



# TABLE OF CONTENTS

---

## English

Introduction.....	3
Universal Bracket (UB-04).....	4
Universal Bracket (UB-04) With Accent Top Panel (ATP).....	18
Collar Bracket (CB-04).....	22
Collar Bracket (CB-04) With Accent Top Panel (ATP).....	26
Angled Bracket (UB & CBS-04).....	30
Universal Bracket Angle Adapter With Accent Top Panel (ATP).....	39
Collar Bracket Side Adjustable (CBS-04) With Accent Top Panel (ATP).....	41
Stair Bracket (UB & CB).....	43
Stair Bracket (SSB).....	51
Care & Maintenance/Warranty.....	58

About California Proposition 65:

<https://fortressbp.com/about/californiaproposition65>

## **INTRODUCTION**

---

### **READ INSTRUCTIONS COMPLETELY BEFORE STARTING INSTALLATION**

It is the responsibility of the installer to meet all code and safety requirements, and to obtain all required building permits. The deck and railing installer should determine and implement appropriate installation techniques for each installation situation. Fortress Railing Products and its distributors shall not be held liable for improper or unsafe installations.

Fortress Posts must always be secured to the deck framing and should never be attached to only the deck boards.

#### **Note**

When cutting Fortress railing, it is very important to complete the following at cut points:

- Remove all metal shavings from the cut area.
- File any sharp edges left by cutting. Thoroughly wipe and remove any filings, grime, or dirt from the railing.
- Apply two coats of Fortress zinc based touch-up paint to the cut area. If touch up is at rail ends, allow paint to dry before connecting bracket to post.
- Be sure to remove any metal shavings from the surface of deck, patio, or balcony to prevent stains on the deck surface.

#### **Torx Safety Tips**

- Always use the lowest speed setting on drill.
- To reduce chance of bit breakage, start tightening with drill on low torque setting and work up until screw is secured.

#### **Tip:**

Pre-drill holes with 3/16" [5mm] drill bit.

## Required Tools



Goggles



Safety  
Gloves



Tape  
Measurer



Speed  
Square



Level  
Tool



Touch-Up  
Paint



T-25  
Driver Bit



#2 Phillips  
Head Bit



Drill Bits:  
1/16", 3/16", 3/8",  
[1.5mm, 5mm, 10mm]



Bit  
Extender



Spring  
Punch



File



Drill



Metal Cutting  
Miter Saw



Rubber  
Mallet



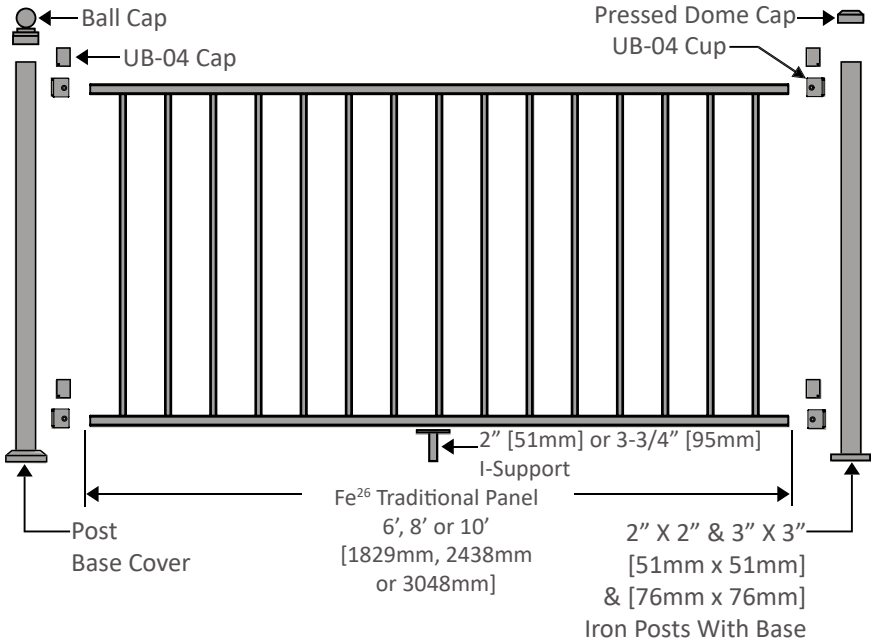
Pencil



Wood Block 2" x 4" (actual  
1-1/2" x 3-1/2" [38mm x 89mm])

## UNIVERSAL BRACKET (UB-04)

### Fe<sup>26</sup> Traditional Universal (UB-04) Bracket Installation Option



## Universal Bracket (UB-04) Post Configuration

### Fe<sup>26</sup> Traditional Panel Height

34" [864mm]

38" [965mm]

40" [1016mm]

40" [1016mm]

### Rail Panel

#### Installed Panel Height\*

37-3/4" [959mm]

41-3/4" [1061mm]

43-3/4" [1111mm]

42" [1067mm]

#### Required Post

39-1/2" [1003mm]

45-1/2" [1156mm]

45-1/2" [1156mm]

45-1/2" [1156mm]

\*Installed panel heights include a 3-3/4" [95mm] space between deck surface and bottom edge of bottom rail.

\*Posts with pre-attached UB-04 Brackets are available for traditional panel **ONLY** installations.

\*Installed panel height of 42" [1067mm] includes a 2" [51mm] space between deck surface and bottom edge of bottom rails and is **ONLY** available for posts with pre-attached UB-04 Brackets.

## UNIVERSAL BRACKET (UB-04):POST MOUNTING

\*If using Fortress Evolution Framing, reference Evolution Post to Frame connection instructions in the link below:

<https://fortressbp.com/Documents/Framing-Installation-Guide.pdf>

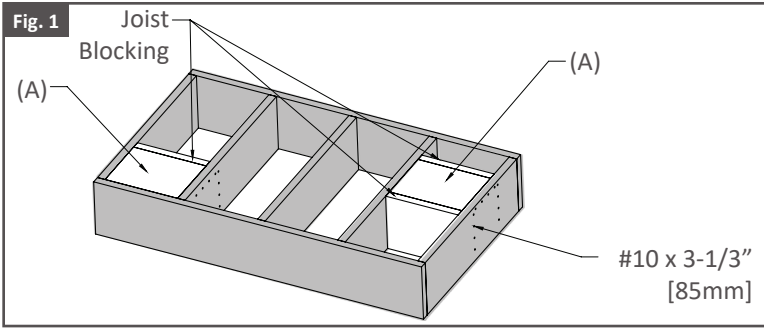
### Note:

**It's recommended to install brackets onto post before Post Mounting. Reference page 7 for Bracket Installation steps.**

**Fe<sup>26</sup> Posts with pre-attached UB-04 Brackets are available. Reference page 8.**

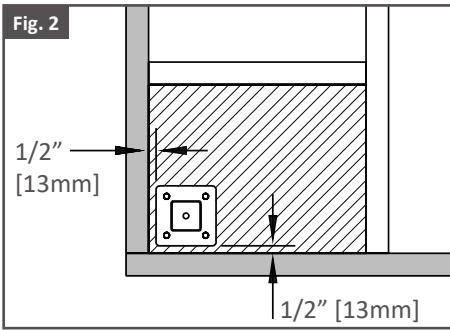
### Step 1: Install Wood Blocks

1. Install Wood Block level with top of joist. As shown in Fig. 1.
2. Secure Wood Block to blocking on all four sides with #10 X 3-1/2" [89mm] deck screws.
  - Wood Block must be constructed with treated dimensional lumber with a minimum thickness of 1-1/2" [38mm].



## Step 2: Position Base Plate

1. Position the edge of base plate a minimum of 1/2" [13mm] from the inside edge of rim joist. As shown in Fig. 2.

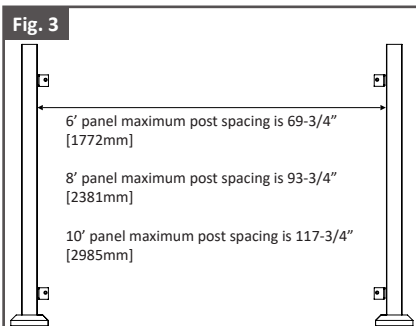


## Step 3: Max Post Spacing

- 6' panel maximum post spacing is 69-3/4" [1772mm].
- 8' panel maximum post spacing is 93-3/4" [2381mm].
- 10' panel maximum post spacing is 117-3/4" [2985mm].

### Note:

- **DO NOT** exceed the maximum post spacing.

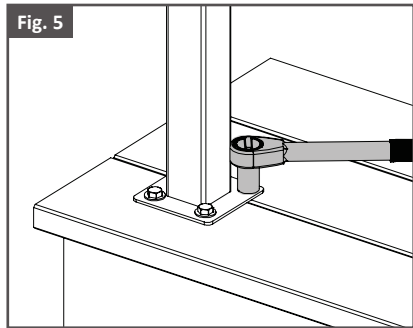
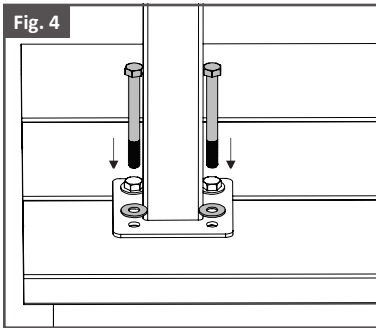


#### Step 4: Mount Posts

1. Mark mounting hole locations and pre-drill a 3/8" [10mm] hole.
2. Insert 3/8" x 3-1/2" [10mm x 89mm] Hex Head galvanized bolts through 3/8" [10mm] galvanized washer and post base plate.

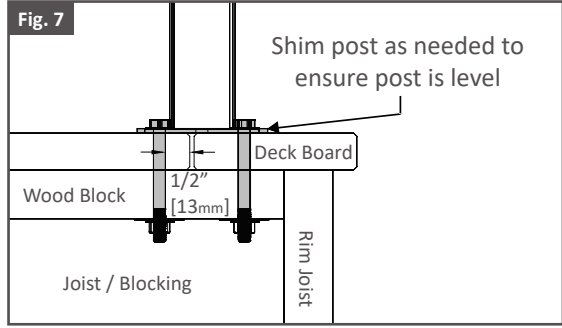
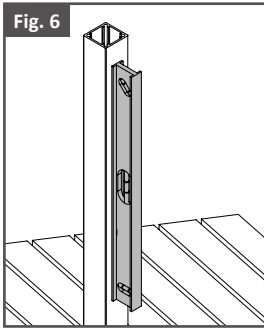
#### Note:

- Post Base Plate holes **MUST** be positioned a minimum 1/2" [13mm] from edge of deck board.



#### Step 5: Check Mounted Posts

1. Shim post as needed to ensure post is level.



# UNIVERSAL BRACKET (UB-04): POST W/ PRE-ATTACHED BRACKET

## Step 1: Identify Required Pre-Attached Post & Bracket

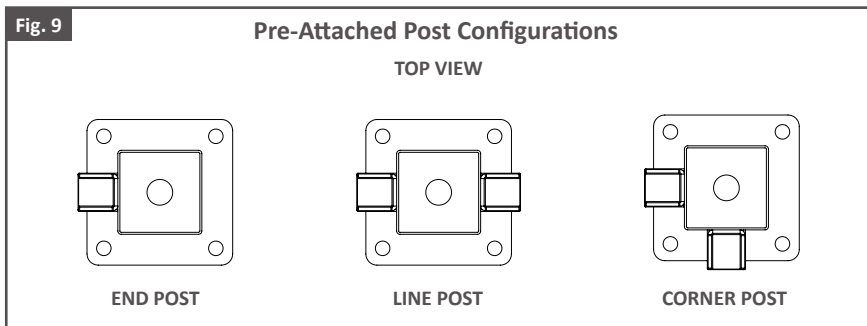
1. Fe26 2" [51mm] and 3" [76mm] Posts are available with pre-attached UB-04 Brackets. Reference Fig. 8 & 9 below for desired post.

### Note:

- Pre-welded posts are **ONLY** applicable to the 34" [864mm] and 40" [1016mm] panels.
- Reference post mounting steps on pages 5 - 7.

**Fig. 8**

Post	Panel	Line	Corner	End	Installed Panel Height
<b>3-3/4" [95mm] spacing between deck surface and bottom rail</b>					
2" x 39-1/2" [51mm x 1003mm]	34" [864mm]	X	X	X	37-3/4" [959mm]
2" x 45-1/2" [51mm x 1156mm]	40" [1016mm]	X	X	X	43-3/4" [1111mm]
3" x 39-1/2" [76mm x 1003mm]	34" [864mm]	X	X	X	37-3/4" [959mm]
3" x 45-1/2" [76mm x 1156mm]	40" [1016mm]	X	X	X	43-3/4" [1111mm]
<b>2" [51mm] spacing between deck surface and bottom rail</b>					
2" x 45-1/2" [51mm x 1156mm]	40" [1016mm]	X	X	X	42" [1067mm]
3" x 45-1/2" [76mm x 1156mm]	40" [1016mm]	X	X	X	42" [1067mm]





## UNIVERSAL BRACKET (UB-04): BRACKET INSTALLATION

### Step 1: Mark Bracket Hole Locations

1. Mark the centerline of each post with a pencil.
2. Take measurements used in Fig. 10 - 12 to mark bottom and top bracket hole locations onto posts.

#### Tip:

- Remove all metal shavings from deck, post base cover, post, and panel before bracket is screwed to post to prevent rust stains.

Fig. 10

#### UB-04 Bracket Hole Locations: 3-3/4" [95mm] Above Deck Spacing

Pre-drill Dimensions: Pre-drilling with a 3/16" [5mm] drill bit is required

A\*

B

C

#### 34" [864mm] Panel

4" [102mm]

1/2" [13mm]

37" [940mm]

#### 38" [965mm] Panel

4" [102mm]

1/2" [13mm]

41" [1041mm]

#### 40" [1016mm] Panel

4" [102mm]

1/2" [13mm]

43" [1092mm]

\*Dimension A positions bottom edge of rail 3-3/4" [95mm] above deck surface.

\*Dimension A is measured from the bottom surface of post base.

Fig. 11

#### UB-04 Bracket Hole Locations: 2" [51mm] Above Deck Spacing

Pre-drill Dimensions: Pre-drilling with a 3/16" [5mm] drill bit is required

A\*

B

C

#### 40" [1016mm] Panel

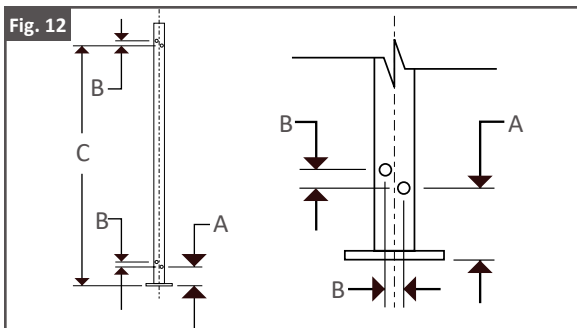
2-1/4" [57mm]

1/2" [13mm]

41-1/4" [1048mm]

\*Dimension A positions bottom edge of rail 2" [51mm] above deck surface.

