AMA Regional SCO Meeting Minutes

Building, Fire, Electrical, Plumbing, Gas & Private Sewage

Grand Prairie

Friday, October 14, 2016
8:30 am – 4:00 pm
Coca Cola Center
KMSC Law Meeting Room A & B

Facilitators

Geoff Brownlie,
Senior Building Inspector, AMA
Stephanie Martin,
Building Inspector, AMA

Minutes

Safety Codes Council Updates

Orders & Variances
  - Council developing a website with a template for submissions
  - Anticipating 2017 for the full launch of the system

Question: Is there a concern with APEGGA or other organizations and the transfer of information or plans that could occur through the site?
Answer: The registry’s security features protect the information that is entered into the registry. Orders and variances in the registry (along with any uploaded files) can only be accessed by the SCO who created them, the accredited organization’s authorized user (for example, the QMP Manager), Technical Administrators at Municipal Affairs, and the Council.

Act Project
  - The Council is looking at developing an automatic tracking system for users to upload personal information like training points etc.
  - There is a 2 year development timeframe for the system so they are looking at an operational system the end of 2017, beginning of 2018.

Question: When will the Professional Development Program be implemented? SCO’s have been expecting this to be implemented in 2017, but now we are hearing that it will not make this date.
Answer: The target for implementing the Professional Development Program is mid-2018. It will not be launched at the same time as the new management system—the management system will be implemented first to allow for some time to work out any kinks and for SCOs to become familiar with the system before they start using it to track their professional development activities.

Allison Karch,
Safety Codes Council
**Municipal Government Act and Safety Codes Act**

- The GoA is trying to build better working relationships with other municipalities and legal government services.
- For any permit application, the first question that should be asked by the SCO is if a development permit has been approved.
- A partnership between Development and Building will provide overall long-term considerations like
  - development on floor plains,
  - erosion risks,
  - availability of potable water supplies,
  - groundwater concerns,
  - aggregate water supplies, and
  - development of pipelines
- Land Use Bylaws provide orderly economic development, maintain quality of the environment, and implement policies for statutory plans.
- There is no legislation which requires a development permit to be in place before a permit is issued, but it would be a better practice to ask the question before it becomes an issue, and build communication links between the two areas of legislation.

**Administrative Penalties**

- anticipate a start date for the program of December 1, 2016
- will be a phased implementation
- The system will work as a partnership between AMA and the local SCO
  a) SCO does the research and provides the information to AMA
  b) AMA will review the application and determine result
- Possible concerns which could be addressed are:
  a) sale of noncertified equipment
  b) no permit in place and building occupied before authorization
  c) non-compliance to orders and regulations
- Role of GoA vs SCO
- Factors
  a) severity of concern
  b) risk of harm
  c) history in place
  d) degree of negligence
- applications cannot be made for old closed files
- Applications must be for current open files, where the concern is still open and applicable
- Applications can use old closed files as part of the case history
- Appeals must be applied for within 30 days
- AP’s will be open to all areas within AB (municipalities, Agencies, accredited corporations, and non-accredited areas etc.)

**Fire Alarm Monitoring as per ULC S561**

- There are new certificates in place for systems in Alberta as of November 1, 2015. The new certificates will apply for all systems and should be posted at the site. *(see attached notes)*
- Burglar alarms are not certified to the same standard, and may have a different
fire transmitter

- A letter stating compliance to the standard is not acceptable. Only the certificate can provide confirmation that a system is acceptable.
- The ULC website has a list of the monitoring and installer companies who have been certified by UL. Please contact Brian McBain directly if you require additional direction @ 1-800-595-9844, Press 1 then 4, or by email at brian.mc Bain@ulc.com
- Monitoring stations do not have to be local, however the standard requires that should a problem arise, a technician must be able to respond and be on site within 4 hours. This may cause some concern for rural areas in AB
- ULC-S559 compliance is for the signal transmitting unit.
- An Active system is always talking to the system.
- A passive system only talks when there are problems
- Digital phone service – committee currently looking to permit these systems in AB, will possibly become an amendment to the standard next year.
- There is an exception to the requirements of the standard – Where no cell service or internet are not available or not reliable, the system can use two phone lines for service.

