



Guidelines for the Design of Standing Workstations
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Purpose: The purpose of this guideline is to assist you with the manufacture, modification, and/or purchase of workstations used for completing tasks, including computer-based tasks, from a standing position.

General Rules

- Plan for all safety hazards & required emergency actions before starting to design.
- Know who the workstation users are going to be. Are they men, women, or a combination of both? Ask the users what tasks they are going to be performing at this workstation or, if they are currently using a workstation, observe them performing these tasks.
- Height adjustable workstations are the ideal solution. While up-front costs of height adjustable workstations are often higher, the costs of well-designed height adjustable workstations are usually much less over the functional life of the workstation.
- If non-adjustable workstations must be used, design the workstation for the tallest users, and then provide platforms, etc. so that smaller users can work at optimal heights.

Acceptable Workstation Heights for Standing Work that Does Not Require the Use of a Computer

Figure 1 shows one method for determining how high a workstation should be in order to help reduce discomfort. To use this method you need to know the following:

- Who will be using the workstation (men, women, or a combination of both)?
- The dimensions of the materials / items being worked on, handled, etc. on top of the workstation's work surface.
- The type of work being done on these materials / items (precise, light, or heavy).

Once you have this information, use the information in Figure 1 to determine how high the workstation should be. Don't forget to take into account the height of the material being worked on.

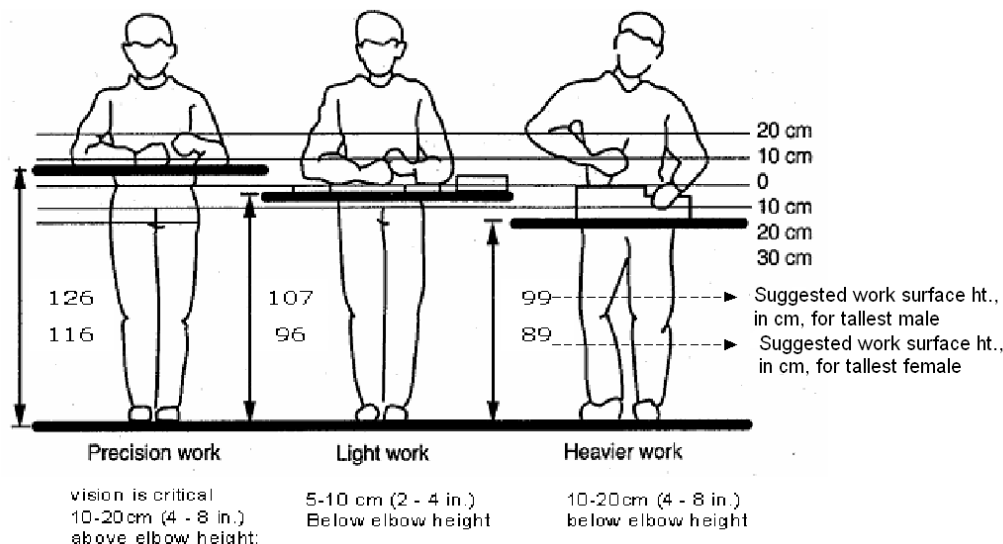


Figure 1: Determining acceptable work surface heights for standing workstations

Recommended Clearance Dimensions / Work Surface Thickness for Standing Workstations

- When designing standing workstations it is important to provide space for the workers' knees and toes. Designing workstations with the recommended clearances helps to ensure that workers have enough space to move, shift their body weight and change postures when standing and working at the workstation.
- A work surface that is no greater than 4.5 cm thick also thicker helps to ensure that workers can stand close to the front edge of the work surface while working without having the bottom edge of the work surface dig into the top of their thighs.

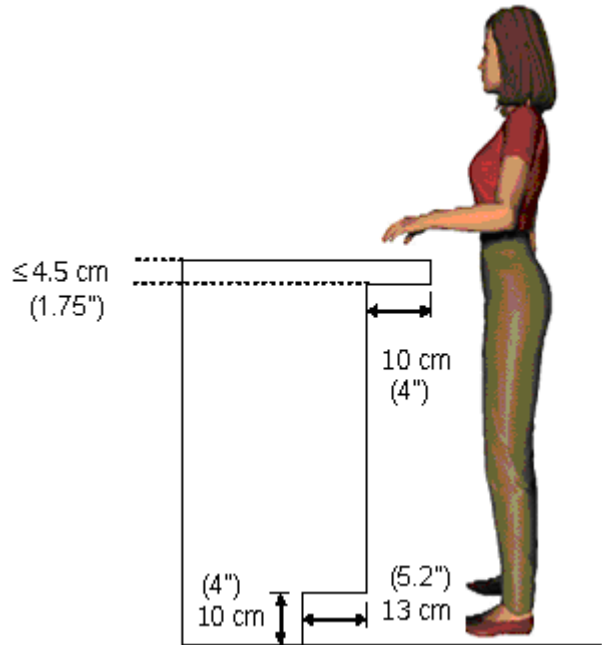


Figure 2: Workstation Specifications - Side View

Acceptable Reach Distances to Consider for Workstations

- Design standing workstations so that all frequent reaches are kept within the user's normal reach zone
- Reaches beyond the user's normal reach zone, but less than their maximum reach distance should only be performed infrequently.
- The user should not be required to perform any reaching beyond their maximum reach distance.

