

Board of Appeals

March 6, 2025

Members Present: Clay Dietrich, Justin Schoenberg, Brian Berg, Mark Lundberg

Members Absent: Kevin Bartram, David Vig

Others Present: Shawn Ouradnik, Chris Rose, Melissa Gaulrapp, Ryan Erickson, William Wischer, Elizabeth Kosel, Larry Mayer

Chairperson Clay Dietrich called the meeting to order at 9:30am.

Brian Berg made a motion to approve the minutes from February 6, 2025, seconded by Justin Schoenberg. No one was in opposition and the motion was declared carried.

Unfinished Business

a) Code Review

- i. IPMC Fees
- ii. IRC Chapter 11
- iii. IECC

2024 IPMC Fees presented by Shawn Ouradnik

SECTION 104 FEES Page 10

We would like to discontinue the local amendment that places the fee schedule for rental and code enforcement activities into the International Property Maintenance code and adopt it the same way we do all other fee schedules. The valuations will not change and we will keep the fee schedule, as it was when this board approved it during the meeting on February 6, 2025. The fee schedule would be adopted in a similar format to the document that follows:

Section 104 is hereby amended to read as follows:

[A] 104.1 Fees. The fees for activities and services performed by the department in carrying out its responsibilities under this code for rental and code enforcement inspections shall be as established by the applicable governing authority.

104.2 Refunds. The *code official* is authorized to establish a refund policy.



INSPECTIONS

INSPECTIONS DEPARTMENT

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FARGO RENTAL AND CODE ENFORCEMENT INSPECTIONS

Effective XXXX, 2025

Inspection	Fee
Initial Inspection	No Charge
First Re-Inspection	No Charge
Second Re-Inspection	\$150.00
Third Re-Inspection	\$150.00
Fourth and Subsequent Re-Inspections	\$150.00
Replacement for removal of Building placard	\$150.00

Fees will be charged for all government projects. Fees will be charged for all inspections conducted beyond the first Re-Inspection even if owner, owners authorized agent, tenant, or other people having any other legal interest in the property are not present.

2024 IRC Chapter 11/2024 IECC Code Review presented by Melissa Gaulrapp

There were literally hundreds of changes to the residential portion of the IECC, but only a fraction of them have significant impact on construction requirements. Many sections were reorganized, reworded for clarity, or had lists of items or lengthy paragraphs converted to tables.

Section N1101.2 Intent – pg. 500 (R101.3, Page 268)

The statement of intent was completely rewritten and greatly expanded, but the intent of the code has not changed. This expansion ties in with the changes to Section N1101.4 regarding above-code programs, which were also expanded and changed for clarity but without significant change in intent.

Section N1101.5.2 Solar-Ready system – pg. 500 (R105.2.2, Page 270)

This is a new section detailing construction document requirements for solar-ready systems.

Section N1101.6 General Definitions – pg. 501 (R202, Page 273)

The definitions have been greatly expanded to include terms not elsewhere defined in the code. For the most part, these new definitions were added because the term is used in a change to a later section of the code. One such change differentiates between common areas, conditioned space, living space, and occupiable space, all of which are new definitions. We will review such definitions in the context of the code where the term was added.

Section N1101.10.6 Airspaces – pg. 539 (R303.1.6, Page 312)

This is a new section that coordinates with N1101.11.2 (303.2.2) regarding radiant barriers. It addresses spaces inside a building like attics, soffits, and behind the exterior wall covering. It includes both ventilated and unventilated airspaces. Both sections designate the standards with which they must comply. The new definitions for "enclosed reflective airspace" and "radiant barriers" are used here. This section only applies if such airspaces are used in calculating compliance with the energy code.

Section N1101.13 Application – pg. 540 (R401.2, Page 314)

Section N1101.13.5 (R401.2.5) has been moved to Section N1108 (R408). There have been edits through subsequent sections to update the new location of the requirements.

