AMA Joint Building / Fire Regional Meeting

TECHNICAL SESSION

Date: November 13, 2014
Location: County of Grande Prairie, Alberta
Facilitator: Geoff Brownlie, Senior Building Safety Codes Officer
AMA Field Technical Services
Minutes: Stephanie Martin, Building Safety Codes Officer
AMA Field Technical Services

MEETING MINUTES

09:00 Call to order and introductions.

New Agenda Items for Discussion
- New Home Warranty Inspectors
- Car plug-ins in SFD
- Smoke Detectors in all sleeping rooms
- Secondary suites with two panels – How can we interconnect the smoke alarms if there are two panels, against Canadian Electrical Code
- HVAC for secondary suites, new construction – Can we use a damper within the plenum to separate the ductwork?

Codes Update
- The Alberta Fire Code compilation is rumored to have been completed. The Alberta Building Code is looking to follow suit shortly. These codes must still be reviewed by cabinet, however they are anticipated as being ready for early 2015, possibly February March.
- The National Energy Codes Part 9 will be adopted as part of the 2014 ABC document; however they will not become enforceable until the following year. This section could be adopted and mirror the NBC, with some specific ABC amendments. We are not sure exactly how this will roll out.
- Barrier-Free requirements for the 2014 ABC will undergo some changes. There are a couple changes to about 9 specific articles; however reference to the CSA standard will not be brought in for this Code cycle.

Code Items for Discussion
Six Storey Construction
The question of how Calgary will be approving these buildings, without being referenced within the ABC has been brought forward. The City of Calgary has provided some information and some links on their website that provide access to documents from BC Housing, Canadian Wood Council, and the NRC, with respects to some research and testing that was done to answer the question of the feasibility of 6 storey combustible construction buildings. The basic premise behind the concept is that the building area does not exceed that of residential buildings already permitted to have combustible construction. However, some additional changes are also believed to be required like:
  a) fully Compliant NFPA 13 sprinkler systems,
b) non-combustible cladding,
c) revised maximum floor height from grade to the floor level of the uppermost storey of 18m,
d) a total building height to underside of roof of 20m, and
e) an enhanced fire safety plan.

Calgary will be reviewing each proposal for these buildings on an individual basis, through the use of an alternative solution. Calgary has looked at each of the issues, and reviewed the research that has been done by the above mentioned industry partners, and established a “base requirement” for each building. Calgary has also indicated that additional inspections by the engineer and/or the Building Inspector may be asked for. It is assumed that this role will be completed by both parties.

- It has been proposed that we should approach Calgary and ask if they would be willing to present at the next Regional Meeting or at the next ABOA or SCC Conference on their experiences and what they have learned.

**Water Supply**

There can be issues of inadequate water supply on sites, and the maintenance of that water supply of that installation. The review of the Code requirement for water, as per article 3.2.5.7. should be reviewed by the Building and Fire SCO before permits are issued. The next code cycle will provide some additional clarification on water flows and rates; however the issue of maintenance still has not been reviewed.

Quite often Fire Inspectors are having issues with incorrect fittings, or water supply after installation. We (Building and Fire) need to make sure that the water supply is a viable source, by all standards. Water supply should be addressed before occupancy of the building is imminent and should also include issues like fire department access, and testing to ensure adequate flow rates. Architects do not seem to acknowledge this as their responsibility, but again, communication between the Building and Fire SCO’s is very important. It would seem appropriate to have all development, and SCO’s review a project while it is in the planning stage.

- Taking issues like these should be brought forward through the BTC.
- A recommendation for a joint STANDATA or Information Bulletin on this topic has been proposed, to address the issue of maintenance of the water source, and the discipline responsible for providing this role.

**10 Minute Response Time**

Volunteer departments have not been able to prove that they are capable of meeting the 10 minute response time. For these areas, sprinklers, increased spatial separation or fire resistive sidewall construction would be some alternative options. There is a responsibility for the Building and Fire SCO to determine what areas do and do not meet the response time, and to better communicate the differing requirements for each.

The Alberta Building Code requirement for response however does not mandate that a city must provide additional fire-fighting apparatus or fire halls to ensure that the response time can be met.

**Rapid Damage Assessment Presentation – Kevan Jess**

A brief review of the previous disasters within Alberta was given – Slave Lake and High River. RASST and color coding was used in differing degrees in both situations. The Flood Team has been working on a proposal directed towards the development of a system to determine which buildings are safe, and which are not.
Incident Command System (ICS) training is recommended for all SCO’s so that they are aware of how the system and the hierarchy work. Ideally, every municipality would develop their own Municipal Emergency Management Plan (MEMP), which would address rapid damage assessment. The GoA is trying to develop a GIS system which can be used on iPads, or tablets, so that an electronic database can be developed, and provide updated, site specific information including pictures, site conditions, notes, and the RDA green, yellow or red label information. Rapid Damage Assessment (RDA) would provide an initial assessment of the property and would not include detailed inspections of the structures. The system is designed as a quick 10 minute review. The main purpose of an RDA is to help people get back into their homes, rather than being restricted to emergency shelters and temporary housing situations. More detailed inspections would occur after the initial RDA.

