

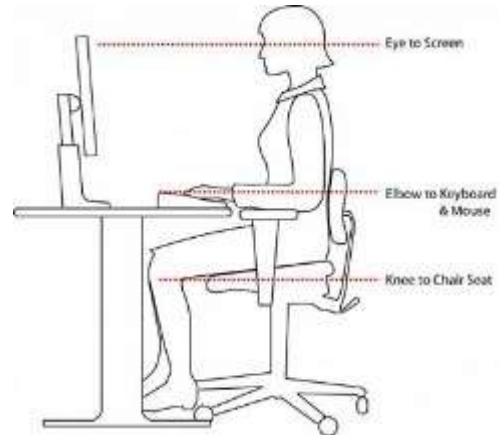
Workstation Equipment Selection Considerations

In the office environment, there are multiple factors that can affect an employee's comfort. The workstation equipment, sitting for extended periods of time, and working in non-neutral postures can make the difference between comfort and discomfort. Careful consideration should be made when determining workstation design and equipment.

This guide will provide guidance on the selection criteria for workstation equipment.

Chair

The majority of task chairs are designed to fit the "average" person (5'3" to 6'2"). For those who are outside of these parameters, the chair will fit poorly and often result in discomfort after a short period of time.



Prior to selecting a chair, consider purchasing a range of sizes to accommodate petite employees 4'11" as well as taller individuals, up to 6'4". Manufacturers often offer ergonomic task chairs in 2 or 3 sizes with adjustable features. A chair should be highly adjustable to provide ability of employee to fit to the correct postures. Verify the chair has these features prior to selecting:

- Base with Five or More Caster Wheels
- Seat Pan Depth Adjustability, "slide" (2-3 inches)
- Waterfall Seat Pan Edge or Seat Pan Tilt
- Seat Height Adjustability (range of 4-5 inches)
- Adjustable Lumbar Support
- Backrest Tilt (forward/back)
- Adjustable Armrest Height

Manufacturers include the above details on their products in the form of a "cut sheet". Depending upon the stature of the employee, the chair should have a range of adjustability. Below is a table with guidelines:

HEIGHT RANGE	SEAT PAN DEPTH	SEAT HEIGHT	SEAT WIDTH (not adjustable)	BACK SUPPORT
4'10" – 5'4"	16" – 18 ½"	15" – 22"	18 – 19 inches	20" min. ht, range of 3"
5'4" – 5'8"	17" – 19 ½"	16" – 22"	19 – 21 inches	20" min. ht, range of 3-4"
5'8" – 6'2"	19 ½" – 22"	18" – 24"	20 – 21 inches	22" min. ht, range of 4-5"
>6'2"	21 ½" – 24"	19" – 25"	20 – 22 inches	Minimum height of 24" with lumbar adjustability

Desks

Designers of cubicles, workstations and desks have added creative flair to the office environment. While the visual appeal may draw you in, keep in mind the practical applications of keyboard/mouse use, writing and referencing documents, phone conferences, and one-on-one meetings. Like chairs, a more adjustable keyboard/mouse surface will allow the employee to adjust to the correct position to support correct postures.

Height Standard desk heights are generally 29-30 inches. For taller individuals (5'6" – 6'2"), this height works well. However, for petite employees to work comfortably at this height, a footrest or keyboard tray will be needed. If you're petite, consider opting for an adjustable height desk with a range from 22.5" to 48.5". You may then be able to place your feet flat on the floor without the need to acquire a keyboard tray or footrest.

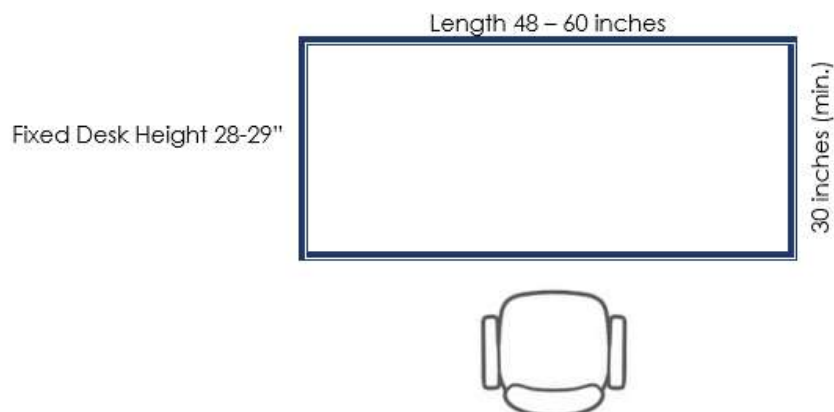
Layout Curved corner desks and straight edge ones accommodate keyboards, monitors, telephones, and documents easily. Ninety-degree corner desks encounter more challenges including where to place dual monitors, keyboard, and wrist rest.

