Gates Lok-Fast Column Clamp
Has These Advantages:

• Can Be Job Built
• Gang Formed
• No Loose Pieces
• Designed For Rapid Placement of Concrete
• Rapid Locking Action

1/2" Diameter bolt holes are spaced on 1" centers for the adjustment of the Column Clamp to various sizes.

NEW Pry point attached to each Pin Angle to open Column form.

3" x 4" x 1/4" Angle
Bracing and Pick-Up Loops

As the form is set, it should be braced on two right angle sides to each other.

IF columns are to be laid on their side, add a horizontal 2x4 across the top of the column form. (As shown in drawing.)

GATES Pick-up Loop bolted around column clamp.

1/2" all-thread COIL ROD fastened between two top column clamps at each Pick-up Loop.

To open form around concrete column use 2x4 or Pry bar.

GATES Column Brace Tongue fastened to Column Clamp.

Attached 1/2" pin can be easily removed to separated brace from column form.

GATES Bracket with pocket at the top.

L.V.L. (LAMINATED) 2X4 Brace bolted to Bracket at top.

New Pry Point welded to Pin Angle to open Column Form.

Column Brace Adjuster.

The GATES cam-over Column Clamp Claw engages the pin at the closing corner and quickly and securely locks the Column Form together.
The diagonal corner, opposite the locking corner, acts as the hinge point for easy opening and resetting of the Gates Lok-Fast Column Form.

Gates Column clamps are designed with 3/8” holes spaced on 2” centers in the 3” leg of the Column Clamp angle to provide easy attachment to the form by using either a 3/8” x 2” lag screw or a GATES 5/16” x 3” flat-head through-bolt.

GATES SQUARING CORNERS MUST BE USED TO ASSURE SQUARE CONCRETE COLUMNS. On column sizes up to 24” x 24” place squaring corners at every other column clamp. On Column Forms over 24” x 24” up to 48” x 48” place squaring corners on every clamp. Strong GATES squaring corners are shipped with 1/2” Grade 5 hardened bolts and nuts.

2 1/4” thick form built using 3/4” plywood and 1 1/2” flat 2x4 L.V.L. vertical lumber

OPEN POSITION

To Close

CLOSING POSITION

3/4” Form Plywood

To Close

CLOSED POSITION

GATES 3/4” Plastic Chamfer

The Gates cam-over Column Clamp Claw engages the pin at the closing corner and quickly and securely locks the Column Form together.
Column Jig Table

1. Place vertical 2x4 on template.
2. Place plywood over 2x4s and screw plywood to 2x4s.

STEP #1

2x4 Walers cut to length are set in place on the template. When all 4 sides are ready for assembly, the squaring template (with hand holes for easy removal) should be placed at each end of the form to insure a form that is built square. Column forms longer than 16’ should have an additional squaring template placed at the midpoint.

STEP #2

When assembling the Column Form, it is recommended to first cut a squaring template from plywood for each end to keep the column square as the Column Clamps are attached.
STEP #3

Mark location of clamps along form. See spacing charts on pages 6 thru 11.

On tall column forms we recommend using straight L.V.L. laminate 2x4s on all 4 corners.

STEP #4

Clamps attached to Column Forms

REMOVE Squaring templates after form completion.

Close all locks before bolting to the form. After the Column Form is completed, check operation of locks by opening and closing each lock.
Use 5/16” x 3” flat head bolts on the top 2 and the bottom column clamps and 3/8” x 2” lag screws on the remaining middle column clamps.

On the bottom column clamp use 5/16” x 3” flat head bolts at each vertical 2x4 to prevent column clamps from pulling away from the column form when opening.

The top two column clamps are used for lifting of the column and 5/16” x 3” flat head through bolts must be used at each vertical 2x4. Use a 1/2” threaded connecting rod between the top two column clamps at each Pick-up Loop. (see page 12 for detail)

5/16” X 3” Flat Head Bolt by GATES

3/8” x 2” Lag Screw
A simple plywood base and two 4x4's cut to proper length (see size chart below) properly spaced can speed the assembly of GATES LOK-FAST COLUMN CLAMPS and at the same time make sure that the column clamps are set to the proper size and are perfectly square when both 90° squaring corners and bolts are securely tightened in place.

After both squaring corners are SECURELY bolted in place on the two opposite 90° corners and back hinge bolt is lightly tightened to allow hinge movement, release locking claw so GATES LOK-FAST COLUMN CLAMP may be removed from template.

**TEMPLATE SIZES**

<table>
<thead>
<tr>
<th>COLUMN SIZE</th>
<th>TEMPLATE SIZE “A”</th>
</tr>
</thead>
<tbody>
<tr>
<td>12” X 12”</td>
<td>16 1/2” X 16 1/2”</td>
</tr>
<tr>
<td>16” X 16”</td>
<td>20 1/2” X 20 1/2”</td>
</tr>
<tr>
<td>20” X 20”</td>
<td>24 1/2” X 24 1/2”</td>
</tr>
<tr>
<td>24” X 24”</td>
<td>28 1/2” X 28 1/2”</td>
</tr>
<tr>
<td>30” X 30”</td>
<td>34 1/2” X 34 1/2”</td>
</tr>
<tr>
<td>36” X 36”</td>
<td>40 1/2” X 40 1/2”</td>
</tr>
<tr>
<td>42” X 42”</td>
<td>46 1/2” X 46 1/2”</td>
</tr>
<tr>
<td>48” X 48”</td>
<td>52 1/2” X 52 1/2”</td>
</tr>
</tbody>
</table>

For any square or rectangular concrete column size using 3/4” form plywood and flat 2x4’s (1 1/2” thick) take concrete column size and add 4 1/2” to width of template (dimension “A”) see to the left.
We recommend L.V.L. 2x4’s at corners.

1 1/4”

1/4” gap

Slight groove for correct center position of screws or nails.