

*Gates*<sup>®</sup>

**CAM-LOCK**<sup>®</sup>

HOW-TO

# MATERIALS

## PLYWOOD FORM PANELS

- A. 8 ¾" X 4'-0" (2) required
- B. 4'-0" x 4'-0" standard panel (8) required
- C. 8" x 4'-0" wall bulkhead (2) required
- D. 2'-0" x 4'-0" panel (1) required

## PLYWOOD CLEATS

- (4) Required

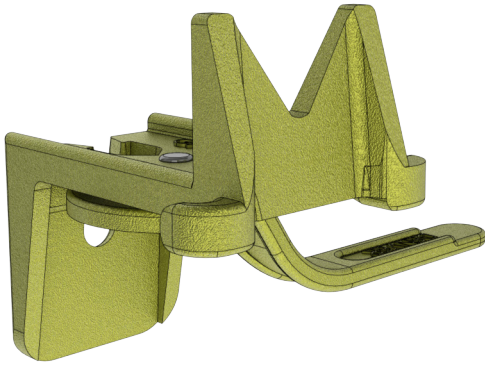
## 2X4 WALERS, STIFF-BACKS, ETC.

- 1. 9'-6" (1) required
- 2. 10'-0" (7) required
- 3. 8'-8" (7) required
- 4. 4'-2" (15) required
- 5. 6'-2" (4) required
- 6. 3'-0" (4) required
- 7. 2'-2" (8) required
- 8. 4'-9" (1) required
- 9. 5'-6" (1) required
- 10. 0'-5" (4) required

## GATES HARDWARE

- Cam-Lock Bracket (68) required
- Stiff-back Cam (12) required
- 8" Cam-Lock ties (36) required
- Scaffold Bracket W/arms (1) required
- Safety Rail Post (1) required
- Gates Form Brace (4) required