Table N1102.1.2 Insulation and fenestration criteria – pg. 541 (Table R402.1.2, Page 315)

Tables N1102.1.2 and N1102.1.3 were both flipped so the columns and rows switched places. This was to accommodate new categories. This table has been expanded to include rows for skylight solar heat gain, insulation entirely above the roof deck, and heated and unheated slab floors. The table now differentiates between skylights and vertical fenestrations. Slabs within 24 inches above or below grade are required to have insulation on the interior or exterior of the foundation wall and must extend to the specified depth or to the depth of the footing, whichever is less. The footnote regarding skylights has been deleted. Footnote e is new and points you to the R-value requirements for slabs in Table N1102.1.3 to determine compliance.

Staff recommends continuing the existing local amendment increasing the U-factors for vertical fenestrations to .32, for wood-framed walls to .57, and for basement walls to .059. The ceiling R-factor was increased back to .026 so this portion of the amendment is no longer required. Staff also recommends deleting the row labeled "Unheated Slab R-Value and Depth".

Table N1102.1.3 R-value alternative – pg. 541 (Table R402.1.3, Page 315)

Similar changes have been made to this table, to differentiate between window and skylight requirements, to provide values for insulation entirely above the roof deck, as well as to require insulation for unheated slabs. Footnote b was deleted and footnote d regarding slab insulation was reworded to point out the installation requirements. Footnote h was added to clarify the requirements for intermittent and continuous insulation.

Staff recommends modifying the existing local amendment changing the Climate Zone 6 requirements for the R-value for wood frame walls to 21 or 13 plus 5 continuous insulation (c.i.) and changing the basement wall R-value to 10 c.i. or 15. The ceiling R-value was changed back to 49 in the 2021 code so that portion of the amendment is no longer required.

Section N1102.1.5 Component performance alternative – pg. 542 (R402.1.5, Page 316)

This section has been renamed, rewritten, and the equation more fully explained but the intent has not changed. The section name has been updated in several subsequent sections.

Section N1102.2.3 Attic knee wall – pg. 543 (R402.2.3, Page 317)

This is a new section specifying the requirements for attic knee walls with unconditioned space on one side, including attic spaces where the knee wall is created by the vertical members of the roof trusses. The section is for clarity, as the intent was always that they be treated as exterior walls.

Justin wanted to go back and talk about Climate Zone 6 requirements for R-value. He asked how the R-value in wood framed walls was going to affect things. Melissa replied that that is the same R-value that we have had. It is the same value as in the 21 code but we amended the 21 code to switch it to R21. He wanted to verify that continuous insulation was not required in residential projects and Melissa confirmed that.

Section N1102.2.7 Steel-frame ceilings, walls and floors – pg. 543 (R402.2.7, Page 318)

Steel-framed building components were removed from the U-factor tables and this section updated to detail how energy code compliance should be determined.

Section N1102.2.8 Floors – pg. 544 (R402.2.8, Page 318)

This section has been extensively reorganized but the requirements remain unchanged.

Section N1102.3 Radiant barriers – pg. 545 (R402.3, Page 319)

This is a new section listing the standard with which radiant barriers must comply. Subsequent sections have been renumbered.

Table N1102.5.1.1 Air Barrier, Air Sealing and Insulation Installation – pg. 546 (Table R402.5.1.1, Page 320)

The ceiling/attic row now specifies that access openings shall be sealed with gasketing materials that allow for repeated use. It also includes a specific reference to eave baffles and the relevant code section. A knee wall row has been added to coordinate with the new section N1102.2.3. Windows and skylights row now specifies that insulation is only required in the rough opening gap if required by the manufacturer's installation instructions.

Fireplaces have been added to the showers and tubs row, as the intent is to require all such spaces to be insulated and the air barrier continuous behind them so they are inside the thermal envelope. The

electrical and HVAC rows now specify that the relevant equipment shall be buried in or surrounded by insulation.

A new row was added for the walls separating attached single-family dwellings. This requires an interior air barrier at that wall and specifies that insulation and air-sealing materials used inside the wall assembly must be part of the rated assembly or otherwise complies with the required fire-resistance rating.

Staff recommends continuing the local amendment adding a paragraph to the basement, crawl space, and slab foundations row requiring flashing and a slip sheet over exterior foundation insulation.

Section N1102.5.1.2 Air leakage testing – pg. 547 (R402.5.1.2, Page 321)

This section has been renamed and reorganized but the intent has not changed.

