Chapter ILHR 66

UNIFORM MULTIFAMILY DWELLINGS

		- Administration and Enforcement		— Occupancy Requirements
ILHR	66.01	Purpose	ILHR 66.32	Construction
ILHR	66.02	Scope	ILHR 66.33	Allowable area and height
ILHR	66.03	Definitions	ILHR 66.335	Access roadways for fire apparatus
ILHR	66.04	Limitations	ILHR 66.34	Number and location of exits
ILHR	66.05	Jurisdiction	ILHR 66.35	Capacity of buildings and exits
ILHR	66.06	Designing requirements	ILHR 66.36	Types of exits
ILHR	66.07	Plans, specifications, and calculations prepared outside	ILHR 66.37	Doors
	and the	Wisconsin	ILHR 66.38	Exit steps, stairs, and ramps in nondwelling unit
ILHR	66.09	Supervision		portions
ILHR	66.10	Owner's responsibility	ILHR 66.39	Steps, stairs, and ramps within dwelling units
ILHR	66.11	Wisconsin uniform multifamily building permit	ILHR 66.40	Handrails and guardrails
ILHR	66.12	Procedures for obtaining a uniform multifamily building permit	ILHR 66.41	Enclosure of shafts, exit stairways, and other vertical openings
ILHR	66.13	Suspension or revocation of Wisconsin uniform	ILHR 66.42	Exit access corridors
		multifamily building permit	ILHR 66.43	Illumination of exits and exit signs
ILHR	66.14	Plan submittal	ILHR 66.44	Habitable rooms with floors below grade
ILHR	66.15	Application for approval	ILHR 66.45	Sanitary facilities
ILHR	66.16	Department approval of plans	ILHR 66.46	Natural light and ventilation
ILHR	66.165	Revisions to approved plans	ILHR 66.465	Ceiling height
ILHR	66.17	Footing and foundation approval	ILHR 66.466	Recycling space
ILHR	66.18	Permission to start construction	ILHR 66.47	Isolation of hazards
ILHR	66.19	Evidence of plan approval	ILHR 66.475	Protection of openings
ILHR	66.195	Sprinkler documents	ILHR 66.48	Standpipes
ILHR	66.20	Revocation of approval	ILHR 66.49	Smoke detection
ILHR	66.21	Expiration of plan approval and extension of plan	ILHR 66.50	Fire alarms
2.20		approval	ILHR 66.51	Fire extinguishers
ILHR	66.22	Design responsibility		T 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ILHR	66.23	Inspections		I — Construction Standards and Definitions
ILHR	66.24	Certified municipalities	ILHR 66.60	Construction standards and definitions
ILHR	66.25	Building material approvals	Subshanter T	- Electrical Standards
ILHR	66.255	Manufactured multifamily dwellings	ILHR 66.61	Electrical standards
ILHR	66.26	Individual variance from a specific rule	111111 00.01	All Marian Annual Control of the Con
ILHR	66.27	Municipal variance from this chapter	Subchapter V	— Plumbing
ILHR	66.2 8	Appeals of orders and determinations and for extension of time	ILHR 66.62	Plumbing
ILHR	66.29	Violations and penalties		

Subchapter I — Administration and enforcement

ILHR 66.01 Purpose. The purpose of this chapter is to establish uniform statewide construction standards and inspection procedures for multifamily dwellings in accordance with the requirements of ss. 101.14 (4m) and 101.971 to 101.976, Stats.

Note: This chapter cannot address every conceivable design option. Points of code application and clarification and formal code interpretations will be addressed and issued from time to time and will be published in the monthly Wisconsin Building Codes Report available from the Safety and Buildings Division, P.O. Box 7969, Madison, Wisconsin 53707.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.02 Scope. (1) The requirements of this chapter apply to all of the following:

- (a) Every multifamily dwelling as defined in s. ILHR 66.03 which is constructed after April 1, 1995.
- (b) Every addition to an existing multifamily dwelling which is constructed after April 1, 1995.
- (c) Any building or portion of a building which is converted to a multifamily dwelling after April 1, 1995, except as provided in s. ILHR 66.025.

- (d) All remodeling or alteration which affects the structural strength, fire hazard, exits, or required natural lighting, or the replacement of major equipment, for a multifamily dwelling constructed after April 1, 1995. These requirements do not apply to minor repairs necessary for the maintenance of any building.
- (2) Dormitories, rooming houses, and other places of abode that are within the scope of ch. ILHR 57 are not included in the scope of this chapter.
- (3) The scope of this chapter does not extend to driveways, sidewalks, landscaping, and other similar features not having an impact on a multifamily dwelling.

Note: Building inspectors and fire inspectors have separate responsibilities in the overall enforcement of this chapter. Normally, a building inspector has primary responsibility during construction of a building, while a fire inspector has primary responsibility after a building is completed.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.025 Historic building code. Buildings qualified under ch. ILHR 70 as being historic and which are elected to be subject to that code are not required to conform to any of the provisions of this chapter which are addressed by ch. ILHR 70.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.03 Definitions. In this chapter:

- (1) "Apartment building" means any building containing 3 or more attached dwelling units, whether designated as apartment house, tenement, rowhouse, townhouse, garden apartment, or any other name.
- (2) "Bedroom" means a room designed or intended to provide a space for sleeping, or a room designated as "study" or "den" that contains or is adjacent to a closet.
- (3) "Condominium" means a multifamily dwelling subject to condominium declaration under ch. 703, Stats.
- (4) "Dwelling unit" has the meaning given in s. 101.61 (1), Stats.

Note: Section 101.61 (1), Stats., reads in part: "Dwelling unit" means a structure or that part of a structure which is used or intended to be used as a home, residence or sleeping place by one person or by 2 or more persons maintaining a common household, to the exclusion of all others.

- (5) "Loft" means a dwelling unit's upper room or floor that has at least 50% of the common wall open to the floor below.
- (6) "Multifamily dwelling" has the meaning given in s. 101.971 (2). Stats.

Note: Section 101.971 (2), Stats., reads: "Multifamily dwelling" means an apartment building, rowhouse, town house, condominium or manufactured building, as defined in s. 101.71 (6), that does not exceed 60 feet in height or 6 stories and that consists of 3 or more attached dwelling units the initial construction of which is begun on or after January 1, 1993. "Multifamily dwelling" does not include a facility licensed under ch. 50.

Note: Section 101.71 (6), Stats., reads: (a) "Manufactured building" means any structure or component thereof which is intended for use as a dwelling and:

- Is of closed construction and fabricated or assembled on-site or off-site in manufacturing facilities for installation, connection, or assembly and installation, at the building site; or
- 2. Is a building of open construction which is made or assembled in manufacturing facilities away from the building site for installation, connection, or assembly and installation, on the building site and for which certification is sought by the manufacturer.
- (b) "Manufactured building" does not mean any manufactured home or mobile home under s. 101.91 or any building or open construction which is not subject to par. (a) 2.
- (7) "Municipality" means any city, village, town, or county in this state.
- (8) "Nondwelling unit portions" has the meaning given in s. 101.14 (4m) (a) 4., Stats.

Note: Section 101.14 (4m) (a) 4., Stats., reads: "Nondwelling unit portions" means the common use areas of a multifamily dwelling, including corridors, stairways, basements, cellars, vestibules, atriums, community rooms, laundry rooms or swimming pool rooms.

- (9) "Ramp" means a sloping floor or walk and the necessary platforms or landings connecting them to form a continuous passage from one elevation to another.
- (10) "Rowhouse" and "Townhouse" mean an apartment building not more than 3 stories in height, arranged to accommodate 3 or more attached, side-by-side or back-to-back dwelling units, with each dwelling unit served by an individual exterior exit within 3 feet of the exit discharge grade.
- (11) "Stairway" means one or more flights of steps and the necessary platforms or landings connecting them to form a continuous passage from one elevation to another. Register, March, 1995, No. 471

(12) "Two-hour fire resistance" has the meaning given in s. 101.14 (4m) (a) 5m., Stats.

Note: Section 101.14 (4m) (a) 5m., Stats., reads: "Two-hour fire resistance" means 2-hour fire separations for all walls that separate dwelling units, exit corridors and exit stair enclosures and for all floors and ceilings, so that the specified walls, floors and ceilings are capable of resisting fire for a period not shorter than 2 hours.

(13) "Type X gypsum wallboard" means conforming to the type X specifications in ASTM C 36, as adopted by reference in s. ILHR 51.25.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.04 Limitations. (1) MUNICIPAL ORDINANCES. (a) Except as provided in pars. (b) to (d), no municipality may enact an ordinance on any subject falling within the scope of this chapter, including establishing restrictions on the occupancy of dwellings, for any reason other than noncompliance with the provisions of this chapter. This chapter does not apply to occupancy requirements occurring after the first occupancy for residential purposes following the final inspection.

- (b) This chapter may not be construed to affect local requirements relating to land use, zoning, property line requirements, or other similar requirements. This chapter does not affect the right of municipalities to establish safety regulations for the protection of the public from hazards at a construction site.
- (c) Any municipality may, by ordinance, require permits and fees for any construction, additions, alterations, or repairs not within the scope of this chapter.
- (d) A municipality may regulate the construction and installation of windows and doors in multifamily dwellings if the regulation is related to preventing illegal entry.
- (e) A municipality may enact an ordinance requiring the automatic fire sprinkler system protection or 2-hour fire resistance specified in either s. ILHR 66.33 (1) (b) or (c). Under s. 101.14 (4m) (am), Stats., no municipality may enact an ordinance specifying thresholds for sprinkler protection or fire resistance that differ from Tables 66.33-A and -B.
- (f) A municipality may not require backflow protection for automatic fire sprinkler systems connected to plumbing systems except where specified in ch. ILHR 82.
- (g) This chapter does not affect municipal requirements contained in a "preexisting stricter sprinkler ordinance," as provided in s. 101.975 (3), Stats.

Note: Section 101.975 (3), Stats., reads: In this subsection, "preexisting stricter sprinkler ordinance" means an ordinance that fulfills all of the following requirements:

- The ordinance requires an automatic sprinkler system in multifamily dwellings containing 20 or less attached dwelling units.
- 2. The ordinance was in effect on January 1, 1992, and remains in effect on May 1, 1992.
- 3. The ordinance does not conform to this subchapter and s. 101.02 (7m) or is contrary to an order of the department under ss. 101.01 to 101.25.
- 4. The ordinance is more stringent than the corresponding provision of this subchapter or s. 101.02 or the contrary provision of an order of the department under ss. 101.01 to 101.25.

If a political subdivision has a preexisting stricter sprinkler ordinance, that ordinance remains in effect, except that the political subdivision may amend the ordinance to conform to this subchapter and s. 101.02 (7m) and to be not contrary to an order of the department under ss. 101.01 to 101.25.

- (2) Legal responsibility. The department or the municipality having jurisdiction may not assume legal responsibility for the design or construction of multifamily dwellings.
- (3) RETROACTIVITY. The requirements of this chapter are not retroactive.
- (4) Innovative discourage the construction of innovative multifamily dwellings, such as a building built below ground, a geodesic dome, a concrete building, a fiberglass building, or any other nonconventional structure, provided written approval from the department is obtained. Under this section, written approval from the department includes an acceptance through preliminary design consultation, plan review, petition for variance, official code interpretations, material approval, or other written forms of approval.
- (5) CHANGE OF USE. (a) If the use of an existing building is changed to a multifamily dwelling and the requirements of this chapter are more stringent than those for the previous use, the building shall be made to comply with the requirements of this chapter except as provided in this subsection.
- (b) The requirements for the new use may be modified through written approval of the department.
- (c) An existing building undergoing a change of use will not be required to comply with the barrier-free environment provisions of s.ILHR 52.04 unless the building undergoes physical remodeling in accordance with the percentages established in s. ILHR 57.79.

Note: These exceptions do not allow exemption from the standards in the federal Americans with Disabilities Act Accessibility Guidelines.

(d) If, upon inspection of an existing building, it is found that the use has changed and the building does not comply with the requirements of this chapter that were in effect at the time of the change, the building shall be made to comply with those requirements.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.05 Jurisdiction. (1) MUNICIPAL JURISDICTION. Pursuant to ss. 101.14 (4m) and 101.975, Stats., municipalities may exercise jurisdiction over the construction and inspection of new multifamily dwellings. Municipalities intending to exercise jurisdiction shall adopt this chapter in its entirety. No additional standards within the scope of this chapter may be adopted by the municipality unless specific approval has been granted by the department pursuant to s. ILHR 66.27.

- (2) DEPARTMENT JURISDICTION. Pursuant to s. 101.14 (4m), Stats., the department will administer and enforce this chapter in any municipality that has not adopted or is not covered by an ordinance in accordance with this section.
- (3) UNIFORMITY. Pursuant to s. 101.972, Stats., this chapter shall be applied uniformly throughout the state. The responsibility for uniform interpretation and application of this chapter ultimately rests with the department. Pursuant to ss. 101.972 and 101.974, Stats., the depart-

ment may consult with the multifamily dwelling code council established under s. 15.227 (20), Stats., in applying or modifying this chapter.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.06 Designing requirements. (1) DESIGN. Every new building or alteration to a building shall be designed in compliance with this chapter.

- (2) BUILDINGS CONTAINING NOT MORE THAN 50,000 CUBIC FEET TOTAL VOLUME. The plans and specifications for every new building or alteration to a building, containing not more than 50,000 cubic feet total volume, or addition to a building in which the volume of the addition results in the entire building containing not more than 50,000 cubic feet total volume, may be prepared by a registered architect, engineer, designer, contractor, or an authorized agent.
- (3) BUILDINGS CONTAINING MORE THAN 50,000 CUBIC FEET TOTAL VOLUME. The plans and specifications for every new building or alteration to a building, containing more than 50,000 cubic feet total volume, or addition to a building in which the volume of the addition results in the entire building containing more than 50,000 cubic feet total volume, shall be designed as follows:
- (a) Building or structural design. The plans and specifications for the design of the building shall be prepared, signed, and sealed by a Wisconsin registered architect or engineer.
- (b) Heating, ventilating, and air conditioning design. The plans and specifications for the heating, ventilating, and air conditioning system shall be prepared, signed, and sealed by a Wisconsin registered architect, engineer, or designer of heating, ventilation, and air conditioning systems
- (c) Energy conservation design. The plans and specifications for energy conservation design shall be prepared, signed, and sealed by a Wisconsin registered architect, engineer, or designer of heating, ventilation, and air conditioning systems.
- (d) Fire protection design. The plans and specifications for a fire protection system shall be prepared, signed, and sealed by a Wisconsin registered architect, engineer, or designer of fire protection systems.

Note: See s. ILHR 51.01 (139a) for definition of total volume.

Note: The above terms "registered architect, engineer, or designer" mean a registered architect, registered professional engineer, or designer as defined by the laws regulating the practice of engineering and architecture, as found in ch. 443, Stats. Designers are restricted to the specific limitations outlined in s. A-E 5.06. See s. A-E 2.02 for rules pertaining to signing, sealing, and dating of plans prepared by registered architects, registered engineers, or designers. In par. (d), "designer" also means a licensed automatic fire sprinkler contractor.