\*Dimension A is measured from the bottom surface of post base.



## Step 2: Pre-Drill and Install Brackets

### Tip:

- **It's important to double check dimensions to confirm accuracy of bracket hole locations before drilling.**
1. Use Spring Punch to mark the holes. As shown in Fig. 13.
  2. Pre-drill bracket holes with a 3/16" [5mm] drill bit. As shown in Fig. 14.
  3. Attach Bracket to the posts with supplied T-25 Thread-Cutting Screws. Use two screws per bracket. Use low speed setting on drill. As shown in Fig. 15.
  4. Once top and bottom brackets are installed, remeasure bracket spacing to confirm dimensions used in Fig. 10 - 12 of step 1 (page 9 & 10). As shown in Fig. 16.
  5. Remove all metal shavings from deck, post base cover, post, and panel before bracket is screwed to post to prevent corrosion.

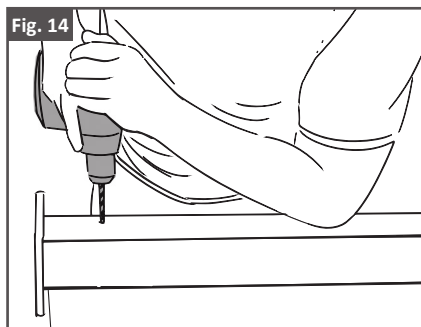
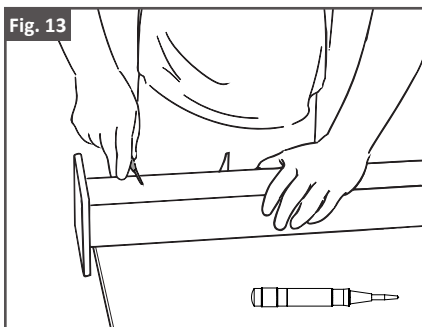


Fig. 15

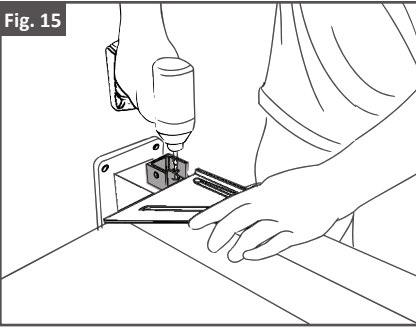
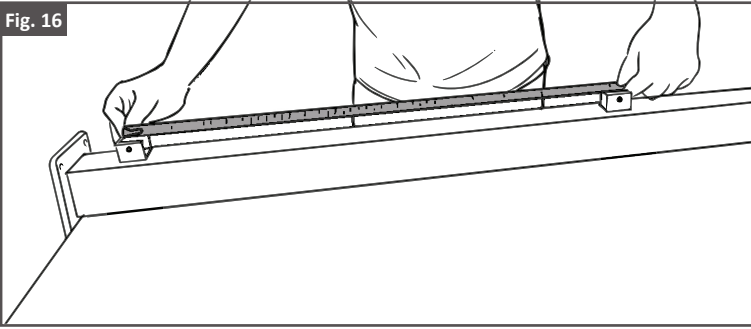


Fig. 16



## UNIVERSAL BRACKET (UB-04): CUTTING DOWN PANEL

### Step 1: Measure The Panel Opening Length

1. Measure the distance of the panel opening. As shown in Fig. 17. Confirm that the measurements for the top brackets are the same as the bottom brackets.

#### Note:

- Measure from the back wall of the bracket to the back wall of the bracket on other post. As shown in Fig. 18.

Fig. 17

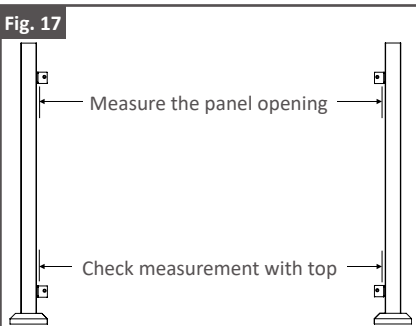
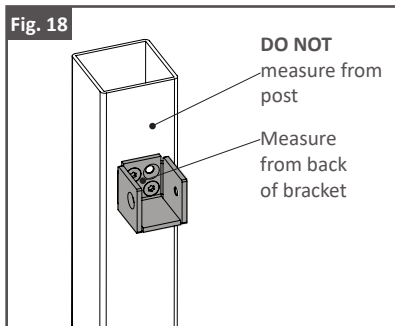
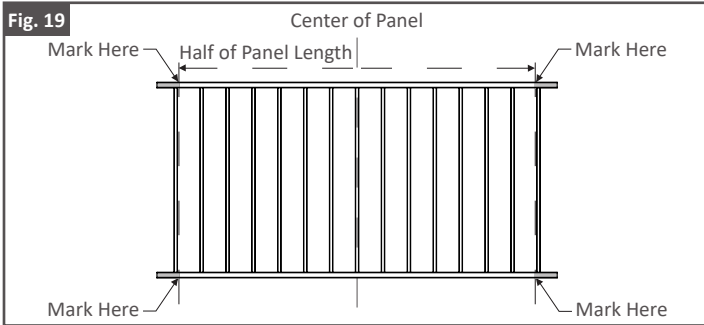


Fig. 18



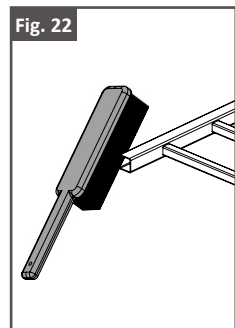
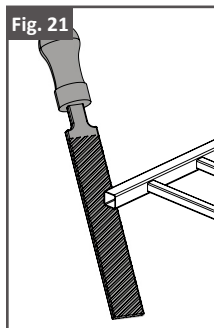
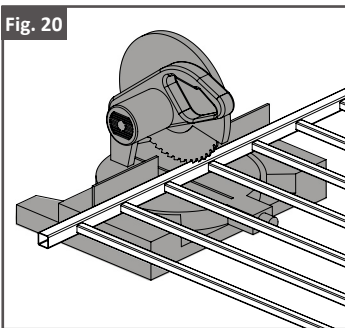
## Step 2: Measure & Mark Panel Where Cuts Will Be Made

1. To ensure rails are symmetrical, take the measurement found in step 1 (Measure The Panel Opening Length), and divide it in half.
2. Find the center of the rails and measure out half of the length each direction. As shown in Fig. 19.
3. Mark these locations with a pencil on the top and bottom rail.



## Step 3: Cut & Clean Panel

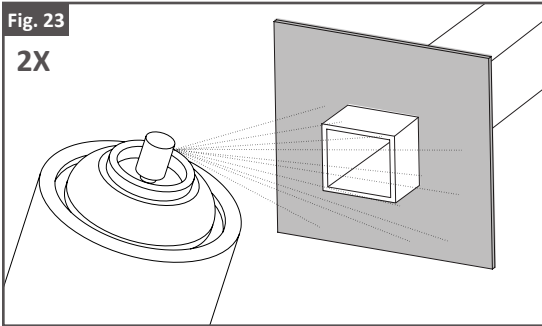
1. Cut the panel using a saw with a ferrous metal cutting blade.
2. Use file to smooth cut edges.
3. Remove any metal shavings and dust with a brush or rag.
4. Make sure surfaces to be painted are clean.



## Step 4: Apply Spray Paint To Cut Areas

1. Using a piece of cardboard as a mask, apply the 1<sup>st</sup> coat of Fortress zinc based touch-up paint. As shown in Fig. 23.
2. Allow to dry before applying second coat.

3. Apply the 2<sup>nd</sup> coat of Fortress zinc based touch-up paint.
4. Allow to dry and install.



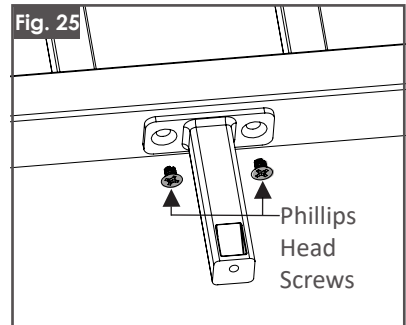
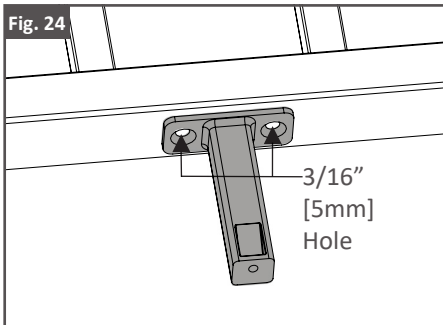
## UNIVERSAL BRACKET (UB-04): PANEL INSTALLATION

### Step 1: Install I-Support On Bottom Rail

1. Measure and locate the center of the bottom rail. Using the I-Support as a guide, mark the center of the 2 screw holes. As shown in Fig. 24.
2. Using a 3/16" [5mm] drill bit, drill through the outside wall. As shown in Fig. 24.
3. Install the I-Support with the provided Phillips Head Screws. As shown in Fig. 25.

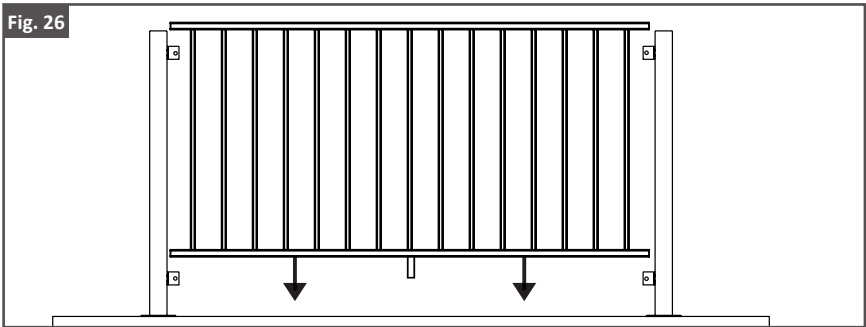
#### Note:

- Be sure to install I-Support on side of rail facing deck.



## Step 2: Install Panel

1. Install cut panel to ensure proper fit.

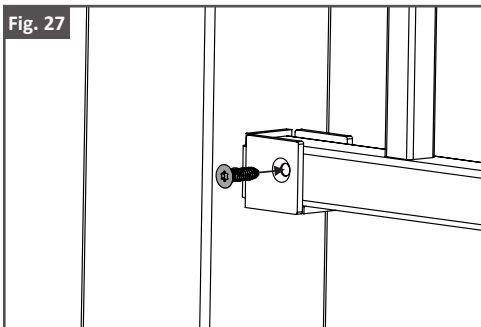


## Step 3: Attach Panel To Bottom & Top Brackets

1. Pre-drill holes for screws using a 3/16" [5mm] drill bit.
2. Apply screws into bottom & top brackets. As shown in Fig. 27.

### Note:

- Only one screw per bracket is needed to secure the bracket to the panel.
- Screws should be installed on the same side of brackets.



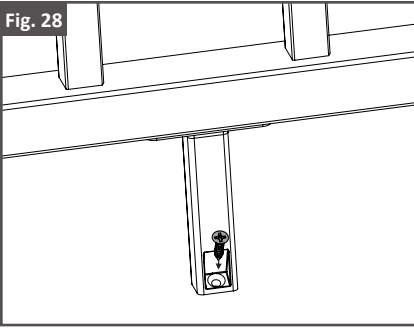
## Step 4: Attach I-Support To Deck

1. Fasten I-Support to deck surface with the supplied Phillips Head Wood Screw.

### Tip:

- Pre-drill with a 1/16" [2mm] drill bit.
- Use a Bit extender to install screws.

Fig. 28



## POST BASE COVER, BRACKET CAP & PRESSED DOME/BALL CAP INSTALLATION

### Step 1: Install Post Base Cover

1. Separate the two-piece base plate cover. Hold one side parallel to the post base plate. As shown in Fig. 29.
2. Place 2nd half of the post base cover on the opposite side of the post. Hold 2nd piece slightly under the 1st piece. As shown in Fig. 30.
3. Twist the 2nd cover  $\frac{1}{4}$  turn and move piece until both half's touch. As shown in Fig. 31.
4. Make sure one of the locking pins on the 2nd cover engage with the proper slot on the 1st cover piece. As shown in Fig. 32.
5. Once the first locking pin is started, turn the 2nd cover piece back parallel to the post base plate. Once you have confirmed both locking pins have engaged with the opposing slots lower both half's over the post base plate. As shown in Fig. 33.

Fig. 29

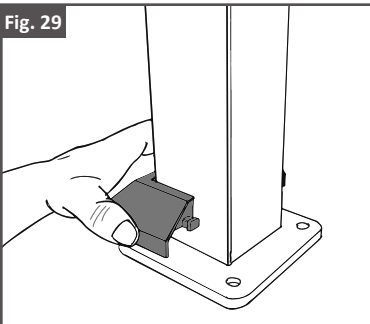
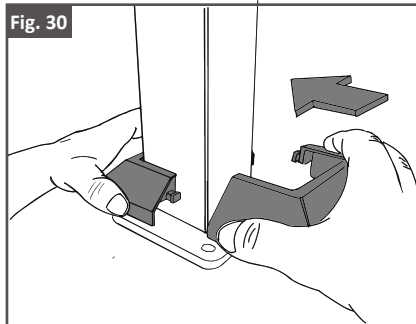
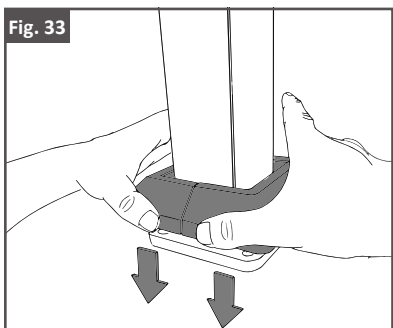
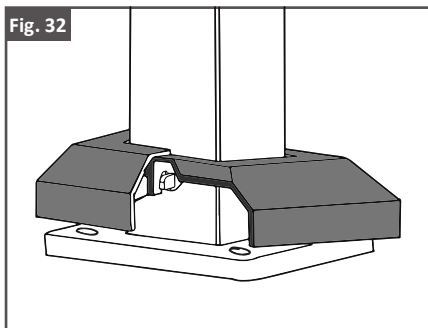
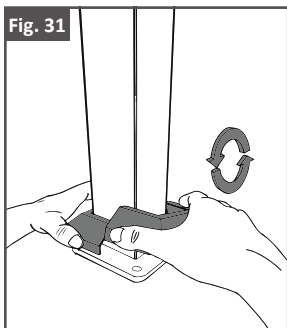


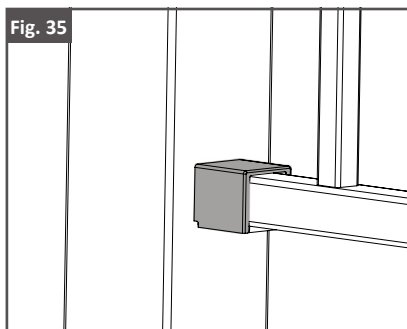
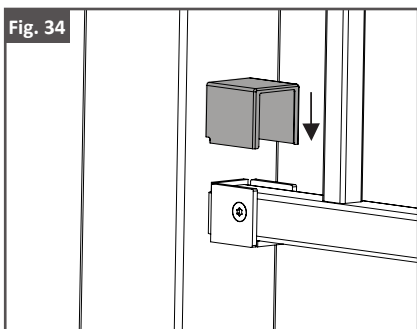
Fig. 30





## Step 2: Install Bracket Caps

1. Bracket Caps snap over Bracket Caps. As shown in Fig. 34 & 35.



## Step 3: Install Pressed Dome Cap

1. Pressed Dome Caps & Ball Caps are press fit into place. As shown in Fig. 36 & 37.
2. Use a broom or compressor to remove debris from railing and deck surface.