Section N1102.5.1.3 Maximum air leakage rate – pg. 548 (R402.5.1.3, Page 322)

The maximum air leakage rate has been reduced to 2.5 air changes per hour (ACH) for Climate Zone 6, but new language has been added allowing 4 ACH if the building complies with either Section 1101.13.2 or 1101.13.3. New exceptions were added for testing individual units in R-2 occupancy buildings and for buildings with less than 1,500 square feet of conditioned floor area allowing these situations to have .27 cubic feet per minute.

Section N1102.5.5 Air-sealed electrical and communication outlet boxes – pg. 548 (R402.5.5, Page 322)

This section was rewritten for clarity and a new sentence added specifying that air-sealed boxes shall be buried in or surrounded by insulation. The intent is unchanged.

Section N1103.3 Duct systems – pg. 549 (R403.3, Page 323)

This section was reorganized and an exception for ventilation ductwork not integrated with a duct system serving heating or cooling systems was added. The intent remains unchanged.

Section N1103.3.2 Building cavities – pg. 549 (R403.3.2, Page 323)

Staff recommends discontinuing the existing local amendment as the new language matches the previous amendment.

Section N1103.3.6 Sealing – pg. 550 (R403.3.6, Page 324)

This section was also reorganized, and a requirement that a written report of the test results be supplied to the building official was added.

Section N1103.3.7 Duct system testing – pg. 550 (R403.3.7, Page 324)

Staff recommends deleting the existing local amendment to this section as the code language has changed to agree with our amendment.

Table N1103.3.8 Maximum Total Duct System Leakage – pg. 550 (Table R403.3.8, Page 324)

The duct system leakage section was rewritten for clarity and flexibility depending when the test is performed. Table 1103.3.8 was added to give specific maximums for different conditions at testing.

Table N1103.5.2 Minimum Pipe Insulation Thickness – pg. 551 (Table R403.5.2, Page 326)

This is a new table giving insulation thicknesses for pipes based on operating temperature. The requirements were changed from R-value to insulation thickness.

Section N1103.6.1 Heat or energy recovery ventilation – pg. 552 (R403.6.1, Page 326)

The requirement for heat recovery or energy recovery ventilation has been expanded to include Climate Zone 6.

Clay asked if that was a significant change and Melissa confirmed it was. Clay confirmed that everyone was going to need an air exchanger going forward and Melissa agreed with that statement. That tied in with the air leakage stated above, Clay was wondering how much that reduced from where things were before. Melissa said it was 3.0 and they reduced it to 2.5. Clay asked if they are still referring to that as a random thing or would that be every property or where do we sit with that. Melissa shared that there has not been a firm decision on that. Right now, we are not testing all properties so the results we have been getting are not concerning. She does not see it changing to require everyone to submit a test. We may decide to do another round of random testing. Clay asked what the average was in comparison to the 2.5 in the code now. The tests provided have been below that, usually below 2. This does not require changes in how we do things, as we are already tighter than they are requiring. Melissa agreed and shared that we were already requiring the rough in for those pieces of equipment, now we are just requiring the equipment be installed too. Clay asked if in the code, are those systems automatic. Melissa shared that they are and adjustable by the homeowner.

Section N1106.3.6.3 Testing – pg. 552 (R403.6.3, Page 327)

Staff recommends continuing the existing local amendment deleting this section in its entirety.

Section R403.6.4 Unit sampling – pg. 327

This section only appears in the IECC. It is a new section allowing for testing the ventilation systems in a portion of the units for buildings with more than 8 units.

Section N1103.6.5 Intermittent exhaust control for bathrooms and toilet rooms – pg. 552 (R403.6.5, Page 327)

This new section requires that bathroom and toilet room fans have automated controls, whether a timer, an occupant sensor, a humidity control, or a particulate/gaseous concentration control. It explicitly prohibits manual function. It includes an exception for exhaust systems that are integrated in an outdoor air or whole-house mechanical system.

Clay stated that this change will add additional cost for homes and asked how that would work if they have one of those where when the light is on the fan is on; is that acceptable or did they need a timer. Melissa said that it would need a sensor or timer, something that would shut it off.

