
STANDATA variance 19-BCV-022

Building

Unvented roof assembly

Date Issued: April 2022

Page 1 of 2

Purpose

This variance sets out the conditions for a building official to accept the use of an unvented roof assembly under Part 9 of the National Building Code-2019 Alberta Edition (NBC(AE)).

Discussion

Currently, the NBC(AE) allows unvented roof assemblies referring the reader to the Appendix for further guidance. Sentence 9.19.1.1.(1) suggests there are some types of roof assemblies where venting is not necessary, with the wording “Except where it can be shown to be unnecessary...” and goes on to refer the reader to Appendix Note A-9.19.1.1.(1) for specific examples of assemblies where venting is not required. The Appendix Notes indicate that “The exception provided in Article 9.19.1.1. recognizes for some specialized ceiling-roof assemblies, ventilation would not be required.”

Elsewhere in Section 9.19. other roof assemblies are identified as not requiring venting. Sentence 9.19.1.4.(1) indicates “The lower portion of a mansard or gambrel style roof need not be ventilated.”

Unless stated otherwise, all Code references in this STANDATA are to Division B of the National Building Code – 2019 Alberta Edition

Issued by the Provincial Building Administrator

[Original Signed]
Paul Chang

Alberta Municipal Affairs – Technical and Corporate Services
Phone: 1-866-421-6929 Email: safety.services@gov.ab.ca

To sign up for our List Subscription Service go to: municipalaffairs.gov.ab.ca/am_list_subscription_services

alberta.ca/building-codes-and-standards.aspx

©2022 Government of Alberta | Published: April 2022 | Municipal Affairs



Code References

Sentence 9.19.1.1.(1) states:

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 Note A-9.19.1.1.(1).)

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.

Sentence 9.19.1.4.(1) states:

9.19.1.4. Mansard or Gambrel Roof

1) The lower portion of a mansard or gambrel style roof need not be ventilated.

Application

Roof assemblies in Part 9 residential buildings.

Variance

This variance provides approximately equivalent or greater safety performance with respect to persons and property as provided for by the *Safety Codes Act* and the NBC(AE).

1. Roof assemblies in Part 9 residential buildings may have an unvented assembly when using the design requirements from the following document:

M-25608.000: ACC - Alberta Unvented Roofs | Evaluation Report

Prepared by Jonathan Smegal | M.A.Sc. - RDH Building Science Laboratories

Published by American Chemistry Council available free of charge, and distributed by:

American Chemistry Council

Mailing Address:

700 2nd Street, NE

Washington DC 20002

Phone: 202-249-6617

Web: <https://www.americanchemistry.com/industry-groups/spray-foam-coalition-sfc/spray-foam-coalition-canadian-resources>

This VARIANCE is applicable throughout the Province of Alberta.