STEEL BEAM CLAMPS

ANSI / FM 1950 Seismic Tested

City Of Los Angeles Approved
COLA Report LARR-26090

NO KNOWN EQUAL

The ULTIMATE Strut & Single Hanger Beam Clamps

- **Visual Inspection Compliant**
- **Works On Fire Proofed Beams**
- **Gravity & Seismic Usage Tested**
- **50% Or More Labor Savings**
- **Ideal For Strut Ceiling Grids**
Ideal For Fire Proofed Beams
SBC158 Beam Clamps

Cost Effective - CODE Compliance - No Known Equal

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES</th>
<th>STRUT BEAM CLAMP</th>
<th>FITS TREADED ROD SIZES</th>
<th><strong>FITS SINGLE STRUT SIZES</strong></th>
<th><strong>FITS BACK-TO-BACK STRUT SIZES</strong></th>
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<th>WEIGHT PER 100</th>
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<tr>
<td>SBC158</td>
<td>See Fitment Detail (SBC158-FRD)</td>
<td>3/8&quot;</td>
<td>1/2&quot;</td>
<td>5/8&quot;</td>
<td>13/16&quot; x 1-5/8&quot;</td>
<td>1&quot; x 1-5/8&quot;</td>
<td>1-3/8&quot; x 1-5/8&quot;</td>
</tr>
<tr>
<td>SBC158-C</td>
<td>See Fitment Detail (SBC158-C-FRD)</td>
<td>3/8&quot;</td>
<td>1/2&quot;</td>
<td>5/8&quot;</td>
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<tr>
<td>SBC158L</td>
<td>See Fitment Detail (SBC158L-FRD)</td>
<td>3/8&quot;</td>
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</tr>
</tbody>
</table>

Contact: Sales@NoDrillHangers.com
Information subject to change without notice. **Strut size fitment varies per beam or joist flange flange thickness.

Contact: Sales@NoDrillHangers.com
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CONTINUED NEXT PAGE
Seismic tension and compression capacities where derived from ANSI/FM 1950-2016 testing performed by Factory Mutual. ANSI/FM 1950-2016 testing meets the requirements of FM 1950-2010 and FM 1950-2013. Seismic (LRFD) tension and compression profiles were determined using the data provided by Factory Mutual. Listed (LRFD) seismic capacities can be converted to (ASD) capacities by dividing by (1.4). Seismic capacities listed within these details only take into consideration the identified beam clamp and/or strut member. Capacities for all other items, including but not limited to, steel beams and joist, threaded rods, pipe / conduit clamps, etc., are not taken into consideration. The following controls and parameters where used to develop listed seismic tension and compression capacities.

b.) Maximum strut deflection at applied load = 1 inch.
c.) Maximum strut (LRFD) design capacity based on 70% of minimum material yield stress.
d.) Section properties per detail identified strut manufacture literature.

Gravity tension capacities were determined through testing performed on a calibrated universal tensile machine at Anvil International’s Research & Development facility in North Kingstown, RI. Test data was analyzed in accordance with ANSI/MSS SP-58. Gravity tension capacities listed within these details only take into consideration the identified beam clamp and/or strut member. Threaded rod tension capacities are based on ANSI/MSS SP-58, Table 3. Capacities for all other items, including but not limited to, steel beams and joist, pipe / conduit clamps, etc., are not taken into consideration. The follow controls and parameters where used to develop listed MSS SP-58 gravity tension capacities.

e.) Tested capacities by the derived safety factors listed within ANSI/MSS SP-58. Maximum capacities not to exceed 67% of the yield load.
f.) Maximum strut design capacity based on 12,900 psi allowable material stress within ANSI/MSS SP-58, referenced by ASME B31.1.
g.) Section properties per detail identified strut manufacture literature.

Allowable stresses were derived from ANSI/MSS SP-58 and ASME B31.1 and apply a minimum 3.5 times safety factor to the design. The Metal Framing Manufacturers Association’s (MFMA) 25,000 psi allowable stress applies a minimum 1.8 times safety factor and exceeds 75% of the material’s minimum yield. MFMA’s allowable design stress does not meet the design requirements of ANSI/MSS SP-58 and therefore was not used to determine listed gravity tension capacities.

For compliance with NFPA-13 (Safety Factor = 5 plus 250 lbs.) gravity hanger building attached component design requirement, take the detail applicable ANSI/MSS SP-58 capacity and multiply it by (3.5) and match it to an equal or lesser Minimum Check Load identified below.

1" & 1-1/4" pipe size ---- 430 lbs Minimum Check Load.
1-1/2" pipe size -------- 520 lbs Minimum Check Load.
2" pipe size ------------ 635 lbs Minimum Check Load.
2-1/2" pipe size -------- 940 lbs Minimum Check Load.
3" pipe size ------------ 1,060 lbs Minimum Check Load.
3-1/2" pipe size ------ 1,255 lbs Minimum Check Load.
4" pipe size ----------- 1,500 lbs Minimum Check Load.
5" pipe size ----------- 2,000 lbs Minimum Check Load.
6" pipe size ----------- 2,650 lbs Minimum Check Load.
8" pipe size ----------- 4,050 lbs Minimum Check Load.
10" pipe size --------- 5,855 lbs Minimum Check Load.
12" pipe size --------- 7,900 lbs Minimum Check Load.

Capacities per NFPA-13 maximum hanger spans using schedule 40 steel pipe full of water and a (Safety Factor = 5 plus 250 lbs.). Project specific hanger spacing and pipe schedule capacities can be engineered provided a (Safety Factor = 5 plus 250 lbs.) is maintained.

SBC GENERAL NOTES
CONTINUED NEXT PAGE
Notice:
Beam Clamp Bolt Shall Be In Full Contact With Inside Back Of Strut Metal. Bolt Shall Not Overhang Or Pass Through Holes, Slots Or Openings In The Back Of The Strut Member. Outside Back Of Strut Shall Be In Full Contact With Underside Of Beam Flange Steel.
Solid Back Strut Without Holes Or Slots Is Not Referenced Within This Notice, As The Placement Of The Clamp Bolt Between The Openings Is Not Relevant.
Strut Options Have Been Identified Within Badger Installation Details.

(TYP.) (1 Of 1) Badger Industries (SBC158)
Beam Clamp Bolt, Installed In Full Contact With Inside Back Of Strut Metal. See Notice

(TYP.) (1 Of 1) Badger Industries (SBC158)
Beam Clamp Bolt, Installed In Full Contact With Inside Back Of Strut Metal. See Notice

Badger Industries
(SBC158)
Beam Clamp Bolt, (TYP.)
Notice: Attachment Usable For Both Upper And Lower Beam Flange Installations. This Attachment May Or May Not Require Patching Of The Fire Proofing. Consult With Project Structural Engineer Of Record And Authority Having Jurisdiction Prior To Notching Fire Proofing.

Use Depicted Badger Industries (SBC158) Beam Clamp For Flange Thickness (0.1875") Inch, To A Maximum Thickness Of (1.260") Inch.

Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

For Beam Flange Thickness (2.1250") To (3.00") Inch Use Badger Industries Beam Clamp (SBC158L) Or Beam Clamp (SBC158L-C).

Prior To Installation Lower Beam Clamp Bolt To Clear Fire Proofing On Bottom Side Of Flange.

Notch Fire Proofing With Saw Blade To Expose Steel For Placement Of Beam Clamp Legs.

Press Or Hammer Tap Beam Clamp Tight To Edge And Top Of Beam Flange Steel. Tighten Torque-Off Bolt Allowing It To Burrow Through Bottom Of Flange Fire Proofing And Become Tight Against Beam Flange Steel. Continue Tightening Until Torque-Off Head Of Bolt Breaks Away. Inspect To Confirm Beam Clamp Is Tight And Secure To Beam Flange Steel.

Beam Clamp Bolt Shall Be In Full Contact With Beam Flange Steel, (TYP.)

Beam Clamp Upper Legs Shall Be In Full Contact With Beam Flange Steel, (TYP.)

Torque-Off Badger Industries Beam Clamp Bolt Head, (TYP.)

END
SBC158 - Beam Clamp - Fitment Reference Detail

Notice:
- Listed Flange Thickness Applicable For Both Upper And Lower Flanges.
- Actual Beam Clamp With Strut And/Or Threaded Rod Assembly Combinations Shall Be As Engineered By Others. Steel Beam And/Or Joist Are By Others.

SBC158-FRD

(BADGER INDUSTRIES)
SEISMIC BRACE
Perpendicular To Beam Length

Notice:
Listed Flange Thickness Applicable For Both Upper And Lower Flanges.
Actual Seismic Brace Assembly Combinations Shall Be As Engineered By Others. Steel Beam And/Or Joist Are By Others.

SBC158-C Beam Clamp - Fitment Reference Detail
(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
**Notice:**

- Listed Flange Thickness Applicable For Both Upper And Lower Flanges.
- Actual Beam Clamp With Strut And/Or Threaded Rod Assembly Combinations Shall Be As Engineered By Others. Steel Beam And/Or Joist Are By Others.

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**SBC158L Beam Clamp - Fitment Reference Detail**

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
**Notice:**
- Listed Flange Thickness Applicable For Both Upper And Lower Flanges.
- Actual Beam Clamp With Strut And/Or Threaded Rod Assembly Combinations Shall Be As Engineered By Others. Steel Beam And/Or Joist Are By Others.

**Installation Detail**

**SBC158L-C Beam Clamp - Fitment Reference Detail**

- (Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
**BADGER INDUSTRIES**

Seismic Vertical Connection - Single Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)

~ BADGER INDUSTRIES ~

Compliant Per 2016 NFPA-13, Paragraph 9.1.1.2 For Single Hanger Piping 8" And Smaller

**Notice:**

Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away.

**Beam Clamp Bolt**

Shall Be In Full Contact With Beam Flange Steel, (TYP.)

**Badger Industries**

SBC158

<table>
<thead>
<tr>
<th>Beam Clamp Bolt</th>
<th>Vertical Support Rod Size</th>
<th>Maximum Allowable Tension Gravity</th>
<th>Maximum Seismic FpT / FpC (LRFD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158</td>
<td>3/8&quot;</td>
<td>730 lbs.</td>
<td>3,531 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>1/2&quot;</td>
<td>1,350 lbs.</td>
<td></td>
</tr>
<tr>
<td>SBC158</td>
<td>5/8&quot;</td>
<td>1,350 lbs.</td>
<td></td>
</tr>
<tr>
<td>SBC158</td>
<td>3/4&quot;</td>
<td>1,350 lbs.</td>
<td></td>
</tr>
</tbody>
</table>

Compliant Per 2016 NFPA-13, Paragraph 9.1.1.2 For Single Hanger Piping 8" And Smaller

**ASTM A563 Coupler Nut,**

One End Sized To Fit (1/2-13) Beam Clamp Bolt, And One End Sized To Fit Vertical Support Rod. Coupler Nut Thread Engagement Onto Torque-Off Bolt Threads Shall Be Minimum (1/2") Inch. Coupler Nut Shall Not Contact Underside Of Beam Clamp
Badger Industries

Installation Detail

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES</th>
<th>Seismic Hardware Part Number</th>
<th>Vertical Support Rod Size</th>
<th>ANSI / MSS SP-58 Maximum Allowable Tension GRAVITY</th>
<th>ANSI / FM 1950-2016 Maximum SEISMIC Fpt / Fpc (LRFD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158</td>
<td>3/8&quot;</td>
<td>730 lbs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBC158</td>
<td>1/2&quot;</td>
<td>1,350 lbs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBC158</td>
<td>5/8&quot;</td>
<td>2,160 lbs.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compliant Per 2016 NFPA-13, Paragraph 9.1.1.2 For Single Hanger Piping 10" And Smaller

Notice:
- Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away.

Thick Flange Notice:
- Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

"W", "M", "HP" & "L" Section Steel Beams And Joists By Others

Beam Clamp Bolt Shall Be In Full Contact With Beam Flange Steel. (TYP.)

Torque-Off Badger Industries Beam Clamp Bolt Prior To Installation Of Vertical Support Rod. (TYP.)

Upper And Lower Strut Nuts Sized To Fit Vertical Support Rod. Installed Hand Tight Plus (1/4) Turn. Lower Strut Nut Is Not Required For Gravity Vertical Supports Not Required To Resist Uplift Forces. (TYP.)

ASTM A36 Or Better Vertical Support Rod Per Chart. (TYP.)

Fpt / Fpc Per Chart

Gravity Per Chart

Badger SBC158 (TYP.) (1 Of 1) Badger Industries

Patent Pending Beam Clamp. See Thick Flange Notice (No Substitution)

Min. (0.1875") Max. (1.260") Beam Flange Thickness. See Thick Flange Notice

ASTM A36 Or Better Vertical Support Rod Per Chart. (TYP.)

Fpt / Fpc Per Chart

Gravity Per Chart

Badger SBC158

Vertical Support Rod Placement Off-Set At Edge Of Beam Flange Allows For Full Beam Depth Vertical Adjustment. (TYP.)
Notice:

Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away.

