

1 (M) [~~The 2003 New Mexico Energy Conservation Code as adopted by~~
2 ~~the Construction Industries Division of the State of New Mexico with an~~
3 ~~effective date of July 1, 2004;~~][The City of Albuquerque hereby adopts the
4 2006 Edition of the International Energy Conservation Code. All references in
5 the IECC to the International Building Code shall be deemed references to
6 14.7.2 NMAC, the 2003 New Mexico Commercial Building Code (NMCBC). All
7 references to the International Residential Code shall be deemed references to
8 14.7.3 NMAC, the 2003 New Mexico Residential Building Code (NMRBC) All
9 references to the International Plumbing Code shall be deemed references to
10 14.8.2 NMAC, the 2003 New Mexico Plumbing Code (NMPC). All references to
11 the International Mechanical Code shall be deemed references to 14.9.2, the
12 2003 New Mexico Mechanical Code (NMMC). All references to the ICC or
13 International Electrical Code shall be deemed references to 14.10.4 NMAC, the
14 2003 New Mexico Electrical Code (NMEC). All references to the International
15 Fuel Gas Code are deemed references to the NMMC or the LP Gas Standards
16 found at 19.15.40 NMAC, and NMSA 1978 70-5-1 et seq. +]

17 Section 4. A High Performance Building Ordinance is adopted as follows:

18 A. Applicability. The provisions of this ordinance shall apply to all new
19 buildings, and existing buildings whose repair, alteration or rehabilitation
20 costs exceed fifty percent of their replacement cost except for historic
21 buildings registered with the State or National historic registries or designated
22 Historic Landmarks in the City of Albuquerque. For purposes of this Section,
23 the Planning Director shall determine the replacement cost of the building or
24 structure and may use the most current building valuation table published by
25 the International Conference of Building Officials. The Planning Director shall
26 also determine the fair market value of any necessary repairs. Regardless of
27 the costs of repairs, alteration, or rehabilitation, any replacement of specific
28 items described herein shall comply with this Ordinance.

29 B. Priority Plan Check for LEED Certification.

30 (1) Buildings subject to the Applicability provisions of this
31 ordinance that are registered with the United States Green Building Council
32 for certification under the Leadership in Energy and Environmental Design
33 Green Building Rating System (LEED), including LEED for Homes (LEED-H),

1 LEED for New Construction (LEED-NC), and LEED for Core and Shell (LEED-
2 CS), shall receive priority plan check processing by all City departments.

3 (2) All applicants wishing to receive priority plan check
4 processing pursuant to subsection (a) of this Section must submit their LEED
5 project registration and checklist to the City indicating all of the credits they
6 intend to pursue. Applicants must also clearly specify the materials, systems
7 and strategies they will use to achieve the credits in the plans submitted to the
8 City for plan check approval.

9 (3) Priority plan check shall consist of expedited prioritization of
10 the submittal by City building code reviewers, moving to the top of any waiting
11 list after any other previously submitted projects that are already in the active
12 process of review.

13 C. Furnaces. All newly installed furnaces shall have a minimum Annual
14 Fuel Utilization Efficiency of 90%.

15 D. Documentation of Heating and Cooling Equipment Sizing.
16 Documentation verifying the methodology and accuracy of heating and
17 cooling equipment sizing shall be submitted with final mechanical code
18 compliance package. Documentation shall include the following information:

19 (1) Address of work

20 (2) Name of individual performing load calculations.

21 (3) Name and version of load calculation software.

22 (4) Design temperatures (outdoor and indoor) according to the Air
23 Conditioning Contractors of America's (ACCA) Manual J, ACCA Manual N,
24 American Society of Heating, Refrigeration and Air Conditioning Engineers,
25 U.S. Department of Energy standards, or other methodology approved by the
26 City of Albuquerque.

27 (5) Area of walls, windows, skylights and doors within +/- 10% of
28 architectural plans or actual building.

