

AXIOM[®] Direct Light Covers

Assembly and Installation Instructions

1. GENERAL

1.1 Description

The Axiom[®] Direct Light Cove system is a pre-engineered lighting solution designed to be used at a wall condition and integrate with Armstrong acoustical, specialty, drywall, and AcoustiBuilt ceiling systems. The system consists of multiple extruded aluminum components and is designed to accept a pre-engineered light manufactured and provided by others.

Component Description:

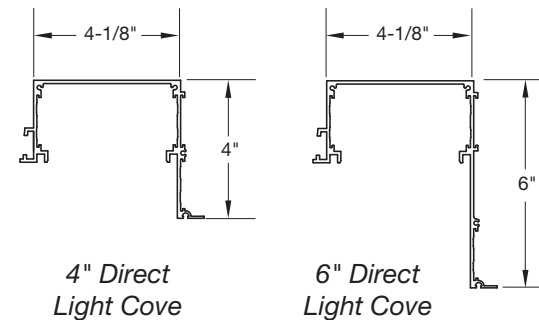
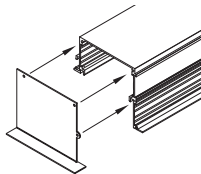
Axiom Direct Light Covers:

Extended aluminum direct light cove with distinct architectural features creates a 2-sided light cove at the wall. Special bosses are provided to connect AXTBC or ACT (Adjustable Trim Clip, item 7239) T-bar connector clips and splice plates to provide positive attachment with no visible fasteners. There are eight profile designs to accommodate most situations, a 4" x 4" cove and a 4" x 6" cove. **(Fig 1)**

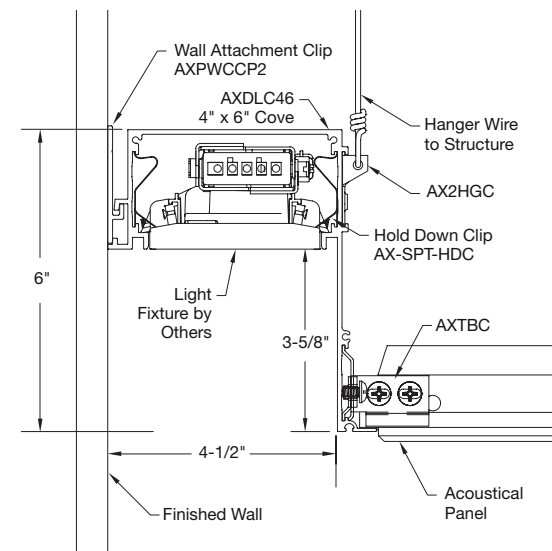
The eight profiles are designed with a hook feature and will attach directly to most wall applications or window mullions using the AXPWCCP2 or AXPWCCP. **(Fig 2)**

Axiom Direct Light Cove End Caps:

End caps are available for applications where the light cove does not extend from wall to wall. End caps are available for each type and size of cove and are designed for easy installation. End caps with flanges are designated as right handed or left handed. End caps without flanges are not.



(Fig 1)



4" x 6" Direct Light Cove – AXDLC46

(Fig 2)

Axiom® Wall Clip

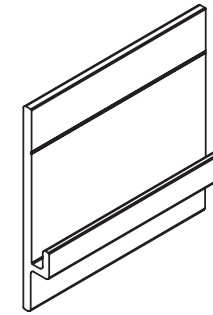
The Axiom® wall clip (AXPWCCP2 or AXPWCCP) should be used to attach the light covers AXPDLG44 and AXPDLG46 to the interior wall stud or wall mullions. AXPWCCP2 Clips are 2" wide and shall be installed no more than 48" apart. Orders will include four (4) per 10' piece. **(Fig 3)** With uneven drywall, installers may find it easier to shim out the full length wall clip (AXPWCCP). In this case, the AXPWCCP should be ordered separately.

