TITLE 14 HOUSING AND CONSTRUCTION CHAPTER 7 BUILDING CODES GENERAL

PART 9 2021 NEW MEXICO COMMERCIAL ENERGY CONSERVATION CODE

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

[14.7.9.1 NMAC – Rp, 14.7.9.1 NMAC, 01/30/2024]

14.7.9.2 SCOPE: This rule applies to all commercial contracting work performed in New Mexico on or after January 30, 2024, 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.

[14.7.9.2 NMAC – Rp, 14.7.9.2 NMAC, 01/30/2024]

14.7.9.3 STATUTORY AUTHORITY: Sections 60-13-9 and 60-13-44 NMSA 1978. [14.7.9.3 NMAC – Rp, 14.7.9.3 NMAC, 01/30/2024]

14.7.9.4 DURATION: Permanent.

[14.7.9.4 NMAC - Rp, 14.7.9.4 NMAC, 01/30/2024]

14.7.9.5 EFFECTIVE DATE: January 30, 2024 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 July 30, 2024 permits may be issued under either the previously-adopted rule, or this rule. After month July 30, 2024, permits may be issued only under this rule.

[14.7.9.5 NMAC – Rp, 14.7.9.5 NMAC, 01/30/2024]

14.7.9.6 OBJECTIVE: The purpose of this rule is to establish minimum standards for energy conservation for commercial construction in New Mexico. [14.7.9.6 NMAC – Rp, 14.7.9.6 NMAC, 01/30/2024]

14.7.9.7 DEFINITIONS: See 14.5.1 NMAC, General Provisions and Chapter 2 [CE] of the IECC as amended in 14.7.6.10 NMAC.

[14.7.9.7 NMAC - Rp, 14.7.9.7 NMAC, 01/30/2024]

14.7.9.8 ADOPTION OF THE 2021 NEW MEXICO COMMERCIAL 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 energy conservation code.
- C. This rule is to be applied where appropriate to each of the following New Mexico building codes, including the NMCBC, NMEBC, NMPC, NMMC and the NMEC. [14.7.9.8 NMAC Rp, 14.7.9.8 NMAC, 01/30/2024]
- **14.7.9.9 CHAPTER 1 [CE] SCOPE AND ADMINISTRATION.** See this chapter of the IECC except as provided below.
 - A. Section C101 Scope and general requirements.
- (1) Section C101.1 Title. Delete this section of the IECC and substitute: This rule shall be known as 14.7.6 NMAC, the 2021 New Mexico Commercial Energy Conservation Code (NMCECC).
 - (2) Section C101.2 Scope. Delete this section of the IECC and see 14.7.9.2 NMAC, Scope.
 - (3) Section C101.3 Intent. Delete this section of the IECC and see 14.7.9.6 NMAC,

Objective.

(4) Section C101.5.1 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 ComCheck, and worksheet or trade-off sheets from the New Mexico energy conservation code commercial applications manual issued by the New Mexico department of energy, minerals, and natural resources.

- B. Section C102 Alternative Materials, Design and Methods of Construction and Equipment. See this section of the IECC.
 - C. Section C103 Construction documents. See this section of the IECC except as provided below.
 - (1) Section C103.1 General. Delete this section of the IECC and see 14.5.2 NMAC,

Permits.

- (2) Section C103.2 Information on construction documents. See this section of the IECC and 14.5.2 NMAC, Permits.
- (3) Section C103.3 Examination of documents. Delete this section of the IECC and see 14.5.2 NMAC, Permits.
- (4) Section C103.4 Amended construction documents. Delete this section of the IECC and see 14.5.2 NMAC, Permits.
- (5) Section C103.5 Retention of construction documents. Delete this section of the IECC and see 1.21.2 NMAC, Retention and Disposition of Public Records.
- (6) Section C103.6 Building documentation and closeout submittal requirements. Delete section and substitute with the following: The construction documents shall specify that the documents described in this section be provided to the building owner or owner's authorized agent.
 - **D.** Section C104 Fees. Delete this section of the IECC and see 14.5.5 NMAC, Fees.
 - **E. Section C105 Inspections.** Delete this section of the IECC and see 14.5.3 NMAC, Inspections.
- **F. Section C106 Notice of approval.** Delete this section of the IECC and see 14.5.2 NMAC, Inspections.
 - **G. Section C107 Validity.** Delete this section of the IECC and see 14.5.2 NMAC, Permits.
- H. Section C108 Referenced standards. Delete this section of the IECC and substitute with the following: All references in the IECC to the international building code shall be deemed references to 14.7.2 NMAC, the New Mexico Commercial Building Code (NMCBC). 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 14.7.9 NMAC, the New Mexico Commercial Energy Conservation Code (NMCECC). All references to the international fuel gas code are deemed references to the NMMC or the LP gas standards found at 19.15.40 NMAC, and Sections 70-5-1 through 70-5-23 NMSA 1978.
- I. Section C109 Stop work order. Delete this section of the IECC and see 14.5.3 NMAC, Inspections.
- J. Section C110 Board of appeals. Delete this section of the IECC and See 14.5.1 NMAC, General Provisions.

