



SECTION 16722

DOOR ENTRY ACCESS CONTROL SYSTEM

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Multi-tenant entry security system.

1.2 RELATED SECTIONS

- A. Section 16010 – General Electrical Requirements.

1.3 REFERENCES

- A. American National Standards Institute (ANSI/TIA/EIA) 568 – Commercial Building Telecommunications Cabling Standard.
- B. International Organization for Standards (ISO) 9001:2008 – Quality Management Systems – Requirements.

1.4 SYSTEM DESCRIPTION

- A. The system shall be hard wired and constructed with a 2-line communication system. The system is designed with communication trunk lines that use a distribution point from a bus control unit. System shall be ADA compliant. Systems with audio only components shall be configurable.
- B. Functional Components:
 - 1. Entrance station.
 - 2. Tenant stations.
 - 3. Access control system.
- C. System Requirement: Unless noted otherwise on drawings provide system size as follows.
 - 1. Entrance stations: One
 - 2. Tenant stations (master): Twelve
- D. Operation:
 - 1. Calling Tenant Station from Entry Station and Communicating.
 - 2. Activating Door Release from Entry, and Tenant.

1.5 SUBMITTALS

- A. Submit under provisions of Section 16010.
- B. Product Data: Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.



3. Installation methods.
- C. Shop Drawings: Submit the following:
1. Wiring Diagrams: Indicate wiring for each item of equipment and interconnections between items of equipment.
 2. Include manufacturer's names, model numbers, ratings, power requirements, equipment layout, device arrangement, complete wiring point-to-point diagrams, and conduit layouts.
 3. Installation and Operation Manuals:
 - (a) Submit manufacturer's installation and operation manual, including operation instructions and component wiring diagrams.
 - (b) Provide detailed information required for Owner to properly operate equipment.
 4. Warranty: Submit manufacturer's standard warranty.
- D. QUALITY ASSURANCE
1. Manufacturer Qualifications: ISO 9001:2008 certified company.
 2. Installer Qualifications: Factory trained and experienced with system installations of scope and size required for the Project.
- E. DELIVERY, STORAGE, AND HANDLING
1. Delivery: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
 2. Storage: Store materials in clean, dry area indoors in accordance with manufacturer's instructions.
 3. Handling: Protect materials during handling and installation to prevent damage.
- F. PROJECT CONDITIONS
1. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Aiphone Corp.; 1700 130th Ave. N. E., Bellevue, WA 98005. ASD. Toll Free Tel: (800) 692-0200. Tel: (425) 455-0510. Fax: (425) 455-0071. Email: tech@aiphone.com. Web: <http://www.aiphone.com>.
- B. Substitutions: Or Approved Equal.

2.2 MULTI-TENANT ENTRY SECURITY SYSTEM

- A. Multi-Tenant Entry Security System: Aiphone "GT Series" as manufactured by Aiphone Corporation.
- B. Entrance Stations:



1. Provide built-in access code keypads for keyless entry.
 2. Entrance Panel: Model GT. Provide modular units with the following functional modules, corresponding panels, hardware and fittings.
 3. Type: Custom with the following functions.
 - a. Audio Access Control.
 - b. Voice Annunciation.
 - c. Digital Display Keypad.
 - d. Name Panels.
- C. Tenant Station:
1. Station Panel: Model GT-1A.
 - a. Hands-free control.
 - b. Talk with visitors.
 - c. Unlock doors.
 - d. Instant communication with concierge stations.
 2. Telephone Line Interface: Model GT-TLI
 - a. Allows for remote access front door entry (unlocking) from an outside telephone.
- D. Bus Controller Components and Mounting Hardware:
1. Bus Control Unit: Model GT-BC.
 2. Video Bus Control Unit: Model GT-VBC.
 3. Expanded Bus Control Unit: Model GT-BCX.
 4. Expanded Video Bus Control Unit: Model GT-VBX.
 5. 4-Way Video Junction Unit: Model GT-4Z.
 6. Power Supply: Model PS-2420UL.
 7. External Signal relay: Model GT-RY.
 8. Frames and back boxes for surface and flush mount as required.
- E. Telephone Line Interface for GT Series

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine areas to receive integrated security and communication system.
- B. Notify Architect of conditions that would adversely affect installation or subsequent use.
- C. Do not begin installation until unacceptable conditions are corrected.

3.2 PREPARATION

- A. Verify the following compliance before starting installation.
 1. All units, except for the entrance station and tenant door station, are designed for indoor use only. Do not use outdoors.
 2. The unit turns inoperative during power failure.



3. Keep the intercom wires at least 1 foot (30 cm) away from strong electrical wiring (AC 100-240 V) including, in particular, wiring for inverter electrical appliances. Noise and malfunction could result.
4. Keep the unit more than 3.3 feet (1 m) away from radio or TV set.
5. Other manufacturer's devices (such as sensor, detectors, door releases) used with this system, comply with the manufacturer's installation requirements.

3.3 INSTALLATION

- A. Install integrated security and communication system in accordance with manufacturer's instructions at locations indicated on the Drawings.
- B. Mount equipment plumb, level, square, and secure. For video entrance stations and video door stations, comply with manufacturer's design requirements to provide optimum picture quality of station monitoring.

3.4 SET-UP AND ADJUSTING

- A. Adjust integrated security and communication system for proper operation in accordance with manufacturer's instructions.

3.5 DEMONSTRATION AND TRAINING

- A. Demonstration:
 1. Demonstrate that integrated security and communication system functions properly.
 2. Perform demonstration at final system inspection by qualified representative of manufacturer.
- B. Instruction and Training:
 1. Provide instruction and training of Owner's personnel as required for operation of integrated security and communication system.
 2. Provide hands-on demonstration of operation of system components and complete system, including user-level program changes and functions.
 3. Provide instruction and training by qualified representative of manufacturer.

3.6 PROTECTION

- A. Protect installed integrated security and communication system from damage during construction.

END OF SECTION