



ISO 9001 : 2008

# U.RAIN

## uPVC Fittings



BS5255 • BS4514 • BS4660 • BSEN1329 • BSEN1401  
uPVC Soil • Waste & Sewer Fittings

Ahmed Abdulla Juma Plastic Pipes and Fittings Industrial Company (**J.J.U.P.I.**) is a major manufacturer of uPVC (Unplasticised Polyvinyl Chloride) in Dubai, U.A.E. and it has continued progress, successfully developing in many export markets. Our comprehensive range of quality uPVC Soil, Waste and Sewer Fittings are manufactured in accordance to the requirement British Standard BS4514, BS5255, BS4660. Constant care is taken to maintain this high standard of quality for all our products.

It is now accepted that there are many economic advantages when using uPVC Pipes and fittings. They are lightweight, resistant to a wide variety of chemicals, do not support combustion, they are impervious to bacteria and fungi attack and are not subjected to electrolytic corrosion. The fittings have a high impact strength which helps prevent damage during handling or assembly. All parts are assembled easily using the simple technique of cold solvent cement welding, together with the use of seal ring joints to accommodate thermal movement, there will be considerable economy in labors and materials.

Installation of products in any **J.J.U.P.I.** plumbing system should be made with reference to the relevant building codes and after obtaining relevant authority approvals.

#### Code Numbers

To facilitate specification, ordering and stocking, each item in our system has a code number. The system of numbering is very simple, and is based on a build up of recognizable, but abbreviated information, as follows :

#### Component Type:

<b>AC</b>	- Access Cap	
<b>B</b>	- Balcony Outlet	
<b>BP</b>	- Boss Pipe-Connector	
<b>CRT</b>	- Cross Tee	
<b>CRY</b>	- Cross Y	
<b>DE</b>	- Door Elbow	
<b>DS</b>	- Door Socket	
<b>DT</b>	- Door Tee	
<b>E</b>	- Elbow	
<b>EM</b>	- Elbow MM	
<b>EN</b>	- End Cap	
<b>FE</b>	- Female Elbow	
<b>FS</b>	- Female Socket	
<b>F.T.</b>	- F-Trap 4x3x2" Machal Pain	
<b>Ft</b>	- F-Trap 4 x 3"	
<b>Gt</b>	- Gully Trap	
<b>JE</b>	- Japan Elbow	<u>Angle</u>
<b>JEC</b>	- Japan End Cap	<b>45°</b>
<b>JH</b>	- Jally H/D	<b>90°</b>
<b>JL</b>	- Jally L/D	<b>92°</b>
<b>JS</b>	- Japan Socket	
<b>JT</b>	- Japan Tee	<u>Size</u>
<b>Pt</b>	- P-Trap	
<b>RB</b>	- Reducer Bush	<b>1 1/4"</b> - 32mm
<b>RO</b>	- Rodding Eye-Cover	<b>4" x 3"</b> - 110mm x 82mm
<b>RPE</b>	- Rubber Push Elbow	<b>4" x 3" x 2"</b> - 110mm x 82mm x 54mm
<b>RPS</b>	- Rubber Push Socket	
<b>RPT</b>	- Rubber Push Tee	
<b>RPY</b>	- Rubber Push Y	<u>Suffix</u>
<b>RT</b>	- Reducer Tee	<b>BA</b> - Big Access
<b>RY</b>	- Reducer Y	<b>D</b> - I/O Check
<b>RW</b>	- Rain Water Outlet	<b>F/F</b> - No Suffix
<b>S</b>	- Socket	<b>L</b> - Long Bend
<b>T</b>	- Tee	<b>MF</b> - Male / Female
<b>TM</b>	- Tee MM	<b>MM</b> - Male / Male
<b>VC</b>	- Vent Cowl	
<b>Y</b>	- Y Tee	
<b>YM</b>	- Y MM	
<b>W/C</b>	- W.C. Seat Cover	

## The System

# Characteristics of the Material

## Material Characteristics

### **Lightness**

uPVC is approximately half the weight of copper pipes, one-fifth of the weight of steel pipes & one-tenth the weight of cast iron pipes. Transport and handling is therefore both simple and convenient.

### **Chemical Resistant**

The excellent chemical resistance of uPVC to acids, alkalis, oxidizing and reducing agents makes it particularly suitable for a wide range of industrial application. Generally uPVC is resistant to most oils, fats, alcohols and aromatic-free petrol, but is unsuitable for use with aromatic and chlorinated hydrocarbons, ketones, esters & cyclic ethers which lead to marked swelling and softening of the material.

