



Envelope Compliance Certificate

Section 1: Project Information

Energy Code: **2009 IECC**
Project Title: Taco Bell
Project Type: New Construction

Construction Site:
TBD US Route 220
Bedford Township
Bedford, PA 15522

Owner/Agent:
Wayne Ferguson
Charter Foods, Inc.
PO Box 430
Talbot, TN 37877
423.587.0690

Designer/Contractor:
Kathleen Day
Kathleen Day, Architect
8535 Ferry Road
Waynesville, OH 45068
617.331.2545
kathleendayarchitect@gmail.com

Building Location (for weather data): Bedford, Pennsylvania
Climate Zone: 5a
Vertical Glazing / Wall Area Pct.: 11%

<u>Building Use: Activity Type(s)</u>	<u>Floor Area</u>
1-Dining: Cafeteria/Fast Food : Nonresidential	2558

Section 2: Envelope Assemblies and Requirements Checklist

Envelope PASSES: Design 7% 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)
Floor: Slab-On-Grade:Unheated, [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	235	---	---	---	---
Entry Elevation: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	1581	19.0	6.3	0.045	0.064
Window: Metal Frame with Thermal Break:Fixed, Perf. Specs.: Product ID na, SHGC 0.60, PF 0.18, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	42	---	---	0.320	0.550
Window: Metal Frame with Thermal Break:Fixed, Perf. Specs.: Product ID na, SHGC 0.60, PF 0.18, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	42	---	---	0.320	0.550
Window: Metal Frame with Thermal Break:Fixed, Perf. Specs.: Product ID na, SHGC 0.60, PF 0.18, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	42	---	---	0.320	0.550
Window 11: Metal Frame with Thermal Break:Fixed, Perf. Specs.: Product ID na, SHGC 0.60, PF 0.70, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	10	---	---	0.320	0.550
Door: , Perf. Specs.: Product ID na, SHGC 0.60, PF 0.18, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	43	---	---	0.320	0.800
Door: Insulated Metal, Swinging, [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	21	---	---	1.200	0.700
Drive Thru: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	1581	19.0	6.3	0.045	0.064
Window: Metal Frame with Thermal Break:Fixed, Perf. Specs.: Product ID na, SHGC 0.60, PF 0.18, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	39	---	---	0.320	0.550
Window: Metal Frame with Thermal Break:Fixed, Perf. Specs.: Product ID na, SHGC 0.60, PF 0.18, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	39	---	---	0.320	0.550

Window: Metal Frame with Thermal Break:Fixed, Perf. Specs.: Product ID na, SHGC 0.60, PF 0.18, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	39	---	---	0.320	0.550
Window: Metal Frame with Thermal Break:Operable, Perf. Specs.: Product ID na, SHGC 0.60, PF 0.70, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	17	---	---	0.320	0.550
Front: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	630	19.0	6.3	0.045	0.064
Window: Metal Frame with Thermal Break:Fixed, Perf. Specs.: Product ID na, SHGC 0.60, PF 0.18, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	36	---	---	0.320	0.550
Window: Metal Frame with Thermal Break:Fixed, Perf. Specs.: Product ID na, SHGC 0.60, PF 0.18, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	36	---	---	0.320	0.550
Window: Metal Frame with Thermal Break:Fixed, Perf. Specs.: Product ID na, SHGC 0.60, PF 0.18, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	36	---	---	0.320	0.550
Window 12: Metal Frame with Thermal Break:Fixed, Perf. Specs.: Product ID na, SHGC 0.60, PF 0.70, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	5	---	---	0.320	0.550
Door 3: Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID na, SHGC 0.60, PF 0.18, [Bldg. Use 1 - Dining: Cafeteria/Fast Food] (b)	21	---	---	0.320	0.800
Rear: Wood-Framed, 16in. o.c., [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	417	19.0	6.3	0.045	0.064
Roof: Insulation Entirely Above Deck, [Bldg. Use 1 - Dining: Cafeteria/Fast Food]	2494	---	25.6	0.038	0.048

(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.

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:

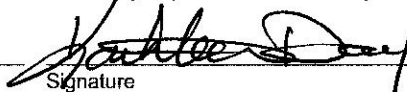
- Building entrances with revolving doors.
- Doors not intended to be used as a building entrance.
- Doors that open directly from a space less than 3000 sq. ft. in area.
- Doors used primarily to facilitate vehicular movement or materials handling and adjacent personnel doors.
- Doors opening directly 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 4.0.0 and to comply with the mandatory requirements in the Requirements Checklist.

Kathleen Day, Architect

Name - Title



Signature

06 Aug 15

Date