
STEINEL®
PROFESSIONAL

Design Guide

EDUCATION

IECC 2015 SOLUTION

PRESENTED BY LOGAN NIKNAM

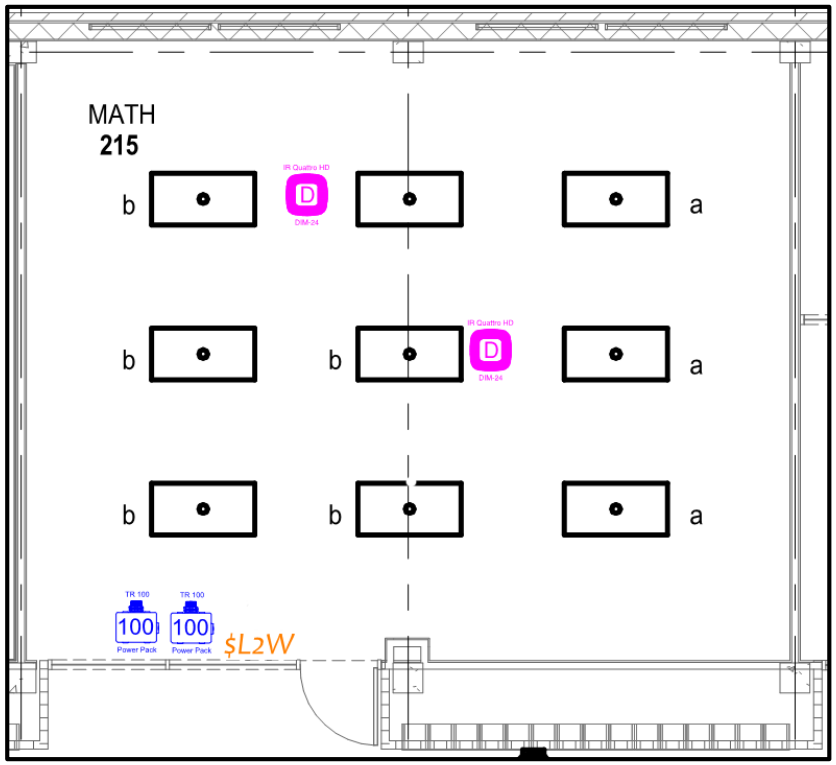
IECC 2015 Code Requirements			Space Type					
Code Provision	Minimum Control Requirement	Code Description	Classrooms Lecture, Training Rooms	Conference Meeting, Multipurpose Rooms	Private Offices Lounge/Break Rooms, Copy/Print Rooms	Open Plan Office Large Private Offices (>250 sqft)	Public Space Corridors, Lobbies	Restrooms Private, Public
C405.2.1.1.1	Automatic full OFF	Automatically turn off lights within 30 minutes of all occupants leaving the space.	X	X	X	X	X	X
C405.2.1.1.2	Manual ON / partial auto ON	Be manual ON or controlled to automatically turn the lighting ON to not more than 50 percent power.	X	X	X	X		
C405.2.1.1.2	Automatic full ON	Full automatic ON controls shall be permitted to control lighting in public corridors, stairways, restrooms, primary building entrance areas and lobbies, and areas where manual ON operation would endanger the safety or security of the room or building occupants.					X	X
C405.2.1.1.3	Manual Controls	Shall incorporate a manual control to allow occupants to turn lights off.	X	X	X	X	X	X
C405.2.3	Daylight-responsive controls	In side daylighting zones with greater than 150W (or greater than 300W within the primary and secondary daylighting zones), daylight must be harvested using photocontrols. In top daylighting zones with greater than 150W, daylight must be harvested using photocontrols.	X	X	X	X	X	X
C405.2.3.1.4	Bi-level control	Where located in offices, classrooms, laboratories and library reading rooms, daylight responsive controls shall dim lights continuously from full light output to 15 percent of full light output or lower.	X		X			

Classroom

IECC 2015 Code Compliance:

- Use of occupancy sensor provides automatic all OFF (C405.2.1.1.1).
- All sensors to be set to partial ON or manual ON to meet the code (C405.2.1.1.2).
- Momentary switch is used to provide manual control of the lighting except lights in daylighting zone (C405.2.1.1.3).
- In case the total wattage of general lighting in the daylighting zone is more than 150 watts, daylight-responsive control is required. This is achieved by using a DIM-24 sensor in the daylighting zone set to constant lighting to dim lights continuously from full light output to 15 percent of full light output or lower (C405.2.3).

