

# **SECTION 09545 SPECIFICATIONS FOR LINEAR DEEP PAN 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 or 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 Linear Deep Pan Ceiling System model number LPXYD/ZZZ-F23 (replace X with appropriate width of panel)(replace YY with appropriate thickness if other than .025") (replace Z with 2- or 2-digit length in inches) (replace F23 with appropriate color number if other than Anodized PXL, per section 2.02 G below) as manufactured by American Decorative Ceilings, Inc.; 4510 E. 71st St.; Cleveland, Ohio 44105; Telephone number (216) 341-2222.

### **2.02 Materials**

- A. Pans (2"); (4"); (6"); (8"); (10"); or (12");, 1" deep vertical legs with square edges formed for attaching to carrier support system. Material to be formed aluminum sheet (.020"); (.025"); (.032"); (.040") thickness, (non-perforated); (perforated) into standard 12' lengths.
- B. Pan Splice: (Matte black finish); (finish to match pans): formed for snap-fit into butt –cut pan ends.
- C. Carrier: Inverted hat-shaped carrier, 1-11/16" high by 2" wide; each leg notched for locating and attaching pans on specified module and providing for a 5/8" reveal between same. Splice sections are formed to match configuration of carrier. Factory finished with matte black baked enamel paint. Material thickness to be 0.040" aluminum.
- D. Flexible Carrier: Aluminum channel shape, 11/16" high by 3-1/2" wide; each leg notched for locating and attaching pans on specified module and providing for a 5/8" reveal between same. Material thickness to be 0.040" aluminum.
- E. Accessories: Provide perimeter 'J'-molding with 1" depth and 3/4" exposed face, 12' lengths in finish to match pans. Access door kits (if required) to be used with standard pans and carriers to provide 24"x 24" units, with downward (upward) accessibility.
- F. Finish to be: (TBD/As Noted), (Painted Standard), (Painted Custom), (Anodized), (Premo Laminate), (Powder Coated Wood Grain), (ReAl Wood Veneer), (OTHER – Please indicated finish and confirm availability/applicability with ADC prior to releasing spec for bid); (Kindly strike out all non-applicable finishes.)

## **2.03 Fabrication**

- A. Pans: Edges formed to snap onto carrier members and provide positive lock; factory finished to match approved samples.
- B. Support system: Formed and fabricated for mechanical connection with adjoining section and pre-punched holes for (direct suspension)(mechanically fastened in place).
- C. Lighting components: Fabricate in accordance with UL classification as specified.
- D. Air distribution components: Formed to provide airtight assembly and positive connection to mechanical equipment components.

## **2.04 Finish (Re-AI 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 an 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.