CAN/ULC 537:2019
FIRE ALARM SYSTEM (FAS)
VERIFICATION RECORDS

SECTION 28.1 FIRE ALARM SYSTEM VERIFICATION REPORT

Electrical Permit No.: ____ – ____ Building Permit No.: ____ – ____ Date: ____

Building Name & Address: ____

Building Owner or Representative's Name: ____

The System Provides: ☐ Single Stage Operation ☐ Two Stage Operation ☐ Other (Describe Operation): ____

System Manufacturer: ____ Model Number: ____

A	The *entire fire alarm system* has been verified in accordance with CAN/ULC 537:2019, *Standard for Verification of Fire Alarm Systems*.	**Yes** ☐	**No** ☐
B	This is a partial verification for a partial occupancy.	**Yes** ☐	**No** ☐
C	This is a partial verification for a *Fire Alarm System* that has been replaced in stages.	**Yes** ☐	**No** ☐
D	This is a verification of a portion of an existing *Fire Alarm System* verified in accordance with Section 27, *System Modifications*. (See Note 4.)	**Yes** ☐	**No** ☐
E	Installed in accordance with the design and CAN/ULC-S524, *Standard for the Installation of Fire Alarm Systems*. (See Note 4 under Section C5.13 - Interconnection to the Fire Signal Receiving Centre.)	**Yes** ☐	**No** ☐
	Record Edition of CAN/ULC-S524 to which this system was verified: ____		
	Record Edition of Building Code in effect in the Jurisdiction applicable for the Design: ____		
	Record Edition of the CEC (Canadian Electrical Code) in effect for the Design: ____		
F	The *Fire Alarm System* documentation is on site (per Section 29, Documentation).	**Yes** ☐	**No** ☐
G	The fire alarm system sequence of operation specified in the design is confirmed and documentation is provided on site (per Section 29, Documentation).	**Yes** ☐	**No** ☐
H	The *Fire Alarm System* is connected to a Fire Signal Receiving Centre.	**Yes** ☐	**No** ☐
	The communicator is ULC Listed for the purpose.	**Yes** ☐	**No** ☐
	The connections between the FAS and the communicator are supervised.	**Yes** ☐	**No** ☐
	If connected, the name and location of the Fire Signal Receiving Centre is: ____		
	ULC "Central Station Fire Protective Signalling Service" Certificate Number: ____		
	which is issued for the above noted installation **is** ☐ **is not** ☐ attached.		
I	The fire alarm system is fully functional (if "No" or N/A, provide comments below).	**Yes** ☐	**No** ☐ **NA** ☐
J	Comments: ____		
K	A copy of this report will be given to: ____ who is the owner or owner's representative for this *building*.	**Yes** ☐	**No** ☐
	During the Verification, were any Deficiencies identified? (See Page 2, if "Yes")	**Yes** ☐	**No** ☐
	As of the following date (M/D/Y) all identified Deficiencies have been corrected: ____		
	During the Verification, were any Recommendations identified? See Page 3, if "Yes"	**Yes** ☐	**No** ☐

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 537:2019 by a qualified technician. The equipment was left in an operational condition except as detailed 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 and Contact Information:**
Print Name:	**Telephone:**
Assisting Technician/Electrician:	**Company and Contact Information:**
Print Name:	**Telephone:**

Date:		**Address:**	
Building Name:			

28.2 DEFICIENCIES

The inspection and Testing of any corrections/repairs of deficiencies noted on this form has been completed by qualified personnel identified in the column marked "Technician Name & Certificate No."

To be completed by the primary individual who conducted the test and inspection.					To be completed by the primary individual responsible for the repair.			
Item #	**Device Type**	**Device Location**	**Deficiency**	**CAN/ULC-S537 Clause Reference**	**Date Corrected (MM/DD/YY)**	**Work Order or Reference #**	**Name of Service Provider Responsible for the Repair**	**Technician Name & Certificate No.**

Item #	**Control Function or Feature**	**Deficiency**	**CAN/ULC-S537 Clause Reference**	**Date Corrected (MM/DD/YY)**	**Work Order or Reference #**	**Name of Service Provider Responsible for the Repair**	**Technician Name & Certificate No.**

BUILDING OWNER'S / REPRESENTATIVE'S COMPLIANCE STATEMENT

I understand that all deficiencies noted in the table above have been corrected.

Printed Name: _____ **Signature:** _____ **Date:** ____ ____ ____ **MM** **DD** **YY**

Date:		**Address:**	
Building Name:			

28.3 Recommendations

Date:		Address:	
Building Name:			

"Yes" - Tested correctly "No" - Did not test correctly (NO answers are typically detailed in "Comments/Remarks")
"NA" = Not applicable (the feature is not available or has not been programmed)

29.1 Documentation

The following shall be examined, and documentation shall be:
a) Readily available to the inspection authority;
b) Retained on site in a single location; and
c) Revised and maintained throughout the life of the fire alarm system.