Fig. 36

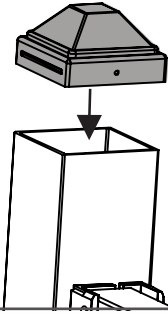
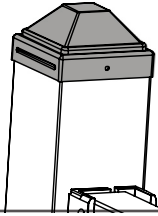
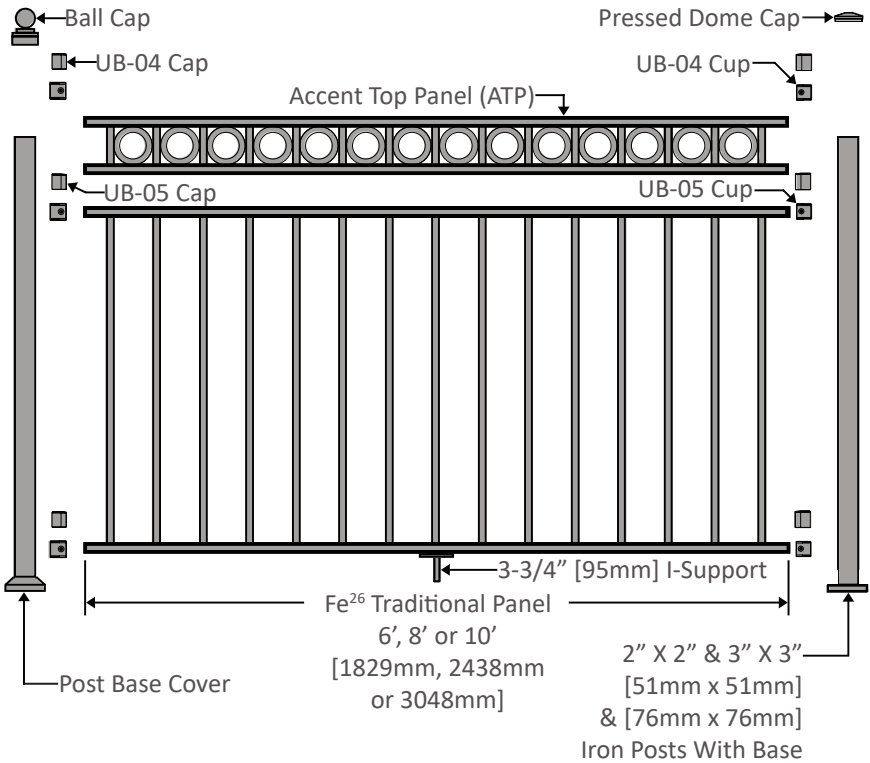


Fig. 37



# UNIVERSAL BRACKET WITH ACCENT TOP PANEL (ATP)

## Fe<sup>26</sup> Traditional Universal (UB-04) Bracket with Accent Top Panel (ATP) Installation Option



### Universal Bracket With Accent Top Panel (ATP) Post Configuration

#### Fe<sup>26</sup> Traditional Panel Height

32" [813mm]

34" [864mm]

38" [965mm]

#### Rail Panel With ATP

Installed Panel Height\*

40-3/4" [1035mm]

42-3/4" [1086mm]

46-3/4" [1187mm]

Required Post

45-1/2" [1156mm]

45-1/2" [1156mm]

55-1/2" [1410mm]

\*Installed heights include a 3-3/4" [95mm] space between deck surface and bottom edge of bottom rail.

## UNIVERSAL BRACKET WITH ATP: POST MOUNTING

- Reference Post Mounting instructions on page 5.

**Note:**

**It's recommended to install brackets onto post before post mounting.**

## UNIVERSAL BRACKET WITH ATP: BRACKET INSTALLATION

### Step 1: Mark Bracket Hole Locations

1. Mark the centerline of each post with a pencil.
2. Take measurements used in Fig. 38 and 39 to mark bracket hole locations onto posts.

**Tip:**

- **Remove all metal shavings from deck, post base cover, post, and panel before bracket is screwed to post to prevent rust stains.**

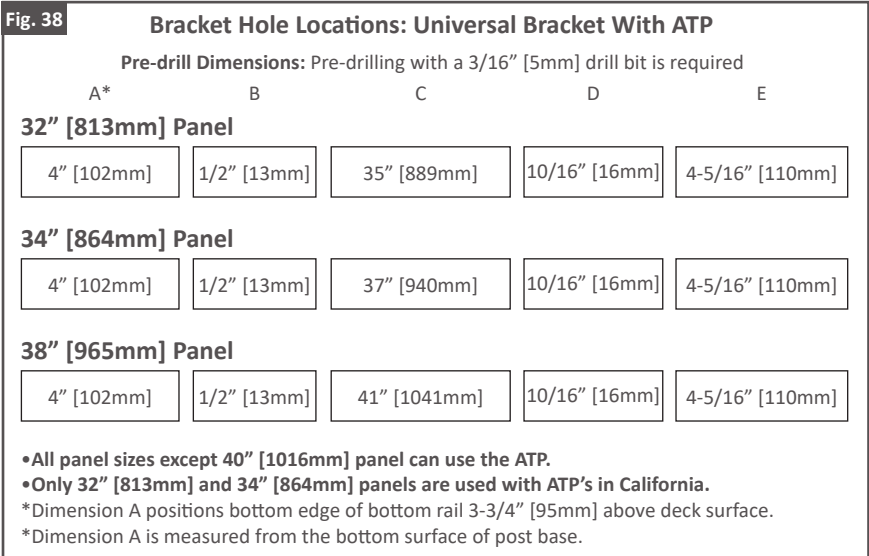
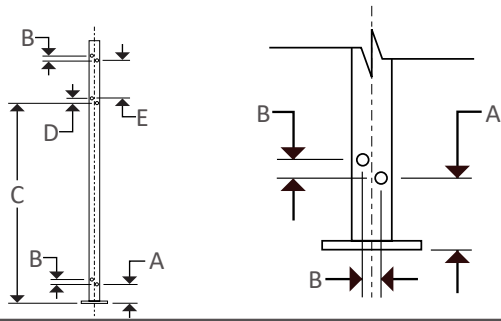


Fig. 39

Universal Bracket  
With ATP



### Step 2: Pre-Drill and Install Brackets

- Reference Bracket hole pre-drilling and installation instructions on pages 10 & 11.

### UNIVERSAL BRACKET WITH ATP: CUTTING DOWN PANEL & ATP

- Reference Panel and ATP cutting instructions on pages 11 - 13.

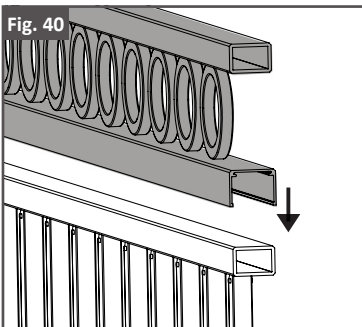
### UNIVERSAL BRACKET WITH ATP: PANEL INSTALLATION

#### Step 1: Install I-Support On Bottom Rail

- Reference I-Support to bottom rail instructions on page 13, step 1.

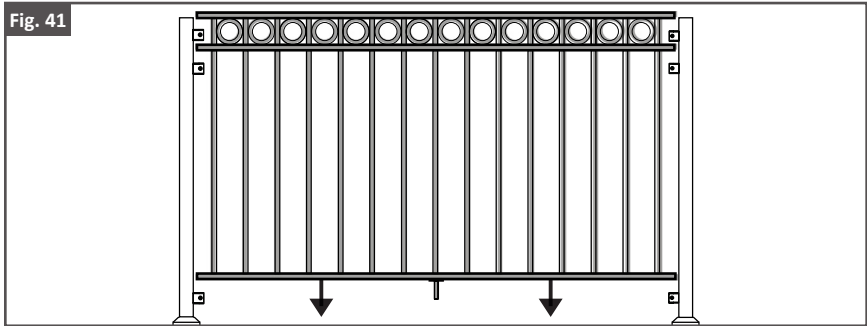
#### Step 2: Install ATP Onto Panel

1. The ATP is press fit into place. As shown in Fig. 40.



### Step 3: Install Panel

1. Install cut panel to ensure proper fit. As shown in Fig. 41.



### Step 4: Attach Panel To Brackets

- Reference panel to bracket instructions on page 14, step 3.

### Step 5: Attach I-Support To Deck

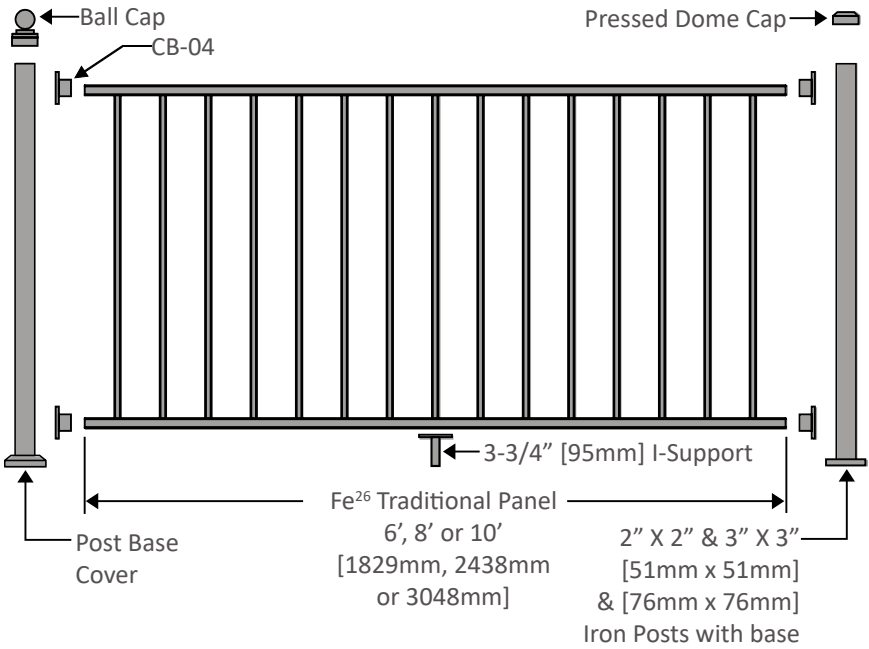
- Reference I-Support to deck instructions on pages 14 & 15, step 4.

## **POST BASE COVER, BRACKET CAP & PRESSED DOME/BALL CAP INSTALLATION**

- Reference Post Base Cover, Bracket Cap & Pressed Dome/ Ball Cap instructions on pages 15 - 17.

# COLLAR BRACKET (CB-04)

## Fe<sup>26</sup> Traditional Collar Brackets (CB-04) Installation Option



Collar Bracket (CB-04) Post Configuration

**Fe<sup>26</sup> Traditional Panel Height**

34" [864mm]
38" [965mm]
40" [1016mm]

**Rail Panel**

Installed Panel Height*	Required Post
37-3/4" [959mm]	39-1/2" [1003mm]
41-3/4" [1061mm]	45-1/2" [1156mm]
43-3/4" [1111mm]	45-1/2" [1156mm]

\*Installed heights include a 3-3/4" [95mm] space between deck surface and bottom edge of bottom rail.

## COLLAR BRACKET (CB-04): POST MOUNTING

- Reference Post Mounting instructions on page 5.

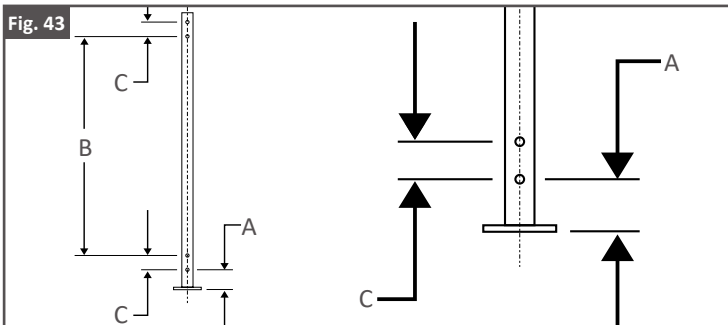
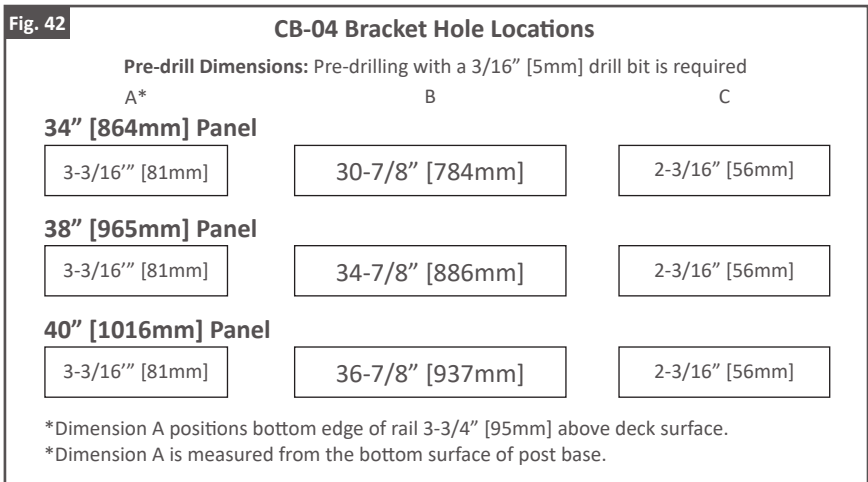
## COLLAR BRACKET (CB-04): BRACKET INSTALLATION

### Step 1: Mark Bracket Hole Locations

1. Mark the centerline of each post with a pencil.
2. Take measurements used in Fig. 42 and 43 to mark bracket hole locations onto posts.