**Table: Vertical Support Rod Placement Off-Set At Edge Of Beam Flange Allows For Full Beam Depth Vertical Adjustment, (TYP.)**

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>Vertical Support Rod Size</th>
<th>ANSI / MSS SP-58 Maximum Allowable Tension GRAVITY</th>
<th>ANSI / FM 1950-2016 Maximum SEISMIC Fpt / Fpc (LRFD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158L Or SBC158L-C</td>
<td>3/8&quot;</td>
<td>730 lbs.</td>
<td>2,040 lbs.</td>
</tr>
<tr>
<td>See Flange Thickness Notes</td>
<td>1/2&quot;</td>
<td>1,350 lbs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5/8&quot;</td>
<td>2,160 lbs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3/4&quot;</td>
<td>2,160 lbs.</td>
<td></td>
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</table>

Compliant Per 2016 NFPA-13, Paragraph 9.1.1.2 For Single Hanger Piping 10' And Smaller
## Notice:

Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

### Thick Flange Notice:
Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

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### ~ BADGER INDUSTRIES ~
**Seismic Vertical Connection - Single Beam Clamp Attachment**

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)

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### Installation Detail

**Table: Cantilever End Load**

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>[X] Maximum Per Chart</th>
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</thead>
<tbody>
<tr>
<td>SBC158 4&quot;</td>
<td>316 lbs.</td>
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<tr>
<td>SBC158 5&quot;</td>
<td>271 lbs.</td>
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<tr>
<td>SBC158 6&quot;</td>
<td>237 lbs.</td>
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<tr>
<td>SBC158 7&quot;</td>
<td>211 lbs.</td>
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<tr>
<td>SBC158 8&quot;</td>
<td>190 lbs.</td>
</tr>
<tr>
<td>SBC158 9&quot;</td>
<td>172 lbs.</td>
</tr>
<tr>
<td>SBC158 12&quot;</td>
<td>135 lbs.</td>
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<tr>
<td>SBC158 15&quot;</td>
<td>111 lbs.</td>
</tr>
<tr>
<td>SBC158 18&quot;</td>
<td>95 lbs.</td>
</tr>
<tr>
<td>SBC158 21&quot;</td>
<td>82 lbs.</td>
</tr>
<tr>
<td>SBC158 24&quot;</td>
<td>73 lbs.</td>
</tr>
</tbody>
</table>

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### American National Standard (ANSI) / Middle States Standard (MSS) SP-58

**Seismic Vertical Connection - Single Beam Clamp Attachment**

**Threaded Rod:** (TYP.) 1-5/8"

- **ASTM A36 Or Better Vertical Support Rod**
- **threaded Rod Conn., To Strut**
- **Anvil (AS 200), (AS 200H) Or (AS 200EH)**

**Beam Clamp Bolt:**

- **Torque-Off Badger Industries Beam Clamp Bolt Head, (TYP.)**

**Gravity Per Chart:**

- **(2") Min.**
- **(2") Maximum Per Chart**

---

**ASTM A36 Or Better Vertical Support Rod**

**threaded Rod Conn., To Strut**

- **Anvil (AS 200), (AS 200H) Or (AS 200EH)**

- **Single Strut Member, (TYP.)**

**Beam Clamp Bolt:**

- **Torque-Off Badger Industries Beam Clamp Bolt Head, (TYP.)**

**Gravity Per Chart:**

- **(2") Min.**
- **(2") Maximum Per Chart**

---

**Installation Notice:**


Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

### Thick Flange Notice:

Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

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**Badger Industries**

www.NUSIG.com
Sales@NUSIG.com

2019 Edition
**Badger Industries**

**SBC158L**

**Patent Pending**

**Beam Clamp**

**No Substitution**

**Min. (0.1875")**

**Max. (1.260")**

**Beam Flange Thickness**

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**Installation Detail**

**Badger Industries**

**Seismic Vertical Connection - Single Beam Clamp Attachment**

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)

---

**Notice:**


Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

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**BADGER INDUSTRIES**

Seismic Vertical Connection - Single Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
### INSTALLATION DETAIL

#### Badger Industries Seismic Vertical Connection - Single Beam Clamp Attachment

**Badger Industries**

Seismic Hardware

**Part Number:** SBC158

**Maximum Allowable Tension (for Gravity and Seismic) per Chart:**

- **Fp** (LRFD)
- **FpC** (LRFD)

**TYP. Dimensions (Badger Industries):**

- **4"**
- **5"**
- **6"**
- **7"**
- **8"**
- **9"**
- **10"**
- **12"**
- **15"**
- **18"**
- **21"**
- **24"**

**Minimum Steel-to-Steel Tight to Flange of Beam:**

- **2"**
- **3"**

**ASTM A36 or Better Vertical Support Rod**

- **Per Chart**

**Threaded Rod Conn., to Strut**

- **Anvil (AS 200), (AS 200H) or (AS 200EH)**
  - **12 ga. 1-5/8"x1-5/8"**
- **Single Strut Member, (TYP.)**

**Beam Clamp Bolt**

- **Shall be in Full Contact with Inside Back Of Strut Metal,**
  - **(TYP.)**

**Torque-Off Badger Industries Beam Clamp Bolt Head,**

- **(TYP.)**

**Attatchment Can Be Other**

- **(2")**
- **(3")**

**Fp / FpC Per Chart**

**Gravity Per Chart**

**Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam.**

- **Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange**
  - **And Torque-Off Head Of Bolt Breaks Away.**
- **Use Of An Alternate Strut Shall Be Engineered By Others.**

**Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.**

**Notice:**

- **Listed Capacities Based On Testing And Engineered Analysis.**
- **Testing Was Performed (Without) Restraining Strap. Beam Clamp Was Not Tested For Use On Beams With "S" Section Shapes.**
- **Weaker Components / Conditions Within Overall Design And Application Including, But Not Limited To, The Building Structure Capacity Shall Control.**

**Min. (0.1875")**

**Max. (1.260")**

**Beam Flange Thickness. See Thick Flange Notice (No Substitution).**

**Thick Flange Notice:**

- **Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.**

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**SVC51-C3**

Seismic Vertical Connection - Single Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
Notice:
- Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.
- Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158L</td>
<td>4&quot;</td>
<td>450 lbs.</td>
<td>1,262 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>5&quot;</td>
<td>393 lbs.</td>
<td>1,104 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>6&quot;</td>
<td>350 lbs.</td>
<td>982 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>7&quot;</td>
<td>315 lbs.</td>
<td>883 lbs.</td>
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<td>SBC158L</td>
<td>8&quot;</td>
<td>286 lbs.</td>
<td>802 lbs.</td>
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<td>SBC158L</td>
<td>9&quot;</td>
<td>262 lbs.</td>
<td>736 lbs.</td>
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<td>210 lbs.</td>
<td>588 lbs.</td>
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<td>326 lbs.</td>
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<tr>
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<td>33 lbs.</td>
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### Beam Clamp

**Badger Industries**

**Patent Pending**

**Beam Clamp. See Thick Flange Notice**

*No Substitution*

- **Min. (0.1875")**
- **Max. (1.260")**

**Beam Flange Thickness. See Thick Flange Notice**

**Threaded Rod Conn., To Strut**

- **(2")** Minimum

**Badger SBC158**

**ASTM A36 Or Better Vertical Support Rod**

**Fpr / Fpc Per Chart**

**Gravity Per Chart**

**"W", "M", "HP" & "L" Section Steel Beams And Joists By Others**

**Beam Clamp Bolt**

- **Shall Be In Full Contact With Inside Back Of Strut Metal**
- **(TYP.)**

**Torque-Off**

**Badger Industries Beam Clamp Bolt Head, (TYP.)**

**ANSL / MSS SP-58 Maximum Allowable Tension**

**ANSI / FM 1950-2016 Maximum SEISMIC Fp T / Fpc Per Chart**

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<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>[X] Maximum</th>
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</thead>
<tbody>
<tr>
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<tr>
<td></td>
<td>5&quot;</td>
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<td>6&quot;</td>
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<td></td>
<td>7&quot;</td>
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<td></td>
<td>8&quot;</td>
</tr>
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<td></td>
<td>9&quot;</td>
</tr>
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<td></td>
<td>12&quot;</td>
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<td></td>
<td>15&quot;</td>
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<td>18&quot;</td>
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<td>21&quot;</td>
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<td></td>
<td>24&quot;</td>
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<table>
<thead>
<tr>
<th>[X] Maximum</th>
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<tbody>
<tr>
<td>475 lbs.</td>
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<td>422 lbs.</td>
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<td>380 lbs.</td>
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<td>336 lbs.</td>
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<td>294 lbs.</td>
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<td>261 lbs.</td>
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<td>195 lbs.</td>
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<td>155 lbs.</td>
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<tr>
<td>128 lbs.</td>
</tr>
<tr>
<td>109 lbs.</td>
</tr>
<tr>
<td>94 lbs.</td>
</tr>
</tbody>
</table>

**Listed Capacities Based On Testing And Engineered Analysis. Testing Was Performed (Without) Restraining Strap. Beam Clamp Was Not Tested For Use On Beams With "S" Section Shapes. Weaker Components / Conditions Within Overall Design And Application Including, But Not Limited To The Building Structure Capacity Shall Control.**

**Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.**

**Multiple Loads Can Be Placed Across Span [X]. Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.**

**Thick Flange Notice:**

Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.
**Badger Industries**

**Beam Clamp**

- Min. (0.1875”)
- Max. (1.260”)

**Beam Flange Thickness**

**Notice:**


- Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

- Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

---

**~ BADGER INDUSTRIES ~**

**Detail (SVC51L-C4)**

**Badger Industries Seismic Hardware Part Number**

- SBC158L
- [X] Maximum
- 4” 525 lbs. 1,472 lbs. 624 lbs.
- 5” 466 lbs. 1,309 lbs. 479 lbs.
- 6” 420 lbs. 1,178 lbs. 388 lbs.
- 7” 381 lbs. 1,071 lbs. 326 lbs.
- 8” 350 lbs. 982 lbs. 382 lbs.
- 9” 333 lbs. 906 lbs. 247 lbs.
- 12” 262 lbs. 736 lbs. 141 lbs.
- 15” 221 lbs. 620 lbs. 88 lbs.
- 18” 190 lbs. 535 lbs. 60 lbs.
- 21” 168 lbs. 471 lbs. 43 lbs.
- 24” 150 lbs. 420 lbs. 33 lbs.

**Threads Rod Conn., To Strut**

- ASTM A36 Or Better Threaded Rod With Hex Nut, Anvil Square Strut Washer And Anvil Strut Nut Tighten Hand Tight Plus (1/4) Turn

**"W", "M", "HP" & "L" Section Steel Beams And Joists**

- By Others

**INSTALLATION DETAIL**

**Badger Industries**

**SBC51L-C4**

Seismic Vertical Connection - Single Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
**Installation Detail**

**Badger Industries**

SVC51-C5

Seismic Vertical Connection - Single Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)

---

**Table: Beam Clamp Bolt Capacities**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Maximum Flange Thickness</th>
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<tbody>
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<td>SBC158</td>
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<td>5&quot;</td>
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<td>SBC158</td>
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<td>SBC158</td>
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<td>SBC158</td>
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<td>18&quot;</td>
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<tr>
<td>SBC158</td>
<td>21&quot;</td>
</tr>
<tr>
<td>SBC158</td>
<td>24&quot;</td>
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</tbody>
</table>

**Notice:**
- Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.
- Multiple Loads Can Be Placed Across Span [X]. Provided the Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

**Thick Flange Notice:**
- Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

---

**Diagram: Installation Details**

1. **Badger Beam Clamp Bolt:**
   - Bolt head: Use against the beam flange.
   - Torque-off: Ensure bolt is tight against the beam flange.

2. **Threaded Rod:**
   - Connects to the beam clamp.
   - Minimizes lateral movement.

3. **Vertical Support Rod:**
   - Provides additional support.
   - Ensures stability.

4. **W" M" HP" & L" Section Steel Beams And Joists:**
   - By others.
   - Requires specific hardware.

---

**General Notes:**

- Read general notes prior to use.
- Contact details provided for Badger Industries.
- Diagram includes detailed views of installation components.
**Notice:**

Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X]. Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.
Badger Industries

Seismic Vertical Connection - Single Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)

Installation Detail

Notice:

Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X]. Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

Thick Flange Notice:
Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

~ BADGER INDUSTRIES ~

Seismic Vertical Connection - Single Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
INSTALLATION DETAIL

Badger Industries

Seismic Vertical Connection - Single Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)

~ BADGER INDUSTRIES ~

Seismic Hardware

Part Number

SBC51L-C6

Notice:

Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

~ BADGER INDUSTRIES ~

Detail (SVC51L-C6)

<table>
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<tbody>
<tr>
<td>SBC158L</td>
<td>4&quot;</td>
<td>630 lbs.</td>
<td>1,767 lbs.</td>
<td>624 lbs.</td>
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<tr>
<td>SBC158L</td>
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<td>572 lbs.</td>
<td>1,606 lbs.</td>
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<td>420 lbs.</td>
<td>1,178 lbs.</td>
<td>247 lbs.</td>
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<tr>
<td>SBC158L</td>
<td>12&quot;</td>
<td>350 lbs.</td>
<td>982 lbs.</td>
<td>141 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>15&quot;</td>
<td>300 lbs.</td>
<td>841 lbs.</td>
<td>88 lbs.</td>
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<tr>
<td>SBC158L</td>
<td>18&quot;</td>
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<td>736 lbs.</td>
<td>60 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>21&quot;</td>
<td>233 lbs.</td>
<td>634 lbs.</td>
<td>43 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>24&quot;</td>
<td>210 lbs.</td>
<td>553 lbs.</td>
<td>33 lbs.</td>
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</table>

Threaded Rod Conn., To Strut

Anvil (AS 200 BTB) (12 ga. 3-1/4”x1-5/8”) Double Back-To-Back Manufacturer Spot Welded Single (12 ga. 1-5/8”x1-5/8”) Strut Members, Both Having Solid Backs (Without) Holes Or Slotted Openings, (TYP.)

