## Iplex WHITE RHINO<sup>®</sup> 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:** Iplex 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: Iplex 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 guarrying and mining
- Acids, alkalies 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<sup>™</sup> pipe. These include Milnes Gunmetal, Crevet Taptite 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.

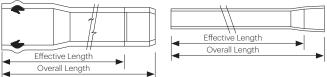
**Design & Installation:** Iplex RHINO PVC-M pipe should be designed and installed in accordance with the following Standards:

General Installation:
 AS/NZS 2032 "Installation of PVC Pipe Systems"

Rubber Ring Joint

- 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".

Solvent Cement Joint



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

Limitations: Iplex 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.

| IPLEX 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  | Mean O.D. | Mean I.D. | Mean W.T. |
| (mm)  | (mm)      | (mm)      | (mm)      | (mm)      | (mm)      | (mm)      | (mm)      | (mm)      | (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      |
| 575   | 630.5     | -         | -         | 596.1     | 17.2      |           | 22.8      | -         | -         |
|   |           |           | -         |           |           |           |           |           |           |



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

Minimum order quantities may apply

*i***PLEX** *Pipelines*