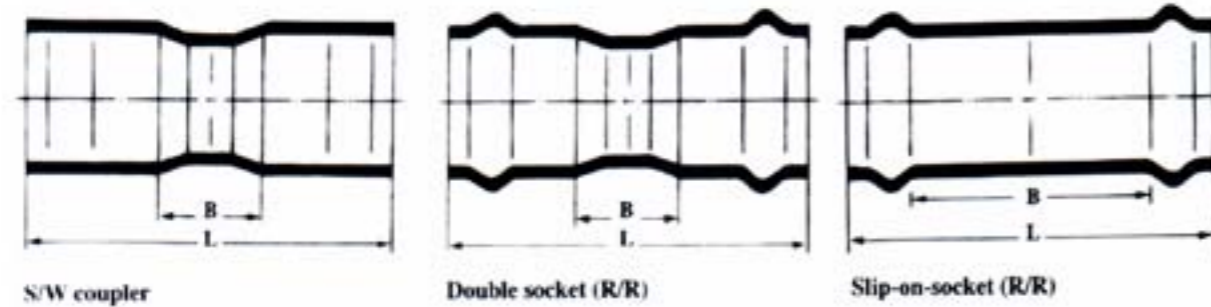
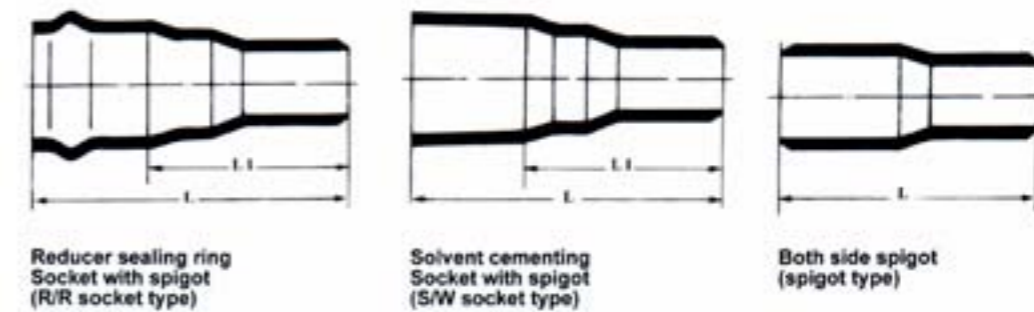


Coupler (Fabricated)

Outside Diameter (mm)	S/W Coupler		DS (R/R)		SOS (R/R)	
	L	B	L	B	L	B
500	-	-	-	-	560	300
450	-	-	-	-	560	300
400	-	-	-	-	550	320
355	-	-	-	-	550	320
315	670	-	570	210	540	300
280	580	270	475	135	470	290
225	485	220	440	106	405	235
200	400	180	400	120	390	190
160	340	140	335	71	330	160
140	290	118	330	80	300	155
110	250	85	320	90	270	130
90	220	80	290	72	250	120
75	200	80	240	32	230	120
63	190	70	230	30	230	110
50	150	60	-	-	-	-
40	120	50	-	-	-	-
32	100	45	-	-	-	-
25	100	40	-	-	-	-
20	100	35	-	-	-	-

Reducers (Fabricated)

Size(mm)	R/R Socket Type		S/W Socket Type		Spigot Type
	Spigot Size	Reducer Length (mm)	Spigot Size	Reducer Length (mm)	Reducer Length (mm)
	L1	L	L1	L	L
315X280	580	750	436	650	600
280X225	548	700	357	550	500
225X200	510	650	340	500	460
225X160	468	600	390	550	460
200X160	368	500	355	500	450
160X140	325	450	329	450	350
110X90	291	400	259	350	270
90X63	250	350	221	300	250

