Ergonomics 101

Adjusting Your Workplace to Fit You

Areas of Concern

- Seat
- Keyboard/Mouse Support
- Workstation Layout
- Computer Equipment
- Special Considerations

The domino effect

Creating the proper set-up is very much like putting a series of dominos in place. If you make a change at any point, in most cases, you will have to return to the starting point in order for everything to fall into place.
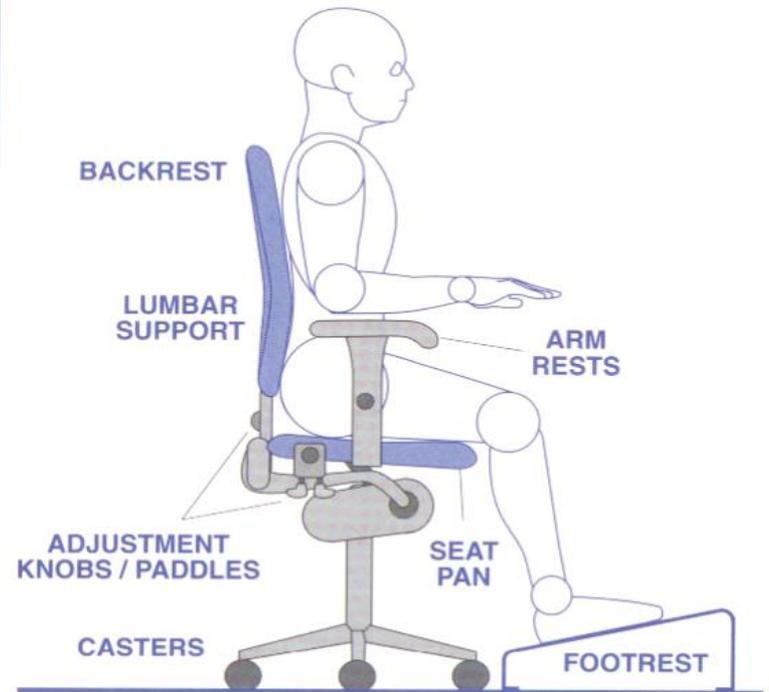
Seating

If the chair fits…

Seating: Seat Height

- Your thighs should be parallel to the floor, knees at a 90 degree angle in line with hips or preferably the hips are slightly above the knees.

- Height can be adjusted by pulling up the lever and standing slightly until chair height is correct.

BACKREST

LUMBAR SUPPORT

ARM RESTS

ADJUSTMENT KNOBS / PADDLES

SEAT PAN

CASTERS

FOOTREST

Seating: Seat Pan

- You should be able to put 2-3 fingers between the back of your knees and the edge of the chair.

BACKREST

LUMBAR SUPPORT

ARM RESTS

ADJUSTMENT KNOBS / PADDLES

SEAT PAN

CASTERS

FOOTREST

Seating: Backrest

- The lumbar support should curve into the small of your back and fit snuggly.

Seating: Tilting and Tension

- The backrest should tilt backward and forward without a lot of pressure. Most chairs can be locked into place with the tilt paddle.

- If the tilt tension is too tight or loose, a knob on the underside of the chair is turned to tighten/loosen it.

BACKREST

LUMBAR SUPPORT

ARM RESTS

ADJUSTMENT KNOBS / PADDLES

SEAT PAN

CASTERS

FOOTREST

Seating: Armrests

- The armrests should be padded, not hard wood or metal. They should be adjusted to below elbow height.

- To raise or lower armrests, squeeze the knob on each and lift or lower.

BACKREST

LUMBAR SUPPORT

ARM RESTS

ADJUSTMENT KNOBS / PADDLES

SEAT PAN

CASTERS

FOOTREST

Keyboard/Mouse Support

Together forever

Support Height

- Height should be comfortable, with wrists in-line with arms and mouse on same level as keyboard.

- Height can be adjusted by either lifting the tray into place or, for other models, pressing the adjustment lever before lifting into place, then releasing it.

