

Elbow Braces and Supports

NBCOBT

National Board for Certification of
Orthopedic Brace Technologists

Straps: Premium Tennis Elbow Support

▶ Ossur

◦ Features:

- Universal 5cm wide with loop-lock Velcro closure
- Foam-lined for comfort
- Available with hot/cold gel therapy

◦ Contraindications

- Any injury requiring orthopedic treatment with a plaster cast, resin cast or surgery
- The strap must not be in direct contact with a skin lesion

◦ Indications

- Tendonitis of the elbow
- Medial and lateral Epicondylitis

Ossur-Strap

- ▶ Product fitting
 - Measure the circumference below the elbow
 - Universal sizing
 - Pull the strap onto the forearm
 - Place the cushions over the painful tendons (just below the elbow)
 - Tighten using the flap to obtain firm but comfortable support
- ▶ Instructions for care
 - Hand wash in warm water with soap
 - Dry flat
 - Store away from sources of excessive heat

Ossur-Strap



- ▶ Reimbursement code: L3700
- ▶ Diabetics and patients with vascular insufficiencies must always consult a physician before using hot/cold therapy
- ▶ (<http://www.ossur.com/?PageID=1342>)

Premium Tennis Elbow Support

Additional considerations

Strap: Clinic Tennis Elbow

▶ DJO

◦ Features

- Two-inch wide nylon strap with D-ring closure to allow comfortable fit and compression

◦ Indications

- Medial and lateral epicondylitis

◦ Contraindications

- Not meant for fractures of the elbow/forearm
- Not to be placed on open wounds

DJO-Strap

▶ Product Fitting

- Size: universal
- Measure the circumference of the forearm
- Slide brace up arm until its 2 inches below the elbow
- Tighten strap so brace fits comfortably and snug

▶ Instructions for care

- Hand wash with cold water and soap
- Do not put in dryer
- Lay it out flat to dry
- Keep away from excessive heat

DJO-Strap

- ▶ Reimbursement code:
L3700
- ▶ Easy to use
- ▶ (<https://www.djoglobal.com/products/procare/clinic-tennis-elbow>)



Additional
Considerations

Clinic Tennis Elbow Strap

Strap: Bledsoe Tendon Strap

▶ Bledsoe

◦ Features

- Foam pad to relieve stress over medial/lateral epicondyles
- Semi-rigid plate to distribute pressure for even compression
- Contoured shape around the elbow

◦ Indications

- For relief of medial/lateral epicondylitis and other forms of forearm and wrist pain

◦ Contraindications

- Unstable fractures of the elbow

Bledsoe-Strap

- ▶ Product fitting
 - Measure forearm circumference
 - XS: 10"–11", S: 11"–12", M: 12"–13", L: 13"–15", XL: 15"–17"
 - Slide arm into brace
 - Secure it 2 inches below elbow with the strap
 - Adjust the strap so it fits around the forearm comfortably
- ▶ Instructions for Care
 - Do not leave this device in a place where the temperature can exceed 150 degrees

Bledsoe-Strap

- ▶ Reimbursement code: L3701
- ▶ Easy to use and adjust
- ▶ Can be used for patellar tendonitis as well
- ▶ (http://www.bledsoebrace.com/products/tendon_strap.asp)



Additional
Considerations

Tendon Strap

Pneumatic Braces

- ▶ Ossur– Airform Tennis Elbow Support
 - Features
 - More support with less constriction
 - Focused pneumatic compression
 - Conforms and comfortably cushions sensitive injured anatomy
 - Easy to apply, simple design fits most for reduced inventory
 - Indications
 - Tendonitis
 - Epicondylitis of the elbow
 - Contraindications/Precautions
 - Patients should inspect their elbow, forearm and the brace before and after each use
 - Do not use on open wounds/skin lesions

Ossur–Pneumatic

▶ Product Fitting

- Fits circumference 8–14”
- Sizing is universal
- Loosen contact closure strap.
- Place arm inside brace
- Apply the brace 2 inches below the elbow
- Tighten the strap until snug
- Secure the contact closure to a comfortable fit
- Adjustments may be necessary as forearm swelling patterns change

▶ Instructions for care

- Clean with a mild detergent and cold water
- Do not wash in a washing machine or use bleach
- Lay it out flat on a towel to dry
- Do not place in dryer or wring out the brace