Axiom Trim/Light Fixture Hold Down Clip

The hold down clip (AX-SPT-HDC) is designed to hold the light firmly in place once installed. This will snap into the bosses on the inside of the light cove profile. **(Fig 4)**

Axiom Hanging Clip

A hanging clip (AX2HGC) may be used with either of the two light covers. The AX2HGC is used in the bosses provided on the outside of the cove with hanger wire support as required. **(Fig 5)**



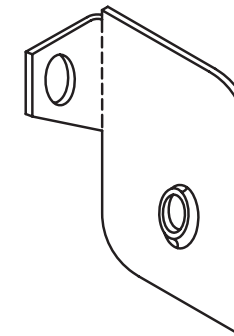
AXPWCCP2

(Fig 3)



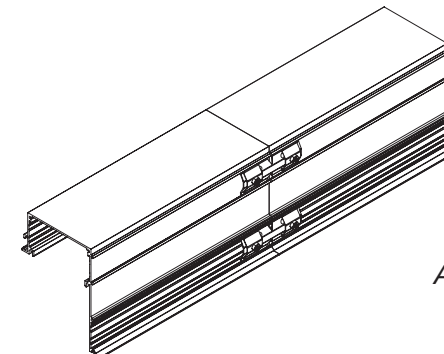
AX-SPT-HDC

(Fig 4)



AX2HGC

(Fig 5)



AXSPLICE2

(Fig 6)

2. MATERIAL DELIVERY AND IDENTIFICATION

Axiom Direct Light Covers are packaged and delivered in the quantities ordered. All hardware and instructions for assembly will be included in the packaging. Custom projects may include shop drawings as well. Identify all parts listed in the drawings and verify they are delivered to the site before starting the installation. Exercise care to protect the finished surfaces of the trim.

3. COMPONENT ASSEMBLY

3.1 Splice Plates

Steel splice plates are used to align and secure joints between sections of the light cove trim. Each joint requires a splice plate at every set of bosses for proper trim alignment. Join straight sections of cove together using the AXSPLICE2 splice plate. Splice plates are secured to the trim sections using factory-installed set screws. **(Fig 6)**

NOTE: Splice plates can slide completely into the channel bosses and then slide into the adjoining section after cove is aligned. This will aid splice plate connections for the last piece.

3.2 T-Bar Connector Clips

T-Bar connector clips are used to attach the channel trim to the supporting suspension system members. These two-piece or three-piece steel clips are supplied as an assembled unit with the steel locking screw factory-installed. One clip is required at each location where the suspension system intersects the channel Axiom trim. (Fig 7)

There are three versions of the T-Bar connector clip:

The AXTBC is used in installations where the grid will rest flush on the Axiom flange (e.g. drywall, lay-in, full size Vector and tegular panels) or need to be raised 1/4" (e.g. cut Tegular panels, Silhouette grid).

The AXVTBC is used in installations where the grid will need to be raised 3/8" or 1/2" (cut Vector panels). The AXVTBC must be requested at the time of order in lieu of the AXTBC clips. Please see Section 5.1 of this guide for additional interface details.

The ATC (Adjustable Trim Clip; item 7239) can be used in various installations to accommodate a range of grid offsets. This clip can be adjusted to install grid at 0" to 3-3/4" above the flange of the Axiom at 1/8" increments. This adjustability enables Axiom to be installed with a range of WoodWorks®, MetalWorks™, and other Architectural Specialties products. The ATC is provided with all Direct Light Coves for Specialty Ceilings.

See section 5.5 for installation details.

T-Bar connector clips are attached to the suspension system members using screws supplied by the installer. Framing screws (#6 x 7/16" or 1/2" lg.) are typical.

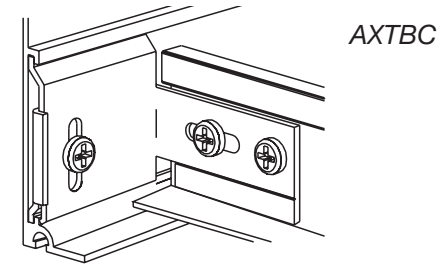
See detail drawings for alignment of the connector clip with the suspension system member.

