Access Control System Installation Standards

A. Raceways

1. Securely mount to permanent structure per NEC requirements. Conditions will determine type of raceway to be used (i.e., EMT, rigid, watertight, wiremold).

2. Securely fasten all connectors.

B. Wiring

1. Use the standard cable types for all projects. Substituting a different cable must be approved by CASE prior to use.

2. Use proper gauge wire for each application. Consider power requirements and distance. Wire should be sized for 80% of its capacity.

3. No exposed wiring within 4 feet of the floor surface.

4. Consider electrical interference when routing cable. No cabling is to be run within 12 inches of high voltage wiring. No cabling is to be run parallel to high voltage wiring.

5. Non conduit wiring must be properly secured to structure per NEC guidelines. Never lay cables across the top of the ceiling.

6. Maintain fire wall and floor penetration ratings using proper sealant per NEC requirements.

7. Cables shall be run between devices without splices. If a splice is required, each wire is to be soldered and the splice will be covered with heat shrink tubing.

8. There shall be no taped splices.

9. All splices are to be done in a junction box or appropriate enclosure. The use of terminal blocks is required in larger enclosures.

10. All wires shall be labeled at both ends and at all splice points using permanent, machine generated tags.

11. Spade connectors shall be used on all wires being placed under a screw terminal that is not rated for stranded wire.

C. End of Line Supervision

When line supervision is required, devices must be installed at the “End of The Line”. 1K ohm +/- 1% resistors shall be used.
D. General

1. All areas must be cleaned at the end of each day.

2. At a minimum, work areas are to be left broom clean.

3. Secure all materials and equipment at the end of each day. CASE shall not be responsible for lost or stolen items.

4. Understand and comply with job site safety requirements. Safety shoes, hard hats, eye and ear protection shall be worn as required.