

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/firepermits
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/>
 - ◆ 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:
 - ◆ 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.
6. Save the completed *Application Form* and *Signature Form* [if applicable] and email these with supporting documents:
 - ◆ Email to firepermits@cor.gov;
 - ◆ In the subject line, enter:

New Permit Application

OR

The existing permit number and type of resubmittal
e.g., *23-023 Resubmittal*, in the subject line.



Fire Alarm System Guidelines
Richardson Fire Department
300 N. Greenville Avenue, Richardson, TX 75081
Telephone: 972-744-5750 www.cor.net/firepermits
[Revised 12/05/2023]
Significant Revisions are in Red.

I. General:

- A. Applications are reviewed in the order submitted.
- B. Permit is required before commencing work or approved in writing.
- C. Separate Application is required for each address/suite.

II. Permit Required:

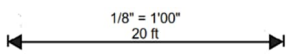
- A. A Permit is required where:
 - 1) System is upgraded or replaced, or a new fire alarm system is installed.
 - 2) 5 or more notification appliances.
 - 3) Initiating devices are affected.
 - 4) Communicator/Dialer is affected.
 - 5) Control [FACU, FACP, Power Supply, etc.] replacements/upgrades.
 - 6) Remove/Demolition.
 - 7) Other work not specifically exempt – call for information.
 - 8) Emergency repairs [modifications]: The permit application shall be submitted within the next working business day.
- B. Exemptions – [No permit, submittals, or acceptance test required. Appropriate Service Tag is required].
 - 1) System Repairs [no modifications].
 - 2) Fewer than 5 notification appliances only are affected.
 - 3) Firmware/software updates, replacing boards of the same model with chips utilizing the same or newer firmware; OR,
 - 4) New supervision of hood suppression **and in-building, two-way emergency responder communication coverage** systems added to existing FACU [FACP].

III. 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.
Permit fees can be paid by credit card AFTER Application is approved. Permit fees are not payable in advance.
- 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 [prior to exemptions], up to \$250, will be assessed.
- C. First inspection and one reinspection are included in permit fee - for each subsequent inspection, a fee of \$100 will be assessed;
- D. For construction or operation commenced prior to obtaining a required permit, an amount equal to the original permit fee [prior to exemptions], up to \$2,000, shall be added to the permit fee.

IV. Submittals:

- A. Submit completed Applications and supporting documents to firepermits@cor.gov with "Permit Application" in the subject line:
 - 1) Submit the original design file saved or printed to .PDF file format. Please do not print and scan the file.
 - 2) Application and related submittals should be submitted together in a single email.
 - 3) The File should be a maximum size of approximately 10MB at 200 dpi – larger files are typically not necessary.
- B. Phased work, where applicable, must be clearly identified.
- C. 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.
- D. Signatures shall be approved[†] digital signatures [preferred] OR original signatures^{††}:
[†]Approved digital signatures have verifiable "digital certificates". [See "[What is a digital signature?](#)";]
^{††}Pasted/inserted & typed signatures are NOT approved.
- E. Indicate the following:
 - 1) Use(s).
 - 2) Occupancy Classification [Group].
 - 3) Occupant Load.
 - 4) Un-sprinklered, Partially Sprinklered [describe], or Fully Sprinklered?
 - 5) High-rise or not high-rise.
- F. Specify on the plans the correct editions of the applicable Codes and standards, including, but not limited to:
 - 1) 2021 International Fire Code as amended and adopted by City of Richardson ord. 4462.
 - 2) 2022 ed. NFPA 72.
 - 3) 2020 ed. NFPA 70/NEC.

