

Section 10

Fuseal Squared™ Double Containment Corrosive Waste Piping System



Fuseal® Squared Double Containment Corrosive Waste Piping System

Glossary

S	= Fuseal Electrofusion Socket
SPG	= Spigot End (same dimension as pipe outside diameter)
FT	= Female Thread (straight)
MT	= Male Thread (straight)
MPT	= Male Pipe Thread
FPT	= Female Pipe Thread
PPFR	= Polypropylene Flame Retardant
PPNFR	= Polypropylene Non-Flame Retardant
*	= Non-returnable/Non-cancellable
^	= 40% Restocking Fee




Product Line	Description	Discount
07	Fusion Accessories	_____
52	Fuseal PPFR Fusion Fittings-molded	_____
55	Fuseal Squared® PPNFR Sch. 40 Fittings	_____
56	Fuseal Squared® PPNFR Sch. 40 Pipe	_____
60	Fuseal Squared® PPFR Sch. 40 Fittings	_____
61	Fuseal Squared® PPFR Sch. 40 Pipe	_____

The technical information given in this publication implies no warranty of any kind and is subject to change without notice. Please consult our Terms and Conditions of Sale.

Not for Use with Compressed Air or Gases

DO NOT TEST with Air or Air over Water

GF Piping Systems DOES NOT RECOMMEND the use of thermoplastic piping products for systems to transport or store compressed air or gases, or the testing of thermoplastic piping systems with compressed air or gases in above or below ground locations. The use of GF Piping products in compressed air or gas systems automatically voids the warranty for such products, and their use against our recommendation is entirely the responsibility and liability of the installer. GF will not accept responsibility for damage or impairment from its products, or other consequential or incidental damages caused by misapplication, incorrect assembly, and/or exposure to harmful substances or conditions. The only exception to this recommendation is when testing the Contain-It™ Secondary Containment System or the Fuseal Squared® Double Containment Piping System's Containment joints.

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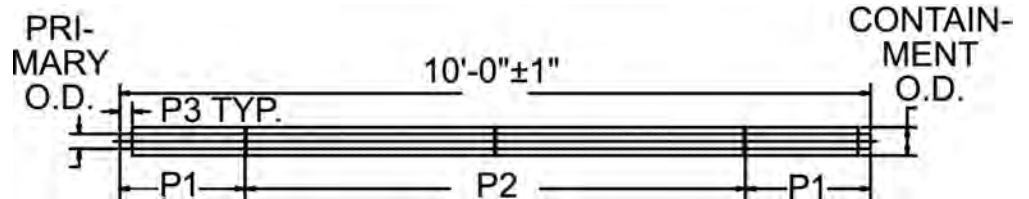
Fuseal Squared Pipe

A

10 ft. lengths

Size (inch)	NFR Part No.	FR Part No.
1 1/2 - 4	37G013015	37F013015
2 - 4	37G013020	37F013020
3 - 6	37G013030	37F013030
4 - 8	37G013040	
6 - 10	37G013060	
8 - 12	37G013080	

Size (inch)	Minimum Footage (ft)	Primary O.D. (inch)	Containment O.D. (inch)	P1 (inch)	P2	P3 (inch)
1 1/2 - 4	10	1.900	4.500	20	2 sps @ 40" = 6'-8"	1.50
2 - 4	10	2.375	4.500	20	2 sps @ 40" = 6'-8"	2.00
3 - 6	10	3.500	6.625	20	2 sps @ 40" = 6'-8"	2.00
4 - 8	10	4.500	8.625	20	2 sps @ 40" = 6'-8"	2.00
6 - 10	10	6.625	10.750	20	2 sps @ 40" = 6'-8"	2.00
8 - 12	10	8.625	12.750	20	2 sps @ 40" = 6'-8"	3.00

