

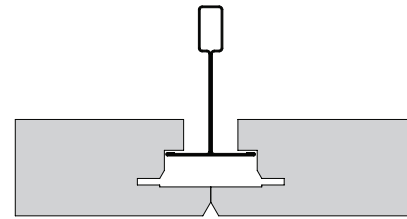
Seismic Category D, E, F Installation Details

Fully Concealed Rockfon® CDX

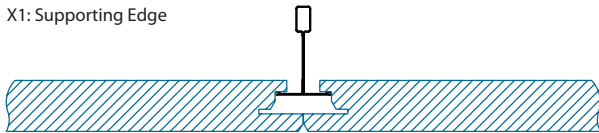
Rockfon fully concealed CDX panels have been shake table tested under the following conditions; the installation details described below are the minimum acceptable installation method. All installation details not shown are per ASTM C636 and ASTM E580, and are subject to additional requirements governed by local building codes and regulations. Consult with local engineer of record or authority having jurisdiction to verify compliance for your project.

CDX Concealed tiles have two supporting X1 and two non-supporting X2 edges. In all rectangular panels, the X1 supporting edge is always the longer edge.

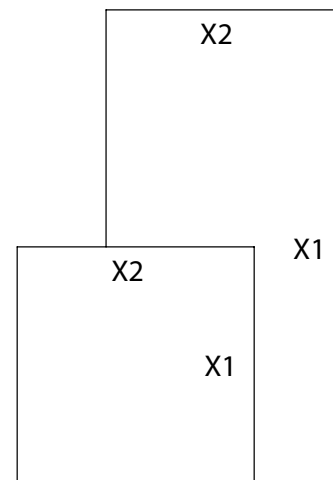
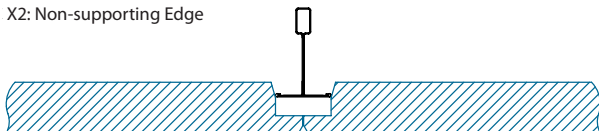
For more installation details, reference the Rockfon installation guide for CDX/SCD.



X1: Supporting Edge



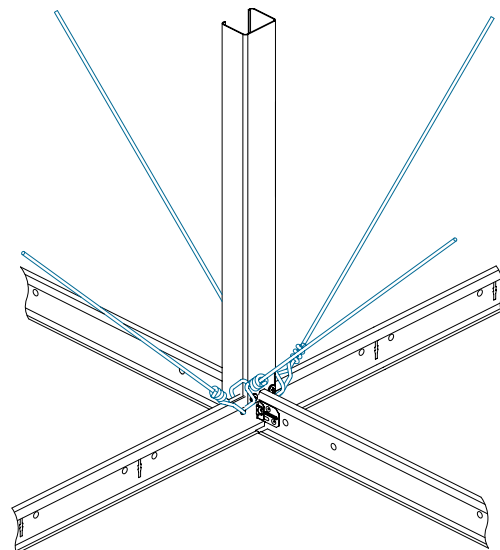
X2: Non-supporting Edge



FIELD INSTALLATION

Grid

The field grid is installed following the practices outlined in ASTM C636 and ASTM E580 and must conform to all local building codes and standards. This includes the requirement of seismic restraint using downposts as prescribed in the standard.



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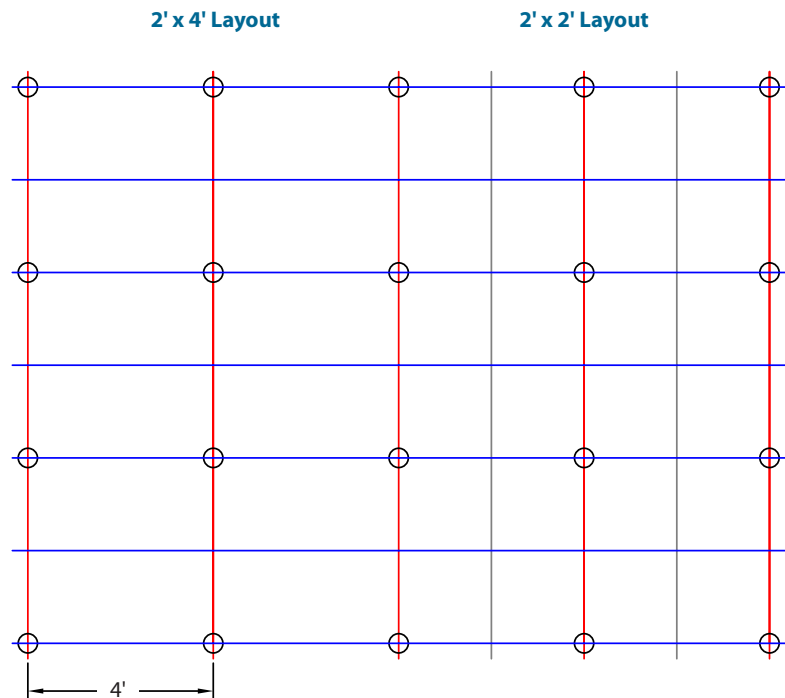
Grid layouts

