1001-ACME - MAS-ACE-STR - 0002.

LODHA BUILDING A BETTER LIFE	Lodha Sales Gallery, ACME Manpada, Thane	ACE GLOBAL AIRCON SERVICES LTD.	Work Order No.:
			Material Approval Submittal
			MAS No:

Contractor:ACE GLOBAL AIRCON SRVICES LTD

To LODHA Group: **Lodha Sales Gallery, Manpada, Thane** | Date: 02-03-2022

Discipline ☐ Architectural ☐ Structural ■ HVAC ☐ Electrical ☐ Plumbing ☐ Facade ☐ Others (.....)

MATERIAL DETAILS (One Item Only Per Form)

Item description :DRAIN PIPE

Name of material :Drain Pipe & Fitting

Remarks ☐ As per specifications ☐ Alternate submission

- Attach all relevant technical literature marked to identify relevant descriptions, current test certificate, samples etc.
- Highlight any element of contractual non-compliance in this submittal

Drawing Ref: -	**Planned Date for applicable submittal for: -**	**Date:**
Specification Ref: -	1. O & M Manual	
BOQ Ref: -	2. Training Manual	
Indian/International Standards Ref: -	3. Specified /recommended spare parts	
	4. Warranties and Guarantees	

Manufacturer / Supplier

Company Name: - **Supreme**	Locally Manufactured
Address: 1161/1162, Solitair Corporate Park, Building,	Production Period
No. 11, 167 Gru Hargovindji Marg, Chakala, Andheri,	Delivery Ex-works
Ghatkopar Link Road, Andheri(e)Mumbai-400 093	Total Delivery Time
Local Agent:	Total Delivery Time

Programme: -

Date required on Site: -

Expected date of arrival on Site: -

Contractor's Authorized Signature

ACE GLOBAL AIRCON SERVICES LTD. MUMBAI

LODHA Engineer's Comments ☐ Design ☐ Con. Mgmt (Civil) ☐ Con. Mgmt (MEP) ☐ Con. Mgmt (Facade) ☐ QA/QC

Signed (LODHA Engineer)

Consultant's Comments. ☐ Hafeez contractor ☐ Sterling ☐ ESKEYEM ☐ Others (.....)

Signed (Consultant's Engineer)

	Status	Code 1	Code 2	Code 3	Code 4
		Work may proceed	Conditionally approved. Work may proceed and resubmit incorporating comments indicated	Revise & Resubmit. Work may not proceed	For information and records only. Work may proceed.

Project Director | **Date: -**

CC: VP (QA/QC), VP (Purchase)

Code 1 – Work may proceed
Code 2 – Conditionally approved. Work may proceed and resubmit incorporating comments.
Code 3 – Revise & Resubmit. Work may not proceed
Code 4 – For information and records only. Work may proceed
Important: Permission to proceed does not relieve contractor from full compliance with contractual obligations

LODHA BUILDING A BETTER LIFE	**Luxuria Marriage Hall** Consultant : Ambrosia Design Architects : KDND	ACE GLOBAL AIRCON SERVICES LTD	**Contract Ref:** **Material Approval Submittal** **MAS No: LX-MAS-AG-HVAC-0018-00**

Contract: Construction of Lodha – LUXURIA MARRIAGE HALL

To LODHA Group: **Ace Global Aircon Service Ltd.** Date: 17.10.2020

Discipline ☐ Architectural ☐ Structural ■ HVAC ☐ Electrical ☐ Plumbing ☐ Facade Others ( )

MATERIAL DETAILS (One Item Only Per Form)

Item description : PVC Drain Pipe

Name of material : PVC Drain Pipe

Remarks ☐ As per specifications ☐ Alternate submission

- Attach all relevant technical literature marked to identify relevant descriptions, current test certificate, samples etc.
- Highlight any element of contractual non-compliance in this submittal

Drawing Ref: -	**Planned Date for applicable submittal for: -**	**Date:**
Specification Ref: - 2 3	1. O & M Manual	
BOQ Ref: - 1 4 & 2 10	2. Training Manual	
Indian/International Standards Ref	3. Specified recommended spare parts	
	4. Warranties and Guarantees	

Manufacturer / Supplier

Company Name: **Supreme Industries Ltd** Locally Manufactured

Address: **Gate No 47, 47/2, At Post Gadegaon,**
Tal. Jamner, Dist. Jalgaon – 425114 Maharashtra

Production Period
Delivery to works
Total Delivery Time

Programme: -
Date required on Site: -
Expected date of arrival on Site: -

Contractor's Authorized Signature

LODHA Engineer's Comments | Design | Con. Mgmt (Civil) | Con. Mgmt (MEP) | Con. Mgmt (Facade) | QA/QC

Lodha comments:
1. Attach approved make list and highlight the same.
2. Material shall be as per BOQ.
3. TC shall be submitted.

