



4050 South 500 West, Salt Lake City, UT 84123 • (801) 261-8980 • FAX (801) 261-1612

ARCHITECTURAL SPECIFICATION

Circlelock Security Door

DIVISION 8 – DOORS AND WINDOWS

SECTION 08320 – SECURITY DOORS

PART I – GENERAL

1.01 SECTION INCLUDES

- A. This section covers the furnishing and installation of a complete Automatic Security Door System.
- B. Provide complete system that has been fabricated, assembled, and tested for proper operation at the factory. It includes curved side walls, canopy, ceiling, door wings, glass, motor drive systems, and security system as required for installation.

1.02 RELATED SECTIONS

- A. Section 07915 - Sealants, Caulking and Seals
- B. Section 08400 - Entrances and Storefronts
- C. Section 08710 - Door Hardware
- D. Section 08810 - Glass and Glazing
- E. Section 09600 - Flooring
- F. Section 16123 - Electrical Supply and Termination
- G. Section () - Security System

1.03 QUALITY ASSURANCE

- A. Manufacturer shall be a company specializing in the supply of automatic security doors with a minimum of 10 years experience.

1.04 SUBMITTALS

- A. Submit project specific shop drawings and finish samples.
- B. Indicate pertinent dimensions, general construction, component connections and locations, anchorage methods and locations, hardware, and installation details.

1.05 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials to job site in manufacturer's packaging undamaged, complete with installation instructions.
- B. Store off ground, under cover, protected from weather and construction activities.

1.06 PROJECT/SITE CONDITIONS

- A. Install security door below finished floor. Floor must be dead level at any point within the footprint of the revolving door.

1.07 WARRANTY

Boon Edam warrants its products against defects in material and workmanship for a period of one (1) year from the date of substantial completion or one and one half (1 ½) years from date of shipment. This warranty excludes glass breakage, normal wear on finishes or damage that occurs due to abuse, misuse or acts of God.

PART II – PRODUCTS

2.01 MANUFACTURER

Circlelock Automatic Security Door Model CL500 (3'-3") or CL 750 (5'-0") as manufactured by:
Boon Edam, Inc., 4050 South 500 West, Salt Lake City, Utah 84123.
(801) 261-8980 Fax: (801) 261-1612 Homepage: www.boonedam.com

2.02 DOOR CONSTRUCTION

- A. Curved Side Walls and Canopy: Shall be manufactured from six (6) extruded aluminum posts, four (4) 8" high one-piece extruded aluminum canopies and two (2) extruded aluminum bottom rails.
- B. Door Leafs: Two non-collapsing sliding door leafs manufactured of 1 3/4" wide aluminum extrusions.
- C. Ceiling: Shall be fabricated of formed aluminum sheet. Ceiling must be secured in position and removed only by authorized personnel.

2.03 EQUIPMENT

- A. Drive System: Overhead drive system with two 1/4 HP AC motors attached to the internal structural framing. The door shall be powered by a 208-230 VAC, single phase with ground service. The motor shall utilize a Frequency Controller to provide for the following characteristics:
 - 1. Adjustment of door speed through a digital setting
 - 2. Constant regulation of door speed
- B. Locking Assembly: Locking of the interior door (secured side) shall be by a fail-secure lock. Locking of the exterior door (non-secured side) shall be by a fail-safe lock. Both doorwings to remain locked at all times until unlocked by authorized signal from an access control device or building/fire/smoke alarm. Loss of power will unlock the fail-safe locking unit only, to prevent entrapment. (Option: Both doors can be fail-safe)
- C. Controls: Microprocessor-based electronics utilizing a 2000-step Programmable Logic Controller (PLC) with the following characteristics:
 - 1. RAM & ROM memory
 - 2. Self-diagnostics for quick detection of problem source
 - 3. Visual display of problem source

2.04 SECURITY EQUIPMENT

- A. Weight Sensor System: Electronic Load Cells installed in a steel framework under the floor of the door and capable of performing the following functions:
 - 1. Measure the weight on the floor in the door compartment
 - 2. Determine if the measured weight exceeds the weight of the preset parameters. If the weight is outside of the preset parameters, the door will immediately stop and the alarm will activate.
- B. Actuation: Door actuation by external card reader, biometric reader, key pad or remote push button. Although tied into the Circlelock, actuation devices are not by Boon Edam.

