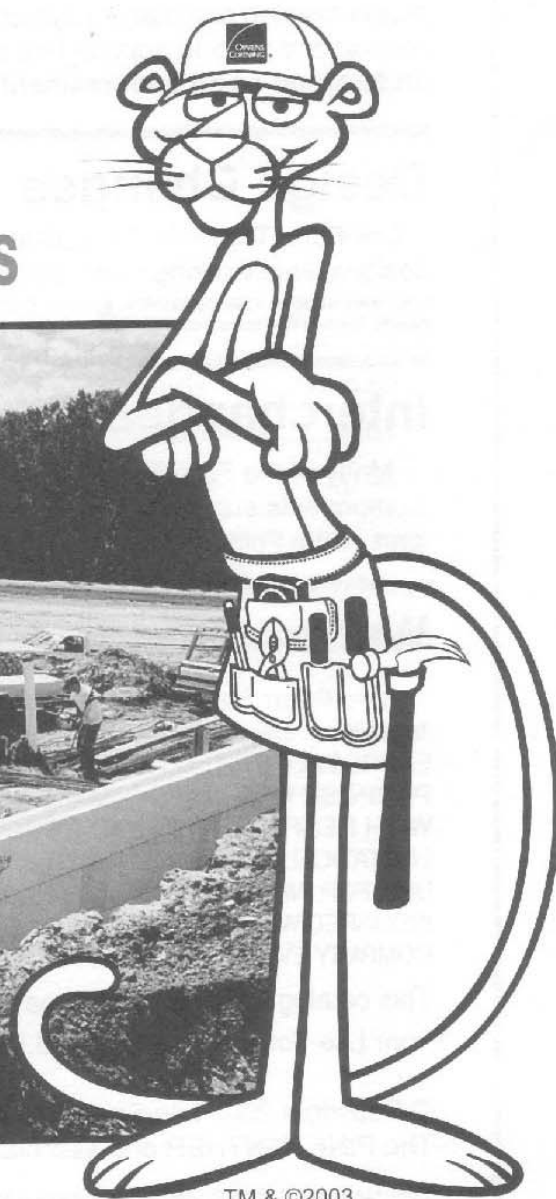
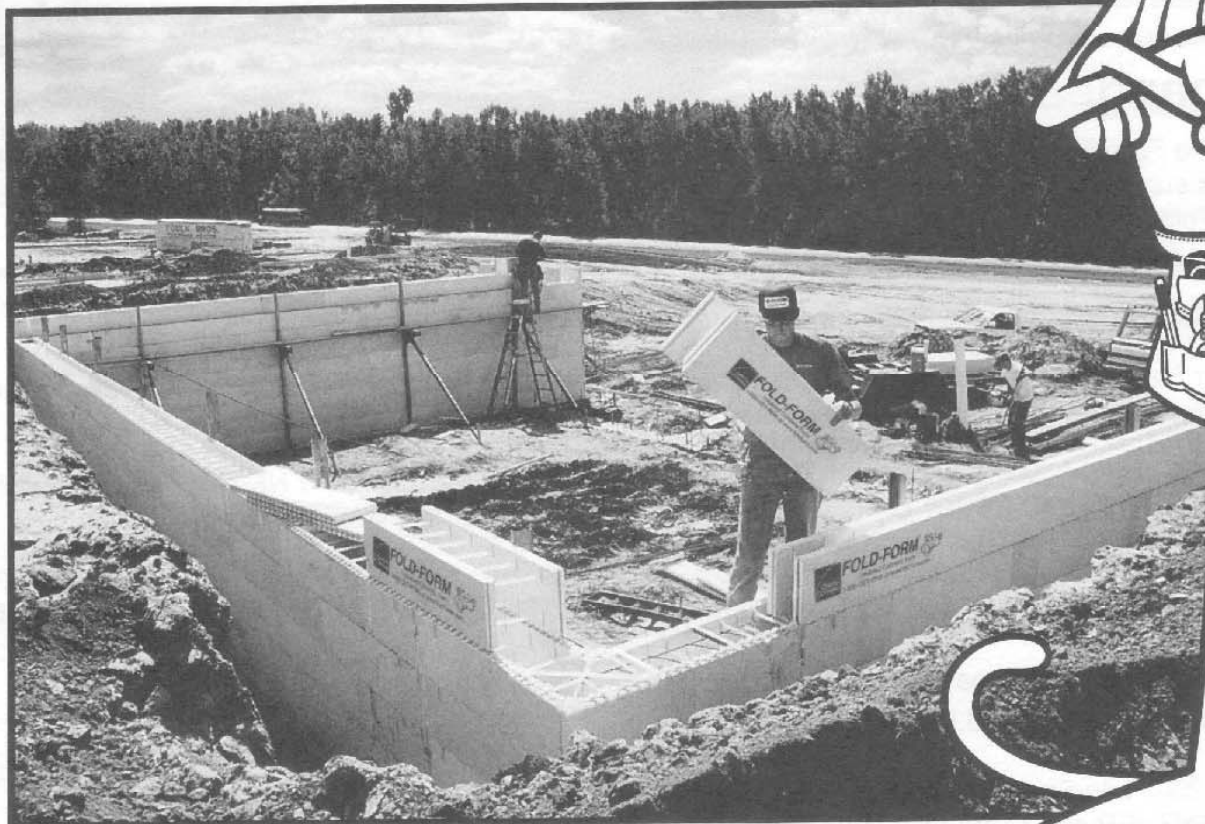




