

Chapter ILHR 20

ADMINISTRATION AND ENFORCEMENT

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Subchapter I — Purpose and Scope

ILHR 20.01 Purpose. The purpose of this code is to establish uniform statewide construction standards and inspection procedures for one- and 2-family dwellings and manufactured dwellings in accordance with the requirements of ss. 101.60 and 101.70, Stats.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; am. Register, March, 1992, No. 435, eff. 4-1-92.

ILHR 20.02 Scope. The provisions of chs. ILHR 20 to 25 shall apply to the construction and inspection procedures used for all new one- and 2-family dwellings, manufactured buildings for dwellings and newly constructed community-based residential facilities providing care, treatment and services for 3 to 8 unrelated adults.

(1) **MUNICIPAL ORDINANCES.** (a) No municipality shall adopt an ordinance on any subject falling within the scope of this code including, but not limited to, establishing restrictions on the occupancy of dwellings for any reason other than noncompliance with the provisions of this code as set forth in s. ILHR 20.10 (3). This code does not apply to occupancy requirements occurring after the first occupancy for residential purposes following the final inspection referred to in s. ILHR 20.10 (1) (b) 3.

(b) This code shall not be construed to affect local requirements relating to land use, zoning, fire districts, side, front and rear setback requirements, property line requirements or other similar requirements. This code shall not affect the right of municipalities to establish safety regulations for the protection of the public from hazards at the job site.

(c) Any municipality may, by ordinance, require permits and fees for any construction, additions, alterations or repairs not within the scope of this code.

(d) Any municipality may, by ordinance, adopt the provisions of chs. ILHR 20 to 25 to apply to any additions or alterations to existing dwellings.

(2) **LEGAL RESPONSIBILITY.** The department or the municipality having jurisdiction shall not assume legal responsibility for the design or construction of dwellings.

(3) **RETROACTIVITY.** The provisions of this code are not retroactive, except as specified in s. ILHR 21.09.

(4) **INNOVATIVE DWELLINGS.** No part of this code is intended to prohibit or discourage the construction of innovative dwellings such as a dwelling built below ground, a geodesic dome, a concrete house, a fiber-glass house or any other nonconventional structure.

(5) **LANDSCAPING.** Except for construction erosion control, the scope of this code does not extend to driveways, sidewalks, landscaping and other similar features not having an impact on the dwelling structure.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; am. (1) (intro.), cr. (1) (d), r. and recr. (6), Register, February, 1985, No. 350, eff. 3-1-85; r. (6), Register, January, 1989, No. 397, eff. 2-1-89; am. (3), Register, April, 1990, No. 412, eff. 5-1-90; am. (5), Register, September, 1992, No. 441, eff. 12-1-92.

ILHR 20.03 Effective date. The effective date of ch. ILHR 22 is December 1, 1978. The effective date of chs. ILHR 20, 21, 23, 24 and 25 is June 1, 1980.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; am. Register, January, 1989, No. 397, eff. 2-1-89; correction made under s. 13.93 (2m) (b) 4, Stats., Register, January, 1989, No. 397.

ILHR 20.04 Applications. (1) **NEW DWELLINGS.** The provisions of this code shall apply to all dwellings, dwelling units, and foundations for dwelling units, for which the construction was commenced or the building permit was applied for on or after the effective date of this code. Additions and alterations to dwellings covered by this code shall comply with the provisions of this code at the time the permit for the addition or alteration is issued.

(2) **RECREATIONAL DWELLINGS.** Recreational dwellings, the initial construction of which was commenced on or after the effective date of this code, shall comply with all structural requirements of this code. The installation of any permanent heating, air conditioning, electrical or plumbing systems shall not be required; however, if such systems are installed, those systems shall comply with the provisions of this code. Any addition or alteration to such recreational dwelling or system therein shall comply with the provisions of the code at the time the permit for the addition or alteration is issued.

(3) **BED AND BREAKFAST ESTABLISHMENTS.** The third floor of bed and breakfast establishments, as defined under s. 50.50 (1), Stats., when used for other than storage, shall comply with the provisions of this code.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; cr. (3), Register, January, 1989, No. 397, eff. 2-1-89; am. (1), r. and recr. (3), Register, March, 1992, No. 435, eff. 4-1-92. Register, September, 1992, No. 441

ILHR 20.05 Exemptions. (1) **EXISTING DWELLINGS.** The provisions of this code shall not apply to dwellings and dwelling units, the construction of which was commenced prior to the effective date of this code, or to additions or alterations to such dwellings.

Note: The provisions of chs. ILHR 20 to 25 may be adopted by a municipality to apply to any additions or alterations to existing dwellings.

(2) **MULTIFAMILY DWELLINGS.** The provisions of this code shall not apply to residences occupied by 3 or more families living independently or occupied by 2 such families and used also for business purposes.

(3) **REPAIRS.** The provisions of this code do not apply to repairs or maintenance to dwellings or dwelling units, or to electrical, heating, ventilating, air conditioning and other systems installed therein.

(4) **MOVING OF DWELLINGS.** The status of a dwelling, new or existing, shall not be affected by the moving of the dwelling.

(5) **ACCESSORY BUILDINGS.** With the exception of s. ILHR 21.08 (5), the provisions of this code do not apply to detached garages or to any accessory buildings detached from the dwelling.

(6) **FARM BUILDINGS.** The provisions of this code do not apply to the buildings used exclusively for farm operations.

(7) **INDIAN RESERVATIONS.** The provisions of this code do not apply to dwellings located on Indian reservation land held in trust by the United States.

(8) **RECREATIONAL VEHICLES AND MANUFACTURED (MOBILE) HOMES.** The provisions of this code shall not apply to recreational vehicles or manufactured (mobile) homes, but shall apply to the onsite construction of additions to recreational vehicles and manufactured homes if the recreational vehicle or manufactured home was produced after June 1, 1980.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; am. (5), r. (9), Register, January, 1989, No. 397, eff. 2-1-89; r. and recr. (8), Register, March, 1992, No. 435, eff. 4-1-92.

Subchapter II — Jurisdiction

ILHR 20.06 Procedure for municipalities exercising jurisdiction. (1) **MUNICIPAL JURISDICTION.** Pursuant to ss. 101.65 and 101.76, Stats., cities, villages, towns and counties may exercise jurisdiction over the construction and inspection of new dwellings. Municipalities intending to exercise jurisdiction shall adopt the Uniform Dwelling Code in its entirety. No additional standards within the scope of this code shall be adopted by the municipality unless specific approval has been granted by the department pursuant to s. ILHR 20.20. No such municipality shall exercise jurisdiction except in accordance with the following procedure.

(a) *Intent to exercise jurisdiction.* Municipalities intending to exercise jurisdiction shall notify the department, in writing, at least 30 days prior to the date upon which the municipality intends to exercise jurisdiction under this code. The notification of intent shall include a statement by the municipality as to which of the following methods will be used for enforcement:

1. Individual municipal enforcement;
2. Joint municipal enforcement;

3. Contract with certified inspector or independent inspection agency;
4. Contract with another municipality;
5. Contract with the department.

(b) *Submission of ordinances.* Municipalities intending to exercise jurisdiction shall submit all ordinances adopting the uniform dwelling code to the department at the same time as the notice of intent. The department shall review and make a determination regarding municipal intent to exercise jurisdiction over new dwellings within 15 business days of receipt of the municipal ordinances adopting the uniform dwelling code. A municipality may appeal a determination by the department that an ordinance does not comply with the code. Any appeal shall follow the procedure set out in s. ILHR 20.21 (2).

(c) *Passage of ordinances.* A certified copy of all adopted ordinances and subsequent amendments thereto shall be filed with the department within 30 days after adoption.

Note: Municipalities adopting the model ordinance shall be considered to be in compliance with the provisions of this code and may exercise jurisdiction.

(2) **COUNTY JURISDICTION.** A county ordinance shall apply in any city, village or town which has not enacted ordinances pursuant to this section. No county ordinance may apply until after 30 business days after the effective date of this code unless a municipality within the county informs the department of its intent to have this code administered and enforced by the county. This section shall not be construed to prevent or prohibit any municipality from enacting and administering this code at any time after the effective date of this code. The department shall review and make a determination regarding county jurisdiction over new buildings within 15 business days of receipt of the county ordinances adopting the uniform dwelling code.

(3) **DEPARTMENTAL JURISDICTION.** Pursuant to ss. 101.63 and 101.73, Stats., the department will administer and enforce this code in any municipality which has not adopted, or is not covered by, an ordinance adopted in accordance with this section.

Note: Every 3 years the department will perform performance audits of the erosion control programs of the municipalities administering the program and issue a written determination on whether the municipality complies with the erosion control ordinances and the erosion control standards.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; am. (1) (b) and (2), Register, February, 1985, No. 350, eff. 3-1-85.

Subchapter III — Definitions

ILHR 20.07 Definitions. In chs. ILHR 20 to 25:

- (1) "Accessory building" means a detached building, not used as a dwelling unit but is incidental to that of the main building and which is located on the same lot. Accessory building does not mean farm building.
- (2) "Addition" means new construction performed on a dwelling which increases the outside dimensions of the dwelling.
- (3) "Allowable stress" means the specified maximum permissible stress of a material expressed in load per unit area.

(4) "Alteration" means a substantial change or modification other than an addition or repair to a dwelling or to systems involved within a dwelling.

(4m) "Annual fuel utilization efficiency" or "AFUE" means the efficiency rating of the heating plant model determined on average usage conditions as set out in the U.S. department of energy test procedures.

Note: The higher the AFUE rating, the higher the heating plant efficiency will be.

(5) "Approved" means an approval by the department or its authorized representative. (Approval is not to be construed as an assumption of any legal responsibility for the design or construction of the dwelling or building component.)

(6) "Attic" means a space under the roof and above the ceiling of the topmost part of a dwelling.

(7) A "balcony" is a landing or porch projecting from the wall of a building.

(8) "Basement" means that portion of a dwelling below the first floor or groundfloor with its entire floor below grade.

(8m) "Best management practices" is defined in s. 101.653, Stats., and means practices, techniques or measures that the department determines to be effective means of preventing or reducing pollutants of surface water generated from construction sites.

(9) "Building component" means any subsystem, subassembly or other system designed for use in or as part of a structure, which may include structural, electrical, mechanical, plumbing and fire protection systems and other systems affecting health and safety.

(10) "Building system" means plans, specifications and documentation for a system of manufactured building or for a type or a system of building components, which may include structural, electrical, mechanical, plumbing and variations which are submitted as part of the building system.

(11) "Ceiling height" means the clear vertical distance from the finished floor to the finished ceiling.

(12) "Certified inspector" means a person certified by the department to engage in the administration and enforcement of this code.

(13) A "chimney" is one or more vertical, or nearly so, passageways or flues for the purpose of conveying flue gases to the atmosphere.

(14) "Chimney connector". Same as smoke pipe.

(15) "Closed construction" means any building, building component, assembly or system manufactured in such a manner that it cannot be inspected before installation at the building site without disassembly, damage or destruction.

(16) "Code" means, chs. ILHR 20 to 25, the Wisconsin uniform dwelling code.

(17) "Coefficient of performance (COP)" means the ratio of the rate of net heat removal or net heat output to the rate of total energy input, expressed in consistent units and under designated rating conditions.

(19) "Compliance assurance program" means the detailed system documentation and methods of assuring that manufactured dwellings and dwelling components are manufactured, stored, transported, assembled, handled and installed in accordance with this code.

(20) "Cooling load" is the rate at which heat must be removed from the space to maintain a selected indoor air temperature during periods of design outdoor weather conditions.

(21) "Dead load" means the vertical load due to all permanent structural and nonstructural components of the building such as joists, rafters, sheathing, finishes and construction assemblies such as walls, partitions, floors, ceilings and roofs, and systems.

