

ED50

Low Energy Automatic Swing Door Operator
Installation in Surface Applied Header

Owner's Manual

DL4614-040 – 08-2018

| EN |

dormakaba 

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1 General information

1.1 Owner's Manual

This Owner's Manual applies to the ED50 low energy automatic swing door system.

1.2 Manual storage

This document must be kept in a secure place, and accessible for reference as required.

If the door system should be transferred to another facility, insure that this document is transferred as well.

1.3 dormakaba.com website

Manuals are available for review, download, and printing on dormakaba.com website.

1.4 Dimensions

Unless otherwise specified, all dimensions are given in inches (").

1.5 Symbols used in this manual.



WARNING

This symbol warns of hazards which could result in personal injury or threat to health.

1.6 Surface applied (SA) header and ED50 operator

Fig.1.1 ED50 surface applied header

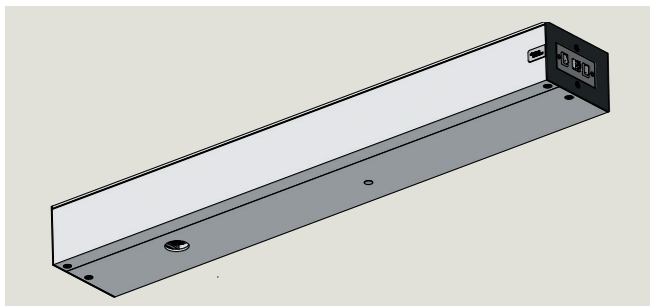


Fig.1.2 ED50 operator



1.7 ANSI/BHMA A156.19, American National Standard for Power Assist and Low Energy Power Operated Doors.

1.7.1 Low energy power operated door definition.

A door with a power mechanism that opens the door upon receipt of a knowing act signal (Para. 3.2), does not generate more kinetic energy than specified in the ANSI / BHMA A156.19 standard, and is closed by a power mechanism or other means.

2 To our customers

We are pleased that a dormakaba USA, Inc. ED50 low energy automatic swing door system has been selected for this installation.

dormakaba USA, Inc. designed, tested and built the system to provide many years of service.

The purpose of this manual is to familiarize you with your ED50 low energy automatic swing door system.

It is essential that you "know your system" and that you recognize the importance of maintaining your door system in compliance with industry standards for safety.

It is your responsibility as owner and caretaker of the equipment, to inspect the operation of your door system on a daily basis as outlined in Chapter 5, Daily Safety Check Procedures to insure that it is safe for use by your customers and employees.



WARNING

Should the door fail to operate as prescribed in the Safety information checklist or at any other time for any reason, do not attempt to repair or adjust the ED50 low energy automatic swing door system!

Call your local authorized dormakaba USA, Inc. distributor for repair. The distributor's AAADM certified technicians are trained to service the ED50 automatic swing door system using the dormakaba USA, Inc. Installation and Service Manuals, and in accordance with applicable industry standards.

2.1 Service availability.

dormakaba USA, Inc. has a nationwide network of authorized distributors for sales, installation and service of its products.

2.2 Compliance with industry standards for safety.

Your ED50 automatic swing door system was designed to the latest operating and safety standards. In order to insure the continued safe operation of the door, it is important that:

- Proper decals and labels be applied and maintained on your doors (Chapter 6).
- If decals and labels have been removed, or cannot be read, contact your local authorized dormakaba USA, Inc. distributor for replacement decals or labels.

3 What you should know

3.1 Distributor information

3.1.1 dormakaba USA, Inc. distributor information.

Be sure that the dormakaba USA, Inc. distributor has provided the following information for each door installation:

1. dormakaba USA, Inc. ED50 Owner's Manual.
2. Review of the daily Safety information checklist (Chapter 4).
3. Instructions on how to conduct the daily Safety Information checklist by walk through example (Chapter 5).
4. Annual compliance inspection label completion (Chapter 4).
5. Circuit breaker or disconnect location for 115 Vac power to the ED50.
6. Header program switch panel location and instructions in its use. (Para. 3.3).
7. Discussion of problems that could result from operator being allowed to operate after a malfunction observed.
8. Number to call for service or questions about your system if you are uncertain of any condition or situation.



