

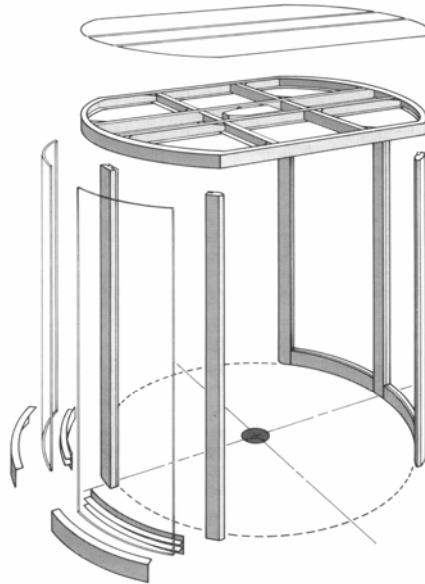
---

# **CRANE**

## **SECURITY REVOLVING DOOR**

### **USER'S MANUAL**

**Crane Revolving Door Company  
924 Sherwood Drive  
Lake Bluff, Illinois 60044  
847 / 295 - 2700**



---

**For Service Call:**

---

---

---

---

---

## **INDEX**

### **PAGE**

3	GENERAL INFORMATION
4	DOOR OPERATION. STANDARD PASSAGE
5	DOOR OPERATION. UNAUTHORIZED ENTRY (EARLY DETECTION)
6	DOOR OPERATION. UNAUTHORIZED ENTRY (LATE DETECTION)
7	MAINTENANCE CLEANING

---

THE SECURITY REVOLVING DOOR SYSTEM IS DESIGNED TO PROVIDE LIMITED ACCESS FOR PEDESTRIAN TRAFFIC BETWEEN TWO SEPARATE AREAS.

**SECURITY DOORS ARE INTENDED FOR USE ONLY BY PERSONS EDUCATED IN THEIR PROPER USE.**

### **CONTROLS**

THE DOOR WILL BE EQUIPPED WITH A FAIL SAFE ELECTRIC BRAKE, TWO CARD READERS AND A MAT DETECTION SYSTEM TO CONTROL PASSAGE INTO AND OUT OF THE BUILDING.

### **FIRE ALARM, EMERGENCY STOP, POWER FAILURE**

THE WINGS WILL BE HELD IN THEIR RESPECTIVE POSITIONS UNDER NORMAL CONDITIONS BY AN ELECTRO-MAGNETIC CRANE BOOK-FOLD LOCK TO MAINTAIN BUILDING INTEGRITY.

UPON A SIGNAL FROM THE BUILDING FIRE ALARM SYSTEM, EMERGENCY STOP BUTTON OR IN THE EVENT OF A POWER FAILURE, POWER TO THE OPERATOR AND THE BOOK-FOLD LOCK WILL BE REMOVED, ALLOWING THE WINGS TO BE BOOK-FOLDED TO THE EMERGENCY POSITION AND/OR THE DOOR TO FREE WHEEL.

### **MANUAL LOCKING**

THE DOOR IS EQUIPPED WITH TWO EMERGENCY MANUAL LOCKS THAT, WHEN ENGAGED, WILL LOCK THE DOOR AND WILL NOT PERMIT THE CONTROLLER TO BE POWERED UNTIL RELEASED.

### **SAFETY**

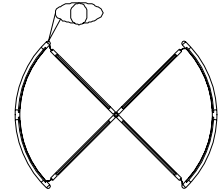
OPERATOR'S BACK PRESSURE SENSING CIRCUIT AND PRESSURE SENSITIVE RUBBER ENCLOSURE EDGES WILL PAUSE THE DOOR OPERATION IF ACTIVATED. THE SENSITIVE FLOOR MATS WILL ALSO PROVIDE THE PROTECTION AGAINST ENTRAPMENT.

### **ACCEPTABLE DOOR SPEED**

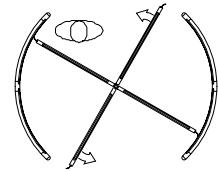
REGULATED BY THE AMERICAN STANDARD FOR POWER AND MANUAL OPERATED REVOLVING PEDESTRIAN DOORS (ANSI/BHMA A156.27-2003, SEC. 8.2), **THE MAXIMUM ALLOWABLE SPEED OF THE DOOR WILL BE 4 RPM.**

## DOOR OPERATION STANDARD PASSAGE

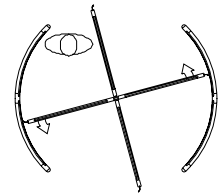
THE DOOR SHALL BE NORMALLY LOCKED IN THE "X" POSITION.



