

TITLE 14 HOUSING AND CONSTRUCTION
CHAPTER 9 MECHANICAL CODES
PART 2 2009 NEW MEXICO MECHANICAL CODE

14.9.2.1 ISSUING AGENCY: Construction Industries Division (CID) of the Regulation and Licensing Department.

[14.9.2.1 NMAC - Rp, 14.9.2.1 NMAC, 8-1-11]

14.9.2.2 SCOPE: This rule applies to all contracting work performed in New Mexico on or after August 1, 2011, that is subject to the jurisdiction of CID, unless performed pursuant to a permit for which an application was received by CID before that date.

[14.9.2.2 NMAC - Rp, 14.9.2.2 NMAC, 8-1-11]

14.9.2.3 STATUTORY AUTHORITY: NMSA 1978 Sections 60-13-9 and 60-13-44.

[14.9.2.3 NMAC - Rp, 14.9.2.3 NMAC, 8-1-11]

14.9.2.4 DURATION: Permanent.

[14.9.2.4 NMAC - Rp, 14.9.2.4 NMAC, 8-1-11]

14.9.2.5 EFFECTIVE DATE: August 1, 2011, unless a later date is cited at the end of a section.

[14.9.2.5 NMAC - Rp, 14.9.2.5 NMAC, 8-1-11]

14.9.2.6 OBJECTIVE: The purpose of this rule is to establish minimum standards for the installation, repair, and replacement of mechanical systems including equipment, appliances, fixtures, fittings and appurtenances including ventilating, heating, cooling, air conditioning, and refrigeration systems, incinerators, and other energy related systems in New Mexico.

[14.9.2.6 NMAC - Rp, 14.9.2.6 NMAC, 8-1-11]

14.9.2.7 DEFINITIONS: See 14.5.1 NMAC, General Provisions and chapter 2 of the 2009 uniform mechanical code (UMC) as amended in 14.9.2.10 NMAC.

[14.9.2.7 NMAC - Rp, 14.9.2.7 NMAC, 8-1-11]

14.9.2.8 ADOPTION OF THE 2009 UNIFORM MECHANICAL CODE:

A. This rule adopts by reference the 2009 uniform mechanical code, as amended by this rule.

B. In this rule, each provision is numbered to correspond with the numbering of the 2009 uniform mechanical code.

C. This rule is to be applied in conjunction with 14.7.6 NMAC, the 2009 New Mexico Energy Conservation Code.

[14.9.2.8 NMAC - Rp, 14.9.2.8 NMAC, 8-1-11]

14.9.2.9 CHAPTER 1 ADMINISTRATION.

A. Part 1 - General.

(1) **101.0 Title.** Delete this section of the UMC and substitute: This code shall be known as 14.9.2 NMAC, the 2009 New Mexico Mechanical Code (NMMC).

(2) **102.0 Purpose.** Delete this section of the UMC and see 14.9.2.6 NMAC.

(3) **103.0 Scope.** Delete this section of the UMC and see 14.9.2.2 NMAC.

(4) **104.0 Application to existing mechanical systems.** See this section of the UMC.

(5) **105.0 Alternate materials and methods of construction.** Delete this section of the UMC and see 14.5.1 NMAC, General Provisions.

(6) **106.0 Modifications.** Delete this section of the UMC and see 14.5.1 NMAC, General Provisions.

(7) **107.0 Tests.** See this section of the UMC.

B. Part II - Organization and enforcement.

(1) **108.0 Powers and duties of the authority having jurisdiction.**

(a) **108.1 General.** Delete this section of the UMC and see CILA.

(b) **108.2 Deputies.** Delete this section of the UMC and see CILA Sections 60-13-8 and 60-

13-41 and NMSA 1978 Section 9-16-7.

(c) **108.3 Right of entry.** Delete this section of the UMC and see CILA Section 60-13-42.

(d) **108.4 Stop orders.** Delete this section of the UMC and see 14.5.2 NMAC, Permits.

(e) **108.5 Authority to disconnect utilities in emergencies.** Delete this section of the UMC and see CILA Section 60-13-42.

(f) **108.6 Authority to condemn equipment.** Delete this section of the UMC and see 14.5.1 NMAC, General Provisions.

(g) **108.7 Connection after order to disconnect.** Delete this section of the UMC and see 14.5.1 NMAC, General Provisions.

