



# Envelope Compliance Certificate

In lieu of meeting IECC 2009, because we are greater than 40% vertical fenestration, we are required to show compliance with ASHRAE 90.1-2007, which is shown in the following COMcheck.

## Project Information

Energy Code: 90.1 (2007) Standard  
 Project Title: Ocean Gateway Addition  
 Location: Portland, Maine  
 Climate Zone: 6a  
 Project Type: Addition  
 Vertical Glazing / Wall Area: 53%

Construction Site:  
 167 Fore Street  
 Portland, ME 04101

Owner/Agent:  
 167 Fore Street LLC  
 PO Box 910  
 Westbrook, ME 04092

Designer/Contractor:  
 Archetype Architects  
 48 Union Wharf  
 Portland, ME 04101  
 207-772-6022

Please address the maximum area of vertical fenestration of 40% for the building envelope per Table 502.3 and the air leakage testing requirements of the curtain wall per Sec. 502.4.2

Building Area	Floor Area
1-Roof (Office) : Nonresidential	2442
2-South Wall (Office) : Nonresidential	10210
3-East Wall (Office) : Nonresidential	305
4-West Wall (Office) : Nonresidential	565
5-North Wall (Office) : Nonresidential	9125

## Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor <sup>(a)</sup>
Roof 1: Insulation Entirely Above Deck, [Bldg. Use 1 - Roof]	2442	---	38.0	0.026	0.048
<b>NORTH</b>					
Exterior Wall 4: Steel-Framed, 24" o.c., [Bldg. Use 5 - North Wall]	9125	25.8	15.0	0.036	0.064
Door 1: Insulated Metal, Swinging, [Bldg. Use 5 - North Wall]	21	---	---	0.160	0.700
Door 2: Insulated Metal, Swinging, [Bldg. Use 5 - North Wall]	21	---	---	0.160	0.700
Door 3: Insulated Metal, Swinging, [Bldg. Use 5 - North Wall]	21	---	---	0.160	0.700
Door 4: Insulated Metal, Swinging, [Bldg. Use 5 - North Wall]	21	---	---	0.160	0.700
Door 5: Insulated Metal, Swinging, [Bldg. Use 5 - North Wall]	21	---	---	0.160	0.700
<b>EAST</b>					
Exterior Wall 2: Steel-Framed, 16" o.c., [Bldg. Use 3 - East Wall]	305	19.0	10.0	0.052	0.064
<b>SOUTH</b>					
Exterior Wall 1: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 2 - South Wall] (b)	10210	---	---	0.270	0.051
Window 1: Metal Frame Curtain Wall/Storefront, Perf. Specs.: Product ID SB60, SHGC 0.32, [Bldg. Use 2 - South Wall] (c)	10210	---	---	0.240	0.450
<b>WEST</b>					
Exterior Wall 3: Other Exterior Wall, Heat capacity 0.0, [Bldg. Use 4 -	565	---	---	0.270	0.051

