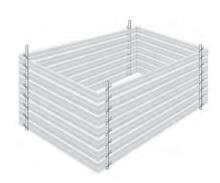
Stay-Form®
The Stay-in-Place Concrete Form

Details and Load Tables for



the stay-in-place concrete form

Bulkheads Blindside Walls **Grade Beams** Pile Caps **Footings Bridges**



Tunnels **Ductbanks Retaining Walls** Keyways Column Pockets Shotcrete

THE DIAGRAMS PRESENTED IN THIS BOOKLET ARE TO DEMONSTRATE A SUGGESTED METHOD OF ASSEMBLY ONLY. SPACING DIMENSIONS AND FOOTING ANCHORS MAY VARY DEPENDING ON POUR RATES AND DEFLECTION SPEC. THE DIAGRAMS SHOULD NOT LIMIT NOR RESTRICT IDEAS OR KNOWLEDGE THE WORKMEN HAVE ABOUT FORMING METHODS OR TECHNIQUES.

THE ENCLOSED LOAD TABLES CAN BE USED AS A GUIDE WHERE DATA PRESENTED IN LOAD TABLES ARE APPLICABLE. IF DATA IN LOAD TABLES ARE NOT APPLICABLE, THEN A SEPARATE CALCULATION MUST BE MADE TO MEET YOUR REQUIRED SPEC. ALL FORMING METHODS, HOWEVER, MUST COMPLY WITH AMICO'S PUBLISHED LOAD TABLES, OR SEPARATE CALCULATION.

> ALABAMA METAL INDUSTRIES CORPORATION 3245 Fayette Avenue • Birmingham, AL 35208

> > www.amicoglobal.com



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GUIDE LINES FOR LOADING #66 Stay-Form®

Support Spacing (Running Perpendicular to Stay-form Ribs)

Support Spacing on centers (inches)	24"	18"	12"
Lateral Loading (psf)	1200	1200	1600
Liquid Head (feet)	8.0	8.0	10.0
Pour Rate (feet/hour)	4.0	4.0	7.0
Maximum Deflection (in)	1-1/4	3/4	1/8
Recommended Lap (inches vertically	8	6	4
Recommended Ties at Lap (both ribs horizontally	2	2	1

THE LOADING SPECIFICATIONS ABOVE ARE BASED ON THE FOLLOWING CONDITIONS:

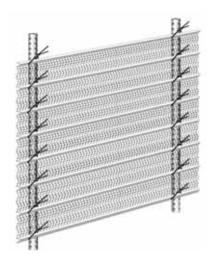
General Construction

- 1. When using tie wire to secure Stay-Form to bracing use 16GA wire and tie each rib to bracing member.
- 2. When using staples or nails; each rib shall be attached to the wooden support.
- 3. When joining sheets end to end, allow for a minimum lap of 4-8 inches over each sheet. Laps should occur over a support with both adjoining sheets secured with wire ties, staples or sheet metal screws.
- 4. Vertically stacked Stay-Form sheets require a minimum 2-rib lap of each adjoining sheet. Nest sheets into the other; secure with wire ties, staples or sheet metal screws at a maximum spacing of 24-inches on center. See detail on page 4.
- 5. When possible place Stay-Form with ribs facing away from supports and into the concrete pour.
- 6. Back-fill 90% of grade beam, footing, or pile cap height prior to concrete pour as an alternative to external bracing.
- 7. "V" notch 80 percent through Stay-Form ribs to make 90 degree turns.

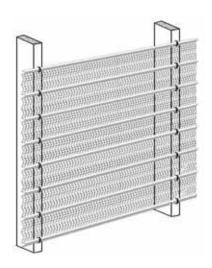
Blindside Walls

- 8. Do not vibrate previous lift by more than 6-inches.
- 9. Stay-Form can accommodate a pour rate of 4-7 feet per hour.
- 10. Stay-Form is compatible with self-consolidating concrete.
- 11. Stay-Form can be cut with a hand held grinder, cutoff saw, abrasive blade or tin snips.

The AMICO rule of thumb is to "brace Stay-Form like you would a piece of plywood." The location, size and spacing of rebar or wooden bracing is similar to that for conventional forming methods per ACI 347, Guide to Formwork for Concrete.



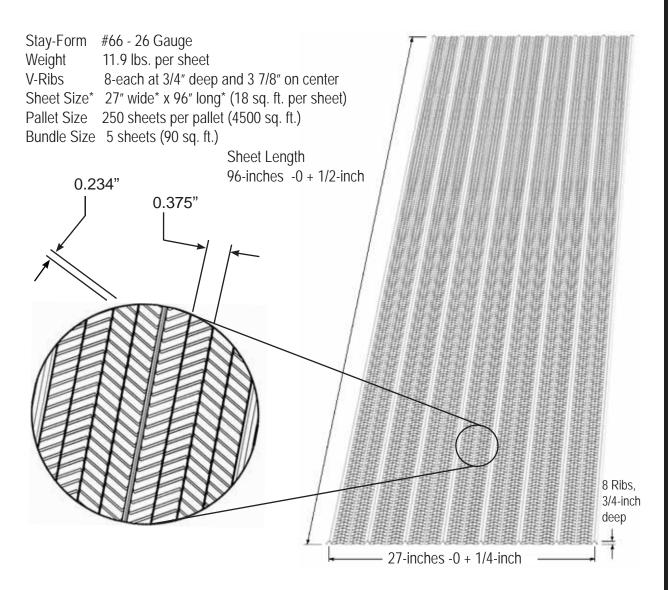
Stay-Form sheets can be either wire tied to rebar (as illustrated above) or nailed / stapled to wooden supports (as illustrated below) depending upon the type of forming required or availability of materials.





