Interior Hangers

Application

Interior bridge deck hangers are typically fabricated using two heavy duty sheet metal end clips that have been electrically resistance welded to an appropriate sized wire or formed metal connecting strut. In most cases, the end clips used on interior hangers locate two coil bolts, one on each side of the bridge beam, at 90° to the top surface of the beam. These hangers can be used on rolled structural steel beams, fabricated steel plate girders or precast/prestressed concrete girders.

On occasion, there is a need for an interior half hanger that may be welded to the top flange of a steel beam, attached to the shear studs on a steel beam or the rebar shear connectors on concrete girders. However, most DOTs specifications prohibit any type of field welding to flanges in tension zones, restricting welding to compression zones only. When this restriction is encountered, several types of clip-on hangers are available for use.

Hangers are placed at predetermined locations on top of the interior bay beams and support the formwork, as well as all construction materials and workers during the installation phase of the formwork construction process. Once the formwork has been completed and concrete is placed, the interior hangers support the weight of the freshly placed concrete. After the concrete reaches a specified strength, hangers no longer serve a purpose and the coil bolts and washers can be removed allowing the formwork to be removed.

All interior hangers are identified by the shape of the end section used in the manufacture of the hanger. Unless otherwise noted, all end sections are designed to accept a 1/2" diameter coil bolt or coil rod.
Interior Hangers

**C-60 Type 1 Pres-Steel Hanger**

When a bridge deck is designed with a fillet that extends a short distance away from the edge of the beam, as shown in the sketch below, this hanger is often selected for use. The hanger is designed to allow 1/8" maximum clearance between the edge of the beam and the supporting 1/2" diameter coil bolts.

To adjust the bridge deck forming to grade, all the user has to do is turn the coil nuts, which will raise or lower the formwork as needed. When adjusting the formwork to grade, care must be taken to ensure that the thread penetration does not become less than 1/2" when measured from the top of the coil nut.

To avoid decreasing the safe working of the hanger, full bearing of the end clips is required. Hangers must be equally loaded on both sides to prevent formwork from tipping.

As the flanges of bridge beams often vary in width, it is essential to check the exact width of the flanges prior to ordering hangers.

**To Order:**
Specify: (1) quantity, (2) name, (3) flange width.

**Example:**
759 pcs. C-60 Type 1 Pres-Steel Hanger for 16" Flange.

---

**Adjustable Coil Bolt Assembly**

**Fixed Length Coil Bolt Assembly**

---

**Safe Working Load**
3,500 lbs. per Side

SWL provides a factor of safety of approximately 2 to 1.

**WARNING:** Hangers must be equally loaded on both sides.
**Interior Hangers**

**C-60 Type 2 Pres-Steel Hanger**

The Type 2 hanger is similar to the Type 1 hanger, except it is designed to be used where the deck has up to a 1” haunch. 1/8” maximum clearance between the edge of the beam and the 1/2” diameter coil bolts. To avoid decreasing the safe working load of the hanger, full bearing of the end clips is required. Hangers must be equally loaded on both sides to prevent formwork from tipping.

**To Order:**
Specify: (1) quantity, (2) name, (3) flange width.

**Example:**
750 pcs. C-60 Type 2 Pres-Steel Hanger for 12" Flange.

**Safe Working Load**
2,375 lbs. per Side

SWL provides a factor of safety of approximately 2 to 1.

**WARNING:** Hangers must be equally loaded on both sides.

---

**C-60 Type 3 Pres-Steel Hanger**

Designed for a 2 1/2” maximum haunch. Uses a corrugated strap to connect the end clips, which are bent outward to provide stability under load. 1/8” maximum clearance between the edge of the beam and the 1/2” diameter coil bolts.

**To Order:**
Specify: (1) quantity, (2) name, (3) flange width.

**Example:**
570 pcs. C-60 Type 3 Pres-Steel Hanger for 18" Flange.

**Safe Working Load**
2,500 lbs. per Side

SWL provides a factor of safety of approximately 2 to 1.