ASTM A36 Or Better Threaded Rod With Hex Nut, Anvil Square Strut Washer And Anvil Strut Nut Tighten Hand Tight Plus (1/4) Turn

Beam Clamp Bolt Shall Be In Full Contact With Inside Back Of Strut Metal, (TYP.)

 INSTALLATION DETAIL

www.NUSIG.com
Sales@NUSIG.com
2019 Edition
**Badger Industries**

**SBC158**

Patent Pending

Beam Clamp. See Thick Flange Notice (No Substitution)

---

**Notice:**

Listed Capacities Based on Testing and Engineered Analysis. Testing was performed (without) Restraining Strap. Beam Clamp was not Tested for use on beams with "S" Section Shapes. Weaker Components / Conditions Within Overall Design and Application Including, But Not Limited to the Building Structure Capacity Shall Control.

Install Beam Clamp Throat Steel-To-Steel Tight to Flange of Beam. Tighten Beam Clamp Bolt Until Strut is Tight Against Underside of Beam Flange and Torque-Off Head of Bolt Breaks Away. Use of an alternate strut shall be engineered by others.

Multiple Loads Can Be Placed Across Span [X], Provided the Accumulated Loads Do Not Exceed Applicable Listing within Chart.

**Thick Flange Notice:**

Use Badger Industries (SBC158L-C) Beam Clamp for Flange Thickness (1.300") Inch, to a Maximum Thickness Of (3.00") Inch.

---

**Badger Industries Seismic Hardware**

<table>
<thead>
<tr>
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<tr>
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<td>503 lbs.</td>
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<td>154 lbs.</td>
<td>386 lbs.</td>
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<td>313 lbs.</td>
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<td>263 lbs.</td>
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<td>29 lbs.</td>
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<tr>
<td>SBC158</td>
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<td>28 lbs.</td>
<td>22 lbs.</td>
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---

**'W', 'M', 'HP' & 'L' Section Steel Beams and Joists**

- Torque-Off Badger Industries Beam Clamp Bolt Head, (TYP.)
- Beam Clamp Bolt shall be in full contact with inside back of strut metal, (TYP.)
- (TYP.) (1 of 1) Badger Industries Patent Pending Beam Clamp. See Thick Flange Notice (No Substitution)
- Min. (0.1875") Max. (1.260") Beam Flange Thickness. See Thick Flange Notice (TYP.) (1 of 1) Badger Industries Patent Pending Beam Clamp. See Thick Flange Notice (No Substitution)

---

**SVC51-Ca**

Seismic Vertical Connection - Single Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
### Installation Detail

**Badger Industries**

**SBC158L**

*Patent Pending*

**Beam Clamp**

*No Substitution*

**Min. (0.1875")**  
**Max. (1.260")**  
**Beam Flange Thickness**

**Notice:**
- Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Strut Is Tight Against Underside Of Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.
- Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

### Beam Clamp Bolt

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<tr>
<th></th>
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<tbody>
<tr>
<td>SBC158L</td>
<td>4&quot;</td>
<td>222 lbs.</td>
<td>624 lbs.</td>
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<tr>
<td>SBC158L</td>
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<td>170 lbs.</td>
<td>479 lbs.</td>
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<td>SBC158L</td>
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<td>138 lbs.</td>
<td>388 lbs.</td>
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<tr>
<td>SBC158L</td>
<td>7&quot;</td>
<td>116 lbs.</td>
<td>326 lbs.</td>
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<tr>
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<td>282 lbs.</td>
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<td>SBC158L</td>
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<tr>
<td>SBC158L</td>
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<td>31 lbs.</td>
<td>33 lbs.</td>
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### Details (SVC51L-Ca)

**Seismic Vertical Connection - Single Beam Clamp Attachment**

- **(Elev. View)**  
  - (Not To Scale)  
  - (Read General Notes Prior To Use)

---

**Anvil (AS 200 BTB)** (12 ga. 3-1/4"x1-5/8")

**Double Back-To-Back Manufacturer Spot Welded Single** (12 ga. 1-5/8"x1-5/8") Strut Members, Both Having Solid Backs (Without) Holes Or Slotted Openings, (TYP.)

**Threaded Rod**

**Conn., To Strut**

- **Min. (2")**
- **Max. Per Chart**

**Beam Clamp Bolt**

Shall Be In Full Contact With Inside Back Of Strut Metal, (TYP.)

**Badger Industries Beam Clamp Bolt Head, (TYP.)**

**Threaded Rod With Hex Nut, Anvil Square Strut Washer And Anvil Strut Nut**

Tighten Hand Tight Plus (1/4) Turn

**ASTM A36 Or Better Vertical Support Rod**

FpT/Fpc Per Chart

**Gravity Per Chart**

**W", "M", "HP" & "L" Section Steel Beams And Joists By Others**

**Badger Industries (SBC158L)**

Patent Pending Beam Clamp, See Thick Flange Notice (No Substitution)

**(1 Of 1)**

**(TYP.)**

**(0.1875")**

Max. (1.260") Beam Flange Thickness

**Anvil Rod**

**(1/4")**

**Threaded Rod Conn., To Strut**

**Min. (2")**

**Max. Per Chart**

**Anvil (AS 200 BTB)** (12 ga. 3-1/4"x1-5/8")

**Double Back-To-Back Manufacturer Spot Welded Single** (12 ga. 1-5/8"x1-5/8") Strut Members, Both Having Solid Backs (Without) Holes Or Slotted Openings, (TYP.)
Notice:


Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Strut Is Tight Against Underside Of Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

Thick Flange Notice:

Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>Maximum</th>
<th>ANSI / MSS SP-58 Maximum Allowable Tension GRAVITY</th>
<th>ANSI / FM 1950-2016 Maximum SEISMIC Fp/t / Fpc (LRFD)</th>
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<tr>
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<td>2&quot;</td>
<td>246 lbs.</td>
<td>615 lbs.</td>
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<td>3&quot;</td>
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<tr>
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<td>52 lbs.</td>
<td>75 lbs.</td>
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</table>

**Installation Detail**

**SVC51-Cb**

Seismic Vertical Connection - Single Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
Notice:

Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Strut Is Tight Against Underside Of Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.
End Of Strut Shall Be Flush With Or Extend Beyond Beam Clamp, (TYP.)

Anywhere Between Clamps

"W", "M", "HP" & "L" Section Steel Beams And Joists By Others

Torque-Off Badger Industries Beam Clamp Bolt Head, (TYP.)

Beam Clamp Bolt Shall Be In Full Contact With Inside Back Of Strut Metal, (TYP.)
**Notice:**

Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>Maximum Beam Flange Width</th>
<th>ANSI / FM 1950-2016 Maximum Allowable Tension GRAVITY</th>
<th>ANSI/MSS SP-58 Maximum SEISMIC Fpt / Fpc (LRFD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158L</td>
<td>18&quot;</td>
<td>2,100 lbs.</td>
<td>2,152 lbs.</td>
</tr>
</tbody>
</table>

Compliant Per 2016 NFPA-13, Paragraph 9.1.1.2 For Single Hanger Piping 10" And Smaller

---

**Seismic Vertical Connection - Double Beam Clamp Attachment**

- Beam Clamp Bolt Shall Be In Full Contact With Inside Back Of Strut Metal, (TYP.)
- Torque-Off Badger Industries Beam Clamp Bolt Head, (TYP.)
- End Of Strut Shall Be Flush With Or Extend Beyond Beam Clamp, (TYP.)
- ASTM A36 Or Better Vertical Support Rod
- Fpt / Fpc Per Chart
- Gravity Per Chart
- Badger SBC158L
- Badger SBC158L
- Anvil (AS 200 BTB) (12 ga. 3-1/4"x1-5/8") Double Back-To-Back Manufacturer Spot Welded Single (12 ga. 1-5/8"x1-5/8") Strut Members, Both Having Solid Backs (Without) Holes Or Slotted Openings
- Threaded Rod With Hex Nut, Anvil Square Strut Washer And Anvil Strut Nut Tighten Hand Tight Plus (1/4) Turn
- (TYP.) (1 Of 2) Badger Industries Patent Pending Beam Clamp (No Substitution) Min. (0.1875") Max. (1.260") Beam Flange Thickness
- (TYP.) (2 Of 2) Badger Industries SBC158L Patent Pending Beam Clamp (No Substitution)
- Anywhere Between Clamps
- (1-5/8"
- (3-1/4"

**SVC52L**

(Elev. View) ~ (Not To Scale) ~ (Read General Notes Prior To Use)
**Notice:**

Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

**Thick Flange Notice:**
Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300”) Inch, To A Maximum Thickness Of (3.00”) Inch.

**INSTALLATION DETAIL**

---

**~ BADGER INDUSTRIES ~**

**Detail (SVC52a)**

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>Maximum Beam Flange Width</th>
<th>ANSI / MSS SP-58 Maximum Allowable Tension (GRAVITY)</th>
<th>ANSI / FM 1950-2016 SEISMIC FpT / Fpc (LRFD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158</td>
<td>6”</td>
<td>1,900 lbs.</td>
<td>1,934 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>12”</td>
<td>1,780 lbs.</td>
<td></td>
</tr>
<tr>
<td>SBC158</td>
<td>18”</td>
<td>1,135 lbs.</td>
<td></td>
</tr>
</tbody>
</table>

Compliant Per 2016 NFPA-13, Paragraph 9.1.1.2 For Single Hanger Piping 6” And Smaller

---

**~ BADGER INDUSTRIES ~**

Seismic Vertical Connection - Double Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
### Table: Beam Clamp Capacities

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES</th>
<th>Maximum Beam Flange Width</th>
<th>ANSI/MSS SP-58 Maximum Allowable Tension</th>
<th>ANSI / FM 1950-2016 Maximum SEISMIC Fpt / Fpc (LRFD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158</td>
<td>18&quot;</td>
<td>1,900 lbs.</td>
<td>1,934 lbs.</td>
</tr>
</tbody>
</table>

Compliant Per 2016 NFPA-13, Paragraph 9.1.1.2 For Single Hanger Piping 10" And Smaller

### Notice:
- Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.
- Thick Flange Notice:
  - Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

### Diagram:
- "W", "M", "HP" & "L" Section Steel Beams And Joists By Others
- Beam Clamp Bolt Hidden Behind Depicted Threaded Rod, Shall Be In Full Contact With Beam Flange Steel, (TYP.)
- (1/2") Bolt Or Threaded Rod With Hex Nut, Square Strut Washer On Strut End And Strut Nut On Beam Clamp End. Tighten Until Strut Is Hand Tight To Underside Of Beam Flange Plus (1/4) Turn, (TYP.)
- (TYP.) (1 Of 2) Badger Industries Patented Beam Clamp. See Thick Flange Notice (No Substitution)
- (TYP.) (2 Of 2) Badger Industries Patented Beam Clamp. See Thick Flange Notice (No Substitution)
- Torque-Off Badger Industries Beam Clamp Bolt Head, (TYP.)
- 8S108S ø55g3g8
- ASTM A36 Or Better Vertical Support Rod
- Fpr / Fpc Per Chart
- Gravity Per Chart
- Anvil (AS 300 BTB), (AS 300H BTB), (AS 300EH BTB), (AS 200 BTB), (AS 200H BTB) Or (AS 200EH BTB) (12 ga, X-X"x1-5/8") Double Back-To-Back Manufacturer Spot Welded Strut Members, Installed Tight To Underside Of Beam Flange Steel, (TYP.)
Notice:

Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

(Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.

Thickness Notice:
Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

~ BADGER INDUSTRIES ~
Seismic Vertical Connection - Double Beam Clamp Attachment
(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
**Installation Detail**

**Notice:**


Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed ApplicableListing Within Chart.

