FIRE SUPPRESSION INSPECTION PROCEDURES

City of Columbus • Department of Development • Building Services Division

Contractor Plan Submittal

System Installation

System is to be installed in accordance with all approved construction documents.

OBBC

System must be installed as code compliant in accordance with all applicable NFPA standards and building codes.

Scheduling Inspections

Contractor completes and faxes a Fire Protection Request Form (see Appendix Item 'B') to: (614) 645-8358

Limited Area, Modified Systems affecting 20 heads or less and final inspections of all systems will be scheduled the next business day if requested prior to 10:00 am.

NOTE: Lead-time for scheduling Fire Suppression inspections is identified in CIC #3 (see Appendix Item 'C')

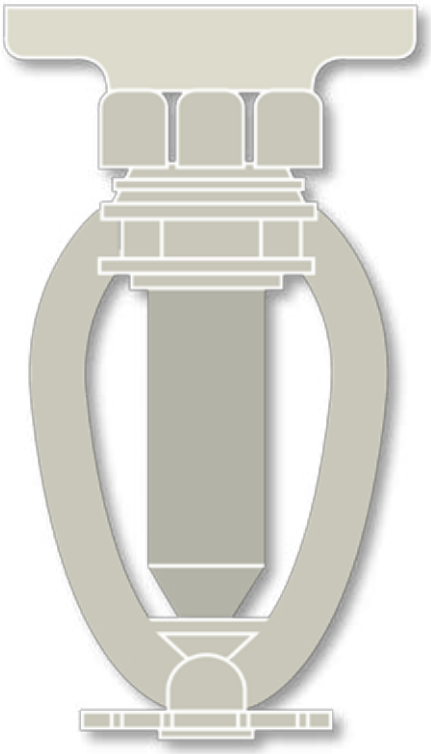
All New and Modified Systems affecting more than 20 Heads shall be tested at 200 PSI without loss of pressure for 2 hours.

Exception: modifications that cannot be isolated shall not require testing in excess of system working pressure.

Inspections requested will be scheduled on the date requested or closest available. A return call will be made within 2 working days upon receipt of fax to confirm date and time of test.

One inspection trip allowing up to one-hour of inspection time will be deducted from the permit to schedule an inspection. For inspections exceeding one-hour, the test will continue but an additional trip for each additional hour will be assessed against the permit and no final approval will be granted until the outstanding fee is paid.

Inspection Of Limited Area Or Modified Systems Having 20 Heads Or Less

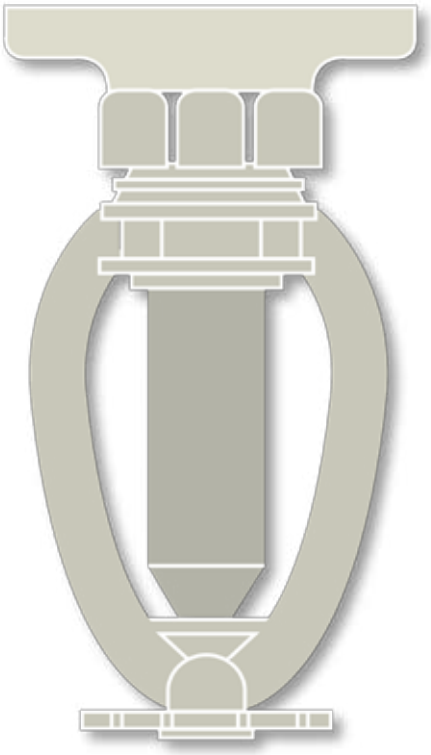


- Inspector reviews construction documents for approvals and completeness.
- Inspector verifies that all piping and devices are according to approved documents (109.1 OBC)
- Inspector will give final approval upon code compliance of all system components.

