

ORDINANCE NO. 2276

AN ORDINANCE ADOPTING THE 1985 EDITION OF THE UNIFORM BUILDING CODE, WITH CERTAIN AMENDMENTS, THE 1985 UNIFORM BUILDING CODE STANDARDS REGULATING THE ERECTION, CONSTRUCTION, ENLARGEMENT, ALTERATION, REPAIR, MOVING, REMOVAL, DEMOLITION, CONVERSION, OCCUPANCY, EQUIPMENT, USE, HEIGHT, AREA AND MAINTENANCE OF ALL BUILDINGS OR STRUCTURES IN THE CITY OF GRAND JUNCTION; PROVIDING FOR THE ISSUANCE OF PERMITS AND COLLECTION OF FEES THEREFOR; PROVIDING FOR PENALTIES FOR THE VIOLATION THEREOF AND REPEALING ALL OTHER ORDINANCES AND PARTS OF ORDINANCES IN CONFLICT HEREWITH.

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

1. There are hereby adopted as the code of the City of Grand Junction for regulating the erection, construction, enlargement, alteration, repair, moving, removal, demolition, conversion, occupancy, equipment, use, height, area and maintenance of all buildings or structures in the City of Grand Junction and providing for issuance of permits and collection of fees therefor, the following:

(a) Uniform Building Code, 1985 Edition, published by the International Conference of Building Officials, including the generic fire-resistive assemblies listed in the Fire Resistance Design Manual, 1981 Edition, published by the Gypsum Association as referenced in Tables No. 43-A, 43-B and 43-C of the specified Uniform Building Code, including Appendix Chapters 7 - Division I - Covered Mall Buildings, 7 - Division II - Aviation Control Towers, 23 - Division I - Alternate Snow Load Design, 32 - Reroofing, 49 - Patio Covers, 53 - Energy Conservation in New Buildings, 55 - Membrane Structures.

(b) Uniform Building Code Standards, 1985 Edition, published by the International Conference of Building Officials, including (i) Structural Welding Code - Reinforcing Steel, AWS D1.4-79 (U.B.C. Standard No. 26-8); (ii) Structural Welding Code - Steel, ANSI/AWS D1.1-84 (U.B.C. Standard No. 27-6); (iii) Structural Welding Code - Sheet Steel, ANSI/AWS D1.3-81 (U.B.C. Standard No. 27-16) published by the American Welding Society, Inc.; and (iv) Standard for the Installation of Sprinkler Systems, NFPA 13-1980, published by the National Fire Protection Association (U.B.C. Standard No. 38-1), as modified or amended in the Uniform Building Code Standards referenced herein, all of which are on file in the office of the City Clerk of the City of Grand Junction and are hereby referred to, adopted and made a part thereof as if fully set out in this Ordinance, except as they may be amended in Section 2 of this Ordinance.

2. The following amendments are made to the codes as printed:

(a) The fee schedule based on valuation of Table 3-A of code is amended to read:

TOTAL VALUATION FEE

\$1.00 to \$500.00

\$15.00

\$501.00 to \$2,000.00

\$15.00 for the first \$500.00 plus \$1.50 for each additional \$100.00 or fraction thereof, to and including \$2,000.00

\$2,001.00 to \$25,000.00

\$37.50 for the first \$2,000.00 plus \$6.00 for each additional \$1,000.00 or fraction thereof, to and including \$25,000.00

\$25,001.00 to \$50,000.00

\$175.50 for the first \$25,000.00 plus \$4.50 for each additional \$1,000.00 or fraction thereof, to and including \$50,000.00

\$50,001.00 to \$100,000.00

\$288.00 for the first \$50,000.00 plus \$3.00 for each additional \$1,000.00 or fraction thereof, to and including \$100,000.00

\$100,001.00 to \$500,000.00

\$438.00 for the first \$100,000.00 plus \$2.25 for each additional \$1,000.00 or fraction thereof, to and including \$500,000.00

\$500,001.00 and up

\$1,338.00 for the first \$500,000.00 plus \$1.50 for each additional \$1,000.00 or fraction thereof.