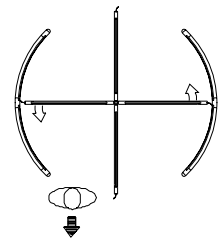
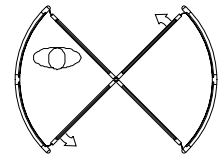
UPON RECEIPT OF A VALID SIGNAL FROM THE CARD READER, THE DOOR WILL START TURNING AT NORMAL SPEED.  
AT THIS TIME THE PEDESTRIAN HAS 3 QUARTERS OF THE DOOR REVOLUTION TO PASS.



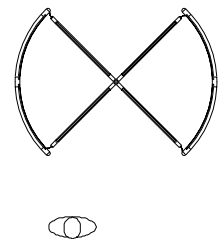
THE SENSITIVE SECURITY MAT SYSTEM DETECTS THE PERSON, IDENTIFIES THE VALIDITY OF THE ACCESS AND ROTATES AT CONSTANT SPEED.



ONCE THE PERSON GETS THROUGH, THE DOOR SLOWS DOWN AT (+) "PLUS" POSITION.

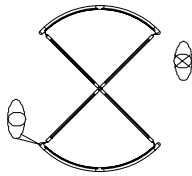


AT THE END OF THE CYCLE, THE DOOR STOPS AND SECURELY LOCKS AT "X" POSITION.

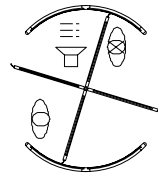


## **DOOR OPERATION. UNAUTHORIZED ENTRY (EARLY DETECTION)**

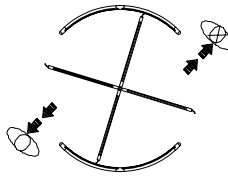
THE DOOR SHALL BE NORMALLY LOCKED IN THE "X" POSITION.



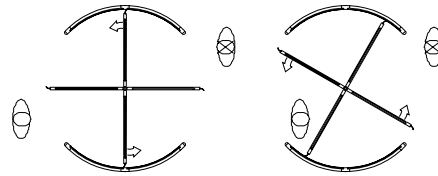
UPON RECEIPT OF A VALID SIGNAL FROM THE CARD READER, THE DOOR WILL START TURNING AT NORMAL SPEED.



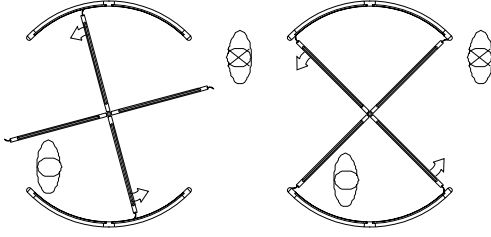
ATTEMPTED PASSAGE THROUGH AN UNAUTHORIZED AREA FROM THE OTHER SIDE OF THE DOOR WILL RESULT IN THE DOOR BEING LOCKED BY THE BRAKE. THE ENUNCIATOR WILL INFORM THE PERSON SECURITY HAS BEEN VIOLATED AND THE SECURED AREA MUST BE CLEARED.



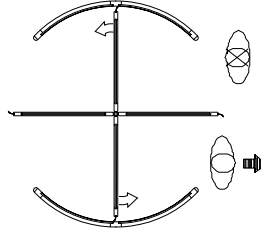
THE DOOR WILL RESUME ROTATING WHEN BOTH PEDESTRIANS STEP OFF THE SENSITIVE MATS, ALLOWING THE AUTHORIZED ENTRY TO BE COMPLETED.



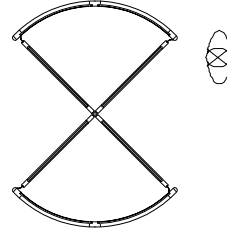
THE SENSITIVE SECURITY MAT SYSTEM DETECTS THE PERSON, IDENTIFIES THE VALIDITY OF THE ACCESS AND ROTATES AT CONSTANT SPEED.