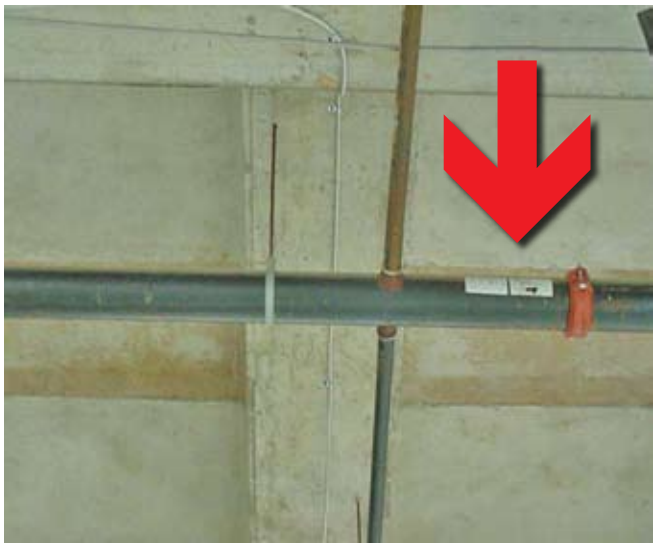
Inspection Of New Or Modified Systems Having More Than 20 Heads

- Inspector reviews construction documents for approvals and completeness.
- Inspector verifies pressure gauge for 200PSI and begins the 2-hour Hydrostatic test.
- Inspector verifies that all piping and devices are according to approved documents (109.1 OBC)
- If no loss of pressure and no violations were observed, the inspector will sign the building permit.
- If violations including loss of pressure were observed, the inspector will leave a Fire Suppression Inspection Form identifying the violations.

Inspection Of New Or Modified Systems Having More Than 20 Heads

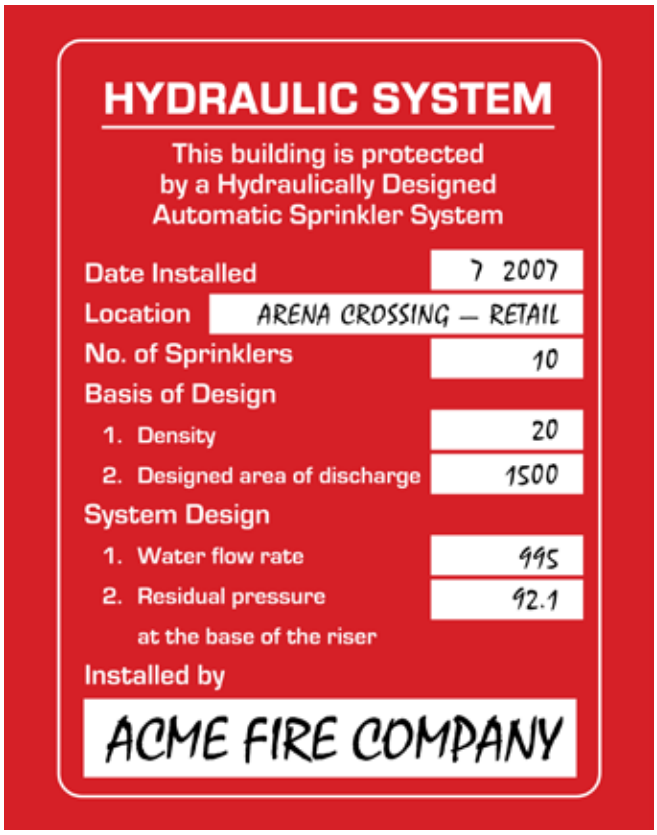


- If system piping is to be covered by ceilings or other building finishes then an additional inspection will be necessary to verify proper sprinkler head placement and signage is in place.



- If sprinkler piping is to be painted, it must be inspected by the building inspector prior to covering to ensure the correct type of pipe was installed.