Classroom



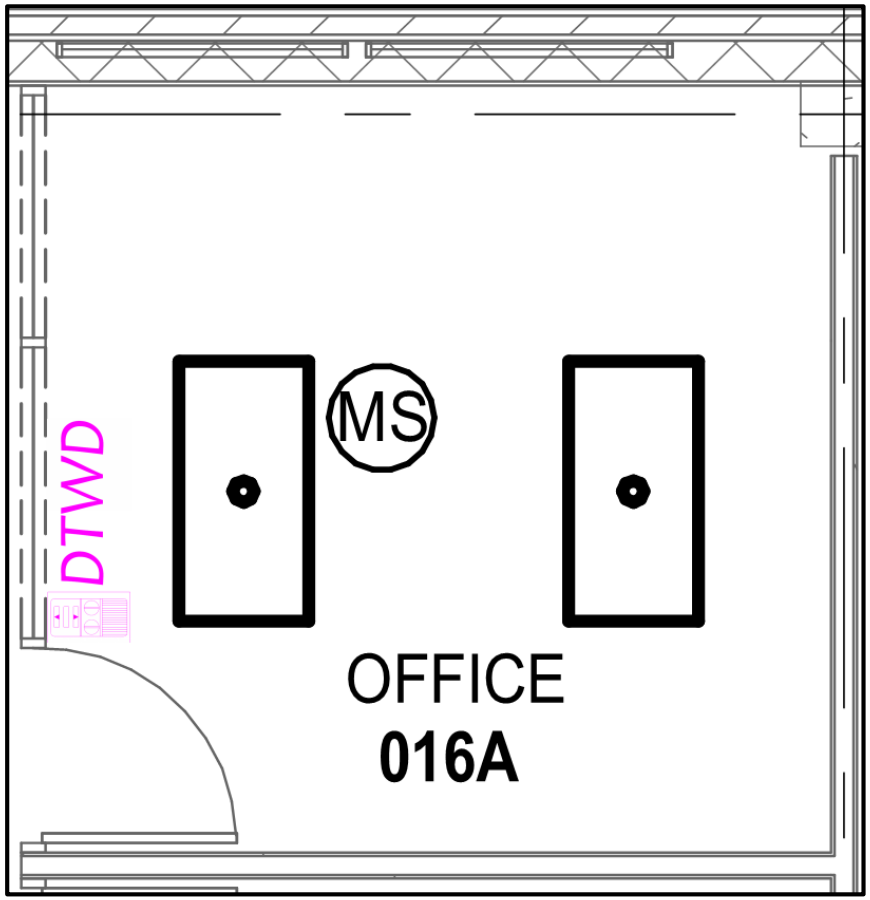
Product	Qty.	Description
IR Quattro HD DIM-24	1	PIR occupancy sensor set to Constant Lighting (daylighting zone)
IR Quattro HD DIM-24	1	PIR occupancy sensor with built-in photocell disabled (general zone)
TR 100	2	Power pack
LV-2-W	1	2 button momentary switch

Private Office / Meeting Room

IECC 2015 Code Compliance:

- Use of occupancy sensor provides automatic all OFF (C405.2.1.1.1).
- All sensors to be set to partial ON or manual ON to meet the code (C405.2.1.1.2).
- An override switch is used to provide manual control of the lighting (C405.2.1.1.3).

