



Envelope Compliance Certificate

Section 1: Project Information

Energy Code: **2009 IECC**
 Project Title: Anderson Creek Plaza Shoppes
 Project Type: New Construction

Construction Site:
 Ray Road at Overhills Road
 Spring Lake , NC 28390

Owner/Agent:
 Jason Wellons
 W. S. Wellons Realty
 511-NC 210
 Spring Lake , NC 28390
 910-436-3131
 jason@wswellonsrealty.com

Designer/Contractor:
 George Rose
 P.O. Box 53441
 Fayetteville, NC 28305
 910-977-5822
 grose9295@gmail.com

Building Location (for weather data): Spring Lake, North Carolina
 Climate Zone: 3a
 Vertical Glazing / Wall Area Pct.: 10%

Building Use: Activity Type(s)	Floor Area
1-Retail : Nonresidential	5600

Section 2: Envelope Assemblies and Requirements Checklist

Envelope PASSES: Design 3% better than code.

Envelope Assemblies:

Component Name/Description	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor ^(a)
Orientation: NORTH					
Exterior Wall 1: Other Mass Wall, Heat capacity 1.0, [Bldg. Use 1 - Retail] (b)	1085	---	---	0.040	0.089
Window 1: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID na, SHGC 0.70, PF 0.44, [Bldg. Use 1 - Retail] (c)	110	---	---	0.500	0.600
Window 2: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID na, SHGC 0.70, PF 0.44, [Bldg. Use 1 - Retail] (c)	110	---	---	0.500	0.600
Window 3: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID na, SHGC 0.70, PF 0.44, [Bldg. Use 1 - Retail] (c)	110	---	---	0.500	0.600
Window 4: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID na, SHGC 0.70, PF 0.44, [Bldg. Use 1 - Retail] (c)	110	---	---	0.500	0.600
Window 5: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID na, SHGC 0.70, PF 0.44, [Bldg. Use 1 - Retail] (c)	14	---	---	0.500	0.600
Window 6: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID na, SHGC 0.70, PF 0.44, [Bldg. Use 1 - Retail] (c)	14	---	---	0.500	0.600
Door 1: Insulated Metal, Swinging, [Bldg. Use 1 - Retail]	21	---	---	0.067	0.700
Door 2: Insulated Metal, Swinging, [Bldg. Use 1 - Retail]	21	---	---	0.067	0.700
Door 3: Insulated Metal, Swinging, [Bldg. Use 1 - Retail]	21	---	---	0.067	0.700
Door 4: Insulated Metal, Swinging, [Bldg. Use 1 - Retail]	21	---	---	0.067	0.700
Orientation: EAST					
Exterior Wall 4: Other Mass Wall, Heat capacity 1.0, [Bldg. Use 1 - Retail] (b)	1120	---	---	0.040	0.089
Orientation: SOUTH					
Exterior Wall 2: Other Mass Wall, Heat capacity 1.0, [Bldg. Use 1 - Retail] (b)	1085	---	---	0.040	0.089
Orientation: WEST					
Exterior Wall 3: Other Mass Wall, Heat capacity 1.0, [Bldg. Use 1 - Retail] (b)	1360	---	---	0.040	0.089

Orientation: UNSPECIFIED ORIENTATION

Roof 1: Metal Building, Standing Seam, [Bldg. Use 1 - Retail]	5600	30.0	0.0	0.051	0.055
Floor 1: Slab-On-Grade:Unheated, [Bldg. Use 1 - Retail]	300	---	---	---	---

- (a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) 'Other' components require supporting documentation for proposed U-factors.
(c) Fenestration product performance must be certified in accordance with NFRC and requires supporting documentation.

Air Leakage, Component Certification, and Vapor Retarder Requirements:

- 1. All joints and penetrations are caulked, gasketed or covered with a moisture vapor-permeable wrapping material installed in accordance with the manufacturer's installation instructions.
- 2. Windows, doors, and skylights certified as meeting leakage requirements.
- 3. Component R-values & U-factors labeled as certified.
- 4. No roof insulation is installed on a suspended ceiling with removable ceiling panels.
- 5. 'Other' components have supporting documentation for proposed U-Factors.
- 6. Insulation installed according to manufacturer's instructions, in substantial contact with the surface being insulated, and in a manner that achieves the rated R-value without compressing the insulation.
- 7. Stair, elevator shaft vents, and other outdoor air intake and exhaust openings in the building envelope are equipped with motorized dampers.
- 8. Cargo doors and loading dock doors are weather sealed.
- 9. Recessed lighting fixtures installed in the building envelope are Type IC rated as meeting ASTM E283, are sealed with gasket or caulk.
- 10. Building entrance doors have a vestibule equipped with self-closing devices.
Exceptions:
 - Building entrances with revolving doors.
 - Doors not intended to be used as a building entrance.
 - Doors that open directly from a space less than 3000 sq. ft. in area.
 - Doors used primarily to facilitate vehicular movement or materials handling and adjacent personnel doors.
 - Doors opening directly from a sleeping/dwelling unit.

Section 3: 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 system has been designed to meet the 2009 IECC requirements in COMcheck Version 4.0.5.3 and to comply with the mandatory requirements in the Requirements Checklist.

Name - Title

Signature

Date