

TECHNICAL NOTE NUMBER 156

FOREST PRODUCTS LABORATORY - U. S. FOREST SERVICE - MADISON, WISCONSIN

HUMIDITY TABLE FOR WET AND DRY BULB HYGROMETER

The following table is for use in determining relative humidity values from wet and dry bulb thermometer readings. Read the temperatures and subtract the wet bulb readings from the dry. Locate the vertical column of figures headed by the appropriate difference between wet and dry bulb readings, and the horizontal row of figures beginning at the extreme left with the observed dry bulb reading. The figure marking the intersection of these rows is the relative humidity value expressed in per cent.

Take the following as an example: wet bulb temperature 132 degrees Fahrenheit; dry bulb temperature 140 degrees; difference 8 degrees. The figure marking the intersection of the vertical column for 8 degrees difference with the horizontal row beginning with 140 at the extreme left, is 79, which is the correct relative humidity for the given thermometer readings.

RELATIVE HUMIDITY TABLE

Difference Between Wet and Dry Bulb Thermometers - in Degrees Fahrenheit

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

Table with 50 columns and 50 rows of numerical data representing the difference between wet and dry bulb thermometers in degrees Fahrenheit for various humidity and temperature conditions.

Temperature of dry bulb

a Possible only at pressures higher than normal atmosphere. b Superheated steam, at normal atmospheric pressure, no air present. At lower humidities air is mixed with the water vapor.