

Facilities Management from A to Z

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Lighting in a workplace is often an aspect that is not appreciated until it proves to be inadequate. There are two main aspects of lighting that are important, being the amount of lighting that is necessary for the work and also the quality of lighting that can help the work or hinder it, even to the extent of causing accidents and ill health. Other aspects that are important are contrast and glare, flicker and stroboscopic effects, and colour effects.

Natural light is always to be preferred wherever possible. It is often stronger than artificial lighting, and has very positive psychological effects on the workforce. However, it must be remembered that glare from bright light, particularly sunlight, must be controlled. As a result, it is necessary to have some means of controlling the glare from windows in areas where display screen equipment is in use. In these areas it will therefore be necessary to ensure that there is also adequate provision of artificial lighting.

If there is good natural lighting then a lower level of overall lighting can be applied at around 300-500 lux maximum, which is more restful, causing less stress than the more normal higher levels. Extra light level required at the desk surface can be achieved using task lighting or by localised lighting distributed around the office area. Lighting levels at the desk surface should be kept as low as is possible to permit accurate reading. Lighting levels up to 750 lux or even 1,000 lux are very rarely needed for office work, but could be required in specialist areas such as graphic design or printing.

It is important that light fittings are kept clean and in good repair flickering fluorescent lights are frequent causes of stress headaches. The lighting should be checked on a regular basis to ensure that all the lamps are functioning. If lamps are replaced all at once on a regular basis it will be almost inevitable that they all fail at the same time. Thus it is necessary to replace the lamps before they fail, or to stagger the replacement to ensure that there are some lamps left functioning in the event of failure. It is important to dispose of old fluorescent tubes correctly. Since the contents are hazardous, they must be disposed of as hazardous waste.

The best source for guidance on specific lighting levels is contained within the Chartered Institution of Building Services Engineers 1994 Code for Interior Lighting and their Lighting Guides LG1-5.