

Going Green With Office Lighting

by

State Compensation Insurance Fund

In a standard office, lighting accounts for about 60% of a company's electrical costs. Despite recent efforts to make energy more efficient, surprisingly the majority are still overlit for computer work. According to the American National Standards Institute (ANSI), about 30 foot candles (fc) of surrounding light for monitor viewing are all that is necessary for healthy computer use. Any more can create glare and reflections on the monitor screen, which can result in awkward positioning and symptoms like headaches, nausea and fatigue in the user. Yet the typical office ranges from 60-100 fc, far more than is recommended, which results in a correspondingly larger consumption of energy as well.

Some simple steps companies can take to both make their lighting environment healthier for employees and to reduce energy costs: If your company hasn't done so already, replace all fluorescent fixture ballasts with high-frequency electronic ballasts and full-spectrum T-8 tubes. This will substantially reduce your energy costs.

Better yet, replace those ballasts with a dimmable type, so that your entire system can be lowered down to the preferred 30 fc range with ease.

Maintaining a balanced overhead lighting system is important, so simply turning off some fixtures or removing certain tubes are not good options, as these can create hot spots or dark areas and electrical safety hazards. Some systems are wired so that one wall switch controls the center tube in a three-tube fixture. If yours is set up this way, simply turning off this center tube can effectively reduce consumption by a third and result in an overall reduction of 20-30 fc.

Another simple energy saving technique in warmer weather is to close the blinds on the south and west facing sides of your building before leaving for the weekend. This will minimize the heat gain your HVAC system must overcome when the system comes back up to speed on Monday. ••

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