TITLE 14 HOUSING AND CONSTRUCTION CHAPTER 7 BUILDING CODES GENERAL

PART 6 2021 NEW MEXICO RESIDENTIAL ENERGY CONSERVATION CODE

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

[14.7.6.1 NMAC - Rp, 14.7.6.1 NMAC, XX/XX/XX]

**14.7.6.2 SCOPE:** This rule applies to all residential contracting work performed in New Mexico on or after XX XX, XXXX, 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.

[14.7.6.2 NMAC - Rp, 14.7.6.2 NMAC, XX/XX/XX]

**14.7.6.3 STATUTORY AUTHORITY:** Sections 60-13-9 and 60-13-44 NMSA 1978. [14.7.6.3 NMAC - Rp, 14.7.6.3 NMAC, XX/XX/XX]

**14.7.6.4 DURATION:** Permanent.

[14.7.6.4 NMAC - Rp, 14.7.6.4 NMAC, XX/XX/XX]

- **14.7.6.5 EFFECTIVE DATE:** XX XX, XXXX, unless a later date is cited at the end of a section. From the date of publication of this rule in the New Mexico register, until month XX/XXXX, permits may be issued under either the previously-adopted rule, or this rule. After month XX/XXXX, permits may be issued only under this rule. [14.7.6.5 NMAC Rp, 14.7.6.5 NMAC, XX/XX/XX]
- **14.7.6.6 OBJECTIVE:** The purpose of this rule is to establish minimum standards for energy conservation for residential construction in New Mexico. [14.7.6.6 NMAC Rp, 14.7.6.6 NMAC, XX/XX/XX]
- **14.7.6.7 DEFINITIONS:** See 14.5.1 NMAC, General Provisions and Chapter 2 [RE] of the IECC as amended in 14.7.6.10 NMAC. [14.7.6.7 NMAC Rp, 14.7.6.7 NMAC, XX/XX/XX]

### 14.7.6.8 ADOPTION OF THE 2021 NEW MEXICO RESIDENTIAL ENERGY CONSERVATION CODE:

- **A.** This rule adopts by reference the 2021 international energy conservation code (IECC), as amended by this rule.
- **B.** In this rule, each provision is numbered to correspond with the numbering of the 2021 international residential energy conservation code.
- C. This rule is to be applied to each of the following New Mexico building codes, including the NMRBC, NMEBC, NMPC, NMMC and the NMEC.

  [14.7.6.8 NMAC Rp, 14.7.6.8 NMAC, XX/XX/XX]
- **14.7.6.9 CHAPTER 1 [RE] SCOPE AND ADMINISTRATION:** See this chapter of the IECC except as provided below.
  - A. Section R101 Scope and General Requirements.
- (1) Section R101.1 Title. Delete this section of the IECC and substitute with the following: This rule shall be known as 14.7.6 NMAC, the 2021 New Mexico Residential Energy Conservation Code (NMRECC).
  - (2) Section R101.2 Scope. Delete this section of the IECC and see 14.7.6.2 NMAC, Scope.
  - (3) Section R101.3 Intent. Delete this section of the IECC and see 14.7.6.6 NMAC,

Objective.

(4) Section R101.5.1 Compliance materials. Delete this section of the IECC and substitute with the following: The code official shall be permitted to approve specific computer software, worksheets, compliance manuals and other similar materials that meet the intent of this code, including but not limited to ResCheck, and worksheet or trade-off sheets from the New Mexico energy conservation code residential applications manual, issued by the New Mexico department of energy, minerals, and natural resources.

- **B.** Section R103 Construction Documents. See this section of the IECC except as provided below.
  - 1. Section R103.1 General. Delete this section of the IECC and see 14.5.2 NMAC,

Permits.

