

## Chapter Ind 57

### APARTMENT BUILDINGS, HOTELS AND PLACES OF DETENTION

|            |   |           |  |
|------------|---|-----------|--|
| Ind 57.001 | Scope   | Ind 57.15 | Repairs                                    |
| Ind 57.01  | Class of construction                                     | Ind 57.16 | Cleanliness                                |
| Ind 57.02  | First floor fire-resistive                                | Ind 57.17 | Size of rooms                              |
| Ind 57.03  | Garage and business separation                            | Ind 57.18 | Habitable rooms—floors below grade         |
| Ind 57.04  | Corridor and dividing partitions, 3 story places of abode | Ind 57.19 | Windows                                    |
| Ind 57.05  | Court walls   | Ind 57.20 | Isolation of fire hazards                  |
| Ind 57.06  | Yards   | Ind 57.21 | Fire protection equipment                  |
| Ind 57.07  | Number, location and type of exits                        | Ind 57.22 | Fire alarms                                |
| Ind 57.08  | Required exit width                                       | Ind 57.23 | Scuttle                                    |
| Ind 57.09  | Exit doors  | Ind 57.24 | Directions for escape                      |
| Ind 57.10  | Passageways   | Ind 57.25 | Row house                                  |
| Ind 57.11  | Lighting of exits   | Ind 57.50 | Garages                                    |
| Ind 57.12  | Enclosure of stairways and shafts                         | Ind 57.51 | Filling stations; buildings and structures |
| Ind 57.13  | Toilet rooms  | Ind 57.52 | Automobile tire or battery shops           |
| Ind 57.14  | Washing facilities  | Ind 57.53 | Automobile parking decks                   |

Ind 57.001 Scope. (1) The requirements of this chapter shall apply to all apartment buildings, row houses, rooming houses, hotels, dormitories, convents, monasteries, hospitals, children's homes, homes for the aged and infirm, nursing homes, convalescent hospitals, convalescent homes, asylums, mental hospitals, jails, and other places of abode or detention, except as provided in section Ind 57.25 (2).

(2) By *place of abode* is meant a building or part of a building, such as apartment building, row house, rooming house, hotel, dormitory, convent, hospital, as follows:

(a) Occupied as a residence of 3 or more families living independently or occupied by 2 such families and used also for business purposes, or

(b) Occupied for sleeping or lodging purposes by 3 or more persons not members of the same family.

(3) By *place of detention* is meant a building or part of a building used as a place of abode and wherein persons are forcibly confined, such as asylums, mental hospitals, and jails.

*Note 1:* The attorney general has ruled that all persons committed to an insane asylum by court order come within the meaning of the words "forcibly confined". Also that the words "forcibly confined" apply to all persons confined without their consent.

*Note 2:* For requirements regarding migrant labor camps see Wis. Adm. Code chapter Ind 49.

**Ind 57.005 History:** Cr. Register, July, 1967, No. 139, eff. 8-1-67; r. Register, December, 1970, No. 180, eff. 1-1-71.

Ind 57.01 Class of construction. (1) All places of abode which are more than 3 stories in height shall be of type No. 1 or No. 2 construction as specified in section Ind 51.03.

Register, December, 1974, No. 228  
Building and heating, ventilating  
and air conditioning code

(2) All 3-story places of abode, other than hospitals and places of detention, shall be at least type No. 6 construction as specified in section Ind 51.03.

(3) All places of detention shall be of type No. 1 or No. 2 construction as specified in section Ind 51.03. All hospitals, convalescent hospitals, and nursing homes 3 or more stories in height shall be of type No. 1 or No. 2 construction as specified in section Ind 51.03.

**History:** 1-2-56; am. (3), Register, September, 1959, No. 45, eff. 10-1-59; am. (1), (2) and (3), Register, June, 1972, No. 198, eff. 1-1-73.

**Ind 57.02 First floor fire-resistive.** (1) In 3 story buildings, except those having not more than one family on each floor, the first floor and its supports shall be of not less than 3-hour fire-resistive construction as specified in section Ind 51.04, except that in a 3 story apartment house which will accommodate not more than four families, or a 3 story hotel or rooming house which will accommodate not more than 30 persons, above the first story, the basement ceiling shall be of not less than 1-hour fire-resistive construction as specified in section Ind 51.04 or shall be protected by automatic sprinklers as specified in section Ind 51.23.

