



Phase II Terminal Addition for:

OLD DOMINION FREIGHT LINE

185 Rand Road
Portland, ME 04102

SITE LOCATION MAP



CODE ANALYSIS

- Maine Uniform Building and Energy Code
- 2009 edition of the International Building Code
- 2009 edition of the International Existing Building Code
- 2009 edition of the International Residential Code
- 2009 edition of the International Energy Conservation Code
- ASHRAE Standards 62.1, 62.2, and 90.1
- 2009 NFPA 1 - Fire Code
- 2009 NFPA 54 - Natural Fuel and Gas Code
- 2009 NFPA 101 - Life Safety Code
- 2009 International Plumbing Code
- 2007 NEC National Electric Code
- 2010 ADAAG Accessibility Code

CODE ANALYSIS

Phase II consists of adding 5,735 SF of dock area.

Occupancy Type: Dock: Storage S-1

Allowable Area: 17,500 SF per Table 503

Actual Area: 11,192 SF (total)
Actual area is below 12,000 SF that requires automatic sprinkler system per 903.2.9

Occupant Load: Dock - Storage Occupancy - 11,192 / 500 SF per person = 22.38
Occupants

Exits Required: Dock - Storage S-1 - Under 29 Occupants require 1 exit
Exit s Provided: Dock - 2

Exit Units Provided: Dock - 33' clear width / .2 (per section 1005.1) = 165 occupants x 2 exits = 330 occupants

Travel Distance: Per Table 1016.1 - 200' for a building without sprinkler system

Building Length: Dock - 226'

COMcheck information

COMcheck Software Version 3.9.3 Interior Lighting Compliance Certificate

2009 IECC

Section 1: Project Information

Project Type: Addition
Project Title: ODPL -
Construction Site: Portland, ME
Owner/Agent:
Designer/Contractor:
Anthony D. Olson
Oliver Rhodes & Associates, Inc.
301 Industrial Boulevard
Tullahoma, TN 37388
931.454.9940

Section 2: Interior Lighting Area and Power Calculation

Area Category	A Floor Area (SQ)	B Allowed Watts / SQ	C Allowed Watts / SQ (B x C)	D Actual Watts / SQ (E x C)	E # of Fixtures (C x D)
Warehouse	5665	58	328570	4332	2166
Total Allowed Watts =		328570			

Section 3: Interior Lighting Fixture Schedule

Fixture ID / Description / Lamp / Wattage Per Lamp / Ballast	A Lamp Type	B # of Fixtures	C Watt (C x D)	D Total Watts	
Warehouse (5665 sq ft) LED T-8 Other	T-8	1	10	2620	
Total Proposed Watts =		2620			

Section 4: Requirements Checklist

- Interior Lighting PASS/Fail** Check 100% better than code.
- Lighting Wattage:**
- Total proposed watts must be less than or equal to total allowed watts.
- | Allowed Watts | Proposed Watts | Complex |
|---------------|----------------|---------|
| 4532 | 2620 | YES |
- Controls, Switching, and Wiring:**
- Daylight zones under skylights more than 15 feet from the perimeter have lighting controls separate from daylight zones adjacent to vertical fenestration.
 - Daylight zones have individual lighting controls independent from that of the general area lighting.
- Exceptions:**
- Continuous daylight zones spanning no more than two orientations are allowed to be controlled by a single controlling device.
 - Daylight zones 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.
 - Independent controls for each space (with occupancy sensors).

Project Title: ODPL
Data Name: W\2014\Projects\0104 ODPL - Portland, ME\0104.1 Ph.ILoad Calculations\0104.1.1.csk
Report date: 07/16/14
Page 1 of 2

COMcheck Software Version 3.9.3 Exterior Lighting Compliance Certificate

2009 IECC

Section 1: Project Information

Project Type: Addition
Project Title: Exterior Lighting Zone: 2 (Light Industrial area with limited nighttime use)
Construction Site: Portland, ME
Owner/Agent:
Designer/Contractor:
Anthony D. Olson
Oliver Rhodes & Associates, Inc.
301 Industrial Boulevard
Tullahoma, TN 37388
931.454.9940

Section 2: Exterior Lighting Area/Surface Power Calculation

Exterior Area/Surface	A Quantity	B Allowed Watts / SQ	C Allowed Watts / SQ (B x C)	D Actual Watts / SQ (E x C)	E # of Fixtures (C x D)	F Total Watts
Parking area	111103 SQ	0.56	62215.68	6566	5310	33561
Total Allowed Watts =		62215.68				33561
Total Allowed Supplemental Watts =		600				33561

*Wattage tradeoffs are only allowed between tradeable areas/surfaces.
**A supplemental allowance equal to 600 watts may be applied toward compliance of both non-tradeable and tradeable areas/surfaces.

Section 3: Exterior Lighting Fixture Schedule

Fixture ID / Description / Lamp / Wattage Per Lamp / Ballast	A Lamp Type	B # of Fixtures	C Watt (C x D)	D Total Watts	
Parking area (111103 SQ) Tradeable Wattage LED 1: UPRAN/AAS: Other	U	1	9	2520	
LED 2: UPRAN: Other	U	1	5	270	
LED 3: P: Other	P	1	5	2520	
Total Tradeable Proposed Watts =		5280			

Section 4: Requirements Checklist

- Lighting Wattage:**
- With all non-tradeable areas/surfaces, total proposed watts must be less than or equal to total allowed watts. Areas with tradeable areas/surfaces, total proposed watts must be less than or equal to total allowed watts.
- Controls, Switching, and Wiring:**
- All emergency egress are associated with fixtures that have a control device independent of the control of the non-emergency lighting.
 - Lighting not designated for dusk-to-dawn operation is controlled by either a photosensor (with time switch), or an astronomical time switch.
 - Lighting designated for dusk-to-dawn operation is controlled by an astronomical time switch or photosensor.