Private Office / Meeting Room



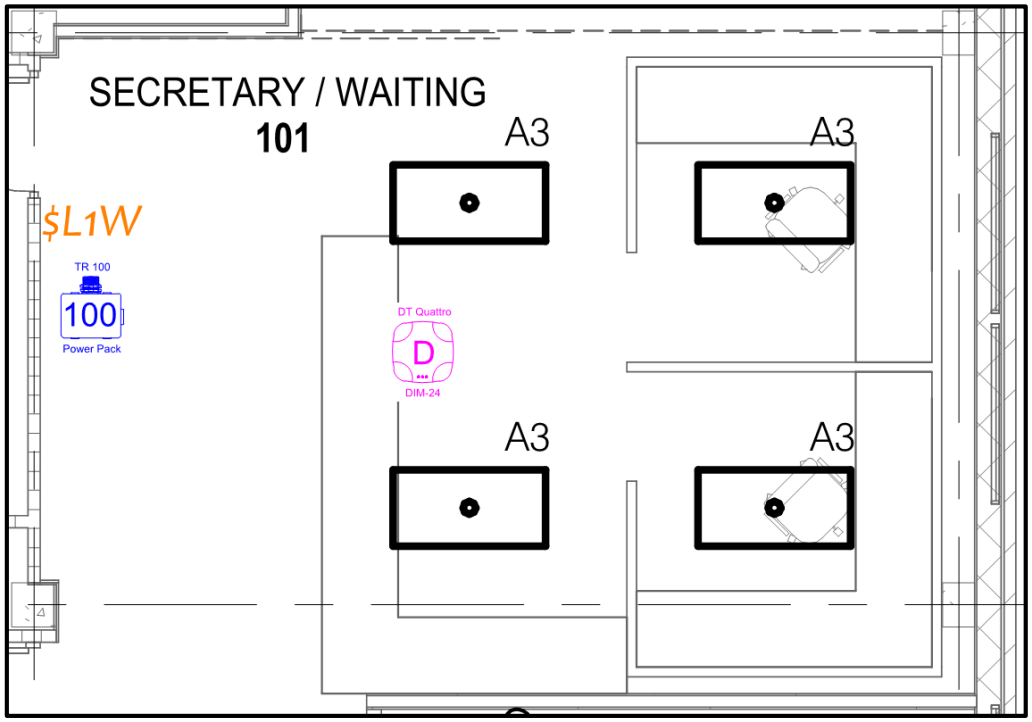
Product	Qty.	Description
DT WLS/VS DIM	1	Dual-tech occupancy/vacancy sensor with 0-10V dimming

Open Office / Reception / Lobby

IECC 2015 Code Compliance:

- Use of occupancy sensor provides automatic all OFF (C405.2.1.1.1).
- All sensors to be set to automatic full ON to meet the code (C405.2.1.1.2).
- Momentary switch is used to provide manual control of the lighting except lights in daylighting zone (C405.2.1.1.3).
- In case the total wattage of general lighting in the daylighting zone is more than 150 watts, daylight-responsive control is required. This is achieved by using a DIM-24 sensor in the daylighting zone set to constant lighting to dim lights continuously from full light output to 15 percent of full light output or lower (C405.2.3).

Open Office / Reception / Lobby



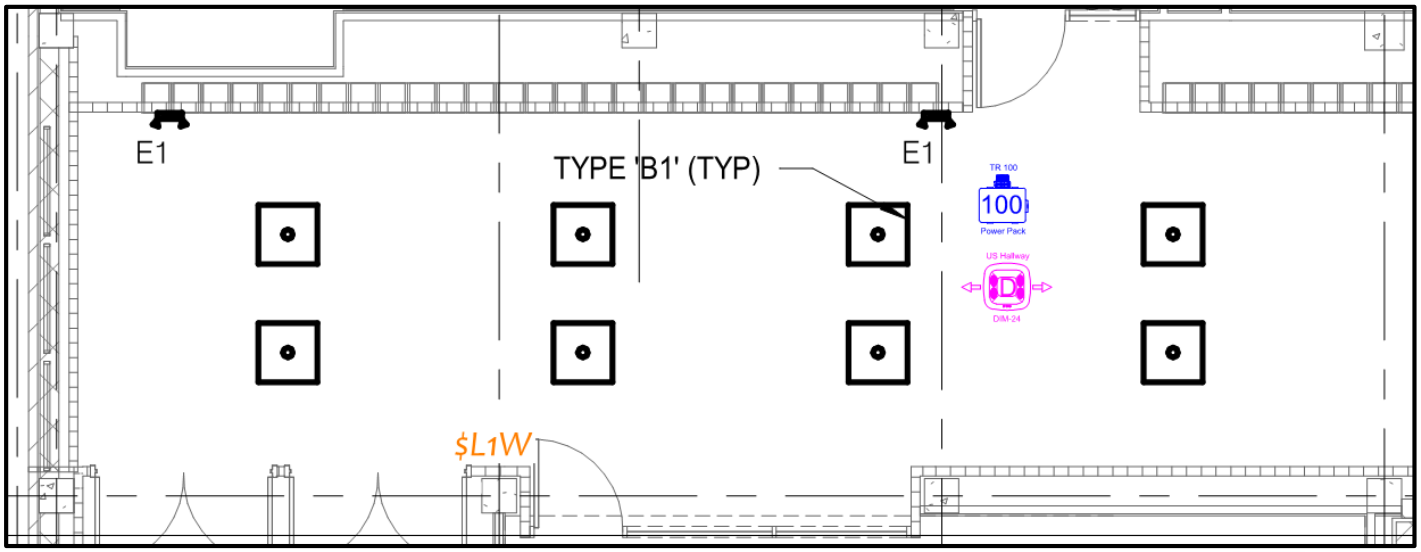
Product	Qty.	Description
IR Quattro HD DIM-24/DT Quattro DIM-24	1	PIR occupancy sensor set to Constant Lighting (daylighting zone)
IR Quattro HD DIM-24/DT Quattro DIM-24	1	PIR occupancy sensor with built-in photocell disabled (general zone)
TR 100	2	Power pack
LV-1-W	1	1 button momentary switch

