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CRANE

**Revolving
Doors**



Distinctive Entrances — Six decades of leadership in revolving doors

Configured for the most demanding application — yours

For more than 60 years, Crane Revolving Doors™ has been the pioneer in revolving door technology. Our passion for quality, precision, and innovative design makes our products favorites among architects, specifiers, interior designers, end-users, and others in the commercial building trades.

Crane Revolving Doors are available in hundreds of configurations to meet virtually any application. You choose the glass, metal, and finish as well as design, size, accessories, and

attachment plan. Our team of highly skilled engineers and dedicated craftsmen will deliver a door that is both functional and beautiful. In fact, Crane is one of the only manufacturers in the world that still offers a fully welded product—a testament to our commitment to quality.

Businesses put great value in the entire experience from the moment the consumer views the location to the moment they exit. Revolving doors from Crane can ensure that the consumer's first and last impressions are positive.

Almost all components of the door—push bars, canopies, glass panels, and more—can be customized to complement the building's exterior and interior design theme. Your revolving door can represent more than a mere entrance—it can act as a passage to an exotic dining room or upscale shopping experience.

Cover:

Nelson-Atkins Museum of Art
Kansas City, MO
Carter Glass Company, Inc.
Steven Holl Architects

Below:

InterContinental Hotel
Boston, MA
Karas & Karas Glass Company
Elkus Manfredi Architects, Ltd.



4000 Series — The all glass door

The Crane 4000 Series provides the elegance and clean styling of glass and metal to create a grand first impression to your building entrance. More and more storefronts and building enclosures are using structural glass façades. In such applications, the entrance system should not only conform to, but also reinforce the rich styling and sleek lines of the all glass design.

Both size and function are customizable. We offer a variety of 4000 Series options including wing style, push bars, attachment options to your storefront, and the connection between the enclosure glass and the ceiling glass. Manual operation only is available for 4000 Series doors.

The highly designed Crane 4000 Series is bolstered by the same precision-g geared manual speed control and world class bookfold mechanism that has become the signature of a Crane revolving door. One of our sales staff or engineers will gladly review your design and specifications to ensure your entrance is safe, functional, and meets your design intent.

550 West Adams
Chicago, IL
Arcadia Products, Inc.
De Stefano + Partners

3000 Series — The fully formed and welded custom door

The Crane 3000 Series door combines premium construction with unmatched design to create a door limited only by your imagination. We use materials such as stainless steel, bronze, and even mahogany or oak to create a door that not only lasts but also conveys an image of class and luxury. Manual operation is the base operation for all Crane doors, but to meet your requirements, the 3000 Series also offers automatic and security operational modes.

The 3000 Series is the only fully formed and welded revolving door in the industry that comes with a standard five year warranty. The skin on our 3000 Series doors is welded to a steel or stainless steel subframe so there are no unnecessary or

unwanted seams caused by cladding pre-finished material to an aluminum subframe.

Our wood doors are handcrafted by skilled mill workers who meticulously design and sculpt the door panel to meet the criteria laid out by the architect. We have a wide portfolio of projects you can use to assist with your design. Or we can create a one-of-a-kind entrance that makes a statement to all who enter.

1740 Broadway
New York, NY
A-Val Architectural Metal Company
Moed de Armas & Shannon



2000 Series — The semi-custom door with clad-constructed wings

The Crane 2000 Series door maintains world class style and function and at the same time leaves room to help manage tight construction budgets. The 2000 Series uses fully formed and welded construction on the enclosure and canopy, but allows the wings to be clad in stainless steel or bronze over an aluminum subframe. In many cases aluminum is the basis of design for 2000 Series doors. They are available in manual, automatic, or security modes of operation, and the door size, finish, canopy, and storefront attachment are all customizable.

With a cladding and finishing process second to none, 2000 Series doors will provide your building with a reliable and functional entrance. Just like the 4000 and 3000 Series, we work with you to achieve the design and traffic control your building requires.

Hyatt Regency Hotel
Dearborn, MI
Don Endres Associates
Ford/Earl Associates



1000 Series — The value choice

The Crane 1000 Series is the solution when your budget-conscious project calls for the look, function, traffic flow advantage, and energy savings of a revolving door. Fabricated with rigid aluminum construction, the 1000 Series offers choices that allow you to match the doors to your entrance requirements.

You can select from several size options, canopy choices, and custom painted or anodized finishes.

