

EXCALIBUR

EXTRUSIONS

Custom Plastic Extrusions, Fabrications, Injection Molding,
Plastic Machined Nipples, Pipe, Hose, Tubing

Proudly Manufactured in the USA

110 E. Crowther Avenue • Placentia, CA 92870

Phone: (800) 648-6804 / Fax: (714) 524-7453

www.excaliburextrusions.com

Effective September 1st, 2012

Serving The Plastics Industry Since 1970



Machined Plastic Nipples

Excilbur manufactures Sch 40, Sch 80, PVC, CPVC, Poly and Polypropylene nipples from 1/8" to 6" in diameter from our own extruded stock. Nipples can be ordered in various lengths in TBE, TOE, Plain End or Victaulic®. We maintain a large inventory at all times and most orders are shipped the same day.

Excilbur Warehouse Located at:
Commerce City, CO (303) 286-7575

Excilbur Outside Sales Reps:
Katy, TX (281) 579-8228
Sacramento, CA (916) 922-5556



Accessories for the Ag And Turf Markets

Our Irrigation Line includes Wye and Tee Strainers with either nylon or stainless steel screens, cut-off nipples, flexible PVC IPS & Irrigation hose, and control tubing. We also provide flexible PVC nipples, extra-flexible PVC nipples, and flexible rubber nipples, along with our Spring Back Risers®.



Custom Extrusion & Custom Fabrication

Excilbur processes include extrusion, injection molding, bending, belling, forming, threading, cutting, and slitting. We provide extrusions up to 8" in diameter in many different materials such as PVC, CPVC, Polyethylene, Polypropylene, ABS, Styrene, Vinyl. We provide Color Matching, Printing, Hot Stamping, Embossing. Technical services are available.

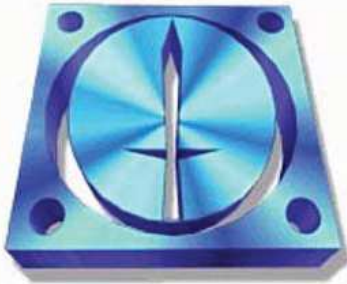


Proudly Manufactured in the USA

Phone 800 648 6804

www.excilburextrusions.com

Fax (714) 524-7453



EXCALIBUR

Machined Nipples*

Sch 40 White PVC Nipples
Sch 80 Grey PVC Nipples
Sch 80 White PVC Nipples
Sch 80 Grey CPVC Nipples
Sch 40 Black Polyethylene Nipples
Sch 80 Natural Polypropylene Nipples
Sch 80 Black Polypropylene Nipples

*TBE, TOE, Plain End, BPT, Victaulic®, or any combination.

Industrial Pipe

Type I PVC Sch 40 Industrial Pipe
Type I PVC Sch 80 Industrial Pipe
Hi Temp CPVC Sch 40 Industrial Pipe
Hi Temp CPVC Sch 80 Industrial Pipe
Sch 80 Black Polypropylene Pipe
Sch 80 Natural Polypropylene Pipe

Irrigation Pipe**

Sch 80 PVC Drop Pipe
Sch 40 White Pipe
Class 125 - 315 PVC Pipe

**Irrigation Pipe is available in bundle or lift quantities, and with plain or belled ends. Available with Alertline® Purple Stripe for Reclaimed Water.

Flexible Nipples

Flexible PVC Nipples
Spring Back Risers®
Extra Flexible PVC Nipples
Flexible Rubber Nipples

Algae-Resistant Flexible PVC Hose***

Flexible PVC Irrigation Hose
Flexible PVC IPS Hose
Cut Lengths of IPS Hose

***Available with Alertline® Purple Stripe for Reclaimed Water.

Hydraulic Control Tubing

Type II PVC Control Tubing for Irrigation Controllers

Water Conditioning

Brinewells 3 1/2" ID White
Brinewell Tops & Bottoms
Overflow Elbows (Black & Natural)
Overflow Nuts (Black & Natural)
U Bends
3/8" Brine Tube
13/16" Grey Brine Tube
3/4" CL 125 & CL 200 White Brine Tube x 10'

Wye & Tee Strainers‡

All Plastic Tee Strainers
Economy Wye Strainers
Plastic Screens
Stainless Steel Screens
Stainless Steel Perforated Screens
‡Contact Factory for pricing & availability.

Clear PVC

Clear Sch 40 PVC Pipe
Clear CL 100 PVC Pipe

Vacuum Tubing

White 2" PVC Vacuum Tube
Grey 2" PVC Vacuum Tube
Clear 2" PVC Vacuum Tube

Custom

Profiles & Tubes up to 8" x any length
Color Matching using Spectrophotometry
Materials include: ABS, PVC, Polyethylene, Polypropylene, & Polystyrene.

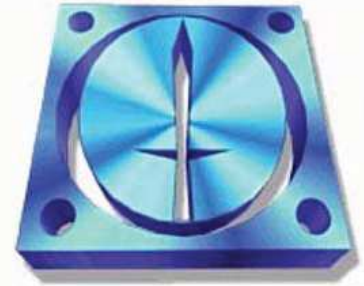
In-Line

Belling
Slitting
Drilling
Printing
Embossing
Barcoding

Post Extrusion

Champhering
Hot Stamping
Printing
Gang Drilling
Bending
Threading & Tapping
Assembly/ Packing / Bagging

EXCALIBUR



100% Proudly Made in the USA

Extruded from our stock to insure the highest quality and widest variety obtainable anywhere!

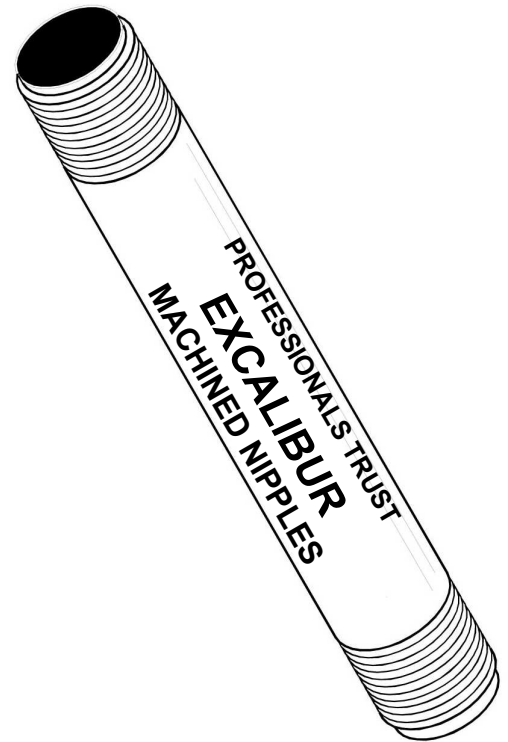
- As specified by Landscape Architects and Landscape Engineers.
- Excalibur machined plastic pipe nipples can be ordered in any length in TBE, TOE, Plain End, and Victaulic®.
- NPT is the most common thread form, however BSP, BSPT, NPS, UN, UNF, and custom threads are readily available.

Why Use Excalibur Machined VS. Competitors' Molded Nipples?

- Can Be Cut Anywhere For Effective Solvent Weld Joint
- Are available In Infinite Lengths From Close Thru 240"
- Seal Better Than Molded Nipples with Mold Lines
- Extruded from high impact resin (exceeds ASTM-D 1785)
- Precision machined

Stock Sizes

- Sch 40 PVC and Polyethylene, 1/2" through 1" Diameter
- Sch 40 Clear PVC Nipples Are Also Available
- Sch 80 PVC, Polypropylene, and CPVC, 1/8" through 6" Diameter
- Sch 80 White PVC, 1/2" through 4" Diameter



EXCALIBUR
EXTRUSIONS

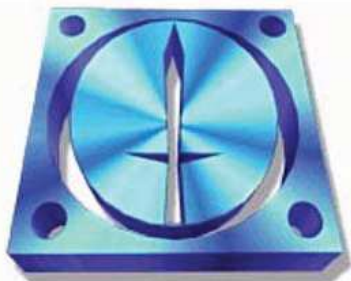
Professionals expect it.
They put it in writing:
Machined Nipples Only

The only way to be sure you receive machined nipples is to specify Excalibur.
714-528-8834
800-648-6804
www.excaliburextrusions.com

Products comply with ASTM D 2464

Threads conform to ASTM F 1498





EXCALIBUR

Sch 80 Grey PVC Machined TBE Nipples*

Products comply fully with ASTM D 2464

Threads conform to ASTM F 1498

Nipples are produced from extruded PVC 1120 –1220 meeting ASTM D 1784 and ASTM D 1785, product standard 21—70

