SITTING COMFORTABLY?

A user manual for wheelchair users

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In order to distribute the pressure in the best way possible, this means that the shape of the seat surface must fit the shape of this part of your body perfectly. Therefore, the wheelchair seat shape must be approx. 3 cm deeper at the back in the spot where your buttock bones are located when you are sitting (drawings 8 & 10). You have to imagine that what you are sitting on needs to be a kind of a cast of you.

If the base or the cushion is inflexible, this might mean insufficient space for your two buttock bones a & b. As a result, your muscles will get stuck and be exposed to a significantly higher risk of pressure than if the seat base and the cushion fit your bottom perfectly. At the same time, it will be difficult to stabilise your pelvis in a neutral position – i.e. on top of the rockers of the buttock bones (drawing 6) – which would also make it difficult to prevent the tissue from being exposed to shear (drawing 7).

Cushion

When you select a cushion, make sure that the seat base and the cushion match. If the seat base is to be tightened or is made up of a fixed plate, which cannot be shaped to fit you, the cushion needs to be thick enough to allow your buttock bones a & b to sink into the cushion material at a level similar to those additional 3 cm reached by the buttock bones.

If, on the other hand, you are able to utilise the fact that the seat base below the cushion can be shaped according to the depth reached by your pelvis bones, you need to select a cushion that fits the shape of the seat as well as the shape of your bottom and the additional 3 cm needed by your buttock bones (drawing 10). The advantage of this type of pressure distribution system is that the cushion does not have to be quite as thick and that it allows you to obtain a high level of stability through the combination seat base/ cushion.

The pelvis bones must not be able to reach through the cushion material to hit the seat base. If this is the case, the pressure distribution is insufficient. It is recommendable to seek professional and impartial advice concerning the choice of cushion in order to ensure good interaction between buttock bones, bottom, seat base and the cushion.