### **High Flow Rate**

The internal surface of uPVC pipe fittings is "extremely smooth" equivalent to manning and kutter coefficient of 0.0010, giving excellent flow properties which remain constant due to reduced build-up of scale.

### **Flammability**

uPVC does not support combustion

### **Non-conductivity**

uPVC is non-conductor of electricity & is therefore not subject to galvanic or electrolytic action.

### **Weather Resistance**

The D.rain range is manufactured from a specially formulated uPVC compound, developed in many years of trial, resulting in a tough resilient material with excellent outdoor weathering performance.

### **Low Installation Cost**

Tight dependable connections are made by solvent cement welding of uPVC pipes and fittings. This combined with other advantages of lightness, flexibility and the use of pre-fabrication techniques, can afford savings both in time and money. As it is the case with all materials, certain characteristics need to be considered during installation. Similarly, before installing uPVC it is necessary to take into account the following properties.

### **Effect of Low Temperature**

The impact strength of uPVC pipes fittings decreases with decreases with reduction in temperature therefore increased care should be exercised if installation is carried out near 0°C.

### **Effect of Elevated Temperature**

The uPVC remains stable under load to a temperature of approximately 75°C and is therefore satisfactory for use in soil or waste systems where continuous full bore discharges of effluent are unlikely to exceed this figure. The low thermal conductivity of the material does allow full bore discharges at higher temperatures provided the duration of discharge is limited to 2-3 minutes.

### **Specialized Applications**

The systems are more than adequate for normal domestic applications in low and multi-rise dwellings. Where more specialized applications such as tea-makers, autoclaves, hospitals, industrial kitchens and laboratories are concerned, where prolonged discharges of liquids at elevated temperatures can occur, our technical department should be concerned.



### Thermal Movement

uPVC has coefficient of linear expansion of  $7 \times 10 \text{ C}^\circ$ . This means that 1 meter of uPVC pipe will expand approximately 0.7mm per  $10\text{C}^\circ$  rise in temperature of the pipe material. However, due to the short duration of most effluent flows and the slow temperature response of the pipe material, the greatest thermal take place due to variation in environment temperature rather than the effect of hot effluent discharge. Successful accommodation of thermal movement is dependant on the controlled direction and distribution of this movement.

The following information is intended as a general guide & reference should be made to the relevant code practice issued by the appropriate statutory authority.

Unless thermal movement can be accommodated by alternate means, expansion joints should be fitted. Maximum spacing intervals for locating expansion joints are 6 meters for cold pipelines and 4 meters for hot pipelines. The maximum length of pipeline between fixed points should be 2 meters for cold pipelines and 1 meter for hot pipelines.

Vertical SWV stacks and discharge pipes should have expansion joints located on each floor where fixtures or branch lines are connected, directly above the highest branch connection. They should also be located at the base of a stack or at the end of a drain connection for a discharge pipe if the length of pipe between fixed point exceeds the distances stated above.

On Graded Pipelines expansion joints should be places immediately upstream of the entry to a vertical stack pr other graded line, & immediately upstream of each change of direction in graded lines.

Expansion joints may be omitted in the following locations:

1. At the top floor of a stack where the stack is free to move through a weather proofed sleeve through the roof.
2. At the base of an external stack connected to a drainage trap where the stack is free to move through a sleeve fitted in the drain connection.
3. At a junction or bend in a graded pipeline where the thermal movement in the pipeline can be accommodated by deflection of the offset leg without affecting the grade of the pipeline, subject to the length of the pipeline & offset leg. Supporting of the pipe shall not impede expansion movement in such cases.

**Table 1. Alternative Expansion Provision**

Normal Size of Pipe (mm)	Maximum Pipe Length(L) (Meters)	Maximum Pipe Length (L) (Meters)
32/40/50	2	0.50
	3	0.60
	4	0.80
	6	1.00
65/80/100	2	0.75
	3	1.00
	4	1.10
	6	1.20
150	2	1.00
	3	1.10
	4	1.20
	6	1.20

# Supports for uPVC Pipelines

Table 2. Maximum Spacing of Pipe Supports For Material Temperature up to 45°C

Normal Size of Pipe (mm)	Maximum Pipe Length(L) (Meters)	Maximum Pipe Length (L) (Meters)
32	0.9	1.8
40/50	1.0	2.0
65 to 150	1.2	2.5

## Supports for uPVC Pipelines

### Fixed Supports

The purpose of a fixed support is to retain all movement and to provide a fixed point in the installation. The clip or support shall be securely attached to the fittings, located in the clamping groove where provided.

