

COMcheck Software Version 3.9.0
**Interior Lighting Compliance
 Certificate**

2009 IECC

Section 1: Project Information

Project Type: **New Construction**
 Project Title : cPort - Portland Forest Ave

Construction Site:
 285 Forwesat Ave
 Portland , ME 04101

Owner/Agent:
 Gene Ardito
 Cport Federal Credit Union
 50 Riverside Industrial Parkway
 PO Box 777
 Portland, Me, ME 04104

Designer/Contractor:
 Stan Gawron
 29 Black Point Rd
 Scarborough, Me , ME 04101
 883-6397

Section 2: Interior Lighting and Power Calculation

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B x C)
Retail Bank (Retail)	3711	1.5	5567
Office Space (Office)	912	1	912
Total Allowed Watts =			6479

Section 3: Interior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Retail Bank (Retail 3711 sq.ft.)				
Compact Fluorescent 1: Quad 2-pin 26W / Electronic	1	43	26	1118
2x2 LED: Other / Electronic	1	41	34	1394
2x4 LED: Other / Electronic	1	5	64	320
Office Space (Office 912 sq.ft.)				
2x4 LED: Other / Electronic	1	9	64	576
Downlights: Quad 2-pin 26W / Electronic	1	12	26	312
High ceiling area: 48" T8 32W / Electronic	2	8	64	512
Mechanical: 48" T8 32W / Electronic	2	3	64	192
Decorative Pendants: Quad 2-pin 13W / Electronic	1	18	13	234
Total Proposed Watts =			4658	

Section 4: Requirements Checklist

Lighting Wattage:

1. Total proposed watts must be less than or equal to total allowed watts.

Allowed Watts	Proposed Watts	Complies
6479	4658	YES

Controls, Switching, and Wiring:

2. Daylight zones under skylights more than 15 feet from the perimeter have lighting controls separate from daylight zones adjacent to vertical fenestration.
3. Daylight zones have individual lighting controls independent from that of the general area lighting.

Exceptions:

- Contiguous daylight zones spanning no more than two orientations are allowed to be controlled by a single controlling device.
- Daylight spaces enclosed by walls or ceiling height partitions and containing two or fewer light fixtures are not required to have a separate switch for general area lighting.
- 4. Independent controls for each space (switch/occupancy sensor).

Exceptions:

- Areas designated as security or emergency areas that must be continuously illuminated.
- Lighting in stairways or corridors that are elements of the means of egress.
- 5. Master switch at entry to hotel/motel guest room.
- 6. Individual dwelling units separately metered.
- 7. Medical task lighting or art/history display lighting claimed to be exempt from compliance has a control device independent of the control of the nonexempt lighting.
- 8. Each space required to have a manual control also allows for reducing the connected lighting load by at least 50 percent by either controlling all luminaires, dual switching of alternate rows of luminaires, alternate luminaires, or alternate lamps, switching the middle lamp luminaires independently of other lamps, or switching each luminaire or each lamp.

Exceptions:

- Only one luminaire in space.
- An occupant-sensing device controls the area.
- The area is a corridor, storeroom, restroom, public lobby or sleeping unit.
- Areas that use less than 0.6 Watts/sq.ft.
- 9. Automatic lighting shutoff control in buildings larger than 5,000 sq.ft.

Exceptions:

- Sleeping units, patient care areas; and spaces where automatic shutoff would endanger safety or security.
- 10. Photocell/astronomical time switch on exterior lights.

Exceptions:

- Lighting intended for 24 hour use.
- 11. Tandem wired one-lamp and three-lamp ballasted luminaires (No single-lamp ballasts).

Exceptions:

- Electronic high-frequency ballasts; Luminaires on emergency circuits or with no available pair.

Interior Lighting PASSES. Design 28% better than code.

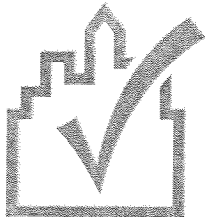
Section 5: Compliance Statement

Compliance Statement: The proposed lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 3.9.0 and to comply with the mandatory requirements in the Requirements Checklist.

WILLIAM BENNETT
Name - Title

WJ
Signature

11/14/11
Date



COMcheck Software Version 3.9.0
**Exterior Lighting Compliance
 Certificate**

2009 IECC

Section 1: Project Information

Project Type: **New Construction**
 Project Title : cPort - Portland Forest Ave
 Exterior Lighting Zone: **4 (High activity metropolitan commercial district)**

Construction Site: 285 Forwesat Ave Portland , ME 04101	Owner/Agent: Gene Ardito Cport Federal Credit Union 50 Riverside Industrial Parkway PO Box 777 Portland, Me, ME 04104	Designer/Contractor: Stan Gawron 29 Black Point Rd Scarborough, Me , ME 04101 883-6397
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Section 2: Exterior Lighting Area/Surface Power Calculation

A Exterior Area/Surface	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B x C)	F Proposed Watts
Drive-up windows/doors	1 windows or doors	400	No	400	1050
Parking area	13000 ft2	0.13	Yes	1690	1600
Main entry	7 ft of door width	30	Yes	210	150
Other door (not main entry)	7 ft of door width	20	Yes	140	450
Total Tradable Watts* =				2040	2200
Total Allowed Watts =				2440	
Total Allowed Supplemental Watts** =				1300	

* Wattage tradeoffs are only allowed between tradable areas/surfaces.
 ** A supplemental allowance equal to 1300 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Section 3: Exterior Lighting Fixture Schedule

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Drive-up windows/doors (1 windows or doors): Non-tradable Wattage				
HID 1: Metal Halide 70W / Standard	1	15	70	1050
Parking area (13000 ft2): Tradable Wattage				
HID 2: Ceramic Metal Halide 150W / Pulse start	1	4	150	600
HID 3: Metal Halide 250W / Pulse start	1	4	250	1000
Main entry (7 ft of door width): Tradable Wattage				
HID 4: Metal Halide 50W / Standard	1	3	50	150
Other door (not main entry) (7 ft of door width): Tradable Wattage				
HID 5: Metal Halide 50W / Standard	1	9	50	450
Total Tradable Proposed Watts =				2200

Section 4: Requirements Checklist

Lighting Wattage:

- 1. Within each non-tradable area/surface, total proposed watts must be less than or equal to total allowed watts. Across all tradable areas/surfaces, total proposed watts must be less than or equal to total allowed watts.

Compliance: Passes using supplemental allowance watts.

Controls, Switching, and Wiring:

- 2. All exemption claims are associated with fixtures that have a control device independent of the control of the nonexempt lighting.
- 3. Lighting not designated for dusk-to-dawn operation is controlled by either a photosensor (with time switch), or an astronomical time switch.
- 4. Lighting designated for dusk-to-dawn operation is controlled by an astronomical time switch or photosensor.
- 5. All time switches are capable of retaining programming and the time setting during loss of power for a period of at least 10 hours.

Exterior Lighting Efficacy:

- 6. All exterior building grounds luminaires that operate at greater than 100W have minimum efficacy of 60 lumen/watt.

Exceptions:

- Lighting that has been claimed as exempt and is identified as such in Section 3 table above.
- Lighting that is specifically designated as required by a health or life safety statute, ordinance, or regulation.
- Emergency lighting that is automatically off during normal building operation.
- Lighting that is controlled by motion sensor.

Exterior Lighting PASSES: Design 18% better than code.

Section 5: Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 3.9.0 and to comply with the mandatory requirements in the Requirements Checklist.

WILLIAM R BARNETT
Name - Title


Signature

11/14/11
Date