

Won-Door FireGuard

Owner's Manual

Operation &
Maintenance
Guide



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Frequently asked questions about the FireGuard system

■ **How do I operate the FireGuard door?**

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■ **How do I get the door to open?**

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Standard Operation

Won-Door FireGuard folding partitions are a part of the fire and life safety equipment of your building and may only be installed and serviced by factory trained personnel. However, it is essential that building personnel have a basic understanding of their purpose and operation.

Reading this manual will acquaint you with the system and how it works. Suggestions on periodic preventive maintenance are outlined in the "Preventive Maintenance" section beginning on page 4. For information regarding various fault conditions or trouble signals, refer to "Operator Troubleshooting" on page 6.

The U.L. listed Won-Door FireGuard assembly is installed in the open position, typically in a storage pocket, closing upon a signal from either a smoke detector or fire alarm system. The door assembly operates on a 12 volt DC system which includes batteries, a transformer and a microprocessor. A 120 volt line connected to a junction box in the storage pocket near the "Control Box" is used to continually float charge the batteries at 13.8 volts. Upon activation of a building alarm, the door will close automatically. The speed at which the door closes can vary, but it is typically set to close at 10 inches per second. Concurrent with the building alarm will be the activation of the horn, an audible signal sounding a steady tone indicating that the system is in the "Fire Mode." It will remain in this condition until the system is physically reset (as described later in this manual).

The leading edge of the door is equipped with a special sensor. Upon encountering an obstruction the door will stop – only light pressure is needed to activate the sensor – pause momentarily, then continue closing. Once the door is in the fully closed position it can be reopened by:

- pressing the Close/Clear – Open/Mute rocker switch to the Open/Mute position which will engage the motor and open the partition. This switch is located on one side near the leading edge of the door assembly. Once the door is in operation, it can be

stopped at any point by pressing the same switch to the Close/Clear position.

- depressing the exit hardware. As little as four pounds of pressure applied anywhere on this plate will cause the door to retract a preset distance from its closed position. If the exit hardware is activated again after the door has stopped, it will open an additional distance equal to the established opening width. After retracting to the prescribed opening width, the door will pause, then recycle closed.

- operating it manually by physically pushing the door back to create an opening. This method can be used if there is a complete loss of power.

It is recommended that the Won-Door FireGuard assembly be routinely operated at least quarterly. This can be done without setting the building into an alarm condition by using the rocker switch. Activating the rocker switch will cause the door to close automatically. Pressing the rocker switch in the opposite direction will cause the door to automatically open.

The door is designed, and can be optionally installed, so that it will close upon power loss in the building. If this occurs, the door can be reset into the pocket by pressing the rocker switch to the *door open* position after the power has been restored.

Alarm activation will be the major reason that resetting the door will be necessary. Assuming that the condition which initiated the alarm has been cleared, resetting the system is accomplished by operating the rocker switch.

Preventive Maintenance

It is recommended that the door assemblies be operated at least quarterly (by use of the rocker switch) and that the following maintenance procedures be performed:

INSPECTIONS

1) The chain. The door assembly is chain driven. The chain is located in a guide track between the tracks in which the door travels. The drive sprocket is located immediately adjacent to the DC motor, and the return idler can be found at the opposite end. Proper chain tension must be maintained to insure reliable door operation. With the door in the fully open or retracted position, find the approximate midpoint of the opening. At the midpoint, the chain should be resting on the chain guide. If the chain has fallen out of the guide or if the door refuses to stay in the closed or open position, the tension of the chain may need to be adjusted. If so, contact the Won-Door Service Department for assistance.

2) The door track system. Locating the track system 3 1/4" above the ceiling line substantially reduces the possibility of damage. Nevertheless, periodic visual inspection of both tracks along the entire length of the opening will insure proper operation in an emergency condition.

3) The leading edge obstruction detector. This is the aluminum cap on the leading edge of the door assembly. Sensing switches, located behind this cap, are connected to the microprocessor. The edge cap should be firmly attached to the lead post assembly of the door and installed so that the only movement is for the activation of the sensors. Test for proper operation by placing the door in the open position. Close the door by operating the rocker switch in the close direction. While the door is closing, depress the leading edge. If the door does not stop quickly or if the edge cap is loose or improperly aligned, contact the Won-Door Service Department to schedule a service call.

