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## MODERN HORIZONTAL PRIVACY PERIMETER GATE INSTALLATION GUIDE (07/25)

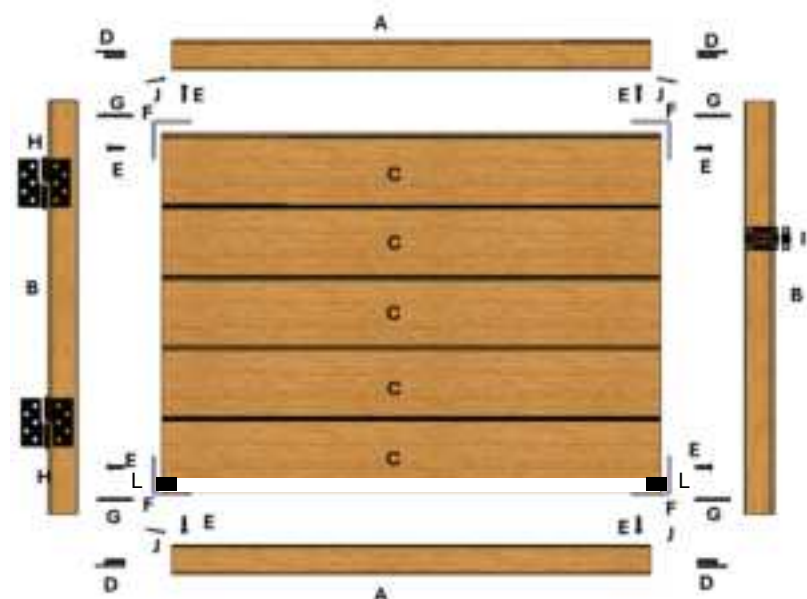
*Our products and/or processes are protected by the following patents, as well as other patents that are pending: US 11,053,707; US 12,110,703; US 12,084,880. For any further information or questions please visit [www.naturescomposites.com](http://www.naturescomposites.com) or call us at (307) 338-2608.*

## MODERN HORIZONTAL PRIVACY PERIMETER GATE

### COMPONENTS

COMPONENT	QTY	DESCRIPTION	NC PART
<b>Complete Product</b>	<b>1</b>	<b>Modern Horizontal Privacy Perimeter Gate</b>	100305XX30400
<b>A</b>	2	Horizontal U-Post-40.5- Per	300722XX0405-FI-PER
<b>B</b>	2	Vertical U-Post-35-Perimeter	300722XX035-SCTC-PER
<b>C</b>	5	T&G Board 1x6-43"	300341XX430
<b>D</b>	4	Modern Sliding Top Cap	200721BK00000
<b>E</b>	8	Rounded Head Thread-Cutting Screws for Metal Zinc-Plated Steel, 5/16"-18 Thread, 1-1/2" Long	AC90087A896
<b>F</b>	4	NC Angle Bracket	NC PART AC L-BRACKET 3.25X3.25
<b>G</b>	4	3 inch Male Zinc-Plated Steel Phillips Flat Head Screws	AC90273A571
<b>H</b>	1	D&D Small Gate Hinge set (DD-TCA1L2S3BT)	AC PERIMETER HINGE
<b>I</b>	1	D&D Small Gate Gravity Latch Set (DD-210001)	AC PERIMETER LATCH
<b>J</b>	4	1 5/8 Torx Composite - Top Cap Screw	TOP CAP SCREW
<b>K - Factory Installed</b>	4	Female Zinc Alloy Tapping Inserts for Softwood	Factory Installed on part 'A' (Horizontal U-Post-40.5- Full)
<b>L</b>	2	Spacer 1"	200723XX010
<b>M</b>	2	Velcro Dots	VELCRO DOTS