Consultant's Comments. ☐ AECOM ☐ Mott McDonald ☐

Signed (LODHA Engineer) Digitally signed

Signed (Consultant's Engineer)

	Status	**Code 1** Work may proceed	**Code 2** Conditionally approved. Work may proceed and resubmit incorporating comments indicated	**Code 3** Revise & Resubmit Work may not proceed	**Code 4** For information and records only Work may proceed.
	Project Director				
	CC GM (QA/QC), GM (Purchase)				

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Code 1 - Work may proceed
Code 2 - Conditionally approved. Work may proceed and resubmit incorporating comments
Code 3 - Revise & Resubmit. Work may not proceed
Code 4 - For information and records only. Work may proceed
Important: Permission to proceed does not relieve contractor from full compliance with contractual obligations

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LODHA
BUILDING A BETTER LIFE

LODHA UPPER THANE

ACE GLOBAL AIRCON SERVICES LTD.

Contract Ref:

Material Approval Submittal

MAS No: UT-MAS-CEP-ACE-HVAC-2651-00

Contractor: ACE GLOBAL AIRCON SERVICES LTD.

To LODHA Group: LODHA UPPER THANE SALES GALLERY. **Date:** 13/08/2021

Discipline ☐ Architectural ☐ Structural ☑ HVAC ☐ Electrical ☐ Plumbing ☐ Facade Others (.....)

MATERIAL DETAILS (One Item Only Per Form)

Item description PVC Drain pipe

Name of material PVC Drain Pipe

Remarks ☐ As per specifications ☐ Alternate submission

Attach all relevant technical literature marked to identify relevant descriptions, current test certificate, samples etc.
Highlight any element of contractual non-compliance in this submittal

Drawing Ref: -	**Planned Date for applicable submittal for: -**	**Date:**
Specification Ref: -	1. O & M Manual	
BOQ Ref: -	2. Training Manual	
Indian/International Standards Ref: -	3. Specified /recommended spare parts	
	4. Warranties and Guarantees	

Manufacturer / Supplier

Company Name: - Supreme Industries Ltd.
Address: Gate NO 47, 4912, At Post. Chadegaon Tal. Jamner, Dist Jalgaon, 425114. Maharashtra.
Local Agent:

Locally Manufactured :
Production Period :
Delivery Ex-works :
Total Delivery Time :
Total Delivery Time :

Programme: -

Date required on Site: -
Expected date of arrival on Site: -

Contractor's Authorized Signature

LODHA Engineer's Comments ☐ Design ☐ Con. Mgmt (Civil). ☐ Con. Mgmt (MEP) ☐ Con. Mgmt (Facade) ☐ QA/QC

Approved make list to be provided. Test certificate to be provided at the time of delivery of material onsite.

Name/ Signature/ Date	Name/ Signature/ Date	Name/ Signature/ Date	Name/ Signature/ Date	Name/ Signature/ Date
QE	CM 13/08/21	Commercial/Contracts	Store	Co-Ordination 17/8/21

Consultant's Comments.

Name/ Signature/ Date	Name/ Signature/ Date
Architect	RCC Consultant

LODHA UPPER THANE
14 AUG 2021
RECEIVED
BY

Status

Code 1	Code 2	Code 3	Code 4
Work may proceed	Conditionally approved. Work may proceed and resubmit incorporating comments indicated	Revise & Resubmit. Work may not proceed	For information and records only. Work may proceed.

1

Project Director **Date: -**

CC: VP (QA/QC), VP (Purchase)

Code 1 – Work may proceed
Code 2 Conditionally approved. Work may proceed and resubmit incorporating comments.
Code 3 – Revise & Resubmit. Work may not proceed
Code 4 – For information and records only. Work may proceed
Important: Permission to proceed does not relieve contractor from full compliance with contractual obligations.

1.
Compliance Statement

LODHA

2.3 Condensate Pipes & Fittings :- Products

As per BOQ class-5

All drain pipe and fittings shall be UPVC pipe conforms to IS 4985 class 3 for pipes sizes up to 50 mm and where as for pipe sizes from 63 mm and above material shall be UPVC SWR type B. The supports for drain piping shall be red oxide painted MS supports. Fittings shall be of pressure rating suitable for the piping system. In plant rooms condensate drain pipe to be G.I class B.

A. All pipes to be used for cold water (makeup), drain, condensate drain and fittings shall be GI / uPVC as indicated in BOQ.

B. All jointing in the pipe system shall be by threaded joints and/or by threaded flanges using 3 mm 3 ply rubber insertion gaskets. Pipe threads and flanges shall be as per relevant BIS Codes.

Comply.

C. All pipes supports shall be mild steel, thoroughly cleaned and given one primary coat of red oxide paint before being installed.

D. Fittings shall be galvanized steel `medium class' malleable casting of pressure rating suitable for the piping system. Flanges shall be of approved make. Supply of flanges shall include bolts, nuts, and gaskets as required. Sufficient number of flanges and unions shall be provided for future cleaning and servicing of piping. Tee-off connection shall be through equal or reducing tees. All equipment and valve connections, or connections to any other mating pipes shall be through flanges required for the mating connections. Fittings & flanges shall form part of piping and are not separately identified in Schedule of Quantities.

E. Gate valves, globe valves, check valves and strainers shall be similar to those specified for chilled, condensing and hot water piping.

F. For proper drainage of AHU and FCU Condensate, 'U' trap shall be provided in the drain piping.

G. All condensate drain piping shall be insulated and painted as per the other sections in this specifications ("Insulation" , painting)

2.4 Condensate Pipes & Fittings: - Execution.

A. Design Drawings indicate schematically the size and location of drain pipes. The Contractor, on award of the work, shall prepare detailed shop drawings, showing the cross-section, longitudinal sections, details of fittings, locations of isolating and control valves, drain and air valves, and all pipe supports. He must keep in view the specific openings in the building through which pipes are designed to pass. Suitable U Trap shall be provided to condensate drain piping and calculation of the same shall be as per approved ESP calculation.

