

Item Number	21 ICC Code	24 ICC Code	15 MN Code	Code Section Heading/ Code Topic	Current MN Amendment?	Description of change(s) to code language	Safety & Health Value?	Cost Impact?	Staff Recommendation: Accept/Amend/Delete	21 TAG Recommend: Accept/Amend	24 TAG Recommend: Accept/Amend	Comments:
					Y or N		N - None, L - Low					
1322-01	MR 1322.0010 Subp 1			General.	Y	Update reference to 2024 IECC, note sections 1101.6 through 1113.1.1 as opposed to chapters 2-5.			AM - Update reference to 2024.			
1322-02	MR 1322.0010 Subp 2			Mandatory chapters.	Y	Update reference to 2024 IECC, note sections 1101.6 through 1113.1.1 as opposed to chapters 2-5.			AM - Update reference to 2024.			
1322-03	MR 1322.0010 Subp 3			Replacement chapters.	Y				A - Adopt as written			
1322-04	MR 1322.0015 Subp 1			Administration.	Y				A - Adopt as written			
1322-05	MR 1322.0015 Subp 2			Purpose.	Y				A - Adopt as written			
1322-06	MR 1322.0030 Subp 1			Generally.	Y				A - Adopt as written			
1322-07	MR 1322.0030 Subp 2			Building code.	Y				A - Adopt as written			
1322-08	MR 1322.0030 Subp 3			Residential code.	Y				A - Adopt as written			
1322-09	MR 1322.0030 Subp 4			Electrical code.	Y				A - Adopt as written			
1322-10	MR 1322.0030 Subp 5			Fuel gas code.	Y				A - Adopt as written			
1322-11	MR 1322.0030 Subp 6			Mechanical code.	Y				A - Adopt as written			
1322-12	MR 1322.0030 Subp 7			Plumbing code.	Y				A - Adopt as written			
1322-13	MR 1322.0030 Subp 8			Private sewage disposal code.	Y				A - Adopt as written			
1322-14	MR 1322.0030 Subp 9			Energy conservation code.	Y				A - Adopt as written			
1322-15	MR 1322.0030 Subp 10			Property maintenance code.	Y				A - Adopt as written			
1322-16	MR 1322.0030 Subp 11			Accessibility code.	Y				A - Adopt as written			
1322-17	MR 1322.0040			Administrative procedure criteria.	Y				A - Adopt as written			
1322-18	MR 1322.0100 Subp 1			Administration.	Y				A - Adopt as written			

1322-19 (Code Change Submitted - RE-1)	MR 1322.0100 Subp 2			Scope.	Y	Change to: "This code applies to residential buildings and associated systems and equipment as defined in the Residential Provisions of the (code year and code book??). Consider repealing this altogether in favor of language in IECC "R401.1 Scope". Also could amend here to add reference to accessory buildings, which are presently difficult to track. Do we need reference to the code year and code book in the scoping? Review CCP RE-1. If the definition for "Residential Building" is changed per CCP RE-15, RE-1 is likely not necessary.			AM -			
1322-20	MR 1322.0100 Subp 3			Applicability.	Y	NA						
1322-21	MR 1322.0100 Subp 3A			Additions, alterations, renovations, or repairs.	Y	Section needs update in light of Chapter 5 Existing Buildings in '21 IECC (R503).			AM - now addressed in R502.			
1322-22	MR 1322.0100 Subp 3B			Change in occupancy or use.	Y	Section needs update in light of Chapter 5 Existing Buildings in '21 IECC (R505). Might not be needed.			AM - now addressed in R502.			
1322-23	MR 1322.0100 Subp 3C			Change in space conditioning.	Y	Section needs update in light of Chapter 5 Existing Buildings in '21 IECC (R502.2). Might not be needed.			AM - now addressed in R502.			
1322-24	MR 1322.0100 Subp 3D			Mixed occupancy.	Y	See also Section C101.4.1 in 2021 IECC-C for similar model code language. Might not be needed.			AM -			
1322-25	MR 1322.0100 Subp 4			Compliance.	Y				A - Adopt as written			
1322-26	MR 1322.0100 Subp 4A			Compliance materials.	Y				A - Adopt as written			
1322-27	MR 1322.0100 Subp 4B			Low energy buildings.	Y	Contain is nearly the same language in the IECC-R under Section R402.1. Also see proposed CCP RE-34			Repeal MN amendment.			
1322-28	MR 1322.0103		R103.2 R103.2.1	Construction documents.	Y	This section is nearly the same as section R103.2 with slight variation. "Energy compliance path" is added. Two items in the MN amendment are not in the IECC text: "Fan motor horsepower and controls" and "Lighting fixture schedule with wattage and control narrative". These two items have little to no application to Residential and are not needed. Suggest using the unamended model code language of R103.2 & R103.2.1 rather than the amended MN language.			Repeal MN amendment.			