# GATES HARDWARE



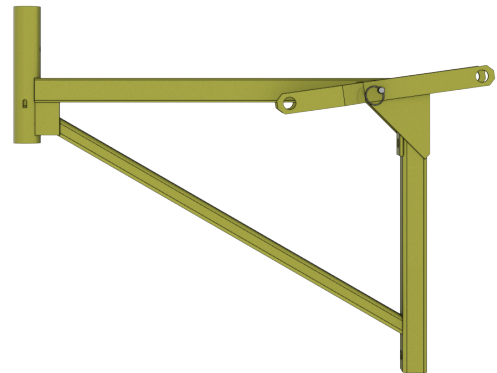
Cam-Lock Bracket



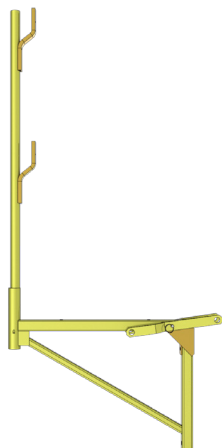
Stiff-Back Cam



8" Cam-Lock Ties



Scaffold Bracket



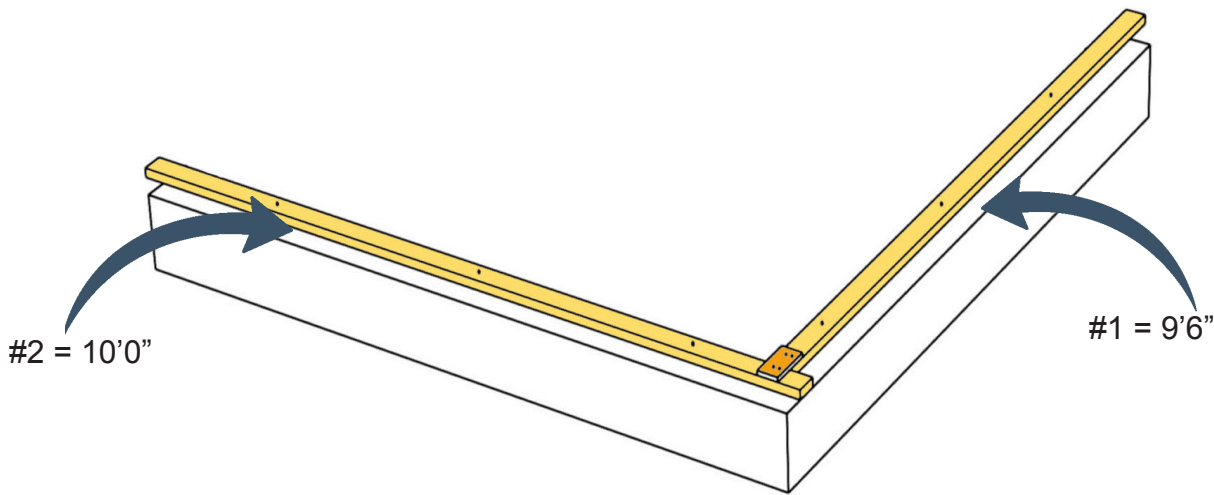
Safety Rail Post



Gates Form Brace

# STEP 1

## SET BOTTOM PLATES

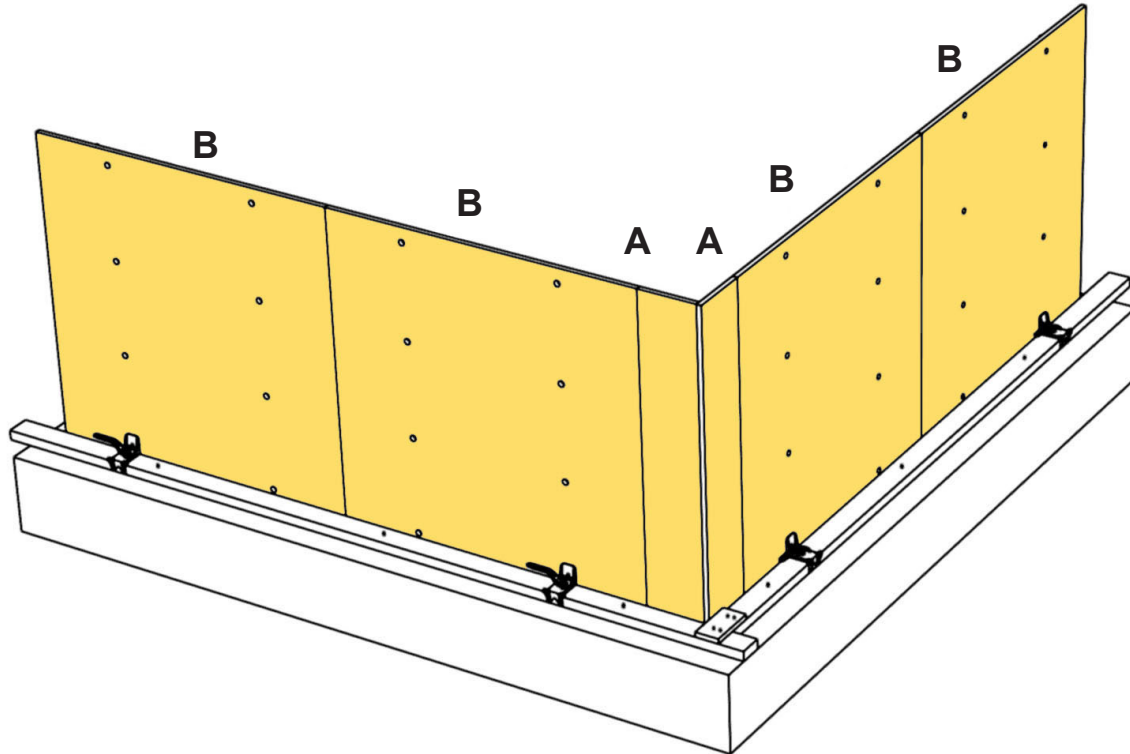


### STEP 1

- Place 2x4 bottom plates (1 & 2) onto 'footing' and secure to 'footing'  $\frac{3}{4}$ " offset from the desired concrete face. Use 16d Duplex nails.
- Fasten a plywood cleat which spans and secures the butt joint of the 2x4 plates with (4) 8d duplex nails.

