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**MODERN VERTICAL SEMI-PRIVACY PERIMETER GATE**  
INSTALLATION GUIDE (12/24)

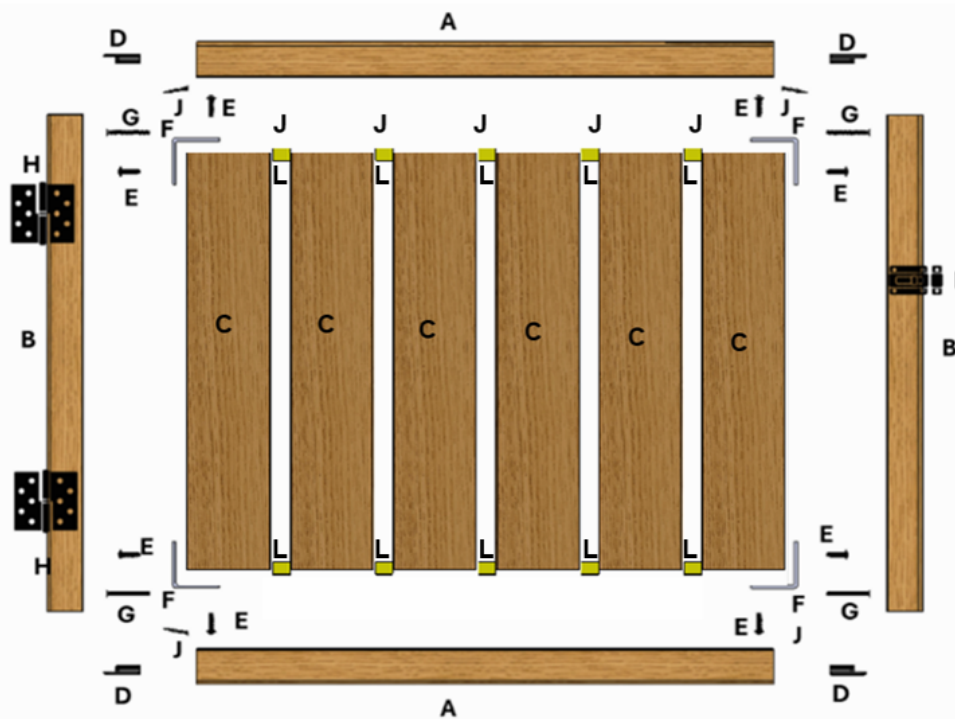
*Our products and/or processes are protected by the following patents, as well as other patents that are pending:  
US 11,053,707; US 12,110,703; US 12,084,880*



## MODERN VERTICAL SEMI-PRIVACY PERIMETER GATE

### COMPONENTS

ITEM	QTY	DESCRIPTION	NC PART
<b>Complete Product</b>	<b>1</b>	<b>Modern Horizontal Semi-Privacy Perimeter Gate</b>	<b>100320XX30400</b>
<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>	6	Sq Board 1x6-31"-PER-VERTICAL	300341XX310-PER-VER
<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	Small gate hinge set (DD TCA 1S3BT)	AC PERIMETER HINGE
<b>I</b>	1	Small gate gravity Latch set (DD-210001)	AC PERIMETER LATCH
<b>J</b>	9	Screw -1 5/8 torx composite -Top cap	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>	4	Spacer 1.25"	200723XX0125
<b>N</b>	1	Velcro Pack	VELCROPACKPERIMETER



## 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.

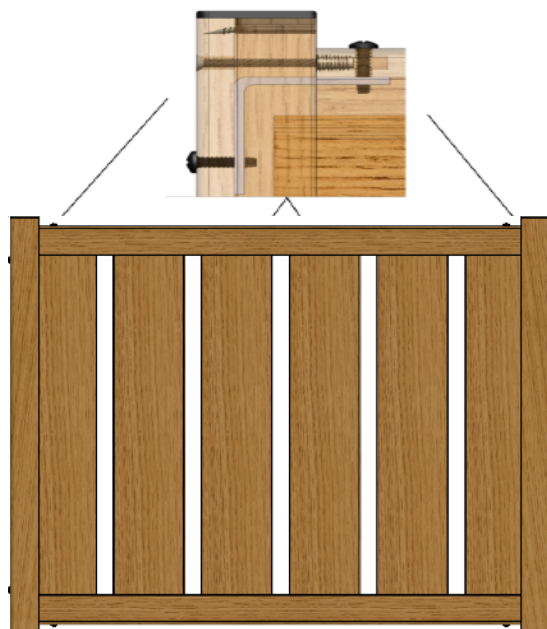
## TOOLS REQUIRED

- 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 1/8 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. NC offers a 5x5 commercial post that matches your gate, we recommend to reinforced the composite post by inserting a 4x4 treated lumber.
- 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.

