

COMcheck Software Version COMcheckWeb
Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
 Project Title: Rockland Logistics Center Bldg. 1
 Project Type: New Construction

Construction Site: 25 Old Mill Road, Suffern, New York 10901
 Owner/Agent: _____ Designer/Contractor: _____

Additional Efficiency Package(s)

Credits: 1.0 Required 0.0 Proposed

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft ²)	C Allowed Watts / ft ²	D Allowed Watts
1 Warehouse (Warehouse)	963100	0.48	462288
		Total Allowed Watts =	462288

Proposed Interior Lighting Power

Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps / Fixture	C # of Fixture (C X D)	D Watt. (C X D)	E
1 Warehouse (Warehouse) 2' x 4' HIGH BAY LED: A: 2' x 4' HIGH BAY LED: Other: 4'-0" LINEAR LED: B: 4'-0" LINEAR LED: Other:	1	460	321	147660
	1	6	31	186
		Total Proposed Watts =		147846

Interior Lighting PASSES: Design 68% better than code

Interior Lighting Compliance Statement

The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Nick Fourakis - Electrical Designer
 Name - Title: _____ Signature: _____ Date: 11/16/2023

Project Title: Rockland Logistics Center Bldg. 1
 Data filename: _____ Report date: 11/16/23
 Page 1 of 5

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3.1 C405.2.3.2 1 C405.2.3.3 2 [EL23]	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3.3 Daylight-responsive controls for applicable spaces. C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.2.4 [EL26]	Separate lighting control devices for specific uses installed per approved lighting plans.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.4 [EL27]	Additional interior lighting power allowed for special functions per the approved lighting plans and is automatically controlled and separated from general lighting.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.3 [EL6]	Exit signs do not exceed 5 watts per face.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.6 [EL26]	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.7 [EL27]	Electric motors meet the minimum efficiency requirements of Tables C405.7(i) through C405.7(j). Efficiency verified through certification under an approved certification program or the equipment efficiency ratings shall be provided by motor manufacturer (where certification programs do not exist).	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.8.2 [EL28]	Escalators and moving walks comply with ASME A17.1/CSA B44 and have automatic controls configured to reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying passengers.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.9 [EL29]	Total voltage drop across the combination of feeders and branch circuits <= 3%.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
 Project Title: Rockland Logistics Center Bldg. 1
 Data filename: _____ Report date: 11/16/23
 Page 4 of 5

COMcheck Software Version COMcheckWeb
Inspection Checklist
 Energy Code: 2018 IECC

Requirements: 100.0% were addressed directly in the COMcheck software
 Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C406 [PR9]	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy efficiency package options.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
 Project Title: Rockland Logistics Center Bldg. 1
 Data filename: _____ Report date: 11/16/23
 Page 2 of 5

Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3 C408.2.5.2 2 [F17]	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.4.1 [F18]	Interior installed lamp and fixture lighting power is consistent with what is shown on the approved lighting plans, demonstrating proposed watts are less than or equal to allowed watts.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	See the Interior Lighting fixture schedule for values.
C408.1.1 [F15]	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturer's information, specifications, programming procedures and means of illustrating to owner how building, equipment and systems are intended to be installed, maintained, and operated.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.2.5.1 [F16]	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C408.3 [F13]	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
 Project Title: Rockland Logistics Center Bldg. 1
 Data filename: _____ Report date: 11/16/23
 Page 5 of 5

Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.2.2 2 [EL22]	Spaces required to have light-reduction controls have a manual control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination pattern >= 50 percent.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.1.1 C405.2.1.1 1 [EL18]	Occupancy sensors installed in classrooms/lecturing/training rooms, conference/meeting/multipurpose rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms, storage rooms, locker rooms, warehouse storage areas, and other spaces <= 300 sq ft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.2.1.1 C405.2.1.1 2 [EL19]	Occupancy sensors control function in warehouses: In warehouses, the lighting in aiseways and open areas is controlled with occupant sensors that automatically reduce lighting power by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.
C405.2.1.3 3 [EL20]	Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq ft, have controls 1) configured so that general lighting can be controlled separately in control zones with floor areas <= 600 sq ft, within the space, 2) automatically turn off general lighting in all control zones within 20 minutes after all occupants have left the space, 3) are configured so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Exception: Requirement does not apply.
C405.2.2.1 1 C405.2.2.2 2 [EL21]	Each area not served by occupancy sensors (per C405.2.1) have time-switch controls and functions detailed in sections C405.2.2.1 and C405.2.2.2.	<input type="checkbox"/> Complies <input checked="" type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	Requirement will be met.

