PLANK AND LARGE PANEL STABILIZER BARS APPLICATION GUIDE

Market demands for plank and large panel ceiling systems such as the USG Ceiling Systems Logix™ Brand Integrated Ceiling Systems has created the need for secondary lateral stabilization of the suspension system members to ensure system integrity.

USG has a long history of product development and innovation for suspended ceiling systems, including plank and large panel ceiling systems, and we continue to commit resources to this endeavor. We have thoroughly examined this condition, and the findings of this study as well as our recommendations are presented in this guide to assist in the understanding, specification, and installation of this ceiling application.
STABILIZER BARS

Introduction

- Versatile engineered stabilizer designs provide support, security, and accessibility.
- Factory-engineered solutions provide system rigidity in large module applications and offer quick installation, which reduces field labor time.
- Numerous dimensions available to facilitate fast delivery.
- Durable galvanized steel construction for seismic and non-seismic installations.
- Accessible stabilizer bars feature factory-engineered capture tabs that prevent panel detachment and lip-out.
- Accessible stabilizer bars feature adjustable stab tabs that secure bars onto the panel.
- Accessible stabilizer bars feature bulb tabs that hook over the grid to prevent detachment, maintain lateral alignment, and provide access.

APPLICATION GUIDELINES

- Stabilizer bars are appropriate for all interior general use areas.
- A large panel is considered any panel that is equal to or longer than 5 feet and/or wider than 30 in.
- In large modules requiring secondary stabilization, the stabilizer bar is acting as a cross tee.
- If the panel length is ≥ 60 in. then one stabilizer is required at midpoint.
- If the panel length is ≥ 96 in. then two stabilizer bars are required at the 1/3 and 2/3 points.
- Cross tees ≥ 96 inches used in large modules shall have hanger wires installed a minimum of 4 ft. o.c.
- Plank and large metal panels requiring secondary stabilization shall use standard or locking stabilizer bars.
- Hanger wire spacing surrounding plank and large panels weighing more than 2 lb./SF, such as wood panels, shall not exceed 4 ft. o.c.
- 2’ wide panels require a minimum of 3” of clearance for installation. 4’ wide panels require 8” of clearance.
STABILIZER BARS

Description

USG offers a variety of stabilizer bars to provide rigid support for ceiling suspension systems. Specially notched safety bars attach to the main tees and cross tees, which prevents the tee ends from spreading and enhances the rigidity of ceiling modules. USG stabilizer bars are available in different sizes and options for various applications. USG stabilizer bars are a unique, factory-engineered solution that meets the requirements for large module and seismic ceiling installations while enhancing system performance, safety, and accessibility.

<table>
<thead>
<tr>
<th>General Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Factory-engineered solution provides system rigidity in general applications and offers quick installation that reduces field labor time.</td>
</tr>
<tr>
<td>• Six different varieties available to meet preference requirements with fast delivery.</td>
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<tr>
<td>• Durable galvanized steel construction for non-seismic installations.</td>
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<table>
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<th>Seismic Applications</th>
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</thead>
<tbody>
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<td>• Factory-engineered solution provides system rigidity in seismic applications and offers quick installation that reduces field labor time.</td>
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<tr>
<td>• Durable galvanized steel construction for seismic installations.</td>
</tr>
<tr>
<td>• Factory-engineered notches prevent transversal movement.</td>
</tr>
<tr>
<td>• Adjustable locking tabs secure bars onto the tees.</td>
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</tbody>
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<th>Plank and Large Panel Ceiling Systems</th>
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<td>• Bulb tabs hook over the grid to prevent detachment, maintain lateral alignment, and provide access.</td>
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STANDARD STABILIZER BARS

