

ing. 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, engineer or person who prepared the plans shall appear on the title sheet, in accordance with s. A-E 2.02, Wis. Adm. Code.

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

1. Plot plan. a. 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. For recycling space designated adjacent to a building, as specified in s. ILHR 52.24, the area and dimensions shall be indicated on the plot plan. A small scale plot plan shall be submitted on 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.

b. The plot plan shall clearly indicate the location of the accessible building, its accessible entrances and the exterior accessible route to, from and between all accessible parking spaces, recreational and public facilities and areas on the site, public transportation stops adjacent to the property, public streets or sidewalks and if provided, passenger loading zones. The plans shall also indicate the size and location of the accessible parking spaces and the gradient or slope information for all walks and ramps on the accessible route.

2. Floor plans. Floor plans shall be provided for each floor. The size and location of all rooms, doors, windows, fire walls, toilet facilities, structural features, exit passageways, exit lights, fire alarms, standpipes, stairs and other pertinent information, including but not limited to adequate space within a building designated for collection, separation and temporary storage of recyclable materials, 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.

5. Interior barrier-free design information. The general building floor plans, elevations and sections shall clearly show the following:

a. All accessible routes through accessible buildings, facilities, tenant spaces and living units.

b. The design and location of all interior and exterior ramps, including the gradient or slope information.

c. The areas of rescue assistance in multilevel buildings, including dimensions of the area and the fire resistive construction details.

d. The type and location of elevator or mechanical lifting equipment and, where applicable, the design and construction of the vertical shaft.

e. The design of bathrooms, toilet rooms and unisex toilet rooms, including door clearances, lavatory or vanity design, plumbing fixture mounting heights, turnaround spaces, clear spaces required for plumbing fixtures, the size and arrangement of toilet compartments and other toilet room equipment such as, but not limited to, mirrors, soap dispensers and hand dryers.

(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. ILHR 18, Elevator Code.

Note 4: Plans for swimming pool installations are examined by the department.

(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:

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- 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. Thermal performance information shall be provided as specified in s. ILHR 63.12.

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(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) *Data for recycling space.* Verifiable data or calculations and specifications shall be submitted in accordance with s. ILHR 52.24 for determining adequate space for the separation, temporary storage and collection of recyclable materials, unless the space designated is based on the requirements identified in this code.

(dm) *Elevator and mechanical lift data.* Where an elevator, limited-access elevator, vertical wheelchair lift, inclined wheelchair lift, stairway chairlift or other mechanical lifting device is to be installed in a public building or place of employment, the following information shall be included on the building plans and submitted to the department for approval:

1. 'Elevator or limited-use elevator.' a. Size of the elevator cab or limited-use elevator cab;

Note 1: In new construction, ch. ILHR 18 requires the minimum clear platform size of an elevator to be 51 inches by 68 inches, with a minimum area not less than 24 square feet. Where elevators are provided in health care facilities, including medical clinics, and in all buildings over 3 stories in height, at least one elevator shall have the combination of car size and door opening which accommodates a 76 inch by 24 inch ambulance type stretcher in the horizontal position with no tilting at any time.

Note 2: In existing construction where an elevator is installed and the car size specified for new construction cannot be provided, ch. ILHR 18 will allow the minimum clear platform size to be not less than 36 inches wide by 54 inches in length, with a minimum area not less than 13.5 square feet. Information shall be submitted with the elevator plans justifying why the larger size elevator cannot be installed.

b. Size, rating and construction of the vertical shaft for the elevator or limited-use elevator;

c. Door clearances to the elevator or limited-use elevator;

d. The accessible route to the elevator or limited-use elevator; and

e. Maneuverability space at the elevator or limited-use elevator hoistway entrance doors.

Note: In accordance with ch. ILHR 18, a minimum maneuverability space of 5 feet by 5 feet with a minimum of 18 inches of clear space at the latch side of the door shall be provided when the hoistway doors are manually-opening and self-closing.

