

Checklist for Purchasing Task Chairs at UC

Use this checklist to help determine if a vendor's product meets UC ergonomics guidelines.

INSTRUCTIONS: Each box listed under the Basic, Seat, Backrest, and Armrest feature sections must be checked. Chairs that meet preferred features are recommended over chairs which meet minimum features. If any of the boxes are not checked, the product is not recommended for purchase. Chairs that also meet recommendations listed under the Value-added Features section are recommended over chairs which do not meet these recommendations.

Note: These guidelines apply to approximately 90% of the population. Petite, tall or large-framed individuals and people with specific ergonomics needs may require equipment with size or range adjustments that are outside the parameters provided below. Contact your local UC Ergonomic Program Coordinator 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*:

Basic Features:

- Chair seat swivels easily on a five-leg pedestal base with casters (2, pg. 13)
- Casters are available for different floor surfaces such as carpet, hardwood, and linoleum (2, pg. 13)
- Adjustment controls - easy to adjust from the sitting position and clearly marked to indicate function (1, pg. 14)
- No sharp or hard edges anywhere on the chair or controls (1, pg. 14)
- Weight capacity of chair is:
 - Preferred: At least 275 pounds (current practice for standard chairs)
 - Minimum: At least 250 pounds (manufacturing industry standard; 5)
- Five-year minimum warranty
- Instructions on how to use chair are provided to end user

Seat Features:

- Seat height – adjustable at least 4.5 inches within the range of 15 - 22 inches from the floor (1, pg. 87)
- Seat depth – **one of the following must be checked:**
 - Preferred: Adjustable seat depth - provide up to 3 inches of forward/backward seat pan movement, range must include 16.9" seat depth (1, pg. 87)
 - Minimum: If non-adjustable, seat should be no greater than 16.9" deep (1, pg. 87)
- Seat pan angle – **one of the following must be checked:**
 - Preferred range is at least 4 degrees of user-controlled adjustability, from leaning forwards to leaning backwards 3 degrees (1, pg. 87)
 - Minimum – If seat pan angle does not adjust, seat is designed with a slight backward or forward angle
- Seat pan width – minimum of 17.7" wide (1, pg. 87)
- Front edge of seat is rounded (1, pg. 87)

Backrest Features:

- Backrest height – top of backrest is at least 17.7 inches above the seat (1, pg. 88)
- Backrest height adjustability – **one of the following must be checked:**
 - Preferred: entire backrest and/or lumbar support adjustable from 5.9-9.8 inches above the seat (1, pg. 88)
 - Minimum: entire backrest and/or lumbar support is height-adjustable within the range of 5.9-9.8 inches above seat (1, pg. 88)
- Backrest width – at least 14.2 inches (1, pg. 88)
- Backrest shape – **one of the following must be checked:**
 - Preferred: backrest should curve outward towards seated user (6, pg. 83)
 - Minimum: backrest is curved at the lower portion to support the lumbar area (6, pg. 83)
- Backrest angle – **one of the following must be checked:**
 - Preferred: backrest angle has an adjustment of 15 degrees or more within the range of upright (90 degrees) to reclined position (120 degrees). User-adjustable headrests are necessary for chairs reclining greater than 120 degrees. (1, pg. 88)
 - Minimum: backrest angle can achieve a position that is upright (90 degrees) or to the rear of upright (1, pg. 88)
- Backrest angle lock – **one of the following must be checked:**
 - Preferred: backrest can be locked into various positions and can move freely with user-adjustable resistance (2, pg. 13)
 - Minimum: backrest can be locked into various positions (2, pg. 13)

Armrest Features:

- Easily attachable and removable – **one of the following must be checked:**
 - Preferred: removable/attachable by end user (1, pg. 89)
 - Minimum: removable/attachable by installer (1, pg. 89)
- Armrest height – **one of the following must be checked:**
 - Preferred: armrest height is adjustable from at least 6.7 to 10.6 inches above seat (1, pg. 89)
 - Minimum: armrest height is adjustable and adjusts within the range of 6.7 to 10.6 inches (1, pg. 89)
- Armrest width – **one of the following must be checked:**
 - Preferred: at least 18.1 inches of clearance between armrests and armrests adjust in/outwards and pivot (1, pg. 89)
 - Minimum: at least 18.1 inches of clearance between armrests (1, pg. 89)
- Armrest shape – smooth, flat, padded with no hard edges or materials (1, pg. 89)

Value-added Features: Recommended, Not Required:

- Chairs are delivered to campus assembled
- Instructions for warranty and maintenance issues are provided
- Available in upholstery for both administrative, labs, and health service needs
- Samples available for Ergonomic Program review and demo rooms
- Speed of delivery/quick ship

*References: (1) ANSI/HFES 100-2007 Human Factors Engineering of Computer Workstations; (2) Ergonomic requirements for office work with visual display terminals (VDTs) ISO 9241-5:1998 (E); (3) Human Factors in Engineering and Design, Mark Sanders and Ernest McCormick, 7th edition, McCraw-Hill, Inc. 1993; (4) Ergonomics Guideline for VDT Furniture used in Office Work Spaces, BIFMA International, 2002; (5) ANSI/BIFMA X5.1-2002; (6) BSR/HFES 100 draft 3/2002