Details and Load Tables for Stay-Form®
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.

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### GUIDE LINES FOR LOADING #66 Stay-Form®
Support Spacing (Running Perpendicular to Stay-form Ribs)

<table>
<thead>
<tr>
<th>Support Spacing on centers (inches)</th>
<th>24&quot;</th>
<th>18&quot;</th>
<th>12&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lateral Loading (psf)</td>
<td>1200</td>
<td>1200</td>
<td>1600</td>
</tr>
<tr>
<td>Liquid Head (feet)</td>
<td>8.0</td>
<td>8.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Pour Rate (feet/hour)</td>
<td>4.0</td>
<td>4.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Maximum Deflection (in)</td>
<td>1-1/4</td>
<td>3/4</td>
<td>1/8</td>
</tr>
<tr>
<td>Recommended Lap (inches vertically)</td>
<td>8</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Recommended Ties at Lap (both ribs horizontally)</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

**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.
Stay-Form® #66 DIMENSIONS

Stay-Form® #66 - 26 Gauge
Weight: 11.9 lbs. per sheet
V-Ribs: 8-each at 3/4" deep and 3 7/8" on center
Sheet Size*: 27" wide* x 96" long* (18 sq. ft. per sheet)
Pallet Size: 250 sheets per pallet (4500 sq. ft.)
Bundle Size: 5 sheets (90 sq. ft.)

Sheet Length: 96-inches -0 + 1/2-inch

8 Ribs, 3/4-inch deep
27-inches -0 + 1/4-inch

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

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.
Stay-Form® #66 Dimensions - METRIC

Stay-Form® #66 - 26 Gauge
Weight 5.4kg per sheet
V-Ribs 8-each at 19.1mm deep and 98.4mm on center
Sheet Size 686mm wide* x 2438mm long* (1.67 m² per sheet)
Pallet Size 250 sheets per pallet 417.5m²
Bundle Size 5 sheets (37.43 sq. m)

Sheet Length
2438mm -0mm + 12.7mm

686mm -0 ± 6.4mm -

8 Ribs
19.1mm
Rib Height

6mm
10mm

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.
INSTALLATION LAP DETAIL

PHYSICAL PROPERTIES OF Stay-form® #66

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gauge Thickness</td>
<td>26 Gauge</td>
</tr>
<tr>
<td>Galvanized Sheet Thickness</td>
<td>0.0217 in. (0.5512mm)</td>
</tr>
<tr>
<td>Sheet Width</td>
<td>27-inches (686mm)</td>
</tr>
<tr>
<td>Sheet Length - Standard</td>
<td>96-inches (2438mm)</td>
</tr>
<tr>
<td>Sheet Length - Special Order</td>
<td>10-feet (3.489m) and 12-feet (3.658m)</td>
</tr>
<tr>
<td>Weight per Square Foot</td>
<td>0.66 lbs/ft² (3.22 kg/m²)</td>
</tr>
<tr>
<td>Yield Strength</td>
<td>27.63 ksi (190.50 MPa)</td>
</tr>
<tr>
<td>Yield Strain</td>
<td>0.00297</td>
</tr>
<tr>
<td>Ultimate Strength</td>
<td>50.28 ksi (346.68 MPa)</td>
</tr>
<tr>
<td>Ultimate Strain</td>
<td>0.25</td>
</tr>
<tr>
<td>Modulus of Elasticity (E)</td>
<td>29,500 ksi (203,400 MPa)</td>
</tr>
</tbody>
</table>

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.

