

CAN/ULC-S537-13
APPENDIX "C" (INFORMATIVE) – FIRE ALARM SYSTEM (FAS)
VERIFICATION REPORT

(Reference: Subsection 4.1-Note, Clause 4.2.1, 4.2.2)

C1. FIRE ALARM SYSTEM VERIFICATION REPORT

(Reference: Clause 4.1.6, 4.1.7, 4.2.2)

| | | | |
|---|---------------------------------|-----------------------------|------------------------------|
| Building Permit Number: _____ | Electrical Permit Number: _____ | Date: _____ | |
| Building Name & Address: _____ | | | |
| System Manufacturer: _____ Model Number: _____ | | | |
| New FAS <input type="checkbox"/> Existing FAS <input type="checkbox"/> (See Note 1) Extinguishment Releasing System <input type="checkbox"/> | | | |
| A System provides single-stage operation. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | |
| B System provides two-stage operation. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | |
| C The <i>entire fire alarm system</i> has been verified in accordance with CAN/ULC-S537-13, <i>Standard for Verification of Fire Alarm Systems</i> . | Yes <input type="checkbox"/> | No <input type="checkbox"/> | |
| D This is a partial verification for a partial occupancy. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | |
| E Components of the existing <i>Fire Alarm System</i> have been modified or replaced with components from a different manufacturer and are compatible with the existing <i>Fire Alarm System</i> components. (See Note 2) | Yes <input type="checkbox"/> | No <input type="checkbox"/> | |
| F This is a partial verification for a <i>Fire Alarm System</i> that has been replaced in stages. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | |
| G This is a verification of a portion of an existing <i>Fire Alarm System</i> verified in accordance with Section 7, <i>System Modifications</i> . Please see Note 4 in Section C5.13 – Interconnection to FSRC. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | |
| H Installed in accordance with the design and CAN/ULC-S524, <i>Standard for the Installation of Fire Alarm Systems</i> . Please see Note 4 in Section C5.13 – Interconnection to FSRC. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | |
| I The <i>Fire Alarm System</i> documentation is on site and includes a description of the system. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | |
| J The <i>Fire Alarm System</i> is now fully functional with <input type="checkbox"/> without <input type="checkbox"/> deficiencies. (See Note 3) | Yes <input type="checkbox"/> | No <input type="checkbox"/> | N/A <input type="checkbox"/> |
| The <i>Fire Alarm System</i> is connected to an acceptable ULC Listed central monitoring station. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | |
| The communicator is ULC Listed for the purpose. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | |
| The connections between the FAS and the communicator are supervised. | Yes <input type="checkbox"/> | No <input type="checkbox"/> | |
| K If connected, the name and location of the central monitoring station is: _____ ULC "Central Station Fire Protective Signalling Service" Certificate Number: _____ which is issued for the above noted central monitoring station address is <input type="checkbox"/> is not <input type="checkbox"/> attached. | | | |
| L Comments: _____ | | | |
| M A copy of this report will be given to: _____ who is the owner or owner's representative for this <i>building</i> . | Yes <input type="checkbox"/> | No <input type="checkbox"/> | |

CERTIFICATION

This certifies that the information contained in this *Fire Alarm System Verification Report* (which incorporates the attached _____ pages) is correct and complete. The system and equipment described here-in was tested/inspected in conformance with CAN/ULC-S537-13 by a qualified technician. The equipment was left in an operational condition except as noted above. A copy of this report must be maintained on the premises for examination by the Fire Marshal, Building Inspector, or other *Authority Having Jurisdiction* at their request.

| | | |
|--|---|---------------|
| Supervising Technician: | Company & Contact Information: | (Stamp Field) |
| _____ | _____ | |
| Print Name: | _____ | |
| _____ | Telephone: _____ | |
| Assisting Technician/Electrician: | Company & Contact Information: | |
| _____ | _____ | |
| Print Name: | _____ | |
| _____ | Telephone: _____ | |
| Designer: | Company & Contact Information: | |
| _____ | _____ | |
| Print Name: | _____ | |
| _____ | Telephone: _____ | |

NOTES (continued in C5.3 - Interconnection to Fire Signal Receiving Centre & C6.2 - Individual Device Test Record):

1. Extent of Verification of the existing FAS: _____
2. If "Yes", ULC test report/compatibility listing is attached.
3. The identified deficiencies relate to:
 - (a) the existing portion of the FAS not covered by the scope of work under the above referenced permit.
 - (b) the newly installed FAS (or modified/added portion of FAS) under the above referenced permit.

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| Date: | | |
| Building Name: | | Address: |

“Yes” - Tested correctly “No” - Did not test correctly (NO answers are typically detailed in “Comments/Remarks”)
 “NA” = Not applicable

| C2. Documentation | | | | |
|--|---|--|--------------------------|--------------------------|
| | | Yes | No | N/A |
| A | Instructions for resetting the system and silencing alarm signals. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | Instructions for silencing the trouble signal and action to be taken when the trouble signal sounds. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | Description of the function of each operating control and indicator on the fire alarm control unit. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | Description of the area or fire zone protected by each alarm detection circuit (this may be in the form of a list or plan drawing). | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E | Description of alarm signal operation. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F | Description of ancillary equipment controlled by the fire alarm system. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| G | In systems that provide logical control of a smoke control system, documentation is on site and includes a sequence of operation of the smoke control system. Smoke control installed in accordance with Measure: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| H | Building diagrams are on site that clearly indicate the type and location of all smoke control equipment (fans, dampers, etc.). | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Recommended Additional Documentation (not mandated by the Standard): | | Yes | No | N/A |
| | Additional documentation relating to smoke control measures in the building is appended to this report. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Fire Safety Plan documentation is on site. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Instructions to Occupants/Evacuation Floor Plans are posted. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | There are a total of: _____ _____ _____ _____ _____ | remotely installed amplifiers in this FAS. supervised power supplies in this FAS. remote sequential display units in this FAS. remote annunciators in this FAS. remote trouble units in this FAS. stand-by batteries in this FAS. remote booster/power supplies in this FAS. | | |
| List all locations where remote booster/power supplies, batteries & amplifiers are installed: | | | | |
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| Date: | |
| Building Name: | Address: |

