



ABOUT MODERN POLYMER PIPE AND EXTRUSIONS

Modern Polymer Pipe and Extrusions was founded in 2014, initially only capable of producing 2" - 6" diameter HDPE pipe. After almost a decade of experience, we have expanded our catalog to produce up to 24" diameter HDPE pipe. Along with developing a larger catalog, we have also been able to focus on improving the quality of our pipe. We are certified by the NSF that our pipe meets AWWA C901 and AWWA C906 requirements to transport potable water safely.

Modern Polymer Pipe and Extrusions is part of The Modern Group, a strong family of industrial equipment companies serving a broad range of industries including oil and gas, agriculture, power generation, storage, and transportation. Also within the Modern family and located within the same facility, Modern Polymer Products offers compounding, packaging, blending, and laboratory analysis services.

HDPE (HIGH DENSITY POLYETHYLENE)

is a strong, light-weight thermoplastic used to manufacture pipe for liquid and gas transfer. We use PE4710, an improved, high-performance resin that offers stronger physical properties allowing the pipe to handle high internal pressures. Due to its unique performance properties, HDPE has a broad range of applications and a 100-year service life. At Modern Polymer Pipe and Extrusions, we can help your company meet your HDPE needs.



HYDRAULIC PERFORMANCE 4" IPS PIPE

VISIT OUR WEBSITE TO VIEW AND DOWNLOAD PERFORMANCE DATA ON ALL PIPE OFFERINGS.

Avg OD,	DR	7	9	11	13.5	17	21
in	Pressure Rating	335 psi	250 psi	200 psi	160 psi	125 psi	100 psi
4.5	Min wall, in	0.643	0.500	0.409	0.333	0.265	0.214
	Avg ID, in	3.137	3.440	3.633	3.793	3.939	4.046
	Weight, lb/ft	3.401	2.750	2.304	1.915	1.547	1.268

STANDARDS FEATURES

Pipe Manufacturing Standards

- ASTM D3035
- ASTM F714
- ASTM F2619
- NSF/ ANSI 14

Pipe Resin Standards

ASTM D3350

Water Works Standards

- AWWA C901
- AWWA C906
- NSF/ ANSI 61
- CC3 Oxidative Resistance Classification

Available in sizes from 2" - 24" **IPS with DR 7 - 21**

- 2" 6", 500/1000/2000 ft coils
- 2" 24", 20/40/50 ft sticks

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Temperatui	re Deratings
Temperature	Multiplier, F _⊤
40	1.22
50	1.15
60	1.08
70	1.02
73	1.00
80	0.96
90	0.90
100	0.84
110	0.78
120	0.73
130	0.68

APPLICATIONS WE'VE GOT DECADES OF EXPERIENCE

- Energy
- EPC
- Municipal
- Water/ Sewer
- Waterworks

- Mining
- Landfill
- Farm and
 - Agriculture
- Golf and Irrigation

THE TOTAL PIPING SOLUTION.





Polyethylene pipe is connected through heat fusion, a technique that partially melts the pipe to then be joined to another section or fitting. The ends of the pipes to be joined are trimmed flush then placed against a heater plate. Once the ends begin to melt, the heater plate is removed, and the ends are brought together. Once cooled, the new formed joint is stronger than the pipe itself and creates a leak-free connection that is self-restrained. HDPE can be installed in several ways including above ground, direct burial, slip lining, pipe-bursting, and directional-drilling as well as be used in open-cut trenchless applications.



WHY CHOOSE HDPE?

- Economical
- Zero Leak Rate
- Hydraulically Smooth
- Long Design Life
- Easy to Install
- Corrosion Resistant
- Abrasion Resistant
- Freeze Resistant
- Impact Resistant

- Surge Resistant
- Inert
- Lightweight
- Flexible/ Coil-able
- 100-year service life
- Listed and Approved
- CC3 Oxidative Resistance Classification

