

## FSR fabrication and assembly

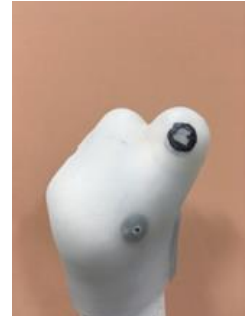
Force Sensing Resistors (FSRs) required movement of a digit remnant to press against the FSR to create an input to control the prosthetic digits.

The FSR is positioned between the silicone socket and an inner lamination. A flat surface must be created on the inner lamination to ensure the FSR is not distorted when assembled into the prosthesis.



## Diagnostic FSR socket fabrication

- Mark position of FSR site.
- Fabricate a clear 50 shore silicone socket with the FSR location thinned to 1mm using 20 shore.
- The FSR area is built onto with a flat 1mm disc slightly larger than the FSR diameter. Then blended in using modelling clay.
- Drape with 3mm PETG. Trim as required to create the frame.



## Definitive FSR fabrication

- Fabricate definitive silicone socket following same process as diagnostic, with pigment added.
- Add 1mm disc to FSR site, as per diagnostic process. Isolate silicone with PVA film and vacuum.
- Lay up 4x perlon and laminate.
- Trim laminate to create inner cap for FSR position.
- Follow alignment transfer process, and continue fabrication as per electrodes process.



## FSR Assembly

- Once fabrication is complete, attach FSR to the inner surface of the cap.
- Assemble FSR connectors into bellows PCB.



**Note:** Take care to not to distort FSR.