[14.7.9.9 NMAC – Rp, 14.7.9.9 NMAC, 01/30/2024]

- 14.7.9.10 CHAPTER 2 [CE] DEFINITIONS. See this chapter of the IECC except for as provided below.
- **A. Section C201.1 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 C201.3 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 NMCBC, NMEBC, NMMC, NMPC, NMEC, or any other New Mexico building code shall have the meanings ascribed to them in those codes.
- C. Section C202 General definitions. See this section of the IECC and add the following definitions:
 - (1) NMCECC means 2021 New Mexico Commercial Energy Conservation Code.
 - (2) NMCBC means 14.7.3 NMAC, the current adopted New Mexico Commercial Building

Code.

(3) NMEBC means 14.7.7 NMAC, the current adopted New Mexico Existing Building

Code.

- (4) NMPC mean 14.8.2 NMAC, the current adopted New Mexico Plumbing Code.
- (5) NMMC means 14.9.2 NMAC, the current adopted New Mexico Mechanical Code.
- (6) NMEC means 14.10.4 NMAC, the current adopted New Mexico Electrical Code.

- (7) **COMCHECK** is the U.S. Department of Energy commercial energy compliance software tool that determines whether a new commercial building meets the requirements of IECC prescriptive based paths or ASHRAE Standard 90.1.
- (8) ASTM means the American society for testing and materials, is an international standards organization that develops and publishes voluntary consensus technical standards for a wide range of materials utilized in construction.
- (9) 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.
- (10) Electric vehicle capable space (EV Capable Space). Add the following definition to the IECC: An automobile parking space provided with electrical infrastructure, such as, but not limited to, raceways, cables, enclosures, electrical capacity, and electrical distribution equipment space, necessary for connection to EVSE.
- (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 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.

[14.7.9.10 NMAC - Rp, 14.7.9.10 NMAC, 01/30/2024]

14.7.9.11 CHAPTER 3 [CE] GENERAL REQUIREMENTS. See this chapter of the IECC except as provided below.

A. Section C301 Climate zones. See this section of the IECC except as provided below. Section C301.1 General. Delete this section of the IECC and substitute with the following: Climate zones from table C301.2 in conjunction with table C301.3(2) shall be used to determine the applicable requirements for Chapter 4. Locations not listed in the table below shall use either table C301.1 or figure C301.1, section C301.3 or the building official may designate a climate zone consistent with the elevation, HDD, and CDD from table C301.2.

B. Table C301.2 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					
City	County	Elev. (feet)	Heating Degree Days (HDD) 65°F Day	Cooling Degree Days (CDD) 50°F Day	Climate Zone
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		6B
Clovis	Curry	4268	4033	4252	4B
Corona	Valencia	6690	5389	3631	4B
Cuba	Sandoval	7035	7122		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

[14.7.9.11 NMAC – Rp, 14.7.9.11 NMAC 01/30/2024]

14.7.9.12 CHAPTER 4 [CE] COMMERCIAL ENERGY EFFICIENCY: See this Chapter of the IECC except as provided below.

- A. Section C401 General. See this section of the IECC except as provided below. Section C401.3 Thermal envelope certificate. Delete this section of the IECC.
- B. Section C402 Building envelope requirements. See this section of the IECC except as provided below. Section C402.4.2.1 Lighting controls in toplit daylight zones. Delete this section of the IECC without substitution.
- C. Section 403 Building mechanical systems. See this section of the IECC except as provided below. Section C403.7.1 Demand control ventilation. See this section of the IECC except delete "Table 403.3.1.1 of the International mechanical code" and replace with "Table 402.1 of the uniform mechanical code" wherever referenced in this section.
- **D.** Section 405 Electrical power and lighting systems. See this section of the IECC except as provided below.
 - (1) Section C405.2.4.3 Toplit zone. Delete this section of the IECC.
- **Section C405.6 Dwelling electrical meter.** Delete this section of the IECC and substitute with the following: Each dwelling unit located in an apartment house, live/work unit, or vacation time share property with an R-2 occupancy shall have a separate electrical meter.
 - (3) Section C405.10 Voltage drop. Delete this section of the IECC.
- (4) Section C405.13 Electric vehicle power transfer infrastructure. Add this section to the IECC. Parking facilities shall be provided with electric vehicle power transfer infrastructure in accordance with design requirements and Sections C405.13.1 through C405.13.6.
- (a) Section C405.13.1 Quantity. Add this section to the IECC. The number of required EV spaces and EV capable spaces shall be determined in accordance with this section and Table C405.13.1 based on the total number of automobile parking spaces and shall be rounded up to the nearest whole number. For R-2 buildings, the table requirements shall be based on the total number of dwelling units or the total number of automobile parking spaces, whichever is less.
 - (i) Where more than one parking facility is provided on a building site, the number of required automobile parking spaces required to have EV power transfer infrastructure shall be calculated separately for each parking facility.

