\section*{JINDALPVCPIPES

## The Tussed Name in the Pine industry

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Note : This catalogue is based on our present technology and is intended to provide general information on our products and their uses. It should not be construed as guaranteeing suitability for a particular application Further, since conditions under which our products are being used are not known, recommendations are made without warranty or guarantee.


## JINDAL COMPOSITE TUBES PVT. LTD.

JINDAL COMPOSITE TUBES PVT LTD belongs to D P JINDAL GROUP a 4000 cr group; India's largest Steel Pipe conglomerate with a strong work force of more than 2500 personnel \& the pioneer in India for the manufacturing of Seamless and ERW pipes.

The well-diversified D.P. Jindal Group has a major presence in other sectors such as Oil Well Drilling, Power Generation, and Finance \& Leasing. Jindal pipes are being exported to many countries across the globe such as USA, Africa, Middle East, Bangladesh \& Myanmar.

Jindal Composite has been in plastic business since 2003, beginning as an importer of Multilayer Composite Pipes and its related fittings and were among the very first to Launch Composite Pipes or Pe-al-Pe Pipes in India with wide range of pipes for Hot, Cold \& Gas Supply.

In 2005 Jindal incorporated and commissioned at its state of the art manufacturing unit under the company name "Jindal Pex Tubes Pyt Ltd" at Dehradun, Uttaranchal, India. Later in 2008 the manufacturing capacity of the plant was doubled seeing the growth of the market. It has recently installed injection moulding machines to make plastic fittings for Composite Pipes.

Composite Pipes \& related Plastic fittings in India. These pipes are manufactured according to BIS Standard IS 15450 \& ASTM F1 282
Jindal Now introduces a wide range of uPVC \& HDPE Pipes:

- Agriculture Selffit \& Ringfit Pipes
- Water Extraction System (Casing pipe)
- Threaded, Plain Pipes for Domestic Plumbing
- Sewerage Pipes
- Column Pipes
- HDPE Pipes

These Pipes finds diverse applications in Agriculture, Housing, Sanitary, Plumbing, Bore Well, Water extraction, telecom etc... Size Ranging from 20 mm to 315 mm depending upon product.

The strength of Jindal lies in its quality product and satisfied customers. For over five decades Jindal has been a trusted name in the pipe industry with its huge distribution network all over India and worldwide. The name Jindal is known for its Quality and Commitments not only in India but worldwide for its pipe range.

The growth in plastic products of Jindal group has been rising up graph both in sales and awareness, reflecting dynamism and efficiency. The company is managed by a group of professionals and the board of Directors consists of eminent personalities led by innovative and dynamic Sahil Jindal, Director of the Group Company with a distinguished record of contributions to the industrial development in India.


## PROPERTIES OF uPVC PIPES

GENERAL
The physical, chemical and mechanical properties of Jindal uPVC pipes and fitting demonstrate their superiority in utility and applications over conventional system.

## DENSITY

The density of Jindal uPVC is approximately $1.43 \mathrm{~g} / \mathrm{cm} 3$, which is almost $1 / 6$ th the weight of cast iron and steel, thus making it much cheaper to transport and easier to handle during installation.

## MECHANICAL STRENGTH

Jindal uPVC pipes are suitable even in varying conditions, because of its mechanical strength This can be gauged from the fact that the tensile, flexural and compressive strength of uPVC is around $450 \mathrm{~kg} / \mathrm{cm} 2$.

## HYGIENIC

Jindal uPVC pipes offer the most hygienic means of fluid transportation. They are highly capable in fighting attacks by fungi and are not subject to contamination. The inside surface which is extremely smooth, does not support any growth, encrustation or fuming, and no odor or taste is fransmitted to the fluid being conveyed. This property is of prime importance for the transportation of potable water to towns and villages.

CHEMICAL RESISTANCE
Jindal uPVC is unaffected by most concentrations of acids, alkalis, organic chemicals, oils and fats. This resistance to corrosion by most chemicals makes Jindal uPVC pipes indispensable for contemporary industrial applications and for sewerage purposes.

## FLEXIBILITY

Being a thermoplastic material, Jindal uPVC is more capable to withstand deformation due to earth movements. Jindal uPVC pipes in this respect are considerably more popular than metallic and asbestos cement pipes, which can collapse under stress levels.

## FIRE RESISTANCE

Jindal UPVC pipes do not support combustion and are self-extinguishing, a fact that has been proven over a considerable amount of time. They are, therefore, ideally suited for use in buildings and other constructions.
DIMENSIONS OF Jindal uPVC PIPES
Jindal UPVC pipes are manufactured conforming to the latest stringent Indian and American standard

Note : uPVC pipe means unplasticised polyinylchloride pipe, also frequently referred to as rigid PVC pipe. The word rigid does not explain its structure, but defines a property, which is self explanatory.