Ossur–Pneumatic

- ▶ Reimbursement code:
L-320000
- ▶ Very comfortable
- ▶ (<http://www.ossur.com/?PagelD=13423>)



Additional
Considerations

Airform Tennis Elbow
Support

Pneumatic Armband

▶ DJO

◦ Features

- Focused compression for less constriction
- Breathable material enhances comfort and wear ability
- Simple, effective design makes it easy to apply
- One size fits most for reduced inventory requirements

◦ Indications

- Epicondylitis

◦ Contraindications

- Do not use if on skin with open wounds or lesions

DJO-Pneumatic

▶ Product Fitting

- Measure forearm circumference
- Universal fit (8"–14")
- Place arm inside brace
- Adjust the brace so it is 2 inches below the elbow and the aircell pouch is on the irritated tendons
- Secure brace with strap so it fits comfortably

▶ Instructions for care

- Remove aircell pouch before cleaning
- Hand wash with soap
- Keep away from extreme heat

DJO-Pneumatic

- ▶ Reimbursement code:
L-05A
- ▶ Comes in beige and black
- ▶ Loosen strap if it becomes too tight
- ▶ (<https://www.djoglobal.com/products/aircast/pneumatic-aramband>)



Additional
Considerations

Pneumatic Armband

Pneumatic Brace

- ▶ DME Direct–Aircast Tennis Elbow Pneumatic Armband Brace
 - Features
 - Reduces forearm shock and tennis elbow pain
 - Features an aircell pillow to dampen forces
 - Very effective & comfortable for all day wear.
 - Indications
 - Tennis elbow (Lateral Epicondylitis)
 - Golfer's elbow
 - Overuse tendonitis
 - Contraindications/precautions
 - do not use on open wounds or skin lesions

DME-Pneumatic

▶ Product Fitting

- Fits forearm circumference of 8"–14"
- Universal sizing
- Place the strap 2 inches below the elbow
- Tighten the strap so the brace is secure and snug and aircell pillow is over painful tendons

▶ Instructions for care

- Foam strap material can be hand washed with cold water once the aircell pillow is removed
- Lay it out flat to dry
- Do not leave near excessive heat

DME-Pneumatic



- ▶ Reimbursement Code: L3701
- ▶ Available in beige and black
- ▶ Athletes favorite
- ▶ Can be used on the left or right side

- ▶ (<http://www.dme-direct.com/aircast-tennis-pneumatic-elbow-aramband-brace>)

Elbow Pneumatic
Armband Brace

Additional
Considerations

Elbow Sleeve

▶ Features

- Easy slip on design
- Compression and warmth
- Durable sleeve for long lasting wear
- Light support to elbow area

▶ Indications

- Swollen and painful elbow joints
- Tennis elbow
- Sprains and strains
- Bursitis and tendonitis

- <http://www.ossurproducts.com/braces/pc/Neoprene-Tennis-Elbow-Sleeve-8p48.htm>



Elbow Sleeve

▶ Contraindications

- Not intended to prevent or reduce the risk of injury

▶ Precautions

- If any additional symptoms occur, discontinue use and seek medical attention
- Discontinue if rash or allergy occurs
- Do not wear while sleeping, may interfere with blood circulation

▶ Measurement Considerations

- Forearm circumference (cm)
 - Small: 9–10
 - Medium: 10–12
 - Large: 12–14
 - X-Large: 14–16

▶ Fitting Instructions

- Measure circumference of forearm
- Slip brace onto affected arm
- Center padded center of brace over center of elbow

Elbow Sleeve

▶ Instructions for Care

- Hand wash with mild detergent and let air dry
- Do not leave in trunk of car on a hot day that may exceed 150 degrees F for an extended period of time

▶ Device Benefits for Select Populations

- Comes in all different sizes to properly fit anyone
- Does not affect everyday living

▶ Additional Considerations

- Some come with straps that can be tightened
- Can be used on left or right side
- Athletes tend to prefer Bledsoe over Ossur

▶ Reimbursement Code

- L3701

Sling

▶ Features

- Fits all patients
 - Easily adjusted
 - Padded shoulder strap
 - Made of lightweight nylon
 - Oversized envelope to accommodate large casts and dressings
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- <http://www.ossurproducts.com/braces/pc/Strap-Style-Contact-Closure-Immobilizer-4p25.htm>



