

CHAPTER 303  
STATE BUILDING CODE—REQUIREMENTS FOR  
ENERGY CONSERVATION IN CONSTRUCTION  
[Prior to 12/21/05, see rules 661—16.800(103A) to 661—16.802(103A)]

**661—303.1(103A) Scope and applicability of energy conservation requirements.**

**303.1(1) Scope.** Rules 661—303.1(103A) through 303.3(103A) establish thermal energy efficiency standards for the design of new buildings and structures or portions thereof, additions to existing buildings, and renovation and remodeling of existing buildings, except for residential buildings of one or two dwelling units, which are intended for human occupancy and which are heated or cooled by regulating their exterior envelopes and selection of their heating, ventilation, and air-conditioning systems, service water heating systems and equipment for the efficient use of energy, and lighting efficiency standards for buildings intended for human occupancy which are lighted.

**303.1(2) Applicability.** Rules 661—303.1(103A) through 661—303.3(103A) apply to design and construction of buildings which are intended for human occupancy throughout the state of Iowa. Any construction of buildings or facilities which are intended for human occupancy and which are heated or cooled is covered, with the exception of renovation and remodeling of residential buildings of one or two dwelling units, which are not covered. Rule 661—303.2(103A) establishes standards for design and construction of residential buildings of three or fewer stories. Rule 661—303.3(103A) establishes standards for design and construction of commercial buildings and residential buildings of four or more stories. The occupancy of any building covered by this chapter shall be determined based upon the occupancy definitions in chapter 3 of the International Building Code, 2006 edition.

**303.1(3) Review by architect or engineer.**

*a. Review required.* The plans and specifications for all buildings to be constructed which exceed a total volume of 100,000 cubic feet of enclosed space that is heated or cooled shall be reviewed by a registered architect or licensed professional engineer for compliance with applicable energy efficiency standards.

*b. Statement of review.* 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 professional engineer. This statement shall be filed with the commissioner or a local building official on a form approved by the commissioner prior to construction or before obtaining any local permits. The statement shall be filed with the commissioner for any project which is subject to plan review by the building code bureau.

*c. Additional buildings.* If the plans and 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 and no additional energy is required for heating, cooling or lighting.

*d. Changes to approved plans.* Prior to the completion of construction, no changes shall be made to any approved plan or specifications which increase the amount of energy used for heating, cooling, or lighting, unless the changes are approved by the responsible registered architect or licensed professional engineer in writing and notice has been filed with the commissioner or a local building official. The commissioner or a local building official shall be notified of any change which is anticipated to decrease the amount of energy used. Notification pursuant to this paragraph shall be to the commissioner for any project which is subject to plan review by the building code bureau.

**661—303.2(103A) Residential energy code.** The International Energy Conservation Code, 2006 edition, is adopted by reference as the residential energy code of the state of Iowa building code, applicable to residential construction limited to three or fewer stories throughout the state of Iowa, with the following amendments:

1. Delete sections 101, 103, 104, 105, and 106, and all sections contained within each of these.

2. Strike section 403.2.2 and adopt the following new section 403.2.2 in lieu thereof:

403.2.2 Sealing. All ducts, air handlers, filter boxes, and building cavities used as ducts shall be sealed. Joints and seams shall comply with Section M1601.3.1 of the International Residential Code. Air handlers with a manufacturer's designation for an air leakage of no more than 2 percent of the design air flow rate when tested at an air pressure of 1-inch water gauge when all air inlets, air outlets, and condensate drain port(s) are sealed shall be deemed sealed. Air handlers with filter boxes shall be tested with the filter box in place.

3. Delete chapter 5.

**661—303.3(103A) Adoption of nonresidential energy code.** The International Energy Conservation Code, 2006 edition, published by the International Code Council, 5203 Leesburg Pike, Suite 600, Falls Church, VA 22041, is hereby adopted by reference as the nonresidential energy code of the state building code, applicable to commercial construction or residential construction of four or more stories within the state of Iowa, with the following amendments:

1. Delete sections 101, 103, 104, 105, and 106, and all sections contained within each of these.
2. Delete chapter 4.

**661—303.4(470) Life cycle cost analysis.**

**303.4(1) *Submission required.*** Any public agency as defined by Iowa Code section 470.1 shall prepare a life cycle cost analysis for any new construction having 20,000 square feet of usable floor space which is heated or cooled by a mechanical or electrical system or for any renovation where additions or alterations exceed 50 percent of the value of the facility and affect an energy system. The life cycle cost analysis shall be prepared in compliance with Iowa Code chapter 470 and shall be submitted to the state building code commissioner before construction commences.

**303.4(2) *Notification by state agency.*** Any public agency which is a state agency as defined in Iowa Code section 7D.34 shall, within 60 days of final selection of a design architect or engineer, notify the commissioner and the department of natural resources of the methodology to be used to perform the life cycle cost analysis. Notice shall be given on the forms provided by the department of natural resources for this purpose. A life cycle cost analysis prepared by a state agency shall be submitted in sufficient time ahead of the release of plans for bids to allow for revisions or additions which may be made to the plans. Public funds shall not be used for the construction or renovation of a facility unless the design for the work is prepared in accordance with Iowa Code chapter 470 and the actual construction or renovation is consistent with the design.

**303.4(3) *Exemptions from implementation.*** Any public agency responsible for construction or renovation of a public facility shall implement the recommendation of the life cycle cost analysis except as provided in this subrule.

*a.* A public agency responsible for construction or renovation of a public facility may apply to the commissioner for exemption from any recommendation of the life cycle cost analysis.

*b.* The public agency shall implement all recommendations of the life cycle cost analysis except those which have been approved for exemption by the commissioner and the director of natural resources.

EXCEPTION: The public agency is not required to implement any recommendation which would result in a violation of any other provision of law. If the public agency determines that compliance with any recommendation of the life cycle cost analysis would result in a violation of law, the public agency shall so notify the commissioner.

*c.* The commissioner and the director of natural resources shall evaluate each request for an exemption on a case-by-case basis.

*d.* The commissioner and the director of natural resources shall consider the following factors in determining whether or not to grant an exemption:

- (1) The purpose of the facility or renovation;
- (2) Preservation of historic architectural features;
- (3) Site considerations;
- (4) Health and safety concerns;

- (5) Compliance with any other provisions of law; and
- (6) The technical feasibility of implementing the recommendation. “Technically feasible” means that a recommendation may be implemented without altering major structural features of an existing facility.

**661—303.5(103A) Energy review fee.** The fee for filing an energy review shall be \$25. Payment of the fee, by money order, check, or warrant made payable to Treasurer, State of Iowa, shall be included with the submission of documents for an energy review.

These rules are intended to implement Iowa Code chapter 103A.

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