29 (6) Orientation of windows and glass doors, infiltration rate, duct
30 loads, internal gains, insulation values, and Solar Heat Gain Coefficient of
31 windows and glass doors.

32 (7) Heating and cooling load calculations

1 (8) Duct sizing according to ACCA Manual D and equipment
2 sizing according to Manual J.

3 E. Space Heating. In all residential buildings and mixed-use buildings
4 with units in excess of 500 square feet, the primary source of space heating
5 may not be electric resistance.

6 F. All evaporative coolers installed in newly constructed buildings,
7 including homes, shall be equipped with thermostat controls.

8 G. Heating, Ventilating and Air Conditioning (HVAC). All HVAC
9 Systems shall be constructed to ACCA Manual recommendations. All
10 residential heating furnaces shall have minimum 90% efficiency. All
11 residential cooling equipment systems shall have minimum 14 SEER, as rated
12 by the Air-Conditioning and Refrigeration Institute (ARI), or be passive or
13 evaporative coolers.

14 H. Building Leakage. Leakage of the building thermal envelope shall
15 not exceed .35 Air Changes per Hour (ACH) as measured by the blower door
16 test. The testing procedure shall be based on ASTM E779 or ANSI/ASHRAE
17 136. Testing shall be performed by a certified independent third-party
18 technician approved by the building official. Documentation verifying thermal
19 envelope air leakage equal to or less than .35 ACH shall include the following
20 information:

21 (a) Address of residence

22 (b) Name and company of technician performing testing

23 (c) Date of final test

24 I. Duct System Leakage. Leakage of supply ducts and return
25 plenum/ducts shall not exceed 6 cubic feet per minute per 100 square feet of
26 floor space. Flexible duct shall be supported every eight feet on center
27 maximum.

28 Exception: Existing construction with no modification of or addition to the
29 existing ductwork.

30 J. Duct Insulation. Supply and return ducts shall be insulated to a
31 minimum of R-8. Ducts in floor trusses shall be insulated to minimum of R-6.
32 Exceptions: Ducts or portions thereof located within the building thermal

1 envelope; Supply and return ducts can be insulated to a minimum of R-6 if the
2 efficiency of the cooling equipment is upgraded to SEER-14.

3 **K. Building Insulation.** Ceilings shall be insulated to at least R-38; walls
4 shall be insulated to at least R-13; framed floors shall be insulated to at least
5 R-19; floor slabs on grade shall be insulated to at least R-5.5; basement/crawl
6 space walls shall be insulated to at least R-11. The replacement or recovering
7 of existing low-slope membrane roofs on projects exempted per Section 4.A.
8 shall nonetheless require the verification of existing roof insulation values and
9 augmentation, if needed, to at least R-30.

10 **L. Water Heating.** All water heaters shall be Energy Star certified, or
11 have a minimum energy factor (EF) of 0.59, or be a solar or demand-type
12 “flash” heater. Hot water recirculating pump systems with temperature-
13 operating controls or equivalent technology shall be installed in all non-
14 exempt construction and renovations.

15 Single-family and multifamily buildings with 11 or fewer units having
16 natural gas service located within the adjacent right-of-way shall not use
17 electric resistance water heating as the primary source for hot water.

18 Single-family and multifamily buildings with 11 or fewer units not having
19 natural gas service located within the adjacent right-of-way or multifamily
20 buildings containing 12 or more units and comprised of more than two stories
21 of residential units may install electric resistance water heaters having a
22 minimum efficiency of 93% in conjunction with a preprogrammed water heater
23 timer in lieu of gas fired water heating. The timer shall be preprogrammed to
24 turn the water heater off between the hours of 3:00 p.m. and 7:00 p.m. from
25 June 1 to September 30 and from 12:00 a.m. to 4:00 a.m. throughout the year.
26 The timer shall have an override capable of restoring power to the water
27 heater for one hour when activated.

