



Delegated Design - Lighting Review

User Guide

Background:

For lighting upgrade projects, there are currently three allowable paths for the electrical design:

1. A Professional Services Consultant (PSC) can create drawings which include electrical design. This design will either be done by or under the supervision of an Illinois licensed Professional Engineer. This typically occurs on capital projects.
2. Design Services, one of the groups within Facilities & Services (F&S), can create drawings which include electrical design. This design will either be done by or under the supervision of an Illinois licensed Professional Engineer. This typically occurs on smaller construction projects.
3. A delegated design for lighting may be submitted by an electrical contractor, possibly with assistance from a lighting supplier. This information will need to be reviewed and approved by Design Services prior to permitting.

Any projects with drawings prepared by a PSC or Design Services do not need to complete this checklist or provide this information. This process is only required for projects that do not otherwise have design drawings. If your project was designed by a PSC or Design Services, the contractor may still have shop drawing requirements.

Purpose:

The reason for allowing this third option is to help expedite relatively straightforward projects that do not otherwise require design documents. A common example could be an office upgrade that includes the following scope: flooring replacement, painting, furniture, and a new ceiling.

This process is intended for relatively straightforward indoor lighting upgrades in labs, offices, conference rooms, etc. If a project is large enough or requires a more complex design, Design Services or a PSC will need to provide a full set of lighting design drawings. Examples include areas that have a high impact on life safety, such as egress corridors and stairs. Design Services and the Authority Having Jurisdiction (AHJ) shall make the final determination regarding if a full design is required.

Instructions:

Project Information:

Please fill out the information at the top of the form. This helps us quickly identify the project location and key information.

Floor Plans:

Submitted floorplans need to include the location of all new lights. If any fixtures will be on emergency power, that should be indicated. Additionally, they need to show the location of any lighting control devices (switches, occupancy sensors, dimmers, etc.), as well as any existing or new exit signs.

Basic architectural floorplans for campus buildings are available upon request. Scans or pictures of hand drawn sketches of the room may also be acceptable, assuming they are legible and include the requested information.

COMcheck Form:

These forms are required to show compliance with the *Illinois State Energy Conservation Code* (ILECC). Effective November 30, 2025, the 2024 edition of the *International Energy Conservation Code* (IECC-2024) with Illinois Amendments went into effect for all construction projects within the state.

COMcheck is a software tool maintained by the Department of Energy to help document compliance with various energy codes. It is free for anyone to use.

To generate PDFs of the compliance forms, you will need to use the new COMcheck-Web tool available here: <https://comcheck.energycode.pnl.gov/>. There is a legacy COMcheck-Web tool, which was not updated to include the IECC-2024 code. If you had an account on the old site, you will need to create a new account on their new site.

If you need a tutorial on how to use the software, the EnergySense Resilience Center (formerly known as SEDAC) has some good resources:

<https://energysense.uillinois.edu/events/illinois-energy-conservation-code-comcheck-rescheck/>

Tips:

1. Make sure you select IECC-2024. Using any other energy codes or versions (IECC 2021, ASHRAE 90.1-2022, etc.) may result in your proposal being sent back for changes.
2. Enter the proper room type (lab, office, classroom, etc.). Many of these have different allowable power densities (W/SF).
3. The fixture wattage entered should match the value shown in the fixture cutsheet.
4. If multiple rooms are part of the same project, they can be input into COMcheck together and submitted with a single form.
5. When doing multiple projects, multiple COMcheck forms will need to be submitted. Example: If rooms 101, 102, 103, 201, 202, and 301 are being renovated, but each floor is being done months apart, a separate form will be required for each floor.

Lighting Fixture Cutsheet(s):

One option is to write out the full model number on the fixture cutsheet or the checklist. The other is to markup the fixture cutsheet to indicate all sizes and options for the fixture(s) being provided (example below). The key is that the reviewer knows specifically which sizes, color, lumen output, CRI, etc. for the fixtures being installed.