Typical procedure

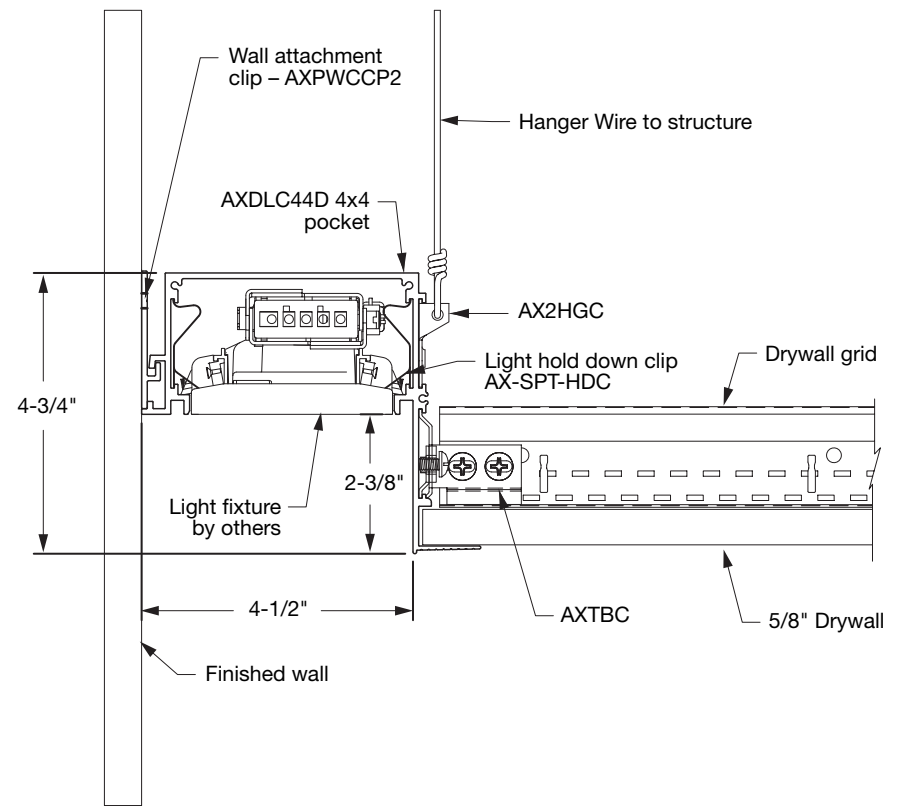
1. Cut suspension system to length
2. Attach clip to suspension system member
3. Engage clip in channel bosses and tighten locking screw

3.3 Drywall Flanged Products

Utilize AXDLC44D or AXDLC46D for integration with drywall. Drywall trim is fastened using standard drywall screws applied through the taping flange of the trim into the drywall suspension system. The trim is finished using standard drywall materials and techniques. Normally, the drywall and Axiom trim are then painted to meet job requirements. (Fig 8)



(Fig 7)



4" x 4" Direct Light Cove – AXDLC44D

(Fig 8)

Typical Procedure

1. Attach the drywall suspension system to the direct light cove with an AXTBC.
2. Attach 5/8" drywall to the system.
3. The framer should provide backing so that moldings may be attached with #6 drywall screws 16" O.C. for horizontal applications.
4. Prior to taping, the attachment flanges should be cleaned using a non-abrasive cleaner and soft rag. When veneer plaster is specified, the flanges must be treated with a bonding agent.
5. Make sure the tape does not overlap the edge of the reveal and an 8" wide trowel is used to apply the final skim coat.
6. Tape and finish drywall.
7. Paint.

NOTE: Fiberglass self-adhesive drywall tape will reduce taping time and help avoid possible cracking.

3.4 AcoustiBuilt Flanged Products

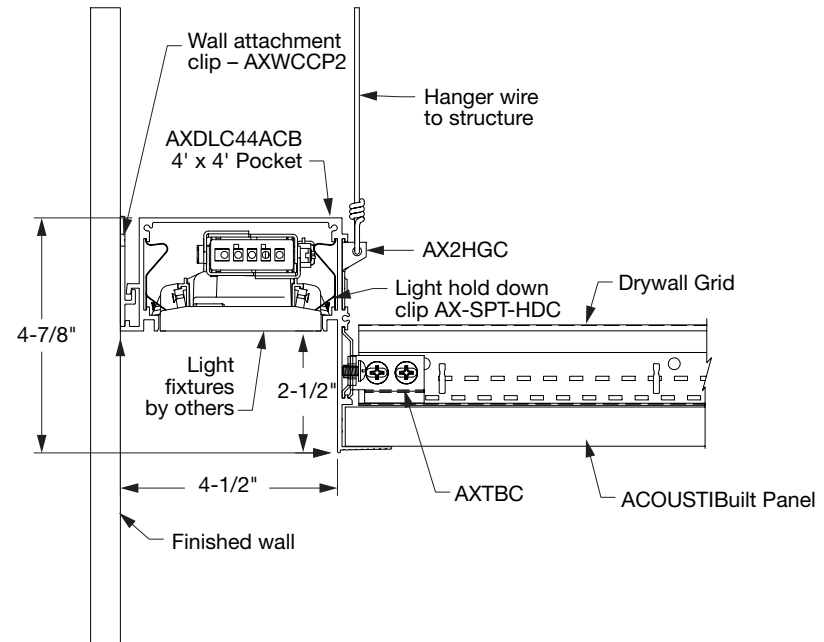
Utilize AXDLC44ACB or AXDLC46ACB for integration with AcoustiBuilt Ceiling Systems. The drywall suspension system is attached to the light cove with an AXTBC. AcoustiBuilt trim is fastened using standard drywall screws applied through the taping flange of the trim into the drywall suspension system. The trim is finished using AcoustiBuilt materials and techniques. (Fig 9) See AcoustiBuilt installation instructions for more details.