| C3. Field Device and Related Circuits – Test and Inspection | | | | |
|--|--|--------------------------|--------------------------|--------------------------|
| | | Yes | No | N/A |
| A | Correct field termination and wiring size. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | Correct circuit polarities. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | An open circuit fault on a conventional device circuit causes a trouble signal. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | Removal of any active or supporting field device circuit causes a trouble signal. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E | One contact device and one non-contact device tested for operation and annunciation at the control unit or transponder, when using a field verifying device. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F | Class “A” circuits serving conventional field devices tested for the capability of providing an alarm signal on each side of an open circuit fault connection at the electrically most remote point in the circuit. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| G | Ground fault indications occur when tested at the electrically furthest field device, and do not result in normal to off-normal status change conditions. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| H | Field device at the electrically furthest point from the power source (in every circuit) receives rated power in accordance with the manufacturer’s specifications. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I | Replaceable over-current devices are of the correct rating. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| J | Where a power buss circuit serves more than one fire alarm zone, a single fault (open circuit fault, short circuit fault or ground fault) on the power circuit does not prevent the normal operation of input or output field devices in more than one fire alarm zone. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| K | Conductor type and wire gauge are in accordance with the equipment manufacturer’s installation wiring requirements at all system termination points. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| L | Confirm that where multiple strand optical fibre cable used with a fire alarm system is not dedicated to the fire alarm system, the fire alarm system shall continue to function as required despite impairment to other systems which may share the cable. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| M | Where power isolation modules are installed in a power distribution riser serving field devices, wiring shall be shorted on the isolated side, annunciation of the fault confirmed, and then a device on the source side shall be operated, and activation confirmed at the control unit or transponder. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| N | Where a signal circuit serves more than one residential suite, a wire-to-wire short circuit fault shall be imposed within each suite in normal (supervisory-non-alarm) and alarm conditions. In all cases the wire-to-wire short circuit fault shall not interfere with the ability of devices in other dwelling units, public corridors, or suites to sound an alarm. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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| Date: | | |
| Building Name: | | Address: |

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|--|--|--------------------------|--------------------------|--------------------------|
| No Data Communication Link is part of this system. <input type="checkbox"/> (This Section is Not Applicable) | | | | |
| C4. Data Communication Link Testing | | | | |
| Control Unit/Transponder Field Location: | | | | |
| Control Unit/Transponder Identification: | | | | |
| DCL Identification: | | | | |
| | | Yes | No | N/A |
| A | Each system abnormal condition specified in Table 1 – Abnormal System Conditions, tested for each data communication link at the control unit or transponder. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | Tests for alarm and trouble received under a single ground fault condition conducted on each conductor of that data communication link independently. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | Each conductor in a data communication link, Class A (DCLA) tested for the capability of providing an alarm signal on each side of a single open circuit fault condition. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | Where a data communication link serves devices on more than one floor area, impose a wire-to-wire short circuit fault within each floor area and confirm receipt of trouble and alarm condition from another floor area. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E | Where fault isolation modules are installed in data communication links serving field devices, wiring shorted on the isolated side, annunciation of the fault confirmed, and then a device on the source side operated, and activation confirmed at the control unit or transponder. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F | Where fault isolation in data communication links is provided between control units or transponders, the field wiring shorted between each pair of control units or transponders, in turn, annunciation of the fault confirmed and operation outside the shorted section is confirmed. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Control Unit/Transponder Field Location: | | | | |
| Control Unit/Transponder Identification: | | | | |
| DCL Identification: | | | | |
| | | Yes | No | N/A |
| A | Each system abnormal condition specified in Table 1 – Abnormal System Conditions, tested for each data communication link at the control unit or transponder. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | Tests for alarm and trouble received under a single ground fault condition conducted on each conductor of that data communication link independently. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | Each conductor in a data communication link, Class A (DCLA) tested for the capability of providing an alarm signal on each side of a single open circuit fault condition. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | Where a data communication link serves devices on more than one floor area, impose a wire-to-wire short circuit fault within each floor area and confirm receipt of trouble and alarm condition from another floor area. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E | Where fault isolation modules are installed in data communication links serving field devices, wiring shorted on the isolated side, annunciation of the fault confirmed, and then a device on the source side operated, and activation confirmed at the control unit or transponder. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F | Where fault isolation in data communication links is provided between control units or transponders, the field wiring shorted between each pair of control units or transponders, in turn, annunciation of the fault confirmed and operation outside the shorted section is confirmed. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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| Date: | | |
| Building Name: | | Address: |

