

STANLEY Access Technologies

OWNER'S MANUAL for AUTOMATIC BIFOLDING DOOR SYSTEMS

SB600 Series Bifold

SB620 2-PANEL

SB640 4-PANEL

<u>Section</u>	<u>Page</u>
<i>Caution Statement</i>	<i>2</i>
<i>To Our Customers</i>	<i>3</i>
<i>Service Availability</i>	<i>3</i>
<i>Limited Warranty</i>	<i>3</i>
<i>Compliance with Safety Standards</i>	<i>3</i>
<i>Functional Description (Electrical)</i>	<i>4</i>
<i>Functional Description (Mechanical)</i>	<i>4</i>
<i>Operation and Daily Maintenance</i>	<i>5</i>
<i>Signage Diagram</i>	<i>6</i>
<i>Troubleshooting and Hints</i>	<i>7</i>
<i>Daily Safety Check</i>	<i>8</i>



CAUTION

Improperly Adjusted Door can cause injury and equipment damage.

Inspect door operation daily using safety checklist in Owner's Manual.

Safety devices should be in place and operational.

Have door adjusted as described in Owner's Manual if necessary.

Have door inspected at least once annually by a Stanley trained technician.

In the following manual,

- the word **Caution** means that injury or property damage can result from failure to follow instructions.
- the word **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”, how it operates, and that you recognize the importance of maintaining your door system within compliance of 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 in order to ensure that it is safe for all users.

This manual will provide you with a description of the operation and maintenance requirements of your door system. It also provides the instructions for the “**Daily Safety Check**” procedure. It is recommended by Stanley that the “**Daily Safety Check**” be performed at least once a day and after any power outage. Occasional observance of the doors as they are in use is also recommended.

Should the door fail to operate as prescribed in the “**Daily Safety Check**”, or at any other time for any reason, do not attempt to repair or adjust the door. Discontinue operation of the door and call a Stanley-trained service technician. These technicians are trained to service your door in accordance with applicable industry safety standards.

Service Availability:

Stanley Access Technologies products are distributed through a nationwide network of authorized distributors that specialize in Sales, Installation and Service of automatic doors systems. Our Service Programs offer support such as regular scheduled preventive maintenance, or if required, emergency service 24 hours a day, 365 days a year. No matter where you are located, our technicians are just a phone call away. Should you need service on your door system, call **Stanley Access Technologies toll free at 1-888-DOOR-444**.

Limited Warranty:

Stanley Access Technologies, a Division of The Stanley Works, warrants the installed door system against failure due to the manufacture of substandard material or workmanship for one year beginning date of installation. Please review your Certificate of Warranty Agreement for full details.

Compliance with Industry Standards:

Your door system is designed to the latest operating and safety standards as prescribed by ANSI A156.10 and Underwriters Laboratory UL325. It is important that:

- Your door system be maintained in compliance with the industry standards.
- Proper decals and labels be applied and maintained on your doors. If decals have

been removed or cannot be read, request that the labels be replaced when calling for service.

Safety devices be checked by a trained technician annually and each time a door

Functional Description (Electrical)

Your Stanley Bifolding Door System is equipped with a Safety Sensor System consisting of a Stangard threshold sensor on the non-fold side and an overhead Safety Sensor on the fold side. These presence sensors work in conjunction with the motion sensors to provide threshold protection on both sides of the door opening.

