

Chapter Ind 62

SPECIALTY OCCUPANCIES

Ind 62.001	Scope	Ind 62.26	Number, location and type of pedestrian exits
Ind 62.10	Definitions	Ind 62.27	Stairway enclosures
Ind 62.20	Scope	Ind 62.28	Handrails and guardrails
Ind 62.21	Construction requirements	Ind 62.29	Illumination and exit lights
Ind 62.22	Setbacks	Ind 62.30	Fire protection
Ind 62.23	Separation from other occupancies	Ind 62.31	Sanitary facilities
Ind 62.24	Construction, height and allowable area	Ind 62.32	Isolation of hazards
Ind 62.25	Clearance limitations	Ind 62.33	Exceptions for mechanical access open parking structures

Ind 62.001 Scope. This classification includes all specialty occupancies as indicated in the scope of each subpart of this code.

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.

Ind 62.10 Definitions. (1) **ENCLOSED PARKING STRUCTURE.** Parking structures which do not satisfy the definition of open parking structure [Ind 62.10 (2)] are considered hazardous occupancies (see section Ind 54.50 for specific requirements).

Note: The department is currently working with a project committee to develop rules for enclosed parking structures. Those rules should be in effect by January 1, 1979.

(2) **OPEN PARKING STRUCTURE.** An open parking structure is used for the parking of passenger vehicles and has open areas in exterior walls and ventilation shafts, if any, on each level of at least 4% of the total floor area of that level distributed on at least 2 exterior sides. Facilities for repairing or fueling vehicles within the structure are prohibited. One lower level may be partially or fully enclosed if mechanical ventilation is provided at a minimum rate of ½ CFM per square foot and exits are so distributed to offer 2 directions of egress. Open parking structures are classified as either ramp access or mechanical access.

(a) **Ramp access.** Ramp access, open parking structures employ a series of continually sloped floors or a series of interconnected ramps between floors permitting the movement of vehicles under their own power between the street level and parking areas.

(b) **Mechanical access.** Mechanical access, open parking structures employ fully automated parking machines, lifts, elevators or other mechanical devices for moving vehicles between the street level and the parking area, and in which public occupancy is prohibited above street level.

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.

Register, December, 1977, No. 264
Building and heating, ventilating
and air conditioning code

PART I — OPEN PARKING STRUCTURES

Ind 62.20 Scope. This classification provides the minimum requirements for the design and construction of open parking structures as defined in section Ind 62.10 (2).

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.

Ind 62.21 Construction requirements. (1) MATERIALS. All structural elements shall be of noncombustible materials.

(2) **FLOORS.** Floors shall be provided with positive surface drainage.

Note #1: Structural components of open parking structures are subjected to corrosive and deteriorating elements. The designer should consider the effects of such elements and should consider the use of air-entrained concrete, concrete sealers and coatings, additional cover for reinforcing and other accepted engineering practices to protect the components.

Note #2: The department recommends a minimum slope of 1%.

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.

Ind 62.22 Setbacks. Open parking structures may be erected without enclosing walls, except that enclosing walls of not less than 2-hour fire-resistive construction, as specified in section Ind 51.04, shall be provided on all sides which are less than 10 feet from a property line between premises or any other building.

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.

Ind 62.23 Separation from other occupancies. Every open parking structure shall be separated from any other occupancy by noncombustible 2-hour (NC-2) rated construction, or better, except as specified in section Ind 55.05. (With respect to Ind 55.05, open parking structures are considered nonhazardous.) All openings in the wall to adjoining occupancies shall be protected by means of self-closing, fire-resistive doors as specified in section Ind 51.047.

Note: It is also the intent of this section to consider office and building maintenance areas used in conjunction with the operation of the open parking structure as distinct occupancies requiring 2-hour separation.

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.

Ind 62.24 Construction, height and allowable area. (1) CONSTRUCTION AND HEIGHT. Open parking structures shall be of the type of construction and shall not exceed the height as specified in this section. The maximum floor area, per level, of any such structure shall not exceed that permitted for the corresponding type of construction and height as follows:

(a) Open parking structures of noncombustible zero-hour (NC-0) rating shall not exceed 70 feet in height or 700,000 square feet in total area.

(b) Open parking structures of noncombustible 2-hour rating or better shall not be limited in height or area per floor level. Exterior walls need not be rated, except as provided in section Ind 62.22.

Note: Open parking structures in excess of 60 feet in height are currently required to be protected by an automatic fire sprinkler system. However, legislation is being introduced to exempt open parking structures from the applicable portions of this Wisconsin statute.

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.

Register, December, 1977, No. 264
Building and heating, ventilating
and air conditioning code

DEPT. OF INDUSTRY, LABOR & HUMAN RELATIONS 219

Ind 62.25 Clearance limitations. (1)* **PRINCIPAL VEHICLE AND PEDESTRIAN TRAFFIC AREAS.** The clear height of each floor level in principal vehicle and pedestrian traffic areas shall be not less than 7 feet 0 inches.