- G. A detailed description of the proposed work shall be on the first page of the plans or in a Scope letter.
- H. Exceptions used in the design must be specifically identified by code or standard, and section number.
- I. Plans shall be drawn in a clearly legible, and professional manner.
- J. North shall be indicated, and plans shall be drawn to scale – a graphic scale shall be indicated, e.g.: 
- K. A legend identifying each symbol, component, make/model number & quantity shall be provided.
- L. Unique room names and/or numbers, and room use shall be indicated for every room.
- M. Show ceiling height(s), wall height(s), walls, doors, partitions, furnishings, equipment & other elements affecting the system.
- N. DO NOT SHOW elements that do not affect the system design.
- O. Submit riser diagram for every affected circuit [show each device and setting in each circuit].
- P. Show point-to-point wiring and end-of-line [EOL] resistors.
- Q. Submit data-sheets for each affected device & significant component [e.g. – FACU/FACP, PS, Detector, A/V, Communicator, etc.].
- R. Battery/Voltage Drop Calculations:
 - 1) Submit worksheets for each affected power supply, and for each affected circuit. [Manufacturer's original battery calculation worksheets with pre-entered values are PREFERRED], AND,
 - 2) Submit documentation of the SOURCE of EVERY SPECIFIC CURRENT DRAW USED IN THE CALCS.:
EXCEPTION: Values pre-entered on worksheets that are clearly identified as the manufacturer's worksheets.
 - a) Highlight the SOURCE of EVERY value used in battery/voltage-drop calculations.
 - b) Highlight ONLY the SOURCE of the specific values used.

V. FACU [FACP] and/or Communicator Replacement/Upgrade only:

- A. Submit a Scope Letter with the Permit Application:
 - 1) Indicate the make and model of the original equipment to be replaced/upgraded.
 - 2) Submit Datasheet(s) for new or changed equipment.
 - 3) Indicate the correct editions of the applicable Codes and standards that apply, [See IV F above]:
 - 4) Confirm APS/PE has validated the new FACU [FACP] battery calculations – complete calcs are not required for initial submittal.
 - 5) The APS/PE must stamp and sign the Scope Letter to confirm he/she has reviewed the proposed work.
- B. Submit a basic plan with proposed location(s) of new equipment, riser room/fire pump, & access doors leading to the equipment.
- C. Other applicable items in this document apply.

VI. 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].
 - 3) Occupant Load.
 - 4) Un-sprinklered, Partially Sprinklered [describe], or Fully Sprinklered?
 - 5) High-rise or not high-rise.

VII. Notification:

- A. Where egress from occupiable outdoor space(s) requires re-entry into a building, notification is required as if the space is indoors.
- B. Indicate the ambient design sound pressure levels for the various coverage areas, and how determined [may reference NFPA 72 Table A.18.4.4].
- C. Visible notification is required in alterations, unless specifically approved.
- D. **NFPA 72 Sec. 18.5.5.6* Obstructions.** [Beginning in 2022 edition, substantially affecting spacing of visible notification appliances.].
[NFPA 72 Enhanced Content]: ...The 2022 edition of the Code has added additional considerations for the fire alarm designer... ..to determine how elements of the building, or its furnishings, might affect the visibility of the visual notification appliances.
NFPA 72 Sec. 18.5.5.6.1 Ceiling mount visual notification appliances shall be mounted such that the effect of the appliance is not blocked by obstructions.
NFPA 72 Sec. 18.5.5.6.2 The effect of obstructions on distribution of light from wall-mounted appliances shall be considered when determining the location of appliances.
- E. Audible appliances provided for sleeping areas to awaken occupants shall be low-frequency, including apartment living rooms
- F. Notification is not required in elevator cars and should be omitted in *exit stair enclosures and exit passageways*. [Exception: Emergency voice/alarm communication systems].
- G. *Occupiable* means, “[a] room or enclosed space designed for human occupancy”. The following are generally not *occupiable* and may be exempt from notification:
 - 1) Private garages in apartment complexes when used only for parking of vehicles and storage of personal items.
 - 2) Closets and storage rooms:
 - a) Includes small computer rooms [IDF and MDF] and telecommunications equipment rooms.

