

R-410A Temperature and Pressure Chart

TEMP	R410	TEMP	R410	TEMP	R410
-60	1.2	16	71.7	44	127.3
-55	3.4	17	73.3	45	129.7
-50	5.8	18	75.0	46	132.2
-45	8.6	19	76.6	47	134.6
-40	11.6	20	78.3	48	137.1
-35	14.9	21	80.1	49	139.6
-30	18.5	22	81.8	50	142.2
-25	22.5	23	83.6	55	155.5
-20	26.9	24	85.4	60	169.6
-15	31.7	25	87.3	65	184.6
-10	36.8	26	89.1	70	200.6
-5	42.5	27	91.0	75	217.4
0	48.6	28	92.9	80	235.3
1	49.9	29	94.9	85	254.1
2	51.2	30	96.8	90	274.1
3	52.5	31	98.8	95	295.1
4	53.8	32	100.8	100	317.2
5	55.2	33	102.9	105	340.5
6	56.6	34	105.0	110	365.0
7	58.0	35	107.1	115	390.7
8	59.4	36	109.2	120	417.7
9	60.9	37	111.4	125	445.9
10	62.3	38	113.6	130	475.6
11	63.8	39	115.8	135	506.5
12	65.4	40	118.0	140	539.0
13	66.9	41	120.3	145	572.8
14	68.5	42	122.6	150	608.1
15	70.0	43	125.0	155	645.0

TOTAL HEAT

$$H_t = 4.5 \times \text{CFM} \times \Delta h \text{ (Change in Heat Content)}$$

$$\text{CFM} = \frac{H_t}{4.5 \times \Delta h}$$

$$\Delta h = \frac{H_t}{4.5 \times \text{CFM}}$$

SENSIBLE HEAT

$$H_s = 1.08 \times \text{CFM} \times \Delta t \text{ (Change in DB Temp.)}$$

$$\text{CFM} = \frac{H_s}{1.08 \times \Delta t}$$

$$\Delta t = \frac{H_s}{1.08 \times \text{CFM}}$$

LATENT HEAT

$$H_L = .68 \times \text{CFM} \times \Delta w \text{ (Change in Grains of Water)}$$

$$\text{CFM} = \frac{H_L}{.68 \times \Delta w}$$

$$\Delta w = \frac{H_L}{.68 \times \text{CFM}}$$

Mixed Air DB = Indoor DB + (% Fresh Air) x (Outdoor DB Minus Indoor DB)

$$\% \text{ Fresh Air} = \frac{\text{Mixed Air DB} - \text{Indoor}}{\text{Outdoor DB} - \text{Indoor DB}}$$