# STEP 2

## PLACE OUTSIDE PANELS

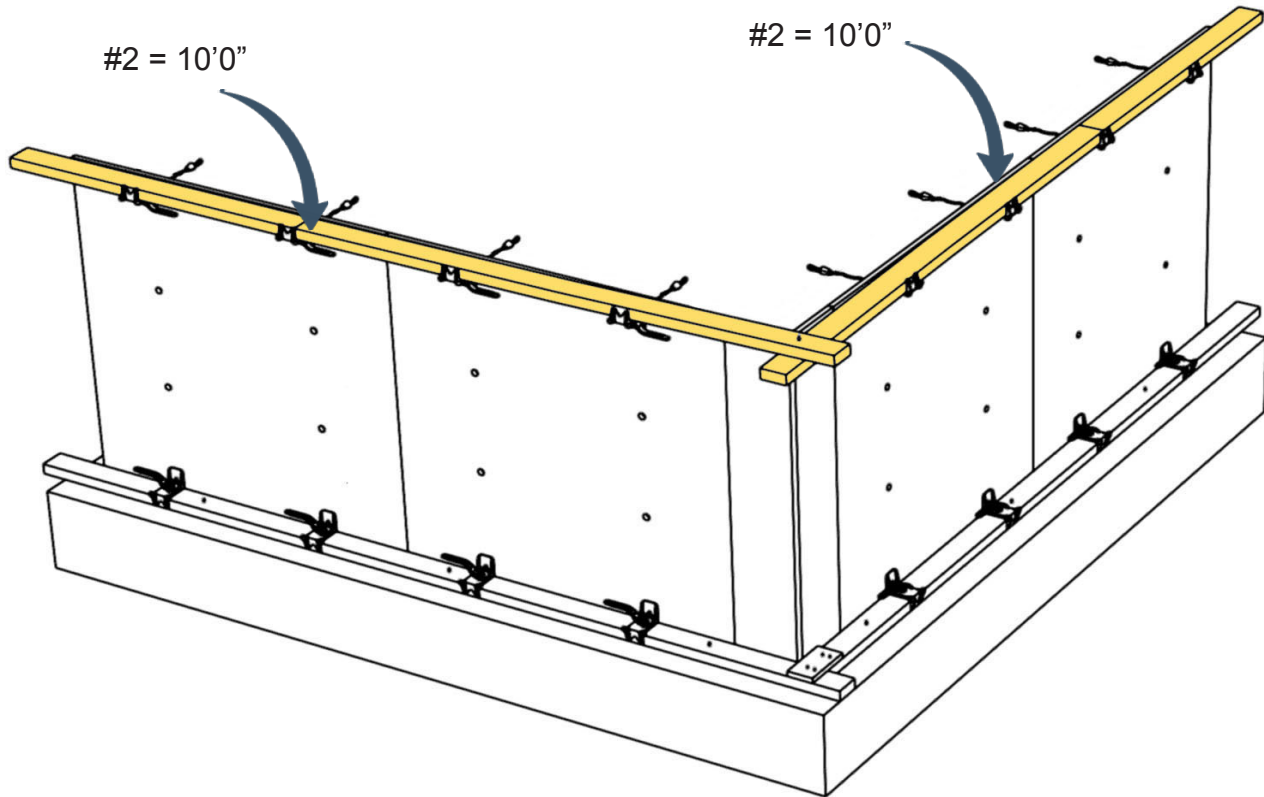


## STEP 2

- Starting at the corner and working towards the ends, place the 8 ¾" corner panels (A). Follow those with the 4' panels (B).
- Nail the 8 ¾" corner panels together with 6d nails at the butt joint, either before placing them or as they are being placed.
- Nail each panel to the adjacent 2x4 plate with 8d duplex nails. Install one 8" cam-lock tie and cam-lock bracket at the bottom of each 4' panel, as shown, to secure them to the bottom plate.

