

# Energy Codes

NECB 2011 in Alberta

Q&A

NECB 2011





## National Energy Code of Canada for Buildings 2011(NECB 2011)

### Q

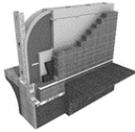
#### Are industrial occupancies exempt from complying with Energy Codes?

Industrial occupancies generally are not exempt from complying with the energy codes regardless of whether the project needs to comply with Alberta Building Code 2014 Section 9.36. or NECB 2011.

Some partial exemptions are permitted in both codes regardless of the occupancy classification (but rather the use and nature of the occupancy), the application of these exemptions should be determined on a case-by-case basis. The designers need to provide the authorities having jurisdiction enough information and references to the energy code indicating why they believe that a building component may be exempted.

An example would be a tent or air supported structure where it may not be practical to apply the prescriptive requirements for the building envelope component; note that the rest of the building components still need to comply with the energy code requirements.

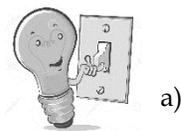
#### The following are some of the application and exemption provisions in the NECB 2011: Building Envelope



##### 3.1.1.2. Application

- 1) This Part applies to the building envelope in buildings
  - a) that are equipped with space-conditioning systems or have provisions for the future installation of such systems, and
  - b) whose heating and/or cooling system output capacity is equal to or greater than 10 W/m<sup>2</sup> of floor surface area.

#### Lighting

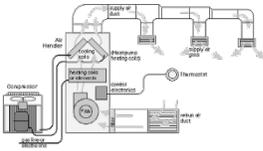


##### 4.1.1.2. Application

- 1) Except as provided in Sentence (2), this Part applies to lighting components and systems that are connected to the building's electrical service.
- 2) This Part does not apply to the following lighting systems:
  - a) emergency lighting that is automatically off during normal hours of building operation,
  - b) lighting within dwelling units, and
  - c) lighting in buildings or parts of buildings and in certain exterior spaces associated with the building where it can be shown that the nature of the occupancy makes it impractical to apply these requirements.

**A-4.1.1.2.(2)(c) Exemptions.** In some cases, the requirements of Part 4 may adversely affect the use of spaces with special functional requirements and so exceptions to the Code requirements may be necessary. Except for particular types of process lighting, however, it is unlikely that a space or lighting system would be exempt from all the requirements of Part 4. Some necessary exceptions to particular requirements are identified in the Code. Exemption should be determined on a case-by-case basis, depending on the space's function, available technologies and cost-effectiveness

## Heating, Ventilating and Air-conditioning Systems

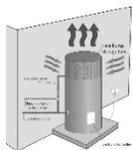


### 5.1.1.2. Application

- 1) Except as permitted in Sentences (2) and (3), and except for systems and equipment used exclusively for the control of smoke in the event of a fire, this Part applies to heating, ventilating and air-conditioning systems and equipment.
- 2) A heating, ventilating or air-conditioning system or part thereof may be exempted from some or all of the requirements in this Part where it can be shown that the nature of the occupancy or the type of heating, ventilating or air-conditioning equipment used makes it impractical to apply these requirements.
- 3) This Part does not apply to the existing components of systems that are extended to serve additions.

**A-5.1.1.2.(2) Exemptions.** Since any list of potentially exempted spaces or equipment would necessarily be incomplete, only a broad exemption statement can be provided in the Code. One example of a space that could be exempted from complying with certain Part 5 requirements is a building or room in which the processes or activities call for temperature or humidity conditions outside the normal range required for comfort.

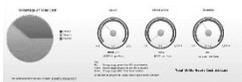
## Service Water Heating Systems



### 6.1.1.2. Application

- 1) Except for systems and equipment used exclusively for firefighting services, this Part applies to service water heating and pumping systems.

## Electrical Power Systems and Motors



### 7.1.1.2. Application

- 1) This Part applies to the electrical power systems and motors that are connected to the building's electrical service.

**A-7.1.1.2.(1) Application.** Sentence 7.1.1.2.(1) is intended to apply to all electrical power systems and motors in or on the building or building site that are connected to the building's electrical service.

**Exemptions Due to Special Occupancy Requirements:**

The intended use or nature of the occupancy of some buildings may be such that compliance with certain Code requirements could limit or prevent these buildings from performing their intended function.

**Sentence 2.2.1.1.(2) of Division C permits the authority having jurisdiction to review such special cases and to permit deviations.**

**Only the nature of the occupancy, rather than economic or other factors, should be considered in permitting such deviations.**

**Some examples of possible exemptions as per A-2.2.1.1.(2) of Division C**

NECB 2011	Exemption
<b>Part 3 (Building Envelope)</b>	
Horticultural	Fenestration performance and area
Silvicultural	
Botanical Greenhouses	
Greenhouses (For research only)	
Process Heat-continuously	Reduced insulation
Continuous large ventilation	Airtightness
Bus shelter-radiant heat	Related requirements
Bleacher areas (Ice arenas)-radiant heat	Related requirements
<b>Part 4 (Lighting)</b>	
Process Light	Unlikely to exempt lighting requirements except for process light
<b>Part 5 (HVAC)</b>	
Temperature /humidity required above normal condition	Related requirements

**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)