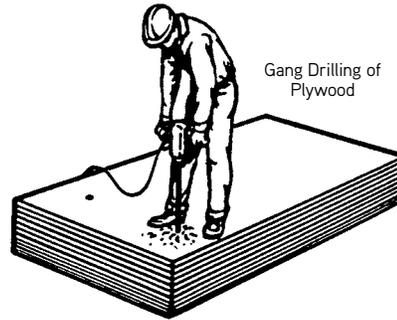


## How to Use the Jahn® Forming System

### 1. Preparation

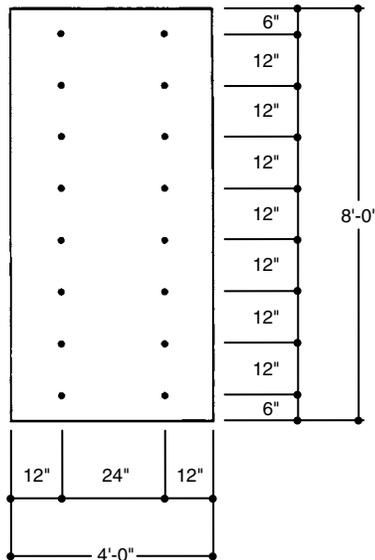
Gang drilling the plywood is the only preparation required. Holes need to be drilled 1/8" larger than the snap tie head. Normally, a 5/8" diameter drill bit will be required.

The 5/8" take-up of the eccentric on the Jahn "A" Bracket allows a snap tie with a L&W dimension of 4-3/4" to be used with 5/8" or 3/4" plywood. The 5/8" take-up on the "C" bracket allows it and 8-1/4" snap ties to be used on 5/8" and 3/4" plywood.

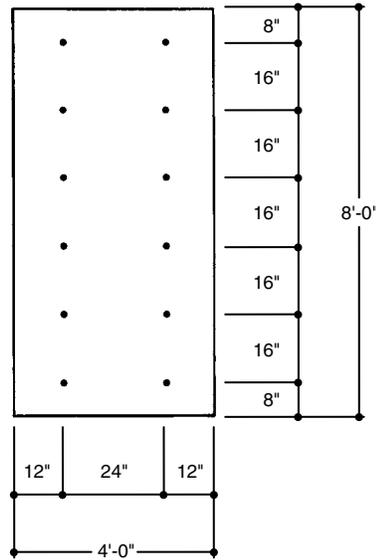


### 2. Snap Tie Spacing and Rate of Placement

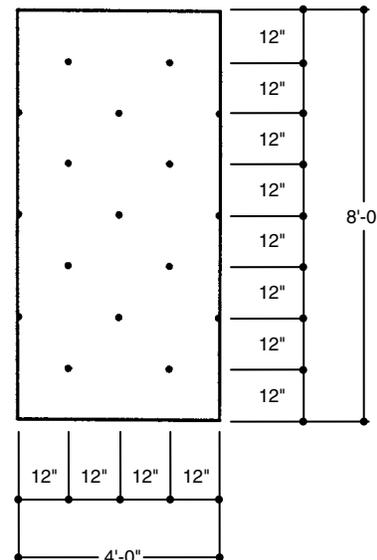
The most common snap tie spacings being used with the Jahn Forming System are shown below. For different rates of pour and/or other tie spacing, contact a Dayton Superior Technical Services Department. Refer to the web site for addresses and phone numbers.



12" vertical x 24" horizontal  
Snap Tie Spacing.  
Recommended rate of  
placement 4.5 ft./hr. at 70°.



16" vertical x 24" horizontal  
Snap Tie spacing.  
Recommended rate of  
placement 2.0 ft./hr. at 70°.



12" vertical x 12" horizontal  
Snap Tie spacing.  
Recommended rate of  
placement 4.5 ft./hr. at 70°.

#### Plywood Used Strong Way (Face Grain Parallel to Spacing)

Notes: The above recommendations are based on the use of 3/4" Plyform Class I, and 2x4 S4S studs (Douglas Fir-Larch, Southern Pine or equal having a minimum allowable fibre stress of 1,200 psi).

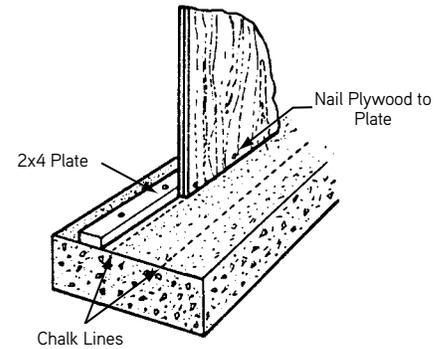
Design is based on all formwork members being continuous over four or more supports.

