

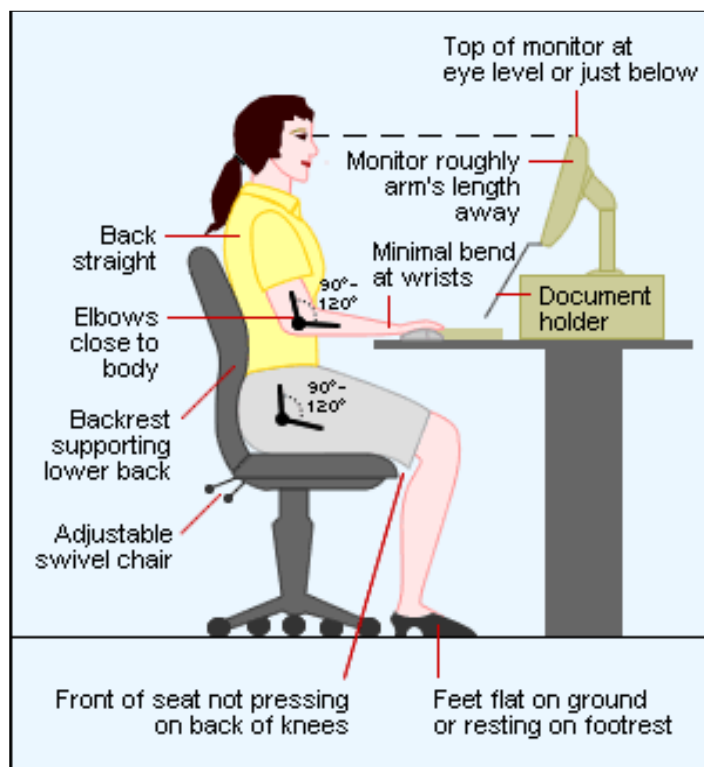


## Workplace seating and equipment

It is important to ensure that workplace seating is meeting an individual worker's needs. Providing suitable and comfortable seating and associated equipment in the workplace will promote good posture and may prevent injury.

People who are having difficulty within their work environment may benefit from using a specific type of seat and additional equipment which improves their posture and enhances their comfort. Workstation design and layout, how the desk and computer are set up, the choice of office or workshop seating, whether back cushions, footstools or other types of body supports are needed, are factors to consider. Attention to these aspects of workplace set-up may allow a person to perform job tasks more effectively and comfortably, as well as help reduce the risk of injury in the future.

### Desk and computer set-up



From website: Ergonomics-Info.com

## Office chairs

### Features to consider when buying an office chair

- If a number of people use the same chair, the seat height, backrest height, armrest height and position of the backrest in relation to the seat should be easily adjustable.
- Be careful if you sit at a computer workstation in a chair with armrests, as they may encourage you to lean to one side or prevent you from getting close to the desk.
- Adjustment can be manual or gas assisted.
- Chair height should permit the user's forearms to be held comfortably at table height (with elbows at 90 degrees) and the lower back should be well supported. This may mean that a footrest is also required in order to support the feet and ankles.
- The back support should curve into the lower back and be slightly curved sideways around the trunk. Some office chairs feature adjustable back contouring to better suit the user's posture. The back support should extend from buttocks to shoulder blades.
- Some office chairs feature a 'free floating' back which will move with the user and provide more constant back support as they lean forward and back.
- A seat that tilts forward can help maintain the natural curves of the back. Seat tilt provides adjustability but some people find this uncomfortable and a seat base parallel with the floor is quite acceptable. An open angle between the trunk and thighs may improve spinal position and comfort. This can be achieved by slightly reclining the backrest.
- Seat bases that promote a forward tilt of the pelvis may also assist in relieving back pain.
- A five-point star base on castor wheels provides stability and mobility. Glides may be safer on hard floors so that the chair does not move too quickly.
- Comfort is a very individual sensation, and different people can sometimes have quite different opinions of the same chair. 'Try before you buy' is always good advice.



**Load capacity:** Load capacity is the maximum occupant-weight recommended by the manufacturer for a product. It varies between chairs. It is important for the occupant's safety that their weight is not greater than the load capacity. Office chairs with higher load capacities are available. Load capacity may also be written as SWL or load test. A kilogram (kg) weight is then provided.

## Workplace stools

Sit-stand or sit-lean stools are used in a variety of work environments and are useful for people who are required to work at benches, alternate postures regularly or complete work tasks for long periods of time such as when working on an assembly line. They place the user in a semi-standing position which can be adjusted depending on the nature of the work, the work environment, height of the workstation, and duration of the task. The overall aim is to ensure correct spinal posture, whilst reducing fatigue during work tasks.

Sit-stand stools are height adjustable and the seat can be tilted to improve lower back posture and comfort. A range of sit-stand and sit-lean stools exist and can be adapted to suit many situations and environments. Stools are available with or without backrests, with saddle style seats and with or without castors or glides.



