LODHA Acme Housing Manpada

Acme Ozone Sales Gallary

Contract Ref: 4630027499
Material Approval Submittal
MAS No: 07

Contractor: G Engineers

To LODHA Group:

Date: 02.03.2022

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

MATERIAL DETAILS (One Item Only Per Form)
Item description :- UPVC Ball valve

Name of material :- SUPREME

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: -
Specification Ref: - **15 MM - 50 MM**
BOQ Ref: - **1.14**
Indian/International Standards Ref: - **ASTM D 1785**

Planned Date for applicable submittal for: - | **Date:**
1. O & M Manual
2. Training Manual
3. Specified /recommended spare parts
4. Warranties and Guarantees

Manufacturer / Supplier
Company Name: - **SUPREME**
Address: **612 Raheja Chamber, Nariman Point,**

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 ☐ sign ☐ . Mgmt (Civil). Cor ☐ gmt (MEP) Con. M ☐ nt (Facade) QA/QC ☐

BAL VALVE ALREADY CONSIDERED IN BOQ. REFER LINE ITEM 2.2. SAME TO BE OF BRASS.

Name/ Signature/ Date	Name/ Signature/ Date	Name/ Signature/ Date	Name/ Signature/ Date	Name/ Signature/ Date
QE	CM	Commercial/Contracts	Store	Co-Ordination

Consultant's Comments.

Not in BOQ, but can be used if required.

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

Jangbahadur Sonkar

Digitally signed by Jangbahadur Sonkar
DN: C=IN, OU=Lodha Group, O=Lodha Group, CN=Jangbahadur Sonkar, E=jangbahadur.sonkar@lodhagroup.com
Reason: I am approving this document
Location: your signing location here
Date: 2022.03.05 12:20:49+05'30'
Foxit PDF Reader Version: 11.1.0

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.

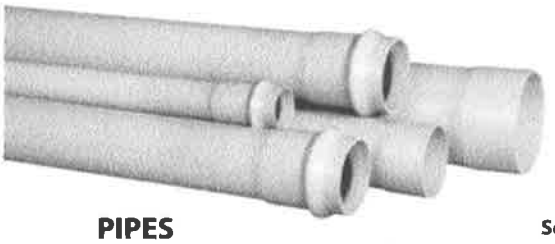
Vice President **Date: -**

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

THE SYSTEM

Supreme offers an exhaustive range of uPVC pressure pipes and fittings. Pressure pipes are manufactured as per IS 4985: 2000 standards and are available in 20 to 450mm sizes in different pressure classes. 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 and company standards. These pipes and fittings are used for a variety of applications like, in irrigation, water supply, industrial process lines, swimming pools, firefighting mains etc. These pipes are superior to CI, DI or RCC pipes in terms of being light in weight, easy and quicker installation, excellent corrosion and chemical resistance propeties, high flow rates, long life and economy. These pipes have approval of MJP.



FEATURES AND BENEFITS

Odorless and hygienic - These pipes are an excellent choice for carrying potable water as they do not allow contamination.

High corrosion resistance - Being immune to chemical, electrolytic and galvanic action, these pipes are free from corrosion which ensures a much longer and useful life.

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

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

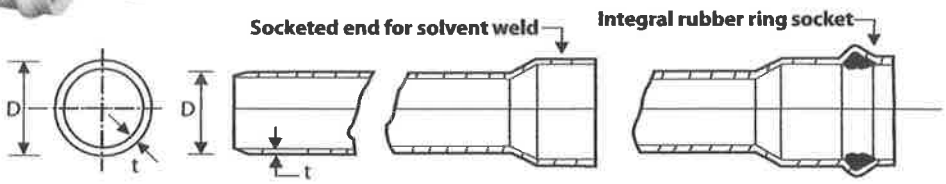
Self extinguishing quality - This feature eliminates the need for fire resistant coatings.

Maintenance free - Corrosion resistance property of the PVC pipes eliminates the need for repeated painting or coating like in the case of GI pipes.

Long lasting - As these pipes are free from weaknesses caused by scale formation, rusting, weathering and chemical action, they have a much longer effecitive life.

Economical - Despite being superior to conventional pipes, Supreme PVC pipes are very light in weight and last much longer than older piping systems offering a great economy in handling, transportation, installation and replacement.

PIPES



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/cm²		Class 2(PN) 4 kgf/cm²		Class 3(PN) 6 kgf/cm²		Class 4(PN) 8 kgf/cm²		Class 5(PN) 10 kgf/cm²		Class 6(PN) 12.5 kgf/cm²		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) colours in standard lengths of 6m. Pipes are offered plain or socketed, based on diameter and class of pipe. 2) Ringtight pipes with integral rubber ring socket (Elastomeric joint) are available from 63mm to 315mm in 4, 6 and 10 kgf/cm² pressure class. 3) Prefix "PN" indicates Nominal Pressure, i.e., working pressure.

