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MODERN SEMI-PRIVACY HORIZONTAL FULL SIZE FENCE

INSTALLATION GUIDE (07/25)

Our products and/or processes are protected by the following patents, as well as other patents that are pending: US 11,053,707; US 12,110,703; US 12,084,880. For any further information or questions please visit <u>www.naturescomposites.com</u> or call us at (307) 338-2608.



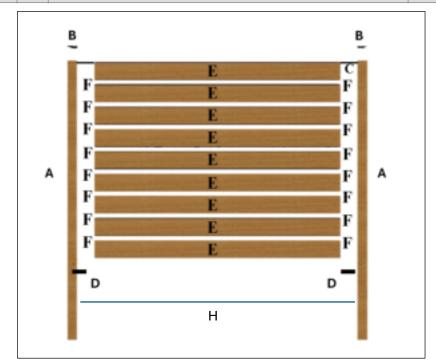
MODERN SEMI-PRIVACY HORIZONTAL FULL SIZE FENCE (6 ft. H x 6 ft. W) - Nominal: 70 in. x 69 in.

COMPONENTS

Watch out for green boxes for our Frequently Asked Questions!

ITEM	QT Y	DESCRIPTION	NC PART
Complete Product		Composite Modern Horizontal Semi-Privacy Full Size Fence	100306XX60600
A	2	U-Channel Post 2.5" X 2.5" X 94"	300722XX094
В	2	U-Post Top Cap	200721BK00000
С	1	Top Cable Assembly	200030GV06900
D	2	Post Depth Stick	ACPC POST DEPTH STICK
E	9	Square Edge Board 67" X 6" X 7/8"	300341XX067
F	16	NC Spacers (1 1/2 inches)	200723XX0150
G	4	#8 1-3/4" Truss Head Screws (only to be used when screwing two panels together!)	ACSCR#8X1-5/8BRONXETRUSS
н	1	Board Stop Assembly (Pre-Installed)	200720BK00000
ı	2	1 3/4 Torx Composite - Top Cap Screw	ACSCR#10XI-3I4RV-
J	32	Velcro Dots	VELCRO DOTS

*please note hardware kit is included in-between U-Posts in box





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BEFORE YOU BEGIN

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.

1. Locate Property Lines

Ensure the fence is installed within your property boundaries to avoid encroachment and comply with legal requirements.

2. 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.

3. Wear Appropriate Safety Equipment

Always wear gloves, safety goggles, and work boots to avoid injuries during installation.

FENCE LOCATION

- 1. **Mark the Fence Layout:** Use stakes and a string line to outline the fence location. The string helps ensure the fence remains straight during installation.
- 2. **Locate Gate Placement:** Mark the post hole locations for gate posts according to the gate installation instructions.
- Mark Corners and Ends: Identify the locations of corner and end posts.
- 4. **Mark Intermediate Fence Posts:** Posts should be placed no wider than **69 inches (5.75 feet)** outside to outside posts for each fence panel.

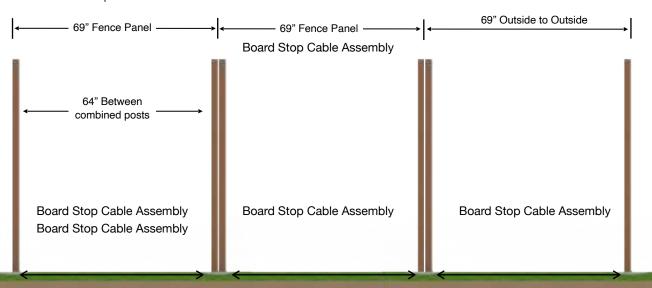
TOOLS REQUIRED

Tools for Preparing the Fence and Post Burial

- Tape Measure
- Post Hole Digger & Shovel
- Post Bubble Level (for ensuring posts are vertically aligned at 90 degrees)
- Level and String Line
- Wheelbarrow
- Stakes or Markers
- Torx T20 Bit (for fastening the self-drilling composite screws provided by NC for both securing the posts and attaching the post cap)
- We recommend using a power tool for both operations to ensure proper installation of the fasteners.

STOP! Are you adding gate? How should you space your posts?

