acumed®

Ankle Plating System 3

Acumed Small Fragment Base Set Required

Acumed Variable Angle Screw Compatible

Product Overview

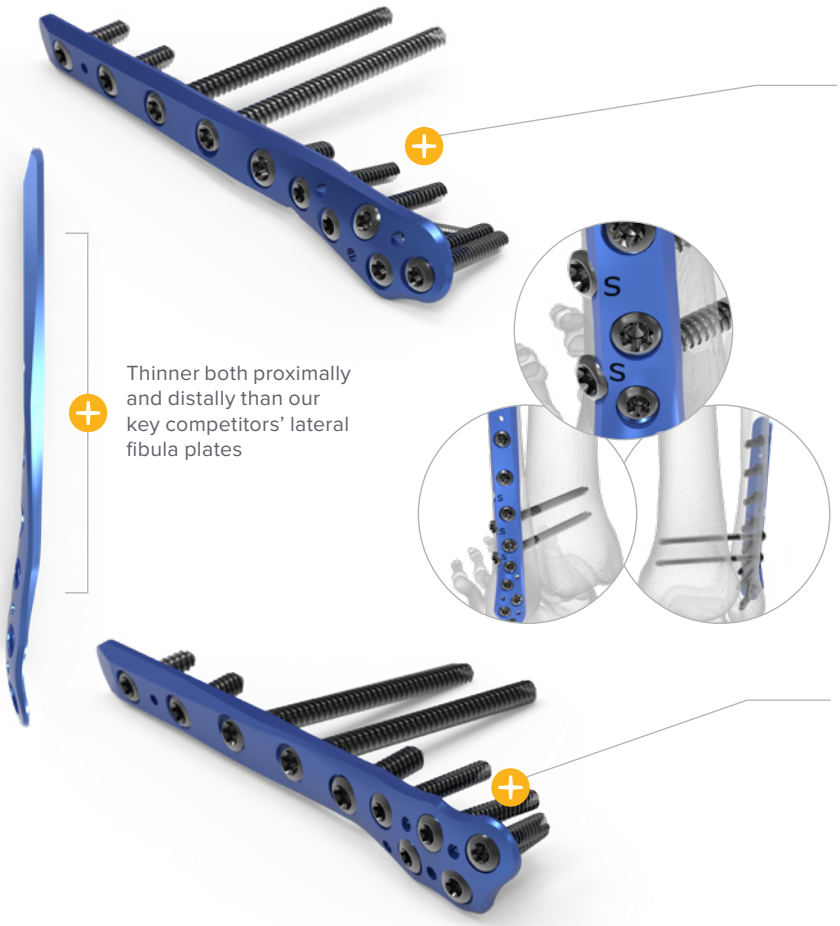
A COLSON ASSOCIATE

Acumed® Ankle Plating System 3

The Acumed Ankle Plating System 3 is designed to provide a variety of fixation options for fractures of the distal tibia and fibula. Designed in conjunction with Anish Kadakia, MD and Bruce Ziran, MD, the Ankle Plating System 3 is composed of seven plate families and a full selection of 4.0 mm cannulated screws designed specifically for the treatment of ankle fractures.

The Ankle Plating System 3 is used in combination with the Acumed Small Fragment Base Set. The set includes One-Third Tubular Plates, as well as cut-to-length and bend-to-fit 2.7 mm L-shaped, T-shaped, and straight Fragment Plates that can also be used to address ankle fractures. The 2.7 mm and 3.5 mm nonlocking, locking, and variable angle hexalobe screws, 4.0 mm fully threaded and partially threaded cancellous hexalobe screws, and universal instrumentation are all housed in the Small Fragment Base Set. A selection of Tension Band Pins and AcuTwist® Compression Screws are also included.

Symbol	Definition
	Products with this symbol require use of the Acumed Small Fragment Base Set in order to complete surgery following the recommended surgical technique.
	Products with this symbol are compatible with Acumed 2.7 mm and 3.5 mm Variable Angle Screws for use in completing surgery following the recommended surgical technique.



Fibula Plates

Posterolateral Fibula Plates

The Posterolateral Fibula Plates sit under the peroneal tendons and contain three scallops labeled with an "S" that allow for syndesmosis screw fixation adjacent to the plate. The scallops may be targeted freehand or with the adjustable Syndesmosis Targeting Guide included in the set.