(21m) "Deck" means an unenclosed exterior structure, attached or adjacent to the exterior wall of a building, which has a floor, but no roof.

(22) "Degree day" means a unit of temperature and time which may be used to determine heating requirements for buildings. A degree day accrues for every degree the mean outdoor temperature for a 24 hour period falls below 65°F.

Note: For example, if, on December 15, the low temperature was + 30° F and the high temperature was + 50° F, the mean temperature would equal $(30° + 50°) \div 2 = 40°$; therefore, $65° - 40° = 25$ degree days.

(23) "Department" means the department of industry, labor and human relations.

(24) "Detached building" means any building which is not physically connected to the dwelling.

(25) "Dwelling" means any building, the initial construction of which is commenced on or after the effective date of this code, which contains one or 2 dwelling units.

(27) "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.

(27m) "Electrically heated" means provided with permanently installed electrical space heating equipment which has an input capacity of 3 kilowatts or more to meet all or part of the space heating requirements.

(28) "Energy efficiency ratio" or "EER" is the ratio of net cooling capacity in Btu per hour to total rate of electric input, in watts, under designated operating conditions.

(28r) "Equivalent leakage area" or "ELA" means the estimated area of a hole in the thermal envelope of a building which would exist if all the leakage openings were gathered into one location.

(28t) "Erosion" means the detachment and movement of soil, sediment or rock fragments by water, wind, ice or gravity.

(28v) "Erosion control procedure" means a practice or a combination of practices implemented to prevent or reduce erosion and the resulting

deposition of soil, sediment or rock fragments into waters of the state, public sewers or off the owner's land. These procedures include, but are not limited to, silt or filter fences, straw or hay bales, tarps or riprap, berms, sediment basins or vegetative strips.

Note: See Appendix E for examples and illustrations.

(29) "Exit" means a continuous and unobstructed means of egress to a street, alley or open court and includes intervening doors, doorways, corridors, halls, balconies, ramps, fire escapes, stairways and windows.

(29m) "Existing dwelling" means a dwelling erected prior to the effective date of this code, one for which a valid building permit exists, or one for which lawful construction has commenced prior to the effective date of this code.

Note: See s. ILHR 20.03 for the effective date of chs. ILHR 20-25.

(30) "Farm operation" is the planting and cultivating of the soil and growing of farm products substantially all of which have been planted or produced on the farm premises.

Note: According to s. 102.04 (3), Stats., the farm operation includes the management, conserving, improving and maintaining of the premises, tools, equipment improvements and the exchange of labor or services with other farmers; the processing, drying, packing, packaging, freezing, grading, storing, delivery to storage, carrying to market or to a carrier for transportation to market and distributing directly to the consumer; the clearing of such premises and the salvaging of timber and the management and use of wood lots thereon but does not include logging, lumbering and wood-cutting operations unless the operations are conducted as an accessory to other farm operations.

(31) "Farm premises" is defined to be the area which is planted and cultivated. The farm premises does not include greenhouses, structures or other areas unless used principally for the production of food or farm products.

(32) "Farm products" are defined as agricultural, horticultural and arboricultural crops. Animals considered within the definition of agricultural include livestock, bees, poultry, fur-bearing animals, and wildlife or aquatic life.

(33) "Farming" means the operation of a farm premises owned or rented by the operator.

(34) "Firebox" means that part of the fireplace used as the combustion chamber.

(34k) "First floor" means the first floor level above any groundfloor or basement or, in the absence of a groundfloor or basement, means the lowest floor level in the dwelling.

(34m) "Floor area" means the area of a room that has a ceiling height of at least 7 feet. Rooms with ceilings less than 7 feet in height for more than 50% of the room are not considered to be floor areas.

(35) "Garage" means an unenclosed or enclosed portion of a dwelling used for storing motorized vehicles.

(36) "Gas appliance" means any furnace or heater, air conditioner, refrigerator, stove having an electrical supply cord, dishwasher, dryer, swimming pool heater, or other similar appliance or device used in a dwelling or dwelling unit which uses a gaseous fuel for operation.

(36m) "Groundfloor" means that level of a dwelling, below the first floor, located on a site with a sloping or multilevel grade and which has a portion of its floor line at grade.

(37) "Habitable room" means any room used for sleeping, living or dining purposes, excluding such enclosed places as kitchens, closets, pantries, bath or toilet rooms, hallways, laundries, storage spaces, utility rooms, and similar spaces.

(38) "Hearth" means the floor area within the fire chamber of a fireplace.

(38m) "Hearth extension" means the surfacing applied to the floor area extending in front of and at the sides of the fireplace opening.

(39) "Heated space" is any space provided with a supply of heat to maintain the temperature of the space to at least 50° F. Heat supplied by convection from the energy-consuming systems may satisfy this requirement in basements if the energy-consuming systems are not insulated.

(40) "Heating load" is the estimated heat loss of each room or space to be heated, based on maintaining a selected indoor air temperature during periods of design outdoor weather conditions. The total heat load includes: the transmission losses of heat transmitted through the wall, floor, ceiling, glass or other surfaces; and either the infiltration losses or heat required to warm outdoor air used for ventilation.

Note: Infiltration losses include heat required to warm outside air which leaks through cracks and crevices, around doors and windows or through open doors and windows.

(40m) "Hollow unit" means a masonry unit which has a net cross-sectional area parallel to the bearing face which is less than 75% of the gross cross-sectional area.

(41) "Independent inspection agency" means any person, firm, association, partnership or corporation certified by the department to perform certified inspections under this code.

(41m) "Infiltration barrier" means a material which restricts the movement of air and liquid water, but is permeable to water vapor.

(42) "Initial construction" means the date of issuance of the Wisconsin uniform building permit.

(43) "Insignia." See "Wisconsin insignia."

(44) "Installation" means the assembly of a manufactured building on site and the process of affixing a manufactured building to land, a foundation, footing or an existing building.

(45) "Intermittent ignition device" means an ignition device which is actuated only when a gas appliance is in operation.

(46) "Kitchen" means an area used, or designed to be used, for the preparation of food.

(47) "Landing" means the level portion of a stairs located within a flight of stairs or located at the base and foot of a stairs.

(48) "Listed and listing" means equipment or building components which are tested by an independent testing agency and accepted by the department.

(49) "Live load" means the weight superimposed on the floors, roof and structural and nonstructural components of the dwelling through use and by snow, ice or rain.

(50) "Loft" means an upper room or floor which has at least 50% of the common wall open to the floor below. The opening may be infringed upon by an open guardrail constructed in compliance with s. ILHR 21.04 (2), but not by a window or half-wall guardrail. All habitable rooms of lofts are open to the floor below.

(51) "Manufacture" means the process of making, fabricating, constructing, forming or assembling a product from raw, unfinished, semifinished or finished materials.

(52) (a) "Manufactured dwelling" means any structure or component thereof which is intended for use as a dwelling and:

1. 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) The term manufactured dwelling does not include a building of open construction which is not subject to par. (a) 2. A single or double width manufactured (mobile) home is not considered a manufactured dwelling and is not subject to this code.

(54) A "multi-wythe wall" is a masonry wall composed of 2 or more wythes of masonry units tied or bonded together.

(55) "Municipality" means any city, village, town or county in this state.

(56) "Open construction" means any building, building component, assembly or system manufactured in such a manner that it can be readily inspected at the building site without disassembly, damage or destruction.

(56m) "Overall thermal transmittance" or "U_o" means the area-weighted average of the thermal transmittance values of all materials, including framing and fenestration, which make up a building section.

Note: Additional explanatory material is contained in the appendix.

(57) "Owner" means any person having a legal or equitable interest in the dwelling.

(58) "Perm" means a unit of permeance which is measured in grains per (hour) (square foot) (inch of mercury vapor pressure difference).

Note: The lower the perm rating of a material is, the more difficult it is for water vapor to pass through it.

(59) "Pilaster" is a projection of masonry or a filled cell area of masonry for the purpose of bearing concentrated loads or to stiffen the wall against lateral forces.

(59m) "Porch" means an unenclosed exterior structure at or near grade attached or adjacent to the exterior wall of any building, and having a roof and floor.

(60) "Recreational dwelling unit" means a permanent structure occupied occasionally or seasonally solely for recreational purposes and not used as a principal residence.

(61) "Repair" means the act or process of restoring to original soundness, including, but not limited to, redecorating, refinishing, nonstructural repairs, maintenance repairs or replacement of existing fixtures, systems or equipment.

(62) "Thermal resistance" or "R" means a measure of the ability to retard the flow of heat. The R-value is the reciprocal of the thermal transmittance or U ($R = 1/U$).

Note: The higher the R-value of a material, the more difficult it is for heat to be transmitted through the material.

(63) A "single-wythe wall" is a masonry wall consisting of one unit of thickness.

(63m) "Site" means all contiguous property under single ownership where land-disturbing activity has been proposed for the purpose of constructing a dwelling.

(64) A "smoke chamber" is that part of a fireplace which acts as a funnel to compress the smoke and gases from the fire so that they will enter the chimney above.

(65) A "smoke pipe" is a connector between the solid or liquid fuel-burning appliance and the chimney.

(65m) "Solid unit" means a masonry unit which has a net cross-sectional area parallel to the bearing face which is 75% or more of the gross cross-sectional area.

(65r) "Stabilized" means action taken at a site to minimize erosion by mulching and seeding, sodding, landscaping, concrete, gravel or other erosion control measures.

(66) A "stairway" is one or more flights of steps, and the necessary platforms or landings connecting them, to form a continuous passage from one elevation to another.

(67) "Step(s)" is a unit(s) consisting of one riser and one tread, alone or in series.

(68) A "story" is that portion of a building located above the basement, between the floor and the ceiling.

(69) A "stove" is a nonportable solid-fuel-burning, vented, nonducted heat-producing appliance located in the space that it is intended to heat. This definition does not include cooking appliances.

(70) Stovepipe. Same as smoke pipe.

(71) "Strain" means a change in the physical shape of a material caused by stress.

(72) "Stress" means internal resistance to an external force expressed in load per unit area; stresses acting perpendicular (compression or tension) to the surface, shear stresses acting in the plane of the surface, or bending stresses which cause curving.

(73) "Structural analysis" is a branch of the physical sciences which uses the principles of mechanics in analyzing the impact of loads and forces and their effect on the physical properties of materials in the form of internal stress and strain.

(73m) "Thermal envelope" means the collective assemblies of the building which enclose the heated space and define the surface areas through which the design heating loss is calculated. The components which make up the thermal envelope form a continuous, unbroken surface.

(74) "Thermal transmittance" or "U" means the time rate of heat flow through a body or assembly which is located in between two different environments, expressed in Btu per (hour) (square foot) ($^{\circ}\text{F}$). The U-value applies to combinations of different materials used in series along the heat flow path and also to single materials that comprise a building section, and includes cavity air spaces and air films on both sides.

Note #1: The lower the U-value of a material, the more difficult it is for heat to be transmitted through the material.

Note #2: The thermal transmittance is also referred to as the coefficient of heat transfer or the coefficient of heat transmission.

(75) The "throat" of a fireplace is the slot-like opening above the firebox through which flames, smoke and other products of combustion pass into the smoke chamber.

(76) "Vent" means a vertical flue or passageway to vent fuel-burning appliances.

(77) A "vent connector" is a connector between a fuel-burning appliance and the chimney or vent.

(77m) "Waters of the state" includes those portions of Lake Michigan and Lake Superior within the boundaries of Wisconsin, and all lakes, bays, rivers, streams, springs, ponds, wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface waters or groundwaters, natural or artificial, public or private, within the state or its jurisdiction.

(78) "Window" means a glazed opening in an exterior wall, including glazed portions of doors, within a conditioned space.

