City of Ames amendments to the 2015 International Building Code (IBC)

Ames Municipal Code **Section 5.200 BUILDINGS AND STRUCTURES.**

The provisions of the 2015 International Building Code (IBC), are amended with the revision of the following text as stated:

(1) The IBC is amended by adding Climatic and Geographical Design Criteria to include the following local values in conjunction with Chapter 16 Structural Design:

Ground Snow Load (lbs)	25
Wind Speed (mph)	115
Topographic Effects	No
Special Wind Region	No
Wind Borne Debris Zone	No
Seismic Design Category	A
Weathering	Severe
Frost Line Depth (inches)	42
Termite	Moderate to Heavy
Winter Design Temp (F.)	– 5
Ice Shield Underlayment Required	Yes
Flood Hazards	See FEMA Maps
Air Freezing Index	1896
Mean Annual Temperature (F.)	48.2

(2) **Section 717.6.2 Membrane Penetrations** is amended by adding the following exception: **Exception;** Duct systems constructed entirely of minimum 0.0187 inch thick steel (No. 26 gauge) shall be allowed without installation of radiation dampers.

(3) **Section 903.4, Sprinkler system supervision and alarms,** is amended by adding the following exception: Water supply valves that are locked in the open position.

(4) **Section 903.4.2, Alarms** is amended by deleting the existing text and inserting the following text: An approved audible/visual device, located on the exterior of the building in an approved location, shall be connected to every automatic sprinkler system. Additional notification devices may be required on the interior of the building. Such sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

(5) **Section 907.2.9, Group R-2,** is amended by adding the following text at the end of the subsection: Notwithstanding the exceptions noted herein, an automatic fire alarm system shall be installed throughout all interior corridors serving sleeping units.

(6) **Section 1009.2 Continuity and components.** The first sentence is amended to read: Each required accessible means of egress shall be continuous to a public way, shall be hard-surfaced, and shall consist of one or more of the following components.

(7) **Section 1011.12 Stairway to roof** is amended by deleting the **Exception** and inserting the following in lieu thereof:

Exception: Other than where required by Section 1011.12.1, in buildings without an occupied roof access to the roof from the top story shall be permitted to be by a ships ladder of a permanent ladder.

(8) **Section 1011.14 Alternating Tread Devices** is amended by removing "and for access to unoccupied roofs" from the text.

(9) **Section 1028.5 Access to a public way** is amended to read: The exit discharge shall provide a direct, hard-surfaced, and unobstructed access to a public way.

(10) **Section 1704.2.3 Statement of special inspections.** Delete the first paragraph and replace with the following: The applicant shall submit verification of a signed agreement with an approve agency stating the required special inspections to be performed and the frequency of said inspections as a condition for permit approval.

(11) **Section 1801.3 Foundations – Concrete encased electrode.** Concrete footing for new buildings and additions shall have a minimum of a #4 reinforcing bar or bare copper conductor sized per the City of Ames currently adopted National Electrical Code as a grounding electrode conductor encased in concrete for 20 feet minimum with a minimum of 2 tie wires for use as a concrete encased electrode.

(12) **Section 1809.5 Frost Protection**. The first sentence is amended to read as follows: Except where otherwise protected from frost, foundations, permanent supports of buildings and structures, and all exterior landings shall be protected from frost by one or more of the following methods:

(13) **Section 1809.5 Frost Protection is further amended by deleting Exception 2** and inserting the following in lieu thereof: Area of 900 square feet or less for light-frame construction or 400 square feet or less for other than light-frame construction: and

(14) **Section 1809.14 Demolition of shallow foundations.** Where a structure has been demolished or removed, all shallow foundations shall be removed in their entirety and the excavation shall be filled and maintained with clean fill material to the existing grade. Removal shall include, but is not limited to the removal of the entire basement including walls, floors, footings, and foundations.

(15) Chapter 18 of the IBC is amended by deleting **Table 1809.7 and inserting the following table with footnotes in lieu of:**

Number of Floors Supported by the Foundations*	1	2	3
Thickness of Foundation Walls (inches)Concrete	8	8	10
Thickness of Foundation Walls (inches) Concrete Block	8	8	12
Width of Footing (inches)	16	16	18
Thickness of Footing (inches)	8	8	12
Minimum Depth of Foundation Below Grade	42	42	42

*Foundations may support a roof in addition to the stipulated number of floors. Foundations supporting roofs only shall be as required for supporting one floor.

*Spread footings shall have a minimum of 2 - #4 continuous horizontal reinforcement bars.

*Foundation walls shall have a minimum of #4 reinforcement bars 18" on center each way.

*All buildings shall have perimeter footings to 42" below finished grade.

*Trench footings are allowed as a continuous 8" pass trench for single story wood frame structures with spans not exceeding 16 feet. The trench must be 42" below finished grade and have at least two #4 horizon reinforcement bars. Bars must tie into abutting adjacent structures.

(16) **Section 2308.3.1 Foundation plates or sills** is amended by replacing “and not spaced more than 6 feet apart” with “and spaced not more than 4 feet apart”