



Envelope Compliance Certificate

Section 1: Project Information

Energy Code: **2009 IECC**

Project Title: 62 India Street

Project Type: New Construction

Construction Site:

62 India Street
Portland, ME 04101
Permit No. 2016-02956

Owner/Agent:

India/ Newbury Residences, LLC.
2730 Transit Road
West Seneca, NY 14224

Designer/Contractor:

Geoffrey Mitchell
Landry French Construction Company
160 Pleasant Hill Road
Scarborough, ME 04074
(207) 730-5566
gmitchell@landryfrenchconstruction.com

Building Location (for weather data): Portland, Maine

Climate Zone: 6a

Vertical Glazing / Wall Area Pct.: 31%

Skylight Glazing / Roof Area Pct.: 1%

Building Use: Activity Type(s)	Floor Area
1-Mixed Use Area's (Retail) : Nonresidential	6648
2-2nd Floor (Multifamily) : Residential	14529
3-3rd Floor (Multifamily) : Residential	14454
4-4th Floor (Multifamily) : Residential	14270

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)
Exterior Wall 1st Floor 'A': Wood-Framed, 16" o.c., [Bldg. Use 1 - Mixed Use Area's]	1801	21.0	0.0	0.062	0.051
Window @ 'A' w/ Canopy: Metal Frame with Thermal Break, Perf. Specs.: Product ID Solarban 60, SHGC 0.38, PF 0.47, [Bldg. Use 1 - Mixed Use Area's] (b)	181	---	---	0.290	0.550
Window @ 'B' w/ Canopy: Metal Frame with Thermal Break, Perf. Specs.: Product ID Solarban 60, SHGC 0.38, PF 0.47, [Bldg. Use 1 - Mixed Use Area's] (b)	97	---	---	0.290	0.550
Window @ 'C' w/ Canopy: Metal Frame with Thermal Break, Perf. Specs.: Product ID Solarban 60, SHGC 0.38, PF 0.47, [Bldg. Use 1 - Mixed Use Area's] (b)	341	---	---	0.290	0.550
Window w/ out Canopy: Metal Frame with Thermal Break, Perf. Specs.: Product ID Solarban 60, SHGC 0.38, [Bldg. Use 1 - Mixed Use Area's] (b)	379	---	---	0.290	0.550
Exterior Wall 2nd Floor 'A': Wood-Framed, 16" o.c., [Bldg. Use 2 - 2nd Floor]	1424	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 2 - 2nd Floor] (b)	519	---	---	0.260	0.350
Exterior Wall 3rd Floor 'A': Wood-Framed, 16" o.c., [Bldg. Use 3 - 3rd Floor]	1424	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 3 - 3rd Floor] (b)	512	---	---	0.260	0.350
Exterior Wall 4th Floor 'A': Wood-Framed, 16" o.c., [Bldg. Use 4 - 4th Floor]	1408	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 4 - 4th Floor] (b)	512	---	---	0.260	0.350
	633	21.0	0.0	0.062	0.051

Exterior Wall 1st Floor 'B': Wood-Framed, 16" o.c., [Bldg. Use 1 - Mixed Use Area's]					
Large Window: Metal Frame with Thermal Break, Perf. Specs.: Product ID Solarban 60, SHGC 0.38, [Bldg. Use 1 - Mixed Use Area's] (b)	140	---	---	0.260	0.550
Small Window: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 1 - Mixed Use Area's] (b)	22	---	---	0.260	0.350
Door 1st floor 'B': Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID Metal Door, SHGC 0.38, [Bldg. Use 1 - Mixed Use Area's] (b)	61	---	---	0.290	0.800
Exterior Wall 2nd Floor 'B': Wood-Framed, 16" o.c., [Bldg. Use 2 - 2nd Floor]	1246	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 2 - 2nd Floor] (b)	417	---	---	0.260	0.350
Exterior Wall 3rd Floor 'B': Wood-Framed, 16" o.c., [Bldg. Use 3 - 3rd Floor]	1246	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 3 - 3rd Floor] (b)	410	---	---	0.260	0.350
Exterior Wall 4th Floor 'B': Wood-Framed, 16" o.c., [Bldg. Use 4 - 4th Floor]	1246	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 4 - 4th Floor] (b)	410	---	---	0.260	0.350
Exterior Wall 2nd Floor 'B.1': Wood-Framed, 16" o.c., [Bldg. Use 2 - 2nd Floor]	371	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 2 - 2nd Floor] (b)	42	---	---	0.260	0.350
Door 2nd Floor 'B.1': Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID Metal Door, SHGC 0.38, [Bldg. Use 2 - 2nd Floor] (b)	24	---	---	0.290	0.800
Exterior Wall 3rd Floor 'B.1': Wood-Framed, 16" o.c., [Bldg. Use 3 - 3rd Floor]	424	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 3 - 3rd Floor] (b)	64	---	---	0.260	0.350
Door 3rd Floor 'B.1': Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID Metal Door, SHGC 0.38, [Bldg. Use 3 - 3rd Floor] (b)	24	---	---	0.290	0.800
Exterior Wall 4th Floor 'B.1': Wood-Framed, 16" o.c., [Bldg. Use 4 - 4th Floor]	424	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 4 - 4th Floor] (b)	41	---	---	0.260	0.350
Door 4th Floor 'B.1': Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID Metal Door, SHGC 0.38, [Bldg. Use 4 - 4th Floor] (b)	24	---	---	0.290	0.800
Exterior Wall 1st Floor 'C': Wood-Framed, 16" o.c., [Bldg. Use 1 - Mixed Use Area's]	1739	21.0	0.0	0.062	0.051
Wood Doors 1st Floor 'C': Glass (> 50% glazing):Nonmetal Frame, Entrance Door, Perf. Specs.: Product ID Wood Frame Door, SHGC 0.02, [Bldg. Use 1 - Mixed Use Area's] (b)	105	---	---	0.360	0.350
Exterior Wall 2nd Floor 'C': Wood-Framed, 16" o.c., [Bldg. Use 2 - 2nd Floor]	1409	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 2 - 2nd Floor] (b)	382	---	---	0.260	0.350
Doors 2nd Floor 'C': Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID Metal Door, SHGC 0.38, [Bldg. Use 2 - 2nd Floor] (b)	72	---	---	0.290	0.800
Exterior Wall 3rd Floor 'C': Wood-Framed, 16" o.c., [Bldg. Use 3 - 3rd Floor]	1409	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 3 - 3rd Floor] (b)	424	---	---	0.260	0.350
Exterior Wall 4th Floor 'C': Wood-Framed, 16" o.c., [Bldg. Use 4 - 4th Floor]	1409	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 4 - 4th Floor] (b)	467	---	---	0.260	0.350
Exterior Wall 1st Floor 'D': Wood-Framed, 16" o.c., [Bldg. Use 1 - Mixed Use Area's]	943	21.0	0.0	0.062	0.051
Window 20: Metal Frame with Thermal Break, Perf. Specs.: Product ID Solarban 60, SHGC 0.38, [Bldg. Use 1 - Mixed Use Area's] (b)	170	---	---	0.290	0.550

