SECTION 26 51 19

LED INTERIOR LIGHTING

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Linear LED Lighting with Acoustic Housing.

B. Linear LED Lighting with Acoustic Baffle Array.

C. Lay-in LED Lighting with Acoustic Housing.

D. Circular LED Lighting Fixtures.

E. Pendant LED Lighting with Acoustic Housing.

F. Pendant LED Lighting with Acoustic Housing and Wood End Caps.

G. Unlit Acoustic Baffles.

H. Unlit Lay-In Acoustic Ceiling Tile.

I. Unlit Circular Acoustic Cloud.

1.2 RELATED SECTIONS

A. Section 09 84 36 – Sound-Absorbing Ceiling Units.

1.3 DEFINITIONS:

A. NRC: Noise Reduction Coefficient.

B. PET: Polyethylene Terephthalate; the commercial name for polyester.

C. SAA: Sound Absorption Average.

D. Sabin: A sound measurement of the ability of one square foot of any surface texture in a room to absorb sound reflections.

1.4 SUBMITTALS

A. Submit in accordance with requirements of Section 01 30 00 - Administrative Requirements.

B. Product Data: Manufacturer's technical data sheets, specifications, performance data and installation instructions for all products referenced in the scope of work defined in this section.

C. Shop Drawings: Submit shop drawings required to depict the requirements for fabrication and installation. Include the following drawings as applicable:
   1. Reflected ceiling plan to coordinate lighting with HVAC and any other items mounted in the ceiling.
   2. Details such as sections, elevations, or isometric views of individual parts including location and appropriate detailing methods for transitions, terminations, penetrations, installation tolerances, and relationships to adjacent work.
   3. Where the installation is required to comply with specific design criteria, include all details required to perform proper analysis.Manufacturer’s standard fixture schedule coordinated with project requirements and the fixture schedule on the drawings. Selection Samples: Provide 3 by 4 inch samples depicting the manufacturer’s full range of options for selection of color and finish.

E. Verification Samples: Provide samples to verify specified finishes, profiles and accessories.

F. Sustainable Submittals:
   1. Product data for PET material; indicating materials are red-list free.
   2. Product data for PET Material; indicating materials are 50% post-consumer content.

G. Warranty: Manufacturer’s sample warranty document, outlining its terms, conditions, limitations, and duration.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Primary products in this section to be provided by a manufacturer with no less than three years of experience producing the products specified in this section at a facility in the United States.

B. Installer's Qualifications: All work specified in this section is to be completed by a firm with demonstrated experience installing systems similar in scope and complexity to those specified.

C. Mock-Up: Arrange for the construction of a mock-up of the products specified in this section. Example must include one light fixture and accessory for each type specified, including the selected color and finish. Owner and Architect will verify acceptance of products and workmanship.
   1. Accepted mockups may be incorporated into the work.
   2. Provide mockups as indicated on the drawings.

1.6 DELIVERY, STORAGE AND HANDLING

A. Deliver, store and handle materials and products in accordance with the manufacturer's instructions and recommendations and industry standards.

B. Store all materials in the manufacturer’s original packaging until ready for installation. Protect all products from damage or exposure to adverse environmental conditions, including weather, humidity, and dust.

C. Coordinate pallet sizes, weights, and delivery schedule with manufacturer.

1.7 PROJECT CONDITIONS

A. Begin installation only after spaces are enclosed and weather-tight, and after all wet work and overhead work has been completed.

B. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's recommended limits.

1.8 COORIDNATION AND SCHEDULING

A. Coordinate locations of lighting fixtures with walls, ceilings, ceiling mounted components, fire partitions, and cabinets.

