Guide To Workplace Lighting

Regulation 8 of the Workplace (Health, Safety and Welfare) regulations 1992 says that every workplace must have 'suitable and sufficient' lighting. Where possible natural light should be used in preference to artificial lighting.

Lighting should be sufficient to enable people to work, use facilities and move from place to place safely and without experiencing eye-strain.

There are minimum standards set out in HSE guidance (see table below) but these are set at very low levels. If people have difficulty doing their job because lighting is too dim then it may not be 'suitable or sufficient' and as such should be challenged by Usdaw reps.

Below is a table that has been reproduced from HSE document HSG38 (Lighting at Work). It gives the recommended minimum lighting levels for different types of work activity and location.

Activity	*Typical Location*	*Average Illuminance (lux)*	*Minimum Illuminance (lux*
Movement of people, machines and vehicles.	Lorry park, corridors, circulation routes.	20	5
Movement of people, machines and vehicles in hazardous areas; rough work not requiring any perception of detail.	Construction site clearance, excavation and soil work, loading bays, bottling and canning plants.	50	20
Work requiring limited perception of detail.	Kitchens, factories assembling large components, potteries.	100	50
Work requiring perception of detail.	Offices, sheet metal work, book binding.	200	100
Work requiring perception of fine detail.	Drawing offices, factories assembling electronic components, textile production.	500	200

Light intensity is measured in 'Lux'. This can be a difficult scale to understand. The table below gives you some idea of how light intensity can vary in different situations.

Illuminance	Example
1 lux	Full moon overhead
50 lux	Family living room
80 lux	Hallway/toilet
100 lux	Very dark overcast day
400 lux	Sunrise or sunset on a clear day. Well lit office area
1000 lux	Overcast day, typical TV studio lighting
10,000-25000 lux	Full daylight (not direct sun)
32,000-130,000 lux	Direct sunlight

It should be noted that these recommendations are for guidance only and that each location/activity needs to be considered individually. Also, if an area measured falls outside these levels, it does not necessarily mean that the lighting system in that whole area needs to be modified. Other measures such as task-specific lighting or use of desk lamps might be easier.

The finer the detail, the higher the illuminance required.

On the other hand light that is too bright or glare that shines into your eyes can also cause problems. Glare from light shining directly into the eye or reflecting from work-surfaces should be controlled.

Workers who move between brightly lit and dimly lit areas may also be at risk because it takes a few moments for the eyes to adjust to the different light levels, so it is important to try to ensure there is not an abrupt change, for example between a yard and a warehouse.

Further information:

The Workplace (Health, Safety and Welfare) at Work Regulations 1992 with Approved Code of Practice and Guidance, L24 can be downloaded free of charge from HSE Books –
http://www.hse.gov.uk/pubns/priced/l24.pdf

HSG38 ' Lighting at Work' can be downloaded free of charge from HSE Books -
http://www.hse.gov.uk/pubns/priced/hsg38.pdf

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