Ergonomic Equipment Purchasing Guideline

Chair
How to choose a suitable office chair?

Chairs are not a ‘one size fits all’. Individuals of different heights and statures require different chairs and it is recommended that a chair is appropriately sized for an individual before purchase. Sizing guidelines and other factors to consider are listed below:

Chair essentials  All office chairs should have the following adjustments as a minimum: adjustable chair height, adjustable backrest height, adjustable backrest tilt. Optional adjustments include seat tilt, adjustable level of lumbar support, synchro ‘rocking’ mechanisms, and seat slides.

Seat size - depth  When sitting upright and back on the chair with feet flat on the ground there should be a 2-3 finger gap between the front edge of the chair and the back of the knee. If there is no gap, the chair is too large. If there is a large gap the chair is too small. To determine seat depth, measure the straight line distance from the back of the seat to the front of the seat.

Seat size - width  The width of the seat should adequately support the user. Check the dimensions of the chair against that required by the user. To determine seat width, measure the straight line distance from one side of the seat pan to the other.

Weight Rating  Check that the weight rating of a chair is suitable for the user, most standard chairs are weight rated to approximately 130kg. Heavy duty chairs are available and should be purchased for those requiring a stronger support base. This is an important factor for safety as well as the lifespan of a chair.

Material  The choice between mesh and cushioned chairs is one of personal preference for comfort.

Armrests  Armrests are generally not recommended as often encourage the user to adopt a sub-optimal posture by slouching or leaning to one side whilst resting on the armrests. Postural awareness should be encouraged. If a chair comes with armrests, they should be height adjustable to minimise obstruction to optimal positioning. Armrests should be lowered or removed if a user is unable to tuck chair in because armrests hit the desk edge. Armrests may be necessary in circumstances where an individual requires assistance / support to rise from, or lower into, their chair.

Casters  Choose casters or ‘feet’ that are suitable to the floor surface e.g. standard casters are suitable for carpet, however glides or casters with breaks may be more suitable for hard flooring.

My chair is broken, what do I do?

Chairs purchased from our preferred suppliers come with a warranty. It is recommended that each department that orders equipment keeps a record of purchases and warranty periods, and contact the supplier in the event that the chair is broken or malfunctioning within this period.

Casters (the wheels on a chair) can be easily replaced if broken and chair height mechanism (gas lift) can be repaired. Your manager or administrative team may have spare casters available that are easily replaced by the user (or submit a MEX request for assistance), alternatively, contact the supplier to assist. If the chair is unable to be repaired and no longer within the warranty period it should not be in use and should be disposed of appropriately. The foam seat cushioning will also wear out over time. It is recommended a chair is replaced when no longer providing adequate support. Submit a MEX request if you are needing assistance to dispose of an unusable chair. If the chair can be reused, consider posting it to the JCU Warp It system.
Mouse & Keyboard
What are the different types of mouse and keyboard for?

The most ergonomic position for our hands, wrists, elbows and shoulders is one which places the joints and muscles in or close to a ‘neutral’ position, meaning there is less stress on the musculoskeletal structures. The different types of mouse and keyboards available aim to reduce the stress on our upper limbs and hands by moving us toward these neutral positions. Some individuals find they are able to use the ‘standard’ mouse and keyboard their whole life without any problem, others may require different equipment.

The size of a mouse is also important, individuals with particularly large or small hands should have an appropriately sized mouse to prevent unnecessary pressure or strain. Any change in mouse or keyboard use can take a short time to get used to.

An example of the options available from JCU’s preferred supplier include:
- Vertical mouse – aligns wrist and elbow in neutral position;
- Split keyboard – aligns wrist and elbow in neutral position, suitable for touch typists;
- Compact keyboard with no number pad / external number pad – allows the mouse to be positioned closer to keyboard to align shoulder in neutral position.

Should I get a wrist rest for my mouse/keyboard?

