Watertown Fire Rescue Fire Prevention Division Fire Sprinkler Permit Application Additional Fees Apply—see fee schedule	Permit No         App. Date:           Receipt No         Issue Date:           Fee: \$         Approved By:
Installation Location Owner/Business: Address: Watertown, SD 57201 Phone No.:	Building Use         Assembly:       Warehouse:         Office (B)       Educational (E)         Residential:       Institutional:         Others:       specify
Installer           Name:	Description of Work (Detailed explanation of area and extent of work to be performed) Design and installation shall be in accordance with current edition of NFPA.
Water Supply         From an independent main, Size         From a domestic feed, Size         Equipment         Total number of sprinkler heads being installed:	A separate permit is required for each tenant within a building site even if there is only one sprinkler system/zone. Permit applications cannot be accepted prior to a building permit application. Two sets of drawings, one digital, one paper, and one submittal book shall be submitted with each permit application for review. The applicant will receive permit after plan review. <i>NO WORK SHALL COMMENCE WITHOUT A VALID PERMIT ISSUED BY FIRE PREVENTION DIVISION.</i>
Number of riser valves being installed (excluding the main valve)	Water Flow Test Data Information on water flow test data shall be current and/or has been obtained within the past two years.
Type of System UVet Dry Pre-Action Deluge Other, specify:	ApplicantI, the undersigned, do hereby affirm that the statements contained on this form are true and correct. I further agree to comply with the provisions of applicable ordinances of the City of Watertown and the approved plans and specifications submitted with this application.In addition, it is understood that the installation of systems shall be made only by persons properly trained and
Auxiliary Equipment Auxiliary Equipment Antifreeze Foam Class I, II, III Standpipe (separate permit required) Fire Pump (separate permit required) Other, specify:	qualified to install the specific system being provided. The installer certifies to this authority that the installation is in complete agreement with the terms of the listing and manufacturer's instructions and/or approved design plan.         Signature:

## Fee Calculation Schedule Automatic Fire Sprinkler System

Description	Number of Each	Unit Fee	Subtotal
1. Wet System (new and existing)		\$52.00	
2. Dry, Pre-Action, Deluge, and Other Types (new and existing)		\$52.00	
3. Number of Sprinkler Heads		\$2.00	
4. Total lines 1, 2, and 3			
5. Sales Tax (6.5%)			
6. Grand Total			

Fire Prevention Division Watertown Fire Rescue 129 1st Ave NW Watertown, SD 57201

(605) 882-5030 firepermits@watertownfirerescue.com

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### Automatic Fire Sprinkler System Required Permit Documents

If there is more than one tenant in a building a separate permit is required for each tenant even if there is only one sprinkler system/zone. Permit applications cannot be accepted prior to a building permit application submittal.

One electronic copy of the plans in PDF format and one set of design documentation in PDF format shall be submitted with each permit application for review. Permit application shall be completely filled out including a full description of scope of work. Upon approval, the applicant will receive a permit.

# NO WORK SHALL COMMENCE WITHOUT AN APPROVED VALID PERMIT ISSUED BY FIRE PREVENTION DIVISION.

Depending on the work load and complexity of the project, automatic fire sprinkler system review may take up to 15 working days for each permit submittal. Plan review may be expedited when additional fees, as set by the permit fee schedule, are paid at the time of permit submittal. Expedited plan review may take up to three business days.

Automatic fire sprinkler working plans shall be prepared by a qualified technician holding a valid NICET III, or IV, in the subfield of fire sprinkler system layout. Required documentation shall be prepared in accordance with the current edition of NFPA 13, Chapter 23 - Plans and Calculations. The following information is required and shall also be shown on the permit documents:

#### A. GENERAL

- 1. Required scale is 1/8" = 1 foot. Include a bar scale.
- 2. Show north arrow on all sheets
- 3. For large facilities provide a key plan to show all building sections
- 4. Show drawing number, revisions, and date
- 5. Provide a 3" x 3" square block at the bottom right corner of all sheets for Fire Prevention Division's review stamp.
- 6. Provide system designer's name, NICET certificate number, and certificate expiration date on all sheets.

#### B. TITLE SHEET:

- 1. Name and address of the building owner
- 2. Name and telephone number of the installer
- 3. Description of work detailed and specific statement indicating work being proposed, occupancy and nature of business, types of commodities/hazards, basis for design, and design approach
- 4. NFPA 170 symbol legend
- 5. Water flow test data, including test date, residual and static pressures (psi), measured flow (gpm), and duration of flow. Flow test data shall be current and no less than 24 months old.
- 6. Detailed drawing of system riser assembly with all parts/fittings name, type, and model numbers called out

- 7. Include a site plan with the following information:
  - a) North Arrow
  - b) Engineering scale (1"=10', 1"=20', 1"=30', 1"=50', etc.)
  - c) Property's street address
  - d) Buildings dimensions, No. of stories, square footage of the building footprint, building setbacks, and building height
  - e) Location of approaches, driveway (length, width, grade, turnarounds, surface material), hardscape/landscape, parking lots, and signs
  - f) Location of all offsite and onsite fire hydrants including those used for water flow test data
  - g) Location of fire department connection (FDC) and post indicator valve (PIV)
  - h) Location of key boxes containing building access keys.

