Natures Composites

Sustainable Outdoor Living

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MODERN VERTICAL PRIVACY FULL SIZE GATE

INSTALLATION GUIDE (9/25)

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

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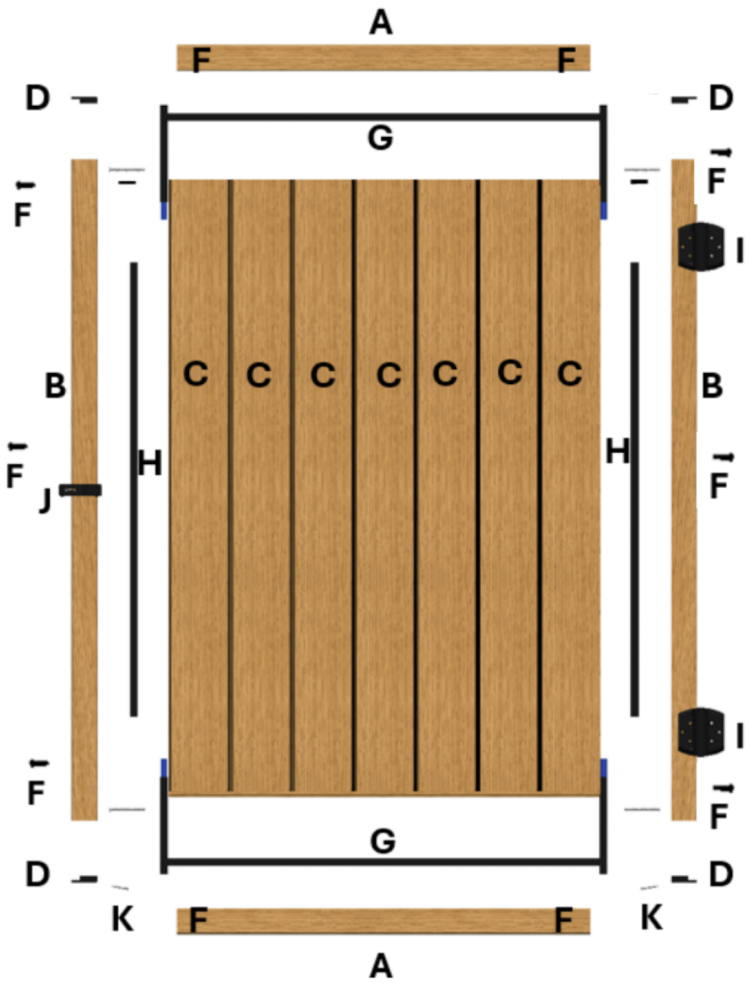
Watch out for green boxes for our Frequently Asked Questions!

COMPONENTS

ITEM	QTY	DESCRIPTION	NC PART
Complete Product	**1**	**Modern Vertical Full Size Fence Gate**	100314XX60400
A	2	Horizontal U-Post 40.5"	300722XX0405
B	2	Vertical U- Post 64.75"	300722XX064
C	7	Tongue & Groove Board 1" x 6" x 62"	300341XX620
D	2	Top Cap 2025 Pack (2 Caps & 4 Screws)	200721BK00000
F	10	3 inch Male Zinc-Plated Steel Phillips Flat Head Screws	90273A571
G	2	Horizontal Upper/Lower Frame	AC GATE UPPER FRAME
H	2	Frame Extension (44.5")	METAL_GATE_FRAME EXT_FULLSIZE
I	1	Heavy Duty Hinge Set	TCHDMA1S3BT
J	1	Heavy Duty Latch Set	210003

MODERN VERTICAL PRIVACY FULL SIZE GATE (6 ft H x 4 ft W) - *Nominal: 65 in. x*



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

For any further information or questions please visit www.naturescomposites.com or call us at (307) 338-2608

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BEFORE YOU BEGIN

A. **Verify Underground Utilities**
Before starting, contact local utility companies or use utility location services to ensure the installation area is clear of underground lines and potential hazards (call 811).

B. **Locate Property Lines**
Confirm the fence will be placed within your property boundaries to prevent encroachment and comply with any applicable legal requirements.

C. **Review Local Building Codes**
Check local building codes to ensure your installation complies with all requirements. Obtain any necessary permits prior to beginning the installation.