4) Operation from open to closed position. Actuate each FireGuard door by pressing the rocker switch to close and then to open, checking for smooth operation across the entire opening. As the door closes, make sure that the leading edge fully seats into the striker. As the door opens, see that the door stops in the properly stacked position.

5) The exit hardware. With the door in the fully closed position, depress the exit hardware to ensure that the door opens the desired amount. (ie: the door will open to a minimum of 38" and stop.)

6) The trolleys and panel pins. Inspect the trolleys and panel pins for damage.

7) The sweeps. Check the top and bottom sweep for proper seal. If there are any tears, holes or light gaps, the sweep should be repaired. If the damage is extensive, it should be replaced.

LUBRICATION

1) The chain. There should always be a light film of lubrication coating the entire chain, indicating adequate lubrication. Use lithium chain oil.

2) The tracks and support trolleys. Apply a light film of lithium grease along the inside of the track as well as on the trolley rollers.

CLEANING

The Won-Door FireGuard doors are easy to clean. The panels, lead posts and bottom of the track are to be cleaned with a mild soap and water base cleaner. Cleaning should be done quarterly unless excessive dirt buildup occurs. In that case, the door should be cleaned more frequently.

Operator Troubleshooting

The Won-Door FireGuard system is the only fire door assembly which is entirely electronically supervised. The microprocessor, located in the "Control Box," receives input from the various integral door components. Monitoring is continuous, occurring approximately 3 times per second. If for any reason a fault condition occurs, an audible signal will be transmitted from a horn located on the Control Box.

If, upon arriving at the door location in your building, you find the door either in the open or closed position and you hear a fault signal, listen carefully to the horn pattern. This pattern will indicate what has caused the condition.

1) A single beep pattern means there is a battery fault. This condition will occur if the battery is overcharged or undercharged due to a failed component in the power supply or if there has been a loss of AC power for a sustained period of time. If the latter situation has occurred, the batteries will have discharged to such a point that, for fire protection, the door will have automatically closed while adequate power remained.

To correct the fault, operate the rocker switch. If the fault clears, make a note that the fault occurred. If it reoccurs within 24 hours, call Won-Door Service and schedule a service call to test the charging system or replace the batteries.

If the fault did not clear when you operated the rocker switch, it is a clear indication that the batteries are low because there was a loss of AC power going to the control box. Since low battery faults will have priority over loss of AC power faults, you may hear the low battery horn pattern even though the real problem is loss of AC power. Follow the procedure for restoring AC power described below. If the fault still cannot be corrected, contact Won-Door Service to schedule a service call.

2) A two beep pattern is communicating a loss of AC power. As soon as the AC power is restored, this fault will automatically clear. If you

are experiencing a general power outage, and it will be a long time before the 120 volt service can be restored, mute the door with the rocker switch to temporarily silence the horn.

If the power is not off:

- check the building circuit breaker to insure there is no interruption of the 120 volt power to the control box.
- If the breaker is okay, check the AC fuse in the control box (it is the one on the left marked 3 amp). Replace it if it is bad. For safety, before entering the pocket to check the fuse, unplug the wire connecting the floating jamb to the control box. The horn will sound a 5 beep pattern and the door will be prevented from opening while you service the fuse. Once the fuse is checked or replaced, be sure to plug the floating jamb wire back in. Reset the 5 beep pattern by operating the rocker switch.

3) A three beep pattern indicates that there is a switch malfunction.

- Check the leading edge detector at the front of the door by pulling out on the cap. If the fault clears it means the leading edge cap is sticking. Contact Won-Door Service to repair the damaged cap.
- Check the fire exit hardware on both sides of the door. If pulling gently on the plates causes the fault to clear, either the switches behind the plate are damaged or the plate is not functioning properly. Call Won-Door Service and arrange for a service call.
- If neither of these procedures enables you to identify the problem, contact Won-Door Service for repair.

4) A continuous tone means that the door is in fire mode and will seek the closed position. As soon as the initiating device (a smoke detector or building alarm system) has been cleared the door can be reset by operating the rocker switch. It can then be operated back into the pocket.

Other fault conditions routinely monitored by the microprocessor are identified by a detailed description of horn patterns found in the "Operation and Instruction Manual" available from the Won-Door Corporation. To schedule service or request additional information, contact the Won-Door Service Department at 1-800-890-2111.