

DIVISION 9 - FINISHES
SECTION 09 51 13 - SUSPENDED ACOUSTICAL CEILINGS
PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Suspended metal grid ceiling system.
- B. Acoustical tile.

1.2 RELATED SECTIONS

- A. Structural framing.
- B. Support of mechanical equipment, lighting fixtures, etc.

1.3 REFERENCES

- A. ASTM C635 - Metal Suspension Systems for Acoustical Tile and Lay-in Panel Ceilings.
- B. ASTM C636 - Installation of Metal Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels.
- C. ASTM E580 - Practice for Application of Ceiling Suspension Systems for Acoustical Tile and Lay-in Panels in Areas Requiring Seismic Restraint.
- D. ASTM E1264 - Classification of Acoustical Ceiling Products.
- E. Ceilings and Interior Systems Contractors Association (CISCA) - Acoustical Ceilings: Use and Practice.
- F. UL - Fire Resistance Directory and Building Material Directory.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01 10 00.
- B. Shop drawings.
- C. Provide product data describing physical and performance characteristics; sizes, patterns, and colors available for both tile and grid.
- D. Submit two tile samples, 12" x 12" in size, and a 12" length of each grid element.
- E. Manufacturer's Certificate: Certify that products meet or exceed specified requirements.

1.5 QUALITY ASSURANCE

- A. Perform work in accordance with reference documents.
- B. Maintain one copy of each installation related reference document, on site.

1.6 QUALIFICATIONS

- A. Manufacturer: A company specializing in the manufacture of the materials specified in this Section, with a minimum of 10 years documented experience.
- B. Installer: An authorized representative of the manufacturer who has satisfactorily completed a minimum of two recent projects, of comparable size and type, using the manufacturer's system.

1.7 COORDINATION

- A. Coordinate this work with other related Sections of Work and including the following:

1. Light fixtures
 2. HVAC equipment
 3. Fire suppression system components
 4. Partitions
 5. Speakers
- B. Prepare and distribute to affected installers data necessary for coordination with related work. Include diagrams showing placement of attachment devices for acoustical ceiling hangers.

1.8 WARRANTY

- A. In accordance with the General Conditions of the Construction Contract.

PART 2 PRODUCTS

2.1 CEILING SYSTEM

- A. A total assembly, by one manufacturer; Armstrong World Industries, Inc., USG Corporation or CertainTeed.
- B. Rated or non-rated systems, as scheduled.

2.2 MATERIALS

- A. Metal Grid: 15/16" Painted steel interlocking grid system, with matching perimeter edge angles.
- B. Suspension: Unless otherwise specifically called for, suspension is to be by wire hangers at 4' - 0" o.c. each way (maximum).
- C. Control Room Lay-In Panels: 5/8" thick, 24" x 24" or 24" x 48" acoustical tile, as called for, square lay-in edges and grid.
1. Washable factory finish, medium textured non-directional fissured pattern in standard white finish, USDA accepted; Ceramaguard Fine Fissured by Armstrong or equal.
- D. Standard Accessories: All appropriate galvanized items such as clips, splices, hold downs, etc., shall be provided as required for a complete installation.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that field conditions are acceptable and are ready to receive work. Ensure that dimensions agree with drawings.
- B. Special attention shall be given to structural framing, to which wire hangers will be attached.
- C. Reference must be made to locations of, and requirements for, related mechanical registers, electrical lighting fixtures, etc.

3.2 INSTALLATION

- A. All work shall be installed in accordance with reviewed shop drawings; review of shop drawings, by the Office of the Contractor, shall be for design intent only. Review of shop drawings shall not relieve the subcontractor of his responsibility for correct installation as called for.

- B. The grid system shall be laid out to a square or rectangular pattern, true to line. Typically, beginning layout points shall be room centerlines; this may vary, according to the lighting layout.
- C. The grid is to be level to within 1/8" in 12 feet; perimeter angles are to be at the same elevation at all sides of any given area.
- D. Lay-in panels shall be neatly cut to fit, where required, including shaping of tegular edges of cut panels. Cut edges shall be spray painted to match panel finish.
- E. Care must be exercised to protect item finishes, and to prevent damage to adjacent surfaces.

3.3 EXTRA MATERIAL

- A. The subcontractor shall provide a minimum of one dozen extra lay-in panels of each type, color, and pattern used; the material shall be packaged for protection, for the Owner's future use.

PART 4 COMPLETION

4.1 CLEANUP

- A. All work shall be left clean and undamaged.
- B. Refer to pertinent portions of Section 01 10 00.

END OF SECTION