SECTION 09545—SPECIFICATION FOR AMERICAN DECORATIVE CEILINGS' "OPEN BEAM" METAL CEILING SYSTEM

PART 1 – GENERAL

1.01 Related Work

A. Insulation: Section:_____

B. Mechanical equipment: Section _____

C. Electrical: Section _____

D. Gypsum board systems: Section _____

E. Acoustical ceilings: Section _____

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 warpage, 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.

D. Protection: Protect completed work above ceiling system from damage during installation of metal ceiling components.

PART 2 – PRODUCTS

2.01 Manufacturer

A. Provide Open Beam Metal Ceiling model number OB24/24-F23 (replace first 2 with Beam face width if other than 2") (replace first 4 with Beam depth if other than 4") (replace second 24 with appropriate Beam spacing if other than 24" o.c.) (replace F23 with appropriate color number if other than Anodized PXL, per section 2.02 H below) as manufactured by American Decorative Ceilings, Inc.; 4510 E. 71st St.; Cleveland, Ohio 44105; Telephone number (216) 341-2222.

2.02 Materials

A. System: Provide Open Beam ceiling system consisting of a beam section (1"x 1"); (1"x 2"); (1"x 4"); (1"x 5"); (2"x 2"); (2"x 4"); (3"x 3"); (3"x 6"); or (4"x 4") _____" wide by _____" deep. Beam module shall be (12"); (16"); (18"); (24"); (30"); (36"); or (48") _____" on centers. Beam members shall be Channel-formed as specified and have a minimum of 1/4" returned edges on the top lips of section for added strength and stability.

B. Main Beams 12' in length (depending upon module size specified) shall be notched with center spacings to accommodate specified module size. Typical Main Beam spacing shall be 48" on center depending upon module size.

C. Main Beam splice/ hanger shall be installed at the insertion of all abutting mains. Additional Main Beam splice? Hanger shall be installed along the main member at remaining slot locations at a spacing not to exceed 48" o.c.

D. Cross Beams shall be in appropriate lengths and notched to accommodate specified module size as indicated on installation drawings. To be installed perpendicular to Main Beams at all notched locations.

E. Filler Beams shall be in module length and installed parallel to Main Beams and engaged into notches of Cross Beams.

F. Floating Perimeter Treatment: shall consist of "Perimeter Main Beams" with exposed notches on one side only, and 1 module main beam/ cross beams to allow concealed integration of system installation. Provide pre-manufactured outside 90 degree corner kits. For installations requiring floating perimeters at 45 degrees to module interfacing, provide 2 piece closure molding per installation drawings.

G. Wall Perimeter: shall consist of P-molding with matching face and depth dimensions of Open Beam section. P-molding to have a minimum top lip returned flange of ½" for added strength and stability.

H. Finish to be (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. Beams: Fabricate and form beam members from appropriate thickness of aluminum to provide positive locking at all intersections without the use of additional fasteners or clips. Factory finished to match sample in Architect's possession.

B. Support system: Formed and fabricated for mechanical inter-connection with adjoining section And pre-punched holes for direct insertion of hanging wires at any notched location along Main Beams.

C. Accessory Items: Independently suspend all mechanical air distribution devices and all Electrical lighting fixtures.

2.04 Finish

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.

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".

3.03 Installation

A. Reference: 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 pre-punched 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.