## HORIZONTAL SEMI-PRIVACY PERIMETER 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

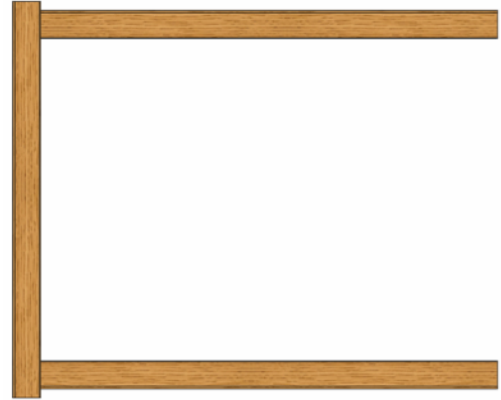
### 1. FRAME ASSEMBLY

#### 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 and stability.

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

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

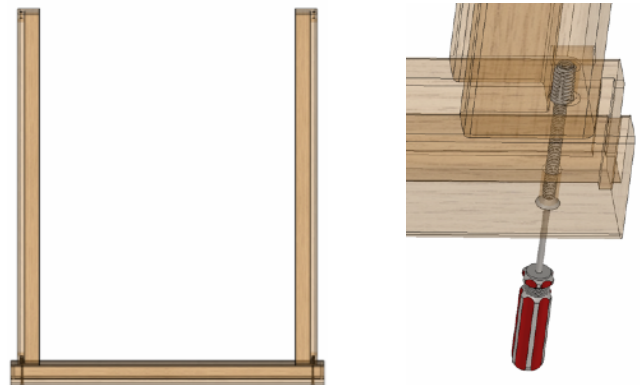


##### 1.2 Secure the 2 Horizontal U-Posts:

Turn the frame assembly to simplify the next steps.

- 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 tighten).

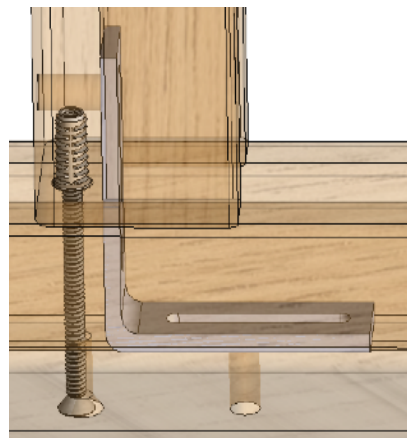
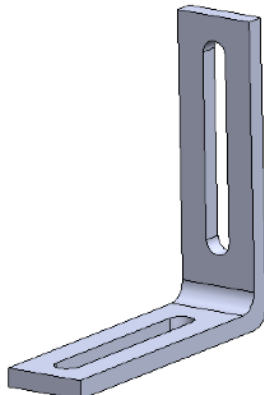
Once the frame is assembled, verify that all connections are tight and aligned before proceeding to the next step.



### 2. NC ANGLE BRACKET INSTALLATION

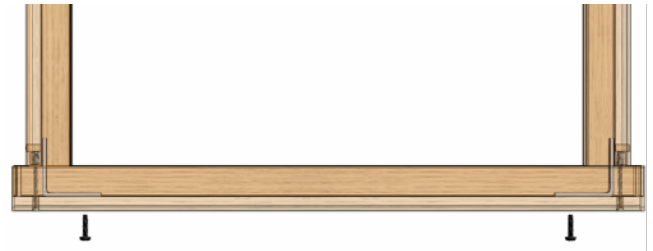
#### 2.1 Position the Angle Bracket (F):

