Home Office Environment Guide

Safety Information

In this document you will find information, as it pertains to the home office environment about:

- Noise
- Temperature and humidity
- Lighting
- Prevention vision problems
- General electrical safety tips

Noise

Office noise is usually not loud enough to cause hearing loss, as such, there are no legal requirements to limit normal office noise. However, there are office noise guidelines, whose main objectives are to prevent:

- Interference with verbal communication
- Annoyance and stress
- Interference with concentration in the performance of mental work

Taking all these factors into account, it is generally recommended that noise levels in an office should be about 50 dB (A). A normal conversation is about 60dB, so the work environment would ideally be quieter than a normal conversation. Which supports having an easy conversation on the phone or by videoconference.

Guidelines for noise control:

- SELECT quiet equipment
- ENSURE that equipment is well maintained
- ISOLATE noisy equipment from general work areas
- USE sound absorbing materials, such as carpeting, or curtains

Ear plugs/hearing protection or the use of ear buds with low level music can also help to minimize distraction.

Temperature and Humidity

Generally speaking, office environments are most comfortable at the following temperature/humidity ranges:

Conditions	Relative Humidity	Acceptable Operating Temperatures	
		°C	°F
Summer (light clothing)	If 30%, then If 60%, then	24.5 – 28 23 – 25.5	76 – 82 74 - 78
Winter (heavy clothing)	If 30%, then If 60%, then	20.5 – 25.5 20 - 24	68.9 – 77.9 68 – 75.2

Source: Adapted from ASHRAE 55-2004

Lighting

Both intensity and quality of lighting (illumination) are important. Common lighting problems include too much light, too little light, glare and shadows. In order to see fine objects and read in poor lighting, people will often use awkward body positions. These awkward positions contribute to musculoskeletal injuries. Lighting should be evenly distributed through out the workstation and should not create glare or shadows. Often, computer users report eyestrain, a burning sensation in the eyes, blurred vision, eye irritation, dry eyes and headaches. Contributing factors include:

- Non-adjustable workstations where reading materials are too far away
- Poor image quality on computer monitors
- Inadequate lighting, glare and shadows
- Low humidity that causes the eyes to become dry, itchy and irritated
- Uncorrected vision
- Poor job design that results in long periods of visually demanding tasks

Preventing Vision Problems

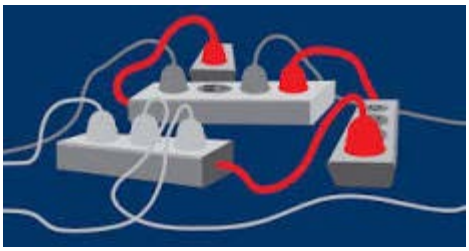
- POSITION work so that it is easy to see. Use adjustable chairs, well-positioned computer monitors, adjustable work surfaces and task lights.
- USE legible source documents and computer monitors with good image quality.
- MAINTAIN adequate humidity levels to prevent dry eyes.
- ENSURE eyes are examined regularly to avoid problems of uncorrected or improperly corrected vision. People who work with monitors may require a special prescription to be able to read at an intermediate distance that bifocals cannot accommodate.

- ENCOURAGE frequent changes in body position by varying tasks and using good work/rest schedules.
- POSITION the desk so that the window is to the side of the worker.
- POSITION desk so that ceiling lights are to the sides. Avoid placing desk where light fixtures are directly in front.
- ADJUST window blinds or drapes to control light levels and glare.
- USE low reflective finishes and neutral colours on walls and furniture. Surface colour and finish determines how much light it reflects.
- USE adjustable task lights to increase light levels when needed. Older workers may need more light.
- REPLACE flickering fluorescent tubes and maintain fixtures properly.
- LOOK up and away from work frequently to rest the eyes.
- WORK from good quality copy that has good contrast and is easy to read. Higher light levels are required for poor copy quality.

General Electrical Safety Tips

- USE extension cords only when fixed wiring is not possible.
- Locate extension leads and flexible cables where they are not likely to be damaged and where they are protected from damage from heat sources and liquids.
- DO NOT “Daisy Chain” power bars or extension cords (do not plug power bars and/or extension cords into each other).
- USE Canadian Standards Association (CSA) or Underwriters Laboratories (UL) approved equipment.
- DISCONNECT electrical equipment from its power source before investigating, cleaning, adjusting, or clearing a jam.
- DO NOT over load outlets.
- NEVER FORCE a 3-prong plug into a 2-prong outlet. Never break the third prong off.
- REPLACE worn or frayed cords immediately.
- NEVER PULL or drag cords over sharp objects.
- NEVER RUN extension cords under rugs or through high traffic areas.
- NEVER PULL a plug out by the cord.
- SWITCH OFF electrical machines at night, unless specifically required to operate.
- DO NOT use fuses with greater current rating than the recommended rating as serious damage may result.

Electrical cord/power bar daisy chain example:



Indications of electrical outlets being overloaded:

- Flickering, blinking, or dimming lights.
- Frequently tripped circuit breakers or blown fuses.
- Warm or discolored wall plates.
- Cracking, sizzling, or buzzing from receptacles.
- Burning odor coming from receptacles or wall switches.
- Mild shock or tingle from appliances, receptacles, or switches.

Reference

Telework and Home Office Health and Safety Guide, 1st Edition, Canadian Centre of Occupational Health and Safety (CCOHS), 2009