**Thick Flange Notice:**

Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

**~ BADGER INDUSTRIES ~**

**Seismic Vertical Connection - Double Beam Clamp Attachment**

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)

---

### Table: Cantilever End Load

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware</th>
<th>ANSI/MSS SP-58 Maximum Allowable Tension GRAVITY</th>
<th>ANSI / FM 1950-2016 Maximum SEISMIC FpT / FpC (LRFD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158 6&quot;</td>
<td>337 lbs.</td>
<td>703 lbs.</td>
</tr>
<tr>
<td>SBC158 9&quot;</td>
<td>254 lbs.</td>
<td>468 lbs.</td>
</tr>
<tr>
<td>SBC158 12&quot;</td>
<td>195 lbs.</td>
<td>350 lbs.</td>
</tr>
<tr>
<td>SBC158 15&quot;</td>
<td>155 lbs.</td>
<td>279 lbs.</td>
</tr>
<tr>
<td>SBC158 18&quot;</td>
<td>128 lbs.</td>
<td>221 lbs.</td>
</tr>
<tr>
<td>SBC158 21&quot;</td>
<td>109 lbs.</td>
<td>166 lbs.</td>
</tr>
<tr>
<td>SBC158 24&quot;</td>
<td>94 lbs.</td>
<td>130 lbs.</td>
</tr>
<tr>
<td>SBC158 27&quot;</td>
<td>83 lbs.</td>
<td>103 lbs.</td>
</tr>
<tr>
<td>SBC158 30&quot;</td>
<td>74 lbs.</td>
<td>84 lbs.</td>
</tr>
</tbody>
</table>

---

Attention can be other

*TYP.* (2 of 2) Badger Industries (SBC158) Patent Pending Beam Clamp. See Thick Flange Notice (No Substitution)

**Threaded Rod Conn., To Strut**

ASTM A36 or Better Threaded Rod With Hex Nut, Anvil Square Strut Washer And Anvil Strut Nut Tighten Hand Tight Plus (1/4) Turn

**FpT / FpC Per Chart**

Gravity Per Chart
Notice:

Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X]. Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.
**Badger Industries**

**Seismic Vertical Connection - Double Beam Clamp Attachment**

**SVC52-C6**

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)

---

**Notice:**

- Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.
- Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

**Thick Flange Notice:**

Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

**Badger Industries Beam Clamp Bolt**

- Bolt Head, (TYP.)
- Min. (0.1875")
- Max. (1.260")

**Beam Clamp Bolt**

- Shall Be In Full Contact With Inside Back Of Strut Metal, (TYP.)

**End Of Strut Without Vertical Support Rod**

- Shall Be Flush With Or Extend Beyond Beam Clamp

**Threaded Rod**

- ASTM A36 Or Better Threaded Rod With Hex Nut, Anvil Square Strut Washer And Anvil Strut Nut Tighten Hand Tight Plus (1/4) Turn

---

**Cantilever End Load**

<table>
<thead>
<tr>
<th>Badger Industries Seismic Hardware Part Number</th>
<th>[X]</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158</td>
<td>6&quot;</td>
<td>392 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>9&quot;</td>
<td>261 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>12&quot;</td>
<td>195 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>15&quot;</td>
<td>155 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>18&quot;</td>
<td>128 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>21&quot;</td>
<td>109 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>24&quot;</td>
<td>94 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>27&quot;</td>
<td>83 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>30&quot;</td>
<td>74 lbs.</td>
</tr>
</tbody>
</table>

---

**ANSI/MSS SP-58**

- Maximum Allowable Tension

**ANSI / FM 1950-2016**

- Maximum SEISMIC FpFp / FpC (LRFD)

---

**ASTM A36 Or Better Vertical Support Rod**

---

**Badger Industries**

www.NUSIG.com

Sales@NUSIG.com

2019 Edition
END OF STRUT WITHOUT VERTICAL SUPPORT ROD SHALL BE FLUSH WITH OR EXTEND BEYOND BEAM CLAMP

---

**Notice:**

Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X]. Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

---

### INSTALLATION DETAIL

**SVC52L-C6**

Seismic Vertical Connection - Double Beam Clamp Attachment

---

**Table: Cantilever End Load**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>[X] (in)</th>
<th>ANSI/MSS SP-58 Maximum Allowable Tension (GRAVITY)</th>
<th>ANSI / FM 1950-2016 Maximum SEISMIC FpT / Fpc (LRFD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158L</td>
<td>6&quot;</td>
<td>492 lbs.</td>
<td>1,545 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>9&quot;</td>
<td>389 lbs.</td>
<td>1,221 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>12&quot;</td>
<td>321 lbs.</td>
<td>1,009 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>15&quot;</td>
<td>274 lbs.</td>
<td>860 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>18&quot;</td>
<td>238 lbs.</td>
<td>742 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>21&quot;</td>
<td>211 lbs.</td>
<td>634 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>24&quot;</td>
<td>189 lbs.</td>
<td>553 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>27&quot;</td>
<td>172 lbs.</td>
<td>490 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>30&quot;</td>
<td>157 lbs.</td>
<td>439 lbs.</td>
</tr>
</tbody>
</table>

---

**Diagram:**

- **Threaded Rod With Hex Nut, Anvil Square Strut Washer And Anvil Strut Nut Tighten Hand Tight Plus (1/4) Turn**
- **Anvil (AS 200 BTB) (12 ga. 3-1/4"x1-5/8") Double Back-To-Back Manufacturer Spot Welded Single (12 ga. 1-5/8"x1-5/8") Strut Members, Both Having Solid Backs (Without)**
- **Holes Or Slotted Openings, (TYP.)**
- **ASTM A36 Or Better Vertical Support Rod**

---

**Badger Industries**

Seismic Hardware

Part Number

Maximum

Maximum

GRAVITY

SEISMIC

FpT / Fpc (LRFD)

12"

3-1/4"x1-5/8"

321 lbs.

Min.

Beam Flange Thickness

(TYP.) (1 Of 2)

Badger Industries

(SBC158L)

Patent Pending

Beam Clamp (No Substitution)

TYP.) (2 Of 2)

Badger Industries

(SBC158L)

Patent Pending

Beam Clamp (No Substitution)

Min. (0.1875"

Max. (1.260"

Beam Flange Thickness

Threaded Rod Conn., To Strut

Beam Clamp Bolt Shall Be In Full Contact With Beam Flange Steel, (TYP.)

Torque-Off Badger Industries Beam Clamp Bolt Head, (TYP.)

End Of Strut Without Vertical Support Rod Shall Be Flush With Or Extend Beyond Beam Clamp

~ BADGER INDUSTRIES ~

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2019 Edition
End Of Strut Without Vertical Support Rod Shall Be Flush With Or Extend Beyond Beam Clamp

Notice:

Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X]. Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

<table>
<thead>
<tr>
<th>Beam Clamp Bolt</th>
<th>Minimum Per Chart</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158L 6&quot;</td>
<td>205 lbs.</td>
</tr>
<tr>
<td>SBC158L 9&quot;</td>
<td>244 lbs.</td>
</tr>
<tr>
<td>SBC158L 12&quot;</td>
<td>343 lbs.</td>
</tr>
<tr>
<td>SBC158L 15&quot;</td>
<td>302 lbs.</td>
</tr>
<tr>
<td>SBC158L 18&quot;</td>
<td>270 lbs.</td>
</tr>
<tr>
<td>SBC158L 21&quot;</td>
<td>232 lbs.</td>
</tr>
<tr>
<td>SBC158L 24&quot;</td>
<td>241 lbs.</td>
</tr>
<tr>
<td>SBC158L 27&quot;</td>
<td>205 lbs.</td>
</tr>
<tr>
<td>SBC158L 30&quot;</td>
<td>205 lbs.</td>
</tr>
</tbody>
</table>

---

SVC52L-C8

Seismic Vertical Connection - Double Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
**Notice:**

Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

### INSTALLATION DETAIL

**SVC52L-C10**

Seismic Vertical Connection - Double Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>[X] Maximum</th>
<th>Cantilever End Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158L 6&quot;</td>
<td>638 lbs.</td>
<td>2,003 lbs.</td>
</tr>
<tr>
<td>SBC158L 9&quot;</td>
<td>533 lbs.</td>
<td>1,493 lbs.</td>
</tr>
<tr>
<td>SBC158L 12&quot;</td>
<td>458 lbs.</td>
<td>1,118 lbs.</td>
</tr>
<tr>
<td>SBC158L 15&quot;</td>
<td>401 lbs.</td>
<td>892 lbs.</td>
</tr>
<tr>
<td>SBC158L 18&quot;</td>
<td>357 lbs.</td>
<td>742 lbs.</td>
</tr>
<tr>
<td>SBC158L 21&quot;</td>
<td>322 lbs.</td>
<td>634 lbs.</td>
</tr>
<tr>
<td>SBC158L 24&quot;</td>
<td>293 lbs.</td>
<td>553 lbs.</td>
</tr>
<tr>
<td>SBC158L 27&quot;</td>
<td>269 lbs.</td>
<td>490 lbs.</td>
</tr>
<tr>
<td>SBC158L 30&quot;</td>
<td>240 lbs.</td>
<td>439 lbs.</td>
</tr>
</tbody>
</table>

**Threaded Rod**
- With Hex Nut, Anvil Square Strut Washer And Anvil Strut Nut Tighten Hand Tight Plus (1/4) Turn

**Anvil (AS 200 BTB)**
- (12 ga. 3-1/4"x1-5/8")
- Double Back-To-Back Manufacturer Spot Welded Single (12 ga. 1-5/8"x1-5/8") Strut Members, Both Having Solid Backs (Without)
- Holes Or Slotted Openings, (TYP.)

**Threaded Rod Conn., To Strut**

**Beam Clamp Bolt**
- Shall Be In Full Contact With Beam Flange Steel, (TYP.)
- End Of Strut Without Vertical Support Rod Shall Be Flush With Or Extend Beyond Beam Clamp

**Beam Clamp-Bolt Head**, (TYP.)

**Torque-Off**

**Badger Industries Beam Clamp Bolt Head**, (TYP.)

**Patent Pending**
- Beam Clamp (No Substitution)

**Badger Industries**
- (SBC158L)

**Threaded Rod**
- (TYP.) (2 Of 2)

**Badger Industries**
- Patent Pending Beam Clamp (No Substitution)

Min. (0.1875")
- Beam Flange Thickness

**ASTM A36**
- Or Better Vertical Support Rod

**FpT / Fpc Per Chart**

**Gravity Per Chart**

**Threaded Rod With Hex Nut, Anvil Square Strut Washer And Anvil Strut Nut Tighten Hand Tight Plus (1/4) Turn**

**Holes Or Slotted Openings, (TYP.)**

**Badger SBC158L**

**Beam Clamp**
- Bolt Head, (TYP.)
- Tension (LRFD)

**End Of Strut Without Vertical Support Rod Shall Be Flush With Or Extend Beyond Beam Clamp**

**Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.**

**Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.**
End Of Strut Without Vertical Support Rod Shall Be Flush With Or Extend Beyond Beam Clamp

Notice:

Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X]. Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>ANSI / MSS SP-58 Maximum Allowable Tension GRAVITY</th>
<th>ANSI / FM 1950-2016 Maximum SEISMIC FpT / FpC (LRFD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158L 6&quot;</td>
<td>685 lbs.</td>
<td>2,152 lbs.</td>
</tr>
<tr>
<td>SBC158L 9&quot;</td>
<td>584 lbs.</td>
<td>1,493 lbs.</td>
</tr>
<tr>
<td>SBC158L 12&quot;</td>
<td>509 lbs.</td>
<td>1,118 lbs.</td>
</tr>
<tr>
<td>SBC158L 15&quot;</td>
<td>451 lbs.</td>
<td>892 lbs.</td>
</tr>
<tr>
<td>SBC158L 18&quot;</td>
<td>404 lbs.</td>
<td>742 lbs.</td>
</tr>
<tr>
<td>SBC158L 21&quot;</td>
<td>351 lbs.</td>
<td>634 lbs.</td>
</tr>
<tr>
<td>SBC158L 24&quot;</td>
<td>305 lbs.</td>
<td>553 lbs.</td>
</tr>
<tr>
<td>SBC158L 27&quot;</td>
<td>269 lbs.</td>
<td>490 lbs.</td>
</tr>
<tr>
<td>SBC158L 30&quot;</td>
<td>240 lbs.</td>
<td>439 lbs.</td>
</tr>
</tbody>
</table>

BADGER INDUSTRIES
Seismic Vertical Connection - Double Beam Clamp Attachment

~ BADGER INDUSTRIES ~

(Svc52l-c12)

Seismic Vertical Connection - Double Beam Clamp Attachment

(Typ.) (2 Of 2) Badger Industries (Sbc158l)
Patent Pending Beam Clamp (No Substitution)

(Typ.) (1 Of 2) Badger Industries (Sbc158l)
Patent Pending Beam Clamp (No Substitution)

Threaded Rod With Hex Nut, Anvil Square Strut Washer And Anvil Strut Nut Tighten Hand Tight Plus (1/4) Turn

Anvil (As 200 Btb) (12 Ga. 3-1/4"x1-5/8") Double Back-To-Back Manufacturer Spot Welded Single (12 Ga. 1-5/8"x1-5/8") Strut Members, Both Having Solid Backs (Without)

Holes Or Slotted Openings, (Typ.)

End Of Strut Without Vertical Support Rod Shall Be Flush With Or Extend Beyond Beam Clamp

Beam Clamp Bolt Shall Be In Full Contact With Beam Flange Steel, (Typ.)

Torque-Off Badger Industries Beam Clamp Bolt Head, (Typ.)

