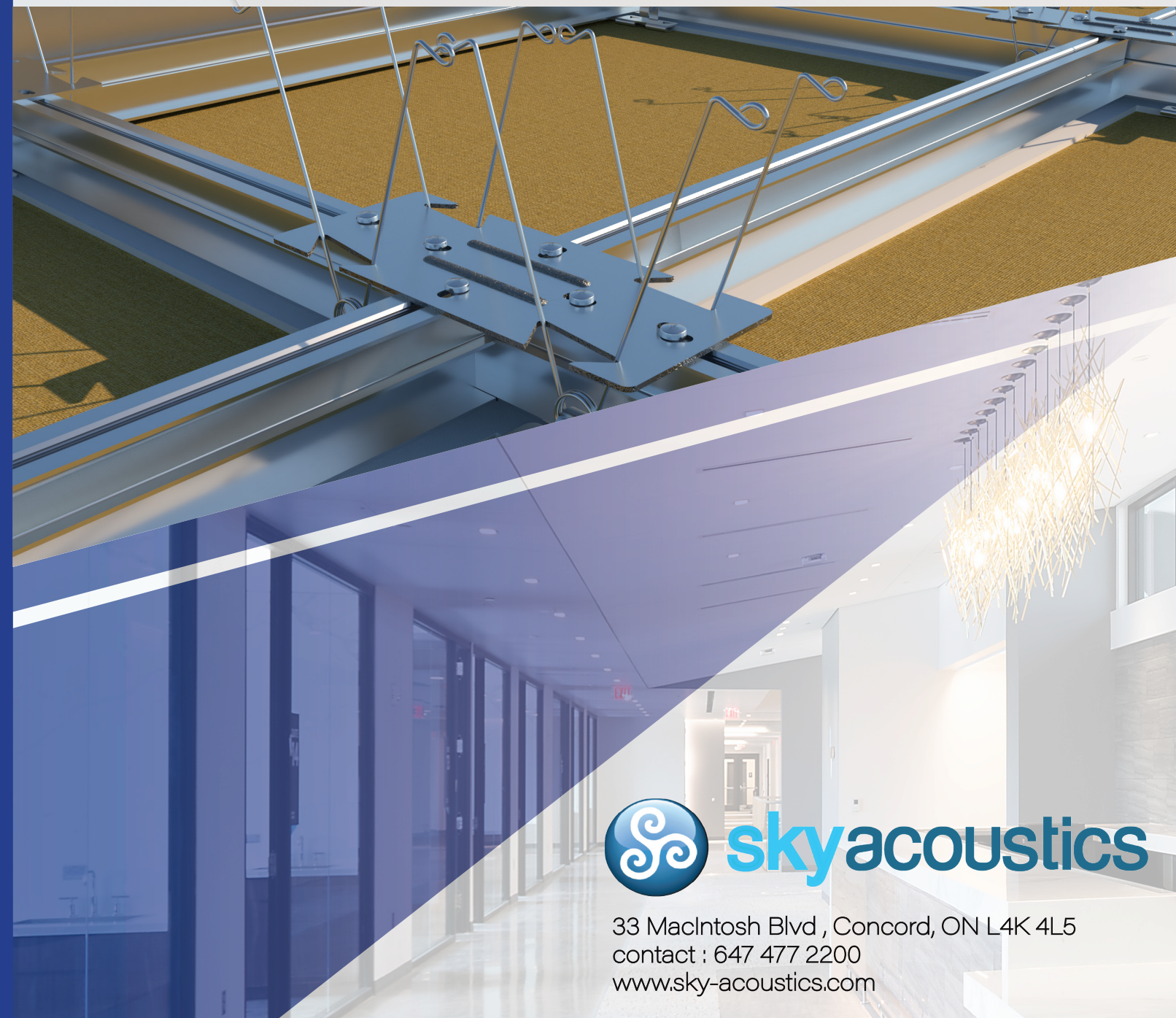


APTUS Grid System

Installation Manual

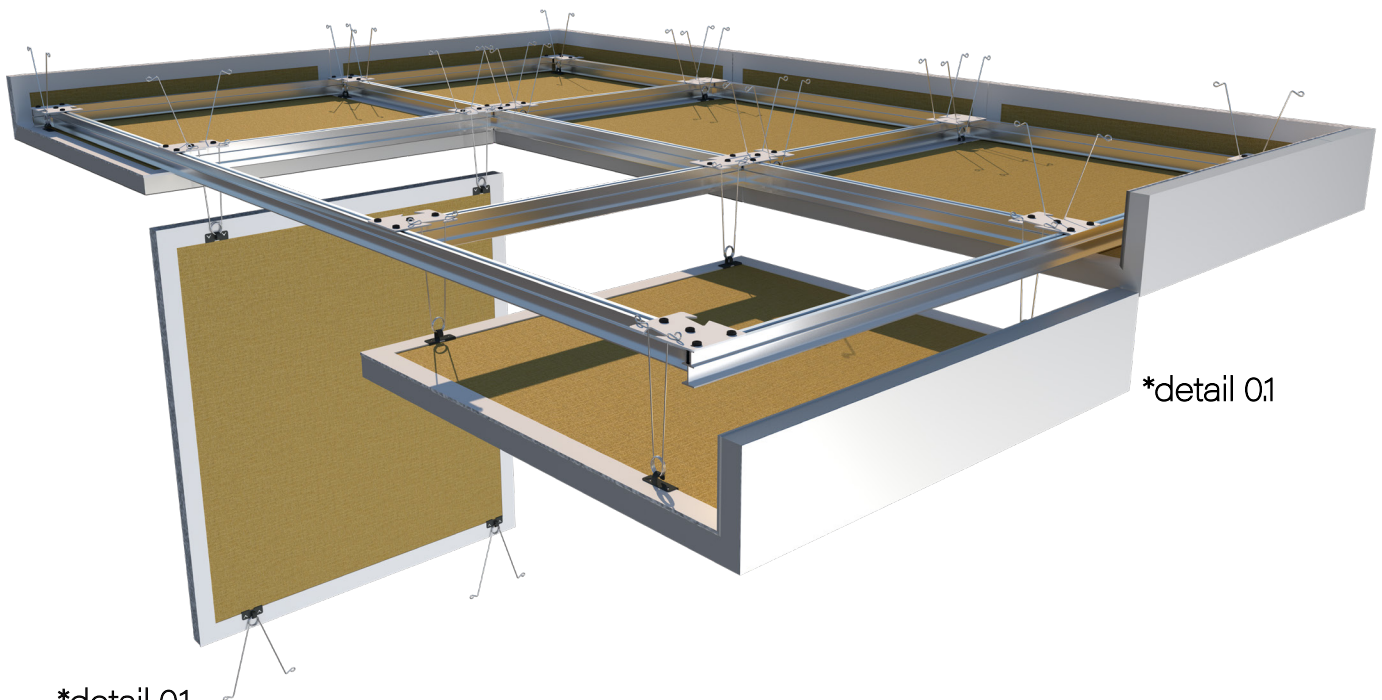
Typical details & step by step installation
Instructions.



