

INNERDUCT

INNERDUCT

Innerduct is manufactured from High Density Polyethylene in accordance with the specifications of ASTM F-2160 and/or NEMA TC 7. Other dimensional requirements may be acceptable upon request.

Innerduct offers excellent characteristics that make it ideal, including:

- High strength to endure heavy external loads
- Its flexibility, toughness, light weight, and impact resistance help lower installation cost
- Resist corrosive chemicals and aggressive soils
- Long term strength for increased life and performance
- Moisture proof and watertight
- Coils provide for fewer joints and lower installation costs
- Does not support biological growth
- Color-coded for easy identification

To decrease costly shoring and hazardous working conditions the duct can be assembled above the ditch, plowed in, buried in open ditches or pulled through existing conduit.

Innerduct shall be joined by either heat fusion or mechanical fittings. Innerduct is offered in various sizes and wall thickness, some of which are covered in the charts on next pages. The duct may be ordered in continuous coils, with or without steel reels, or produced in straight lengths up to 50 feet.

Vikimatic stocks a vast supply of Innerduct to meet most applications. Special orders are also accepted with usually one of the quickest turnaround in the business. Less than truckload orders are shipped on common carriers that offer cost effective and timely service. Hot Shot services for quick delivery needs are also available.



tidbit

Most common innerduct colors are orange and black. Other options are blue, grey, green, yellow, white, red, and striped.

O.D. CONTROLLED (SDR) INNERDUCT DIMENSIONAL SPECIFICATIONS

The following table represents the specifications of ASTM F-2160 and NEMA TC-7 for O.D. controlled conduit. 1" - 6" sizes.

Sizes	Wall Thickness	Nominal O.D.	Nominal I.D.	Minimum Wall	Nominal Lbs/Ft	Standard Coil/Reels Lengths	Standard Truck	Steel Reel Size - FxTxD*
1"	SDR 9	1.315"	1.00"	.146"	0.23	500'	117000'	Coils
	SDR 9	1.315"	1.07"	.120"	0.20	5000'	80000'	70x38x30
	SDR 13.5	1.315"	1.12"	.097"	0.17	8000'	96000'	84x43x36
1-1/4"	SDR 9	1.660"	1.26"	.184"	0.37	500'	78000'	Coils
	SDR 11	1.660"	1.34"	.151"	0.31	2000'	32000'	70x28x30
	SDR 13.5	1.660"	1.39"	.123"	0.26	5000'	70000'	84x42x36
	SDR 15.5	1.660"	1.44"	.017"	0.23	8000'	96000'	96x43x30
1-1/2"	SDR 9	1.900"	1.45"	.211"	0.49	500'	36000'	Coils
	SDR 11	1.900"	1.53"	.173"	0.41	4000'	56000'	84x42x36
	SDR 13.5	1.900"	1.60"	.141"	0.34	6000'	72000'	96x45x36
2"	SDR 9	2.375"	1.81"	.264"	0.76	500'	24500'	Coils
	SDR 11	2.375"	1.91"	.216"	0.64		18000'	70x42x36
	SDR 13.5	2.375"	2.00"	.176"	0.53	1000'	18000'	70x42x36
	SDR 15.5	2.375"	2.04"	.153"	0.47	2500'	35000'	84x42x36
	SDR 17	2.375"	2.07"	.140"	0.43	4000'	48000'	96x45x36
2-1/2"	SDR 11	2.875"	2.32"	.261"	0.94	1500'	18000'	96x38x55
	SDR 13.5	2.875"	2.42"	.213"	0.78			
3"	SDR 11	3.500"	2.86"	.318"	1.39	500'	12000'	Coils
	SDR 13.5	3.500"	2.98"	.259"	1.15	1000'	12000'	96x38x55
	SDR 15.5	3.500"	3.04"	.226"	1.02	1250'	15000'	96x45x55
4"	SDR 9	4.500"	3.50"	.500"	2.77	500' 550' 750'	6000'	Coils 96x45x70 102x45x70
	SDR 11	4.500"	3.68"	.409"	2.29		6600'	
	SDR 13.5	4.500"	3.83"	.333"	1.90		9000'	
	SDR 15.5	4.500"	3.92"	.290"	1.68			
5"	SDR 11	5.563"	4.55"	.506"	3.50	500'	4000'	114x45x80
	SDR 13.5	5.563"	4.73"	.412"	2.91	500'		
6"***	SDR 11	6.625"	5.42"	.602"	4.97	450'	3600'	120x45x84
	SDR 13.5	6.625"	5.64"	.491"	4.13	450'		

*Flange x Internal Traverse x Drum (in inches)

** Coiled duct truckloads may require special state permits.

Other reel and coil sizes are available upon request.