General Applications

CC1530
30" Stabilizer Bar

CC2520
20" Stabilizer Bar

CC15-5
5' Stabilizer Bar

CC15-4-2
4' Stabilizer Bar Notched 2' on Center

CC15-4
4' Stabilizer Bar

CC15-3
3' Stabilizer Bar

CC15-2
2' Stabilizer Bar

CC15-1
1' Stabilizer Bar
LOCKING STABILIZER BARS

Seismic Applications

**SB12**
1' Stabilizer Bar
1 ft. (12") center-to-center notch spacing

**SB24**
2' Stabilizer Bar
2 ft. (24") center-to-center notch spacing

**SB36**
3' Stabilizer Bar
3 ft. (36") center-to-center notch spacing

**SB48**
4' Stabilizer Bar
4 ft. (48") center-to-center notch spacing

**SB48-24**
4' Stabilizer Bar
Notched 2' on Center
2 ft. (24") center-to-center notch spacing
4 ft. (48") center-to-center notch spacing

**SB60**
5' Stabilizer Bar
5 ft. (60") center-to-center notch spacing
## ACCESSIBLE STABILIZER BARS

### Plank and Large Panel Applications

<table>
<thead>
<tr>
<th>Model</th>
<th>Length</th>
<th>Center-to-Center Spacing</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASB24</td>
<td>24”</td>
<td>2 ft (24”)</td>
</tr>
<tr>
<td>ASB30</td>
<td>30”</td>
<td>2 ft 6 in (30”)</td>
</tr>
<tr>
<td>ASB48</td>
<td>48”</td>
<td>4 ft (48”)</td>
</tr>
<tr>
<td>ASB600</td>
<td>600 mm</td>
<td>600 mm</td>
</tr>
<tr>
<td>ASB900</td>
<td>900 mm</td>
<td>900 mm</td>
</tr>
<tr>
<td>ASB1200</td>
<td>1200 mm</td>
<td>1200 mm</td>
</tr>
</tbody>
</table>

*Notes:*
- Center-to-center spacing is the distance between the centers of the bars.
- Notch spacing refers to the spacing of the notches along the length of the bars.
## STABILIZER BARS

### Requirements

**One Stabilizer Bar**
- Panels ≥ 60” If panel length is ≥ 60”, then one stabilizer is required at midpoint.

**Two Stabilizer Bars**
- Panels ≥ 96” If panel length is ≥ 96”, then two stabilizer bars are required at the 1/3 and 2/3 points.

### Sample Layouts

#### NO STABILIZER BAR

<table>
<thead>
<tr>
<th>Traditional Panels</th>
<th>Large Panels</th>
<th>Planks</th>
</tr>
</thead>
<tbody>
<tr>
<td>12” x 12”</td>
<td>4’ x 4’</td>
<td></td>
</tr>
<tr>
<td>2’ x 2’</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30” x 30”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2’ x 4’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### ONE STABILIZER BAR

<table>
<thead>
<tr>
<th>Traditional Panels</th>
<th>Large Panels</th>
<th>Planks</th>
</tr>
</thead>
<tbody>
<tr>
<td>20” x 60”</td>
<td>2’ x 6’</td>
<td></td>
</tr>
<tr>
<td>30” x 60”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2’ x 5’</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### TWO STABILIZER BARS

<table>
<thead>
<tr>
<th>Traditional Panels</th>
<th>Large Panels</th>
<th>Planks</th>
</tr>
</thead>
<tbody>
<tr>
<td>4’ x 8’</td>
<td>2’ x 8’</td>
<td></td>
</tr>
</tbody>
</table>
INSTALLATION

Standard Stabilizer Bars

STEP 1

Apply the stabilizer bar perpendicular to the perimeter tees.

STEP 2

Place the stabilizer bar aligning the notches onto the bulb of the tee.
INSTALLATION

Locking Stabilizer Bars

STEP 1
Apply the stabilizer bar perpendicular to the perimeter tees.

STEP 2
Fit the stabilizer bar onto the tee bulbs through the notches.

STEP 3
Fold the locking tabs to secure the stabilizer bar in place.
INSTALLATION

Accessible Stabilizer Bars (ASB)

**STEP 1**
Towards each end of the ASB, a stab tab is punched out of the lower leg. To ensure proper positioning, the stab tab should be bent downwards.

