Material Composition

**BB75**: ASTM A1003/A1003M Structural Grade 33 (230) Type H, ST33H (ST230H): 33ksi (230MPa) minimum yield strength, 45ksi (310MPa) minimum tensile strength, 28mil minimum thickness (22 gauge, 0.0295” design thickness) with ASTM A653/A653M G60 (Z180) hot dipped galvanized coating.

**BB150**: ASTM A1003/A1003M Structural Grade 50 (340) Type H, ST50H (ST340H): 50ksi (340MPa) minimum yield strength, 65ksi (450MPa) minimum tensile strength, 33mil minimum thickness (20 gauge, 0.0346” design thickness) with ASTM A653/A653M G90 (Z275) hot dipped galvanized coating.

Effective Section Properties and Allowable Loads

<table>
<thead>
<tr>
<th>Section</th>
<th>Minimum Thickness (in)</th>
<th>Design Thickness (in)</th>
<th>Minimum Yield Strength (ksi)</th>
<th>Design Thickness (in)</th>
<th>Effective Section Properties (in)</th>
<th>Effective Section Properties (lbs)</th>
<th>Load Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>BB75</td>
<td>0.0280</td>
<td>0.0295</td>
<td>33</td>
<td>52”</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BB150</td>
<td>0.0329</td>
<td>0.0346</td>
<td>50</td>
<td>75”</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes:

- Use BridgeClip® for a quick & easy method of securing BridgeBar to stud (when required)
- Resists compressive loads through the plane of the wall
- Use through ¾” and 1½” stud punchouts.
- Gross section properties are calculated based on the minimum dimensions of the cross section.
- Effective section properties and allowable loads for BridgeBar are calculated based on AISI S100-2007 Specification.
- Effective section modulus (S_e) is calculated based on the minimum dimensions of the cross section.
- Effective area (A_e) and allowable axial load (P_a) are calculated based on the average dimensions of the cross section.

Securing Bar to Stud

When loads require attachment of BridgeBar to stud, consider the screw shear allowables below for connection of BridgeClip to stud and BridgeBar.

Nomenclature

BridgeBar is available in ¾” and 1½” widths. Designations are BB75 and BB150.

**Example**: Stud with ¾” knockout
**Designate**: BB75

Cross Sections

**BB75**

**BB150**

Lap Joint

BridgeBar’s 52” length allows for a 4” overlap at joints. Simply fit one end over the other and line up the guide holes for quick & easy placement of screw(s). Joint locations maintain stud spacing as designed through length of the wall system.