



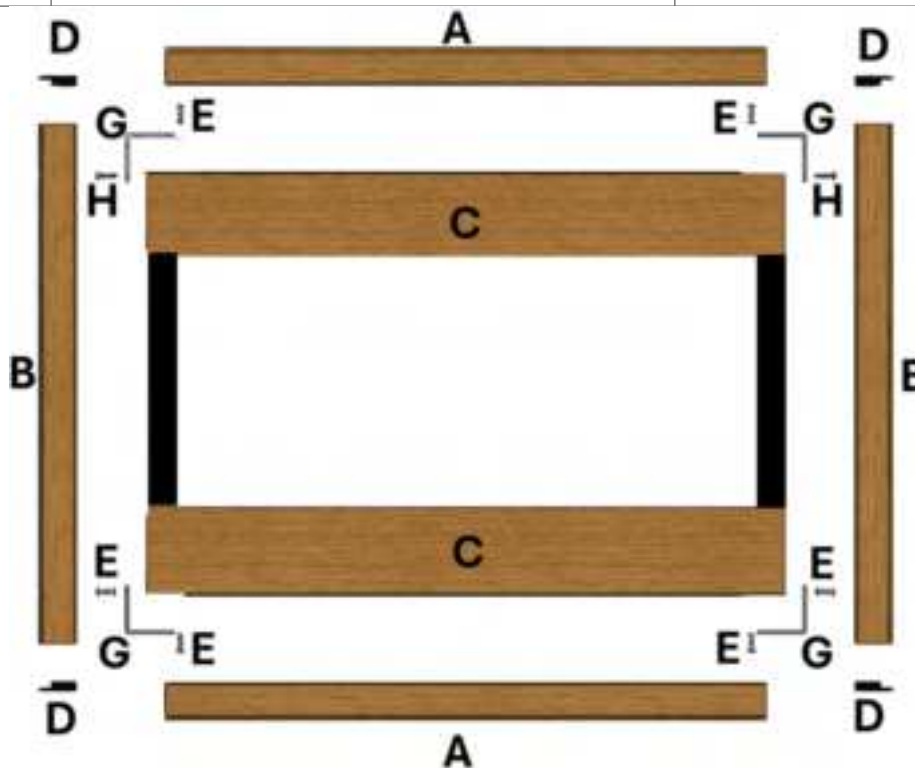
TWO BOARD RANCH RAIL GATE
INSTALLATION GUIDE

TWO BOARD RANCH RAIL GATE

COMPONENTS



ITEM	QTY	DESCRIPTION	NC PART
Complete Product	1	Two-Board Ranch Rail Gate	100324XX30400
A	2	Horizontal U-shape posts (40 1/2 inches)	300722XX0405
B	2	Vertical U-shape posts (26 5/16 inches)	300722XX035
C	2	Square edge 1x6 boards (43 inches)	300341XX043
D	4	NC Top Caps	200721BK0000
E	6	Joint connector pairs (Chicago screws)	AC98002A304
F	2	NC Spacers (10 11/16 inches)	200723XX00000
G	4	NC Angle Brackets	AC L-BRACKET 3.25X3.25
H	2	Phillips flat head thread-cutting screws (5/16-inch diameter, 1 1/2 inches long)	AC90087A896



BEFORE YOU BEGIN

Before You Begin:

1. **Verify Underground Utilities**
Use aids such as local building departments, utility companies, or utility location services to ensure the area is free from underground lines or hazards.
2. **Locate Property Lines**
Ensure the fence is installed within your property boundaries to avoid encroachment and comply with legal requirements.
3. **Consult Local Building Codes**
Review local codes to ensure the fence and gate installation meets all requirements. Obtain any necessary permits before starting the installation.
4. **Wear Appropriate Safety Equipment**
Always wear gloves, safety goggles, and work boots to avoid injuries during installation.

TOOLS REQUIRED

Tools for Installing the Fence

- **Rubber mallet** (not included, for securing angle brackets)
- **#4 Phillips screwdriver**
- **Power tool** compatible with a #4 Phillips screwdriver
- **Torx T20 Bit** (for fastening the top cap)

STEP 1: Attach 2 Angle Brackets to the Bottom Horizontal U-Post

1. **Install Two Angle Brackets**
Attach an angle bracket on each side of the U-post. The pre-drilled holes will automatically align with the brackets. Use a rubber mallet if needed to secure the brackets inside the U-channel.
2. **Secure the Angle Brackets with Joint Connectors (Chicago Screws)**
Place the female joint connector on the outside of the post and the male part inside the U-channel. Use the **#4 Phillips screwdriver** to tighten them, but do not fully tighten until the next step. (Do not over-tighten).