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I.D. CONTROLLED (SIDR) INNERDUCT DIMENSIONAL SPECIFICATIONS

The following table represents the dimensional specifications of ASTM D-2239, and ASTM F-2160 for I.D.

Sizes	Wall Thickness	Nominal O.D.	Nominal I.D.	Minimum Wall	Nominal Lbs/Ft	Standard Coil/Reels Lengths	Standard Truck	Steel Reel Size - FxTxD*
1"	SIDR 11.5	1.213"	1.049"	.091"	0.15	5000'	80000'	70x38x30
	SIDR 15	1.189"	1.049"	.070"	0.11	8000'	96000'	84x43x36
1-1/4"	SIDR 9	1.690"	1.380"	.153"	0.33	5000'	70000'	84x42x36
	SIDR 11.5	1.627"	1.380"	.120"	0.25	8000'	96000'	96x43x30
1-1/2"	SIDR 11.5	1.890"	1.610"	.140"	0.34	4000'	56000'	84x42x36
	SIDR 15	1.825"	1.610"	.107"	0.26	6000'	72000'	96x45x36
2"	SIDR 11.5	2.427"	2.067"	.180"	0.56	2500'	35000'	84x42x36
4"	SIDR 11.5	4.750"	4.026"	.350"	2.12	500'	6000'	96x45x70
						700'	8400'	102x45x70

*Flange x Internal Traverse x Drum (in inches)

RIBBED HDPE INNERDUCT SPECIFICATIONS

Manufactured to specifications of ASTM F2160. It has a lower coefficient of friction when compared to smooth duct and is available in a wide variety of colors, stripes and sizes. See table below for specifications.

Sizes	Wall Thickness	Nominal O.D.	Nominal I.D.	Minimum Wall	Nominal Lbs/Ft	Standard Coil/Reels Lengths	Standard Truck	Steel Reel Size - FxTxD*
1"	13.5	1.315"	1.11"	.097"	.17	5000'	80000'	70x38x30
1-1/4"	13.5	1.660"	1.41"	.123"	.26	5000'	70000'	84x42x36
1-1/2"	13.5	1.900"	1.61"	.141"	.34	4000'	56000'	84x42x36
2"	13.5	2.375"	2.02"	.176"	.53	2500'	35000'	84x42x36
3"	13.5	3.500"	2.97"	.259"	1.15	1000'	12000'	96x38x55
4"	13.5	4.500"	3.82"	.333"	1.90	550'	6600'	96x45x70

*Flange x Internal Traverse x Drum (in inches)

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SCHEDULE 40 AND SCHEDULE 80 O.D. CONTROLLED INNERDUCT SPECIFICATIONS

The following table represents the specifications of ASTM F-2160 for O.D. Controlled.

Sizes	Wall Thickness	Nominal O.D.	Nominal I.D.	Minimum Wall	Nominal Lbs/Ft	Standard Coil/Reels Lengths	Standard Truck	Steel Reel Size - FxTxD*
1"	SCH 40	1.315"	1.04"	.133"	0.22	5000'	80000'	70x38x30
	SCH 80	1.315"	0.95"	.179"	0.28	8000'	96000'	84x43x36
1-1/4"	SCH 40	1.660"	1.38"	.140"	0.29	5000'	70000'	84x42x36
	SCH 80	1.660"	1.27"	.191"	0.39	8000'	96000'	96x43x30
1-1/2"	SCH 40	1.900"	1.61"	.145"	0.35	4000'	56000'	84x42x36
	SCH 80	1.900"	1.50"	.200"	0.47	6000'	72000'	96x45x36
2"	SCH 40	2.375"	2.06"	.154"	0.47	2500'	35000'	84x42x36
	SCH 80	2.375"	1.93"	.218"	0.64	4000'	48000'	96x45x36
2-1/2"	SCH 40	2.875"	2.46"	.203"	0.75	1500'	18000'	96x38x55
	SCH 80	2.875"	2.32"	.276"	0.99	1500'	18000'	96x38x55
3"	SCH 40	3.500"	3.06"	.216"	0.98	1000'	12000'	96x38x55
	SCH 80	3.500"	2.90"	.300"	1.32	1250'	15000'	96x45x55
4"	SCH 40	4.500"	4.02"	.237"	1.39	20' & 40'	16240'	Sticks Only
	SCH 80	4.500"	3.82"	.337"	1.92	550'	6600'	96x45x70
5"	SCH 40	5.563"	5.04"	.258"	1.89	20' & 40'	12160'	Sticks Only
	SCH 80	5.563"	4.81"	.375"	2.69	20' & 40'	12160'	Sticks Only
6"	SCH 40	6.625"	6.03"	.280"	2.44	20' & 40'	7280'	Sticks Only
	SCH 80	6.625"	5.70"	.432"	3.67	20' & 40'	7280'	Sticks Only
8"	SCH 40	8.625"	7.94"	.322"	3.68	40' & 50'	4480'	Sticks Only
10"	SCH 40	10.75"	9.97"	.365"	5.21	40' & 50'	2880'	Sticks Only
12"	SCH 40	12.75"	11.89"	.406"	6.90	40' & 50'	2240'	Sticks Only

*Flange x Internal Traverse x Drum (in inches)
Other reel and coil sizes are available upon request.