- b) Does NOT include file rooms, data halls, and warehouses.
 - c) If workspaces are present [e.g. desks, tables, chairs] notification is required^{†††}.
 - 3) Walk-in coolers/freezers in restaurants: *Public-use* “walk-ins” in Groups M and S occupancies are not exempt^{†††}.
 - 4) Mechanical Rooms smaller than 1,000 square feet, containing only mechanical equipment, and not “regularly occupied”: If workspaces are present [e.g. desks, tables, chairs] notification is required^{†††}.
 - 5) Electrical Rooms: If workspaces are present [e.g. desks, tables, chairs] notification is required^{†††}.
 - 6) Private offices [not shared]: Small conference tables in private offices do not necessarily trigger visible notification.
- ^{†††} *Public-use* and *common use* spaces are not exempt – see *Fire Alarm Notification Policy* at www.cor.net/firepermits.

VIII. Smoke and Heat Detection:

- A. Where non-required automatic fire detection is installed, meet the prescriptive spacing requirements of NFPA 72 Chapter 17 and protect, at minimum, common paths of egress throughout the protected premises, OR
- B. Demonstrate how the prescriptive requirements of the Code are met, OR
- C. Submit documentation supporting a Performance-based design in accordance with NFPA 72 section 17.3, OR
- D. IF an existing, previously approved system protects a building with detection only in the means of egress, a design may propose the same method of protection. This must be clearly indicated in the proposed design documentation.

IX. Duct smoke detectors [when supervised by a fire alarm system]:

- A. Test duct smoke detectors that use sampling tubes to ensure they will properly sample the airstream in the duct using a method acceptable to the manufacturer or in accordance with their published instructions. [See NFPA 72 Table 14.4.3.2]:
Exception: Existing duct smoke detectors are presumed to have been properly tested if previously supervised by an alarm system.
- B. BEFORE requesting “final” inspection, email the following [.PDFs ONLY] to firepermits@cor.gov, with the permit # and “close-out documents” in the subject line:
 - 1) The page(s) of the manufacturer’s instructions, describing the test methods and acceptable differential pressure range, AND,
 - 2) The individual measurements and differential calculations for each unit. The measurements and results must be on letterhead, signed by a representative of the fire alarm or HVAC contractor.
- C. When CRAH units and CRAC units are provided with factory installed duct smoke detectors that are not required by the 2021 International Mechanical Code, Section 606, Smoke Detection Systems Control, these shall be supervised by a Fire Alarm system ONLY when the following conditions apply:
 - 1) Each component of the duct smoke detection system [smoke detector, smoke detector housing, sampling tubes, etc...] shall be listed for the specific application, and installed and tested according to the smoke detector manufacturer’s instructions and NFPA 72 [see above].
 - 2) Duct smoke detectors shall initiate a “supervisory” condition and required smoke control functions, only.
- D. Duct smoke detectors shall not be supervised by Dedicated Function Fire Alarms such as “Sprinkler Monitoring” systems.

X. Where Sprinklered:

- A. FACU [FACP] shall be located at the fire sprinkler riser unless otherwise approved.
- B. Exterior, weatherproof, “waterflow-only” A/V, min. 75cd, shall identify the primary access to the fire sprinkler riser room.
- C. “Waterflow-only” alarm shall activate ONLY upon 45-60 seconds of constant waterflow through smallest sprinkler orifice.
- D. “Waterflow” alarms shall be “silenceable”.
- E. Knox Box Key Box is required at the exterior of the Riser Room.

XI. Other System Requirements:

- A. System shall transmit to supervising station the specific initiating device address, location, device type, floor level where applicable, and status, including indication of normal, alarm, trouble, and supervisory status, as appropriate, unless exempt.
- B. **Signaling Line Circuits (SLC) shall be Class A with a minimum of four feet separation.**
- C. One fire alarm control panel is permitted per building, unless specifically approved.
- D. Document cabinet is required for all systems, new and existing.
- E. Elevator Shunt-trip:
 - 1) Automatic Sprinklers shall not be installed in elevator machine rooms, elevator machine spaces, and elevator hoistways, other than pits where such sprinklers would not necessitate shunt trip under any circumstances.
 - 2) Fire Department recommends removal of sprinklers in such spaces, and subsequent removal of shunt-trip functions.