3.5 Light Fixture Hold Down Clips

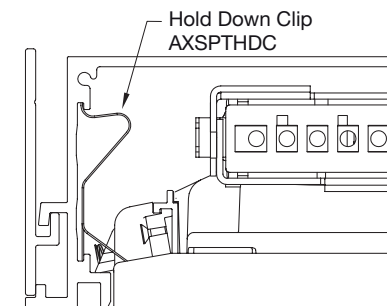
Light fixture hold down clips (AX-SPT-HDC) are used to provide downward pressure on the light fixture to ensure continued positive light fixture latch engagement. Insert two clips (one in each channel) every 4' O.C. with a minimum of four clips per light fixture. (Fig 10)

Typical Procedure

1. Insert the top of the clip into the channel
2. Press upwards to compress the clip
3. Insert the bottom leg into the channel
4. Install light fixture



(Fig 9)



(Fig 10)

4. GENERAL INSTALLATION INSTRUCTIONS

4.1 Axiom Light Cove Installation

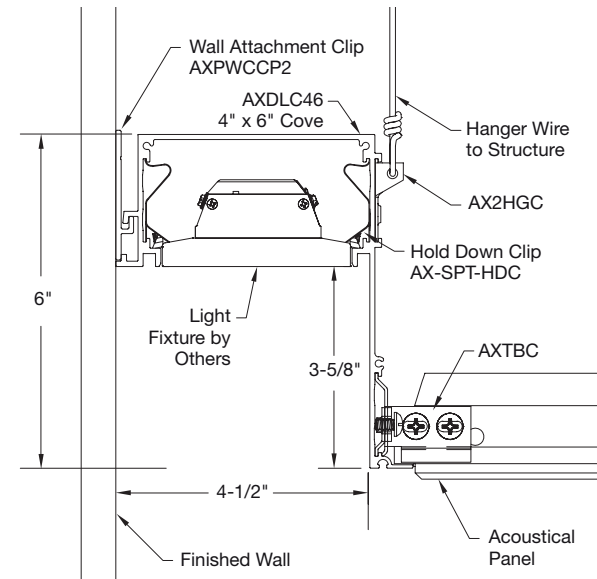
The pocket is the main component of the Axiom Direct Light Cove System. In cases where the pocket can be directly attached to the wall structure, shimming may be required to correct any irregularities in the wall. (Fig 11)

Typical Procedure

1. Attach AXPWCCP2 wall clip (included) to the wall structure with appropriate fasteners. Shim as required.

NOTE: It is important that the AXPWCCP2 is installed flat and level, to ensure the pocket will easily attach to the wall clip.

2. Use a laser to level the wall clip along the wall and secure it to the blocking no less than every 48".
- 3a. The front of the cove can be supported with 12 gauge wire. Insert the AX2HGC into the bosses in the front of the cove. Attach hanger wire to structure, then to the AX2HGC. Wire spacing should not exceed 48".
- 3b. CBS hangers can be used for NYC installations. CBS hangers shall be within 6" of the light cove.
4. If this installation requires end caps, these may be installed now. Using the screws provided secure in place.



4" x 6" Direct Light Cove – AXDLC46

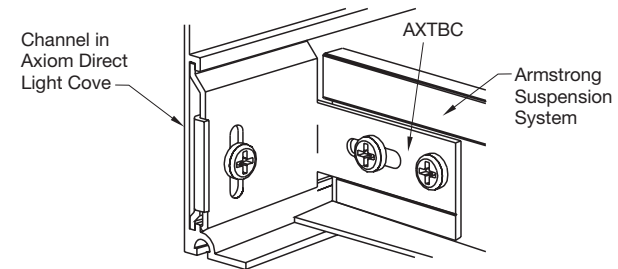
(Fig 11)

5. ATTACHING TO SUSPENSION SYSTEM

Axiom® Direct Light Covers are installed before acoustical or drywall grid systems. Most acoustical and drywall systems will attach directly to the light cove. There are several options for the Axiom connector clip used to attach the grid to the cove. Carefully review these options based on the systems being installed. (Fig 12)

Typical Procedure

1. Refer to the reflected ceiling plan for the suspension system layout.
2. Determine the size of the border panel next to the Axiom Light Cove.
3. Install the suspension system so it will rest 3/8" above the light cove flange.
4. Select the correct Axiom T-Bar connector clip (AXTBC, AX-V-TBC, or ATC) for your suspension system option listed below.
5. Rest the bottom of the clip on the flange of the suspension system.