The properties listed in Tables 1A, 1B and 1C are characteristic of the material and are derived from large numbers of test samples.
UPVC pipes and fittings will not adversely affect other materials in contact or in close proximity to them, underground or in open space.

Table 1A
MECHANICAL PROPERTIES OF UPVC AT $200^{\circ} \mathrm{C}$

| Density |  |
| :--- | :--- |
| Minimum Ultimate Tensile Strength | $1430-1500 \mathrm{~kg} / \mathrm{m}^{3}$ |
| Compressive Strength | 45 Mpa |
| Shear Strength | 66 MPa |
| Tensile (Youngs) Modulus | 39 MPa |
| Hardness (Shore) | 2750 MPa (at high loads) |
| Hardness (Brinnrll) at $23^{\circ} \mathrm{C}$ | 85 (ASTM D2240) |
| Impact (Charpy) $-20^{\circ} \mathrm{C}$ | Dec- 15 |
| Impact (Charpy) $-0^{\circ} \mathrm{C}$ | $20 \mathrm{~kJ} / \mathrm{m}^{2}(250 \mu \mathrm{~m}$ notch radius) |
| Elongation at Break | $8 \mathrm{~kJ} / \mathrm{m}^{2}$ |
| Poissons Ratio | $50-80 \%$ |

Table 1B
THERMAL PROPERTIES

| Max continuous service temperature | $60^{\circ} \mathrm{C}$ |
| :--- | :--- |
| Specific heat | $1047 \mathrm{~J} / \mathrm{kg} /{ }^{\circ} \mathrm{C}$ |
| Coefficient of linear expansion | $7 \times 10-5 /{ }^{\circ} \mathrm{C}$ |
| Thermal conductivity | $0.13-0.15 \mathrm{~W} / \mathrm{m} /{ }^{\circ} \mathrm{C}$ |


| Flame resistance |
| :--- |
| Primary softening point |
| Vicat. softening temperature |

Self-extinguishing UPVC does not support combustion when the source of ignition is removed. At the tabrication temperature, it can be shaped by deformation.
Not less than $80^{\circ} \mathrm{C}$ (AS 1426)
$80^{\circ} \mathrm{C}$ to BS 2782

Table 1 C

| Electrical properties | Table 1C |
| :--- | :--- |
| Dielectric strength | $12-38 \mathrm{kV} / \mathrm{mm}$ |
| Dielectric strength | $3.0-3.2 @ 106 \mathrm{~Hz}$ |
| Power factor | $0.02 @ 106 \mathrm{~Hz}$ |
| Surface resistivity | $1013-1014 \mathrm{Ohm}$ |



DIMENSIONS OF UPVC PIPES (as per IS : 4985-2000)

| Nomina Outside Diameter (Nominal Size) | Mean Outside Diameter |  | WALL THICkNESS |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { Class } 1 \\ \hline 2.5 \mathrm{Kg} / \mathrm{cm}^{2} \end{gathered}$ |  | $\frac{\mathrm{Closs} 2}{4.0 \mathrm{Kg} / \mathrm{cm}^{2}}$ |  | $\frac{\text { Class } 3}{6.0 \mathrm{Kg} / \mathrm{cm}^{2}}$ |  | $\frac{\text { Closs } 4}{8.0 \mathrm{Kg} / \mathrm{cm}^{2}}$ |  | $\begin{gathered} \text { Class } 5 \\ \hline 10.0 \mathrm{Kg} / \mathrm{cm}^{2} \end{gathered}$ |  | Class 6 |  |
|  |  |  |  | $\mathrm{cm}^{2}$ |  |  |  |  |  |  |  |  |
|  | Min | Max |  |  | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max |
| 20 | 20 | 20.3 | . | . | . | . | . | . | . | . | 1.1 | 1.5 | 1.4 | 1.8 |
| 25 | 25 | 25.3 | . | - |  | - | - | - | 1.2 | 1.6 | 1.4 | 1.8 | 1.7 | 2.1 |
| 32 | 32 | 32.3 | . | . | - | . | - | - | 1.5 | 1.9 | 1.8 | 2.2 | 2.2 | 2.7 |
| 40 | 40 | 40.3 | - | . | - | . | 1.4 | 1.8 | 1.8 | 2.2 | 2.2 | 2.7 | 2.8 | 3.3 |
| 50 | 50 | 50.3 | . | . |  | . | 1.7 | 2.1 | 2.3 | 2.8 | 2.8 | 3.3 | 3.4 | 4.0 |
| 63 | 63 | 63.3 | - | - | 1.5 | 1.9 | 2.2 | 2.7 | 2.8 | 3.3 | 3.5 | 4.1 | 4.3 | 5.0 |
| 75 | 75 | 75.3 | - | - | 1.8 | 2.2 | 2.6 | 3.1 | 3.4 | 4.0 | 4.2 | 4.9 | 5.1 | 5.9 |
| 90 | 90 | 90.3 | 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 | 110 | 110.4 | 1.6 | 2.0 | 2.5 | 3.0 | 3.7 | 4.3 | 4.9 | 5.6 | 6.1 | 7.1 | 7.5 | 8.7 |
| 160 | 160 | 160.5 | 2.3 | 2.8 | 3.7 | 4.3 | 5.4 | 6.2 | 7.2 | 8.3 | 8.8 | 10.2 | 10.9 | 12.6 |
| 200 | 200 | 200.6 | 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 | 225 | 227.7 | 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 | 250 | 253 | 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 | 280 | 283.4 | 4.1 | 4.8 | 6.4 | 7.4 | 9.5 | 11.0 | 12.5 | 14.4 | 15.4 | 17.8 | 19.0 | 21.9 |
| 315 | 315 | 318.8 | 4.6 | 5.3 | 7.2 | 8.3 | 10.7 | 12.4 | 14.0 | 16.1 | 17.3 | 19.9 | 21.4 | 24.7 |