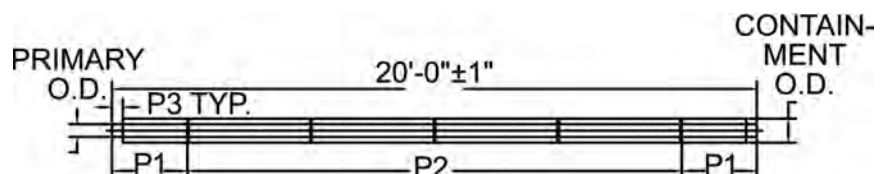


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20 ft. lengths

Size (inch)	NFR Part No.	FR Part No.
1 1/2 - 4	37G023015	37F023015
2 - 4	37G023020	37F023020
3 - 6	37G023030	37F023030
4 - 8	37G023040	37F023040
6 - 10	37G023060	37F023060
8 - 12	37G023080	37F023080

Size (inch)	Minimum Footage (ft)	Primary O.D. (inch)	Containment O.D. (inch)	P1 (inch)	P2	P3 (inch)
1 1/2 - 4	20	1.90	4.50	24.00	4 sps @ 48" = 16'-0"	1.50
2 - 4	20	2.38	4.50	24.00	4 sps @ 48" = 16'-0"	2.00
3 - 6	20	3.50	6.63	30.00	3 sps @ 60" = 15'-0"	2.00
4 - 8	20	4.50	8.63	30.00	3 sps @ 60" = 15'-0"	2.00
6 - 10	20	6.63	10.75	30.00	3 sps @ 60" = 15'-0"	2.00
8 - 12	20	8.63	12.75	30.00	3 sps @ 60" = 15'-0"	3.00



Fuseal Squared Fittings

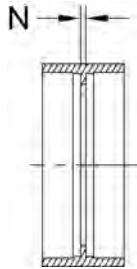
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Primary Coupling (S x S)

Each DC fitting supplied with primary coupling(s) installed on upstream primary leg(s)
 Downstream primary leg may require primary coupling
 Each DC pipe length may require a primary coupling

Size (inch)	FR Part No.	N (inch)
1 1/2	527001	0.06
2	527002	0.06
3	527003	0.13
4	527004	0.13
6	527006	0.19
8	527008	0.25



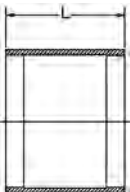
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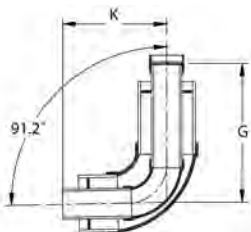
Closure Coupling (S x S)

One required per joint

Size (inch)	FR Part No.	Pack Qty	L (inch)
4	607004	2	6.00
6	607006	2	8.00
8	607008	2	8.00
10	607010	2	8.00
12	607012	2	8.00



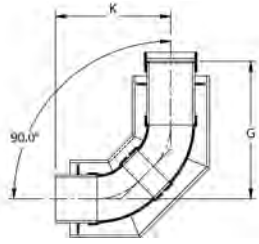
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1/4 Bend (molded x molded) (Spg x S)

Size (inch)	NFR Part No.	FR Part No.	G (inch)	K (inch)
1 1/2 x 4	556251	606251	11.00	9.00
2 x 4	556252	606252	11.00	9.00
3 x 6	556253	606253	16.00	12.00

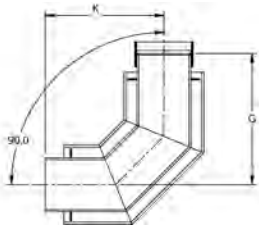
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1/4 Bend (molded x fabricated) (Spg x S)

Size (inch)	NFR Part No.	FR Part No.	G (inch)	K (inch)
4 x 8	556254	606254	17.00	13.00
6 x 10	556256	606256	19.00	16.00

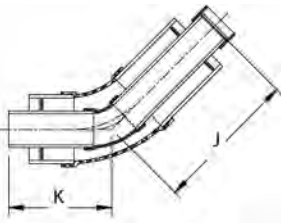
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1/4 Bend (fabricated x fabricated) (Spg x S)