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HDPE LARGE DIAMETER CONDUIT

Available in 20', 40' and 50' lengths. Meets ASTM F 2160 Specifications.

O.D. Controlled.

Pipe Size	Nominal O.D.	Min. Wall	SDR 9 Average I.D.	Weight (lbs/ft.)	Min. Wall	SDR 11 Average I.D.	Weight (lbs/ft.)
4"	4.500	0.500	3.44	2.74	0.409	3.63	2.29
5"	5.563	0.618	4.25	4.18	0.506	4.49	3.51
6"	6.625	0.736	5.06	5.93	0.602	5.34	4.97
8"	8.625	0.958	6.59	10.05	0.784	6.96	8.43
10"	10.750	1.194	8.21	15.62	0.977	8.67	13.09
12"	12.750	1.417	9.74	21.97	1.159	10.29	18.41
14"	14.000	1.556	10.70	26.49	1.273	11.30	22.20

Pipe Size	Nominal O.D.	Min. Wall	SDR 13.5 Average I.D.	Weight (lbs/ft.)	Min. Wall	SDR 17 Average I.D.	Weight (lbs/ft.)
4"	4.500	0.333	3.79	1.91	0.265	3.93	1.54
5"	5.563	0.412	4.68	2.91	0.327	4.86	2.35
6"	6.625	0.491	5.58	4.13	0.390	5.79	3.34
8"	8.625	0.639	7.27	7.00	0.507	7.54	5.66
10"	10.750	0.796	9.06	10.88	0.632	9.40	8.79
12"	12.750	0.944	10.74	15.30	0.750	11.16	12.36
14"	14.000	1.037	11.80	18.45	0.824	12.25	14.90

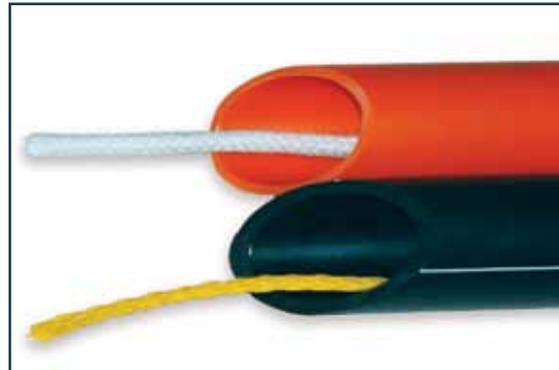
PRE-INSTALLED PULL TAPE/PULL ROPE

HDPE Innerduct is available with pull tape or pull rope installed. The following table represents the characteristics listed by the manufacturer of the most popular applications for both rope and tape.

Product	Material	Approximate Width	Tensile Strength	Sequential Footage Markings	Pre-lubricated
Rope	Polypropylene	1/4"	1250 lbs.	No	No
Non-Sequential Tape	Polyester	1/2"	1130 lbs.	No	No
1250 lb Pull Tape	Polyester	1/2"	1250 lbs.	Yes	Yes
1800 lb Pull Tape	Polyester	5/8"	1800 lbs.	Yes	Yes
2500 lb Pull Tape	Polyester	3/4"	2500 lbs.	Yes	Yes



HDPE Conduit with Pull Tape



HDPE Conduit with Pull Rope

PRODUCT SPECIFICATION & TECHNICAL INFORMATION INNERDUCT

The previous innerduct products are certified to be manufactured from select high density polyethylene copolymers (see typical properties below) and meet specifications set forth in ASTM D-3350, ASTM F-2160, and NEMA TC-7. The high density polyethylene copolymers are selected specifically for use in telecommunications, electrical/power or telephone ducting applications, while keeping in mind the required properties to balance stiffness, ESCR and molecular weight to provide toughness and crush strength.