Note1: The table is based on metric series of pipe dimension given in ISO 161/1 in respect of pipe dimensions and ISO DIS 4422
Note2: The wall thickness of pipe is based on a safe working stress of 8.6 MPa at $27^{\circ} \mathrm{C}$. The working pressure gets reduced at sustained higher temperatures. Occasional rise in temperature, as in summer, with concurrent corresponding reduction in temperature during nights has no deleterious effect on the working pressure of the pipes considering the total life of pipe.

## SELFIT UPVC PIPES (For Agriculture \& Potable Water Supply)

The Selfit (Solvent Cement Joint) pipes have one end self-socketed and the other end plain, which fits snugly without the use of couplers. The strong solvent cement joint is permanent and troublefree.

RANGE
Selfit pipes are manufactured in the range of 20 mm to 315 mm diameters in $2.5,4,6,8,10$ and $12.5 \mathrm{kgf} / \mathrm{cm} 2$ working pressure.

## ADVANTAGES

- Selfit sockets are formed with high precision on specially developed sophisticated machines.
- $50 \%$ saving in installation time, as compared with plain ended pipes and loose couplers.
- The number of joints is reduced by $50 \%$ resulting in substantial saving in labour costs.
- The requirement of Solvent Cement for a pipeline is reduced by almost $50 \%$
- Cost less than conventional plain ended pipes with loose couplers.
- Eliminates the inconvenience of loose couplers and reduction in inventory costs.
- Selfit pipes are supplied in a standard lengths of 6 meters exclusive of the socket portion.



## SELFIT SWR PVC PIPES

(As per IS 13592 with Latest Amendment)
The pipes conform to Indian standards (IS). One end of the pipe is plain and the other end is self socket on sophisticated automatic machines for high degree of accurate diameters. The pipes when joined using solvent cement, forms a permanent water tight joint

## RINGFIT SWR PVC PIPES

(As per IS 13592 with Latest Amendment)
One end of the pipe is plain and other end is self socket with an integral groove to hold the gasket. When jointed with a rubber ring, the joint formed is a trouble free, water tight one, ready to take care of thermal expansion / contraction

| Nominal Diameter | Mean Outside Diameter of Pipe |  | Outside Diameter of Pipe at Any Point |  | Wall Thickness |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DN | Min | Max | Min | Max | Min | Max |
| 75A | 75.0 | 75.3 | 74.1 | 75.9 | 1.8 | 2.2 |
| 75B | 75.0 | 75.3 | 74.1 | 75.9 | 3.2 | 3.8 |
| 90A | 90.0 | 90.3 | 88.9 | 91.2 | 1.9 | 2.3 |
| 90B | 90.0 | 90.3 | 88.9 | 91.2 | 3.2 | 3.8 |
| 110A | 110.0 | 110.4 | 108.6 | 111.4 | 2.2 | 2.7 |
| 110B | 110.0 | 110.4 | 108.6 | 111.4 | 3.2 | 3.8 |
| 160A | 160.0 | 160.5 | 158.0 | 162.0 | 3.2 | 3.8 |
| 160B | 160.0 | 160.5 | 158.0 | 162.0 | 4.0 | 4.6 |

