

# AXIOM<sup>®</sup> Direct Light Covers

## Assembly and Installation Instructions

### 1. GENERAL

#### 1.1 Description

The Axiom<sup>®</sup> Direct Light Cove system is a pre-engineered lighting solution designed to be used at a wall condition and integrate with Armstrong acoustical or drywall ceiling systems. The system consists of single extruded aluminum components and is designed to accept a pre-engineered light manufactured and provided by others.

Component Description:

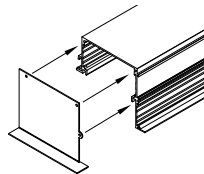
#### Axiom Direct Light Covers:

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 T-bar connector clips and splice plates to provide positive attachment with no visible fasteners. There are two profile designs to accommodate most situations, a 4" x 4" cove and a 4" x 6" cove. (Fig 1)

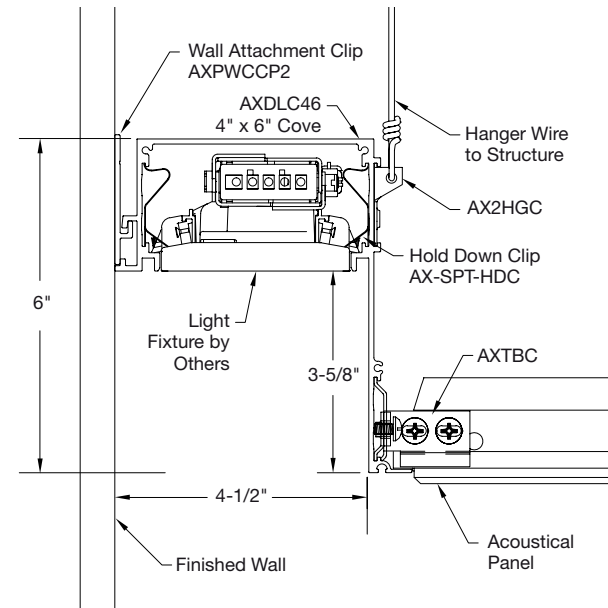
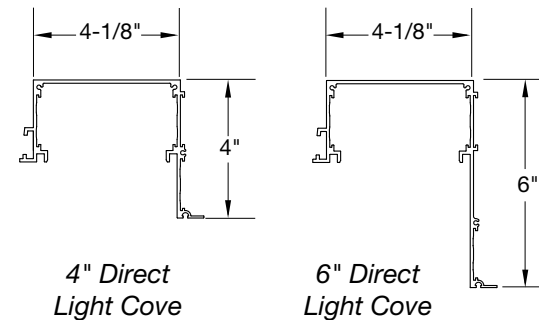
The two profiles are designed with a hook feature and will attach directly to most wall applications using the AXPWCCP2. (Fig 2)

#### 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 are designated as right handed or left handed:



- AXDLC46ECR: 4 x 6" – Direct Light Cove End Cap – Right
- AXDLC46ECL: 4 x 6" – Direct Light Cove End Cap – Left
- AXDLC44ECR: 4 x 4" – Direct Light Cove End Cap – Right
- AXDLC44ECL: 4 x 4" – Direct Light Cove End Cap – Left



4" x 6" Direct Light Cove – AXDLC46

### Axiom® Wall Clip

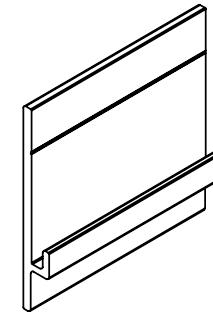
The Axiom® wall clip (AXPWCCP2) should be used to attach the light covers AXPDLC44 and AXPDLC46 to the interior wall stud. Clips are 2" wide and shall be installed no more than 48" apart. Orders will include four (4) per 10' piece. (Fig 3)