SIZE ↓	→ P/N	1/8" & 1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"
		001-002	004	005	007	010	012	015	020	025	030	040	060
CI	005	0.66	0.66	0.64	0.67	0.96	1.22	1.51	2.00	6.10	7.30	11.98	94.33
1 1/2"	015	0.70	0.70	0.67	0.67								
2"	020	0.76	0.76	0.67	0.71	1.05	1.29	1.56					
2 1/2"	025	0.76	0.88	0.71	0.78	1.14	1.42	1.72	2.18				
3"	030	0.84	0.92	0.78	0.80	1.19	1.56	1.89	2.37	6.90	7.95		
3 1/2"	035	0.88	0.99	0.80	0.90	1.29	1.72	2.05	2.57	7.43	8.64		
4"	040	0.92	1.10	0.85	0.96	1.39	1.84	2.18	2.75	7.95	9.28	12.43	97.89
4 1/2"	045	0.92	1.22	0.96	1.11	1.56	2.00	2.34	3.07	8.47	9.96	13.24	
5"	050	0.99	1.25	1.03	1.14	1.72	2.16	2.52	3.23	8.98	10.62	14.04	
5 1/2"	055	1.10	1.37	1.05	1.22	1.84	2.27	2.68	3.42	9.56	11.29	14.85	
6"	060	1.25	1.41	1.11	1.35	1.89	2.37	2.88	3.62	10.05	11.92	15.61	113.90
7"	070	1.35	1.51	1.22	1.42	2.11	2.68	3.14	4.12	11.12	13.24	17.23	
8"	080	1.43	1.60	1.29	1.56	2.24	2.88	3.42	4.42	12.19	14.57	18.95	129.93
9"	090	1.54	1.76	1.42	1.72	2.52	3.10	3.71	4.87	13.24	15.91	20.66	
10"	100	1.66	1.87	1.51	1.86	2.68	3.34	3.95	5.24	14.29	17.23	22.51	145.94
11"	110	1.76	1.97	1.64	2.00	2.88	3.58	4.02	5.65	15.36	18.52	24.12	
12"	120	1.87	2.08	1.72	2.11	2.98	3.74	4.25	6.00	16.42	19.88	25.96	158.38
14"	140	2.28	2.46	1.89	2.27	3.48	4.53	5.29	6.79	18.52	22.51	29.64	172.63
15"	150	2.46	2.64	2.05	2.44	3.71	4.77	5.61	7.34	19.59	23.84	31.53	
16"	160	2.64	2.77	2.11	2.68	3.85	5.06	5.90	7.69	20.66	25.18	33.38	190.44
18"	180	3.05	3.15	2.34	2.81	4.27	5.49	6.50	8.57	22.77	27.83	37.33	199.33
20"	200	3.31	3.47	2.52	3.07	4.68	6.04	7.08	9.15	24.92	30.49	41.04	211.80
24"	240	3.55	4.11	2.88	3.58	5.11	7.06	8.32	10.71	28.09	35.78	48.99	224.22
30"	300	4.43	5.16	3.59	4.47	6.37	8.52	10.05	13.06	35.10	44.71	61.26	250.95
36"	360	5.31	6.16	4.36	5.54	7.59	10.11	11.88	15.71	39.20	51.64	70.19	275.88
48"	480	7.09	8.22	5.42	7.42	9.70	13.26	14.56	20.65	50.32	67.54	91.38	329.24
60"	600	8.86	10.28	6.36	9.08	11.79	16.38	17.76	25.48	62.91	98.89	114.22	380.84

* For T.O.E., Victaulic®, or Plain End, add 10%

List Price Each - Prices Subject to Change Without Notice

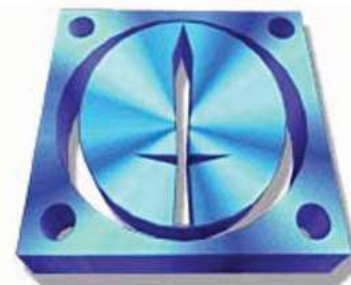
Any length available - Contact Factory for Pricing

Threaded Connections: Excalibur recommends the use of quality grade sealant. Teflon tape, paste, or pipe joint compound is at the discretion of the installer. Some pipe joint compounds or Teflon pastes may contain substances that cause stress cracking to plastic. 1 to 2 turns beyond finger tight is all that is required to make a sound plastic threaded connection. Over tightening may cause damage to both pipe and fitting.

Do Not Use Pipe Wrenches

Warning! Do not use compressed Gas or Air to test any PVC thermoplastic piping product or system. Do not use devices propelled by compressed Gas or Air to clear systems. By doing so, may result in explosive fragmentation of piping system and components causing bodily injury.

EXCALIBUR



Sch 80 Grey CPVC Machined TBE Nipples*

Material: CPVC type 4, grade 1 (Cell Classification 23477-B) Meets the specifications for rigid CPVC per ASTM F 441/F.
Dimensions: Schedule 80 CPVC Nipples meet or exceed the requirements of F 441/F, produced from extruded stock pipe.
Threads conform to ASTM F 1498.

SIZE	→	1/4"	3/8"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	6"
↓	Pt. No.	C002	C004	C005	C007	C010	C012	C015	C020	C025	C030	C040	C060
CI	005	0.89	0.89	0.99	1.29	1.77	2.61	2.58	4.31	7.84	11.07	15.49	96.35
1 1/2"	015	1.01	1.01	1.12									
2"	020	1.18	1.18	1.28	1.64	2.14	2.89	3.14					
2 1/2"	025	1.34	1.34	1.47	1.85	2.46	3.33	3.62	4.98				
3"	030	1.50	1.50	1.65	2.10	2.84	3.80	4.16	5.70	8.86	11.21		
3 1/2"	035	1.69	1.69	1.85	2.37	3.22	4.31	4.74	6.50	10.09	12.72		
4"	040	1.84	1.84	2.03	2.60	3.56	4.71	5.12	7.17	11.13	13.76	19.88	100.07
4 1/2"	045	1.98	1.98	2.18	2.84	3.90	5.18	5.75	7.84	12.27	15.56	22.04	
5"	050	2.18	2.18	2.40	3.08	4.27	5.64	6.26	8.57	13.41	17.07	24.24	
5 1/2"	055	2.34	2.34	2.58	3.32	4.62	6.12	6.79	9.30	14.56	18.54	26.42	
6"	060	2.53	2.53	2.80	3.60	5.05	6.68	7.42	10.59	15.92	20.33	29.02	127.26
7"	070	2.87	2.87	3.14	4.06	5.72	7.55	8.43	11.56	18.08	23.17	33.22	
8"	080	3.20	3.20	3.51	4.54	6.42	8.47	9.48	13.17	20.34	26.12	37.54	142.85
9"	090	3.53	3.53	3.87	5.00	7.07	9.37	10.48	14.40	21.44	29.40	42.08	
10"	100	4.16	4.16	4.32	5.59	7.96	10.48	11.74	16.16	25.22	32.46	46.89	163.86
11"	110	4.25	4.25	4.66	6.07	8.66	11.39	12.78	17.60	27.48	35.48	51.23	
12"	120	4.74	4.74	5.18	6.62	9.50	12.50	14.07	19.33	30.22	39.05	56.44	183.02

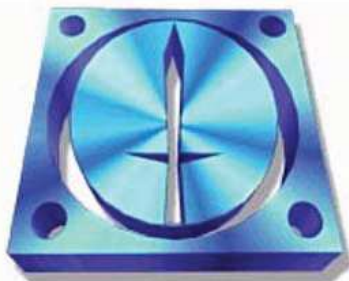
* For T.O.E., Victaulic®, or Plain End, add 10% List Price Each - Prices Subject to Change Without Notice
Any length available - Contact Factory for Pricing

Threaded Connections: Excalibur recommends the use of quality grade sealant. Teflon tape, paste, or pipe joint compound is at the discretion of the installer. Some pipe joint compounds or Teflon pastes may contain substances that cause stress cracking to plastic. 1 to 2 turns beyond finger tight is all that is required to make a sound plastic threaded connection. Over tightening may cause damage to both pipe and fitting.

Do Not Use Pipe Wrenches

Warning! Do not use compressed Gas or Air to test any PVC thermoplastic piping product or system. Do not use devices propelled by compressed Gas or Air to clear systems. By doing so, may result in explosive fragmentation of piping system and components causing bodily injury.

Size	1/8"	1/4"	3/8"	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"
Close	3/4"	7/8"	1"	1-1/8"	1-3/8"	1-1/2"	1-5/8"	1-3/4"	2"	2-1/2"	2-5/8"	2-7/8"	3-1/2"
Short	1-1/2"	1-1/2"	1-1/2"	1-1/2"	1-1/2"	2"	2"	2"	2-1/2"	3"	3"	4"	4"



EXCALIBUR

Sch 80 Polypropylene Machined TBE Nipples*

Material: Polypropylene comply with ASTM D 4101

Pipe meets or exceeds standards set forth by ASTM F2389

Threads conform to ASTM F 1498

Prefix N for Natural • B for Black**

SIZE	→	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	3"	4"	6"
↓	Pt. No.	N005	N007	N010	N012	N015	N020	N030	N040	N060
CI	005	1.00	1.23	1.66	2.17	2.16	2.93	7.47	11.66	72.05
1 1/2"	015	1.08								
2"	020	1.22	1.39	1.74	2.29	2.27				
2 1/2"	025	1.34	1.58	2.16	2.86	2.84	3.28			
3"	030	1.47	1.74	2.33	2.93	2.98	3.36	8.10		
3 1/2"	035	1.60	1.91	2.58	3.26	3.32	3.71	8.73		
4"	040	1.72	2.07	2.86	3.60	3.66	4.16	9.59	12.90	73.82
4 1/2"	045	1.74	2.12	3.11	3.94	3.99	4.49	10.21	13.83	
5"	050	1.84	2.30	3.35	4.26	4.31	4.86	10.85	14.76	
5 1/2"	055	1.95	2.45	3.58	4.61	4.64	5.19	11.47	15.67	
6"	060	2.08	2.61	3.70	4.91	4.89	5.54	12.12	16.59	90.54
7"	070	2.32	2.95	4.19	5.59	5.69	6.25	13.38	18.44	
8"	080	2.57	3.28	4.66	6.25	6.23	6.95	14.65	20.28	97.06
9"	090	2.81	3.60	5.17	6.93	7.17	7.64	15.91	22.12	
10"	100	3.07	3.93	5.66	7.60	7.70	8.36	17.17	23.97	108.35
12"	120	3.55	4.60	6.63	8.28	9.01	9.78	19.71	27.65	118.14

