

**ARAPAHOE COUNTY BUILDING DEPARTMENT  
POLICIES AND PROCEDURES MANUAL**

Table of Contents.....	1
General office information and hours of operation .....	2
Telephone, fax numbers for departments .....	2
Building permit and plan review fees .....	3-5
Items that are exempt from permitting .....	5
County adopted code data and design criteria .....	6
Plan review and code information .....	7
Speaking with an inspector .....	7
Obtaining a building permit, how the process works .....	7
Obtaining a building permit, submittal information .....	8
Residential, New home construction .....	8
Residential, Misc. permits .....	8
Basement finishing, decks .....	8
Patio covers.....	9
Detached garages, sheds, outbuildings .....	9
Attached garages, additions .....	9
Gas logs, inserts, fire place conversions.....	10
Furnace and water heater replacements.....	10
Lawn irrigation systems.....	10
Re-roof information, fencing and retaining wall information .....	10
Hot tubs, pools.....	10
Commercial.....	11
New shell buildings and additions to existing buildings .....	11
Foundation only permits .....	11
Remodeling of existing buildings and tenant spaces.....	12
First time finish of a tenant space .....	12
Change of occupancy permits .....	12
Electrical permits, service upgrades, etc. ....	12
Calling for inspections, how and when .....	13
Paying re-inspection fees, and closing out permits .....	13
What to do in the event that an inspection is not approved.....	13
Obtaining a Certificate of Occupancy (C.O.) .....	14
Residential and Commercial.....	14
Types of inspections .....	15
Building Department policies and interpretations .....	16/17
Inspection Guidelines .....	16/17
Permit and plan review fees, based on 1997 UBC Table 1A .....	See web link
ICC Building Valuation Data .....	See web link
Monoslab detail for some buildings under 1000 SF.....	See web link
Appendix G, Swimming Pools, Spas and Hot Tubs fencing requirements .....	See web link
Permit Application.....	See web link

## **General office information**

The Building Department office personnel are available between the hours of 8:00 AM and 4:30 PM to provide information and answer questions, including:

- Accept building permit applications and plan submittals
- Provide information relating to submittal requirements,
- Provide code interpretations and specific information
- Issue building permits and accept payments for permits, re-inspection fees, etc.
- Record inspection requests (up to 4:30 PM) for the following business day
- Provide text and phone communication with inspectors
- Provide access to public files, plans, permit and inspection histories
- Provide access to Board of Review information and requests

**(Note: No permits or C.O.'s will be issued after 4:15 PM)**

## **Hours of operation**

### **7:00 - 7:30 AM**

Inspectors and a building official are normally available in the office to answer code questions, to provide approximate inspection times (an estimated two (2) hour "window" can usually be given), to record inspection requests for the next business day, etc. Their time in the office is limited at this time of the day, therefore if a detailed discussion or a meeting is required, please use this time to request a time that would be convenient for both the inspectors and the caller. Most inspectors are usually also back in the office between 4:30 - 5:00 to accept calls, (depending upon their workload for the day).

### **8:00 AM- 4:30 PM**

The Building Department (and other related offices including Zoning, Planning, Engineering, Mapping and Records) is open for general business. (See General Office information above) Inspection requests for the next business day are accepted up until 4:30 PM, and no permits or C.O.'s will be issued after 4:15 PM.

### **4:30 - 5:00 PM**

The Building Department general offices are closed, however the inspectors are usually available via phone to answer questions, provide code information, record inspection request, etc.

## **Phone and fax numbers**

720-874-6600	Building Department, including inspection requests
303-798-6054	Fax line, for the Building, Zoning and Planning Departments
720-874-6711	Zoning
720-874-6650	Planning
720-874-6500	Engineering Services
720-874-6686	Mapping

## **Building Department Address**

Arapahoe County Building Department  
6924 S Lima St  
Centennial, CO 80112

## **Building permit and plan review fees**

See page four (4) for other fee assessments

### **Building permit valuations and fee assessment**

Permit fees shall be assessed as per estimated total labor and material valuation, or if applicable (where the actual valuation is unknown for some reason), and as a minimum, using the current County adopted Fee and Valuation Schedule, which may be amended periodically as needed.

The permit applicant shall provide an estimated total labor and material valuation at time of application. This valuation is for all construction work for which the permit is issued, as well as all finish work, painting, roofing, electrical, plumbing, heating, air conditioning, elevators, fire extinguishing systems and any other permanent equipment, along with any necessary site work. If, in the opinion of the building official, the valuation is underestimated on the application, the permit shall be denied, unless the applicant can show detailed estimates to meet the approval of the building official. The Building Official may also utilize the Building Valuation Data, periodically published in the ICC Building Safety Journal, as a guide for the determination of the minimum value or valuation under any of the provisions of this Code. The final building permit valuation shall be set by the building official. Based on the estimated value identified above, the permit fee will be calculated from Table 1-A in the 1997 UBC, **plus** a plan review fee of 65% of the permit fee.

New residential and commercial structures may also be subject to one or more special fee districts, depending upon their location, that would be **added to the permit / plan review amount**, and collected by the Building Department. These special districts are as follows:

- **Cherry Creek Regional Drainage Basin Authority**

This district imposes a fee of 4 cents per square foot, based on the building "footprint" and on-site impervious areas for new commercial buildings and a flat fee of \$60.00 for new residential dwellings.