(79) "Wisconsin insignia" means a device or seal approved by the department to certify compliance with this code.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; cr. (34m) and (36m), Register, February, 1985, No. 350, eff. 3-1-85; am. (8), (22), (36m), (50), (58), (62) and (74), r. (18) and (53), renum. (26) to (29m) and am., cr. (34r), (38m), (40m), (59m) and (65m), r. and recr. (38), Register, January, 1989, No. 397, eff. 2-1-89; am. (16), (34m), (40), (52) (a) (intro.) and (b), cr. (21m), Register, March, 1992, No. 435, eff. 4-1-92; am. (16), cr. (intro), (8m), (28t), (28v), (63m), (65r) and (77m), Register, September, 1992, No. 441, eff. 12-1-92.

Subchapter IV — Approval and Inspection of One- and 2-Family Dwellings

ILHR 20.08 Wisconsin uniform building permit. A Wisconsin uniform building permit shall be obtained from the department or the municipality administering and enforcing this code before any on-site construction, including excavation for a structure, within the scope of this code is commenced, except where a permit to start construction has been issued in accordance with s. ILHR 20.09 (5) (b) 2. A Wisconsin uniform building permit shall not be required for repairs.

Note: Section ILHR 20.09 (5) (b) 2. permits the issuance of a footing and foundation permit prior to the issuance of the Wisconsin uniform building permit.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; am. Register, September, 1992, No. 441, eff. 12-1-92.

ILHR 20.09 Procedures for obtaining uniform building permit. (1) APPLICATION FOR A WISCONSIN UNIFORM BUILDING PERMIT. Application for a Wisconsin uniform building permit shall be on the forms obtained from the department or the municipality administering and enforcing this code. No application shall be accepted that does not contain all the information requested on the form.

Note 1: See appendix for a copy of the Wisconsin uniform building permit and application.

Note 2: Any municipality exercising jurisdiction may require reasonable supplementary information not contained on the Wisconsin building permit application.

(2) FILING OF THE WISCONSIN UNIFORM BUILDING PERMIT APPLICATION. The Wisconsin uniform building permit application shall be filed with the municipality administering and enforcing this code or its authorized representative. The municipality shall promptly forward a copy of all applications to the department. If no municipality administers and enforces the code, the application shall be filed with the department or its authorized representative.

Note: Section 101.64, Stats., permits the department to collect and publish data.

(3) FEES. (a) Municipal fees. Fees shall be submitted to the municipality at the time the Wisconsin uniform building permit application for new construction is filed. The municipality shall, by ordinance, determine fees to cover expenses of plan examination, inspection and the issuance of the Wisconsin uniform building permit. The municipality shall collect and send to the department the fee for Wisconsin uniform building permits issued for new dwellings in accordance with s. Ind 69.21.

(b) Department fees. Where the department administers and enforces the code, the fees for plan examination, inspection, and the issuance of the Wisconsin uniform building permit, in accordance with s. Ind 69.21, shall be submitted to the department, or its authorized representative, at the time the Wisconsin uniform building permit application is filed.

(4) SUBMISSION OF PLANS. At least 2 sets of plans for all one- and 2-family dwellings shall be submitted to the department, or the municipality administering and enforcing this code, for examination and approval at the time the Wisconsin uniform building permit application is filed. A municipality exercising jurisdiction may require a third set of plans at its option.

(a) Required building plans. The required building plans shall be legible and drawn to scale or dimensioned and shall include the following:

1. Plot plan. a. The plot plan shall show the location of the dwelling and any other buildings, wells, surface waters and disposal systems on the site with respect to property lines. For sites greater than 5 acres, the plot plan shall indicate the area of land-disturbing activity within the site.

b. For sites with slopes greater than 12%, the plot plan shall show the direction of slopes on the site and indicate areas with slopes greater than 12% within the area of land disturbing activity. The plot plan shall indicate initial erosion control procedures as specified in s. ILHR 21.125 based on slopes existing immediately prior to building construction.

c. For sites with slopes less than 12%, the plot plan shall show the direction of all slopes on the site. The plot plan shall indicate initial erosion control procedures as specified in s. ILHR 21.125 based on slopes existing immediately prior to building construction.

d. Dwelling sites within subdivisions with subdivision erosion control plans approved by the local municipality are exempt from erosion control plot plan requirements when the subdivision erosion control plan includes adequate best management practices as specified in s. ILHR 21.125 (2) for each site to be developed.

Note: See Appendix E for examples of plot plans indicating erosion control procedures as specified in sub. (4) (a).

2. Floor plans. Floor plans shall be provided for each floor. The size and location of all rooms, doors, windows, structural features, exit passages and stairs shall be indicated. The use of each room shall be indicated. The location of plumbing fixtures, chimneys, and heating and cooling appliances, and, when requested, a heating distribution layout shall be included.

3. Elevations. The elevations shall contain information on the exterior appearance of the building, indicate the location, size and configuration of doors, windows, roof, chimneys, exterior grade, footings and foundation walls, and include the type of exterior materials.

(b) Data required. All required plans submitted for approval shall be accompanied by sufficient data, calculations and information to determine if the dwelling will meet the requirements of this code. The data and information for determining compliance with the energy conservation standards shall be submitted on forms provided by the department or other approved forms. A municipality exercising jurisdiction may accept plans or calculations which are stamped by an architect or engineer but may not require plans or calculations to be stamped by an architect or engineer.

(c) Master plans. Where a dwelling is intended to be identically and repetitively constructed at different locations, a master plan may be submitted for approval. The plans shall include floor plans, elevations and data as required in par. (a) 2. and 3. If the plans conform to the provisions of the code, an approval and a master plan number shall be issued. The number issued may be used in lieu of submitting building plans for each location. A plot plan shall be submitted for each location at the time of application for the Wisconsin uniform building permit.

(5) **APPROVAL OF PLANS AND ISSUANCE OF PERMITS.** (a) *Plan approval.* If the department, or the municipality administering and enforcing the code, determines that the plans, including the plans indicating the erosion control procedures as specified in sub. (4), submitted for a one- or 2-family dwelling substantially conform to the provisions of this code and other legal requirements, an approval shall be issued. The plans shall be stamped "conditionally approved" by a certified inspector or certified independent inspection agency. One copy shall be returned to the applicant; one copy shall be retained by the department or the municipality administering and enforcing the code. The conditions of approval shall be indicated by a letter or on the permit. All conditions of the approval shall be met during construction.

(b) *Issuance of permits.* 1. Uniform building permit. The Wisconsin uniform building permit shall be issued if the requirements for filing and fees are satisfied and the plans have been conditionally approved. The permit shall expire 24 months after issuance if the dwelling exterior has not been completed. The municipality issuing the Wisconsin uniform building permit shall send a copy of the application to the department.

2. Permit to start construction of footings and foundation. Construction may begin on footings and foundations prior to the issuance of the Wisconsin uniform building permit where a permit to start construction is obtained. Upon submittal of the application for a permit to start construction, a plot plan as specified in sub. (4) (a) 1, complete footing and foundation information including exterior grading, and a fee, the department or the municipality enforcing this code may issue a permit to start construction of the footings and foundation. The issuance of a permit to start construction shall not influence the approval or denial of the Wisconsin uniform building permit application.

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

(c) *Posting of permit.* The Wisconsin uniform building permit shall be posted in a conspicuous place at the dwelling site.

(6) **DISAPPROVAL OF PLANS AND DENIAL OF PERMITS.** If the department, or the municipality administering and enforcing the code, determines that the Wisconsin uniform building permit application or the plans, including the plans indicating the erosion control procedures as specified in sub. (4), do not substantially conform to the provisions of this code or other legal requirements are not met, approval shall be denied.

(a) *Denial of application.* A copy of the "denied" application, accompanied by a written statement specifying the reasons for denial, shall be sent to the applicant and to the owner as specified on the Wisconsin uniform building permit application.

(b) *Stamping of plans.* Plans which do not substantially conform to the provisions of the code shall be stamped "not approved." One copy shall be returned to the person applying for the Wisconsin uniform building permit; one copy shall be retained by the department or the municipality administering and enforcing the code.

(c) *Appeals.* The applicant may appeal a denial of the application in accordance with the procedure outlined in s. ILHR 20.21.

(7) **ACTION TO APPROVE OR DENY.** Action to approve or deny a uniform building permit application shall be completed within 10 business days of receipt of all forms, fees, plans and documents required to process the application.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; r. and recr. (7), Register, February, 1985, No. 350, eff. 3-1-85; am. (4) (b) and (5) (b) 1., Register, January, 1989, No. 397, eff. 2-1-89; am. (3) (a) and (4) (a) 2., Register, March, 1992, No. 435, eff. 4-1-92; am. (4) (a) 1., (5) (a), (b) 2. and (6) (intro.), Register, September, 1992, No. 441, eff. 12-1-92.

ILHR 20.10 Inspections. All inspections, for the purpose of administering and enforcing this code, shall be performed by a certified inspector or certified independent inspection agency.

(1) **REQUIRED INSPECTIONS.** Inspections shall be conducted by the department or the municipality administering and enforcing this code to ascertain whether or not the construction or installations conform to the conditionally approved plans, the Wisconsin uniform building permit application and the provisions of this code and shall notify the permit holder and the owner of any violations to be corrected.

(a) *Inspection notice.* The applicant or an authorized representative shall, in writing or orally, request inspections of the department or the municipality administering and enforcing this code. The department, or the municipality administering and enforcing this code, shall perform the requested inspection within 2 business days after notification, except the final inspection. Construction shall not proceed beyond the point of inspection until the inspection has been completed. Construction may proceed if the inspection has not taken place within 2 business days of the notification, except if otherwise agreed between the applicant and the department or the municipality administering and enforcing the code.

(b) *Inspection types.* The following sequence of inspections shall be performed for the purpose of determining if the work complies with this code:

1. **Footing and foundation inspection.** The excavation shall be inspected after the placement of forms, shoring and reinforcement, where required, and prior to the placement of footing materials. Where below-grade drain tiles, waterproofing or exterior insulation is required, the foundation shall be inspected prior to backfilling.

2. **Rough inspection.** A rough inspection shall be performed for each inspection category listed in subpars. a. through e. after the rough work is constructed but before it is concealed. All categories of work for rough inspections may be completed before the notice for inspection is provided. The applicant may request one rough inspection or individual rough inspections. A separate fee may be charged for each individual inspection.

a. General construction, including framing.

b. Rough electrical.

c. Rough plumbing.

d. Rough heating, ventilating and air conditioning.

e. Basement drain tiles.

3. Insulation inspection. An inspection shall be made of the insulation and vapor retarder after they are installed but before they are concealed.

4. Final inspection. The dwelling may not be occupied until a final inspection has been made which finds that no violations of this code exist that could reasonably be expected to affect the health and safety of the occupant.

a. The basement portion of the dwelling may be occupied prior to completion of the dwelling, but only if the basement portion to be occupied would otherwise comply with the provisions of this code, particularly those relating to construction of underground dwellings.

(c) *Notice of compliance or noncompliance.* Notice of compliance or non-compliance shall be written on the building permit and posted at the job site. Upon finding of noncompliance, the department or the municipality enforcing this code shall notify the applicant and the owner, in writing, of the violations to be corrected. The department or municipality shall order all cited violations corrected within 30 days after written notification, unless an extension of time is granted pursuant to s. ILHR 20.21. The department or municipality shall order all cited violations of erosion control procedures under s. ILHR 21.125 corrected within 72 hours after written notification and may issue a special order directing an immediate cessation of work for failure to comply with the corrective order. Work may progress if the conditions of the cessation orders have been met.