# **FOLD-FORM<sup>®</sup>**

# **Installation Guide to Insulated Concrete Construction**

Details for Builders and Designers



**5th Edition**

TM & ©2003  
United Artists Corporation

# Residential Basic Steps

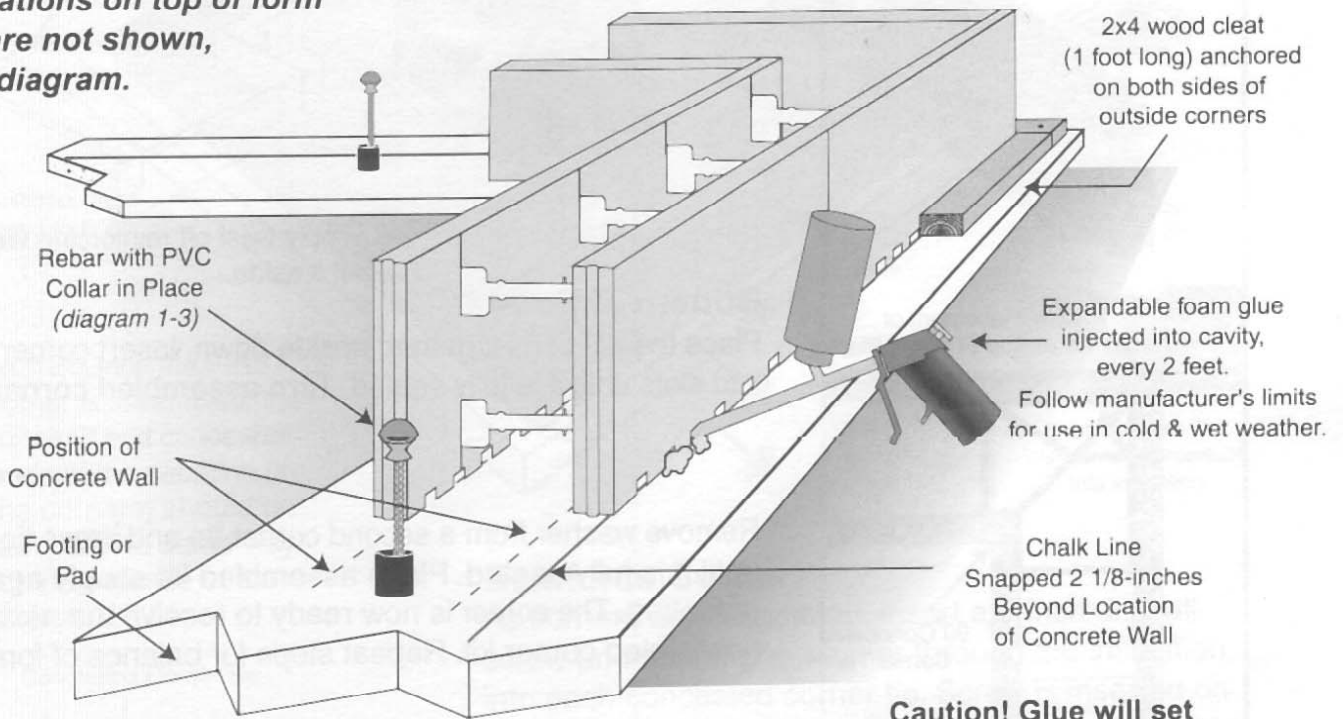


## 1 Footing or Pad Preparations

Footing/pad must be level, uniform and wide enough for the form and corner cleats. **Footing/pad must be proper width and thickness for soil conditions. Check with local code officials for guidelines.** If project requires continuous vertical rebar, lengths of rebar must be cast into concrete footing/pad at time of installation.

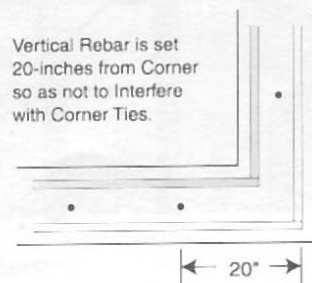
Snap an accurate chalk line around entire perimeter, to establish the position of form. Allow 2 1/8 inches for form thickness. Firmly anchor wood corner cleats (1 foot long) to footing/pad at the outside of each corner, at the chalk line. Expandable foam glue is injected after the first course of forms have been completely assembled and put in place. Glue is injected every 2 feet, to hold forms in place.