- **2. Section R103.2 Information on construction documents.** See this section of the IECC and 14.5.2 NMAC, Permits.
- 3. Section R103.3 Examination of documents. Delete this section of the IECC and see 14.5.2 NMAC, Permits.
- **4. Section R103.4 Amended construction documents.** Delete this section of the IECC and see 14.5.2 NMAC, Permits.
- **5. Section R103.5 Retention of construction documents.** Delete this section of the IECC and see 1.21.2 NMAC, Retention and Disposition of Public Records.
  - C. Section R104 Fees. Delete this section of the IECC and see 14.5.5 NMAC, Fees.
  - **D.** Section R105 Inspections. Delete this section of the IECC and see 14.5.3 NMAC, Inspections.
- **E.** Section R106 Notice of Approval. Delete this section of the IECC and see 14.5.3 NMAC, Inspections.
  - F. Section R107 Validity. Delete this section of the IECC and see 14.5.2 NMAC, Permits.
- G. Section R108 Referenced Standards. Delete this section of the IECC and substitute with the following: All references to the international residential code shall be deemed references to 14.7.3 NMAC, the New Mexico residential building code (NMRBC). All references to the international plumbing code shall be deemed references to 14.8.2 NMAC, the New Mexico plumbing code (NMPC). All references to the international mechanical code shall be deemed references to 14.9.2 NMAC, the New Mexico mechanical code (NMMC). All references to the IEC or international electrical code shall be deemed references to 14.10.4 NMAC, the New Mexico electrical code (NMEC). All references to the international energy conservation code shall be deemed references to 14.7.6 NMAC, the New Mexico residential energy conservation code (NMRECC). All references to the international fuel gas code are deemed references to the NMMC or the 19.15.40 NMAC LP gas standards, and sections 70-5-1 through 70-5-23 NMSA 1978.
- H. Section R109 Stop Work Order. Delete this section of the IECC and see 14.5.3 NMAC, Inspections.
- I. Section R110 Means of Appeals. Delete this section of the IECC and see 14.5.1 NMAC, General Provisions.

[14.7.6.9 NMAC - Rp, 14.7.6.9 NMAC, XX/XX/XX]

- 14.7.6.10 CHAPTER 2 [RE] DEFINITIONS: See this chapter of the IECC except as provided below.
- A. Section R201.1 Scope. See this section of the IECC and add the following: If the same term is defined in the New Mexico construction codes and in the IECC, the term shall have the meaning given it in the New Mexico construction codes.
- **B.** Section R201.3 Terms defined in other codes. Delete this section of the IECC and substitute with the following: Terms that are not defined in this code but are defined in the NMRBC, NMMC, NMPC, NMEC, or any other New Mexico building code shall have the meanings ascribed to them in those codes.
  - C. Section R202 General Definitions. See this section of the IECC except as provided below.
    - (1) NMRECC means 2021 New Mexico Residential Energy Conservation Code.
    - (2) NMRBC means 14.7.3 NMAC, current adopted New Mexico Residential Building Code.
    - (3) NMPC means current adopted 14.8.2 NMAC, New Mexico Plumbing Code.
    - (4) NMMC means 14.9.2 NMAC, NMMC current adopted New Mexico Mechanical Code.
    - (5) NMEC means 14.10.4 NMAC, NMEC current adopted New Mexico Electrical code.
- **(6) RESCHECK.** A document describing the overall efficiency of the insulation of a building which works by performing a simple U-factor x Area (UA) calculation for each building assembly to determine the overall UA of a building. The UA of the proposed project building is compared to the code requirements.
- (7) **RESNET Software.** Is an approved software program to meet the performance requirements of the IECC.
- (8) ASTM. Means the American society for testing and materials, an international standards organization that develops and publishes voluntary consensus building technical standards for a wide range of materials utilized in construction.

- (9) HERS. Means the home energy rating system index and is the industry standard by which home energy efficiency is measured. It is also the nationally recognized system for inspecting and calculating home energy performance.
- (10) Electric Vehicle (EV). Add the following definition to the IECC: An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, and electric motorcycles, primarily powered by an electric motor that draws current from a building electrical service, EVSE, a rechargeable storage battery, a fuel cell, a photovoltaic array, or another source of electric current. Plug-in hybrid electric vehicles are electric vehicles that have a second source of motive power. Off-road, self-propelled electric mobile equipment such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats, and the like are not considered electric vehicles.
- (11) Electric Vehicle Supply Equipment (EVSE). Add the following definition to the IECC: Equipment for plug-in power transfer including the ungrounded, grounded and equipment grounding conductors, and the electric vehicle connectors, attachment plugs, personal protection system and all other fittings, devices, power outlets or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.
- (12) Unconditioned space. Add the following definition to the IECC: Space within a building that is not mechanically heated or cooled and is outside the building thermal envelope.
- (13) Vapor retarder class. Add the following definition to the IECC: A measure of a material or assembly's ability to limit the amount of moisture that passes through that material or assembly. Vapor retarder class shall be defined using the desiccant method of ASTM E96 as follows:
  - (a) class I: 0.1 perm or less; (b) class II: > 0.1 perm ≤1.0 perm; (c) class III: > 1.0 perm ≤10 perm.

