Grande Prairie

AMA Regional Meeting

Electrical, Plumbing, Gas, Private Sewage, Building and Fire
AGENDA

8:30 am   Call to Order and Introductions   Joe Healy, AMA

8:35 am – 8:45 am   AMA General Updates   Stephanie Martin, AMA
                      Q & A

8:45 am – 9:30 am   Safety Codes Council Updates   Peter Thomas, Council
                      Q & A

9:30 am – 10:00 am   Open Mic
                      • What is a kitchen?
                      • Private vs Public Washrooms
                      • Air Admittance Valves
                      • Temporary Heat Standata
                      Q & A

COFFEE BREAK 10:00 am – 10:20 am
Sponsored by the Safety Codes Council

10:20 am – 11:45 am   Break-Out Sessions
Electrical – Salon B
Plumbing / Gas / PSDS – Salon C
Fire / Building – Grande Ballroom 1

LUNCH 11:45 am – 12:45 pm
Sponsored by the Safety Codes Council
AMA Updates – Joint Session

Builders Licencing
Regulations currently sit with the Cabinet for approval. The timeline in this document may change, depending on Cabinet’s directive.

Overview
In its aim to strengthen protection of consumers who purchase a new home, the New Home Buyer Protection Amendment Act, if passed, will create a Builder Licensing Program. The Bill is anticipated to come into force December 2017.

The Program will require potential builders to first obtain a license in order to build as a requirement for obtaining warranty coverage and building permits in Alberta. To ensure construction activities are not disrupted, the program will be phased in at the enforcement date with full implementation planned for May 1, 2018.

The Amending Act requires all new homes to be built by someone with either a valid builder’s license or an owner builder authorization. This means that going forward, all owner builders must apply for an authorization regardless of whether they are choosing to build with or without warranty.
AMA Updates – Joint Session

Permit Regulation Review
Permit Regulation is under review but not for broad amendment this term. The current Permit Regulation expires on January 31, 2019.

There is likely to be solicitation for stakeholder input on potential changes but no changes to the permit regulation until after 2019, unless the changes are needed to accommodate other legislation.
What is a Kitchen?
Kitchen counter and fridge receptacles are exempt from CAFCI protection. Yet where a wet bar is installed with the same design, because not considered a kitchen, both CAFCI and TR requirements are enforced. What defines a kitchen?
After some discussion it appears that a range is still a key factor in defining a space as a kitchen. Rooms not defined as kitchens are not AFCI protection exempt under 26-724 (f).

If a room has a sink, dedicated counter receptacles, microwave, fridge circuits in place then that sounds a lot like a kitchen as laid out by the CEC. A wet bar counter with a shared circuit receptacle for a blender and bar fridge does not seem like much of a kitchen.

In summary, a wet bars receptacles require AFCI protection regardless of intended use such as counter receptacle or fridge. As currently written only fridges in kitchens are AFCI exempt. There is no dedicated circuits required by code on wet bar counters. GFCI protection for receptacles near sinks is still required, as per 26 700 (11).
Definition of Private vs Public

When is a washroom considered private rather than public?

The National Plumbing Code requires each lavatory in a public washroom to be equipped with a device capable of automatically shutting off the flow of water when the lavatory is not in use. Examples of these types of water shut-off devices include occupant sensors and self-closing valves.

Private use (as applying to the classification of plumbing fixtures) means fixtures in residences and apartments, in private bathrooms of hotels, and in similar installation in other building for one family or an individual.

Public use (as applying to the classification of plumbing fixtures) means fixtures in general washrooms of schools, gymnasiums, hotels, bars, public comfort stations and other installation where fixtures are installed so that their use is unrestricted.
Air Admittance Valves
There has been considerable discussion regarding Article 2.5.9.2.1 (d) of the National Plumbing Code of Canada which allows for the installation of an Air Admittance Valve where connection to a vent may not be practical. What are your thoughts?

Air Admittance Valves
1) *Air admittance valves shall only be used to vent*
   a) *fixtures* located in island counters,
   b) *fixtures* that may be affected by frost closure of the vent due to local climatic conditions,
   c) *fixtures* in one- and two-family dwellings undergoing renovation, or
   d) *installations* where connection to a vent may not be practical.
Temporary Heat using the Residential Furnace

What are the requirements surrounding the use of the installed residential furnace as the appliance providing temporary heat during construction?

A STANDATA is being drafted which will be taken to the Gas Sub Council, to provide parameters around the use of furnaces installed during the construction of a home, as the means of providing temporary heat during construction.

A change in manufacturers certified installation instructions for residential style furnaces was made on May 1, 2017. This change restricts these furnaces from being used to heat buildings which are under construction or being renovated. Buildings would be considered under construction or renovation where dusty conditions may be created from installing drywall or textured finishes are present.

The STANDATA is looking at providing an example of a form which can be used to ensure an approved heater being used for heat during construction. The form may include information regarding the activation of the permanent furnace, which both the builder and the HVAC Contractor will be required to fill out. There may also be a portion of the form which will addresses the Pre-Occupancy maintenance schedule for the furnace.
Breakout Session Locations

Electrical Meeting – Salon B
Plumbing, Gas & PSDS Meeting – Salon C
Fire / Building Meeting – Grande Ballroom 1
Joint Fire / Building Meeting
AMA Updates – Joint Session
Harmonization of the Alberta Codes

This is a priority ongoing process between Code update and Harmonization using the NBC 2015 as a Base document. The comparison review and analysis between the NBC 2010 –NBC 2015, as well as comparing to the ABC 2014 for Alberta specifics and where we can update and Harmonize towards the National Codes.

At this time, we have a goal of automatic code adoption of the NBC 2020 with a supplement to address the retained Alberta Specific requirements.

The NBC 2020 expected publication date may be around December 2020 or January 2021. Automatic code adoption in Alberta would come into effect one year after publication.

Section 3.8 and Part 7 has a number of Alberta Specifics and at this time is being retained, such differences would go into the supplement.

Administrative requirements have Alberta Specifics which will be retained.

There is a ULC standards committee currently drafting up a National Standard for Relocatable Structures, using ABC Part 10 as the seed document. This should address ABC specific Part 10.

Only the Edmonton Airport Vicinity is currently affected by ABC Part 11 and there is currently a review in process for the AVPA, this may address the retention of Part 11 in the ABC.

This is a brief overview of the extensive review process and all items may not have been captured, but to give you an idea of our direction towards updating and Harmonization.
AMA Updates – Joint Session

Next Code Cycle

The Government of Alberta is currently reviewing the possibility of skipping the next Code cycle which was to be based on the NBC 2015. The proposal has gone forward to the Minister, and is waiting final response.

This was a proposal which was originally brought forward by the Building Sub-Council, and which seems to be the same viewpoint from most SCO’s when asked for comment.
NFPA 96 – Annunciation for Commercial Kitchens

NFPA 96-11 is the standard for hood fans over commercial cooking appliances. In that standard, section 10.6 discusses system annunciation. If the building has a fire alarm system and the hood fan fire suppression system goes off, 10.6.2 requires the suppression system to activate the fire alarm (and annunciate as a separate zone). This seems to be consistently applied.

What is not consistently applied is 10.6.1 for annunciation if the building DOES NOT have a building-wide fire alarm system. What are SCO’s accepting?

NFPA 96

10.6 System Annunciation.

10.6.1 Upon activation of an automatic fire-extinguishing system, an audible alarm or visual indicator shall be provided to show that the system has activated.

10.6.2 Where a fire alarm signaling system is serving the occupancy where the extinguishing system is located, the activation of the automatic fire-extinguishing system shall activate the fire alarm signaling system.
Alternative Solution Proposals and Acceptance

When should an alternative solution proposal be accepted by the local AHJ?

Alternative solution proposals are required by both the ABC and the AFC to achieve at least the minimum level of performance required by Division B in the areas defined by the objectives and functional statement attributes. All proposals must be made to demonstrate that an alternative solution will perform as well as a design that would satisfy the applicable acceptable solutions in Division B – not “well enough,” but “as well as”.

1.2.1.1. Compliance with this Code
1) Compliance with this Code shall be achieved by
a) complying with the applicable acceptable solutions in Division B (see Appendix A), or
b) using alternative solutions that will achieve at least the minimum level of performance required by Division B in the areas defined by the objectives and functional statements attributed to the applicable acceptable solutions (see Appendix A).
Upcoming STANDATAS

Door Release Hardware for Exit Doors (14-BCV-000)
To provide a compliant means to reduce the probability of wandering occupants unknowingly exiting a building or supervised area and exposing themselves or others to undue risks, while still maintaining an acceptable level of safety for the occupants of the building.

APPLICATION
This Variance applies to doors in Group B, Division 2 and Division 3 occupancies.

VARIANCE
This variance, which can be applied to new and existing buildings, provides approximately equivalent or greater safety performance with respect to persons and property as that provided for by the Safety Codes Act, the ABC 2014 and the AFC 2014.
Upcoming STANDATAS

Wireless Interconnection of Smoke Alarms (14-BCI-XXX)
To provide clarification on what is meant in the Alberta Building Code 2014 (ABC 2014) by interconnected smoke alarms, and to recognize the appropriate application of listed devices that perform this function using wireless technology.

APPLICATION
This STANDATA applies where smoke alarms are required to be interconnected under the ABC 2014, so that the actuation of one smoke alarm will cause all interconnected smoke alarms within the dwelling unit or house with a secondary suite to sound.

INTERPRETATION
A smoke alarm that is certified in conformance with CAN/ULC-S531, “Smoke-Alarms” and uses wireless interconnection technology is an acceptable means of meeting the interconnection requirements of Sentence 3.2.4.21.(9) and Sentences 9.10.19.5.(1) and (2).
Upcoming STANDDATAS

Buildings Used for Parking, Repairing and/or Servicing Tank Vehicles (14-BCB-XXX)

Tank vehicles containing flammable liquids or vapours or combustible liquids or vapours present a unique hazard when they are brought into a building. In addition to the hazard inherent in the product itself, there is a potential for the release of flammable or combustible vapours in significant quantities that can overwhelm a standard ventilation system for a building and become a fire or explosion risk.

1. Buildings to be used for parking tank vehicles which contain flammable or combustible gases or vapours (classified as Group F, Division 1, high hazard industrial occupancies),
2. Buildings to be used for parking, repairing and/or servicing tank vehicles (classified as Group F, Division 2, medium hazard industrial occupancies),
3. Buildings containing both uses, parking tank vehicles that contain flammable or combustible gases or vapours classified as Group F, Division 1 (F-1) according to Sentence 1, and parking, repairing and/or servicing tank vehicles classified as Group F, Division 2 (F-2) according to Sentence 2 provided:
Afternoon Break Out Session Locations

Fire Meeting – Salon A

Building Meeting – Grande Ballroom 1
AMA Regional SCO Meeting
Building, Fire, Electrical, Plumbing, Gas & Private Sewage

October 5, 2017
8:30 am – 4:00 pm

Grande Prairie
Pomeroy Hotel & Conference Center
11633 100 Street
Grande Ballroom 1
AMA Regional SCO Meeting
Fire/Building Break-Out Session
10:20pm – 11:45 pm
Grande Ballroom 1

AGENDA

10:20 pm – 10:30 pm  General Updates from AMA
- Code Harmonization
- Next Code Cycle

10:30 pm – 11:45 pm  Joint Fire/Building Break-Out Session
- NFPA 96 – Annunciation for Commercial Kitchens
- Alternative Solution Acceptance
- Door Release Hardware for Exit Doors
- Wireless Interconnection of Smoke Alarms
- Building Used for Parking, Repairing and/or Servicing Tank Vehicles

LUNCH 11:45 am – 12:45 pm
Sponsored by the Safety Codes Council

Building Break-Out Session 12:45pm – 4:00 pm
Grande Ballroom 1

12:45 pm – 1:00 pm  General Updates from AMA
- Standata – New & Upcoming
- Mobile Cooking Operations Standata

1:00 pm – 2:00 pm  Discussion Topics / Questions
- Radon Gas in Commercial Buildings
- Swimming Pools
- Cantilevered Deck Beams
- Door Release Hardware
- Spray Foam on underside of Roof Deck
- Wireless Smoke Alarms
- Combustion Air for Garages

COFFEE BREAK 2:00 pm – 2:20 pm
Sponsored by Safety Codes Council

2:20 pm – 4:00 pm  Discussion Topics / Questions
- DC 315
- Manufactured Homes – Additional Loading
- Application of 9.36 to Additions
- Adding a Bedroom to an Office
- Potable Water
- 9.36 and Heatloss
- Secondary Suites and furnace Room Access
- Make Up Air for Depressurization
- Washroom Signage
- A660 and A277 Compliance
- Cancellation of New Home Buyer Insurance
In its aim to strengthen protection of consumers who purchase a new home, the New Home Buyer Protection Amendment Act, if passed, will create a Builder Licensing Program. The Bill is anticipated to come into force December 2017.