### Sliding Supports

The purpose of a sliding support or clip is to provide a guide without restraint on axial movement of the pipe.

### Location of Supports

Refer Table 2

uPVC pipe shall be supported at intervals dependent on the maximum temperature likely to be reached by the material.

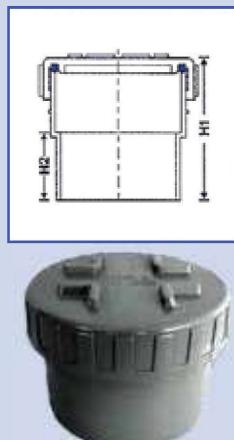
### uPVC Pipes through Walls and Floors

Any pipe or fitting built into a wall or floor shall either be lagged with a suitable flexible material not less than 6mm thick, or pass through a sleeve providing an annular clear space of not less than 6mm, so as to permit the pipe to be sealed in position without restricting axial movement of the pipe.

### Conversion Factors (Approximate)

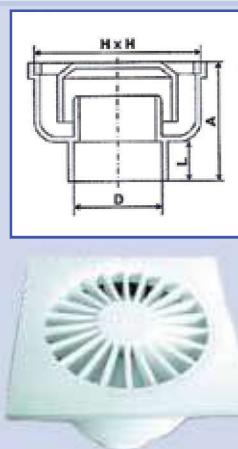
Quantity	Imperial to Meter		Imperial to Meter	
Length	1 inch	= 25.4 mm	1 mm	= 0.039 in
	1 feet	= 305 mm	1 m	= 3.28 ft
	1 yard	= 0.914 m	1 m	= 1.09 yrd
	1 mile	= 1.61 km	1 km	= 0.62 mile
Volume (Fluids)	1 fl oz (UK)	= 28.4 ml	1 ml	= 0.035 fl oz(UK)
	1 pint (UK)	= 568 ml	1 L	= 1.76 pint (UK)
	1 gallon (UK)	= 4.55 ml	1 m³	= 220 gallons(UK)
	1 fl oz (US)	= 29.6 ml	1 ml	= 0.034 fl oz (US)
	1 pint (US)	= 473 ml	1 L	= 2.11 pint (US)
	1 gallon (US)	= 3.79 ml	1 L	= 0.264 gallon(US)
Mass	1 oz	= 28.3 g	1 g	= 0.035 oz
	1 lb	= 454 g	1 kg	= 2.20 lb
	1 ton	= 1.02 tonne	1 tonne	= 0.984 ton
Pressure	1 psi	= 6.89 kPa	1 kPa	= 0.145 psi
	1 kgf/cm²	= 98 kPa	1 kPa	= 0.01 kgf/cm²
	1 in H <sub>2</sub> O	= 249 kPa	1 Pa	= 0.004 H <sub>2</sub> O
	1 bar	= 100 kPa	1 kPa	= 0.01 bar
Temperature	°C	= $\frac{5}{9} (\text{°F} - 32)$	°F	= $\frac{9}{5} (\text{°C}) + 32$

## Solvent Fittings



### No. 01 UPVC ACC Cap

Product Code	Color	Nom. Size mm (min.)	Dimension (mm) H1    L1
AC008	White, Gray	1 1/4"	54    23
AC001	White, Gray	1 1/2"	62    28
AC003	White, Gray	2"	71    30
AC005	Gray, Red	3"	100    45
AC006	Gray, Red	4"	114    52
-	Gray, Red	6"	-    -



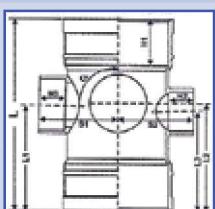
### No. 02 UPVC Balcony Outlet

Product Code	Color	Nom. Size mm (min.)	Dimension (mm) D    A
-	White	Flat - 1 1/2" x 2"	50    110
BJ001		Vertical - 1 1/2"	-    -
BJ002		Horizontal - 2"	-    -



### No. 03 Boss Connector

Product Code	Color	Nom. Size mm (min.)	Dimension (mm)
	Gray	4" x 1 1/2"	
	Gray	4" x 2"	
	Gray	6" x 1 1/2"	
	Gray	6" x 2"	



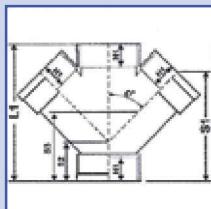
### No. 04 UPVC Boss Pipe Connector

Product Code	Color	Nom. Size mm (min.)	H1	H2	H3	L	L1	L2	L3	S1	S2	Dimension (mm)
BP001	Gray	Single Socket - 4"	50.5	27	29	209	115.5	117.5	108.5	86.5	84	
		Double Socket - 4" x 4"										



