

# SMOOTH WALL



## FEATURES

Smooth wall is the most common material used for containing and protecting underground communications wires, fiber optics and power cables. This product is tested and meets the requirements for ASTM F 2160. This conduit is packaged on large reels which promotes long runs with less joining.

- **Ductility:** HDPE conduit will better resist brittleness with age or cold weather.
- **Low temperature impact resistance:** HDPE withstands low temperature impact at 4 °F.
- **Flexibility:** HDPE flexes without breakage, even with ground heaves or shifts, over a wide range of temperatures.
- **Temperature versatility:** HDPE can be installed over an ambient temperature range of -30° F to 180° F.
- **Chemical resistance:** HDPE is highly resistant to a wide range of chemical agents even at elevated temperatures.
- **Lightweight:** Making it easy to handle and transport.

*Available in long continuous lengths on reels*

## CONDUIT MARKINGS

Our conduit is printed with identifications of a standard sequential foot markings, manufacturing date, location and can have your company name added.

## INSTALLATION METHODS

- Open Trench
- Directional Boring
- Plowing
- Concrete Encasement

## SOLID COLORS & STRIPES



*Custom colors available*

## ACCESSORIES

- **Preinstalled Pull Tape:** Our tape is made from low friction, high abrasion resistant yarns providing a low coefficient of friction. Available in 1250 lb. and 1800 lb. tensile strengths. Pre-installed pull tape substantially reduces cable installation labor, material, and inventory costs.
- **Ribbed In/Smooth Out:** Our longitudinal ribbed in pipes reduces friction during cable placement.
- **Polywater:** Reduces friction with ultra-thin coating levels.
- **Segmented Reels:** We can provide 2, 3 or 4 colors on a single reel.

## RESIN REQUIREMENTS – ASTM D 3350

ASTM TESTS	DESCRIPTION	
D-1505	Density g/cm <sup>3</sup>	0.941 - 0.955
D-1238	Melt Index, g/10 min Con 190/2.16	0.15 - 0.4
D-638	Tensile Strength at Yield (psi)	3000 - <4000
D-1693	ESCR Conditions B F20	> 192 hours
D-790	Flexural Modulus, Mpa (psi)	80,000 - <160,000

*Standard length tolerances will be held at +/-5% of the ordered lengths.*

## SMOOTH WALL SPECIFICATIONS

NOM. SIZE	NOM. ID	NOM OD	MIN. WALL	WGT/100 FT.	PULLED TENSILE SAFE (LBS)
<b>SDR-9 ASTM D3035 / F2160</b>					
1"	1.023	1.315	0.146	23.000	599
1-1/4"	1.292	1.660	0.184	36.599	953
1-1/2"	1.478	1.900	0.211	48.026	1250
2"	1.847	2.375	0.264	75.102	1955
3"	2.722	3.500	0.389	163.084	4245
4"	3.500	4.500	0.500	269.520	7016

NOM. SIZE	NOM. ID	NOM OD	MIN. WALL	WGT/100 FT.	PULLED TENSILE SAFE (LBS)
<b>SDR-11 ASTM D3035 / F2160</b>					
1/2"	0.688	0.840	0.076	7.825	204
3/4"	0.860	1.505	0.095	12.226	318
1"	1.075	1.315	0.120	19.325	503
1-1/4"	1.358	1.660	0.151	30.706	799
1-1/2"	1.554	1.900	0.173	40.262	1048
2"	1.943	2.375	0.216	62.845	1636
3"	2.864	3.500	0.318	136.360	3550
4"	3.682	4.500	0.409	225.483	5870

NOM. SIZE	NOM. ID	NOM OD	MIN. WALL	WGT/100 FT.	PULLED TENSILE SAFE (LBS)
<b>SDR-13.5 ASTM D3035 / F2160</b>					
1/2"	0.716	0.840	0.062	6.500	169
3/4"	0.894	1.505	0.078	10.217	266
1"	1.121	1.315	0.097	15.921	414
1-1/4"	1.414	1.660	0.123	25.477	663
1-1/2"	1.618	1.900	0.141	33.423	870
2"	2.023	2.375	0.176	52.155	1358
2-1/2"	2.469	2.875	0.203	73.096	1989
3"	2.982	3.500	0.259	113.120	2945
4"	3.834	4.500	0.333	186.994	4868

