TITLE 14 HOUSING AND CONSTRUCTION CHAPTER 7 BUILDING CODES GENERAL

PART 9 2018 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 – N, 9/25/2020]

14.7.9.2 SCOPE: This rule applies to all commercial contracting work performed in New Mexico on or after 9/25/2020, 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 – N, 9/25/2020]

14.7.9.3 STATUTORY AUTHORITY: Sections 60-13-9 and 60-13-44 NMSA 1978. [14.7.9.3 NMAC – N, 9/25/2020]

14.7.9.4 DURATION: Permanent.

[14.7.9.4 NMAC, 9/25/2020]

14.7.9.5 EFFECTIVE DATE: September 25, 2020 unless a later date is cited at the end of a section. [14.7.9.5 NMAC - N, 9/25/2020]

[From the date of publication of this rule in the New Mexico register, until month 3/2021 permits may be issued under either the previously-adopted rule, or this rule. After month 3/2021, permits may be issued only under this rule.]

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 – N, 9/25/2020]

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

[14.7.9.7 NMAC - N, 9/25/2020]

14.7.9.8 ADOPTION OF THE 2018 NEW MEXICO COMMERCIAL ENERGY CONSERVATION CODE:

- **A.** This rule adopts by reference the 2018 international energy conservation code (IECC) commercial provisions, as amended by this rule.
- **B.** In this rule, each provision is numbered to correspond with the numbering of the 2018 international commercial 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 N, 9/25/2020]

14.7.9.9 CHAPTER 1 - ADMINISTRATION:

A. Section C101 - General.

- (1) C101.1 Title. Delete this section of the IECC and substitute: this rule shall be known as 14.7.6 NMAC, the 2018 New Mexico Commercial Energy Conservation Code (MCECC).
 - (2) C101.2 Scope. Delete this section of the IECC and see 14.7.9.2 NMAC, Scope.
 - (3) C101.3 Intent. Delete this section of the IECC and see 14.7.9.6 NMAC, Objective.
- (4) C101.5.1 Compliance materials. Delete this section of the IECC and substitute 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, ResCheck, and worksheet or trade-off sheets from the New Mexico energy conservation code commercial

applications manual issued by the New Mexico department of energy.

B. Section C102 Alternate Materials-Method of Construction, Design for Insulating Systems. See this section of the IECC.

- C. Section C103 Construction Documents. Delete this section of the IECC and see 14.5.2 NMAC, Permits except retain Section C103.2 and C103.6 to read as follows:
- **D.** Section C103.2 Information on construction documents. Delete section and substitute the following: Ducts shall be installed in accordance with Chapter 6 and Chapter 17 of the New Mexico Mechanical Code and current applicable standards.
- E. Section C103.6 Building documentation and closeout submittal requirements. Delete section and substitute 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.
 - F. Section C104 Fees. Delete this section of the IECC and see 14.5.5 NMAC, Fees.
- **G. Section C105 Inspections.** Delete this section of the IECC and see. 14.5.3 NMAC, General Provisions.
 - **H. Section C106 Validity.** Delete this section of the IECC and see. 14.5.2.12 NMAC, Permits.
- I. Section C107 Referenced Standards. 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 ICC 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.
- J. Section C108 Stop Work Order. Delete this section of the IECC and see 14.5.3 NMAC, Inspections.
- **K. Section C109 Board of Appeals.** Delete this section of the IECC and See 14.5.1 NMAC, General Provisions.

[14.7.9.9 NMAC – N, 9/25/2020]

- **14.7.9.10 CHAPTER 2 DEFINITIONS:** See this chapter of the IECC substituting the definition for residential building and adding the other definitions.
- 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 defined in the New Mexico Commercial Construction Code and the New Mexico Existing Building Code.
 - C. Section C202 General Definitions. See this section of the IECC and additionally the following:
- (1) Unconditioned space. Add the following definition: Space within a building that is not mechanically heated or cooled and is outside the building thermal envelope.
- (2) Vapor retarder class. Add the following definition: 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 ASTME96 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.
- (3) NMCECC means 2018 New Mexico Commercial Energy Conservation Code, which adopts by reference and amends the 2009 International Energy Conservation Code.
- (4) NMCBC 14.7.3 NMAC, 2015 New Mexico Commercial Building Code, which adopts by reference and amends the 2015 International Commercial Code.
- (5) NMEBC means the 2015 New Mexico Existing Building Code, which adopts by reference and amends the 2015 International Existing Building Code.
- (6) NMPC means 2015 New Mexico Plumbing Code, which adopts by reference and amends the 2012 Uniform Plumbing Code.
- (7) NMMC means 14.9.2 NMAC, NMMC 2015 New Mexico Mechanical Code, which adopts by reference and amends the 2012 Uniform Mechanical Code.
- (8) NMEC means 14.10.4 NMAC, NMEC 2017 New Mexico Electrical Code, which adopts by reference and amends the 2017 National Electrical Code.