For Sel-fit Socket

| Socket Depth | Mean ID of Socket at Mid Point |  |
| :---: | :---: | :---: |
| Min | Min | Max |
| 40 | 75.1 | 75.3 |
| 40 | 75.1 | 75.3 |
| 46 | 90.1 | 90.3 |
| 46 | 90.1 | 90.3 |
| 48 | 110.1 | 110.4 |
| 48 | 110.1 | 110.4 |
| 58 | 160.2 | 160.5 |
| 58 | 160.2 | 160.5 |

For Ring-fit Socket

| Inside Dia of Socket |  | Length of Beading \& Neck | Length Beyond Beading |
| :---: | :---: | :---: | :---: |
| Min | Max | Min | Min |
| 75.3 | 76.2 | 20.0 | 25.0 |
| 75.3 | 76.2 | 20.0 | 25.0 |
| 90.3 | 91.2 | 23.0 | 28.0 |
| 90.3 | 91.2 | 23.0 | 28.0 |
| 110.4 | 111.3 | 26.0 | 32.0 |
| 110.4 | 111.3 | 26.0 | 32.0 |
| 160.5 | 161.5 | 32.0 | 42.0 |
| 160.5 | 161.5 | 32.0 | 42.0 |

1. Dimension of 'CS' Casing Pipes - for well depth upto 80 meters


## PROTECTOR WELL CASINGS \& SCREENS

The Jindal protector range of PVC plain casing and ribbed screen pipes is specially designed to ensure clean, clear water from bore wells, whether shallow or deep.
The protector range is manufactured as per IS 12818 and DIN 4925 Standards.

| Nominal <br> Diameter | Mean outside <br> dia of pipe |  | Outside dia of pipe <br> at anypoint |  | Mean outside dia <br> over connection | Wall thickness |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DN | Min | Max | Min | Max | Max | Min | Max |
| 150 | 165 | 165.4 | 164.8 | 165.6 | 174 | 5.7 | 6.5 |
| 175 | 200 | 200.5 | 199.8 | 200.6 | 211 | 7.0 | 7.8 |
| 200 | 225 | 225.5 | 224.8 | 225.8 | 238 | 7.6 | 8.8 |
| 250 | 280 | 280.5 | 279.6 | 280.8 | 292 | 9.6 | 11.0 |

Note: In addition to the above range we also refer $125 \mathrm{CS}, 180 \mathrm{CS}$ \& 225 CS plain and any other casing pipe as per specific requirement.
2. Dimension of 'CM' Casing Pipes - for well depth between 80-250 meters

| Nominal <br> Diameter | Mean outside <br> dia of pipe | Outside dia of pipe <br> at anypoint |  | Mean outside dia <br> over connection | Wall thickness |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DN | Min | Max | Min | Max | Max | Min | Max |
| 40 | 48 | 48.2 | 48.0 | 48.3 | 52.0 | 3.5 | 4.0 |
| 50 | 60 | 60.2 | 59.9 | 60.3 | 65.0 | 4.0 | 4.6 |
| 80 | 88 | 88.3 | 88.0 | 88.4 | 94.0 | 4.0 | 4.6 |
| 100 | 113 | 113.3 | 112.9 | 113.4 | 120.0 | 5.0 | 5.7 |
| 125 | 140 | 140.4 | 139.9 | 140.5 | 150.0 | 6.5 | 7.3 |
| 150 | 165 | 165.4 | 164.8 | 165.6 | 178.0 | 7.5 | 8.5 |
| 175 | 200 | 200.5 | 199.8 | 200.6 | 215.0 | 8.8 | 9.8 |
| 200 | 225 | 225.5 | 224.8 | 225.8 | 243.0 | 10.0 | 11.2 |
| 250 | 280 | 280.5 | 279.6 | 280.8 | 298.0 | 12.5 | 14.0 |

Advantages

- Non toxic
- Corrosion resistant
- Light weight
- Longer lasting
- Easy installation
- Higher well yields


## Range:

Jindal Casing Pipes are available as follows:
(A) Up to 80 meters depth-Shallow well pipes (CS Pipes) and
(B) Up to 250 meters depth-Medium Well Pipes (CM Pipes)

These pipes are available in sizes from 100 mm D.N. to 200 mm D.N.

In the lengths of 2,3 or 4 meters in blue color. These pipes have male threads at one end and female threads at the other end, as per $\operatorname{Din} 2999 / 103$ or BS 21.


3. Dimension of Screen Pipe with RIBS

| Nominal <br> Diameter | Mean outside <br> dia of pipe | Outside dia of pipe <br> at anypoint | Mean outside dia <br> over connection | Wall thickness |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DN | Min | Max | Max | Min | Max |
| 40 | 52 | 51.9 | 56 | 3.5 | 4 |
| 50 | 64 | 63.9 | 69 | 4 | 4.6 |
| 80 | 92 | 91.8 | 98 | 4 | 4.6 |
| 100 | 117 | 116.8 | 124 | 5 | 5.7 |
| 150 | 168 | 168.6 | 182 | 7.5 | 8.5 |
| 200 | 229 | 228.5 | 247 | 10 | 11.2 |

Jindal SDR series casing pipes are specially designed for very shallow well depths
i.e. well depths from 12 mtr. - 24 mtr.

