

Introduction

Prinsco’s Goldflex® is a flexible dual-wall pipe for the agricultural market. 8”, 12”, and 15” Goldflex is available in large coils and can be installed using a trencher or tile plow with a proper boot, thereby eliminating the need for workers in an open trench. The information presented here details recommendations for boot design, burial depths, and installation techniques, along with additional considerations for installing Goldflex pipe.



Figure 1: Goldflex Pipe

Boot Design Recommendations

Optimizing factors of boot width, bend radius, shaped bottom, and cutting plate width will allow the pipe to move through the boot while also providing proper support to the installed pipe.

The width of the inside of the boot shall be approximately **3” wider** than the outside diameter (OD) of the pipe (Figure 2). Therefore, a boot for 12” Goldflex pipe will be 17.5” wide considering the OD of a 12” pipe is approximately 14.5” (Table 1). The excess width will help aid in initially feeding the pipe through the boot.

The boot shall have a minimum **40” to 50” bend radius** depending on the pipe diameter (Table 1). Many commercial boots have a greater bend radius, which may be considered for use for installation of Goldflex. Contact your Prinsco representative for questions on specific boots.

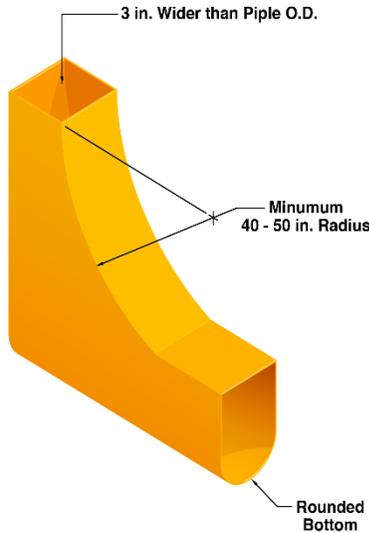


Figure 2: Boot Design Example

Table 1: Goldflex Pipe and Recommended Boot Dimensions

Nominal Pipe ID	Approx. Pipe OD	Boot Width	Minimum Boot Bend Radius
8" (200mm)	9.25" (240mm)	12.25" (315mm)	40" (1000mm)
12" (300mm)	14.5" (365mm)	17.5" (440mm)	50" (1250mm)
15" (375mm)	17.75" (445mm)	20.75" (520mm)	50" (1500mm)

The boot shall have a **rounded bottom** similar to the OD of the pipe to provide the installed pipe with proper support.

The cutting plate shall be roughly **6” wider** than the OD of the pipe to allow room for the boot and pipe to be pulled through the trench with ease while leaving enough soil in tact to provide proper support around the pipe.

Burial Depth

The maximum burial depth is significantly influenced by the quality and compaction level of the soil backfill around the pipe. Goldflex, along with all flexible pipe, relies on the strength of the soil around it to help carry the overburden load. In a tile plow application, an adequately shaped trench bottom is necessary to provide support to the pipe. With this in mind, the maximum recommended burial depth for Goldflex pipe installed in native soil by a tile plow is **8 feet**. Reference Prinsco’s *Agricultural Installation Guide* for additional information.



Installation Recommendations

- To aid with installation, a support should be used to help guide the pipe from the ground into the boot and avoid obstacles (Figure 3). If a guide is not used, someone should walk with the tile plow to support the pipe and form an even arch into the boot.
- Split couplers and a generous amount of tile tape should be used when connecting two ends of Goldflex pipe coils to ensure they do not pull apart during installation. A double-wide split coupler may also be utilized to further secure the connection.

Additional Considerations

Below are some additional considerations that should be made when installing Goldflex pipe:

- An overcut, or sub-cut, may be required for deeper burial depths (Figure 4). The depth and use of an overcut will vary based on pipe diameter, soil type, moisture content, ground temperature, etc.
- Special care shall be taken when water table depths are at or near the ground surface. Soil strength and support around the pipe may be reduced with high water levels, thus reducing the load-carrying strength of the installed pipe.
- The same care and methods that are used for single-wall installations are recommended for Goldflex as well. Refer to Prinsco's *Agricultural Installation Guide* for additional installation recommendations.



Figure 3: Goldflex Support Guide

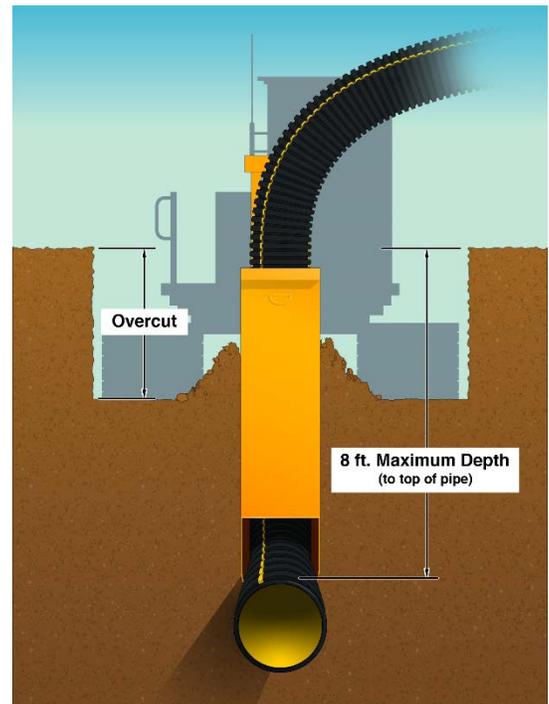


Figure 4: Goldflex Burial Depth and Overcut