FIRE SAFETY MANUAL INSPECTION FORMS

FORM F-1 AUTOMATIC SPRINKLER SYSTEMS – WEEKLY INSPECTION
FORM F-2 AUTOMATIC SPRINKLER SYSTEMS – MONTHLY INSPECTION
FORM F-3 AUTOMATIC SPRINKLER SYSTEMS – QUARTERLY INSPECTION AND TESTS
FORM F-4 AUTOMATIC SPRINKLER SYSTEMS – SEMI-ANNUAL INSPECTION AND TESTS
FORM F-5 AUTOMATIC SPRINKLER SYSTEMS – ANNUAL INSPECTION, TESTS & MAINT
FORM F-6 AUTOMATIC SPRINKLER SYSTEMS – 5-YEAR INSPECTION
FORM F-7 STANDPIPE AND HOSE SYSTEMS – STANDPIPE HYDROSTATIC & FLOW TEST
FORM F-8 STANDPIPE AND HOSE SYSTEMS – ANNUAL INSPECTION & MAINTENANCE
FORM F-9 HYDRANT-INSPECTIONS – SEMI-ANNUAL INSPECTION FOR DRY BARREL HYDRANTS
FORM F-10 FIRE PUMPS – MONTHLY INSPECTION
FORM F-11 FIRE PUMPS – MONTHLY TESTS
AUTOMATIC SPRINKLER SYSTEMS
Weekly Inspection

This form covers a 6-month period

<table>
<thead>
<tr>
<th>DATE</th>
<th>INSPECTOR</th>
<th>VALVE(S) SEALED</th>
<th>SPRINKLERS OK</th>
<th>ALARM VALVE OK</th>
<th>DRY PIPE VALVE</th>
<th>PREACTION VALVE</th>
<th>DELUGE VALVE WATER PRESSURE</th>
<th>NOTES</th>
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<td>Air Pres.</td>
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<td>Water Pres.</td>
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</table>

1. Date of inspection.
2. Inspector’s name, initials or badge number.
3. If valves are sealed, note “yes” in this block. If any are not sealed, reseal and note “resealed” in this block.
4. If all sprinklers are in good condition and storage is maintained at least 18 in. below the sprinklers, note “yes” in this block. If not, see that corrections are made and briefly describe under “notes.”

5-8. Record pressure readings (psi). A loss of more than 10% should be investigated.

9. Record any notes about the system which the inspector believes to be significant. Use separate sheet if needed.
### FORM F-2

**AUTOMATIC SPRINKLER SYSTEMS**

**Monthly Inspection**

**SYSTEM**

<table>
<thead>
<tr>
<th>DATE</th>
<th>INSPECTOR</th>
<th>FIRE DEPARTMENT CONNECTIONS</th>
<th>VALVES LOCKED</th>
<th>ALARM VALVES</th>
<th>SPARE SPRINKLERS</th>
<th>ALARM DEVICES</th>
<th>WATER PRESSURE</th>
<th>NOTES</th>
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**NOTES**

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1. Date of inspection.
2. Inspector’s name, initials or badge number.
3. If fire department connections are unobstructed and in good condition, note “OK” in block. If not, see that corrections are made and briefly describe under “notes.”
4. If valves are locked, note “yes” in this block. If any are not locked, relock and note “relocked” in this block.
5. Inspect alarm valves to assure no leakage from retard chamber or alarm drains.
6. Assure there is proper number and type of sprinklers and a sprinkler wrench.
7. Check for physical damage and that electrical connections are secure.
8. Record pressure readings (psi). A loss of more than 10% should be investigated.
9. Record any notes about the system which the inspector believes to be significant. Place a number in this block and number the corresponding note at the end of the inspection form.
### AUTOMATIC SPRINKLER SYSTEMS

#### Quarterly Inspection and Tests

<table>
<thead>
<tr>
<th>DATE</th>
<th>INSPECTOR</th>
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#### MAIN DRAIN TEST
Conduct a main drain test as follows:

1. Record the static water supply pressure (psi) as indicated on the lower pressure gauge.
2. Open the main drain and allow water flow to stabilize.
3. Record the residual water supply pressure while water is flowing from the 2-inch main drain as indicated on the lower pressure gauge.
4. Close the main drain (slowly).