WRISTS IN-LINE WITH THE ARMS

**KEYBOARD SUPPORT**

INPUT DEVICE SUPPORT
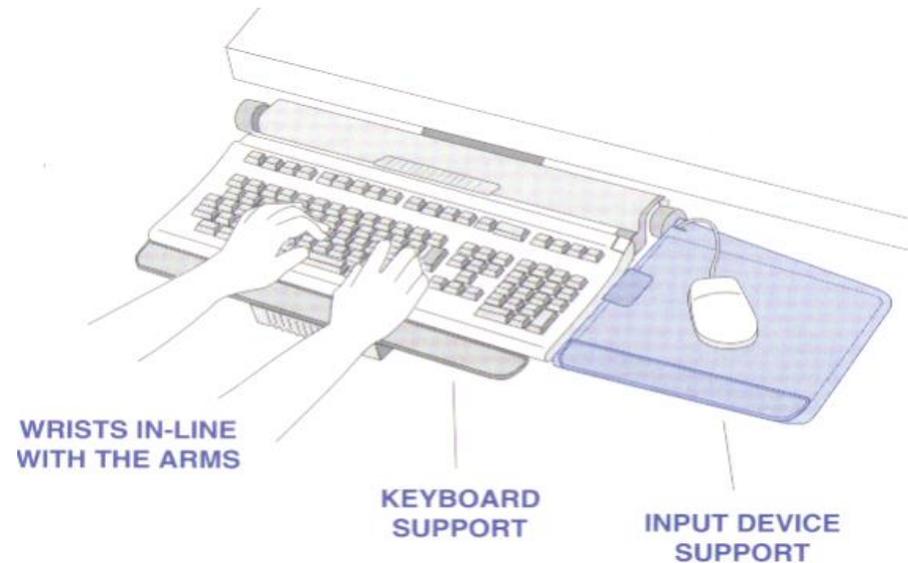
Support Position

- The keyboard should be in front of the monitor.

- The ANGLE of the keyboard should keep wrists in-line with arms. This is adjusted by loosening the knob at the arm of the tray, tilting it to the correct angle and tightening.

WRISTS IN-LINE WITH THE ARMS

KEYBOARD SUPPORT

INPUT DEVICE SUPPORT
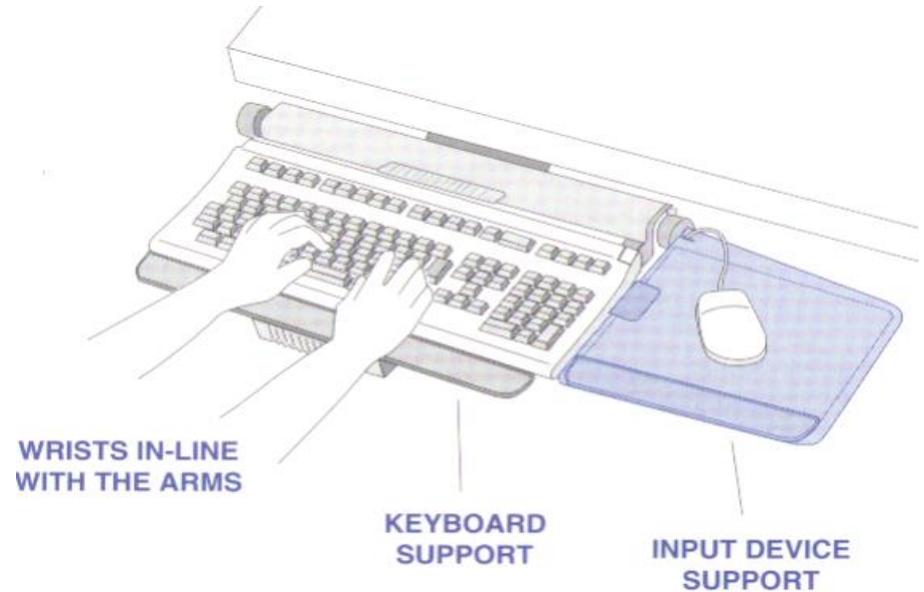
Support Features

- The tray should be stable while typing and mousing.

- There should be room to use both the keyboard and mouse.

