

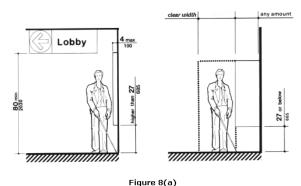
The ADA EZ Wire Free Door Opener fully complies with the Uniform Federal Accessibility Standards (UFAS) Section 4.4 on Protruding Objects.

For convenience and clarity the section of the standard appears below: Reference Figure 8a. This standard allows an object between 27 in and 80 in above the finished floor to protrude no more than 4 inches. The ADA EZ is mounted in the same location as an ordinary door closer and protrudes no more than 3 1/16 inches as does an ordinary door closer making the device fully compliant with the standard.

4.4 PROTRUDING OBJECTS.

4.4.1* GENERAL. Objects projecting from walls (for example, telephones) with their leading edges between 27 in and 80 in (685 mm and 2030 mm) above the finished floor shall protrude no more than 4 in (100 mm) into walks, halls, corridors, passageways, or aisles (see Fig. 8(a)). Objects mounted with their leading edges at or below 27 in (685 mm) above the finished floor may protrude any amount (see Fig. 8(a) and (b)). Freestanding objects mounted on posts or pylons may overhang 12 in (305 mm) maximum from 27 in to 80 in (685 mm to 2030 mm) above the ground or finished floor (see Fig. 8(c) and (d)). Protruding objects shall not reduce the clear width of an accessible route or maneuvering space (see Fig. 8(e)).

4.4.2 HEAD ROOM. Walks, halls, corridors, passageways, aisles, or other circulation spaces shall have 80 in (2030 mm) minimum clear head room (see <u>Fig. 8(a)</u>). If vertical clearance of an area adjoining an accessible route is reduced to less than 80 in (nominal dimension), a barrier to warn blind or visually-impaired persons shall be provided (see <u>Fig. 8(c)</u>).



Protruding Objects Walking Parallel to a Wall

Dynatool Industries Inc. 3540 St-Patrick, Montréal, Québec, CANADA, H4E 1A2 877.ADA EZ US (877.232.3987)





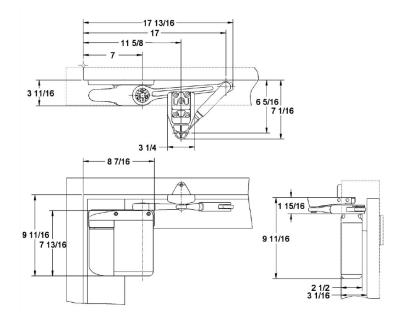


Figure 1. ADA EZ Dimensions

The ADA EZ Wire Free Door Opener fully complies with Part IV of the CT Fire Safety Code Guidebook Section 7.2.1.9.2

For convenience and clarity the section of the safety code appears below:

The ADA EZ Wire Free Door Opener:

- Can be opened manually in accordance with 7.2.1.9.1 to allow egress in the event of power failure.
- Will keep doors in the closed position unless actuated or opened manually.
- Will not allow the door to remain open for longer than 30 seconds when actuated.
- Can be connected to the fire panel to prevent operation in the event of activation from said panel.
- Will close and latch a door upon receipt of signal from a fire panel
- And is fully compliant with BHMA/ANSI A156.19 the American National Standard for Power Assist and Low Energy Power Operated Doors.

For these reasons the ADA EZ Wire Free Door Opener is fully compliant with the CT Fire Safety Code.

Dynatool Industries Inc. 3540 St-Patrick, Montréal, Québec, CANADA, H4E 1A2 877.ADA EZ US (877.232.3987)





7.2.1.9.2 Doors Required to Be Self-Closing. Where doors are required to be self-closing and are operated by power upon the approach of a person, or are provided with power-assisted manual operation, they shall be permitted in the means of egress where they meet the following criteria:

- (1) The doors can be opened manually in accordance with 7.2.1.9.1 to allow egress travel in the event of power failure.
- (2) New doors remain in the closed position unless actuated or opened manually.
- (3) When actuated, new doors remain open for not more than 30 seconds.
- (4) Doors held open for any period of time close and the power-assist mechanism ceases to function upon operation of approved smoke detectors installed in such a way as to detect smoke on either side of the door opening in accordance with the provisions of NFPA 72[®], National Fire Alarm Code[®].
- (5) Doors required to be self-latching are either self-latching or become self-latching upon operation of approved smoke detectors per 7.2.1.9.2(4).
- (6) New power-assisted swinging doors comply with BHMA/ANSI A156.19, American National Standard for Power Assist and Low Energy Power Operated Doors.

