

APPLICATION OF 9.36. ENERGY EFFICIENCY REQUIREMENTS TO EXISTING BUILDINGS

PURPOSE

This interpretation was developed to clarify the current application of Section 9.36. energy efficiency requirements of the Alberta Building Code 2014 (ABC 2014) to buildings for which Section 9.36. did not originally apply.

DISCUSSION

“Section 9.36. Energy Efficiency” of the ABC 2014 came into effect November 1, 2016.

Applying the current ABC 2014 to existing buildings involves a similar analysis to the process for assessing alternative design proposals for new construction. In both cases, the alternatives need to be evaluated to provide approximately equivalent or greater safety performance as required under the *Safety Codes Act*. The available design options are much more limited for existing buildings than for new construction, since each existing building presents a unique set of design and economic constraints.

The ABC 2014 allows for alteration, rehabilitation, refurbishment, renovation or repairs to existing buildings without requiring full compliance to the current building code as long as the level of life safety and building performance is not decreased.

Under the requirements of the Government of Canada's *Energy Efficiency Act* and Regulations, installation of new equipment or renovations for energy-using products is designed to provide for greater energy efficiency performance in existing buildings as well as new construction. The Regulations establish energy efficiency standards for a wide range of energy-using products, with the objective of eliminating the least efficient products from the Canadian market. They apply to energy-using products imported into or manufactured in Canada and shipped from one province to another. The Regulations continue to apply to an energy-using product even if that product is merely a component of another product and establish both labelling and data collection requirements.

The Regulations are administered by Natural Resources Canada (NRCan) and are amended on a regular basis to strengthen existing performance standards or to introduce performance standards for new products. The *Energy Efficiency Act* and Regulations may be viewed at <http://www.nrcan.gc.ca/energy/regulations-codes-standards/6845>

CODE REFERENCES

1. ABC Division A, Sentence 1.1.1.1.(1) states:

1.1.1.1. Application of this Code

- 1) This Code applies to any one or more of the following:
 - a) the design of a *new building*,
 - b) the construction of a *new building*,

Unless stated otherwise, all Code references in this STANDATA are to Division B of the Alberta Building Code 2014.

Issue of this STANDATA is authorized by
the Building Administrator

[Original Signed]
Paul Chang



- c) the *occupancy* of any *building*,
- d) the change in *occupancy* of any *building*,
- e) an *alteration* to any *building*,
- f) an addition to any *building*...
- m) the installation, replacement, or *alteration* of equipment regulated by this Code,

2. ABC Division A, Article 1.1.1.2.

1.1.1.2. Application to Existing Buildings

(See Appendix A.)

- 1) This Article applies to a *building* that has been legally built, occupied and used before 01 May 2015.
- 2) If a *building* is altered, rehabilitated, refurbished, renovated or repaired, the level of life safety and *building* performance shall not be decreased.
- 3) Except as specified in Part 10 of Division B, the *authority having jurisdiction* shall accept any construction or condition that lawfully existed in Alberta before 01 May 2015 if the construction or condition does not constitute an *unsafe condition*.
- 4) A change in *occupancy* or *alteration* of any *building* constructed before 01 May 2015 shall be permitted if the level of safety and *building* performance proposed are acceptable to the *authority having jurisdiction*.
- 5) For a *building* constructed before 01 May 2015, the *authority having jurisdiction* may accept an alternative or a proposal that achieves the appropriate level of safety for the specific activity for which the *building* is to be used.
- 6) The *authority having jurisdiction* may accept existing construction not in complete compliance with this Code, in which case it may be accepted, subject to conditions.

APPLICATION

This interpretation applies to existing buildings that were constructed prior to the application of Section 9.36. of ABC 2014 and also applies to buildings for which a building permit was issued before November 1, 2016.

INTERPRETATION

1. An alteration, rehabilitation, refurbishment, or repair of a building, where a building permit was issued before November 1, 2016 for the building, shall be permitted if the level of life safety and building performance is not decreased.
2. The installation of building equipment and materials with an efficiency rating not in full compliance with Section 9.36. of ABC 2014 is acceptable, and may include, but not limited to:
 - a. replacing existing building services equipment (i.e. service water heater, heating appliance, A/C unit);
 - b. building services equipment is being installed in an at a later date (i.e. A/C unit);
 - c. relocation of building service equipment within the building.
3. The installation, construction or use of building envelope components or assemblies not in full compliance as required by Section 9.36 is allowed for the:
 - a. components or assemblies installed for alteration, rehabilitation, refurbishment, or repair to the existing construction.

This INTERPRETATION is applicable throughout the province of Alberta.