D. **Use Appropriate Safety Gear**
Wear protective equipment, including gloves, safety goggles, and work boots, to ensure a safe installation

TOOLS REQUIRED

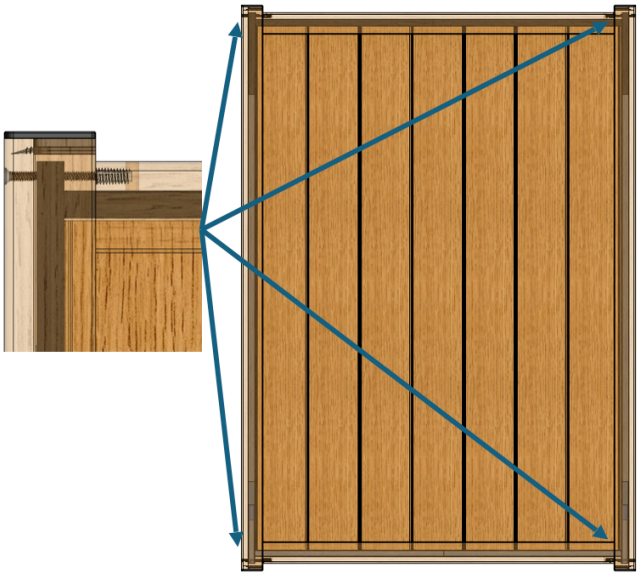
A. **Rubber mallet** (not included; used for securing angle brackets)

B. **#4 Phillips screwdriver**

C. **Power drill** (compatible with a #4 Phillips head screwdriver)

D. **Torx T20 Bit** (for fastening the top cap)

VERTICAL PRIVACY GATE INSTALLATION SUMMARY



TO ENSURE YOUR NC GATE OPERATES CORRECTLY FOLLOW THESE GUIDELINES

- This assembly requires an intermediate skill level. Prior experience with tools and assembly techniques is necessary.

- For the assembly of this gate, NC recommends to position components on a sturdy work table.

- NC Gates come in a fixed size of 45.5 inches wide by 65 inches tall and are not adjustable. Proper planning for the gate opening is essential to accommodate these exact dimensions.

- This full-size gate weights around 90 pounds, in order to work properly it requires strong support.**You must purchase our matching NC 5x5 Commercial Post to mount your gate, otherwise it will not hold over time. We recommend to reinforce the composite post by inserting a 4x4 treated lumber post for extra strength.**

- Post Installation Accuracy: NC recommends taking the time to position the posts where the gate will be hung with precision before securing them into the ground.

How should I space my posts if I'm adding a gate?

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".

The following instructions outline the assembly process for the shown Gate. You will find the CAD drawing exploded view with all components, followed by a fully assembled gate view in transparent format, allowing you to easily identify each part behind the composite U-Posts and boards.

1. **Assemble the Metal Frame:** Begin by assembling the metal frame according to the provided specifications.
2. **Position the Frame:** Place the assembled metal frame inside the composite U-Posts.
3. **Install the Boards:** Insert the boards into the frame, ensuring they fit securely within the U-Posts.
4. **Secure the Gate:** Fasten the structure by installing four 3-inch screws—one at each corner.
5. **Attach Top Caps:** Slide the top caps onto each corner of the gate and secure them using the provided screws.

Once the gate is fully assembled, refer to the additional instructions for mounting the hardware and hanging the gate onto the posts.

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Can my gate be Surface Mounted or only Buried?

Our gates are too heavy to be surface mounted. Please purchase and bury two of our NC 5x5 Comercial Grade Post to hang your gate.

PART A: GATE ASSEMBLY INSTRUCTIONS

1. Metal Frame Assembly

Assemble the Metal Frame
Begin by assembling the metal frame, which serves as the structural backbone of the gate.

