

return ends of the heating units for preventing steam from entering the return mains; they also have a pressure-equalizing and air-eliminating device at the end of the dry return.

Velocity: A vector quantity which denotes at once the time rate and the direction of a linear motion. $V = \frac{ds}{dt}$. For uniform linear motion $V = \frac{s}{t}$. Common units are: feet per second.

Ventilation: The process of supplying or removing air, by natural or mechanical means, to or from any space. Such air may or may not have been conditioned. (See Air Conditioning.)

Volume, Specific: The volume of a substance per unit mass; the reciprocal of density. Units: cubic feet per pound, cubic centimeters per gram, etc.

Warm Air Heating System: A warm air heating plant consists of a heating unit (fuel-burning furnace) enclosed in a casing, from which the heated air is distributed to the various rooms of the building through ducts.

Warm Air Heating System, Gravity: A warm air heating system in which the motive head producing flow depends on the difference in weight between the heated air leaving the casing and the cooler air entering the bottom of the casing.

Warm Air Heating System, Mechanical: A warm air heating system in which circulation of air is effected by a fan. Such a system may include air cleaning devices.

CHAPTER 2

ABBREVIATIONS AND SYMBOLS

Standard Abbreviations; Standard Symbols; Greek Alphabet; Conversion Equations; Graphical Symbols for Piping, Ductwork, Heating and Ventilating, Refrigerating; Identification of Piping by Color; Specific Heat Table

THIS chapter contains information regarding abbreviations, symbols, and conversion equations, which are of particular interest to the engineer engaged in heating, ventilating, and air conditioning.

ABBREVIATIONS

Abbreviations are shortened forms of names and expressions employed in texts and tabulations and should not generally be used as symbols in equations. Most of the following abbreviations have been compiled from a list of approved standards¹. In general the period has been omitted in all abbreviations except where the omission results in the formation of an English word. Additional abbreviations applying to individual chapters will be found at the end of Chapters 3, 4, 5, 7, 15, 16, 39, and 41.

Absolute.....	abs
Air horsepower.....	air hp
Alternating-current (as adjective).....	a-c
Ampere.....	amp
Ampere-hour.....	amp-hr
Atmosphere.....	atm
Average.....	avg
Avoirdupois.....	avdp
Barometer.....	bar.
Boiling point.....	bp
Brake horsepower.....	bhp
Brake horsepower-hour.....	bhp-hr
British thermal unit.....	Btu
British thermal units per hour.....	Btuh
Calorie.....	cal
Centigram.....	cg
Centimeter.....	cm
Centimeter-gram-second (system).....	cgs
Cubic.....	cu
Cubic centimeter.....	cu cm or cc
Cubic foot.....	cu ft
Cubic feet per minute.....	cfm
Cubic feet per second.....	cfs
Decibel.....	db
Degree ²	deg or °
Degree, Centigrade.....	C
Degree, Fahrenheit.....	F
Degree, Kelvin.....	K
Degree, Réaumur.....	R
Diameter.....	diam

¹ Abbreviations for Scientific and Engineering Terms, Z10.1-1941 (American Standards Association).

² It is recommended that the abbreviation for the temperature scale, F, C, K, R, be included in expressions for numerical temperatures but, wherever feasible, the abbreviation for degree be omitted; as 68 F.