

# Energy Codes

ABC 2014 Section 9.36.



# Q&A

## General Questions



## ABC 2014 Division B Section 9.36.

**Q1**

**How do I download a free HOT2000 software suite- an energy simulation and design tool for low-rise residential buildings?**

Contact NRC; <http://www.nrcan.gc.ca/energy/>

**Q2**

**What energy efficiency requirements are covered in the Alberta Building Code 2014 (ABC 2014)?**

The energy efficiency provisions in the ABC 2014- Section 9.36. deal with the construction of the building envelope, the sizing and selection of Heating, Ventilation and Air Conditioning (HVAC) and water heating equipment, as well as the energy performance simulation for housing.

**Q3**

**When did the energy efficiency requirements come into effect?**

The energy efficiency requirements came into force on November 1, 2016. All building permit applications submitted on and after November 1, 2016 shall comply with Section 9.36. Check with your local authority for permit and inspection procedures.

**Q4**

**I have a farm building; is it exempt from energy efficiency requirements?**

Yes, please contact your local authority to confirm if it qualifies as a farm building. A farm building is a building associated with the operation of a farm and used for the housing of livestock, storage of maintenance equipment or storage of materials or produce. A farm building is not for residential use.

**Q5**

**I am building an addition to my house; do I have to comply with energy efficiency requirements if my house was built before the requirements came into force?**

Yes, it has to comply with Section 9.36. of ABC 2014.

**Q6**

**If I'm building an addition to my house, can I make upgrades to my existing house and use the trade-off path to reduce the energy efficiency requirements of my addition?**

No, you can only use the trade-off path on building elements within the addition. You cannot trade-off with upgrades to your existing home.

**Q7**

**I am renovating my house; do I have to comply with energy efficiency requirements if my house was built before requirements came into effect?**

Depending on the scope of the renovation you may be required to comply with energy efficiency requirements. Contact your local authority and provide specific details for the scope of work. Please note that other sections of the building code or other safety codes may apply.

**Q8**

**I am developing my basement; do I have to comply with energy efficiency requirements if my house was built before the requirements came into effect?**

Depending on the scope of the work, you may be required to comply with energy efficiency requirements. Contact your local authority and provide specific details for the scope of work. Please note that other sections of the building code or other safety codes may apply.

Q9

**I am renovating my home to develop a secondary suite; does the secondary suite have to comply with energy efficiency requirements if my house was built before the requirements came into effect?**

It depends on the scope of the renovation. If the secondary suite is contained entirely within the existing building, the renovation does not have to meet the energy efficiency requirements. Please note that other sections of the building code or other safety codes may apply.

Q10

**I want to replace the windows in my house; do my new windows have to comply with the energy efficiency requirements if my house was built before the requirements came into effect?**

No, your replacement windows do not have to meet energy efficiency requirements. However, you are strongly encouraged to use replacement windows meeting the energy efficiency requirements.

Q11

**Do the energy efficiency requirements limit the area of windows I am allowed to install in my house?**

There are no limits in the energy efficiency requirements that restrict the area of windows. However, if using the energy performance compliance path (using an approved modelling software), there are restrictions on the area of windows for the reference house. Also note that other requirements in the building code may limit the area of windows.

Q12

**I want to build an attached garage for my home? Does it have to be insulated? Does it matter if the garage is not heated?**

Attached garages are required to be insulated even if they are not heated.

Q13

**I want to build a detached garage for my home; what are the energy efficiency requirements for insulation?**

An unheated detached garage is not required to be insulated. However, if heated, a detached garage is required to be insulated.

Q14

**I am installing in-floor heating (e.g. hydronic heating) in my house; do I need to insulate my floor as per the energy efficiency requirements?**

Heated floors in contact with the ground are to be insulated as per the energy efficiency requirements even if the floor is below the frost line.

Q15

**What are the current energy efficiency requirements for a gas fired forced air furnace?**

Annual Fuel Utilization Efficiency (AFUE) more than or equal to 92%

Q16

**I am replacing my furnace; does my new furnace have to comply with the energy efficiency requirements if my house was built prior to the requirements coming into force?**

No, your new furnace doesn't have to meet the energy efficiency requirements. However, you are encouraged to use a replacement furnace meeting the requirements of Section 9.36. Most new furnaces on the market will probably have significantly better efficiency ratings. Equipment efficiencies cannot be less than those found in the government of Canada's Energy Efficiency Regulations, <http://www.nrcan.gc.ca/energy/regulations-codes-standards>.

Q17

**I am replacing my hot water heater (Service Water Heater- SWH); does my new heater have to comply with the energy efficiency requirements if my house was built prior to the requirements coming into force?**

No, your new SWH doesn't have to meet the energy efficiency requirements. However, you are encouraged to use a replacement SWH meeting the requirements of Section 9.36. Most new SWH on the market will probably have significantly better efficiency ratings. Equipment efficiencies cannot be less than those found in the government of Canada's Energy Efficiency Regulations, <http://www.nrcan.gc.ca/energy/regulations-codes-standards>.

Q18

**I don't have enough experience to design a house under the new energy efficiency requirements, what do I do?**

Contact the local authority as they may provide you with some guidance. You may also contact a professional consultant or an energy advisor to assist you.

Q19

**How do I determine the climate zone for a project?**

The climate zones are determined according to heating degree-day (HDD) zones. Appendix C in the Alberta Building Code contains climatic data including HDD for major centers throughout the province. You may also contact : Environment and Climate Change Canada / Government of Canada [ec.services.climatiques-climate.services.ec@canada.ca](mailto:ec.services.climatiques-climate.services.ec@canada.ca) / Tel: 416-739-4365

Q20

**Can CAN/CSA-F326-M be used to comply with the ventilation requirements under 9.36.?**

Yes CAN/CSA-F326-M "Residential Mechanical Ventilation Systems" can be used.

Q21

**Where can I find additional information on energy efficiency requirements?**

Additional information can be found on Alberta Municipal Affairs' website, see the following link: [http://www.municipalaffairs.alberta.ca/CP\\_Energy\\_Codes\\_Information](http://www.municipalaffairs.alberta.ca/CP_Energy_Codes_Information)

### **CONTACT YOUR LOCAL AUTHORITY HAVING JURISDICTION:**

Always contact the local authority having jurisdiction prior to any construction activity to ensure your project complies with codes and regulations under the Safety Codes Act and local bylaws.

Local authority and Permit Information may be accessed at:

<http://www.municipalaffairs.alberta.ca/permits>

### **ALBERTA MUNICIPAL AFFAIRS CONTACT INFORMATION:**

Public Safety Division

Phone: 1-866-421-6929 (local callers must dial the 1-866)

780-644-1010 (outside of Canada)

Fax: 780-427-8686

E-mail: [safety.services@gov.ab.ca](mailto:safety.services@gov.ab.ca)