

InvisAcoustics™ Ceiling & Wall Panels

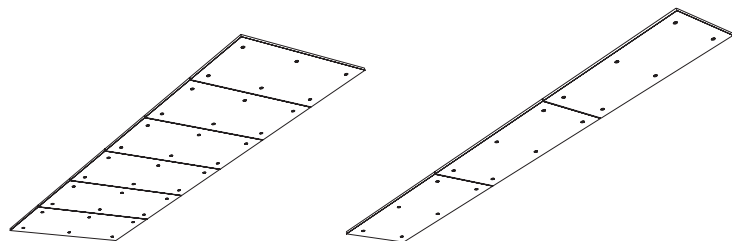
Assembly and Installation Instructions

1. GENERAL

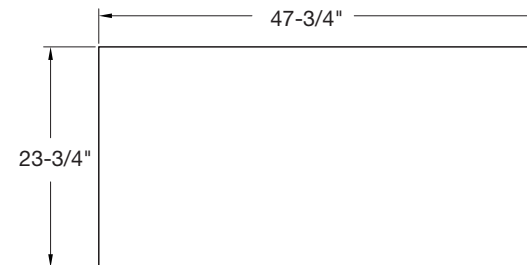
1.1 Product Description

InvisAcoustics™ ceiling and wall panels are 3/4" thick, available in nominal size of 2' x 4', and offer acoustical sound absorption when installed in an exposed structure environment. Field-paintable panels have square edges on all four sides. On factory-painted panels the long edges of the panel are square and the short edges are reverse tegular.

Standard panels are available in Black, White, Concrete, and a scrimmed panel with no finish. This panel can then be painted post installation to directly match the deck on which it's being installed. InvisAcoustics panels are installed using the all-in-one fastener on FrameAll™ Drywall Grid or furring (wood or metal), as well as directly applied with adhesive to painted gypsum, concrete, or plaster surfaces **(Figs 1a and 1b)**.



(Fig 1a)



(Fig 1b)

1.2 Safety

During the installation be certain that the work site is well ventilated, and avoid breathing dust. If high dust levels are anticipated during installation such as with the use of power tools, use appropriate NIOSH designated dust respirator. All power cutting tools must be equipped with dust collectors. Avoid contact with skin or eyes. Wear long-sleeve, loose-fitting clothes, gloves, and eye protection.

1.3 Warranty

Failure to follow the Armstrong Ceilings recommended installation instructions in effect at the time of installation will void the product and/or ceiling system warranty.

1.4 Surface Finish

InvisAcoustics panels (Black and White only) feature an acoustically transparent membrane with white or black factory-applied latex paint.

1.5 Storage & Handling

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

1.6 Site Conditions

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

InvisAcoustics™ panels in Black, White, and Concrete field-paintable feature HumiGuard® Plus performance and can be installed in conditions between 32° F (0° C) and 120° F (49° C) and in spaces before the building is enclosed where HVAC systems are cycled or not operating.

InvisAcoustics field-paintable panels have standard humidity resistance and should be installed in areas where the building is enclosed and the HVAC is continuously functioning.

These products are not recommended for exterior applications where standing water is present, or where moisture will come into direct contact with the ceiling.

1.7 HVAC Design & Operation, Temperature & Humidity Control

It is also necessary for the area to be enclosed and for the HVAC systems to be functioning and in continuous operations for the life of the product. All wet work (plastering, concrete, etc.) must be complete and dry. Standard 3/4" InvisAcoustics panels cannot be used in exterior applications.

1.8 Colors

Standard InvisAcoustics panels are available in Black, White, Concrete, and no finish. Panels with no finish can be field-painted.

1.9 Cleaning/Maintenance

Use a clean, dry, soft, white cloth to wipe off any dust or fingerprints. If this does not clean the panel, use a damp, clean, soft, white cloth or sponge with a mild detergent to wipe the panel. Remove any remaining moisture with a dry cloth.

2. DESIGN AND INSTALLATION CONSIDERATIONS – DIRECT-ATTACH

2.1 Directionality

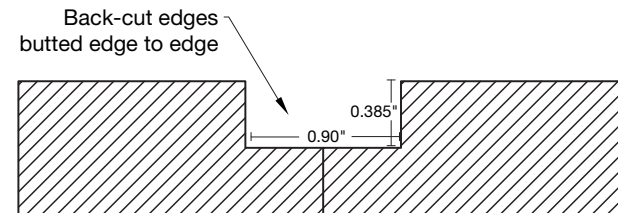
InvisAcoustics panels have three different installation methods. For all installation methods, please note the following in regards to directionality. Panels are designed to be installed in single panel width rows. All panels can be butted edge-to-edge within each row in the case of all installation methods. Rows can have panels join short edge-to-short edge (23-3/4", nominal 2' wide) or long edge-to-long edge (47-3/4" nominal 4' wide). Due to the directional finish of the product, Armstrong Ceilings does not recommend butting short edges to long edges.

2.2 Edges

Field-paintable panels (Item 1212FP) have square edges on all sides.

White, Black, and Concrete panels (Items 1212WH/BL/CE1) have square edges on the 4' sides but have back-cut edges along the 2' sides.

Because of this back-cut, butting the 2' sides of White, Black, and Concrete panels edge to edge will result in the visual of a notch that is 0.385" x 0.90" (**Fig 2**).



