The *Application* Form is at the end of this *Guidelines* document. Please follow all instructions:

1. Use only the currently posted version of all Forms from:

www.cor.net/fire/permits

- 2. Download this document to your computer;
- 3. Open the downloaded document in Adobe Acrobat Reader DC or other compatible PDF software:
 - If needed, download and install the free Adobe Acrobat Reader DC from: https://get.adobe.com/reader/
 - O Do not complete the Forms in a web browser unless you can digitally sign them there.
- 4. Tab or mouse through the Forms to complete each field all applicable information is required:
 - o Click "Highlight Fields" if available, to help identify each field;
 - o Some fields contain a drop-down box from which a selection can be made.
- 5. Digitally sign each Form after completion by clicking on the signature field and following the prompts:
 - o Do not "lock" the document.
- 6. Save the completed *Application Form* and *Signature Form* [if applicable] and email these with supporting documents:
 - o Email to firepermits@cor.gov;
 - o In the subject line, enter:
 - New Permit Application; OR,
 - The existing permit number and type of resubmittal, e.g. 20-023 Resubmittal, in the subject line.



Fire Sprinkler and Related Systems Guidelines

Richardson Fire Department 300 N. Greenville Avenue, Richardson, TX 75081

Telephone: 972-744-5750 Fax: 972-744-5796 www.cor.net/fire

[Revised 11/22/2022]
Latest Revisions are in Red.

I. General:

- A. The following Codes and Standards apply, but are not limited to:
 - 1) 2018 International Fire Code as amended and adopted by The City of Richardson, ord. 4374;
 - 2) 2022 NFPA 13 [effective September 15, 2021] and the following if applicable:
 - a) 2022 NFPA 13R:
 - b) 2022 NFPA 13D;
 - c) 2022 NFPA 24;
 - d) 2019 NFPA 14;
 - e) 2022 NFPA 20;
 - f) 2017 NFPA 70/NEC.
 - g) 2023 NFPA 25.
- B. Applications are reviewed in the order submitted;
- C. Permit is required before commencing work unless approved in advance;
- D. Separate Application is required for each address/suite.

II. Permit Required:

- A. A permit is required where:
 - 1) The following systems are new or modified:
 - a) Fire sprinkler systems;
 - b) Fire pumps;
 - c) Standpipe systems;
 - d) Fire service mains:
 - e) Fire department connections [FDC];
 - f) Fire service backflow prevention.
 - 2) Fire sprinkler density changes;
 - 3) Demolition:
 - 4) Other work not specifically exempt call for information.
- B. Exempt [No permit, submittals, or acceptance test required. Appropriate Service Tag is required.]:
 - 1) System Repairs;
 - 2) Existing systems where 20 or fewer sprinklers ONLY are affected, including "turn-ups" and "turn-downs".

III. Permit and Inspection Fees:

A. Permit fee is 1% of the total cost, with minimum fee of \$60.00 per system.

EXCEPTION: No fee for a demolition permit.

- B. First review and one re-submittal review are included in permit fee for each subsequent review, a fee of one-half (1/2) the original permit fee, up to \$250, will be assessed;
- C. Permit fees are due upon issue, by check to "City of Richardson", or credit card. Permit fees are not accepted in advance;
- D. For work commenced without written approval, prior to obtaining a permit, the permit fee will be doubled;
- E. First inspection and one reinspection are included in permit fee for each subsequent inspection, a fee of \$100 will be assessed.

IV. Submittals:

- A. Electronic submittals ONLY:
 - 1) Submit the original design file saved or printed to unprotected PDF file format;
 - 2) MAX 10MB total is preferred at 200dpi resolution;
 - 3) E-Mail: firepermits@cor.gov.
- B. Scope and a detailed description of work shall be on the first page of the plans;
- C. Phased work, where applicable, must be clearly identified;
- D. Construction documents [including "as-builts"] shall be prepared, stamped, signed[†], & dated [after revision], by a licensed design professional OR accompanied by a completed and signed Signature of Licensed Design Professional Form.