#### Tip:

- **Remove all metal shavings from deck, post base cover, post, and panel before bracket is screwed to post to prevent rust stains.**



## **Step 2: Pre-Drill Bracket Holes**

- Reference Bracket hole pre-drilling instructions on page 10 (Step 2: 1 & 2).

### **Note:**

- **DO NOT** install brackets in this step.

## **COLLAR BRACKET (CB-04): CUTTING DOWN PANEL**

- Reference Panel cutting instructions on pages 11 - 13.

### **Note:**

- **When measuring the panel opening length for the CB-04 installation, measure from the inside face of each post.**

## **COLLAR BRACKET (CB-04): PANEL INSTALLATION**

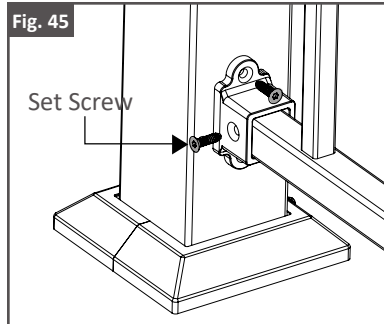
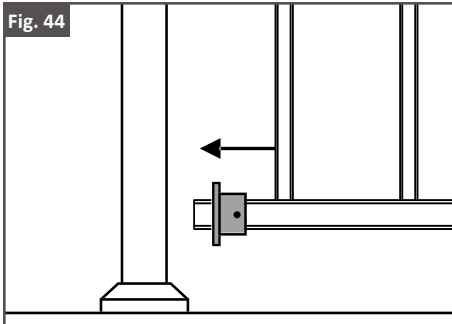
### **Step 1: Install I-Support On Bottom Rail**

- Reference I-Support to bottom rail instructions on page 13, step 1.

### **Step 2: Install Panel**

1. Slide CB-04 Brackets over each end of the bottom & top rails. Make sure that all set screw holes face the desired direction. As shown in Fig. 44.
2. Secure Brackets into pre-drilled Bracket holes on post with provided T-25 Drive Thread-Cutting Screws.
3. Pre-drill Bracket Set Screw holes on bottom & top Rail using a 3/16" [5mm] drill bit.
4. Secure Bracket onto Rails with provided T-25 Drive Thread-Cutting Screws. Use low speed setting on drill. As shown in Fig. 45.





### Step 3: Attach I-Support To Deck

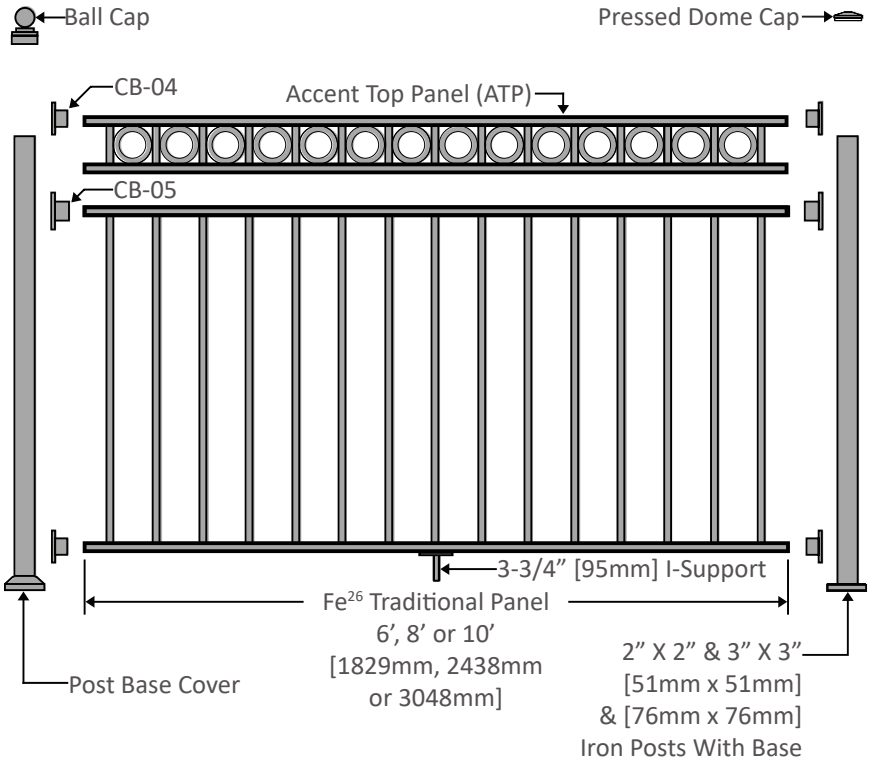
- Reference I-Support to deck instructions on pages 14 & 15, step 4.

### POST BASE COVER, BRACKET CAP & PRESSED DOME/BALL CAP INSTALLATION

- Reference Post Base Cover, Bracket Cap & Pressed Dome/Ball Cap instructions on pages 15 - 17.

## COLLAR BRACKET WITH ACCENT TOP PANEL (ATP)

### Fe<sup>26</sup> Traditional Collar Bracket (CB-04) with Accent Top Panel (ATP) Installation Option



#### Collar Bracket (CB-04) With Accent Top Panel (ATP) Post Configuration

##### Fe<sup>26</sup> Traditional Panel Height

32" [813mm]

34" [864mm]

38" [965mm]

##### Rail Panel With ATP

###### Installed Panel Height\*

40-3/4" [1035mm]

42-3/4" [1086mm]

46-3/4" [1187mm]

###### Required Post

39-1/2" [1003mm]

45-1/2" [1156mm]

55-1/2" [1410mm]

\*Installed heights include a 3-3/4" [95mm] space between deck surface and bottom edge of bottom rail.

## COLLAR BRACKET WITH ATP: POST MOUNTING

- Reference Post Mounting instructions on page 5.

## COLLAR BRACKET WITH ATP: BRACKET INSTALLATION

### Step 1: Mark Bracket Hole Locations

1. Mark the centerline of each post with a pencil.
2. Take measurements used in Fig. 46 and 47 to mark bracket hole locations onto posts.

#### Tip:

- **Remove all metal shavings from deck, post base cover, post, and panel before bracket is screwed to post to prevent rust stains.**

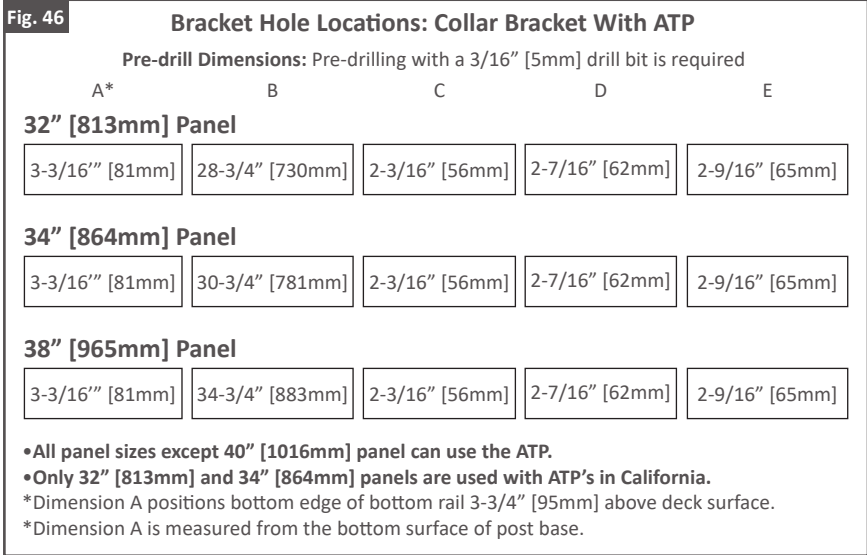
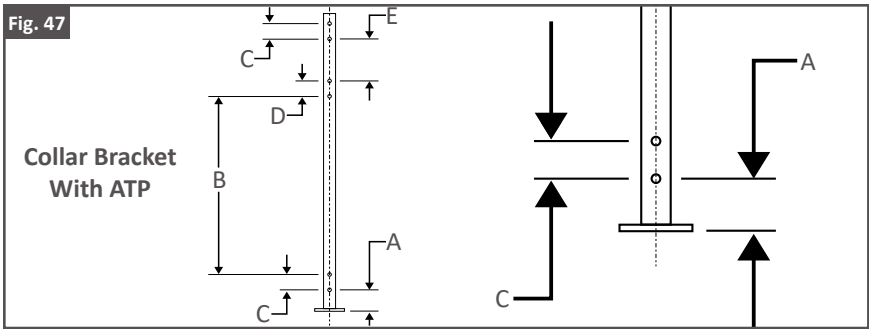


Fig. 47



### Step 2: Pre-Drill Bracket Holes

- Reference Bracket hole pre-drilling instructions on page 10 (Step 2: 1 & 2).

#### Note:

- **DO NOT** install brackets in this step.

### COLLAR BRACKET WITH ATP: CUTTING DOWN PANEL

- Reference Panel cutting instructions on pages 11 - 13.

#### Note:

- **When measuring the panel opening length for the CB-04 installation, measure from the inside face of each post.**

### COLLAR BRACKET WITH ATP: PANEL INSTALLATION

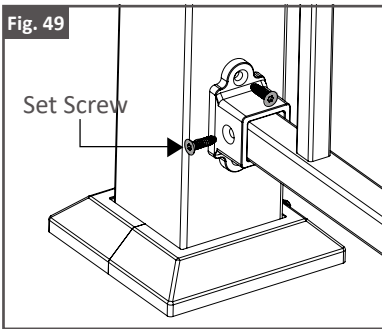
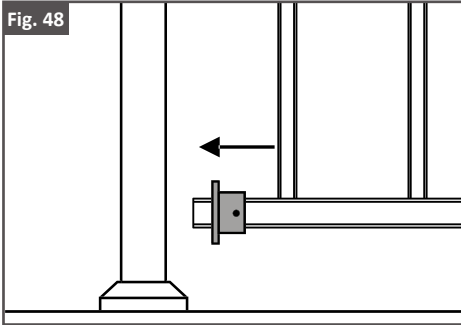
#### Step 1: Install I-Support On Bottom Rail

- Reference I-Support to bottom rail instructions on page 13, step 1.

#### Step 2: Install Panel

1. Slide CB-04 Brackets over each end of the bottom, middle & top rails. Make sure that all set screw holes face the desired direction. As shown in Fig. 48.
2. Secure Brackets into pre-drilled Bracket holes on post with provided T-25 Drive Thread-Cutting Screws.
3. Pre-drill Bracket Set Screw holes on bottom, middle & top Rail using a 3/16" [5mm] drill bit.

- Secure Bracket onto Rails with provided T-25 Drive Thread-Cutting Screws. Use low speed setting on drill. As shown in Fig. 49.



### Step 3: Attach I-Support To Deck

- Reference I-Support to deck instructions on pages 14 & 15, step 4.

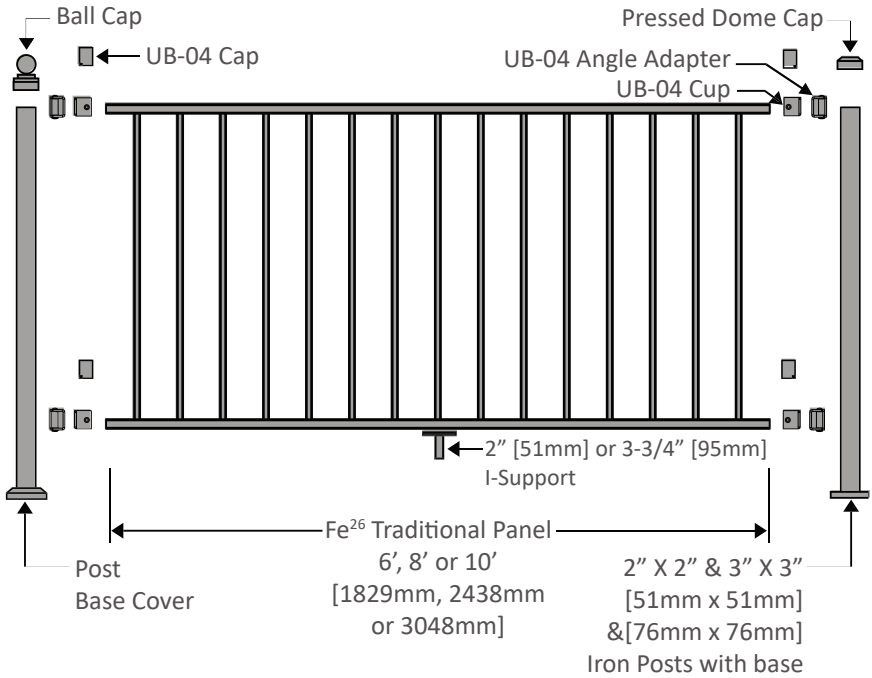
### POST BASE COVER, BRACKET CAP & PRESSED DOME/BALL CAP INSTALLATION

- Reference Post Base Cover, Bracket Cap & Pressed Dome/Ball Cap instructions on pages 15 - 17.

# ANGLE BRACKET (UB-04 & CBS-04)

## Fe<sup>26</sup> Traditional Angle Brackets Installation Options

### Universal Bracket Angle Adapter (UB-04)



### Universal Bracket Angle Adapter (UB-04) Post Configuration

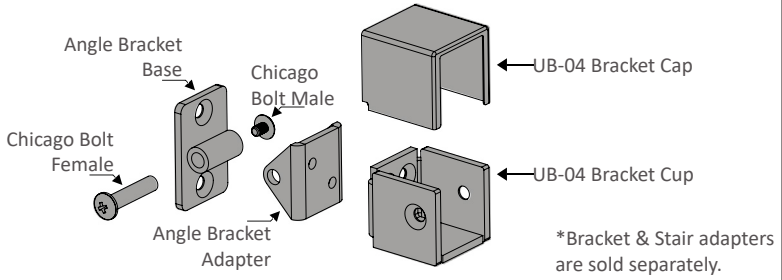
Fe <sup>26</sup> Traditional Panel Height	Rail Panel	
	Installed Panel Height*	Required Post
34" [864mm]	37-3/4" [959mm]	39-1/2" [1003mm]
38" [965mm]	41-3/4" [1061mm]	45-1/2" [1156mm]
40" [1016mm]	43-3/4" [1111mm]	45-1/2" [1156mm]
40" [1016mm]	42" [1067mm]	45-1/2" [1156mm]

\*Installed panel heights include a 3-3/4" [95mm] space between deck surface and bottom edge of bottom rail.