**WARNING:** Hangers must be equally loaded on both sides.
Interior Hangers

C-60 Type 4 Pres-Steel Hanger

The C-60 Type 4 Pres-Steel Hanger is a heavy duty hanger designed to be used when there is a fillet next to the beam flange. The hanger is manufactured using two 90° end sections that are electrically resistance welded to a 0.440” diameter wire strut. The end clips accepts 1/2” diameter coil rod and/or bolts which along with the coil nuts and washers support the interior formwork loads.

Due to the Interlock design of this hanger, it is very important that the user is aware of the exact flange widths prior to ordering hangers. Once on the jobsite, if the flange width is too wide, not allowing the hanger to be positioned on the flange as shown below, the hanger may be used with the Interlock ends pointing up instead of down.

The Interlock portion of the End Clip provides a reaction point that aids in reducing bending of the support bolts when hangers are used on extremely wide flanges.

To Order:
Specify: (1) quantity, (2) name, (3) flange width.
Example:
1,234 pcs. C-60 Type 4 Pres-Steel Hanger for 12” flange.

Safe Working Load
6,000 lbs. per Side

S.W.L. provides a factor of safety of approximately 2 to 1.

WARNING: Hangers must be equally loaded on both sides.
Interior Hangers

C-60 Type 5 Pres-Steel Hanger

This hanger is exactly like the Type 4 hanger except it does not have the Interlock style end clips.

Use with two 1/2" diameter coil rod and/or bolts which along with the coil nuts and washers support the interior formwork loads.

**To Order:**
Specify: (1) quantity, (2) name, (3) flange width.

**Example:**
1,640 pcs. C-60 Type 5 Pres-Steel Hanger for 15° flange.

**Safe Working Load**
6,000 lbs. per Side

**WARNING:** Hangers must be equally loaded on both sides.

C-60 Type 7 Pres-Steel Hanger

The C-60 Type 7 Pres-Steel Hanger is similar to the standard Type 1 hanger but has the capacity to accommodate haunch heights up to 1 1/2".

**Note:** The C-60 Type 7 Pres-Steel Hanger is designed to be used with full bearing under the end sections. It is essential to check the exact beam width dimensions before ordering.

**To Order:**
Specify: (1) quantity, (2) name, (3) flange width.

**Example:**
1,000 pcs. C-60 Type 7 Pres-Steel Hanger, for 18" flange.

**Safe Working Load**
2,375 lbs. per Side

**WARNING:** Hangers must be equally loaded on both sides.

C-60 Type 8 Pres-Steel Hanger

The Type 8 Press-Steel hanger is similar to the standard Type 1 except the two end clips are designed to angle the 1/2" diameter bolts at 15° from vertical. It is available in two different versions, a standard version or a heavy version. The standard version uses a 0.375" diameter wire to connect the end clips while the heavy version uses a 0.440" diameter wire.

This hanger design offers the bridge contractor an advantage on certain concrete girders, as it allows additional clearance below the formwork to support ledgers. An B-42 Batter Washer is recommended for use beneath the ledgers, which will allow for proper bearing of the head of the 1/2" diameter coil bolt.

**Safe Working Load**
Standard Version - 4,500 lbs. per Side
Heavy Version - 6,000 lbs. per Side

**WARNING:** Hangers must be equally loaded on both sides.

**To Order:**
Specify: (1) quantity, (2) name, (3) flange width.

**Example:**
1,640 pcs. C-60 Type 8 Pres-Steel Hanger for 18" flange.
**Interior Hangers**

**C-60 Type 9 Pres-Steel Hanger**

The Type 9 Press-Steel hanger is designed especially to support heavy forming loads using 3/4” diameter coil bolts or coil rods. The hanger is fabricated using a 3/4” diameter rod connecting two 90° end clips that have been formed from 3/16” thick material.