**Castellations on top of form block are not shown, in this diagram.**

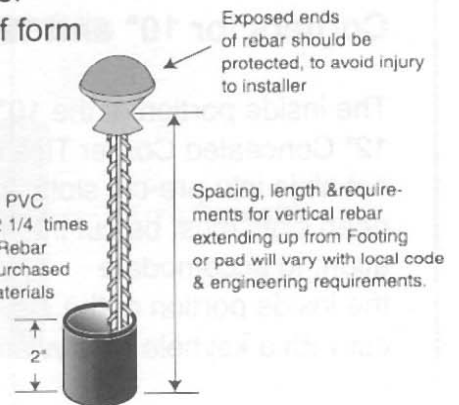


**Caution! Glue will set approx. 30 minutes after injection.**

Wood 2x4 cleats (6 inches long) can be used in place of foam glue. Cleats should be placed approx. 2 feet apart, prior to placement of form & anchored firmly into footing/pad.



Inside Diameter of PVC Collar Should be 2 1/4 times that of the Rebar. Rebar and PVC can be Purchased from a Building Materials Supplier.



## 2

### 90° Corners

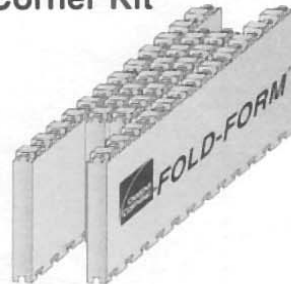
#### Concealed Corner Tie & Washer

Forms for 90° corners are supplied as kits, packaged with two pre-trimmed sections. Plastic corner ties are packaged separately. **Two corner ties are used for each kit.** Two types of kits are used: 4-foot "long kits" and 2-foot "short kits". Like all Fold-Form sections, the kits are used in the walls with male castellations on top. On the first course of the wall, **begin by using a long corner kit at each 90° corner.**

