Safe Workstations and Purchasing Guide Checklists

# This checklist can help you create a safe and comfortable computer workstation. You can also use it in conjunction with the Purchasing Guide checklist that begins on page 3. A "No" response indicates that a problem may exist and further analysis is needed.

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| **WORKING POSTURES–The workstation is designed or arranged for doing computer tasks so it allows your** | **Yes** | **No** |
| Head and neck to be upright or in-line with the torso (not bent down or back). |  |  |
| Head, neck, and trunk to face forward (not twisted). |  |  |
| Trunk to be perpendicular to floor (may lean back into backrest but not forward). |  |  |
| Shoulders and upper arms to be in-line with the torso, generally about perpendicular to the floor and relaxed (not elevated or stretched forward). |  |  |
| Upper arms and elbows to be close to the body (not extended outward). |  |  |
| Forearms, wrists, and hands to be straight and in-line (forearm at about 90 degrees to the upper arm). |  |  |
| Wrists and hands to be straight (not bent up/down or sideways toward the little finger). |  |  |
| Thighs to be parallel to the floor and the lower legs to be perpendicular to floor (thighs may be slightly elevated above knees). |  |  |
| Feet to rest flat on the floor or supported by a stable footrest. |  |  |

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| **SEATING–Consider these points when evaluating the chair:** | **Yes** | **No** |
| Backrest provides support for your lower back (lumbar area). |  |  |
| Seat width and depth accommodate the specific user (seat pan not too big or small). |  |  |
| Seat front does not press against the back of your knees and lower legs (seat pan not too long). |  |  |
| Seat has cushioning and is rounded with a "waterfall" front (no sharp edge). |  |  |
| Armrests, if used, support both forearms while you perform computer tasks; and they do not interfere with movement. |  |  |
| **"No" answers to any of these questions should prompt a review of chairs.** | | |

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| **KEYBOARD/INPUT DEVICE– Consider these points when evaluating the keyboard or pointing device.** | **Yes** | **No** |
| The Keyboard/input device platform(s) is stable and large enough to hold a keyboard and an input device. |  |  |
| The input device (mouse or trackball) is located right next to your keyboard so it can be operated without reaching. |  |  |
| The input device is easy to activate and the shape/size fits your hand (not too big/small). |  |  |
| Wrists and hands do not rest on sharp or hard edges. |  |  |
| **"No" answers to any of these questions should prompt a review of keyboards, pointers, or wrist rests.** | | |



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| **MONITOR–Consider these points when evaluating the monitor. The monitor is designed or arranged for computer tasks so the** | **Yes** | **No** |
| Top of the screen is at or below eye level so you can read it without bending your head or neck down/back. |  |  |
| User with bifocals/trifocals can read the screen without bending the head or neck backward. |  |  |
| Monitor distance allows you to read the screen without leaning your head, neck or trunk forward/backward. |  |  |
| Monitor position is directly in front of you so you don't have to twist your head or neck. |  |  |
| Glare (for example, from windows or lights) is not reflected on your screen, which can cause you to assume an awkward posture to clearly see information on your screen. |  |  |
| **"No" answers to any of these questions should prompt a review of monitors or lighting/glare.** | | |

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| **WORK AREA–Consider these points when evaluating the desk and workstation.**  **The work area is designed or arranged for doing computer tasks so the** | **Yes** | **No** |
| Thighs have sufficient clearance space between the top of the thighs and your computer table/keyboard platform (thighs are not trapped). |  |  |
| Legs and feet have sufficient clearance space under the work surface so you are able to get close enough to the keyboard/input device. |  |  |

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| **ACCESSORIES–Check to see if the** | **Yes** | **No** |
| Document holder, if provided, is stable and large enough to hold documents. |  |  |
| Document holder, if provided, is placed at about the same height and distance as the monitor screen so there is little head movement, or need to re-focus, when you look from the document to the screen. |  |  |
| Wrist/palm rest, if provided, is padded and free of sharp or square edges that push on your wrists. |  |  |
| Wrist/palm rest, if provided, allows you to keep your forearms, wrists, and hands straight and in-line when using the keyboard/input device. |  |  |
| Telephone can be used with your head upright (not bent) and your shoulders relaxed (not elevated) if you do computer tasks at the same time. |  |  |
| **"No" answers to any of these questions should prompt a review of work surfaces, document holders, wrist rests, or telephones.** | | |