B. Condensate drain should be shall be connected to nearest drain point as indicated drawing.

The joints shall be properly sealed so that there is no leakage

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2.
Name of Manufacturers & Address

Supreme Industries Ltd
Gate No. 47, 47/2, At Post Gadegaon,
Tal. Jamner, Dist. Jalgaon – 425114.
Maharashtra.

3.
Technical Specification & Catalogue

ACE GLOBAL AIRCON SERVICES LTD. MUMBAI

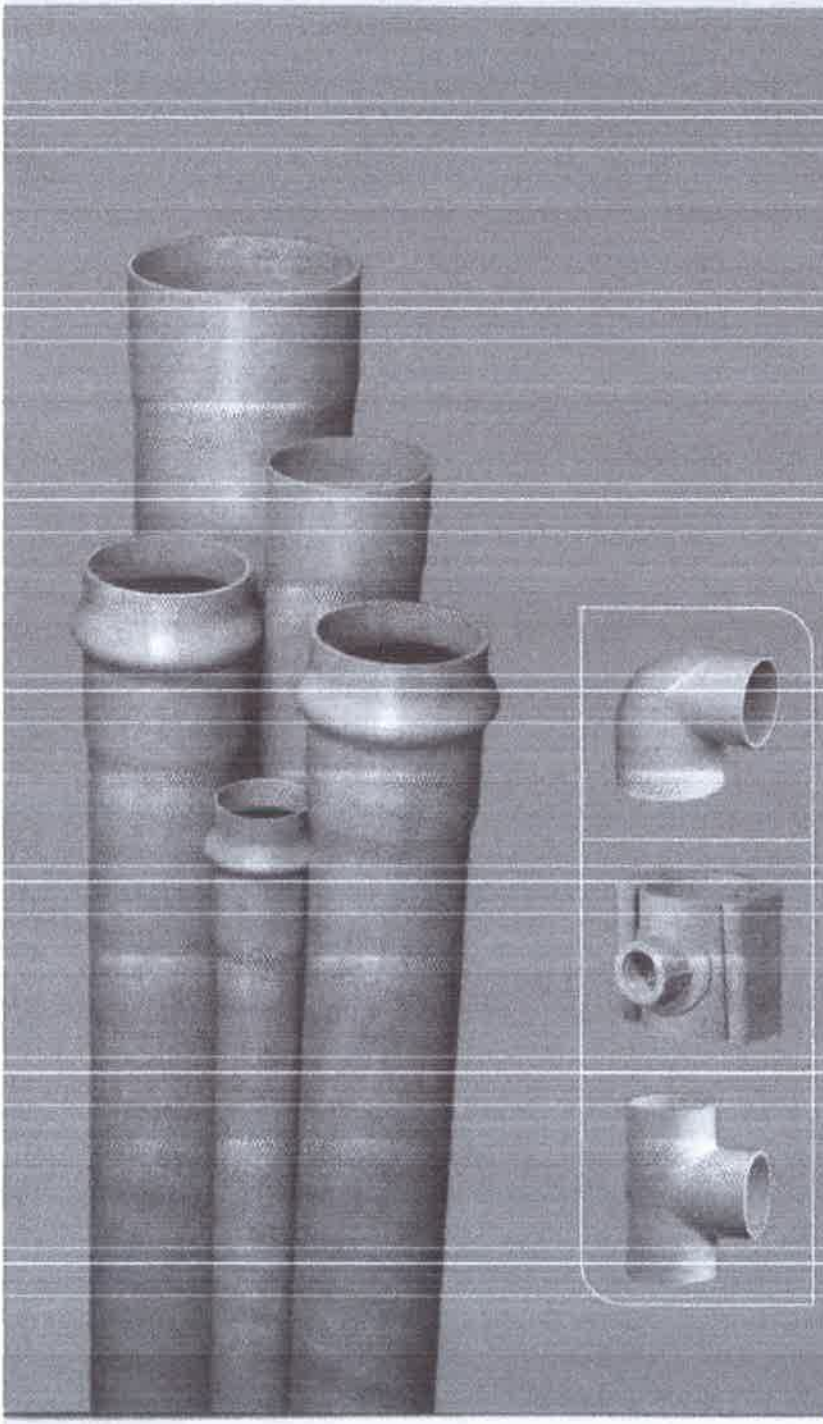
ACE GLOBAL AIRCON SERVICES LTD. MUMBAI

RIGID PVC PRESSURE PIPES AND FITTING

... Most comprehensive range with wide spectrum of fittings

Supreme
People who know plastics best

uPVC Pressure Pipes



The Supreme Industries Ltd., is an acknowledged leader of India's plastic industry. It is credited with pioneering several path breaking products and has valuable experience in providing innovative and cost effective piping solution. Company's objective is to meet the growing needs of its clientele in water, waste management and infrastructure sector through specially developed high performance range of piping products. The innovative product portfolio offered by Supreme is extensive in range and application and comprises a variety of pipes and a vast spectrum of fittings totaling around 6500 diverse products. Together these constitute the most comprehensive range in the industry that caters almost every conceivable need and application. Company has played a vital role in the transformation of conventional products to advance plastics piping products in the country and has been termed as trend setters of plastic piping products.

