SAVING ENERGY On Campus



Wurster Hall



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Background

Wurster Hall, built in 1964, houses the College of Environmental Design, the Center for Environmental Design Research, the Institute for Urban and Regional Development and Ramona's Café. There are around 40 people occupying the office areas, and an additional 80+ faculty and 1,000 students during the year. Students have access to the building 24 hours a day and 7 days a week. During the summer, the building only runs at around 50% capacity. Wurster is one of the few campus buildings that houses a Pulse kiosk. One of Wurster Hall building manager Eliahu Perszysk's primary concerns is the large plug load from space heaters, inefficient personal refrigerators, and other devices and appliances. Wurster Hall's 120 kilowatt baseload can certainly be reduced by replacing old devices with energy efficient ones, by consolidating repetitive devices and by encouraging occupants to both unplug appliances and utilize power strips.

Lighting

Wurster Hall has undergone a lighting system retrofit in order to reduce energy use. Overall, the office spaces of Wurster Hall seem appropriately lit. The overhead lighting in the hallways and office spaces is composed of halogen and compact fluorescent lightbulbs. All the offices have excellent access to natural light from multiple large windows. One occupant in the architects' office explained how in most afternoons and early evenings, the overhead lights are turned off because the natural light is sufficient. Occupants are supportive of the idea of putting up stickers reminding users to turn off lights and computers. For the most part, offices use overhead lighting, not task lighting. However, one desk in the dean's office does have a task light. Occupants generally do turn off lights at the end of the day, although there is no specific system or assigned individual whose job it is to ensure they are off. While one room in the dean's office space has occupancy sensor lighting, no other areas of the dean's office have occupancy sensor lighting. The architects' office has some occupancy sensor lighting. The kitchenettes in all the office spaces could benefit highly from occupancy sensor light switches. For example, one kitchenette was empty and had the door latched shut but all the lights were still on. Installing occupancy motion light switches in low traffic areas such as the kitchenettes could lead to noticeable energy reductions.

Recommendations

- ☐ Continue to utilize natural light as much as possible.
- ☐ Consider purchasing more task lamps as a substitute to overhead lighting; ensure that task lamps are equipped with LED or compact fluorescent bulbs.
- ☐ Install occupancy sensor light switches in low traffic areas such as the kitchenettes
- Please leave the light on in this copy room during regular office hours. We are saving energy by leaving the hall light off, but we need this one on so people don't trip on the stool.

 Thanks!
- Place reminder stickers on lights and other devices to remind occupants to turn off devices when not in use

Thermal Comfort

Occupants of the Wurster Hall office spaces reported that the temperature is generally too cold, especially in winter. There are individual thermostats in all the offices but due to serious problems with the HVAC system occupants use space heaters



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when the temperature is too cold. Occupants did report that they tried to dress for the weather and wear warm clothes in the winter. But given that some occupants still have space heaters means that they could try to bring even warmer layers. While the office spaces rarely feel too hot, occupants did report that they open windows on warm summer days. One occupant explained how keeping the windows and the door open allowed for good ventilation and cross breezes, and she never felt too hot, even on hot summer days.

Recommendations

☐ Dress for appropriate temperature. Wear warm clothes instead of using space heaters!

Computers/Printers

For the most part, occupants use individual printers. Many of the office spaces do have networked printers, but these are in addition to occupants' personal printers. In one kitchenette area, although no one was using it, the printer was on, and not in energy saving mode. Printers can definitely be consolidated in all the office spaces. Occupants are supportive of the idea of consolidating printers. For example, the dean's office is planning on getting rid of the printer in the kitchenette.

At the end of the day, occupants generally turn off their computers or put them into sleep mode. According to an occupant, monitors can be turned off when not in use. An occupant reported that she and many of her colleagues do use screen savers.

Recommendations

- ☐ Avoid screensavers☐ Clean vents & fans regularly
- ☐ Continue to turn monitors off at the end of the day or when not in use



Kitchenette

The kitchenettes in all the office spaces could benefit heavily from the utilization of power strips. In all the kitchenettes, various appliances such as coffee makers, microwaves, toasters and water boilers were plugged into outlets while not in use. Putting these appliances on power strips could significantly reduce energy loss from phantom loads.

During the summer, refrigerators are left plugged in, even though they are not highly used. Office spaces might consider consolidating or unplugging some refrigerators just during the summer months. Furthermore, items on top of refrigerators should be cleared off in order to allow heat to escape. In the dean's office, the refrigerator has to be opened to get water. The fridge, Kenmore brand, is not energy efficient but because it works well, occupants do not plan to replace it.

Recommendations

- ☐ Consolidate refrigerators if possible.
- ☐ Clear items from top of fridge (prevents higher energy use to generate cold temperatures).
- ☐ Clean coils & fans regularly
- ☐ Unplug appliances after use, or put them on a power strip and turn off the entire strip when done.
- ☐ Continue defrosting freezer regularly.
- ☐ Place reminder stickers conspicuously to remind occupants to unplug appliances when not in use.



Further Resources

- ☐ Keep stocked with stickers to prompt energy conservation. Visit the myPower Resource Center in 192 Barrows.
- Become a Power Agent: bit.ly/PowerAgents
- ☐ Physical Plant Campus Services (PPCS) (510) 642-1032
- myPower office tips available at: mypower.berkeley.edu/takeaction/office.html
- ☐ Get rid of old or underutilized electronics at Berkeley Overstock and Surplus:

businessservices.berkeley.edu/overstock

