

Inspection, Testing and Maintenance of Fire Alarm Systems

Service Company	Date of Service		Time
	Annual Inspection <input type="checkbox"/>	Initial Inspection <input type="checkbox"/>	Last Service Date
	Single Stage <input type="checkbox"/>	Two Stage <input type="checkbox"/>	Direct Connection <input type="checkbox"/> yes <input type="checkbox"/> no
	Manufacturer:		Model #
Building Name:	Contact Person:		Phone:
Address:	Owner:		Fax:
City: Postal Code:	Central Station:		Phone:
			Fax:

“Yes” - Acceptable “No” - Unacceptable (Explain No answers in comments)

Yes	No	Summary
<input type="checkbox"/>	<input type="checkbox"/>	The Fire alarm system is now fully functional without deficiencies.
<input type="checkbox"/>	<input type="checkbox"/>	The Fire alarm system has deficiencies noted on the pages attached.
<input type="checkbox"/>	<input type="checkbox"/>	The Fire Alarm System is tested in accordance with CAN/ULC S536-97
<input type="checkbox"/>	<input type="checkbox"/>	Sequence of Operation confirmed and tested.

	Technicians After-test Checklist
<input type="checkbox"/>	Reconnect time limit cutouts?
<input type="checkbox"/>	Reconnect ancillary functions?
<input type="checkbox"/>	Reconnect ancillary functions (off site connections)?
<input type="checkbox"/>	Reconnect signal power?
<input type="checkbox"/>	Advise fire department the testing is completed?
<input type="checkbox"/>	Ensure that the alarm system is functional?

Comments

I state that the information on this form is correct at the time and place of my inspection, and that all equipment was tested in conformance with applicable codes and the Manufacturers requirements and at this time was left in operational condition upon completion of this inspection except as noted in comments.			
Technician Stamp	Date	Time	Owner or Authorized Agent

Inspection, Testing and Maintenance of Fire Alarm Systems

Date	Building Name
-------------	----------------------

“√” Yes - Tested correctly “X” No - Did not test correctly (Explain NO answers in comments) “NA” Not applicable

Control Unit Tests

- Power on visual indicator?
- Common visual trouble signal?
- Common audible trouble signal?
- Trouble signal silence switch?
- Main Power supply failure trouble signal?
- Ground fault tested on positive and negative trouble signal
- Alert signal operation?
- Alarm signal operation?
- Automatic transfer from Alert signal to Alarm signal?
- Acknowledge switch operation?
- Alarm signal silence inhibit?
- Alarm signal silence operation?
- Alarm signal silence visual indication?
- Alarm signal when silenced automatically reinstate on subsequent alarm?
- Alarm signal silence automatic cut-out timer?
- Input circuit alarm and supervisory operation including visual indicator?
- Input circuit trouble operation?
- Output circuit alarm operation?
- Output circuit trouble operation?
- Visual indicator test (lamp test)?
- Coded signal sequence operate not less than the required number of times and the correct alarm signal thereafter.
- Coded signal sequences are not interrupted by subsequent alarms?
- Input circuit to output circuit operation including ancilliary device, for correct matrix operation
- Reset operation?
- Main power to emergency power supply transfer?
- Data communications link (DCL) supervision & operation
- Control unit interconnection to monitoring station?

Control Unit Inspection

- Input circuit designations, correctly identified in relation to connected field devices
- Output circuit designations correctly identified in relation to connected field devices.
- Designations for common control functions & indicators
- Cabinet, plugin components and modules securely in place
- Plugin cables securely in place
- Record date, revision and version of Firmware & software
- Date: _____ Rev: _____ Ver: _____
- Cleanliness?
- Fuses in accordance with MFGs specification
- Control Unit lock
- Termination points from wiring to field devices secure

Annunciator Inspection & Tests

- Power on indicator?
- Individual alarm and supervisory zone indication?
- Individual alarm and supervisory zone indication labels?
- Common trouble signal?
- Visual indicator test - Lamp test?
- Input wiring from control unit is supervised?
- Alarm signal silence visual indicator?
- Switches for ancillary function operate as intended?
- Other ancillary function visual indicators?
- Manual activation of alarm signal and indication?

Power Supply Inspection

- Fused with mfgs marked rating of the system?
- Adequate to meet the requirements of the system?

Remote Trouble Unit Tests and Inspection

- Input wiring from control unit is supervised?
- Visual trouble signal?
- Audible trouble signal?
- Audible trouble signal silence?

Battery Tests and Inspection

- Battery type
- Battery Voltage :
- AC power on : _____ Vdc.
- AC power off : _____ Vdc
- AC power off in full alarm : _____ Vdc.
- Battery Current:
- AC power on : _____ mA
- AC power off : _____ mA
- AC power off in full alarm : _____ A
- Inspected for physical damage?
- Terminal cleaned and lubricated?
- Terminals clamped tightly?
- Correct Electrolyte level?
- Specific gravity within mfg specifications?
- Electrolyte leaks?
- Adequately ventilated?
- Within manufacturer’s rated life date code?
- Disconnection causes trouble signal?
- Perform battery tests demonstrating specified battery operation as in Appendix “F”
- (1) Full load operation A-F1
- (2) Silent test A-F2
- (3) Silent accelerated test A-F3

Generator Power Supply

- Provides power to AC circuit serving the fire alarm?
- Trouble condition at the em gen shall result in an audible common trouble signal and a visual indication at the required annunciator?