†Approved digital signatures have verifiable "digital certificates". [See "What is a digital signature?"] Pasted/inserted & typed signatures are NOT approved;

- E. Indicate the following:
 - Use(s);
 - Occupancy Classification [Group];
 - 3) Occupant Load;
 - 4) Un-sprinklered, Partially Sprinklered [describe], or Fully Sprinklered?
 - 5) Hazard classification(s):
 - 6) High-rise or not high-rise;
 - 7) Other factors that affect the system design.
- F. Specify on the plans the correct editions of the applicable Codes and standards See IA above;
- G. Exceptions used in the design must be specifically identified by code or standard, and section number;
- H. Plans shall be drawn in a clearly legible, and professional manner;
- North shall be indicated, and plans shall be to drawn to scale a graphic scale is REQUIRED, e.g.: ^{20 ft}
- J. Unique room names and/or numbers, and room use shall be indicated for every room;
- K. A legend identifying each symbol, component, make/model number & quantity shall be provided;
- L. Show ceiling height(s), wall height(s) & ALL walls, doors, partitions, equipment & structural elements that affect the system;
- M. DO NOT SHOW Systems, furnishings, and other elements that do not affect the system design;
- N. Indicate quantity and SIN of each affected head;
- O. Submit cut-sheets for each affected sprinkler & significant component [e.g. DCVA, pre-action/dry- valves, etc...];
- P. "Pre-action" systems: Identify the ACR licensee responsible for testing the Fire Alarm component of the system;
- Q. Main fire sprinkler riser rooms shall have an exterior fire department access door not less than 3 ft. in width and 6 ft. 8 in. in height, regardless of any interior doors that are provided;
- R. Retroactive Installation ...a thorough hydraulic analysis, including revised hydraulic calculations, new fire flow data, and all necessary system modifications to accommodate the additional friction loss, shall be completed;
- S. Signs shall comply with Richardson Fire Department's Signs Policy applicable portions attached below;
- T. Richardson Fire Department encourages removal of existing sprinklers in elevators and machine rooms that trigger the shunt-trip requirements, and removal of the shunt-trip function of the fire alarm.
- U. Backflow Protection must comply with TCEQ publication RG-345 Table 1, Minimum Recommended Backflow Protection:
 - 1) When Minimum Recommended Backflow Protection is indicated:
 - a) Identify and document how the existing system complies with Table 1 [below]; or,
 - b) Submit a current City of Richardson Backflow Prevention Assembly Test and Maintenance Report; or,
 - c) Submit details with the submittals, indicating type, make, model and location of the existing protection; or,
 - d) Submit a separate Application for installation of backflow protection complying with Table 1.
 - 2) TCEQ publication RG-345 Table 1, Minimum Recommended Backflow Protection:

	Type of System	Minimum Requirements for a New Installation	Minimum Requirements for an Existing System
1	dry-pipe nonpressurized fire suppression system (deluge) piping open to atmosphere	none ¹	none ¹
2	dry-pipe pressurized and pre-action fire suppression systems (dry and preaction)	double check valve assembly ¹	an acceptable form of directional flow ² control until system is substantially altered ¹
3	other closed pipe fire protection system	compare with a similar configuration and use the same requirement ¹	compare with a similar configuration and use the same requirement for existing systems ¹
4	residential, single-family fire sprinkler system (separate piping from domestic system) less than 1.5 inch diameter	double check valve assembly ¹	
5	residential, single-family fire sprinkler system (integrated piping with domestic system) less than 1.5 inch diameter and material approved for potable water	none ¹	
6	wet-pipe fire sprinkler systems (wet) or a wet standpipe hose system	double check valve assembly, double check detector assembly or air gap ¹	an acceptable form of directional flow control ² that contains no lead until system is substantially altered— a directional flow control ² containing lead should be upgraded with a double check valve assembly by a licensed sprinkler contractor.
7	any system above in which a chemical additive is used, injected, or may possibly be injected	reduced-pressure principle backflow prevention assembly or air gap	retrofit with a reduced-pressure principle backflow prevention assembly or air gap by a licensed sprinkler contractor
8	segment of system filled with a non- freezing agent (antifreeze loop)	reduced-pressure principle backflow prevention assembly where segment starts	reduced-pressure principle backflow prevention assembly where segment starts

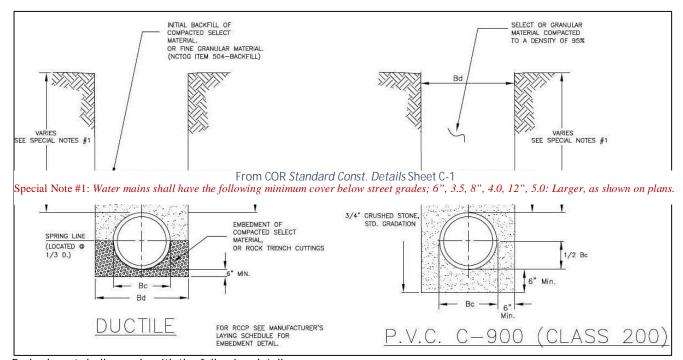
Source: Compilation from the American Water Works Association (AWWA) Recommended Practices for Backflow Prevention and Cross-Connection Control, Manual M14, 3rd edition

1/8" = 1'00"

Where there is a health hazard or where chemicals are likely to be added, use the recommendations for item number 7.

