

**c. j. rush industries**  
**4500 SERIES REVOLVING SECURITY DOOR SYSTEMS**  
**Section 08470**

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**I. GENERAL.**

**DESCRIPTION.**

Work included: Furnish labour, materials and other services to complete the fabrication and installation of the revolving doors complete with canopy, enclosure, factory glazed wings and curved glass. Include all materials and fitments required for the operation of the units in the manner, direction and performance shown on the shop drawings and specified herein. Work not included:(Specifier list).Related work specified elsewhere:(Specifier list).

**QUALITY ASSURANCE.**

Drawings and specifications for work of this section are based upon Series 4500 security revolving doors as manufactured by **c.j. rush industries**. Whenever alternative products are offered, submit supporting technical literature, samples, drawings and performance data for comparison 10 days prior to closing date.

**PERFORMANCE.**

Three wing design Series 4500 one way or two way controlled card access security revolving door with non-collapsible wings as manufactured by **c.j. rush industries**. Speed control unit shall be used which prevents rapid acceleration of the wings and provides smooth and progressive resistance up to a limit of 12 R.P.M. A control system based on programmable control with capability of expansion for additional inputs and outputs, and having the capability of being programmed to change functions. Compatibility with all types of card readers with a controller having full diagnostic capability. Capability of being interconnected with central control for monitoring and data acquisition. Pressure sensitive rubber mats for detection. Vertical load sensing device to detect hanging on the door leaf; and, emergency sequence to allow disabling of security functions upon activation from fire alarm system or authorized security personnel.

**MAINTENANCE AND GUARANTEE**

Provide data for maintenance and cleaning in accordance with instructions under General Conditions. Provide a written guarantee for the complete installation provided under this section against defective material and workmanship which appears within a period of one year from the date of substantial completion.

**II. PRODUCTS.**

**MATERIALS.**

Extrusions shall be 6063 T5 alloy and temper. Formed aluminum components shall be sheet of alloy and temper suitable for their purpose and finish. Fasteners shall be 300 series stainless steel or 400 series stainless steel cadmium plated and of sufficient size and quantity to perform their intended function. Glazing gaskets shall be extruded, black, closed cell or dense elastomer of durometer appropriate to the function. Door wing top rail weather-stripping shall be black neoprene/felt sweep. Door wing bottom rail weather-stripping shall be reinforced neoprene sweep. Door wing stile weather-stripping shall be black felt sweep with neoprene back-up.

**FINISH.**

**CLEAR ANODIZED.**

Exposed aluminum sections shall be given an anodic oxide treatment in accordance with Aluminum Association specification. #14 Clear (AA-M12C22A41), #17 Clear (AA-M12C22A31), OR,

**PERMANODIC HARD COLOR.**

Exposed aluminum sections shall be given an anodic oxide treatment to obtain an Architectural Class 1 Anodic Colour Coating in accordance with Aluminum Association specification AA-M12C22A42/44

Colour shall be: (Specify one of the following).

- #18 Champagne
- #26 Light Bronze
- #28 Medium Bronze
- #40 Bronze
- #29 Black

OR,

**FLUOROPOLYMER PAINT.**

Exposed aluminum sections shall be given a factory applied thermo-setting fluoropolymer coating in accordance with American Architectural Manufacturers Association specification AAMA 605.2. Colour shall match....(Specifier provide colour reference number).

OR,

**STAINLESS STEEL CLADDING.**

Exposed aluminum sections shall be clad in 304 stainless steel with a minimum thickness of 0.050" (1.27 mm). (Specifier to select mirror or satin polished finish).

OR,

**MUNTZ METAL CLADDING.**

Exposed aluminum sections shall be clad in alloy 280 Muntz metal with a minimum thickness of 0.050" (1.27 mm). (Specifier to select mirror or satin polished finish)

**HARDWARE.**

Hardware for revolving doors shall be **c.j. rush industries** standard hardware as follows:

Stainless Steel support arms and flanges.  
Concealed overhead electro-mechanical brake assembly and programmable controller.  
Standard deadlock in two (2) bottom rails locking into enclosure jambs.  
4" x 1/8" Stainless steel push bars electronic controller, brake, floor mat switch detectors, bearings, and weather-stripping.  
(Power supply by others).

**GLASS**

Glass shall be supplied by **c.j. rush industries** and shall be:  
Door wings: 6mm (A") tempered glass. (Clear or tinted as specified.)  
Enclosure: 8mm (5/16) laminated glass (Clear or tinted as specified.)

**FABRICATION.**

Construct door from extrusions of size and shape shown on shop drawings. Door top rails and bottom rails shall be porthole extrusions and corner construction shall be cap screws through stiles into integral screw splines in horizontal members.  
Enclosure joinery shall be clips and mechanical fasteners.  
Canopy shall be fabricated from... (Specifier select aluminum, stainless steel or Muntz metal).  
Enclosure glazing stops shall be screw applied.

**III. EXECUTION.**

**INSTALLATION.**

Doors shall be installed, glazed and adjusted by experienced personnel in accordance with the manufacturer's instructions and approved shop drawings. All items in this section shall be set in their correct location and shall be set level, square, plumb and at proper elevations and in alignment with other work.

**PROTECTION AND CLEANING**

Doors shall be protected from other building materials during and after installation until acceptance by the General Contractor. Thereafter, it shall be the responsibility of the General Contractor to maintain protection and provide final cleaning.