# STEP 3

## PLACE TOP TIE ROW & WALERS

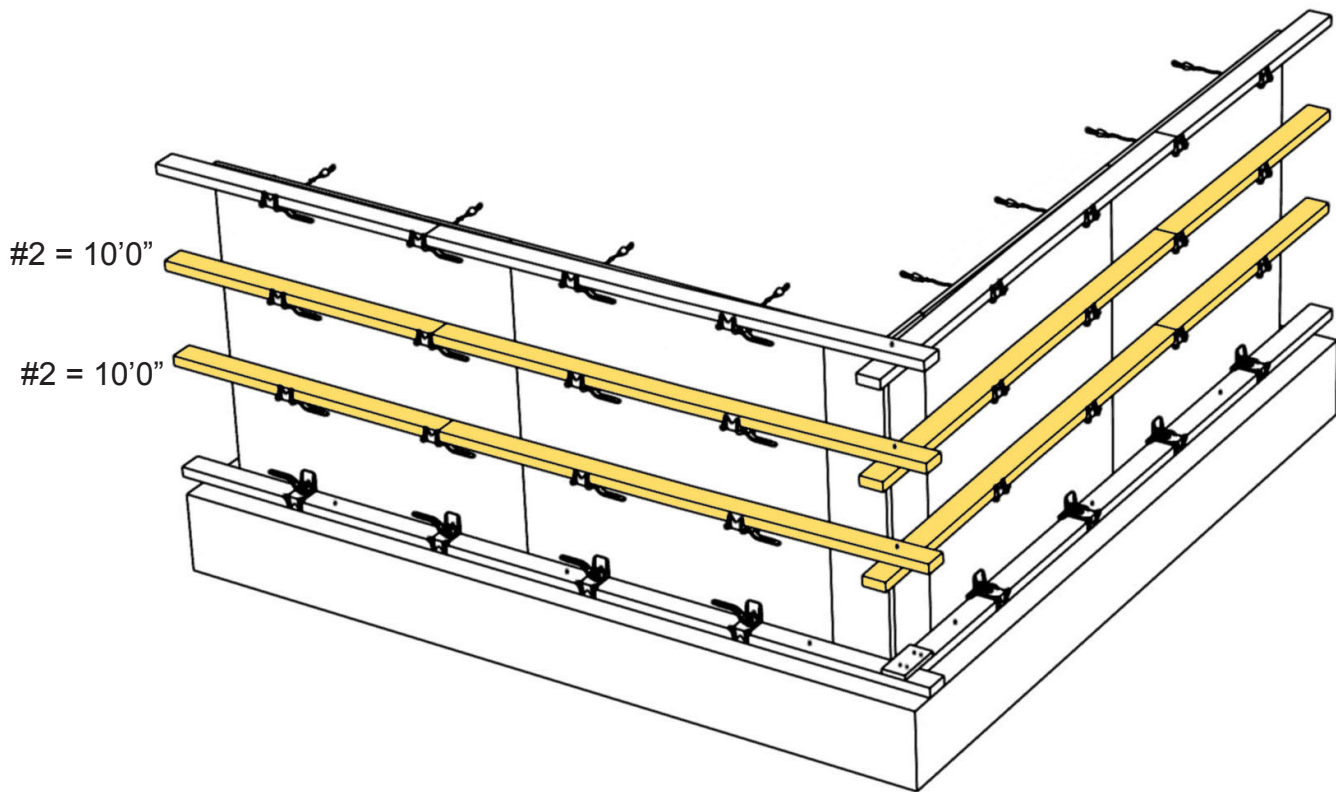


### STEP 3

- Install the top row of ties and locks with the locks approx. 2/3 closed.
- Place top walers in the locks and tighten the locks. See above for waler lengths.
- Use two 16d duplex nails to fasten walers together where they overlap at the corner.

# STEP 4

## INSTALL REMAINING TIES & WALERS

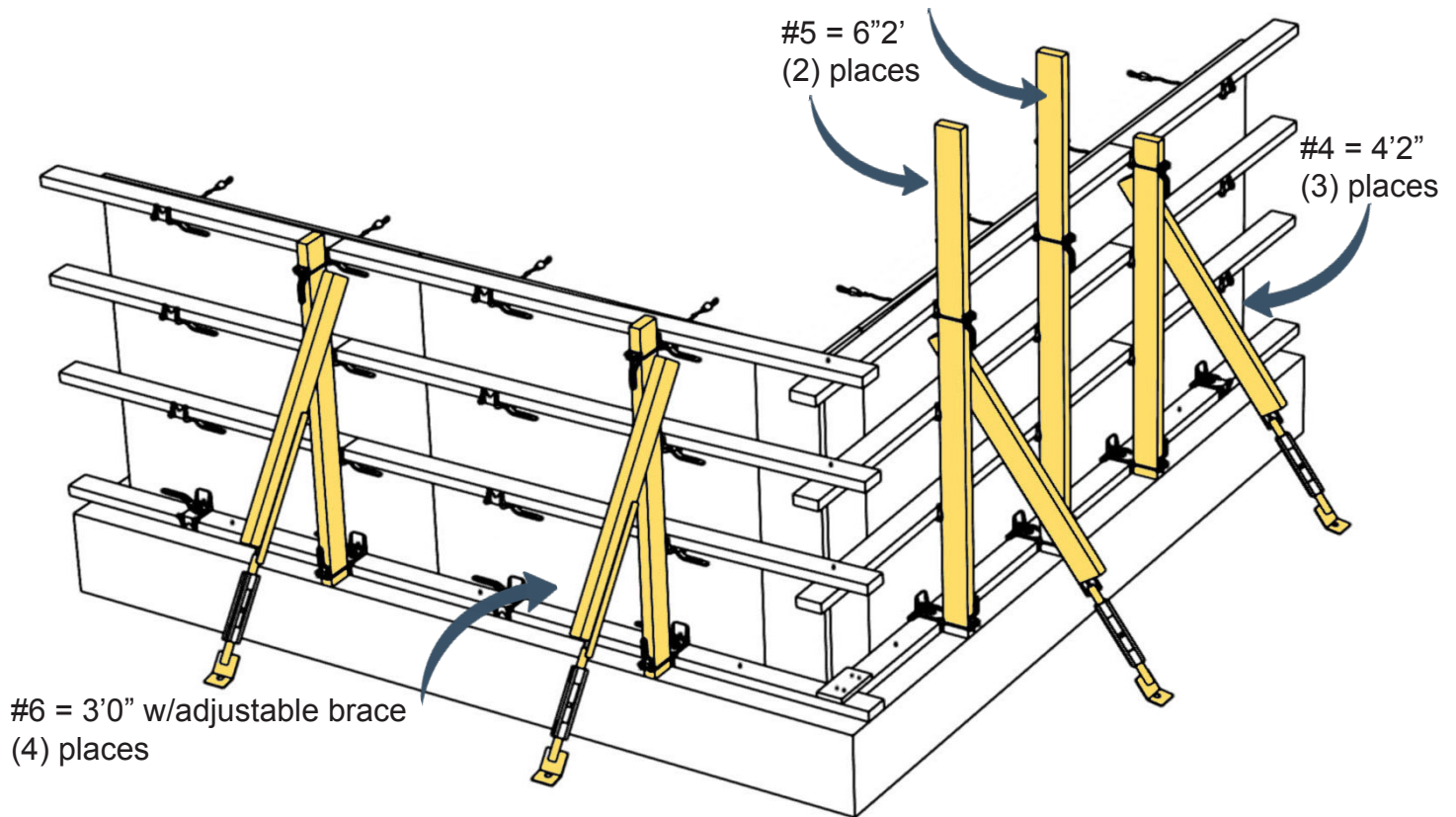


### STEP 4

- Install the remaining ties and locks. Locks to be approx. 2/3 closed.
- Install remaining walers, and finish tightening the locks.
- Use two 16d duplex nails to fasten walers together where they overlap at the corner.