WRISTS IN-LINE
WITH THE ARMS

KEYBOARD
SUPPORT

INPUT DEVICE
SUPPORT
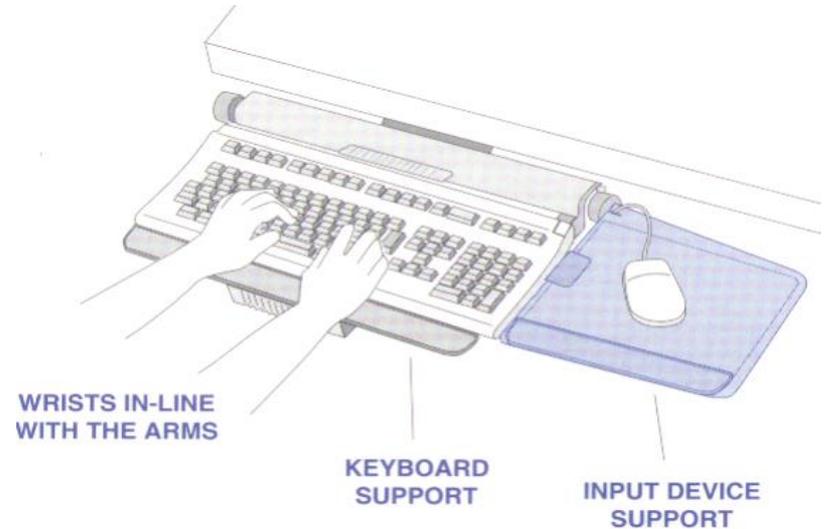
Workstation Layout

Bend and Stretch and Reach

Workstation Space

- Desktop have adequate room for computer, phone and other necessary equipment

- You should have adequate storage space for files, office supplies, reference material etc.

- You should have some free desktop space for job task such as sorting, writing etc.

SOURCE DOCUMENT

REFERENCE MATERIALS, PHONE, DOCUMENTS (easy arm's reach)

WORKSURFACE DEPTH

FREE DESKTOP SPACE

STORAGE
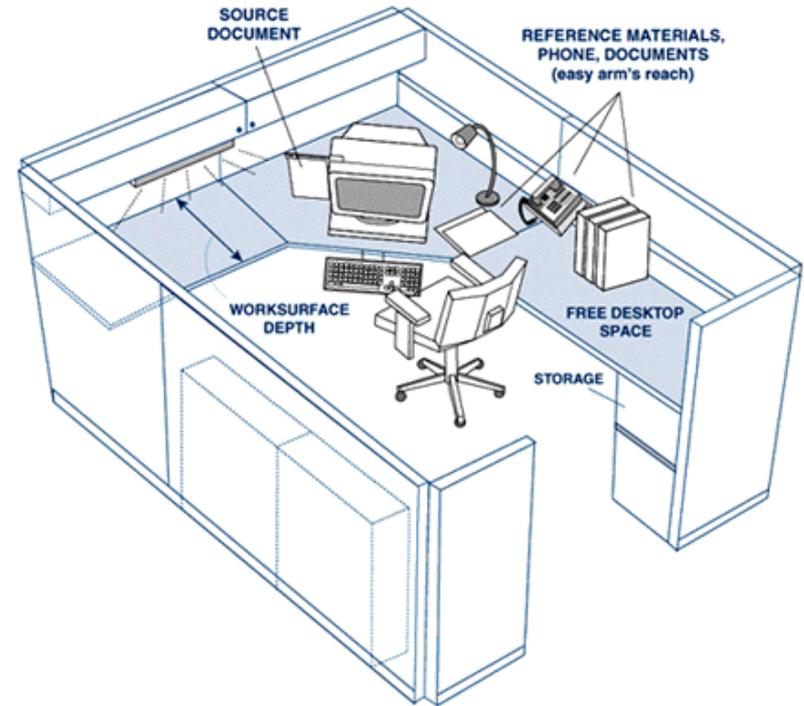
Functional Space

- Frequently accessed items (phone, files etc) should be within an **easy arm's reach.**

- There should be adequate legroom under the desk.

- Source documents should be positioned for easy reference without twisting or reaching when using the computer.

- Monitor is in front of you while typing.
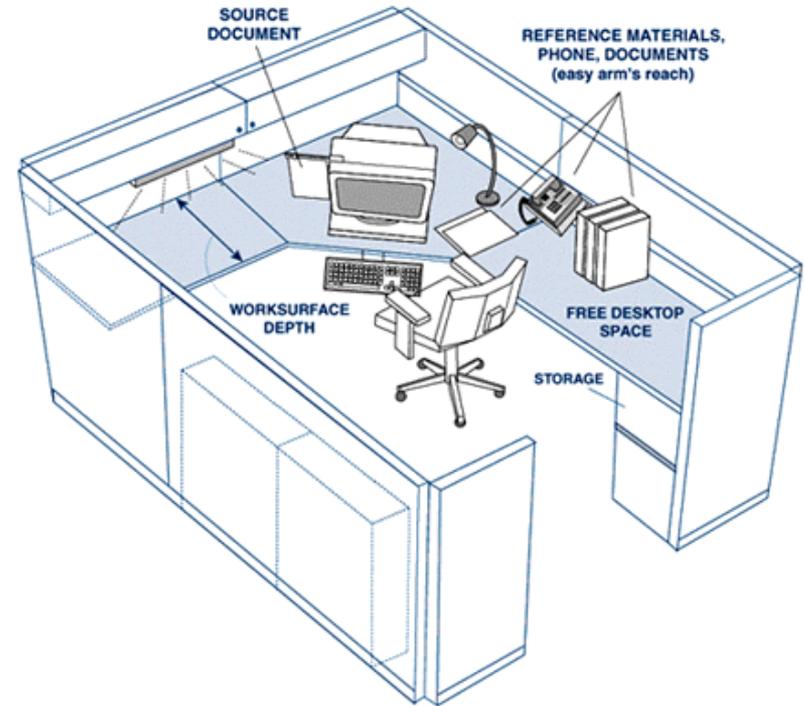
Work Surface

- The work surface should be deep enough for the monitor to fit directly behind the keyboard.