Due to its innovative range of products coupled with meticulous quality assurance, Supreme is referred to as **"People who know plastics best."** Supreme uPVC pressure piping system with wide spectrum of pipes and fittings in different sizes and pressure class is perfect and ideal solution for water supply and irrigation. Supreme piping systems are prime choice of farmers, water supply bodies, architects, builders, government bodies and have successfully replaced conventional piping products.

Jeevan bhar ka saath...

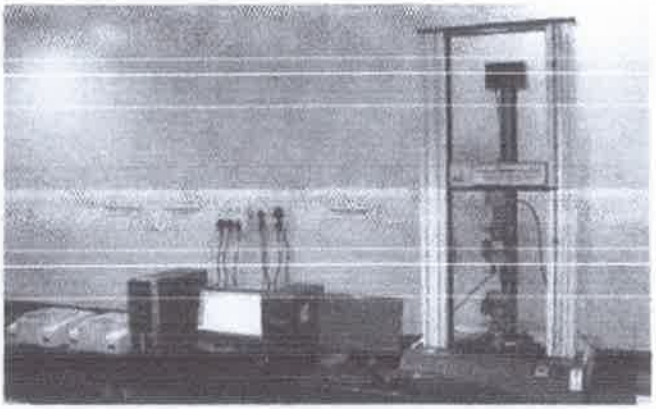
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Rigid PVC Pressure Pipes and Fittings

The System

Supreme offers an exhaustive range of uPVC pressure pipes and fittings. Pressure pipes are manufactured as per IS 4985: 2000 standard and are available in 20 to 450 mm sizes in different pressure class. Pipes with both types of joints i.e. solvent cement type and rubber seal type are available. Varieties of moulded fittings and wide range of handmade fittings are also available. Moulded fittings are manufactured as per IS 7834 and fabricated fittings are manufactured as per IS 10124 as well as company standards. These pipes and fittings are used for variety of applications like, agriculture, irrigation, water supply, industrial process lines, swimming pools and fire fighting mains, etc. These pipes are superior to C.I., D.I.or R.C.C. pipes and offers number of advantages like-lightweight, easy and fast installation, excellent corrosion and chemical resistance, high flow rates, long life and economy.



Advantages of Rigid PVC Pipes

Odourless and hygienic - These pipes are most ideal for carrying drinking water as they do not subject to contamination.

High corrosion resistance - Being immune to chemical, electrolytic and galvanic action, these pipes are free from corrosion.

High chemical resistance - Pipes offer excellent resistance to acids, oxidizing agents, alkalis, oils and domestic effluents.

Smooth bore : Pipes have mirror smooth inside surface and hence better flow characteristics in comparison to AC, CI and GI pipes.

Self extinguishing quality - This eliminates need for fire resistant coatings.

Maintenance free - Corrosion resistance property of the PVC pipes, eliminates the need for painting or coating.

Longer lasting - As these pipes are free from weakness caused by scale formation, rusting, weathering and chemical action, they lasts for a life time.

Economical - Apart from superiority over conventional pipes, Supreme PVC pipes are light in weight and hence they offer total economy in handling, transportation and installation.

Properties :

Hazen Williams constant	:	150 (remains constant)
Specific gravity	:	1.41 - 1.46
Coefficient of linear expansion	:	5.4×10^{-5} mm / m / °C
Combined flexural and compressive strength	:	600 - 650 kgf/cm^2
Impact strength at 20°C	:	3 Kgf/cm^2
Modulus of elasticity	:	$3 - 3.8 \times 10^4$ Kgf/cm^2
Vicat softening point	:	80°C
Electrical resistance	:	10^{14} ohm, cm

