

## BUILDING, ELECTRICAL, PLUMBING, MECHANICAL, ENERGY, ELEVATORS, BOILERS AND PRESSURE VESSELS

### INTRODUCTION

Construction codes establish minimum standards for structural integrity, life safety, accessibility and energy conservation in construction of buildings and facilities intended for human occupancy. These requirements affect all of the major systems of buildings and facilities.

### WHO REGULATES WHAT?

Jurisdiction over construction codes in Iowa is shared among several state agencies and political subdivisions. The following are all subject to requirements established at the state level:

#### BUILDING CODE COMMISSIONER

##### Department of Public Safety

- Electrical installations (authority shared with State Fire Marshal and Electrical Examining Board)
- Energy efficiency measures required in construction
- Accessibility to persons with disabilities of buildings and facilities which are available to the public
- Factory built structures, which are manufactured homes and modular buildings of all types
- Minimum plumbing facilities in places of public assembly restaurants, pubs, and lounges
- The State Historical Building Code, which may be used in lieu of the State Building Code or local building codes, at the discretion of the code authority, for buildings or facilities of historical significance

#### STATE FIRE MARSHAL

##### Department of Public Safety

- General Fire Safety Requirements
- Flammable Liquid Installations
- Fire Safety at Construction Sites



#### LABOR COMMISSIONER

##### Iowa Workforce Development

- Elevators
- Boilers and pressure vessels

##### Iowa Department of Public Health

- Plumbing installations in cities or connected to city water or wastewater treatment systems

Political subdivisions in Iowa (cities and counties) have discretionary authority to adopt local building codes, which may cover any aspect of construction not listed above as under state jurisdiction. Local code adoptions may also include more stringent standards than are required by the state in many of the areas listed above as subject to state jurisdiction, but not in all of them.

Construction projects may also be subject to other regulatory requirements, such as requirements for registration, licensing, or certification of persons or firms engaged in specific aspects of construction, zoning restrictions and environmental standards.

### THE TERM "BUILDING CODE"

The term "building code" is used in two different ways: (1) It may be used to refer to the whole set of codes establishing requirements for construction in force in a jurisdiction. (2) Alternatively, the "building code" is one of the set of codes typically adopted. It establishes general requirements for structural integrity and life safety features. An illustration of these two uses is the following: The "State Building Code" refers to construction requirements established by the State Building Code Commissioner and the Building Code Advisory Council. Among the provisions of the State Building Code is the adoption by reference of the International Building Code (IBC), a nationally-recognized code which is one of a "family" of codes published by the International Code Council.

## STATE BUILDING CODE

As described earlier, authority to adopt construction codes in Iowa is shared among state agencies and political subdivisions. The State Building Code is adopted by the Building Code Commissioner, within the Iowa Department of Public Safety; it applies generally to construction projects involving the following:

- Buildings and facilities owned by the state or any agency of the state;
- Buildings and facilities in political subdivisions which have adopted the State Building Code by local ordinance and in any city of more than 15,000 population which has not adopted a local building code;
- Newly constructed buildings and facilities, including additions to existing buildings, which are financed in whole or in part with state funds or federal funds distributed by a state agency;
- Any school construction which occurs in an area without a local building code;
- Gaming facilities, in a jurisdiction without a local building code; and
- Conversion of an apartment building from rental units to condominiums, in a jurisdiction without a local building code.

## STATEWIDE REQUIREMENTS

### ELECTRICAL INSTALLATIONS

Standards for electrical installations are established by the Electrical Examining Board, the State Fire Marshal and the Building Code Commissioner. While each of these agencies has authority to establish such requirements, they cooperate in doing so and all three have adopted the National Electrical Code, 2008 edition, published by the National Fire Protection Association. Local jurisdictions may establish additional, more stringent standards.

#### Electrical Examining Board:

[www.dps.state.ia.us/fm/electrician/index.shtml](http://www.dps.state.ia.us/fm/electrician/index.shtml)

#### State Fire Marshal:

[www.dps.state.ia.us/fm/index.shtml](http://www.dps.state.ia.us/fm/index.shtml)

#### Building Code Commissioner:

[www.dps.state.ia.us/fm/building/index.shtml](http://www.dps.state.ia.us/fm/building/index.shtml)

## STATE ENERGY CODE

The State Energy Code is adopted by the Building Code Commissioner, with the approval of the Building Code Advisory Council. The State Energy Code establishes minimum energy efficiency requirements for all construction in the state, except for renovation or remodeling of one or two family residences.

[www.dps.state.ia.us/fm/building/energy/index.shtml](http://www.dps.state.ia.us/fm/building/energy/index.shtml)

## ACCESSIBILITY REQUIREMENTS

The Building Code Commissioner adopts requirements for accessibility to persons with disabilities of buildings and facilities available to the public. These requirements, which are included in the State Building Code, are based upon the federal Americans with Disabilities Act Accessibility Guidelines (ADAAG) and federal Fair Housing Act. Additional requirements may be established by local jurisdictions.