WARNING

If there are any problems, discontinue door operation immediately and secure the door in a safe manner.
Call your local dormakaba USA, Inc. distributor for repair.

3.2 Knowing act

3.2.1 ANSI/BHMA standard A159.19 definition.

Consciously initiating the powered opening of a low energy door using acceptable methods including:

- Push plates.
- Fixed non-contact switches.
- Action of manually opening (pushing or pulling) a door.
- Controlled access devices such as keypads, card readers, and key switches.

3.3 Program switch panel

3.3.1 Program switch door control modes.

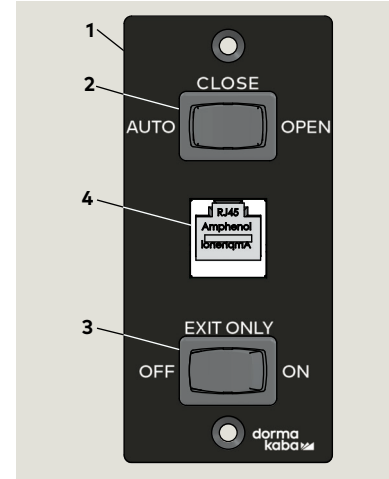
1. Auto, door opens automatically when actuated by:
 - Knowing act device (Para. 3.2). Door will remain at full open position for not less than 5 seconds.
 - Push/pull actuation of door, Para. 6.1.4. Door will remain at full open position for not less than 3 seconds.
2. Open, door opens automatically and remains open.
3. Close, door will remain closed, or if door is open door will close.

3.3.2 Exit only switch.

- Only used with activation sensors.

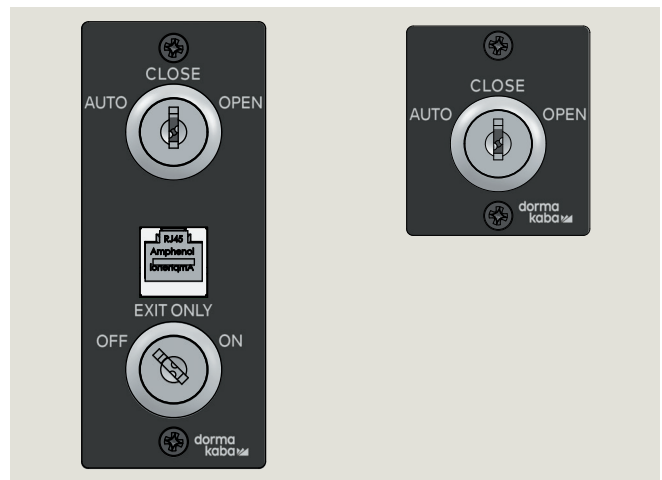
Fig. 3.3.1 Program switch panel

- 1 Program switch panel
- 2 Program switch, three position
- 3 Exit only switch, two position
- 4 Comm port for dormakaba .handheld



3.4 Optional key switch panels

Fig. 3.4.1 Optional key switch panels



4 AAADM Safety information labels

4.1 Safety information labels, low energy power operated doors

4.1.1 Low energy swing door safety information label.

This AAADM label outlines safety checks that should be performed daily on a low energy swing door controlled by an ED50 operator.

4.1.2 Safety information label location.

Place label in a protected, visible location on door frame, near program switch panel if possible.