Dimensions of uPVC Pressure Pipes as per : IS 4985:2000

Nominal Outside Diameter (D)	Tolerance on Outside Diameter	Wall Thickness (t) mm													
		Class 1(PN) 2.5 kgf/cm^2		Class 2(PN) 4 kgf/cm^2		Class 3(PN) 6 kgf/cm^2		Class 4(PN) 8 kgf/cm^2		Class 5(PN) 10 kgf/cm^2		Class 6(PN) 12.5 kgf/cm^2		Plumbing Pipes	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
20	+0.3	-	-	-	-	-	-	-	-	1.1	1.5	1.4	1.8	2.8	3.3
25	+0.3	-	-	-	-	-	-	1.2	1.6	1.4	1.8	1.7	2.1	2.9	3.4
32	+0.3	-	-	-	-	-	-	1.5	1.9	1.8	2.2	2.2	2.7	3.4	3.9
40	+0.3	-	-	-	-	1.4	1.8	1.8	2.2	2.2	2.7	2.8	3.3	3.6	4.2
50	+0.3	-	-	-	-	1.7	2.1	2.3	2.8	2.8	3.3	3.4	4.0	3.7	4.3
63	+0.3	-	-	1.5	1.9	2.2	2.7	2.8	3.3	3.5	4.1	4.3	5.0		
75	+0.3	-	-	1.8	2.2	2.6	3.1	3.4	4.0	4.2	4.9	5.1	5.9		
90	+0.3	1.3	1.7	2.1	2.6	3.1	3.7	4.0	4.6	5.0	5.7	6.1	7.1		
110	+0.4	1.6	2.0	2.5	3.0	3.7	4.3	4.9	5.6	6.1	7.1	7.5	8.7		
125	+0.4	-	-	2.9	3.4	4.3	5.0	-	-	-	-	-	-		
140	+0.5	2.0	2.4	3.2	3.8	4.8	5.5	6.3	7.3	7.7	8.9	9.5	11.0		
160	+0.5	2.3	2.8	3.7	4.3	5.4	6.2	7.2	8.3	8.8	10.2	10.9	12.6		
180	+0.6	2.6	3.1	4.2	4.9	6.1	7.1	8.0	9.2	9.9	11.4	12.2	14.1		
200	+0.6	2.9	3.4	4.6	5.3	6.8	7.9	8.9	10.3	11.0	12.7	13.6	15.7		
225	+0.7	3.3	3.9	5.2	6.0	7.6	8.8	10.0	11.5	12.4	14.3	15.3	17.6		
250	+0.8	3.6	4.2	5.7	6.5	8.5	9.8	11.2	12.9	13.8	15.9	17.0	19.6		
280	+0.9	4.1	4.8	6.4	7.4	9.5	11.0	12.5	14.4	15.4	17.8	-	-		
315	+1.0	4.6	5.3	7.2	8.3	10.7	12.4	14.0	16.1	17.3	19.9	-	-		
355	+1.1	5.1	5.9	8.1	9.4	12.0	13.8	15.8	18.2	-	-	-	-		
400	+1.2	5.8	6.7	9.1	10.5	13.5	15.6	-	-	-	-	-	-		
450	+1.4	6.5	7.5	10.3	11.9	15.2	17.5	-	-	-	-	-	-		

Note : 1) Pipes are offered in Light Grey (LG) and/or Dark Grey (DG) colour I standard lengths of 6 meter. Pipes are offered either plain or socketed, based on diameter and class of pipe. 2) Ringtight pipes with integral rubber ring socket (Elastomeric joint) are available in 63mm to 315mm in 4,6 and 10 kgf/cm^2 pressure class. 3) Non standard [illegible] lengths and colour can also be offered, if desired. 4) Prefix "PN" indicates Nominal Pressure i.e. working pressure.

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Supreme©
People who know plastics best

Salient Features

- General dimensions are conforming to IS 7834-87.
- Wall thickness is designed to meet required working pressure.
- Made to close dimensional tolerance.
- Different working pressure rating up to 16 kgf /cm² for different sizes.



Coupler

Size in mm (OD)	Available Pressure Rating in kgf /cm² (PN)
20	10, 16
25	10, 16
32	10, 16
40	6, 10
50	6, 10, 16
63	1, 6, 10, 16
75	1, 6, 10, 16
90	1, 6, 10, 16
110	1, 6, 10, 16
140	6
160	6, 10
200	6
250	6

Application/Special note : These are used for joining of two uPVC pipes. Fabricated couplers are also available in 20 to 400mm sizes in different pressure class.



Elbow 90° (Plain)

Size in mm (OD)	Available Pressure Rating in kgf /cm² (PN)
20	3, 10, 16
25	3, 10, 12.5, 16
32	3, 10, 16
40	3, 6, 10, 16
50	3, 4, 6, 10, 16
63	1, 2, 3, 4, 6, 10, 16
75	1, 2, 3, 4, 6, 10, 16
90	1, 2, 3, 4, 6, 10, 16
110	1, 2, 3, 4, 6, 10, 16
140	4, 6
160	4, 6, 10
180	6
200	4, 6
250	6
315	6

Application/Special note : These are used for short turns of 90°. These are not advisable on large pipeline involving high pressure.



Reducing Elbow (H.W.)

Size in mm (OD)	Available Pressure Rating in kgf /cm² (PN)
32 x 25	10
*75 x 63	6
*90 x 50	6
90 x 63	6
*110 x 63	6
110 x 75	6
110 x 90	6



Elbow 90° One side threaded

Size in mm (OD)	Available Pressure Rating in kgf /cm² (PN)
20 x 15 (½")	10
25 x 15 (½")	10
25 x 20 (¾")	10
50 x 40 (1½")	16
63 x 50 (2")	6, 16
75 x 50 (2")	6
75 x 65 (2½")	6
90 x 80 (3")	6
*110 x 100 (4")	6

Application/Special note : These are used for short turns of 90°. These are not advisable on large pipe lines.



Elbow 45°

Size in mm (OD)	Available Pressure Rating in kgf /cm² (PN)
20	16
25	16
32	16
40	6, 16
50	6, 16
63	6, 16
75	6,16
90	6,16
110	4, 6, 16
140	4
160	4, 6
200	4, 6
250	6



Equal Tee

Size in mm (OD)	Available Pressure Rating in kgf /cm² (PN)
20	3, 10, 16
25	3, 10, 16
32	3, 10, 16
40	3, 6, 10, 16
50	3, 4, 6, 10, 16
63	1, 2, 3, 4, 6, 10, 16
75	1, 2, 3, 4, 6, 10, 16
90	1, 2, 3, 4, 6, 10, 16
110	1, 2, 3, 4, 6, 10, 16
140	4, 6
160	4, 6, 10
180	6
200	4, 6
250	6
*315	4

Application/Special note : These are used for bypass and taking equal size service line out of main line at 90°.