| C5.1 Control Unit or Transponder Tests (Reference Clause 5.1.1) | | | | | |
|--|--|--------------------------|--------------------------|--------------------------|--|
| Control Unit/Transponder Field Location: | | | | | |
| Control Unit/Transponder Identification: | | | | | |
| | | Yes | No | N/A | |
| A | Power 'on' visual indicator operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| B | Common visual trouble signal operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| C | Common audible trouble signal operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| D | Trouble signal silence switch operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| E | Main Power supply failure trouble signal operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| F | Ground fault tested on positive and negative initiates trouble signal. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| G | Alert signal operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| H | Alarm signal operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| I | Automatic transfer from alert signal to alarm signal operates. Time: _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| J | Manual transfer from alert signal to alarm signal. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| K | Automatic transfer from alert to alarm signal cancel (acknowledge) operates on a two stage system. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| L | Alarm signal silence inhibit function operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| M | Alarm signal manual silence operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| N | Alarm signal silence visual indication operates | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| O | Alarm signal and visible signal devices, when silenced, automatically reinitiate upon subsequent alarm. <input type="checkbox"/> In same zone <input type="checkbox"/> In other zone/circuit | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| P | Alarm signal silence automatic cut-out timer. Time: _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Q | Audible, visual, alert, and alarm signals programmed and operate as per manufacturer's design and specification. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| R | Input circuit alarm and supervisory operation including audible and visual indicator operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| S | Input circuit supervision fault causes a trouble indication. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| T | Output circuit alarm indicators operate. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| U | Output circuit supervision fault causes a trouble indication. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| V | Visual indicator test (lamp test) operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| W | Coded signal sequence operate not less than the required number of times and the correct alarm signal thereafter. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| X | Coded signal sequences are not interrupted by subsequent alarms. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Y | Ancillary device control circuit is rated for the intended purpose. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Z | Ancillary device by-pass results in trouble signal. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| AA | Input circuit to output circuit operation including ancillary device circuits (refer to Appendix C5.12, Ancillary Device Circuit Test), for correct program operation as per design and specification. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| BB | Fire alarm reset function operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| CC | Main power to emergency power supply transfer operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| DD | Control unit or transponder enclosure bonded to ground. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| EE | Status change confirmation feature (smoke detectors only) verified. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Recommended Additional Testing (not mandated by the Standard): | | Yes | No | N/A | |
| Alarm, trouble, & supervisory relays function correctly. | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Is an AC disconnecting switch installed? YES <input type="checkbox"/> NO <input type="checkbox"/> | | | | | |
| (ULC CAN4-S524 restricts this, but some AHJ's will accept it.) | | | | | |
| A "YES" answer here must be noted in the "Comments/Remarks" section of this report.) | | | | | |

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| Date: | |
| Building Name: | Address: |

No Voice Communication Equipment is installed in this system. (This Section is Not Applicable)

C5.2 Voice Communication Test

| Location: | | | | |
|---|---|--------------------------|--------------------------|--------------------------|
| Identification: | | | | |
| | | Yes | No | N/A |
| A | Power 'on' visual indicator operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | Common visual trouble signal operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | Common audible trouble signal operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | Trouble signal silence switch operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E | All-call voice paging, including visual indicator, operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F | Output circuits for selective voice paging, including visual indication, operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| G | Output circuits for selective voice paging trouble operation, including visual indication, operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| H | Microphone, including press to talk switch, operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I | Operation of voice paging does not interfere with initial inhibit time of alert signal and alarm signal. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| J | All-call voice paging operates (on emergency power supply). | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| K | Upon failure of one amplifier, system automatically transfers to backup amplifier(s). | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| L | Circuits for emergency telephone call-in operation, including audible and visual indication operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| M | Circuits for emergency telephones for operation, including two-way voice communication, operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| N | Circuits for emergency telephone trouble operation, including visual indication, operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| O | Emergency telephone verbal communication operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| P | Emergency telephone operable or in-use tone at handset operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Q | While in standby mode, voice communication busses used for paging, alert signal, alarm signal, and emergency telephone communication circuits, an open circuit fault, or short circuit fault, or operation of an overcurrent protective device provided for the purpose, shall result in a specific trouble indication specific to the faulty buss. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Recommended Additional Testing (not mandated by the Standard): | | Yes | No | N/A |
| | Visual indicator test (lamp test) operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Main power to emergency power supply transfer operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Communication control enclosure bonded to ground. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Trouble signal on the voice communication system results in common trouble signal on the fire alarm system. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Dead-front panel(s) in place & as per manufacturer's specification. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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| Date: | | |
| Building Name: | | Address: |

| C5.3 Required System Response Times | | | | |
|---|---|--------------------------|--------------------------|--------------------------|
| Control Unit/Transponder Field Location: | | | | |
| Control Unit/Transponder Identification: | | | | |
| | | Yes | No | N/A |
| A | Audible signal devices and visible signal devices operated within ten seconds and; subsequent input operated within ten seconds. | <input type="checkbox"/> | <input type="checkbox"/> | |
| B | Remote connection operated within ten seconds. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | Release device start of sequence operated within ten seconds. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | Required Annunciation operated within ten seconds and; subsequent input operation within ten seconds. | <input type="checkbox"/> | <input type="checkbox"/> | |
| E | Required central alarm and control facility operated within ten seconds and; subsequent input operation within ten seconds. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F | Ancillary circuits operated within ten seconds. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Required Additional Testing for Installations Requiring Compliance with CAN/ULC-S524-14 | | | | |
| | Audible signal devices and visible signal devices within the same manually initiated fire alarm zone operated within five seconds | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Trouble signal activation annunciates within ninety seconds and; subsequent trouble input annunciates within ninety seconds | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Water flow devices activation operated within ten seconds and; subsequent activation operated within ten seconds. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C5.3 Required System Response Times | | | | |
| Control Unit/Transponder Field Location: | | | | |
| Control Unit/Transponder Identification: | | | | |
| | | Yes | No | N/A |
| A | Audible signal devices and visible signal devices operated within ten seconds and; subsequent input operated within ten seconds. | <input type="checkbox"/> | <input type="checkbox"/> | |
| B | Remote connection operated within ten seconds. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | Release device start of sequence operated within ten seconds. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | Required Annunciation operated within ten seconds and; subsequent input operation within ten seconds. | <input type="checkbox"/> | <input type="checkbox"/> | |
| E | Required central alarm and control facility operated within ten seconds and; subsequent input operation within ten seconds. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F | Ancillary circuits operated within ten seconds. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Required Additional Testing for Installations Requiring Compliance with CAN/ULC-S524-14 | | | | |
| | Audible signal devices and visible signal devices within the same manually initiated fire alarm zone operated within five seconds | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Trouble signal activation annunciates within ninety seconds and; subsequent trouble input annunciates within ninety seconds | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Water flow devices activation operated within ten seconds and; subsequent activation operated within ten seconds. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

