SECTION 13700

ACCESS CONTROLS

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\*\* NOTE TO SPECIFIER \*\* LiftMaster; Access Control Systems, Telephone Entry Control Systems, Parking Control Systems.

This section is based on the products of LiftMaster, which is located at:

300 Windsor Drive

Oak Brook, IL 60523

Toll Free Tel: 800-282-6225

Fax: 630-516-8412

Email: request info (specs@liftmaster.com)

Web: [LiftMaster.com](http://LiftMaster.com)

[[Click Here](https://www.liftmaster.com/for-pros/for-architects)] for additional information.

LiftMaster's full commercial and residential garage door operator/gate operator/access control product lines meet the needs of Architects, Designers, Engineers, and Specifiers in any design or conceptual plan, while offering 100 percent compliance with UL 325-2010 safety and construction codes. Our entire product line also contributes to energy-efficiency credits for LEED green building certification from the U.S. Green Building Council. LiftMaster is a registered presenter of the American Institute of Architects and is approved to present any of our AIA CEUs at your firm's location. For learning objectives and to schedule a Lunch & Learn for your firm, please send a request to specs@LiftMaster.com.

Find a complete library of architectural specifications, shop drawings, CSI format 3-part specs, CAD, and BIM product renderings, visit LiftMaster.com.

1. GENERAL
	1. SECTION INCLUDES
		1. Telephone Entry Control Systems:
			1. Residential and light commercial telephone entry control system (LiftMaster Model EL25).
	2. RELATED SECTIONS

\*\* NOTE TO SPECIFIER \*\* Delete any sections below not relevant to this project; add others as required.

* + 1. Section 03300 - Cast-in-Place Concrete: Concrete mounting pads.
		2. Section 16050 - Basic electrical materials and methods.
		3. Section 16720 - Telephone Entry Systems.
		4. Division 16 - Requirements for electrical connections.
	1. REFERENCES

\*\* NOTE TO SPECIFIER \*\* Delete references from the list below that are not actually required by the text of the edited section.

* + 1. International Standards Organization (ISO):
			1. ISO 18000-6 - Information Technology: Radio frequency identification for item management, Part 6: Parameters for air interface communications at 860 MHz to 960 MHz.
		2. Underwriters Laboratories (UL):
			1. UL 294 - Standard for Access Control System Units.
			2. UL 325 - Standard for Safety for Door, Drapery, Gate, Louver, and Window Operators and Systems.
			3. UL 991 - Standard for Tests for Safety-Related Controls Employing Solid-State Devices.
		3. NFPA 70 - National Electrical Code.
		4. FCC Regulations.
		5. Canadian Department of Communications.
	1. SUBMITTALS
		1. Submit under provisions of Section 01300.

\*\* NOTE TO SPECIFIER \*\* Applicable to Access Control Systems and Telephone Entry Systems. Delete if not required.

* + 1. Submittals:
			1. Manufacturer's Data: Submit copies of the following:
				1. Product data sheets and system description.
				2. Installation instructions.
				3. Authorized dealer certificate and certified training certificates of installers who will be working on this project.

\*\* NOTE TO SPECIFIER \*\* Applicable to Access Control Systems. Delete if not required.

* + - * 1. Block diagrams.
				2. Equipment list.
			1. Shop Drawings: Submit the following:
				1. Access system layout and locations, including size requirements.
				2. Detailed wiring diagrams of access equipment.
				3. Load calculations of all equipment for proper sizing of electrical provided by the customer and standby emergency generator circuits.

\*\* NOTE TO SPECIFIER \*\* Delete the following paragraph if not required by building owner.

* + - 1. As-Built Drawings: Update shop drawings to create final as-built drawings. Submit 3 copies and digitally in AutoCAD 14 or later format on a CD (3 copies).
			2. Operation Data: Include 3 copies of the software administrator and operator manuals.
			3. Maintenance Data: Include maintenance and repair procedures.

\*\* NOTE TO SPECIFIER \*\* Applicable to Parking Control Systems. Delete if not required.

* + 1. Submittals:
			1. Product Data: Equipment list, system description, electrical wiring diagrams for installation, and 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.
			2. Shop Drawings: Submit shop drawings showing layout, profiles, and product components, including anchorage, edge conditions, and accessories.
				1. Operation, installation, and maintenance manuals including wiring diagrams.
				2. Risers, layouts, and special wiring diagrams showing any changes to standard drawings.
	1. DELIVERY, STORAGE, AND HANDLING
		1. Store products in manufacturer's unopened packaging with labels intact until ready for installation.
		2. Schedule delivery of parking control equipment so that spaces are sufficiently complete that operators can be installed upon delivery.