33 MacIntosh Blvd , Concord, ON L4K 4L5
contact : 647 477 2200
www.sky-acoustics.com

Features

- Complete Concealed Torsion Spring Ceiling System.
- Light Weight grid system is made from extruded aluminum.
- 100% downward accessible panel system through the use of torsion springs.
- Panel can be hung and swung open or completely removed for easy access to service any mechanicals, AV and any other items in the plenum.
- Intermediate grid fins provide a controlled ($\pm 1/8"$) defined ceiling panel joint.
- The suspension system is custom-engineered and manufactured for each specific project.
- Grid is precut and labeled for ease of installation and field assembly.
- Grid connecting plates fastened to the grid to form a rigid system.
- The APTUS grid has many different accessories that can be added for design requirements and functionality (see details for more information)



*detail 0,1

APTUS Grid System + Aura acoustic paneling with integrated design returns.

Preparation

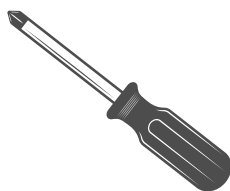
Tools



Safety Helmet



Pliers



Phillips/ Robinson
Screwdriver



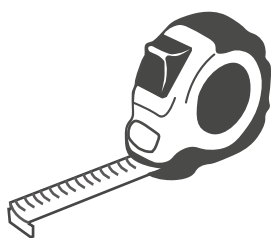
Hand
Drill



Work
Gloves



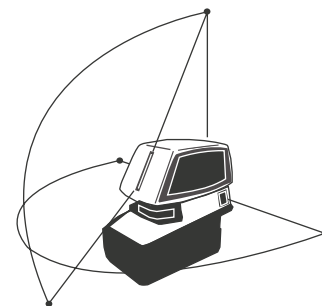
Hand Clamp



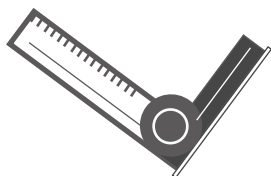
Measuring Tape



Eye Protection



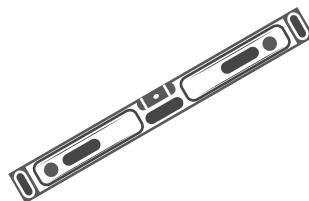
360 Laser Level



Square Tool



Pen / Pencil

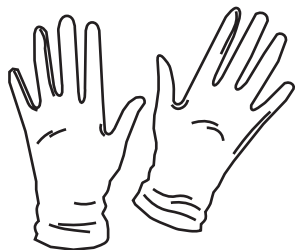


Box-beam Level



Ceiling Hanger Wire

Tools Supplied



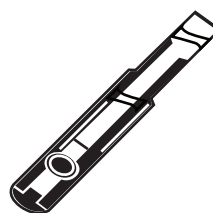
Panel handling Gloves (White)



#8 x 1/2"



#10 x 3/8"



Panel Access Tool



Custom
Panel Access Tool
(Project Based)

Preparation

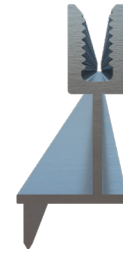
Supplied Components (All Components Shipped loose)