The 100:1 gear manual speed control and bookfold mechanism are the same as on all Crane products. We use .125 thickness

aluminum construction as the primary material, and all door construction is completed by the experienced iron workers and craftsmen in our Chicago facility.

The Crane 1000 series also offers an expedited production lead time for those jobs that have a fast-tracked completion date.

DORMA Entrance Systems
North American Headquarters
Lake Bluff, IL





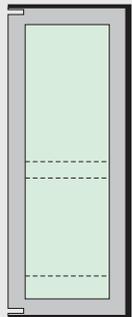
Crane Revolving Door Wing Designs



Narrow Stile (2-1/16") or Medium Stile (3")

Optional Center Muntin†

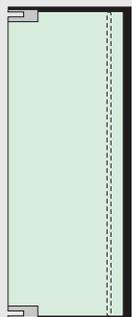
Optional Kickplate



Wide Stile (5")

Optional Center Muntin†

Optional Kickplate



Patch Fitting Type Wing



Herculite Type Wing

†Required on Wide Diameter and Security Doors.

Product Selector Guide

Model	Mtrl	Finishes	Op Mode	Attachment Type	Diameter	Enclosure Height	Enclosure Material	Enclosure Glass	Sightline†
AL 1000	AL	○ ● ● ● ● ●	M	B,F	6'6"(ID), 7'(ID),8'(OD)	7'-9'	Glass	7/16" clear or tinted*	4"
AL 2000	AL	○ ● ● ● ● ●	All	A,B,C,D,F	6'(ID)-12'(OD)	7'-9'	Glass or Aluminum Panels	7/16" clear or tinted*	4", 6", or Custom (up to 12")
SS 2000	SS	● ● ● ● ● ●	All	A,B,C,D,F	6'(ID)-12'(OD)	7'-9'	Glass	7/16" clear or tinted*	4", 6", or Custom (up to 12")
BZ 2000	BZ	● ● ● ● ● ●	All	A,B,C,D,F	6'(ID)-12'(OD)	7'-9'	Glass	7/16" clear or tinted*	4", 6", or Custom (up to 12")
AL 3000	AL	○ ● ● ● ● ●	All	All	6'(ID)-12'(OD)	7'-10', Custom	Glass or Solid Metal Enclosure	7/16" or 9/16" clear or tinted**	1"-36"
SS 3000	SS	● ● ● ● ● ●	All	All	6'(ID)-12'(OD)	7'-10', Custom	Glass or Solid Metal Enclosure	7/16" or 9/16" clear or tinted**	1"-36"
BZ 3000	BZ	● ● ● ● ● ●	All	All	6'(ID)-12'(OD)	7'-10', Custom	Glass or Solid Metal Enclosure	7/16" or 9/16" clear or tinted**	1"-36"
WD 3000	WD	● ● ● ● ● ●	M	All	6'(ID)-8'(OD)	7'-9'	Glass or Solid Wood Enclosure	7/16" or 9/16" clear or tinted**	6"-36"
SS 4000	SS	● ● ● ● ● ●	M	A, B, C, D, F, H, I, J, K, L	6'(ID)-8'(OD)	7'-10', Custom	Glass	9/16" clear or tinted**	0"-36"
BZ 4000	BZ	● ● ● ● ● ●	M	A, B, C, D, F, H, I, J, K, L	6'(ID)-8'(OD)	7'-10', Custom	Glass	9/16" clear or tinted**	0"-36"

*Center post required

**Center post optional

†Enclosure base and bottom rail sightline

KEY

Mtrl (Material)

AL	Aluminum
SS	Stainless Steel #304, #316
BZ	Bronze #220, #280, Nickel Silver
WD	Mahogany, Oak

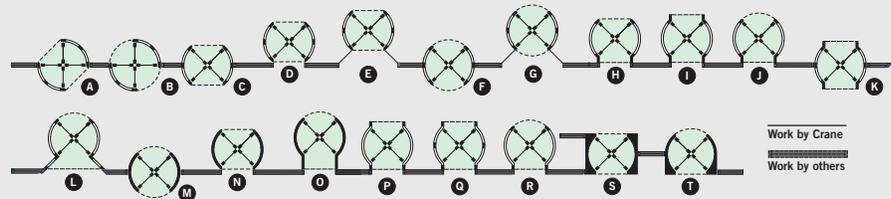
Finishes

○	Clear Anodized	●	#7 Mirror
●	Dk BZ Anodized	●	#8 Mirror
●	Custom Anodized	●	Non-Directional
●	Painted	●	Bead Blast
●	#4 Satin	●	Custom
●	#6 Fine Satin	●	Stain