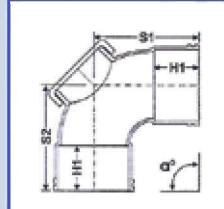
### No. 05 UPVC Cross Tee

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)			
				H1	L1	L2	L3
-	Gray, Red	3"	92	52	239	134	120
CRT 4"	Gray, Red	4"	-	-	-	-	-



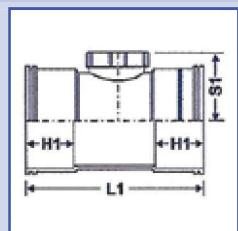
### No. 06 UPVC Cross Yee

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)				
				H1	L1	S1	S2	S3
CRY 4"	Gray, Red	4"	45	45	259	205	75	129.5
CRY 3"	Gray, Red	3"	45					



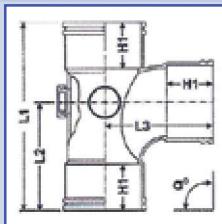
### No. 07 UPVC Door Elbow

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)			
				H1	H2	L1	L2
DE001	Gray, Red	3"	92	52	/	112	120
DE003	Gray, Red	4"	92	52	/	112	120
DE005	Gray, Red	6"	92	52	/	112	120
-	Gray, Red	8"	45	-	/	-	-
-	Gray, Red	8"	90	-	/	-	-



### No. 08 UPVC Door Socket

Product Code	Color	Nom. Size mm (min.)	Dimension (mm)		
			H1	L1	S1
DS3	Gray, Red	3"	46	212	83
DS4	Gray, Red	4"	52	256	105
DS6	Gray, Red	6"	77	312	132
DS8	Gray, Red	8"	-	-	-



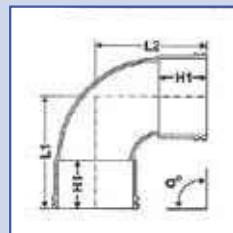
### No. 09 UPVC Door Tee

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)			
				H1	L1	L2	L3
DT001	Gray, Red	3"	92	46	224	115	114
DT003	Gray, Red	4"	92	52	239	134	120
DT005	Gray, Red	6"	92	77	380	223	210
-	Gray, Red	8"	92				

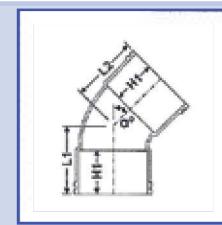


### No. 10 UPVC Door Yee

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)			
-	Gray, Red	4"	45				

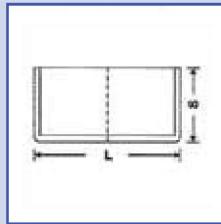


Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)			
				H1	H2	L1	L2
E001	White, Gray	1 1/4"	92	26	/	50	53
E002	White, Gray	1 1/2"	92	30	/	62	62
-	White, Gray	1 1/2"	90	-	/	-	-
E003	White, Gray	2"	92	32	/	74	74
E004	Gray, Red	3"	92	46	/	109	112
E007	Gray, Red	4"	92	52	/	120	121
E009	Gray, Red	6"	92	77	/	200	203
-	Gray, Red	8"	92	-	/	-	-
-	Gray, Red	10"	92	-	/	-	-
-	White, Gray	2"	90	-	/	-	-
-	Gray, Red	4"	90	-	/	-	-
-	Gray, Red	6"	90	-	/	-	-



### No. 12 UPVC Elbow

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)			
				H1	H2	L1	L2
E015	White, Gray	1 1/4"	45	24	/	35	35
E017	White, Gray	1 1/2"	45	27	/	38	42
E01P	White, Gray	2"	45	31	/	44	44
-	Gray, Red	3"	45	46	/	78	82
-	Gray, Red	4"	45	52	/	83	83
-	Gray, Red	6"	45	77	/	130	131
-	Gray, Red	8"	45				
-	Gray, Red	10"	45				



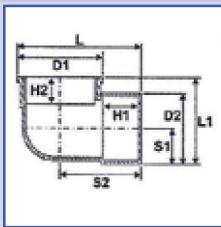
### No. 13 UPVC End Cap

Product Code	Color	Nom. Size mm (min.)	Dimension (mm)	
			L	S
EN001	White, Gray	2"	62.5	28
EN003	Gray, Red	3"	90	28
EN005	Gray, Red	4"	/	/
EN006	Gray, Red	6"	/	/
-	Gray, Red	8"	/	/