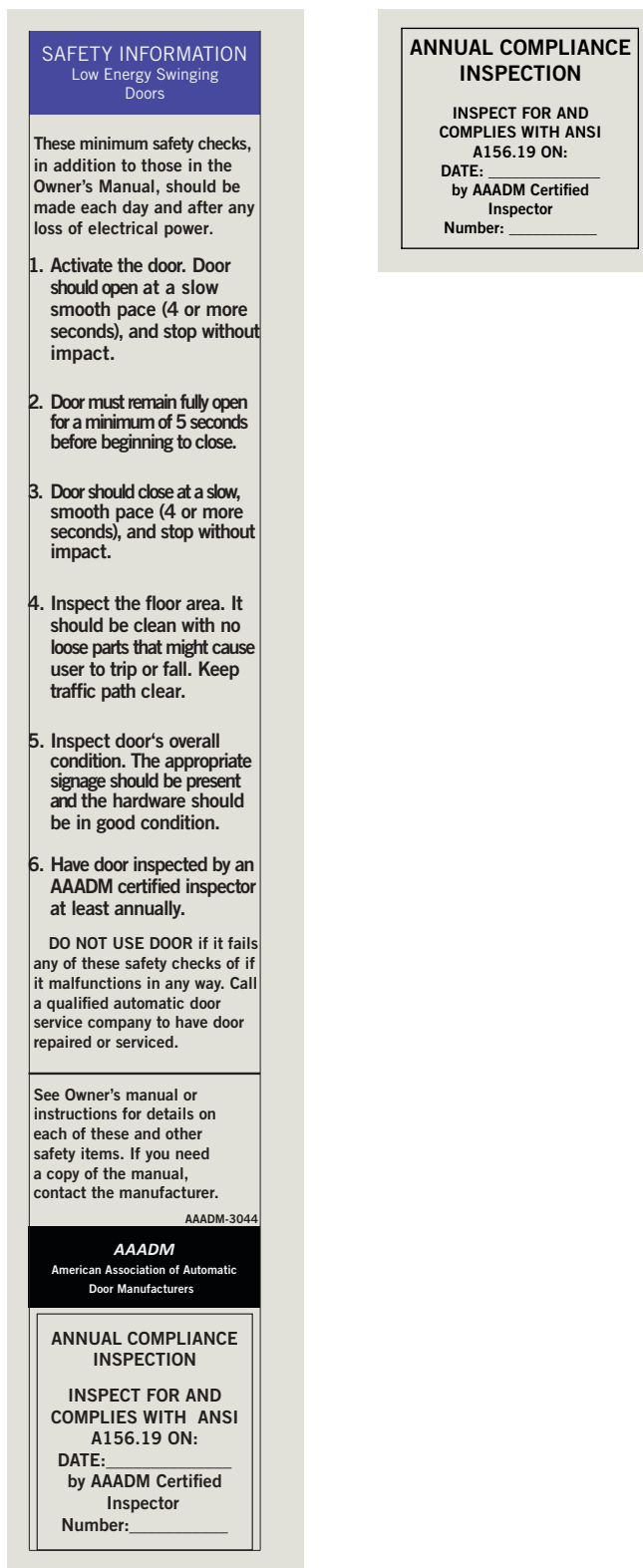
4.1.3 Annual compliance section of label.

This section of label is only completed on low energy swing doors that comply with ANSI/BHMA A156.19 standard and pass inspection by a AAADM certified dormakaba USA, Inc. technician.

4.1.4 Additional annual compliance inspection labels.

Place additional labels over annual compliance inspection section of safety information label.

Fig. 4.1.1 Safety Information and Annual Compliance Inspection labels



5 Daily safety check procedures

5.1 Low energy power operated swing doors

5.2.1 Performing daily safety checks.

Perform safety checks daily on your low energy swing door to insure your customer and employee safety. These daily safety checks are also listed in Chapter 4, Safety Information labels, low energy swinging doors.

1. Activate the door by a knowing act (Para.3.2).
 - Door should open at a slow smooth pace (4 seconds or more) and stop without impact.
2. Door must remain fully open for a minimum of 5 seconds before beginning to close.
 - Door should close at a slow smooth pace (4 seconds or more) and stop without impact.
3. Inspect the floor area, it should be kept clean with no loose parts that might cause user to trip or fall. Keep traffic path clear.
4. Inspect door's overall condition. The appropriate signage should be present and all hardware should be in good condition.
5. Have door inspected by a dormakaba USA Inc. AAADM certified technician annually, at a minimum.



WARNING

If there are any problems, discontinue door operation immediately and secure the door in a safe manner.
Call your local dormakaba USA, Inc. distributor for repair.

5.2.2 Review safety related items and perform checks periodically as noted.



TIPS AND RECOMMENDATIONS

Perform these checks while traffic is restricted.