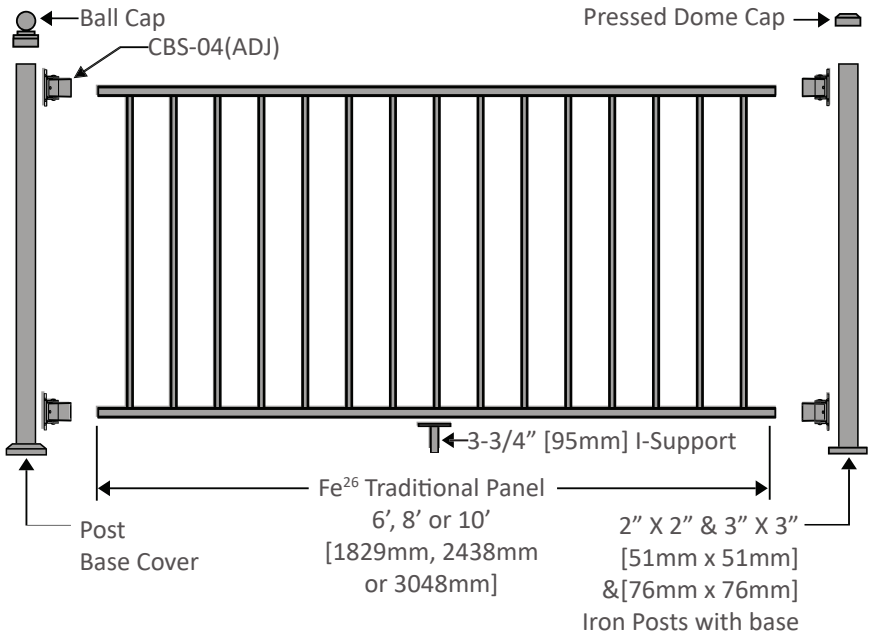
\*Posts with pre-attached UB-04 Brackets are available for traditional panel **ONLY** installations.

\*Installed panel height of 42" [1067mm] includes a 2" [51mm] space between deck surface and bottom edge of bottom rails and is **ONLY** available for posts with pre-attached UB-04 Brackets.

### Universal Bracket Angle Adapter (UB-04)



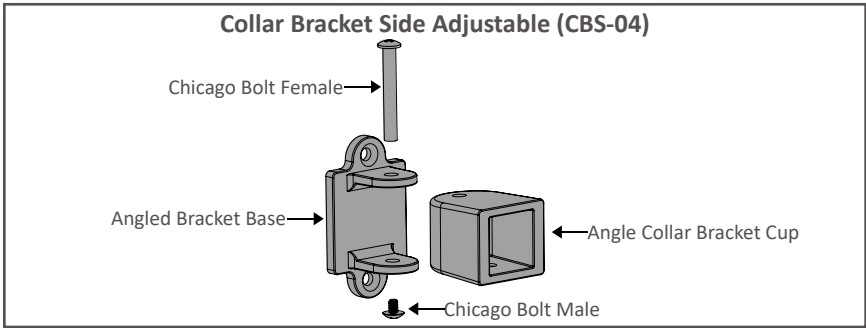
### Collar Bracket Side Adjustable (CBS-04)



### Collar Bracket Side Adjustable (CBS-04) Post Configuration

Fe <sup>26</sup> Traditional Panel Height	Rail Panel	
	Installed Panel Height*	Required Post
34" [864mm]	37-3/4" [959mm]	39-1/2" [1003mm]
38" [965mm]	41-3/4" [1061mm]	45-1/2" [1156mm]
40" [1016mm]	43-3/4" [1111mm]	45-1/2" [1156mm]

\*Installed heights include a 3-3/4" [95mm] space between deck surface and bottom edge of bottom rail.



## POST MOUNTING

- Reference Post Mounting instructions on page 5.

### Note:

IT'S RECOMMENDED TO INSTALL BRACKETS ON TO POST BEFORE POST MOUNTING.

## ANGLE BRACKET (UB-04 & CBS-04): BRACKET INSTALLATION

### Note:

**The bracket installation instructions cover both UB-04 and CBS-04, only use steps specific to bracket being installed.**

### Step 1: Mark Bracket Hole Locations (UB-04 or CBS-04)

1. Mark the centerline of each post with a pencil.
2. Take measurements used to mark bottom and top bracket hole locations onto posts. Reference Fig. 50 - 52 for UB-04 and Fig. 53 and 54 for CBS-04.

### Note:

- Installed panel heights include space between the deck surface and underside of bottom rail. Fe<sup>26</sup> has a spacing of 3-3/4" [95mm] spacing.



**Fig. 50 UB-04 Angle Adapter Bracket Hole Locations: 3-3/4" [95mm] Above Deck Spacing**

**Pre-drill Dimensions:** Pre-drilling with a 3/16" [5mm] drill bit is required

A*	B	C
<b>34" [864mm] Panel</b>		
4-1/4" [108mm]	37-1/4" [946mm]	1-3/16" [30mm]
<b>38" [965mm] Panel</b>		
4-1/4" [108mm]	41-1/4" [1047mm]	1-3/16" [30mm]
<b>40" [1016mm] Panel</b>		
4-1/4" [108mm]	43-1/4" [1099mm]	1-3/16" [30mm]

\*Dimension A positions bottom edge of rail 3-3/4" [95mm] above deck surface.

\*Dimension A is measured from the bottom surface of post base.

**Fig. 51 UB-04 Angle Adapter Bracket Hole Locations: 2" [51mm] Above Deck Spacing**

**Pre-drill Dimensions:** Pre-drilling with a 3/16" [5mm] drill bit is required

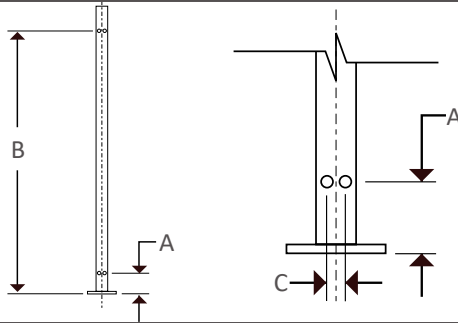
A*	B	C
<b>40" [1016mm] Panel</b>		
2-3/8" [60mm]	41-3/8" [1051mm]	1-3/16" [30mm]

\*Dimension A positions bottom edge of rail 2" [51mm] above deck surface.

\*Dimension A is measured from the bottom surface of post base.

**Fig. 52**

**UB-04 Angle Adapter**



**Fig. 53 Collar Bracket Side Adjustable (CBS-04) Bracket Hole Locations**

Pre-drill Dimensions: Pre-drilling with a 3/16" [5mm] drill bit is required

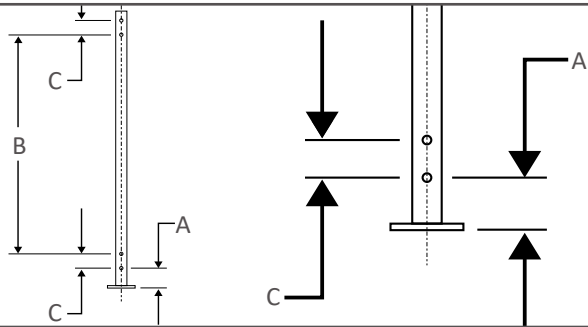
A*	B	C
<b>34" [864mm] Panel</b>		
3-3/16" [81mm]	30-11/16" [780mm]	2-5/16" [59mm]
<b>38" [965mm] Panel</b>		
3-3/16" [81mm]	34-3/4" [882mm]	2-5/16" [59mm]
<b>40" [1016mm] Panel</b>		
3-3/16" [81mm]	36-3/4" [933mm]	2-5/16" [59mm]

\*Dimension A positions bottom edge of rail 3-3/4" [95mm] above deck surface.

\*Dimension A is measured from the bottom surface of post base.

**Fig. 54**

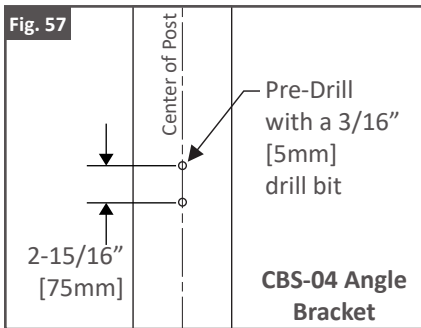
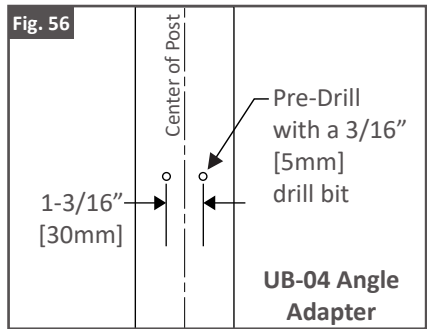
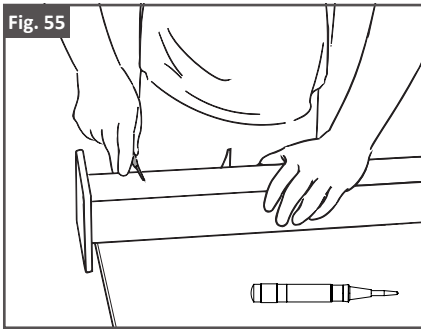
**CBS-04 Angled Bracket**



## Step 2: Pre-drill Angle Bracket Holes

### Tip:

- **It's important to double check dimensions to confirm accuracy of bracket hole locations before drilling.**
1. Use Spring Punch to mark the holes. As shown in Fig. 55.
  2. Pre-drill bracket holes with a 3/16" [5mm] drill bit. As shown in Fig. 56 & 57.
  3. Remove the bolt from the Angle Bracket Assembly.



### Step 3: Install UB-04 Angle Adapter

1. Attach Angle Adapter Base piece to the posts with supplied T-25 Thread-Cutting Screws. Use low speed setting on drill. As shown in Fig. 58.
2. Assemble Angle Adapter Body piece & Base piece. As shown in Fig. 59.
3. Attach UB-04 Bracket to Angle Adapter using T-25 Thread-Cutting Screws. As shown in Fig. 60.

#### Tip:

- Use a Bit Extender for an easier drilling process.

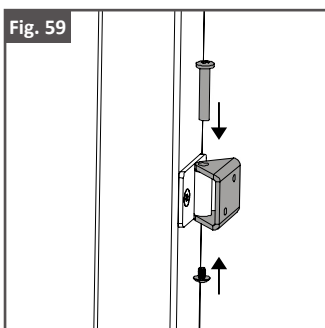
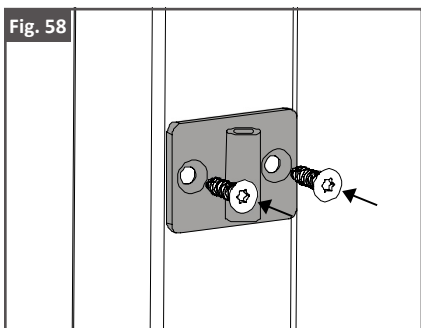
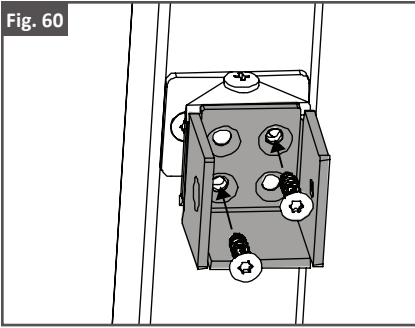


Fig. 60



#### Step 4: Install CBS-04 Angle Brackets

1. Attach Angle Bracket Base piece to the posts with supplied T-25 Thread-Cutting Screws. Use low speed setting on drill. As shown in Fig. 61.
2. Assemble Angle Bracket Body piece & Base piece. As shown in Fig. 62.

#### Tip:

- Use a Bit Extender for an easier drilling process.

Fig. 61

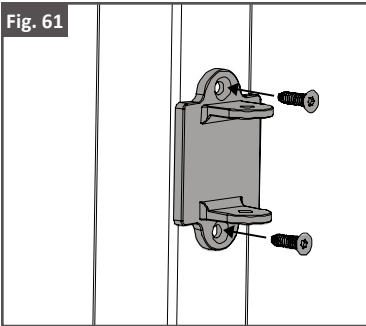
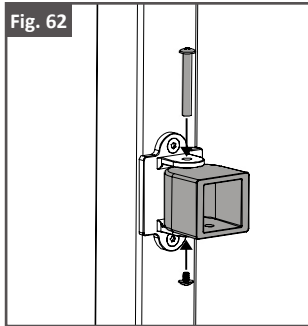


Fig. 62



#### Step 5: Determine Panel Length

1. Check to ensure that all posts are square and straight. Shim posts as required.
2. Ensure that the Angle Bracket Cups are approximately aligned.
3. With another person's help, measure the distance from the inside back of one cup to the inside back of the other cup. This will be the panel length. As shown in Fig. 64 & 65.

Fig. 63

UB-04 Angle Bracket



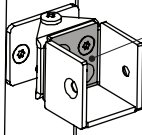
CBS-04 Angle Bracket



Fig. 64

DO NOT measure from post

Measure from back of bracket

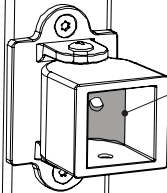


UB-04 Angle Bracket

Fig. 65

DO NOT measure from post

Measure from back of bracket



CBS-04 Angle Bracket

## ANGLE BRACKET: CUTTING DOWN PANEL

- Reference Panel cutting instructions on pages 11 - 13.