(Fig 12)

6. Attach the clips by aligning the end of the elongated hole 1/4" from the cut end of the suspension system and inserting a standard framing screw into the center of the slot.
7. Use a Phillips screwdriver to loosen the locking screw on the lower plate.
8. Engage the top ear of the connector clip under the boss of the cove channel trim. Slide the lower leg downward to engage the lower boss on the trim and secure by tightening and locking the screw.
9. Loosen the locking screw and adjust the clip as necessary to properly align the suspension system.
10. Insert a second framing screw through the other hole in each of the connector clips.

NOTE: It is required that the opening for the light fixture is 3-7/16" (Max 3-1/2", Min 3-13/32"). Make adjustments at T-Bar connector clip to grid connection if necessary.

Axiom Connector Clip Options

5.1 Prelude® and Suprafine® T-Bar suspension systems will rest on the lower flange of the light cove. For use with flat lay-in, Vector® panels, and some Tegular applications.

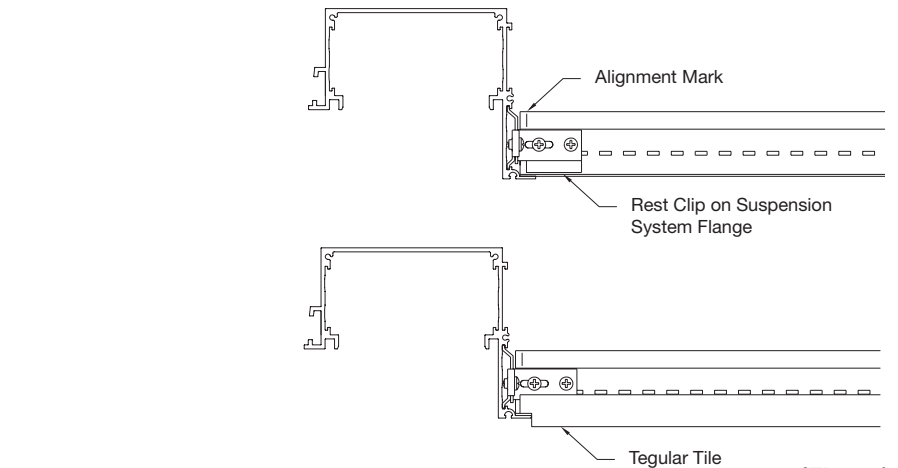
T-Bar suspension system that will rest on the lower flange of the Axiom trim – use AXTBC. **(Fig 13)**

5.2 Silhouette® and Interlude® (systems with 5/16" shoulder height) will require the clip to be modified to be held 1/4" above the light cove flange. Modify the clip by cutting 1/4" off the bottom of the clip at the score line. This can be done with a regular pair of snips. Follow visual instructions at right for more detail.

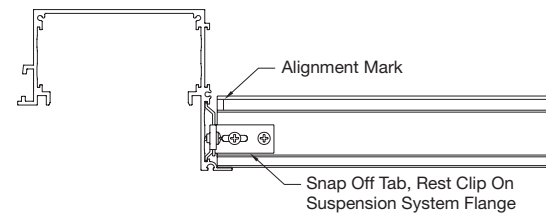
Silhouette, Interlude® XL®, and HRC (systems with a 5/16" shoulder height), Tegular panels on Prelude® or Suprafine® with the panel face resting on the trim flange, and 5/8" concealed tile – use AXTBC.