Section N1103.9 Mechanical systems located outside of the building thermal envelope – pg. 553 (R403.9, Page 328)

This section was renamed and reorganized to address specific locations for mechanical systems located outside the thermal envelope. Outdoor heaters are required to have a timer or occupant sensor. Snowmelt and roof/gutter deicing systems are required to have temperature and moisture or daylight sensors. Freeze protection systems for outdoor piping and heat exchangers are required to have automatic controls that will shut off the system when conditions will prevent freezing.

Section N1103.13 Fireplaces – pg. 553 (R403.13, Page 328)

This is a new section that prohibits continuous pilots for gas fireplaces. Subsection R1103.13.1 lists the relevant standards for gas fireplace efficiency based on whether they are heaters or decorative appliances. In both cases, they are required to be listed and labeled.

Clay wanted to make a note on this change. This may require residents in our area to use their fireplaces a little differently because when its -25 outside, their flus may frost so then it rains inside the fireplace. They may need to run their fireplace a little bit when it is cold out to keep that from happening. That is what the continuous pilot light did for ND, kept it from frosting over. This could definitely create a problem and we may need to look into it. Melissa said they would do some research and bring that back to the board.

Section N1104.1 Lighting equipment – pg. 554 (R404.1, Page 329)

This section now gives more specific efficacy requirements for luminaires or lamps. The exceptions have been removed from the text and expanded to include antimicrobial lighting, low-input luminaires, and lamps that comply with the Department of Energy standard listed.

Table N1104.1 Lighting Power Allowances for Building Exteriors – pg. 554 (Table R404.1, Page 329)

This new table sets a maximum amount of energy for building grounds and entrances or exits to determine compliance with new Section 1104.1.3.

Section N1104.1.2 Exterior lighting power requirements – pg. 554 (R404.1.2, Page 329)

This is a new section that limits exterior lighting power, with exceptions for a number of circumstances, including safety lighting, temporary and emergency lighting, lighting for water features and swimming pools, and lights controlled from within the dwelling unit.

Section N1104.1.4 Additional exterior lighting power – pg. 555 (R404.1.4, Page 330)

This new section allows additional exterior lighting power for façade lights based on the gross above-grade wall area.

Section N1104.2 Interior lighting controls –pg. 555 (R404.2, Page 330)

Staff recommends continuing the existing local amendment deleting this section in its entirety.

Section 1104.3 Exterior lighting controls – pg. 555 (R404.3, Page 330)

Staff recommends continuing the existing local amendment deleting this section in its entirety.

Section N1104.4 Renewable energy certificate (REC) documentation – pg. 555 (R404.4, Page 330)

This is a new section requiring that documentation for renewable energy systems be provided to the code official.

Section N1105 Simulated Building Performance – pg. 555 (R405, Page 330)

The word Total was replaced with Simulated throughout this section and the entirety was reorganized and updated to account for changes elsewhere in the code.

Section N1105.5 Calculation software tools – pg. 561 (R405.5, Page 336)

The requirements for software that calculates compliance have been reorganized and updated to include testing to ANSI/ASHRAE 140 or ANSI/RESNET/ICC 301.

Section N1105.5.4 Compliance reports – pg. 562 (R405.5.4, Page 336)

Reports showing compliance with Section 1105 are required both at permit application and prior to Certificate of Occupancy issuance.

Section N1106.1 Scope – pg. 562 (R406.1, Page 337)

A new sentence requires that spaces other than dwelling units in Group R-2, R-3, or R-4 buildings comply with the relevant commercial sections of the IECC.

Table N1106.5 Maximum Energy Rating Index – pg. 564 (Table R406.5, Page 338)

The table now includes a column for buildings with on-site power production (OPP). Staff recommends expanding the existing local amendment setting the ERI for buildings without OPP to 58 to also require buildings with OPP to have a minimum ERI of 48.

Section N1108.2 Additional energy efficiency credit requirements – pg. 566 (R408.2, Page 340)

This section now includes a requirement for a specific number of credits based on the additional efficiencies listed in new Table 1108.2. Buildings with more than 5,000 square feet of living space above grade plan will require additional credits. This replaces the basic requirement that at least one of the additional efficiency packages be included. The table includes many more options and various levels to give designers more flexibility, but the overall impact is essentially unchanged. The new subsections give details for the qualifying for the credits in the table.