Door 1st Floor 'D': Glass (> 50% glazing):Nonmetal Frame, Entrance Door, Perf. Specs.: Product ID Wood Frame Door, SHGC 0.19, [Bldg. Use 1 - Mixed Use Area's] (b)	24	---	---	0.300	0.350
Exterior Wall 2nd Floor 'D': Wood-Framed, 16" o.c., [Bldg. Use 2 - 2nd Floor]	1529	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 2 - 2nd Floor] (b)	386	---	---	0.260	0.350
Exterior Wall 3rd Floor 'D': Wood-Framed, 16" o.c., [Bldg. Use 3 - 3rd Floor]	1529	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 3 - 3rd Floor] (b)	485	---	---	0.260	0.350
Exterior Wall 4th Floor 'D': Wood-Framed, 16" o.c., [Bldg. Use 4 - 4th Floor]	1529	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 4 - 4th Floor] (b)	414	---	---	0.260	0.350
Exterior Wall 2nd Floor 'D.1': Wood-Framed, 16" o.c., [Bldg. Use 2 - 2nd Floor]	371	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 2 - 2nd Floor] (b)	42	---	---	0.260	0.350
Doors 2nd Floor 'D.1': Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID Metal Door, SHGC 0.38, [Bldg. Use 2 - 2nd Floor] (b)	48	---	---	0.290	0.800
Exterior Wall 3rd Floor 'D.1': Wood-Framed, 16" o.c., [Bldg. Use 3 - 3rd Floor]	424	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 3 - 3rd Floor] (b)	107	---	---	0.260	0.350
Door 3rd Floor 'D.1': Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID Metal Door, SHGC 0.38, [Bldg. Use 3 - 3rd Floor] (b)	24	---	---	0.290	0.800
Exterior Wall 4th Floor 'D.1': Wood-Framed, 16" o.c., [Bldg. Use 4 - 4th Floor]	424	21.0	0.0	0.062	0.051
Pella Windows: Wood Frame, Perf. Specs.: Product ID Double Hung, SHGC 0.25, [Bldg. Use 4 - 4th Floor] (b)	85	---	---	0.260	0.350
Door 4th Floor 'D.1': Glass (> 50% glazing):Metal Frame, Entrance Door, Perf. Specs.: Product ID Metal Door, SHGC 0.38, [Bldg. Use 4 - 4th Floor] (b)	24	---	---	0.290	0.800
2nd Floor System: Wood-Framed, [Bldg. Use 2 - 2nd Floor]	14529	35.0	0.0	0.029	0.033
3rd Floor System: Wood-Framed, [Bldg. Use 3 - 3rd Floor]	14454	35.0	0.0	0.029	0.033
4th Floor System: Wood-Framed, [Bldg. Use 4 - 4th Floor]	14270	35.0	0.0	0.029	0.033
Slab on Grade: Slab-On-Grade:Unheated, Vertical 4 ft., [Bldg. Use 1 - Mixed Use Area's]	421	---	10.0	---	---
Roof 1: Insulation Entirely Above Deck, [Bldg. Use 4 - 4th Floor]	14270	---	35.0	0.028	0.048
Skylights (4): Metal Frame with Thermal Break:Plastic, With Curb, Perf. Specs.: Product ID DDSA6060, SHGC 0.52, [Bldg. Use 4 - 4th Floor] (b)	100	---	---	0.700	0.600

(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 4.0.5.5 and to comply with the mandatory requirements in the Requirements Checklist.

Name - Title

Signature

Date

Project Notes:

Permit #2016-01911 (Issued 11.17.16)

Permit #2016-02956 (Submitted 12.07.16)