Size (inch)	NFR Part No.	FR Part No.	G (inch)	K (inch)
8 x 12	556258	606258	21.00	19.00

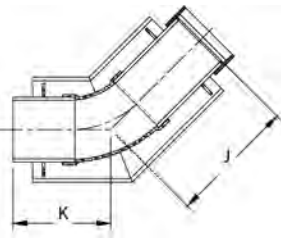
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1/8 Bend (molded x molded) (Spg x S)

Size (inch)	NFR Part No.	FR Part No.	J (inch)	K (inch)
1 1/2 x 4	556501	606501	11.00	8.00
2 x 4	556502	606502	11.00	8.00
3 x 6	556503	606503	14.00	10.00

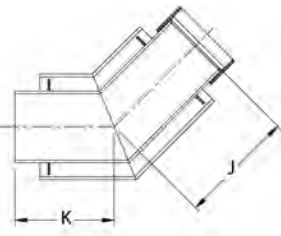
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1/8 Bend (molded x fabricated) (Spg x S)

Size (inch)	NFR Part No.	FR Part No.	J (inch)	K (inch)
4 x 8	556504	606504	12.00	9.00
6 x 10	556506	606506	13.00	10.00

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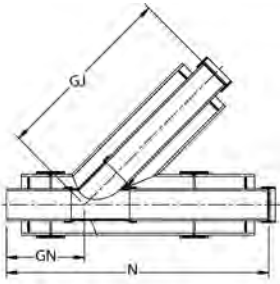


1/8 Bend (fabricated x fabricated) (Spg x S)

Size (inch)	NFR Part No.	FR Part No.	J (inch)	K (inch)
8 x 12	556508	606508	14.00	12.00

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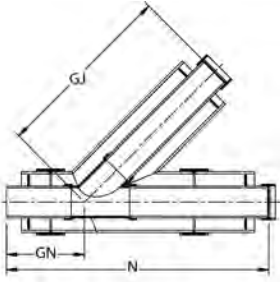
45° Wye (molded x molded) (Spg x S x S)



Size (inch)	NFR Part No.	FR Part No.	GJ (inch)	GN (inch)	N (inch)
1 ½ x 4	556301	606301	15.00	7.00	22.00
2 x 4	556302	606302	15.00	7.00	22.00
3 x 6	556303	606303	20.00	8.00	28.00

A

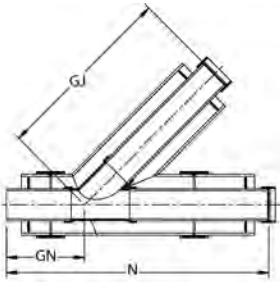
45° Wye (molded x fabricated) (Spg x S x S)



Size (inch)	NFR Part No.	FR Part No.	GJ (inch)	GN (inch)	N (inch)
4 x 8	556304	606304	20.00	11.31	31.31
6 x 10	556306	606306	26.00	12.25	38.25

A

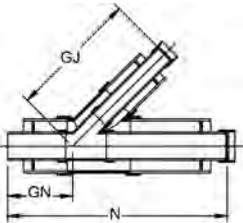
45° Wye (fabricated x fabricated) (Spg x S x S)



Size (inch)	NFR Part No.	FR Part No.	GJ (inch)	GN (inch)	N (inch)
8 x 12	556308	606308	31.00	15.00	46.00

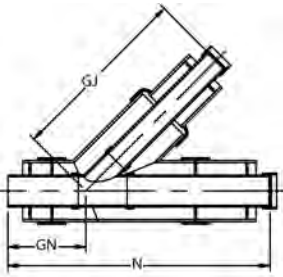
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45° Wye - Reducing (molded x molded) (Spg x S x S)



