

Instructions for Lincoln Aluminum Variable Bracket



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Component List:

- A) Bracket Base - 2
- B) Wedge - 2
- C) Top Bracket - 1
- D) Bottom Bracket - 1
- E) #10-32 x7/16" Screws - 4
- F) 1/4" x 3/8" Set Screws - 2
- G) Allenwrench - 1

Tools Required:

- Drill Bits: 5/32"
- #2 square drive hex bit 4" long
- Drill with Adjustable Clutch
- Miter Saw with Metal Cutting Blade
- Level
- Rubber Mallet or Wood Block
- Tape Measure
- Masking or Duct Tape
- 12" Combination Square
- 8" File
- Straight Edge
- Center Punch - optional
- Touch-up Paint - optional
- Silicone Adhesive - optional
- Shop Vac or Blower - optional
- Always wear safety goggles*

Installer is responsible for quality workmanship and meeting all building codes.

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1

Install collar onto post. Measure up from top of collar 1-3/4" and make a mark on center of post. For 36" rails, measure up from top of collar 34-1/2" and make another mark on center of post. For 42" rails, measure up from top of collar 40-1/2". Pre-drill 5/32" diameter hole on each mark.

2

Install bracket base (A) and wedge (B) on to post. NOTE: Wedge is only required for angles over 36°. Install (1) #10x1" screw through base and wedge (if required) through upper hole. Using a square, pre-drill second hole through base and wedge and install (1) #10x1" screw. NOTE: #10x1" screws are in rail section carton. Repeat for both top and bottom brackets. NOTE: Install all bases with set screws facing the same direction.

3

Install top bracket (C) into top base. Install and tighten 1/4"x3/8" set screw (F) with bracket facing direction of rail. Install bottom bracket (D) into bottom base with screw holes facing down. Install and tighten 1/4"x3/8" (F) with bracket facing direction of rail.

4

Repeat steps 1-3 for all posts requiring variable angle brackets.

5

Apply tape on bottom and top rail inserts to prevent them from moving while cutting. Place bottom rail against posts and center baluster openings. Check that variable angle brackets are square with rails, measure from bracket face to first baluster opening. A minimum of 1-1/4" is required for rail brackets. Re-position rail as needed. Make a mark on rail square to bottom brackets. Cut bottom rail. Check that bottom rail fits between brackets.

6

Align top and bottom rail. Mark top rail where bottom rails was cut. Measure in 3/8" on each end. Cut top rail. NOTE: top rail will be 3/4" shorter than bottom rail, 3/8" per end.

7

Install balusters into bottom rail. Attach top rail on to balusters. Turn assembled section over and install brace plugs. Rails under 72" require 1 plug, centered. Rails over 72" require 2 plugs, install approximately one-fourth of total rail length from each end. Set rail assembly aside.

8

Install top rail brackets on to top angle brackets. Use (2) #10x7/16" (E) machine screws. Slide top cover (2) on to top rail, 1 on each end. Set rail assembly on to top brackets. Check that both top and bottom rail is fully seated in to balusters. Measure gap between bottom of bottom rail and deck. Cut brace(s) to fit this opening.

9

Slide bottom rail bracket on to bottom rail, screw holes down and out. Install bottom brace. Set assembly on to brackets. Install (2) #10x1" screws into bottom of top rail through hole in top bracket. Slide top covers against post. NOTE: Set screws in bases may be loosened for final bracket alignment, one set screw at a time.

10

Attach bottom brackets on to bottom angle brackets (D) with (2) #10x7/16" (E) machine screws.