



Safety Codes Council

MINUTES OF THE FIRST BUILDING SUB-COUNCIL MEETING OF 2022

DATE: January 13, 2022

TIME: 8:33 a.m. to 12:08 p.m.

LOCATION: Videoconference

PRESENT: *Sub-Council Members*

Andy Smith, Chair
Colin Belliveau
Keven Lefebvre
David Flanagan
Rick Gratton, Vice-Chair, South
Stephen Hill
Keith Jansen (at 8:49 a.m.)
Corey Klimchuk, Vice-Chair, North
Matthew Kramer
Grace O'Brien
Laura Ritchie
Darin Sceviour
Darrin Harsch
Justin Pockar

Safety Codes Council

Allison Karch, Kathryn Derkach

Alberta Municipal Affairs

Paul Chang

REGRETS: Terry O'Flaherty, Zachary Walker

GUESTS: Cam Buskell; Chris Taylor (FSC Liaison); Gerry Wiles (ESC Liaison); Karen Muir (BFSC Liaison)

RECORDER: Allison Karch

2022 MEETINGS: March 10, May 12, September 22, November 10

1. Meeting Opening

The Chair called the meeting to order at 8:33 a.m. A round table introduction was held and videoconferencing functionality was reviewed. Members were reminded that the primary duty of Council members to act in the best interest of safety for the benefit of all Albertans.

1.1 Agenda Adoption

Darin Sceviour / Rick Gratton moved that the agenda be adopted, as circulated; CARRIED

1.2 Agenda of the November 18, 2021 Minutes

Justin Pockar / Grace O'Brien moved to adopt the minutes of the November 18, 2021 meeting, as circulated; CARRIED

2. Matters for Decision

2.1. Off-Site Review of Buildings Draft STANDATA

It was explained that this STANDATA was redrafted based on comments provided at the last BSC meeting. The main change was to introduce clarity within the Variance section of the document. The reference to CSA A277 was removed as this is already reference in the code, and it was clarified that any of the three items noted in the Variance section, or a combination thereof, could be used as applicable. Other changes were also made based on comments from the last meeting.

Darin Sceviour / Rick Gratton move to support the issuance of the Off-Site Review of Buildings STANDATA; CARRIED

2.2. Shipping Containers Working Group (joint with FSC)

This is an existing BSC working group that the FSC has agreed to make a joint working group.

Corey Klimchuk / Darin Sceviour move to create a joint Shipping Containers Working Group with the FSC; CARRIED

Stephen Hill / Keven Lefebvre move to extend the timeline for a final report to May 2022; CARRIED

2.3. Non-combustible Insulation (joint with FSC)

This is an existing BSC working group that the FSC has agreed to make a joint working group.

A question was asked about revising the scope to omit “non-combustible” and it was clarified that a broader scope is preferred by the Working Group. More detail on this will be given during the Working Group report.

Rick Gratton / Stephen Hill move to create joint working group with FSC to investigate the use of external insulation with regards to fire and building code requirements; CARRIED

3. Review Matters Arising/Action List

	Item	Description	Action	Responsible	Date Initiated	Priority	Status/Update
1.	Off Site Review Clarification re: Pre-manufactured Structures	Development of an Information Bulletin on pre-manufactured structures.	Info Bulletin	Chang	Sep 3/15	High	Item 2.1 on agenda. Complete, remove from Action List.
2.	Professional Schedules	Proposed revision to schedules have been prepared.	With AMA	Orr		High	Schedules and user guide are finalized and are being approved by APEGA and AAA boards shortly. Publication of the schedules on the APEGA and AAA websites is anticipated by the March BSC meeting. A variance will be issued allowing the option to use the new schedules prior to code publication; once the new NBC(AE) is published, only the new schedules may be used. The intent is to publish the user guide at the same time as the schedules. APEGA is planning online training sessions that can be recorded and disseminated.
3.	Farm Buildings in NBC(AE) Code	Harmonization with 2020 Code		Council Staff/Orr	Mar 19/20		Decision pending with Government, no timeline available.
4.	Unvented Roof Assemblies Engineering Report	Review documents for spray foam insulation as an acceptable alternative solution in Alberta.		All	Nov 18/21		Item 4.2 on agenda.