- **Transportation Improvement Fund (TIF)**

This district imposes various fees based on the character and use of the structure. The fee is a per square foot amount and is based on the **total** building square footage – valid 7/1/07 to current

\$1.34 per square foot Office use	\$1.44 per square foot Retail use
\$0.73 per square foot Industrial use	\$1202.85 Multi-Family Home, each unit
\$1804.28 Residential Two car garage	\$2345.56 Residential Three car garage

- **E-470 Fee Area**

This is a special district area, that imposes either a flat rate fee (\$20.82 to \$138.78) for single family residences and multi-family units, or a per square foot fee (\$.03 - \$.97) for commercial uses, based on the total square footage of the structure. The Zoning Department provides the Building Department with the legal location on which the fees will be based.

- **Open Space Use Tax**

All building permit applications as of January 1<sup>st</sup> 2004 shall be assessed the Arapahoe County's Open Space Use Tax of 0.25% ("Use Tax"), to be based upon an estimate of the cost of the construction and building materials, generally calculated at 50% the total project construction cost.

- **Parker Jordan Metro District Fees** are imposed but not collected by the County

## Permit fees and valuation calculation

### Flat rate fee amounts, or fees based on the labor and material estimated value

Est. Value	Air conditioning, residential
Est. Value	Air conditioning, commercial
\$ 75.00	Board of Review, regular session (\$250.00 for special session)
\$ 50.00	Construction trailer permit
Est. Value	Demo permits
\$ 5.00	Duplicate permit card
Est. Value	Foundation only permits min. fee (These are generally <u>not</u> being issued)
Est. Value	Furnace replacement, residential
Est. Value	Furnace, boiler, A/C replacements (commercial)
Est. Value	Gas log installation, residential
\$ 10.00	Indemnification Form (to move in personal possessions prior to C.O.)
Est. Value	Landscaping sprinkler systems, residential
Est. Value	Landscaping sprinkler systems, commercial
\$ varies	Microfilm or photocopies
\$150.00	Pre-move inspection (for buildings moved into or within the County)
\$ 42.00	Re-inspection fee for each disapproval beyond the initial inspection in each category, the 2nd re- inspection would be \$84, the 3 <sup>rd</sup> \$126, etc
Est. Value	Re-roof permits, residential
Est. Value	Re-roof permits, commercial
Est. Value	Sales Trailer
Est. Value	Retaining walls
\$100.00	TCO Temporary Certificate of Occupancy
Est. Value	Trailer hookups (\$100 minimum)
Est. Value	Water Heater, residential
Est. Value	Water Heater, commercial

### Electric only permits

\$100.00	for valuations less than \$2000.00
\$25.00	per each \$1000 or part thereof, for valuations \$2001 and above, <u>plus</u> \$100

### Permit and Plan Review fees, based on Table 1-A, 1997 UBC

**See web page link for a partial list of permit fees.** All other permit and plan review fees are based on the calculations listed at the bottom of the table.

### Permit Application

**See web page link. The form can be down loaded in PDF format.**

## Permit Fee Assessments

### Permit and plan review fees from Table 1-A, 1997 UBC, and based on valuation

#### **Single and multi-family residential, items being completed during initial building construction**

Est. Value      All areas associated with single- or multi-family homes, including finished habitable areas, this would include corridors / breezeways in multi-family, finished or unfinished basements, garages, decks, covered porches, patio covers and required site work

#### **Single and multi-family residential, items completed in existing house construction**

Est. Value      Basement finishing

Est. Value      Decks, covered porches, patio covers, spas / hot tubs, sheds, gazebos, etc

#### **Commercial buildings, tenant finish and remodeling**

Est. Value      For first time tenant finish in a shell space / building

Est. Value      Remodeling or tenant finish in a previously finished space.

#### **Commercial buildings and additions**

Est. Value      For all building components and associated site work of the space or building

#### **Items that are exempt from permitting**

The following is a partial list of work that is exempt from permitting, from Section 105 of the 2009 IRC / IBC, though said exemption **does not** permit any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances.

1. One-story detached accessory structures, provided the floor area does not exceed 120 square feet.
2. Fences not over 6 feet high and that **do not** incorporate masonry/concrete components.
3. Retaining walls that are not over 4 feet in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge.
4. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons and the ratio of height to diameter or width does not exceed 2 to 1.
5. Sidewalks and driveways not more than 30 inches above adjacent grade and not over any basement or story below. Decks are no longer excluded.
6. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
7. Prefabricated swimming pools that are less than 24 inches deep.
8. Swings and other playground equipment accessory to a one or two-family dwelling.
9. Window awnings supported by an exterior wall which do not project more than 54 inches from the exterior wall and do not require additional support.
10. The exception for decks less than 30" above grade listed in the IRC Section 105.2 Item 10 has been deleted, thereby requiring permits for decks.
11. IBC Section 105.2 Item 13 - Non-fixed and movable fixtures, cases racks, counters and partitions not over 5 feet 9 inches in height. All racking systems over 8 feet in height must have engineered plans provided
  - Unless otherwise exempted, separate plumbing, electrical and mechanical permits will be required for the above exempted permits.