(2) **VOLUNTARY INSPECTION.** The department or its authorized representative may, at the request of the owner or the lawful occupant, enter and inspect dwellings, subject to the provisions of this code, to ascertain compliance with this code.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; am. (1) (a), Register, February, 1985, No. 350, eff. 3-1-85; cr. (1) (b) 2. f., Register, January, 1989, No. 397, eff. 2-1-89; correction (1) (b) 2. intro. made under s. 13.93 (2m) (b) 4, Stats., Register, January, 1989, No. 397; r. (1) (b) 2. e., renum. (1) (b) 2. f. and 3. and (3) to be (1) (b) 2. e. and 4. and (2), cr. (1) (b) 3., Register, March, 1992, No. 435, eff. 4-1-92; am. (1) (c), Register, September, 1992, No. 441, eff. 12-1-92.

ILHR 20.11 Suspension or revocation of Wisconsin uniform building permit. The department, or the municipality administering and enforcing this code, may suspend or revoke any Wisconsin uniform building permit where it appears that the permit or approval was obtained through fraud or deceit, where the applicant has willfully refused to correct a violation order or where the inspector is denied access to the premises. No construction shall take place on the dwelling after suspension or revocation of the permit.

(1) Any person aggrieved by a determination made by the municipality exercising jurisdiction may appeal the decision in accordance with s. ILHR 20.21.

(2) Any person aggrieved by a determination made by the department may appeal the decision in accordance with s. ILHR 20.21.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80.
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Subchapter V — Approval and Inspection of Manufactured Dwellings and Their Components

ILHR 20.12 Scope. This part shall govern the design, manufacture, installation and inspection of manufactured dwellings, manufactured building systems and the components of the building systems displaying the Wisconsin insignia.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80.

ILHR 20.13 Manufacture, sale and installation of dwellings. (1) **MANUFACTURE AND SALE.** No manufactured dwelling, manufactured building system or component of the building system subject to this part shall be manufactured for use, sold for initial use or installed in this state unless it is approved by the department and it bears the Wisconsin insignia issued or a state seal or an insignia reciprocally recognized by the department.

(2) **INSTALLATION.** A Wisconsin uniform building permit shall be obtained in accordance with the procedures outlined in s. ILHR 20.09 (1), (2), (3) and (4) (a) 1. before any on-site construction falling within the scope of this code is commenced for a manufactured dwelling. The permit shall be issued in accordance with s. ILHR 20.09 (5) (b) 1.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80.

ILHR 20.14 Approval procedures. (1) **APPLICATION FOR APPROVAL.** An application for the approval of any manufactured dwelling, building system or component shall be submitted to the department, in the form required by the department, along with the appropriate fees in accordance with s. Ind 69.21. The department shall review and make a determination on an application for approval of a manufactured dwelling within 3 months of receipt of all forms, fees, plans and documents required to complete the review.

(2) **APPROVAL OF BUILDING SYSTEMS AND COMPONENTS.** (a) *Approval of building systems.* 1. Plans and specifications. All plans and specifications shall be submitted to the department according to subpar. a. or b.:

a. Three complete sets of building, structural, mechanical and electrical plans, (including elevations, sections and details), specifications and calculations shall be submitted to the department on behalf of the manufacturer for examination and approval.

b. At least one complete set of building, structural, mechanical and electrical plans, (including elevations, sections and details), specifications and calculations shall be submitted to the department on behalf of a manufacturer by an independent inspection/evaluation agency certified under s. ILHR 26.14. All plans and specifications submitted to the department shall be stamped "conditionally approved" by the independent inspection/evaluation agency.

2. Compliance assurance program. Three sets of the compliance assurance program shall be submitted for examination and approval. The compliance assurance program submitted to the department on behalf of the manufacturer shall meet the standards of the NBS "Model Rules and Regulations" [ILHR 20.24 (3)] or their equivalent as determined by the department.

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(b) *Approval of building components.* 1. Plans and specifications. All plans and specifications shall be submitted to the department according to subpar. a. or b.:

a. At least 3 complete sets of plans and specifications for manufactured dwelling building components shall be submitted to the department on behalf of the manufacturer for examination and approval.

b. At least one complete set of plans and specifications for manufactured dwelling building components shall be submitted to the department on behalf of the manufacturer by an independent inspection/evaluation agency certified as required in s. ILHR 26.14. All plans and specifications submitted to the department shall be stamped "conditionally approved" by the independent inspection/evaluation agency.

2. Compliance assurance program. Three sets of the compliance assurance program shall be submitted to the department on behalf of the manufacturer for examination and approval of components. The compliance assurance program shall meet the requirements established by the department or, where applicable, be in the form of the NBS "Model Rules and Regulations" [ILHR 20.24 (3)].

(3) NOTIFICATION OF APPROVAL OR DENIAL OF PLANS, SPECIFICATIONS AND COMPLIANCE ASSURANCE PROGRAM. (a) *Conditional approval.* If the department determines that the plans, specifications, compliance assurance program and application for approval submitted for such building system or component substantially conform to the provisions of this code, a conditional approval shall be issued. A conditional approval issued by the department shall not constitute an assumption of any liability for the design or construction of the manufactured building.

1. Written notice. The conditional approval shall be in writing and sent to the manufacturer and the person submitting the application for approval. Any noncompliance specified in the conditional approval shall be corrected before the manufacture, sale or installation of the dwelling, building system or component.

2. Stamping of plans, specifications and compliance assurance program. Approved plans, specifications and compliance assurance programs shall be stamped "conditionally approved." At least 2 copies shall be returned to the person designated on the application for approval; one copy shall be retained by the department.

(b) *Denial.* If the department determines that the plans, specifications, compliance assurance program or the application for approval do not substantially conform to the provisions of this code, the application for approval shall be denied.

1. Written notice. The denial shall be in writing and sent to the manufacturer and the person submitting the application for approval. The notice shall state the reasons for denial.

2. Stamping of plans, specifications and compliance assurance program. Plans, specifications and compliance assurance programs shall be stamped "not approved." At least 2 copies shall be returned to the person submitting the application for approval; one copy shall be retained by the department.

(4) EVIDENCE OF APPROVAL. The manufacturer shall keep at each manufacturing plant where such building system or component is manufactured, one set of plans, specifications and compliance assurance program bearing the stamp of conditional approval. The conditionally approved plans, specifications and compliance assurance program shall be available for inspection by an authorized representative of the department during normal working hours.

(5) INSPECTIONS. Manufacturers shall contract with the department or an independent inspection agency to conduct in-plant inspections to assure that the building system and components manufactured are in compliance with the plans, specifications and the compliance assurance program approved by the department. All inspections, for the purpose of administering and enforcing this code, shall be performed by a certified inspector or certified independent inspection agency.

(6) WISCONSIN INSIGNIA. Upon departmental approval of the plans, specifications and compliance assurance program, and satisfactory in-plant inspections of the building system and components, Wisconsin insignias shall be purchased from the department in accordance with the fee established in s. ILHR 2.34. A manufacturer shall be entitled to display the Wisconsin insignia on any approved system or component.

(a) *Lost or damaged insignia.* 1. Notification. If Wisconsin insignias become lost or damaged, the department shall be notified immediately, in writing, by the manufacturer or dealer.

2. Return of damaged insignias. If Wisconsin insignias become damaged, the insignia shall be returned to the department with the appropriate fee to obtain a new insignia.

(b) *Affixing Wisconsin insignias.* Each Wisconsin insignia shall be assigned and affixed to a specific manufactured dwelling or component in the manner approved by the department before the dwelling is shipped from the manufacturing plant.

(c) *Insignia records.* 1. Manufacturer's insignia records. The manufacturer shall keep permanent records regarding the handling of all Wisconsin insignias, including construction compliance certificates, indicating the number of Wisconsin insignias which have been affixed to manufactured dwellings or manufactured building components (or groups of components); which Wisconsin insignias have been applied to which manufactured dwelling or manufactured building component; the disposition of any damaged or rejected Wisconsin insignias; and the location and custody of all unused 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.

2. Construction compliance certificate. Within 30 days after receiving the original Wisconsin insignias from the department, and at the end of each month thereafter, the manufacturer shall submit a construction compliance certificate, in the form determined by the department, for each manufactured dwelling intended for sale, use or installation in the state.

(d) *Unit identification.* Each manufactured dwelling and major transportable section or component shall be assigned a serial number. The serial number shall be located on the manufacturer's data plate.

(e) *Manufacturer's data plate.* The manufacturer's data plate for building systems shall contain the following information, where applicable:

1. Manufacturer's name and address;
2. Date of manufacture;
3. Serial number of unit;
4. Model designation;
5. Identification of type of gas required for appliances and directions for water and drain connections;
6. Identification of date of the codes or standards complied with;
7. State insignia number;
8. Design loads;
9. Special conditions or limitations of unit;
10. Electrical ratings; instructions and warnings on voltage, phase, size and connections of units and grounding requirements.

(7) **RECIPROCITY.** Upon request, the department will make available to any person a list of those states whose dwelling codes are considered equal to the codes established by the department and whose products are accepted reciprocally by Wisconsin.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; am. (1) (a), r. and recr. (2) (a) 1. and (b) 1., Register, February, 1985, No. 350, eff. 3-1-85; correction in (6) (intro.) made under s. 13.93 (2m) (b) 7, Stats., Register, September, 1992, No. 441.

ILHR 20.15 Effect of approval. (1) **RIGHT TO BEAR INSIGNIA.** A manufactured dwelling or building component approved by the department, manufactured and inspected in accordance with this code, shall be entitled to bear the Wisconsin insignia.

(2) **EFFECT OF INSIGNIA.** Manufactured dwellings and manufactured building components bearing the Wisconsin insignia are deemed to comply with this code, except as to installation site requirements, regardless of the provisions of any other ordinance, rule, regulation or requirement.

(3) **RIGHT TO INSTALL.** Manufactured dwellings and components bearing the Wisconsin insignia may be manufactured, offered for sale and shall be entitled to be installed anywhere in Wisconsin where the installation site complies with the other provisions of this code.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80.

ILHR 20.16 Suspension and revocation of approval. The department shall suspend or revoke its approval of a manufactured building system or manufactured building component if it determines that the standards for construction or the manufacture and installation of a manufactured building system or manufactured building component do not meet this code or that such standards are not being enforced as required by this code. The procedure for suspension and revocation of approval shall be as follows:

(1) **FILING OF COMPLAINT.** Proceedings to suspend or revoke an approval shall be initiated by the department or an independent inspection agency having a contract with the manufacturer whose approval is

sought to be suspended or revoked. Initiation shall be by a signed, written complaint filed with the department. Any alleged violation of the code shall be set forth in the complaint with particular reference to time, place and circumstance.

(2) **INVESTIGATION AND NOTIFICATION.** The department may investigate alleged violations on its own initiative or upon the filing of a complaint. If it is determined that no further action is warranted, the department shall notify the persons affected. If the department determines that there is probable cause, it shall order a hearing and notify the persons affected.

(3) **MAILING.** Unless otherwise provided by law, all orders, notices and other papers may be served by the department by certified mail to the persons affected at their last known address. If the service is refused, service may be made by sheriff without amendment of the original order, notice or other paper.

(4) **RESPONSE.** Upon receipt of notification of hearing from the department, the person charged with noncompliance or nonenforcement may submit to the department a written response within 30 days of the date of service. If the person charged files a timely written response, such person shall thereafter be referred to as the respondent.

(5) **CONCILIATION AGREEMENT PRIOR TO HEARING.** If the department and the respondent are able to reach agreement on disposition of a complaint prior to hearing, such agreement shall:

- (a) Be transmitted in writing to the secretary;
- (b) Not be binding upon any party until signed by all parties and accepted by the secretary;
- (c) Not be considered a waiver of any defense nor an admission of any fact until accepted by the secretary.