"W", "M", "HP" & "L" Section Steel Beams And Joists By Others

FpT / FpC Per Chart

ASTM A36 Or Better Vertical Support Rod

Gravity Per Chart

(12") Minimum

(2") Min.

(2") Min.

(3-1/4")

(1-5/8")


Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X]. Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>ANSI / MSS SP-58 Maximum Allowable Tension GRAVITY</th>
<th>ANSI / FM 1950-2016 Maximum SEISMIC FpT / FpC (LRFD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158L 6&quot;</td>
<td>685 lbs.</td>
<td>2,152 lbs.</td>
</tr>
<tr>
<td>SBC158L 9&quot;</td>
<td>584 lbs.</td>
<td>1,493 lbs.</td>
</tr>
<tr>
<td>SBC158L 12&quot;</td>
<td>509 lbs.</td>
<td>1,118 lbs.</td>
</tr>
<tr>
<td>SBC158L 15&quot;</td>
<td>451 lbs.</td>
<td>892 lbs.</td>
</tr>
<tr>
<td>SBC158L 18&quot;</td>
<td>404 lbs.</td>
<td>742 lbs.</td>
</tr>
<tr>
<td>SBC158L 21&quot;</td>
<td>351 lbs.</td>
<td>634 lbs.</td>
</tr>
<tr>
<td>SBC158L 24&quot;</td>
<td>305 lbs.</td>
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</tr>
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<td>269 lbs.</td>
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</tr>
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<td>439 lbs.</td>
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</tr>
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<td>439 lbs.</td>
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</table>

Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

Thick Flange Notice:
Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

~ BADGER INDUSTRIES ~

Seismic Vertical Connection - Double Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
Notice:

Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

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<td>594 lbs.</td>
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</tr>
<tr>
<td>SBC158L</td>
<td>36&quot;</td>
<td>88 lbs.</td>
<td>276 lbs.</td>
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Beam Clamp Bolt Shall Be In Full Contact With Inside Back Of Strut Metal, (TYP.)

"W", "M", "HP" & "L" Section Steel Beams And Joists By Others

Anvil (AS 200 BTB) (12 ga. 3-1/4"x1-5/8") Double Back-To-Back Manufacturer Spot Welded Single (12 ga. 1-5/8"x1-5/8") Strut Members, Both Having Solid Backs (Without) Holes Or Slotted Openings, (TYP.)

ASTM A36 Or Better Vertical Support Rod

<table>
<thead>
<tr>
<th>Minimum</th>
<th>Maximum Per Chart</th>
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<tbody>
<tr>
<td>(2&quot;)</td>
<td>Fpt / Fpc Per Chart</td>
</tr>
<tr>
<td>(2&quot;)</td>
<td>Gravity Per Chart</td>
</tr>
</tbody>
</table>

INSTALLATION DETAIL

BADGER INDUSTRIES
www.NUSIG.com
Sales@NUSIG.com
2019 Edition
Notice:

Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.
Badger Industries

Beam Clamp

Min. (0.1875")
Max. (1.260") Beam Flange Thickness

Anvil (AS 200 BTB) (12 ga. 3-1/4"x1-5/8")
Double Back-To-Back Manufacturer Spot Welded Single (12 ga. 1-5/8"x1-5/8") Strut Members, Both Having Solid Backs (Without) Holes Or Slotted Openings, (TYP.)

Threaded Rod With Hex Nut, Anvil Square Strut Washer And Anvil Strut Nut Tighten Hand Tight Plus (1/4) Turn

Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

Holes Or Slotted Openings, (TYP.)

ASTM A36 Or Better Vertical Support Rod

Fpt / Fpc Per Chart Gravity Per Chart

Badger Industries

Seismic Vertical Connection - Double Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
### Cantilever End Load

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158L</td>
<td>6&quot;</td>
<td>638 lbs.</td>
<td>2,003 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>9&quot;</td>
<td>533 lbs.</td>
<td>1,493 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>12&quot;</td>
<td>458 lbs.</td>
<td>1,118 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>15&quot;</td>
<td>401 lbs.</td>
<td>892 lbs.</td>
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<tr>
<td>SBC158L</td>
<td>18&quot;</td>
<td>357 lbs.</td>
<td>742 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>21&quot;</td>
<td>322 lbs.</td>
<td>634 lbs.</td>
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<tr>
<td>SBC158L</td>
<td>24&quot;</td>
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<tr>
<td>SBC158L</td>
<td>33&quot;</td>
<td>217 lbs.</td>
<td>397 lbs.</td>
</tr>
<tr>
<td>SBC158L</td>
<td>36&quot;</td>
<td>197 lbs.</td>
<td>362 lbs.</td>
</tr>
</tbody>
</table>

**Notice:**


**Installation Details:**

- **Beam Clamp Bolt:** Shall Be In Full Contact With Inside Back Of Strut Metal, (TYP.)
- **"W", "M", "HP" & "L" Section Steel Beams And Joists By Others**
- **(TYP.) (1 Of 2) Badger Industries (SBC158L) Patent Pending Beam Clamp (No Substitution)**
- **(TYP.) (2 Of 2) Badger Industries (SBC158L) Patent Pending Beam Clamp (No Substitution)**
- **Min. (0.1875") Max. (1.260") Beam Flange Thickness**
- **ASTM A36 Or Better Vertical Support Rod**
- **Threaded Rod With Hex Nut, Anvil Square Strut Washer And Anvil Strut Nut Tighten Hand Tight Plus (1/4) Turn**
- **Anvil (AS 200 BTB) (12 ga. 3-1/4"x1-5/8") Double Back-To-Back Manufacturer Spot Welded Single (12 ga. 1-5/8"x1-5/8") Strut Members, Both Having Solid Backs (Without) Holes Or Slotted Openings, (TYP.)**

---

**Badger Industries**

Seismic Vertical Connection - Double Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
### ANSI/MSS SP-58

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>[X] Maximum</th>
<th>ANSI / FM 1950-2016 Maximum SEISMIC Fpt / Fpc (LRFD)</th>
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</thead>
<tbody>
<tr>
<td>SBC158L</td>
<td>6&quot;</td>
<td>685 lbs.</td>
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<tr>
<td>SBC158L</td>
<td>9&quot;</td>
<td>584 lbs.</td>
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<td>SBC158L</td>
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<td>509 lbs.</td>
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<td>SBC158L</td>
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<td>451 lbs.</td>
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<tr>
<td>SBC158L</td>
<td>18&quot;</td>
<td>404 lbs.</td>
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**Notice:**
- Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

---

**INSTALLATION DETAIL**

**Beam Clamp Bolt**
- Shall Be In Full Contact With Inside Back Of Strut Metal, (TYP.)

**Threaded Rod**
- With Hex Nut, Anvil Square Strut Washer And Anvil Strut Nut Tighten Hand Tight Plus (1/4) Turn

**Anvil**
- (AS 200 BTB) (12 ga. 3-1/4"x1-5/8") Double Back-To-Back Manufacturer Spot Welded Single (12 ga. 1-5/8"x1-5/8") Strut Members, Both Having Solid Backs (Without) Holes Or Slotted Openings, (TYP.)

**ASTM A36 Or Better Vertical Support Rod**
- (1-5/8"")

**Threaded Rod Conn., To Strut**
- (3-1/4"")

**Fpt / Fpc Per Chart**
- Gravity Per Chart

---

**SVC52L-2C12**

Seismic Vertical Connection - Double Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
**Badger Industries**

**Seismic Vertical Connection - Double Beam Clamp Attachment**

**SVC52L-2C14**

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)

---

**Notice:**
- Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.
- Multiple Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Listing Within Chart.

---

**INSTALLATION DETAIL**

**~ Badger Industries ~**

**Detail (SVC52L-2C14)**

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**Cantilever End Load**

- **ANSI/MSS SP-58**
  - Maximum Allowable Tension
  - Gravity
- **ANSI / FM 1950-2016**
  - Maximum SEISMIC Fpt / Fp (LRFD)

**Beam Clamp Bolt**
- Shall Be In Full Contact With Inside Back Of Strut Metal, (TYP.)

**Threaded Rod With Hex Nut, Anvil Square Strut Washer And Anvil Strut Nut Tighten Hand Tight Plus (1/4) Turn**

**Anvil (AS 200 BTB) (12 ga. 3-1/4"x1-5/8")**
- Double Back-To-Back Manufacturer Spot Welded Single (12 ga. 1-5/8"x1-5/8") Strut Members, Both Having Solid Backs (Without) Holes Or Slotted Openings, (TYP.)

---

**ASTM A36 Or Better Vertical Support Rod**

---

**ASTM A36**
- Or Better Vertical Support Rod

---

**Fpt / Fp**
- Per Chart

---

**Gravity**
- Per Chart

---

Badger Industries
Seismic Hardware
Part Number

---

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Sales@NUSIG.com

2019 Edition
Notice:


Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others. (Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.

Thick Flange Notice:

Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

~ BADGER INDUSTRIES ~

Seismic Vertical Connection - Double Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
Beam Clamp Bolt Shall Be In Full Contact With Beam Flange Steel, (TYP.)


**Notice:**
- Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.
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**Thick Flange Notice:**
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<th>Beam Clamp</th>
<th>Uniform Load</th>
<th>Concentrated Center Load</th>
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<tr>
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<td>Gravity</td>
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<tr>
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<td>SBC158</td>
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<td>1,493 lbs.</td>
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<td>SBC158</td>
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<td>SBC158</td>
<td>9'- 0&quot;</td>
<td>312 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>10'- 0&quot;</td>
<td>277 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>11'- 0&quot;</td>
<td>247 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>12'- 0&quot;</td>
<td>222 lbs.</td>
</tr>
</tbody>
</table>

~BADGER INDUSTRIES~

Seismic Vertical Connection - Double Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
**Listed Capacities Based On Testing And Engineered Analysis. Testing Was Performed Without Restraining Strap. Beam Clamp Was Not Tested For Use On Beams With "S" Section Shapes. Weaker Components / Conditions Within Overall Design And Application Including, But Not Limited To The Building Structure Capacity Shall Control.**

**Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.**

**Uniform Loading Per Chart - And - Not Depicted Center Concentrated Loading Per Chart**

**Thick Flange Notice:**

Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

**Notice:**

<table>
<thead>
<tr>
<th>Beam Clamp Bolt</th>
<th>TYP.</th>
<th>(1 Of 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Badger Industries</td>
<td>SBC158</td>
<td>Patent Pending Beam Clamp. See Thick Flange Notice (No Substitution)</td>
</tr>
</tbody>
</table>

**Notice:**

Beam Clamp Bolt Shall Be In Full Contact With Beam Flange Steel, (TYP.)

**Notice:**

Torque-Off Badger Industries Beam Clamp Bolt Prior To Installation Of Vertical Support, Rod (TYP.)

**Notice:**


**Notice:**

Beam Clamp Bolt Shall Be In Full Contact With Beam Flange Steel, (TYP.)

**Notice:**

Anvil (AS 100), (AS 100H) Or (AS 100EH) (12 ga. 3-1/4"x1-5/8") Single Strut Member

**Notice:**

Badger Industries (SBC158)

**Patent Pending**

**Badger Industries**

**Seismic Vertical Connection - Double Beam Clamp Attachment**

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
## BADGER INDUSTRIES

Seismic Vertical Connection - Double Beam Clamp Attachment

### INSTALLATION DETAIL

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>[X]</th>
<th>Maximum Uniform Load Allowable Tension Gravity</th>
<th>Maximum Center Load Maximum Allowable Tension Gravity</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158</td>
<td>1'-0&quot;</td>
<td>1,572 lbs. 785 lbs.</td>
<td>2,817 lbs. 1,407 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>2'-0&quot;</td>
<td>783 lbs. 390 lbs.</td>
<td>1,405 lbs. 701 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>3'-0&quot;</td>
<td>519 lbs. 257 lbs.</td>
<td>934 lbs. 464 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>4'-0&quot;</td>
<td>386 lbs. 189 lbs.</td>
<td>697 lbs. 345 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>5'-0&quot;</td>
<td>306 lbs. 148 lbs.</td>
<td>555 lbs. 273 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>6'-0&quot;</td>
<td>252 lbs. 120 lbs.</td>
<td>459 lbs. 224 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>7'-0&quot;</td>
<td>212 lbs. 100 lbs.</td>
<td>390 lbs. 189 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>8'-0&quot;</td>
<td>183 lbs. 84 lbs.</td>
<td>338 lbs. 162 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>9'-0&quot;</td>
<td>159 lbs. 72 lbs.</td>
<td>297 lbs. 141 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>10'-0&quot;</td>
<td>140 lbs. 61 lbs.</td>
<td>235 lbs. 123 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>11'-0&quot;</td>
<td>124 lbs. 52 lbs.</td>
<td>178 lbs. 109 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>12'-0&quot;</td>
<td>110 lbs. 45 lbs.</td>
<td>137 lbs. 86 lbs.</td>
</tr>
</tbody>
</table>

### Notice:
- Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.
- (Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.
- Min. (0.1875") Max. (1.260") Beam Flange Thickness. See Thick Flange Notice (No Substitution)

### Thick Flange Notice:
Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

### Vertical Support Rod Placement
- Off-Set At Edge Of Beam Flange Allows For Full Beam Depth Vertical Adjustment, (TYP.)