SR. No.	ITEM DESCRIPTION	HSN/SAC Code	UNIT	QTY	RATE	AMOUNT
1.01.6	32mm Dia	995462	NOS	72,000	280,00	20.160,00
1.01.7	The following including all fittings, fixings, accessories, cover frame, etc., complete NOTE :- CP Cover Shall be Supplied by LODHA Single Floor Trap / Drain, type FT,	995462	NOS	10,000	400,00	4.000,00
1.01.8	Multi Floor Trap / Drain, type FT,	995462	NOS	10,000	520,00	5.200,00
1.01.9	Bourdon type (100 mm) pressure gauge (Glycerin filled)	995462	NOS	4,000	2.200,00	8.800,00
1.01.10	Capacitive type water level sensor including Controller, Control Panel, Indicator & wiring etc.	995462	NOS	2,000	15.000,00	30.000,00
1.01.11	Glass tube manometer / level indicator	995462	NOS	2,000	12.500,00	25.000,00
1.01.12	Medium duty FRP Access Cover as per BSEN - 124-1994 600 mm Dia	995462	NOS	2,000	8.500,00	17.000,00
1.01.13	5000 Lrs capacity Plastic tank	995462	NOS	1,000	48.000,00	48.000,00
1.01.14	FRP step ladder 2.0 m high & min 1.3 feet wide	995462	NOS	2,000	5.000,00	10.000,00
1.02	**PLUMBING INSTALLATIONS** Include for the supply, complete installation, Testing & Commissioning as detailed in the specifications and on the Drawings and to the complete satisfaction and approval of the Engineer and all concerned Statutory Authorities and under the following sections. To be read in conjuction with the drawings no : P-002 for the details.					

LIST OF APPROVED MAKES – FIRE FIGHTING SYSTEM

Sr.No.	Details of Materials / Equipment	Manufacturer's Name
1	Fire Pumps End Suction Back Pull out	-Mather and Platt (Wilo) -HBD -Kirloskar
2	Jockey pumps - Vertical inline/ Mono block end suction	-Mather and Platt (Wilo) -KSB -Kirloskar
3	Terrace booster pump - Mono block end suction	-Mather and Platt (Wilo) -KSB -Kirloskar
4	Motors	-Crompton Greaves Ltd -Bharat Bijlee -Siemens India -Kirloskar
5	Diesel Engine	-Greaves Ltd -Cummins Ltd -Caterpillar -Kirloskar
6	AMF Panel	-Tricolite -Advance -Sterling -Sudhir
7	G.I Pipes /M S pipes	-Jindal star -Tata -Jindal Hissar -Zenith
8	G.I Fittings (malleable and Forged)	-Sanghvi -Swastik -Kirti- Zoloto-m
9	G.I Butt weld seamless fittings	-Rajeshar -Maitri
10	Sluice Valves (C.I) - IS:780/IS:2906 marked	-Zoloto -Castle -SKS -Audco
11	Butterfly valves above 50mm dia. - IS:13095	-Zoloto -Castle -SKS -Audco
12	Non return valves (G.M).	- Zoloto -Castle -SKS -Audco
13	Non return valves swing type/ Dual plate (C.I)	- Zoloto -Castle -SKS -Audco

5. DRAINAGE WORKS (INTERNAL)

SCOPE

The scope of this section comprises the supply, installation, testing and commissioning of internal drainage services.

Work under this section shall consist of furnishing all labour, materials, equipments and appliances necessary and required to completely install all soil, waste, vent and rainwater pipes etc and fittings as required by the drawings, and given in the schedule of quantities.

BASIC PIPING SYSTEM

Soil, waste and vent pipes in shafts, ducts and in concealed areas i.e. false ceilings etc. shall consist of uPVC pipes & fittings as called for. In general wastes and vents smaller than and up to 50mm dia shall be of heavy class PVC pipes as specified.

The soil pipes shall be circular with a minimum diameter of 110mm. Pipes shall be fixed by means of stout GI clamps in two sections, bolted together, built into the walls, wedged and neatly jointed as directed and approved by the Owner's site representative / Architect. All bends, branches, swan neck and other parts shall conform to the requirement and standards as described for the pipes. Pipes shall be rested against the walls on suitable wooden cradles. Local authority regulations applicable to the installations shall be strictly followed.

Where indicated, the soil pipes shall be continued upwards without any diminution in its diameter, without any bend or angle to the height shown in the drawings. Soil pipes shall be painted as provided under `painting'. The soil pipes shall be covered on top with uPVC terminal outlets as directed and approved. All vertical soil pipes shall be firmly fixed to the walls with properly fixed clamps, and shall as far as possible be kept 50mm clear of wall. Waste pipes and fittings shall be of uPVC pipes.