The Program will require potential builders to first obtain a licence in order to build as a requirement for obtaining warranty coverage and building permits in Alberta. To ensure construction activities are not disrupted, the program will be phased in at the enforcement date with full implementation planned for May 1, 2018.

The phased in implementation would enable granting of Provisional Licence to builders that are registered in the system and who have good track record based on their recent construction history in Alberta. This licence will expire on May 1, 2018 after which they will then participate in the annual renewal process. Other builders, including new builders, can apply for a full licence at the expected program launch.

"Builders" refer to individuals and companies that construct new homes (this also includes major renovations that are more than 75% of the home’s footprint) and condominium property. For greater transparency, two classes of licence are being proposed that also cover sales arrangements administered by builders which have direct relation with consumers. (1) Developer licences are for those who build or sell new homes that include construction under Part 3 of the Alberta Building Code. (2) General contractor licences are for those who construct or sell smaller home buildings or under Part 9 of the Alberta Building Code. It will not apply to construction projects on First Nation Reserves or Métis Settlements.

The Amending Act requires all new homes to be built by someone with either a valid builder’s licence or an owner builder authorization. This means that going forward, all owner builders must apply for an authorization regardless of whether they are choosing to build with or without warranty.

The legislation establishes powers of the Registrar who will render decisions stemming from the results of screening applications and vetting builders’ information to determine risks of granting licences. Screening will be based on the builder’s corporate structure, compliance with relevant legislation, financial standing and other material changes as disclosed to the Registrar.


There will also be provisions for the Registrar to remove builders or place conditions on a licence based on risk assessments on records of fraud convictions, construction-related court proceedings, undischarged company bankruptcies, arrangements under the Companies’ Creditors Arrangement Act, warranty de-enrollments, status of business registration through the Corporate Registry and loss of builder licence in another Canadian jurisdiction. In addition, a random audit will also be exercised throughout the year with the provision for the Registrar to obtain additional information from builders for auditing purposes.

Consumers’ complaints will be reviewed by the Registrar who will consider whether the nature of the complaint indicates that the licence decision should be revisited, using the risk matrix and the scoring rubric. Complaints will be investigated to determine whether a material breach has occurred that could harm consumers if allowed to continue.

In light of duty of fairness, all licencing decisions may be appealed through the New Home Buyer Protection Board by which all Board appeals may be appealed to the Court.

This pertinent information will be made available to the public. A Builder Registry Platform targeted to be active by Spring 2018 will be accessible online to provide information on builders, their associated companies, licence status, compliance record and warranty provider acceptance.

A new home is, after all, the most substantial investment an individual can make and the Builder Licensing Program will assist in protecting both the consumers and their investment.
Brochures

Safety Tips
The new updated brochures are now available on the GoA website. All documents are PDF and printable from the website when opened.

Alberta Municipal Affairs Website:

Safety Codes Council Website:
http://www.safetycodes.ab.ca/Public/Pages/Safety-Tips.aspx

To obtain tri-fold brochures contact safety.services@gov.ab.ca
Energy Efficiency Q & A

Check Sheets

A Q & A document answering some of the common questions surrounding energy efficiency under Section 9.36 is also available on the GoA website.

Alberta Municipal Affairs Website:
http://www.municipalaffairs.alberta.ca/CP_Energy_Codes_Information

All documents are printable from the website when opened.
Energy Efficiency Check Sheets

Check Sheets
The GoA website now has available a document to assist industry and SCO's with examples of check sheets, Trade-Off sample calculations as well as a project summary sample.

Alberta Municipal Affairs Website:
http://www.municipalaffairs.alberta.ca/CP_Energy_Codes_Information

All documents are printable from the website when opened.
STANDATA Updates
New & Proposed

Variances

14-BCV-001 Joint Fire/Building Code Variance-Construction Site Fire Safety Plans

14-BCV-002 Tall Wall Generic Engineered Details
To recognize the acceptability of the values within the “Guidelines for the Construction of Residential Tall Walls” prepared by Grubb Engineering Corporation.

14-BCV-003 Wind Data for Low-Rise Buildings Guideline
To recognize the acceptability of the values within the “Guideline for specifying the required NAFS ratings of fenestration in low-rise buildings applicable to Part 9 of Division B of the Alberta Building Code 2014,” as prepared by Berkeley Vadocz Engineering Inc. (Issued May 11, 2016)

14-BCV-004 Spans for Joists, Rafters and Beams
To recognize the acceptability of the values within the “The Span Book” published by the Canadian Wood Council.

14-BCV-005 CSA-A277-16 Procedure for Certification of Prefabricated Buildings, Modules, and Panels
To recognize the acceptability of CSA-A277-16 “Procedure for certification of prefabricated buildings, modules, and panels”.

14-BCV-006 Elevators and Passenger-Elevating Devices
This STANDATA has been developed regarding the use of a passenger elevator where a lift for persons with physical disabilities (LPPD) that conforms to the CSA-B355 standard would suffice to meet the requirements of a barrier free path of travel.

14-BCV-007 Interior Stairways for Roof Access
This STANDATA has been developed to allow the use of fixed attic folding stairs, rung-type ladders or “ship’s ladders/fixed industrial stairs” in place of the interior stairways required by the Alberta Building Code 2014 (ABC 2014).

14-BCV-008 Separation of Suites in Strip Malls
Many smaller malls, commonly referred to as “strip” malls, do not include an enclosed public corridor as each suite exits directly to the outside. In these cases, must suites of business and personal services and mercantile occupancies be separated from each other by fire separations in accordance with Sentence 3.3.1.1.(1) or 9.10.9.13.(1)?
14-BCV-009 Polyethylene Film for Greenhouse Enclosure
The purpose of this STANDATA is to allow the use of products specifically designed for commercial greenhouse facilities occupied only by greenhouse staff, where members of the public are not permitted access.

14-BCV-000 CSA-S16-14 Design of Steel Structures
To recognize the acceptability of CSA-S16-14 “Design of Steel Structures.”

14-BCV-000 Oil and Gas Processing Facilities
The Alberta Building Code 2014 (ABC 2014) for small high hazard industrial occupancies do not address the hazard presented by these buildings as effectively and efficiently as possible for small production facilities.

This STANDATA applies to oil or gas processing buildings that are
1. considered as low human occupancy buildings,
2. located outside of urban areas, and
3. used to house oil and gas processing equipment, such as
   a. compressor stations,
   b. heater packages,
   c. pump packages,
   d. separator packages,
   e. treater packages,
   f. dehydrator units,
   g. field equipment,
   h. L.P.G. handling facilities,
   i. refrigeration process units,
   j. oil batteries, and
   k. similar types of buildings.

14-BCV-000 Energuide Rating System for New Homes
This STANDATA has been developed to acknowledge similarities between ABC 9.36.5 energy modeling requirements and the Energuide Rating System v15 for homes.

This use of a modified ERS v15 certification is an acceptable compliance path in addition to the prescriptive, trade off and Subsection 9.36.5 performance path and the NECB as stated in 9.36.1.3. (1), provided some conditions itemized within the STANDATA are met.
STANDATA Updates
New & Proposed

Interpretations

14-BCI-002 Visual Signals
The purpose of this Standata is to clarify the intended locations for Visual Signal Devices under the Alberta Building Code 2014 (ABC 2014).

14-BCI-004 Mechanically Vented Appliances
This STANDATA has been developed to provide clarity to safety codes officers and industry stakeholders as to what types of appliances are considered to meet the definitions of *mechanically vented* and *direct-vented* in the Alberta Building Code 2014 (ABC 2014) and, subsequently, when make-up air would need to be provided within a dwelling unit to protect against the effects of depressurization.

14-BCI-005 Rooms Containing Gaseous Chlorine
The purpose of this STANDATA is to provide guidance as to what is meant by “mechanical proportioning device” and how to achieve a reasonable measure of “gas-tightness.”

14-BCI-006 Barrier Free Design Requirements
Barrier-free design requirements apply to all buildings as specified in Article 3.8.1.1. Application. All new builds, including additions, are expected to comply with all barrier-free design requirements. There are various occupancy types where people with disabilities are unemployable for reasons of safety, and would be exempt from providing barrier-free design requirements.
A Pre-Assessment for Relaxation of Barrier-Free Requirements form must be attached to all barrier-free relaxation requests. This form must be signed by the local AHJ, and the submitted drawings noted as being reviewed by the local AHJ.

14-BCI-XXX Application of Energy Efficiency Requirements to Existing Buildings
This STANDATA was developed to clarify the application of energy efficiency code requirements to existing buildings. The installation or replacement of one piece of equipment or renovation of a building would not adversely affect the overall energy usage of the building as a whole. Under the requirements of the Government of Canada Energy Efficiency Act and regulations installation of new equipment or renovations using current energuide products and construction practices would be more energy efficient than the existing building conditions.
The Government of Canada Energy Efficiency Act and regulations may be viewed at http://www.nrcan.gc.ca/energy/regulations-codes-standards/6845

14-BCI-XXX PIB-XXX Joint Building Code Interpretation/ Plumbing Information Bulletin, Radon-Soil Gas Vent Termination
This Standata is to provide direction for Soil Gas Vent Termination when an active soil depressurization (ASD) system is installed.
14-BCI-XXX Photoluminescent Exit Signs
This Standard was developed to provide clarification regarding the required illumination of photoluminescent (PL) exit signs according to Articles 3.4.5.1 and 9.9.11.3. of the Alberta Building Code 2014 (ABC 2014).
CAN/ULC-S572 “Photoluminescent and Self-Luminous Signs and Path Marking Systems” is the standard to which PL exit signs are to be constructed in conformance with as per the ABC14.

14-BCI-XXX Attached Garage Insulation
This Standard was developed to provide a consistent approach to the insulation of attached garages, at the walls and ceilings adjacent to unconditioned space or the exterior.
The principle objective of the attached garage insulation in conjunction with the air and vapour barrier is to reduce the probability of damage to or deterioration of building or facility elements.

14-BCI-XXX Non-Liquid Disposal Systems
To provide guidance related to installations of Non-Liquid Disposal Systems.
A non-liquid disposal system as related to this Standard is not a:
- plumbing system
- water-closet
- plumbing fixture
- chemical toilet
Therefore, falls within the scope of the Building Discipline. A non-liquid disposal system is considered as, other means for the disposal of human waste where there is an absence of water supply.

14-BCI-XXX Application of ABC for Structural Insulated Panels
The Standard is to present the issue of how to consider Structural Insulated Panels (SIPs) under the Alberta Building Code 2014 (ABC 2014) in single family, duplex and row house construction, and the professional involvement requirements.
Provision of a CCMC evaluation report for the SIPs, in accordance to ABC 2014, Division A, sentence 1.2.2.1(2), would be acceptable as being in compliance to the ABC 2014. The SIPs must be installed in accordance with the conditions of the evaluation report.
Pre-assessment for Relaxation of Barrier-Free Requirements

This form is an acknowledgment that the Authority Having Jurisdiction (AHJ) has met with the applicant at the Building Permit application stage. This document **must** accompany the Application for Relaxation of Barrier-Free Requirements.

Municipality________________________ SCO/Plans Examiner________________________

Date Reviewed by AHJ___________________ Project/Reference #________________________

Name of Client__________________________ Occupancy Type__________________________

The following documents shall be initialled by SCO/Plans Examiner to ensure that the same plans are submitted to the Province and **must** also accompany the application for Relaxation of Barrier-Free Requirements:

- A floor plan showing existing layout including identified rooms/spaces/areas, measurements and orientation of washroom fixtures, if applicable. *The floor plan must also bear the AHJ's initials.*
- A written explanation – by the applicant – describing the reason for the request for a barrier-free relaxation.

Comments:

If the above information is not attached, the Application for Relaxation of Barrier-Free Requirements will **not** be processed by Community and Technical Support.

All new buildings and additions will automatically be denied relaxation for any of the barrier-free design requirements in the ABC Section 3.8. Exemptions are listed Sentence 3.8.1.1.(1) Application, Sentence 3.8.2.1.(2) Areas Requiring a Barrier-Free Path of Travel, Sentence 3.8.3.13.(2) Showers and STANDATA 14-BCI-006 Barrier-Free Design Requirements: Relaxations.

**NOTE:** A request for Relaxation of Barrier-Free Requirements is not a guarantee a relaxation will be granted.

Please mail, email or fax the required documents accompanied with a $100.00 + GST payable to the **Government of Alberta** to the address listed above. If you need to speak with the Barrier-Free Administrator, please call for an appointment. Thank you.

