

DEPT. OF INDUSTRY, LABOR & HUMAN RELATIONS 187
Heating, Ventilating
and Air Conditioning

(c) Exceptions: Fire damper or fire door assemblies are not required in (a) where

1. Maximum duct area does not exceed 20 square inches.
2. Duct serves as an exhaust for kitchen range hood.

History: Cr. Register, January, 1965, No. 109, eff. 2-1-65; r. and recr. Register, September, 1973, No. 213, eff. 10-1-73; am. (4) (e), Register, February, 1974, No. 218, eff. 3-1-74.

Ind 59.70 Volume dampers and deflectors. Necessary volume dampers, splitters and deflectors shall be provided in all ducts to permit accurate balancing of the system. The dampers, splitters and deflectors shall be adjusted to satisfy the heating and ventilating requirements of the conditioned space and locked in place.

History: Cr. Register, January, 1965, No. 109, eff. 2-1-65.

Ind 59.71 History: Cr. Register, January, 1965, No. 109, eff. 2-1-65; r. Register, September, 1973, No. 213, eff. 10-1-73.

Ind 59.72 Equipment location and protection required. Heating and ventilating equipment in gymnasiums, play rooms and similar occupied areas shall be fully recessed, and protected, or located not less than 7 feet above the floor. Heating and ventilating equipment shall not block any part of the required aisles, passageways and corridors.

History: Cr. Register, January, 1965, No. 109, eff. 2-1-65.

Ind 59.74 Piping. (1) PIPE SIZES AND ARRANGEMENT. All steam and hot water supply and return piping, air-line piping and auxiliary equipment shall be of appropriate sizes, elevations and arrangements in accordance with standard engineering practice to accomplish the calculated services in practical operation, without undue noise, stress or other detriment.

(2) EXPANSION AND CONTRACTION. The piping for heating system shall be equipped with anchors, expansion swings or joints, supports and similar devices to relieve stress and strains caused by temperature change of the pipe material.

(3) PIPE INSULATION. Steam, hot water supply and return piping in occupied areas shall be covered with not less than ½ inch insulating material, where the heat emission is objectionable or where piping is subject to freezing.

Note: For additional requirements see Wis. Adm. Code section Ind 52.13.

History: Cr. Register, January, 1965, No. 109, eff. 2-1-65.

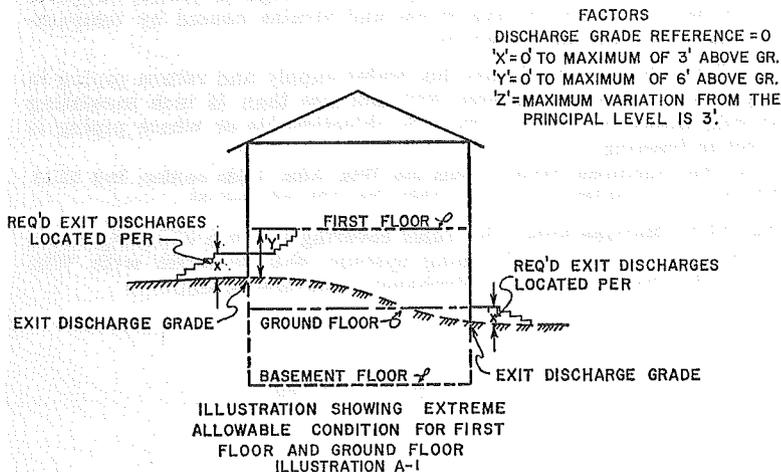
Ind 59.75 Refrigerants. The rules covering the use of refrigerants as a function of air conditioning systems shall conform with Wis. Adm. Code chapter Ind 45 (Mechanical Refrigeration).

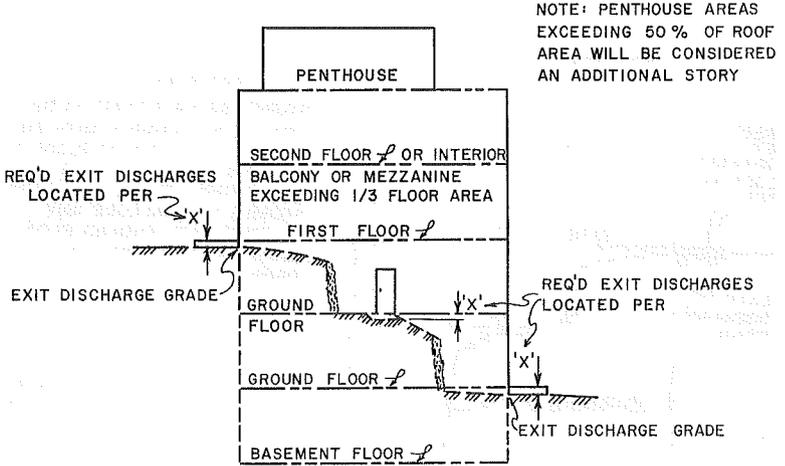
*Cr. Ch. and Rec.
Oct. Reg. No. 226*

APPENDIX A

The following notes, bearing the same number as the text of the building and heating, ventilating and air conditioning code to which they apply, contain useful explanatory material to clarify the referenced definitions and rules.

