

COMMERCIAL FIRE INSPECTIONS
Royse City Fire Department - Fire Marshal's Office
305 N Arch St. • Royse City, TX 75189 • Phone: 972.524.4819
Website: <http://www.roysecity.com/departments/fire/>
Email: rcfd@roysecity.com

The following guidelines shall be used when calling for commercial fire inspection requests:

Fire Department Inspection Requests and Procedures

- ❖ All inspection requests shall be coordinated by calling 972.524.4819 or emailing Catherine Akkerman at cakkerman@roysecity.com
- ❖ Contact our office at least 24 hours in advance of the requested inspection date and time
- ❖ The following information must be provided when requesting an inspection:
 - Fire Department issued permit number
 - Name of Project
 - Address of Project
 - Fire protection contractor's company name
 - Fire protection contractor's contact name and phone number
 - Type of inspection requested
 - Other information as required, or requested.
- ❖ A representative of the requesting company must be present at time of inspection
- ❖ Permit must be kept on the job site, and presented to the inspector upon request
- ❖ FD approved, stamped, and signed plans must be kept on the job site and presented to the inspector upon request. Contractor shop drawings are not considered approved plans
- ❖ Provide all previous inspection forms within the permit jacket

Fire Department Inspection Process Details

- ❖ Fire Sprinkler Underground
 - **Visual:** All underground piping and joints must be uncovered and exposed, with labeling of the pipe legible from grade. All thrust blocks will be visually inspected and must be uncovered and exposed to grade. Depth of bury of the pipe shall be measured and verified. All ductile iron, retaining rods, and other non-plastic components shall be externally coated for corrosion and poly wrapped.
 - **Hydrostatic Test:** Underground piping will have to have passed the visual inspection. The test will be at 200 psi or at 50-psi pressure in excess of the maximum static pressure when the maximum static pressure exceeds 150 psi, for a minimum of two hours. Testing to be from the gate valve to the top of the spigot, no pressure drop or gain allowed.
 - **Flush:** Upon completion of the underground hydrostatic test, the underground piping will be flushed, witnessed by the Fire Department. Proper methods and equipment to perform the flush must be used. All piping used to flush must be properly secured or retrained. Hoses may not be used. Field Fire Inspector must approve of flushing method and equipment. The flushing must be completed prior to stacking the riser to the overhead piping.
 - **Fire Sprinkler Underground Final:** Final Fire Department sign-off of completion of all inspections and the receipt of all State require paperwork.



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❖ Fire Sprinkler Overhead

Do not stack the riser until the underground flushing has been completed. Check Fire Sprinkler Underground permit for verification of completion.

- **Visual:** All overhead piping and joints must be uncovered and exposed, with labeling of the pipe legible from the floor. All hangers will be visually inspected and must be uncovered and exposed to the floor.
- **Overhead Hydrostatic Test:** Overhead piping will be visually inspected with all joints exposed and labeling of the pipe turned downward. The test will be at 200 psi for a minimum of two hours. No pressure drop or gain allowed.
 - A hydrostatic test is required for all new installations.
 - A hydrostatic test is required for all modifications/tenant finish-out with twenty or more sprinkler heads added and/or relocated.
- **24-hour air test:** The test will be conducted at 40 psi of air for 24-hours with less than 1.5 psi loss.
- **Trip Test:** Operational test of the dry-pipe valve is performed and the quick opening device (500+ gallon systems) is tested, 750+ gallon systems must trip within 60 seconds.
- **Compressor Test:** Dry system compressor fills the system within 30 minutes.
- **Riser Main Flush:** Upon completion of the overhead hydrostatic test, the overhead piping will be drained and witnessed by the Fire Department.
- **Riser Room:** Verify riser room requirements, including floor drain for fire pumps, heat, light, markings, spare sprinkler head box and wrench, etc.
- **Standpipe and Fire Department Connection (FDC):** Hydrostatic testing if not already done, the test will be at 200 psi for a minimum of two hours. No pressure drop or gain allowed. A flow test at hydraulically most remote standpipe through FDC to verify required pressure and flow.
- **Fire Pump:** Hydrostatic testing (if not already done, the test will be at 200 psi for a minimum of two hours. No pressure drop or gain allowed.), all piping flushed, pump room requirements verified, and operational test conducted by manufacture witnessed by the fire department.
- **Fire Sprinkler Final:** Final Fire Department sign-off at completion of all inspections and the receipt of all State require paperwork. *The inspection shall be conducted when all sheet rock and millwork is completed. The objective of this inspection is to verify that coverage is adequate after the initial hydrostatic test. This will give the Fire Department and the contractor(s) the opportunity to make any changes before there is a request for a CO. Sprinkler heads must be clean and free from paint, construction debris, or other conditions that would affect the proper operation of the sprinkler heads.*

