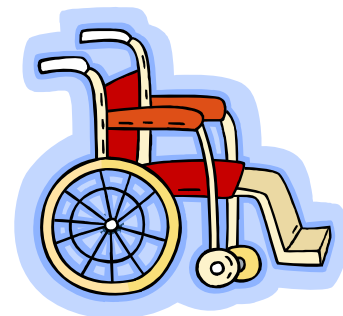




Information Sheet

Wheelchairs or Scooters: selecting a manual wheelchair

For some people, a manual wheelchair is the only way they can get about. For others it is a way that they can enjoy time out with their family or friends without getting tired. Either way, there are many different wheelchairs from which to choose but finding the right one is not always easy. The following tips may help.



Weight

A lightweight wheelchair is easier for someone to lift in and out of a car and reduces the overall weight that someone has to push around.

Frame

Wheelchair frames are made from various materials such as steel, aluminium, titanium or carbon fibre, which differ in properties and weight. Some wheelchair frames include anti-tip wheels to prevent the wheelchair from tipping backwards, and tipping levers to assist an attendant to tilt the wheelchair to negotiate kerbs and small changes in terrain height. Wheelchair frames may be rigid or folding. Many manual wheelchairs fold up to make them easier to store and transport in a vehicle, and have removable quick-release rear wheels and footplates which make the wheelchair lighter and easier to fit into a car boot. Rigid frame wheelchairs, as the name suggests, cannot be folded. However, they do tend to be lighter and can still fit into a car by removing the quick release rear wheels and folding down the backrest (if the wheelchair has this feature). Rigid frame wheelchairs also have the advantage of having less moving parts, making them stronger and easier to push.

Size

The correct fit of a wheelchair seat size is very important for safety, comfort and function. Wheelchair seats that are too small or too big can provide inadequate support, cause pressure areas and make it difficult to self-propel. Some wheelchairs can be made to measure.

Getting the correct floor-to-seat height is crucial if someone is using a foot (or both feet) to self-propel their wheelchair.

Rear Wheels

If someone is going to be pushing themselves in the wheelchair (self-propel), large rear wheels, usually a diameter of 60 centimetres (24 inches), with hand rims are needed. Large rear wheels can also be useful when trying to get a wheelchair up a kerb or when going over rougher terrain.

These large rear wheels are generally removable via a quick-release axle to assist with transport or storage. Push rims are usually metal, and rubber coated push rims can assist with gripping.

Small rear wheels, usually a diameter of 30 centimetres (12 inches), are generally used when someone cannot push themselves, or where the person in the wheelchair is likely to injure themselves or their carer by grabbing the wheel. A wheelchair with small rear wheels is easier to get into a car. A wheelchair with small rear wheels is generally called a 'transit' (or 'push-transit') wheelchair.

Spoke wheels are generally lighter in weight but require maintenance. Mag wheels are made from one-piece moulded plastic or metal and require less maintenance but may be more expensive. Adjustable axles enable the rear wheels to be positioned for stability, manoeuvrability and appropriate seat height.

Castor (Front Wheel) Size

Castors are available in many different sizes. Larger castors make it easier to go over bumps and uneven terrain but do require more effort to change direction. Smaller castors make it easier to change direction but are more suited to smoother terrain or to users that can easily lift the front of their wheelchair from the ground whilst self-propelling.

Tyres (rear wheels)

Tyres are available in a variety of materials including pneumatic, puncture-proof and solid. Pneumatic tyres are air-filled which provides a cushioned ride, but are prone to punctures and need to have their air pressure checked regularly. Puncture-proof tyres are similar to pneumatic tyres in providing a cushioned ride but instead of air they are filled with foam, plastic or a rubber insert which increases the weight of the tyre. Solid tyres require minimal maintenance and are easier to propel over a smooth surface but do not provide much shock absorption over an uneven surface, creating a rougher ride for the user. High-pressure sports tyres have very little tread and have less rolling resistance for efficient self-propulsion.

Leg rests and Footplates

Most wheelchairs have two flip-up footplates that swing away and are removable to facilitate standing transfers. A once piece flip-up or removable footplate may be preferred by some people. Elevating leg rests may be required for those with limited knee bending or swelling in their feet.

Arm rests

Arm rests are available in a range of styles, including full length and desk length. Most arm rests have some form of padding and may flip back to facilitate sideways sliding transfers and enable a person to access desks and tables. Full-length arm rests may assist people to stand up from the wheelchair, whereas desk length arm rests facilitate access to desks or tables. Some arm rests are height-adjustable and many have an attached cloth or skirt guard underneath the arm rest padding to provide protection for the person's thighs and clothing from the rear wheels.

Backrest

A backrest is designed to support the trunk of the user and can vary in height depending on the functional ability of the wheelchair user. Users with poor sitting

balance may require a higher backrest than users with good upper body strength. It is important that the height of the backrest on a self-propelling wheelchair does not affect the ability of the user to propel the rear wheels.

Backrests can vary in style (fixed, removable, folding or height-adjustable) and material (slung, tension-adjustable or solid). Most wheelchairs are supplied with a slung material backrest.

