

Project

Energy Code: 2012 IECC

Location: Frederick, Colorado

Construction Type: Single-family
Project Type: New Construction

Conditioned Floor Area: **3,405 ft2** Glazing Area **13%**

Climate Zone: **5 (6443 HDD)**

Permit Date: Permit Number:

Construction Site: Beautiful Home Plan Anytown, CO Owner/Agent: ABC Construction Co Designer/Contractor: Scott Home Inspection, LLC Berthoud, CO 80513 888-288-2883

Compliance: Passes using UA trade-off

Compliance: 3.2% Better Than Code Maximum UA: 375 Your UA: 363

The % Better or Worse Than Code Index reflects how close to compliance the house is based on code trade-off rules. It DOES NOT provide an estimate of energy use or cost relative to a minimum-code home.

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	U-Factor	UA
Ceiling 1: Flat Ceiling or Scissor Truss	1,400	13.0	36.0	0.020	28
Wall 1 Front: Wood Frame, 16" o.c.	700	21.0	0.0	0.057	32
Window 1: Vinyl/Fiberglass Frame:Double Pane with Low-E	105			0.340	36
Window 2: Vinyl/Fiberglass Frame:Double Pane with Low-E	6			0.310	2
Door 1: Solid	20			0.200	4
Wall 2 Rear: Wood Frame, 16" o.c.	700	21.0	0.0	0.057	32
Window 3: Vinyl/Fiberglass Frame:Double Pane with Low-E	101			0.340	34
Door 2: Glass	40			0.330	13
Wall 3 Left: Wood Frame, 16" o.c.	730	21.0	0.0	0.057	40
Window 4: Vinyl/Fiberglass Frame:Double Pane with Low-E	30			0.340	10
Wall 4 Right: Wood Frame, 16" o.c.	730	21.0	0.0	0.057	39
Window 5: Vinyl/Fiberglass Frame:Double Pane with Low-E	29			0.340	10
Door 1: Solid	20			0.200	4
Basement Wall 1: Solid Concrete or Masonry Wall height: 8.0' Depth below grade: 7.0' Insulation depth: 8.0'	1,200	19.0	0.0	0.045	52
Window 6: Vinyl/Fiberglass Frame:Double Pane with Low-E	48			0.340	16

Project Title: Report date: 08/23/17

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Assembly	or Perimeter	Cavity R-Value	Cont. R-Value	U-Factor	UA	
Floor 1 Over Garage: All-Wood Joist/Truss:Over Unconditioned Space 335 30.0					11	
Compliance Statement: The proposed building design described here is co calculations submitted with the permit application. The proposed building here is comply with the mandatory requirements list.	as been designed	to meet the	2012 IECC	requireme		
Name - Title Signature			Date			

Report date: 08/23/17

REScheck Software Version 4.6.3 Inspection Checklist Energy Code: 2012 IECC

Requirements: 0.0% were addressed directly in the REScheck software

Text in the "Comments/Assumptions" column is provided by the user in the REScheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Pre-Inspection/Plan Review	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
103.1, 103.2 [PR1] ¹	Construction drawings and documentation demonstrate energy code compliance for the building envelope.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
103.1, 103.2, 403.7 [PR3] ¹	Construction drawings and documentation demonstrate energy code compliance for lighting and mechanical systems. Systems serving multiple dwelling units must demonstrate compliance with the IECC Commercial Provisions.			□Complies □Does Not □Not Observable □Not Applicable	
302.1, 403.6 [PR2] ²	Heating and cooling equipment is sized per ACCA Manual S based on loads calculated per ACCA Manual J or other methods approved by the code official.	Heating: Btu/hr Cooling: Btu/hr	Heating: Btu/hr Cooling: Btu/hr	□Complies □Does Not □Not Observable □Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Foundation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1 [FO4] ¹	Conditioned basement wall insulation R-value. Where interior insulation is used, verification may need to occur during Insulation Inspection. Not required in warm-humid locations in Climate Zone 3.	R R	R R	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
303.2 [F05] ¹	Conditioned basement wall insulation installed per manufacturer's instructions.			□Complies □Does Not □Not Observable □Not Applicable	
402.2.8 [FO6] ¹	Conditioned basement wall insulation depth of burial or distance from top of wall.	ft	ft	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
303.2.1 [FO11] ²	A protective covering is installed to protect exposed exterior insulation and extends a minimum of 6 in. below grade.			□Complies □Does Not □Not Observable □Not Applicable	
403.8 [FO12] ²	Snow- and ice-melting system controls installed.			□Complies □Does Not □Not Observable □Not Applicable	