Lengths: 66–116 mm

Lateral Fibula Plates

The Lateral Fibula Plates include two plate holes labeled with an "S" which have a fixed 30° anterior angle to target the center of the tibia to help optimize syndesmosis screw positioning.[1,2]

Lengths: 74–188 mm

Posterior Malleolus Fracture Fixation

The Ankle Plating System 3 incorporates 4.0 mm cannulated and cancellous screws, one-third tubular plates, fragment plates, and fragment-specific plates for the posteromedial and posterolateral distal tibia to specifically address these difficult fracture patterns.

Posterolateral Distal Tibia Plates

The plates incorporate a unique contour designed to act as a template and to aid in anatomic fracture reduction. They include a distal cluster of 2.7 mm hexalobe screws that are angled approximately 15° superior to the joint space.

Lengths: 48–60 mm

Posteromedial Distal Tibia Plate

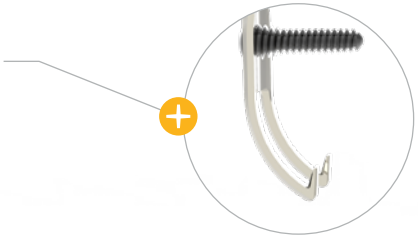
This plate sits beneath the posterior tibial tendon and is designed with a low plate and screw profile. The plate's distal end is contoured and is designed to act as a buttress to distal fragments.

Length: 49 mm

Hook Plates

Two prongs at the distal end are designed to support an avulsion fragment.

Lengths: 43–57 mm



Locking Peg Hook Plates

Designed to support an avulsion fragment that may require additional stability, these plates include a 2.3 mm Cortical Peg across the fracture site.

Lengths: 45–59 mm

Medial Anti-Glide Plate

The plate is designed to address vertical shear fractures of the medial malleolus. Includes a distal hole cluster for 2.7 mm screws to capture fragments in cases with distal comminution.

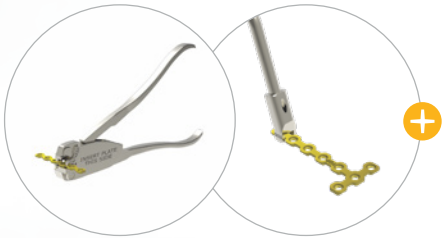
Length: 70 mm

4.0 mm Cannulated Screws

The screws are included in the Ankle Plating System 3 tray in lengths of 36 mm, 42 mm, and 48 mm. In addition, both short thread and long thread 4.0 mm cannulated screws ranging in length from 10 mm to 72 mm are housed in a standalone tray and use the 4.0 mm cannulated instruments within the Ankle Plating System 3.

Lengths: 36, 42, and 48 mm (10–72 mm available in standalone tray)

2.7 mm Fragment Plates



One-Third Tubular Plates

Small Fragment Base Set

The set contains One-Third Tubular Plates available in a variety of lengths as well as 2.7 mm L-shaped, T-shaped, and straight Fragment Plates to treat small bone fractures and malunions. Plates are designed to minimize soft tissue irritation.

Compatible with 2.7 mm locking, nonlocking, and variable angle hexalobe screws

Plates are designed to be cut to desired length and bent prior to insertion or *in situ*

2.7 mm Fragment Plate Benders

Compatible with 3.5 mm nonlocking hexalobe screws

Designed to minimize soft tissue irritation

Lengths: 37–145 mm (3-hole to 12-hole)
Thickness: 1.2 mm

Screw Options

Acumed plating systems supported by the Small Fragment Base Set accept screws that feature a hexalobe recess and are designed to have greater torsional strength in comparison to similar size hex screws.

