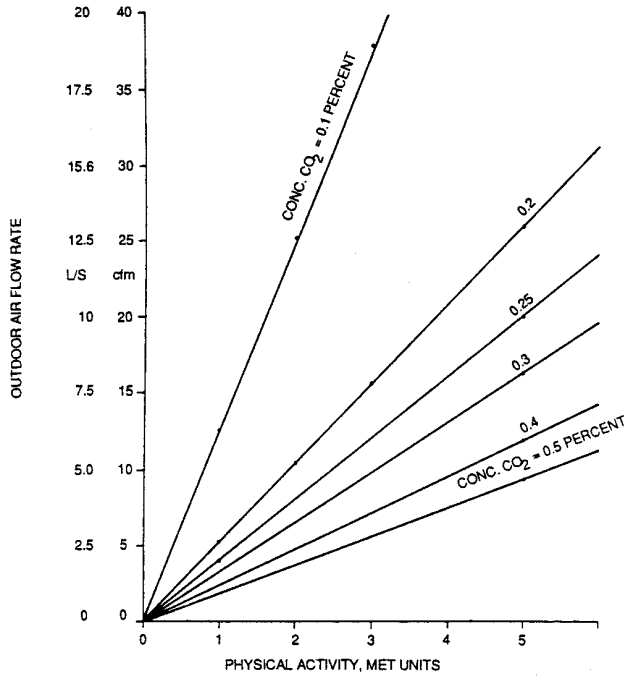

FIGURE D-3 Ventilation requirements.

The term N now has a negative value with respect to its use in Equation D-1 because oxygen is consumed rather than generated.

$$C_s = C_o - N/V_o \quad \text{(D-3)}$$

The oxygen consumption rate is 0.0127 cfm (0.36 L/min) when the activity level is 1.2 met. For ventilation at a rate of 15 cfm (429 L/m) and an activity level of 1.2 met units, the room oxygen level will be reduced from an outdoor concentration of 20.95% to 20.85%, a percent change of 0.48% ([20.95 – 20.85]/20.95). Unlike oxygen, CO_2 is generated as a result of activity. At 1.2 met, the CO_2 indoors is raised from the outdoor background of 0.03% to 0.1%, a percent change of 230%. Thus, measuring the increase of CO_2 is clearly more significant than measuring the decrease of oxygen.

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