**Watch out  
for green  
boxes for our  
Frequently  
Asked  
Questions!**



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

## 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.

### 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 process.

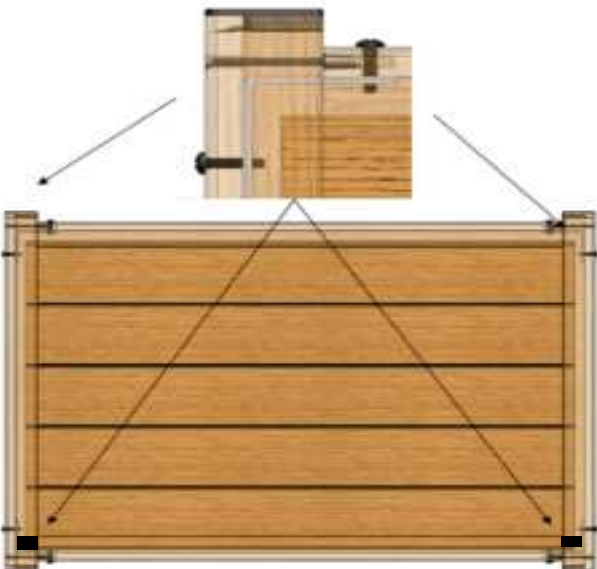
## TOOLS REQUIRED

- 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)

## 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 a clear, flat surface like a table.
- NC Gates come in a fixed size of 45.5 inches wide by 35 inches tall and are not adjustable. Proper planning for the gate opening is essential to accommodate these exact dimensions.
- Gate Opening: The space between posts should measure 47 inches. This clearance is essential for the smooth operation of the hinges and latch, ensuring they function correctly and reducing the risk of operational issues caused by restricted hardware space.
- This perimeter gate weights around 55 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. This careful preparation can prevent the need for adjustments or reinstallation later, saving both time and effort.

## GATE INSTALLATION SUMMARY



The following instructions outline the assembly process for the pictured gate. Refer to the CAD exploded view and transparent assembled view to identify each part.

The gate frame consists of horizontal and vertical U-Posts with a dual securing system:

1. **Primary Fastening:** Use 3-inch screws through pre-drilled holes in the vertical posts, securing them to the horizontal factory-installed female inserts.
2. **Angle Bracket Reinforcement:** Install 4 angle brackets using 8 round head cutting screws through pre-drilled holes in the posts, ensuring they fully penetrate the metal brackets for maximum stability.
3. **Board & Spacer Installation:** The boards fit securely between the U-shaped posts, completing the gate structure.

Follow the detailed steps to assemble the gate correctly in the next section.

## PART A: GATE ASSEMBLY INSTRUCTIONS

### 1. FRAME ASSEMBLY

#### Step 1: Frame Assembly

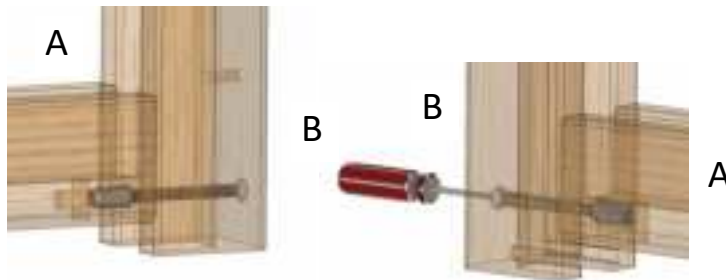
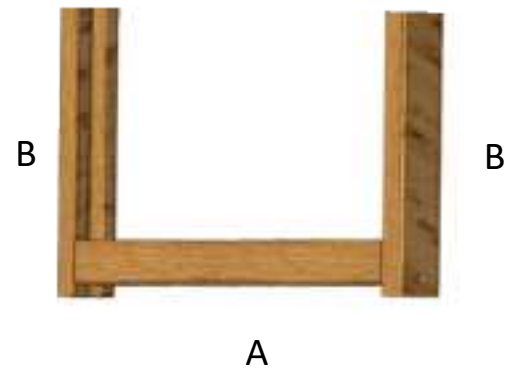
The Frame Assembly is the foundation of your gate, providing structural support and serving as the main assembly where all components come together to ensure strength

##### 1.1 Position the U-Posts:

- Arrange one Horizontal U-Post (A) and two Vertical U-Posts (B) into a U-shape.
- Ensure all components are aligned properly for easy assembly.

##### 1.2 Secure the Vertical U-Posts and Spacer:

- Insert a 3-inch screw (G) through each Vertical U-Post (B) and into the threaded coupler already inserted (at factory) into the Horizontal U-Channel. Tighten securely to stabilize the frame. We recommend manual Phillips screwdriver #4 (this will prevent over-tightening).



