

Clearinghouse Rule 96-099
RULES CERTIFICATE
Department of Commerce

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, William J. McCoshen, Secretary of the Department of Commerce,

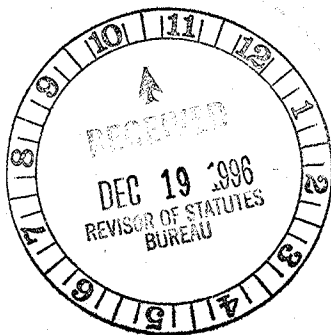
and custodian of the official records of said department, do hereby certify that the annexed rule(s) relating to

Floodplain Construction Requirements in the Uniform Dwelling Code

(Subject)

were duly approved and adopted by this department.

I further certify that said copy has been compared by me with the original on file in the department and that the same is a true copy thereof, and of the whole of such original.



IN TESTIMONY WHEREOF, I have hereunto set

my hand at 4:00 P.M.

in the city of Madison, this 16 th

day of December A.D. 19 96

William J. McCoshen
Secretary

ORDER OF ADOPTION

Department of Commerce

Pursuant to authority vested in the Department of Commerce by section(s) 101.02 (1) and

101.63 (1) Stats., the Department of Commerce creates; amends;

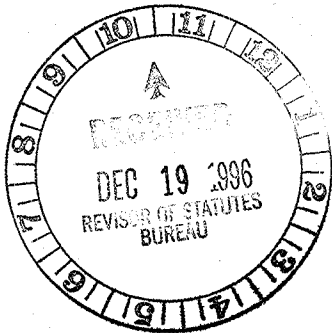
repeals and recreates; repeals and adopts rules of Wisconsin Administrative Code chapter(s):

ILHR 20 and 21
(number)

Uniform Dwelling Code
(Title)

The attached rules shall take effect on the first day of the month following publication in the

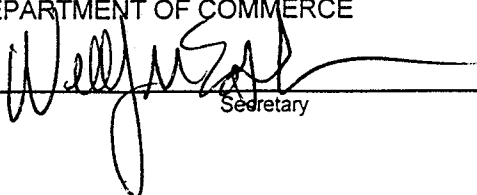
Wisconsin Administrative Register pursuant to section 227.22, Stats.



Adopted at Madison, Wisconsin this

date: December 16, 1996

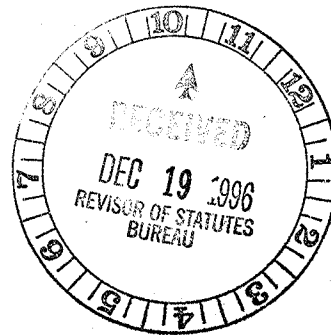
DEPARTMENT OF COMMERCE


Secretary



State of Wisconsin \ Department of Commerce

RULES in FINAL DRAFT FORM



Rule No.: Chapters ILHR 20 & 21

Relating to: Dwelling Construction in Floodplains

Clearinghouse Rule No.: 96-099

The Wisconsin Department of Commerce (formerly Industry, Labor and Human Relations) proposes an order to renumber ILHR 20.07 (34k);

to amend ILHR 20.09 (4) (b); and

to create ILHR 20.07 (7m), ILHR 20.07 (15m), ILHR 20.07 (34g), ILHR 20.07 (34h), ILHR 20.07 (34i), ILHR 21.33, and 21.34 in the Uniform Dwelling Code relating to floodplain construction.

ANALYSIS OF PROPOSED RULES

Statutory Authority: ss. 101.02 (1) and 101.63 (1)

Statutes Interpreted: ss. 101.02 (1), 101.63 (1) and 443.15 (1)

These rules are intended to apply only where local zoning ordinances allow construction to take place in floodfringe areas of floodplains. There are two recognized levels of hazard: (normal) floodplains and coastal floodplains. In both cases, a registered surveyor, engineer, or architect must certify the elevation of the lowest structural member of the dwelling in relation to the base flood elevation.

