

Award-winning Army Reserve Facility Saves \$16,000/year with Occupancy Sensors by The Watt Stopper

The Army Reserve facility in Toledo, Ohio was designed for energy efficiency. Design planning began in March 1992, construction in December 1994, with completion in August 1996. Since the facility was a new building, projected savings are based on alternative product selections available, but not utilized. A conservative estimate of \$16,000 annually in potential energy savings was calculated. An award winning facility, this branch sets the standard for future Army buildings.

The facility consists of two main buildings, a training building and a maintenance building, encompassing 71,094 square feet.

During the design phase, it was decided to implement energy efficient measures within the facility even though they were not required at the time. Barney Kemter, Facility Energy Manager claims "We wanted to become a leader in energy conservation issues on this project. We wanted state-of-the-art and maximum efficiency potential".

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Facility Energy Manager

Occupancy sensors by The Watt Stopper were used throughout the buildings to control lighting. The Watt Stopper sensors were chosen because they provided the area coverage required for the project. According to Mike Kandt, Design Project Manager with Gossen Livingston Associates, Inc., "We needed several different sensing technologies that The Watt Stopper offered".

A total of 109 occupancy sensors were used to control 512 fixtures. The CI-100 passive infrared sensor was used in corridors; the W-500 ultrasonic occupancy sensor was used in restrooms; the WS-120/277 automatic wall switch was used in offices and classrooms; and the DT-100 dual technology sensor was used in conference rooms.

Mr. Kemter clearly believes in the use of occupancy sensors to control energy usage, and states "based on previous experience, we knew they would work, so we used them." Although occupancy at the facility is

light during the week, with only a small full-time staff, it is heavy on the weekends when one of four reserve units appear for training.

Electrical efficiency is a concern to the Army Reserve. They received an \$11,055 incentive rebate from Toledo Edison Co., the local electric utility, along with a discount for energy usage since they were installing energy efficient controls. Adding the rebate and discounts to the estimated \$16,000 in energy savings clearly demonstrates the effectiveness of using energy saving controls.

The United States Army Reserve Center has won awards based on its energy efficient design. It was officially recognized by the Federal Energy Management Program, which gave the site The Federal Energy Management Program Showcase Award in 1995, during the project development stage. In 1997, it won the Marvin M. Black Excellence in Partnership Award by the Association of General Contractors of America.