Overview of Safety Services Discussion Feedback

- AMA and the Council seem to keep lowering the bar for BSCO qualifications. How are we going to get qualified people?
- Better and timelier communication from the Council and AMA to SCO’s. SCO’s feel left in the dark compared to other industry partners like Builders who have the CHBA.
- Could there be an on-line training option, but still provide the written course information. SCO’s still want and need written information for future reference.
- Is there an option for courses or meeting such as the Regional Meetings to be offered through a webinar format?
- Can practical training courses be developed for BSCO’s which will aid them in doing plan reviews and site inspections?
- Can training be developed for industry / homeowners / municipalities ie electrical installations etc.?
- Is there a system in place to address complaints regarding municipalities who are not being accountable under the SCA. ie don’t require permits etc.
- Education is lacking for everyone.
- Can AB look at putting together a Builders Association licencing program?
- Can AMA/the Council do more for awareness of the SCO profession
  - speak to 4th year apprenticeship programs
  - WCB, as a re-qualification as an SCO when they cannot do the trade anymore
- Fees of $100 to determine if a person has the necessary entry level qualifications is deterring people from looking into becoming an SCO. Can this be reviewed?
- New Home Buyer Protection Department – Could the letter provided by NHBP clearly identify which officer is signing the letter? It is difficult to read the signatures.
- Can it be clearly identified where jurisdiction lies? ie an accredited corporation starts a new site in a municipality, who has jurisdiction? Is there a template on what information should be included in the letter, and can this be something

David Ramsay,
AMA
Allison Karch,
Safety Codes Council

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ADJOURNMENT ***
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Concurrent Break-Out Session - Building

Friday, October 14, 2016
1:00 pm – 4:00 pm

KMSC Law Meeting Room A

Facilitator

Fire Safety Plans & SCO Authority
- Construction fire safety plans now required as directly by AMA Standards
- Building SCO has an obligation to require a fire safety plan where the Fire SCO is not available.

Updates from Municipal Affairs

Barrier-Free Relaxation form
- SCO to fill out the form, applicant to include the form with the barrier-free relaxation application.

Garage wall construction
- The tables in 9.25 are no longer applicable once 9.36 is in place. Once this happens, there are no longer any specified minimum RSI values provided for a heated garage, and the 06 STANDATA is no longer applicable.

Question: What RSI value is required for attached garage walls?
Answer: The wall(s) between the house and an enclosed attached garage is required to be constructed and meet the same requirements as the remaining exterior house walls, and shall include an appropriate air barrier and the minimum RSI values provided in Table 9.36.2.6.A or Table 9.36.2.6.B, but are permitted to be reduced by an RSI value of 0.16 under sentence 9.36.2.4(4).
The exterior walls of an attached garage are also required to be provided with the appropriate building envelope assemblies required within 9.36, and include thermal insulation meeting the requirements set out in Tables 9.36.2.6.A or Table 9.36.2.6.B, whichever is used for the design of the house. Detached garages whether heated or unheated, do not fall under the scope of 9.36 as these buildings are not required to be conditioned spaces.

Insulation and Hot Water Piping
- There appears to be a difference in the requirements for the insulation of hot water tank piping within the ABC Section 9.36, and the requirements within the 2011 NECB.
- The ABC legislates that insulation is required for the first 2 metres, while the NECB appears to have an exception for dwelling units, and does not require the insulation on systems other than suction-line piping of direct expansion.
Question to pose to NRC: Why is there a difference?
Answer: Awaiting a response. Information will be provided at future meetings.

R Value vs U Value - No additional discussion

Combustion Air for Appliances
- There have been many situations where industry is having concerns with vents freezing. Industry has asked if they can install a combustion can and draw from the furnace room rather than drawing directly from the exterior.
- If this type of installation is done, every exhaust appliance is then required to provide make up air for the device.

Commercial Kitchen Exhaust and Make Up Air
- The scope of Section 9.32 is specific to the requirements for the ventilation of rooms and spaces in residential occupancies. Kitchens designed and installed in any other occupancy must be designed according to Part 6. Within part 6, the ventilation of commercial cooking appliances and the requirements for make-up are legislated.