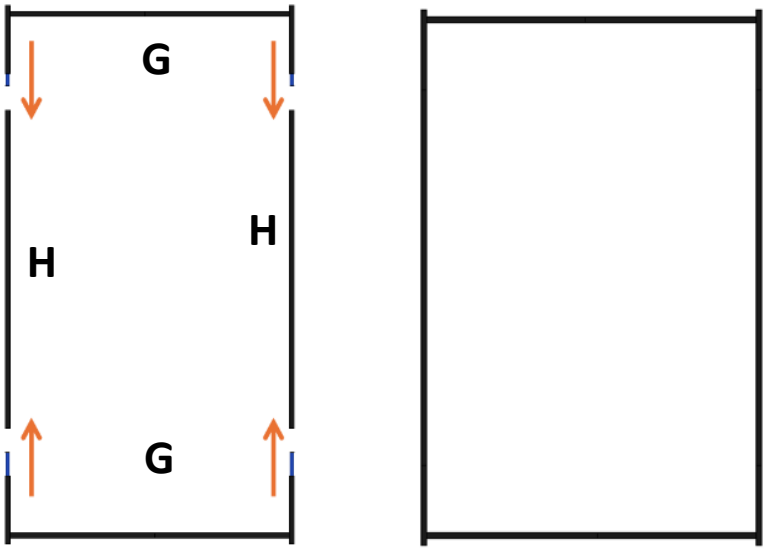
1.1 Connect the Frame Components

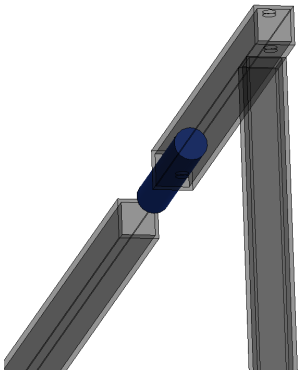
- Take **2 Horizontal Upper/Lower Frames (G)** and connect them with **2 Frame Extensions (H)**.
- Ensure the components are aligned properly for a seamless connection.

Tips for a Secure Fit:

- The fit between the metal frame parts (G and H) is designed to be tight to ensure structural stability.
- Use a **rubber mallet** to gently tap the components together, ensuring they are securely connected without damaging the frame.
    - Start with light taps and gradually increase force as needed until the parts are firmly joined.

Once the frame components are fully assembled, verify that all connections are tight and properly aligned before proceeding to the next step.



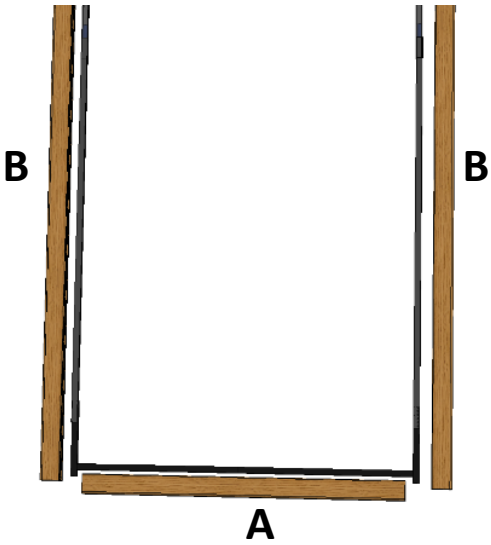


2. Composite U-Post and Metal Frame Assembly

2.1 Assemble the Lower Composite Gate Frame. [A+(B+B)].

- Start by positioning one Horizontal U-Post (A) and two Vertical U-Post (B) in a U-Shape configuration.

*This will become your lower U-Post Frame assembly.



2.2 Metal frame positioning into the Lower Composite Gate Frame.

- Insert assembled metal frame into the Lower Composite Gate Frame.

Can I paint my gate?

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.

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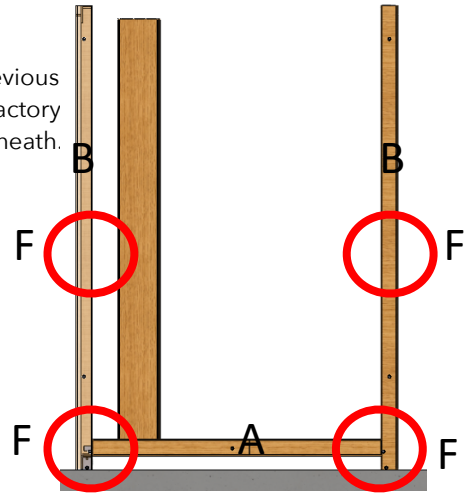
Why should I not over-tighten my screws?
Our screws are self tapping and if you over-tighten it will strip the screw (cut into the metal) and could potentially lead to failure.

2.3 Fasten the Bottom of the Gate Frame

At this stage, you are ready to secure the gate frame by fastening the cutting screws through the pre-drilled holes on the horizontal (A) and vertical U-Posts (B) into the metal frame. This process requires **10 pre-drilled holes (pre-drilled at factory - no need for you to do it) and 10 screws (F)** for a secure and stable assembly. You will start with the first 6 holes and screws.

