

Solid ankle cushion heel (SACH) foot - passive keel



Description

Solid Ankle, Cushioned Heel (SACH) feet are prosthetic feet at their most basic.

SACH feet have no moving parts and an internal keel. In passive SACH feet the keel will not flex within the foot.

To perform the necessary foot function(s), rubber regions provide areas which will bend, flex or deform under load.

A heel wedge compresses at heel strike. This lowers the forefoot to the ground as weight is transferred onto the foot. As the user rolls over the toe the toe break flexes to smooth the transition.

Advantages

- SACH feet can be made lighter than almost any other foot of the same size.
- Reasonably waterproof.
- Quite durable.

- Inexpensive.
- Stable.
- Ideally suited to low activity and lighter weight users.

Disadvantages

- Rigid keel cannot bend.
- Heel height is fixed and cannot be readily customized.
- Minimal shock absorption.
- Almost no option to tune the foot to a users requirements.
- Fixed with a single bolt which can fail without warning.
- Active users will quickly overpower a passive SACH foot.