² An example of a directional flow control device is a listed alarm check valve, or a listed regular check valve, maintained in accordance with the requirement of the National Fire Protection Association, NFPA 25.

- V. Hydraulic Calculations:
 - 1) Required for new systems, or whenever calculated changes occur in existing systems:
 - 2) Submit copy of the original City of Richardson waterflow test report:
 - a) Call (972) 744-4220 for Water Utilities Field Operations;
 - b) Waterflow tests shall be conducted within one year of submittal.
 - 3) The exact location of the static/residual hydrant and the flow hydrant shall be indicated on the design drawings;
 - 4) Indicate the dominant water tank level at the time of the test and the maximum and minimum operating levels of the tank, as well, or identify applicable water supply fluctuation;
 - 5) Adjust static and residual data to minimum water supply level in tower [.434 psi/ft elevation];
 - Safety factor is minimum 5psi;
 - 7) Indicate hazard classification(s) for sprinkler design areas;
- W. Plan Review Notes and approved and/or marked-up plans will be returned via email;
- X. Permits must be retrieved within 30-day of approval Resubmittal, or status updates, are due within 30-days of review.
- V. Demolition of System and/or Related Equipment, only:
 - A. Submit a Scope Letter with the Permit Application:
 - 1) Describe the system/equipment/function(s) to be removed;
 - 2) Describe the reason for the demolition.
 - B. Submit a floor plan showing the approximate location(s) of the equipment/device(s) to be removed;
 - C. Indicate the following:
 - 1) Use(s);
 - 2) Occupancy Classification [Group];
 - Occupant Load;
 - 4) Un-sprinklered, Partially Sprinklered [describe], or Fully Sprinklered?
 - 5) High-rise or not high-rise.
- VI. Fire Service Mains and Fire Department Connections Additional Requirements:
 - A. A licensed utility contractor must coordinate with City of Richardson, Development & Engineering Department [(972) 744-4240 / fax (972) 744-5804 / information line (972) 744-4241], for a permit to tap into the city's water supply;
 - B. Submit applicable details:
 - 1) Fire Lanes;
 - 2) Building Heights;
 - 3) Fire Hydrants existing and proposed;
 - Thrust-block(s) and/or other stabilization methods;



- 5) Embedment shall comply with the following details:
- 6) Protection from Freezing shall comply with 2022 NFPA 24 10.4.2. [See Figure A.10.4.2(a) Recommended Depth of Cover (in feet) Above Top of Underground Yard Mains] Richardson's recommended depth is 3-feet.
- 7) Vault, and Backflow Prevention;
- 8) Piping, including risers;

- 9) Where a standpipe system is required, the FDC line will be a minimum of 6" diameter;
- 10) FDCs shall be accessible from a fire lane, not from a public street, unless specifically approved;
- 11) FDC location(s) shall be at least 1½ the building height away from the building served [OR minimum 50' away from the building served when specifically approved]. They should be off a corner of the building when practical, and out of collapse zone;
- 12) FDC distance to the fire lane should be minimum 3' and maximum 35', along an approved path;
- 13) FDC distance to the fire hydrant should be min. 35' and max. 135', along an approved path [measure along hose lay];
- 14) FDC shall be located relative to fire hydrant such that hose lay will not cross roadway or fire lane;
- 15) A 3-foot (914 mm) clear space shall be maintained around the circumference of FDCs;
- 16) An unobstructed path to the FDC of at least 5' width must be provided and maintained.
- 17) FDC shall be 5-inch Storz with a 30° elbow turned down;
- 18) FDC shall be min. 18 in. to bottom, max. 48 in. to top, above the adjoining ground, sidewalk, or grade surface;
- 19) FDCs shall be provided with locking Knox StorzGuard Caps order from www.knoxbox.com;
- 20) FDC Signs SUBMIT DETAILS of design and installation See Signs Policy [excerpts attached]:
 - a) Approved address/building number(s) sign shall be attached to ALL FDCs Buildings served by each FDC shall have approved address/building number(s) sign(s) plainly visible from the FDC;
 - b) A metal sign with raised letters at least 1 inch in size shall be mounted on all fire department connections serving automatic sprinklers, standpipes or fire pump connections. Such signs shall read: AUTOMATIC SPRINKLERS or STANDPIPES or TEST CONNECTION or a combination thereof as applicable;
 - c) Where the system demand pressure exceeds 150 psi, the sign [above] shall indicate the required design pressure indicate the system demand in submittals;
 - d) Where the [FDC] does not serve the entire building, a sign shall be provided indicating the portions of the building served.
- 21) Other details affecting the design and operation of the system;