G - Grid



F - Grid



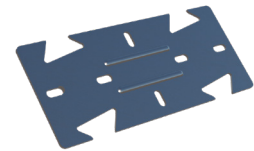
P - Grid



Half Grid Connecting Plate



Corner Grid Connecting Plate



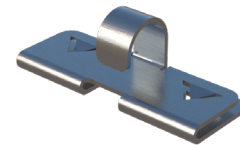
Full Grid Connecting Plate



Torsion Spring



Splice plate



M - Clip



#8 x 1/2" TEK

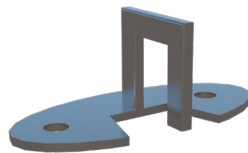


#10 x 3/8" TEK

Special Project Hardware



Multi Angle Full Clip



R - Clip



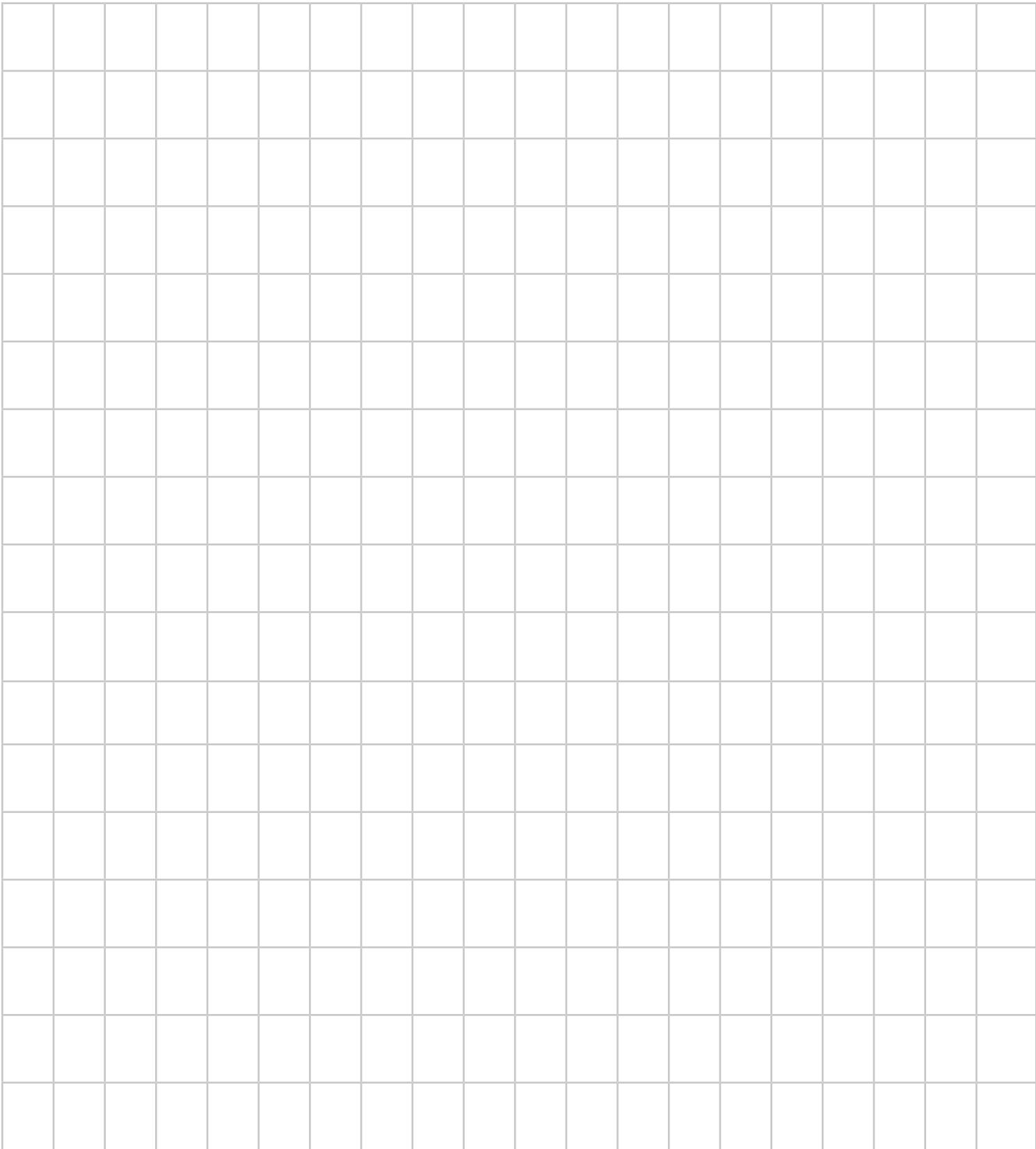
Multi Angle Half Clip



FC- Clip

Notes Area

Use this Area to make general notes.



Prior to Installation

Review typical panel layout drawings

1. Locate & review panel tagging diagrams and grid layout.
ensure drawings match ceiling layout. (This package can be found in **crate #1**)
2. Before commencing the APTUS installation, verify that you have received all the necessary components.
3. Ensure all components are complete , without damage and ready to install.



Note: If components are found to be damaged or missing please contact Sky Acoustics Inc., for further guidance.
(Find contact list on our website)
www.sky-acoustics.com

1. Identifying Grid components for installation.

Grid components will be labeled by cut lengths and bundled accordingly , refer to grid layout plans.

- All exterior grid components will be labeled as (P)
- All main grid components will be labeled as (F)
- All Cross grid components will be labeled as (G)

Note: Some exception may apply please refer to project specific drawing package.
(Found in Crate #1)



G - Grid



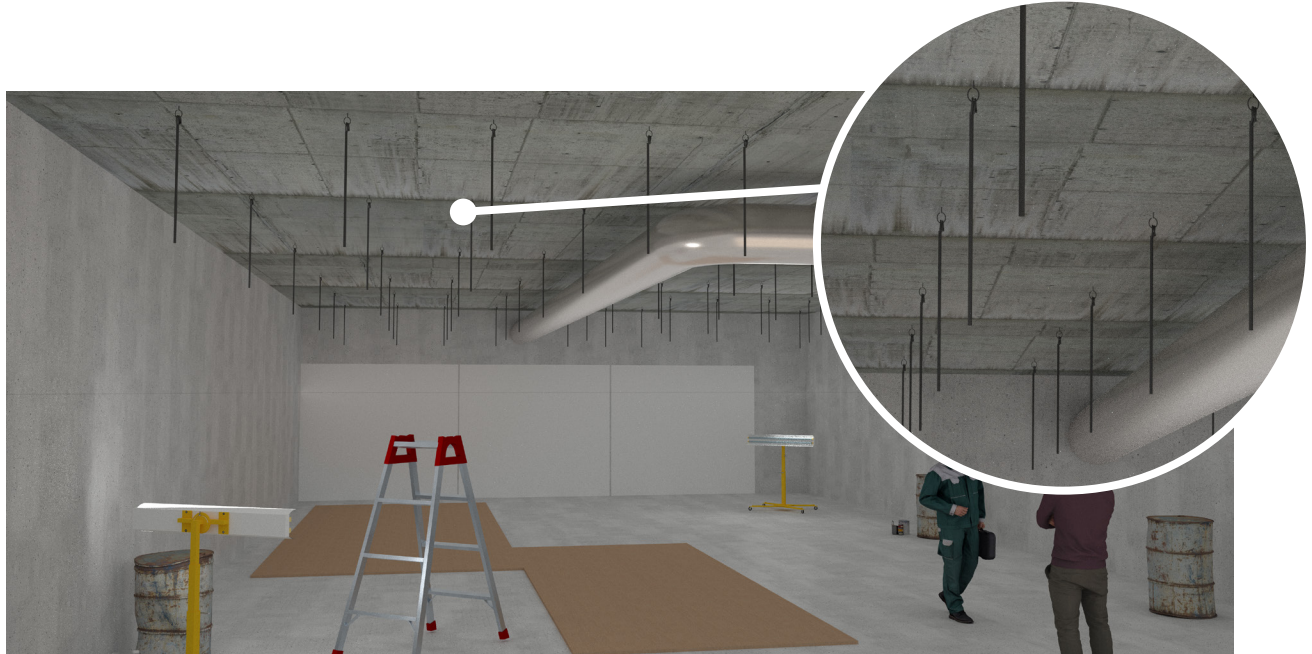
F -Grid



P - Grid

1a. Installation of Hanger Wire (not supplied by Sky Acoustics Inc)

Note: Refer to local building codes and ASTM standards
For more information on Hanger wire and installation.



1b. Begin Grid Attachment

Note: do this in small manageable sections on the ground and lift into place.

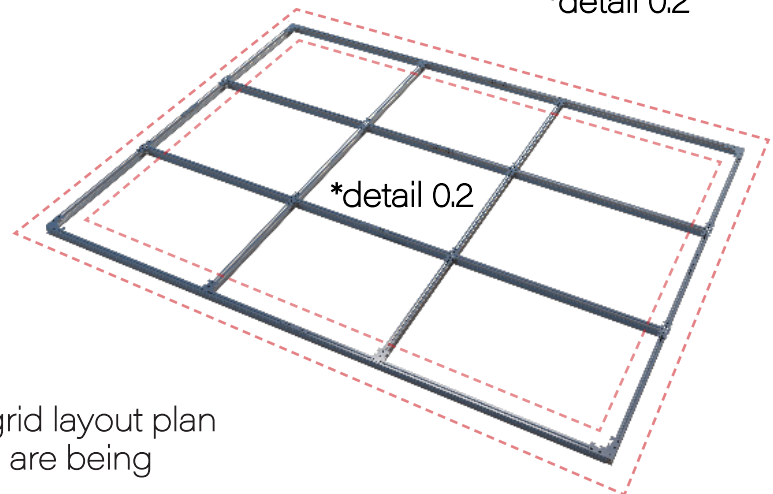
Ex. Complete Grid Assembled
*detail 0.2



P - grid



F - grid



Caution: At this stage refer to your grid layout plan to ensure the correct grid members are being used.