To be completed by AHJ only. The purpose of this form is to ensure that the AHJ has met the permit applicant and the applicant is cognisant of what and why a barrier-free requirement has been requested.
STANDATA Updates
New & Proposed

Bulletins

14-BCB-001 Steel Building Systems
This bulletin is to emphasize the importance of compliance to the CSA A660 standard by responsible persons under the Safety Codes Act including manufacturers, designers, vendors and owners, as well as to provide guidance for safety codes officers and local authorities in applying the requirements of the Alberta Building Code (ABC) 2014 for steel building systems.

How Do I Find Out if a Manufacturer is Certified to CSA A660?
A list of certified manufacturers can be accessed through the web site of the Canadian Welding Bureau (CWB Group) at https://www.cwbgroup.org/services/certified-directory-search or under Certified Directory Search. Be advised that this list can change frequently as new companies are certified.

14-BCB-002 Roof Anchors
The purpose of this STANDATA is to describe situations where roof anchors are required in the Alberta Building Code 2014 (ABC 2014).

This Bulletin was developed to identify the requirements within the Alberta Building Code 2014 (ABC 2014) for labeling of radon/soil gas pipes.

14-BCB-XXX Spray Foam Insulation-Hybrid Assemblies and CAN/ULC S705.2
This Bulletin was developed to inform the industry of situations where 2lb. (closed cell) spray foam is being applied over 1/2 lb. (open cell) spray foam insulation in buildings. The Standata is to inform builders that installing 2 lb. spray foam over 1/2 lb. spray foam is not an acceptable practice unless testing has been conducted in accordance with CAN/ULC S705.2 and approval for this type of installation has been identified in the product CCMC evaluation report. Documentation providing evidence of testing and approval must be provided to the Authority Having Jurisdiction prior to this "hybrid" system being used within their Jurisdiction.

14-BCB-XXX Firestop Technical Judgements
This Standata was developed to provide guidance on where an Engineering Judgement for Firestop Systems may be considered as an acceptable solution under Division B or as an alternative solution under Division A of the Alberta Building Code 2014 (ABC 2014). For the purpose of this Standata Engineering Judgements shall be referred to as Technical Judgements (TJ). The Standata includes a Table to assist with determining what documentation is required for most situations.
14-BCB-XXX Walkways and Guardrails
This bulletin has been developed to inform designers, vendors, builders, contractors and owners of the minimum requirements to ensure safe installation of gas appliances in Alberta.

- Be advised that it is reasonable to consider the degrees of a roofs slope within the application of Code Clause 4.14.6(a),
- An appliance installed on the roof that has a slope equal to or greater than 4° (7%, -1 in 12), will fall within the scope of Clause 4.14.6(a) and require a suitable antiskid walkway and guardrails.
- All other code requirements shall be required to ensure proper accessibility of rooftop appliances are maintained for installing, servicing, and inspection, such as but not limited to:
  - CSA-B149.1 Clause 4.14 Accessibility,
  - CSA-B149.1 Clause 6.25 Rooftop gas piping and tubing.
  - Alberta Building Code.

14-BCB-XXX Permit Application for a Residential building with Multi-Units
There have been situations where applications are being requested for each unit in a building with multiple-units (i.e. semi-detached, duplexes, multi-plexes, row-housing, townhouses).

A single building permit is required for each building, not a permit for each unit within the building.

Exception where a property line divides a duplex, requiring the construction of a firewall which can be constructed as a party wall; thus providing for a two building scenario for the purposes of requesting a building permit application for each of the properties.
Mobile Cooking Operations

The Administrators from the Fire, Building, Electrical, Plumbing and Gas disciplines have come together to write the STANDATA. The concept of the STANDATA has also been taken to the Sub-Councils, in which it appears that there is support for the writing of the STANDATA.

MA is taking the stance that although these structures are not considered to be "buildings", there are certain aspects of the facility which should be compliant to the Codes in Alberta. An example being a Ventilation and Fire Suppression system as per NFPA 96. We are currently working with NFPA and our legal department to alter the documents to reflect the requirements under the Alberta Fire Code, Electrical Code, Plumbing and Gas codes.

Once this STANDATA is complete, it will be reviewed by the Fire Sub Council, Electrical Sub Council and Plumbing and Gas Sub Council before it is published to our website.
Radon Gas in Commercial Buildings

Question:
What are the minimum requirements for radon mitigation for a commercial building?
Part 3 buildings are not required by the ABC to provide a rough-in radon mitigation system. Part 9 buildings, both residential, commercial or industrial are required to install a rough-in system as per Sub-Section 9.13.4.

When reviewing the designs for a Part 3 building, the ABC has requirements for an air barrier to be installed. Further mitigation measures may be required once testing has been completed, and can be addressed through the use of the EPA standard referenced within Sentence 6.2.1.1.(1).

Background Information:
2014 Alberta Building Code
9.13.4. Soil Gas Control
9.13.4.1. Application and Scope
1) This Subsection applies to
a) wall, roof and floor assemblies separating conditioned space from the ground, and
b) the rough-in to allow the future protection of conditioned space that is separated from the ground by a wall, roof or floor assembly.

2) This Subsection addresses the leakage of soil gas from the ground into the building.

Section 5.4. Air Leakage
5.4.1. Air Barrier Systems
5.4.1.1. Required Resistance to Air Leakage (See Appendix A.)
1) Where a building component or assembly separates interior conditioned space from exterior space, interior space from the ground, or environmentally dissimilar interior spaces, the properties and position of the materials and components in those components or assemblies shall be such that they control air leakage or permit venting to the exterior so as to
a) provide acceptable conditions for the building occupants,
b) maintain appropriate conditions for the intended use of the building,
c) minimize the accumulation of condensation in and the penetration of precipitation into the building component or assembly,
d) control heat transfer to roofs where ice damming can occur,
e) minimize the ingress of airborne radon from the ground with an aim to controlling the indoor radon concentration to an acceptable level, and
f) not compromise the operation of building services.

2) Except as provided in Sentence (3), an air barrier system shall be installed to provide the principal resistance to air leakage.
3) An air barrier system is not required where it can be shown that uncontrolled air leakage will not adversely affect any of
a) the health or safety of building users,
b) the intended use of the building, or
c) the operation of building services.

Section 6.2. Design and Installation
6.2.1. General
6.2.1.1. Good Engineering Practice (See Appendix A.)
1) Heating, ventilating and air-conditioning systems, including mechanical refrigeration equipment, shall be designed, constructed and installed in conformance with good engineering practice such as that described in, but not limited to,
a) the ASHRAE Handbooks and Standards,
b) the HRAI Digest,
c) the Hydronics Institute Manuals,
d) the NFPA Standards,
e) the SMACNA Manuals,
f) the Industrial Ventilation Manual published by the ACGIH,
g) CSA B214, "Installation Code for Hydronic Heating Systems,"
i) EPA 625/R-92/016, "Radon Prevention in the Design and Construction of Schools and Other Large Buildings."
Private Swimming Pools

Question:
There is no depth or size requirements defining swimming pools within the 2014 ABC. Does this then mean that any private pool, including small plastic wading pools, inflatable pools, or the above grade "Canadian Tire or Walmart" temporary pools require fencing or a lockable cover?
The previous 2006 ABC included the dimension of greater than 600mm in depth at any point within the definition for swimming pool. An ABC change proposal was made to remove the dimensional tolerance because it excluded smaller pools such as wading pools or spray parks from meeting the requirements of the ABC.

The change in definition for swimming pools, which now does not indicate a depth requirement, now means that the requirements for swimming pools within Part 7, are applicable to all pools, and to private swimming pools.

Because there is no distinction within the definition of a private swimming pool which provides clarification that the requirements are not applicable to private wading pools etc, the installation of any private wading pool, private swimming pool, or private hot tub etc. falls within the scope of the 2014 ABC as a swimming pool. Therefore, a permit and a fence or lockable cover etc. should be required for every installation.

Background Information:
2014 Alberta Building Code
1.4.1.2. Defined Terms
Swimming pool means a structure, basin or tank containing an artificially created pool of water that is used for swimming, recreation, bathing, diving, wading, healing or therapy, religious rituals or other purposes, and includes all buildings, equipment and facilities used in connection with it.

Private swimming pool means a swimming pool that is constructed for the use of a single family dwelling unit or a house with a secondary suite by the owners and their guests.

Wading pool means a swimming pool that is 600 mm or less in depth throughout and is used for swimming, bathing, wading, or other similar purposes.

7.2.2. Location and Layout
7.2.2.1. Fence and Gate Design and Construction
1) Except as provided in Sentence (7), the entire area of an outdoor swimming pool shall be protected by a fence, building wall or enclosure that can prevent access by unauthorized persons, and its height above the outside ground level shall be not less than

19
a) 1.8 m for a private swimming pool, and
b) 2.0 m for all other swimming pools.

2) An opening for access through a fence around a swimming pool or a private swimming pool shall be protected by a gate that is
   a) the same height as the fence,
   b) equipped with a self-closing device,
   c) equipped with a self-latching device on the inside of the gate located no less than 1.5 m above the ground level, and
   d) capable of being locked.

3) The fence and gate around a swimming pool or a private swimming pool shall
   a) be constructed so that all horizontal and diagonal members are located on the swimming pool side, and
   b) not permit the passage of a sphere whose diameter is more than 100 mm.

4) Barbed wire shall not be used on or as a fence or gate around a swimming pool or a private swimming pool.

5) No device shall be installed on or adjacent to a fence or gate around a swimming pool or a private swimming pool that could cause an electric current to pass through the fence or gate.

6) A fence is not required around any portion of an outdoor private swimming pool if the top of the outside wall of the private swimming pool is not less than 1.8 m above the level of the ground outside the wall and the wall is constructed so that the only means of access to the private swimming pool is through a gate or similar facility.

7) Sentence (1) does not apply to a swimming pool that is provided with a cover that
   a) has been designed and constructed in conformance with ASTM F 1346, “Safety Covers and Labeling Requirements for All Covers for Swimming Pools, Spas and Hot Tubs,” and
   b) is provided with lockable devices to prevent access to the water by unauthorized persons. (See Appendix A.)

2.2.10. Permits
2.2.10.1. General
1) A permit is required for the construction, alteration, installation, repair, relocation, demolition, or change in occupancy or any work to which this Code applies in accordance with regulations made pursuant to the Safety Codes Act.
Cantilevered Beams

Question:
Where a beam extends past the outside support post, how far can it cantilever? The 2014 Alberta Building Code speaks to cantilevering of joists however, it is silent when addressing any requirements for the cantilevering of a support beam.

When an item has not been addressed within the Alberta Building Code, procedure is that the item must be designed by other means.

Therefore, support beams should not be cantilevered out past their supports (the column below) unless the design has been professionally reviewed and approved.

Background Information:
2014 Alberta Building Code
9.23.9.9. Cantilevered Floor Joists
1) Floor joists supporting roof loads shall not be cantilevered more than 400 mm beyond their supports where 38 mm by 184 mm joists are used and not more than 600 mm beyond their supports where 38 mm by 235 mm or larger joists are used.

2) The cantilevered portions referred to in Sentence (1) shall not support floor loads from other storeys unless calculations are provided to show that the design resistances of the cantilevered joists are not exceeded.

3) Where cantilevered floor joists described in Sentences (1) and (2) are at right angles to the main floor joists, the tail joists in the cantilevered portion shall extend inward away from the cantilever support a distance equal to not less than 6 times the length of the cantilever, and shall be end nailed to an interior doubled header joist in conformance with Table 9.23.3.4.
Door Hardware

Question 1:
Can knob style hardware be used in a building? Does Sentence 3.8.3.3.(3) refer to all doors, or only doors in a barrier-free path of travel? Can exit doors be provided with "knob" hardware if they are not in a barrier-free path of travel?

Door release hardware is noted within the ABC as part of both barrier-free design requirements, as well as a requirement under Part 9 and Part 3. Buildings constructed under the ABC are required to provide barrier-free design for all buildings. Those areas within a barrier-free path of travel as per 3.8.3. should be installed with door release hardware that does not require tight grasping or twisting of the wrist. Where an exit is a part of the barrier-free path of travel, that door is also required to provide barrier-free accessible hardware.

Question 2:
Where does panic hardware fit in?
The reference for "panic hardware" can be found within Sentence 3.4.6.16.(2) which requires a device which will release when a force of not more than 90 N is applied to the device in the direction of travel. This hardware is required on every exit door from an assembly occupancy with an occupant load more than 100, every door leading to an exit lobby from an exit stair shaft, and every exterior door leading from an exit stair shaft in a building having an occupant load more than 100, and, every exit door from a high-hazard industrial occupancy.

Background Information:
2014 Alberta Building Code
Section 3.3. Safety within Floor Areas
3.3.1.13. Doors and Door Hardware
3) Except as permitted by Sentence (4), door release hardware shall be operable by one hand and the door shall be openable with not more than one releasing operation. (See also Sentence 3.8.3.3.(3).)