(6) **HEARINGS.** (a) *Subpoenas; witness fees.* Subpoenas shall be signed and issued by the department or the clerk of any court of record. Witness fees and mileage of witnesses subpoenaed on behalf of the department shall be paid at the rate prescribed for witnesses in circuit court.

(b) *Conduct of hearings.* All hearings shall be conducted by persons selected by the department. Persons so designated may administer oaths or affirmations and may grant continuances and adjournments for cause shown. The respondent shall appear in person and may be represented by an attorney-at-law. Witnesses may be examined by persons designated by all parties.

(7) **FINDINGS.** The department shall make findings and enter its order within 14 days of the hearing. Any findings as a result of petition or hearing shall be in writing and shall be binding unless appealed to the secretary.

(8) **APPEAL ARGUMENTS.** Appeal arguments shall be submitted to the department in writing in accordance with ch. 227, Stats., unless otherwise ordered. The department shall review and make a determination on

an appeal of notification of suspension or revocation of approval within 45 business days of receipt of the appeal.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; am. (8), Register, February, 1985, No. 350, eff. 3-1-85.

ILHR 20.17 Effect of suspension and revocation. (1) **BEARING OF INSIGNIA.** Upon suspension or revocation by the department of the approval of any manufactured dwelling or manufactured building component, no further insignia shall be attached to any dwelling or building component manufactured with respect to which the approval was suspended or revoked. Upon termination of such suspension or revocation, insignias may again be attached to the dwelling or building component manufactured after the date approval is reinstated. Should any dwelling or building component have been manufactured during the period of suspension or revocation, it shall not be entitled to bear the Wisconsin insignia unless the department has inspected, or caused to be inspected, such manufactured dwelling or manufactured building component and is satisfied that all requirements for certification have been met.

(2) **RETURN OF INSIGNIAS.** The manufacturer shall return to the department all insignias allocated for a manufactured dwelling or manufactured building component no later than 30 days from the effective date of any suspension or revocation of the approval by the department. The manufacturer shall also return to the department all insignias which it determines for any reason are no longer needed.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80.

Subchapter VI — Approval of Materials

ILHR 20.18 Materials. (1) **ALTERNATE MATERIALS.** No provision in this code is intended to prohibit or prevent the use of any alternate material or method of construction not specifically mentioned in this code. Approval of alternate materials or methods of construction shall be obtained from the department. Requests for approval shall be accompanied by evidence showing that the alternate material or method of construction performs in a manner equal to or superior to the material or method required by the code. The department may require any claims made regarding the equivalent performance of alternate materials or methods to be substantiated by test.

(a) *Tests.* The department may require that the materials, methods, systems, components, or equipment be tested to determine the suitability for the intended use. The department will accept results of tests conducted by a recognized independent testing agency. The cost of testing shall be borne by the person requesting the approval.

1. The test method used to determine the performance shall be one that is a nationally recognized standard.

2. If no nationally recognized standard exists, past performance or recognized engineering analysis may be used to determine suitability.

(2) **UNGRADED OR USED MATERIALS.** Ungraded or used building materials may be used or reused as long as the material possesses the essential properties necessary to achieve the level of performance required by the code for the intended use. The department or the municipality enforcing this code may require tests in accordance with sub.(1) (a).

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(3) **MATERIAL APPROVAL PROCESSING TIME.** The department shall review and make a determination on an application for material, equipment or device approval within 30 business days of receipt of all forms, fees, plans and documents required to complete the review.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; cr. (3), Register, February, 1985, No. 350, eff. 3-1-85.

Subchapter VII — Variances, Appeals, Violations and Penalties

ILHR 20.19 Individual variance from a specific rule. The department may grant an individual variance to a specific rule only if the granting of such 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, but not limited to, the effect of granting the variance on statewide and local uniformity.

(1) **APPLICATION FOR VARIANCE.** The applicant shall submit the application for variance 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 code 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) A fee to be determined by the department or the municipality exercising jurisdiction. Where the municipality administers and enforces the code, the department may require a fee for the processing of the application in addition to any municipal fee.

Note: A copy of the Petition for Variance Application form (SB-8) is contained in the Appendix.

(2) **MUNICIPAL RECOMMENDATION.** The municipality administering and enforcing this code shall submit all applications for variance to the department, together with a municipal recommendation concerning whether or not a variance should be granted within 10 days, excluding Saturdays, Sundays and legal holidays, after the receipt of the application. The recommendation of the municipality shall include, but not be limited to, the following items:

(a) What inspections, if any, have actually taken place with regard to the dwelling for which a variance is requested;

(b) Whether or not any correction orders have been issued with regard to the dwelling; and

(c) Whether the granting of the variance would substantially affect the health, safety or welfare of any individual within the municipality.

Note: A copy of the Municipal Recommendation form (SBD-6071) is contained in the Appendix.

(3) **DEPARTMENTAL ACTION.** Where a municipality administers and enforces the code, the department shall approve or deny applications for variance and shall mail said notification to the municipality and the applicant within 5 days, excluding Saturdays, Sundays and legal holidays,

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after receipt of the application for variance and recommendation is received from the municipality. Where the department administers and enforces the code, the department shall approve or deny applications for variance and shall mail said notification to the applicant within 15 days, excluding Saturdays, Sundays and legal holidays, after receipt of the application and fees by the department.

(4) **APPEALS.** Any aggrieved applicant, or the municipality administering and enforcing the code, may appeal the determination of the department in the manner set out in s. 101.02 (6) (e) to (i) and (8), Stats.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80.

ILHR 20.20 Municipal variance from the code. Any municipality exercising or intending to exercise jurisdiction under this code may apply to the department for a variance permitting the municipality to adopt an ordinance not in conformance with this code. The department shall review and make a determination on a municipal request to adopt an ordinance not in conformance with this code within 60 business days of receipt of the request.

(1) **APPLICATION FOR VARIANCE.** The department may grant an application only under the following circumstances:

(a) The municipality has demonstrated that the variance is necessary to protect the health, safety or welfare of individuals within the municipality because of specific climate or soil conditions generally existing within the municipality.

(b) The municipality has demonstrated 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 code.

(2) **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 or not said application should be granted.

(3) **APPEALS.** Any municipality aggrieved by the denial of an application may appeal the determination in accordance with the procedure set out in s. 101.02 (6) (e) to (i) and (8), Stats. The department shall review and make a determination on an appeal of denial of a municipal request to adopt an ordinance not in conformance with this code within 60 business days of receipt of the appeal.

(4) **UNIFORMITY.** This section shall be strictly construed in accordance with the goal of promoting statewide uniformity.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; am. (intro.) and (3), Register, February, 1985, No. 350, eff. 3-1-85.

ILHR 20.21 Appeals of orders, determinations, and for extension of time.

(1) **APPEALS OF ORDERS AND DETERMINATIONS BY A MUNICIPALITY EXERCISING JURISDICTION.** Appeals of an order or determination of a municipality exercising jurisdiction under this code, including denials of application for permits, shall be made in accordance with the procedure set out in ch. 68, Stats., except as follows:

(a) *Appeals of final determinations by a municipality exercising jurisdiction.* Appeals of final determination by municipalities shall be made to Register, September, 1992, No. 441

the department after the procedures prescribed in ch. 68, Stats., have been exhausted. All appeals 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.

Note: Chapter 68, Stats., provides that municipalities may adopt alternate administrative appeal procedures that provide the same due process rights as ch. 68, Stats. Municipalities having adopted such alternate procedures may follow those alternate procedures.

(2) **APPEALS OF ORDERS AND DETERMINATIONS BY THE DEPARTMENT.** Appeals of an order of the department made pursuant to the provisions of this code, including denials of application for permits, shall be in accordance with the procedure set out 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) The time for correction of cited orders as set out in s. ILHR 20.10 shall automatically be extended in the event that an appeal of said orders is filed. The extension of time shall extend to the termination of the appeal procedure and for such additional time as the department or municipality administering and enforcing this code may allow.

(b) The department or municipality administering and enforcing this code may grant additional reasonable time in which to comply with a violation order.

(4) **APPEALS OF SOIL EROSION CONTROL ORDERS BY A MUNICIPALITY FOR CESSATION OF WORK.** (a) Appeals of orders for cessation of work issued under s. ILHR 20.10 (1) (c) may be made to the authority issuing the cessation of work order. The authority shall make a determination on such appeal within 3 business days. Determination of appeals by a municipality may be conducted in consultation with the department.

(b) Appeals of a final determination by a municipality on cessation of work orders may be made to the department. The department shall issue a final determination on the appeal within 3 business days after receipt of such appeal.

(c) If the issuing authority determines the site to be compliant with s. ILHR 21.125, orders shall be rescinded and work may commence.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; am. (1) (a) and (2), Register, February, 1985, No. 350, eff. 3-1-85; cr. (4), Register, September, 1992, No. 441, eff. 12-1-92.

ILHR 20.22 Penalties and violations. (1) **VIOLATIONS.** No person shall construct or alter any dwelling in violation of any of the provisions of this code.

(a) *Injunction.* When violations occur, the department may bring legal action to enjoin any violations.

(b) *Ordinances.* This code shall not affect the enforcement of any ordinance or regulation, the violation of which occurred prior to the effective date of this code.

(2) **PENALTIES.** Pursuant to ss. 101.66 and 101.77, Stats., whoever violates this code shall forfeit to the state not less than \$25 nor more than \$500 for each violation. Each day that the violation continues, after notice, shall constitute a separate offense.

(3) **MUNICIPAL ENFORCEMENT.** Any municipality which administers and enforces this code may provide, by ordinance, remedies and penalties for violation of that jurisdiction exercised under s. 101.65, Stats. These remedies and penalties shall be in addition to those which the state may impose under subs. (1) and (2).

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; am. (3), Register, March, 1992, No. 435, eff. 4-1-92.

Subchapter IX — Adoption of Standards

ILHR 20.24 Adoption of standards. All dwellings shall be required to be designed by the method of structural analysis or the method of accepted practice outlined in chs. ILHR 20 to 25. Dwellings designed by the method of structural analysis shall comply with the standards and manuals listed in subs. (1) to (6). Pursuant to s. 227.21 (2), Stats., the attorney general and the revisor of statutes have consented to the incorporation by reference of the following standards. Copies of the standards are on file in the offices of the department, the secretary of state and the revisor of statutes. Copies for personal use may be obtained, at a reasonable cost, from the organizations listed.

(1) American Institute of Steel Construction, One E. Wacker Drive, Suite, 3100, Chicago, IL 60601, SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, ALLOWABLE STRESS DESIGN AND PLASTIC DESIGN, WITH COMMENTARY, June 1, 1989.

(2) American Concrete Institute (ACI), P.O. Box 19150, Redford Station, Detroit, Michigan 48219, BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318-89; BUILDING CODE REQUIREMENTS FOR STRUCTURAL PLAIN CONCRETE, ACI 318.1-89.

(2k) American Society for Testing and Materials (ASTM), 1916 Race Street, Philadelphia, Pennsylvania 19103, STANDARD SPECIFICATION FOR MORTAR FOR UNIT MASONRY, ASTM Designation C270-88; STANDARD SPECIFICATION FOR ASPHALT-SATURATED ORGANIC FELT USED IN ROOFING AND WATER PROOFING, ASTM Designation D226-87; STANDARD PRACTICE FOR MEASURING AIR LEAKAGE BY THE FAN PRESSURIZATION METHOD, ASTM Designation E779-87.

(2m) American Society of Heating, Refrigerating, and Air-conditioning Engineers, Inc. (ASHRAE), 1791 Tullie Circle, N.E., Atlanta, Georgia 30329, ENERGY CONSERVATION IN NEW BUILDING DESIGN, ASHRAE Standard 90A-80; ASHRAE HANDBOOK, FUNDAMENTALS, 1989 edition.