## Arapahoe County adopted codes and design criteria

### 2009 International Building Code, IBC, including:

- Appendix C, Group U, Agricultural Buildings
- Plus amendments - viewable form our web page under county Adopted Codes and Amendments

### 2009 International Residential Code, IRC, including Appendices:

- Appendix G, Swimming Pools, Spas and Hot Tubs
- Appendix H, Patio Covers
- Plus amendments - viewable form our web page under county Adopted Codes and Amendments

### 2009 Minimum Design Criteria

**TABLE R301.2(1)**

Ground Snow Load	Wind Design		Seismic Design Category	Subject to damage from			Winter Design Temp	Ice Barrier Underlayment required	Flood Hazards	Air Freezing Index	Mean Annual Temp
	Speed MPH	Topographic Effects		Weathering	Frost Line depth	Termite					
30 # Roof 30# non-reducible	90 mph 3 second gust	No	B	Severe	36" inches	Slight to moderate	1 degree F	No	1989 FIRM: 1995	712	50.3 F

### 2009 International Plumbing Code

- Plus amendments - viewable form our web page under county Adopted Codes and Amendments

### 2009 International Mechanical Code

- Plus amendments - viewable form our web page under county Adopted Codes and Amendments

### 2009 International Fuel Gas Code

- Plus amendments - viewable form our web page under county Adopted Codes and Amendments

### 2009 International Energy Conservation Code

- Plus amendments - viewable form our web page under county Adopted Codes and Amendments

### 2011 National Electrical Code, NEC

### 1997 Uniform Code for the Abatement of Dangerous Buildings

- Plus amendments - viewable form our web page under county Adopted Codes and Amendments

### A117.1-2003 ANSI manual

### Elevator and Escalator Codes

ASME A17.1 – 2007, A17.3 – 2005, A18.1 – 2008 and ASCE 21 Parts 1, 2, 3, and 4

## Plan Review and Code Information

The Chief Building Official (Steven Byer) is involved the general administration of the Building Division, and works with the office, plan review and inspection staff to enable consistency within the department. Specific code related questions should first be directed to the framing, plumbing, electrical or mechanical inspection departments, or plan review staff, which may all be reached by the main office number, 720-874-6600. (See page 2) Questions regarding code interpretations, approximate plan review times or for a status of a particular plan submittal may be addressed to either the Chief Building Official or one of the Plans Examiners.

Chief Building Official Email address: [sbyer@co.arapahoe.co.us](mailto:sbyer@co.arapahoe.co.us)

The Plans Examiners (John Garritano / Paul Banza / Gary Karnish) consolidate the review comments from the electrical, mechanical and plumbing departments, with comments regarding I-Code and NEC compliance into a Plan Review Letter that is issued with each permit. Specific code related questions should first be directed to the framing, plumbing, electrical or mechanical inspection departments, which may all be reached by the main office number, 720-874-6600. (See page 2) Questions regarding Code issues, commercial or residential plan submittal requirements, approximate time frames for plan review or for a status of a particular plan review may be addressed to either the Chief Building Official or one of the Plans Examiners.

Email addresses: [jgarritano@co.arapahoe.co.us](mailto:jgarritano@co.arapahoe.co.us) , [pbanza@co.arapahoe.co.us](mailto:pbanza@co.arapahoe.co.us) , [gakarnish@co.arapahoe.co.us](mailto:gakarnish@co.arapahoe.co.us)

### **Speaking with the Inspectors**

The inspectors are always in the office between 7:00 - 7:30 AM and are usually also back in the office between 4:30 - 5:00. **See page (2)** for more details and phone numbers.

## **Obtaining a Building Permit, How the Process Works**

To obtain a building permit, the applicant must first submit a completed application to the Building Department, along with any other required submittal information. The submittal requirements vary depending upon the type of work to be included within the permit, though Contractor Information (including State Plumbing / Electrical Contractor License numbers) and Open Space Use Tax forms are **required** on every permit. The following pages give specific submittal requirements. A **complete** submittal would then be forwarded to the Zoning Department for approval prior to being released to the Building Department for review and permit processing. Upon the completion of the permit review and permit issuance, the applicant will be notified by phone of the permit status and fees. The time it takes to process individual permits varies greatly, from the same day up to several weeks. Simple “walk through” type permits like furnace and water heater replacements may take a few minutes or a day or more, depending upon the workload on any given day. These permits may be available over the internet via Velocity Hall (contact the office staff at 720-874-6600 for registration information). Commercial buildings and tenant finish permits may take anywhere from a few days to a month or more, depending upon several factors, including the complexity of the project, the completeness of the submittal and plans, the speed at which the architect / engineer provides response comments, the reception of the Fire Department stamped plans and review comments, and quantity of permits that may be in for review at any given time, etc.

