CODES AND STANDARDS

■ **MODEL CODES** - The Routt County Regional Building Department (RCRBD) administers and enforces the following model codes and standards:

INTERNATIONAL BUILDING CODE, 2006 EDITION

The *International Building Code* covers the fire, life, and structural safety aspects of all buildings and related structures. (*Including Appendix Chapters C & J*)

INTERNATIONAL RESIDENTIAL CODE, 2006 EDITION

The *International Residential Code* covers the fire, life, and structural safety aspects of one and two family dwellings, townhomes and private garages. (*Including Appendix Chapter E*)

INTERNATIONAL PLUMBING CODE, 2006 EDITION

The *International Plumbing Code* covers all aspects of plumbing, including requirements for plumbing materials, and installation, and special piping systems for medical and nonmedical gas and medical vacuum systems. (*Including Appendix Chapters B, D, E, F, and G*)

INTERNATIONAL MECHANICAL CODE, 2006 EDITION

The *International Mechanical Code* contains requirements for the design, installation, maintenance, alteration and inspection of mechanical systems that are permanently installed and utilized to provide control of environmental conditions and related processes within buildings.

INTERNATIONAL FUEL GAS CODE, 2006 EDITION

The *International Fuel Code* contains requirements for the installation of fuel gas piping systems, fuel gas utilization equipment and related accessories.

INTERNATIONAL ENERGY CONSERVATION CODE, 2006 EDITION

The International Energy Conservation Code regulates the design and construction of buildings for the effective use of energy.

INTERNATIONAL CODE COUNCIL ELECTRICAL CODE, ADMINISTRATIVE PROVISIONS, 2006 EDITION

The International Code Council Electrical Code, Administrative Provisions contains administrative requirements for the National Electrical Code

NATIONAL ELECTRICAL CODE, 2008 EDITION

The National Electrical Code contains requirements for the installation and maintenance of electrical systems.

INTERNATIONAL EXISTING BUILDING CODE, 2006 EDITION The *International Existing Building Code* establishes a means for preserving existing buildings while achieving appropriate levels of safety.

UNIFORM CODE FOR THE ABATEMENT OF DANGEROUS BUILDINGS, 1997 EDITION (*Published by ICBO*) The *Uniform Code for the Abatement of Dangerous Buildings* sets forth orderly procedures for remedying dangerous buildings.

* It is important that individuals, performing work governed by the model codes, study and review the codes to understand what is required to carry out their responsibilities for compliance with code requirements.

REGIONAL CODE AMENDMENTS

International Building Code – The following is a summary of code amendments and deletions for the jurisdictions served by Routt County Regional Building Department. Complete copies of code adoptions may be obtained at the building department or on our website at www.co.routt.co.us.

Section 105.5 Expiration, a second paragraph is added to read:

All building permits for which an approved final inspection has not been received by the first day of January of the third year after the permit was issued shall automatically expire and no further work on the project for which the permit was issued shall be done unless a renewal permit is issued as provided below. Renewal permits must be issued within six months of the expiration date. A renewal permit for the originally permitted work shall be issued upon payment of a renewal permit fee of one-half of the original permit fee. A renewal permit may be obtained only if no changes have been made to the construction documents submitted with the original permit application. Renewal permits will be based upon the codes in effect at the time of the issuance of the original permit. Renewal permits will be issued a current year permit number and be subject to this section. Any changes to the original approved plans will be subject to additional fees and requirements based on valuation and current fee schedule. Only one renewal permit will be authorized at half fee. Further renewals will require new permits and fees based on the valuation of the remaining work, current codes and current fee schedules.

Section 115.1 Conditions, is amended by adding a second paragraph to read as follows:

The building official may use the Uniform Code for Abatement of Dangerous Buildings, as adopted, to provide a just, equitable and practicable method to be cumulative with and in addition to any other remedy provided by this code.

Section 310.1 Residential Group R, R-2, delete Vacation timeshare properties.