(2p) American Wood Preservers Association (AWPA), P.O. Box 849, Stevensville, Maryland 21666, STANDARD FOR COAL TAR CREOSOTE FOR LAND AND FRESH WATER AND MARINE (COASTAL WATER) USE, P1/P13-89; STANDARD FOR CREOSOTE SOLUTIONS, P2-89; STANDARD FOR CREOSOTE-

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PETROLEUM OIL SOLUTION, P3-67; STANDARDS FOR WATERBORNE PRESERVATIVES, P5-90; STANDARDS FOR OIL-BORNE PRESERVATIVES, P8-90; STANDARDS FOR SOLVENTS AND FORMULATIONS FOR ORGANIC PRESERVATIVE SYSTEMS, P9-87; ALL TIMBER PRODUCTS - PRESERVATIVE TREATMENT BY PRESSURE PROCESSES, C1-90; LUMBER, TIMBERS, BRIDGE TIES AND MINE TIES - PRESERVATIVE TREATMENT BY PRESSURE PROCESSES, C2-90; PILES - PRESERVATIVE TREATMENT BY PRESSURE PROCESSES, C3-90; POLES - PRESERVATIVE TREATMENT BY PRESSURE PROCESSES, C4-90; PLYWOOD - PRESERVATIVE TREATMENT BY PRESSURE PROCESSES, C9-90; STANDARD FOR PRESSURE TREATED MATERIAL IN MARINE CONSTRUCTION, C18-90; ROUND POLES AND POSTS USED IN BUILDING CONSTRUCTION - PRESERVATIVE TREATMENT BY PRESSURE PROCESSES, C23-84; SAWN TIMBER PILES USED FOR RESIDENTIAL AND COMMERCIAL BUILDING, C24-86; STANDARD FOR PRESERVATIVE TREATMENT OF STRUCTURAL GLUED LAMINATED MEMBERS AND LAMINATIONS BEFORE GLUING OF SOUTHERN PINE, PACIFIC COAST DOUGLAS FIR, HEMFIR AND WESTERN HEMLOCK BY PRESSURE PROCESSES, C28-90; and STANDARD FOR THE CARE OF PRESERVATIVE-TREATED WOOD PRODUCTS, M4-90.

(2s) American Wood Preservers Bureau (AWPB), 2772 South Randolph Street, P.O. Box 6085, Arlington, Virginia 22206, STANDARD FOR SOFTWOOD LUMBER, TIMBER AND PLYWOOD PRESURE TREATED WITH WATER-BORNE PRESERVATIVES FOR GROUND CONTACT USE, AWPB STANDARDS LP-22, 1988; QUALITY CONTROL PROGRAM FOR SOFTWOOD LUMBER, TIMBER AND PLYWOOD PRESURE TREATED WITH WATER-BORNE PRESERVATIVES FOR GROUND CONTACT USE IN RESIDENTIAL AND LIGHT COMMERCIAL FOUNDATIONS, AWPB Standard FDN, 1988.

(3) National Bureau of Standards, U.S. Department of Commerce, Washington, D.C. 20234, MODEL DOCUMENTS FOR THE EVALUATION, APPROVAL, AND INSPECTION OF MANUFACTURED BUILDINGS, NBS Building Science Series 87, July 1976.

(3m) National Fire Protection Association, Batterymarch Park, Quincy, Mass. 02269, NATIONAL FUEL GAS CODE, NFPA No. 54-1988.

(4) National Forest Products Association, 1250 Connecticut Avenue N.W., Washington, D.C. 20036, NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION, 1986 edition, except for section 4.1.7., including DESIGN VALUES FOR WOOD CONSTRUCTION, 1988, supplement; THE PERMANENT WOOD FOUNDATION SYSTEM, Basic Requirements, Technical Report No. 7, January, 1987, except for section 3.3.1.

(5) Portland Cement Association, 5420 Old Orchard Road, Skokie, Illinois 60077, CONCRETE MASONRY HANDBOOK FOR ARCHITECTS, ENGINEERS, BUILDERS, fifth edition, 1991.

(6) Truss Plate Institute, Inc., 583 D'Onofrio Drive, Madison, Wisconsin 53719, DESIGN SPECIFICATION FOR METAL PLATE

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CONNECTED WOOD TRUSSES, TPI-85; DESIGN SPECIFICATION FOR METAL PLATE CONNECTED PARALLEL CHORD WOOD TRUSSES, PCT-80.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; am. (intro.) and (2), cr. (2m) and (2n), r. and recr. (4), Register, February, 1985, No. 350, eff. 3-1-85; renum. (2m) to be (2k) and am., cr. (2m), Register, July, 1986, No. 367, eff. 1-1-87; am. (intro.), (1), (2k) and (4), r. (2n), cr. (2p), (2s) and (3m), Register, January, 1989, No. 397, eff. 2-1-89; am. (intro.), (1), (2), (2k), (2m), (2p), (2s), (3m), (4), (5), cr. (6), Register, March, 1992, No. 435, eff. 4-1-92.

Chapter ILHR 21

CONSTRUCTION STANDARDS

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ILHR 21.01 Scope (p. 27)	ILHR 21.17 Drain tiles (p. 45)
Subchapter II—Design Criteria	Subchapter V—Foundations
ILHR 21.02 Loads and materials (p. 27)	ILHR 21.18 Foundations (p. 47)
ILHR 21.03 Exits, doors and hallways (p. 31)	Subchapter VI—Floors
ILHR 21.04 Stairs and elevated areas (p. 33)	ILHR 21.19 Floor design (p. 50)
ILHR 21.042 Ladders (p. 35)	ILHR 21.20 Concrete floors (p. 51)
ILHR 21.045 Ramps (p. 36)	ILHR 21.205 Wood floors in contact with ground (p. 51)
ILHR 21.05 Light and ventilation (p. 37)	ILHR 21.21 Precast concrete floors (p. 51)
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ILHR 21.08 Firestopping and fire separation (p. 38)	Subchapter VII—Walls
ILHR 21.09 Smoke detectors (p. 41)	ILHR 21.23 Wall design (p. 59)
ILHR 21.10 Protection against decay and termites (p. 41)	ILHR 21.24 Exterior covering (p. 59)
ILHR 21.11 Foam plastic insulation (p. 42)	ILHR 21.25 Wood frame walls (p. 59)
Subchapter III—Excavations	ILHR 21.26 Masonry walls (p. 62)
ILHR 21.12 Grade (p. 43)	Subchapter VIII—Roof and Ceilings
ILHR 21.125 Erosion control procedures (p. 43)	ILHR 21.27 Roof design (p. 68)
ILHR 21.13 Excavations adjacent to adjoining property (p. 44)	ILHR 21.28 Roof and ceiling wood framing (p. 69)
ILHR 21.14 Excavations for footings and foundations (p. 44-1)	Subchapter IX—Fireplace Requirements
Subchapter IV—Footings	ILHR 21.29 Masonry fireplaces (p. 71)
ILHR 21.15 Footings (p. 44-1)	ILHR 21.30 Masonry chimneys (p. 73)
	ILHR 21.32 Factory-built fireplaces (p. 74)

Note: Chapter Ind 21 was renumbered to be chapter ILHR 21, Register, February, 1985, No. 350, eff. 3-1-85.

Subchapter I — Scope

ILHR 21.01 Scope. The provisions of this chapter shall apply to the design and construction of all one- and 2-family dwellings.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80.

Subchapter II — Design Criteria

ILHR 21.02 Loads and materials. Every dwelling shall be designed and constructed in accordance with the requirements of this section.

(1) **DESIGN LOAD.** Every dwelling shall be designed and constructed to support the actual dead load, live loads and wind loads acting upon it without exceeding the allowable stresses of the material.

(a) *Dead loads.* Every dwelling shall be designed and constructed to support the actual weight of all components and materials. Earth-sheltered dwellings shall be designed and constructed to support the actual weight of all soil loads.

(b) *Live loads.* 1. Floors and ceilings. Floors and ceilings shall be designed and constructed to support the minimum live loads listed in Table

21.02. The design load shall be applied uniformly over the component area.

TABLE 21.02

Component	Live Load (pounds per sq. ft.)
Floors	40
Garage floors	50
Exterior balconies, decks, porches	40
Ceilings (with storage)	20
Ceilings (without storage)	5

2. Snow loads. Roofs shall be designed and constructed to support the minimum snow loads listed on the zone map. The loads shall be assumed to act vertically over the roof area projected upon a horizontal plane.

(c) *Wind loads.* Every dwelling shall be designed and constructed to withstand a horizontal and uplift pressure of 20 pounds per square foot acting over the surface area.

(d) *Fasteners.* All building components shall be fastened to withstand the dead load, live load and wind load. Where the effect of the dead load exceeds the wind load effect, the dwelling need not be anchored to the foundation.

Note: See the Appendix for a schedule of fasteners that will be acceptable to the department for compliance with this subsection. Other fastening methods may be allowed if engineered under s. ILHR 21.02 (3).

(c) *Roofs.* Roof coverings may be applied over foam plastic insulation where the interior of the dwelling is separated from the foam plastic insulation by plywood sheathing, oriented strand board, particle board or waferboard at least 15/32-inch in thickness, or other approved 15-minute thermal barrier materials.

(d) *Doors.* Foam plastic insulation having a flame-spread rating of 75 or less may be used in doors when the door facing is of metal having a minimum thickness of 0.032-inch aluminum or No. 26 gauge sheet metal.

(2) **SPECIFIC APPROVAL.** Foam plastic insulation not meeting the requirements of this section may be approved by the department based upon diversified tests which evaluate materials or assemblies representative of actual end use applications.

Note: Approved diversified tests may include, but are not limited to: ASTM E-84 (tunnel test), ASTM E-19 fire test, full-scale corner test, enclosed room corner test and ignition temperature test.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80; am. (1) (b), Register, January, 1989, No. 397, eff. 2-1-89; r. and recr. (1) (intro.), am. (1) (a), renum. (1) (b) and (c) to be (1) (c) and (d) and am. (1) (c), cr. (1) (b), Register, March, 1992, No. 435, eff. 4-1-92.

Subchapter III — Excavations

ILHR 21.12 Grade. The grade shall slope away from the dwelling to provide drainage away from the dwelling.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80.

ILHR 21.125 Erosion control procedures. (1) **PERFORMANCE STANDARDS.** (a) *General.* Erosion control procedures shall be placed along downslope areas and along sideslope areas as required to prevent or reduce erosion where erosion during construction will result in a loss of soil to waters of the state, public sewer inlets or off-site. The best management practices as defined in s. ILHR 20.07 (8m) or alternative measures that provide equivalent protection to these standards may be utilized to satisfy the requirements of this section. When the disturbed area is stabilized, the erosion control procedures may be removed. Sites within subdivisions with approved subdivision erosion control plans are exempt from erosion control procedures specified in this section when the subdivision erosion control plan includes adequate best management practices specified in sub. (2) for erosion control on individual construction sites.

(b) *Tracking.* Sediment tracked by construction equipment from a site onto a public or private paved roadway or sidewalk shall be minimized by providing a gravel access roadway where possible.

(c) *Sediment cleanup.* Off-site sediment deposition occurring as a result of a storm event shall be cleaned up by the end of the next work day following the occurrence. All other off-site sediment deposition occurring as a result of construction activities shall be cleaned up at the end of the work day.

(d) *Public sewer inlet protection.* Downslope, on-site public sewer inlets shall be protected with erosion control procedures.

(e) *Building material waste disposal.* All building material waste shall be properly managed and disposed of to prevent pollutants and debris from being carried off the site by runoff.

Note: For proper disposal of flammable, combustible and hazardous liquids, contact the local fire department.

