Concrete Bridge Forming

C-60 Pres-Steel Hangers

Type 4

Safe Working Load
6000 lbs. per Side

Type 2, 3, 7

Type 1

Safe Working Load
3500 lbs. per Side

Type 8

Safe Working Load
Standard – 4500 lbs.
Heavy – 6000 lbs.

C-29 Fillet Clip

For use in supporting 3" to 4" wide fillets.

Safe Working Load
Type

6000 lbs. per Side

Maximum

Type

2 2375 lbs.
3 2500 lbs.
7 2375 lbs.

Haunch

1"
2-1/2"
1-1/2"

HANGERS

SWL provides a safety factor of approximately 2:1.

Warning: Hangers must be equally loaded on both sides.

TOLL FREE  800-892-7224
LOCAL  816-525-3640
FAX  816-525-4533

800-821-7735
Concrete Bridge Forming

C-60 45° Pres-Steel Hangers

Type 4-A, 5-A and 9-A

<table>
<thead>
<tr>
<th>Type</th>
<th>SWL</th>
<th>Bolt Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>45° End</td>
</tr>
<tr>
<td>4-A</td>
<td>6000 lbs. per Side</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>5-A</td>
<td>6000 lbs. per Side</td>
<td>3/4&quot;</td>
</tr>
<tr>
<td>9-A</td>
<td>11,300 lbs. per Side</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

Type 2-A, 7-A

<table>
<thead>
<tr>
<th>Type</th>
<th>Safe Working Load per Side</th>
<th>Maximum Haunch</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-A</td>
<td>2375 lbs.</td>
<td>1&quot;</td>
</tr>
<tr>
<td>7-A</td>
<td>2375 lbs.</td>
<td>1-1/2&quot;</td>
</tr>
</tbody>
</table>

Type 1-A

Safe Working Load
3500 lbs. per Side

C-62 45° Pres-Steel Hanger

<table>
<thead>
<tr>
<th>Safe Working Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>4000 lbs. on 45° Side</td>
</tr>
<tr>
<td>2800 lbs. on 90° Side</td>
</tr>
</tbody>
</table>

Type 8-A

Safe Working Load
4500 lbs. per Side

HANGERS

SWL provides a safety factor of approximately 2:1.

Type 1-A, 2-A, 7-A, 8-A

Warning: It is recommended that this hanger be used to support overhang brackets only when the weight of concrete finishing machines and/or conveyor machines is supported directly on the bridge exterior beam.
**Concrete Bridge Forming**

**C-24 Precast Half Hangers**

![C-24 Selection Chart](image)

<table>
<thead>
<tr>
<th>Hanger Type</th>
<th>Safe Working Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>45°</td>
<td></td>
</tr>
<tr>
<td>4-AP</td>
<td>3300 lbs.</td>
</tr>
<tr>
<td>4-APR</td>
<td>6000 lbs.</td>
</tr>
<tr>
<td>90°</td>
<td></td>
</tr>
<tr>
<td>1-PR</td>
<td>3000 lbs.</td>
</tr>
<tr>
<td>4-PR</td>
<td>6000 lbs.</td>
</tr>
</tbody>
</table>

Note: Recommended dimensions when used with Type 4-A Pres-Steel Hangers: L = As Required; C = 1-1/2"; T = 2"; R = 1/4" and B = 5° maximum.

**C-25 Adjustable Half Hangers**

![C-25 Clip Detail](image)

**D-1-LA Hook Bolt**

![D-1-LA Hook Bolt](image)

**Note:** Recommended dimensions when used with Type 4-A Pres-Steel Hangers: L = As Required; C = 1-1/2"; T = 2"; R = 1/4" and B = 5° maximum.
Concrete Bridge Forming

C-41 Coil Rod Hangers

C-41 45°

45° End Clip  
Drop  
1/2" Contour Thread

FLANGE WIDTH

C-41

444 wire

Note: Hanger is fabricated 1/2" wider than flange width specified.

When ordering, specify flange width, drop and thread length.

SWL provides a safety factor of approximately 2:1.

C-68 45° Ty-Down Hanger

C-68 45° Ty-Down Hanger

C-63 45° Pres-Steel Hook Hanger

C-63 Pres-Steel Hanger

Selection Chart

<table>
<thead>
<tr>
<th>Type</th>
<th>Safe Working Load</th>
<th>Bolt Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-AB</td>
<td>5000 lbs.</td>
<td>1/2&quot;</td>
</tr>
<tr>
<td>5-AB</td>
<td>5000 lbs.</td>
<td>3/4&quot;</td>
</tr>
</tbody>
</table>

SWL provides a safety factor of approximately 2:1.

When ordering, specify flange width and thickness.
C-49 and C-49-D Bridge Overhang Brackets

Dayton/Richmond Bridge Overhang Brackets are designed with maximum adjustability to meet the varied overhang-forming requirements on structural steel and precast/prestressed concrete beams. The C-49 and C-49-D Bridge Overhang Brackets accommodate an adjustment range of 30" to 70" and can be mounted to steel beams, precast concrete beams and concrete box beams with the appropriate hanger devices. Both of the bracket models can be easily and quickly preset on the ground and then set in place as needed.