(2) Spaces between floor joists, below or above stud partitions where the studs extend through one or more stories, shall be fire-stopped.

**History:** 1-2-56; am. (1), Register, February, 1971, No. 182, eff. 7-1-71; r. and recr. (1) eff. 8-1-71 and exp. 1-1-72, and cr. (1) eff. 1-1-72, Register, July, 1971, No. 187.

**Ind 57.03 Garage and business separation.** (1) In every building in which a lower story is used for garage purposes, the ceiling over the garage shall be of unpierced 4-hour fire-resistive construction as specified in section Ind 51.04. Stairways from garages leading to the upper stories shall be separated from the garage area with walls of 4-hour fire-resistive construction as specified in section Ind 51.04, with openings protected as specified for special occupancy separation, section Ind 51.08.

(2) In a building more than 2 stories in height where the lower story is used for business purposes, other than the hazards listed in Chapter Ind 57 of this code, the ceiling over the lower story shall be of not less than 1-hour fire-resistive construction as specified in section Ind 51.04.

**History:** 1-2-56; am. Register, February, 1971, No. 182, eff. 7-1-71; r. and recr. eff. 8-1-71 and exp. 1-1-72; cr. eff. 1-1-72, Register, July, 1971, No. 187.

**Ind 57.04 Corridor and dividing partitions—3-story places of abode.**

(1) The public passageways shall be enclosed with partitions of not less than one-hour fire-resistive construction as specified in section Ind 51.04 and shall have all living units separated by such partitions, except as follows:

(a) Apartment buildings having one living unit on each floor.

(b) Hotels, motels, hospitals, nursing homes and other similar buildings having not more than 8 habitable rooms on each floor.

(2) Hotels, motels, hospitals, nursing homes and other similar

Register, December, 1974, No. 228  
Building and heating, ventilating  
and air conditioning code

buildings having more than 8 habitable rooms on each floor shall be divided into groups of not more than 8 habitable rooms each, with partitions of not less than one-hour fire-resistive construction as specified in section Ind 51.04.

(3) Corridor and specified dividing partitions shall be provided with 20-minute fire door assemblies, or equivalent.

**Note:** See Ind 51.047 for standards of 20-minute door assemblies or equivalent.

**History:** 1-2-56; am. (1), Register, February, 1971, No. 182, eff. 7-1-71; r. and recr. (1) eff. 8-1-71 and exp. 1-1-72; cr. (1) eff. 1-1-72; Register, July, 1971, No. 187; r. and recr., Register, September, 1973, No. 213, eff. 10-1-73; am. (3), Register, December, 1974, No. 228, eff. 1-1-75.

**Ind 57.05 Court walls.** For walls of courts and similar interior shafts for light and air, see table 51.03-A.

**History:** 1-2-56; am. Register, February, 1971, No. 182, eff. 7-1-71; r. and recr. eff. 8-1-71 and exp. 1-1-72; cr. eff. 1-1-72; Register, July, 1971, No. 187; am. Register, June, 1972, No. 198, eff. 1-1-73.

**Ind 57.06 Yards.** (1) Behind every apartment house, the rear of which does not abut on an alley or street, there shall be a yard across the entire width of the lot, open and unobstructed from the ground to the sky. The width of the yard behind a 2 story building shall be either:

(a) At least 5 feet of unobstructed width; or

(b) At least 10 feet from the rear lot line to the building line, of which at least 3 feet shall be unobstructed, and the remainder may be occupied by an open (or screened) porch.

(2) For apartment houses of more than 2 stories, the unobstructed width of the entire yard shall be increased one foot for each additional story, except in the case of corner lots.

(3) No apartment house shall be placed behind any other building unless there is at least 50 feet between the buildings.

**Ind 57.07 Number, location and type of exits.** (1) There shall be at least 2 exits accessible from each living unit by means of stairways, ramps or horizontal exits. The number and location of such exits shall be such that in case any exit or passageway is blocked at any point, some other exit will still be accessible through public passageways from every living unit.

(a) In type No. 1 and No. 2 buildings a total area of not more than 1,200 square feet may be placed between an exit and the end of the building.

(2) Exits shall be distributed so that the entrance to each living unit will be not more than 50 feet distant from an exit, measuring along public passageways, if in a building of less than type No. 1 or No. 2 construction, or 75 feet in a type No. 1 or No. 2 building.