# STEP 5

## ADD STIFF-BACKS AND BRACES



## STEP 5

- Attach 2x4 stiff-backs (4 & 5) to form using stiff-back cams at locations shown.
- Nail form braces to stiff-backs with 16d duplex nails, while stiff-backs are close to plumb. Place with an included angle between the vertical form face and the brace of 30° - 40°
- Once the bottom of the brace is attached to a solid base it may be adjusted to hold the form plumb.

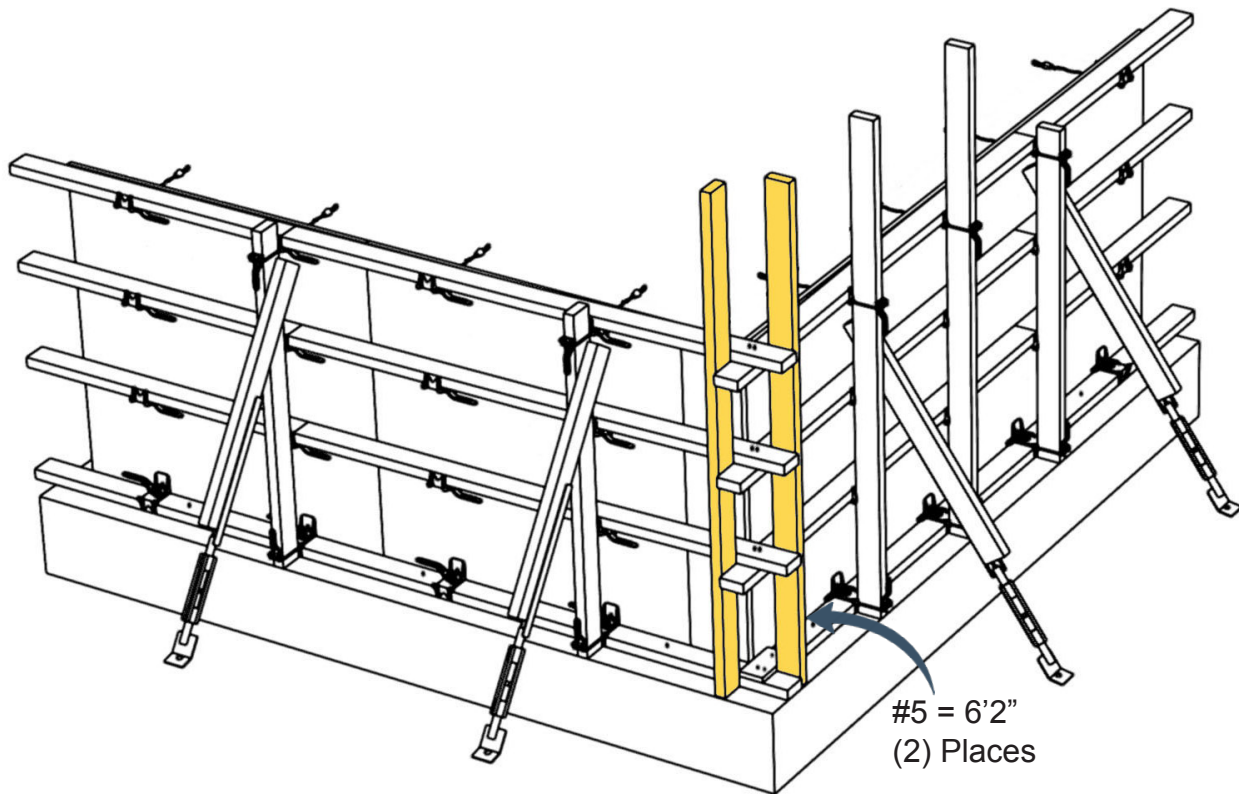
## NOTE

- Stiff-back, scaffold bracket, and brace locations to be determined by job-site conditions. In addition to plumbing the forms, the bracing must withstand any wind loads, worker induced loads, and any other external loads applied to form assembly.



