

5205.0110 INDOOR WORKROOM VENTILATION AND TEMPERATURE.

Subpart 1. **Air.** Air shall be provided and distributed in all indoor workrooms as required in this code, unless prohibited by process requirements.

Outside air shall be provided to all indoor workrooms at the rate of 15 cubic feet per minute per person.

Air circulated in any indoor workroom shall be supplied through air inlets arranged, located, and equipped so that the workers shall not be subjected to air velocities exceeding 200 feet per minute except under special circumstances specified in this code or where approved by the Department of Labor and Industry.

Subp. 2. [Repealed, 21 SR 1897]

Subp. 2a. **Heat stress.** The requirements of this subpart cover employee exposure to environmental heat conditions indoors.

A. The following definitions apply when assessing and controlling health hazards associated with extremes in temperature and humidity indoors.

(1) "Wet bulb globe temperature index" or "WBGT" means a measure of the combined effect of air temperature, air speed, humidity, and radiation. $WBGT = 0.7 T_{nwb} + 0.3 T_g$.

(2) "Natural wet-bulb temperature" or " T_{nwb} " means temperature measured by a thermometer which has its sensor covered by a wetted cotton wick, exposed to natural air movement.

(3) "Globe temperature" or " T_g " means temperature measured by a thermometer with its sensor inside a matte black globe, exposed to radiant heat, Vernon Globe or equivalent.

(4) "Heavy work" means 350 to 500 kcal/hr (kilocalories per hour), for example: heavy lifting and pushing, shovel work.

(5) "Moderate work" means 200 to 350 kcal/hr, for example: walking about with moderate lifting and pushing.

(6) "Light work" means up to 200 kcal/hr, for example: sitting or standing performing light hand or arm work.

B. Employees shall not be exposed to indoor environmental heat conditions in excess of the values listed in Table 1. The values in Table 1 apply to fully clothed acclimatized workers.

TABLE 1. Two-hour time-weighted average permissible heat exposure limits.

Work Activity	WBGT, °F
Heavy work	77
Moderate work	80
Light work	86

C. Employees with exposure to heat shall be provided training according to part 5206.0700, subparts 1 and 3.

Subp. 3. **Minimum air temperature.** Indoor workroom temperatures shall be maintained as follows:

A. The minimum air temperature of 60 degrees Fahrenheit shall be maintained in all indoor workrooms where work of a strenuous nature is performed, unless prohibited by process requirements.

B. The minimum air temperature of 65 degrees Fahrenheit shall be maintained in all other indoor workrooms unless prohibited by process requirements.

Subp. 4. **Recirculated air.** Air from any exhaust system handling materials listed in Code of Federal Regulations, title 29, part 1910, subpart Z, shall not be recirculated without written permission from the Department of Labor and Industry.

Statutory Authority: *MS s 182.655; 182.657*

History: *12 SR 634; 21 SR 1897*

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