(3) At least one-half of the required exits, in buildings of more than one story, shall be stairways as specified in section Ind 51.16. The remaining exits shall be either stairways, or horizontal exits; or fire escapes may be used as exits from floors which are not more than 40 feet above grade if they are placed against blank walls. Every

building which accommodates more than one family, or 8 persons, above the second story shall have at least 2 stairways.

(4) Apartment buildings 3 stories or less in height whose floors and supporting members are of not less than 2-hour fire-resistive construction as specified in section Ind 51.04, and which have a plan so arranged that not more than 2 living units on any floor make use of a common stairway, may be constructed with one common stairway as a single exit, provided the walls between units and those enclosing the stairway are of 2-hour fire-resistive construction as specified in section Ind 51.04. In this case, the stairways must be of not less than 2-hour fire-resistive construction, must lead directly to the outside and have all interior openings protected by approved fire-resistive doors as specified in section Ind 51.047.

(5) Where a jail or other place of detention wherein persons are forcibly confined is located on the upper floors of a court house or office building, at least one of the exits from the jail shall be a separate smokeproof stair tower leading directly from the jail section to the outside at street grade. This stairway shall serve only the jail area and there shall be no doors opening into it from the office or court house section of the building.

**History:** 1-2-56; r. and recr. (1), Register, December, 1970, No. 180, eff. 1-1-71; am. (4), Register, February, 1971, No. 182, eff. 7-1-71; r. and recr. (4) eff. 8-1-71 and exp. 1-1-72; cr. (4) eff. 1-1-72, Register, July, 1971, No. 187; am. (1) and (2), Register, June, 1972, No. 198, eff. 1-1-73; am. (1) (Intro.), (2) and (4), Register, September, 1973, No. 213, eff. 10-1-73.

**Ind 57.08 Required exit width.** The total required exit width from a building level shall be in accordance with the requirements of subsections Ind 51.15 (6) and Ind 51.16 (3).

**History:** 1-2-56; am. Register, December, 1974, No. 228, eff. 1-1-75.

**Ind 57.09 Exit doors.** Exit doors shall be as specified in section Ind 51.15; except that a door which is used by not more than 6 families, or 40 persons, shall be not less than 3 feet wide and shall not be required to open outward.

**Ind 57.10 Passageways.** Every public passageway leading from an exit shall be at least as wide as the required width of such exit. Every public passageway leading to an exit shall be at least 3 feet wide. The required width shall be kept clear and unobstructed at all times.

**Ind 57.11 Lighting of exits.** In every building which accommodates more than 4 families, or 30 persons, and in every building which accommodates transients, the public passageways and stairways and exit doors shall be illuminated from one hour after sunset to one hour before sunrise. This illumination shall include lights at all intersections of passageways, at all exits, and at the head, foot and landing of every stairway. The lights at emergency exit doors shall be red lights and shall be accompanied by a sign bearing the word "EXIT" or "OUT", in plain letters.

**Ind 57.12 Enclosure of stairways and shafts.** (1) All stairways and shafts shall be enclosed as specified in table 51.03-A, except that in

Register, December, 1974, No. 228  
Building and heating, ventilating  
and air conditioning code

all buildings 3 or more stories all basement stairways shall be enclosed with 2-hour fire-resistive partitions as specified in section Ind 51.04.

(2) In buildings more than 3 stories in height, all stairways shall be enclosed with 2-hour fire-resistive partitions, as specified in section Ind 51.04, except that one stairway may be unenclosed in the first and second stories, provided such stairway does not lead to the basement.

(3) In all buildings more than 2 stories in height in which the first story is used for business purposes, at least one stairway shall be enclosed in the first story with an unpierced wall of 2-hour fire-resistive construction, as specified in section Ind 51.04, and such stairway shall not connect with the basement.

(4) Every elevator shaftway, dumbwaiter shaftway, clothes chute, wastepaper chute, pipe shafts and other similar vertical shafts in buildings more than 2 stories in height shall be enclosed with 2-hour fire-resistive partitions, as described in section Ind 51.04, except that for 3 story buildings, 1-hour fire-resistive partitions may be used where the enclosure does not pass through a business portion. In all cases the basement enclosure shall be of not less than 4-hour fire-resistive construction.

