

# **2007 DALLAS FIRE CODE LIMITED ACCESS GATES STANDARD SECTION I104**

**Reference: 2007 Dallas Fire Code, Section 503.6 and Section I104**

**I104.1 General.** Limited access gates which obstruct fire department access roads (fire lanes) shall be installed and maintained in accordance with the provisions of this section.

**I104.1.1 Submit building plans prior to installation.** Submit two sets of plans drawn to scale for plan review and approval prior to installation. See the 'Limited Access Gate Requirements' handout for information required for plan designs.

**I104.1.2 Building permit required.** A building permit is required to install fencing over 6 feet (1828.8 mm) high.

**I104.1.3 Electrical permit required.** An electrical permit is required for all electrical work.

**I104.1.4 Limited access gates.** An annual permit is required for the operation and maintenance of limited access gates which obstruct fire apparatus access roads and which open electro-mechanically, using an approved Dallas Fire-Rescue Department radio receiver and transmitter.

**I104.2 Design.** Limited access gates which obstruct fire department access roads shall:

1. Be set back a minimum of 20 feet (6096 mm) from public access roadways.
2. Open electro-mechanically using an approved Dallas Fire-Rescue Department radio receiver and transmitter when installed at residential occupancies (to include apartments, hotels/motels, gated residential communities, etc.), institutional occupancies, and other locations when, in the opinion of the fire chief, life safety needs must be addressed. When approved by the fire chief, general business occupancies may utilize manual Knox entry equipment, such as a Knox padlock and chain.
  - 2.1. Each Dallas Fire-Rescue Department radio receiver shall comply with the following design criteria:

- 2.1.1. Consist of a six channel modular receiver having 400+ MHz frequency. Each digital channel module shall be preset to a specified digital code designated by the fire chief;
  - 2.1.2. Be equipped with one external, weather-tight, antenna assembly;
  - 2.1.3. Be equipped with a flasher unit and external lamp assembly with a red globe and guard to be mounted separate from the enclosure. This shall be wired to 115 volts and clearly visible from the entry side of the gate;
  - 2.1.4. Be located so that it can receive a clear signal from the transmitter when activated from inside responding emergency vehicles from a distance of 100 feet (30 480 mm);
  - 2.1.5. Shall override all other opening systems;
  - 2.1.6. Be protected from weather and physical damage; and
  - 2.1.7. When activated, the gate shall open at a minimum speed of 1 foot per second and remain open until closed by the fire department.
3. Gate designs that involve installing gates within close proximity of each other shall be relayed so that both gates will open when activated. One Dallas Fire-Rescue Department transmitter and compatible radio receiver may be used to achieve this requirement.
4. A manual back-up system shall be provided for all electro-mechanical gates. It shall be accessible on the entry side of the gate, using the Knox padlock that conforms to the Dallas Fire-Rescue Department Knox security key that is used at all other locations.
  - 4.1. A fail-safe manual back-up system shall be installed to allow access through the gate in the event of operational failure.
  - 4.2. On swing gates and barrier arms, this manual system shall be designed:
    - 4.2.1. To be clearly visible and easily accessible from the entry side of the gate.
    - 4.2.2. To open manually by one person removing the Knox padlock and/or pin that is secured in the arm.
  - 4.3. On slide gates this manual system shall be designed:

- 4.3.1. To be clearly visible and easily accessible from the entry side of the gate.
  - 4.3.2. To be mounted within 10 feet (3048 mm) of the gate and open manually by one person utilizing an approved single manual release device.
5. Commercial locations not required to install radio receivers shall utilize approved manual Knox entry equipment, such as a Knox padlock and chain.

**I104.3 Weatherproof box required.** The manual release device as required in Item 4 of Section I104.2 shall be protected from weather and physical damage in a weatherproof box which is:

1. Red in color.
2. At least 5 inches high, 5 inches wide and 1½ inches deep (127 mm high, 127 mm wide and 38.1 mm deep).
3. Clearly labeled 'Fire Dept.' in white block letters 1 inch (25.4 mm) tall with a ¼-inch (6.35 mm) stroke.
4. Located within 10 feet (3048 mm) of the gate.
5. Clearly visible and easily accessible.
6. Designed to accept the Knox padlock that conforms to the Dallas Fire-Rescue Department Knox security key when used with the manual release device.