For multi-lift forming, see 12 Joint Cover Details.

### 3. Footing Plates

Good forming practices require that a level footing be used as a starting point for all forming applications.

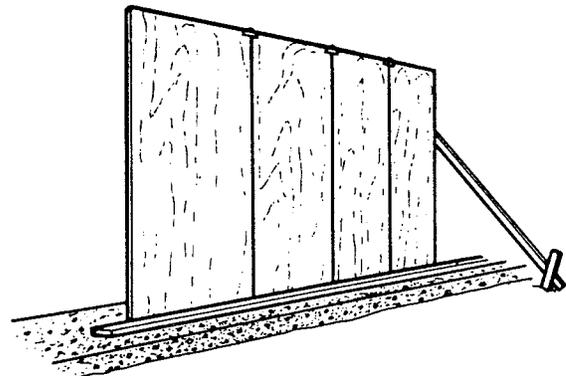
Snap a chalk line in back of the plywood thickness and nail down a 2 x 4 plate.



### 4. Plywood Panel Erection

Erect, plumb, nail to plate and temporarily brace the first sheet of plywood.

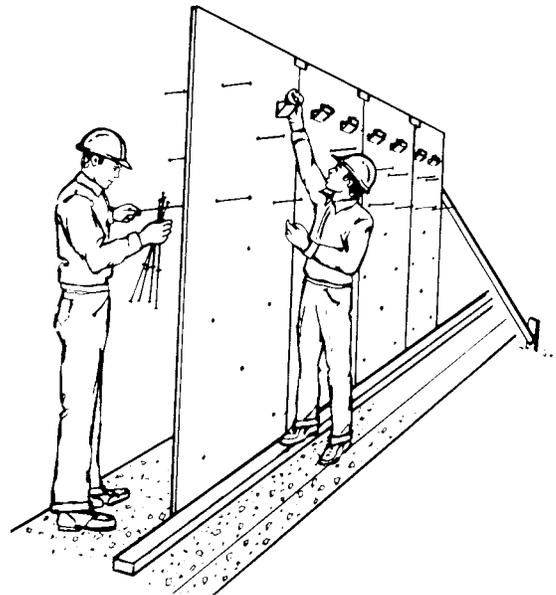
Erect additional sheets of plywood by nailing them to the 2x4 plate and temporary wood cleats at the top corners. Make sure the joints are tight. If panels are to be stacked, ensure that the panel tops are level.



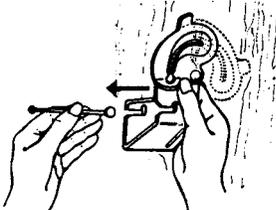
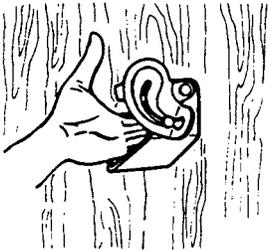
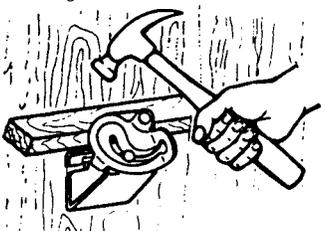
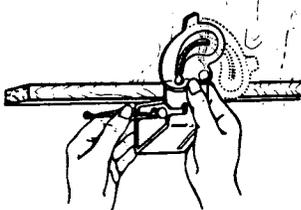
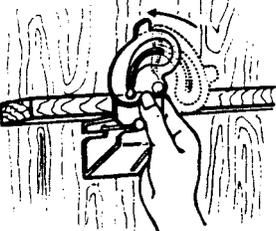
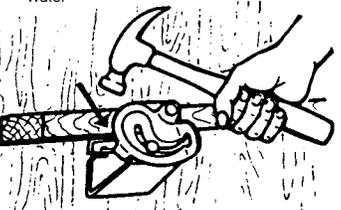
### 5. Installation of Snap Ties and "A" Brackets

Place the ends of the Snap Ties through the holes in the plywood. The 4-3/4" L&W A3 Snap Tie, Standard is recommended for use with the Jahn "A" Brackets, 5/8" or 3/4" plywood and 2x4 wales.

Two workmen can install the snap ties with speed and economy. One inserts the tie through the tie hole and the other attaches the "A" bracket.