Op (Operational) Mode

M	Manual
MS	Manual Security
A	Automatic
AS	Automatic Security

Typical Attachment Plans



Options

- **Welded Floor Grates**—Curved floor grates in pie shapes, quarter radians, or arcs are available. Custom fabricated from concentrically rolled circles of stainless steel or bronze bar and finished to match doors.
- **Ceiling Lights**—Optional fixtures consisting of translucent lens and snap-in trim ring of the same material and finish as the door are mounted flush in the ceiling. Standard and custom fixtures available. Not available for glass ceiling installations.

- **Standard and Custom Push Bars**—Standard push bars are same material and finish as door. Formed from 1/2" x 1-1/2" rectangular bar or 1" diameter round bar. Mounted with through-bolts or concealed fasteners. Custom push bars are available with a 1-1/4" maximum projection from face of door stile.
- **Self-Positioning Closer**—Senses when the door comes to rest at any position other than closed, rotating the door to the closed position with

all four door wing weathersweeps in contact with the enclosure wall. The door is then set in the most welcoming position for the next user while maintaining the maximum weather seal between the indoor and outdoor environments. The self closer's low-energy drive (15 pounds or less in compliance with ANSI A156.19[4.4]), fits into a 7" high canopy and plugs into a 110 volt outlet.

Crane Construction

Construction of revolving doors is limited only by functionality, local codes, and availability of materials. Choose the glass, metal, and finish, as well as design, size, and configuration of your revolving door.

Welded Door Wings 3000 Series

These doors are cut, formed, and precisely welded from heavy USS 16 gauge stainless steel or 14 B&S gauge bronze sheet and compatible bar stock to create the sturdiest structural elements possible. The exterior surface metal is fully welded to the interior reinforcing substructure. All four corners of the door wings are welded. The interior enclosure-post-to-base connections

can be welded as well. Canopy fascia are visually seamless and attached to the ceiling soffit with concealed welds. All exposed surfaces are ground and polished to eliminate blemishes from rolling, forming, and welding.

Clad Door Wings 2000 Series

In addition to fully welded construction, Crane fabricates revolving door wings by cladding prefinished metal sheet over full

7 mil exterior grade anodized aluminum substructures. When value engineering is required, clad construction is an excellent alternative. Crane clad doors are available in prefinished brushed or mirror stainless steel & bronze.

Aluminum Wings 1000 Series

Crane produces revolving doors from aluminum extrusions and sheet material. Each piece is carefully cut and fitted.

Connections are tightly bolted hairline joints. After fabrication, all exposed surfaces are mechanically finished to eliminate marks caused by rolling, forming, and welding. Anodized or painted finish is then applied. All standard colors, as well as most exotics and metallics can be applied.

Energy Saving

Since traffic rate, building height, and indoor-outdoor temperature difference are uncontrolled, entrance infiltration can be reduced by reducing the entrance pressure differential. This is accomplished by sealing or tightening the building envelope, pressurizing with outdoor air, or sealing with proper doors.

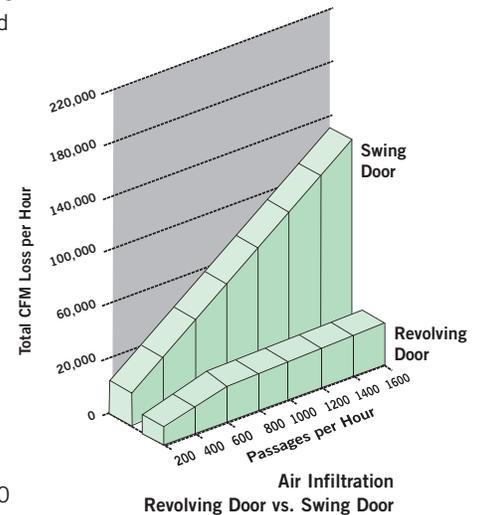
Net outdoor air supply over exhaust reduces the entrance pressure differential, decreasing the infiltration rate. The use of

outdoor air in excess of ventilation needs—merely to pressurize entire buildings and reduce infiltration problems—may add an economically unjustified heating load. Pressurizing only the ground floor requires much less outdoor air. However, this may cause excessive pressure differentials across stair and elevator doors on the ground floor.