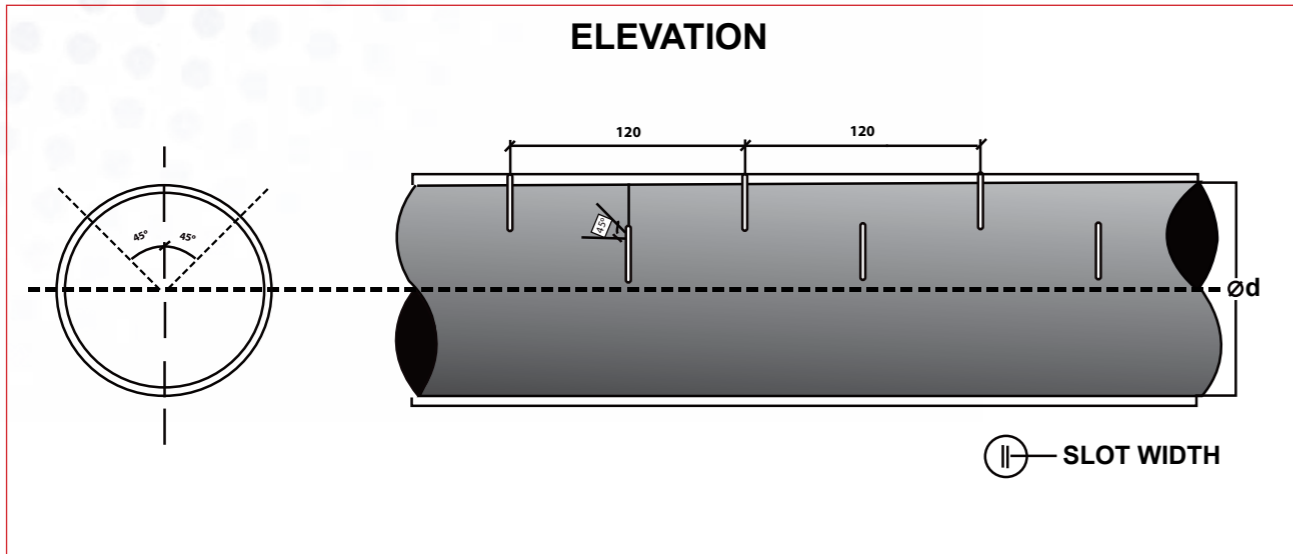


Note: Other fabrications are also available upon request

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Slotted Pipes



S#	PIPE Ød(mm)	SLOT WIDTH (mm)	SLOT LENGTH (mm)	No. OF ROWS
1	110	4.5	55-65	2
2	160	4.5	80-90	2
3	200	4.5	90-100	2
4	225	4.5	100-110	2
5	250	4.5	130-140	2
6	280	4.5	130-140	2
7	315	4.5	150-160	2
8	400	4.5	150-160	3
9	450	4.5	150-160	3
10	500	4.5	150-160	3



U PVC DRAINAGE PIPE SYSTEMS

BS EN 1329-1: 2000

Nominal Size DN/OD	Nominal OD	Mean Outside Diam		Wall Thickness (e, min)	Application Area B (e, max)
		(dem, min)	(dem, max)		
32*	32	36.2	36.5	3.0	3.5
40*	40	42.8	43.1	3.0	3.5
50*	50	55.8	56.1	3.0	3.5
75*	75	82.0	82.3	3.0	3.5
110 (4")*	110	110.0	110.30	3.2	3.8
160 (6")*	160	160.0	160.40	3.2	3.8
200 (8")*	200	200.0	200.5	3.9	4.5
250 (10")*	250	250.0	250.5	4.9	5.6
315 (12")*	315	315.0	315.6	6.2	7.1

BS EN 1401-1: 1998

Nominal Size DN/OD	Nominal OD	Mean Outside Diam		Wall Thickness SN2, SDR 51		Wall Thickness SN4, SDR 41	
		(dem, min)	(dem, max)	(e, min)	(e, max)	(e, min)	(e, max)
110 (4")*	110	110.0	110.3	--	--	3.2	3.8
160 (6")*	160	160.0	160.4	3.2	3.8	4.0	4.6
200 (8")*	200	200.0	200.5	3.9	4.5	4.9	5.6
250 (10")*	250	250.0	250.5	4.9	5.6	6.2	7.1
315 (12")*	315	315.0	315.6	6.2	7.1	7.7	8.7
400(16")*	400	400.0	400.7	7.9	8.9	9.8	11.0



*Available upon request



U PVC DRAINAGE PIPE SYSTEMS

Characteristics of Pipes

Raw Material

The raw material is 100% virgin PVC-U

Colour

BS EN 1329-1:2000 > Light Grey

BS EN 1401-1:2000 > Orange Brown

Chamfering

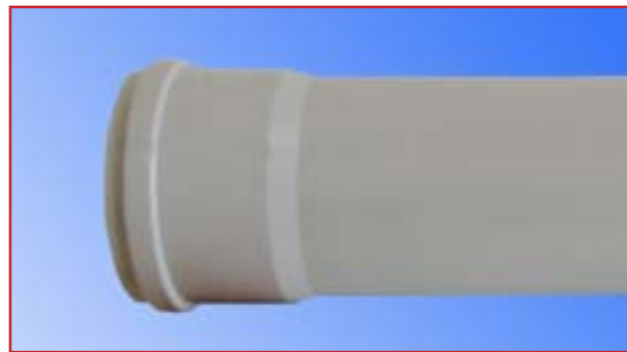
A 150 chamfer is applied to all spigot ends

Length

Pipes are normally supplied in 6m overall length.

Pipes can also be supplied in 5.8m overall length to fit inside containers.

Sizes 32, 40 and 50mm are supplied in 4m overall length with plain ends.



Drainage Fitting (Low Pressure)



DOUBLE COUPLER
32 mm to 315 mm



WYE TEE
40 mm to 315 mm



EQUAL TEE
40 mm to 315 mm



REDUCER TEE
40 mm to 315 mm
(different sizes)



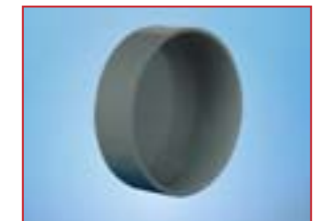
REDUCER BUSH
32 mm to 315 mm
(different sizes)



ELBOW
40 mm to 315 mm



SCREW END CAP
50 mm to 200 mm



END CAP
50 mm to 315 mm

* Drainage fitting rubber rings (Low Pressure) are available
Dia from 160mm - 315 mm



