SECTION 09510 - NOISE CONTROL PANELS

City of San Diego, CWP Guidelines

PART 1 - GENERAL

- 1.1 WORK OF THIS SECTION
 - A. The WORK of this Section includes providing [wall mounted] [free standing] noise control panels and all related work, complete.
- 1.2 CODES
 - A. The WORK of this Section shall comply with the current editions of the following codes as adopted by the City of San Diego Municipal Code:
 - 1. Uniform Building Code
- 1.3 SPECIFICATIONS AND STANDARDS
 - A. Except as otherwise indicated, the current editions of the following apply to the WORK of this Section:
 - 1. Federal Specifications:

HH-I-558B(3)	Insulation, Blocks, Boards, Blankets, Felts, Sleeving
	(Pipe and Tube Covering), and Pipe Fitting Covering,
	Thermal (Mineral Fiber, Industrial Type)

2. Commercial Standards:

ASTM B 117	Method of Salt Spray (Fog) Testing
ASTM C 423	Test Method for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method
ASTM E 84	Test Method for Surface Burning Characteristics of Building Materials

1.4 SHOP DRAWINGS AND SAMPLES

- A. The following shall be submitted in compliance with Section 01300:
 - 1. Product Data: CONTRACTOR shall submit manufacturer's detailed technical product data and installation instructions for each type of noise control panel and mounting configuration, including details of core and edge construction, trim, and mounting.
 - a. Copies of test results performed on similar panels from an accredited testing laboratory shall be submitted to the CONSTRUCTION MANAGER to substantiate the sound reduction capabilities of the panels.

- 2. Shop Drawings: Shop drawings shall be submitted indicating location and size of each noise control panel, details of mounting, requirements for finishing and other pertinent data.
- 3. Samples: Samples shall be submitted of the manufacturer's range of standard colors for the CONSTRUCTION MANAGER'S selection and approval.

1.5 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Noise control panels shall be protected during transit, storage and handling to prevent damage, soiling and deterioration.
- B. **Delivery of Materials**: Noise control panels shall be delivered in original, unbroken packages or containers bearing the name of the manufacturer. Packages or containers shall be delivered to the site with seals unbroken.
- C. **Storage**: All components and assemblies shall be carefully stored in an area that is protected from the deleterious effects of the elements, in a manner recommended by the product manufacturer.

PART 2 - PRODUCTS

- 2.1 NOISE CONTROL PANELS
 - A. Facings shall be fabricated of [22 gauge (minimum) zinc coated sheet steel] [.032-inch aluminum] with stiffeners of [18 gauge (minimum) zinc coated sheet steel] [aluminum].
 - 1. Facings shall be perforated with 3/32-inch diameter holes on 5/32-inch staggered centers, ridged on 6-inch centers and flanged at sides and top for stiffness.
 - 2. Facing surface may be corrugated or otherwise textured to enhance noise control performance and structural rigidity.
 - 3. Finish shall be polyurethane enamel in manufacturer's standard color as selected by the CONSTRUCTION MANAGER.
 - B. Noise control insulation shall be 2-inch thick fine fibered, fibrous glass having a density of not less than 1.5 lbs per cubic foot and meeting Federal Specification HH-I-558B(3), Form B, Type 1, Class 7.
 - 1. Where indicated, noise control insulation shall be enclosed in 2 mil plastic when panels are exposed to high humidity environments.
 - 2. Noise control material shall have a Class A Flame Spread rating when tested in conformance with ASTM E 84. The material shall also be classified by Underwriters Laboratories, Inc., with a flame spread index of 0 to 25 and smoke rating of 450 maximum.
 - [C. Framing members shall be manufactured from [20 gauge zinc coated steel] [stainless steel]. Each framing member shall be supplied with two 1/4-inch, #20, blind threaded inserts for attachment of panel to mounting bracket. Inserts shall have a tensile strength of at least 220 pounds per insert.

- 1. Brackets for wall panels shall be [11 gauge galvanized steel] [316 stainless steel].
- 2. 3/4-inch long, 1/4-inch, #20, [cadmium plated] [stainless] bolts shall be supplied with lock washers for attachment of wall brackets].
- [C. Floor stands shall be provided for free-standing applications.]
- 2.2 MANUFACTURERS
 - A. Products of the type indicated shall be manufactured by one of the following (or equal):
 - 1. Eckel Industries, Inc., Acoustical Division
 - 2. ESSI Acoustical Products Company

PART 3 - EXECUTION

- 3.1 INSTALLATION
 - A. Noise control panels shall be installed in strict compliance with manufacturer's instructions and with approved shop drawings.

** END OF SECTION **