SECTION 09 51 13
AXIOM® INDIRECT FIELD LIGHT COVE PERIMETER SYSTEM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

Drawings and general conditions of Contract, including General and Supplementary Conditions and Divisions-1 Specification sections apply to work of this section.

1.2 SUMMARY

A. Section Includes:

1. Pre-engineered perimeter transition system

B. Related Sections:

1.Section 09 51 00 – Acoustical Ceilings

2. Section 09 20 00 – Plaster and Gypsum Board

3. Divisions 23 – HVAC

4. Section 26 50 00 Lighting

C. Alternates

1. Prior Approval: Unless otherwise provided for in the Contract documents, proposed product substitutions may be submitted no later than TEN (10) working days prior to the date established for receipt of bids. Acceptability of a proposed substitution is contingent upon the Architect's review of the proposal for acceptability and approved products will be set forth by the Addenda. If included in a Bid are substitute products which have not been approved by Addenda, the specified products shall be provided without additional compensation.

2. Submittals that do not provide adequate data for the product evaluation will not be considered. The proposed substitution must meet all requirements of this section, including but not necessarily limited to, the following: Single source materials suppliers (if specified in Section 1.5); panel design, size, composition, color, and finish; suspension system component profiles and sizes; compliance with the referenced standards.

1.3 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM C 635 Standard Specifications for Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.
2. ASTM C 636 Recommended Practices for Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels.
3. ASTM E 580 Installation of Metal Suspension Systems in Areas Requiring Moderate Seismic Restraint

4. ASCE 7 American Society of Civil Engineers, Minimum Design Loads for Buildings and Other Structures
5. International Code Council-Evaluation Services - AC 156 Acceptance Criteria for Seismic Qualification Testing of Non-structural Components
6. LEED - Leadership in Energy and Environmental Design is a set of rating systems for the design, construction, operation, and maintenance of green buildings

B. American National Standards Institute (ANSI)
1. ANSI H35.1 Properties and Characteristics of Wrought Aluminum Alloys

1.4 SYSTEMS DESCRIPTION

Build Type / Finished Form as selected by customer

1.5 SUBMITTALS

A. Product Data: Submit manufacturer's technical data for perimeter components and each type of suspension system required.
B. Samples: Minimum 3-inch-wide samples of specified component.
C. Shop Drawings: Layout and details of acoustical ceilings. Show locations of items that are to be coordinated with, or supported by the ceilings.

1.6 SUSTAINABLE MATERIALS

A. Transparency: Manufacturers will be given preference when they provide documentation to support sustainable requirements for the following: Material ingredient transparency, Removal of Red List Ingredients per LBCV3, Life Cycle impact information, Low-Emitting Materials, and Clean Air performance.
   1. Health Product Declaration (HPD). The end use product has a published, complete Health Product Declaration with disclosure at a minimum of 1000ppm of known hazards in compliance with the Health Product Declaration Open Standard.
   2. Declare Label. The end use product has a published Declare label by the International Living Future Institute with disclosure of 100 ppm with a designation of Red List Free or Compliant (less than 1% proprietary ingredients).
   3. Low Emitting products with VOC emissions data. Preference will be given to manufacturers that can provide emissions data showing their products meet any of the following: CDPH/EHLB/Standard Method v1.2-2017; Indoor Air Quality Certified to SCS-105 v4.2-2023 [Gold VOC Certificate OR Clearchem]
   4. Life cycle analysis. Products that have communicated lifecycle data through Environmental Product Declarations (EPDs) will be preferred.
   5. End of Life Programs/Recycling: Where applicable, manufacturers that provide the option for recycling of their products into new products at end-of-life through take-back programs will be preferred.
   6. Products meeting LEED V5 requirements including:
      i. Storage & Collection of Recyclables

ii. Construction and Demolition Waste Management Planning
iii. Building Life-Cycle Impact Reduction
iv. Building Product Disclosure and Optimization Environmental Product Declarations
v. Building Product Disclosure and Optimization Sourcing of Raw Materials
vi. Building Product Disclosure and Optimization Material Ingredients
vii. Construction and Demolition Waste Management

1.7 QUALITY ASSURANCE

A. Single-Source Responsibility: Provide perimeter trim components and grid components by a single manufacturer.

B. Coordination of Work: Coordinate acoustical ceiling work with installers of related work including, but not limited to building insulation, gypsum board, light fixtures, mechanical systems, electrical systems, and sprinklers.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Deliver perimeter trim components to project site in original, unopened packages and store them in a fully enclosed space where they will be protected against damage from moisture, direct sunlight, surface contamination, and other causes.

B. Before installing components permit them to reach room temperature and stabilized moisture content.

C. Handle components carefully to avoid damage.

1.9 PROJECT CONDITIONS

A. Space Enclosure:

Building areas to receive ceilings shall be free of construction dust and debris. Products with can be installed up to 120°F (49°C) and in spaces before the building is enclosed, where HVAC systems are cycled or not operating. Cannot be used in exterior applications where standing water is present or where moisture will come in direct contact with the ceiling.

1.10 WARRANTY

A. Perimeter Transition System: Submit a written warranty executed by the manufacturer, agreeing to repair or replace components that fail within the warranty period. Failures include, but are not limited to:

1. Rusting and manufacturer’s defects

B. Warranty Period:

1. Perimeter Transition Components: Ten (10) years from date of substantial completion.

2. Armstrong commercial transition components, suspension systems and ceiling products have a thirty (30) year warranty when installed together and used under normal conditions.

