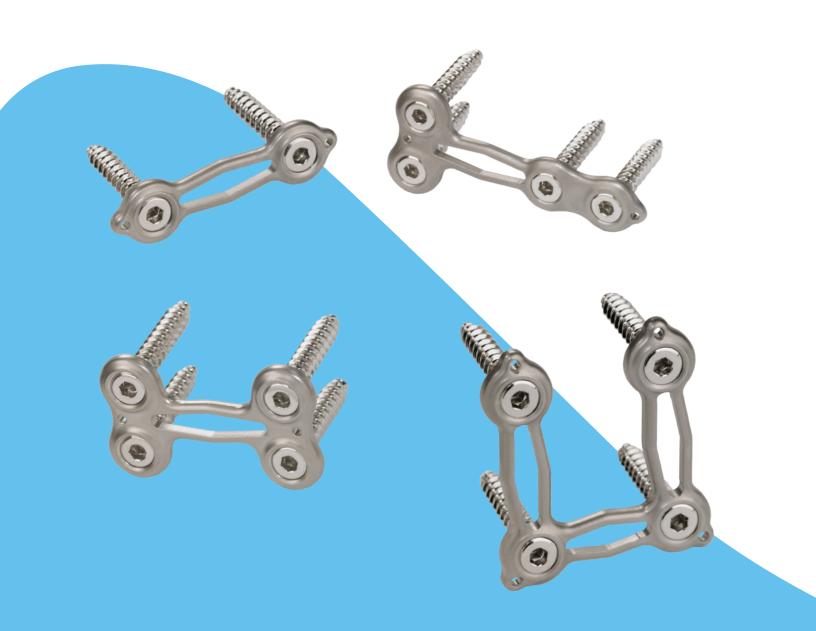
# Smith-Nephew

UNI-CP<sup>♦</sup>
Compression Plate

Surgical Technique



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## Description

#### Plate configurations:

- 2 hole design (17, 20, 25, and 30mm interaxis)
- 4 hole design (20, 25, and 30mm interaxis)
- 4 hole T-shape design (20mm interaxis)
- 4 hole U-shape design (17, 19, and 21mm interaxis)

#### 3.5mm diameter range of screw lengths:

• 12-34mm in 2mm increments

Surfix® Locking Technology

Material: Stainless Steel

## Surgical site preparation

The articular surfaces should be prepared using standard technique to resect the necessary amount of cartilage and, if necessary, to remove bone graft material.

Obtain adequate reduction and provisional fixation using guide wires or reduction forceps.

#### Note Bena

The following technique guide is intended for informational and educational purposes only. It is not intended to serve as medical advice. It is the responsibility of treating physicians to determine and utilize the appropriate products and techniques, according to their own clinical judgment, for each of their patients. For more information on the product, including its indications for use, contraindications, and product safety information, please refer to the product's label and the Instructions for Use packaged with the product.



Figure 1-1



Figure 2-1



Figure 3-1

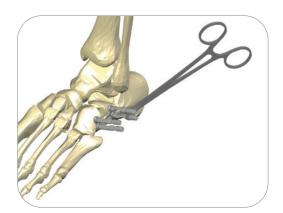


Figure 4-1

## Surgical technique

#### Step 1 • Trial plate positioning

**1- 1** Use the trial implant (339 005ND or 339 004ND) to determine the appropriate plate configuration. Depending on the indication, the surgical exposure may not accommodate the trial plate. Place the graduated end of the trial over the larger bone (fragment), under the soft tissue to minimize irritation.

**Note:** 1mm guide wires can be placed through the trial to maintain plate alignment if desired.

#### Step 2 • Plate contouring

**2-1** The chosen plate can be contoured, prior to application, to better fit the patient's anatomy. A set of two plate benders (219 735ND) are included to aid in this process. It is important to position the benders in the locking holes to protect the locking mechanical properties of the plate design. If this is not the case, the intermediate locking threads may be damaged or deformed, thus preventing optimal functioning of the lock-screw mechanism.

Warning: The plate will weaken with excessive bending. Do not bend the plate excessively to ensure the metal is not compromised.

## Step 3 • Drill guides

**3-1** Insert the drill guides (219 635ND) into the appropriately contoured plate. The screwdrivers (219 835ND) can be used to ease introduction into the threaded hole. Make sure that each guide is fully seated in the plate to maintain proper alignment.

**Note:** The drill guides are slotted to allow for the removal of bodily debris during the drilling process.

### Step 4 • Implant positioning

**4-1** Position the plate in the desired location. An implant holder (339 003ND) can be secured to any one of the drill guides to aid in this process. 1mm guide wires can then be inserted into the wire holes in the plate for temporary fixation.

**Note:** If 1mm guide wires were introduced through the trial instrument, the plate can be introduced over them, positioning the guide wires through the holes in the plate.