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| Date: | |
| Building Name: | Address: |

| C5.4 Control Unit or Transponder Inspection | | | | |
|---|---|--------------------------|--------------------------|--------------------------|
| Control Unit/Transponder Field Location: | | | | |
| Control Unit/Transponder Identification: | | | | |
| | | Yes | No | N/A |
| A | Input circuit designations correctly identified in relation to connected field devices. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | Output circuit designations correctly identified in relation to connected field devices. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | Correct designations for common control functions and indicators. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | Plug-in components and modules securely in place. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E | Plug-in cables securely in place. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F | Record the date, revision and version of firmware: Date: _____ Revision: _____ Version: _____ | | | |
| | Record the date, revision and version of the program software: Date: _____ Revision: _____ Version: _____ | | | |
| G | Control unit/transponder is clean and free of dust and dirt. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| H | Fuses in accordance with the manufacturer's specification. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I | Control unit/transponder lock is functional. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| J | Termination points for wiring to field devices secure. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| K | Control unit/transponder power disconnects in accordance with C22.1, Safety Standard for Electrical Installations, Canadian Electrical Code, Part 1. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| L | Field wiring entry points for the various circuits and circuit separations are in accordance with the manufacturer's installation instructions. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| M | Main power supply feed wiring is in accordance with the manufacturer's specifications. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| N | Verify control units/transponders with stand-alone capability serve the same area for both input circuits and output circuits. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| O | Control units or transponders which operate with stand-alone capability have signal silence, reset, and trouble silence switches with visual indications, degraded mode capability and stand-alone capability indicators. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| P | Each control unit/transponder has been furnished with installation, operating and maintenance instructions. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Q | Control unit/transponder visual indicators comply with Table 3 – Visual Indicators Colour Code. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Recommended Additional Visual Inspection (not mandated by the Standard): | | Yes | No | N/A |
| | Dead-front panel(s) in place & as per manufacturer's specification. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| | | |
|-----------------------|--|-----------------|
| Date: | | |
| Building Name: | | Address: |

| This system does not qualify as a Large-Scale Network System <input type="checkbox"/> (This Section is Not Applicable) | | | | |
|--|---|--------------------------|--------------------------|--------------------------|
| C5.5 Large-Scale Network Systems | | | | |
| Control Unit/Transponder Field Location: | | | | |
| Control Unit/Transponder Identification: | | | | |
| | | Yes | No | N/A |
| A | Verify control units/transponders serve the same area for both input circuits and output circuits. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | Verify control units/transponders with stand-alone capability have signal silence, reset, and trouble silence switches with visual indicators, degraded mode capability and stand-alone capability indicators. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | Confirm that between any nodes a single open circuit fault, wire-to-wire short circuit fault, or ground fault on the network results in a trouble signal at each node and continued alarm receipt capability at each node under these conditions. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | To test stand-alone capability, create a condition of data communication link failure, and confirm each control unit or transponder is capable of receiving an alarm initiation and provides output operation in the area as served by the control unit or transponder in degraded mode. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E | To test degraded mode capability, create a condition of data communication link failure in two separate locations creating two network segments, and confirm each segment of the network has the following operation: (i) Operate the alarm signals in accordance with the system operating sequence; (ii) Maintain synchronization of control units or transponders for alert signals and alarm signals; (iii) Operate local relays in control units or transponders connected to ancillary devices as required; (iv) Confirm the operation of acknowledge, signal silence, reset and trouble silence switches with visual indicators, degraded mode capability and stand-alone capability indicators are functional for each network segment. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C5.5 Large Scale Network Systems | | | | |
| Control Unit/Transponder Field Location: | | | | |
| Control Unit/Transponder Identification: | | | | |
| | | Yes | No | N/A |
| A | Verify control units/transponders serve the same area for both input circuits and output circuits. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | Verify control units/transponders with stand-alone capability have signal silence, reset, and trouble silence switches with visual indicators, degraded mode capability and stand-alone capability indicators. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | Confirm that between any nodes a single open circuit fault, wire-to-wire short circuit fault, or ground fault on the network results in a trouble signal at each node and continued alarm receipt capability at each node under these conditions. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | To test stand-alone capability, create a condition of data communication link failure, and confirm each control unit or transponder is capable of receiving an alarm initiation and provides output operation in the area as served by the control unit or transponder in degraded mode. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E | To test degraded mode capability, create a condition of data communication link failure in two separate locations creating two network segments, and confirm each segment of the network has the following operation: (i) Operate the alarm signals in accordance with the system operating sequence; (ii) Maintain synchronization of control units or transponders for alert signals and alarm signals; (iii) Operate local relays in control units or transponders connected to ancillary devices as required; (iv) Confirm the operation of acknowledge, signal silence, reset and trouble silence switches with visual indicators, degraded mode capability and stand-alone capability indicators are functional for each network segment. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| | | |
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| Date: | | |
| Building Name: | | Address: |