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Stay-Form® #66 DIMENSIONS



7 spaces @ 3-7/8-inches each = 27- inches

Special Order - 10-foot and 12-foot lengths are also available. Call for lead-time.

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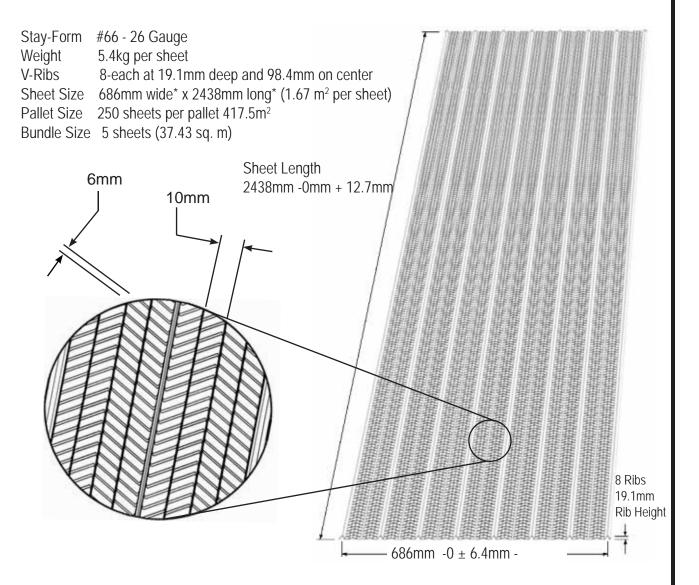


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Stay-Form® #66 Dimensions - METRIC



7 spaces @ 98.4mm each = 686mm

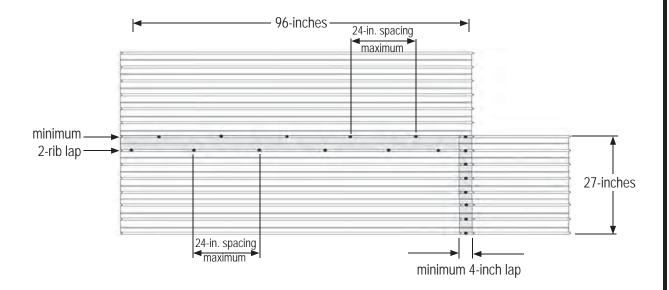
Special Order - 10-foot and 12-foot lengths are also available. Call for lead-time.

NOTE: See load table on page 3 for spacing and load information.



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INSTALLATION LAP DETAIL



PHYSICAL PROPERTIES OF Stay-form® #66

Gauge Thickness	26 Gauge	
Galvanized Sheet Thickness	0.0217 in. (0.5512mm)	
Sheet Width	27-inches (686mm)	
Sheet Length - Standard	96-inches (2438mm)	
Sheet Length - Special Order	10-feet (3.489m) and 12-feet (3.658m)	
Weight per Square Foot	0.66 lbs/ft² (3.22 kg/m²)	
Yield Strength	27.63 ksi (190.50 MPa)	
Yield Strain	0.00297	
Ultimate Strength	50.28 ksi (346.68 MPa)	
Ultimate Strain	0.25	
Modulus of Elasticity (E)	29,500 ksi (203,400 MPa)	
Stay-Form® is manufactured from hot dip galvanized steel to meet ASTM A-653.		

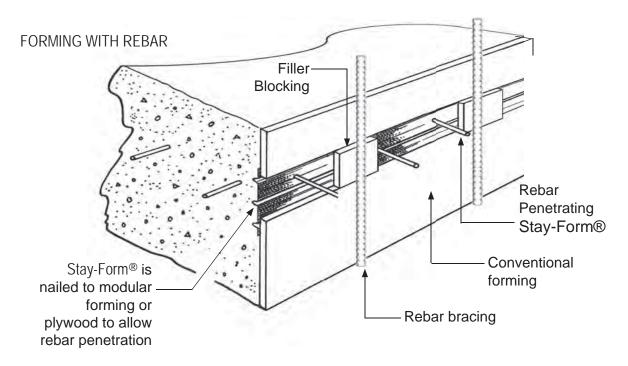
This data is based on results from testing conducted by an independent testing lab. For more information on the details of the testing, contact AMICO at 800/366-2642.

