

1) Toplit and Sidelit Zones must be controlled independently

- 2) Daylight Responsive Controls must be configured or calibrated from within that space
- 3) Calibration mechanism must be ready access
- 4) Offices, classrooms, laboratories and library reading room must dim continuously from 100% to 15% (or lower)
- 5) Daylight Controls must be capable of complete shutoff
- 6) Sidelit Zones facing different cardinal orientations (N/S/E/W) must be controlled independently (Exception: 150W or less)

Daylight Sensor
Dimming Ballast/Drivers

Continue to Step 7A

STEP SIX B

Exterior Lighting Controls

Do any of the following criteria apply?

Decorative Lighting

All other Exterior Lighting

- 1) Lighting for covered vehicle entrances & parking structures, where required for eye adaption
- 2) Lighting controlled from within dwelling units



Exterior Lighting Controls not required

Exterior Lighting Controls are required

Continue to step 7B



Automatic shutoff 1-hour after business closing to 1-hour before business open

Automatic shutoff via TC/PC and > 30% reduction:

- 1) Midnight to 6AM
- 2) One hour after close to one hour before open
- 3) Fifteen minutes of vacancy

2018 IECC LIGHTING CONTROLS DESIGN FLOWCHART



NEED HELP WITH YOUR DESIGN? HAVE QUESTIONS ABOUT HOW TO APPLY THE CODE TO YOUR PROJECT?

WE ARE HERE TO HELP! CALL US AT 720.590.6773 OR EMAIL US AT CONTROLS@VISUALINTEREST.COM

Lighting Controls are required per the following code sections:

C405.2.1: Occupant Sensor Controls

C405.2.2: Time-Switch Controls

C405.2.3: Daylight-Response Controls

C405.2.4: Specific Application Controls

C405.2.5: Manual Controls

C405.2.6: Exterior Lighting Controls

*Manual Control: Dimmer, Switch or Keypad that is located in a readily accessible location, and where the controlled lights are visible or where the device identifies the area served with indicated status

2018 IECC LIGHTING CONTROLS DESIGN FLOWCHART



Determine if Lighting Controls are required

STEP ONE

Do any of the following criteria apply?

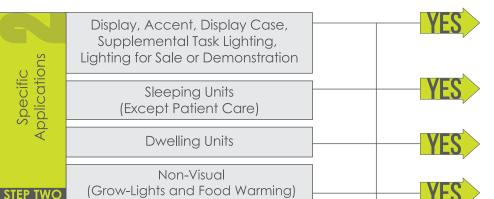
- Is the area designated as security or emergency, requiring continuous light?
- 2) Is the area an interior exit stairway, ramp, or passageway?
- 3) Is the lighting emergency egress lighting that is normally off?



Lighting Control is not required

Lighting Controls are required

Continue to Step 2



Continue to Step 4 **OR** 5A

Provide separate *Manual Control from general lighting

Provide master control device that is capable of automatically switching off all installed luminaires within 20 minutes after all occupants leave the room

Continue to Step 4 **OR** 5B

Continue to Step 5A
Provide separate *Manual Control
from general lighting

Determine Lighting Control Requirements Do any of the following criteria apply?

Continue to Step 3

Classroom
Lecture Room
Training Room
Conference Room
Meeting Room
Multipurpose Room

Copy/Print Room

Lounge

Open Plan Office Areas Restroom

Storage Room Locker Room

Breakrooms

Enclosed Office

Enclosed (F-T-C) Room > 300sf Warehouse Storage Areas YES

Occupant Sensor Controls are required

Continue to Step 4



Lighting Controls are required

Continue to Step 5

Provide Luminaire Level Lighting Controls

Specify integrated luminaire controls which comply with the following:

- Monitor occupant activity to brighten or dim lighting when occupied or unoccupied
- Monitor and maintain desired light level by dimming electric lighting
- 3) Provide configurable occupancy and daylight strategies for setpoints, timeouts, fade rates, sensitivity and zoning

Additional Controls not required

Determine Occupant Sensor Control Requirements (20 min max time-out) Public Corridors, Stairways, Restrooms, Primary Entrances, Lobbies

Warehouses (Aisles and Open Areas)

