

A Science Service Feature

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? WHY THE WEATHER ? Mailed November 20, 1935

DEGREE-DAYS

By Charles Fitzhugh Talman
Authority on Meteorology

The use of "degree-days" as a means of measuring the fuel requirements of buildings has made rapid progress in the last few years.

The degree-day is based on the fact that the amount of fuel used in the heating of buildings is proportional to the number of degrees the outside temperature falls below (about) 65 degrees. This base temperature was found to be 65 degrees for residences, and for other buildings as follows:

Office buildings, 66.2 degrees; stores, 64.0 degrees; apartments, 68.8 degrees; service buildings, 61.2 degrees. However, all of these are near enough to 65 degrees so that that figure can be used for all practical purposes.

The number of degree-days per day is the difference between 65 degrees and the outside temperature when the outside temperature (i.e., the mean of the maximum and the minimum) is below 65 degrees. If the outside temperature is above 65 degrees, there are no degree-days. On a day, for example, when the outside temperature is 60 degrees there are five degree-days that day. Totaling these for the month gives the number of degree-days for that month, and this is a measure of the amount of fuel used for the heating of buildings in a given locality.

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SCIENCE SERVICE
2101 Constitution Ave.,
Washington, D. C.