Section 406.1.1 Classification, is amended to read as follows:

Building or parts of buildings classified as Group U Occupancies because of the use or character of the occupancy shall not exceed 1,000 square feet in area or two (2) stories in height except as provided in Section 406.1.2. Any building or portion thereof that exceeds the limitations specified in this chapter shall be classed in the occupancy group other than Group U that it most nearly resembles.

Section 705.3 Materials, is amended to read as follows:

Fire walls shall be of concrete or masonry construction only, without exception.

Section 901.1 Scope, is amended to add a second paragraph as follows:

The fire code official shall have the authority to adopt additional standards for fire protection systems subject to applicable provisions of State statutes and home rule charter.

Section 903.2.7 Group R, is amended to add the following exception:

EXCEPTION: An automatic sprinkler system is not required in multi-use buildings, two stories or less with no more than 2 dwelling units, provided the building is constructed as required by Section 508.3.3, and an automatic and manual fire alarm system is installed in accordance with NFPA 72. Sprinkler systems required by other sections and other codes must still be provided.

Section 907.2.1 Group A, Exception, is hereby deleted.

Section 907.2.2 Group B, Exception, is hereby deleted.

Section 907.2.4 Group F, Exception, is hereby deleted.

Section 907.2.7 Group M, Exception, is hereby deleted.

Section 907.2.8.1 Manual fire alarm system, Exception 2, is hereby deleted.

Section 907.2.9 Group R-2, Exception 2, is hereby deleted.

Section 907.3.1 Location, Exception, is hereby deleted.

Section 1007.3 Exit stairways, Exceptions is amended to read as follows:

- 1. The area of refuge is not required at unenclosed interior exit stairways as permitted by Section 1020.1 in buildings or facilities that are equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
- 2. The clear width of 48 inches (1219 mm) between the handrails is not required at exit stairways in buildings or facilities equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
- 3. Areas of refuge are not required at exit stairways in buildings or facilities equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
- 4. The clear width of 48 inches (1219 mm) between the handrails is not required for exit stairways accessed from a horizontal exit.
- 5. Areas of refuge are not required at exit stairways serving open parking garages.
- 6. Areas of refuge are not required for smoke protected seating areas complying with Section 1025.6.2
- 7. Areas of refuge are not required in Group R-2 occupancies.

Section 1009.1 Stairway width, the first paragraph is amended to read as follows:

The width of stairways shall be determined as specified in Section 1005.1, but such width shall be not less than 48 inches (1219 mm). See Section 1007.3 for accessible means of egress stairways.

Section 1009.1 Stairway width. Exception 1, is amended to read as follows:

1. Stairways serving one individual dwelling unit in Group R, Division 1 or 2, or serving Group U Occupancies may be 36 inches (914 mm) in width.

1012.3 Handrail graspability, is amended to read as follows:

Handrails with a circular cross section shall have an outside diameter of at least 1.25 inches (32 mm) and not greater than 2 inches (51 mm) or shall provide equivalent graspability. If a handrail is not circular, it shall have a maximum horizontal cross section dimension of as least 1.25 inches (32mm) and not greater than 3 inches (57 mm). The narrowest horizontal cross section of the handgrip portion of the handrail shall have a minimum dimension .75 inch less than the maximum horizontal cross section. The surface of the handgrip portion of the handrail shall have a perimeter dimension of at least 4 inches (102 mm) and not greater than 6.25 inches (160 mm) measured to the centerline of the narrowest horizontal cross section. Edges shall have a minimum radius of 0.01 inch (0.25 mm).

Section [F]1028.2 Reliability, is added to read (as required by the Steamboat Springs Fire Code adoption):

All exits to a public way shall be designed to be a minimum of 4 feet wide and of an all-weather surface capable of being maintained unobstructed year round.

Section 1104.4 Multilevel buildings and facilities. Exception 1, the following paragraph is added to this exception:

This exception, exempting elevator or ramp service does not obviate or limit the obligation to comply with all other accessibility requirements required by this chapter. For example, floors above or below the accessible ground floor must meet the requirements of this chapter except for elevator or ramp service. If toilet or bathing facilities are provided on a level not served by an elevator or ramp, then toilet or bathing facilities must be provided on the accessible ground floor.