### 2. NC ANGLE BRACKET INSTALLATION

#### 2.1 Position the Angle Bracket (F):

- Place the Angle Bracket (F) in the corner where the Vertical U-Post (B) meets the Horizontal U-Post (A).

#### 2.2 Secure Spacer to L-Bracket:

- Affix velcro dot (M) to spacer (L) and attach to corner of L-Bracket inside Vertical U-Post (B).

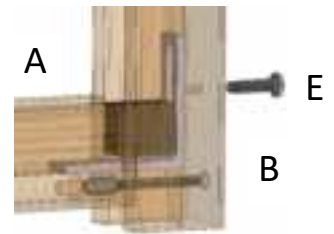


## Why should I not over-tighten my screws?

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.

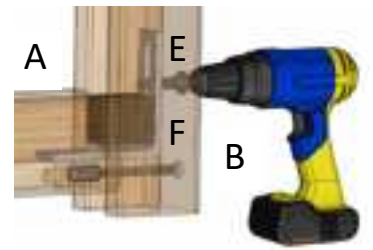
### 2.3 Insert the First Thread-Cutting Screw:

- Start by inserting the **Rounded Head Thread-Cutting Screw for Metal (E)** through the pre-drilled hole in the **Vertical U-Post (B)**. **Do not over-tighten.**
- Note:** Begin with the **Vertical U-Post (B)** to stabilize the Angle Bracket before proceeding further.



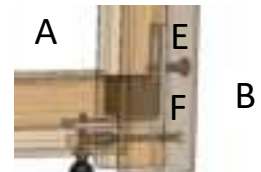
### 2.4 Secure the Screw:

- Use a **#4 Phillips power tool** to drive the **Rounded Head Thread-Cutting Screw for Metal (E)** into the **Angle Bracket (F)**.
- Note:** Apply **inward pressure** to the **Angle Bracket (F)** to ensure the screw penetrates the metal of the bracket securely.



### 2.5 Secure the Second Screw:

- Secure the second **Rounded Head Thread-Cutting Screw for Metal (E)** on the other side of the **Angle Bracket (F)** through the **Horizontal U-Post (A)**.
- Note:** Repeat the same operation as in Step 2.5, applying inward pressure to ensure the screw penetrates the metal bracket.



### 2.6 Secure the Second Angle Bracket:

- Repeat the entire operation to secure the **second Angle Bracket (F)** on the opposite side of the bottom gate frame.

**Final Note:** Ensure that all **4 Rounded Head Thread-Cutting Screws for Metal (E)** are securely inserted to fasten both angle brackets properly. This step ensures a stable base for the frame, which is essential for gate assembly.

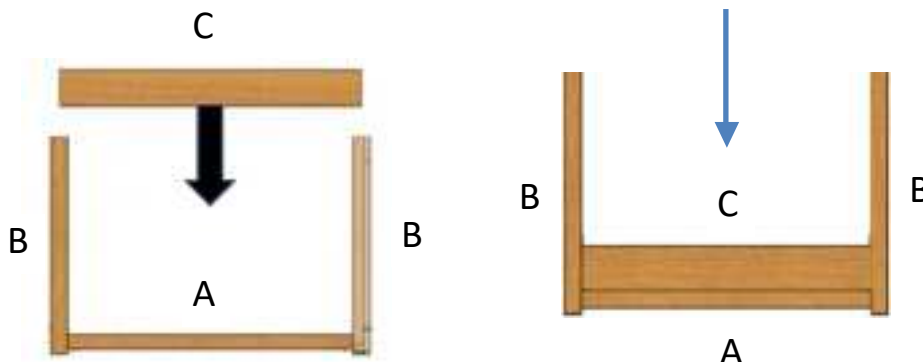


## 3. Insert the First Square Edge Board

### 3.1 Insert the First Square Edge Board (C):

- Carefully position and insert the **first Square Edge Board (C)** into the **U-shaped frame**.
- Ensure the board is properly aligned within the **channels of the Vertical U-Posts (A)** and sits flush at the bottom of the frame.

**Note:** Double-check the alignment to ensure the board fits snugly and securely within the frame before proceeding to the next step.