❖ Fire Alarm

- **Rough Wiring/ Above Ceiling:** All fire alarm wiring will be inspected for proper installation and penetration of any firewalls. *Fire alarm wiring shall not be tied to ceiling grid wire.*
- **Audible Device Test:** Ensure audible notification devices provide occupant notification for all areas without strobe devices.
- **Visual Device Test:** Ensure that all areas that do not have audible notification have visual coverage.
- **Initiating Device Test:** Test all smoke detectors and/or fire alarm initiating devices for Alarm and/or Standby conditions.
- **Waterflow:** The waterflow alarm will be tested by opening the inspectors test connection. The time



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delay feature on the flow switch switches must be set to a minimum delay of 30 seconds.

- **Central Station Monitoring:** Alarms and/or trouble signals are required to be monitored by a UL listed Central Station. Standard response to contact Fire Department shall be within 3 minutes.
- **Device Address Test:** All analog or addressable system will have all devices pulled and/or activated. The print out must comply with the devices that were pulled.
- **Final:** Final inspection.

❖ Kitchen Hood

- **Air Test:** The nozzles protecting the cooking appliance shall be tested with compressed air to simulate activation.
- **Utility Shut-off Test:** All utilities connected to the protected cooking devices, shall have automatic shut-off valves.
- **Manual Pull Station Test:** Operation of the manual pull station shall bring about full system operation.
- **Audible / Visual Notification:** Audible and/or visual notification devices shall be tested.
- **Fire Alarm Connection:** Automatic fire-extinguishing systems shall be monitored by the building fire alarm system in accordance with NFPA 72.
- **Final:** Final inspection.

❖ Underground Storage Tank

- See Installation Checklist for Underground Storage Tanks for all required inspections.

❖ Aboveground Storage Tank

- See Installation Checklist for Aboveground Storage Tanks for all required inspections.

❖ Access Control

- **Magnetic-Lock / Push Bar Test:** Magnetic locks will be tested.
- **Back-up Power Verification:** Test emergency backup power to the access control system, where provided
- **Fail Safe Verification:** Loss of power, or function to that part of the access control system, which locks the doors, shall automatically unlock.
- **Connection to Fire Sprinkler/Alarm System:** Activation of the building fire alarm or automatic sprinkler system, if provided, shall automatically unlock the doors. In addition, remain unlocked until the fire alarm system is reset.
- **Manual Operation:** Manual operation of the access control system, independent of any automatic function, will be tested.
- **Egress:** Electric strike, or designated access doors shall be tested to verify free egress

❖ Hazardous Materials

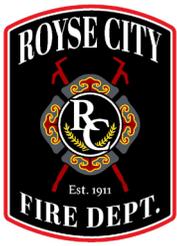
- **Permit Posted:** Permit is clearly posted near the entrance to the occupancy.
- **Permitted Quantity is not exceeded:** The quantities permitted are not exceeded.
- **Controls in Place:** Administrative and/or containment controls are in place. Proper storage requirements are provided for the quantity of materials stored. Non-compatible materials shall be properly segregated.



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- **Placard:** Required NFPA 704 diamond placard posted.
 - **Date of Issue:** Permit is valid for one year from date of issue.
- ❖ High-Piled/High-Racked Storage
- **Permit Posted:** Permit is clearly posted near the entrance to the occupancy.
 - **Permitted Quantity is not exceeded:** The quantities permitted are not exceeded.
 - **Controls in Place:** Administrative and/or containment controls are in place. Proper storage requirements are provided for the quantity of materials stored. Non-compatible materials shall be properly segregated.
 - **Date of Issue:** Permit is valid for one year from date of issue.
- ❖ Building Construction Items
- **Fire rated walls and sealant:** Inspect all fire rated walls and sealant at the deck.
 - **Fire Wall penetrations:** Inspect all fire rated wall penetrations and sealant of those penetrations.
 - **Fire curtains or smoke barriers:** Inspect any fire curtains or smoke barriers.
 - **Fire/Smoke Dampers:** Inspect all fire/smoke dampers in fire rated walls.
 - **Labeling:** Inspect labeling on ceiling grid, which indicates fire, and smoke dampers. (Fire Damper / Smoke Damper)
 - **Fire Rated Doors:** Inspect all fire rated doors jambs, doors, smoke seals, and door closures on fire rated doors.
 - **Stage Curtains:** Inspect any stage curtains for fire rating.
 - **Exit Signs:** Inspect all exit signs and test.
 - **Emergency Lighting:** Inspect all emergency lighting and test.
 - **Portable Fire Extinguishers:** Inspect all portable fire extinguishers size, location of devices, and for state tag.
 - **Door Hardware:** Inspect all door hardware on means of egress. (Panic hardware, thumb latch, locks, etc.)
 - **Fire Lane:** Inspect fire lane striping which shall include the top of the curb
 - **Fire Hydrants:** Inspect all fire hydrants for color-coding, obstructions, and protective barriers if applicable.
 - **Knox Box:** Inspect Knox box placement and place master key and all other emergency keys inside it.
 - **Elevator:** Inspect elevator and all operational equipment. Firefighter re-call tested. Must have State Elevator inspection record and certificate posted.
 - **Designated smoking areas:** Inspect all designated smoking areas for signage and proper ashtrays.
 - **Boilers:** Inspect any boilers and boiler room. Must have State boiler inspection posted.
- ❖ Fire Final/Certificate of Occupancy (C.O.)
- **Fire Final Inspection:** Project is 100% completed. Final inspections for any outstanding items see next section for additional details.
 - **Completed Inspections:** All required fire protection inspections completed.
 - **Additional Information:** As-built drawings or additional requested material provided.
 - **Certificate of Occupancy Inspection:** See next section for inspection details.