VII. Standpipe Systems – Class I – Additional Requirements:

- A. Buildings Exceeding 10,000 sq. ft. in area per story and where any portion of the building's interior area is more than 200 feet of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I automatic wet or manual wet standpipes shall be provided. For the purpose of this provision, fire walls shall not define separate buildings. Exceptions:
 - 1) Automatic dry, semi-automatic dry, and manual dry standpipes are allowed as provided for in *NFPA 14* where *approved* by the *fire code official*;
 - 2) R-2 occupancies of four stories or less in height having no interior corridors.
- B. Class I standpipe hose connections shall be provided in all of the following locations:
 - In every required exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose
 connections shall be located at an intermediate landing between stories, unless otherwise approved;
 - On each side of the wall adjacent to the exit opening of a horizontal exit.
 Exception: Where floor areas adjacent to a horizontal exit are reachable from an interior exit stairway hose connection by a 30-foot hose stream from a nozzle attached to 100 feet of hose, a hose connection shall not be required at the horizontal exit.
 - 3) In every exit passageway, at the entrance from the exit passageway to other areas of a building.

 Exception: Where floor areas adjacent to an exit passageway are reachable from an exit stairway hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet of hose, a hose connection shall not be required at the entrance from the exit passageway to other areas of the building.
 - 4) In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an exit passageway or exit corridor to the mall. In open mall buildings, adjacent to each public entrance to the mall at the perimeter line and adjacent to each entrance from an exit passageway or exit corridor to the mall;
 - 5) Where the roof has a slope less than four units vertical in 12 units horizontal, each standpipe shall be provided with a hose connection [the most demanding standpipe shall be provided with a two-way hose connection] located to serve the roof or at the highest landing of an interior exit stairway with stair access to the roof provided in accordance with IFC Section 1011.12, or as otherwise *approved*;
 - 6) Where the most remote portion of a non-sprinklered floor or story is more than 150 feet from a hose connection or the most remote portion of a sprinklered floor or story is more than 200 feet from a hose connection, the *fire code official* is authorized to require that additional hose connections be provided in *approved* locations;
 - 7) When required IFC Chapter 9, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred feet (200') intervals along major corridors thereafter, or as otherwise *approved*.
- C. Identification and clearance
 - A minimum 36-inch wide, permanently marked, clear path shall be provided in front of standpipe hose connections and shall extend from the center of the connection to the aisle or driveway from which it can be accessed. Vehicle impact protection complying with Section 312 shall be provided where damage from a vehicle can occur.
 - Standpipe hose valve connection locations shall be clearly identified in the following manner:
 - a) In parking garages, a blue reflective driveway marker shall be placed in the center of the driveway in line with the center of the standpipe connection.
 - b) When the connection is on a wall the pipe shall be painted red from floor to ceiling, or min. 10-ft. high, whichever is less. Exception: Standpipe hose valve connections in stairs and in interior corridors of commercial and residential occupancies, when approved.

- c) The fire code official may require additional signs and/or markings to clearly identify standpipe locations.
- D. Roof Connections shall have approved durable and conspicuous signs identifying the stair number serving each;
- E. Manual Standpipe Calculations shall be based on RFD pumper capacity of 150 PSI plus 5 PSI per story [MAX. 200 PSI] @1,250 GPM;
- F. Hose Threads: 2½" NST connections shall be specified.

VIII. Inspections:

- A. Close-out documents must be submitted BEFORE requesting acceptance test [see *Review Notes* for each permit]. EXCEPTION: When sub-permits are assigned under a main permit number, ALL close-out documents must be submitted before the main permit number will be marked "final".
- B. Complete and check all work [pre-test] before requesting inspections all conditions must be met;
- C. Hydrostatic testing and visual inspections shall be scheduled to occur at the same time;
- D. Ceilings [other than acoustic grids without tiles] shall not be installed until AFTER above ceiling work has been accepted;
- E. Permit holder shall request inspections by calling (972) 744-5750. Inspections will be scheduled based on availability;
- F. Licensed personnel familiar with the specific work under each permit [installer, designer, etc...] must be present during inspection;
- G. Work that is exempt from permitting does not require an inspection or submittals.
- IX. Referenced Publications:
 - A. City of Richardson Fire Code Amendments www.cor.net/fire/permits;
 - B. International Fire Code, 2018 edition https://codes.iccsafe.org/content/IFC2018;
 - C. National Fire Protection Association Standards [available by subscription] https://codesonline.nfpa.org/.

