

**LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
SPECIFICATIONS**

**DUCT AND FITTINGS, HIGH DENSITY POLYETHYLENE,
FOR ELECTRICAL WIRING**

DESCRIPTION:

The duct shall be manufactured of virgin high density polyethylene. The addition of clean rework material is permissible in duct manufacture. Duct shall be smooth wall construction and gray in color. The duct shall be capable of being coiled in continuous lengths, transported, stored outdoors and uncoiled for installation without affecting its properties or performance. Duct shall be marked with a durable identification showing the name or trademark of the manufacturer, date of manufacture (in following format: MM-YY), and duct size (i.e., 2" IPS (Iron Pipe Size) SCH-80).

WORKMANSHIP:

The duct shall be free of visible cracks, holes or other physical defects that would degrade its performance. Duct shall be as uniform in color, dimensions, density and wall thickness as possible. Duct color shall include a UV light stabilizer to protect duct for a minimum of twelve (12) months in direct sunlight.

DIMENSIONS:

The dimensions of the duct shall be as follows:

SIZE	O. D.	MIN. WALL THICKNESS
1 Inch IPS, Schedule 40	1.315	.133
2 Inch IPS, Schedule 80	2.375	.218
3 Inch IPS, Schedule 80	3.500	.300

PULL TAPE & LUBRICANT:

Pull tape shall be composed of polyester material and have a minimum tensile strength of 1800 lbs (PNA (Petroflex North America) No. WP1800-03). Lubricant shall be certified by manufacturer for installation of wire in a high density polyethylene duct. Lubricant shall be completely effective from 20 - 250 degrees Fahrenheit, will not harm duct, cable or cable insulation. Duct shall have cable pulling lubricant and pull tape pre-installed by the manufacturer.

INSTALLATION:

Duct shall be capable of being direct buried by plowing or trenching with no special consideration to using selective backfill. The duct shall also be capable of being encased in concrete with no negative effects on performance or to contents therein.

PACKAGING AND SHIPPING:

Duct shall be provided on metal non-returnable reels large enough to allow maximum lengths possible with no joints or splices. Maximum reel sizes to be:

1 inch duct - 4 foot diameter

2 inch duct - 8 foot diameter

3 inch duct - 9 1/2 foot diameter

Duct ends shall be capped to prevent the entrance of moisture, dirt and/or other foreign matter.

SAP MATERIAL MASTER NUMBERS:

10695 (12-50-0100)	1 inch IPS, Sch 40, gray, 2,400 feet continuous length per reel, Petroduct No. P100 or equal
10696 (12-50-0200)	2 inch IPS, Sch 80, gray, 3,000 feet continuous length per reel, Petroduct No. P200 or equal
10697 (12-50-0300)	3 inch ISP, Sch 80, gray, 1,600 feet continuous length per reel, Petroduct No. P300 or equal
10698 (12-50-0410)	1 inch coupling, for duct, pvc outer shell with polyurethane elastomer inner sleeve, PNA No. EL-131 or equal
10699 (12-50-0420)	2 inch coupling, for duct, pvc outer shell with polyurethane elastomer inner sleeve, PNA No EL-237 or equal
10700 (12-50-0430)	3 inch coupling for duct, pvc outer shell with polyurethane elastomer inner sleeve, PNA No. EL-350 or equal