(b) Table 3-A Building Permit Fees is amended by adding:

"House Moving \$15.00

Demolition \$15.00

Fence \$15.00

Sign

Illuminated \$15.00

Non-Illuminated \$15.00

(c) Section 503(d)3 is amended to read as follows:

"3. In the one-hour occupancy separation between a Group R,

Division 3 and M Occupancy, the separation may be limited to the installation of materials approved for one-hour fire-resistive construction on the garage side and tight fitting solid wood door 1-3/8 inches in thickness will be permitted in lieu of a one-hour fire assembly. Fire dampers need not be installed in air ducts passing through the wall, floor or ceiling separating a Group R, Division 3 Occupancy from a Group M Occupancy, provided such ducts within the Group M Occupancy are constructed of steel having a thickness not less than 0.019 inch (No. 26 galvanized sheet gauge) and have no openings into the Group M Occupancy."

(d) Section 504 is amended by the addition of subsection (d) to read as follows:

"(d) Property Line Walls. Single family dwellings built on adjoining properties may be built on the common property line provided the party wall separating the two dwellings shall be fire rated one hour with no penetrations. Property line party wall shall extend from the foundation to a point at least 30 inches above the roof.

Exceptions:

1. Property line party walls may terminate at the roof line, provided that the roof covering is class "A" fire retardant rated.
2. Property line party walls may terminate at the underside of roof sheathing provided the roof has at least one hour fire resistive time period for a width of not less than five feet on each side of the wall.
3. Property line party walls may terminate at roofs of entirely non-combustible construction.

A party wall agreement executed by owners of both properties shall be made a matter of record in the county courthouse and shall run with the land in perpetuity. Copy of recorded party wall agreement shall be submitted with application for building permit. This section applies only to not more than two single family residences."

(e) Section 1202(b) is amended to read:

"(b) Special Provisions. Group R, Division 1 Occupancies more than two floors in height or having more than 3,000 square feet of floor area above the first floor shall be not less than one-hour fire resistive construction throughout except as provided in Section 1705(b)2.

Storage or laundry rooms that are within Group R, Division 1 Occupancies that are used in common by tenants shall be separated from the rest of the building by not less than one-hour fire-resistive occupancy separation.

Every apartment house three floors or more in height or containing more than 15 dwelling units and every hotel three floors or more in height or containing 20 or more guest rooms shall have an approved fire alarm system as specified in the Fire Code.

Exception: An alarm system need not be installed in buildings not over two floors in height when all individual dwelling units and contiguous attic and crawl spaces are separated from each other and from public or common areas by at least one-hour fire-resistive occupancy separations and each individual dwelling unit has an exit direct to a yard or public way.

For Group R, Division 1 Occupancies with a Group B, Division 1 parking garage in the basement or first floor, see Section 702(a).

For attic space partitions and draft stops, see Section 2516(f)."

(f) Section 1210(a) is amended to read:

"Sec. 1210(a). Fire-warning Systems. Every dwelling unit and every guest room in a hotel or lodging house used for sleeping purposes shall be provided with smoke detectors conforming to U.B.C. Standard No. 436. In dwelling units, detectors shall be mounted on the ceiling or wall at a point centrally located in the corridor or area giving access to rooms used for sleeping purposes. In an efficiency dwelling unit, hotel sleeping room and in hotel suites, the detector shall be centrally located on the ceiling of the main room or hotel sleeping room. Where sleeping rooms are on an upper level, the detector shall be placed at the center of the ceiling directly above the stairway. All detectors shall be located in accordance with approved manufacturer's instructions. When actuated, the detector shall provide an alarm in the dwelling unit or guest room.

When one or more sleeping rooms are added or created in an existing Group R, Division 3 Occupancies, the entire building shall be provided with smoke detectors as required for new Group R, Division 3 Occupancies.

In new construction, required smoke detectors shall receive their primary power from the building wiring when such wiring is served from a commercial source. Wiring shall be permanent and without a disconnecting switch other than those required for overcurrent protection. Smoke detectors may be battery operated when installed in existing buildings, or in buildings without commercial power, or in buildings which undergo alterations, repairs or additions regulated by the second paragraph of this section.

A smoke detector shall be installed in the basement of dwelling units having a stairway which opens from the basement into the dwelling. Such detector shall be connected to a sounding device or other detector to provide an alarm which will be audible in the sleeping area.

Where air handling vents are installed in hallways adjoining sleeping rooms, the detectors shall be placed on the living room side of the vent. Apartment houses and hotels or motels being served by common interior corridor shall be provided with smoke detectors. Detectors shall be placed not more than fifteen (15) feet from each end of corridor and not more than thirty (30) feet apart, within the corridor. Smoke detectors shall be wired to activate built-in horn in all detectors in corridors.