To add a gate, you must use two NC 5x5 Commercial Posts—standard posts won't support the weight. The gate is 48" wide, and each post is 5" wide, so space them 58" apart (outside to outside) to ensure proper hinge and latch function. For added strength, insert a 4x4 treated wood post inside each composite post. For Full Size and Perimeter Gates with a 3.5" ground clearance, burial depth is 24". If you choose the 2" ground clearance option, burial depth increases to 25.5". For 2 or 3-board Ranch Rail Gates, burial depth is 16.5".



Can my fence be Surface Mounted or only Buried?

Our fences are engineered for maximum stability when buried directly into the ground. However, if in-ground installation isn't possible, our posts can still be surface-mounted using common bracket systems. While this method doesn't provide the same level of structural integrity as direct burial, it remains a practical solution. You can either: 1) Attach the standard U-Posts included in any NC Modern Fencing Panel model using a bracket like the RPBZ ZMAX Galvanized Retrofit Post Base for double 2x4 nominal lumber or, for more stability, we **RECOMMEND** purchasing our NC <u>Commercial-Grade Posts</u> to place between each panel, anchoring them using the E-Z Base Black Powder-Coated Post Base for 4x4 Nominal Lumber. For added strength, we recommend inserting a 4x4 pressure-treated wood post inside the bracket and the composite post in this configuration. This ensures better support for screws and results in a sturdier overall installation. Additionally, securing the fence to an adjacent structure—such as a house, wall, or corner—will help minimize movement, as angles provide natural reinforcement. *Please note surface mounts will void your warranty for any structural issues*.

Understanding Your Posts

The **NC** patented Universal Post System is designed for maximum flexibility. Unlike traditional systems that require specific post types (start/end posts, line posts, and corner posts), the NC Modern system uses a **single, versatile U-channel post** that can be adapted for any configuration, simplifying the ordering process and providing flexibility during installation.

Each NC panel system includes **two U-channel posts**, designed with features for smooth installation:

Board Stop:

Each post comes with a **pre-installed board stop**. This helps maintain the correct spacing between boards and ensures that the last board is aligned correctly, leaving just enough room for the installation of the Top Cap.

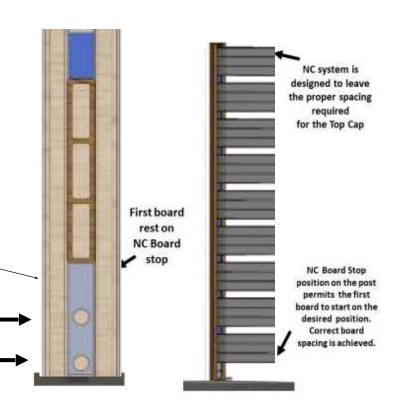
Board Stop

2" Ground Clearance

3.5" Ground Clearance

Can I paint my fence?

No! Painting is not advisable. Our products come pre-finished with durable, lasting color and a textured, non-reflective surface. They're designed to maintain their appearance without the need for painting, staining, or sealing—just occasional cleaning with soap and warm water.



• Grooves at the Top:

The posts have **grooves at the top** to accommodate the **Top Cable Fastener** during installation. These grooves also serve as the attachment points for the **Top Cap**, which finalizes the installation and gives the fence a finished look.





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Prepare Your Posts

For Multiple Panel Sections:

• **Note**: When installing multiple panels, bolt the posts together before the burial process. This ensures proper alignment and simplifies installation.

Procedure for Line Sections, Corner Posts, and End/Gate Posts:

The **NC** system uses a patented design with a **versatile U-channel post**. The **5 composite screws** provided should be used to assemble the posts in the desired configuration. We recommend using a **Torx T20 Bit** and power tool for faster, secure assembly:

- For Line Sections: Install two U-channel posts back-to-back to seamlessly connect panels.
- For Corner Posts: Install two U-channel posts adjacent to each other, ensuring correct orientation for corners.
- For Start/End or Gate Posts: Install a single U-channel post at the start, end, or gate section.

Do I need to buy a line, corner and start/end post?