# STEP 6

## FINISH LOG CABIN CORNER

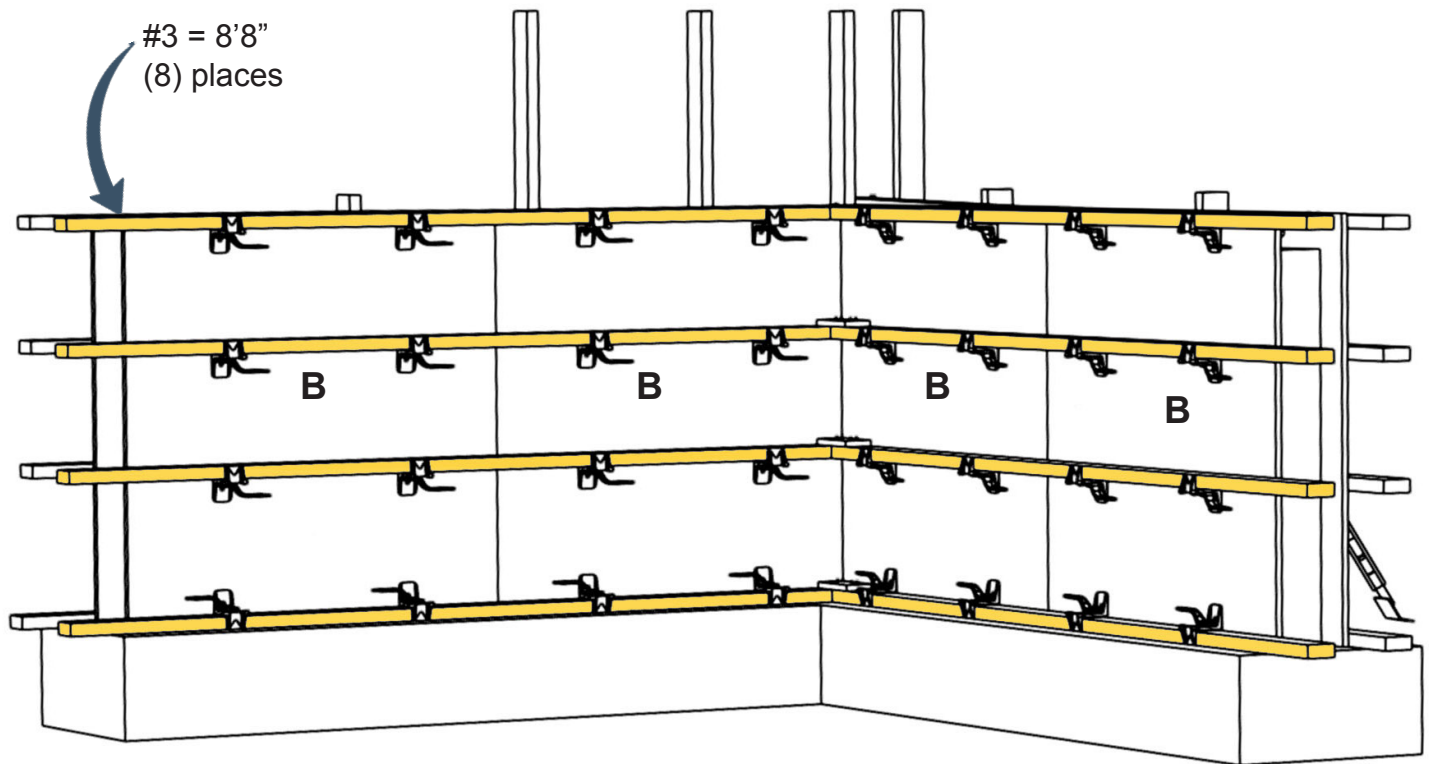


### STEP 6

- Finish the 'Log Cabin' corner assembly by nailing two #5 2x4's to the walers at the outside corner, as shown. Nail with 16d duplex nails through the 3 ½" face of the vertical 2x4 into each waler they cross. The 1 ½" faces of the vertical 2x4's are to be tight against the perpendicular walers.