Conditioned Space vs Unconditioned Space
- Conditioned space requires the temperature of the space to be controlled through heating or cooling over substantial portions of the year.

Application of Energy Requirements to Secondary Suites
- Section 9.36 would only be applicable to items which were not part of the original construction of the home.

Farm Buildings
- Personal storage is not something that would fall under the definition of a use permitted within a farm building.

Plan Reviews and Permit Conditions
- Noting deficiencies identified during a plan review provides the SCO with the opportunity to reference these deficiencies when writing an order. Not meeting the permit conditions is an offense under the SCA.

Radon Mitigation
- A collection pot such as a sump pit or even an open area in front of a solid pipe can make a huge difference in the air flow under a slab, achieved by a fan. However, this pit does not negate the need for gravel under the slab.

School Washrooms
- Gender neutral washrooms must be constructed to meet the minimum construction requirements, and include walls and doors to meet privacy concerns.

Secondary Suite Exits
- Exiting through an attached garage would not meet the intent of the ABC and the definition of an exit.
Sprinkling of Crawl Spaces
• Required within the ABC, and not excluded within NFPA 13.

Pull Station Update
• No additional discussion

Bedroom Egress Windows
• The exemption within the ABC under 9.10.15.4.(3)&(4) for egress windows to be excluded from the 50% area requirement, also includes an exemption for these egress windows to be excluded from the 2 m clearances specified in sentence (4) as well.

Firewall Construction
• There have been a couple assemblies which have been approved in other provinces which include combustible elements.

**Question:** The discussion brought forward the question on if an SCO could approve a combustible element in a firewall through an Alternative Solution proposal?
**Answer:** The wording of the ABC and the STANDATA for 2 Hour Firewalls each legislate that 2 hour firewalls are to be constructed of non-combustible materials. Combustible components should not be included in assemblies which are being proposed as firewalls.

**Question:** If AB is harmonizing with the NBC, will the same opinion of the GoA remain, or will AMA change the thought process to be in line with the other provinces and the NRC?
**Answer:** This question is being reviewed by the CBA. Updates will be provided at the next meeting.

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Concurrent Break-Out Session - Fire

Wednesday October 14, 2016
1:00 pm – 4:00 pm

KMSC Law Meeting Room B

Facilitators

Tina Parker,
Fire Technical
Advisor, AMA

Tom Harnos,
Field Officer,
AMA

Minutes

Discussion Topics / Questions

1) How do we treat the “tow” behind BBQ’s and open air BBQ’s on a mobile deck?

Other than ensuring there are spatial distances between the BBQ’s and any combustible products/structures, the propane cylinder is certified and the maintenance of the BBQ appears to be clean and maintained, there is nothing under the AFC that would require these types of food vendors to have a fire suppression system. Fire extinguishing device (i.e. fire extinguisher) should be in close proximity to the BBQ.

2) Easy Rock – interior applications:

http://www.easyrock.biz/support/ratings-certifications

The question was, has anyone seen this product being used on the inside of restaurants and does anyone have any information on it.

Intertek Canada's information:

All products certified through Intertek may be found on their website: http://www.intertek.com/building/ under Building Products (bottom screen, right side of page) https://whdirectory.intertek.com/Pages/DLP_Search.aspx
Select the company name and it will take you to the product and the standard in which it was certified to.
Easyrock is certified to ULCS102-2007 Surface Building Characteristics of Building Materials and Assemblies.

3) Any municipalities allowing the use of private dry hydrants?

Consensus was most municipalities do not allow for a private dry hydrant nor would any FD’s draft from them.
4) Is there a recognized product(s) for spray foam applications? Municipal Affairs does not endorse products, however, the following are products that have supporting documentation that indicates they meet a 2hr fire resistance rating:


Hilti CP660
https://www.hilti.ca/medias/sys_master/images/hb0/919627002398/firestop.pdf

5) Are we aware of anyone in the insurance industry that will void insurance if a business does not comply with fire code requirements (i.e. failing to get their annual inspection done on their fire suppression over their deep fat fryer and there is a kitchen fire or failing to get their kitchen exhaust cleaned by a recognized cleaning exhaust company)?

