

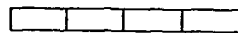
GRAPHICAL SYMBOLS FOR DRAWINGS

Heating and Ventilating

75. Heat Transfer Surface, Plan



76. Wall Radiator, Plan



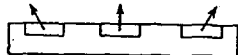
77. Wall Radiator on Ceiling, Plan



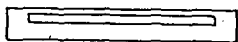
78. Unit Heater (Propeller), Plan



79. Unit Heater (Centrifugal Fan), Plan

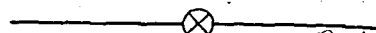


80. Unit Ventilator, Plan

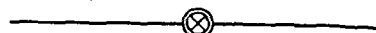


TRAPS

81. Thermostatic



82. Blast Thermostatic



83. Float and Thermostatic



84. Float



85. Boiler Return



VALVES

86. Reducing Pressure



87. Air Line



88. Lock and Shield



89. Diaphragm



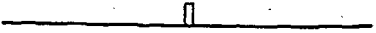
90. Air Eliminator



91. Strainer



92. Thermometer



93. Thermostat



CHAPTER 46. TERMINOLOGY

TABLE 1. SPECIFIC HEAT OF SOLIDS

MATERIALS	TEMPERATURE F	SPECIFIC HEAT	AUTHORITY
Alloys	32	0.0899	S
Brass, Red	32	0.0883	S
Brass, Yellow	57-208	0.0862	S
Bronze (80Cu, 20Sn)	68-2370	0.127	S
Monel Metal	80-212	0.212	S
Aluminum	68-208	0.195	S
Asbestos	104-1637	0.195	H
Brickwork	104-1637	0.314	I
Carbon (Graphite)	64	0.278	H
Coal	64-212	0.201	H
Coke	77-1832	0.270	H
Concrete	64-212	0.0928	I
Copper	77-1832	0.258	S
Fire Clay Brick	50-122	0.161	S
Glass	50-122	0.117	S
Crown	64	0.0312	S
Flint	32	0.259	S
Gold	32	0.487	S
Gypsum	32	0.434	S
Ice	32-40	0.1043	S
Iron, Pure	32-600	0.127	M
Iron, Cast	68-212	0.1189	H
Iron, Wrought	59-212	0.1152	H
Lead	32	0.0297	S
Nickel	32	0.1032	S
Masonry	58-212	0.2159	H
Plaster	58-212	0.2	S
Platinum	63-210	0.0319	S
Rocks	54-212	0.196	S
Gneiss	59-212	0.192	S
Granite	32-212	0.216	S
Limestone	32	0.21	S
Marble	32	0.22	S
Sandstone	32	0.0536	S
Silver	240-320	0.1175	S
Steel	77-1832	0.220	S
Sulphur	77	0.263	S
Silica Brick	68	0.0548	S
Tin	32	0.327	S
Woods (Average)	32	0.0913	S
Zinc			

TABLE 2. SPECIFIC HEAT OF LIQUIDS

LIQUID	TEMPERATURE F	SPECIFIC HEAT	AUTHORITY
Alcohol, Ethyl	32	0.548	S
Alcohol, Methyl	59-68	0.601	S
Glycerine	59-122	0.576	S
Lead (Molten)	380	0.041	S
Mercury	68	0.03325	S
Petroleum	70-136	0.511	S
Sea Water	64	0.980	S
Sp. Gr. 1.0043	64	0.903	S
Sp. Gr. 1.0463	59	1.000	S
Water			

TABLE 3. SPECIFIC HEAT OF GASES AND VAPORS

SUBSTANCE	TEMPERATURE F	SPECIFIC HEAT AT CONSTANT PRESSURE	RATIO OF SPECIFIC HEAT C_p/C_v	SPECIFIC HEAT AT CONSTANT VOLUME (COMPUTED)	AUTHORITY
Air	32-392	0.2375	1.405	0.169	S
Ammonia	80-392	0.5356	1.277	0.419	S
Carbon Dioxide	52-417	0.2169	1.3003	0.1668	S
Carbon Monoxide	79-388	0.2426	1.395	0.1736	S
Coal Gas	68-1900	0.3145			S
Flue Gas		0.24 (Approx.)			S
Hydrogen	70-212	3.41	1.419	2.402	S
Nitrogen	32-392	0.2438	1.41	0.1729	S
Oxygen	55-404	0.2175	1.3977	0.155	S
Water Vapor	212	0.421	1.305	0.322	S
Water Vapor	356	0.51			S

NOTES: When one temperature is given the true specific heat is given, otherwise the value is the mean specific heat between the given limits.

AUTHORITIES: S—Smithsonian Physical Tables, 1933; I—International Critical Tables; H—Heating, Ventilation and Air Conditioning, by L. A. Harding and A. C. Willard; M—Engineers' Handbook, by Lionel S. Marks.