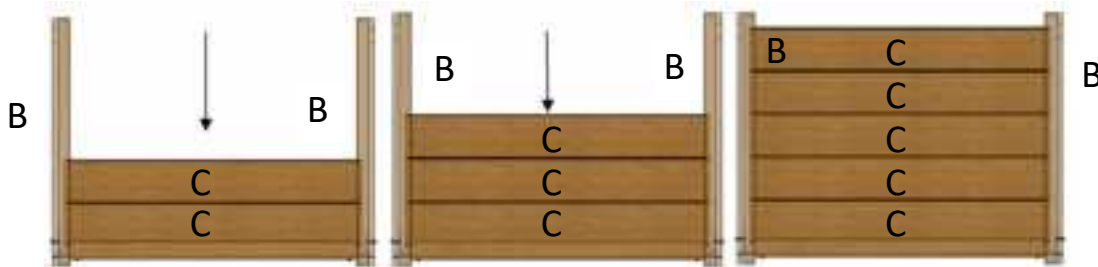


## Can I cut my gate to adjust the size?

No! Our gates cannot be cut due to their metal inserts and structural design.

### 3.2 Repeat for the Next Boards:

- Insert the next **4 T&G Boards (C)** into the **Vertical U-Posts (B)**.



### 4. Complete the Frame

Now you are ready to close and secure the composite frame. This step is similar to **Step 1** and **Step 2**, but applied to the **top side** of the frame.

#### 4.1 Position the Angle Bracket (F):

- Place the **Angle Bracket (F)** in the corner where the **Vertical U-Post (B)** meets the **Horizontal U-Post (A)**.

#### 4.2 Position the Horizontal U-Post (A):

- Align and position the remaining **Horizontal U-Post (A)** on the **top side** of the frame, ensuring it fits securely into the assembly.

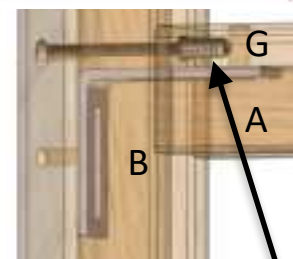
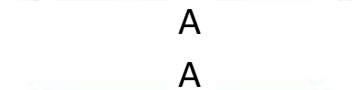
#### 4.3 Insert the 3-Inch Screw (G):

- Insert the **3-inch screw (G)** through the **Vertical U-Post (B)** into the **threaded coupler** already inserted in the **Horizontal U-Channel (A)**.
- Note:** Repeat this process on the other side to secure both corners.

#### 4.4 Insert the Thread-Cutting Screws (E):

- Use a **#4 Phillips power tool** to drive the **Rounded Head Thread-Cutting Screws for Metal (E)** through the **pre-drilled holes** in the **Horizontal U-Post (A)**, and **Vertical U-Post (B)** into the **Angle Brackets (F)**.
- Note:** Apply inward pressure to ensure proper alignment and penetration of the screws into the bracket.
- Repeat this process** on the opposite side to secure both angle brackets.

Final Note: Double-check that all screws, spacers, and brackets are securely in place and properly aligned to ensure the frame is stable and complete. This step ensures the gate's structural integrity.



## Do not over-tighten!

By over tightening you will pull this insert out.



## 5. Top Cap Installation

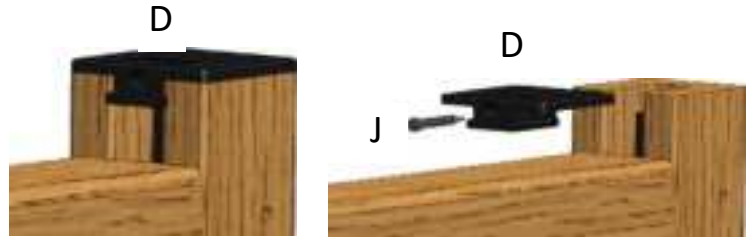
5.1 Slide the Modern Sliding Top Cap (D) into the Top Cap Routed space on the top of the Vertical U-Channel Post (B).

5.2 Fix into position using one 1 5/8 Torx composite screw (J) and a drill (find these in the small package with screws).