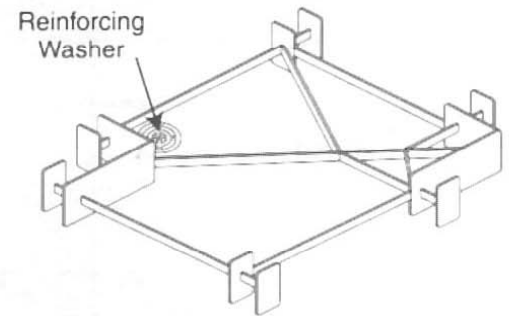
4-foot Long  
Corner Kit



2-foot Short  
Corner Kit

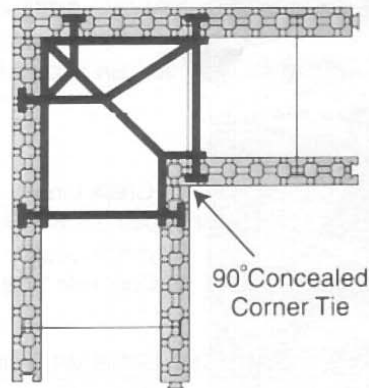


#### Concealed Corner Tie with Reinforcing Washer



Simply twist off reinforcing **washer** and set it aside.

Proper Placement of  
Corner Tie on Top of Foam Planks



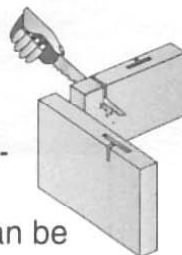
#### Bottom of Form

Place the sections together, upside down. Insert corner tie into slots until it is fully seated. **Turn assembled corner over**

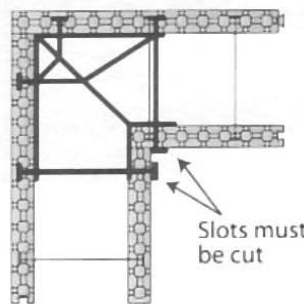
Remove washer from a second corner tie and press tie in place until it is fully seated. Place assembled kit snugly against cleat, at footing. The corner is now ready to receive the next assembled corner kit. Repeat steps for balance of form wall.

#### Corners for 10" and 12" Concrete Walls

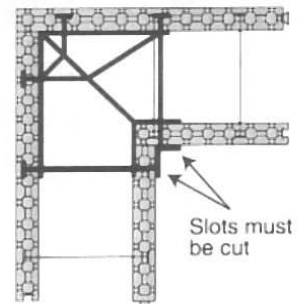
The inside portion of the 10" and 12" Concealed Corner Ties does not slide into pre-cut slots. 2 1/2" deep slots must be cut into the insulation, to accommodate the inside portion of the Tie. Slots can be cut with a keyhole or drywall saw.