STEP 2: Install the Vertical U-Posts to the Bottom Horizontal U-Post

1. **Position the Vertical U-Posts:**

Attach the two 35-inch vertical U-posts to the bottom horizontal U-post to create the gate frame.



2. **Align and Slide the Angle**

Brackets: Slide the angle brackets into the U-channels of the vertical posts, tapping gently with a rubber mallet if necessary.

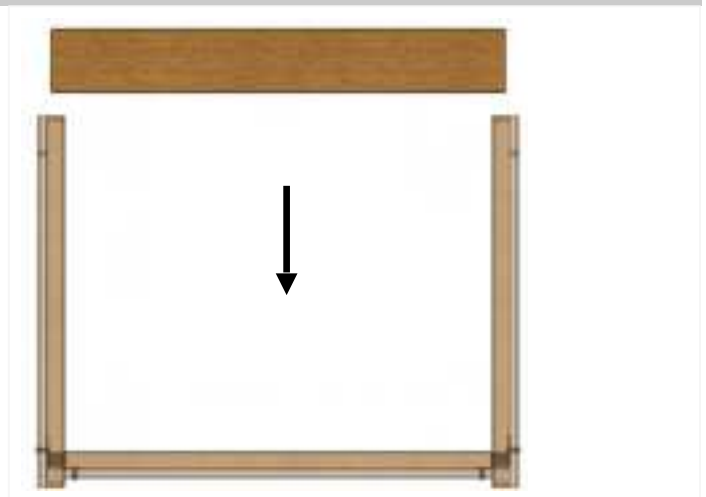


3. **Secure the Angle Brackets with**

Joint Connectors: Repeat the process to tighten the joint connectors. Once aligned, fully tighten all connectors, ensuring the connectors do not interfere with the NC boards (do not over-tighten).

STEP 3: Slide the NC Boards into the Frame

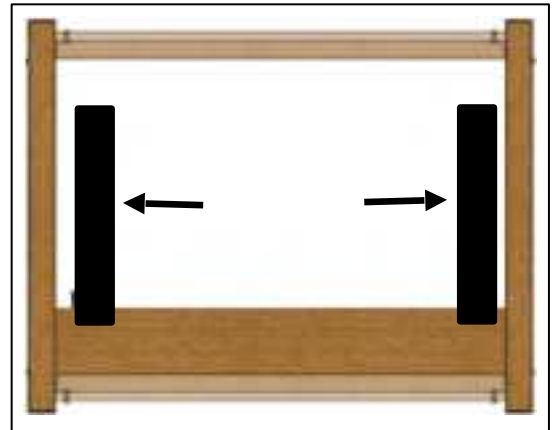
1. **Slide the First NC Board.** The gate comes with four square edge boards (43 inches). Slide one board into the frame from the top until it fits securely.



1.

2. **Position the NC Spacers**

Place a 10 11/16-inch spacer inside each U-shaped post after sliding in the first board.



3. **Secure the Spacers with Velcro Dots**

Attach four Velcro dots to each spacer, positioning them to ensure they touch the inside of the U-channel post. Repeat the process for the remaining boards and spacers.



4. **Complete the Gate Structure**

After all boards and spacers are installed, the main structure of your gate will be complete.



STEP 4: Close the Gate by Installing the Top Horizontal U-Post

1. **Attach Angle Brackets to the Top U-Post**

Attach two angle brackets to the top U-post. Install the joint connectors (Chicago screws) but do not fully tighten them.

2. **Slide the Top U-Post into Place**

Carefully slide the top U-post into the frame, ensuring it fits above the last NC board. Use a rubber mallet if needed. Once aligned, fully tighten the joint connectors (do not over-tighten).



