

DRY AIR			MIXTURES OF DRY AIR AND SATURATED WATER VAPOR						
°F	Specific Volume Cu.ft./lb	Density lbs/cu.ft.	Specific Volume Cu.ft./lb	Density lbs/cu.ft.	Moisture Content (per lb. of dry air)		Heat Content (Enthalpy) Btu/lb of air and moisture		
					Pounds	Grains	Sensible	Latent	Total
0	11.58	.0864	11.59	.0863	.000781	5.47	0.0	.85	.85
1	11.60	.0862	11.63	.0860	.000825	5.77	.24	.90	1.14
2	11.63	.0860	11.65	.0858	.000869	6.08	.48	.95	1.43
3	11.65	.0858	11.67	.0857	.000916	6.41	.72	1.00	1.72
4	11.68	.0856	11.70	.0855	.000963	6.74	.96	1.05	2.01
5	11.70	.0854	11.72	.0853	.001015	7.10	1.21	1.11	2.31
6	11.73	.0852	11.75	.0851	.001067	7.47	1.45	1.16	2.61
7	11.75	.0851	11.77	.0849	.001125	7.87	1.69	1.22	2.91
8	11.78	.0849	11.80	.0847	.001183	8.28	1.93	1.29	3.21
9	11.80	.0847	11.83	.0845	.001246	8.72	2.17	1.35	3.52
10	11.83	.0845	11.86	.0843	.001309	9.16	2.41	1.42	3.83
11	11.85	.0843	11.88	.0841	.001378	9.64	2.65	1.51	4.16
12	11.88	.0841	11.91	.0840	.001447	10.13	2.89	1.57	4.46
13	11.91	.0839	11.94	.0838	.001523	10.66	3.13	1.65	4.79
14	11.94	.0837	11.97	.0836	.001599	11.19	3.38	1.73	5.11
15	11.96	.0836	12.00	.0834	.001681	11.77	3.62	1.82	5.44
16	11.99	.0834	12.02	.0832	.001764	12.35	3.86	1.91	5.77
17	12.02	.0832	12.05	.0830	.001855	12.98	4.10	2.01	6.11
18	12.04	.0830	12.06	.0828	.001946	13.62	4.34	2.10	6.44
19	12.06	.0829	12.10	.0826	.002045	14.31	4.58	2.21	6.79
20	12.09	.0827	12.13	.0824	.002144	15.0	4.82	2.31	7.14
21	12.11	.0825	12.16	.0822	.002252	15.8	5.06	2.43	7.49
22	12.14	.0823	12.19	.0820	.002360	16.5	5.31	2.55	7.85
23	12.16	.0822	12.22	.0819	.002478	17.4	5.55	2.67	8.22
24	12.19	.0820	12.24	.0817	.002596	18.2	5.79	2.80	8.58
25	12.21	.0819	12.27	.0815	.002725	19.1	6.03	2.93	8.96
26	12.24	.0817	12.30	.0813	.002854	20.0	6.27	3.07	9.34
27	12.26	.0815	12.33	.0812	.002994	20.9	6.51	3.22	9.73
28	12.29	.0813	12.35	.0810	.003134	21.9	6.75	3.37	10.12
29	12.31	.0812	12.39	.0808	.003289	23.0	6.99	3.54	10.53
30	12.34	.0810	12.41	.0806	.003444	24.1	7.23	3.70	10.93
31	12.37	.0809	12.44	.0804	.003613	25.3	7.48	3.88	11.36
32	12.39	.0807	12.47	.0802	.003782	26.5	7.72	4.06	11.78
33	12.41	.0806	12.49	.0801	.003938	27.6	7.96	4.22	12.18
34	12.44	.0804	12.52	.0799	.004100	28.7	8.20	4.40	12.60
35	12.47	.0802	12.55	.0797	.004268	29.9	8.44	4.57	13.02
36	12.49	.0800	12.58	.0795	.004442	31.1	8.68	4.76	13.44
37	12.52	.0799	12.61	.0793	.004622	32.4	8.93	4.95	13.87
38	12.54	.0797	12.64	.0791	.004809	33.7	9.17	5.14	14.31
39	12.57	.0795	12.67	.0789	.005002	35.0	9.41	5.35	14.76
40	12.59	.0794	12.70	.0787	.005202	36.4	9.65	5.56	15.21

Thermodynamic Properties of Air based on one pound of air at a total pressure of 29.921 in. hg. (Atmo

$$40^{\circ} \quad 15.21 \text{ BTU/lb of air} \times 0.0787 \text{ lbs/cu ft} = 1.199 \text{ BTU/cu ft}$$

$$15^{\circ} \quad 5.44 \text{ BTU/lb} \times 0.0834 \text{ lbs/cu ft} = 0.45036 \text{ BTU/cu ft}$$

$$(40^{\circ} - 15^{\circ}) \quad 1.199 - 0.45036 = 0.74333 \text{ BTU/cu ft air}$$