## ANGLE BRACKET: PANEL INSTALLATION

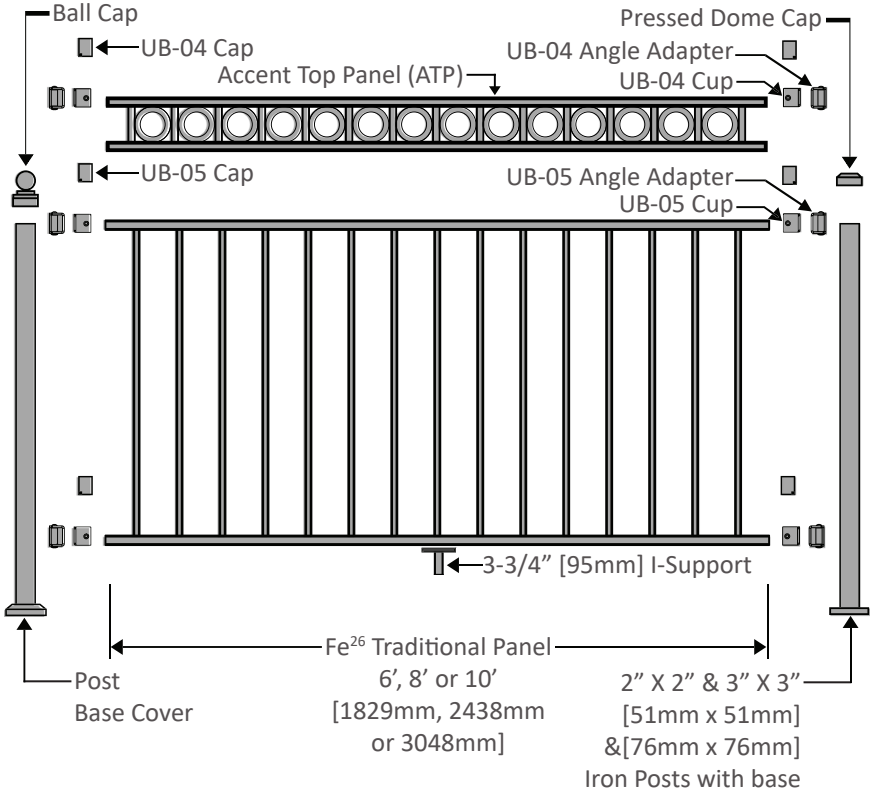
- Reference UB-04 Panel installation instructions on pages 13 - 15.
- Reference CB-04 Panel installation instructions on pages 24 - 25.

## **POST BASE COVER, BRACKET CAP & PRESSED DOME/BALL CAP INSTALLATION**

- Reference Post Base Cover, Bracket Cap & Pressed Dome/  
Ball Cap instructions on pages 15 - 17.

# UNIVERSAL BRACKET ANGLE ADAPTER WITH ACCENT TOP PANEL (ATP)

## Fe<sup>26</sup> Traditional Angle Universal Bracket with Accent Top Panel (ATP) Installation Option



### Universal Bracket Angle Adapter (UB-04) Post Configuration

#### Fe<sup>26</sup> Traditional Panel Height

32" [813mm]

34" [864mm]

38" [965mm]

#### Rail Panel With ATP

##### Installed Panel Height\*

40-3/4" [1035mm]

42-3/4" [1086mm]

46-3/4" [1187mm]

##### Required Post

39-1/2" [1003mm]

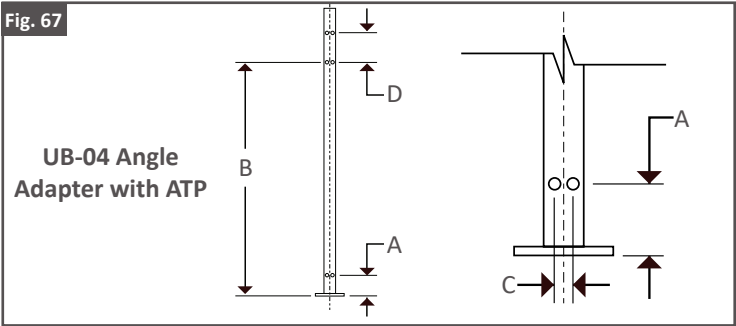
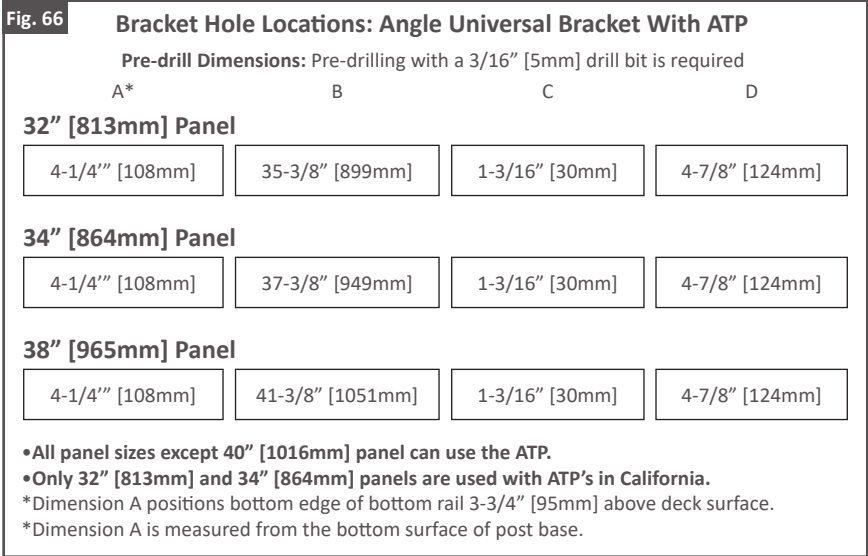
45-1/2" [1156mm]

55-1/2" [1410mm]

\*Installed heights include a 3-3/4" [95mm] space between deck surface and bottom edge of bottom rail.

# UNIVERSAL BRACKET ANGLE ADAPTER WITH ATP: INSTALLATION

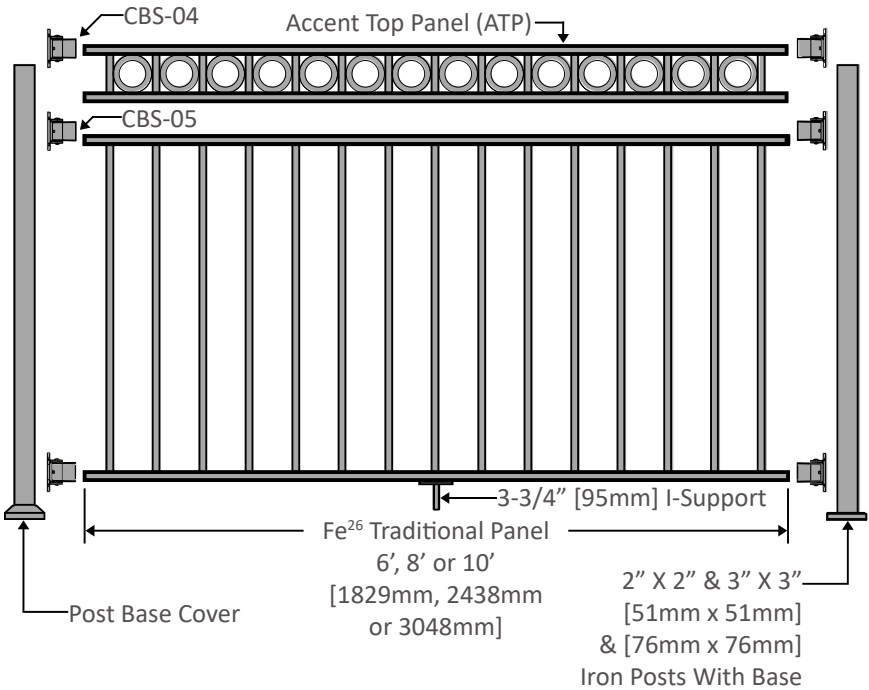
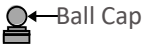
- Reference Universal Bracket With Accent Top Panel (ATP) installation instructions on pages 18 - 21.
- Reference Fig. 66 & 67 below for bracket hole locations.





# COLLAR BRACKET SIDE ADJUSTABLE (CBS-04) WITH ACCENT TOP PANEL (ATP)

## Fe<sup>26</sup> Traditional Collar Bracket Side Adjustable (CBS-04) with Accent Top Panel (ATP) Installation Option



### Collar Bracket Side Adjustable (CBS-04) With Accent Top Panel (ATP) Post Configuration

#### Fe<sup>26</sup> Traditional Panel Height

32" [813mm]

34" [864mm]

38" [965mm]

#### Rail Panel With ATP

##### Installed Panel Height\*

40-3/4" [1035mm]

42-3/4" [1086mm]

46-3/4" [1187mm]

##### Required Post

39-1/2" [1003mm]

45-1/2" [1156mm]

55-1/2" [1410mm]

\*Installed heights include a 3-3/4" [95mm] space between deck surface and bottom edge of bottom rail.

## COLLAR BRACKET SIDE ADJUSTABLE (CBS-04) WITH ATP: INSTALLATION

- Reference Collar Bracket With Accent Top Panel (ATP) installation instructions on pages 26 - 29.
- When measuring panel opening length, measure from back of bracket, **DO NOT** measure from the inside face of post. As shown in Fig. 65 on page 37.
- Reference Fig. 68 & 69 below for bracket hole locations.

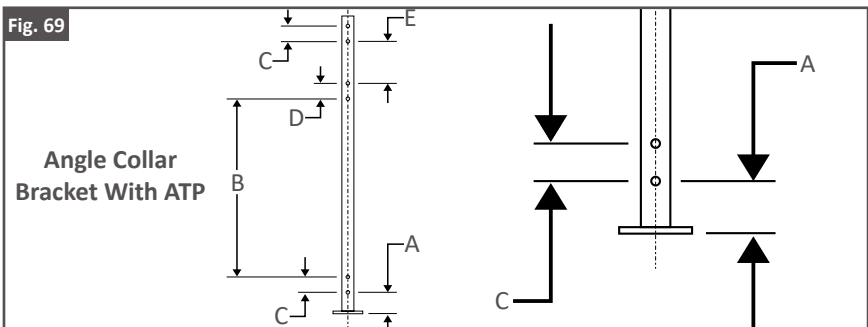
**Fig. 68**

**Bracket Hole Locations:  
Collar Bracket Side Adjustable (CBS-04) With ATP**

Pre-drill Dimensions: Pre-drilling with a 3/16" [5mm] drill bit is required

A*	B	C	D	E
<b>32" [813mm] Panel</b>				
3-3/16" [81mm]	28-5/8" [727mm]	2-3/16" [56mm]	2-1/2" [64mm]	2-1/2" [64mm]
<b>34" [864mm] Panel</b>				
3-3/16" [81mm]	30-5/8" [778mm]	2-3/16" [56mm]	2-1/2" [64mm]	2-1/2" [64mm]
<b>38" [965mm] Panel</b>				
3-3/16" [81mm]	34-5/8" [880mm]	2-3/16" [56mm]	2-1/2" [64mm]	2-1/2" [64mm]

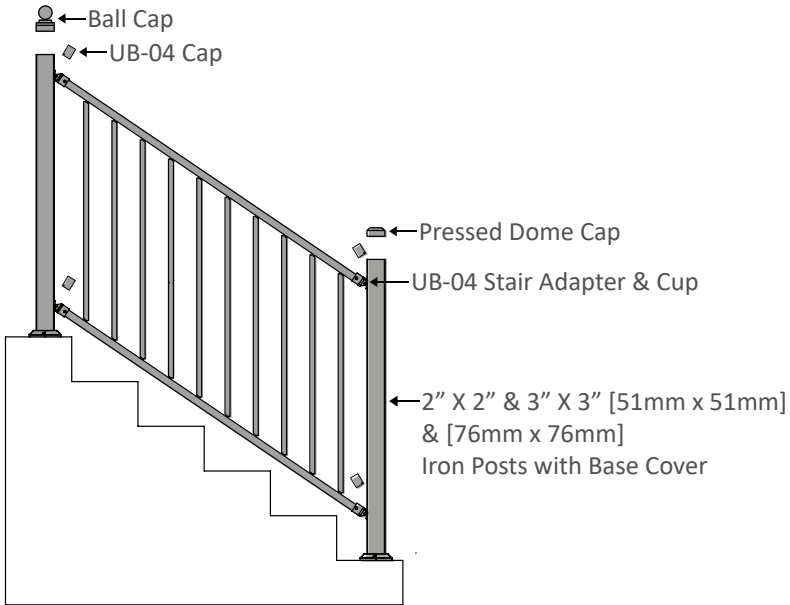
• All panel sizes except 40" [1016mm] panel can use the ATP.  
 • Only 32" [813mm] and 38" [864mm] panels are used with ATP's in California.  
 \*Dimension A positions bottom edge of bottom rail 3-3/4" [95mm] above deck surface.  
 \*Dimension A is measured from the bottom surface of post base.



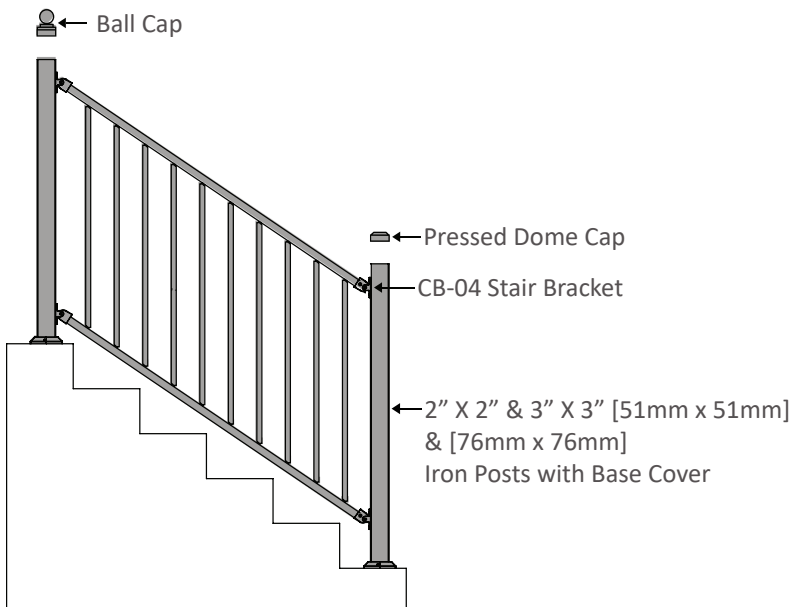
# STAIR BRACKET

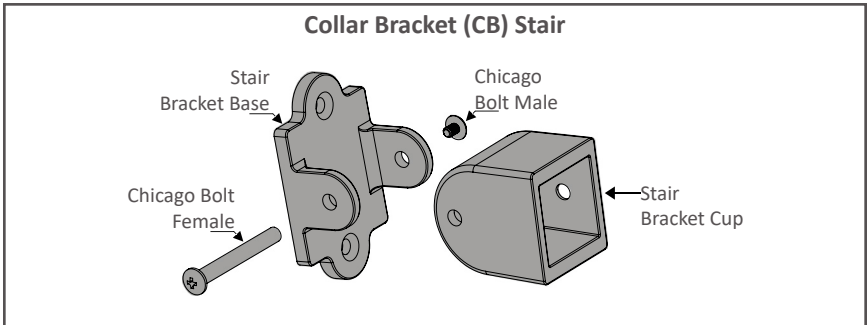
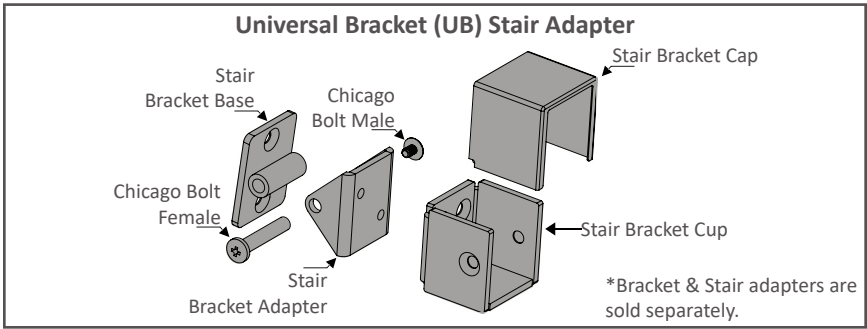
## Fe<sup>26</sup> Traditional Stair Bracket Installation Options

### Universal Bracket (UB) Stair Adapter



### Collar Bracket (CB) Stair





**Note:**

The stair bracket installation instructions cover both UB-04 and CB-04, only use steps specific to bracket being installed.