We reached out to one of our contacts in the insurance industry and they provided the following response:

Property wordings can have a Property Protection Systems clause in them that requires the client to advise of any interruption to or flaw in any sprinkler system, fixed extinguishing system, or fire detection system. If the case set a precedent or there was a trend, then an article might be posted in magazines such as Canadian Underwriter.

http://www.canadianunderwriter.ca/

He was not aware of any incidents within the province of Alberta. Typically a denied claim is a private matter between the client and the insurer. In the event the insured disputes the claim and they proceed to court, such proceedings can become public and are searchable.

6) Phil Acklands Training Course.

http://www.philacklandtraining.com/

   a. Who offers the program and provides the training in Alberta?

      The 5 day program is only offered out of Fort Worth Texas. All other courses are on-line.

   b. Who audits this program?

      The Chief Fire Administrator (CFA) works with and approves training for commercial cooking exhaust systems. If there are any issues with this program or members working in the industry that have taken this program, SCO’s may contact the CFA with their concerns.
2.2.4. Qualifications

2.2.4.5. Commercial Cooking Equipment Exhaust Systems
1) Only qualified persons shall perform maintenance on commercial cooking equipment exhaust systems when they have obtained a certificate verifying they have completed an approved course of training in duct-cleaning procedures.

7) Tele-warrants:

The process has been set and approved, but with the OFC that is yet to be tested. The suggestion was made that any municipality was at a point of using a tele-warrant they could share their challenges and successes with the group. The Tele-Warrant information is laid out in the Safety Codes Act section 48.1, but the “playbook” or steps are not. Can that loop be closed and a step by step process with applicable form be put together and made available to everyone.

8) Food Trucks:

There was an ask for a set of provincial standards for food truck operations/guidelines that municipalities could follow and build their own requirements/bylaws, they are looking forward to Kevan Jess's updated (hope to be a STANDATA, possible using the new NFPA 96 standards) on food trucks.

9) Fire SCO Scope of Practice:

Concerns were brought up about the proposed changes to the scope of practice to safety codes officers (fire), what those changes will be and how it will be delivered.

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Concurrent Break-Out Session - Electrical

Wednesday October 14, 2016
1:00 pm – 4:00 pm

Norbord Meeting Room

Facilitator

Clarence Cormier, Chief Electrical Administrator,AMA

Minutes

STANDATA Presentation by Clarence

1. STANDATA Presentation by Clarence

2. Powerpoint Presentation (first 23 slides) by Clarence
   - PV requirements
   - AFCI requirements
   - Mud Tanks
   - Branch circuit loading
   - Farm Services
   - Bonding 2 or more buildings
   - Engineers and Variances

3. Info All
   - Clarence is part of the working group for the 2018 CE Code and section 10 is currently being rewritten, possibly adding single point utility ground.
   - Retrofit to luminaires with recertification, contractors are leaving unnecessary parts in fixtures i.e. fluorescent ballast.
   - Table 39 cannot be used when there is a service disconnect. Use Table 2 and 4 from service disconnect to panel.
   - SCC says only utility companies can have Group B SCO’s
   - If Utilities installing street lights to the utility code on private property, they need to be rewired to the CE Code
   - Apprenticeship and Industry Training, when they come to a site to check trade tickets they consider it a conflict of interest for their inspector to be the same trade as the trade they are inspecting. I.e. an electrician to check electrician tickets is not allowed, it could be a plumber or hairdresser checking a electricians tickets.
   - A disconnect is not needed when the inverter connects right to the breaker on a PV system.
   - Calgary unofficially officially will be changing its requirements for
AFCI in detached garages.
- Issues with light switches tripping AFCI
- Bathroom receptacles that are not located 1m from wash basin require AFCI protection.

INFO ALL
- The above presentations were the basis for discussions that went 30 minutes overtime.
- Attendees were very receptive and engaged.
- Clarence is part of the working group for the 2018 CE Code and section 10 is currently being rewritten, possibly adding single point utility ground.
- Table 39 cannot be used when there is a service disconnect. Use Table 2 and 4 from service disconnect to panel.
- SCC says only utility companies can have Group B SCO’s.
- Calgary unofficially officially will be changing its requirements for AFCI in detached garages.