* For T.O.E., Victaulic®, or Plain End, add 10%

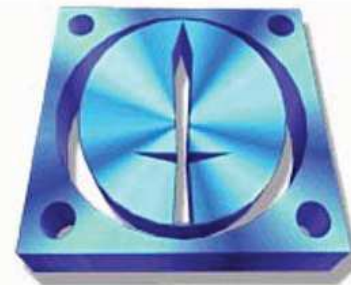
** For Black Polypropylene, add 10%

Do Not Use For Compressed Air or Gas

List Price Each - Prices Subject to Change Without Notice

Any length available - Contact Factory for Pricing

EXCALIBUR



Sch 40 Machined TBE Nipples*

Products comply fully with ASTM D 2466

Threads conform to ASTM F 1498

Nipples are produced from extruded pipe meeting ASTM D 1784 and ASTM D 1785

Not Recommended for Compressed Air or Gases

Sch 40 PVC (White)

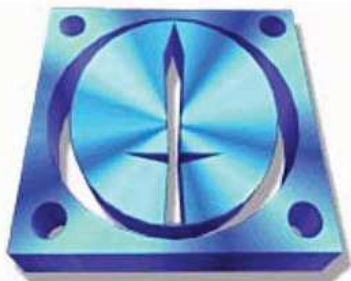
Size	→	1/2"	3/4"	1"
↓	Pt. No	W005	W007	W010
Close	005	0.53	0.56	0.78
1-1/2"	015	0.56	0.56	0.00
2"	020	0.56	0.58	0.88
2-1/2"	025	0.58	0.64	0.93
3"	030	0.64	0.67	0.97
3-1/2"	035	0.67	0.74	1.04
4"	040	0.69	0.78	1.16
4-1/2"	045	0.78	0.90	1.29
5"	050	0.83	0.93	1.42
5-1/2"	055	0.88	1.02	1.49
6"	060	0.90	1.11	1.56
7"	070	1.02	1.18	1.72
8"	080	1.04	1.29	1.85
9"	090	1.18	1.42	2.08
10"	100	1.25	1.51	2.18
12"	120	1.42	1.72	2.47
14"	140	1.56	1.88	2.85
15"	150	1.71	1.98	3.05
16"	160	1.72	2.18	3.16
18"	180	1.91	2.29	3.50
20"	200	2.08	2.50	3.82
24"	240	2.35	2.93	4.22
36"	360	3.56	4.53	6.25

Sch 40 Polyethylene (Black)

Size	→	1/2"	3/4"
↓	Pt. No	P005	P007
Close	005	0.60	0.74
1-1/2"	015	0.60	-
2"	020	0.60	-
2-1/2"	025	0.64	0.83
3"	030	0.66	0.89
3-1/2"	035	0.67	1.01
4"	040	0.71	1.08
4-1/2"	045	0.81	1.19
5"	050	0.85	1.23
5-1/2"	055	0.87	1.26
6"	060	0.89	1.34
7"	070	0.99	1.42
8"	080	1.03	1.50
9"	090	1.13	1.63
10"	100	1.19	1.89
12"	120	1.34	1.98
14"	140	1.51	-
15"	150	1.60	-
16"	160	1.69	-
18"	180	1.87	-
20"	200	2.05	-
24"	240	2.43	-
36"	360	3.21	-

* For T.O.E., Victaulic®, or Plain End, add 10%
Any length available - Contact Factory for Pricing

List Price Each - Prices Subject to Change Without Notice
Do Not Use Pipe Wrenches



EXCALIBUR

Sch 80 White PVC Machined TBE Nipples*

Products comply fully with ASTM D 2464

Threads conform to ASTM F 1498

Nipples are produced from extruded PVC 1120 –1220 meeting ASTM D 1784 and ASTM D 1785, product standard 21—70

SIZE ↓	→ Pt. No.	1/2" Z005	3/4" Z007	1" Z010	1 1/4" Z012	1 1/2" Z015	2" Z020	2 1/2" Z025	3" Z030	4" Z040	6" Z060
CI	005	0.72	0.78	1.10	1.40	1.74	2.30	7.01	8.40	13.78	108.48
1 1/2"	015	0.78	0.78								
2"	020	0.78	0.82	1.22	1.49	1.80					
2 1/2"	025	0.82	0.89	1.31	1.63	1.97	2.51				
3"	030	0.89	0.91	1.37	1.80	2.18	2.73	7.94	9.14		
3 1/2"	035	0.91	1.04	1.49	1.97	2.35	2.96	8.56	9.93		
4"	040	0.99	1.10	1.60	2.11	2.51	3.16	9.14	10.69	14.29	112.57
4 1/2"	045	1.10	1.27	1.80	2.30	2.69	3.53	9.74	11.46	15.23	
5"	050	1.18	1.31	1.97	2.49	2.90	3.72	10.32	12.21	16.14	
5 1/2"	055	1.22	1.40	2.11	2.60	3.09	3.93	10.98	12.98	17.07	
6"	060	1.27	1.56	2.18	2.73	3.31	4.17	11.56	13.71	17.97	130.99
7"	070	1.40	1.63	2.43	3.09	3.61	4.73	12.79	15.23	19.82	
8"	080	1.49	1.80	2.57	3.31	3.93	5.08	14.01	16.76	21.80	149.42
9"	090	1.63	1.97	2.90	3.56	4.26	5.61	15.23	18.29	23.76	
10"	100	1.74	2.14	3.09	3.83	4.54	6.03	16.43	19.82	25.88	167.82
11"	110	1.88	2.30	3.31	4.13	4.62	6.49	17.67	21.32	27.73	
12"	120	1.97	2.43	3.43	4.31	4.88	6.90	18.89	22.86	29.84	182.14
14"	140	2.18	2.60	4.00	5.21	6.09	7.81	21.32	25.88	34.08	198.52
15"	150	2.35	2.80	4.26	5.49	6.45	8.43	22.52	27.42	36.27	
16"	160	2.43	3.09	4.43	5.82	6.79	8.84	23.76	28.96	38.39	219.00
18"	180	2.69	3.24	4.92	6.31	7.48	9.85	26.20	31.99	42.93	229.24
20"	200	2.90	3.53	5.39	6.94	8.15	10.52	28.65	35.07	47.21	243.57
24"	240	3.31	4.13	5.88	8.12	9.57	12.31	32.31	41.15	56.34	257.86
30"	300	4.14	5.15	7.34	9.80	11.56	15.03	40.37	51.42	70.46	288.59
36"	360	5.01	6.37	8.74	11.62	13.65	18.06	45.08	59.39	80.72	317.26
48"	480	6.23	8.54	11.16	15.25	16.75	23.75	57.86	77.66	105.09	378.62
60"	600	7.32	10.44	13.56	18.84	20.42	29.31	72.33	113.73	131.34	437.97

* For T.O.E., Victaulic®, or Plain End, add 10%

List Price Each - Prices Subject to Change Without Notice

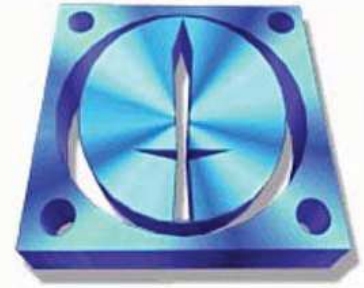
Any length available - Contact Factory for Pricing

Threaded Connections: Excalibur recommends the use of quality grade sealant. Teflon tape, paste, or pipe joint compound is at the discretion of the installer. Some pipe joint compounds or Teflon pastes may contain substances that cause stress cracking to plastic. 1 to 2 turns beyond finger tight is all that is required to make a sound plastic threaded connection. Over tightening may cause damage to both pipe and fitting.

Do Not Use Pipe Wrenches

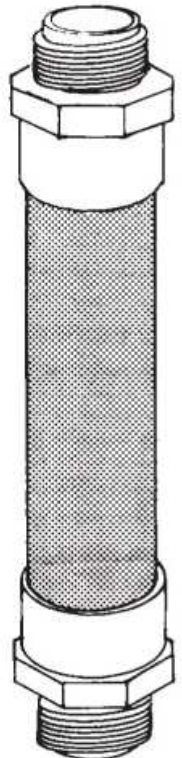
Warning! Do not use compressed Gas or Air to test any PVC thermoplastic piping product or system. Do not use devices propelled by compressed Gas or Air to clear systems. By doing so, may result in explosive fragmentation of piping system and components causing bodily injury.