28 Solar collectors shall be the primary source to heat swimming pool water
29 and to preheat industrial process water, including but not limited to, car
30 washes and laundries.

31 **M. Pipe Insulation.** All hot water distribution and recirculating system
32 piping shall be thermally insulated from the heater to the end-use fixtures.

1 Pipe insulation shall have R-value equal to R-4 for piping two inches or less in
2 diameter and R-6 for larger piping.

3 N. Bathroom Ventilation Systems. Any newly installed bathroom
4 ventilation system in any building shall be on an automatic timer switch.

5 O. The following appliances when installed by the builder in a new
6 building, including a home, shall be Energy Star certified:

7 Clothes Washers

8 Air-source Heat Pumps

9 Ventilation Fans

10 Freezers

11 Air conditioners

12 Refrigerators

13 Boilers

14 Dishwashers

15 Light Fixtures (exception: T-6 or T-8 fluorescent tubes, standard fixtures
16 with standard-base screw-in compact fluorescent bulbs).

17 P. Windows. North-, east-, and west-facing window and door glass shall be
18 low-e coated. South-facing glass shall have calculated overhangs or awnings
19 as required to provide minimum shading of 90 percent of the glass surface
20 area at noon on June 20. All glass facing within 10 degrees of west shall be
21 shaded by a minimum of 90 percent at 3 p.m. on June 20, utilizing vegetation
22 or shading structures, or have a maximum solar heat gain coefficient of 40
23 percent. Exception: unheated greenhouse structures that can be decoupled
24 from the building's conditioned thermal envelope.

25 Section 5. The following definitions are added to § 9-5-4-2 of the
26 "Woodburning Ordinance" in alphabetical order:

27 GARBAGE. All solid, semi-solid and liquid wastes generated from
28 residential, commercial and industrial sources, including trash, refuse,
29 rubbish, industrial wastes, asphaltic products, manure, vegetable or animal
30 solids and semi-solid wastes, and other discarded solid and semi-solid
31 wastes.

1 **PAINTS.** All exterior and interior house and trim paints, enamels,
2 varnishes, lacquers, stains, primers, sealers, undercoatings, roof coatings,
3 wood preservatives, shellacs, and other paints or paint-like products.

4 **PAINT SOLVENTS.** All original solvents sold or used to thin paints
5 or to clean up painting equipment.

6 **TREATED WOOD.** Wood of any species that has been chemically
7 impregnated, painted or similarly modified to improve resistance to insects or
8 weathering.

9 **WASTE PETROLEUM PRODUCTS.** Any petroleum product other
10 than gaseous fuels that has been refined from crude oil, and has been used,
11 and as a result of use, has been contaminated with physical impurities.

12 Section 6. The following new section is added to the “Woodburning
13 Ordinance” as § 9-5-4-7 ROA 1994:

14 **§ 9-5-4-7 PROHIBITION ON BURNING CERTAIN MATERIALS**

15 It is unlawful to burn the following in any solid fuel heating device:
16 garbage, treated wood, plastic products, rubber products, waste petroleum
17 products, paints, paint solvents, coal, glossy or colored papers or particle
18 board.

19 Section 7. **SEVERABILITY CLAUSE.** If any section, paragraph, sentence,
20 clause, word or phrase of this ordinance is for any reason held to be invalid or
21 unenforceable by any court of competent jurisdiction, such decision shall not
22 affect the validity of the remaining provisions of this ordinance. The Council
23 hereby declares that it would have passed this ordinance and each section,
24 paragraph, sentence, clause, word or phrase thereof irrespective of any
25 provision being declared unconstitutional or otherwise invalid.

26 Section 8. **COMPILATION.** This ordinance shall be incorporated in and
27 made part of the Revised Ordinances of Albuquerque, New Mexico, 1994.

28 Section 9. **EFFECTIVE DATE.** This ordinance shall take effect five days
29 after publication by title and general summary.