

SECTION 09545 SPECIFICATIONS FOR OPEN CELL METAL CEILING SYSTEM

PART 1 - GENERAL

1.01 Related Work

- A. Insulation: Section (insert here)
- B. Mechanical equipment: Section (insert here)
- C. Electrical: Section (insert here)
- D. Gypsum board systems: Section (insert here)
- E. Acoustical ceilings: Section (insert here)

1.02 System Description

- A. Provide the entire system as specified herein, and as detailed within the Contract Documents, and installation drawings of the manufacturer. The system shall be as described in Section 2.02 "Materials".

1.03 Quality Assurance

- A. Subcontractor qualifications: Installer shall have not less than three years of successful experience in the installation of Grid Cell metal ceiling systems on projects with requirements specified.
- B. Requirements of regulatory agencies: Codes and regulations of authorities having jurisdiction.
- C. Source quality control:
 - 1. Test reports: Manufacturer will provide test certification for minimum requirements as tested in accordance with applicable industry standards and/or to meet performance standards specified by various agencies.
 - 2. Changes from system: System performance following any substitution of materials or change in assembly design must be certified by the manufacturer.

1.04 References

- A. ASTM C636: Manufacturing and Installation of Suspended Ceilings.
- B. ASTM E119: Fire Tests of Building Construction and Materials.
- C. ASTM C423: Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method.

1.05 Submittals

- A. Samples: Submit representative sample of color and finish of all exposed materials. Sample shall be approximately 11"x 11".
- B. Installation Drawings: Submit three copies each of typical installation details indicating system components, splice details, and sequence of installation.
- C. Manufacturer's data: Submit manufacturer's standard catalog cut sheet with sample above.

1.06 Delivery, Storage and Handling

- A. Delivery of materials: Deliver materials in original, unopened packages clearly labeled with manufacturer's name and identification numbers.
- B. Storage: Store in manner that will prevent warping, scratches or damage of any kind.

- C. Handling: Handle in such a manner as to insure against racking, distortion of physical damage of any kind.

1.07 Project Conditions

- A. Existing conditions: (Include specific alteration work requirements for project, if any).
- B. Environmental requirements for interior installation: Building shall be enclosed with windows and exterior doors in place and glazed, and roof watertight before installation of metal ceiling system and related components. Climatic condition range of 60 degrees Fahrenheit (15.56 degrees Celsius) to 85 degrees Fahrenheit (29.44 degrees Celsius) and relative humidity of not more than 70% before installation of metal ceiling components.
- C. Coordination with other work:
1. Mechanical work: Ductwork above ceiling shall be complete, and permanent heating and cooling systems operating to climate conditions prior to installation of metal ceiling components.
 2. Electrical work: Installation of conduit above ceiling shall be complete before installation of metal ceiling components.
 3. Fire protection work: Fire protection lines and/or equipment occurring above ceiling shall be completed and tested before metal ceiling components are installed.
 4. Protection: Protect completed work above ceiling system from damage during installation of metal ceiling components.

PART 2 - PRODUCTS

2.01 Manufacturer

- A. Provide Open Cell Metal Ceiling model number OC240-2448-F23 (replace 40 with appropriate cell spacing (times 10) if other than 4.0" o.c.) (replace F23 with appropriate color number if other than Anodized PXL, per section 2.02 F below) as manufactured by American Decorative Ceilings, Inc. 4510 E. 71st Street Cleveland, Ohio 44105 Telephone number (216) 341-2222.