Note: According to s. 87.30, Stats., every building, structure, fill, or development that is placed or maintained within any flood plain is required to satisfy local or state regulations adopted pursuant to that section.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.07 Plans, specifications, and calculations prepared outside Wisconsin. (1) GENERAL. Plans, specifications, and calculations for multifamily dwellings under s. ILHR 66.06 (3) may be prepared by an architect or engineer registered outside of the state of Wisconsin provided the conditions of this section are satisfied.

TLHR 66.07

- (2) REGISTRATION. The state agency or entity that registers the architect or engineer shall be an agency or entity recognized by the department of regulation and licensing as having equivalent standards for registration.
- (3) SEAL. The plans, specifications, and calculations shall bear the signature and seal or stamp of a registered architect or registered engineer.
- (4) CERTIFICATE. A certificate that is dated, signed, and sealed by an architect or engineer registered in Wisconsin shall be attached to the plans, specifications, and calculations. The certificate shall indicate that the plans, specifications, and calculations were prepared in a state other than Wisconsin by an architect or professional engineer registered in that state; describe the work performed by the Wisconsin registered architect or engineer; state that the plans and specifications have been reviewed and comply with this chapter; and state that the reviewing architect or engineer will be responsible for the supervision of the construction in accordance with the requirements in s. ILHR 66.09.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.09 Supervision. (1) GENERAL. All constructions or installations under s. ILHR 66.06 (3) shall be supervised by a Wisconsin registered architect or engineer except that Wisconsin permitted designers may supervise the installation of components or systems within the field of their permit. The person responsible for supervision shall also be responsible for the construction and installation being in substantial compliance with the approved plans and specifications. If the supervising architect, engineer, or designer observes a nonconformance to this chapter during or at the end of construction, the supervising individual, together with the designing architect, engineer, or designer, shall effect compliance or notify the department or its authorized representative of the noncompliance.

- (2) DUTIES. Supervision of construction is a professional service, as distinguished from superintending of construction by a contractor, and includes the performance or the supervision thereof of reasonable on-the-site observations to determine that the construction is in substantial compliance with the approved plans and specifications.
- (3) Name of supervising architect, engineer, or designer. Prior to the start of construction, the owner of the building, whose name must be a part of or accompany all plans submitted for approval, or an authorized agent, shall designate in writing to the department or its authorized representative the name and Wisconsin registration number of the architect, engineer, or designer retained to supervise construction of the building or structure.
- (4) Compliance Statement. Prior to initial occupancy of a new building or addition, and prior to final occupancy of an alteration of an existing building, the supervising architect, engineer, or designer shall file a written statement with the department certifying that, to the best of his or her knowledge and belief, construction of the portion to be occupied has been performed in substantial compliance with the approved plans and specifications. This statement shall be on a form prescribed by the department. In a municipality administering this chapter, a copy of this statement shall be filed with the municipality.

Note: See Appendix A for an example of the compliance statement form (SBD-9720).

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.10 Owner's responsibility. No building owner may construct or alter any building or portion of a building, or permit any building to be constructed or altered, except in compliance with this chapter. Compliance with this section does not relieve the building owner from compliance with the administrative rules established in other codes.

Note: Section ILHR 66.06 (3) specifies which plans and specifications must be prepared by a registered architect, engineer, or designer. Section ILHR 66.09 (1) specifies which construction must be supervised by a registered architect, engineer, or designer. Section ILHR 66.09 (3) specifies the building owner's responsibilities in informing the department of the construction supervisor. Section ILHR 66.09 (4) specifies the requirements for filing compliance statements prior to occupancy. Section ILHR 66.12 requires submittal of a building permit application form, and that form must be signed by the building owner or other applicant. Section ILHR 66.14 specifies the requirements for plan submittal and approval. Section ILHR 66.15 requires submittal of a plans approval application form, and that form must be signed by the building owner.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.11 Wisconsin uniform multifamily building permit. A building owner or authorized agent shall obtain a Wisconsin uniform multifamily building permit from the municipality administering and enforcing this code before any on-site construction within the scope of this code is commenced, including excavation for a building, except where a footing and foundation approval has been issued under s. ILHR 66.17 or where a permit to start construction has been issued under s. ILHR 66.18.

Note: This section and s. ILHR 66.12 can be disregarded where no municipality administers and enforces this chapter.

Note: Section 66.036, Stats., prohibits issuance of building permits by municipalities for structures requiring connection to a private domestic sewage treatment and disposal system unless the system satisfies all applicable requirements or all necessary permits for such system have been obtained.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.12 Procedures for obtaining a uniform multifamily building permit. (1) APPLICATION FOR A WISCONSIN UNIFORM MULTIFAMILY BUILDING PERMIT. Application for a Wisconsin uniform multifamily building permit shall be on a form obtained from the department or on a form obtained from the municipality administering and enforcing this chapter. Forms provided by the municipality shall include all the information prescribed by the department. No application may be accepted that does not contain all the information requested on the form.

Note: See Appendix A for an example of the Wisconsin uniform multifamily building permit (SBD-9886) and an example of the department's plans approval application form (SBDB-118), which includes prescription of the data pertinent to multifamily dwellings.

Note: Section 101.973 (5) requires the department to collect and publish data secured from multifamily building permits.

Note: Any municipality exercising jurisdiction may require reasonable supplementary information not contained on the Wisconsin multifamily building permit application.

(2) FILING OF A WISCONSIN UNIFORM MULTIFAMILY BUILDING PERMIT APPLICATION. A Wisconsin uniform multifamily building permit application shall be filed with the municipality administering and enforcing this chapter or its authorized representative.

- (3) PERMIT FEES. The municipality shall, by ordinance, determine fees to cover expenses for issuance of the Wisconsin uniform multifamily building permit. Fees shall be submitted to the municipality when a Wisconsin uniform multifamily building permit application is filed there.
- (4) ISSUANCE OF PERMITS. A Wisconsin uniform multifamily building permit shall be issued if the department and municipal requirements for filing and fees are satisfied and the plans have been conditionally approved. The municipality may require a building permit card to be posted in a conspicuous place at the dwelling site. The permit shall expire 2 years after issuance if the dwelling exterior has not been completed, unless the permit has been extended by the municipality or the department for a period of up to 2 years. A municipality issuing the permit shall either send a copy of the application to the department or tally and transfer the data to the department in either written or electronic-based format.
- (5) ACTION TO APPROVE OR DENY. Action to approve or deny a uniform multifamily building permit application shall be completed within 15 business days of receipt of all forms, fees, plans, and documents required to process the application. Denied applications shall include a written statement specifying the reasons for denial.

ILHR 66.13 Suspension or revocation of Wisconsin uniform multifamily building permit. The department or the municipality administering and enforcing this chapter may suspend or revoke any Wisconsin uniform multifamily building permit if it appears that the permit or plan approval was obtained through fraud or deceit, where the applicant has willfully refused to correct a violation order issued under s. ILHR 66.23, or where the inspector is denied access to the premises. No construction may take place on a multifamily dwelling after suspension or revocation of a permit.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.14 Plan submittal. (1) TYPES OF PLAN APPROVAL. The following types of plans shall be submitted to the department or its authorized representative for examination and approval before construction for a multifamily dwelling is commenced:

- (a) General building plans.
- (b) Structural plans.
- (c) Heating and ventilating plans.
- (d) Data and information relative to the requirements of chs. ILHR 63 and 64, for the replacement of a major piece of heating or air conditioning equipment.
- (e) Alteration plans for existing buildings except for those alterations involving changes in interior finishes only.
 - (f) Footing and foundation plans.
 - (g) Fire escape plans.

Note: See s. ILHR 66.24 (5) for plan submittal procedures in certified municipalities.

Note: Section 101.12 (3) (h), Stats., prohibits local issuance of permits or licenses for construction or use of public buildings until drawings and calcu-

lations have been examined and approved by the department or its authorized representative.

- (2) PLANS AND SPECIFICATIONS. (a) General. 1. At least 4 complete, bound sets of plans, which are clear, legible, and permanent copies, and one copy of specifications shall be submitted to the department. The plans shall be bound in a manner that enables them to be reviewed without removing the binding.
- 2. All plans shall contain the address of the building, the name of the building owner, and the name of the person who prepared the plans. Plans prepared by a registered architect, engineer, or designer shall be signed, sealed, and dated in accordance with s. A-E 2.02.
- (b) General building plans. 1. 'Plot plan.' a. The location of the building with respect to property lines, lot lines, adjoining streets, alleys, and any other buildings on the same lot or property shall be indicated on the plot plan. For recycling space designated adjacent to a building, as specified in s. ILHR 52.24, the area and dimensions shall be indicated on the plot plan. A small-scale plot plan shall be submitted on an 8%" x 11" sheet for projects containing multiple buildings. For purposes of this requirement, a plot plan does not have to be a certified survey map.
- b. The site plan shall clearly indicate the location of a barrier-free accessible building and its accessible entrances; the exterior accessible route to, from, and between all accessible parking spaces; the size and location of accessible parking spaces; the gradient or slope information for all walks and ramps on accessible routes; any recreational and public facilities and areas on the site; public transportation stops adjacent to the property; sidewalks; public streets, if the site plan is not on the same sheet as the plot plan; and, if provided, passenger loading zones.
- 2. 'Floor plans.' Floor plans shall be provided for each floor. The size and location of all rooms, doors, windows, fire walls, toilet facilities, structural features, exit passageways, exit lights, fire alarms, standpipes, stairs, and other pertinent information shall be indicated. Schematic exit plans shall be provided for large buildings, indicating normal paths of egress.
- 3. 'Elevations.' The elevations shall contain information on the exterior appearance of the building; indicate the location and size of doors, windows, roof shape, chimneys, exterior grade, footings, and foundation walls; and include information about the exterior materials.
- 4. 'Sections and details.' Sections and details shall include information to clarify the building design.
- 5. 'Interior barrier-free design information.' The general building floor plans, elevations, and sections shall clearly show the following:
- a. All barrier-free accessible routes through accessible buildings, facilities, tenant spaces, and living units.
- b. The design and location of all interior and exterior ramps, including the gradient or slope information.
- c. The areas of rescue assistance in multilevel buildings, including dimensions of the area and the fire-resistive construction details.

ILHR 66.14

- d. The location and type of mechanical vertical transportation equipment, such as elevators and lifts, and the shaft design.
- e. The design of bathrooms, toilet rooms, and unisex toilet rooms, including door clearances; lavatory or vanity design; plumbing fixture mounting heights; turn-around spaces; clear spaces required for plumbing fixtures; and the size and arrangement of toilet compartments.
- (c) Heating, ventilating, and air conditioning plans. Heating, ventilating, and air conditioning plans shall indicate the layout of the system, including location of equipment and size of all piping, ductwork, dampers, fire dampers, chimneys, vents, and controls. The quantity of outside air introduced to each zone and the quantity of supply air and exhaust air for each room shall be listed on the plans. The type of equipment and capacities shall be indicated on the plans or equipment schedules. Input and output capacities shall be included for heating equipment.
- (d) Specifications. The specifications shall be properly identified with the drawings and describe the quality of the materials and the workmanship.
- (e) Schedules. Schedules shall be provided which contain information pertinent to doors, room finishes, equipment, and the use of all rooms and number of occupants accommodated therein, unless this information is indicated on the plans.

Note: Original drawings are not considered a substitute for permanent copies.

Note: Duplicate information need not be submitted when heating, ventilating, air conditioning, and building plans are submitted simultaneously.

Note: For pit depth and overhead clearance requirements applicable to design of elevator hoistways, see ch. ILHR 18, Elevator Code.

- (3) DATA REQUIRED. (a) General. All plans submitted for approval shall be accompanied by sufficient data and information for the department or its authorized representative to judge if the design of the building, the capacity of the equipment, and the performance of the system will meet the requirements of this chapter.
- (b) Structural data. 1. Sample structural calculations, including the assumed bearing value of soil, live loads and itemized dead loads, unit stresses for structural materials, and typical calculations for slabs, beams, girders, columns, and trusses, shall be submitted. Typical wind and bracing calculations and diagrams, including the manner in which shear transfer is made between resisting elements, shall also be included. Complete structural calculations shall be furnished upon request of the department or other authorized approving official.
- 2. The building designer shall submit one copy of the following minimum information for structural components, such as wood trusses, precast concrete, laminated wood members, steel joists, and steel girders, when the component fabricator is specified as being responsible for the component design:
 - a. Structural framing plan.
- Bearing support and connection details of the component to the structure.
- c. Design loads, including location and magnitude of uniform superimposed dead and live loads; concentrated Register, March, 1995, No. 471

dead and live loads; nonuniform snow loads; wind and bracing loads for each component system; and wind, bracing, and gravity forces required to be developed at interfaces with other materials.

- d. Required fire rating.
- e. Outside configuration of components.
- f. Permanent bracing system.
- 3. The building designer shall also submit the following information with the initial building plan submittal or the component plan submittal:
- a. A framing plan showing all members and labels, handling and erecting or other special installation instructions, and any required permanent bracing which was the basis for the component design.
- b. Information regarding the member design of the following structural components: web configuration, stress diagram or tabulation of axial force in the members, member size, grade of lumber, fabricated splices, and member bracing, for wood trusses; web configuration, stress diagram or tabulation of axial force in the members, member size, steel yield, fabricated splices, and number bracing, for steel joists and joist girders subjected to nonuniform loading; specified concrete strengths, prestressing data including final effective forces and centroids, mild reinforcing including release and confinement steel, shear reinforcing, and stripping, transportation, and erection handling points, for precast concrete members; and species of wood, bending stress of wood, adhesive, and member sizes, for laminated wood members.
- c. Information pertaining to the design of connections within or between like components for the following structural components: web and chord connection details and connector plate holding values, for wood trusses; web and chord connection details, for steel joists and joist girders subjected to nonuniform loading; bearing confinement steel, dapped end reinforcing, corbel reinforcing, bearing pads, and loose and embedded connection steel including welding and bolting requirements, for precast concrete members; and member connection and bearing details, for laminated wood members.
- 4. For the purposes of this paragraph, the department does not consider truss layout plans or truss erection plans as architectural practice or engineering practice, and therefore, such plans are not required to be signed and sealed or stamped in accordance with s. ILHR 66.06 or 66.07.
- 5. Information regarding reinforcement, concrete strength, and fire resistive ratings for precast concrete components may be provided in either the specifications or calculations furnished with the precast concrete plans.
- (c) Energy conservation data. Calculations and specifications shall be submitted in accordance with s. ILHR 63.01 for the types of projects outlined in s. ILHR 63.001. Thermal performance data shall be provided as specified in s. ILHR 63.12.
- (d) Heating and ventilating data. A description of the construction for the walls, floors, ceilings, and roof and the transmission coefficients of the construction materials shall be furnished. The calculations shall include heat

losses for the individual rooms; transmission, infiltration, or ventilation losses, whichever are greater; and a summary of the total building heat loss expressed in BTU per hour or watts.