For standard 2' x 2' and 2' x 4' installations, the main runners are installed on traditional 48" centers. For plank panel installations, the main runners are spaced at the distance of the long panel edge. Reference the below layouts as a guide. Install downposts at grid intersections at 12' centers maximum.

2' x 2' and 2' x 4' Layouts

Grid

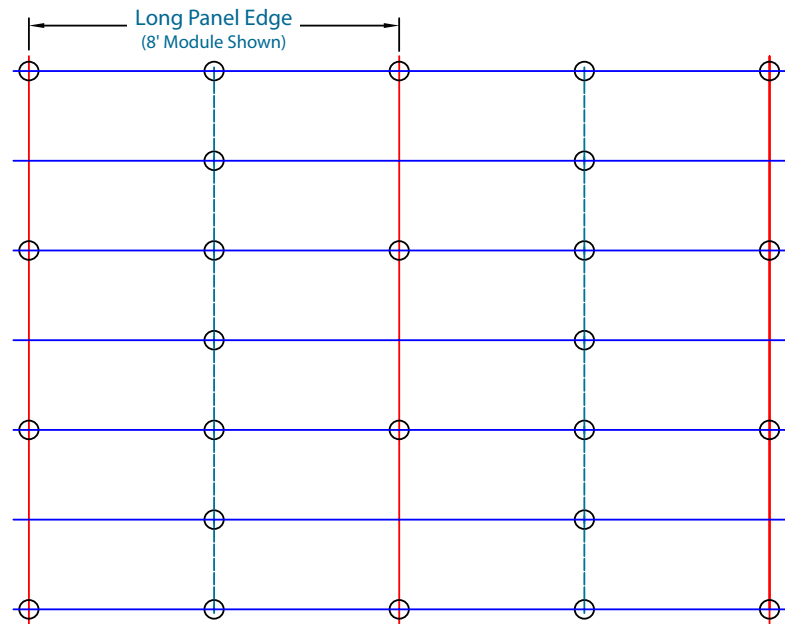
- 200: Main Runners
- 1210: 4' Cross Tees
- 1202: 2' Cross Tees
- Hanger wires



Plank Panels

Grid

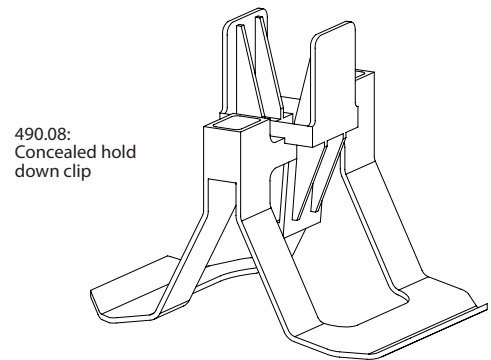
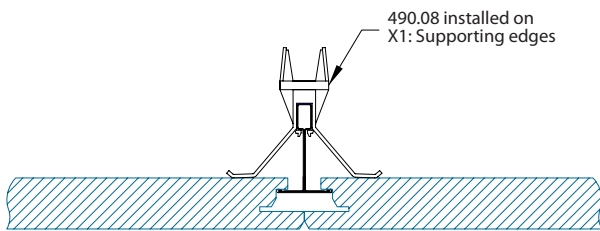
- 200: Main Runners
- Cross Tees:
 - 1278: 8' Cross Tee
 - 1236: 6' Cross Tee
 - 1296: 5' Cross Tee
- 824.00H Spacer Bar
- Hanger wires