(h) **108.8 Liability.** Delete this section of the UMC and see CILA Section 60-13-26.

(i) **108.9 Cooperation of other officials and officers.** Delete this section of the UMC.

(2) **109.0 Unsafe equipment.** Delete this section of the UMC and see 14.5.1 NMAC, General Provisions.

(3) **110.0 Board of appeals.** Delete this section of the UMC and see 14.5.1 NMAC, General Provisions.

(4) **111.0 Violations.** Delete this section of the UMC and see CILA Section 60-13-1 et seq., and 14.5.3 NMAC, Inspections.

C. Part III - Permits and inspections.

(1) **112.0 Permits.** See 14.5.2 NMAC, Permits.

(2) **113.0 Application for permit.** Delete this section of the UMC and see 14.5.2 NMAC, Permits.

(3) **114.0 Permit issuance.** Delete this section of the UMC and see 14.5.2 NMAC, Permits.

(4) **115.0 Fees.** Delete this section of the UMC and see 14.5.5 NMAC, Fees.

(5) **116.0 Inspections.** Delete this section of the UMC and see 14.5.3 NMAC, Inspections.

(6) **117.0 Connection approval.** Delete this section of the UMC and see 14.5.2 NMAC, Permits.

(7) **Table 1.1 Mechanical permit fees.** Delete this table from the UMC and see 14.5.5 NMAC, Fees.

D. 116.6 Reinspection. Delete this section of the UMC and see 14.5.5.14 (G) NMAC. [14.9.2.9 NMAC - Rp, 14.9.2.9 NMAC, 8-1-11]

14.9.2.10 CHAPTER 2 DEFINITIONS: See this chapter of the UMC except as provided below.

A. 203.0 Authority having jurisdiction. Delete the text of this definition and substitute: The authority having jurisdiction is the construction industries division (CID) and the bureau chief of the mechanical and plumbing bureau of CID.

B. 214.0 Listed and listing. See this definition in the UPC and add the following provision at the end of the definition: A manufacturer may select the independent certification organization of its choice to certify its products, provided that the certification organization has been accredited by the American national standards institute (ANSI), or another certification organization that CID has approved in writing. [14.9.2.10 NMAC - Rp, 14.9.2.10 NMAC, 8-1-11]

14.9.2.11 CHAPTER 3 GENERAL REQUIREMENTS: See this chapter of the UMC except as provided below.

A. 305.0 Automatic control devices. See this section of the UMC and 14.7.6 NMAC.

B. 311.0 Heating and cooling air system. See this section of the UMC except as provided below.

(1) **311.1 Source.** See this section of the UMC

(2) **311.2 Air filters.** See this section of the UMC except delete the exception.

(3) **311.3 Prohibited source.** See this section of the UMC except delete the text of location (5) and replace with the following: a closet, bathroom, laundry room, toilet room or kitchen and add location (7) to read as follows: where it will pick up objectionable odors, fumes, or flammable vapors.

[14.9.2.11 NMAC - Rp, 14.9.2.11 NMAC, 8-1-11]

14.9.2.12 CHAPTER 4 VENTILATION AIR SUPPLY: See this chapter of the UMC and add the following material to section 405.0 Evaporative cooling systems: "Barometric relief dampers shall be installed on all new residential evaporative cooling systems to allow conditioned air from occupied spaces to exit the occupied space through a discreet opening in the ceiling, allowing the required air change to pass through the attic space to the outdoors. The authority having jurisdiction shall determine whether relief dampers shall be required on retrofits. Barometric relief dampers shall not be required on flat roof construction. Water saving or water management pumps

shall be installed on all new and replaced evaporative coolers.”

[14.9.2.12 NMAC - Rp, 14.9.2.12 NMAC, 8-1-11]

14.9.2.13 CHAPTER 5 EXHAUST SYSTEMS: See this chapter of the UMC except as provided below.

511.3 Replacement air. See this section of the UMC except add the following: windows and doors shall not be used for the purpose of providing replacement air. The exhaust and replacement air systems shall be connected by an electrical interlocking switch. When using equipment that is not listed for make-up air, a device to sense continued air movement within the replacement air plenum shall be installed initiating a complete system shut-down if air-flow is interrupted.