### 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)



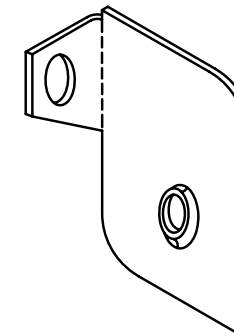
AXPWCCP2

(Fig 3)



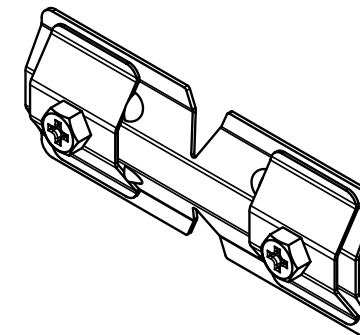
AX-SPT-HDC

(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

Axiom T-Bar connector clips (AXTBC or AX-V-TBC) are used to attach the ceiling or drywall suspension systems to the Axiom Direct Light Cove.

These two-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 light cove trim.

There are two versions of the T-Bar Connector Clip:

1. AXTBC is used with drywall, lay-in, Tegular, concealed tile and installations of Vector panels that are FULL SIZE. These are INCLUDED with each shipment.
2. AX-V-TBC is used with CUT Vector panels. These must be ordered separately.

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" long) are typical.

See installation system section for alignment of AXTBC connector clip to 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 (Fig 7)

**3.3 Drywall Trim**

Drywall bottom trim (AXBTSTR) is added to finish the edges of 5/8" drywall applied to the bottom surface of the Axiom® Light Cove. 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. (Fig 8)

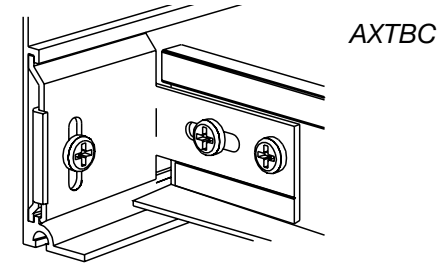
**Typical Procedure**

1. Attach the drywall suspension system to the light cove trim with an AXTBC
2. Attach 5/8" drywall to the system
3. Install Axiom bottom drywall trim
4. Tape and finish drywall
5. Paint

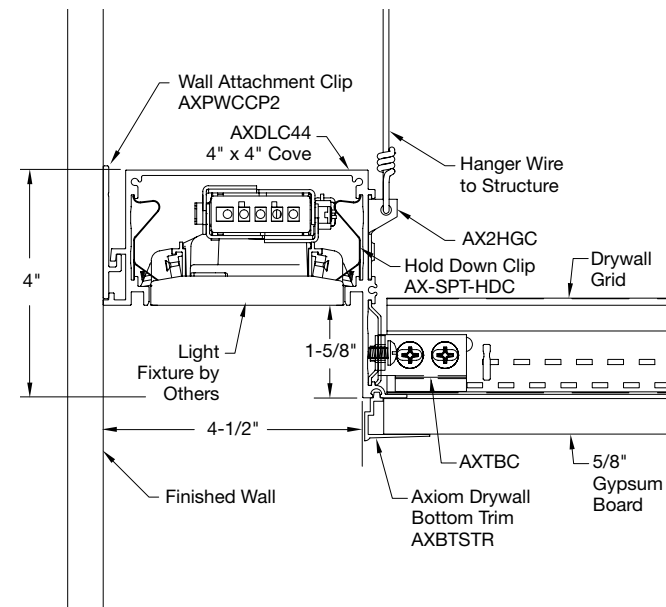
**Tapable Flange Installation**

1. Install the moldings after the gypsum board is mounted in place.
2. Provide backing so that the moldings may be attached with #6 drywall screws 16" O.C. for horizontal applications.
3. 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.
4. Be sure the tape does not overlap the edge of the reveal and an 8" wide trowel is used to apply the final skim coat.