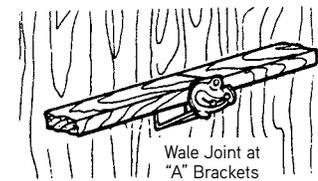
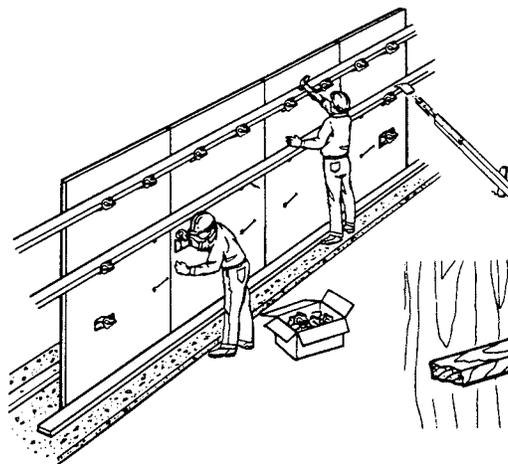
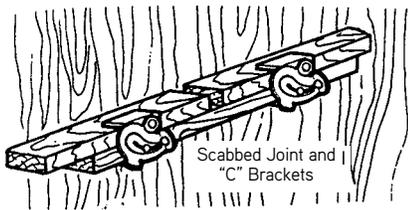


### Proper "A" Bracket Installation

<p><b>Without Water In Place:</b></p>  <p>5A. Place The "A" bracket on the tie end by slipping the tie end into the slots in the bracket body.</p>	 <p>5B. Rotate the eccentric loosely over the tie end.</p>	<p><b>Placing Waler</b></p>  <p>5C. Drop 2x4 waler in place. Seat 2x4 with hammer, if necessary.</p>
<p><b>With Water In Place:</b></p>  <p>5D. Slip the back slot in the bracket body over the tie directly behind the head.</p>	 <p>5F. Push the bracket toward the plywood until the tie head emerges through the front of the bracket.</p>	<p><b>Tightening Waler</b></p>  <p>5G. Rotate the eccentric over the tie head and tighten.</p>

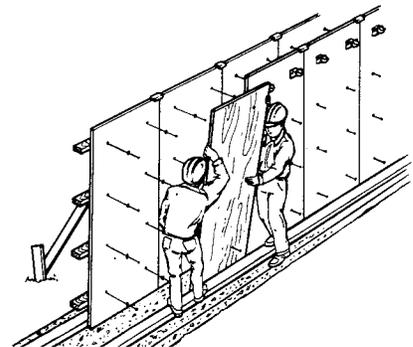
### 6. Installation of Wales

Install the walers into the brackets working from top to bottom of the panel and tightening the eccentric as you go. Waler joints should occur at a bracket or scab should be utilized to reinforce the joint (see sketch).



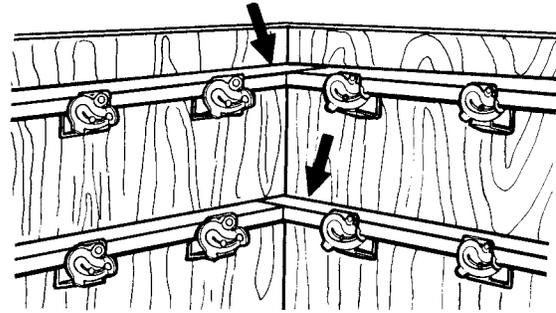
### 7. Inside Wall Panel Erection

The inside panel sequence is the same as the outside panel described above except for the placement of the plywood panels over the tie ends. This can be accomplished by two workmen by starting at the bottom and moving the panel from side to side and up and down to align the snap ties with the holes in the plywood.



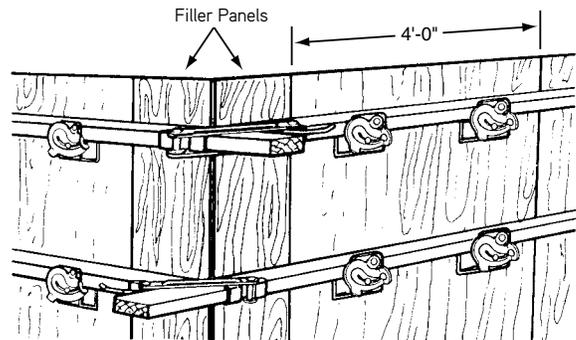
## 8. Inside Corner Forming

No special treatment is required for inside corners other than the alternating of the wales as shown in the sketch. It is advantageous to start the inside corners with full size plywood panels to facilitate forming the outside corners.



