# ORDINANCE NO. 2812

ORDINANCE REGULATING CONSTRUCTION, ALTERATION, OCCUPANCY, AND OTHER ACTIVITIES AND STANDARDS CONCERNING BUILDINGS AND STRUCTURES; AND ADOPTING BY REFERENCE THE UNIFORM BUILDING CODE, 1994 EDITION; THE NATIONAL ELECTRICAL CODE AS PROMULGATED BY THE NATIONAL FIRE PROTECTION ASSOCIATION AND AS ADOPTED BY THE STATE OF COLORADO; THE UNIFORM PLUMBING CODE, 1994 EDITION; THE UNIFORM MECHANICAL CODE, 1994 EDITION; THE UNIFORM CODE FOR THE ABATEMENT OF DANGEROUS BUILDINGS, 1994 EDITION; AMENDING CERTAIN ADOPTED CODES; AMENDING ALL ORDINANCES IN PROVISIONS IN THE CONFLICT OR INCONSISTENT HEREWITH; AND PROVIDING A PENALTY FOR VIOLATION OF ANY PROVISION OF SAID CODES

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF GRAND JUNCTION:

The Code of Ordinances of the City of Grand Junction is hereby amended as indicated below to read as set forth below.

#### SECTION 1.

### Sec. 8-51. Adoption of Uniform Building Code.

- (a) The Uniform Building Code, 1994 edition, Volumes I, II, and III; promulgated by the International Conference of Building Officials, 5360 South Workman Mill Road, Whittier, California, together with amendments set forth below (hereinafter "UBC or Uniform Building Code"), is hereby adopted to provide minimum standards to safeguard life and limb, health, property and the public welfare by regulating and controlling various matter including but not limited to the design, construction, quality of materials, use and occupancy, location and maintenance of all buildings and structures within this jurisdiction, and certain equipment specifically regulated in this chapter.
- (b) The following chapters of the Appendix of the Uniform Building Code, 1994 edition, are adopted:

Chapter 3, Division I - Detention and Correction Facilities

Chapter 3, Division II - Agricultural Buildings Chapter 4, Division II - Aviation Control Towers

Chapter 13 - Energy Conservation in New Buildings

Chapter 15 - Re-roofing

Chapter 29 - Minimum Plumbing Fixtures

Chapter 31, Division II - Membrane Structures

Chapter 31, Division III - Patio Covers

No other chapters of the Appendix are adopted.

## Sec. 8-52 Amendments to Uniform Building Code.

The Uniform Building Code adopted in section 8-51 is hereby amended as follows:

- (1) Section 105. Section 105 is amended by deletion thereof. The board of appeals established by section 8-26 shall serve as the board of appeals.
- (2) Section 106.2. Section 106.2 is amended by the addition of the following new sub sections;
  - 12. Re-roofing of R-3 occupancies that do not exceed the limits of Appendix 1517.2, 1517.3, 1527.4, and 1517.5.
  - 13. Re-siding of R-3 occupancies.
- (3) Section 107. Section 107 is amended to read in its entirety:

Fees shall be assessed in accordance with this Section; except that no fee shall be required for a building permit for Agricultural Buildings as defined at section 202A. This agricultural building fee exception is not an exception to fees for electrical, plumbing or mechanical permits or requirements for said structures.

(4) Section 108.1. Section 108.1 of the Uniform Building Code is amended by the addition, to the first paragraph, of the following new sentence:

No inspection shall be required for a building permit obtained for Agricultural Buildings as defined at section 202A. However, this Agricultural Building exception to building inspections is not an exception to the minimum building standards set forth by the Uniform Building Code nor to the other requirements of inspections for electrical, plumbing or mechanical permits.

- (5) Section 108.5. Section 108.5 is amended by the deletion of section 108.5.5.
- (6) Table 1-A--Building Permit Fees. Table 1-A is amended by adoption of the schedule of fees established by resolution of the city council and on file in the city clerk's office.
- (7) Section 217. Section 217 is amended to add the following definition of "place of employment":

Place of employment: A specific area set aside or occupied by a person or persons who perform a task for another in return for financial or other compensation.

- (8) Section 302.4, Exception #3. Section 302.4 Exception #3 is amended by deleting the words: "self closing."
- (9) Section 310.11. Section 310.11 is amended by adding: such facilities shall be designed to minus ten (-10) degrees fahrenheit or less and five thousand six hundred (5600) degree days heating or less.
- (10) Section 708.2.1. Section 708.2.1 **EXCEPTION** is amended by replacement with the following:

Fire stops may be omitted at floor and ceiling levels when approved smoke-actuated fire dampers are installed at these levels, or when approved smoke detectors are placed not more than fifteen feet from side wall of attic and not more that thirty feet from detectors. Detectors shall be connected to sound all alarms throughout the building.