[14.9.2.13 NMAC - Rp, 14.9.2.13 NMAC, 8-1-11]

14.9.2.14 CHAPTER 6 DUCT SYSTEMS: See this chapter of the UMC except as follows.

A. Section 604.7. Location of ducts. Duct work shall not be installed in exterior walls or exterior to the thermal envelope unless the insulation of the duct work meets or exceeds the insulation requirement applicable to the exterior walls of the building.

B. Section 604.3 Factory-made air ducts. See this section of the UMC and add the following text to the end of the third paragraph: The use of flexible duct shall be limited to supply- and return-air run-outs of not more than 12 feet in length. Flexible duct shall not be used for the main supply or return-air plenum.

C. Section 605.0 Insulation of ducts. See this section of the UMC except as follows: Delete **Tables 6, 6A, and 6B. Minimum duct insulation R values,** and replace with the following:

(1) Residential duct:

- (a)** Supply ducts in attics shall be insulated to a minimum of R-8.
- (b)** All other ducts shall be insulated to a minimum R-6.

(2) Commercial duct:

- (a)** All supply and return air ducts and plenums located in unconditioned spaces shall be insulated to a minimum of R-5.
- (b)** All supply and return air ducts and plenums located outside the building shall be insulated to a minimum of R-8.
- (c)** All supply and return air ducts and plenums located within a building envelope assembly shall be separated from the building exterior or unconditioned or exempt spaces by a minimum of R-8 insulation.

(3) Exceptions:

- (a)** Buried ducts for combination systems will be required to be insulated to a minimum of R-3.5.
- (b)** On commercial ducts: when located within the equipment.
- (c)** On commercial ducts: when the design temperature difference between the interior and exterior of the duct or plenum does not exceed 15 degrees F (8C).

D. Section 604.2. Metal ducts. See this section of the UMC and add the following to the last sentence of the second paragraph, “and be installed so as to support the weight of the concrete during encasement.”

E. Section 609.0 Automatic shutoffs: See this section of the UMC and add the following to the exception: (6) Automatic shutoffs are not required on evaporative coolers that derive all of their air from outside the building.

[14.9.2.14 NMAC - Rp, 14.9.2.14 NMAC, 8-1-11]

14.9.2.15 CHAPTER 7 COMBUSTION AIR: See this chapter of the UMC.

[14.9.2.15 NMAC - Rp, 14.9.2.15 NMAC, 8-1-11]

14.9.2.16 CHAPTER 8 CHIMNEYS AND VENTS: See this chapter of the UMC.

[14.9.2.16 NMAC - Rp, 14.9.2.16 NMAC, 8-1-11]

14.9.2.17 CHAPTER 9 INSTALLATION OF SPECIFIC EQUIPMENT: See this chapter of the UMC except as provided below.

A. Section 904.10.3 Access to equipment on roofs.

- (1) 904.10.1** See this section of the UMC.
- (2) 904.10.2** See this section of the UMC except after the words “in height” add the following: except those designated as R-3 occupancies.

B. 907.2 Installation. See this section of the UMC except add the following: Installation of gas logs in solid fuel burning fireplaces. Approved gas logs may be installed in solid fuel burning fireplaces, provided.

(1) The gas log is installed in accordance with the manufacturer's installation instructions.

(2) If the fireplace is equipped with a damper, it shall be permanently blocked open by welding or cutting a hole of sufficient size to prevent spillage of combustion products into the room. On eight (8) inch and smaller flues, the damper shall be removed.

(3) The minimum flue passageway shall not be less than 1 square inch per 2000 Btu/h input.

(4) Gas logs shall be equipped with a pilot and listed safety shutoff valve.

(5) The use of flexible gas connections shall not be permitted within a firebox, unless it is part of the listed gas log assembly.

(6) Factory built fireplaces shall be approved for installation of gas logs and provided with a means of installing the gas piping.

(7) All gas outlets located in a barbecue or fireplace shall be controlled by an approved separating valve located in the same room and outside the hearth, but not less than six (6) feet from such outlets.

C. Section 928.2 Location. See this section of the UMC except add the following to the end: unlisted wall furnaces shall be installed with clearances to combustible material of not less than eighteen (18) inches (460 mm).