**STEP 3**
Position the ASB on the back of the panel. There is a slot on either end of the bar that should align with the panel edge. Press firmly down on the bar until the stab tabs are fully engaged.

**STEP 3**
Engage the capture tabs on either end of the ASB.
**INSTALLATION**

**Accessible Stabilizer Bars (ASB)**

**STEP 4**

The capture tabs should not contact the paint or finish of the panel edge and should be pressed in as far as they can go to avoid interference with the suspension system.

**STEP 5**

If the panel length is > 96”, then two stabilizer bars are required at the 1/3 and 2/3 points.

Note: Install adjoining stabilizer bars at a slight offset to avoid interference with adjacent stabilizer bars.

**STEP 6**

Install the panel into the suspension system.
INSTALLATION

Accessible Stabilizer Bars (ASB)

STEP 7

The panel bar hooks over the bulb of the suspension system.

**Note:** The bar does not seat on the top of the grid bulb. It captures the bulb laterally and keeps the bulb in the proper relative position to the panel edge.

STEP 8

After the panel is installed, the bulb tab may be turned towards the suspension system body to avoid interference when the adjacent panel is installed.
**INSTALLATION**

**Accessible Stabilizer Bars (ASB)**

The maximum thickness of the material sitting on the suspension system flange is 7/8".

The minimum thickness of the material sitting on the suspension system flange is 3/8".

**Note:** The ASB works with full-size grid profiles and does not work on the 19 small bulb profiles.
INSTALLATION

Accessible Stabilizer Bars for USG True™ Wood Panels

A stabilizer bar is needed when installing certain USG True™ Brand Wood Panels. The Accessible Stabilizer Bar is to be used with the outer capture tab snipped off.

**STEP 1**

Determine the number of stabilizer bars required.

<table>
<thead>
<tr>
<th>Panel Size</th>
<th>Number of Stabilizer Bars</th>
</tr>
</thead>
<tbody>
<tr>
<td>1' x 4'</td>
<td>0</td>
</tr>
<tr>
<td>1' x 5'</td>
<td>0</td>
</tr>
<tr>
<td>2' x 6'</td>
<td>1</td>
</tr>
<tr>
<td>2' x 8'</td>
<td>3</td>
</tr>
<tr>
<td>20&quot; x 60&quot;</td>
<td>1</td>
</tr>
<tr>
<td>30&quot; x 60&quot;</td>
<td>1</td>
</tr>
</tbody>
</table>

**STEP 2**

Snip off the outer capture tab.
## INSTALLATION

**Accessible Stabilizer Bars for USG True™ Wood Panels**

**STEP 3**
Center the stabilizer bar so the ends are flush with the panel edge.

**STEP 4**
Fasten with 1/2" x 1/2" #12 screws.

**STEP 5**
Lower the panel into the grid opening, ensuring the stabilizer bar engages with the bulb of grid.
PRODUCT INFORMATION
See usg.com for the most up-to-date product information.

INSTALLATION
Must be installed in compliance with ASTM C636, ASTM E580, CISCA, and standard industry practices.

CODE COMPLIANCE
The information presented is correct to the best of our knowledge at the date of issuance. Because codes continue to evolve, check with a local official prior to designing and installing a ceiling system. Other restrictions and exemptions may apply. This is only intended as a quick reference.

ICC EVALUATION SERVICE, INC., REPORT COMPLIANCE
Suspension systems manufactured by USG Interiors, LLC, have been reviewed and are approved by listing in ICC-ES Evaluation Report 1222. Evaluation Reports are subject to reexamination, revision and possible cancellation. Please refer to usgdesignstudio.com or usg.com for current reports.

L.A. RESEARCH REPORT COMPLIANCE
Donn Brand suspension systems manufactured by USG Interiors, LLC, have been reviewed and are approved by listing in the following L.A. Research Report number: 25764.

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SAFETY FIRST!
Follow good safety/industrial hygiene practices during installation. Wear appropriate personal protective equipment. Read MSDS and literature before specification and installation.

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