

INDUSTRY, LABOR & HUMAN RELATIONS 7
Administration & enforcement ILHR 50

Note 2: Section 101.12 (3) (h), Stats., prohibits local issuance of permits or licenses for construction or use of public buildings or places of employment until drawings and calculations have been examined and approved by the department.

(a) Factories, office and mercantile buildings (ch. ILHR 54).

1. Department examination and approval for factories, office and mercantile buildings containing less than 25,000 cubic feet total volume is waived; however, the buildings shall comply with the applicable requirements of this code.

(b) Theaters and assembly halls (ch. ILHR 55).

(c) Schools and other places of instruction (ch. ILHR 56).

(d) Apartment buildings, hotels, motels and places of abode (ch. ILHR 57).

(e) Health care facilities and places of detention (ch. ILHR 58).

(f) Hazardous Occupancies, ch. ILHR 59.

1. Department examination and approval of plans shall be waived for a hangar accommodating one airplane; however, the building shall conform with the applicable requirements of this code.

2. Department examination and approval shall be waived for a storage garage which is less than 25,000 cubic feet in total volume; however, the building shall comply with the applicable requirements of this code.

(g) Day care facilities (ch. ILHR 60).

(h) Community-Based Residential Facilities (CBRF) (ch. ILHR 61).

(i) 1. Except as provided in subd. 2, department examination and approval is waived for television and radio transmitting and receiving antennas, outdoor theater screens, water tanks, display signs, observation towers, docks, piers, wharves, tents or inflatable structures used temporarily, and other similar structures; however, these structures and temporary tents shall comply with the applicable structural and other requirements of chs. ILHR 50-64.

2. a. Plan examination and approval is required for the installation of roof mounted antenna structures exceeding 20 feet in height above the roof, unless the building is otherwise exempt or plan submittal is waived.

b. Plan examination and approval is required for the installation of ground mounted antenna structures exceeding 200 feet in height.

c. Plan examination and approval is required for the installation of ground mounted antenna structures exceeding 50 feet in height if the structure is located nearer to any street, public thoroughfare or property line than the height of the structure measured from its base of the structure nearest to the street, thoroughfare or property line to the topmost point.

(2) TYPES OF PLAN APPROVAL. The following types of plans shall be submitted to the department or its authorized representative, as provided in s. ILHR 50.21, for examination and approval before construction is commenced:

(a) General building plans.

(b) Structural plans.

(c) 1. Heating and ventilating plans; and

2. Data and information relative to requirements of chs. ILHR 63 and 64 for the replacement of a major piece of heating or air conditioning equipment.

(d) Alteration plans for existing buildings, except for those alterations involving changes in interior finishes only.

(e) Revisions to previously examined plans.

(f) Industrial exhaust system plans within government-owned buildings.

Note: See s. ILHR 64.54 (3) relating to the types of exhaust ventilation systems requiring plan submittal.

(g) Spray booth plans (government-owned buildings only).

(h) Footing and foundation plans (see s. ILHR 50.13).

(i) Assembly seating facility plans.

(j) Fire escape plans.

(3) **PLANS AND SPECIFICATIONS.** At least 4 complete bound sets of plans, which are clear, legible and permanent copies, and one copy of specifications shall be submitted for examination and approval before commencing construction. The plans and specifications shall contain the following information:

Note: Also see sub. (5)(b) note.

(a) *General.* All plans shall contain the name of the owner and the address of the building. The name and seal of the architect(s), engineer(s) or person(s) who prepared the plans shall appear on the title sheet, in accordance with s. A-E 1.04 (4), Wis. Adm. Code — registration seals.

(b) *General building plans.* The general building plans shall include the following:

1. Plot plan. The location of the building with respect to property lines and lot lines and adjoining streets, alleys and any other buildings on the same lot or property shall be indicated on the plot plan. A small scale plot plan shall be submitted on a 8½" × 11" sheet for projects containing multiple buildings. For purposes of this requirement, a plot plan does not have to be a certified survey.

2. Floor plans. Floor plans shall be provided for each floor. The size and location of all rooms, doors, windows, firewalls, toilet facilities, structural features, exit passageways, exit lights, fire alarms, standpipes, stairs and other pertinent information shall be indicated. Schematic exit plans shall be provided for large buildings, indicating normal paths of egress.

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

4. Sections and details. Sections and details shall include information to clarify the building design.

(c) *Heating, ventilating and air conditioning plans.* Heating, ventilating and air conditioning plans shall indicate the layout of the system, including location of equipment and size of all piping, ductwork, dampers (including fire dampers), chimneys, vents and controls. The quantity of outside air introduced to each zone, and the quantity of supply air and exhaust air for each room shall be listed on the plans. The type of equipment and capacity (including the input and output) shall be indicated on the plans or equipment schedules, unless indicated in the specifications.