HDPE PIPE CHART



Pipe Size Avg OD DR 6 7 9 11 13.5 17 21			PE	4710 Pressure Class*	400 psi		335 psi		250 psi	200 psi		160 psi		125 psi		100 psi
2" IPS		Pipe Size	Avg OD	DR	6		7		9	11		13.5		17		21
Weight, lb/ft 1.072		18/18/18/18		Min Wall, in	0.396		0.339		0.264	0.216		0.176		0.140		0.113
3" IPS 3.5 Min Wall, in 2.583 0.500 0.389 0.318 0.229 0.206 0.167 Weight, lib/tt 2.329 2.057 1.663 1.394 1.1158 0.396 0.767 Weight, lib/tt 3.849 0.663 0.500 0.409 0.333 0.265 0.214 4" IPS 4.5 Avg (D, in 2.910 3.137 0.500 0.643 0.500 0.409 0.333 3.393 0.265 Weight, lib/tt 3.849 3.401 2.750 2.304 1.915 1.547 1.268 Min Wall, in 1.104 0.946 0.736 0.6602 0.491 0.390 0.315 Weight, lib/tt 8.343 7.371 5.960 0.995 4.150 3.354 0.599 5.556 Weight, lib/tt 1.438 1.732 0.998 0.784 0.669 0.786 0.602 0.491 0.390 0.315 Weight, lib/tt 1.438 1.732 0.998 0.784 0.639 0.507 0.411 8" IPS 8.625 Avg (D, in 5.578 6.013 6.993 0.980 7.721 7.549 7.754 0.693 0.700 0.70		2" IPS	2.375	Avg ID, in	1.536		1.656		1.816	1.917		2.002		2.079		2.135
3" IPS 3.5 Avg ID, in 2.263 2.440 2.676 2.825 2.950 3.064 3.147				Weight, lb/ft	1.072		0.947		0.766	0.642		0.533	Ш	0.431	Ш	0.353
Weight, lb/ft 2.329				Min Wall, in	0.583		0.500		0.389	0.318		0.259		0.206		0.167
## IPS ## Avg ID, in		3" IPS	3.5	Avg ID, in	2.263		2.440		2.676	2.825		2.950		3.064	Ш	3.147
4" PS				Weight, lb/ft	2.329		2.057		1.663	1.394		1.158		0.936		0.767
Weight, lb/ft 3.849 3.401 0.546 0.756 0.602 0.491 0.390 0.315 0.506 0.602 0.491 0.390 0.315 0.606 0.602 0.491 0.390 0.315 0.606 0.602 0.491 0.390 0.315 0.606 0.602 0.491 0.390 0.315 0.606 0.602 0.491 0.390 0.315 0.606 0.602 0.491 0.390 0.315 0.606 0.602 0.491 0.390 0.315 0.606 0.602 0.491 0.390 0.315 0.606 0.602 0.491 0.390 0.315 0.606 0.602 0.491 0.390 0.315 0.606 0.602 0.491 0.639 0.507 0.611 0.411 0.491 0.495 0.639 0.507 0.411 0.491 0.495 0.639 0.507 0.411 0.49				Min Wall, in	0.750		0.643		0.500	0.409		0.333		0.265		0.214
6" IPS 6.625 Avg ID, in 4.284 4.619 5.966 5.348 5.585 5.799 5.956 6.901 6.625 Avg ID, in 4.284 4.619 5.966 4.995 4.150 3.354 2.749 5.960 4.995 4.150 3.960 4		4" IPS	4.5	Avg ID, in	2.910		3.137		3.440	3.633		3.793		3.939		4.046
6" IPS				Weight, lb/ft	3.849		3.401		2.750	2.304		1.915		1.547		1.268
Weight, lb/ft 8.343 1.232 0.958 0.784 0.639 0.507 0.411				Min Wall, in	1.104		0.946		0.736	0.602		0.491		0.390		0.315
8" IPS		6" IPS	6.625	Avg ID, in	4.284		4.619		5.064	5.348		5.585		5.799		5.956
8" IPS				Weight, lb/ft	8.343		7.371		5.960	4.995		4.150		3.354		2.749
Weight, lb/ft				Min Wall, in	1.438		1.232		0.958	0.784		0.639		0.507		0.411
10" PS 10.75 Avg D, in 1.792 1.536 1.194 8.218 8.678 9.062 9.409 9.665		8" IPS	8.625	Avg ID, in	5.578		6.013		6.593	6.963		7.271		7.549		7.754
10" IPS				Weight, lb/ft	14.141		12.493		10.102	8.466		7.034		5.684		4.660
