

SECTION 09830

LOW FREQUENCY SOUND ABSORBER (MODEX™ EDGE)

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Low Frequency Sound Absorber (Model Modex™ Edge)

1.02 RELATED SECTIONS

A. Section 06400 – Architectural Woodwork

1.03 DEFINITIONS

A. The Modex™ Edge shall offer absorption from 20 Hz to 500 Hz, utilizing a series of nested, optimized cavities, perforated boundaries and porous absorption. The Modex Edge shall be fabric wrapped with either exposed or non-exposed perimeter trim. The perimeter trim can be natural wood finish or painted.

1.04 SYSTEM DESCRIPTION

A. Design Requirements: Surface or corner applied porous materials lose efficiency at low frequencies, because the particle velocity or air movement associated with these long wavelengths is low. The Modex™ Edge is pressure activated and is most effective in high pressure dihedral or trihedral surface locations. The system shall offer low and mid frequency absorption.

B. Performance Requirements:

1. Random Incidence Sound Absorption Coefficients ( $\alpha$ ): Tested by independent, accredited, NVLAP facility according to ISO 354 for a type A mounting of the Type 1 unit:

Hz				100	125	160	200	250	315	400
Sabins				37	37	37	32	28	23	22

Hz	500	630	800	1000	1250	1600	2000	2500	3150	4000
$\alpha$	20	16	15	13	11	9	8	7	6	5

1.05 SUBMITTALS

- A. Product Data: Submit standard manufacturer product cutsheet showing product, standard dimensions and selected options.
- B. Design Data / Test Reports: Submit sound absorption coefficients.

#### 1.06 QUALITY ASSURANCE

- A. Qualifications: Manufacturer and installation contractor shall have a minimum of three years experience with similar systems.
- B. Single Source: All products under this section shall be supplied by a single manufacturer to ensure consistency in product size and finish.
- C. Flame Spread / Smoke Developed Characteristics: Product components tested by independent, accredited NVLAP facility according to ASTM E 84 and NFPA 255.
  - a. Component Flame Spread Rating: 25 (maximum)
  - b. Component Smoke Developed: 450 (maximum)
- D. Pre-Installation Meeting: Installing contractor shall organize and conduct pre-installation meetings with all other trades to coordinate substrate conditions, conditioning of the space (temperature & humidity), and elements attaching to, penetrating through or concealed above/behind work in this section.

#### 1.07 DELIVERY STORAGE AND HANDLING

- A. Packing, Shipping, Handling and Unloading: Modex Edges are susceptible to damage and shall be removed from packaging and handled with care. Units shall be carried by a minimum of 2 people. Units shall never be set down on finished powder coated metal faces, only on backside.
- B. Storage and Protection: Store Modex Edges in original packaging until ready to install. Store Modex Edges in temperature and humidity controlled conditions for 24 hours prior to installation and protect from moisture and infestation.
- C. Acceptance at Site: Installation constitutes complete acceptance.

#### 1.08 PROJECT CONDITIONS

- A. Project Environmental Requirements: Installation area shall be enclosed, protected from weather and be temperature and humidity controlled prior to unpacking and installing Modex Edges.

### PART 2 PRODUCTS

#### 2.01 MANUFACTURER

- A. RPG Acoustical Systems, LLC, 99 South St, Passaic, NJ 07055 (telephone) 973-916-1166, <http://www.rpgacoustic.com>.

#### 2.02 MATERIALS

- A. Unit Dimensions  
Standard Units: Height (31.5") x Width (36") x Max Depth (36") X Min Depth (8")
- B. Weight: 70 lbs.
- C. Finishing: Fabric wrap with no trim, painted trim or wood trim.

## 2.03 ACCESSORIES

- A. Optional: Base and Cap components for complete floor to ceiling installation.

## PART 3 EXECUTION

### 3.01 INSTALLERS

- A. Only qualified installers with 3 years (minimum) experience installing similar products shall install diffusers.

### 3.02 EXAMINATION

- A. Site Verification of Conditions: Commencement of installation constitutes acceptance of prior work.

### 3.03 PREPARATION

- A. Protection: Protect surrounding work so as to avoid damage during installation of diffusers.
- B. Surface Preparation: Inspect substrate and ensure surface is flat, plumb, clean and dry without protruding elements that would otherwise interfere with installation.

### 3.04 INSTALLATION

- A. Field measure the inside height dimension of the room to determine clearance for units.
- B. Units sit on finished floor or optional base and stack. It is recommended that the units be attached or tethered to the wall/corner.

### 3.05 CLEANING AND PROTECTION

- A. After installation, clean dirt and dust from powder coated surface with white, cotton cloth. Do not scratch the powder coated surface with a hard abrasive cleaner.
- B. After installation, protect Modex Edges against dirt, scratching and contact.

END OF SECTION