

Pressure

1 lb per square inch	=	$\left\{ \begin{array}{l} 144 \text{ lb per square foot} \\ 2.0421 \text{ in. mercury at 62 F} \\ 2.309 \text{ ft water at 62 F} \\ 27.71 \text{ in. water at 62 F} \end{array} \right.$
1 oz per square inch	=	$\left\{ \begin{array}{l} 0.1276 \text{ in. mercury at 62 F} \\ 1.732 \text{ in. water at 62 F} \end{array} \right.$
1 atmosphere	=	$\left\{ \begin{array}{l} 14.6959 \text{ lb per square inch} \\ 2117 \text{ lb per square foot} \\ 33.9 \text{ ft water at 62 F} \\ 30 \text{ in. mercury at 62 F} \\ 29.921 \text{ in. mercury at 32 F} \end{array} \right.$
1 in. water at 62 F	=	$\left\{ \begin{array}{l} 0.03609 \text{ lb per square inch} \\ 0.5774 \text{ oz per square inch} \\ 5.196 \text{ lb per square foot} \end{array} \right.$
1 ft water at 62 F	=	$\left\{ \begin{array}{l} 0.433 \text{ lb per square inch} \\ 62.35 \text{ lb per square foot} \end{array} \right.$
1 in. mercury at 62 F	=	$\left\{ \begin{array}{l} 0.491 \text{ lb per square inch} \\ 7.84 \text{ oz per square inch} \\ 1.131 \text{ ft water at 62 F} \\ 13.58 \text{ in. water at 62 F} \end{array} \right.$

Metric Units

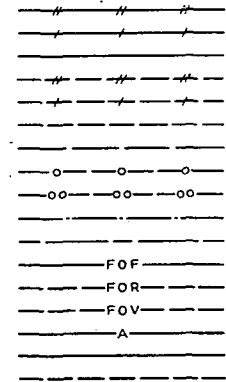
1 cm	=	0.3937 in.
1 in.	=	2.540 cm
1 m	=	3.281 ft
1 ft	=	0.3048 m
1 sq cm	=	0.155 sq in.
1 sq in.	=	6.452 sq cm
1 sq m	=	10.76 sq ft
1 sq ft	=	0.0929 sq m
1 cu cm	=	0.06102 cu in.
1 cu in.	=	16.39 cu cm
1 cu m	=	35.31 cu ft
1 cu ft	=	0.02831 cu m
1 liter	=	1000 cu cm = 0.2642 gal
1 kg	=	2.205 lb (avdp)
1 lb	=	0.4536 kg
1 metric ton	=	2205 lb (avdp)
1 gram	=	0.002205 lb (avdp)
1 kilometer per hour	=	0.6214 mph
1 gram per square centimeter	=	$\left\{ \begin{array}{l} 0.02905 \text{ in. mercury at 62 F} \\ 0.3944 \text{ in. water at 62 F} \end{array} \right.$
1 kg per sq cm (metric atmosphere)	=	14.22 lb per square inch
1 gram per cubic centimeter	=	$\left\{ \begin{array}{l} 0.03613 \text{ lb per cubic inch} \\ 62.43 \text{ lb per cubic foot} \end{array} \right.$
1 dyne	=	0.00007233 poundals
1 joule	=	$\left\{ \begin{array}{l} 10,000,000 \text{ ergs} \\ 0.7376 \text{ ft-lb} \end{array} \right.$
1 metric horsepower	=	$\left\{ \begin{array}{l} 75 \text{ kg-m per second} \\ 0.986 \text{ hp (U. S.)} \end{array} \right.$
1 kilogram-calorie per kilogram	=	1.8 Btu per pound
1 gram-calorie per square centimeter	=	3.687 Btu per square foot
1 gram-calorie per square centimeter per centimeter	=	1.452 Btu per sq ft per inch
1 gram-calorie per second per square centimeter for a temperature gradient of 1 deg C per centimeter.	=	$\left\{ \begin{array}{l} 2903 \text{ Btu per hour per square foot for a temperature gradient of 1 deg F per inch of thickness.} \end{array} \right.$

GRAPHICAL SYMBOLS FOR DRAWINGS

HEATING

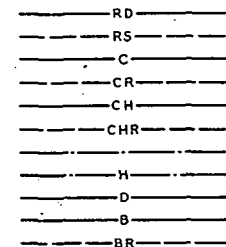
1. High Pressure Steam
2. Medium Pressure Steam
3. Low Pressure Steam
4. High Pressure Return
5. Medium Pressure Return
6. Low Pressure Return
7. Boiler Blow Off
8. Condensate or Vacuum Pump Discharge
9. Feedwater Pump Discharge
10. Make Up Water
11. Air Relief Line
12. Fuel Oil Flow
13. Fuel Oil Return
14. Fuel Oil Tank Vent
15. Compressed Air
16. Hot Water Heating Supply
17. Hot Water Heating Return

Piping



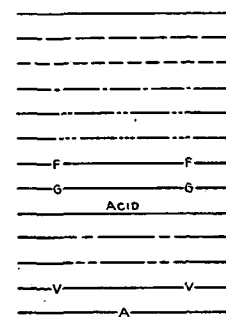
AIR CONDITIONING

18. Refrigerant Discharge
19. Refrigerant Suction
20. Condenser Water Flow
21. Condenser Water Return
22. Circulating Chilled or Hot Water Flow
23. Circulating Chilled or Hot Water Return
24. Make Up Water
25. Humidification Line
26. Drain
27. Brine Supply
28. Brine Return



PLUMBING

29. Soil, Waste or Leader (Above Grade)
30. Soil, Waste or Leader (Below Grade)
31. Vent
32. Cold Water
33. Hot Water
34. Hot Water Return
35. Fire Line
36. Gas
37. Acid Waste
38. Drinking Water Flow
39. Drinking Water Return
40. Vacuum Cleaning
41. Compressed Air



SPRINKLERS

42. Main Supplies
43. Branch and Head
44. Drain

