# AXIOM<sup>®</sup> Indirect Field Light Coves for Specialty Ceilings

# Assembly and Installation Instructions

# 1. GENERAL

#### **1.1 Description**

The Axiom<sup>®</sup> Indirect Field Light Coves for Specialty Ceilings system is a pre-engineered lighting solution designed to be used at a ceilingto-wall condition or a ceiling-to-ceiling transition and integrate with Armstrong Specialty Ceilings systems. The system consists of an extruded aluminum components (*Fig 3*), which integrate with Armstrong drywall grid and drywall to create the vertical leg of the light cove (*Figs 1 & 2*). Designed with a notched channel for perfect integration with Axis Lighting, or Vode Lighting.

**NOTE:** Axiom Indirect Field Light Coves for Specialty Ceilings are designed to integrate with Axis CovePerfekt<sup>™</sup>, or Vode<sup>®</sup> ZipWave<sup>™</sup> | LED | 707 light fixtures only.







#### **Component Description:**

#### Axiom Indirect Field Light Coves for Specialty Ceilngs

Extruded aluminum forms an indirect 2-sided light cove at the wall or at a ceiling-to-ceiling transition. Special bosses are provided to connect ATC (Adjustable Trim Clip) and AX4SPLICE splice plates to provide positive attachment with no visible fasteners. Both Axiom<sup>®</sup> Knife Edge<sup>®</sup> trim and Axiom<sup>®</sup> Classic trim are designed to accommodate Specialty Ceiling integration.

Axiom<sup>®</sup> Indirect Field Light Coves for Specialty Ceilings corners can be ordered in both Knife Edge<sup>®</sup> and Classic trim for both the ceiling-to-wall and the ceiling-to-ceiling coves. Pre-made factory-finished inside and outside corners are made to coordinate with the straight Indirect Field Light Cove for Specialty Ceilings sections. Each corner section is 12" by 12" square (dimension taken on the face of the extrusion) (*Fig 4*).

# 2. MATERIAL DELIVERY AND IDENTIFICATION

Axiom Indirect Field Light Coves for Specialty Ceilings are packaged and shipped in the quantities ordered. All hardware and instructions for assembly are 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 AX4SPLICE splice plate. Splice plates are secured to the trim sections using factory-installed set screws. A 1/8" hex key is included with the hardware (*Fig 5*).

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



#### 3.2 T-Bar Connector Clips

Adjustable Trim Clips (ATC) are attached to suspension system members using screws supplied by the installer. Framing screws (#6 x 7/16" or 1/2" long) are typical (*Fig 6*).

See general installation instructions for alignment of ATC connector clip to the suspension system member.

#### **Typical procedure**

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

See section 5.1 (Attaching to Suspension System) for alignment and installation methods for the ATC clip and associated suspension system components.

# 4. GENERAL INSTALLATION INSTRUCTIONS

#### 4.1 Axiom Indirect Field Light Cove for Specialty Ceilings Installation

The aluminum extrusion is the main component of the Axiom Indirect Field Light Cove for Specialty Ceilings System.

Typical Procedure for installing of Axiom Indirect Field Light Cove for Specialty Ceilings for Ceiling-to-Ceiling Applications with a non-gypsum upper ceiling.

#### **Straight Sections:**

- 1. Axiom Indirect Field Light Coves are shipped in 10' straight lengths. Straight lengths of the Axiom Indirect Field Light Cove can be cut to size in the field using a 12" compound miter saw.
- Build 10' modules of the Axiom Indirect Field Light Coves for Specialty Ceilings on a flat, level surface using drywall grid, Strongback (SB12), and the appropriate light cove.

NOTE: For drops over 2', 1-5/8" studs are recommended.

**3.** Cut drywall grid vertical risers to match the dimension specified by the project-specific architectural drawings.

**NOTE:** The recommended minimum ceiling-to-ceiling or ceiling-to-wall elevation change is 6".

- **4.** Cut and laminate 4" segments of drywall grid to one end of the vertical risers using 4 #8 x 5/8" screws, 2 through each bulb, as shown in *(Fig 7).*
- **5.** Attach to the light cove using 4 #8 x 5/8" self-taping screws as shown in *(Fig 8),* due to the weight of the light cove. The risers should be spaced 4' O.C. along the light cove starting 1' from each end.



(Fig 6)







Ceiling side

Light side

**NOTE:** Ensure the first riser is square front-to-back and side-to-side before attaching all screws. Utilizing cross tees, the remaining risers only need to be verified for squareness front-to-back as the cross tees will hold them square side-to-side.

6. Attach Strongback (SB12) to the vertical risers with framing screws (#6 x 7/16" or 1/2" long are typical) using the alignment holes. It is recommended leave 1' overhanging the light cove to allow for overlapping and splicing together subsequent segments of strongback.

If hanger wire cannot be attached at the vertical risers, Strongback should be laminated to a horizontal cross tee or KAM to provide lateral support to the Strongback. This will also provide continuous points of attachment for wall molding in subsequent steps.

- The cove can now be suspended with 12 gauge wire attached to the Strongback with hanger wire spacing not to exceed 48" O.C. (Fig 9)
- **8.** AX4SPLICE plates should be used to attach multiple sections of the Axiom Indirect Field Light Cove together.
- **9.** Attach the Axiom<sup>®</sup> Indirect Field Light Cove for Specialty Ceilings to the lower ceiling using ATC. See product-specific installation instructions for more details.