Section 1207.2 Air-borne sound, The first sentence of this section is amended to read as follows:

Walls, partitions and floor/ceiling assemblies separating dwelling units from each other or from public or service areas shall have a sound transmission class (STC) of not less than 49 (45 if field tested) for air-borne noise when tested in accordance with ASTM E 90.

Section 1207.3 Structure-borne sound, is hereby deleted.

Table 1604.5 Classification of Buildings and Other Structures for Importance Factors, is amended to add the following:

Category	Nature of Occupancy		
I	 Detached private garage 		

Section 3007, CERTIFICATES OF INSPECTION is added to read as follows:

- **3007.1 General.** Elevators, dumbwaiters and escalators shall be maintained to sustain safely all imposed loads, to operate properly, and to be free from physical and fire hazards. The most current certificate of inspection shall be on display at all times within the elevator or attached to escalator or dumbwaiter; or the certificate shall be available for public inspection in the office of the building operator.
- **3007.2 Elevators.** In buildings equipped with passenger elevators, at least one elevator shall be maintained in operation at all times when the building is occupied.

Exception: Buildings equipped with only one elevator shall be permitted to have the elevator temporarily out of service for testing or servicing.

Section 3202.1.1 Structural support, is amended to read as follows:

A part of a building erected below grade that is necessary for structural support of the building or structure shall not project beyond the lot lines.

Section 3202 Encroachments above grade and below 8 feet in height, is amended to read as follows:

Encroachments into the public right-of-way above grade and below 8 feet (2438 mm) in height shall be prohibited except as provided for in Section 3202.2.3. Doors and windows shall not open or project into the public right-of-way.

Section 3202.2.1 Steps, is hereby deleted.

Section 3202.2.2 Architectural features, is amended to read as follows:

Columns, pilasters, moldings, bases, belt courses, lintels, sills, architraves, pediments and similar architectural features shall not project more than 4 inches (102 mm).

Section 3202.3.1 Awnings, canopies, marquees and signs, is amended to read as follows:

Awnings, canopies, marquees and signs shall be supported entirely by the building and constructed of noncombustible materials or, when supported by a building of Type V construction, may be of one-hour fire-resistive construction. Awnings, canopies, marquees and signs shall not extend more than 4 feet (1220 mm) from the building.

Section 3202.3.3 Encroachments 15 feet or more above grade, is hereby deleted.

Appendix Section J103.3 Grading fees, is added to read as follows:

When plans or other data are required to be submitted, a plan review fee shall be paid at the time of submitting plans and specifications for review. A grading permit fee shall be paid at permit issuance. Said plan review and grading permit fees shall be as set forth in the adopted fee schedule.

Chapter 36 Construction Site Management See page 33 of this booklet for information about the requirements and the adoption for the complete text of this amendment.

Chapter 37 Floodplain Construction Standards See the adoption for the complete text of this amendment.

International Residential Code – The following is a summary of code amendments and deletions for the jurisdictions served by Routt County Regional Building Department. Complete copies of code adoptions may be obtained at the building department or on our website at www.co.routt.co.us.

Section R105.5 Expiration, a second paragraph is added to read:

All building permits for which an approved final inspection has not been received by the first day of January of the third year after the permit was issued shall automatically expire and no further work on the project for which the permit was issued shall be done unless a renewal permit is issued as provided below. Renewal permits must be issued within six months of the expiration date. A renewal permit for the originally permitted work shall be issued upon payment of a renewal permit fee of one-half of the original permit fee. A renewal permit may be obtained only if no changes have been made to the construction documents submitted with the original permit application. Renewal permits will be based upon the codes in effect at the time of the issuance of the original permit. Renewal permits will be issued a current year permit number and be subject to this section. Any changes to the original approved plans will be subject to additional fees and requirements based on valuation and current fee schedule. Only one renewal permit will be authorized at half fee. Further renewals will require new permits and fees based on the valuation of the remaining work, current codes and current fee schedules.

