

# Sensor Release of Electrically Locked Egress Doors

Access control systems installed on egress doors that utilize a sensor-release function must fully conform to [section \(§\) 1010.1.9.9 of the 2020 Minnesota State Fire Code \(MSFC\)](#) when using an electromagnetic locking device, or other electrified hardware that secures both the access-side and egress-side of the door. Note that §1010.1.9.9 does not apply to access control systems where the egress-side of the door is always unlocked and allows for free and uninhibited egress.

This information sheet provides a *general summary* of requirements.

## Use limitations

- Sensor release systems can be used in any occupancy except Group H (hazardous).

## Listing requirements

- The door locking system units shall be listed in accordance with UL 294 – Access Control System Units.

## Primary release functions

- **Occupant sensor**
  - An approved sensor (typically a motion-sensor) must be installed on the egress side, arranged to detect an occupant approaching the door, causing the door to immediately unlock.
- **Manual release device**
  - A clearly identified and readily accessible manual unlocking device/switch must be located on the egress side of the door. The manual unlocking device must be:
    - Located within 5 feet of the door.
    - Mounted between 40 inches and 48 inches vertically above the floor.
    - Clearly identified by a sign that reads “PUSH TO EXIT.”
  - When operated, the manual unlocking device shall result in direct interruption of power to the electric lock (independent of any other electronics) and the door shall remain unlocked for not less than 30 seconds.



- **Monthly testing ([MSFC §1031.2.3](#))**

- Both primary release functions must be tested monthly for proper operation. Testing of the manual release function will require the motion sensor to be temporarily covered. Monthly testing of the primary release functions may be conducted by building staff, provided the individual can demonstrate knowledge of the primary operating components of the door.
- A monthly testing recording form is provided on page 3.

Fire protection system interconnects and failsafe functions

- **Fire alarm system interconnection**

- Activation of the building fire alarm system, if so equipped, shall automatically unlock the door. The door shall remain unlocked until the fire alarm system has been reset.

- **Fire sprinkler system interconnection**

- Activation of the building fire sprinkler system, if so equipped, shall automatically unlock the door. The door shall remain unlocked until the system has been reset.

- **Loss of power**

- The door must unlock upon loss of power to:
  - The occupant sensor, or
  - The lock or locking control system.

- **Annual testing ([MSFC §1031.2.3](#))**

- These features must be tested annually for proper operation. Testing shall be done by individuals who can demonstrate knowledge and understanding of the operating components of the door being tested. Typically, testing of fire alarm and/or sprinkler system interconnection will be performed by a fire alarm contractor or a qualified low-voltage electrical contractor.
- An annual testing certification form is provided on page 4.

**Minnesota Department of Public Safety  
State Fire Marshal Division**

# Sensor Release of Electrically Locked Egress Doors Monthly Testing Recording Form

**Sensor release of electrically locked egress doors  
Monthly testing of primary release functions**

Year:

Facility name:

Address:

Door location:

Conducted by:

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
The sensor automatically unlocks the door when an occupant approaches from the egress side.												
The manual PUSH TO EXIT device immediately unlocks the door and remains unlocked for at least 30 seconds. **This test must be done with the motion sensor temporarily covered.												



# Minnesota Department of Public Safety State Fire Marshal Division

## Sensor Release of Electrically Locked Egress Doors Annual Testing Certification Form

Sensor release of electrically locked egress doors Annual testing certification form																								
Testing date:																								
Facility name:																								
Address:																								
Door location:																								
Company/service provider:																								
Name of technician:																								
Phone:				Email:																				
				<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">YES</th> <th style="width: 10%;">NO</th> <th style="width: 10%;">N/A</th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> <th style="width: 10%;"></th> </tr> </thead> </table>									YES	NO	N/A									
YES	NO	N/A																						
<b>Fire alarm system interconnection:</b> Activation of the building fire alarm system, if so equipped, shall automatically unlock the door. The door shall remain unlocked until the fire alarm system has been reset.																								
<b>Fire sprinkler system interconnection:</b> Activation of the building fire sprinkler system, if so equipped, shall automatically unlock the door. The door shall remain unlocked until the system has been reset.																								
<b>Loss of power:</b> The door must unlock upon loss of power to any of the following: 1) occupant sensor, 2) the locking device, or 3) the locking control system.																								
<b>Listing:</b> The door locking system units are listed in accordance with UL 294.																								
<b>Notes:</b>																								