Reducing Tee

Size in mm (OD)	Available Pressure Rating in kgf /cm² (PN)
25 x 20	10
32 x 20	10
32 x 25	10
40 x 25	10
50 x 25	10
50 x 32	6
63 x 25	10
63 x 32	10
63 x 50	6,10
75 x 50	6
75 x 63	4, 6
90 x 63	4, 6
90 x 75	4, 6
*110 x 50	6
110 x 63	6
110 x 75	4, 6
110 x 90	4, 6
140 x 110	6
160 x 75	4
160 x 110	4, 6
200 x 160	6

Application/Special note : These are used for by pass and taking lower diameter service line out of main line.

Note : 1) Fittings are offered in Light Grey (LG) and Dark Grey (DG) colour. All the fittings shown in dark grey colour are in 16kgf/cm² (PN) pressure class. PN indicates nominal Pressure i.e. working pressure. 3) * - Marked Fittings will be shortly introduced.

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Rigid PVC Pressure Pipes and Fittings



Elbow 90°
(both side threaded)

Size in mm (OD)	Available Pressure Rating in kg/cm² (PN)
*75	10
*90	10



One Side Threaded Tee

Size in mm (OD)	Available Pressure Rating in kg/cm² (PN)
20 x 15 (½")	10
25 x 15 (½")	10
25 x 20 (¾")	10
63 x 50 (2")	6
75 x 65 (2½")	6
90 x 80 (3")	6
*110 x 50 (2")	6
110 x 65 (2½")	6
110 x 80 (3")	6
*110 x 100 (4")	6

Application/Special note : These are used for by pass and branch is threaded to connect male threaded pipe/fitting.



Enlarging Tee

Size in mm (OD)	Available Pressure Rating in kg/cm² (PN)
63 x 75	6

Application/Special note : These are used for by pass and taking higher diameter service line out of main line.



Cross Tee

Size in mm (OD)	Available Pressure Rating in kg/cm² (PN)
63	6
75	6
90	6
110	6

Application/Special note : These are used for by pass and taking equal size service line on both side of main line.



Male Threaded Adapter (M.T.A.)

Size in mm (OD)	Available Pressure Rating in kg/cm² (PN)
20	10, 16
25	10, 16
32	10, 16
40	6, 16
50	6, 16
63	6, 10, 16
75	6, 10, 16
90	6, 10, 16
110	6, 10, 16
140	6
160	6

Application/Special note : These are used to connect a uPVC pipeline directly to a female threaded metal pipe and all types of valves, taps, pumps etc. through a male portion.



Reducing Male Threaded Adaptor (R.M.T.A.)

Size in mm (OD)	Available Pressure Rating in kg/cm² (PN)
75 x 50 (2")	6
90 x 50 (2")	6
90 x 65 (2½")	6

Application/Special note : These are used to connect a uPVC pipeline directly to a female threaded metal pipe.



Female Threaded Adapter (F.T.A.)

Size in mm (OD)	Available Pressure Rating in kg/cm² (PN)
20	10, 16
25	10, 16
32	10, 16
40	6, 16
50	6, 16
63	6, 10, 16
75	6, 10, 16
90	6, 10, 16
110	6, 10, 16
160	6

Application/Special note : These are used to connect a uPVC pipeline directly to a male threaded metal pipe.



Reducing Female Threaded Adaptor (R.F.T.A.)

Size in mm (OD)	Available Pressure Rating in kg/cm² (PN)
25 x 15 (½")	10, 16
32 x 15 (½")	10, 16
32 x 20 (¾")	10
40 x 25 (1")	6
*50 x 32 (1¼")	6
63 x 40 (1½")	6
75 x 50 (2")	6
90 x 50 (2")	6
90 x 65 (2½")	6
*110 x 50 (2")	6
110 x 80 (3")	6

Application/Special note : These are used to connect a uPVC pipeline directly to a metal pipe of over diameter or vice - versa.



Reducer

Size in mm (OD)	Available Pressure Rating in kg/cm² (PN)
25 x 20	10
32 x 20	10
32 x 25	10, 16
40 x 25	6
40 x 32	6, 16
50 x 32	6
50 x 40	6, 16
63 x 32	6
63 x 40	6
63 x 50	6, 16
75 x 40	6
75 x 50	6
75 x 63	6
90 x 50	6
90 x 63	6
90 x 75	6
110 x 50	6
110 x 63	6
110 x 75	6
110 x 90	6
140 x 75	4
140 x 90	4
140 x 110	4, 6
160 x 90	4
160 x 110	4, 6
160 x 140	4
180 x 110	6
200 x 110	4, 6
200 x 160	4, 6
200 x 180	6
250 x 200	6

Application/Special note : These are used to convert the service line into small or extra small lines.

Note : 1) Fittings are offered in Light Grey (LG) and Dark Grey (DG) colour. All the fittings shown in dark grey colour are in 16kgf/cm² (PN) pressure class. 2) [illegible] indicates nominal Pressure i.e. working pressure. 3) * - Marked Fittings will be shortly introduced.