Typical Properties (1)	English	SI Units	ASTM Method
Density	-	0.948 g/cc	D 4883
Melt Index ²	-	0.22 g/10 min	D 1238
Tensile Strength			
@ Yield (2 in/min)	3400 psi	23.4 MPa	D 638
@ Break (2 in/min)	4500 psi	31.0 MPa	D 638
Elongation @ Break (2 in/min)	>800%	>800%	D 638
Flexural Modulus ³	130,000 psi	897 MPa	D 790
Hardness (Shore D)	68	68	D 2240
Deflection Temperature @66 psi	156°F	69°C	D 648
Brittleness Temperature	<-180°F	<-118°C	D 746
OIT @ 200°C	>20 min.	>20 min.	D 3895 Modified ⁴
Environmental Stress Crack Resistance ⁵	>96 hrs	>96 hrs	D 1693
Environmental Stress Crack Resistance ⁶	>192 hrs	>192 hrs	D 1693
Cell Classification	335430A	335430A	D 3350

(1) Typical properties will vary within specification limits

(2) 190°C / 2160g

(3) 2% Secant-Method 1

(4) Excludes Copper Mesh

(5) Condition B, 10% Igepal, F10

(6) Condition C, 100% Igepal, F20

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SDR or Standard Dimension Ratio relates the outside diameter (OD) of the duct to its wall thickness (t), so $SDR = OD / t$.

SIDR or Standard Inside Dimension Ratio relates the inside diameter (ID) of the duct to its wall thickness (t), so $SIDR = ID / t$.

INNERDUCT

PLENUM DUCT

Plenum Duct is a flexible, non-metallic, corrugated raceway used for effective cable and fiber optic management within interior raceways.

Plenum is offered in 1", 1-1/4" and 1-1/2", with pre-installed pull tape for easy cable installation. The standard color is orange and is offered in a variety of other colors. Sequential marked footage is standard. Custom options, such as multiple colors per reel and Slit Duct, are also available.

Future growth or maintenance of your interior cable system is made easy with Plenum Duct.

PLENUM REELS

Size	Color	Nominal I. D.	Nominal O. D.	Pull Tape	Reel Size	Reel Length (ft.)
1"	Orange	1.049"	1.35"	900 lb	36-36-21	500
1"	Orange	1.049"	1.35"	900 lb	36-36-21	1000
1"	Orange	1.049"	1.35"	900 lb	44-36-21	2000
1"	Orange	1.049"	1.35"	900 lb	48-41-24	2800
1"	Orange	1.049"	1.35"	900 lb	66-41-24	5000
1"	Orange	1.049"	1.35"	900 lb	72-41-24	6000
1"	Orange	1.049"	1.35"	900 lb	82-41-24	9000
1-1/4"	Orange	1.25"	1.56"	900 lb	36-36-21	700
1-1/4"	Orange	1.25"	1.56"	900 lb	44-36-21	1500
1-1/4"	Orange	1.25"	1.56"	900 lb	48-41-24	1800
1-1/4"	Orange	1.25"	1.56"	900 lb	66-41-24	3400
1-1/4"	Orange	1.25"	1.56"	900 lb	72-41-24	4000
1-1/4"	Orange	1.25"	1.56"	900 lb	82-41-24	6000
1-1/2"	Orange	1.57"	1.80"	900 lb	36-36-21	500
1-1/2"	Orange	1.57"	1.80"	900 lb	44-36-21	700
1-1/2"	Orange	1.57"	1.80"	900 lb	48-41-24	1000
1-1/2"	Orange	1.57"	1.80"	900 lb	66-41-24	2500
1-1/2"	Orange	1.57"	1.80"	900 lb	72-41-24	3500
1-1/2"	Orange	1.57"	1.80"	900 lb	82-41-24	5000



PLENUM COILS

Size	Color	Nominal I. D.	Nominal O. D.	Pull Tape	Coil Length (ft.)
1"	Orange	1.049"	1.35"	900 lb	Up to 500
1-1/4"	Orange	1.25"	1.56"	900 lb	Up to 500
1-1/2"	Orange	1.57"	1.80"	900 lb	Up to 350

TEST RESULTS (USING TEST METHOD UL-2024)

Properties	Value
Smoke peak optical	0.02
Smoke average optical density	0.01
Max. flame spread distance (ft.)	1.5'
Max. flame temperature	554° F