### **Obtaining a Building Permit, minimum submittal requirements**

**All engineers and architects stamping plans must be Colorado registered**

### **Residential, new home construction and additions**

1. A complete Building Permit Application, signed and dated
2. A Soils Test Report, stamped and signed by an engineer
3. A site plan, complete with all dimensions to property lines & buildings on the same lot
4. Foundation plans, (2) stamped and signed by an engineer / architect.
5. Construction plans, (2) drawn to scale, and clearly indicating all work to be performed. The plans must show the square footage of each floor, of any finished and unfinished basement areas, the garage area and of any decks and/or porches. Indicate the use of all rooms, the location of the furnace and water heater, stairways, window and door sizes and locations. All framing members must be clearly identified for size, span, species type and grading. Indicate the roof pitch, type of sheathing and roofing materials, and provide stamped truss details. Long span beams, glu-lams, steel beams, etc., are to be sized by an engineer / architect and clearly indicated on the plans.
6. Sewer availability letter from the sanitation district **or** Tri-County Health Department review and approval letter for tank and leach field system.
7. Provide calculations / details indicating compliance with the County adopted 2009 Energy Conservation Code, mechanical equipment details, REScheck compliance, Manual J / D / S, etc

### **Residential, basement finish**

1. A complete Building Permit Application, signed and dated
2. Construction plans, (2) drawn to scale, and clearly indicating all work to be performed. The plans are to indicate the square footage of the area being finished, the use of all rooms, the locations of the furnace and water heater, the stairway, egress windows, etc.
3. Indicate finished ceiling and soffit heights (7' minimum, though soffit areas may be reduced to 6' 6" for a maximum width of 8' when necessary to conceal beams, ducts and piping)
4. Egress windows must be compliant with the following:
  - A minimum of 5.7 square feet of openable area.
  - Minimum clear openable height of 24 inches. Minimum clear openable width of 20 inches.
  - Maximum sill height of 44 inches.
  - The window well shall have a minimum horizontal area of (9) sq. ft. and a minimum dimension of 36" inches.
  - Window wells over 44" deep shall have an approved egress ladder permanently installed.

### **Residential, decks**

1. A complete Building Permit Application, signed and dated.
2. A site plan, complete with dimensions from the deck to all property lines.
3. Construction plans, (2) drawn to scale, and clearly indicating all work to be performed, including the actual square footage of the deck. All framing members (beams, joists, posts, etc) must be clearly identified for size, span, species type and grading, along with specific bolting details at ledger and post to beam. Indicate the caisson location and size (12" X 36" minimum) for each post. Show the height of the deck above grade for guardrail consideration (with **grade** being the surrounding area **within 3' feet of the deck perimeter**). Any extra loads (i.e. hot tubs) must be indicated. Provide specific stairway and guardrail details, including height of railings, maximum openings, stair rise and run, landing type and size, etc.

### **Residential, Patio Covers**

1. A complete Building Permit Application, signed and dated.
2. A site plan, complete with dimensions from the patio cover to all property lines.

3. Construction plans, (2) drawn to scale, and clearly indicating all work to be performed.
4. All framing members (beams, rafters, wall ledger, ceiling joists, posts, etc) must be clearly identified for size, span, species type and grading. Indicate whether there is to be a finished ceiling installed on the bottom of the joists / rafters. Show walking clearance under all components.
5. Provide details regarding the type or roofing material, roof slope, type and thickness of roof sheathing, gutter and downspouts, how this roof is to be tied into an existing roof or bolting details as to how the ledger is to be attached to house wall, etc. Indicate the caisson location and size (12" X 36" minimum) for each post. (Attachment to existing fascia and rafter tails is not permitted)

### **Residential, detached garages, shed, agricultural outbuildings**

1. A complete Building Permit Application, signed and dated
2. A Soils Test Report, stamped and signed by an engineer (for buildings over 1000 SF) **or** an “open hole” inspection by the engineer along with a stamped and signed compliance letter.
3. A site plan, complete with all dimensions to property lines and buildings on the same lot.
4. Foundation plans, (2) copies. An approved monoslab detail (see web link) is acceptable for single story buildings under 1000 square feet (SF). Foundation plans, stamped and signed by an engineer / architect, must be submitted for buildings in excess of 1000 SF **or** for buildings over (1) story in height **or** if there is any brick or cement block work involved.
5. Construction plans, (2) drawn to scale, including dimensions and total square feet (SF) and clearly indicating all work to be performed. All framing members (studs, headers, rafters, sheathing, etc) must be clearly identified for size, span, on center spacing, species type and grading, the type of siding, etc. Show the locations and sizes of all door and window openings. Provide details regarding the roof system, including roof pitch, type of roofing materials to be used, the type and thickness of roof sheathing, whether engineered trusses are to be used and if not then provide **all** framing details (rafters, ceiling joists, ridge beam, etc). Long span wood beams and steel beams will require engineering. Provide stamped plans if sidewalls exceed 10' in height and stamped truss details if engineered trusses are used.

### **Residential, additions, attached garages**

1. A complete Building Permit Application, signed and dated
2. A Soils Test Report, stamped and signed by an engineer
3. A site plan, complete with all dimensions to property lines and buildings on the same lot
4. Foundation plans, (2) stamped and signed by an engineer / architect.
5. Construction plans, (2) drawn to scale, and clearly indicating all work to be performed. The plans must show all the dimensions and total square footage. Indicate the use of all rooms, the use of all adjoining existing rooms, the location of any stairways, window and door sizes and locations. All framing members must be clearly identified for size, span, on center spacing, species type and grading. Provide details regarding the roof system, including roof pitch, type of roofing materials to be used, the type and thickness of roof sheathing, whether engineered trusses are to be used (stamped details required) and if not then provide **all** framing details (rafters, ceiling joists, ridge beam, etc). Long span beams, glu-lams, steel beams, etc., are to be sized by an engineer / architect.
6. Provide calculations indicating compliance with the County adopted 2009 Energy Conservation Code, mechanical equipment details, REScheck compliance, etc for all habitable spaces.