Quality - Assurance & Control

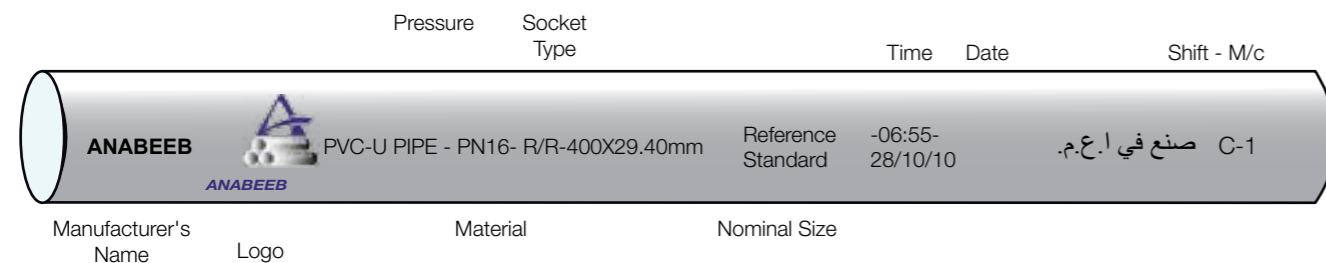
The ANABEEB has quality systems, which are, designed to satisfy the exacting requirements of the ISO 9001/9002 Standard. Each pipe manufactured by computer controlled production process is marked with unique number that permits complete traceability of the product with respect to the origin and quality of the raw materials, the manufacturing conditions and conformance test results, Even before the pipe is produced, QA approved raw materials are tested in the laboratory in order to insure that they meet the standards.

Production processes

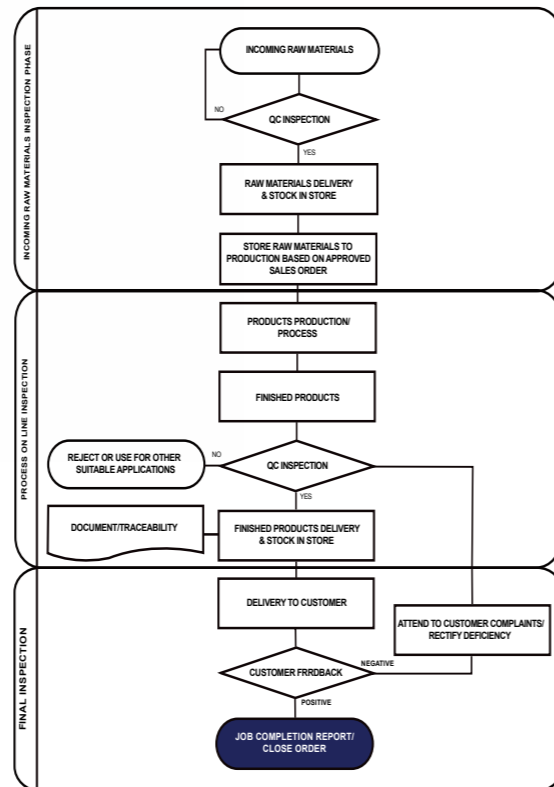
Suitable working environment.
Modern extrusion lines.
Highly skilled workers.
Regular maintenance of the machines and equipment.
Systems to monitor and control process parameters

Finished Products Marking (Traceability)

The following controlled marking / printing sample is always provided in ANABEEB's PVC-U/PE-LD finished products. They are established as means of control for the traceability, identification, storage, protection, retrieval, retention time and disposition of products specifically with respect to customers/ client's requirements.



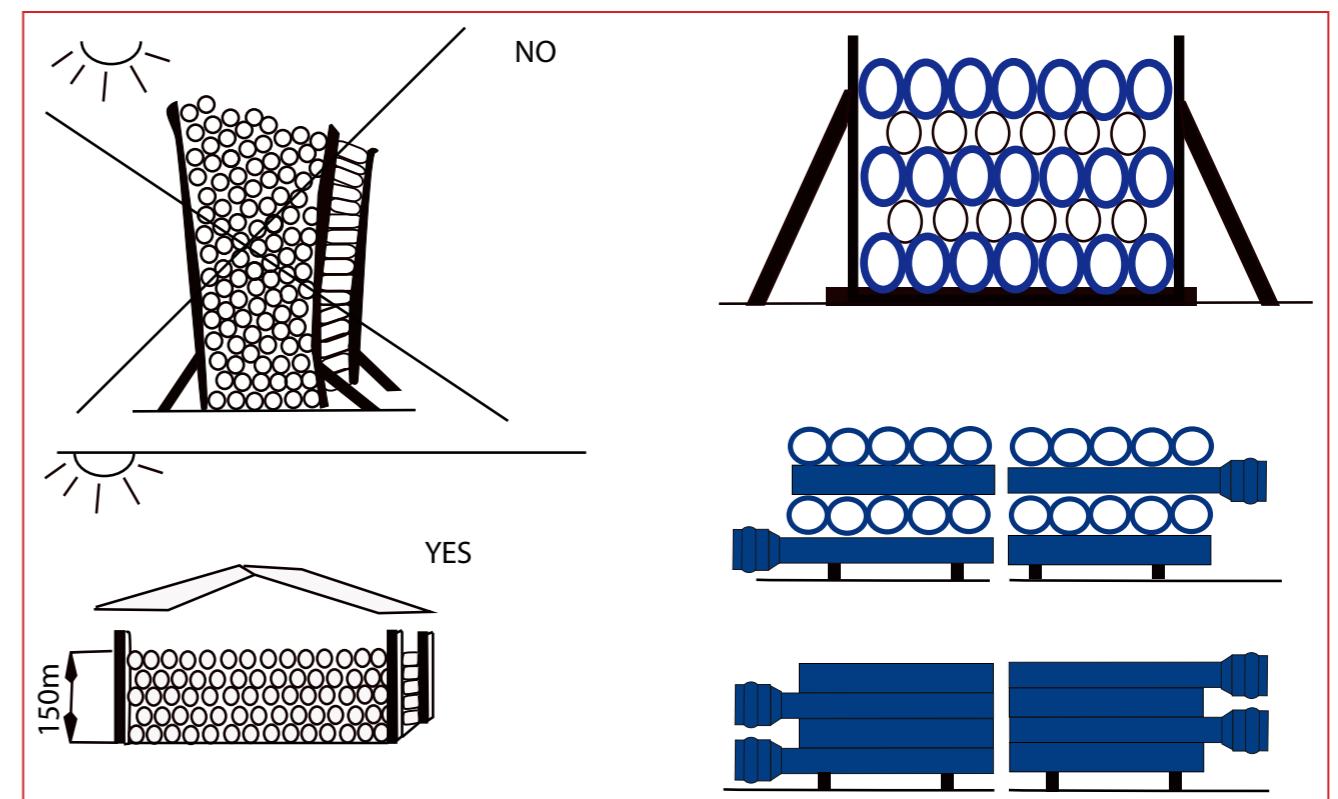
Manufacturer's Name : ANABEEB
Material : PVC-U
Pressure Range : PN16
Socket Type : R/R or S/W
Nominal Size : 400x29.40mm
Reference Standard : DIN 8062 ISO 161/1, ISO 4422-2, BS EN ISO 1452, BS EN 1401 & BS EN 1329
Time : 06:55
Date : 05/12/14
Origin : United Arab Emirates
Shift - Machine : C-1