The ADA EZ Wire Free Door Opener fully complies with NFPA 80 Standard for Fire Doors and Other Opening Devices - 2007 Edition. The installation and application of the ADA EZ Wire Free Door Opener will not violate UL Certifications or Listings as the product fully conforms to UL325 and is certified to CAN/CSA 22.2 No. 247.

For convenience and clarity several sections of the standard are shown below. Taking each applicable section one at a time one can conclude the following:

1. Per the excerpt below from NFPA Standard for Fire Doors and Other Opening Devices 2007

Edition the ADA EZ would be considered labeled since it has been tested to conform to UL325
the recognized UL standard for Door, Drapery, Gate, Louver and Window Operators and
Systems. All Low Energy Power Operated Door Operators and Opener are tested to Conform to
this UL Standard- reference the UL 325 Scope below:

Dynatool Industries Inc. 3540 St-Patrick, Montréal, Québec, CANADA, H4E 1A2 877.ADA EZ US (877.232.3987)





Chapter 3 Definitions

3.1 General. The definitions contained in this chapter shall apply to the terms used in this standard. Where terms are not defined in this chapter or within another chapter, they shall be defined using their ordinarily accepted meanings within the context in which they are used. *Merriam-Webster's Collegiate Dictionary*, 11th edition, shall be the source for the ordinarily accepted meaning.

3.2 NFPA Official Definitions.

- **3.2.1* Approved.** Acceptable to the authority having jurisdiction.
- 3.2.2* Authority Having Jurisdiction (AHJ). An organization, office, or individual responsible for enforcing the requirements of a code or standard, or for approving equipment, materials, an installation, or a procedure.
- **3.2.3 Labeled.** Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization that is acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

MARCH 14, 2003 UL 325

INTRODUCTION

1 Scope

- 1.1 These requirements cover electric operators for doors, draperies, gates, louvers, windows and other opening and closing appliances rated 600 V or less to be employed in ordinary locations in accordance with the National Electrical Code, NFPA 70.
- 1.2 These requirements also cover complete doors, gates, and other such assemblies that include electric opening and closing appliances.
- 1.3 These requirements also cover accessories, such as external entrapment protection devices, for use with appliances covered by this standard.
- 1.4 Doors and door operators intended for exit use as defined in the Life Safety Code, NFPA 101 and codes such as the BOCA National Building Code, the Standard Building Code, and the Uniform Building Code, are additionally subject to design requirements specific to such use.

Dynatool Industries Inc.

3540 St-Patrick, Montréal, Québec, CANADA, H4E 1A2 877.ADA EZ US (877.232.3987)





2. Per the excerpt below from NFPA Standard for Fire Doors and Other Opening Devices 2007 Edition the ADA EZ conforms to Chapter 6 Swinging Doors with Builders Hardware since it can be equipped with a releasing device that shall automatically disconnect the power operator at the time of fire, allowing a self-closing or automatic device to close the door regardless of power failure or manual operation.

6.1.4.2 Self-Closing Doors.

- **6.1.4.2.1** Self-closing doors shall swing easily and freely and shall be equipped with a closing device to cause the door to close and latch each time it is opened.
- **6.1.4.2.2** The closing mechanism shall not have a hold-open feature.
- **6.1.4.3 Automatic-Closing Doors.** Automatic-closing doors shall be permitted to close automatically by means of the installation of a closing device and one of the following:
- A separate, labeled, fail-safe door holder/release device or a hold-open mechanism that shall be permitted to be an integral part of the basic closing device
- (2) An integral closing device that allows the door to swing freely and that automatically closes the door during an alarm condition, provided the hold-open mechanisms are released by one or a combination of automatic fire detectors acceptable to the AHJ
- **6.1.4.4 Power-Operated Fire Doors.** Power-operated fire doors shall be equipped with a releasing device that shall automatically disconnect the power operator at the time of fire, allowing a self-closing or automatic device to close the door regardless of power failure or manual operation.