Note: The department will accept as the basis for calculations and design data the methods and standards recommended by the Mechanical Contractors' Association of America; the American Society of Heating, Refrigerating and Air-Conditioning Engineers; and the Institute of Boiler and Radiator Manufacturers.

- (e) Data for recycling space. Verifiable data or calculations and specifications shall be submitted in accordance with s. ILHR 52.24 for determining adequate space for the separation, temporary storage, and collection of recyclable materials.
- (f) Additional data. When requested by the department or its authorized representative, additional data pertaining to design, construction, materials, and equipment shall be submitted for approval.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.15 Application for approval. A plans approval application form prescribed by the department and the fee specified in ch. ILHR 2 shall be included with the plans submitted to the department. The department shall review and make a determination on an application for plan review within 15 business days of receipt of the application and all forms, fees, plans, and documents required to complete the review.

Note: See Appendix A for an example of the plans approval application form (SBDB-118).

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.16 Department approval of plans. (1) PLAN APPROVAL. If the department determines that the submitted plans and application for approval substantially conform to this chapter and other legal requirements, an approval shall be issued. The plans shall be stamped "conditionally approved." At least one copy shall be returned to the applicant and at least one copy shall be retained by the department. The conditions of approval shall be indicated in a letter to the applicant and the building owner. All conditions of the approval shall be met during construction.

(2) DISAPPROVAL OF PLANS. If the department determines that the plans or the application for approval do not substantially conform to this chapter, approval shall be denied. A written statement specifying the reasons for denial shall be sent to the applicant and to the building owner. Plans which do not substantially conform to this chapter shall be stamped "not approved." One copy shall be returned to the applicant and one copy shall be retained by the department.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.165 Revisions to approved plans. (1) All revisions and modifications which involve provisions of this chapter and which are made to plans or specifications that have previously been granted approval by the department or municipality shall be submitted to the department or municipality for review. Revisions or modifications to approved plans may be shown on 8½- by 11-inch addendums to bound plans.

- (2) All revisions and modifications to the plans shall be approved in writing by the department or municipality prior to the work involved in the revision or modification being carried out.
- (3) A revision or modification to a plan, drawing, or specification shall be signed and sealed in accordance with s. ILHR 66.06 (3) or 66.07, if applicable.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

- ILHR 66.17 Footing and foundation approval. (1) The department or its authorized representative, as provided in s. ILHR 66.24, may conditionally approve footing and foundation plans, to permit construction of footings and foundations prior to the examination and approval of the complete plans, upon submission of all of the following:
- (a) The plans approval application form specified in s. ILHR 66.15 or 66.24 (5) (d) 3.b., whichever is applicable.

Note: See Appendix A for an example of the plans approval application form (SBDB-118).

- (b) The fee specified in ch. ILHR 2 or s. ILHR 66.24 (7), whichever is applicable.
- (c) At least 4 bound sets of footing and foundation plans which include a plot plan and which are signed and sealed in accordance with s. ILHR 66.06 (3) or 66.07, if applicable
 - (d) At least 1 set of all of the following:
 - 1. Schematic floor plans indicating the exits.
 - 2. Building elevations.
 - 3. Itemized structural loads.
 - 4. Structural footing and foundation calculations.
- (2) The department or its authorized representative shall review and make a determination on an application for footing and foundation approval within 15 business days of receipt of the application and all forms, fees, plans, and documents required to complete the review.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.18 Permission to start construction. (1) The department or its authorized representative, as provided in s. ILHR 66.24, may grant a permission to start construction for the footings and foundations upon submission of the following:

(a) The plans approval application form specified in s. ILHR 66.15 or 66.24 (5) (d) 3.b., whichever is applicable.

Note: See Appendix A for an example of the plans approval application form (SBDB-118).

- (b) 1. At least 4 bound sets of building plans as specified in s. ILHR 66.14 (2) or the number of copies required under s. ILHR 66.24 (5) (d), whichever is applicable, and one copy of specifications, or
- 2. At least 4 bound sets of footing and foundation plans and the information specified in s. ILHR 66.17 (1) (d).
- (c) A written request by the building owner to start construction, on a form prescribed by the department.
- (d) The fee specified in ch. ILHR 2 or s. ILHR 66.24 (7), whichever is applicable.

ILHR 66.18

Note: See Appendix A for an example of the permission to start construction form (SBDB-198).

- (2) Building owners who submit a permission to start construction form proceed at their own risk without assurance that a conditional approval for the building will be granted.
- (3) The department or its authorized representative shall review and make a determination on an application for permission to start construction within 3 business days of receipt of the application and all forms, fees, plans, and documents required to complete the review.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.19 Evidence of plan approval. The architect, engineer, designer, builder, manufacturer, or building owner shall keep at the building site one set of plans bearing the stamp of conditional approval and a copy of the specifications. The plans shall be open to inspection by an authorized representative of the department or municipality.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.195 Sprinkler documents. (1) PLANS. (a) 1. Except as provided in subd. 2, where automatic fire sprinkler systems are to be installed or altered, sprinkler plans and specifications shall be present at the installation site and made available, upon request, to the department or municipality, and their authorized representatives.

- 2. a. When a project involves the alteration or addition of 20 or fewer sprinkler heads to an existing automatic fire sprinkler system, sprinkler plans and specifications shall not be required to be present at the installation site or made available unless required by local ordinance.
- b. When sprinkler plans and specifications are not provided for a project involving the alteration or addition of 20 or fewer sprinkler heads to an existing automatic fire sprinkler system, the automatic fire sprinkler contractor responsible for the work shall provide a written description of the type and scope of the work. The description shall be included with the material and test certificate, if required. The description shall be made available, upon request, to the department or municipality, and their authorized representatives.
 - (b) The sprinkler plans at the installation site shall be:
- 1. Signed and sealed in accordance with s. A-E 2.02 by an architect, engineer, or sprinkler designer who is registered or permitted by the department of regulation and licensing; or
- Signed, including license number, and dated by an automatic fire sprinkler contractor who is responsible for the installation of the sprinklers and who is licensed by the department.
- (c) Where automatic fire sprinkler plans are required by local ordinance to be reviewed and approved by a local governmental agency or their agent, the sprinkler plans at the installation site shall bear evidence of that approval.
- (d) The plans for the automatic fire sprinkler system to be at the installation site shall include at least:

- 1. The name of the:
- a. Owner of the building.
- b. Occupant or occupants in the building.
- 2. The location or address of the building.
- 3. A full height cross section through the building.
- 4. The location within the building of:
- a. Partitions, walls, and fire walls.
- b. Concealed spaces, closets, attics, and bathrooms.
- c. Sprinklers.
- d. Alarms.
- e. Pumps, valves, drain pipes, and test connections.
- f. Pipe hangers and supports.
- 5. The occupancy class of each area or room within the building as defined in s. ILHR 51.01 (87).
- 6. The sources of water supply, including the static pressure, residual pressure, the flow, and the dates and time of determination for each.
 - 7. The location and size of
 - a. All aboveground and underground piping.
 - b. Hose outlets.
 - 8. The number of sprinklers on each riser per floor.
- The relative elevations of sprinklers, junction points, and supply points.
- (e) The specifications for the automatic fire sprinkler system to be at the installation site shall include at least:
- 1. The type of materials and devices that comprise the sprinkler system.
 - 2. The settings of pressure reducing valves.
- 3. Type and amount of antifreeze solutions being employed, if any.
- (2) SPRINKLER MATERIAL AND TEST CERTIFICATES. (a) Where automatic fire sprinkler systems have been installed or altered, completed sprinkler material and test certificates shall be made available, upon request, to the department, its agent, or local governmental agencies exercising jurisdiction.
- (b) A sprinkler material and test certificate shall provide at least the information as enumerated in s. 8-1 of NFPA 13 or s. 2-1 of NFPA 13R, as adopted by reference in s. ILHR 51.25, depending upon the type of sprinkler system.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.20 Revocation of approval. The department or municipality may revoke any approval that they issue under the provisions of this chapter, for any false statements or misrepresentation of facts on which the approval was based.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

Register, March, 1995, No. 471

ILHR 66.21 Expiration of plan approval and extension of plan approval. (1) EXPIRATION OF PLAN APPROVAL. (a) Building shell. Plan approval by the department or its authorized representative for new buildings and building additions shall expire 2 years after the approval date indicated on the approved building plans if the building shell is not closed in within those 2 years.

- (b) Occupancy. Except as provided in sub. (2), plan approval by the department or its authorized representative for new buildings and building additions shall expire 3 years after the approval date indicated on the approved building plans if the building is not ready for occupancy within those 3 years.
- (c) Alterations. Except as provided in sub. (2), plan approval by the department or its authorized representative for interior building alterations shall expire 1 year after the approval date indicated on the approved building plans if the alteration work is not completed within that year.
- (d) HVAC construction only. Except as provided in sub. (2), plan approval by the department or its authorized representative for heating, ventilating, or air conditioning construction that does not include any associated building construction shall expire 1 year after the approval date indicated on the approved plans if the building or building area affected by the plans is not ready for occupancy within that year.
- (2) EXTENSION OF PLAN APPROVAL. Upon request and payment of the fee specified in ch. ILHR 2, the expiration dates in sub. (1) (b), (c), and (d) shall be extended for one 1-year period provided the request is submitted prior to expiration of the original approval.

Note: According to s. 66.05 (1) (a), Stats., the local governmental body or building inspector may order the razing of buildings or portions thereof, where there has been a cessation of normal construction for more than 2 years.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.22 Design responsibility. A conditional approval of a plan by the department or municipality may not be construed as an assumption of any design responsibility.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

- ILHR 66.23 Inspections. (1) CERTIFICATION OF INSPECTORS. All inspections for the purpose of administering and enforcing this chapter, except for inspections performed by fire inspectors, shall be performed by a certified inspector or certified independent inspection agency. Certifications shall be in accord with the requirements in ch. ILHR 26 for commercial building inspection.
- (2) REQUIRED INSPECTIONS. Inspections may be conducted by the department or the municipality administering and enforcing this chapter to determine whether the construction or installation conforms to the conditionally approved plans, the notice of conditional approval, the Wisconsin uniform multifamily building permit application, and this chapter.

Note: See Appendix A for an example of the inspection progress report form (SBD-224) and an example of the inspection report and orders form (SBD-2).

(3) NOTICE OF COMPLIANCE OR NONCOMPLIANCE. Upon an inspector's finding of noncompliance, the department or the municipality enforcing this code shall notify the applicant and the building owner in writing of the violations to be corrected. All cited violations shall be ordered corrected within 30 days after written notification unless an extension of time is granted pursuant to s. ILHR 66.28.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.24 Certified municipalities. (1) GENERAL. This section establishes the manner under which municipalities may examine building plans and inspect multifamily dwellings.

- (2) CONDITIONS OF PARTICIPATION. (a) Before assuming the responsibilities of examining building plans and providing inspection services, a municipality shall comply with all of the conditions in pars. (b) through (h). While certified, the municipality shall comply with pars. (f), (h), (i), and (i).
- (b) Notify the department in writing at least 30 days prior to the date upon which the municipality or county intends to assume the responsibilities.
- (c) Adopt by ordinance or regulation the responsibilities of plan examination and building inspection.
- (d) Adopt by ordinance or regulation this chapter in its entirety.
- (e) Submit to the department a certified copy of all ordinances or regulations assuming the plan examination and building inspection responsibilities and adopting this chapter.
- (f) Employ one or more certified commercial building inspectors to perform the plan examinations and building inspections.
- (g) Receive from the department certification to perform the plan examinations and building inspections.
- (h) Forward to the department any information requested by the department relative to the examination of plans and the inspections of buildings.
- (i) Forward to the department any multifamily dwelling data collected from a city, village, or town that does not administer and enforce this chapter, as specified in sub. (5) (d) 3.b.
- (j) Notify the department in writing at least 30 days prior to the date upon which the municipality intends to relinquish the responsibilities of examining plans or inspecting buildings.
- (3) JURISDICTION. (a) Departmental. 1. Nothing in this section prevents the department from conducting its own investigations or inspections, or from issuing orders relative to the administration and enforcement of this chapter.
- 2. The department shall administer and enforce this chapter in any municipality which has not assumed the responsibilities for plan examination and building inspection.
- (b) County. 1. Ordinances enacted by a county for establishing county plan examination and building inspection functions shall apply to all cities, villages, or towns within that county which have not assumed those functions.

- 2. Ordinances enacted by a county for establishing county plan examination and building inspection functions may not prevent or prohibit any city, village, or town within that county from assuming those functions pursuant to sub. (2) at any time.
- (4) CERTIFICATION OF INSPECTORS. Inspectors employed by municipalities to administer and enforce this chapter under sub. (2) shall be certified by the department in accordance with ch. ILHR 26 as commercial building inspectors.
- (5) Plan examination (a) First class cities. Drawings, specifications, and calculations for all multifamily dwellings except state-owned buildings, to be constructed within the limits of a first class city, shall be submitted to that city if that city has assumed the responsibilities of plan examination and building inspection.
- (b) Other municipalities. Drawings, specifications, and calculations for all multifamily dwellings except state-owned buildings, to be constructed within the limits of a municipality other than a first class city, shall be submitted to that municipality if that municipality has assumed the responsibilities of plan examination and building inspection, and if the plans are for any of the following:
- 1. A new building containing less than 5,000 square feet of total floor area.
- 2. An addition to a building where the area of the addition results in the entire building containing less than 5,000 square feet of total floor area.
- 3. An alteration of a space involving less than 10,000 square feet of total floor area.

Note: The department will allow use of 50,000 and 100,000 cubic feet of total volume in lieu of the thresholds of 5,000 and 10,000 square feet of total floor area, respectively, as established in s. 101.12 (3) (b), Stats., provided calculations showing that volume are included in the submittal to the municipality.

- (c) Project waiver. A certified municipality may waive its jurisdiction for the plan review of a specific project, in which case plans and specifications shall be submitted to the department for review and approval.
- (d) Plan submittal procedures. 1. A building permit application shall be included with the submitted plans.
- 2. At least 2 sets of complete building plans and one copy of specifications shall be submitted to the municipality having jurisdiction for examination. The municipality may by ordinance require submittal of additional copies of plans and specifications.
- Building plans submitted to a municipality for examination shall include all of the following:
 - a. The information specified in s. ILHR 66.14.
- b. The department's plans approval application form specified in s. ILHR 66.15, unless a municipally supplied form is submitted that includes the building owner's, designer's, and supervising professional's statements and signatures which are required on the department's form. Any municipally supplied plan approval application form for a multifamily dwelling in a city, village, or town that does not administer and enforce this chapter shall also include the multifamily dwelling data prescribed by the department.