No! Our patented U-Post system is designed for ultimate versatility, allowing you to use the same post for corners, line posts, and start/end posts with ease. This simplifies installation and reduces the number of different components



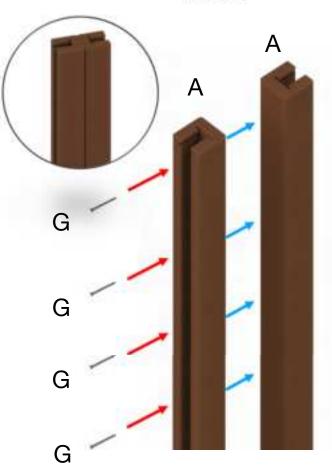




Screw the Adjacent U-Channel Posts Together

If you are placing panels next to the other it is important to screw the posts together for maximum stability. Use the included four #8 1-5/8" Truss Head Screws (G) to secure the U-Post (A).

- 1. Place the first screw (G) toward the top of the inside of the U-Post (A). Make sure it is below the siding top cap routing!
- 2. Place the second screw (G) toward the bottom of the U-Post (A) just above your grade line.
- 3. Place the other two screws evenly between the top and bottom as pictured on the right.





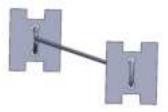
Precise Post Spacing for Installation

NC Top Cable Solution

Another patented feature of the NC system is the **Top Cable Assembly (C)**, which ensures precise post spacing during installation.

1. Precise Post Spacing During Installation

- The **Top Cable system (C)** consists of two H-type fasteners and a **69-inch cable** connecting them. This ensures the precise spacing required for the fence panels to function properly.
- o **Install the Top Cable before the burial process**: Insert the H-shaped fasteners into the grooves of the U-shaped posts. Spread the posts apart until the cable is **fully extended**. This keeps the posts aligned and properly spaced during this critical stage. the posts are spaced at exactly **69 inches**.



2. Maintaining Post Alignment During Curing

The **Top Cable Fastener** should remain in place throughout the concrete curing process. This keeps the posts aligned and properly spaced during this critical stage.

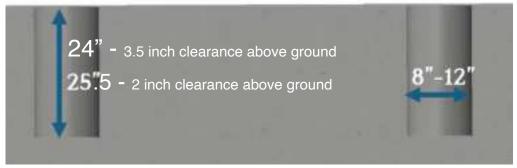
Note: The Top Cable Fastener is essential for maintaining the correct spacing for the free-floating board system, allowing the boards to move slightly without binding or falling out.

- If Spacing is Too Short: Boards will not fit correctly between the posts.
- If Spacing is Too Wide: Boards may become loose and potentially fall out of the channels.

Post Installation

1. Dig Post Holes to the Correct Depth

Dig **12-inch diameter holes** at least **25.5 inches deep** to ensure proper stability when burying posts **25.5 inches.**





2. Add Gravel for Drainage

Pour 6 inches of gravel into the bottom of each post hole to improve drainage and ensure long-term stability.

3. Set the Posts in Concrete: Two Critical Factors to Monitor

When setting the posts in concrete, monitor two critical factors to ensure the correct installation:

3.1 Precise Post Spacing:

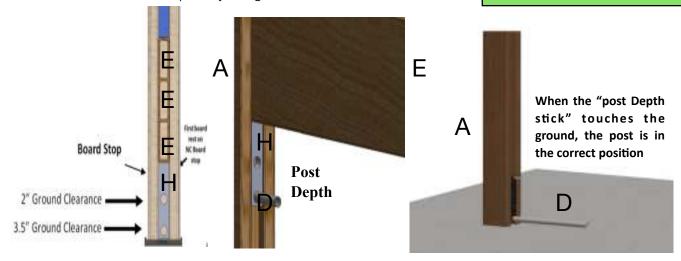
Use the NC Top Cable Fastener to ensure posts are spaced correctly at 69 inches. Before pouring the concrete, ensure that the Top Cable is fully extended to lock the posts in place at the correct distance, allowing proper fence panel installation. Keep the Top Cable tensioned throughout the curing process to prevent any movement or misalignment of the posts.

3.2 Ground Clearance:

Ground clearance is essential for the proper function and appearance of the fence. The NC system includes a Post Depth Stick, which provides a visual guide to ensure posts are buried to the correct depth, allowing for the intended ground clearance: If the Post Depth Stick is installed in the bottom cavity, the ground clearance will be 3 ½ inches. If installed in the top cavity, the ground clearance will be 2".

Can I cut my fence to adjust the length?