Section N1109 Existing Buildings – pg. 572 (R501, Page 348)

Chapter 5 has been changed throughout for clarity and to update references.

Section N1110.2.5 Lighting – pg. 573 (R502.2.4, Page 349)

This new section sets requirements for when additions require five additional credits under Section 1108.2.

Section N1111.1.5 Additional efficiency credit requirements for substantial improvements – pg. 575 (R503.1.5, Page 350)

This is a new section that requires alterations worth more than 50% of the value of the structure to include three additional credits from Table 1108.2.

Clay asked Melissa for some additional information on what the additional credits are requiring. Melissa shared that instead of saying you have to have an efficiency package for your mechanical and it had to meet all of the requirements under that. Now they break it out into specific pieces of where you can get extra energy efficiency and change it so that there are different levels you can meet. You can get a few credits here and a few credits there instead of having to meet one full package. You may be able to do additional insulation on the outside of the building and do a more efficient air conditioner and just do those two pieces instead of having to do all HVAC; you can do different pieces of the building. This is just a much more flexible way to be able to meet the code.

2024 IECC AMENDMENTS:

Section R101.1 is hereby amended as follows:

R101.1 Title. This code shall be known as the *Energy Conservation Code* of ~~[Name of Jurisdiction]~~ the city of Fargo, and shall be cited as such. It is referred to herein as “this code”.

Table R402.1.2 is hereby amended to read as follows:

Maximum Assembly U-Factors and Fenestration Requirements			
Climate Zone	###	6	###
Vertical Fenestration U-Factor	###	0.28 <u>0.32</u>	###
###	###	###	###
Wood-Framed Wall R-Value ^h	###	0.045 <u>0.057</u>	###
###	###	###	###
Basement Wall R-Value ^{b, e}	###	0.050 <u>0.059</u>	###
Unheated Slab R-Value & Depth^e	###	0.66	###

(balance of table remains the same.)

Table R402.1.2 is hereby amended to read as follows:

Insulation Minimum R-Values and Fenestration Requirements by Component			
Climate Zone	###	6	###
Vertical Fenestration U-Factor	###	0.30 <u>0.32</u>	###
###	###	###	###
Wood-Framed Wall R-Value ^{e, h}	###	30 or 20 & 5 ci or 13 & 10 ci or 0 & 20 ci <u>21 or 13 & 5 ci</u>	###
###	###	###	###
Basement Wall R-Value ^{b, e}	###	15 ci or 19 or 13 & 5 ci <u>15 or 10 ci</u>	###
Unheated Slab R-Value & Depth^e	###	10ci, 3 ft	###

(balance of table remains unchanged)

Table R402.5.1.1 Is hereby amended as follows:

Air Barrier, Air Sealing and Insulation Installation		
Component	Air Barrier Criteria	Insulation Installation Criteria
Basement, Crawl Space and Slab Foundations	<i>(Text Unchanged)</i>	<p><i>(Additional Text Being Added):</i></p> <p><u>Exterior foundation insulation shall be covered and flashed to protect it from exposure to light and weather to a minimum of 6 inches (152 mm) below grade and be covered by a minimum 6-mil polyethylene slip sheet over the entire surface.</u></p>

(balance of table remains unchanged)

Section R403.6.3 Testing. Is hereby deleted in its entirety.

Section R404.2 Interior Lighting Controls. Is hereby deleted in its entirety.

Section R404.3 Exterior Lighting Controls. Is hereby deleted in its entirety.

Table R406.5 is hereby amended as follows:

Maximum Energy Rating Index		
Climate Zone	Energy Rating Index Not Including OPP	Energy Rating Index Including OPP
###	###	###
6	53 <u>58</u>	43 <u>48</u>

(balance of table remains unchanged)

New Business

No new Business.

Announcements

No announcements.

Clay Dietrich called for a motion to adjourn the meeting. Brian Berg motioned to adjourn the meeting, seconded by Mark Lundberg. No one was in opposition and the motion was declared carried.

Meeting adjourned at 10:02am.

Respectfully submitted

A handwritten signature in blue ink, appearing to be 'S. Ouradnik', with a stylized flourish at the end.

Shawn Ouradnik
Board Secretary