



INFORMATION SHEET

NO. DA-05

DATE : September 2, 2014

CATEGORY : Disabled Access

SUBJECT : **Use of Powered Door Operators in Lieu of Exterior and Interior Doors and Gates Side Clearances and Opening Force in Existing Buildings**

SECTIONS INVOLVED

- : **2013 California Building Code**
- Section 202, Technically Infeasible, defined
 - Section 202, Equivalent Facilitation, defined
 - Section 1126A.3, Maneuvering Clearances at 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
 - Sections 11B-404.2.4., Maneuvering Clearances at Doors; Figures 11A-8A through 11A-8F, Level Maneuvering Clearances at Doors
- DSA Advisory 11B-404.3, Automatic and Power-assisted Doors**

PURPOSE : To detail an equivalency which may be administratively approved for the use of powered door operators in lieu of both the required maximum opening force and the maneuvering clearances adjoining the exterior and interior of doors and gates within existing buildings which are required to be made accessible to persons with disabilities.

DISCUSSION :

Clearance is required adjacent to the pull side and, in some cases, the push side of doors used in accessible paths-of-travel to allow wheelchair users to approach and open doors. The current minimum required pull side clearances are 18 inch strike side clearance for interior doors, 24 inch strike side clearance for exterior doors and 12 inch push side clearance for doors equipped with both latches and closers. These clearances frequently cannot be reasonably provided due to existing structural constraints or other fixed obstructions. Additionally, it is often infeasible to comply with the maximum required opening force for doors of 5 pounds. This Information Sheet outlines circumstances under which a Documentation of Technical Infeasibility may be administratively approved for such conditions when equivalent facilitation is provided through the use of power operated doors. A door which complies with this Information Sheet will be considered to be accessible to and usable by persons with disabilities.

DSA Advisory 11B-404.3 allows for automatic power door operators to be used as an equivalent facilitation where required strike and push side clearance is technically infeasible or when the door closer pressure would exceed the allowable opening force for interior and exterior doors. The DSA will also recognize them as fully equivalent in such situations. This equivalency does not require an unreasonable hardship, an approval of the technical infeasibility and equivalency must be reviewed, approved and recorded by the DSA.

Where multiple doors at a single location exceed the maximum allowable opening force, not all doors need to have power door operators if all the remaining doors fully comply with the conditions of Section 11B-404.2.9 exception #2. No documentation of infeasibility or equivalency will be required if there is full compliance with this exception.

This Information Sheet outlines circumstances under which an approval of a Technical Infeasibility and approval of an Equivalent Facilitation may be administratively approved for such conditions when equivalent facilitation is provided through the use of powered door operators. Submittal of a Documentation of Technical Infeasibility form must be accompanied by information which documents that strict compliance with code requirements cannot be met because of structural or other existing physical or site constraints, as defined under San Francisco Building Code, Section 202- Technically Infeasible.

Administrative approval may be granted for the use of powered door operators in lieu of side clearances or door opening force if the following conditions, as applicable, are met:

1. The powered door operator is to be supplementary to manual door(s) which meet other code requirements.
2. Powered door operator is to be maintained in operating condition.
3. Powered door operator shall be operational whenever door is unlocked.
4. Powered 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 push side and pull side of the door.
5. Door operator push plates shall be a minimum of 4 inches in diameter or a minimum of 4 inches by 4 inches square and display the International Symbol of Accessibility (ISA) complying with Section 11B-703.7.2.1.
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 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.
7. At each location where vertical actuation bars are provided, the operable portion shall be located so 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.

8. Powered 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 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.
9. A clear floor space of 30" x 48" is to be provided adjacent to each door operating device. Objects adjacent to and below door operating devices shall not project more than 4" from the wall.
10. 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 shall be not be allowed.

The distance shall be established from the center of the door to the center of the farthest operator control.

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

Tom C. Hui

9/2/14

Tom C. Hui, S.E., C.B.O.
 Director
 Department of Building Inspection

Date

This Information Sheet is subject to modification at any time. For the most current version, visit our website at <http://www.sfdbi.org>