XII. Inspections:

- A. Installers and testing personnel must have a copy of the Plan Review Notes and the approved plans – they must comply with all conditions noted therein.
- B. Complete and check all work [pre-test] before requesting inspections – all conditions must be met, including, but not limited to:
 - 1) Confirm and record audibility levels throughout using an ANSI S1.4a compliant sound level meter – with all walls, ceilings, floors, windows, and doors installed. Use ONLY dBA scale and “fast” time-weighted settings [NFPA 72 Table 14.4.3.2].
 - 2) **All devices are located per approved plans, unless conditions necessitate relocation – stamped and signed “as-builts” must be submitted prior to the acceptance test.**

- C. 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".
 - D. Permit holder shall request inspections by calling (972) 744-5750. Inspections will be scheduled based on availability.
 - E. Licensed personnel familiar with the specific work under each permit [installer, designer, etc...] must be present during inspection.
 - F. Work exempt from permit requires no inspection or submittals [e.g. hood suppression supervision], unless specifically requested.
- XIII. Referenced Publications:
- A. City of Richardson Fire Code Amendments - www.cor.net/firepermits.
 - B. International Fire Code, 2021 edition - <https://codes.iccsafe.org/content/IFC2021P2>.
 - C. National Fire Protection Association Standards [available by subscription] - <https://codesonline.nfpa.org/>.



Fire Alarm System 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 11/08/2023]

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

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]:

TYPE	SUBMITTAL TYPE: _____ Except "Initial Application" - enter the original FIRE DEPT. Application/Permit Number: _____
-------------	--

"Project" is the property and owner/agent of the property [E.g. Property Manager, Construction Manager, etc...]:

PROJECT	PROJECT NAME [name of business or property]: _____ 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 protection firm and is **RESPONSIBLE FOR ALL WORK UNDER THE PERMIT**:

APPLICANT	LICENSED FIRE PROTECTION FIRM: _____ FIRM'S PHONE: _____ FIRM'S LICENSE #: _____ ACR- _____
	FIRM'S MANAGER: _____ POSITION: _____ PHONE: _____ OWNER/MGR'S EMAIL: _____
	FIRM'S MAILING ADDRESS - STREET ADDRESS/SUITE #: _____ CITY: _____ ST: _____ ZIP: _____ 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:

SYSTEM	SYSTEM TYPE: _____
	EXTENT OF WORK: _____
	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.

[Redacted Signature]

APPLICANT'S SIGNATURE* [Must be signed by the Applicant named above.]

DATE

*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 ---

PERMIT #: _____	BLDG. PERMIT #: _____	FEE: \$ _____	EXEMPT: _____
DATE ISSUED: _____	CC or Check #: _____	PERMIT ISSUED BY: _____	
NOTES: _____			



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 11/08/2023]

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 [Initial Submittal, Resubmittal, Permit Renewal, Modification of Open Permit, or As-builts/Record Drawings]: _____

Original FIRE DEPARTMENT Application/Permit # [IF applicable]: _____

PROJECT NAME: _____

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.

FIRE ALARM PLANS

I have reviewed these plans and [pick ONE]:

certify that they comply with 2021 International Fire Code as amended and adopted by The City of Richardson, currently published applicable NFPA standards, and 2020 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.

ACR- _____

APS- _____

 Licensee Signature* License 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.

FIRE EXTINGUISHER FIXED SYSTEM NOT PRE-ENGINEERED
 FIRE ALARM FIRE SPRINKLER

For Submittal As Built Record Drawings

I have reviewed these plans and [pick ONE]:

certify that they comply with 2021 International Fire Code as amended and adopted by The City of Richardson, currently published applicable NFPA standards, and 2020 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.

Registered Firm's Name: _____

Street Address: _____

City, State, Zip: _____

Phone Number: _____

Registration Type and Number: _____
[include ALL letters, e.g. SCR-G-1234]

 Licensee Signature* License Number
[include ALL letters, e.g. SCR-G-1234]

 Licensee Printed name Date Signed

OR

*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 page, complete stamp on right, sign in ink, scan signed document and submit as .pdf. Do NOT "lock" Form when digitally signing.