SECTION N1101

REVISIT	R101.2/R20 1.1	1101.1	1322.0100 Subp. 2 AND	Scope.	Y	Update scope to align with the '24 MCE.			Amend, using '24 MCE language in 2.6			
REVISIT	R101.3	1101.2	NA	Intent.	Y	Need to amend model code for MN relevance.			Amend			
REVISIT	R101.5.1	1101.3	1322.0100 Subp. 4A.	Compliance materials.	Y	Very similar to '15.			Adopt			
REVISIT	R102.1.1	1101.4	NA	Above code programs.		Adopt			Adopt			
REVISIT	R103.2	1101.5	1322.0103	Information on construction documents.	Y	15 does not include "Fan motor horsepower and controls" or "Lighting fixture schedule with wattage and control narrative"			Adopt			

REVISIT	R103.2.1	1101.5.1	NA	Building thermal envelope depiction.	Y	New provision.			Adopt			
REVISIT	NA	1101.5.2	NA	Solar-ready system.		New provision			Adopt?			
REVISIT		1101.6		Defined terms.		Look at R201.1, .2, .3 and amended .4.			Consider what IRC TAG did in chapter 2.			
SECTION N1101 (After definitions)												
301-1	R301.1	1101.7	R301.1	Climate zones, general.	N	Minor changes to text. Same net outcome.	N	N	Adopt	AM		Recommend that Zone 5 upgrade to Zone 6. Will coordinate.
301-2 (Code Change Submitted - RE-2) REVISIT	Figure R301.1	Figure 1101.7	Figure R301.1	Climate zone map.	N	Updated climate zone map, need to amend 3 SE counties to bring into CZ 6			Amend	AM		
301-3 (Code Change Submitted - RE-2) Skip	Table R301.1	Table 1101.7	Table R301.1	Climate Zones.	N	10 counties affected between '21 IECC and '15 MRE. (Becker, Clay, Fillmore, Grant, Houston, Kanabec, Mille Lacs, Otter Tail, Wilkin, Winona.) Suggest amending to delete all states other than MN.			AM	AM	Amend	Amend to delete non-minnesota data.
301-4 Skip	R301.2	1101.7.1	R301.2	Warm Humid Counties.	N	No change and no affect on Minnesota. Suggest amending to delete.			Delete	AM	Delete	Delete
301-5 Skip	R301.3	1101.7.2 (& Table)	R301.3	Climate zone definitions.	N	This section has been changed from "International climate zones" to "Climate zone definitions". Changes tabular format in 2015 MRE to paragraph form. Largely has little implications for MN.			A - Adopt as written	A		
301-6 Skip	Table R301.3		Table R301.3	Thermal climate zone definitions.	N	Gives cooling and heating degree days based on climate zone. Could amend to remove zones 1-4.			A - Adopt as written	AM		Amend to delete Zones 1-5
301-7 Skip	None	1101.8	R301.4	Tropical Climate region.	N	New section with no affect on Minnesota. Suggest deleting.	N	N	Delete	AM	Delete	Delete
R302-1 Skip	R302.1	1101.9	R302.1	Interior design conditions.	N	No change in '24.	N	N	A - Adopt as written	AM		Amend to add exterior design conditions to match commercial energy code for climatic parameters.
R302-2 (Code Change Submitted - RE-3.1) Skip	NA		NA	Climatic data design conditions.	N	Proposed code change submitted to add this content to section R302. Content may fit better into Section R403.7(?).			AM			RE-3.1 Supported.
303-1	R303.1	1101.10	R303.1	Identification.	Y	The MRE expands to include 3 additional criteria. R303.1 Identification. Materials, systems, and equipment shall be identified in a manner that will allow a determination of compliance with the applicable provisions of this code. Materials used shall be: (1) listed for the intended use; (2) installed in accordance with the manufacturer's installation instructions; and (3) installed by an installer who is certified by a manufacturer to install that specific product, if such certification exists.	L	L	Comment: Suggest maintaining current MRE language.		Repeal amendment, use model code language.	Recommend deleting item 3 at the very least because it is out of scope for a building official.