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Concurrent Break-Out Session - Plumbing, Gas & Private Sewage

Wednesday October 14, 2016
1:00 pm – 4:00 pm

Hockey Legends Lodge

Facilitator

Minutes

Discussion Topics - INFO ALL

- Discussed AMOS power point Presentation.

- Plumbing 2.2.10.7 Temperature control valve on fixtures. Plumber will adjust hot water tank dip switch higher but not reset fixture valves. That would be the plumber call, not able to control.

- Plumbing 2.6.1.9(1) and appendix. Water hammer arrestor on quick closing valves and if AHJ permits a expand tank in rural application will do.

- Plumbing: Land Developer will only bring ¾ poly pipe to property line. The code does not deal with the public main. 1.1.1.1 Application of Code. See water distribution system definition.

- PSDS
  Easements and subdivision application with an existing open discharge system. 7.1.1.2(7)e

  Municipal planner rule subdivision could proceed. If this SOP article was brought to the attention of the development department, the SCO duty is completed unless it was a safety concern.

ADJOURNMENT ***

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CAN/ULC-S561
To comply, or not to comply....actually it’s not even a question!
By Frank Donati, Brian McBain & Al Cavers

CAN/ULC-S561, Installation And Services For Fire Signal Receiving Centres And Systems is without a doubt one of the most misunderstood standards in the lexicon of the ULC SS00 Series of Fire and Life Safety Standards. Simply stated, CAN/ULC-S561 promotes reliable fire alarm monitoring. This standard has been a Code requirement in Canada for over 10 years and yet every day Authorities find non-compliant systems and ULC, along with organizations like the Canadian Fire Alarm Association (CFAA), field daily inquiries about in conformity to, listing of, requirements for and understanding of CAN/ULC-S561. This article will endeavor to provide for a better understanding of this Standard, its place and requirements, in fire and life safety systems.

Why is it important?
In Canada, fire alarm system installations are required to meet the intent of the applicable National or Provincial/Territory Building Code. The Codes require that signals to the Fire Signal Receiving Centre are received and disposed of in a uniform manner.

NB: For this article, the National Model Codes 2010 shall be referenced.

The CAN/ULC-S561 Standard covers:
- Construction, operation, installation, inspection and tests applicable to fire signal receiving centres for fire protective signaling services utilizing fire signal receiving centre facilities and satellite centres and bridging centres;
- Construction and operation of a proprietary fire signal receiving centre; and
- Installation, inspection and tests applicable to a fire signal transmitting unit and its field device inputs at the protected premises.

Fire signal receiving centres come in two defined types; a Signal Receiving Centre and a Proprietary Fire Signal Receiving Centre. What’s the difference? A Signal Receiving Centre is a facility that receives alarm signals and at which trained personnel and service persons are on duty at all times.

- Think normal commercial businesses like an ADT or Chubb Edwards - these involve the monitoring of multiple properties and/or for multiple owners.

A Proprietary Fire Signal Receiving Centre is a facility, operated by the owner of the protected premises in which services encompassed in this Standard are monitored at all times by trained personnel.

- Think Specific business or facility with one owner, often having multiple sites and no third party monitoring. These are often Hospitals or Universities with large multi-building campuses with their own in-house policing/security service that can provide 24/7 monitoring. Also some national retail chains will provide their own monitoring of their facilities.

Codes and Standards
The National Model Codes govern the requirements for signals to the fire department, for new buildings it’s the National Building Code of Canada (NBC) and for existing buildings is the National Fire Code of Canada (NFC). The occupancies that are generally required to have CAN/ULC-S561 compliance are:

For Single Stage Fire Alarm System
- Group A - Assembly Occupancy - >300
For Two Stage Fire Alarm System

- All Occupancies at the Alert Stage initiation

All Occupancies with a Fire Alarm System that includes Water-flow devices

Note: Certain jurisdictions have added additional occupancies to these requirements.

