

## Chair Features - Your Basic Guide

To promote good posture at work it's important to have appropriate adjustability options.

#### Backrests:

**Back Height:** <u>All</u> office chairs should offer an adjustable back height, to ensure adequate support is provided to the thoracic and lower back. Since individuals vary in height and anatomical measurement, it is well worth choosing a suitable size backrest to meet the individual office workers needs and as a preventative measure to reduce instances of possible back and shoulder pains.

**Angle-Adjustable Backrest:** This requirement is essential in helping the user gain a fully supported posture, which should be adjusted throughout the day and while undertaking different tasks.

Thoracic Support: Mid-back support

Adjustable Lumbar Support: Often inflatable by hand pump or by hand wheel operation

**Pelvic Support**: Pushes the pelvis inwards to promote a natural s-shape spine and discourages slouching

**Split or Duo Backrests** – two backrest panels that move independently, supporting the main muscles whilst leaving the spine untouched. (No pressure on protruding discs. May suit those with scoliosis).



# Seats:

**Seat Height -** Every computer chair for DSE use in an office needs to have a seat height range. It's important to consider your workstation height and whether the chair can ensure your arms are at the optimum angle in relation to your desk. A variety of footrests can complement the set up.

**Seat Slide -** All of our 'ergonomic seating' range can provide around 5 cm of depth adjustment. Depth-Adjustable Seating not only accommodates the longer or shorter femur length user, but can also provide additional support for the thighs, which can reduce stress on the lower back. When the seat is too long, the user is unable to make contact with the backrest. (It also allows the chairs to be adapted for other users).



**Seat Pan -** It's not just the seat slide that is most important ...it's the size of the seat! Perhaps you need a short, long/deep, wide or narrow seat pan? When choosing an office chair, you'll need to consider the individual's body measurements, based on their physical size and shape. Human factors are becoming more important as original anthropometric data is out of date with today's workforce.

**Waterfall Edge** – encourages blood circulation by tapering away behind the knee thereby avoiding pressure application.





# Additional Seat options:

**Seat Tilt -** Allows seat to tilt forward placing hips higher than knees for an open or dropped pelvis. May relieve pressure on coccyx or central area and assist with sciatic pain. Also encourages the spine to take on its natural S shape.

**Split Seat** – The front half of the seat is split to offer two seat panels that move independently and can be folded downwards to reduce pressure on the legs. (May suit those with limb shortening, hip conditions or prosthetic limbs).

**Coocyx cut out –** Hollowed foam to relieve pressure on the coccyx area

**Memory foam –** Pressure relieving foam which moulds to user shape

### Other Options:

**Body tension mechanism:** Counter-balances movement (backrest only or seat and backrest) to support the user's instinct to 'fidget'.

**Free-Flow:** With adjustable tension that should be sensitive enough to suit user weight. This preferable feature allows for continual movement at your workstation, not only because adopting a static position for long periods of time can cause fatigue, but regular movement increases blood flow and will keep you more alert.



**PCB (Permeant contact back):** Seat remains static while backrest follows your movement. PCB's may not have a weight tension.

**Anti-Shock Mechanism** – Prevents backrest from 'accidently' impacting on the user with force



**Synchronous Mechanism –** Fixed ratio between backrest and seat – may not suit all body shapes or tasks.

**Asynchronous or Independent Mechanism -** Seat and backrest angles can be adjusted independently for optimum comfort.



**Swivel lock –** Stops the chair rotating. Varieties can be fixed, part (90 degrees) or locked on/off.

**Movement lock** - Stops the chair moving or rotating when getting in or out. Can be fitted in addition to a swivel lock.





### Armrests:



**Ring arms –** fixed height. Generally of little use and can cause other issues.

**Height Adjustable** (HAA) – up and down to support length of arm.

**3D -** Offer the flexibility to adjust the height, width and depth – some also offer locking twist features

**4D -** Offers height, depth width (at seat) and arm pads that width adjust inwards and outwards over the hips.

**Fold-down Arms:** The complete armrest assembly can fold backwards so that the chair appears not to have arms at all. Note: Can offer unrestricted access for those transferring from a wheelchair.

You should however make sure that if your chair features armrests, they are not restrictive by preventing the user from getting sufficiently close to their desk and in turn cause unnecessary stretching – i.e. encouraging movements well outside of the 'easy reach zone'.

## Castors:



Soft Castors: for hard floors

Hard castors: for carpeted floors

**Brake loaded:** Prevents the chair from moving when weight is applied.

**Unloaded:** Prevents the chair from moving as the user get out of the seat.