Inspection, Testing and Maintenance of Fire Alarm Systems

Date	Building Name
-------------	----------------------

“√” Yes - Tested correctly “X” No - Did not test correctly (Explain NO answers in comments) “NA” Not applicable

Field Devices 6.6

- Each device is free of damage, foreign substance & mechanically supported independent of wiring?
- Each device tested while connected to control unit?
- Manual Pull stations tested?
- Two stage pullstations tested and functions confirmed?
- Heat detectors tested as per 6.6.3

Smoke detectors 6.6.4

- Inspected for cleanliness?
- Sensitivity tested?
- Tested for Operation?
- Remote indicator units inspected and tested?
- Status change confirmation inspection and tested?

Air Duct smoke detectors tested? 6.6.4.4

- Beam type smoke detectors for actuation & sensitivity?
- Flame detectors inspected and tested?
- Combination detectors inspected and tested?
- Automatic detectors – other types inspected & tested
 - a) alarm initiation
 - b) detector is oriented so as to detect hazard?
 - c) sensivity tested?

Sequential Display Inspection and Testing

- Individual alarm, supervisory and trouble inputs are clearly indicated and separately designated?
- Individual alarm and supervisory input designation labels are properly identified?
- Alarm input overrides supervisory and trouble input?
- Supervisory input overrides trouble input?
- Display can be manually advanced?
- First alarm is clearly identified each time it is displayed
- Alarm and supervisory input can be retrieved until system is reset?

Printer Testing

- Operation as intended?
- Zone of each alarm initiating device is correctly printed?
- Rated voltage is present?

Printers located in Proprietary Control Centers

- Events and acknowledgements are automatically printed?
- Time and date is recorded by the printer?
- Each event is recorded as they occur?
- System records status changes with loss of data?
- Paper advances automatically such that print record is visible?
- Printer operates under loss of main power supply?
- Printer is monitored for “low paper” and “paper out”?

Field Devices continued 6.6

Water Flow Detection devices 6.6.8.1

- a) tested by appropriate water flow means
- b) time delay recorded

Supervisory Devices 6.6.8.2

- Shut-off valves tested and result in trouble signal?
- Low pressure supervisory device inspected and tested?
- Low water supervisor test?
- Low temperature supervisor device tested
- Each power loss (eg fire pump and air compressor) tested?

Other Fixed Type Extinguishing Systems 6.6.8.3

- Verify operation of the output contacts initiates the specified function at the FA control unit.

Supervisory Devices Other Types 6.6.8.4

- Inspected and tested as per manufacturer requirements?

Signal Appliances 6.6.9

- Shall be inspected and tested for operability
- Proper installation and tightness, tampering & obstruction?
- Intelligibility of voice messages?
- Audibility of alert, alarm and voice messages/
- Visual signal appliance inspected and tested?
- Combination devices tested?

Voice Communication Inspection/Tests

- Power on indicator?
- Common visual trouble signal?
- Common audible trouble signal?
- Trouble signal silence switch?
- All call voice paging including visual indicator?
- Output circuits for selective voice paging and visual.
- Output circuits for selective voice paging trouble/visual
- Microphone including press to talk switch?
- Operation of VC systems does interfere with initial inhibit time of alert and alarm signal.
- All call voice paging operates on emergency power?
- Upon failure of one amplifier, system automatically transfers to backup amplifier.
- Circuits for emergency telephone call in operation including audible and visual indication
- Circuits for emergency telephone for operation, including two way voice communication?
- Circuits for emergency telephones trouble and visual ops.
- Emergency telephone verbal communication?
- Emergency telephone operable or in-use tone at handset.
- Emergency telephone call-in lamp?
- Emergency telephone call-in audible signal?
- All telephone zone select switches individually tested?
- Individual telephone zone select indicators?
- Operating instruction clearly visible?
- Lockable release mechanism is intact?

Ancillary Device Testing

- Circuit _____
- Circuit _____
- Circuit _____

Inspection, Testing and Maintenance of Fire Alarm Systems

Date	Building Name
------	---------------

Device Testing – Legend and Notes

Device	Description	Type	Model No.
M	Manual Pull station		
HT	Heat detector, non restorable (Note 9)		
RHT	Heat detector, Restorable (Note 9)		
S	Smoke detector (Note 1, 2 & 9)		
RI	Remote indicator unit		
DS	Duct smoke detector (Note 1, 3 & 9)		
PS	Photo electric smoke detector		
SFD	Supporting field device (monitor)		
FS	Sprinkler flow switch (Note 4)		
SS	Sprinkler supervisory device (Note 5)		
	LA – Low air		
	PS – Pressure switch		
EM	Fault isolation module		
B	Bell		
H	Horn		
V	Visual signal appliance		
BZ	Mini Buzzer		
SP	Cone type speaker		
HSP	Horn type speaker		
AD	Ancillary device (Note 8)		
ET	Emergency Telephone		
---	Other supervisory devices (Notes 6 & 7)		
---	Other type of detector		

Note 1. Smoke detector sensitivity measurement and cleaning date should be recorded in the remarks column.

Note 2. Status change, including time delay, should be recorded in the remarks column.

Note 3. Duct smoke detector pressure differential should be confirmed and recorded in the remarks column.

Note 4. Time delay setting of water flow switch should be recorded in the remarks column.

Note 5. Sprinkler supervisory switches cause trouble condition to be annunciated but not an alarm condition.

Note 6. Upper and lower pressure setting of supervisory devices should be recorded in the remarks column.

Note 7. Low temperature setting should be recorded in the remarks column.

Note 8. Identify the specific ancillary devices in the remarks column.

Note 9. Identify date fire detector was changed.

Caution: The tests reported on this form do not include the actual operational test of ancillary devices.