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CORRUGATED HDPE DUCT

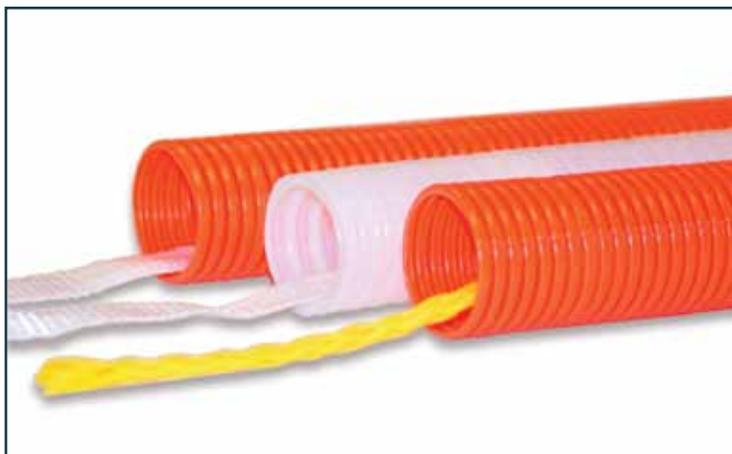
Corrugated HDPE is manufactured from High Density Polyethylene (HDPE) and is intended to be placed inside of existing innerduct. It's ideal for pulls under 1000 ft. and is designed to reduce surface contact when pulling cable. This lightweight product offers maximum flexibility, and allows for installation in small or restricted areas. Corrugated duct is available in 1", 1-1/4" and 1-1/2". The standard color is orange but is offered in a variety of other colors. Sequential marked footage is standard. Custom options, such as multiple colors per reel and Slit Duct, are also available.

CORRUGATED HDPE REELS

Size	Color	Nominal I. D.	Nominal O. D.	Pull Tape	Reel Size	Reel Length (ft.)
1"	Orange	1.049"	1.35"	900 lb	36-36-21	500
1"	Orange	1.049"	1.35"	900 lb	36-36-21	1000
1"	Orange	1.049"	1.35"	900 lb	44-36-21	2000
1"	Orange	1.049"	1.35"	900 lb	48-41-24	2800
1"	Orange	1.049"	1.35"	900 lb	66-41-24	5000
1"	Orange	1.049"	1.35"	900 lb	72-41-24	6000
1"	Orange	1.049"	1.35"	900 lb	82-41-24	9000
1-1/4"	Orange	1.25"	1.56"	900 lb	36-36-21	700
1-1/4"	Orange	1.25"	1.56"	900 lb	44-36-21	1500
1-1/4"	Orange	1.25"	1.56"	900 lb	48-41-24	1800
1-1/4"	Orange	1.25"	1.56"	900 lb	66-41-24	3400
1-1/4"	Orange	1.25"	1.56"	900 lb	72-41-24	4000
1-1/4"	Orange	1.25"	1.56"	900 lb	82-41-24	6000
1-1/2"	Orange	1.57"	1.80"	900 lb	36-36-21	500
1-1/2"	Orange	1.57"	1.80"	900 lb	44-36-21	700
1-1/2"	Orange	1.57"	1.80"	900 lb	48-41-24	1000
1-1/2"	Orange	1.57"	1.80"	900 lb	66-41-24	2500
1-1/2"	Orange	1.57"	1.80"	900 lb	72-41-24	3500
1-1/2"	Orange	1.57"	1.80"	900 lb	82-41-24	5000

CORRUGATED HDPE COILS

Size	Color	Nominal I. D.	Nominal O. D.	Pull Tape	Coil Length (ft.)
1"	Orange	1.049"	1.35"	900 lb	Up to 500
1-1/4"	Orange	1.25"	1.56"	900 lb	Up to 500
1-1/2"	Orange	1.57"	1.80"	900 lb	Up to 350



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INNERDUCT

RISER DUCT

Riser Duct is a flexible, non-metallic, corrugated raceway used for effective cable and fiber optic management within interior raceways. Riser Duct meets UL-(1666) standards safety test for flame propagation height of electrical and optical fiber cables installed vertically in shafts. Meets UL-2024 standards for safety optical fiber cable raceway. Riser Duct is offered in 1", 1-1/4" and 1-1/2", with pre-installed pull tape for easy cable installation. The standard color is orange and is offered in a variety of other colors. Sequential marked footage is standard. Custom color options are available.

RISER REELS

Size	Color	Nominal I. D.	Nominal O. D.	Pull Tape	Reel Size	Reel Length (ft.)
1"	Orange	1.049"	1.35"	900 lb	36-36-21	500
1"	Orange	1.049"	1.35"	900 lb	36-36-21	1000
1"	Orange	1.049"	1.35"	900 lb	44-36-21	2000
1"	Orange	1.049"	1.35"	900 lb	48-30-24	2800
1"	Orange	1.049"	1.35"	900 lb	66-41-24	5000
1"	Orange	1.049"	1.35"	900 lb	72-41-24	6000
1"	Orange	1.049"	1.35"	900 lb	82-41-24	9000
1-1/4"	Orange	1.25"	1.56"	900 lb	36-36-21	700
1-1/4"	Orange	1.25"	1.56"	900 lb	44-36-21	1000
1-1/4"	Orange	1.25"	1.56"	900 lb	48-41-24	1800
1-1/4"	Orange	1.25"	1.56"	900 lb	66-41-24	3400
1-1/4"	Orange	1.25"	1.56"	900 lb	72-41-24	4000
1-1/4"	Orange	1.25"	1.56"	900 lb	82-41-24	6000
1-1/2"	Orange	1.57"	1.80"	900 lb	36-36-21	500
1-1/2"	Orange	1.57"	1.80"	900 lb	44-36-21	700
1-1/2"	Orange	1.57"	1.80"	900 lb	48-30-24	1000
1-1/2"	Orange	1.57"	1.80"	900 lb	66-41-24	2500
1-1/2"	Orange	1.57"	1.80"	900 lb	72-41-24	3500
1-1/2"	Orange	1.57"	1.80"	900 lb	82-41-24	5000



