

Checklist for Purchasing New Office Desks/Work Surfaces and Adjustable Tables at UCSF

Use this checklist to help determine if a vendor's product falls within the ergonomic guidelines. If any of the boxes are not checked, then the product should not be recommended for purchase. Please keep in mind that this checklist is not applicable for reception workstations, because often these areas need a depth narrower than 24 inches to reduce reaching to the client.

Note: These guidelines apply to approximately 95% of the population. Petite, tall or large-framed individuals and people with specific ergonomic needs may require equipment with size or range adjustments that are outside the parameters provided below. Contact the UCSF Ergonomics Program at ergonomics@ucsf.edu for assistance with applying these requirements and for more information.

Throughout this document there are numbers in parentheses. These numbers correspond to the references at the end of the document.

MINIMUM REQUIREMENTS*:

These requirements apply to freestanding workstations, and do not apply to panel systems. This checklist is divided into sections for three different types of work surfaces: A) Mixed use workstations, (for computer, paperwork, and phone use), B) Computer workstations (for computer use only) and C) Paperwork workstations, (for paperwork and phone use only), and into section D) Storage placed above or below work surfaces. Some work surface requirements will vary depending on what tasks will be performed on the work surface. Refer to the appropriate section for the type of desk, work surface, or adjustable table being purchased.

Note: Keyboard trays are not the recommended standard solution for adjustability in many cases. Keyboard trays may be added to work surfaces that meet the requirements below; however, keyboard trays alone may not meet the requirements.

A. MIXED-USE WORKSTATIONS: FOR COMPUTER, PAPERWORK, AND PHONE USE:

- Height: one of the following must be checked:**
 - Preferred: Entire work surface is user or installer height adjustable. Recommended adjustability range is between 22-30 inches or more (7, pg. 21-22; 1, pg. 79)
 - Minimum: 28.5 inches if not adjustable. (1, pg. 79)
- Width of top surface:** At least 60 inches of usable desk surface with a minimum of 41 inches unobstructed leg room underneath (1, pg 17; 8, pg. 212)
- Depth of top surface: one of the following must be checked:**
 - Preferred: At least 30 inches deep (1, pg. 80)
 - Minimum: 24 inches deep (1, pg. 80)
- Width underneath work surface: one of the following must be checked:**
 - Preferred: 20.5 inches wide or greater (1, pg. 80); 30 inches wide for ADA (5, pg. 321)
 - Minimum: 20.5 inches wide (1, pg. 80); 30 inches wide for ADA (5, pg. 321)

- **Depth underneath work surface: one of the following must be checked:**
 - Preferred: 17.3 inches or greater at the level of the knee and 23.6 inches or greater at level of the feet (1, pg. 80). If keyboard trays are to be added, a minimum unobstructed depth of 22 inches is recommended under the work surface.
 - Minimum: 17.3 inches at the level of the knee and 23.6 inches at level of the feet (1, pg. 80). If keyboard trays are to be added, a minimum unobstructed depth of 22 inches is recommended under the work surface.
- **Thickness:** No greater than 1.5 inches
- **Finish:** Matte finish (1, pg. 78)
- **Edges:** Rounded front edges with 3mm radii; no sharp corners, cut-outs, or edges (1, pg. 78)
- **Stability:** Shall be structurally rigid and stable (1, pg. 77). Freestanding work surfaces should have a functional load capacity of at least 200 pounds. (9, pg. 18-20)
- **Adjustment controls:** Easy to reach and operate from normal working postures and do not interfere with users' work positions (1, pg. 14)

