

Statutory Authority for the Iowa State Energy Code (Pertinent Text is Bolded)

103A.7 STATE BUILDING CODE.

1. The state building code commissioner with the approval of the advisory council is hereby empowered and directed to formulate and adopt and from time to time amend or revise and to promulgate, in conformity with and subject to the conditions set forth in this chapter, reasonable rules designed to establish minimum safeguards in the erection and construction of buildings and structures, to protect the human beings who live and work in them from fire and other hazards, and to establish regulations to further protect the health, safety, and welfare of the public.
2. The rules shall include reasonable provisions for the following:
 - a. The installation of equipment.
 - b. The standards or requirements for materials to be used in construction.
 - c. The manufacture and installation of factory-built structures.
 - d. Protection of the health, safety, and welfare of occupants and users.
 - e. The accessibility and use by persons with disabilities and elderly persons, of buildings, structures, and facilities which are constructed and intended for use by the general public. The rules shall be consistent with federal standards for building accessibility and shall only apply to those buildings, structures, and facilities subject to chapter 104A.
 - f. The conservation of energy through thermal efficiency standards for buildings intended for human occupancy and which are heated or cooled and lighting efficiency standards for buildings intended for human occupancy which are lighted.**
 - g. Standards for sustainable design, also known and referred to as green building standards.**
3. These rules shall comprise and be known as the state building code.

103A.8 STANDARDS.

The state building code shall as far as practical:

1. Provide uniform standards and requirements for construction, construction materials, and equipment through the adoption by reference of applicable national codes where appropriate and providing exceptions when necessary. The rules adopted shall include provisions imposing requirements reasonably consistent with or identical to recognized and accepted standards contained in performance criteria.
2. Establish such standards and requirements in terms of performance objectives.
3. Establish as the test of acceptability, adequate performance for the intended use.
4. Permit the use of modern technical methods, devices, and improvements which tend to reduce the cost of construction without substantially affecting reasonable requirements for the health, safety, and welfare of the occupants or users of buildings and structures.
5. Encourage the standardization of construction practices, methods, equipment, material, and techniques.
6. Eliminate restrictive, obsolete, conflicting, and unnecessary

regulations and requirements which tend to unnecessarily increase construction costs or retard unnecessarily the use of new materials, or provide unwarranted preferential treatment to types or classes of materials or products or methods of construction.

7. **Limit the application of thermal efficiency standards for energy conservation to construction of buildings which are heated or cooled. Air exchange fans designed to provide ventilation shall not be considered a cooling system. The commissioner shall exempt any construction from any thermal efficiency standard for energy conservation if the commissioner determines that the standard is unreasonable as it would apply to a particular building or class of buildings. No standard adopted by the commissioner for energy conservation in construction shall be interpreted to require the replacement or modification of any existing equipment or feature solely to ensure compliance with requirements for energy conservation in construction. Lighting efficiency standards shall recognize variations in lighting intensities required for the various tasks performed within the building. The commissioner shall consult with the department of natural resources regarding standards for energy conservation prior to the adoption of the standards. However, the standards shall be consistent with section 103A.8A.**
8. **Facilitate the development and use of renewable energy.**

103A.8A ENERGY CONSERVATION REQUIREMENTS.

The state building code commissioner shall adopt as a part of the state building code a requirement that new single-family or two-family residential construction shall comply with energy conservation requirements. The requirements adopted by the commissioner shall be based upon a nationally recognized standard or code for energy conservation. The requirements shall only apply to single-family or two-family residential construction commenced after the adoption of the requirements. Notwithstanding any other provision of this chapter to the contrary, the energy conservation requirements adopted by the commissioner and approved by the council shall apply to new single-family or two-family residential construction commenced on or after July 1, 2008, and shall supersede and replace any minimum requirements for energy conservation adopted or enacted by the governmental subdivision prior to that date applicable to such construction. The state building code commissioner may provide training to builders, contractors, and other interested persons on the adopted energy conservation requirements.

103A.8B SUSTAINABLE DESIGN OR GREEN BUILDING STANDARDS.

The commissioner, after consulting with and receiving recommendations from the department of natural resources and the office of energy independence, shall adopt rules pursuant to chapter 17A specifying standards and requirements for sustainable design and construction based upon or incorporating nationally recognized ratings, certifications, or classification systems, and procedures relating to documentation of compliance. The standards and requirements shall be incorporated into the state building code established in section 103A.7, but in lieu of general applicability shall apply to construction projects only if such applicability is expressly authorized by statute, or as established by another state agency by rule.