- (11) Section 903. Section 903 is amended by adding: Story, any habitable level used or occupied by humans.
- (12) Section 904.2.2. Section 904.2.2 is amended by adding subsection 6 to read as follows;
  - 6. In any building four stories or more in height.
- (13) Table 10-A--Minimum Egress Requirements. Table 10 A is amended by adding use:
  - #31 Agricultural Buildings 10 500
- (14) Section 1203.3. Section 1203.3 is amended by deleting the words: "laundry rooms and similar rooms."
- (15) Section 1701.1. Section 1701.1 is amended to read: in addition to the inspections required by section 108, the owner or the engineer or architect of record acting as the owner's agent shall employ one or more special inspectors who shall provide inspections during construction on the types of work listed under section 1701.5 and section 108.
- (16) Section 2109.9. Section 2109.9 is amended to read as follows:
  - 2109.9.1 General. Masonry of stabilized unburned clay units shall not be used in any building more than two stories in height. The unsupported height of every wall of unburned clay units shall not be more than 10 times the thickness of such walls. Bearing walls in any case shall not be less that 10 inches. All footing walls which support masonry of unburned clay units shall

extend to an elevation not less than 6 inches above the adjacent ground at all points.

- 2109.9.2 Compressive Strength. The units shall have an average compressive strength of 300 pounds per square inch, when tested in accordance with ASTM C 67. One sample out of five may have a compressive strength of not less than 250 pounds per square inch.
- 2109.9.3 Modules of Rupture. The unit shall average 50 pounds per inch in modules of rupture when tested according to the following procedure:
- 2109.9.3 (a). A cured unit shall be laid over cylindrical supports two inches in diameter, located two inches from each end, and extended across the full width of the specimen.
- 2109.9.3 (b). A cylinder two inches in diameter shall be laid midway and on top of the unburned clay specimen parallel to the supports.
- 2109.9.3 (c). Load shall be applied to the top cylinder at the rate of 500 pounds per minute until rupture occurs.
- 2109.9.3 (d). Modules of rupture is equal to S=3WL/2B(DD)
  - S = Stress in specimen at midspan.
  - W = Maximum load indicated by testing machine.
  - L = Distance between supports in inches.
  - B = Average overall width, face to face, of specimen, in inches.
  - D = Average overall depth, bed surface to bed surface, of specimen, in inches.
  - 2109.9.4 Soil. The soil used for unburned masonry units shall contain not less than twenty five percent (25%) and not more than forty five percent (45%) of material passing through a number 200 mesh sieve. The soil shall contain sufficient clay to bind the particles together but, shall not contain more than two tenths of a percent (0.2 %) of water soluble salts. Most clay loams, except with those of high clay content, are suitable, but it is not practicable to make a selection on the basis of soil analysis only. Soils having a high clay content shrink or crack badly when drying, and sandy soils do not have sufficient binding material to prevent crumbling. Neither of these soils should be used alone for unburned masonry units, but a very good building material can be created by mixing the two types of soil together in proportions that will overcome the undesirable qualities of each. The best way to determine the fitness of a soil is to make a

sample unit and allow it to cure in the open, protected from moisture. The unit should dry without serious warping or cracking to be deemed fit.

2109.9.5 Stabilizers. A stabilizing agent shall be used, and shall be uniformly mixed with the soil in amounts sufficient to provide the required resistance to absorption of water ("waterproof") into the soil, to cement particles of the soil together, and to keep the soil from shrinking or sweating. A list of the most common stabilizers are:

| 1.                 | PORTLAND CEMENT & LIME | 8.  | WOOD ASH     |
|--------------------|------------------------|-----|--------------|
| 2.                 | ASPHALT                | 9.  | RESINS       |
| 3.                 | STRAW                  | 10. | COCONUT OIL  |
| 4.                 | FLYASH & LIME          | 11. | TANNIC ACID  |
| 5.                 | SODIUM SILICATE        | 12. | CATTLE URINE |
| 6.                 | SULFITE LIQUOR         | 13. | COW DUNG     |
| 7.                 | ALIQUATE 11226         | 14. | MOLASSES     |
| (QUARTENARY AMINE) |                        |     | GUM ARABIC   |
|                    |                        |     |              |

Note: Due to the diverse types of soils and numerous types of stabilizers, the only sure method to determine results is through testing.