| C5.6 Power Supply Inspection | | | | |
|---|---|--|--------------------------|--------------------------|
| Power Supply Field Location: | | | | |
| Power Supply Identification: | | | | |
| Circuit Disconnect Means Location: | | | | |
| Circuit Panel/Breaker Identification: | | | | |
| | | Yes | No | N/A |
| A | Conforms with the requirements of CAN/ULC-S524, Standard for the Installation of Fire Alarm Systems; and C22.1, Safety Standard for Electrical Installations, Canadian Electrical Code, Part 1, Section 32. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | Fused in accordance with the manufacturer’s marked rating of the system. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | Equipped with the identified disconnect means. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | Adequate to meet the requirements of the system. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E | Power for ancillary devices is taken from a source separate from the fire alarm system control unit or transponder power supply. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F | Power for ancillary devices is taken from the control unit or transponder that is designed to provide such power. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| G | Ancillary devices, which are powered from the control unit or transponder, are recorded. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Recommended Additional Visual Inspection (not mandated by the Standard): | | | | |
| Dead-front panel(s) in place & as per manufacturer’s specification. | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Circuit disconnect means painted RED and locked “on”. | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Power supply cabinet (where applicable) is clean and free of dust and dirt. | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C5.7 Emergency Power Supply Test And Inspection | | | | |
| Emergency Power Supply Field Location: | | | | |
| Emergency Power Supply Identification: | | | | |
| Battery Type (as installed): | | <input type="checkbox"/> Sealed Lead Acid <input type="checkbox"/> Ni-Cad <input type="checkbox"/> Lithium-Ion <input type="checkbox"/> Wet Lead | | |
| Battery Capacity (as installed): | | _____ AH | | |
| Required Building Code Alarm Operation: | | <input type="checkbox"/> 30 minutes <input type="checkbox"/> 120 minutes | | |
| | | Yes | No | N/A |
| A | Correct battery type as recommended by the manufacturer. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | Correct battery rating as determined by battery calculations based on full system load. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | Battery voltage (main power “on”): | _____ | VDC | |
| D | Battery voltage – main power “off” – FAS in supervisory condition: | _____ | VDC | |
| | Battery current - main power “off” – FAS in supervisory condition: | _____ | mA | |
| E | Battery voltage – main power “off” – FAS in full load ALARM: | _____ | VDC | |
| | Battery current – main power “off” – FAS in full load ALARM: | _____ | A | |
| F | Battery charging current (main power “on”): | _____ | mA | |
| G | Inspected for physical damage. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| H | Terminals cleaned and lubricated. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I | Terminals clamped tightly. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| J | Correct electrolyte level. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| K | Specific gravity of the electrolyte is within the battery manufacturer’s specifications. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| L | Inspected for electrolyte leakage. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| M | Adequately ventilated. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| N | Record manufacturer’s date code or in-service date: | _____ | | |
| O | Disconnection causes trouble signal. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| P | Indicate type of tests performed on a fully charged battery: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | (i) Required supervisory load for 24 h followed by the required full load operation | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | (ii) Silent test using load resistor method for full duration test (refer to Appendix D1) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | (iii) Silent accelerated test (refer to Appendix D2) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Q | Record calculated battery capacity (refer to Appendix D3.1-C). | _____ | AH | |
| R | Record the battery terminal voltage after tests are completed. | _____ | VDC | |
| S | Battery voltage not less than 85% of its rated capacity after tests completed. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| T | Generator provides power to the AC circuit serving the fire alarm system. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| U | Trouble condition at the emergency generator results in an audible common trouble signal and a visual indication at the required annunciator. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Recommended Additional Inspection (not mandated by the Standard): | | | | |
| Generator running indication is provided at the required annunciator. | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Low Fuel Level trouble results in an audible trouble signal and a visual indication at the required annunciator? | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Generator fueled by: <input type="checkbox"/> Diesel <input type="checkbox"/> Natural Gas <input type="checkbox"/> Other: | | _____ | | |
| Fuel Level: _____ % of full capacity | | Estimated run time: _____ Hours | | |
| Low Fuel Level Set-point: _____ | | <input type="checkbox"/> % of full capacity <input type="checkbox"/> Gallons <input type="checkbox"/> Litres | | |

| | | |
|-----------------------|--|-----------------|
| Date: | | |
| Building Name: | | Address: |

No Annunciator and Display & Control Centre is installed in this system. (This Section is Not Applicable)

C5.8 ANNUNCIATOR AND DISPLAY AND CONTROL CENTRE TEST AND INSPECTION

Annunciator Location: _____
 Annunciator Identification: _____

| | | Yes | No | N/A |
|---|---|--------------------------|--------------------------|--------------------------|
| A | Power “on” indicator operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | Individual alarm and supervisory input zone clearly indicated and separately designated. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | Individual alarm and supervisory input zone designation labels are properly identified. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | Where active and supporting field devices are utilized, device labels correspond with actual field location. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E | Common trouble signal operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F | Visual indicator test (lamp test) operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| G | Input wiring from control unit or transponder is supervised and of the correct type and gauge in accordance with the equipment manufacturer’s installation wiring requirements. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| H | Alarm signal silence visual indicator operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I | Switches for ancillary functions operate as per design and specification. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| J | Ancillary functions visual indicators operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| K | Manual activation of alarm signal and indication operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| L | Displays are visible in the installed location. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| M | Operates on emergency power. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| N | Visual indicators comply with Table 3 – Visual indicators Colour Code | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| O | Multi-line sequential display operates as per Appendix C5.9 (Annunciators or Sequential Displays), where utilized. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Recommended Additional Testing (Not Mandated in the Standard) – FOR OUTDOOR INSTALLATIONS

| | | | |
|--|--------------------------|--------------------------|--------------------------|
| Rating of Enclosure: <input type="checkbox"/> CAT 3 <input type="checkbox"/> CAT 3R <input type="checkbox"/> CAT 4 <input type="checkbox"/> Other: _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Interior free of dirt or evidence of moisture (no corrosion)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is the installed heater compatible with the enclosure? <input type="checkbox"/> 24VDC <input type="checkbox"/> 24VAC <input type="checkbox"/> 120VAC | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is voltage present at the <input type="checkbox"/> heater <input type="checkbox"/> thermostat terminals? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Disconnect means on a separate circuit? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Disconnect means identification – Panel and Circuit Number: _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Internal environment supervised by the fire alarm control panel? <input type="checkbox"/> Temperature <input type="checkbox"/> Power | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Low voltage transformer of the correct size and rating as per the manufacturer’s instructions? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