4. Matters for Discussion

4.1. Follow up discussion on energy tiers (BILD Alberta)

Members were reminded of the presentation given at the last meeting and slides were shown on screen. The member representing Builders and Developers noted that the presenters are supportive of the concept of energy efficiency codes, and the primary aims of the presentation were to raise awareness about certain aspects of the tiers and to suggest that BSC take a forward-looking approach about considerations that should be in place before mandating higher tiers, such as enforcement capabilities for all jurisdictions, availability of materials, education for builders and SCOs, and applying the tiers to factory-built construction.

It was reiterated that the Province of Alberta will be implementing Tier 1 within the prescriptive part of the next NBC(AE) and the higher tiers will be available as options for those who want to build beyond the mandatory code provisions. Which tier is mandatory is the decision of each province, and there is currently no federal requirement stipulating a timeline for when provinces must mandate each tier. The Provincial Building Administrator reported that municipalities will not be able to require a higher tier within their jurisdiction. This led to discussion regarding the interplay between the Municipal Government Act and the Safety Codes Act, but it was suggested that these questions are beyond the scope of BSC's discussion, which will focus instead on the code-related questions and considerations.

It was generally agreed that industry education is imperative to successful implementation of tiered energy codes. Some builders are already well versed in how to meet energy codes successfully, but there are items that all builders and SCOs will need to be aware of—for example, external insulation is a great tool for energy efficiency but it must be the right kind, and issues with this are already being seen in industry. It was suggested BSC can have a key role in advising Municipal Affairs of the importance of providing sufficient time and support for all of industry to be educated and prepared. It is believed that government support will have a large impact on industry's success in implementing these changes, notably on the inspection and enforcement side, and an example of appropriate support was noted in BC's implementation of their energy step code.

It was asked whether the decision of which tier is mandatory in Alberta will be set at each future code cycle or whether the province may move to another tier between code cycles. It was reported that the government has the authority to adopt a new tier at any time, though it would require a regulation change if a new tier were to be mandated before it was required within the code. Government officials generally seek input from government staff and stakeholders prior to major regulatory steps such as this.

Awareness was noted as a way to address some considerations; for example, education and materials will become available if enough notice is given to educational institutions and suppliers about when the province is expected to move to higher tiers. The concept of a "roadmap" of the implementation of higher tiers, and the resources and supports that would need to be in place, was suggested as a way to plan in advance so that industry has the time and resources to prepare for each tier.

Some specific concerns with tiers 4 and 5, as suggested by the original presenters, were noted, such as the concept of embodied carbon and the possibility of emitting more carbon during manufacturing and construction than is saved over the lifetime of a building's operation. It was suggested it would be valuable to discuss possible health and safety implications of each tier as well.

A question was asked about future national code cycles and whether the lowest tier will eventually become more stringent in future codes. It was suggested to be likely that lower tiers would eventually be removed from the NBC, creating a higher minimum. The Building Administrator will look into whether information is available about an overarching plan regarding the tiers at a federal level. [Chang]

Justin Pockar / Keith Jansen move to create a working group to make recommendations on the implementation of energy tiers in Alberta; CARRIED

Corey Klimchuk / Keith Jansen move that the group will include Stephen Hill (as Working Group Chair), Justin Pockar, Cam Buskell, Keith Jansen, Darin Sceviour, Andy Smith, and supported by Nabil Habashy (Municipal Affairs energy code specialist); CARRIED

Corey Klimchuk / Justin Pockar move that the working group deliver a report at the November 2022 BSC meeting; CARRIED

It was noted that, since the scope of the working group doesn't specify parts of the code, it could look at Part 3 as well as Part 9.

4.2. Unvented Attics

Members were reminded of the presentation and documents reviewed at the last meeting along with the request to submit any comments to the Provincial Building Administrator. Key feedback received was that there needs to be a clear implementation guide that could be followed. It was clarified that all documents—the implementation guide as well as the scientific background—would need to be stamped by a Professional Engineer.

The Provincial Building Administrator will provide a draft STANDATA along with all supporting documents for review at the next meeting. [Chang]

4.3. Liaison Reports

4.3.1. Fire Sub-Council

The following was reported:

- Discussion on wildland-urban interface was continued from a previous meeting. A key concern was confusion about application of Section 66.1 of the Safety Codes Act in relation to FireSmart practices. It was clarified that FireSmart is an educational piece and is not within code.
- Fireworks STANDATA was issued in December.
- External insulation working group—Cameron Bardas is the co-chair from FSC.
- Updates were provided on the new NFPA 13D.

