

CEILING SYSTEMS

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METALWORKS™ Open Cell Lay-In and Lock-In Systems Installation Instructions

1. GENERAL

1.1 Product Description

The MetalWorks Open Cell Lock-In System is an open cell metal ceiling comprised of 2' x 2' panels, 8' mounting rails, 2' cross rails, and channel molding. Mounting rails and cross rails are fabricated from 0.016" aluminum. Hanger wires run from structure to suspension clips, which support the mounting rails. The nominal dimension of the panels is 24" square. The interior cell sizes are 3", 4", 6" and 8". The square panels are supplied assembled. The mounting rails, cross rails, suspension clips, and channel (end or wall) moldings are supplied loose.

The MetalWorks Open Cell Lay-In System is an open cell metal ceiling comprised of 2' x 2' panels that install in standard 9/16" T-bar grid systems. Only sections 1, 3.15 and 4.2 of these instructions relate to the Lay-In system.

1.2 Storage and Handling

The ceiling materials shall be stored in a dry interior location and shall remain in cartons prior to installation to avoid damage. Proper care should be taken when handling to avoid damage or soiling.

1.3 Site Conditions

Building areas to receive ceilings shall be free of construction dust and debris.

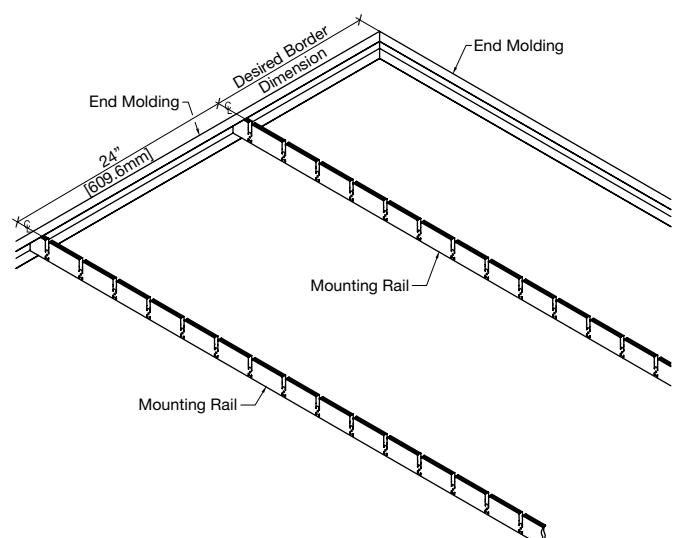
2. PREPARATION

2.1 Do not calculate borders based on a 2' square panel size. **Borders should be calculated based on the 3", 4", 6", or 8" cell size.**

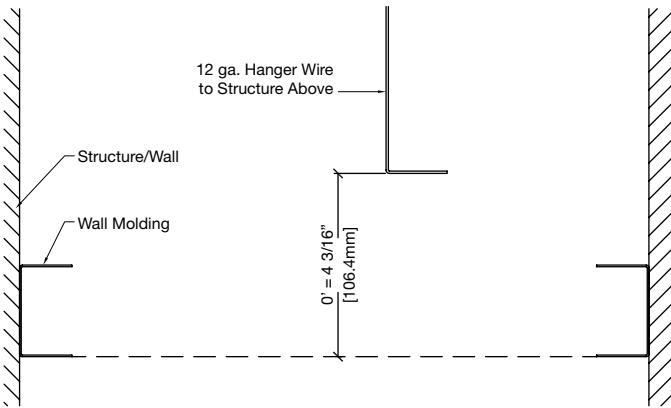
3. INSTALLATION – LOCK-IN SYSTEM

3.1 Determine the finished ceiling height and install end molding. (Note: wall molding can also be used, except in seismic installations.)

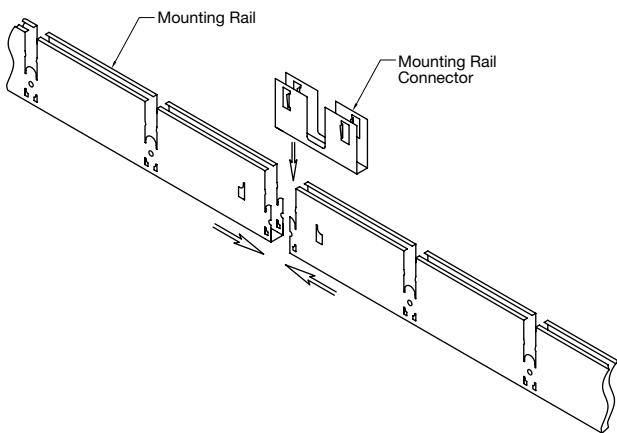
3.2 Determine the desired borders and locate the first row of mounting rails. Attach hanger wires to structure every four feet to attach the suspension clips, which support the mounting rails. Mounting rails are installed on 24" centers.



3.3 Hanger wires should be bent 4 3/16" inches above the bottom of the molding. This will ensure that the mounting rails will be level with the bottom of the molding.