**Residential, Gas log and fire place conversions**

1. A complete Building Permit Application, signed and dated
2. Provide a gas piping isometric, if there is to be a significant quantity of pipe installed.
3. The actual installation will require a (non-concealed) shut off within (6) six feet of the appliance in the same room, that adequate combustion air is supplied, and that a pressure test is performed prior to connection and hookup of the appliance. For installations in wood burning type fireplaces, the existing damper must be removed, welded open, or modified to provide an acceptable flue opening for the unit installed. (Conventional wood burning appliances are not permitted West of Kiowa Creek)

**Residential, furnace and water heater replacements**

1. A complete Building Permit Application, signed and dated

**Residential, Lawn irrigation systems**

1. A complete Building Permit Application, signed and dated

**Residential, re-roofing**

1. A complete Building Permit Application, signed and dated
2. Existing roofing layers need to be removed prior to installation of the new roof covering – see Section R907.3 in the IRC and/or Section 1510.3 in the IBC

**Residential, wood fences, 72" inches or less in height (with only posts, no masonry columns)**

1. Fences that are (72") inches or less in height will only require a permit from the Zoning Department at 720-874-6711, which is adjacent to the Building Department.

**Residential or commercial fences, over (72") high or of masonry / concrete**

For all fences and any masonry / concrete walls over (72") inches in height, or that incorporate components (like brick / concrete columns) that are over 72" in height.

1. A complete Building Permit Application, signed and dated.
2. A site plan, complete with **all** dimensions to property lines and buildings on the same lot
3. Foundation / construction plans, (2) stamped and signed by an engineer / architect.

**Residential or commercial retaining walls 48" or more in height from the footing bottom or walls that are directly adjacent to required egress paths, parking areas, sidewalks used for egress, etc**

1. A complete Building Permit Application, signed and dated.
2. A site plan, complete with **all** dimensions to property lines
3. Construction plans, (2) stamped and signed by an engineer or architect, showing how wall is to be constructed and the type of materials to be used.

**Residential, hot tubs and pools**

1. A complete Building Permit Application, signed and dated.
2. A site plan, complete with dimensions from the pool / tub to adjacent property lines
3. All outdoor pools, hot tubs are required to be protected by an approved barrier, meeting all the requirements for Appendix G of the 2009 IRC. (See web link to access form).
4. Provide stamped engineering for all in-ground pools that are cast in place, panelized, etc.
5. Provide verification of UL listing and any relevant installation instructions to field inspectors.

**Commercial, new shell buildings and additions to existing structures**

1. A complete Building Permit Application, signed and dated.
2. A Soils Test Report, stamped and signed by an engineer.
3. A site plan, complete with **all** dimensions to property lines & buildings on the same lot
4. Foundation plans, (2) stamped and signed by an engineer / architect.
5. Applicable specification books, structural calculations, energy compliance data, etc.
6. Construction plans, (2) stamped and signed by an engineer / architect, drawn to scale, and indicating **all** work to be performed (including all electrical, plumbing and mechanical). Complete code data must be listed, including building construction type, occupancy classification(s), square footage and occupant data for each floor and distinct occupancy, plumbing fixture details showing compliance with Table 2902.1, total building and building footprint square footage figures, the listing of the code versions used, exiting width calculations, building height data, etc. Provide all relevant cross sections, roof and wall details, door and hardware information, glazing types and locations, structural design calculations and criteria, etc.
  - Additions must also show all adjacent areas, separate and combined square footage and occupant data, revised exiting travel distances due to the addition, revised allowable building size data, etc.
7. Provide a Sewer Availability Letter from the appropriate Sewer / Water District.
8. Provide Tri-County Health Department approval, if applicable. (Restaurants, day care, commercial kitchens, public swimming pools, State licensed group homes, etc.)
9. Provide calculations indicating compliance with the County adopted 2009 Energy Conservation Code, including COMcheck compliance certification.
10. Provide the Fire Department review comments and approval stamp on plans, prior to the completion of the County plan review and before permit issuance. (The Fire Dept review may be concurrent with the Building Dept review)
  - **NOTE:** Some buildings that are (2) stories or more in height and **all buildings** that are (3) or more stories and/or potentially hazardous / dangerous occupancies could very likely be sent out for review by an outside agency. This would require that (5) five complete sets of items 4, 5 and 6 listed above be submitted for review purposes, instead of the (2) listed, though (4) sets will be returned at permit issuance. It is acceptable to provide (2) stamped and signed sets along with (3) unstamped identical plans for review purposes.