A-3.3.1.13.(4) Door Hardware. The permission to have additional door releasing devices is intended to allow the use of a security chain, night latch or dead bolt to supplement the normal door latching device. These are permitted for dwelling units and locations where guests in a hotel or motel require additional security. The height of these items is also governed by the maximum height stipulated in Sentence 3.3.1.13.(5) to ensure that they can be operated by persons with physical disabilities. This additional hardware should not require appreciable dexterity by the user and the general requirements on the ability to operate the device without the use of keys, special tools or specialized knowledge still apply.

Barrier-free means that a building and its facilities can be approached, entered, and used by persons with physical, mental or sensory disabilities.
3.8.3. Design Standards
3.8.3.3. Doorways and Doors
3) Door operating devices shall be of a design which does not require tight grasping and twisting of the wrist as the only means of operation. (See Appendix A.)

A-3.8.3.3.(3) Lever Handles. Lever handles are usable by most persons with limited hand mobility and will meet the intent of this requirement. Lever handles with an end return towards the door are less prone to catch the clothing of someone passing through the doorway.

3.4.6.16. Door Release Hardware
1) Except for devices on doors serving a contained use area or an impeded egress zone designed to be remotely released in conformance with Article 3.3.1.13., and except as permitted by Sentence (4) and Article 3.4.6.17., locking, latching and other fastening devices on a principal entrance door to a building as well as on every exit door shall permit the door to be readily opened from the inside with not more than one releasing operation and without requiring keys, special devices or specialized knowledge of the door opening mechanism. (See Appendix A.)

2) If a door is equipped with a latching mechanism, a device that will release the latch and allow the door to swing wide open when a force of not more than 90 N is applied to the device in the direction of travel to the exit shall be installed on:
   a) every exit door from a floor area containing an assembly occupancy having an occupant load more than 100;
   b) every door leading to an exit lobby from an exit stair shaft, and every exterior door leading from an exit stair shaft in a building having an occupant load more than 100, and
   c) every exit door from a floor area containing a high-hazard industrial occupancy.

3) Except as required by Sentence 3.8.3.3.(7), every exit door shall be designed and installed so that, when the latch is released, the door will open under a force of not more than 90 N, applied at the knob or other latch releasing device.

9.9.6.7. Door Latching, Locking and Opening Mechanisms
2) Except for doors serving a single dwelling unit or a house with a secondary suite, and doors to accessory buildings and to garages serving a single dwelling unit, door release hardware on doors in a means of egress shall be operable with one hand and the door shall be openable with not more than one releasing operation. (See also Sentence 3.8.3.3.(3) and A-3.3.1.13.(4) in Appendix A.)

2005 NBC Intent Statements

Application 1:
Design, with respect to grasping and twisting, of door operating devices on doors located in a barrier-free path of travel, as stated in Sentences 3.5.1.2, 3.5.1.4.1, 3.5.1.4.2, 3.5.1.4.3, and Article 3.5.1.9.

Application 2:
This also applies to:
- barrier-free (exterior) pedestrian entrances required by Sentence 3.8.1.2.(1) or (2), as stated in Sentence 3.8.1.2(3),
- one doorway per entrance as a barrier-free path of travel, as stated in Sentence 3.8.1.2 (4), and
- universal toilet rooms provided primarily for the use of persons of both sexes with physical disabilities, in lieu of facilities for persons with physical disabilities in washrooms used by the general public, in existing buildings where alternatives are being made, as stated in Sentence 3.8.2.3 (4).

2010 NBC
3.3.1.13. Doors and Door Hardware
3) Except as permitted by Sentence (4), door release hardware shall be operable by one hand and the door shall be openable with not more than one releasing operation. (See also Sentence 3.8.3.3.(3).)
2015 NBC
3.3.1.13. Doors and Door Hardware
3) Except as permitted by Sentence (4), door release hardware shall comply with Clause 3.8.3.8(1)(b) and the door shall be operable with not more than one releasing operation. (see also Sentence 3.8.3.6.(4)).

3.8.3.8.
(1)(b) be operable
i) with one hand in a closed fist position, without requiring tight grasping, pinching with the fingers, or twisting of the wrist, and
ii) unless otherwise stated, with a force not more than 22 N.

NRC Construction Response to Inquiry
Your question:
My department has been asked by a local SCO within a municipality to clarify if the requirement for door hardware to be operable without tight grasping, or twisting of the wrist, is a requirement for doors only within a barrier-free path of travel, or if other doors such as exit doors would also be required to provide the same hardware. The 2005 Application statements indicate the requirement is specific to doors within a barrier-free path of travel. However, the change in wording of the 2015 NBC references only clause 3.8.3.8.(1)(b) which from my interpretation is not specific to doors within or adjacent to a barrier-free path of travel, but to all doors.
The same clause is referenced within 3.3.1.13.(3), and repeatedly through-out the NBC Section 3.8. for barrier-free design requirements.
We would appreciate your clarification on if all doors within a building are required to meet Clause 3.8.3.8.(1)(b) or if it is only applicable to those within or adjacent to a barrier-free path of travel. Additionally, if only applicable to doors within or adjacent to a barrier-free path of travel, is there a clear definition of "adjacent to" or could you provide clarification on the intent of the application?

Codes Canada response:
Requirements on door operating devices located in Section 3.8. serve two purposes. The specific height of the hardware applies to doors located in the barrier-free path of travel, which is designated for wheelchair users. The operable criteria of door hardware though is helpful for occupants who may not need wheelchairs and therefore, have access to any location. Consequently, the 2015 NBC was amended to ensure that all door hardware could be used by all, including those who having difficulty grasping objects.
Spray Foam Under Roof Deck

Question:
More and more are having this done. Some applicators are saying that it is not a problem and that we can accept it without having to apply for a variance?

The application of spray foam insulation to the underside of a roof deck should not be permitted unless an alternative solution approach is accepted by the AHJ.

Because the Alberta Building Code does not specifically address these installations, an alternative solution approach, as per Section 2.3. Alternative Solutions, in Volume 1 Division C is an option.

As per the 2014 ABC Sentence 9.19.1.1.(1), ventilation of the roof space to permit the transfer of moisture from the space to the exterior is required unless it can be shown to be unnecessary. For this reason, a designer should be submitting an Alternative Solution proposal to demonstrate Code compliance.

Additionally, the SCO may want to confer with the manufacturers installation specifications. The manufacturer may require that the product be applied to the sheathing which has not more than 18% moisture content.

Background Information:
2014 Alberta Building Code Requirements
9.19.1.1. Required Venting
1) Except where it can be shown to be unnecessary, where insulation is installed between a ceiling and the underside of the roof sheathing, a space shall be provided between the insulation and the sheathing, and vents shall be installed to permit the transfer of moisture from the space to the exterior. (See Appendix A.)

A-9.19.1.1.(1) Venting of Attic or Roof Spaces. Controlling the flow of moisture by air leakage and vapour diffusion into attic or roof spaces is necessary to limit moisture-induced deterioration. Given that imperfections normally exist in the vapour barriers and air barrier systems; recent research indicates that venting of attic or roof spaces is generally still required. The exception provided in Article 9.19.1.1. recognizes that some specialized ceiling-roof assemblies, such as those used in some factory-built buildings, have, over time, demonstrated that their construction is sufficiently tight to prevent excessive moisture accumulation. In these cases, ventilation would not be required.
Combustion Air For Garages

Question:
With building enveloped getting tighter, and garages being heated, should combustion air be provided in a garage?
The Alberta Building Code, does not consider an attached or detached garage to be a "conditioned space" or "living space".

Based on this understanding, there are no requirements within the ABC for a typical single family homeowners garage to be provided with heat or ventilation to this space.

Background Information:
2014 Alberta Building Code
1.4.1.2. Defined Terms
Conditioned space means any space within a building the temperature of which is controlled to limit variation in response to the exterior ambient temperature by the provision, either directly or indirectly, of heating or cooling over substantial portions of the year.

9.33.2.1. Required Heating Systems
1) Residential buildings intended for use in the winter months on a continuing basis shall be equipped with heating facilities conforming to this Section.

9.33.3.1. Indoor Design Temperatures
1) At the outside winter design temperature, required heating facilities shall be capable of maintaining an indoor air temperature of not less than
   a) 22°C in all living spaces,
   b) 18°C in unfinished basements,
   c) 18°C in common service rooms, ancillary spaces and exits in houses with a secondary suite, and
   d) 15°C in heated crawl spaces.

Canadian Oxford Dictionary
Living Space means an area in a room or house for general use during the day. 2 space for accommodation.
DC 315 Update

Update on DC 315 Intumescent Coating from CCMC

Dear Building Officials,

In response to questions from Building Officials across Canada concerning the Canadian Construction Material Centre’s (CCMC) evaluation report “CCMC 14036-R DC 315 Intumescent Coating” manufactured by International Fireproof Technology Inc. (IFTI), CCMC is providing the following technical clarification as was requested by many.

Key Points

1. It is the Technical Opinion of CCMC that DC315 intumescent coating complies with the NBC 2015 for the protection of foamed plastics as outlined within the CCMC Report 14036-R. (see “CCMC’s Technical Opinion” below)

2. CCMC Evaluations are impartial, neutral and science-evidence based, and provides an opinion of a product’s National Building Code 2015 (NBC 2015) compliance, without commercial interest. (see Technical Due Diligence below)

3. DC315 was evaluated against NBC 2015 Clause 9.10-17.10.(1)(a) for the protection of foamed plastic and was found to be an acceptable Alternative Solution. (see “Code Analysis” below)

4. Provincial & Territorial Authorities were consulted to validate the NBC 2015 interpretation and to ensure that the CCMC Evaluation was consistent with their acceptable building practices. (see “Provinces and Territories Consultation” below)

5. CCMC Report 14036-R establishes that DC315 meets or exceeds the minimum level of performance required by the NBC 2015 prescribed thermal barriers and ½” regular gypsum. (see “Prescribed Thermal Barriers” below)

6. NBC 2015 Division A, Clause 1.2.1.1.(1)(b) describes the compliance path used to determine if a product can be considered an Alternative Solution to a Division B Acceptable Solution based on Objective and Functional Statements. (see “Alternative Solution Analysis” below)

7. The evaluation of DC315 was based on thorough mechanical and durability testing at an accredited lab and fire testing was also conducted at NRC’s National Fire Laboratory. (see “Testing” below)

8. CCMC values its partnership with Building Officials across Canada, and will continue to provide updates as required or requested. (see “Regular Communication with Canada’s Building Officials” below)
CCMC’s Mandate
As a result of the 1990 Memorandum of Understanding between the National Research Council (NRC) and the Provinces and Territories (PTs), the CCMC was created and centralized at NRC in Ottawa as Canada’s official national construction product evaluation service. CCMC’s mandate is to provide technical opinions on innovative, non-standardized construction products for compliance with Canadian building codes, while protecting the health and safety of Canadians. On behalf of the PTs, for use by Authorities with jurisdiction (AHJ), the CCMC develops test protocols and produces evaluations of innovative construction products, materials and systems (i.e. alternative solutions). The PTs also requested that CCMC provide a listing service for standardized construction products. CCMC views itself as a partner to the PTs to support local Building Officials in addressing code compliance for alternative solutions, and assisting the construction industry in obtaining product acceptance across Canada.

CCMC’s Technical Opinion on CCMC 14036-R
It is the opinion of the CCMC that the “DC 315 Intumescent Coating,” when installed as a thermal barrier over spray urethane foam insulation, in accordance with the conditions and limitations stated in CCMC 14036-R, complies with the National Building Code 2015 and also complies with NBC 2010 for the same relevant articles. CCMC stands behind its technical opinion regarding the product’s code compliance as an alternative solution.

Prescribed Thermal Barriers
We understand that Building Officials have concern with respect to the NBC 2015 continuing to reference fibreboard, particle board, OSB, waferboard, etc., as ‘acceptable solutions’ as a thermal barrier over foamed plastic (NBC 2015 9.29.4 to 9.29.9). Based on consultation with the PTs and opinion of NRC fire experts, the CCMC 14036-R evaluation report provides the NRC/CCMC opinion that this intumescent coating over spray urethane foam is an alternative solution to a minimum thermal barrier with a performance level of 10 minutes prior to flash-over occurring (this was found to be 10 times greater than the performance of the current minimum panel products specified in the NBC). This provides AHJs an alternative solution to the code prescribed minimum. For AHJs seeking equivalent protection to that which would be provided by 12.7mm (1/2") drywall performance (common practice), the CCMC evaluation (14036-R) report indicates a 20-minute performance solution for this intumescent coating when installed over spray urethane.

Technical Due Diligence
Being a Federal Government organization and part of NRC, CCMC’s due diligence on all evaluations are impartial, neutral and science-evidence based. CCMC uses the same objective, factual and rigorous process on all evaluations and provides an expert, unbiased opinion on code compliance without commercial interest of the products evaluated.

