

2023 NATIONAL **BUILDING CODE** **AND HOW IT** **PERTAINS TO** **LOG HOMES**

Division B

Section 9.37. Log Construction

9.37.1. General

9.37.1.1 Design Standards

- 1) Full log, interlocking, scribe-fit construction shall be designed on the basis of
 - a) structural analysis,
 - b) accepted tests, or
 - c) standards such as ILBA 2020, “Effective Practices & Methods for Handcrafted Log Home Construction.”

- 2) Manufactured log building systems shall be constructed in accordance with the manufacturer's instructions and recommendations.

9.37.1.2. Materials

- 1) Logs used in log construction shall be sound and free of rot or other such defects.

2) The portion of any log coming into contact with masonry or concrete at or below ground level, or with soil, shall be treated with preservative.

3) Logs shall be seasoned to a moisture content not exceeding 19% before installation.

9.37.2. Walls

9.37.2.1. Horizontal Log Walls

1) Walls made of logs placed horizontally shall a) have interlocking intersections that will prevent the collection of water in the joints, or b) butt against and be firmly attached to a vertical corner post.

2) Joints in exterior horizontal log walls shall be constructed to be

- a) self-draining or gasketed, and
- b) resistant to water, air and insect infiltration.

9.37.2.2. Fastening to Bearer

1) Each Horizontal log shall be scribed to fit as closely as possible to its bearer and fastened to the bearer in at least 3 places throughout its length by dowels, continuous machined joints, vertical framing members, interlocking sections or any combination of these, and the distance between fastenings shall not exceed 1.8 m.

9.37.2.3. Vertical Log Walls

1) Each log in a wall built of vertical logs shall be scribed to fit as closely as possible to the adjacent logs.

9.37.2.4. End Plates

1) Logs Used in a vertical position shall have plates at the top and at the bottom that are at least as wide as the largest end diameter of any of the logs.

A-9.36.2.1.

(6) Log Walls. The purpose of this Sentence is to specifically exempt log wall assemblies from meeting the thermal resistance requirements of Section 9.36. Log buildings are not exempt from meeting other building envelope requirements, such as those for fenestration and doors

Below is a letter which addressed issues brought forth by the changes made in 2014 to the energy code which would have potentially wiped the log home industry off the map in Canada.



February 25, 2015

AR77977

Lloyd Beckedorf
Moose Mountain Log Homes Inc.
info@moosemountain.com

Dear Mr. Beckedorf,

Thank you for your email of February 2, 2015 regarding log walls in log-built homes being exempt from the upcoming adoption of national energy codes for buildings and houses. You present a persuasive case for requesting this exemption and I appreciate your bringing this to my attention.

I am pleased to inform you that the upcoming adoption of the Alberta Building Code (ABC), which includes energy efficiency requirements for housing, will not apply energy efficiency requirements for log walls in log homes. This exemption forms part of the ABC requirements, so an exemption in regulation is not required, as was the case in Ontario and the Yukon. The National Research Council, which develops the National Building Code, is supporting provinces and territories to make energy code exemptions for log walls for many of the same reasons that you describe. Of course, the ABC will continue to apply to all other aspects of log-home construction.

As you point out, log homes represent a fraction of the home-building industry, primarily in rural or recreational areas. Energy efficiency codes were never designed to accommodate this traditional building construction because it is simply not practical to do so. Another reason for an exemption is that this class of housing forms a niche market where the application of energy efficiency requirements has no discernable impact on climate change, energy efficiency ratings, or the economics of the housing industry. Most importantly, the scope of application for energy code requirements does not represent a matter of public safety.

I understand you have discussed your concerns with James Orr, Director of Building/Fire and Accessibility Standards at Alberta Municipal Affairs. I encourage you to raise any additional concerns with him. Log homes represent an important heritage symbol in Alberta and across our nation, and that is well worth preserving.

Thank you again for sharing your perspective on this matter

Sincerely,

Diana McQueen
Minister

204 Legislature Building 10800 97 Avenue, Edmonton, Alberta T5K 2B6 Canada Telephone 780-427-5744 Fax 780-422-9550

Printed on recycled paper

What the Above Letter says.

ALBERTA MUNICIPAL AFFAIRS
Office of the Minister

AR77977

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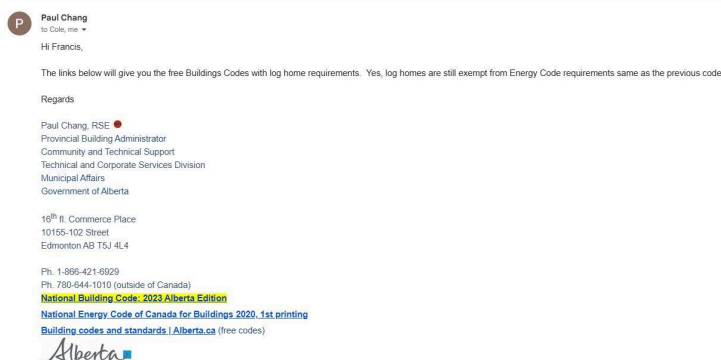
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Sincerely,
Diana McQueen
Minister

204 Legislature Building 10800 97 Avior, Edmonton Alberta TSK 286 Canada Telephone
780-427-3744 Fax 780-422-9550

To make sure the same rules apply I inquired via email and here is the short version of the response I got.



It Reads as Follows:

P

Paul Chang

Hi Francis,

The links below will give you the free Buildings Codes with log home requirements. Yes, log homes are still exempt from Energy Code requirements same as the previous code.

Regards

Paul Chang, RSE

Provincial Building Administrator

Community and Technical Support

Technical and Corporate Services Division

Municipal Affairs

Government of Alberta

16th fl. Commerce Place

10155-102 Street

Edmonton AB T5J 4L4

Ph. 1-866-421-6929

And in a follow up just to clarify where it is located in the code:



Paul Chang

to me ▾

National Building Code – 2023 Alberta Edition

6) The thermal characteristics of log walls need not comply with this Section.
(See Note A-9.36.2.1.(6).)

A-9.36.2.1.(6) Log Walls. The purpose of this Sentence is to specifically exempt log wall assemblies from meeting the thermal resistance requirements of Section 9.36. Log buildings are not exempt from meeting other building envelope requirements, such as those for fenestration and doors.

Regards,

Paul

The above email reads as follows:

Paul Chang

to me

National Building Code – 2023 Alberta Edition

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Regards,
Paul

If you are interested in obtaining any or all of this information feel free to download it or send an email to frankslog@gmail.com and we will get the info off to you as soon as we can.

Frank