1. Housekeeping
 - Check door area for tripping or slipping hazards.
 - Make sure all hardware and overhead 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 or encourage people to stop and stand in the door area.
2. Check all doors for damage.
3. Force
 - Force to prevent the door from closing should not exceed 15 pounds measured with a force gauge.
4. Door safety signage
 - Refer to Chapter 6 for door safety signage requirements.
5. Lock stile
 - With door open, grasp lock stile of door and attempt to move horizontally and vertically.
 - There should be no looseness in the door pivots or in connections between door and operator.
6. Breakout stop
 - Center pivoted in swinging doors may be supplied with an emergency breakout stop or switch that will allow the door to open in the direction of emergency egress.
 - When the door is pushed into the breakout mode, check that the door will not activate.



WARNING

If there are any problems, discontinue door operation immediately and secure the door in a safe manner.
Call your local dormakaba USA, Inc. distributor for repair.

6 ED50 door signage

6.1 Low energy operator

6.1.1 Overview

Signage and warnings are specified in ANSI /BHMA A156.19; American National Standard for power assist and low energy power operated doors.

6.1.2 All low energy doors.

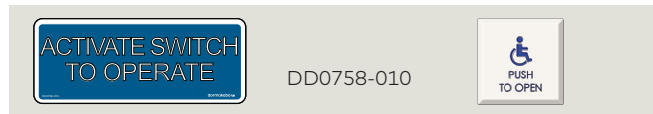
Fig. 6.1.1 AUTOMATIC CAUTION DOOR decal



1. AUTOMATIC CAUTION DOOR decal.
 - All low energy doors shall be marked with signage visible from both side of door with the words "AUTOMATIC CAUTION DOOR".
 - Signs shall be mounted $50" \pm 12"$ from floor to centerline of sign.

6.1.3 Knowing act switch used to initiate door operation.

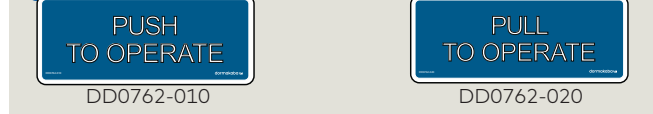
Fig. 6.1.2 ACTIVATE SWITCH TO OPERATE decal



1. ACTIVATE SWITCH TO OPERATE decal.
 - When a knowing act device is used to initiate operation of door operator, door shall be provided with sign on each side of door where switch is operated with message "ACTIVATE SWITCH TO OPERATE".

6.1.4 Push/Pull used to initiate door operation.

Fig. 6.1.3 PUSH TO OPERATE, PULL TO OPERATE decals



1. PUSH TO OPERATE, PULL TO OPERATE decals.
 - When push/pull is used to initiate operation of door operator, doors shall be provided with the message "PUSH TO OPERATE" on push side of door and "PULL TO OPERATE" on pull side of door.