No Annunciator or Sequential Display is installed in this system. (This Section is Not Applicable)

C5.9 ANNUNCIATORS OR SEQUENTIAL DISPLAYS

Annunciator/Sequential Display Location: _____
 Annunciator/Sequential Display Identification: _____

| | | Yes | No | N/A |
|---|---|--------------------------|--------------------------|--------------------------|
| A | Power “on” indicator operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | Individual alarm and supervisory zone indication operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Exception: Operation of each individual alarm and supervisory zone indication gives the identical indication, or lights the identical indicators at the other annunciator(s) and sequential display(s). Specify method of confirmation: _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| | Minimum of one alarm zone and one supervisory zone tested per annunciator or sequential display to confirm operation. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | Individual alarm and supervisory input zone designation labels are properly identified. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | Where active and supporting field devices are utilized, device labels correspond with actual field location. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| E | Common trouble signal operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| F | Visual indicator test (lamp test) operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| G | Input wiring from control unit or transponder is supervised and of the correct type and gauge in accordance with the equipment manufacturer’s installation wiring requirements. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| H | Alarm signal silence visual indicator operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I | Switches for ancillary functions operate as per design and specification. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| J | Ancillary functions visual indicators operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| K | Manual activation of alarm signal and indication operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| L | Displays are visible in the installed location. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Recommended Additional Testing (Not Mandated in the Standard) – FOR OUTDOOR INSTALLATIONS

| | | | |
|--|--------------------------|--------------------------|--------------------------|
| Rating of Enclosure: <input type="checkbox"/> CAT 3 <input type="checkbox"/> CAT 3R <input type="checkbox"/> CAT 4 <input type="checkbox"/> Other: _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Interior free of dirt or evidence of moisture (no corrosion)? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is the installed heater compatible with the enclosure? <input type="checkbox"/> 24VDC <input type="checkbox"/> 24VAC <input type="checkbox"/> 120VAC | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Is voltage present at the <input type="checkbox"/> heater <input type="checkbox"/> thermostat terminals? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Disconnect means on a separate circuit? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Disconnect means identification – Panel and Circuit Number: _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Internal environment supervised by the fire alarm control panel? <input type="checkbox"/> Temperature <input type="checkbox"/> Power | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Low voltage transformer of the correct size and rating as per the manufacturer’s instructions? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| | | |
|-----------------------|--|-----------------|
| Date: | | |
| Building Name: | | Address: |

No Remote Trouble Signal Unit is installed in this system. (This Section is Not Applicable)

C5.10 Remote Trouble Signal Unit Test And Inspection

| | | | | |
|--|--|--------------------------|--------------------------|--------------------------|
| Remote trouble signal unit location: | | | | |
| Remote trouble signal unit identification: | | | | |
| | | Yes | No | N/A |
| A | Input wiring from control unit or transponder is supervised. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | Visual trouble signal operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | Audible trouble signal operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| D | Audible trouble signal silence operates. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

No Printers are installed in this system. (This Section is Not Applicable)

C5.11 Printer Test

| | | | | |
|-------------------------|--|--------------------------|--------------------------|--------------------------|
| Printer Location: | | | | |
| Printer Identification: | | | | |
| | | Yes | No | N/A |
| A | Operates as per design and specification | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| B | Zone of each alarm initiating device is correctly printed. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| C | Rated voltage is present. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| | |
|-----------------------|-----------------|
| Date: | |
| Building Name: | Address: |

| No Interconnection to a Fire Signal Receiving Centre has been provided. <input type="checkbox"/> (This Section is Not Applicable) | | | | |
|---|--|-------------------------------------|-------------------------------------|-------------------------------------|
| C5.13 Interconnection to the Fire Signal Receiving Centre | | | | |
| Communicator Location: | | | | |
| Circuit Disconnect Means Location: | | | | |
| Circuit Panel/Breaker Identification: | | | | |
| | | Yes | No | N/A |
| A | The fire signal receiving centre transmitter is integral to the fire alarm control unit. | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |
| B | The fire signal receiving centre transmitter is located remotely from the fire alarm control unit. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |
| C | Where an interconnection between the fire alarm control unit and a separate fire signal receiving centre transmitter is provided, a demarcation terminal box with a minimum of twelve (12) terminals is installed. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| D | The demarcation terminal box is located in the same room as the fire alarm control unit it is connected to. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| E | The demarcation terminal box is labeled “Fire Alarm Demarcation” and/or “Limitation D’Alarme Incendie”. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| F | The conductors installed between the fire alarm control panel and the demarcation terminal box complies with Section 3.4 of CAN/ULC-S524-06. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| G | Tested and confirmed operation of alarm relay. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| H | Tested and confirmed operation of trouble relay. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| I | Tested and confirmed operation of supervisory relay. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| J | Confirm that the alarm transmission to the fire signal receiving centre is received. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| K | Confirm that the supervisory transmission to the fire signal receiving centre is received. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| L | Confirm that the trouble transmission to the fire signal receiving centre is received. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| M | Operation of the fire signal receiving centre transmitter bypass means results in a specific trouble indication at the fire alarm control unit or transponder. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| N | Operation of the fire signal receiving centre transmitter bypass means transmits a trouble signal to the fire signal receiving centre. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| O | The contact information of the fire signal receiving centre is: Company: _____ Telephone: _____ Address: _____ | | | |
| Additional Information (not mandated by the Standard): | | Yes | No | N/A |
| The communicator installed in accordance with CAN/ULC-S561-13. | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The fire signal receiving centre is ULC Listed. | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The fire signal receiving centre ULC certification number is: _____ | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The communicator is being tested in accordance with CAN/ULC-S561-13. | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Supporting documentation attesting to this is on site and has been reviewed. | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The ULC “Central Station Fire Protective Signalling Service” Certificate is valid. | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The ULC “Central Station Fire Protective Signalling Service” Certificate expires on: _____ | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The last inspection noted on the Certificate occurred on: _____ | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The communicator has been reset following completion of testing. | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The communicator has been placed back into service. | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| The communicator is trouble free. | | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

