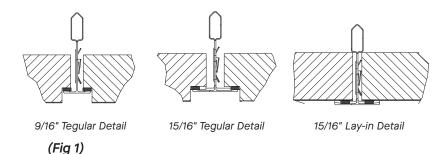
Calla® Health Zone™ AirAssure®, Ultima® Health Zone AirAssure® School Zone Fine Fissured™ AirAssure®

Assembly and Installation Instructions

1. GENERAL

1.1 Product Description

Ultima® Health Zone™ AirAssure®, Calla® Health Zone™ AirAssure®, and School Zone® Fine Fissured™ AirAssure® ceiling panels with integrated AirAssure gasket reduce air leakage through the ceiling plane up to 4x compared to ceiling panels without a gasket. AirAssure Panels can be installed on Armstrong 15/16" and 9/16" Suspension Systems, and are available as lay-in and tegular ceiling panels (*Fig 1*).



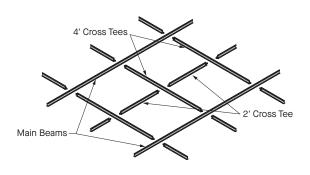
2. INSTALLATION LAYOUT

2.1 Grid Layout

2.1.1 Suspension systems, whether 9/16" or 15/16", shall be installed to meet the minimum requirements established in the ASTM C636 standard, and any other requirements established by local code.

2.1.2 Standard 2' × 2' (Fig 2)

- · Main beams spaced 48" O.C.
- 4' cross tees shall intersect the main beams at 90° every 24" O.C.
- 2' cross tees shall be installed at the midpoints of the 4' cross tees, creating 24" × 24" modules

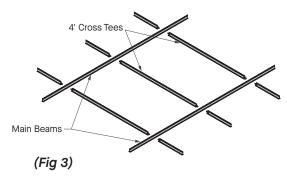


(Fig 2)



2.1.3 Standard 2' × 4' (Fig 3)

- · Main beams spaced 48" O.C.
- · 4' cross tees shall intersect the main beams at 90° every 24" O.C.



2.2 Room Layout

Proper layout within a space is crucial for a good installation. Some layouts may have a starting point established by the architect noted on the prints. Examples of starting points may be for a specific border dimension, full size borders, or referenced from lights or columns. It is important to check the project plans before installation.

2.2.1 Calculating Equal Borders

The most pleasing visual is achieved when the border panels are no less than 10" wide, and the opposite wall has the exact same size border panel achieving proper room balance. For installations that require equal borders, the following steps will help you layout an installation with equal borders on opposite sides of the space.

- Determine the direction of the main beams and panel length
- Divide each dimension of the space (length and width) by the panel length in that direction

Ex: 28' 9" (room width) / 2' (panel width) = 14 full size panels and a 9" remainder

Divide the remainder to get even opposite border panels.
 If this results in border panels less than 10" you will need to
 add a full panel to the remainder so that the border panels
 are greater than 10".

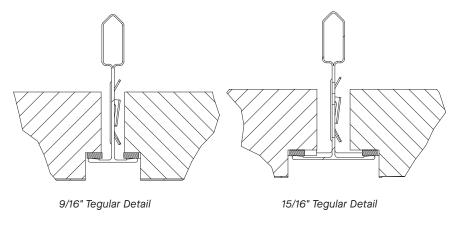
Ex: 9" (remainder) / 2 (borders) = 4-1/2" border (too small) 24" (full panel width) + 9" = 33" (new remainder) 33" / 2 (borders) = 16-1/2" borders with 13 full size panels

2.3 Plenum

Allow at least 3" below the old ceiling, duct work, pipes, or wiring as clearance to maneuver a ceiling panel into the opening of the grid.

3. PANEL INSTALLATION

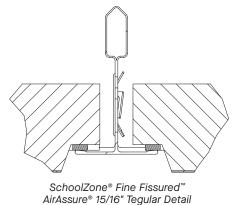
3.1 Ultima® Health Zone™ AirAssure® and Calla® Health Zone™ AirAssure® tegular panels will have a step cut out around the edge of the panel. They will install above the grid, with the AirAssure® Sealing Tape resting on the flange of the grid (*Fig 4*).