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

### 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.



## PART B: HANGING THE MODERN GATE

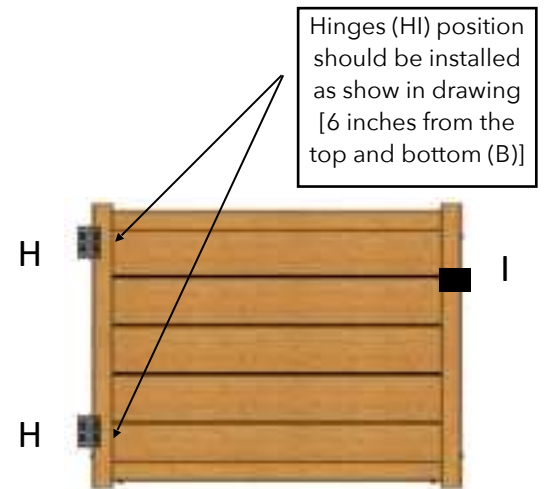
NC gates are crafted for durability, with the perimeter gate weighing approximately 55 pounds. Proper installation is essential to ensure smooth functionality and longevity in your chosen location.

### Premium Hardware for Optimal Performance

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 (H) and a latch (I), 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 (H) and latch (I) model included in the gate kit.

*\*Please note D&D recommends a different positioning, please use NC recommendation (image right). Consult local regulation guidance for latch height installation.*



Download Hinge, part # TCA1L2S3BT, installation guide:  
<https://us.ddtech.com/products/truclose-regular-for-metal-gates?variant=27661859717184>



Download Latch, part # 210001, installation guide:  
<https://us.ddtech.com/products/wood-hardware-regular-gravity-latch>

## Gate Opening Requirements

The gate opening must be measured accurately to ensure proper fit and function of the hinges and latch:

**Recommended Gate Opening:** To properly accommodate the NC gate width and required hardware spacing, the opening between posts should measure 47". This allows the 45.5-inch-wide gate plus .75" clearance on each side, as needed for the D&D hinges.

## Proper Support for Your Gate

For optimal performance and durability, it's important to understand that our perimeter NC gate weighs approximately 55 pounds. Due to this weight, it needs robust support to ensure smooth operation and prevent sagging over time. **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.**

## Why do I need to purchase additional 5x5 posts and reinforce them with a pressure treated 4x4 post?

For optimal structural integrity! You want your gate to hold against any challenges and this will ensure the screws that hold it to your panels have enough support. It also allows additional support for your hinge and latch screws.

## Post Burial Depth Recommendations

- Burial minimum 24 inches.
- The hole for the footing should be three times the diameter of the post.

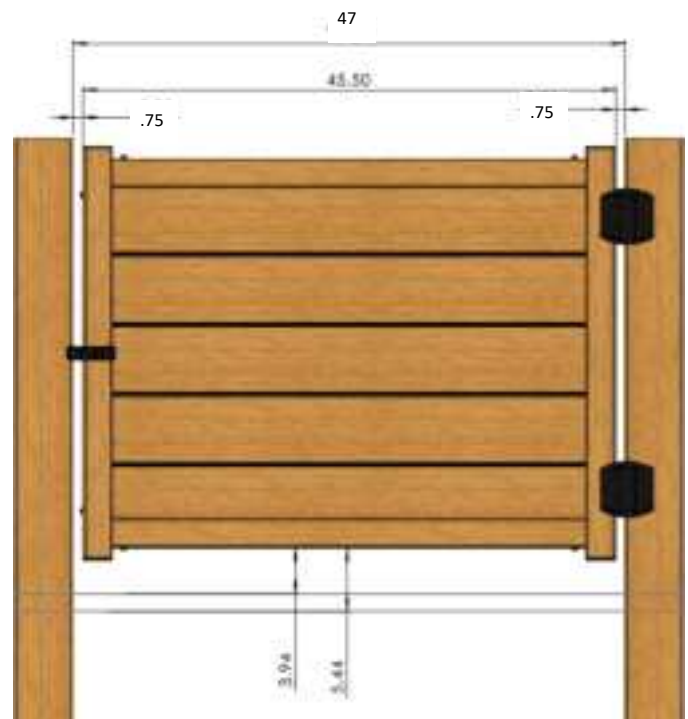
**Make sure your post is plumb.**

**When building a double gate, a 4x4 or metal stiffener is required in both NC 5x5 posts.**

## 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 pounds of concrete per post to provide a solid foundation. **Make sure your post is plumb.**

