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## **MODERN HORIZONTAL SEMI-PRIVACY PERIMETER GATE**

### **INSTALLATION GUIDE (11/24)**

*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*

45.5"

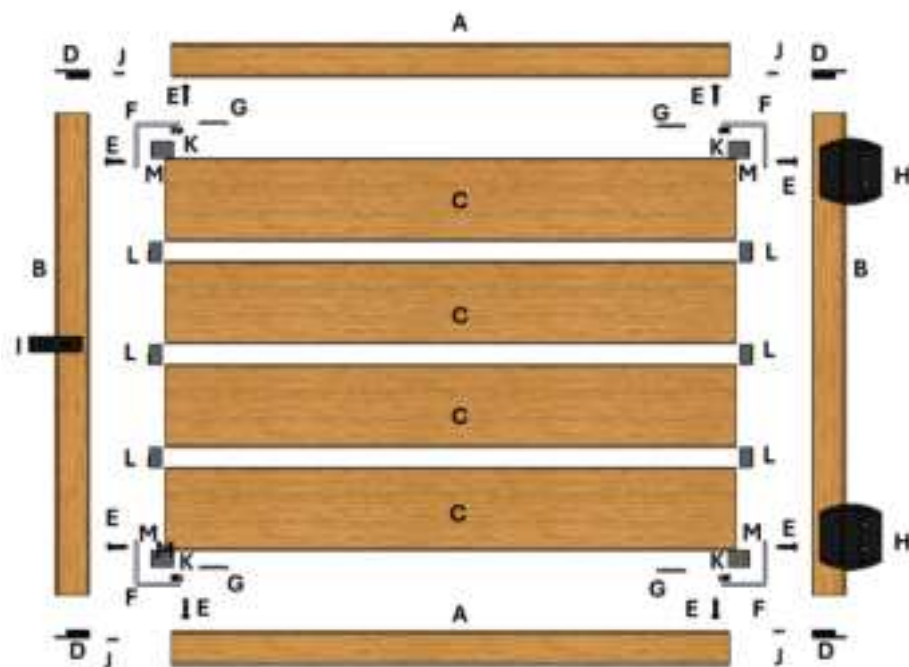


35"

## MODERN HORIZONTAL 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>	100310XX30400
<b>A</b>	2	Horizontal U-Post-40.5- Per	300722XX0405-FI-PER
<b>B</b>	2	Vertical U- Post-35-Perimeter	300722XX064-SCTC-PER
<b>C</b>	5	Sq 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	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>	4	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'(Horizon tal U- Post-40.5- Full)
<b>L</b>	6	Spacer 1-1/2"	200723XX015
<b>M</b>	4	Spacer 1"	200723XX010
<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.

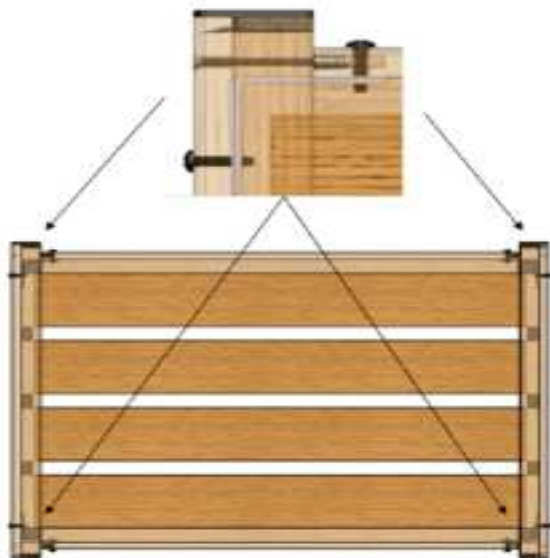
## TOOLS REQUIRED

- 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. COMPOSITE U-POST (A) FRAME ASSEMBLY

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

- This assembly will serve as the first stage of the frame to insert boards.

1.2 Insert the 3 inch screw (G) through the Vertical U-Post (B) into the threaded coupler already inserted into the Horizontal U-Chanel.

- Do fully tighten.
- Repeat on both sides.

### 2. NC ANGLE BRACKET INSTALLATION

On this step the Composite Lower Frame will be secured.