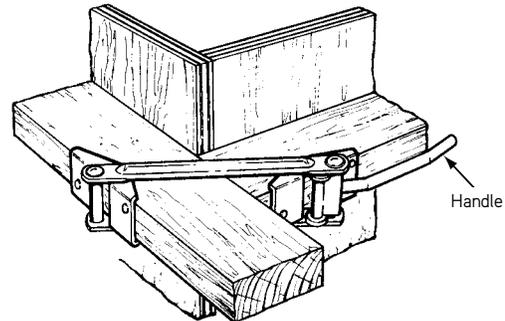
## 9. Outside Corner Forming

Install the first outside panel in line with the first inside panel. Filler panels, the same thickness as the wall plus the plywood thickness, are then used to fill out the exterior corner.



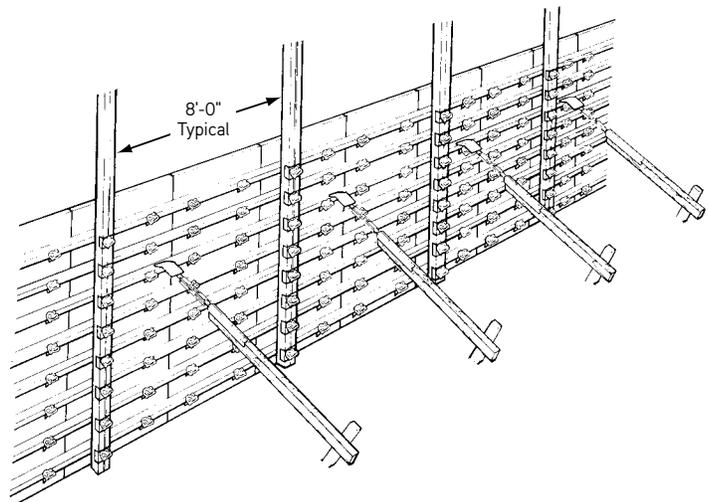
## 10. Installation of A83 Jahn Cornerlock

The A83 cornerlock eliminates costly overlapping and blocking of the wales. Its cam action draws the wales securely together. Place one wale flush at the corner and let the other extend past the flush one. Slip the cornerlock into place with the handle perpendicular to the wale. Nail the cornerlock in place and rotate the handle 90° toward the wale. A snug, tight outside corner is accomplished.



## 11. Installation of Strongbacks

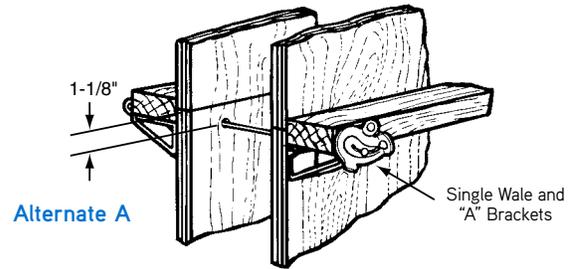
Strongbacks are used to aid in form alignment and to tie stacked panels together. Loose 2x4's are used in conjunction with A82 Jahn "C" Brackets and 8-1/4" L&W snap ties or 4-3/4" L&W snap ties with the A86 Jahn Tie Extenders to strongback the forms. Normal strongback spacing is 8'-0" on center.



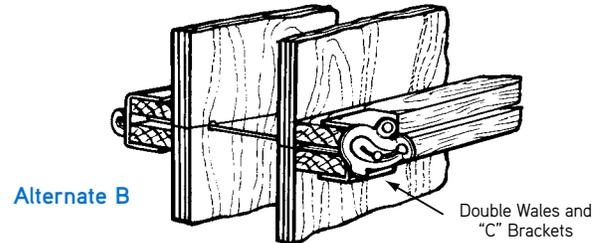
Light Forming Products

## 12. Joint Cover Details

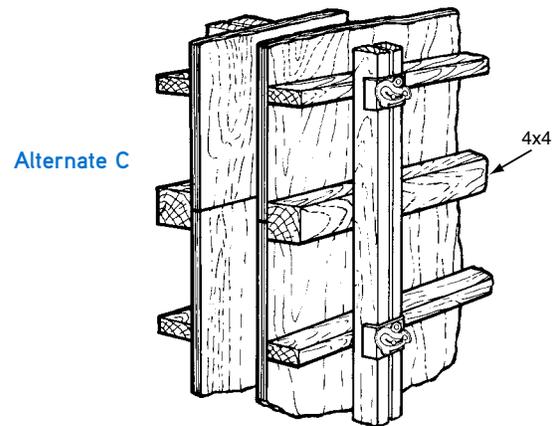
**Alternate A** - Drill 5/8" diameter hole 1-1/8" down from top edge of the lower sheet of plywood. Install snap tie, "A" Brackets and wale and then the upper sheet of plywood. Nail the upper sheet of plywood to the wale.