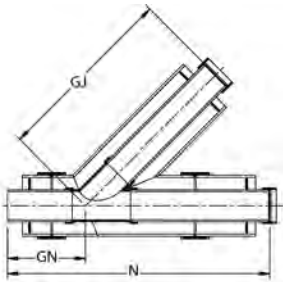
Main (inch)	Reduced (inch)	NFR Part No.	FR Part No.	GJ (inch)	GN (inch)	N (inch)
2 x 4	1 ½ x 4	556322	606322	15.00	7.00	22.00
3 x 6	1 ½ x 4	556323	606323	18.00	7.00	25.00
3 x 6	2 x 4	556324	606324	18.00	7.00	25.00

A 45° Wye - Reducing (molded x fabricated) (Spg x S x S)



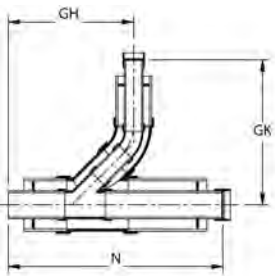
Main (inch)	Reduced (inch)	NFR Part No.	FR Part No.	GJ (inch)	GN (inch)	N (inch)
4 x 8	2 x 4	556325	606325	15.75	11.31	31.31
4 x 8	3 x 6	556326	606326	18.50	11.31	31.31
6 x 10	3 x 6	556327	606327	22.00	12.25	38.25
6 x 10	4 x 8	556328	606328	25.00	12.25	38.25

A 45° Wye-Reducing (fabricated x fabricated) (Spg x S x S)



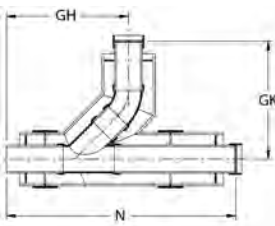
Main (inch)	Reduced (inch)	NFR Part No.	FR Part No.	GJ (inch)	GN (inch)	N (inch)
8 x 12	4 x 8	556329	606329	24.00	15.00	46.00
8 x 12	6 x 10	556330	606330	26.00	15.00	46.00

A Combo Wye & 1/8 Bend (molded x molded) (Spg x S x S)



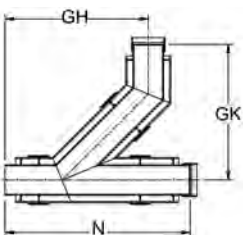
Size (inch)	NFR Part No.	FR Part No.	GH (inch)	GK (inch)	N (inch)
1 1/2 x 4	557301	607301	15.25	18.00	23.50
2 x 4	557302	607302	15.25	18.00	23.50
3 x 6	557303	607303	18.00	24.00	28.00

A Combo Wye & 1/8 Bend (molded x fabricated) (Spg x S x S)

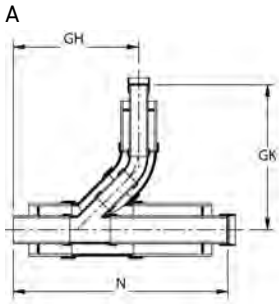


Size (inch)	NFR Part No.	FR Part No.	GH (inch)	GK (inch)	N (inch)
4 x 8	557304	607304	20.00	20.00	31.31
6 x 10	557306	607306	25.25	25.25	38.25

A Combo Wye & 1/8 Bend (fabricated x fabricated) (Spg x S x S)

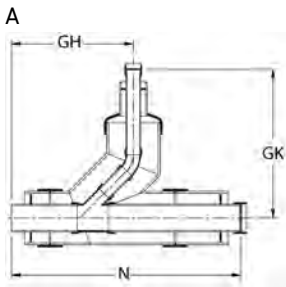


Size (inch)	NFR Part No.	FR Part No.	GH (inch)	GK (inch)	N (inch)
8 x 12	557308	607308	30.00	30.00	46.00



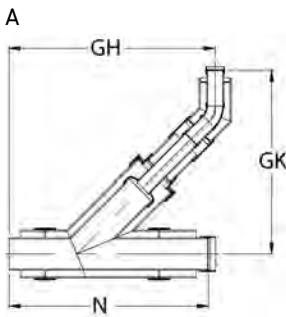
**Combo Wye & 1/8 Bend - Reducing
(molded x molded) (Spg x S x S)**

