



COMcheck Software Version 3.9.1 Envelope Compliance Certificate

2009 IECC

Section 1: Project Information

Project Type: Alteration

Project Title : Coastal Trading & Pawn

Construction Site:

543 Forest Ave
Portland, ME 04103

Owner/Agent:

Rick LaChapelle
Coastal Trading & Pawn
379 Lisbon St.
Lewiston, ME 04240
207-784-7919

Designer/Contractor:

Mark Sengelmann
Alpha Architects
17 Chestnut St.
Portland, ME 04101
207-761-9500
mark@alphaarchitects.com

Section 2: General Information

Building Location (for weather data):

Portland, Maine

Climate Zone:

6a

Building Type for Envelope Requirements:

Non-Residential

Vertical Glazing / Wall Area Pct.:

1%

Activity Type(s)

Floor Area

Retail

4941

Section 3: Requirements Checklist

Envelope PASSES

Climate-Specific Requirements:

Post-Alteration Assembly	R-Value		Proposed		Max. Allowed	
	Cavity	Cont.	U-Factor	SHGC	U-Factor	SHGC
Floor 1: Slab-On-Grade:Unheated	---	0.3	3.125	---	0.550	---
Exterior Wall 1: Concrete Block:12", Unreinforced, Cells Empty, Furring: Wood	0.0	18.8	0.044	---	0.080	---
New Windows: Metal Frame with Thermal Break:Double Pane, Clear	---	---	0.320	0.800	0.550	0.800
New Door Entry: Glass (> 50% glazing):Metal Frame, Entrance Door, Entrance Door	---	---	0.580	0.800	0.800	0.800
Exist Door 2: Uninsulated Single-Layer Metal	---	---	0.200	---	0.700	---
New Door: Insulated Metal	---	---	0.160	---	0.700	---
Roof 1: Attic Roof with Steel Joists	0.0	38.0	0.026	---	0.027	---

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.