**Commercial, Foundation Only permits (though these are normally NOT issued)**

1. A complete Building Permit Application, signed and dated.
2. A Soils Test Report, stamped and signed by an engineer.
3. A site plan, complete with **all** dimensions to property lines & buildings on the same lot
4. Foundation plans, (2) stamped and signed by an engineer / architect.
5. Construction (structural and minimal architectural) plans, (2) stamped and signed by an engineer / architect, drawn to scale and providing sufficient information to indicate the type and use of the building for code compliance verification. Complete code data must be listed, including building construction type, occupancy classification(s), square footage figures for each floor, total building and building footprint square footage figures, the listing of the code versions used, building height data, etc.
6. Provide a Sewer Availability Letter from the appropriate Sewer / Water District.
7. A County indemnification (form) letter must be signed by the building owner and contractor (both signatures to be notarized) **Public Works Director approval is required for foundation only permits.**

### **Commercial, remodeling of existing buildings and tenant spaces**

1. A complete Building Permit Application, signed and dated. (including valuation of all work)
2. Construction plans, (2) stamped and signed by an engineer / architect, drawn to scale, and indicating **all** work to be performed (including all electrical, plumbing and mechanical). Complete code data must be listed, including building construction type, occupancy classification(s), square footage and occupant data for each area and distinct occupancy, the listing of the code versions used, etc. Provide relevant details of **all** areas that are adjacent and open into the area being remodeled. Also include all required egress paths and corridors from this space to a stair tower or to the exterior of the building.
3. Provide the Fire Department review comments and approval stamp on plans, prior to the completion of the County plan review and before permit issuance.
4. Provide Tri-County Health Department approval, **if applicable**. (Restaurants, day care, commercial kitchens, public swimming pools, State Social Service licensed group homes, veterinary clinics, etc.)

### **Commercial, First time tenant finish of a shell space**

1. A complete Building Permit Application, signed and dated.
2. Construction plans, (2) stamped and signed by an engineer / architect, drawn to scale, and indicating **all** work to be performed (including all electrical, plumbing and mechanical). Complete code data must be listed, including building construction type, occupancy classification(s), character and use of each area including the use of any adjacent tenant spaces, **square footage** and occupant data for each area and distinct occupancy, the listing of the code versions used, etc. Provide details relevant to all required egress paths and corridors from this space to a stair tower or to the exterior of the building. Provide all relevant door and glazing details, including hardware, fire ratings, etc.
3. Provide Tri-County Health Department approval, **if applicable**. (Restaurants, day care, commercial kitchens, public swimming pools, State Social Service licensed group homes, veterinary clinics, etc.)
4. Provide the Fire Department review comments and approval stamp on plans, prior to the completion of the County plan review and before permit issuance.

### **Commercial, Change of use of existing buildings and tenant spaces**

The owner / contractor is responsible for contacting the Building Department and providing sufficient information and/or plans, to enable the Building Department to verify code compliance for the proposed use of the existing space, and to determine if a building permit and inspections will be required. If a permit is required, the submittal criteria listed above for **Commercial, remodeling of existing buildings and tenant spaces** will apply. **Change of occupancy requires that a permit and Certificate of Occupancy be issued.**

### **Residential or commercial, electrical permits, service upgrades**

1. A complete Building Permit application signed and dated, along with the valuation of all work.
2. All commercial (and some residential) electrical work will require stamped engineered plans, clearly showing all work that is to be performed, unless specifically waived by the Building Official and Electrical Inspection Department, due to the relatively minor nature of the work. Required plans will include panel schedules, one-line diagram with calculations, power and lighting circuiting, etc.

### **Calling for inspections, how and when - See IRC / IBC Section 109 for specifics**

Inspections may be requested upon receiving the proper building permit and the completion of the appropriate type and quantity of work to justify an inspection. **No work shall be concealed until properly inspected and approved.** Simple or single item permits, a gas water heater replacement for example, would only require (1) one inspection (approval), and a furnace replacement would require both electrical and mechanical inspections, whereas a house or commercial building would require numerous and multiple inspections. If in doubt, please call the Building Department, or ask for the appropriate inspection department for specific details.

The applicant is to call the Building Department, 720-874-6600 prior to 4:30 PM for **specific** inspection requests, being certain to request **each type** of inspection needed. Generally, the inspection will be performed the next business day, though due to circumstances beyond our control (adverse weather conditions, an inordinate quantity of inspections being called for the same day, illnesses, etc.) it is not always possible to complete all inspection requests. These missed inspections would be carried over to the next business day and generally would be done as soon as possible that day. All work being called for inspections must be complete, as inspection times may be anywhere from 7:30 AM until up to 5:00 PM. The inspection permit card, stamped approved plans and any plan review comments must be on site and available for review. The inspection site address must be posted and the site must be accessible to the inspector including any ladders to provide safe access to the inspection area. Inspectors **are not permitted** to enter an occupied residence / tenant space when no one is present, or to perform an inspection unless an adult (18 years of age or older) is present. The inspectors will also not enter a gated or rear yard unless specific permission has been granted and assurance has been provided that no dogs are present.

### **Passing or failing an inspection, what to do**

The inspector will sign off (approve) the appropriate category on the inspection card upon inspection approval, or if only partially approved, the inspector will place notations on the back of the permit card. If the inspection is not approved, the inspector will list the rejection on the permit card in the “not approved” category, and will issue a correction notice. The item(s) on the correction notice are to be **totally completed prior** to calling for re-inspection, following the same parameters listed above. This correction notice (along with the permit card, plans and comments) must be present at the time of re-inspection to enable the inspector to know which item(s) did not pass the first inspection and are now to be re-inspected and approved.