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| **GENERAL** | **Yes** | **No** |
| Workstation and equipment have sufficient adjustability so you are in a safe working posture and can make occasional changes in posture while performing computer tasks. |  |  |
| Computer workstation, components and accessories are maintained in serviceable condition and function properly. |  |  |
| Computer tasks are organized in a way that allows you to vary tasks with other work activities, or to take micro-breaks or recovery pauses while at the computer workstation. |  |  |
| **"No" answers to any of these questions should prompt a review of chairs, work surfaces, or work processes.** | | |

**Purchasing Guide Checklist**

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| **MONITORS** | |
| Make sure the screen is large enough for adequate visibility. Usually a 15 to 20-inch  monitor is sufficient. Smaller units will make it difficult to read characters and larger units may require excessive space. |  |
| The angle and tilt should be easily adjustable. |  |
| Flat panel displays take less room on the desk and may be more suitable for locations with limited space. |  |

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| **KEYBOARDS** | |
| Split keyboard designs will allow you to maintain neutral wrist postures. |  |
| Keyboards with adjustable feet will accommodate a wider range of keyboard positions and angles. Adjustable feet on the front as well as the back will further aid adjustments.  Increased adjustability will facilitate neutral wrist postures. |  |
| The cord that plugs into the CPU should be long enough to allow the user to place the keyboard and the CPU in a variety of positions. At least six feet of cord length is desirable. |  |
| Consider a keyboard without a 10-key keypad if the task does not require one. If the task does require one occasionally, a keyboard with a separate 10-key keypad may be appropriate. Keyboards without keypads allow the user to place the mouse closer to the  keyboard. |  |
| Consider the shape and size of the keyboard if a keyboard tray is used. The keyboard should fit comfortably on the tray. |  |
| Consider keyboards without built-in wrist rest, because separate wrist rests are usually better. |  |
| Keyboards should be detached from the display screen if they are used for a long duration keying task. Laptop keyboards are generally not suitable for prolonged typing tasks. |  |

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| **KEYBOARD TRAYS** | |
| Keyboard trays should be wide enough and deep enough to accommodate the keyboard and any peripheral devices, such as a mouse. |  |
| If a keyboard tray is used, the minimum vertical adjustment range (for a sitting position) should be 22 inches to 28 inches from the floor. |  |
| Keyboard trays should have adjustment mechanisms that lock into position without turning knobs. These are frequently over tightened, which can lead to stripped threads, or they may be difficult for some users to loosen. |  |

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| **DESKS AND WORK SURFACES** | |
| The desk area should be deep enough to accommodate a monitor placed at least 20 inches away from your eyes. |  |
| Ideally, your desk should have a work surface large enough to accommodate a monitor and a keyboard. Usually about 30 inches is deep enough to accommodate these items. |  |
| Desk height should be adjustable between 20 inches and 28 inches for seated tasks. The desk surface should be at about elbow height when the user is seated with feet flat on the floor. Adjustability between seated and standing heights is desirable. |  |
| You should have sufficient space to place the items you use most often, such as keyboard, mouse, and monitor directly in front of you. |  |
| There should be sufficient space underneath for your legs while sitting in a variety of positions. The minimum under-desk clearance depth should be 15 inches for your  knees and 24 inches for your feet. Clearance width should be at least 20 inches. |  |
| Purchasing a fixed-height desk may require the use of a keyboard tray to provide adequate height adjustment to fit a variety of users. |  |
| Desktops should have a matte finish to minimize glare. Avoid glass tops. |  |
| Avoid sharp leading edges where your arms come in contact with work surfaces. Rounded or sloping surfaces are preferable. |  |
| The leading edge of the work surface should be wide enough to accommodate the arms of your chair, usually about 24 inches to 27 inches. Spaces narrower than this will interfere with armrests and restrict your movement. This is especially important in four-  corner work units. |  |