B. COMPUTER WORKSTATIONS

- **Height: one of the following must be checked:**
 - Preferred: Entire work surface (not keyboard tray) is user or installer height-adjustable. Recommended adjustability range is between 22 – 30 inches or greater from the floor to the top of the work surface (1, pg. 79).
 - Minimum: 28.5 inches if not adjustable. (1, pg. 79)
- **Width of top surface:** 27.6 inches or greater (this is strictly an anthropometric requirement. In fact, the functional requirements of the task will most likely dictate a larger width). (1, pg 77, 82; 8, pg. 212)
- **Depth of top surface: one of the following must be checked:**
 - Preferred: At least 30 inches deep (1, pg. 80)
 - Minimum: 24 inches deep (1, pg. 80)
- **Width underneath work surface: one of the following must be checked:**
 - Preferred: 20.5 inches wide or greater (1, pg. 80); 30 inches wide for ADA (5, pg. 321)
 - Minimum: 20.5 inches wide (1, pg. 80); 30 inches wide for ADA (5, pg. 321)
- **Depth underneath work surface: one of the following must be checked:**
 - Preferred: 17.3 inches or greater at the level of the knee and 23.6 inches or greater at level of the feet (1, pg. 80). If keyboard trays are to be added, a minimum unobstructed depth of 22 inches is recommended under the work surface.
 - Minimum: 17.3 inches at the level of the knee and 23.6 inches at level of the feet (1, pg. 80). If keyboard trays are to be added, a minimum unobstructed depth of 22 inches is recommended under the work surface.
- **Thickness:** No greater than 1.5 inches
- **Finish:** Matte finish (1, pg. 78)
- **Edges:** Rounded front edges with 3mm radii; no sharp corners, cut-outs, or edges (1, pg. 78)
- **Stability:** Shall be structurally rigid and stable (1, pg. 77). Freestanding work surfaces should have a functional load capacity of at least 200 pounds. (9, pg. 18-20)
- **Adjustment controls:** Easy to reach and operate from normal working postures and do not interfere with users' work positions (1, pg. 14)

C. PAPERWORK WORKSTATIONS – FOR PAPERWORK AND PHONE USE ONLY (NO COMPUTERS):

- Height: one of the following must be checked:**
 - Preferred: Entire work surface is user or installer height adjustable. Recommended adjustability range is between 26-32 inches or more (7, pg. 21-22)
 - Minimum: maximum height of 28.5 inches (1, pg. 79)
- Width of top surface:** 30 inches or greater (1, pg 79; 8, pg. 212)
- Depth of top surface: one of the following must be checked:**
 - Preferred: At least 30 inches deep (1, pg. 80)
 - Minimum: 24 inches deep (1, pg. 80)
- Width underneath work surface: one of the following must be checked:**
 - Preferred: 20.5 inches wide or greater (1, pg. 80); 30 inches wide for ADA (5, pg. 321)
 - Minimum: 20.5 inches wide (1, pg. 80); 30 inches wide for ADA (5, pg. 321)
- Depth underneath work surface: one of the following must be checked:**
 - Preferred: 17.3 inches or greater at the level of the knee and 23.6 inches or greater at level of the feet (1, pg. 80)
 - Minimum: 17.3 inches at the level of the knee and 23.6 inches at level of the feet (1, pg. 80)
- Thickness:** No greater than 1.5 inches
- Finish:** Matte finish (1, pg. 78)
- Edges:** Rounded front edges with 3mm radii; no sharp corners, cut-outs, or edges (1, pg. 78)
- Stability:** Shall be structurally rigid and stable (1, pg. 77). Freestanding work surfaces should have a functional load capacity of at least 200 pounds. (9, pg. 18-20)
- Adjustment controls:** Easy to reach and operate from normal working postures and do not interfere with users' work positions (1, pg. 14)

D. REQUIREMENTS FOR STORAGE PURCHASED FOR PLACEMENT ABOVE OR BELOW ALL WORKSURFACE TYPES:

Storage under work surfaces:

- Height: one of the following must be checked:**
 - Preferred: 21 inches in height to allow for full desk height adjustability range (general ergonomics recommendation)
 - Minimum: Maximum height of 27 inches (1, pg. 76); pedestal drawers supporting the work surface do not allow for height adjustability unless they are removed and the work surface can be supported in another manner.

Built-in storage above work surfaces:

- Height:**
 - Overhead bins or shelves that overhang the work surface must be removable or adjustable to allow for appropriate monitor height (1, pg. 77- 78).

*References: (1) ANSI/HFES 100-2007 Human Factors Engineering of Computer Workstations; (2) Human Factors in Engineering and Design, Mark Sanders and Ernest McCormick, 7th edition, McGraw-Hill, Inc., 1993; (3) Humantech Ergonomic Design Guideline for Engineers Manual; (4) Ergonomics Guideline for VDT (Visual Display Terminal) Furniture Used in Office Workspaces, BIFMA International, 2/28/2002 ; (5). CalDAG California Disabled Accessibility Guidebook, 1998; (6) Architectural Graphic Standards, Charles Ramsey, Harold Sleeper and John Ray Hoke editor, 9th edition, John Wiley & Sons, Inc., 1994; (7) Ergonomic Design for People at Work, Volume 1, Eastman Kodak Company, John Wiley & Sons, Inc., 1983; (8) Kodak's Ergonomic Design for People at Work, Second Edition, The Eastman Kodak Company, John Wiley & Sons, Inc. 2004; (9) ANSI-BIFMA x5.5-1998, Desk/Table Products - Tests.