

Question 2: What amount of support does the foot and ankle complex need in the *sagittal* plane to obtain 5-15 degree shank angle in midstance? *How much assistance do you need to provide to the tibia (shank) to control flexion and extension forces during standing and walking?*

None/minimal assistance

None
Shoe insert
SMO
SMO with proximal strap

Moderate assistance
WITHOUT (or minimal) pronation or supination

Group 5: Sagittal Plan Only
-Flexible upright with no/minimal/non-specific mid/hindfoot control.

Anterior strut: better for knee buckling
Posterior strut: better for knee hyperextension

Lack of heelstrike
Toe Drop

Knee extension during LR

Knee collapse/buckling

Excessive flexion during LR



Anterior Shell

Posterior Shell

Moderate assistance
WITH significant pronation or supination

Group 3: AFO with flexible upright
-flexible upright with custom wrap-around

Group 3: AFOs with Motion

Excessively inclined shank (crouch)

Knee collapse/buckling

Excessively reclined shank (knee hyperextension)



Maximal assistance

Group 4: Solid AFO with wrap-around
Group 4D: Solid AFO with wrap-around and dynamic element
-work well when posting is required for shank kinematics
-removes ankle from variables
-focus of motor learning is at knee and hip

Group 4: AFOs – Solid

Group 4D: AFOs – Solid With Dynamic Element

Dependent standing

Non-weightbearing positioning