- A-51.01 (12) **BUILDING.** The intent was to consider permanent awnings as part of a building.
- A-51.01 (42) **FAMILY.** The intent of this definition is to clarify the use of the word "family" in reference to subsection Ind 57.001 (2) (a); it is not intended as a variance to requirements stated under Ind 57.001 (2) (b).
- A-51.01 (67a) **HABITABLE ROOM.** It is the intent that rooms designated as recreation, study, den, family room, office, etc. and providing the only space for living and/or sleeping are considered habitable rooms.
- A-51.01 (115) **SETBACK.** The intent was to not include gutters, downspouts, outdoor lighting fixtures, signs and similar attachments as parts of a building.
- A-51.01 (121) **STORIES, NUMBER OF.** For further clarification, refer to A-51.02 (14).
- A-51.01 (144) **WALL (DIVISION).**
- Building division wall* is intended to denote a wall constructed in a manner sufficient to meet requirements for a party wall [see "Wall (Party)"] and is acceptable as a dividing wall or enclosing wall when determining the volume of a building as referred to in sections Ind 50.10, 52.001 and 59.20. Also see Chapter A-E 2 of Wis. Adm. Code—Examining Board of Architects, Professional Engineers, Designers and Land Surveyors.
 - Fire division wall* is intended to relate to construction that provides separation between portions of a building to satisfy allowable floor area limitations, separation between 2 classes of construction, or separation of hazardous occupancies. For other separations, see "occupancy separations" and isolation of hazards sections of this code.
- A-51.02 (14) **DETERMINATION OF NUMBER OF STORIES.** The following illustrations are provided to give visual aid to this rule and the definition of Ind 51.01 (121) Stories, Number of.

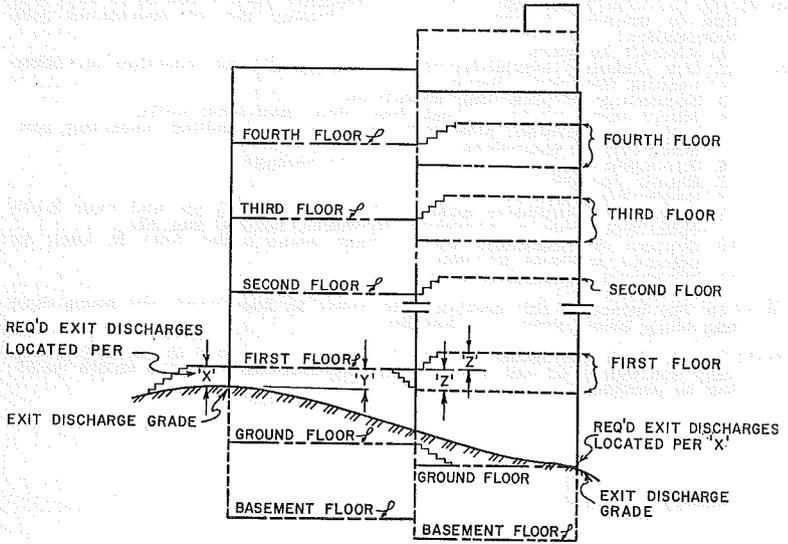




NOTE: PENTHOUSE AREAS
 EXCEEDING 50% OF ROOF
 AREA WILL BE CONSIDERED
 AN ADDITIONAL STORY

ILLUSTRATION SHOWING POSSIBLE
 2 STORY CONDITION OR 3
 STORY WITH PENTHOUSE

NOTE: FOR ADDITIONAL VARIATIONS TO NO. OF
 STORIES SEE IND. 51.02 (3)(b).
 ILLUSTRATION A-2



FOUR STORY BUILDING
 ILLUSTRATION A-3

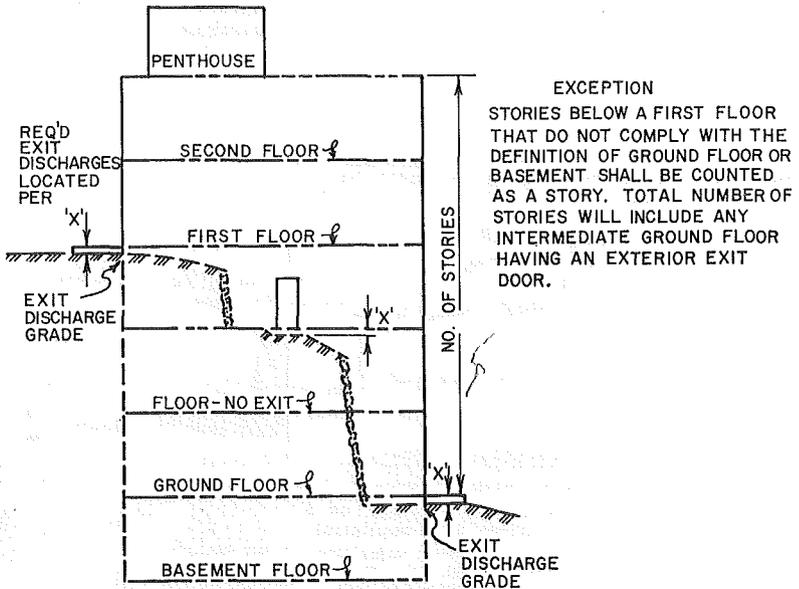


ILLUSTRATION A-4

A-51.042 (5) The use of the term "high hazard" as referred to in this section is intended to apply to the following list of operations and occupancies:

1. Aircraft hangars.
2. Dry cleaning establishments: using or storing gasoline or other volatile flammable liquids.
3. Enameling or japanning operations.
4. Mills: sugar, starch, cereal, feed, flour and grist mills.
5. Paint and varnish: manufacturing, storing, handling, spraying, and other related operations.
6. Pyroxylin products: manufacture and storage.
7. Repair garages.
8. Smoke houses.
9. Storage of: explosive gases under pressure (15 psi and over 2,500 cubic feet) such as acetylene, hydrogen, natural gas, etc.
10. Storage of: materials with a flash point under 200° F, such as celluloid products, kerosene, oils, etc.
11. Woodworking establishments.

A-57.18 The intent of this section is to apply to floor levels not more than one story below grade (at building).

A-57.18 (6) It is the intent of this subsection that each living unit needs only one means of exit from within the unit and that the entire building be provided with no less than 2 exits.