ARMSTRONG® Clean Room™ Suspension Systems

Assembly and Installation Considerations

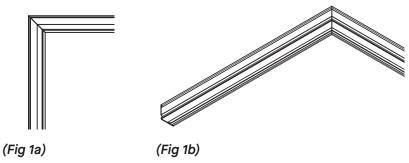
1. GENERAL

Armstrong® Clean Room™ Suspension Systems come factory finished with an integral gasket designed specifically for clean rooms, food processing areas, and data centers.

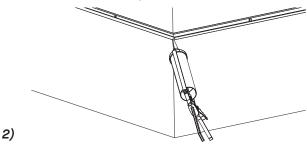
2. INSTALLATION LAYOUT

2.1.1 Grid installation should be square, level, and installed per ASTM Standards. See Standard Suspended Ceilings – Assembly and Installation Instructions, BPLA-293022.

2.1.2 The wall angle at the corners should not overlap as would be typical with most installations. Miter wall molding corners. This allows the panels to lie flat against the gasket without creating additional gaps. (*Figs 1a & 1b*)



If necessary, caulk the miter joint to seal any gaps to prevent dust and loss of air pressure. (Fig 2)



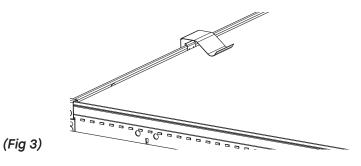
2.1.3 Follow the project guidelines for main beam or cross tee attachment to wall angle.

3. MEP INTEGRATION

If the weight of MEP/Fixtures causes flexion of the grid, MEP/fixture integration should be supported to structure independently to ensure level with grid in order to engage properly with gasketing.

4. PANEL INSTALLATION

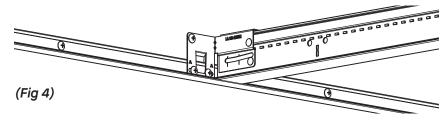
Ensure panels are engaged with the gasket on all four sides. If necessary to close off visible seams or as project guidelines call out, hold down clips may be required. Clear Hold Down Clips (CHDC) and/or Border Hold Down Clips (BHDC) (CHDC and/or BHDC) should be installed 24" O.C. (Fig 3)





5. SEISMIC

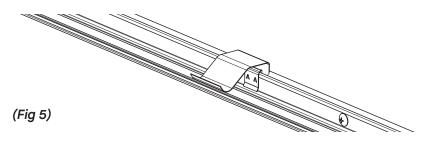
Installations occurring in seismic design categories C, D, E, or F must follow the methods described in the Seismic Design: What You Need to Know document. This document outlines the Armstrong® Seismic Rx® methods for installing suspended ceilings in compliance with the International Building Code (IBC) requirements for seismic design categories C, D, E, and F. Beam End Retaining Clip (BERC2 Steel) and Beam End Retaining Clip (ALBERC2 Aluminum) are available as part of the Armstrong Seismic Rx solution. (Fig 4)



6. ADDITIONAL CONSIDERATIONS FOR PRESSURIZED SPACES

(Not necessary for a typical installation but may be required per project guidelines):

6.1 If positive pressure is being maintained in the clean room, hold down clips may be required – one on each side of the 2' × 2' panel and two clips at the third point on each 4' cross tee. Clear Hold Down Clips (CHDC) also may be required within 3" of the perimeter on the perimeter tee. Border Hold Down Clips (BHDC) are recommended every 24" O.C. (*Fig 5*)



6.2 If project requires sealing or caulking at perimeters, caulking is not necessary when wall gasketed angle molding (EA7812WG) is installed. If alternative wall angle is installed and caulking is required, 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.

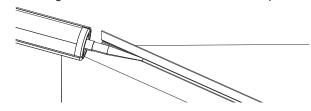
Wall molding can be caulked between the wall and molding along the top of the wall molding. (Fig 6)



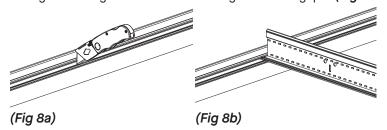
(Fig 6)

(Fig 7)

Alternate method: The gasketed Clean Room[™] wall angle has a groove along the vertical leg. This is to receive a latex caulk, if specified. (*Fig 7*)



6.3 As necessary, to eliminate additional gaps, wherever a grid component contacts the wall angle, the gasket of the wall angle beneath the component should be cut away. This allows the grid component to lie flat against the gasket without creating additional gaps. (Fig 8a & Fig 8b)





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MORE INFORMATION

For more information, or for an Armstrong Ceilings representative, call 1 877 276-7876. For complete technical information, detail drawings, CAD design assistance, installation information, and many other technical services, call TechLine customer support at 1 877 276-7876 or FAX 1 800 572-TECH.