		Yes	No	N/A
A	Instructions for resetting the system and silencing alarm signals.	☐	☐	☐
B	Instructions for silencing the trouble signal and action to be taken when the trouble signal sounds.	☐	☐	☐
C	Description of the function of each operating control and indicator on the fire alarm control unit.	☐	☐	☐
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).	☐	☐	☐
E	Description of alarm signal operation.	☐	☐	☐
F	Description of ancillary equipment controlled by the fire alarm system.	☐	☐	☐
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:	☐	☐	☐
H	Building diagrams are on site that clearly indicate the type and location of all smoke control equipment (fans, dampers, etc.).	☐	☐	☐
I	Description of fire alarm system:			
	i) Sequence of Operation (see 5.9)	☐	☐	☐
	ii) Operating Instructions (see 5.9)	☐	☐	☐
	iii) Description of each type of field device	☐	☐	☐
	iv) Details of input to programmed output functions for programmed systems	☐	☐	☐
	v) Connection to fire signal receiving centre, if required by applicable codes and regulations	☐	☐	☐
	vi) Previous Verification Report(s) if applicable	☐	☐	☐
	viii) The plans of the building showing the fire alarm zoning, device address and locations of each control unit, transponder, remote power supply, field device of the fire alarm system including fault isolators, ancillary devices and annunciators or display and control centres	☐	☐	☐
J	Indicate location of documentation: Indicate format of documentation:			

Recommended Additional Documentation (not mandated by the Standard):	Yes	No
Fire Safety Plan documentation is on site.	☐	☐
Instructions to Occupants/Evacuation Floor Plans are posted.	☐	☐

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:

Design Company:	Address:	Telephone:

Installation Company:	Address:	Telephone:

Original Verification Company:	Address:	Telephone:

Date:		Address:	
Building Name:			

30 Individual Field Device, Related Circuits and Circuit Fault Tolerance – Test and Inspection				
		Yes	No	N/A
A	Correct field termination, conductor type and wire gauge, in accordance with CSA C22.1, Canadian Electrical Code, Section 32.	☐	☐	☐
B	Correct field termination, conductor type and wire gauge, in accordance with the equipment manufacturer's installation instructions at all system termination points.	☐	☐	☐
C	Correct circuit polarities.	☐	☐	☐
D	An open circuit fault on a conventional device circuit causes a trouble signal.	☐	☐	☐
E	Removal of any active or supporting field device circuit causes a trouble signal.	☐	☐	☐
F	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.	☐	☐	☐
G	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.	☐	☐	☐
H	Ground fault indications occur when tested at the electrically furthest field device, and do not result in normal to off-normal status change conditions.	☐	☐	☐
I	Field device at the electrically furthest point from the power source (in every circuit) receives rated power in accordance with the manufacturer's specifications.	☐	☐	☐
J	Replaceable over-current devices are of the correct rating.	☐	☐	☐
K	Where multiple strand optical fibre cable is not dedicated to the fire alarm system, the fire alarm system continues to function as required despite an impairment to other systems which share the cable.	☐	☐	☐
L	Confirm circuit fault tolerance operation under OPEN CIRCUIT FAULT conditions (Record individual operation in 33.2, Individual Device Record and 33.4, Circuit Fault Tolerance Test Sheet).	☐	☐	☐
M	Confirm circuit fault tolerance operation under SHORT CIRCUIT FAULT conditions (Record individual operation in 33.2, Individual Device Record and 33.4, Circuit Fault Tolerance Test Sheet).	☐	☐	☐
N	Confirm circuit fault tolerance operation under GROUND FAULT conditions (Record individual operation in 33.2, Individual Device Record and 33.4, Circuit Fault Tolerance Test Sheet).	☐	☐	☐
O	Where suite fault isolators are provided, confirm in-suite signal circuit fault tolerance operation under SHORT CIRCUIT FAULT conditions (Record individual operation in 33.2, Individual Device Record and 33.4, Circuit Fault Tolerance Test Sheet).	☐	☐	☐
P	Under an alarm condition, confirm device operation on the source side of each shorted residential suite isolation module (Record individual operation in 33.2, Individual Device Record and 33.4, Circuit Fault Tolerance Test Sheet).	☐	☐	☐
Q	Where voice communication systems are used to broadcast messages not related to life safety (e.g., general paging), fault detection for signalling busses or circuits is maintained while broadcasting. (Confirm operation in 32.4, Non-life Safety Message Circuit Supervision Test.)	☐	☐	☐

Date:		Address:	
Building Name:			

No Data Communication Link is part of this system. ☐ (This Section is Not Applicable)

31 Operation Test Circuit Fault Tolerance

Control Unit/Transponder Field Location: _____
Control Unit/Transponder Identification: _____
DCL Identification: _____

		Yes	No	N/A
A	Each system abnormal condition specified in Table 3.1 – Abnormal System Conditions, tested for each data communication link at the control unit or transponder.	☐	☐	☐
B	Tests for alarm and trouble received under a single ground fault condition conducted on each conductor of that data communication link independently.	☐	☐	☐
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.	☐	☐	☐
D	Where data communication link(s) are installed without fault isolation, impose a wire-to-wire short circuit fault on each data communication link during a non-fire alarm condition and confirm receipt of trouble and alarm condition from each adjacent data communication link (Record results in 33.4, Circuit Fault Tolerance Test Sheet).	☐	☐	☐
E	Where fault isolators are installed in data communication links serving field devices, impose a wire-to-wire short on the isolated side during non-fire alarm condition, confirm annunciation of the fault, and then operate a device on the source side, and confirm activation at the control unit or transponder (Record results in 33.4, Circuit Fault Tolerance Test Sheet).	☐	☐	☐
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 (Record results in 33.4, Circuit Fault Tolerance Test Sheet).	☐	☐	☐

