



## Swing Door Operators & Door Closers ADA Compliance

### What is a Door Operator?

A swing-door operator is a device that operates a swing door for pedestrian use. It opens or helps open the door automatically, waits, then closes it. They are powered by an electric motor, coming in different types...

Full Energy operators are typically used on the outside doors of medium-sized retail business.

Low Energy operators, which we will be talking about today, are typically used where a simple door closer is sufficient for able users, yet it is necessary to add for ADA standards users in small businesses, apartments, bathrooms.

#### *A door operator may be triggered in various ways:*

- Approach sensor (such as a radar sensor in the form of a Gunn diode and Waveguide) - the door opens when a user approaches it.
- Push button - the door opens when a user presses a button.
- Push-&-go - the door opens fully when the user begins opening it.
- Access control - the door opens when an access control system determines the user is authorized to go through.

A trigger from any of the above requests that the door be opened (or reopened if it was closing). The operator will heed that requests only after it is able to do so safely for any other users in the area.



Above is the Norton's ADAEZ Series is certified to reduce energy consumption by as much as 100 percent versus other comparable operators. Available in wireless and plug-in versions and able to fit in the tightest of spaces, the 5800 ADAEZ is simple to install and use.

A fully charged battery has the capability to open a door up to 2000 times in a row, generously allowing for periodic fluctuations from 80/25 guidelines with little impact on the product's overall usability. Example: 30% automatic use for one day is not a problem, as long as that level of automatic use is not sustained.



## What are ADA requirements for doors?

By ADA standards, the clear width of a door opening must be a minimum of 32 inches and a maximum of 48 inches. This clear width measurement is taken between the face of the door and the stop of the frame with the door open to 90 degrees.

Norton also offers a larger Series Low Energy Operator, which offers a broad set of intelligent functions, such as power close, latch assist and obstruction detection to safely secure a variety of moderate to high traffic openings.

## What is a Door Closer?

A door closer is defined as any mechanical device that closes a door in a controlled manner, preventing it from slamming, in general *after* someone opens it, or after it was automatically opened. The force used to open the door is stored in some type of spring and when released this energy is then utilized to return the door to a closed position.

Door closers can be linked to a building's fire alarm system.

There are seven styles of interior door-closer:

- Surface-mounted
- Concealed in frame (jamb)
- Concealed in header (transom)
- Concealed in floor
- Concealed in door
- Concealed in shoe
- Integral to hinge



LCN is one company that produces door closers -- and above, is featuring their 4040XP Series is LCN's most durable surface-mounted heavy-duty closer, designed for the most demanding high-use-and-abuse applications.

Materials include high-strength cast-iron cylinder, forged steel arm, double heat-treated steel pinion and full complement, low friction bearing for rugged reliability in high-traffic installations.



Sargent is another popular manufacturer of door closers. They have a wide variety of all of the different types of door closers, including a Cam Action door closer.

The Cam Action closer is designed to meet ADA requirements in push/pull track applications, the 422 Cam Action Closer ensures that a door is light to open, but still has enough internal force to close securely even in abusive, high-traffic environments like nursing homes, healthcare facilities, schools, and office buildings.



*Cam-Action closer bottom right, A standard Sargent door closer above right.*

## ***The Benefits of Door Closers;***

### ***Fire safety***

Door closers are most commonly installed on fire doors and entrance doors, which need to be closed in case of fire, to help prevent the spread of fire and smoke. In most countries, their performance will be governed by national standards.

### ***Maintaining room temperatures***

Door closers also play a role in maintaining desired interior temperatures, reducing air movement in and out of conditioned space.

### ***Security***

Door closers also play a role in security at building entrance doors, closing doors once somebody has passed through and re-latching the door lock.

### ***Noise control***

In buildings that require noise control (Studios) door closers play an important part in the suppression of unwanted noise both in and out rooms and the buildings themselves.

### ***Privacy***

Door closers are often used to ensure privacy in toilets and washrooms.

### ***Hygiene***

Door closers can also play a part in keeping buildings and rooms free from dirt, debris and pests.

***For more information or a consultation for your own building or facility, please contact FST!***