4.1 Verify Alignment
The alignment of the composite U-Posts (B) with the metal frame was completed in the previous step. Before proceeding, double-check to ensure that the alignment has not shifted. The factory pre-drilled holes on the U-Posts (B) must remain perfectly aligned with the metal frame beneath.

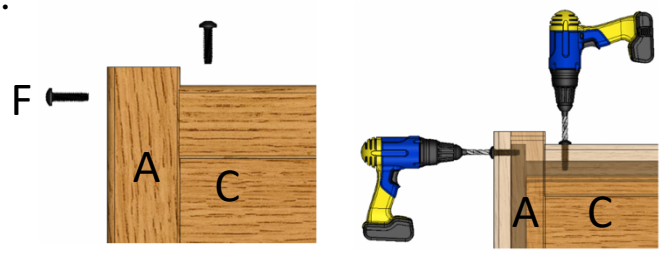


4.2 Pre-Drill Holes into the Metal Frame
Using a power drill and a 17/64-inch drill bit, pre-drill 10 holes into the metal frame at each location using the the factory pre-drilled holes in the U-Posts as a guide - this way the holes will align.

- Drill carefully through the composite U-Posts and into the metal frame to maintain accurate alignment.
- Tip: Keep the drill perpendicular to the surface to avoid misaligned holes and ensure a precise fit for the screws.

4.3 Insert Cutting Screws
Once the pre-drilling is complete, insert the cutting screws (F) into each pre-drilled hole on the composite U-Posts (B). **DO NOT OVER-TIGHTEN.** Use a power drill to drive the screws securely into the metal frame.

4.4 Check Stability
After securing all 10 screws, verify the gate's stability. Ensure that all screws are tightened and that the U-Posts are firmly and uniformly



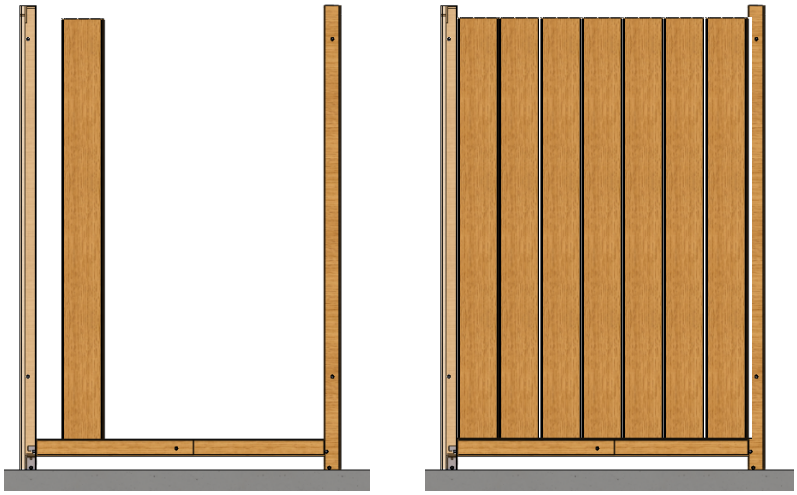
3. Install the Tongue & Groove Boards

3.1 Insert the first T&G board (C) into the U-Post and Metal Frame assembly.

3.2 Repeat sliding 5 T&G (C) boards into assembly.

3.3 Insert the last T&G board in the assembly.

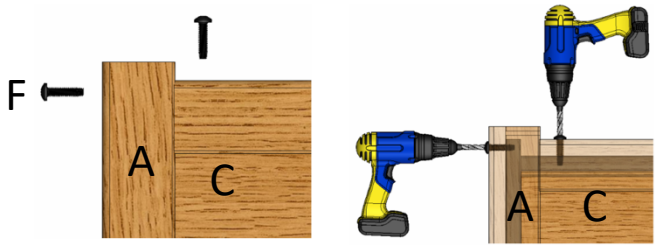
- The last board, will need to be inserted in a way where the Tongue will fit into the groove of the previous board.
- You will need to angle both boards.



4. Complete de Gate Assembly

4.1 Fasten the Top of the Gate Frame

- Fasten the remaining Horizontal U-Post (A) by drilling the remaining 4 holes on the metal frame - using the U-Post as a guide (see step 2.3).
- Insert the remaining four 3-inch screws (E) through the Vertical U-Post (B), and metal frame (G).
  - Repeat on both sides. Do not fully tighten the screws. **Do not over-tighten!**



STOP! Have you attached all screws to the hinges?