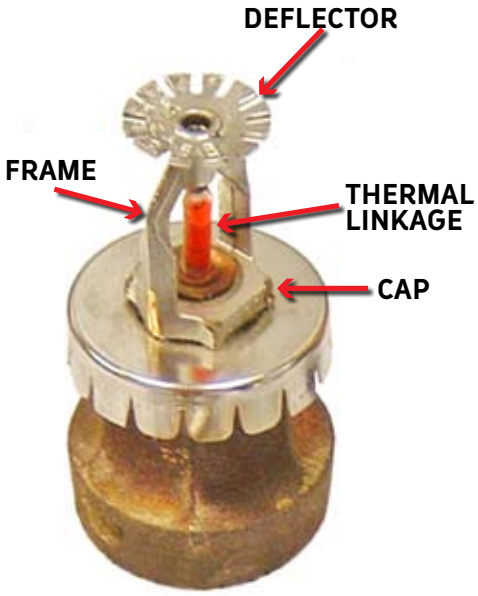
Inspection Of New Or Modified Systems Having More Than 20 Heads



The fire alarm acceptance test and approval of all newly installed tamper switches, flow or alarm devices must be completed prior to scheduling a final suppression inspection.

- Contractor must provide a completed material and test certificate. (see Appendix Item 'D' – Contractor's Material and Test Certificate for Aboveground Piping)
- Inspector reviews construction documents for approvals and completeness.
- Inspector will verify the installation of the Hydraulic calculation sign, stock of spare sprinkler heads in cabinet and the general information sign.
  Note: spare special sized dry pendant heads are not required in cabinet
- Inspector will check for signage on all valves

Inspection Of New Or Modified Systems Having More Than 20 Heads



- Inspector will verify head type and placement.
- Inspector will check to ensure a ceiling is provided for pendant heads when applicable and escutcheon plates are installed.
- Inspector will check for obstructions to the sprinkler heads.
- If violations were observed during the inspection the inspector will leave a fire suppression inspection form on site identifying the corrections needed. If no violations were observed the inspector will sign the building permit under fire suppression final.

Fire Suppression Permit Application (page 1)

Applicant Name: _____ **Job Site Address:** _____ **App. No.:**_____

Fire Suppression Permit Application

City of Columbus, Ohio ▪ Department of Building & Zoning Services
757 Carolyn Avenue, Columbus, Ohio 43224 ▪ **Phone**: 614-645-7433 ▪ **Fax**: 614-645-0082 ▪ www.columbus.gov

ALL FEES ARE NON-REFUNDABLE ▪ Please type or print all information

Date: _____

☐ **Revision to Fire Suppression Permit #:** _____ **Bldg. Permit #:** _____

Type of Permit:

Commercial:
- ☐ 4 or more Family Dwelling; # of Units: _____
- ☐ Commercial Structure
- ☐ Phase 1 Foundation Underground Only

Type of Work:
- ☐ Addition to Building
- ☐ New Construction
- ☐ Removal Start to Fire Suppression Permit #: _____
- ☐ Replace/ Repair Existing
- ☐ Alteration

Additional Inspections Requested w/ this Application: # _____

Building Use: _____

Scope of Work: _____

Job Site Information:

_____ _____ _____
Certified Address Zip | Working in Unit #/ Suite/ Flr. | Tenant's Name(s)

_____ _____
Tax District/ Parcel | Cost of Construction

Are there any active Building Services Division Violation Orders on this Property? ☐ Y ☐ N

Are there any active Neighborhood Services Division Violation Orders on this Property? ☐ Y ☐ N

Contractor:

_____ _____ _____
State Company Number | Contractor Name | Installer Number

_____ _____
Installer Name | Street Address, City, State & Zipcode

_____ _____ _____
Telephone Number | Fax Number | Email Address

_____ _____
Signature of Certified Installer or Authorized Signer | **Print or Type Name**

Sprinkler/ Standpipe Systems	No. of Units
Limited Area Sprinklers	
Standpipes	
Sprinklers	
Limited Scope- Describe Work:	

Hydraulic Calculations: ☐ **Y** ▪ ☐ **N**

Independent Suppression Systems	No. of Pounds	No. of Systems
Wet Chemical		
Dry Chemical		
Clean Agent		
Other:		
Total Number of Systems:		0.00

PLEASE NOTE: Incomplete information will result in the rejection of this submittal.
For all questions regarding this form and fees please call : 614-645-6090
Please make checks payable the Columbus City Treasurer