(2) **BEST MANAGEMENT PRACTICES.** (a) *General.* Appropriate best management practices, as defined in s. ILHR 20.07 (8m) or specified in chapter 3, Wisconsin Construction Site Best Management Practices Handbook, published by the department of natural resources, may be selected, installed, maintained and remain in place until the site is stabilized to meet the performance standards specified in sub. (1).

Note: The best management practices for slopes is covered under section B. 1, chapter 3, Wisconsin Construction Site Best Management Practices Handbook. For a reprint, see Table E-1 in Appendix E.

(b) *Exceptions and clarification.* All references to a model ordinance and planning considerations within chapter 3, Wisconsin Construction Site Best Management Practices Handbook, are not adopted by the department.

(3) **MAINTENANCE OF EROSION CONTROL PROCEDURES.** (a) *General.* During the period of construction at a site, all erosion control procedures necessary to meet the performance standards of this section shall be properly implemented, installed and maintained by the building permit applicant or subsequent landowner. If erosion occurs after building construction activities have ceased, some or all of the erosion control procedures shall be maintained until the site has been stabilized.

(b) *Exceptions and clarification.* The maintenance procedures and inspection sequences within chapter 3, Wisconsin Construction Site Best Management Practices Handbook, are not adopted as a part of this code.

Note: The handbook is available from Document Sales, 202 South Thorton Avenue, P.O. Box 7840, Madison, Wisconsin 53707-3480; phone (608) 266-3358.

History: Cr. Register, September, 1992, No. 441, eff. 12-1-92.

ILHR 21.13 Excavations adjacent to adjoining property. (1) **NOTICE.** Any person making or causing an excavation which may affect the lateral soil support of adjoining property or buildings shall provide at least 30 days written notice to all owners of adjoining buildings of the intention to excavate. The notice shall state that adjoining buildings may require permanent protection.

(a) *Exception.* The 30-day time limit for written notification may be waived if such waiver is signed by the owner(s) of the adjoining properties.

(2) **RESPONSIBILITY FOR UNDERPINNING AND FOUNDATION EXTENSIONS.** (a) *Excavations less than 12 feet in depth.* If the excavation is made to a depth of 12 feet or less below grade, the person making or causing the excavation shall not be responsible for any necessary underpinning or extension of the foundations of any adjoining buildings.

(b) *Excavations greater than 12 feet in depth.* If the excavation is made to a depth in excess of 12 feet below grade, the owner(s) of adjoining buildings shall be responsible for any necessary underpinning or extension of the foundations of their buildings to a depth of 12 feet below grade. The person making or causing the excavation shall be responsible for any underpinning or extension of foundations below the depth of 12 feet below grade.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80.
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ILHR 21.14 Excavations for footings and foundations. (1) **EXCAVATIONS BELOW FOOTINGS AND FOUNDATIONS.** No excavation shall be made below the footing and foundation unless provisions are taken to prevent the collapse of the footing or foundation.

(2) **EXCAVATIONS FOR FOOTINGS.** All footings shall be located on undisturbed or compacted soil, free of organic material, unless the footings are reinforced to bridge poor soil conditions.

History: Cr. Register, November, 1979, No. 287, eff. 6-1-80.

Subchapter IV — Footings

ILHR 21.15 Footings. The dwelling shall be supported on a structural system designed to transmit and safely distribute the loads to the soil. The loads for determining the footing size shall include the weight of the live load, roof, walls, floors, pier or column, plus the weight of the structural system and the soil over the footing. Footings shall be sized to not exceed the allowable material stresses. The bearing area shall be at least equal to the area required to transfer the loads to the supporting soil without exceeding the bearing values of the soil.

(1) **SIZE.** Unless designed by structural analysis, unreinforced concrete footings shall comply with the following requirements:

(a) *Continuous footings.* The minimum width of the footing on each side of the foundation wall shall measure at least 4 inches wider than the wall. The footing depth shall be at least 8 inches nominal. Footing placed in unstable soil shall be formed. Lintels may be used in place of continuous footings when there is a change in footing elevation.

Note: Unstable soil includes soils which are unable to support themselves.

(b) *Column or pier footing.* The minimum width and length of column or pier footings shall measure at least 2 feet by 2 feet. The depth shall measure at least 12 inches nominal. The column shall be so placed as to provide equal projections on each side of the column.

(c) *Trench footings.* Footings poured integrally with the wall may be used when soil conditions permit. The minimum width shall be at least 8 inches nominal.

(d) *Chimney and fireplace footings.* Footing for chimneys or fireplaces shall extend at least 4 inches on each side of the chimney or fireplace. The minimum depth shall measure at least 12 inches nominal.

(e) *Floating slabs.* Any dwelling supported on a floating slab on grade shall be designed through structural analysis.

(f) *Deck footings.* Decks attached to dwellings and detached decks which serve an exit shall be supported on a structural system designed to transmit and safely distribute the loads to the soil. Footings shall be sized to not exceed the allowable material stresses. The bearing area shall be at least equal to the area required to transfer the loads to the supporting soil without exceeding the bearing values of the soil.

(2) **SOIL-BEARING CAPACITY.** No footing or foundation shall be placed on soil with a bearing capacity of less than 2,000 pounds per square foot unless the footing or foundation has been designed through structural

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ILHR 21

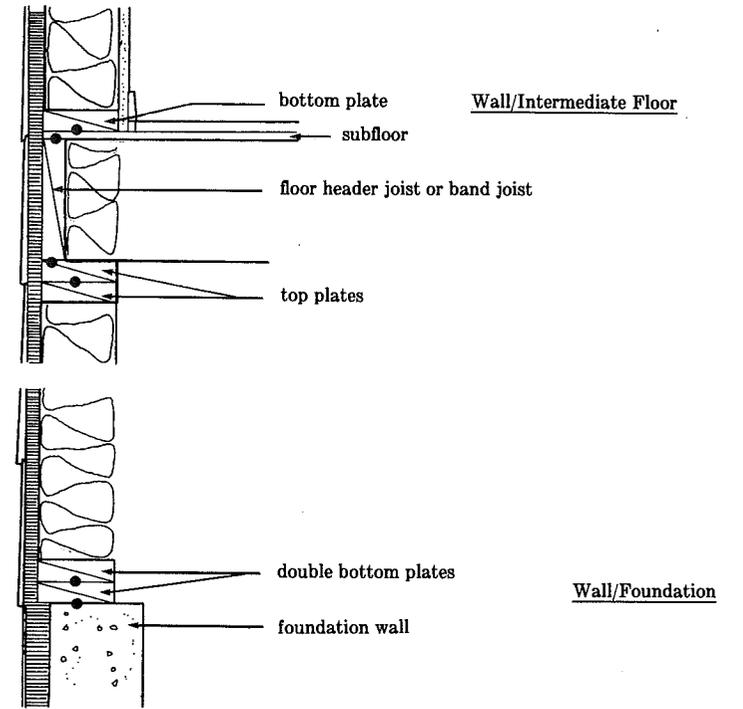
WISCONSIN ADMINISTRATIVE CODE

analysis. The soil-bearing values of common soils may be determined through soil identification.

Note: The department will accept the soil-bearing values for the types of soil listed in the following table:

Next page is numbered 45

ILHR 22.13 Infiltration Control for Electrically Heated Homes
(continued)



APPENDIX E

EROSION CONTROL PROCEDURES
EXAMPLES, ILLUSTRATIONS AND GUIDELINES

The following examples and illustrations of some erosion control procedures are provided for your information. Many of these examples and accompanying illustrations are excerpted from the "Wisconsin Construction Site Best Management Practices Handbook," developed by the Wisconsin department of natural resources. The illustrations, Figures E-1 to E-7, depict the materials, excavations and placement necessary for construction of some erosion control procedures outlined in this code.

Note: The handbook is available from Document Sales, 202 South Thornton Avenue, P.O. Box 7840, Madison, Wisconsin 53707-8480; phone (608) 266-3358.

Also included in this appendix are examples of plot plans depicting the requirements as specified in ss. ILHR 20.09 (4) (a) 1 and 21.125. Figure E-8 is an example of a site with a simple slope (all slopes occurring in one general direction); Figure E-9 is an example of a plot having complex slopes (slopes occurring in more than one direction). Figure E-10 is an example of a plot plan in which the location of the erosion control procedures are clearly indicated on the plot plan. Figure E-11 is an example of a large lot, greater than 5 acres, with slopes greater than 12% and where the area of land disturbing activity is indicated.

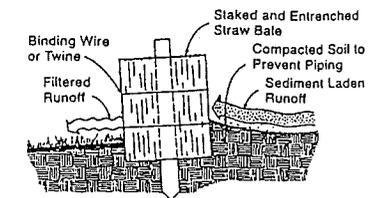
Guidelines for timing the implementation of the erosion control practices and procedures in order to stabilize areas disturbed during construction of one- and 2-family dwellings are also included in this appendix.

For sites with steeper slopes using either straw bales or silt fences, Table E-1 is included as a guide for determining the distance between parallel fences constructed on these slopes. On complex or steep slopes, fencing should be at right angles to the direction of flow, and placed parallel to the contour on other slopes.

TABLE E-1
DISTANCE BETWEEN PARALLEL
STRAW BALES OR SILT FENCES

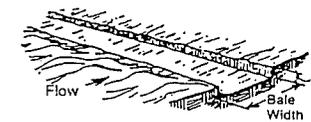
Slope Percent*	Slope Distance (feet)
12 to 20	25
20 or more	15

*Steep slopes are identified as having gradients greater than 12 percent.



Source: Michigan Soil Erosion and Sedimentation Control Guidebook, 1975.

1. Excavate a 4" deep trench.



2. Place bales in trench with bindings around sides away from the ground. Leave no gaps between bales.



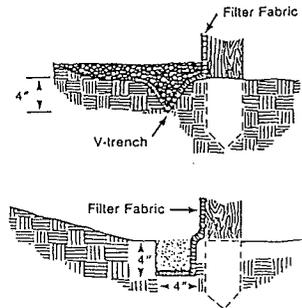
3. Anchor bales using two steel re-bars or 2" x 2" wood stakes per bale. Drive stakes into the ground at least 8".



4. Backfill and compact the excavated soil.



Figure E-1. Straw Bale Fences



Source: North Carolina Erosion and Sediment Control Planning and Design Manual, 1988.