(Fig 4)

(Fig 5)

School Zone® Fine Fissured™ AirAssure® tegular panels will have an angled step cut out around the edge of the panel. They will install above the grid, with the AirAssure Sealing Tape resting on the flange of the grid *(Fig 5)*.



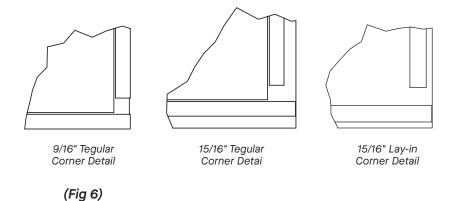
All lay-in panels will install above the grid, with the AirAssure Sealing Tape resting on the flange of the grid.

3.2 Perimeter Treatment

- **3.2.1** Perimeter panels with a tegular edge that are less than full size shall be installed by recutting the Tegular edge detail and reinstalling the AirAssure® Sealing Tape on the new field cut Tegular edge.
- **3.2.2** Lay-in perimeter panels less than full size shall be installed by cutting the panel to size and reinstalling the AirAssure Sealing Tape on the new field cut edge.
- **3.2.3** Regardless of the panel edge detail, the installer will need a separate roll of AirAssure Sealing Tape (Item 1350) for reinstallation on the cut panel.
- 3.2.4 Installers may apply AirAssure Sealing Tape (Item 1350) directly to the wall molding in place of applying the sealing tape to each cut perimeter panel. Alternatively, you can use standard cleanroom gasketed wall molding for the perimeter.

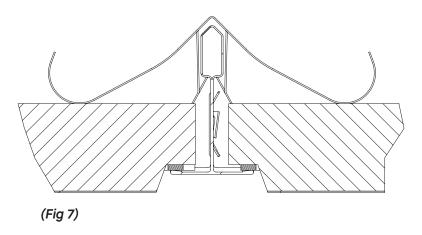
Both options will deliver equivalent air leakage performance as outlined in the product data page.

3.2.5 Make the necessary cuts with a sharp utility knife. Blow and brush off dust and residue from the new cut edge(s) to ensure a clean surface to apply the new sealing tape. Once the perimeter panel is cut, position the new AirAssure Sealing Tape tight to the tegular corner (for tegular panels) and close to the edge on the panel face (for lay-in panels). Trim the sealing tape flush with the back cut. Do not overlap sealing tape joints (*Fig 6*). AirAssure Sealing Tape cuts best with scissors or snips.



3.2.6 Apply pressure to the entire sealing tape surface to assure proper bond with the panel substrate. Apply on a clean, flat surface to not damage the field cut tegular edge.

- **3.2.7** All field-cut edges "exposed to view" should be colored to match the factory finish. Armstrong® SuperCoat™ Ceiling Panel Touch-up Paint is recommended.
- **3.2.8** An all-purpose silicone caulk or acoustical caulk can be used to fill any gaps around the perimeter to reduce air leakage points through the ceiling plane.
- **3.2.9** Install Vector® Hold Down Clips (Item 442) to achieve positive pressure greater than 0.09 Water Column (WC) in a space (*Fig 7*). Clips should be placed every 2' 0.C. and on each side of the panel.



4. MEP INTEGRATION

AirAssure Gasketed Tiles that are integrated with any MEP must have the AirAssure Sealing Tape applied to the trim in order to reduce air leakage points through the ceiling plane.

5. SEISMIC

5.1 Installations occurring in seismic design categories C, D, E, or F must follow the methods described in the <u>Seismic Design: What You Need to Know</u> document. This document outlines the Armstrong Seismic Rx methods for installing suspended ceilings in compliance with the International Building Code (IBC) requirements for seismic design categories C, D, E, and F.