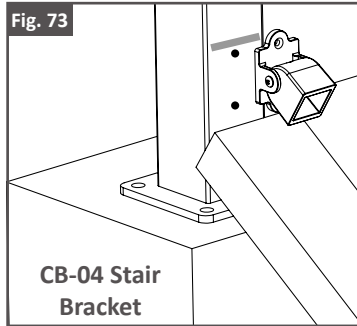
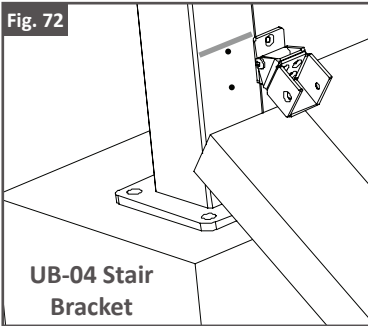
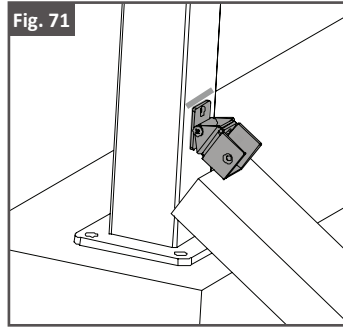
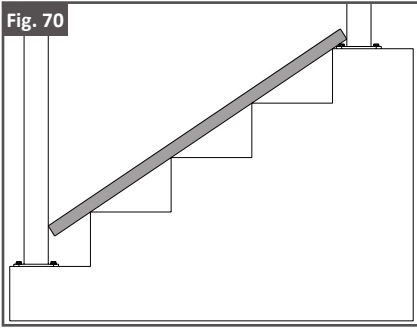
**STAIR BRACKET: BRACKET INSTALLATION**

**Step 1: Bottom Bracket Installation (UB-04 or CB-04)**

1. Position wood 2" x 4" (actual 1-1/2" x 3-1/2" [38mm x 89mm]) between posts. As shown in Fig. 70.
2. Position bottom UB or CB bracket centered flat on post & wood 2" x 4" (actual 1-1/2" x 3-1/2" [38mm x 89mm]). Use pencil to mark top edge of bracket location on post. As shown in Fig. 71.
3. Place UB or CB bracket base on previous top edge mark. Center the base on the post and use pencil to add marks for two screw hole locations. As shown in Fig. 72 & 73.
4. Dis-assemble the bracket by removing the barrel and screw.

**Note:**

- For best results, be sure bracket base is centered on post when making marks.

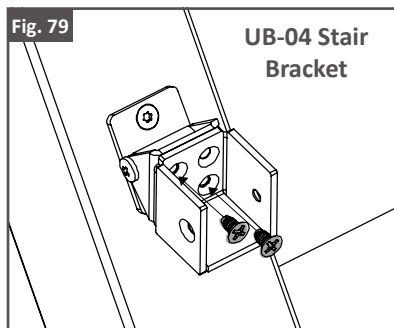
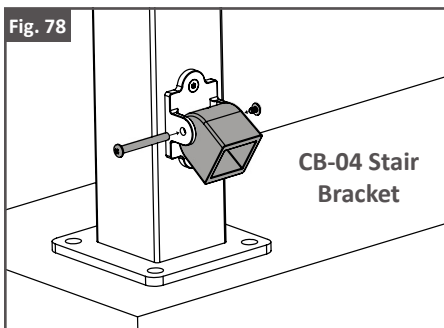
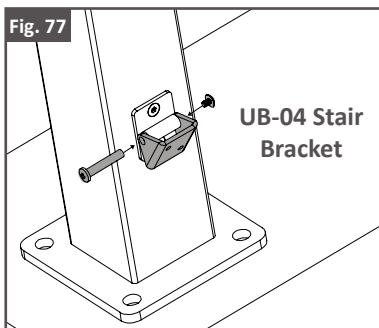
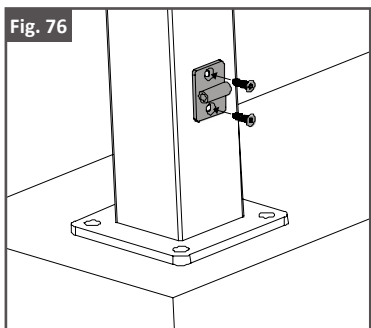
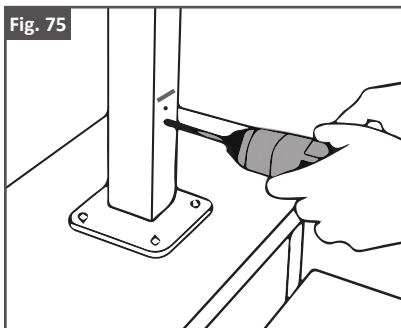
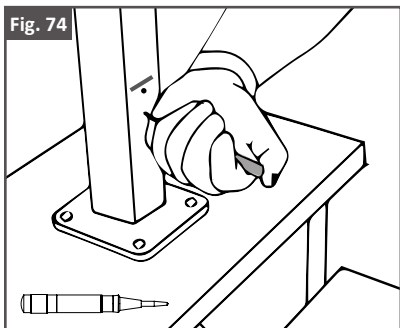


## Step 2: Bottom Bracket Installation Continued (UB or CB)

1. Use Spring Punch to mark the holes. As shown in Fig. 74.
2. Drill out bracket hole with a 3/16" [5mm] drill bit. As shown in Fig. 75.
3. Use T-25 screws to attach the UB or CB base to the post. Begin with top hole then bottom. As shown in Fig. 76.
4. Keep bracket base centered as you install second screw.
5. Insert barrel & screw to re-assemble bracket.
6. Tighten barrel & screw. As shown in Fig. 77 & 78.
7. Use T-25 screws to attach UB-04 Bracket to UB-04 Adapter. As shown in Fig. 79.

### Note:

- **Lower Post may need to be unmounted to install bracket then remounted.**



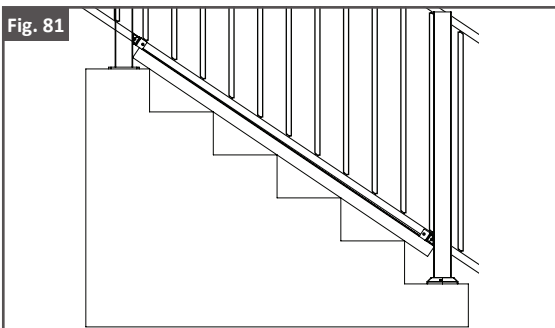
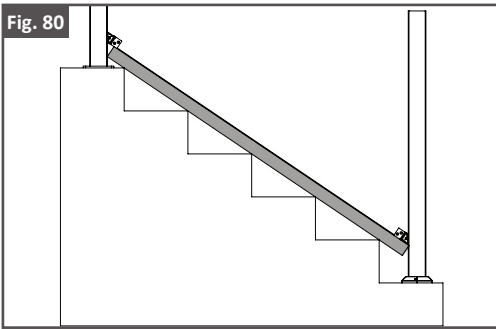
### Step 3: Top Bracket Installation

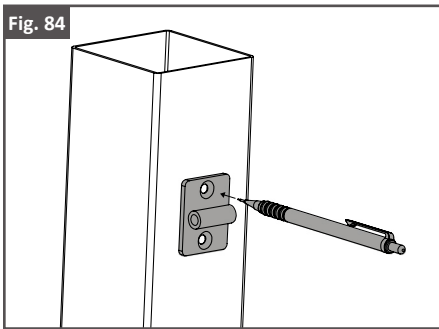
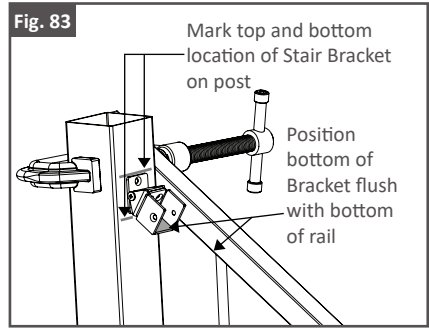
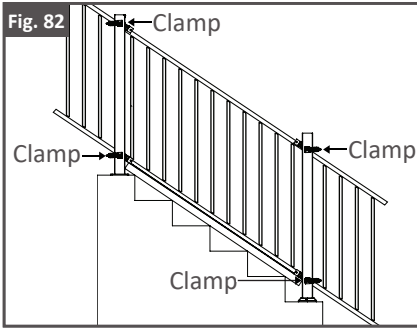
1. Position wood 2" x 4" (actual 1-1/2" x 3-1/2" [38mm x 89mm]) on stairs in line with bottom brackets. As shown in Fig. 80.
2. Place panel on top of wood 2" x 4" (actual 1-1/2" x 3-1/2" [38mm x 89mm]) next to bottom brackets. As shown in Fig. 81.
3. Rake the panel level until and positioned as close to final installation position as possible.

4. Clamp the panel to the post. Be sure to clamp at four touch points to keep panel in position. As shown in Fig. 82.
5. Position bracket parallel with top rail & flat centered on post. **Make sure inside bottom of bracket is flush with bottom of rail. As shown in Fig. 83.**
6. Use pencil to mark top edge of bracket location on post.
7. Dis-assemble the bracket by removing the barrel and screw. Reference the bracket options on page 44.
8. Place Bracket Base on previous top edge mark. Center the base on the post and use pencil to add marks for two screw hole locations. As shown in Fig. 84.

**Note:**

- For best results, be sure bracket bases are centered on posts when making marks.





#### Step 4: Top Bracket Installation Continued

- Reference bottom bracket installation step 2 on pages 44 & 45.

### STAIR BRACKET: POST MOUNTING

- Reference Post Mounting instructions on page 5.

#### Note:

It's recommended to install brackets on to post before post mounting.

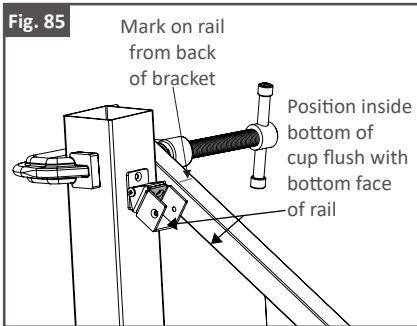
### STAIR BRACKET: CUTTING DOWN PANEL

#### Step 1: Measure & Mark Panels Where Cuts Will Be Made

1. Position wood 2" x 4" (actual 1-1/2" x 3-1/2" [38mm x 89mm]) on stairs in line with bottom and top brackets.
2. Place the panel on top of wood 2" x 4" (actual 1-1/2" x 3-1/2" [38mm x 89mm]) next to bottom brackets.

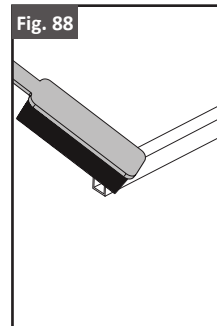
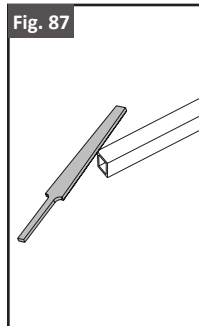
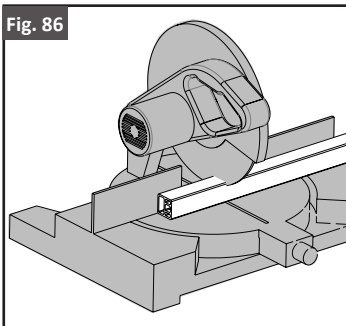


3. Have the panel raked and as close to final installation position as possible.
4. Confirm that panel is level.
5. Place cut marking on rails in line with the back of bracket opening. Be sure bottom of bracket and bottom of rail are flush. As shown in Fig. 85.
6. Use speed square to ensure markings are perpendicular to panel.



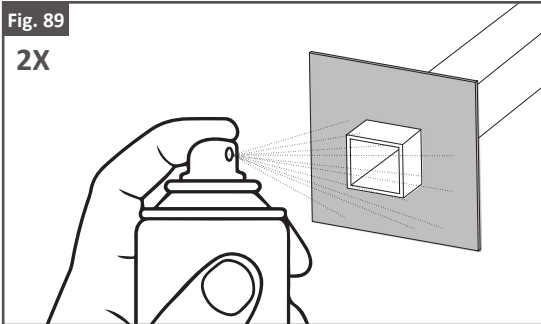
## Step 2: Cut & Clean Panel

1. Cut panel using a saw with a ferrous metal cutting blade.
2. Use file to smooth cut edges.
3. Remove any metal shavings and dust with a brush or rag.
4. Make sure surfaces to be painted are clean.



### Step 3: Apply Spray Paint To Cut Areas

1. Using a piece of cardboard as a mask, apply the 1<sup>st</sup> coat of Fortress zinc based touch-up paint.
2. Allow to dry before applying second coat.
3. Apply the 2nd coat of Fortress zinc based touch-up paint.
4. Allow to dry and install.



### STAIR BRACKET: PANEL INSTALLATION

---

- Reference panel installation steps 2 & 3 on page 14.

#### Tip:

- Be sure to confirm that the raked panel is level.

