



AUSTIN FIRE DEPARTMENT

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Automatic Sprinkler System

System Submittal Completeness Checklist Items

This checklist is not required for 20 or fewer sprinkler head submittals that meet the requirements of the [Fire Protection Criteria Manual \(FCM\) Section 3.2.5 Item C](#).

See [Twenty Head or Less Sprinkler Work Letters and Plans](#) on AFD website for detailed instructions

This checklist does not apply to City of Sunset Valley Projects.

NOTE: Submittal shall be rejected if any required/applicable checklist items are not provided. Please email fireprevention@austintexas.gov for assistance.

| | |
|-------------------------|--|
| Project Name | |
| Project Street Address | |
| Installation Contractor | |
| Primary Contact Person | |
| Email Address | |
| Phone Number | |
| Date | |

ITEMS REQUIRED FOR NEW OR REMODEL SYSTEMS SUBMITTALS

([See checklist instructions on AFD website detailed instructions](#))

Check **Y** (Yes) item is complete, or **N/A** if the item does Not Apply to the project.

GENERAL

- Y** 1) A completed and current Fire System Plan Review Submittal Form (New or Remodel), these can be found at the following web address:
<https://fs25.formsite.com/AustinFire/form64/index.html>
- Y** 2) Are any NEW control valves or NEW Risers being added as part of the project? If the answer is yes then the project shall be treated as a NEW project and you must indicate NEW on the Fire System Plan Review Submittal Form, otherwise use REMODEL.

- Y 3) If there is an existing riser, is it being replaced/modified, either down to the stub and completely rebuilt or size of riser is being changed (increased or decreased) or are valves being replaced on the riser? If the answer is yes, then the project shall be treated as a NEW project and you must indicate NEW on the Fire System Plan Review Submittal Form.
- Y 4) Correct project address is shown on the following: this form, Fire System Plan Review Submittal Form, submittal cover sheet, and project drawings.
Note: Incorrect project address shall result in non-approval.
- Y N/A 5) If project is phased, a copy of the City of Austin Building Department Approved Phasing Plan is attached.
- Y N/A 6) On a single PDF file, provide data sheets for all sprinkler system components, all sprinkler heads used, BFPs, quick release valves, compressors, fire pump submittal datasheets, etc... per 2019 NFPA 13, 27.1.1.1(3).
Exception: Data sheets do not need to be provided for piping.

PLANS

- Y 7) An electronic set of plans in a vector-based (direct plot from CAD) PDF format that is unlocked and unrestricted so they can be marked-up by AFD reviewers. The floor plan shall also be at a standard measurement scale and size, so that when printed to paper, is large enough for the AFD Inspector to read. An electronic copy (PDF) of the reviewed plans shall be returned to the customer when the review is completed.
Note: For NEW systems, plans and hydraulic calculations, for REMODEL systems plans and hydraulic calculations (only if the remodel requires new hydraulic calculations to be performed).
- Y 8) Plans shall have an original RME signature on them or electronic signature that conforms to the [State Fire Marshal's Office/Texas Board of Insurance](#) requirements. The contractors SCR # and contact information on the plans. If the installing company is not the same as the designing company, then both companies shall provide this information on the Cover Sheet or the first sheet in the plan set.
- Y N/A 9) Project building permit number is shown in the lower right-hand corner on all project drawings.
Note: If building permit number is not applicable, provide a response on a company letter signed by an RME on why a building permit is not needed.
- Y N/A 10) For NEW systems, the name and SCR of the underground contractor shall be on the plans, per 2019 NFPA 13, 27.1.3(35). If the submitting contractor is the same as the underground contractor, provide a clear notation next to the submitting contractor's information on the plans.
Exception: NFPA 13D system is not required to provide underground contractor's information if the fire sprinkler system is feeding off a common water supply.
- Y 11) The International Fire Code (IFC) code year and the edition of NFPA 13, 13R or 13D that apply to the project are shown on the plans per 2019 NFPA 13, 27.1.3(47). *A list of*

current codes that are adopted by the City of Austin is found here:

<https://www.austintexas.gov/page/building-technical-codes>

- Y N/A 12) A brief scope of work specific to the project is on the drawing cover sheet or 1st plan. For example; “Sprinkler coverage is being revised/adjusted for the new tenant finish.”
Note: generic/boiler plate scopes of work shall not be accepted, it must be specific to the project.
- Y N/A 13) Plans shall have a note with information including the Hazard Classification(s) used for the project, clearly identify the hazard areas on the floor plans per 2019 NFPA 13, 27.1.3(8).
- Y N/A 14) The limits of the contract shall be clearly identified on plans with hatching, bold outlines, etc.
- Y N/A 15) Ceiling heights shall be clearly shown on all plans by either using notes or ceiling height identifiers per 2019 NFPA 13, 27.1.3(5).
- Y N/A 16) Room names shown for all rooms on the plans.
- Y N/A 17) A full height cross section or schematic diagram is shown on the plans that is to scale, including structural member information if required for clarity and including ceiling construction and method of protection for nonmetallic piping per 2019 NFPA 13, 27.1.3(4).
- Y N/A 18) Code compliant sprinkler coverage provided in all areas with exceptions allowed by NFPA 13 and the International Fire Code.
- Y N/A 19) Quick Response (QR) sprinklers in light hazard occupancies if required by NFPA 13.
- Y 20) Sprinkler legend with all existing and new heads that includes the following information for each sprinkler head:
- A distinct symbol for the head
 - The manufacturer model number and SIN #
 - Quantity used in the project for new heads or note it as existing
 - K-Factor for each sprinkler installed on project
 - Head Type – pendent, upright, recessed pendant, dry sidewall, etc.
 - Response Type (Standard or Extended Coverage)
 - Temperature – Ordinary, Intermediate, High, etc.
 - The coverage area used or maximum spacing used for the head in the project such as 15ft x 15ft, 16ft max, 20ft x 20ft etc.
- Y N/A 21) A note for Non-Standard Coverage sprinklers (Residential, Extended Cover, ESFR, etc.) is provided on the plans indicating the proposed spacing with the required flow and pressure per the manufacture’s datasheets.
- Y N/A 22) Pipe hanger type and locations shown on plans per 2019 NFPA 13, 27.1.3(23).
Exception: CPVC hanger locations are not required to be shown on the plans if the hanger spacing chart from the manufacture data sheets or 2019 NFPA 13, Table 17.4.2.1(a) are provided.
- Y N/A 23) FDC location and type shown on plans per 2019 NFPA 13, 27.1.3(46). **Note:** Knox FDC locking caps shall be provided for all FDC inlets per 2021 IFC Section 912.4.1 (Local Amendment).

