

## 10 rules to follow in choosing an ergonomic chair:

1. Make sure casters fit the intended use of the chair – i.e. Nylon casters for carpet, urethane casters for hard floor surfaces, etc.
2. The base of the chair should be the correct size and type for the size and type of chair. If bases are plastic, they should be made of 30% glass-reinforced nylon.
3. Pick a chair with a pneumatic seat height adjustment. This allows the seat height to be easily adjusted, acts as a shock absorber when sitting down and allows the chair to swivel so you don't have to twist your back when reaching for things. A brand name gas lift from one of the original manufacturers is advisable, as many lower priced versions are unproven at best.
4. The seat pan should tilt forward and backward, should lock into any position to provide the variation in postures required by the human body, and have a tilt tension control if the seat has a free float mode.
5. For a proper fitting seat:
  - a) The seat size must allow the user to sit back against the backrest while leaving approximately a three-finger width of clearance between the back of the knees and front of the seat.
  - b) The seat should have a waterfall (curves downward) front edge to reduce pressure on the veins beneath the thighs and should subtly curve up at the sides to redistribute the user's weight away from their seat bones.
  - c) The seat should **not** be 'dished out' (dip inward in the centre), which puts pressure on the veins beneath the thighs and should not rise up at the back middle portion of the seat pan, as that puts extra pressure on the base of the spine.
  - d) The seat pan depth should be adjustable.
6. To ensure the best support for your back:
  - a) The backrest must have a firm lumbar support built into its structure, not just the foam, as foam alone cannot provide the force necessary to reposition the lumbar spine back into its natural curvature.
  - b) The backrest must also have lateral curves to support the upper body, so as to reduce the amount of muscle activity required to keep it in the upright posture.
  - c) The backrest should be covered with foam to avoid having a hard structure come in direct contact with the user's back and should not have hard edges that can cause discomfort for some users.
  - d) The backrest should be the correct size for the length of the person.

7. The angle between the seat pan and back support should be greater than 90 degrees to help reduce stress on the structure of the spine. The backrest angle should be adjustable to greater than 90 degrees to allow the user to vary the amount of support.
8. The lumbar support should adjust up and down to fit people of different body types. A large range in lumbar height adjustment is more necessary than most people realize, as it must not only accommodate people of different heights but people of different weights, especially when additional weight is carried on the buttocks.
9. Adjustable arms (when appropriate) should:
  - a) Allow the user to pull their chair close to their work surface;
  - b) Support the weight of the arms to reduce stress on the shoulders and neck;
  - c) Provide guidance and support when getting in and out of the chair.
10. Adjustable chairs must be safe and well built to avoid injury. A low quality adjustable chair can cause more harm than good.