2. 'Vertical wheelchair lift.' a. Size of the platform of the vertical wheelchair lift;

b. Size and construction of the shaft for the vertical wheelchair lift, where applicable;

Note: In accordance with ch. ILHR 18, the net platform area shall not exceed 18 square feet with a minimum clear width of 32 inches and a minimum clear length of 54 inches.

c. Door clearances to the vertical wheelchair lift; and

Note: In accordance with ch. ILHR 18, a minimum maneuverability space of 5 feet by 5 feet with a minimum of 18 inches of clear space at the latch side of the door shall be provided when the hoistway doors are manually-opening and self-closing.

d. Accessible route to the vertical wheelchair lift.

3. 'Inclined wheelchair lift.' a. Size of the platform of the inclined wheelchair lift;

Note: In accordance with ch. ILHR 18, the net platform area shall not exceed 18 square feet with a minimum clear width of 32 inches and a minimum clear length of 64 inches.

b. Number of occupants in the building;

c. Location and width of all exits and stairways in the building;

d. Accessible route to the inclined wheelchair lift; and

e. Width of the stairway where the inclined wheelchair lift will be installed and verification that the installation of the lift in its operational position does not infringe into the required exit width.

4. 'Stairway chairlifts.' a. Size of the stairway chairlift;

b. Number of occupants in the building;

c. Location and width of all exits and stairways in the building;

d. Accessible route to the stairway chairlift; and

e. Width of the stairway where the stairway chairlift will be located and verification that the installation of the lift in its operational position does not infringe into the required exit width.

(e) *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 as specified in s. ILHR 2.07 (3).

Note: See Appendix A for an example of the plans approval application (form SBD-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; am. (1) (a) 1., cr. (1) (a) 2., Register, March, 1992, No. 435, eff. 4-1-92; am. (5), Register, June, 1992, No. 438, eff. 7-1-92; am. (3) (b) 1. and 2., renum. (4) (d) to be (e), cr. (4) (d), Register, October, 1992, No. 442, eff. 5-1-93; am. (1) (e), (i) 2. c., (3) (intro.) and (a), (4) (a) 2. b. and (b), Register, January, 1994, No. 457, eff. 2-1-94; cr. (4) (dm), Register, March, 1994, No. 459, eff. 4-1-94; renum. (3) (b) 1. to (3) (b) 1. a., cr. (3) (b) 1. b., 5., Register, November, 1994, No. 467, eff. 12-1-94; reprinted to restore dropped copy in (3) (b) 5., Register, January, 1995, No. 469.

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

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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
 - 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 ch. ILHR 2.

(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; correction in (1) (d) made under s. 13.93 (2m) (b) 7, Stats., Register, June, 1993, No. 450.

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 ch. ILHR 2.

(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; correction in (1) (d) made under s. 13.93 (2m) (b) 7, Stats., Register, June, 1993, No. 450.

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 50.155 Sprinkler documents. (1) **PLANS.** (a) 1. Except as provided in subd. 2, where automatic fire sprinkler systems are to be installed or altered, sprinkler plans and specifications shall be present at the job site and made available, upon request, to the department, its agent or local governmental agencies exercising jurisdiction.

2. a. When a project involves the alteration or addition of 20 or less sprinkler heads to an existing automatic fire sprinkler system, sprinkler plans and specifications shall not be required to be present at the job site or made available, unless required by local ordinance.

b. When sprinkler plans and specifications are not provided for a project involving the alteration or addition of 20 or less sprinkler heads to an existing automatic fire sprinkler system, the automatic fire sprinkler contractor responsible for the work shall provide a written description of the type and scope of the work. The description shall be included with the material and test certificate, if required. The description shall be made available, upon request, to the department, its agent or local governmental agencies exercising jurisdiction.

(b) The sprinkler plans at the installation site shall be:

- 1. Signed and sealed in accordance with s. A-E 2.02 by an architect, engineer or sprinkler designer who is registered by the department of regulation and licensing; or
- 2. Signed, including license number, and dated by an automatic fire sprinkler contractor who is responsible for the installation of the sprinklers and who is licensed by the department of industry, labor and human relations.

(c) Where automatic fire sprinkler plans are required by local ordinance to be reviewed and approved by a local governmental agency, the sprinkler plans at the installation site shall bear evidence of that approval.

(d) The plans for the automatic fire sprinkler system to be at the installation site shall include at least:

- 1. The name of the:
 - a. Owner of the building; and
 - b. Occupant or occupants in the building;
- 2. The location or address of the building;
- 3. A full height cross section through the building;