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| **CHAIRS** | |
| The chair should be easily adjustable. |  |
| The chair should have a sturdy five-legged base with good chair casters that roll easily over the floor or carpet. |  |
| The chair should swivel 360 degrees so it is easier to access items around your workstation without twisting. |  |
| Minimum range for seat height should be about 16 inches. |  |
| Seat pan length should be 15 inches to 17 inches. |  |
| Seat pan width should be at least as wide as the user's thighs. A minimum width of about 18 inches is recommended. |  |
| Chair edges should be padded and contoured for support. |  |
| Seat pan tilt should have a minimum adjustable range of about 5 degrees forward and backward. |  |
| Avoid severely contoured seats as these limit seated postures and are uncomfortable for many users. |  |
| Front edge of the seat pan should be rounded in a waterfall fashion. |  |
| Material for the seat pan and back should be firm, breathable, and resilient. |  |

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| **CHAIRS (Continued)** | |
| The seat pan depth should be adjustable. Some chairs have seat pans that slide forward and backward and have a fixed back. On others the seat pan position is fixed and the backrest moves horizontally forward and backward so the effective depth of the seat pan can be adjusted. Beware of chairs where the back only tilts forward and backward. These do not provide adequate adjustment for a wide range of users. |  |
| The backrest should be at least 15 inches high and 12 inches wide and should provide lumbar support that matches the curve of your lower back. |  |
| The backrest should widen at its base and curve in from the sides to conform to your body and minimize interference with your arms. |  |
| The backrest should allow you to recline at least 15 degrees and should lock into place for firm support. |  |
| The backrest should extend high enough to support your upper trunk and neck/shoulder area. If the backrest reclines more than about 30 degrees from vertical, a headrest should be provided. |  |
| Armrests should be removable and the distance between them should be adjustable. They should be at least 16 inches apart. |  |
| Armrest height should be adjustable between 7 inches and 10.5 inches from the seat pan. Fixed height armrests are not desirable, especially for chairs that have more than  one user. |  |
| Armrests should be large enough (in length and width) to support your forearm without interfering with the work surface. |  |
| Armrests should be padded and soft. |  |
| Most chairs are designed for weights under 275 pounds. If the user weighs more than 275 pounds, the chair must be designed to support the extra weight. |  |

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| **DESK LIGHTING** | |
| Good desk lighting depends on the task you're performing. Use bright lights with a large lighted area when working with printed materials. Limit and focus light for computer tasks. |  |
| The location and angle of the light sources, as well as their intensity levels, should be fully adjustable. |  |
| The light should have a hood or filter to direct or diffuse the light. |  |
| The base should be large enough to allow a range of positions or extensions. |  |

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| **DOCUMENT HOLDERS** | |
| The document holder needs to be stable but easy to adjust for height, position, distance, and viewing angle. |  |
| If the monitor screen is your primary focus, purchase a document holder that will sit next to the monitor at the same height and distance. |  |
| If the task requires frequent access to the document (such as writing on the document) a holder that sits between the keyboard and monitor may be more appropriate. |  |

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| **MOUSE AND POINTING DEVICES** | |
| Choose a mouse or pointer based on the requirements of your task and your physical limitations. There really is no difference, other than preference, among a mouse, trackball, or other device. |  |
| A mouse should match the contour of your hand and have sufficient cord length to allow its placement next to the keyboard. |  |
| If you choose a trackball, avoid ones that require the thumb to roll the ball--they may cause discomfort and possible injury to the area around your thumb. |  |
| A smaller mouse may be more appropriate especially if you have small hands. Caution should be taken if a mouse is used by more than one person. |  |
| A mouse that has sensitivity adjustments and can be used with either hand is desirable. |  |

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| **TELEPHONES** | |
| If task requirements mandate extended periods of use or other manual tasks, such as typing while using the phone, use a telephone with a “hands-free” headset. |  |
| The telephone should have a speaker feature for “hands-free” usage. |  |
| “Hands-free” headsets should have volume adjustments and volume limits. |  |

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| **WRIST RESTS** | |
| Wrist rest should match the front edge of the keyboard in width, height, slope, and contour. |  |
| Pad should be soft but firm. Gel type materials are recommended. |  |
| Wrist rest should be at least 1.5 inches deep (depth away from the keyboard) to minimize contact pressure on the wrists and forearm. |  |

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