### No. 14 UPVC End Plug

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)				
				L	W	H	S1	S2
-	Gray, Red	4"						



### No. 15 UPVC Female Elbow

Product Code	Color	Nom. Size mm (min.)	L	L1	D1	D2	H1	H2	S1	S2	Dimension (mm)	
											1½" x 1½"	82.5
F-E001	White, Gray	1½" x 1½"	82.5	58	57	48	25	18	24	54		



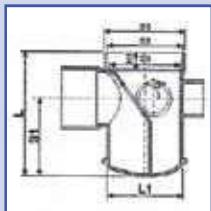
### No. 16 UPVC Nipple Socket

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)			
				1¼"	1½"	2"	-
-	White, Gray	1¼"					
-	White, Gray	1½"					
-	White, Gray	2"					



### No. 17 UPVC Female Socket

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)			
				1½" x 1½"	1½" x 2"	-	-
-	White, Gray	1½" x 1½"					
-	White, Gray	1½" x 2"					



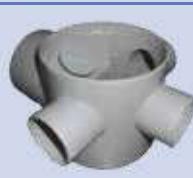
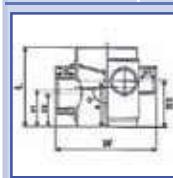
**T/Type**



**4" x 3" x 2" - D/Seal**

### No. 18 UPVC Floor Trap

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)					
				H1	L	L1	S1	D1	D2
FT 4 x 3	Gray	-	88.5	26	180	110	114	117	110
-		4"x 3"x 1 1/2" - T/Type	-	-	-	-	-	-	-
-		4"x3"x2"x1 1/2"-MC -Type	-	-	-	-	-	-	-
-		4"x 3"x 1 1/2" - B/Type	-	-	-	-	-	-	-
-		4"x 3"x 1 1/2" - Short	-	-	-	-	-	-	-
-		4"x 3"x 2" - Short	-	-	-	-	-	-	-
-		4"x 3"x 1 1/2" - D/Seal	-	-	-	-	-	-	-
-		4"x 3"x 2" - D/Seal	-	-	-	-	-	-	-



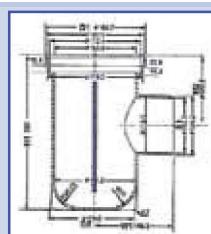
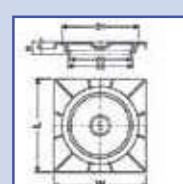
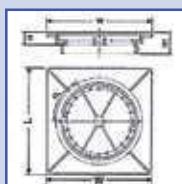
**4" x 3" x 2 x 1 1/2" - MAC-Type**

**4" x 3" x 1 1/2" - B/Type**

**Short Type**

### No. 19 UPVC F.Trap Cover H.D. & UPVC F.Trap Cover L/D

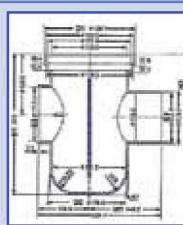
Product Code	Color	Nom. Size mm (min.)	Dimension (mm)
		15" x 15" H/D	
		15" x 15" H/D/02	
		20" x 20" H/D	
		15" x 15" Mac Type	
		15" x 15" Mac Type 02	
		15" x 15" Taiwan Model	
		20" x 20" Taiwan Model	



**6" x 4"**

### No. 20 UPVC Gully Trap Bottle Type

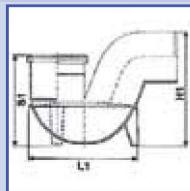
Product Code	Color	Nom. Size mm (min.)	H1	H2	Dimension (mm)				
					W1	D1	D2	S1	S2
GT001	Red	6" x 4"	289	130.2	254.7	188.7	159.6	102.3	111.2
GT002	Red	6" x 4" x 4"	289	130.2	254.7	188.7	159.6	102.3	111.2



**6" x 4" x 4"**

**No. 21 UPVC Gully Trap - H/D with rubber**

Product Code	Color	Nom. Size mm (min.)	Dimension (mm)
-	Red	6" x 4" x 4" x 4"	

**No. 22 P/Trap**

Product Code	Color	Nom. Size mm (min.)		Dimension (mm)
			H1	S1
			L1	
Pt-4"	Red	4"	248.3	194
				238.5

**No. 23 UPVC V/Trap**

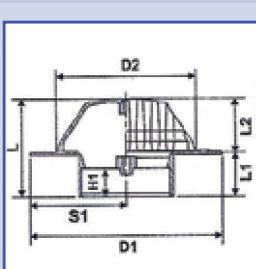
Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
-	Red	4"	-	