Project Title:
Data Name: W\2014\Projects\0104 ODPL - Portland, ME\0104.1 Ph.ILoad Calculations\0104.1.1.csk
Report date: 07/16/14
Page 3 of 4

NOTE:
Dock Addition is an uncondition space and there is no additional plumbing being added.

- Area designated as security or emergency areas that must be continuously illuminated.
 - Lighting in stairways or corridors that are elements of the means of egress.
 - Master switch at entry to basement/guest room.
 - Individual dwelling units separately metered.
 - Medical task lighting or auxiliary display lighting claimed to be exempt from compliance has a control device independent of the control of the non-emergency lighting.
 - 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, stairwell, restroom, public lobby or sleeping unit.
 - Area that use less than 10 Watts/Sq.
 - Automatic lighting shutoff control in buildings larger than 5,000 sq.ft.

- Exceptions:**
- Shipping units, patient care areas, and spaces where automatic shutoff would endanger safety or security.
 - 10. Photocell/photometer time switch on exterior lights.
 - Lighting intended for 24 hour use.
 - 11. Ten-foot wide one-lamp and three-lamp ballasted luminaires (two single-lamp ballasts).
- Exceptions:**
- Electronic high-frequency ballasts; Luminaires on emergency circuits or with no available path.

Section 5: Compliance Statement

Compliance Statement: The proposed lighting design represented in this certificate 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 3.9.3 and to comply with the applicable International Building Code Requirements Checklist.

Anthony D. Olson, P.E.
Name - Title
Date: 7/16/14

Project Title:
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Report date: 07/16/14
Page 2 of 4

- 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:**
 - All exterior building grounds luminaires that operate at greater than 100W have minimum efficacy of 80 lumens/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 to a health or life safety status, 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 certificate is consistent with the building plans, specifications and other calculations submitted with this permit application. The proposed exterior lighting system has been designed to meet the 2009 IECC requirements in COMcheck Version 3.9.3 and to comply with the applicable International Building Code Requirements Checklist.

Anthony D. Olson, P.E.
Name - Title
Date: 7/16/14

Project Title:
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Page 4 of 4

- GENERAL**
- A0.0 RENOVATION COVER SHEET
 - A0.1 ADDITION COVER SHEET
 - A0.2 GENERAL NOTES
 - A0.3 ADA REQUIREMENTS
 - A0.5 ADDITION LIFE SAFETY PLAN

- CIVIL**
- C0 SURVEY PLAN
 - C1 COVER SHEET
 - C2 EXISTING CONDITIONS & DEMOLITION PLAN
 - C3 SITE LAYOUT & UTILITY PLAN
 - C4 GRADING, DRAINAGE, & EROSION CONTROL PLAN
 - C5 SITE DEVELOPMENT DETAILS
 - C6 STORMWATER DETAILS
 - C7 EROSION CONTROL DETAILS & NOTES

- ARCHITECTURAL**
- A1.0 SITE PLAN
 - A1.1 SITE DETAILS
 - A2.4 ADDITION DEMOLITION & FLOOR PLAN
 - A2.5 ADDITION ROOF PLAN
 - A3.2 ADDITION ELEVATIONS
 - A5.2 ADDITION WALL SECTION & STAIR PLAN
 - A6.2 ADDITION REFLECTED CEILING PLAN
 - A8.2 ODFL STANDARD DETAILS

- STRUCTURAL**
- S0.1 GENERAL NOTE, SCHEDULES AND SPECIFICATIONS
 - S1.1 FOUNDATION PLAN
 - S3.1 FOUNDATION SECTIONS

MECHANICAL

- PLUMBING**
- P1.1 PIPING PLAN

- ELECTRICAL**
- E1.1 POWER & LIGHTING PLAN
 - E2.1 SCHEDULES & RISER DIAGRAMS
 - E3.1 PANEL SCHEDULES
 - E4.1 LEGEND & NOTES
 - ES1.1 SITE LIGHTING PLAN
 - ES1.1A SITE PHOTOMETRICS
 - ES1.1B Unnamed
 - ES2.1 SITE POWER PLAN

Project No. 13061.00

Description	Date
PERMIT ISSUE	04/16/2014
COMcheck	7-15-14



Owner:
Old Dominion Freight Line
500 Old Dominion Way
Thomasville, NC 27360

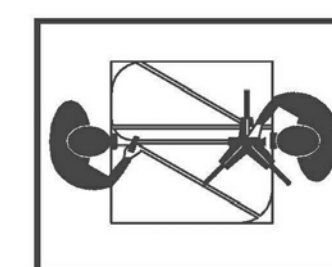
336-822-5324
Phil Danner



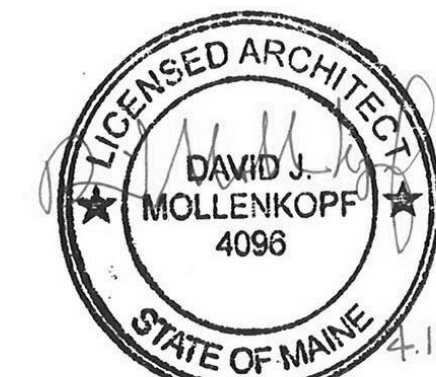
General Contractor:
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Scott Freeman



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