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Handmade Fittings : Besides, vast range of moulded fittings, an exhaustive range of handmade fitting is also offered. This includes Couplers, Bends, Short bends, Tee's Reducing tee's Cross tee's, Tail pieces, Reducers, Wye's, End caps, Leakage couplers etc. in 20 to 450mm sizes in different pressure class.

Handmade division of the company is capable of making any tailor-made item as per customer standards and requirements. This implies a complete system solution made of the same material and hence customer need not to depend on any conventional product.

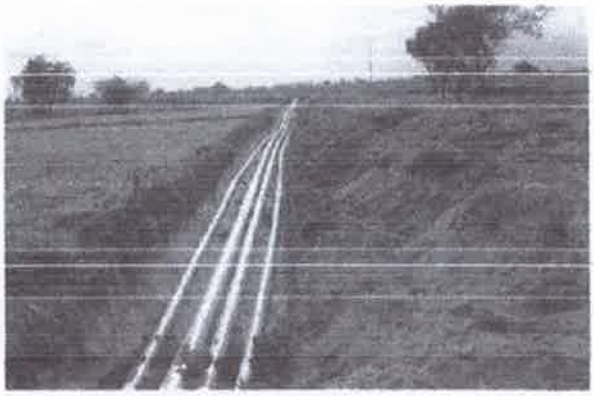
Handling Instructions:

Pipes should be kept on an even surface while storing. They should be properly supported and should not be stacked for heights more than 1.5m for longer durations.

While laying big pipelines provision should be made for expansion joints, air vents and proper anchorage.

Pipes or fittings should not be cleaned with solvent cement. Quality of solvent cement plays an important role and hence it is recommended to use good quality solvent cement only.

For large diameter and higher class pipes (6 Kgf/cm^2 and above) always use heavy duty solvent cement. Very old, hard, semi-fluid solvent cement should not be used.



Installation of Supreme pipeline in the field

Friction Loss Calculation:

Following Hazen William formula should be used for friction loss calculation.

$$\frac{hf}{L} = \frac{1.213 \times 10^{10} \times Q^{1.852}}{D^{4.87} \times C^{1.852}}$$

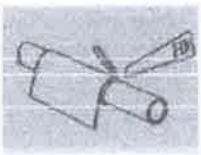
Where

- hf - Heads loss in m
- L - Length of pipe section in m
- Q - Discharge in litres / sec
- D - Internal diameter of pipe in mm
- C - Hazen William constant 150
  (For design purpose consider 140)

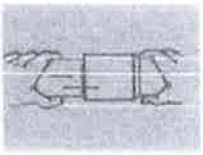
Consumption of Solvent Cement :

Diameter of pipe (mm)	20	25	32	40	50	63	75	90	110	140	160	180	200	225	250	280	315	355	400	450
Appx. no. of joints which can be made per liter of solvent cement	354	270	225	180	130	125	103	79	54	36	27	25	15	12	9	7	5	3	2	2

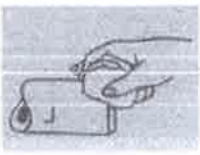
Joining Instructions :



Cut the pipe as square as possible. Please ensure that fitment of pipe with socket of fitting is correct



Total length of socket shall be marked on pipe (for most of the cases the pipe inserted should be up to the marked line and in no case shall be less than 2/3rd of pipe end up to the marked line.)



The pipe and the socket should be clean and dry. Dust, oil, water grease etc. should be wiped out with dry cloth or cleaner from the surfaces to be coated with solvent cement

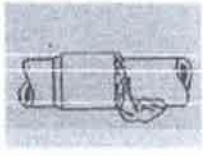
Roughen the outside of the pipe and the inside of the socket using sand paper or piece of hacksaw blade up to the entry mark. Stir adhesive i.e. solvent cement throughly.



Apply a thick coat of solvent cement using a flat clean brush evenly on the inside of the socket mouth for full length of insertion and then on outside of the pipe end up to the marked line.



After application of solvent cement, insert the pipe within one minute into the socket. Hold the joint for few seconds and ensure that pipe does not come out the fitting. Wipe off extra cement. Let it dry. Within 24 hours, your Supreme rigid PVC pipes are ready for use.



In case of big pipeline projects, it is recommended to refer our installation guide.

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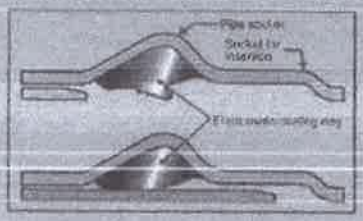
Ringtight Rigid PVC Pipes with Sealing Rings

Supreme®
People who know plastics best

Ringtight Advantages:

These pipes are specially designed and suitable to overcome difficulties experienced while joining solvent type pipes in higher diameter and offers following advantages.

- As elastomeric sealing rings are used, requirements and precautions associated with quality and quantity of solvent cement are avoided.
- Unlike solvent type joints, curing periods are not required and hence pipelines can be tested and brought in use immediately after jointing.
- Pipe laying and jointing is very easy, quicker and more reliable. Pipes up to 140 mm size can be jointed by hand force but large diameter pipes requires a jack.