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



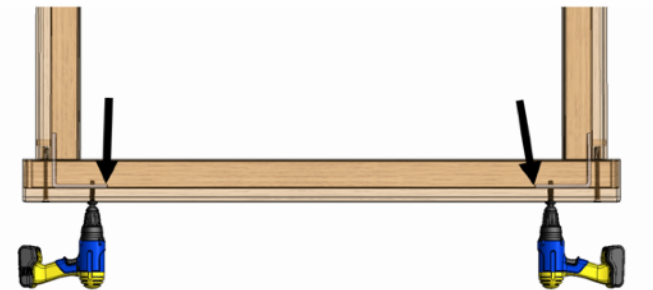
## 2.2 Insert the First Thread-Cutting Screw:

- Start by inserting the **Rounded Head Thread-Cutting Screw for Metal (E)** through the pre-drilled hole in the **Vertical U-Post (B)**.
- Note:** Begin with the **Vertical U-Post (B)** to stabilize the Angle Bracket before proceeding further.



## 2.3 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.



## 2.4 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.

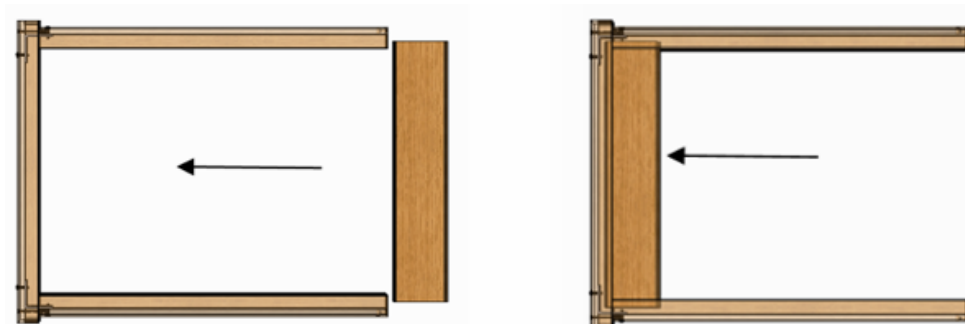


## 3. Insert the First Square Edge Board

### 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 (B)** 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.



## 4. Prepare and Position the 1.25" Spacer

### 4.1 Apply Velcro to the Spacer (L):

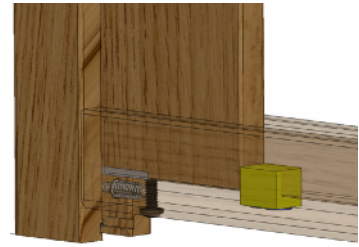
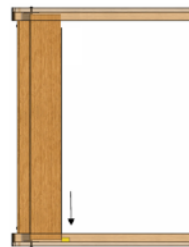
- Attach 1 **Velcro dot** (included) to the 1.25" **spacer (L)**.
- Ensure the **adhesive backing** of each Velcro dot is applied to the spacer, with the **Velcro side facing outward**.

**Tip:** Place the four Velcro dots together (**hook and loop connected**) to simplify alignment. Ensure the adhesive backing on one side is firmly stuck to the spacer, while the other adhesive side is ready to stick to the **Vertical U-Post (B)** groove during installation.



### 4.2 Insert the Lower Spacer (L):

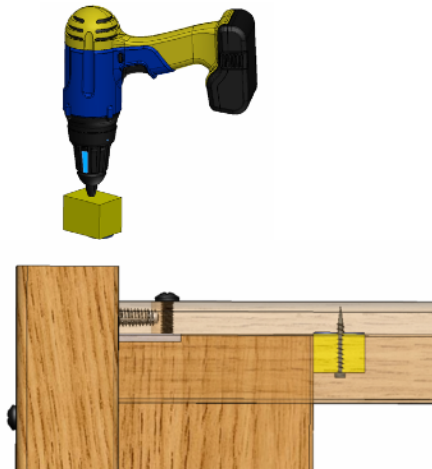
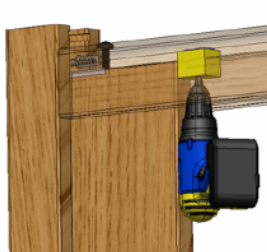
- Place the **1.25" spacer (L)** on top of the installed **Square Edge Board (C)**.
- Ensure the spacer is properly positioned:
  - It should rest fully on the **Horizontal U-Post (A)**.
  - The spacer should fit **all the way into the groove** of the **Horizontal U-Post (A)**, with **1 Velcro dot** making firm contact with the post for secure adhesion.