4.3.2. Barrier Free Sub-Council

The following was discussed:

- Work continues on a condensed checklist of the Barrier Free Design Guide focusing on recurring issues, one being curb cuts (ex curb cut right in the middle of two accessible parking stalls). Feedback was requested to bring back to BFSC about how AHJs deal with enforcement of this issue and comments included:
 - complaints to 311.
 - ideally sidewalks are finished upon inspection but that doesn't always happen so the plan may show something different from what is built (painted lines in wrong place, didn't put barrier far enough back to allow for an alley for access).
 - Could be dealt with on development permit or on complaint.
 - Education of the developer is key--this is what the condensed checklist aims to do.
- 3.8.4.2(9) was discussed, which requires structural support in at least one bedroom and one washroom to accommodate a ceiling track. The issue is that

“structural support” is not clearly defined in the current or upcoming code. This is an Alberta-specific provision in the adaptable dwelling units section and won’t be impacted by what’s in the NBC 2020. As a policy group, BFSC is equipped to determine what the accessibility goals of the code should be but not necessarily the technical details, and asked BSC to be involved with the technical side of this topic. It was noted that the intent is not to change the requirement, just to add clarity about what the minimum requirement is.

4.4. Working Group Reports

4.4.1. Resilient Roofing

The group is still looking at data and working with Environment Canada to figure out how to define a high hail zone, taking into account both frequency and size of hail.

4.4.2. Stacked Townhomes

The following was discussed:

- The report provided at the November BSC meeting was revisited and comments were welcomed.
- The definition of soffit is a sticking point, and property lines are a complicating factor.
- It was clarified that the working group would like both options listed in the report for issue #1 to be available.
- The Provincial Building Administrator clarified that a roof soffit is not considered a combustible projection, but anything on the exposing building face would be a combustible projection. A written response from the Provincial Building Administrator was requested about whether a roof soffit enclosing an attic is a combustible projection. [Chang]
- The City of Edmonton and the City of Calgary currently build in alignment with option 1, but provincial consistency would be preferred. It was suggested that if the cities could share documentation with the Provincial Building Administrator, this may provide support for a provincial variance.
- Development of a code change request about 9.10.15.5 is still being worked on and will be brought to the next meeting. [Jansen]

4.4.3. Interior Stairways for Roof Access

No update was provided as the working group chair was not in attendance.

4.4.4. Refrigeration

This group is awaiting industry participation to begin discussions.

4.4.5. Shipping Containers (joint with Fire)

- A written report was posted in the Member Portal. Two meetings were held since the last BSC meeting.
- Key tasks of the group are: defining temporary vs permanent; determining when a shipping container would be subject to building and fire codes; identifying challenges with new uses; and identifying gaps in the codes.
- The group is developing a matrix outlining low, medium, and high risk uses to guide industry on when shipping containers are subject to building and fire codes.

- The working group requested input from BSC on the definition of temporary (varying definitions are in the codes) and consideration for grandfathering existing inventory. The following feedback was given:
 - Grandfathering:
 - The example of secondary suites was given where a lower minimum standard under the fire code was allowed for existing secondary suites, and it was suggested this could work for existing inventory of shipping containers. A STANDATA on this topic was referenced and posted in the portal—it has a similar approach as what the working group is aiming for.
 - The term “grandfathering” is not used in any code—rather, buildings are deemed compliant with a previous code. It was suggested that there should be some sort of acceptance process for existing containers that were implemented without permits under a previous code.
 - It was noted that the working group made a distinction between development and building permits, and anything about land use bylaws is out of scope for the working group’s recommendations.
 - A self-checklist was suggested as a possible option for ensuring there are no unsafe conditions in certain types of existing inventory, since the large number of existing containers may make it difficult for them all to be inspected by building safety codes officers.
 - Definition of temporary:
 - Storage during construction is generally understood to be temporary.
 - The appendix of the code states, “temporary is usually thought of as less than three years,” but this is not enforceable and could be determined by the AHJ.
- Discussion was held about when a shipping container becomes a building, and the distinction between transport (including unloading) and storage.
- A question was asked about potential parallels to RVs, and it was clarified that an RV is motor vehicle through registration and is never considered a building.
- Discussion was held about treating residential, commercial and industrial applications differently as there is varying levels of risk with each.
- Any building over 110 sq ft as well as any residential use need a building permit.
- Industrial applications may not need a building permit, but would have to be non-modified.
- A development or building permit would be needed in order for enforcement to occur, including removal.
- A bulletin from Saskatchewan was shared for information, which points to the use as a deciding factor—if being used as a building, it’s a building, and permit requirements would apply.
- The working group is focusing on containers that are being used as storage, not residential uses such as a hotel built from containers, since the latter would certainly have permits.