1.9 WARRANTY

A. Manufacturer’s Warranty: Manufacturer agrees to replace products that fail within the specified warranty period.
   1. Lit Products: 5 years from date of Substantial Completion.
   2. Unlit Products: One year from date of Substantial Completion.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. Basis of Design Manufacturer: Focal Point LLC.
   1. Address: 4141 S Pulaski Road, Chicago, IL 60632.
   2. Phone: (773) 247-9494
   3. Website: www.focalpointlights.com/acousticsolutions
   4. Email: acoustic.solutions@focalpointlights.com

B. Manufacturer List:
   1. Manufacturer:

C. Substitution Limitations:
   1. Submit substitution requests in accordance with provisions of Section 01 60 00.

2. Single manufacturer to provide, from a single source, primary products and accessories specified in this section.

2.2 PERFORMANCE REQUIREMENTS

A. System Certifications:
1. UL/cUL and ETL certification marks for Canada/USA.

B. Safety Standards:
1. UL/cUL 1598; Pass, Standard for Luminaires in Non-Hazardous Locations.
2. UL/cUL 294; Pass, Standard for Emergency Lighting and Power Equipment.
3. UL/cUL 8750; Pass, Standard for Light Emitting Diode (LED) Equipment for use in Lighting Products.

C. Sustainability Standards:
1. Recycled Content: Postconsumer recycled content not less than 50 percent for PET materials.
2. Certified Non-Toxic Materials: Provide PET materials Declare Labelled to be free of Red List Materials as defined by Living Building Challenge.

D. Fire Performance Characteristics: Provide products with manufacturer's standard PET acoustic housing complying with the following:
1. Flame-Spread and Smoke-Developed Indexes: 0 and 300, respectively, when tested in accordance with ASTM E84.

E. LED Performance:
1. LED Board: Provide manufacturer's standard LED Board with no hum or flicker.

F. Electrical Power: Provide fixtures capable of being powered by the following power sources with flicker free performance:

G. Dimming: Provide Class 2 Drivers ETL and UL approved with 1% dimming capacity.

H. Dimming: Provide Class 2 Drivers ETL and UL approved with 5% dimming capacity.

I. Dimming: Provide Class 2 Drivers ETL and UL approved with 10% dimming capacity.

2.3 LINEAR LED LIGHTING WITH ACOUSTIC BAFFLE HOUSING

A. Basis of Design Product: Seem 1 Acoustic, by Focal Point Lights.

B. Physical Requirements:
1. Length: Insert Custom Length.
2. Height: As Indicated on Drawings.
3. Height: 8 inches.
4. Height: 12 inches.

5. Height: 16 inches.
6. Height: Insert Custom Height.
7. Width: 2.27 inches.

C. Installation Method: Suspended.

D. Installation Method: Direct attached to grid or strut.

E. Lighting Configuration: Direct and Indirect.

F. Lighting Configuration: Direct.

G. Lighting Configuration: Indirect.

H. Lens: Provide frosted acrylic lens that provides even, uninterrupted illumination without pixels or shadows regardless of length.

I. Sound Absorption Average: Apparent absorption value from total coverage area when tested from 200 Hz to 2500 Hz in accordance with ASTM C423.
1. SAA Rating: 0.69 for baffles 8 inches tall at 12-inch spacing.
2. SAA Rating: 0.51 for baffles 8 inches tall at 18-inch spacing.
3. SAA Rating: 0.41 for baffles 8 inches tall at 24-inch spacing.
4. SAA Rating: 1.19 for baffles 12 inches tall at 12-inch spacing.
5. SAA Rating: 0.88 for baffles 12 inches tall at 18-inch spacing.
6. SAA Rating: 0.69 for baffles 12 inches tall at 24-inch spacing.
7. SAA Rating: 1.14 for baffles 16 inches tall at 12-inch spacing.
8. SAA Rating: 0.87 for baffles 16 inches tall at 18-inch spacing.
9. SAA Rating: 0.70 for baffles 16 inches tall at 24-inch spacing.

