

CARROLLTON FIRE RESCUE

FIRE MARSHAL'S OFFICE



CONSTRUCTION GUIDE VEHICLE ACCESS GATES

2022 Edition

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GENERAL PERMIT REQUIREMENTS:

The goal of the Fire Prevention Division is to assist its customers in understanding our submittal, plan review and inspection process and policies, as they pertain to new construction and finish outs. Familiarity with and adherence to these guidelines can greatly assist you in compliance with local codes, ordinances and inspections.

This guide does not replace, nor supersede any adopted codes and/or ordinances adopted by the City of Carrollton, or determinations and positions of the Fire Chief or Fire Marshal.

To expedite the plan review and inspection processes, please refer to the information listed below:

1. **All permits shall be submitted online through the CityServe Portal.**
2. All plan review and inspection process steps must be followed. Deviation from the requirements may result in delays, possible rejection of plans or inspection delays.
 - o ***Conducting any work without an approved permit may result in a double permit fee in addition to citations and fines being assessed.***
3. All fire department inspection forms, permits and stamped drawings shall be kept in a permit packet on the job site until final inspection.
 - o Failure to have the approved drawings and permit on-site may result in a failed inspection and re-inspection fees.
4. All installations must concur with the approved plans. Any deviation from the approved plans requires a re-submittal to the Fire Prevention Division.
5. The contractor is responsible for ensuring that the system(s) being installed or serviced are in compliance with all current locally adopted codes – including, but not limited to the **2021 International Fire Code (IFC)**, 2021 International Building Code (IBC), most current NFPA Standards, and City of Carrollton **Ordinance #4044**.
6. Any approval issued by the Fire Prevention Division does not release the contractor or property owner from the responsibility of full compliance with all applicable codes and ordinances relating to the construction project.
7. Plans approved by the City of Carrollton Fire Marshal's Office give authorization for construction only. Final approvals are subject to field verification.
8. The Fire Inspector will provide documented results after each inspection.

It is the goal of the Fire Prevention Division to complete your plan review within the shortest possible time. **We strive to complete your plan review within fifteen (15) business days from receipt of the plan submittal package.** Please be advised that revisions, changes, or an incomplete submittal package may delay your final plan approval.

ACCESS CONTROL (VEHICLE GATES)

These guidelines are to be followed when a building, facility, residential subdivision, or multi-family dwelling units, within the City of Carrollton, intends to install an entry and/or exit access control/security gate for vehicular traffic. All access control criteria for the purposes of this guideline and any other guidelines or requirements of the Fire Department shall conform to the **2021 IFC**, as adopted and amended by the City of Carrollton **Ordinance #4044**.

This guide does not replace, nor supersede any codes and/or ordinances adopted by the City of Carrollton, or determinations and positions of the Fire Marshal's Office.

General Vehicle Access Gate Requirements

- A separate permit is required for each automatic gate.
- The gate must be sized and constructed so it does not obstruct any portion of the fire lane, in any manner, when the gate is fully opened.
- All gates obstructing fire department access, whether in the open or closed position, must be equipped with a means to move the gate to a fully open position manually.
- Gate operator(s) shall open at a rate of one foot per second.
- The primary drive gate type to be installed across fire lanes shall be the sliding type.
- Parking barrier arms will open or clear in approximately two seconds.
- In the event of power failure the gate shall open freely. It shall be capable of being opened manually by one person of average stature.

Manually Operated Vehicle Access Gates

- Gates, in which operation is by manual means only, shall be acceptable.
- If gates are to be locked, then a **Knox 3770** Padlock is required in conjunction with occupant's lock.

Electrically Controlled Vehicle Access Gates

- All electrically controlled access gates shall have a **Knox KS-3502** key switch with dust cover that controls the gate under primary or secondary power.
 - The gate must stay open until the key switch is returned to normal operation.
- The KS-3502 switch shall be mounted 5 ½ feet above grade (location shown on plan).
- The key switch shall be located next to a sign labeled "FD ACCESS". See Fire Department Sign Specifications

Special Requirements for R-2 Occupancies (Apartment Complexes)

R-2 occupancies with automatic gates shall have all 3 methods of gate control listed below on the main gate and any additional gates as required by the fire code official.

