



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

ARCHITECTURAL SPECIFICATION

TG-Crystal Manual Revolving Door

DIVISION 8 – DOORS AND WINDOWS

SECTION 08470 – REVOLVING DOORS

PART I – GENERAL

1.01 SECTION INCLUDES

- A. This section covers the furnishing and installation of a complete All-Glass Manual Revolving Door System. Provide complete system that has been fabricated, assembled, and tested for proper operation at the factory. It includes curved glass sidewalls, glass ceiling, door wings, hardware, speed control and emergency collapsing mechanism as required for installation.

1.02 RELATED SECTIONS

- A. Section 07915 - Sealant, 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

1.03 QUALITY ASSURANCE

- A. Manufacturer shall be a company specializing in the supply of manual revolving doors with a minimum of 10 years experience.
- B. Installer shall supply a factory-trained supervisor during installation of the door.

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. Revolving doors install only in the floor in a factory approved mat well trim. Floor must be dead level at any point within the footprint of the revolving door.

1.07 WARRANTY

Boon Edam warranties 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

TG Crystal Manual Revolving Door 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: Shall have a standard inside diameter of 6'-6 ¾" (only available in 4-wing), 7'-2 5/8", 7'-10 ½" and be manufactured from 5/8" curved laminated safety glass.
- B. Door Wings: Three or four doors as designed and manufactured from ½" tempered safety glass with stainless steel clad Poly-Carbonate channels and removable horsehair weather stripping on three sides. Door wings must be capable of folding forward or backward allowing for emergency egress.
- C. Ceiling: Shall be fabricated from 11/16" tempered laminated safety glass.
- D. Stainless Steel Connectors: Polished stainless steel connectors between sidewalls and ceiling.

2.03 EQUIPMENT

- A. Speed Control: Floor-mounted manual speed control attaches to the center rotating shaft and limits the rotation speed of the door to a preset RPM not to exceed 12 revolutions per minute. Operating in an oil bath, the centrifugal braking unit can be adjusted for lower maximum speeds to meet code requirements.
- B. Emergency Collapsing Mechanism: Precision-engineered door hangers and disks to allow the door wings to be collapsed, or folded, and stored in a bookfold position. Hangers and disks are finished in black and provide tension to hold the door wings in position until a strong force, not to exceed 130 pounds, is applied to the outer stile of the door wing to meet NFPA, BOCA code requirements.
- C. Surface Applied Slide Bolt Locks: Two (2) standard 1 3/4" x 5 5/8" surface-mounted deadbolt locks with removable, keyed cylinders that lock into the floor on the two interior door wings.

2.04 HARDWARE/MATERIALS

- A. Tempered Glass: All flat glass in door wings shall be ½" clear tempered safety glass. All glass shall meet ANSI standard Z 97.1.
- B. Laminated Glass: All curved glass in sidewalls shall be clear 5/8" curved laminated safety glass. All glass shall meet ANSI standard Z 97.1.
- C. Ceiling Glass: All flat ceiling glass shall be 11/16" tempered laminated safety glass. All glass shall meet ANSI standard Z 97.1.
- D. Weather Stripping: Genuine horsehair weather stripping on all required edges of door wings to provide a seal between door wings and drum that meets ASTM E-283.
- E. Bumpers: rigid, rubber-tipped bumper located on the top upper right hand corner of each door wing to prevent door wings from contacting one another when in the bookfold position.
- F. Pivot: Ceiling mounted pivot above the center shaft to provide smooth rotation.
- G. Center Shaft: Stainless steel shaft with connections to the speed control and pivot.
- H. Push Bars: Provide 1" diameter vertical stainless steel push bars. (Horizontal mounted push bars are available as an option.)
- I. Speed Control Cover: Provide square stainless steel floor mounted cover over recessed speed control.

(Optional round stainless steel cover available.)
- J. Matwell Ring: Stainless Steel tube embed frame required to be installed in floor prior to the installation of the door.

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 must be dead level at any point within the footprint of the door
 - 2. Finished floor matwell trim not yet installedInstallation shall not begin until these unacceptable conditions are met.
- 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 and hardware 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.