Note: Alberta requires the owner of a building to provide evidence of compliance to the AHJ by means of a Fire Protective Signaling Certificate from a certified listing agency. This certificate must show the address of the building, the listed fire alarm installation company and the listed fire alarm monitoring company. The ULC Fire Protective Signaling Certificate Program meets these requirements.

The fire monitoring service for a building fire alarm system is mandated in Canada in the NBC Division B, 3.2.4.8 (4) and in the NFC Division B, 6.3.1.3. Further Code references for fire alarm monitoring service and CAN/ULC-S561 conformity are made through three other Code referenced ULC fire alarm standards.

1. CAN/ULC-S524, Standard for Installation of Fire Alarm Systems which is referenced at NBC Division B, 3.2.4.5 (1) has as its last enforceable clause:
   - 5.15.1 (CAN/ULC-S524) - The interconnection wiring from the fire alarm control unit or transponder to the fire signal receiving centre shall comply with CAN/ULC-S561, Installation and Services for Fire Signal Receiving Centres and Systems.

2. and CAN/ULC-S537, Verification of Fire Alarm Systems in NBC 3.2.4.5.(2) contains within it the following:
   - CAN/ULC-S537-04 Appendix C2 (G) - Documentation to include the name and number of the Fire Signal Receiving Centre (CAN/ULC-S561), and the And the latest edition of CAN/ULC-S537-13, has expanded this section to impart the importance on fire monitoring:
     - (CAN/ULC-S561-13) NOTE: This standard presupposes that, where provided, the interconnection from the fire alarm control unit or transponder to the fire signal receiving centre shall comply with CAN/ULC-S561, Standard for Installation and Services for Fire Signal Receiving Centres and Systems. (Refer to Items A to I in Appendix C5.13, Interconnection to Fire Signal Receiving Centre.)

3. And CAN/ULC-S536, Inspection and Testing of Fire Alarm Systems in NFC Division B, 6.3.1.2.(1)

The key take away here is that the fire alarm system monitoring is an extension of the fire alarm system, hence similar installation methods, and carries the same importance for installation and maintenance as the fire alarm system.

Fire Monitoring System

So, what is a fire monitoring system? It is a Fire alarm system or a sprinkler riser that is connected to a fire alarm transmitter for the purposes of transmitting fire alarm conditions from the protected property to a fire signal receiving centre in order to dispatch the correct responding authorities.
All 3 parts are required to make up a compliant system. This article focuses is on Fire Signal Receiving Centres but will touch on the installation and periodic testing for them.

**Signal Receiving Centre vs. Proprietary**

There are two types of Fire Signal Receiving Centres (FSRC) as defined earlier in this article and CAN/ULC-S561 outlines how to construct, secure, equip and operate each of these types of Centres.

**Fire Signal Receiving Centre**

Is a facility that receives alarm signals and at which trained persons are on duty at all times. This facility must consist of the following:

- Facility with 2hr. Fire rating
- Signal receivers, station automation computer
- Dedicated Power Source
- Back-up systems which include – Telephone back-up, generator, Uninterrupted Power Supply Units (UPS)
- Security Vestibule- Interlocked Doors where only one can be opened at a time by the alarm room operator.
- CCTV Camera System and intercom
- Early warning fire protection system
- Fire Extinguishers
- Buddy System – as in back up alarm centre
- Trained staff to handle and dispatch alarms – 24hrs a day/7 days a week
- Contingency Plan – for unforeseen disasters – natural or man-made

Fire Signal Receiving Centres receiving the following alarms or notification from the fire alarm system

- Fire Alarm
- Fire Trouble
- Fire Supervisory
- AC Fail
- Communication Failures

**Proprietary Signal Receiving Centre**

Is a facility that is operated by the owner of the protected premises in which services encompassed in this Standard are monitored at all times by trained personnel. The owner of the property monitors and maintains its own premise. Examples again include - universities, hospitals, Walmart, Target. These facilities must consist of the following:

- 2 hour fire separation.
  - Exception- 1 hour only if the building is sprinklered.
• Single locked door
• Owner will provide Staffing 24/7
• Owner usually provides installation and maintenance on the protected premises.
• Owner usually provides a runner service.

Also the installations at the protected buildings can be proprietary fire alarm equipment or off the shelf fire alarm transmitters.