- The height of the work surface should allow your arms to form approximately 90 degree angle when performing non-computer task.
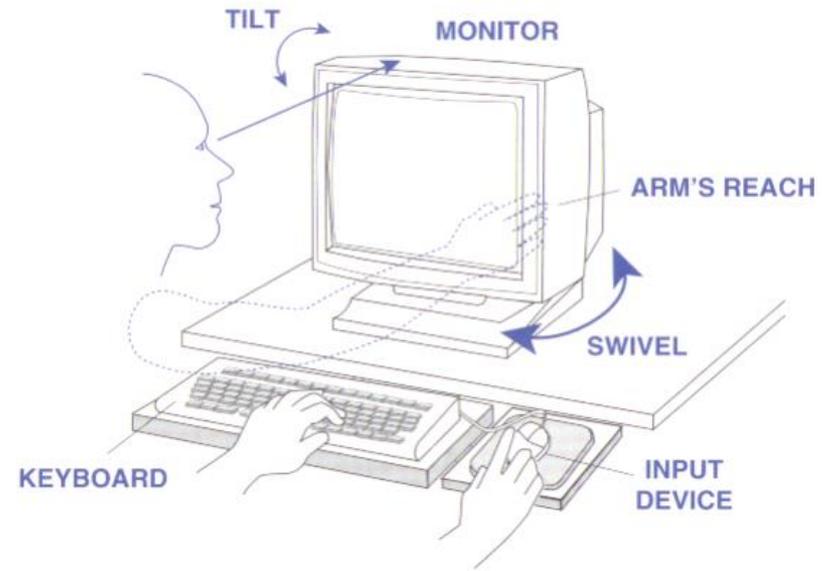

SOURCE DOCUMENT

REFERENCE MATERIALS, PHONE, DOCUMENTS (easy arm's reach)

WORKSURFACE DEPTH

FREE DESKTOP SPACE

STORAGE
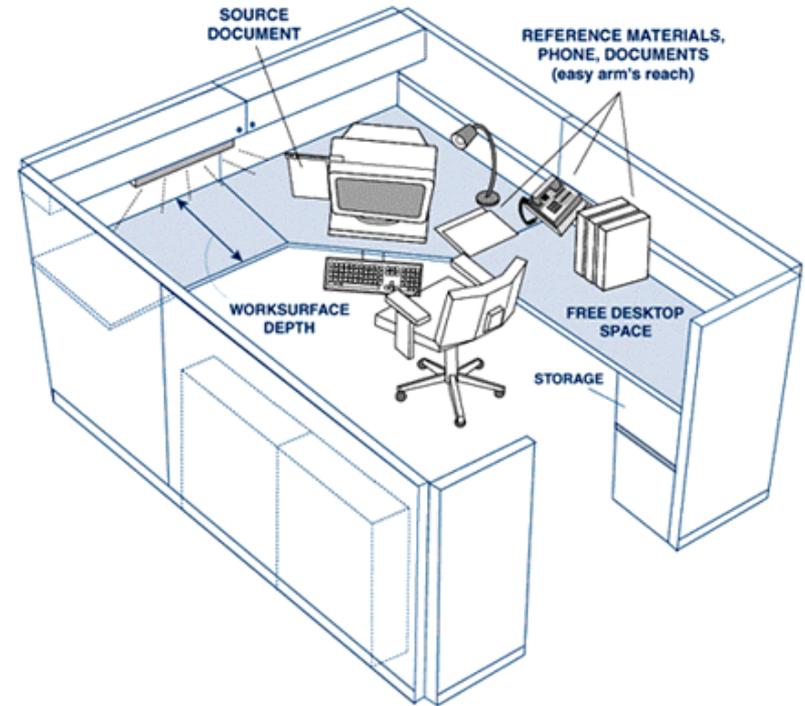
# Computer Equipment

Does this thing work?

Keyboard and Mouse

- Both the keyboard and mouse should have all the features your job requires and both should work **reliably.**

Monitor

- The top of the monitor should be at or just below eye level

- Top line of text – let's do an exercise

- The monitor should be about an arm's reach away.

