

## **5205.0110 INDOOR VENTILATION AND TEMPERATURE IN PLACES OF EMPLOYMENT.**

Subpart 1. **Air flow and circulation.** Air shall be provided and distributed in all indoor places of employment as required in this part, unless prohibited by process requirements.

Outdoor air shall be provided to all indoor places of employment at the rate of 15 cubic feet per minute per person.

Air circulated in any indoor place of employment 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 part or where approved by the Department of Labor and Industry.

Subp. 2. [Repealed, 21 SR 1897]

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

A. The following definitions apply when assessing and controlling health hazards associated with indoor climate.

(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 or higher 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 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. **Cold conditions.** The requirements of this subpart cover employee exposure to indoor environmental cold conditions. The definitions in subpart 2 apply to this subpart.

A. Indoor places of employment shall maintain a minimum air temperature of 60 degrees Fahrenheit where heavy work is performed, unless prohibited by process requirements.

B. Indoor places of employment shall maintain a minimum air temperature of 65 degrees Fahrenheit where light to moderate work is performed, 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.

Subp. 5. **Definitions.** For the purposes of this part, the following definitions apply.

A. "Indoor" means any space between a floor and a ceiling that is bound on all sides by walls. A wall includes any door, window, retractable divider, garage door, or other physical barrier that is temporary or permanent, whether open or closed.

B. "Place of employment" has the meaning given in Minnesota Statutes, section 182.651, subdivision 10.

**Statutory Authority:** *MS s 182.655; 182.657*

**History:** *12 SR 634; 21 SR 1897; 39 SR 418*

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