J. Noise Reduction Coefficient: Apparent value from total coverage area when tested from 200 Hz to 2500 Hz in accordance with ASTM C423.
1. NRC Rating: 0.70 for baffles 8 inches tall at 12-inch spacing.
2. NRC Rating: 0.50 for baffles 8 inches tall at 18-inch spacing.
3. NRC Rating: 0.40 for baffles 8 inches tall at 24-inch spacing.
4. NRC Rating: 1.20 for baffles 12 inches tall at 12-inch spacing.
5. NRC Rating: 0.90 for baffles 12 inches tall at 18-inch spacing.
6. NRC Rating: 0.70 for baffles 12 inches tall at 24-inch spacing.
7. NRC Rating: 1.15 for baffles 16 inches tall at 12-inch spacing.
8. NRC Rating: 0.85 for baffles 16 inches tall at 18-inch spacing.
9. NRC Rating: 0.70 for baffles 16 inches tall at 24-inch spacing.

2.4 LINEAR LED LIGHTING WITH ACOUSTIC BAFFLE ARRAY

A. Basis of Design Product: AirCore Bridge, by Focal Point Lights.

B. Physical Configuration:

1. Truss Style: Baffles of uniform length attached to two suspended linear luminaires as indicated on drawings.
2. Cantilever Style: Suspended baffles of uniform length attached to one suspended linear luminaire as indicated on drawings.
3. Cantilever Wave Style: Suspended baffles of varying lengths attached to one suspended linear luminaire as indicated on drawings.

C. Installation Method: Suspended.

D. Lighting Configuration: Direct.

E. Lens: Provide frosted acrylic lens that provides even, uninterrupted illumination without pixels or shadows regardless of length.

F. Sound Absorption Average: Apparent absorption value from total coverage area when tested from 200 Hz to 2500 Hz in accordance with ASTM C423.
1. SAA Rating: 0.40 for baffles 8 inches tall at 12-inch spacing.
2. SAA Rating: 0.29 for baffles 8 inches tall at 18-inch spacing.
3. SAA Rating: 0.23 for baffles 8 inches tall at 24-inch spacing.
4. SAA Rating: 0.65 for baffles 12 inches tall at 12-inch spacing.
5. SAA Rating: 0.46 for baffles 12 inches tall at 18-inch spacing.
6. SAA Rating: 0.36 for baffles 12 inches tall at 24-inch spacing.
7. SAA Rating: 0.90 for baffles 16 inches tall at 12-inch spacing.
8. SAA Rating: 0.63 for baffles 16 inches tall at 18-inch spacing.
9. SAA Rating: 0.50 for baffles 16 inches tall at 24-inch spacing.

G. Noise Reduction Coefficient: Apparent value from total coverage area when tested from 200 Hz to 2500 Hz in accordance with ASTM C423.
1. NRC Rating: 0.40 for baffles 8 inches tall at 12-inch spacing.
2. NRC Rating: 0.30 for baffles 8 inches tall at 18-inch spacing.
3. NRC Rating: 0.25 for baffles 8 inches tall at 24-inch spacing.
4. NRC Rating: 0.63 for baffles 12 inches tall at 12-inch spacing.
5. NRC Rating: 0.45 for baffles 12 inches tall at 18-inch spacing.
6. NRC Rating: 0.35 for baffles 12 inches tall at 24-inch spacing.
7. NRC Rating: 0.87 for baffles 16 inches tall at 12-inch spacing.
8. NRC Rating: 0.60 for baffles 16 inches tall at 18-inch spacing.
9. NRC Rating: 0.50 for baffles 16 inches tall at 24-inch spacing.

2.5 Y-SHAPED LINEAR LED LIGHTING WITH ACOUSTIC BAFFLE HOUSING

A. Basis of Design Product: Seem 1 Acoustic Trio, by Focal Point Lights.

B. Physical Requirements:
1. Diameter: 4 feet.
2. Diameter: 6 feet.

3. Height: As Indicated on Drawings.
4. Height: 8 inches.
5. Height: 12 inches.
6. Height: 16 inches.
7. Width: 2.27 inches.

C. Installation Method: Suspended.

D. Lighting Configuration: Direct and Indirect.

E. Lighting Configuration: Direct.

F. Lighting Configuration: Indirect.

G. Lens: Provide frosted acrylic lens that provides even, uninterrupted illumination without pixels or shadows regardless of length.