10" Corner Tie



12" Corner Tie



# Residential Basic Steps

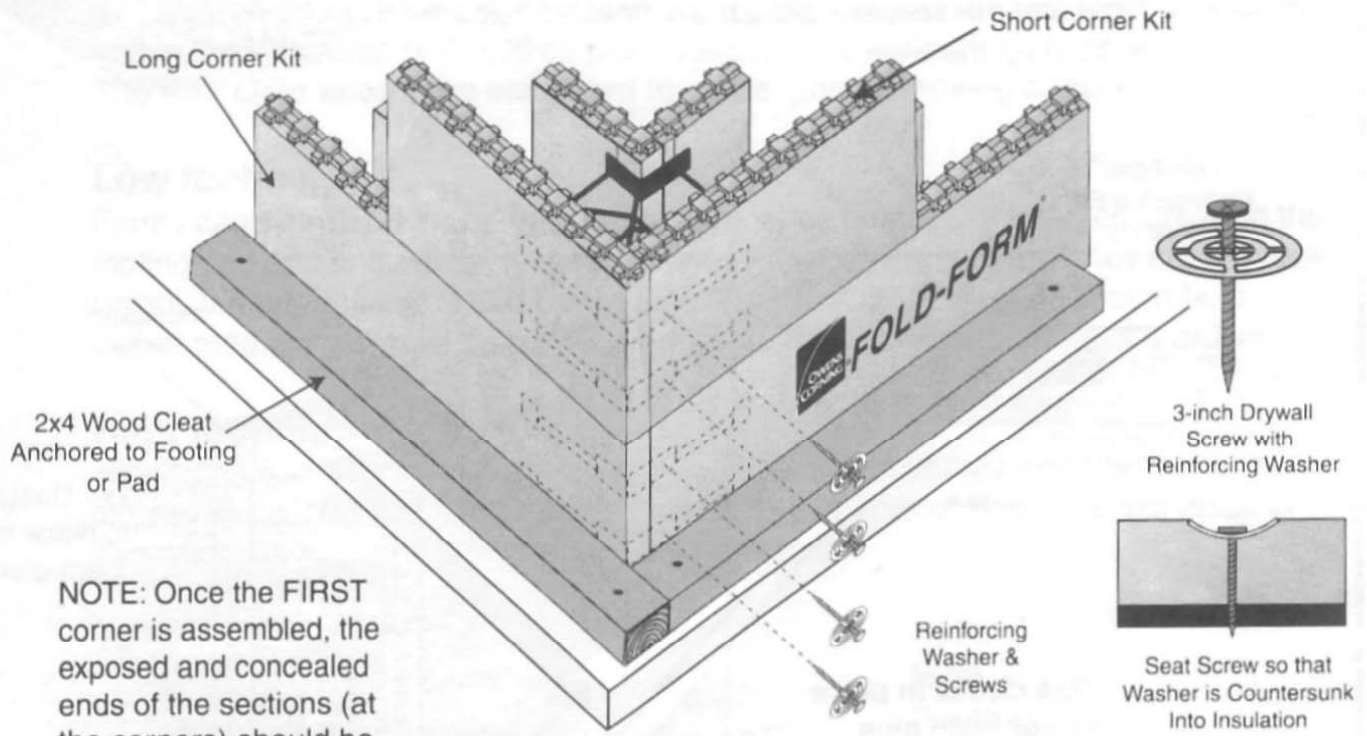


# FOLD-FORM

Basic Residential

## 90° Corners *continued*

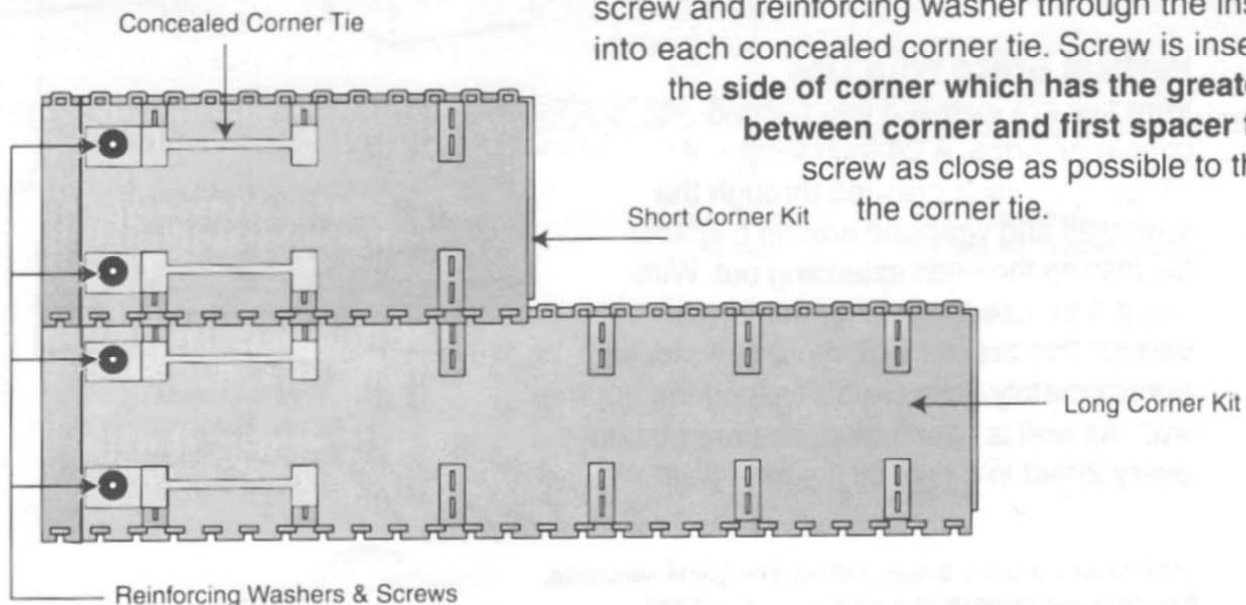
Long corner kits are placed into position, against the cleats and the first course of wall is assembled, starting at the corners & working toward the center of the straight walls. Long kits and short kits are alternated up the wall so that full sections are properly placed, as the wall is assembled.