**No. 24 UPVC Hopper Trap**

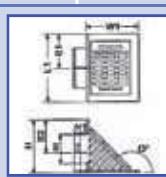
Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
-	Red	4"	-	

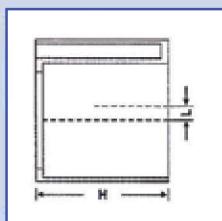
**No. 25 Pipe Fixing Bracket**

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Gray	3"		
	Gray	4"		

**No. 26 Rain Water Outlet**

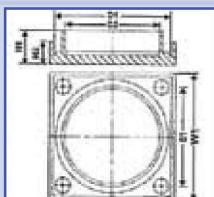
Product Code	Color	Nom. Size mm (min.)	Dimension (mm)
Dome Large-3"	Gray	3"	-
Dome Large-4"	Gray	4"	
Dome Small-3"	Gray	3"	
Flat Type	Gray	3"	
Side Parapet	Gray	3" & 4"	
Dome Medium	Gray	4"	





### No. 27 UPVC Reducer Bush

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)	
				H1	L1
	Gray	1" x 1½"	-	-	-
	White, Gray	1¼" x 1½"		39	0
	White, Gray	1½" x 2"		33	5
	Gray, Red	2" x 3"		45	9
	Gray, Red	2" x 4"		51	23
	Gray, Red	3" x 4"		54	10
	Gray, Red	4" x 6"		56.5	21
	Gray, Red	8" x 6"		-	-
	Gray, Red	10" x 8"		-	-



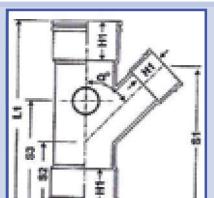
### No. 28 UPVC Rodding Eye Cover

Product Code	Color	Nom. Size mm (min.)	Dimension (mm)		
			H1	H2	L1
	White, Black	15" x 15" x 4"			
	White, Black	15" x 15" x 3" x 4"			
	Black	6" x 4"			



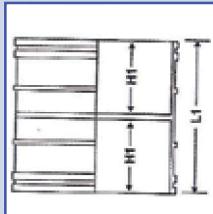
### No. 29 UPVC Reducer Tee

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)			
				H1	H2	L1	L2
	Gray, Red	4" x 2"	-				
	Gray, Red	6" x 4"	92	77	52	318	173



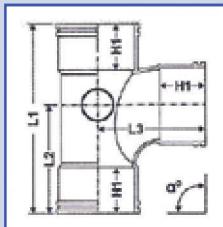
### No. 30 UPVC Reducer Yee

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)				
				H1	H2	L1	S1	S2
	Gray, Red	6" x 4"	45	77	52	380	256	115



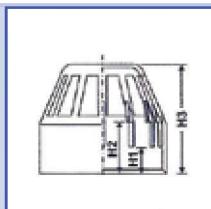
### No. 31 UPVC Socket

Product Code	Color	Nom. Size mm (min.)	Dimension (mm) H1 L1	
S011	White, Gray	1 1/4"	24	52
S002	White, Gray	1 1/2"	27.5	58
S003	White, Gray	2"	30"	63
S005	Gray, Red	3"	46"	96
S007	Gray, Red	4"	52"	107
S009	Gray, Red	6"	77"	158
-	Gray, Red	8"	-	-
-	Gray, Red	10"	-	-



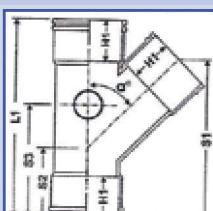
### No. 32 UPVC Tee

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm) H1 L1 L2 L3			
T001	White, Gray	1 1/4"	92	25	109	62	52
T002	White, Gray	1 1/2"	92	27	111	67	58
T004	White, Gray	2"	92	31	129	71	69
T005	Gray, Red	3"	92	46	224	115	114
T007	Gray, Red	4"	92	52	239	134	120
T010	Gray, Red	6"	92	77	380	223	210
-	Gray, Red	6"	90	-	-	-	-
-	Gray, Red	8"	92	-	-	-	-
-	Gray, Red	10"	92	-	-	-	-



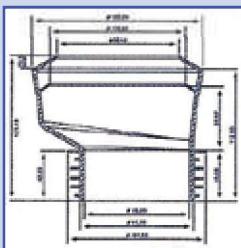
### No. 33 Vent Cowl

Product Code	Color	Nom. Size mm (min.)	Dimension (mm) H1 L1 S1		
VC001	Gray	2"	18	33	76
VC002	Gray	3"	20	38	80
VC003	Gray, Red	4"	26	52	104
-	Gray	6"	-	-	-