**I104.4 Pedestrian walkway gates.** Limited access gates may be installed across pedestrian walkways provided they swing in the direction of egress travel. Gates serving as part of a required means of egress shall also comply with Chapter 10. Gates obstructing fire department access required in Section 503 shall comply with the following designs:

1. Electronic locking devices installed on pedestrian walkway gates shall have a manually operated weatherproof Knox key switch and be compatible with the Dallas Fire-Rescue Department Knox security key. In the event of a power failure or other failure of the electro-mechanical system, a fail-safe system shall automatically unlock the gate to allow free entry and exit.
2. Pedestrian walkway gates using Simplex-style door knob locks shall conform with the attached fire department access window diagrams. Fire department access windows shall have a required minimum dimension of

9 inches by 12 inches (228.6 mm by 304.8 mm) and include a hasp for the Dallas Fire Department Knox padlock that is compatible with the Dallas Fire-Rescue Department Knox security key.

**I104.5 Maintenance.** The gate opening systems shall be serviced on a regular basis and maintained in an approved operating condition.

1. The mechanical and electrical components shall be serviced on a regular basis and maintained in an approved operating condition.
2. A power supply shall be maintained to electronic components at all times.

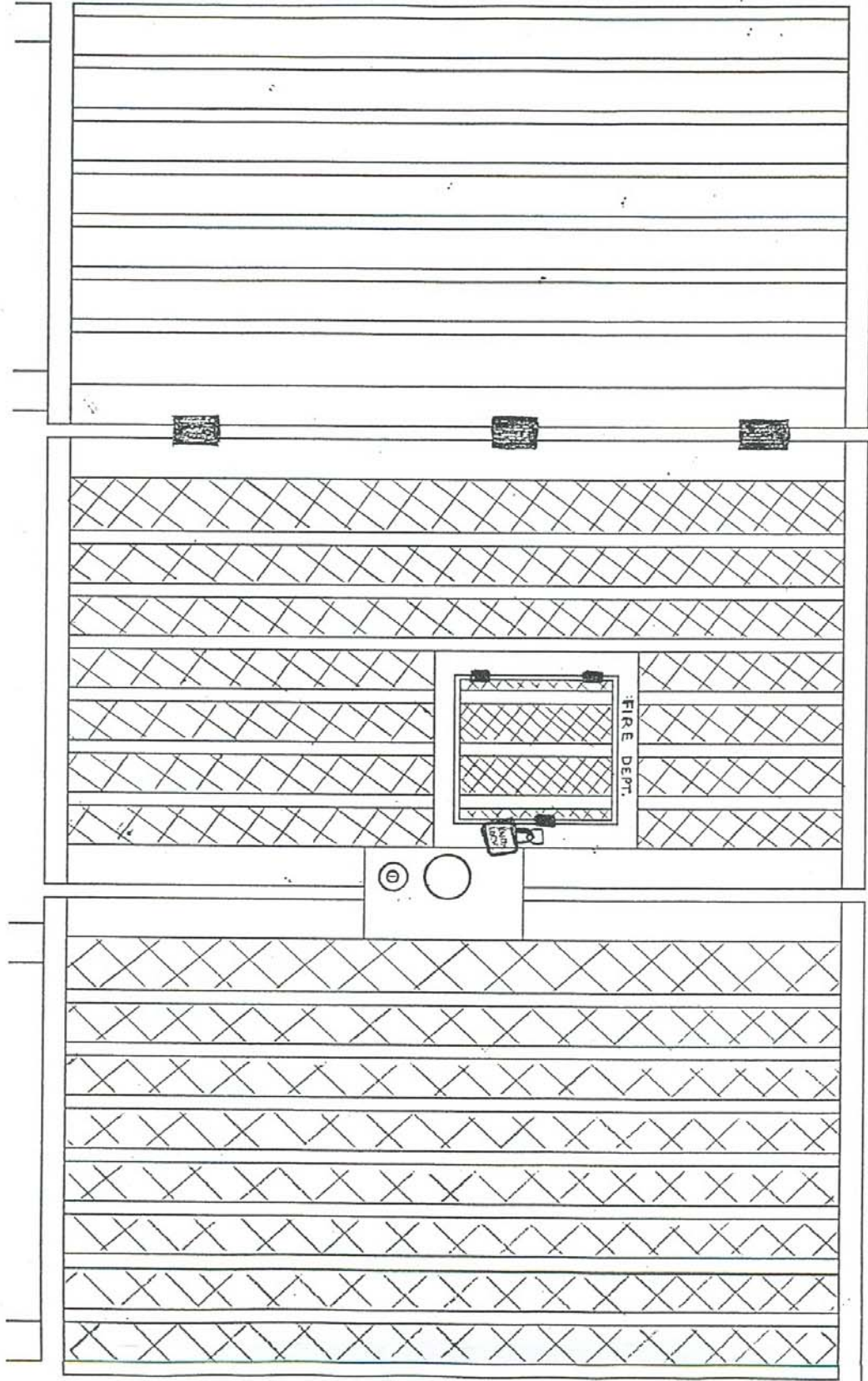
**I104.6 Performance test required.**

1. A performance test shall be conducted annually to verify proper operation of equipment.
2. Upon failure of the performance test, the security gate system shall be disabled and maintained in the open position until repaired and tested by the fire code official.