Solid backrests may be custom made and may provide greater postural support than slung backrests. Solid backrests can be made out of many different types of materials including foam, gel and a mixture.

Headrests can be mounted to a backrest if head and neck support is required by the wheelchair user.

Load Capacity

All wheelchairs have a load capacity (maximum weight) that they can carry. This includes not only the person but also the weight of anything else being carried on the wheelchair such as an oxygen bottle.

Brakes

It is important that the brakes on a wheelchair are easily activated. Different styles are available to suit people with different abilities (for example brakes that push on, brakes that pull on, ones that are mounted down low on the wheelchair, or that swing out of the way under the seat). Extension levers are also available to make it easier for someone who has reduced strength or reduced reach to apply the brakes.

Transfers

Certain features can make it easier to get in and out of the wheelchair. If standing up when transferring out of a wheelchair, having footplates that can be flipped up and removed or swung away can make it easier. If a person slides across from the side to transfer, it might be easier to have arm rests that can be removed or flipped back. Brakes should always be applied when transferring on or off a wheelchair.

Camber

Camber refers to the angle of the rear wheel. Increasing wheel camber involves setting the rear wheel so that the top is angled in towards the wheelchair user and the bottom of the wheel is angled away from the chair. This increases the base width of the chair which will make it more laterally stable and easier to manoeuvre but which may also decrease access (it may be harder to get through doorways).

Cushions

Many wheelchairs come with very basic cushioning, if any. If you are spending any length of time in a wheelchair, have a history of pressure sores or are at risk of developing pressure sores, it may be worth considering a better quality cushion. Cushions for pressure relief can be made from many different materials depending on need. It is best to consider the cushion that will be used at the time the wheelchair is purchased, as it will have an impact on the size of the chair and how it is set up.

Other Considerations

- ▶ **Environment:** It is important to consider the type of environment in which the wheelchair will be used; including how easy it is to access and manoeuvre the chair within commonly-accessed areas such as the person's home, their workplace and local shopping areas. Floor coverings such as high pile carpet may affect a person's ability to self-propel. Outdoor terrain such as steep inclines, uneven ground, sand and distances travelled need to be considered when selecting a chair and if required, it may be worth considering whether a powered mobility device is a more suitable option.
- ▶ **Maintenance and support:** Consider availability of local support for servicing, maintenance and repair.
- ▶ **Advice:** With such a large range of wheelchairs and so many different options available, it is a good idea to trial products and get some professional advice. One way you can do this is by visiting the Independent Living Centre.

Contacting the Independent Living Centre

For further information or to make an appointment to visit the display please contact the Independent Living Centre.

The Independent Living Centre offers free advice on equipment and techniques to help you with everyday tasks.

Independent Living Centre
11 Blacks Road
Gilles Plains SA 5086

Phone: 1300 885 886 (SA & NT callers only) or 8266 5260

Fax: 8266 5263

Email: ilcsa@dfc.sa.gov.au

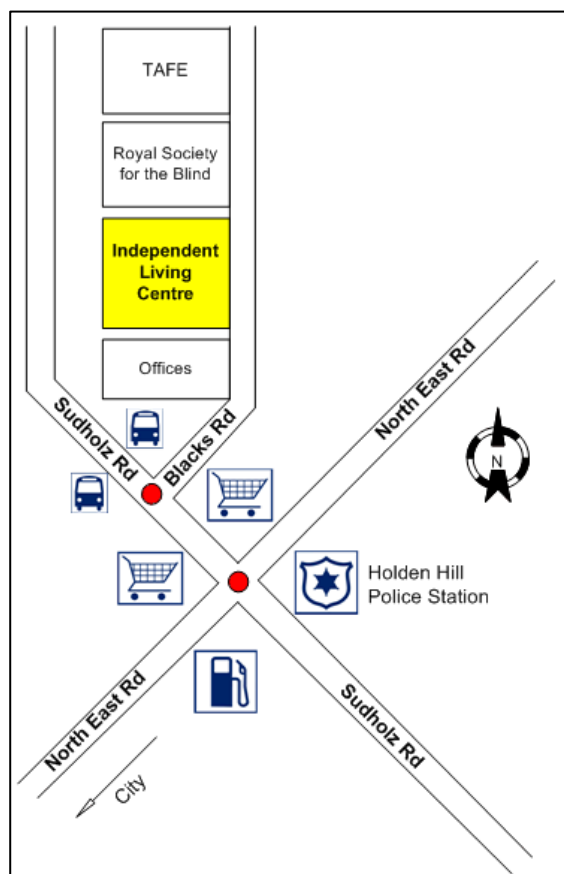
Website: www.sa.gov.au/disability/ilc

Accessible off street parking is available.

Bus routes:

From the city T500/T501 or 207/208 to Stop 28 Sudholz Road

Timetable information: 8210 1000



Copies of this publication are available from the Disability Information Service

Tel: 1300 786 117 Email: disabilityinfo@dfc.sa.gov.au Website: www.sa.gov.au/disability Version: Aug 2011



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