4.4.6. Non-combustible Insulation (joint with Fire)

- The FSC agreed to participate as a joint working group and provided 3 members: Cameron Bardas (Professional Engineers) as co-chair, Richard Friesen (ABOA) and Payman Montakhebi (Public).
- The group is seeking a tangible result that could allow for reducing the limiting distance.
- No meeting has been held yet, but the two co-chairs have corresponded and provided points for consideration to the working group members:
 - Consider fire code requirements for protecting adjacent properties during construction.
 - Determine how the existing limiting distances were arrived at.
 - Wall frame combustibility doesn't change based on limiting distance and cladding combustibility—the group is not looking to make any changes to that.
 - A fire plume emitting from an opening in the wall is the main concern for building to building spread.
 - Literature review and possible modelling activities.
 - Possible alternative solution lens—demonstrating an acceptable level of risk.
 - Variation in surveyor's practices is heard of anecdotally and may come into play.
 - Larger vs smaller buildings—recladding of tall buildings that didn't contemplate limiting distances and combustibility.

4.5. Administrator/AMA Report

The Administrator reported:

- Issued STANDATA:
 - Lightning Protection Systems Joint STANDATA Building and Electrical interpretation: [19-BCI-025/18-ECI-009](#)
 - Lightning protection systems are covered under the electrical permit, not building permit
 - Adhered Masonry Veneer STANDATA was revised to reference the Engineering report with and update the expiry date: [19-BCV-018 Rev2 Adhered masonry veneer-generic engineering details Part 9 residential buildings](#)
 - Energy efficiency exemptions for oil and gas industrial buildings: [Interpretation 19-BCI-026 Energy efficiency exemptions for oil and gas industrial buildings](#)
- Qualifications STANDATA Fire/Building /Plumbing 19-FCI-008 19-BCI-027 15-PCB-002 is expected to be issued later this month, which deals with certain qualifications that the Provincial Fire Administrator can require under the fire code (ex. for cleaning of commercial kitchen hoods and maintaining fire suppressions systems, etc.)
 - AMA ensured there were no conflicts with Advanced Education Act.
- NRC has indicated it may be mid 2022 before the National Codes are published.
- A partial Draft 2020 NBCC has been received by MA. Development of the next Alberta Edition will commence when the complete draft is received, as not all changes have been incorporated into the partial draft.
- Combustible Dust Explosion Webinar for SCO's scheduled for Friday, January 21st.

- Shawn Ewasiuk (formerly Executive Director of Community and Technical Services) is the new Assistant Deputy Minister. Jon Elliott and James Orr currently share acting duties for the vacant Executive Director role.
- CSA is sending code change proposals to NRC for the recognition of CSA-A277 *Procedure for certification of prefabricated buildings, modules, and panels*.
- Year in Review—snapshot of the building discipline:
 - 186 barrier free relaxation equests reviewed
 - It was reported that most of the requests were accepted, and were mainly for existing buildings that would be very difficult to remedy. For new buildings, most of the relaxation requests were for universal genderless toilet rooms along with a number of accessible toilet rooms.
 - It was asked whether there were types of requests that were routinely accepted and could be dealt with through a provincial variance. This approach would likely not be appropriate because of the number of considerations that need to be individually reviewed, but there is a [STANDATA on barrier free relaxations](#) that outlines the criteria.
 - 13 STANDATA/Notices issued
 - approximately 4500 Duty Officer inquiries
 - Webinars and presentations—Safety Codes Council, ECAA, EIAA, Alberta Parks, ABOA
 - Orchestrated the following presentations facilitated by the Council: ULC-S1001 for AHJ’s-integrated Testing of Fire and Life Safety systems; WWTA—related to manufactured structural components; Energy Code—MA & City of Edmonton; Hilti Firestop—Firestopping and technical judgements.
- A question was asked about acceptable insulation on flat roofed garages in regards to high intensity residential fires (HIRF). It was asked whether the requirements for protection between unheated and heated space could be reviewed, with the possibility to think holistically about flat roofs and rooms over unheated garages, perhaps with the end result of a variance to allow for less insulation in certain cases.

