

**Standard Practice for
Installation of Annular Corrugated Profile Wall
Polyethylene Pipe for
Agricultural Drainage or Water Table Control**

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Foreword

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The purpose of this technical note is to provide general information on resistance of solid wall polyethylene pipe to a sanitary sewage environment.

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SCOPE

This practice is recommended for agricultural subsurface drainage or water table control installations using Annular Corrugated Profile Wall Polyethylene Pipe (Double Wall Pipe). It is not recommended for sanitary or storm sewer applications. Procedures are outlined to minimize pipe deflection or structural damage during and after the installation process. These installation procedures are in accordance with “flexible conduit” principles.

MATERIAL

Pipe and Fittings installed under this specification shall comply with the requirements for materials, test methods, dimensions, and marking in accordance with the current issue of AASHTO M252 type S and SP for 4” through 10” diameters, or ASTM F 2306 for 12” through 60” diameters except there shall be no requirement for the NCLS test for ASTM F2306 pipe and fittings.

GENERAL REQUIREMENTS

The maximum and minimum burial depth are affected by the following factors: groove support angle of the trench bottom, bedding, blinding backfill, soil density, envelope density, envelope placement, pipe stiffness, the live load expected, desired water table depth, and width of trench.

Minimum Cover: The minimum recommended cover needed to protect the pipe is 2 ft. Granular bedding or special construction techniques may be used to reduce the recommended minimum cover.

Maximum Cover: The maximum burial depth is influenced by such factors as degree of compaction, type of bedding, support from the trench bottom, trench width, size of pipe, pipe stiffness, weight of backfill, and live loads imposed. In general, when pipes are to be installed without the benefit of an Engineered design, the maximum depth of cover should be limited to 6 feet. For installation at depths greater than 6 feet, an Engineer should be retained to review the design and to develop site specific recommendations to ensure a successful installation.

Trench Width: Increasing the trench width increases the soil load on the pipe. Side clearances of more than 6 in. on each side should only be used with an engineering design and special construction. Trench width must be at least 3 in. wider than the pipe on each side for open trench installation to allow sufficient bedding to support the pipe.

- Minimum Pipe Cover – 2 feet
- Maximum Pipe Cover – 6 feet
- Minimum Trench Width – Pipe OD plus 6 inches
- Maximum Trench Width – Pipe OD plus 12 inches