**I104.7 Illegal secondary obstructions to limited access gates.**

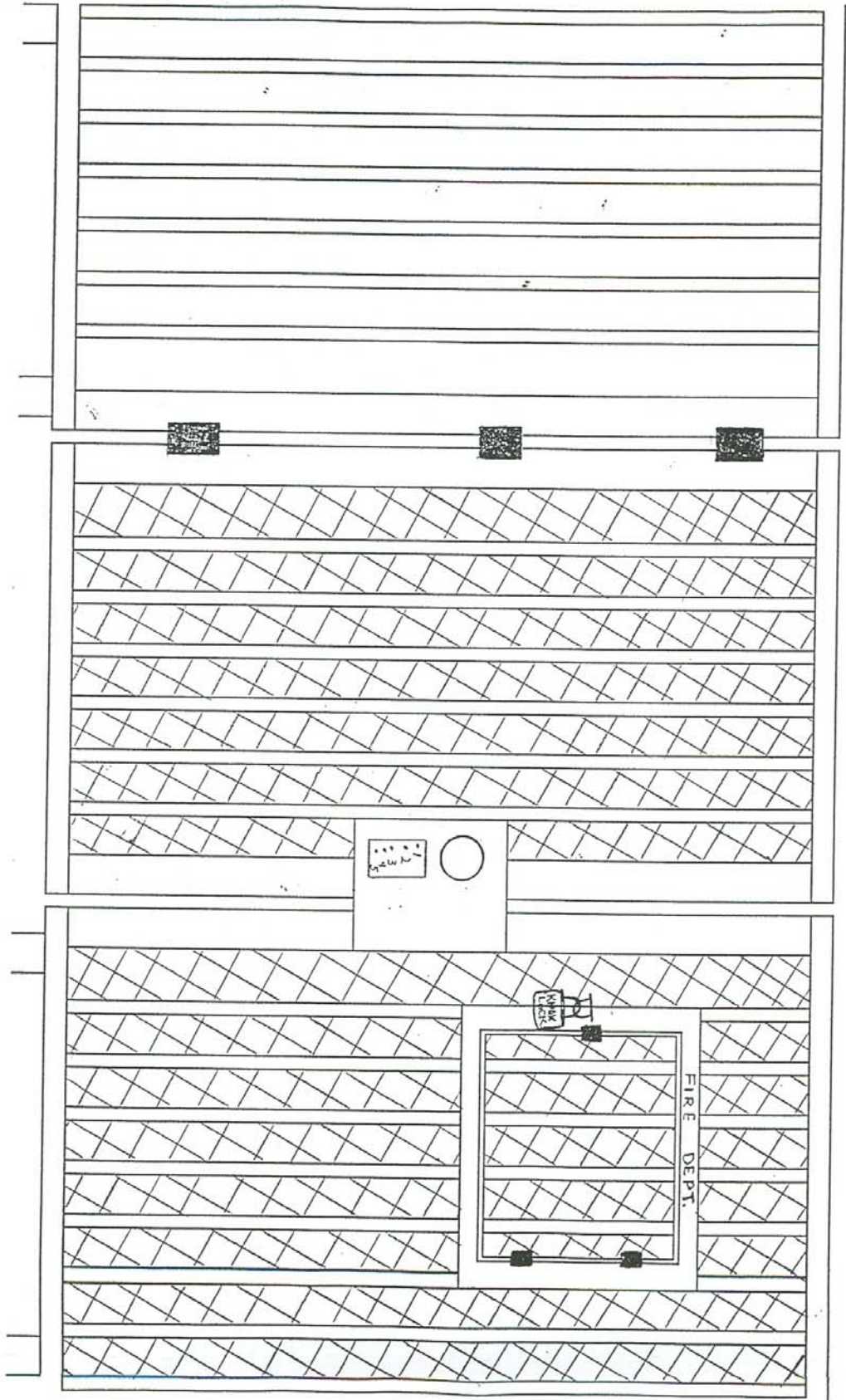
1. Barrier arms in front of access gates are not allowed.
2. Magnetic locking devices interconnected to Dallas Fire-Rescue Department radio receivers on limited access gates are prohibited.

