

an office desk, for example, the task area may only be about the size of a desk blotter, but in interiors such as drawing offices the visual task may cover the whole area of a drawing board. The range of task areas is even wider in industry – from a micro-electronics assembly line to a car body production line. However, when the precise size of the task area is not known, calculations can be based on an area measuring  $0.5\text{ m} \times 0.5\text{ m}$  located immediately in front of the observer at the edge of the desk or working surface.

It is recommended that the uniformity of illuminance (minimum to average illuminance) over any task area should not be less than 0.7 (section 3.8.4, Specification and interpretation of illuminance variation; also Measurement of illuminance variation – see CD) and that the average illuminance on the task must be appropriate to that of the activity as set out in the Lighting schedule (section 2.5). Where task areas may be located anywhere over an area of a room, the recommendation applies to all potential task areas within that area. The uniformity recommendation does not necessarily have to apply to the entire room.

The illuminance of the immediate surrounding areas must be related to the illuminance of the task area, and should provide a well-balanced luminance distribution in the field of view. The immediate surrounding area is taken to be a band with a width of at least 0.5 m.

Large spatial variations in illuminance around the task area may lead to visual stress and discomfort.

The illuminance of the immediate surrounding areas may be less than the values in Table 2.1. The uniformity of the surrounding area should be at least 0.5.

**Table 2.1** Relationship of illuminances of immediate surrounding areas to task area

Task illuminance (lx)	Illuminance of immediate surrounding areas (lx)
$\geq 750$	500
500	300
300	200
$\leq 200$	$E_{\text{task}}$

In most spaces there are various visual tasks with differing degrees of difficulty. Although general lighting systems (see section 3.5.1, General lighting) provide flexibility of task location, the average illuminance is determined by the needs of the most exacting task. It is often wasteful to illuminate all areas to the same level, and non-uniform lighting may be provided by local or localised lighting systems (see sections 3.5.2, Localised lighting, and 3.5.3, Local lighting). If control systems (see section 3.7.1, Choice of controls; also Lighting controls – see CD) are used, individuals may be able to adjust their levels of supplementary task lighting, and presence detection may also switch off luminaires in unoccupied areas. Whatever lighting system is used, excessive variations of horizontal illuminance across an interior must be avoided; the diversity of illuminance expressed as the ratio of the maximum illuminance to the minimum illuminance