



A Member of
AAADM

American Association of Automatic Door Manufacturers

AUTOMATIC BI-FOLD DOOR

OWNER'S MANUAL

▲ Ready-Fold™

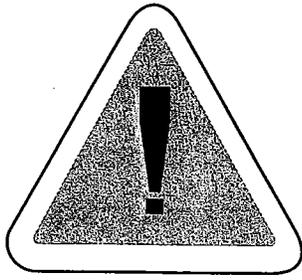
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CAUTION

Improperly Adjusted Doors can cause injury and equipment damage.

Inspect door operation daily using safety checklist in owner's manual and at the door.

- ▲ Have the door adjusted as described in Owner's Manual.
- ▲ Safety devices should be in place and operational.

Have the door inspected at least annually by an AAADM certified inspector and after any adjustment or repair.

In the following manual, the word:

Caution means that injury or property damage can result from failure to follow instructions.

Note is used to indicate important steps to be followed or important differences in equipment.

To Our Customers

The purpose of this manual is to familiarize you with your automatic door system. It is essential that you "know your system" and that you recognize the importance of maintaining your door system in compliance with the industry standards for safety.

It is your responsibility, as owner or caretaker of the equipment, to inspect the operation of your door system on a daily basis to ensure that it is safe for use by your invitees, customers, or employees.

This manual will provide you with a description of the operation and maintenance requirements of your door. It also provides the instructions for the Daily Safety Check.

Should the door fail to operate as prescribed in the Daily Safety Check, or at any other time for any other reason, **do not attempt to repair or adjust the door**. Call a qualified service technician. These technicians are trained to service your door in accordance with applicable industry safety standards.

To order a complimentary Daily Safety Check Video, please contact Besam's Marketing Department at 1-800-752-9290.

Service Availability

Besam products are distributed through a nationwide

network of Besam authorized distributors for sales, installation, and service.

Should you need service on your door system, consult the yellow pages of your telephone directory under "Door-Opening Devices" for your local Besam authorized distributor or call 1-800-752-9290 for a local distributor.

Compliance with Safety Standards

Your door system was designed to the latest operating and safety standards. In order to ensure the continued safe operation of your door, it is important that:

- ▲ Your door system be maintained in compliance with the standards of the industry.
- ▲ Proper decals and labels be applied and maintained on your doors. If decals are removed or cannot be read, request labels be replaced when calling for service.
- ▲ Safety devices for all doors should be checked by an AAADM certified inspector annually and each time a door is serviced.

AAADM, the American Association of Automatic Door Manufacturers, has established a program to certify automatic door inspectors. Through this program, the inspectors check your door systems for compliance with the appropriate version of the American National Standards Institute standard ANSI A156.10.

What You Should Know

Be sure that a Besam distributor has provided the following for each door:

1. Instruction on how to conduct the Daily Safety Check (by walk-through example).
2. Location of function switches and instruction in their use.
3. Circuit breaker or power disconnect location for each door system.
4. Discussion of problems that could result from door being allowed to operate after a malfunction is observed.

5. Number to call for service or questions about your system if you are uncertain of any condition or situation.

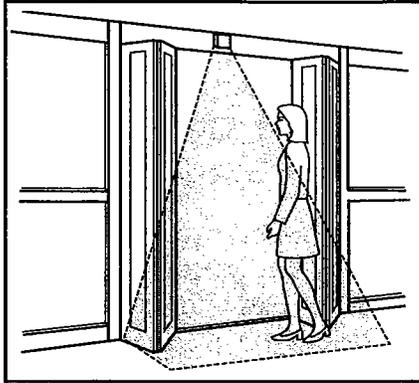
Note: If there are any problems, discontinue door operation immediately and secure in a safe manner. Call your local authorized Besam distributor for repair.

6. AAADM compliance certificate signed by an AAADM certified automatic door inspector.
7. Warranty information for each door.

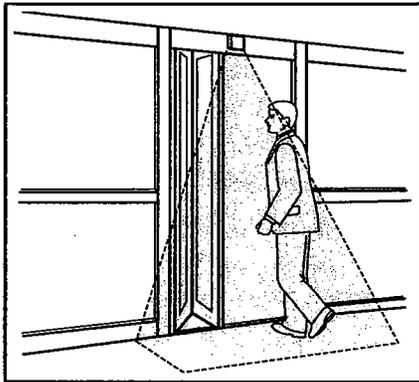
FOLDING DOORS LOW ENERGY VERSION

besam

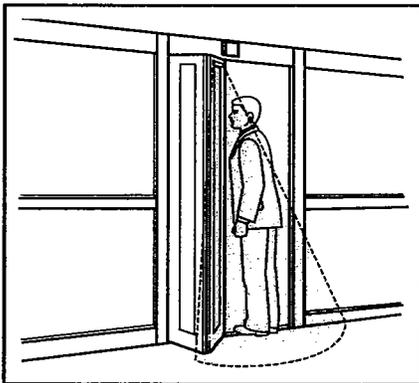
DAILY SAFETY & PERFORMANCE CHECK



Approach swing/fold side



Approach opposite swing/fold side



If door is equipped with hold open device, stand motionless in threshold for 10 seconds