**History:** 1-2-56; am. Register, February, 1971, No. 132, eff. 7-1-71; r. and recr. eff. 8-1-71 and exp. 1-1-72; cr. eff. 1-1-72, Register, July, 1971, No. 137; r. and recr. (1), Register, June, 1972, No. 198, eff. 1-1-73.

**Ind 57.13 Toilet rooms.** (1) Every building within this occupancy classification shall be provided with toilet rooms meeting the requirements of this section and the requirements for general sanitation, section Ind 52.50 through 52.64.

(a) Each living unit of an apartment or row house building shall be provided with a toilet room having a water closet, lavatory and bathing facilities.

(2) Every building within this occupancy classification, except apartment buildings, shall have at least one water closet for every 10 persons or fraction thereof.

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

**Note:** For general toilet room requirements, see sections Ind 52.50 to Ind 52.64, inclusive.

**History:** 1-2-56; am. (1), (2) and (3), Register, June, 1956, No. 6, eff. 7-1-56; cr. (4), Register, July, 1967, No. 139, eff. 8-1-67; r. and recr., Register, December, 1970, No. 180, eff. 1-1-71.

**Ind 57.14 Washing facilities.** Every building within this occupancy classification where water supply is available or can be made available, there shall be at least one sink or wash bowl in connection with each toilet fixture.

**History:** 1-2-56; r. and recr., Register, December, 1970, No. 180, eff. 1-1-71; am. Register, May, 1971, No. 185, eff. 6-1-71.

**Ind 57.15 Repairs.** Every building of this classification, and all parts thereof, shall be kept in good repair and the roof shall be

Register, December, 1974, No. 228  
Building and heating, ventilating  
and air conditioning code

maintained to prevent leakage. All rainwater shall be so drained and conveyed therefrom to prevent dampness in the walls and ceilings.

**Ind 57.16 Cleanliness.** Every building shall be kept clean, and shall also be kept free from any accumulation of dirt, filth, rubbish, garbage, or other matter in or on the same or in the yards, courts, passages, areas or alleys connected with or belonging to the same.

**Ind 57.17 Size of rooms.** Every habitable room used for sleeping shall be of sufficient size to afford at least 400 cubic feet of air space for each occupant over 12 years of age and 200 cubic feet for each occupant under 12 years, except that a minimum of 150 cubic feet may be provided for infants in hospital nurseries. No greater number of occupants than the number thus established shall be permitted in any such rooms.

**History:** 1-2-56; r. and recr. Register, June, 1967, No. 138, eff. 7-1-67; r. and recr. (2), Register, July, 1967, No. 139, eff. 8-1-67; r. (2), Register, December, 1970, No. 180, eff. 1-1-71; am. Register September, 1973, No. 213, eff. 10-1-73.

**Ind 57.18 Habitable rooms—floors below grade.\*** (1) Any building or part of a building used or occupied as a hospital, home for the aged and infirm, nursing home, convalescent hospital or home, asylum, mental hospital, jail or place of detention shall not have any living units located below grade (at building) except:

(a) In ground-story living units, habitable rooms shall have at least one exterior wall with a full exterior exposure from the ground floor level to the ceiling. The exterior exposure shall not be made by the construction of an areaway.

(2) Living units, other than those in (1) above, having habitable rooms, or parts thereof, on floor levels below grade (at building) shall comply with the requirements of this section.

(a) The grade (at building) does not include the grade level within the perimeter of an areaway.

(3) Every habitable room shall have at least one exterior wall adjoining an areaway or court.

(4) Every habitable room shall have at least one outside window which can be opened from the inside without the use of tools to provide a clear opening of not less than 22 inches in least dimension and not less than 5 square feet in area, with the bottom of the opening not more than 4 feet above the floor.

(a) Windows having sills below grade (at building) shall be provided with an areaway as described in (5) of this section.

(b) All windows shall comply with the requirements of Ind 52.02 and 57.19 in addition to this subsection.

(c) Window assemblies of a type which, when open, obstruct emergency egress shall not be used.

(5) Areaways used for compliance with this section shall:

(a) Have a minimum width of 3 feet measured perpendicular to the building wall;

\*See Appendix A for further explanatory material.

Register, December, 1974, No. 228  
Building and heating, ventilating  
and air conditioning code

**Note:** For further restrictions, see Ind 59.24 (4).

(b) Have, when used as a required means of egress, exits complying with sections Ind 51.16 and 52.21.

(6)\* All living units with floors below grade (at building) shall have access to 2 exits complying with all applicable sections of this code except as listed below.