Yes, our proprietary wheat-based composite formula can be cut just like wood using standard woodcutting tools. When cutting a fence panel or ranch rail down, make sure to cut all boards at the same place to avoid creating an uneven alignment. First, you must remove the bottom cable by cutting it at the board stop. Then, once the panel is cut to your desired length, you will also need to adjust the Top Cable Assembly, which helps keep the posts plumb and properly spaced. To do this, cut the top cable to the desired length and remove the top cable bracket at the end, as it will need to be replaced. You will need to purchase an aluminum ferrule and stop set to reattach the shortened cable, ensuring it functions correctly. You can reattach it by hitting it with a hammer to crimp it back into place. Following these steps will help maintain proper spacing and stability during your fence installation.



Lower the post into the ground until the **Post Depth Stick** touches the surface. This ensures that the post has been buried to the correct depth. If the terrain is uneven, ensure that both posts are at a consistent depth and aligned horizontally. Use a **Post Bubble Level** to check for vertical alignment.





3. Maintain Proper Post Alignment and Spacing

Keep the **Base Cable Assembly taut** to ensure the posts remain correctly spaced. Additionally, continue to use the **Top Cable Fastener** to maintain proper post alignment during the curing process.

4. Allow the Concrete to Cure

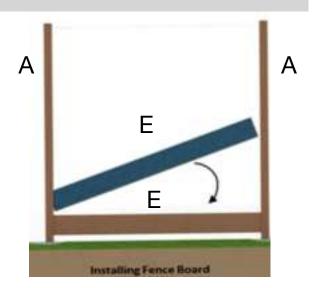
Allow the concrete to cure for **24-48 hours** before proceeding with installation.

Fence Board Installation

The **NC system** comes pre-assembled with a **Board Stop (H)**, which ensures correct spacing for the boards.

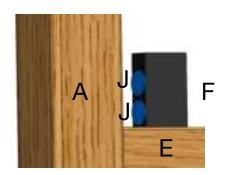
1. Install Bottom Square Edge Board (E)

- Hold the bottom board at an angle and insert one end into the U-shaped post. Rotate the other end into the opposite post.
- Push the board down until it rests against the **Board Stop Assembly**.



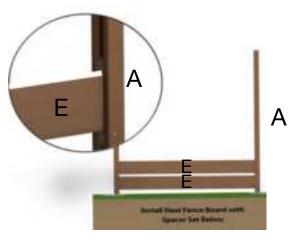
2. Install NC Spacer with Velcro Dots

- After you add the first board, attach two Velcro dots (J) to the unfinished side of one NC Spacer (F).
- Position the spacers so it is properly touching the Square Edge Board (E) and secured in place within the U-channel Post (A).
- Repeat on both sides.



3. Continue Adding Square Edge Boards and Spacers with Velcro Dots

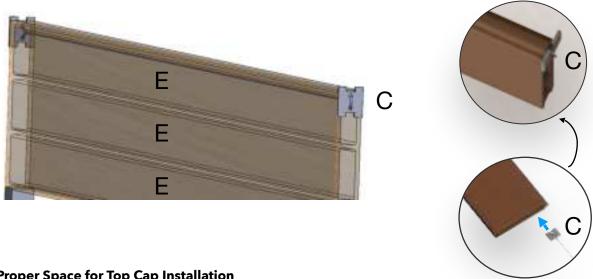
Repeat the process with each **Square Edge 1x6 Board**, using the spacers to maintain alignment.





4. Install the Top Cable (C) Inside the Top Cavity of the Last Board

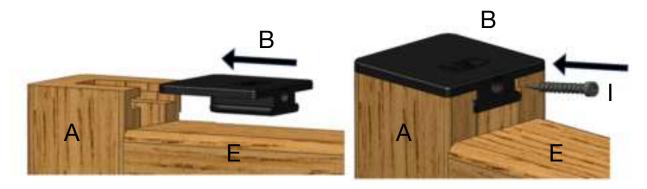
Before installing the last board, insert the H-shaped fasteners attached to the Top Cable (C) into the top cavity of the board. Once secured, slide the last board into place.



5. Ensure Proper Space for Top Cap Installation

After the last board is installed, ensure a proper gap for installing the **Top Cap (B)**.

- 1. Slide the Top Cap (B) into the Top Cap Routed space on the top of the U-Channel Post (A).
- 2. Fasten the Top Cap (B) using one of the provided 1-5/8 Torx Composite Screws (I) with a Torx T20 Bit and power tool.
- 3. Repeat for both U-Channel Posts (A).



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