### Uniform Loading Per Chart
- And - Not Depicted Center Concentrated Loading Per Chart

### (Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
Seismic Vertical Connection - Double Beam Clamp Attachment

(TYP.) (1 Of 2)
Badger Industries
(SBC158) Patent Pending
Beam Clamp. See
Thick Flange Notice
(No Substitution)

Beam Clamp Bolt
Hidden Behind Depicted
Threaded Rod, Shall Be
In Full Contact With Beam
Flange Steel, (TYP.)

Threaded Rod With
Hex Nuts And Square
Strut Washers, (TYP.)
For Suspended Trapeze Supports

(TYP.) ASTM A36 Or Better Vertical Support Rod, Engineered By Others

Upper And Lower Strut Nuts Sized To Fit Vertical Support Rod. Installed Hand Tight Plus (1/4)
Turn. Lower Strut Nut Is Not Required For
Gravity Vertical Supports Not Required To
Resist Uplift (Compression) Forces, (TYP.)

Torque-Off
Badger Industries
Beam Clamp Bolt
Prior To Installation Of Vertical Support Rod, (TYP.)

Vertical Support Rod Placement
Off-Set At Edge Of Beam Flange
Allows For Full Beam Depth Vertical Adjustment, (TYP.)

"W", "M", "HP" & "L" Section Steel
Beams And Joists By Others

Min. (0.1875")
Max. (1.260")
Beam Flange
Thickness. See
Thick Flange Notice

Depicted Individual Beam
Clamps Can Be Installed
On Upper Or Lower Flange
And/Or On Individual Steel
Beams Or Joists.

Notice:
Listed Capacities Based On Testing And Engineered Analysis. Testing Was Performed
(Without) Restraining Strap. Beam Clamp Was Not Tested For Use On Beams With "S" Section
Shapes. Weaker Components / Conditions Within Overall Design And Application Including,
But Not Limited To The Building Structure Capacity Shall Control.

Install Each Beam Clamp Throat Steel-To-Steel
Tight To Flange Of Beam. Tighten Beam Clamp
Bolt Until Tight Against Beam Flange And
Torque-Off Head Of Bolt Breaks Away. Use Of
An Alternate Strut Shall Be Engineered By
Others.

(Non-Uniform) Load Or Loads Can Be Placed
Across Span [X], Provided The Accumulated
Loads Do Not Exceed Applicable Center
Concentrated Load Listing Within Chart.

Vertical Loading Per Chart - Not Depicted Center Concentrated Loading Per Chart

Notice:
Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To
A Maximum Thickness Of (3.00") Inch.

BADGER INDUSTRIES
Seismic Hardware
Part Number

SVC52-EF2T

Seismic Vertical Connection - Double Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
Anvil (AS 100), (AS 100H) Or (AS 100EH)
(12 ga. 3-1/4"x1-5/8") Single Strut Member

...
Anvil (AS 200 BTB), Or (AS 200H BTB) Or (AS 200EH BTB)

12 ga. 1-5/8"x1-5/8"

Double Back-To-Back
Manufacturer Spot Welded Strut Member

SVC52-EF4T

Seismic Vertical Connection - Double Beam Clamp Attachment

(Typ.) (1 Of 2) Badger Industries
(SBC158) Patent Pending
Beam Clamp. See Thick Flange Notice
(No Substitution)

(Typ.) (2 Of 2) Badger Industries
(SBC158) Patent Pending
Beam Clamp. See Thick Flange Notice
(No Substitution)

Vertical Support Rod Placement
Off-Set At Edge Of Beam Flange
Allows For Full Beam Depth
Vertical Adjustment, (Typ.)

Notice:

Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

(Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.


depicted Individual Beam Clamps Can Be Installed
On Upper Or Lower Flange
And/or On Individual Steel Beams Or Joists.

Min. (0.1875")
Max. (1.260")
Beam Flange Thickness. See Thick Flange Notice

Uniform Loading Per Chart - And - Not Depicted Center Concentrated Loading Per Chart

[X] Maximum Per Chart
**Seismic Vertical Connection - Double Beam Clamp Attachment**

**ANALYSIS**


**INSTALLATION**

- Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

**Notice:**

- Non-Uniform Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.

**Threaded Rod With Hex Nuts And Square Strut Washers.**

- ASTM A36 Or Better Vertical Support Rod, Engineered By Others.

**Beam Clamp Bolt Hidden Behind Depicted Threaded Rod, Shall Be In Full Contact With Beam Flange Steel.**

- Beam Clamp Bolt Shall Be In Full Contact With Beam Flange Steel, (TYP.)

---

**Anvil (AS 150 BTB), (AS 150H BTB) Or (AS 150EH BTB) (12 ga. 2-7/16"x1-5/8") Double Back-To-Back Manufacturer Spot Welded Strut Member**

---

**INSTALLATION DETAIL**

**BADGER INDUSTRIES**

**www.NUSIG.com**

**Sales@NUSIG.com**

**2019 Edition**
Seismic Vertical Connection - Double Beam Clamp Attachment

(TYP.) ASTM A36 Or Better Vertical Support Rod, Engineered By Others

Threaded Rod With Hex Nuts And Square Strut Washers. (TYP.) For Suspended Trapeze Supports

Beam Clamp Bolt Hidden Behind Depicted Threaded Rod, Shall Be In Full Contact With Beam Flange Steel, (TYP.)

(1-5/8") Min. (2")

Uniform Loading Per Chart - And - Not Depicted Center concentration Loading Per Chart

[X] Maximum Per Chart

Vertical Support Rod Placement Off-Set At Edge Of Beam Flange Allows For Full Beam Depth Vertical Adjustment, (TYP.)

Notice:

Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

(Typ.) (1 Of 2)
Badger Industries SBC158 Patented Pending Beam Clamp. See Thick Flange Notice (No Substitution)

(Typ.) (2 Of 2)
Badger Industries SBC158 Patented Pending Beam Clamp. See Thick Flange Notice (No Substitution)

Min. (0.1875") Max. (1.260") Beam Flange Thickness. See Thick Flange Notice

Depleted Individual Beam Clamps Can Be Installed On Upper Or Lower Flange And/or On Individual Steel Beams Or Joists.

Torque-Off Badger Industries Beam Clamp Bolt Prior To Installation Of Vertical Support Rod, (TYP.)

Uniform Load Concentrated Center Load

Uniform Load Gravity | Concentrated Center Load Gravity

SBC158

SBC158

SBC158

SBC158

SBC158

SBC158

SBC158

SBC158

3'-0"
4'-0"
5'-0"
6'-0"
7'-0"
8'-0"
9'-0"
10'-0"
11'-0"
12'-0"

1,146 lbs.
4,320 lbs.
3,616 lbs.
2,883 lbs.
2,392 lbs.
2,040 lbs.
1,775 lbs.
1,567 lbs.
1,400 lbs.
1,262 lbs.

540 lbs.
2,409 lbs.
1,797 lbs.
1,427 lbs.
1,179 lbs.
1,000 lbs.
865 lbs.
758 lbs.
672 lbs.
600 lbs.

2,101 lbs.
4,083 lbs.
3,625 lbs.
2,883 lbs.
2,313 lbs.
1,932 lbs.
1,584 lbs.
1,396 lbs.
1,247 lbs.
1,123 lbs.

~ BADGER INDUSTRIES ~

SVC52-EF6T Seismic Vertical Connection - Double Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
Anvil (AS 200), (AS 200H) Or (AS 200EH) (12 ga. 1-5/8"x1-5/8")

Single Strut Member, Installed Tight To Underside Of Beam Flange Steel, (TYP.)

Badger Industries
(SBC158)
Patent Pending
Beam Clamp. See Thick Flange Notice (No Substitution)

Min. (0.1875") Max. (1.260") Beam Flange Thickness. See Thick Flange Notice

Notice:
- Install Each Beam Clamp Through Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.
- (Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.

Thick Flange Notice:
Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

Installation Detail

Badger Industries
www.NUSIG.com
Sales@NUSIG.com

2019 Edition

Badger Industries Hardware
Seismic Part Number

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES</th>
<th>ANSI/MSS SP-58 Uniform Load</th>
<th>Concentrated Center Load</th>
<th>ANSI / FM 1950-2016 Uniform Load</th>
<th>Concentrated Center Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part Number</td>
<td>GRAVITY</td>
<td>GRAVITY</td>
<td>SEISMIC Fp / Fpc (LRFD)</td>
<td>SEISMIC Fp / Fpc (LRFD)</td>
</tr>
<tr>
<td>SBC158</td>
<td>5'- 0&quot;</td>
<td>463 lbs.</td>
<td>306 lbs.</td>
<td>837 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>6'- 0&quot;</td>
<td>383 lbs.</td>
<td>252 lbs.</td>
<td>694 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>7'- 0&quot;</td>
<td>325 lbs.</td>
<td>212 lbs.</td>
<td>592 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>8'- 0&quot;</td>
<td>281 lbs.</td>
<td>183 lbs.</td>
<td>514 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>9'- 0&quot;</td>
<td>246 lbs.</td>
<td>159 lbs.</td>
<td>454 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>10'- 0&quot;</td>
<td>219 lbs.</td>
<td>140 lbs.</td>
<td>405 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>11'- 0&quot;</td>
<td>195 lbs.</td>
<td>124 lbs.</td>
<td>365 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>12'- 0&quot;</td>
<td>176 lbs.</td>
<td>110 lbs.</td>
<td>331 lbs.</td>
</tr>
</tbody>
</table>

Beam Clamp Bolt Shall Be In Full Contact With Inside Back Of Strut Metal, (TYP.)

Concentrated Center Loading Per Chart

Uniform Loading Per Chart

(TYP.) (1 Of 2)
Badger Industries
(SBC158)
Patent Pending Beam Clamp, See Thick Flange Notice (No Substitution)

(TYP.) (2 Of 2)
Badger Industries
(SBC158)
Patent Pending Beam Clamp, See Thick Flange Notice (No Substitution)

((W", "M", "HP" & "L") Section Steel Beams And Joists By Others

Min. (0.1875") Max. (1.260") Beam Flange Thickness. See Thick Flange Notice

SBC158

AS 200H) Or (AS 200EH) (12 ga. 1-5/8"x1-5/8")

Single Strut Member, Installed Tight To Underside Of Beam Flange Steel, (TYP.)

SVC52-LF

Seismic Vertical Connection - Double Beam Clamp Attachment
(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
**Notice:**


Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

(Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.

### BADGER INDUSTRIES ~

**Seismic Vertical Connection - Double Beam Clamp Attachment**

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
**Badger Industries**

**Installation Detail**

~ Badger Industries ~

Detail (SVC52-LFa)

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>[X] Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158</td>
<td>5'-0&quot;</td>
</tr>
<tr>
<td>SBC158</td>
<td>6'-0&quot;</td>
</tr>
<tr>
<td>SBC158</td>
<td>7'-0&quot;</td>
</tr>
<tr>
<td>SBC158</td>
<td>8'-0&quot;</td>
</tr>
<tr>
<td>SBC158</td>
<td>9'-0&quot;</td>
</tr>
<tr>
<td>SBC158</td>
<td>10'-0&quot;</td>
</tr>
<tr>
<td>SBC158</td>
<td>11'-0&quot;</td>
</tr>
<tr>
<td>SBC158</td>
<td>12'-0&quot;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANSI/MSS SP-58 Uniform Load</th>
<th>Maximum Tension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uniform Load</td>
<td>GRAVITY</td>
</tr>
<tr>
<td>Concentrated Center Load</td>
<td>Maximum</td>
</tr>
</tbody>
</table>

| 463 lbs.                   | 360 lbs.        |
| 383 lbs.                   | 300 lbs.        |
| 325 lbs.                   | 250 lbs.        |
| 281 lbs.                   | 180 lbs.        |
| 246 lbs.                   | 150 lbs.        |
| 219 lbs.                   | 140 lbs.        |
| 195 lbs.                   | 120 lbs.        |
| 176 lbs.                   | 110 lbs.        |

<table>
<thead>
<tr>
<th>ANSI / FM 1950-2016 Uniform Load</th>
<th>Maximum Tension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uniform Load</td>
<td>GRAVITY</td>
</tr>
<tr>
<td>Concentrated Center Load</td>
<td>Maximum</td>
</tr>
</tbody>
</table>

| 837 lbs.                    | 530 lbs.        |
| 694 lbs.                    | 450 lbs.        |
| 592 lbs.                    | 390 lbs.        |
| 514 lbs.                    | 330 lbs.        |
| 454 lbs.                    | 297 lbs.        |
| 405 lbs.                    | 264 lbs.        |
| 365 lbs.                    | 237 lbs.        |
| 331 lbs.                    | 214 lbs.        |

**Notice:**


Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

(Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.