In order to achieve the rated safe working load of 11,300 lbs. per side, 3/4” diameter B-13-H Heavy Coil Nuts that measure 1 1/4” across flats are required. If the hanger is used with standard 3/4” diameter B-13 Coil Nuts, the safe working load will be reduced to 8,000 lbs. per side.

**To Order:**
Specify: (1) quantity, (2) name, (3) flange width.
**Example:**
600 pcs. C-60 Type 9 Pres-Steel Hanger for 24” flange.

**Safe Working Loads:**

<table>
<thead>
<tr>
<th>Safe Working Load</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>11,300 lbs. per Side</td>
<td>with 3/4” B-13-H Coil Nuts</td>
</tr>
<tr>
<td>8,000 lbs. per Side</td>
<td>with 3/4” B-13 Coil Nuts</td>
</tr>
</tbody>
</table>

S.W.L. provides a factor of safety of approximately 2 to 1.

**WARNING:** Hangers must be equally loaded on both sides.

---

**C-41 Coil Rod Hanger**

This hanger provides a simple, yet strong method of suspending formwork from interior bridge beams. The formwork is adjusted to grade, after the ledgers are installed, by the worker reaching under the ledgers and adjusting the coil nut – raising or lowering the ledgers as required.

Once the formwork has been stripped, a length of pipe is placed over the extended leg and rotated back and forth until it breaks at the provided break back.

Hangers are fabricated 1/2” wider than the flange width specified. A 1” break back is standard.

When used on steel beams or girders, legs formed at 90° to the top flange are recommended. For concrete girders or box beams, legs formed at 15° to vertical are suggested.

**To Order:**
Specify: (1) quantity, (2) name, (3) flange width, (4) total drop, (5) length of thread, (6) bend angle

**Example:**
900 pcs. C-41 Coil Rod Hanger, 12” flange, 18” total drop, 8” of thread and a 15 degree angle.

**Safe Working Load**

4,500 lbs. per Side

S.W.L. provides a factor of safety of approximately 2 to 1.

**WARNING:** Hangers must be equally loaded on both sides.
C-24 Type S Pres-Steel Steel Beam Half Hangers

C-24 Type S Pres-Steel Steel Beam Half Hangers are produced using a single 1/2" end clip welded to a formed wire strut and are used where conditions prevent the use of regular interior hangers. All of the C-24 Interior Half Hangers utilize a 90° end clip except for the Type 8-S Half Hanger which use a 15° end clip.

Type S Half Hangers are designed for use on steel beams. The standard Type S Half Hanger uses a wire strut that measure 6" from the centerline of the bolt to the end of the strut.

C-24 Type C Pres-Steel Concrete Beam Half Hangers

The Type C Pres-Steel Half Hanger used on concrete beams are the same as the above Half Hangers with the exception that the standard wire strut is 9" long.

These concrete beam half hangers are designed to be welded to the rebar shear connectors that extend from the top surface of a precast concrete girder.

More weld and hanger capacity can be achieved by welding a suitably sized steel plate to the rebar shear connectors, using four vertical fillet welds, to weld the plate to the shear connectors. Then weld the strut wire to the steel plate. May be applied to steel beams by welding to the shear connector studs.

This application is shown in the Special Precast Concrete Girder Application To the right.

Please see the General and Technical Section of this handbook for additional information on field welding of half hangers.
C-24 Pres-Steel Half Hangers

Proper welding procedures must be used when welding half hangers, as field welding may limit the safe working load of a hanger to less than the maximum SWL listed. Field tests should be conducted to establish the actual safe working load of the hanger.

