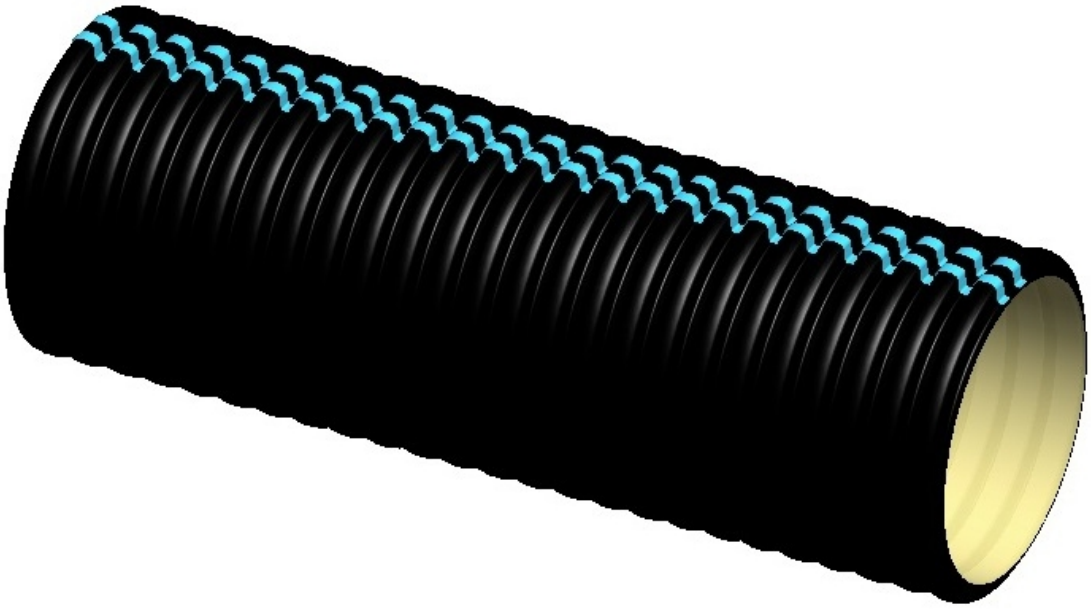
MAXIpipe

Corrugated Plastic Pipe



ADVANTAGES FOR ENGINEERS AND CONTRACTORS

Maxipipe is a corrugated pipe for non-pressure applications. Using modern co-extrusion techniques, the pipes can be manufactured with a smooth bore for optimum hydraulic performance and a corrugated outside for a high stiffness-to-weight ratio.

Combining the strength and toughness of advanced polymer systems with a unique wall structure, Maxipipe provides an environmentally sensitive and cost-effective piping solution for drainage and sewerage applications in nominal sizes from 100-750mm.

DESIGN AND PERFORMANCE ADVANTAGES FOR ENGINEERS

High Density Polyethylene (HDPE) and Polypropylene (PP) Maxipipe are proven performers in the municipal, industrial, farming and forestry pipe markets. Engineered for gravity flow systems, an extensive range of Maxipipe designs are available to meet New Zealand standards and project requirements. Design and performance advantages include:

STRENGTH
The corrugated exterior provides this product with its inherent minimum pipe stiffness. The smooth inner provides longitudinal stiffness which enables alignment and grade to be maintained in the trench during installation

IMPACT RESISTANCE
Maxipipe can take bumps during handling, moving and installation. The combination of the flexible material and its unique corrugated exterior makes Maxipipe capable of sustaining impact in both warm and cold weather installations.

UV RESISTANCE
Maxipipe contains carbon black additives to protect the product from ultraviolet light and all colours contain a minimum 0.2% HALS for up to 2 years UV protection when stored outdoors. This gives Maxipipe maximum weather resistance where continuous exposure to the elements is expected.

CHEMICAL RESISTANCE
HDPE and PP have the highest chemical resistance of all traditional sewer products. Maxipipe gives the gravity flow sewer the same exceptional performance that HDPE and PP have exhibited in other civil applications, remaining tough and resistant under conditions that could seriously damage conventional materials.

PH RESISTANCE
HDPE and PP provide excellent resistance to both acidic and alkaline environments in the range of 1.25 to 14.

ABRASION RESISTANCE
Abrasion is the wearing of a pipe material surface caused by an abrasive material such as gravel or rock being carried by the flow. Tests indicate that HDPE (and to a slightly higher degree PP) is highly resistant to abrasion, giving it significant advantages over other pipe materials in abrasive environments.

HYDRAULIC PERFORMANCE
Research and years of service have shown HDPE and PP smooth bore pipes offer flow characteristics that are superior to traditional materials such as concrete and vitrified clay. Using the Colebrook-White formula for water velocity in a smooth bore pipe, in laminar conditions widely recognised as the most accurate, the roughness coefficient k is as follows:

HDPE and PP	0.003 - 0.015
Concrete	0.030 - 0.150
Vitrified Clay	0.150 - 0.600

INSTALLATION ADVANTAGES FOR CONTRACTOR

The design and construction of Maxipipe offers a distinct weight advantage over conventional pipe. It provides ease of handling, positioning, installing and connecting which conventional pipes cannot match. Installation advantages include:

SAVINGS ON INSTALLATION
Due to its light weight, less manpower and machinery is needed to transport, handle and connect Maxipipe compared with concrete pipe.

FITTINGS
Maxipipe comes with a full range of fittings which are fabricated and plastic-welded. Standard fittings are readily available and custom-made fittings can be fabricated to suit special projects.

FASTER INSTALLATION
Standard 6m lengths are easily handled using minimal equipment. Longer lengths mean less joins and less chance of leakage. Comparative production rates from US operators show corrugated pipe can be installed 25% faster than concrete pipe of the same diameter. Nominal diameters from 225-750mm are available in standard EPDM rubber ring spigot/socket configuration in 6m and 3m nominal lengths.

IMPACT TOUGHNESS
Maxipipe is highly resistant to the rigours of installation handling in New Zealand's tough environment. Maxipipe can be installed with confidence in the hottest of summer and coldest of winter conditions.

SAFER HANDLING
At less than 10% of the weight per metre of concrete pipe, Maxipipe gives the installer a big safety advantage. For example, a 2.4m length of 750mm diameter concrete pipe weighs more than 1700kg and an equal length of 750mm Maxistorm weighs less than 70kg.

QUICK ON-SITE CUTTING
Maxipipe can be trimmed in minutes using a handsaw, jigsaw or chainsaw.