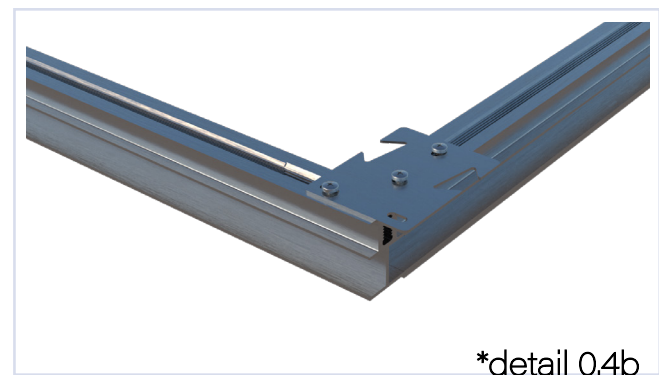
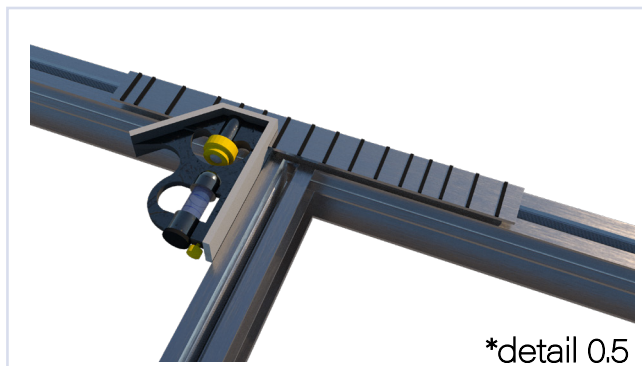
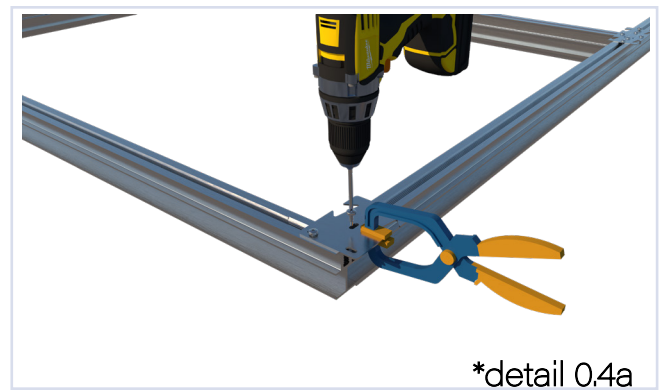
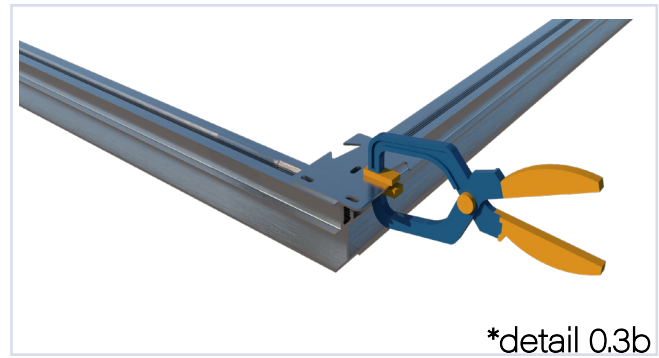
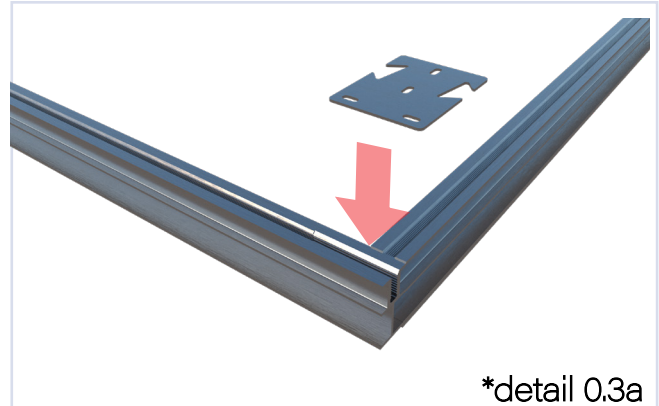
1c. Fastening Members & Corner Grid Connection Plate

i. Firmly secure the corner grid connecting plate and ensure its proper positioning, make use of a hand clamp for added stability. (refer to *detail 0.3a/b)

iii. Attach the corner grid connecting plate use a Phillips screw bit. Carefully use it to screw the matching #8 x 1/2" screw into the grid, effectively connecting both members. (refer to *detail 0.4a/b)

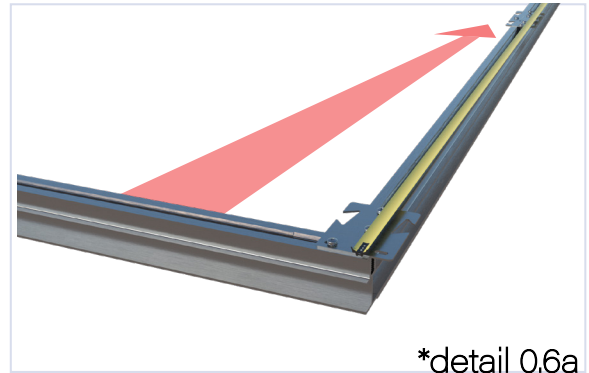
iii. To perform this action again, follow the same procedure at any perimeter corner of the grid system.

Note: To ensure that the grid installs properly, use a square at all connection points and make sure they are 90 degrees after tightening. (refer to *detail 0.5)

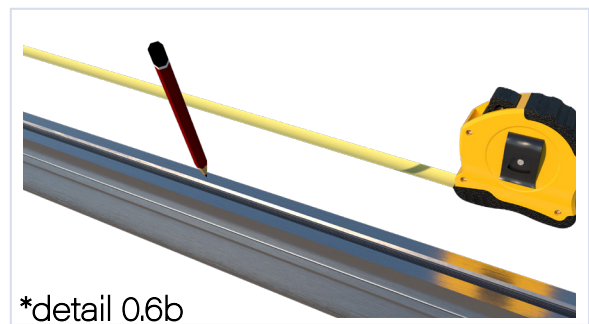


2. Attachment of cross grid members

- i. To Perform the Attachment of the cross-grid members or G - grid; Use a measuring tape to ensure the cross-grid member is at the correct location along the perimeter grid.(refer to *detail 0.6a also refer to grid layout plan fir location)

