

## **Michigan does not require Power Operated doors in any facility.**

Neither Michigan Building Code 2009, ANSI (ICC/ANSI A117.1 2003) nor Michigan Barrier Free (Interoperation of Michigan Building Code 2009 and ICC/ANSI A117.1 2003) requires power operated doors..... They only prescribe guidelines when power operated doors are used.

One Caveat: None of the codes state that Power Operated doors are required; however, Michigan Building Code 2009 section 1105.1 does state: "at least 60 percent of all public entrances shall be accessible". In discussion with other industry experts; it is concluded that this statement could be accomplished by having a doorbell to call for ADA assistance, adding a Power Operated door or having one exterior opening designated and marked as an "ADA Opening" -this door would be provided with a hydraulic door closers that is set at 5lbs or less.

### **Supporting Documentation:**

*What Mi Building Code 2009 says about Door Forces and Power Operated Doors:*

Excerpts from Chapter 10 MEANS OF EGRESS (Starting on Page 225) in the Mi Building Code 2009:

1008.1.3 Door opening force. The force for pushing or pulling open interior swinging egress doors, other than fire doors, shall not exceed 5 pounds (22 N). For other swinging doors, as well as sliding and folding doors, the door latch shall release when subjected to a 15-pound (67 N) force. The door shall be set in motion when subjected to a 30-pound (133 N) force. The door shall swing to a full-open position when subjected to a 15-pound (67 N) force.

1008.1.4.2 Power-operated doors. Where means of egress doors are operated by power, such as doors with a photoelectric-actuated mechanism to open the door upon the approach of a person, or doors with power-assisted manual operation, the design shall be such that in the event of power failure, the door is capable of being opened manually to permit means of egress travel or closed where necessary to safeguard means of egress. The forces required to open these doors manually shall not exceed those specified in Section 1008.1.3, except that the force to set the door in motion shall not exceed 50 pounds (220 N). The door shall be capable of swinging from any position to the full width of the opening in which such door is installed when a force is applied to the door on the side from which egress is made. Full-power-operated doors shall comply with BHMA A156.10. Power-assisted and low-energy doors shall comply with BHMA A156.19.

*What Mi Building Code 2009 says about Accessibility:*

Excerpts from Chapter 11 Accessibility (Starting on Page 255) in the Mi Building Code 2009

SECTION 1101 GENERAL 1101.1 Scope.

The provisions of this chapter shall control the design and construction of facilities for accessibility to physically disabled persons.

1101.2 Design. Buildings and facilities shall be designed and constructed to be accessible in accordance with 1966 PA 1, MCL 125.1351 to 125.1356, this code, and ICC/ANSI A 117.1, except sections 611 and 707. R 408.30427

## SECTION 1103 SCOPING REQUIREMENTS

1103.1 Where required. Sites, buildings, structures, facilities, elements and spaces, temporary or permanent, shall be accessible to persons with physical disabilities.

## SECTION 1105 ACCESSIBLE ENTRANCES

1105.1 Public entrances. In addition to accessible entrances required by Sections 1105.1.1 through 1105.1.6, at least 60 percent of all public entrances shall be accessible.

Exceptions:

1. An accessible entrance is not required to areas not required to be accessible.
2. Loading and service entrances that are not the only entrance to a tenant space.

1105.1.1 Parking garage entrances. Where provided, direct access for pedestrians from parking structures to buildings or facility entrances shall be accessible.

1105.1.2 Entrances from tunnels or elevated walkways. Where direct access is provided for pedestrians from a pedestrian tunnel or elevated walkway to a building or facility, at least one entrance to the building or facility from each tunnel or walkway shall be accessible.

1105.1.3 Restricted entrances. Where restricted entrances are provided to a building or facility, at least one restricted entrance to the building or facility shall be accessible.

1105.1.4 Entrances for inmates or detainees. Where entrances used only by inmates or detainees and security personnel are provided at judicial facilities, detention facilities or correctional facilities, at least one such entrance shall be accessible.