## Kneel sit chairs

A kneel sit chair is a type of chair for sitting which creates a body angle of 90 degrees or wider, by lowering the angle of the lower body while keeping the spine in alignment and the sitter properly positioned to the task. Some of the weight bears onto the shins, not the knees. The primary function of the shin rests is to prevent the user from falling forward out of the chair. Most of the weight remains on the buttocks. This position may reduce stress on the spine and surrounding muscles. Kneel sit chairs have a forward slanting padded seat and supportive knee pad both of which usually have a tilting mechanism to enable change in position. Some models have a backrest. If there is no lumbar support posture and comfort may be compromised.



## Exercise balls

Exercise balls (stability balls or fitballs) are sometimes used as office chairs. Abdominal muscles must be constantly engaged to prevent falling off the exercise ball and although balance and core strength may be improved, sitting on a ball for prolonged periods can increase fatigue and make back pain worse. Because they do not have armrests or a backrest your upper body is not fully supported. There is little, if any, evidence that the effect fitness balls have in exercise and training makes them suitable for use on a daily basis as a seat at work. They are generally not suitable as office chairs because they are not adjustable in height and back position, may not be stable and safe to use, do not have appropriate lumbar and thigh support, do not allow the movement possible with an office chair, and do not allow a variety of supported postures relevant for the work being done. Some government work authorities warn against their use.



## Footrests

Footrests support the feet when the person is working from a seated position in situations where they have adjusted their chair for optimum arm positioning whilst working at a desk, keyboard or mouse, and consequently cannot place their feet flat on the floor. If the feet remain unsupported when working from a seated position, circulation to the legs can be restricted due to too much pressure on the back of the thighs. This can also place extra pressure on the lower back due to the tendency to lean forward away from the support of the chair in order to obtain foot support.



When considering which footrest to purchase, take into account not only the look and price of the product but the amount of adjustability required, whether it is to be a multi-user workstation and how easily it can be adjusted. Can this be done by the person, using their feet, or do they need to bend down under the desk to make the adjustment?

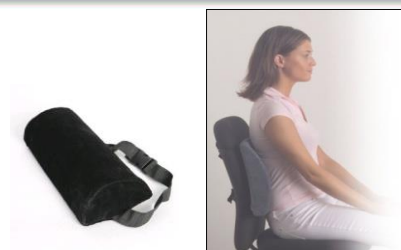
Specific types of footrests are available in a range of materials and designs including:

- adjustable height and angle footrests which can be adjusted by the person using their feet
- custom made footrests for situations where users may have different length legs or be of a height that requires a specially made model
- fixed height, non-adjustable footrests
- gel footrests, or footrests with inbuilt rollers, massage capacity or heated panels
- highly adjustable footrests in both height and angle required to be adjusted by hand and most suitable to single user workstations
- rocking footrests
- footrests with antimicrobial protection for use at multi-user workstations
- footrests or steps (instead of a foot ring) designed specifically for the base of drafting stools which lift to a greater height than a standard chair



## Back supports

Contoured back support cushions support the spine and lumbar area, and a foam lumbar roll may improve lower back comfort.



## Wrist and forearm supports

Wrist supports are designed to support the forearm, wrist and/or fingers in a straight line when using a keyboard and/or mouse. Wrist supports come in a range of different models according to the type of keyboard or computer they are being used with, and are made from hard foam and gel with neoprene covers.



Although a need for movable forearm supports is rarely indicated, these products are designed to provide support to the forearms whilst performing repetitive tasks, keyboard work or other table top activities. The support gutter and articulated arms are connected by three swivel joints and attach to the desk with an adjustable clamp. The supports are height adjustable and rotate through 360 degrees and through 180 degrees at the desk mounting, but move in only the horizontal plane.



### A few questions about your workstation:

- **Telephone set-up** – Is the telephone located close to you, within easy reach? Could you use a headset designed to allow hands-free telephone conversations?
- **Desktop layout** – Are frequently handled objects within easy reach?
- **Sitting position** – Are your monitor, keyboard and mouse directly in front of you so that you are not reaching sideways to use them?
- **Document holder** – Is it positioned between the screen and the keyboard?
- **Computer monitor** – Is it supported on an extender arm which would allow greater flexibility to position and move the screen, and increase free desk space?
- **Computer mouse** – Is it positioned close to you and at the same level as the keyboard? Would a different type of mouse be easier to hold?
- **Laptop** – Do you use a stand, or external monitor together with an external keyboard and mouse?
- **Lighting** – Is it bright enough, and without glare? Would a computer screen glare guard help?
- **Comfort** – Do you change your posture frequently, take regular breaks and drink plenty of water?

There is a wide range of workplace equipment and seating on display at ILC Tas

## Contact ILC Tas for more information



Ring **1300 885 886** to speak to a health professional

Visit our website [www.ilctas.asn.au](http://www.ilctas.asn.au) or email us at [ilc@ilctas.asn.au](mailto:ilc@ilctas.asn.au)

Make an appointment to visit our centre at 275 Wellington Street, South Launceston

Ring us to find out when we will be visiting your area

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