ONCE THE PERSON GETS THROUGH, THE DOOR SLOWS DOWN AT (+) "PLUS" POSITION.

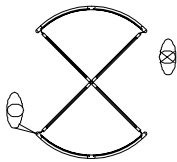


AT THE END OF THE CYCLE, THE DOOR STOPS AND SECURELY LOCKS AT "X" POSITION.

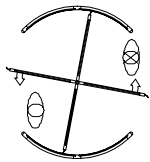


## DOOR OPERATION. UNAUTHORIZED ENTRY (LATE DETECTION)

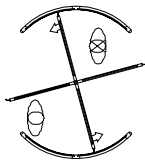
THE DOOR SHALL BE NORMALLY LOCKED IN THE "X" POSITION.



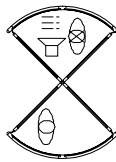
UPON RECEIPT OF A VALID SIGNAL FROM THE CARD READER, THE DOOR WILL START TURNING AT NORMAL SPEED.



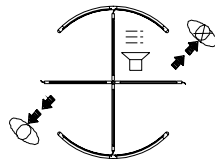
ATTEMPTED PASSAGE THROUGH AN UNAUTHORIZED AREA FROM THE OTHER SIDE OF THE DOOR AFTER THE DOOR PASSED (+) "PLUS" POSITION WILL RESULT IN THE DOOR BEING LOCKED AT THE NEXT "X" POSITION BY THE BRAKE.



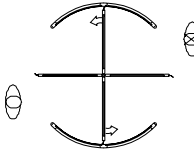
THE ENUNCIATOR WILL INFORM THE PERSON SECURITY HAS BEEN VIOLATED AND THE DOOR WILL REVERSE.



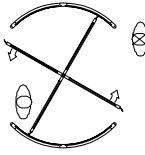
THE DOOR THEN REVERSES TO THE CLOSEST (+) PLUS POSITION, LOCKS AND THE ENUNCIATOR WILL DIRECT THE PERSON TO CLEAR THE SECURED AREA.



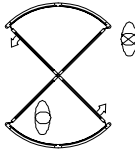
THE DOOR WILL RESUME ROTATING WHEN BOTH PEDESTRIANS STEP OFF THE SENSITIVE MATS, ALLOWING THE AUTHORIZED ENTRY BE COMPLETED.



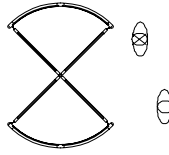
THE SENSITIVE SECURITY MAT SYSTEM DETECTS THE PERSON, IDENTIFIES THE VALIDITY OF THE ACCESS AND ROTATES AT CONSTANT SPEED.



ONCE THE PERSON GETS THROUGH, THE DOOR SLOWS DOWN AT (+) "PLUS" POSITION.



AT THE END OF THE CYCLE, THE DOOR STOPS AND SECURELY LOCKS AT "X" POSITION.



---

## MAINTENANCE — CLEANING

**ALUMINUM** - Can provide years of dependable service with minimum maintenance. Dust and grime should be removed by regular cleaning. Use soap and water, any mild non-abrasive soap or cleaning solution is adequate. To remove tar or built up dirt, solvent cleaners such as turpentine are safe if followed by a soap and water cleaning and fresh water rinse. Acid or alkali cleansers should not be used as they may attack the anodic coating. After cleaning, surfaces should be wiped dry with a clean absorbent material.

**STAINLESS STEEL** - For routine cleaning on #4 satin finish, use soap, ammonia, or a detergent and water. Rub with sponge or rag, rinse with clear water, wipe dry. Always rub in direction of grain. For removal of stubborn or heavy dirt or grime, any quality commercial stainless steel cleaner can be used. Mirror finish stainless steel requires very special care, no abrasive cleaner or cloth should ever be used. Mild soap and water or glass cleaner only, is recommended.

**BRONZE** - Bronze provides years of dependable service with normal maintenance. It is recommended a professional bronze finisher be consulted and a regular metal cleaning program be established.

**PAINTED FINISH** - Any mild non-abrasive soap or mild solvent is recommended for cleaning. Strong solvents may dissolve paint. Wax can be used to protect the finish.