(d) *Specialty plans.* Specialty plans for spray booths, special exhaust systems, assembly seating facilities, fire escapes and special structural systems shall include pertinent information with respect to the design and construction of the specialty.

(e) *Specifications.* The specifications shall be properly identified with the drawings and describe the quality of the materials and the workmanship.

(f) *Schedules.* Schedules shall be provided which contain information pertinent to doors, room finishes, equipment, and the use of all rooms and the number of occupants accommodated therein, unless this information is indicated on the plans.

Note 1: Original drawings are not considered a substitute for permanent prints.

Note 2: Duplicate information need not be submitted when heating, ventilating, air conditioning and building plans are submitted simultaneously.

Note 3: For pit depth and overhead clearance requirements applicable to design of elevator hoistways, see ch. Ind 4, Elevator Code.

Note 4: Plans for swimming pool installations are examined by the department of health and social services.

(4) **DATA REQUIRED.** All plans submitted for approval shall be accompanied by sufficient data and information for the department to judge if the design of the building, the capacity of the equipment, and the performance of the system will meet the requirements of this code. The following data shall be submitted:

(a) *Structural data.* Sample structural calculations, including assumed bearing value of soil, live loads and itemized dead loads, unit stresses for structural materials, typical calculations for slabs, beams, girders, columns and trusses shall be submitted. Typical wind and bracing calculations and diagrams including the manner in which shear transfer is made between resisting elements shall also be included. Complete structural calculations shall be furnished upon request of the department or other authorized approving official.

1. The building designer shall submit the following minimum information for structural components such as but not limited to wood trusses, precast concrete, laminated wood members, steel joists and steel girders when the component fabricator is specified as being responsible for the component design:

a. Structural framing plan;

b. Bearing support and connection details of the component to the structure;

c. Design loads, including location and magnitude of: uniform superimposed dead and live loads; concentrated dead and live loads; nonuniform snow loads; wind and bracing loads for component system; and wind, bracing and gravity forces required to be developed at interfaces with other materials;

d. Required fire rating;

e. Outside configuration of components; and

f. Permanent bracing system.

2. The building designer shall also submit the following information with the initial building plan submittal or the component plan submittal:

a. A framing plan showing all members and labels and special installation (e.g., handling and erection) instructions and any required permanent bracing required which was the basis for the component design;

b. Information regarding the member design of the following structural components: Web configuration, stress diagram or tabulation of axial force in the members, member size, grade of lumber, fabricated splices and member bracing for wood trusses; Web configuration, stress diagram or tabulation of axial force in the members, member size, steel yield, fabricated splices and member bracing for steel joists and joist girders subjected to nonuniform loading; Specified concrete strengths, prestressing data including final effective forces and centroids, mild reinforcing including release and confinement steel, shear reinforcing, and stripping, transportation and erection handling points for precast concrete members; Species of wood, bending stress of wood, adhesive and member sizes for laminated wood members; and

c. Information pertaining to the design of connections within or between like components for the following structural components: Web and chord connection details and connector plate holding values for wood trusses; Web and chord connection details for steel joist and joist girders subjected to nonuniform loading; Bearing confinement steel, dapped end reinforcing, corbel reinforcing, bearing pads, and loose and embedded connection steel including welding and bolting requirements for precast concrete members; Member connection and bearing details for laminated wood members.

3. For the purposes of this paragraph, the department does not consider truss layout plans or truss erection plans as architectural practice or engineering practice, and therefore, such plans are not required to be signed and sealed or stamped in accordance with s. ILHR 50.07 or 50.08.

4. Information regarding reinforcement, concrete strength, fire resistive ratings for precast concrete components may be provided in either the specifications or calculations furnished with the precast concrete plans.

(b) *Energy conservation data.* Calculations and specifications shall be submitted in accordance with s. ILHR 63.01 for the types of projects outlined in s. ILHR 63.001.

(c) *Heating and ventilating data.* A description of the construction for the walls, floors, ceilings and roof, and the transmission coefficients of the construction materials shall be furnished. The calculations shall include

heat losses for the individual rooms (including transmission and infiltration and/or ventilation losses, whichever are greater) and a summary of the total building heat loss expressed in Btu/hour or watts.

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

(d) *Additional data.* When requested, additional data pertaining to design, construction, materials and equipment shall be submitted to the department for approval.

(5) *Application for approval.* A plans approval application form shall be included with the plans submitted to the department for examination and approval. The department shall review and make a determination on an application for plan review within 15 business days of receipt of the application and all forms, fees, plans and documents required to complete the review.

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

(a) *Conditional approval.* If, upon examination, the department determines that the plans and the application for approval substantially conform to the provisions of this code, a conditional approval, in writing, will be granted. All non-code-complying conditions stated in the conditional approval shall be corrected before or during construction. A conditional approval issued by the department shall not be construed as an assumption of any responsibility for the design or construction of the building.