- Note: See Appendix A for an example of the department's plans approval application form (SBDB-118), which includes prescription of the data pertinent to multifamily dwellings.
- (e) Plan approval. 1. a. If the municipality having jurisdiction determines that the plans submitted substantially conform to this chapter and other legal requirements, an approval shall be issued in accord with this paragraph.
- b. The plans shall be stamped "CONDITIONALLY AP-PROVED", signed, and dated by a certified inspector.
- c. At least one set of the conditionally approved plans and all calculations and correspondence shall be retained in their original form or as microfilm or electronic-based copies for at least 4 years by the municipality. All other plans shall be returned to the submitter or the submitter's representative.
- d. A notice of conditional approval shall be provided in writing to the submitter and the building owner stating all conditions of approval.
- All conditions of the conditional approval shall be met before or during construction, and before occupancy of the building.
- (f) Denial of plan approval. 1. If the municipality determines that the plans submitted do not substantially conform to this chapter or other legal requirements, a denial of plan approval shall be issued in accord with this paragraph.
- 2. The plans shall be stamped "NOT APPROVED", signed, and dated by a certified inspector.
- 3. At least one set of the not-approved plans shall be retained by the municipality. All other plans shall be returned to the submitter or the submitter's representative.
- 4. A notice of the not-approved plans shall be provided in writing to the submitter and the building owner stating the reasons for the denial.
- (g) Liability. A conditional approval of a plan by a municipality may not be construed as an assumption of any responsibility on the part of the municipality, the certified inspector, or the department for the design or construction of the building.
- (6) INSPECTIONS. (a) Inspections shall be conducted by a certified municipality in accord with this subsection to determine whether the construction or installation conforms to the conditionally approved plans, the notice of conditional approval, the Wisconsin uniform multifamily building permit application, and this chapter.
- (b) All inspections for the purpose of administration and enforcement of this chapter shall be performed by a certified commercial building inspector.
- (c) At least one inspection report shall be written for the construction or installation shown on the approved plans. All reports shall include the name of the certified inspector.
- (d) A copy of each inspection report shall be furnished to the building owner and plan submitter.

- (e) A copy of each inspection report, or an electronic-based version of the data from the report, shall be permanently maintained in the files of the municipality.
- (f) The inspection report shall indicate all items of noncompliance noted during the inspection.
- (g) If noncomplying items are not corrected, orders to correct shall be issued in accordance with local ordinances.
- (7) FEES. Municipalities and counties having jurisdiction for plan examination and building inspection may set by ordinance the fees for plan examination and building inspection services.

Note: See Appendix A for a list of the municipalities providing plan examination and building inspection under this section.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.25 Building material approvals. (1) ALTERNATE MATERIALS. No provision in this chapter is intended to prohibit or prevent the use of any material, equipment, device, or method of construction not specifically mentioned in this code. Approval of an alternate material, equipment, device, or method of construction shall be obtained from the department.

- (2) APPLICATION. Application for approval shall be made on a form prescribed by the department. The application shall include the fee specified in ch. ILHR 2 and evidence showing that the material, equipment, device, or method of construction meets the requirements of this chapter.
- (3) Tests. (a) The department may require testing of any material, component, system, equipment, device, or method to determine the suitability for the intended use or to substantiate any claims made regarding equivalency to the requirements of this chapter. The department will accept results of tests conducted by a recognized, independent testing agency. The person requesting the approval shall bear the cost of any testing.
- (b) The test method used to determine compliance with this chapter shall conform to a nationally recognized standard.
- (c) If no nationally recognized standard exists, past performance or recognized engineering analysis may be used to determine suitability.
- (4) TESTING LABORATORIES. A testing laboratory may submit to the department a request to be recognized as an approved testing laboratory that evaluates and certifies materials, products, or assemblies for conformance with the specifications or standards of this chapter. The request shall include all of the following:
 - (a) A completed building material approval application.
- (b) Information, data, and other evidence describing the operations, policies, and procedures of the testing laboratory.
 - (c) The fee specified in ch. ILHR 2.
- (5) REQUIRED APPROVALS. An approval shall be obtained from the department for the following:
 - (a) Light-transmitting plastics.

- (b) Direct vent sealed combustion chamber appliances.
- (6) UNGRADED OR USED MATERIALS. Ungraded or used building materials may be used or reused as long as the materials possess the essential properties necessary to achieve the level of performance required by this chapter for the intended use. The department or the municipality enforcing this chapter may require tests in accordance with sub. (3). Approval for use of ungraded or used materials may be issued under this section or may be issued for a specific project under s. ILHR 66.14.
- (7) APPROVAL PROCESSING TIME. The department shall review and make a determination on an application under this section within 30 business days of receipt of all forms, fees, plans, and documents required to complete the review.

Note: A building material approval application form (SBD-8028) may be obtained from the Safety and Buildings Division, P.O. Box 7969, Madison, Wisconsin 53707.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.255 Manufactured multifamily dwellings. (1) General. Pursuant to s. 101.75 (2), Stats., all manufactured multifamily dwellings approved by the department shall be deemed to comply with the requirements of all building ordinances and regulations of any local government except the security regulations permitted under s. 101.975 (1), Stats., and any regulations related to zoning and siting requirements, such as building setback requirements, side and rear yard requirements, and property line requirements.

Note: Department approvals for manufactured multifamily dwellings do not apply to on-site constructed elements, such as footings, foundations, attached porches or steps, concrete floor slabs, and on-site constructed mechanical systems.

- (2) AFFIXING WISCONSIN INSIGNIA. A Wisconsin insignia shall be installed on a manufactured multifamily dwelling approved by the department and inspected at the manufacturing plant. Each Wisconsin insignia shall be assigned and affixed to a specific manufactured multifamily dwelling, in the manner approved by the department, before the dwelling is shipped from the manufacturing plant. The serial number shall be located on the manufacturer's data plate.
- (3) Manufacturer's responsibilities (a) Insignia records. The manufacturer shall keep permanent records regarding the handling of all Wisconsin insignias indicating the number of Wisconsin insignias which have been affixed to manufactured multifamily dwellings, building components, or groups of components; which Wisconsin insignias have been applied to which manufactured multifamily dwelling or building component; and the disposition of any damaged or rejected Wisconsin insignias. The records shall be maintained by the manufacturer or by the independent inspection agency for at least 10 years. A copy of the records shall be sent to the department upon request.
- (b) Lost or damaged insignia. 1. If Wisconsin insignias become lost or damaged, the department shall be notified immediately in writing by the manufacturer or dealer.
- If a Wisconsin insignia becomes damaged, the insignia shall be returned to the department with the fee specified in ch. ILHR 2 to obtain a new insignia.

- (4) Insignia suspension and revocation. (a) The department may suspend or revoke its approval if it determines that the standards for the construction or manufacture and installation of a manufactured multifamily dwelling do not meet this chapter, or if such standards are not being enforced as required by this chapter.
- (b) Upon suspension or revocation of the approval, no further insignias may be attached to any manufactured multifamily dwelling or type of manufactured multifamily dwelling with respect to which the approval was suspended or revoked.
- (c) Upon suspension or revocation of the approval, all insignias allocated to the manufacturer shall be returned to the department no later than 30 days from the effective date of the suspension or revocation.
- (5) IN-PLANT INSPECTIONS. Manufacturers of multifamily dwellings shall contract with the department or an independent inspection agency to conduct in-plant inspections to assure that the manufactured multifamily dwellings are in compliance with the plans approved by the department. All inspections shall be performed by a certified inspector or independent inspection agency.

ILHR 66.26 Individual variance from a specific rule. (1) GENERAL. The department may grant an individual variance to a specific rule only if the granting of the variance does not result in lowering the level of health, safety, and welfare established or intended by the specific rule. The department may consider other reasonable criteria in determining whether a variance should be granted, including the effect of granting the variance on statewide and local uniformity.

Note: Section 101.02 (6), Stats., and ch. ILHR 3 outline the procedure for submitting petitions to the department and the department procedures for hearing petitions.

- (2) APPLICATION FOR VARIANCE. The applicant shall submit the application for variance on a form prescribed by the department to the municipality exercising jurisdiction. Where no municipality exercises jurisdiction, the application shall be submitted to the department. The following items shall be submitted when requesting a variance:
- (a) A clear and concise written statement of the specific provisions of this chapter from which a variance is requested, together with a specific statement of the procedure and materials to be used if the variance is granted.
 - (b) The fee specified in ch. ILHR 2.
- (c) Any fee for processing the application that is required by a municipality which administers and enforces this chapter.

Note: See Appendix A for an example of the petition for variance application form (SBD-9890).

(3) MUNICIPAL RECOMMENDATION. The municipality administering and enforcing this chapter shall submit all applications for variance to the department within 10 business days after receipt. The municipality's submittal shall include the fire department's position statement in sub. (4), if applicable, and may include a municipal recommendation of whether the variance should be granted. Any recommendation from a municipality shall be on a

form prescribed by the department and include all of the following:

- (a) What inspections, if any, have taken place concerning the dwelling for which a variance is requested.
- (b) Whether any correction orders have been issued concerning the dwelling.
- (c) Whether the granting of the variance would substantially affect the health, safety, or welfare of any individual within the municipality.

Note: See Appendix A for an example of the municipal recommendation form (SBD-9890).

(4) FIRE DEPARTMENT POSITION STATEMENT. A fire department having responsibility in a rule for which a variance is being requested may only report its position on the variance on a form prescribed by the department.

Note: See Appendix A for an example of the fire department position statement form (SBD-9890).

(5) DEPARTMENTAL ACTION. Where a municipality administers and enforces this chapter, the department shall approve or deny applications for variance and mail a notice of the results to the municipality and the applicant within 30 business days after receipt of the application and recommendation. Where the department administers and enforces this chapter, the department shall approve or deny applications for variance and mail a notice of the result to the applicant within 30 business days for regular petitions for variance, or within 10 business days for priority petitions for variance as provided in ch. ILHR 2.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.27 Municipal variance from this chapter. (1) GENERAL. Any municipality exercising or intending to exercise jurisdiction under this chapter may apply to the department for a variance permitting the municipality to adopt an ordinance not in conformance with this chapter. The department shall review and make a determination on a municipal request under this section within 60 business days of receipt of the request.

- (2) APPLICATION FOR VARIANCE. The department may grant a municipal variance only where all of the following are demonstrated:
- (a) The municipality demonstrates that the variance is necessary to protect the health, safety, and welfare of individuals within the municipality because of specific climate or soil conditions generally existing within the municipality.
- (b) The municipality demonstrates that the granting of the variance, when viewed both individually and in conjunction with other variances requested by the municipality, does not impair the statewide uniformity of this chapter.
- (3) DEPARTMENTAL INQUIRY. Prior to making a determination, the department shall solicit within the municipality and consider the statements of any interested persons as to whether the variance should be granted.
- (4) Uniformity. This section shall be strictly construed in accordance with the goal of promoting statewide uniformity.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

Register, March, 1995, No. 471

ILHR 66.28 Appeals of orders and determinations and for extension of time. (1) APPEALS OF ORDERS AND DETERMINATIONS BY A MUNICIPALITY EXERCISING JURISDICTION. (a) General. Appeal of an order or determination of a municipality exercising jurisdiction under this chapter, including denial of an application for a permit, shall be made in accordance with the procedure in ch. 68, Stats., except as provided in this subsection.

- (b) Appeal of a final determination by a municipality exercising jurisdiction. Appeal of a final determination by a municipality may be made to the department in lieu of the judicial review specified in ch. 68, Stats. Any appeal to the department shall be in writing stating the reason for the appeal. All appeals shall be filed with the department within 10 business days of the date the final determination is rendered under ch. 68, Stats. The department shall render a written decision on all appeals within 60 business days of receipt of all calculations and documents necessary to complete the review.
- (c) Informal appeal of any determination by a municipality exercising jurisdiction. Informal appeal of any determination by a municipality may be made to the department prior to exhausting the procedures in ch. 68, Stats. The department may require the appeal to be in writing and may require the municipality's response to the appeal, prior to issuing a determination. The department's determination may be in writing but may not prevent the appellant from exhausting the procedures in ch. 68, Stats., and par. (b).
- (d) Appeal of a determination by a municipality electing to not be governed by ch. 68, Stats. Any appeal of an order or determination of a municipality exercising jurisdiction under this chapter and electing to not be governed by ch. 68, Stats., shall be in writing to the department and shall state the reason for the appeal. The department shall render a written decision on any appeal within 60 business days of receipt of all calculations and documents necessary to complete the review.
- (2) APPEALS OF ORDERS AND DETERMINATIONS BY THE DEPARTMENT. Appeal of an order or determination of the department made pursuant to this chapter, including denial of an application for approval, shall be in accordance with the procedure in s. 101.02 (6) (e) to (i), and (8), Stats. The department shall review and make a determination on an appeal of an order or determination within 60 business days of receipt of all calculations and documents necessary to complete the review.
- (3) EXTENSIONS OF TIME. (a) When an order issued under s. ILHR 66.23 is appealed, the time specified in s. ILHR 66.23 (3) for correction of the order is automatically extended to the termination of the appeal procedure.
- (b) The department or municipality administering and enforcing this chapter may grant additional time to comply with a violation order.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.29 Violations and penalties. (1) VIOLATIONS. No person may construct or alter any dwelling in violation of any provision of this chapter.

(2) INJUNCTION. When a violation occurs, the department may bring legal action to enjoin the violation.

- (3) Ordinances. This chapter does not affect the enforcement of any ordinance or regulation, the violation of which occurred prior to the effective date of this chapter.
- (4) PENALTIES. Penalties for violations shall be assessed in accordance with s. 101.978, Stats.

Note: Section 101.978, Stats., reads, "Any person who violates this subchapter or any rules promulgated under this subchapter shall forfeit not less than \$25 nor more than \$500 for each offense. Each day of continued violation constitutes a separate offense."

(5) MUNICIPAL ENFORCEMENT. Any municipality which administers and enforces this chapter may, by ordinance, provide remedies and penalties that do not conflict with subs. (1) to (4).

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

Subchapter II — Occupancy Requirements

ILHR 66.32 Construction. (1) GENERAL. For the purpose of determining the maximum height and area of buildings within the scope of this chapter, the building construction is classified in accordance with the construction standards specified in s. ILHR 51.03. Floor systems for mezzanines, lofts, and open balconies located within an individual dwelling unit may be nonrated.

- (2) DWELLING UNIT SEPARATION. (a) 1. Except where 2-hour fire resistance is provided in accord with s. ILHR 66.33 (1), each dwelling unit shall be separated from other units, common use areas, and the exit access corridors by construction protected with fire-protective membranes consisting of at least the equivalent of one layer of 5/8-inch type X gypsum wallboard with taped joints, on each side of the wall and on the ceiling. Where the building is equipped with an automatic fire sprinkler system in accordance with s. ILHR 66.33 (1), and except as provided in s. ILHR 66.33 (2) (a), the protection may be reduced to a single layer of ½-inch type X gypsum wallboard with taped joints, on each side of the wall, and on the ceiling.
- 2. The fire-protective membrane required in subd. 1. shall be fastened to the framing or suspended in the manner required for 1-hour fire-resistive rated assemblies, except the fastening to the ceiling may be made without the clips associated with that manner if the spacing of the fasteners does not exceed the spacing of the framing elements.
- 3. The fire-protective membrane required in subd. 1. may be omitted on the ceiling of the topmost story if the dwelling unit separation wall extends to the roof deck.
- (b) 1. Mineral fiber or glass fiber type insulation may be used to fill the cavity spaces of the separation specified in par. (a).
- 2. Soundboard products may be used in conjunction with the systems specified in par. (a).
- (3) BASEMENT AND GROUND FLOORS. (a) A ceiling located below the first story of a multifamily dwelling shall be protected with a fire-protective membrane consisting of at least the equivalent of one layer of 5/8-inch type X gypsum wallboard with taped joints. Fastening of the membrane shall be in accord with sub. (2) (a) 2.