1	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Reg.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.3.4 [FR1] ¹	Door U-factor.	U	U	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
402.1.1, 402.3.1, 402.3.3, 402.3.6, 402.5 [FR2] ¹	Glazing U-factor (area-weighted average).	U	U	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
303.1.3 [FR4] ¹	U-factors of fenestration products are determined in accordance with the NFRC test procedure or taken from the default table.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
402.4.1.1 [FR23] ¹	Air barrier and thermal barrier installed per manufacturer's instructions.			□Complies □Does Not □Not Observable □Not Applicable	
402.4.3 [FR20] ¹	Fenestration that is not site built is listed and labeled as meeting AAMA /WDMA/CSA 101/I.S.2/A440 or has infiltration rates per NFRC 400 that do not exceed code limits.			□Complies □Does Not □Not Observable □Not Applicable	
402.4.4 [FR16] ²	IC-rated recessed lighting fixtures sealed at housing/interior finish and labeled to indicate ≤2.0 cfm leakage at 75 Pa.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.2.1 [FR12] ¹	Supply ducts in attics are insulated to ≥R-8. All other ducts in unconditioned spaces or outside the building envelope are insulated to ≥R-6.	R R	R R	□Complies □Does Not □Not Observable □Not Applicable	
403.2.2 [FR13] ¹	All joints and seams of air ducts, air handlers, and filter boxes are sealed.			□Complies □Does Not □Not Observable □Not Applicable	
403.2.3 [FR15] ³	Building cavities are not used as ducts or plenums.			□Complies □Does Not □Not Observable □Not Applicable	
403.3 [FR17] ²	HVAC piping conveying fluids above 105 °F or chilled fluids below 55 °F are insulated to ≥R- 3.	R	R	□Complies □Does Not □Not Observable □Not Applicable	
403.3.1 [FR24] ¹	Protection of insulation on HVAC piping.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.4.2 [FR18] ²	Hot water pipes are insulated to ≥R-3.	R	R	□Complies □Does Not □Not Observable □Not Applicable	

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Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
403.5 [FR19] ²	Automatic or gravity dampers are installed on all outdoor air intakes and exhausts.			□Complies □Does Not □Not Observable □Not Applicable	

L	High Impact (Tier 1)	2	Medium Impact (Tier 2)	3	Low Impact (Tier 3)

Section # & Req.ID	Insulation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
303.1 [IN13] ²	All installed insulation is labeled or the installed R-values provided.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
402.1.1, 402.2.6 [IN1] ¹	Floor insulation R-value.	R Wood Steel	R Wood Steel	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
303.2, 402.2.7 [IN2] ¹	Floor insulation installed per manufacturer's instructions, and in substantial contact with the underside of the subfloor.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
402.1.1, 402.2.5, 402.2.6 [IN3] ¹	Wall insulation R-value. If this is a mass wall with at least ½ of the wall insulation on the wall exterior, the exterior insulation requirement applies (FR10).	R	R	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
303.2 [IN4] ¹	Wall insulation is installed per manufacturer's instructions.			□Complies □Does Not □Not Observable □Not Applicable	

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Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.2.1, 402.2.2, 402.2.6 [FI1] ¹	Ceiling insulation R-value.	R Wood Steel	R Wood Steel	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
303.1.1.1, 303.2 [FI2] ¹	Ceiling insulation installed per manufacturer's instructions. Blown insulation marked every 300 ft².			□Complies □Does Not □Not Observable □Not Applicable	
402.2.3 [FI22] ²	Vented attics with air permeable insulation include baffle adjacent to soffit and eave vents that extends over insulation.			□Complies □Does Not □Not Observable □Not Applicable	
402.2.4 [FI3] ¹	Attic access hatch and door insulation ≥R-value of the adjacent assembly.	R	R	□Complies □Does Not □Not Observable □Not Applicable	
402.4.1.2 [FI17] ¹	Blower door test @ 50 Pa. <=5 ach in Climate Zones 1-2, and <=3 ach in Climate Zones 3-8.	ACH 50 =	ACH 50 =	□Complies □Does Not □Not Observable □Not Applicable	
403.2.2 [FI4] ¹	Duct tightness test result of <=4 cfm/100 ft2 across the system or <=3 cfm/100 ft2 without air handler @ 25 Pa. For rough-in tests, verification may need to occur during Framing Inspection.	cfm/100 ft ²	cfm/100 ft ²	□Complies □Does Not □Not Observable □Not Applicable	
403.2.2.1 [FI24] ¹	Air handler leakage designated by manufacturer at <=2% of design air flow.			□Complies □Does Not □Not Observable □Not Applicable	
403.1.1 [FI9] ²	Programmable thermostats installed on forced air furnaces.			□Complies □Does Not □Not Observable □Not Applicable	
403.1.2 [FI10] ²	Heat pump thermostat installed on heat pumps.			☐Complies ☐Does Not ☐Not Observable ☐Not Applicable	
403.4.1 [FI11] ²	Circulating service hot water systems have automatic or accessible manual controls.			□Complies □Does Not □Not Observable □Not Applicable	
403.5.1 [FI25] ²	All mechanical ventilation system fans not part of tested and listed HVAC equipment meet efficacy and air flow limits.			□Complies □Does Not □Not Observable □Not Applicable	
404.1 [FI6] ¹	75% of lamps in permanent fixtures or 75% of permanent fixtures have high efficacy lamps. Does not apply to low-voltage lighting.			□Complies □Does Not □Not Observable □Not Applicable	

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Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
404.1.1 [FI23] ³	Fuel gas lighting systems have no continuous pilot light.			□Complies □Does Not	
				□Not Observable □Not Applicable	
401.3 [FI7] ²	Compliance certificate posted.			□Complies □Does Not	
•				□Not Observable □Not Applicable	
303.3 [FI18] ³	Manufacturer manuals for mechanical and water heating			□Complies □Does Not	
•	systems have been provided.			□Not Observable □Not Applicable	

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Insulation Rating	R-Value	
Above-Grade Wall	21.00	
Below-Grade Wall	19.00	
Floor	30.00	
Ceiling / Roof	49.00	
Ductwork (unconditioned spaces):		
Glass & Door Rating	U-Factor	SHGC
Window	0.34	
Window Door	0.34 0.33	
Door	0.33	
Door Heating & Cooling Equipment	0.33 Efficiency	
Door Heating & Cooling Equipment Heating System:	0.33 Efficiency	
Door Heating & Cooling Equipment Heating System: Cooling System:	0.33 Efficiency	

Comments