Section R110.1 Use and occupancy. Exception, is amended to add a third exception to read as follows:

3. Certificates of occupancy are not required for one and two family dwellings and private garages.

Table R301.2(1) CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA, is completed as follows:

- Ground Snow Load Varies by site location and elevation. (Use actual roof snow load)
- Wind Speed 90 MPH
- Seismic Design Category B
- Subject to Damage by Weathering Severe
- Subject to Damage by Frostline Depth 48 inches (1220mm)
- Subject to Damage by Termite None to slight
- Subject to Damage by Decay None to slight
- Winter Design Temperature -15°F (-26°C)
- Ice Shield Underlayment Required Yes
- Flood Hazards FIRM, February 4, 2005
- Air Freezing Index Steamboat 2239
- Mean Annual Temperature 40-45°F (4.5-7.2°C)

Section R305.1 Minimum height. Exception 2, is hereby deleted.

Section R311.5.6.3 Handrail grip size, Item 1, is amended to read as follows:

Handrails with a circular cross section shall have an outside diameter of at least 1.25 inches (32 mm) and not greater than 2 inches (51 mm) or shall provide equivalent graspability. If a handrail is not circular, it shall have a maximum horizontal cross section dimension of as least 1.25 inches (32mm) and not greater than 3 inches (57 mm). The narrowest horizontal cross section of the handgrip portion of the handrail shall have a minimum dimension .75 inch (20 mm) less than the maximum horizontal cross section. The surface of the handgrip portion of the handrail shall have a perimeter dimension of at least 4 inches (102 mm) and not greater than 6.25 inches (160 mm) measured to the centerline of the narrowest horizontal cross section. Edges shall have a minimum radius of 0.01 inch (0.25 mm).

Section R311.5.6.3 Handrail grip size, Item 2, is hereby deleted.

Section R311.5.8.3 Ship's ladder stairway, is added to read as follows:

An interior fire escape stairway may serve as an exit from an area not to exceed 200 square feet. The pitch of the stairway shall not exceed 60 degrees with a minimum width of 24 inches. Treads shall be not less than 4 inches in width and the rise between treads shall not exceed 10 inches. An approved handrail shall be provided on each side.

Section R311.5.8.4 Alternating tread stairway, is added to read as follows:

Alternating tread stairways may serve as an exit from an area not to exceed 200 square feet. Alternating tread stairways shall have a minimum projected tread of 8.5 inches (216 mm) with a minimum tread depth of 10.5 inches (267 mm). The rise to the next alternating tread surface should not be more than 8 inches (203 mm). The initial tread of the stairway shall begin at the same elevation as the platform, landing or floor surface. An approved handrail shall be provided on each side.

Section R317.1.1 Two family dwellings, Exceptions: Delete Exception 2

Section R601.2 Requirements, is amended to read as follows:

Wall construction shall be capable of accommodating all loads imposed according to Section 301 and of transmitting the resulting loads to the supporting structural elements. All tables and Applicability Limits in this chapter that use roof live load less than 50 psf or ground snow load of 70 psf or less are hereby unusable for design in this jurisdiction.

Section R801.2 Requirements, is amended to read as follows:

Roof and ceiling construction shall be capable of accommodating all loads imposed according to Section 301 and of transmitting the resulting loads to the supporting structural elements. All Tables and Applicability Limits in this chapter that use roof live load less than 50 psf or ground snow load of 70 psf or less are hereby unusable for design in this jurisdiction.

Section R1004.4 Unvented gas log heaters, is hereby deleted.

Section G2406.2 (303.3) Prohibited locations. Exception 3, is hereby deleted.

Section G2406.2 (303.3) Prohibited locations. Exception 4, is hereby deleted.

Section G2406.4 Liquid propane gas appliance in pit or basement, is added to read as follows:

Liquefied petroleum gas piping may serve a gas appliance located in a pit, basement or similar location when the following conditions are met:

- 1. There shall be installed a listed gas detector that is interlocked to a listed solenoid valve located so as to shut off the supply of gas to the building in the event of an alarm.
- 2. There shall be installed an exhaust system for the purpose of removing unburned gases. The exhaust system shall be interlocked to the gas detector so as to operate automatically in the event of an alarm. The exhaust system shall provide a minimum of four (4) air changes per hour, and the exhaust intake shall be located within 6 inches of the floor.