Pipe Storage, Handling and Transportation

Storage

- PVC-u pipes should be stacked on a reasonably flat surface free from sharp projections, stones, or other protuberances likely to cause deformation.
- Side supports should be provided at intervals of not less than 1.5 m.
- Pipes should be uniformly supported throughout the length. If this is not possible, then timber supports of at least 75 mm bearing width, at spacing not greater than 1m centers, should be placed beneath the pipes. Pipes of different size and wall thickness should be stacked separately, or, where this is not possible, those with larger diameters and thicker walls should be at the bottom.
- When socket and spigot pipes are stacked, the sockets should be placed at alternate ends of the stack with the sockets protruding so that pipes are evenly supported along their entire length.
- Pipes stacks should not exceed seven (7) layers in height, with a maximum height of 1.5 meters.
- Storage of pipes under high ambient temperatures should be avoided. In UAE and surrounding countries stack heights should be reduced and pipes should be stored in the shade to prevent deformation.
- Do not leave PVC-U pipes under direct sun for a long time, even if they are stored under a tarpaulin cover. PE-LD Coils should be stored under cover from direct sunlight coils may be stacked to maximum of six high on a flat even surface





Handling

Care should be exercised in handling pipe to avoid damage to the wall surface. This is important when the ends of the pipe are treated for socket and spigot jointing, or are chamfered.

Pipes should not be dragged along rough ground.

The loading and unloading of pipes should be carried out safely, without safety risk & damage to the pipe. Where mechanical handling is employed, the techniques used should ensure that the handling equipment causes no damage to the pipes. Metals slings, hooks, and chains should not come in to direct contact with the pipe.

Pipe should not be dropped on a hard surface.

When pipes are transported one inside the other, the inner pipe should always be removed first, and stored separately.



Transportation

Vehicles with flat beds should be used for transporting pipes. Beds should be free from nails or other projection. Pipe should be supported uniformly along its length.

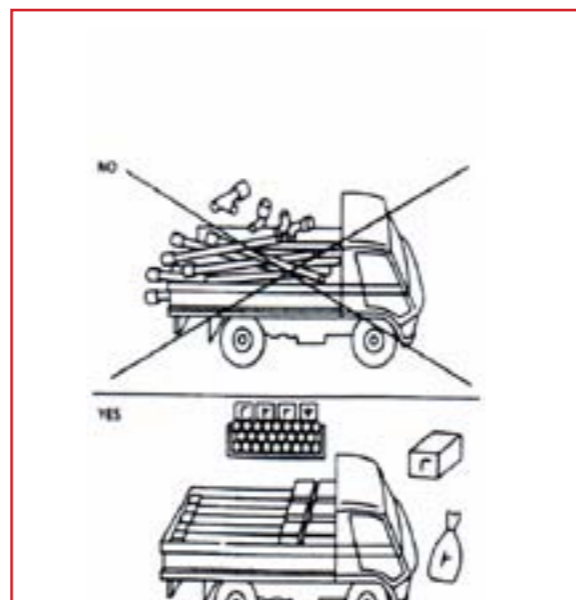
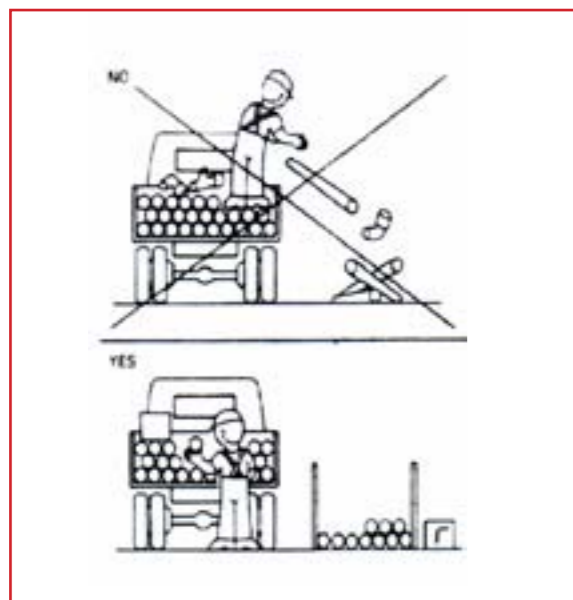
Vehicle should have adequate side support at approximately 2m intervals and pipe should be effectively secured during transit.

