

~~PROPOSED~~ REVISION OF WISCONSIN STATE BUILDING CODE

~~May 15, 1956~~

IND 51.001 Fire Resistive Construction.

(2) All exterior and inner court walls shall be of not less than 4-hour fire resistive construction, as specified in section Ind 51.05, except that non-load bearing exterior walls which face streets, alleys, outer or inner courts 20 feet or more in width may be constructed of incombustible panels of not less than 1-hour fire resistive construction.

(a) Non-load bearing exterior walls which face streets, alleys, outer or inner courts 30 feet or more in width may be constructed of incombustible panels with no fire resistive rating.

(3) Interior partitions shall be constructed of incombustible materials, except that dividing partitions in stores, offices, and similar places not exceeding 3,000 square feet in area, occupied by one tenant only, may be constructed of wood panels or similar light construction.

(a) Partitions entirely within apartments having a floor area of not more than 800 square feet shall be of 1-hour fire resistive construction but such partitions may be constructed with wood studs as specified in section Ind 51.05. Doors in such partitions may be wood panel doors.

IND 51.01 Mill Construction

(2) Exterior and court walls shall be 2-hour fire resistive construction as specified in section Ind 51.05, except that non-load bearing exterior walls which face streets, alleys, outer or inner courts 20 feet or more in width may be constructed of incombustible panels of not less than 1-hour fire resistive construction.

(a) Non-load bearing exterior walls which face streets, alleys, outer or inner courts 30 feet or more in width may be constructed of incombustible panels with no fire resistive rating.

IND 51.16 Stairways

(2) Width. Every required exit stairway, whether enclosed or not, shall be not less than 3 feet 8 inches wide of which not more than 4 inches on each side may be occupied by a handrail. Every platform shall be at least as wide as the stairway, measuring at right angles to the direction of travel. Every straight run platform shall measure at least 3 feet in the direction of travel. Wherever a door opens onto a stairway, a platform shall be provided extending at least the full width of the door in the direction of travel.

Exception. (a) In apartment buildings not more than two stories in height and having not more than two apartments on a floor and in rooming houses, hospitals, hotels and similar buildings not more than two stories in height and having not more

than 6 living or sleeping rooms on a floor, such stairways shall not be less than 3 feet wide.

(b) If other stairways are provided in addition to those required by this code, such additional stairways need not conform to the width requirements of this code.

IND 53.09 Bearing Masonry walls, Bearing Partitions and Piers.

(10) Height and Thickness. All bearing walls, party walls and standard division walls, except as hereinafter provided, shall be not less than 12 inches thick in the upper 3 stories, increasing 4 inches in thickness for each 3 stories, or fraction, below. No such 3 story height shall exceed 40 feet.

(11) A building not more than 3 stories in height may have 8 inch bearing walls in the upper story, provided such story is not more than 10 feet high in the clear, and the span is not more than 20 feet, and the wall is not more than 30 feet long between cross walls, offsets or pilasters.

(12) A building not more than one story in height may have 8 inch bearing walls, provided the clearstory height is not more than 12 feet, the roof span is not more than 25 feet, and the distance between cross walls, offsets or pilasters is not more than 20 feet.

(a) A building not more than one story in height may have 6-inch bearing walls provided the clearstory height is not more than 9 feet, the roof span is not more than 18 feet and the distance between cross walls, offsets, or pilasters is not more than 15 feet. All other one story buildings shall have all bearing walls not less than 12 inches thick.

masonry
(13) All bearing/walls shall have substantial lateral support at right angles to the wall face at intervals, measured either vertically or horizontally, not exceeding 18 times the wall thickness. Such lateral support shall be obtained by masonry cross walls, piers or buttresses when the limiting distance is measured horizontally, or by floors or roof when the limiting distance is measured vertically.

(14) Masonry walls which are in contact with the soil in any story shall be increased 4 inches in thickness in that story, except that for places of abode as specified in section Ind 57.00 not over 2 stories in height 12 inch walls will be accepted if substantial lateral supports consisting of masonry walls, offsets or pilasters are provided at intervals not to exceed 20 feet.

(15) Rubble and rough cut stone walls shall be 4 inches thicker than required for walls of artificially formed units or of ashlar masonry.