EXCALIBUR



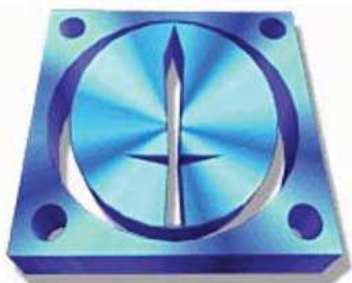
Flexible PVC Nipples - Brown
 Excalibur Hose ASTM D-2287
 Cell #6464500 Meets or Exceeds Cell #5360500
 Patent #3,759,445

Part	Pipe	Over- all	Type of	Quan- tity		List
Number	Size		Fittings	Per Box	Per Box	Price
506 MM	1/2"	6"	MAxMA	100	15	2.44
506 MF	1/2"	6"	MAxFA	100	15	2.61
506 FF	1/2"	6"	FAxFA	100	15	2.35
506 ME	1/2"	6"	MAx90 ELL	100	19	2.39
506 MS	1/2"	6"	MAxST ELL	100	18	2.58
506 SS	1/2"	6"	STxST ELL	100	19	3.57
512 MM	1/2"	12"	MAxMA	100	30	2.98
756 MM	3/4"	6"	MAxMA	50	11	3.36
756 MF	3/4"	6"	MAxFA	50	11	3.09
756 ME	3/4"	6"	MAx90 ELL	50	14	3.65
756 MS	3/4"	6"	MAxST ELL	50	13	4.31
756 SS	3/4"	6"	STxST ELL	50	14	3.96
712 MM	3/4"	12"	MAxMA	50	22	4.26
1007 MM	1"	7"	MAxMA	50	18	4.39
1007 MF	1"	7"	MAxFA	50	18	3.99
1007 ME	1"	7"	MAx90 ELL	50	21	4.29
1007 MS	1"	7"	MAxST ELL	50	20	5.44
1012 MM	1"	12"	STxST ELL	50	27	5.43



Special Flexible PVC Nipples

Special nipples can be made in any length or with any combination of fittings so desired in minimum quantities of 50 or more of item. Contact your Distributor or Factory for details.



EXCALIBUR

Installation

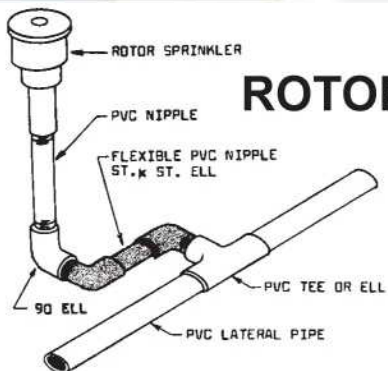
SPECIFICATIONS:

For 1/2", 3/4" & 1" Flexible PVC Nipples. Check factory for availability of sizes 1-1/4" & 1-1/2". Made from all virgin PVC materials. Flexible hose complies with ASTM D2287. Schedule 40 fittings complies with ASTM D2466. Tested at 200 psi static pressure for 2 hours. Quick burst test exceeds 400 psi.

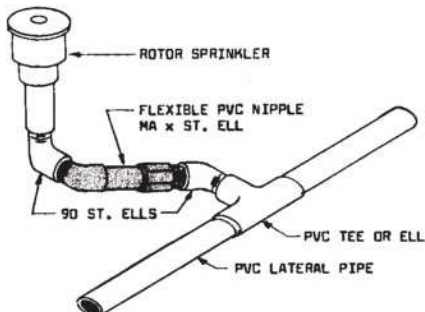
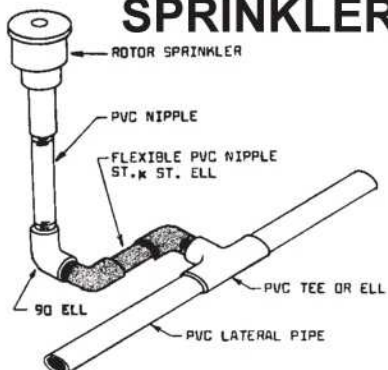
INSTALLATION INSTRUCTIONS:

1. If the system is to be pressure tested this must be done before installation of the flexible nipples or damage to the nipples could result.
2. Do not install under constant static pressure conditions such as under quick couplers or valve in head sprinklers.
3. When installing sprinkler heads on flexible nipples be sure to hold the nipple with a wrench so that the nipple is not twisted when tightening heads.

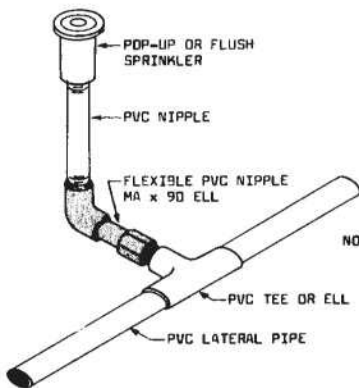
ROTOR



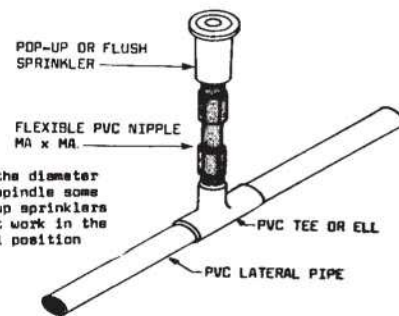
SPRINKLERS



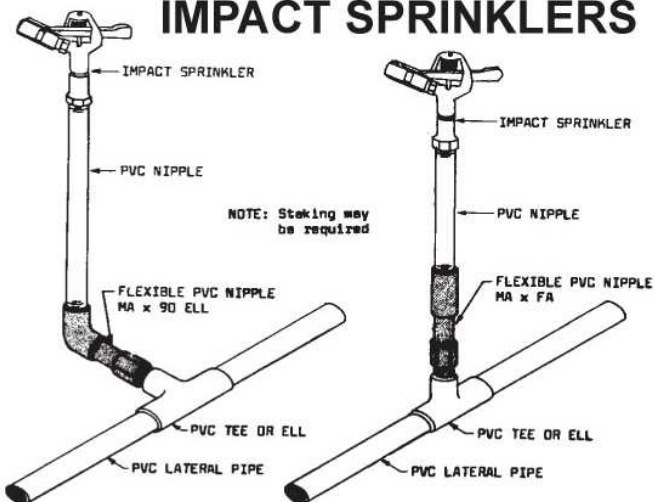
POP-UP OR FLUSH SPRINKLERS



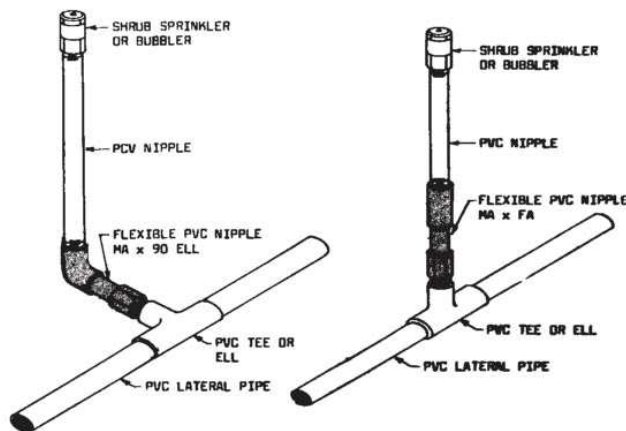
NOTE: Due to the diameter of the spindle some "M" pop-up sprinklers will not work in the vertical position



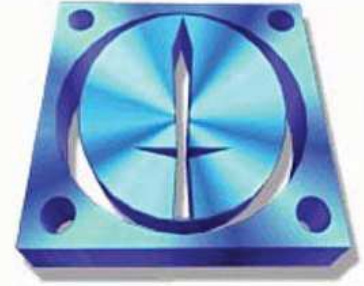
IMPACT SPRINKLERS



SHRUB SPRINKLERS



EXCALIBUR



White

Patent #3,759,445

Pt. No.	Pipe Size	Overall Length	Type of Fitting	Quantity/ Box	Weight/ Box	List
504MM-EF	1/2"	4"	MA x MA	100	11	1.94
504MF-EF	1/2"	4"	MA x FA	100	11	2.04
504FF-EF	1/2"	4"	FA x FA	100	11	2.10
504ME-EF	1/2"	4"	MA x 90 ELL	100	15	2.44
504MS-EF	1/2"	4"	MA x ST ELL	100	14	2.42
504SS-EF	1/2"	4"	ST x ST ELL	100	15	3.41
505MM-EF	1/2"	5"	MA x MA	100	13	2.44
505MF-EF	1/2"	5"	MA x FA	100	13	2.27
505FF-EF	1/2"	5"	FA x FA	100	13	2.35
505ME-EF	1/2"	5"	MA x 90 ELL	100	17	2.32
505MS-EF	1/2"	5"	MA x ST ELL	100	16	2.58
505SS-EF	1/2"	5"	ST x ST ELL	100	17	3.57

Extra Flexible PVC Nipples are made of the finest quality virgin material
Especially useful where greater flexibility is required

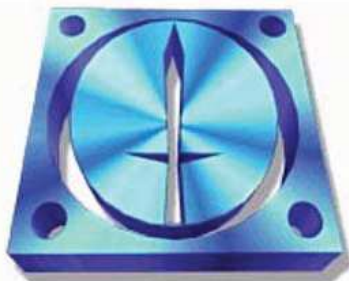
Flexible Rubber Nipples

Part Number	Pipe Size	Overall Length	Type of Fittings	Quantity Per Box	Weight Per Box	List Price
R-506MM	1/2"	6"	MA x MA	100	13	2.10
R-756MM	3/4"	6"	MA x MA	50	14	6.01
R-756MS	3/4"	6"	MA x ST ELL	50	15	6.01
R-1007MM	1"	7"	MA x MA	50	19	6.75
R-1007MS	1"	7"	MA x ST ELL	50	21	6.14
R-1259MM	1-1/4"	9"	MA x MA	25	23	13.19
R-1259MS	1-1/4"	9"	MA x ST ELL	25	27	14.30
R-1511MM	1-1/2"	11"	MA x MA	25	29	17.06
R-1511MS	1-1/2"	11"	MA x ST ELL	25	31	18.71

Flexible Rubber Nipples are made of the finest synthetic rubber and are banded with stainless steel. They are impervious to acidic or alkaline soils. They are particularly useful under large turf irrigation equipment or cold weather applications.