(Fig 2)

2.3 Exterior installations

InvisAcoustics™ panels are not intended for exterior use.

2.4 Direct Attachment to Deck or Wall

InvisAcoustics panels are mechanically fastened to FrameAll™ Drywall Grid, or furring (metal or wood) using the all-in-one self-stop fastener. These panels and fasteners can be installed on ceilings of any slope or on walls when following the suspension and fastening instructions in this document. InvisAcoustics panels can also be adhered directly to drywall, plaster and concrete.

2.5 Plenum

Design limitations require relatively clear deck areas and are not suitable for plenum spaces with services or obstructions that interrupt the attachment surface.

2.6 Fire and Sprinklers

InvisAcoustics panels, as with other architectural features located at the ceiling, may obstruct or skew the planned fire sprinkler water distribution pattern, or possibly delay or accelerate the activation of the sprinkler or fire detection systems by channeling heat from a fire either toward or away from the device. Please consult a fire protection engineer, NFPA 13, and the local codes for guidance where automatic fire detection and suppression systems are present.

2.7 Attachment to Deck

Overall system weight will combine the panels and the suspension system.

- Panels weigh 1 LB/SF
- HD8906 Drywall Grid weighs 0.3 LBS/SF
- Metal or wood furring (refer to manufacturer)

Fastener connections of the suspension system to building structure are specified by the contractor and must follow the manufacturer's instructions and reference code.

2.8 Wall Installations

InvisAcoustics panels can be installed on a wall or vertical surface following the instructions in Sections 4 and 5, however, the panels are not intended to be installed where they may be contacted. It is recommended that they be installed at least 6' above the finished floor to avoid damage.

2.9 Direct-Apply Installations

Surfaces must be dry and free of dust, grease, oil, dirt or any other material that may deter adhesion. If the paint is flaking or peeling it must be removed. Existing finish paint must be well-bonded and not flaking or peeling.

Avoid applying to a newly painted ceiling. Glossy painted surfaces must be abraded. For painted or sealed surfaces, install a small test area and observe after 12 hours. For plaster ceilings, plaster must be painted, non-chipping, and smooth.

To ensure a finished installation that is level, it is recommended that the ceiling surface for attachment be free of irregularities and be level within 1/4" in 12'.

3. INVISACOUSTICS ACCESSORIES

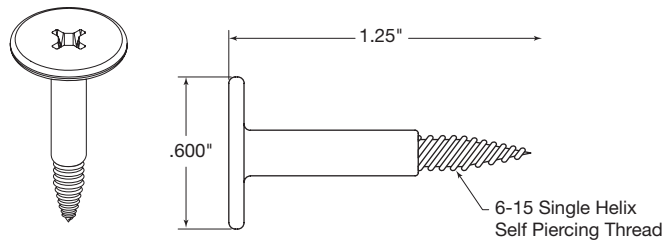
3.1 Fasteners

Armstrong Ceiling Solutions provides installers with two types of fasteners, one for direct mounting to furring or drywall grid, and one for securing to steel trusses. For direct mounting to furring or drywall grid, use the all-in-one self-stop fastener, described in Section 3.2. For mounting to trusses, use the Truss Fastening Kit, described in Section 3.3.

System performance is based on using the appropriate fastener at the correct spacing. Armstrong Ceilings does not warrant the use of any other types of fasteners for InvisAcoustics installations.

3.2 All-in-one Self-stop Fastener

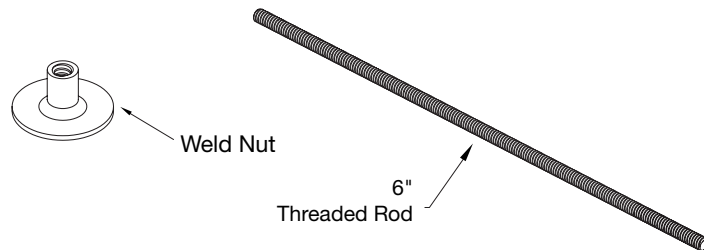
Armstrong Ceiling Solutions provides installers with an all-in-one self-stop fastener for InvisAcoustics™ panel attachment to furring or drywall grid. This fastener is designed to stop as soon as the collar comes in contact with furring or drywall grid, thereby allowing the head of the screw to rest snug against the face of the panel without the risk of countersinking. The same fastener is used for FrameAll™ Drywall Grid or 20- to 25-gauge furring channel, or wood furring. The screw's oversized head acts as a built-in washer once properly installed (**Fig 3**).



(Fig 3)

3.3 Truss Fastening Kit

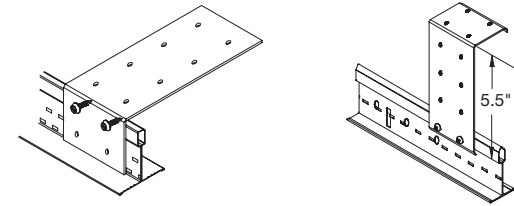
The Truss Fastening Kit contains threaded rod and weld nuts. The threaded rod is designed to pierce panels and be capped on both ends by the weld nut. The weld nut's head acts as a washer once properly installed. Each kit contains 20 threaded rod and 40 weld nuts. See Section 6.2.2 for installation steps (**Fig 4**).