2.1 Insert angle bracket (F) in the corner of the Vertical (B) and Horizontal (A) U-Posts.

2.2 Insert the Rounded Head Thread-Cutting Screws for Metal (E) through the pre-drilled hole in Vertical U-Post (B) using a #4 Phillips (power tool required so it can cut in the metal).

- Note: In order to get the Cutting Screw (E) into the Angle Bracket (F) you will need to position and apply inward pressure to the NC angle bracket (F) at this moment you will be able to drive the cutting screw into the NC Angle Bracket (F).
- Repeat the operation in the opposite side.

### 3. Frame Spacer 1" (M)

*\*Velcro included to attach spacers to frame.*

Position the 1-Inch Spacer (M)

#### Purpose of the Spacer:

The **1-inch spacer (M)** is designed to create the required space between the **top of the NC Angle Bracket (F)**, the **Horizontal U-Post (A)** and the **Square Board (C)** for proper alignment and functionality.

1. Apply a Velcro Dot (included) into the spacer1" (M).

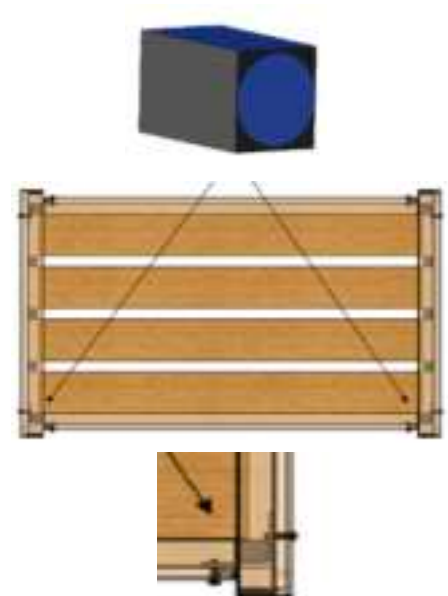
- The velcro dot is two sided. make sure the adhesive backing part goes into the spacer and the velcro faces out.

Tip: Place the two velcro dots together (Hook and Loop ), with the adhesive backing facing out, then stick one of the sides to the spacer, the other adhesive side will stick into the Vertical U Post (B) when you place it on the groove of the post.

2. **Place the Spacers:**

At this step only place the frame spacers for the bottom part of the gate.

- Position **one spacer** in each corner, where the **top of the NC Angle Bracket (F)** meets the **Horizontal U-Post (A)**.
- Ensure that the **finished side of the spacer** is facing outward for a clean appearance.



**NOTE:** Double-check that the spacers are aligned correctly before proceeding to insert the Square Edge boards.

#### 4. Insert the first Square Edge Board (C) and Secure the Horizontal Bottom U-Post (A) with the NC Angle Bracket (F)

When the first board is in place, this will help fasten the L Bracket (F) to the Horizontal U Post (A)

4.1 Insert the first Square 1x6 Board (C) down into the Composite Frame Assembly.

- Make sure it is seated all the way down into the Horizontal U-Post (A).

4.2 Insert the Rounded Head Thread-Cutting Screw for Metal (E) through the pre-drilled hole in the Horizontal U-Post (A) using a #4 Phillips (power tool required so it can cut into the metal).

- Note: This Square Edge Board (C) will help us keep the Angle Bracket (F) in position and stable so the cutting screw (E) can be installed correctly.
- Repeat the operation in the opposite side.

4.3 Apply a **Velcro Dot (included)** into the **spacer 1 1/2" (L)**.

The velcro dot is two sided. make sure the adhesive backing part goes into the spacer and the velcro faces out.

**Tip:** Place the two velcro dots together (Hook and Loop), with the adhesive backing facing out, then stick one of the sides to the spacer the other adhesive side will stick into the Vertical U Post (B) when you place it on the groove of the post.