(a) Exception: Living units having one exit door leading directly outside (not to an areaway) need not have access to a second exit.

(7) All buildings having living units below grade (at building) shall be designed and constructed to prevent undue collection of moisture in all stories below grade.

**Note #1:** Surface and subsoil draining systems for areaways and foundation walls are regulated under the requirements of the Wis. Adm. Plumbing Code Chapter H-62, administered by the department of health and social services.

**Note #2:** See Ind 50.10 (1) "Note" for reference to flood plane requirements.

(a) All foundation walls shall be thoroughly dampproofed prior to backfilling of soil.

(b) Provisions shall be made to prevent the accumulation of moisture due to condensation of high humidity so as to prevent slippery floors and to prevent conditions susceptible to mildew or other undesirable fungi or bacteria.

**Note #1:** The inside design conditions for cooling or dehumidification will be accepted on the basis of a dry bulb temperature of 75° F and a relative humidity not greater than 50%.

**Note #2:** See Ind 59.20 (4) (g) "Note: Cross reference" for the acceptance of nationally recognized association methods and standards as a basis for calculations and design data.

**Note #3:** The standards for winter heating are found in Chapter Ind 59 of this code.

**History:** 1-2-56; r. and recr., Register, September, 1973, No. 213, eff. 10-1-73.

**Ind 57.19 Windows.** The outside windows in every habitable room shall have a total sash area of at least one-tenth of the floor area of the room but not less than 12 square feet. The openable area of such windows shall be equal to not less than 5% of the floor area of the room served.

**Note:** Also see Ind 52.02 and Ind 59.24 (4).

**History:** 1-2-56; r. and recr. Register, September, 1959, No. 45, eff. 10-1-59; r. and recr. Register, June, 1967, No. 138, eff. 7-1-67; r. and recr. (2), Register, July, 1967, No. 139, eff. 8-1-67; r. (2), Register, December, 1970, No. 180, eff. 1-1-71; am. Register, September, 1973, No. 213, eff. 10-1-73.

**Ind 57.20 Isolation of fire hazards.** (1) All boiler and furnace rooms, including fuel rooms and breeching, all laundries, drying rooms, carpenter shops, paint shops, and other hazardous work rooms and storage rooms in hospitals and buildings accommodating transients which are more than 3 stories in height and in all asylums and other places of detention shall be enclosed with a 4-hour fire-resistive enclosure as specified in section Ind 51.04. All openings shall be protected by self-closing fire-resistive doors as specified in section Ind 51.047.

\*See Appendix A for further explanatory material.

Register, December, 1974, No. 228  
Building and heating, ventilating  
and air conditioning code

(2) In all other buildings under this classification, such rooms shall be enclosed with a 2-hour fire-resistive enclosure as provided in section Ind 51.04, or better, except as otherwise provided in this section.

(3) In apartment buildings not more than 2 stories in height, such rooms shall be enclosed with a 1-hour fire-resistive enclosure as specified in section Ind 51.04, or better, except as provided in subsection (5).

(4) In one-story buildings having a floor area of not more than 3,000 square feet and two-story buildings having a floor area of not more than 1,500 square feet per floor which are used for business purposes and also accommodate not more than two families, such rooms shall be enclosed with a 1-hour fire-resistive enclosure, as specified in section Ind 51.04, or better.

(5) The enclosure for the heating plant may be omitted in apartment buildings not more than 2 stories in height and having not more than 2 living units on a floor, and in rooming houses not more than 2 stories in height and having not more than 8 habitable rooms on a floor, provided no part of the building is used for business purposes and all interior basement stairways are enclosed with a one-hour fire-resistive enclosure as specified in section Ind 51.04, or better. See section Ind 57.25 for exception to row house installations.

(a) Exception: Gas-fired space heaters may be used within living units of apartment buildings and within habitable rooms of motels or tourist courts without an enclosure if approved by the department. Space heaters fired with liquid fuel may be used without an enclosure in motels and apartment buildings not more than one story in height.

**History:** 1-2-56; am. (1), Register, September, 1959, No. 45, eff. 10-1-59; am. Register, February, 1971, eff. 7-1-71; r. and recr. eff. 8-1-71 and exp. 1-1-72; cr. eff. 1-1-72, Register, July, 1971, No. 187; am. (5), Register, September, 1973, No. 213, eff. 10-1-73.