[14.9.2.17 NMAC - Rp, 14.9.2.17 NMAC, 8-1-11]

14.9.2.18 CHAPTER 10 STEAM AND HOT WATER BOILERS: See this chapter of the UMC.

[14.9.2.18 NMAC - Rp, 14.9.2.18 NMAC, 8-1-11]

14.9.2.19 CHAPTER 11 REFRIGERATION: See this chapter of the UMC.

[14.9.2.19 NMAC - Rp, 14.9.2.19 NMAC, 8-1-11]

14.9.2.20 CHAPTER 12 HYDRONICS: See this chapter of the UMC except as provided below.

A. 1201.2.8.3 Pressure test. See this section of the UMC except delete the first sentence and substitute: piping shall be tested with a hydrostatic pressure or an air test of not less than 1.5 times operating pressure.

B. 1201.3.1.1. PEX tubing. See this section of the UMC except add the following: tubing shall be manufactured with an approved oxygen diffusion barrier.

[14.9.2.20 NMAC - Rp, 14.9.2.20 NMAC, 8-1-11]

14.9.2.21 CHAPTER 13 FUEL PIPING: See this chapter of the UMC except as provided below.

A. 1309.5.2.3 Copper and brass pipe shall not be used. Aluminum alloy pipe shall not be used with gases corrosive to such material.

B. 1312.1.2 Protection against damage. Delete the text of subsection (A) of this section of the UMC, cover requirements, and substitute: Underground piping systems shall be installed with a minimum of 18 inches (460 mm) of cover. Where 18 inches (460 mm) of cover cannot be provided, the pipe shall be installed in conduit or bridged (shielded).

C. 1312.9.3 Emergency shutoff valves. See this section of the UMC except delete the following: the emergency shutoff valves shall be plainly marked as such and their locations posted as required by the authority having jurisdiction. See this section of the UMC except add the following to the end: For purposes of isolation and safety, an additional gas shut off shall be installed downstream of the serving supplier gas meter prior to any distribution of gas into the gas piping system

D. 1312.13 Electrical bonding and grounding. Delete this section of the UMC and see the New Mexico Electrical Code (NMEC).

E. 1315.0 Liquefied petroleum gas facilities and piping. Delete this section of the UMC and substitute the following: Liquefied petroleum gas facilities shall comply with 19.15.40 NMAC, liquefied petroleum gas standards, and NMSA 1978 70-5-1 et seq., liquefied and compressed gasses.

[14.9.2.21 NMAC - Rp, 14.9.2.21 NMAC, 8-1-11]

14.9.2.22 CHAPTER 14 PROCESS PIPING: See this chapter of the UMC.

[14.9.2.22 NMAC - Rp, 14.9.2.22 NMAC, 8-1-11]

14.9.2.23 CHAPTER 15 SOLAR SYSTEMS: See this chapter of the UMC.

[14.9.2.23 NMAC - Rp, 14.9.2.23 NMAC, 8-1-11]

14.9.2.24 CHAPTER 16 STATIONARY POWER PLANTS: See this chapter of the UMC.

[14.9.2.24 NMAC - Rp, 14.9.2.24 NMAC, 8-1-11]

14.9.2.25 RESIDENTIAL ENERGY EFFICIENCY: See this Chapter of the 2009 IECC.

[14.9.2.25 NMAC - Rp, 14.9.2.25 NMAC, 8-1-11]

14.9.2.26 COMMERCIAL ENERGY EFFICIENCY: See this Chapter of the 2009 IECC.

[14.9.2.26 NMAC - Rp, 14.9.2.26 NMAC, 8-1-11]

14.9.2.27 CHAPTER 17 STANDARDS: See this chapter of the UMC and add the following: ACCA manual S - 2003.

[14.9.2.27 NMAC - Rp, 14.9.2.27 NMAC, 8-1-11]

14.9.2.28 APPENDICIES: See this section of the UMC.

[14.9.2.28 NMAC - Rp, 14.9.2.28 NMAC, 8-1-11]

HISTORY OF 14.9.2 NMAC:

Pre-NMAC History: The material in this part was derived from that previously filed with state records center and archives under:

CIC MB 68-2, 1964 New Mexico Plumbing Code, filed 1/23/68.

CIC MB 70-8, 1970 Plumbing Code of New Mexico, filed 4/29/70.

CIC MB 71-4, 1970 Plumbing Code of New Mexico, filed 6/8/71.

CIC MB 74-9, 1973 Uniform Plumbing Code, filed 11/20/74.

CIC 76-1, 1976 Uniform Plumbing Code, filed 5/4/76.

CIC MB 80-5, 1979 Uniform Plumbing Code, filed 4/24/80.

