

# Ergonomic Considerations when purchasing office furnishings:

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## Ergonomic task chair

An ergonomic task chair does not need to have a multitude of adjustments to be a good fitting chair. In fact, too many controls can be a deterrent to getting a proper fitting chair. An ergonomic task chair should have the following essential adjustments available to the user:

- Seat height-capable of being adjusted low or high enough for the user to have feet flat on the floor and thighs parallel to the floor.
- Seat pan depth- capable of adjusting forward or back to allow at least 2 inches of clearance behind the knees.
- Lumbar support -that adjusts to fit the small of the lower back.
- Armrest height- able to move armrest height to where it is no higher than seated elbow height.
- Back recline tension- self adjusting recline, or the ability to adjust the back recline tension so user feels supported throughout the recline range. User should be able to easily recline at workstation and feel like they will not fall backwards and enough tension that they do not feel like they are thrust forward when they sit up.

## Work surface and key board trays

Most commercial desks are manufactured at a height of 29.5". Ergonomically speaking, this is the correct working height for a 6'4" male; less than 2% of the population. As a result, unless you are 6'4" tall the work surface results in a keyboard and mouse position that is too high and far away from the body. Since most desks are manufactured this way, a common fix is to install an articulating keyboard support. In order for a keyboard support to be a successful alternative, it should have the following features:

- Platform should be large enough to accommodate keyboard and mouse, or ideally have an independent mouse platform.
- Platform needs to be sturdy while maintaining a thin platform. A lack of sturdiness is the key component in whether a keyboard support is used.
- Integrated palm support for keyboard
- Negative tilt adjustments

## Sit/Stand Desk Options

Many folks would like the option of standing while working. Sit/stand desks are a good choice as long as a few key points are considered before purchasing. It should be noted that recent research has shown that while standing is a good idea while working, it is not recommended that people stand for longer than 10-15 minutes an hour. Standing for long periods of time is linked to foot pain, varicose veins, and static muscle fatigue. Studies show that for a sit-to-stand desk to succeed, it is important that the sit/stand option chosen requires minimal time and effort to adjust. Key things to look for when purchasing a sit/stand desk or unit that fits on your existing desk:

- Ease of unit going up and down- counter balanced units offer the most ease and take the less time to adjust. Crank units require 2-3 minutes to adjust and can require considerable manual effort. Electric units require less time, 20-30 seconds and require a power source.
- Sturdiness of the unit is important. Once adjusted up or down, it should not be flimsy and bounce around when working.
- Sit/stand desk should have all-in-one movement. That means it is important that the keyboard, monitor, and work surface work in unison up and down without additional adjustments.
- Sit/stand units that are most successful are ones that have the ability to have an articulating keyboard attached and a monitor holder that move up and down with the user.
- The sit/stand desk should be capable of adjusting to the correct height for the user. Challenges may occur in people that are shorter or taller than the average user. Check to make sure the desk will go down far enough for the seated user. If the sit/stand desk goes down far enough for the user, they may not need a keyboard and mouse tray.

Optional sit/stand workstations that attach to an existing desk are an economical option; however there are some considerations in purchasing one that will work for the user.

- It should lift up and down easily and be sturdy when in the elevated (standing) position.
- It should be established before purchasing that the monitor(s) can be adjusted to the correct distance and height whether you are sitting or standing with minimal readjustments.
- In most cases, there will still be a need for a keyboard tray installed on the existing work surface, unless the unit has an articulating keyboard tray that comes out over the desk and can go low enough to have arms in a neutral position. If not, once lowered to the desktop, the keyboard and mouse will need to come off easily and be put onto the tray. In this case, it may be beneficial to have a wireless keyboard and mouse.
- If a user sits in the corner of a desk workstation, we do NOT advise the Vari-desk units as they are currently designed. The corner unit will usually require additional monitor arms attached to get the monitor(s) at the recommended height and distance from the user. The addition of the weight of monitor arms to the desk and the position in the corner of the desk, put the user in a vulnerable position for back injury when lifting the Vari-desk to use in the standing position.