4.6. Council Updates

A written report was included in the portal and updates were provided on:

- The Council is anticipated to open on February 15th at the earliest, but that may change. A decision from Council leadership is expected in the next few days.
 - An update will be provided to members as early as possible about the office reopening and whether the planned in-person spring meeting will proceed.
- The Council is looking for members’ input on what safety system data would be beneficial to collect and analyze. Members were invited to provide feedback by email to allison.karch@safetycodes.ab.ca
- Council Member Training—spring 2022 dates
 - New Member Orientation: April 28, 9:00 a.m. – 12:30 p.m.
 - Effective Meetings Workshop: February 16 and 17, 8:30 a.m. – 12:30 p.m. (must attend both days)
 - Appeals Training: March 8 and 9, 8:30 a.m. – 12:30 p.m. (must attend both days)
 - Contact gerry.letendre@safetycodes.ab.ca to register.
 - These will be offered in the fall as well.

- The decision following our September 2021 appeal hearing in the building discipline has now been [posted online](#). This involved the deliberation of an unsafe condition at the subject property.
- Watch past webinars, including Variances, Refusals, and Appeals on the [Council website](#).

5. Meeting Finalization

5.1. Round Table

- A vice-chair election will be added to the next agenda as Rick Gratton will be leaving the sub-council after the next meeting and a new vice-chair will be needed. It was noted that there are no longer geographic requirements (i.e. north and south) for the vice-chairs. [Council Administration]
- Review of members acting as liaison to the FSC will also be added to the next agenda as Rick Gratton was one of the liaisons. [Council Administration]
- The member representing Fire Officials shared a letter from the Prime Minister to Ministers identifying firefighter and first responder safety as items that should be core objectives in the National Building Code. This initiative was requested by the Canadian Firefighter Association. It was reported that NRC formed a joint task group last year on fire performance of unprotected floor assemblies which will make a report back to the national standing committee later this year, and firefighter safety was major topic of discussion for the task group.

5.2. Next Meeting

The next meeting was reconfirmed for March 10, 2022 via videoconference at 8:30 a.m.

5.3. Meeting Adjournment

Keith Jansen / Grace O'Brien moved to adjourn; CARRIED

The meeting was adjourned at 12:08 p.m.

– NEW ACTION ITEMS –

4.1. Follow up discussion on energy tiers (BILD Alberta)

The Building Administrator will look into whether information is available about an overarching plan regarding the tiers at a federal level. [Chang]

4.2. Unvented Attics

The Provincial Building Administrator will provide a draft STANDATA along with all supporting documents for review at the next meeting. [Chang]

4.4.2. Stacked Townhomes

A written response from the Provincial Building Administrator was requested about whether a roof soffit enclosing an attic is a combustible projection. [Chang]

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– MOTIONS –

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Corey Klimchuk / Justin Pockar move that the working group deliver a report at the November 2022 BSC meeting; CARRIED

5.3. Meeting Adjournment

Keith Jansen / Grace O'Brien moved to adjourn; CARRIED

– WORKING GROUP MEMBER LISTS –

WORKING GROUP	WORKING GROUP MEMBERS (<u>Chair</u>)
Resilient Roofing	<u>Justin Pockar</u> Keith Jansen, Zachary Walker, Rick Gratton Municipal Affairs: Mike Hill
Stacked Townhomes	<u>Keith Jansen</u> Rick Gratton, David Flanagan, Justin Pockar Municipal Affairs: Bruce Adair
Interior Stairways for Roof Access	<u>Terry O’Flaherty</u> Grace O’Brien, Corey Klimchuk, Hunter Langpap (FSC) Municipal Affairs: Joe Healy
Trade-Offs for Sprinklers in Part 9 Buildings	<u>Rick Gratton</u> Keith Jansen, Bruce Schultz, Terry O’Flaherty, Cammie Laird (FSC) Municipal Affairs: Roopendra Singh
Refrigeration	<u>Matthew Kramer</u> Terry O’Flaherty, Stephen Hill, Colin Belliveau RAHA representatives
Shipping Containers	<u>Corey Klimchuk</u> Keven Lefebvre, Laura Ritchie, Keith Jansen, Darin Sceviour, Zachary Walker
External Insulation	<u>David Flanagan</u> Rick Gratton, Keith Jansen
Tiered Energy Codes	<u>Stephen Hill</u> Justin Pockar, Cam Buskell, Keith Jansen, Darin Sceviour, Andy Smith AMA Support: Nabil Habashy