

## PART 1 – GENERAL

- 1.1 Scope
  - A. Furnish and install complete security metal tile ceiling or wall system as manufactured by Accurate Perforating Company Inc., Chicago, Illinois. The complete system shall include:
    - 1. Metal security ceiling panels
    - 2. Metal security wall panels
    - 3. Suspension system and wall supports
    - 4. Acoustical insulation (with perforated panel)
- 1.2 Related Work
  - A. Section 09120 Ceiling Suspension Systems
  - B. Section 15550 Heating, Ventilating and Air-Conditioning
  - C. Section 16500 Lighting
- 1.3 References
  - A. American Society for Testing and Materials (ASTM)
    - 1. C635 – Standard specification for the manufacture, performance and testing of metal suspension systems for acoustical tile and lay-in panel ceilings.
    - 2. C636 – Standard practice for installation of metal ceiling suspension systems for acoustical tile and lay-in panels.
    - 3. E84 – Test method for surface burning characteristics of building materials.
- 1.4 Submittals
  - A. Product data sheets listing dimensions, style, perforation pattern and finish.
  - B. Samples of each tile proposed for each location showing perforation pattern and edge details.
- 1.5 Project Conditions
  - A. Environmental requirements
    - 1. Area to receive ceiling or wall system shall be protected from the weather.
    - 2. Wet trades work shall be complete and dry prior to installation of ceiling system.
    - 3. Installation shall not proceed until the temperature and humidity conditions closely approximate finish conditions.
    - 4. Heating and air-conditioning systems shall be operating prior to and during installation.

## PART 2 – PRODUCTS

- 2.1 Manufacturer
  - A. Metal tile security ceiling or wall system manufactured by Accurate Perforating Company Inc, Chicago, Illinois to include, but not limited to the following:
    - 1. Panels
    - 2. Mid-span support member
    - 3. Wall molding
    - 4. Accoustical insulation (with perforated panels)
- 2.2 Materials
  - A. Suspension System
    - 1. Heavy-duty main runners and cross runners shall be made from .020 galvanized steel and supported from existing structure by not less than 12-gauge hanger wire, wrapped tightly for three full turns and spaced not more than 48" along the component length. Mid-span support member shall be finished to match panel.
    - 2. Support struts of not less than 16-gauge C-channels shall be tightly secured to the hanger wires by means of tie wire and shall extend the entire length of the hanger wire from structure to mid-span support to prevent uplift.
    - 3. Moldings shall be manufactured from 18-gauge galvanized steel and shall be securely fastened to wall surfaces with Drilled-in anchors at 24" centers. Molding shall be finished to match panels. Hold-down clips made of 18-gauge steel shall secure the plank tightly within the molding.
    - 4. Fasteners and hardware shall be galvanized steel or other noncorrosive material. Security fasteners spaced 6" on center will be utilized where access panels are required.
  - B. Security Panels
    - 1. Panels shall be manufactured from \_\_\_ gauge (18, 20) galvanized steel and shall have vertical legs splayed to engage the bulb of the heavy-duty suspension system without the use of any clips.
    - 2. Panels shall be 24" wide and \_\_\_ (24", 48") in length.
    - 3. Panels shall be perforated with 12% open area hole pattern.
    - 4. Panels shall be finished with baked-on powder finish.
  - C. Acoustical Backing
    - 1. Perforated panel shall be filled with 1-1/2" thick, one-pound density, PVC wrapped glass fiber insulation.

## **PART 3 – INSTALLATION**

### **3.1 General**

- A. Manufacturer's standard recommendations shall be the minimum acceptable method, material, accessory and/or procedure. However, where said manufacturer's standard recommendations are lesser in any way, shape or form than anything contained herein, the subcontractor shall proceed in accordance with provisions of this specification insofar as they may be applicable.
- B. The subcontractor shall carefully examine the building before commencing work in order to determine that the job conditions as described in the current edition of "ACOUSTICAL CEILING: USE AND PRACTICE" published by CISCA have been met. Each area shall be broom cleaned by the General Contractor. This subcontractor shall not proceed until all unsatisfactory conditions have been corrected and the work of others has been coordinated by the General Contractor.
- C. The installation of the acoustical units shall not start until the exterior openings have been glazed and/or closed and all wet work, such as concrete, masonry, ceramic tile and plastering, etc., have been completed and dried. A uniform temperature of not less than 60° F shall be maintained in rooms or spaces to receive acoustical treatment before, during and after installation of said treatment.
- D. In all spaces of 1,000 square-feet or more, ceiling shall be maintained in rooms or spaces to receive acoustical treatment before, during and after installation of said treatment.

### **3.2 Suspension Systems**

- A. Install per approved shop drawings.
- B. Where mechanical and electrical work interferes with regular spacing of structural hangers, provide additional hangers, and make necessary adjustments in ceiling construction.
- C. Do not attach or pass hangers through mechanical ductwork or attach to electrical conduit.
- D. Maximum hanger splay away from vertical: 6 inches per 4 feet.
- E. Mechanical units and electrical fixtures are to be independently supported by the respective mechanical and electrical subcontractors.

### **3.3 Metal Panels**

- A. Install in accordance with Manufacturer's printed instructions and approved shop drawings.

### **3.4 Panel Penetrations**

- A. All openings or notches required in the ceiling panels shall be properly field cut by the installing sub-contractor.

### **3.5 Access Panels**

- A. Entire ceiling or wall system shall be accessible. Accessibility to be accomplished by removing a complete ceiling or wall panel module(s). Access panels shall be held securely in place with tamperproof fasteners as approved by Architect. Hinges, latches and swing-type panels are not permitted. Access panels are to be located where required by the contract documents and shown on the approved shop drawings.

### **3.6 Cleaning and Finishing**

- A. Following erection, installation and application and when directed by the Architect, clean all exposed surfaces of dirt, discoloration, abrasion and all foreign substances using material and methods recommended by the manufacturer of the material. Units or surfaces that are damaged or improperly installed shall be moved and replaced or refinished as directed at no additional cost.

### **3.7 Replacement Materials**

- A. Provide \_\_\_ sq. ft. of extra security ceiling panels for use by owner. Panels shall be delivered to the job site upon substantial completion of the work of the section.