- (ii) Where one shared parking facility serves multiple building occupancies, the required number of spaces shall be determined proportionally based on the floor area of each building occupancy.
 - (iii) Installed EVSE spaces that exceed the minimum requirements of this meet

section may be used to meet minimum requirements for EV capable spaces.

(iv) Requirements for a Group S-2 parking garage shall be determined by the occupancies served by that parking garage. Where new automobile spaces do not serve specific occupancies, the values for Group S-2 parking garage in Table C405.13.1 shall be used.

Exception: Parking facilities, serving occupancies other than R-2 with fewer than 10 automobile parking spaces.

(b) Table C405.13.1 Required EV Power Transfer Infrastructure. Add this table to the IECC. TABLE C405.13.1 REQUIRED EV POWER TRANSFER INFRASTRUCTURE

TABLE CHUSTION REQUIRE	EVSE	*EV Capable
Occupancy	Spaces	Spaces
Group A	5%	10%
Group B	5%	5%
Group E	5%	5%
Group F	2%	5%
Group H	1%	0%
Group I	5%	10%
Group M	5%	10%
Group R-1	5%	15%
Group R-2	5%	15%
Group R-3 and R-4	2%	5%
Group S exclusive of Parking Garages	1%	0%
Group S-2 Parking Garages	5%	10%

^{*}EV Capable Spaces are in addition to the required EVSE Spaces.

- (c) Section C405.13.2 EV Capable Spaces. Add this section to the IECC. Each EV capable space used to meet the requirements of section C405.13.1 shall comply with the following:
- (i) A continuous raceway or cable assembly shall be installed between an enclosure or outlet located within 6 feet (914 mm) of the first EV capable space it serves and electrical distribution equipment.
- (ii) EV capable space raceway or cable assembly may be installed to a point at an island or median in the parking lot to provide future EV spaces without being required to provide each space with an EV capable space.
- (iii) Installed raceway or cable assembly shall be sized and rated to supply a minimum circuit capacity in accordance with Section C405.13.5.
- (iv) The electrical distribution equipment to which the raceway or cable assembly connects shall have dedicated overcurrent protection device space and electrical capacity to supply a calculated load in accordance with Section C405.13.5.
- (v) The enclosure or outlet and the electrical distribution equipment directory shall be marked: "For electric vehicle supply equipment (EVSE)".
 - (vi) Accessible parking shall be in accordance with section 1107 of the IBC.
- (d) Section C405.13.3 EVSE Spaces. Add this section to the IECC. An installed EVSE with multiple output connections shall be permitted to serve multiple EVSE spaces. Each EVSE installed to meet the requirements of section C405.13.1, serving either a single EVSE space or multiple EVSE spaces, shall comply with the following:
 - (i) Have a minimum system and circuit capacity in accordance with section

C405.13.5.

- (ii) Have a nameplate rating of not less than 6.2kW.
- (iii) Be located within 6 feet (914 mm) of each EVSE space it serves.
- (iv) Be installed in accordance with Section C405.13.6.

