



# MAISY

## RAILING

### *Installation Guide*

#### ***Tools***

- Cable Cutters
- Swage Crimp Tool
- 9/16 Socket
- 3/8 Socket
- 7/16 Socket
- Ratchet
- Pencil
- Speed Square
- Measuring Tape
- Miter Saw (Carbide Tipped Blade)
- Skill Saw (Carbide Tipped Blade)
- Carbide Tipped Blade
- Clamps

#### ***Materials***

- Posts
- Post Bolts
- Top Rail
- Top Rail Caps
- Self Tapping Top Rail Screws
- 1/8" Cable
- Swages, Washers, Hex Nuts, & Acorn Nuts
- Stair Post (Optional)
- Angle Washers (Optional)
- Shims (Optional – Not Provided)

## **PLEASE READ THROUGH ALL INSTRUCTIONS BEFORE STARTING**

### **Step 1: Install End Posts**

#### **Surface Mount – Straight Runs (No Corners)**

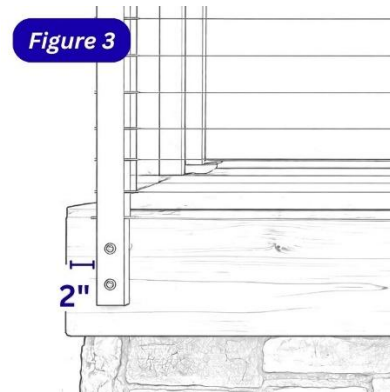
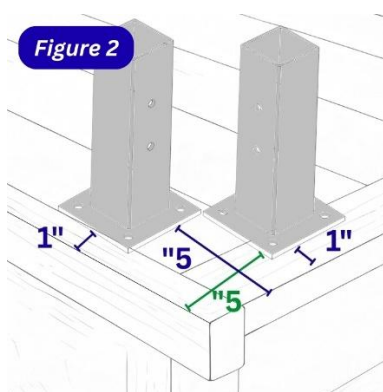
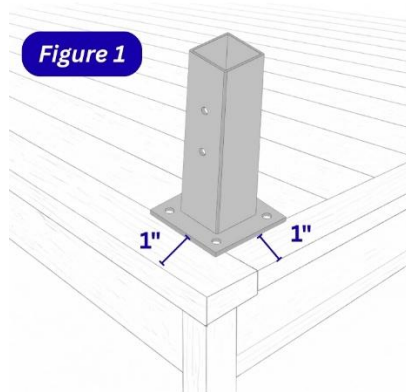
- Measure and mark **1 inch in from the end** and **1 inch in from the front edge** of the deck.
- Refer to **Figure 1**.

#### **Surface Mount – Corner Runs**

- Install **two posts** per corner section.
- Position each post **1 inch from the near face** and **5 inches from the deck end**.
- Refer to **Figure 2**.

#### **Fascia Mount Posts**

- Measure and mark **2 inches in from the edge of the deck**.
- Refer to **Figure 3**.

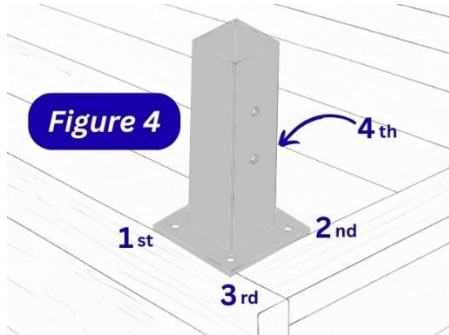


### **Post Positioning**

- Set the post on the marked location.
- Use a **speed square** to ensure the post is square to the deck edge.
- Use a **level** to confirm the post is plumb.
- Add **shims as needed** to compensate for deck slope.

## Fastening

- Secure the post to deck framing using post screws.
- Install surface-mount lag bolts in a **diagonal (crisscross) sequence** to ensure even pressure and proper alignment.
- Tighten bolts incrementally until fully seated.
- Refer to **Figure 4**.