H. Sound Absorption Average: Apparent absorption value from each unit when tested from 100 Hz to 5000 Hz in accordance with ASTM C423-17.
1. Geo Y Configuration: 11.63 Sabins per unit.
2. Staggered Hex Configuration: 11.68 Sabins per unit.

2.6 LAY-IN LED LIGHTING.

A. Basis of Design Product: Nivo, by Focal Point.

B. Physical Requirements:
1. Length: 24 inches.
2. Width: 24 inches.
3. Diffuser: Hollow.
4. Diffuser: Solid.
5. Drop Height: As Indicated on Drawings.
6. Drop Height: Flush.
7. Drop Height: 1 inch.
8. Drop Height: 2 inches.
9. Drop Height: 3 inches.
10. Drop Height: 4 inches.
11. Drop Height: 5 inches.
12. Drop Height: 6 inches.
13. Drop Height: 7 inches.

C. Lens: Provide formed frosted acrylic lens with even backlighting by square LED panels.

2.7 CIRCULAR LED LIGHTING.

A. Basis of Design Product: Skydome Edge, by Focal Point.

B. Physical Requirements:
   1. Diameter: 24 inches.
   2. Diameter: 36 inches.
   3. Diameter: 48 inches.
   4. Height: As Indicated on Drawings.
   5. Height: 2.9 inches.
   6. Height: 3.9 inches.

C. Installation Method: Suspended.

D. Installation Method: Surface Mounted.

E. Lens: Provide edge lighting technology that ensures even illumination of the lens.

2.8 PENDANT LED LIGHTING WITH CIRCULAR ACOUSTIC HOUSING.

A. Basis of Design Product: Zyl, by Focal Point.

B. Physical Requirements:
   1. Diameter: 8.35 inches.
   2. Diameter: 12.61 inches.
   3. Height: 12.13 inches
   4. Height: 14.13 inches.
   5. Housing Style: Pinstripe.
   6. Housing Style: Solid.

C. Installation Method: Suspended.

D. Lens: One-piece die-cast reflector with knife edge.

E. Noise Reduction Coefficient: Apparent value from each unit when tested from 200 Hz to 2500 Hz in accordance with ASTM C423.
   1. Rating: 0.90 NRC.

2.9 PENDANT LED LIGHTING WITH TAPERED ACOUSTIC HOUSING.

A. Basis of Design Product: Blume, by Focal Point.

B. Physical Requirements:
   1. Diameter: 12.27 inches.
   2. Diameter: 12.60 inches.
   3. Diameter: 18.65 inches.
   4. Diameter: 19.04 inches.
   5. Height: 9.22 inches
   6. Height: 9.13 inches.
   7. Height: 11.25 inches.

8. Height: 11.15 inches.
9. Housing Style: Pinstripe.
10. Housing Style: Solid.

C. Installation Method: Suspended.

D. Lens: One-piece die-cast reflector with knife edge.

E. Noise Reduction Coefficient: Apparent value from each unit when tested from 200 Hz to 2500 Hz in accordance with ASTM C423.
1. Rating: 0.90 NRC.

2.10 PENDANT LED LIGHTING WITH ACOUSTIC BAFFLE HOUSING AND WOOD END CAPS

A. Basis of Design Product: Eave, by Focal Point Lights.

B. Physical Requirements:
1. Length: 3 feet.
2. Length: 4 feet.
3. Length: 5 feet.
4. Length: 6 feet.
5. Height: 11.9 inches.
6. Width: 7.3 inches.

C. Installation Method: Suspended.

D. Lighting Configuration: Direct.

E. Lighting Configuration: Direct and Indirect.

F. Lens: Provide frosted acrylic lens that provides even, uninterrupted illumination without pixels or shadows regardless of length.

G. Sound Absorption Average: Apparent absorption value from total coverage area when tested from 200 Hz to 2500 Hz in accordance with ASTM C423.
1. SAA Rating: .70 for baffles at 30-inch spacing.