A revolving door, which allows traffic but seals air flow, is both practical and effective. Infiltration through a revolving door

(except for a small amount passing through the door seals) is virtually unaffected by building height, indoor-outdoor pressure difference, and fan operation.

Infiltration rates through a swinging door are about 900 cubic feet (25.5 cubic meters) per person for a single-bank entrance, and 550 cubic feet (15.6 cubic meters) per person for a vestibule entrance. But it is only about 60 cubic feet (1.7 cubic meters) per person for a

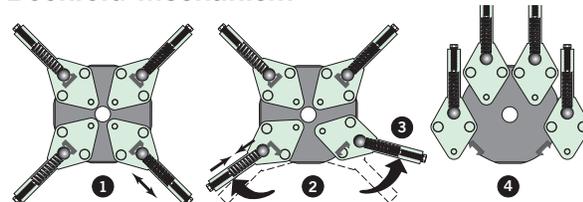


Safety

Attention to detail goes beyond the aesthetics of a revolving door. To ensure dependable operation with minimum maintenance, we have developed and perfected our own operating hardware. All operating hardware used in Crane doors is manufactured by us or under our direct control. For example, our bookfold mechanism features machined chill-cast bronze discs and hangers that are finished to match your door. Required by law on revolving doors in the

United States, a bookfold mechanism provides emergency egress. The pressure to engage the bookfold mechanism is adjustable to meet local conditions—for example, stack conditions, negative pressure, and wind conditions. Likewise, our speed control has a precision-machined, cast-steel gear train mounted in the ceiling canopy or floor. The speed control is factory set to ensure that the revolving door does not exceed the revolutions per minute set by governing building codes.

Bookfold Mechanism



- 1 During normal operation, spring tension holds ball in socket maintaining proper wing configuration.
- 2 Panic pressure on wing compresses spring and releases ball.
- 3 Minimal pressure is required to continue bookfolding.
- 4 Wings bookfold either way, providing a clear passage on both sides. Release spring tension is adjustable.

Crane Security Doors



Baxter
Deerfield, IL
Dynamic Door Service, Inc.

Wrigley Building
Chicago, IL
Scibcor
McBride & Kelly Architects

Every Crane door is equipped with our bookfold mechanism, which meets both ANSI, NFPA Life Safety, and International Building codes.

Power and security components include the Crane Collapse Lock—patented in 1990—to prevent unauthorized bookfold of the door, and enclosure posts with edge sensor strips.

Two-Way Security Doors

Power-operated doors from Crane allow one- or two-way controlled entrance and exit.

Airport Type Exit-Only Security Doors

The banks of these doors allow crowds and luggage to exit secure areas unhindered. Exit-only door operation is triggered via sensor or push button. The door returns to a preset position at the end of the cycle. Slow speed and full manual operation are also possible.

For further information about security doors, please contact the factory.

DORMA KTC Series — Large diameter revolving doors



Attractive, functional and practical, DORMA KTC Series large-diameter automatic revolving doors from Crane combine modern styling with proven performance. Offered in outside diameters up to 21 feet—among the widest in North America—DORMA's KTC Series doors are available in a variety of configurations and programming options to meet your most demanding installations.

To meet a wide range of applications, KTC Series doors are available in two-, three-, and four-wing models with outside diameters from 12'-6" to 21'. Summer configurations enable doors to collapse inward for unobstructed flow or passage of bulky items. Optional locked wings and night shields can be selected for increased security.

Revolving Door Rehab Kits

Like any other door, a revolving door requires annual maintenance. Sometimes a revolving door has not been properly maintained, or the door's style has fallen out of fashion. In cases like these, a Crane Rehab Kit is a great solution.

Crane can manufacture a Rehab Kit to any dimension to replace the wings and hardware of an existing revolving door, no matter who originally manufactured it. (The enclosure and canopy do need to be level and plumb to ensure proper fit and operation.)

The kit can be manufactured from aluminum, stainless steel, bronze, or wood to match the original door as closely as

possible, or it can be manufactured to give new style to an outdated entrance.

If you have any questions regarding a Crane Rehab Kit, please contact the factory. The Rehab Kit includes:

- Speed Control
- Center Shaft with Cover
- Hanger Discs
- Hangers
- Pivot Bearing
- Pre-glazed Wings with Weathersweeps
- Push Bars
- Bumpers
- Lock Cases