Main (inch)	Reduced (inch)	NFR Part No.	FR Part No.	GH (inch)	GK (inch)	N (inch)
2 x 4	1 1/2 x 4	557322	607322	15.25	18.00	23.50
3 x 6	1 1/2 x 4	557323	607323	16.00	20.50	26.00
3 x 6	2 x 4	557324	607324	16.00	20.50	26.00



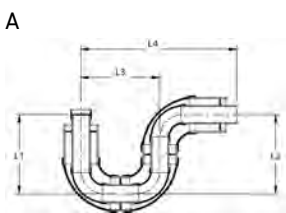
**Combo Wye & 1/8 Bend - Reducing
(molded x fabricated) (Spg x S x S)**

Main (inch)	Reduced (inch)	NFR Part No.	FR Part No.	GH (inch)	GK (inch)	N (inch)
4 x 8	2 x 4	557325	607325	20.00	17.00	31.31
4 x 8	3 x 6	557326	607326	20.00	19.00	31.31
6 x 10	3 x 6	557327	607327	25.25	24.25	38.25
6 x 10	4 x 8	557328	607328	25.25	26.25	38.25



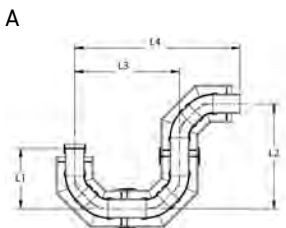
**Combo Wye & 1/8 Bend - Reducing
(fabricated x fabricated) (Spg x S x S)**

Main (inch)	Reduced (inch)	NFR Part No.	FR Part No.	GH (inch)	GK (inch)	N (inch)
8 x 12	4 x 8	557329	607329	26.00	24.00	46.00
8 x 12	6 x 10	557330	607330	28.00	26.00	46.00



P-Trap (molded x molded) (Spg x S)

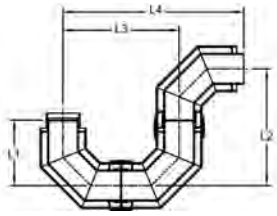
Size (inch)	NFR Part No.	FR Part No.	L1 (inch)	L2 (inch)	L3 (inch)	L4 (inch)
1 1/2 x 4	557201	607201	7.25	9.13	9.44	19.00
2 x 4	557202	607202	7.25	9.13	9.44	19.00
3 x 6	557203	607203	12.00	15.00	15.00	27.00



P-Trap (molded x fabricated) (Spg x S)

Size (inch)	NFR Part No.	FR Part No.	L1 (inch)	L2 (inch)	L3 (inch)	L4 (inch)
4 x 8	557204	607204	14.00	24.25	24.25	38.25
6 x 10	557206	607206	16.25	28.25	28.25	44.25

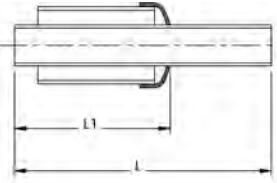
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P-Trap (fabricated x fabricated) (Spg x S)

Size (inch)	NFR Part No.	FR Part No.	L1 (inch)	L2 (inch)	L3 (inch)	L4 (inch)
8 x 12	557208	607208	18.25	32.31	32.31	50.31

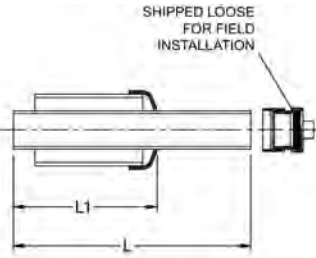
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Termination Fitting (Spg x Spg)

Size (inch)	NFR Part No.	FR Part No.	L (inch)	L1 (inch)
1 1/2 x 4	558001	608001	18.00	12.88
2 x 4	558002	608002	18.00	11.25
3 x 6	558003	608003	22.00	13.25
4 x 8	558004	608004	22.00	13.50
6 x 10	558006	608006	22.00	8.00
8 x 12	558008	608008	22.00	8.00