The EVSE space shall be in a location that will not obstruct a public walkway when the EVSE is being utilized by a user. Accessible parking shall be in accordance with section 1107 of the IBC. (vi) Section C405.13.4 System and circuit capacity. Add this section to the IECC. The (e) system and circuit capacity shall comply with C405.14.5.1 and C405.14.5.2. Section C405.13.4.1 System capacity. Add this section to the IECC. The electrical **(f)** distribution equipment supplying the branch circuit(s) serving each EV capable space and EVSE space shall comply with one of the following: (i) Have a calculated load of 7.2 kVA or the nameplate rating of the for each EV capable space and EVSE space. equipment, whichever is larger, Meets the requirements of section C405.13.5.3.1. (ii) Section C405.13.4.2 Circuit Capacity. Add this section to the IECC. The branch circuit serving each EV capable space and EVSE space shall comply with one of the following: Have a rated capacity of not less than 50 amperes or the nameplate rating of (i) whichever is greater. the equipment, Meets the requirements of section C405.13.5.3.2. (h) Section C405.14.4.3 System and circuit capacity management. Add this section to the IECC. Where system and circuit capacity management are selected in section C405.13.5.1(2) or section C405.13.5.2(2), the installation shall comply with sections C405.13.4.3.1 and C405.13.4.3.2. Section C405.13.4.3.1 System capacity management. Add this section to the IECC. The maximum equipment load on the electrical distribution equipment supplying the branch circuits(s) serving EV capable spaces and EVSE spaces controlled by an energy management system shall be the maximum load permitted by the energy management system, but not less than 3.3 kVA per space. Section C405.13.4.3.2 Circuit Capacity Management. Add this section to the IECC. Each branch circuit serving multiple EVSE spaces or EV capable spaces controlled by an energy management system shall comply with one of the following: Have a minimum capacity of 25 amperes per space. (ii) Have a minimum capacity of 20 amperes per space for R-2 occupancy type. C405.13.5 EVSE Installation. EVSE shall be installed in accordance with NFPA 70 and shall be listed and labeled in accordance with UL 2202 or UL 2594. Section C408 Maintenance Information and System Commissioning. See this section of the IECC except as provided below. Section C408.2 Mechanical systems and service water-heating systems commissioning and completion requirements. Delete this section of the IECC and substitute with the following: Prior to the final mechanical and plumbing inspections, the registered design professional or approved agency, shall provide evidence of mechanical systems commissioning and completion in accordance with the provisions of this section. Construction document notes shall clearly indicate provisions for commissioning requirements in accordance with this section and are permitted to refer to specifications for further requirements. Copies of all documentation shall be given to the building owner or owners authorized agent. **Exceptions:** The following systems are exempt: Mechanical systems and service water heater systems in buildings where the (a) total mechanical equipment capacity is less than 480,000 Btu/h (140.7 kW) cooling capacity and 600,000 Btu/h (175.8 kW) combined service water-heating and space-heating capacity. Systems included in Section C403.5 that serve individual dwelling units and sleeping units. **(2)** Section C408.2.4 Preliminary commissioning report. See this section of the IECC. (3) Figure C408.2.4 Commissioning compliance checklist. Delete this figure from the IECC and substitute with the following figure: **FIGURE C408.2.4** COMMISSIONING COMPLIANCE CHECKLIST Project Information: Project Name:

14.7.9 NMAC 7

Project Address:

Commissioning Authority:						
Commissioning Plan (Section C408.2.1)						
Commissioning Plan was used during construction and includes all items required by Section C408.2.1						
Systems Adjusting and Balancing shall be completed per plans and specifications.						
HVAC Equipment Functional Testing shall be completed per plans and specifications.						
HVAC Controls Functional Testing shall be completed per plans and specifications.						
☐ Economizer Functional Testing shall be completed per plans and specifications.						
☐ Lighting Controls Functional Testing shall be completed	per plans and specifications.					
☐ Service Water Heating System Functional Testing shall b	be completed per plans and specifications.					
☐ Manual, record documents and training shall be complete	ed per plans and specifications.					
 Preliminary Commissioning Report shall be submitted to C408.2.4. The above-referenced items are scheduled to be provide 						
I, the commissioning provider, do hereby certify that I am p with documentation as to the mechanical, service water hear accordance with the 2021 IECC.						
Signature of Commissioning Provider	Date					
Signature of Building Owner/Owner's Representative	Date					
(4) Section C408.2.4.1 Acceptance	of report. Delete section without					
substitution.						
	ort. Delete section without substitution.					
(6) Section C408.2.5 Documentation substitute with the following: The construction documents	on requirements. Delete this section of the IECC and					
be provided to the building owner or owner's authorized ag						
(7) Section C408.3 Functional testi	ing of lighting controls. See this section of the IECC					
except as provided below. Section C408.3.2 Documentation substitute with the following: The construction documents						

14.7.9.13 CHAPTER 5 EXISTING BUILDINGS: See this Chapter of the IECC.

be provided to the building owner or owner's authorized agent. [14.7.6.12 NMAC – Rp, 14.7.9.12 NMAC, 01/30/2024]

[14.7.9.13 NMAC – Rp, 14.7.9.13 NMAC, 01/30/2024]

14.7.9.14 CHAPTER 6 REFERENCED STANDARDS: See this Chapter of the IECC.

[14.7.9.14 NMAC – Rp, 14.7.9.14 NMAC, 01/30/2024]

HISTORY OF 14.7.9 NMAC:

14.7.9 NMAC – 2018 New Mexico Commercial Energy Conservation Code, filed 9/25/2020, was repealed and replaced by 2021 New Mexico Commercial Energy Conservation Code, effective 01/30/2024.