(b) *Denial of approval.* If the department determines that the plans or the application do not substantially conform to the provisions of this code, the application for conditional approval will be denied, in writing.

Note: A letter will be sent to the designer and the owner of record with a statement relating to the examination of the plans and citing the conditions of approval or denial. The plans will be dated and stamped "conditionally approved" or "not approved," whichever applies. The department will retain one copy of the plans for all projects. The department will forward one copy of the plans for projects of less than 100,000 cubic feet and alterations of less than \$100,000 estimated cost to the state building inspector of record. The remaining plans will be returned to the person designated on the plans approval application.

(6) **REVISIONS TO APPROVED PLANS.** (a) 1. All revisions and modifications, which involve provisions of this code, made to plans or specifications, which have previously been granted approval by the department, shall be submitted to the department for review.

2. All revisions and modifications to the plans shall be approved in writing by the department prior to the work involved in the revision or modification being carried out.

(b) A revision or modification to a plan, drawing or specification shall be signed and sealed in accordance with s. ILHR 50.07 (2), if applicable.

History: Cr. Register, December, 1976, No. 252, eff. 1-1-77; am. (1) (g) 1, Register, December, 1977, No. 264, eff. 1-1-78; am. (4) (b), Register, May, 1978, No. 269, eff. 7-1-78; am. (1) (g) (intro.), Register, December, 1978, No. 276, eff. 1-1-79; am. (2) (c) 1., (3) (intro.) and (4) (b), cr. (2) (k), Register, January, 1980, No. 289, eff. 2-1-80; am. (1) (b) and (d), (2) (c) 2., (d) and (i), (3) (d), (4) (a), renum. (1) (e), (f) and (g) to be (1) (f), (g) and (i) and am. (1) (f) and (i) (intro.), cr. (1) (e) and (h), Register, December, 1981, No. 312, eff. 1-1-82; r. and recr. (1) (i), am. (4) (a) 2. intro., Register, December, 1983, No. 336, eff. 1-1-84; am. (5) (intro.), Register, January, 1985, No. 349, eff. 2-1-85; am. (1) (intro.) and (2) (intro.), Register, April, 1985, No. 352, eff. 5-1-85; am. (4) (a) 1., Register, August, 1985, No. 356, eff. 1-1-86; r. (2) (k),

Register, December, 1985, No. 360, eff. 1-1-86; r. and recr. (1) (f), (i), (2) (c) and (f), am. (3) (intro.), (b) 1. and (4) (b), cr. (4) (a) 3. and 4. and (6), Register, March, 1991, No. 423, eff. 4-1-91.

ILHR 50.125 Wisconsin insignia. A Wisconsin insignia shall be installed on a manufactured multi-family dwelling approved by the department and inspected at the manufacturing plant.

(1) **AFFIXING WISCONSIN INSIGNIA.** Each Wisconsin insignia shall be assigned and affixed to a specific manufactured multi-family dwelling in the manner approved by the department before it is shipped from the manufacturing plant. The serial number shall be located on the manufacturer's data plate.

(2) **MANUFACTURER'S RESPONSIBILITIES.** (a) *Insignia records.* The manufacturer shall keep permanent records regarding the handling of all Wisconsin insignias indicating the number of Wisconsin insignias which have been affixed to manufactured multi-family dwellings or manufactured building components (or groups of components); which Wisconsin insignias have been applied to which manufactured multi-family dwelling or building component; the disposition of any damaged or rejected Wisconsin insignias. The records shall be maintained by the manufacturer or by the independent inspection agency for at least 10 years. A copy of the records shall be sent to the department upon request.

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

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

(3) **INSIGNIA SUSPENSION AND REVOCATION.** The department may suspend or revoke its approval if it determines that the standards for construction or the manufacture and installation of a manufactured multi-family dwelling do not meet this code or that such standards are not being enforced as required by this code.

(a) Upon suspension or revocation of the approval, no further insignias shall be attached to any manufactured multi-family dwelling with respect to which the approval was suspended or revoked.

(b) Upon suspension or revocation of the approval, all insignias allocated to the manufacturer shall be returned to the department no later than 30 days from the effective date.

History: Cr. Register, May, 1980, No. 293, eff. 6-1-80.

ILHR 50.13 Footing and foundation approval. (1) The department or its authorized representative, as provided in s. ILHR 50.21, may conditionally approve footing and foundation plans to permit construction of footings and foundations prior to the examination and approval of the complete plans upon submission of:

(a) A plan approval application form, SBD 118;

(b) At least 4 bound sets of footing and foundation plans which:

1. Include a plot plan; and

Register, March, 1991, No. 423

2. Are signed and sealed in accordance with s. ILHR 50.07 or 50.08, if applicable.

(c) At least one set of:

1. Schematic floor plans indicating the exits;
2. Building elevations;
3. Itemized structural loads; and
4. Structural footing and foundation calculations; and

(d) The fee as specified in s. Ind 69.09.

