



Envelope Compliance Certificate

Section 1: Project Information

Energy Code: **2009 IECC**

Project Title: Salvation Army ARC Dining Hall Addition

Project Type: Addition

Construction Site:

88 Preble Street
Portland, ME 04101
Permit No. 201602844
Permit Date: 11/7/2016

Owner/Agent:

Major Ronald Bernardi
Salvation Army
30 Warren Ave
Portland, ME 04103
207-8787-8555
Ronald.Bernardi@use.salvationarmy.org

Designer/Contractor:

Evan Carroll
Bild Architecture
PO Box 8235
30 Danforth, Suite 213
Portland, ME 04104
207-408-0168
evan@bildarchitecture.com

Building Location (for weather data):

Portland, Maine

Climate Zone:

6a

Vertical Glazing / Wall Area Pct.:

24%

Building Use: Activity Type(s)

Floor Area

1-Dining Hall Addition (Dining: Cafeteria/Fast Food) :
Nonresidential

4233

Section 2: Envelope Assemblies and Requirements Checklist

Envelope PASSES: Design 19% 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)
Roof 1: Insulation Entirely Above Deck, [Bldg. Use 1 - Dining Hall Addition]	4233	---	23.6	0.041	0.048
Exterior Wall 1: Steel-Framed, 16" o.c., [Bldg. Use 1 - Dining Hall Addition]	4014	21.0	9.6	0.052	0.064
Window 1: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID Kawneer, SHGC 0.40, [Bldg. Use 1 - Dining Hall Addition] (b)	972	---	---	0.450	0.450
Door 1: Insulated Metal, Swinging, [Bldg. Use 1 - Dining Hall Addition]	63	---	---	0.450	0.700
Floor 1: Slab-On-Grade:Unheated, Horizontal with vertical >= 4 ft., [Bldg. Use 1 - Dining Hall Addition]	4233	---	10.0	---	---

(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. N/A
- 9. Recessed lighting fixtures installed in the building envelope are Type IC rated as meeting ASTM E283, are sealed with gasket or caulk. N/A
- 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 4.0.5.1 and to comply with the mandatory requirements in the Requirements Checklist.

Evan Carroll, Principal *Evan Carroll* 1/18/17
 Name - Title Signature Date

Project Notes:

- Envelope completed by Bild
- Lighting completed by Swift Current
- Mechanical completed by Ripcord