### 4.3 Insert the Upper Spacer (L):

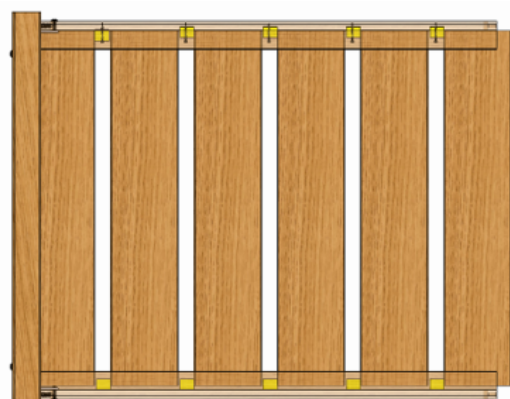
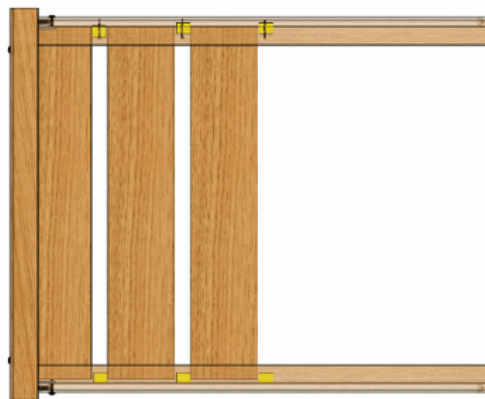
**The Upper Spacer requires to be screwed to the top Horizontal u post (A)**

- Pre-drilled the 1.25 spacer (L) with a  $\frac{1}{8}$ " drill bit
- Place the upper 1.25 spacer (L) next to the board (C) and inside the horizontal u post (A)
- Use a power tool with a torx 1 5/8 bit



### 4.3 Repeat for the Next Boards:

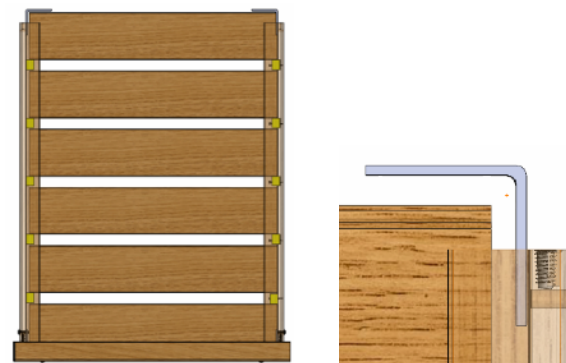
- Insert the next 5 **Square Edge Boards (C)** into the **Horizontal U-Posts (A)**.
- Position a **1.25" spacer (L)** between each board, ensuring proper alignment.





## 5. 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.

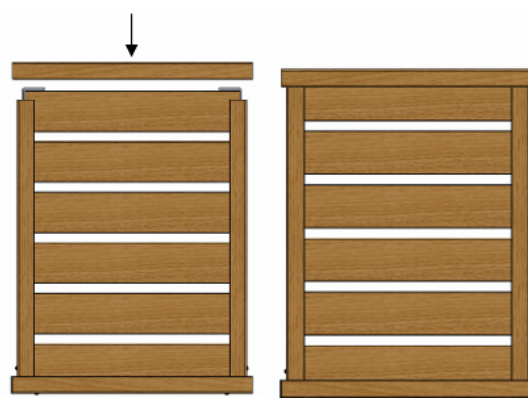


### 5.1 Position the Angle Bracket (F):

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

### 5.3 Position the Vertical U-Post (B):

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



### 5.4 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.



### 5.5 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.



## 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 and a drill (find these in the small package with screws).

5.3 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 55 pounds. Proper installation is essential to ensure smooth functionality and longevity in your chosen location.

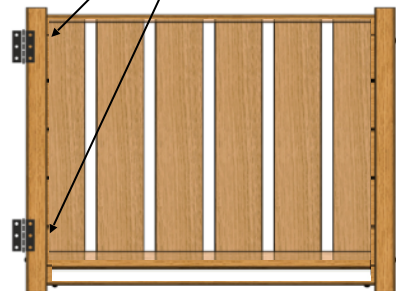
### Premium Hardware for Optimal Performance

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 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.

*\*Please note D&D recommends a different positioning, please use NC recommendation (image right).*

Hinges position to be as show in drawing (hinge position to be just below Horizontal U-post on top and just above Horizontal U-Post on bottom)



Download Hinge, part # TCA1S3BT, 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 1/8 inches. This allows the 45.5-inch-wide gate plus .81-inch 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.