**Thick Flange Notice:**

Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

**Uniform Loading Per Chart**

<table>
<thead>
<tr>
<th>[X] Maximum Per Chart</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158</td>
</tr>
<tr>
<td>2'-0&quot;</td>
</tr>
<tr>
<td>3'-0&quot;</td>
</tr>
<tr>
<td>4'-0&quot;</td>
</tr>
<tr>
<td>5'-0&quot;</td>
</tr>
<tr>
<td>6'-0&quot;</td>
</tr>
<tr>
<td>7'-0&quot;</td>
</tr>
<tr>
<td>8'-0&quot;</td>
</tr>
<tr>
<td>9'-0&quot;</td>
</tr>
<tr>
<td>10'-0&quot;</td>
</tr>
<tr>
<td>11'-0&quot;</td>
</tr>
<tr>
<td>12'-0&quot;</td>
</tr>
</tbody>
</table>

**Uniform Load Concentrated Center Loading**

<table>
<thead>
<tr>
<th>Uniform Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>694 lbs.</td>
</tr>
<tr>
<td>592 lbs.</td>
</tr>
<tr>
<td>514 lbs.</td>
</tr>
<tr>
<td>454 lbs.</td>
</tr>
<tr>
<td>405 lbs.</td>
</tr>
<tr>
<td>365 lbs.</td>
</tr>
<tr>
<td>331 lbs.</td>
</tr>
<tr>
<td>297 lbs.</td>
</tr>
<tr>
<td>264 lbs.</td>
</tr>
<tr>
<td>237 lbs.</td>
</tr>
</tbody>
</table>

**Seismic Vertical Connection - Double Beam Clamp Attachment**

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>Uniform Load Maximum</th>
<th>Concentrated Center Load Maximum</th>
<th>Uniform Load Maximum</th>
<th>Concentrated Center Load Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158L 5'-0&quot;</td>
<td>1,306 lbs.</td>
<td>865 lbs.</td>
<td>2,152 lbs.</td>
<td>1,563 lbs.</td>
</tr>
<tr>
<td>SBC158L 6'-0&quot;</td>
<td>1,082 lbs.</td>
<td>714 lbs.</td>
<td>1,954 lbs.</td>
<td>1,296 lbs.</td>
</tr>
<tr>
<td>SBC158L 7'-0&quot;</td>
<td>921 lbs.</td>
<td>606 lbs.</td>
<td>1,669 lbs.</td>
<td>1,104 lbs.</td>
</tr>
<tr>
<td>SBC158L 8'-0&quot;</td>
<td>799 lbs.</td>
<td>524 lbs.</td>
<td>1,454 lbs.</td>
<td>960 lbs.</td>
</tr>
<tr>
<td>SBC158L 9'-0&quot;</td>
<td>704 lbs.</td>
<td>459 lbs.</td>
<td>1,286 lbs.</td>
<td>847 lbs.</td>
</tr>
<tr>
<td>SBC158L 10'-0&quot;</td>
<td>627 lbs.</td>
<td>407 lbs.</td>
<td>1,150 lbs.</td>
<td>755 lbs.</td>
</tr>
<tr>
<td>SBC158L 11'-0&quot;</td>
<td>564 lbs.</td>
<td>363 lbs.</td>
<td>1,039 lbs.</td>
<td>680 lbs.</td>
</tr>
<tr>
<td>SBC158L 12'-0&quot;</td>
<td>510 lbs.</td>
<td>326 lbs.</td>
<td>946 lbs.</td>
<td>617 lbs.</td>
</tr>
</tbody>
</table>

Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

(Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.

Notice:

Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Each Beam Clamp Bolt Until Strut Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

(Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.
Depicted Individual Beam Clamps Can Be Installed On Upper Or Lower Flange.

(TYP.) (1 Of 2)
Badger Industries
(SBC158)
Patent Pending
Beam Clamp. See Thick Flange Notice (No Substitution)

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>[X] Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158 5'-0&quot;</td>
<td>306 lbs. 148 lbs. 555 lbs. 273 lbs.</td>
</tr>
<tr>
<td>SBC158 6'-0&quot;</td>
<td>252 lbs. 120 lbs. 459 lbs. 244 lbs.</td>
</tr>
<tr>
<td>SBC158 7'-0&quot;</td>
<td>212 lbs. 100 lbs. 390 lbs. 189 lbs.</td>
</tr>
<tr>
<td>SBC158 8'-0&quot;</td>
<td>183 lbs. 84 lbs. 338 lbs. 162 lbs.</td>
</tr>
<tr>
<td>SBC158 9'-0&quot;</td>
<td>159 lbs. 72 lbs. 297 lbs. 141 lbs.</td>
</tr>
<tr>
<td>SBC158 10'-0&quot;</td>
<td>140 lbs. 61 lbs. 235 lbs. 123 lbs.</td>
</tr>
<tr>
<td>SBC158 11'-0&quot;</td>
<td>124 lbs. 52 lbs. 178 lbs. 109 lbs.</td>
</tr>
<tr>
<td>SBC158 12'-0&quot;</td>
<td>110 lbs. 45 lbs. 137 lbs. 86 lbs.</td>
</tr>
</tbody>
</table>

Notice:

Vertical Support Rod Placement
- Off-Set At Edge Of Beam Flange
- Allows For Full Beam Depth Vertical Adjustment, (TYP.)

"W", "M", "HP" & "L" Section Steel Beams And Joists By Others

Min. (0.1875") Max. (1.260")
Beam Flange Thickness. See Thick Flange Notice

Threaded Rod With Hex Nuts And Square Strut Washers. (TYP.)
For Suspended Trapeze Supports

(TYP.) ASTM A36 Or Better Vertical Support Rod, Engineered By Others

Anvil (AS 200), (AS 200H) Or (AS 200EH)
(12 ga. 1-5/8"x1-5/8") Single Strut Member

Uniform Loading Per Chart - And - Not Depicted Center Concentrated Loading Per Chart

(X) Maximum Per Chart

SVC52-LF1T
Seismic Vertical Connection - Double Beam Clamp Attachment

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
### ANSI/MSS SP-58

<table>
<thead>
<tr>
<th>Part Number</th>
<th>[X] Maximum</th>
<th>Uniform Load</th>
<th>Concentrated Center Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158</td>
<td>5'-0&quot;</td>
<td>588 lbs.</td>
<td>288 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>6'-0&quot;</td>
<td>486 lbs.</td>
<td>236 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>7'-0&quot;</td>
<td>412 lbs.</td>
<td>198 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>8'-0&quot;</td>
<td>356 lbs.</td>
<td>169 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>9'-0&quot;</td>
<td>312 lbs.</td>
<td>146 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>10'-0&quot;</td>
<td>277 lbs.</td>
<td>127 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>11'-0&quot;</td>
<td>247 lbs.</td>
<td>111 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>12'-0&quot;</td>
<td>222 lbs.</td>
<td>98 lbs.</td>
</tr>
</tbody>
</table>

### ANSI / FM 1950-2016

<table>
<thead>
<tr>
<th>Part Number</th>
<th>[X] Maximum</th>
<th>Uniform Load</th>
<th>Concentrated Center Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158</td>
<td>5'-0&quot;</td>
<td>1,062 lbs.</td>
<td>525 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>6'-0&quot;</td>
<td>881 lbs.</td>
<td>433 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>7'-0&quot;</td>
<td>751 lbs.</td>
<td>367 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>8'-0&quot;</td>
<td>652 lbs.</td>
<td>317 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>9'-0&quot;</td>
<td>576 lbs.</td>
<td>278 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>10'-0&quot;</td>
<td>514 lbs.</td>
<td>245 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>11'-0&quot;</td>
<td>463 lbs.</td>
<td>219 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>12'-0&quot;</td>
<td>373 lbs.</td>
<td>196 lbs.</td>
</tr>
</tbody>
</table>

**Notice:**


Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

(Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.

**Vertical Support Rod Placement**

- Off-Set At Edge Of Beam Flange Allows For Full Beam Depth Vertical Adjustment, (TYP.)
- Vertical Support Rod Placement

**Thickness Flange Notice:**

Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300") Inch, To A Maximum Thickness Of (3.00") Inch.

**Uniform Loading Per Chart**

- (Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)

---

**Badger Industries**

SVC52-LF2T

Seismic Vertical Connection - Double Beam Clamp Attachment

www.NUSIG.com  
Sales@NUSIG.com  
2019 Edition
### BADGER INDUSTRIES ~
Detail (SVC52-LF3T)

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>Uniform Load Maximum Allowable Tension GRAVITY</th>
<th>Concentrated Center Load Maximum Allowable Tension GRAVITY</th>
<th>ANSI / FM 1950-2016 Uniform Load Maximum SEISMIC Fpt / Fpc (LRFD)</th>
<th>Concentrated Center Load Maximum SEISMIC Fpt / Fpc (LRFD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158 5'- 0&quot;</td>
<td>944 lbs.</td>
<td>465 lbs.</td>
<td>1,701 lbs.</td>
<td>844 lbs.</td>
</tr>
<tr>
<td>SBC158 6'- 0&quot;</td>
<td>781 lbs.</td>
<td>382 lbs.</td>
<td>1,413 lbs.</td>
<td>698 lbs.</td>
</tr>
<tr>
<td>SBC158 7'- 0&quot;</td>
<td>665 lbs.</td>
<td>322 lbs.</td>
<td>1,206 lbs.</td>
<td>593 lbs.</td>
</tr>
<tr>
<td>SBC158 8'- 0&quot;</td>
<td>576 lbs.</td>
<td>277 lbs.</td>
<td>1,050 lbs.</td>
<td>514 lbs.</td>
</tr>
<tr>
<td>SBC158 9'- 0&quot;</td>
<td>507 lbs.</td>
<td>241 lbs.</td>
<td>928 lbs.</td>
<td>451 lbs.</td>
</tr>
<tr>
<td>SBC158 10'- 0&quot;</td>
<td>451 lbs.</td>
<td>211 lbs.</td>
<td>830 lbs.</td>
<td>401 lbs.</td>
</tr>
<tr>
<td>SBC158 11'- 0&quot;</td>
<td>405 lbs.</td>
<td>187 lbs.</td>
<td>749 lbs.</td>
<td>359 lbs.</td>
</tr>
<tr>
<td>SBC158 12'- 0&quot;</td>
<td>366 lbs.</td>
<td>166 lbs.</td>
<td>681 lbs.</td>
<td>324 lbs.</td>
</tr>
</tbody>
</table>

#### Notice:
- Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.
- (Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.

**Badger Industries Beam Clamp Bolt Head, (TYP.)**

**Upper And Lower Strut Nuts Sized To Fit Vertical Support Rod, Installed Hand Tight Plus (1/4) Turn. Lower Strut Nut Is Not Required For Gravity Vertical Supports Not Required To Resist Uplift Forces, (TYP.)**

**Threaded Rod With Hex Nuts And Square Strut Washers, (TYP.)**

**For Suspended Trapeze Supports**

**Uniform Loading Per Chart - And - Not Depicted Center Concentrated Loading Per Chart**

**SVC52-LF3T**

Seismic Vertical Connection - Double Beam Clamp Attachment

(Typ.) (Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>[X] Maximum</th>
<th>Uniform Load Maximum Allowable Tension GRAVITY</th>
<th>Concentrated Center Load Maximum Allowable Tension GRAVITY</th>
<th>ANSI / FM 1950-2016 Uniform Load Center Load Maximum SEISMIC Fpt / Fpc (LRFD)</th>
<th>Concentrated Center Load Maximum SEISMIC Fpt / Fpc (LRFD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158</td>
<td>5'- 0&quot;</td>
<td>865 lbs.</td>
<td>424 lbs.</td>
<td>1,563 lbs.</td>
<td>773 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>6'- 0&quot;</td>
<td>714 lbs.</td>
<td>347 lbs.</td>
<td>1,296 lbs.</td>
<td>637 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>7'- 0&quot;</td>
<td>606 lbs.</td>
<td>291 lbs.</td>
<td>1,104 lbs.</td>
<td>540 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>8'- 0&quot;</td>
<td>524 lbs.</td>
<td>248 lbs.</td>
<td>960 lbs.</td>
<td>466 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>9'- 0&quot;</td>
<td>459 lbs.</td>
<td>214 lbs.</td>
<td>847 lbs.</td>
<td>408 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>10'- 0&quot;</td>
<td>407 lbs.</td>
<td>186 lbs.</td>
<td>755 lbs.</td>
<td>360 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>11'- 0&quot;</td>
<td>363 lbs.</td>
<td>162 lbs.</td>
<td>680 lbs.</td>
<td>321 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>12'- 0&quot;</td>
<td>326 lbs.</td>
<td>142 lbs.</td>
<td>617 lbs.</td>
<td>288 lbs.</td>
</tr>
</tbody>
</table>

**Notice:**


Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

(Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.

