



Envelope Compliance Certificate

2009 IECC

Section 1: Project Information

Project Type: **New Construction**

Project Title : Canal Landing

Construction Site:

Owner/Agent:

Designer/Contractor:

Section 2: General Information

Building Location (for weather data): **Portland, Maine**
 Climate Zone: **6a**
 Building Space Conditioning Type(s): **Nonresidential**
 Vertical Glazing / Wall Area Pct.: **2%**

Activity Type(s)	Floor Area
Warehouse	23000

Section 3: Requirements Checklist

Envelope PASSES: Design 7% better than code.

Climate-Specific Requirements:

Component Name/Description	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor ^(a)
Roof 1: Metal Building, Standing Seam	29196	48.0	0.0	0.046	0.049
Exterior Wall 1: Metal Building Wall, Single Layer Mineral Fiber	20203	19.0	0.0	0.113	0.069
Window 1: Metal Frame with Thermal Break, Perf. Type: Other testing/cert. Product ID: na, SHGC 0.79 (b)	504	---	---	0.490	0.550
Man doors: Insulated Metal, Swinging	168	---	---	0.070	0.700
OH doors: Insulated Metal, Non-Swinging	2618	---	---	0.062	0.500

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

(b) Fenestrations 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 4: 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 3.9.4 and to comply with the mandatory requirements in the Requirements Checklist.

KEVIN M. CROUCH, ARCHITECT
Name - Title


Signature

25 SEP 2014
Date