INSTALLATION:

1. If the system is to be pressure tested this must be done before installation of the flexible rubber nipples or damage to the nipples could result.
2. Do not install under constant static pressure conditions such as under quick couplers or valve-in-head sprinklers.
3. When installing sprinkler heads on flexible rubber nipples be sure to hold the nipple with a wrench so that the nipple is not twisted when tightening heads.



EXCALIBUR



Spring Back Risers®

Springs Back To Original Position After Impact
Over 12 Years Field Tested & Approved

Many Applications

- Landscaping
- Shrubbery
- Green Belts
- Roadway Landscaping



Cuts Costs

- Vandalism
- Broken Pipes
- Washed Out Landscaping

1/2" Heavy Wall Flex PVC Tube

Has Been Tested At Over 150 PSI

Springs are made from .187" DIA. (OTMB) Spring Wire. They have an inside DIA of .910" a pitch of .475" and have squared ends.

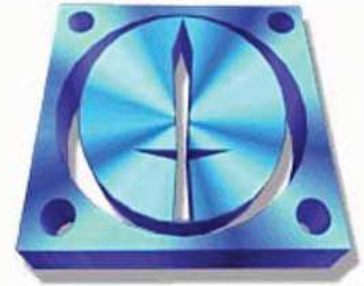
Special SPRING BACK RISERS® can be made in any length with any combination of fittings desired. Contact your distributor or factory for details.

5 Sizes

*As Specified for Cal. Trans. as TYPE B7

Pt. No.	Pipe Size	Overall Length	Spring Length	Quantity/ Box	List
SL508MM	1/2"	6"	4"	50	7.81
SL512MM	1/2"	12"	8"	50	9.01
SL516MM	1/2"	16"	12"	25	9.62
SL518MM	1/2"	18"	14"	25	9.83
SL524MM	1/2"	24"	18"	25	10.56

EXCALIBUR



Brown / Black

Excalibur Hose ASTM D-2287
 Cell #6464500 As Specified by Cal Trans
 Extruded from Algae-Resistant resin
 Flexible PVC Hose Meets the Following Specifications
 50 PSI for 60 Minutes @ 73° F When Tested in Accord ance with
 ASTM D-1598

Part Number	Size	List Per 100 Ft.	Ft. Per Coil.	Weight Per 100 Ft.	Outside Diameter	Inside Diameter	Minimum Wall
005IRR	1/2" Irrigation	38.48	500	10.3	0.680"	0.500"	0.090"
006IRR	5/8" Irrigation	51.40	300	13.8	0.825"	0.625"	0.100"
007IRR	3/4" Irrigation	68.99	300	18.5	.970"	0.750"	0.110"
010IRR	1" Irrigation	113.67	100	30.5	1.250"	0.970"	0.140"
005IPS	1/2" IPS	74.61	200	20.76	.840"	0.546"	0.147"
007IPS	3/4" IPS	97.31	200	28.19	1.050"	0.742"	0.154"
010IPS	1" IPS	143.59	100	41.58	1.315"	0.957"	0.179"

Alertline

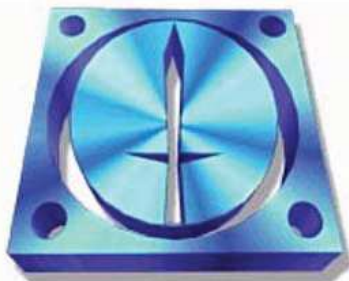
For Reclaimed Water applications
 Cell #6464500 As Specified by Cal Trans
 Extruded from Algae-Resistant resin
 Flexible PVC Hose Meets the Following Specifications
 50 PSI for 60 Minutes @ 73° F When Tested in Accordance with ASTM
 D-1598

Produced with Purple Stripe to prevent cross contamination
 Print Reads "RECLAIMED WATER DO NOT DRINK"

Part Number	Size	List Per 100 Ft.	Ft. Per Coil.	Weight Per 100 Ft.	Outside Diameter	Inside Diameter	Minimum Wall
005IPSP	1/2" IPS	85.81	200	20.76	0.84	0.546"	0.147"
007IPSP	3/4" IPS	111.93	200	28.19	1.050"	0.742"	0.154"
010IPSP	1" IPS	165.17	100	41.58	1.315"	0.957"	0.179"

CUT LENGTHS OF IPS HOSE

Part Number	Size	Box Quantity	List Price Each	Part Number	Size	Box Quantity	List Price Each
CH005060	1/2" X 6"	200	0.45	CH007060	3/4" X 6"	200	0.59
CH005120	1/2" X 12"	100	0.89	CH007120	3/4" X 12"	100	1.06
CH005180	1/2" X 18"	50	1.34	CH007180	3/4" X 18"	50	1.59
CH005240	1/2" X 24"	50	1.80	CH007240	3/4" X 24"	50	2.1
CH005300	1/2" X 30"	50	2.24	CH007300	3/4" X 30"	50	3.02
CH005360	1/2" X 36"	25	2.69	CH007360	3/4" X 36"	25	3.48
CH005420	1/2" X 42"	25	3.22	CH007420	3/4" X 42"	25	3.68
CH005480	1/2" X 48"	25	3.70	CH007480	3/4" X 48"	25	4.84



EXCALIBUR

FRICITION LOSS IN P.S.I. PER 100 FT.

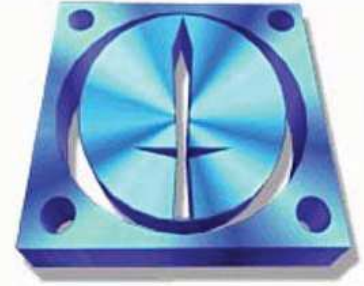
Irrigation Hose I.P.S. Hose

GMP	1/2"	5/8"	3/4"	1"	1/2"	3/4"	1"
1/2"	0.3				0.22		
1	1.22	0.41	0.16		0.79	0.18	
2	4.38	1.47	0.61	0.17	2.86	0.64	0.19
3	9.28	3.13	1.29	0.37	6.05	1.36	0.39
4	15.79	5.33	2.20	0.63	10.30	2.31	0.67
5	23.86	8.05	3.32	0.95	15.56	3.50	1.01
6	33.44	11.29	4.65	1.33	21.80	4.90	1.42
7		15.01	6.18	1.78	28.99	6.52	1.89
8		19.22	7.92	2.27	37.11	8.34	2.42
9		23.91	9.85	2.82		10.37	3.00
10		29.05	11.97	3.42		12.75	3.65
11			14.27	4.08		15.04	4.36
12			16.76	4.8		17.66	5.12
13			19.44	5.65		20.48	5.93
14			22.3	6.38		23.49	6.81
15			25.33	7.24		26.69	7.74
20			43.13	12.34		45.45	13.17
25				18.64			19.91
30				26.12			27.90
35				34.74			37.10

These figures are derived from the Williams and Hazen formula reduced specifically for P.V.C.

Note: Pressure ratings for non-reinforced flexible vinyl hose have not been established by the Society of Plastics Industry due to the many variables that affect a non-rigid product, such as temperature, elasticity, etc. However, **Excalibur** customers have used PVC hose to 60 PSI on open-end sprinkler systems. If pressures are to exceed 60 PSI, **Excalibur** recommends that the purchaser should make their own test to determine the suitability of hose for their own particular purpose. Please note, a drip irrigation system is not classified as an open-end system. Flexible PVC hose is not recommended for closed systems.

EXCALIBUR



Sch 40 PVC Industrial Pipe*

Part Number	Pipe Size	List Per 100 ft.	Ft. Per Bundle	Ft. Per Lift	Weight Per 100 ft.	Pressure Rating	Outside Diameter	Inside Diameter	Minimum Wall
002402	1/4"	41.906	500	5000	7.8	780	0.540"	0.364"	.088"
004402	3/8"	56.480	500	5000	10.5	620	0.675"	0.493"	.091"

TYPE I PVC 1120-1220 SCHEDULE 80 PIPE
Complies with ASTM D 1785 and Product Standard PS 21-70

Sch 80 PVC Industrial Pipe

Part Number	Pipe Size	List Per 100 ft.	Ft. Per Bundle	Ft. Per Lift	Weight Per 100 ft.	Pressure Rating	Outside Diameter	Inside Diameter	Minimum Wall
001802	1/8"	43.722	500	5000	5.8	1230	0.405"	0.215"	0.095"
002802	1/4"	52.826	500	5000	9.8	1130	0.540"	0.300"	0.119"
004802	3/8"	72.87	500	5000	13.6	915	0.675"	0.423"	0.126"

HI TEMP CPVC SCHEDULE 40 PIPE
Complies with ASTM D 1784; ASTM F-441; Commercial Standard CS-207-60

