

Interior Lighting Control

Lighting energy use is determined by the lighting load and duration of its use (time). Types of lighting control include: (1) manual switching, (2) occupancy sensors, (3) timers, (4) daylight sensors, (5) alarm conditions and (6) control from a central Building Management System (BMS). Lighting control can adjust the load (dim) to provide the right amount of light, switch-off at select times or in select areas when spaces are not in use, or a combination.



(Veti, 2018)

Recommendations

- ❑ Each enclosed space should have at least one control device to independently control the general lighting within the space.
 - ❑ Each control device should not control more than a 230 m².
 - ❑ Occupants should be able to operate and override controls easily, after which the scheduled programmes should be automatically reset.
 - ❑ BMS or scheduled controllers should switch off non-critical lights during after hours, when the building is not being actively used.
 - ❑ Contact [Ecolution](http://www.ecolution.co.za) for more details.
- 1) If manual lighting control is used, it must be easily accessible and clearly labelled.
 - 2) Occupancy sensors should be strategically positioned with a (max) 30 minutes delay.
 - 3) Timers are preferable for activities on a regular schedule (e.g. working hours).
 - 4) Photosensors respond to the availability of daylight and works well with dimmable lighting control.
 - 5) Lighting control to indicate emergency conditions.
 - 6) BMS offers central monitoring and control of all lights in the building. This system is vital for the energy management of large or complex buildings.

Savings and Benefits

- ❑ Reduce lighting electricity usage.
- ❑ Lengthens lifetime of light bulbs.
- ❑ Reduces cooling loads.
- ❑ Improved security.



(Coydon, 2015)

Environmental Improvement	Medium
Awareness Impact	High
Capital	Medium
Payback	< 1 year