Richardson Fire Department

300 N. Greenville Avenue, Richardson, TX 75081 Telephone: 972-744-5750 Fax: 972-744-5796 firepermits@cor.gov www.cor.net/fire/permits

Signs Policy [revised 06/03/2020]

This Policy is subject to revision – download the latest version and all Forms from www.cor.net/fire/permits. SGINS THAT DO NOT COMPLY WITH THIS POLICY ARE NOT APPROVED.

Policy may not include all requirements.

GENERAL

The Richardson Fire Department has adopted the following specifications for signs. Signs must comply with this Policy. The diagrams in this document are examples only. Where specific text is indicated by Code or Standards, that text must be used. Please contact the Richardson Fire Marshal's Office if you have specific questions.

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SIGN CONSTRUCTION SPECIFICATIONS

1. Dimensions:

Unless specific dimensions are indicated, signs shall be as large as necessary to clearly contain all necessary information in the approved format.

2. Materials:

- A. ALL Letters, graphics, and backgrounds shall be "engineer-grade" or "exterior-grade" materials;
- B. Sign backing shall be .080 aluminum sheet with minimum .5" radius corners.

EXCEPTIONS:

Addresses;

Fire Lane pavement markings.

3. Colors:

- A. "Traffic-red" letters and graphics on a white background; OR,
- B. White letters on a "traffic-red" background; OR,
- C. As specifically indicated in this Policy and/or applicable Codes and standards.

4. Font:

- A. Letters and numbers shall be Calibri Bold Caps or similar, unless otherwise specified;
- B. Letters and numbers shall be the specified size, where indicated.
- 5. Reflectivity is NOT required.

FIRE PROTECTION AND UTILITY EQUIPMENT IDENTIFICATION AND ACCESS - GENERAL

509.1 Identification. Fire protection equipment shall be identified in an approved manner. Rooms containing controls for air-conditioning systems, sprinkler risers and valves, or other fire detection, suppression or control elements shall be identified for the use of the fire department. Approved signs required to identify fire protection equipment and equipment location shall be constructed of durable materials, permanently installed and readily visible.

509.1.1 Utility identification. Where required by the fire code official, gas shutoff valves, electric meters, service switches and other utility equipment shall be clearly and legibly marked to identify the unit or space that it serves. Identification shall be made in an approved manner, readily visible and shall be maintained.

509.1.2 Sign Requirements. Signs shall be approved by the fire code official.

FIRE DEPARTMENT CONNECTIONS (FDC)

- 1. A metal sign with min. 1" raised letters shall be mounted on all fire department connections, reading, "AUTOMATIC SPRINKLERS", "STANDPIPES" or "TEST CONNECTION" or a combination thereof as applicable;
- 2. A sign shall also indicate the pressure required at the inlets to deliver the greatest system demand. EXCEPTION: Where the system demand pressure is less than 150 psi;







3. When required, F.D.C.s shall have signs reading "DO NOT BLOCK – BY ORDER OF FIRE MARSHAL" permanently installed over the F.D.C., MAXIMUM 6' AFF, facing the fire apparatus access road:



4. Wall-mounted F.D.C.s:

- A. When required, wall-mounted F.D.C.s shall have a sign permanently installed over the F.D.C., MAXIMUM 6' AFF, identifying the street number of the building served by the F.D.C. Additional information may be necessary to identify the portion of the building served by the F.D.C., the type of system served by the F.D.C., and/or other necessary information;
- B. Street name may also be required where the address number alone is not enough to clearly indicate the building served by the F.D.C.;

5. Remote F.D.C.s:

- A. Remote F.D.C.s shall have a sign permanently installed on the F.D.C. piping, facing the street or fire lane, identifying the street number of the building served by the F.D.C.;
- B. Where a fire department connection services only a portion of a building, a sign shall be attached indicating the portions of the building served;
- C. Additional signs may be necessary to identify the type of system served by the F.D.C., and/or other information;
- D. Street name may also be required where the address number alone is not enough to clearly indicate the building served by the F.D.C.;
- 6. The following examples identify approved specifications for F.D.C. signs:







Protects Part of Building



When System Protects Part of Building





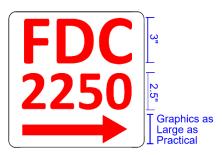




When Street Name is Unclear



Additional signs and/or directional arrow may be required to clearly identify the FDC location.