### **Paying of re-inspection fees and closing out a permit**

Upon successfully passing all required inspections and receiving all required approvals, the applicant must return the permit card to the Building Department to close out the file and to obtain a C.O. if necessary. Re-inspection fees will only be assessed if the items or area that was called for an inspection were not ready, if the plans or permit card was not available, if access to the inspection site was not provided, or if any items from a previous correction notice were not completed. Should any of these apply, the applicant may be required to come to the Building Department, pay any re-inspection fees, and sign an affidavit stating that no additional inspections will be requested until the deficiencies have been totally corrected. When assessed, the re-inspection fees are: 1<sup>st</sup> time \$42, 2<sup>nd</sup> time \$84 (plus the 1<sup>st</sup>), 3<sup>rd</sup> time \$126 (plus the 1<sup>st</sup> and 2<sup>nd</sup>) etc.

**Obtaining a Certificate of Occupancy (C.O.)**

**The applicant is to provide an advanced notice of (24) hours to prepare a C.O.**

**Residential**

- Call the main office number (720-874-6600) with (24) hours-advanced notice to prepare a C.O. The applicant must provide the permit number, address and date of the last inspection. To receive the C.O. the applicant must submit to the Building Department office:
  1. A permit card with all relevant inspection categories signed off as approved. This may or may not include Zoning ILC approval
  2. Verification that all original stamped foundation inspection letters are on file, along with a stamped structural floor installation letter if applicable.
  3. A completed 2009 Energy Conservation Code Affidavit, verifying full compliance.
  4. An insulation certificate from the installation company, listing all areas, thicknesses and R-values
  5. A signed Building Component Certification Affidavit.
  6. A completed Contractor Information form, with State plumbing / electrical license numbers
  7. Provide evidence of Tri-County septic system approval, if applicable.
  8. Pay any re-inspection fees that are due.

**Commercial**

- Call the main office number (720-874-6600) with (24) hours advanced notice to prepare a C.O. The applicant must provide the permit number, address and date of the last inspection. A C.O. may not be prepared for commercial projects until verification of Fire Dept inspection approval and complete review of the Building Dept file status has been performed. To receive the C.O. the applicant must submit to the Building Department office:
  1. The permit card, complete with all applicable approval signatures for the work permitted
  2. Original stamped foundation and wall steel letters (if not already submitted and on file)
  3. A signed and stamped “General Compliance letter” from the architect / engineer of record, stating that all applicable special inspections required by the building design have been performed to the satisfaction of the special inspector, and that due to these special inspection reports and / or any periodic inspections performed by the architect / engineer, that the building appear to be in general compliance with the stamped approved plans and any applicable codes / regulations.
  4. Provide all stamped and signed foundation and required special inspection letters
  5. A signed insulation affidavit, verifying compliance with the criteria of the 2009 Energy Conservation Code submittal data.
  6. Provide verification of Fire Department inspection approval for the building and all systems
  7. Provide documentation / confirmation from the DRCOG elevator / escalator inspector that the elevator has passed inspections and is approved for use. A Certificate of Operation, issued by the County, is required to be obtained prior to placing the elevator into use.
  8. Verification that ALL plan review items have been properly addressed and approved by the County
  9. A completed Contractor Information form, with State plumbing / electrical contractor license numbers
  10. Pay any re-inspection fees or any other fees due to the County

**Partial list of the types of inspections performed, and not performed by the County**

The type and quantity of inspections to be performed varies upon the complexity of the project, and each phase must be inspected and approved prior to concealment. The following provides a brief overview of probable inspections performed:

**Water heater (gas) replacement, (1) plumbing / mechanical inspection**

**Water heater (electric) replacement, (1) electrical and (1) plumbing inspection**

**Furnace replacement, (1) electrical and (1) plumbing / mechanical inspection**

**Residential, new homes, remodeling, additions may require any of the following:**

- Electrical construction meter, foundation (offer) ground and trench inspections
- Ground plumbing (under-slab, -floor), and structural wood floor inspections
- Rough framing, electrical, plumbing, mechanical, gas logs, gas pipe pressure test and final meter
- Final inspection and approval for framing, electrical, plumbing, mechanical, gas log fireplaces
- The applicant must have stamped foundation inspection letters and a foundation location certificate (or some other approved method of proving the location of the foundation on the property) on site prior to receiving a rough frame inspection, the Improvement Survey (or ILC) must be reviewed and approved by Zoning prior to receiving a Final Frame inspection, and insulation certificates and original foundation inspection letters must be on file at the County prior to the issuance of a Certificate of Occupancy.
- The County does not perform the following inspections: foundation dampproofing, perimeter drain installation, residential drywall (unless part of a fire assembly, where the fire rock stamp and nailing pattern and on center spacing will be concealed due to painting, texture, etc. However, the applicant must submit a signed and dated County installation / certification form.

**Commercial, new structures and additions**

- Electrical construction meter, site lighting, foundation (offer) ground and trench inspections
- Ground plumbing (under-slab, -floor)
- Rough framing, electrical, including above ceiling and rough walls, plumbing, mechanical, gas pipe pressure test and final meter
- Final inspection and approval for framing, electrical, plumbing, mechanical
- Provide verification of Fire Department inspection approval for the building and all systems
- The County does perform partial inspections for commercial projects, providing that the area being inspected is complete and ready for inspection, and that the contractor does not call for numerous small areas to be inspected. The contractor should also call the specific inspection department to find out how much of an area or building that they will be able to do on any given day. For example, they may only be able to inspect a few apartment units or a single floor, not an entire building. Call ahead, do not assume that all areas will be inspected when you need them.
- The applicant must have stamped foundation inspection letters and foundation location certificate on site prior to receiving a rough frame inspection. The Improvement Survey (or ILC) must be reviewed and approved by Zoning prior to receiving a Final Frame inspection, and insulation affidavit and original foundation inspection letters must be on file at the County prior to the issuance of a Certificate of Occupancy.

