

Successful daylight harvesting is the result of a collaboration between the design team, the installer, and equipment manufacturer.

Lighting Control & Design

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Specifications

Selecting and locating digital photosensors, switches, and occupant sensors is the responsibility of the specifier.

Final Placement

Final placement of photosensors is the responsibility of the installer and manufacturer. This compensates for on-site changes (walls, furniture, lighting) and any idiosyncrasies of installed devices.

Commissioning

Commissioning of daylight harvesting system is the responsibility of the manufacturer and installer. LEEDs projects may require an commissioning agent.

After Market Support

After-market adjustment of photosensors is the responsibility of the lighting control manufacturer, and must be offered at no cost

Sample Daylight Harvesting Specification

1. Photosensors shall be diode-based or shall have a demonstrable linear reaction to daylight. The photosensor shall see light in the same manner as the human eye.
2. Photosensors shall be capable of operating both as open loop and closed loop or at least shall be available in either style. Closed loop photosensors must be capable of operating with suspended indirect luminaires either as mounting directly below the luminaire or with some capability to block-out direct light.
3. Photosensors shall be both locally and remotely programmable as to trigger-points (switching) or maintained light levels (dimming) from a handheld device or PC. Photosensors which require climbing a ladder to adjust set-screws shall not be allowed.
4. Other adjustment which shall be remotely and locally programmable include:
 - a. High trim/low trim for dimming ballasts
 - b. Must turn-on level and dimming curve
 - c. Baseline
 - d. fade rate up/fade rate down
 - e. Time delay on / time delay off
5. Photosensor shall control lighting through a smart control panel. This is to allow them to operate with manual switches, occupant sensors and building automation as required. Control panels shall be available centralized and distributed as one system
6. Photosensors, switches, and occupant sensors must be capable of being enabled or disabled through programming or from other digital devices
7. Photosensor placement. The consulting specifying engineer shall be responsible for general photosensor placement during the planning phase. This is recommended placement only. Final placement is the responsibility and must be submitted by electrical contractor or photosensor manufacturer.
8. Photosensor commissioning and client demonstration. Commissioning shall be the responsibility of the electrical contractor and lighting control manufacturer. System shall be demonstrated as operational to the satisfaction of the client.
9. After-market support shall be offered by the lighting control manufacturer or electrical contractor at no additional cost for a period of not less than two years, including remote adjustment of any settings needed to create a daylight harvesting system that is satisfactory to the client.
10. Manual bypass options which shall be available through programming include:
 - a. Temporary override above levels allowed by photosensor
 - b. Override up to levels allowed by photosensor
 - c. Temporary override off for presentations
 - d. Permanent adjustment of baseline
11. Photosensors and controllers shall be part of a building-wide lighting package.