

WHITE RHINO™ PVC-M Pressure Pipes Series 1 (White)

Compliance: Manufactured in accordance with AS/NZS 4765 Modified PVC (PVC-M) pipes for pressure applications for Series 1 pipe.

(Standardsmark Licence Number SMK02570)

Product Code: 850 Series

Benefits: WHITE RHINO™ is a Modified PVC (PVC-m) pressure pipe, which has some superior mechanical qualities compared with equivalent Iplex PVC-U pressure pipe, including; higher impact resistance, greater ductility, lighter weight and an increase in hydraulic capacity.

Applications: WHITE RHINO™ may be used for:

- Urban potable water supply
- Pumped sewer rising mains**
- Agricultural irrigation and Rural Water Supply
- Industrial processing fluids
- Slip lining
- Industrial effluent disposal
- Abrasive slurries in quarrying and mining
- Acids, alkalis and aggressive chemicals,*

* Refer to 'A Guide to Chemical Resistance of Thermoplastic and Elastomeric Materials' - available from IPLEX Pipelines.

** Subject to fatigue design for Cyclic Dynamic Stresses

Jointing: Solvent cement joints are available in 100mm diameter (always use cleaner primer prior to applying solvent cement). Rubber ring joints are available in all sizes, 100mm - 575mm inclusive.

Fittings: PVC-compatible socketed ductile iron fittings complying with AS/NZS 2280 "Ductile iron pipes and fittings". Many DI fittings are now designed to use metric OD transition seal rings with Series 1 pipe. Socket spacers may be required in some diameters and in some fitting brands with Series 1 pipe, to centrally locate and support the pipe. Iplex recommend you consult your fitting supplier for specific advice on the need for socket spacers.

Service & Connections: Iplex recommends the use of PVC-compatible, full circle supported tapping bands with WHITE RHINO™ pipe. These include Milnes Gunmetal, Crevet Taprite or other tapping bands manufactured by AS/NZS 4793 "Mechanical Tapping Bands for Water Works Purposes". Either O or V type tapping band seals are suitable for use with White Rhino.

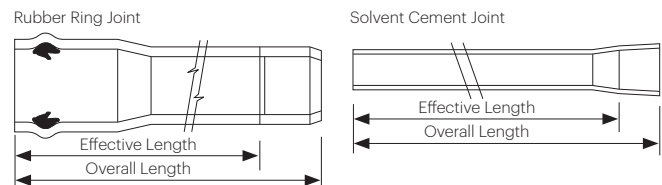
"Universal" tapping bands that use U-bolt support straps are prohibited.

Tapping bands must be installed centrally positioned over the drilled service hole. This hole should be drilled using a fine-tooth hole saw. Twist Drills or flat bits MUST NOT BE USED on any PVC pipe.

Mechanical Couplings: Iplex recommends the use of unrestrained mechanical couplings manufactured to AS/NZS 4998 – Bolted Unrestrained Mechanical Couplings for Water Works Purposes.

Design & Installation: RHINO PVC-M pipe should be designed and installed in accordance with the following Standards:

- **General Installation:**
AS/NZS 2032 "Installation of PVC Pipe Systems"
- **Buried Structural Design:**
AS/NZS 2566 Part 1 and supplement 1 "Buried Flexible Pipelines - Structural Design"
- **Detailed Installation and Site Pressure Testing:**
AAS/NZS 2566 Part 2 "Installation".



Length: 6 metre effective length. Length of the witness mark is added to give the overall length.

Limitations: WHITE RHINO™ and BLUE RHINO™ PVC-M pressure pipes should not be used:

- With aromatic and chlorinated hydrocarbons, ketones, esters and ethers
- At any service temperature above 50°C
- Where provision for temperature derating has not been made above 20°C
- With compressed air
- Without adequate support to the pipe both in above ground and below ground applications
- Without adequate thrust support
- Where depth of cover is less than:
 - 300mm where pipeline is not subject to vehicular loadings
 - 450mm where pipeline is subject to vehicular loadings not in roadways
 - 600mm where pipeline is subject to vehicular loading in sealed roadways
 - 750mm where pipeline is subject to vehicular loading in unsealed roadways
 - 750mm where pipeline is subject to construction equipment loadings
- Without provision for fatigue design, to accommodate cyclic dynamic stresses where appropriate (such as pressure sewer rising mains) (in accordance with published PIPA guidelines)
- Where working pressure plus surge/cyclic pressure exceeds the nominated pressure performance rating of the pipe
- When exposed to direct sunlight above ground for applications or storage exceeding 24 months without protection.
- This protection may include pale coloured UV resistant paint systems, nonexposed location or physical shading
- Never tap service connections directly into the pipe wall. Always use a full encirclement tapping band, designed for PVC pipe.

WHITE RHINO™ PVC-M Metric Series Pressure Pipe Dimensions									
Class		PN6		PN9		PN12		PN15	
Pressure rating (MPa)		(0.6 MPa)		(0.9 MPa)		(1.2 MPa)		(1.5 MPa)	
Approx rating (m head)		60m head		90m head		120m head		150m head	
Nom. Dia (mm)	Mean O.D. (mm)	Mean I.D. (mm)	Mean W.T. (mm)	Mean I.D. (mm)	Mean W.T. (mm)	Mean I.D. (mm)	Mean W.T. (mm)	Mean I.D. (mm)	Mean W.T. (mm)
100	114.3	108.3	3.0	107.5	3.4	105.5	4.4	103.5	5.4
125	140.2	133.3	3.5	131.8	4.2	129.4	5.4	127.2	6.5
150	160.3	152.3	4.0	150.9	4.7	148.3	6.3	145.5	7.4
175	200.3	190.5	4.9	188.7	5.8	185.3	7.5	181.9	9.2
200	225.3	214.3	5.5	212.5	6.4	208.5	8.4	204.7	10.3
225	250.4	238.2	6.1	236.2	7.1	232.0	9.2	226.6	11.9
250	280.4	-	-	264.6	7.9	259.8	10.3	-	-
300	315.5	300.5	7.5	297.9	8.8	292.3	11.6	286.9	14.3
375	400.5	381.5	9.5	378.1	11.2	371.3	14.6	364.3	18.1
450	500.5	476.9	11.8	472.9	13.8	464.3	18.1	455.3	22.6
500	560.5	-	-	529.5	15.5	519.9	20.3	-	-
575	630.5	-	-	596.1	17.2	584.9	22.8	-	-

Minimum order quantities may apply



DN575 (630mm OD) PN9 WHITE RHINO™ for a wastewater outfall, installed under a sealed road, Edendale, Southland.