National Building Code Analysis
In this particular case, a manufacturing company submitted an intumescent coating (for which there is no product standard in the NBC 2015) for product evaluation as an ‘alternative solution’ to Clause 9.10.17.10.(1)(a) of the NBC 2015, when applied over spray urethane foam compliant to CAN/ULC S705.1 (as per 9.25.2.2.(1)(h)). Non-standardized products are often referred to as ‘innovative’ as they are not regulated by a product standard that would define their minimum physical properties,
performance and durability. As they are not standardized, they are proprietary and each must be evaluated on a case-by-case basis to ensure code compliance.

The first part of the CCMC evaluation process involves a code analysis to determine the applicable code sections for this product's usage. For thermal barriers over foam plastics, the summary of the code analysis is as follows:

(i) As per sentence 9.10.17.10.(1) there are 3 ‘acceptable solutions’ for thermal barrier over spray urethane foam insulation outlined in Clauses (a), (b) and (c). Clause (a) deems any of the interior finishes outlined in 9.29.4. to 9.29.9. as acceptable protection for foam plastics. Clause (b) allows for sheet metal as protection and Clause (c) allows for thermal barriers meeting 3.1.5.15.(2) as protection of foam plastics in Part 9 buildings;

(ii) As per 9.29.4. to 9.29.9., interior finishes must meet respective product standards;

(iii) As per 9.25.2.3.(7), where insulation may be subject to mechanical damage it shall be protected by a covering of either gypsum board, plywood, particleboard, OSB or hardboard; and

(iv) As per 9.10.17.1., interior finishes shall have a surface flame spread rating of 150.

Alternative Solution Analysis

Based on the compliance path as per NBC 2015 Division A, Clause 1.2.1.1.(1)(b), an ‘Alternative Solution’ can be used that will achieve the minimum level of performance required by the acceptable solutions in Division B defined by applicable Objectives(O) and Functional Statements(FS). More specifically,

(i) For an alternative solution to 9.10.17.10.(1)(a), Protection of Foam Plastics: The O/FS relate to minimizing the risk of accidental ignition, limiting severity and effects of fire and retarding effects of fire so that persons may move to a safe place during a fire;

(ii) For an alternative solution to the interior finishes outlined in 9.29.4 to 9.29.9: The applicable O/FS relate to having to meet a product standard requirements to resist deterioration of expected in-service environment(F80); and

(iii) For an alternative solution for mechanical damage protection in 9.25.2.3.(7): The O/FS relate to requirements to resist deterioration of expected in-service environment (F80).

The current intent statement of the Clause (NBC 2015 9.10.17.10.(1)(a), Protection of Foamed Plastics) relates to the probability of the foam insulation being ignited and contributing to early growth and spread of fire. The intent published in the 1995 User’s Guide elaborates further in the case of a room fire where the foam insulation is to be shielded by a wall/ceiling finish so as to not have a premature ‘flash-over’ condition.

Province and Territory Consultation

In keeping with CCMC’s role to provide a nationally recognized technical opinion for decision-making by the local AHJs, we consult the PTs when validating NBC 2015 interpretations. For the evaluation of DC 315 Intumescent Coating (CCMC 14036-R), CCMC consulted the PTs on the following two items:

1. The interior finishes specified in 9.29.4 to 9.29.9. - The PTs were asked whether they considered the code specified minimum interior finish to be an acceptable benchmark for an alternative solution or whether the current common practice finish would be required.

2. The jurisdictional requirements of the protection of wood stud/ceiling members. - All the acceptable solutions for protection of foam plastics (9.29.4. to 9.29.9.) are panel products and when installed they effectively protect the wood wall stud/ceiling joist member. As a result, the
PTs were asked whether the intumescent coating should cover the foam and the wood stud/ceiling member or just the foam insulation within the cavity.

The results of this consultation, which can be used by the local AHJs in their decision-making, is presented in Appendix B of CCMC 14036-R.

**Testing**
CCMC understands that most AHJs do not have the means to complete the required technical analysis to identify an innovative product’s equivalent performance to code prescribed minimums. This is why testing for this product was conducted by NRC’s National Fire Laboratory and reviewed by NRC’s fire experts. The CCMC 14036-R outlines the NRC/CCMC technical opinion and provides AHJs a 10-minute or 20-minute performance option for this product based on PTs consultation. These options are related to an alternative solution to the Code ‘minimum’ stated in NBC 2015 9.10.17.10.(1).a and 3.1.4.2.(1).a.

**Regular communication with Canada’s Building Officials**
CCMC values its partnership with Building Officials across Canada. CCMC has increased its outreach to Building Officials via your respective associations and will continue to do more in the future. In 2017, CCMC plans on launching a Building Official Helpdesk supported by regular technical updates and we invite building officials to contact CCMC directly for clarification on CCMC evaluations which may be causing confusion in the marketplace.

For additional information regarding the evaluation Report CCMC 14036-R DC 315 Intumescent Coating or any other evaluation reports, please contact us at 613-993-6189 or ccmc@nrc-cnrc.gc.ca and consult the CCMC registry of product evaluations.

Thank you again for your comments and we look forward to continue working with you,

Dino Zuppa,
CCMC Manager
Roof Addition to a Manufactured Home

Question:
When adding a new roof over an existing roof on a manufactured home, is a Professional Engineers Report required? When a manufactured unit under CSA certification is undergoing any alterations, renovations or repairs, this work should be reviewed and completed under the design of a professional engineer. A building permit would be required at the discretion of the SCO, during which, the SCO would determine the extent of the involvement required by the professional engineer.

In situations where a manufactured home is installing a new roof over an existing roof, the same application would be applicable. The additional loading of the new roof onto the existing walls, and the structural integrity of the walls, the floor and the supporting structure should be reviewed for compliance to the current Alberta Building Code.

Owners should avoid making any changes to the home which will impact the original engineering conducted for the home, as the integrity of the structure may be impacted. In the event the homeowner elects to directly affix structures onto the home, a qualified engineer should be consulted.

Background Information:

What if a CSA Z240 home has been modified since leaving the factory?
A CSA Z240 home cannot be recertified once leaving the factory. In the event the home is renovated or repaired after suffering damage, all applicable work must be conducted in accordance with the Building Code in place at the time the work is undertaken. Licensed trade persons should be used who can attest that Code requirements have been met whenever modifying or repairing this type of home. Also, homeowners must avoid making any changes to the home that impact the original engineering conducted for the home. As examples, additions or decks should not be affixed directly to the home as the integrity of the walls may be impacted. Such additions should be "stand-alone"; that is should carry their own weight without depending upon the original building to carry the weight. In the event the homeowner elects to directly affix structures onto the home, a qualified engineer should be consulted.
Application of Section 9.36 to Additions

Question:
Under the ABC Section 9.36, is an addition required to meet energy efficiency requirements? Where you have an existing deck being turned into a four-season room, would the room have to address all aspects of Section 9.36?
The 2014 ABC does not include any reference excluding additions of any size from being required to meet the energy efficiency requirements within Section 9.36. Therefore, all additions should be required to meet Section 9.36.

Where an existing deck is being changed into a four-season room, a change of use of the existing space is occurring, and therefore should be viewed as new construction which would be required to meet Section 9.36 Energy Efficiency requirements.

Background Information:
2014 Alberta Building Code
1.1.1.1. Application of this Code
1) This Code applies to any one or more of the following:
f) an addition to any building,

9.36.1.3. Compliance and Application
(See Appendix A.)
1) Except as provided in Sentences (2) to (5), buildings shall comply with
a) the prescriptive or trade-off requirements in Subsections 9.36.2. to 9.36.4.,
b) the performance requirements in Subsection 9.36.5., or
c) the NECB.

Part 9 Illustrated Users Guide:
ABC Part 9 is applicable to the reconstruction, demolition, removal, relocation and occupancy of existing buildings. The ABC is most often applied to existing buildings when an owner plans to rehabilitate a building, change its use, build an addition, or when an enforcement authority decrees that a building or class of buildings be altered for reasons of public safety.
Bedrooms in a Group D?

Question:
A client is proposing to add two bedrooms into an existing Group D office building? Can this be done, and if so, how?

A proposal to install a bedroom(s) into an existing D occupancy could be permitted provided some design aspects required under the ABC are taken into consideration. Through the ABC, a designer has the ability to take into consideration if the bedroom(s) area is less than 10% of the floor area of the storey, or if the total sleeping room area exceeds 10% and should be considered a separate major occupancy.

When a sleeping room(s) is less than 10%, the occupancy does not have to be considered as a major occupancy, for the purposes of determining building construction. For areas larger than 10% of the floor area, the whole building should be constructed as per the most restrictive major occupancy requirements.

In addition to the building construction requirements, the designer may also have to take into consideration aspects for sleeping rooms such as smoke alarm installations, fire separations, travel distances, exiting, sprinkler systems, and fire alarm systems.

Background Information
2014 Alberta Building Code
3.2.2.4. Buildings with Multiple Major Occupancies
1) The requirements restricting fire spread and collapse for a building of a single major occupancy classification are provided in this Subsection according to its building height and building area.

2) If a building contains more than one major occupancy, classified in more than one Group or Division, the requirements of this Subsection concerning building size and construction relative to major occupancy shall apply according to Articles 3.2.2.5. to 3.2.2.8.

3.2.2.6. Multiple Major Occupancies
1) Except as permitted by Articles 3.2.2.7. and 3.2.2.8., in a building containing more than one major occupancy, the requirements of this Subsection for the most restricted major occupancy contained shall apply to the whole building.

3.2.2.8. Exceptions for Major Occupancies
1) In a building in which the aggregate area of all major occupancies in a particular Group or Division is not more than 10% of the floor area of the storey in which they are located, these major occupancies need not be considered as major occupancies for the purposes of this Subsection, provided they are not classified as Group F, Division 1 or 2 occupancies.

3.2.4.21. Smoke Alarms
1) Except as required by Sentence (4) and permitted by Sentence (7), smoke alarms
conforming to CAN/ULC-S531, “Smoke-Alarms,” shall be installed in each dwelling unit and, except for care, treatment or detention occupancies required to have a fire alarm system, in each sleeping room not within a dwelling unit or suite of care occupancy.

3.3.1.1. Separation of Suites
1) Except as permitted by Sentences (2) and (3), each suite in other than business and personal services occupancies shall be separated from adjoining suites by a fire separation having a fire-resistance rating not less than 1 h. (See also Subsection 3.3.3. for care, treatment or detention occupancies, Article 3.3.4.2. for residential occupancies, and Article 3.1.8.7. for fire dampers.)

3.3.4.2. Fire Separations
1) Except as permitted by Sentences (2) and 3.2.2.9.(2), suites of residential occupancy shall be separated from each other and the remainder of the building by a fire separation having a fire-resistance rating not less than 1 h.

3.4.2.1. Minimum Number of Exits
1) Except as permitted by Sentences (2) to (4), every floor area intended for occupancy shall be served by at least 2 exits.

3) Except as permitted by Sentence (4), if Sentence (2) permits a single exit from a floor area classified as Group B or Group C occupancy, the exit shall be an exterior doorway not more than 1.5 m above adjacent ground level.

1.4.1.2. Defined Terms
Residential occupancy means the occupancy or use of a building or part thereof by persons for whom sleeping accommodation is provided but who are not harboured for the purpose of receiving care or treatment and are not involuntarily detained.

Business and personal services occupancy means the occupancy or use of a building or part thereof for the transaction of business or the rendering or receiving of professional or personal services.

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.

Major occupancy means the principal occupancy for which a building or part thereof is used or intended to be used, and shall be deemed to include the subsidiary occupancies that are an integral part of the principal occupancy.

Group D
Banks, Barber and hairdressing shops, Beauty parlours, Dental offices, Dry cleaning establishments, self-service, not using flammable or explosive solvents or cleaners, Laundries, self-service, Medical offices, Offices, Police stations without detention quarters, Radio stations, Small tool and appliance rental and service establishments

Group C
Apartments, Boarding houses, Clubs – residential, Colleges – residential, Convents, Dormitories, Family day homes/group family child care homes, Hotels, Houses, Lodging houses, Monasteries, Motels, Schools – residential
Potable Water to Buildings

Question:
A farm/shop building has turned into a shop with offices and full-time staff. Is potable water required as per 3.7.2.1.(3) where a piped water supply is available on the property, but not to the building directly?

Where a building is constructed, the building is required to be provided with a piped water supply for hot and cold water for every kitchen sink, lavatory, bathtub, shower, etc. where a water supply is available.

Water supply is considered to be “available” when a water supply system is distributed to the property through a municipal distribution system, or where an existing water supply is available.