**NOTE:** Hanger wires on the on the lower ceiling should be spaced no further than 8" from the light cove.

- **10.** Attach additional lengths of drywall grid from the risers of one module to the other as needed for screw attaching drywall.
- 11. Add 45 degree bracing to vertical risers to structure to level wall.
- **12.** Install drywall board against the drywall grid vertical risers using single point attachment screws.
- **13.** For attachment to upper acoustical ceilings, mud, tape, sand, and paint drywall as required to finished vertical rise per architectural specifications. Then install angle molding.
- **14.** For attachment to an upper drywall grid ceiling, install KAM at the top of the drywall grid vertical riser.
- 15. For seismic considerations, see section 9.

**NOTE:** CBS hangers attached to black iron are required in NYC installations.



#### **Corners:**

- **16.** Axiom Indirect Field Light Coves for Specialty Ceilings have welded corners that are shipped with 12" face lengths
- **17.** Build corner modules on a flat, level surface using drywall grid, KAM, and the appropriate light cove.
- NOTE: For drops over 2', 1-5/8" studs are recommended
- **18.** Construct vertical risers and attach as described in the Straight Sections section. Utilize KAM at the corner to provide positive attached for drywall. Position as shown in (*Fig 10 & 11*).

**NOTE:** For the larger corner, the vertical riser should be positioned approximately 6" from the end.

**19.** Attach corners to straight sections of light cove utilizing AX4SPLICE plates and Strongback attached the the drywall grid and KAM vertical risers. Splice in additional Strongback as needed.

**20.** Suspend the corner from the Strongback with a minimum of one hanger wire. Ensure the hanger wire is spaced no more than 4' away from the adjacent hanger wire on the straight sections.

- 21. Add 45 degree bracing to vertical risers to structure to level wall.
- 22. Proceed with drywall installation as described previously.
- 23. For seismic considerations, see section 9.

Typical Procedure for installing of Axiom Indirect Field Light Cove for Specialty Ceilings for Ceiling-to-Wall Applications or Ceiling-to-Ceiling Applications with a gypsum upper ceiling

**NOTE:** This installation procedure is similar to Ceiling-to-Ceiling application with a non-gypsum upper ceilings installation with the following modifications (see Fig 2):

- **1.** Strongback will be replaced with DW90 clips attached to the drywall grid with two single point screws.
- **2.** The cove will be suspended by the DW90 clips with hanger wires spaced no greater than 4' O.C.
- **3.** The upper drywall grid ceiling will be attached to the DW90 clips with two single point screws 4' O.C.
- **4.** KAM will be installed at the transition from the vertical riser to upper drywall ceiling.







(Fig 11)

# 5. INSTALLING COMPATIBLE LIGHT FIXTURES

Axiom<sup>®</sup> Indirect Field Light Coves for Specialty Ceilings are designed to work exclusively with Axis CovePerfekt<sup>™</sup>, or Vode<sup>®</sup> ZipWave<sup>™</sup> | LED | 707 light fixtures only. Please refer to the lighting manufacturer's specific installation instructions for details on light installation.

**NOTE:** A key notch is located both in straight coves and compatible lighting fixtures to ensure proper alignment.

#### 5.1 Installing Suspension System

Install the lower acoustical or drywall grid ceiling- supporting main beams, cross tees, etc. as noted in product-specific installation instructions.

Install the upper acoustical or drywall grid ceiling- supporting main beams, cross tees, wall attachment methods, etc. as noted in productspecific installation instructions.

#### 5.2 Attaching to Suspension System

Axiom<sup>®</sup> Indirect Field Light Coves for Specialty Ceilings are installed before acoustical or drywall suspension systems. Most acoustical and drywall systems will attach directly to the light cove. There are several options for attaching the suspension system to the cove. Carefully review these options based on the systems you are installing.

#### **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 Indirect Field Light Cove for Specialty Ceilings.
- 3. Install the suspension system so it will rest on the light cove flange.
- **4.** Rest the bottom of the ATC clip on the flange of the suspension system. 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).
- **5.** 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.
- **6.** Use a Phillips screwdriver to loosen the locking screw on the lower plate.
- 7. 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.

- **8.** Loosen the locking screw and adjust the clip as necessary to properly align the suspension system.
- **9.** Insert a second framing screw through the other hole in each of the connector clips.

### 6. AXIOM INDIRECT FIELD LIGHT COVE FOR SPECIALTY CEILNGS COMPONENT SUPPORT

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

# 7. INSTALL CEILING PANELS OR DRYWALL

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

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

# 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 fingerprints, 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 Indirect Field Light Coves, Axis CovePerfekt<sup>™</sup>, and Vode<sup>®</sup> ZipWave<sup>™</sup> | LED | 707 light fixtures are all suitable for Seismic Design Category D, E, F installations.

9.2 Drywall grid vertical risers should be spaced 16" on center.

**9.3** 20 GA 3-5/8" studs attached to structure should be laminated along the length of the vertical risers 48" O.C. without interfering with the lower ceiling with the addition of a 45-degree bracing stud attached near the bottom of the vertical stud also attached to structure.

If you have additional questions, contact your Armstrong Installation Specialist.





#### **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. CovePerfekt<sup>™</sup> is a trademark of Axis Lighting, Inc.; ZipWave and the Vode logo are trademarks of Vode Lighting LLC; All other trademarks used herein are the property of AWI Licensing LLC and/or its affiliates. © 2021 AWI Licensing LLC Printed in the United States of America