303-2 Skip	R303.1.1	1101.10.1	R303.1.1	Building thermal envelope insulation	N	Minor changes to text, same net outcome. Exception has been added in IECC for insulation installed above the roof deck along with references to the IRC & IBC. <u>Exception: For roof insulation installed above the deck, the R-value shall be labeled as required by the material standards specified in Table 1508.2 of the International Building Code or Table R906.2 of the International Residential Code, as applicable.</u>	N	N	A - Adopt as written	A		May need reference to '24 IRC because Table 906.2 is referenced.
		N1101.10.1		Building thermal envelope insulation	N	Minor changes. <u>For reflective insulation , the number of reflective sheets, the number and thickness of the enclosed reflective airspaces and the R-value for the installed assembly determined in accordance with Section N1101.10.6 shall be listed on the certification.</u> For insulated siding, the R-value shall be on a label on the product's package and shall be indicated on the certification. The insulation installer shall sign, date and post the certification in a conspicuous location on the job site. <u>Exception: For roof insulation installed above the deck, the R-value shall be labeled as required by the material standards specified in Table R906.2.</u>	N	N	A - Adopt as written		Committee polled with unanimity to remove references to radiant/reflective barriers. John Smith to draft CCP to remove references.	
303-3 Skip	R303.1.1.1	1101.10.1.1	R303.1.1.1	Blown/sprayed roof insulation	N	Minor changes to text. Same net outcome.	N	N	A - Adopt as written	A		
303-4 Skip	R303.1.2	1101.10.2	R303.1.2	Insulation Mark Installation.	N	Similar language, but IECC now addresses blown or draped insulation products by requiring that an insulation certificate is left immediately after installation in a conspicuous area. Insulation mark installation. Insulating materials shall be installed such that the manufacturer's R-value mark is readily observable at inspection. <u>For insulation materials that are installed without an observable manufacturer's R-value mark, such as blown or draped products, an insulation certificate complying with Section R303.1.1 shall be left immediately after installation by the installer, in a conspicuous location within the building, to certify the installed R-value of the insulation material.</u>	L	L	A - Adopt as written	A		
	N1101.10.2	1101.10.2		Insulation Mark Installation.	N	Changed definition: N1101.10.2 (R303.1.2) Insulation mark installation. Insulating materials shall be installed such that the manufacturer's R-value mark is readily observable at inspection. For insulation materials that are installed without an observable manufacturer's R-value mark , such as blown or draped products, an insulation certificate complying with Section N1101.10.1 shall be left immediately after installation by the installer, in a conspicuous location within the building , to certify the installed R-value of the insulation material. <u>Exception: For roof insulation installed above the deck, the R-value shall be labeled as specified by the material standards in Table 1508.2 of the International Building Code or Table R906.2 of this code, as applicable.</u>			A - Adopt as written		Accept	