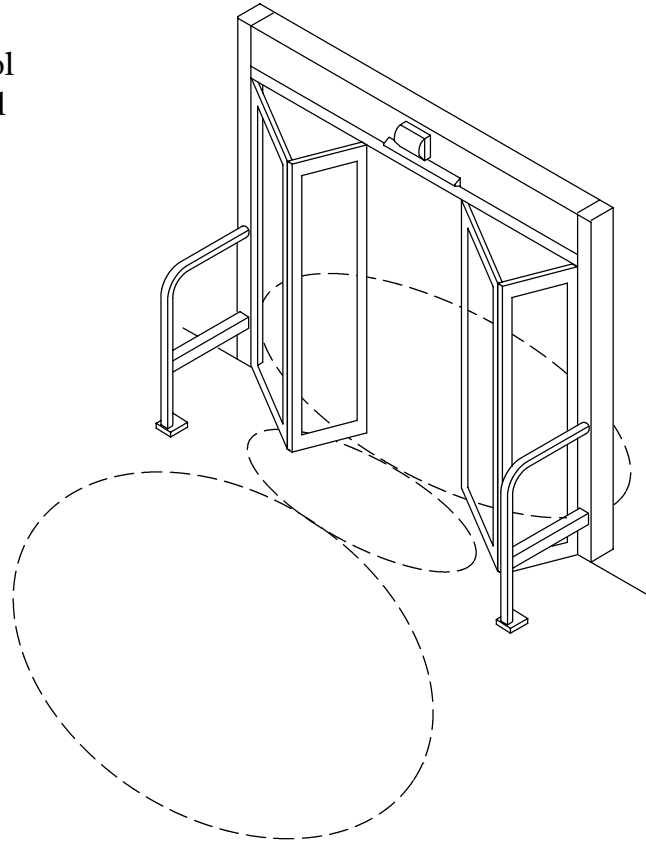
If the fold side safety sensor detects an object prior to the doors opening, the control system will keep the doors fully closed until the object is no longer detected.

Once the doors are in motion, they will continue to open to the full open position.

If either the Stangard or the fold side safety sensor detects an object while the doors are in the fully-open position, the control system will keep the doors in the fully-open position until the object is no longer detected.

Door closure will follow the time-out of the hold open delay setting of the microprocessor control box.

If you desire to keep the door in the full open or hold open position, change the selector switch mounted in the header or jamb to the hold open position.

***Functional Description (Mechanical)***

The Stanley Bifolding Door System uses the Magic-Swing operator to swing a door panel that is connected to a second panel by a new low profile hinge. A follower located in the breakout track guides the lead edge of the side panel. The slide or lead panel slides linearly as the hinge stile is pulled outward by the swing or pivot panel, creating the fold. This fold can be to the inside or outside of the structure and still breakout for emergency egress. The breakout track, with adjustable breakout force, is mounted on the bottom surface of the header. When the track is broken out for emergency egress, a magnetic type switch shuts off the power to the operator. Once the breakout track is manually reset to its normal non-breakout position, power is restored to the operator.

Each panel and jamb has fingerguard protection to prevent fingers from been pinched.

This package is also equipped with a two-point locking system. The four-panel unit is locked at lead stiles and into the floor. The two-panel unit locks into the jamb and into the floor.

Operation and Daily Maintenance

The Bifold Series SB600 System has been equipped with two switches for customer convenience. The switches are mounted in the jamb. They are:

- Power On/Off – This switch is illuminated in red when the power is on. It should not be turned off unless the door is being serviced.
- On/Off/Hold Open – This switch allows the door to function automatically with sensor activation (ON), disables the door operator (OFF), or holds the door in the full open position (Hold Open).

In an emergency, the bifold door “breaks out” to provide a wide opening. “Break out” means that when the leading edge of the sliding panel is pushed outward, the panel will unlatch and pivot outward like a swing door. This can be performed at any point in the normal slide path and in case of power failure or other emergency. See Figure 1.

General housekeeping maintenance should be provided by the owner or responsible person in charge. Check the door area for tripping or slipping hazards. Check that guide rails are firmly anchored. There should be no bulletin boards, literature racks, merchandise displays, or other attractions in the door area where people could be hit by the door. The track assembly must be maintained free of debris. It is recommended that any debris in the door track be vacuumed regularly.

Inspect the finger guard to see that it is secure and in good repair. Check all door panels for broken or cracked glass. Panels should be made of a safety type material. The door glass can be cleaned with commercial glass cleaner. Clean the lenses of the sensor with a dampened cloth. **Do not spray cleaners directly at the lens.**

Inspect the door to ensure decals are properly displayed. See signage diagram on the following page for proper placement of decals.