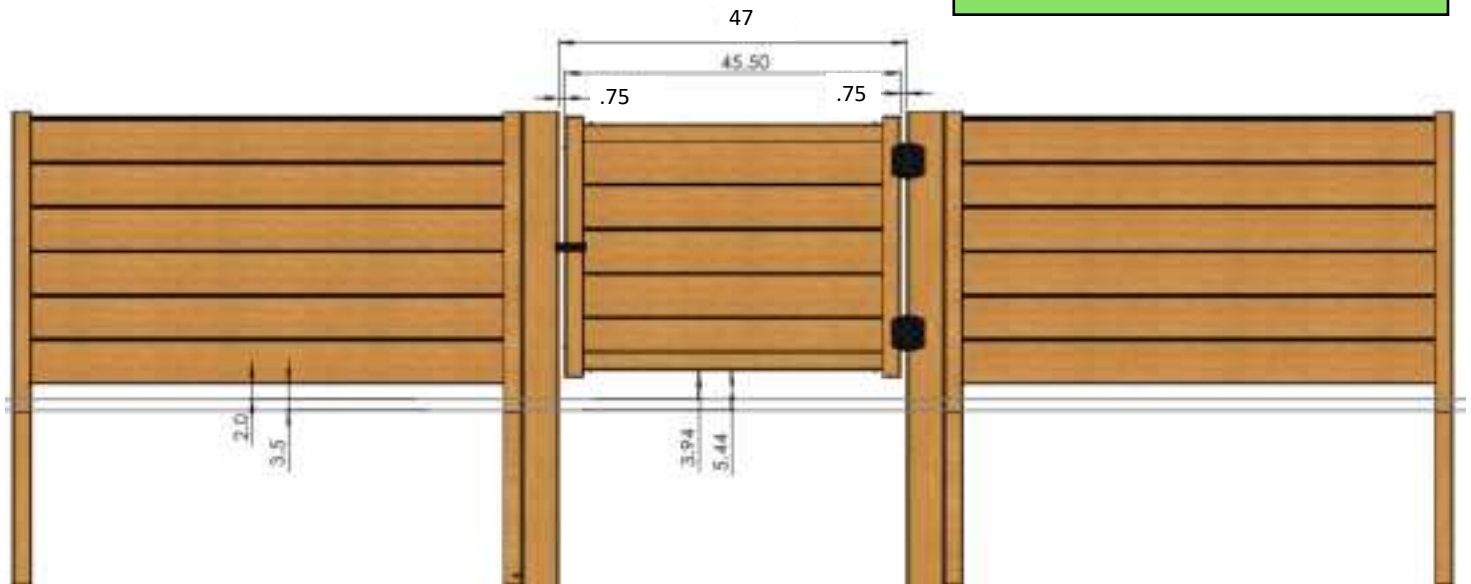




**Can I make a double gate with this model?**

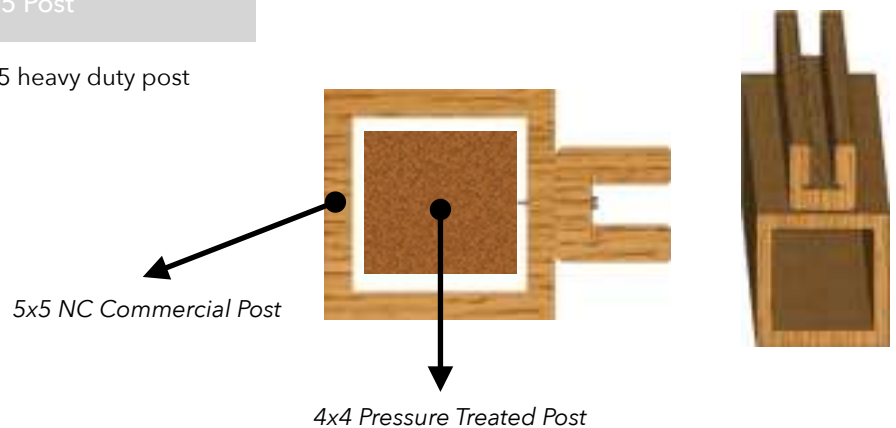
No! Our gates are too heavy to be made into double gates and must be supported by two 5x5 NC commercial grade posts with an 4x4 pressure treated lumber insert in order to hang the gate.

**PART C: GATE INSTALLATION WITH NC MDOERN 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



**2. Bury the Posts Together into the Ground**

2.1 Assembled posts should be buried together in the ground.