**Notice:**


Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

(Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.
Depicted Individual Beam Clamps Can Be Installed On Upper Or Lower Flange. (TYP.) (1 Of 2) Badger Industries (SBC158) Patent Pending Beam Clamp. See Thick Flange Notice (No Substitution)

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Seismic Hardware Part Number</th>
<th>ANSI/MSS SP-58 Uniform Load</th>
<th>ANSI / FM 1950-2016 Uniform Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158 5'-0&quot;</td>
<td>1,736 lbs.</td>
<td>Maximum Allowable Tension GRAVITY</td>
</tr>
<tr>
<td>SBC158 6'-0&quot;</td>
<td>1,438 lbs.</td>
<td>Maximum Allowable Tension GRAVITY</td>
</tr>
<tr>
<td>SBC158 7'-0&quot;</td>
<td>1,224 lbs.</td>
<td>Maximum Allowable Tension GRAVITY</td>
</tr>
<tr>
<td>SBC158 8'-0&quot;</td>
<td>1,063 lbs.</td>
<td>Maximum Allowable Tension GRAVITY</td>
</tr>
<tr>
<td>SBC158 9'-0&quot;</td>
<td>936 lbs.</td>
<td>Maximum Allowable Tension GRAVITY</td>
</tr>
<tr>
<td>SBC158 10'-0&quot;</td>
<td>834 lbs.</td>
<td>Maximum Allowable Tension GRAVITY</td>
</tr>
<tr>
<td>SBC158 11'-0&quot;</td>
<td>750 lbs.</td>
<td>Maximum Allowable Tension GRAVITY</td>
</tr>
<tr>
<td>SBC158 12'-0&quot;</td>
<td>679 lbs.</td>
<td>Maximum Allowable Tension GRAVITY</td>
</tr>
</tbody>
</table>

Vertical Support Rod Placement Off-Set At Edge Of Beam Flange Allows For Full Beam Depth Vertical Adjustment, (TYP.)

Beam Clamp Bolt Shall Be In Full Contact With Beam Flange Steel, (TYP.)

Torque-Off: Badger Industries Beam Clamp Bolt Head, (TYP.)

Upper And Lower Strut Nuts Sized To Fit Vertical Support Rod. Installed Hand Tight Plus (1/4) Turn. Lower Strut Nut Is Not Required For Gravity Vertical Supports Not Required To Resist Uplift Forces, (TYP.)

Threaded Rod With Hex Nuts And Square Strut Washers, (TYP.) For Suspended Trapezoid Supports

Notice:
- Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.
- (Non-Uniform) Load Or Loads Can Be Placed Across Span [X]. Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.
**Seismic Vertical Connection - Double Beam Clamp Attachment**

**Badger Industries**

**SVC52-LF6T**

**INSTALLATION DETAIL**

**Badger Industries Seismic Hardware Part Number**

<table>
<thead>
<tr>
<th>BADGER INDUSTRIES Part Number</th>
<th>Minimum Allowable Tension</th>
<th>Maximum Allowable Tension</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158</td>
<td>2,883 lbs.</td>
<td>1,427 lbs.</td>
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<tr>
<td>SBC158</td>
<td>2,392 lbs.</td>
<td>1,179 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>2,040 lbs.</td>
<td>1,000 lbs.</td>
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<tr>
<td>SBC158</td>
<td>1,775 lbs.</td>
<td>865 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>1,567 lbs.</td>
<td>758 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>1,400 lbs.</td>
<td>672 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>1,262 lbs.</td>
<td>600 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>1,146 lbs.</td>
<td>540 lbs.</td>
</tr>
</tbody>
</table>

**Notice:**

**Note:**
(Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.

**American National Standards Institute (ANSI) / Manufacturers Standardization Board (MSS) SP-58**

**ANSI / FM 1950-2016**

<table>
<thead>
<tr>
<th>Uniform Load</th>
<th>Concentrated Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fpt / Fpc (LRFD)</td>
<td>Fpt / Fpc (LRFD)</td>
</tr>
</tbody>
</table>

**Threaded Rod With Hex Nuts And Square Strut Washers**

**Trapeze Supports**

**Beam Clamp Bolt**

**Upper And Lower Strut Nuts Sizing To Fit Vertical Support Rod. Installed Hand Tight Plus (1/4) Turn. Lower Strut Nut Is Not Required For Gravity Vertical Supports Not Required To Resist Uplift Forces.**

**Torque-Off**

**Beam Clamp Bolt Head**

**Anvil (AS 100 BTB), (AS 100H BTB) Or (AS 100EH BTB)**

**Double Back-To-Back**

**Thickness Notice:**
Use Badger Industries (SBC158-L-C) Beam Clamp For Flange Thickness (1.300") In. To A Maximum Thickness Of (3.00") In. 2019 Edition
**SVC52-LFS1**

**Seismic Vertical Connection - Double Beam Clamp Attachment**

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)

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### INSTALLATION DETAIL

**BADGER INDUSTRIES**

Seismic Vertical Connection - Double Beam Clamp Attachment

---

**Notice:**


Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others. (Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.

---

<table>
<thead>
<tr>
<th>Beam Clamp Part Number</th>
<th>Maximum Load</th>
<th>[X] Maximum</th>
<th>Uniform Load</th>
<th>Concentrated Center Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>SBC158</td>
<td>8'-0&quot;</td>
<td>183 lbs.</td>
<td>84 lbs.</td>
<td>338 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>9'-0&quot;</td>
<td>159 lbs.</td>
<td>72 lbs.</td>
<td>297 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>10'-0&quot;</td>
<td>140 lbs.</td>
<td>61 lbs.</td>
<td>238 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>11'-0&quot;</td>
<td>124 lbs.</td>
<td>52 lbs.</td>
<td>179 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>12'-0&quot;</td>
<td>110 lbs.</td>
<td>45 lbs.</td>
<td>138 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>13'-0&quot;</td>
<td>98 lbs.</td>
<td>38 lbs.</td>
<td>109 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>14'-0&quot;</td>
<td>88 lbs.</td>
<td>32 lbs.</td>
<td>87 lbs.</td>
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<tr>
<td>SBC158</td>
<td>15'-0&quot;</td>
<td>79 lbs.</td>
<td>26 lbs.</td>
<td>71 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>16'-0&quot;</td>
<td>71 lbs.</td>
<td>21 lbs.</td>
<td>58 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>17'-0&quot;</td>
<td>63 lbs.</td>
<td>17 lbs.</td>
<td>49 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>18'-0&quot;</td>
<td>56 lbs.</td>
<td>12 lbs.</td>
<td>41 lbs.</td>
</tr>
</tbody>
</table>

---

**BADGER INDUSTRIES**

Seismic Vertical Connection - Double Beam Clamp Attachment

---

**Thick Flange Notice:**

Use Badger Industries (SBC158-L) Beam Clamp For Flange Thickness (1.300”) Inch, To A Maximum Thickness Of (3.00”) Inch.

---

**Beam Clamp Bolt shall be in Full Contact With Beam Flange Steel, (TYP.)**

**Torque-Off Beam Clamp Bolt Head Prior To Installation Of Depicted Lock Washer And Long (1/2-13) Coupler Nut, Tightened Until Lock Washer Is Flat, Plus (1/4) Turn, (TYP.)**

---

**Concentrated Center Loading Per Chart**

**Uniform Loading Per Chart**

---

**W**, "M", "HP" & "L" Section Steel Beams And Joists By Others

---

**Min. (0.25")**

**Max. (1.26")**

---

**Beam Flange Thickness. See Thick Flange Notice**

---

**Approximate Long (1/2-13) Coupler Nut And Lock Washer. Tightened Until Lock Washer Is Flat, Plus (1/4) Turn, (TYP.)**
**Notice:**


Instal Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

(Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.

**Badger Industries**

**Seismic Hardware**

**Part Number**

**SVC52-LFS2**

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<tbody>
<tr>
<td>Part Number</td>
<td>Uniform Load</td>
<td>Concentrated Center Load</td>
</tr>
<tr>
<td>Minimum</td>
<td>Maximum</td>
<td>Allowable Tension Gravity</td>
</tr>
<tr>
<td>SBC158</td>
<td>8'-0&quot;</td>
<td>356 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>9'-0&quot;</td>
<td>312 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>10'-0&quot;</td>
<td>277 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>11'-0&quot;</td>
<td>222 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>12'-0&quot;</td>
<td>201 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>13'-0&quot;</td>
<td>182 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>14'-0&quot;</td>
<td>166 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>15'-0&quot;</td>
<td>151 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>16'-0&quot;</td>
<td>138 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>17'-0&quot;</td>
<td>126 lbs.</td>
</tr>
<tr>
<td>SBC158</td>
<td>18'-0&quot;</td>
<td>115 lbs.</td>
</tr>
</tbody>
</table>

**Diagram:**

- Strut Can Be Skewed Or Perpendicular To Beams
- Uniform Loading Per Chart
- Concentrated Center Loading Per Chart
- Torque-Off Beam Clamp Bolt Head Prior To Installation Of Depicted Lock Washer And Long (1/2-13) Coupler Nut, Tightened Until Lock Washer Is Flat, Plus (1/4) Turn, (TYP.)
- Thick Flange Notice: Use Badger Industries (SBC158L-C) Beam Clamp For Flange Thickness (1.300"") Inch, To A Maximum Thickness Of (3.00"") Inch.

**Anvil:**

- Badger Industries (AS 150) Or (AS 150H) (12 ga. 2-7/16"x1-5/8"") Single Strut Member, (TYP.)
**Notice:**


Install Each Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away. Use Of An Alternate Strut Shall Be Engineered By Others.

(Non-Uniform) Load Or Loads Can Be Placed Across Span [X], Provided The Accumulated Loads Do Not Exceed Applicable Center Concentrated Load Listing Within Chart.

### Badger Industries

**Seismic Vertical Connection - Double Beam Clamp Attachment**

**SVC52-LFS3**

**Seismic Hardware**

**Part Number**

*www.NUSIG.com*

**Sales@NUSIG.com**

**2019 Edition**
**INSTALLATION DETAIL**

**Seismic Brace Connection - Single Beam Clamp Attachment**

(Typ. View) - (Not To Scale) - (Read General Notes Prior To Use)

---

**Notice:** "SEBO" Seismic Engineering By Others


Install Beam Clamp Throat Steel-To-Steel Tight To Flange Of Beam. Tighten Beam Clamp Bolt Until Cup Point End Of Spacer Is Tight Against Beam Flange And Torque-Off Head Of Bolt Breaks Away.

-C Or C Which Indicates Cup Point Spacer Required To Be Installed At Threaded End Of Torque-Off Beam Clamp Bolt, May Or May Not Be Stamped Into Beam Clamp.

**Do Not Install With Brace Arm Crossing Over Beam Clamp Torque-Off Bolt**

**Do Not Connect Seismic Hardware To Beam Clamp Torque-Off Bolt**

---

**ANSI / FM 1950-2016**

<table>
<thead>
<tr>
<th>Brace Splayed Between Perpendicular And Parallel.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brace Angle From Vertical</td>
</tr>
<tr>
<td>Perpendicular To Beam Length</td>
</tr>
<tr>
<td>30° to 44° Maximum Fp (LRFD)</td>
</tr>
<tr>
<td>45° to 60° Maximum Fp (LRFD)</td>
</tr>
<tr>
<td>61° to 75° Maximum Fp (LRFD)</td>
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</tr>
</tbody>
</table>

---

**~ BADGER INDUSTRIES ~**

**Detail (SSC51)**

**BADGER INDUSTRIES**

- Beam Clamp Part Number
- SBC158-C
- 493 lbs.
- 493 lbs.
- 435 lbs.
- 440 lbs.
- 550 lbs.
- 478 lbs.

---

**SSC51**

**Seismic Brace Connection - Single Beam Clamp Attachment**

(Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)
**~ BADGER INDUSTRIES ~**

**Detail (SSC51-J)**

<table>
<thead>
<tr>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Beam Clamp Part Number</td>
<td>Perpendicular To Beam Length</td>
<td>Parallel To Beam Length</td>
</tr>
<tr>
<td></td>
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<td>61º to 75º Max Fp (LRFD)</td>
<td>61º to 75º Max Fp (LRFD)</td>
</tr>
</tbody>
</table>

- **SBC158-C**
  - 493 lbs.
  - 493 lbs.
  - 435 lbs.

- **Install Beam Clamp Throat**
  - Steel-To-Steel Tight To Flange Of Joist. Tighten Beam Clamp Bolt Until Cup Point End Of Spacer Is Tight Against Joist Flange And Torque-Off Head Of Bolt Breaks Away.

- **C Or C** Which Indicates Cup Point Spacer Required To Be Installed At Threaded End Of Torque-Off Beam Clamp Bolt, May Or May Not Be Stamped Into Beam Clamp.

- **Notice: “SEBO”™ Seismic Engineering By Others**

- **Vertical Fp**
  - Per Chart

- **Horizontal Fp**
  - Per Chart

- **Brace Splayed Between Perpendicular And Parallel.**
  - 440 lbs.
  - 435 lbs.
  - 435 lbs.

- **Brace Angle From Vertical**
  - 30º to 44º Maximum Fp (LRFD)
  - 45º to 60º Maximum Fp (LRFD)
  - 61º to 75º Maximum Fp (LRFD)

- **Do Not Install**
  - With Brace Arm Crossing Over Beam Clamp Torque-Off Bolt

- **Do Not Connect**
  - Seismic Hardware To Beam Clamp Torque-Off Bolt

- **APPENDIX**

- **SC51-J**

- **Seismic Brace Connection - Single Beam Clamp Attachment**

  (Elev. View) - (Not To Scale) - (Read General Notes Prior To Use)