

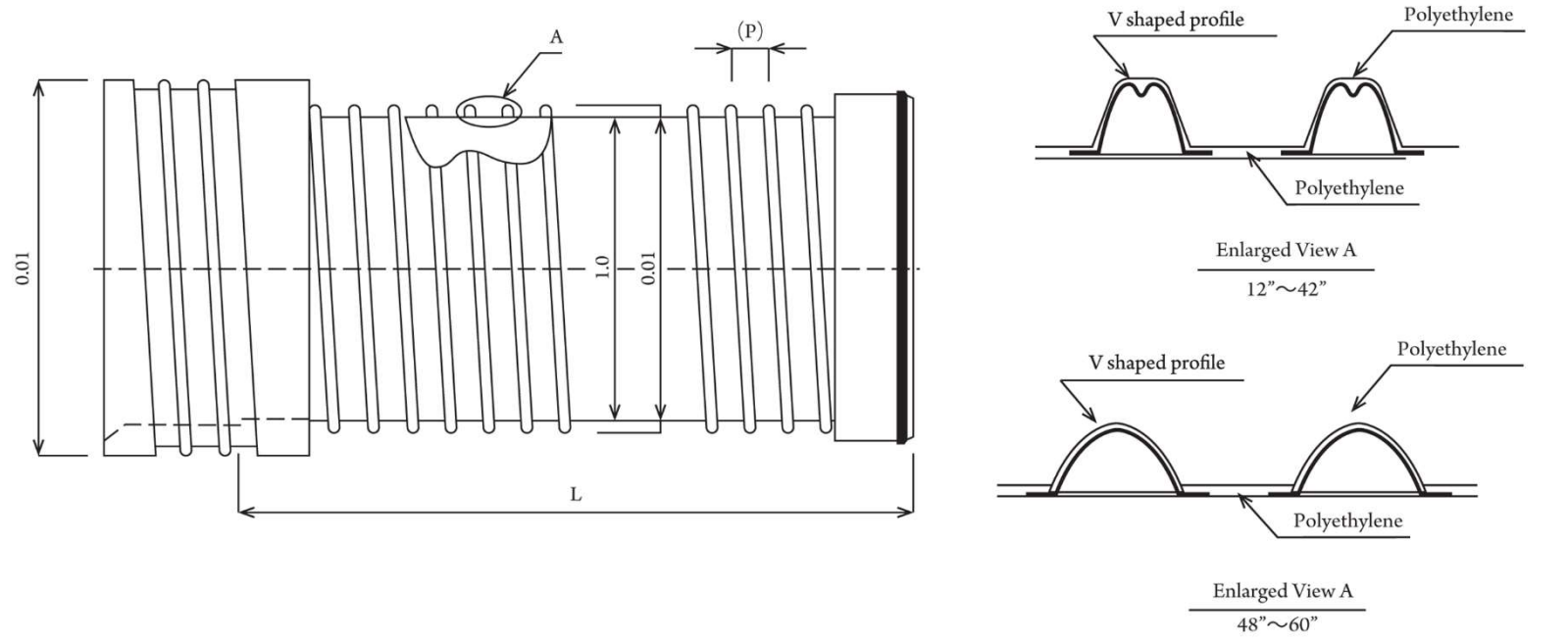
Kanaflex®



High-Strength Steel Reinforced HDPE Pipe



Pipe & Joint Dimensions



Nominal Diameter		Pipe Body						Pipe Joint	
		ID		OD ₁		Pitch		OD ₂	
inches	mm	inches	mm	inches	mm	inches	mm	inches	mm
12	300	12.0	305	13.3	338	2.36	60	15.0	380
15	375	15.0	381	16.3	413	2.36	60	18.1	460
18	450	18.0	457	19.3	489	2.44	62	21.3	540
24	600	24.0	610	25.7	653	2.76	70	27.6	700
30	750	30.0	762	32.2	817	3.54	90	34.5	875
36	900	36.0	915	38.2	970	3.94	100	40.6	1,030
42	1,050	42.0	1,067	44.4	1,128	3.94	100	46.9	1,190
48	1,200	48.0	1,220	52.0	1,320	6.30	160	57.7	1,465
60	1,500	60.0	1,524	65.2	1,656	7.68	195	70.9	1,801
72	1,800	72.0	1,829	77.2	1,961	7.68	195	—	—

* For pipe larger than 72" O.D., contact your Kanaflex representative

Allowable Burial

AASHTO — Allowable Burial Min/Max (ft)										
Diameter (inches)	Class I		Class II			Class III			Class IV	
	Compacted	Dumped	95%	90%	85%	95%	90%	85%	95%	90%
12	69	37	54	37	35	38	30	27	27	25
15	59	30	47	30	26	30	22	18	18	16
18	50	28	45	28	23	29	19	15	14	12
24	62	27	45	27	22	29	20	16	16	14
30	42	25	38	25	23	23	17	13	13	11
36	27	22	25	22	19	23	15	11	10	8
42	41	22	25	22	22	23	15	11	11	9
48	31	18	25	18	16	18	12	9	9	8
60	28	19	22	19	12	16	11	8	8	7
72	21	13	16	13	9	12	8	5	5	4

* For greater burial depth requirements, contact your Kanaflex representative.