[14.7.6.10 NMAC - Rp, 14.7.6.10 NMAC, XX/XX/XX]

- **14.7.6.11 CHAPTER 3 [RE] GENERAL REQUIREMENTS:** See this chapter of the IECC except as provided below.
  - (A) Section R301 Climate Zones. See this Chapter of the IECC except as provided below.
- **(B)** Section R301.1 General. Delete this section of the IECC and substitute with the following: The table below in conjunction with Table 301.3(2) shall be used to determine the applicable requirements for chapter 4. Locations not listed in the table below shall use either Table 301.1, Section 301.3, or the building official may designate a climate zone consistent with the elevation, HDD & CDD from the table below.

(C) Table 301.2 New Mexico Climate Zones Based on Heating and Cooling Degree Days. Add the following table to the IECC.

Table 301.2  New Mexico Climate Zones Based on Heating and Cooling Degree Days								
Abiquiu Dam	Rio Arriba	6380	5872		5B			
Angel Fire	Colfax	8406	9769	195	7B			
Alamogordo	Otero	4350	3053	5309	3B			
Albuquerque	Bernalillo	5312	4332	4462	4B			
Artesia	Eddy	3380	3366	5374	3B			
Aztec Ruins	San Juan	5644	5757		5B			
Belen	Valencia	4800	4432	5012	3B			
Bernalillo	Sandoval	5052	4782	4138	4B			
Bloomfield	San Juan	5456	5490		5B			
Bosque del Apache	Socorro	4520	3916	5012	3B			
Carlsbad	Eddy	3295	2813	5997	3B			
Carrizozo	Lincoln	5438	4234	3631	4B			
Cedar Crest	Bernalillo	6581	5703		5B			

Chaco Canyon	San Juan	6200	6137		5B
Chama	Rio Arriba	7871	8254		6B
Clayton	Union	5056	5150	3170	4B
Cloudcroft	Otero	8801	7205	3170	6B
Clovis	Curry	4268	4033	4252	4B
Corona	Valencia	6690	5389	3631	4B
Cuba	Sandoval	7035	7122	3031	5B
Deming	Luna	4305	3347	5292	3B
Dulce	Rio Arriba	6793	7979		6B
Eagle Nest	Colfax	8262	9254		7B
Edgewood	Santa Fe	6649	6146		5B
Espanola	Rio Arriba	5643	5641		5B
Farmington	San Juan	5395	5747		5B
Fence Lake	Cibola	7055	6396		5B
Fort Sumner	De Baca	4032	3799	4616	3B
Gallup	McKinley	6465	6207		5B
Glenwood	Catron	4725	3632	4427	4B
Grants	Cibola	6460	6143		5B
Hatch	Dona Ana	4052	3270	5904	3B
Hobbs	Lea	3622	2954	5181	3B
Jemez Springs	Sandoval	6198	5260	2059	4B
Las Cruces	Dona Ana	4000	3223	5904	3B
Las Vegas	San Miguel	6424	5738		5B
Lordsburg	Hidalgo	4250	3213	5210	3B
Los Alamos	Los Alamos	7320	6381		5B
Los Lunas	Valencia	4856	4725	4462	4B
Magdalena	Socorro	6572	5074	2093	4B
Mescalero	Otero	6611	5540		5B
Moriarty	Torrance	6220	4735	3786	4B
Mosquero	Harding	5485	5209	3631	4B
Mountainair	Torrance	6520	5558		5B
Organ	Dona Ana	5245	3215	4919	3B
Placitas	Sandoval	5955	4917	3701	4B
Portales	Roosevelt	4006	3845	4347	4B
Raton	Colfax	6680	6001		5B
Red River	Taos	8671	8742	179	7B
Reserve	Catron	5847	5483		5B
Rio Rancho	Sandoval	5282	4880	3949	4B
Roswell	Chaves	3573	3565	5505	3B
Ruidoso	Lincoln	6920	6309		5B
Sandia Crest	Bernalillo	10680	10034		7B
Sandia Park	Bernalillo	7077	7510		6B
Santa Fe	Santa Fe	7260	6001		5B
Santa Rosa	Guadalupe	4620	3749	4714	3B
Shiprock	San Juan	4892	5475		5B