RISER COILS

Size	Color	Nominal I. D.	Nominal O. D.	Pull Tape	Coil Length (ft.)
1"	Orange	1.049"	1.35"	900 lb	Up to 500
1-1/4"	Orange	1.25"	1.56"	900 lb	Up to 500
1-1/2"	Orange	1.57"	1.80"	900 lb	Up to 350

TEST RESULTS (USING TEST METHOD UL-2024)

Properties	Value
Smoke peak optical	0.02
Smoke average optical density	0.01
Max. flame spread distance (ft.)	1.5'
Max. flame temperature	554° F

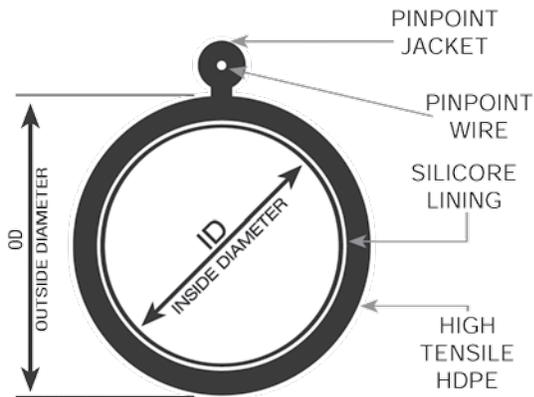
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PINPOINT® LOCATE BURIED DUCT

PINPOINT® is a proven, reliable method for locating buried duct. The PINPOINT® wire is encased in HDPE providing a corrosion-resistant conductor. Ideal for plow, open trench or directional bores. It is extremely functional at a wide range of frequencies, compatible with industry standard locating equipment. No special tools are required to couple the duct and the PINPOINT® wire - current coupling methods can be utilized.

Features & Benefits

- Wire is 18 AWG copper clad 30.041 ohm/1,000 ft 68°F
- Size ranges from 1/2" (13mm) to 2" (51mm)
- Available Smooth in/Smooth out and Smooth out/Ribbed in
- Available with Silicore permanent lining
- No special tools required
- Sequential markings in feet or meters
- Easily connected with standard couplers



PINPOINT® duct is available on steel reels or coils.

- PINPOINT® is available in DURATHANE fire retardant material
- PINPOINT® is available with a variety of ropes and tapes
- A full line of accessories is available for easier and faster duct installation, including splice kits and web slitters

Part Number Ordering Matrix Begins On Page 90

FUTUREPATH® FIBER OPTIC TECHNOLOGY

FuturePath® can be customized to meet your specific project needs; be it 7-way, 5-way, 4-way, 3-way or 2-way. FuturePath® can also be packaged as MicroDucts in an oversheath configuration for aerial, conduit, or buried applications to meet your specific needs.

Versatility

Fiber technology is constantly changing. By installing only the fibers you need today, you have the opportunity to utilize the latest in fiber technology as it becomes available in either a MicroCable or Blown Fiber configuration.

Efficiency

By reducing wasted conduit space, MicroTechnology allows maximum utilization of all current and future telecommunications infrastructure.

Enhanced Profitability

MicroTechnology allows maximum cost-effectiveness and greatest return on investment for existing and future right-of-way expenditures.

Network Expansion

By placing several MicroDucts into the larger empty ducts (or a few MicroDucts into occupied ducts), the concerns of future expansion are addressed. Future build-outs will not interrupt existing services.

Enhanced Utilization of Capital

MicroCable comes in sizes ranging from a 2 fiber to 144 fiber count cable. Micro fiber optic cable costs are generally lower. By using the lower fiber count cable, the upfront cost is dramatically less. You would only install the MicroCable as needed to satisfy a customer's present requirements for capacity. That way, you can keep your investment very closely tied to your present cash flow.

How it can be used...