Minimum Pipe Stiffness

Minimum Pipe Stiffness Values Kanapipe Dual Wall SRPE													
Nominal Size		Inside Diameter		Outside Diameter		Pitch		Waterway Wall Thickness (min)		Minimum Steel Thickness		Minimum Pipe Stiffness	
inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	inches	mm	MPa	psi
12	300	12.0	305	13.3	338.0	2.36	60.0	0.059	1.5	0.0118	0.30	0.40	58
15	375	15.0	381	16.3	413.0	2.36	60.0	0.059	1.5	0.0118	0.30	0.40	58
18	450	18.0	457	19.3	489.0	2.44	62.0	0.059	1.5	0.0118	0.30	0.275	40
24	600	24.0	610	25.7	653.0	2.76	70.0	0.059	1.5	0.0118	0.30	0.235	34
30	750	30.0	762	32.2	817.0	3.54	90.0	0.079	2.0	0.0118	0.30	0.200	29
36	900	36.0	915	38.2	970.0	3.94	100.0	0.079	2.0	0.0118	0.30	0.155	22.5
42	1,050	42.0	1,067	44.4	1,128.0	3.94	100.0	0.079	2.0	0.0118	0.30	0.145	21
48	1,200	48.0	1,220	52.0	1,320.0	6.30	160.0	0.157	4.0	0.0118	0.30	0.135	20
60	1,500	60.0	1,524	65.2	1,656.0	7.68	195.0	0.157	4.0	0.0118	0.30	0.105	15
72	1,800	72.0	1,829	77.2	1,961.0	7.68	195.0	0.157	4.0	0.0118	0.30	0.105	15

* Minimum stiffness values at 5% deflection. For greater stiffness requirements, contact your Kanaflex representative.

Material Characteristics

Polyethylene Materials

The polyethylene compound meets the requirements of the 333430C cell class in accordance to the ASTM D3350 standard.

Steel Materials

Steel materials meet A1008/A1008M or A653/A653M standards. Meets the lowest zinc painting designation, 20Z, as stated in the A591/A591M standard for galvanizing painting.

Chemical Resistance (Polyethylene)						
Chemical		Temperature		Chemical	Temperature	
		20°C °F	60°C °F		20°C °F	60°C °F
Sulfuric acid	10 - 50%	●	●	Sodium carbonate	●	●
Hydrochloric acid	10%	●	●	Calcium chloride	●	●
	35%	●	●	Methyl alcohol	●	▲
Nitric acid	10%	●	●	Ammonia water	●	●
	40%	●	▲	Hydrogen peroxide 30%	●	●
Hydrogen fluoride	75%	●	▲	Gasoline	▲	✖
Phosphoric acid	30%	●	●	Acetone	▲	✖
Formic acid	40%	●	●	Aniline	●	✖
Acetic acid	10%	●	●	Carbon tetrachloride	✖	✖
Glacial acetic acid		●	✖	Glycerin	●	▲
Caustic soda	50%	●	●	Benzene	✖	✖
Caustic potash	10%	●	●			

Pipe Weight (lbs/ft)		
Pipe Size (in)	PE x PE	B x S
12	3.32	3.86
15	4.12	4.76
18	4.80	5.70
24	8.78	10.06
30	11.86	13.71
36	20.23	22.90
42	28.0	31.59
48	39.52	45.37
60	51.15	60.30
72	64.10	