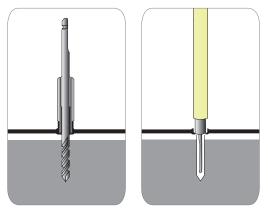


Figure A

Figure B

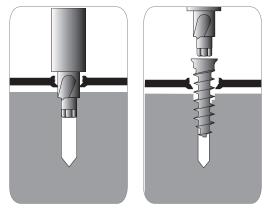


Figure C

Figure D

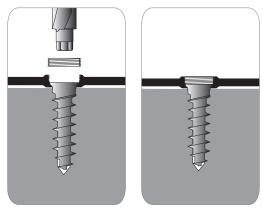


Figure E

Figure F

#### Step 5 - Screw insertion

Warning: When using the 4-hole plate, always place diagonal screws first to maintain accurate placement and optimally contour the plate to the bone surface.

- A Prepare holes with the 2.7mm drill (219 535ND) through the drill guide. The screw length can be determined from the calibrated scale on the drill. The depth is determined from the top side of the drill guide.
- **B** Alternately, measure the necessary screw length using the depth gauge (219 336ND). It can be used with or without the drill guide. Each depth gauge has two sets of markings to use with or without the drill guide.
- **C** Remove the drill guide and chamfer the drill hole with the screwdriver (219 835ND). Ensure that the threaded hole is not damaged when performing the chamfering.
- D Insert the screw (286 3XXSND or 286 3XXND) into the prepared hole and tighten until the plate is fully seated in the plate. Clean the threaded hole before and after introducing the screw. (Unlike a traditional locking mechanism, the screw can be continually tightened to contour the plate to the bone.)
- **E** Place the lock-screw on the appropriate screwdriver. The lock-screw should be inserted after each screw, and before preparation and insertion of the subsequent screw. This prevents potential damage to the thread.
- **F** Fully seat the lock-screw using the screwdriver (over tightening the lock-screw provides no additional benefit and increases the chances of stripping). When it is fully inserted, the lock-screw should be flush with the top of the plate.

Warning: Steps A through F should be completed for each screw before beginning preparation of the subsequent screw(s). If not, the axes of the screw and the prepared hole may be misaligned.



Figure 6-1

### **Step 6 • Compression**

**6-1** After all screws are locked in place, compress the Integra UNI-CP compression plate using the compression forcep (spreading) instrument (339 001ND). Upon opening the diamond designed bridge, the compressive forces will pull the ends of the plate toward one another.

#### **SPECIFIC U-Shape Plate**

Compress the UNI-CP U-shape compression plate using the compression forcep (spreading) instrument (339001ND).

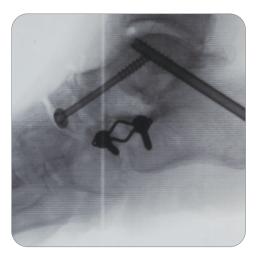
The transverse intercuneiform diamond bridge should be compressed first, followed by compression of the tarsometatarsal segments. Upon opening the diamond designed bridge, the compressive forces will pull the ends of the plate toward one another.

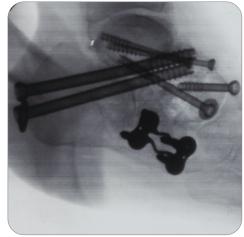
## X-rays













# Ordering information

## UNI-CP<sup>◊</sup> Compression Plate

Catalog Number (sterile)	Catalog Number (non-sterile)	Description
330 217SND	330 217ND	2 holes 17mm interaxis
330 220SND	330 220ND	2 holes 20mm interaxis
330 225SND	330 225ND	2 holes 25mm interaxis
330 230SND	330 230ND	2 holes 30mm interaxis
330 420SND	330 420ND	4 holes 20mm interaxis
330 425SND	330 425ND	4 holes 25mm interaxis
330 430SND	330 430ND	4 holes 30mm interaxis
330 030SND	330 030ND	4 holes 20mm interaxis T-shape
330 021SND		4 holes 17mm interaxis U-shape
330 023SND		4 holes 19mm interaxis U-shape
330 025SND		4 holes 21mm interaxis U-shape

# Stainless Steel Screws Diam. 3.5mm + Lock-Screw

Catalog Number (sterile)	Catalog Number (non-sterile)	Description
286 312SND	286 312ND	Length 12mm
286 314SND	286 314ND	Length 14mm
286 316SND	286 316ND	Length 16mm
286 318SND	286 318ND	Length 18mm
286 320SND	286 320ND	Length 20mm
286 322SND	286 322ND	Length 22mm
286 324SND	286 324ND	Length 24mm
286 326SND	286 326ND	Length 26mm
286 328SND	286 328ND	Length 28mm
286 330SND	286 330ND	Length 30mm
286 332SND	286 332ND	Length 32mm
286 334SND	286 334ND	Length 34mm
186 300SND	186 300ND	Lock-screw

#### Instrument Container

Catalog Number	Description
339 900ND	Container
339 910ND	Base
339 901ND	Lid
339 911ND	Module

### Instrumentation

Catalog Number	Description
219 835ND	Screwdriver Hex diam. 2.0mm
219 435ND	Screwdriver AO Hex diam. 2.0mm
219 635ND	Drilling guide diam. 2.7mm
219 535ND	Drill AO diam. 2.7mm
219 735ND	Bending forceps diam. 3.5mm hole
219 336ND	Depth gauge diam. 3.5mm screws
339 001ND	Compression plate forceps (spreader)
339 005ND	Trial implant 2 hole and 4 hole
339 004ND	Trial implant T and U plate
339 003ND	Implant holder
115 101ND	K-wire, 100mm