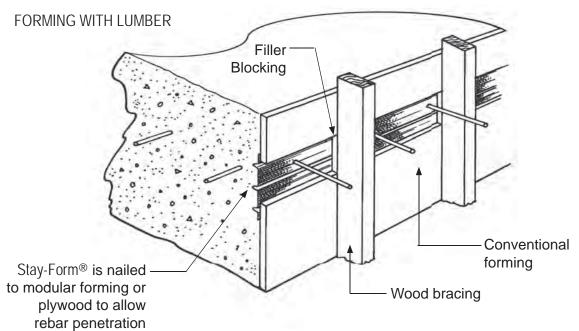
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REBAR PENETRATION OF BULKHEADS



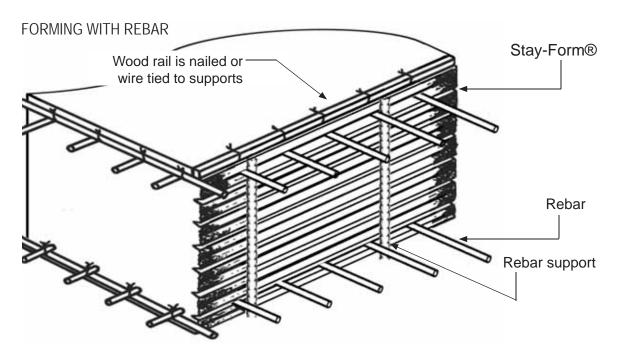


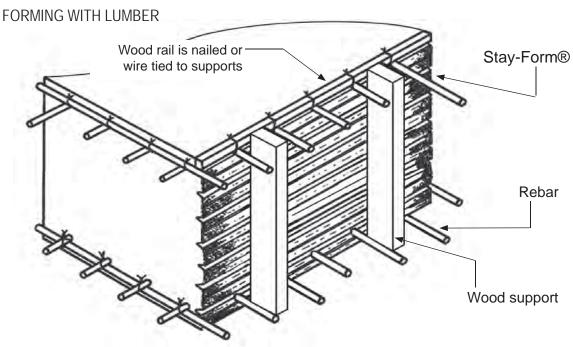
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FORMING HEAVY MAT BULKHEAD





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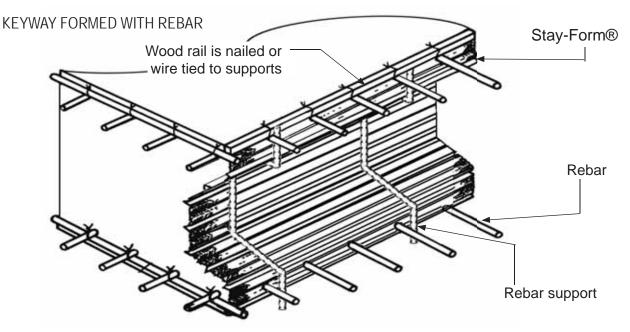
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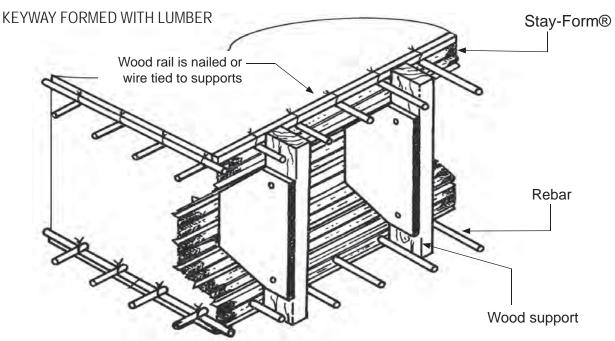
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FORMING HEAVY MAT BULKHEAD WITH KEYWAY





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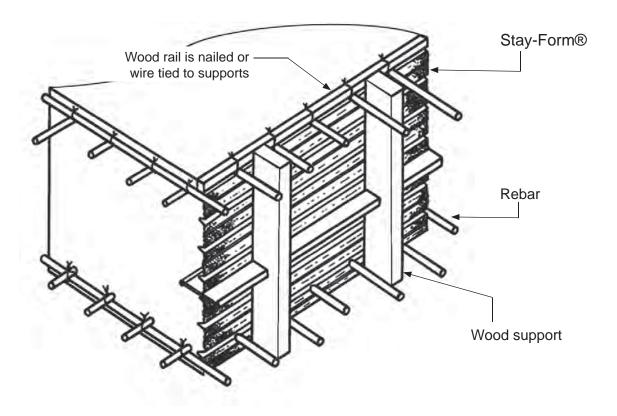


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FORMING HEAVY MAT BULKHEAD WITH WATERSTOP



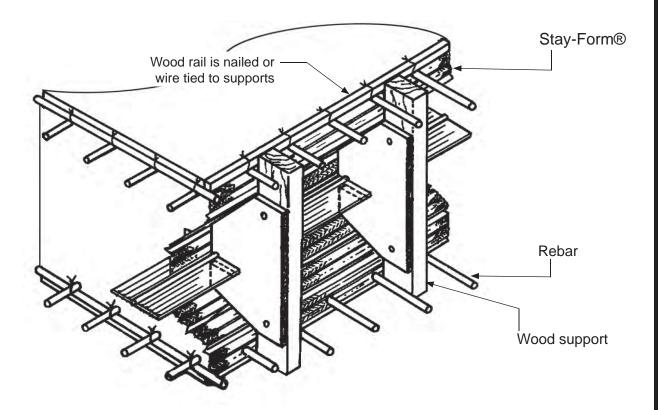
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The Stay-in-Place Concrete Form