No additional Data Communication Links are installed. ☐ (This Section is Not Applicable)

Control Unit/Transponder Field Location: _____
Control Unit/Transponder Identification: _____
DCL Identification: _____

		Yes	No	N/A
A	Each system abnormal condition specified in Table 3.1 – Abnormal System Conditions, tested for each data communication link at the control unit or transponder.	☐	☐	☐
B	Tests for alarm and trouble received under a single ground fault condition conducted on each conductor of that data communication link independently.	☐	☐	☐
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.	☐	☐	☐
D	Where data communication link(s) are installed without fault isolation, impose a wire-to-wire short circuit fault on each data communication link during a non-fire alarm condition and confirm receipt of trouble and alarm condition from each adjacent data communication link (Record results in 33.4, Circuit Fault Tolerance Test Sheet).	☐	☐	☐
E	Where fault isolators are installed in data communication links serving field devices, impose a wire-to-wire short on the isolated side during non-fire alarm condition, confirm annunciation of the fault, and then operate a device on the source side, and confirm activation at the control unit or transponder (Record results in 33.4, Circuit Fault Tolerance Test Sheet).	☐	☐	☐
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 (Record results in 33.4, Circuit Fault Tolerance Test Sheet).	☐	☐	☐

Date:		Address:	
Building Name:			

32.1 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.	☐	☐	☐
B	Output circuit designations correctly identified in relation to connected field devices.	☐	☐	☐
C	Correct designations for common control functions and indicators.	☐	☐	☐
D	Plug-in components and modules securely in place.	☐	☐	☐
E	Plug-in cables securely in place.	☐	☐	☐
F	Record the date, revision and version of control unit or transponder 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.	☐	☐	☐
H	Fuses in accordance with the manufacturer's specification.	☐	☐	☐
I	Control unit/transponder lock is functional.	☐	☐	☐
J	Termination points for wiring to field devices secure.	☐	☐	☐
K	Control unit/transponder power disconnects in accordance with C22.1, Safety Standard for Electrical Installations, Canadian Electrical Code, Part 1.	☐	☐	☐
L	Field wiring entry points for the various circuits and circuit separations are in accordance with the manufacturer's installation instructions.	☐	☐	☐
M	Main power supply feed wiring is in accordance with the manufacturer's specifications.	☐	☐	☐
N	Verify control units/transponders with stand alone capability serve the same area for both input circuits and output circuits.	☐	☐	☐
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.	☐	☐	☐
P	Each control unit/transponder has been furnished with installation, operating and maintenance instructions.	☐	☐	☐
Q	Control unit/transponder visual indicators comply with Table 8.1 – Visual Indicators Colour Code.	☐	☐	☐
Recommended Additional Visual Inspection (not mandated by the Standard):		**Yes**	**No**	**N/A**
Dead-front panel(s) in place & as per manufacturer's specification.		☐	☐	☐

Date:		Address:	
Building Name:			

32.2 Control Unit or Transponder Test

Control Unit/Transponder Field Location:

Control Unit/Transponder Identification:

		Yes	No	N/A
A	Power 'on' visual indicator operates.	☐	☐	☐
B	Time and date indication corresponds with the local time and date.	☐	☐	☐
C	Common visual trouble signal operates.	☐	☐	☐
D	Common audible trouble signal operates.	☐	☐	☐
E	Trouble signal silence switch operates.	☐	☐	☐
F	Main Power supply failure trouble signal operates.	☐	☐	☐
G	Trouble signal operates during positive and negative ground fault tests.	☐	☐	☐
H	Alert signal operates.	☐	☐	☐
I	Alarm signal operates.	☐	☐	☐
J	Automatic transfer from alert signal to alarm signal operates. Time:	☐	☐	☐
K	Manual transfer from alert signal to alarm signal.	☐	☐	☐
L	Automatic transfer from alert to alarm signal cancel (acknowledge) operates on a two stage system.	☐	☐	☐
M	Alarm signal silence inhibit function operates.	☐	☐	☐
N	Alarm signal manual silence operates.	☐	☐	☐
O	Alarm signal silence visual indication operates	☐	☐	☐
P	Alarm signal, when silenced, automatically reinitiate only upon subsequent alarm from another NBC required fire alarm zone. ☐ In same zone ☐ In other zone/circuit	☐	☐	☐
Q	Duration of alarm signal prior to automatic silence.			☐
R	Audible, visual, alert, and alarm signals programmed and operate as per manufacturer's design and specification.	☐	☐	☐
S	Input circuit alarm and supervisory operation including audible and visual indicator operates.	☐	☐	☐
T	Input circuit supervision fault causes a trouble indication.	☐	☐	☐
U	Output circuit alarm indicators operate.	☐	☐	☐
V	Output circuit supervision fault causes a trouble indication.	☐	☐	☐
W	Visual indicator test (lamp test) operates.	☐	☐	☐
X	Coded signal sequences are not interrupted by subsequent alarms.	☐	☐	☐
Y	Ancillary device control circuit is rated for the intended purpose.	☐	☐	☐
Z	Ancillary device by-pass results in trouble signal.	☐	☐	☐
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.	☐	☐	☐
BB	Fire alarm reset function operates. Record reset time: seconds	☐	☐	☐
CC	Main power to emergency power supply transfer operates.	☐	☐	☐
DD	Control unit or transponder enclosure bonded to ground.	☐	☐	☐
EE	Status change confirmation feature (smoke detectors only) verified.	☐	☐	☐
Recommended Additional Testing (not mandated by the Standard):		**Yes**	**No**	**N/A**
	Alarm, trouble, & supervisory relays function correctly.	☐	☐	☐