Before purchasing a gel / cushioned wrist rest, think about the reasons why you feel it is needed and if it is possible to address the underlying cause of discomfort. Wrists should not be angled down and resting on the desktop whilst typing (see picture), as this leads to compression and an angling up of the wrist. If an individual is experiencing pain or discomfort due to this practice, the typing method should be reviewed. Wrists should not be resting on a wrist-rest while mousing as it restricts movement from the shoulder, causing an increased reliance on wrist movement, and compression under the wrist.

Wrist rests are not a necessity, and when used incorrectly they can contribute to the development of hand/wrist pain or discomfort.

A floating typing posture (pictured) is recommended for individuals who can touch type. This typing posture lifts the wrists off the desk while typing to neutralise the wrist joint and to remove compressive forces. Wrists can be rested on the desktop surface when not typing. The alternate typing method is a supported posture where the majority of an individuals forearms rest along the desktop surface. In the supported position there is no need for a wrist rest.
Phone
What are the benefits of a headset?

A headset is useful for employees frequently required to type on the keyboard whilst using the phone. A headset allows the employee to maintain a neutral neck position whilst performing these two actions simultaneously. Consideration should be given to a cordless headset as this allows the user to alter body position whilst making telephone calls, in line with the HSE-GUI-008f Activity Based Work Guideline.

Floor mat
Should I be using a plastic floor mat?

Plastic floor mats can present as a trip hazard and have caused injuries in the past. Plastic floor mats should only be used if plush carpet or underlay creates too much friction and prevents ease of chair movement. Before purchasing a floor mat, inspect chair wheels for dirt blockages or cracks, and replace if necessary. Plastic floor mats should be inspected regularly and replaced if cracked or curling up at the edges.

Document Holder
What type of document holder is best?

There are two main types of document holders, A4 Document Holder and a Copy Holder. Document holders are an important consideration for those who frequently work between paper based tasks and computer tasks. Which document holder is best is dependent on the task being performed, the type of material being referenced, and the available space.

<table>
<thead>
<tr>
<th>A4 Document Holder</th>
<th>Copy Holder</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="A4 Document Holder" /></td>
<td><img src="image" alt="Copy Holder" /></td>
</tr>
<tr>
<td>Description</td>
<td>Holds sheets of paper to one side of the computer screen</td>
</tr>
<tr>
<td>Positive</td>
<td>Reference material is at the same height as monitor to promote neutral neck posture</td>
</tr>
<tr>
<td></td>
<td>Can attach to computer screen or desk</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative</td>
<td>Heavy/bulky reference material may not be supported</td>
</tr>
</tbody>
</table>
Desk
I wish to purchase a new desk, what should I consider?

There are a number of factors that impact upon the ability to obtain an optimal ergonomic set up, and should be considered when purchasing a new desk. These include:

- Desk depth: 80cm with adequate clearance above the desk for monitor placement;
- Desk height: 68 – 73.5cm tall (from floor to worktop), providing sufficient clearance under the desk i.e. be aware of structural components of the desk that may interfere with leg movement including the use of a footrest;
- Desktop thickness: 2.5cm to provide adequate clearance for legs.
- A smooth flat surface for keyboard and mouse;

I am interested to know more about Sit to Stand Workstations, what information do we have?

Please refer to HSE-GUI-008d Sit to Stand Workstation Information Guideline for information about height adjustable workstations.

Equipment Suppliers

JCU has preferred suppliers for purchasing ergonomic office equipment. These suppliers include:

Winc (formally Staples)
www.winc.com.au
Contact: Karyn Berra
Ph: 0409 636 474
E: karyn.berra@winc.com.au
Some items including chairs are available to be viewed at Winc in Townsville and Cairns.

Empire Furniture
www.empirefurniture.com.au
Contact: Brett Ryan
Ph: 07 4775 1960
E: BrettR@empirefurniture.com.au
Some items including chairs are available to be viewed at Empire Furniture in Townsville.

A list of other preferred suppliers can be found on the JCU staff homepage under Procurement.

Equipment can be purchased through the JCU Winc online catalogue, accessed by logging in to the Winc website, or through My Requisitions

Please direct purchasing enquiries and requests for assistance to procurement@jcu.edu.au