

HOTEL BATHROOM LIGHTS CONSUME THE MOST ELECTRICITY

Typically, hotel bathroom lights are left on between five to eight hours per occupied day. Sometimes people leave the bathroom light on at night as a guide. Sometimes people don't turn off the bathroom light when they leave the room, and it stays on until maid service arrives.

The WN-100 Motion Sensor Nightlight from The Watt Stopper is a motion sensing wall switch and nightlight that controls lighting based on occupancy. Designed for installation in hotel rooms, and institutional and other semi-public spaces, the energy efficient, super bright light-emitting diode (LED) nightlight remains on whenever lights are off, providing constant illumination in the space and energy savings through reduced use of overhead lighting.

This pilot project stimulated development of the Motion Sensor Nightlight and demonstrated it in at the DoubleTree Hotel in Sacramento.



The nightlight has the potential to save from 45 to 75 percent of the total energy used by bathroom light fixtures.

MOTION SENSOR NIGHTLIGHT STUDY

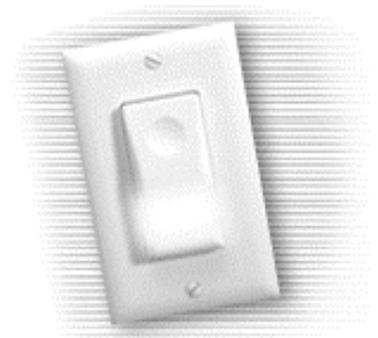
RESEARCHERS INSTALLED A MOTION SENSING WALL SWITCH AND NIGHTLIGHT IN MORE THAN 400 HOTEL BATHROOMS. THEIR STUDY SHOWED THAT THE NIGHTLIGHT PROVIDED 46 PERCENT ENERGY SAVINGS AND RECEIVED POSITIVE COMMENTS FROM CUSTOMERS STAYING AT THE HOTEL.



The Motion Sensor Nightlight helps save energy and provides security benefits.

The Motion Sensor Nightlight can cut lighting operation by six or more hours per occupied day. For hotels and institutional spaces where the main bathroom lights are connected to high-wattage fixtures, the payback for the technology can be as short as one year.

CUT OPERATING COST AND INCREASE SAFETY



The Motion Sensor Nightlight

Benefits

By installing the Motion Sensor Nightlight, facility managers and property owners can cut bathroom lighting energy use about 50 percent. The simple payback is 2.5 years for new projects and 5.5 years for retrofits.

Other benefits include:

- Built-in LED nightlight illuminates room whenever overhead lights are off.
- Reduced lamp operation lengthens lamp-changing cycle and reduces maintenance cost.
- Impact resistant hard lens offers long life.
- Adjustable time delay from 15 minutes to 2 hours meets varying needs.
- 180 degree coverage, maximum of 300 square feet fits most bathroom applications.
- Manual-ON or Auto-ON provides operational flexibility.

INTERESTED?

Hotel and institutional owners/managers, contractors, design engineers, building scientists, code developers, and utility staff should be interested in this information on improved lighting controls in hotel bathrooms.

Key next steps include:

- Educate hotel and institutional owners/managers about energy and maintenance savings opportunities.
- Identify buildings with high-wattage fixtures that would be ideal early adopters of this technology.
- Characterize bathroom lighting usage patterns in different types of hotels and other institutional facilities.

For more information, visit The Watt Stopper website (www.wattstopper.com). Rebates may be available from the manufacturer or local utility company.

This project was part of the PIER Lighting Research Program. To view the project results, as well as other current research activities, visit www.energy.ca.gov/pier.

Additional information about this technology can be found on the following web sites:

- PIER project site:
http://www.energy.ca.gov/pier/buildings/projects/500-01-041-0-4-4_1.html
- PIER contractor site:
http://www.archenergy.com/lrp/advlight_luminaires/project_4_1.htm
- PIER researcher site:
<http://cltc.ucdavis.edu/>



Funded by the
California Energy Commission
Public Interest Energy Research Program

Contact Information

California Energy Commission
www.energy.ca.gov/pier
Michael Seaman
mseaman@energy.state.ca.us

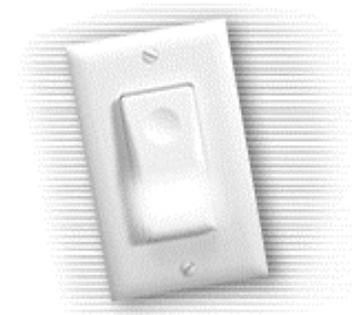
Architectural Energy Corporation
www.archenergy.com/lrp
Judie Porter
jporter@archenergy.com

California Lighting Technology Center
<http://cltc.ucdavis.edu/>
Michael Siminovitch
mjsiminovitch@ucdavis.edu

The Watt Stopper
www.wattstopper.com
Jon Null
Jon_Null@Wattstopper.com

Arnold Schwarzenegger, *Governor*
California Energy Commission
Chair: Jackalyne Pfannenstiel
Vice Chair: James D. Boyd
Commissioners: Arthur H. Rosenfeld, Jeffery Byron,
John L. Geesman

MOTION SENSOR NIGHTLIGHT



A SMART AND ENERGY EFFICIENT NIGHTLIGHT



Public Interest
Energy Research