(Fig 4)

3.4 QSUTC (QuickStix™ Uptight Clip)

Installations using FrameAll™ Drywall Grid require the QSUTC for attachment to deck or wall. The minimum distance from the deck or wall to the face of grid when using the QSUTC is 1-3/4" and can adjust up to 5-1/2" to account for unevenness in the surface (**Fig 5**).



(Fig 5)

- Each QSUTC requires secure attachment to structure (specified by contractor based on deck material) and two framing screw attachments from the clip to the grid

For Flat Installations:

- Each 12' main runner requires 3 QSUTC attachments to deck spaced no further than 6' O.C.
- All drywall mains must have a QSUTC attachment within 12" of each and within 3" of the fire expansion notch

See Section 9.1 for attachment spacing requirements for sloped and wall installations.

3.5 Direct Apply Accessories

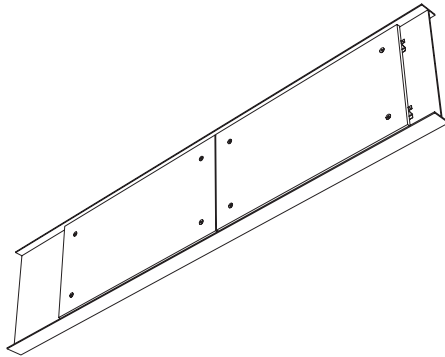
The recommended adhesive for direct apply panel installations is Titebond® GREENchoice™ Acoustical Ceiling Tile Adhesive (see Section 7).

4. SUSPENSION SYSTEM

4.1 Installation Options

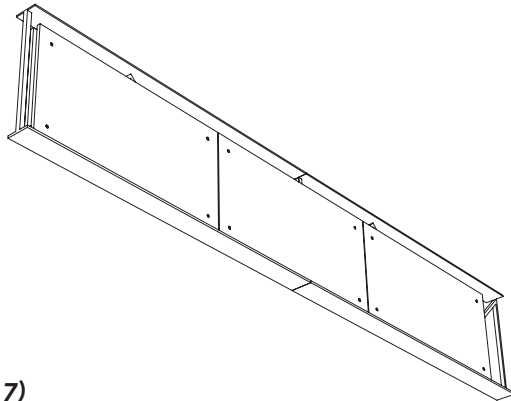
There are three different installation options for use with InvisAcoustics™ panels. These options are:

- Screw attached to furring or drywall grid that is secured to structure (ceiling or walls – Sections 4 and 5)
- Direct-Apply with recommended ceiling adhesive (Section 7)
- Installed on an I-Beam – screw attached to furring that is secured to the I-Beam (see Section 6.1) (**Fig 6**)



(Fig 6)

- Installed on a steel truss with the Truss Fastening Kit (see Section 6.2) (**Fig 7**)



(Fig 7)

4.2 Suspension System Overview

InvisAcoustics panels are required to be screw-attached to FrameAll™ Drywall Grid or furring, and are not intended for an A-mount installation. The use of drywall grid, metal furring (20- to 25-gauge), or wood furring is required for panel attachment and also helps in increasing the product's overall NRC performance. The panels are installed in rows with the short edges or the long edges butted up against each other, or for stand alone acoustical treatment.

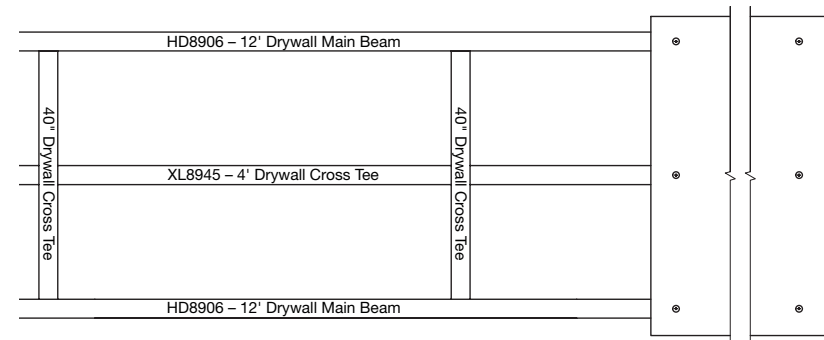
4.3 FrameAll™ Drywall Grid Recommendations

Installations using FrameAll™ Drywall Grid will require:

- 12' Drywall Grid mains (HD8906)
- Uptight Clips (QSUTC)
- 4' Drywall Grid cross tee (XL8945P) – dependent upon layout
- 40" Drywall Grid cross tee – dependent upon layout

The drywall grid spacing layout will be based on the panel orientation (**Fig 8**). See Section 4.5 for layout information.

Attachments of the drywall grid to the deck are made with the QSUTC Uptight Clip. See Section 3.4 for attachment rules and spacing.



(Fig 8)

4.4 Furring Recommendations

Furring for InvisAcoustics™ panels can be either wood or metal. For steel channel/hat channel, Armstrong Ceiling Solutions recommends 25-gauge 7/8" furring, however, ranges of 20- to 25-gauge metal furring can be used. For wood furring, 3/4" x 1-1/2" or 3/4" x 2-1/2" is recommended.

Furring layout will be based on panel orientation. See Section 4.5 for additional furring layout information.

