



Fire Suppression System Plan Review

Sioux City Fire Rescue

601 Douglas St. Sioux City, IA 51101
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fireprevention@sioux-city.org

NO construction shall commence until project plans have been reviewed, approved, and a permit issued. Construction without a permit shall receive a Red Tag/immediate Stop Work Order. A Stop Work Order will not be lifted until a Permit is issued and the contractor pays all applicable fees.

SECTION A – PROPERTY INFORMATION

Name of facility: _____ Facility address: _____
Owner's Name: _____ Owner's Address: _____
Owner Phone #: _____ Size of building covered by project: _____ Sq.ft.

SECTION B – SYSTEM DESIGNER / CONTRACTOR:

Company Name: _____ Iowa FSC #: _____
Company Address: _____ Contact Person (Designer): _____
Contact Phone #: _____ Contact Email: _____

Is the system designed and stamped by an Iowa registered Professional Engineer? Yes No

SECTION C - GENERAL

Indicate if the installation of the proposed fire sprinkler system is (check all that apply):

- Required by the International Fire Code Required by insurance provider
- Not required, system is being voluntarily installed Other _____

Indicate the appropriate NFPA Standard (2022 edition) used in the system design and proposed installation:

- NFPA 13 *Standard for the Installation of Sprinkler Systems*
- NFPA 13R *Standard for the Install. of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height*
- NFPA 13D *Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes*

SECTION B – BUILDING USE AND OCCUPANCY CLASSIFICATION

Construction type of building as defined by NFPA 220:

- Fire resistive Non-combustible Ordinary Heavy Timber Wood Frame Mixed

Occupancy classification as defined by the 2024 International Fire Code (check all that apply):

- A-1 B E F-1 H-1 I-1 Cond 1 I-3 Cond 1 R-1 S-1 U
- A-2 F-2 H-2 I-1 Cond 2 I-3 Cond 2 R-2 S-2
- A-3 H-3 I-2 Cond 1 I-3 Cond 3 R-3
- A-4 H-4 I-2 Cond 2 I-3 Cond 4 R-4
- A-5 H-5 I-3 Cond 5 R-4 Cond 1
- I-4 R-4 Cond 2

Hazard classification as defined by NFPA 13:

- Light Hazard Ordinary Hazard Group I Extra Hazard Group I High-Pile Storage
- Special Occupancy Ordinary Hazard Group II Extra Hazard Group II

Special occupancy requirements for the system (flammable/combustible liquids, aircraft hangers, oxidizers, etc.)? Yes No

If a storage occupancy, describe in detail what is being stored: Not Applicable

Describe: _____

Storage Commodity Classification: Not Applicable

- Commodity: Class I Class II Class III Class IV
- Plastics: Group A - Expanded Group A – Unexpanded Group B Group C
- Storage height: _____ feet Ceiling Height: _____ feet Ceiling Material: _____
- Will rack storage be used? Yes No Rack Type: Single Double Multiple



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Horizontal Flue Width: _____ in. Longitudinal Flue Width: _____ in. Aisle Width: _____ in.

Will racks contain solid shelves, grates, or slats? (If yes, explain) Yes No

Explain: _____

Will other storage methods such as bin-box, hanging garments, automated, or carousel be used? Yes No

Will banding or encapsulation of the commodity be used (if yes, explain)? Yes No

Explain: _____

Will smoke and heat removal (venting) be provided? Yes No

For high-piled storage with a mix of commodities, provide information on the three most hazardous commodities that will be stored in quantities greater than two pallet loads inside the building:

- 1. _____ Quantity: _____
- 2. _____ Quantity: _____
- 3. _____ Quantity: _____

Describe in detail the commodity classification used for design: _____

Describe in detail the sprinkler protection for the high-piled combustible storage. Include information on the design standard, Section or Table numbers, ceiling sprinkler density, type of sprinkler head etc:

SECTION D – SPRINKLER TYPE AND COVERAGE

Type of Sprinkler System: Wet Dry Anti-Freeze Chemical Foam Preaction Deluge

Area of coverage: Total Partial Special Hazard Other (specify): _____

Sprinklers omitted in any area? (specify): Yes No _____

SECTION E – FIRE PUMP: Not Applicable

Fire pump provided: Yes No Type of fire pump: Electric Diesel Gasoline LPG LNG

Pump layout is in accordance with NFPA 20 Yes No Gallon per minute and pressure rating of the pump _____

SECTION F – WATER SUPPLY

Will municipal water be used for the water supply? Yes No

Municipal Main size: _____ in. Dead-End Main Circulating (Looped) Size of supply into building: _____ in.

Has a water flow test been performed within past 12 months? Yes No

Flow test location: _____ Date of Test: _____

Static: _____ psi Residual: _____ psi Flow: _____ gpm

SECTION D – REQUIREMENTS AND FEES

Yes No

Electronic copies (in PDF format) of plans submitted on CD, thumb drive or emailed to fireprevention@sioux-city.org

Yes No

Two (2) copies plans submitted in paper format.

Yes No N/A

Return postage with self-addressed packaging. (For return of stamped set of plans and specs, if applicable)

Yes No

Plans include all applicable elements listed in Section 28.1.3 of NFPA 13 (2022 edition).

Yes No

The proper submittal fee must accompany the plans based on the following fee schedule.

Building size 0-4,999 square feet	\$100.00
Building size 5,000-19,999 square feet	\$200.00
Building size 20,000-99,999 square feet	\$300.00
Building size 100,000 square feet and above	\$500.00
Standpipe system, if separate from sprinkler system	\$100.00

Checks shall be made payable to CITY TREASURER, SIOUX CITY, IA.

Applicant's Signature _____

Date _____

Applicant's Printed Name _____

Contact Phone Number _____