FORMING HEAVY MAT BULKHEAD WITH KEYWAY & WATER STOP

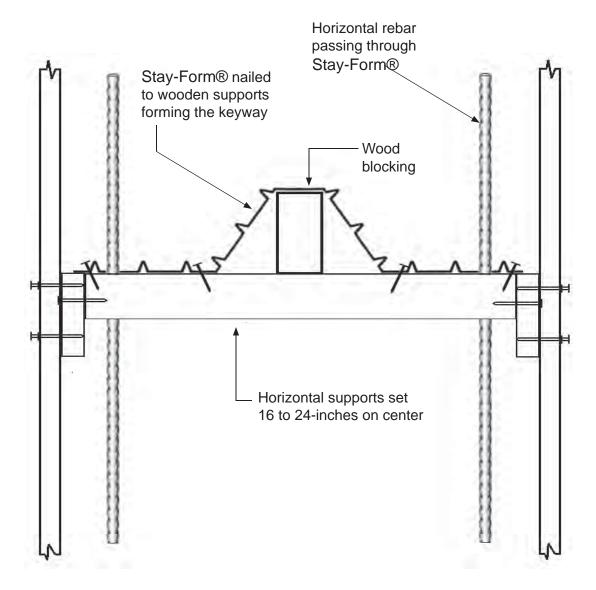


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FORMING WALL BULKHEAD WITH KEYWAY



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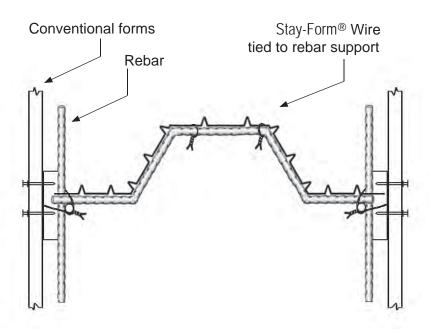


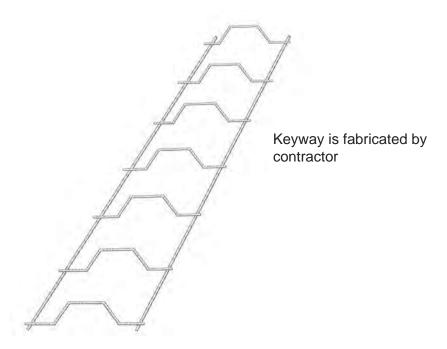
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FORMING WALL BULKHEAD WITH KEYWAY



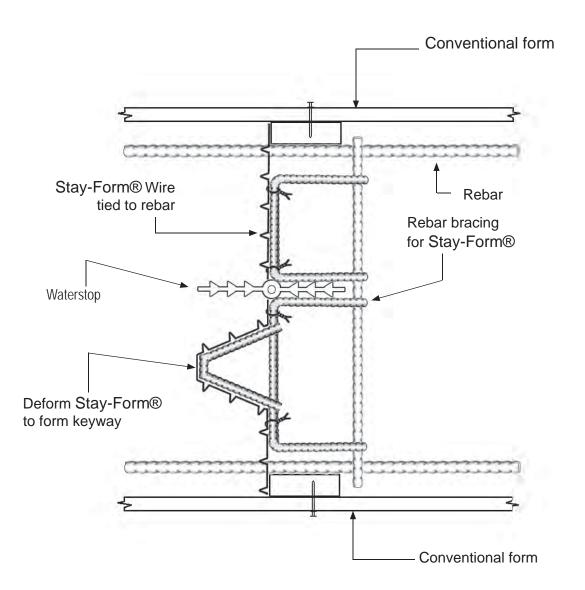


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FORMING WALL BULKHEAD WITH KEYWAY AND WATER STOP (Plan View)



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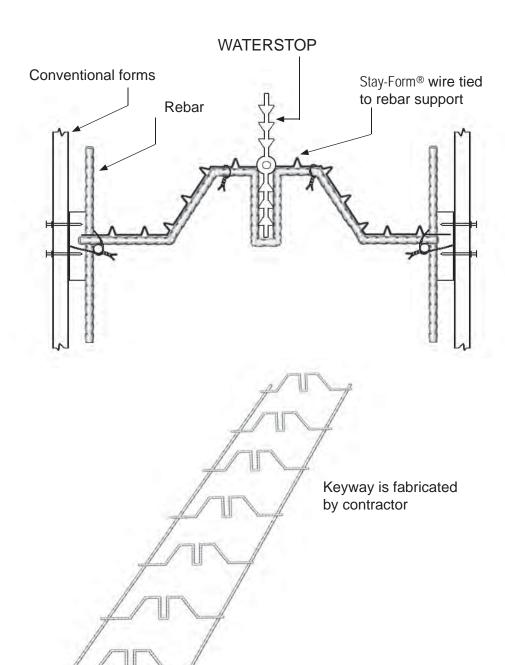


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FORMING WALL BULKHEAD WITH KEYWAY & WATER STOP (Section View)



