



TEXAS TECH UNIVERSITY™

Operating Policy and Procedure

OP 61.14: Electronic or Keyless Locking Systems

DATE: January 8, 2009

PURPOSE: The purpose of this Operating Policy/Procedure (OP) is to establish standards and guidelines for the use and selection of electronic or keyless locking devices on university facilities. Security systems in housing facilities are not addressed in this OP.

REVIEW: This OP will be reviewed in September of even-numbered years by the managing director of Physical Plant with recommended revisions forwarded through the associate vice president for operations to the associate vice president and controller and the senior vice president for administration and finance by October 15.

POLICY/PROCEDURE

1. General Policy

- a. The Physical Plant is responsible for the management of all locking systems to university facilities through the university's Facility Planning and Security Systems manager and the Lock Shop. Standards and programs have been established for the control and issuance of keys, development of keying systems, standardization of hardware, and maintenance programs for the upkeep of these systems. Installation of systems other than those approved in the standards or deviation from the standards may occur only with the approval of the managing director of Physical Plant and under the guidelines set forth in this OP.
- b. Requests for various types of electronic or keyless locks for campus facilities have prompted Physical Plant's Building Maintenance and Construction (BMC) section to study and test many of the available options and develop standards and guidelines for the selection and use of these devices. It is imperative that these devices do not replace the existing key and lock systems, but supplement and interface with them. They are not intended to supplant the role of the Lock Shop in maintaining campus security. They may be used in isolated areas of high security requirements or in areas where doors are normally locked, but still require high-volume or after-hours traffic.
- c. Four locking systems have been selected that will serve the requirements of most departments. Requests to install electronic or keyless systems will be limited to the selection of one of the systems described in this OP.

2. Requirements for Installation

- a. Any new electronic or keyless system will interface or coexist with the existing restricted keyway system. The existing master key will remain functional for service, custodial, police, and emergency access. If an electronic key/card system replaces the existing key/lock system, the university Lock Shop will control the issuance of key/cards under the same provisions outlined in OP 61.15.

- b. The Lock Shop will stock spare parts and electronically encoded key/cards for the devices selected or will have vendor sources available for quick delivery, and will be the only department authorized to stock or order these items.
- c. The **installation** and **maintenance** of the devices will be on a departmental charge basis since installation will be primarily for the convenience of the department and a departure from the standard locking devices adopted for campus use. The university Lock Shop will install or supervise the installation of such devices on university education and general facilities. Therefore, any keyless or electronic locking device installed that is not in compliance with this OP will be removed and confiscated by the Lock Shop.
- d. All requests for installation of electronic or keyless locking devices will be processed through BMC on a *Customer Project Request* (CR) form and will be limited to those devices as specified below. Devices to be installed in new construction or renovation projects will be selected from this group. The managing director of Physical Plant will have the authority to approve/disapprove the use and installation of these devices and any proposed deviation from this OP.
- e. In order to maintain control and audit the security of university facilities, the Lock Shop will program or reprogram all systems with the cost of reprogramming charged to the department. On a device that allows a master key bypass but is limited to one programming code, the department will be authorized to reprogram locks and maintain code combinations. The Lock Shop will have sole responsibility for reprogramming systems with two or more programming capabilities, as well as maintaining and issuing all electronic keys. The cost of these keys will be charged to each department.
- f. Wherever keyless devices are used, the department will be completely responsible for assignment of codes to its personnel and students, along with maintaining combinations. The Lock Shop will only maintain records of individuals issued bypass keys and code combinations of devices they program.
- g. Outside vendors will not be permitted to install, maintain, or program any system without written authorization from the university Lock Shop.

3. **Systems Description**

Selected systems range in function from simple, mechanically operated, push button locks to high-tech, computerized electronic devices. The wide range of functions from which selections can be made allow almost any departmental requirement to be met. The university Lock Shop will assist departments in making selections. Lock expense is categorized 1, 2, 3, and 4, with 1 being the least expensive and 4 the most expensive.

Approved systems are limited to:

- a. Simplex Unican 1000 Series

This is a mechanically operated, reprogrammable, push button system whereby each door can be programmed to separate combinations or programmed alike. Anyone with the assigned combination can pass. Only one combination can be programmed into each lock at any one time. It has a master key bypass and can be keyed to the existing Sargent restricted keyway system. This is a completely new lock and requires replacement of existing locksets. It will

replace cylindrical locks with very little door modification, but will not replace mortise locks without extensive door modification or replacement.

Expense Category: 1 (without door replacement)

b. Essex Model 260, Electronic Push Button

This is an electronically operated, single program, touch-button keypad unit that operates on 120 VAC, 60 Hz input to a control module mounted somewhere near the door. The unit can be mounted on any door, and it operates in conjunction with existing locksets. Each unit has a battery backup good for about 20 hours or 20 operations, and it can be easily programmed from the touch pad. Only one operator code can be programmed at one time.

Expense Category: 2 (plus installation)

c. Sargent 4211 Electronic Push Button

This is a keypad motor-driven mortise lock with cylinder override, and has a capacity of 100 user codes. It operates on four AA batteries with a life of two years or 40,000 cycles. It has an adjustable unlock time and does not contain an internal clock or calendar. Data retrieval is limited to the last 15 entries. This type is available for mortise applications only. This is a new lock and requires the replacement of the existing lockset.

Expense Category: 3 (plus installation)

The Sargent 4211 system requires special equipment for data retrieval. The equipment is installed in the university Lock Shop and is accessible to the Facility Planning and Security Systems Manager and Lock Shop personnel only.

d. Locknetics CM5000 Series

This is a stand-alone electromechanical access control system. There are three access control methods: card reader, TouchEntry electronic key reader, and keypad code. The standard model is programmable for 150 users with 100-event audit trail; the optional model is 500 users with 500-event audit trail. This is a new lock and requires the replacement of the existing lockset. It operates on four AA batteries with a life of two years or 80,000 cycles. The TouchEntry keys range in cost from \$5.00 to \$7.00, with the cards ranging from \$1.00 to \$1.50. It is available for mortise and cylindrical applications.

Expense Category: 4 (plus installation)

The Locknetics system requires special equipment for encoding keys, encoding cards, programming, and data retrieval. The equipment is installed in the university Lock Shop and is accessible to the Facility Planning and Security Systems manager and Lock Shop personnel only.

e. VingCard PERSONA

This is a stand-alone electromechanical access control system that has two access control methods: card reader and keypad code. It is programmable for unlimited users with 500-event audit trail. It operates on battery pack with a life of three years or 65,000 cycles. This is a new lock and requires the replacement of the existing lockset. It is available for mortise applications only.

Expense Category: 4 (plus installation)

The VingCard system requires special equipment for encoding cards, programming, and data retrieval. The equipment is installed in the university Lock Shop and is accessible to the Facility Planning and Security Systems manager and Lock Shop personnel only.

4. Justification

Due to the large number of electronic or keyless security systems available on the open market, standards and limitations must be established for the use of these systems on the campus. The selection of the four systems listed above provides departmental security and flexibility without jeopardizing existing security, and allows the university Lock Shop to maintain the systems without heavy investment in inventories and specialized equipment.