Dimensions The minimum width (or depth) should be 30 inches, to allow for single or dual monitors and keyboard and mouse placement on desk's surface. Length should be a minimum of 48 inches, if the employee does not require space for phone, files, printer, notepad and pen. Ideal desk length is 60 inches.

Other Important Considerations

Desktops with front aprons, drawers or thicker than 2 inches are not recommended. While adding style to the desk design, they restrict leg space when the chair is raised, or the user is tall in stature.

Built-in keyboard trays may be beneficial if they are at least 28 inches in length. Anything less than this may result in insufficient space to place keyboard and mouse comfortably.



Keyboards

Standard

There are countless keyboards on the market today. For the majority of your employees, a standard keyboard (17-18" wide, with slightly raised keys, and numeric keypad) is adequate. Prices vary from \$15-20. Not all "standard" keyboards are created the same.



Raised keys – more separation between them, more natural hand/wrist posture.



Low Profile Keys – less separation between the keys, hands/wrists are less comfortable.

Ergonomic

For employees who have discomfort, ergonomic keyboards can offer relief. As a best practice a complete workstation evaluation is recommended by an ergonomic professional who can provide guidance.

To stay in line with budget demands, it is best to select 2 or 3 keyboards that will benefit the majority and fit your organization's budget. Some examples include:

- [Kensington Pro Fit Ergo Keyboard](#) (Wired & Wireless)
- [Logitech Wave Keys](#)
- [Nulea RT05 Wireless Ergonomic Keyboard](#)

Keyboard Trays

Keyboard trays are under-mounted to the desk and extend/articulate for use while seated. This is a keyboard/mouse height solution for employees who may have a difficult time working from a non-adjustable, standard height work surface, or do not wish to use a footrest.

Below are a few guidelines to follow when selecting a keyboard tray:

- Purchase a quality product from a reputable company. Cheaper trays have a much shorter lifespan.
- The keyboard and mouse should be able to fit on the same level surface (minimum 27" wide).
- Height adjustability for optimal positioning
- Negative tilt feature



Humanscale makes a quality product (400 or 500 model) as does UPLIFT Desk (Large Keyboard Tray and Tray System for Corner L-Shaped).

Mice

When selecting mice as part of your standardized equipment, less is best. There are countless designs and some will not stand the test of time. Discount brands have a reputation for failing more quickly than their well-known counterparts. A selection that includes the 3 primary styles of mice is typically adequate:

- Standard optical mouse (in 2 sizes), that encourages natural hand posture
 - Lenovo Yoga Pro
 - Logitech M500
- Vertical mouse (in 2 sizes)
 - Evoluent 4 (available in right and left)
 - Contour UniMouse (available in right and left)
- Trackball mouse (in 2 sizes)
 - Trackman Marble
 - Kensington Optical Wireless



It is best to maintain a policy of not permitting employees to bring in their personal mouse from home. This may encourage a trend of sourcing a solution independently. In addition, an employee may be less likely to report discomfort in a timely manner and receive a proper evaluation from an ergonomic professional.

Wrist Rests

During keystroke entry and mouse use, wrists “drop” or “bend” and make contact with the desk. This can result in tightness in the wrists and/or irritation on the underside. To place the wrists “flat” (in a straight line with the forearm), wrist rests are needed. Soft silicone gel offers the least resistance and pressure on the wrists.

Examples:

<i>BRILA Ergonomic Silicone Mouse Wrist Rest (\$9-10)</i>		<i>Staples TECH Gel Non-Skid Wrist Rest (Blue, Purple only- \$17-20)</i>	
<i>Kensington ErgoSoft Gel Wrist Rest, Non-Skid Backing (\$12-15)</i>		<i>Fellowes Photo Gel Keyboard Wrist Rest (\$15-25)</i>	
<i>IMAK Le Petit Cushion Ergobeads Wrist Rest (\$10-15)</i>		<i>3M Gel Non-Skid Wrist Rest for Keyboards (\$26-30)</i>	

Be sure the wrist rest height is no higher in profile than ¾”.

Footrests

Footrests provide relief from pressure on the back of the leg when a chair is raised, and a person's feet are unable to be placed flat on the ground. The choices are numerous with prices ranging from \$30 to \$100. While a more expensive footrest may come with an appealing design, it's unlikely anyone will see it under a desk. Instead, consider selecting ones with the following features:

- Stable/non-rocking motion
- Multiple adjustable heights – for petite employees, up to 7 inches
- Low profile footrest – for individuals who need 2-3 inches of height/support.

	
Example: Kensington SmartFit Solemate	Example: VIVO Black Adjustable Foot Rest

Alliant does not endorse any product or manufacture mentioned. Suggestions are based upon experience with these products at customer sites. It is the sole discretion of the organization to determine equipment selection. To determine the best ergonomic equipment option, a professional ergonomic evaluation is recommended.