

# Tables of Psychrometric Properties at Sea Level Pressure

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# Chapter 1

## Preface

These charts grew out of the need to be able to quickly find psychrometric properties for the PE exam. The tables are only in the I.P. unit system as the PM portion of the PE exam only consists of problems in these units.

The table entries were completed using the formulations given in *ASHRAE Fundamentals 2017*. Temperatures between 32°F and 100°F were considered. Entries with enthalpy values greater than 60 BTU/lb<sub>da</sub> were not printed.

For the  $T_{db}$ ,  $\phi$  table, entries were skipped if the difference between the previous values for both  $\omega$  and  $h$  were not greater than 0.0025 and 0.5 BTU/lb<sub>da</sub> respectively.

Table 1.1: Symbols and units.

$T_{db}$	Dry bulb temperature	°F
$T_{wb}$	Wet bulb temperature	°F
$T_{dp}$	Dew point temperature	°F
$\phi$	Relative humidity	% (0-100)
$\omega$	Specific humidity	0-1
$h$	Enthalpy	BTU/(lb <sub>da</sub> )



## Chapter 2

### $T_{db}$ and $T_{wb}$

The following charts are based on integer combinations of  $T_{db}$  and  $T_{wb}$ .