Applications and adjustments must comply with ANSI 156.19. Use this safety check for each low energy folding door unit. All safety checks must be performed while restricting traffic and/or movement within the door(s) activation and hold open detection areas.

To ensure efficient, safe operation of automatic, low energy, bi-folding doors, it is recommended that this operational checklist be performed on a daily basis:

1. Check that electrical power is on.
2. Check door activating devices (motion sensors) for either:
one way traffic (in **or** out)
or
two way traffic (in **or** out)

SWING/FOLD SIDE ACTIVATION: approach door, door(s) should begin to open when you are about 6.5 feet (1981mm) to 7 feet (2134mm) away. Door(s) should fold open smoothly and stop softly in the full open position.

OPPOSITE SWING/FOLD SIDE ACTIVATION: approach door, door(s) should begin to open when you are about 4 feet (1219mm) to 5 feet (1524mm) away. Door(s) should fold open smoothly and stop softly in the full open position.

If using push plates, fully closed door(s) should begin to open when push plate is pressed. Door(s) should close smoothly after a 5.0 second minimum time delay and stop softly in the closed position.

3. Leave motion sensor zone, fully opened door(s) should close smoothly after a 5.0 second minimum time delay and stop softly in the closed position.
4. Check motion detection across the door opening by activating at various approach angles.
5. Check each sensor on door package. If using motion sensor(s) and a hold open sensing device a time delay of 15 seconds minimum is acceptable. Check hold open function, if applicable. With door fully open, stand motionless in the threshold for a time period of ten seconds. Door(s) should remain open.

IF DOOR(S) TRIES TO CLOSE DURING HOLD OPEN CHECK, TURN DOOR(S) OFF AND CONTACT YOUR BESAM DISTRIBUTOR.

6. Check operating speeds (see safety requirement).
7. Check door(s) and surrounding areas for any broken glass, damaged wiring or loose or broken materials.
8. If thresholds are used, they should be firmly anchored to the ground.
9. SHOULD YOU ENCOUNTER A PROBLEM, TURN DOOR OFF AND CONTACT YOUR BESAM DISTRIBUTOR.

SAFETY REQUIREMENTS

Opening/closing speeds - the maximum opening/closing speeds from fully open/close to the starting point of closing latch check and opening back check is 3.0 seconds minimum.

Closing low speed distance - the final slow closing (latch check) distance between pairs of doors or jamb must be a minimum of 2" (51mm) in width. Folding door(s) shall not close through this distance in less than 15 seconds.

Opening low speed - the final slow opening (back check) distance should be observed during the completion of an opening cycle.

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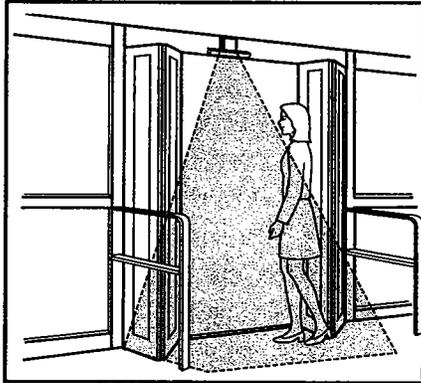
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FOLDING DOORS PEDESTRIAN VERSION

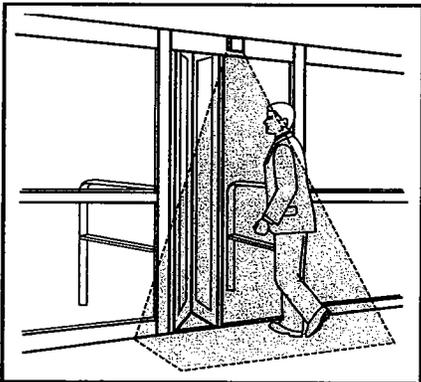
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DAILY SAFETY & PERFORMANCE CHECK

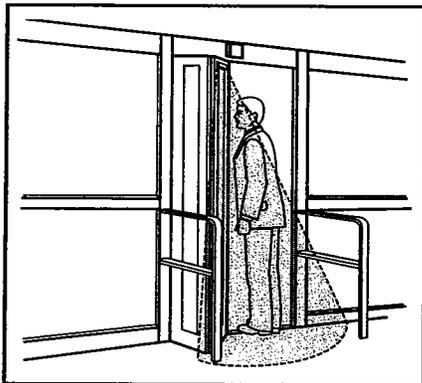
Approach swing/fold side



Approach opposite swing/fold side



Check hold open function



Applications and adjustments must comply with ANSI 156.10. Use this safety check for each folding door unit with motion detectors, hold open and safety zones. All safety checks must be performed while restricting traffic and/or movement within the door(s) activation and hold open detection areas.