Sch 40 CPVC Industrial Pipe*

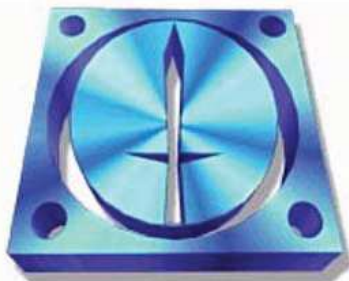
Part Number	Pipe Size	List Per 100 ft.	Ft. Per Bundle	Ft. Per Lift	Weight Per 100 ft.	Pressure Rating	Outside Diameter	Inside Diameter	Minimum Wall
C002402	1/4"		500	5000	8.7	780	0.540"	0.364"	.088"
C004402	3/8"		500	5000	11.7	620	0.675"	0.493"	.091"

Sch 80 CPVC Industrial Pipe

Part Number	Pipe Size	List Per 100 ft.	Ft. Per Bundle	Ft. Per Lift	Weight Per 100 ft.	Pressure Rating	Outside Diameter	Inside Diameter	Minimum Wall
C001802	1/8"	88.08	500	5000	6.3	1230	0.405"	0.215"	0.095"
C002802	1/4"	121.38	500	5000	11.9	1130	0.540"	0.300"	0.119"
C004802	3/8"	169.88	500	5000	16.5	915	0.675"	0.423"	0.126"
C005802	1/2"	196.41	400	4000	24.3	850	0.840"	0.546"	0.147"
C007802	3/4"	269.09	300	3000	32.9	690	1.050"	0.742"	0.154"

20 Ft. Lengths — Plain Ends, Belled Ends Available Sch 40 Not Recommended For Threading
NOT RECOMMENDED FOR COMPRESSED AIR OR GAS

* Threading of Schedule 40 pipe not recommended



EXCALIBUR

BLACK POLYPROPYLENE

NOT RECOMMENDED FOR COMPRESSED AIR OR GASES

Material: Meets the specification for Polypropylene per ASTM D 4101. Pipe: Meets ASTM F 2389.

Sch 80 Black Polypropylene								
Part Number	Pipe Size	List Per 100 ft.	Ft. Per Bundle	Ft. Per Lift	Weight Per 100 ft.	Outside Diameter	Inside Diameter	Minimum Wall
B002802	1/4"	98.69	500	5,000	6.7	0.540"	0.300"	0.119"
B004802	3/8"	134.91	500	5,000	9.3	0.675"	0.423"	0.126"
B005802	1/2"	144.15	400	5,000	13.6	0.840"	0.546"	0.147"
B007802	3/4"	188.52	300	4,000	18.4	1.050"	0.742"	0.154"
B010802	1"	277.21	200	3,000	27.1	1.315"	0.957"	0.179"
B012802	1 1/4"	380.71	100	2,500	37.3	1.660"	1.278"	0.191"
B015802	1 1/2"	365.91	100	2,000	44.8	1.900"	1.500"	0.200"
B020802	2"	506.39	100	1,500	62	2.375"	1.939"	0.218"
B025802	2 1/2"	1012.76	100	1,000	92.6	2.875"	2.323"	0.276"
B030802	3"	1012.76	60	1,000	124.1	3.500"	2.900"	0.300"
B040802	4"	1478.45	-	600	181.4	4.500"	3.826"	0.337"
B060802	6"	2820.15	-	300	345.9	6.625"	5.761"	0.432"

NATURAL POLYPROPYLENE

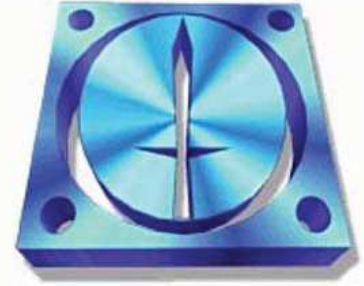
NOT RECOMMENDED FOR COMPRESSED AIR OR GASES

Material: Meets the specification for Polypropylene per ASTM D 4101. Pipe: Meets ASTM F 2389.

Sch 80 Natural Polypropylene								
Part Number	Pipe Size	List Per 100 ft.	Ft. Per Bundle	Ft. Per Lift	Weight Per 100 ft.	Outside Diameter	Inside Diameter	Minimum Wall
N002802	1/4"	88.59	500	5,000	6.7	0.540"	0.300"	0.119"
N004802	3/8"	123.72	500	5,000	9.3	0.675"	0.423"	0.126"
N005802	1/2"	131.34	400	5,000	13.6	0.840"	0.546"	0.147"
N007802	3/4"	171.07	300	4,000	18.4	1.050"	0.742"	0.154"
N010802	1"	253.54	200	3,000	27.1	1.315"	0.957"	0.179"
N012802	1 1/4"	347.28	100	2,500	37.3	1.660"	1.278"	0.191"
N015802	1 1/2"	332.97	100	2,000	44.8	1.900"	1.500"	0.200"
N020802	2"	459.73	100	1,500	62	2.375"	1.939"	0.218"
N025802	2 1/2"	836.99	100	1,000	92.6	2.875"	2.323"	0.276"
N030802	3"	920.98	600	1,000	124.1	3.500"	2.900"	0.300"
N040802	4"	1344.05	-	600	181.4	4.500"	3.826"	0.337"
N060802	6"	2562.86	-	300	345.9	6.625"	5.761"	0.432"

Copolymer Polypropylene is joined by the thermo-seal fusion process, threading or flanging. Polypropylene has resistance to common reagents such as sulfuric acid, nitric acid, hydrochloric acid and caustic soda. Polypropylene is excellent even at high temperatures where thermoplastics such as PVC and Polyethylene cannot be used. Resistance to abrasion is also very high. Polypropylene is not recommended to be used with strong oxidizing acids, chlorinated hydrocarbons and aromatics.

EXCALIBUR



Made from PVC 2110-2116 meeting ASTM D 1784 and meets
ASTM D 1785, products standard 21-70

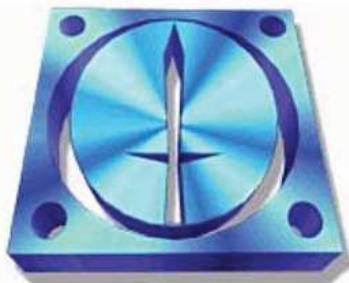
Part Number	Size	O.D.	Average I.D.	Min. Wal	Weight Per 100 ft.
CLR005401	1/2" Sch 40	.840"	.622"	0.109"	15.7
CLR007401	3/4" Sch 40	1.050"	.824"	0.113"	21
CLR010401	1" Sch 40	1.315"	1.049"	0.133"	30.1
CLR012401	1 1/4" Sch 40	1.660"	1.380"	0.140"	42.1
CLR015401	1 1/2" Sch 40	1.900"	1.610"	0.145"	50.5
CLR020401	2" Sch 40	2.375"	2.067"	0.154"	67.8
CLR030401	3" Sch 40	3.500"	3.068"	0.216"	140.8
CLR040401	4" Sch 40	4.500"	4.026"	0.237"	200.1
CLR060101	6" CL 100	6.625"	6.301"	0.162"	215.8

Standard 10 foot lengths.

Belling is available with minimum runs.

The material used to manufacture the Sch 40 and CL 100 Clear PVC is a food grade extrusion molding compound with indoor UV resistance properties, high gloss, and clarity. This material is formulated with an FDA approved tin stabilizer to meet the 21CFR 178.2650 food additive regulation, and is produced under stringent manufacturing conditions limiting RVCM to minimum levels.

Not suitable for contact with liquid milk, malt beverages, or non alcoholic carbonated beverages.



EXCALIBUR

2" Vacuum Tube
Grey, White, Clear
 For Residential Central Vacuum Systems

Custom Colors • Custom Printing in Ink or Embossing
Custom Packaging • Bundling for UPS

Part Number	Description	Lift Quantity
VW08	White 2" Vac Tube x 8'	800'
VW10	White 2" Vac Tube x 10'	1,000'
VG08	Grey 2" Vac Tube x 8'	800'
VG10	Grey 2" Vac Tube x 10'	1,000'
VC08	Clear 2" Vac Tube x 8'	N/A
VC10	Clear 2" Vac Tube x 10'	N/A



Specifications: ASTM F2158
 O.D. 2.00" +.005" -.005"
 Wall: .060" +.005" -.005"

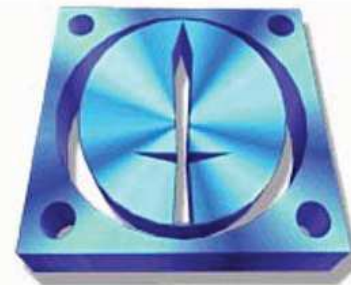
Fire Rating: UL-94V-0

Material: Type II (Hi Impact) PVC 2110-2116

Freight Class: #157004 Sub 3 - Plastic Pipe
 Class 70

Weight: 23 lbs. per 100' ft.

EXCALIBUR



Technical Data

Excalibur's Part Numbers

For your convenience, you will find our part numbers on each of our nipple sheets. This will give you the option of ordering by description or by part number.

Example—1/2" x 6" Sch 80 PVC
005060

Physical & Thermal Properties of:

	PVC	CPVC
Specific Gravity	1.4	1.55
Izod Impact Strength (fts. Lbs./inch of notch)	0.8	3.0
Modules of Elasticity, psi	4.2 x 10#	4.23 x 10#
Ultimate Tensile Strength, psi	7200	8400
Working Stress@73 F, psi	2000	2000
Hazen & Williams "C" factor	150	150
Coefficient of Linear Expansion x 10 # in(in F)	3.0	3.8
Thermo Conductivity BTU/(hr F ft#/in)	1.10	0.95
Upper Temperature Limit	140	210

Flammability—Burns only when in contact with ignition source.