Section G2433 (603) Log Lighters, is hereby deleted.

Section G2445.2 (621.2) Prohibited use, is amended to read as follows:

Unvented room heaters are not to be installed in dwelling units.

Section G2445.7 (621.7) Unvented decorative room heaters, is hereby deleted.

Section G2445.7.1 (621.7.1) Ventless firebox enclosures, is hereby deleted.

Section P2717.2 Sink, dishwasher is amended to read as follows:

A sink and dishwasher are permitted to discharge through a single 1.5 inch (38 mm) trap after the dishwasher passes through an air gap device. No domestic dishwashing machine shall be directly connected to a drainage system or food waste disposer without the use of an approved dishwasher air gap fitting on the discharge side of the dishwashing machine. Listed air gap fittings shall be installed with the flood level (FL) marking at or above the flood level of the sink or drainboard, whichever is higher, or separately trapped with the air gap located on the stand pipe.

Section P2717.3 Sink, dishwasher and food grinder is amended to read as follows:

The combined discharge from a sink, dishwasher and food grinder is permitted to discharge through a single 1.5 inch (38 mm) trap after the dishwasher passes through an air gap device. No domestic dishwashing machine shall be directly connected to a drainage system or food waste disposer without the use of an approved dishwasher air gap fitting on the discharge side of the dishwashing machine. Listed air gap fittings shall be installed with the flood level (FL) marking at or above the flood level of the sink or drainboard, whichever is higher, or separately trapped with the air gap located on the stand pipe.

Section P2904.4.2 Water service installation, is amended to read as follows:

Water service pipe and the building sewer shall be separated as required by policy established by authority having jurisdiction. No exceptions.

Section E3301.1 Applicability, is amended by the addition of a second paragraph as follows:

Any conflict with the provisions of this code and the current electrical code adopted by the State of Colorado Electrical Board shall comply with the current State code.

International Mechanical Code – The following is a summary of code amendments and deletions for the jurisdictions served by Routt County Regional Building Department. Complete copies of code adoptions may be obtained at the building department or on our website at www.co.routt.co.us.

Section 303.9 Liquid propane gas appliance in pit or basement, is added to read as follows:

Liquefied petroleum gas-burning appliances shall not be installed in a pit, basement or similar location where heavier-than-air gas might collect, unless the following conditions are met:

- 1. There shall be installed a listed gas detector that is interlocked to a listed solenoid valve located so as to shut off the supply of gas to the building in the event of an alarm.
- 2. There shall be installed an exhaust system for the purpose of removing unburned gases. The exhaust system shall be interlocked to the gas detector so as to operate automatically in the event of an alarm. The exhaust system shall provide a minimum of four (4) air changes per hour, and the exhaust intake shall be located within 6 inches of the floor.

Section 903.3 Unvented gas log heaters, is hereby deleted.

International Plumbing Code – The following is a summary of code amendments and deletions for the jurisdictions served by Routt County Regional Building Department. Complete copies of code adoptions may be obtained at the building department or on our website at www.co.routt.co.us.

Section 107.1 Required inspections and testing, Item 1, is amended to read as follows:

1. Underground inspection shall be made in accordance with the specifications of the authority having jurisdiction and before any backfill is put in place. Underground inspections of the water service pipe and building sewer shall be performed by the authority having jurisdiction.

Section 312.5 Water supply system test, is amended by adding the following exception:

Exception: The water service piping shall be tested as required by the authority having jurisdiction.

Section 312.6 Gravity sewer test, is amended to read as follows:

Gravity sewer tests shall be made in accordance with the specifications of the authority having jurisdiction. **Section 603.2 Separation of water service and building sewer,** is amended to read as follows:

Water service pipe and the building sewer shall be separated as required by policy established by authority having jurisdiction.

