



BINA PLASTIC
INDUSTRIES SDN BHD
(Co.No. 54840-T)

BBB™
PIPE 153mm PN

BBB™
MODIFIED POLY VINYL
CHLORIDE (M-PVC) PIPE

INTRODUCTION

Bina Plastic Industries Sdn. Bhd. (Binaplas) is established in 1973. We are expert in producing plastic piping system which includes Unplasticised Poly Vinyl Chloride (U-PVC), High Density Poly Ethylene (HDPE) and Acrylonitrile Butadiene Styrene (ABS).

We believe quality product has always been the key success for our business. To hold up our commitment on supplying superior quality product to the water industry, we have further enhanced our U-PVC technology. Consequently, we have successfully producing Modified Poly Vinyl Chloride (M-PVC) pipe – a tough and high performance thermoplastic pipes.

MATERIAL CHARACTERISTICS

M-PVC is a thermoplastic alloy developed through modern technology. The addition of modifying agents in M-PVC significantly enhances PVC's physical and mechanical properties. This gives a number of exceptional features, without altering the advantages and properties of the original polymer.

Like U-PVC, stabilizers are an important component in M-PVC manufacture to maintain thermal stability during the extrusion process. Binaplas M-PVC pipe is manufactured using compound with non – lead stabilizers.

Most plastics are affected by sunlight. However, Binaplas M-PVC pipe does not degrade when exposed to sunlight due to the presence of UV-inhibitor in the pipe. Nonetheless, proper protection to the pipe is essential under prolonged sunlight exposure.

APPLICATION

Binaplas M-PVC pipe is suitable for following applications :

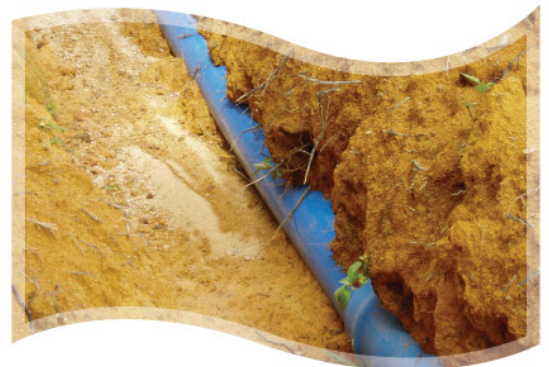
- Water reticulation
- Sewer effluent control and water purification
- Irrigation systems
- Industrial applications



M-PVC pipes take any kind of deformation without suffering structural damage



Load test conducted on M-PVC pipe by using a 20 tones excavator



M-PVC pipes install at site

BENEFITS & FEATURES

Ductility and Toughness

Binaplas M-PVC pipe is virtually impossible to destroy by impact. This means that the pipe is resistance to breakage caused by accidental handling and installation damage. Furthermore, the pipes prevent the propagation of cracks and scratches which eliminate the risk of rapid crack behaviour.

Hydraulic Efficiency

The gain in ductility means that higher hoop stresses can safely be utilized. This means that the walls of M-PVC pipes can become thinner while the safety factory (1.4) remains adequate. The reduced wall thickness of M-PVC pipes providing greater hydraulic efficiency.

System Compatibility

Binaplas M-PVC pipe is fully compatible with the existing pipeline systems, where the full range of valves and fittings are available in market. The dimensions of M-PVC pipes are complied with existing MS 628 systems, which make M-PVC pipes are interchangeable with U-PVC pipes.

Total Water Quality

Binaplas M-PVC pipe is immune to corrosion and nature chemical substances, as well as aggression from micro and macro organisms. Therefore, the quality of the fluid that circulates in the pipes will always remain unaltered. Mandatory tests show that the excellent qualities of M-PVC pipes comply with the required health standards of water for human consumption.

Lower Cost and Easy Installation

Binaplas M-PVC pipes are lighter and can be lifted without mechanical assistance, which brings down the overall cost of installation. The rubber-ring joint system of M-PVC pipes allow the installation to be completed in shortest time and providing a flexible joint with capability of axial and angular movement. The use of dual hardness rubber-ring in the joint system has reduced jointing effort and improved reliability.



A 20 tones excavator passed through M-PVC pipe (OD 300mm PN 12). The pipe does not show any sign of cracks.

INSTALLATION GUIDELINE



STEP 1
Clean the socket area.



STEP 2
Insert the rubber ring into the ring groove.



STEP 3
Clean the spigot end of the pipe as far back as the reference line.