1105.1.5 Service entrances. If a service entrance is the only entrance to a building or a tenant space in a facility, that entrance shall be accessible. 1105.1.6 Tenant spaces, dwelling units and sleeping units. At least one accessible entrance shall be provided to each tenant, dwelling unit and sleeping unit in a facility.

Exceptions:

1. An accessible entrance is not required to tenants that are not required to be accessible.
2. An accessible entrance is not required to dwelling units and sleeping units that are not required to be Accessible units, Type A units or Type B units.

ACCESSIBLE. A site, building, facility or portion thereof that complies with this chapter.

*What ICC/ANSI A117.1 2003 says about Door Forces and Power Operated Doors:*

ICC/ANSI A117.1 2003 only prescribes interior door forces:

**404.2.8 Door–Opening Force.** Fire doors shall have the minimum opening force allowable by the appropriate administrative authority. The force for pushing or pulling open doors other than fire doors shall be as follows:

1. Interior hinged door: 5.0 pounds (22.2 N) maximum
2. Sliding or folding door: 5.0 pounds (22.2 N) maximum

These forces do not apply to the force required to retract latch bolts or disengage other devices that hold the door in a closed position.

Operation criteria if using a power operated door:

404.3 Automatic Doors. Automatic doors and automatic gates shall comply with Section 404.3. Full powered automatic doors shall comply with ANSI/BHMA A156.10 listed in Section 105.2.4. Power–assist and low–energy doors shall comply with ANSI/BHMA A156.19 listed in Section 105.2.3.

EXCEPTION: Doors, doorways, and gates designed to be operated only by security personnel shall not be required to comply with Sections 404.3.2, 404.3.4, and 404.3.5.

404.3.1 Clear Opening Width. Doorways shall have a clear opening width of 32 inches (815 mm) in power–on and power–off mode. The minimum clear opening width for automatic door systems shall be based on the clear opening width provided with all leaves in the open position.

404.3.2 Maneuvering Clearances. Maneuvering clearances at power–assisted doors shall comply with Section 404.2.3.

*What ADA and ABA says about Door Forces and Power Operated Doors:*

ADA Accessibility Guidelines for Buildings and Facilities (ADAAG) 2004

ADA Standards for Accessible Design - DOJ, 2010

ABA Accessibility Standard for Federal Facilities, 2006

ADA and ABA are identical in regard to opening force and Power Operator criteria and similar to ICC/ANSI A117.1 2003:

Opening force criteria:

404.2.9 Door and Gate Opening Force. Fire doors shall have a minimum opening force allowable by the appropriate administrative authority. The force for pushing or pulling open a door or gate other than fire doors shall be as follows:

Interior hinged doors and gates: 5 pounds (22.2 N) maximum.

Sliding or folding doors: 5 pounds (22.2 N) maximum.

Operation criteria if using a power operated door:

404.3 Automatic and Power-Assisted Doors and Gates. Automatic doors and automatic gates shall comply with 404.3. Full-powered automatic doors shall comply with ANSI/BHMA A156.10 (incorporated by reference, see "Referenced Standards" in Chapter 1). Low-energy and power-assisted doors shall comply with ANSI/BHMA A156.19 (1997 or 2002 edition) (incorporated by reference, see "Referenced Standards" in Chapter 1).

404.3.1 Clear Width. Doorways shall provide a clear opening of 32 inches (815 mm) minimum in power-on and power-off mode. The minimum clear width for automatic door systems in a doorway shall be based on the clear opening provided by all leaves in the open position.

404.3.2 Maneuvering Clearance. Clearances at power-assisted doors and gates shall comply with 404.2.4. Clearances at automatic doors and gates without standby power and serving an accessible means of egress shall comply with 404.2.4.

EXCEPTION: Where automatic doors and gates remain open in the power-off condition, compliance with 404.2.4 shall not be required.