App. Rev. 10/2011: btc S:\APPLICATIONS WITH NEW DEPT NAME\Web

Fire Suppression Permit Application (page 2)

Applicant Name: _____ **Job Site Address:** _____ **App. No.:**_____

Fire Suppression Permit Application

City of Columbus, Ohio ▪ Department of Building & Zoning Services
757 Carolyn Avenue, Columbus, Ohio 43224 ▪ **Phone**: 614-645-7433 ▪ **Fax**: 614-645-0082 ▪ www.columbus.gov

ALL FEES ARE NON-REFUNDABLE ▪ Please type or print all information

Property Owner of Record:

Name _____ Street Address, City, State & Zipcode _____

Telephone Number _____ Fax Number _____ E-Mail Address _____

If Payment will be made through a SOFT Account, please provide the following:

SOFT Account #/ PIN # _____ **SOFT Account Authorized Signature** _____

The following Documents must be submitted with this Application:

☐ **Four** copies of complete fire suppression drawings that include:

- Drawings shall bear the signature & identification number of an Ohio Certified Sprinkler System Designer or the seal of the Ohio Registered Architect or Engineer who designed the system per the Ohio Building Code.
- **NOTE**: For Limited area sprinkler systems, only **three** copies of complete drawings are needed

☐ **One** separate set of drawings as described above for the Columbus Division of Fire, Fire Prevention Bureau.

- **NOTE**: This is not required for limited area sprinkler systems

☐ Completed Division of Fire Alarm/ Suppression Permit Application

Fire Suppression Permit Fees for Building Services:

For 1-19 Sprinklers or a Limited Scope Project:

Examination Fee: $10.00
Inspection Fee: $300.00 (Includes **2** one hour inspections)

For 20 or more Sprinkler Heads:

Examination Fee: $200 + 1.50 per sprinkler
Inspection Fee: $300.00 (Includes **2** one hour inspections)

For a Standpipe not included with a Sprinkler Installation:

Examination Fee: $150.00 + $50 per Standpipe
Inspection Fee: $300.00 (Includes **2** one hour inspections)

Independent Suppression System (ie. wet or dry chemical, clean agent, Halon, etc.):

Examination Fee: $150.00 + $60 per Independent Suppression System
Inspection Fee: $300.00 (Includes **2** one hour inspections)

Applicant has the option to buy additional inspections at the time of permit issuance for $150 per inspection

Other
After Hours Inspection: $450 (for first **2** hours); $225 per hour over 2 hours

Fire Suppression Permit Fees for Columbus Division of Fire:

Sprinkler Heads:

No. of Heads	Fee	Fee w/ Hydraulic Calculations
001-200	$160.00	$240.00
201-300	$200.00	$300.00
301-400	$240.00	$360.00
401-750	$300.00	$450.00
751-Over	$300+$.50 per head **over 750**	$450+$.50 per head **over 750**

Automatic Extinguishing System (CO2, FM-200, Dry Chemical, Foam, etc.):

For 01-50 Pounds: $150.00
For 51-200 Pounds: $175.00
For 201-500 Pounds: $200.00
For 501+ Pounds: $200.00 + $1.00 per Pound **over 500 lbs**.

Fire Pump & Standpipe:

Standpipe: $100.00
Fire Pump & Standpipe: $200.00

Other Fire Protection Systems (Smoke Removal, Flammable/Combustible Liquids & Gases):

$100.00 per Hour (1hr. minimum)

** Retests of Failed Inspections: $100 per Trip**

** One check can be presented with application for the combined Building Services and Division of Fire fees. **

PLEASE NOTE: Incomplete information will result in the rejection of this submittal.
For all questions regarding this form and fees please call : 614-645-6090
Please make checks payable the Columbus City Treasurer

