**SECTION 09 84 36**

**SOUND ABSORBING CEILING UNITS**

(Acoustic Clouds by CSI Creative)

**PART 1 - GENERAL**

1. SECTION INCLUDES
	1. Connect Clouds
	2. Waffle Clouds
	3. Waffle Slanted Clouds
	4. Waffle Folded Clouds
	5. Profile Plus Clouds
	6. Profile Clouds
	7. Profile Framed Clouds
	8. Stacked Clouds
	9. Faceted Clouds
	10. Notched Clouds
	11. Blade Clouds
2. REFERENCES
	1. ASTM C 423 Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
	2. ASTM E 84/CAN/ULC S102 Standard Test Method for Surface Burning Characteristics of Building Materials.
	3. NFPA 701 (2010; Small Scale Test) Standard Methods of Fire Tests for Flame Resistant Textiles and Films.
	4. NFPA 705 Recommended Practice for a Field Flame Test for Textiles and Films.
	5. SIN 722-06 Flammability Requirements for Fire Retardant Trees and Plants.
	6. Title 19 California State Fire Marshal minimum requirements for flame resistance products identified in Section 13115, California Health and Safety Code.
	7. NF X 70-100 (1986, Tube Furnace Method) Fire Test for Analysis of Pyrolysis and Combustion Gasses. Evaluation of Toxic Fumes.
3. SUBMITTALS
	1. Product Data: Submit Data sheet or Manufacturer Documentation for each product showing dimensions, materials, and colors.
	2. Shop Drawings: Submit shop drawings of site plans showing details of construction, product configuration, and related construction.
	3. Verification Samples: Submit samples of each chosen material and color.
4. QUALITY ASSURANCE
	1. Single-Source Responsibility: Provide acoustical components and installation components by a single manufacturer.
	2. 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.
5. DELIVERY, STORAGE, AND HANDLING
	1. 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.
	2. Before installing, allow acoustic components to gradually reach room temperature and a stabilized moisture content.
	3. Handle acoustic components carefully to avoid damage.
6. PROJECT CONDITIONS
	1. Space Enclosure:
		1. 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.
7. WARRANTY
	1. 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
	2. Warranty Period:
		1. Acoustical Room Component: Refer to manufacturer’s standard warranty.

**PART 2 - PRODUCTS**

1. MANUFACTURER
	1. Accepted Manufacturer: CSI Creative.
		1. Location: 9901 W 74th St, Eden Prairie, MN 55344
		2. Phone: 800-213-0653
		3. Email: info@csiwallpanels.com
		4. Web Address: [www.csiwallpanels.com](http://www.csiwallpanels.com)
	2. Substitutions: No substitutions permitted.
2. SOUND ABSORBING CLOUDS
	1. Basis-of-Design:
		1. [Product Name] by CSI Creative [www.csiwallpanels.com](http://www.csiwallpanels.com)
		2. Materials
			1. Felt: PoshFelt® 100 percent wool 3mm design felt, 100 percent biodegradable.
			2. Acoustic Substrate: Soundcore® 100 percent recyclable 12mm PET, 60 percent recycled content.
			3. 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.
				1. ASTM E 84/CAN/ULC S102: Pass
				2. NFPA 701: Pass
				3. NFPA 705: Pass
				4. SIN 722-06: Pass
				5. California Title 19: Pass
				6. NF X 70-100: Pass
			4. Contains no formaldehyde, chemical irritants, or harmful substances.
			5. 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:
			1. Acoustic Performance: NRC (ASTM C423): 0.45 - 1.55 varies by design.
			2. Burning Characteristics: ASTM E-84 Class A

**PART 3 - EXECUTION**

1. EXAMINATION
	1. Proceed with installation only when all wet work is completed, and unsatisfactory site conditions have been corrected.
2. INSTALLATION
	1. Clean substrates and attachment points of dirt, oils, and other substances that could cause issues during installation.
	2. Install units in accordance with manufacturer's instructions and approved submittals.
3. ADJUSTING AND CLEANING
	1. Replace damaged or broken components.
	2. Adjust units for proper position, uniform appearance and operation.
	3. Clean exposed and semi-exposed surfaces using materials acceptable to the manufacturer.
	4. Maintenance of components should consist of:
		1. 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.
4. WASTE MANAGEMENT
	1. Waste Management
		1. Coordinate recycling of waste materials with Section [01 74 19 - Construction Waste Management and Disposal].
		2. Collect recyclable waste and dispose of or recycle field generated construction waste created during demolition, construction or final cleaning.
		3. Remove recycling containers and bins from site.
5. PROTECTION
	1. Protect finished installation from dust and damage from subsequent and ongoing construction activity.

END OF SECTION