Automatic and Power Assisted Doors

Presenters

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AGENDA

- ADA/ABA Standards
- BHMA
- ANSI 156.19
- ANSI 156.38
- ANSI 156.10
- IBC-Codes / ADA / ABA
- AAADM
- OWNERS RESPONSIBILITY

Automatic and Power-Assisted Doors
(§404.3)

- ANSI/BHMA Standards (for safety and operation)
- Thresholds (same as manual doors)
- Doors in series (same as manual doors)
- Clear width
- Break Out Opening
- Controls
- Maneuvering Clearance*
Clear width (§404.3.1)

- 32” minimum in power-on and power-off mode
- If both leaves open when activated the clear width is based on the opening provided by all leaves in the open position.

Controls

Operable part, within reach range

Outside swing of the door
Maneuvering clearance at Automatic/Power assisted doors

**A156.19 Power-Assisted Doors**
- Compliance with 404.2.4 required

**A156.10 Full-Powered Automatic Doors**
**A156.19 Low-Energy Power Operated Doors**
- Compliance with 404.2.4 required at doors on accessible MOE that lack standby power or that do not stay open in power-off mode.

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BHMA

**About BHMA:**
The Builders Hardware Manufacturers Association (BHMA®) is the trade association for North American manufacturers of commercial builders' hardware.

**BHMA Mission Statement:**
Enhancing public safety and the security of buildings through standards, code advocacy and a commitment to fostering innovations that lead to the continuous improvement of builders hardware.

[https://buildershardware.com/](https://buildershardware.com/)
GENERAL – sections 1.1-1.7

1.1 SCOPE

1.2 Doors that require higher speeds, forces, shorter time delays, and activating sensing devices…

1.3 Custom design installations
DEFINITIONS – *section 2.1 -2.4*

2.1 Knowing Act

2.2 Low Energy Power Operated Door

2.3 Power Assist Door

2.4 Push-Pull Activation

ANSI A156.19 *section 3*

REQUIREMENTS FOR POWER ASSIST DOORS
POWER ASSIST DOORS – section 3.1 – 3.5

3.1 Activation

3.2 Opening

3.3 Time Delay

3.4 Closing

3.5 Force

POWER ASSIST DOORS – section 3.5

3.5 Force and Kinetic Energy
SIGNAGE FOR POWER ASSIST DOORS

SIGNAGE- POWER ASSIST DOORS section 6.3.1

6.3.1 When a separate wall switch is used to initiate power assist…
SIGNAGE - POWER ASSIST DOORS - section - 6.3.2

6.3.2 When remote devices, and/or pushing or pulling the door are used to initiate power assist, …

ANSI A156.19 section 4

REQUIREMENTS FOR LOW ENERGY POWER OPERATED DOORS
**LOW ENERGY POWER OPERATED DOORS** – *section 4.1*

4.1 Activation  
The operator shall be activated by a knowing act.

**LOW ENERGY POWER OPERATED SWINGING DOORS** – *section 4.2*

4.2 Switch Location
Knowing Act Switch Type

- Oftentimes the question is raised, “What type of Knowing Act Switch am I required to use?”

LOW ENERGY POWER OPERATED SWING DOORS – section 4.3 – 4.5

4.3 Opening

4.4 Time Delay

4.5 Closing
LOW ENERGY POWER OPERATED SWING DOORS – section 4.6

4.6 Force

ANSI A156.19 SECTION 6 – SIGNAGE (cont.)