<table>
<thead>
<tr>
<th>Designation</th>
<th>Sketch</th>
<th>Strut Configuration</th>
<th>Standard Length</th>
<th>Haunch</th>
<th>S.W.L.</th>
<th>B Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-C</td>
<td></td>
<td>Jogged</td>
<td>9&quot;</td>
<td>—</td>
<td>3,000</td>
<td>2&quot;</td>
</tr>
<tr>
<td>1-S</td>
<td></td>
<td>Jogged</td>
<td>6&quot;</td>
<td>—</td>
<td>3,000</td>
<td>2&quot;</td>
</tr>
<tr>
<td>2-C</td>
<td></td>
<td>Jogged</td>
<td>9&quot;</td>
<td>1&quot;</td>
<td>2,375</td>
<td>3&quot;</td>
</tr>
<tr>
<td>2-S</td>
<td></td>
<td>Jogged</td>
<td>6&quot;</td>
<td>1&quot;</td>
<td>2,375</td>
<td>3&quot;</td>
</tr>
<tr>
<td>3-S</td>
<td></td>
<td>Jogged</td>
<td>6&quot;</td>
<td>2½&quot;</td>
<td>2,000</td>
<td>4½&quot;</td>
</tr>
<tr>
<td>4-C</td>
<td></td>
<td>Straight</td>
<td>9&quot;</td>
<td>—</td>
<td>6,000</td>
<td>2&quot;</td>
</tr>
<tr>
<td>4-S</td>
<td></td>
<td>Straight</td>
<td>6&quot;</td>
<td>—</td>
<td>6,000</td>
<td>2&quot;</td>
</tr>
<tr>
<td>7-C</td>
<td></td>
<td>Jogged</td>
<td>9&quot;</td>
<td>1½&quot;</td>
<td>2,375</td>
<td>3½&quot;</td>
</tr>
<tr>
<td>7-S</td>
<td></td>
<td>Jogged</td>
<td>6&quot;</td>
<td>1½&quot;</td>
<td>2,375</td>
<td>3½&quot;</td>
</tr>
<tr>
<td>8-C</td>
<td></td>
<td>Jogged</td>
<td>9&quot;</td>
<td>—</td>
<td>3,000</td>
<td>2½&quot;</td>
</tr>
<tr>
<td>8-S</td>
<td></td>
<td>Jogged</td>
<td>6&quot;</td>
<td>—</td>
<td>3,000</td>
<td>2½&quot;</td>
</tr>
</tbody>
</table>

Coil bolt or coil rod must penetrate through the coil nut a minimum of 1/2".

"B" dimension is distance from top of girder to top of coil rod (see previous page for diagram).

When used on concrete beams, the safe working load shown is based on a minimum concrete flange thickness of 5" and the normal weight concrete having reached a minimum compressive strength of 5,000 psi.

For hangers used on concrete beams with conditions not meeting above requirements please contact your nearest Dayton Superior Technical Service Department. Please see inside back cover for locations.

Longer length strut wire is available on request.

To Order:
Specify: (1) quantity, (2) name, (3) strut length

Example:
57 pcs. C-24 Type-8C Pres-Steel Half Hanger with 12" long strut
Precast half hangers were developed for use in wide precast concrete girders. They are currently used in all types of precast concrete bridge girders and beams.

Half hangers are installed by the precaster during the girder production process at predetermined centers provided by the bridge contractor.

Care must be exercised by the precaster to install these hangers so there will be a 1/8" clearance between the edge of the beam and the 1/2" coil bolt.

The half hangers must be positioned so the end clip will bear on the top surface of the beam. Failure to properly install these half hangers can result in a reduction in the hangers safe working load.

Type 1PR and Type 4PR are used when a fillet is required next to the beam.

The Type 3PR Half hanger is used with a maximum of 2 1/2" haunch.

When additional clearance is required beneath the ledgers for the supporting hardware, the Type 8PR Half hanger will support the coil rod at a 15° angle off of vertical.

SWL provides approximately a 2 to 1 factor of safety when hangers are installed in a beam having a concrete flange thickness of 5" and the normal weight concrete having achieved a minimum compressive strength or 5,000 psi.
C-25 Pres-Steel Adjustable Half Hanger

The C-25 Pres-Steel Adjustable Half Hanger is available in three types:

- **Type 1 Hanger** – 90° end clip
- **Type 2 Hanger** – 90° end clip with 1” haunch
- **Type 7 Hanger** – 90° end clip with 1 1/2” haunch
- **Type 8 Hanger** – 15° end clip

Each half hanger consists of a 1/2” end clip welded to a length of 1/2” diameter Coil Rod, Stirrup Clips and 1/2” Coil Nuts.

