
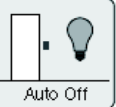




| | | | |
|--|---|--|--|
| TECHNICAL MEMO # | <input type="text" value="201702"/> | DATE | <input type="text" value="4/13/2017"/> |
| ENGINEER | <input type="text" value="Sam Abdelfattah"/> | | |
| SUBJECT | <input type="text" value="Occupancy Sensors vs Vacancy Sensors"/> | | |
| DISCIPLINES | Mech <input type="checkbox"/> | Elec <input checked="" type="checkbox"/> | Plum <input type="checkbox"/> GAS <input type="checkbox"/> FA <input type="checkbox"/> FS <input type="checkbox"/> |
| DESCRIPTION | | | |
| <p>IECC-2012, section C405.2.2.2 states that automatic control devices shall automatically turn off the lights within 30-mns of all occupants leaving the space, and shall either be manual on, or shall be controlled to automatically turn the lights on to not more than 50%.</p> <p>This language is applicable to all classrooms, conference/meeting rooms, lunch and break rooms, private offices, restrooms, storage rooms, janitorial closets, and any other spaces that are 300-SF or less and are enclosed by floor-to-ceiling height partitions.</p> <p>The point here is that light control sensors in these rooms will have to function different from the standard occupancy sensor, which will automatically turn on the lights when someone walks in the room, and will turn them off after occupants leave the room, hence the need for a different sensor type and designation: Vacancy Sensors.</p> <p>Full automatic-on is still permitted in public corridors, stairways, restrooms, primary building entrances and in areas where manual-on operation would endanger safety or security.</p> <p>We recommend that the electrical designer have different symbols for occupancy and vacancy sensors and properly noted and specified.</p> | | | |
| SKETCH | | | |
| <p>Occupancy sensors</p> <p>An occupancy sensor automatically turns lights on when you enter a room and off when you leave, making this type of sensor the most convenient, since you never have to touch the lighting controls.</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">  <p>Auto On</p> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">  <p>Auto Off</p> </div> </div> <p>Vacancy sensors</p> <p>A vacancy sensor also turns lights off when you leave a room—but you need to manually turn them on when you walk into a room. Vacancy sensing maximizes the energy savings from the sensor because it's not always necessary to turn lights on when you walk into a room.</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; text-align: center;">  <p>Manual On</p> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;">  <p>Auto Off</p> </div> </div> | | | |