- 2109.9.6 Sampling. Each of the tests prescribed in this section shall be applied to five sample units selected at random from each five thousand (5000) bricks or units to be used.
- 2109.9.7 Moisture Content. The moisture content of the unit shall be not more than four percent (4 %) by weight.
- 2109.9.8 Absorption. A dried four inch (4 ") cube cut from a sample unit shall not absorb more than two and one half percent (2.5 %) moisture by weight when placed upon a constantly saturated porous surface.
- 2109.9.10 Shrinkage Cracks. No unit shall contain more than three shrinkage cracks, and no shrinkage crack shall exceed three inches in length or one-eighth inch in width.
- 2109.9.11 Size. Each unit shall not be less than a nominal size of ten inches by fourteen inches by four inches (10  $^{\prime\prime}$  X 4  $^{\prime\prime}$ ). No adobe shall be laid in a wall for at least three weeks after making.
- 2109.9.12 Foundations. Unburned clay units shall not be used for foundation or basement walls. All unburned clay unit walls shall have a continuous concrete foundation of at least eight inches (8 ") thick and at least four inches (4 ") wider on each side than the foundation wall above. All foundation walls that

support unburned clay units shall extend at least six inches (6 ") above the finished grade. Foundations shall be designed for each specific use when constructing with unburned clay units.

2109.9.13 Exterior Walls. All walls of unburned clay units shall have a minimum thickness of ten inches (10") for one story and fourteen inches (14") for the lower story of two story buildings. All bricks shall be laid up in adobe or lime mortar with full slush joints and shall be bonded not less than five inches (5"). All exterior walls shall be topped with a continuous tie beam. At the time of laying, all units shall be clean and damp at the surface.

2109.9.14 Wood Lintels and Tie Beams shall be a minimum size of six inches by ten inches (6" X 10") overlapped, or spliced, and at least six inches (6") at all joints. All joints shall have a wall bearing of at least twelve inches (12"). Wood joists, vegas, and beams shall be spiked to the wood tie beam with large nails or large screws. All lintels, wood or concrete, in excess of nine feet (9') shall not been installed until the specific approval of the building official is obtained.

2109.9.15 Plastering. All unburned clay units shall have all weather exposed wall plastered with portland cement plaster, minimum three quarters of an inch (3/4") thickness in accordance with section 2320. Metal lath shall be securely nailed to the unburned clay units by 16 penny nails spaced not more than twelve inches (12") on center. All exposed wood surfaces in walls shall be treated with an approved wood preservative before the application of metal lath. No unburned clay units shall be used for isolated piers, porch columns, or wall sections of less than twenty eight inches by ten inches (28" X 10"). A minimum twelve inch (12") wall section will be permitted between openings provided a continuous lintel of concrete or timber is installed spanning all openings and wall sections.

2109.9.16 Floors and Roofs may be constructed of wood in accordance with chapter 16.

2109.9.17 Partitions of Wood shall be in accordance with chapter 16. Wood partitions shall be nailed to nailing blocks the size of a brick or bolted through the wall with one half inch (1/2") bolts twenty four inches (24") on center with large washers or plates.

Sec. 8-53. Adoption of National Electrical Code; amendments.

- (a) The National Electrical Code, as promulgated by the National Fire Protection Association, Batterymarch Park, Quincy, Massachusetts, and as adopted by the state pursuant to C.R.S. section 12-23-100.2 et seq., is hereby adopted as amended by this section:
  - (1) Article 220-4. Article 220-4 is amended by adding subsection (e) which reads:

In dwelling units and residential garages the maximum number of current consuming openings on a fifteen (15) ampere circuit shall be ten (10). The maximum number of current consuming openings on a twenty (20) ampere circuit shall be twelve (12), except for kitchen and dining room circuits which shall have a maximum of six (6) current consuming openings.

(b) Applicants shall pay, for each electrical permit at the time of issuance, a fee for electrical permits and inspections as determined pursuant to section 107 of the Uniform Building Code, as amended in section 8-52(6).

### Sec. 8-54. Adoption of Uniform Plumbing Code; amendments.

The Uniform Plumbing Code, 1994 edition, as promulgated by the International Association of Plumbing and Mechanical Officials, 20001 Walnut Drive South, Walnut, California, along with the appendices published therein, is hereby adopted as amended in this section:

- (1) Section 103.4. Section 103.4 of the Uniform Plumbing Code is replaced in its entirety as follows:
  - Applicants shall pay, for each permit at the time of issuance, a fee for plumbing permits and inspections as determined pursuant to section 107 of the Uniform Building Code, as amended in section 8-52(6).
- (2) Section 103.9. Section 103.9 of the Uniform Plumbing Code is added to read: The Colorado State Plumbing Board shall serve as the Board of Appeals for any plumbing appeals.
- (3) Section 509.0. Section 509.0 of the Uniform Plumbing Code is amended by replacing the last sentence with the following:

It is prohibited to install a water heater, which depends on the combustion of fuel for heat, under a stairway or landing.

