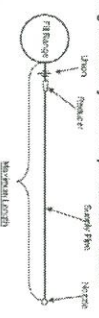


**Single Nozzle Systems - Pipe Limitation Tables**



\* The 85-130 pound fill range requires an increase in pipe size to 1 1/2" BEFORE the union.

**Distribution Pipe and Fittings**  
 Discharge pipe and fittings must comply with the requirements in NFPA 2001. Pipe that meet the requirements includes schedule 40 black iron, galvanized, chrome-plated, or stainless steel pipe conforming to ASTM A-106B or A-106C Seamless, A-53A or A-53B Seamless, A-53A or A-53B ERW, or A-53F Furnace.

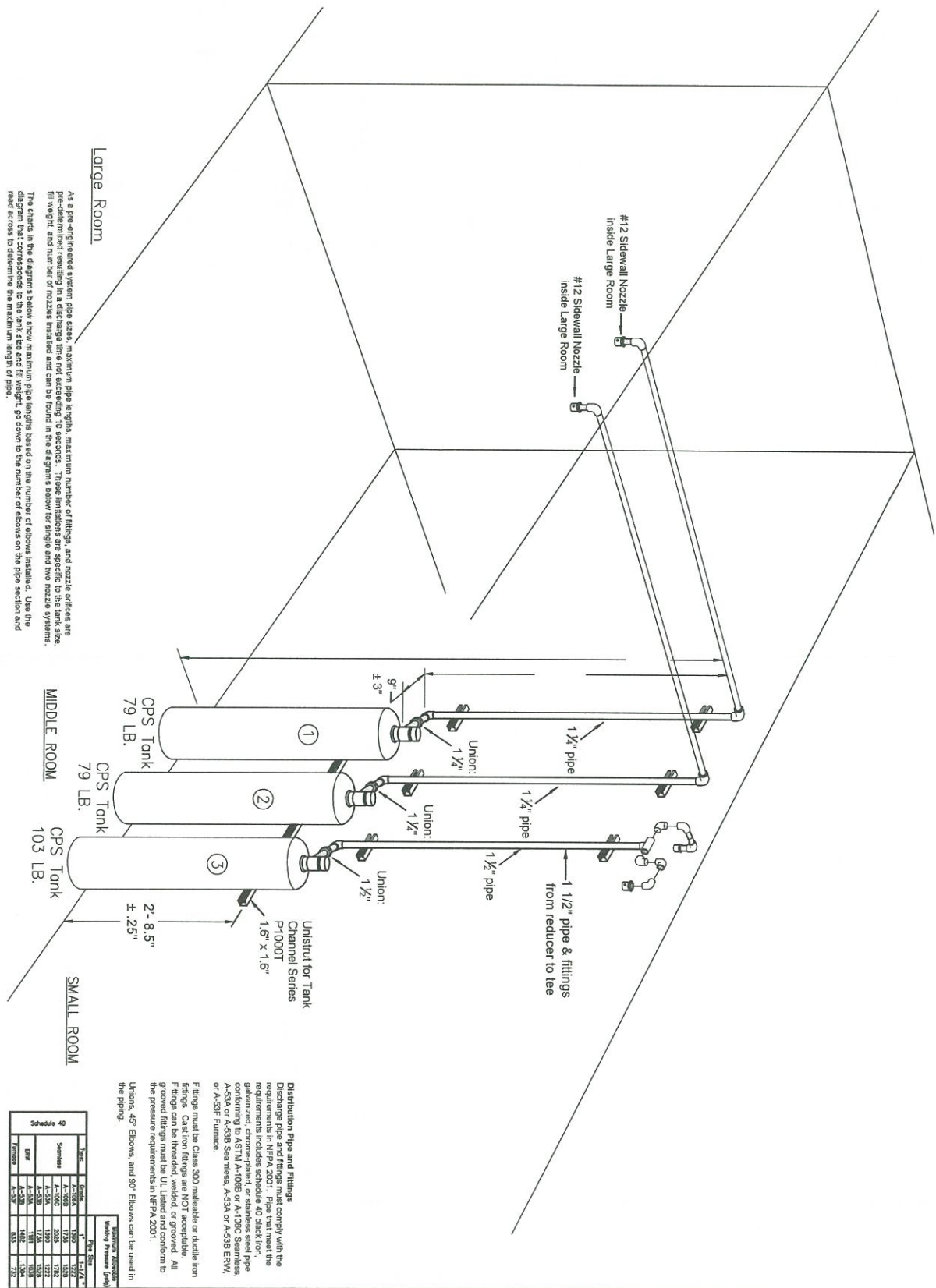
**Fittings** must be Class 300 malleable or ductile iron fittings. Cast iron fittings are NOT acceptable. Fittings can be threaded, welded, or grooved. All grooved fittings must be UL Listed and conform to the pressure requirements in NFPA 2001.

Unions, 45° Elbows, and 90° Elbows can be used in the piping.

Schedule 40	Type	Grade	Pipe Size	
			1 1/4"	1 1/2"
Seamless	A-106A	A-106A	150	122
	A-106C	A-106C	175	158
ERW	A-53A	A-53A	150	122
	A-53B	A-53B	142	120
Furnace	A-53A	A-53A	150	122
	A-53B	A-53B	142	120

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<b>SHEET TITLE</b> CLEAN AGENT FIRE SUPPRESSION SYSTEM PLANS	
<b>Job No.</b> 10/1/2014	<b>ELEC FILE NAME</b> A&M PARTNERS - THREE ROOMS
<b>Date</b> DPW	<b>SHEET NO.</b> 6 OF 12
<b>Scale</b> N/S	<b>Engr</b> A&M PARTNERS 400 CONGRESS ST. PORTLAND, ME 04101



As a pre-engineered system pipe size, maximum pipe weights, maximum number of fittings, and nozzle orifices are pre-determined resulting in a discharge time not exceeding 10 seconds. These limitations are specific to the tank size, its weight, and number of nozzles installed and can be found in the diagrams below for single and two nozzle systems. The charts in the diagrams below show maximum pipe lengths based on the number of elbows installed. Use the diagram that corresponds to the tank size and fill weight, go down to the number of elbows on the pipe section and read across to determine the maximum length of pipe.

Unistrut for Tank Channel Series P1000T 1.5" x 1.5"

**Distribution Pipe and Fittings**  
 Discharge pipe and fittings must comply with the requirements in NFPA 2001. Pipe that meet the requirements includes schedule 40 black iron, galvanized, chrome-plated, or stainless steel pipe conforming to ASTM A-1069 or A-1062; stainless steel pipe conforming to ASTM A-312; brass, A-354 or A-358; DNI, or A-53F. Fittings:

Fittings must be Class 300 malleable or ductile iron fittings. Cast iron fittings are NOT acceptable. Fittings can be threaded, welded, or grooved. All pipe and fittings must be UL listed and conform to the pressure requirements in NFPA 2001. Unions, 45° Elbows, and 90° Elbows can be used in the piping.

Pipe Size	Schedule 40	
	Weight (LB)	Length (Feet)
1"	11.7	52.5
1 1/2"	17.0	35.0
2"	24.7	25.0
2 1/2"	33.6	17.5
3"	44.1	12.5
3 1/2"	57.2	9.5
4"	72.6	7.5
4 1/2"	90.1	6.0
5"	109.7	5.0