Is an AC disconnecting switch installed? YES ☐ NO ☐

(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.

Date:		Address:	
Building Name:			

No Voice Communication Equipment is part of this system. ☐ (This Section is Not Applicable)

32.3 Voice Communication Test

Location:				
Identification:				
		Yes	No	N/A
A	Power 'on' visual indicator operates.	☐	☐	☐
B	Common visual trouble signal operates.	☐	☐	☐
C	Common audible trouble signal operates.	☐	☐	☐
D	Trouble signal silence switch operates.	☐	☐	☐
E	All-call voice paging, including visual indicator, operates.	☐	☐	☐
F	Output circuits for selective voice paging, including visual indication, operates.	☐	☐	☐
G	Output circuits for selective voice paging trouble operation, including visual indication, operates.	☐	☐	☐
H	Microphone, including press to talk switch, operates.	☐	☐	☐
I	Operation of voice paging does not interfere with initial inhibit time of alert signal and alarm signal.	☐	☐	☐
J	All-call voice paging operates (on emergency power supply).	☐	☐	☐
K	Upon failure of one amplifier, system automatically transfers to backup amplifier(s).	☐	☐	☐
L	Circuits for emergency telephone call-in operation, including audible and visual indication operates.	☐	☐	☐
M	Circuits for emergency telephones for operation, including two-way voice communication, operates.	☐	☐	☐
N	Circuits for emergency telephone trouble operation, including visual indication, operates.	☐	☐	☐
O	Emergency telephone verbal communication operates.	☐	☐	☐
P	Emergency telephone operable or in-use tone at handset operates.	☐	☐	☐
Q	In standby mode, a short, or open on a paging, alert, alarm, or emergency telephone voice communication buss results in a buss specific trouble condition.	☐	☐	☐
R	Where the voice paging system is also used for non-life safety related messages, the life safety related messages take precedence.	☐	☐	☐
Recommended Additional Testing (not mandated by the Standard):		**Yes**	**No**	**N/A**
Visual indicator test (lamp test) operates.		☐	☐	☐
Main power to emergency power supply transfer operates.		☐	☐	☐
Communication control enclosure bonded to ground.		☐	☐	☐
Trouble signal on the voice communication system results in common trouble signal on the fire alarm system.		☐	☐	☐
Dead-front panel(s) in place & as per manufacturer's specification.		☐	☐	☐

Date:		**Address:**	
Building Name:			

32.4 Non-life Safety Message Circuit Supervision Test

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

Circuit Fault Test Location	Circuit Number	Type of Fault Tested (Check all that apply)			Speaker Circuit Fault Annunciation Confired at Fire Alarm Control Panel	
Identify area served by speaker circuit to which fault was introduced and confirmed during NON-FIRE ALARM audio broadcast	Identify circuit serving area	Short	Open	Grnd	Yes	No
		☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐
		☐	☐	☐	☐	☐

Date:		Address:	
Building Name:			

32.5 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 within the same manually initiated fire alarm zone operated within five seconds.	☐	☐	
B	Audible signal devices and visible signal devices operated within ten seconds and; subsequent input operated within ten seconds.	☐ ☐	☐ ☐	
C	Remote connection operated within ten seconds.	☐	☐	☐
D	Releasing device start of sequence operated within ten seconds.	☐	☐	☐
E	Required Annunciation operated within ten seconds and; subsequent input operation within ten seconds.	☐ ☐	☐ ☐	☐ ☐
F	Required central alarm and control facility operated within ten seconds; and subsequent input operation within ten seconds.	☐ ☐	☐ ☐	☐ ☐
G	Ancillary circuits operated within ten seconds, and Subsequent input operation within 30 seconds	☐ ☐	☐ ☐	☐ ☐
Required Additional Testing in Accordance with Table 6.1				
Trouble signal activation annunciates within ninety seconds and; subsequent trouble input annunciates within ninety seconds		☐ ☐	☐ ☐	
Water flow devices activation operated within ten seconds and; subsequent activation operated within ten seconds.		☐ ☐	☐ ☐	☐ ☐

Only one control unit / transponder was tested in this Verification. ☐ (This Section is Not Applicable)