Weight, lb/ft 21.968 19.407 15.693 13.151 10.927 8.830 7.239				Min Wall, in	1.792		1.536		1.194	0.977		0.796		0.632		0.512
12" IPS 12.75 Min Wall, in 2.125 8.889 9.747 10.293 10.748 11.160 11.463 1.463 1.47 1.159 10.293 10.748 11.160 11.463 1.47 1.47 1.159 10.293 10.748 11.160 11.463 11.463 1.47 1.47 1.159 10.293 10.748 11.160 11.463 11.463 1.47 1.47 1.47 1.483 1.481 1		10" IPS	10.75	Avg ID, in	6.952		7.494		8.218	8.678		9.062		9.409		9.665
12" IPS				Weight, lb/ft	21.968		19.407		15.693	13.151		10.927		8.830		7.239
Weight, lb/ft 30.903 27.300 22.075 18.500 15.372 12.421 10.183				Min Wall, in	2.125		1.821		1.417	1.159		0.944		0.750		0.607
Min Wall, in 2.333 2.000 1.556 1.273 1.037 0.824 0.667		12" IPS	12.75	Avg ID, in	8.245		8.889		9.747	10.293		10.748		11.160		11.463
14" IPS 14 Avg ID, in Weight, lb/ft 9.053 9.760 10.702 11.302 11.801 12.254 12.587 16" IPS Min Wall, in Wall, in Weight, lb/ft 2.667 2.286 1.778 1.455 1.185 0.941 0.762 16" IPS 16 Avg ID, in Wall, in Wall, in Wall, in Weight, lb/ft 48.665 42.991 34.764 29.133 24.207 19.560 16.035 18" IPS 18 Avg ID, in Weight, lb/ft 11.640 12.549 13.760 14.531 15.173 15.755 16.183 20" IPS 20 Min Wall, in Avg ID, in Wall, in Wall, in Wall, in Sweight, lb/ft 3.333 2.857 2.222 1.818 1.481 1.176 0.952 20" IPS 20 Avg ID, in Wall, in Wall, in Sweight, lb/ft 76.038 67.174 54.318 45.521 37.824 30.563 25.055 24" IPS 24 Avg ID, in Wall, in Wall, in Sweight, lb/ft 76.038 67.174 54.318 45.521 37.824 30.563 25.055 24" IPS 24 Avg ID, in Wall, in Sweight, lb/ft 76.038 67.174 54.318 <				Weight, lb/ft	30.903		27.300		22.075	18.500		15.372		12.421		10.183
No.	_			Min Wall, in	2.333		2.000			1.273		1.037		0.824		
Min Wall, in		14" IPS	14	Avg ID, in	9.053		9.760		10.702	11.302		11.801		12.254		12.587
16" IPS Avg ID, in Weight, lb/ft 48.665 42.991 34.764 29.133 24.207 19.560 16.035 18" IPS Min Wall, in 3.000 2.571 2.000 1.636 1.333 1.059 0.857 18" IPS Avg ID, in 11.640 12.549 13.760 14.531 15.173 15.755 16.183 Weight, lb/ft 61.591 54.411 43.998 36.872 30.637 24.756 20.295 20" IPS Avg ID, in 12.933 13.943 15.289 16.145 16.859 17.506 17.981 Weight, lb/ft 76.038 67.174 54.318 45.521 37.824 30.563 25.055 24" IPS Avg ID, in 2 16.731 18.347 19.375 20.231 21.007 21.577 Weight, lb/ft 96.730 78.218 65.550 54.466 44.011 36.079				Weight, lb/ft	37.259				26.616	22.305		18.534		14.976		12.277
Weight, lb/ft 48.665 42.991 34.764 29.133 24.207 19.560 16.035 18" IPS 18 Avg ID, in 11.640 12.549 13.760 14.531 15.173 15.755 16.183 Weight, lb/ft 61.591 54.411 43.998 36.872 30.637 24.756 20.295 20" IPS 20 Avg ID, in 12.933 13.943 15.289 16.145 16.859 17.506 17.981 24" IPS Avg ID, in 3.429 2.667 2.182 1.778 1.412 1.143 24" IPS Avg ID, in 16.731 18.347 19.375 20.231 21.007 21.577 Weight, lb/ft 96.730 78.218 65.550 54.466 44.011 36.079																