2.05 SENSOR SYSTEM

- A. Sensor Switches: A system of pressure sensitive switches in front of sliding door wings will stop the door's movement immediately upon compression. All switches must be tied into the programmable logic controller, give a visual signal when malfunctioning and cause the door to stop moving until corrected. System components shall be incorporated as follows:
 - 1. S.R.D. (Sensor Rail Doorwing): A multi-directional, closed-contact pressure sensitive switch contained within a black rubber profile mounted on the edge of each sliding door wing that will immediately stop the door's movement if compressed.
- B. Emergency Egress Doors: The two doors shall automatically slide open to allow for unobstructed egress in cases of building fire alarm. This will not occur during loss of power failure.

2.06 HARDWARE/MATERIALS

- A. Tempered Glass: All curved glass shall be 1/4" clear bent tempered safety glass. All glass shall meet ANSI standard Z 97.1.
- B. Laminated Glass (Optional): 7/16" clear curved laminated safety glass is available as an option. All glass shall meet ANSI standard Z 97.1.
- C. Bullet Resistant Glazing (Optional): Bullet resistant glazing up to Level I is available as an option.
- D. Aluminum Extrusions: All commercial grade extrusions shall be of aluminum alloy 6063-T6 per ASTM B-221.
- E. Aluminum Sheets: Shall meet ASTM B-209 and be of .063 minimum thickness.
- F. Weather Stripping: Genuine mohair weather stripping on all required edges of door wings to provide a seal between door wings and drum that meets ASTM E-283.

2.07 FINISH

The following finishes are available for the enclosure walls, sliding door wings and ceiling.

- A. Anodized Coatings
 - 1. AAMA 611 Architectural Class 1 Clear anodized Type AA-M10C22 A41
 - 2. AAMA 611 Architectural Class 1 anodized Type AA-M10C22 A42: Light, Medium and Dark Bronze, Black and Champagne.
- B. Painted Coatings
 - 1. AAMA 2605 Superior Performing Organic Coatings (e.g.: Duranar, Fluorpon; 70% Kynar Fluoropolymers).
 - 2. AAMA 2604 High Performance Organic Coatings (e.g.: Powder Coating).
- C. Stainless Steel Clad Type 304
 - 1. #4 Brushed Satin
 - 2. #6 Brushed Satin Fine-Lined
 - 3. #8 Highly Polished (mirror finish)
- D. Bronze Clad Alloy #280 (Muntz Metal)
 - 1. #4 Brushed Satin
 - 2. #8 Highly Polished (mirror finish)

PART III – EXECUTION

3.01 INSTALLATION

- A. Inspection: Installer must examine the location and advise the Contractor of any site conditions unacceptable for proper installation of product. These conditions include but are not limited to the following:
 - 1. Floor cutout not yet provided.
 - 2. Floor must be dead level at any point within the footprint of the door.
 - 3. Power supply must be installed.Installation shall not begin until these unacceptable conditions are rectified.
- B. Erection: Install revolving doors in accordance with manufacturer's printed instructions. Set units level, plumb, and with uniform hairline joints. Anchor securely into place. Use only factory trained installers.
- C. Adjustment: Installer shall adjust door, hardware and sensors for smooth operation and proper performance.
- D. Instruction: A factory-trained installer shall demonstrate to the owner's maintenance crew the proper operation of the door and the necessary service requirements such as lubrication, cleaning, and inspection of components upon completion of installation.
- E. Cleaning: Clean metal and glass surfaces carefully after installation to remove excess caulk, dirt and labels.

Boon Edam, Inc. reserves the right to change this specification at any time without notice.