103A.10 EFFECT AND APPLICATION.

1. The state building code shall, for the buildings and structures to which it is applicable, constitute a lawful local building code.
2. The state building code shall be applicable:
 - a. To all buildings and structures owned by the state or an agency of the state.
 - b. In each governmental subdivision where the governing body has enacted an ordinance accepting the application of the code.
 - c. To all newly constructed buildings and structures the construction of which is paid for in whole or in part with moneys appropriated by the state but which are not wholly owned by the state.
 - d. In each city with a population of more than fifteen thousand that has not adopted a local building code that is substantially in accord with standards developed by a nationally recognized building code organization. The city shall enforce the state building code, including the provisions in section 103A.19, subsection 2.
3. Provisions of the state building code relating to the manufacture and installation of factory-built structures shall apply throughout the state. A factory-built structure approved by the commissioner shall be deemed to comply with all building regulations applicable to its manufacture and installation and shall be exempt from any other state or local building regulations. Except with respect to manufactured homes, as defined in section 103A.51, subsection 4, a provision of this chapter relating to the manufacture or installation of factory-built structures shall not alter or supersede any provision of chapter 542B concerning the practice of professional engineering or chapter 544A concerning the practice of architecture.
4. **Notwithstanding the provisions of section 103A.22, subsection 1:**
 - a. Provisions of the state building code establishing thermal efficiency energy conservation standards shall be applicable to all construction in the state which will contain enclosed space that is heated or cooled. The commissioner shall provide appropriate exceptions for construction where the application of an energy conservation requirement adopted pursuant to this chapter would be impractical.
 - b. Provisions of the state building code establishing lighting efficiency standards shall be applicable to all construction in the state and to new and replacement lighting in existing buildings.
5. **Notwithstanding any other provision of this chapter to the contrary, the energy conservation requirements adopted by the commissioner and approved by the council shall apply to all new construction commenced on or after July 1, 2008, and shall supersede and replace any minimum requirements for energy conservation adopted or enacted by the governmental subdivision prior to that date and applicable to such construction.**

103A.10A PLAN REVIEWS AND INSPECTIONS.

1. All newly constructed buildings or structures subject to the state building code, including any addition, but excluding any renovation or repair of a building or structure, owned by the state or an agency of the state, except as provided in subsection 2, shall be subject to a plan review and inspection by the commissioner or an independent building inspector appointed by the commissioner. A fee

shall be assessed for the cost of plan review and the cost of inspection. **The commissioner may inspect an existing building that is undergoing renovation or remodeling to enforce the energy conservation requirements established under this chapter.**

103A.19 ADMINISTRATION AND ENFORCEMENT.

1. The examination and approval or disapproval of plans and specifications, the issuance and revocation of building permits, licenses, certificates, and similar documents, the inspection of buildings or structures, and the administration and enforcement of building regulations shall be the responsibility of the governmental subdivisions of the state and shall be administered and enforced in the manner prescribed by local law or ordinance. All provisions of law relating to the administration and enforcement of local building regulations in any governmental subdivision shall be applicable to the administration and enforcement of the state building code in the governmental subdivision. An application made to a local building department or to a state agency for permission to construct a building or structure pursuant to the provisions of the state building code shall, in addition to any other requirement, be signed by the owner or the owner's authorized agent, and shall contain the address of the owner, and a statement that the application is made for permission to construct in accordance with the provisions of the code. The application shall also specifically include a statement that the construction will be in accordance with all applicable energy conservation requirements.

2. In aid of administration and enforcement of the state building code, and in addition to and not in limitation of powers vested in them by law, each governmental subdivision of the state may, and each city designated in section 103A.10, subsection 2, paragraph "d", shall:

a. Examine and approve or disapprove plans and specifications for the construction of any building or structure, the construction of which is pursuant or purports to be pursuant to the provisions of the state building code, and to direct the inspection of buildings or structures during the course of construction.

b. Require that the construction of any building or structure shall be in accordance with the applicable provisions of the state building code, subject, however, to the powers granted to the board of review in section 103A.16.

c. Order in writing any person to remedy any condition found to exist in, or about any building or structure in violation of the state building code. Orders may be served upon the owner or the owner's authorized agent personally or by certified mail at the address set forth in the application for permission to construct a building or structure. Any local building department may grant in writing such time as may be reasonably necessary for achieving compliance with an order.

d. Issue certificates of occupancy or use, permits, licenses, and other documents in connection with the construction of buildings or structures as may be required by ordinance.