SIGNAGE FOR LOW ENERGY POWER OPERATED SWING DOORS
SIGNAGE - LOW ENERGY POWER OPERATED SWING DOORS
- section 6.4.1 - 6.4.3

6.4.1 All low energy doors shall be marked with signage visible from both sides of the door, with the words "CAUTION AUTOMATIC DOOR"

6.4.2 When a Knowing Act Switch is used to initiate the operation of the door operator, ...

6.4.3 When push/pull is used…

ANSI 156.38 – LOW ENERGY POWER OPERATED FOLDING AND SLIDING DOORS

- KNOWING ACT
- SPEED
- FORCE
- TIME DELAY
- SIGNAGE
ANSI 156.10

POWER OPERATED PEDESTRIAN DOORS

• GUIDE RAILS
• MATS
• SENSORS
• KNOWING ACT
• ENTRAPMENT
• SIGNAGE
• BREAKAWAY - EGRESS
• APPENDIX

CODES

• The 2021 IBC section 1010.3.2 – Power-Operated Doors requires compliance to A156.10, A156.19 or A156.38
• The 2021 IBC section 1105.1 now requires some type of Power Operated Door at public entrances for many building occupancies.
• NFPA 5000 – 2024 code for construction, protection, and occupancy features necessary to safeguard life, health, property, and public welfare and minimize injuries. Similar language as IBC requiring Power Operated Doors at Public Entrances.
• NFPA 101 Life Safety Code - section 7.2.1.9 – Power Door Leaf Operation requires compliance to the above standards
IBC

2021 INTERNATIONAL BUILDING CODE ADOPTION FOR POWER OPERATED DOORS

- Adoption will take some time as research shows 50% of states typically take 3-6 yrs to adopt a given building code
- PUBLIC ENTRANCES REQUIRES .10 OR .19 COMPLIANT SYSTEM
  - Based on occupancy type

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IBC continued

2021 IBC: Section 1105.1 Public Entrances

At least 60% of all public entrances shall be accessible
CODES > ADA > ABA

• Title III of the ADA – 28 CFR Part 36 subpart D requires commercial facilities or a place with public accommodations are required to ensure a facility is readily accessible for persons with disabilities.

• When costs exceed certain disproportionate expenditures. The highest priority duty is to provide accessible entrances followed by accessible routes, and restrooms and so on.

• The Architectural Barriers Act (ABA) of 1968 requires buildings or facilities that were designed, built, or altered with federal dollars to be accessible.

AAADM

AMERICAN ASSOCIATION OF AUTOMATIC DOOR MANUFACTURERS

• 30 YEARS TRAINING
• COMPLIANCE TO ANSI STANDARDS
• CERTIFICATION
• AAADM CERTIFIED INSPECTORS / ELIGIBILITY
  • (6000+ CERTIFIED INSPECTORS)
MISSION STATEMENT

The mission of AAADM is to advance the interests of the automatic door system industry; to increase education, training and professionalism among installers and service providers; and to generally promote the safe use of automatic doors.

OWNERS RESPONSIBILITY

1) Know your door system
   a) Owner’s Manual

2) Inspect your door system on a daily basis
   a) Daily Safety Check
   b) Walk test
   c) Visual test
   d) Listen
   e) Take out of service if deficiency is noticed

3) Service Availability
   a) Know who to call for service
   b) Qualified automatic door inspector/technician
   c) Maintain accurate service records
OWNERS RESPONSIBILITY CONTINUED

1) Automatic doors must interact safely with pedestrians
2) Automatic doors must comply with safety standards
3) If door is not properly adjusted and maintained an accident may occur.
4) It’s the owner’s responsibility to ensure their automatic doors are operating properly every day.
5) In most cases the owner of the door bears the greatest amount of liability if an accident does occur.

Questions?

You may type and submit questions in the Q&A Area

(questions submitted in the Chat will not be considered)
Access Board Technical Guides on the Standards

Chapters 1-7, & 10 available on Board's website
www.access-board.gov

Newly Released
Accessible Signage

Updating Chapter 10
Recreation Facility Guides

Resources

BHMA. Builders Hardware Manufacturers Association
https://buildershardware.com/

AAADM. American Association of Automatic Door Manufacturers
https://www.aaadm.com/

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Continuing Education

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Questions will be addressed at the conclusion of this presentation.
Thank you for participating in today’s webinar

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Next scheduled session: January 5, 2022

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