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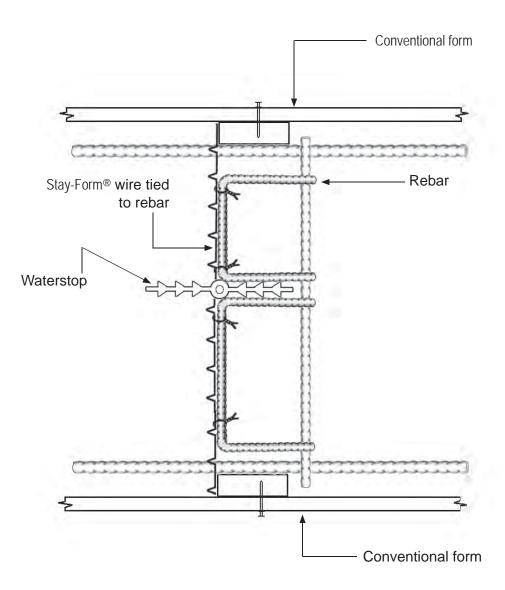


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FORMING WALL BULKHEAD WITH WATER STOP

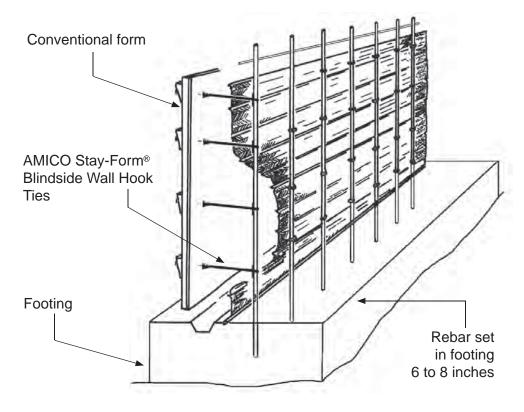


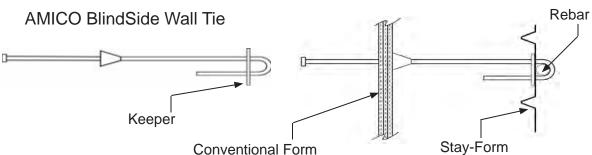
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BLINDSIDE WALLS





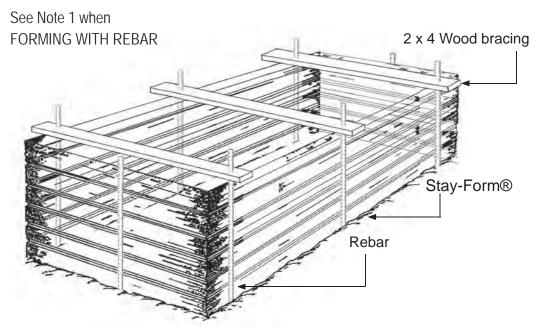
Cut a narrow slit in the Stay-Form on both sides of the rebar stud in each tie location. Slide Keeper on to tie. Push the Rebar Hook through the slits. Slide the other end of tie through conventional form, strongback and or whaler. With a slight twist, the hook grips the rebar stud behind the mesh. Tighten and secure in place.

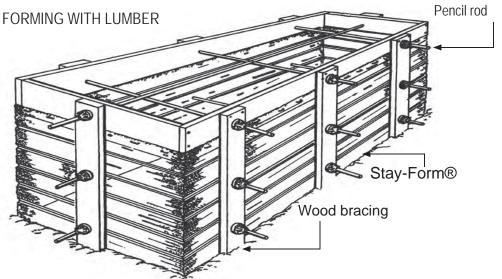
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FORMING GRADE BEAMS, FOOTINGS AND MAT SLABS





NOTE 1: Horizontal bracing can be accomplished with lumber, tie wire, kickers, pencil rod or by backfilling (90% of form height) prior

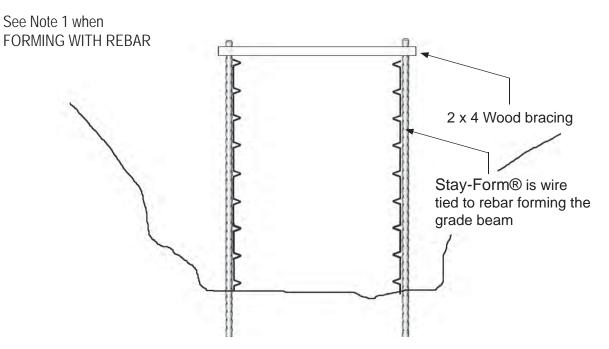
to the concrete pour.

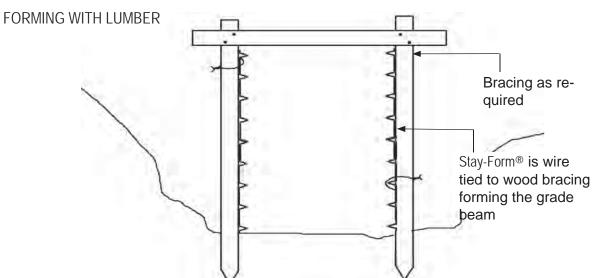
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GRADE BEAM FORMWORK





NOTE 1: Horizontal bracing can be accomplished with lumber, tie wire, kickers, pencil rod or by backfilling (90% of form height) prior to the concrete pour.