FIRE PUMP TEST HEADER

Where a Fire Pump is installed, the following sign shall be placed above the pump test header:



FIRE SPRINKLER SYSTEM SIGNS

Fire sprinkler system signs shall comply with this Policy and the latest effective edition of NFPA 13:

- **8.6.1.4 Where antifreeze systems are remote from the system riser**, a placard shall be mounted on the system riser that indicates the number and location of all remote antifreeze systems supplied by that riser.
- **8.6.1.5** A placard shall be placed on the antifreeze system main valve that indicates the manufacture type and brand of the antifreeze solution, the concentration by volume of the antifreeze solution used, and the volume of the antifreeze solution used in the system.
- **16.9.3.5 Control Valve Identification.** Identification signs shall be provided at each valve to indicate its function and what it controls.

16.9.12 Identification of Valves.

- 16.9.12.1 All control, drain, venting, and test connection valves shall be provided with permanently marked weather-proof metal or rigid plastic identification signs.
- 16.9.12.2 The identification sign shall be secured with corrosion-resistant wire, chain, or other approved means.
- 16.9.12.3 The control valve sign shall identify the portion of the building served.
- 16.9.12.3.1* Systems that have more than one control valve that must be closed to work on a system or space shall have a sign referring to existence and location of other valves.
- **16.10.5.3.7 Systems with low point drains** shall have a sign at the dry pipe or preaction valve indicating the number of low point drains and the location of each individual drain.

28.5* Hydraulic Design Information Sign (Hydraulic Data Nameplate).

- 28.5.1 The installing contractor shall identify a hydraulically designed sprinkler system with a permanently marked weatherproof metal or rigid plastic sign secured with corrosion-resistant wire, chain, or other approved means. ["Permanently Marked" includes stamped or engraved metal, or other pre-approved methods, but does NOT include markers or labels.]
- 28.5.2 Such signs shall be placed at the alarm valve, dry pipe valve, preaction valve, or deluge valve supplying the corresponding hydraulically designed area.
- 28.5.3 The sign shall include the following information:
- (1) Location of the design area or areas
- (2) Size (area) of or number of sprinklers in the design area
- (3) Discharge densities over the design area or areas
- (4) Required flow and residual pressure demand at the base of the riser or fire pump where applicable
- (5) Occupancy classification or commodity classification and maximum permitted storage height and configuration
- (6) Hose stream allowance included in addition to the sprinkler demand
- (7) Name of the installing contractor

28.6* General Information Sign.

28.6.1 The installing contractor shall provide a general information sign used to determine system design basis and information relevant to the inspection, testing, and maintenance requirements required by NFPA 25.

28.6.1.1 Such general information shall be provided with a permanently marked weatherproof metal or rigid plastic sign, secured with corrosion-resistant wire, chain, or other acceptable means.

["Permanently Marked" includes stamped or engraved metal, or other pre-approved methods, but does NOT include markers or labels.]

- 28.6.1.2 Such signs shall be placed at each system control riser, antifreeze loop, and auxiliary system control valve.
- 28.6.2 The sign shall include the following information:
 - (1) Name and location of the facility protected
 - (2) Occupancy classification
 - (3) Commodity classification
 - (4) Presence of high-piled and/or rack storage
 - (5) Maximum height of storage planned
 - (6) Aisle width planned
 - (7) Encapsulation of pallet loads
 - (8) Presence of solid shelving
 - (9) Flow test data
 - (10) Presence of flammable/combustible liquids
 - (11) Presence of hazardous materials
 - (12) Presence of other special storage
 - (13) Location of venting valve
 - (14) Location of auxiliary drains and low point drains on dry pipe and preaction systems
 - (15) Original results of main drain flow test
 - (16) Original results of dry pipe and double interlock preaction valve test
 - (17) Name of installing contractor or designer
 - (18) Indication of presence and location of antifreeze or other auxiliary systems
 - (19) Where injection systems are installed to treat MIC or corrosion, the type of chemical, concentration of the chemical, and where information can be found as to the proper disposal of the chemical
- 28.6.3 Combination hydraulic design information and general information are permitted.
- 28.6.4 The sign shall include the following information:
 - (1) Location of the design area or areas
 - (2) Size (area) of or number of sprinklers in the design area
 - (3) Discharge densities over the design area or areas
 - (4) Required flow and residual pressure demand at the base of the riser
 - (5) Occupancy classification or commodity classification and maximum permitted storage height and configuration
 - (6) Hose stream allowance included in addition to the sprinkler demand
 - (7) Name of the installing contractor