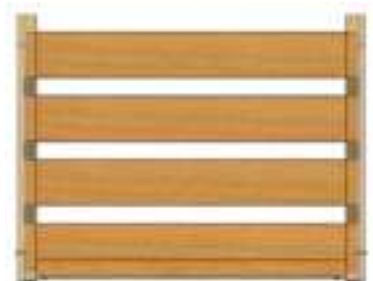
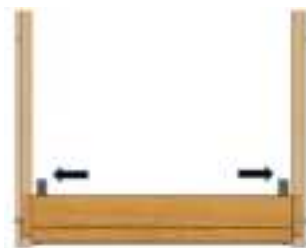
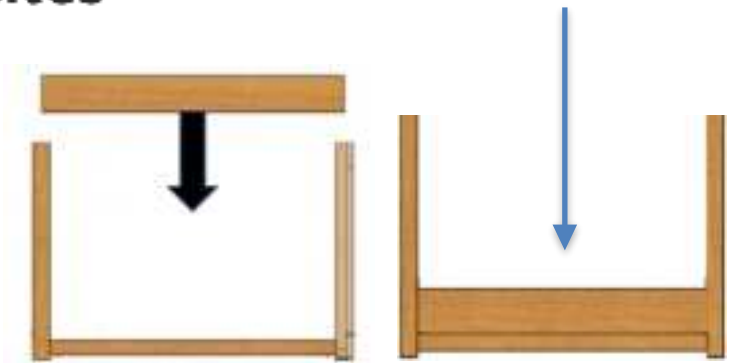
4.4 Insert the Spacer 1 1/2 (L) on top of the square edge board (C) and into the Square vertical post (B).

- Make sure it is seated on top of the Square board (C) and all the way in into the groove of the Vertical U Post (B) where the adhesive side will should make contact.

4.5 Repeat installing the next 3 Square 1X6 boards (C) into the Vertical U Posts (B) with spacers in between each board.

- Ensure each spacer is firmly against each board.
- The last board may require it being inserted at slight angle.

4.6 Assemble the remaining Horizontal top U-Post (A) to complete the gate frame and U-Channel.



## 5. INSTALL THE HORIZONTAL U-POST AND NC ANGLE BRACKETS

Now you are ready to close and secure the Composite frame. This step will be similar to step 2 but on the Top side.

5.1 Insert angle bracket (F) in the corner of the Vertical (B) and Horizontal (A) U-Post. Repeat on the other side.

5.2 Place the horizontal U-Post (A) between T&G Board.

5.3 Drive the cutting screws into the NC Angle bracket (F). Secure the cutting screws on both sides (horizontal and vertical U-post (A and B). Repeat the process in the opposite side. Do not over-tighten.

### 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

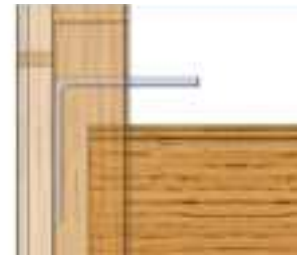
NC gates are crafted for durability, with the full-size gate weighing approximately 70 pounds. Proper installation is essential to ensure smooth functionality and longevity in your chosen location.

### Premium Hardware for Optimal Performance

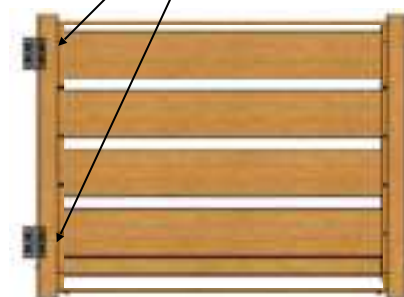
To provide a reliable and hassle-free experience, NC has partnered with D&D Technologies, the premier gate hardware manufacturer. Every NC gate kit includes a pair of D&D hinges and a latch, selected specifically to support the weight and design of our gates. This premium hardware is engineered to deliver 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 should be installed as show in drawing [6 inches from the top and bottom (B)]







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 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.**