# STEP 7

## BUTTON-UP INSIDE FORM

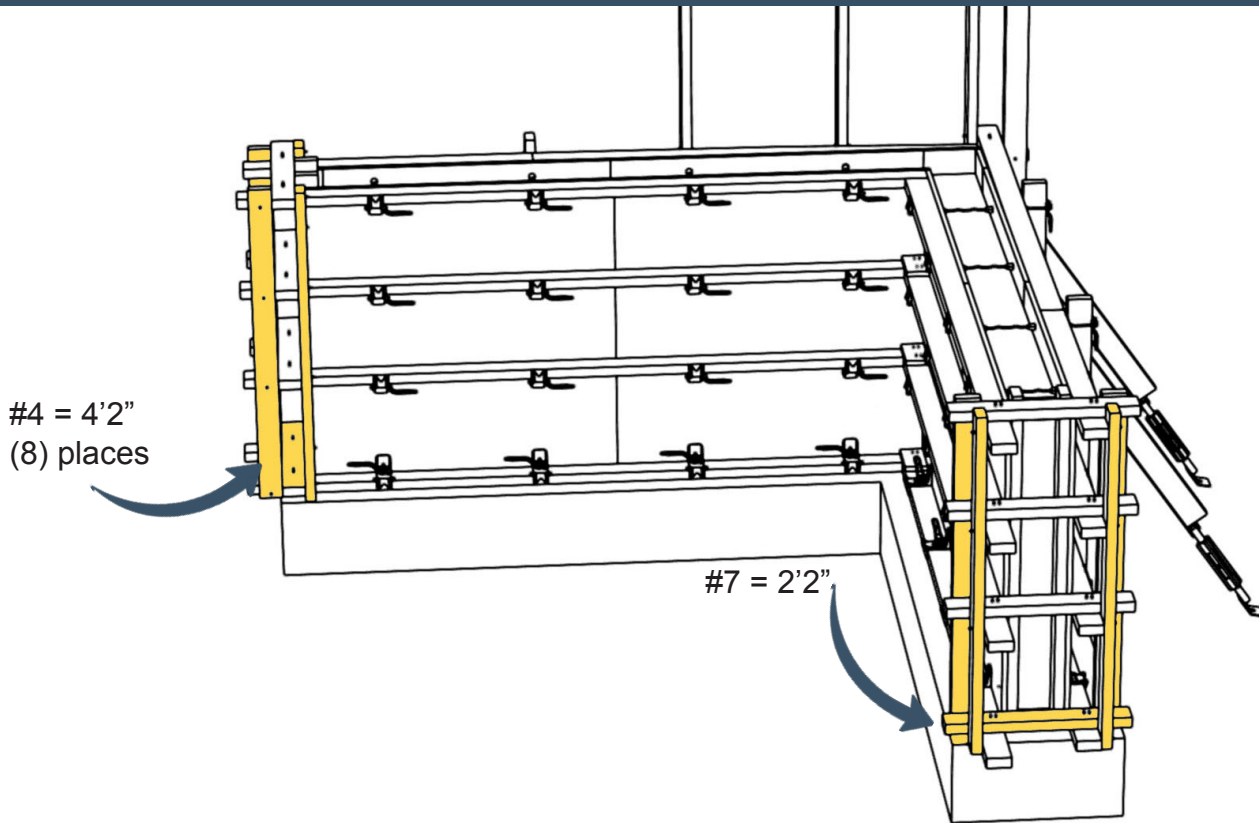


## STEP 7

- Starting at the inside corner and working towards the ends, place the four remaining 4' panels (B) while threading the tie ends through the tie holes.
- Place the bottom walers #3 loose, on top of the footing as shown.
- Place cam-lock brackets on the tie ends, capturing the bottom walers, and tighten them approx. 2/3 of the way.
- Install the remaining Cam-Locks and #3 walers as shown.
- Add plywood cleats on top of the walers at the inside corner butt joints, with (4) 8d duplex nails at each cleat.
- Tighten all the Cam-Locks.

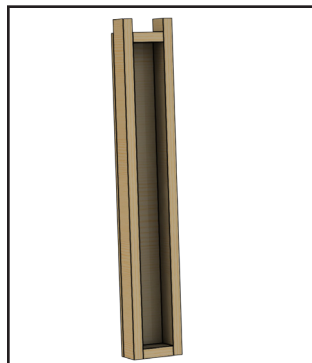
# STEP 8

## INSTALL BULKHEADS



## STEP 8

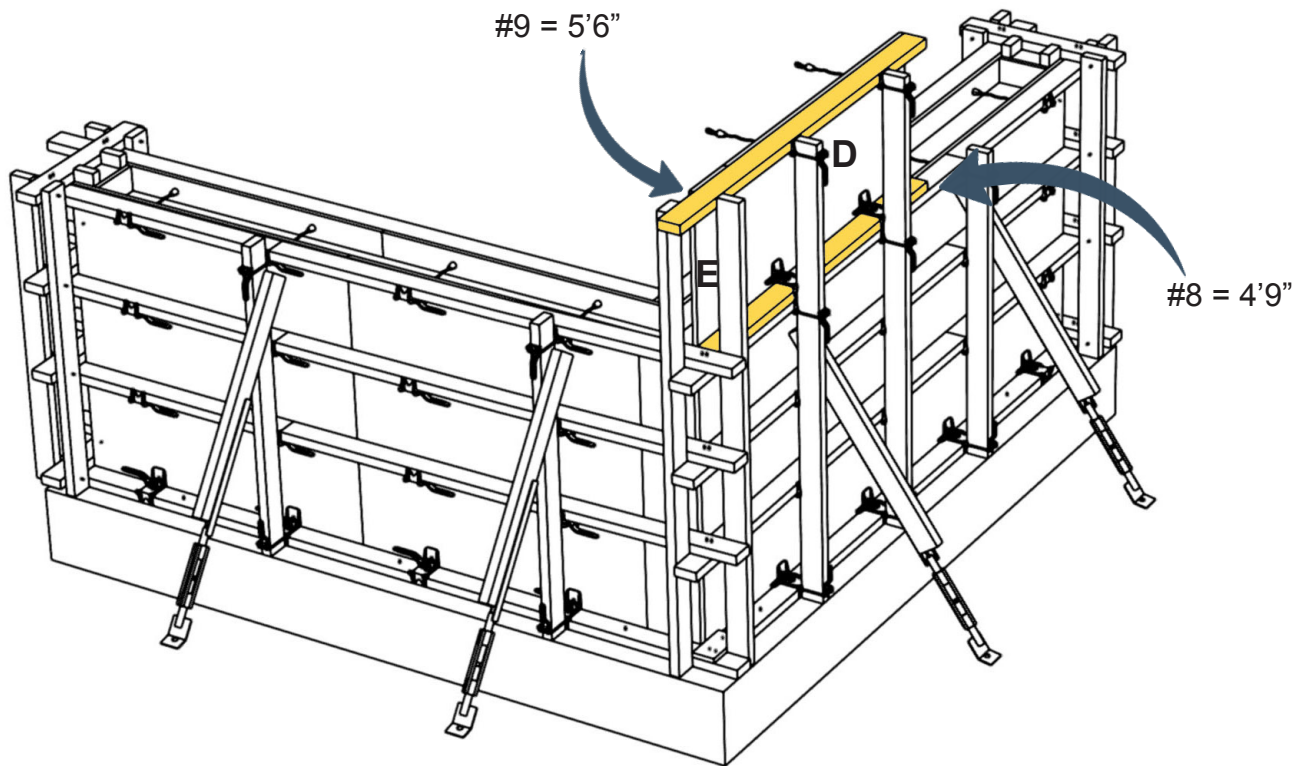
- Install 8" bulkhead subassembly at ends of each wall. Install 8d duplex nails through plywood panels into vertical 2x4s of bulkhead to temporarily hold in place. Secure in place by creating a double log cabin using walers #7 fastened to the wall walers with 16d duplex nails.
- Install #4 vertical 2x4-s to finish the log cabin corner as shown and nail to walers with 16d duplex nails as at previous log cabins.



