

Residential Review

Group	Title	Year, Code	Section(IRC s)	Comment Text
Administrative	IDENTIFY ROOMS	2018 IRC	R106.1.1	Please identify the use of all rooms on all floors of the proposed design, including attic and basement areas. (IRC R106.1.1)
Administrative	OUT OF DATE ESR	2018 IRC	R104.11	The submitted evaluation/research report from the nationally recognized evaluation service is out-of-date and does not reference the current building code in Commerce City. (IRC R104.11)
Administrative	PERMIT DESCRIPTION	2018 IRC	R105.3	The current permit description does not match the scope of work shown in the drawings.
Administrative	PROFESSIONAL ASSISTANCE	2018 IRC	R106.1	Please consider hiring a licensed contractor or design professional to help you with preparing your plans; their knowledge and expertise will make the plan review process easier and smoother. (IRC R106.1)
Alarms	CO ALARMS	2018 IRC	R315	Please show the location of carbon monoxide alarms. (IRC R315)
Alarms	SMOKE ALARMS	2018 IRC	R314	Please show the location of smoke alarms. (IRC R314)
Energy	CEILING R-VALUE	2018 IRC	N1102.1.2	Using prescriptive insulation values, please ensure that ceiling or roof insulation is shown as R-49 minimum. Please note, R-38 is acceptable only if "raised heel" or "energy" trusses are used for roof framing. (IRC N1102.1.2)
Energy	CRAWL SPACE WALLS	2018 IRC	R408.3, N1102.1.2	Please note that insulated crawl spaces are permitted only when they are unvented and there is a suitable vapor barrier over exposed earth. (IRC R408.3, N1102.1.2)
Energy	FENESTRATION U-FACTORS MISSING	2018 IRC	N1102.1.2	Using prescriptive compliance, the maximum U-factor for all fenestrations shall not exceed 0.30 for windows and doors and 0.55 for skylights. Please note applicable U-factors on plans. (IRC N1102.1.2)
Energy	FLOOR R-VALUES	2018 IRC	N1102.1.2	Using prescriptive insulation values, please ensure that floor insulation is shown as R-30 minimum. This requirement applies to any floor cavity below habitable space and above unconditioned space or above outside air, such as a floor that is cantilevered or over an unheated crawl space. (IRC N1102.1.2)
Energy	INSUFFICIENT WALL CAVITY	2018 IRC	N1102.1.2	Plans specify R-19 insulation in cavities of framed walls; however, a minimum of 2x6 studs are required to accommodate typical R-19 fiberglass insulation. Please clarify R-value, insulation type and wall construction on drawings. (IRC N1102.1.2)
Energy	MASS WALL R-VALUE	2018 IRC	N1102.1.2, footnote "i", N1102.2.5	Using prescriptive compliance, a mass wall is required to be insulated to R-17 where more than half of the insulation is located on the interior of the wall. R-13 is acceptable when more than half of the insulation is located on the exterior. (IRC Table N1102.1.2, footnote i, IRC N1102.2.5)
Energy	R-VALUES MISSING	2018 IRC	N1102.1.2	Please show or note all R-values or U-factors based on the prescriptive compliance or submit a REScheck design. (IRC N1102.1.2)
Energy	SLAB EDGE INSULATION	2018 IRC	N1102.1.2	Using prescriptive compliance where slabs are less than 12 inches below grade, the slab edge insulation must be R-10 minimum at the slab perimeter, with an overall length (IRC horizontal and/or vertical) of 2 feet. When the slab itself is heated (e.g., embedded hot water pipes), R-5 is required below the entirety of the slab. Slab edge insulation must be increased to R15 where it is at or near grade. (IRC N1102.1.2)
Energy	WOOD-FRAMED WALL R-VALUE	2018 IRC	N1102.1.2	Using prescriptive compliance, please ensure that wood-framed wall insulation has an R-20 minimum when installed solely in wall cavities or R-13 in wall cavities with R-5 continuous insulation over the entire wall surface. (IRC N1102.1.2)
Fire-Resistance	DOORS TO GARAGE	2018 IRC	R302.5	Doors between garages and living spaces must be constructed of 1-3/8 inch solid wood/approved steel doors, or door with a 20 min. rating. Please ensure code compliant doors are used in these locations. (IRC R302.5)
Fire-Resistance	EXTERIOR WALL PROTECTION	2018 IRC	R302.6	Please note that a fire separation is required when portions of a building are located within 5' of the property line (IRC non-sprinklered buildings) or 3' of the property line (IRC sprinklered buildings). Please include the design for this fire-separation in the plans including the complete listing details when applicable. (IRC R302.6)
Fire-Resistance	GARAGE SEPARATION	2018 IRC	R302.6	Please illustrate how garages will be separated from all living spaces in this design. This protection must include all exposed beams and columns within the garage area. (IRC R302.6)
Fire-Resistance	UNDER STAIR PROTECTION	2018 IRC	R302.7	When accessible, the enclosed area under stairs shall be protected with 1/2-inch gypsum board on the enclosed side. (IRC R302.7)

