#### Pt. 435

# PART 435—ENERGY EFFICIENCY STANDARDS FOR NEW FEDERAL LOW-RISE RESIDENTIAL BUILD-INGS

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SOURCE: 53 FR 32545, Aug. 25, 1988, unless otherwise noted.

#### Subpart A—Mandatory Energy Efficiency Standards for Federal Low-Rise Residential Buildings.

Source: 71 FR 70283, Dec. 4, 2006.

#### § 435.1 Purpose and scope.

This part establishes energy efficiency performance standard for the construction of new Federal low-rise residential buildings as required by section 305(a) of the Energy Conservation and Production Act, as amended (42 U.S.C. 6834(a)).

#### § 435.2 Definitions.

For purposes of this part, the following terms, phrases and words shall be defined as follows:

Design for construction means the stage when the energy efficiency and sustainability details (such as insulation levels, HVAC systems, water-using systems, etc.) are either explicitly determined or implicitly included in a project cost specification.

DOE means U.S. Department of Energy

Federal agency means any department, agency, corporation, or other entity or instrumentality of the executive branch of the Federal Government, including the United States Postal Service, the Federal National Mortgage Association, and the Federal Home Loan Mortgage Corporation.

*ICC* means International Code Council.

*IECC* means International Energy Conservation Code.

IECC Baseline Building 2004 means a building that is otherwise identical to the proposed building but is designed to meet, but not exceed, the energy efficiency specifications in the ICC International Energy Conservation Code, 2004 Supplement Edition, January 2005 (incorporated by reference, see § 435.3).

IECC Baseline Building 2009 means a building that is otherwise identical to the proposed building but is designed to meet, but not exceed, the energy efficiency specifications in the ICC International Energy Conservation Code, 2009 Edition, January 2009 (incorporated by reference, see § 435.3).

Life-cycle cost means the total cost related to energy conservation measures of owning, operating and maintaining a building over its useful life as determined in accordance with 10 CFR part 436.

Life-cycle cost-effective means that the proposed building has a lower life-cycle cost than the life-cycle costs of the baseline building, as described by 10 CFR 436.19, or has a positive estimated net savings, as described by 10 CFR 436.20, or has a savings-to-investment ratio estimated to be greater than one, as described by 10 CFR 436.21; or has an adjusted internal rate of return, as described by 10 CFR 436.22, that is estimated to be greater than the discount

rate as listed in OMB Circular Number A-94 "Guidelines and Discount Rates for Benefit-Cost Analysis of Federal Programs."

Low-rise residential building means any building three stories or less in height above grade that includes sleeping accommodations where the occupants are primarily permanent in nature (30 days or more).

New Federal building means any building to be constructed by, or for the use of, any Federal agency which is not legally subject to State or local building codes or similar requirements. A new building is a building constructed on a site that previously did not have a building or a complete replacement of an existing building from the foundation up.

Proposed building means the building design of a new Federal low-rise residential building proposed for construction.

 $[71\ \mathrm{FR}\ 70283,\ \mathrm{Dec}.\ 4,\ 2006,\ \mathrm{as}\ \mathrm{amended}\ \mathrm{at}\ 72\ \mathrm{FR}\ 72571,\ \mathrm{Dec}.\ 21,\ 2007;\ 76\ \mathrm{FR}\ 49285,\ \mathrm{Aug}.\ 10,\ 2011]$ 

## § 435.3 Materials incorporated by reference.

(a) General. The Department of Energy incorporates by reference the energy performance standards listed in paragraph (b) of this section into 10 CFR part 435. The Director of the Federal Register has approved the material listed in paragraph (b) of this section for incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Any subsequent amendment to a standard by the standardsetting organization will not affect DOE regulations unless and until DOE amends its energy performance standards. Material is incorporated as it exists on the date of the approval, and a notice of any change in the material will be published in the FEDERAL REG-ISTER. All approved material is available for inspection at the U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Building Technologies Program, Sixth Floor, 950 L'Enfant Plaza, SW., Washington, DC 20024, (202) 586-2945. Also, this material is available for inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: http://www.archives.gov/federal\_register/code\_of\_federal\_regulations/ibr\_locations.html.

- (b) ICC. International Code Council, 500 New Jersey Avenue, NW., 6th Floor, Washington, DC 20001, 1–888–ICC–SAFE or (202) 370–1800, or go to http://www.iccsafe.org/Pages/default.aspx.
- (1) ICC International Energy Conservation Code (IECC), 2004 Supplement Edition ("IECC 2004"), January 2005, ISBN 7801S04, IBR approved for §§ 435.2, 435.4, 435.5;
- (2) ICC International Energy Conservation Code (IECC), 2009 Edition ("IECC 2009"), January 2009, ISBN 978-1-58001-742-8, IBR approved for §§ 435.2, 435.4, 435.5.

[76 FR 49285, Aug. 10, 2011]

### § 435.4 Energy efficiency performance standard.

- (a)(1) All Federal agencies shall design new Federal buildings that are low-rise residential buildings, for which design for construction began on or after January 3, 2007, but before August 10, 2012, to:
- (i) Meet the IECC 2004 (incorporated by reference, see §435.3), and
- (ii) If life-cycle cost-effective, achieve energy consumption levels, calculated consistent with paragraph (b) of this section, that are at least 30 percent below the levels of the IECC Baseline Building 2004.
- (2) All Federal agencies shall design new Federal buildings that are low-rise residential buildings, for which design for construction began on or after August 10, 2012, to:
- (i) Meet the IECC 2009 (incorporated by reference, see §435.3), and
- (ii) If life-cycle cost-effective, achieve energy consumption levels, calculated consistent with paragraph (b) of this section, that are at least 30 percent below the levels of the IECC Baseline Building 2009.
- (b) Energy consumption for the purposes of calculating the 30 percent savings shall include space heating, space cooling, and domestic water heating.
- (c) If a 30 percent reduction is not life-cycle cost-effective, the design of the proposed building shall be modified so as to achieve an energy consumption level at or better than the maximum