

SECTION 087111

SLIDING DOOR TRACK AND HARDWARE SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

- A. Provide track and hardware for sliding door systems, including:
 - 1. Pocket frames.
 - 2. Track systems.
 - 3. Automatic sliding door systems.
- B. Related Sections: Coordinate with the following as applicable:
 - 1. Section 087112 – Sliding Door Locking Hardware.

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's literature including product characteristics and accessories.
- B. Shop Drawings: Submit details of construction and mounting. Provide templates for hardware preparation of doors and frames to be performed in factory.
- C. Closeout Submittals:
 - 1. Operation and Maintenance Data.
 - 2. Provide any specialized tools required for Owner's adjustments.

1.3 PERFORMANCE REQUIREMENTS

- A. Compliance: Comply with the following standards and guidelines as applicable to products specified in this Section:
 - 1. ANSI/ DHI A115.IG – Installation Guide for Doors and Hardware.
 - 2. American with Disabilities Act (ADA) 2010 Standards for Accessible Design.
 - 3. ANSI A117.1 Accessibility Guidelines for Building and Facilities.
 - 4. All state and local accessibility standards.
- B. Operating hardware shall be fully exposed and usable from both sides at all times.
- C. Doors shall comply with maximum opening force of 5 lbf applied parallel to door at latch.

1.4 QUALITY ASSURANCE

- A. Manufacturer: Minimum of 5 years experience manufacturing similar products.
- B. Installer: Minimum of 2 years experience installing similar products.
- C. Field Measurements: Coordinate with field measurements to ensure proper support and installation.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials and products in unopened factory labeled packages. Store and handle in strict compliance with manufacturer's instructions and recommendations.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Basis-of-Design: Cavity Sliders, 548 Finney Ct., Gardena CA 90248. Toll Free 1-888-466-0030. Fax 310-769-5824.

2.2 POCKET FRAMES

- A. Pocket Frames: CS CavitySlider Pocket Frame by Cavity Sliders with the following characteristics:
 - 1. Capacity: 500 lb (240 kg).
 - 2. Material: Extruded aluminum.
 - 3. Supplied as kitset and easy to assemble.
 - 4. Door Thickness: 1-3/8 to 1-3/4 inches (35 to 44 mm).
 - 5. Width: Up to 4 feet (1219 mm).
 - 6. Height: Up to 8 feet (2438 mm).
 - 7. Features: Suitable for residential or commercial use and compliant with Type 1 construction requirements.

2.3 TRACK SYSTEMS

- A. Sliding Door Tracks: CS CaviTrack by Cavity Sliders with the following characteristics:
 - 1. Capacity: 500 lb (240 kg).
 - 2. Material: Extruded aluminum.
 - 3. Height: 1-11/16 inches (42 mm).
 - 4. Width: 1-3/4 inches (44 mm).
 - 5. [Single Action Soft Stop: CS SofStop with [no stops.] [one stop.] [two stops.]]
 - 6. [Double Action Soft Stop: CS SofStop with [no stops.] [one stop.] [two stops.]]
 - 7. Features:
 - a. Notched for simple carriage insertion.
 - b. Pre-machined mounting holes.
 - c. Minimal clearance prevents carriages or wheels from jumping off track or jamming.
- B. Sliding Door Tracks: CS FH-Ceiling Mount Track - Single by Cavity Sliders with the following characteristics:
 - 1. Material: Extruded aluminum.
 - 2. Capacity: 500 lb (240 kg).
 - 3. Height: 1-7/16 inches (36 mm).
 - 4. Width: 3-9/16 inches (90 mm).
 - 5. [Single Action Soft Stop: CS SofStop with [no stops.] [one stop.] [two stops.]]
 - 6. [Double Action Soft Stop: CS SofStop with [no stops.] [one stop.] [two stops.]]
 - 7. Features:
 - a. Notched for simple carriage insertion.