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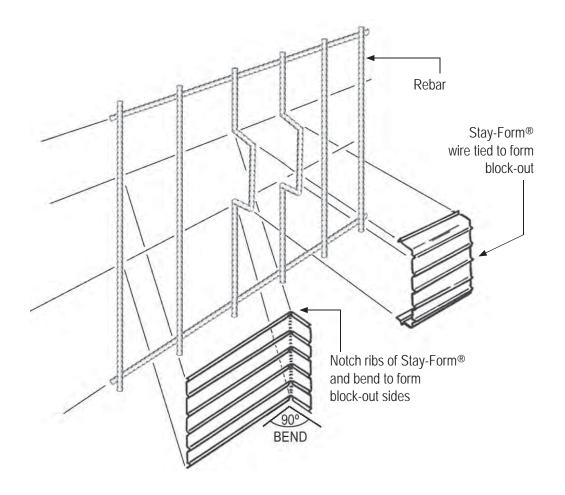


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FORMING BLOCK-OUTS WITH REBAR



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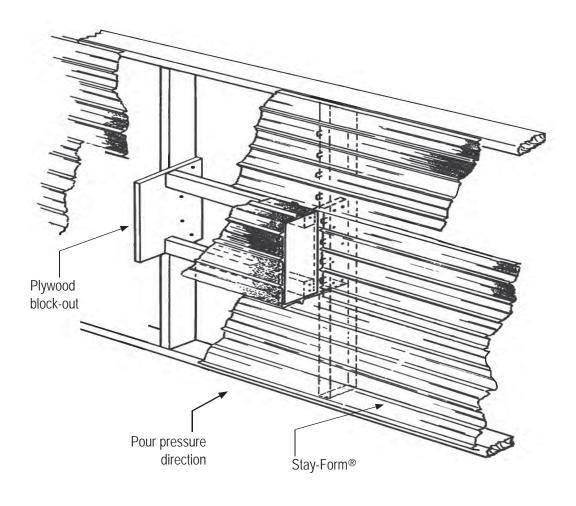


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FORMING BLOCK-OUTS WITH LUMBER



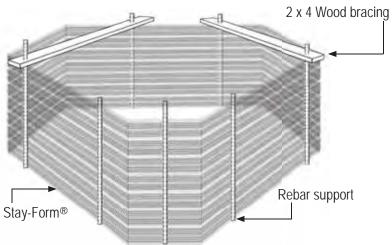
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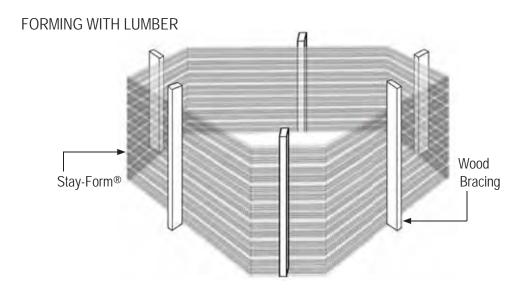


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FORMING TYPICAL PILE CAPS

See Note 1 when FORMING WITH REBAR





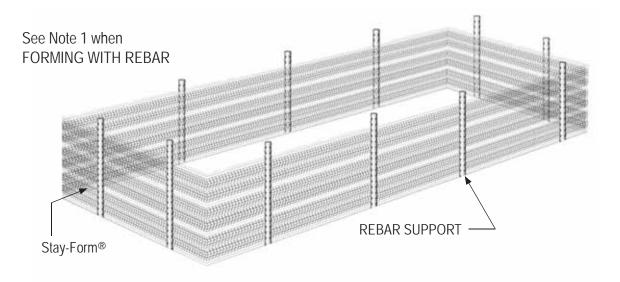
NOTE 1: Horizontal bracing can be accomplished with lumber, tie wire, kickers, pencil rod or by backfilling (90% of form height) prior to the concrete pour.

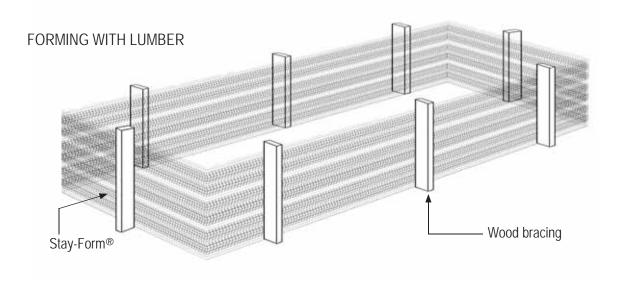
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FORMING TYPICAL FOOTINGS





NOTE 1: Horizontal bracing can be accomplished with lumber, tie wire, kickers, pencil rod or by backfilling (90% of form height) prior to the concrete pour.