These pipes are available in a standard length of 6 meters \& are blue in colour. These pipes have a Selfit type of a joint.
4. SDR 52 - for well depth upto 40 feet ( 12 meters)

| Size Class | Mean outside dia of Pipe |  | Ooutside dia of Pipe at any point |  | Wall Thickness |  | length Tolerance |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Min | Max | Min | Max | Min | Max | Plain(m) | Socketed(m) |
| 110 SDR - 52 | 110.0 | 110.4 | 108.6 | 111.4 | 2.1 | 2.4 | -- | 6.005 |
| 140 SDR - 52 | 140.0 | 140.5 | 138.3 | 141.7 | 2.7 | 3.2 | -- | 6.005 |
| 160 SDR - 52 | 160.0 | 160.5 | 158.0 | 162.0 | 3.1 | 3.5 | -- | 6.005 |
| 180 SDR - 52 | 180.0 | 180.6 | 177.8 | 182.2 | 3.5 | 3.9 | -- | 6.005 |
| 200 SDR - 52 | 200.0 | 200.6 | 197.6 | 202.4 | 3.8 | 4.3 | -- | 6.005 |

5. SDR 35 - for well depth upto 60-90 feet (18-24 meters)

| Size Class | Mean outside dia of Pipe |  | Outside dia of Pipe at any point |  | Wall Thickness |  | length Tolerance |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Min | Max | Min | Max | Min | Max | Plain(m) | Socketed(m) |
| 110 SDR - 35 | 110.0 | 110.4 | 108.6 | 111.4 | 3.1 | 3.5 | -- | 6.005 |
| 125 SDR - 35 | 125.0 | 125.4 | 123.5 | 126.5 | 3.6 | 4.0 | -- | 6.005 |
| 140 SDR - 35 | 140.0 | 140.5 | 138.3 | 141.7 | 4.0 | 4.5 | -- | 6.005 |
| 160 SDR - 35 | 160.0 | 160.5 | 158.0 | 162.0 | 4.5 | 4.9 | -- | 6.005 |
| 180 SDR - 35 | 180.0 | 180.6 | 177.8 | 182.2 | 5.1 | 5.6 | -- | 6.005 |
| 200 SDR - 35 | 200.0 | 200.6 | 197.6 | 202.4 | 5.7 | 6.3 | -- | 6.005 |
| 225 SDR - 35 | 225.0 | 225.7 | 222.3 | 227.5 | 6.4 | 7.0 | -- | 6.005 |




## PLUMBING PIPES (For Domestic Plumbing Applications)

ASTM HEAVY PRESSURE PIPES
UV Stabilised Blue \& White plumbing pipes are available in sizes from $1 / 2^{\prime \prime}$ to 4 : in Schedule 40 \& Schedule 80 series as per ASTM D 1785 standards. These pipes are available in standard length of 3 meters \& 6 mtrs. These pipes are threaded at both the ends with threads as per IS 554, BSPT. These pipes can be used in combination with G.I. fittings readily available in the market

## White Plain Ended Pipes

These pipes are plain at both the ends and can be joined with PVC fittings available in white colour. The joint formed between the pipe \& fitting with the help of solvent cement is a permanent homogeneous joint. These pipes are also avaiable with threaded ends with threds as per IS 554.

Advantages over conventional G.I. piping systems

- Low transportation cost
- Ease of handling
- Lower material \& installation cos
- uPVC pipe has a smooth surface, which reduces pressure losses and thus conserves electrica energy
- High corrosion resistance
- Durable. The solvent cement joints are leak proof and the joint is as strong as the parent material.
- The joints are tested under pressure as stipulated in the standard.
- The lengths can be cut to required measurement and joined easily without laborious threading
operation