When a piped water supply system is available, i.e. located on the property, it should be expected that the building will be provided with plumbing facilities. Additionally, as per Part 7, the water supply is required to be provided with potable water to the plumbing system.

Background Information:
2014 Alberta Building Code Requirements
3.7.2.1. Plumbing and Drainage Systems
3) Where a piped water supply is available, piping for hot and cold water shall be connected to every kitchen sink, lavatory, bathtub, shower, slop sink and laundry area.

Functional Statements and Objectives
3.7.2.1. Plumbing and Drainage Systems
3) [F71-OH2.3]
F71 To provide facilities for personal hygiene.
OH2 Sanitation
OH2.3 – inadequate facilities for personal hygiene

7.1.2.1. Conformance with Regulations
1) Every plumbing system and private sewage disposal system shall be designed and installed in conformance with the Plumbing Code Regulation and Private Sewage Disposal Systems Regulation made pursuant to the Safety Codes Act.

1.4.1.2. Defined Terms
Plumbing system means a drainage system, a venting system and a water system or parts thereof.

Functional Statements and Objectives
7.1.2.1. Conformance with Regulations
(1) [F30-OS3.1] [F31-OS3.2] [F43-OS3.4][F70-OH2.2] [F72-OH2.1]
F70 To provide potable water.
9.36. and Heat Loss

Question:
Performance path compliance summary under HOT 2000, we receive a space heating system number designed by the energy advisor. The heating installer submits a number as per their calculation for the house. The heating installer and energy advisor numbers differ as much 30,000 to 40,000 BTU. When we do our “cheat” sheet our number is different also. I think their might be a disconnect here as the houses are getting tighter and built to use less energy, therefore the furnaces should become less output in BTU’s. There also appears to be an energy designer doing a performance path on the house and the heating installer not considering this, but still designer the same old way.

Alberta Building Code 2014 article 9.33.5.1. requires that heating appliances that serve a dwelling unit are determined in accordance with CSA F280.
The heating system capacity calculated by the software is dependent on all loads of the house as a system. Hot2000 calculates the exact heat loss but may not include other contingency factors built into the heating programs used by the mechanical contractors, such as duct heat loss, air volumes and distribution.

The following information is required on the modeling report:
1. The equipment type (condensing, induced draft, etc.).
2. Energy source (natural gas).
3. Output capacity (kW or btu/hr) "Higher calculated values as per the Mechanical contractor may be accepted"
4. Efficiency of the furnace (AFUE)
5. Information about the furnace fan.

Any change in the output capacity will change the output of the annual energy consumption. (see Q&A below)

Note that based on the heat loss calculation the software calculates, HOT2000 won't accept values that are below the heating demand but will accept values which are above.

The higher the capacity the less energy consumption.

Questions
1. When the energy advisor submits a furnace size and energy efficiency on his HOT 2000 program, must it be the same as what the installer submits with their calculations?
   No. H2K (HOT 2000) models are for the energy comparison and not for calculating heat losses for mechanical.
2. Should the energy advisor be designing to what the furnace installer has sized to or design to the construction of the house?

Energy advisors do not calculate heating capacities, the software gives an option of calculating it automatically for both the reference and the proposed house, these values are good for comparison (for calculating the annual energy consumption) but not for the required heating capacity as per CSA F280, also Energy advisors are not required to do heating capacity calculation according to NRCan requirements, although that is an option in HOT2000.

3. Is the heating being designed under CSA F280 with energy advisor?

H2K does calculate heating loss and adjusts value according to the components of the building; energy advisors can’t verify or adjust any values under F280 in H2K.

We don’t have enough information about how much of this standard has been incorporated in the program, NRCan has been contacted to confirm if all the standard requirements are been addressed in H2K.

Background Information

CSA F280

The AIM2.xls spreadsheet is based on the AIM-2 MODEL (Alberta Air Infiltration Model VERSION 1) developed by I.S. Walker and D.J. Wilson, University of Alberta, Department of Mechanical Engineering, Technical Report 71, January 1990 and implemented in the HOT2000 Energy Simulation computer program since 1993. The current AIM-2 model has the distinct enhancement of including the effects of both balanced and unbalanced mechanical ventilation, the effects of wind and shielding parameters, and takes flues into account. In general, the AIM-2 model results in a reduction in space heating loads for houses that are “very tight” and, given that energy efficient buildings are achieving increasing levels of air tightness and include mechanical ventilation, recognition of these improvements was considered critical to the accuracy of heat loss and heat gain calculations.

CSA F280

The 2012 edition of this Standard was able to build on the principles of earlier versions with specific advancements in how foundations, air leakage, and windows are modeled. These enhancements were based largely on work that was done by Natural Resources Canada in their development of the current versions of the HOT2000 Energy Simulation Software. Many changes in this edition of the Standard were designed to reflect advancements in building science and the increasing energy efficiency of new buildings and to ensure accurate sizing throughout a range of building ages, locations, and efficiency.

Questions

4. When designing the house under the performance path, would not the houses be tighter and need less of a furnace size?

That’s true, in the performance path H2K will always reduce the heating capacity required for the proposed house.
5. Should we still verify 9.33. for size of furnace or let the energy advisor dictate size?
   Local authorities should verify compliance with Section 9.33. Hot2000 is only for comparison.

6. If the energy advisor sets a size, should we expect that size to be installed?
   May not be the same as F280 calculations. Mechanical contractor should set sizing and follow CSA F280 and good practice, local authorities need to verify compliance.

7. When an energy advisor changes the size or ups the size closer to our calculations, should that not change the performance path calculations?
   That is true, but energy advisors will allow the HOT2000 to automatically calculate these values, unless they input calculated values (user defined) through mechanical contractors (very rare). So, allowing the program to automatically calculate values for both reference and proposed will result in fair comparison.

Summary:

1. Heating calculation based on CSA F280 is required as per section 9.33., and needs to be submitted to the local authorities for verification.

2. H2K heating calculation is for comparison only between the proposed house and the reference house. This information is superseded by the calculations conforming to 9.33 and CSA F280, completed by the contractor.
Secondary Suite Furnace Room Access

Question:
Our Building SCO group have discussed tenant accessibility to mechanical systems in a house with a secondary suite. For example, we have had several applications were the upper floor occupant would have to enter the lower floor occupant's living space to access a tripped electrical breaker. We have not found anything in the ABC that deals with this issue of privacy. We are curious as to how other jurisdictions deal with this.

The Alberta Building Code does not address required access to common areas within a house with a secondary suite, such as the furnace room, for both tenants.

The Canadian Electrical Code simply states that the panel is to be accessible, however it does not specify for both tenants.

Therefore, the furnace room could be accessible to only one tenant, and still meet the minimum construction requirements within the Alberta Building code.
Make-Up Air for Depressurization

Question:
In meeting with CHBA Edmonton it appears our Builders have the understanding that no MUA is required in a residential application providing they use direct vent or mechanically vented gas appliances. They cited 9.32.3.8 in their defense. Article 9.32.3.8 only applies to spillage susceptible appliances. Is it correct to negate the rest of Section 9.32 for the sake of one article?

As per Article 9.32.3.8. where dwelling units contain a fuel-fired space heating appliance, or a fuel-fired water heating appliance, where these appliances are direct-vented or mechanically vented, protection against depressurization is not required.

There are some appliances available which have been tested to comply to the Gas Code CSA B149.1, as meeting category III or IV which are designed to be mechanically vented.

Where these appliances are being proposed, the SCO should confirm that the appliances are classed as category III or IV, are mechanically vented, and that the appliance has been installed with or without combustion air as per the manufacturer’s installation instructions. The SCO has the ability to permit the installation of these appliances, (which draw air from the inside of the house), without requiring additional make-up air.

Background Information:
2014 Alberta Building Code
9.32.3.8. Protection Against Depressurization (See Appendix A.)
1) This Article applies to
a) dwelling units that contain a fuel-fired space-heating appliance or fuel-fired water-heating appliance of other than direct-vented or mechanically vented types, and
b) ancillary spaces that contain an exhaust device, where the space is not within a dwelling unit in a house with a secondary suite and where the house with a secondary suite contains a fuel-fired space-heating appliance or fuel-fired water-heating appliance of other than direct-vented or mechanically vented types.

Direct-vented (as applying to a fuel-fired space- or water-heating appliance) means an appliance and its venting system in which all the combustion air is supplied directly from the outdoors and the products of combustion are vented directly to the outdoors via independent, totally enclosed passageways connected directly to the appliance.

Mechanically vented (as applying to a fuel-fired space- or water-heating appliance) means an appliance and its combustion venting system in which the products of combustion are entirely exhausted to the outdoors by a mechanical device, such as a fan, blower or aspirator, upstream or downstream from the combustion zone of
the appliance, and the portion of the combustion venting system that is downstream of the fan, blower or aspirator's sealed and does not include draft hoods or draft control devices. (See Appendix A.)

Mechanically Vented
The definition of this term is intended to include all types of appliances and venting systems that rely entirely on fans to evacuate the products of combustion. Systems variously referred to as "forced draft," "power vented" and "induced draft" in standards and industry terminology may be covered by this definition. The key characteristic of such systems is that they are more resistant to depressurization-induced spillage of combustion products into the building in which they are housed because the combustion venting system downstream of the fan is "sealed," i.e., includes no draft hood or draft control device.

2014 ABC
A-9.32.3.8. Protection against Depressurization. When an exhaust device extracts air from a house and there are no provisions for the introduction of outdoor air, such as by means of an outdoor air duct as required by Articles 9.32.3.4. and 9.32.3.5., and no supply fans are operating simultaneously, the exhausted air will automatically be replaced by outdoor air that has infiltrated through the house's building envelope. The rate of inward leakage will automatically equal the rate of outward extraction: otherwise the house would eventually implode. The instant the exhaust device is turned on, the house pressure is lowered and the inside/outside pressure difference drives outdoor air in through any leaks it can find. See Figure A-9.32.3.8.-A.

Even if the house is made more airtight, the inward leakage will equal the outward fan flow. However, because there are fewer and/or smaller leakage sites in an airtight house, it will take a larger inside/outside pressure difference to drive the same amount of air through the remaining leakage sites. See Figure A-9.32.3.8.-B.

It is possible that the exhaust device will no longer be able to achieve its rated flow when operating against a very high inside/outside pressure difference. However, in this case, the inward flow will also decrease and will still be in equilibrium with the outward flow, but now at a higher inside/outside pressure difference than in a leakier house.

An exhaust device not operated in conjunction with a supply fan will always depressurize a house to some extent—even a leaky house. But it will depressurize a tight house more than it will depressurize a leaky house. And, of course, an exhaust device with a higher capacity will depressurize a house more than a device with a smaller capacity.

Spillage of Combustion Products
Depressurization of the house by the ventilation system or other exhaust devices can cause the spillage of combustion products from certain types of combustion appliances. The types of appliances that are susceptible to pressure-induced spillage can generally be identified by the fact that they are vented through a natural draft chimney rather than through an arrangement that uses a fan to draw the products of combustion out of the house. Naturally aspirated gas furnaces with draft hoods and oil furnaces with barometric dampers are examples of spillage-susceptible appliances.

On the other hand, some gas furnaces with induced draft venting systems and the "sealed combustion" oil furnaces commonly used in mobile homes, are more resistant to spillage. Terms
used in gas appliance standards to describe categories of spillage-resistant appliances include "direct-vented" and "side-wall-vented."

Almost all fireplaces are spillage-susceptible, even those with so called "airtight" glass doors and outside combustion air intakes, since most "airtight" doors are not really airtight. Certain types of gas combustion appliances, such as cooking appliances and "decorative appliances," are not required to be vented. Their operation will not be significantly affected by depressurization of the house.

The Alberta Building Code addresses the potential for spillage from combustion appliances with requirements for:
- makeup air, and
- carbon monoxide alarms.

**Makeup Air Requirements**
Depressurization caused by the principal ventilation system itself is not an issue in houses with balanced systems (that is, non-exhaust-only systems). However, the operation of other exhaust devices, such as stove-top barbecues, can cause depressurization. Therefore, in a house with spillage-susceptible appliances, any such exhaust devices, including the required supplemental exhaust fans, must be provided with makeup air [see Sentence 9.32.3.8.(2)].

In the past, the Alberta Building Code and other codes and standards have tended to rely on the passive supply of makeup air through makeup air openings. This is no longer considered to be a reliable approach in the context of a simple, prescriptively described system without sophisticated controls on depressurization. Therefore, the makeup air must be provided by a supply fan that is automatically activated whenever the exhaust device that requires the makeup air is activated [see Sentences 9.32.3.8.(2) and (3)].

The need for makeup air can be avoided by not using spillage-susceptible combustion equipment.