Bulkhead Sub-Assembly

# STEP 9

## INSTALL STACKED PANELS

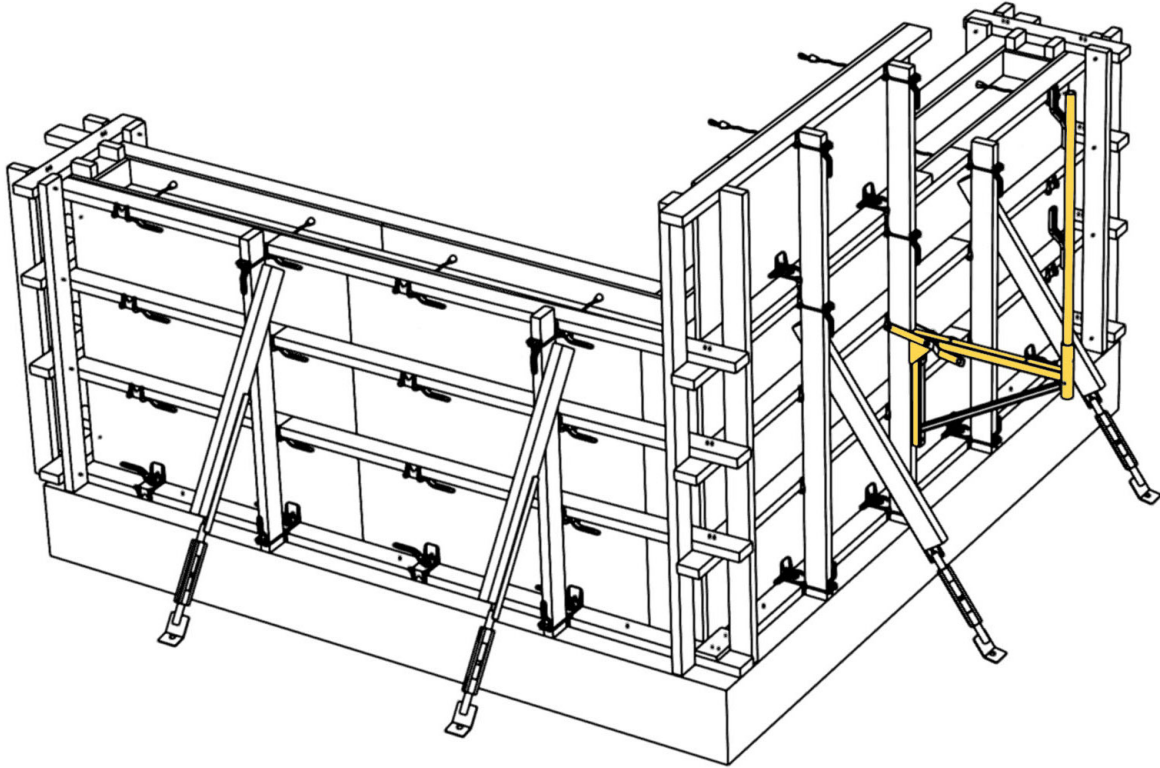


## STEP 9

- Nail 2x4 waler #8 to top waler on 4' tall form, as shown, with (2) 16d duplex nails.
- Preload ties and Cam-Lock brackets onto 2' x 4' panel "D".
- Slide panel "D" into place making sure the 8 3/4" corner panel will fit later. Tighten bottom two Cam-Locks.
- Install top waler #9 and tighten Cam-Locks.
- Install stiff-back cams on top two Cam-Locks.
- Nail through 3 1/2" face of 6' tall corner vertical into top waler with 16d duplex nail.
- Install 8 3/4" corner panel "E" and nail to top and bottom walers with 8d duplex nails.

# STEP 10

## INSTALL SCAFFOLD BRACKETS



### STEP 10

- Install scaffold bracket and safety rail post.
- A 2x4 stiffback must be attached above and below scaffold bracket connection as illustrated.



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