Your D&D kit package comes with 12 screws. Once you pre-drill your holes (see instructions left), you must attach all 12 screws, **including inserting two screws into the leg side of each hinge into order to penetrate the internal steel frame. If you do not do this your gate will sag.**

4. Top Cap Installation

4.1 Slide the Modern Sliding Top Cap (D) into the Top Cap Routed space on the top of the Vertical U-Channel Post (B).

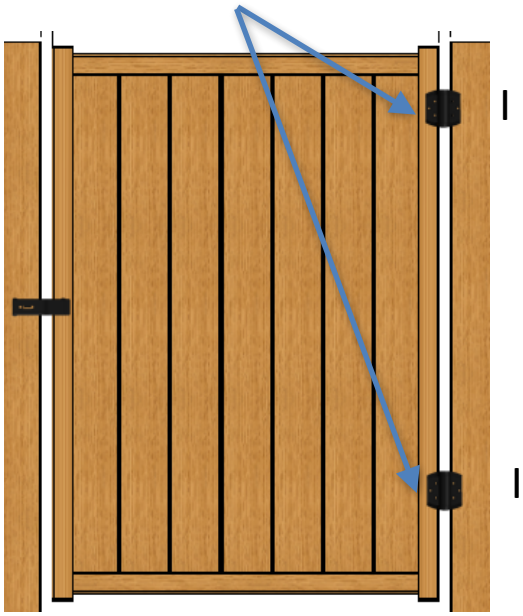
4.2 Fix into position using two composite screw (find these in the small package with screws (D)).

4.3 Repeat for all Vertical U-Channel Posts (B).

PART B: HANGING THE MODERN GATE

NC gates are crafted for durability, with the full-size gate weighing approximately 90 pounds. Proper installation is essential to ensure smooth functionality and longevity in your chosen location.

Hinges position should be installed as show in drawing [3.5 inches from the top and bottom]



Hinge Installation Note

The NC Gate requires the hinges to be secured into the gate through the composite material and into the metal frame to properly support the gate's weight and ensure optimal functionality.

Pre-Drill for the Gate Side: Pre-drill holes using a 5/32" drill bit for the hinge screws. On the gate, the hinge screws must penetrate the composite U-Post and the metal frame.
Ensure proper alignment so the screws securely fasten into the metal frame; 4 of the 6 screws on the gate side will anchor into the metal frame for stability.

Pre-Drill for the Post Side:
If using an NC 5x5 Commercial Post, pre-drill the holes using the same 5/32" drill bit.Insert a 4x4 post insert inside the 5x5 post for additional reinforcement. Ensure the hinge screws penetrate both the 5x5 post and the 4x4 post insert for a secure connection.

D&D Manuals

To provide a reliable and hassle-free experience, NC has partnered with D&D Technologies, the premier gate hardware manufacturer. Every NC gate kit includes a pair of D&D hinges and a latch, selected specifically to support the weight and design of our gates. This premium hardware is engineered to deliver optimal operation, ensuring that your gate functions smoothly and securely over time.
For further installation instructions, please refer to the provided link for the specific D&D hinge and latch model included in the gate kit (www.us.ddtech.com) ***Please note D&D recommends a different positioning, please use NC recommendation (see image above).**

Download Hinge, SKU# TCHDMA1S3BT: https://us.ddtech.com/products/truclose-multi-adjust-heavy-duty-series-3?variant=43821580943517

Download Latch, part # 210003, instructions here: https://us.ddtech.com/products/wood-hardware-standard-post-latch