These half hangers are used to support interior deck formwork when one-sided forming is required and welding to the shear connectors or flange is not permitted by the DOT.

Stirrup Clips are available in #3, #4, #5, #6 and #7 rebar sizes or 3/8”, 1/2”, 5/8”, 3/4” and 7/8” stud diameters as required.

<table>
<thead>
<tr>
<th>Type</th>
<th>Safe Working Load</th>
<th>Maximum Haunch</th>
<th>Minimum Length</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3,000 lbs.</td>
<td>0”</td>
<td>8”</td>
</tr>
<tr>
<td>2</td>
<td>2,000 lbs.</td>
<td>1”</td>
<td>8”</td>
</tr>
<tr>
<td>7</td>
<td>2,000 lbs.</td>
<td>1 1/2”</td>
<td>8”</td>
</tr>
<tr>
<td>8</td>
<td>2,000 lbs.</td>
<td>0”</td>
<td>8”</td>
</tr>
</tbody>
</table>

SWL provides a safety factor of approximately 2 to 1

SAFETY NOTE:
In order to develop the safe working loads listed, two Coil Nuts must compress each Stirrup Clip securely to the rebar stirrup or shear stud. Failure to accomplish a secure connection will greatly reduce the safe working load of the hanger.

To Order:
Specify: (1) quantity, (2) name, (3) type, (4) Length, (5) number of clips and (6) clip size.

Example:
125 pcs. C-25 Type 2 Pres-Steel Adjustable Half Hanger, 12” long with 2 clips for #6 Rebar.
C-63 Pres-Steel Hook Half Hanger

Several types of hook half hangers are available for use with metal or prestressed concrete stay-in-place interior deck forms. The beam hook is designed to slip over the edge of a steel beam having a minimum flange thickness of ½”.

These half hangers are manufactured using a 90° end clip that accepts a ½” diameter coil bolt. The end clip is electrically resistance welded to a wire strut which is formed and welded to a steel beam hook, providing 180° reinforcement to the hook for increased safety.

SWL’s provides approximately a 2 to 1 factor of safety.

C-63 Type 1-B Hanger
3,500 lbs. safe working load.
Designed to form a bridge deck having a fillet next to the beam.

C-63 Type 2-B Hanger
2,375 lbs. safe working load.
Designed to accommodate haunch heights of up to 1”.

C-63 Type 4-B Hanger
5,000 lbs. safe working load.
Heavy duty half hanger designed for use to form a bridge deck having a fillet next to the beam.

To Order:
Specify: (1) quantity, (2) name, (3) type, (4) flange width, (5) flange thickness.

Example:
175 pcs. C-63 Type 2 Pres-Steel Hook Half Hanger, for 18” flange width x 1-1/4” thick.
Interior Hangers

C-68 90° Type 4B Ty-Down Half Hanger

This is an excellent hanger for applications requiring a heavy duty interior half hanger. Normally supplied hot dipped galvanized after fabrication as a portion of the hanger will normally not be encased in the concrete deck leaving the exposed portion to rapidly corrode if not protected with a heavy zinc coating.

This hanger is rated with a safe working load of 6,000 lbs. and is designed to work with 1/2" diameter coil bolt.

SWL provides approximately a 2 to 1 factor of safety.

To Order:
Specify: (1) quantity, (2) name, (3) type, (4) flange width, (5) flange thickness and (6) finish.

Example:
175 pcs. C-68 Type 4 Ty-Down Half Hanger, for 14" flange width x 1-1/8" thick, HDG.

C-65 Adjustable Joist Hanger

As wales are not required when using this system, an immediate savings in lumber cost is realized.