App. Rev. 10/2011: btc S:\APPLICATIONS WITH NEW DEPT NAME\Web

Fire Protection Inspection Request Form

City of Columbus **Development Department** **Building Services Division**

FIRE PROTECTION INSPECTION REQUEST FORM

JOBSITE ADDRESS	

DATE REQUESTED		CONFIRMED DATE / TIME	

- ☐ FIRE ALARM WITNESS TEST
- ☐ FIRE SUPPRESSION HYDROSTATIC TEST
- ☐ HVAC SYSTEM TEST
- ☐ ELECTRICAL SYSTEM TEST
- ☐ ROUGH SUPPRESSION
- ☐ FINAL SUPPRESSION

- ☐ Regular Business Hours
- ☐ After Regular Business Hours

SOFT ACCOUNT # PIN # AUTHORIZED SIGNATURE OF ACCOUNT

PERMIT NUMBER FIRE ALARM # FIRE SUPPRESSION #	CONTRACTOR INFORMATION CONTACT PERSON	CONTACT PHONE NUMBER

#	Fire Alarm Devices	#	Fire Alarm Devices	#	HVAC Devices	#	Electrical Systems
	Manual Pull Stations		Egress Control Devices		Smoke Control System		Generator test
	A/V Units		Hold Open Devices		Duct Detectors		Fire Pump Test
	Smoke/Heat Detectors		Fire Shutter		Smoke Dampers		**Fire Suppression Systems**
	Elevator Recall		Sprinkler Flow Alarm		Hood/Suppression Alarm		
	Electric Strikes		Sprinkler Tamper Device		FM 200		Sprinkler Heads
	Other:		Other:		Stairway Pressurization		Risers
					Other:		

Comments:

FIRE PROTECTION COMPANY NAME					
F/A INSTALLER SIGNATURE		DATE		FIRE PROTECTION LICENSE #	
F/S INSTALLER SIGNATURE		DATE		FIRE SUPPRESSION LICENSE #	

FP INSPECTION REQUEST FORM
3/25/2008
DG

Aboveground Piping Certificate (page 1)

Contractor's Material and Test Certificate for Aboveground Piping

PROCEDURE

Upon completion of work, inspection and tests shall be made by the contractor's representative and witnessed by the property owner or their authorized agent. All defects shall be corrected and system left in service before contractor's personnel finally leave the job.

A certificate shall be filled out and signed by both representatives. Copies shall be prepared for approving authorities, owners, and contractor. It is understood the owner's representative's signature in no way prejudices any claim against contractor for faulty material, poor workmanship, or failure to comply with approving authority's requirements or local ordinances.

Property name	Date
Property address	

Plans	Accepted by approving authorities (names)		
	Address		
	Installation conforms to accepted plans	❑ Yes	❑ No
	Equipment used is approved If no, explain deviations	❑ Yes	❑ No
Instructions	Has person in charge of fire equipment been instructed as to location of control valves and care and maintenance of this new equipment? If no, explain	❑ Yes	❑ No
	Have copies of the following been left on the premises?	❑ Yes	❑ No
	1. System components instructions	❑ Yes	❑ No
	2. Care and maintenance instructions	❑ Yes	❑ No
	3. NFPA 25	❑ Yes	❑ No
Location of system	Supplies buildings		

Sprinklers	Make	Model	Year of manufacture	Orifice size	Quantity	Temperature rating

Pipe and fittings: Type of pipe _____ Type of fittings _____

Alarm valve or flow indicator	Alarm device			Maximum time to operate through test connection	
	Type	Make	Model	Minutes	Seconds

Dry pipe operating test	Dry valve			Q. O. D.		
	Make	Model	Serial no.	Make	Model	Serial no.

	Time to trip through test connection[a,b]		Water pressure	Air pressure	Trip point air pressure	Time water reached test outlet[a,b]		Alarm operated properly	
	Minutes	Seconds	psi	psi	psi	Minutes	Seconds	Yes	No
Without Q.O.D.									
With Q.O.D.									