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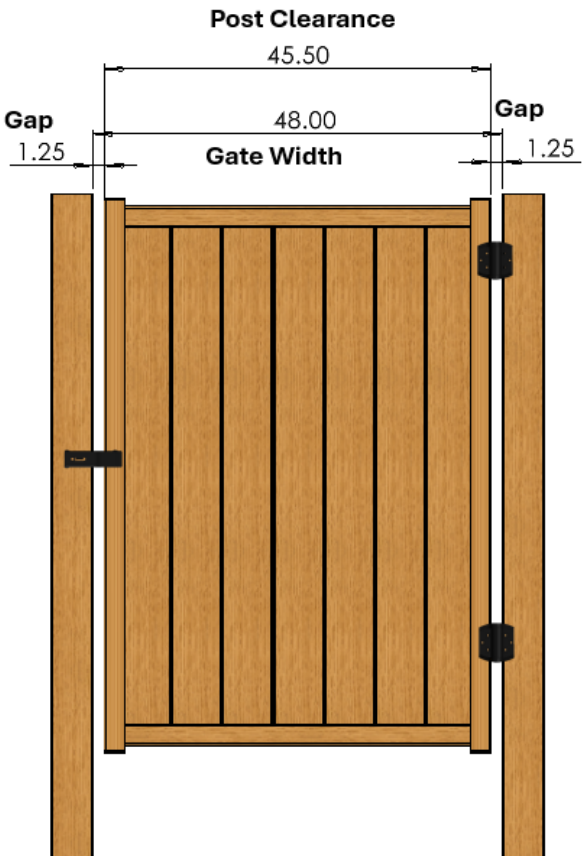
Gate Opening Requirements



To properly accommodate the NC gate width and required hardware spacing, the opening between posts should measure 48 inches. This allows the 45.5-inch-wide gate plus 1.25-inch clearance on each side, as needed for the D&D hinges. To add a gate, you must use two NC 5x5 Commercial Posts—standard posts will not support the weight. Since the gate is 48" wide, and each 5x5 post is 5.5" wide, so space them 58" apart (outside to outside). This ensures proper hinge and latch function.

Proper Support for Your Gate

For optimal performance and durability, it's important to understand that our full-size NC gate weighs approximately 90 pounds. Due to this weight, it needs robust support to ensure smooth operation and prevent sagging over time.

NC offers a 5x5 Commercial Grade Composite Post that matches the gate's color and material, offering a cohesive, seamless look.

- NC 5x5 Commercial post dimension.
    - Outside dimensions 5X5. inches.
    - Inside dimensions 3.87 inches (3 7/8").

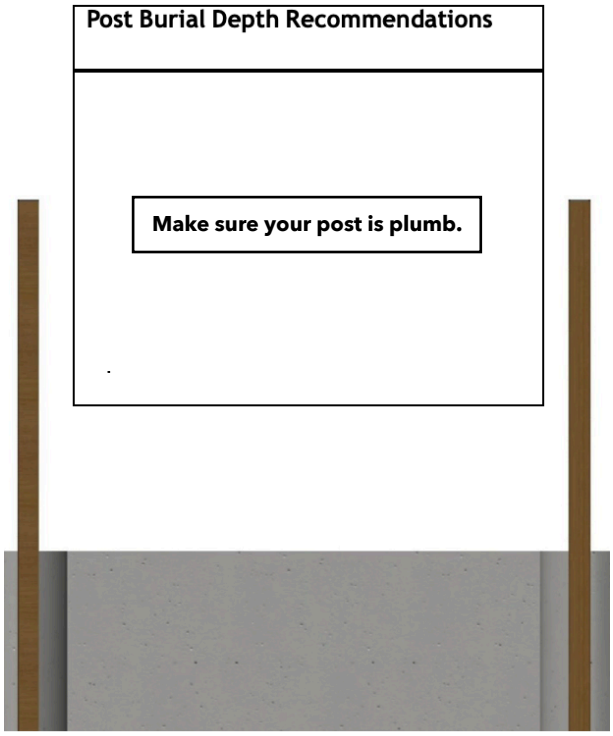
The NC 5X5 NC post when used as support of a full size gate should be reinforced inserting a 4x4 treated wood post inside the composite post. This added reinforcement greatly increases the strength and durability of the post.

- Commercial 4x4 treated wood post dimension is 3.5 X 3.5"
    - This lumber post will fit inside our 5X5 NC Commercial post.

Post Burial Recommendations

Select the Correct Post Length: For full-size gates, choose a post length suitable for your local soil and engineering conditions. NC offers 5x5 Commercial Posts in lengths of 94", 108", and 132" to meet different installation needs. Consult your contractor for guidance on the appropriate post length.

Burial Depth and Concrete Requirements: To ensure stability, we recommend burying at least 1/3 of the post length in the ground. For example, a 94" post should be buried 31 inches deep. Use a minimum of 80-100 pounds of concrete per post to provide a solid foundation. **Make sure your post is plumb.**



We do not recommend using these gates as a double gates as they are too heavy. If you would like to create a double gate, please call the number below for a custom solution.