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Fire Department Final & Certification of Occupancy Fire Inspections

In order to assist the building owners and general contractors in receiving a Certificate of Occupancy for their business, the premises is inspected to identify fire related hazards and conditions. Listed below are the most commonly found fire code violations. The below listed items must be in compliance prior to making an appointment for Fire Department personnel to inspect the facility.

❖ Exterior Features

- All fire lanes are clear, unobstructed, and striped per City of Royse City standards.
- Fire hydrants shall be completed and in working order prior to construction.
- No accumulation of waste material.
- Fire Department Connection (FDC) unobstructed with caps in place, and within 50 ft. of a fire hydrant and faces fire lane, provided with a 5-foot wide unobstructed pathway from fire lane with an all-weather walking surface.
- Address on front in 12" numbers and rear in 4" numbers. legible from the street and fire lane.
- Address listing on electric and gas meters and/or disconnecting means.
- Knox Box located at the main entrance and/or riser room.

❖ General

- Storage clearance: unsprinklered 24" to ceiling, sprinklered 18" to sprinkler heads
- Sprinkler heads clear of paint / overspray
- All ceiling panels in place
- Clearance in front of electrical panel (36").
- Slots in electrical panels must be filled by blanks and all electrical receptacles have cover plates
- Occupancy load posted
- Fire rated assemblies properly constructed and penetrations sealed
- Extension cords / multiple adapters utilized per code
- Abatement of electrical hazards
- Mechanical/electrical/boiler rooms free from storage and combustibles
- Gasoline stored in proper location / container
- General housekeeping and precautions against fire
- Wall and ceiling finishes shall be in accordance with the 2018 International Fire Code, for all corridors, rooms and enclosed spaces. Field tests on interior finishes may be required.
- All required tenant separation wall/demising wall shall be a minimum of 1hr fire rated construction.
- All fire rated assemblies and fire doors intact

❖ Exits

- Accessible means of egress
- Exits unlocked
- Exits are not blocked
- Exit lights operational
- Emergency lighting operational



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- All exit doors located in the means of egress that are capable of locking or latching shall be operable from the inside without the use of a key, tool or any special knowledge or effort, or provided with approved panic hardware.

❖ Fire Protection Equipment

- Portable fire extinguisher serviced within 1 year or manufactured in current calendar year
- Minimum 2A-10:BC fire extinguishers per 3000 sq. ft, with a maximum travel distance of 75 ft. from any point within the building.
- Sprinkler system "Green Tagged", in-service and deemed operational.
- Alarm system "Green Tagged", in-service and deemed operational.
- Kitchen hood and/or spray booth system "Green Tagged", in-service and deemed operational.
- Other fire protection systems "Green Tagged", in-service and deemed operational.
- Approved plans and permits on-site.
- All devices installed according to plans.
- Fire protection equipment room(s), riser room, labeled and access provided.
- Access control system/gates in-service and deemed operational.
- Arrangement of interior walls and/or drop ceiling shall not interfere with the operation of the fire sprinkler system.
- Fire doors unblocked/operational.
- Provide spare sprinklers and wrench in cabinet
- All fire department inspection forms and permits shall be kept in a permit packet on the job site until final CO inspection.
- Will any type of special protection system be required? (I.e., ventilation, smoke dampers, fire alarm, fire sprinkler, kitchen hood, storage tank).