SECTION 09 50 00
ACOUSTICAL PANEL CEILINGS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes acoustical panels and exposed suspension systems for ceilings.

1.2 SUBMITTALS

A. Product Data: For each product indicated.

B. Samples: For each acoustical panel, for each exposed suspension system member, for each exposed molding and trim, and for each color and texture required.

C. Product test reports.

D. Research/evaluation reports.

E. Maintenance data.

1.3 QUALITY ASSURANCE

A. Acoustical Testing Agency Qualifications: An independent testing laboratory or an NVLAP-accredited laboratory.

1.4 EXTRA MATERIALS

A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Acoustical Ceiling Units: Full-size units equal to 2 percent of quantity installed.
2. Suspension System Components: Quantity of each exposed component equal to 2 percent of quantity installed.

PART 2 - PRODUCTS

2.1 GENERAL

2.2 ACOUSTICAL PANELS

A. Acceptable Manufactures
1. ARMSTRONG
2. CERTAINTEED
3. US GYPSUM BOARD

B. PANEL TYPES
1. ARMSTRONG Optima, #3256 24”x24”x3/4” beveled edge, NRC .95, light reflectance, LR .90.
2. ARMSTRONG Metal Works, #9442U6A1 tegular edge, NRC 0.10, light reflectance .77, color “silver grey.”
3. ARMSTRONG Metal Works, Acoustical wall panels, 24” x 24” NRC 0.95, color “silver grey.”

C. METAL SUSPENSION SYSTEM

D. Products:

1. Exposed Tee Grid System
a. Description: Cold rolled electrogalvanized steel, factory applied finish paint to match ceiling tile.
b. Typical Grid: 15/16” exposed face; DONN (USG Interiors) Model DX; CHICAGO METALLIC 200 Snap Grid System; ARMSTRONG Prelude:

E. Description: Comply with ASTM C635. Provide systems adequate to support light fixtures, ceiling diffusers, and other normal accessories. Maximum deflection 1/360 of the span. All components of system from one manufacturer, die cut, and interlocking.

1. Structural Classification: Intermediate-duty system.
2. Type of System: Direct Hung.
3. Attachment Devices: Size for 5 times design load indicated on ASTM C635, Table 1 Direct Hung.
4. Hanger Wires: ASTM A641 galvanized carbon steel, soft temper, prestretched not less than 12 gauge.
5. Carrying Channels: 1-1/2” steel channels, hot-rolled or cold rolled not less than 0.475lbs per linear foot, standard finish.
6. Members: Provide manufacturers standard exposed runners, cross runners and accessories of type and profiles indicated with exposed cross runners coped to lay flush with main runners.

F. Edge Moldings: Hemmed edge wall angles, cold rolled electrogalvanized steel, factory applied finish to match grid system

PART 3 - EXECUTION

3.1 INSTALLATION

A. General: Install acoustical panel ceilings to comply with ASTM C 636 and seismic requirements indicated, per manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."

B. Measure each ceiling area and establish layout of acoustical panels to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width tiles at borders.

C. Suspend ceiling hangers from building's structural members, plumb and free from contact with insulation or other objects within ceiling plenum. Splay hangers only where required to miss obstructions; offset resulting horizontal forces by bracing, countersplaying, or other equally effective means. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with location of hangers, use trapezes or equivalent devices.

D. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical panels. Screw attach moldings to substrate with concealed fasteners at intervals not more than 16 inches o.c. and not more than 3 inches from ends, leveling with

ceiling suspension system to a tolerance of 1/8 inch in 12 feet . Miter corners accurately and connect securely.

E. Install suspension system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.

F. Install acoustical panels with undamaged edges and fit accurately into suspension system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.

END OF SECTION 09 50 00