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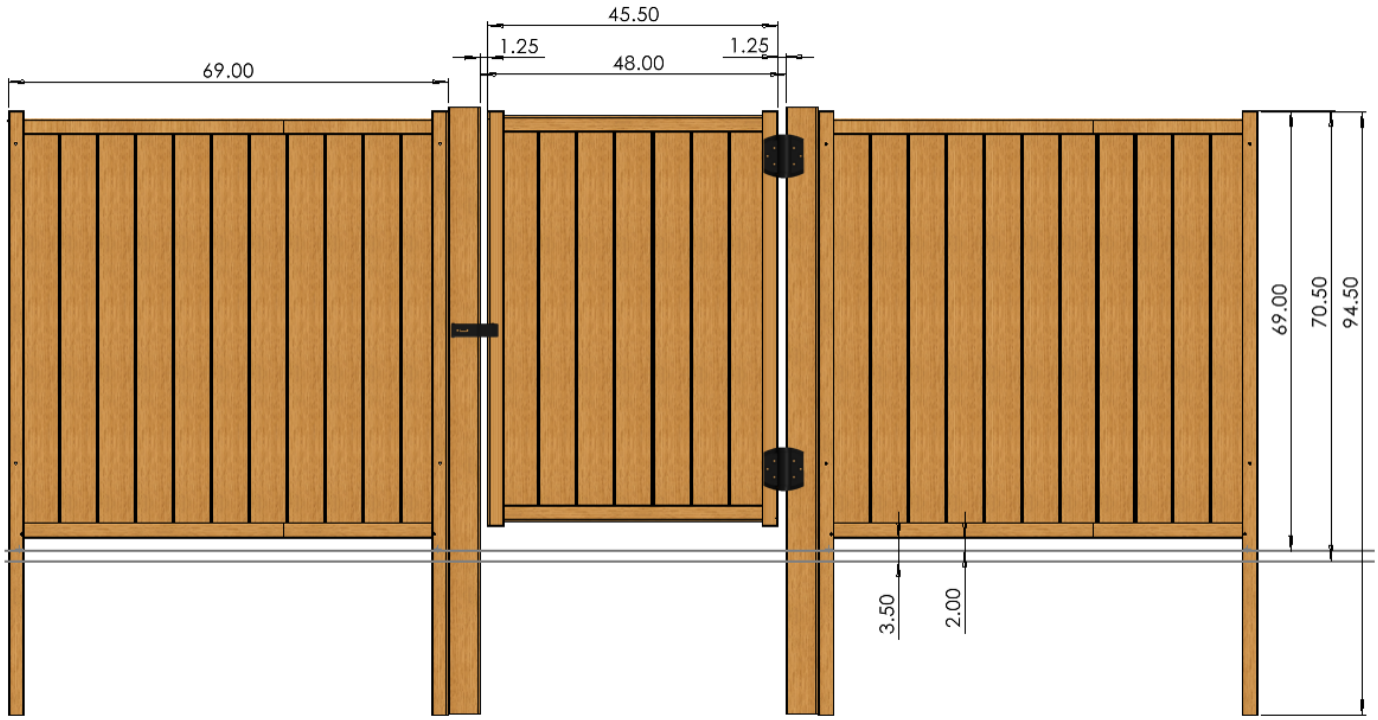
Can I make a double gate with this model?

No! Our gates are too heavy to be made into double gates and must be supported by two 5x5 NC commercial grade posts with an 4x4 pressure treated lumber insert in order to hang the gate.

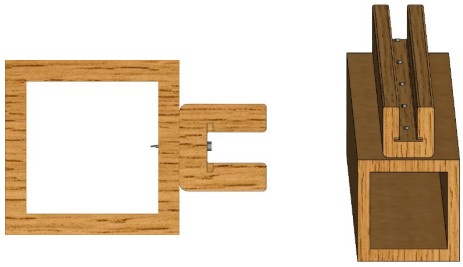
PART C: INSTALLING GATE WITH NC MODERN FENCE SYSTEM



1. Screw the U-Channel Fence Post to the 5x5 Post

1.1 Attach the NC U-Channel fence post to the 5x5 heavy duty post

** Using 5 composite screws, secure the posts together.*



2. Bury the Posts Together into the Ground

2.1 Assembled posts should be buried together in the ground.