To ensure efficient, safe operation of pedestrian automatic bi-folding doors, it is recommended that this operational checklist be performed on a daily basis.

1. Check that electrical power is on.
2. Check door activating devices (motion sensors) for either:
one way traffic (in **or** out)
or
two way traffic (in **or** out)

SWING/FOLD SIDE ACTIVATION: approach door, door(s) should begin to open when you are about 6.5 feet (1981mm) to 7 feet (2134mm) away. Door(s) should fold open smoothly and stop softly in the full open position.

OPPOSITE SWING/FOLD SIDE ACTIVATION: approach door, door(s) should begin to open when you are about 4 feet (1219mm) to 5 feet (1524mm) away. Door(s) should fold open smoothly and stop softly in the full open position.

3. Leave motion sensor zone, door(s) should close smoothly after a 15 second minimum time delay and stop softly in the closed position.
4. Check motion detection across the door opening by activating folding door at various approach angles.
5. Check each sensor on door package.
6. Check hold open function. Stand motionless in the threshold for a time period of ten seconds. Door(s) should remain open.

IF DOOR(S) TRIES TO CLOSE DURING HOLD OPEN CHECK, TURN DOOR(S) OFF AND CONTACT YOUR BESAM DISTRIBUTOR.

7. Check safety zone. With folding door(s) closed, have someone stand carefully (within 2 feet maximum) on the swing/fold side of the door. Approach activating side of the door, door should NOT open.

IF DOOR(S) OPENS, TURN DOOR(S) OFF AND CONTACT YOUR BESAM DISTRIBUTOR.

8. Check operating speeds (see safety requirement).
9. Check door(s) and surrounding areas for any broken glass, damaged wiring or loose or broken materials.
10. If thresholds are used, it should be firmly anchored to the ground.
11. SHOULD YOU ENCOUNTER A PROBLEM, TURN DOOR OFF AND CONTACT YOUR BESAM DISTRIBUTOR.

SAFETY REQUIREMENTS

Closing speed - the maximum closing speed from fully open to the starting point of latch check is 3.0 seconds.

Closing low speed distance - the final slow closing (latch check) distance between pairs of doors or jamb must be a minimum of 2" (51mm) in width. The folding door(s) shall not close through this distance in less than 15 seconds.

Opening speed - the maximum opening speed from fully closed to starting point of slow opening distance (back check) which should be observed is 15 seconds.

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DEALER
STAMP

Service Schedule

Although Besam's automatic door equipment has earned a reputation for world-class quality and reliability, all mechanical devices need service...just like your automobile. Your authorized Besam distributor can offer you a Planned Maintenance Agreement on the equipment you have just purchased. This agreement means the distributor will make planned maintenance calls to inspect, clean, lubricate, adjust, repair or replace worn components.

Frequency of maintenance visits will depend on factors such as traffic, climate, etc. Please ask your Besam distributor how often they recommend the following services:

1. Gaskets and Seals
2. Glass Protection Bars
3. Moldings and Thresholds
4. Pivots (Top and Bottom)
5. Door Control Operations

6. Condition of Door Frames
7. Opening and Closing Speeds
8. Function of Sensors
9. Guide Rails (if applicable)

Periodic maintenance will increase the life and performance of your Besam automatic door. We suggest you contact your authorized Besam Distributor to discuss a Planned Maintenance Agreement. Planned Maintenance Agreements differ between Besam distributors, and Besam has no control over the Agreement each distributor may offer.

Limited Warranty

Besam, Inc. hereby warrants, subject to the provisions hereof, that the products and parts manufactured by Besam and its affiliates shall be free from defects in material and workmanship for a period of 1 year from the date of shipment from Besam's factory.

Product Configurations

Besam's Ready-Fold 400 packages are offered in either two panel or four panel configurations. They can also be ordered to accommodate either one way or two way traffic.