\*\* NOTE TO SPECIFIER \*\* Applicable to Access Control Systems. Delete if not required.

* + 1. Owner will provide, on-site, a secure, dry, locked storage area for all equipment delivered under this scope of work.
	1. QUALITY ASSURANCE

\*\* NOTE TO SPECIFIER \*\* Applicable to Access Control Systems and Telephone Entry Systems. Delete if not required.

* + 1. Quality Assurance:
			1. Manufacturer: The access control system shall be from a single-source manufacturer that specializes in telephone entry control systems with a minimum of 5 years of experience.
			2. Installer: Company specializing in access control systems with a minimum of 3 years of experience on systems of similar size and scope. Technicians working on project must have been certified on the hardware and software used for this project.

\*\* NOTE TO SPECIFIER \*\* Applicable to Parking Control Systems. Delete if not required.

* + 1. Assurance:
			1. Perform installation by factory authorized contractor specifically trained in gate operation systems of the type found within this section.
			2. Provide documentation of maintenance and repair service availability for emergency conditions.
			3. Provide quarterly maintenance for 1 year following substantial completion of the project.
	1. 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.
	2. WARRANTY
		1. Manufacturer's Standard Warranty:

\*\* NOTE TO SPECIFIER \*\* Delete paragraphs for warranties not required.

* + - 1. Telephone Entry System Warranty: 1 year limited warranty.
			2. Telephone Entry/Access and Perimeter Control System: 2 years limited warranty.
1. PRODUCTS
	1. MANUFACTURERS
		1. Acceptable Manufacturer: LiftMaster, which is located at: 300 Windsor Dr.; Oak Brook, IL 60523; Toll Free Tel: 800-282-6225; Fax: 630-516-8412; Email:[request info (specs@liftmaster.com)](http://admin.arcat.com/users.pl?action=UserEmail&company=LiftMaster&coid=42485&rep=&fax=630-516-8412&message=RE:%20Spec%20Question%20(13700cha):%20%20&mf=); Web:[LiftMaster.com](http://LiftMaster.com)

\*\* NOTE TO SPECIFIER \*\* Delete one of the following two paragraphs; coordinate with requirements of Division 1 section on product Options and substitutions.

* + 1. Substitutions: Not permitted.
		2. Requests for substitutions will be considered in accordance with provisions of Section 01600.
	1. TELEPHONE ENTRY CONTROL SYSTEMS
		1. Residential and Light Commercial Telephone Entry Control System:

\*\* NOTE TO SPECIFIER \*\* Retain one of the following two paragraphs.

* + - 1. Acceptable Product: LiftMaster EL25 Residential and Commercial Telephone Entry System with expanded capacity and enhanced versatility.
			2. Wiegand Input Module: Allows addition of card readers, remote keypads and Passport Receiver.
			3. Memory Chip Capacity: 2,000 users; programmable as directory codes, access codes and cards.
			4. Standard Features:
				1. Remote Access Diagnostics: Unit will record the following alarms: Forced door/gate, door/gate ajar, unit over/under voltage.
				2. Voice Prompts: Push-button provides ADA-compliant voice prompts for end users.
				3. Line Noise Tolerance: Enhanced telephone connection to unit via modem.
				4. Legacy Database Conversion: Versa XS 4.0 software allows transfer of information from existing Sentex system to new Sentex system.
				5. Programming: Versa XS 4.0 software allows control programming through modem, unit keypad or direct laptop connection.
				6. Controllable System Relays: 4 independent relays can be set to activate doors/gates; can function as strike, control, shunt, alarm or CCTV relays. Activation time between 1 and 300 seconds.
				7. Call Forwarding: System will dial a pre-programmed telephone number when the tenant is not at the monitored location. Access can be granted or denied from remote location. Call forwarding can be programmed manually as needed or time-activated to occur at scheduled intervals.
				8. Call Waiting: Resident can answer an access call from a visitor while in the middle of another outside call. Resident can answer an outside call if on an access call.
				9. Illuminated keypad.
				10. Non-Volatile Memory: In event of power failure, database information is retained in memory allowing immediate start-up and operation when power
				11. is restored.
				12. Separate Call Button: Initiates phone call to resident.
				13. Distinctive Ringing: Unique double ring on resident's telephone to distinguish between a standard call and an access request call.
				14. Entry Codes: Codes can be time-restricted or established as one-time-use only.
				15. Holiday Programming: Maximum of 16 holidays can be defined to override the pre-defined lock/unlock schedules.
				16. Time Zones: Software manages up to 62 separate time zones with 3 segments each for access/no access schedules.