C-89 and C-89-L Heavy-Duty Bridge Overhang Brackets

Dayton/Richmond C-89 and C-89-L Heavy-Duty Bridge Overhang Brackets are designed for maximum adjustment and strength to meet the rigors of heavy cantilever/overhang applications. The C-89 bracket features 72" long, four-inch horizontal channels and an overall vertical adjustment range of 27-5/8" to 66-3/4". The C-89-L bracket has 90" long, six-inch horizontal channels and an overall vertical adjustment range of 29-5/8" to 68-3/4".

Both brackets come equipped with nail holes in the top of the horizontal channels for attaching 2x6 or 2x8 lumber (flat), and both brackets have built-in guardrail receptacles for 2x4 guardrail posts.

The C-89 and C-89-L brackets can be used equally well on steel or precast concrete bridge girders with the appropriate 3/4" C-60 45° Pres-Steel Hanger (Type 9-A). The brackets can be shipped "knocked down" for easier handling and shipping, and then preset on the ground at the job site.
C-51 Wall Plate Assembly and C-51-R Adjustable Insert Adapter

The C-51 Wall Plate Assembly and C-51-R Adjustable Insert Adapter are used to mount a C-49 Overhang Bracket directly to a 3/4" diameter insert cast in a precast/prestressed concrete box girder.

C-54 Bridge Overhang Bracket Extender

The C-54 Bridge Overhang Bracket Extender attaches to the end of the C-49 or C-49-D bracket’s horizontal member to extend the usable working surface of the bracket. When used to support a walkway, each overhang bracket is required to have an extender.

C-52 and C-53 Guardrail Receptacles

The C-52 and C-53 Guardrail Receptacles are designed to facilitate placement of guardrail posts on the exterior formwork. The C-52 receptacle bolts securely to the C-54 Bridge Overhang Bracket Extender and accepts 2x4 guardrail posts. The C-53 receptacle attaches to the flat 2x6 which is nailed to the channels of the overhang bracket, and accepts 2x6 guardrail posts.
Concrete Bridge Forming

**Bridge Jacks**

**Capacity:**
50 KIPS at 2-1/2:1

**Friction Collars**

<table>
<thead>
<tr>
<th>Capacity Per Screw</th>
<th>18k</th>
<th>27k</th>
<th>36k</th>
<th>54k</th>
<th>72k</th>
<th>108k</th>
<th>144k</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter of Screw</td>
<td>1-1/2</td>
<td>1-3/4</td>
<td>2</td>
<td>2-1/4</td>
<td>2-1/2</td>
<td>3</td>
<td>3-1/2</td>
</tr>
<tr>
<td>Tension Bolt Diameter</td>
<td>7/8</td>
<td>7/8</td>
<td>7/8</td>
<td>1-1/4</td>
<td>1-1/4</td>
<td>1-1/4</td>
<td>1-1/4</td>
</tr>
<tr>
<td>Qty. of Tension Bolts</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>6</td>
<td>8</td>
<td>12</td>
<td>16</td>
</tr>
<tr>
<td>Normal Height For Head</td>
<td>7-1/2</td>
<td>8</td>
<td>8-1/2</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>13</td>
</tr>
</tbody>
</table>

- All capacities have 3:1 safety factor to ultimate strength.
- The friction collar should be field tested to 1-1/2 times the maximum intended load for each job.
- Both sides of the friction collar must be loaded equally.

**Bracket Jacks**

<table>
<thead>
<tr>
<th>Capacity Per Screw</th>
<th>20k</th>
<th>30k</th>
<th>45k</th>
<th>60k</th>
<th>80k</th>
<th>105k</th>
<th>125k</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter of Screw</td>
<td>1-1/2</td>
<td>1-3/4</td>
<td>2</td>
<td>2-1/4</td>
<td>2-1/2</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Thru-Bolt Diameter</td>
<td>1</td>
<td>1-1/4</td>
<td>1-1/2</td>
<td>1-3/4</td>
<td>2</td>
<td>2-1/4</td>
<td>2-1/2</td>
</tr>
<tr>
<td>Torque Thru-Bolt Ft.-Lbs.</td>
<td>260</td>
<td>450</td>
<td>780</td>
<td>1400</td>
<td>2100</td>
<td>2900</td>
<td>3900</td>
</tr>
<tr>
<td>Thru-Bolt Centers</td>
<td>7&quot;</td>
<td>8&quot;</td>
<td>9&quot;</td>
<td>10&quot;</td>
<td>11&quot;</td>
<td>12-1/4&quot;</td>
<td>13-1/2&quot;</td>
</tr>
<tr>
<td>Set Back From Wall</td>
<td>4-1/2, 4-1/2, 4-1/2, 4-1/2, 4-1/2, 4-1/2, 4-1/2, 7-1/2, 7-1/2, 7-1/2, 7-1/2, 7-1/2, 7-1/2, 10-1/2, 10-1/2, 10-1/2, 10-1/2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height Adjustment Ft.*</td>
<td>7 to 13</td>
<td>8 to 14</td>
<td>9-1/2 to 15-1/2</td>
<td>11 to 17</td>
<td>12 to 18</td>
<td>14 to 20</td>
<td>14 to 20</td>
</tr>
</tbody>
</table>

* Center of thru bolt to top of jack.

All capacities have 3:1 safety factor to ultimate strength.