### **Building Department Policies and Code Interpretations**

**IBC 1013 - IRC R312**, A barrier or guardrail is required where excavation or retaining wall installation creates a drop off and falling hazard adjacent to walking or parking surfaces.

**IBC 1013 - IRC R312**, compliant window well covers will be required for any wells that are located within a walking surface (patio slab, deck, sidewalk, etc) or that are unprotected and that are directly adjacent to the same areas (any well over 30" deep and within 3' of the walking surface). Exception examples would include a window well that is within 5' of a deck, but that is around the corner of a house, where someone could not fall from the deck into the well, **or** if there is a permanent barrier between the walking surface and the well, like a deck rail or bench seating.

### **INSPECTION GUIDELINES AND REQUIREMENTS**

#### **General Requirements**

- The building address must be clearly posted and visible from the street
- Provide access to the structure. Inspections are performed anywhere from 7:30 AM – 5:00 PM
- Provide the permit card, County approved plans, and any previous correction notices
- Submit any changes to the approved plans to the County, allowing adequate review time, prior to calling for inspections for any modified portion of the plans
- Be certain that all work is complete for portions of the structure being called for inspections. The inspectors are there to verify compliant installation of code required components, not to provide a "punch list" of incomplete items. Inspections may be stopped and a re-inspection fee charged for jobs that are called for inspections that are not complete and ready for inspection
- All commercial foundations, structural framework, welding, etc., are to be inspected by appropriate, certified, approved engineering firms / inspection agencies, licensed by the State of Colorado, per Sections 106.3.4 and Chapter 17. The owner or the registered design professional acting as the owner's agent shall be responsible for employing the special inspectors.
- Shell buildings receive only final approvals, only full finish buildings and tenant finishes receive a Certificate of Occupancy. The shell must be "signed off" prior to any C.O.'s being issued for any tenant finish projects.
- The contractor / applicant is responsible for making arrangements to have all elevators / escalators be inspected by the DRCOG inspector (Paul Nappo) at 720-385-3170 until 12/31/2011, prior to being placed in service. After 1/1/2012 contact the County at 720-874-6600 for updated elevator inspection information. Registration is also required by the State and is the responsibility of the owner to do so.

#### **Rough Framing**

- Provide stamped foundation inspection letters to receive a rough frame inspection
- Provide foundation location certificate or other approved method to properly indicate the location of the foundation on the site, to receive a rough frame inspection
- All work performed by all other trades must be complete and inspected in the inspection area, for the framing inspection to be performed
- The building must be "weathered in" and protected from the elements, with the roof, windows, doors, etc. to be installed

## Final Frame

- The ‘improvement survey’ portion of the permit card must be approved and signed off on the card by the Zoning Department, prior to calling for or receiving the final frame inspection
- The building must be completely finished, including everything shown on the approved plans
- Verify that all requirements included in the plan review have been completed and approved
- If any changes have been made which do not match what was on the approved plans, the applicant must re-submit plans to the Building Department, (allowing adequate review time). The original and revised approved plans, along with all review comments must be on site prior to receiving inspections
- The permanent building address and all required signage must be installed, (parking, stairs, etc)
- Provide a ladder to gain access to above ceiling areas to check for penetrations of corridors and rated wall assemblies, where applicable
- Provide visible verification that any rated doors on hold opens will close and latch under loss of power, fire alarm, etc., where applicable
- Provide verification that the appropriate Fire Department has inspected and approved all required sprinkler and alarm systems
- All exits (required or labeled as such) must have IBC / ANSI compliant exterior egress paths, (i.e. concrete sidewalks with compliant slope) which are continuous to a public way
- Verify that all required inspection “letters” are on file at the County, prior to scheduling final inspections, grand openings, etc. These would include caisson / footings, foundation and masonry reinforcement / grouting, welding, soil compaction, structural steel erection, insulation certificates verifying State compliance, the architect’s “General Compliance Letter”, etc.
- If there is any landscaping, asphalt, parking striping, etc., that will not be completed due to extenuating circumstances, and which is shown on the permitted plans and / or required by the County, the applicant must contact the County to make arrangements to guarantee that the required work will be performed. Currently, the applicant and/or building owner would have to provide an itemized list of the incomplete work stating when the work will be performed, a written estimate (bid) from an approved contractor listing all the work, and then a check / escrowed funds for the bid amount plus 10%.
- Effective 1 May 2000, all new construction/additions (excluding single family detached) will require an Occupancy Inspection to insure that the project complies with the Final Development Plan (FDP) or Land Development Code, whichever is applicable. You will need to call (720) 874-6711 to schedule this inspection when you have completed these items and PRIOR to your request for a Certificate of Occupancy or Letter of Compliance. Any “field” changes must be presented to the Planning and Zoning Division staff for approval. Failure to inform Planning and Zoning of any field changes will result in delay of your Certificate of Occupancy. Please allow 48-72 hours for your inspection lead time.