32.5 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 within the same manually initiated fire alarm zone operated within five seconds.	☐	☐	
B	Audible signal devices and visible signal devices operated within ten seconds and; subsequent input operated within ten seconds.	☐ ☐	☐ ☐	
C	Remote connection operated within ten seconds.	☐	☐	☐
D	Releasing device start of sequence operated within ten seconds.	☐	☐	☐
E	Required Annunciation operated within ten seconds and; subsequent input operation within ten seconds.	☐ ☐	☐ ☐	☐ ☐
F	Required central alarm and control facility operated within ten seconds; and subsequent input operation within ten seconds.	☐ ☐	☐ ☐	☐ ☐
G	Ancillary circuits operated within ten seconds, and Subsequent input operation within 30 seconds	☐ ☐	☐ ☐	☐ ☐
Required Additional Testing in Accordance with Table 6.1				
Trouble signal activation annunciates within ninety seconds and; subsequent trouble input annunciates within ninety seconds		☐ ☐	☐ ☐	
Water flow devices circuit activations operated within ten seconds and; subsequent activation operated within ten seconds.		☐ ☐	☐ ☐	☐ ☐

Date:		Address:	
Building Name:			

This system does not qualify as a Large-Scale Network System ☐ (This Section is Not Applicable)

32.6 Large-Scale Network Systems

Control Unit/Transponder Field Location: _____

Control Unit/Transponder Identification: _____

		Yes	No	N/A
A	Control units or transponders serve the same area for both input circuits and output circuits.	☐	☐	☐
B	Control units or transponders with stand alone capability have signal silence, reset, and trouble silence switches with visual indicators, degraded mode capability and stand alone capability indicators.	☐	☐	☐
C	A single open circuit fault, wire-to-wire short circuit fault, or ground fault on the network results in a trouble signal and continued alarm receipt capability at each node under these conditions.	☐	☐	☐
D	Under data communication link failure condition, each control unit or transponder with stand-alone capability is capable of receiving an alarm initiation and provides output operation in the area as served by the control unit or transponder.	☐	☐	☐
E	Under multiple data communication link failure conditions which create two network segments, each control unit or transponder with degraded mode capability for each segment of the network provides the following operations:			
	(i) Signals operate in accordance with the system sequence of operation.	☐	☐	☐
	(ii) Alert signals and alarm signals are synchronized throughout each separate network segment.	☐	☐	☐
	(iii) Ancillary device controls continue to operate within each network segment.	☐	☐	☐
	(iv) Acknowledge, signal silence, reset and trouble silence switches with visual indicators, degraded mode capability and stand-alone capability indicators, function for each network segment.	☐	☐	☐

There are no additional loop controllers installed on this system ☐ (This Section is Not Applicable)

32.6 Large Scale Network Systems

Control Unit/Transponder Field Location: _____

Control Unit/Transponder Identification: _____

		Yes	No	N/A
A	Control units or transponders serve the same area for both input circuits and output circuits.	☐	☐	☐
B	Control units or transponders with stand alone capability have signal silence, reset, and trouble silence switches with visual indicators, degraded mode capability and stand alone capability indicators.	☐	☐	☐
C	A single open circuit fault, wire-to-wire short circuit fault, or ground fault on the network results in a trouble signal and continued alarm receipt capability at each node under these conditions.	☐	☐	☐
D	Under data communication link failure condition, each control unit or transponder with stand-alone capability is capable of receiving an alarm initiation and provides output operation in the area as served by the control unit or transponder.	☐	☐	☐
E	Under multiple data communication link failure conditions which create two network segments, each control unit or transponder with degraded mode capability for each segment of the network provides the following operations:			
	(i) Signals operate in accordance with the system sequence of operation.	☐	☐	☐
	(ii) Alert signals and alarm signals are synchronized throughout each separate network segment.	☐	☐	☐
	(iii) Ancillary device controls continue to operate within each network segment.	☐	☐	☐
	(iv) Acknowledge, signal silence, reset and trouble silence switches with visual indicators, degraded mode capability and stand-alone capability indicators, function for each network segment.	☐	☐	☐

Date:		Address:	
Building Name:			

32.7 Power Supply Inspection

Control Unit or Transponder Location:	
Control Unit or Transponder Identification:	
Circuit Disconnect Means or Breaker Location:	
Circuit Disconnect Means or 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.	☐	☐	☐
B	Fused in accordance with the manufacturer's marked rating of the system.	☐	☐	☐
C	Equipped with the identified disconnect means.	☐	☐	☐
D	Adequate to meet the requirements of the system.	☐	☐	☐
E	Power for ancillary devices is taken from a source separate from the fire alarm system control unit or transponder power supply.	☐	☐	☐
F	Power for ancillary devices is taken from the control unit or transponder that is designed to provide such power.	☐	☐	☐
G	Ancillary devices, which are powered from the control unit or transponder, are recorded.	☐	☐	☐

32.8 Emergency Power Supply Test and Inspection

Emergency Power Supply Location:	
Emergency Power Supply Identification:	
Emergency Power Supply Provided By:	☐ Batteries ☐ UPS ☐ Generator ☐ Combination
Battery Type (as installed):	☐ Sealed Lead Acid ☐ Ni-Cad ☐ Lithium-Ion ☐ Wet Lead
Battery Capacity (as installed):	AH
Required Building Code Alarm Operation:	☐ 5 minutes ☐ 30 minutes ☐ 60 minutes ☐ 120 minutes

