

Construction Specification Institute (CSI) Master Format

Section 1106 70 Schedules for Healthcare Equipment

MEDICAL EQUIPMENT MANAGEMENT RAIL SYSTEM

PART 1 - GENERAL

1.01 SECTION INCLUDES

- A. Fairfield-style medical equipment management rail system that provides a means to support and secure the following Owner-furnished medical devices and equipment to the wall - and to easily re-position those devices or equipment along the rail - or move them to another rail. Accessories may include but are not limited to:
 - 1. Sharps containers.
 - 2. Glove box dispensers.
 - 3. Diagnostic Instruments/Monitors
 - 4. Sphygmomanometers.
 - 5. Soap/Sanitizer dispensers.
 - 6. Paper towel dispensers.

1.02 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Marked-up to reflect scope and requirements of this Project.
- C. Shop Drawings: Include schedule identifying rooms receiving rail systems.
 - 1. Identify rail lengths and which adapters and accessory mounting plates are required in each room.

PART 2 - PRODUCTS

2.01 MANUFACTURER

- A. Paladin Healthcare LLC; Evolution Equipment Management Rail System: www.paladinhc.com.
- B. Substitutions: Not permitted.

2.02 COMPONENTS

- A. Rails: Seamless extruded aluminum profile with a clear anodized finish.
 - 1. Rail shall have a groove for attaching a friction-fit and lockable adapter that supports the identified Owner-furnished devices and equipment. To prevent accidental dislodgment, design the groove so that a 7-degree tilt is required to attach the adapter.
 - a. Edge-to-Edge Face Dimension: 1.145 inches.
 - b. Face-to-Back Dimension: 1.175 inches.
 - c. Factory-cut to lengths indicated.
 - 1) Lengths greater than 10 feet shall be joined together using manufacturer's joiner piece.
 - d. Screw Holes in Rail for Mounting to Wall: Pre-drilled on 16-inch centers.
 - 1) Exception: Provide two mounting holes in rails less than 16-inches long.
 - 2. Face profile of rail shall facilitate the insertion of a decorative inlay strip in the field. Inlay strip shall be a high-pressure decorative laminate material designed to resist most hospital cleaning and disinfecting chemicals. Pre-cut inlay strip to match length of rail.
 - a. Color of Laminate Inlay Strip: Wilsonart; _____: www.wilsonart.com.
 - 3. At each end of rail, provide friction-fit closure caps constructed of white injection-molded thermoplastic material designed to resist most hospital cleaning and disinfecting chemicals and embedded throughout with a zinc-based anti-microbial compound that cannot be scratched or wiped off.

- B. Adapters:
 1. Design and manufacture adapters to be easily snapped on and off any standard Fairfield-style rail by employing a 7-degree upward tilt.
 2. Adapters shall utilize a spring-loaded friction fit to hold the attached product in place when snapped onto the rail and yet allow the product to slide horizontally along the rail until locked in place.
 3. Install Allen-type screws in the bottom of the adapter. Tighten screws to lock the accessories and equipment in place.
 4. Material: Molded medical-grade plastic embedded throughout with a zinc-based anti-microbial compound that cannot be scratched or wiped off.
 - a. Exceptions for heavy loads, and at rail manufacturer's direction, provide multiple adapters, double-width adapters, and/or aluminum adapters extruded from aluminum alloy with a clear-anodized finish.
- C. Accessory Mounting Plates:
 1. Material and Finish: Aluminum having a powder-coated finish with anti-microbial silver-ion technology.
 2. Sizes and locations of holes in mounting plates shall match sizes and pattern on the back of the device to be hung.
 4. Additional holes shall be drilled on plates mounting accessories which may need field height adjustment (Foam/Soap, Sharps containers, Paper Towel holders etc.) based on fixed heights of casework or changing designs of 3rd party manufacturers.
 3. To maintain plumb orientation of plates taller than six inches, or those carrying cantilevered loads, manufacture shall provide 1-1/2-inch long hollow cylindrical polymer anti-microbial standoffs near the bottom edges.
- D. Hardware for Mounting to Wall: 1/4-inch-diameter fasteners furnished by manufacturer of rail system and of type suitable for relevant wall framing or substrate - and exceeding loading capability specified in Part-3 article entitled "Examination."

PART 3 - EXECUTION

3.01 EXAMINATION

- A. The loading capability of the rail system is dependent on the load-bearing capacity of the wall or partition to which it is mounted.
 1. In the case of metal-stud-and-gypsum-board construction, this includes the adequacy of the installation of both the metal framing and the gypsum board.
- B. Installed rail system shall be able to accommodate a functional loading of 62 foot-pounds of torque per foot between 16-inch centers.
 1. Exception: Rails less than 16 inches shall accommodate 20 pounds of direct weight.
- C. Notify Architect if it appears that relevant existing or new walls or partitions are not capable of accommodating this loading.

3.02 INSTALLATION

- A. Install rail system in strict accordance with manufacturer's installation instructions and approved Shop Drawings.
 1. Comply with licensure rules and local, state, and national codes applicable to this installation.
 2. Contact manufacturer with installation questions prior to beginning installation.
- B. Position and level the rail on the wall at the correct height and location as shown on approved Shop Drawings. Mark location on wall.
- C. For Stud Mounting:
 1. Align holes in rail with studs. If required, drill new holes into rail to align with stud locations.
 2. Drive 1/4-inch-diameter sheet-metal screws through rail and drywall and securely fasten into studs.

- D. For Mounting through Gypsum Board to Metal or Wood Backing:
 - 1. Mark through each of the pre-drilled holes in the rail and onto the drywall.
 - 2. Use 1/4-inch-diameter screws to securely mount the rail to the wall.
 - a. For sheet metal backing use sheet-metal screws.
 - b. For wood backing, use wood screws.
- E. For Mounting to Gypsum Board without Backing:
 - 1. Mark through each of the pre-drilled holes in the rail and onto the drywall.
 - 2. Remove the rail and securely install toggle-type wall anchors with a 1/4-inch nominal diameter in locations as marked.
 - 3. Realign the rail holes with the installed wall anchors and tightly secure the rail to the wall with the wall anchor machine screws.
- F. Ensure a tight fit between rail and wall.
- G. Remove location marks that remain visible after installation.
- H. Insert supplied inlay strip into grooves and secure end caps.
- I. Mounting of Owner-furnished medical devices and equipment to their respective adapters and accessory mounting plates may be included in the scope of work by the vendor. Owner (or owner representative) shall install accessories in rooms to which they have been assigned on approved Shop Drawings.

3.03 ADJUSTING AND CLEANING

- A. Remove packaging – and dust and debris created during mounting.
- B. Touch-up wall finishes if necessary to remove evidence of location marks.

END OF SECTION