- (b) The provisions of par. (a) do not apply where the space below the first story is a dwelling unit or portion thereof, where the space below the first story is a nondwelling unit portion that is protected by an approved automatic sprinkler system, and in crawlspaces.
- (c) All exterior walls that are in contact with the soil shall be of masonry or concrete.
- (d) Exposed exterior walls between the first floor structural system and grade shall be of masonry or concrete except other materials may be used if the following conditions are satisfied:
- 1. The construction shall meet the requirements of Table 51.03-A for the specified class of construction.
- 2. In buildings where the class of construction permits exterior walls to be of combustible construction, no floor level that is more than one level below the first floor framing system may have exterior walls constructed of combustible materials.
- (4) ATTACHED GARAGES. (a) An attached garage that is larger than 600 square feet in area shall either be separated from the rest of the multifamily dwelling by 3-hour fire-resistive rated construction, or be protected by an automatic fire sprinkler system and be separated by 2-hour fire-resistive rated construction.
- (b) 1. a. An attached garage which is 600 square feet or less in area, or which is divided into areas of 600 square feet or less by walls having at least one-hour fire-resistive rating, shall be separated from the rest of the multifamily dwelling by the construction specified in sub. (2). Any opening in a wall separating the garage from the rest of the multifamily dwelling shall be protected by means of a self-closing door assembly providing a minimum fire-resistive rating of % hours, except as provided in subpar. b.
- b. For an attached garage that serves a single dwelling unit, the door shall have a minimum fire rating of 20 minutes. A 1%-inch solid core wood or insulated metal door may be installed with a pair of 1%-inch steel hinges in a 1 7/32-inch minimum thick solid wood frame with a ½-inch thick door stop. The self-closing device may be omitted.
- Facilities for repairing or fueling vehicles are prohibited within an attached garage.
- (c) Small, gasoline-fired equipment and associated, incidental containers of gasoline that are used in maintaining the dwelling premises may be stored in an attached garage, without providing additional fire-resistive separation.

Note: Automatic operators of residential vehicular garage doors are required by the federal consumer product safety commission to include an external entrapment protection device that conforms to various specifica-

- tions. Operators that comply with this requirement generally are labeled with the Underwriters Laboratory logo or listing mark and a date of manufacture subsequent to January 1, 1993.
- (5) PENETRATIONS. (a) General. Piping, ductwork, and telephone or electrical components that penetrate into or through fire-protective membranes shall be permitted in accordance with this subsection.
- (b) Service openings. Openings around piping, ductwork, telephone or electrical compartments, or other service installations penetrating required fire-resistive rated floor, wall, and roof assemblies shall be filled solidly with noncombustible materials or material of fire-resistive rating equal to the required rating of the assembly penetrated.
- (c) Fire dampers. Duct openings in required fire-resistive rated floor and wall assemblies shall be protected as specified under s. ILHR 64.42.
- (d) Plastic plumbing and electrical system components. Penetration of required fire-resistive rated floor, wall, ceiling, and roof assemblies by plastic piping and electrical system components shall be in accordance with one of the following:
- 1. Install a fire-resistive device or system that is tested and listed by an approved testing laboratory for use in such penetrations.
- 2. For plastic piping, conduits, or raceways, substitute a steel or cast iron pipe or conduit in the penetration of the fire-rated assembly to a distance of at least 10 inches beyond both faces of the assembly.
- 3. Provide a 10-gauge steel sleeve one inch larger in diameter than the plastic piping or electrical wiring and extending 10 inches beyond both faces of the assembly, with the annular space between the plastic component and protective sleeve packed with a noncombustible filler.
- 4. Wrap the plastic component for a distance of at least 3 feet from both faces of the fire-rated assembly with at least one inch of noncombustible insulating material. The noncombustible insulation material shall be mechanically attached to the plastic component.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.33 Allowable area and height. (1) FLOOR AREAS.
(a) The requirements in par. (b) apply where a local ordinance is not more restrictive. The requirements in par. (c) apply where a more restrictive local ordinance is enacted.

Note: "A preexisting stricter sprinkler ordinance" as specified in s. ILHR 66.04 (1) (g) will contain additional requirements.

(b) An automatic fire sprinkler system or 2-hour fire resistance shall be provided in every multifamily dwelling that contains floor areas or dwelling units exceeding any of the thresholds established in Table 66.33-A.

TABLE 66.33-A THRESHOLDS ABOVE WHICH SPRINKLERS OR 2-HOUR SEPARATIONS ARE REQUIRED

Class of Construction	Total Floor Area Within Individual Dwelling Units	Number of Units	Portions (Co corridors, st cellars, vest	Area of Nondwelling Unit ommon use areas, such as airways, basements, ibules, community rooms, ns, pools, etc.)
Type 1 Fire Resistive Type A				16,000 sq ft
Type 2 Fire Resistive Type B				12,000 sq ft
Type 3 Metal Frame Protected			·	8,000 sq ft
Type 4 Heavy Timber Type 5A				
Masonry Protected Type 5B	16,000 sq ft	20 units		
Masonry Unprotected Type 6	144 1 - 144			5,600 sq ft
Metal Frame Unprotected Type 7 Wood Frame Protected				
Type 8 Wood Frame Unprotected	e de la composition della comp			4,800 sq ft

⁽c) Where a local ordinance is adopted that is more restrictive than par. (b), an automatic fire sprinkler system or 2-hour fire resistance shall be provided in every multifamily dwelling that contains floor areas or dwelling units exceeding any of the thresholds established in Table 66.33-B.

TABLE 66.33-B
THRESHOLDS ABOVE WHICH SPRINKLERS OR 2-HOUR SEPARATIONS ARE REQUIRED BY A
MORE RESTRICTIVE LOCAL ORDINANCE

Class of Construction	Total Floor Area Within Individual Dwelling Units	Number of Units	Total Floor Area of Nondwelling Unit Portions (Common use areas, such as corridors, stairways, basements, cel- lars, vestibules, community rooms, laundry rooms, pools, etc.)
Type 1 Fire Resistive Type A			12,000 sq ft
Type 2 Fire Resistive Type B			10,000 sq ft
Type 3 Metal Frame Protected			8,000 sq ft
Type 4 Heavy Timber Type 5A Masonry Protected Type 5B Masonry Unprotected Type 6 Metal Frame Unprotected Type 7 Wood Frame Protected	8,000 sq ft	8 units	5,600 sq ft
Type 8 Wood Frame Unprotected			4,800 sq ft

(d) An unpierced 4-hour-rated building division wall constructed as specified in s. ILHR 51.02 (13) may be used to separate a building into smaller buildings which individually do not exceed the thresholds in Table 66.33-A or B and which therefore are not required to have an automatic sprinkler system or 2-hour fire resistance.

Note: The separation specified in this paragraph does not enable circumvention of requirements relating to barrier-free accessibility or fair housing.

- (e) Two-hour fire resistance for sloping roofs may be provided with one of the following:
 - 1. A 2-hour rated ceiling.
- 2. A 1-hour roof-ceiling assembly and extension of all 2-hour vertical separations to the underside of the roof deck.

Note: Section ILHR 51.042 (8) requires a 2-hour fire-resistive rating for structural elements that support 2-hour fire-resistive construction.

- (f) Automatic fire sprinkler systems in buildings of 4 stories or less shall comply with NFPA 13R or 13, as adopted by reference in s. ILHR 51.25, except the sprinklers within the dwelling units shall be residential type conforming to NFPA 13R and installed in accord with the recommendations and requirements of the manufacturer.
- (g) Automatic fire sprinkler systems in buildings of 4 to 6 stories shall comply with NFPA 13 as adopted by reference in s. ILHR 51.25, except the sprinklers within the dwelling units shall be residential type conforming to NFPA 13R and installed in accord with the recommendations and requirements of the manufacturer.

Note: It is the intent of the department to require NFPA 13 compliance only to 5 and 6 story buildings.

- (h) In the automatic fire sprinkler systems specified in pars. (f) and (g), sprinklers may be omitted in the following locations:
- 1. Unheated exterior storage rooms that do not exceed 12 square feet in area.
- Unheated exterior mechanical equipment rooms that do not exceed 16 square feet in area.
- 3. Storage areas not exceeding 1500 square feet in area that are in nondwelling unit portions and separated from the remainder of the building by at least 2-hour fire-resistive construction, provided the areas are equipped with an approved smoke detection system which complies with all of the following:
- a. The smoke detection system is directly and permanently wired to a proper unswitched circuit.

- b. The smoke detection system is interconnected with the building manual fire alarm system. If the building does not have a manual fire alarm system, the smoke detection system shall be capable of sounding an audible alarm that can be heard in all occupied areas of the building.
- (i) Except as specified in par. (h) 3., a building that will contain a sprinklered portion and a 2-hour fire-resistive unsprinklered portion shall have those portions separated by a 4-hour unpierced fire wall.
- (2) ALLOWABLE AREA AND HEIGHT. (a) Buildings exceeding the thresholds in sub. (1). Buildings protected by an automatic fire sprinkler system or 2-hour fire resistance in accordance with sub. (1) are not limited in area or height, up to the 60-foot maximum in s. ILHR 66.03 (6), except that buildings of Type 7 or 8 construction may have no more than 4 occupied floor levels of wood frame construction; any additional floor levels shall be of Type 5 or better construction, and the total number of stories may not exceed 4. For Type 8 buildings, the structural parts and the enclosing walls and ceilings, as listed in Table 51.03-A, and the dwelling unit separations listed in s. 66.32 (2), shall be protected with at least the 5/8-inch type X wallboard specified in s. ILHR 66.32 (2).
- (b) Buildings at or below the thresholds in sub. (1). 1. Buildings without the sprinkler protection or 2-hour fire resistance required by sub. (1) shall comply with Table 66.33-C, except that Type 8 buildings may be built to the Type 7 limits in that table if the structural parts and the enclosing walls and ceilings, as listed in Table 51.03-A, are protected with at least the 5/8-inch type X wallboard specified in s. ILHR 66.32 (2).
- 2. a. Except as provided in subpars. b. and c., a building without the sprinkler protection or 2-hour fire resistance required by sub. (1) shall be separated from any other building or property line by either a 10-foot setback or a 4-hour-rated wall.
- b. The property lines specified in subpar. a. do not include property lines along streets.
- c. The separation in subpar. a. does not apply where the combined areas or dwelling units of buildings closer than 10 feet are at or below the thresholds in sub. (1).

TABLE 66.33-C ALLOWABLE HEIGHT (STORIES) AND AREA (SQUARE FEET) FOR BUILDINGS WITHOUT AUTOMATIC FIRE SPRINKLER SYSTEM PROTECTION OR TWO-HOUR FIRE RESISTANCE (MAXIMUM GROSS FLOOR AREA PER FLOOR)

		Number of Building Sides With Either Open Space at Least 30 Feet in Width or Street Within 50 Feet			Number o	f Stories		
	Class of Construction	of the Building	1	2	3	4	5	6
1.	Fire-Resistive Type A	1	19,800			·		
		.	23,900			A.U.		
		3	28,000					
·		4	32,000					
2.	Fire-Resistive Type B	1	17,800					
		2	21,900			A.U.		
		, 3	26,000					
		4	28,000					
3.	Metal Frame Protected	1	15,800					
		2	19,900		A.U.		N.P.	N.P.
	Mark Salah Sal Salah Salah Sa	3	24,000					
	e (1911). Niver en en en generalista en	4	24,000	· · · · · · · · · · · · · · · · · · ·				
4.	Heavy Timber	1	12,800	10,500				
	and the Armed Herry Carles and the	2	16,500		A.U.		N.P.	N.P.
		3	20,300					
		4	21,600					
5A.	Exterior Masonry Protected	1	11,600	9,600	7,200			
		2	15,000		A.U.		N.P.	N.P.
		3	18,400					
	a traditional transfer and proceedings	4	21,600	N + 1				
5B.	Exterior Masonry Unprotected,	1	10,500	8,600	6,800			
6.	Metal Frame Unprotected, and	2	13,500		30-	N.P.	N.P.	N.P.
7.	Wood Frame Protected	3	16,500		A.U.			
1		4	19,500					
8.	Wood Frame Unprotected	1	7,500	3,800				
	불빛이 살아보는 게 되는 것은 하는 것이다.	2	9,000	4,500	N.P.	N.P.	N.P.	N.P.
		3 .	10,500	5,300				
		4	12,000	6,000				

N.P.means not permitted

A.U.means the total areas of all floors and the total number of dwelling units cannot exceed the area and unit thresholds in Table 66.33-A. Note: For example, a 2-story Type 7 building with 2 sides having either open space at least 30 feet in width or a street within 50 feet may have (1) no more than 15,000 square feet of dwelling and nondwelling unit area on the first floor, (2) no more than 16,000 square feet of total dwelling unit area, (3) no more than 5,600 square feet of total nondwelling unit area, and (4) no more than 20 dwelling units.

- (c) Mixed-use buildings. 1. In a building containing a multifamily dwelling and one or more occupancies that are regulated by chs. ILHR 54 to 62, the chs. ILHR 54 to 62 occupancy shall comply with subds. 2 and 3 and be separated from the multifamily dwelling in accord with s. ILHR 51.08 except as follows:
- a. In applying Table 51.08, the multifamily dwelling shall be treated as a ch. ILHR 57 occupancy.
- b. Any of the fire-resistive ratings in Table 51.08 that are less than 4 hours shall be increased by 1 hour.
- 2. The chs. ILHR 54 to 62 occupancy may not be on a floor or story that exceeds the height limitation specified in s. ILHR 51.02 (21).

- 3. The chs. ILHR 54 to 62 occupancy shall comply with the applicable requirements in chs. ILHR 50 to 64, including class of construction separation, maximum floor area, and minimum automatic fire sprinkler system protection.
- 4. An unpierced, 4-hour-rated building division wall constructed as specified in s. ILHR 51.02 (13) may be used to separate the multifamily use. Buildings in which the multifamily use is separated from chs. ILHR 54 to 62 occupancies in this manner may be designed to meet only the ch. ILHR 66 requirements on the multifamily side and to meet only the chs. ILHR 50 to 64 requirements on the other side.
- (3) ATTIC COMPARTMENTALIZATION. Attics shall be compartmentalized in accordance with s. ILHR 51.02 (19), except that the uncompartmentalized area may not ex-

ceed 15,000 square feet in attics containing sprinkler protection complying with NFPA 13 or in buildings having the 2-hour fire resistance required by par. (1).