● ... OK to Use ▲ ... Use with Caution ✖ ... Do Not Use

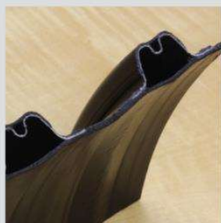
Flow Velocity/Rate										
Nominal Diameter in (mm)	12 (300)		15 (375)		18 (450)		24 (600)		30" (750)	
Inside Diameter ft (m)	1.00 (0.305)		1.25 (0.381)		1.50 (0.457)		2.00 (0.610)		2.50 (0.762)	
Gradient	Flow Velocity ft/s (m/s)	Flow Rate ft³/s (m³/s)	Flow Velocity ft/s (m/s)	Flow Rate ft³/s (m³/s)	Flow Velocity ft/s (m/s)	Flow Rate ft³/s (m³/s)	Flow Velocity ft/s (m/s)	Flow Rate ft³/s (m³/s)	Flow Velocity ft/s (m/s)	Flow Rate ft³/s (m³/s)
1/10	18.62 (5.674)	14.62 (0.414)	21.60 (6.584)	26.52 (0.751)	24.39 (7.435)	43.05 (1.219)	29.68 (9.046)	93.27 (2.641)	34.41 (10.488)	168.91 (4.783)
1/20	13.16 (4.012)	10.35 (0.293)	15.28 (4.656)	18.75 (0.531)	17.25 (5.257)	30.44 (0.862)	20.99 (6.397)	65.97 (1.868)	24.33 (7.416)	119.43 (3.382)
1/30	10.75 (3.276)	8.44 (0.239)	12.47 (3.801)	15.29 (0.433)	14.08 (4.292)	24.86 (0.704)	17.14 (5.223)	53.85 (1.525)	19.87 (6.055)	97.50 (2.761)
1/40	9.31 (2.837)	7.31 (0.207)	10.80 (3.292)	13.24 (0.375)	12.19 (3.717)	21.54 (0.610)	14.84 (4.523)	46.65 (1.321)	17.20 (5.244)	84.44 (2.391)
1/50	8.32 (2.537)	6.53 (0.185)	9.66 (2.944)	11.87 (0.336)	10.91 (3.325)	19.25 (0.545)	13.27 (4.046)	41.71 (1.181)	15.39 (4.690)	75.54 (2.139)
1/100	5.89 (1.794)	4.63 (0.131)	6.83 (2.082)	8.37 (0.237)	7.72 (2.351)	13.63 (0.386)	9.39 (2.861)	29.49 (0.835)	10.88 (3.317)	53.43 (1.513)
1/200	4.16 (1.269)	3.28 (0.093)	4.83 (1.472)	5.93 (0.168)	5.45 (1.662)	9.64 (0.273)	6.64 (2.023)	20.87 (0.591)	7.69 (2.345)	37.75 (1.069)
1/300	3.40 (1.036)	2.68 (0.076)	3.94 (1.202)	4.84 (0.137)	4.45 (1.357)	7.88 (0.223)	5.42 (1.652)	17.02 (0.482)	6.28 (1.915)	30.83 (0.873)
1/400	2.94 (0.897)	2.30 (0.065)	3.42 (1.041)	4.20 (0.119)	3.86 (1.176)	6.82 (0.193)	4.69 (1.430)	14.76 (0.418)	5.44 (1.658)	26.70 (0.756)
1/500	2.63 (0.802)	2.08 (0.059)	3.05 (0.931)	3.74 (0.106)	3.45 (1.051)	6.07 (0.172)	4.20 (1.279)	13.17 (0.373)	4.87 (1.483)	23.87 (0.676)
1/1000	1.86 (0.567)	1.45 (0.041)	2.16 (0.658)	2.65 (0.075)	2.44 (0.743)	4.31 (0.122)	2.97 (0.905)	9.32 (0.264)	3.44 (1.049)	16.88 (0.478)