303-5 Skip	R303.1.3	1101.10.3	R303.1.3	Fenestration product rating.		Modified section in '21, no change to '24: U-factors of fenestration products such as windows, doors, and skylights shall be determined in accordance with NFC 100. Exception: <u>Where required, garage door U-factors shall be determined in accordance with either NFRC 100 or ANSI/DASMA 105.</u> U-factors shall be determined by an accredited independent laboratory, and labeled and certified by the manufacturer. Products lacking such a labeled U-factor shall be assigned a default U-factor from Table R303.1.3(1) or Table R303.1.3(2). The solar heat gain coefficient (SHGC) and visible transmittance (VT) of glazed fenestration products such as windows, glazed doors and skylights shall be determined in accordance with NFRC 200 by an accredited, independent laboratory, and labeled and certified by the manufacturer. Products lacking such a labeled SHGC or VT shall be assigned a default SHGC or VT from Table 303.1.3(3).	L		A - Adopt as written	A		Important to have 3rd party tested to provide consumers with information. R-value equivalency may not be enough. Overhead doors are also now often used for fully conditioned sport-courts.
	Table R303.1.3(1)	Table 1101.10.3(1)		Default glazed window, glass door and skylight U-factors		No change from '21 to '24.			A - Adopt as written.			
	Table R303.1.3(2)	Table 1101.10.3(2)		Default opaque door U-factors		No change from '21 to '24.			A - Adopt as written.			
	Table R303.1.3(3)	Table 1101.10.3(3)		Default glazed fenestration SHGC and VT		No change from '21 to '24.			A - Adopt as written.			
303-6 Skip	R303.1.4	1101.10.4	R303.1.4	Insulation product rating.	N	Sentence has been restructured, no technical changes in '24.	N	N	A	A		
303-7 Skip	R303.1.4.1	1101.10.4.1	R303.1.4.1	Insulated Siding.	N	New Section in '21, unchanged in '24: <u>The thermal resistance, R-value, of insulation shall be determined in accordance with ASTM C1363. Installation for testing shall be in accordance with the manufacturer's instructions.</u>	L	L	A - Adopt as written	A		
303-8 Skip	R303.1.5	1101.10.5	R303.1.5	Air-impermeable insulation.	N	New section in '21, unchanged in '24: <u>Insulation having an air permeability not greater than 0.004 cubic feet per minute per square foot under pressure differential of 0.3 inch water gauge when tested in accordance with ASTM E2178 shall be determined air-impermeable insulation.</u>	N	N	A - Adopt as written	A		
303-9	R303.1.5		NA	Minnesota Thermal Insulation Standards.	N	Section does not exist in the IECC. Renumber to 303.1.6 and retain existing amendment as follows: Thermal insulation shall comply with Minnesota Rules, Chapter 7640, Minnesota Thermal Insulation Standards, adopted by the Department of Commerce.	L	L	AM			DLI will study to see if still necessary.