**Alternate B** - Install snap tie in the joint between the panels. Add double wales and a "C" Bracket.



**Alternate C** - Nail 4x4 wale to lower sheet of plywood, hold the wale in place with strongbacks and add upper sheet of plywood.



## 13. Installation of Second Lift of Plywood

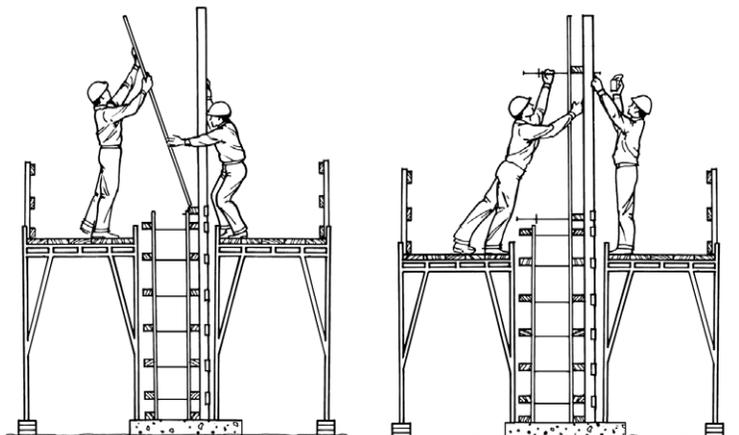
Lift the plywood sheet and place it into position. Hold the sheet in place with a short 2x4 spacing block, snap tie and "C" Bracket placed toward the top of the panel and nail the bottom of the sheet to the joint cover wale.

Set additional panels by nailing them to the joint cover wale and securing them to the previous panel with a small wood cleat.

Install the snap ties, brackets and wales - working bottom to top.

**Note:** Snap ties are not designed to carry scaffold bracket loads.

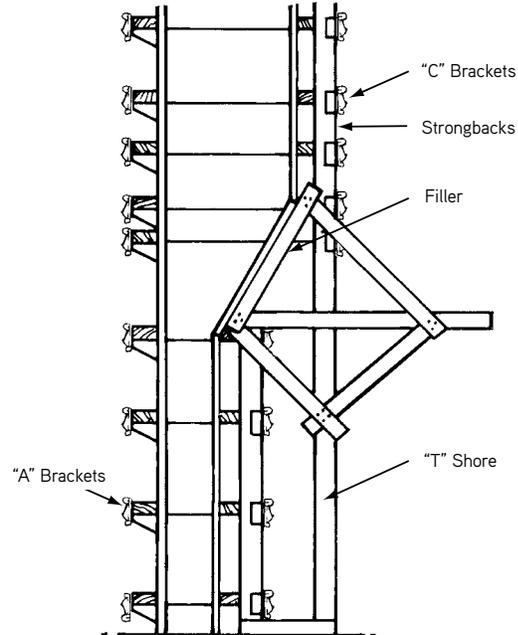
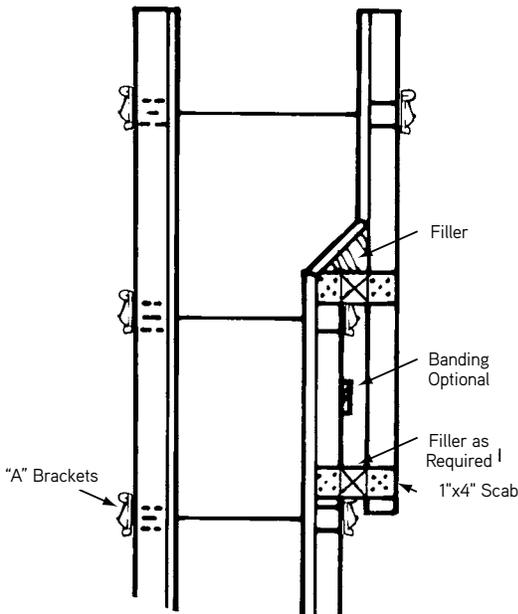
Note: A89 Jahn Scaffold Bracket is designed to support 25 psf walkway loads, after both sides of the formwork have been installed. Scaffold Brackets should not be used when the bracket is supported by one sided forming, as metal snap tie washers can bend, or plastic snap tie cones can fracture resulting in incorrect wall thickness, personal property damage, personal injury, and/or death.