### POST BASE COVER, BRACKET CAP & PRESSED DOME/BALL CAP INSTALLATION

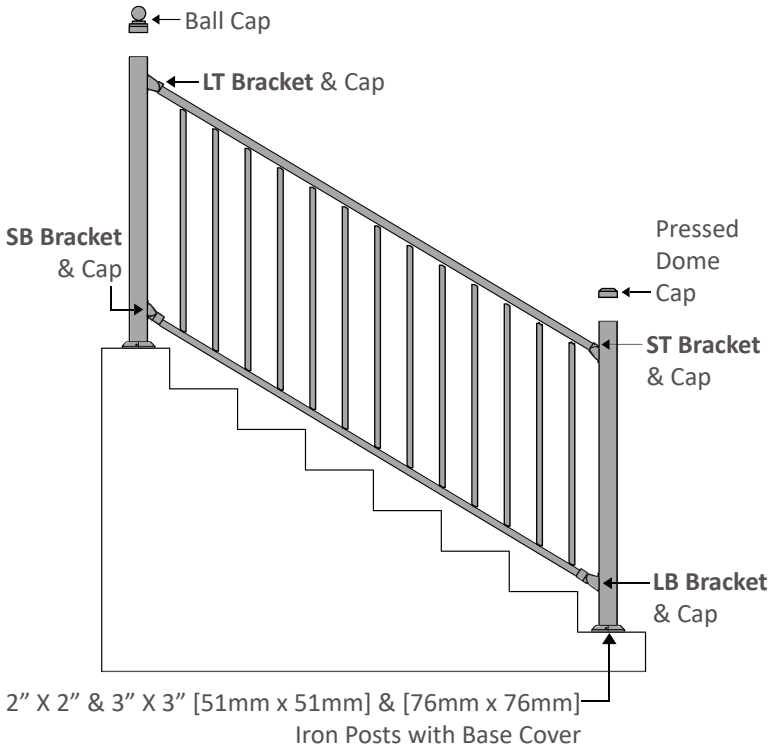
---

- Reference Post Base Cover, Bracket Cap & Pressed Dome/ Ball Cap instructions on pages 15 - 17.

# STAIR BRACKET (SSB-04)

## Fe<sup>26</sup> Traditional Stair Bracket Installation Option

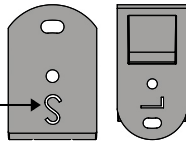
### Simplified Stair Bracket (SSB-04)



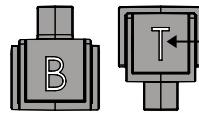
### Simplified Stair Bracket

Each bracket base of the SSB's has a stamped letter marking on the outside face to show the bracket being used

Back View



Front View



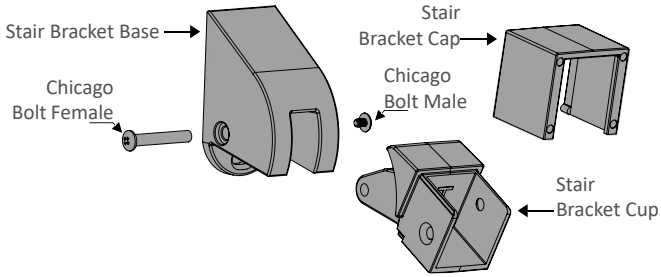
Each bracket cup of the SSB's has a stamped letter marking on the inside face to show the bracket being used

#### Bracket Letter Marking:

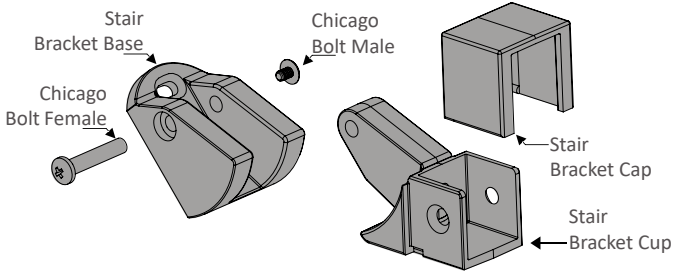
S: Small L: Large B: Bottom T: Top

- Available Lengths: 6' [1829mm] and 8' [2438mm].
- Available Heights: 34" (864mm) and 40" (1016mm).
- Adjustable Angle Range: 31° to 37°.

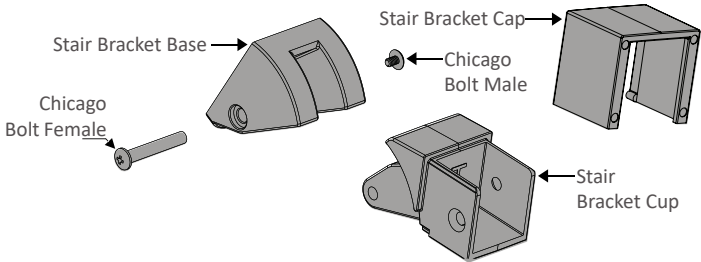
### Simplified Stair Bracket (SSB-04): LT



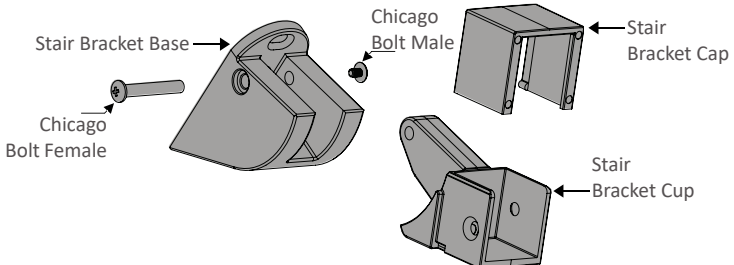
### Simplified Stair Bracket (SSB-04): SB



### Simplified Stair Bracket (SSB-04): ST



### Simplified Stair Bracket (SSB-04): LB



## STAIR BRACKET (SSB-04): BRACKET INSTALLATION

### Bracket Options

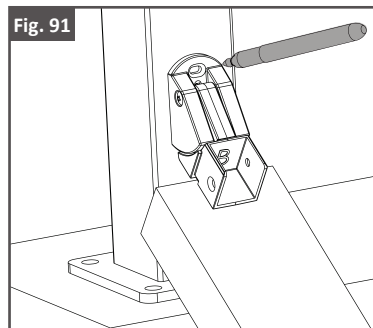
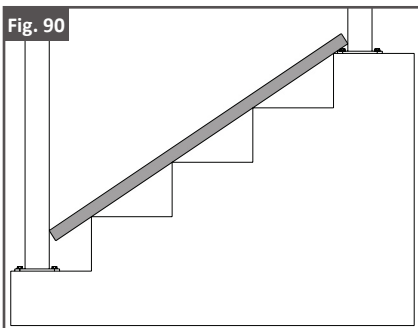
- When installing SSB brackets, Identify the 4 brackets (LT, ST, LB and SB) by the letters stamped in each part.
- Reference the installed panel image and the placement of each SSB bracket on page 51.

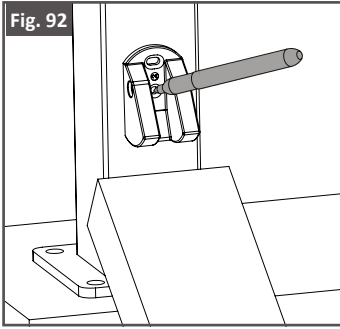
### Step 1: Bottom Bracket Installation

1. Position wood 2" x 4" (actual 1-1/2" x 3-1/2" [38mm x 89mm]) between posts. As shown in Fig. 90.
2. Position bottom brackets centered flat on post & wood 2" x 4" (actual 1-1/2" x 3-1/2" [38mm x 89mm]). Use pencil to mark top edge of bracket location on post. As shown in Fig. 91.
3. Disassemble the bracket by removing the barrel and screw. Reference the bracket options on page 52.
4. Place bracket base on previous top edge mark. Center the base on the post and use pencil to add marks for two screw hole locations. As shown in Fig. 92.

### Note:

- Be sure bracket base is centered on post when marking hole locations.





## Step 2: Bottom Bracket Installation Continued

1. Use Spring Punch to mark the holes. As shown in Fig. 93.
2. Drill out bracket hole with a 3/16" [5mm] drill bit. As shown in Fig. 94.
3. Use T-25 screws to attach the base to the post. Begin with bottom hole then top. As shown in Fig. 95.
4. Keep bracket base centered as you install second screw.
5. Insert barrel & screw to re-assemble bracket.
6. Tighten barrel & screw. As shown in Fig. 96.

### Note:

- Lower Post may need to be unmounted to install bracket then remounted.

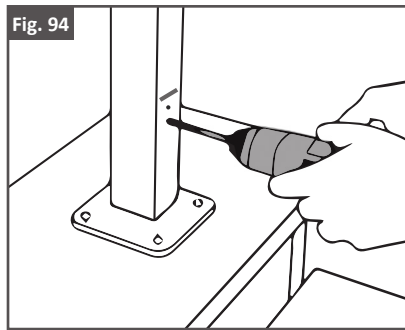
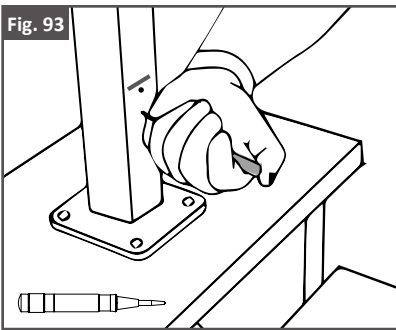


Fig. 95

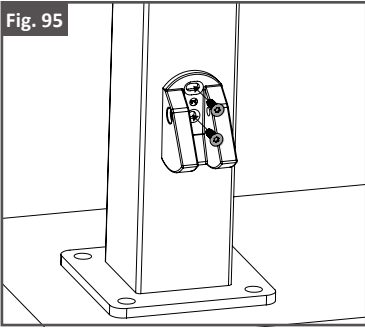
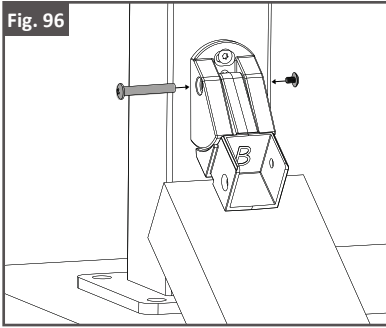


Fig. 96

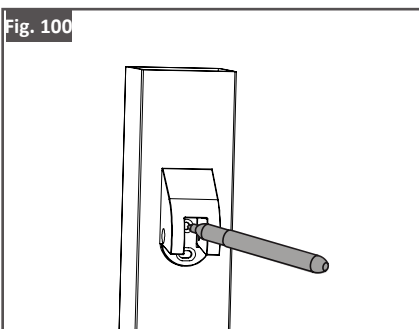
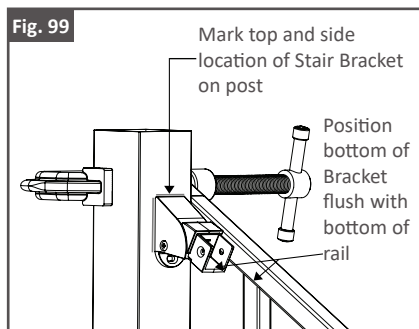
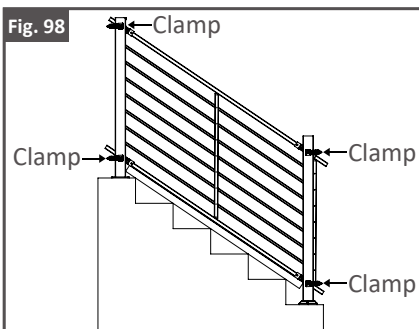
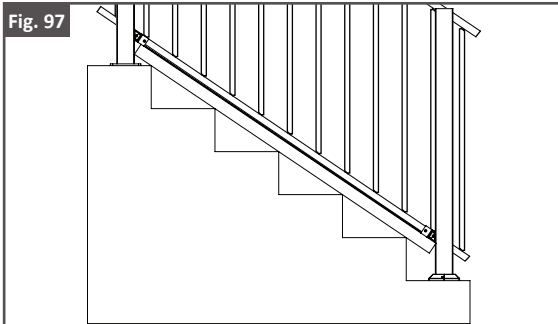


### Step 3: Top Bracket Installation

1. Position wood 2" x 4" (actual 1-1/2" x 3-1/2" [38mm x 89mm]) on stairs in line with bottom brackets.
2. Place panel on top of wood 2" x 4" (actual 1-1/2" x 3-1/2" [38mm x 89mm]) next to bottom brackets. As shown in Fig. 97.
3. Rake the panel until center upright is parallel to the post or level and positioned as close to final installation position as possible.
4. Clamp the panel to the post. Be sure to clamp at four touch points to keep panel in position. As shown in Fig. 98.
5. Position bracket parallel with top rail & flat centered on post. **Make sure inside bottom of bracket is flush with bottom of rail. As shown in Fig. 99.**
6. Use pencil to mark top edge of bracket location on post.
7. Dis-assemble the bracket by removing the barrel and screw. Reference the bracket options on page 52.
8. Place Bracket Base on previous top edge mark. Center the base on the post and use pencil to add marks for two screw hole locations. As shown in Fig. 100.

#### Note:

- Be sure bracket bases are centered on posts when marking hole locations.



#### Step 4: Top Bracket Installation Continued

- Reference bottom bracket installation step 2 on pages 53 & 54.

#### Tip:

- For both top brackets (LT & ST), install the top screw first.



## **STAIR BRACKET (SSB-04): POST MOUNTING**

---

- Reference Post Mounting instructions on page 5.

### **Note:**

**It's recommended to install brackets on to post before post mounting.**

## **STAIR BRACKET (SSB-04): CUTTING DOWN PANELS**

---

- Reference panel cutting instructions on pages 47 - 49.

## **STAIR BRACKET (SSB-04): PANEL INSTALLATION**

---

- Reference panel installation steps 2 & 3 on page 14.

### **Tip:**

- Be sure to confirm that the raked panel is level.

## **POST BASE COVER, BRACKET CAP & PRESSED DOME/BALL CAP INSTALLATION**

---

- Reference Post Base Cover, Bracket Cap & Pressed Dome/Ball Cap instructions on pages 15 - 17.

## CARE & MAINTENANCE

---

### Care And Maintenance Of Fortress Building Products Powder-Coated Products And Surfaces:

- After installation of your Fortress Building Product, clean powder-coated products and surfaces with a solution of warm water and non-abrasive, pH neutral detergent solution. Surfaces should be thoroughly rinsed after cleaning to remove all residues. All surfaces should be cleaned using a soft cloth or sponge. Examples of acceptable cleaners are Simple Green, dish soap and warm water.
- Ensure construction materials such as concrete, plaster, and paint splashes are removed immediately before they have a chance to dry. Failure to remove these materials may cause damage to the powder-coated surfaces.
- The frequency of cleaning depends in part on the standard of appearance and also the requirements to remove deposits that may cause damage to the powder coating after prolonged exposure. Fortress recommends cleaning in three to four monthly intervals all products and powder-coated surfaces. In areas where higher traffic, increased atmospheric substances, or other effects may occur, the time period between cleanings should be increased to monthly intervals.
- **WARNING: DO NOT use strong solvents such as thinners, or solutions containing chlorinated hydrocarbons, esters, or ketones. Abrasive cleaners or cutting compounds should not be used.**

## WARRANTY

---

To obtain and review a copy of the warranty, please go to: <https://Fortressbp.com/warranties>. You can also contact: (844) 909-1999 or write to: Fortress Building Products Warranty, 1720 N 1st St, Garland, TX 75040 to obtain a copy of the warranty.





**JOIN THE REVOLUTION.**

**FortressBP.com | 866.323.4766**