Residential Review

Floors	FASTENER SPACING AT LEDGER BOARD INADQUATE	2018 IRC	R507.9.1.3	The fastener spacing at the ledge board appears to be insufficient to carry the applied loads. Please clarify by specifying the prescriptive fastener spacing or by providing calculations in accordance with the current National Design Specification. (IRC R507.9.1.3)
Floors	FASTENER EDGE DISTANCE AT LEDGER BOARD INADQUATE	2018 IRC	R507.9.1.3	The fastener edge distances at the ledge board appears to be insufficient. Please clarify by specifying the prescriptive fastener spacing or by providing calculations in accordance with the current National Design Specification. (IRC R507.9.1.3)
Floors	FRAMING PLAN REQUIRED	2018 IRC	R106.1	Please provide complete framing plans for all levels and/or roof of the proposed design. (IRC R106.1)
Floors	NAME, SIZE, SERIES OF I-JOISTS	2018 IRC	R106.1 , R502.1.2	Please provide the manufacturer's name, size and series number for the manufactured floor joists (I-joists). (IRC R106.1, R502.1.2)
Floors	NAME, SIZE, SERIES OF ENGINEERED LUMBER	2018 IRC	R106.1 , R502.1.2	Please provide the manufacturer's name, size and series number for the engineered structural members. (IRC R106.1, R502.1.2)
Geotechnical	ALLOWABLE BEARING PRESSURE	2018 IRC	R401.4.1	The maximum assumable soil bearing capacity in Commerce City without a geotechnical report is 1,500 psf. (IRC R401.4.1)
Geotechnical	SOILS REPORT VS FOUNDATION DESIGN	2018 IRC	R401.2, R401.4.1	Please coordinate the foundation design with data from the geotechnical report. (IRC R401.2, R401.4.1)
Wall Bracing	WALL BRACING	2018 IRC	R602.10	Please note that the wall bracing shown on the plans does not conform to the requirements of the code. Please revise the braced wall lines and braced wall panels. (IRC R602.10)
Wall Bracing	CONTINUOUS PORTAL FRAME (IRC CS-PF)	2018 IRC	R602.10.6.4	The proposed portal frame construction shown in the submitted documents does not conform to IRC Figure R602.10.6.4. Please revise drawings accordingly. (IRC R602.10.6.4)
Wall Bracing	INTERACTIVE WORKSHEET	2018 IRC	R602.10	Please submit a completed copy of the wind bracing work sheet offered on our web page. The spreadsheet compiles and calculates all of the data to comply with the IRC wall bracing provisions. (IRC R602.10)

*Please note: mechanical, plumbing and electrical systems are not evaluated for code compliance during building plan review. Compliance is determined in the field.