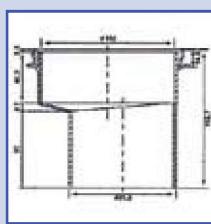
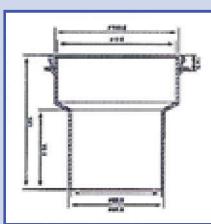


### No. 34 UPVC Yee

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm) H1 L1 S1 S2 S3				
YT001	White, Gray	1 1/4"	45	27	108	90	30	55
YT002	White, Gray	1 1/2"	45	30	122	110	40	60
YT003	White, Gray	2"	45	36	172	137	51	86
YT005	Gray, Red	3"	45	45	225	177	70	108
YT007	Gray, Red	4"	45	52	276	219	84	130
YT009	Gray, Red	6"	45	78	400	313	116	200



<b>No. 35 WC Connector</b>				
<b>Product Code</b>	<b>Color</b>	<b>Nom. Size mm (min.)</b>	<b>Angle <math>\alpha^\circ</math></b>	<b>Dimension (mm)</b>
Multi-Quick 00			00	
Multi-Quick 02			02	
Multi-Quick 04			04	
Mac Type			-	
Mac Type			00	
Mac Type			02	
Mac Type			04	



### WC Seat Cover



**No. 36 USA Model**



**No. 37 Italy Model**



**No. 38 Heavy Duty D.rain**



**No. 39 RAK Model Medium (ARWA)**

**No. 40 RAK Model Heavy (SALMA)**

## **PVC FITTING AS PER JAPAN OR THAILAND STANDARD**



## No. 41 PVC End Cap

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
-	Gray	4"		



## No. 42 PVC Elbow

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	<b>Gray</b>	<b>1½"</b>		
	<b>Gray</b>	<b>2"</b>		
	<b>Gray</b>	<b>3"</b>		
	<b>Gray</b>	<b>4"</b>		

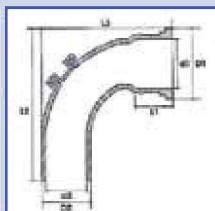


## No. 43 PVC Socket



## No. 44 PVC Tee

## UPVC Soil Fittings (Single Spigot Rubber Push)



### No. 45 UPVC Door Elbow

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)						
				D1	d1	D2	d2	L1	L2	L3
	Gray, Red	3"	87½	107	82	82	76	60	225	200
	Gray, Red	4"	87½	135	110	110	102	70	275	245
	Gray, Red	6"	87½	-	-	-	-	-	-	-
	Gray, Red	8"	87½	-	-	-	-	-	-	-

### No. 46 UPVC Door Socket (Access Pipe)



Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)			
				D1	d1	D2	d2
	Gray	3"	-				
	Gray	4"	-				

### No. 47 UPVC Door Tee



Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)						
				D1	d1	D2	d2	L1	L2	L3
	Gray, Red	3"	87½	107	82	82	76	60	276	195
	Gray, Red	4"	87½	135	110	110	102	70	265	120
	Gray, Red	6"	-	-	-	-	-	-	-	-
	Gray, Red	8"	-	-	-	-	-	-	-	-

### No. 48 UPVC Door Yee

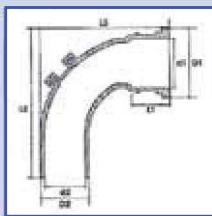


Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)			
				D1	d1	D2	d2
	Gray, Red	6"	-				
	Gray, Red	8"	-				

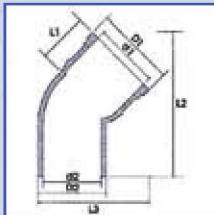


### No. 49 UPVC V Trap

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)			
				D1	d1	D2	d2
	Red	4"	-				



## No. 50 UPVC Elbow 87.5°



## No. 51 UPVC Elbow 45°



## No. 52 UPVC Reducer Socket



## No. 53 UPVC Reducer Tee

Product Code	Color	Nom. Size mm (min.)	Angle a°	Dimension (mm)
	Gray, Red	6" x 4"		
	Gray, Red	8" x 6"		



## **No. 54 UPVC Reducer Door Tee**

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Gray, Red	6" x 4"		
	Gray, Red	8" x 6"		



## No. 55 UPVC Reducer Yee

Product Code	Color	Nom. Size mm (min.)	Angle a°	Dimension (mm)
	Gray, Red	6" x 4"		
	Gray, Red	8" x 6"		