### 14. Haunch or Corbel Forming

A low wall with a light corbel or haunch can be formed using the method illustrated below.

For heavy corbels or haunches forming use vertical strongbacks, T shores and "A" and "C" Brackets.

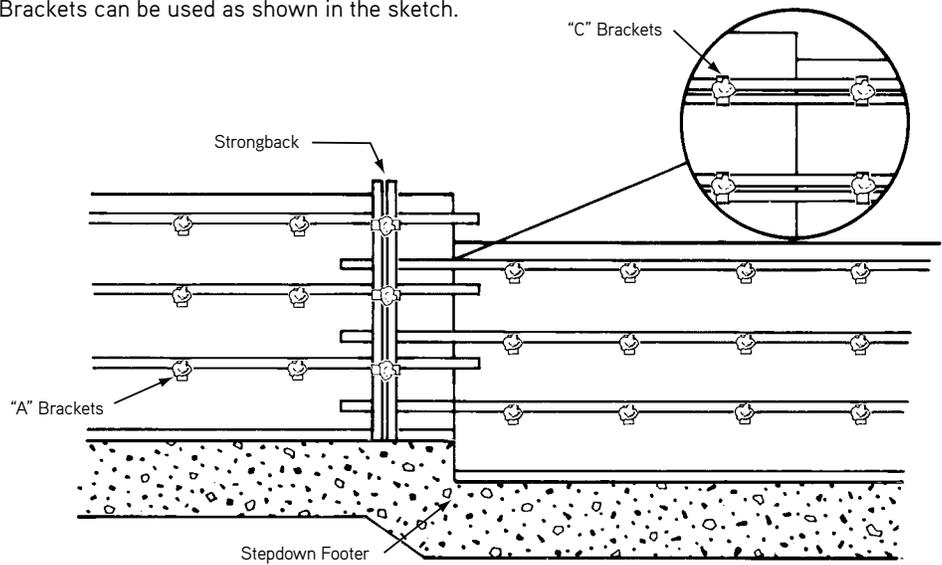


Light Forming Products

### 15. Step Forming

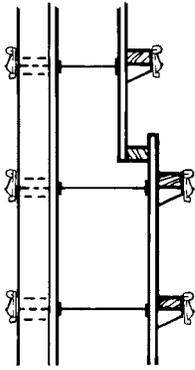
Use of Jahn "C" Brackets and Jahn Tie Extenders to attach strongbacks allows 2x4 wales to run free and holes do not have to line up at stepdowns.

When tie alignment is fairly close, "C" Brackets can be used as shown in the sketch.

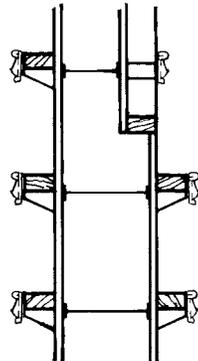


### 16. Brick Ledge Forming

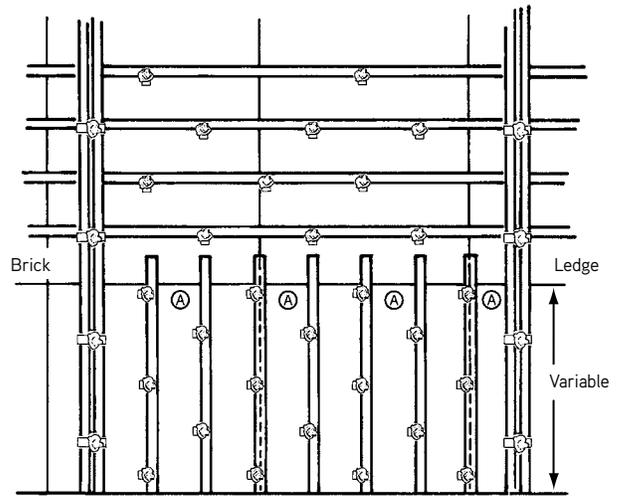
Brick ledges can be quickly formed with 2x4s placed either vertically or horizontally. By adding shims of required thickness to a 2x4, ledges of varying thickness can be formed.



All "A" Brackets



All "A" Brackets



### 17. 3-Way Wall Forming

3-way walls can be formed using "A" and "C" Brackets with single and double wales, as shown in the sketches.

