



# COMcheck Software Version COMcheckWeb

## Envelope Compliance Certificate

### Project Information

Energy Code: 2018 IECC  
Project Title: WoodSpring Suites - Lee's Summit, MO  
Location: Lees Summit, Missouri  
Climate Zone: 4a  
Project Type: New Construction  
Vertical Glazing / Wall Area: 11%

Construction Site:  
1010 NW Ward Road  
Lee's Summit, Missouri 64086

Owner/Agent:  
Genesis Companies  
4420 Madison Ave, Suite 100  
Kansas City, Missouri 64111

Designer/Contractor:

### Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed  
Reduced Lighting Power, 1.0 credit

### Building Area

### Floor Area

1-Hotel : Nonresidential

50470

### Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor <sup>(a)</sup>
Floor: Unheated Slab-On-Grade, Horizontal with vertical 2 ft., [Bldg. Use 1 - Hotel] (c)	690	---	5.0	0.700	0.540
Roof: Attic Roof, Wood Joists, [Bldg. Use 1 - Hotel]	12204	60.0	15.0	0.014	0.027
Roof - Entry: Attic Roof, Wood Joists, [Bldg. Use 1 - Hotel]	262	30.0	15.0	0.022	0.027
<b>NORTH</b>					
RIGHT - EIFS: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Hotel]	4335	19.0	7.5	0.043	0.064
Window: Vinyl Frame: Operable, Perf. Specs.: Product ID na, SHGC 0.27, [Bldg. Use 1 - Hotel] (b)	486	---	---	0.450	0.450
RIGHT - STONE: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Hotel]	1391	19.0	0.0	0.067	0.064
Window: Vinyl Frame: Operable, Perf. Specs.: Product ID na, SHGC 0.27, [Bldg. Use 1 - Hotel] (b)	126	---	---	0.450	0.450
Window: Metal Frame: Fixed, Perf. Specs.: Product ID na, SHGC 0.27, [Bldg. Use 1 - Hotel] (b)	76	---	---	0.650	0.380
Door: Glass (over 50% glazing): Metal Frame, Entrance Door, Perf. Specs.: Product ID na, SHGC 0.27, [Bldg. Use 1 - Hotel] (b)	45	---	---	0.600	0.770
<b>EAST</b>					
FRONT - EIFS: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Hotel]	3825	19.0	7.5	0.043	0.064
Window: Vinyl Frame: Operable, Perf. Specs.: Product ID na, SHGC 0.27, [Bldg. Use 1 - Hotel] (b)	216	---	---	0.450	0.450
FRONT - STONE: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Hotel]	2774	19.0	0.0	0.067	0.064
Door: Glass (over 50% glazing): Metal Frame, Non-Entrance Door, Perf. Specs.: Product ID na, SHGC 0.27, [Bldg. Use 1 - Hotel] (b)	45	---	---	0.600	0.450
Door: Insulated Metal, Swinging, [Bldg. Use 1 - Hotel]	50	---	---	2.200	0.610
Window: Metal Frame: Fixed, Perf. Specs.: Product ID na, SHGC 0.27, [Bldg. Use 1 - Hotel] (b)	75	---	---	0.650	0.380

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U- Factor <sup>(a)</sup>
Window: Vinyl Frame: Operable, Perf. Specs.: Product ID na, SHGC 0.27, [Bldg. Use 1 - Hotel] (b)	306	---	---	0.450	0.450
<b>SOUTH</b>					
LEFT - EIFS: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Hotel]	4160	19.0	7.5	0.043	0.064
Window: Vinyl Frame: Operable, Perf. Specs.: Product ID na, SHGC 0.27, [Bldg. Use 1 - Hotel] (b)	324	---	---	0.450	0.450
LEFT - STONE: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Hotel]	1872	19.0	0.0	0.067	0.064
Window: Metal Frame: Fixed, Perf. Specs.: Product ID na, SHGC 0.27, [Bldg. Use 1 - Hotel] (b)	40	---	---	0.650	0.380
Door: Insulated Metal, Swinging, [Bldg. Use 1 - Hotel]	26	---	---	2.200	0.610
Window: Vinyl Frame: Operable, Perf. Specs.: Product ID na, SHGC 0.27, [Bldg. Use 1 - Hotel] (b)	162	---	---	0.450	0.450
<b>WEST</b>					
REAR - EIFS: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Hotel]	3872	19.0	7.5	0.043	0.064
Window: Vinyl Frame: Operable, Perf. Specs.: Product ID na, SHGC 0.27, [Bldg. Use 1 - Hotel] (b)	432	---	---	0.450	0.450
REAR - STONE: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Hotel]	2532	19.0	0.0	0.067	0.064
Window: Vinyl Frame: Operable, Perf. Specs.: Product ID na, SHGC 0.27, [Bldg. Use 1 - Hotel] (b)	324	---	---	0.450	0.450
Window: Metal Frame: Fixed, Perf. Specs.: Product ID na, SHGC 0.27, [Bldg. Use 1 - Hotel] (b)	72	---	---	0.650	0.380

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.

(b) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.