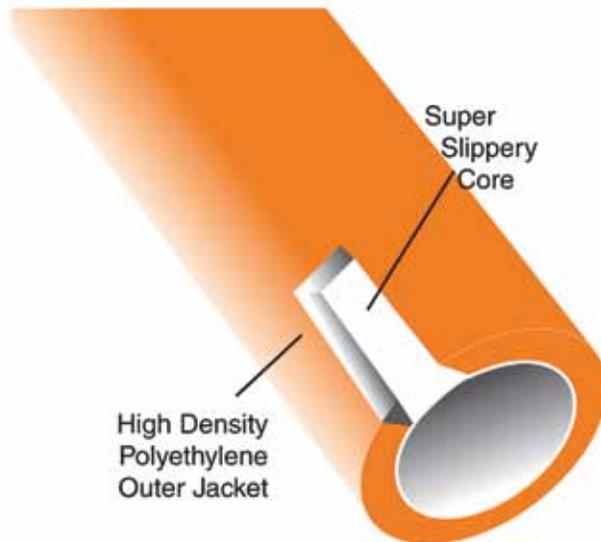
Your needs are changing and the world is changing. You have to be able to adjust with these changes and our products allow you to do that. Today's primary markets (Telecom, CATV and Power Utilities) need a future path for growth.



SILICORE®

SUPER SLICK PERMANENT LINING

SILICORE® is co-extruded with our tough, durable High Density Polyethylene (HDPE) jacket. SILICORE® ducts provide complete cable protection before, during and after installation. The ultra slick permanent lining remains for future repairs, replacements or upgrades.



Features & Benefits

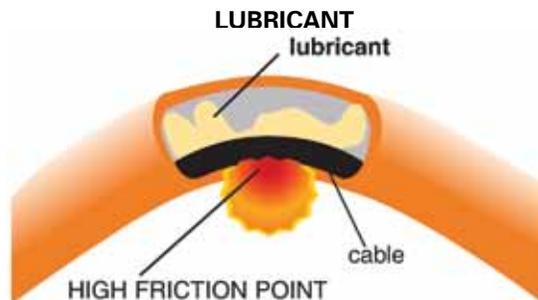
- Easier cable installation
- Reduced coefficient of friction
- Flexibility for growth
- Cost effective repairs or upgrades
- Can be extruded with most A-D Technologies product up to and including 3"

SILICORE® Smoothwall SILICORE® Ribbed SILICORE® Corrugated

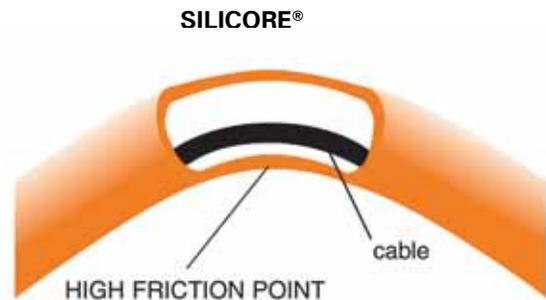


Solid Polymer
Super Slick Permanent Lining

How SILICORE® WORKS



Heat builds, lubricant dissipates causing direct contact between cable and HDPE duct. Installation friction increases causing damage where the cable contacts the duct.



Cable remains in contact with the permanent SILICORE® lining. Reduced burn through, low coefficient of friction, and easier, longer cable pulls!

ABOUT MAXCELL®

MaxCell® is the only flexible fabric innerduct system designed specifically for the network construction industry.

The unique fabric construction allows MaxCell to conform to the shape of cables placed within, greatly reducing the wasted space associated with rigid innerduct.

Today's network owners and builders use MaxCell to increase their cable density by as much as 300%. Faced with the challenge of deploying new infrastructure while minimizing investment costs, using MaxCell will:

- Reduce the number of conduits required for new network construction
- Minimize the need for additional conduit in occupied applications
- Enable incremental deployment to match system requirements

Over 150 million feet of MaxCell innerduct, equaling over 275 million feet of channel, has been successfully installed around the globe in a variety of applications including:

- Cable TV
- Telecom
- Wireless Backhaul
- Power/Utilities
- Municipalities
- University, Corporate, and Hospital campuses
- Military and Government installations

WHY MAXCELL?

- Save on network construction
- Eliminate new network construction
- Place 300% more cables
- Install MaxCell 2x faster
- Use 30% less manpower
- Reduce freight & storage costs

As the pioneer in fabric innerduct technology, MaxCell has the industry experience and know how to develop unique solutions for specific application issues. Whether overbuild of an existing network or the deployment of cable in a new FTTH system, MaxCell can help you provide the right product and right design to maximize the efficiency of your assets.

Independent surveys and actual field experience prove that MaxCell is a revolutionary product that reduces material and labor costs by 50% & more in most applications. Installers and network engineers can cut conduit installation time in half, and increase cable installation speed.

