

Solid ankle cushion heel (SACH) foot - dynamic 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 dynamic SACH feet a flexible or dynamic keel allows forefoot to flex under load. As load is released, the keel returns to its original shape. The flex acts as a shock absorber and gives the user a little extra 'push' as their weight is transferred over the toe.

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.
- Quite waterproof.
- Quite durable.
- Inexpensive.

- Stable.
- Ideally suited to low activity and light to medium weight users.

Disadvantages

- Flexible keel cannot be customized.
- Heel height is fixed and cannot be readily changed.
- Improved shock absorption over passive SACH feet.
- Almost no option to tune the foot to a users requirements.
- Fixed with a single bolt which has been known to fail without warning.