

# **Compliance Certificate**

### **Project Information**

Project Title: Hernandez Residence

Energy Code: 2015 IECC

Location: Cameron, North Carolina

Construction Type: Single Family
Project Type: New Construction

Project Sub Type: None
Conditioned Floor Area: 2757 ft2
Glazing Area: 8%

Climate Zone: 3a (3215 HDD)

All Electric: false
Is Renewable: false
Has Battery: false
Has Charger: false
Has Heat Pump false

Construction Site: Owner/Agent: Designer/Contractor:

520 Tree Bark Lane Cameron , NC 28326

#### **Project Notes:**

2018 North Carolina State Building Code: Energy Conservation Code: 2015 Amended - allows for wood frame wall r-value 15 & glazed fenestration SHGC of 0.30. CZ3 requires no slab insulation.

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#### **Envelope Assemblies**

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Prop. U- Factor/ F-Factor	Req. U- Factor/ F-Factor	Prop. UA	Req. UA
Ceiling: Cathedral Ceiling	3082	35.0	0.0	0.030	0.030	92	92
Floor: Slab-On-Grade (Unheated) Insulation depth: 0.00' Insulation position: No Insulation	237		0.0	1.042	1.042	0	0
Front Wall: Wood Frame, 16" o.c.	824	19.0	0.0	0.060	0.060	39	39
Windows: Vinyl Frame SHGC: 0.25	135			0.350	0.350	47	47
Door Front Entry: Solid Door (under 50% glazing)	40			0.350	0.350	14	14
Rear Wall: Wood Frame, 16" o.c.	824	19.0	0.0	0.060	0.060	45	45
Windows: Vinyl Frame SHGC: 0.25	48			0.350	0.350	17	17
Door Rear Entry: Glass Door (over 50% glazing) SHGC: 0.25	33			0.350	0.350	12	12
Left Wall: Wood Frame, 16" o.c.	620	19.0	0.0	0.060	0.060	37	37
Window: Vinyl Frame SHGC: 0.25	10			0.350	0.350	4	4
Right Wall: Wood Frame, 16" o.c.	620	19.0	0.0	0.060	0.060	36	36
Door Breezeway Garage: Solid Door (under 50% glazing)	20			0.350	0.350	7	7

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.

Slab-on-grade tradeoffs are no longer considered in the UA or performance compliance path in REScheck. Each slab-on-grade assembly in the specified climate zone must meet the minimum energy code insulation R-value and depth requirements.

### **Compliance Statement**

Compliance: 0.0% Better Than Code

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 2015 IECC requirements in REScheck-Web and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

Cameron Allison - EnergyReports.net

Cameron Allison

8.19.25

Name - Title

Signature

Date

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Energy Code: 2015 IECC

Requirements: 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.

### **Pre-Inspection/Plan Review**

Section # & Req.ID	Pre-Inspection/Plan Re	view	Plans Verified Value	Field Verified Value	Comp	lies?	Comments/Assumptions
103.1, 103.2 [PR1] <sup>1</sup>	Construction drawings and documentation demonstratenergy code compliance for building envelope. Thermatenvelope represented on construction documents.	te r the			Compl Does I Comply Not Observab Not Applicabl	Not	
103.1, 103.2, 403.7 [PR3] <sup>1</sup>	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 Provi	te r st rith			Compl Does I Comply Not Observab Not Applicabl	Not	
302.1, 403.7 [PR2] <sup>2</sup>	Heating and cooling equipris sized per ACCA Manual Sbased on loads calculated ACCA Manual J or other meapproved by the code offic	per thods	Heating: Btu/hr Cooling: Btu/hr	Heating: Btu/hr Cooling: Btu/hr	Compl Does I Comply Not Observab Not Applicabl	Not	
Additional	Comments/Assumptio	ns:					
1 High I	Impact (Tier 1)	2	Medium Impac	t (Tier 2)	3	3 Lov	v Impact (Tier 3)

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# **Foundation Inspection**

Section # & Req.ID	Foundation Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.2 [FO1] <sup>1</sup>	Slab edge insulation R-value.	R- Unheated Heated	R- Unheated Heated	Complies Does Not Comply Not Observable Not Applicable	See the Envelope Assemblies table for values
303.2.1 [FO11] <sup>2</sup>	A protective covering is installed to protect exposed exterior insulation and extend a minimum of 6 in. below grad			Complies Does Not Comply Not Observable Not Applicable	
403.9 [FO12] <sup>2</sup>	Snow- and ice-melting system controls installed.			Complies Does Not Comply Not Observable Not Applicable	
402.1.2 [FO3] <sup>1</sup>	Slab edge insulation depth/length.	ft	ft	Complies Does Not Comply Not Observable Not Applicable	See the Envelope Assemblies table for values
Additional	Comments/Assumptions	:			
1 High	Impact (Tier 1) 2	Medium Impac	t (Tier 2)	3	Low Impact (Tier 3)