PRODUCT USES AND TYPES

MaxCell comes in a variety of sizes and configurations – all tailored to maximize your network structure. And with a complete line of complementary Installation and Termination accessories, we can provide a total package to make your network installation a breeze.

MaxCell is produced in:

- **Standard MaxCell** is available in sizes from 1.1" to 4", and in 1, 2 and 3-Cell configurations – giving you the flexibility to choose the right product for your system & your application.
- **Plenum and Riser** rated products are Low Smoke Zero Halogen versions for use in premise wiring. These products provide numerous low friction pathways for installation of multiple cables in a variety of building environments – including air handling space, raised floors, cable trays and riser ducts.
- **Detectable MaxCell** is configured like our standard product, but contains an 18 gauge copper tracer wire inserted in the edge for use in underground utility location.
- **Micro MaxCell** products can be used to create additional pathways in small conduits for Intelligent Transportation Systems (ITS) and Signalization projects.



More Space. More Productivity.



MAXCELL® APPLICATION GUIDE

MaxCell® product descriptions do not directly correlate to the size of conduits. 4" 3-Cell or 3" 3-Cell are not meant specifically for 4" or 3" conduits. The description only applies to the width of the product when pressed flat.

General guidelines for deciding which MaxCell to use in various applications.

MaxCell 3" 3-Cell

Designed for use in 3" or larger conduits. Multiple combinations of large, medium, and smaller cable sizes are applicable and anticipated.

Min Conduit ID	Suggested Product	Max # of Packs	Max # of Cables	Max Cable Dia. per Cell	Rec. Pull Length	Max Pull Length
3"	MaxCell 3" 3-Cell	2	6	1.03"	1250'	2000'
4"	MaxCell 3" 3-Cell	3	9	1.03"	1500'	2500'
5"	MaxCell 3" 3-Cell	4	12	1.03"	1500'	2500'
6"	MaxCell 3" 3-Cell	5	15	1.03"	1500'	2500'

MaxCell 4" 3-Cell

Designed for use in 4" or larger conduits. Multiple combinations of large, medium, and smaller cable sizes are applicable and anticipated. Since larger cable applications are anticipated, the number of cables and MaxCell packs that can be placed is reduced, therefore a smaller number of cables are available.

Min Conduit ID	Suggested Product	Max # of Packs	Max # of Cables	Max Cable Dia. per Cell	Rec. Pull Length	Max Pull Length
3"	MaxCell 4" 3-Cell	1	3	1.34"	1500'	2000'
4"	MaxCell 4" 3-Cell	2	6	1.34"	1500'	2500'
5"	MaxCell 4" 3-Cell	3	9	1.34"	1500'	2500'
6"	MaxCell 4" 3-Cell	4	12	1.34"	1500'	2500'

MaxCell 2" 3-Cell

Designed for use in 2" or larger conduits where three cables are being placed.

Min Conduit ID	Suggested Product	Max # of Packs	Max # of Cables	Max Cable Dia. per Cell	Rec. Pull Length	Max Pull Length
2"	MaxCell 2" 3-Cell	1	3	.70"	800'	1500'

MaxCell 2" 2-Cell

Designed for use in 1.75" or larger conduits where two cables are being placed.

Min Conduit ID	Suggested Product	Max # of Packs	Max # of Cables	Max Cable Dia. per Cell	Rec. Pull Length	Max Pull Length
2"	MaxCell 2" 2-Cell	1	2	.70"	800'	1500'

MaxCell 2" 1-Cell

Designed for use in 1.5" innerduct or larger conduits. It is designed to deploy an additional cable in a small confined or occupied Innerduct or conduit.

Min Conduit ID	Suggested Product	Max # of Packs	Max # of Cables	Max Cable Dia. per Cell	Rec. Pull Length	Max Pull Length
1.5" +	MaxCell 2" 1-Cell	1	1	.70"	800'	1500'

Micro MaxCell

This set of products was designed for use in 1.5" innerduct or large conduits. The small compact design is well suited for placing drop cables in FTTH applications.

Min Conduit ID	Suggested Product	Max # of Packs	Max # of Cables	Max Cable Dia. per Cell	Rec. Pull Length	Max Pull Length
1.25"	Micro 3-Cell	1	2	.40"	800'	1500'
1.25"	Micro 2-Cell	1	2	.40"	800'	1500'
1.0"	Micro 1-Cell	1	1	.40"	800'	1500'

Additional Cable

In some applications, an additional cable can be pulled in on top of the MaxCell if the customer pulls in a pull tape at the same time as placing a MaxCell pack. Multiple cables may be placed in a single cell provided the overall diameter of the cables does not exceed the maximum cell diameter. Application information above is provided as general guidelines for MaxCell use and is for reference only. Always consult with MaxCell Technical Support specialists to review your project needs.