In the "normal" floodplain, floodproof basements are allowed. No limitation is placed on the use or occupancy of the basement, however, a registered engineer or architect is required to design the basement. Other, non-floodproof enclosures are allowed below the base flood elevation, but these spaces are limited as to use and occupancy. These other enclosures may be designed by a registered engineer or architect, or they may be designed according to generic requirements in these proposed rules.

In the coastal floodplains, areas along Lake Michigan and Lake Superior subject to high wave heights or rapid wave runoff, the entire dwelling must be designed by a registered engineer or architect. Enclosures below the base flood elevation are limited in use and occupancy and must be designed to break away or otherwise relieve the pressure exerted by floodwaters. Therefore, floodproof basements are not allowed in these areas.

SECTION 1. ILHR 20.07 (7m) is created to read:

ILHR 20.07 (7m) "Base flood elevation" means the depth or peak elevation of flooding, including wave height, which has a one percent or greater chance of occurring in any given year.

SECTION 2. ILHR 20.07 (15m) is created to read:

ILHR 20.07 (15m) "Coastal floodplain" means an area along the coast of Lake Michigan or Lake Superior below base flood elevation that is subject to wave runup or wave heights of 3 feet or more.

SECTION 3. ILHR 20.07 (34g) is created to read:

ILHR 20.07 (34g) "Floodfringe area" means that portion of the floodplain outside of the floodway that is at or below base flood elevation. The term "floodfringe" is intended to designate an area of standing, rather than flowing, water.

SECTION 4. ILHR 20.07 (34h) is created to read:

ILHR 20.07 (34h) "Floodplain" means land which is subject to flooding which is at or below base flood elevation. The floodplain includes the floodway and floodfringe areas.

SECTION 5. ILHR 20.07 (34i) is created to read:

ILHR 20.07 (34i) "Floodway" means the channel of a river or stream and those portions of the floodplain adjoining the channel required to carry the flood discharge. The term "floodway" is intended to designate an area of flowing, rather than standing, water.

SECTION 6. ILHR 20.07 (34k) is renumbered (34e).

SECTION 7. ILHR 20.09 (4) (b) is amended to read:

ILHR 20.09 (4) (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 Except as required under s. ILHR 21.33, 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.

SECTION 8. Chapter ILHR 21 Subchapter X is created to read:

SUBCHAPTER X - CONSTRUCTION IN FLOODPLAINS

ILHR 21.33 CONSTRUCTION IN FLOODPLAINS. (1) GENERAL. Where dwelling construction is allowed by local zoning ordinances to take place in floodfringe areas of floodplains, the dwelling shall meet the requirements of this subchapter.

Note: The department of natural resources (DNR) and the federal emergency management agency (FEMA) also have regulations that apply to construction in floodfringe areas.

(2) ELEVATION. (a) General. Except as provided in pars. (b) and (c), all dwellings constructed within a floodfringe area shall be elevated so the lowest floor and all basement floor surfaces are located at or above the base flood elevation.

(b) Certified floodproof basements. Floodproof basements may have the top of the basement floor no more than 5 feet below the base flood elevation provided the basement is designed by a registered architect or engineer to be watertight and impermeable. No limitation is placed on the use or occupancy of a certified floodproof basement by the provisions of this subchapter.

(c) Other enclosed spaces. 1. Enclosed spaces not meeting the requirements of par. (b) are allowed at any depth below the base flood elevation provided the spaces are used only for one or more of the following purposes:

- a. Means of egress.
- b. Entrance foyers.
- c. Stairways.
- d. Incidental storage of portable or mobile items.

