



T.M. Bier: Study shows that lighting controls achieve energy savings

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For building owners and managers not yet convinced of the value of lighting controls, recent findings from a Lawrence Berkley National Laboratory study should clear up any doubts.

According to Ted Bier, P.E., president of T.M. Bier & Associates, one of the New York metropolitan area's leading independent control systems integrators, the study clearly demonstrates that lighting controls such as occupancy sensors, which automatically adjust the lighting on or off based on whether a space is occupied, can reduce energy consumption by up to 24%.

In the Lawrence Berkley National Laboratory Study, 240 energy savings estimates from 88 case studies and papers were analyzed. The study applied filters to enable a focus only on lighting energy savings produced by lighting controls in actual field installations. Then, researchers developed best estimates to determine average lighting savings.

"This is not a surprise to us or our clients for whom we have installed occupancy sensors," said Bier. "The savings are real and when you consider that lights in a commercial building consume the largest amount of electricity, typically around 40% of the total bill, it is inconceivable why every building owner and manager would not be using lighting controls." He noted that there is a wide range of high quality occupancy sensors with features ranging from self-adjusting occupancy sensing technologies and those which detect airflow and motion, to dual technologies for lighting and HVAC controls, and intelligent controls which work by monitoring daylight conditions in a room and adjust lighting levels based on natural light levels.

Along with using occupancy sensors, Bier recommends that additional strategies be deployed to further decrease energy consumption. Among those he recommends and which were also analyzed in the Lawrence Berkley National Laboratory Study are: dimming controls, which the study indicated achieved up to 36% energy savings on average, as well as daylight harvesting for up to 28% savings. When multiple strategies (i.e., occupancy sensors, dimming controls and daylighting) are used, energy consumption can be reduced by as high as 38% based on the Lawrence Berkley National Laboratory Study.

At TMBA, commercial and multi-family building owners/managers, healthcare and educational institutions, diverse businesses and municipalities benefit from the company's integrated approach to building automation and controls for the reduction of energy consumption, increase in occupant comfort, and enhanced operational efficiencies. In addition to lighting controls, the company's offerings include: sophisticated building automation systems: heating, ventilating and air conditioning systems; security systems, variable frequency drives and solar services.

About T.M. Bier & Associates

T.M. Bier & Associates is one of the New York-Tri-State area's largest independent control systems integrators and has been at the forefront of the building automation and energy management field

for over three decades. The company offers end-to-end capabilities, from the design, installation, monitoring and servicing of building management, controls, HVAC, lighting and security systems, to deregulated energy and financing programs. Through TMBA's comprehensive services, building owners and operators are realizing many important benefits, including up to a 50% reduction in operating costs, an extended lifespan of building equipment, improved indoor air quality and comfort, in addition to reduced carbon footprints. The company is a "go to" resource for leading builders, developers, general contractors, commercial/industrial property owners, and property managers. T.M. Bier & Associates lists among its diverse clientele, Fortune 500 companies, hospitals, libraries, schools, shopping malls, and municipalities. For more information, visit: www.tmba.com.

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