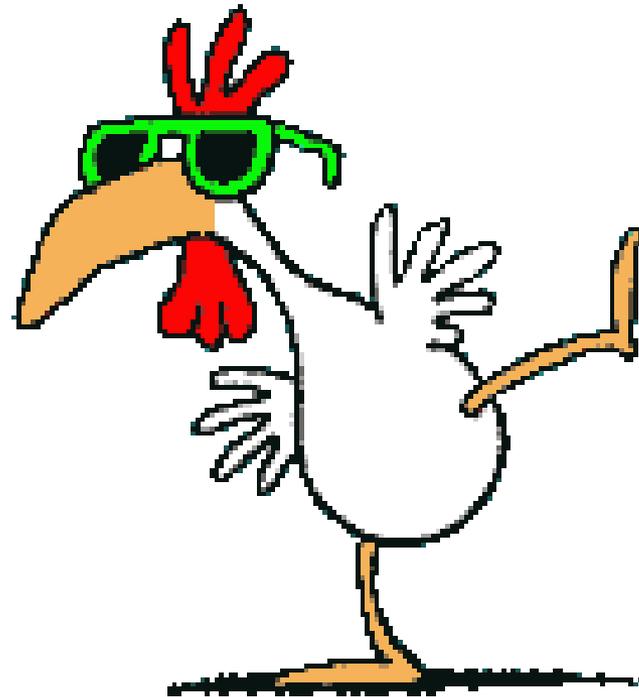- The monitor should be clean, easy to read and free from blurry areas.
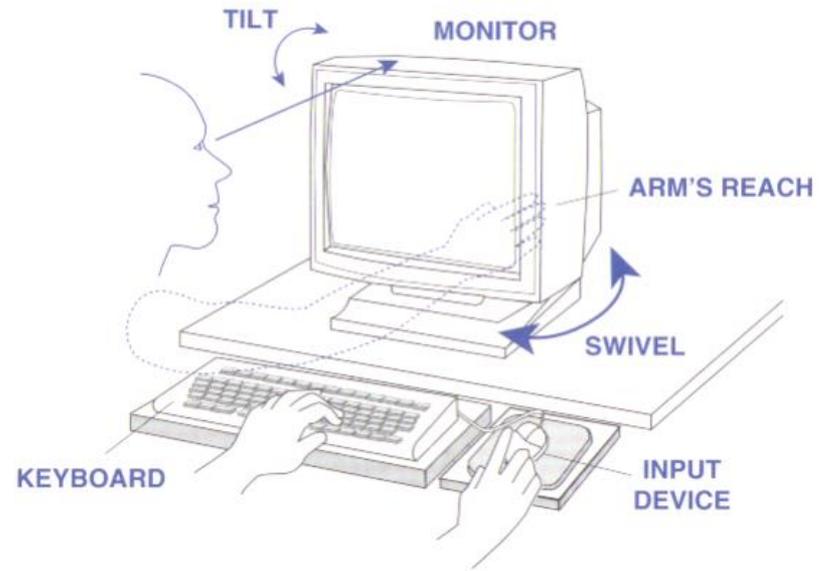
Special Considerations

Because you're special . . .

Monitor Glare

- The monitor should be free from glare from outside windows or overhead lights.

- Placing the monitor at 90 or 45 degree angle to windows and tilting it slightly downward will reduce glare.

General Lighting

- Adequate overhead lighting, about the same as your computer screen

- Task lighting to supplement the overhead lighting when necessary.
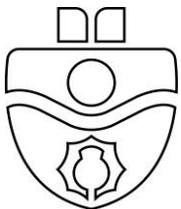
Glasses

- If your glasses are specifically for computer use, be sure to position the monitor where it is most comfortable.

- Bifocal wearers should be able to view the monitor without bending their necks.

Laptop Users

- When using your laptop in the office, you should be able to connect to an external monitor, mouse and keyboard through a docking station

On the Phone

- If you spend more than 90 minutes a shift on the phone, a headset should be used to avoid neck strain.

- Improper phone usage is one of the most common causes of neck/shoulder pain.

Office of Horrors

Neck twisted to look at monitor

✗ Monitor not positioned head on

✗ Cacti grow well in hot, dry environments

✗ Keyboard at an angle, increasing angle at wrist

✗ Incorrect positiong of desk lamp

✗ Using mouse too far away causing strain on shoulder

✗ Back not supported by the backrest

✗ Feet not firmly on the floor

✗ Cushion pressing into underside of thigh

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