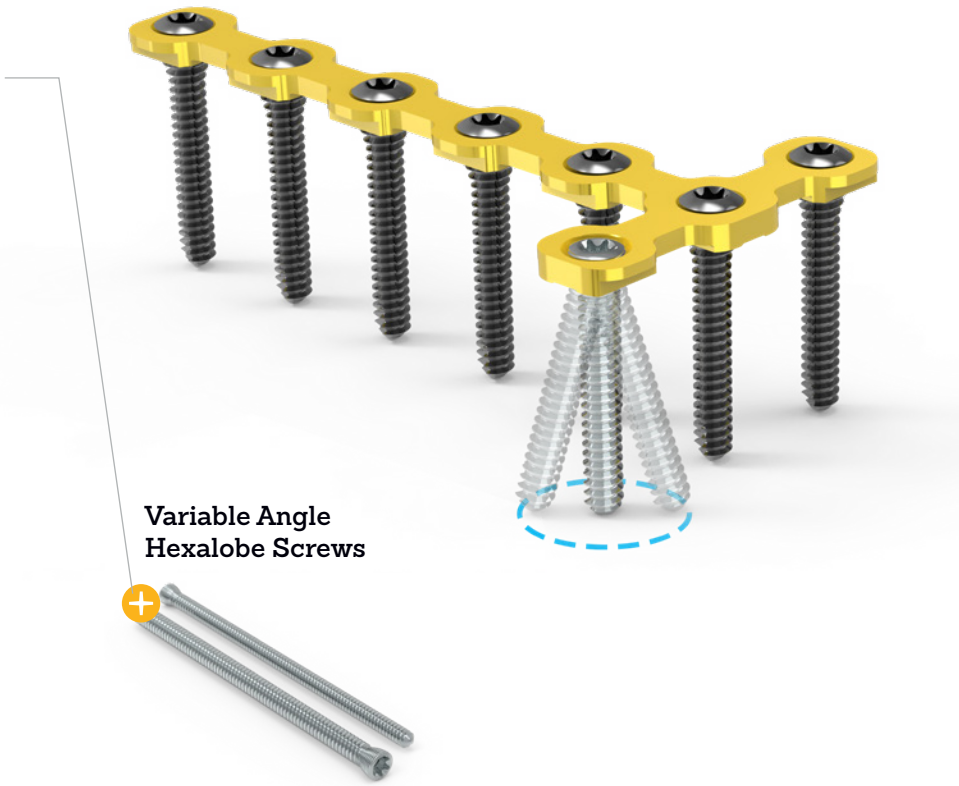
Small Fragment Base Set Screw sizes and types:

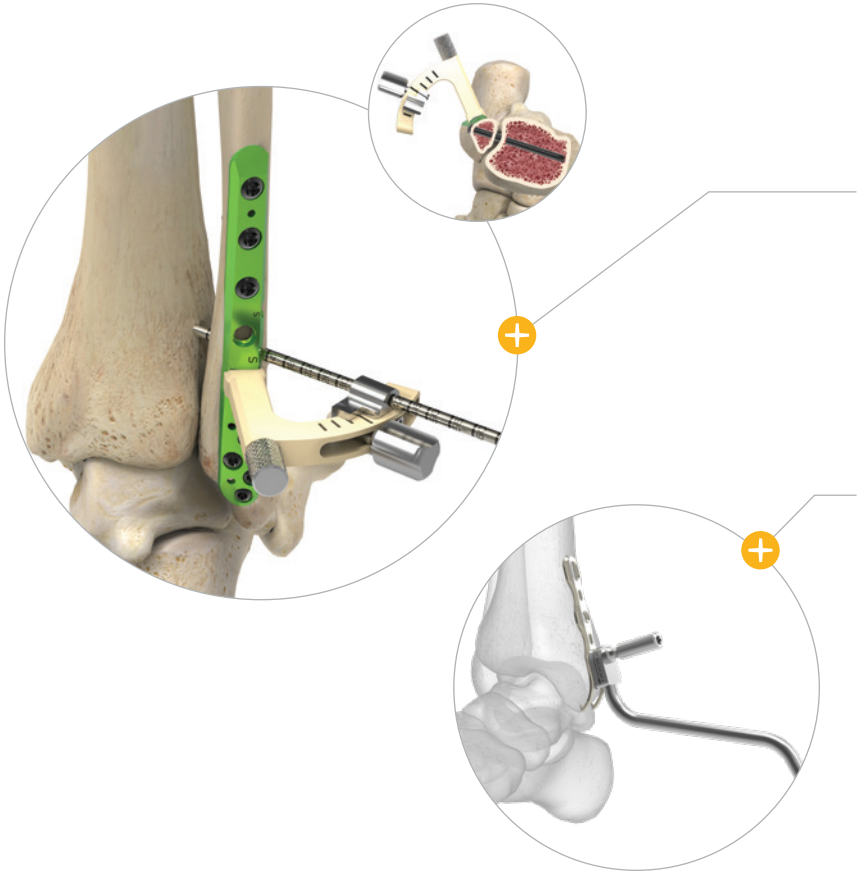
2.7 mm and 3.5 mm Variable Angle Locking Hexalobe Screws

