



INFORMATION SHEET

NO. DA-05

DATE : April 29, 2024
CATEGORY : Disabled Access
SUBJECT : **The Use of Power Door Operators in lieu of Required Push and Pull Side Clearances at Doors and Gates and when Door and Gate Opening Force Exceeds Maximum Force to Operate**

PURPOSE : The purpose of this Information Sheet is to detail requirements for using power door operators to overcome existing conditions which present a technical infeasibility to comply with door side clearances and door maximum opening forces in existing buildings.

REFERENCE : California Building Code (CBC), Current Edition
Section 202 Definitions, Technically Infeasible
Section 202 Definitions, Equivalent Facilitation
Section 1126A.3, Maneuvering Clearances at Doors; Figures 11A-8A
Maneuvering Clearances at Swing Doors
Section 11B-202.3, Exception 2, Technical Infeasibility
Section 11B-202.4, Exception 8, Path of Travel in Alterations
Section 11B-404.3, Automatic and Power-Assisted Doors
Section 11B-404.2.4, Maneuvering Clearances at Doors
Section 11B-404.2.9, Door and Gate Opening Force
Division of State Architect (DSA) Advisory 11B-404.3 Automatic and Power-Assisted Doors and Gates
American National Standards Institute / Building Hardware Manufacturers Association (ANSI/BHMA) A156.19 and ANSI/BHMA A156.10
Information Sheet DA-02, Disabled Access Upgrade Compliance Checklist Package

DISCUSSION :

This Information Sheet outlines circumstances under which a technical infeasibility request may be ministerially approved.

An Approval of Technical Infeasibility Request form and an Approval of Equivalent Facilitation Request form must be submitted with the permit plans and accompanied by information documenting that strict compliance with code requirements cannot be met because of structural or other existing site constraints, as defined under San Francisco Building Code, Section 202 Technically Infeasible. Refer to Information Sheet DA-02 for the required forms and for instructions on how to fill out disability compliance forms.

Side Clearances:

For a person with disabilities to operate doors, minimum clearances are needed as prescribed by the code. The current minimum required pull-side clearances are 18 inches of clearance on the strike-side for interior doors, 24 inches of strike-side clearance for the exterior side of exterior doors, and 12 inches of push-side clearance for doors equipped with both latches and closers per CBC 11B-404.

Many existing buildings were not required to provide the clearances listed above when they were originally designed and built. However, when existing buildings are altered, renovated or repaired, they then are required to provide the minimum clearances at doors and gates. It is often infeasible to comply with the required doors and gate clearances.

Opening Force in Existing Buildings:

Per CBC 11B-404.2.9, door and gate opening forces are limited to 5 pounds of pressure to operate. This applies to hinged, sliding or folding doors. Additionally, fire doors are permitted to take up to 15 pounds to operate. At exterior doors, due to differences in pressures between the inside and outside the building, exterior door size, and wind tunnels created by tall buildings, the maximum operating force of 5 pounds may be technically infeasible to achieve.

Technical Infeasibility:

Where it is technically infeasible to achieve the required door side clearances and maximum door operating forces, power door operators may be used and ministerially approved where the following conditions, as applicable, are met:

1. The power door operator must be fully functional.
2. The power door operator shall be functional whenever the door is unlocked.
3. The power door operator controls (sensing devices, push plates, vertical actuation bars or other similar operating devices complying with Section 11B-205) are to be located in a conspicuous location at both the push side and the pull side of the door.
4. The power door operator push plates shall be a minimum of 4 inches in diameter or a minimum of 4-inch by 4-inch square and display the International Symbol of Accessibility (ISA) complying with Section 11B-703.7.2.1.
5. At each location where push plates are provided, there shall be two push plates. The centerline of one push plate shall be 7 inches minimum and 8 inches maximum above the floor or ground surface and the centerline of the second push plate shall be 30 inches minimum and 44 inches maximum above the floor or ground surface. CBC Section 11B-404.2.9.
6. At each location where vertical actuation bars are provided, the operable portion shall be located such that the bottom is 5 inches maximum above the floor or ground surface and the top is 35 inches minimum above the floor or ground surface. The operable portion of each vertical actuation bar shall be a minimum of 2 inches wide and shall display the International Symbol of Accessibility (ISA) complying with Section 11B-703.7.2.1.
7. Power door operating devices shall be outside the swing of the operated door, and a level and clear floor or ground space for forward or parallel approach complying with Section 11B-305 shall be centered on the operating device. Where there is a pair of doors with only one operated leaf,

the power door operator should be, whenever possible, on the strike side of the operated door leaf and as close to the operated door leaf as reasonably possible.

8. The minimum time from door opening to the start of door closing shall be as indicated in the following table (distance is from center of the closed door face to the center of the control device):

DISTANCE (feet)	TIME (seconds)
0 to 6	5
7 to 8	6
9 to 10	7
11 to 12	10

Distances over 12 feet are not allowed. The distance shall be established from the center of the door to the center of the farthest operator control.

9. Equipment installation shall be in accordance with the manufacturer’s product listing and ANSI/BHMA A156.19 and ANSI/BHMA A156.10, as applicable.



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Date

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