2007 Edition







- 3. Per the excerpts below from NFPA Standard for Fire Doors and Other Opening Devices 2007 Edition the ADA EZ conforms to Chapter 7 Swinging Doors with Fire Door Hardware Sections 7.4 and 7.4.3 since the ADA EZ is an automatic closing device and since the ADA EZ is considered labeled door hardware per paragraph 3.2.3 and UL 325.
- 7.4 Assembly Components.
- 7.4.1* Closing Devices for Swinging Tin-Clad and Sheet Metal Fire Doors.
- **7.4.1.1** Swinging tin-clad and sheet metal fire doors shall be equipped with self-closing or automatic-closing devices to ensure that they are closed and latched at the time of fire.
- 7.4.1.2 Other arrangements acceptable to the AHJ shall be permitted.



- 7.4.3 Fire Door Hardware.
- 7.4.3.1 General.
- **7.4.3.1.1** Only labeled fire door hardware shall be used.
- **7.4.3.1.2** The design and construction of typical fire door hardware for swinging fire doors shall be as illustrated in UL 14C, Swing Hardware for Tin-Clad Fire Doors Mounted Singly and in Pairs.
- 7.4.3.2 Components. Fire door hardware shall include hinge brackets, hinges, latches, latch keepers, and operating handle mechanisms, and hardware for inactive door or pairs of doors shall include top and bottom bolts and keepers.



Dynatool Industries Inc. 3540 St-Patrick, Montréal, Québec, CANADA, H4E 1A2 877.ADA EZ US (877.232.3987)



4. Per the excerpts below from NFPA Standard for Fire Doors and Other Opening Devices 2007 Edition the ADA EZ conforms to Chapter 4 General Requirements Section 4.1.3 Appurtenances since the ADA EZ installation does not require function holes greater than ¾ in.

4.1.3 Appurtenances.

- **4.1.3.1** Preparation of fire door assemblies for locks, latches, hinges, remotely operated or remotely monitored hardware, concealed closers, glass lights, vision panels, louvers, astragals and split astragals, and the application of plant-ons and laminated overlays shall be performed in accordance with the manufacturer's inspection service procedure and under label service. (See Annex E and Annex F.)
- **4.1.3.2** For job site preparation of surface-applied hardware, function holes for mortise locks, and holes for labeled viewers, a maximum ¾ in. (19 mm) wood and composite door undercutting, and protection plates (see 6.4.5) shall be permitted.
- **4.1.3.3** Surface-applied hardware shall be applied to the door or frame without removing material other than drilling round holes to accommodate cylinders, spindles, similar operational elements, and through-bolts in doors.
- **4.1.3.4** The holes described in 4.1.3.3 shall not be permitted to exceed a diameter of 1 in. (25.4 mm) with the exception of cylinders.
- **4.1.4 Signage.** Informational signs shall be permitted to be installed on the surfaces of fire doors in accordance with 4.1.4.1 through 4.1.4.4 or in accordance with the manufacturer's published listing.
- **4.1.4.1** The total area of all attached signs shall not exceed 5 percent of the area of the face of the fire door to which they are attached.

Dynatool Industries Inc. 3540 St-Patrick, Montréal, Québec, CANADA, H4E 1A2 877.ADA EZ US (877.232.3987)



The ADA EZ Wire Free Door Opener fully complies with the California building code (CBC): 1133B.2.3.2 & 1133B.2.5 as outlined below.

CBC Sec. 1133B.2.3.2

Automatic door closers shall comply with BHMA A156.10. Slowly opening, automatic doors shall comply with BHMA A156.19. Such doors shall not back check faster than 3 seconds and shall require no more than 15 lbf to stop door movement. If a power-assisted door is used, its door-opening force shall not exceed 5 lbf (15 lbf for fire doors) and closing shall conform to BHMA A156.19.

1133B.2.5 Door Opening Force.