**NOTE:** Once the **FIRST** corner is assembled, the exposed and concealed ends of the sections (at the corners) should be handled the same way, for the balance of the project.

### Reinforce Corner

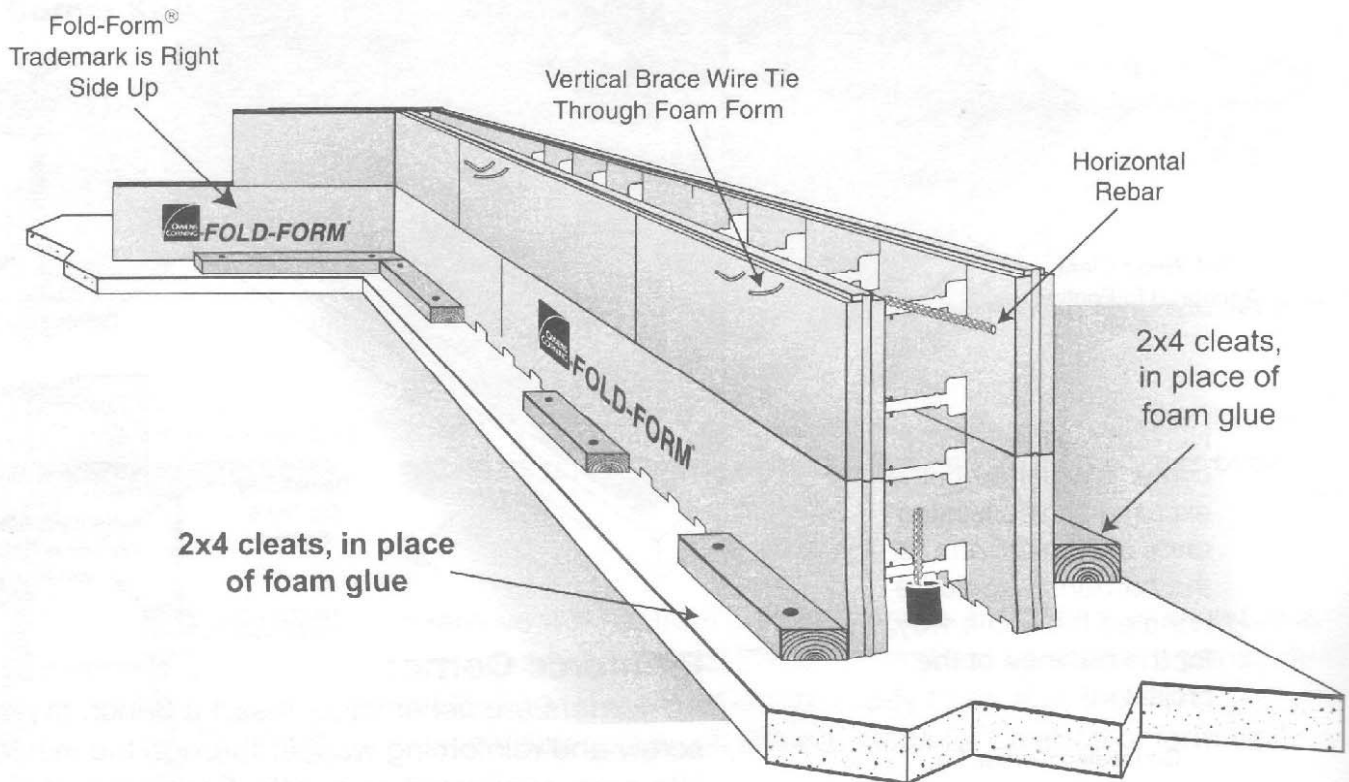
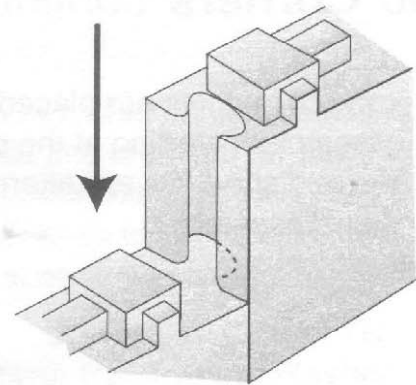
As corners are assembled, insert a 3-inch drywall screw and reinforcing washer through the insulation, into each concealed corner tie. Screw is inserted on the **side of corner which has the greatest span between corner and first spacer tie**. Place screw as close as possible to the point of the corner tie.