Open Plan Office Areas > 300sf

All Other Spaces

Independent, *Manual Control not required

50% Max Unoccupied Level Aisles to be

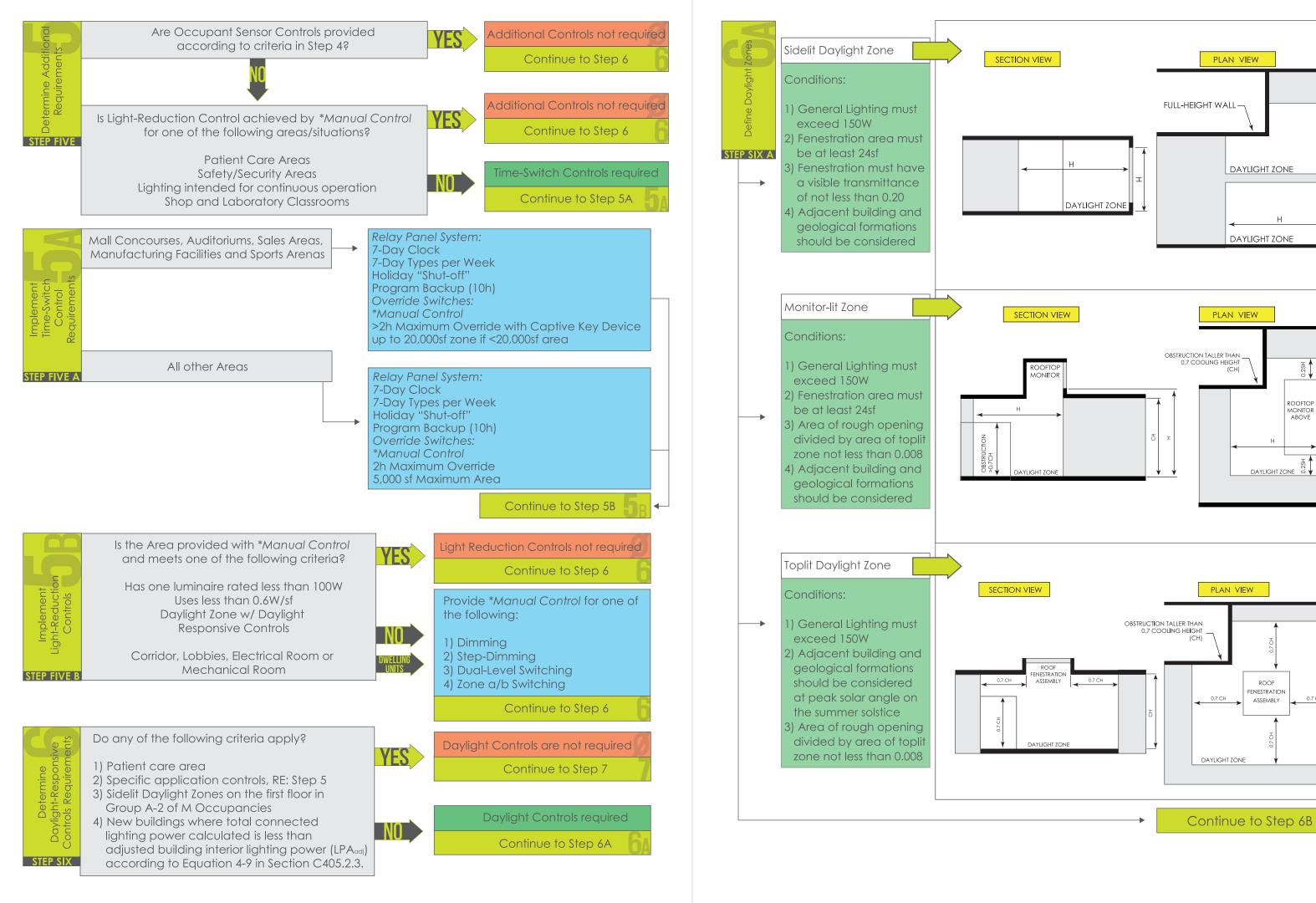
- Controls zones required for areas < 600sf
- Control zones must be reduced > 80% within 20 min vacancy

Auto-On to 100% permitted, *Manual Control required

Daylight controls shall activate with occupancy in control zone

Auto-On to 50% OR Vacancy Sensor, *Manual Control required

Continue to Step 5



7 ₹

2 ₹

ROOFTOF MONITOR

DAYLIGHT ZONE 3

ROOF

ENESTRATION