#### WET PIPE SYSTEM FLOW ALARM
Test water flow alarms by opening the inspectors test valve.

#### DRY PIPE PRIMING LEVEL
Check dry valve priming water level by opening the test valve and checking for a small amount of water to discharge. If no water flows out of the test line, add priming water.

#### DRY PIPE SYSTEM LOW AIR PRESSURE ALARM
Close the water supply valve, carefully open inspector test valve to reduce air pressure slowly (Do not reduce air pressure sufficiently to trip the dry pipe valve). Confirm operation of low pressure alarm, record air pressure at which low pressure alarm activated, close inspector test, allow air pressure to rise to normal, then open water supply valve.

#### DRY PIPE SYSTEM FLOW ALARM
Open the alarm by-pass valve.

#### PREACTION SYSTEM FLOW ALARM
Open the alarm by-pass valve.

#### DELUGE SYSTEM FLOW ALARM
Open the alarm by-pass valve.

#### CONTROL VALVES
Close valves and reopen until spring or tension is felt - back valve ¼ turn.

#### HYDRAULIC NAME PLATE
If system was hydraulically calculated, assure nameplate is legible and securely attached to riser.

#### COMMENTS
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<table>
<thead>
<tr>
<th>SYSTEM</th>
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<tbody>
<tr>
<td>DATE</td>
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<tr>
<td>INSPECTOR</td>
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</table>

**DRY PIPE SYSTEMS**
Quick opening devices and accelerators, if provided, should be tested semi-annually.
Low point drains should be drained thoroughly before cold weather and after any system trip.

**DELUGE SYSTEM**
Test fire detection system for proper operations.

**PREAMPTION SYSTEM**
Test fire detection system for proper operation.
Record any notes about the system which the inspector believes to be significant.
Place a number in this block and number the corresponding note at the end of the inspection form.

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## GENERAL CONDITION
Inspect sprinklers, sprinkler piping, pipe hangers and seismic braces to make sure they are in good condition.

## FREEZING
Before freezing weather, inspect building to assure exterior wall openings will not expose sprinkler piping to freezing temperature.

## MAINTAIN VALVES
Valves should be maintained, including exercising each valve and lubricating each valve stem.

## CLEAN STRAINERS
Shut the water supply valve and remove the strainer for thorough cleaning.

## TEST ANTIFREEZE
Wet pipe systems with antifreeze solution should have the solution checked for proper freeze level. Record freezing point.

## DRY PIPE SYSTEM
Trip test the dry pipe valve. Record the time from opening the inspectors test valve until the dry pipe valve trips.

- Internally inspect dry pipe valve.
- Test air pressure maintenance device.

## PREACTION SPRINKLER SYSTEM
Trip test the preaction system. (Refer to manufacturer's instructions.)

- Internally inspect preaction valve.

## DELUGE SPRINKLER SYSTEM
Trip test the deluge system. (Refer to manufacturer's instructions.)

- Record time from activation of detector until water in discharged.
- Check to see that water discharge pattern is adequate.
- Record water pressure at hydraulically most remote sprinkler.
- Record water pressure at deluge valve.
- Internally inspect deluge valve.

## COOKING EQUIPMENT SPRINKLERS
Replace sprinklers with fusible links.

### COMMENTS

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**ALARM VALVE INTERNAL INSPECTION**
Verify that all components operate properly, move freely, and are in good condition.

**CHECK VALVE INTERNAL INSPECTION**
Verify that all components operate properly, move freely, and are in good condition.

**COMMENTS**

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</table>
### Standpipe Hydrostatic and Flow Test

