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(5) Has transparent or solid doors, sliding or hinged doors, a combination of hinged, sliding, transparent, or solid doors, or no doors;

(6) Is designed for pull-down temperature applications or holding temperature applications; and

(7) Is connected to a self-contained condensing unit or to a remote condensing unit.

*Holding temperature application* means a use of commercial refrigeration equipment other than a pull-down temperature application, except a blast chiller or freezer.

*Integrated average temperature* means the average temperature of all test package measurements taken during the test.

*Pull-down temperature application* means a commercial refrigerator with doors that, when fully loaded with 12 ounce beverage cans at 90 degrees F, can cool those beverages to an average stable temperature of 38 degrees F in 12 hours or less.

*Remote condensing unit* means a factory-made assembly of refrigerating components designed to compress and liquefy a specific refrigerant that is remotely located from the refrigerated equipment and consists of 1 or more refrigerant compressors, refrigerant condensers, condenser fans and motors, and factory supplied accessories.

*Self-contained condensing unit* means a factory-made assembly of refrigerating components designed to compress and liquefy a specific refrigerant that is an integral part of the refrigerated equipment and consists of 1 or more refrigerant compressors, refrigerant condensers, condenser fans and motors, and factory supplied accessories.

TEST PROCEDURES [RESERVED]

ENERGY CONSERVATION STANDARDS

**§ 431.66 Energy conservation standards and their effective dates.**

(a) In this section—

(1) The term “AV” means the adjusted volume (ft<sup>3</sup>) (defined as 1.63 x frozen temperature compartment volume (ft<sup>3</sup>) + chilled temperature compartment volume (ft<sup>3</sup>)) with compartment volumes measured in accordance with the Association of Home Appliance

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Manufacturers Standard HRF1–1979.

(2) The term “V” means the chilled or frozen compartment volume (ft<sup>3</sup>) (as defined in the Association of Home Appliance Manufacturers Standard HRF1–1979).

(b) Each commercial refrigerator, freezer, and refrigerator-freezer with a self-contained condensing unit designed for holding temperature applications manufactured on or after January 1, 2010, shall have a daily energy consumption (in kilowatt hours per day) that does not exceed the following:

Category	Maximum daily energy consumption (kilowatt hours per day)
Refrigerators with solid doors	0.10V + 2.04.
Refrigerators with transparent doors.	0.12V + 3.34.
Freezers with solid doors .....	0.40V + 1.38.
Freezers with transparent doors.	0.75V + 4.10.
Refrigerator/freezers with solid doors.	the greater of 0.27AV–0.71 or 0.70.

(c) Each commercial refrigerator with a self-contained condensing unit designed for pull-down temperature applications and transparent doors manufactured on or after January 1, 2010, shall have a daily energy consumption (in kilowatt hours per day) of not more than 0.126V + 3.51.

**Subpart D—Commercial Warm Air Furnaces**

SOURCE: 69 FR 61939, Oct. 21, 2004, unless otherwise noted.

**§ 431.71 Purpose and scope.**

This subpart contains energy conservation requirements for commercial warm air furnaces, pursuant to Part C of Title III of the Energy Policy and Conservation Act, as amended, 42 U.S.C. 6311–6317.

[69 FR 61939, Oct. 21, 2004, as amended at 70 FR 60415, Oct. 18, 2005]

**§ 431.72 Definitions concerning commercial warm air furnaces.**

The following definitions apply for purposes of this subpart D, and of subparts J through M of this part. Any words or terms not defined in this Section or elsewhere in this Part shall be

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defined as provided in Section 340 of the Act.

*Commercial warm air furnace* means a warm air furnace that is industrial equipment, and that has a capacity (rated maximum input) of 225,000 Btu per hour or more.

*Thermal efficiency* for a commercial warm air furnace equals 100 percent minus percent flue loss determined using test procedures prescribed under § 431.76.

*Warm air furnace* means a self-contained oil-fired or gas-fired furnace designed to supply heated air through ducts to spaces that require it and includes combination warm air furnace/electric air conditioning units but does not include unit heaters and duct furnaces.

### TEST PROCEDURES

#### § 431.75 Materials incorporated by reference.

(a) We incorporate by reference the following test procedures into subpart D of Part 431. 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 51. Any subsequent amendment to this material by the standard-setting organization will not affect the DOE test procedures unless and until DOE amends its test procedures. We incorporate the material as it exists on the date of the approval and a notice of any change in the material will be published in the FEDERAL REGISTER.

(b) *List of test procedures incorporated by reference.* (1) American National Standards Institute (ANSI) Standard Z21.47-1998, "Gas-Fired Central Furnaces," IBR approved for § 431.76.

(2) Underwriters Laboratories (UL) Standard 727-1994, "Standard for Safety Oil-Fired Central Furnaces," IBR approved for § 431.76.

(3) Sections 8.2.2, 11.1.4, 11.1.5, and 11.1.6.2 of the Hydronics Institute (HI) Division of GAMA Boiler Testing Standard BTS-2000, "Method to Determine Efficiency of Commercial Space Heating Boilers," published January 2001 (HI BTS-2000), IBR approved for § 431.76.

(4) Sections 7.2.2.4, 7.8, 9.2, and 11.3.7 of the American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. (ASHRAE) Standard 103-1993, "Method of Testing for Annual Fuel Utilization Efficiency of Residential Central Furnaces and Boilers," IBR approved for § 431.76.

(c) *Availability of references*—(1) *Inspection of test procedures.* The test procedures incorporated by reference are available for inspection at:

(i) 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

(ii) U.S. Department of Energy, Office of Energy Efficiency and Renewable Energy, Hearings and Dockets, "Test Procedures and Efficiency Standards for Commercial Warm Air Furnaces; Efficiency Certification, Compliance, and Enforcement Requirements for Commercial Heating, Air Conditioning and Water Heating Equipment;" Docket No. EE-RM/TP-99-450, Forrestal Building, 1000 Independence Avenue, SW., Washington, DC 20585.

(2) *Obtaining copies of Standards.* Anyone can purchase a copy of standards incorporated by reference from the following sources:

(i) The ASHRAE Standard from the American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc., 1971 Tullie Circle, NE., Atlanta, GA 30329, or <http://www.ashrae.org/book/bookshop.htm>.

(ii) The ANSI Standard from Global Engineering Documents, 15 Inverness Way East, Englewood, CO 80112, or <http://global.ihs.com/>, or <http://webstore.ansi.org/ansidocstore/>.

(iii) The UL Standard from Global Engineering Documents, 15 Inverness Way East, Englewood, CO 80112, or <http://global.ihs.com/>.

(iv) The HI Standard from the Hydronics Institute Division of GAMA, P.O. Box 218, Berkeley Heights, NJ 07922, or <http://www.gamanet.org/publist/hydroordr.htm>.