2.7 mm and 3.5 mm Nonlocking Hexalobe Screws

2.7 mm and 3.5 mm Locking Hexalobe Screws

4.0 mm Partially and Fully Threaded Cancellous Hexalobe Screws





Instrumentation and Design

Syndesmosis Targeting Guide

The Syndesmosis Targeting Guide attaches to the Posterolateral Fibula Plates and allows the surgeon to target the desired angle for syndesmotic screw fixation alongside the scallops adjacent to the plate.

Published literature has shown that the target location for syndesmosis screw fixation should be at the center of the tibia, through the fibula, 1 to 3 centimeters above the tibial plafond.[3]

Hook Plate Reduction Handle

This handle allows for plate placement, and reduction of the avulsed fragment. The cannulated bolt enables drilling through the plate hole in which it is attached to.

11-hole Lateral Fibula Plate with syndesmotic screws

Final post-op image of a trimalleolar fracture using the 4.0 mm Cannulated Screws

Post-op image using a posterolateral approach to implant the Posterolateral Fibula Plate and Posterolateral Distal Tibia Plate

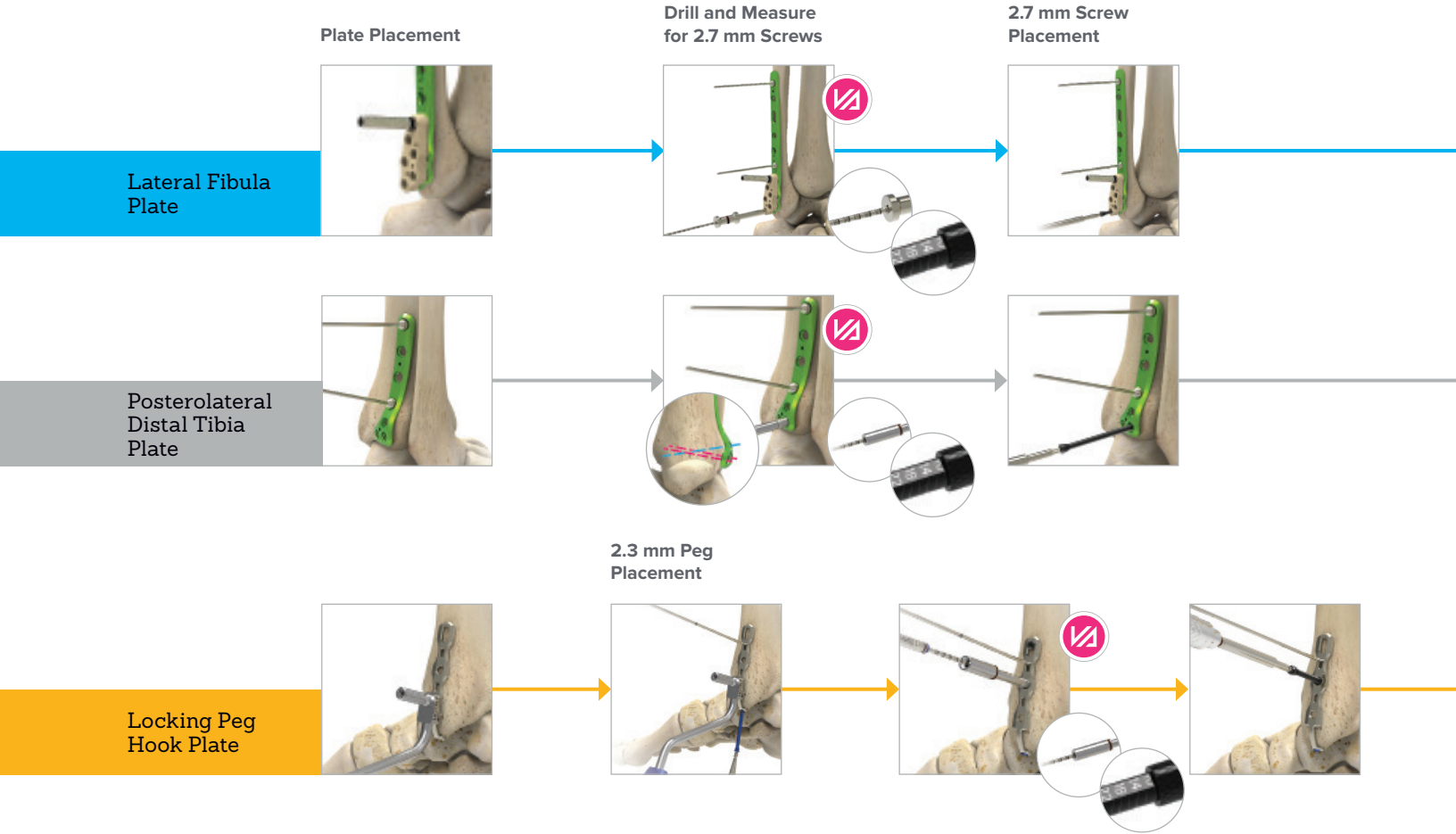


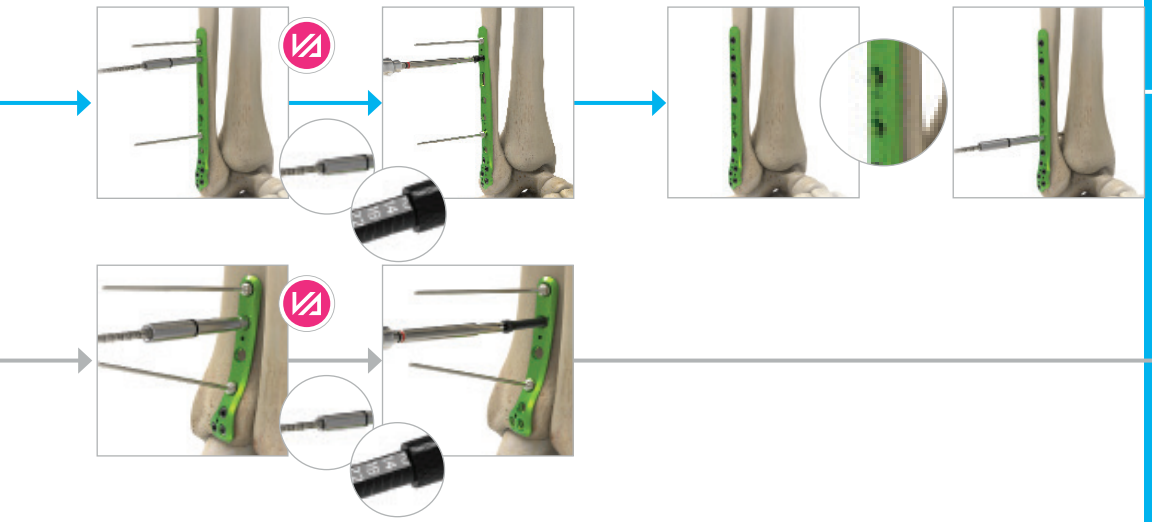
Plate Placement
Drill and Measure for 2.7 mm Screws
2.7 mm Screw Placement
Lateral Fibula Plate
Posterolateral Distal Tibia Plate
2.3 mm Peg Placement
Locking Peg Hook Plate

Drill and Measure for 3.5 mm Screws

3.5 mm Screw Placement

Optional Syndesmosis Repair

Confirmation



Acumed Variable Angle Screw Compatible

Surgical Technique Overview

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References

1. Needleman, RL. Accurate reduction of an ankle syndesmosis with the “glide path” technique. *Foot Ankle Int*. 2013;34:1308-1311.
2. van den Bekerom M, Hogervorst M, Bolhuis CN. Operative aspects of the syndesmotic screw: Review of current concepts. *Injury*. 2008;39:491-498.
3. Wheeless, C. Technique of syndesmotic fixation. Wheeless Textbook of Orthopaedics website. http://www.wheelessonline.com/ortho/technique_of_snydesmotic_fixation. Published December 11, 2014.

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