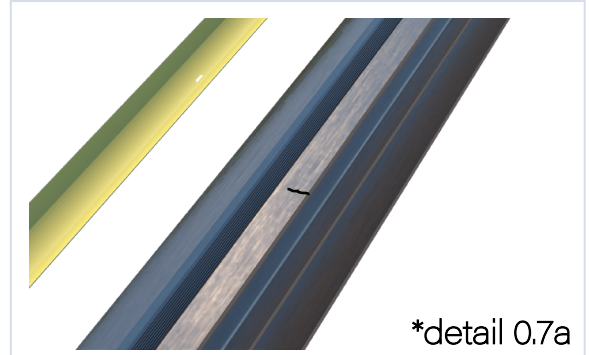


Note: using a pencil, mark the location of the perpendicular grid member. (refer to *detail 0.6b)



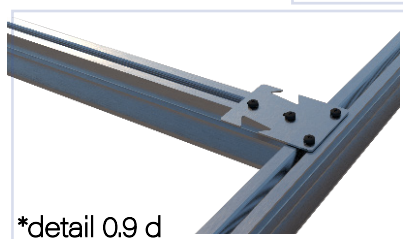
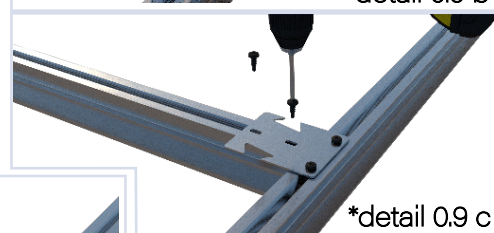
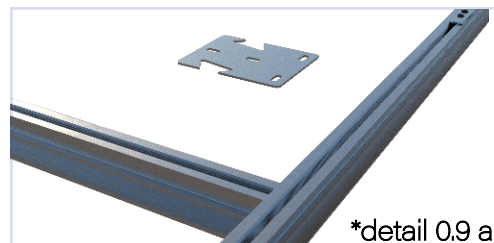
- ii. Bring the two grid members together at the marked location and ensure the grid member is centered on the mark. (refer to *detail 0.7 a/b)

Note: To ensure that the grid installs properly, use a square at all connection points and make sure they are 45 degrees after tightening. (refer to *detail 0.8)



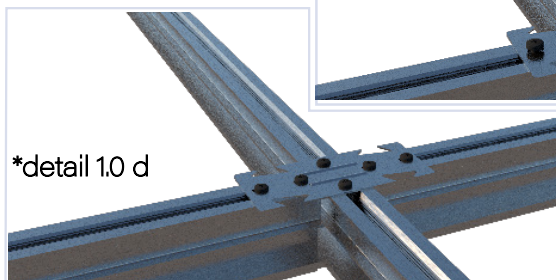
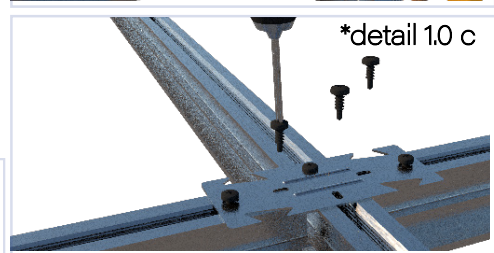
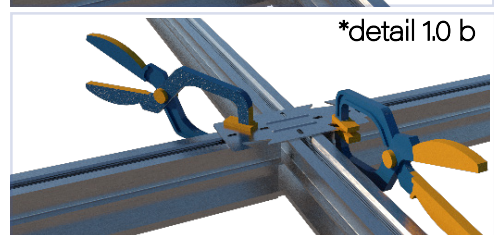
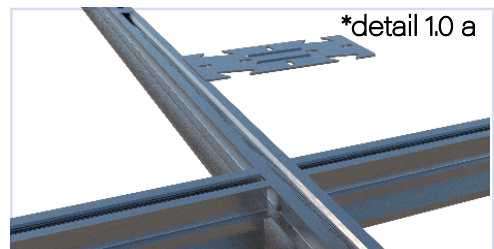
2a. Fastening Members & Half Grid Connecting plate

- i. To firmly secure the Half Grid connecting plate and ensure its proper positioning, make use of a hand clamp for added stability. (refer to *detail 0.9 a/b)
- ii. To attach the Half grid connecting plate use a Phillips screw bit. Then, carefully use it to screw the matching #8 x 1/2" screw into the grid, effectively connecting both members.(refer to *detail 0.9 c/d)
- iii. To perform this action again, follow the same procedure at any Cross member corner of the grid system.



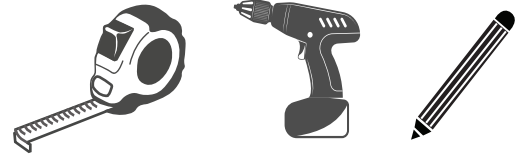
3. Fastening Members & Full Grid Connecting plate

- i. To firmly secure the Full Grid Connecting plate and ensure its proper positioning, make use of a hand clamp for added stability.(refer to *detail 1.0 a/b)
- ii. To attach the Full grid connecting plate use a Phillips screw bit. Then, carefully use it to screw the matching #8 x 1/2" screw into the grid, effectively connecting both members.(refer to *detail 1.0 c/d)
- iii. To perform this action again, follow the same procedure at any Cross member corner of the grid system.



4. Splice plate and grid member connection

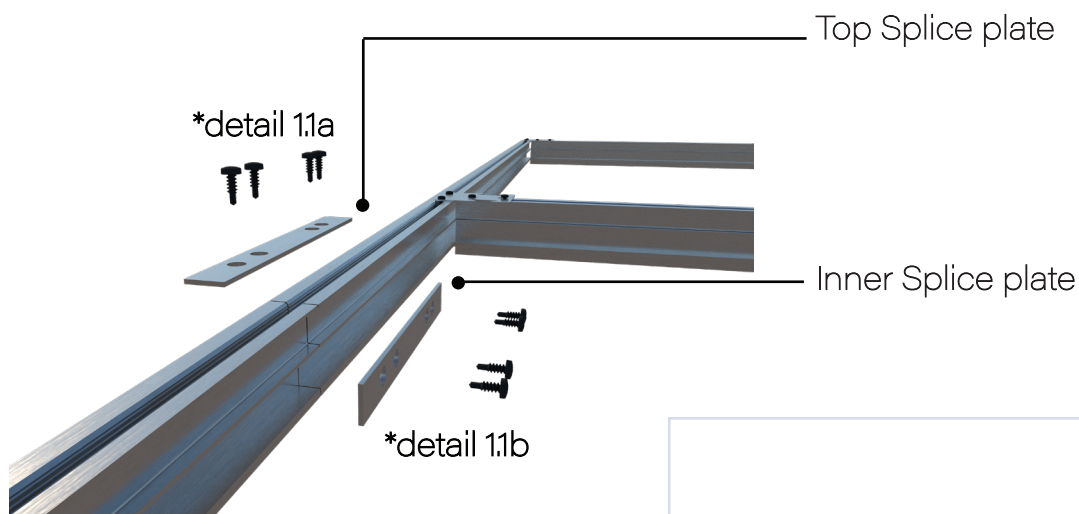
Note: Splice plates are used to connect the in line grid members, when sections are longer than standard grid.