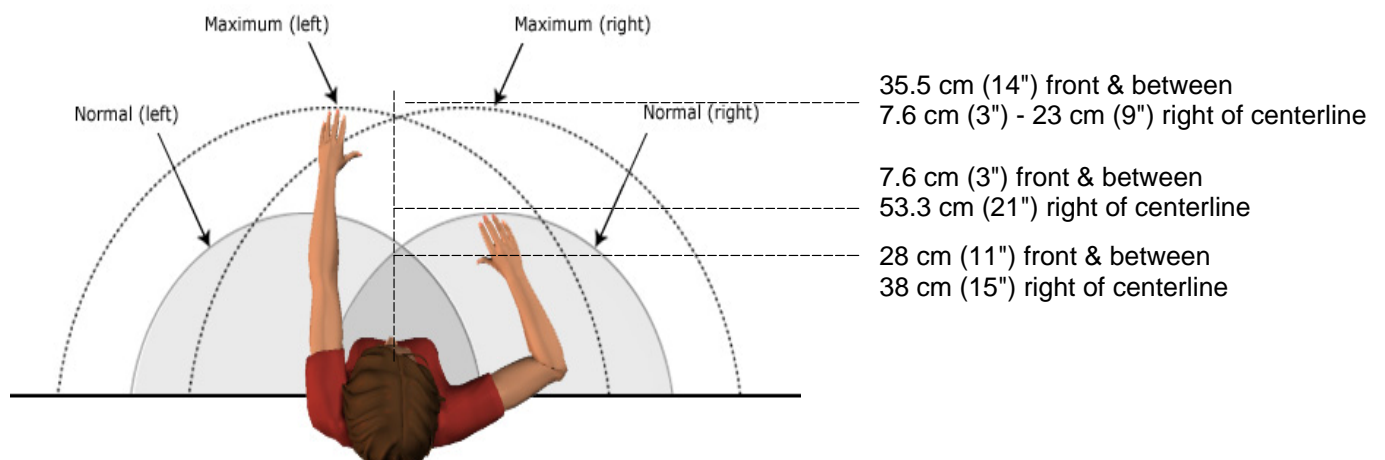


Figure 3: Workstation Specifications – Reach Distances – Top View

Acceptable Workstation Heights for Standing Work that Requires the Use of a Computer

- If the user **does not** perform reading and writing tasks on the work surface then the work surface is an excellent place for the computer keyboard and mouse. The height of the work surface should be approximately 2.5 cm (1 inch) below the user's standing elbow height, as measured from the surface on which they are standing.
- Height adjustable, standing workstations should adjust from 86 cm (34") – 117 cm (46") to allow the keyboard and mouse to be at the standing elbow height for almost all male and female users.

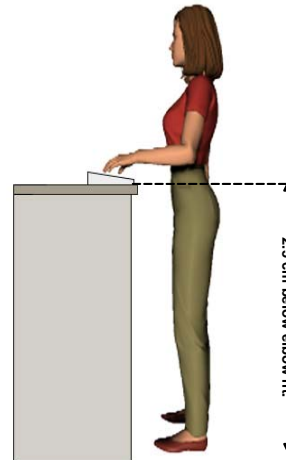


Figure 4: Keyboard on Work Surface

- If the user **does** perform reading and writing tasks on the work surface then a height adjustable keyboard / mouse support should be used.
- Adjustment range for the support should be from 86 cm (34") – 117 cm (46") from the floor
- Computer monitors should be equipped with well-designed height adjustable stands so that users can easily adjust the monitor to an optimal viewing height.
- LCD monitor arms are recommended as they allow for a full range of adjustments (height, distance, tilt, etc.)

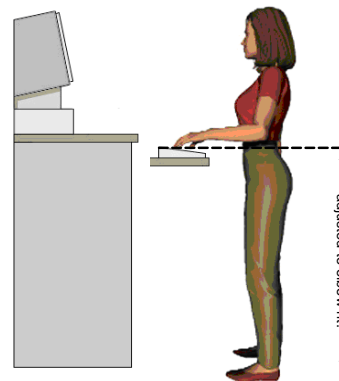


Figure 5: Keyboard on a Support

When using a height adjustable keyboard / mouse support mechanism the following guidelines should be followed:

- The keyboard and mouse should always be located beside one another and at the same height.
- The user should be able to locate the mouse on either side of the keyboard.
- A keyboard and mouse support should be at least 68.5 cm (27") wide to allow for enough space for comfortable mouse use.

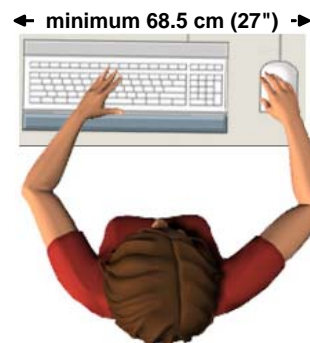


Figure 6: Functional Width Required