| SIZE | O.D. | SCHEDULE 40 |  |  | SCHEDULE 80 |  |  | $\begin{aligned} & \text { Thread } \\ & \text { Length } \\ & ( \pm 2 \mathrm{~mm}) \end{aligned}$ | Thread Per 25.54 mm (nos) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Wall Thickness |  | Pressure Rating | Wall Thickness |  | Pressure Rating |  |  |
|  |  | Min. | Max. | (Mpa) | Min. | Max. | (Mpa) |  |  |
| 1/2 | 21.24 | 2.77 | 3.28 | 4.14 | 3.73 | 4.24 | 5.86 | 15.00 | 14 |
| $3 / 4$ | 26.57 | 2.87 | 3.38 | 3.31 | 3.91 | 4.42 | 4.76 | 16.50 | 14 |
| 1 | 33.27 | 3.38 | 3.89 | 3.10 | 4.55 | 5.08 | 4.34 | 19.00 | 11 |
| $11 / 4$ | 42.03 | 3.56 | 4.07 | 2.55 | 4.85 | 5.43 | 3.59 | 22.00 | 11 |
| $11 / 2$ | 48.11 | 3.68 | 4.19 | 2.28 | 5.08 | 5.69 | 3.24 | 22.00 | 11 |
| 2 | 60.17 | 3.91 | 4.42 | 1.93 | 5.54 | 6.20 | 2.76 | 30.00 | 11 |
| $21 / 2$ | 73.02 | 5.16 | 5.77 | 2.07 | 7.01 | 7.85 | 2.90 | 32.00 | 11 |
| 3 | 88.70 | 5.49 | 6.15 | 1.79 | 7.62 | 8.53 | 2.55 | 35.00 | 11 |
| 4 | 114.07 | 6.20 | 6.73 | 1.52 | 8.56 | 9.58 | 2.21 | 42.00 | 11 |

(The compound used in the manufacture of pipes is Type 1, i.e. Grade 1 PVC 1120 as identified in ASTM D 1784 with specified amount of pigment, stabilizers \& other additives)


## uPVC COLUMN PIPES

JINDAL uPVC Column pipes are specially designed for submersible pumps. These pipes blend the perfect combination of technology and quality that guarantees a long hassle-free performance. These pipes are perfect replacement of galvanized steel pipes used for column application. Stringent quality is checked at every stage of production and ensuring the highest standards which forms the ball mark of Jindal uPVC Column Pipes.

We offer a quality imbibed range of Column Pipe that has minimum frictional losses and thus saves the pumping cost. These are widely reckoned by our clients for its features such as corrosion resistant, easy to install and light weight. Our range of column pipe is widely used for following applications:

Portable Water Supply Schemes
Domestic \& Industrial Plumbing
Lift \& Gravity Irrigation Systems
Chemical Transportation
Agriculture Pumpset, Suction \& Delivery Pipes
Horticultural \& Green House Technology

Salient features of Column Pipes

- Long life \& low maintenance
- No contamination due to incrustation or corrosion
- Leak proof joints
- Low cost in comparison to G.I \& C.I. Pipes
- Easy in installation
- Minimum frictional losses thus saving in pumping cost
- 25 \% higher discharge rate than G.I. Pipes
- Fire resistant, non conductor of electricity \& low thermal conductivity
- Economical
- Negligible maintenance \& Longer Life
- Smooth bore, hence excellent flow properties
- High impact strength
- The grip design of Square Type Threads gives a high tensile load capacity and for easy fitment and re-fitment

| Normal Diameter | O.D. <br> Nom | O.D. Over <br> Connection <br> max | Light Wall <br> Thickness <br> Nom | Medium Wall <br> Thickness Nom | Heavy Wall <br> Thickness Nom |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 25 | $1^{\prime \prime}$ | 33.40 | 40.40 | 3.38 | 4.55 |
| 32 | $11^{\prime \prime \prime}$ | 42.16 | 50.10 | 3.56 | 4.85 |
| 40 | $11^{\prime \prime \prime}$ | 48.26 | 60.32 | 3.68 | 5.08 |
| 50 | $2^{\prime \prime}$ | 60.32 | 79.00 | 3.91 | 5.54 |
| 65 | $21 / 2^{\prime \prime}$ | 73.02 | 94.50 | 5.16 | 7.01 |
| 80 | $3^{\prime \prime}$ | 88.90 | 114.00 | 5.49 | 7.62 |
| 100 | $4^{\prime \prime}$ | 114.30 | 136.50 | 6.02 | 8.56 |



## CPVC PIPES

Jindal group is the largest manufacturer of ERW Pipes well- diversified in other piping systems such as PE-AL-PE Pipes (Multilayer Composite Pipe), PVC Pipes, UPVC Pipes, HDPE Pipes. The strength of Jindal lies in its quality products and satisfied customers. For over 50 years Jindal has been a trusted name in the Piping Industry, having a wide distribution network all over India and worldwide.
Jindal now introduces a wide range of CPVC Pipes and fittings. Jindal CPVC Pipes are manufactured in SDR 11 and SDR 13.5 as per ASTM D 2846, and are available in lengths of 3 meters and 5 meters both.

