

saturated with moisture. The *effective temperature index* cannot be measured directly but is determined from dry- and wet-bulb temperatures and air motion observations by reference to an Effective Temperature Chart (see Figs. 8, 9, and 10) or tables.

Fig. 8 gives the effective temperature for any combination of dry- and wet-bulb temperatures for *still air* (15 to 25 fpm) conditions. Charts similar to Fig. 8 for air velocities of 300 and 500 fpm have been presented in some of the earlier editions of the GUIDE. Fig. 9 is another form of

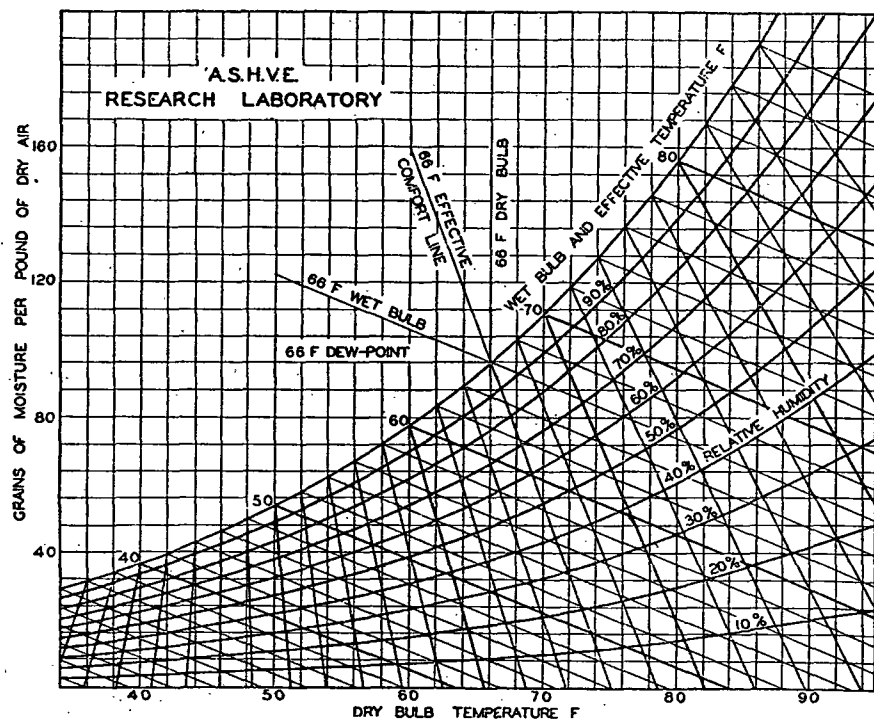


FIG. 8. PSYCHROMETRIC CHART, PERSONS AT REST, NORMALLY CLOTHED, IN STILL AIR

effective temperature chart embodying all three variables; dry-bulb and wet-bulb temperatures, and air velocity.

As stated previously, effective temperature is an index of the degree of warmth experienced by the body. An effective temperature line is, therefore, a line defining the various combinations of conditions which will induce like sensations of warmth. It does not necessarily follow that like sensations of comfort will also be experienced along the entire length of an effective temperature line. Some degree of discomfort is likely to be experienced at very high or very low relative humidities, regardless of the effective temperature. It has also been found that the optimum effective temperature varies with the season, and is lower in winter than in summer.

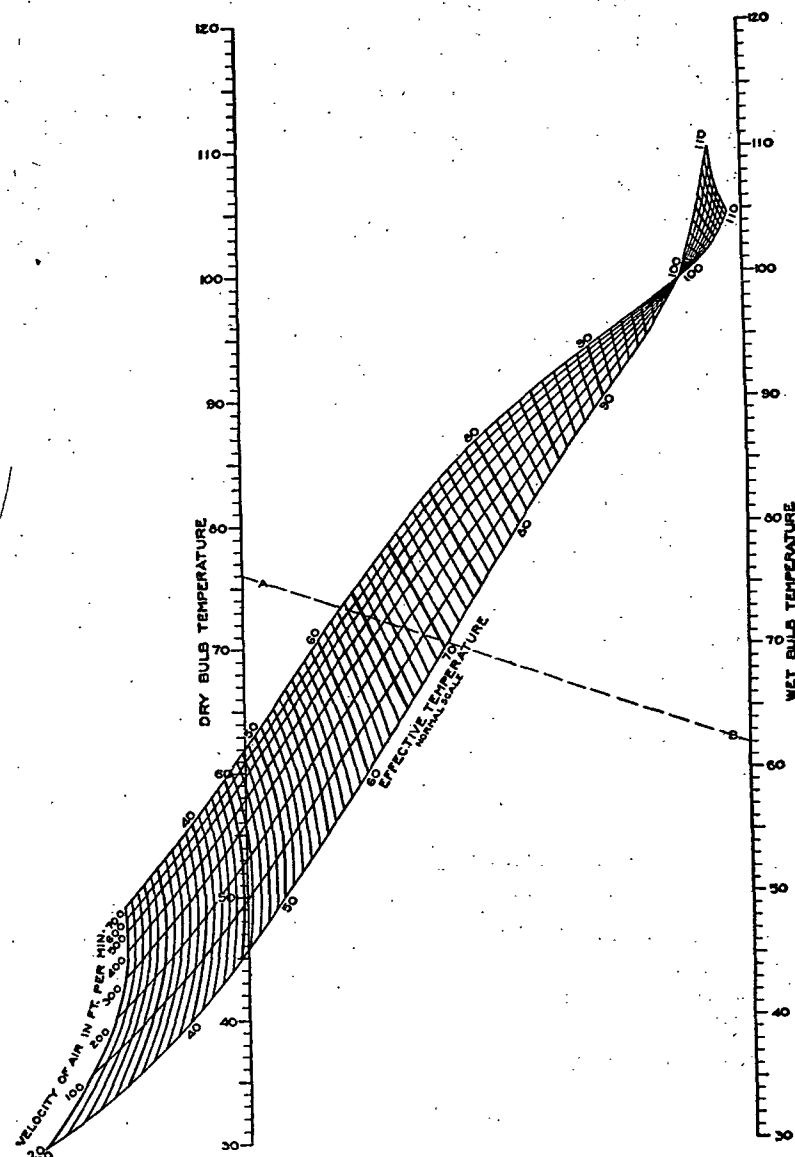


FIG. 9. EFFECTIVE TEMPERATURE CHART SHOWING NORMAL SCALE OF EFFECTIVE TEMPERATURE, APPLICABLE TO INHABITANTS OF THE UNITED STATES UNDER FOLLOWING CONDITIONS:

A. Clothing: Customary indoor clothing. B. Activity: Sedentary or light muscular work. C. Heating Methods: Convection type, i.e., warm air, direct steam or hot water radiators, plenum systems.