**Ind 57.21 Fire protection equipment.** (1) Standard first-aid standpipes shall be provided in every building which is more than 2 stories high and accommodates 20 or more transients, and in all hospitals, asylums and other places of detention.

(2) In the above buildings where adequate water supply is not available, and in buildings accommodating less than 20 transients where first-aid standpipes are not provided, a standard fire extinguisher shall be placed on each floor at the head of each stairway and at each elevator or group of elevators.

**Ind 57.22 Fire alarms.** (1) Every building which accommodates 20 or more persons except hospitals, places of detention, and motels not more than one story in height in which each unit has an outside door at grade level, shall be provided with a fire alarm system complying with section Ind 51.24.

(2) Every hospital which accommodates 20 or more persons shall be provided with a fire alarm complying with section Ind 51.24 except that chimes or other approved sounding devices shall be used when within hearing distance of the patients. Visual attention compelling devices may be used in hospitals where approved by the department of industry, labor and human relations.

Register, December, 1974, No. 228  
Building and heating, ventilating  
and air conditioning code

(a) A presignal fire alarm system may be installed in hospitals or hotels when not less than 4 employes are on duty at all times to respond to fire alarms.

(b) Where presignal systems are installed, it is recommended that the fire department be called immediately after the pre-alarm signal is received.

(3) This section applies to buildings now in existence and to buildings hereafter constructed.

**History:** 1-2-56; am. Register, October, 1958, No. 84, eff. 11-1-58.

**Ind 57.23 Scuttle.** Every building more than one story in height which accommodates more than 4 families, or 30 persons, shall have a permanent means of access to the roof from the inside. The opening shall be not less than 20 x 30 inches and there shall be a permanent ladder or stairway leading thereto.

**Ind 57.24 Directions for escape.** (1) In every habitable room likely to be used by transients, a notice shall be conspicuously posted giving complete and plain directions for reaching at least 2 exits.

(2) In addition to this, a red exit light shall be provided over each exit on every floor.

**History:** 1-2-56; am. (1), Register, September, 1973, No. 213, eff. 10-1-73.

**Ind 57.25 Row house.** (1) **DEFINITION.** A row house is a place of abode not more than 2 stories in height, arranged to accommodate 3 or more attached row living units in which each living unit is separated from the adjoining unit by an unpierced vertical occupancy separation of not less than one-hour fire-resistive construction, extending from the basement or lowest floor to the under side of the roof boards.

(2) **REQUIREMENTS.** (a) Each living unit shall have separate entrances and exits leading directly to the outside.

(b) Heating ducts may be installed in the space between studs in the occupancy separation wall provided all such ducts are covered with ¼ inch corrugated asbestos or the equivalent protection. Heating ducts shall not be installed back to back in the occupancy separation wall.

(c) Where each living unit has a separate heating system, the requirements of sections Ind 57.20 and 57.22 need not be complied with.

(d) Each living unit shall have access to the attic from the inside by means of an opening not less than 20 x 30 inches located above the stair landing on the second floor, but the other provisions of section Ind 57.23 need not be complied with.

**History:** 1-2-56; am. (1) and (2) (a), Register, September, 1973, No. 213, eff. 10-1-73.

## HAZARDOUS OCCUPANCIES

**Ind 57.50 Garages.** (1) **DEFINITIONS.** (a) A garage is a building, or part of a building, which accommodates or houses self-propelled vehi-

Register, December, 1974, No. 228  
Building and heating, ventilating  
and air conditioning code

cles. For the purpose of this code the term vehicle includes land, air and water vehicles.

(b) A private garage is one used in connection with a private residence for the purpose of housing self-propelled vehicles owned by the occupant of the residence and used only for personal or family service.

(2) CONSTRUCTION REQUIREMENTS. (a) All garages, except private garages, which are more than 500 square feet in area, shall have walls and roof of types No. 1 through No. 6 construction as specified in section Ind 51.03, and all floors of vehicle storage rooms, sales-rooms and repair shops shall be of not less than 4-hour fire-resistive construction as specified in section Ind 51.04.

*Exception:* 1. A garage not more than one story in height and 2,000 square feet in area may have walls and roof of type No. 7 or No. 8 construction if located at least 100 feet from any other building or boundary line between premises.