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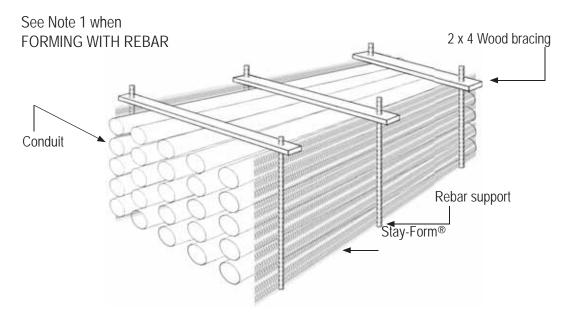


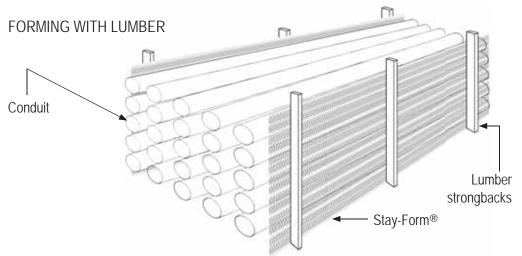
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FORMING DUCTBANKS





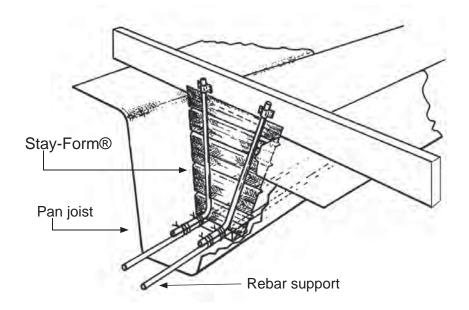
NOTE 1: Horizontal bracing can be accomplished with lumber, tie wire, kickers, pencil rod or by backfilling (90% of form height) prior to the concrete pour.

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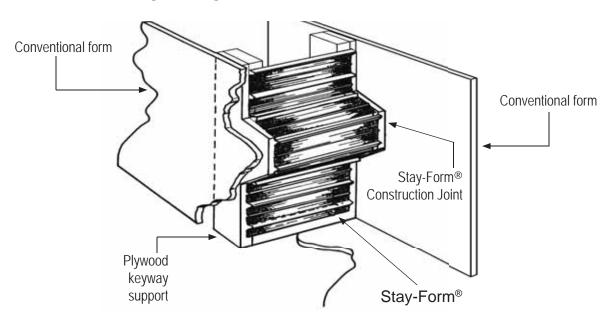


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FORMING PAN JOIST CONSTRUCTION JOINT



FORMING BEAM WITH KEYWAY



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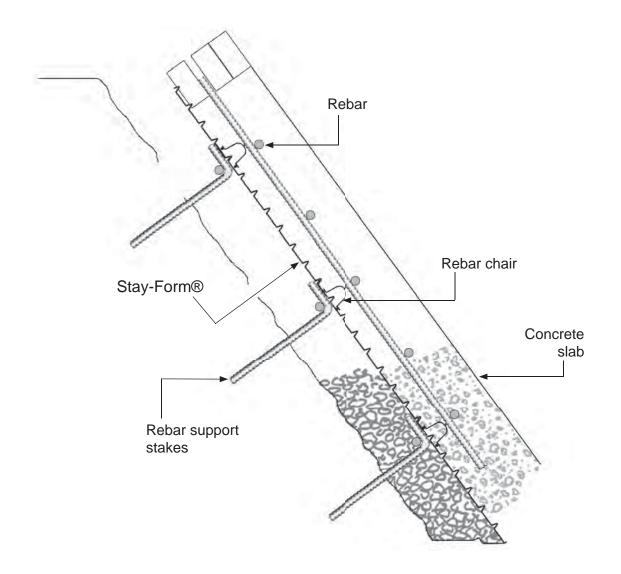


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FORMING ON GRADE SLOPED SLAB



NOTE: Stay-Form may be used in ground stabilization applications using shotcrete or concrete.

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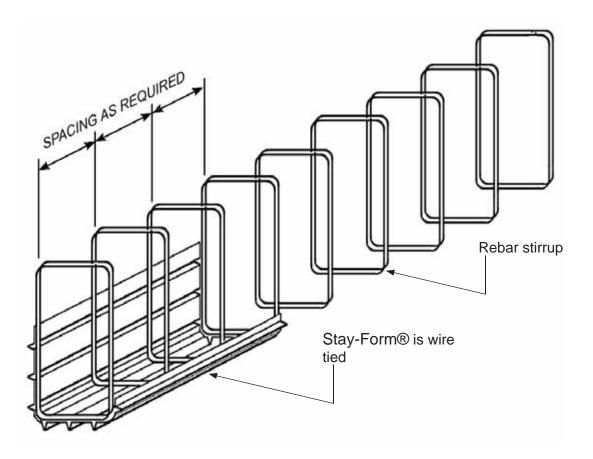


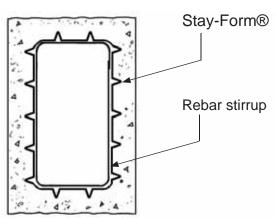
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FORMING BOX BEAM CAVITIES