A “**Daily Safety Check**” of the doors should be completed at a minimum of once a day. Please see the attached “**Daily Safety Check**” list for procedures. When performing the “**Daily Safety Check**”, pay attention to how your door system works. If you encounter a difference in performance, whether it be mechanical or the zones of the sensors, **discontinue the door operation and call for service.**

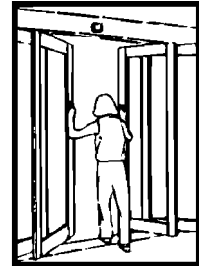


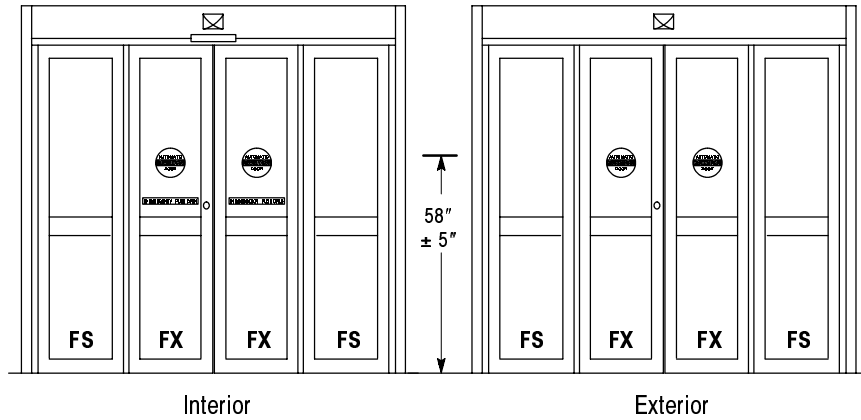
Figure 1

Typical Stanley Bi-Fold Door Decal Application

TWO WAY TRAFFIC

Folding doors serving both egress and ingress shall have a decal visible from the non fold side and the fold side with the words **“CAUTION AUTOMATIC DOOR”**. Locate and affix the decals central on each FX panel and 58" ± 5" from the finished floor. Folding doors shall be provided with decals **“IN EMERGENCY PUSH OPEN”** to be mounted on the FX panels and applied to the side appropriate for egress. Locate and affix adjacent to lock stile at lock elevation.

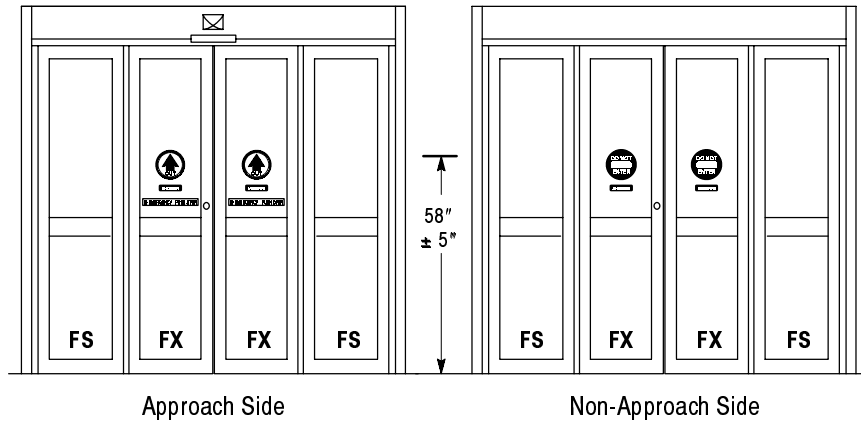
Decals for Two Way Traffic





ONE WAY TRAFFIC

An arrow decal shall be visible from the approach side of a folding door mounted on the door at a height 58" ± 5" from the finished floor to the center line of the decal on each FX panel. On the non-approach side the international **“DO NOT ENTER”** sign shall be visible in the same location. Place **“AUTOMATIC DOOR”** decal directly below both signs. The **“IN EMERGENCY PUSH OPEN”** decals are to be mounted on the FX panels on the side appropriate for egress. Locate and affix adjacent to lock stile at lock elevation.

Decals for One Way Traffic



 **Knowing Act Doors** -- The door shall have signage which says **“AUTOMATIC DOOR - ACTIVATE SWITCH TO OPERATE”** along with other required signage visible from each side of the door.