If no, explain

[a] Measured from time inspector's test connection is opened
[b] NFPA 13 only requires the 60-second limitation in specific sections

Aboveground Piping Certificate (page 2)

Deluge and preaction valves

Operation ❑ Pneumatic ❑ Electric ❑ Hydraulics

Piping supervised ❑ Yes ❑ No | Detecting media supervised ❑ Yes ❑ No

Does valve operate from the manual trip, remote, or both control stations? ❑ Yes ❑ No

Is there an accessible facility in each circuit for testing? ❑ Yes ❑ No | If no, explain

Make	Model	Does each circuit operate supervision loss alarm?		Does each circuit operate valve release?		Maximum time to operate release	
		Yes	No	Yes	No	Minutes	Seconds

Pressure reducing valve test

Location and floor	Make and model	Setting	Static pressure		Residual pressure (flowing)		Flow rate
			Inlet (psi)	Outlet (psi)	Inlet (psi)	Outlet (psi)	Flow (gpm)

Test description

Hydrostatic: Hydrostatic tests shall be made at not less than 200 psi (13.6 bar) for 2 hours or 50 psi (3.4 bar) above static pressure in excess of 150 psi (10.2 bar) for 2 hours. Differential dry-pipe valve clappers shall be left open during the test to prevent damage. All aboveground piping leakage shall be stopped.

Pneumatic: Establish 40 psi (2.7 bar) air pressure and measure drop, which shall not exceed 1½ psi (0.1 bar) in 24 hours. Test pressure tanks at normal water level and air pressure and measure air pressure drop, which shall not exceed 1½ psi (0.1 bar) in 24 hours.

Tests

All piping hydrostatically tested at _____ psi (____ bar) for ____ hours ❑ Yes ❑ No | If no, state reason

Dry piping pneumatically tested ❑ Yes ❑ No

Equipment operates properly ❑ Yes ❑ No

Do you certify as the sprinkler contractor that additives and corrosive chemicals, sodium silicate or derivatives of sodium silicate, brine, or other corrosive chemicals were not used for testing systems or stopping leaks? ❑ Yes ❑ No

Drain test | Reading of gauge located near water supply test connection: _____ psi (____ bar) | Residual pressure with valve in test connection open wide: _____ psi (____ bar)

Underground mains and lead-in connections to system risers flushed before connection made to sprinkler piping

Verified by copy of the Contractor's Material and Test Certificate for Underground Piping. ❑ Yes ❑ No | Other Explain

Flushed by installer of underground sprinkler piping ❑ Yes ❑ No

If powder-driven fasteners are used in concrete, has representative sample testing been satisfactorily completed? ❑ Yes ❑ No | If no, explain

Blank testing gaskets

Number used	Locations	Number removed

Welding

Welding piping ❑ Yes ❑ No

If yes . . .

Do you certify as the sprinkler contractor that welding procedures used complied with the minimum requirements of AWS B2.1, ASME Section IX *Welding and Brazing Qualifications,* or other applicable qualification standard as required by the AHJ? ❑ Yes ❑ No

Do you certify that all welding was performed by welders or welding operators qualified in accordance with the minimum requirements of AWS B2.1, ASME Section IX *Welding and Brazing Qualifications*, or other applicable qualification standard as required by the AHJ? ❑ Yes ❑ No

Do you certify that the welding was conducted in compliance with a documented quality control procedure to ensure that (1) all discs are retrieved; (2) that openings in piping are smooth, that slag and other welding residue are removed; (3) the internal diameters of piping are not penetrated; (4) completed welds are free from cracks, incomplete fusion, surface porosity greater than 1/16 in. diameter, undercut deeper than the lesser of 25% of the wall thickness or 1/32 in.; and (5) completed circumferential butt weld reinforcement does not exceed 3/32 in.? ❑ Yes ❑ No

Aboveground Piping Certificate (page 3)

Cutouts (discs)	Do you certify that you have a control feature to ensure that all cutouts (discs) are retrieved? ❑ Yes ❑ No	
Hydraulic data nameplate	Nameplate provided ❑ Yes ❑ No	If no, explain
Remarks	Date left in service with all control valves open	
Signatures	Name of sprinkler contractor	
	Tests witnessed by	
	The property owner or their authorized agent (signed) Title Date	
	For sprinkler contractor (signed) Title Date	

Additional explanations and notes