**STANDPIPE SYSTEM**

<table>
<thead>
<tr>
<th>INITIAL TEST PRESSURE</th>
<th>Initial test pressure is used to determine if the system can meet the minimum fire flow requirements. Test pressure should be 200 psi or 50 psi above normal pressure if normal pressure exceeds 150 psi.</th>
</tr>
</thead>
<tbody>
<tr>
<td>START TIME</td>
<td>Record the time at the start of the test after the test pressure is reached.</td>
</tr>
<tr>
<td>END TIME</td>
<td>Record the time at the conclusion of the hydrostatic test. The system should hold the pressure for at least 2 hours.</td>
</tr>
<tr>
<td>END TEST PRESSURE</td>
<td>Record the hydrostatic test pressure at the conclusion of the test.</td>
</tr>
<tr>
<td>FLOW TEST</td>
<td>Flow water from the hydraulically most remote standpipe outlet.</td>
</tr>
<tr>
<td>Record: Static Pressure</td>
<td>Residual pressure</td>
</tr>
<tr>
<td>Nozzle diameter</td>
<td>Pivot pressure</td>
</tr>
<tr>
<td>Flow</td>
<td>gpm.</td>
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<tr>
<td>Note:</td>
<td>The minimum flow should be 500 gpm at 65 psi residual pressure.</td>
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</tbody>
</table>

**NOTES**

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## VISUALLY INSPECT DRY PIPING
Visually inspect all accessible piping for damage and corrosion. If piping is in good condition, note “OK” in block. If not, see that corrections are made and briefly describe actions taken.

## CHECK NOZZLES
Open and close all nozzles to assure they operate easily. Lubricate with graphite if needed. If nozzles are in good condition, note “OK” in block. If not, see that corrections are made and briefly describe actions taken.

## LUBRICATE SWING-OUT RACKS
Lubricate swing-out racks with graphite to assure they operate properly. Record “OK” in block if no problems are found.

## RERACK HOSE
Remove and rerack hose so that different parts of hose are located at bends. Check gaskets for deterioration and replace if necessary.

## NOTES

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### HYDRANTS – INSPECTIONS

**Semi-Annual Inspection for Dry Barrel Hydrants**

**Annual Inspection for Wet Barrel Hydrants**

**DATE**

**INSPECTOR**

**YES = SATISFACTORY**  **NO = UNSATISFACTORY (EXPLAIN BELOW)**

<table>
<thead>
<tr>
<th>Description</th>
<th>YES</th>
<th>NO</th>
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<tbody>
<tr>
<td>Hydrants are accessible.</td>
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<tr>
<td>Hydrant outlets are slightly more than hand-tight.</td>
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<tr>
<td>There are no leaks in the top of the hydrant.</td>
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<tr>
<td>There are no leaks in the gasket under the caps.</td>
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<tr>
<td>There are no cracks in the hydrant barrel.</td>
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<tr>
<td>Hydrant drains properly (in dry barrel hydrants).</td>
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<tr>
<td>Operating nut is not worn and does not have rounded corners.</td>
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<tr>
<td>Nozzle threads are not damaged.</td>
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<tr>
<td>Check hose houses to assure all equipment is in good condition.</td>
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**COMMENTS**

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<table>
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**Monthly Inspection**

<table>
<thead>
<tr>
<th><strong>REMOVE BATTERY CORROSION AND CLEAN BATTERY CASE</strong></th>
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<tbody>
<tr>
<td>CHECK BATTERY CHARGER AND CHARGER DATE</td>
</tr>
<tr>
<td>INSPECT CIRCUIT BREAKERS OR FUSES FOR PROPER OPERATION</td>
</tr>
<tr>
<td>EQUALIZE CHARGE IN BATTERY SYSTEM</td>
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</tbody>
</table>

**COMMENTS**

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## FIRE PUMPS
### Monthly Tests

**YES** = SATISFACTORY  
**NO** = UNSATISFACTORY (EXPLAIN ON REVERSE)

<table>
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<th>YEAR</th>
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- **EXERCISE ISOLATING SWITCH AND CIRCUIT BREAKER**
- **OPERATE MANUAL STARTING MEANS (SEMI-ANNUALLY)**
- **TEST ANTIFREEZE TO DETERMINE PROTECTION LEVEL**
- **TEST BATTERIES FOR SPECIFIC GRAVITY OR STATE OF CHARGE**
- **OPERATE SAFETY DEVICES AND ALARMS (SEMI-ANNUALLY)**
- **TEST CIRCUIT BREAKERS AND FUSES FOR PROPER OPERATION**

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