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**SECTION 13120  
SPECIAL WALL SYSTEMS**

**1. GENERAL**

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**1.1. SECTION INCLUDES**

- A. Accessible wall panel systems.
- B. Aluminum Studs and Extrusions
- C. Supply screens and return air louvers.

**1.2. SUBMITTALS**

- A. Submit sample of wall panels and metal stud under provisions of Division 1.
- B. Products Data: Submit manufacturer's product data and installation instructions.
- C. Shop Drawings: Show details of fabrication, installation, anchoring, joining and reinforcing.

**1.3. PRODUCT DELIVERY, STORAGE AND HANDLING**

- A. Package, handle, deliver and store in a manner that will avoid damage or deformation.
- B. Do not deliver materials for cleanroom construction to the project site until they can be included in the work in a timely manner. Arrange with the general contractor for clean, dry, suitable space for material storage.

**2. PRODUCTS**

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**2.1. ACCEPTABLE MANUFACTURERS**

- A. Gerbig Engineering Company AireCell System.

**2.2. MATERIALS:**

- A. Panels: Gerbig Engineering 1/4 inch aluminum face both sides, fluted PVC core, factory sized for the wall system.
- B. Finish: Provide factory standard, anodized aluminum finish.
- C. Studs: AireCell aluminum extrusions designed to accept the panels in a non-progressive manner.
- D. Corners: Provide inside and outside extruded aluminum corners to match the system.
- E. Gaskets: All panels to be sealed in the mullion extrusion using a gasket. Panels to be sealed airtight.

- F. Discharge Screens: HEPA filtered air to be discharged through perforated aluminum screens integrated into the wall system using a gasket method. Screens to be anodized, 1/16" holes staggered 3/32" and 0.063" thickness.
- G. Return Air Louvers: Return air louvers shall be frameless and integrated into the wall system, with sizes as shown on the plans. Louvers to be extruded aluminum 1 1/4" deep.
- H. HEPA Filters: HEPA Filters shall be supplied by the wall supplier and integrated into the wall framing with appropriate mounting hardware. Filters shall be removable from the downstream side with hand tools. HEPA filters to be 99.99% efficient, factory scanned with scan data recorded and stored for later retrieval. Frames shall be extruded aluminum. Media shall be encapsulated into the frame with urethane or equal potting material. Filter installation and the framing system shall not allow a penetration rate greater than 0.01% of the upstream concentration.
- I. Certification: Wall/HEPA supplier shall certify the room using methods established by NEBB. Tests include a) filter integrity test, b) velocity/uniformity, c) final particle count, d) room pressure.

### **3. EXECUTION**

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#### **3.1. INSTALLATION**

- A. All installation methods shall be in accordance with the latest recommendations with the manufacturer and in conformance with the specifications and reviewed shop drawings.
- B. The installation of the cleanroom wall systems will be by the wall manufacturer.

#### **3.2 ACCEPTANCE**

- A. Materials found to be defective or improperly installed will be replaced.

#### **3.3 CLEANING**

- A. Vacuum the concealed side of the wall system prior to installation of the panels. Periodically clean-up and remove all debris from the site. Remove all rubbish and leave broom clean.
- B. After the HEPA filters and fan systems are in operation, clean the panels by wiping the cleanroom side with a cleanwipe provided by the General Contractor.

#### **3.4 GUARANTEE**

- A. Warrant the system to be free of defective material and workmanship for a period of one year.

(END OF SECTION)