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

- ILHR 66.335 Access roadways for fire apparatus. (1) Buildings shall be accessible to fire department apparatus by means of access roadways. An access roadway shall be at least 24 feet in width, have a driving surface capable of supporting the imposed loads of the fire apparatus during all weather conditions, be located within 50 feet of the building, extend along at least 25% of the total building perimeter, and have a minimum vertical clearance of 13 feet 6 inches. Alternate means of access not complying with the specific criteria listed in this section but receiving written approval of the local fire department shall be considered as meeting these requirements.
- (2) From the access roadway, at least 50% of the building perimeter shall be reachable with 150 feet of fire hose, and the remaining perimeter shall be reachable with 250 feet of fire hose.
- (3) The space between the access roadway and the building shall be free of permanent obstructions that may impede firefighting access, such as fences, hedges, walls, substantial grade changes, or waterways.
- (4) (a) A minimum outside turning radius of 50 feet and a minimum inside turning radius of 22 feet shall be provided and maintained.
- (b) A dead-end private access roadway longer than 300 feet shall have a turnaround with a minimum outside radius of 50 feet.
- (5) (a) The access roadway shall be kept free at all times of all obstructions, including parked vehicles and snow
- (b) The access roadway shall be maintained to support the imposed loads of fire apparatus during all weather conditions.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

- ILHR 66.34 Number and location of exits. (1) NUMBER OF EXITS. (a) Except as provided in pars. (b) and (c), each dwelling unit shall have exits or exit accesses in accordance with one of the following:
- 1. The unit shall have at least 1 exit access door into a common area of the building arranged such that there are 2 directions of travel from the unit's exit access door, leading to separate exits.
- 2. The unit shall have 2 separate exits contained within the unit.
- 3. The unit shall be provided with 2 exit access doors into separate common areas, with each common area provided with at least 1 exit.
- 4. The unit shall be provided with an exit access door into a common area with at least 1 exit, in addition to an exit contained within the unit.
- (b) The second exit for a dwelling unit may be through an attached garage which serves only that unit and which is provided with an exit door that discharges to grade. An overhead garage door may not be counted as an exit door.

- (c) A unit with a habitable room on a floor of exit discharge may be provided with at least 1 exit, directly from the unit to the exterior, with the unit exit door sill at or within 6 feet of grade at the exit door.
- (2) DISTANCE TO EXIT. (a) 1. Except as provided in subd. 2., exits shall be distributed so that the entrance to each dwelling unit is no more than 100 feet from an exit, measuring along public passageways or corridors.
- 2. Where 2-hour fire resistance or fire sprinkler system protection as specified in s. ILHR 66.33 (1) is provided, an increase in exit distance to 200 feet is permitted, except as provided in s. ILHR 66.36 (2) (c) 2.
- (b) The exit distances required by this section shall be measured to exits to grade, to doors leading to stairway enclosures as specified in ss. ILHR 66.41 and 51.18, to horizontal exits as specified in s. ILHR 51.19, or to the top of exterior stairways as specified in s. ILHR 66.41 (3).
- (3) EXIT DISTRIBUTION (a) Except as provided in par. (b), exit access passageways and corridors that serve more than one exit shall provide direct connection to those exits in 2 directions from any point in the passageway or corridor. The angle between the 2 directions may not be less than 90°. An exit access door may be recessed no more than 3 feet into an alcove serving only that exit access, provided the alcove width is at least 3 feet.
- (b) A dead-end corridor may be provided if its length to the 2 directions in par. (a) is no more than 20 feet and if the building is protected with 2-hour fire resistance or a sprinkler system as specified in s. ILHR 66.33 (1). An exit access door opening into a dead-end corridor may be counted as having 2 directions of travel.
- (4) EXITS FROM A SECOND STORY IN A DWELLING UNIT.
 (a) Except as provided in par. (b) and s. ILHR 66.39 (3)
 (e), at least 2 exits shall be provided from a second story within a dwelling unit. One of the exits shall be a stairway or ramp that leads to the first story or discharges to grade. The second exit may be a stairway or ramp that discharges to grade or that discharges to a rescue platform which complies with s. ILHR 66.36 (2) (b).
- (b) Windows that comply with s. ILHR 66.36 (2) (d) may be provided in each bedroom on the second story within a dwelling unit in lieu of the second exit from the story.
- (5) Extrs above a second story in a dwelling unit. Except as provided in sub. (6) and s. ILHR 66.39 (3) (e), at least 2 exits shall be provided for each habitable floor above a second story in a dwelling unit. The exits shall be located such that in case any exit is blocked, some other exit will still be accessible to the second story. The exits shall be stairways or ramps that lead to the second story or discharge to grade.
- (6) Lorrs. (a) The net floor area of a loft may not exceed one-third of the net area of the next lower floor level in a dwelling unit. The opening in the common wall to the floor below may be infringed upon by an open guardrail constructed in compliance with s. ILHR 66.40 but not by a window or half-wall guardrail. All habitable rooms of a loft shall be open to the floor below.
- (b) A loft exceeding 400 square feet in area shall have at least 1 stairway exit to the floor below.

Register, March, 1995, No. 471

- (c) A loft 400 square feet or less in area shall have at least 1 stairway or ladder exit to the floor below. Ladder exits shall comply with s. ILHR 66.39 (4).
- (7) EGRESS FROM SLEEPING ROOMS. Every sleeping room shall have at least 2 means of egress. Windows used for this purpose shall comply with s. ILHR 66.36 (2) (d) 4.
- (8) EXITS FOR NONDWELLING UNIT PORTIONS OF BUILDINGS. Exits serving nondwelling unit portions of buildings shall be as specified in ss. ILHR 54.02 to 54.07, or ss. ILHR 55.06 to 55.10, whichever is applicable.

ILHR 66.35 Capacity of buildings and exits. The occupant load for determining the size of the elements of the exits shall be based on 2 persons for each bedroom or on actual use, whichever is greater.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.36 Type of exits. (1) GENERAL. Except as provided in sub. (2) (a), at least one-half of the required exits, accessible from each dwelling unit, shall be exits to grade or stairways as specified in s. ILHR 66.38. Except as provided in sub. (2) (b) to (d), the remaining exits shall be either stairways, interior enclosed stairways, exits to grade, or horizontal exits. Fire escapes placed against blank walls may be used as exits from floors which are in existing buildings and which are not more than 40 feet above grade.

- (2) EXCEPTIONS. (a) Every building which accommodates more than either one dwelling unit or 8 persons above the second story shall have at least 2 stairways.
- (b) A rescue platform of combustible construction may be used as a required second exit for buildings with 3 or fewer stories, provided par. (c) and all of the following conditions are satisfied:
 - 1. The platform serves a single dwelling unit.
- 2. The height of the platform floor is either at the elevation of the second story or no more than 15 feet above the adjacent grade below the platform, whichever is less.
- 3. The platform area is at least 14 square feet, with a minimum dimension of 3 feet, except that if the platform is inside the building, the minimum area is 100 square feet.
- 4. If inside the building, the platform is separated from all other parts of the dwelling unit by 1-hour fire-resistive construction, is provided with an access door which complies with s. ILHR 66.37 (2), is provided with a means to vent smoke and to supply fresh air to the occupants, and is provided with an egress opening which complies with par. (d).
- 5. The platform is designed for at least 80 pounds per square foot live load plus dead load.
- 6. Any wood used in the construction of an exterior platform is of a durable species which is resistant to decay or which is pressure-preservative treated in accord with AWPA C1, C2, or C9, as adopted by reference in s. ILHR 51.25.
- Railings which are designed and constructed to withstand a load of at least 200 pounds applied in any direc-

- tion at any point are provided on the open sides of the platform, at an elevation 3 feet above the platform, and include balusters, intermediate rails, or an ornamental pattern designed such that a sphere 6 inches in diameter cannot pass through any opening in the rail.
- (c) Where a rescue platform or egress windows are provided as the second required exit, one of the following subdivisions shall be satisfied:
- 1. The dwelling unit has direct access to a stairway serving only that unit, and if inside the building, the stairway is enclosed with at least 1-hour fire-resistive construction.
- 2. The number of dwelling units does not exceed 4 per floor; the exit distance does not exceed 35 feet; and either 2-hour fire resistance is provided, or 1-hour rated corridors are provided in combination with the sprinkler protection specified in s. ILHR 66.33 (1).
- (d) Windows used for exiting. 1. Windows that are installed for exit purposes shall be limited in accordance with par. (c) and shall comply with the requirements of this paragraph.
- 2. The window shall be accessible to firefighters and firefighting equipment. Walls, fences, substantial grade changes, or other obstructions shall not impede access to the window.
- 3. The window shall be openable from the inside without the use of tools or the removal of a sash. If equipped with a storm or screen, the storm or screen shall be openable from the inside.
- 4. a. The nominal size of the net clear window opening shall be at least 20 inches in width by 24 inches in height. Nominal dimensions shall be determined by rounding up fractions of inches if they are ½ inch or greater or rounding down fractions of inches if they are less than ½ inch.
- b. Except as provided in subpar. c., no portion of the window, including stops, stools, meeting rails, and operator arms of an awning window, may infringe on the required opening.
- c. The movable sash of a casement window may infringe on the required opening width. The net clear opening width of a casement window shall be measured between the stops.
- d. The area and dimension requirements of subpar. a. may be infringed on by a storm window.
- 5. The sill height may not be more than 46 inches above the floor or the top of a permanent platform, with or without steps, installed below the window. The platform and steps, if provided, shall be as wide as the actual egress opening and have a minimum tread depth of 9 inches and maximum riser height of 8 inches.
- The bottom of the window opening shall be no more than 15 feet above the adjacent grade directly below the window.
- 7. If a window that is provided as an exit is located below grade, an areaway shall be provided. The width of the areaway shall be at least equal to the width of the exit

window. The bottom of the areaway may not be more than 46 inches below grade. The areaway length shall be at least 1½ times the depth of the bottom of the opening with a minimum of 3 feet measured perpendicular to the building wall. The areaway shall be constructed to prevent rainfall flowing into the areaway from entering the dwelling.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

- ILHR 66.37 Doors. (1) EXIT AND EXIT ACCESS DOORS. (a) General. Except as provided in par. (b), exit doors shall be swinging doors that open in the direction of egress. Exit doors shall have a width of at least 36 inches and shall meet the minimum aggregate width requirements in s. ILHR 66.42 (3) (c) and (d).
- (b) Exceptions. 1. A sliding, glazed patio-type door may serve as the second exit from an individual dwelling unit if there is a means to prevent accumulation of snow and ice in the door track or freezing of the door. Permanent obstructions, such as electric baseboard heating units, may not be installed in front of patio doors.
- 2. A door which is used by not more than 25 persons is not required to open in the direction of egress.
- 3. A secondary exit door from a dwelling unit may have a clear opening of no less than 32 inches.
- (c) Door heights. Primary exit doors shall have a height of at least 6 feet 8 inches. All other exit doors shall have a height of at least 6 feet 4 inches.
- (d) Door hardware. Dwelling unit exit doors and exit doors serving nondwelling unit portions of buildings containing 10 or fewer dwelling units may have dead bolt locks that are not interconnected with the door latch. Locks needing a key for unlocking from the inside are prohibited.
- (2) OPENINGS INTO CORRIDORS. (a) Except as provided in par. (b), all doors opening into public exit access corridors shall be protected by at least 20-minute labeled fire-door assemblies. The doors shall be self-closing or automatic-closing, except that any fire door extending across a corridor shall have an automatic-closing device which is activated by a smoke detector complying with s. ILHR 66.49 (3) and (4).
- (b) In a building having 2-hour fire-resistance or the sprinkler protection specified in s. ILHR 66.33 (1), the fire-resistive rating for a door opening from a dwelling unit into a corridor may be applied to only the door, rather than to the door assembly. A listed door assembly is not required at this location.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.38 Exit steps, stairs, and ramps in nondwelling unit portions. (1) Exit steps, stairs, and ramps in nondwelling unit portions shall comply with this section.

(2) REQUIRED WIDTH. (a) Stairs or ramps shall have a width of at least 36 inches and shall meet the minimum aggregate width requirements in s. ILHR 66.42 (3) (c) and (d). No more than 4 inches of each side of the minimum width may be occupied by any obstruction, such as handrails, stringers, or baseboard heating units.

- (b) Under no circumstances may stairways or ramps decrease in width in the line of travel toward an exit.
- (3) Headroom. The headroom clearance shall be at least 6 feet 8 inches. In stairways, the minimum clearance shall be measured vertically from a line parallel to the nosing of the treads to the ceiling or soffit directly above that line.
- (4) RISERS, TREADS, AND RAMP SLOPES. (a) 1. Except as provided in subd. 2, all stairways and steps shall have a rise of not more than 7% inches, measured from tread to tread, and a tread of not less than 9½ inches, measured from nosing to nosing of tread. The slope of a tread may not exceed % inch per foot for the depth of the tread. Treads and risers shall be uniform in any one flight. Winders may not be used.
- 2. Stairs on required barrier-free accessible routes connecting levels that are not connected by an elevator shall comply with all of the following:
- a. Steps shall have a rise of not more than 7 inches, measured from tread to tread.
- b. Steps shall have a tread of not less than 11 inches, measured from nosing to nosing of tread.
 - c. Open risers may not be used.
- (b) The edges of all treads and the edges of all stairway landings shall be finished with a slip-resistant surface at least 3 inches in width.
- (c) Where an exit door leads to an outside platform or sidewalk, the level of the platform or sidewalk may not be more than 7% inches below the doorsill, except as provided in s. ILHR 57.82 for a required barrier-free accessible route.
- (d) 1. Except as provided in subd. 2., every stairway shall have at least 3 risers.
- 2. Exterior stairs with less than 3 risers may be provided between exterior platforms and grade if the total length of the platforms and treads does not exceed 5 feet in the direction of travel.
- (e) No flight of stairs may exceed 12 feet in height unless intermediate landings are provided.
- (f) Ramp slopes may not exceed 1:12. At-grade walk-ways with gradients less than 1:20 are not considered to be ramps.
- (g) Ramps and their landings shall be finished with a slip-resistant surface.

Note: A coefficient of friction of 0.5 or greater is considered to be slipresistant, except that a coefficient of 0.6 is recommended for accessible routes, and a coefficient of 0.8 is recommended for ramps.

- (5) LANDINGS AND PLATFORMS. (a) 1. Where a door is at the top or bottom of a ramp or stairs, a landing or platform shall be placed between the door and the stairway or ramp, regardless of the swing of the door, except as provided in subd. 2.
- Platforms may be omitted for ramps 6 feet or less in length.

Note: Chapter ILHR 69 and subch. II of ch. ILHR 57 do not allow omission of platforms on required barrier-free accessible routes.