Every waste pipe shall discharge above the grating of properly trapped gully. The contractor will ensure that this requirement is adequately met with. Wherever floor traps are provided, it shall be ensured that at least one wash is connected to such floor traps to avoid drying of water seal in the trap. Anti-syphon vent pipes/relief vent pipes to provided for satisfactory working of system. The pipes shall be of the diameter shown on the drawings.

All traps on branch soil and waste pipes shall also be ventilated at a point not less than 75mm or more than 300mm from their highest part and on the side nearest to the soil pipe or waste pipes.

Access doors for fittings and clean outs shall be so located that they are easily accessible for repair and maintenance. Any access panel required in the civil structure, false ceiling or marble cladding etc. shall be clearly reported to the Owner in the form of shop drawings so that other agencies are instructed to provide the same.

All the fittings used for connections between soil, waste and ventilation pipes and branch pipes shall be made by using pipe fittings with inspection doors for cleaning. The doors shall be provided with 3mm thick rubber insertion packing and when closed and bolted shall be air and water tight.

Where soil, waste and ventilating pipes are accommodated in shafts ducts, adequate access to cleaning eyes shall be provided.

Vent Pipe Terminations

a) Vent system conforming to IS : 13592 -Type as per building height comprising uPVC pipes and uPVC fittings (moulded as well as fabricated) like bends, tees, Y-tees, crosses, boss connections, access pieces, saddle pieces, cleanouts, adaptors for connections to other materials, plugs, reducers, cowls, offsets and other specials. Jointing shall be done with push fit rubber ring jointing technique in general. Solvent cement joints may be provided for fittings and specials which are not manufactured with push fit rubber joints. Pipes may be laid/ fixed in pipe ducts, sunken floors, under slung from ceiling. The pipes laid in sunken floor shall be encased with 75 mm thick cement concrete (1:2:4) all around. Pipes fixed on MS structural supports shall be fixed with U-clamps made from 10 mm dia MS bar complete with necessary threading nuts and washers (MS Structural Work to be included in the rate). The installation shall be complete in all respects including cutting chases / holes in walls, slabs and making good the same as per specifications

b) Providing GI pipe sleeves of suitable higher size wherever pipes crossing a fire rated wall / floor slab and sealing of space around pipe and pipe sleeve with glass wool in between and fire proof sealant at either end to the satisfaction of the Project Manager /Consultants and making good the same after pipes have been duly laid and testing.

c) Ventilating pipes terminating to atmosphere shall pass through the roof level with a proprietary roof vent connector and purpose made weathering slate to suit the roofing material.

d) Ventilating pipes terminating to atmosphere, shall terminate with a vent cowl, balloon guard or ridge tile termination, 900mm vertically and/or 3000mm horizontally from the nearest opening into the building or fresh air intake, in accordance with the Building Regulations and BS EN 12056-2.

PIPES HANGERS, SUPPORTS, CLAMPS ETC.

All vertical pipes shall be fixed by galvanized clamps (3mm to 5mm) and galvanized angle brackets (3mm to 5mm) truly vertical. Branch pipes shall be connected to the stack at the same angle as that of the fittings. No collars shall be used on vertical stacks. Each stack shall be terminated at top with a cowl (terminal guard).

Horizontal pipes running along ceiling shall be fixed on galvanized structural adjustable clamps of special design shown on the drawings or as directed. Horizontal pipes shall be laid to uniform slope and the clamps adjusted to the proper levels so that the pipes fully reset on them.

Contractor shall provide all sleeves, openings, hangers, inserts during the construction. He shall provide all necessary information to the building contractor for making such provisions in the structure as necessary. All damages shall be made good to restore the surfaces.

All pipes clamps, supports and hangers shall be galvanized. Factory made prefabricated clamps shall be preferred. Contractor may fabricate the clamps of special nature and galvanize them after fabrication but before installation. All nuts, bolts, washers and other fasteners shall be factory galvanized..

When required to be fixed on RCC columns, walls or beam they shall be fixed with approved type of galvanized expansion anchor fasteners (Dash fasteners) of approved design and size according to load. Structural clamps e.g.. Trapeze or cluster hangers shall be fabricated by electro-welding from MS structural members e.g. rods, angles, channels flats as per contractors shop drawings shall be galvanized after fabrication. All nuts, bolts and washers shall be galvanized.

Galvanized slotted angle/channel of approved sizes supports on walls shall be provided wherever shown on shop drawings. Angles/channels shall be fixed to brick walls with bolts embedded in cement concrete blocks and to RCC walls with anchor fasteners mentioned above. The spacing of support bolts on support members fixed horizontally shall not exceed 1 m.