603.2 Separation of water service and building sewer, Exceptions 1, 2, and 3, are hereby deleted.

605.3 Water service piping. The first sentence of the paragraph is amended to read:

Water service piping shall conform to NSF 61 and shall conform to one of the standards listed in Table 605.3 as approved by the authority having jurisdiction.

Section 701.3 Separate sewer connection, is amended to read as follows:

Every premises having plumbing fixtures installed and intended for human habitation, occupancy or use on premises abutting on a street, alley or easement in which there is a public sewer shall have a separate connection to the sewer.

Section 703.6 Slope of building sewer, is added to read as follows:

The building sewer shall have a minimum slope of $^{1}/_{4}$ -inch (6.35 mm) per lineal foot (305 mm).

Section 802.1.6 Domestic dishwashing machines, is amended to read as follows:

No domestic dishwashing machine shall be directly connected to a drainage system or food waste disposer without the use of an approved dishwasher air gap fitting on the discharge side of the dishwashing machine. Listed air gaps shall be installed with the flood level (FL) marking at or above the flood level of the sink or drainboard, whichever is higher, or separately trapped with the air gap located on the stand pipe.

Section 1003.4 Sand and oil separators required, is amended to read as follows:

At any building providing access to motor vehicles, repair garages, car washing facilities, and where oily or flammable liquid wastes are produced or stored and in hydraulic elevator pits, separators shall be installed into which water that may contain heavy solids, oil-bearing, grease-bearing or flammable wastes shall be discharged before emptying in the building drainage system or other point of disposal. Sand and oil interceptors shall be designed and located so as to be provided with ready access for cleaning. Location within a building will require a vapor tight cover.

Exception: Private garages attached to a dwelling or townhome.

Section 1003.4.2 Sand and Oil Separator Design is amended to read as follows:

Sand and oil separators shall be designed in accordance with 1003.4.2.1.

Section 1003.4.2.1 General Design Requirements, is amended to read as follows:

Sand and oil separators shall have a depth of not less than 2 feet (610 mm) below the invert of the discharge drain. The outlet opening of the separator shall have not less than an 18-inch (457 mm) water seal. The inlet shall extend to a minimum of 6-inches (152 mm) below the water level of the interceptor. Sand and oil separators shall have a minimum capacity of 6 cubic feet (0.168 m³) for the first 100 square feet (9.3 m²) of area to be drained, plus 1 cubic foot (0.028 m³) for each additional 100 square feet (9.3 m²) of area to be drained into the separator.

Section 1003.4.2.2 Garages and service stations, is hereby deleted.

Section 1107.3 Location and sizing, is amended to add the following:

Secondary roof drains shall be located with the inlet flow line two inches (51 mm) above the low point of the roof.

International Fuel Gas Code – The following is a summary of code amendments and deletions for the jurisdictions served by Routt County Regional Building Department. Complete copies of code adoptions may be obtained at the building department or on our website at www.co.routt.co.us.

Section 303.3, Prohibited locations, Exception 3, is hereby deleted.

Section 303.3, Prohibited locations, Exception 4, is hereby deleted.

Section 303.8, Liquid propane gas appliance in a pit or basement, is added to read as follows:

Liquefied petroleum gas-burning appliances shall not be installed in a pit, basement or similar location where heavier-than-air gas might collect, unless the following conditions are met:

- 1. There shall be installed a listed gas detector that is interlocked to a listed solenoid valve located so as to shut off the supply of gas to the building in the event of an alarm.
- 2. There shall be installed an exhaust system for the purpose of removing unburned gases. The exhaust system shall be interlocked to the gas detector so as to operate automatically in the event of an alarm. The exhaust system shall provide a minimum of four (4) air changes per hour, and the exhaust intake shall be located within 6 inches of the floor.

Section 603 Log Lighters, is hereby deleted.

Section 621.2 Prohibited use, is amended to read as follows:

Unvented room heaters are not to be installed in dwelling units.

Section 621.7 Unvented decorative room heaters, is hereby deleted.

Section 621.7.1 Ventless firebox enclosures, is hereby deleted.