Available in two sizes, for 2x or 4x joist lumber. Both models are fully adjustable and are adaptable to concrete girders, box culverts and steel beams/girders. The A-65 Adjustable Joist Hangers are 100% reusable and are rated at 3,000 lbs. safe working load with an approximate 2 to 1 factor of safety.

No welding or additional working parts are required. Hanger are installed by simply placing the support angle on top of the beam flange and inserting the joist. Turn the adjusting handle to raise or lower the formwork to its proper elevation.

Stripping of the formwork is equally easy. Removal of the Release Pin allows Jack-Screw Assembly to be taken out, allowing the joist to be stripped.

Concrete should be placed at mid span and be evenly distributed outward towards the joist hanger C-65-S Cover Shields are available for ease of hanger removal.
C-65 Adjustable Joist Hanger Typical Applications
## C-65 Adjustable Joist Hanger Spacing Chart

This chart is used to determine the allowable spacing for the C-65 hanger when the maximum clear span and concrete thickness is known. Design load is based on 160 pounds per cubic foot concrete and 50 pounds per square foot live load. This chart is based on the use of Southern Pine, Grade #2 or equivalent strength lumber joists.

<table>
<thead>
<tr>
<th>Concrete Thickness</th>
<th>Design Load</th>
<th>Joist Lumber</th>
<th>Clear Span</th>
<th>Joist Spacings Based on 3/4&quot; Plyform</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>5′-0″</td>
<td>6′-0″</td>
<td>7′-0″</td>
</tr>
<tr>
<td>5″</td>
<td>116.7 psf</td>
<td>2x6</td>
<td>23″</td>
<td>21″</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2x8</td>
<td>23″</td>
<td>23″</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2x10</td>
<td>23″</td>
<td>23″</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2x12</td>
<td>23″</td>
<td>23″</td>
</tr>
<tr>
<td>6″</td>
<td>130.0 psf</td>
<td>2x6</td>
<td>22″</td>
<td>18″</td>
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<tr>
<td></td>
<td></td>
<td>2x8</td>
<td>22″</td>
<td>22″</td>
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<td>22″</td>
<td>22″</td>
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<tr>
<td></td>
<td></td>
<td>2x12</td>
<td>22″</td>
<td>22″</td>
</tr>
<tr>
<td>8″</td>
<td>156.7 psf</td>
<td>2x6</td>
<td>21″</td>
<td>15″</td>
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<td></td>
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<td></td>
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<td>2x12</td>
<td>20″</td>
<td>20″</td>
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<td>12″</td>
<td>210.0 psf</td>
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<td></td>
<td>4x12</td>
<td>21″</td>
<td>21″</td>
</tr>
<tr>
<td>10″</td>
<td>183.3 psf</td>
<td>4x6</td>
<td>20″</td>
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<td>20″</td>
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<tr>
<td></td>
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<td>4x12</td>
<td>20″</td>
<td>20″</td>
</tr>
<tr>
<td>12″</td>
<td>210.0 psf</td>
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<td>19″</td>
<td>19″</td>
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<td>19″</td>
<td>19″</td>
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<tr>
<td></td>
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<tr>
<td></td>
<td></td>
<td>4x12</td>
<td>19″</td>
<td>19″</td>
</tr>
</tbody>
</table>
## Interior Hangers

### C-44 and C-45 Con-Beam Hanger

![Typical Con-Beam Hanger](image)