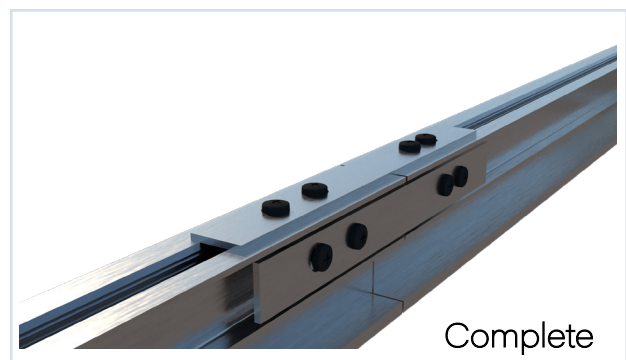
- i To start the installation of a splice plate, locate the two joints of the grid requiring a splice plate.
- ii Utilizing a tape measure, locate the splice plate over the center of the joint.(refer to *detail 1.1a).
- iii Once the splice plates are properly positioned on the joint, fasten them to the grid member using (#10 3/8") tek screws provided. This should be done with a hand drill and ensure all holes provided are used. (refer to *detail 1.1a)
- iii Following the same procedure attach the secondary splice plate on the inner part of the joining grid members.(refer to *detail 1.1b)



Splice plate



Caution:
At this stage refer to your Grid layout plan to ensure the correct placement of splice plates is achieved.

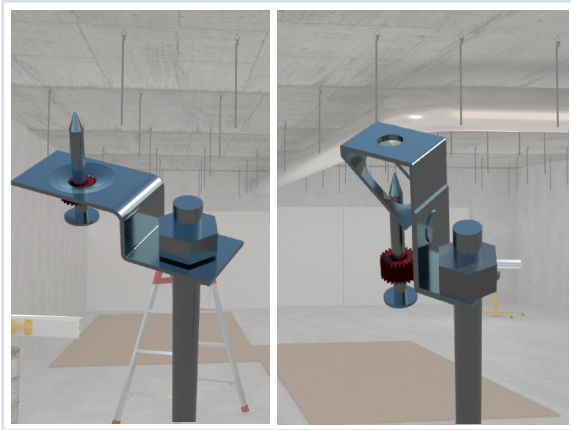


Tips & Recommendations

Tie - Offs

Grid to plenum tie-offs are common practice in Ceiling installations. There are many different types of hardware and procedures to secure the grid to the plenum. This will ensure no uplift when installing the panels

Examples:



(Hanger Rod with different attachments)



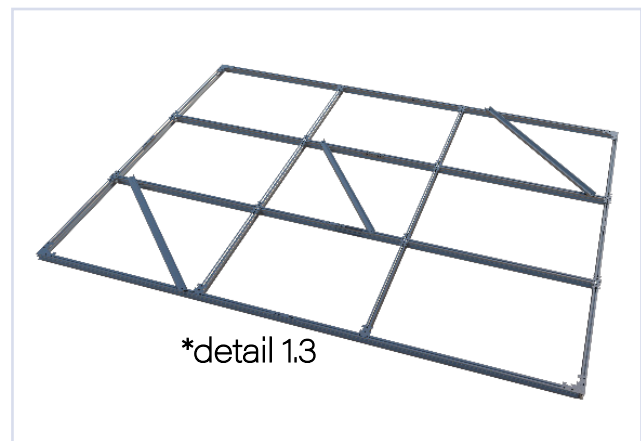
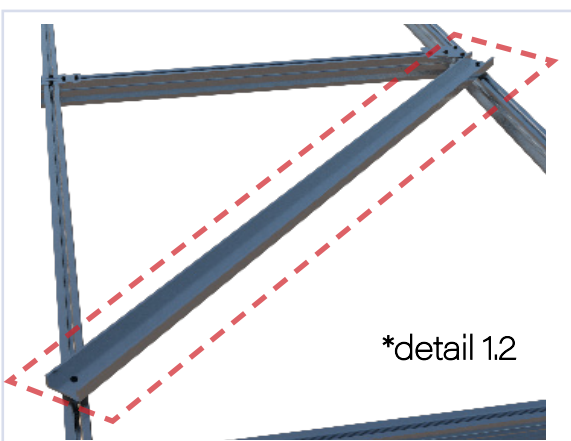
(Metal or aluminum wall Stud)

Tie-offs are recommended; this will make for a rigid and strong grid-to-plenum connection and will allow the installer to easily and safely apply the paneling to the grid without any grid movement.

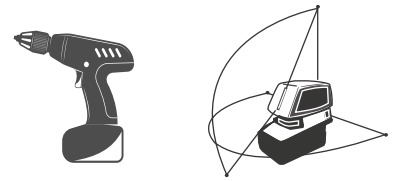
Re - Enforcement

Grid re-enforcement is also commonly used in the field as it helps the system stay square and rigid and in its intended shape during regular use.

The grid re-enforcement is placed on top of the grid in a diagonal position. Installation of the re-enforcement is fairly simple and will add to the rigidity of the grid. (refer to *detail 1.2 and 1.3)

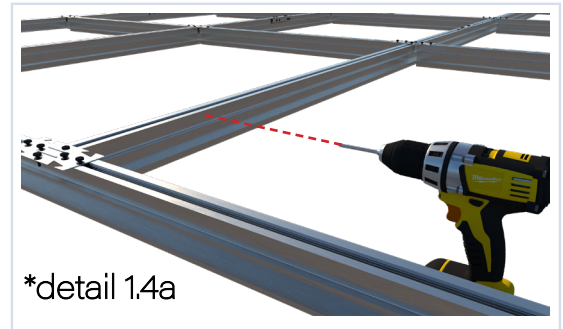


5. Completed assembly / Merging hanger wire



*At this stage the grid should be fully segmented and ready to lift into place.

i. At this stage lift the pre assembled grid sections into place, ensuring the correct elevation (refer to architectural drawings) as well ensure the grid remains square once in place.