## Multiple End Posts

- If installing end posts on different deck sections, place a level across the tops of the posts to confirm consistent height.
- Repeat the above steps to install all end posts.

## Maximum Run Length

- Maximum recommended cable run length is **20 feet**.
- For runs longer than 20 feet, install a **mid-run double-post break**:
  - Posts must be **3 inches apart**
  - Surface-mount bases require **1 inch of separation between base plates** to achieve proper spacing
- Example: A 29' run should be split at approximately **14' 6"**, allowing for **½" reduction per post** to maintain the 3" separation.
- Refer to **Figure 5**.

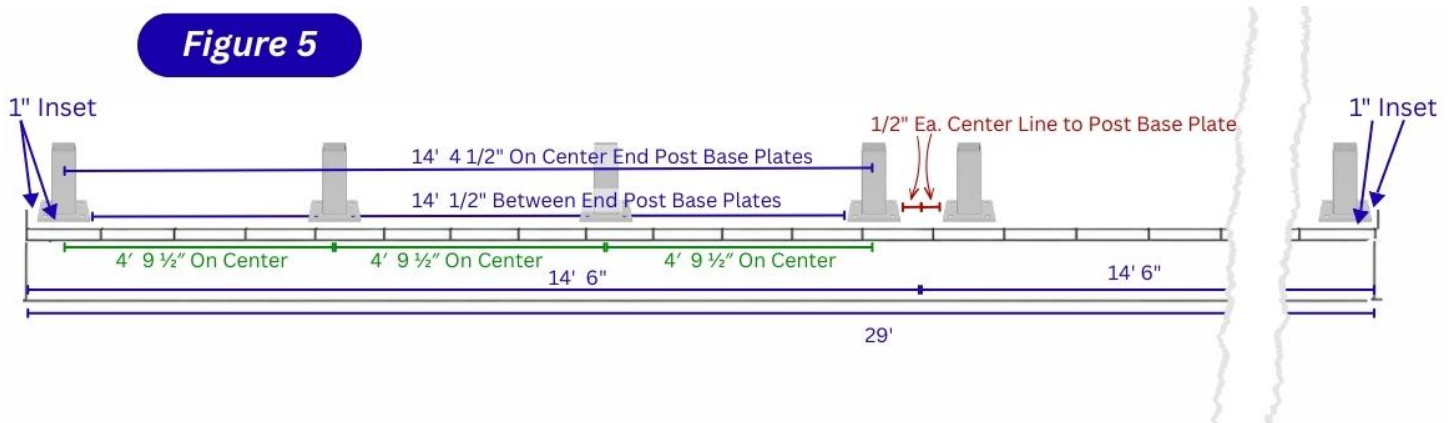
**Important:** All cable runs reference the end posts. Take extra care to ensure end posts are accurately positioned and plumb.

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## Step 2: Determine Line Post Layout

- Measure the distance **from end post to end post**.
- Divide the run evenly into sections **no longer than 4 feet 6 inches**.
- Mark each location — these marks indicate line post placement.
- Refer to **Figure 5**.

**Figure 5**



**Maximum spacing: 4' 6" per section.**

### Step 3: Install Line Posts

- Run a **string line** between the two end posts.
- Use the string line to establish the correct height for each line post.

