

Most associated Regulations and Acts call for adequate lighting and installation maintenance, some of these are listed below:

- Health and Safety (Signs and Signals) Regulations 1996, (plus BS 5266, EN 1838)
- Building Regulations, Part L: Conservation of fuel and power
- Building Regulations, Part B: Fire safety
- Fire Precautions (Workplace) Regulations 1997
- Visual Display Screens Act 1992
- Electricity at Work Regulations 1989.

Extensive guidance on office lighting is given in the SLL Lighting Guide 7: *Office lighting*.

9.2.2 Type of work done

The stereotypical office consists of a room filled with workstations or desks where individuals handle information presented either on paper or on a screen. While this is undoubtedly part of the work done in an office, frequently office work requires verbal communication between individuals. This can be done by telephone, via a video link or face to face. That this is so is evident from the existence of meeting rooms, conference rooms, boardrooms and training rooms in many offices. The lighting of such spaces should be designed to facilitate non-verbal communication as well as the visibility of paper and screen-based materials. Offices also contain circulation and reception areas, such areas frequently representing the public face of the business. The lighting of such areas should be designed to send the required message to the visitor.

9.2.3 Screen type

An important consideration for office lighting is the optical and geometric properties of the computer screens in the office. The relevant optical properties are diffuse reflectance, specular reflectance, display polarity and display background luminance. The relevant geometric properties are screen tilt and curvature.

The optical properties of the screen matter because they determine the visibility of reflections from the screen relative to the visibility of the display itself. The higher the diffuse reflectance, the greater will be the reduction in contrast of the display. The higher the specular reflectance; the sharper will be the reflected image in the screen and the greater the probability that it will be distracting. A positive polarity screen (bright characters on a dark background) will make reflected images more visible than a negative polarity (dark characters on a bright background) screen. The higher the background luminance of the display, the less visible will be the reflected image in the screen. What all this means is that a computer screen with anti-reflection treatment and a negative contrast display with a high background luminance, has a low probability of disturbing screen reflections. Conversely, a screen without anti-reflection treatment, using a positive contrast display with a low background luminance will be very sensitive to the lighting conditions.