(c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

### Envelope PASSES: Design 4% better than code

### Envelope Compliance Statement

*Compliance Statement:* The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Trevor Tyson Holcomb

Name - Title

Signature

8/17/2023

Date



# Inspection Checklist

Energy Code: 2018 IECC

Requirements: 0.0% were addressed directly in the COMcheck software

Text in the "Comments/Assumptions" column is provided by the user in the COMcheck 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	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR1] <sup>1</sup>	Plans and/or specifications provide all information with which compliance can be determined for the building envelope and document where exceptions to the standard are claimed.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.4.1 [PR10] <sup>1</sup>	The vertical fenestration area $\leq$ 30 percent of the gross above-grade wall area.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.4.1 [PR11] <sup>1</sup>	The skylight area $\leq$ 3 percent of the gross roof area.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.4.2 [PR14] <sup>1</sup>	In enclosed spaces $>$ 2,500 ft <sup>2</sup> directly under a roof with ceiling heights $>$ 15 ft. and used as an office, lobby, atrium, concourse, corridor, storage, gymnasium/exercise center, convention center, automotive service, manufacturing, non-refrigerated warehouse, retail store, distribution/sorting area, transportation, or workshop, the following requirements apply: (a) the daylight zone under skylights is $\geq$ half the floor area; (b) the skylight area to daylight zone is $\geq$ 3 percent with a skylight VT $\geq$ 0.40; or a minimum skylight effective aperture $\geq$ 1 percent.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C406 [PR9] <sup>1</sup>	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	<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)
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Section # & Req.ID	Footing / Foundation Inspection	Complies?	Comments/Assumptions
C303.2 [F04] <sup>2</sup>	Slab edge insulation installed per manufacturer's instructions.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C303.2.1 [F06] <sup>1</sup>	Exterior insulation protected against damage, sunlight, moisture, wind, landscaping and equipment maintenance activities.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C105 [F03] <sup>2</sup>	Installed slab-on-grade insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	<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.
C402.2.4 [F07] <sup>2</sup>	Slab edge insulation depth/length. Slab insulation extending away from building is covered by pavement or >= 10 inches of soil.	<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.

**Additional Comments/Assumptions:**

Section # & Req.ID	Framing / Rough-In Inspection	Complies?	Comments/Assumptions
C303.1.3 [FR12] <sup>2</sup>	Fenestration products rated in accordance with NFRC.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C303.1.3 [FR13] <sup>1</sup>	Fenestration products are certified as to performance labels or certificates provided.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.4.3 [FR10] <sup>1</sup>	Vertical fenestration SHGC value.	<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.
C402.4.3, C402.4.3.4 [FR8] <sup>1</sup>	Installed vertical fenestration U-factor and SHGC consistent with label specifications and as reported in plans and COMcheck reports.	<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.
C402.5.1.2.2 [FR20] <sup>1</sup>	The building envelope contains a continuous air barrier that is sealed in an approved manner and average assembly air leakage $\leq 0.04$ cfm/ft <sup>2</sup> . Air barrier penetrations are sealed in an approved manner.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.5.2, C402.5.4 [FR18] <sup>3</sup>	Factory-built fenestration and doors are labeled as meeting air leakage requirements.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.5.7 [FR17] <sup>3</sup>	Vestibules are installed on all building entrances. Doors have self-closing devices.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

**Additional Comments/Assumptions:**

Section # & Req.ID	Mechanical Rough-In Inspection	Complies?	Comments/Assumptions
C402.5.5, C403.2.4.3 [ME3] <sup>3</sup>	Stair and elevator shaft vents have motorized dampers that automatically close. Refernece section C403.7.7 for operational details.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C403.7.7 [ME58] <sup>3</sup>	Outdoor air and exhaust systems have motorized dampers that automatically shut when not in use and meet maximum leakage rates. Check gravity dampers where allowed. Reference section language for operational details.	<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)
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Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.6 [EL26] <sup>2</sup>	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.7 [EL27] <sup>2</sup>	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.8.2, C405.8.2.1 [EL28] <sup>2</sup>	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.9 [EL29] <sup>2</sup>	Total voltage drop across the combination of feeders and branch circuits $\leq 5\%$ .	<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)
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Section # & Req.ID	Insulation Inspection	Complies?	Comments/Assumptions
C303.1 [IN3] <sup>1</sup>	Roof insulation installed per manufacturer's instructions. Blown or poured loose-fill insulation is installed only where the roof slope is ≤3 in 12.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.2.1 [IN20] <sup>1</sup>	Insulation installed on a suspended ceiling having ceiling tiles is not being specified for roof/ceiling assemblies. Continuous insulation board installed in 2 or more layers with edge joints offset between layers.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C303.1 [IN10] <sup>2</sup>	Building envelope insulation is labeled with R-value or insulation certificate providing R-value and other relevant data.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C303.2 [IN7] <sup>1</sup>	Above-grade wall insulation installed per manufacturer's instructions.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C105 [IN6] <sup>1</sup>	Installed above-grade wall insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	<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.
C402.2.3 [IN8] <sup>2</sup>	Installed floor insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports.	<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.
C402.2.6 [IN18] <sup>3</sup>	Radiant panels and associated components, designed for heat transfer from the panel surfaces to the occupants or indoor space are insulated with a minimum of R-3.5.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C105 [IN2] <sup>1</sup>	Installed roof insulation type and R-value consistent with insulation specifications reported in plans and COMcheck reports. For some ceiling systems, verification may need to occur during Framing Inspection.	<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.
C402.5.1.1 [IN1] <sup>1</sup>	All sources of air leakage in the building thermal envelope are sealed, caulked, gasketed, weather stripped or wrapped with moisture vapor-permeable wrapping material to minimize air leakage.	<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	Complies?	Comments/Assumptions
C402.5.6 [FI37] <sup>1</sup>	Weatherseals installed on all loading dock cargo door openings and provide direct contact along the top and sides of vehicles parked in the doorway.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C402.5.8 [FI26] <sup>3</sup>	Recessed luminaires in thermal envelope to limit infiltration and be IC rated and labeled. Seal between interior finish and luminaire housing.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C408.1.1 [FI57] <sup>1</sup>	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	<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)
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