When loading socket and spigot pipe, these should be stacked in alternate layers so that the sockets do not bear any direct weight.

Pipes should be loaded on a vehicle in such a way that the overhang is no more than 1m.

Thick wall pipes should always be loaded beneath thin wall pipes,

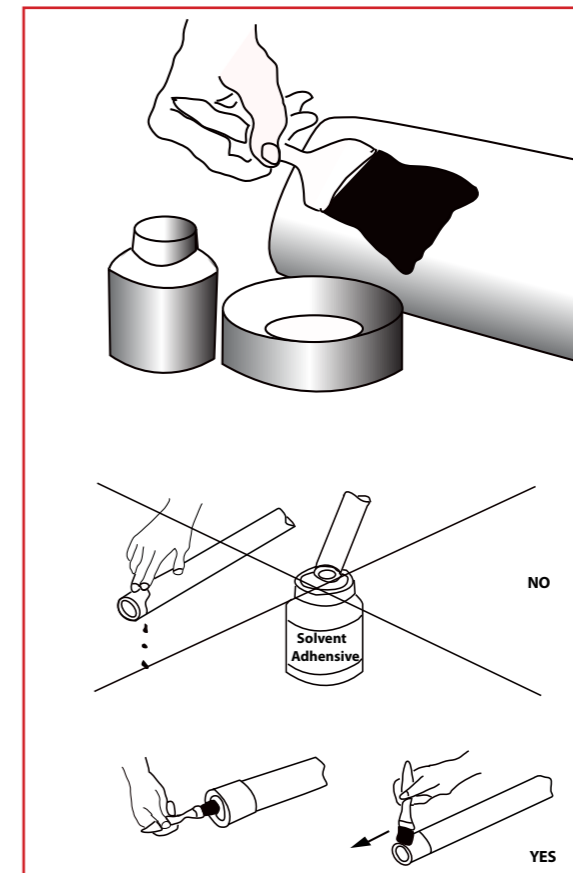
When deliveries are mixed, PE-LD coils must always be transported in the top of PVC-U pipe. Never place PVC-U pipes on top of PE-LD coils, as possible deformation may occur.



Instructions for Jointing and fittings with Solvent Type (S/W) Sockets



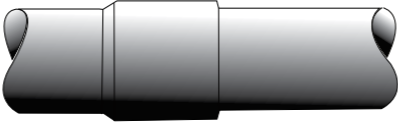
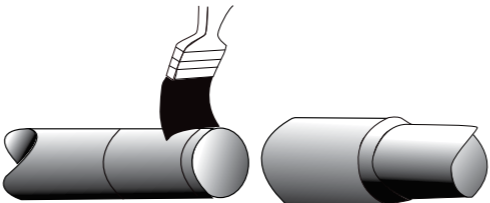
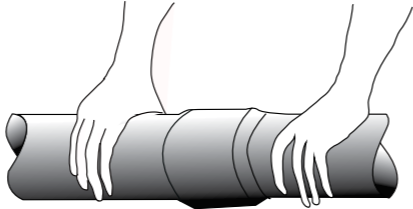
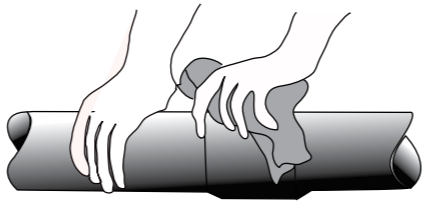
Preparation

- Cut pipe at right angles to the pipe axis. De-burr inside, chamfer outside edges according to diagram. Well-chamfered and rounded pipe ends prevent the cement layer from being removed when the pipe and fitting are pushed together.
- Before marking the joint, the bonding length and alignment of the fitting should be marked on the pipe end. A check can then be easily made to determine whether the fitting has been pushed on to the pipe to the full extent of the socket.
- It may be difficult to insert pipes with a maximum ISO OD or oval shape fully in to the socket before applying solvent cement. Only after application of the solvent that actual jointing is possible.
- Solvent joints up to an approx. OD of 75mm (2 1/2) can be made by one worker. The application of solvent to sizes of an OD 90mm and above takes longer and there is a danger of the cement drying before the joint can be made. Two workers should therefore, apply the solvent cement simultaneously to the pipe end and socket fitting.
- Usable cement should be thick flowing and run from an inclined wooden palette, if the cement has become so thick that it no longer spreads easily, a new tin must be used. Solvent cement and cleaner should be store in a cool and dry place at a temperature not exceeding 23°C.
- Chamfering angle is approximately 15 degrees.



