EXTERIOR SHUTTERS

SECTION 10 71 13

The McGill MS132- TELESCOPIC is a hardware system designed for sliding shutter and screens made of wood, metal or aluminum with a panel weight up to 132 lbs (60kg). Panels and sliding tracks are made to withstand high wind pressures and provide a low-maintenance alternative to historically accurate wooden shutters. Available in styles to fit residential and commercial buildings in any region. Each shutter is custom made to fit your specific window or opening, and built strong to be functional and almost maintenance-free. Custom cut-outs are also available upon request.
This hardware system for the manually-operated sliding shutters offers different fitting options. Attached to the ceiling or window lintel, the top track screws directly to the load-bearing surface. An angled profile support is available for wall fitting, whereby the top track is secured to the support profile using proprietary screws supplied by McGill Architectural Products Inc

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Furnish and install factory fabricated and finished sliding hardware system(s) in accordance with plans and specifications.

B. Related Sections:

a. Section 08 14 00 – Sliding Wood Doors

b. Section 08 71 00 – Door Hardware Cylinder Locks, Pulls, and Handles

c. Section 10 71 13 – Exterior Sun Control Devices

d. Section 09 90 00 - Painting and Coating

C. References:

a. ASTM B209-[2010], Specification for Aluminum and Aluminum-Alloy Sheet and Plate.

b. ASTM B221-[2013], Specification for Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes.

c. ASTM E330-[02], Standard Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference.

d. CAN/CSA-S157-[2005], Strength Design in Aluminum.

e. CAN/CSA-S136-[2007], North American Specification for the Design of Cold-Formed Steel Structural Members.

f. CAN/CSA W59.2-[M1991(R2003)], Welded Aluminum Construction.

g. CAN/CSA-B651-04 (r2010), Accessible Design for the Built Environment

1.2 SUBMITTALS

A. Submit under provisions of Section 01 30 00

B. Product Data: Submit manufacturer's product data, specific hardware details and installation instructions for all materials provided in this section.

C. Shop Drawings: Submit drawings that document layout, profiles, product components, anchorage details, track mounting and support, and adjoining interface construction.

D. Provide Manufacturer's Warranty. Minimum acceptable two (2) years.

1.3 QUALITY ASSURANCE

A. Sliding hardware system shall be certified and tested to the design performance criteria by an established independent testing laboratory.

B. Installer qualifications: approved by the hardware supplier

1.4 PRODUCT HANDLING

A. All materials shall arrive in the manufacturer's original sealed and labeled containers.

B. Hardware and track components shall be protected from damage and stored in a dry, well ventilated area. Store products in manufacturer's packaging until ready for installation. Immediately report any damaged material to carrier that made the delivery and note such damage on the carrier's freight bill of lading.

C. Precautions shall be taken during construction to ensure that hardware is not damaged. Do not install damaged goods. Damaged components shall be replaced.

1.5 SUBSTITUTIONS

A. Request for substitutions shall be submitted in writing to and approved by the Architect 30 days prior to bid date.

B. Requested substitutions shall meet the performance and quality standards of this section.

1.6 JOB CONDITIONS

A. Verify that other trades have completed the necessary related work before installing the sliding hardware track.

B. Floor and mounting surfaces shall be level, plumb, secure, true and straight. Substrates shall be of proper dimensions and material. Structural member that anchors the hardware system shall be of sufficient strength to support the attached loads.

1.7 WARRANTY

A. Manufacturer's Standard Warranty: Warranted materials shall be free of defects in product material for a period of two (2) years from the date of substantial completion.

PART 2 PRODUCTS

2.1 MANUFACTURER

A. Acceptable Manufacturer: **McGill Architectural Products**; 1050 Squires Beach Road, Pickering, Ontario, CA L1W 3N8. Tel: (905) 420-0485.

Toll free Tel: (888) 624-4557,Fax: (905) 420-4564, Toll free Fax: (888) 624-4558.Website: www.mcgillarchitectural.com.