<table>
<thead>
<tr>
<th>Type</th>
<th>Overhang</th>
<th>Setback</th>
<th>Haunch</th>
<th>Leg Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-44</td>
<td>⅛&quot;</td>
<td>1¼&quot;</td>
<td>4&quot;</td>
<td>4¼&quot;</td>
</tr>
<tr>
<td>C-44</td>
<td>⅛&quot;</td>
<td>1&quot;</td>
<td>3¼&quot;</td>
<td>4¼&quot;</td>
</tr>
<tr>
<td>C-44</td>
<td>⅜&quot;</td>
<td>¾&quot;</td>
<td>2½&quot;</td>
<td>4¼&quot;</td>
</tr>
<tr>
<td>C-44</td>
<td>1 ⅛&quot;</td>
<td>½&quot;</td>
<td>1&quot;</td>
<td>4¼&quot;</td>
</tr>
<tr>
<td>C-44</td>
<td>1 ⅜&quot;</td>
<td>¼&quot;</td>
<td>0&quot;</td>
<td>4¼&quot;</td>
</tr>
<tr>
<td>C-45</td>
<td>⅜&quot;</td>
<td>1½&quot;</td>
<td>5&quot;</td>
<td>5¼&quot;</td>
</tr>
<tr>
<td>C-45</td>
<td>¾&quot;</td>
<td>1¼&quot;</td>
<td>4½&quot;</td>
<td>5¼&quot;</td>
</tr>
<tr>
<td>C-45</td>
<td>⅛&quot;</td>
<td>1&quot;</td>
<td>3¼&quot;</td>
<td>5¼&quot;</td>
</tr>
<tr>
<td>C-45</td>
<td>1⅛&quot;</td>
<td>⅛&quot;</td>
<td>2&quot;</td>
<td>5¼&quot;</td>
</tr>
<tr>
<td>C-45</td>
<td>1 ⅜&quot;</td>
<td>½&quot;</td>
<td>1&quot;</td>
<td>5¼&quot;</td>
</tr>
<tr>
<td>C-45</td>
<td>1 ⅝&quot;</td>
<td>¼&quot;</td>
<td>0&quot;</td>
<td>5¼&quot;</td>
</tr>
</tbody>
</table>

**Note:** Dimension “A” is equal to 2 times the overhang plus flange width.

The C-44 and C-45 Con-Beam Hanger is designed to provide coverage of various haunch heights up to 5” and numerous overhang conditions. The top plate of the hanger is fabricated from steel strap and is reinforced with a brace chair on wider hangers. C-44 and C-45 hangers are designed for use with 1/2” Coil Bolts or Coil Rods only.

Con-Beam Hangers are designed for supporting interior formwork only. Do not use for suspending overhang form loads.

---

### Safe Working Load

3,000 lbs. per Side

S.W.L. provides a factor of safety of approximately 2 to 1.

**WARNING:** Hangers must be equally loaded on both sides.

---

### To Order:

Specify: (1) quantity, (2) name, (3) dimension “A”, (4) flange width.

**Example:**

750 pcs. C-44 Con-Beam Hanger, 15⅜” A dimension for 15” flange.
The C-46 Con-Beam Hanger is designed to provide coverage of various haunch heights up to 2 7/8" and numerous overhang conditions. The top plate of the hanger is fabricated from steel strap and is reinforced with a brace chair on wider hangers. C-46 hangers are designed for use with 1/2" Coil Bolts or Coil Rods only.

Con-Beam Hangers are designed for supporting interior formwork only. Do not use for suspending overhang form loads.

<table>
<thead>
<tr>
<th>C-46 Con-Beam Hanger</th>
<th>Haunch</th>
<th>Overhang</th>
<th>Setback</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 7/8&quot;</td>
<td>3/8&quot;</td>
<td>1&quot;</td>
<td></td>
</tr>
<tr>
<td>2 1/2&quot;</td>
<td>1/2&quot;</td>
<td>3/4&quot;</td>
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<tr>
<td>2&quot;</td>
<td>1/2&quot;</td>
<td>1/2&quot;</td>
<td></td>
</tr>
<tr>
<td>1 5/8&quot;</td>
<td>1&quot;</td>
<td>3/8&quot;</td>
<td></td>
</tr>
</tbody>
</table>

Note: Dimension “A” is equal to 2 times the overhang plus flange width.

To Order:
Specify: (1) quantity, (2) name, (3) dimension “A”, (4) flange width.

