

Ergonomic Seating Adjustment Guide

There are three contact areas in the work space that affect the worker's posture: the seat, the work surface (desk top or keyboard) and the floor. To ensure the most comfortable posture possible, two of these factors have to be adjustable. If you can afford to do nothing else, **a fully adjustable chair is a "must"**.

A chair that is well-designed and appropriately adjusted is an essential element of a safe and productive computer workstation. A good chair provides necessary support to the back, legs, buttocks, and arms, while reducing exposures to awkward postures, contact stress, and forceful exertions. Increased adjustability ensures a better fit for the user, provides support in a variety of sitting postures, and allows variability of sitting positions throughout the workday. This is particularly important if the chair may have multiple users.

A basic rule of ergonomics is that there is no such thing as an "average" person. However, providing a chair specifically designed for each individual is not practical. However, GSA has competitively awarded a contract for ergonomically adjustable chairs that can accommodate a maximum range of people (typically around 90 percent of the population). Workers falling in the ranges of 5% of the shortest and the tallest may need more customized chairs. The National Stock Number (NSN) Ergonomic Seating Brochure which includes a description of the ergonomic features, a listing of the stock numbers for the available colors and fabric options, and information on how to submit and pay for your order is available at www.gsa.gov/ergonomic.

How do I adjust a chair for my height?

Potential Hazard: Using a chair with a seat that is too high may force you to work with your feet unsupported or encourage you to move forward in the chair to a point where your back is unsupported making it more difficult to maintain the S-shape of the spine (Figure 2). These awkward postures can lead



1. Stand in front of the chair.
2. Adjust the height so the highest point of the seat, (when in the horizontal position), is just below the knee cap.

Once your chair is properly adjusted for your height, check if you can sit at the workstation comfortably with your legs underneath.

If you cannot fit your legs under the workstation or there is not enough space to move them freely, your workstation is too low for you and you should not use such a workstation on a regular basis! Consider purchasing an Adjustable Height Desk. Many styles are now available for purchase on GSAAdvantage!

If you can sit comfortably but need to elevate your arms in order to place them over the work surface, your workstation is too high. Adjust the chair height so your elbows are about the same height as the work surface. **If you cannot place your feet flat on the floor, consider purchasing the Skillcraft® ergonomic footrest (NSN 7195-01-590-9070) which is available at www.gsaglobalsupply.gsa.gov and is adjustable to support both feet and allow you to keep your feet flat and firm on the footrest.**

Potential Hazard: An inappropriately sized seat pan can be uncomfortable, provide inadequate support to the legs, and restrict movement. One that is too short can place excess pressure on the buttocks of taller users, one that is too long can place excess pressure on the knee area of shorter users and minimize back support. One that is too small can restrict movement and provide inadequate support. Prolonged use can restrict blood flow to the legs and create irritation and pain.



4. Sit on the chair and keep your feet flat on the floor.
5. Check that the clearance between the front edge of the seat and the lower part of the legs (your calves) fits a clenched fist (about 5 cm or 2 inches) and adjust the “depth” of the seat pan accordingly.

The seat pan should provide support for most of the thigh without contact between the back of the user's knee and the front edge of the seat pan. A footrest (**NSN 7195-01-590-9070**) **may also be used to elevate the** slightly to relieve pressure on the back of the leg.

While all the ergonomic seating available through GSA Global Supply features seat pans that are wide enough to accommodate the majority of hip sizes, Intensive Use 24/7 Task Chairs are also available with oversize seat pan and thicker seat cushioning for larger users (See NSN 7110-01-630-5182).

Potential Hazard: Poor back support and inappropriate postures may result from inadequate backrest size, material, positioning, or use. Working in these postures may lead to back pain and fatigue. For example, a chair without a suitable or adjustable backrest will not provide adequate lumbar support or help maintain the natural S-shape curvature of the spine.



6. Adjust the back rest forwards and backwards as well as up and down so that it fits the hollow in your lower back.
7. Sit upright with your arms hanging loosely by your sides. Bend your elbows at about a right angle (90 degrees) and adjust the armrest(s) height until they barely touch the undersides of the elbows.
8. Remove the armrests from the chair if this level can not be achieved or if armrests, in their lowest adjustment, elevate your elbows even slightly.
9. Tilt the seat itself forwards or backwards if you prefer.



Different office tasks require different equipment, accessories and layouts.

Nonetheless, the chair and its adjustment remain constant for the majority of setups in a typical office environment.

Visit www.gsa.gov/ergonomic for the National Stock Number (NSN) Ergonomic Seating Brochure, a complete description of the available chairs and features, a listing of the stock numbers for the available colors and fabric options, as well as information on how to submit and pay for your order. Please refer to www.globalsupply.gsa.gov for the most current pricing.

If you have additional questions, contact our National Customer Service Center at (800) 488-3111 or NCSCcustomer.service@gsa.gov