Flow Velocity/Rate										
Nominal Diameter in (mm)	36 (900)		42 (1050)		48 (1200)		60 (1500)		72 (1800)	
Inside Diameter ft (m)	3.00 (0.915)		3.50 (1.067)		4.00 (1.220)		5.00 (1.524)		6.00 (1.828)	
Gradient	Flow Velocity ft/s (m/s)	Flow Rate ft³/s (m³/s)	Flow Velocity ft/s (m/s)	Flow Rate ft³/s (m³/s)	Flow Velocity ft/s (m/s)	Flow Rate ft³/s (m³/s)	Flow Velocity ft/s (m/s)	Flow Rate ft³/s (m³/s)	Flow Velocity ft/s (m/s)	Flow Rate ft³/s (m³/s)
1/10	38.84 (11.837)	275.07 (7.789)	43.02 (13.112)	413.96 (11.722)	47.01 (14.328)	591.49 (16.749)	54.52 (16.619)	1070.49 (30.313)	61.58 (18.769)	1741.23 (49.306)
1/20	27.46 (8.370)	194.48 (5.507)	30.42 (9.272)	292.72 (8.289)	33.24 (10.132)	418.27 (11.844)	38.56 (11.752)	757.01 (21.436)	43.54 (13.272)	1231.25 (34.865)
1/30	22.42 (6.834)	158.81 (4.497)	24.84 (7.570)	239.01 (6.768)	27.14 (8.273)	341.53 (9.671)	31.48 (9.595)	618.04 (17.501)	35.55 (10.836)	1005.27 (28.466)
1/40	19.42 (5.918)	137.52 (3.894)	21.51 (6.556)	206.98 (5.861)	23.50 (7.164)	295.76 (8.375)	27.26 (8.310)	535.26 (15.157)	30.79 (9.384)	870.54 (24.651)
1/50	17.37 (5.293)	123.00 (3.483)	19.24 (5.864)	185.12 (5.242)	21.02 (6.408)	264.54 (7.491)	24.38 (7.432)	478.73 (13.556)	27.54 (8.394)	778.72 (22.051)
1/100	12.28 (3.743)	86.98 (2.463)	13.60 (4.146)	130.91 (3.707)	14.87 (4.531)	187.06 (5.297)	17.24 (5.256)	338.56 (9.587)	19.47 (5.935)	550.59 (15.591)
1/200	8.68 (2.647)	61.52 (1.742)	9.62 (2.932)	92.56 (2.621)	10.51 (3.204)	132.25 (3.745)	12.19 (3.716)	239.36 (6.778)	13.77 (4.197)	389.34 (11.025)
1/300	7.09 (2.161)	50.22 (1.422)	7.85 (2.394)	75.57 (2.140)	8.58 (2.616)	107.99 (3.058)	9.95 (3.034)	195.43 (5.534)	11.24 (3.427)	317.90 (9.002)
1/400	6.14 (1.872)	43.51 (1.232)	6.80 (2.073)	65.44 (1.853)	7.43 (2.266)	93.55 (2.649)	8.62 (2.628)	169.26 (4.793)	9.74 (2.968)	275.31 (7.796)
1/500	5.40 (1.674)	38.88 (1.101)	6.08 (1.854)	58.52 (1.657)	6.65 (2.026)	83.63 (2.368)	7.71 (2.350)	151.36 (4.286)	8.71 (2.654)	246.21 (6.972)
1/1000	3.88 (1.184)	27.51 (0.779)	4.30 (1.311)	41.39 (1.172)	4.70 (1.433)	59.15 (1.675)	5.45 (1.662)	107.04 (3.031)	6.16 (1.877)	174.10 (4.930)

Kanaflex Steel Reinforced Polyethylene Pipe (SRPE) Kanapipe for Storm and Sanitary Sewer Applications — 12" to 72"

Kanaflex Steel Reinforced Polyethylene Pipe (SRPE) is the sound solution for storm drainage, combined sewer overflow, retention/detention, low head irrigation, culverts, slip lining, and sanitary sewer mainline applications.

Kanapipe combines the strength of steel and the long-term durability of HDPE, utilizing quality virgin resin and high-grade alloy steel. Kanapipe's composite structural design produces higher stiffness ratings and deeper burial allowances (over 50') than standard dual wall pipe products. Smooth wall interior (.010) for full flow rates, and chemical resistance to corrosive soils, discharges, and chemicals. Pressure resistant in both vertical and horizontal installations.



Kanaflex Kanapipe can be supplied with perforations, as required.

Specify Kanaflex Kanapipe with confidence. Meets or exceeds the requirements of ASTM F2435, D2321, D2412, D3212, F449, A1008, F2136, F477, and AASHTO M-294 standards.

Member:



Standard, Perforated, and Custom Lengths

Kanaflex Kanapipe is available in standard lengths of 20' and 24' lengths as well custom lengths up to 40' in Bell x Spigot, PE x PE, or combination configurations. Ideal for culvert rehab, slip lining, and significantly reducing installed joints on storm and sanitary sewer layouts. Longer lengths improve the integrity of pipelines, eliminates waste, and reduces the cost of installation.



Iowa 72" pipe slip, two runs, 83' lengths

Sanitary Sewer Joint

Kanapipe's engineered bell and spigot gasketed joint is a watertight, high performance connection with an enhanced leakage rating of 20 psi, significantly exceeding the ASTM D3212 minimum allowable leakage of 10.8 psi for sanitary sewers. Eliminates damage to roadway/parking lot pavements (cracking joint shifting, sinkhole depressions) due to infiltration/exfiltration commonly caused by using concrete pipe. Third party tested and certified, Kanapipe's joint is also internationally rated and certified to be earthquake resistant.





For pipe specifications, please visit:
www.kanaflexcorp.com

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Kanaflex®