



# AUTOMATIC FIRE SPRINKLER SYSTEM TECHNICAL SUBMISSION

Fire Suppression Engineer,

The following submission shall be required in the event that a new sprinkler system is being installed or a major renovation of the system will be required. This is per The State of Illinois (225 ILCS 325/3) (from Ch. 111, par. 5203). The renovation portion of the requirement shall consist of the addition of 20 or more new heads that will require sprinkler pipe changes. In addition, any changes to the hazard classification of an occupancy or changes to commodities stored within an occupancy shall require the preparation of a Technical Submission. In the situation of relocates or arm-overs this shall not be required. Any questions please contact the Fire Prevention Division Chief at (630) 434-5975.

225 ILCS 325/3 from Ch. 111, par. 5203:

(d) A building permit for a building that requires a fire suppression Submitted system shall not be issued without the submission of a technical submission prepared and sealed by a licensed design professional. Fire protection system layout documents do not require an engineering seal if prepared by a technician who holds a valid NICET level 3 or 4 certification in fire protection technology, automatic sprinkler system layout. An authority having jurisdiction may not accept fire protection system layout documents in lieu of technical submissions. Fire protection system layout documents may be submitted as supporting documents to supplement technical submissions. However, in the event the fire protection system layout documents materially alter the technical submissions, the authority having jurisdiction shall return both the fire protection layout documents and technical submissions to the licensed design professional for review.

Project name \_\_\_\_\_

Project address \_\_\_\_\_

Owner \_\_\_\_\_

Occupant \_\_\_\_\_

Building Official \_\_\_\_\_

Fire Official \_\_\_\_\_

\_\_\_\_\_  
Year of Codes and Standards:

NFPA 13, 13D, 13R, 14, 20, 25, 72, and 2001: Most Current Edition

Building Code \_\_\_\_\_ Edition.

Local amendments applied \_\_\_\_\_ Other \_\_\_\_\_

\_\_\_\_\_



# AUTOMATIC FIRE SPRINKLER SYSTEM TECHNICAL SUBMISSION

Water flow test information (current to within one year of the date of the Submission):

Date \_\_\_\_\_ Location \_\_\_\_\_ Witness \_\_\_\_\_

Static pressure \_\_\_\_\_ PSI Residual pressure \_\_\_\_\_ PSI Flow \_\_\_\_\_ GPM

Source \_\_\_\_\_ Seasonal or local adjustment \_\_\_\_\_

Water quality investigation (MIC or other) \_\_\_\_\_ Results \_\_\_\_\_

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Building footprint \_\_\_\_\_ square feet Building height \_\_\_\_\_

Number of stories \_\_\_\_\_ Floor to floor height \_\_\_\_\_

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Water supply: Same as domestic \_\_\_\_\_ Size \_\_\_\_\_

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Type of pipe which can be used \_\_\_\_\_

Risers \_\_\_\_\_ Bulk main \_\_\_\_\_

Cross main \_\_\_\_\_ Branch lines \_\_\_\_\_

Type of fittings which can be used \_\_\_\_\_

Backflow device/s required \_\_\_\_\_

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Fire department connection:

Type: 5" Storz Connection with a 30 degree elbow

Location (within 100' of a fire hydrant) \_\_\_\_\_

Fire pump and controller:

Size \_\_\_\_\_ GPM @ \_\_\_\_\_ PSI Type of drive \_\_\_\_\_ Voltage \_\_\_\_\_

Location of service \_\_\_\_\_ Generator required \_\_\_\_\_

Water storage tank required \_\_\_\_\_ Type of tank \_\_\_\_\_

Location of tank \_\_\_\_\_ Size of tank \_\_\_\_\_

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Standpipes required \_\_\_\_\_

Class \_\_\_\_\_ Type \_\_\_\_\_ Location(s) \_\_\_\_\_

Required flows: Top most outlet \_\_\_\_\_ Most remote \_\_\_\_\_ Total flow \_\_\_\_\_

Required valves: 1 1/2" \_\_\_\_\_ 2 1/2" \_\_\_\_\_ 1 1/2" hose required \_\_\_\_\_

Length of hose \_\_\_\_\_ Other \_\_\_\_\_

\_\_\_\_\_  
Signature, Seal, Date of NICET III/IV or PE

Design Area # 1: \_\_\_\_\_ Type of system \_\_\_\_\_

Description of use of area or hazard \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Hazard classification \_\_\_\_\_ Commodity \_\_\_\_\_

Design criteria \_\_\_\_\_ gpm over \_\_\_\_\_ square feet

Area per sprinkler \_\_\_\_\_ square feet Standpipe flow \_\_\_\_\_

Other water flow:

Hose \_\_\_\_\_ GPM Outside hydrants \_\_\_\_\_ Special \_\_\_\_\_ gpm

In rack or special sprinklers \_\_\_\_\_ gpm Total flow required \_\_\_\_\_

Fire pump required \_\_\_\_\_ Submit graph sheet \_\_\_\_\_ gpm at \_\_\_\_\_ psi