The furring must be attached to the structure in a method that supports the full weight of the panels. Armstrong Ceiling Solutions does not provide guidance regarding the attachment of furring to structure and is therefore not liable for any damage or installation complications that may occur from an improper installation of furring. For guidance on the attachment of the furring to structure please refer to the manufacturer's instructions.

4.5 Drywall Grid or Furring Layout

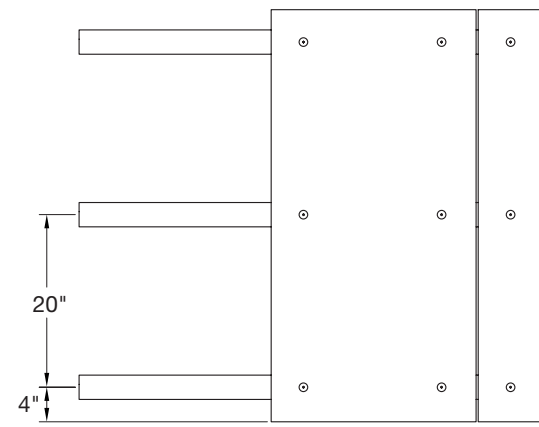
The layout of the suspension is dependent upon the desired panel layout. Panels are installed in single panel width rows with the edges butting together long edge-to-long edge (nominally 4' wide) or short edge-to-short edge (nominally 2' wide).

NOTE: The spacing and straightness of structural components in the deck may vary so it is recommended to use an alignment method that can operate independently from these components (e.g. laser, chalk line). The drywall grid or furring should be leveled to within 1/4" over 10' (ASTM C636) to ensure a satisfactory visual.

Make sure at least 6" of clearance is given between the outside edges of the suspension and the nearest possible obstruction as the panels, when installed, will extend 4" beyond the edge of the suspension and may interfere with obstructions if sufficient clearance is not given.

4.5.1 4' (nominal) Wide Rows

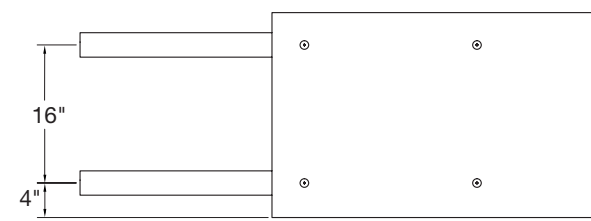
Rows with panels butting long edge-to-long edge require three rows of suspension. Suspension is installed perpendicular to the length of the panels. Suspension must be spaced 4" On Center (O.C.) in from the desired short edges of the panels, with a center row of suspension installed at the midpoint of the panels, leaving 20" O.C. spacing between the three rows. Where the rows start and end, the suspension should be cut 1"- 2" short of the desired panel edges to avoid visibility of the suspension (**Fig 9**).



(Fig 9)

4.5.2 2' (nominal) Wide Rows

Rows with panels butting short edge-to-short edge require two rows of suspension. Suspension is installed parallel to the length of the panels. Suspension must be spaced 4" O.C. in from the desired long edges of the panels, leaving 16" O.C. spacing between the two rows. Where the rows start and end, the suspension should be cut 1"- 2" short of the desired panel edges to avoid visibility of the suspension (**Fig 10**).



(Fig 10)

5. PANELS

5.1 First Panel and Alignment

InvisAcoustics™ panels are installed in single panel width rows, butted against each other with no reveal. Because panel edges are butted against each other, the alignment of the first panel determines the straightness of the rest of the panels within the row. Alignment and even spacing in relation to the suspension is critical. The spacing and straightness of structural components in the deck may vary so it is recommended to use an alignment method that can operate independently from these components (e.g. laser, chalk line).

5.2 Panel Attachment

For all panel layouts, the same spacing and fastener attachment rules apply:

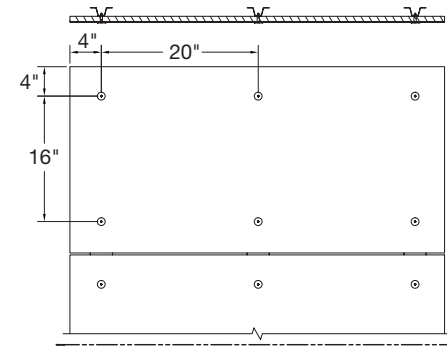
- Each full-size panel requires six Armstrong® all-in-one self-stop fasteners
- Exact fastener spacing is based on alignment with suspension but should target 20" O.C. between fasteners along the length of the panel and 16" O.C. between fasteners across the width of the panel
- Each fastener is placed roughly 4" in from the nearest panel edge (between 3" and 5" is acceptable)
- There must be at least 2" of space between panel ends of separate rows

5.3 Panel Attachment – 4' (nominal) Wide Rows

If panels are being butted up long edge-to-long edge, three rows of suspension attached to the deck 20" (O.C.) is required. This arrangement creates the least amount of net sag, and alternative spacing of the suspension is not recommended.

Once properly aligned, use Armstrong Ceiling Solutions all-in-one self-stop fastener to attach the first panel to suspension. The proper installation of the fasteners results in an installation where the heads of the fasteners are tight against the panel.

Each panel requires six fasteners. Each fastener is to be placed roughly 4" inwards from the closest edge (a range of 3" to 5" is acceptable) (**Fig 11**).