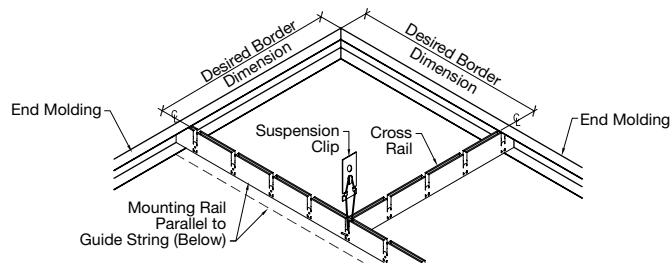
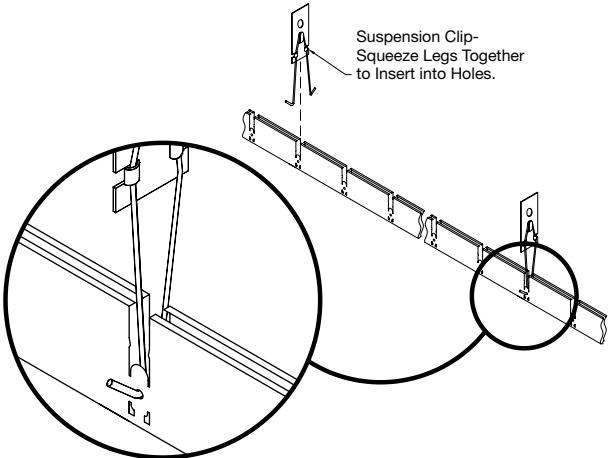


3.4 The first mounting rail must be cut to accommodate the calculated border cell size. Mounting rails are then joined end to end by means of mounting rail connectors. These connectors fit inside the "U" shape of the mounting rails and engage slots in the upright sides to lock the mounting rails together laterally and vertically.



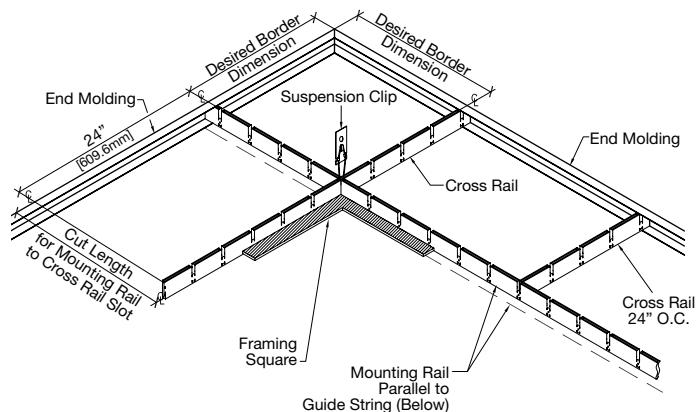
3.5 Stretch a guide string to indicate the location of the first row of mounting rails.

3.6 Engage the suspension clips into the indicated holes in the sides of the mounting rails. It is best to locate the suspension clips in the mounting rails in the same slots where cross rails will be installed so that the suspension clips will not interfere with panel insertion.



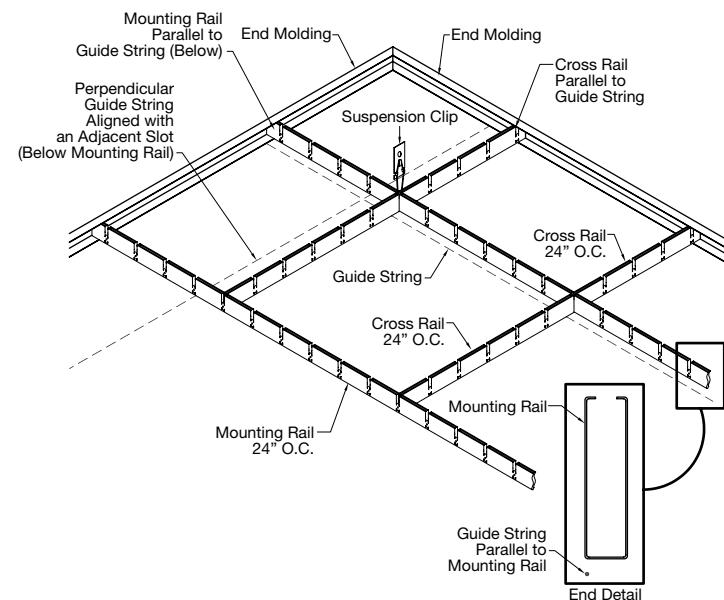
3.7 After the first row of mounting rails is installed, cut cross rails to fit between the mounting rail and the molding to positively locate the mounting rail along the string line.

3.8 With the border cross rails installed and the first row of mounting rails aligned with the string, insert the first cross rail on the other side of the mounting rail. Align the cross rail 90 degrees from the mounting rail using a framing square. Measure from the other end of the cross rail to the end wall to determine where to cut the second mounting rail so that the grid will be square.