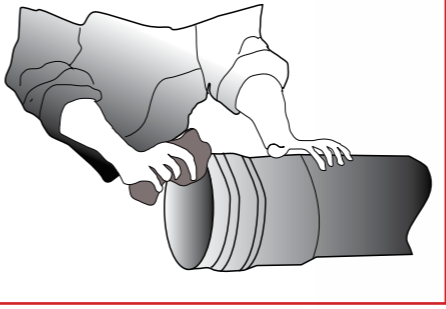
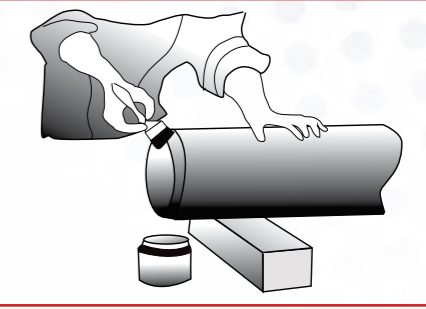

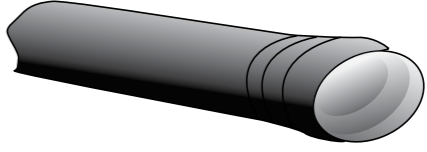

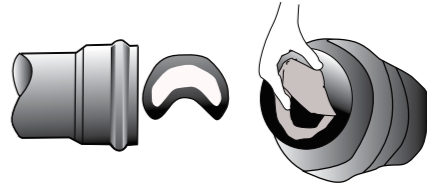
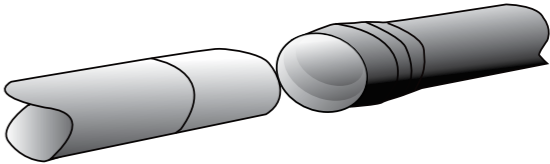
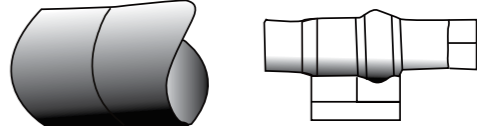


Procedure - Solvent Weld Pipes & Fittings

<p>Mark & Chamfer</p> <p>Mark the socket depth on the pipe end. cut a 150 chamfer on large pipes</p>	
<p>Clean</p> <p>Clean, dry and degrease the socket and spigot.</p>	
<p>Check the Fit</p> <p>Insert the spigot in to socket (without solvent cement). An interference fit should occur between 1/3 and 2/3 of full entry.</p>	
<p>Apply solvent</p> <p>Apply an even coat of solvent to the socket and then the spigot to the full marked length.</p>	
<p>Joint</p> <p>Insert the spigot the full marked depth in the socket and HOLD for a minimum of 30 second, depending on temperature.</p>	
<p>Clean Off</p> <p>Remove surplus solvent Cement</p>	



Procedure - Rubber Ring Joints

	
<p>Check Spigot end</p> <p>Ensure pipe spigot has full 150 chamfer and entry depth mark</p>	
<p>Clean socket</p> <p>Clean socket and ring groove of dirt and loose gravel</p>	
<p>Clean rubber ring</p> <p>Clean, dry and degrease the rubber ring</p>	
<p>Fit rubber ring</p> <p>Place rubber ring in groove and check for proper sealing. Fin must fit in to pipe</p>	
<p>Align Pipe</p> <p>Align Pipe horizontally and vertically. Do not try to insert pipe at an angle to socket.</p>	
<p>Lubricate Spigot</p> <p>Clean of dust and dirt and apply jointing lubricant to chamfer. Keep and free from dirt.</p>	



Properties of PVC-U Pipe & Derating Factor

Properties of PVC-U Pipe

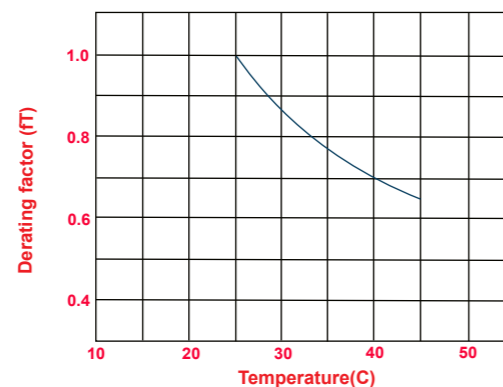
PVC-U is a thermoplastic and its physical properties vary as the temperature changes. When used at higher temperature its strength is reduced. Therefore, it is necessary to select a proper pipe nominal pressure (PN) according to ambient temperature, (see derating factor)

PROPERTIES	U/M	RANGE
Specific Gravity	-	1.46 max
Hardness & Rockwell	Degrees	110-120
Tensile Strength	Kg/cm ²	450-550
Elongation	%	80-150
Compressive Strength	Kg/cm ²	700
Shear Strength	Kg/cm ²	450
Bending Strength	Kg/cm ²	1.000
Tensile Modulus	104Kg/cm ²	2.5-3.5
Impact Strength Charpy (V.Notch)	Kg-cm/cm ²	5 - 7
Resistant to Heat (Continuous)	°C	60 - 70
Brittle Temperature	°C	-18
Vicat Softening Temperatur	°C	80
Combustibility	°C	Self-Extinguishing
Thermal Expansion Coefficient(Linear)	10-5 ^o /C	6 - 8
Specific Heat	Cal ^o /C/g	0.2 - 0.3
Thermal Conductivity	Kcal/m.h. °C	0.12 - 0.14
Young's Modulus E	Kg/cm ²	3.4x10 (at 20 °C) E=(3.808 - 0.0220) x 10 ⁴

(Note: The above are general properties for PVC-U Pipes)

Derating Factor

A supplementary derating factor f_T shall be applied for operating temperatures between 25°C and 45°C. Values of this factor for different temperatures are given in figure 1. The maximum working pressure is given by multiplying the nominal pressure (PN) by the derating factor (f_T).



Technical Specification

Pressure Rating

The nominal working pressures are calculated to give continuous use for over 50 years. The operating pressure are for temperature at 20°C, as temperature increases the pressure rating decreases and an appropriate de-rating factor should be applied as follows.