Decals included:  P/N 709481

SIDE 1 & 2



 P/N 412615




P/N 511165

Decals ordered separately:

TWO SIDED SIDE 1 & 2



P/N 413743

 A **“Daily Safety Check”** decal has also been provided as a reminder that your automatic door equipment must be checked daily for safe operation. Affix this decal to the inside jamb tube.
P/N 412266

For jurisdictions that the ICBO/UBC code compliance requires **“This Door Must Remain Unlocked During Business Hours”** affix the decal on all exit doors. This decal is not supplied as part of the decal kit.

This Door Must Remain Unlocked During Business Hours

Troubleshooting and Hints

<u>PROBLEM</u>	<u>CAUSE</u>	<u>REMEDY</u>
1. Door will not open.	No power	Turn on circuit breaker at main panel box
	Door locked	Unlock door
	Jamb power switch off	Set power switch "on"
	On/Off/Hold Open Switch "off"	Set On/Off/Hold Open Switch to "on"
	Power failure	Set On/Off/Hold Open switch to "off" for 15 seconds. Then set switch to "on".
2. Door will not close. of	Door(s) broken out	Reset sliding (lead edge) panel Call for service if all the checks have been made and the door still does not open.
	Obstruction	Remove obstruction in swing path of door. Move the door manually. Door must move freely.
3. Door opens too far.	Bad control box	Turn off power – does the door close? If not, call for service.
	Presence sensor detection	Check for objects in sensor detection area or on floor. If door remains open, set power switch to "off" for 15 seconds, then "on" again.

NOTES:

1. A "Daily Safety Check" of the doors should be completed at a minimum of once a day. Please see the attached "Daily Safety Check" list for procedures.
2. Stanley recommends a semi-annual inspection / adjustment of your automatic door equipment to optimize its performance and to extend the life-time of your purchase.

Daily Safety Checklist

Perform these safety checks *daily* on each automatic folding door to ensure your customers' safety and your own protection. Perform these tests while traffic is restricted from all detection and sensing zones.

Sensor Activation/Presence Detection Safety

1. Check electronic sensor by walking toward the door opening at a moderate speed. The door should start opening when you are about 4 feet from the door, fold open smoothly and stop without impact. Move slowly through the door (6 in. per second). The door should remain open.
2. Step out of the sensor zone. After a brief time delay (at least 1¹/₂ seconds) the door should close to no less than 2" from fully closed, then noticeably slow down and take at least 1¹/₂ seconds for the final 2" of closing.
3. Approach the fold side of the door first, then have someone else approach the non fold side of the door. As long as you are in the safety area (fold area) of the door, it should not open (See Figure 1).
4. Crouch motionless in the door for at least 4 seconds. The door should not close.

Caution: If safety sensor is not working, door may open toward you without stopping.

Floor Mat Actuation/Floor Mat Safety

1. Step on the "opening" (activating) mat several times in different locations. Door should open smoothly without impact.
2. Step through the doorway onto the safety mat and remain motionless for 4 seconds. The door should remain open. Repeat at several locations on the mat.
3. Step off the "safety" mat. After a brief time delay (at least 1¹/₂ seconds) the door should close to no less than 2" from fully closed, then slow down. The last 2" of closing should be noticeably slower (at least 1¹/₂ seconds).
4. With the door closed, step on the "safety" mat on the fold side. Have someone step on the opening mat. Door should remain closed as long as someone remains on the "safety" mat.