3.9 Hang the second row of mounting rails 24" OC from the first row.

3.10 Install cross rails from the first row of mounting rails to the second. Stretch a second guide string 90 degrees from the first guide string, aligning it with corresponding notches in the first and second rows of mounting rails. Measure from the string to the end wall to determine where to cut the first mounting rail in each succeeding row.

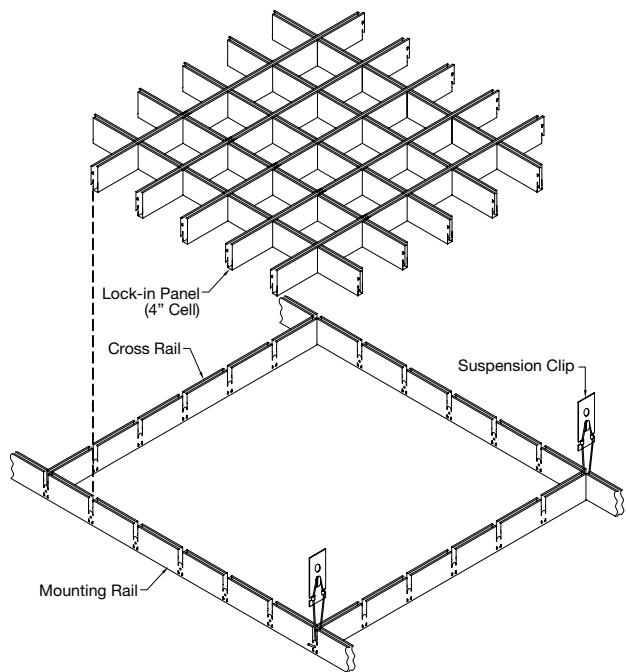


3.11 Install all of the mounting rails and connect them row-to-row with cross rails.

3.12 All cross rails that meet a wall will have to be cut to fit. (See section 3.15 for cutting guidelines.)

3.13 After all of the mounting rails and cross rails are in place, install the panels.

3.14 Enter the single sided tabs on the panels into the appropriate slots in the rails. Gently ease the panels into place. Enter one side of the panel at a time.



3.15 Border panels can be cut to size two ways. Either cut individual rails with the panel assembled, or disassemble the panel to cut the rails with snips. To disassemble the panel, squeeze the channels together where they meet and pull them apart. Then cut the individual panel rails to length. After all pieces are cut to length, the panel can then be reassembled and placed in the grid.

These border cut instructions also apply to MetalWorks Open Cell Lay-In Panels that install in standard 9/16" T-bar suspension systems.

3.16 In the completed installation, individual panels should not be visually evident. The cell structure is uniform from wall to wall.

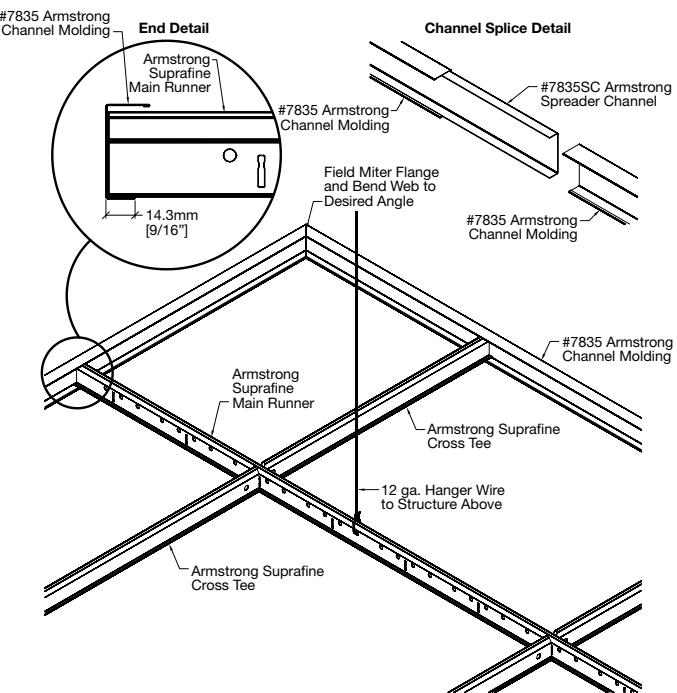
4. PERIMETER OPTIONS

4.1 For the Open Cell Lock-in System, the end or "C" channel molding is available to use as a perimeter or cloud trim. The bottom flange of the "C" molding must be pop-riveted to the bottom of a panel blade twice within the 2' span of each panel.

Note: This perimeter or cloud trim application with the Lock-In System is not recommended for seismic areas.

4.2 For the Open Cell Lay-in System with panels installed in 9/16" T-bar grid, conventional perimeter trim options for Armstrong grid, such as Axiom products, can be used. In addition, Armstrong Channel Molding item 7835 can be used as shown below. Attachment of item 7835 to the perimeter of the cloud is accomplished by pop-riveting the bottom flange of the molding to the bottom flange of each grid member where the grid members enter the molding.

Use spreader channel 7835SC as shown to align the channel molding in this type of installation.



MORE INFORMATION

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