2.02 Materials

- A. 2' x 4' Open Cell louvers consisting of U-formed 2' filler blades (4' filler blades for 6.8" and 12"), & 4' tab blades. Said blades to be factory assembled on (2") (2.4") (3") (3.4") (4") (4.8") (6") (6.8") (8") (12") or (24") centers. The face width of U-formed blades shall be 9/16". Depth of same blades shall be 2" deep. Material shall be .020" thick aluminum.
- B. Main Runners: 8' in length, notched with center spacing to accommodate above louver size and Spacer Tabs. Main runners to have factory attached integral splice for alignment with adjoining mains. Material thickness, and depth, and face width to be identical to that of U-formed louver blades.
- C. Spacer Tabs: 4' in length, to be free of intermediate notching, and have an end configuration allowing easy insertion in any slot location along 8' Main Runner. Material thickness, depth, and face width to be identical to that of U-formed louver blades.
- D. Edge Cap: 12' in length to be 2-1/8" deep with a 3/8" face. The top formed lip to have an inside angle of less than 90 degrees so as to allow "snap-on" installation and adequate friction for remaining in place. Edge Cap to be furnished in matching color to louver.
- E. Wall Molding: 12' in length to be 2" deep with a 1" face. Molding shall have same finish as specified louver.
- F. Finish to be painted: (white (F41)); (black (F42)); (anodized PXL (F23)); (satin anodized (F23R)); (brushed aluminum (F98)); (brite clear (F28)); (brite brass (F27)); (natural birch (F4025)); (american maple (F4026)); (auburn cherry (F4023)); or (custom color (F47)) (strike out all non-applicable finishes.)

2.03 Fabrication

- A. Louvers: Intersection of blades notched to provide positive locking of intersection of assembled blades. Factory finished to match Architect's sample.
- B. Support system: Formed and fabricated for mechanical inter-connection with adjoining section and pre-punched holes for fish hook insertion at any notch location along Main Runner.
- C. Accessory Items: Independently suspend all mechanical air distribution devices and all electrical lighting fixtures.

2.04 Finish (Re-Al Wood Veneer)

- A. All surfaces to receive wood veneer are to be properly primed and free of any dirt, grime, or particles that will inhibit proper adhesion or produce surface imperfections.
- B. Adhesion: The primed surfaces shall be coated with formaldehyde free adhesive specifically designed for use with wood veneers. Said adhesive to be engineered to provide an adhesion strength of 10 pounds per square inch, and formulated from cross linked emulsion.
- C. Veneer: Species of the Wood Veneer shall be selected by Architect from Manufacturer's standard selection of 3 face Wood Veneers. Said Veneer to be of 1/32" thickness. Exposed surfaces of veneer shall be two-step sealed, finished with a 600 grit sandpaper, and then clear-top coated.

PART 3 - EXECUTION

3.01 Inspection

- A. Examine areas to receive metal ceiling system for conditions which will adversely affect installation.
- B. Do not start work until unsatisfactory conditions are corrected.
- C. Work to be concealed: Verify work above support system is complete, tested, and installed in manner which will not affect layout and installation of metal ceiling system.

3.02 Preparation

- A. Field dimensions: Installer must verify actual field dimension prior to installation.
- B. Coordination: Coordinate and schedule installation of metal ceiling system with work of trades affected by this installation, with particular attention given to mechanical and electrical work required to be installed and operating before ceiling work can begin.
- C. Provide the entire system as specified herein, and as detailed within the Contract Documents, and installation drawings of the manufacturer. The system shall be as described in Section 2.02 "Materials".

3.03 Installation

- A. Reference:
 - 1. Install in accordance with approved installation drawings and Contract Documents.
- B. Hanger wires:
 - 1. Spacing: Space hanger wires maximum 48" o.c. along length of mains and within 6" (for interior applications) from the mains (or carriers) starting and end points, attached directly to structure above.
 - 2. Attachment to Mains (Carriers): Install adjacent wires through manufacturer's prepunched holes at appropriate locations. Align support system straight true and level. Re-level hanging wire as required.
 - 3. Limitation: Do not support hanger wires from mechanical and/or electrical equipment, piping, or other equipment occurring above ceiling.
 - 4. Fixtures at ceiling: Provide additional fixture support as required in accordance with local building codes or other regulatory agencies.

3.04 Adjust and Clean

- A. Adjust components for uniform tolerances. Replace any and all ceiling panels that are scratched or dented.
- B. Clean exposed surfaces with non-solvent based, non-abrasive commercial cleaner.

3.05 Extra Stock

- A. Provide (2-5% (depending on project size)) extra members in matching finish to owner's representative. Stock material to be labeled for storage.