

**BRINE TANK CAPACITY AND AREA**

**BRINE DATA**

TANK DIA. (INCHES)	TANK AREA (SQ. FT)	BRINE PER INCH OF HEIGHT (GALLONS)*	SALT PER INCH SATURATED BRINE SOLUTION (LBS)
18	1.76	1.10	2.86
20	2.16	1.33	3.48
24	3.14	1.95	5.07
30	4.90	3.04	7.90
36	7.06	4.40	11.4
42	9.62	5.97	15.5
48	12.57	7.8	20.2
54	15.90	9.9	25.2
60	19.63	12.2	31.8
66	23.76	14.7	38.2
72	28.27	17.5	45.5

\* gallons without salt in tank (brine only)

**RESIN EXCHANGE CAPACITY**

- 20,000 grain approx. per cu. ft.  
6 lbs. salt-sodium chloride
- 25,000 grain approx. per cu. ft.  
8 lbs. salt-sodium chloride
- 30,000 grain approx. per cu. ft.  
15 lbs. salt-sodium chloride

**NOTE:** To convert parts per million (ppm) or milligrams per liter (mg/l) to grains divide by 17.1.

**EXAMPLE:** Water Hardness of 250 ppm  
(250 ppm ÷ 17.1 ppm/gr) = 14.6 gr.

**HANDY CONVERSION FACTORS**

GPG (grains per gallon) = PPM ÷ 17.1

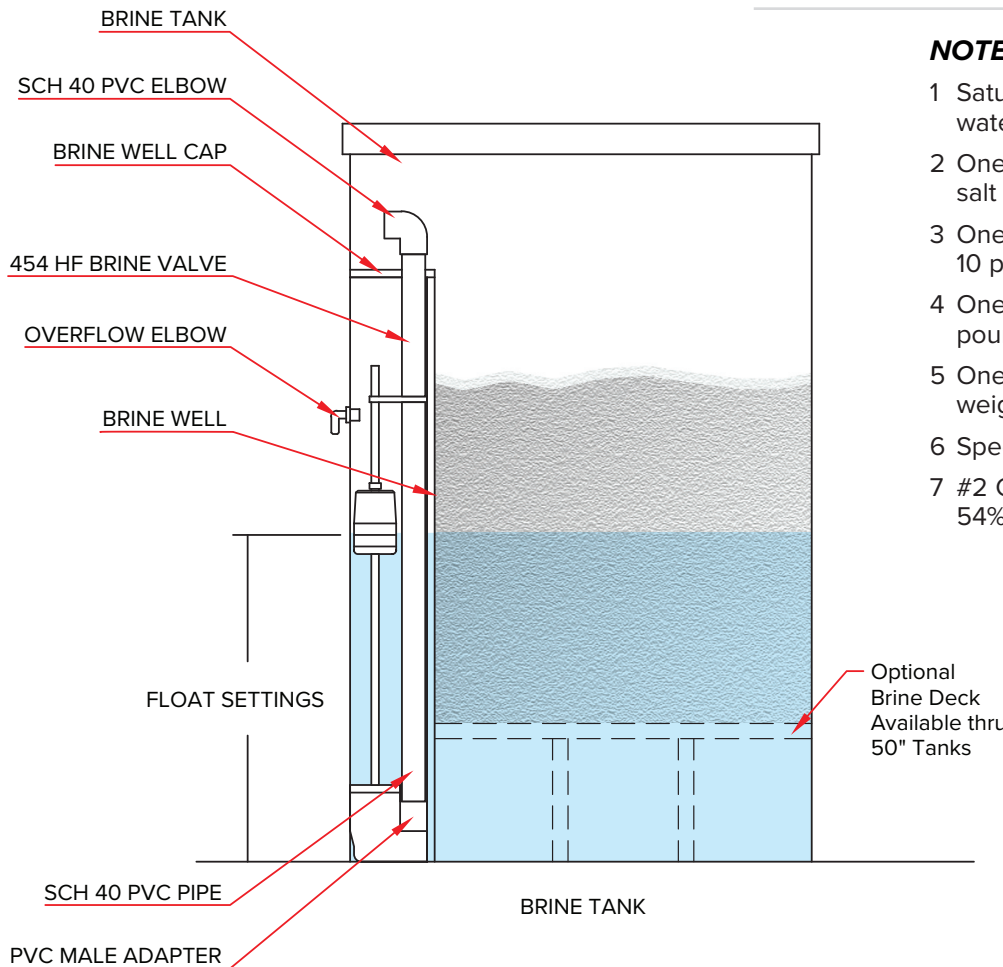
PPM (part per million) = MG/L (milligrams/liter)

PSI = Rise in Feet X .434

i.e.: 5 story building = 50' x .434

= 22 PSI loss on 5th Floor

Square Foot of Bed Area = D2 x .785



**NOTE:**

- 1 Saturated brine is when salt dissolves in water to ± 26% by weight.
- 2 One gallon of 26% brine has 2.6 pounds of salt @80° F.
- 3 One gallon of 26% brine solution weighs 10 pounds.
- 4 One cubic foot of 26% brine has 19.5 pounds of salt.
- 5 One cubic foot of 26% brine solution weighs 75 pounds.
- 6 Specific gravity of 26% brine at 60°F is 1.2.
- 7 #2 Coarse rock salt is ± 46% and voids are 54% of space in a salt tank.