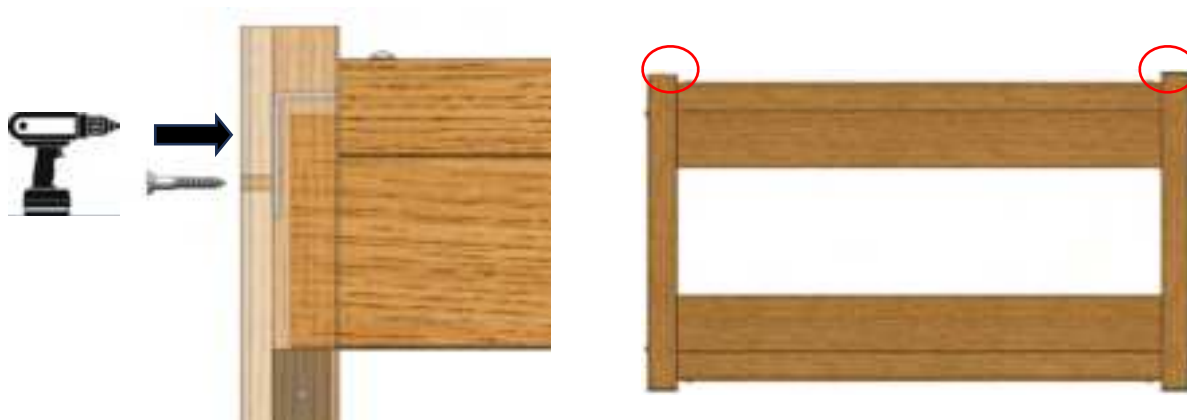
STEP 5: Secure the Top U-Post

1. **Insert the Screws into the Vertical U-Posts**

Use the provided flat head screws and insert them into the pre-drilled holes on both vertical U-posts.

2. **Tighten the Screws with a Power Tool**

Use a power tool with a #4 Phillips screwdriver to drive the self tapping screws into the angle brackets for a secure connection.



STEP 6: Install the Post Caps on All 4 Post Ends

1. Slide the Top Caps into Place

The gate comes with four NC top caps. Slide a top cap onto each of the four post ends, aligning the groove of the cap with the post.

2. Secure the Top Caps

Use the provided screws and a Phillips screwdriver to secure the top caps in place, ensuring they are tight and properly aligned.



Before Hanging Your Gate

Please see below for NC recommended mounting options.

Option 1. Considers mounting the gate from a NC Composite Modern Perimeter Fence system (3.5 ft. H x 6 ft. W)

1. For Residential Installations (Light to Moderate Use):

This post is part of the **Composite Modern Two Board Ranch Rail (3 ft. H x 5.75 ft. W)** system and is suitable for residential applications where the gate will not experience heavy usage. The **top cable fastener**, included as part of the fence installation, must be used when hanging the gate on this post. It is **critical** to install the top cable fastener to ensure that the gate's weight is distributed across the entire system, preventing sagging and ensuring long-term stability.



1. **For Commercial or Heavy Usage Applications:**

- **NC Part number 300755XX094 (includes post cap)**
- **NC 5x5 Composite Commercial Grade Post (94 in. H x 5 in. W)**

For commercial settings or residential applications with heavy use, NC recommends the **5x5 Composite Commercial Grade Post**. This post is specifically designed to handle the gate's weight and withstand the demands of high-traffic environments, providing a secure and stable installation.



Before You Begin Installation

1. **Measure and Prepare the Gate Opening**

The gate measures 40 inches high and 45.5 inches wide. Ensure the gate opening is 47.5 inches wide, leaving 1 inch of clearance on each side.

2. **Select the Post**

Depending on your installation type, choose the option is best fitted for the job.

3. **Adjust Post Height**

The 5x5 post should be cut to a height of 65-70 inches, with 1/3 of the post buried in the ground for stability.

4. **Check Ground Clearance**

Maintain a minimum 2-inch clearance between the gate and the ground to prevent dragging and ensure smooth operation.

Best Practice for Hole Depth

The best practice for determining post hole depth is to ensure that the hole is at least **one-third of the total post length** or more, depending on the type of fence or gate. However, if you are specifically burying the post **24 inches**, the **recommended post hole depth should be 26-30 inches** to account for the following:

1. **Stability:** The extra depth provides better stability, especially when supporting weight, such as a gate.
2. **Gravel Layer:** Adding **6 inches of gravel** for drainage at the bottom of the hole helps prevent water buildup and rot while maintaining stability.
3. **Concrete Footing:** The concrete should be poured above the gravel to secure the post and fill the remaining depth.

In summary, for a post buried **24 inches**, digging the hole **26-30 inches deep** provides a secure foundation and ensures long-term durability.



Gate Alignment and Support

1. **Recheck Alignment**
Ensure the posts are straight and level.
2. **Test Post Stability**
Apply pressure to check that the posts are stable to prevent gate sagging.

Prepare the Gate and Hardware.

NC recommends to follow the gate hardware manufacturers instructions.

1. **Check Hardware**
Ensure you have all necessary hardware, including hinges and latches.
2. **Attach Hinges and Pre-Drill Holes**
Pre-drill holes in the posts and attach the hinges to ensure level gate hanging.
3. **Reversible Installation**
The gate is reversible for **left-hand** or **right-hand installation**.
- 4.

Building Codes and Permits

1. **Check Local Regulations**
Ensure compliance with local building codes and zoning regulations.
2. **Obtain Permits (if necessary)**
Obtain any required permits before starting the project.

For any further information or questions please visit www.naturescomposites.com or call us at (877) 810-4029

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US 11,053,707; US 12,110,703; US 12,084,880*