6.2 Door signage, low energy single swing door

Fig. 6.2.1 Knowing act device initiation of door operation

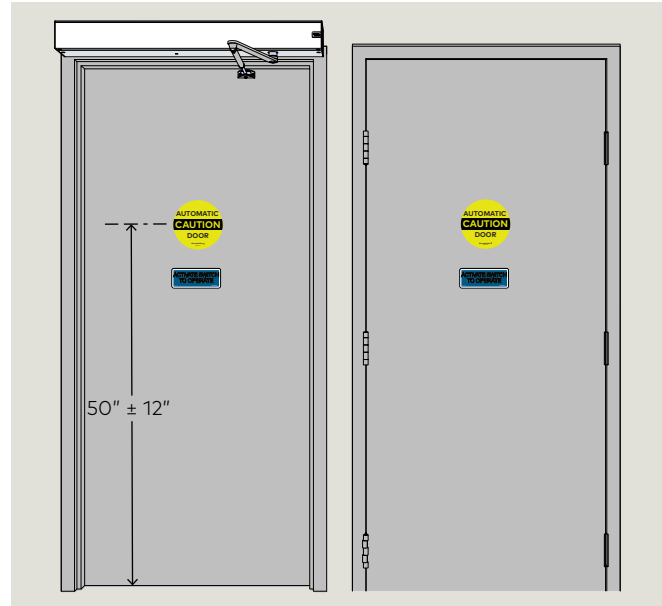
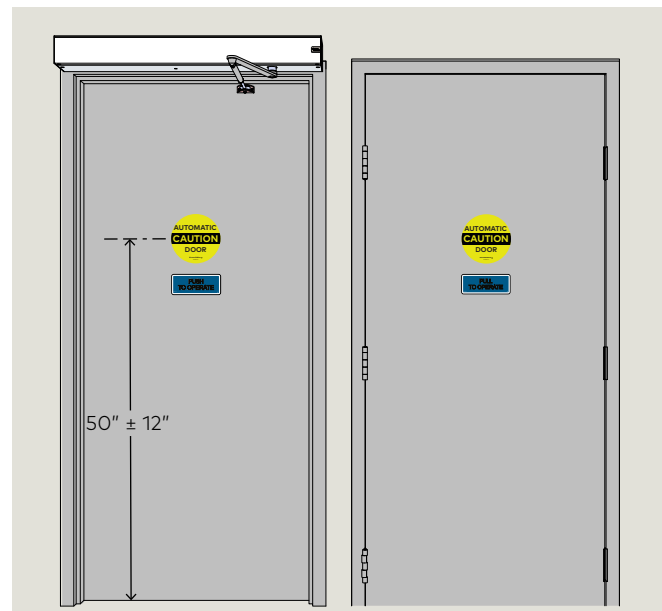


