## Corrugated & Smooth Flow fittings ===

NOTE: CORRUGATED FITTINGS AVAILABLE IN 2" - 24" \*FOR A FULL CORRUGATED FITTING LIST SEE OUR CATALOG OR YOUR SALES PERSON

Size	Desription	#/Bag
4	Tee	25
4	Combo Tee (3"External/4"Internal)	25
4	Blind Tee	25
4	Internal Tee	10
4	Internal Tap Tee	50
4	Short Tap Tee	50
4	Long Tap Tee	50
4	Internal Coupler (Injection Mold)	50
4	Internal Coupler (Blow Mold)	50
4	Snap Coupler	50
4	Split Coupler	50
4	Wye	10
4	401 End Plug	100
4	402 End Plug	100
4	402 Perf End Plug	100
4	Elbow	25
4	Clay to Plastic Adaptor	50
4	PVC to Plastic Adaptor	50
4x3	Reducer	25
5x4	Reducer	10
6x5x4	Reducer	10

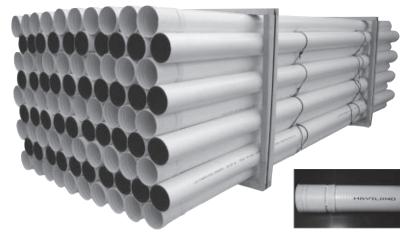
NOTE: OTHER SMOOTH FLOW FITTINGS, STRUCTURES, AND SYSTEMS FABRICATED UPON REQUEST, UP THROUGH 60"

Size	Desription
4x4 - 60x60	Tees - Plain End
4x4 - 48x48	Tees - Bell End
6x4 - 60x48	Reducing Tees - Plain End
6x4 - 48x42	Reducing Tees - Bell End
4x4 - 60x60	Wyes - Plain End
4x4 - 48x48	Wyes - Plain End
6x4 - 60x48	Reducing Wyes - Plain End
6x4 - 48x42	Reducing Wyes - Bell End
6x4 - 60x48	Reducers - Plain End
6x4 - 48x42	Reducers - Bell End
4x4 - 48x48	Double/Cross Tees - Plain End
4x4 - 48x48	Double/Cross Tees - Bell End
4 - 60	22 1/2º Elbow - Plain End
4 - 48	22 1/2º Elbow - Bell End
4 - 60	45° Elbow - Plain End
4 - 48	45° Elbow - Bell End
4 - 60	90° Elbow - Plain End
4 - 48	90° Elbow - Bell End





Size	Length (ft)	Description	Hole Diameter
3	1380	Tri-Wall Solid	
3	1380	Tri-Wall 2 Hole	1/2"
4	900	Tri-Wall Solid	
4	900	Tri-Wall 2 Hole	1/2"
4	900	Tri-Wall 4-6-8	5/8"
4	900	Tri-Wall 4-8-12	5/8"
6 6	390 390	Tri-Wall Solid Tri-Wall 2 Hole	1/2"



Tri-Wall pipe is a three layered high density polyethylene sewer and drain pipe. With a welded bell for consistent fit, this product is truly revolutionary. It provides better impact resistance, added strength and is easier to handle than conventional sewer and drain pipe. Consisting of a white exterior and a black interior, tri-wall pipe meets or exceeds ASTMF 810 when installed in accordance to ASTM F 481. It is available in 3", 4" and 6" diameter, in 10' lengths and bundled in pallets. Thirty pallets can be shipped per truckload on 53' trailers. 4" 2 - Hole Tri-Wall is available with 5/8" holes upon special request.







| 4" x 900' Tri-Wall Solid |

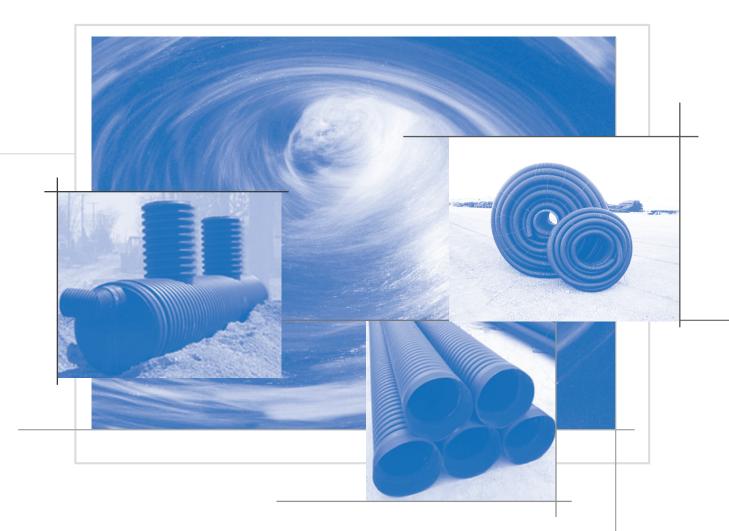


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## Heavy Pipe & Tubing

Haviland's heavy pipe and tubing has the strength, flexibility and endurance to fulfill most job requirements. Made of high-density polyethylene plastic, our tubing meets or exceeds ASTMF 405 and ASTM F 667 standards. Our tubing and pipe is available in 2" through 24" diameters in the lengths listed below.