C. The Warranty shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under the requirements of the Contract Documents.

PART 2 - PRODUCTS

Attention Design Professional: Please edit Part 2 based on your project needs. Select product attributes and acceptable product item (s) that fit with the requirements of your project. Delete all items from the specification that do not relate to your project needs. Please refer to the Armstrong website for additional ceilings, suspension systems, perimeter trim options, and accessories. The related guide specifications for each of these items are available on the Armstrong website.

2.1 MANUFACTURERS

A. Axiom Indirect Field Light Coves:

1. Armstrong World Industries, Inc.

2.2 PERIMETER AXIOM® INDIRECT FIELD LIGHT COVES

A. Product/Manufacturer: Axiom® Indirect Field Light Coves; Armstrong World Industries, Inc.

1. Material Ingredient Transparency: Health Product Declaration (HPD); Declare Label
2. Life Cycle Assessment: Third Party Certified Environmental Product Declaration (EPD)
3. Indoor Air Quality Certified to SCS-105 v4.2-2023

B. System: An extruded aluminum light cove system fully concealed integrated design to create a light cove profile. Installs with Armstrong® Ceiling Solutions acoustical and drywall suspension systems. Commercial quality extruded aluminum alloy 6063 trim channel, factory finished in baked polyester paint (white) color to match intersecting grid system. Commercial quality aluminum unfinished t-bar connection clips; galvanized steel splice plates.

C. Components:

1. Axiom Indirect Field Light Coves: Aluminum extrusions with a distinct architectural detail grooves to accept the Axiom Light Fixture Alignment Clip (ALFAC). Installed without the ALFAC, Axiom® Indirect Light Coves accept any Standard Light Cove Fixture (recommended fixture weight 2lbs/lft). Installed with the ALFAC, Axiom® Indirect Light Coves deliver aim free predictable performance with Axis Lighting Cove Perfekt, Vode Lighting ZipWAVE or Litecontrol 17L light fixture. Special bosses are designed to connect AXTBC T-bar connector clip and splice plate; to provide positive mechanical lock with no visible fasteners. Factory finished matching approved samples.

2. Axiom® Indirect Light Coves, Straight and Curved Sections:

A. AXIFL4STR – 4” Classic Profile – Straight – 120” Length

B. AXIFLKESTR – Knife Edge for ACT Profile – Straight – 120” Length

C. AXIFLKDSTR – Knife Edge for Drywall Profile– Straight –120” Length

D. AXIFL4CUR – 4” Classic Profile – Curved – Vary

E. AXIFLKECUR – Knife Edge for ACT Profile – Curved – Vary

F. AXIFLKDCUR – Knife Edge for Drywall Profile– Curved - Vary

2. Axiom® Indirect Light Cove Corners, each corner is factory finished and sided to accommodate the straight section of the axiom indirect field light cove.

A. AXIFL4IC – 4” Classic Profile – Inside Corner – 12” x 12”

B. AXIFL4OC – 4” Classic Profile – Outside Corner – 12” x 12”

C. AXIFLKEIC – Knife Edge for ACT Profile – Inside Corner – 12” x 12”

D. AXIFLKEOC – Knife Edge for ACT Profile –Outside Corner – 12” x 12”

E. AXIFLKDIC – Knife Edge for Drywall Profile– Inside Corner – 12” x 12”

F. AXIFLKDOC – Knife Edge for Drywall Profile–Outside Corner – 12” x 12”

3. Axiom® Indirect Light Cove Accessories

A. AXCCLT45 – 45 Degree Tee Bar Connector Twist (for use with Knife Edge® Profile Coves)

B. AXTBC – T-Bar Connector Clip (for use with 4” Classic Axiom Profile Coves)

C. AX4SPLICE – Axiom Splice Plate

2.3 LIGHTING FIXTURE

A. Standard Cove Light Fixtures (recommended 2lbs/lft fixture weight)

B. Product Name: Axis Cove Perfekt, Vode ZipWave or Litecontrol 17L

1.Product/Manufacturer: Axis, Vode or Litecontrol

C. Ceiling Grid Compatibility: Armstrong World Industries

D. Color: Finished Trim in white

PART 3 - EXECUTION

3.1 EXAMINATION

A. Do not proceed with installation until all wet work such as concrete, terrazzo, plastering and painting has been completed and thoroughly dried out, unless expressly permitted by manufacturer’s printed recommendations.

3.2 PREPARATION

A. Coordinate panel layout with mechanical and electrical fixtures.

3.3 INSTALLATION

A. Install suspension system and panels in accordance with manufacturer's instructions, and in compliance with ASTM C 636 and with the authorities having jurisdiction

1. Install seismic components if required by the building code. Seismic components to be specified on the architectural plans by the project engineer or design team.
2. Refer to the manufacture's indirect field light cove installation instructions as a reference when installing this product.

3.4 ADJUSTING AND CLEANING

A. Clean exposed surfaces of trim, edge moldings, and suspension members. Comply with manufacturer's instructions for cleaning and touch up of minor finish damage. Remove and replace work that cannot be successfully cleaned and repaired to permanently eliminate evidence of damage.

END OF SECTION