

SECTION 28 13 00

ACCESS CONTROL

PART 1: GENERAL

1.1 INTRODUCTION

Zimmer Development's Oasis Apartments is a market-rate garden style project consisting of 3 buildings and 204 units.

InfiniSys has been contracted to coordinate the overall design and cabling for Access Control Systems for the project on behalf of Zimmer Development.

1.2 COPYRIGHT

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1.3 INFORMATION FOR BIDDERS

The access management contractor is responsible for procuring, installing wiring and testing all components as described in this document and the accompanying drawing set, and for scheduling all work to meet the overall project schedule according to the needs of the Owner.

InfiniSys, the Owner or local providers may supply some materials.

All items necessary for proper installation, not limited to but including such items as special tools, fasteners, fire caulking and other materials not specifically mentioned are the responsibility of the access management contractor. The access management contractor is responsible for secure storage of materials on site.

We recommend that a single Authorized Dealer install all Gate and Access Control Systems.

This Specification is meant to supplement the systems Owner's Manuals for the appropriate systems. All bidding access management contractors should be thoroughly familiar with these documents in addition to this Specification.

Other manuals for supplemental equipment may also be required.

The access management contractor is responsible for completing all work a minimum of 30 days prior to the first C.O. in order to provide time for rework, repairs, and installation of Service Provider equipment. This 30-day requirement may be waived by the Owner or Owner's Representative.

1.4 COORDINATION

The access management contractor is responsible for communicating all other trade requirements, such as special Electrical, Low Voltage, Video-Cable Service Provider, Security, Locksmith, Masonry, Paving, and Landscaping requirements, to the General Contractor, and for ensuring coordination with other trades as required.

The access management contractor is responsible for ensuring that all other trades complete such work in a manner suitable for the installation of this system to these specifications, and in a timely manner that allows the installation of this system to be completed according to the General Contractor's schedule.

The access management contractor is responsible for ensuring that the completed system meets all local Codes, and all Fire Department and Postal access requirements.

1.5 CODES, REGULATIONS, AND STANDARDS

All work will meet or exceed the requirements of all applicable statutes, ordinances, rules, codes, regulations, decisions, and orders of all local, state, and federal authorities having jurisdiction over the construction of telecommunications cable systems, including, but not limited to, applicable building codes, fire codes, and regulations of the Occupational Safety and Health Administration and Federal Communications Commission.

All work will meet or exceed the requirements of the 2020 National Electrical Code, other NFPA codes, and any then-current amendments or addenda thereto, including, but not limited to:

NFPA 70 National Electrical Code 2020 Edition, Article 800

"Communications Systems"

NFPA 70 National Electrical Code 2020 Edition, Article 200

"Wiring and Protection"

Except as otherwise specified in the Scope of Work, all work will meet or exceed the requirements of the ANSI/TIA telecommunications cabling standards and any then-current amendments or addenda thereto, including, but not limited to:

ANSI/TIA-570-D

"Residential Telecommunications Infrastructure Standard"

ANSI/TIA-568.0-D and addenda

"Generic Telecommunications Cabling For Customer Premises"

ANSI/TIA-568.1-D and addenda

"Commercial Building Telecommunications Cabling Standard"

ANSI/TIA-568.2-D and addenda

" Balanced Twisted-Pair Telecommunications Cabling and Components Standards"

ANSI/TIA-568.3-D and addenda

"Optical Fiber Cabling Components Standard"

ANSI/TIA-568.4-D and addenda

"Broadband Coaxial Cabling and Components Standard"

ANSI/TIA-569-E and addenda

" Telecommunications Pathways and Spaces"

ANSI/TIA-606-C and addenda

" Administration Standard for Commercial Telecommunications Infrastructure"

ANSI/TIA-607-C and addenda

" Generic Telecommunications Bonding and Grounding (Earthing) For Customer Premises"

All work will meet or exceed the safety requirements and certifications of Underwriters Laboratories Inc. (UL).

Except as otherwise specified in the Scope of Work, all video cabling will be installed and terminated in accordance with Society of Cable Telecommunications Engineers standards.

PART 2: PRODUCTS

2.1 CABLE AND COMPONENTS

Items that are not specifically shown on the drawings or called for by the scope of work, but are required by local, state, and federal authorities or normally used and required for the system design to perform to specifications and system design intent, will be considered part of the scope of work.

PART 3: EXECUTION

3.1 CABLING PRACTICES

A. Labeling

All cables must be labeled at both ends in a clear and legible manner. Cabling between equipment should be labeled at both ends with the function and device at both ends. We recommend using printed labels created with a Wire Marker Printer.

Both sides of a dual cable must be labeled, and unterminated cables must also be labeled. The label should be located within 2ft of the likely termination point after trim, so the label will not be cut off. All cable ends should be placed in a plastic bag after labeling, and the bag taped around the cable bundle, so the cable ends will not be painted, textured, or damaged.

B. Testing

All prewire cabling shall be tested after installation. The entire system must be tested after completion, and performance demonstrated to the Owner. All components must operate properly and clearly, with performance consistent with the manufacturers' specifications.

