Upper Extremity Socket Designs

**Supracondylar Suspension Socket Design**
Supracondylar suspension of the transradial (below elbow) prosthesis is achieved by extending the prosthetic socket proximal to (above) the epicondyles of the humerus (upper arm bone) and the olecranon (pointy part of the elbow).

**Suprastyloid Suspension Socket Design**
Suprastyloid suspension of the transradial (below elbow) prosthesis is achieved by creating purchase on the styloids (wide boney parts) of the wrist. This is done by using a soft insert or by creating an opening in the wall of the socket.

**Single or Double Wall Socket Design**
Single or double wall socket design describes the way an upper extremity prosthesis is fabricated. Sometimes it is necessary to have double wall construction to accommodate components or to make the prosthesis more cosmetic.

**Flexible Inner Socket with Rigid External Frame**
The flexible socket design is used by transhumeral (above elbow) and transradial (below elbow) amputees. The flexible socket creates total contact on the residual limb, while the rigid frame provides support over the pressure tolerant areas. This design provides decreased weight and better heat dissipation, but can be less cosmetic (attractive) and more difficult and time consuming to fabricate.