(16) Stone and similar solid facing not less than 4 inches thick may be considered as part of the required thickness of a wall if bonded to the backing as required for brickwork. No such wall shall be less than 12 inches thick.

IND 53.28 Wood Construction

(9) Posts and Columns. Wood posts, when used in basements, shall bear on a cement base which shall extend not less than 3 inches above the finish floor. The base shall bear directly on the post footing.

(a) Short columns or posts are those having an $\frac{L}{d}$ ratio of 10 or less in which L = unsupported length in inches d and d the least side in inches.

(b) Safe load for short columns may be obtained by the formula

$$\frac{P}{A} = S$$

in which $\frac{P}{A}$ represents the working stress for the column and S represents the safe unit compressive stress parallel to the grain given in the table of working stresses.

(c) Safe load for long columns of square or rectangular shape may be obtained by the formula:

$$\frac{P}{A} = \frac{0.3E}{\left(\frac{L}{d}\right)^2}$$

Where E is the modulus of elasticity as given in the table on working stresses.

The value $\frac{P}{A}$ calculated by this formula shall in no case exceed S.

IND 55.02 Class of Construction

(1) The capacities of buildings or parts of buildings in this classification for the various types of construction shall not exceed, and shall comply, with the following requirements:

MAXIMUM CAPACITIES		
Type of Construction	With Stage	Without Stage
Fire Resistive - - - - -	No limit	No limit
Mill - - - - -	750	1,500
Ordinary - - - - -	500	1,000
Frame - - - - -	300	750

(a) Exception: The fire protection for structural steel supporting the roof may be omitted in one-story buildings in this classification provided the roof is of incombustible construction throughout.

(2) Where a building of this classification is erected of frame construction, the following restrictions shall apply:

(a) Not more than one story in height without a balcony, and with no basement except a heating and fuel room enclosed with 4-hour fire resistive construction as specified in sections Ind 51.05 and Ind 51.06 with all interior openings protected as specified in section Ind 51.09.

(b) Located at least 20 feet from any other building or adjoining property line.

(c) Is not built in connection with a building used for any other purpose.

(d) Is provided with foundation walls and piers of masonry construction.

(e) Where motion picture booths are required, they shall be enclosed with 4-hour fire resistive construction.

(f) Exception: In places of worship a full basement and a balcony seating not more than 30 persons may be provided.

(3) In any theater or assembly hall, balconies which accommodate more than 100 persons shall be of fire resistive construction as specified in section Ind 51.001.

IND 57.13 Toilet Rooms

(1) Every apartment shall have a water closet in a bathroom or separate compartment, except that where there are apartments consisting of not more than 3 rooms, there shall be at least one water closet for every 2 such apartments. All other buildings in this classification shall have at least one water closet for every 10 persons or fraction thereof.

(2) Occupants of rooms with private water closets shall not be considered in counting either the number of persons or the number of fixtures.

(3) Water closets and urinals, and the pipes connected therewith, shall be protected against freezing as provided in section Ind 52.61.

IND 57.53 Automobile Parking Decks

(1) Definition.

(a) For the purpose of this code, a parking deck is an unenclosed or partially enclosed structure used for the parking or storage of self-propelled vehicles, which are driven into the structure and are parked under their own power with no facilities for the repairing of such vehicles.

(2) Construction Requirements.

(a) Parking decks may be erected without enclosing walls except that unpierced enclosing walls of not less than 2-hour fire resistive construction, as specified in section Ind 51.05, shall be provided on all sides which are located less than 10 feet from the boundary line between premises or from any other building.

(b) Parking decks of 4-hour fire resistive construction shall not be limited in height or in floor area.

(c) Parking decks more than 50 feet in height shall have floors and supporting members of 2-hour fire resistive construction or better. Such structures shall not exceed 75 feet in height or 30,000 square feet in area.

(d) Parking decks of unprotected incombustible construction shall not exceed 50 feet in height or 20,000 square feet in area. This area may be increased to 25,000 square feet where the structure faces 2 streets and to 30,000 square feet where it faces 3 or more streets.

(e) A continuous wheel guard not less than 10 inches in height shall be provided on all sides of the structure on all floors.

(f) A guard rail not less than 3 feet 6 inches in height and having an intermediate rail at mid-height and a toeboard at least 6 inches high at the base or the equivalent shall be provided on all open sides of the structure on each floor.