18" IPS Min Wall, in 3.000 2.571 2.000 1.636 1.333 1.059 0.857 18" IPS 18 Avg ID, in 11.640 12.549 13.760 14.531 15.173 15.755 16.183 20" IPS 20 Min Wall, in 3.333 2.857 2.222 1.818 1.481 1.176 0.952 20" IPS 20 Avg ID, in 12.933 13.943 15.289 16.145 16.859 17.506 17.981 24" IPS 24 Min Wall, in 3.429 2.667 2.182 1.778 1.412 1.143 24" IPS 24 Avg ID, in 16.731 18.347 19.375 20.231 21.007 21.577 Weight, l		16" IPS	16													
18" IPS 18 Avg ID, in Weight, Ib/ft 11.640 12.549 13.760 14.531 15.173 15.755 16.183 20" IPS Min Wall, in 3.333 2.857 2.222 1.818 1.481 1.176 0.952 Avg ID, in Weight, Ib/ft 76.038 67.174 54.318 45.521 37.824 30.563 25.055 Avg ID, in Weight, Ib/ft 3.429 2.667 2.182 1.778 1.412 1.143 44.011 16.731 18.347 19.375 20.231 21.007 21.577 Weight, Ib/ft 96.730 78.218 65.550 54.466 44.011 36.079				•												
Weight, lb/ft 61.591 54.411 43.998 36.872 30.637 24.756 20.295 20" IPS Avg ID, in Weight, lb/ft 12.933 13.943 15.289 16.145 16.859 17.506 17.981 24" IPS Min Wall, in Avg ID, in Weight, lb/ft 3.429 2.667 2.182 1.778 1.412 1.143 24" IPS Avg ID, in Weight, lb/ft 16.731 18.347 19.375 20.231 21.007 21.577 Weight, lb/ft 96.730 78.218 65.550 54.466 44.011 36.079				· ·												
20" IPS Min Wall, in 3.333 2.857 2.222 1.818 1.481 1.176 0.952 Avg ID, in Weight, Ib/ft 12.933 13.943 15.289 16.145 16.859 17.506 17.981 Weight, Ib/ft 76.038 67.174 54.318 45.521 37.824 30.563 25.055 Avg ID, in Weight, Ib/ft 16.731 18.347 19.375 20.231 21.007 21.577 Weight, Ib/ft 96.730 78.218 65.550 54.466 44.011 36.079		18" IPS	18													
20" IPS Avg ID, in 12.933 13.943 15.289 16.145 16.859 17.506 17.981 Weight, lb/ft 76.038 67.174 54.318 45.521 37.824 30.563 25.055 24" IPS Avg ID, in 16.731 18.347 19.375 20.231 1.412 1.143 Weight, lb/ft 96.730 78.218 65.550 54.466 44.011 36.079					THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN											
Weight, lb/ft 76.038 67.174 54.318 45.521 37.824 30.563 25.055 24" IPS Avg ID, in 16.731 18.347 19.375 20.231 21.007 21.577 Weight, lb/ft 96.730 78.218 65.550 54.466 44.011 36.079																
24" IPS Min Wall, in Avg ID, in Weight, lb/ft 3.429 2.667 2.182 1.778 1.412 1.143 Weight, lb/ft 16.731 18.347 19.375 20.231 21.007 21.577 54.466 44.011 36.079		20" IPS	20													
24" IPS 24 Avg ID, in 16.731 18.347 19.375 20.231 21.007 21.577 Weight, lb/ft 96.730 78.218 65.550 54.466 44.011 36.079					76.038											
Weight, lb/ft 96.730 78.218 65.550 54.466 44.011 36.079		A.W														
		24" IPS	24													
Legend Potable Water Use Sewage Water Use Reclaimed Water Use	10 TO			Weight, lb/ft			96.730		78.218	65.550		54.466		44.011		36.079
			Legend		Potable Water U	se	Sew	age	Water Use	Reclaimed W	ate	r Use				
*Pressure Ratings based on water at 73°F.		*Pressure	Ratings based on w	ater at 73°F.												