#### C. FLOOR PLAN SHEET(s):

- 1. Show dimensions on all floor plans. Floor plans shall not include overlays of other building systems and components except those systems that impact sprinkler performance (i.e. mechanical, electrical, and structural.)
- 2. Location of all walls and doors for storage areas show dimensions, location, and orientation of all racks, shelves, and partitions.
- 3. Intended use of each room e.g. storage, classroom, restroom, vestibule, office
- 4. Ceiling height & details
- 5. Full height cross sections of the building In all directions including top elevation
- 6. Location of fire sprinkler risers, water flow and all tamper switches (including exterior devices), spare sprinkler head cabinet, fire pumps, and controllers
- 7. Design areas including system design summaries.

#### D DESIGN DOCUMENTATION

- 1. Owner's Information Certificate NFPA 13, Fig. A.23.1(b)
- 2. Hydraulics calculations summary sheet NFPA 13, Fig. 23.3.5.1.2(a). Submit one sheet per design area. A computer generated summary sheet will be acceptable when all the required information is included.
- 3. Design approach for all calculated areas; list any deviations or reductions considered in the design.
- 4. Make, type, model, nominal K-factor, and sizes of all sprinkler heads size and type of piping used.
- 5. Graph Sheet NFPA 13, Fig. 23.3.5.1.2(b)
- 6. Supply and node analysis
- 7. Detailed worksheet or computer printout.
- 8. A minimum pressure safety factor of 10 pounds per square inch (10 psi) shall be added to all hydraulically calculated sprinkler pressure demands.

#### E AS BUILT:

Within 10 days after the fire sprinkler system has been tested and accepted by the Fire Prevention's Inspector - a complete and accurate "as built" of the system shall be submitted for Fire Prevention review and records. The "as built" shall be submitted in PDF electronic format showing final locations of all components. All as built drawings sheets shall include the word "AS BUILT" or "RECORD DRAWINGS".

#### **OWNER'S INFORMATION CERTIFICATE**

Name and address of property to be protected with sprinkler protection:

Name of owner:
Existing or planned construction is:
Fire-resistive or noncombustible
Wood frame or ordinary (masonry walls with wood beams)
Describe the intended use of the building:

Note regarding speculative buildings: The design and installation of the fire sprinkler system is dependent on an accurate description of the likely use of the building. Without specific information, assumptions will need to be made that will limit the actual use of the building. Make sure that you communicate any and all use considerations to the fire sprinkler contractor in this form and that you abide by all limitations regarding the use of the building based on the limitations of the fire sprinkler system that is eventually designed and installed.

Is the system installation intended for one of the following special occupancies:

Aircraft hangar	🗌 Yes	🗌 No
Fixed guide way transit system	🗌 Yes	🗌 No
Race track stable	🗌 Yes	🗌 No
Marine terminal, pier, or wharf	🗌 Yes	🗌 No
Airport terminal	🗌 Yes	🗌 No
Aircraft engine test facility	🗌 Yes	🗌 No
Power plan	🗌 Yes	🗌 No
Water-cooling tower	🗌 Yes	🗌 No

If the answer to any of the above is "yes," the appropriate NFPA standard should be referenced for sprinkler density/area criteria.

Indicate whether any of the following special materials are intended to be present:

		_
Flammable or combustible liquids	🗌 Yes	🗌 No
Aerosol products	🗌 Yes	🗌 No
Nitrate film	🗌 Yes	🗌 No
Pyroxylin plastic	🗌 Yes	🗌 No
Compressed or liquefied gas cylinders	🗌 Yes	🗌 No
Liquid or solid oxidizers	🗌 Yes	🗌 No
Organic peroxide formulations	🗌 Yes	🗌 No
Idle pallets	🗌 Yes	🗌 No

If the answer to any of the above is "yes," describe type, location, arrangement, and intended maximum quantities.

Indicate whether the protection is intended for one of the following specialized occupancies or areas:

Spray area or mixing room Solvent extraction Laboratory using chemicals Oxygen-fuel gas system for welding or cutting Acetylene cylinder charging Production or use of compressed or liquefied gases Commercial cooking operation Class A hyperbaric chamber Cleanroom Incinerator or waste handling system Linen handling system Industrial furnace	<ul> <li>☐ Yes</li> </ul>	NoNoNoNoNoNoNoNoNoNoNoNoNo
Industrial furnace Water-cooling tower	☐ Yes ☐ Yes	□ No □ No

If the answer to any of the above is "yes," describe type, location, arrangement, and intended maximum quantities.

Will there be any storage of products over 12 ft. (3.6m) in height? Yes	
If the answer is "yes," describe product, intended storage arrangement	t, and height.
Will there be any storage of plastic, rubber, or similar products over 5 f above?	ft. (1.5 m) high except as described
Yes 🗌 No 🔲	
If the answer is "yes," describe product, intended storage arrangement	t, and height.
Is there any special information concerning the water supply? Yes	
If the answer is "yes," provide the information, including known enviror responsible for corrosion, including microbiologically influenced corros	nmental conditions that might be ion (MIC).
I certify that I have knowledge of the intended use of the property and	that the above information is correct.
Signature of owner's representative or agent:	Date:
Name of owner's representative or agent completing certificate (print):	
Relationship and firm of agent (print):	