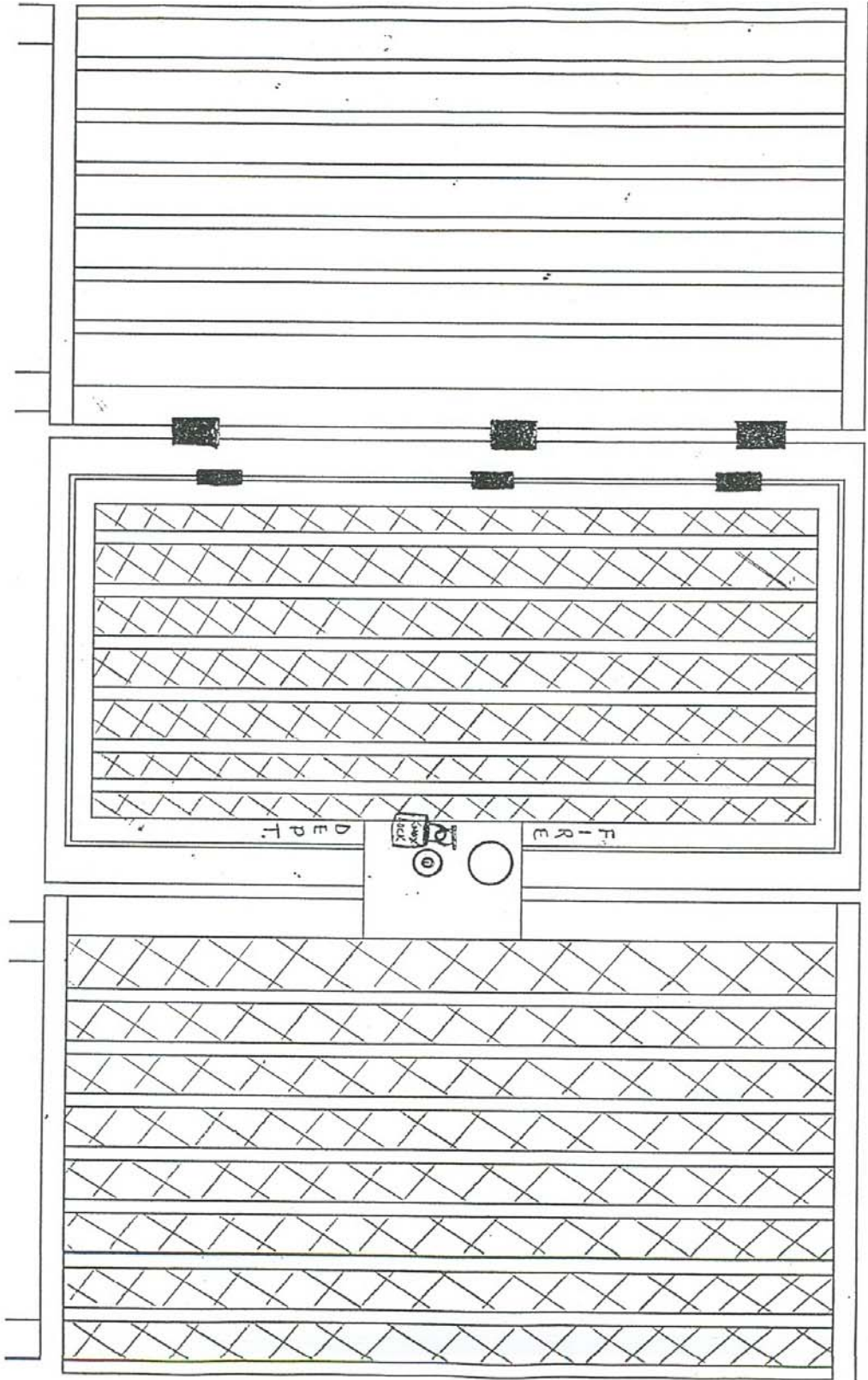
9/25/07



KEY ACCESS GATE  
FREE EXIT

PEDESTRIAN WALKWAY SECURITY GATES





GATE WITHIN A GATE  
A SECONDARY ACCESS GATE BIG ENOUGH TO WALK THROUGH.