(2) **CLEARANCE SIGNS.** Clearance limitation signs shall be prominently posted at all vehicle entrances.

Note: A lesser clear height may be permitted in mechanical-access open parking structures when approved by the department.

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.

Ind 62.26 Number, location and type of pedestrian exits. (1) **NUMBER OF EXITS.** Every open parking structure and every floor level thereof shall have at least 2 exits.

(2) **DISTANCE TO EXITS.** Additional exits shall be provided so that no part of the open parking structure will be more than 200 feet distant to the exit discharge grade or to a stair enclosure if the walls separating the stair from the open parking structure are of at least noncombustible one-hour (NC-1) rating or better and the enclosure is continuous to an outside exit.

(3) **LOCATION OF EXITS.** Exits in all open parking structures shall be placed as far apart as practicable and so located that if any exit is blocked, some other exit will still be available from every part of the structure.

(4) **TYPE OF EXITS.** At least one-half of the exits required in this section shall be stairways or standard exits to grade as specified in sections Ind 51.15-51.16. The other exits may be non-parking access ramps with a maximum slope of 1:6.

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.

Ind 62.27 Stairway enclosures. Stair enclosures of NC-0 hour rating, or better, shall be provided for all required exit stairways, unless otherwise required to be rated.

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.

Ind 62.28 Handrails and guardrails. (1) **HANDRAILS.** (a) Handrails, or equivalent, not less than 3 feet 6 inches in height, conforming to the requirements of section Ind 51.16 (5) (b), shall be provided on all open sides of the structure on each level.

(b) Handrails as specified in Ind 62.28 (1) (a) shall be provided at changes of elevation within the structure when the clear vertical opening at the elevation change is one foot 6 inches or greater.

(2) **PERIMETER GUARDRAILS.** (a) Perimeter guardrails shall be installed at the end of drive lanes and shall be designed for a minimum horizontal live load of 1000 pounds per lineal foot acting at 18 inches above the floor level.

*See Appendix A for further explanatory material.

(b) Perimeter guardrails shall be installed at the end of parking stalls and shall be designed for a minimum horizontal live load of 500 pounds per lineal foot acting at 18 inches above the floor.

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.

Ind 62.29 Illumination and exit lights. (1) **ILLUMINATION LEVELS.** Minimum illumination levels at a horizontal plane 30 inches above the floor shall conform to the requirements of Table 62-I.

(2) **EXIT LIGHTS.** Every required exit from each floor shall be indicated by an approved illuminated exit sign bearing the word **EXIT** or **OUT** in plain letters not less than 5 inches in height.

TABLE 62-I

MINIMUM ILLUMINATION LEVELS

Area	Intensity (in footcandles)
Stairways and exits	10
Parking areas	2

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.

Ind 62.30 Fire protection. (1) **STANDPIPES.** Fire department standpipes shall be provided in all open parking structures more than 2 levels in height.

(a) Such standpipes shall be dry standpipes and are not required to be interconnected.

1. Exception. Standpipes which are not accessible to the fire department at grade level shall be interconnected to an accessible standpipe.

(b) Standpipes shall be provided in each stair enclosure and shall be provided with a siamese connection at each floor level with one connection in the stair towers and one immediately outside.

(c) Such standpipes shall conform to the requirements outlined in section Ind 51.21 (3) (e) through (i).

(d) Exceptions: 1. The department will recognize special considerations in lieu of standpipes in structures up to 60 feet in height.

2. The department will accept open parking structures without standpipes if clearances are provided to allow fire-fighting equipment access in the structure.

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.

Ind 62.31 Sanitary facilities. (1) **UNATTENDED PARKING STRUCTURES.** Sanitary facilities need not be provided in unattended parking structures.

Register, December, 1977, No. 264
Building and heating, ventilating
and air conditioning code

DEPT. OF INDUSTRY, LABOR & HUMAN RELATIONS 221

(2) **ATTENDED PARKING STRUCTURES.** Sanitary facilities for employes shall be provided in accordance with section Ind 54.12 in attended parking structures.

Note: Sanitary facilities for patrons need not be provided.

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.

Ind 62.32 Isolation of hazards. (1) **FIRE PROTECTION.** Boilers, furnaces and all open-flame equipment within parking structures shall be isolated from the rest of the parking structure by at least a 2-hour fire-resistive enclosure as specified in section Ind 51.04.

(2) **PROTECTION OF OPENINGS.** All openings in such enclosure shall be protected with self-closing fire-resistive doors as specified in section Ind 51.047.

(3) **SUSPENDED EQUIPMENT.** Space heaters, suspended furnaces, and direct-fired unit heaters, fired with various fuels, may be used without an enclosure where approved by the department. Where such equipment is used without an enclosure, they shall be located at least 8 feet above the floor.

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.

Ind 62.33 Exceptions for mechanical access open parking structures. Mechanical access open parking structures need not comply with sections Ind 62.25 - 62.29, inclusive.

History: Cr. Register, December, 1977, No. 264, eff. 1-1-78.