2. A hangar for the storage of not more than one airplane, or a boathouse for the storage of not more than one motor boat, may be of type No. 7 or No. 8 construction if located at least 15 feet from any property line or other building.

(b) All walls, or parts of walls, nearer than 5 feet to a boundary line between premises or to any other building shall be unpierced. All walls, or parts of walls, nearer than 10 feet, but not nearer than 5 feet, to a boundary line between premises or to any other building shall have all openings therein protected by means of fire-resistive doors and windows as specified in section Ind 51.047.

(c) Where a garage which is more than 500 square feet in area is built in connection with a building used for other purposes, it shall be separated therefrom by means of 4-hour fire-resistive walls as specified in section Ind 51.04 and unpierced 4-hour fire-resistive floors above and below as specified in section Ind 51.04. All openings in the walls to adjoining parts of the building shall be protected by means of self-closing fire-resistive doors as specified in section Ind 51.047. Stairways from garages leading to upper stories shall be separated from the garage area with walls of 4-hour fire-resistive construction as specified in section Ind 51.04 with all openings protected by means of self-closing fire-resistive doors as specified in section Ind 51.047.

(d) Where a garage which is less than 500 square feet in area is built in connection with a public building or place of employment under this code, the garage shall have walls and ceilings of not less than 1-hour fire-resistive construction as specified in section Ind 51.04, and the openings to adjoining parts of the building shall be protected by means of fire-resistive doors as specified in section Ind 51.047.

(3) FIRE PROTECTION. Boilers, furnaces and all open flame equipment within garages and service stations shall be effectively separated from other areas by not less than 2-hour fire-resistive walls, floors and ceilings as specified in section Ind 51.04. Such enclosures in basements shall have no openings into other basement areas. All stairways leading to such basement enclosures from the first floor shall be enclosed on the first floor with not less than 2-hour fire-

resistive construction as specified in section Ind 51.04, and the opening thereto protected with a fire-resistive door as specified in section Ind 51.047.

(a) Suspended furnaces and direct fired unit heaters fired with liquid fuel or gas may be used without an enclosure where approved by the department of industry, labor and human relations. Where approved, the equipment and installation shall satisfy requirements of section Ind 59.66.

(b) In garages or service stations which are heated by a suspended furnace located in a utility room or storage room, the enclosing walls, floor and ceiling shall be of 2-hour fire-resistive construction unless one side of the room is left open.

(4) FLOOR PITS. There shall be no pits or other depressions in the floor of any garage area, except that this requirement shall not apply to the shallow depressions formed to secure floor drainage, nor to catch basins installed in compliance with the provisions of the plumbing code issued by the state board of health nor to floor openings for access to regular basements.

(a) This will permit service openings in the floors of garages or service stations provided that the area below can be classed as regular basements and are ventilated in accordance with the requirements of the building, heating, ventilating and air conditioning code.

**History:** 1-2-56; r. and recr. (2) (c), Register, September, 1959, No. 45, eff. 10-1-59; am. Register, January, 1961, No. 61, eff. 2-1-61; am. (3) (a), Register, December, 1967, No. 144, eff. 1-1-68; am. (2) (a) intro. par., (b), (c), (d) and (3) intro. par., Register, February, 1971, No. 182, eff. 7-1-71; r. and recr. (2) (a) intro. par.; (2) (b), (c), (d) and (3) intro. par. eff. 8-1-71, exp. 1-1-72; cr. (2) (a) intro. par., (2) (b), (c), (d) and (3) intro. par., eff. 1-1-72, Register, July, 1971, No. 187; am. (2) (a), Register, June, 1972, No. 198, eff. 1-1-73.

Ind 57.51 Filling stations; buildings and structures. (1) DEFINITIONS. (a) By filling station is meant one or more pumps, tanks, and other pieces of equipment used in the storage and dispensing of liquid fuels and arranged for the sale of such liquid fuels to the public.

(b) By dispensing area is meant any area within 15 feet of any pump or other dispensing equipment.

(c) By basement or open space under a floor or dispensing area is meant any space that does not have an outlet at its lowest level, at or above grade.

(2) CONSTRUCTION. (a) All buildings having a service space of not more than 500 square feet in area, designed to accommodate motor-driven vehicles, and all other buildings erected within 15 feet of the dispensing equipment, shall be of types No. 1 through No. 6 construction as specified in section Ind 51.03, except where canopies are provided over the dispensing equipment such canopies shall be of noncombustible construction throughout.

