

INDUSTRIAL COMMISSION OF WISCONSIN

GEO. P. HAMBRECHT, Chairman FRED M. WILCOX THOMAS F. KONOP

E. E. WITTE, Secretary

S. J. WILLIAMS, Engineer

Issued Sept. 1, 1917

AMENDMENTS TO STATE BUILDING CODE

The following includes all amendments which have been made since October 15, 1915, excepting the revised toilet room orders, effective August 4, 1917, which are printed separately.

ARCHITECTS AND BUILDERS: Paste these amendments in your building code at the appropriate places.

Order 5009 (new order). If plans for any building are approved by the Industrial commission, or by the city building inspector, plumbing inspector, or health department, the architect or builder shall keep at the building either the plans which were approved, or a copy thereof, and shall mark on such plans, in ink, the person or department which gave the approval, and the date thereof.

Note. The purpose of this order is to make it possible for any building or plumbing inspector, whether state or city, to ascertain when he visits a building under construction, whether the plans have been approved and by what department, in case he finds any apparent violation. The architect can easily comply with this requirement as follows: When a plan has been approved, mark on the tracing and on blueprints previously made, "This plan was approved by ----- on -----."

Order 5124 (6018). After fourth paragraph add: Frame bars shall not project more than $\frac{1}{4}$ inch above platform bars, except around the outside of platform.

Order 5127 (6021). Add: Treads for "A" balanced stairways may be made as follows: two $1\frac{1}{4} \times 1\frac{1}{4} \times \frac{1}{4}$ inch angles at front and back; two $1\frac{1}{4} \times \frac{1}{4}$ inch bars between, lying flatwise; one inch space between bars. Treads for "B" balanced stairways may be made as follows: two $1\frac{1}{2} \times 1\frac{1}{2} \times \frac{1}{4}$ inch angles at front and back; two $1\frac{1}{2} \times \frac{1}{4}$ inch bars between, lying flatwise; one inch space between bars. All such treads shall be strongly fastened together with cross bars not more than 14 inches apart.

Order 5129 (6023). In the first line, after "fire escape," insert "which extends higher than the second floor."

Order 5204. In line 14 on page 37, after "height" insert "except that an inner lot line court one story high shall be not less than 4 feet wide and not less than 40 square feet in area."

Order 5309. After first sentence of second paragraph add "except that in clay tile used in one-story buildings the hollow spaces shall not exceed 60 per cent."

In third paragraph strike out "Hollow tile if laid with cells vertical shall have all horizontal beds reinforced with metal fabric."

Order 5400. Strike out "restaurants accommodating not more than 100 persons." Add "and places where less than 100 persons assemble for entertainment, worship, or dining purposes."

Order 5505. In first paragraph, after "theater" insert "which has a stage,"

Order 5513. In line 5 after "½ inch thick," insert, "also fixed seats on an approximately level floor in an assembly hall,"

Strike out the second sentence which reads "All seats shall average at least 20 inches in width and no seat shall be less than 18 inches wide."

Order 5528. In line 4 after "accommodated" insert "in the auditorium,"

Order 5604. Add: In primary and grammar schools, the girls' and boys' portions of the basement shall be separated by a fireproof partition in which there shall be no opening except a door for the use of the janitor, kept normally closed.

Note. This serves the double purpose of fire protection and privacy.

Order 5605. After paragraph "Exception" add: In a one-room building only one exit will be required. In a one-story, two-room building only one exit will be required, provided all basement partitions are of incombustible material and the boiler room door is a standard fire door.

Before the last paragraph insert: "Closets shall not be placed below non-fireproof stairways."

Order 5612. Add:

Note. The following are recommended by the Department of Public Instruction:

(1) Each class room should be large enough to accommodate forty-five pupils and should be at least 23 feet wide by 32 feet long.

(2) Eight feet should be reserved at the end of the room for the use of the teacher. The corresponding wall space may conveniently be provided with a blackboard to contain programs, etc. The teacher's desk should always be placed at the end of the room and not on the long side.

(3) Window sills should be from 36 to 42 inches above the floor; for grades above the fourth, such height should be about 42 inches. In class rooms lighted from the rear as well as from the left, the glass area should be at least one-fifth of the floor area. At the front of the room, eight feet of blank wall should be left between the front corner and the first window.

In class rooms lighted from the side only, the blank wall just mentioned may be reduced to four feet; the first window should then be provided with a shade for use on bright days. Windows should extend as close as possible to the rear corner. The ceiling height should be $12\frac{1}{2}$ or 13 feet so as to give a glass ratio of at least $1:5\frac{1}{2}$. This amount of glass area is especially necessary where electric current is not available.

(4) Where electric current is available, outlets for at least four lights should be provided for each room of standard size.

(5) Blackboards should be from 24 inches (for primary grades) to 30 inches (for upper grades) above the floor, and from 36 to 48 inches high. Slate blackboards are best. A wide aisle should be provided next to all blackboards.

(6) Inbuilt bookcases are not generally recommended.

Order 5613. After the first sentence insert: Manual training and domestic science rooms, toilet rooms, and other rooms used by pupils (not including play-rooms) shall have ceilings at least 4 feet above grade.

Order 5617. Add: Where no fan is provided, the area of heat and vent flues for class rooms shall be at least $1/200$ of the floor area and the area of the cold air inlet shall be at least

1/250 of the floor area. If no fan is provided and steam heat is used, there shall be at least 160 square feet of radiating surface at the base of the fresh air flue for each room which will accommodate 40 pupils, and corresponding amounts for larger or smaller rooms. Every heating plant shall include adequate provisions for humidifying the air.

Notes. (1) Foul air outlets should be placed in the wall, flush with the floor, and not provided with gratings. Fresh air inlets should be 7½ or 8 feet above the floor. Floor registers are not recommended; registers for warming the feet may be placed in the baseboard. Fresh air should be taken from the outside through a fresh-air room, and not admitted directly from the outside. For heating the building while unoccupied, a return flue may be provided with wing register in the wall (not the floor.)

(2) The heating and ventilating system should be considered as a part of the general design, and should be laid out by, or in collaboration with, the architect. The contract for such system should not be let until the general design has been worked out. It is often desirable to require a test of the system in cold weather, meanwhile withholding 25 per cent of the contract price or requiring an equivalent bond.

Order 5619. Line 3, strike out "In all buildings" and insert "In every building which is more than one story high and which is."

Order 5701. In line 6 strike out "six" and insert "three". At end of sentence add: provided that where the number of such persons is less than six, the following orders shall not apply: 5703 to 5716, inclusive, 5720, 5726 to 5729, inclusive.

Order 5702. Add: Hospitals of three or more stories shall be of fireproof construction.

Order 5710. At beginning of order insert; There shall be at least two exits accessible from each room or apartment, and such exits shall be at least 30 feet apart, measuring along the shortest line but not piercing any fireproof partition or wall.

After "Exception. In a fireproof building", insert "or in a two-story, nonfireproof building."

Order 5711. Add after first paragraph: In three-story buildings accommodating more than two families or 15 persons above the first story, all basement stairways shall be enclosed with fireproof enclosures.