Silver City	Grant	5895	4438	3975	4B
Socorro	Socorro	4603	3984	5147	3B
Springer	Colfax	5797	5653		5B
Taos	Taos	6967	6827		5B
Taos Ski Valley	Taos	9321	9769		7B
Tatum	Lea	3999	3680	4721	3B
Thoreau	McKinley	7200	5789		5B
Tierra Amarilla	Rio Arriba	7425	7901		6B
Tijeras	Bernalillo	6322	6338		5B
Tohatchi	McKinley	6447	5418		5B
Truth or Consequences	Sierra	4245	3394	5103	3B
Tucumcari	Quay	4096	3767	4429	4B
Tularosa	Otero	4508	3056	5130	3B
Zuni	McKinley	6293	5742		5B

[14.7.6.11 NMAC - Rp, 14.7.6.11 NMAC, XX/XX/XXXX]

# 14.7.6.12 CHAPTER 4 [RE] RESIDENTIAL ENERGY EFFICIENCY: See this Chapter of the IECC except as provided below.

- A. Section R401 General. See this section of the IECC except as provided below.
- (1) Section R401.2 Application. Delete this section of the IECC and substitute with the following: Residential buildings shall comply with one of the following sections: R401.2.1, R401.2.2, R401.2.3, or 401.2.4. Exception: Additions, alterations, repairs, and changes of occupancy to existing buildings complying with Chapter 5.
- (2) Section R401.2.4 Tropical climate region option. Delete this section of the IECC and substitute with the following: Code programs recognized by the state of New Mexico. Programs such as build green New Mexico, LEED-H, or other programs approved under IECC section 102.1.1.
  - (3) Section R401.2.5 Additional energy efficiency. Delete this section of the IECC.
  - (4) Section R401.3 Certificate. Delete this section of the IECC.
- **B.** Section R402 Building Thermal Envelope. See this section of the IECC except as provided below.
- (1) Table 402.1.2 Maximum assembly U-factors and fenestration requirements. See this table in the IECC except as provided below.
- (a) See this table in the IECC except in the ceiling U-Factor column change 0.026 to 0.028 in climate zone 3.
- (b) See this table in the IECC except in the ceiling U-Factor column change 0.024 to 0.026 in climate zones 4 except marine, 5 and marine 4, 6, 7 and 8.
- (2) Table 402.1.3 Insulation minimum R-values and fenestration requirements by component. See this table in the IECC except as provided below.
- (a) See this table in the IECC except in the ceiling R-value column change 49 to 38 in climate zone 3.
- **(b)** See this table in the IECC except in the ceiling R-value column change 60 to 49 in climate zones 4 except marine, 5 and marine 4, 6, 7 and 8.
- (c) See this table in the IECC except in the slab R-value and depth column change 10ci, 4ft to 10ci, 2ft in climate zones 4 except marine, 5 and marine 4.
  - (3) Section 402.4 Air leakage. See this section of the IECC except as provided below.
- (a) Section 402.4.1.2 Testing. See this section of the IECC except delete the last paragraph of the section and substitute with the following: Mechanical ventilation shall be provided in accordance with chapter 4 of the uniform mechanical code, as applicable, or with other approved means of ventilation.
- **(b) Section R402.4.1.4 Visual Inspection Option.** Add the following section to the IECC: Building envelope tightness, and insulation installation shall be considered acceptable with the items listed in table 402.1.2 or table 402.1.3 applicable to the method of construction. It shall be field verified by the code official as part of the inspection process, and the builder or an energy rater may also field verify using the state of

New Mexico acceptable processes. Acceptable processes include but are not limited to the following: construction industries division thermal bypass visual inspection checklist, a thermal bypass certification or checklist from a HERS rater, a build green NM checklist, or an energy star program checklist from the New Mexico energy, minerals, and natural resources department.