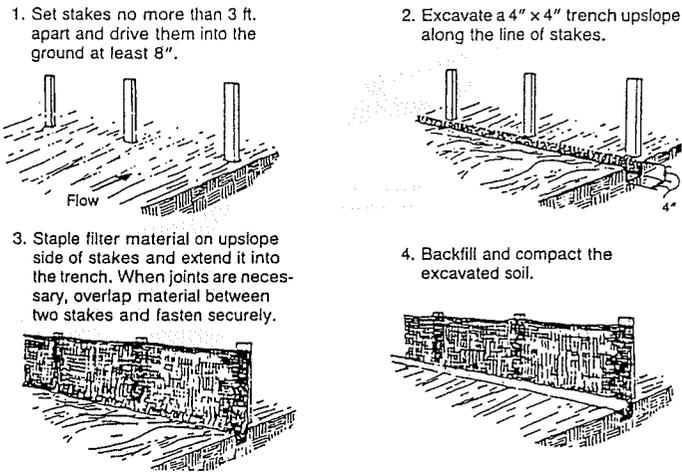


Figure E-2. Silt Fences

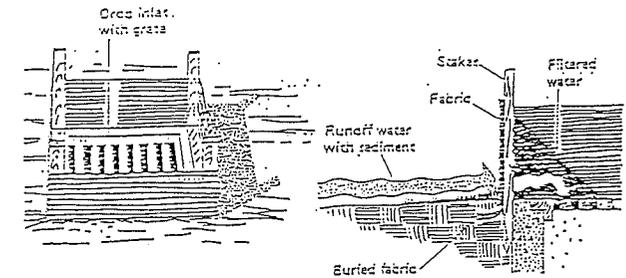


Figure E-3. Drop Inlet with Burlap or Filter Fabric

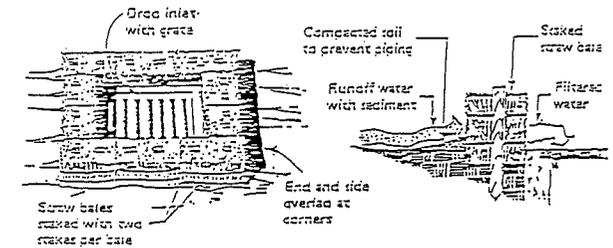


Figure E-4. Drop Inlet with Straw Bales

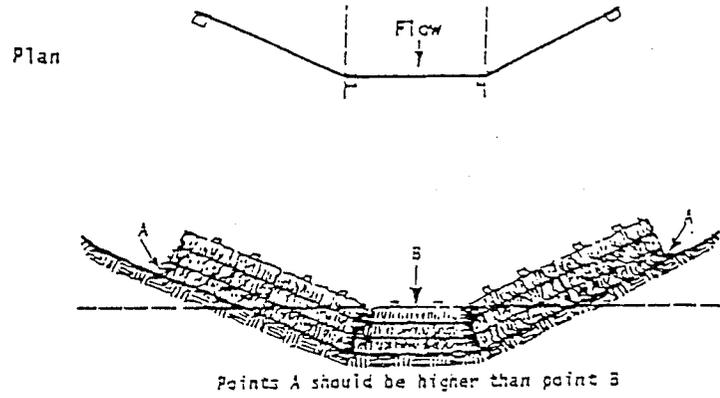


Figure E-5. Straw Bale Barrier in Drainageway

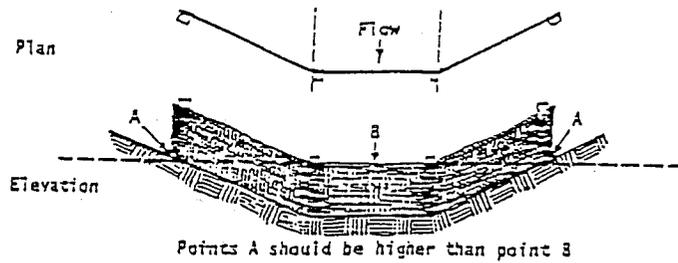


Figure E-6. Filter Barrier in Drainageway

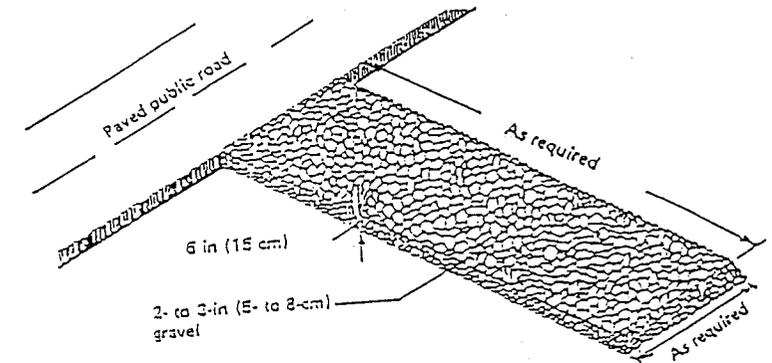
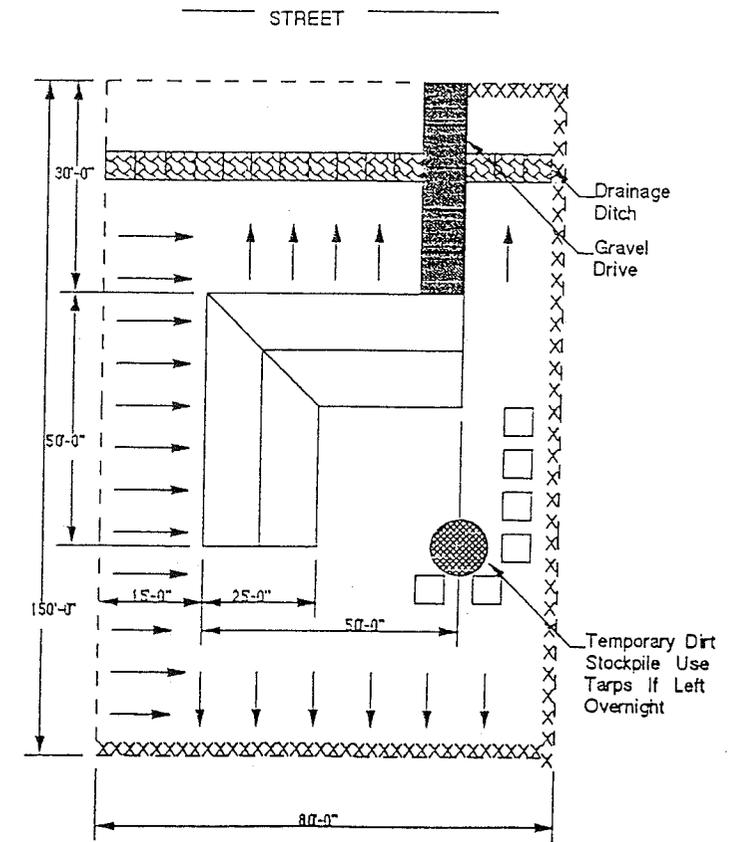
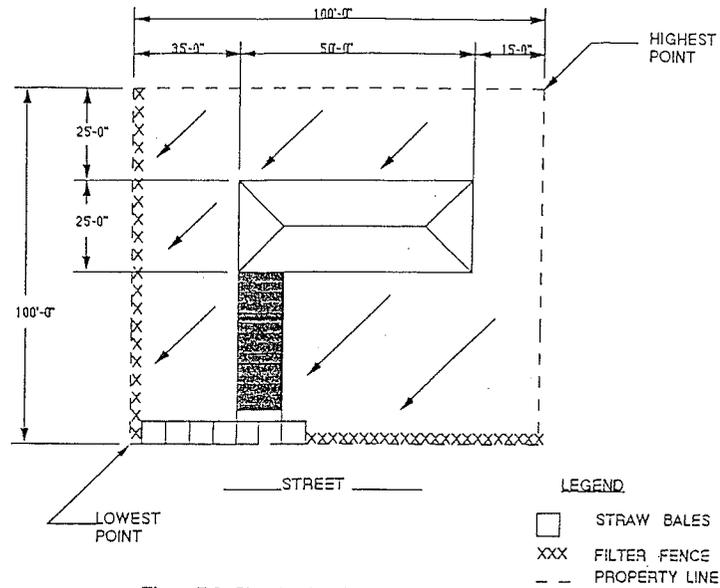


Figure E-7. Gravel Access Roadway



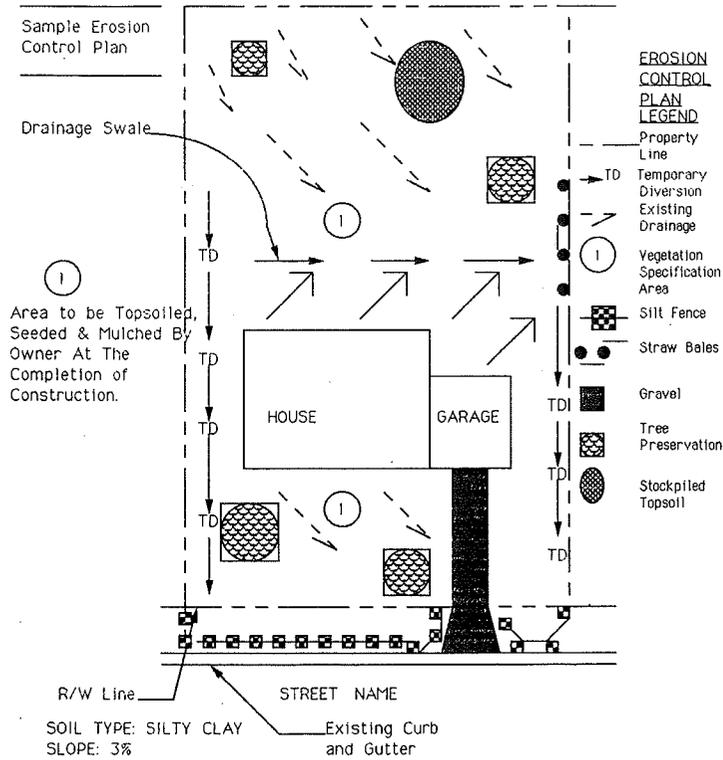
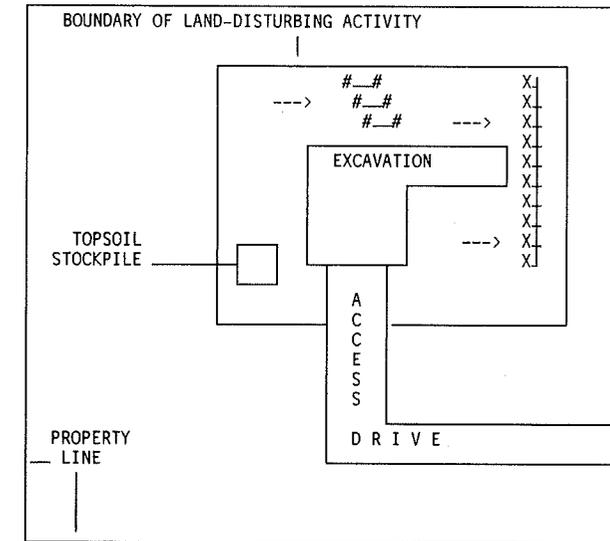


Figure E-10. Plot Plan with Erosion Control Procedures Indicated.



KEY

X-X-X-X Slopes greater than 12%

---#--- Vegetative Buffer Strip

---> Direction of Slope

Figure E-11. Plot plan for one-family dwelling on large lot (greater than 5 acres) with boundary of land disturbing activity and steep slopes indicated.

**Guidelines for Stabilizing the Site
and Construction of Erosion Control Procedures**

REVEGETATION

- Seed, sod or mulch bare soil as soon as possible.

SEEDING AND MULCHING

- Spread 4 to 6 inches of topsoil.
- Fertilize according to soil test (or apply at a rate of 10 lb./100 sq. ft.)
- Seed with appropriate seed mixture for site conditions.
- Rake area lightly to cover seed with ¼ inch of soil. Roll lightly.
- Mulch with hay or straw.
- Anchor mulch or use netting on steep slopes.
- Water and keep soil moist every day or two until grass is 2 inches tall.

SODDING

- Spread topsoil 4 to 6 inches.
- Fertilize according to soil test.
- Lightly water the soil.
- Lay sod; tamp or roll lightly.
- On slopes, begin laying sod at bottom and work up the slope. Peg in place.
- Initial watering should dampen soil 6 inches. Continue watering every day for two weeks.

SOIL PILES

- Locate away from any down-slope street, driveway, stream, lake, wetland, ditch or drainageway, or inlets.
- For topsoil piles, temporary seed with annual ryegrass or use tarp for cover.

GRAVEL ACCESS DRIVE

- Install a single access drive using 2- to 3-inch aggregate.
- Lay gravel to a depth of 6 inches and at least 7 feet wide from street to area of disturbance.
- Maintain throughout construction.

SEDIMENT CLEANUP

- Sweep or scrape up soil and sediment tracked into the street daily.
- Clean up sediment washed off-site by a storm event by the end of the next work day.

DOWNSPOUT EXTENDERS

- Not required, but highly recommended.
- Install as soon as gutters and downspouts are completed.
- Route water to a grassed or paved area.
- Maintain until lawn is established.

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