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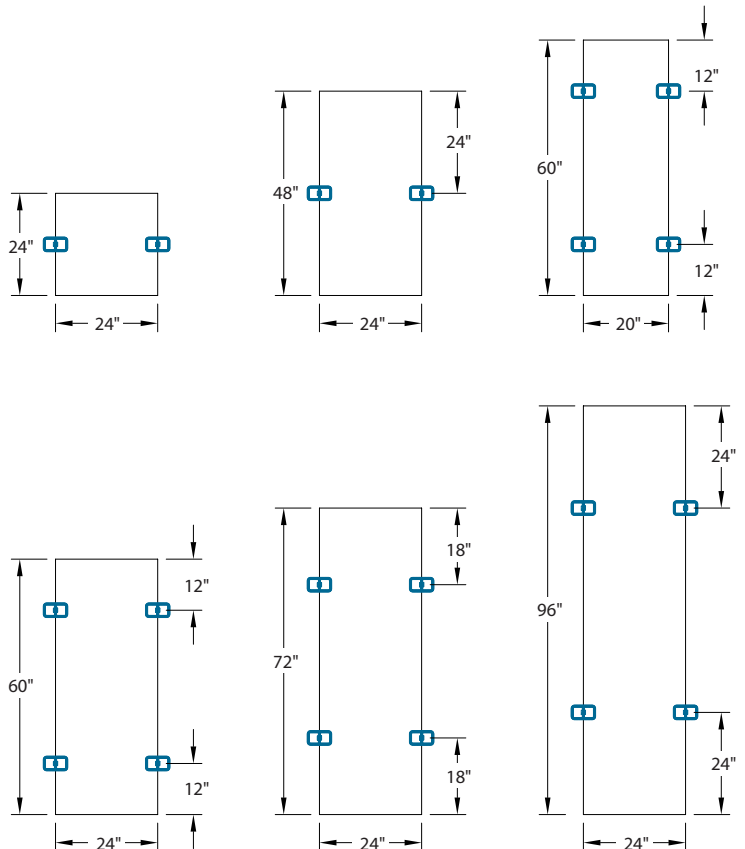
Field Panels

The full field panels are installed from below and require 490.08 concealed hold down clips in seismic D, E, and F installations. These hold down clips do not limit accessibility of the system. Always install the 490.08 concealed hold down clips on cross tees and on the X1 supporting edge. Installing the 490.08 clips on the X2 non-supporting edge will create panel lipping and poor aesthetics on the finished ceiling. The 490.08 concealed hold down clips install quickly and easily by pushing the clips over the bulb of the grid.



Hold down requirements

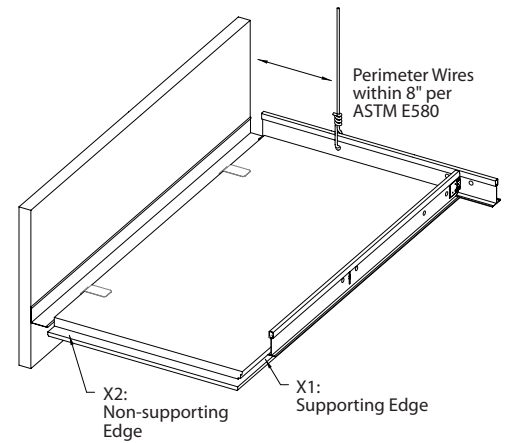
| Panel size | Hold downs X1 edge | Location |
|------------|--------------------|---------------------|
| 2' x 2' | 1 | Centered on X1 edge |
| 2' x 4' | 1 | Centered on X1 edge |
| 20" x 5' | 2 | 12" from X2 edge |
| 2' x 5' | 2 | 12" from X2 edge |
| 2' x 6' | 2 | 18" from X2 edge |
| 2' x 8' | 2 | 24" from X2 edge |



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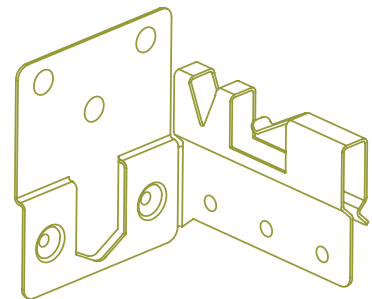
Perimeter Details

In all seismic design categories special attention must be given to the perimeters. Per ASTM E580 two adjacent walls are to be fixed or anchored and the remaining two adjacent walls are floating with the suspension components cut 3/4" short of the wall to allow movement of the system. All grid components must have a suspension wire within 8" of the wall as described in the code.