- (c) R402.4.1.5 Based on census. Add the following section to the IECC: Based on census rural urban mapping the following areas will be required to comply with R402.4.1 building thermal envelope, R402.4.1.2 testing, and R403.3.5 Duct testing: San Juan County, Sandoval County, Santa Fe County, Bernalillo County, Torrance County, and Dona Ana County.
- (d) R402.4.1.5 State of New Mexico Thermal Bypass Inspection Checklist and Duct Sealing Visual Inspection Checklist. Add the following section to the IECC: In accordance with sections R402.4.1, R402.4.1.2 and R403.3.5 the thermal bypass inspection checklist and duct sealing visual inspection checklist will be provided at the time of issuance of building permit or can also be accessed at www.rld.nm.gov/construction-industries/ under forms and applications.
  - C. Section R403 Systems. See this section of the IECC except as provided below.
- (1) Section R403.1.1 Programmable thermostat. See this section of the IECC except add the following exceptions to the end of the section:
- (a) When a water circulation system is utilized to heat and/or cool the residence, no programmable set-back thermostat is required.
- **(b)** Where the home is registered in a performance-based certification program, the requirements for a programmable thermostat shall be waived.
- (c) Where approved alternative methods of construction and/or materials are being used, programmable thermostats may be omitted.
- (2) Section R403.3.5 Duct testing. See this section of the IECC and add the following to the methods: 3. Duct sealing shall be considered in compliance with R403.3.5 when field inspected by the code official and verified by the builder or an energy rater using the state of New Mexico duct sealing visual inspection checklist which can be accessed at www.rld.nm.gov/construction-industries.
- (3) Section R403.4 Mechanical system piping insulation. See this section of the IECC and add the following exception: In-floor radiant heating or cooling systems do not require insulation.
- **D.** Section R404 Electrical Power and Lighting Systems. See this section of the IECC except as provided below.
- (1) Section R404.4 Electric Vehicle Power Transfer Infrastructure. Add this section to the IECC. New residential automobile parking spaces for residential buildings shall be provided with electric vehicle power transfer infrastructure in accordance with Section R404.4.1 and Section R404.4.2.
- (2) Section R404.4.1 Quantity for single- and two-family dwellings. Add this section to the IECC. New one- and two-family dwellings and townhouses as defined in 14.7.3 NMAC with a designated attached or detached garage or other onsite private parking provided adjacent to the dwelling unit shall be provided with the following:
  - 1. One electrical receptable box
  - 2. 8 ga. wiring from receptable box to a 50-amp circuit breaker in the electrical panel
  - 3. The circuit breaker in the electrical panel and the receptable box shall be marked "For future electrical vehicle charging equipment".
- (3) Section R404.4.2 Quantity for Residential Buildings with R-2, R-3, R-4 Occupancy Classifications. Add this section to the IECC. New R-2, R-3, and R-4 buildings that are three stories or less above grade plane shall comply with Section C405.13 of the NMCECC.
- E. Section R408 Additional Efficiency Package Options. See this section of the IECC except as provided below.
- (1) Section R408.1 Scope. Delete this section of the IECC and substitute with the following: This section establishes additional efficiency package options.
- (2) Section R408.2 Additional efficiency package options. Delete this section of the IECC and substitute with the following: Additional efficiency package options are set forth in Sections R408.2.1 through R408.2.10.
  - (a) Section R408.2.1 Enhanced envelope performance option. See this section of

the IECC.

(b) Section R408.2.2 More efficient HVAC equipment performance option. See this section of the IECC.

(c) Section R408.2.3 Reduced energy use in service water-heating option. See

this section of the IECC.

(d) Section R408.2.4 More efficient duct thermal distribution system option.

