



REScheck Software Version 4.6.5 Compliance Certificate

Project

Energy Code: **2015 IECC**
 Location: **Huntsville, Texas**
 Construction Type: **Single-family**
 Project Type: **New Construction**
 Conditioned Floor Area: **3,755 ft2**
 Glazing Area: **16%**
 Climate Zone: **2 (1862 HDD)**
 Permit Date:
 Permit Number:

Construction Site:
GA

Owner/Agent:
Building Builderson

Designer/Contractor:
Builders Building Plans

Compliance: Passes using UA trade-off

Compliance: **17.5% Better Than Code** Maximum UA: **502** Your UA: **414** Maximum SHGC: **0.25** Your SHGC: **0.25**

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 | 1,959 | 30.0 | 0.0 | 0.035 | 69 |
| Front Wall area of home forming sides of insulation envelope: Wood Frame, 16" o.c.:Not Attic Kneewall | 833 | 19.0 | 0.0 | 0.060 | 41 |
| Window area of home using energy efficient units: Vinyl/Fiberglass Frame:Double Pane with Low-E SHGC: 0.25 | 111 | | | 0.300 | 33 |
| Energy efficient door unit: Solid | 21 | | | 0.200 | 4 |
| 20 minute fire door: Solid | 21 | | | 0.200 | 4 |
| Left Wall area of home forming sides of insulation envelope: Wood Frame, 16" o.c.:Not Attic Kneewall | 41 | 19.0 | 0.0 | 0.060 | 2 |
| Back Wall area of home forming sides of insulation envelope: Wood Frame, 16" o.c.:Not Attic Kneewall | 833 | 19.0 | 0.0 | 0.060 | 35 |
| Window area of home using energy efficient units copy 1: Vinyl/Fiberglass Frame:Double Pane with Low-E SHGC: 0.25 | 231 | | | 0.300 | 69 |
| Energy efficient door unit: Glass SHGC: 0.25 | 21 | | | 0.300 | 6 |
| Right Wall area of home forming sides of insulation envelope: Wood Frame, 16" o.c.:Not Attic Kneewall | 799 | 19.0 | 0.0 | 0.060 | 45 |
| Window area of home using energy efficient units: Vinyl/Fiberglass Frame:Double Pane with Low-E SHGC: 0.25 | 51 | | | 0.300 | 15 |
| Slab perimeter of home forming bottom of insulation envelope: Slab-On-Grade:Unheated Insulation depth: 0.0' | 87 | | 0.0 | 1.042 | 91 |

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 2015 IECC requirements in REScheck Version 4.6.5 and to comply with the mandatory requirements listed in the REScheck Inspection Checklist.

Name - Title

Signature

Date



Inspection Checklist

Energy Code: 2015 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. Thermal envelope represented on construction documents. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> 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. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 302.1, 403.7 [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____ | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |

Additional Comments/Assumptions:

| | | |
|------------------------|--------------------------|-----------------------|
| 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 |
|-----------------------------|---|--|--|--|---|
| 402.1.2 [FO1] ¹ | Slab edge insulation R-value. | R-____ <input type="checkbox"/> Unheated <input type="checkbox"/> Heated | R-____ <input type="checkbox"/> Unheated <input type="checkbox"/> Heated | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | See the Envelope Assemblies table for values. |
| 402.1.2 [FO3] ¹ | Slab edge insulation depth/length. | ____ ft | ____ ft | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> 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. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.9 [FO12] ² | Snow- and ice-melting system controls installed. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |

Additional Comments/Assumptions:

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

| 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-____ | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | See the Envelope Assemblies table for values. |
| 402.1.1, 402.3.1, 402.3.3, 402.5 [FR2] ¹ | Glazing U-factor (area-weighted average). | U-____ | U-____ | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | See the Envelope Assemblies table for values. |
| 402.1.1, 402.3.2, 402.3.3, 402.5 [FR3] ¹ | Glazing SHGC value (area-weighted average). | SHGC:____ | SHGC:____ | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> 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. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 402.4.1.1 [FR23] ¹ | Air barrier and thermal barrier installed per manufacturer's instructions. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> 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. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 402.4.5 [FR16] ² | IC-rated recessed lighting fixtures sealed at housing/interior finish and labeled to indicate ≤2.0 cfm leakage at 75 Pa. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.3.1 [FR12] ¹ | 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. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.3.5 [FR15] ³ | Building cavities are not used as ducts or plenums. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.4 [FR17] ² | HVAC piping conveying fluids above 105 °F or chilled fluids below 55 °F are insulated to ≥R-3. | R-____ | R-____ | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.4.1 [FR24] ¹ | Protection of insulation on HVAC piping. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |

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

| Section # & Req.ID | Framing / Rough-In Inspection | Plans Verified Value | Field Verified Value | Complies? | Comments/Assumptions |
|--|---|----------------------|----------------------|--|----------------------|
| 403.5.3 [FR18] ²  | Hot water pipes are insulated to $\geq R-3$. | R-_____ | R-_____ | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.6 [FR19] ² | Automatic or gravity dampers are installed on all outdoor air intakes and exhausts. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |

Additional Comments/Assumptions:

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|---|----------------------|---|------------------------|---|---------------------|
| 1 | 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. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> 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 1/2 of the wall insulation on the wall exterior, the exterior insulation requirement applies (FR10). | R-_____ <input type="checkbox"/> Wood <input type="checkbox"/> Mass <input type="checkbox"/> Steel | R-_____ <input type="checkbox"/> Wood <input type="checkbox"/> Mass <input type="checkbox"/> Steel | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | See the Envelope Assemblies table for values. |
| 303.2 [IN4] ¹ | Wall insulation is installed per manufacturer's instructions. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |

Additional Comments/Assumptions:

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

| 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-____ <input type="checkbox"/> Wood <input type="checkbox"/> Steel | R-____ <input type="checkbox"/> Wood <input type="checkbox"/> Steel | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> 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 . | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> 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. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 402.2.4 [FI3] ¹ | Attic access hatch and door insulation ≥R-value of the adjacent assembly. | R-____ | R-____ | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> 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 = ____ | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.3.4 [FI4] ¹ | Duct tightness test result of ≤=4 cfm/100 ft ² across the system or ≤=3 cfm/100 ft ² 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 | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.3.3 [FI27] ¹ | Ducts are pressure tested to determine air leakage with either: Rough-in test: Total leakage measured with a pressure differential of 0.1 inch w.g. across the system including the manufacturer's air handler enclosure if installed at time of test. Postconstruction test: Total leakage measured with a pressure differential of 0.1 inch w.g. across the entire system including the manufacturer's air handler enclosure. | ____ cfm/100 ft ² | ____ cfm/100 ft ² | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.3.2.1 [FI24] ¹ | Air handler leakage designated by manufacturer at ≤=2% of design air flow. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.1.1 [FI9] ² | Programmable thermostats installed for control of primary heating and cooling systems and initially set by manufacturer to code specifications. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.1.2 [FI10] ² | Heat pump thermostat installed on heat pumps. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.5.1 [FI11] ² | Circulating service hot water systems have automatic or accessible manual controls. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |

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

| Section # & Req.ID | Final Inspection Provisions | Plans Verified Value | Field Verified Value | Complies? | Comments/Assumptions |
|-------------------------------|---|----------------------|----------------------|--|----------------------|
| 403.6.1 [FI25] ² | All mechanical ventilation system fans not part of tested and listed HVAC equipment meet efficacy and air flow limits. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.2 [FI26] ² | 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. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.5.1.1 [FI28] ² | 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. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.5.1.2 [FI29] ² | 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. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.5.2 [FI30] ² | 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 ^o F. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 403.5.4 [FI31] ² | 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. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> 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. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 404.1.1 [FI23] ³ | Fuel gas lighting systems have no continuous pilot light. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |

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

| Section # & Req.ID | Final Inspection Provisions | Plans Verified Value | Field Verified Value | Complies? | Comments/Assumptions |
|---------------------------|---|----------------------|----------------------|--|----------------------|
| 401.3 [F17] ² | Compliance certificate posted. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| 303.3 [F118] ³ | Manufacturer manuals for mechanical and water heating systems have been provided. | | | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |

Additional Comments/Assumptions:

| | | | | | |
|---|----------------------|---|------------------------|---|---------------------|
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|---|----------------------|---|------------------------|---|---------------------|



2015 IECC Energy Efficiency Certificate

| Insulation Rating | R-Value |
|----------------------------------|---------|
| Above-Grade Wall | 19.00 |
| Below-Grade Wall | 0.00 |
| Floor | 0.00 |
| Ceiling / Roof | 30.00 |
| Ductwork (unconditioned spaces): | _____ |

| Glass & Door Rating | U-Factor | SHGC |
|---------------------|----------|------|
| Window | 0.30 | 0.25 |
| Door | 0.20 | 0.25 |

| Heating & Cooling Equipment | Efficiency |
|-----------------------------|------------|
| Heating System: _____ | _____ |
| Cooling System: _____ | _____ |
| Water Heater: _____ | _____ |

Name: _____ Date: _____

Comments