Chemical Resistance of PVC

Weak Acids Resistant

Strong Acids Resistant in most situations

Weak Basis Resistant

Strong Basis Resistant

Solvents Resists alcohols, aliphatic hydrocarbons and oils. Soluble or swell in ketones and esters. Swell in aromatics.

Halogens Attacked by elemental halogens. Resists water solutions.

Temperature Correction Factors

The effects of temperature have been exhaustively studied and correction (derating) factors developed for each thermoplastic piping compound. To determine the maximum operating pressure at any given temperature, multiply the pressure rating at ambient by the temperature correction factor for that material.

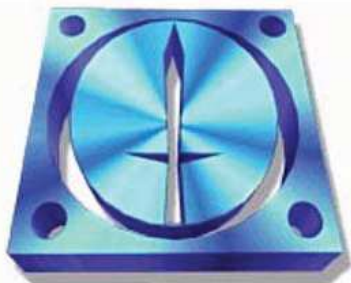
Attention must also be given to the pressure rating of the joining technique, i.e., threaded system normally reduces pressure capabilities substantially.

Operating Temperatures °F	FACTORS		
	PVC	CPVC	POLY- PRO- PYLENE
73	1	1	1
80	0.9	0.96	0.97
90	0.75	0.92	0.91
100	0.62	0.85	0.85
110	0.5	0.77	0.8
120	0.4	0.7	0.75
130	0.3	0.62	0.68
140	0.22	0.55	0.65
150	N/R	0.47	0.57
160	N/R	0.4	0.5
180	N/R	0.25	N/R
200	N/R	0.18	N/R
210	N/R	0.16	N/R
220	N/R	N/R	N/R

Caution should be exercised in design of system operating above 100 °F

Compressed Air or Gases

Excalibur strongly recommends against testing assembled PVC piping systems with compressed air or other compressed gases and against using PVC systems for distribution of compressed air or gases.



EXCALIBUR

PRIMER AND CEMENT:

First and most important, choose the proper solvent cements and primers. According to the American Society for Testing and Materials (ASTM), a primer must be identified by its function and the designation "F-656" on its label. This avoids confusion with plastic piping cleaner, which is intended only to clean the surface of the pipe. Most primers are colored blue or purple to aid you in verifying their use in a completed joint. Most solvent cement labels show the pipe sizes that the manufacturer recommends for that cement. Follow the cement manufacturer's instructions rigidly; otherwise, joint failure is likely. Solvent cements designed for smaller-sized piping systems have a more "water-like" consistency. They do not have the body necessary to fill the normal gap or void between larger-diameter fittings and pipe. In some of the larger sizes (4-inch Schedule 40, for example), the industry-allowable tolerances for pipe and fittings can result in a gap of approximately 1/32 inch at the socket entrance. Correct size applicators Solvent cement consists primarily of volatiles that evaporate during curing. When an applicator or brush is too small to apply the cement quickly, the volatiles flash off, leaving insufficient solvent to create a bond between the pipe and fitting. This results in a dry joint. To prevent dry joints, the applicator size should be at least one half the pipe diameter. For example, a 4-inch pipe requires a 2-inch wide brush or applicator. The typical one-quart cement can comes with a 1½-inch-diameter applicator.

Proper procedures for solvent cementing PVC Do not ignore the proper sequence of applying the primer and cement.

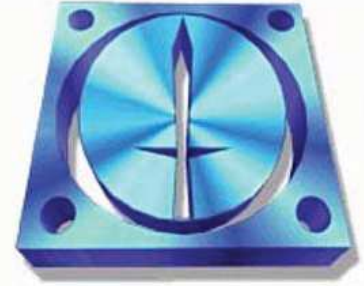
Follow these steps in order:

1. Assemble necessary materials needed.
2. Cut pipe square.
3. Remove all burrs.
4. Clean ends to remove dirt and moisture.
5. Conduct a dry-fit of pipe to the fitting socket.
6. Prime both the pipe and fitting socket to be joined.
7. Immediately apply a coat of cement to the pipe end.
8. Apply a light coat of cement to the fitting socket.
9. Add a second coat of cement to the pipe.
10. Push the parts together, rotating one-eighth to one-quarter turn, and hold for 15 to 30 seconds.
(In cold weather installations, increase the hold time to prevent push-off.)
11. Wipe off excess cement.
12. Follow specified wait-time prior to disturbing.
13. Place carefully into position.
14. Snake pipe in ditch from side-to-side.
15. Shade pipe with back-fill, leaving joints exposed for testing.
16. Check cure time, which will depend on humidity, temperature, pipe size, cement type, and dry-fit tightness.
17. Bring pipe to operating temperature prior to testing and backfilling.
18. Conduct pressure test.

INSTALLATION OF FLEXIBLE PVC IPS HOSE:

1. Flexible PVC hose is not recommended for closed systems. Please note, a drip irrigation system is not classified as an open-end system.
2. If the system is to be pressure tested this must be done before installation of the flexible PVC hose or damage to the nipples could result.
3. Do not install under constant static pressure conditions such as under quick couplers or valve-in-head sprinklers.

EXCALIBUR



Water Conditioning

Assembled Brinewells 3 1/2" ID White

Part Number	Size	1 - 24 Pcs.	25 - 99 Pcs.	100 - 499 Pcs.	500 Pcs & Up
BWT215	21 1/2"	3.8242	3.3271	3.0976	2.8873
BWT270	27"	4.2562	3.7029	3.4475	3.2134
BWT280	28"	4.4468	3.8687	3.6019	3.3573
BWT300	30"	4.5357	3.9461	3.6739	3.4245
BWT320	32"	4.7263	4.1119	3.8283	3.5684
BWT360	36"	5.1201	4.4545	4.1473	3.8657
BWT3875	38 3/4"	5.5013	4.7861	4.4561	4.1535

Brinewells supplied slotted for flow and come pre-assembled complete with tops and bottoms. Any length available. Contact factory for pricing.

25 pcs. per carton

Unassembled Brinewells - 3 1/2" ID White

Part Number	Size	1 - 24 Pcs.	25 - 99 Pcs.	100 - 499 Pcs.	500 Pcs. & Up
BWT260U	26"	3.1508	2.7412	2.5521	2.3789
BWT270U	27"	3.2398	2.8186	2.6242	2.4460
BWT280U	28"	3.4558	3.0065	2.7992	2.6091
BWT300U	30"	3.5447	3.0839	2.8712	2.6762
BWT320U	32"	3.7353	3.2497	3.0256	2.8202
BWT360U	36"	4.1037	3.5702	3.3240	3.0983
BWT375U	37 1/2"	4.4086	3.8355	3.5710	3.3285
BWT3875U	38 3/4"	4.4976	3.9129	3.6431	3.3957

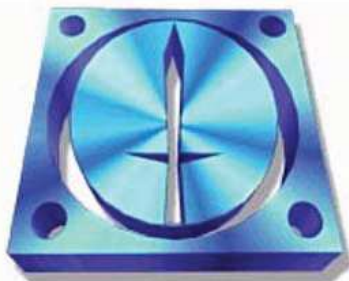
Brinewells supplied slotted for flow. Tops and Bottoms are sold separately. Any length available.

Contact factory for pricing.

25 pcs. per carton

Brinewell Tops and Bottoms

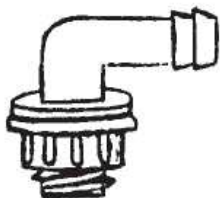
1 - 99 Pcs.	100 - 249 Pcs.	250 - 499 Pcs.	500 Pcs. & Up
\$.3812 ea.	\$.3336 ea.	\$.2859 ea.	\$.2223 ea.



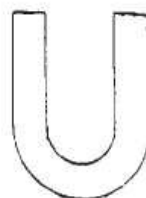
EXCALIBUR

Water Conditioning Accessories

Overflow Fittings



Elbows (Black BWBOF) \$.4158 ea.
 (Natural BWNOF)
 Nuts (Black BWBON) \$.2081 ea.
 (Natural BWNON)
 500 Sets Min.



U-Bends

3/4" Sch 80 PVC—\$ 1.6950 ea.

3/8" White Tube

O.D. .375" Min. Wall .065"
 20 ft. Lengths Uncut \$10.23 per 100 ft.
 500 ft. min.

Straight Lengths	Bent Lengths
1" - 12" \$1.1885 ea.	13" - 24" \$1.3213 ea.
13" - 24" \$1.3213 ea.	25" - 36" \$1.8503 ea.
25" - 36" \$1.4338 ea.	37" - 48" \$1.9827 ea.
37" - 48" \$1.5678 ea.	49" - 60" \$1.1593ea.
49" - 60" \$1.6801 ea.	



13/16" Grey Tube

Part Number: BW1316
 O.D. .812" Min. Wall .057"
 20 ft. Lengths Uncut \$17.04 per 100 ft.
 500 ft. min.

Straight Lengths	
1" - 12"	\$1.3100
13" - 24"	\$1.6200
25" - 36"	\$1.9400
37" - 48"	\$1.250
49" - 60"	\$1.560

3/4" CL 125 White PVC x 10'

Part Number: BW20010G
 O.D. 1.050" Min. Wall .045"
 250 ft. min.

250' - 3,999'	\$20.04 per 100 ft.
4,000' - 19,999'	\$16.70 per 100 ft.
20,000' - 39,999'	\$15.03 per 100 ft.
40,000' And Over	\$13.36 per 100 ft.

