

**SECTION 098413 ACOUSTICAL WALL PANELS**

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- A. Work of this Section, as shown or specified, shall be in accordance with the requirements of the Contract Documents.

1.2 SECTION INCLUDES

- A. Work of this Section includes all labor, materials, equipment and services necessary to complete the acoustical wall panels as shown on the drawings and/or specified herein, including, but not limited to, the following:
  - 1. 2" thick acoustical absorption panels wrapped in selected fabric.

1.3 RELATED SECTIONS

- A. Carpentry - Section 062000.
- B. Gypsum Drywall - Section 092900.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualification: At least 5 years' experience fabricating and installing comparable work, employing skilled mechanics under competent supervision for all phases of the Work.

1.5 SUBMITTALS

- A. Shop Drawings/Product Data
  - 1. Base drawings on field measurements.
  - 2. Show dimensioned wall elevations with seam and joint locations, cutout sizes and locations, anchor locations, relation to adjacent work; large scale joint and mounting details; materials type, weight/thickness, design, color; and other data necessary to fabricate and install work and coordinate work with affected trades.
- B. Samples: Two 12" x 12" (minimum) panels in selected finish, showing seam, edge and cutout conditions.
- C. Certification
  - 1. Acoustical Performance: Certified reports of acoustical performance tests conducted and/or witnessed by a recognized, independent, testing agency. Tests shall have been done by specified methods or recognized equivalent. Sound absorption tests shall be not more than three years old. Reports on earlier tests are acceptable if it can be established to the Architect's satisfaction, that they are valid indications of compliance with Project requirements.
  - 2. Fire Hazard: Evidence of compliance with regulatory agency and specifications requirements.

- D. Cleaning and Maintenance Instructions: Recommendations for Owner maintenance and cleaning per Section 017300 requirements. Identify cleaning/spotting products generically or by trade name.
- E. Manufacturer Qualifications: List comparable installations with 3-year (minimum) service histories. Describe installations and give Owner/building manager names and addresses.

#### 1.6 REFERENCES

- A. ASTM C 423, Test for Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.
- B. ASTM E 84, Test for Surface Burning Characteristics of Building Materials.

#### 1.7 DELIVERY, STORAGE AND HANDLING

- A. Allow materials to become acclimated to Project conditions before installation, if necessary, to prevent sag and distortion during service life.

#### 1.8 PROJECT CONDITIONS

- A. Work areas shall be at or near ambient occupancy temperature and relative humidity.
- B. Painting, dust-raising activities, and work that introduces dampness shall be completed.

### PART 2 - PRODUCTS

#### 2.1 GENERAL

- A. Fabricate panels to sizes and configurations indicated; attach facing materials to cores to produce installed panels with visible surfaces fully covered and free from waves in fabric weave, wrinkles, sags, blisters, seams, adhesive or other foreign matter.
  - 1. Fabricate back mounted panels in factory to exact sizes required to fit wall surfaces based on field measurements of completed substrates indicated to receive acoustical wall panels.
  - 2. Where radius corners are indicated, attach facing material so there are no seams or gathering of material.
- B. Dimensional Tolerances of Finished Units: Overall height and width of panels plus or minus 1/16".
- C. Sound Absorption Performance: Provide acoustical wall panels with minimum noise reduction coefficients (NRC) indicated, as determined by testing per ASTM C 423 for mounting type specified under individual product requirements.
- D. Colors, Textures, and Patterns: Where manufacturer's standard material is indicated, provide acoustical wall panels faced with manufacturer's material complying with the following requirements:
  - 1. Provide Architect's selections from manufacturer's full range of colors, textures, and patterns for products of type indicated.

## 2.2 BACK MOUNTED ACOUSTICAL WALL PANELS

- A. Back Mounted, Edge Reinforced Acoustical Wall Panels: Manufacturer's standard panel construction consisting of facing material laminated to front, edges, and back border of molded glass fiber board core; with edges chemically hardened to reinforce panel perimeter against warpage and damaged; and complying with the following requirements:
1. Core Density: 6 - 7 lb./cu. ft.
  2. Thickness and NRC: Nominal overall panel thickness of 2" and NRC of not less than 0.95 for Type A (ABPMA No. 4) mounting.
  3. Facing Material: Manufacturer's standard abuse resistant woven polyester fabric over glass fiber scrim.
  4. Panel Size: As indicated.
  5. Edge Detail: Square.

## 2.3 ACCESSORIES

- A. Back Mounting Accessories: Manufacturer's standard or recommended accessories for securely mounting panels of type and size indicated to substrates provided, and complying with the following requirements:
1. Mechanically Mounted Edge Reinforced Panels: Metal panel clip and base support bracket system consisting of 2 part panel clips, with one part of each clip mechanically attached to back of panel and the other part to wall substrate, designed to support panels laterally; and base support brackets designed to support full weight of panels; with both designed to allow panel removal.

## PART 3 - EXECUTION

### 3.1 INSPECTION

- A. Examine the areas and conditions where acoustical wall panels are to be installed and correct any conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions are corrected to permit proper installation of the work.

### 3.2 INSTALLATION

- A. General: Install acoustical wall panels in locations indicated with vertical surfaces and edges plumb, top edges level and in alignment with other panels, scribed to fit adjoining work accurately at borders and at penetrations. Comply with panel manufacturer's printed instructions for installation of panels using type of mounting accessories indicated or, if none indicated, as recommended by manufacturer.
- B. Construction Tolerances
1. Variation from Plumb and Level: +/- 1/16".
  2. Variation of Joints from Hairline: Not more than 1/16".
- C. Anchoring to Drywall: Anchor clips to unreinforced gypsum board with toggle or Molly anchors. Anchor clips to metal drywall framing with tapping sheet metal screws.

- D. Panels shall be pressed against wall and slid down engaging 'Z' clips into wall brackets.
- E. Remove and replace panels that are damaged and are unacceptable to Architect.

3.3 ADJUSTING AND CLEANING

- A. Correct non-complying and damaged/defective Work. Replace work that cannot be satisfactorily repaired.
- B. Restretch and reinstall sagging and distorted fabric and correct other defects that occurred during normal service.
- C. Carefully and thoroughly clean completed work by vacuuming and/or other means. Remove soil, stains, loose threads.
- D. Protect work from soiling and other damage.

END OF SECTION 098413