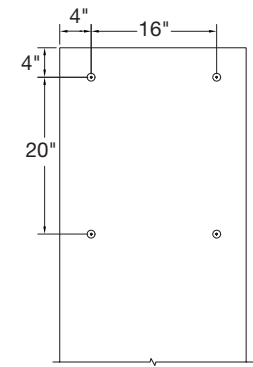
(Fig 11)

5.4 Panel Attachment – 2' (nominal) Wide Rows

If panels are being butted up short edge-to-short edge, two rows of suspension attached to the deck 16" O.C. is required. This arrangement creates the least amount of net sag, and alternative spacing of the suspension is not recommended.

Once properly aligned, use Armstrong Ceiling Solutions all-in-one self-stop fasteners to attach the first panel to suspension. The proper installation of the fasteners results in an installation where the heads of the fasteners are tight against the panel.

Each panel requires six fasteners. Each fastener is to be placed roughly 4" inwards from the closest edge (a range of 3" to 5" is acceptable) (**Fig 12**).

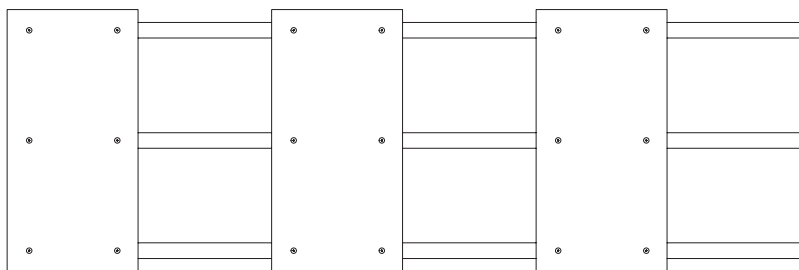


(Fig 12)

5.5 Panel Attachment – Stand Alone or Alternate Panel Spacing

InvisAcoustics™ panels can also be used for spot acoustical treatment. This type of installation would be similar to those described in Sections 5.3 and 5.4 but with the rows in short sections.

Additionally, spacing between panel edges within a row can vary, but will require individual alignment of each panel or the use of a temporary spacer before attachment (**Fig 13**).



(Fig 13)

For all panel layouts, the same spacing and fastener attachment rules apply:

- Each full-size panel requires six Armstrong Ceiling Solutions all-in-one self-stop fasteners
- Exact fastener spacing is based on alignment with furring but should target 20" O.C. between fasteners along the length of the panel and 16" O.C. between fasteners across the width of the panel
- Each fastener is placed roughly 4" in from panel edges (between 3" and 5" is acceptable)
- For parallel rows, there must be at least 2" of space between panel ends of separate rows

Make sure at least 6" of clearance is given between the outside edge of the last suspension and the nearest possible obstruction as the panels, when installed, will extend 4" beyond the edge of the suspension and may interfere with obstructions if sufficient clearance is not given.

5.6 Field Cutting

InvisAcoustics panels can be cut to length, as long as the panels follow the same attachment rules, and the panels are supported within 4" of the edges.

If the field-cut edge is placed against a factory-painted edge then the bottom of the cut edge should be painted.

5.7 Touch-up Paint Recommendations

All field-cut edges should be colored to match the factory finish. For minor surface and edge scratches or to field paint a cut edge for InvisAcoustics Direct-Apply panels, use Sherwin-Williams® ProMar® 200 Zero VOC Interior Flat Latex Paint (**Fig 14**).

PAINT FOR WHITE INVISACOUSTICS™ PANELS – FLAT EXTRA WHITE BASE				
Colorant	OZ	32	64	128
Y3 – Deep Gold	–	–	1	–
PAINT FOR BLACK INVISACOUSTICS™ PANELS – FLAT ULTRA DEEP BASE				
Colorant	OZ	32	64	128
W1 – White	–	8	1	–
B1 – Black	8	55	1	–

(Fig 14)

6. ALTERNATE INSTALLATION OPTIONS:

6.1 Attachment to I-Beam

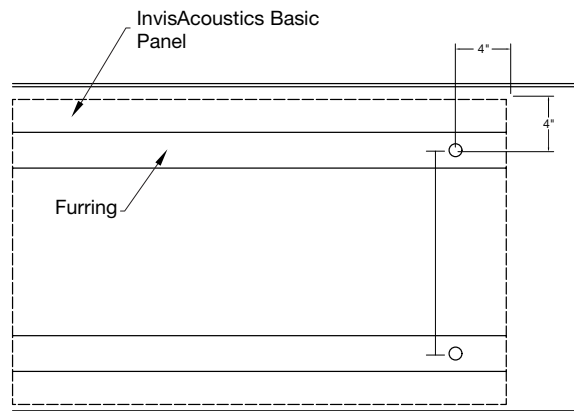
InvisAcoustics™ is mounted to I-beams using metal furring channel and the All-in-one self-stop fastener. Panels must be installed in single panel height rows, with the 2' edges of each panel end to end. Panels can be installed with ends butted up or installed with a reveal between ends.

6.1.1 I-Beam Requirements

- The I-beam web must be tall enough to accommodate two rows of furring spaced at least 4" O.C. up to a maximum of 16" O.C. running the same direction as the beam.
- Fastener connections of the furring channel to the I-beam structure are specified by the contractor and must follow the manufacturer's instructions and reference code.