(1) A certificate of occupancy or use for a building or structure constructed in accordance with the provisions of the state building code shall certify that the building or structure conforms to the requirements of the code. The certificate shall be in the form the governing body of the governmental subdivision prescribes.

(2) Every certificate of occupancy or use shall, until set aside or vacated by the board of review, director, or a court of competent jurisdiction, be binding and conclusive upon all state and local agencies, as to all matters set forth and no order, direction, or requirement at variance therewith shall be made or issued by any other state or local agency.

e. Make, amend, and repeal rules for the administration and enforcement of the provisions of this section, and for the collection of reasonable fees in connection therewith.

f. Prohibit the commencement of construction until a permit has been issued by the local building department after a showing of compliance with the requirements of the applicable provisions of the state building code.

3. The specifications for all buildings to be constructed after July 1, 1977, and which exceed a total volume of one hundred thousand cubic feet of enclosed space that is heated or cooled shall be reviewed by a registered architect or licensed engineer for compliance with applicable energy efficiency standards. A statement that a review has been accomplished and that the design is in compliance with the energy efficiency standards shall be signed and sealed by the responsible registered architect or licensed engineer. This statement shall be filed with the commissioner prior to construction. If the specifications relating to energy efficiency for a specific structure have been approved, additional buildings may be constructed from those same plans and specifications without need of further approval if construction begins within five years of the date of approval. Alterations of a structure which has been previously approved shall not require a review because of these changes, provided the basic structure remains unchanged.

103A.27 COMMISSION ON ENERGY EFFICIENCY STANDARDS AND PRACTICES.

1. A commission on energy efficiency standards and practices is established within the department of public safety. The commission shall be composed of the following members:

a. The state building code commissioner, or the commissioner's designee.

b. The director of the office of energy independence, or the director's designee.

c. A professional engineer licensed pursuant to chapter 542B.

d. An architect registered pursuant to chapter 544A.

e. Two individuals recognized in the construction industry as possessing expertise and experience in the construction or renovation of energy-efficient residential and commercial buildings.

f. A member of a local planning and zoning commission or county board of supervisors.

g. Three individuals representing gas and electric public utilities within this state, comprised of one individual representing rural electric cooperatives, one individual representing municipal utilities, and one individual representing investor-owned utilities.

h. A local building official whose duties include enforcement of requirements for energy conservation in construction.

i. Two consumers, one of whom owns and occupies a residential

building in this state and one of whom owns and occupies a building used in commercial business or manufacturing.

2. The commissioner shall appoint all members to the commission other than those members designated in subsection 1, paragraphs "a" and "b". Appointment of members is subject to the requirements of sections 69.16 and 69.16A. A vacancy on the commission shall be filled for the unexpired portion of the regular term in the same manner as regular appointments are made. Members appointed by the commissioner shall be reimbursed for actual and necessary expenses incurred in performance of their duties. Such members may also be eligible to receive compensation as provided in section 7E.6. A majority of the members shall constitute a quorum.

3. Duties of the commission shall include but are not limited to the following:

a. Evaluate energy efficiency standards applicable to existing or newly constructed residential, commercial, and industrial buildings and vertical infrastructure at the state and local level and make suggestions for their improvement and enforcement. The evaluation of energy efficiency standards shall include but not be limited to a review of the following:

- (1) The reduction in energy usage likely to result from the adoption and enforcement of the standards.
- (2) The effect of compliance with the standards on indoor air quality.
- (3) The relationship of the standards to weatherization programs for existing housing stock and to the availability of affordable housing, including rental units.

b. Develop recommendations for new energy efficiency standards, specifications, or guidelines applicable to newly constructed residential, commercial, and industrial buildings and vertical infrastructure.

c. Develop recommendations for the establishment of incentives for energy efficiency construction projects which exceed currently applicable state and local building codes.

d. Develop recommendations for adoption of a statewide energy efficiency building labeling or rating system for residential, commercial, and industrial buildings and complexes.

e. Obtain input from individuals, groups, associations, and agencies in carrying out the duties specified in paragraphs "a" through "d", including but not limited to the Iowa league of cities regarding local building code adoption and enforcement in both large and small communities, the Iowa landlord association, the department of transportation, the department of public health, the division of community action agencies of the department of human rights regarding low-income residential customers, and obtain additional input from any other source that the commission determines appropriate.