H. Noise Reduction Coefficient: Apparent value from total coverage area when tested from 200 Hz to 2500 Hz in accordance with ASTM C423.
1. NRC Rating .75 for baffles at 30-inch spacing.

2.11 UNLIT ACOUSTIC BAFFLE.

A. Basis of Design Product: Seem 1 Acoustic Unlit, by Focal Point.

B. Physical Requirements:
1. Length: **Insert Custom Length**.

2. Height: As Indicated on Drawings.
3. Height: 8 inches.
4. Height: 12 inches.
5. Height: 16 inches.
6. Height: **Insert Custom Height**.
7. Width: 2.27 inches.

C. Installation Method: Suspended.

D. Installation Method: Direct attached to grid or strut.

E. Sound Absorption Average: Apparent absorption value from total coverage area when tested from 200 Hz to 2500 Hz in accordance with ASTM C423.
1. SAA Rating: 0.69 for baffles 8 inches tall at 12-inch spacing.
2. SAA Rating: 0.51 for baffles 8 inches tall at 18-inch spacing.
3. SAA Rating: 0.41 for baffles 8 inches tall at 24-inch spacing.
4. SAA Rating: 1.19 for baffles 12 inches tall at 12-inch spacing.
5. SAA Rating: 0.88 for baffles 12 inches tall at 18-inch spacing.
6. SAA Rating: 0.69 for baffles 12 inches tall at 24-inch spacing.
7. SAA Rating: 1.14 for baffles 16 inches tall at 12-inch spacing.
8. SAA Rating: 0.87 for baffles 16 inches tall at 18-inch spacing.
9. SAA Rating: 0.70 for baffles 16 inches tall at 24-inch spacing.

F. Noise Reduction Coefficient: Apparent value from total coverage area when tested from 200 Hz to 2500 Hz in accordance with ASTM C423.
1. NRC Rating: 0.70 for baffles 8 inches tall at 12-inch spacing.
2. NRC Rating: 0.50 for baffles 8 inches tall at 18-inch spacing.
3. NRC Rating: 0.40 for baffles 8 inches tall at 24-inch spacing.
4. NRC Rating: 1.20 for baffles 12 inches tall at 12-inch spacing.
5. NRC Rating: 0.90 for baffles 12 inches tall at 18-inch spacing.
6. NRC Rating: 0.70 for baffles 12 inches tall at 24-inch spacing.
7. NRC Rating: 1.15 for baffles 16 inches tall at 12-inch spacing.
8. NRC Rating: 0.85 for baffles 16 inches tall at 18-inch spacing.
9. NRC Rating: 0.70 for baffles 16 inches tall at 24-inch spacing.

2.12 NARROW UNLIT ACOUSTIC BAFFLE.

A. Basis of Design Product: AirCore Blade, by Focal Point.

B. Physical Requirements:
1. Length: **Insert Custom Length**.
2. Height: As Indicated on Drawings.
3. Height: 8 inches.
4. Height: 12 inches.

5. Height: 16 inches.
6. Height: Insert Custom Height.
7. Width: 1.08 inches.

C. Installation Method: Suspended.

D. Installation Method: Direct attached to grid or strut.

E. Installation Method: <Insert custom hardware>.

F. Sound Absorption Average: Apparent absorption value from total coverage area when tested from 200 Hz to 2500 Hz in accordance with ASTM C423.
1. SAA Rating: 0.40 for baffles 8 inches tall at 12-inch spacing.
2. SAA Rating: 0.29 for baffles 8 inches tall at 18-inch spacing.
3. SAA Rating: 0.23 for baffles 8 inches tall at 24-inch spacing.
4. SAA Rating: 0.65 for baffles 12 inches tall at 12-inch spacing.
5. SAA Rating: 0.46 for baffles 12 inches tall at 18-inch spacing.
6. SAA Rating: 0.36 for baffles 12 inches tall at 24-inch spacing.
7. SAA Rating: 0.90 for baffles 16 inches tall at 12-inch spacing.
8. SAA Rating: 0.63 for baffles 16 inches tall at 18-inch spacing.
9. SAA Rating: 0.50 for baffles 16 inches tall at 24-inch spacing.