6.1.2 Installation Steps:

Spacing of the furring will be based on the panel size and necessary fastener locations. All panels require four fasteners, one in each corner, within 4" of each edge. Furring must be installed accordingly so that it is behind each fastener location (**Fig 15**).



(Fig 15)

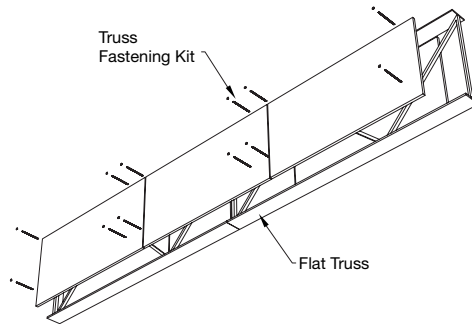
Once your furring is installed, make sure you have sufficient clearance to install your panel between the flanges of the I-beam. Measure the space between the flanges of the I-beam to determine if the panels need to be cut to size. It is recommended that the panel have at least 1" of clearance at the top since I-beam flanges taper inwards in most cases. If cuts are required the panels can be cut with a utility knife.

Once your panels fit, you can install them using the all-in-one self-stop fastener. When installing InvisAcoustics panels for this application, only four fasteners are needed for each panel when following the spacing detailed above.

When panels are cut, they still must be supported with a fastener located near each corner of the panel, approximately 4" in from each edge. You can either rest the panels on the bottom flange of the I-beam as a method of aligning panels end to end, or, if installing the panels up off the flange, use a laser or string line to ensure a level installation. Panel ends are intended to be butted up against each other for the most pleasing visual.

6.2 Attachment to Truss

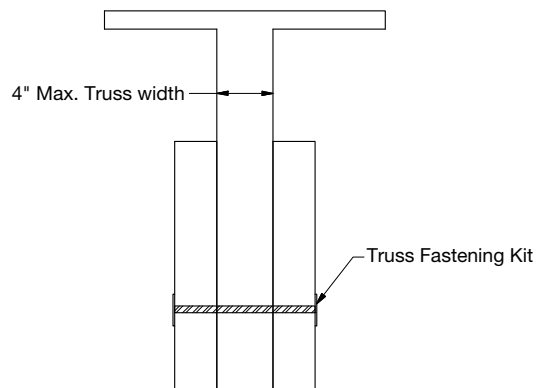
InvisAcoustics™ panels can be mounted to flat trusses using the Truss Fastening Kit. The panels must be installed in pairs and cover both sides of the truss. Panels must be installed in single panel height rows, with the 2' edges of each panel end to end. Panels can be installed with ends butted up or installed with a reveal between ends (**Fig 16**).



(Fig 16)

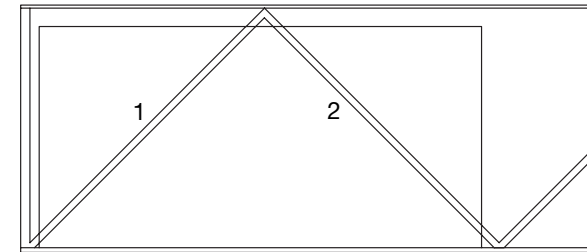
6.2.1 Truss Requirements:

- The truss must have a horizontal flange on the bottom edge greater than the width of the panel.
- It must be no smaller than 6" in height between top and bottom flanges.
- Webs/Braces of the truss can be no more than 4" (max dimension of air gap between panels that truss fastening kit will accommodate) (**Fig 17**).



(Fig 17)

- It must have a sufficient number of webs or braces for the panels to be fastened against. It is recommended that there are at least two webs or braces contacting each pair of panels when installed, thereby eliminating any risk of movement (**Fig 18**).



(Fig 18)

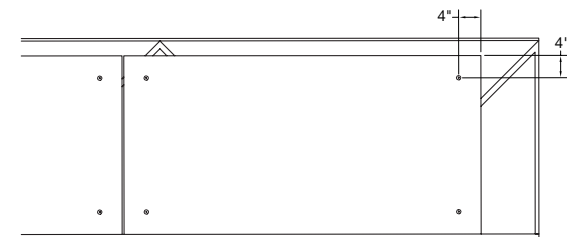
6.2.2 Installation Steps:

Make sure you have sufficient clearance to install your panels between the flanges of the truss. The panels should rest on the bottom flange of the truss and have at least 1/2" of clearance between the panel and the top flange of the truss when pressed up against the webs or braces. If your panel does not fit, you must cut it down to size.

It is recommended to have two installers for truss installations.

Once the panels are cut to fit, pre-mark the locations for your truss fastening kit onto the panel.

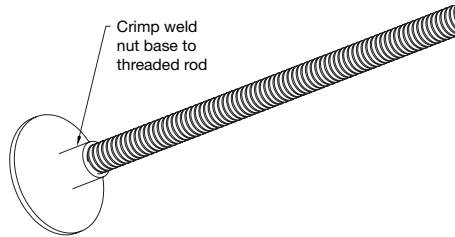
Four fasteners are required per panel. It is required to have one fastener located near each corner of the panel, approximately 4" from each edge (**Fig 19**).