Exception: If apartment, dwelling unit or guest room has an exit directly to the outside, allowing access to ground level, smoke detectors in corridor may be omitted."

(g) Section 1211 is amended to read as follows:

"Sec. 1211. Every dwelling unit and guest room shall be provided with heating facilities capable of maintaining a room temperature of 70 deg. F at a point 3 feet above the floor in all habitable rooms. Such facilities shall be designed to -10 deg. F. below zero or less and 5600 degree days heating or less."

(h) Section 1807(a) is amended to read as follows:

"Sec. 1807(a) Scope. This section shall apply to all Group B, Division 2 office buildings and Group R, Division 1 Occupancies, each having floors used for human occupancy located more than 75 feet above the lowest level of fire department vehicle access. Such buildings shall be provided with an approved automatic sprinkler system in accordance with Section 1807(c).

(i) Section 1807(l) is deleted in its entirety.

(j) Section 1807 is amended by the addition of a subsection (n) reading as follows:

"(n) All buildings designed for human occupancy more than 75 feet in height shall have a helistop for emergency rescue constructed in accordance with Section 2308 and Section 710 of this code."

(k) Section 2407(i).6 is amended to read as follows:

"6. Unburned clay masonry.

A. General. Masonry or 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 shall in no case be less than 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.

B. Compressive Strength. The units shall have an average compressive strength of 300 pounds per square inch when tested in accordance with ASTM C67. One sample of five may have a

compressive strength of not less than 250 pounds per square inch.

C. Modulus of Rupture. The unit shall average 50 pounds per inch in modulus of rupture when tested according to the following procedure:

1. A cured unit shall be laid over (cylindrical) supports two inches (2") in diameter, located two inches (2") from each end, and extending across the full width of the unit.

2. A cylinder two inches (2") in diameter shall be laid midway between the parallel to the supports.

3. Load shall be applied to the cylinder at the rate of 500 pounds per minute until rupture occurs.

4. The modulus of rupture is equal to $3 \frac{WL}{2 Bd^2}$

W = Load of Rupture

L = Distance between Supports

B = Width of Brick

D = Thickness of Brick

D. Soil. The soil used shall contain not less than 25 percent and not more than 45 percent of materials passing of No. 200 mesh sieve. The soil shall contain sufficient clay to bind the particles together but shall not contain more than 0.2 percent of water-soluble salts.

Most clayey loams, except those with a 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 bonding materials to prevent drying, and sandy soils to not have sufficient bonding materials to prevent crumbling. Neither of these soils should be used alone for brick, but a very good building material can be obtained by mixing the two soils 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 brick and allow it to cure in the open, protected from moisture. It should dry without serious warping or cracking.

E. 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 or "waterproof" the soil, to cement particles of the soil together, keep the soil from shrinking or sweating. A list of the most common stabilizers are:

1. Portland Cement & Lime

2. Asphalt
3. Straw
4. Flyash & Lime
5. Sodium Silicate
6. Sulfite Liquor
7. Aliquate 11226 (Quarternary amine)
8. Wood Ash
9. Resins
10. Coconut Oil
11. Tannic Acid
12. Cattle Urine
13. Cow Dung
14. Molasses
15. Gun Arabic

NOTE: Due to so many types of soil and numerous types of stabilizers, the only sure method to determine results is through testing.

F. Sampling. Each of the tests prescribed in this section shall be applied to five sample units selected at random from each 5000 bricks to be used.

G. Moisture Content. The moisture content of the unit shall be not more than four percent by weight.

H. Absorption. A dried four-inch (4") cube cut from a sample unit shall absorb not more than two and one-half percent moisture by weight when placed upon a constantly water saturated porous surface.

I. Shrinkage Cracks. No units shall contain more than three shrinkage cracks, and no shrinkage crack shall exceed three inches (3") in length or one-eighth inch (1/8") in width.

J. Size. Each unit shall be not less than a nominal size of ten inches (10") by fourteen inches (14") by four inches (4"). No adobe shall be laid in the wall for at least three (3) weeks after making, dependent on weather conditions.

K. Foundations. Adobes shall not be used for foundation or basement walls. All adobe walls shall have a continuous concrete footing at least eight inches (8") thick and not less than four inches (4") wider on each side than the foundation walls above. All foundation walls which support adobe units shall extend to an elevation not less than six inches (6") above the finish grade. Foundation walls shall be at least as thick as the exterior wall as specified in Section 2405(1).

