

Where indirect luminaires are suspended from the ceiling, the luminaires need to be well above normal head height. A minimum height of 2.3 m to the underside of the luminaire is recommended. As for the separation from the ceiling, this is a matter of luminaire design. Manufacturers usually specify a minimum separation from the ceiling. This minimum should not be ignored.

9.2.6 Obstruction

Obstructions in offices are created by the use of partitions between individual workstations and/or the use of full height partitions to subdivide the office.

The degree of obstruction created by the use of partitions between individual workstations will depend on the height of the partitions; the higher the partition, the greater the obstruction. 1.2 m high partitions provide visual privacy for anyone sitting at the workstation but not when standing. 2 m high partitions provide visual privacy for both sitting and standing occupants. An office equipped with 2 m high partitions is effectively a collection of very small offices. This has both advantages and disadvantages for lighting. The advantage is that luminaires and windows are very unlikely to be seen reflected in the computer screen. The disadvantage is that the amount of light on the workstation will be reduced unless allowance is made for the additional light absorption in the design of the electric lighting. As for daylight, the presence of partitions between workstations limits the role of windows in providing a view out, the amount of daylight reaching the workstation being negligible.



Figure 9.1
A view of partitioned office

Most office buildings constructed for lease show the office floor as one large open space but require the lighting to be designed so as to allow full height partitions to be installed to subdivide the space into offices of different sizes. The effect of these partitions will depend on the size of the offices created and the reflectance of the partitions. The smaller the office and the lower the reflectance of the partitions, the greater is the reduction in illuminance. Ideally the designer needs to know the size of the smallest office in order to determine the most suitable type and layout of lighting. Thought will also have to be given to the control system for the lighting.

9.2.7 Surface finishes

The colour and reflectance of all the surfaces in an office influence the distribution of light. Figure 9.2 gives recommended ranges of average cavity reflectances for floor and ceiling and the average wall reflectance.