**Installation of a Fire Alarm monitoring system**

Although there are differences between an FRSC and a Proprietary system regarding the physical centres themselves, the installation of a CAN/ULC-S561 compliant fire alarm monitoring system at the protected premises are very similar. Both require:

- Transmitter that is CAN/ULC- S559
  (a Proprietary System is eligible to use CAN/ULC-S527 Compliant transmitter)
- Manufacturer’s Installation Instructions.
- Communication Channels
- Metallic raceway for interconnecting wires
- Supervision of circuits
- Installed as per CAN/ULC-S561
- Tested prior to occupancy

When it comes to the transmission of signals, CAN/ULC-S561 lays out the methods of communication for these systems. Communications can be Active or Passive. Active means that the channel between the fire alarm system and the alarm centre is continuously monitored so that any fault or failure that could affect signal transmission and reception is identified to the fire signal receiving centre. Passive means that it is not monitored but that incorporates dual or multiple communications. These dual or more channels create a communication system where the signal is transmitted through all channels and when acknowledgement through one is received, the other(s) will stop transmitting that signal. These channels also monitor each other for any faults and is tested every 24hrs.

Regardless of Active or Passive, the maximum time to receive a fire alarm signal from a protected premise is **60 seconds**, and this brings us to the requirements for accuracy of Signals.

All installed fire monitoring systems shall be properly programed to transmit accurate signals to the Signal Receiving Centre in order that the operators can quickly dispatch responding authorities. Therefore there can be no miscommunication of what is occurring at the system,

- Fire Alarm = Fire Alarm
- Fire Trouble = Fire Trouble
- Fire Supervisory = Fire Supervisory

and there can be no conflicting signals (i.e. Burglar alarm – there are provisions for a location to be both fire and burglar alarmed through the same transmitter but fire alarm signals ALWAYS take precedents over burglar).
It’s not just the transmitted signals that are required to be accurate for compliance with CAN/ULC-S651 but also that the Contact Lists for each protected premise is up to date, that the proper fire department phone numbers are recorded (and not just 911) and that there is no system of verification of fire alarm signals prior to notification of the fire service to respond. CAN/ULC-S651 provides for the disposition of signals as follows:

- maximum time to receive a fire alarm signal from a protected premise is 60 seconds,
- maximum time to contact the fire department is within 30 seconds
- maximum time to contact persons designated by the owner is within 5 minutes
- maximum time for Fire Trouble and Supervisory, Communications Troubles or Signal Transmitting Unit Troubles is to contact the owner within 5 minutes
- and that a service company/personnel is within 4 hours of the location to effect repairs.

A note on Standalone Sprinkler Risers

Standalone Sprinkler Risers that are monitored have the same time frame requirements but only transmit the following signals:

- Waterflow (alarm)
- Fire Trouble
- Fire Supervisory (pressure and gate valves)

As the communications systems of fire alarm systems are tested communication, active or passive, CAN/ULC-S561 lays out further required periodic testing which is also referenced in CAN/ULC-S536.

- Fire Alarm System - Annually
- Waterflow - Every two months
- Supervisory- Gate Valves, Pressure - Every Six months

How do you make sure all these requirements are met?

Compliance with CAN/ULC-S561 is not a simple matter of just checking off a box or two but rather involves a complete audit of both the Receiving Centre and the Fire Alarm Transmitter. Authorities Having Jurisdiction (AHJ), Property Owners and Alarm Companies all require the knowledge that the fire monitoring system as a whole is in compliance. The National Codes required that these systems to comply to the NBC/ NFC – Signals to the Fire Department by way of Fire Alarm Monitoring System in Compliance to CAN/ULC-S561 and that they shall provide a Certificate of Compliance attesting that the fire alarm monitoring system is in compliance to the applicable Standard for submission to the AHJ.