(2) The department shall review and make a determination on an application for footing and foundation approval within 15 business days of receipt of the application and all forms, fees, plans and documents required to complete the review.

History: Cr. Register, December, 1976, No. 252, eff. 1-1-77; am. Register, May, 1980, No. 293, eff. 6-1-80; am. Register, January, 1985, No. 349, eff. 2-1-85; am. Register, April, 1985, No. 352, eff. 5-1-85; r. and recr. register, March, 1991, No. 423, eff. 4-1-91.

ILHR 50.14 Permission to start construction. (1) The department or its authorized representative, as provided in s. ILHR 50.21, may issue a permission to start construction form for the footings and foundations upon submission of:

(a) A completed plan approval application form, SBD 118;

(b) 1. At least 4 bound sets of building plans and one copy of specifications; or

2. At least 4 bound sets of footing and foundation plans and the information specified in s. ILHR 50.13 (1).

(c) A written request by the owner to start construction, form SBD 198; and

(d) Fees as specified in s. Ind 69.09.

(2) The holders of the permission form shall proceed at their own risk without assurance that a conditional approval for the building will be granted.

(3) The department shall review and make a determination on an application for permission to start construction within 3 business days of receipt of the application and all forms, fees, plans and documents required to complete the review.

History: Cr. Register, December, 1976, No. 252, eff. 1-1-77; am. Register, May, 1980, No. 293, eff. 6-1-80; am. Register, December, 1983, No. 336, eff. 1-1-84; am. Register, January, 1985, No. 349, eff. 2-1-85; am. Register, April, 1985, No. 352, eff. 5-1-85; r. and recr. Register, March, 1991, No. 423, eff. 4-1-91.

ILHR 50.15 Evidence of plan approval. The architect, engineer, designer, builder, manufacturer or owner shall keep at the building site one set of plans bearing the stamp of conditional approval and a copy of the specifications. The plans shall be open to inspection by an authorized representative of the department.

History: Cr. Register, December, 1976, No. 252, eff. 1-1-77; am. Register, May, 1980, No. 293, eff. 6-1-80.

ILHR 50.16 Revocation of approval. The department may revoke any approval, issued under the provisions of this code, for any false statements or misrepresentation of facts on which the approval was based.

History: Cr. Register, December, 1976, No. 252, eff. 1-1-77.

ILHR 50.17 Expiration of plan approval and extension of plan approval. (1) **EXPIRATION OF PLAN APPROVAL.** Except as provided in sub. (2), plan approval by the department or its authorized representative shall expire 2 years after the date indicated on the approved plans if construction has not commenced within that 2 years or if, having once begun, construction ceases for a period of 2 years or more.

(2) **EXTENSION OF PLAN APPROVAL.** Upon request and payment of the fee under s. Ind 69.09 (7), plan approval shall be extended for one 2-year period provided that the approved plans are revised to comply with the code in effect at the time of the extension request and the request is submitted during the original approval period.

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

History: Cr. Register, December, 1976, No. 252, eff. 1-1-77; r. and recr. Register, August, 1986, No. 368, eff. 9-1-86.

ILHR 50.175 Department limitation. A conditional approval of a plan by the department shall not be construed as an assumption of any design responsibility.

History: Cr. Register, August, 1986, No. 368, eff. 9-1-86.

ILHR 50.18* Inspections. (1) **ON-SITE.** Inspections shall be conducted by an authorized representative of the department to ascertain whether or not the construction or installations conform to the conditionally approved plans, the conditional approval letter, and the provisions of this code.

Note: Municipalities certified under s. ILHR 50.21 are authorized representatives of this department to make the inspections specified in this section.

(2) **IN-PLANT.** Manufacturers of multi-family dwellings shall contract with the department or an independent inspection agency to conduct in-plant inspections to assure that the manufactured multi-family dwellings are in compliance with the plans approved by the department. All inspections shall be performed by a certified inspector or independent inspection agency.

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

History: Cr. Register, December, 1976, No. 252, eff. 1-1-77; am. Register, May, 1980, No. 293, eff. 6-1-80.

ILHR 50.19 Building material approvals. (1) **MATERIALS, EQUIPMENT AND DEVICES.** All materials, equipment and devices not specifically mentioned in this code shall be permitted if approved in writing by the department. Sufficient data, tests and other evidence to prove that the material, equipment or device is equivalent to the standards required in this code shall be submitted. Upon receipt of a fee and a written request, the department may issue an approval number for the material, piece of

*See Appendix A for further explanatory material.