G. Noise Reduction Coefficient: Apparent value from total coverage area when tested from 200 Hz to 2500 Hz in accordance with ASTM C423.
1. NRC Rating: 0.40 for baffles 8 inches tall at 12-inch spacing.
2. NRC Rating: 0.30 for baffles 8 inches tall at 18-inch spacing.
3. NRC Rating: 0.25 for baffles 8 inches tall at 24-inch spacing.
4. NRC Rating: 0.63 for baffles 12 inches tall at 12-inch spacing.
5. NRC Rating: 0.45 for baffles 12 inches tall at 18-inch spacing.
6. NRC Rating: 0.35 for baffles 12 inches tall at 24-inch spacing.
7. NRC Rating: 0.87 for baffles 16 inches tall at 12-inch spacing.
8. NRC Rating: 0.60 for baffles 16 inches tall at 18-inch spacing.
9. NRC Rating: 0.50 for baffles 16 inches tall at 24-inch spacing.

2.13 EXTRA NARROW UNLIT ACOUSTIC BAFFLE.

A. Basis of Design Product: TruBlade, by Focal Point.

B. Physical Requirements:
1. Length: **Insert Custom Length**.
2. Height: As Indicated on Drawings.
3. Height: 8 inches.
4. Height: 12 inches.
5. Height: 16 inches.
6. Height: Insert Custom Height.

7. Width: 9 mm.

C. Installation Method: Suspended.

D. Installation Method: Direct attached to grid or strut.

E. Installation Method: <Insert custom hardware>.

F. Sound Absorption Average: Apparent absorption value from total coverage area when tested from 200 Hz to 2500 Hz in accordance with ASTM C423.
1. SAA Rating: 0.55 for baffles 8 inches tall at 12-inch spacing.
2. SAA Rating: 0.43 for baffles 8 inches tall at 18-inch spacing.
3. SAA Rating: 0.33 for baffles 8 inches tall at 24-inch spacing.
4. SAA Rating: 0.96 for baffles 12 inches tall at 12-inch spacing.
5. SAA Rating: 0.71 for baffles 12 inches tall at 18-inch spacing.
6. SAA Rating: 0.55 for baffles 12 inches tall at 24-inch spacing.
7. SAA Rating: 1.11 for baffles 16 inches tall at 12-inch spacing.
8. SAA Rating: 0.84 for baffles 16 inches tall at 18-inch spacing.
9. SAA Rating: 0.68 for baffles 16 inches tall at 24-inch spacing.

G. Noise Reduction Coefficient: Apparent value from total coverage area when tested from 200 Hz to 2500 Hz in accordance with ASTM C423.
1. NRC Rating: 0.55 for baffles 8 inches tall at 12-inch spacing.
2. NRC Rating: 0.45 for baffles 8 inches tall at 18-inch spacing.
3. NRC Rating: 0.35 for baffles 8 inches tall at 24-inch spacing.
4. NRC Rating: 0.95 for baffles 12 inches tall at 12-inch spacing.
5. NRC Rating: 0.70 for baffles 12 inches tall at 18-inch spacing.
6. NRC Rating: 0.55 for baffles 12 inches tall at 24-inch spacing.
7. NRC Rating: 1.10 for baffles 16 inches tall at 12-inch spacing.
8. NRC Rating: 0.85 for baffles 16 inches tall at 18-inch spacing.
9. NRC Rating: 0.70 for baffles 16 inches tall at 24-inch spacing.

2.14 Y-SHAPED UNLIT ACOUSTIC BAFFLE.

A. Basis of Design Product: Acoustic Trio Unlit, by Focal Point.

B. Physical Requirements:
1. Diameter: As Indicated on Drawings.
2. Diameter: 4 foot.
3. Diameter: 6 foot.
4. Height: As Indicated on Drawings.
5. Height: 8 inches.
6. Height: 12 inches.
7. Height: 16 inches.
8. Width: 1.5 inches.