Tested Code Alternatives

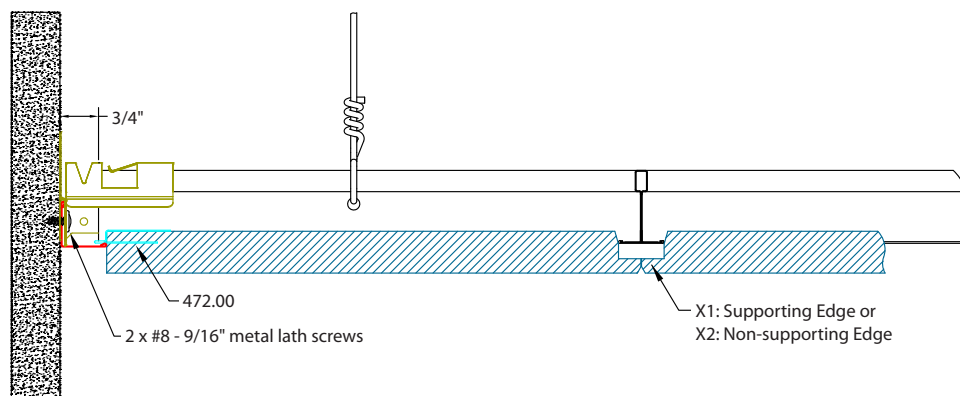
The use of Rockfon 472.00 CDX/SCD border clips in conjunction with seismically accepted code alternative perimeter conditions have been shake table tested for use with Chicago Metallic™ 1496 seismic perimeter clip. The 1420 - 15/16" wall enclosure is an industry standard wall enclosure. This option will create a reveal around the perimeter of the room. If it is desired to have a flush finished ceiling, the Chicago Metallic 1454 sets the grid height to flush out the face of the tile. In both options the perimeter tiles are straight cut to fit snugly against the wall angle. For the 1420 wall enclosure the cut edge may require in-field finishing. Rockfon (RFN940 or RFN940Q) paint is available for finishing the cut edge.



1496 Perimeter Clip

1420 with 1496 Seismic Perimeter Clip

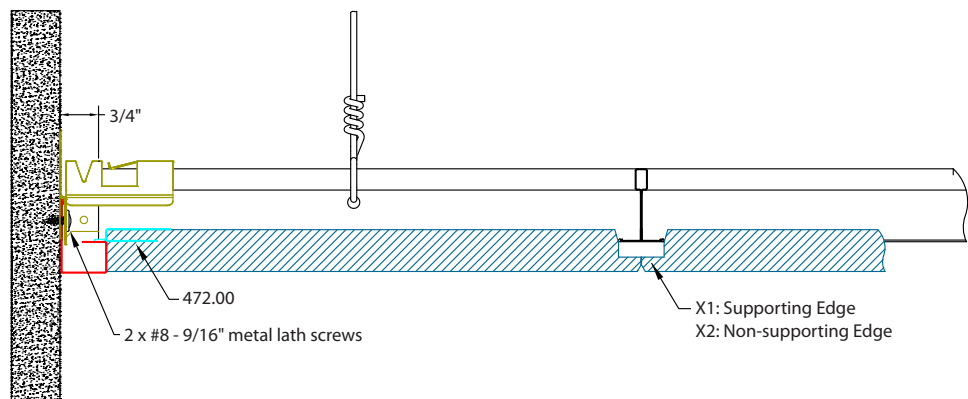
Free wall details shown, suspension cut back 3/4" as described in ASTM E580. Attach the 1496 clip to the wall using two #8 - 9/16" screws through the two lower holes of the clip into the wall angle. The grid on the fixed wall can be cut tight to the wall and attached to the 1420 wall angle with a 1/8" aluminum pop rivet with a steel mandrel. The 472.00 Border Clips are only required when recreating a supporting edge.



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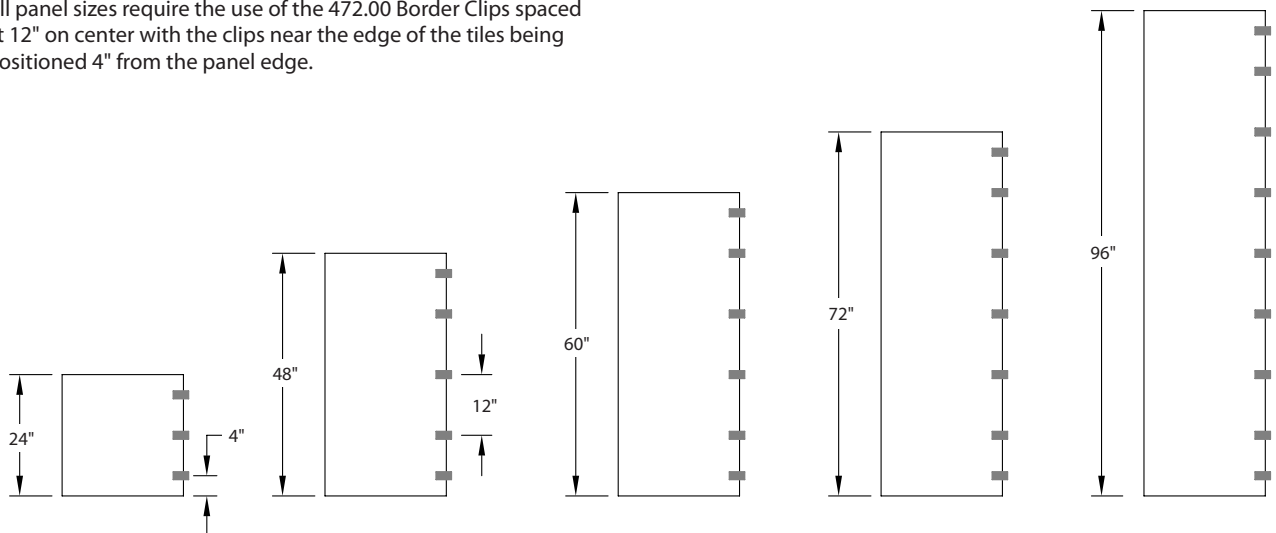
1454 with 1496 Seismic Perimeter Clip