	Battery Tests (Reference 10.4)			Yes	No	N/A
A	Correct battery type as recommended by the manufacturer.			☐	☐	
B	Correct battery rating as determined by battery calculations based on full system load.			☐	☐	☐
C	Battery voltage – main power supply "ON":		VDC			
	Battery current – main power supply "ON":		mA			
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	Inspected for physical damage.			☐	☐	☐
G	Terminals cleaned and lubricated.			☐	☐	☐
H	Terminals clamped tightly.			☐	☐	☐
I	Correct electrolyte level.			☐	☐	☐
J	Specific gravity of the electrolyte is within the battery manufacturer's specifications.			☐	☐	☐
K	Inspected for electrolyte leakage.			☐	☐	☐
L	Adequately ventilated.			☐	☐	☐
M	Record manufacturer's date code or in-service date:					
N	Disconnection causes trouble signal.			☐	☐	☐
O	Indicate type of tests performed on a fully charged battery:					
	(i) Required supervisory load for 24 h followed by the required full load operation			☐	☐	☐
	(ii) Silent test using load resistor method for full duration test (refer to Appendix D1)			☐	☐	☐
	(iii) Silent accelerated test (refer to Appendix D2)			☐	☐	☐
P	Record calculated battery capacity (refer to Appendix D3.1-C).		AH			
Q	Record the battery terminal voltage after tests are completed.		VDC			
R	Battery voltage not less than 85% of its rated capacity after tests completed.			☐	☐	☐

	Emergency Power Generator Tests (Reference: 10.5)	Yes	No	NA
A	Generator provides power to the AC circuit serving the fire alarm system.	☐	☐	☐
B	Trouble condition at the emergency generator results in an audible common trouble signal and a visual indication at the required annunciator.	☐	☐	☐
C	Generator Run condition at the emergency generator shall result in an audible common trouble signal and a visual indication at the required annunciator.	☐	☐	☐
D	Testing coordinated with emergency power generator tests:	☐	☐	☐
E	Low Fuel Level trouble results in an audible trouble signal and a visual indication at the required annunciator?	☐	☐	☐

Generator fueled by: ☐ Diesel ☐ Natural Gas ☐ Other:			
Fuel Level:	% of full capacity	Estimated run time:	Hours
Low Fuel Level Set-point:	☐ % of full capacity ☐ Gallons ☐ Litres		

Date:		Address:	
Building Name:			

No Annunciator is installed in this system. ☐ (This Section is Not Applicable)

32.9 Annunciator Inspection

(This section is for the primary annunciator as required by the National Building Code of Canada)

Annunciator Location:

Annunciator Identification:

		Yes	No	N/A
A	Power "on" indicator operates.	☐	☐	☐
B	Individual alarm and supervisory input zone clearly indicated and separately designated.	☐	☐	☐
C	Individual alarm and supervisory input zone designation labels are properly identified.	☐	☐	☐
D	Where active and supporting field devices are utilized, device labels correspond with actual field location.	☐	☐	☐
E	Common trouble signal operates.	☐	☐	☐
F	Visual indicator test (lamp test) operates.	☐	☐	☐
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.	☐	☐	☐
H	Alarm signal silence visual indicator operates.	☐	☐	☐
I	Switches for ancillary functions operate as per design and specification.	☐	☐	☐
J	Ancillary functions visual indicators operates.	☐	☐	☐
K	Manual activation of alarm signal and indication operates.	☐	☐	☐
L	Displays are visible in the installed location.	☐	☐	☐
M	Operates on emergency power.	☐	☐	☐
N	Visual indicators comply with Table 3 – Visual indicators Colour Code	☐	☐	☐
O	Multi-line sequential display operates as per Appendix C5.9 (Annunciators or Sequential Displays), where utilized.	☐	☐	☐
Recommended Additional Testing (Not Mandated in the Standard) – FOR OUTDOOR INSTALLATIONS				
Rating of Enclosure: ☐ CAT 3 ☐ CAT 3R ☐ CAT 4 ☐ Other:				
Interior free of dirt or evidence of moisture (no corrosion)?		☐	☐	☐
Is the installed heater compatible with the enclosure? ☐ 24VDC ☐ 24VAC ☐ 120VAC		☐	☐	☐
Is voltage present at the ☐ heater ☐ thermostat terminals?		☐	☐	☐
Disconnect means on a separate circuit?		☐	☐	☐
Disconnect means identification – Panel and Circuit Number:				
Internal environment supervised by the fire alarm control panel? ☐ Temperature ☐ Power		☐	☐	☐
Low voltage transformer of the correct size and rating as per the manufacturer's instructions?		☐	☐	☐

Date:		Address:	
Building Name:			

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

32.10 ANNUNCIATORS OR SEQUENTIAL DISPLAYS

If the fire alarm system DOES utilize remote annunciators, complete 32.10 for each annunciator or sequ;eential display.