L. Exterior Walls. All walls of adobe 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 adobe 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.

M. Wood Lintels or Tie Beams. Shall be minimum size of six inches (6") by ten inches (10") overlapped, or spliced, at least at least six inches (6") at all joints. All joints shall have a wall bearing of at least twelve inches (12"). Wood joists, figas, or 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 have specific approval of the building official.

N. Plastering. All adobe shall have all exterior walls plastered with portland cement plaster minimum thickness of 3/4" in accordance with Chapter 47. Metal lath shall be securely nailed to the adobe by 16 penny nails spaced not more than twelve inches (12") each way. All exposed wood surfaces in adobe walls shall be treated with an approved wood preservation before the application of metal lath. No adobe bricks shall be used for isolated piers, porch columns, or wall sections or less than 28" by 10". A minimum twelve inch (12") wall section will be permitted between openings provided a continuous lintel of concrete or timber be installed spanning both openings and wall section.

O. Floors and roofs may be constructed of wood, the sizes and spans to be in accordance with Chapter 25.

P. Allowable floor area shall not exceed that specified under occupancy (Part III). Adobe construction shall be allowed the same area as given in Table No. 5-C, Type V Construction Column N.

Q. Partitions of Wood shall be constructed as specified in Chapter 25. Wood partitions shall be nailed to nailing blocks the size of an adobe or bolted through the adobe wall the height of the partition with 1/2" o bolts at 24" on center with large washers or plates.

R. Stop Work. The building official shall have the power to stop work whenever adobes have not been thoroughly cured and shall give prior approval to the use of any hardeners, stabilizers or other so-called preservations."

(l) Section 2516(f)2.A Exception is amended to read as follows:

"Exception: 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 15 feet from side wall of attic and not more than 30 feet between detectors. Detectors shall be wired in such a manner as to activate horn and all smoke detectors in the building."

(m) Section 3801(c) is amended by the addition of the following definition:

"STORY for the purpose of requirement of installation of fire extinguishing systems and standpipes, is defined as any habitable level used or occupied by humans."

(n) Section 3802(b) is amended by the addition of a subsection 5 reading as follows:

"5. In any building four stories or more in height."

(o) Section 3802(g) Exceptions is amended to read as follows:

"Exceptions: In hospitals of Type I, II Fire-resistive and Type II One Hour construction, the automatic sprinkler system may be omitted from operating, delivery, cardiac, x-ray and intensive care rooms when each such room is provided with smoke detectors connected to a continuously attended station or location within the building. Increases for area and heights specified in Section 506(c) and 507 shall not apply when this exception is used."

(p) Table 38-A Standpipe Requirements is amended by the addition of Item 6:

		Nonsprinklered Building		Sprinklered Building
Occupancy	Standpipe Class	Hose Requirement	Standpipe Class	Hose Requirement
6. Standpipes may be required when access is restricted, or an undue	II ⁵ ;	YES	NO REQUIREMENT	NO

hardship would be placed on the Fire Department laying hose line in the building, due to arrangement of stairway area separation wall, occupancy walls, etc.				
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3. A public hearing on the adoption by reference thereto of the Uniform Building Code, 1985 Edition, with certain amendments thereto and the 1985 Uniform Building Code Standards, 1985 Edition, is hereby scheduled in the City-County Auditorium at 520 Rood Avenue, City of Grand Junction, Colorado, at 7:30 p.m. on the 5th day of March, 1986, and 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.

4. At least three copies of the Uniform Building Code, 1985 Edition, with certain amendments thereto, and Uniform Building Code Standards, 1985 Edition, all certified to be true copies, shall be on file in the office of the City Clerk of the City of Grand Junction, Colorado, at least fifteen (15) days preceding said hearing and may be inspected by any interested persons between the hours of 8:00 a.m. and 5:00 p.m. Monday through Friday.

5. Any violation of the building code of the City of Grand Junction, Colorado, from and after the effective date thereof shall be punishable by a fine not exceeding three hundred dollars (\$300.00) or imprisonment for a term not exceeding ninety (90) days, or by both such fine and imprisonment.

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

7. This Ordinance shall become Section 7-1 of the Code of Ordinances of the City of Grand Junction.

PASSED and ADOPTED this 5th day of March, 1986.

