## DASMA TECHNICAL DATA SHEET

Door & Access Systems Manufacturers Association International

#355

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## **Access Controlled Egress Doors**

NFPA 101, the Life Safety Code, states, "...doors in the means of egress shall be permitted to be equipped with an approved entrance and egress access control system..." This Code outlines five conditions under which such systems can be installed.

- 1. When a sensor is provided on the egress side and arranged to detect an occupant approaching the doors, and the doors are arranged to unlock upon detection of an approaching occupant, activation of the building fire protection system, or loss of power to the sensor. This provision is written as "performance-based", where any means of sensor design can be utilized to allow the doors to unlock in an emergency situation. The system is required to be listed in accordance with ANSI/UL 294. The standard states that detection shall detect an approaching occupant within 5 feet of the egress side of the door. It is important to note that, during loss of power, the doors would be required to be "fail-safe" (prioritizing safety over security).
- 2. When a loss of power, to that part of the access control system that locks the doors automatically, unlocks the doors. Access controlled egress doors are held secure with fail-safe devices (such as magnetic locks and electric door-strikes) so that these doors will automatically unlock when power to the locking device is interrupted. In some instances, the access controller may be powered from a different power source than the locking device itself. In these cases, a loss of power to the access controller (while power remains applied to the locking device) must also cause the egress door to automatically unlock.
- 3. When the doors are arranged to unlock from a manual release device located 40 inches to 48 inches vertically above the floor and within 5 feet of the secured doors. The Code goes on to describe the fact that the manual release shall be readily accessible and clearly identified by a sign that reads, "PUSH TO EXIT". It is also required that, when operated, the manual release device shall result in direct interruption of power to the lock independent of the access control system electronics and the doors shall remain unlocked for at least 30 seconds.
- **4.** When activation of the building fire-protective signaling system, if provided, automatically unlocks the doors. The Code also states that the doors must remain unlocked until the fire-protective signaling system has been manually reset.
- 5. When activation of the building automatic sprinkler system or fire detection system, if provided, automatically unlocks the doors. As with the fire-protective signaling system, the Code also states that the doors must remain unlocked until the fire-protective signaling system has been manually reset.

To summarize, it is important to keep in mind that NFPA 101 states than an egress door equipped with an access control system must always allow egress whether power is present or not. The egress door must be "fail-safe" and must assume this "fail-safe" condition when power is removed from any part of the access control system. In other words, if the access control system loses power, the egress door must be capable of being opened. People must be kept from being involuntarily locked inside buildings. In addition, be aware that any activation of a fire alarm or sprinkler system must cause access-controlled egress doors to unlock, and the egress side of access-controlled egress doors, other than existing access-controlled egress doors, shall be provided with emergency lighting.

Note: Technical Data Sheets are information tools only and should not be used as substitutes for instructions from individual manufacturers. Always consult with individual manufacturers for specific recommendations for their products and check the applicable local regulations.

This Technical Data Sheet was prepared by the members of DASMA's Operator & Electronics Division Technical Committee. DASMA is a trade association comprising manufacturers of rolling doors, fire doors, grilles, counter shutters, sheet doors, and related products; upward-acting residential and commercial garage doors; operating devices for garage doors and gates, sensing devices, and electronic remote controls for garage doors and gate operators; as well as companies that manufacture or supply either raw materials or significant components used in the manufacture and installation of the Active Members' products.