1. Automatic, radio-controlled traffic control devices shall be provided on all automatic gates that obstruct fire apparatus roads (***Opticom, Firestroke, or equivalent***)
 - Automatic, radio-controlled traffic control devices shall be keyed to Carrollton Fire Rescue mobile transmitters
 - As the emergency vehicle approaches the entrance, the gates shall open without the use of an access code, door opener or Knox key switch.
 - All automated gates must also be equipped with one flasher unit and one external lamp assembly with a red globe and guard to be mounted separate from the enclosure. The light shall be visible from both sides of the gate, be mounted at the top of the fence within 2 feet of the gate opening and flash upon the gate being activated by the Opticom System or KS-2 switch and continue to flash as long as the gate is being held by the emergency access system.
2. All electrically controlled access gates shall have a ***Knox KS-3502*** key switch with dust cover that controls the gate under primary or secondary power.
 - The gate must stay open until the key switch is returned to normal operation.
3. A manual override system in case of power loss to the gate opener.
 - (T-Handle in box with ***Knox 3770*** Padlock)
 - All other manual override options must be approved by the Fire Code Official on a case-by-case basis

Radio-Controlled Receiver Requirements (Opticom, Firestroke, etc)

- Shall be mounted 8 to 10 feet above grade.
- Shall be located behind the access gate (property side).
- Shall be mounted on a 4 inch x 4 inch metal post, not on guidepost,
 - Post shall be cemented 18" below grade.
- Detectors shall activate 150-feet from gate.
- Each gate shall have two individual detectors or an approved Tomar dual strobe switch
- Detectors shall point toward the **APPROACH** and **EXIT** path of the emergency vehicle.
- Detectors' sight path shall be free of visual obstructions such as signs, covered parking canopies, and vegetation.
- Individual detectors shall be mounted together with the power module in a dual detector mounting box, or with an approved Tomar dual strobe-switch.

Inspection Requirements

- Fire Lane Unobstructed with gate fully opened (All gates)
- Manual Operation (All gates)
- Knox Key Switch Operation (All electrically controlled vehicle gates)
- Back-Up Power Verified (All electrically controlled vehicle gates)
- Opticom Sensor Operation (All R-2 Occupancies and Others as applicable)

Plan Submittal Requirements for Access Control Gates

Each submittal packet shall contain the following:

- Written description of the operation of the Vehicle Access Gate:
 - o In normal operation
 - o During loss of power
 - o In manual mode
- A full equipment listing with manufacturer, model number and quantity
- Data specifications sheets for all equipment shall be provided
 - o Specific materials on data sheets shall be identified by arrow or highlighter
- Site plan drawings w/ location & layout, including primary and emergency power
- Equipment location drawings of the actual configuration of the access gate(s)

INSPECTION REQUESTS AND PROCEDURES

The following guidelines shall be used when requesting an inspection:

- All inspection requests shall be coordinated by contacting the inspector on your permit.
- **Contact your inspector at least 48 hours in advance of the requested inspection.**

All inspection requests shall be submitted in the following format:

Subject Line of e-mail shall contain:

- Type of inspection Request- Address of installation - Permit #
- (i.e., Vehicle Access Gate Inspection Request – 1234 Any Street – Permit #202201120)

Body of e-mail shall contain:

- Name, complete address, phone number and e-mail of installing company
- Name, cell number and e-mail of on-site representative
- Photo proof of installed T-handle box on all electrically controlled gates
- Photo proof of installed Knox KS-3502 on all Electrically controlled gates
 - o Properly mounted with correct signage installed

On-Site Requirements:

- A representative of the requesting company must be present at time of inspection who can effectively communicate and answer questions of Fire Inspector.
- City of Carrollton Fire Marshal's Office approved, stamped, and signed plans and permits must be kept on the job site and presented to the inspector prior to beginning acceptance tests.