- Y N/A 24) The location of all control valves, check valves, drain pipes and test connections are clearly shown on the plans per 2019 NFPA 13, 27.1.3(24).
- Y N/A 25) Outside system cutoff or riser room access for NEW systems or where applicable for REMODEL systems.

CALCULATIONS

- Y N/A 26) Electronic Copy of the AFD Hydrant Flow Test that is less than 1yr old from the time a set of plans are submitted to AFD that supports the pressures used in any associated hydraulic calculations.
- Y N/A 27) Hydraulic Reference Points and Remote Area(s) clearly shown on plans per 2019 NFPA 13, 27.1.3(36)
- Y N/A 28) For hydraulically designed systems, the information on the hydraulic data plate to be placed on the riser shall be shown on the plans per 2019 NFPA 13, 27.1.3(33).

MISCELLANOEUS

- Y N/A 29) All methods of freeze protection shall be detailed on the sprinkler plans. Insulation design is required to comply with 2019 NFPA 13 par 16.4.1 and the recommended insulation practices outlined in NFPA 13R and 13D.
- Y N/A 30) Information about listed antifreeze solution used (type and amount) IF antifreeze is used in the system per 2019 NFPA 13, 27.1.3(44).
- Y N/A 31) The setting for pressure reducing valves (PRVs) shall be shown on the plan if any are used, per 2019 NFPA 13, 27.1.3(43).
- Y N/A 32) A table showing Pressure reducing valves (PRVs) serving automatic sprinkler and standpipe systems in high rise buildings is provided on the sprinkler plans. These shall include at a minimum the information shown on the [High-Rise Standpipe PRV Calculations and PRV Chart Requirements](#) on the AFD Fire Marshal's website.

DRY SYSTEMS

In ADDITION to all the above items include the following additional items for dry systems:

- Y N/A 1) Total volume (gal) of system per 2019 NFPA 13, 27.1.3(18).
- Y N/A 2) Dry system area increase in calculations per 2019 NFPA 13, 19.3.3.2.5
- Y N/A 3) Hazen-Williams factor of C= 100 for black Sch. 40 and galvanized.
- Y N/A 4) Inspectors test connection on remote point of system.
- Y N/A 5) Dry systems shall be pitched towards a drain per 2019 NFPA 13, 16.10.3.

NFPA 13D SYSTEMS

In ADDITION to all the above items for New or Remodel System submittals, include the following items for NFPA 13D systems.

For NFPA 13D systems, place the following note on the COVER SHEET of the plans that indicates the flow rate (gpm) & pressure (psi) at the riser system gauge at the top of the riser that is required for the NFPA 13D system to work properly as designed and verified during bucket testing:

Required system flow rate at top of
riser gauge is
XXgpm at XXpsi

RE-SUBMITTALS FOR REJECTED PLANS

In addition to all the above items include the following additional items for resubmittals:

Note for re-submittals:

*Provide a clean replacement plan set with information as indicated below. **DO NOT** revise the previously rejected/stamped plans and turn those back in as the “new” plans, the submittal package shall be rejected – the purpose of this is to avoid confusion at time of test and inspection.*

- Y N/A 1) Completed fee calc form **including resubmittal fees** – see bottom of fee calc form regarding resubmittal fees and when they apply.
- Y N/A 2) A copy of the rejection review comments.
- Y N/A 3) Applicant’s response to rejection comments are on a company letter head signed by the RME or Engineer briefly explaining how each review comment was addressed.
- Y N/A 4) A copy of the AFD rejected stamped plan set.
- Y N/A 5) On all re-submittal plans, all changes to the plans are clearly marked with a cloud and a triangular note corresponding to the revision number (revision 1, revision 2, etc... **NOT the comment number, the revision cycle**). This includes all changes included with the re-submittal due to; AFD reviewer comments, new changes per the contractor, architect, owner etc...

SUBMITTALS FOR PLAN REVISIONS AFTER PLANS HAVE ALREADY BEEN APPROVED

In ADDITION to all the above items for New or Remodel Systems submittals include the following additional items for plan revision submittals:

- Y N/A 1) Completed Fire System Plan Review Submittal Form.
- Y N/A 2) A copy of the previously AFD stamped approved plans.
- Y N/A 3) A letter on the company letter head signed by the RME briefly explaining what changed on the project that has caused the need to submit a revision to the previously approved plans, new changes per the owner, architectural changes, etc...
- Y N/A 4) For all Revisions, changes to the plans are clearly marked with a cloud and a triangular note corresponding to the revision number (revision 1, revision 2, etc... **NOT the comment number, the revision cycle**). This includes all changes included with the re-submittal due to; AFD reviewer comments, new changes per the contractor, architect, owner etc...