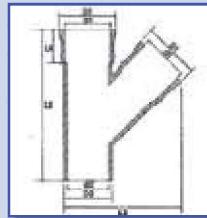


## No. 56 UPVC Socket

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)		
				D1	d1	L1
	Gray, Red	3"		107	82	110
	Gray, Red	4"		135	110	120
	Gray, Red	8"		-	-	-



## No. 57 UPVC Tee

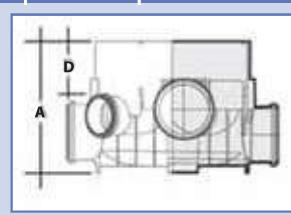
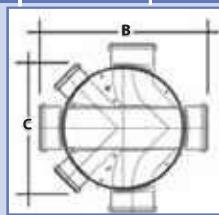


**No. 58 UPVC Yee**



## **No. 59 Inspection Chamber**

Product Code	Color	Riser	Frame + Cover	Dimension (mm)				
				A	B	C	D	E
	Red	320 x 60mm	30 x 30	240	440	370	100	320



## UPVC Soil Fitting Rubber Push (Double Socket)



### No. 60 UPVC Elbow

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Gray, Red	4"	45	
	Gray, Red	6"	45	
	Gray, Red	8"	45	



### No. 61 UPVC Door Elbow

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Gray, Red	6"	45	
	Gray, Red	8"	45	



### No. 62 UPVC Door Tee

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Gray	6"	92	
	Gray, Red	8"	90	



### No. 63 UPVC Socket

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Gray, Red	3"		
	Gray, Red	4"		
	Gray, Red	6"		
	Gray, Red	8"		



### No. 64 UPVC Tee

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Gray, Red	4"	87½	
	Gray, Red	6"	87½	
	Gray, Red	8"	87½	



### No. 65 UPVC Reducer Tee

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Gray, Red	6" x 4"		
	Gray, Red	8" x 6"		



#### No. 66 UPVC Reducer Door Tee

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Gray, Red	6" x 4"		
	Gray, Red	8" x 6"		



#### No. 67 UPVC Reducer Yee

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Gray, Red	6" x 4"		
	Gray, Red	8" x 6"		



#### No. 68 UPVC Repairing Socket

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Gray, Red	3"		
	Gray, Red	4"		
	Gray, Red	6"		



#### No. 69 UPVC Elbow

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Gray, Red	4"	92	
	Gray, Red	6"	92	
	Gray, Red	8"	90	



#### No. 70 UPVC Door Elbow

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Gray, Red	6"	90	
	Gray, Red	8"	90	



#### No. 71 Double Rubber Yee

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
				87½°
	Gray, Red	4"	45	
	Gray, Red	6"	45	
	Gray, Red	8"	45	

## MM Fittings



### No. 01 UPVC Elbow

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Light Gray	50 x 90 mm		
	Light Gray	75 x 90 mm		
	Light Gray	75 x 92 mm		



### No. 02 UPVC Vent Cowl

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Light Gray	50 mm		
	Light Gray	75 mm		



### No. 03 UPVC Elbow

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Light Gray	50 x 45 mm		
	Light Gray	75 x 45 mm		



### No. 04 UPVC Socket

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Light Gray	50 mm		
	Light Gray	75 mm		



### No. 05 UPVC Female Socket

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Light Gray	50 mm x 1½"		



### No. 06 UPVC Tee

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Light Gray	50 mm		
	Light Gray	75 mm		

**No. 07 UPVC Yee**

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Light Gray	50 mm		
	Light Gray	75 mm		

**No. 08 UPVC Reducer Bush**

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Light Gray	110 x 50 mm		
	Light Gray	75 x 50 mm		

**No. 09 UPVC Access Plug**

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Light Gray	50 mm		
	Light Gray	75 mm		

**No. 10 UPVC Door Elbow**

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Light Gray	75 x 90 mm		

**No. 11 UPVC Door Socket**

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Light Gray	75 mm		

**No. 12 UPVC Door Tee**

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Light Gray	75 mm		
	Light Gray			

**No. 13 UPVC Cross Tee**

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Light Gray	75 mm		

**No. 14 UPVC F/Trap**

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Light Gray	110 x 75 x 50 mm		

**No. 15 UPVC Floor Trap**

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Light Gray	160 x 110 x 50 mm		

**No. 16 UPVC Female Elbow**

Product Code	Color	Nom. Size mm (min.)	Angle $\alpha^\circ$	Dimension (mm)
	Light Gray	1 1/2" x 50 mm		