1. Pumps or other dispensing equipment serving liquid fuel to the public, which are located within or under any occupied part of any building or structure, shall be installed in compliance with the provisions of the flammable liquids code.

(b) Buildings not more than one story in height and not exceeding 500 square feet in area may be of type No. 7 or No. 8 construction if

Register, December, 1974, No. 228  
Building and heating, ventilating  
and air conditioning code

located at least 15 feet from dispensing equipment and 10 feet from the boundary lines between premises and from other buildings on the same premises.

(c) Buildings more than 500 square feet in area used as office buildings exclusively, or in connection with other nonhazardous occupancies, may be of type No. 7 or No. 8 construction if not more than one story in height and located at least 30 feet from boundary lines between premises, from other buildings on the same premises and from the dispensing equipment.

(d) All walls, or parts of walls, in buildings under par. (a) which are nearer than 5 feet to a boundary line between premises or to any other building shall be unpierced. All walls, or parts of walls nearer than 10 feet, but not nearer than 5 feet, to a boundary line between premises or to any other building shall have all openings therein protected by means of fire-resistive doors and windows as specified in section Ind 51.047.

(e) The main floor level of any building erected within 15 feet of equipment used to dispense liquid fuel shall not be below the level of the driveway or grade at such equipment.

(f) There shall be no basement or other open space under the floor of the dispensing area outside of the building. There shall be no basement or other open space under the floor of any filling station building, unless:

1. The main floor level is at least 6 inches above the driveway or grade at the dispensing equipment, and

2. There is no outside door, window or other wall opening to such under floor space, except fuel chutes or other similar vertical openings having a tight-fitting cover, with the bottom of such opening at least 6 inches above the driveway or grade at the dispensing equipment.

3. The floor and enclosure of the underfloor space is of 4-hour fire-resistive construction as specified in section Ind 51.04.

4. The under floor space is effectively vented by gravity means.

**Note:** For requirements applying to floor pits, see section Ind 57.50.

**History:** 1-2-56; am. (2) (a); cr. (2) (a) 1., Register, September, 1959, No. 45, eff. 10-1-59; am. (2) (d) and (2) (f) 3., Register, February, 1971, No. 182, eff. 7-1-71; r. and recr. (2) (d) and (2) (f) 3., eff. 8-1-71, exp. 1-1-72; cr. (2) (d) and (2) (f) 3, eff. 1-1-72, Register, July, 1971, No. 187; am. (2) (a), (b), (c), Register, June, 1972, No. 198, eff. 1-1-73.

**Ind 57.52 Automobile tire or battery shops.** (1) Any building, or part of a building, in which tires are repaired or fitted to vehicles shall be constructed, equipped and maintained as a garage under section Ind 57.50.

(2) Any building or part of a building, in which electric storage batteries are charged, repaired, or are installed in vehicles shall be constructed, equipped and maintained as a garage under section Ind 57.50.

**Ind 57.53 Automobile parking decks.** (1) **DEFINITION.** 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 51.04, 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 having floor and supporting members of 2-hour fire-resistive construction or better shall not exceed 75 feet in height or 40,000 square feet in area. This area may be increased to 50,000 square feet where the structure faces 2 streets and to 60,000 square feet where the structure faces 3 or more streets.

(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.

(g) All parking decks and parts thereof shall be designed and constructed to support the following minimum superimposed live loads in pounds per square foot of horizontal area, in addition to the dead load:

| <i>Passenger Cars Only</i> | <i>Pounds Per Square Foot</i> |
|----------------------------|-------------------------------|
| Top floor -----            | 80                            |
| First floor -----          | 80                            |
| Intermediate floors -----  | 50                            |
| Ramps -----                | 80                            |

*Busses and Trucks*

All floor and ramp areas ----- 8,000 pound axle load  
 in any possible position  
 or 80 pounds per square  
 foot, whichever produces  
 the greater stress.

**History:** Cr. Register, June, 1956, No. 6, eff. 7-1-56; cr. (2) (g), Register, August, 1957, No. 20, eff. 9-1-57; am. Register, December, 1962, No. 84, eff. 1-1-63; am. (2) (a), Register, February, 1971, No. 182, eff. 7-1-71; r. and recr. (2) (a) eff. 8-1-71 and exp. 1-1-72; cr. (2) (a) eff. 1-1-72, Register, July, 1971, No. 187.