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)
 Project Title: Rockland Logistics Center Bldg. 1
 Data filename: _____ Report date: 11/16/23
 Page 3 of 5

2018 IECC COMMISSIONING, TESTING, & CLOSEOUT REQUIREMENTS

PER REQUIREMENTS OF 2018 IECC C408, THESE CONSTRUCTION DOCUMENTS HEREBY SPECIFY THAT THE EC SHALL RETAIN A REGISTERED DESIGN PROFESSIONAL OR APPROVED AGENCY, TO BE IN CHARGE OF TESTING/COMMISSIONING THE ELECTRICAL ASPECTS OF BUILDING SYSTEM(S) ASSOCIATED WITH THIS PROJECT ("ELECTRICAL CxA"). THE ELECTRICAL CxA SHALL COORDINATE COMPLETELY WITH THE MECHANICAL CxA ON ALL ITEMS OF COORDINATION/DOCUMENTATION, PER REQUIREMENTS OF IECC C408.

ADDITIONALLY, PER C408.3.1, THESE CONSTRUCTION DOCUMENTS HEREBY SPECIFY THAT THE EC, PRIOR TO PASSING FINAL INSPECTION, SHALL HAVE THE ELECTRICAL CxA PROVIDE EVIDENCE THAT THE LIGHTING CONTROL SYSTEM(S) HAVE BEEN TESTED TO ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS, AND MANUFACTURER'S INSTRUCTIONS; FUNCTIONAL TESTING SHALL BE IN ACCORDANCE WITH IECC SECTIONS C408.3.1.1 THROUGH C408.3.1.3 FOR THE APPLICABLE CONTROL TYPE.

REQUIRED FUNCTIONAL TESTING INCLUDES THE FOLLOWING TYPES OF CONTROLS, AS APPLICABLE TO THIS PROJECT; ELECTRICAL CxA SHALL SEE IECC SECTION C408.3.1 FOR COMPLETE DETAILS & REQUIREMENTS:

- OCCUPANT SENSOR CONTROLS
- TIME-SWITCH CONTROLS
- DAYLIGHT RESPONSIVE CONTROLS

ADDITIONALLY, PER REQUIREMENTS OF 2018 IECC C408.3.2, THESE CONSTRUCTION DOCUMENTS HEREBY SPECIFY THAT THE DOCUMENTS DESCRIBED BELOW BE PROVIDED BY THE EC TO THE BUILDING OWNER OR OWNER'S AUTHORIZED AGENT WITHIN 90 DAYS OF THE DATE OF RECEIPT OF THE CERTIFICATE OF OCCUPANCY.

DRAWINGS: RECORD DOCUMENTS SHALL INCLUDE, AT A MINIMUM, THE FOLLOWING:

- LOCATION AND CATALOGUE NUMBER OF EACH PIECE OF EQUIPMENT.

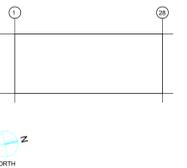
MANUALS: THESE MANUALS SHALL INCLUDE, AT A MINIMUM, THE FOLLOWING:

- AN OPERATING AND MAINTENANCE MANUAL SHALL BE PROVIDED AND INCLUDE THE FOLLOWING:
 - NAME AND ADDRESS OF NOT LESS THAN ONE SERVICE AGENCY FOR INSTALLED EQUIPMENT.
 - A NARRATIVE OF HOW EACH SYSTEM IS INTENDED TO OPERATE, INCLUDING RECOMMENDED SETPOINTS.
 - SUBMITTAL DATA INDICATING ALL SELECTED OPTIONS FOR EACH PIECE OF LIGHTING EQUIPMENT AND LIGHTING CONTROLS.
 - OPERATION AND MAINTENANCE MANUALS FOR EACH PIECE OF LIGHTING EQUIPMENT. REQUIRED ROUTINE MAINTENANCE ACTIONS, CLEANING AND RECOMMENDED RELAMPING SHALL BE CLEARLY IDENTIFIED.
 - A SCHEDULE FOR INSPECTING AND RECALIBRATING ALL LIGHTING CONTROLS.

- A REPORT OF TEST RESULTS SHALL BE PROVIDED AND INCLUDE THE FOLLOWING:
 - RESULTS OF FUNCTIONAL PERFORMANCE TESTS.
 - DISPOSITION OF DEFICIENCIES FOUND DURING TESTING, INCLUDING DETAILS OF CORRECTIVE MEASURES USED OR PROPOSED.



KEY PLAN



SUBMITTALS

NO.	DATE	DESCRIPTION
A	11.20.2024	ISSUE FOR REVIEW
B	02.02.2024	ISSUE FOR REVIEW
0	02.09.2024	ISSUE FOR PERMIT