



COMcheck Software Version 4.1.5.1

## Interior Lighting Compliance Certificate

### Project Information

Energy Code: 2018 IECC  
Project Title: Lincoln Equities - NY-312 - Alternate Building B  
Project Type: New Construction

Construction Site: NY-312 & Pugsley Road  
Southeast, NY 10509  
Owner/Agent:  
Designer/Contractor: FXB Inc.  
5 Christy Drive, Suite #307  
Chadds Ford, PA 19317  
610-558-3464

### Additional Efficiency Package(s)

Unspecified

### Allowed Interior Lighting Power

A Area Category	B Floor Area (ft <sup>2</sup> )	C Allowed Watts / ft <sup>2</sup>	D Allowed Watts (B X C)
1-Warehouse (Warehouse)	614870	0.48	295138
Total Allowed Watts = 295138			

### Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
1-Warehouse (Warehouse)				
2x4 High Bay LED: A: 2x4 High Bay LED: Other:	1	234	321	75114
4'-0" Linear LED Strip: B: 4'-0" Linear LED Strip: Other:	1	2	31	62
Total Proposed Watts =				75176

Interior Lighting PASSES: Design 75% better than code

### Interior Lighting Compliance Statement

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 4.1.5.1, and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Bill Moore - Electrical Designer  
Name - Title  
Signature  
Date: 03.17.2022

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Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.3, C405.2.3.1, C405.2.3.2 [EL23]†	Daylight zones provided with individual controls that control the lights independent of general area lighting. See code section C405.2.3 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 type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.2.4 [EL26]†	Separate lighting control devices for specific uses installed per approved lighting plans.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
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 type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.3 [EL6]†	Exit signs do not exceed 5 watts per face.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.6 [EL26]†	Low-voltage dry-type distribution electric transformers meet the minimum efficiency requirements of Table C405.6.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.7 [EL27]†	Electric motors meet the minimum efficiency requirements of Tables C405.7(1) through C405.7(4). 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 type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.8.2, C405.8.2.1 [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 type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.9 [EL29]†	Total voltage drop across the combination of feeders and branch circuits <= 5%.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

### Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

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## Inspection Checklist

Energy Code: 2018 IECC

Requirements: 0.0% 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 type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
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 type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

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Section # & Req.ID	Final Inspection	Complies?	Comments/Assumptions
C303.3, C408.2.5.2 [F117]†	Furnished O&M instructions for systems and equipment to the building owner or designated representative.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.4.1 [F118]†	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 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 [F157]†	Building operations and maintenance documents will be provided to the owner. Documents will cover manufacturers' 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 type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C408.2.5.1 [F116]†	Furnished as-built drawings for electric power systems within 90 days of system acceptance.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C408.3 [F133]†	Lighting systems have been tested to ensure proper calibration, adjustment, programming, and operation.	<input type="checkbox"/> Complies <input type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

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Section # & Req.ID	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
C405.2.2.2 [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 type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.2.1, C405.2.1.1 [EL18]†	Occupancy sensors installed in classroom/lecture/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 type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.2.1.2 [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 type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.2.1.3 [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 type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	
C405.2.2.1, C405.2.2.2 [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 type="checkbox"/> Does Not <input type="checkbox"/> Not Observable <input type="checkbox"/> Not Applicable	

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### 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.

DESIGNER / BUILDER

**ARCO**  
DESIGN/BUILD  
INDUSTRIAL

44 SOUTH BROADWAY, SUITE 1003  
WHITE PLAINS, NY 10601  
P: 914.821.5535 F: 914.306.8010

**ADBI** | DESIGN  
SERVICES

PROJECT TITLE

**LINCOLN  
EQUITIES -  
NY-312 - ALT.  
BLDG B  
NY-312 & PUGSLEY RD,  
SOUTHEAST, NY 10509**

ARCHITECT

ADBI / DESIGN SERVICES LLC  
44 SOUTH BROADWAY, SUITE 1003  
WHITE PLAINS, NY 10601

CIVIL ENGINEER

LANGAN ENGINEERING  
300 KIMBALL DRIVE  
PARSIPPANY, NJ 07054

STRUCTURAL ENGINEER

SMITH ROBERTS AND ASSOCIATES, INC.  
6501 BLUFF RD.  
INDIANAPOLIS, INDIANA 46217

MECHANICAL ENGINEER

NATIONAL DESIGN/ BUILD SERVICES  
11840 BORMAN DRIVE  
ST. LOUIS, MO 63146

ELECTRICAL ENGINEER

5 CHRISTY DRIVE, SUITE 307  
CHADDS FORD, PA 19317

PLUMBING ENGINEER

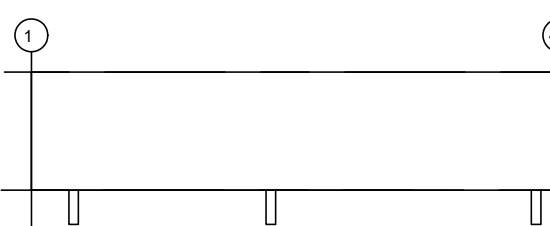
MCCARTHY ENGINEERING ASSOCIATES,  
INC.  
315 EAST SECOND STREET  
BOYERTOWN, PA 19512

FIRE PROTECTION ENGINEER

S A COMMUNALE CO. INC.  
2900 NEWPARK DRIVE  
BARBERTON, OH 44203

SEAL

KEY PLAN



### SUBMITTALS

NO.	DATE	DESCRIPTION
A	05.27.22	ISSUE FOR REVIEW
0	06.10.22	ISSUE FOR PERMIT

PROJECT NO.

AS286-211 NY131

DRAWN BY

FXB

SHEET TITLE

**ENERGY  
COMPLIANCE**

SHEET NO.

**EN1.0**