

Webb Core Cleanroom Wall System

PART 1 – GENERAL

1.1 WORK INCLUDED

- A. This Section specifies the requirements necessary to furnish, install and complete a cleanroom wall system (CRW) including, but not limited to:
 - 1. Cleanroom wall system, non-load bearing, completely demountable, non-progressive, including all installation attachments.
 - 2. Wall panel material including paint, coating, or finish.
 - 3. Reinforcing and bracing as necessary to maintain wall system structural integrity.
 - 4. Trim closure strips and non-outgassing type gaskets.
 - 5. Glazed wall panels.
 - 6. All labor, supervision and equipment for the cleanroom wall installation.
 - 7. Grilles with dampers.
 - 8. Related work specified elsewhere.
- B. Inspect all building areas prior to installation, where support system will be installed, for any job condition that will alter the layout or details shown on the Drawings. Coordinate installation with other trades to avoid conflicts.

1.2 WARRANTY

- A. Submit three copies of written warranty agreeing to repair or replace wall components which appear to have failed in general durability or any other forms of apparent deterioration.
- B. Warranty shall be for a period of 1 year and shall begin following date of Substantial Completion.

1.3 QUALITY ASSURANCE

- A. Cleanroom wall system installer shall be trained and approved by the manufacturer and shall be experienced in the installation of this cleanroom wall system.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Wall system panels shall be delivered with an approved protective coating and packaged to prevent transit and construction dust from contaminating surfaces. Stripping of packaging and coatings to be done outside the cleanroom area.
- B. Deliver materials in their original, unopened packages.
- C. Exercise extreme care in handling all cleanroom wall system components to prevent damage.
- D. Store materials in such manner as to prevent damage or intrusion of foreign matter.
- E. Conspicuously mark "Rejected" on materials which have been damaged, and remove from the jobsite.

PART 2 – PRODUCTS

2.1 CLEANROOM WALL PANEL

- A. Manufacturer: Webb Core, Inc. 1-800-697-8062
- B. Wall Panel Characteristics: ALUMINUM
 - 1. Shall consist of two layers of sheet aluminum with two glue lines bonding a non-faced honeycomb aluminum core. Components can vary due to make-up of panel thickness and over all size.
 - 2. Overall panel thickness: Total bonded panel including core, glue lines and face sheets shall be: .25" (single wall) or 1.87" (double wall).
 - 3. All aluminum face skins shall conform to the following general standard: 3000 series aluminum sheet, half hard, .032 thick by specified with by various leveled lengths.

2.2 CLEANROOM WALL FRAMING SYSTEM

- A. Manufacturer: Webb Core, Inc. 1-800-697-8062
- B. Aluminum Wall Framing System: Webb Core Cleanroom Wall System with all hardware including head track, floor track, corner details, and appurtenances.

1. Construction:
 - a. Head track: Extruded aluminum for connection to the ceiling grid. Head track to provide vibration isolation between CRW and ceiling system. Allow 3/4 inch minimum vertical movement, in addition to wall system support and removal; 2-inch-wide maximum.
 - b. Studs:
 1. For single wall (1/4" panel on one side): Extruded aluminum with continuous threaded screw boss on one side for attachment of batten, and continuous open slot on other side to accept standard Unistrut pipe-clamps and fittings, or vinyl closure.
 2. For double wall (nominal 2" panel): Extruded aluminum with a continuous threaded screw boss on either side for attachment of batten.
 - c. Floor Track: Extruded aluminum for connection to cleanroom floor at 18- inch-on-center minimum.
 - d. Panel Batten: Extruded aluminum for connection to framing studs at 12 inches on center. Continuous vinyl closure cover over fasteners.
 - e. Miscellaneous Components - Corners, Door Frames, Bulkhead Frames.
2. Finish
 - a. Aluminum Head Track, Studs, Battens, and Floor Track: Clear anodized.
 - b. Vinyl Closures: Standard colors - black, white, shell, and others upon request.

PART 3 – EXECUTION

3.1 INSTALLATION

- A. The nature of the completed facility demands special attention to maintaining an overall cleanliness in the project area.
- B. All installation methods shall be in accordance with the latest recommendations of the component manufacturer and in conformance with this Specification. Accurately align and securely anchor framing and finish members in accordance with Drawings. Position framing vertically, spaced as required. Locate framing adjacent to door frames, openings, door pockets, partition intersections, and comers. Lock wall panels securely in place, flush with adjacent panels.

- C. Assemble partition components into a rigid structure with tight, straight-line joints. Completed installation shall be free of exposed bolts, nuts, rivets, and fasteners within the cleanroom area, and shall interface with all mechanical and electrical work in a clearly pre-planned and craftsman-like installation.

3.2 CONDITIONS OF SURFACES

- A. Examine substrates and adjoining construction and conditions under which Work is to be installed. Do not proceed with the Work until unsatisfactory conditions have been corrected.

3.3 ERECTION

- A. Verify dimensions of supporting structure by field measurements to insure cleanroom wall will be accurately designed, fabricated, and fitted to the structure.
- B. Coordinate cleanroom wall work with the work of related sections. Provide items to be placed during the installation of other work at the proper time to avoid delays in the Work. Place such items, including inserts and anchors, accurately in relation to the final location of the cleanroom wall system components using locking type devices at all connections.
- C. Erect all component parts of the cleanroom wall in accordance with the manufacturers written instructions and recommendations.
- D. Erection Tolerances - erect all component parts within the following tolerances: Variations from plumb or angle shown: 1/8 inch maximum variation in height or 10-foot run, noncumulative.
- E. Cutting and Trimming of Component Parts:
 - 1. Cut and trim component parts of the cleanroom wall during erection only with the approval of the manufacturer or fabricator, and in accordance with their recommendations. Restore finish completely to protect material and remove all evidence of cutting and trimming. All cutting and trimming to be done outside the cleanroom area.
 - 2. Field cutting shall conform to fire safety requirements.
 - 3. Field cut and drill panels for installation of electrical and telephone device box block outs and conduit at locations indicated.
- F. Do not erect members which are observed to be warped, bowed, deformed, or otherwise damaged or defaced to such extent as to impair strength or appearance. Remove and replace members damaged in the process of erection.
- G. Set units level, plumb, and true to line, with uniform joints. Support and secure in place by bolting to clip angles and similar supports anchored to supporting structure.

- H. Paint concealed contact surfaces of dissimilar materials with a heavy coating of isolation paint, or provide other separations as per manufacturers recommendations.

3.4 CLEANING

- A. Provide cleaning in accordance with Project Specifications.
- B. Provide cleaning methods required for each component part as recommended by the manufacturer.
- C. The nature of the project requires special attention to minimizing potential contamination of the fully developed cleanroom environment. All construction dust and contaminants left on surfaces or in recesses that will be exposed to cleanroom air will have the effect of unduly loading up the filter system. Daily cleanup and vacuuming of the work area is essential for an ongoing control of contaminants, especially as the cleanroom fit-up progresses.

3.5 PROTECTION

- A. Protect the cleanroom wall system throughout the construction period in a clean and properly protected condition so it will be without any indication of use or damage at the time of Substantial Completion.
- B. Protect the Work during shipment, storage, erection, and construction so as to avoid development of non-uniformity of appearance or other deleterious effects in the Work.
- C. Remove protection when no longer required.
- D. Materials found to be defective or improperly installed shall be replaced.