C. Documentation

All pertinent equipment documentation shall be given to the owner upon completion. This shall include all equipment users' guides and manuals, safety instructions, and specific documentation of the installed system, including as-built drawings and schematics, and customized user instructions.

The documentation should be neatly arranged in a ring binder.

D. Protection from Cable Damage

Protecting cabling from damage is the responsibility of the installing access management contractor. All cabling must be run where it is unlikely to be damaged after installation. Nail plates should be installed where cabling passes through wall studs. All cabling must be properly supported and secured in a way that will not compress or deform the cables. All cable bends must maintain a minimum 3" bend radius.

Splicing or repair of cabling is not permitted. Damaged cable must be replaced entirely.

Any defective or damaged cabling must be replaced at the access management contractor's expense, unless it is the result of gross negligence by another trade, or unavoidable because of later changes, structural modifications, etc.

The General Contractor shall be responsible for notifying the access management contractor of any such cable damage.

3.2 CONTROLLED RESIDENT COMMON ENTRANCES (KABA/KEYSCAN)

A. Locations

All controlled common entrances to the building and within the building shall use Kaba/Keyscan CA8500, CA4500 or CA250 Door Controllers in conjunction with Kaba SRK Readers with BLE (SRK-RNFC2 for flush mount and SRK-RNSC2 for surface mount), and either electrified door hardware, an electric strike or magnetic lock as denoted in the door hardware schedule. Provide a Request to exit (REX) device per Local and State agencies (AHJ) at each location.

B. Cabling

Each controller shall require one (1) Category 6 cable from the controller to the patch panel in the A/V Closet with a contractor provided network switch. Total length of the Category 6 cable must not exceed 300 feet. Controllers and power supplies are to be centrally located in the A/V Closet.

C. Electric Strikes and Magnetic Locks

All controlled resident common entrances utilizing magnetic locks shall include a battery backup for the lock power supply to provide a minimum of 30 minutes of backup power.

For all gates with magnetic locks, the locks shall be installed at the center of the gate closure, not at the top.

D. Programming PC

The access management contractor shall supply and install the PC required for programming the system and the fobs.

3.3 INDIVIDUAL APARTMENT ENTRANCES (KABA/KEYSCAN)

All apartment main entries shall use Kaba Saffire LX D offline BLE enabled electronic deadbolt locks. Zimmer Development to verify finish selection.

3.4 CREDENTIALS

The access management contractor shall provide 1.5 Kaba Mifare Classic fobs times the number of bedrooms for resident and staff use.

The access management contractor shall provide 1.5 AWID sticker tags times the number of parking spaces for use at the garage entries.

3.5 GROUNDING

Proper grounding of this system is a requirement. The use of surge suppressors can significantly reduce the chance of component failure because of static charges or surges.

The shielding in the cables for all remote keypads or card readers should be connected to the earth ground terminal at the controller end of the cable only. All grounds must be to the same common point.

3.6 SYSTEM INTEGRATION

The access management contractor shall be responsible for all of the system integration necessary for the Keyscan hardware and Aurora/Community software to work together. This includes, but is not limited to, the Keyscan ACU system and reader firmware updates necessary for the SRK readers to read dormakaba credential format.

3.7 SYSTEM INITIALIZATION

The access management contractor shall be responsible for installing the Aurora and Community programming software on the computer they provide, performing all of the integration of the systems, programming all necessary parameters, and creating the initial database of authorized users. The database shall be tested to ensure that it performs all requested functions, and that the on-site personnel are familiar with the operation and maintenance of the system.

3.8 SOFTWARE AND DATABASE INITIALIZATION

The access management contractor shall create a back-up disk containing the software and database, on a USB drive and test the backup to ensure that it can be restored. The backup disk shall be delivered to the Property Manager. It is recommended that the access

management contractor also keep a copy of the initial database, and of all system settings, to aid in future maintenance.

Site personnel shall subsequently back up the database on a scheduled basis.

3.9 SITE TRAINING

The access management contractor shall provide on-site training on software and hardware maintenance of the Access Management system. Designated Site personnel shall be trained in all aspects of managing the Systems and the User databases, including adding and deleting users, changing access codes and levels, and backing up and restoring the database.

The Property Manager shall designate the employees to receive training on the system and ensure that they are present for the training session, and that at least one properly trained employee is always available on-site to perform programming as needed. The Property Manager shall determine the date and time of the training session(s), and will determine when training is satisfactorily complete, and the designated personnel are comfortable with operating and maintaining the system.

The access management contractor shall provide one additional training session at no additional charge, within the first year of operation, at the request of the Property Manager. Further training may be charged per the agreed Service Contract rate.

3.10 SYSTEM ACCEPTANCE

The Property Manager shall accept the Access Management system as complete when training is satisfactorily complete, the designated personnel are comfortable with operating and maintaining the system, and all agreed functions are operating properly.

The Warranty period shall begin upon written acceptance of the system by the Property Manager or other representative designated by the Owner.

END OF SECTION