- (9) **RESNET Software** is an approved software program to meet the performance requirements of the IECC.
- (10) COMCHECK is the commercial energy compliance tool of the U.S. Department of Energy designed to clarify commercial energy code compliance providing a user information whether or not a building meets the requirements of the International Energy Conservation Code (IECC) and ASHRAE 90.1, as well as state-specific codes.
- (11) **RESCHECK** is 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.
- (12) 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.
- (13) HERS means the home energy rating system index and is the industry standard by which a home's energy efficiency is measured. It's also the nationally recognized system for inspecting and calculating a home's energy performance.

[14.7.9.10 NMAC, N, 9/25/2020]

14.7.9.11 CHAPTER C301 - CLIMATE ZONES: See this Chapter of the IECC except delete the text of section 301.1 General and replace 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.

Table 301.2					
New Mexico Climate Zones Based on Heating and Cooling Degree Days					
City	County	Elev. (feet)	Heating Degree Days (HDD) 65°F	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 - N, 9/25/2020]

- **14.7.9.12 CHAPTER 4 COMMERCIAL ENERGY EFFICIENCY:** See this Chapter of the IECC except for the following:
- A. Section C402.4.2.1 Lighting controls in toplit daylight zones. Delete section without substitution.
 - **B. Section C405.2.3.3 Toplit zone.** Delete section without substitution.
- C. Section C405.5 Dwelling electrical meter (Mandatory). Amend to read as follows: Each dwelling unit located in a Group R-2 building shall have a separate electrical meter. Dormitories, fraternities, sororities, monasteries, and convents shall be exempt from the requirements of this section.
- D. Section C405.9 Voltage drop in branch circuits supplying motors or motor driven mechanical equipment with a rating of 50 HP and higher. Amending to read as follows: The total voltage drop across branch circuits supplying motors or motor driven mechanical equipment with rating of 50 HP and higher shall not exceed 5 percent.
- E. C408.2 Mechanical systems and service water-heating systems commissioning and completion requirements. Amending to read as follows: 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 owner's authorized agent.

Exceptions: The following systems are exempt:

- (1) Mechanical systems and service water heater systems in buildings where the 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.
- (2) Systems included in Section C403.5 that serve individual dwelling units and sleeping units.
 - F. C408.2.4.1 Acceptance of report. Delete section without substitution.
 - G. C408.2.4.2 Copy of report. Delete section without substitution.
- H. C408.2.5 Documentation requirements. Change section to read as follows. The construction documents shall specify that the documents described in this section be provided to the building owner or owner's authorized agent.
- I. C408.3.2 Documentation Requirements. Change section to read as follows: The construction documents shall specify that the documents described in this section be provided to the building owner or owner's authorized agent.

FIGURE C408.2.4 COMMISSIONING COMPLIANCE CHECKLIST

Project Information:	Project Name:	
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 complete	ed per plans and specifications.				
☐ Economizer Functional Testing shall be completed p	er plans and specifications.				
☐ Lighting Controls Functional Testing shall be comple	eted per plans and specifications.				
☐ Service Water Heating System Functional Testing sha	all be completed per plans and specifications.				
☐ Manual, record documents and training shall be comp	pleted per plans and specifications.				
 Preliminary Commissioning Report shall be submitted C408.2.4. The above-referenced items are scheduled to be proven. 	•				
I, the commissioning provider, do hereby certify that I as with documentation as to the mechanical, service water accordance with the 2018 IECC.					
Signature of Commissioning Provider	Date				
Signature of Building Owner/Owner's Representative	Date				
[14.7.6.12 NMAC – N, 9/25/2020]					
14.7.9.13 CHAPTER 5 - EXISTING BUILDI [14.7.9.13 NMAC - N, 9/25/2020]	NGS: See this Chapter of the IECC.				
14.7.9.14 CHAPTER 6 - REFERENCED STA [14.7.9.14 NMAC – N, 9/25/2020]	ANDARDS: See this Chapter of the IECC.				

14.7.9 NMAC 6

HISTORY OF 14.7.9 NMAC: [RESERVED]