\*\* NOTE TO SPECIFIER \*\* Requires use of Optional exit reader. Delete if not required.

* + - * 1. Anti-Passback: Waits for pre-programmed period of time before code or card can be reused.
				2. Transaction Monitoring: Maximum of 4,000 transactions (date, time, unit ID and transaction) stored in unit are retrievable for record of on-site activities.
				3. Battery backed clock/calendar including daylight savings and leap years.
				4. Automatic Gate/Door Unlock Schedule: Main or auxiliary access points can be programmed to open at pre-defined times.
				5. Security Lockout: Locks out all users for a programmable period of time if several invalid code attempts are made.
				6. Alarm Calling: System dials pre-defined telephone number to notify security personnel of the alarm condition if door/gate is forced open or held open too long.
				7. Remote Updates: Software updates accomplished through remote computer and modem connection.
				8. Do Not Disturb: Assignable on tenant-by-tenant basis when programmed manually through touch-tone telephone or by a pre-programmed schedule.
				9. Lightning Protection: Installer shall provide external surge suppressors in addition to surge protection inherent in the entry system.
				10. Auto Sensor Input: Programmable to automatically dial the residence when a vehicle approaches the property.

\*\* NOTE TO SPECIFIER \*\* Delete optional features not required.

* + - 1. Exit Reader: Provides reader for true anti-passback operation.
			2. Camera: Integrates camera into system to provide live video directly to television or monitor screen.

\*\* NOTE TO SPECIFIER \*\* Retain one of the following two paragraphs.

* + - * 1. Color low-lux camera compatible with DVRs.
			1. Passport Control: Push-button remote control will operate LiftMaster Garage Door Operators, Gate Operators and Commercial Door Operators. Requires Passport receiver.
			2. Dimensions for LiftMaster EL25 Surface Mount: 6 inches H x 10-1/4 inches W x 4 inches D (152 mm H x 260 mm W x 102 mm D).
			3. Power: 12V AC at 0.75A max.
			4. Enclosure: Vandal-resistant.

\*\* NOTE TO SPECIFIER \*\* Retain one of the following three paragraphs.

* + - * 1. Color: Nickel.
				2. Color: Silver.
				3. Color: Gray.
			1. System Components:
				1. LiftMaster WOMODKT Wiegand Module that supports 2 Wiegand-compatible remote proximity card readers and keypads.
				2. LiftMaster EL25DVRCAMKT DVR-Compatible Low-Lux Color Camera; 480 lines of resolution.

\*\* NOTE TO SPECIFIER \*\* Delete mount option not required.

* + - 1. Mount: LiftMaster PED42 Pedestal; 42 inches (1067 mm) pad mount, 2 inches H x 2 inches W (51 mm H x 51 mm W) square black powder-coated pedestal.
			2. Mount: LiftMaster PED64 Pedestal; 64 inches (1626 mm) in-ground mount, 2 inches H x 2 inches W (51 mm H x 51 mm W) square black powder-coated pedestal.
1. EXECUTION
	1. EXAMINATION AND PREPARATION
		1. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions. If preparation is the responsibility of another installer, notify Architect in writing of deviations from manufacturer's recommended installation tolerances and conditions.
		2. Do not proceed with installation until substrates have been properly prepared and deviations from manufacturer's recommended tolerances are corrected. Commencement of installation constitutes acceptance of conditions.
		3. Clean surfaces thoroughly prior to installation.
		4. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
	2. INSTALLATION
		1. Install in accordance with manufacturer's instructions including but not limited to the following:
			1. Mount directly to concrete pad, firmly secured, plumb and level.
			2. Mount to mounting pedestal; provide base plate.
			3. Wire in accordance with National Electric Code.
			4. Enclose all splices in easily accessible junction boxes or on terminal boards.
			5. Tag and identify all cable runs in all junction boxes.
		2. Test system and adjust to assure components and accessories are properly connected and in working order.

\*\* NOTE TO SPECIFIER \*\* Applicable to Access Control systems. Delete if not required.

* + 1. Wiring shall be in accordance with national electric codes and manufacturer's instructions. Make conduit and wiring connections to existing gate and door hardware devices as required.

\*\* NOTE TO SPECIFIER \*\* Applicable Telephone Entry systems Delete if not required.

* + 1. Install wiring for detection and signal circuit conductors in conduit. Use 22 AWG minimum size conductors.
	1. PROTECTION
		1. Protect installed products until completion of project.
		2. Touch up, repair or replace damaged products before Substantial Completion.
	2. MAINTENANCE
		1. Maintain at 3-month intervals during specified maintenance period, checking external reversing devices once per month.

END OF SECTION