Sling

▶ Indications

- Immobilizes and supports sprains and strains of the shoulder, elbow, or fractures of the arm

▶ Contraindications

- Unstable fractures

▶ Precautions

- Not intended to prevent injuries or reduce the risk of injury

▶ Measurement Considerations

- Different depths and lengths of envelope
 - X-Small: 19cmx28cm
 - Small: 19cmx34cm
 - Medium: 19cmx39cm
 - Large: 19cmx44cm
 - X-Large: 19cmx51cm

Sling

▶ Fitting Instructions

- Place arm in sling and adjust
- Sling can be shortened by folding the end inward and attaching the hook and loop fastener
- Position shoulder strap
- Place strap over unaffected shoulder
- Adjust strap tension
- Adjust strap using buckle fastener

▶ Instructions for Care

- Machine wash in cold water with mild detergent
- Do not leave in hot car or trunk if temperature may exceed 150 degrees F

Sling

▶ Additional Considerations

- Sling comes in 5 different sizes so made for anyone
- Sling can be adjusted to fit patient and be comfortable
- Reimbursement Code: L8699

Post-Op Hinge Brace

▶ Features

- Formable aluminum plates adjust to fit any arm circumference
- Easily removed in one piece and reapplied by patient with one hand
- Light for patient comfort
- Lateral hinge and arm design prevents rubbing against body
- Easily set ROM from – 10 to 110

▶ Features (cont'd)

- Hinge provides most comprehensive range of motion solution in the industry
- Controlled flexion and extension
- Comfort pad at neck and shoulder
- Low cost
- Universal sizing

Post Op Hinge Brace



<http://www.ossurproducts.com/braces/pc/Innovator-X-Post-Op-Elbow-8p158.htm>

Post Op Hinge Brace

▶ Indications

- Post-operative elbow or arm surgery
- Collateral ligament sprains
- Ulnar nerve injuries
- May be used after cast removal to stabilize fracture
- Radial fractures
- Lateral/medial epicondylitis

▶ Contraindications

- Unstable fractures
- Fracture of proximal humerus
- Fracture of distal radius or ulna

Measurement Considerations

- Measuring Lower Arm
 - Measure from ulnar styloid process to medial humeral epicondyle
 - Small: 18–24cm
 - Large: 21.5–32cm
- Measuring Upper Arm
 - Measure from medial humeral epicondyle to axilla
 - Small: 14–20cm
 - Large: 18–29cm

Fitting Instructions

- ▶ Elbow brace is packaged in locked position
- ▶ Slide orange button away from hinge to unlock brace
- ▶ There are 4 over-center buckles on brace
- ▶ Open over-center buckles by pinching the 2 gray tabs on the buckle
- ▶ Position the hinge over the lateral epicondyle
- ▶ Make length adjustments to the forearm
- ▶ Slide the locking clip over to expose the button, depress the button and extend the arm to the desired length

Fitting Instructions (cont'd)

- ▶ Secure the locking clip by sliding it over the button to lock the button in place
- ▶ Repeat the same process to adjust the humeral arm length
- ▶ Slide the arm into the brace
- ▶ Form the black aluminum plates around the forearm
- ▶ Connect the over-center buckle located closest to the wrist

Fitting Instructions (cont'd)

- ▶ Adjust the strap tension using the hook to pile fastener at the strap end
- ▶ If necessary trim excess strap by removing the hook piece, trimming the strap, and replacing the hook piece
- ▶ Repeat this process for the remaining three straps

Post-Op Hinge Brace

- ▶ Instructions for Care
 - Don't leave in car or trunk where temperature may exceed 150 degrees F for an extended period of time
 - Hand wash with soap and water
- ▶ Additional Considerations
 - This brace provides the most comprehensive range of motion solution in the industry
 - Brace can be adjusted for patient comfort
- ▶ Reimbursement Code
 - L3740

References

- ▶ www.ossur.com
- ▶ www.djoglobal.com
- ▶ www.bledsoebrace.com
- ▶ www.dme-direct.com
- ▶ <http://www.betterbraces.com/aircast-mayo-clinic-elbow-brace>
- ▶ <http://www.rehabmart.com/product/phoenix-elbow-hinges-choose-size-4634.html>
- ▶ <http://www.breg.com/sites/default/files/downloads/pdfs/1.94012B-Slingswathe-shoulder-brace.pdf>