HDPE STICK TRUCK LOAD CHART &

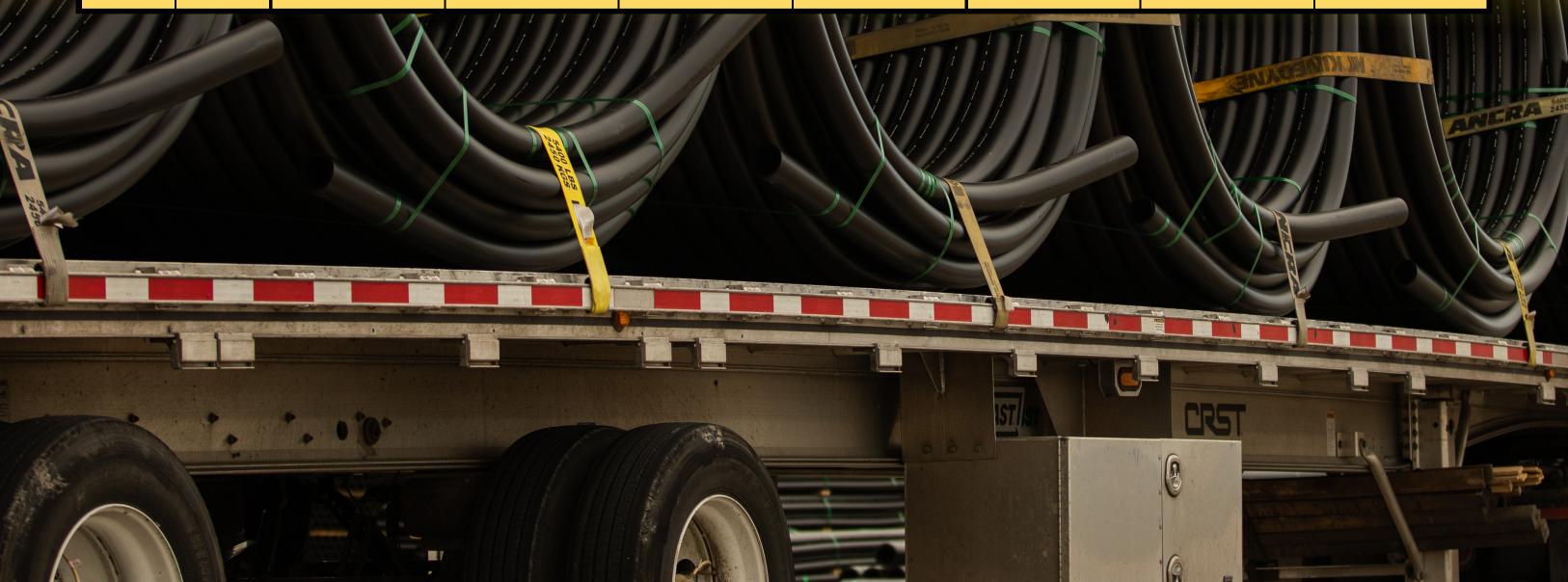


			Sticks per		50 ft Sticks			40 ft Sticks		20 ft Sticks			
Н	Pipe Size	DR	Bundle	Bundles per	Sticks	Footage per	Bundles per	Sticks	Footage per			Footage per	
L			Danaic	Truck	per Truck	Truck	Truck	per Truck	Truck	Truck	per Truck	Truck	
ı	2" IPS	7	50	20	1,000	50,000	24	1,200	48,000	48	2,400	48,000	
L		9 - 21		24	1,200	60,000				0.0			
ı		7		8	400	20,000	11	550	22,000	22	1,100	22,000	
L	3" IPS	9	50	10 13	500 650	25,000 32,500	14	700	28 000	28	1 400	28,000	
		13.5 - 21		14	700	35,000	14	700	28,000	20	1,400	26,000	
H		7		14	266	13,300	18	342	13 680	36	684	13,680	
		9		18	342	17,100	10	0.2	10,000	30	001	13,000	
ı	4" IPS	11	19	21	399	19,950	22	418	16,720	44	836	16,720	
ŀ		13.5 - 21		22	418	20,900							
		7		10	130	6,500	12	156	6,240	24	312	6,240	
	6" IPS	9	13	12	156	7,800	14	187	7 280	28	364	7,280	
L		11 - 21		14	182	9,100							
		7		8	72	3,600	10	90	3,600	20	180	3,600	
	8" IPS	9	9	10	90	4,500	12	108	4,320	24	216	4,320	
		11 - 21		12	108	5,400	C	Γ.4	2.100	12	100	2.160	
	10" IPS	7 9	5/4	5 6	45 54	2,250 2,700	6	54	2,160	12	108	2,160	
10	10 11 3	11 - 21	5/4	8	72	3,600	8	72	2,880	16	144	2,880	
٢		7		4	32	1,600	5	40	1,600	10	80	1,600	
							6			13			
	12" IPS	9	4	5	40	2,000	+4 sticks	52	2,080	+4 sticks	s 108	2,160	
		11		6	48	2,400	7	56	2.240	14	112	2,240	
L	4.411.100	13.5 - 21		7	56	2,800				T 1			
		7	4/2	4	28	1,400	5	35	1,400	10	70	1,400	
	14" IPS	9	4/3	5	35	1,750	6	342 13,680 36 684 418 16,720 44 836 156 6,240 24 312 182 7,280 28 364 90 3,600 20 180 108 4,320 24 216 54 2,160 12 108 72 2,880 16 144 40 1,600 10 80 52 2,080 13 108	1,680				
ŀ		11 - 21 7		6 7	42	2,100	0	24	060	16	40	960	
		9		8	21	1,050 1,200	8 11					1,320	
	16" IPS		3	10			11	33	1,320	ZZ	00	1,320	
16"		11		+2 sticks	32	1,600	12	36	1,440	24	72	1,440	
		13.5 - 21		12	36	1,800							
	10 100	7	2/2	4 +1 stick	17	850	4	20	800	8	40	800	
1	18" IPS	9	3/2	4	20	1,000	Г	25	1.000	10	FO	1 000	
		11-21		5	25	1,250	5	25	1,000	10	50	1,000	
		7		2	10	500	3	15	600	6	30	600	
20" IPS	20" IPS	9	3/2	3	15	750	4	20	800	8	40	800	
		11-21		4	20	1,000							
		7		2	8	400	3	12	480	6	24	480	
	24" IDC	9	2	3	12	600							
	24" IPS	11	2	3 +2 sticks	14	700	4	16	640	8	32	640	
		13.5-21		4	16	800							