- (b) Every landing or platform shall be at least as wide as the stairway or ramp, measured at right angles to the direction of travel, and shall be at least 3 feet in length, measured in the direction of travel.
- (6) CURVED STAIRS. Curved stairs used as required exits shall have a minimum radius at the interior edge of the tread of twice the stair width and shall have a minimum tread depth of 11 inches, as measured 12 inches from the narrower end of the tread.
- (7) EXTERIOR STAIRS. Exterior stairs for nondwelling unit portions shall comply with this section.

- ILHR 66.39 Steps, stairs, and ramps within dwelling units.
 (1) CHANGES IN ELEVATION WITHIN INDIVIDUAL DWELLING UNITS. Changes of elevation within a dwelling unit shall be overcome by means of steps, stairs, ladders, or ramps and shall be as specified in this section. Access to an attic or crawlspace is exempt from these requirements.
- (2) LANDINGS. (a) Intermediate landings. Intermediate landings located in a flight of stairs shall be at least as wide as the stairs and shall measure at least 3 feet in the direction of travel.
- (b) Landings at the top and base of stairs. A level landing shall be provided at the top and at the foot of every flight of stairs. The landing shall be at least as wide as the stairs and shall measure at least 3 feet in the direction of travel.
- (c) Obstructions. No more than 4 inches of each side of the minimum landing width may be occupied by any obstruction, such as handrails, stringers, or baseboard heating units.
- (d) Landings at doors. 1. Except as provided in subds. 2. to 5., level landings shall be provided on each side of any door located at the foot or head of a stairway, regardless of the door swing. In the application of the exceptions given in subds. 2. to 5., stairways to attached garages or porches are considered to be interior stairways.
- 2. A landing may not be required between a door and the head of interior stairs if the door does not swing over the stairs.
- 3. A landing may not be required between a door and the head of an interior stairway of 2 or fewer risers, regardless of the door swing.
- 4. A landing may not be required between a sliding glass door and the head of an exterior stairway of 3 or fewer risers.
- 5. An exterior landing, platform, or sidewalk at an exterior doorway may not be more than 8 inches below the interior floor elevation and, except as provided in s. ILHR 57.84 for barrier-free accessible routes, shall have a length at least equal to the width of the door.
- (3) STAIRS. (a) Minimum width. Every stair shall measure at least 3 feet in width. No more than 4 inches of each side of the minimum width may be occupied by any obstruction, such as handrails, stringers, or baseboard heating units.

- (b) Headroom. Except as provided in par. (e), every stair shall have a minimum headroom clearance of 6 feet 4 inches. The minimum clearance shall be measured vertically from a line parallel to the nosing of the treads to the ceiling or soffit directly above that line.
- (c) Treads and risers. Risers may not exceed 8 inches, measured vertically from tread to tread. Treads shall be at least 9 inches deep, measured horizontally from nosing to nosing. There shall be no variation in uniformity exceeding 3/16 inch in the depth of treads or in the height of risers. The slope of a tread may not exceed ¼ inch per foot for the depth of the tread. Riser and tread dimensions should be measured prior to application of finish materials. No flight of stairs may exceed 12 feet in height unless intermediate landings are provided.
- (d) Winders. Winder steps may be used in a flight of stairs where the width of the tread is at least 3 feet and the winder tread measures at least 7 inches in depth at a point 12 inches from the narrow end of the tread.
- (e) Spiral stairways. A spiral stairway may serve as the only exit from a floor level that is no larger than 400 square feet. The minimum tread width shall be 26 inches, with each tread having a 7 inch minimum tread depth at 12 inches from the narrow edge. All treads shall be identical, and the rise may not be more than 9 ½ inches. A minimum headroom of 6 feet 6 inches shall be provided. The minimum clearance shall be measured vertically from a line parallel to the nosing of the treads to the nearest obstruction directly above that line.
- (4) LADDERS. (a) General. Ladders that are used as part of a required exit access shall conform to this subsection.
- (b) Design load. Ladders shall be designed to withstand vertical loads of at least 300 pounds.
- (c) Tread or rungs. 1. Minimum tread dimensions shall be as specified in Table 66.39. Treads less than 9 inches in depth shall have open risers. All treads shall be uniform in dimension.

TABLE 66.39 LADDER TREADS AND RISERS

	dder Angle to al (degrees)	Maximum Rise (inches)	Minimun Tread (inches)	
50-10 A	41.6 to 48.4	8	9	
greater tl	nan 48.4 to 55.0	9	8	
	nan 55.0 to 61.4	10	7	
greater ti	nan 61.4 to 67.4	11	6	
	nan 67.4 to 71.6	12	5	
greater tl	nan 71.6 to 75.9	12	4*	
greater th	nan 75.9 to 80.5	12	3*	
greater tl	nan 80.5 to 90	12	2*	

- * Minimum tread dimensions do not apply to rungs.
- 2. Rungs may only be used for ladders with a pitch range of 75° to 90°. Rungs shall be at least 1 inch in diameter for metal ladders and 1½ inches for wood ladders. All rungs shall be uniform in dimension.
- (d) Risers. Risers shall be uniform in height and shall conform with Table 66.39.

ILHR 66.39

- (e) Width. The width of the ladder shall be at least 20 inches and no more than 30 inches.
- (f) Handrails. 1. Handrails are required for a ladder with a pitch of less than 65°.
- 2. The top of the handrail shall be mounted between 30 and 34 inches above the nosing of the treads.
- 3. Open handrails shall comply with s. ILHR 66.40 (3) (c). All handrails shall comply with s. ILHR 66.40 (3) (d) and (e).
- (g) Clearances. 1. A ladder shall have a clearance of at least 15 inches on either side of the center of the tread.
- 2. The edge of the tread nearest to the wall behind the ladder shall be separated from the wall by at least 7 inches.
- 3. A passageway clearance of at least 30 inches shall be provided parallel to the slope of a 90° ladder. A passageway clearance of at least 36 inches shall be provided parallel to the slope of a 75° ladder. Clearances for intermediate pitches shall vary between these 2 limits in proportion to the slope.
- 4. For ladders with a pitch of less than 75°, the vertical clearance above any tread to an overhead obstruction shall be at least 6 feet 4 inches, measured from the tread edge that is furthest from the wall behind the ladder.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.40 Handrails and guardrails. (1) HANDRAIL LOCATIONS. Handrails shall be provided on stairs and ramps in all of the following conditions:

- (a) On either side of any interior stairway of more than 3 risers and for any ramp overcoming a change in elevation of more than 24 inches.
- (b) On any open side of a stairway with more than 3 risers and on any open side of a ramp overcoming a change in elevation of more than 24 inches.
- (c) On both sides of an interior stairway or ramp 5 feet or more in width.
- (d) To divide an interior stairway or ramp more than 8 feet wide into widths which are less than 8 feet and which comply with s. ILHR 66.38 (2).
- (e) On both sides of an exterior stairway with more than 3 risers and on both sides of an exterior ramp overcoming a change of elevation of more than 24 inches.
- (f) To divide an exterior stairway or ramp more than 25 feet wide into widths which are less than 25 feet and which comply with s. ILHR 66.38 (2).
- (2) GUARDRAIL LOCATIONS. All openings between floors or at open sides of landings, platforms, balconies, and porches that are more than 24 inches above grade or above a floor shall be protected with guardrails.
- (3) Handrail and guardrail details. (a) Height. The top of a handrail gripping surface shall be mounted between 34 and 38 inches above the nosing of the treads on stairways or above the surface of ramps. Guardrails in dwelling units shall extend to at least 36 inches above the upper surface of the floor. Guardrails in nondwelling unit

portions shall extend at least 42 inches above the upper surface of the floor.

(b) Handgrip Dimensions. The handgrip portion of a handrail serving a stairway or ramp may not be less than 1% inches nor more than 2 5/8 inches in any horizontal cross-sectional dimension, or may be any other shape with a perimeter dimension of at least 4 inches but not greater than 6% inches and with the largest cross-sectional dimension not exceeding 2% inches.

Note: See s. ILHR 57.82 for handrail requirements at stairs on required barrier-free accessible routes.

- (c) Openings. Open guardrails or handrails shall have balusters, intermediate rails, or an ornamental pattern designed such that a sphere 6 inches in diameter cannot pass through any opening between the rail and the stair, ramp, or floor.
- (d) Wall clearance. The clearance between a handrail and a wall surface shall be at least 1½ inches.
- (e) Loading. Handrails and guardrails shall be designed and constructed to withstand a 200-pound load applied in any direction, at any point.
- (4) EXTERIOR RAILS. Exterior handrails and guardrails shall be constructed of metal, concrete, masonry, or plastic, or of wood that is either decay resistant, protected from the weather, or pressure treated in accord with AWPA C1, C2, or C9, as adopted by reference in s. ILHR 51.25.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.41 Enclosure of shafts, exit stairways, and other vertical openings. (1) INTERIOR SHAFTS AND EXIT STAIRWAYS. Except as provided in sub. (4), all shafts and exit stairways, including landings and ramps and other vertical openings, shall be enclosed with 2-hour fire-resistance construction in buildings 4 to 6 stories in height and shall be enclosed with 1-hour fire-resistive construction in buildings 3 stories or less in height. Where the building is protected with an automatic fire sprinkler system in accordance with s. ILHR 66.33 (1), the enclosure walls may be of 1-hour construction.

- (2) Insulation. (a) Walls. 1. Except as provided in subd. 2., mineral fiber or glass fiber type insulation that is not specified as part of a fire-tested wall or partition system may be used to fill the cavity spaces of the wall enclosures specified in sub. (1). The thickness of any insulation provided under this paragraph may not exceed the stud depth.
- Glass fiber type insulation may not be substituted for mineral fiber type insulation that is included in a firetested wall or partition system.
- (b) Floor-ceiling and roof-ceiling assemblies. The cavity spaces in the firetested floor-ceiling and roof-ceiling systems for the enclosures specified in sub. (1) may not be altered from the tested condition except as provided in s. ILHR 66.32 (5).
- (3) EXTERIOR EXIT STAIRWAYS. (a) An exterior exit stairway that is not enclosed in accord with sub. (1) may be provided if constructed in accord with this subsection.

Register, March, 1995, No. 471

- (b) An outside wooden stairway may serve as a required exit for buildings up to 2 stories in height.
- (c) The exterior wall against which the stairway is placed shall comply with Table 51.03-A.
- (d) A stairway without an enclosure having fire-resistance equivalent to the building served shall be limited to a secondary exit.
 - (e) The stairway shall be protected from the weather.
- (f) Openings in fire-rated or weather enclosures shall comply with Table 51.03-B.
- (g) The stairway height shall be limited in accordance with Table 51.03-C except a stair penthouse may be provided above that limit.
- (4) Exceptions. (a) A shaft or exit access stairway connecting any two adjacent floor levels in a residential building 3 stories or less in height may be left open where all of the following conditions are satisfied:
- 1. Every shaft or exit access stairway to the basement or ground floor is cut off with 1-hour fire-resistive construction at the first floor, first adjacent basement, or ground floor level.
- 2. The exit access travel distance to an exit, including the horizontal travel distance on the exit access stair, does not exceed 100 feet in buildings not protected with 2-hour fire resistance or an automatic fire sprinkler system, or 150 feet in buildings protected with 2-hour fire resistance or a sprinkler system as specified in s. ILHR 66.33 (1). The exit access travel distance shall be measured from the entrance door of the dwelling unit along public passageways or corridors to an approved exit.
- (b) A vertical opening serving 2 floor levels need not be enclosed if all of the following conditions are met:
 - 1. The opening is not a required means of egress.
- 2. The opening is separated from any exit access corridor or exit stairway by fire-resistive rated construction with at least the hourly rating specified for fire-rated enclosures in line 20 of Table 51.03-A.
- (c) Vertical openings serving and contained within individual dwelling units are not required to be enclosed.

- ILHR 66.42 Exit access corridors. (1) WHERE REQUIRED. Where there is not direct access to outside exit doors from a dwelling unit, an exit access corridor leading directly to an exit shall be provided and maintained at all times.
- (2) GENERAL. (a) Nonprotected construction. Except in buildings having 2-hour fire resistance and except as specified in par. (b), exit access corridors shall be enclosed with walls providing a minimum of 1-hour fire-resistive construction. The construction specified in s. ILHR 66.32 (2) (a) for 5/8-inch type X gypsum wallboard or its equivalent shall be considered as meeting this requirement.
- (b) Protected construction. 1. In a building protected with a sprinkler system in accordance with s. ILHR 66.33 (1), and except as provided in ss. ILHR 66.33 (2) (a) or

- 66.36 (2) (c) 2., exit access corridor walls may be of 30-minute fire-resistive construction. The ½-inch type X wall-board construction specified in s. ILHR 66.32 (2) shall be considered as meeting this requirement.
- 2. In a building having 2-hour fire resistance, exit access corridor walls may be of 4-inch nominal masonry construction, except as provided in s. ILHR 66.36 (2) (c) 2.
- (3) MINIMUM WIDTH. (a) Except as provided in par. (b), a public passageway or corridor leading to an exit shall have a width of at least 44 inches and shall meet the minimum aggregate width requirements of pars. (c) and (d). Building objects, such as radiators or pipes, may protrude no more than 4 inches into each side of the minimum width.
- (b) Corridors with a required capacity of 50 or less shall have a width of at least 36 inches.
- (c) The minimum aggregate width of exits from a level shall be determined as follows by using the full occupant load of that level plus the percentage effects of the occupant loads of adjacent levels, above and below, which exit through it:
 - 1. 50% of the occupant load of each first-adjacent level.
- 2. 25% of the occupant load of each second-adjacent level.
- (d) The minimum aggregate width shall be based upon the following ratios:
- 1. Types 1 through 4 construction unsprinklered, 40 inches per 100 persons.
- 2. Types 5 through 8 construction unsprinklered, 50 inches per 100 persons. ~
- 3. Types 1 through 4 construction sprinklered, 30 inches per 100 persons.
- 4. Types 5 through 8 construction sprinklered, 40 inches per 100 persons.

Note: See Appendix A for a sample determination of total aggregate exit width.

(4) MAINTENANCE. The minimum aggregate width shall be kept clear and unobstructed at all times, except as provided in sub. (3) (a).

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.43 Illumination of exits and exit signs. (1) ILLU-MINATION. (a) Buildings having more than 4 dwelling units shall have public passageways, stairways, and exit doors illuminated from one hour after sunset to one hour before sunrise.

- (b) The illumination requirements specified in par. (a) shall be provided at all intersections or passageways, at all exits, and at the head, foot, and landing of every stairway.
- (2) Exit signs. (a) Except as provided in par. (d), every required exit shall be identified by an illuminated, translucent exit sign conforming to par. (b).
- (b) 1. An exit sign shall bear the words "EXIT" or "OUT."

