June 4, 2008

THE WATT STOPPER, INC.

Quick Design Rules of Thumb

Common Applications - **Specifiers**

APPLICATION:

Small Office 10' X 12' or less **– Use one WPIR - Corner Mount on ceiling same wall as the corridor. Time delays no less than 15 minutes. Must include Power Pack.**

Larger office **larger than 10' X 12'- One CX-100 - Corner Mount on ceiling on same wall as the corridor. Time delays no less than 15 minutes. Must include power pack.**

Small conference room **– same as above.**

Large conference room **– One DT-200 - Mount same as above. Rooms over 30' in length, add additional sensor. Time delays no less than 15 minutes. Must include power pack.**

Classroom under 30' in length **– One DT-200 - Corner mounted on ceiling, same wall as corridor & favor end of room with teacher's desk. Time delays no less than 15 minutes. Must include power pack.**

Classrooms over 30' in length **– One DT-200 - Same as above. Add 2nd sensor opposite end of room. Time delays no less than 15 minutes. Must include power pack.**

Kindergarten Classrooms **– Two CX-100 - Corner mounted on ceiling, same wall as corridor. One in each corner. Add more sensors to overcome obstructions. Time delays no less than 30 minutes. Must include power pack.**

Art Rooms **– Same as above. Time delays no less than 15 minutes. Add more sensors to overcome obstructions.**

Computer Classrooms **– Two DT-200 - Corner mounted on ceiling, same wall as corridor. Time delays to 30 minutes. Must include power pack.**

Corridors **- WT2255 - Mount on ceiling or pendant mount below obstructions. Aim receivers to point long ways down corridor. Maintain spacing of no more than 60' on center. 1st unit half the distance off the wall. (Just like high bays in a warehouse) Stay 6' from supply registers. (Hi-low or on-off) Time delays 15 minutes for on/ off. 10 minutes for hi / low. Must include power pack.**

Stairwells **– One W500A at each landing or one WT-2255 wall mounted between floors with receivers aimed at same angle as stairwell. (Hi-low or on-off) Time delays for on / off 15 minutes. 10 minutes for hi / low. Must include power pack.**

Restrooms with 2 to 3 stalls **– One W500A - Place on the ceiling over the centermost stall with the receiver aimed towards the corridor entry. Time delays of no less than 15 minutes. Must include power pack.**

Restrooms with 4 to 6 stalls **– One W1000A - Mount central to the stall area with receivers aimed toward corridor entry. Time delays of no less than 15 minutes. Must include power pack.**

Library Stacks
Short stacks 16' **- One WPIR & power pack at main entry end, one foot in.**
Larger stacks 16' – 30' **- Two WPIR & power pack. Mount on ceiling at each end one foot in. (Providing lighting follows stacks) Call for assistance if otherwise. Time delays of no less than 15 minutes.**

Warehouse Aisles **–One CX105-4 at each aisle entry point. 40' coverage.**
Use one CX105-3 in centermost part of aisle. (Max. spacing 60')
Must use one CX105-4 at each side of cross aisles. Each cross aisle represents the beginning of a new control zone. Add one power pack per control zone.
Add one MB-1 mounting bracket per sensor.
For HID hi / low retrofit applications, add one DM-100 per fixture to be controlled.
Recommended Time Delays: 15 minutes for on / off. 10 minutes for hi / low.

Storage closet **– TS-400 - Set delay for 15 minutes.**

Open Office **– W2000A or DT-300 on 25' X 25' spacing. Ceiling heights up to 12'. Time delays of no less than 15 minutes. Stay 6' from supply registers. Use DT-200 in corners of room. Must include power packs.**

Walk-in Freezer or Cooler. **TS-400 - Set delay for 15 minutes. Select "Time Scrolls Up" and "Flash On" feature options.**

See NOTES on next page:

NOTES:

1) The above design notes are intended for average spaces. Irregular shaped spaces may require more than what is indicated. When in doubt, add or call for assistance.

2) Avoid designing with wall switch sensors. Use them only as a cost savings measure when needed. (vandalism, furniture obstructions)

3) Always include the recommended time delays in the spec. Never let your client tell you what it should be.

4) Always start out specifying product with the spare set of contacts. (DT200 VS. DT205) This becomes a low cost point of control for other systems in the facility today or sometime in the future. (Unit ventilators, VAV boxes, EMS)

5) Remember that there is always more than one way to design a space with sensors. Whenever possible, the above recommendations should simply be your first choice.

6) All ceiling mounted occupancy sensors require a power / switch pack. One power / switch pack is required per circuit or per control zone.
Catalog #'s: 120 volt - #B120E-P 277 volt – #B277E-P Dual Voltage – #BZ-100

7) Don't be afraid to contact us. The Watt Stopper will ALWAYS help you!

Technical Support:
Occupancy Sensors: 800-879:8585
Lighting Control Panels: 800-852-2778 ext 122 or 127

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