#### **SECTION 09 84 36**

#### SOUND ABSORBING CEILING UNITS

(Acoustic Clouds by CSI Creative)

#### PART 1 - GENERAL

- 1.1. SECTION INCLUDES
  - A. Connect Clouds
  - B. Waffle Clouds
  - C. Waffle Slanted Clouds
  - D. Waffle Folded Clouds
  - E. Profile Plus Clouds
  - F. Profile Clouds
  - G. Profile Framed Clouds
  - H. Stacked Clouds
  - I. Faceted Clouds
  - J. Notched Clouds
  - K. Blade Clouds
- 1.2. REFERENCES
  - A. ASTM C 423 Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
  - B. ASTM E 84/CAN/ULC S102 Standard Test Method for Surface Burning Characteristics of Building Materials.
  - C. NFPA 701 (2010; Small Scale Test) Standard Methods of Fire Tests for Flame Resistant Textiles and Films.
  - D. NFPA 705 Recommended Practice for a Field Flame Test for Textiles and Films.
  - E. SIN 722-06 Flammability Requirements for Fire Retardant Trees and Plants.

- F. Title 19 California State Fire Marshal minimum requirements for flame resistance products identified in Section 13115, California Health and Safety Code.
- G. NF X 70-100 (1986, Tube Furnace Method) Fire Test for Analysis of Pyrolysis and Combustion Gasses. Evaluation of Toxic Fumes.

## 1.3. SUBMITTALS

- A. Product Data: Submit Data sheet or Manufacturer Documentation for each product showing dimensions, materials, and colors.
- B. Shop Drawings: Submit shop drawings of site plans showing details of construction, product configuration, and related construction.
- C. Verification Samples: Submit samples of each chosen material and color.

## 1.4. QUALITY ASSURANCE

- A. Single-Source Responsibility: Provide acoustical components and installation components by a single manufacturer.
- B. Coordination of Work: Coordinate acoustical component work with installers of related work including, but not limited to light fixtures, mechanical systems, electrical systems, and sprinklers.

### 1.5. DELIVERY, STORAGE, AND HANDLING

- A. Deliver acoustical 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, allow acoustic components to gradually reach room temperature and a stabilized moisture content.
- C. Handle acoustic components carefully to avoid damage.

# 1.6. PROJECT CONDITIONS

- A. Space Enclosure:
  - Acoustical Components: All wet work must be complete and dry prior to installation. Installation shall be carried out where the temperature is between 60 degrees F and 100 degrees F. These temperature conditions must be maintained for optimal component lifespan.

### 1.7. WARRANTY

- A. Acoustic Room Component: Submit a written manufacturer warranty, agreeing to repair or replace acoustical components that fail within the warranty period. Failures include, but are not limited to:
  - 1. Acoustical Room Component: Manufacturer's defects
- B. Warranty Period:
  - 1. Acoustical Room Component: Refer to manufacturer's standard warranty.

### PART 2 - PRODUCTS

- 2.1. MANUFACTURER
  - A. Accepted Manufacturer: CSI Creative.
    - 1. Location: 9901 W 74th St, Eden Prairie, MN 55344
    - 2. Phone: 800-213-0653
    - 3. Email: info@csicreative.com
    - 4. Web Address: <u>www.csicreative.com</u>
  - B. Substitutions: No substitutions permitted.

### 2.2. SOUND ABSORBING CLOUDS

- A. Basis-of-Design:
  - 1. [Product Name] by CSI Creative <u>www.csicreative.com</u>
  - 2. Materials
    - a. Felt: PoshFelt® 100 percent wool 3mm design felt, 100 percent biodegradable.
    - b. Acoustic Substrate: Soundcore® 100 percent recyclable 12mm PET, 60 percent recycled content.
    - c. Artificial Greenery: ThermaLeaf® Inherently Flame Retardant Foliage. ThermaLeaf® artificial foliage is a proprietary formulation and manufacturing process whereby the fire retardants are impregnated directly into the raw materials of the foliage resulting in an inherently fire retardant "IFR" product.
      - a. ASTM E 84/CAN/ULC S102: Pass

- b. NFPA 701: Pass
- c. NFPA 705: Pass
- d. SIN 722-06: Pass
- e. California Title 19: Pass
- f. NF X 70-100: Pass
- d. Contains no formaldehyde, chemical irritants, or harmful substances.
- e. VOC info: VOC Free, Berkeley Analytical Certificate ID 190313-01
- 3. Panel Thickness: [12-48mm]
- 4. Panel Size: []
- 5. Felt Color: []
- 6. Acoustic Substrate Color: []
- 7. Edge: [Exposed Edge] [Covered Edge].
- 8. Attachment Method: [Channel Suspension] [Individual Suspension] [Direct Attachment].
- 9. Properties:
  - a. Acoustic Performance: NRC (ASTM C423): 0.45 1.55 varies by design.
  - b. Burning Characteristics: ASTM E-84 Class A

### PART 3 - EXECUTION

- 3.1. EXAMINATION
  - A. Proceed with installation only when all wet work is completed, and unsatisfactory site conditions have been corrected.
- 3.2. INSTALLATION
  - A. Clean substrates and attachment points of dirt, oils, and other substances that could cause issues during installation.
  - B. Install units in accordance with manufacturer's instructions and approved submittals.

## 3.3. ADJUSTING AND CLEANING

- A. Replace damaged or broken components.
- B. Adjust units for proper position, uniform appearance and operation.
- C. Clean exposed and semi-exposed surfaces using materials acceptable to the manufacturer.
- D. Maintenance of components should consist of:
  - i. Blot spills from material quickly. Wipe with a damp cloth. If stain persists, apply small quantities of carpet or upholstery shampoo solution with a damp cloth (test on inconspicuous location first). Blot well with a clean cloth after each application. Avoid excessive amounts of water. Ensure adequate ventilation if the product is subject to excessive moisture.

## 3.4. WASTE MANAGEMENT

- A. Waste Management
  - i. Coordinate recycling of waste materials with Section [01 74 19 Construction Waste Management and Disposal].
  - ii. Collect recyclable waste and dispose of or recycle field generated construction waste created during demolition, construction or final cleaning.
  - iii. Remove recycling containers and bins from site.

### 3.5. PROTECTION

A. Protect finished installation from dust and damage from subsequent and ongoing construction activity.

END OF SECTION