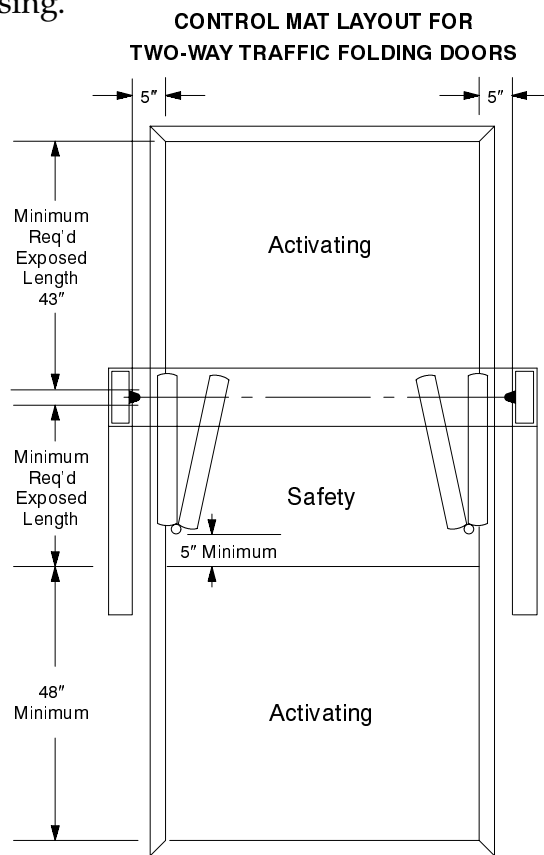


Figure 1

Caution: If safety mat is not working, door may open toward you without stopping.

5. Check the mat molding and threshold. It should be complete and secured with all required screws.
6. Crouch motionless in the door for at least 4 seconds. The door should not close.
7. **Do not** move heavy objects over floor mats.

General Safety

1. Breakout Stop. Center pivoted folding doors may be supplied with an emergency breakout stop or switch that will allow the door to swing open. Call your automatic door supplier for details.

When the door is pushed into the breakout mode, the power to the operator is removed. Check that the door will not activate.

2. Decals. The door should have traffic decals properly displayed as follows:
 - A. An arrow sign shall be visible from the approach side of a folding door, mounted on the door at a height 58 in., ± 5 in. (147 cm, ± 13 cm) from the floor to the centerline of the sign. The sign shall be minimum of 6 in. (15.2 cm) in diameter, having a green circle surrounding a black arrow on a white background.
 - B. If one-way traffic, an international "DO NOT ENTER" sign shall be visible from the side of that would swing toward pedestrians attempting to travel in the wrong direction. It should be mounted on the door at a height 58 in., ± 5 in. (147 cm, ± 13 cm) from the floor to the centerline of the sign. The sign shall be minimum of 6 in. (15.2 cm) in diameter, having a red circle with the wording, "Do Not Enter", in white letters in a red circle.
 - C. Doors serving two-way traffic shall be marked with a decal, visible from both sides of the door, with the words "CAUTION, Automatic Door". The words "Automatic Door" must be at least 1/2 in. letters. It should be mounted on the door at a height 58 in., ± 5 in. (147 cm, ± 13 cm) from the floor to the centerline of the sign. The sign shall be minimum of 6 in. (15.2 cm) in diameter and made with black lettering on a yellow background.
3. Activating Switch. (Knowing Act) Doors equipped with a manual operate switch shall, when activated, hold the door open for five seconds minimum after release of activating switch. Reactivate door and crouch in door opening for 10 seconds. Door should not close.

Doors equipped with manual activating switch shall have signage as follows: "Automatic Door. Activate switch to operate". The sign should be visible from both sides of the door.

4. Guide Rails. Check that guide rails or other barriers or separators are present (one per folding door side) and firmly anchored.
5. Lock Stile. There should be no looseness in the door pivots or in connections between door and operator.
6. Housekeeping. Check the door area for tripping or slipping hazards.
Check all door panels for damage. Make sure that all covers are properly secured. There should be no bulletin boards, literature racks, merchandise displays, or other attractions in the door area that would interfere with the use of the door.
7. Traffic Patterns. Observe traffic patterns. Plan routing so people enter and exit in a straight approach, directly onto the center of the door opening.
8. Finger Guard. Inspect finger guard to see that it is secure and in good repair.

**IF YOU HAVE A PROBLEM, TURN OFF THE DOOR OPERATING EQUIPMENT
AND CALL STANLEY ACCESS TECHNOLOGIES TOLL FREE AT
1-888-DOOR-444.**

STANLEY Access Technologies

STANLEY ACCESS TECHNOLOGIES

Route 6 & Hyde Road

Farmington CT USA 06032

(800) 7-ACCESS or (800) 722-2377

(860) 677-2861