Annunciator/Sequential Display Location:

Annunciator/Sequential Display Identification:

		Yes	No	N/A
A	Power "on" indicator operates.	☐	☐	☐
B	Individual alarm and supervisory input zone designation labels are properly identified.	☐	☐	☐
C	Where individual devices are also annunciated confirm the individual alarm and supervisory indications are properly identified.	☐	☐	☐
D	Where active and supporting field devices are utilized, device labels correspond with actual field location.	☐	☐	☐
E	Common trouble signal operates.	☐	☐	☐
F	Visual indicator test (lamp test) operates.	☐	☐	☐
G	Input wiring from control unit or transponder is supervised.	☐	☐	☐
H	Alarm signal silence visual indicator operates.	☐	☐	☐
I	Switches for ancillary functions operate as per design and specification.	☐	☐	☐
J	Ancillary functions visual indicators operates.	☐	☐	☐
K	Manual activation of alarm signal and indication operates.	☐	☐	☐
L	Displays are visible in the installed location.	☐	☐	☐
Recommended Additional Testing (Not Mandated in the Standard) – FOR OUTDOOR INSTALLATIONS				
Rating of Enclosure: ☐ CAT 3 ☐ CAT 3R ☐ CAT 4 ☐ Other:				
Interior free of dirt or evidence of moisture (no corrosion)?		☐	☐	☐
Is the installed heater compatible with the enclosure? ☐ 24VDC ☐ 24VAC ☐ 120VAC		☐	☐	☐
Is voltage present at the ☐ heater ☐ thermostat terminals?		☐	☐	☐
Disconnect means on a separate circuit?		☐	☐	☐
Disconnect means identification – Panel and Circuit Number:				
Internal environment supervised by the fire alarm control panel? ☐ Temperature ☐ Power		☐	☐	☐
Low voltage transformer of the correct size and rating as per the manufacturer's instructions?		☐	☐	☐

Date:		**Address:**	
Building Name:			

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

32.11 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.	☐	☐	☐
B	Visual trouble signal operates.	☐	☐	☐
C	Audible trouble signal operates.	☐	☐	☐
D	Audible trouble signal silence operates.	☐	☐	☐

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

32.12 Printer Test

Printer Location:
Printer Identification:

		Yes	No	N/A
A	Operates as per design and specification	☐	☐	☐
B	Zone of each alarm initiating device is correctly printed.	☐	☐	☐
C	Rated voltage is present.	☐	☐	☐

Date:		**Address:**	
Building Name:			

32.13 Ancillary Device Circuit Test					
Identify Ancillary Circuit and Device	Ancillary Circuit is Powered by:		Operation of Ancillary Circuit Confirmed		
	FACU	Other (Specify)	Yes	No	Confirmation Method (See Annex A, A22.10)
	☐		☐	☐	
	☐		☐	☐	
	☐		☐	☐	
	☐		☐	☐	
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	☐		☐	☐	
	☐		☐	☐	
	☐		☐	☐	

*FACU - Fire Alarm Control Unit
Note: The tests reported on this form may not include the actual operational test of ancillary devices except when noted in the Confirmation Method column.

Date:		Address:	
Building Name:			

No Interconnection to a Fire Signal Receiving Centre has been provided. ☐ (This Section is Not Applicable)

32.14 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.	☐	☐	
B	Receipt of the alarm transmission to the fire signal receiving centre.	☐	☐	
C	Confirm that the supervisory transmission to the fire signal receiving centre is received.	☐	☐	☐
D	Confirm that the trouble transmission to the fire signal receiving centre is received.	☐	☐	☐
E	Disabling or disconnection the fire signal receiving centre transmitter results in a specific trouble signal at the control unit or transmitter and also transmits a trouble signal to the fire signal receiving centre.	☐	☐	☐
F	Disabling or disconnecting the fire signal receiving centre transmitter transmits a trouble signal to the fire signal receiving centre.	☐	☐	☐
G	The contact information of the fire signal receiving centre is: Company: Address:			

Optional Additional Information (not mandated by the Standard):	Yes	No	N/A
The communicator installed in accordance with CAN/ULC-S561-13.	☐	☐	☐
The fire signal receiving centre is ULC Listed.	☐	☐	☐
The fire signal receiving centre ULC certification number is:			
The communicator is being tested in accordance with CAN/ULC-S561-13. Supporting documentation attesting to this is on site and has been reviewed.	☐ ☐	☐ ☐	☐ ☐
The ULC "Central Station Fire Protective Signalling Service" Certificate is valid.	☐	☐	☐
The ULC "Central Station Fire Protective Signalling Service" Certificate expires on:			
The last inspection noted on the Certificate occurred on:			
The communicator has been reset following completion of testing.	☐	☐	☐
The communicator is trouble free.	☐	☐	☐
The communicator has been placed back into service.	☐	☐	☐

33.1.1 The following notes apply to 33.2, Individual Device Record:

1. Smoke detector sensitivity reading confirmed by the control panel or measurement obtained through testing to be recorded in the remarks column.
2. Smoke detector cleaning or replacement date to be recorded in the remarks column.
3. Status change, including time delay, to be recorded in the remarks column. Refer to A3.78 and Annex E.
4. Duct smoke detector pressure differential to be confirmed and recorded in the remarks column.
5. Transport time of air sampling type detector to be confirmed and recorded in the Readings Column.
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. Record and identify the specific ancillary devices in the "Remarks" column (if individually tested).
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. 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".
11. Identify type and function of each supporting field device in the "Remarks" column.
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 "Comments".
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.
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.

