

# Haviland Drainage Products Co.

SMOOTH-FLOW F-477 PIPE SPECIFICATIONS		S
Diameter:	4"-60" (100-1500mm)	DRAINAGE
Length:	20' Sections	solutions, inc (317) 346-4110
Joint System:	Bell & Spigot	www.drainagesolutionsinc.com
Joint Performance:	Soil-Tight	
Gasket:	Meets or exceeds ASTM F477	
Specifications:	AASHTO M294, AASHTO M252, ASTM D3350, ASTM F477, ASTM F2306	

## **Description**

This specification includes Haviland Smooth-Flow F-477 dual wall pipe, diameters 4"-60" (100-1500mm), for use in non-pressure gravity flow applications, including storm sewers, culverts, highway drains, and various other gravity flow drainage applications.

# **Pipe Requirements**

Smooth-Flow F-477 pipe meets or exceeds specifications set forth in AASHTO M294, Type S.

## **Material Properties**

Raw materials used in the manufacture of Smooth-Flow pipe and fittings are high density polyethylene, with a minimum cell class of 424420C for 4" to 10" and 435420C for 12" to 60", conforming to the requirements of ASTM D3350

#### **Joint Performance**

Smooth-Flow F-477 pipe is joined with a bell & spigot joint system, made soil-tight by compressing a rubber gasket between the bell and spigot ends of the pipe. The pre-lube gasket conforms to the requirements of ASTM F477. Gaskets are installed before shipment and protected by a removable plastic wrap. During pipe installation and joint assembly, a joint lubricant is to be used. This lubricant is available from Haviland Drainage Products Co.