4. The commission shall be formed for the two-year period beginning July 1, 2008, and ending June 30, 2010, and shall submit a report to the governor and the general assembly by January 1, 2011, regarding its activities and recommendations. Administrative support shall be furnished by the department of public safety, with the assistance of the office of energy independence and the department of natural resources.

CHAPTER 470 LIFE CYCLE COST ANALYSIS OF PUBLIC FACILITIES

470.1 DEFINITIONS.

As used in this chapter unless the context otherwise requires:

1. "*Commissioner*" means the state building code commissioner.
2. "*Department*" means the department of natural resources.
3. "*Director*" means the director of the department of natural resources.
4. "*Economic life*" means the projected or anticipated useful life of a facility as expressed by a term of years.
5. "*Energy system*" includes but is not limited to the following equipment or measures:
 - a. Equipment used to heat or cool the facility.
 - b. Equipment used to heat water in the facility.
 - c. On-site equipment used to generate electricity for the major facility.
 - d. On-site equipment that uses the sun, wind, oil, natural gas, coal or electricity as a power source.
 - e. Energy conservation measures in the facility design and construction that decrease the energy requirements of the facility.
6. "*Facility*" means a building having twenty thousand square feet or more of usable floor space that is heated or cooled by a mechanical or electrical system or any building, system, or physical operation which consumes more than forty thousand British thermal units (BTUs) per square foot per year.
7. "*Initial cost*" means the moneys required for the capital construction or renovation of a facility.
8. "*Life cycle cost analysis*" means an analytical technique that considers certain costs of owning, using and operating a facility over its economic life including but not limited to the following:
 - a. Initial costs.
 - b. System repair and replacement costs.
 - c. Maintenance costs.
 - d. Operating costs, including energy costs.
 - e. Salvage value.
9. "*Public agency*" means a state agency, political subdivision of the state, school district, area education agency, or community college.
10. "*Renovation*" means a project where additions or alterations exceed fifty percent of the value of a facility and will affect an energy system.

470.2 POLICY -- ANALYSIS REQUIRED.

The general assembly declares that energy management is of primary importance in the design of publicly owned facilities. Commencing January 1, 1980, a public agency responsible for the construction or renovation of a facility shall, in a design begun after that date, include as a design criterion the requirement that a life cycle cost analysis be conducted for the facility. The objectives of the life cycle cost analysis are to optimize energy efficiency at an acceptable life cycle cost. The life cycle cost analysis shall meet the requirements of section 470.3.

470.4 ANALYSIS APPROVED.

The life cycle cost analysis shall be approved by the public agency before contracts for the construction or renovation are let. A public agency may accept a facility design and shall meet the requirements of this chapter if the design meets the operational requirements of the agency and provides the optimum life cycle cost. The public agency shall retain a copy of the life cycle cost analysis and a statement justifying a design decision both of which shall be available for public inspection at reasonable hours.

470.7 LIFE CYCLE COST ANALYSIS -- APPROVAL.

The public agency responsible for the new construction or renovation of a public facility shall submit a copy of the life cycle cost analysis for review by the commissioner who shall consult with the department. If the public agency is also a state agency under section 7D.34, comments by the department or the commissioner, including any recommendation for changes in the analysis, shall, within thirty days of receipt of the analysis, be forwarded in writing to the public agency. If either the department or the commissioner disagrees with any aspects of the life cycle cost analysis, the public agency affected shall timely respond in writing to the commissioner and the department. The response shall indicate whether the agency intends to implement the recommendations and, if the agency does not intend to implement them, the public agency shall present its reasons. The reasons may include, but are not limited to, a description of the purpose of the facility or renovation, preservation of historical architectural features, architectural and site considerations, and health and safety concerns. Within thirty days of receipt of the response of the public agency affected, the department, the commissioner, or both, shall notify in writing the public agency affected of the department's, the commissioner's, or both's agreement or disagreement with the response. In the event of a disagreement, the department, the commissioner, or both, shall at the same time transmit the notification of disagreement with response and related papers to the executive council for resolution pursuant to section 7D.34. The life cycle cost analysis process, including submittal and approval, and implementation exemption requests pursuant to section 470.8, shall be completed prior to the letting of contracts for the construction or renovation of a facility.