TASK LIGHTING INFORMATION & BENEFITS

What is task lighting?

Think 'desk lamp'. With task lighting, the area you need to see the most, like a book or papers on your desk, is brightly lit. Task lighting focuses the correct light level on a targeted working surface. In contrast, overhead lighting diffuses light all over a room and can cause shadows or glare on your work surface.

Isn't overhead lighting the standard?

They were invented for big open rooms where rows of workers needed light shining from high ceilings above, like in factories and typewriter 'pools'. The new technology produced adequate amounts of quality light in large spaces – but these 'adequate amounts' can be excessive for the lighting needs of today's office environment, with our illuminated computer screens and individual desks. OSHA stipulates 20 foot-candles illumination for an office workspace. Overhead fixtures generally disperse upward of 50 foot-candles (more if you are under them) because they are designed to light the whole room. We just never changed our old ways to catch up to the times!

Why is task lighting better?

In a personal work area, task lighting will provide exceptional levels of bright, comfortable light and yield ergonomic, economic, and environmental benefits.

Ergonomic: Our posture changes during the day. Our tasks vary. Natural light in the room changes from morning to evening. All these changing conditions require eyes to continually re-focus. Plus overhead lighting can create glare, shadows, uneven light and other conditions that stress our vision. To reduce eyestrain and fatigue, we need to optimize lighting levels directly on our work. The key is adjustable-arm task lighting so you are in control of the light for your own optimal comfort. Simply put, better light = better sight = personal comfort = productivity.

Economic: The EPA estimates that lighting accounts for 25% of total US electricity use, and lighting for industry, offices, stores, and warehouses is 90% of that. Unnecessary illumination of large spaces can waste energy. Energy-efficient lighting (including appropriate task lighting) can reduce electricity demand and therefore costs by more than 50%. Plus those overhead bulbs have to be replaced frequently as they burn out or lose luminosity, adding costs. And, since they contain mercury they have to be carefully transported, stored, and recycled with a licensed company in accordance with federal regulations, creating another cost burden. Clark has already upgraded many of our overhead fixtures to the latest energy-efficient technology. Transitioning to appropriate task lighting is the next logical step in saving money and resources.

Environmental: Lighting up empty space obviously wastes money and resources, but it also creates greenhouse gas emissions and a bigger-than-necessary carbon footprint. Electricity comes from a power plant burning fossil fuels which makes pollutants and greenhouse gases (Clark's co-generation plant burns natural gas; National Grid's fuel mix includes coal, oil and gas). Each 4 foot T-8 fluorescent bulb draws about 30 watts of electricity. In a typical office that's up to 2,000 watts per day (8 lamps for 8 hours). Over a year, that adds up to 1/3 of a ton of greenhouse gas CO_2 emissions! You can do your own carbon calculation on the EPA website. Clark's upgraded overhead lighting helps toward our Climate Action Plan goal of zero emissions – but switching to a desk lamp and turning off unneeded overheads will help reduce our emissions even more.

If I turn off the overhead lights and use a desk lamp, will visitors think the office is closed?

More and more people are switching to the comfort and savings of task lighting. It's becoming the norm in offices everywhere as people recognize the benefits and phase out overhead lighting. Modern office design even incorporates 'daylight harvesting', using natural light and windows in place of overhead fixtures. If it makes you more comfortable, hang a sign outside the office door to let visitors know the office is open. Chances are you will get complemented on your desk lamp and energy efficiency! Note that not all office environments are suited to task lighting. Meeting rooms or reception areas may still require diffuse illumination. But if you work at a computer, a desk, or in a cube then task lighting is the healthier choice – for you and the planet.

More information…

References:
"Putting Light Where It's Needed" www.dazor.com/benefits.html
"Basic Information About Recycling Mercury-Containing Lamps" www.epa.gov/osw/hazard/wastetypes/universal/lamps/basic.htm
"Task Lighting Solutions" http://continuingeducation.construction.com/article.php?L=95&C=262

The LED Bulb in the ***Green Office Give-Away***:
Philips Endura LED 12.5W product information: www.usa.philips.com/c/led-light-bulbs/ambientled-12.5w-a19-soft-white-dimmable-046677409906/prd/en/
Consumer Reports tested and reviewed.
Features:

- 12.5 watts; 800 lumens of brightness
- Equivalent to 60 watt incandescent
- Provides low energy consumption and a superior life (~23 years); almost unbreakable
- Supplies warm, white light and is dimmable
- Emits essentially no heat
- Discharges no UV/IR light in the beam
- Contains no mercury
- Easy installation, screws in to standard lamp socket

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