ILHR 66.43

- 2. The wording for the exit sign shall be of letters not less than 6 inches high with principal strokes of letters not less than % inch wide.
- 3. The wording for the exit sign shall be of red or green lettering on a contrasting background.
- 4. A self-luminous type of exit sign which provides evenly illuminated letters shall have a minimum luminance of 0.06 foot-lamberts. Other types of exit signs shall be illuminated by a source providing not less than 5 footcandles at the illuminated surface.
- (c) Where exit doors are not readily visible to occupants, directional exit signs shall be provided in exit access corridors and other appropriate locations so as to indicate the direction and way of egress.
- (d) 1. Exits within an individual dwelling unit need not be provided with exit signs.
- 2. Exits in buildings having 4 dwelling units or less per floor need not be provided with exit signs if the building contains not more than 8 dwelling units and the path of exit from all floor levels, including the basement to the outside, is readily apparent.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.44 Habitable rooms with floors below grade. (1) Windows. Every habitable room with a floor level below grade shall have at least one outside window that can be opened from the inside without the use of tools. The window shall have a clear opening of not less than 20 inches

in width, 24 inches in height, and 5.7 square feet in area, with the bottom of the opening not more than 46 inches above the floor.

- (2) Moisture protection. (a) All buildings having dwelling units below grade shall be designed and constructed to prevent undue collection of moisture in all stories below grade.
- (b) Provisions shall be made to prevent the accumulation of condensation so as to prevent slippery floors and to prevent conditions susceptible to mildew or other undesirable fungi or bacteria. The inside design conditions for cooling or dehumidification shall be a dry-bulb temperature of 75° F and a relative humidity not greater than 50%.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.45 Sanitary facilities. (1) Tollet rooms. Every dwelling unit shall include a toilet room.

- (2) Sanitary fixtures. (a) Within dwelling units. A minimum of one bathtub or shower, one lavatory, and one water closet shall be provided in every dwelling unit. Water closets may be of a round-bowl type with a hinged, closed-front seat.
- (b) Other areas. 1. Except as provided in subd. 2., common use areas within a multifamily dwelling which are larger than 400 square feet and which serve patrons who do not reside within that dwelling shall be provided with sanitary fixtures in accordance with Table 66.45.

TABLE 66.45 NUMBER OF SANITARY FIXTURES REQUIRED FOR COMMON USE AREAS 1,2,3

			Type of F	ixtures		
Number of Patrons/	Water Closets (WC)					
Occupants of Each Sex	Males (M)	Females (F)	Urinals (U)	Drinking Facilities (DF)	Lavatories ⁴ (L)	
1 - 100	1	1	0			
101 - 200	1	2	1	One (DF) for each 150	One (L) fo	or each 2
201 - 250	1	. 3	2	occupants or	fixtures (WC) or (U)
251 - 300	1	4	2	fraction up to 600	required o	or fraction
301 - 350	2	5	2	· · · · · · · · · · · · · · · · · · ·	-	
351 - 400	2	6	2			
401 - 450	2	7	3			
451 - 500	2	8	3			
501 - 600	2	9	4			
Over 600	One (WC) for ea 600 (M) or 275 (One (U) for each additional 500 (M) or fraction	One additional (DF) for each additional 3,000 occupants or fraction	<u> </u>	

¹ For structures with additions or alterations, the required number of sanitary fixtures shall be the sum of the fixtures required for the existing portion at the time it was constructed plus the fixtures required by this table for the new addition or altered area. At such time as the summation of the addition and alteration area is equal to or greater than 51% of the building area calculated as specified in s. ILHR 50.03 (4) (d), fixtures shall be provided in conformance to this table utilizing the capacity of the entire building.

² The determination of the number of each sex shall be based on an equal number of each sex unless other information is made available to the department and accepted. Where a single toilet room designated as UNISEX is provided, it shall be considered as accommodating no more than 10 employes and 24 occupants.

³ The capacity of facilities shall be calculated in accord with s. ILHR 54.05 or 55.06, whichever is applicable.

⁴ A minimum of one lavatory shall be provided in each toilet room.

- 2. Swimming pool facilities shall be provided with sanitary fixtures in accordance with ss. ILHR 90.16 and 54.05.
- 3. Sanitary facilities for employes who do not reside in the building shall be provided as specified in Table 54.12-B. Separate toilet rooms for employes and the patrons need not be provided if the toilet rooms are accessible to both employes and the patrons during all hours of operation.
- (3) KITCHEN SINK. One kitchen sink that is equipped with hot and cold running water shall be provided in every dwelling unit.

ILHR 66.46 Natural light and ventilation. (1) Light. (a) Every habitable room shall be provided with natural light by means of glazed openings.

- (b) Glazed openings shall consist of windows, skylights, or glazed doors, or a combination of the three, except that no more than 25% of the minimum required light for a dwelling unit may be provided with skylights.
- (c) The area of glazed openings shall equal at least 8% of the floor area of the room served.
- (d) Glazed openings serving habitable rooms shall view onto the outside.
- (2) VENTILATION. (a) Except as provided in par. (b), every habitable room shall be provided with natural ventilation by means of openable doors or windows. The openable area of such doors and windows shall be at least 4% of the floor area of the room.
- (b) Up to 25% of the minimum required ventilation for a dwelling unit may be provided by mechanical ventilation supplying tempered, outside air as specified in s. ILHR 64.06. The rate of this ventilation shall be 5 cfm/person, based on 2 people per bedroom.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

- ILHR 66.465 Ceiling height. (1) WITHIN DWELLING UNITS. (a) All rooms within a dwelling unit, including hallways, shall have a ceiling height of at least 7 feet except as provided in par. (b) and subs. (3) and (4).
- (b) Ceiling heights of less than 7 feet may be provided if at least 50% of the room's floor area has a ceiling height of at least 7 feet.
- (2) Nondwelling unit portions, including hallways and corridors, shall have a ceiling height of at least 6 feet 8 inches except as provided in subs. (3) and (4).
- (3) PROJECTIONS. Beams and girders or other projections may not extend more than 8 inches below the required ceiling height. No projection may extend below the required ceiling height within the required minimum width in public hallways and corridors.
- (4) EXEMPTION. This section does not apply to storage and mechanical rooms.

Note: See ss. ILHR 66.38 (4) and 66.39 (3) (b) for the minimum headroom clearance in stairways.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.466 Recycling space. All multifamily dwellings shall provide recycling space conforming to s. ILHR 52.24.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.47 Isolation of hazards. (1) Two-hour enclosures. Except as provided in sub. (3), a 2-hour fire-resistive rated enclosure shall be provided for all solid-fuel heating equipment and for all rooms in a 3- to 6-story building that are used for storage of flammable or combustible liquids, trash collection, or other similar hazards. These isolations shall also comply with ss. ILHR 64.21 and 64.22 except that flammable and combustible liquid isolations shall comply with ch. ILHR 10. If the building is protected with an automatic fire sprinkler system in accordance with s. ILHR 66.33 (1), the isolation may be reduced to a 1-hour fire-resistive rated enclosure.

- (2) ONE-HOUR ENCLOSURES. Except as provided in sub. (3), a 1-hour fire-resistive rated enclosure shall be provided for all nonsolid-fuel heating equipment and for all rooms in a 2-story or shorter building that are used for storage of flammable or combustible liquids, trash collection, or other similar hazards. These isolations shall also comply with ss. ILHR 64.21 and 64.22 except that flammable and combustible liquid isolations shall comply with ch. ILHR 10.
- (3) EXCEPTIONS. (a) 1. A residential clothes dryer having a rated capacity of 37,000 Btu/hour or less may be used within a dwelling unit without providing a fire-resistive rated enclosure.
- 2. A laundry of not more than 100 square feet that is in a nondwelling unit portion may be either protected with a sprinkler system complying with s. ILHR 66.33 (1), or isolated with a 1-hour fire-resistive rated enclosure.
- (b) Direct vent sealed combustion chamber appliances may be used without a fire-resistive rated enclosure.
- (c) A furnace and water heater serving a single dwelling unit, when located within that unit, may be used without a fire-resistive rated enclosure.

Note: See s. ILHR 66.32 (4) (c) for an isolation exemption relating to gasoline-fired equipment in garages.

- (4) CLEARANCE TO COMBUSTIBLES AND COMBUSTIBLE CONSTRUCTION. (a) Heating equipment shall be installed in accordance with the manufacturer's recommendations to provide minimum clearance. In the absence of manufacturer's recommendations, a minimum clearance of 36 inches shall be provided.
- (b) Existing installations providing less than 36 inches of clearance will be accepted if there is no physical evidence of fire hazard, such as charring.
- (c) New combustible construction, such as partitions, shelving, or storage lockers, may not encroach upon the required clearance.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.475 Protection of openings. All openings in rated enclosures and separations, except for corridors covered in s. ILHR 66.37 and garages covered in s. ILHR 66.32 (4) (b), shall be protected by labeled, self-closing fire-door assemblies in accordance with Table 66.475.

TABLE 66.475
MINIMUM FIRE-RESISTIVE RATINGS OF
DOOR ASSEMBLIES

Fire-Resistive Rating of a Wall or Wall Assembly	Fire-Resistive Rating of Door Assembly*		
4-Hour	3-Hour A		
3-Hour	2-Hour A		
2-Hour	1 1/2-Hour B		
1-Hour	3/4-Hour C		
3/4-Hour	3/4-Hour C		
1/2-Hour	1/3-Hour C*		

*The letter A, B, or C following the hourly rating designates the location for which the assembly is designed, which is intended to agree with NFPA Standard 80. Compliance with the hourly rating is required regardless of the letter designation.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.48 Standpipes. Wet or dry standpipes with a minimum capacity of 200 gallons per minute shall be provided in the following buildings:

- (1) Any building without 2-hour fire resistance or the sprinkler protection specified in s. ILHR 66.33 (1), and that has 3 or more floor levels above the fire-access grade.
- (2) Any building with 2-hour fire resistance or the sprinkler protection specified in s. ILHR 66.33 (1), and that has 5 or 6 floor levels above the fire-access grade.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.49 Smoke detection. (1) All buildings within the scope of this chapter shall be provided with approved smoke detectors as specified in this section.

- (2) A smoke detector shall be provided at all of the following locations:
 - (a) In the basement.
 - (b) At the head of every open stairway.
- (c) At the door on each floor level leading to every enclosed stairway.
- (d) Either in each sleeping area of each dwelling unit, or elsewhere in the unit within 6 feet from the doorway of each sleeping area but not within a kitchen.
- (3) (a) All smoke detectors shall be directly and permanently wired to a proper unswitched circuit and be provided with a backup power source.
- (b) Where an emergency electrical power system is installed, detectors in stairways, corridors, and other public places shall be connected to it.
- (c) All detectors except those located within individual dwelling units shall be electrically interconnected to any required manual fire alarm system. All detectors that are electrically interconnected to the manual fire alarm system shall be latching-type system detectors intended for use with a control panel and shall utilize a supervised circuit.
- (4) Smoke detectors shall be installed and maintained in accordance with s. 101.145 (3), Stats.

Note: Section 101.145 (3), Stats., reads: "The owner of a residential building shall install any smoke detector required under this section accord-Register, March, 1995, No. 471

ing to the directions and specifications of the manufacturer of the smoke detector and maintain any smoke detector which is located in a common area of that residential building. The occupant of a unit in a residential building shall maintain any smoke detector in that unit, except that if an occupant who is not an owner, or a state, county, city, village or town officer, agent or employe charged under statute or municipal ordinance with powers or duties involving inspection of real or personal property, gives written notice to the owner that a smoke detector in the unit is not functional the owner shall provide, within 5 days after receipt of that notice, any maintenance necessary to make that smoke detector functional."

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

ILHR 66.50 Fire alarms. (1) GENERAL. Except as provided in sub. (2), every building which is 3 to 6 stories in height or which contains more than 10 bedrooms shall be provided with a manual fire alarm system as specified in this section.

- (a) 1. All alarm systems required by this section shall consist of operating stations on each floor of the building, including the basement, with bells, horns, or other approved sounding devices connected to the system. An audible sounding device shall be provided in every dwelling unit and shall have a minimum rating of 85 decibels at 10 feet away. Fire alarms shall be audible throughout the nondwelling unit portions and be readily distinguishable from any other signalling devices used in the building. A system designed for fire alarm and paging service may be used if the design is such that fire alarm signals will have precedence over all others.
- 2. In all buildings where a fire alarm system and an automatic fire sprinkler system are installed, a water flow detecting device shall be provided to actuate the fire alarm system.
- (b) Every fire alarm system shall be electrically operated on closed circuit current under constant electrical supervision, so arranged that upon a circuit opening and remaining open, or in case of a ground or short circuit in the ungrounded conductor, audible trouble signals will be given instantly. Means shall be provided for testing purposes, and a backup power source shall be provided.
- (c) Except as provided in par. (d) and sub. (2), operating stations shall be located in an accessible position at all required exit doors, entrances to exit stairways, and on each floor level at the normal exit therefrom. Operating stations shall be of an approved type and shall be conspicuously identified. All operating stations shall be of a type that, after being operated, will indicate an alarm has been sent therefrom until reset by an authorized means. Operating stations having a "Break Glass" panel will be acceptable. On systems having a device to permanently record the transmission of an alarm, "Open Door" type stations may be used. The fire alarm operating stations shall be mounted between 3 and 4 feet above the finished floor, as measured from the floor to the center of the box.
- (d) Manual pull stations are not required within individual dwelling units, except a dwelling unit which is above or below another dwelling unit and which contains a primary exit shall have one pull station, located at that exit.
- (e) All alarm systems shall be tested at least once a month, and a record of the tests shall be kept.

- (f) All fire alarm systems, whether required by this chapter or not, shall be maintained in an operable condition
- (2) EXEMPTION. Rowhouses, townhouses, and singlestory buildings in which each dwelling unit has a primary swinging exit door at grade level are exempt from the provisions of sub. (1).

ILHR 66.51 Fire extinguishers. Portable fire extinguishers shall be provided in all hazardous areas that are outside of dwelling units. Hazardous areas are building areas containing heat-producing equipment, and building areas that pose a degree of hazard which is greater than normally associated with a residence, such as areas for storing or using combustible, flammable, toxic, noxious, or corrosive materials. All portable fire extinguishers that are provided, whether required by this chapter or not, shall be provided and maintained in accordance with NFPA 10, as adopted by reference in s. ILHR 51.25.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

Subchapter III — Construction standards and definitions

ILHR 66.60 Construction standards and definitions. The design and construction of multifamily dwellings shall comply with the applicable requirements of chs. ILHR 51

to 53, subchapter II of ch. ILHR 57, and chs. ILHR 63, 64, and 69, which are hereby incorporated by reference into this chapter.

Note: A longer-term goal of the department is to place these applicable requirements in an appendix to this code.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

Subchapter IV — Electrical standards

ILHR 66.61 Electrical standards. All electrical wiring, installations, equipment, and materials used in the construction of multifamily dwellings shall comply with the requirements of the Wisconsin administrative electrical code, vol. 2., ch. ILHR 16, which is hereby incorporated by reference into this chapter.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.

Subchapter V — Plumbing

ILHR 66.62 Plumbing. The design, construction, and installation of plumbing shall comply with the requirements of the Wisconsin administrative plumbing code, chs. ILHR 81 to 86, which is hereby incorporated by reference into this chapter.

History: Cr. Register, March, 1995, No. 471, eff. 4-1-95.