**Note:** Decks are rarely perfectly level — rely on the string line, not visual judgment.

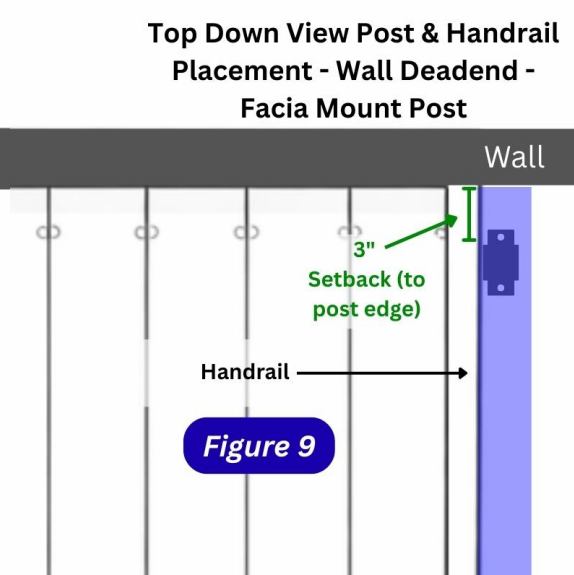
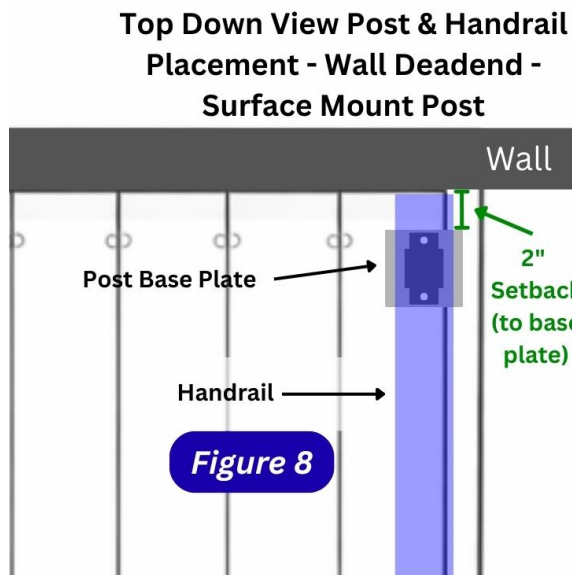
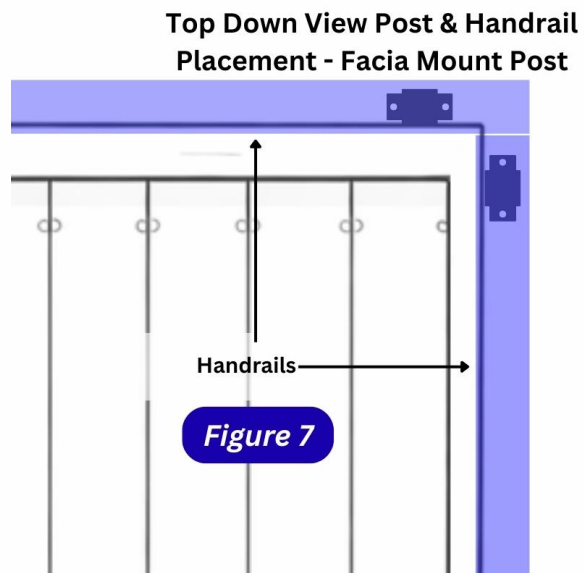
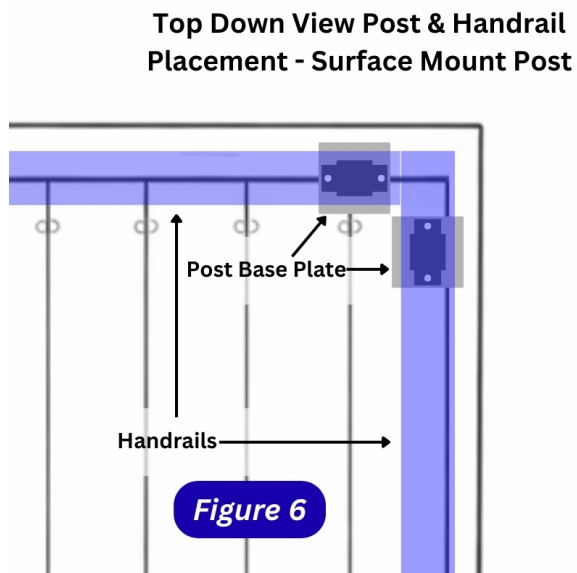
At each marked location:

- Position the line post
- Adjust height using the string line as reference
- Level the post
- Shim as necessary to keep the post plumb
- Secure with lag bolts

Repeat for all line posts.