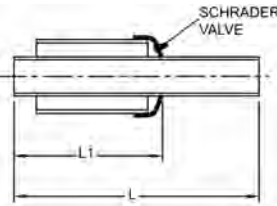
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Fitting Cleanout Adapter with Plug Assembly (Loose) (Spg x Spg)

Size (inch)	NFR Part No.	FR Part No.	L (inch)	L1 (inch)
1 1/2 x 4	557701A	607701A	18.00	10.75
2 x 4	557702A	607702A	18.00	11.25
3 x 6	557703A	607703A	22.00	13.25
4 x 8	557704A	607704A	22.00	13.50
6 x 10	557706A	607706A	22.00	8.00
8 x 12	557708A	607708A	22.00	8.00

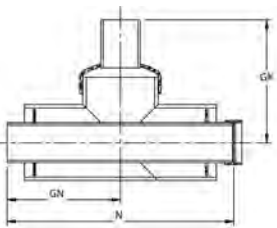
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Test Fitting (Spg x Spg)

Size (inch)	NFR Part No.	FR Part No.	L (inch)	L1 (inch)
1 1/2 x 4	558501	608501	18.00	10.75
2 x 4	558502	608502	18.00	11.25
3 x 6	558503	608503	22.00	13.25
4 x 8	558504	608504	22.00	13.50
6 x 10	558506	608506	22.00	8.00
8 x 12	558508	608508	22.00	8.00

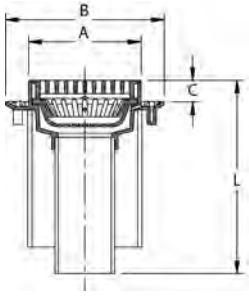
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Access Tee (4" Access) (Spg x Spg x S)

Size (inch)	NFR Part No.	FR Part No.	GK (inch)	GN (inch)	N (inch)
1 1/2 x 4	557901	607901	11.00	11.00	22.00
2 x 4	557902	607902	11.00	11.00	22.00
3 x 6	557903	607903	13.00	13.00	26.00
4 x 8	557904	607904	8.00	13.00	26.00
6 x 10	557906	607906	12.00	17.00	34.00
8 x 12	557908	607908	18.00	18.00	36.00

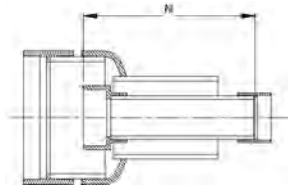
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Floor Drain (Spg)

Size (inch)	NFR Part No.	FR Part No.	A (inch)	B (inch)	C (inch)	L (inch)
2 x 4	557752	607752	8.50	12.00	1.63	13.63
3 x 6	557753	607753	8.50	12.00	1.63	13.63
4 x 8	557754	607754	8.50	12.00	1.63	14.63
6 x 10	557756	607756	8.50	12.00	1.63	22.63

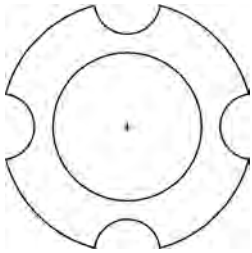
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Pipe Increaser (Spg x S)

Main (inch)	Reduced (inch)	NFR Part No.	FR Part No.	N (inch)
2 x 4	1 ½ x 4	557022	607022	1.61
3 x 6	1 ½ x 4	557023	607023	9.38
3 x 6	2 x 4	557024	607024	9.38
4 x 8	2 x 4	557025	607025	10.50
4 x 8	3 x 6	557026	607026	9.00
6 x 10	3 x 6	557027	607027	14.00
6 x 10	4 x 8	557028	607028	12.00
8 x 12	4 x 8	557029	607029	18.00
8 x 12	6 x 10	557030	607030	15.00

A



Centralizer

Size (inch)	PP Part No.	Pack Qty
1 ½ x 4	557801	10
2 x 4	557802	10
3 x 6	557803	10
4 x 8	557804	10
6 x 10	557806	10
8 x 12	557808	10