STANDPIPE HOSE VALVE CONNECTIONS

905.4.3 Identification and clearance. A minimum 36-inch clear width shall be provided in front of standpipe hose connections and shall extend from the centered connection to the aisle or driveway from which it can be accessed. The clear width shall be permanently marked in an approved manner, by red chevron on contrasting background on the finished floor surface. An approved method to prevent obstruction of the marked area shall be provided. Vehicle impact protection complying with Section 312 shall be provided in garages and other locations where vehicles are operated.

Standpipe hose valve connection locations shall be clearly identified in the following manner:

- 1. When the connection is on or adjacent to a column, a 6-inch red band, or approved signs, shall mark all visible sides of the column. The band shall be as high as practical, but no more than 10-feet above the finished floor; or,
- 2. When the connection is on a wall the pipe shall be painted red from floor to ceiling, or minimum 10-feet high, whichever is less; or,
- 3. Where the fire code official determines it is necessary for standpipe system identification, the fire code official may require additional signs and/or markings.

Exception: Standpipe hose valve connections in stairs and in interior corridors of commercial and residential occupancies, when approved by the fire code official.

ROOMS CONTAINING FIRE PROTECTION SYSTEMS

- 1. Signs shall be permanently posted identifying doors leading to rooms containing fire protection system controls:
 - A. Doors to rooms containing Fire Alarm Control Panels [FACP], Fire Sprinkler Risers, Fire Pumps, and combinations thereof, shall have signs posted identifying these systems as below:
 - B. Riser Room signs shall also indicate, "STORAGE PROHIBITED" [unless the riser shares a warehouse storage area or otherwise approved]:



2. Signs shall be permanently posted identifying other doors that lead to Fire Sprinkler Riser Rooms when indicated by the Fire Marshal's Office. These Signs shall read, "RISER ROOM ACCESS";









Fire Sprinkler and Related Systems Construction Permit Application

Richardson Fire Department

300 N. Greenville Avenue, Richardson, TX 75081
Telephone: 972-744-5750 Fax: 972-744-5796 www.cor.net/fire
[revised 05/26/2021]

Fire Department Permit Forms and Information are available at www.cor.net/fire/permits.

APPLICATIONS THAT DO NOT COMPLY WITH THE FOLLOWING MAY NOT BE REVIEWED:

E-mail this COMPLETED Form and supporting .PDFs to firepermits@cor.gov with the original Application/Permit Number [if applicable] and submittal type in the subject line [E.g.: New Permit Application or 20-123 Resubmittal].

- Use ONLY the current version of all Forms;
- Comply with ALL instructions and guidelines;
- Submit a separate Application for each address/suite#;
- Forms must be complete, correct, readable, and signed;

- COMPLETE and CORRECT address must match Building Permit or Certificate of Occupancy;
- Submit ONLY documents applicable to the proposed work.

