

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Provide and install medical equipment support system for Owner-Furnished-Vendor-Installed equipment booms.

1.02 RELATED SECTIONS

- A. Section 01330 – Delegated Design Procedures
- B. Section 09260 - Gypsum Board Assemblies

1.03 SUBMITTAL

- A. Delegated Design: Vendor shall provide design and engineering services as described in Section 01350 Delegated Design Procedures.
- B. Shop Drawings: Successful vendor shall submit documents showing the complete system, including plans, sections and details of the system. Plans shall show all manufactured parts, by catalog numbers, all fabricated parts, and all fasteners and hardware.

1.04 QUALITY ASSURANCE

- A. Material and installation shall be provided by a qualified vendor, with at least five (5) years experience in the manufacture and installation of adjustable metal framing supports. Vendor shall demonstrate experience of projects of similar scope and size, and shall maintain a continuing quality assurance program for both its material and installation crews.
- B. Vendor shall provide the single source responsibility for materials and workmanship.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

- A. Acceptable manufacturers include:
 - 1. Unistrut Corporation, www.unistrut.com
- B. Substitutions: See Section 01600 - Product Requirements for substitution procedures.

2.02 MATERIALS - GENERAL

- A. Materials used shall conform to the following ASTM specifications: ASTM 653SQ33, ASTM A570 Grade 33, ASTM A575, ASTM 675 Grade 50, SAE J429 Grade 2.
- B. All materials shall be protected from corrosion with a factory applied finish.
- C. All materials shall be stamped and identifiable by manufacturer and part number (where appropriate). Materials that appear damaged, distressed, unidentifiable or rusted shall not be used and will not be accepted.

2.03 2.03 COMPONENTS

- A. Structural steel members:
 - 1. Steel Angles and Plates: ASTM A 36/A 36M
 - 2. Steel W Shapes and Tees: ASTM A 992/A 992M
 - 3. Hot-Formed Structural Tubing: ASTM A 501, seamless or welded
 - 4. Steel Sheet: ASTM A 1011/A 1011M, Designation SS, Grade 30 hot-rolled, or ASTM A 1008/A 1008M, Designation SS, Grade 30 cold-rolled
 - 5. Structural Bolts and Nuts: Carbon steel, ASTM A 307, Grade A
 - 6. Shop and Touch-Up Primer: Fabricator's standard, complying with VOC limitations of authorities having jurisdiction.
- B. Ceiling anchorage: Whenever possible, attachment to ceiling structure above shall be done by means of imbedded concrete inserts, through bolts, or by direct attachment to the structural framing of the building.
- C. Seismic bracing: Support system shall be braced to meet all applicable seismic code requirements.

- D. Loading: The support structure shall be designed to support a concentrated load as required by medical equipment manufacturer. The concentrated load shall be the maximum that will be encountered by positioning the equipment at the extremities of its travel (maximal load configuration).
- E. Safety factor: The system shall be designed with a minimum safety factor of 2 and one half (2.5) based on ultimate strength under static loading conditions.
- F. Design tolerances: System shall be true, plumb and level to the tolerances indicated by medical equipment manufacturer, but no more than 1/720th of the span maximum deflection in either plane when maximum loading conditions are applied during equipment operation.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. The contractor shall make field measurements to assure that the medical support can be installed according to plans, and without interference with structural framing, mechanical systems, plumbing or other obstructions. Any interferences shall be reported to the Architect.

3.02 INTERFACE WITH OTHER WORK

- A. The contractor shall assure that the support system is installed in a timely and practical sequence, ahead of any extensive electrical, mechanical or HVAC work in the area, and prior to any ceiling framing or room finishes.

3.03 ERECTION

- A. Erect equipment support system according to final approved design documents.
- B. Any changes or modifications from approved shop drawings shall require approval from the architect and engineer, and shall be noted on the final drawings.

3.04 CLEANING

- A. Protect installed support system from subsequent construction operations.

END OF SECTION