Positions of Function

ALWAYS POSITION AS PRESCRIBED BY THE PHYSICIAN

These functional positions are indicated for many injuries and are a general guideline only. It is important to position appropriate to the injury, individual patient needs, and physician preference.

1. **VOLAR SPLINT** – Position wrist at neutral to 20 degrees extension, allowing free motion of all fingers and thumb.

2. **VOLAR DORSAL** – Position wrist at 20 degrees extension, allowing free motion of all fingers and thumb.

3. **FINGER SPLINT** – Place in functional position.

4. **THUMB SPICA** – Place thumb in functional position with wrist in approximately 30 degrees extension and thumb and index finger in opposition.

5. **BOXER SPLINT** – (4th-5th Metacarpal) – Position wrist at 20 degrees extension with MCP joint at 45-70 degrees flexion, depending on the injury.

6. **REVERSE SUGARTONG** – Position wrist at neutral and elbow at 90 degrees.

7. **ELBOW SPLINT** – Position wrist at neutral and elbow at 90 degrees.

8. **KNEE IMMOBILIZER** – Splint knee fully extended if possible; a 10-15 degree flexion at knee may be necessary for proper gait and crutch walking.

9. **POSTERIOR ANKLE** – Position at 90 degrees unless otherwise directed.

10. **ANKLE STIRRUP** – Position at 90 degrees unless otherwise directed.
General Splinting Guidelines

1. Pre and post splint checks are imperative. Use the “Five P’s” formula to check: pain, pallor, pulse, paresthesia, paralysis.

2. If desired, a light layer of undercast padding may be applied under splint to bony prominences or at injury site before applying splint. Place padding or gauze between any fingers or toes that will be wrapped inside splint.

3. Choose splint material width from 2” to 6”. Cut length as measured. Immediately push unused portion of splint roll back inside foil, then reseal foil end with clip provided.

4. Stretch splint padding over exposed fiberglass edges before applying water.

5. Run splint quickly under small stream of water. Only a minimal amount of cool water is needed to start the splint setup process. Do not over-saturate splint.

6. Roll wet splint in a towel twice to remove all excess water. Splint should feel almost dry to the touch when applying to patient.

7. Immediately apply splint to patient and smooth any wrinkles on splint with palm. Leave fingertips exposed to monitor circulation.

8. Secure splint with elastic bandage on the extremity using slight tension. Too much tension may lead to circulation issues and other complications.

9. Patient should remain still for 5-10 minutes until heat subsides from the splint to allow for proper initial setup. Splint will be completely set in 20-25 minutes.

Patient discharge instructions should include:

- Review R-I-C-E Instructions: Rest / Ice / Compression / Elevation

- Patient should not remove splint until follow-up appointment with physician, unless there is an increase in pain, discoloration of fingertips or toes, numbness, etc.

- Patient should keep splint dry, securing plastic bag over splint for bathing instead of removing splint.

- Patient should not introduce foreign object under splint to scratch an itch, as injury may occur.
**Indications:** wrist sprains, strains, soft tissue injuries, lacerations, carpal tunnel night splints

- Measure 1” above palmer crease to 2” from the antecubital.

- Cut splint, stretch splint padding over both fiberglass edges, add minimal water, blot.

- Fold edge 1” to form pad, positioning splint at angle of palmer crease.

- Secure with elastic wrap at wrist, finish wrapping distal to proximal, mold with palm, position as prescribed.
Volar Dorsal
Splint Material Width: Use 3” or 4”

**Indications:** forearm fractures, severe sprains

- Measure 1” above palmer crease to 2” from the antecubital, double this measurement.

- Cut splint, then make additional cut at center of splint towards taped side, leaving 1/2” hinge.

- Stretch padding over all exposed fiberglass edges, add minimal water, blot.

- Place hinge at webspace, positioning splint over volar and dorsal sides.

- Secure splint with elastic wrap at wrist, finish wrapping distal to proximal, mold with palm, position as prescribed.
Indications: lacerations, crush injuries, tendon repairs

• Measure desired length from dorsal to volar sides, cut splint, stretch padding over fiberglass edges.

• Open padding at taped side, remove fiberglass.

• Cut fiberglass to desired width, then cut fiberglass in half at midpoint for fingertip opening.

• Close padding around fiberglass pieces, cut away excess padding, fold splint at center, snip center of padding to expose fingertip opening.

• Apply minimal water, blot.

• Secure with elastic wrap or tape, leaving fingertip exposed, position as prescribed.
Indications: navicular injuries, scaphoid fractures, dislocations, UCL sprains

- Measure from thumb to 2” from the antecubital.

- Cut splint, stretch splint padding over both fiberglass edges, add minimal water, blot.

- Apply splint starting at thumb, smoothing over dorsal aspect of hand and forearm.

- Secure with elastic wrap at wrist, finish wrapping distal to proximal, mold with palm, position as prescribed.
Indications: 4th or 5th metacarpal fractures

- Measure near tip of 5th finger to 2” from the antecubital.

- Cut splint, stretch splint padding over both fiberglass edges, add minimal water, blot.

- Apply as a gutter to the ulnar side of hand.

- Secure with elastic wrap at wrist, finish wrapping distal to proximal, mold with palm, position as prescribed.
Indications: Colles’ or forearm fracture

• Measure U-shape under elbow from fingertips to fingertips.
• Cut splint, then make additional cut at center of splint towards taped side, leaving 1/2” hinge.
• Stretch padding over all fiberglass edges, add minimal water, blot.
• Place hinge at webspace, positioning splint over volar and dorsal sides, leaving ends free at elbow.
• Secure with elastic wrap at wrist, finish wrapping distal to proximal, overlapping splint ends under elbow. Figure-8 elastic wrap from bicep to forearm to lock in position.
• Mold with palm, position as prescribed.
Indications: supracondylar fractures, elbow sprains

• Measure from the base of 5th metacarpal to 3” away from the axilla.

• Cut splint, stretch splint padding over both fiberglass edges, add minimal water, blot.

• Apply splint, overlapping corners of splint at elbow.

• Secure with elastic wrap at wrist, finish wrapping distal to proximal, mold with palm, position as prescribed.
Knee Immobilizer

Splint Material Width: Use 4” to 6”

Indications: knee injuries, post-op knee surgery

- Measure 6 - 10” above and below patella, double this measurement.

- Cut splint, then make additional cut at center of splint towards taped side, leaving 1/2” hinge.

- Stretch padding over all fiberglass edges, add minimal water, blot.

- Place hinge on shin, positioning splint on medial and lateral sides of patella.

- Secure with elastic wrap at shin, finish wrapping distal to proximal, mold with palm, position as prescribed.
Indications: ankle sprains, strains, or fractures, metatarsal or distal tib/fib fractures

- Measure 2” below the popliteal to 2” beyond toes.
- Cut splint, stretch splint padding over both fiberglass edges, add minimal water, blot.
- Fold splint under at toes, overlap corners at heel.
- Secure with elastic wrap starting at toes, figure-8 at ankle, finish wrapping distal to proximal, mold with palm, position as prescribed.
Indications: ankle sprains, hairline fractures

- Measure U-shape medial to lateral under heel ending 2” from popliteal.

- Cut splint, stretch splint padding over both fiberglass edges, open taped edge and cut fiberglass out at heel area, close taped edge, apply minimal water, blot.

- Apply splint, secure with elastic wrap starting at ankle in figure 8, wrapping distal to proximal.

- Mold with palm, position as prescribed.
Splinting Pocket Guide