	Submittal Type [Initial, Resubmittal, Renewal, Modification, or As-builts]:						
PE							
TYPE	Except "Initial Application" - enter the original FIRE DEPT. Application/Permit Number:						
	"Project" is the property and owner/agent of the	e property [E.g. Prop	perty Manager, Construction Manager, etc]:				
PROJECT	PROJECT NAME [name of business or property]:	PROJECT CONTACT TYPE [Not the Fire Protection Co	PROJECT CONTACT TYPE [Not the Fire Protection Contractor]:				
	PROJECT CONTACT (A PERSON): [Not the Fire Protection Contractor]:	CONTACT'S PHONE:	CONTACT'S E-MAIL:				
	PROJECT COMPLETE AND CORRECT ADDRESS [Include direction, e.g.: N. S. E. W., and suite #, if applicable]:						
	BRIEF description of Scope and Area of Work Proposed:						
	"Applicant" is an agent of the licensed fire protecti	on firm and is RESP	PONSIBLE FOR ALL WORK UNDER THE PERMIT:				
	LICENSED FIRE PROTECTION FIRM:		FIRM'S PHONE: FIRM'S LICENSE TYPE	& #:			
APPLICANT	FIRM'S MANAGER: POSITION:	PHONE:	OWNER/MGR'S EMAIL:				
	FIRM'S MAILING ADDRESS [Include City, State and Zip]:	DESIGN PROFESSIONAL'S LI	DESIGN PROFESSIONAL'S LICENSE#:				
	APPLICANT'S NAME: APPLICANT'S TITLE:	DIRECT PHONE:	APPLICANT'S E-MAIL ADDRESS:				
	"System" is the fire protection system to be permitted. A separate Application is required for each license type:						
Σ	SYSTEM TYPE(s): Fire Service Mains Fire Dept.Connections [FDC] Standpipes Backflow Prevention Fire Pumps Fire Sprinkler [indicate type(s)]: NFPA 13 NFPA 13R NFPA 13D						
SYSTEM	EXTENT OF WORK:						
Ś	TOTAL COST OF THE SYSTEM(s) TO BE COVERED BY THIS PERMIT [Include all labor, materials, etc]:						
Applicant has reviewed & complied with all guidelines and instructions and all information is complete and correct.							
*Approved digital signatures have verifiable "digital certificates". [See "What is a digital signature?"] Pasted/inserted & typed signatures are NOT approved. If you cannot digitally							
sign: Print this page, sign in ink, scan signed document and submit as .pdf. Do NOT "lock" Form when digitally signing OFFICE USE ONLY							
PEF	RMIT #: BLDG. PERMIT #:		FEE: \$ EXE	MPT:			
	ATE ISSUED: CC or Check #:		PERMIT ISSUED BY:				
	DTES:						



Signature of Licensed Design Professional Form

Richardson Fire Department

300 N. Greenville Avenue, Richardson, TX 75081
Telephone: 972-744-5750 Fax: 972-744-5796 www.cor.net/fire
[revised 05/26/2021]

Fire Department Permit Forms and Information are available at www.cor.net/fire/permits.

Meets signature requirements of TAC 34.6 The Fire Alarm Rules.

READ AND FOLLOW ALL INSTRUCTIONS:

- This Form is mostly auto-filled when the Application is computer completed. TAB through to complete the remaining fields;
- Use ONLY the current version of all Forms;
- This Form is an optional alternative to digitally stamping & signing plans, including "as-builts". Please do **NOT** print and re-scan plans;
- The Stamp **must** be signed and dated by the Licensed Design Professional.

SUBMITTAL TYPE	:						
PROJECT NAME:			Original FIRE [DEPARTMENT Applica	ation/Permit # [IF a	applicable]:	
PROJECT COMPLETE AND CORRECT ADDRESS [Include direction, e.g.: N. S. E. W., and suite #, if applicable]:							
DO NOT LEAVE THE FOLLOWING SECTION BLANK!							
TOTAL NUMBER OF STAMPED PAGES:							
Sheet Number	Date Drawn / Revised	Sheet Number	Date Drawn / Revised	Sheet Number	Date Drawn / Revised	Sheet Number	Date Drawn / Revised
						Attach additional	Forms if needed.

The below stamp is substantially auto-filled when the Permit Application is completed online - provide the missing information, sign and date.

<u> </u>
FIRE SPRINKLER PLANS
I have reviewed these plans and certify that they comply with 2018 International Fire Code as amended and adopted by The City of Richardson, currently published applicable NFPA standards, and 2017 edition of NFPA 70 (if applicable). OR certify they were copied from sealed engineering plans and any violations of the applicable codes or standards are specifically noted on these plans.
Licensee Signature* Licensee Number
Licensee Typed Name Date Signed

The below stamp is ONLY intended to be used when the Permit Application is NOT completed online. Print and complete this stamp in ink.

_	is NOT completed online. Print and complete this stamp in ink.				
	□FIRE EXTINGUISHER FIXED SYSTEM NOT PRE-ENGINEERED □FIRE ALARM □FIRE SPRINKLER				
	☐For Submittal ☐As Built Record Drawings				
	I have reviewed these plans and				
	☐ certify that they comply with 2018 International Fire Code as amended and adopted by The City of Richardson, currently published applicable NFPA standards, and 2017 edition of NFPA 70 (if applicable); OR,				
	☐ certify they were copied from sealed engineering plans and any violations of the applicable codes or standards are specifically noted on these plans.				
)R	Registered Firm's Name:				
	Street Address:				
	City, State, Zip:				
	Phone Number:				
	Registration Type and Number:				
	Licensee Signature* License Number				
	[include ALL letters, e.g. RME-G-1234]				
	Licensee Printed name Date Signed				