| Nominal Bore | Outer Diameter (OD) in mm |  | SDR - 11 |  |  |  | SDR - 13.5 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Wall Thickness (mm) |  | Working Pressure |  | Wall Thickness (mm) |  | Working Pressure |  |
|  |  |  | $23^{\circ} \mathrm{C}$ | $82^{\circ} \mathrm{C}$ | $23^{\circ} \mathrm{C}$ | $82^{\circ} \mathrm{C}$ |  |  |
| (inch) | Average | Tolerance |  |  | Minimum | Tolerance | $\mathrm{Kg} / \mathrm{cm}^{2}$ | $\mathrm{Kg} / \mathrm{cm}^{2}$ | Minimum | Tolerance | $\mathrm{Kg} / \mathrm{cm}^{2}$ | $\mathrm{Kg} / \mathrm{cm}^{2}$ |
| 1/2 | 15.90 | $\pm 0.08$ | 1.73 | +0.51 | 28.10 | 7.0 | 1.40 | +0.51 | 22.50 | 5.6 |
| $3 / 4$ | 22.20 | $\pm 0.08$ | 2.03 | +0.51 | 28.10 | 7.0 | 1.65 | +0.51 | 22.50 | 5.6 |
| 1 | 28.60 | $\pm 0.08$ | 2.59 | +0.51 | 28.10 | 7.0 | 2.12 | +0.51 | 22.50 | 5.6 |
| $11 / 4$ | 34.90 | $\pm 0.08$ | 3.18 | +0.51 | 28.10 | 7.0 | 2.59 | +0.51 | 22.50 | 5.6 |
| $11 / 2$ | 41.30 | $\pm 0.10$ | 3.76 | +0.51 | 28.10 | 7.0 | 3.06 | +0.51 | 22.50 | 5.6 |
| 2 | 54.00 | $\pm 0.10$ | 4.90 | +0.58 | 28.10 | 7.0 | 4.00 | +0.58 | 22.50 | 5.6 |

## CPVC FITTINGS

Entire range of fittings are available in SDR 11 from sizes $1 / 2^{\prime \prime}$ to $2^{\prime \prime}$ (CTS series) in accordance to ASTM D 2846.


Features :
Fire Resistance: CPVC Pipes do not support combustion
Corrosion free : CPVC Pipes are fully resistant to corrosion
Minimum Installation Time : CPVC Pipes are installed using quick and simple Solvent cement jointing procedure, hence installation time is drastically reduced in comparison to other systems. Long Working Life : CPVC Pipes have a long working life of 50 years
Scaling free : CPVC Pipes are resistant to scaling, hence ensures optimum flow rates
Leak Proof System : Solvent Cement jointing procedure ensures leak proof piping system Cost Effective: It is one of the most economical piping system available.
Strong \& Rigid Material : CPVC Pipes are stronger than other plastic pipes, have a good impact resistance and can withstand high pressures.

## Application :

- For Drinking Water Supply
- For Hot \& Cold Water supply in Residential and Commercial buildings
- For Plumbing application in Industries such as Food \& Beverage, Chemical processing, Paper, Waste Water Treatment and many more.


## Notes

- Warranty is applicable only if Jindal CPVC Solvent Cement is used with Jindal CPVC Pipes and fittings.
- Pressure testing should be done whenever the piping system is to be concealed
- For Solar Water heater installation, CPVC Pipes should not be directly connected with the water heater outlet. CPVC Pipes should be connected after installing of minimum One meter metal pipe.
- CPVC Pipes should not be used for Compressed Air/Gas applications.



## HDPE PIPES

JINDAL HDPE pipe is a quality product. Low resistance to corrosion, non-toxic and inert to chemicals, low thermal conductivity and high electric resistance. These pipes are manufactured as per BIS specification IS 4984-1995, in raw material grades PE-63 and PE-80 for various applications, like water supply, irrigation, tube wells submersible pumps, sewerage disposal and effluent treatment plants etc.

Salient Features:

- Excellent corrosion and chemical resistance.
- Inert to most acidic and alkaline solutions.
- High flow characteristics, Good abrasion resistance
- Light in Weight, Easy to handle \& transport.
- Excellent flexibility combined with strength.
- Smooth inner walls minimizes frictional losses.
- Safe for potable water supply

Applications

## Water Supply Systems

In water supply distribution systems.
As a replacement of G.I. Pipes in Bore Well application of submersible pumps.
For suction and delivery lines of jet pumps and centrifugal pumps.

Industrial Applications
HDPE pipes can be used for disposal of corrosive effluents chemicals and treated / untreated wastes.
Acids and Alkalis can be transported through these pipes.
For conveying edible oils, fruit pulps, juices, milk and other food products. As ducts for Air Conditioning and Ventilation.