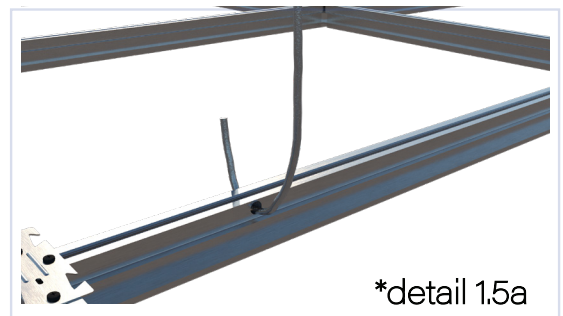


ii. using a hand drill and the hanger wire as reference, drill a hole into the grid member corresponding with the positioning of the chosen hanger wire.
(refer to *detail 1.4b ,also refer to the grid layout plan for accuracy)

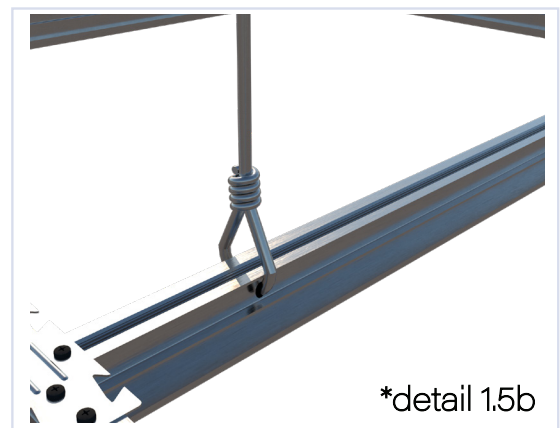


Note: The hanger wire should have extra length to it, this will allow the grid to be adjusted to the correct height and minimize error.

iii. Move the hanger wire through the grid member and adjust the wire and the grid to the correct height. use a 360 laser level to make sure the grid is at the intended height all together.
(refer to *detail 1.5a)



iv. once the grid is at the correct height and the wire has been moved through it, tightly fasten it using pliers or any other commonly used practice.
(refer to *detail 1.5b)



Torsion spring and M - Clip Application

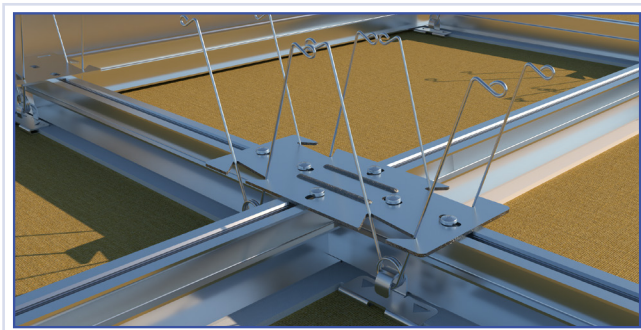
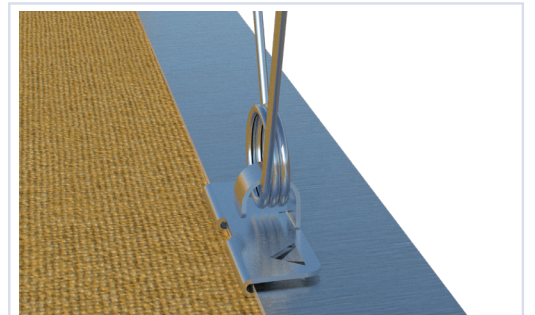
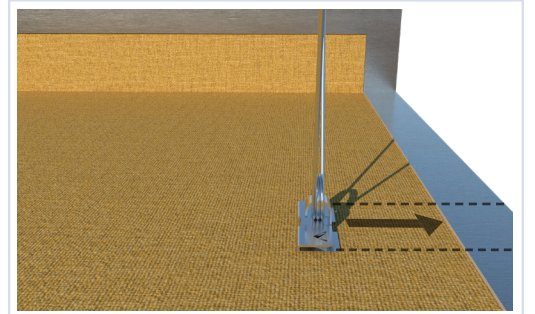
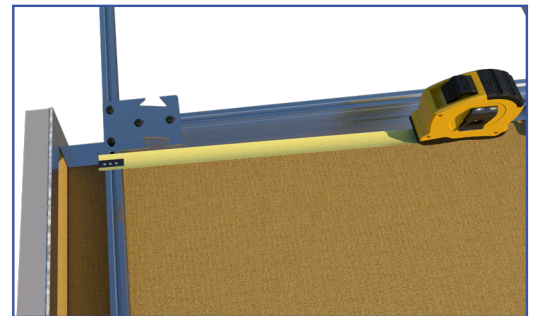
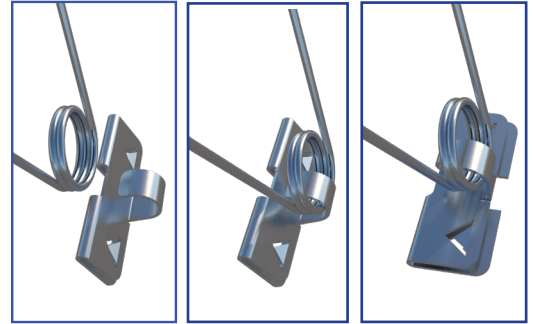
Note: Before starting this application, pre assemble the torsion spring to the M clip

i. To start installing the pre assembled M-clip/torsion springs, first locate the center of the grid clips by using a tape measure.

Note: It is recommended to add a soft layer between the metal edge of the panel and the plier to make sure no damage is done to the edge.

ii. Next take the corresponding panel and measure the same distance on the metal edge of the panel and with pliers slide the M-clip into the edge.

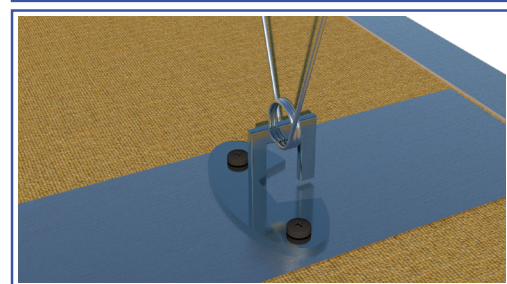
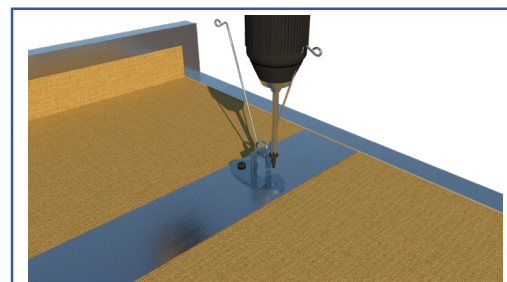
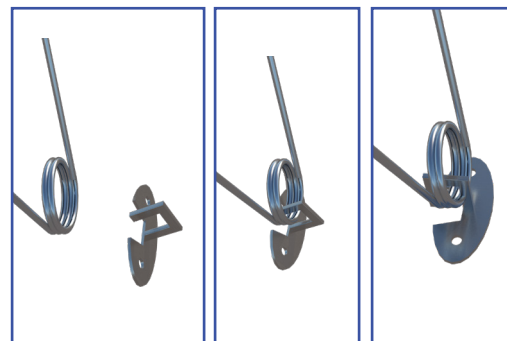
iii. Repeat these steps to any panel adapted to the APTUS torsion spring system



R-Clip Installation

In certain design applications a metal edge may not be accessible or appropriate for applying the M-clip and torsion spring. In these cases a R-Clip and spring may need to be utilized.

