

One Council Ave Wheatland, PA 16161 Ph: (800) 257-8182 GUIDELINE FOR DETERMINING THE MAXIMUM WORKING PRESSURE IN PSI, CALCULATIONS ARE BASED ON 2024 ASME B31.1 POWER PIPING CODE

CAL	CULATIONS ARE BASI			CODE
		UOUS WELD PIPE (
		5L GRADE A25 PSL	, <u> </u>	
	SCHEDULE 40		SCHEDULE 80	
NPS	PLAIN END	THREADED	PLAIN END	THREADED
1/2	2000	850	2850	1600
3/4	1650	750	2350	1350
1	1550	650	2150	1200
1 1⁄4	1300	600	1750	1050
1 1⁄2	1150	550	1600	1000
2	950	500	1400	900
2 1/2	1050	500	1450	850
3	900	450	1300	800
3 1/2	850	400	1200	800
4	750	400	1100	750
	CONTIN	UOUS WELD PIPE	(CW)	
	ASTN	/I A 53 TYPE F GRA	DEB	
	SCHEDULE 40		SCHEDULE 80	
NPS	PLAIN END	THREADED	PLAIN END	THREADED
1/2	2550	1050	3550	2000
3/4	2050	900	2900	1700
1	1950	850	2700	1500
1 1⁄4	1600	750	2250	1300
1 1⁄2	1450	700	2000	1250
2	1200	600	1750	1100
2 1/2	1300	600	1850	1100
3	1150	550	1600	1000
3 1/2	1050	550	1500	950

A safety factor should always be included when using the above pressures. Working pressures are theoretical; The actual pressure may vary based on design calculations.

1400

950

500

Safety Factor	Multiplier
5	0.80
6	0.67
7	0.57
8	0.50
9	0.44
10	0.40

4

A safety factor of 8 would be suitable for the majority of applications, local codes or specific applications may require a higher safety factor. A piping design engineer should be consulted for specific applications. To determine a safe working pressure using a safety factor, multiply the values found in the tables by one of the above multipliers.

Note:

1. The pressures listed are based on the 2024 ASME B31.1 Power Piping Code.

- 2. No provision is made for abnormal or unusual conditions.
- 3. No allowance for the coupling design or limitations.

950

- 4. No allowance for the thinning of the pipe wall due to corrosion, bending etc.
- 5. Temperature rating: -20 degrees to 400 degrees Fahrenheit.
- 6. CW pipe may not be suitable for specific applications, consult a piping design engineer for specific applications.

SPRINKLER PIPE MAXIMUM WORKING PRESSURE

Туре	Maximum Pressure in PSI
WLS, MEGA-FLOW, MLT, MEGA-THREAD	→ <mark>300</mark>
Schedule 10→	1" through 4" – <mark>500</mark> psi and 5" and 6" – <mark>400</mark> psi
Schedule 40	1" through 4" – <mark>500</mark> psi; 5", 6" and 8" – <mark>400</mark> psi

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