5.3 Vector® CUT panels and 3/4" concealed tile will require use of the AX-V-TBC clip (sold separately). The suspension system must be held 3/8" above the light cove flange. **(Fig 14)**

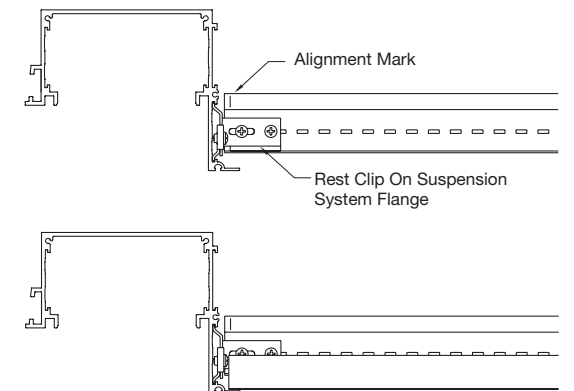
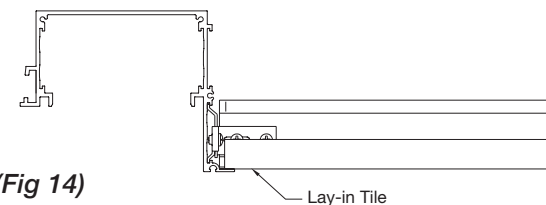
Vector (cut panels) and 3/4" concealed tile – use AXVTBC. **(Fig 15)**



(Fig 13)



(Fig 14)



(Fig 15)

5.4 Ultima® and Optima® Vector® CUT panels will require use of the AX-V-TBC clip (sold separately). The clip must be modified to hold the suspension system 1/2" above the light cove flange. Modify the AX-V-TBC by cutting 1/8" off the bottom of the clip at the score line.

Ultima and Optima Vector (cut panels) – use AXVTBC. **(Fig 16)**

5.5 For products that require a grid offset from the Axiom flange that cannot be achieved with the AXTBC (0", 1/4") or the AXVTBC (3/8" or 1/2") – use the ATC (7239). The ATC can be adjusted to install grid at 0" to 3-3/4" above the flange of the Axiom® at 1/8" increments (when tab is cut off). **(Fig 17)**

6. AXIOM® DIRECT LIGHT COVE COMPONENT SUPPORT

The manufacturer requires the Axiom Light Cove and ceiling suspension system be installed and supported in a manner that complies with all applicable codes and standards.

7. INSTALL CEILING PANELS, TILE, OR DRYWALL

7.1 Cut and install tiles or panels using standard procedures for the products specified.

7.2 Treat exposed cut edges of ceiling panels as detailed in the product specifications.

7.3 For drywall applications, attach 5/8" gypsum to the suspension system per the manufacturer's recommendations.

7.4 For AcoustiBuilt applications, see AcoustiBuilt Installation Instructions.

8. FINAL DETAILING

8.1 Check and adjust the alignment of the suspension system and ceiling panels.

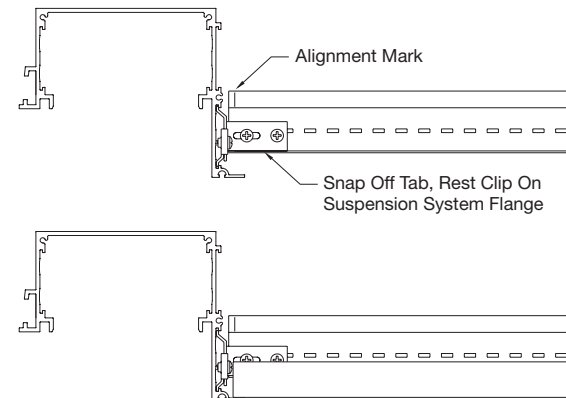
8.2 Clean exposed surfaces as required. Painted Axiom components may be wiped down with rubbing alcohol or a mild soap solution to remove finger prints, oil, etc.

8.3 Touch up painted components as required. All painted custom Axiom shipments include a container of paint to be used for touch up.

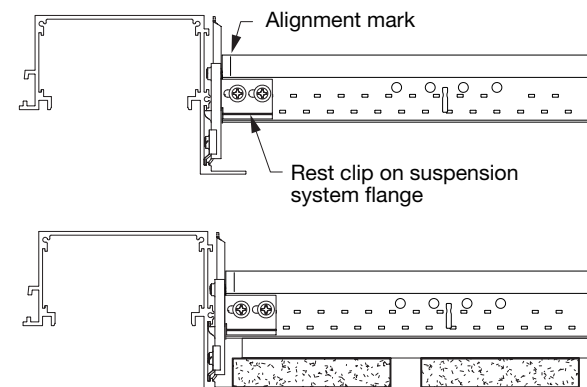
9. SEISMIC INSTALLATION

9.1 Axiom Direct Light Coves with the XAL LENO or the Axis Click are suitable for seismic D, E, F installations.

Ask your Armstrong Installation Specialist for bracing requirements.



(Fig 16)



(Fig 17)

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.

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