**CSA B149.1 - 4.25.1**
Every heating appliance, water heater, or refrigerator installed in a mobile home or a vehicle, other than a canvas-top tent trailer, shall be of the direct-vent appliance type or equivalent, and shall be installed to provide complete separation of the combustion system from the atmosphere of the space provided for living.
Male/Female Washroom Signage

Question:
Does the ABC prescribe the designation of male/female washroom signs?

The ABC Tables within Section 3.7 of the ABC use male/female criteria only as a means of calculating the required number of water closets where the actual M/F ratios are not known. Other than the requirements for barrier-free access signage, there are no requirements within the ABC which mandate that a washroom be identified with a sign for a specific gender.

Therefore, every washroom facility could be identified as a gender neutral washroom, as long as the total number of water closets provided meets the minimum number required by the ABC for both sexes.

Background Information:
2014 Alberta Building Code
3.7.2.2. Water Closets
1) Except as permitted by Sentence (4), water closets shall be provided for each sex assuming that the occupant load is equally divided between males and females, unless the proportion of each sex expected in the building can be determined with reasonable accuracy. (See Appendix A.)

3.8.3.1. Accessibility Signs
2) A washroom, shower, elevator or parking space designed to be barrier-free shall be identified by a sign consisting of the international symbol of accessibility for persons with physical disabilities and by appropriate graphic or written directions to indicate clearly the type of facility available. (See Appendix A.)
A660 and A277 Compliance

Question?
When a Building Vendor holds certifications for CSA A660 & CSA W47.1, does this mean that they are already in compliance with CSA A277 Quality program, and/or does the CSA A277 still apply?
The A-660 Standard addresses a “building system” but not the building. It concerns only the structural steel elements that are factory produced and normally comes as a shipped package to be assembled on site. In some cases, items such as cladding or roofing are included because they are structural elements. Use of this Standard is acceptable where it forms part of the documentation for a site built building. In this case the engineer of record for the building can rely on a recognized third party building system as part of his structural responsibilities. Factories are often at distant and out of Province locations making site reviews for the engineer of record difficult. This is recognized by APEGA Guidelines as well as the building code.

A-277 intent is to address all the objectives of the building code, not just structural. An A-277 manufacturer that manufactures a steel building system can do so under A-277 without need for the A-660 certification. They may also purchase an A-660 building system and incorporate it into the A-277 building much like they can purchase a manufactured certified beam for instance. Thus A-277 is much more comprehensive than A-660.

Use of A-660 will impact the relocatable potential of a building as well as the scope and extent of the permit inspections on site. There is a need for buildings that can be moved frequently or more than once during its serviceable lifespan. A-277 is normally done in modules that incorporate certified architectural, electrical, plumbing and gas elements reducing the need for site inspections and work. Relocation of a building with, or without an A-660 structural frame is much more problematic for the owner and the local Authority.

The A-660 certification is strictly limited to off-site manufacture of the structural building system and architectural, electrical, plumbing and gas elements may not be included as part of its certified product.

Background Information:
2014 Alberta Building Code Requirements
10.1.1.4. Renovation Requirement of Existing Units
1) Sections 10.6. and 10.7. apply to
   a) a building constructed on or after 01 May 2015, and
b) except as varied by Sentence (2), a building constructed before 01 May 2015 at the time of relocation.

2) Units built between 01 March 1977 and 01 May 2015 shall comply with the requirements of Part 10 of the Code in effect at the time of construction and to Sections 10.6. and 10.7. of this Code upon relocation.

3) A building referred to in Sentences (1) and (2) must be constructed or renovated by a constructor certified by the Chief Building Administrator and must carry the appropriate Alberta label.

4) A building regulated by this Part that is constructed in or relocated into Alberta after 01 May 2015 shall conform in all respects to this Code.
Cancellation of New Home Buyer Protection After the Fact

Question?
The New Home Buyer Protection (NHBP) Department notifies us if coverage has been cancelled. If this happens after issuance of a permit, what should the Building Inspector do? When warranty insurance coverage has been cancelled, either by the builder or the insurance provider, a New Home Buyer Protection Officer will contact the local AHJ to advise them, so that no further inspections or work is completed.

Under the Permit Regulation, a permit can be suspended or cancelled if a permit has been issued, where incorrect or insufficient information is provided under section 11. Additionally, a permit can also be cancelled or suspended where the undertaking contravenes the Act or another enactment, or where there is a contravention of a condition under which the permit was issued.

When coverage has been cancelled, the permit application requirements have no longer been met, and the permit can be suspended or cancelled until appropriate corrections have been made.

In situations where the house has previously been finaled, but NHBP has now been cancelled, a copy of the final inspection report should be provided to the NHBP Department, so they can contact the warranty provider.

Background Information:
SCA - Permit Regulation
Refusal to issue, suspension or cancellation
26 Without restricting the generality of section 46 of the Act, a permit issuer may refuse to issue a permit and, without restricting the generality of section 44 of the Act, a safety codes officer may suspend or cancel a permit that has been issued if
(b.1) incorrect or insufficient information is provided under section 11 of the New Home Buyer Protection (General) Regulation or section 2 of the New Home Buyer Protection (Regional Municipality of Wood Buffalo) Regulation,
(b.2) evidence provided under section 6.1(2) was incorrect or is no longer correct,
(c) in the opinion of the permit issuer, the undertaking for which the permit would be or has been issued would or does contravene the Act or another enactment,
(d) the permit fee has not been paid,
(e) there is a contravention of any condition under which the permit was issued, or
Spray Foam over Ductwork

Question?
The ABC says you can't spray foam around supply ducts, yet it seems to be common practice with the condition that joints are sealed? How is everyone accepting this?
There are some jurisdictions who have been accepting foam plastic insulation in contact with heating ductwork where the manufacturer has had testing completed confirming compliance to the CAN/ULC-S705.1 or the CAN/ULC-S102, as well as testing of the products flame-spread rating and smoke development classification.

In these situations, the AHJ has accepted a city wide variance for the manufacturer's product as long as it is installed as per their proposal.

The 2015 National Building Code has implemented a change within the document, which permits this installation where certain conditions have been met. See references below for conditions.

Background Information:
2014 Alberta Building Code Requirements
9.32.3.11. Ducts
8) Joints in all ventilation system ducting shall be sealed with mastic, metal foil duct tape or the manufacturers’ specified sealants.

Coverings, Linings, Adhesives and Insulation (3.6.5.4. and 9.33.6.4.)
3.6.5.4. & 9.33.6.4. Coverings, Linings, Adhesives and Insulation
5) Except as permitted by Sentence (6), foamed plastic insulation shall not be used as part of an air duct system or for insulating an air duct.

9.33.6.4.(5)
OS1 Fire Safety
Intent
Intent 1:
To limit the probability that foamed plastic, once ignited, will contribute to the rapid spread of fire and smoke throughout the building, which could lead to harm to persons.

3.6.5.4.(5)
OS1 Fire Safety
Intent
Intent 1:
To limit the probability that foamed plastic insulation will be used in air duct systems or for insulating air ducts, which could lead to the insulation contributing to the growth or spread of fire, which could lead to the spread of fire to other parts of the building by means of the air duct systems, which could lead to harm to persons.
2015 National Building Code
9.33.6.4.
5) Except as provided by Sentence (6) & (7), foamed plastic insulation shall not be used as part of an air duct or for insulating an air duct.

6) Foamed plastic insulation confirming to Article 9.25.2.2. is permitted to be used to insulate a galvanized steel, stainless steel or aluminum air duct, provided
   a) the foamed plastic insulation applied to supply ductwork is not less than 3m from the furnace bonnet,
   b) the temperature within the ductwork where the insulation is installed is not greater than 50 degrees C,
   c) duct joints are taped with a product conforming to Sentence 9.33.6.3.(1),
   d) return air plenums are separated from the foamed plastic insulation, and
   e) the foamed plastic insulation is protected
      i) by one of the interior finishes described in Subsection 9.29.4. to 9.29.9.,
      ii) provided the building does not contain a Group C major occupancy, by sheet metal that is mechanically fastened to the supporting assembly independent of the insulation, is not less than 0.38mm thick and has a melting point of 650 degrees C, or
      iii) by any thermal barrier that meets the requirements of Clause 3.1.5.15.(2)(e).

Excerpt from 2014 NBC Illustrated User’s Guide:

9.33.6.3. Tape

This Article requires, through reference to a standard, acceptable tape for sealing duct joints that will not create a fire hazard by facilitating the spread of fire along its surface.

9.33.6.4. Coverings, Linings, Adhesives and Insulation

This Article requires that air ducts (including plenums) and their components, such as coverings, linings, insulation and adhesives, not facilitate the spread of fire along the ducts, and not generate excessive amounts of smoke in the event of a fire. It requires that these materials not ignite when they are near sources of high temperatures, and that they be able to preserve the integrity of any fire separation through which the ducts pass. Lining materials can interfere with the operation of dampers or fire block flaps. This has to be prevented.

Example of an Alternative Solution Approval

The information evaluated in relation to this Sentence follows:

- Testing of the Spray Foam to ASTM C411, Test Method for Hot-Surface Performance of High Temperature Thermal Insulation. The test results show that the Spray Foam, in contact with a hot surface maintained at 121+14°C for 96 hours did not flame, glow, smoulder or smoke, nor was there any evidence of melting, dripping, cracking, delaminating or warping. This constitutes a pass for this test.

- The CCMC evaluation report allows product 1 to be used at maximum in-service temperatures not exceeding 70°C, and CAN/ULC-S705.2 allows product 2 to be used at maximum in-service temperatures not exceeding 60°C.

- Your office provided information that the maximum exterior surface temperature of a residential duct would be in the range of 60°C at a distance of at least 3 m from the furnace.

Based on your office’s submission and our subsequent review and interpretation of the articles involved, we agree that the Spray Foam may be installed in direct contact with forced air heating ductwork and return air ductwork in residential construction limited to single family homes, semi-detached houses, duplexes and row houses that are not stacked. This is subject to the following limitations.

1. The Spray Foam may be applied to supply ductwork at a distance of 3 m or greater from the furnace bonnet and there must be a temperature of 50°C or less within the ductwork at the point where the
Spray Foam is being applied.

2. Ductwork section joints are to be taped with a product complying to the ABC – Article 9.33.6.3. prior to installing the Spray Foam.

3. Return air plenums are to be isolated from the Spray Foam by sheet metal.

4. All void spaces around ducts are to be filled with the Spray Foam up to the thermal barrier.

5. A thermal barrier is to cover the Spray Foam in order to isolate it from adjacent space other than adjacent concealed spaces, as required by the CCMC evaluation report for the product, and the ABC – Article 9.10.17.10.

6. The Spray Foam insulation is to be kept away from heat emitting devices such as chimneys, recessed lights etc., as outlined in CAN/ULC-S705.2 and the CCMC evaluation report.

7. The Spray Foam shall not isolate any plumbing pipes so that pipes may be exposed to unheated areas.

We also note that the installer intends to supply an identification certificate on-site to identify the type of foam used, builder, and/or certified contractor doing the installation. We suggest that this information be supplied to the home builder at the start of the job and be available for our Safety Codes Officers in the on-site job pouch. In this way our inspection staff will be aware of the type of insulation and will look for the appropriate installation of heating and plumbing pipes in relation to the installation.
Two Furnaces, One HRV

Question:
When a new building is constructed with two furnaces and an HRV, how many HRV's are required? One for each furnace, or one in total?

There are no requirements within the 2014 ABC, within Section 9.36 Energy Efficiency which require 2 HRV's when 2 furnaces are installed in a dwelling unit. However, ventilation for a dwelling unit should be designed and installed to meet the requirements of Section 9.32., which is intended to ensure ventilation to a home is distributed through-out the dwelling unit.

Furnace and HRV installations should be designed to meet the requirements of the ABC for ventilation. Where two separate furnaces are installed, and if each furnace is providing ventilation to specific and separate portions of the building, considerations should be provided to ensure ventilation to all portions of the dwelling unit are being achieved.

Background Information:
2014 Alberta Building Code
9.32.3.1. Required Ventilation
1) The heating-season ventilation required by Clause 9.32.1.2.(1)(b) shall be provided by a mechanical ventilation system complying with
a) good practice such as that described in CAN/CSA-F326-M, "Residential Mechanical Ventilation Systems;"
b) for dwelling units with 5 or fewer bedrooms, the balance of this Subsection, or
c) Part 6. (See Appendix A.)

2) Mechanical ventilation systems complying with the balance of this Subsection shall incorporate at least the following components:
a) a principal ventilation system complying with Article 9.32.3.3.,
b) supplemental exhaust fans complying with Article 9.32.3.7., and
c) protection against depressurization in accordance with Article 9.32.3.8.

9.32.3.3. Principal Ventilation System
(See Appendix A.)
1) The principal ventilation system shall incorporate the following components:
a) a principal ventilation fan complying with this Article, and
b) provision for the introduction of outdoor air to the dwelling unit, in conformance with Article 9.32.3.4. or 9.32.3.5.