MB-UPC-82-1, 1982 Uniform Plumbing Code, filed 11/4/82.

MB-UPC-85-1, 1985 Uniform Plumbing Code, filed 10/1/85.

MB-UPC-88-1, 1988 Uniform Plumbing Code, filed 12/15/88.

MB-UPC-91-1, 1991 Uniform Plumbing Code, filed 7/28/92.

CIC MB 68-3, 1966 New Mexico Gas Code, filed 1/23/68.

CIC MB 70-7, 1970 Natural Gas Code of New Mexico, filed 4/29/70.

CIC MB 71-3, 1970 Natural Gas Code of New Mexico, filed 6/8/71.

CIC-74-8, 1973 Uniform Mechanical Code, filed 11/20/74.

CIC 76-4, 1976 Uniform Mechanical Code, filed 11/24/76.

CID MB 80-3, 1979 Uniform Mechanical Code, filed 4/23/80.

MB-UMC-82-1, 1982 Uniform Mechanical Code, filed 11/4/82.

MB-UMC-85-1, 1985 Uniform Mechanical Code, filed 10/1/85.

MB-UMC-88-1, 1988 Uniform Mechanical Code, filed 12/15/88.

MB-UMC-91-1, 1991 Uniform Mechanical Code, filed 7/28/92.

CIC 77-3, 1976 New Mexico Uniform Solar Energy Code, 2/26/77.

CID MB-80-6, 1979 Uniform Solar Energy Code, 4/24/80.

MB-USEC-82-1, 1982 Uniform Solar Energy Code, filed 11/4/82.

MB-USEC-85-1, 1985 Uniform Solar Energy Code, 12/23/85.

MB-USEC-88-1, 1988 Uniform Solar Energy Code, 12/15/88.

MB-USEC-91-1, 1991 Uniform Solar Energy Code, 7/28/92.

CIC-75-1, 1973 Uniform Swimming Pool Code, Section 1.7, 10/31/75.

CIC-76-3, 1976 Uniform Swimming Pool Code, 7/27/76.

CIC MB 80-4, 1979 Uniform Swimming Pool Code, filed 4/23/80.

MB-USPC-82-1, 1982 Uniform Swimming Pool Code, 11/4/82.

MB-USPS and HTC-85-1, 1985 Uniform Swimming Pool, Spa and Hot Tub Code, 12/23/85.

MB-USPS and HTC-88-1; 1988 Uniform Swimming Pool, Spa and Hot Tub Code, 12/15/88.

MB-USPS and HTC-91-1, 1991 Uniform Swimming Pool, Spa and Hot Tub Code, 7/28/92.

CID-MB-NMP&M 91-1, 1991 New Mexico Plumbing and Mechanical Code, 7/7/92.

History of Repealed Material: 14 NMAC 9.2, 1997 New Mexico Plumbing and Mechanical Code (filed 10/30/98), repealed 7/1/04.

14.9.2 NMAC, 2003 New Mexico Mechanical Code (filed 5/27/04), repealed 1/7/04.

14.9.2 NMAC, 2006 New Mexico Mechanical Code (filed 08/16/07), repealed 1/28/11.

14.9.2 NMAC, 2009 New Mexico Mechanical Code (filed 12/28/10), repealed 8/1/11.

Other History:

CID-MB-NMP&M 91-1, 1991 New Mexico Plumbing and Mechanical Code, (filed 7/7/92), replaced by 14 NMAC 9.2, 1997 New Mexico Plumbing and Mechanical Code, effective 12-31-98.

14 NMAC 9.2, 1997 New Mexico Plumbing and Mechanical Code (filed 10-30-98) (that applicable portion) replaced by 14.9.2 NMAC, 2003 New Mexico Mechanical Code, effective 7/1/04.

14.9.2 NMAC, 2003 New Mexico Mechanical Code (filed 5/27/04) replaced by 14.9.2 NMAC, 2006 New Mexico Mechanical Code, effective 1/1/08.

14.9.2 NMAC, 2006 New Mexico Mechanical Code (filed 08/16/07) replaced by 14.9.2 NMAC, 2009 New Mexico Mechanical Code, effective 1/28/11.

14.9.2 NMAC, 2009 New Mexico Mechanical Code (filed 12/28/10) replaced by 14.9.2 NMAC, 2009 New Mexico Mechanical Code, effective 8/1/11.