(Fig 19)

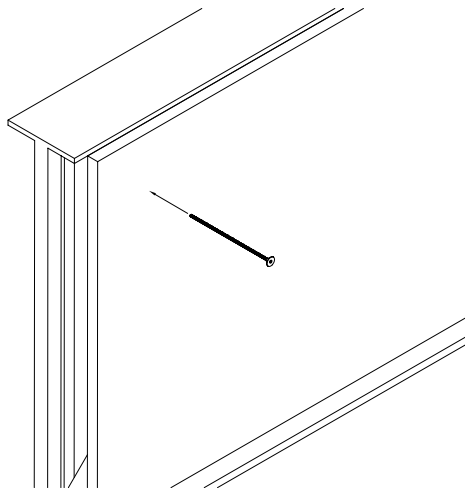
With your holes marked, screw one weld nut onto the threaded rod such that it sits flush with the end of the rod.

Once in place, crimp the base of the weld nut so it cannot be unscrewed. Do this for all needed hardware (**Fig 20**).



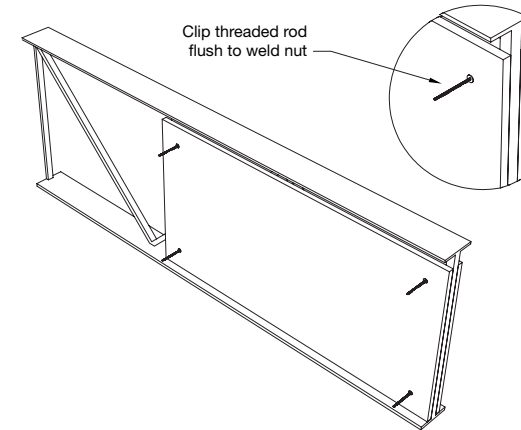
(Fig 20)

Next, move your panels into the truss (one on each side of the web) and align your two panels together. With the marked side of the panel facing you, take your threaded rod/crimped weld nut and tap the uncapped side through the panel, the air gap between panels, and out through the panel on the other side (**Fig 21**).



(Fig 21)

Once through, cap off the other side with a weld nut by hand tightening it against the panel. Use pliers to cut off the excess threaded rod (**Fig 22**).



(Fig 22)

7. DRYWALL/CONCRETE/PLASTER INSTALLATIONS

7.1 For drywall, concrete, and plaster installations with InvisAcoustics™ panels, reference the following sections.

The Titebond® GREENchoice™ Acoustical Ceiling Tile Adhesive provides a secure bond and does not require any supplemental mechanical attachment as long as these instructions are followed.

7.2 The Trowel Line Method (ceilings level within 1/4" in 12')

Panels should have at least a 1/4"-3/8" reveal between edges. This will help alleviate slight differences in the levelness of adjacent panel faces. See Section 5.5 for more details on panel spacing.

7.3 Your glue lines should be 20" long and 4" wide.

NOTE: The max distance between glue centerlines on any panel is 24". For panels whose edges may overhang, maximum allowable overhang is 7" from the centerline of your glue to the edge of the panel.

7.4 Utilizing the trowel, ensure that the adhesive is uniformly spread to cover your specified area.

7.5 Once in position, push the panel against the ceiling applying even hand pressure to the board where the adhesive is located in the center first, followed immediately by the edges of the panel. By attaching the center first, you can still pivot the panel slightly left or right before adhering the edges. This ensures that the panel can be aligned correctly first before the edges are solidified into place. Avoid excessive pressure to minimize panel flexing that will disturb the previously pressed areas of adhesive and result in release of the adhesive.

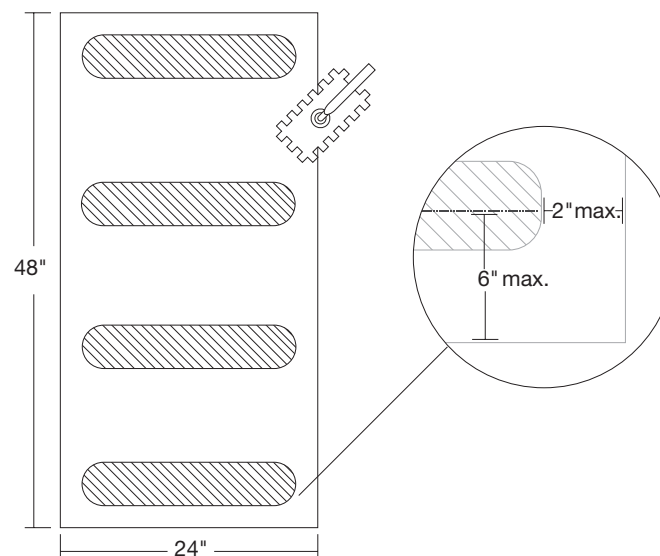
7.6 Any slight adjustments to the panel placement should be done immediately to not weaken the adhesive bond once it has started to set. Once the panel is evenly pressed into position, the adhesive should provide an immediate bond to hold the panel in place while the adhesive sets.

7.7 Press a sponge float across all areas of the panel where glue was applied to ensure all glue spots and lines are properly compressed and adhere to the deck. Lastly, measure adjacent panel edges to check levelness as panels are installed; the levelness of the finish face of adjacent panels should be within 1/8" to ensure a satisfactory visual.