- b. For use with full height doors.
 - c. Full-length fins allow ceiling lining to be fixed flush with underside of track.
- C. Wall Mounted Sliding Door Tracks: CS WallMount Track - Single by Cavity Sliders with the following characteristics:
 - 1. Capacity: 500 lb (240 kg).
 - 2. Material: Extruded aluminum.
 - 3. Door Thickness: 1-3/8 to 1-3/4 inches (35 to 44 mm).
 - 4. Height: 2-1/2 inches (63 mm).
 - 5. Width: 2-1/2 inches (63 mm).
 - 6. [Single Action Soft Stop: CS SofStop with [no stops.] [one stop.] [two stops.]]
 - 7. [Double Action Soft Stop: CS SofStop with [no stops.] [one stop.] [two stops.]]
 - 8. [Fascia: 3-15/16 x 2-3/16 inches (100 x 56 mm).]
 - 9. Features:
 - a. Suitable for surface sliding applications.
 - b. Pre-machined fixing slots.
- D. Barn Door Tracks: CS Barn Door Track - Single by Cavity Sliders with the following characteristics:
 - 1. Capacity: 650 lb (300 kg).
 - 2. Material: Extruded aluminum.
 - 3. Finish: Black anodized
 - 4. Height: 11-3/4 inches (298 mm).
 - 5. Width: [] [3-7/16 inches (87.5 mm)].
 - 6. [Hangers and Stops: CS Barn Door Hangers and Stops Pack.]
 - 7. [Stop: SofStop 264 lb. (120 kg) Single Pack for CS Barn Door Track.]
 - 8. Features:
 - a. Suitable for surface sliding applications.
 - b. Pre-machined fixing slots.
 - c. Narrow and wide options available
- E. Double Sliding Door Tracks: CS Top Mount Track – Double 1-3/8 - Single by Cavity Sliders with the following characteristics:
 - 1. Capacity: 500 lb (240 kg).
 - 2. Material: Extruded aluminum.
 - 3. Door Thickness: 1-3/8 inches (35 mm).
 - 4. Height: 1-1/2 inches (37.5 mm).
 - 5. Width: 3-7/8 inches (97 mm).
 - 6. Features:
 - a. Pre-machined mounting holes.
 - b. Quick release system allows door to be removed easily.
- F. Double Sliding Door Tracks: CS Top Mount Track – Double 1-3/4 - Single by Cavity Sliders with the following characteristics:
 - 1. Capacity: 500 lb (240 kg).
 - 2. Material: Extruded aluminum.
 - 3. Door Thickness: 1-3/4 inches (44 mm).
 - 4. Height: 1-1/2 inches (37.5 mm).

5. Width: 4-3/16 inches (106.5 mm).
 6. Features:
 - a. Pre-machined mounting holes.
 - b. Quick release system allows door to be removed easily.
- G. Triple Sliding Door Tracks: CS Top Mount Track – Triple 1-3/8 - Single by Cavity Sliders with the following characteristics:
1. Capacity: 500 lb (240 kg).
 2. Material: Extruded aluminum.
 3. Door Thickness: 1-3/8 inches (35 mm).
 4. Height: 1-1/2 inches (37.5 mm).
 5. Width: 5-11/16 inches (144 mm).
 6. Features:
 - a. Pre-machined mounting holes.
 - b. Quick release system allows door to be removed easily.
- H. Triple Sliding Door Tracks: CS Top Mount Track – Triple 1-3/4 - Single by Cavity Sliders with the following characteristics:
1. Capacity: 500 lb (240 kg).
 2. Material: Extruded aluminum.
 3. Door Thickness: 1-3/4 inches (44 mm).
 4. Height: 1-1/2 inches (37.5 mm).
 5. Width: 6-7/16 inches (163 mm).
 6. Features:
 - a. Pre-machined mounting holes.
 - b. Quick release system allows door to be removed easily.
- I. Double Sliding Door Tracks: CS FH-Ceiling Mount Track – Double 1-3/8 - Single by Cavity Sliders with the following characteristics:
1. Capacity: 500 lb (240 kg).
 2. Material: Extruded aluminum.
 3. Door Thickness: 1-3/8 inches (35 mm).
 4. Height: 1-7/16 inches (36.5 mm).
 5. Width: 5-1/2 inches (140 mm).
 6. Features:
 - a. Notched for simple carriage insertion.
 - b. For use with full height doors.
 - c. Full-length fins allow ceiling lining to be fixed flush with underside of track.
- J. Double Sliding Door Tracks: CS FH-Ceiling Mount Track – Double 1-3/4 - Single by Cavity Sliders with the following characteristics:
1. Capacity: 500 lb (240 kg).
 2. Material: Extruded aluminum.
 3. Door Thickness: 1-3/4 inches (44 mm).
 4. Height: 1-7/16 inches (36.5 mm).
 5. Width: 5-1/2 inches (140 mm).
 6. Features:

- a. Notched for simple carriage insertion.
 - b. For use with full height doors.
 - c. Full-length fins allow ceiling lining to be fixed flush with underside of track.
- K. Triple Sliding Door Tracks: CS FH-Ceiling Mount Track – Triple 1-3/8 - Single by Cavity Sliders with the following characteristics:
 - 1. Capacity: 500 lb (240 kg).
 - 2. Material: Extruded aluminum.
 - 3. Door Thickness: 1-3/8 inches (35 mm).
 - 4. Height: 1-1/2 inches (38 mm).
 - 5. Width: 7 inches (177 mm).
 - 6. Features:
 - a. Notched for simple carriage insertion.
 - b. For use with full height doors.
 - c. Full-length fins allow ceiling lining to be fixed flush with underside of track.
- B. Triple Sliding Door Tracks: CS FH-Ceiling Mount Track – Triple 1-3/4 - Single by Cavity Sliders with the following characteristics:
 - 1. Capacity: 500 lb (240 kg).
 - 2. Material: Extruded aluminum.
 - 3. Door Thickness: 1-3/4 inches (44 mm).
 - 4. Height: 1-1/2 inches (38 mm).
 - 5. Width: 7-3/4 inches (196 mm).
 - 6. Features:
 - a. Notched for simple carriage insertion.
 - b. For use with full height doors.
 - c. Full-length fins allow ceiling lining to be fixed flush with underside of track.
- B. Heavy Duty Sliding Door Tracks: CS Heavy Duty Track - Single by Cavity Sliders with the following characteristics:
 - 1. Capacity: 1100 lb (500 kg).
 - 2. Material: Extruded aluminum.
 - 3. Height: 2-3/16 inches (56 mm).
 - 4. Width: 3-1/16 inches (77.5 mm).
 - 5. Features:
 - a. Ultra heavy duty construction.
 - b. Supports up to 1100 lb (500 kg).
- C. Glass Clamp: CS Frameless Glass Clamp by Cavity Sliders with the following characteristics:
 - 1. Material: Extruded aluminum.
 - 2. Height: 2-3/8 inches (60 mm).
 - 3. Width: 1-5/8 inches (41 mm).
 - 4. Length: [2 feet (610 mm)] [3 feet (914 mm)] [4 feet (1219 mm)] [5 feet (1524 mm)] [6 feet (1829 mm)].
 - 5. Glass Thickness: [3/8 inches (10 mm)] [1/2 inches (12 mm)].
 - 6. Capacity: 500 lb (240 kg).
 - 7. Compatible with all standard CS tracks.

D. Carriage: M6 Carriage by Cavity Sliders with the following characteristics:

1. Wheels: Two wheels.
2. Capacity: 200 lb (91 kg).
3. Features:
 - a. Large diameter wheels with precision ground bearings.
 - b. Self centering hanger bolt.
 - c. High performance nylon tires.

E. Carriage: M8 Carriage by Cavity Sliders with the following characteristics:

1. Wheels: Four wheels.
2. Capacity: 500 lb (227 kg).
3. Features:
 - a. Large diameter wheels with precision ground bearings.
 - b. Self centering hanger bolt.
 - c. High performance nylon tires.

F. Carriage: M10 Carriage by Cavity Sliders with the following characteristics:

1. Wheels: Four wheels.
2. Capacity: 1000 lb (454 kg).
3. Features:
 - a. Large diameter wheels with precision ground bearings.
 - b. Self centering hanger bolt.
 - c. High performance nylon tires.

G. Collection System: CS Door Collection System by Cavity Sliders with the following characteristics:

1. Includes: Pick-up extrusion, guides, and fixing screws.
2. Doors: [2 Doors] [3 Doors].

H. Floor Channel and Guide: Floor Channel and Bearing Guide System by Cavity Sliders with the following characteristics:

1. Material: Aluminum with PVC insert.
2. Depth: 7/8 inch (22 mm).
3. Width: 15/16 inch (24 mm).
4. Roller Guide: [Double roller, stainless steel] [Single roller, stainless steel].

1.2 AUTOMATIC SLIDING DOOR SYSTEMS

A. Automatic Sliding Door Systems: CS AutoCav by Cavity Sliders with the following characteristics:

1. Belt: Steel reinforced belt.
2. Pulley: Self-tensioning roller pulley.
3. Track: Heavy duty one-piece extruded aluminum track.
4. Carriage: Large diameter wheels with precision ground bearings.
5. Access Panels: Ensure access to track section.

6. Controller: Fully programmable with many standard operating modes. Includes safety beam controller, object detection, and smart learning modes.
7. Motor: Locks doors in place without the need for solenoid or magnetic locking devices.
8. Gearbox: Precision cut metal gears and oil filled gearbox.
9. Safety Beam Sensors: Provide obstacle detection.
10. Guide: Hidden T-guide at base of the pocket.
11. Access Control: [Push button] [Overhead sensor] [Secure entry via touch pad] [Secure entry via swipe key] [_____].
12. Features:
 - a. Quality components designed for all parts of the system for product longevity and reduced servicing intervals.
 - b. No visible floor track.
 - c. Compatible with most control switching devices.
 - d. Fully assembled ready for installation.
 - e. Interface capable, can be wired to an overriding PLC or to work in conjunction with fire alarm and security systems.
 - f. Manual opening in event of power failure.

PART 2 - EXECUTION

2.1 EXAMINATION

- A. Examine substrates for compliance with requirements for installation tolerances and other conditions affecting performance. Proceed with installation only after unsatisfactory conditions have been corrected.

2.2 PREPARATION

- A. Steel Doors and Frames: Comply with ANSI/ BHMA A156-115.
- B. Wood Doors: Comply with ANSI/ BHMA A156-115W.

2.3 INSTALLATION

- A. Install products in strict accordance with manufacturer's instructions, approved submittals and in proper relationship with adjacent construction.
- B. Install hardware level, plumb, sure, true and straight.
- C. Clean track and hardware surfaces before hanging sliding doors.
- D. Test for proper operation and adjust until satisfactory results are obtained. Replace units which do not operate properly.

2.4 CLEANING

- A. Clean surfaces to remove soiling, stains, dust, and dirt using materials acceptable to manufacturer.

END OF SECTION