Environmental Protection
HDPE Pipes are also used for industrial waste treatment plants and water treatment plants.
For drainage of Sewerage
For disposal of sand slurry in dredging operations.

| JINDAL HDPE PIPE : WALL THICKNESS CHART IS:4984-95 PE 63 (Fig. in mm) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| O.D. Nominal | O.D. <br> Tolerance | Ovality Tolerance | P.N. - 4 |  | P.N. - 6 |  | P.N. - 10 |  |
|  |  |  | Min | Max | Min | Max | Min | Max |
| 20 | 0.3 | 1.2 | - | - | - | - | 2.3 | 2.8 |
| 25 | 0.3 | 1.2 | - | - | - | - | 2.8 | 3.3 |
| 32 | 0.3 | 1.3 | - | - | 2.3 | 2.8 | 3.6 | 4.2 |
| 40 | 0.4 | 1.4 | 2.0 | 2.4 | 2.8 | 3.3 | 4.5 | 5.2 |
| 50 | 0.5 | 1.4 | 2.4 | 2.9 | 3.5 | 4.1 | 5.6 | 6.4 |
| 63 | 0.6 | 1.5 | 3.0 | 3.5 | 4.4 | 5.1 | 7.0 | 7.9 |
| 75 | 0.7 | 1.6 | 3.6 | 4.2 | 5.3 | 6.1 | 8.4 | 9.5 |
| 90 | 0.9 | 1.8 | 4.3 | 5.0 | 6.3 | 7.2 | 10.0 | 11.2 |
| 110 | 1.0 | 2.2 | 5.3 | 6.1 | 7.7 | 8.7 | 12.3 | 13.8 |



GARDEN FLEXIBLE HOSES
Features and Benefits:

- Its Non-corrosive, anti-rust, electrolytic, anti-clogging and hence ensures clean and safe water supply.
- Long life
- Easy to install or handle
- Allows smooth water flow that reduces the expenses of electricity
- Light weight and easy to transport.


## Applications

- Ideal for Suction delivery for Monoblocks
- Domestic, agriculture and gardening water supply.
- Filling sand from river into trucks used in construction.

Available Sizes

- Suction Hose Pipe - Available In 1/2 To 6 Inches.


## TECHNICAL SPECIFICATIONS

| Type |  |  | Regular |  |
| :---: | :---: | :---: | :---: | :---: |
| ID <br> Inch | Wall <br> Thickness <br> mm | Working <br> Pressure <br> $\mathrm{kg} / \mathrm{cm} 2$ | Bursting <br> Pressure <br> $\mathrm{kg} / \mathrm{cm} 2$ | Meters |
| 2 | 3 | 5 | 14 | $30 / 50$ |
| 2.5 | 3.5 | 5 | 13 | $30 / 50$ |
| 3 | 3.5 | 4.5 | 13 | $30 / 50$ |
| 2.5 | 4 | 4 | 12 | 30 |
| 4 | 5 | 3.5 | 10 | 30 |
| 5 | 6.5 | 2.5 | 8 | $15 / 18$ |
| 6 | 7 | 2.5 | 8 | $15 / 18$ |


| Type |  |  | Medium |  |
| :---: | :---: | :---: | :---: | :---: |
| ID <br> Inch | Wall <br> Thickness <br> mm | Working <br> Pressure <br> $\mathrm{kg} / \mathrm{cm} 2$ | Bursting <br> Pressure <br> $\mathrm{kg} / \mathrm{cm} 2$ | Meters |
| 2 | 4.5 | 6 | 15 | $30 / 50$ |
| 2.5 | 4.5 | 5.5 | 13 | $30 / 50$ |
| 3 | 5 | 5 | 13 | $30 / 50$ |
| 3.5 | 5 | 5 | 12 | 30 |
| 4 | 6 | 4.5 | 10 | 30 |
| 5 | 7 | 3 | 9 | $15 / 18$ |
| 6 | 7.5 | 3 | 9 | $15 / 18$ |


| Type |  | Super |  |  |
| :---: | :---: | :---: | :---: | :---: |
| ID <br> Inch | Wall Thickness <br> mm | Working Pressure <br> $\mathrm{kg} / \mathrm{cm} 2$ | Bursting Pressure <br> $\mathrm{kg} / \mathrm{cm} 2$ | Meters |
| $1 / 2$ | 3 | 16 | 30 | $30 / 50$ |
| $3 / 4$ | 4 | 13.5 | 24 | $30 / 50$ |
| 1 | 4.5 | 10.5 | 23 | $30 / 50$ |
| 1.5 | 5 | 9 | 16 | $30 / 50$ |
| 2 | 5.5 | 8 | 16 | $30 / 50$ |
| 2.5 | 6 | 7 | 16 | $30 / 50$ |
| 3 | 6.5 | 6 | 15 | $30 / 50$ |