NOM. SIZE	NOM. ID	NOM OD	MIN. WALL	WGT/100 FT.	PULLED TENSILE SAFE (LBS)
<b>SCHEDULE 40 - ASTM D2447 / F2160 / NEMA TC-7</b>					
1/2"	0.622	0.840	0.109	10.738	280
3/4"	0.824	1.505	0.113	14.269	371
1"	1.049	1.315	0.133	21.185	551
1-1/4"	1.38	1.660	0.140	28.677	747
1-1/2"	1.61	1.900	0.145	34.293	893
2"	2.067	2.375	0.154	46.093	1200
2-1/2"	2.469	2.875	0.203	73.096	1903
3"	3.088	3.500	0.216	95.591	2488
4"	4.026	4.500	0.237	136.152	3544

## SMOOTH WALL SPECIFICATIONS

NOM. SIZE	NOM. ID	NOM OD	MIN. WALL	WGT/100 FT.	PULLED TENSILE SAFE (LBS)
<b>SCHEDULE 80 - ASTM D2447 / F2160 / NEMA TC-7</b>					
1/2"	0.546	0.840	0.147	13.728	357
3/4"	0.742	1.505	0.154	18.595	484
1"	0.957	1.315	0.179	27.403	713
1-1/4"	1.278	1.660	0.191	37.811	984
1-1/2"	1.500	1.900	0.200	45.818	1193
2"	1.939	2.375	0.218	63.368	1650
2-1/2"	2.323	2.875	0.276	96.667	2516
3"	2.900	3.500	0.300	129.370	3386
4"	3.826	4.500	0.337	189.059	4922

NOM. SIZE	NOM. ID	NOM OD	MIN. WALL	WGT/100 FT.	PULLED TENSILE SAFE (LBS)
<b>SIDR 11.5 - ASTM D2239</b>					
1"	1.049	1.231	0.091	13.980	364
1 1/4"	1.380	1.620	0.120	24.257	631
1 1/2"	1.610	1.890	0.140	33.016	859
2"	2.067	2.427	0.180	54.505	1419
4"	4.026	4.726	0.350	206.398	5373

NOM. SIZE	NOM. ID	NOM OD	MIN. WALL	WGT/100 FT.	PULLED TENSILE SAFE (LBS)
<b>SIDR 15 - ASTM D2239</b>					
1"	1.049	1.189	0.070	10.556	275
1 1/4"	1.380	1.564	0.092	18.250	475
1 1/2"	1.610	1.824	0.107	24.758	645
2"	2.067	2.343	0.138	41.006	1067
4"	4.026	4.562	0.268	155.081	4037

## SMOOTH WALL

### BEND RADIUS

PIPE SIZE	SUPPORTED	UNSUPPORTED
1/2" - 2 1/2"	10 X outside diameter	20 x outside diameter
3" - 4"	11 x outside diameter	22 x outside diameter

## TRUCKLOAD CAPACITIES

REEL SIZE	REELS PER TRUCK
48	18
60	16
84	14
96	12
102	12

*Custom reel footage, single put ups, parallel, and multi-sectional put ups available by request.*

## REEL CAPACITIES

PIPE SIZE	REEL SIZE					Standard reel capacities are listed in <b>bold</b> .
	48x50x48	<b>60x50x60</b>	72x50x72	84x50x84		
1/2"	5,000'	<b>10,000'</b>	17,000'	24,000'		
	48x50x48	60x50x60	<b>72x50x72</b>	84x50x84	96x50x96	
3/4"	3,500'	7,000'	<b>10,000'</b>	16,000'	20,000'	
	48x50x48	60x50x60	72x50x72	<b>84x50x84</b>	96x50x96	102X50X102
1"	2,000'	4,400'	7,000'	<b>10,000'</b>	13,000'	15,000'
	60x50x60	72x50x72	<b>84x50x84</b>	90X50X90	<b>96X50X96</b>	102X50X102
1 1/4"	2,300'	3,900'	<b>5,000'</b>	6,900'	<b>8,000'</b>	9,300'
	72x50x72	84x50x84	90X50X90	<b>96X50X96</b>	102X50X102	114X50X114
1 1/2"	3,000'	4,500'	5,300'	<b>6,500'</b>	7,200'	9,200'
	72x50x72	84x50x84	90X50X90	<b>96X50X96</b>	102X50X102	114X50X114
2"	1,900'	2,800'	3,300	<b>4,000'</b>	4,500'	5,800'
	84x50x84	90X50X90	<b>96X50X96</b>	102X50X102	114X50X114	
2 1/2"	1,800'	2,100'	<b>2,500'</b>	2,900'	3,800'	
	<b>96X50X96</b>	102X50X102	114X50X114			
3"	1,200'	1,500'	2,000'			
	<b>96X50X96</b>	<b>102X50X102</b>	<b>114X50X114</b>			
4"	550'	766'	1,000'			
	<b>96X50X96</b>	<b>102X50X102</b>	<b>114X50X114</b>			
4"	500	700	900			