C. Installation Method: Suspended.

D. Sound Absorption Average: Apparent absorption value from each unit when tested from 100 Hz to 5000 Hz in accordance with ASTM C423-17.
   1. Geo Y Configuration: 11.63 Sabins per unit.
   2. Staggered Hex Configuration: 11.68 Sabins per unit.

2.15 UNLIT LAY-IN ACOUSTIC CEILING TILE.

A. Basis of Design Product: Nivo Tile, by Focal Point.

B. Physical Requirements:
   1. Length: 24 inches.
   2. Width: 24 inches.
   3. Drop Height: As Indicated on Drawings.
   4. Drop Height: Flush.
   5. Drop Height: 1 inch.
   6. Drop Height: 2 inches.
   7. Drop Height: 3 inches.
   8. Drop Height: 4 inches.
   9. Drop Height: 5 inches.
   10. Drop Height: 6 inches.
   11. Drop Height: 7 inches.

C. Installation Method: Suspended ceiling grid per section 09 51 23.

D. Noise Reduction Coefficient: Apparent value from total coverage area when tested from 200 Hz to 2500 Hz in accordance with ASTM C423
   1. NRC Rating: 0.90 for flush tiles.
   2. NRC Rating 1.05 for 1 inch drop tiles.
   3. NRC Rating 1.30 for 7 inch drop tiles.

2.16 UNLIT TAPERED LAY-IN ACOUSTIC CEILING TILE.

A. Basis of Design Product: Ori, by Focal Point.

B. Physical Requirements:
   1. Length: 24 inches.
   2. Width: 24 inches.
   3. Drop Height: Varies, as indicated on drawings.

C. Installation Method: Suspended ceiling grid per section 09 51 23.

D. Noise Reduction Coefficient: Apparent value from total coverage area when tested from 200 Hz to 2500 Hz in accordance with ASTM C423

1. NRC Rating: 1.10 average.

2.17 UNLIT CIRCULAR ACOUSTIC CLOUD.

A. Basis of Design Product: Skydome Edge, by Focal Point.

B. Physical Requirements:
1. Diameter: 22.6 inches.
2. Diameter: 33.4 inches.
3. Diameter: 44.7 inches.
4. Height: As Indicated on Drawings.
5. Height: 3.0 inches.
6. Height: 3.7 inches.

C. Installation Method: Suspended.

D. Installation Method: Surface Mounted.

E. Sound Absorption Average: Apparent absorption value from total coverage area when tested from 200 Hz to 2500 Hz in accordance with ASTM C423.
1. SAA Rating: 0.55 for 8 inches tall at 12-inch spacing.

F. Noise Reduction Coefficient: Apparent value from total coverage area when tested from 200 Hz to 2500 Hz in accordance with ASTM C423.
1. Rating: 1.05 NRC.

PART 3 EXECUTION

3.1 EXAMINATION

A. Do not begin work until adjacent substrates have been properly prepared to receive work specified in this section.

B. Verify that locations of concealed reinforcements have been clearly marked for the installer.

C. Locate reinforcement points and clearly mark their locations if not already done.

3.2 PREPARATION

A. Clean surfaces prior to installation.

B. Protect all adjacent surfaces from possible damage during installation of units.

C. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

A. Install in accordance with manufacturer's current installation instructions, industry recognized best practices, and all code bodies having jurisdiction; do not install damaged products.

B. Test for proper operation and adjust until satisfactory results are obtained.

C. Adjust fixture suspension heights to match RCP and submittal drawings.

D. Protect finishes from damage during installation using manufacturer's recommendations.

3.4 CLEANING AND PROTECTION

A. Remove dust and debris with a clean soft lint-free cloth or vacuum.

B. Damaged products must be repaired or replaced prior to substantial completion.

C. Protect installed products until completion of work specified in this section.

END OF SECTION