DRP involvement and assistance is not always a guarantee. Typically DRP will only provide assistance for damage that is outside what would normally be covered by homeowner’s insurance providers.

The Flood Team is working towards providing the necessary emergency training from ICS 100, ICS 200, ATC 45, and ATC 20 for all SCO’s, and is hoping to have something in place for some time in the spring.

The Flood Team is finding issues with mold in houses, in High River, that were redeveloped before the wood was permitted to dry out completely, and reach a level of roughly 15% moisture content.

(The RDA program is currently only a proposal we are researching and developing at this time. The timeframes suggested in the presentation are contingent upon quick submission and approval of the proposal we are working on.)

C-Can Fire Safety and Mini Storage

C-cans are being used right across Canada. There does not seem to be a consistent means of dealing with them, however it would seem appropriate to require that these structures, when providing a “use” should meet the ABC requirements for a building in any installation. Any concerns that do not meet the ABC can be addressed through the use of an alternative solution. The fact that quite often these buildings are considered to be temporary, does not remove the requirements for the building to have a full evaluation. Professionals should be utilized for a full review of the structure to ensure compliance.

- A proposal for a STANDATA or Information Bulletin has been brought forward for these structures to provide some consistency for the approval of these structures.

Fire Alarm Verification

An engineer was questioning a Building SCO and the requirements of Fire Alarm Verification. The information that is being provided by the engineer or technician should meet the information within the STANDATA. Engineers should be using the appropriate verification paperwork. The installation of a fire alarm must be completed by an engineer. Testing or maintenance of a system however, would require an electrical journeyman ticketed as of 1991. A BC red seal does not give a journeyman the authority to do the installation or testing of a system, they must complete the appropriate upgrading.

Whose responsibility is it to ensure that all parts are c UL approved? The engineer should be responsible to check, however they may not review each and every device. ULC has a site that lists all the monitoring companies.

ULC Monitoring Companies Website Link:
http://database.ul.com/cgi-bin/XYV/template/LISCANADA/1FRAME/index.html
Type in Code DAYYC in the ULC Category Code box.
Also, Pierre McDonald and Frank Donati are contacts from ULC who can assist AHJ’s with technical support and standards interpretation.

Pierre McDonald contact info:
Telephone: 780-419-3202
Toll Free: 1-800-595-9844 Press 1, then 4
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Frank Donati contact info:
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Vapour Barriers over Pot Lights
The question has come up again, as to whether Building SCO’s are asking for vapour barriers over pot lights. There are pot light units that have been approved for use without vapour barriers; however you should always be checking the manufacturer’s specifications for installation requirements. If in doubt, always ask the manufacturer.

Portable Fire Extinguishers
The installation of portable fire extinguishers is the responsibility of the Building SCO. The need for cabinets is only referenced within the ABC, and not specifically in the NFPA 10 standard. Perhaps it would be beneficial to include the requirement for cabinets within the Plan Review letter for each permit.

New Home Buyer Protection Program (NHBP) – Allison Scott
The NHBP has been effective since February 1, 2014. The intent was to enhance the standard of building in Alberta and to improve consumer protection and recourse options. Legislation for NHBP is covered under the New Home Buyer Act, and the Insurance Act. NHBP is a mandatory program, rather than the NHW program that was optional. The Act does not apply to hotels, care facilities, work camps, most habitat for humanity and Alberta Social Housing projects, because most of these tenants do not own the property and cannot be held responsible for any repairs. The Act also does not apply to detached garages, or amenity buildings. The definition of a dwelling can be used to help determine where ANHBP would apply.