[www.dps.state.ia.us/fm/building/accessibility/index.shtml](http://www.dps.state.ia.us/fm/building/accessibility/index.shtml)

## FIRE CODES

State requirements for fire safety in construction are established by the State Fire Marshal. The rules of the Fire Marshal apply statewide, although any city or county may also adopt a local fire ordinance, establishing such requirements. The rules of the Fire Marshal provide that enforcement of certain municipal or county ordinances may substitute for enforcement of the rules of the Fire Marshal, based upon what requirements those ordinances establish and how they are enforced.

[www.dps.state.ia.us/fm/inspection/index.shtml](http://www.dps.state.ia.us/fm/inspection/index.shtml)

## STATE PLUMBING CODE

Plumbing installations within cities or connected to municipal water systems or municipal wastewater treatment systems are required to comply with the State Plumbing Code, which is adopted by the Iowa Department of Public Health. For further information, contact [mmagnant@idph.state.ia.us](mailto:mmagnant@idph.state.ia.us) or 515.281.8722.

[www.idph.state.ia.us/eh/plumbing\\_code.asp](http://www.idph.state.ia.us/eh/plumbing_code.asp)



### PRIVATE SEWAGE DISPOSAL

Private sewage disposal (septic) systems are required to comply with requirements established by the Iowa Department of Natural Resources. These requirements are enforced by local public health departments.

Daniel.Olson@dnr.iowa.gov  
515.281.8263  
[www.iowadnr.gov/water/septic/index.html](http://www.iowadnr.gov/water/septic/index.html)

### ELEVATORS AND ESCALATORS

Safety requirements for elevators are established by the Elevator Safety Board. Every elevator is required to be inspected by and to obtain a permit from the Labor Services Division of Iowa Workforce Development.

[www.iowaworkforce.org/labor/elevatorboard.htm](http://www.iowaworkforce.org/labor/elevatorboard.htm)  
[www.iowaworkforce.org/labor/elevator\\_forms.htm](http://www.iowaworkforce.org/labor/elevator_forms.htm)

### BOILERS AND PRESSURE VESSELS

The Boiler and Pressure Vessel Safety Board establishes safety requirements for boilers and pressure vessels, which are required to be inspected by the Labor Services Division of Iowa Workforce Development.

[www.iowaworkforce.org/labor/boilerboard.htm](http://www.iowaworkforce.org/labor/boilerboard.htm)  
[www.iowaworkforce.org/labor/boiler\\_inspection\\_.htm](http://www.iowaworkforce.org/labor/boiler_inspection_.htm)

### SWIMMING POOLS AND SPAS

Requirements for swimming pools and spas are established by the Iowa Department of Public Health:

[www.idph.state.ia.us/eh/swimming\\_pools.asp](http://www.idph.state.ia.us/eh/swimming_pools.asp)

## REGISTRATION, LICENSES, AND CERTIFICATIONS RELATED TO CONSTRUCTION

There are a variety of requirements for registrations, licenses, certifications and permits related to construction projects, and to requirements for engaging in various occupations related to construction. Among those which are most likely to affect projects are the following:

- Asbestos Permits and Licenses  
[www.iowaworkforce.org/labor/asbestos.htm](http://www.iowaworkforce.org/labor/asbestos.htm)
- Air Quality: Asbestos  
[www.iowadnr.gov/air/prof/asbestos/asbestos.html](http://www.iowadnr.gov/air/prof/asbestos/asbestos.html)
- Air Quality: Construction Permits  
[www.iowadnr.gov/air/prof/const/const.html](http://www.iowadnr.gov/air/prof/const/const.html)
- Alarm System Contractor and Installer Certification  
[www.dps.state.ia.us/fm/building/alarm/index.shtml](http://www.dps.state.ia.us/fm/building/alarm/index.shtml)
- Building Permits (contact local jurisdiction)
- Contractor Registration  
[www.iowaworkforce.org/labor/contractor.htm](http://www.iowaworkforce.org/labor/contractor.htm)
- Electrician Licensing and Electrical Permits  
[www.dps.state.ia.us/fm/electrician/index.shtml](http://www.dps.state.ia.us/fm/electrician/index.shtml)
- Fire Extinguishing System Contractor Certification  
[www.dps.state.ia.us/fm/building/fesccp/index.shtml](http://www.dps.state.ia.us/fm/building/fesccp/index.shtml)
- Environmental Permitting  
[http://regassist.iowa.gov/business\\_resources/enviro\\_n\\_assistance/index.html](http://regassist.iowa.gov/business_resources/enviro_n_assistance/index.html)
- Health Care Facilities: Certificate of Need  
[www.idph.state.ia.us/adper/cert\\_of\\_need.asp](http://www.idph.state.ia.us/adper/cert_of_need.asp)
- Plumber and Mechanical Professional Licensing  
[www.idph.state.ia.us/eh/plumbing.asp](http://www.idph.state.ia.us/eh/plumbing.asp)
- Zoning Requirements (contact local jurisdiction)



