Spiral

Engineered Pipe and Tank Systems

RIBFLO PIPE

MS ISO 9002 REG. NO AR2379

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INTRODUCTION

Ribflo Corrugated Subsoil Drainage Pipe is made from PE resin that well known for its strong structural strength and durability as drainage or discharge pipe that suitable to install in any soil conditions. The corrugated profile is special designed to suit any trenching and soil conditions with objective to achieve perfect drainage system. The Ribflo pipes are normally installed in shallow buried depth without heavy traffic load.

The subsoil drainage pipe is available in both perforated and non-perforated design for various applications. With its uniform slot pattern throughout the pipes, drainage performance is guaranteed.

GENERAL SPECIFICATION

Material:
PE 100

Reference Standard:
AS 2439 Part 1

Size:
ND 175mm, 100mm

Slotted area per meter of pipe can be as high as 1500mm^2 or more.

ADVANTAGE

- Long lengths of coils to enable high speed installation with less joints
- Light Weight
- Even and efficient drainage through the uniform slot pattern
- Corrosion resistant
- Great flexibility

APPLICATION

- Road and highway
- Swamp, plantation and agriculture land
- Retaining structure wall
- Garden, golf course, stadium and school field
- Leaches discharge pipe for landfill.
- Building Foundation

DESIGN CONSIDERATION

Rough Guide for Depth and Spacing for Subsoil Pipes Vs Soil Type

SOIL TYPE	DEPTH (m)	SPACING (m)	SOIL PERMEABLITY
Sand	0.6 - 0.9	15.0 - 23.0	High / Medium
Loam	0.9 - 1.2	12.0 - 15.0	Medium / Low
Clay	0.9 - 1.2	5.0 - 6.0	Low

Note:
1. The depth of the impermeable soil layer is the critical factor in determining maximum drain depth. Spacing varies depending on the soil texture.
2. In some fine sand and coarse silt soils surrounding, a filter sock may be used to restrict the sediment from entering the drain line.

STANDARD DETAILS

Production Data in accordance with AS 2439 Part 1

Dimension:

Nominal Diameter (mm)	175	100
Internal Diameter (mm)	150	85
No. of Slotted Rows	3	6
Slot Area Per Meter of Pipe (mm^2)	>1500	>1500
Length of Pipe Per Coil (m)	50	100

Note:
For ND 175mm size is an OEM product

JOINTING

To join RIBFLO:

Cut off a length approximately 250mm and slit it open lengthwise. Place the two ends to be joined together and snap the slit length equidistant over them. Normally, this is all you need to do. It is recommended to bind joints with light wire for extra strength.

Type of Fabricated Fitting:

Y-Joint, Tee-Joint, Reducer and End Cap

LAYING PROCEDURE

- Dig a narrow trench approximately 2 x the outer diameter of the pipe is sufficient. The gradient of the trench and pipe should be no less than on the following gradient.

DIAMETER	GRADIENT
100 mm	1 in 400
175 mm	1 in 1000

Many successful installation use gradient between the 1 in 80 and 1 in 120 grade.

- A layer of screening should first be placed in the trench to take out any local irregularrities in the trench bed and provide a drainage path underneath the Ribflo Pipes. Aggregate to a maximum size of 13mm or coarse sand may be used as filter material. This layer should be a minimum depth of 50mm. Lay RIBFLO pipes on the trench floor after making sure the bed is evenly graded.
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- An envelope of granular aggregate around the Ribflo Pipe to depth of 100mm to 150mm improves the flow of soil water.
- When installing Ribflo Pipes, trench alignments should follow the contours of the land i.e. at right angles to the slope of the land and must avoid heavy clay backfill.