

Project

Energy Code: Utah Energy Conservation Code

Location: Alpine, Utah
Construction Type: Single-family
Project Type: New Construction

Conditioned Floor Area: **2,204 ft2** Glazing Area **3%**

Climate Zone: 5 (6342 HDD)

Permit Date: Permit Number:

Construction Site: Owner/Agent: Designer/Contractor: 3009 Building Lane Buildy Builderson Builder's Building Plans

ΤX

Compliance: Passes using UA trade-off

Compliance: **5.1% Better Than Code** Maximum UA: **314** Your UA: **298**

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 area of home forming top of insulation envelope: Flat Ceiling or Scissor Truss	2,204	38.0	0.0	0.030	66
Wall area of home forming sides of insulation envelope: Wood Frame, 16" o.c.	601	21.0	0.0	0.057	29
Window area of the home using energy efficient units: Vinyl/Fiberglass Frame:Double Pane with Low-E	50			0.310	16
Energy efficient door unit: Glass	21			0.350	7
Energy efficient door unit: Solid	21			0.200	4
Wall area of home forming sides of insulation envelope: Wood Frame, 16" o.c.	612	21.0	0.0	0.057	35
Wall area of home forming sides of insulation envelope: Wood Frame, 16" o.c.	584	21.0	0.0	0.057	32
Energy efficient door unit: Solid	21			0.200	4
Wall area of home forming sides of insulation envelope: Wood Frame, 16" o.c.	563	21.0	0.0	0.057	32
Subfloor of home forming bottom of insulation envelope: All-Wood Joist/Truss:Over Unconditioned Space	2,204	30.0	0.0	0.033	73

Compliance Statement: The proposed building design described here is consistent with the building plans, specifications, and other calculations submitted with the permit application. The proposed building has been designed to meet the Utah Energy Conservation Code requirements in REScheck Version 4.6.5 and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

Name - Title	Signature	Date

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REScheck Software Version 4.6.5 Inspection Checklist Energy Code: Utah Energy Conservation Code

Requirements: 0.0% were addressed directly in the RES*check* 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	
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	

Additional Comments/Assumptions:

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

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Section # & Req.ID	Foundation Inspection	Complies?	Comments/Assumptions
303.2.1 [FO11] ²	protect exposed exterior insulation	□Complies □Does Not	
•	and extends a minimum of 6 in. below grade.	□Not Observable □Not Applicable	
403.8 [FO12] ²	Snow- and ice-melting system controls installed.	□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
402.1.1, 402.3.4 [FR1] ¹	Door U-factor.	U	U	□Complies □Does Not	See the Envelope Assemblies table for values.
②			1 	□Not Observable □Not Applicable	
402.1.1, 402.3.1, 402.3.3, 402.3.6, 402.5	Glazing U-factor (area-weighted average).	U	U	□Complies □Does Not □Not Observable □Not Applicable	See the Envelope Assemblies table for values.
[FR2] ¹					1 1 1 1
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	
402.4.2				□Not Applicable	
402.4.3 [FR20] ¹	Fenestration that is not site built is listed and labeled as meeting			☐Complies ☐Does Not	
•	AAMA /WDMA/CSA 101/I.S.2/A440 or has infiltration rates per NFRC 400 that do not exceed code limits.			□Not Observable □Not Applicable	
402.4.4 [FR16] ²	IC-rated recessed lighting fixtures sealed at housing/interior finish			□Complies □Does Not	1 1 1 1 1
•	and labeled to indicate ≤2.0 cfm leakage at 75 Pa.			□Not Observable □Not Applicable	1 1 1 1 1
403.2.1 [FR12] ¹	Supply ducts in attics are insulated to ≥R-8. All other ducts	R R	R R	□Complies □Does Not	
•	in unconditioned spaces or outside the building envelope are insulated to ≥R-6.	N	K	□Not Observable □Not Applicable	
403.2.2 [FR13] ¹	All joints and seams of air ducts, air handlers, and filter boxes are			☐Complies ☐Does Not	
②	sealed.			□Not Observable □Not Applicable	
403.3 [FR17] ²	HVAC piping conveying fluids above 105 °F or chilled fluids	R	R	□Complies □Does Not	
•	below 55 $^{\Omega}$ F are insulated to \geq R-3.			□Not Observable □Not Applicable	
403.3.1 [FR24] ²	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	
3			1 1 1 1 1	□Not Observable □Not Applicable	
403.5 [FR19] ²	Automatic or gravity dampers are installed on all outdoor air			Complies Does Not	1
(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	intakes and exhausts.			□Not Observable	
				□Not Applicable	<u>.</u>

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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	R	□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 ft ² .			☐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	
403.2.2 [FI4] ¹	Duct tightness test result of <=10 cfm/100 ft2 across the system or <=7.5 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	
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 systems have been provided.			□Complies □Does Not □Not Observable □Not Applicable	

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Insulation Rating	R-Value	
Above-Grade Wall	21.00	
Below-Grade Wall	0.00	
Floor	30.00	
Ceiling / Roof	38.00	
Ductwork (unconditioned spaces):		
Glass & Door Rating	U-Factor	SHGC
Glass & Door Rating Window	U-Factor 0.31	0.22
· ·		
Window	0.31	0.22
Window Door	0.31 0.35	0.22

Date:

Name: ____ Comments

Water Heater:___