Corridor

IECC 2015 Code Compliance:

- Use of occupancy sensor provides automatic all OFF (C405.2.1.1.1).
- All sensors to be automatic ON to meet the code (C405.2.1.1.2).
- Momentary switch is used to provide manual control of the lighting except lights in daylighting zone (C405.2.1.1.3).
- In case the total wattage of general lighting in the daylighting zone is more than 150 watts, daylight-responsive control is required. This is achieved by using a DIM-24 sensor in the daylighting zone set to constant lighting to dim lights continuously from full light output to 15 percent of full light output or lower (C405.2.3).

Corridor



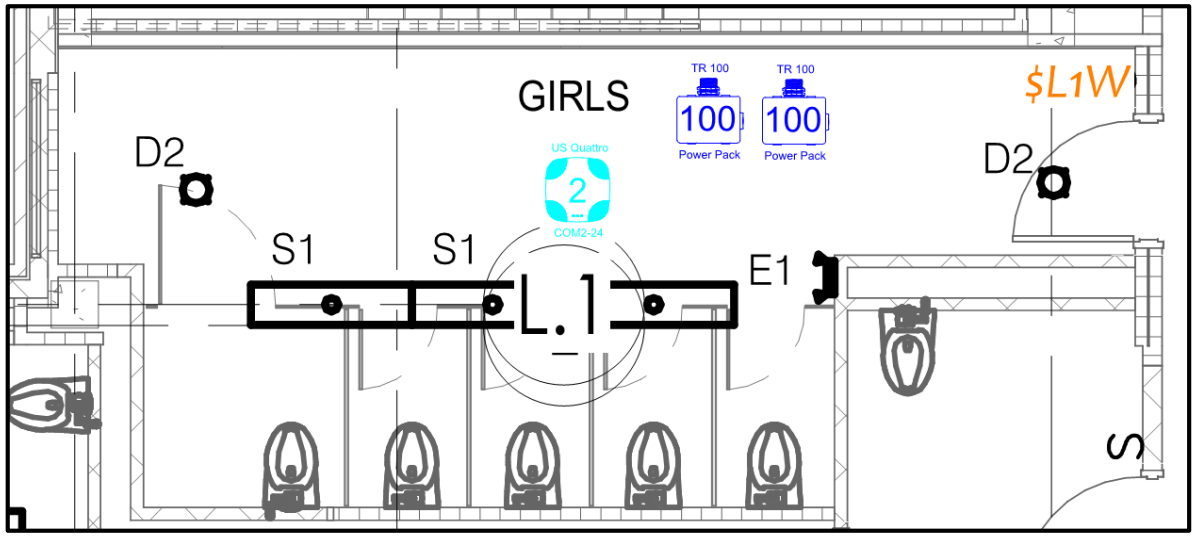
Product	Qty.	Description
US Hallway DIM-24 / US Oneway DIM-24*	1	Ultrasonic occupancy sensor with 0-10V dimming
TR 100	1	Power pack
LV-1-W	1	1 button momentary switch

Restroom

IECC 2015 Code Compliance:

- Use of occupancy sensor provides automatic all OFF (C405.2.1.1.1).
- All sensors to be automatic ON to meet the code (C405.2.1.1.2).
- Momentary switch is used to provide manual control of the lighting except lights in daylighting zone (C405.2.1.1.3).

Restroom



Product	Qty.	Description
US Quattro COM2-24*	1	Ultrasonic occupancy sensor with a isolated relay
TR 100	2	Power pack
LV-1-W	1	1 button momentary switch

Thank You

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