26. *REMARK* - additional details specific to the device or function being tested, such as:
    i. Measured sensitivity of smoke detector;
    ii. Measured air differential pressure of duct smoke detector;
    iii. Measured mechanical delay of water flow switch; or
27. Measured transport time of aspiration smoke detector.

Caution: The tests reported on this form may not include the actual operational test of ancillary devices unless otherwise noted.

Date:		Address:	
Building Name:			

33.1 Field Device Testing - LEGEND

Device	Description	Type	Model Number
	Manual Initiating Devices		
M	**Manual** pull station		
MAS	**Manual Abort Station**		
	Automatic Fire Detection Devices		
HT	**Heat Detector**, restorable or non-restorable, fixed temperature (9)		
RHT	**Heat Detector**, restorable, **rate-of-rise thermostat** (9)		
S	Ionization **Smoke** detector (9)		
	Sensitivity Test Method (or Test Equipment Model/Method):		
	Manufacturer's Sensitivity Test Range:		
PS	**Photo-electric Smoke** detector (9)		
	Sensitivity Test Method (or Test Equipment Model/Method):		
	Manufacturer's Sensitivity Test Range:		
DS	**Duct Smoke** detector (9, 29)		
	Sensitivity Test Method (or Test Equipment Model/Method):		
	Manufacturer's Sensitivity Test Range:		
MC	**Multi-Criteria** type detector (specify detection types) (9)		
	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** (29)		
FPS	Sprinkler **Flow Pressure Switch** (29)		
TS	Sprinkler valve supervisory **Tamper Switch**		
LA	**Low Air** supervisory device (6)		
LT	**Low Temperature** supervisory device (7)		
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**		
SSS	**Suite Silencing Switch**		
V	**Visual** alarm device (specify strobe type or corridor indicator)		
SP	Cone type **Speaker**		
HSP	**Horn Type 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**		
EM	**Fault Isolator**		
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** (8, 12)		

Date:		Address:	
Building Name:			

33.2 Individual Device Record

"✓" Yes - Acceptable "X" No – Unacceptable (Explain NO answers in comments and list *Deficiencies* on page two) "Dash" - Not applicable

Device Location	Annunciation Label or LCD Text Displayed (if applicable)	Device Type	Requires Service, Repairs, Cleaning or Missing	Circuit Number or Address	Annunciated Fire Zone	Correctly Installed	Additional Readings (Remarks)	Alarm / Operation Confirmed	Annunciation Indication Confirmed	Supervision of Wiring or Device Confirmed	Comments

Date:		Address:	
Building Name:			

33.2 Individual Device Record

"✓" Yes - Acceptable "X" No – Unacceptable (Explain NO answers in comments and list *Deficiencies* on page two) "Dash" - Not applicable

Device Location	Annunciation Label or LCD Text Displayed (if applicable)	Device Type	Requires Service, Repairs, Cleaning or Missing	Circuit Number or Address	Annunciated Fire Zone	Correctly Installed	Additional Readings (Remarks)	Alarm / Operation Confirmed	Annunciation Indication Confirmed	Supervision of Wiring or Device Confirmed	Comments

Date:		**Address:**	
Building Name:			

33.3 SUBSEQUENT ALARM (ALARM RESOUND) CONTROL PANEL TEST SHEET

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

Initial Fire Alarm Input Zone Test Location	Field Device Label	Subsequent Alarm Activation Test (Following Alarm Singal Silence)	Field Device Label	Alarm Signals Remain Silent	
Identify NBC Zone Designation Where Initial Firer Alarm Condition Was Activated	**Identify fire alarm device used to initiate fire alarm signals activation**	**Identify NBC zone designation where subsequent fire alarm device was activated following alarm signal silence.**	**Identify subsequent fire alarm device activated in same NBC zone following signal silence.**	**Yes**	**No**
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐
				☐	☐

Note: If signals re-activated following signal silence resulting from a fire alarm device located in the same NBC fire alarm zone, this is a deficiency which must be recorded in Section 28.2, Deficiencies.

Date:		Address:	
Building Name:			

33.4 CIRCUIT FAULT TOLERANCE TEST SHEET

"✓" Yes - Acceptable "X" No – Unacceptable (Explain NO answers in comments) "Dash" - Not applicable "P" - Passed Test "F" - Failed Test

Circuit Fault Test Location	Type of Fault Tested			Isolation Results	Non-Faulted Circuit Location	Test Result
Identify Device Location where circuit fault was introduced and description of affected NBC Fire Alarm zone or area	Short	Open	Grnd	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	Pass or Fail (P / F)
	☐	☐	☐			
	☐	☐	☐			
	☐	☐	☐			
	☐	☐	☐			
	☐	☐	☐			
	☐	☐	☐			
	☐	☐	☐			
	☐	☐	☐			
	☐	☐	☐			

Date:		**Address:**	
Building Name:			

33.5 SIGNALLING DEVICE SOUND LEVEL MEASUREMENT

(Reference: Clause 5.10.1-C)

Zone	Location/Description	Ambient dBA	Alarm dBA	Remarks

Remarks/Comments

Date:		**Address:**	
Building Name:			

Additional Comments / Observations