

Title: Magnetic Lock

Objective: Verify system is installed using acceptable standards and practices, communicates properly, and provides proper protection of assets and meets or exceeds the contract performance specification.

Applicability: Doors and gates. Magnetic Locks. Electronic Entry Control Systems (EECS). NFPA and life safety codes.

Notes:

1. These procedures are based on interior door with card reader for entrance. This magnetic lock is installed in a fail secure configuration. On the secure side, the door has a magnetic lock with door position switch, PIR REX (Passive Infrared Request to Exit) sensor above the door, and a Push To Exit button on the wall (this is as a backup exit system).
2. All standard access control tests are needed in addition to this test. The intent of this test is to ensure egress due to the dangers of magnetic locks.
3. Ensure that the magnetic lock is installed correctly: it is flush with the closer, is on the handle side of the door, and the closer does not slam the door.
4. Assumes only one credential is required for entry (i.e. card only).
5. The Power Failure – Fail Secure Test is performed if the door is configured in “Fail Secure” mode (i.e. in a power fail situation, the door defaults to the locked condition).
6. Real-time voice communications between the workstation operator and the field technician is required.
7. For Steps 9.0 and 10.0, coordinate testing so that building occupants and emergency response forces along with all appropriate parties understand that testing is occurring.

Steps	Actions	Expected Results
<u>1.0</u>	<u>Lock Test</u>	
1.1	Ensure that the door is closed and locked. Contract the operator to verify that the door is secure.	Door is locked and secure.
1.2	Activate the door hardware from the public side and attempt open the door.	Door does not open. No alarm received at the workstation.
<u>2.0</u>	<u>PIR REX Field of View Test</u>	
2.1	Stand slightly outside of the PIR's expected field of view	PIR does not detect test subject. Lock does not release.
2.2	Staying slightly outside of the PIR's expected field of view, walk the boundary of the PIR.	PIR does not detect test subject. Lock does not release.
<u>3.0</u>	<u>Valid Credential Test</u>	
3.1	Present a valid badge to the reader.	Transaction logged. Lock releases.
3.2	Open door and enter.	Door indicates as open. No alarm is received at workstation.
3.3	Close the door.	Door indicates as closed. No alarm is received at workstation. Lock reactivates when door is closed. The active alarm queue is empty.
<u>4.0</u>	<u>Invalid Credential Test</u>	
4.1	Present Invalid Badge to the reader.	An invalid credential alarm is received at the

Steps	Actions	Expected Results
4.2	Clear the alarm at the workstation.	workstation. Transaction logged. Door lock does not release. The active alarm queue is empty.
5.0	<u>Exit Test</u>	
5.1	Walk up to the door.	PIR releases the magnetic lock.
5.2	Walk through the door.	Door indicates as open at the workstation. Alarm does not activate.
5.3	Close the door.	Door indicates as closed. No alarm is received at workstation. Lock reactivates when door is closed. The active alarm queue is empty.
6.0	<u>Push-To-Exit Test</u>	
6.1	Walk up to the door and stand to the side (with hand on the Push To Exit button) until the PIR no longer detects the person trying to exit.	PIR releases the magnetic lock and relocks it after appropriate time. No alarm received.
6.2	Push the Push To Exit button.	Magnetic Lock releases. No alarm received.
6.3	Have person outside the room open the door.	Door opens and indicates as open at the workstation. Alarm is received at workstation.
6.4	Close the door and clear the alarm queue.	Door indicates as closed. Lock reactivates when door is closed. The active alarm queue is empty.
7.0	<u>Power Failure – Fail Secure Test</u>	
	(This procedure is for use when lock is configured in the Fail Secure mode. I.e. lock remains active when power fails.)	
7.1	Disconnect AC power from the door controller.	
7.2	Activate the door hardware from the public side and attempt open the door.	Door does not open. No alarm received at the workstation.
7.3	Attempt to exit through the door by means of the PIR REX.	Free egress is achieved.
7.4	Attempt to exit through the door by means of the Push To Exit button. (Stand still on the secure side of the door until the PIR disengages to do this).	Free egress is achieved.
8.0	<u>Power Failure – Fail Safe Test</u>	
	(This procedure is for use when lock is configured in the Fail Safe mode. I.e. lock disengages when power fails.)	
8.1	Disconnect AC power from the door controller.	
8.2	Activate the door hardware from the public side and	Door opens. Door forced alarm received at the

Steps	Actions	Expected Results
8.3	<p>attempt open the door.</p> <p>Attempt to exit through the door from the secure side.</p>	<p>workstation.</p> <p>Free egress is achieved.</p>
9.0	<p><u>Fire Alarm – Fail Secure Test</u> (This procedure is for use when lock is tied into the fire alarm system and is configured in the Fail Secure mode. I.e. lock remains active when power fails.)</p>	
9.1	Activate the fire alarm system.	
9.2	Activate the door hardware from the public side and attempt open the door.	Door does not open. No alarm received at the workstation.
9.3	Attempt to exit through the door by means of the PIR REX.	Free egress is achieved.
9.4	Attempt to exit through the door by means of the Push To Exit button. (Stand still on the secure side of the door until the PIR disengages to do this).	Free egress is achieved.
10.0	<p><u>Power Failure – Fail Safe Test</u> (This procedure is for use when lock is tied into the fire alarm system and is configured in the Fail Safe mode. I.e. lock disengages when power fails.)</p>	
10.1	Activate the fire alarm system.	
10.2	Activate the door hardware from the public side and attempt open the door.	Door opens. Door forced alarm received at the workstation.
10.3	Attempt to exit through the door from the secure side.	Free egress is achieved.