ORDERING EXAMPLE: PT - 2 4 - L90/835 - RA - OPTIONS - CONTROL/DIM - UNV

ORDERING INFO

SERIES	WIDTH	LENGTH	LUMENS ^[1]	CRI	CCT	SHIELDING
PT	1 1' ^[2]	2 2' ^[3]	1x4	8 80	27 2700K	RA Diffuse ribbed acrylic, round
	2 2'	4 4'	L27 2,700lm	9 90	30 3000K	SA Diffuse ribbed acrylic, square ^[4]
			L45 4,500lm		35 3500K	
			L61 6,100lm		40 4000K	
			L80 8,000lm		50 5000K	
			2x2			
			L26 2,600lm			
			L43 4,300lm			
			L52 5,200lm			
			L61 6,100lm			

OPTIONS ^[5]

See page 3 for FLEXIBLE WHIP OPTIONS.

EM/10W	10-watt emergency battery ^[7]
EM/10WLP	Low-profile 10-watt emergency battery ^[8]
EM/12W	12-watt emergency battery ^[9]
EQCLIPS	Earthquake clips ^[10]
(L__)	Additional lower lumen packages available. Example: 8,000 lumens = PT-24-L90/835-(L80) ^[11]
AMW	Anti-microbial white finish
CP	Chicago Plenum (CCEA)

CONTROL ^[6]

See page 5 for ADDITIONAL CONTROL OPTIONS.

—	None
AVI-LVFA	Avi-on wireless fixture control ^[12]
AVI-LVFA-CS2-PIR	Avi-on wireless fixture control with PIR motion and daylight sensor ^[13]
AWNRR	Lutron Athena wireless node integral fixture control, RF only ^[14]
AWNRS	Lutron Athena wireless node integral fixture control, RF with daylight and occupancy sensing ^[15]

Lighting Controls Information:

Include cutsheets on any lighting controls devices being provided. These commonly include dimmers and occupancy sensors. The energy code continues to add more spaces to the list of rooms where occupancy sensors are required. If occupancy sensors are not being provided, indicate how manual switching still complies with the energy code (example – a wet lab where chemical use could create a safety hazard should the lights turn off while working).

Emergency Lighting:

One of the three options will need to be selected.

If new emergency lighting is being provided, the cutsheets should be attached. Any emergency fixtures should be indicated on the floorplan submitted, and the emergency power source per NFPA 101 (battery, emergency circuit from building generator, etc.) should be indicated.

If an existing circuit serves one or more existing lights and that circuit will be reused, simply indicate which fixtures will be connected to emergency on the floorplan and indicate where this circuit is fed from.

If no new emergency lighting is being provided and no existing emergency lighting exists, we will need more information about why it is not required.

Exit Lighting

One of the four options will need to be selected.

If new exist signage is being provided, the cutsheets should be attached, and their location indicated on the floorplans. The emergency power source per NFPA 101 (battery, emergency circuit from building generator, etc.) should also be indicated.

If an existing exit sign will remain, simply note the exit sign location and its emergency power source so the reviewer knows it is already covered.

If there are no existing and no new exit signs planned, one of the last two options will need to be checked. IBC 1013.1.1 is one of the more common exceptions, and may apply to a variety of rooms which only have a single door. For simplicity, it was given its own checkbox on the checklist. If there is a different exception that applies, the final checkbox can be selected and the reasoning wrote in (see IBC-2021 excerpt below).

Section 1013: Exit Signs INSIGHTS

1013.1: Where required. INSIGHTS

Exits and *exit access* doors shall be marked by an *approved* exit sign readily visible from any direction of egress travel. The path of egress travel to *exits* and within *exits* shall be marked by readily visible exit signs to clearly indicate the direction of egress travel in cases where the exit or the path of egress travel is not immediately visible to the occupants. Intervening means of egress doors within *exits* shall be marked by exit signs. Exit sign placement shall be such that any point in an *exit access corridor* or *exit passageway* is within 100 feet (30 480 mm) or the *listed* viewing distance of the sign, whichever is less, from the nearest visible *exit* sign.

Exceptions:

1. Exit signs are not required in rooms or areas that require only one exit or *exit access*.
2. Main exterior exit doors or gates that are obviously and clearly identifiable as *exits* need not have exit signs where *approved* by the building official.
3. Exit signs are not required in occupancies in Group U and individual *sleeping units* or *dwelling units* in Group R-1, R-2 or R-3.
4. Exit signs are not required in dayrooms, sleeping rooms or *dormitories* in occupancies in Group I-3.
5. In occupancies in Groups A-4 and A-5, exit signs are not required on the seating side of vomitories or openings into seating areas where exit signs are provided in the concourse that are readily apparent from the vomitories. Egress lighting is provided to identify each vomitory or opening within the seating area in an emergency.