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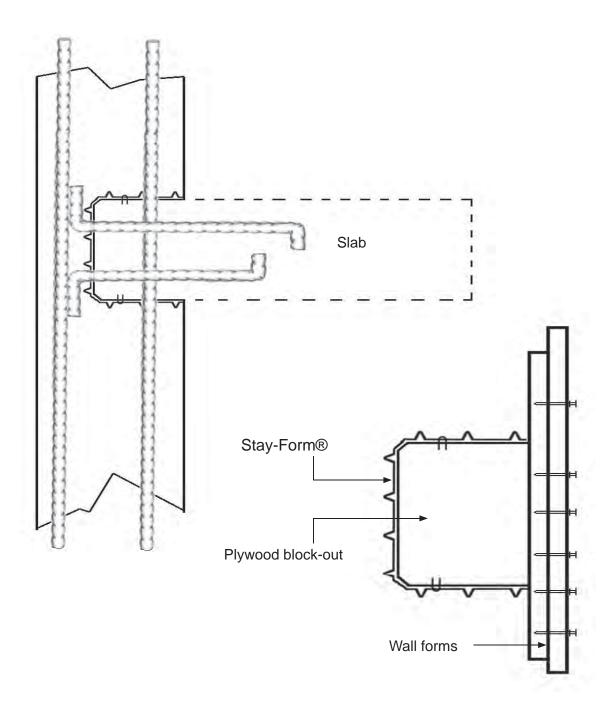
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FORMING SLAB POCKET



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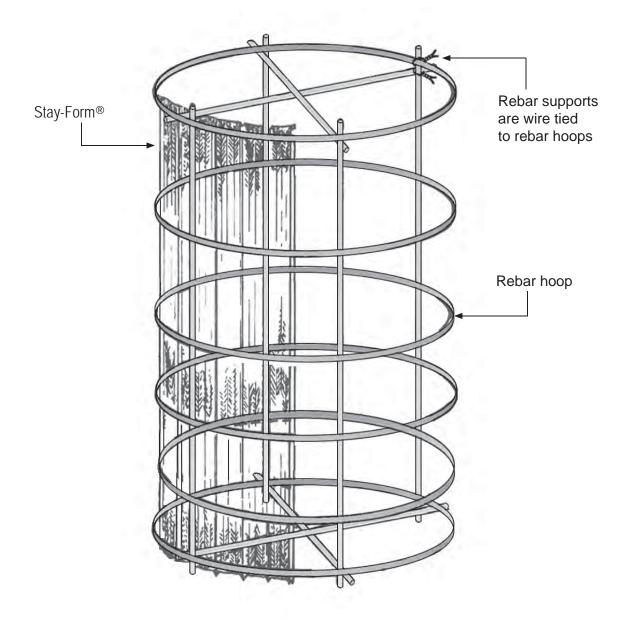


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FORMING CONCRETE COLUMNS



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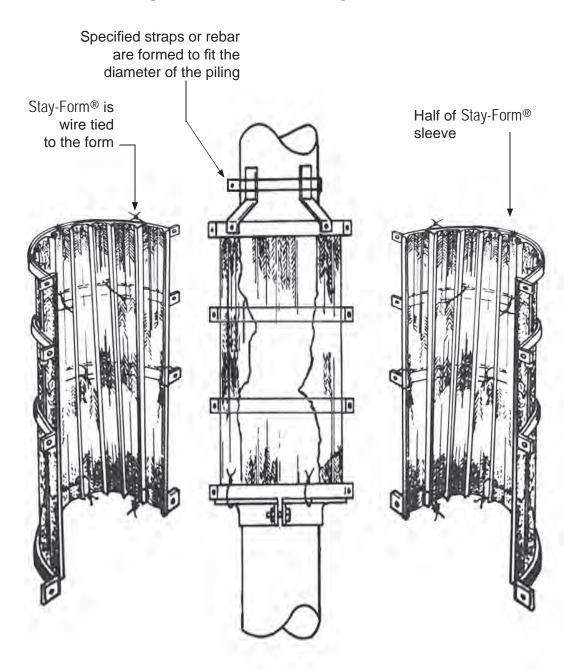


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UNDER WATER PILING REPAIR



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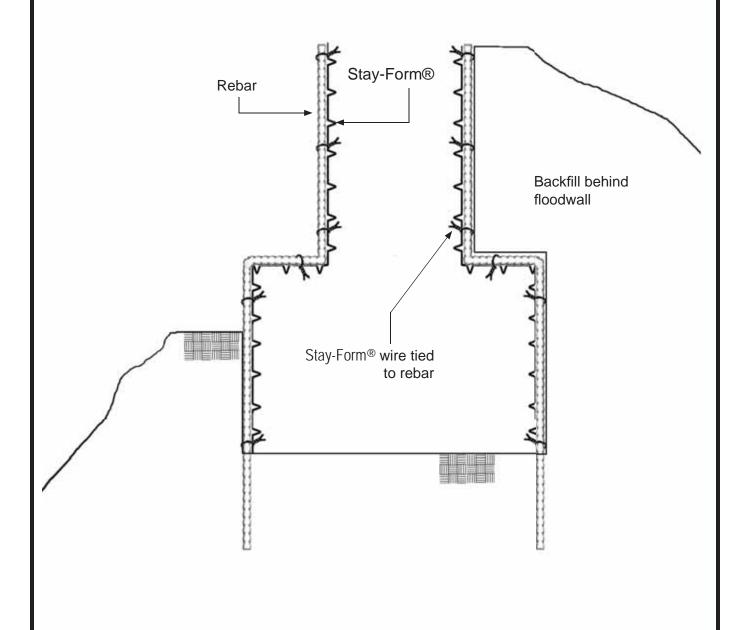


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FORMING FLOOD WALLS



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