

Close-Packed & Loose-Packed Positions

Joint(s)	Loose-Packed Position	Close-Packed Position
Vertebral	Midway between flex & ext	Maximal extension
Temporomandibular	Jaw slightly open	Mouth closed with teeth clenched or mouth maximally opened
Sternoclavicular	Arm resting by side	Arm maximally elevated
Acromioclavicular	Arm resting by side	Arm abd 90
Glenohumeral	55-70 abd; 30 horiz add, neutral rot	Maximal abd & er
Humeroulnar	70 flex; 10 sup	Full ext & sup
Humeroradial	Full ext & sup	90 flex & 5 sup
Proximal radioulnar	70 flex; 35 sup	5 sup & full ext
Distal radioulnar	10 sup	5 sup
Radio/ulnocarpal	Neutral , slight UD	Full ext & RD
Hand – midcarpal	Neutral, slight flex, slight UD	Full extension
Hand – carpometacarpal	Midway between flex & ext	Full opposition
Hand – trapeziometacarpal	Midway between flex & ext; midway between abd & add	Full opposition
Hand – metacarpophalangeal	1 st MCP: slight flex 2-5: flight flex; UD	1 st MCP: full extension 2-5: full flexion
Hand – interphalangeal	PIP: 10 flex DIP: 30 flex	Full extension
Hip	30 flex; 30 abd; slight ER	Ligamentous: full ext, abd, IR Bony: 90 flex; slight abd; slight ER
Knee – tibiofemoral	25 flex	Full ext & ER
Talocrural	Mid inv/ever; 10 PF	Full DF
Subtalar	Midway; 10 PF	Full inv
midtarsal	Midway; 10PF	Full sup
Tarsometatarsal	Midway between sup/pron	Full sup
Toes - Metatarsophalangeal	Neutral	full ext
Toes - Interphalangeal	Slight flex	Full ext