#### Step 4: Install Top Rail

- Measure from **corner post to corner post** for each straight section.
- Cut the top rail to length, allowing **1½ inches of overhang on each end**.
- Install end caps.
- Place the top rail onto the posts.
- Secure post brackets to the underside of the top rail using **self-tapping screws**.
- Confirm equal overhang on both sides of each post bracket.
- Refer to **Figures 6-9**.



## Step 5: Install Cable

- Each straight section requires **its own continuous cable run**.

### Cable Preparation

- Fully insert the cable into the threaded swage fitting.
- Using a  $\frac{1}{8}$ " **crimp tool**, crimp the swage **twice**:
  - One crimp approximately  $\frac{3}{8}$ " **from each end** of the swage, avoiding the threaded portion.

### Cable Routing

- Insert the swage through the first end post.
- Run the cable through all line posts.

### Opposite End Post

- Push the threaded end of the swage through the end post.
- Install the **flat washer** and **standard nut**.
- Do **not** leave any threads exposed at this stage.
- Refer to **Figure 10**.

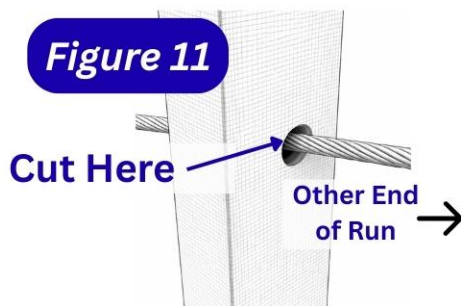
**Figure 10**



### Final Cable Fit

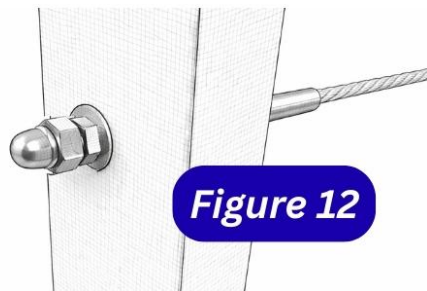
- Return to the starting end post and pull the cable snug.
- Cut the cable at the point where it passes through the inside face of the post.
- Refer to **Figure 11**.

**Figure 11**



- Crimp the final swage onto the cut end.

- Insert through the post and install:
  - Flat washer
  - Standard nut
  - Cap nut
- Refer to **Figure 12**.



### Tensioning

- Return to the opposite end post.
- Tighten the standard nut to achieve proper cable tension.
- Install the cap nut.
- Confirm cable tension and alignment.

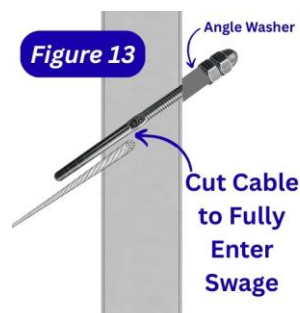
Repeat for all cable runs.

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### Stair Installation Notes (If Applicable)

- Post spacing on stairs must be **no greater than 4 feet**.
- Use the **provided angle washers** at stair posts to maintain proper cable alignment.

Because the swage passes through the stair end post at an angle, stair-rail cables must be measured differently than level runs. When cutting cable, hold the swage at the same angle as the stair (matching the drilled hole angle) and estimate the cut point so the cable will fully seat inside the swage once inserted (see Figure 13).



- Measure **each stair run individually**.
  - Maintain consistent spacing and tension across all stair cables.
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### **Final Checks**

- Verify all posts are secure and plumb
- Ensure all swages, standard nuts, and cap nuts are fully tightened
- Inspect top rail alignment and all fasteners