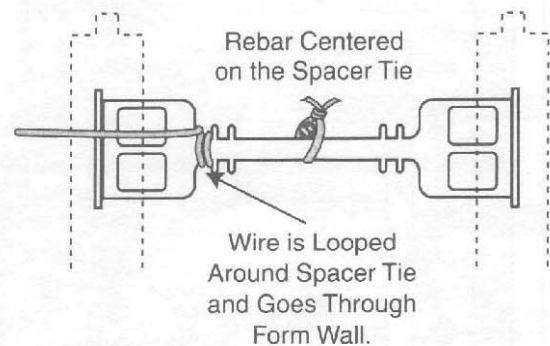
## 3 Wall Form Assembly

Ends of sections slide together during assembly. **If installer is using wood cleats in place of foam glue**, secondary cleats are placed along the form and anchored to the footing/pad, once the wall has been assembled 2 courses high. *Note that the sections are arranged in a brick pattern up the wall*



### Vertical Brace Wire Ties

Wire ties are installed into second course of forms. A 24-inch length of 16-gauge wire is pressed through the form wall and wrapped around a spacer tie, leaving the ends extending out. Wire ties will be used to anchor the form's vertical 2x4 braces and should be placed approximately 8-feet apart\*, along the entire wall. As wall is assembled, ties are placed every 2-feet in a row, up the form wall.



\* Maximum spacing of **6-feet** is allowed by OSHA standards, if brace is also being used to support work platform.

## Wall Form Assembly *continued* Correcting for Uneven Footing/pad

Conditions may exist where portions of the concrete footing/pad are not level. To insure that the **top** of the finished wall is flat and level, corrections must be made on the **first course** of forms. The following techniques can be used to correct errors of less than 2 inches. If several corrections must be made, a stringline (set 12-inches above the footing/pad) should be placed around the entire project, as a guide. **The first cleat should be anchored in place**, prior to making corrections.

### Low footing/pad

Forms can be **raised** slightly by placing 2 mounds or strips of fresh concrete on the footing/pad and immediately pressing forms into the concrete until they are at proper height. If the forms are raised beyond the cleat height, a 2nd cleat should be added in that area. Forms must be placed **before** the fresh concrete hydrates (hardens).

### High footing/pad

Forms can be **lowered** slightly by trimming the bottom of the panels with a keyhole or drywall saw. **Do not remove the bottom row of spacer ties.** That will result in immediate form failure, during concrete placement.