### Sec. 8-55. Adoption of Uniform Mechanical Code; amendments.

- (a) The Uniform Mechanical Code, 1994 edition, as promulgated by the International Conference of Plumbing and Mechanical Officials, 5360 South Workman Mill Road, Whittier, California, with appendices and amendments are provided below, is hereby adopted to provide minimum standards to safeguard life or limb, health, property, and the public welfare by regulation and controlling the design, construction, installation, quality of materials, location, operation and maintenance of heating, ventilation, cooling, refrigeration systems, incinerators and other miscellaneous heat-producing appliances.
- (b) The following amendments to the Uniform Mechanical Code adopted in subsection (a) of this section, are hereby adopted:
  - (1) Section 110. Section 110 is amended by the deletion of section 110. The board of appeals established by section 8-26 shall serve as the board of appeals.
  - (2) Section 111.2. Section 111.2 is created to read as follows:
    - It shall be unlawful for any person to erect, construct, enlarge, alter, repair, move, improve, remove, convert, demolish, equip, use, occupy, or maintain any building or structure or cause or permit the same to be done in violation of this code.
  - (3) Section 115. Section 115 is amended by replacement of the section with the following:
    - Applicants shall pay, for each permit at the time of issuance, a fee for necessary permits and inspections as determined pursuant to section 107 of the Uniform Building Code, as amended in section 8-52(6).
  - (4) Section 315.1. Section 315.1 is amended with the addition of item 8., which reads:
    - No appliance, which depends on the combustion of fuel, shall be installed under any stairway or landing.
  - (5) Table 3-A. Table 3-A is amended as follows:
- Fireplace Stove Clearances: from back thirty six inches (36") and from side thirty six inches (36").

Footnote 5 to: "The thirty six inch (36 ") clearance may be reduced to eighteen inches (18") when protection equivalent to that provided by items (1) through (8) of Table 3-B is applied to combustible construction."

Sec. 8-56. Adoption of Uniform Swimming Pool, Spa and Hot Tub Code; amendments.

This section is hereby repealed.

# Sec. 8-57. Adoption of the Uniform Code for the Abatement of Dangerous Buildings, amendments.

The Uniform Code for the Abatement of Dangerous Buildings, 1994 Edition, promulgated by the International Conference of Building Officials, 5360 South Workman Mill Road, Whittier, California, is hereby adopted as amended in this section.

(1) Section 403. Section 403 is amended by the deletion of paragraph 403(1)(1.3).

# SECTION 2. Public Hearing

A public hearing on the adoption by reference of the Uniform Building Code, 1994 Edition Volumes 1, 2, and 3; the National Electrical Code; Uniform Mechanical Code, 1994 Edition; Uniform Plumbing Code, 1994 Edition; Uniform Code for the Abatement of Dangerous Buildings, 1994 Edition; including the appendices thereto, together with certain amendments, is scheduled in the City-County Auditorium at City Hall in Grand Junction, Colorado, at 7:30 p.m. on the 15th day of February, 1995. The City Clerk is hereby directed to publish Notice of said public hearing in the manner and style and pursuant to the schedule of such publication prescribed in Colorado Revised Statutes 31-16-201, et seq.

### **SECTION 3.** Public Inspection

At least one copy of the Uniform Building Code, 1994 Edition Volumes 1, 2, and 3; Uniform Mechanical Code, 1994 Edition; Uniform Plumbing Code, 1994 Edition; Uniform Code for the Abatement of Dangerous Buildings, 1994 Edition; including the appendices thereto, together with certain amendments, all certified to be true and correct, shall be on file as aforesaid in the office of the City Clerk at least fifteen (15) days preceding said hearing and may be inspected by any interested person between the hours of 7:30 a.m. and 5:30 p.m., Monday through Friday, holidays excepted.

### **SECTION 4.** Validity

Any and all sections or parts of sections of the Code of Ordinances of the City of Grand Junction, Colorado, as amended, in conflict herewith, are hereby repealed.

### **SECTION 5.** Penalty Provision

Section 1-9 of the Code of Ordinances of the City of Grand Junction Colorado shall apply as though fully set forth in each code and provision adopted in this ordinance.

Introduced and ordered published this 18th day of January, 1995.

Passed on second reading this 15th day of February, 1995.

City of Grand Junction

/s/ R.T. Mantlo

R.T. Mantlo President of the Council

Attest:

/s/ Stephanie Nye Stephanie Nye City Clerk

I HEREBY CERTIFY that the foregoing ordinance, being Ordinance No. 2812, was introduced, read, and ordered published by the City Council of the City of Grand Junction, Colorado, at a regular meeting of said body held on the 18th day of January, 1995, and that the same was published in The Daily Sentinel, a newspaper published and in general circulation in said City, at least ten days before its final passage.

IN WITNESS WHEREOF, I have hereunto set mt hand and affixed the official Seal of said City this 16th day of February, 1995.

/s/ Stephanie Nye

Stephanie Nye, CMC City Clerk

Published: January 27, 1995

Published: February 3, 1995

Effective: March 19, 1995