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



(Fig 7)



4" x 4" Direct Light Cove – AXDLC44

(Fig 8)

### 3.4 Light Fixture Hold Down Clips

Metal panel hold down clips (AXSPTHDC) are used to secure the cut edges of metal ceilings at the light cove trim. Insert one clip for every 24" or as needed to maintain contact between panel edge and the flange of the trim. (Fig 9)

#### Typical Procedure

1. Install metal panel
2. Insert the top of the clip into the channel
3. Press upward to compress the clip
4. Insert the bottom leg into the channel

## 4. GENERAL INSTALLATION INSTRUCTIONS

### 4.1 Axiom Light Cove Installation

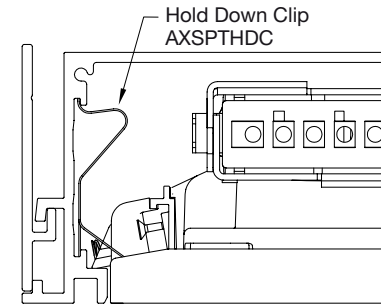
The pocket is the main component of the Axiom Direct Light Cove System. In cases where the pocket can be directly attached to the wall structure, shimming may be required to correct any irregularities in the wall. (Fig 10)

#### Typical Procedure

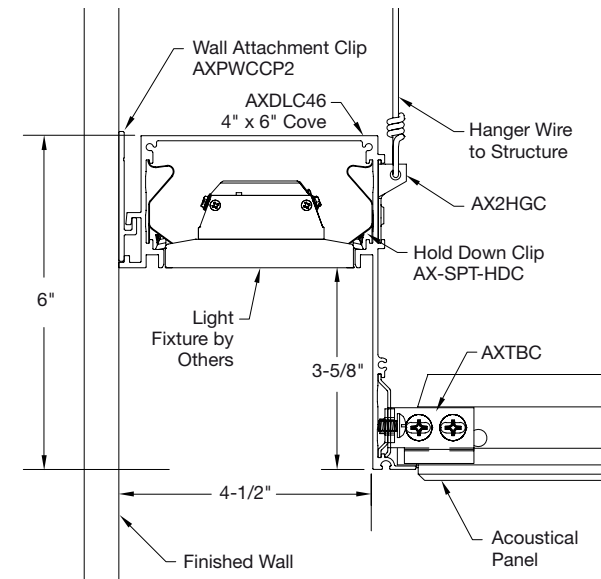
1. Attach AXPWCCP2 wall clip (included) to the wall structure with appropriate fasteners. Shim as required.

**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.



(Fig 9)



4" x 6" Direct Light Cove – AXDLC46

(Fig 10)

## 5. ATTACHING TO SUSPENSION SYSTEM

Axiom® Direct Light Coves 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 11)

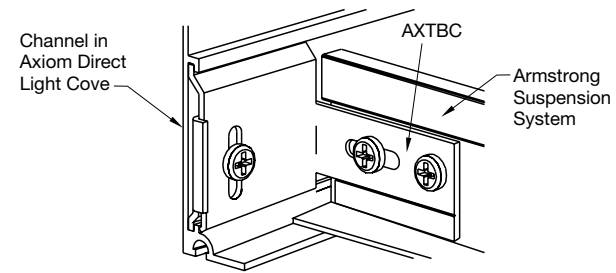
### Typical Procedure

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" on the light cove flange.
4. Select the correct Axiom T-Bar connector clip (AXTBC) for your suspension system option listed below.
5. Rest the bottom of the clip on the flange of the suspension system.
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.