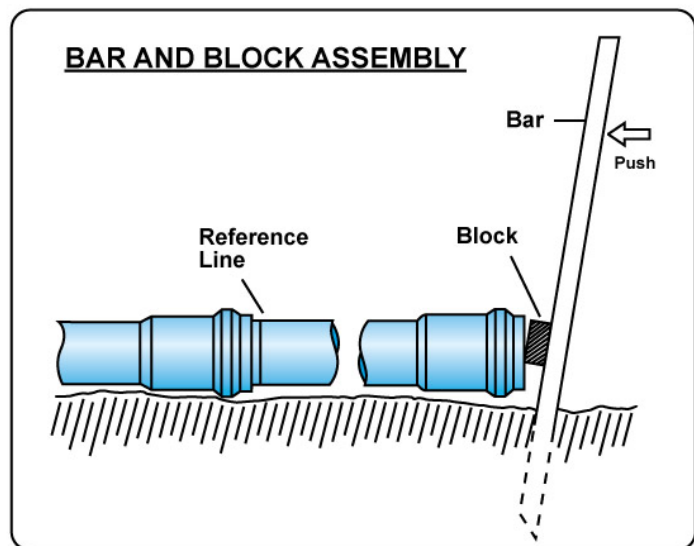
STEP 4
Apply lubricant to the spigot end and approximately mid-way back to the reference line.



STEP 5
Insert the spigot end into the socket and apply steady pressure until the spigot slips through the rubber ring. Insert pipe until the reference line is just visible at the face of each socket.

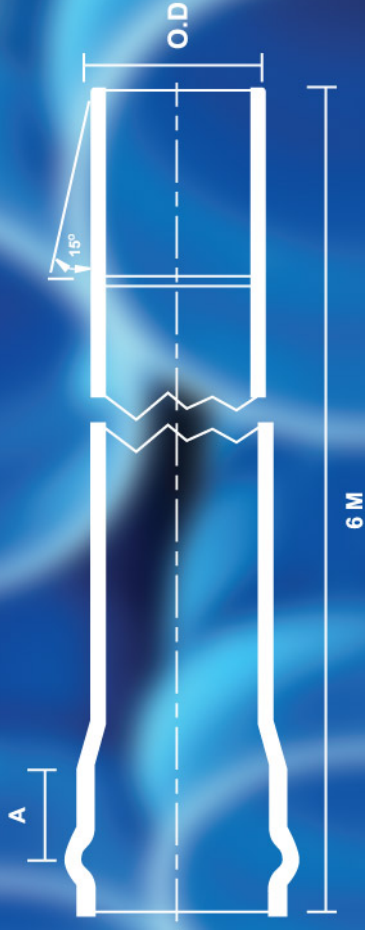
Important Points of Pipe Installation with Rubber – Ring Joints

1. The rubber ring is correctly fitted when the thickest cross section of the ring is positioned towards the outside of the socket and the groove in the rubber ring is positioned inside the socket.
2. Check the rubber ring to make sure it is sealed uniformly in the ring groove by running your finger around the inner edge of the rubber ring.
3. Keep lubricated areas clean. If dirt or sand adheres to lubricated areas, clean and re-lubricate.
4. Bar and block assembly is recommended because a worker is able to feel the amount of force being used and whether the joint goes together smoothly.
5. If undue resistance to pipe insertion is encountered, disassemble the joint and check the position of the rubber ring
 - If the rubber ring has been dislocated from the ring groove, inspect the pipe and rubber ring for damage, replace damaged items, clean components and repeat the installation steps.
 - If the rubber ring is properly positioned, verify proper positioning of the reference line. Relocate the line if it is not correctly positioned.
 - If the pipe still cannot be inserted properly, please do contact us for assistance.



PRODUCT DATA

Brand : BBB
 Colour : Blue or other colour can be manufactured as request by the customer
 Length : 6 meter



| Nominal Size | | Outside Diameter, O.D (mm) | | Insertion Length, A (mm) | PN 9 (Class C) | | PN 12 (Class D) | | PN 15 (Class E) | |
|--------------|-----|----------------------------|-------|--------------------------|----------------|------|-----------------|------|-----------------|------|
| | | min | max | | min | max | min | max | | |
| 3 | 80 | 88.7 | 89.1 | 85.50 | 3.5 | 4.1 | 4.6 | 5.3 | 5.7 | 6.6 |
| 4 | 100 | 114.1 | 114.5 | 86.20 | 4.5 | 5.2 | 6.0 | 6.9 | 7.3 | 8.4 |
| 6 | 155 | 168.0 | 168.5 | 91.90 | 6.6 | 7.6 | 8.8 | 10.2 | 10.8 | 12.5 |
| 8 | 200 | 218.8 | 219.4 | 115.10 | 7.8 | 9.0 | 10.3 | 11.9 | 12.6 | 14.5 |
| 10 | 250 | 272.6 | 273.4 | 128.60 | 9.7 | 11.2 | 12.8 | 14.8 | 15.7 | 18.1 |
| 12 | 300 | 323.4 | 324.3 | 136.00 | 11.5 | 13.3 | 15.2 | 17.5 | 18.7 | 21.6 |

MS 628 : PART 1 : 1999
 Wall Thickness (mm)

