



## **VARIANCE SPV - 004**

February 25<sup>th</sup>, 2020

### **Subject:**

**ANSI/ASHRAE 62-2001 Ventilation for Acceptable Indoor Air Quality (except addendum n)**

### **Background**

A variance is written permission to build, install, process or otherwise act in a manner not consistent with the provisions of an applicable code but which provides, in the opinion of the Authority Having Jurisdiction (AHJ) or safety codes officer, an equivalent or greater level of safety to persons or property.

As stated in Sentence 1.2.1.1.(1). of Division A of the National Building Code Alberta Edition 2019, compliance with this Code may be achieved by either of the following methods:

- a) Complying with the applicable acceptable solutions in Division B of the Code or
- b) Using alternative solutions that will achieve at least the minimum level of performance required by Division B in areas defined by the objectives and functional statements attributed to the applicable acceptable solutions.

### **Applicable regulatory requirements**

National Building Code - Alberta Edition 2019, Division B, Sentence 1.3.1.2.(1).

### **Reason for the Variance**

This Variance addresses the requirement for use of the standard ANSI/ASHRAE 62-2001, which is currently referenced in the most recent version of the Building Code applicable in Alberta.

There have been numerous newer versions of the ANSI/ASHRAE 62-2001 Standard issued, all of which call for lower ventilation rates to be used. With adoption of the National Building Code - Alberta Edition 2019 and the National Energy Code for Buildings 2017 there are many sustainable design practices that have been improved upon compared to the referenced standard.

Industry professionals have proposed the acceptance of more recent versions of ANSI/ASHRAE 62-2001 Ventilation for Acceptable Indoor Air Quality (except addendum n).

### **Accepted Method of Variance**

Relevant to this Variance, The National Building Code - Alberta Edition 2019, Division B, 6.2.1.1. Sentence (1) states: 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, the ASHRAE Handbooks and Standards.

More recent versions of the referenced standard - ANSI/ASHRAE 62-2001 Ventilation for Acceptable Indoor Air Quality (except addendum n) will be accepted under the following criteria:

- The Professional Engineer of record for the project shall review, sign and seal the mechanical drawings for the project.
- The Professional Engineer of record for the project shall identify in writing the version of the ASHRAE 62 standard proposed to be used, and that the ventilation rates will be sufficient for the use of the occupancy intended.
- The Professional Engineer of record for the project shall state that the proposed standard will be used in its entirety for the scope of work of the entire project.

**Attributing Objective and Functional Statements:**

An objective of this Code is to limit the probability that, as a result of the design or construction of the building or facility, a person in the building or facility will be exposed to an unacceptable risk of illness due to unsanitary conditions. The risk of illness due to unsanitary conditions addressed in this code are those caused by –

- OH1.1 – inadequate indoor air quality
- F50 – to provide air suitable for breathing

**This Variance is based on the following:**

- National Building Code - Alberta Edition 2019, Article B 6.2.1.1. Good Engineering Practice.
- Reference to Variance SPV-004 in permit documents submitted to obtain a building permit.
- Reference to Variance SPV-004 within the permit conditions of the building permit.

**Address**

Where referenced as (SPV-004) within the building permit conditions, this Variance shall be applicable to the address of the Building Permit.

**Authority and conditions**

Under the authority of Section 38 of the Safety Codes Act, Chapter S-1 of the Statutes of Alberta 2000, this Variance is granted based on:

- The owner/contractor acknowledging the authority under which the variance is issued by referencing the Variance in the Building Permit documentation.
- The owner/contractor ensuring that the project is carried out as outlined in this Variance.

**Non-compliance with the requirements of this Variance  
is an offence under the Safety Codes Act.**

Chief Building Official  
Calgary Building Services  
Planning & Development