2.2 SLIDING HARDWARE SYSTEM

A. McGill MS 132 -TELESCOPIC Sliding Hardware for sliding shutters weighing up to 132 lbs (60 kg), tested in accordance with CAN, ASTM E330-02, or EN 1932, EN 13659+A1(10/2008) standards for Resistance to Wind Loads and Operating Forces

1. Complete set for two to four shutters (550-1200mm), without top track, and bottom guide channels comprised of the following components:
   i. Two-wheeled trolley, M8, with DERLIN wheels
   ii. Top fixing plate stainless steel with hanger bolt M8
   iii. Track stop, with adjustable retainer
   iv. Toothed belt clamp
   v. Guide pulley wheel with fixing plate long
   vi. Guide pulley wheel with fixing plate short
   vii. Driver, wide
   viii. Driver counter-plate, wide
   ix. Toothed belt, black, 8'-10"(2700mm) fiberglass reinforced

2. Top track, for manual systems, aluminum plain anodized, predrilled for installation with or without covering screens of varying length , 8'-2"(2500mm),11'- 5"(3500mm), 19'-8"(6000mm) with Connecting bolts

3. Angled profile support for two sliding level, alum., plain anodized, predrilled of varying length , 8'-2"(2500mm) , 11'- 5"(3500mm), 19'-8"(6000mm) with Connecting bolts, Special fixing screws for securing top track to angled profile support.

4. Covering screens, aluminum, plain anodized of varying length , 8'-2"(2500mm) , 11'- 5"(3500mm), 19'-8"(6000mm) with Connecting bolts, Parts for fitting top track cover for manual systems, set of 5 pieces

5. Front cover plates for wall fitting, alum, plain anodized , 1 pair per set for one sliding level without spacer profile

6. Guides options
   i. Bottom guide channel, aluminum plain anodized, undrilled. 19'-8"(6000mm)
   ii. Stop bumper complete set
   iii. Z-guide profile, alum., plain anodized, undrilled, 19'-8"(6000mm)
   iv. Floor guide, rattle proof, short, for Z-profile

v. Floor guide, rattle proof, long, for Z-profile
vi. Single laterally adjustable, floor mounted guide, rattle proof, black plastic with standard or extended angle.
vii. Guide rattle proof, for screw mounting to floor, adjustable
viii. Point guide, Φ25mm, for sliding shutters
ix. Bottom door stop with centering assembly, dull chromium finish

7. Locking options (Optional)
   i. Catch for sliding shutters, stainless steel, with fixing screws.
   ii. bolt lock
      a. Bar bolt lock, backset 1-11/16”(42.5mm) socket square/hexagonal, complete
      b. Thumb turn, chromium finish, for panel thickness 1-3/8”-1-19/32”(35-40mm)
      c. Key for dead bolt lock
      d. Split-fit rose, brass, dull nickel finish
      e. Floor mounted sleeve with oblong hole and chromium plated brass spring cover
      f. Rosette for floor mounted sleeve
      g. Strike plate, chromium plated steel

2.3 OPERATING CONDITIONS

A. McGill MS 132-TELESCOPIC Hardware System shall operate smoothly, quietly and effortlessly.

PART 3 EXECUTION

3.1 EXAMINATION

A. Do not begin installation until support and floor substrates have been properly completed.

B. Verify structural supports are level and of adequate strength for applicable loads

C. Verify opening(s) dimensions prior to fabrication & assembly.

D. Notify Architect of unsatisfactory conditions.

3.2 PREPARATION

A. Site conditions shall be level, plumb, secure, straight and true. Area shall be dry, clean and free of debris.

B. Installer shall ensure hardware & track surfaces are clean and free of foreign matter.

3.3 INSTALLATION

A. Installation shall be completed by an installer with a minimum of five (5) years experience with approval by the architect in strict accordance with manufacturer’s instructions.

B. Sliding hardware system(s) shall be level, plumb, secure, true and straight and comply with manufacturer’s installation instruction.

C. Provide installation fasteners as required by the manufacturer.

D. Clean track and hardware surfaces before hanging sliding doors.

3.4 ADJUSTMENT

A. Upon installation, make appropriate adjustments and test hardware for ease of operation and safety.

END OF SECTION