The maximum force required to push or pull open a door shall comply with this section. Push or pull force for a hinged door shall be measured perpendicular to the door face at the door opening hardware or 30 inches (762 mm) from the hinged side, whichever is farther from the hinge. Push or pull force for a sliding or folding door shall be measured parallel to the door at the door pull or latch. Compensating devices or automatic door operators complying with Section 1133B.2.3.2 may be used to meet the maximum force limits.

- 1. Required fire doors shall have the minimum opening force allowable by the appropriate administrative authority, not to exceed 15 lbf (66.7 N).
- 2. Other than required fire doors, interior doors shall have a maximum opening force of 5 lbf (22.2 N).
- 3. Other than required fire doors, exterior doors shall have a maximum opening force of 5 lb (22.2 N).

Exceptions:

- 1. Exterior doors to machinery spaces including, but not limited to, elevator pits or elevator penthouses; mechanical, electrical or communications equipment rooms; piping or equipment catwalks; electric substations and transformer vaults; and highway and tunnel utility facilities.
- 2. When, at a single location, one of every 8 exterior door leafs, or fraction of 8, is a powered door, other exterior doors at the same location, serving the same interior space, may have a maximum opening force of 8.5 lbf (37.8 N). The powered leaf(s) shall be located closest to the accessible route.
- a. Powered doors shall comply with Section 1133B.2.3.2. Powered doors shall be fully automatic doors

Dynatool Industries Inc. 3540 St-Patrick, Montréal, Québec, CANADA, H4E 1A2 877.ADA EZ US (877.232.3987)

www.adaez.com



complying with Builders Hardware Manufacturers' Association (BHMA) A156.10 or low energy operated doors complying with BHMA A156.19.

- b. Powered doors serving a building or facility with an occupancy of 150 or more shall be provided with a back-up battery or back-up generator. The back-up power source shall be able to cycle the door a minimum of 100 cycles.
- c. Powered doors shall be controlled on both the interior and exterior sides of the doors by sensing devices, push plates, vertical actuation bars or other similar operating devices complying with Section 1117B.6.

At each location where push plates are provided there shall be two push plates; the centerline of one push plate shall be 7 inches (178 mm) minimum and 8 inches (203 mm) maximum above the floor or ground surface and the centerline of the second push plate shall be 30 inches (762 mm) minimum and 44 inches (1219 mm) maximum above the floor or ground surface. Each push plate shall be a minimum of 4 inches (102 mm) diameter or a minimum of 4 inches by 4 inches (102 mm by 102 mm) square and shall display the International Symbol of Accessibility complying with Section 1117B.5.8.1.

At each location where vertical actuation bars are provided the operable portion shall be located so the bottom is 5 inches (127 mm) maximum above the floor or ground surface and the top is 35 inches (889 mm) minimum above the floor or ground surface. The operable portion of each vertical actuation bar shall be a minimum of 2 inches (51 mm) wide and shall display the International Symbol of Accessibility complying with Section 1117B.5.8.1.

Where push plates, vertical actuation bars or other similar operating devices are provided, they shall be placed in a conspicuous location. A level and clear floor or ground space for forward or parallel approach complying with Sections 1118B.4 and 1124B.1 shall be provided, centered on the operating device. Doors shall not swing into the required clear floor or ground space.

d. Signage identifying the accessible entrance required by Section 1127B.3 shall be placed on, or immediately adjacent to, each powered door. Signage shall be provided in compliance with BHMA A156.10 or BHMA 156.19, as applicable.

Dynatool Industries Inc. 3540 St-Patrick, Montréal, Québec, CANADA, H4E 1A2 877.ADA EZ US (877.232.3987)

www.adaez.com



e. In addition to the requirements of Item d, where a powered door is provided in buildings or facilities containing assembly occupancies of 300 or more, a sign displaying the International Symbol of Accessibility measuring 6 inches by 6 inches (152 mm by 152 mm), complying with Section 1117B.5.8.1, shall be provided above the door on both the interior and exterior sides of each powered door.

Sincerely,

J. Jay Vaitkus

Business Development Dynatool Industries – ADA EZ Division 1-877-ADA-EZ-US (877-232-3987)

jvaitkusj@dyna-tool.com

Dynatool Industries Inc. 3540 St-Patrick, Montréal, Québec, CANADA, H4E 1A2 877.ADA EZ US (877.232.3987)

