

SECTION 28 13 00 - CARD ACCESS**PART 1 GENERAL****1.01 DESCRIPTION**

- A. There will be multiple entry points and the system will need to interact with an apartment entry system as well as ADA door operators.
- B. Office staff and residents to be programmed with separate permissions.

1.02 QUALITY ASSURANCE

- A. Underwriters Laboratories, Inc., listed, and NEC approved.

1.03 SUBMITTAL AND RECORD DOCUMENTATION

- A. Submit product data describing all components whether listed in specifications or on plans needed for a complete installation.
- B. Submit shop drawings which shall include complete wiring and schematic diagrams for equipment furnished, equipment layout, and other details.
- C. Include performance field test reports with operation and maintenance manuals.

PART 2 PRODUCTS**2.01 MATERIALS**

- A. Proximity Reader
 - 1. Mount to single gang Junction box.
 - 2. Have a read range of up to 8".
 - 3. Black finish with LED indicating system power.
 - 4. Interior or exterior grade depending on mounting location as shown on plans.
 - 5. HID
- B. Door Controller and Software
 - 1. Single or multiple door, controllers locations dependent.
 - 2. Network based for staff to easily add users and program cards onsite.
- C. Proximity Cards
 - 1. Cards shall be capable of reprogramming onsite with proper equipment.

PART 3 EXECUTION**3.01 GENERAL INSTALLATION**

- A. Wiring Method: Install wiring in raceways except in accessible indoor ceiling spaces and attics, and as otherwise indicated. Conceal raceways and wiring except in unfinished spaces and at terminal boards. Extend wiring as needed.
- B. Wiring Within Enclosures: Bundle, lace, and train the conductors to terminal points with no excess. Provide and use lacing bars and distribution spools.
- C. Pulling Cables: Do not exceed manufacturer's recommended pulling tensions. Do not install bruised, kinked, scored, deformed, or abraded cable. Do not splice cable between indicated termination, tap, or junction points. Remove and discard cable where damaged during installation and replace it with new cable.

- D. Splices, Taps, and Terminations: For power and control wiring use numbered terminal strips in junction, pull, and outlet boxes; terminal cabinets; and equipment enclosures. Tighten connections to comply with torque tightening requirements specified in UL 486A.
- E. Grounding: Provide independent signal circuit grounding recommended by manufacturer.

3.02 OPERATION

- A. When card is read by proximity reader it will unlock the door associated with that particular reader and no other door. The system shall record date, time, and person who accessed the door.

3.03 IDENTIFICATION

- A. Identify system components, wiring, cabling, and terminals according to Section 16195, Electrical Identification.

3.04 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Provide services of a factory-authorized service representative to supervise the field assembly and component connections and the pretesting, testing, and adjusting of the system.
- B. Inspection: Verify that units and controls are properly installed, connected, labeled and that interconnecting wires and terminals are identified.
- C. Pretesting: Align and adjust the system and pretest all components, wiring, and functions to verify they conform to specified requirements. Replace malfunctioning or damaged items with new items. Retest until satisfactory performance and conditions are achieved.
- D. Acceptance Test Schedule: Schedule tests after pretesting has been successfully completed and system has been in normal functional operation for at least two weeks. Provide a minimum of 10 days' notice of acceptance test performance schedule.

3.05 CLEANING

- A. Clean installed items using methods and materials recommended by manufacturer.

3.06 DEMONSTRATION

- A. Is not required the installation is just a modification of the existing.

3.07 ON-SITE ASSISTANCE

- A. Occupancy Adjustments: When requested within one year of substantial completion, provide on-site assistance in tuning and adjusting the system to suit actual occupied conditions and to optimize performance. Provide up to two requested adjustment periods at the site for this purpose without additional cost.

END OF SECTION