2. Fully enclosed spaces used only for those purposes listed in subd. 1. shall be designed to automatically equalize the hydrostatic pressure on exterior walls by allowing the entry and exit of floodwaters. Designs for meeting this requirement shall be certified by a registered architect or engineer or shall meet all of the following requirements:

a. There shall be at least two pressure relieving openings and the openings shall have a total net area of not less than one square inch for every square foot of enclosed area subject to flooding.

b. The bottom of all openings shall be no more than 12 inches above grade.

c. Openings may not be equipped with screens, louvers, valves or other coverings or devices unless such devices permit the automatic entry and discharge of floodwaters.

(3) CERTIFICATION OF ELEVATION. A registered land surveyor, architect or engineer shall certify the actual elevation in relation to mean sea level of the lowest structural member required to be elevated by the provisions of this subchapter.

(4) ANCHORAGE. The structural systems of all dwellings shall be designed, connected and anchored to resist flotation, collapse or permanent lateral movement due to structural loads and stresses at the base flood elevation.

(5) PROTECTION OF ELECTRICAL AND MECHANICAL SYSTEMS. Electrical and mechanical equipment shall be placed above the base flood elevation or shall be designed to prevent water contact with the equipment in case of a flood up to the base flood elevation.

(6) CONSTRUCTION MATERIALS AND METHODS. All dwellings constructed in floodplains shall be constructed using materials and methods designed to minimize flood and water damage.

ILHR 21.34 CONSTRUCTION IN COASTAL FLOODPLAINS. (1) GENERAL. All dwellings constructed in coastal floodplains shall be designed by a registered architect or engineer and shall meet the requirements of this section and section ILHR 21.33.

(2) ELEVATION. All dwellings constructed in a coastal floodplain shall be elevated so the lowest portion of all structural members supporting the lowest floor, with the exception of mat or raft foundations, pilings, piling caps, columns, grade beams and bracing, is located at or above the base flood elevation.

(3) ENCLOSURES BELOW BASE FLOOD ELEVATION. Enclosures below the base flood elevation in a coastal floodplain may not be used for human occupancy and shall be free of all obstructions, except for non-loadbearing walls and partitions. Non-loadbearing walls and partitions below base flood elevation shall be constructed to break away without causing any structural damage to the elevated portion of the dwelling or foundation system due to the effect of wind loads and water loads acting simultaneously.

(4) FOUNDATIONS. All dwellings located in a coastal floodplain shall be supported and anchored on pilings or columns. The piling or column shall have adequate soil penetration to resist combined water and wind loads at the base flood elevation. Piling or column design shall consider the effect of scour of soil strata. Mat or raft foundations to support columns may not be used where soil under the mat or raft is subject to scour or other erosion from wave flow conditions.

(END)

EFFECTIVE DATE

Pursuant to s. 227.22 (2) (intro.), Stats., these rules take effect on the first day of the month following publication in the Wisconsin Administrative Register.

December 16, 1996

Gary Poulson
Assistant Revisor of Statutes
Suite 800
131 West Wilson Street
Madison, Wisconsin 53703-3233

Douglas LaFollette
Secretary of State
10th Floor
30 West Mifflin Street
Madison, Wisconsin 53703

Dear Messrs. Poulson and LaFollette:

TRANSMITTAL OF RULE ADOPTION

CLEARINGHOUSE RULE NO.: 96-099

RULE NO.: Chapters ILHR 20 and 21 of the Uniform Dwelling Code

RELATING TO: Construction in Floodplains

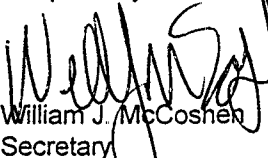
Pursuant to section 227.20, Stats., agencies are required to file a certified copy of every rule adopted by the agency with the offices of the Secretary of State and the Revisor of Statutes.

At this time, the following material is being submitted to you:

1. Order of Adoption.
2. Rules Certificate Form.
3. Rules in Final Draft Form.

Pursuant to section 227.114, Stats., a summary of the final regulatory flexibility analysis is included for permanent rules. A fiscal estimate and fiscal estimate worksheet is included with an emergency rule.

Respectfully submitted,


William J. McCoshen
Secretary