Size	Length (ft	) Description	Stock
2"	100	Perf	
_	100	Solid	
	500	Perf	
	500	Solid	
3"	10	Perf	
9	10	Perf w/Coupler 10/Bundle	
	10	Solid	
	100	Perf	
	100	Solid	
	250	Perf	
	250	Solid	
	300	Perf	
	300	Solid	
	5600	Perf *	
	5600	Sand *	
4"	10	Perf w/Bell 10/bundle	
	10	Solid w/Bell 10/bundle	
	10	Leach w/Bell 10/bundle	
		MI Leach w/Stripe & Bell 10/bundle	
	100	Perf	
	100	Solid	
	100	Leach	
	150	Perf	
	150	Solid	
	250	Yellow Solid	
	250	Co-Ex 416	
	250	Co-Ex 418	
	250	Co-Ex Salid	
	250 250	Co-Ex Solid	
	250	Co-Ex Staggered Perf	
	250	Sand	
	250	Solid	
	250	Leach	
	3250	Co-Ex 416 *	
	3250	Co-Ex 418 *	
	3250	Extra Heavy Co-Ex 418*	
	3250	Co-Ex Sand *	
	3250	Extra Heavy Co-Ex Sand*	
	3250	Co-Ex Staggered *	
	3250	Extra Heavy Co-Ex Staggered*	
	3250	Staggered *	N
	3250	Extra Heavy Staggered *	
	3250	Sand *	
	3250	Extra Heavy Sand*	
	3250	Solid *	
	3250	Leach*	



x 100' Sock	4" x 100' Solid	4" x 250' Sock

Size	Length (ft)	Description	Stock
5"	150 150 150 2150 2150 2150 2150 2150	Perf Solid Leach Perf * Extra Heavy Perf* Sand * Solid * Leach*	N
6"	20 20 100 100 100 1600 1600 1600 1600	Perf Solid Perf Solid Leach Perf * Sand * Co-Ex Staggered * Extra Heavy Perf* Solid * Leach*	Ν
8"	20 20 620 620 620 875 875	Perf Solid Perf * Sand * Solid * Perf * Sand * Solid *	
10"	20 20 580 580 580	Perf Solid Perf * Sand * Solid *	
12"	20 20 24 330 330 330	Perf Solid Solid Perf * Sand * Solid *	
15"	20 20 24	Perf Solid Solid	
18"	20 20	Perf Solid	N
24"	20	Solid (only)	14
	* requires speci	ialized handling equipment	

## Smooth Flow Pipe

Smooth Flow pipe is a corrugated polyethylene pipe with a smooth interior. This combination provides a light weight, durable product for storm sewers, culverts, and many other applications where high strength and maximum flow are essential. Haviland Smooth Flow pipe is available with plain ends from 8" to 30" and with belled ends from 4" to 60". Smooth Flow pipe conforms to AASHTO M-252 and AASHTO M-294 specifications. An installation guide is available specifically for Smooth Flow pipe on our website. As shown below, 4" and 6" pipe can be ordered in pallets.



| 6" x 20' SF Solid |



| 8" x 20' SF Solid w/Bell |



SF Solid w/ Bell

SF Solid w/ Bell F-477

SF Perf w/ Bell

SF Sock

SF Solid

SF Sock w/ Bell

SF Solid w/ Bell

SF Solid w/ Bell F-477

SF Perf w/ Bell SF Sock w/ Bell SF Solid w/ Bell F-477

SF Perf

SF Perf w/ Bell

SF Sock

SF Sock w/ Bell

SF Solid SF Solid w/ Bell F-477

SF Solid

SF Solid

SF Solid w/ Bell F-477

SF Perf w/ Bell

SF Sock w/ Bell SF Perf SF Perf w/ Bell

SF Sock

SF Sock w/ Bell

SF Solid

SF Solid

WT

SF Solid w/ Bell F-477 SF Solid

WT SF Perf

20

20

20

20

20

20

20

20

20

20

20

20

20

20

20

30

20 9.5

9.5

20 20

20

20

20

30

20

15"

10"

| 12" x 20' SF Solid |



| 18" x 20' SF Solid w/Bell & Spigot |



| 48" x 20' SF Solid w/Bell & Spigot |

Size	Length (ft)	Description	Stock
18"	10 10 10 20 20 20 20 20 20 24 30 20	SF Solid w/ Bell F-477 SF Perf w/ Bell SF Sock w/ Bell SF Perf SF Perf w/ Bell SF Sock SF Sock w/ Bell SF Solid SF Solid SF Solid SF Solid WT	N
24"	9.25 9.25 9.25 20 20 20 20 20 24 30 20	SF Perf w/ Bell SF Sock w/ Bell SF Solid w/ Bell F-477 SF Perf SF Solid SF Perf w/ Bell SF Sock w/ Bell SF Solid w/ Bell F-477 SF Solid SF Solid WT	N
30"	13.5 13.5 20 20 20 20 20	SF Perf w/ Bell SF Solid w/ Bell F-477 SF Perf SF Perf w/ Bell SF Solid SF Solid w/ Bell F-477 WT	N N
36"	13 13 20 20 20	SF Solid w/ Bell F-477 SF Perf w/ Bell SF Perf w/ Bell SF Solid w/ Bell F-477 WT	N
42"	13 13 20 20 20	SF Perf w/ Bell SF Solid w/ Bell F-477 SF Perf w/ Bell SF Solid w/ Bell F-477 WT	N N N
48"	14.5 14.5 20 20 20	SF Perf w/ Bell SF Solid w/ Bell F-477 SF Perf w/ Bell SF Solid w/ Bell F-477 WT	N N N
60"	14.5 20 20	SF Solid w/ Bell F-477 SF Solid w/ Bell F-477 WT	N