7.8 For wall installations, follow steps 7.1 – 7.7 and apply the same methods in the vertical. The bottom edge of the panel should be at least 6' from the floor to avoid damage.

NOTE: Panel creep may occur as the glue is setting. Panels should creep no more than 1/8" during installations.

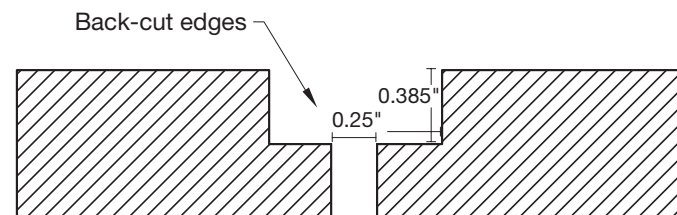
InvisAcoustics Direct-ApPLY panels have the following requirements (**Fig 23**):



(Fig 23)

- Glue line end to panel edge: 2" max.
- Glue center line to panel edge: 6" max.
- Distance between center line of the glue rows: 18" max.

7.8.1 Factory painted panels (Items 1212WH/BL) have square edges on the 4' sides but have back-cut edges along the 2' sides (**Fig 24**).



(Fig 24)

8. FIELD PAINTING

Field-Painting Specification Recommendation:

Sherwin-Williams® Product – Waterborne Acrylic Dryfall (B42W1) 50 GAL. Drums MPI# 118 (or substitute Alkali-based, flat latex paints with similar properties)

Recommended Spread Rate per Coat –

Wet Mils: 3.5 – 5.0

Dry Mils: 1.5 – 2.0

Coverage – 336-450 sq. ft./gallon approximate
(based on flat surface)

*If necessary, cross spray at a right angle

Armstrong Ceiling Solutions recommends post painting once the install is complete. Do not paint panels prior to installation in the ceiling as damage/markings during installation may be visible once installed. Field painting may alter acoustical and fire performance.

Surface Preparation

Surface must be clean, dry, and in sound condition. Remove all oil, dirt, grease, and other foreign material to ensure adequate adhesion.

Application Conditions and Equipment

Paint must be applied in a spray application and cannot be applied by use of a roller or brush. Consult paint manufacturer for spray equipment recommendations.

9. SPECIAL INSTALLATION CONSIDERATIONS

9.1 Sloped and Wall Installations

InvisAcoustics™ panels can be installed on any slope (up to vertical surfaces/wall) when following the rules below:

- The furring or DGS for panel attachment must be directly attached to structure (no suspension to create a slope)
- Panel fastener attachment to furring must follow the spacing rules in Section 5.

9.1.1 Drywall Grid Attachments

- When DGS mains are installed on a wall, it is recommended that the mains run vertical up the wall.
- When DGS mains are installed on a slope, it is recommended that the mains run parallel with the slope.

If the panel layout requires the DGS mains to run horizontally across a wall or perpendicular to a slope, the spacing of the support attachments of the DGS to structure (QSUTC) must be no more than 48" O.C.

9.2 Pools/Auditoriums

3/4" InvisAcoustics direct-attach ceiling panels are not to be used in pool areas or other high-humidity areas where standing water is present.

9.3 Exterior Installation

3/4" thick standard InvisAcoustics panels are not intended for use in exterior applications.

10. SEISMIC INSTALLATIONS

Seismic installations of 3/4" thick InvisAcoustics panels are to be handled per building code.

CEILING PANELS STANDARD ITEMS:				
Item #	Item Name	Included w/panels	Sold by the:	SF per Ctn
1212FP	23-3/4 × 47-3/4 × 3/4" No Finish	–	Ctn	48
1212BL	23-3/4 × 47-3/4 × 3/4" Black	–	Ctn	48
1212WH	23-3/4 × 47-3/4 × 3/4" White	–	Ctn	48
1212CE1	23-3/4 × 47-3/4 × 3/4" Concrete	–	Ctn	48
DIRECT-ATTACH:				
Item #	Item Name	Included w/panels	Sold by the:	Pcs/Ctn
1221	All-in-one Self Stop Fastener 1-1/4" x 0.60"	No	Ctn	100
1221BL		No	Ctn	100
1221WH		No	Ctn	100
1222	Truss Fastening Kit	No	Ctn	20
1222BL		No	Ctn	20
1222WH		No	Ctn	20
DIRECT-APPLY INSTALLATION ACCESSORIES:				
Item #		Item Details		
Recommended Adhesive		Titebond® GREENchoice™ Acoustical Ceiling Tile Adhesive		
Trowel		Notched – 1/4 × 1/2 1/4		
Gloves		Clean White		
Sponge Float				
SUSPENSION SYSTEM COMPONENTS:				
Item #	Item Name	Included w/panels	Sold by the:	Pcs/Ctn
HD8906	12' HD Drywall Main Beam	No	Ctn	12
QSUTC	QuickStix™ Uptight Clip	No	Ctn	150
– –	Steel Furring Channel (alternate suspension)	No	Refer to manufacturer	
– –	Wood Furring (alternate suspension)	No	Refer to manufacturer	

MORE INFORMATION

For more information, or for an Armstrong Ceilings representative, call 877 276-7876.

For complete technical information, detail drawings, CAD design assistance, installation information, and many other technical services, call TechLine customer support at 877 276-7876 or FAX 800 572-TECH.

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