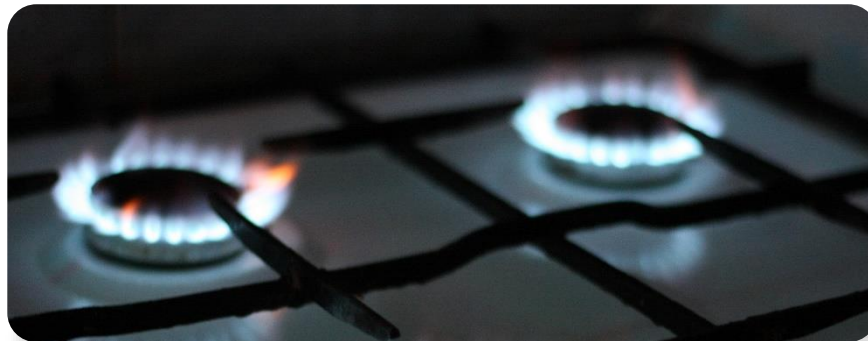


Natural Gas

When it comes to natural gas, there is often a discrepancy that happens between the information that is supplied by the local Gas Utility company and the requirements of the equipment that needs this type of fuel...

Normally, Gas fired equipment specifications indicate the required fuel delivery pressure expressed in inches of Water Column (WC); however, the Gas utility company will define pressure as Pounds per square inch (PSI). The weight of water for 1 inch of WC is: 0.578 oz, or 0.0361 lb. - In consequence 1 PSI = 27.7 inches in a water column, defining this number as the multiplier to find the required gas pressure for equipment or a full system.

27.708



Definitions: (Merriam-Webster)

Pipe = A long tube or hollow body for conducting a: liquid, gas, or finely divided solid or for structural purposes.

Hg = Mercury
ID = Inside Diameter
IPS = Iron Pipe Size
PSI = Pounds per Square Inch
WC = Water Column

One PSI is expressed in multiple ways according to application:

1 PSI =
0.068046 atmospheres
0.0689476 Bar
6894.76 Pascals
51.7149 Torr
2.03602 inHg
27.7076 inches of water column



WC to PSI		
1	IN = ~	0.03609 PSI
2	IN = ~	0.07218 PSI
3	IN = ~	0.10827 PSI
4	IN = ~	0.14436 PSI
5	IN = ~	0.18045 PSI
6	IN = ~	0.21654 PSI
7	IN = ~	0.25263 PSI
8	IN = ~	0.28873 PSI
9	IN = ~	0.32482 PSI
10	IN = ~	0.36091 PSI
11	IN = ~	0.397 PSI
12	IN = ~	0.43309 PSI
13	IN = ~	0.46918 PSI
14	IN = ~	0.50527 PSI
15	IN = ~	0.54136 PSI
20	IN = ~	0.72181 PSI
25	IN = ~	0.90227 PSI
30	IN = ~	1.08272 PSI
35	IN = ~	1.26317 PSI
40	IN = ~	1.44363 PSI
45	IN = ~	1.62408 PSI
50	IN = ~	1.80453 PSI
60	IN = ~	2.16544 PSI
70	IN = ~	2.52635 PSI
80	IN = ~	2.88725 PSI
90	IN = ~	3.24816 PSI
100	IN = ~	3.60907 PSI

PSI to WC		
0.25	PSI = ~	6.927 IN.
0.5	PSI = ~	13.854 IN.
0.75	PSI = ~	20.781 IN.
1	PSI = ~	27.708 IN.
1.5	PSI = ~	41.562 IN.
2	PSI = ~	55.416 IN.
2.5	PSI = ~	69.27 IN.
3	PSI = ~	83.124 IN.
4	PSI = ~	110.832 IN.
5	PSI = ~	138.54 IN.
6	PSI = ~	166.248 IN.
7	PSI = ~	193.956 IN.
8	PSI = ~	221.664 IN.
9	PSI = ~	249.372 IN.
10	PSI = ~	277.08 IN.
11	PSI = ~	304.788 IN.
12	PSI = ~	332.496 IN.
15	PSI = ~	415.62 IN.
20	PSI = ~	554.16 IN.
30	PSI = ~	831.24 IN.
40	PSI = ~	1108.32 IN.
50	PSI = ~	1385.4 IN.
60	PSI = ~	1662.48 IN.
70	PSI = ~	1939.56 IN.
80	PSI = ~	2216.64 IN.
90	PSI = ~	2493.72 IN.
100	PSI = ~	2770.8 IN.

References:

ASPE Design Handbooks. IPC (International Plumbing Code) UPC (Uniform Plumbing Code)

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