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.

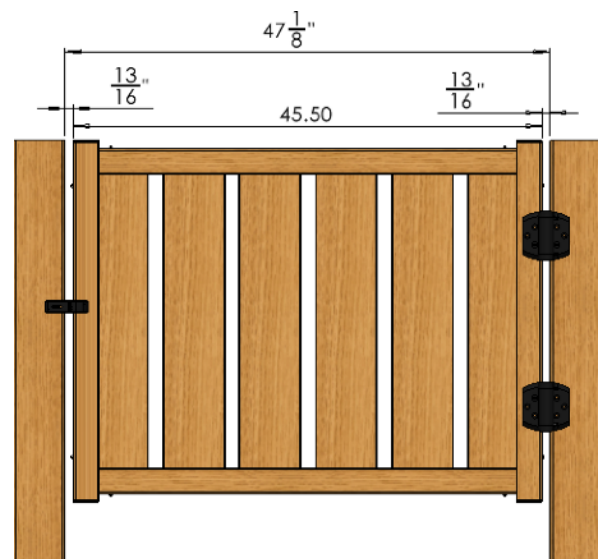
**Burial Depth and Concrete Requirements:** To ensure stability, we recommend burying at least 1/3 of the post length in the ground. For example, a 94" post should be buried 31 inches deep. Use a minimum of 80-100 pounds of concrete per post to provide a solid foundation. **Make sure your post is plumb.**

#### Post Burial Depth Recommendations

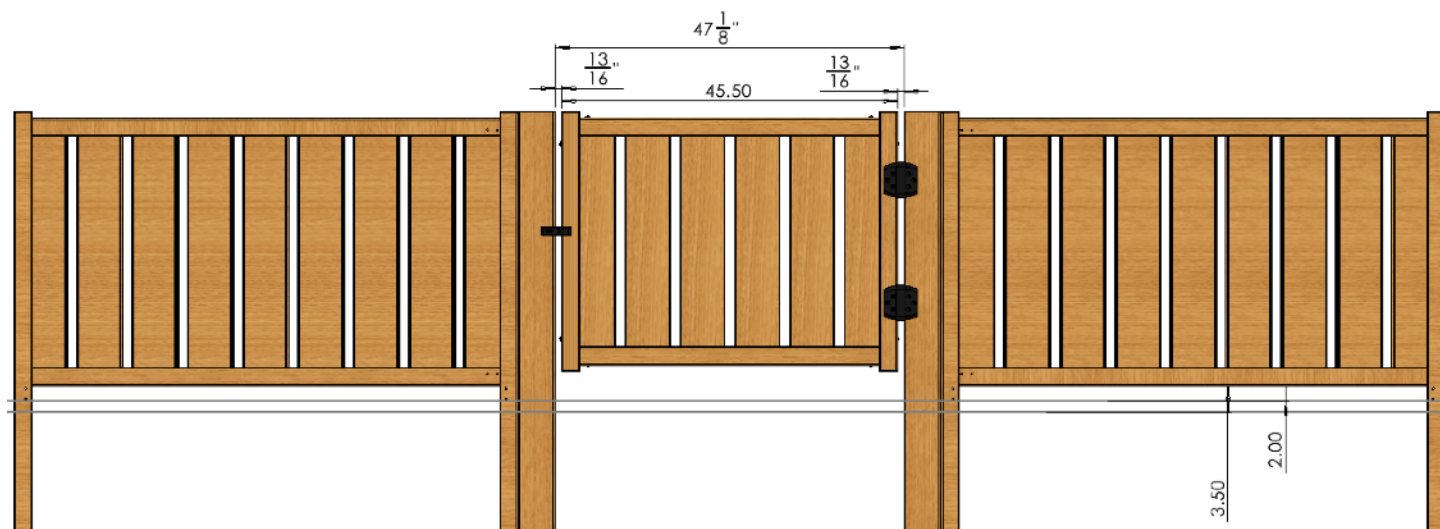
- Bury one-third of the aboveground height of the post.
- The hole for the footing should be three times the diameter of the post.
- Deeper holes are needed for unstable soil, windy weather, or gate posts.

**Make sure your post is plumb.**

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



**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

\* 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.

