COM*check* Software Version 3.9.1

Envelope Compliance Certificate

2009 IECC

Section 1: Project Information

Project Type: **New Construction**
Project Title : Danforth on High

Construction Site:
81 Danforth Street
Portland, ME 04101

Owner/Agent:
Danforth on High, LP
309 Cumberland Ave.
Portland, ME 04101

Designer/Contractor:
Archetype Architects PA
48 Union Wharf
Portland, ME 04101

Section 2: General Information

Building Location (for weather data):	**Portland, Maine**
Climate Zone:	**6a**
Building Type for Envelope Requirements:	**Residential**
Vertical Glazing / Wall Area Pct.:	**23%**

Activity Type(s)	Floor Area
Entire Building (Multifamily)	20908

Section 3: Requirements Checklist

Envelope PASSES: Design 16% 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: Insulation Entirely Above Deck	5317	---	60.0	0.016	0.048
Exterior Wall 1: Wood-Framed, 16" o.c.	14321	21.5	12.5	0.033	0.051
Window 1: Metal Frame with Thermal Break:Double Pane with Low-E, Clear, SHGC 0.35	3352	---	---	0.320	0.550
Door 1: Insulated Metal, Non-Swinging	48	---	---	0.200	0.500
Floor 1: Concrete Floor (over unconditioned space)	5317	---	35.0	0.026	0.057

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

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 COM*check* Version 3.9.1 and to comply with the mandatory requirements in the Requirements Checklist.

Name - Title	Signature	Date