



One Council Ave Wheatland, PA 16161 Ph: (800) 257-8182

**GUIDELINE FOR DETERMINING THE MAXIMUM WORKING PRESSURE IN PSI,  
CALCULATIONS ARE BASED ON 2022 ASME B31.1 POWER PIPING CODE**

CONTINUOUS WELD PIPE (CW) ASTM A 53 TYPE F <b>GRADE A</b> , APL5L GRADE A25 PSL 1				
	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

  

CONTINUOUS WELD PIPE (CW) ASTM A 53 TYPE F <b>GRADE B</b>				
	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
4	950	500	1400	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.

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

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 2022 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.
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**

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

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