Example:
750 pcs. C-46 Con-Beam Hanger, 22" A dimension for 20" flange.

Safe Working Load
3,000 lbs. per Side

S.W.L. provides a factor of safety of approximately 2 to 1.

Warning: Hangers must be equally loaded on both sides.
**C-47 Con-Beam Hanger**

The C-47 Con-Beam Hanger is designed to provide coverage of various haunch heights up to 2 1/2" and overhang conditions up to 1 3/4" away from the beam side. The top plate of the hanger is fabricated from steel strap and is reinforced with a brace chair on wider hangers. C-47 hangers are designed for use with 1/2" Coil Bolts or Coil Rods only.

Con-Beam Hangers are designed for supporting interior formwork only. Do not use for suspending overhang form loads.

**Note:** Dimension “A” is equal to 2 times the overhang plus flange width.
**WARNING:** Hangers must be equally loaded on both sides.

The C-47 Con-Beam Hanger is designed to provide coverage of various haunch heights up to 2 1/2" and overhang conditions up to 1 3/4" away from the beam side. The top plate of the hanger is fabricated from steel strap and is reinforced with a brace chair on wider hangers. C-47 hangers are designed for use with 1/2" Coil Bolts or Coil Rods only.

Con-Beam Hangers are designed for supporting interior formwork only. Do not use for suspending overhang form loads.

**Safe Working Load**

**2,000 lbs. per Side**

S.W.L. provides a factor of safety of approximately 2 to 1.

**To Order:**
Specify: (1) quantity, (2) name, (3) dimension “A”, (4) flange width.

**Example:**
750 pcs. C-47 Con-Beam Hanger, 15 1/2" A dimension for 12" flange.
The C-46-H and C-46-TH Half Hangers are designed to be used where conditions prevent the use of standard Con-Beam Hangers. The C-46-H hanger is designed so it can be welded to the top surface of a structural steel bridge beam. It is 5 1/4" from centerline of the bolt hole to the end of the hanger and has an overall height of 3 1/2".

The C-46-TH hanger comes in a standard length of 12" and has an overall height of 4 1/4". The hanger is designed to be welded to the stirrups of a precast concrete bridge beam.

**Caution:** Care must be exercised when welding hangers. Field welding may alter the strength of the wire strut and may limit the hanger to a much lower safe working load than that shown in the chart. Field tests should be conducted to verify actual safe working loads. See related note on welding in the General and Technical Information Section.

**To Order:**
Specify: (1) quantity, (2) name

**Example:**
750 pcs. C-46-H Con-Beam Half Hanger,
C-28 Haunch Carrier

The C-28 Haunch Carrier is used to support haunch or filler strips to simplify framing, erection and stripping. The C-28 Haunch Carrier is available for interior and exterior forming configurations and is equipped with a standard 1” breakback capability similar to Snap Ties.

Do not weld haunch carrier to beam. Do not stand on trim strips supported only by the Haunch Carrier.

To Order:
Specify: (1) quantity, (2) name, (3) types, (4) beam width, (5) “A” and “C” (Exterior only) dimensions, (6) break back.

Example:
500 pcs. C-28 Haunch Carrier, Exterior Type, 12” beam width, “A” = 1¾” “C” = ¾”, Break Back 1”.

Safe Working Load
100 lbs. per Side

S.W.L. provides a factor of safety of approximately 2 to 1.

C-29 Fillet Clip

The C-29 Fillet Clip is used to support haunch or filler strips by bolting through the form with a ½” Coil Bolt (not included). The C-29 clip is available for flange thickness of ¾” or greater and can be special ordered with plastic protected legs, if required.

Do not stand on trim strips supported only by the fillet clips.

To Order:
Specify: (1) quantity, (2) name.

Example:
200 pcs. C-29 Fillet Clips.

Safe Working Load
350 lbs. per Clip

S.W.L. provides a factor of safety of approximately 2 to 1.