- Joints are stable, watertight and can resist loads from horizontal and vertical tractive forces.
- Joints can accommodate angular deflection up to 2° and axial displacement resulting from thermal expansion and contraction, which eliminates the need of expansion joint as required in solvent type joints.
- Joints can be made in any climatic condition.

About Elastomeric Sealing Ring:



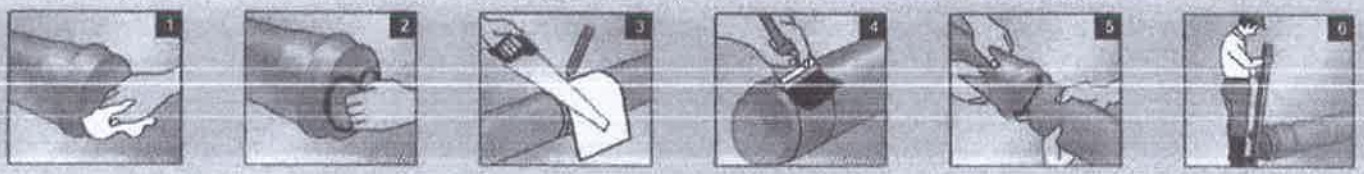
Unique design of sealing ring supplied with the pipe is made from high quality EPDM rubber to meet the practical requirements of sites, which add major contribution to installation efficiency. This seal can be safely and easily fitted in wet, cold and muddy conditions. These sealing rings offer following advantages.

1. Very low assembly force is required for joint.
2. It has big operational life. (As per manufacturer minimum life is about 50 years.)
3. These rings give greater reliability and joint tightness and can withstand pressures beyond that of specified testing pressure of the pipe.
4. Specially suitable for under ground application.
5. It is resistant to salt water, organic vegetable oils, dilute acids and alkalies normally found in waste water. It is also resistant to ozone, ultra violet radiation, bacteria, fungus and termites. In short Supreme ringtight pipes are designed to give long term satisfaction to the customer.



Jointing Instructions:

1. Clean the inside of socket. Remove all traces of mud, dirt, grease, gravel and clean elastomeric sealing ring.
2. Form the ring into a heart shape by pinching a portion of ring from inside. Insert into the socket and release to seat into the groove.
3. Factory supplied pipes are provided with a 15° chamfer. Mark the insertion depth on spigot portion of pipe. Clean and apply lubricant to insertion depth before pushing into the socket.
4. If pipe need to be cut, it should be cut perpendicular to the axis of the pipe. Then it should be chamfered properly.
5. Align the socket and spigot correctly in the horizontal and vertical planes (before insertion, ensure that no sand or dirt adheres to the lubricated surface of the pipe). Care should be taken that the spigot end is inserted in the socket at the correct angle.
6. Push the spigot into the socket until it reaches the depth of entry mark, do not over insert. This must be done manually. Use a steel crow bar if necessary. Protect the pipe with wooden block. Insertion of spigot end inside the socket should be at the correct angle.
7. In case of large diameter pipes, if crow bar does not give sufficient leverage, use of a jointing jack may be helpful.



*Any specification can change without prior notice. *All information contained in this literature is given in good faith and believed to be accurate and reliable. But because of many factors which may be outside our knowledge and control and affect the use of the product, no warranty is given or is to be implied with respect to such information, nor do we offer any warranty of immunity against patent infringement. No responsibility can be accepted for any error, omissions or incorrect assumptions.

The Supreme Industries Ltd. (Plastic Piping Division)
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• Unit No.3, Gat No.47-48, at post Gadegaon, Tal. Jamner, Dist., Jalgaon- 425 114
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Fwd: Vendor Appointment for SITC of HVAC work - ACME Ozone Sales Gallery

Mukesh Mahajan

---------- Forwarded message ---------
From: **Santosh Rahate** <
Date: Mon, 14 Feb 2022 12:59
Subject: Fwd: Vendor Appointment for SITC of HVAC work - ACME Ozone Sales Gallery
To: Mukesh Mahajan <

---------- Forwarded message ---------
From: **Rajesh Parab** <
Date: Mon, 14 Feb 2022 10:53 am
Subject: Vendor Appointment for SITC of HVAC work - ACME Ozone Sales Gallery
To: Alok Joshi <> Rashmi Singh Chauhan <
Cc: Asha Pancha <> Rakesh Mahadik <> Prashant Desai <> Santosh Rahate <> Rajesh Kumar <> Nilesh Palande <> Bhagwan Barteker <> Dushant Ranavare <

Vendor Appointment
Dear All The following Contract has been finalized for: Project: ACME Ozone Sales Gallery

Vendor Appointment

Dear All

The following Contract has been finalized for-

Project	ACME Ozone Sales Gallery
Vendor for	SITC of HVAC work
Vendor Details as follows Name of the Company	M/s. Ace Global Aircon Services Ltd.
Contact Person	Mr. Ajay Ubale Contact No - 9619899955

Dear Sir

Please start coordinating with our Project Team and submit the required drawing, local samples immediately for approval to our Design team. We have a very tight schedule for the subject work, requesting you to immediately start the work. We are in process of releasing the orders which will follow shortly.

The Contact detail of our site representatives are as follows

Mr. Santosh Rahate ([redacted])

Rajesh Parab

[redacted]

Please do not print this email unless it is absolutely necessary

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