

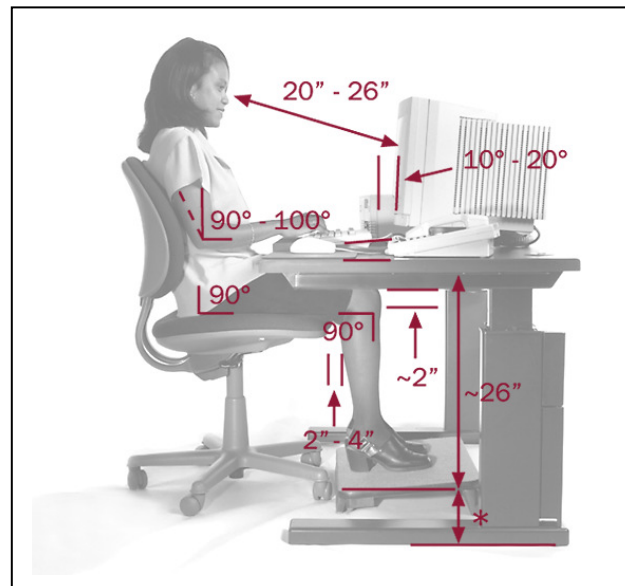
## OPTIMAL POSITION OF BODY AND EQUIPMENT FOR COMPUTER USERS



The following information is provided as a generic guide to assist you in your efforts to improve the comfort of computer users. Variations in specifications may be acceptable and should be determined individually.

### 1. Optimal position of body while seated at your computer:

- a. Ears, shoulders, and hips in vertical alignment.
- b. Arch in back supported by chair or pillow.
- c. Feet flat on floor or stool.
- d. Thighs supported evenly on chair.
- e. Shoulders in neutral position (i.e., not elevated).
- f. Upper arms near sides of body.
- g. Forearms approximately parallel to floor.
- h. Wrist in neutral position (knuckles slightly higher than wrist).



### 2. Optimal equipment position:

- a. Top line of screen slightly below eye level or lower.
- b. Monitor screen at approximately 20 to 26 inches from user's eyes.
- c. Keyboard and monitor positioned in alignment in front of user (unless monitor is referred to only intermittently).
- d. Keyboard (height) positioned such that home row (ASDF) is at approximately elbow level.
- e. Mouse (height) positioned at elbow level and as central as possible.
- f. Document holder located near monitor at same height and distance from user as screen.
- g. Work surface at height to allow appropriate arm/wrist/hand position while also allowing adequate leg space.
- h. Chair - seat and back rest height and angle adjusted to allow comfortable posture.
- i. Shelf height and location within comfortable reach.
- j. All frequently used equipment, manuals, etc. within comfortable reach.

## COMPUTER WORKSTATION GUIDELINES



### COMPUTER WORK SURFACE

***Height Adjustable*** - in range of 23 to 28 inches. Work surface should position keyboard such that home row (ASDF) is approximately level with elbow. A non-adjustable computer work surface of 26-27 inches is acceptable if appropriate body position can be achieved through chair height adjustments and/or accessory use. Operator adjustable work surfaces are recommended for shared or multi-user workstations and may also be an advantage in frequently changing environments.

Work surface Dimensions - Adequate computer workstation depth to allow aligned symmetrical position of keyboard and monitor. Minimum of 30 inches is required for computers with standard size monitors up to 18 inches in depth, and 36 inches for computers with larger monitors which exceed 18 inches in depth. In some situations, a work surface less than 30 inches deep can be adapted to accommodate the computer.

The width of the work surface must be adequate to support the keyboard and other necessary equipment, including mouse, mouse pad, paperwork, document holder, telephone and calculator. A minimum of 36 inches is required in order to support both keyboard and mouse.

Non-interfering and accessible storage space is required for the processing unit.

In general, work surface space should be adequate to support all necessary equipment and supplies, with frequently used items in comfortable reach.

### CHAIR

#### *Critical Chair features:*

- Easily height adjustable (range of 15-21 inches)
- Smooth rolling casters
- Locking back
- Height adjustable backrest
- Tension adjustment for chairs that recline
- Model available with and without arms
- Model available in smaller or larger size
- Independently adjustable seat and back angles
- Swivel
- Five (5) spoke base

#### *Other Chair features:*

- Seat pan tilt
- Height adjustable armrests
- Width adjustable armrests

### OTHER

Adequate and accessible work surface space for "non-computer" job functions is required as necessary. This work surface should also be height adjustable (range 24-30 inches). File/storage that is adequate and accessible as required by specific job functions must be available.

### SUMMARY

These criteria can be met in a variety of ways and by various types of furniture. The caveat to any generic guideline is that the specific workstation design may need to be tailored to meet the needs of the specific job. The optimal goal is to build maximum adjustability and flexibility into a generic workstation design to allow accommodations for various job functions and accommodations for individual staff variances.

## WORKSTATION CHECKLIST

### CHAIR:

- |   |                              |                             |
|---|------------------------------|-----------------------------|
| Is individual sitting up straight?                    | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| When sitting, are thighs parallel to floor?           | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| When sitting, are feet resting firmly on floor?       | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Is seat pan adjusted so that front of seat pan is up? | <input type="checkbox"/> YES | <input type="checkbox"/> NO |

Actions taken: \_\_\_\_\_

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### VDT SCREEN:

- |   |                              |                             |
|---|------------------------------|-----------------------------|
| Is top line of screen slightly below eye level? | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Is video display screen glare free?             | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Is video display screen clean?                  | <input type="checkbox"/> YES | <input type="checkbox"/> NO |

Actions taken: \_\_\_\_\_

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### KEYBOARD/CALCULATOR/MOUSE:

- |  |                              |                             |
|--|------------------------------|-----------------------------|
| Is keyboard as close to edge of desk as practical?         | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Is keyboard angle adjusted to middle or lowest position?   | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Is keying done without pen, pencil, or other tool in hand? | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Is mouse at keyboard height and close to keyboard?         | <input type="checkbox"/> YES | <input type="checkbox"/> NO |

Actions taken: \_\_\_\_\_

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### BODY POSITION:

- |   |                              |                             |
|---|------------------------------|-----------------------------|
| Are shoulders in a relaxed position?            | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| While inputting are:                            |                              |                             |
| Forearms parallel to floor or slightly angled?  | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Wrists in neutral (close to straight) position? | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Upper arms close to side of body?               | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Is body position changed throughout the day?    | <input type="checkbox"/> YES | <input type="checkbox"/> NO |

Actions taken: \_\_\_\_\_

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### GENERAL:

- |  |                              |                             |
|--|------------------------------|-----------------------------|
| Are equipment, supplies, files, and manuals easily accessible?     | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| Is the floor area free of clutter?                                 | <input type="checkbox"/> YES | <input type="checkbox"/> NO |
| When talking on phone, is phone supported by hand instead of neck? | <input type="checkbox"/> YES | <input type="checkbox"/> NO |

Actions taken: \_\_\_\_\_

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