Fig. 6.2.2 Push/Pull initiation of door operation
Push Pull



6.3 Door signage, low energy double swing doors

Fig. 6.3.1 Knowing act, non-swing side

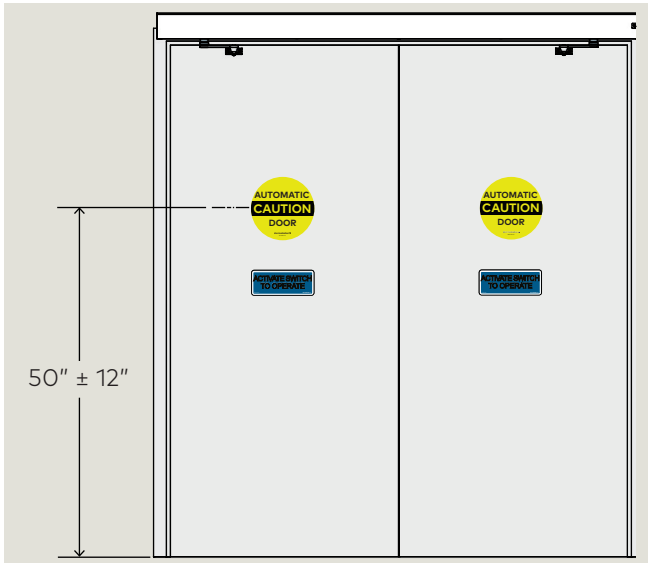


Fig. 6.3.2 Knowing act, swing side

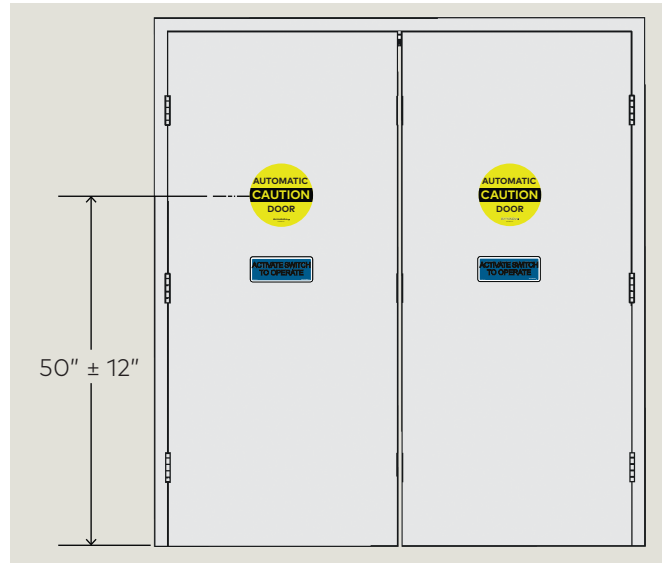


Fig. 6.3.3 Push/Pull, Push to operate

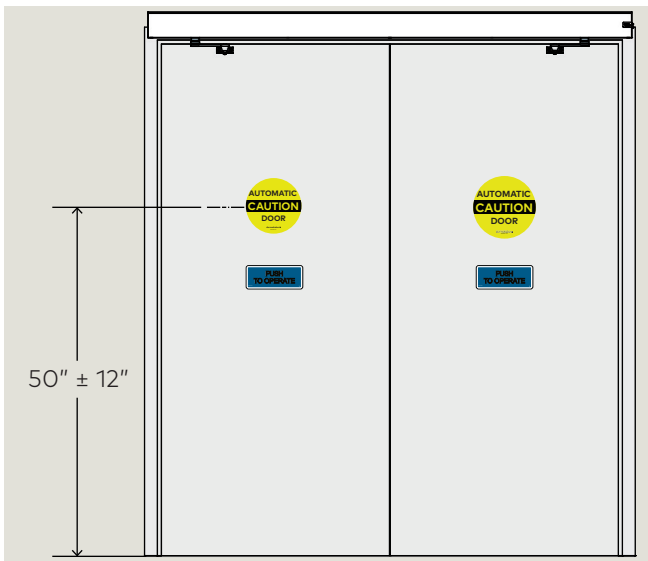


Fig. 6.3.4 Push/Pull, Pull to operate

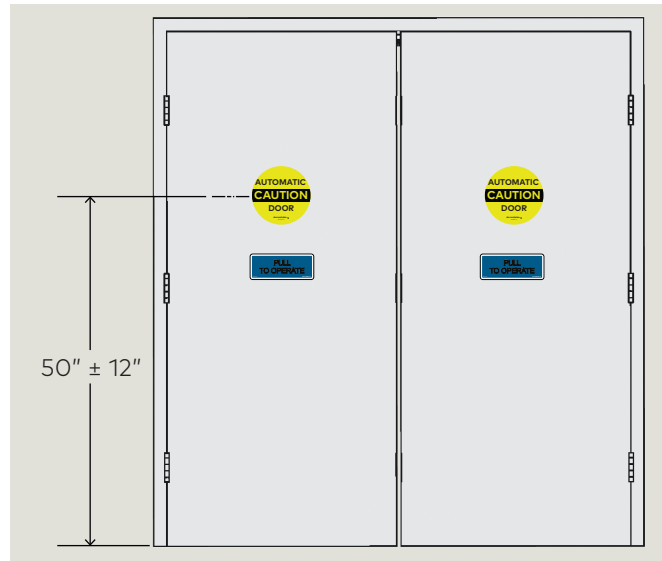


Fig. 6.3.5 Double egress, RH, knowing act, interior

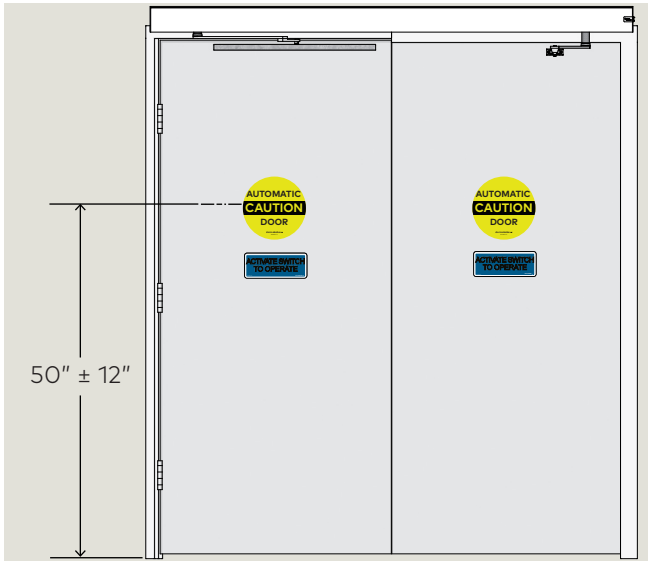
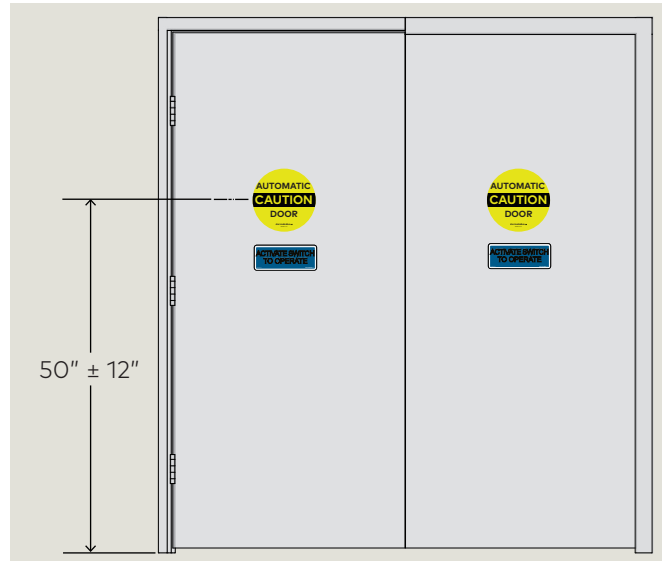


Fig. 6.3.6 Double egress, RH, knowing act, exterior



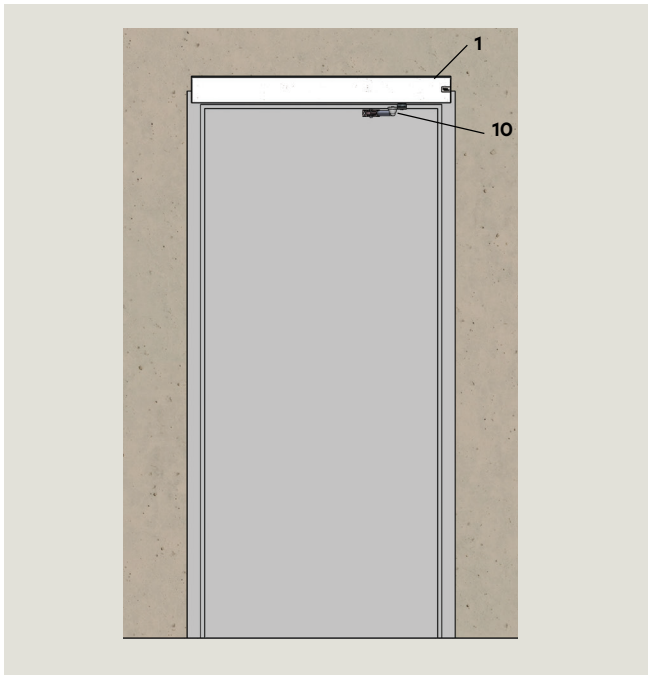
7 ED50 header cleaning

7.1 ED50 environment and cleaning

Table 7.1.1 Operator environmental requirements.

Ambient temperature	5 to 122 °F
Suitable for dry rooms only	Relative air humidity: 93% maximum, non-condensing

Fig. 7.1.1 ED50 header



7.1.1 ED50 environmental requirements.

ED50 header assembly is designed to operate on an interior building surface under the specifications shown in Table 7.1.1.

7.1.2 Areas around door(s) and door swing radius.

Areas around doors and door swing radius must be kept clear of all obstacles.

7.1.3 Cleaning



WARNING

Cleaning of header surfaces must be done with program switch (Para. 3.3) in Close position!

External surfaces of the header can be cleaned with a damp cloth and commercial cleaning agents.



TIPS AND RECOMMENDATIONS

Abrasive (scouring) agents should not be used as they may damage external surfaces.

7.1.4 Water and other liquids.

CAUTION

No water or other liquids must be sprayed or spilled on ED50 header!

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