Free wall details shown, suspension cut back 3/4" as described in ASTM E580. Attach the 1496 clip to the wall using two #8 - 9/16" metal lath screws through the two lower holes of the clip into the wall angle. The grid on the fixed wall can be cut tight to the wall and attached to the 1454 wall angle with 1496 clips. Secure the 1496 clip to the wall angle as described above, secure to the grid using one #7 - 7/16" sharp point screw minimum. The 472.00 Border Clips are only required when recreating a supporting edge.



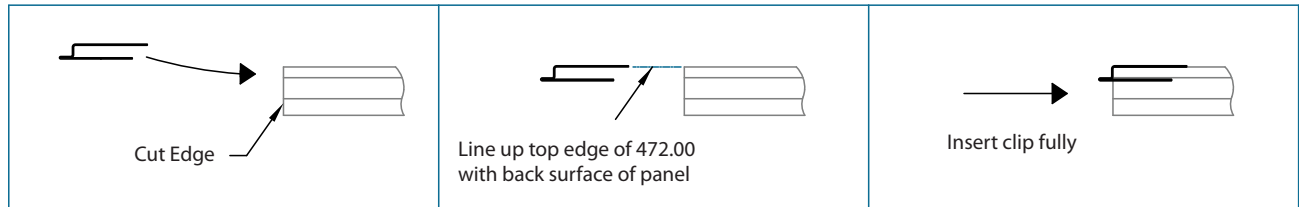
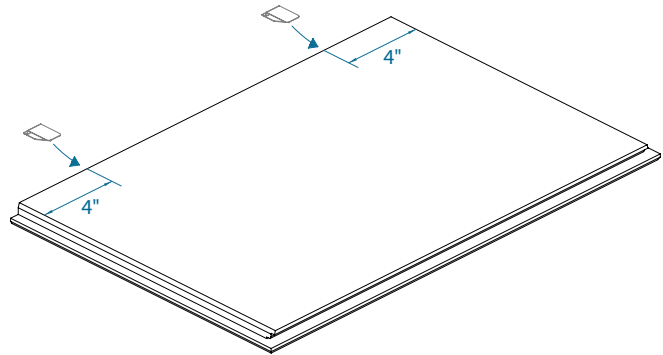
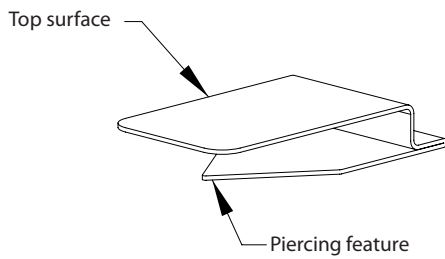
472.00 CDX/SCD Border Clip

All panel sizes require the use of the 472.00 Border Clips spaced at 12" on center with the clips near the edge of the tiles being positioned 4" from the panel edge.



Seismic Category D, E, F Installation Details

The 472.00 border clips are designed with an upper blunt edge and a lower pointed portion for piercing the edge of the panels. The upper portion is longer than the piercing surface. Align the upper flat portion on the back surface of the panel and push the clip into the fibers of the panel.



Have questions?

Contact the Rockfon Technical Services Team by calling 800-323-7164 and we can provide assistance on your project.



Rockfon 4849 SOUTH AUSTIN AVE., CHICAGO, IL 60638 / USA and Canada: 800-323-7164 / Fax: 800-222-3744 / rockfon.com