Working Temp.		De-rating Multiplier
°C	°F	
23	73	1.00
27	80	0.88
32	90	0.75
38	100	0.62
43	110	0.51

uPVC pipes are not recommended for operating at temperature exceeding 60°C or 140 °F.

Thermal Expansion

uPVC pipe expands as temperature rises, the expansion is independent of pipe diameter. The co-efficient of liner expansion as follows.

$$\text{Change in length (mm)} = \text{Original length of pipeline (m)} \times 0.06 \times \text{maximum occurring temperature different (K)}$$

PE-LD (Low Density Polyethylene) Pipes

High quality pipes for irrigation systems.
The size ranges from 15.50-40 mm and coil (rolls) length varies according to the diameter , i.e.500, 250, 200 & 150 meters. Other dimensions are also available on request.



Size in accordance with ISO 8779:2001

Nominal Outside Diameter (mm)	Outside Diameter in Inch	Nominal Inside Diameter (mm)	Wall Thickness (mm)
16.0	1/2	13.0	1.5
25.0	5/8	22.0	1.5



Customized Sizes

Nominal Outside Diameter (mm)	Nominal Diameter in Inch	Nominal Inside Diameter (mm)	Wall Thickness (mm)
15.5	1/2	13.1	1.2
18.5	5/8	16.1	1.2
19.0	5/8	16.0	1.5
21.5	1/2	18.5	1.5
28.4	3/4	25.4	1.5
30.0	1	25.0	2.5
32.0	1	25.8	3.1
32.0	1	25.6	3.2
32.0	1	25.4	3.3
32.0	1	23.6	4.2



Random list & Prestigious projects in the U.A.E.

Sl. No.	Client / Customer	Projects
1	Ghantoot Transport	Al Falah Community Deve. Package A, Village 2 & 3
2	Sotraviv Limitee, Mauritius Project	Plaines Wilhems Sewerage Project, Stage – 1.
3	Hilal Bil Badi & Partners.	Al Ain Wildlife Park & Resort – AD 472 near Al Ain Zoo
4	Al Jaber	Con of Sew: C&RW for isolate properties. Project 1185
5	Nurol LLC.	Contract No. 5001 Salam Street
6	Al Ula General Transport & Contracting Est.	Dalma Mall Development
7	Gulf Crescent Road Contracting	Raising Club, Dubai Project
8	BIN HAFEEZ Gen. Cont. Est	Dualling between Baniyas East – Al Heeleh Road
9	Delma Engineering Projects Co. W.L..L.	Rawdhat Development Infra. Package (189)
10	Mohammed Abdulmohsin Al Kharafi & Sons	Salam Street Interchange at IP-111& IP 111A
11	Hilal Bil Badi & Partners Contracting	AD 477 Sadiyat Island Project
12	Western Bairoona	Abu Dhabi Int'l Shooting Club – Khalifa A
13	Al Jaber	ALOR Infrastructure Management.
14	Al Geemi & Partners	Khalifa City B Project.
15	Orascom / Marshal Contracting	Reem Island Development
16	Al Jaber	Yas Island Free Way Cross
17	Al Jaber	Reconstruction of Mafraq Interchange Project
18	Admac	Al Raha Beach Development
19	Gulf Contractors	Drainage Works in Forest Green Belt at A, Jarf Area - Contract 482.
20	Al Nasr Contracting Co.	Al Reef Villas Infrastructure Works.
21	Saif Bin Darwish	Saadiyat Island Expressway Project
22	National Project & Constructions	Roads & Utilities Works for Najmat Abu Dhabi.
23	Al Geemi & Partners	Shams Abu Dhabi Project on Reem Island
24	Al Muhairy General Contracting	Contract No. 953/4-2 - Mohammed Bin Zayed City.
25	Mushrif National Construction.	IETP-ICAD 2 Musaffah



Random list & Prestigious projects in the U.A.E.

Sl. No.	Client / Customer	Projects
26	Admac	Project. 509/4 -Surface Drainage project for Al Bathya & Al Sadr Areas.
27	Al Jaber	Shahama Saadiyat Freeway Package 1 & 2
28	Nurol L.L.C.	Shams Abu Dhabi Project on Reem Island
29	Nael & Bin Harmal	Contract No. MT5 - Storm Drainage of Western Area of Al Ain.
30	Delma Engineering	Contract No. 953/4-1 - Mohammed Bin Zayed City.
31	Cyprus Cybarco - Bahrain	Riffa Views IW 4100
32	Ghantoot Transport	Contract No. 953/4-1 - Mohammed Bin Zayed City.
33	Ghantoot Transport	Contract No. 2000 & 972
34	Fujaira Municipality, FUJAIRAH / Biflanger Berger	Waste Water Treatment System for City Of Fujairah & its Environs
35	MINISTRY OF REGIONAL MUNICIPALITIES ENVIRONMENT & WATER RESOURCES	Wadi Khabb Recharge Dam, OMAN
36	WORKS DEPTT. OF ABU DHABI	Mis. Works / J- 232
37	SEWERAGE PROJECTS COMMITTEE & ROAD	238 / Internal Roads in Sectors E 19/02, E 25 & E 48
38	ROAD SECTION OF ABU DHABI MUNICIPALITY	987/1 / Breakwater Developments - Stage-2
39	WORKS DEPTT. OF ABU DHABI	4-B, LIWA/Contract 4B, Liwa
40	WORKS DEPTT. OF ABU DHABI	Cont. 1, 2, 3 & 4 / Dualling of Al Ain - Al Wagan - Al Quat'a Road
41	ROAD SECTION ABU DHABI MUNICIPALITY	BA/2/L/2560/Main Rehab. & Add. Works for Roads & Br. Of AUH.
42	PVT DEPT FOR H.H. SHEIKH ZAYED BIN SULTAN AL NAHYAN	A 174 / TWIN 1400mm PIPELINES FROM GHOMADH SOUTH TO ALAIN RECEPTION
43	Doha Municipality	Marine / Infrastructure Site Dev Landscape (Ph 1 & 2) 505 Project
44	SPC ABU DHABI	750/751 / Sewerage of Al-Aclah, Phase I & II - Abu Dhabi
45	Kuwait Municipality	12-99/2000 / Waste water treatment and Reclamation Plant at Sulabiya
46	Bahrain Municipality / Power Tech	Distribution Line 4, Package 11, Bahrain