See this section of the IECC.

(e) Section R408.2.5 Improved air sealing and efficient ventilation system option. See this section of the IECC.

**(f) Section R408.2.6 Electric Readiness.** Add this section to the IECC. Water heaters, household clothes dryers, and cooking appliances that use *fuel gas* or *liquid fuel* shall comply with the requirements of Sections R408.2.7 through R408.2.10.

- (g) Section R408.2.7 Cooking appliances. Add this section to the IECC. A dedicated branch circuit with a rating not less than 240-volts, 40-amperes shall be installed and terminate within three feet (304 mm) of conventional cooking tops, conventional ovens or cooking appliances combining both. Exception: Cooking appliances not installed in an individual dwelling unit.
- (h) Section R408.2.8 Household Clothes Dryers. Add this section to the IECC. A dedicated branch circuit with a rating not less than 240-volts, 30-amperes shall be installed and terminate within three feet (304 mm) of each household clothes dryer. Exception: Clothes dryers not installed in an individual dwelling unit.
- (i) Section R408.2.9 Domestic Hot Water Heaters. Add this section to the IECC. A dedicated branch circuit with a rating not less than either 240-volts, 30-amperes or 120V, 20-amperes shall be installed and terminate within three feet (304 mm) of each domestic hot water heater. Exception: Water heaters serving multiple dwelling units serving an R-2 occupancy.
- (j) Section R408.2.10 Electrification-ready circuits. Add this section to the IECC. The unused conductors required by sections R408.2.6 through R408.2.9 shall be labeled with the word appropriate to the appliance terminus. Capacity for the circuits required by Sections R408.2.6 through R408.2.9 shall be included in the load calculations of the original installation.

  [14.7.6.12 NMAC Rp, 14.7.6.12 NMAC, XX/XX/XX]

**14.7.6.13 CHAPTER 5 [RE] EXISTING BUILDINGS:** See this Chapter of the IECC. [14.7.6.13 NMAC - Rp 14.7.6.13 NMAC, XX/XX/XX]

**14.7.6.14 CHAPTER 6 [RE] REFERENCED STANDARDS:** See this Chapter of the IECC. [14.7.6.14 NMAC - Rp 14.7.6.14 NMAC, XX/XX/XX]

# HISTORY OF 14.7.6 NMAC: Pre NMAC History: None.

#### **History of Repealed Material:**

14.7.6 NMAC, 2003 New Mexico Energy Conservation Code (filed 5/27/2004) repealed 1/7/2004.

14.7.6 NMAC, 2006 New Mexico Energy Conservation Code (filed 8/16/2007) repealed 1/28/2011.

14.7.6 NMAC, 2009 New Mexico Energy Conservation Code (filed 12/28/2010) repealed 8/1/2011.

14.7.6 NMAC, 2009 New Mexico Energy Conservation Code (filed 6/15/2011) repealed 6/28/2013.

14.7.6 NMAC, 2009 New Mexico Energy Conservation Code (filed 6/28/2013) repealed 9/25/2020.

#### **NMAC History:**

14.7.6 NMAC, 2003 New Mexico Energy Conservation Code (filed 5/27/2004) replaced by 14.7.6 NMAC, 2006 New Mexico Energy Conservation Code, effective 1/1/2008.

14.7.6 NMAC, 2006 New Mexico Energy Conservation Code (filed 8/1622007) replaced by 14.7.6 NMAC, 2009 New Mexico New Mexico Energy Conservation Code, effective 1/28/2011.

14.7.6 NMAC, 2009 New Mexico Energy Conservation Code (filed 12/28/2010) replaced by 14.7.6 NMAC, 2009 New Mexico Energy Conservation Code, effective 8/1/2011.

14.7.6 NMAC, 2009 New Mexico Energy Conservation Code (filed 6/15/2011) replaced by 14.7.6 NMAC, 2009 New Mexico Energy Conservation Code, effective 6/28/2013.

14.7.6 NMAC, 2009 New Mexico Energy Conservation Code (filed 6/28/2013) replaced by 14.7.6 NMAC, 2018 New Mexico Energy Conservation Code, effective 9/25/2020.