ADDITIONAL NOTES (apply to C6.2 – Individual Device Record):

4. Where this Report is issued in respect of a Section 7 Modification, “installed correctly” refers to only those devices which were tested and are documented in the Appendix Section C6.2 – Individual Device Record.
5. Sprinkler supervisory switches should cause a “trouble” condition to be annunciated. This should be a latching type trouble (or “supervisory trouble”) only restorable by pressing “Reset” on the fire alarm control panel. Exceptions must be noted in “Comments”.
6. Upper and lower pressure setting of supervisory devices should be recorded in the “Remarks” column.
7. Low temperature setting should be recorded in the “Remarks” column.
8. Identify the specific ancillary devices in the “Remarks” column.
9. Where possible, identify the date a fire detector is changed. If housing discolouration is noted, attempt to identify the source and note the date of manufacture. Heat detectors whose labels are missing, faded and unreadable, or painted are considered failed and require replacement. This information should be noted in the “Remarks” column.
10. Identify type and function of each addressable device in the “Remarks” column.
11. Prolonged exposure to charging currents in excess of 100 mA will significantly shorten the service life of Ni-Cad and sealed lead acid batteries.
12. Relays connected to listed fire alarm equipment initiating/supervisory circuits must be properly supervised. Note exceptions in “Comments”.
13. The system’s documentation should provide information concerning the number of addressable devices that are connected to each isolator and identify each isolator’s location. Any exceptions should be noted in “Remarks”.
14. Operation of each annunciator or sequential display must be confirmed visually.
15. Stand-by batteries that are remotely located from the Fire Alarm Common Control must be fused (or installed in accordance with the manufacturer’s recommendations or requirements).
16. Test and confirm that visible signal devices used to advise occupants that a fire emergency exists shall be turned on automatically when audible signals are reactivated.

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

| | | | |
|-----------------------|--|-----------------|--|
| Date: | | Address: | |
| Building Name: | | | |

| C6.1 Field Device Testing - LEGEND | | | |
|---|---|-------------|---------------------|
| Device | Description | Type | Model Number |
| | Manual Initiating Devices | | |
| M | Manual pull station | | |
| MAS | Manual Abort Station | | |
| | Automatic Fire Detection Devices | | |
| HD | Heat Detector , restorable or non-restorable, fixed temperature | | |
| RHD | Heat Detector , restorable, rate-of-rise thermostat | | |
| S | Ionization Smoke detector | | |
| | Sensitivity Test Method (or Test Equipment Model/Method): | | |
| | Manufacturer's Sensitivity Test Range: | | |
| PS | Photo-electric Smoke detector | | |
| | Sensitivity Test Method (or Test Equipment Model/Method): | | |
| | Manufacturer's Sensitivity Test Range: | | |
| DS | Duct Smoke detector | | |
| | Sensitivity Test Method (or Test Equipment Model/Method): | | |
| | Manufacturer's Sensitivity Test Range: | | |
| MC | Multi-Criteria type detector (specify detection types) | | |
| | Sensitivity Test Method (or Test Equipment Model/Method): | | |
| | Manufacturer's Sensitivity Test Range: | | |
| CO | Carbon Monoxide detector | | |
| OD | Other Detector type (specify) | | |
| EOL(R) | End-of-Line resistor (“R” indicates “Power Supervision Relay”) | | |
| | Fire Sprinkler Devices | | |
| FS | Sprinkler Flow Switch | | |
| FPS | Sprinkler Flow Pressure Switch | | |
| TS | Sprinkler valve supervisory Tamper Switch | | |
| LA | Low Air supervisory device (9) | | |
| LT | Low Temperature supervisory device | | |
| HTC | Heat Trace Controller | | |
| TLW | Tank Low Water supervisory device | | |
| | Fire Alarm Signalling Devices | | |
| B | Bell | | |
| H | Horn | | |
| BZ(S) | Mini Buzzer (“S” indicates “silenceable” type) | | |
| SSB | Smoke Sounder Base | | |
| V | Visual alarm device (specify strobe type or corridor indicator) | | |
| SP | Cone type Speaker | | |
| HSP | Horn Speaker | | |
| AV | Combination Audible/Visual Device - specify type (i.e. Horn/Strobe Unit) | | |
| SCIM | Signal Circuit Isolation Module | | |
| ET | Emergency Telephone (Fire Fighter's Phone) | | |
| SYNC | Signalling Circuit Synchronization Module | | |
| | Supporting Field Devices (Addressable Systems) | | |
| RPM | Remote Point Module | | |
| SRIM | Single point Remote Initiating Module | | |
| DRIM | Dual input Remote Initiating Module | | |
| RPIM | Remote Point Isolator Module | | |
| SCRM | Signal Circuit Remote Module | | |
| RRM(S) | Remote Relay Module (“S” provides supervised outputs) | | |
| | Extinguishment Releasing Devices | | |
| RS | Releasing Solenoid | | |
| PDS | Pressure Discharge Switch | | |
| LPS | Low Cylinder Pressure Switch | | |
| | Ancillary Devices | | |
| DH(M,FL) | Door Holder (“M” is Magnetic, “FL” is Fusible Link) | | |
| DM | Damper Motor | | |
| R | Relay | | |
| AD | Other Ancillary Device | | |
| SA | Smoke Alarm (specify single or multi-station type) | | |