\textit{Dwelling unit means a suite operated as a housekeeping unit, used or intended to be used by one or more persons and usually containing cooking, eating, living, sleeping and sanitary facilities.}

Condo buildings require a Building Assessment Report (BAR) which is to be provided to the condo board. Secondary suites are included in the definition of a new home. The Act may apply to a secondary suite built after the home IF the size exceeds the 75% rule for reconstructed area, if it is above grade, or if it is a suite or new residential unit that can be sold separately. Claims are processed through the insurance provider. The GoA is not responsible for that process. Consumers should be aware of the process, coverage terms, and commencement dates. Dispute resolution process is provided for in the Insurance Act. The GoA can point you in that direction if you require contact information:

Dispute Resolution:
There is a performance guide working group that is being developed and should be in place by the end of this year. This document would review when an issue is a claimable item. All providers will be using this guide however it is not written in stone. Around 1% of registrations are manually reviewed for quality assurance. Public awareness has been the departments new focus. There is a NHBP Appeal Board. This board reviews appeals for the Owner/Builder application or for compliance orders, or administrative penalties only. ANHBP would apply to a separate cabin on a property; however it would probably not apply to a separate mother-in-law or garden suite. The 75% rule would then govern. If an owner/builder decides to sell the property before the mandated 10 years is up, coverage is required to be provided for the remaining years. Compliance officers have the authority to state that a non-compliance builder will get no further coverage. But it is the insurance providers right to determine what needs to be done, and how, for their coverage to remain, as long as it meets or exceeds ABC requirements. Fire Properties can follow the registrar bulletin “Reconstruction”. This information bulletin can provide clarity on determining when NHBP is required. The insurance coverage must cover the entire house, either an old house with a new addition, or new construction after a fire. Shops with living quarters would be recommended to speak with a compliance officer in NHBP to determine if warranty is required. Private sewage is part of this if it is installed at the same time as the new house, and the contractor is overseeing the installation. If the owner is acting as the contractor, then NHBP is not required. Date of coverage starts on the date occupancy is granted. CSA Z240 or CSA A277 modular units would require coverage.

Warranty Providers
In Alberta, there are currently seven warranty providers that builders may partner with for your coverage:

- Blanket Home Warranty Ltd.
- Millennium Insurance Corporation
- National Home Warranty Group Inc.
- Progressive Home Warranty Solutions Inc.
- The Alberta New Home Warranty Program
- Travelers Insurance Company of Canada
- WBI Home Warranty Ltd

Additional Agenda Items:

Car Plug-Ins in SFD
Is there a Code that applies to these types of installations? Should it be the Canadian Electrical Code. As this installation is still an optional requirement, it would fall under the CEC, and would not be enforceable by a Building SCO. We are not aware of any proposed changes to the 2014 ABC to include these types of plugs.
Smoke Alarms in all Bedrooms
Yes, the requirement for smoke alarms in each bedroom has been proposed for the new 2014 ABC. There is no requirement for these devices to provide both smoke and CO unless the bedroom has a fuel fired appliance within the room. In the new Code, if you are adding a single bedroom development, interconnection is not required. If more than 1 bedroom is being developed, then interconnection is required.

Secondary Suites with Separate Electrical Panels
The Canadian Electrical Code does not permit the interconnection of smoke alarms where two separate panels have been installed. There have been temporary approvals for Radio Frequency alarms; however these are also not permitted under the CEC. In these situations where there are two separate panels, the buildings would be constructed as true duplexes, with all the necessary fire separations etc, rather than as a secondary suite.

The clear difference separating a secondary suite from a duplex or semi-detached dwelling is the ownership. If the units have been separated by title, then they are not permissible to be classified as a secondary suite, as per the definition of secondary suite within the ABC.

Secondary suite means a second self-contained dwelling unit that is located within a primary dwelling unit, where both dwelling units are registered under the same land title. (See Appendix A.)

HVAC for Secondary Suites
The ventilation for dwelling units within secondary suites requires that the ductwork be separate for each unit. It has been proposed that the use of a damper within the main plenum would provide this separation. However, unless a mechanical engineer can design the system with a mechanism to ensure that there is a permanent separation between the ductwork; these systems quite often will not be separated when both units call for air; the use of a damper should not be permitted. These types of installation would not seem to be cost effective, and would be approved through an alternative solution proposal.

SCC Mandatory Training
The SCC is completing their mandatory review of the program, and will be looking for a 2016 for the official rollout. This may be able to bring forward professional designation in the following 4 plus years.

SCC’s Professional Training Program
Schedules are required for all projects that require professional involvement under Section 2.4.2. There should be no difference between a project within a municipality or through an accredited corporation.

APEG A Documents Link: [http://www.apega.ca/Members/Publications/guidelines.html](http://www.apega.ca/Members/Publications/guidelines.html)

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AAA Documents Link:
Security and Fire Alarm Systems Connections
There is a new standard that is being developed which will address security alarm and fire alarm connection. These systems would be monitored to CAN-S561.

Ventless Hoods
There is a new appliance that is not vented directly to the exterior. These appliances must be listed and approved, but they can be used. The ABC does not require that appliances be vented directly to the exterior, as long as the heat, odors etc. that the appliances give off has been reviewed by the mechanical contractor, and calculated as part of the HVAC system being installed.