

3.5.2 Localised lighting

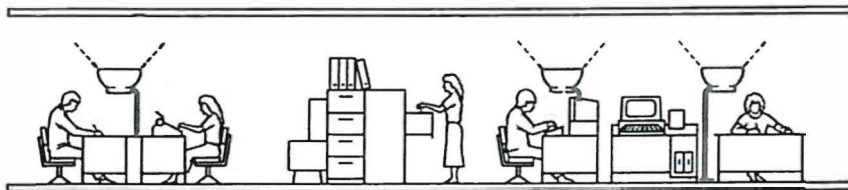
Localised lighting systems (see Figure 3.7) employ an arrangement of luminaires designed to provide the required maintained illuminance on work areas together with a lower illuminance for the other areas. The average illuminance on the other areas should not be less than one-third of the average illuminance over the work areas (see sections 1.4, Variation in lighting, and 2.3.4, Luminance and illuminance ratios).

The lighting layout must be coordinated with the task positions and orientation. The system can be inflexible, and information on plant and furniture layout is essential at the design stage. Changes in the work layout can seriously impair a localised system, although uplighters and other easily relocatable systems or energy management controls (see section 3.7, Energy management) can overcome these problems.

Localised systems normally consume less energy than general lighting systems unless a high proportion of the area is occupied by workstations. This should be confirmed by calculations. Maintenance of localised systems can be more critical than with general lighting systems.



(a)



(b)

Figure 3.7(a) and (b) A localised lighting system uses luminaires located adjacent to the workstations to provide the required task illuminance. The necessary ambient illuminance in the surrounding areas is provided by additional luminaires if required