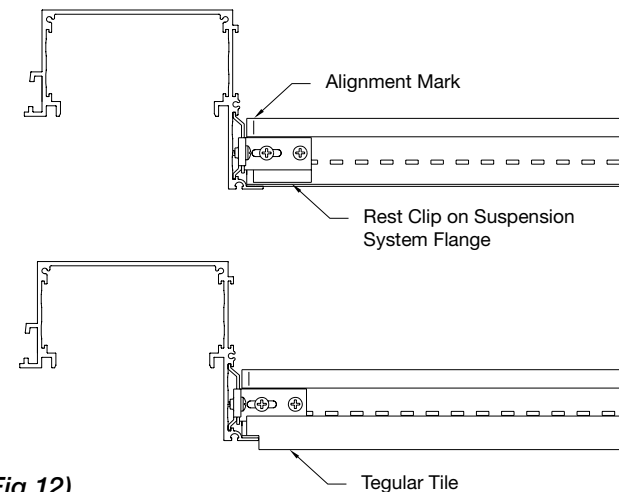
### Axiom Connector Clip Options

**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 12)



(Fig 11)



(Fig 12)

**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 13*)

Vector (cut panels) and 3/4" concealed tile – use AXVTBC. (*Fig 14*)

**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 15*)

## 6. AXIOM® DIRECT LIGHT COVE COMPONENT SUPPORT

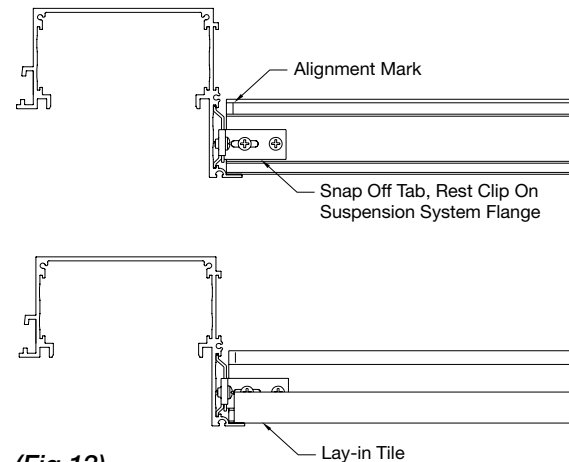
The manufacturer requires the Axiom Light Cove and ceiling suspension system be installed and supported in a manner that complies with all applicable codes and standards.

## 7. INSTALL CEILING PANELS, TILE, OR DRYWALL

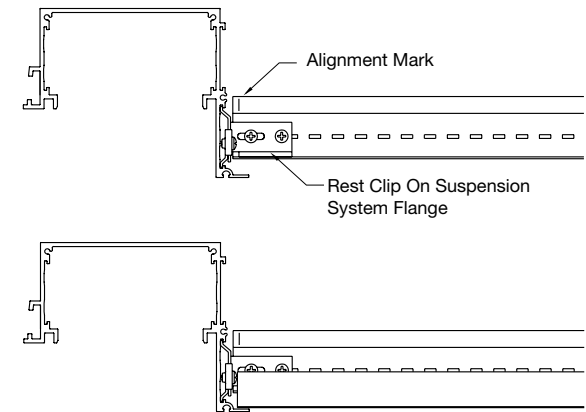
**7.1** Cut and install tiles or panels using standard procedures for the products specified.

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

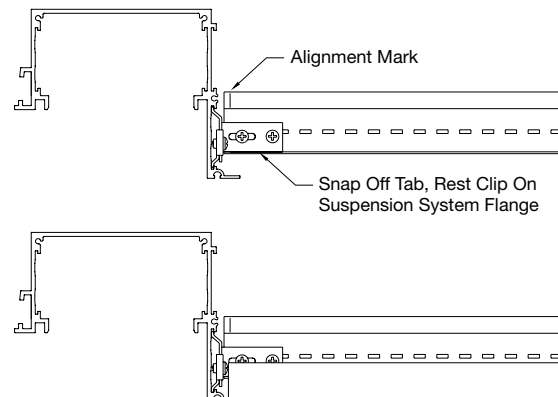
**7.3** For drywall applications, attach 5/8" gypsum to the suspension system per the manufacturers recommendations.



(Fig 13)



(Fig 14)



(Fig 15)

## 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 Covers with the XAL LENO or the Axis Click are suitable for seismic D, E, F installations.

Ask your Armstrong Installation Specialist for bracing requirements.

### 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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