Certificate of Registration



This is to certify that the Quality Management System of :

ANABEEB Pipes Manufacturing Factories

PVC & Bags Factory

P.O. Box: 2915, Mussafah

Abu Dhabi, UAE

has been assessed and found compliant with the requirements of :

ISO 9001: 2008

Approval is hereby granted for registration on the proviso that the certification rules and conditions are observed at all times.

Certification Scope:

Manufacture of PVC-U Pipes and Fittings, Low Density Polyethylene Drip-line Irrigation Pipes, Multi-Wall Kraft Paper Sacks, Low Density Polyethylene Bags and Rolls.

Certificate No.: **27111002002-2**

Issue Date: October 08, 2010

Expiry Date: October 07, 2013

Authorised Signature

Moody International Certification Ltd.

www.moodyint.com

The use of the Accreditation Mark indicates accreditation in respect of those activities covered by the Accreditation Certificate 014. The certificate remains the property of Moody International Certification Limited to whom it must be returned on request.



014



EMIRATES AUTHORITY FOR STANDARDIZATION & METROLOGY
UNITED ARAB EMIRATES

هيئة الإمارات للمواصفات والمقاييس
الإمارات العربية المتحدة

CERTIFICATE OF CONFORMITY

Certificate No. 0051/11 Issue Date: 05 July 2011 Valid Until: 04 July 2014
The Emirates Authority for Standardization and Metrology (ESMA)

Hereby certify that:

ANABEEB PIPE MANUFACTURING FACTORIES

P.O. Box 2915, Abu Dhabi,
United Arab Emirates

Has complied with the following published documents:

ESMA General Rules for Emirates Product Certification Scheme

In respect of a certification scheme for the manufacture of

PVC-U / LDPE PIPES

These rules have among other things necessitated the submission of samples of the scheduled products for examination and testing by ESMA to the Standards referred to in the schedule. Additionally, the scheme requires the firm

(A) To permit their factory located at Plot number M 22, Mussafah Industrial Area, Abu Dhabi, UAE to be periodically inspected by ESMA.

(B) To allow samples of the scheduled products to be selected from production, or from the market for independent testing and examination for assurance that conformity is being maintained.

The firm hereby agrees with ESMA to duly observe and comply with the requirements of the scheduled standards, the general and specific rules and with any regulations for the scheme that ESMA may establish.

Signed on behalf of

ESMA

Eng. Mohammed Saleh Badri
Acting Director General

Signed on behalf of

Anabeeb Pipes Manufacturing Factories

Engr. Abdullah Ahmed Khalil
Factory Manager

P.O.Box 48666, Dubai - UAE Tel: +971 4 294 44 34 Fax: +971 4 294 44 28

E-mail: conformity@esma.ae

WWW.ESMA.AE



Our Ref: GH/M110329
Test Report: MAT/LAB 499D



18th October 2011

Anabeeb Pipes Manufacturing Factories
P O Box 2915
Mussafah
Abu Dhabi
United Arab Emirates

**WATER REGULATIONS ADVISORY SCHEME (WRAS)
MATERIAL APPROVAL**

The material referred to in this letter is suitable for contact with wholesome water for domestic purposes having met the requirements of BS 6920-1:2000 'Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water'.

The reference relates solely to its effect on the quality of the water with which it may come into contact and does not signify the approval of its mechanical or physical properties for any use.

POLYVINYLCHLORIDE (PVC, PVC-U & CPVC) - COMPONENTS 5300

Anabeeb UPVC Potable Water Pipe. Black coloured, extruded PVC-U pipe. For use with water up to 45°C.

**APPROVAL NUMBER: 1110510
APPROVAL HOLDER: ANABEEB PIPES MANUFACTURING FACTORIES**

The Scheme reserves the right to review approval. This approval is valid between October 2011 and October 2016.

An entry, as above, will accordingly be included in the Water Fittings Directory on-line under the section headed, "Materials which have passed full tests of effect on water quality".

The Directory may be found at: www.wras.co.uk/directory

Yours faithfully

Jason Furnival
Approvals & Enquiries Manager
Water Regulations Advisory Scheme

Water Regulations Advisory Scheme Ltd
30 Fern Close, Perry-Farm Industrial Estate,
Oakdale, Gerrards Cross, Bucks, UK.
Tel: 01495 248554, Fax: 01495 236289
E-mail: info@wras.co.uk, Website: www.wras.co.uk



ANABEEB
Pipes Manufacturing Factories
(Formerly NPBF)