2) The principal ventilation fan shall be capable of operating at an exhaust capacity complying with Table 9.32.3.3., referred to hereinafter as the "normal operating
exhaust capacity." (See Appendix A.)

3) The requirement for a principal ventilation fan may be satisfied by a single fan, by the exhaust side of a heat recovery ventilator, or by a group of fans, provided all fans in the group are controlled simultaneously by a controller complying with Sentences (5), (6) and (7). (See Appendix A.)

**A-9.32.3.3. Principal Ventilation System.** The principal ventilation system circulates air throughout the house for the purpose of maintaining acceptable indoor air quality. Each ventilation system has three main components:
- indoor air exhaust
- outdoor air supply
- distribution of air

**Indoor Air Exhaust**
The principal ventilation fan extracts indoor air. Its operation is linked with a means of introducing and distributing outdoor air to the dwelling unit at approximately the same rate at which the indoor air is exhausted.
The principal ventilation fan must be capable of drawing air from throughout the dwelling unit and exhausting it to the outdoors. Though actual usage will be determined by the occupants, the fan must be capable of continuous operation. Unfortunately, there is no standard method of testing and designating fans for continuous use. Therefore, such a designation is not a mandatory requirement [see Sentence 9.32.3.3.(4)].

### 2010 NBC Intent Statements

**9.32.3.1.(1)**

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**Intent**

**Intent 1:**
To limit the probability of the inadequate replacement of indoor air with outdoor air, which could lead to excessive negative pressure in dwelling units, which could lead to the spillage of combustion products from fuel-burning appliances that are susceptible to spillage.

This is to limit the probability of the entry of carbon monoxide gas into living space, which could lead to the acute poisoning or asphyxiation of persons.
Multiple Tenant Self-Storage Warehouse

Question?
Will the requirements for mini storage buildings be changed to coincide with the 2015 NBC requirements?
A previous 1997 STANDATA which previously permitted some exceptions for construction requirements for multi-tenant storage buildings was withdrawn and the requirements for fire separations can be found within 3.3.5.9.

Currently AMA is reviewing the changes within the 2015 NBC, to determine if a new STANDATA should be developed which will address various options. This review will also take place as part of the discussions towards addressing any Code changes which should be established should Alberta decide to skip a code cycle, which is also still under review.

If a permit application for a multiple tenant self-storage warehouse were proposed prior to the issuance of a STANDATA. The local SCO would have to ability to review an Alternative Solution proposal which identified the 2015 NBC requirements as rationale for meeting the intent of the ABC.

Background Information:
2014 Alberta Building Code
3.3.5.9. Multiple-Tenant Self-Storage Warehouses
1) Unless the building is sprinklered throughout, each individual tenancy in a multiple-tenant self-storage warehouse classified as an industrial occupancy shall be separated from the remainder of the building by a fire separation having a fire-resistance rating not less than 45 min.

9.9.6.4.(5) Exit doors need not conform to Sentences (1) or (2), where
a) the doors serve accessory buildings where life safety is not adversely affected,
b) the doors serve storage garages or other accessory buildings serving not more than one dwelling unit, or
c) the doors
   i) serve storage suites of not more than 20 m² in gross area that are in warehousing buildings of not more than one storey, and
   ii) open directly to the exterior at ground level.

Ontario Building Code
3.10.2.5. Exit Requirements
(1) Except as provided in Sentences (2) and (3), the requirements in Section 3.4. shall apply.
(2) The clear width of an exit stair shall be not less than 1 100 mm.
(3) Exit doors from rental spaces are not required to swing on a vertical axis provided,
   (a) the area of the rental space is not more than 50 m², and
   (b) the travel distance within the rental space is not more than 10 m.
2015 National Building Code Requirements

Section 3.9. Self-service Storage Buildings

3.9.1. General

3.9.1.1. Definition

1) For the purpose of this Section, the term “self-service storage building” shall mean a building that is open to the public for the sole purpose of providing individual self-service storage units.

3.9.1.2. Application

1) This Section applies to self-service storage buildings that
   a) are not more than one story in building height,
   b) do not contain a basement or mezzanine,
   c) consist of individual self-service storage units with external access only.
   d) are used for no purpose other than storage, and
   e) except as provided in Sentences 3.9.3.1.(2) and (4), contain no other major occupancy.

2) Where there is a conflict between the requirements of this Section and other requirements in Part 3, this Section shall govern.

3) The requirements in Part 3 regarding occupant load shall not apply to self-service storage buildings.

3.9.1.3. Occupancy Classification

1) Self-service storage buildings shall be classified as Group F, Division 2 major occupancies.

3.9.2. Building Fire Safety

3.9.2.1. Building Area

1) For the purpose of applying the requirements of Subsections 3.2.1. and 3.2.2. to self-service storage buildings, building area shall mean
   a) the building area of each building, or
   b) the total of the building areas of all buildings as a group. (See Note A-3.9.2.1.(1).)

3.9.2.2. Spatial Separation

(See Note A-3.9.2.2.)

1) Except as provided in Sentence (3), the spatial separation requirements in Subsection 3.2.3. shall apply to self-service storage buildings.
3.9.2.3. Access Route

1) Where Clause 3.9.2.1.(1)(b) is applied to a group of buildings, Article 3.2.5.4. and Sentence 3.2.5.5.(1) shall apply to that group of buildings as if they were a single building.

3.9.3. Floor Areas

3.9.3.1. Safety Requirements Within Floor Areas

1) Except as provided in Sentences (2) to (6), the requirements of Section 3.3. shall apply. (See Note A-3.9.3.1.(1).)

2) Not more than one dwelling unit is permitted to be contained within one of the self-service storage buildings on a property.

3) A dwelling unit referred to in Sentence (2) shall be separated from individual self-service storage units by a fire separation having a fire-resistance rating not less than 2 h.

4) Where an office not more than 50 m² in area is adjacent to a dwelling unit referred to in Sentence (2), it shall be considered as part of the dwelling unit.

5) Fire separations required by Sentences 3.3.1.1.(1) and 3.3.5.9.(1) need not be provided between individual self-service storage units.

6) The floor area of self-service storage buildings shall be
   a) subdivided into compartments not more than 500 m² in area by a fire separation having a fire-resistance rating not less than 1 h, or
   b) sprinklered.
(See also Sentence 3.4.6.12.(2) for the exemption applying to exit doors of individual self-service storage units.)

3.9.3.2. Sanitary Facilities

1) Except as provided in Sentence 3.7.2.1.(1), two public washrooms, each containing a water closet and a lavatory, shall be provided within one of the self-service storage buildings on the property. (See Note A-3.9.3.2.(1).)

3.4.6.12. Direction of Door Swing

1) Except for doors serving a single dwelling unit and except as permitted by Sentence (2) and Article 3.4.6.14., every exit door shall
   a) open in the direction of exit travel, and
   b) swing on its vertical axis.

2) Exit doors need not conform to Sentence (1), where
   a) they serve storage garages serving not more than one dwelling unit,
   b) they serve accessory buildings serving not more than one dwelling unit,
   c) they
      i) serve storage units not more than 28 m² in area that are on the first story in warehousing buildings, and
      ii) open directly outdoors at ground level, or
   d) they serve individual self-service storage units referred to in Section 3.9[]
Secondary Suites & “Carriage” Suites

Question?
Is a carriage suite being categorized as a secondary suite, or a second dwelling unit? How are other municipalities dealing with these?
The definition of a secondary suite with in the Alberta Building Code is specific to a secondary dwelling unit within a primary dwelling unit. Carriage suites are not located within the primary dwelling unit, and therefore by definition should not be classified as a secondary suite.
When not classified as secondary suite, the second dwelling unit as well as the primary dwelling unit would be required to meet all spatial separation requirements including exposing building face construction. Additionally, if the garage area is not associated with the use of the second dwelling unit, a fire separation with a fire resistance rating should be provided between the two suites.

Background Information:
2014 Alberta Building Code Requirements
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.)

Secondary Suite
A secondary suite is a self-contained dwelling unit that is part of a house containing not more than two dwelling units (including the secondary suite) and any common spaces such as common storage, common service rooms, common laundry facilities or common areas used for egress. Secondary suites are typically created within an existing single dwelling unit—commonly called a “house”—either constructed as an addition to an existing house or incorporated during the construction of a new house. A secondary suite may have more than one storey and may be on the same level as the principal dwelling unit of the house or be above or below it.
Examples of buildings where secondary suites are permitted include individual detached houses, or where the secondary suite is located in a portion of a building, semi-detached houses (half of a double) and freehold row houses. (See Appendix Note A-9.10.15.1.(1) of Division B.)
Where a building has multiple occupancies, the secondary suite can only be created in a portion of the building that is of residential occupancy. Apartment buildings have more than two dwelling units and are therefore not permitted to have secondary suites.
A secondary suite is only permitted where approved by the local authority, in accordance with municipal land use bylaws.
AMA Regional SCO Meeting

ELECTRICAL Break-Out Session

2017 STANDATA & 2018 CE Code

Thursday, October 5, 2017
Salon B
Pomeroy Hotel & Conference Center
11633 100 Street, Grande Prairie, AB
Clarence C. Cormier, P.Eng.
Provincial Electrical Administrator

EDUCATION
• Technical University of NS (now Dalhousie University)
• Graduated May 7, 1988
• Bachelor of Engineering – Electrical, Power Option

EXPERIENCE
• Electrical Consulting Engineer | 15 Years
• NS Senior Electrical Engineer | 10 Years
• AB Chief Electrical Inspector | 4 Years
Clarence C. Cormier, P.Eng.  
Provincial Electrical Administrator

COMMITTEE PARTICIPATION

• Alberta Electrical Sub-Council and 3 of its 4 working groups:
  – Canadian Electrical Code Working Group
  – Electrical Utility Code Working Group
  – Oil & Gas Code Working Group

• Canadian Standards Association
  – TC Canadian Electrical Code (CE Code), Part 1
  – TC Industrial Products (TCIP) (CE Code, Part 2)
  – TC Wind Turbines (CE Code, Part 2)
  – TC Canadian Electrical Code (CE Code), Part 4 - Objective Based Industrial Electrical Code (OBIEC)

• Standards Council of Canada
  – Electrical Product Safety - Health Canada
  – Canadian Advisory Council for Electrical Safety (CACES)

• Underwriters Laboratories
  – UL Electrical Council
  – UL STP 111 - Committee for Multioutlet and Prefabricated Wiring Assemblies
  – UL STP 497 – Protectors
  – UL STP 1446 – Systems of Insulating Materials – General
  – UL STP 1974 - Evaluation for Repurposing of Batteries
  – UL STP 2743 - Portable Power Packs
  – UL STP 3001 Application - Distributed Energy Generation and Storage Systems
  – UL STP 3741 - Photovoltaic Hazard Control (PV Rapid Shutdown)
  – UL STP 9540 - Energy Storage Systems and Equipment
AMA Electrical Staff

• Provincial Electrical Administrator
  – Clarence Cormier (Edmonton)
• Electrical Team Lead
  – Kevin Glubrecht (Red Deer)
• Electrical Technical Advisor
  – Bob Hall (Edmonton)
• Electrical Technical Advisor
  – Cameron Doram (Red Deer)
• Electrical Technical Advisor
  – David Phillips (Edmonton)
• Electrical Technical Advisor
  – Gregg Marshall (Calgary)
• Partnership Support Officer
  – Steve Eagles (Red Deer)
1 The Electrical Code Regulation (AR 209/2006) is amended by this Regulation.

2 Section 3 is amended

(a) by repealing clauses (a) and (b) and substituting the following:

   (a) the Canadian Electrical Code, Part 1 (Twenty-third edition),
   being Canadian Standards Association standard C22.1-15, as amended from time to time;

   (b) the Code for Electrical Installations at Oil and Gas Facilities, 5th
   Edition, 2015, published by the Safety Codes Council, as amended from time to time;

(b) in clause (c) by adding “, as amended from time to time” after “Council”.

3 The Schedule is repealed.

4 This Regulation comes into force on January 1, 2016.
Automatic Code Adoption

From the Safety Codes Act, Section 39:
(4) If a code, standard or body of rules is declared in force as amended or replaced from time to time, any amendments to the code, standard or body of rules or replacement of the code, standard or body of rules comes into force on the first day of the month following the expiry of 12 months after the date on which the amendment or replacement is published, unless the Minister publishes an order in Part I of The Alberta Gazette declaring
(a) that the amendment or replacement will not be in force on the expiry of 12 months following the date on which the amendment was published, or
(b) that the coming into force of the amendment or replacement is to occur on an earlier or later date.
Grande Prairie Regional Meeting
Electrical Break – Out Session

2018 CE CODE
Questions
The End

THANK YOU