

SECTION 09510
ACOUSTICAL CEILINGS

1 PART 1 GENERAL

1.1 DESCRIPTION

- A. Work included: Provide acoustical ceilings where shown on the Drawings, as specified herein, and as needed for a complete and proper installation.
- B. Related work:
 - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

1.2 QUALITY ASSURANCE

- A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

1.3 SUBMITTALS

- A. Comply with pertinent provisions of Section 01340.
- B. Product data: Within 20 calendar days after the Contractor has received the Owner's Notice to Proceed, submit:
 - 1. Materials list of items proposed to be provided under this Section;
 - 2. Manufacturer's specifications and other data needed to prove compliance with the specified requirements;
 - 3. Manufacturer's recommended installation procedures which, when approved by the Architect, will become the basis for accepting or rejecting actual installation procedures used on the Work.

1.4 PRODUCT HANDLING

- A. Comply with pertinent provisions of Section 01640.

1.5 EXTRA STOCK

- A. Deliver to the Owner for his use in future modifications, an extra stock of 2 unopened boxes of each type of acoustic tile used.

2 PART 2 PRODUCTS

2.1 SUSPENSION SYSTEM

- A. Provide a complete system of supporting members, anchors, wall cornices, adapters for light fixtures and grilles, and accessories of every type required for a complete suspended "T" grid system of the arrangements shown on the Drawings, in color or colors selected by the Architect from standard colors of the approved manufacturer, and complying with pertinent requirements of Underwriters Laboratories, Inc., and the governmental agencies having jurisdiction.
- B. Acceptable Products:
 - 1. Exposed tee grid 24 inch by 24 inch shall be Donn DX System as manufactured by USG Interiors, Inc., Chicago, IL or Chicago Metallic 200 Snap Grid, or approved equal. Components shall be formed from commercial quality cold-rolled steel, electro-galvanized coated and prepainted. Exposed finish shall be low sheen satin white.

2.2 ACOUSTICAL CEILING PANELS

- A. Acceptable products:
 - 1. Acoustic panels shall be equal to Armstrong "Fine Fissured square-edge lay-in panels, 24 inches by 24 inches by 5/8 inch.
 - 2. All ceiling materials shall be 100% free of asbestos.

2.3 OTHER MATERIALS

- A. Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor subject to the approval of the Architect.

3 PART 3 EXECUTION

3.1 SURFACE CONDITIONS

- A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2 INSTALLATION, GENERAL

- A. Except as modified by requirements of governmental agencies having jurisdiction, recommendations of the manufacturer as approved by the Architect, or specific directions of the Architect, install in accordance with ASTM C636 and the pertinent UL design requirements.

- B. Lateral Bracing:
 - 1. Provide lateral bracing as required by pertinent codes and regulations.
 - 2. Secure lateral bracing to structural members. Secure at right angles to the direction of the partition and four ways in large ceiling areas.
- C. Provide hold-down clips for ceiling boards only when so required by governmental agencies having jurisdiction.
- D. Make all grid level within a tolerance of one in 1000 and straight within a tolerance of one in 1000.
- E. Install the suspension system in accordance with the layout indicated on drawings. Layout tile from center of areas in both directions, except where otherwise shown on Drawings. Provide proper openings for the installation of electrical fixtures, mechanical items, etc. Any field conditions interfering with the installation of the ceiling shall be called to the attention of the Architect for solution before proceeding with work.
- F. Provide approved type inserts and fastenings as required for the suspension system.
- G. Suspension system shall be of sufficient strength to support lighting fixtures, supply diffusers, return grilles, and acoustic panels with a maximum deflection of 1/360 of the span. All extra supports shall be provided wherever required to maintain alignment of suspension system due to installation of mechanical and electrical trade components.
- H. Units abutting vertical surfaces shall be provided with metal wall molding.

3.3 INSTALLATION OF ACOUSTICAL MATERIALS

- A. Suspension System Hangers - Fasten 12 gauge galvanized steel wire hangers to structural framing at not more than 3 feet apart for the length of main runners. Support of each hanger shall be a galvanized eye fitting fastened to structural support. Provide all supports for main tees.
- B. Main Runners - Erect main runners 48" o.c. for exposed grid; loop hanger wire through wire support and secure by twisting on drop not less than 3 turns; lower end of hanger wire shall be looped through tab on main runner and secured by twisting on self not less than three turns. Provide extra wire and eye support in center of long dimension on each side of light or mechanical fixture.
- C. Cross Tees - Insert cross tees 24" apart and secure to main runners. Cross tees shall not engage main runners at joints.
- D. Borders - Install wall molding securely fastened to wall. Parallel borders shall be not less than 6" wide and equal.
- E. Acoustical - Install 24" by 24" panels in exposed grid system, with pattern of all panels running parallel to short axis of room.

3.4 CLEANING AND FINISHING

- A. Following erection and when directed by the Architect, clean all exposed surfaces of dirt, discoloration and all foreign substances. Units which are damaged or improperly installed shall be removed and replaced with whole new units as directed by the Architect, at no additional cost to the Owner.
- B. Remove all cartons, containers, rubbish and waste materials from the premises as they accumulate or as required by the Architect.

...END OF SECTION