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|-----------------------|-----------------|
| Date: | |
| Building Name: | Address: |

C6.2 Individual Device Record

“✓” **Yes - Acceptable** “X” **No – Unacceptable** (Explain NO answers in comments) “Dash” - Not applicable

| Device Location ¹⁷ | Annunciation Label or LCD Text Displayed ¹⁸ (if applicable) | Device Type ¹⁹ | Requires Service, Repairs, Cleaning or Missing ²⁰ | Circuit Number or Address ²¹ | NBC Fire Alarm Zone ²² | Correctly Installed ²³ | Alarm / Operation Confirmed ²⁴ | Annunciation Indication Confirmed ²⁵ | Supervision of Wiring or Device Confirmed ²⁶ | Remarks ²⁷ / Comments |
|-------------------------------|---|---------------------------|--|---|-----------------------------------|-----------------------------------|---|---|---|----------------------------------|
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NOTES:

- 17. Record the physical location of the device
- 18. Records the description of the individual device tested as shown on the *annunciator* or *control unit*.
- 19. Indicate the device type per C6.1, Field Device Testing-Legends and Notes
- 20. Place check mark if the device requires service, repair, cleaning or if the device is missing
- 21. Record the circuit number of conventional device or address of *active field device*
- 22. Record the zone number or description of the NBC required fire alarm zone
- 23. Place check mark if the device is correctly installed in accordance with CAN/ULC-S524, the manufacturer’s installation instructions
- 24. Place check mark if the device functions properly
- 25. Place check mark if the device operation is annunciated in accordance with S524
- 26. Place check mark if:
 - A. conventional field device circuit activates trouble on open circuit fault; and
 - B. active and supporting field device activates trouble in the absence of the device.
- 27. **REMARK** - additional details specific to the device or function being tested, such as:
 - i. Measured sensitivity of smoke detector;
 - ii. Record voltage reading at each end-of-line device;
 - iii. Measured air differential pressure of duct smoke detector;
 - iv. Measured mechanical delay of water flow switch; or
 - v. Measured transport time of aspiration smoke detector.

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| Date: | | |
| Building Name: | | Address: |

C6.2 Individual Device Record

“√” **Yes - Acceptable** “X” **No – Unacceptable** (Explain NO answers in comments) “Dash” - Not applicable

| Device Location ¹⁷ | Annunciation Label or LCD Text Displayed ¹⁸ (if applicable) | Device Type ¹⁹ | Requires Service, Repairs, Cleaning or Missing ²⁰ | Circuit Number or Address ²¹ | NBC Fire Alarm Zone ²² | Correctly Installed ²³ | Alarm / Operation Confirmed ²⁴ | Annunciation Indication Confirmed ²⁵ | Supervision of Wiring or Device Confirmed ²⁶ | Remarks ²⁷ / Comments |
|-------------------------------|---|---------------------------|--|---|-----------------------------------|-----------------------------------|---|---|---|----------------------------------|
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| Date: | | |
| Building Name: | | Address: |

C6.2A CIRCUIT FAULT TOLERANCE TEST SHEET

“✓” **Yes - Acceptable** “X” **No – Unacceptable (Explain NO answers in comments)** “Dash” - Not applicable

| Circuit Fault Test Location | Type of Fault Tested | | | Isolation Results | Non-Faulted Circuit Location |
|---|----------------------|------|--------|---|--|
| | Short | Open | Ground | | |
| Identify Device Location where circuit fault was introduced and description of affected NBC Fire Alarm zone or area | | | | Identify NBC Fire Alarm Zone or area Location where devices failed due to fault condition | Identify Individual Device tested for operation located in Non Faulted NBC Fire Alarm zone or area |
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| Date: | |
| Building Name: | Address: |

C6.3 SIGNALLING DEVICE SOUND LEVEL MEASUREMENT

(Reference: Clause 5.10.1-C)

| Zone | Location/Description | Ambient dBA | Alarm dBA | Remarks |
|------|----------------------|-------------|-----------|---------|
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| Remarks/Comments |
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| Date: | |
| Building Name: | Address: |

C6.4 SIGNALLING DEVICE INTELLIGIBILITY MEASUREMENT

(Reference: CAN/ULC-S537-13 Clause 6.10.1-C and 6.10.1-G, NBCC 2010 Sentence 3.2.4.22-2)

| Zone | Location/Description | Intelligibility CIS | Remarks |
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Remarks/Comments

CAN/ULC-S537-13 – FIRE ALARM SYSTEM VERIFICATION APPENDIX “C” REPORT

| | |
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| Date: | |
| Building Name: | Address: |

| C6.5 DEFICIENCIES | | | | | | | | |
|--|-----------------------------|-----------------|------------|----------------------------------|--|---------------------------|---|---|
| To be completed by the primary individual who conducted the test and inspection. | | | | | To be completed by the Building Owner / Representative | | | |
| Item # | Device Type | Device Location | Deficiency | CAN/ULC-S537-13 Clause Reference | Date Corrected (MM/DD/YY) | Work Order or Reference # | Name of Service Provider Responsible for the Repair | Building Owner's / Representative's Signature |
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| Item # | Control Function or Feature | | Deficiency | CAN/ULC-S537-13 Clause Reference | Date Corrected (MM/DD/YY) | Work Order or Reference # | Name of Service Provider Responsible for The Repair | Building Owner's / Representative's Signature |
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| Date: | |
| Building Name: | Address: |

C6.6 Recommendations

C6.7 Remarks