# Framing / Rough-In Inspection

Section # & Req.ID	Framing / Rough-In Inspection	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
402.1.1, 402.3.4 [FR1] <sup>1</sup>	Door U-factor.	U-	U-	Complies Does Not Comply Not Observable Not Applicable	See the Envelope Assemblies table for values
402.1.1, 402.3.1, 402.3.3, 402.5 [FR2] <sup>1</sup>	Glazing U-factor (area-weighted average).	U-	U-	Complies Does Not Comply Not Observable Not Applicable	See the Envelope Assemblies table for values
402.4.1.1 [FR23] <sup>1</sup>	Air barrier and thermal barrier installed per manufacturer's instructions.			Complies Does Not Comply Not Observable Not Applicable	
402.4.3 [FR20] <sup>1</sup>	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 Comply Not Observable Not Applicable	
402.4.5 [FR16] <sup>2</sup>	IC-rated recessed lighting fixtures sealed at housing/interior finish and labeled to indicate ≤2.0 cfm leakage at 75 Pa.			Complies Does Not Comply Not Observable Not Applicable	
403.3.1 [FR12] <sup>1</sup>	Supply and return ducts in attics insulated >= R-8 where duct is >= 3 inches in diameter and >= R-6 where < 3 inches. Supply and return ducts in other portions of the building insulated >= R-6 for diameter >= 3 inches and R-4.2 for < 3 inches in diameter.			Complies Does Not Comply Not Observable Not Applicable	
403.3.5 [FR15] <sup>3</sup>	Building cavities are not used as ducts or plenums.			Complies Does Not Comply Not Observable Not Applicable	
403.4 [FR17] <sup>2</sup>	HVAC piping conveying fluids above 105 °F or chilled fluids below 55 °F are insulated to ≥R- 3.	R-	R-	Complies Does Not Comply Not Observable Not Applicable	

Section # & Req.ID	Framing / Rough-In	l	Plans Verified Value	Field Verified Value	Complie	s?	Comments/Assumptions
403.4.1 [FR24] <sup>1</sup>	Protection of insulation on piping.	HVAC			Complies Does Not Not Observable Not Applicable		
403.5.3 [FR18] <sup>2</sup>	Hot water pipes are insulat ≥R-3.	ed to	R-	R-	Complies Does Not Comply Not Observable Not Applicable		
402.1.1, 402.3.2, 402.3.3, 402.5 [FR3] <sup>1</sup>	Glazing SHGC value (areaweighted average).		SHGC:	SHGC:	Complies Does Not Observable Not Applicable		See the Envelope Assemblies table for values
403.6 [FR19] <sup>2</sup>	Automatic or gravity damp are installed on all outdoor intakes and exhausts.	ers air			Complies Does Not Comply Not Observable Not Applicable		
303.1.3 [FR4] <sup>1</sup>	U-factors of fenestration products are determined in accordance with the NFRC procedure or taken from the default table.	test			Complies Does Not Comply Not Observable Not Applicable		
Additional	Comments/Assumptio	ns:					
1 High I	mpact (Tier 1)	2	Medium Impaci	t (Tier 2)	3	Low	/ Impact (Tier 3)

# **Insulation Inspection**

Section # & Req.ID	Insulation Inspection	า	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
303.1 [IN13] <sup>2</sup>	All installed insulation is lat or the installed R-values provided.	peled			Complies Does Not Comply Not Observable Not Applicable	
402.1.1, 402.2.5, 402.2.6 [IN3] <sup>1</sup>	Wall insulation R-value. If the a mass wall with at least ½ the wall insulation on the wexterior, the exterior insula requirement applies (FR10)	of all tion	R- Wood Mass Steel	R- Wood Mass Steel	Complies Does Not Comply Not Observable Not Applicable	See the Envelope Assemblies table for values
303.2 [IN4] <sup>1</sup>	Wall insulation is installed p manufacturer's instructions	er i.			Complies Does Not Comply Not Observable Not Applicable	
Additional Comments/Assumptions:						
1 High I	mpact (Tier 1)	2	Medium Impac	t (Tier 2)	3 L	ow Impact (Tier 3)

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# **Final Inspection Provisions**

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] <sup>1</sup>	Ceiling insulation R-value.	R- Wood Steel	R- Wood Steel	Complies Does Not Comply Not Observable Not Applicable	See the Envelope Assemblies table for values
303.1.1.1, 303.2 [FI2] <sup>1</sup>	Ceiling insulation installed per manufacturer's instructions. Blown insulation marked every 300 ft <sup>2</sup> .			Complies Does Not Comply Not Observable Not Applicable	
403.1.2 [FI10] <sup>2</sup>	Heat pump thermostat installed on heat pumps.			Complies Does Not Comply Not Observable Not Applicable	
403.5.1 [FI11] <sup>2</sup>	Circulating service hot water systems have automatic or accessible manual controls.			Complies Does Not Comply Not Observable Not Applicable	
403.6.1 [FI25] <sup>2</sup>	All mechanical ventilation system fans not part of tested and listed HVAC equipment meet efficacy and air flow limits.			Complies Does Not Comply Not Observable Not Applicable	
403.2 [FI26] <sup>2</sup>	Hot water boilers supplying heat through one- or two-pipe heating systems have outdoor setback control to lower boiler water temperature based on outdoor temperature.			Complies Does Not Comply Not Observable Not Applicable	
403.5.1.1 [FI28] <sup>2</sup>	Heated water circulation systems have a circulation pump. The system return pipe is a dedicated return pipe or a cold water supply pipe. Gravity and thermos-syphon circulation systems are not present. Controls for circulating hot water system pumps start the pump with signal for hot water demand within the occupancy. Controls automatically turn off the pump when water is in circulation loop is at set-point temperature and no demand for hot water exists.			Complies Does Not Comply Not Observable Not Applicable	
403.5.1.2 [FI29] <sup>2</sup>	Electric heat trace systems comply with IEEE 515.1 or UL 515. Controls automatically adjust the energy input to the heat tracing to maintain the desired water temperature in the piping.			Complies Does Not Comply Not Observable Not Applicable	