HDPE COIL TRUCK LOAD CHART



Dino Sizo	DB		48 - 50)' Truck	53' Truck					
Pipe Size	DK	Coil Size	Dimensions	Coils per Truck	Footage per Truck	Coil Size	Coils per Truck	Footage per Truck		
2" IDS	LIDC 7 12 F	2000'	H-80" W-44"	16	32,000	E00'	56	28,000		
2 173	7 - 13.5	500'	H-80" W-13.5"	49	24,500	300		28,000		
2" IDC	7 . 12 5	1000'	H-96" W-45"	13	13,000	500'	26	13,000		
3 IF3	7 - 13.5	500'	H-96" W-23"	24	12,000	300	20	13,000		
∕I" IDS	7 12 5	800'	H-102" W-45"	12	9,600	E00'	10	9,000		
4 113	7 - 13.5	500'	H-102" W-29"	18 3400 LBS 2450 KGS	9,000	300	10	9,000		
6" IPS	7 - 13.5	500'	H-120" W-48"	6	3,000	500'	8	4,000		
	Pipe Size 2" IPS 3" IPS 4" IPS	2" IPS 7 - 13.5 3" IPS 7 - 13.5 4" IPS 7 - 13.5	Coil Size 2" IPS 7 - 13.5 7 - 13.5 1000' 3" IPS 7 - 13.5 4" IPS 7 - 13.5 800' 500'	Pipe Size DR 2" IPS 7 - 13.5 3" IPS 7 - 13.5 4" IPS 7 - 13.5 800' H-102" W-45" 500' H-102" W-29"	Coil Size Dimensions Coils per Truck 2" IPS 7 - 13.5 7 - 13.5 1000' H-80" W-44" 16 1000' H-96" W-45" 13 500' H-96" W-23" 24 4" IPS 7 - 13.5 800' H-102" W-45" 12 H-102" W-29" 18	Coil Size Dimensions Coils per Truck Footage per Truck 2" IPS 7 - 13.5 2000' H-80" W-44" 16 32,000 3" IPS 7 - 13.5 1000' H-96" W-45" 13 13,000 4" IPS 7 - 13.5 800' H-96" W-23" 24 12,000 4" IPS 7 - 13.5 800' H-102" W-45" 12 9,600 4" IPS 500' H-102" W-29" 18 9,000	Coil Size Dimensions Coils per Truck Footage per Truck Coil Size	Coil Size DR		





3005B PASADENA FREEWAY
PASADENA, TEXAS 77503
713-475-6155
MODERNPOLYMERPIPE.COM

SEPTEMBER 2024 EDITION