What kind of certificate to submit? There are two options,

1. A document that is acceptable to the Authority Having Jurisdiction. Your local Building Official for new construction/installation and your Fire Official for existing buildings/installations. Or


Companies that are certified to CAN/ULC-S561 can be found on our ULC Online Directory at http://database.ul.com/cgi-bin/XYV/template/LISCANADA/1FRAME/index.html

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and using the following ULC Category Codes:
DAYRC- CAN/ULC-S559-04 Equipment
DAYY- CAN/ULC-S561-04 – Shared Installation Co.
DAYIC - CAN/ULC-S561-03 – Shared and Full Service Fire Signal Receiving Centres

A Final Note
CAN/ULC-S561 is a vital component in the chain of Fire Alarm standards and is mandated by our Codes, yet is possibly one of the highest non-conformity issues with fire alarm systems that require monitoring. Although the National Codes have since 2005 explicitly required CAN/ULC-S561 conformity, for the upcoming 2015 National Codes ULC has submitted an Appendix Note to further clarify the interconnection between it and CAN/ULC-S524 Installation of Fire Alarm Systems so that Code users and enforcement authorities ensure complete conformance with Code requirements. The draft Appendix note submitted (and as of this writing not yet finalized by the Codes Commission) is:

CAN/ULC-S561, “Installation and Services for Fire Signal Receiving Centres and Systems,” which is referenced in Sentence 3.2.4.8.(4), and CAN/ULC-S524, “Installation of Fire Alarm Systems,” which is referenced in Sentence 3.2.4.5.(1), go hand-in-hand: conformity to CAN/ULC-S561 entails conformity with the fire alarm system components required in that standard. These components include fire alarm transmitter (signal transmitting unit), interconnections and communication path.

We hope you have a clearer picture and understanding of CAN/ULC-S561, its requirements and how it fits into our Codes and requirements for fire alarm systems. If any further assistance, interpretation, details or concerns are required, do not hesitate to contact either ULC Regulatory Services or Certificate Services below. The CAN/ULC-S561 Standard, along with any other ULC standards, can be purchased at the link below:

ULC Store: http://canada.ul.com/ulcstandards/aboutus/salesofulcstandardsmaterials/

ULC Regulatory Services
For additional information or questions ULC Regulatory Services is here to help.
Contact Brian McBain by email at Brian.McBain@ul.com or by Telephone at +1.613.751.3404 or
Pierre McDonald by email at Pierre.McDonald@ul.com or by telephone at: +1.780.419.3202

ULC Certificate Services
For additional information or questions to ULC Certificate Services you can reach them at +1.866.937.3852
Cheryl Cerqua ext 61224
Alan Cavers ext. 61207
Or via email at TRT.Certificate@ul.com

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CERTIFICATION BULLETIN 2014-02

UL ENHANCED MARK FOR CANADA

Products today must meet a diverse spectrum of certification and compliance requirements. On May 16, 2013, UL launched the enhanced Certification Mark to help the Authorities Having Jurisdiction (AHJs), manufacturers, retailers and consumers better understand the scope of certification for a given product. All currently existing versions of UL's Listing and Classification Marks remain valid and should continue to be accepted. This bulletin addresses visual identifiers of the enhanced Certification Mark in the Canadian marketplace.

This enhanced Mark is a modular design that acts as a singular identifier describing product’s scope of Certification, Country Code and unique identifier (also known as the UL file number). The enhanced Certification Mark utilizes the familiar “UL in a Circle” Mark as the central unique design element consistent to all UL’s marks to which the information module(s) are added. In compliance with the Standards Council of Canada CAN-P-1500-2013, clause 4.2.2, UL has introduced the “CA” Country abbreviation code provided in ISO 3166 to identify products evaluated to Canadian standards. As inspectors across the country are very familiar with the “c” at the 8:00 o’clock position, this bulletin is to provide some additional guidance regarding the enhanced Certification Mark’s use of the “CA” Country identifier.

The Marks Hub is UL’s official source of information about the enhanced mark and is free to use. We encourage you to utilize the resources there for the latest and most up to date information. For additional information or for answers to specific questions, please contact: Mr. Pierre McDonald, Senior Regulatory Representative
T: 780.419.3202, M: 780.236.0131, Email: pierre.mcdonald@ul.com

The following examples illustrate the enhanced Certification Marks and the “CA” Canadian Identifier. Country Identifiers will appear within the module right after the Attributes describing the scope of Certification.

Yours truly,

Underwriters Laboratories of Canada Inc.

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