



Envelope Compliance Certificate

2003 IECC

Report Date: 01/16/08

Data filename: G:\DATA\802-Portland\802-comcheck\802-portland.cck

Section 1: Project Information

Project Title: Residence Inn by Marriott

Construction Site:

Corner of Fore and Hancock Streets
Portland, ME 04101

Owner/Agent:

Ara Aftandilian
Norwich Partners LLC c/o: Summit
Properties
218 Boston Street
Topsfield, MA, ME
(978) 887-3640

Designer/Contractor:

James Ryan
Group One
21 West Third Street
Boston, MA 02127
617-268-7000
jim@grouponeinc.com

Section 2: General Information

Building Location (for weather data): **Portland, Maine**
Climate Zone: **15**
Heating Degree Days (base 65 degrees F): **7378**
Cooling Degree Days (base 65 degrees F): **268**
Project Type: **New Construction**
Vertical Glazing / Wall Area Pct.: **32%**

Building Type

Hotel Function

Floor Area

131871

Section 3: Requirements Checklist

Envelope PASSES: Design 6% 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 |
|---|----------------------------|-------------------|------------------|----------------------|--------------------|
| Roof 1: Structural Slab | 26001 | --- | 23.0 | 0.041 | 0.053 |
| Skylight 1: Metal Frame with Thermal Break:Double Pane with Low-E, Clear, SHGC 0.63 | 252 | --- | --- | 0.600 | 0.053 |
| Exterior Wall 1: Metal Frame, 16" o.c. | 42279 | 19.0 | 5.0 | 0.073 | 0.075 |
| Window 1: Metal Frame with Thermal Break:Double Pane with Low-E, Tinted, SHGC 0.58 | 6914 | --- | --- | 0.400 | 0.526 |
| Window 2: Metal Frame with Thermal Break:Double Pane with Low-E, Clear, SHGC 0.63 | 7354 | --- | --- | 0.400 | 0.526 |
| Door 1: Glass, Clear, SHGC 0.87 | 157 | --- | --- | 0.920 | 0.526 |
| Door 2: Solid | 91 | --- | --- | 0.700 | 0.122 |
| Exterior Wall 2: Metal Frame, 16" o.c. | 13087 | 19.0 | 5.0 | 0.073 | 0.075 |
| Window 3: Metal Frame with Thermal Break:Double Pane with Low-E, Tinted, SHGC 0.58 | 2685 | --- | --- | 0.400 | 0.526 |
| Window 4: Metal Frame with Thermal Break:Double Pane with Low-E, Clear, SHGC 0.63 | 308 | --- | --- | 0.400 | 0.526 |
| Door 3: Glass, Clear, SHGC 0.87 | 63 | --- | --- | 0.920 | 0.526 |
| Door 4: Solid | 21 | --- | --- | 0.700 | 0.122 |
| Floor 1: Slab-On-Grade:Heated, Horizontal 4 ft. | 835 | --- | 10.0 | --- | --- |

(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. 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.
- 5. Stair, elevator shaft vents, and other dampers integral to the building envelope are equipped with motorized dampers.
- 6. Cargo doors and loading dock doors are weather sealed.
- 7. Recessed lighting fixtures are: (i) Type IC rated and sealed or gasketed; or (ii) installed inside an appropriate air-tight assembly with a 0.5 inch clearance from combustible materials and with 3 inches clearance from insulation material.
- 8. Building entrance doors have a vestibule and equipped with closing devices.

Exceptions:

Building entrances with revolving doors.

Doors that open directly from a space less than 3000 sq. ft. in area.

- 9. Vapor retarder installed.

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 2003 IECC requirements in COMcheck Version 3.4.2 and to comply with the mandatory requirements in the Requirements Checklist.

James Ryan - Associate
Name - Title

[Signature]
Signature

1/16/08
Date