NOTE: See load table on page 3 for spacing and load information.
REBAR PENETRATION OF BULKHEADS

FORMING WITH REBAR

Stay-Form® is nailed to modular forming or plywood to allow rebar penetration

Filler Blocking

Rebar Penetrating Stay-Form®

Conventional forming

Rebar bracing

FORMING WITH LUMBER

Stay-Form® is nailed to modular forming or plywood to allow rebar penetration

Conventional forming

Wood bracing

NOTE: See load table on page 3 for spacing and load information.
FORMING HEAVY MAT BULKHEAD

FORMING WITH REBAR

Wood rail is nailed or wire tied to supports

Rebar support

Rebar

Stay-Form®

FORMING WITH LUMBER

Wood rail is nailed or wire tied to supports

Wood support

Stay-Form®

Rebar

NOTE: See load table on page 3 for spacing and load information.
FORMING HEAVY MAT BULKHEAD WITH KEYWAY

KEYWAY FORMED WITH REBAR

Wood rail is nailed or wire tied to supports

KEYWAY FORMED WITH LUMBER

Wood rail is nailed or wire tied to supports

NOTE: See load table on page 3 for spacing and load information.
FORMING HEAVY MAT BULKHEAD WITH WATERSTOP

NOTE: See load table on page 3 for spacing and load information.
FORMING HEAVY MAT BULKHEAD WITH KEYWAY & WATER STOP

NOTE: See load table on page 3 for spacing and load information.
FORMING WALL BULKHEAD WITH KEYWAY

Horizontal supports set 16 to 24-inches on center

Wood blocking

Stay-Form® nailed to wooden supports forming the keyway

Horizontal rebar passing through Stay-Form®

NOTE: See load table on page 3 for spacing and load information.
FORMING WALL BULKHEAD WITH KEYWAY

Conventional forms
Rebar
Stay-Form® Wire tied to rebar support

Keyway is fabricated by contractor

NOTE: See load table on page 3 for spacing and load information.
FORMING WALL BULKHEAD WITH KEYWAY AND WATER STOP
(Plan View)

NOTE: See load table on page 3 for spacing and load information.
FORMING WALL BULKHEAD WITH KEYWAY & WATER STOP
(Section View)

Keyway is fabricated by contractor

Conventional forms
Rebar
Stay-Form® wire tied to rebar support

WATERSTOP

NOTE: See load table on page 3 for spacing and load information.
FORMING WALL BULKHEAD WITH WATER STOP

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

Conventional form

Stay-Form® hook tie by others

Footing

Rebar set in footing 6 to 8 inches

Stay-Form® hook tie

Place keeper over threaded end of hook tie and secure with washer and nut

DETAIL “A”

Slit Stay-Form® to allow hook tie to engage rebar

Stay-Form®

NOTE: See load table on page 3 for spacing and load information.
FORMING GRADE BEAMS, FOOTINGS AND MAT SLABS

See Note 1 when

FORMING WITH REBAR

FORMING WITH LUMBER

2 x 4 Wood bracing

Rebar

Pencil rod

Wood bracing

Stay-Form®

Stay-Form®

Stay-Form®

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.

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

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.

NOTE: See load table on page 3 for spacing and load information.
FORMING BLOCK-OUTS WITH REBAR

NOTE: See load table on page 3 for spacing and load information.
FORMING BLOCK-OUTS WITH LUMBER

NOTE: See load table on page 3 for spacing and load information.
FORMING TYPICAL PILE CAPS

See Note 1 when
FORMING WITH REBAR

FORMING WITH LUMBER

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.

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

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.

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

See Note 1 when
FORMING WITH REBAR

2 x 4 Wood bracing

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

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.

FORMING WITH LUMBER

Lumber strongbacks

Conduit

Rebar support

Stay-Form®

Conduit

Stay-Form®

2 x 4 Wood bracing
NOTE: See load table on page 3 for spacing and load information.
NOTE: See load table on page 3 for spacing and load information.
FORMING ON GRADE SLOPED SLAB

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

NOTE: See load table on page 3 for spacing and load information.
FORMING BOX BEAM CAVITIES

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

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

NOTE: See load table on page 3 for spacing and load information.
UNDER WATER PILING REPAIR

Specified straps or rebar are formed to fit the diameter of the piling

Stay-Form® is wire tied to the form

Half of Stay-Form® sleeve

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

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