Project name \_\_\_\_\_

Project address \_\_\_\_\_  
\_\_\_\_\_



# AUTOMATIC FIRE SPRINKLER SYSTEM TECHNICAL SUBMISSION

Design Area # 2: \_\_\_\_\_ Type of system \_\_\_\_\_

Description of use of area or hazard \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Hazard classification \_\_\_\_\_ Commodity \_\_\_\_\_

Design criteria \_\_\_\_\_ gpm over \_\_\_\_\_ square feet

Area per sprinkler \_\_\_\_\_ square feet Standpipe flow \_\_\_\_\_

Other water flow:

Hose \_\_\_\_\_ gpm Outside hydrants \_\_\_\_\_ Special \_\_\_\_\_ gpm

In rack or special sprinklers \_\_\_\_\_ gpm Total flow required \_\_\_\_\_

Fire pump required \_\_\_\_\_ Submit graph sheet \_\_\_\_\_ gpm at \_\_\_\_\_ psi

Project name \_\_\_\_\_

Project address \_\_\_\_\_

\_\_\_\_\_

Design Area # 3 \_\_\_\_\_ Type of system \_\_\_\_\_

\_\_\_\_\_

Description of use of area or hazard \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Hazard classification \_\_\_\_\_ Commodity \_\_\_\_\_

Design criteria \_\_\_\_\_ gpm over \_\_\_\_\_ square feet

Area per sprinkler \_\_\_\_\_ square feet Standpipe flow \_\_\_\_\_

Other water flow:

Hose \_\_\_\_\_ gpm Outside hydrants \_\_\_\_\_ Special \_\_\_\_\_ gpm

In rack or special sprinklers \_\_\_\_\_ gpm Total flow required \_\_\_\_\_

Fire pump required \_\_\_\_\_ Submit graph sheet \_\_\_\_\_ gpm at \_\_\_\_\_ psi

Project name \_\_\_\_\_

Project address \_\_\_\_\_



# AUTOMATIC FIRE SPRINKLER SYSTEM TECHNICAL SUBMISSION

Storage Area #1: \_\_\_\_\_ Type of system \_\_\_\_\_

Description of use of area or hazard \_\_\_\_\_

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Type of storage and maximum height \_\_\_\_\_ Pallet \_\_\_\_\_ Bulk \_\_\_\_\_

Shelf \_\_\_\_\_ Bin box \_\_\_\_\_ Rack \_\_\_\_\_

Minimum aisles width \_\_\_\_\_ Maximum rack depth \_\_\_\_\_

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Commodity classification \_\_\_\_\_ Encapsulated \_\_\_\_\_

Rack type: Single row \_\_\_\_\_ Double row \_\_\_\_\_ Multiple row \_\_\_\_\_ Other \_\_\_\_\_

Flue spaces: Longitudinal required \_\_\_\_\_ size \_\_\_\_\_ Transverse required \_\_\_\_\_ size \_\_\_\_\_

Ceiling design criteria \_\_\_\_\_ gpm over \_\_\_\_\_ square feet

Area per sprinkler \_\_\_\_\_ square feet Standpipe flow \_\_\_\_\_

Other water flow:

Hose \_\_\_\_\_ gpm Outside hydrants \_\_\_\_\_ Special \_\_\_\_\_ gpm

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In rack or special sprinklers \_\_\_\_\_ gpm Number of levels \_\_\_\_\_

Location \_\_\_\_\_ Type \_\_\_\_\_ Temp rating \_\_\_\_\_ Orifice size \_\_\_\_\_

Fire pump required \_\_\_\_\_ Submit graph sheet \_\_\_\_\_ gpm at \_\_\_\_\_ psi

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Required accommodations for building structure:

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# AUTOMATIC FIRE SPRINKLER SYSTEM TECHNICAL SUBMISSION

Storage Area #2: \_\_\_\_\_ Type of system \_\_\_\_\_

Description of use of area or hazard \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

Type of storage and maximum height Pallet \_\_\_\_\_ Bulk \_\_\_\_\_

Shelf \_\_\_\_\_ Bin box \_\_\_\_\_ Rack \_\_\_\_\_

Minimum aisles width \_\_\_\_\_ Maximum rack depth \_\_\_\_\_

Commodity classification \_\_\_\_\_ Encapsulated \_\_\_\_\_

Rack type Single row \_\_\_\_\_ Double row \_\_\_\_\_ Multiple row \_\_\_\_\_ Other \_\_\_\_\_

Flue spaces: Longitudinal required \_\_\_\_\_ size \_\_\_\_\_ Transverse required \_\_\_\_\_ size \_\_\_\_\_

Ceiling design criteria \_\_\_\_\_ gpm over \_\_\_\_\_ square feet

Area per sprinkler \_\_\_\_\_ square feet Standpipe flow \_\_\_\_\_

Other water flow:

Hose \_\_\_\_\_ gpm Outside hydrants \_\_\_\_\_ Special \_\_\_\_\_ gpm

In rack or special sprinklers \_\_\_\_\_ gpm Number of levels \_\_\_\_\_

Location \_\_\_\_\_ Type \_\_\_\_\_ Temp rating \_\_\_\_\_ Orifice size \_\_\_\_\_

Fire pump required \_\_\_\_\_ Submit graph sheet \_\_\_\_\_ gpm at \_\_\_\_\_ psi

Required accommodations for building structure:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_