- i Before starting this application, pre assemble the torsion spring to the R clip (refer to detail 1.6a)
- ii To start installing the pre assembled R-clip/torsion springs, first locate the center of the grid clips by using a tape measure.
- iii Locating the marks made, make two incision to the support plate where the R - clip will be attached.
- iv Before permanently installing the R - Clip insert the torsion spring into the R - Clip.
- v Utilizing a hand drill and some #8 TEK 1/2" screw, First attach the R - clip to the support plate, then Attach the torsion spring to the R - clip.



Multi Angle Half / Full Connecting Grid

Multi angle Half / Full Connecting Grid Plate are used for angled APTUS grid systems. These clips make it easier to adapt our grid to any design that comes our way.

The Clips are attached to the Grid members the same way standard Half / Full Connecting Grid Plate are but can be adjusted and rotated to fit the design of the Grid.

- i To install a Multi - angle Half or Full Connecting Grid Plate use the grooves on the clip to adjust and maneuver to its desired installment angle.

Note: When installing Multi-angle Half / full Connecting Grid plates always reference the Grid installation plan, this has to do with the highly custom nature of our product.



Multi Angle Half Connecting Grid Plate



Multi Angle Full Connecting Grid Plate

Notices

Sky Acoustics is dedicated to providing high-quality acoustical ceiling and wall panels. Our commitment to quality and service is unwavering. We take great care in designing, engineering, and manufacturing our acoustical panels to meet the highest standards. However, it's important to understand the following regarding product liability:

Quality Assurance: Sky Acoustics rigorously inspects and tests all panels before they are shipped to ensure they meet our quality standards.

Customization: Our panels are custom-manufactured to meet your unique design needs. We work closely with clients to ensure that the panels are manufactured to their specifications.

Product Information: We provide detailed product information, including specifications and data sheets, to assist in proper panel and grid selection and installation.

Installation: Proper installation is crucial for the performance of acoustical panels. It is the responsibility of the installer to follow our recommended installation guidelines.

Liability Limitation: While we strive to deliver flawless products, we cannot be held responsible for improper installation, misuse, or modifications made to our panels after purchase.

Warranty: Sky Acoustics offers warranties on our products. Please refer to our official warranty documentation for specific terms and conditions.

Safety: Safety is a priority. We ensure that our products are free from hazards and are safe when used as intended.



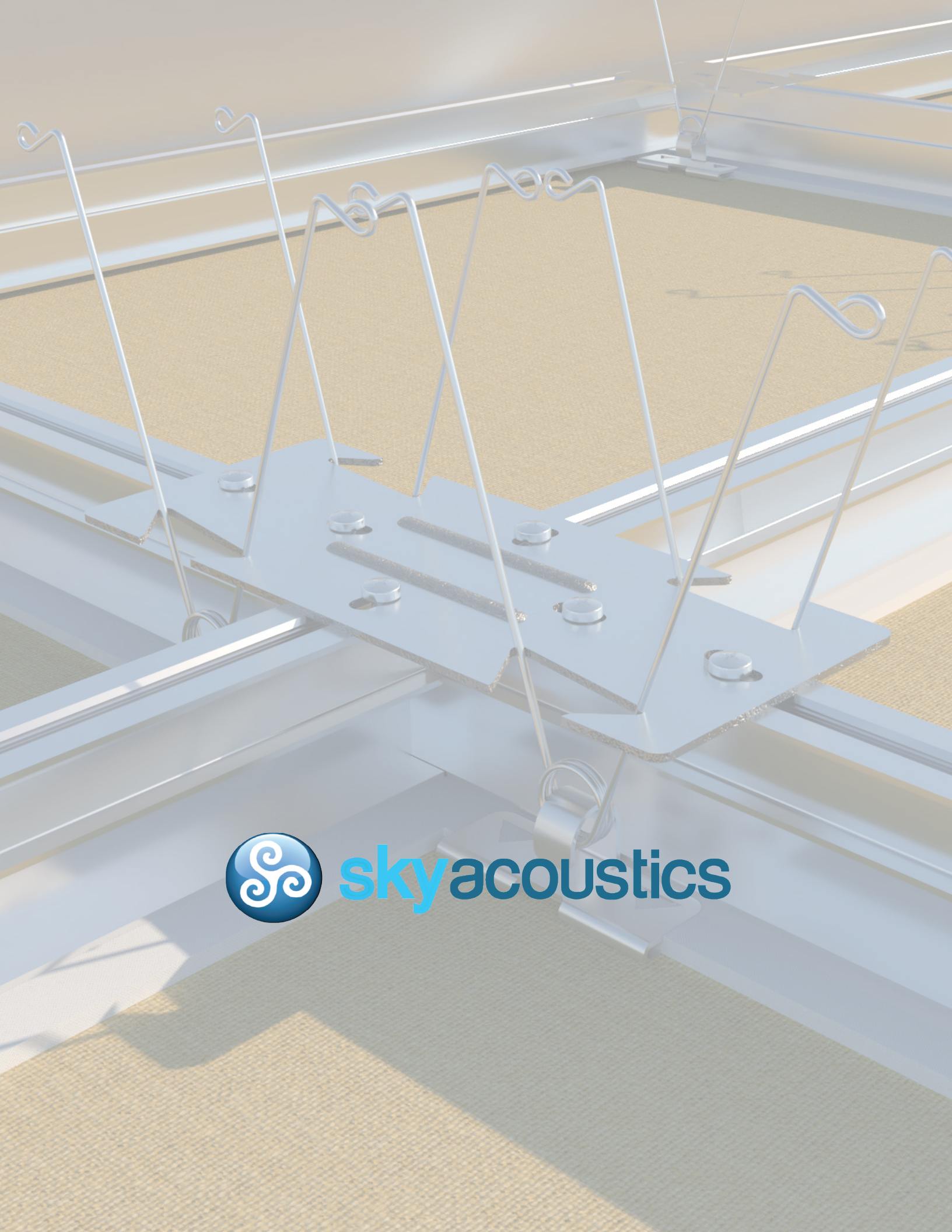
Contact : +1 647 - 477 - 2200

www.Sky-acoustics.com

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