This product is available with two types of opening and closing speeds:

Low Energy: opening and closing speeds on this package comply with ANSI A156.19 - 1990. Activation device is either Besam's SelectScan3 or press wall switches (Competitive motion systems will not properly work with the Ready-Fold package). Besam's Eye-Cue presence detection system may also be used with this system to reduce the hold open time from not less than 5 seconds (ANSI 156.19) to not less than 1.5 seconds (ANSI 156.10) as detailed in ANSI 156.19, Paragraph 4.3.

Pedestrian: opening and closing speeds comply with ANSI A156.10. Activation device must be Besam's SelectScan3. (Competitive motion systems will not properly work with Ready-Fold package.) Presence detection system is two guide rails with hold open beams to be mounted on the fold side of the door package and Eye-Cue (2 panel - mounted on top horizontal door rail, 4 panel mounted on center of header).

Operational Features

Control Switch Functions

Two
Position
Switch

"OFF"
"AUTO"

Operator is disconnected (Door[s] can be locked manually).

Normal position -- the door can be opened with inner and/or outer opening devices (Normal business hour setting).

Three
Position
Switch

"OFF"
"AUTO"
"HOLD OPEN"

Operator is disconnected (Door[s] can be locked).

Normal position -- the door can be opened with inner and/or outer opening devices (Normal business hour setting).

Door(s) permanently open.

To Be Provided from the Distributor to the Owner

Be sure that your Besam distributor has given you all the following information for each installation:

1. Location of operator switches and their functions.
2. Supplied and installed door panel decals to appropriate safety and manufacturer specifications in order to inform pedestrians of door operation.
3. Installed procedures decal for daily safety checks and door locking function.
4. Warning of maintenance problems that could result from door being allowed to operate incorrectly.
5. Number to call for problems or service. If you have a problem you cannot correct or in case of malfunction, turn off the door operating equipment, secure door(s) in safe position, redirect traffic if necessary and call your service representative.

Door Locking Procedures

On low energy packages, the key switch is located in the door jamb. On pedestrian packages, the key switch is located at the edge of the guide rail.

To Lock

1. Turn door function switch to "off" position (See control switch functions).
2. For interior locking -- Door(s) can now be secured with lock mechanism.
3. For exterior locking -- manually fold open doors, exit, close manually and secure with key.

To Unlock

1. Unlock door(s).
2. For exterior unlocking, manually fold open doors. Then turn switch to desired function.
3. For interior unlocking, turn door switch to desired function (See control switch function).

Emergency Egress (Panic Opening)



In the event of an emergency, your bi-fold doors are, in most cases, capable of swinging outwards into a "Panic Breakaway" position by exerting force at the lock side of the door. The operator's function is shut off whenever positioned in this mode and will automatically resume when the doors come shut.

Troubleshooting for Ready-Fold

Fault	Possible Reasons Why	Remedies/Explanations
Door won't open.	<ul style="list-style-type: none"> Switch in off mode. Door locked or jammed closed. Main power off. Safety rail system defective. Approach detector defective. Control fuse(s) blown. Motor fuse(s) blown. Defective motor/pump. 	<ul style="list-style-type: none"> Switch to automatic mode. Unlock or remove obstruction. Check main power breaker and turn on. Turn door off, secure and consult Besam distributor. Turn door off, secure and consult Besam distributor. Turn door off and consult Besam distributor. Turn door off and consult Besam distributor. Turn door off and consult Besam distributor.
Door holds open.	<ul style="list-style-type: none"> Door jammed open. Approach detector, rail system, or Eye-Cue (shorted) defective. Mechanical problem with operator. Broken closing spring. Defective control. Switch in hold open. 	<ul style="list-style-type: none"> Remove obstruction. Turn door off, secure and consult Besam distributor. Switch to automatic mode.
Door closes while standing in its path.	<ul style="list-style-type: none"> Defective Eye-Cue presence detector. 	<ul style="list-style-type: none"> Turn door off, secure and consult Besam distributor.
Door recycles open and closed.	<ul style="list-style-type: none"> Defective approach detector. Defective Eye-Cue presence detector. 	<ul style="list-style-type: none"> Turn door off, secure and consult Besam distributor. Turn door off, secure and consult Besam distributor.

NOTE: Door and detection device functions must comply with applicable safety standards. Repairs should be performed by an authorized Besam distributor. For safety standards information, consult Besam Inc.

Naturally, to make sure this equipment continues to function properly for years to come, you will want to purchase only Replacement Parts that are designed to function with the original equipment. Genuine Replacement Parts from Besam are the finest parts money can buy. We do not cut corners. They are manufactured to exacting specifications and are not just designed to "fit" -- they are made to function just as the original components. Genuine Besam Replacement Parts have been tested to ensure that they perform properly and reliably. Genuine Besam Replacement Parts are only available through an authorized Besam distributor.

