



COMcheck Software Version 4.0.7.1

Interior Lighting Compliance Certificate

Section 1: Project Information

Energy Code: **2009 IECC**
 Project Title: Cport Credit Union
 Project Type: New Construction

Construction Site:
 50 India Street
 Portland, ME 04103

Owner/Agent:
 Cport Credit Union

Designer/Contractor:
 Gawron Turgeon Architects

Section 2: Interior Lighting and Power Calculation

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts (B x C)
Bank Retail Lobby (Retail)	702	1.5	1053
Office	2278	1	2278
Kitchenette 204 (Dining: Cafeteria/Fast Food)	173	1.4	242
Total Allowed Watts =			3573

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)
Bank Retail Lobby (Retail 702 sq.ft.)				
LED 1: A: DECORATIVE LED PENDANT: Other:	1	4	5.6	22.4
Incandescent 1: B: WALL SCONCE: Incandescent 40W:	1	3	40	120
Incandescent 2: C: PENDANT: Incandescent 30W:	1	4	30	120
Incandescent 3: D: 9-LAMP PENDANT: Incandescent 60W:	8	1	540	540
LED 4: J: RECESSED DOWNLIGHT: Other:	1	14	16.5	231
LED 3: H: RECESSED WALL WASHER: Other:	1	6	16.5	99
LED 7: S: LED ADJUSTABLE SPOT: Other:	1	2	12	24
LED 8: U: 17" LED UNDERCABINET: Other:	1	6	3.5	21
LED 11: Z: 2' X 2' RECESSED LED: Other:	1	5	22.6	113
Office (2278 sq.ft.)				
Incandescent 1: B: WALL SCONCE: Incandescent 40W:	1	2	40	80
Incandescent 2: C: PENDANT: Incandescent 30W:	1	3	30	90
LED 2: E: LED WALL SCONCE: Other:	1	5	6	30
LED 4: J: RECESSED DOWNLIGHT: Other:	1	14	16.5	231
LED 5: P: 4' LED LENSED STRIP: Other:	1	2	16.8	33.6
LED 6: Q: 2' LED LENSED STRIP: Other:	1	5	17.1	85.5
LED 8: U: 17" LED UNDERCABINET: Other:	1	7	3.5	24.5
LED 11: Z: 2' X 2' RECESSED LED: Other:	1	19	22.6	429.4
Kitchenette 204 (Dining: Cafeteria/Fast Food 173 sq.ft.)				
LED 11: Z: 2' X 2' RECESSED LED: Other:	1	3	22.6	67.8
Total Proposed Watts =				2362

Section 4: Requirements Checklist

Interior Lighting PASSES: Design 34% better than code.

Lighting Wattage:

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

Allowed Watts	Proposed Watts	Complies
3573	2362	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.

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 4.0.7.1 and to comply with the mandatory requirements in the Requirements Checklist.

Stephen Markiewicz, Senior Electrical Designer

11/15/2017

Name - Title

Signature

Date



Exterior Lighting Compliance Certificate

Section 1: Project Information

Energy Code: **2009 IECC**
 Project Title: Cport Credit Union
 Project Type: New Construction
 Exterior Lighting Zone: 2 (Neighborhood business district)

Construction Site:
 50 India Street
 Portland, ME 04103

Owner/Agent:
 Cport Credit Union

Designer/Contractor:
 Gawron Turgeon Architects

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
Door 100 (Main entry)	3 ft of door width	20	Yes	60	16
ATM (ATM/Night depository location)***	1 machines	90	No	270	10
All other exterior doors (Other door (not main entry))	19 ft of door width	20	Yes	380	88
Total Tradable Watts* =				440	105
Total Allowed Watts =				710	
Total Allowed Supplemental Watts** =				600	

* Wattage tradeoffs are only allowed between tradable areas/surfaces.

** A supplemental allowance equal to 600 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

*** ATM/Night depository sites have a base allowance of 180 W per site.

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)
Door 100 (Main entry 3 ft of door width): Tradable Wattage				
LED 4: J: RECESSED DOWNLIGHT: Other:	1	1	16.5	16.5
ATM (ATM/Night depository location 1 machines): Non-tradable Wattage				
LED 10: W2: LED WALL PACK: Other:	1	1	10	10
All other exterior doors (Other door (not main entry) 19 ft of door width): Tradable Wattage				
LED 9: W: LED WALL PACK: LED Other Fixture Unit 13W:	1	6	13	78
LED 10: W2: LED WALL PACK: Other:	1	1	10	10
Total Tradable Proposed Watts =				105

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.

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.

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 4.0.7.1 and to comply with the mandatory requirements in the Requirements Checklist.

Stephen Markiewicz, Senior Electrical Designer

11/15/2017

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