Section # & Req.ID	Final Inspection Provisions	Plans Verified Value	Field Verified Value	Complies?	Comments/Assumptions
403.5.2 [FI30] <sup>2</sup>	Water distribution systems that have recirculation pumps that pump water from a heated water supply pipe back to the heated water source through a cold water supply pipe have a demand recirculation water system. Pumps have controls that manage operation of the pump and limit the temperature of the water entering the cold water piping to 104°F.			Complies Does Not Comply Not Observable Not Applicable	
403.5.4 [FI31] <sup>2</sup>	Drain water heat recovery units tested in accordance with CSA B55.1. Potable water-side pressure loss of drain water heat recovery units < 3 psi for individual units connected to one or two showers. Potable water-side pressure loss of drain water heat recovery units < 2 psi for individual units connected to three or more showers.			Complies Does Not Comply Not Observable Not Applicable	
404.1 [FI6] <sup>1</sup>	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 Comply Not Observable Not Applicable	
404.1.1 [FI23] <sup>3</sup>	Fuel gas lighting systems have no continuous pilot light.			Complies Does Not Comply Not Observable Not Applicable	
401.3 [FI7] <sup>2</sup>	Compliance certificate posted.			Complies Does Not Comply Not Observable Not Applicable	
303.3 [FI18] <sup>3</sup>	Manufacturer manuals for mechanical and water heating systems have been provided.			Complies Does Not Comply Not Observable Not Applicable	
402.2.3 [FI22] <sup>2</sup>	Vented attics with air permeable insulation include baffle adjacent to soffit and eave vents that extends over insulation.			Complies Does Not Comply Not Observable Not Applicable	
402.2.4 [FI3] <sup>1</sup>	Attic access hatch and door insulation ≥R-value of the adjacent assembly.	R-	R-	Complies Does Not Comply Not Observable Not Applicable	

Section # & Req.II		ions	Plans Verified Value	Field Verified Value	Com	plies?	Comments/Assumptions
402.4.1.2 [FI17] <sup>1</sup>	Blower door test @ 50 Pa. ach in Climate Zones 1-2, <=3 ach in Climate Zones	and	ACH 50 =	ACH 50 =		able	
403.3.4 [FI4] <sup>1</sup>	Duct tightness test result of <=4 cfm/100 ft2 across the system or <=3 cfm/100 ft2 without air handler @ 25 Prough-in tests, verification need to occur during Fram Inspection.	e 2 a. For may	cfm/100 ft <sup>2</sup>	cfm/100 ft <sup>2</sup>		able	
403.3.3 [FI27] <sup>1</sup>	Ducts are pressure tested determine air leakage with either: Rough-in test: Total leakage measured with a pressure differential of 0.1 w.g. across the system incit the manufacturer's air han enclosure if installed at tim test. Postconstruction test: leakage measured with a pressure differential of 0.1 w.g. across the entire syste including the manufacture handler enclosure.	inch uding dler ne of Total inch	cfm/100 ft <sup>2</sup>	cfm/100 ft <sup>2</sup>	Com Doe Comply Not Observ Not Applica	s Not able	
403.3.2.1 [FI24] <sup>1</sup>	Air handler leakage design by manufacturer at <=2% design air flow.	ated of			Com Doe Comply Not Observ Not Applica	able	
403.1.1 [FI9] <sup>2</sup>	Programmable thermostatinstalled for control of prim heating and cooling system and initially set by manufa to code specifications.	nary ns			Com Doe Comply Not Observ Not Applica	s Not able	
Addition	nal Comments/Assumptio	ns:					
			I				
1 Hig	gh Impact (Tier 1)	2	Medium Impac	t (Tier 2)		3	Low Impact (Tier 3)



Insulation Rating	R-Value
Above-Grade Wall	19.00
Below-Grade Wall	0.00
Floor	0.00
Ceiling / Roof	35.00
Ductwork (unconditioned spaces):	

Glass & Door Rating	<b>U-Factor</b>	SHGC
Window	0.35	0.25
Door	0.35	0.25
Skylight	0.00	

Heating & Cooling Equipment	Efficiency
Heating System:	
Cooling System:	
Water Heater:	

Signature	
Name:	Date:

**Comments:**