Fuseal Squared Fusion Accessories

B



Fusion Locking Collar with Plastic Clamp

6" Fusion Locking Collars without plastic clamp

Size (inch)	Part No.	Pack Qty
1 1/2	526042	10
2	526043	10
3	526044	10
4	526045	10
6	526047	10

B



Loose Coil

4" & 6" Loose Coils are for Closure Couplings only

Size (inch)	Part No.	Pack Qty
4	37F160804	10
6	37F160806	10
8	37B160808	10
10	37B160810	10
12	37B160812	10

B



Metal Clamp

Size (inch)	Part No.	weight (lb)	Pack Qty
4	37Z000400	0.399	1
6	37Z000600	0.399	1
8	37Z000800	0.500	1
10	37Z001000	0.600	1
12	37Z001200	0.600	1

Leak Detection

A



Low Point Leak Detection Alarm Box

- Visual alarm indicators
- Powered on lithium batteries
- Alarm box does not include sensors
- No output option

	Part No.	Description
*	150 240 001	4 Sensor Signal Leak Detection Alarm Box

A



Low Point Leak Detection System

- 12 point leak detection system
- 14" x 12" NEMA 4 Enclosure with locking latches.
- Internal fusible breaker for power protection.
- (12) Red LED indicators for leak detection at a specific points.
- RS485 Communications for building automation.
- Alarm output terminals for remote alarm indication.
- Optional audible alarm available.
- Other options available upon request.

	Part No.	Description
*	150 000 060	12 Point Leak Detection System

A



Continuous Cable Leak Detection System

- Dimensions: 13.75" x 11.81" x 4.00" (350mm x 300mm x 102mm) Type 12 (IP52)
- Power: 110-240VAC, 50/60 Hz, 0.3 A/50 VA 24 VDC, 1 A/24 VA
- Accepts probe and cable sensors in one sensor string

	Maximum Cable Range (ft)	Cable Capacity	Part No.
*	3000	1	150 000 061
*	7500	1	150 000 064
*	7500	4	150 000 065

GF Piping Systems

Double Containment Corrosive Waste Piping System

Specification Submittal Data Sheet

Fuseal Squared® Polypropylene Pipe and Fittings

Pipe

Pipe will be manufactured to the dimensions and tolerances of ASTM F1412. The polypropylene material will be either flame retardant (FR) or non flame retardant (NFR) and will conform to ASTM D4101. The pipe will conform to NSF-cw, CSA, UPC®, The City of Los Angeles and the Commonwealth of Massachusetts standards. The pipe shall also meet IGC 164-2001 "Standard Specification for Dual Containment Piping Systems Intended to Convey Acid Wastes or Other Special Wastes"

- PPFR Sch.40 Group I Pipe - 10 ft. Lengths
- PPFR Sch.40 Group I Pipe - 20 ft. Lengths
- PPNFR Sch.40 Group I Pipe - 20 ft. Lengths
- PPNFR Sch.40 Group I Pipe - 20 ft. Lengths

Fittings

Molded & fabricated fittings will be manufactured to the dimensions and tolerances of ASTM F1412. Molded fitting patterns will conform to ASTM D3311. The polypropylene material will conform to ASTM D4101. The fittings will conform to NSF-cw, CSA, UPC®, The City of Los Angeles and the Commonwealth of Massachusetts standards. The fittings shall also meet IGC 164-2001 "Standard Specification for Dual Containment Piping Systems Intended to Convey Acid Wastes or Other Special Wastes"

- PPFR Sch.40 Fabricated
- PPNFR Sch.40 Fabricated

Joining

Pipe and fittings are joined by electrofusion. Electrofusion joints will conform to ASTM F1290 and consist of a polypropylene jacked wire.

- Electrofusion

Job Name: _____

Job Location: _____

Engineer: _____

Contractor: _____

Representative: _____