3/4" CL 200 White PVC x 10'

Part Number: BW20010
 O.D. 1.050" Min. Wall .060"
 250 ft. min.

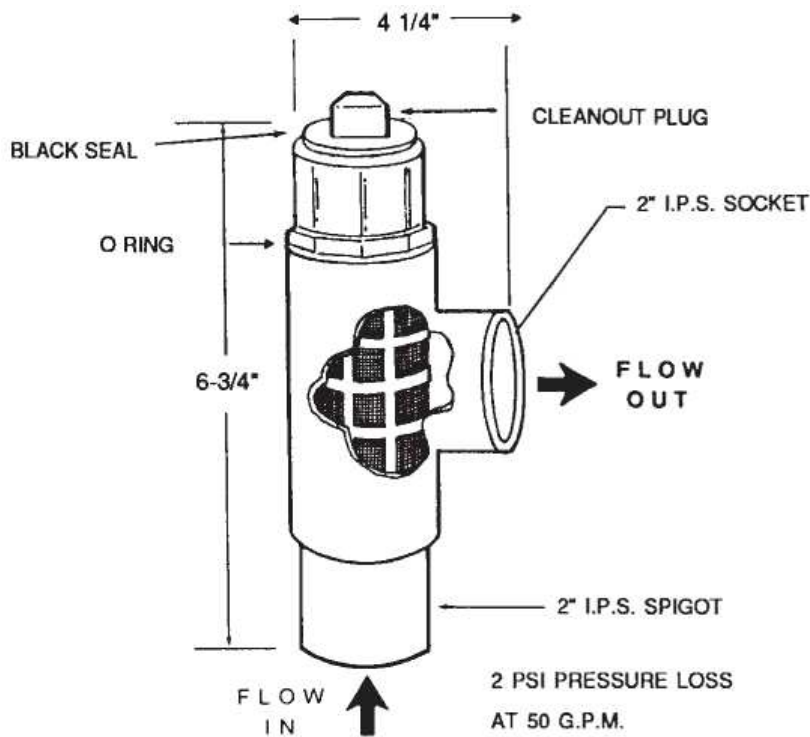
250' - 3,999'	\$20.04 per 100 ft.
4,000' - 19,999'	\$16.70 per 100 ft.
20,000' - 39,999'	\$15.03 per 100 ft.
40,000' And Over	\$13.36 per 100 ft.

Please Contact Factory For Custom Sizes and Lengths

EXCALIBUR



WYE & TEE STRAINERS

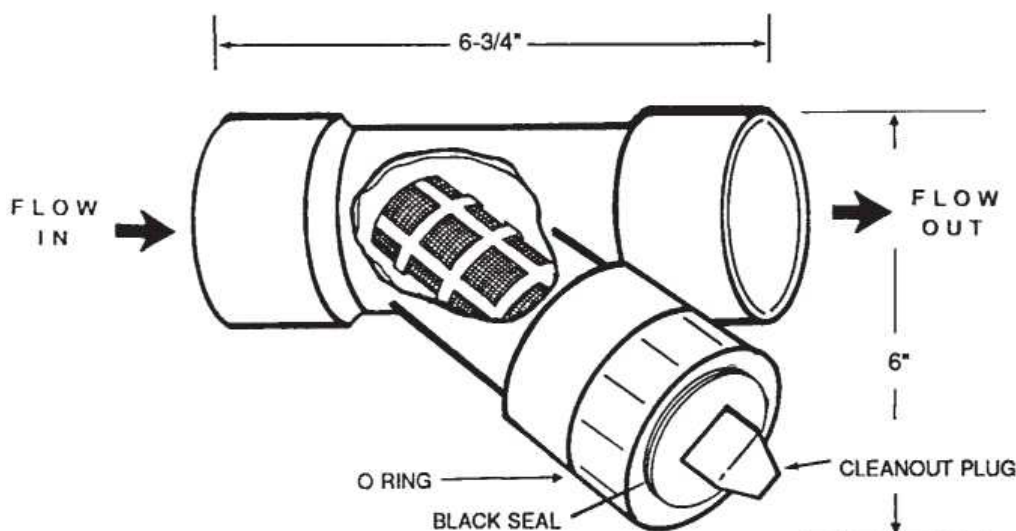


All Plastic
TEE STRAINERS
200 PSI OPERATING PRESSURE
List Price - \$24.45
(Including Plastic Screen)

Tee Strainers are white PVC 2" spigot inlet and 2" socket outlet.

Strainers can be bushed for smaller lines and manifolded where larger capacities are required.

Order As: TS020 2" Tee Strainer
Less Screen \$19.37
Shipping Weight: 1.50 lb./ea.



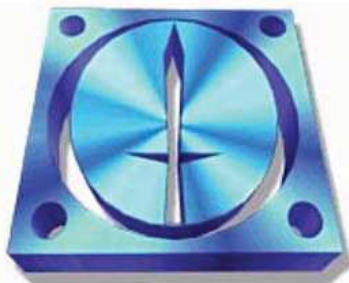
Heavy Duty All Plastic
WYE STRAINERS
200 PSI OPERATING PRESSURE
List Price - \$41.16
(Including Plastic Screen)

Tee Strainers are white PVC 2" socket inlet and 2" socket outlet.

Strainers can be bushed for smaller lines and manifolded where larger capacities are required.

Order As: HS020 2" Heavy Duty Wye
Less Screens \$35.57
Shipping Weight: 1.50 lb./ea.

Order Screens Separately



EXCALIBUR

TYPE II PVC 2116 CONTROL TUBING Light Grey

Part Number	Size	List Per 100 Ft.	Ft. Per Coil.	Weight Per 100 Ft.	Outside Diameter	Inside Diameter	Minimum Wall
002C.T.	1/4"	12.17	500'	2	0.250"	0.156"	0.047"
003C.T.	5/16"	19.44	500'	3.2	0.312"	0.187"	0.062"
004C.T.	3/8"	25.90	500'	3.9	0.375"	0.250"	0.062"
005C.T.	1/2"	40.65	500'	5.6	0.500"	0.375"	0.062"

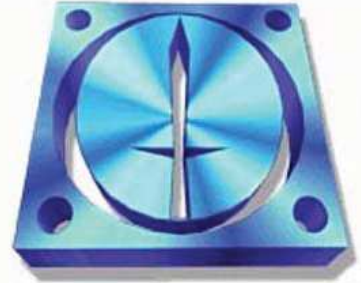
Hydraulic Control Tubing for Irrigation Controllers

Offers reliable hydraulic performance for quiet & smooth water flow during operation.

Low pressure required to operate each valve.

Brass Compression Unions Available – Contact Factory For Pricing

EXCALIBUR



Order Acceptance: Excalibur Extrusions, Inc. (hereinafter "Seller") reserves the right to accept or reject any order. Possession of a price list by Customer does not constitute an offer to sell.

Credit Approval: Customer credit approval is required prior to any shipments.

Standard Terms: Net 30 days on approved credit. No unauthorized deductions allowed.

List Price, Discount, Freight: List Prices, discount, and freight are subject to change without notice. All prices are F.O.B. seller's factory or authorized warehouse at Seller's discretion. Products listed hereon will be invoiced at price prevailing at time of shipment.

Minimum Charge: \$50.00 Smaller orders will be billed at minimum charge.

Method of Shipment or Packaging: Special packaging or handling, and any additional costs will be the responsibility of the Customer.

Damage, Loss or Shortage Claims: Shipping errors must be made to Seller within 20 days of receipt of order. Any claims for damaged product or shortages should be made directly to the common carrier by the consignee.

Delivery: Customer is advised that delivery dates are estimated or schedules are based at the time of quotation and that Seller will devote its best efforts to meet schedules. However, the Seller assumes no liability for additional cost or damages resulting from late deliveries.

Claims: Shipping errors must be made to Seller within 20 days of receipt of order.

Returns: No returned products will be accepted without a RGA number provided by the Seller. Products arriving to Seller without an RGA number will be returned to the Customer/Distributor, freight collect. All product(s) being returned must be freight prepaid to Seller for inspection. There will be a 20% restocking charge of the net of the invoice. An additional 15% will be charged to all products if repackaging is required. Please have Purchase Order number and/or Invoice number available.

Seller will not accept products:

1. That have been invoiced for more than 1 year.
2. Products that are dirty or damaged and unsuited for resale.
3. Special order products, non-stock or obsolete material cannot be canceled or returned.

WARRANTY

All Excalibur Products are guaranteed against defects resulting from faulty workmanship or material for one year from the date of delivery provided that the products are installed, used and/or adjusted only in strict accordance with the appropriate guidelines. If any such product is found to be defective by reason or faulty workmanship or materials, upon written notice and return of the product, the defective product will be replaced by Excalibur free of charge, including shipping charges for the replacement products. Claims for labor costs and other expenses required to replace such defective product or to repair any damage resulting from the use thereof will not be allowed by Excalibur. Excalibur's liability is limited to the price paid for the defective product. Excalibur shall not be bound by any warranty other than the above set forth unless such warranty shall be in writing. No returned product will be accepted without prior written authorization.



**Quality Products For The Turf, Agriculture,
Home Improvement, Personal Recreation, Water Treatment,
As Well As The Custom Extrusion Markets**

EXCALIBUR
e x t r u s i o n s

110 E. Crowther Ave. • Placentia, CA 92870

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