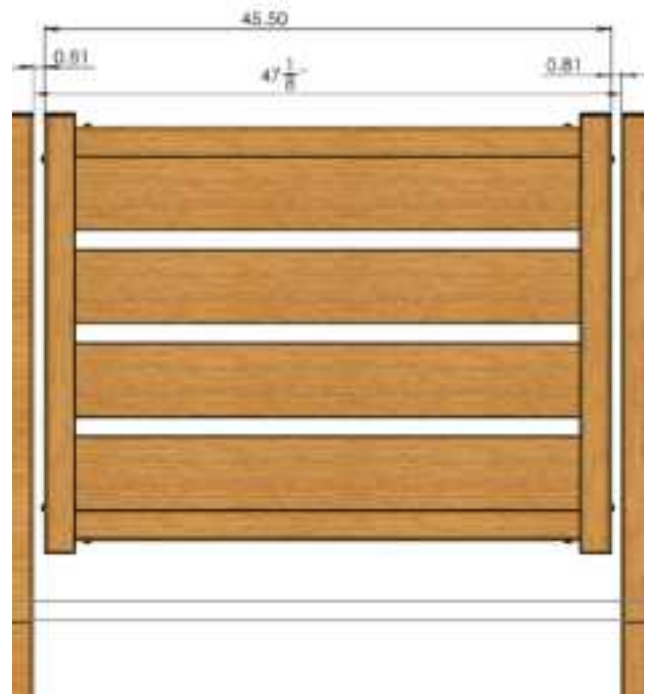
**When building a double gate, a 4x4 or metal stiffener is required in both NC 5x5 posts.**

## Post Burial Recommendations

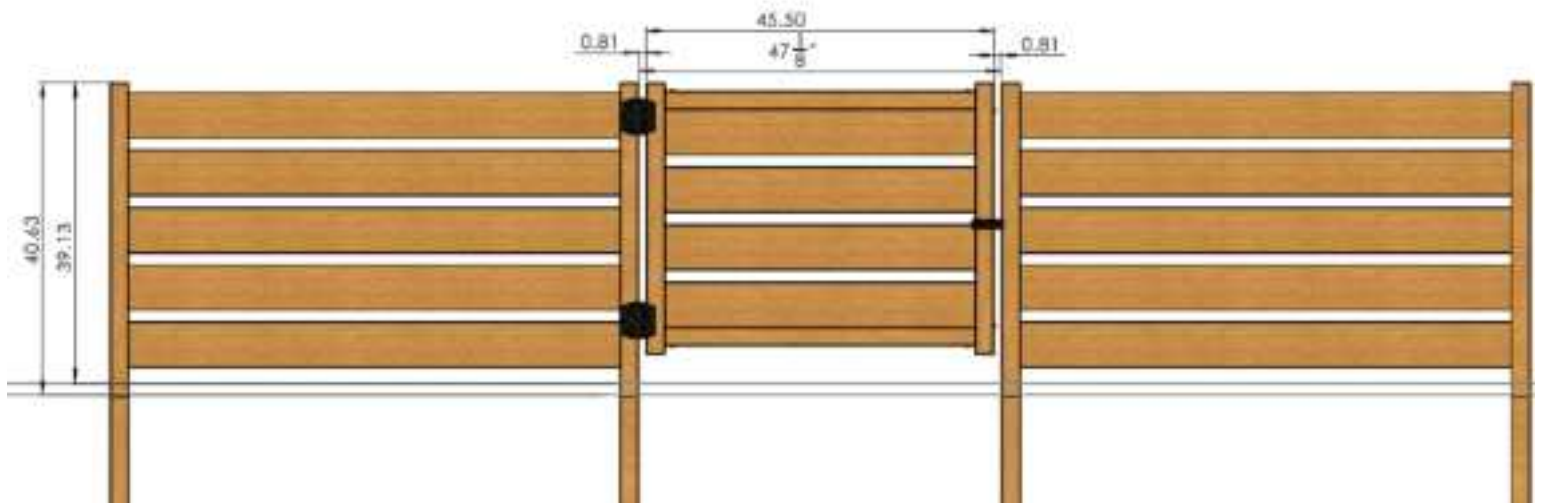
**Select the Correct Post Length:** For full-size gates, choose a post length suitable for your local soil and engineering conditions. NC offers 5x5 Commercial Posts in lengths of 94", 108", and 132" to meet different installation needs. Consult your contractor for guidance on the appropriate post length.

**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.**

Before securing posts into the ground, confirm the necessary spacing between them. Ensure a minimum of 47.12 inches (47 1/8") between posts for the standard gate setup, allowing the D&D hinges to function without obstruction.



## 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.

