



Envelope Compliance Certificate

Project Information

Energy Code: 2015 IECC
 Project Title: Champs Building
 Location: Fuquay-Varina, North Carolina
 Climate Zone: 4a
 Project Type: New Construction
 Vertical Glazing / Wall Area: 10%

| | | |
|---|--|--|
| Construction Site: Fuquay-Varina, NC 27526 | Owner/Agent: Jay Ambe Shatki LLC - Champs Convenience Store 8920 Hwy 401 North Fuquay-Varina, NC 27526 | Designer/Contractor: Regency Construction P O Box 25640 Fayetteville, NC 28314 910-424-0455 regency@regencync.com |
|---|--|--|

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed
 Enhanced Interior Lighting Controls, 1.0 credit

Building Area

Floor Area

| | |
|---------------------------|------|
| 1-Retail : Nonresidential | 6600 |
|---------------------------|------|

Envelope Assemblies

| Assembly | Gross Area or Perimeter | Cavity R-Value | Cont. R-Value | Proposed U-Factor | Budget U- Factor ^(a) |
|--|-------------------------------|-------------------|------------------|----------------------|------------------------------------|
| Roof: Insulation Entirely Above Deck, [Bldg. Use 1 - Retail] | 6600 | --- | 30.0 | 0.032 | 0.032 |
| Floor 1: Slab-On-Grade:Unheated, Vertical 2 ft., [Bldg. Use 1 - Retail] (c) | 364 | --- | 15.0 | 0.520 | 0.540 |
| <u>NORTH</u> | | | | | |
| Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Retail] | 763 | 21.0 | 3.6 | 0.077 | 0.064 |
| <u>EAST</u> | | | | | |
| Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Retail] | 1914 | 21.0 | 3.6 | 0.077 | 0.064 |
| Door: Insulated Metal, Swinging, [Bldg. Use 1 - Retail] | 21 | --- | --- | 0.620 | 0.610 |
| Door: Insulated Metal, Swinging, [Bldg. Use 1 - Retail] | 21 | --- | --- | 0.620 | 0.610 |
| <u>SOUTH</u> | | | | | |
| Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Retail] | 763 | 21.0 | 3.6 | 0.077 | 0.064 |
| <u>WEST</u> | | | | | |
| Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Retail] | 2112 | 21.0 | 3.6 | 0.077 | 0.064 |
| Window1 over Door: Metal Frame, Perf. Specs.: Product ID 1, SHGC 0.23, PF 3.00, [Bldg. Use 1 - Retail] (b) | 13 | --- | --- | 0.286 | 0.380 |
| Window2 over Door: Metal Frame, Perf. Specs.: Product ID 1, SHGC 0.23, PF 3.00, [Bldg. Use 1 - Retail] (b) | 13 | --- | --- | 0.286 | 0.380 |
| Window Large: Metal Frame, Perf. Specs.: Product ID 1, SHGC 0.23, PF 3.00, [Bldg. Use 1 - Retail] (b) | 37 | --- | --- | 0.286 | 0.380 |
| Window Standard: Metal Frame, Perf. Specs.: Product ID 1, SHGC 0.23, PF 3.00, [Bldg. Use 1 - Retail] (b) | 25 | --- | --- | 0.286 | 0.380 |
| Window Standard copy 1: Metal Frame, Perf. Specs.: Product ID 1, | 25 | --- | --- | 0.286 | 0.380 |



Inspection Checklist

Energy Code: 2015 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] ¹ | 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] ¹ | The vertical fenestration area <= 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] ¹ | The skylight area <= 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] ¹ | In enclosed spaces > 2,500 ft ² 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 >= half the floor area; (b) the skylight area to daylight zone is >= 3 percent with a skylight VT >= 0.40; or a minimum skylight effective aperture >= 1 percent. | <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 | Footings / Foundation Inspection | Complies? | Comments/Assumptions |
|-----------------------------|---|--|--|
| C303.2 [FO4] ² | 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 [FO6] ¹ | 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 | |
| C104 [FO3] ² | 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 | <i>See the Envelope Assemblies table for values.</i> |

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 | Complies? | Comments/Assumptions |
|---|--|--|---|
| C303.1.3 [FR12] ² | 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] ¹ | 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] ¹ | 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] ¹ | Vertical fenestration U-Factor. | <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. |
| C402.4.4 [FR14] ² | U-factor of opaque doors associated with the building thermal envelope meets requirements. | <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. |
| C402.5.1.2.1 [FR19] ¹ | The building envelope contains a continuous air barrier that is sealed in an approved manner and material permeability ≤ 0.004 dfm/ft ² . 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] ³ | 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] ³ | 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:

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

| Section # & Req.ID | Mechanical Rough-In Inspection | Complies? | Comments/Assumptions |
|---|---|--|----------------------|
| C402.5.5, C403.2.4.3 [ME3] ³ | Stair and elevator shaft vents have motorized dampers that automatically close. | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| C402.5.5, C403.2.4.3 [ME58] ³ | 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. | <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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|------------------------|--------------------------|-----------------------|

| Section # & Req.ID | Insulation Inspection | Complies? | Comments/Assumptions |
|-------------------------------|--|--|---|
| C303.1 [IN3] ¹ | 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 | |
| C303.1 [IN10] ² | 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] ¹ | 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 | |
| C303.2.1 [IN14] ² | Exterior insulation is protected from damage with a protective material. Verification for exposed foundation insulation may need to occur during Foundation Inspection. | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| C402.2.1 [IN17] ³ | Insulation intended to meet the roof insulation requirements cannot be installed on top of a suspended ceiling. Mark this requirement compliant if insulation is installed accordingly. | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| C104 [IN6] ¹ | 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. |
| C104 [IN8] ² | 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] ³ | 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 | |
| C104 [IN2] ¹ | 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] ¹ | 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 |
|------------------------------|---|--|----------------------|
| C402.5.3 [FI51] ³ | Where open combustion air ducts provide combustion air to open combustion fuel burning appliances, the appliances and combustion air opening are located outside the building thermal envelope or enclosed in a room, isolated from inside the thermal envelope. Such rooms are sealed and insulated. | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| C402.5.6 [FI37] ¹ | Weatherseals installed on all loading dock cargo doors. | <input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable | |
| C402.5.8 [FI26] ³ | 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 | |

Additional Comments/Assumptions:

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