		1101.10.6	R1101.10.6	Airspaces	N	New Section: Where the R-value of an enclosed reflective airspace or enclosed nonreflective airspace is used for compliance with this standard, the airspace shall be enclosed in a cavity bounded on all sides by building components and constructed to minimize airflow into and out of the enclosed airspace. Airflow shall be deemed minimized where one of the following conditions occur: 1. The enclosed airspace is unventilated. 2. The enclosed airspace is bounded on one or more sides by an anchored masonry veneer constructed in accordance with Chapter 7, and vented by veneer weep holes located only at the bottom portion of the airspace and spaced not less than 15 inches (381 mm) on center with the top of the cavity airspace closed. Exception: For ventilated cavities, the effect of the ventilation of airspaces located on the exterior side of the continuous air barrier and adjacent to and behind the exterior wall covering material shall be determined in accordance with ASTM C1363, modified with an airflow entering the bottom and exiting the top of the airspace at an air movement rate of not less than 70 mm/second.			A - Adopt as written		Table, waiting for CCP to review.	
303-10 Skip		1101.11	R303.2	Installation.	N	Updated section now includes reference to IRC. Materials, systems and equipment shall be installed in accordance with the manufacturer's installation instructions and the International Building Code or the International Residential Code, as applicable.			A - Adopt as written	A		Adjust to reference all of 2024 IRC chapters.
303-11 Skip	R303.2.1	1101.11.1	R303.2.1	Protection of exposed foundation insulation.	N	Very minor changes to language. Same net effect.	N	N	A - Adopt as written	A		
		N1101.11.2		Radiant Barrier	N	New section: Where installed, radiant barriers shall comply with the requirements of ASTM C1313/C1313M and shall be installed in accordance with ASTM C1743.	N	N	A - Adopt as written		Table, waiting for CCP to review.	
303-12 Skip	R303.3	1101.12	R303.3	Maintenance information.	N	One word changed: "accessible" label in MRE, "visible" label in IECC.	N	N	A - Adopt as written	A		
401-1	R401.1		R401.1	Scope.	N	No "scope" section in N11. May need this if Energy is stand alone book.	N	N	A - Adopt as written	A		This could replace language in MR 1322.0100 Subp. 2 "Scope".
401-2 Skip	R401.2	1101.13	R401.2	Application/ Compliance.	N	Different language in 2021 IECC. With the new paths in the '21, plus the "Existing Buildings" content, the language needs updating.			A - Adopt as written	A		
401-3 Skip	NA	1101.13.1	R401.2.1	Prescriptive option.	N	This and the following sections provide guidance to understand which subsequent sections must be used depending on the compliance path chosen. This guides the user to N1101 General, N1102 Building Thermal Envelope, N1103 Systems, N1104 Electrical Power, Lighting, and Renewable Energy Systems.				A		
401-4 Skip	NA		R401.2.2	Total building performance option.	N	This path guides the user to R405 Total Building Performance.				A		
		N1101.13.2		Total Simulated Building Performance Option	N	Modified section: The Total Simulated Building Performance Compliance Option requires compliance with Section N1105.	N	N	A - Adopt as written		Accept	

401-5 Skip	NA	1101.13.3	R401.2.3	Energy Rating Index (ERI) option.	N	This path guides the user to N1106 ERI option.				A		
401-6 Skip	NA	1101.13.4	R401.2.4	Tropical climate region option.	N	This path guides the user to N1107 Tropical Climate Region Compliance Path. No relevance to MN as we are not tropical.	N	N	AM - Delete section.	AM		
401-7 (Code Change Submitted - RE-5.1) Skip	NA		R401.2.5	Additional energy efficiency.	N	This section identifies additional items that must be adhered to based on which compliance path is selected.			RE-5.1 will need to be revised by author and resubmitted for review.	A		
	N1101.13.5		N1101.13.5	Additional energy efficiency.	N	Section moved - N1108	N	N	0		Nothing needs to be done.	
401-8 Skip	R401.3		R401.3	Certificate.	Y	Similar language between MN & '21 text, suggest combining to take the best of both sections and remove irrelevant content. Maintain numbered format as it reads better.			AM - Combine relevant and best language between MRE & IECC.			DLI will study to see if we need the amended language.
Start 3/10 Meeting Here	N1101.14		N1101.14	Certificate		Minor changes to section including changes 7 & 8. 7. The code edition under which the structure was permitted, the compliance path used <u>and, where applicable, the additional efficiency measures selected for compliance with Section N1108.</u> <u>8. The location and dimensions of a solar-ready zone where one is provided.</u>			AM - Combine relevant and best language between MRE & IECC. Staff to review certificate for potential amendment. Remove requirement to post on electrical panel.		Amend, with consideration to address Performance Path documentation.	DLI will study to see if we need the amended language.
SECTION 1102 BUILDING THERMAL ENVELOPE												
402-1 Skip	R402.1	1102.1	R402.1	General.	N	The leading paragraph includes the addition of a reference to R402.1.5 due to differences in the content and layout of the codes in R402.1.1 - 402.1.5.		M		A		
	R402.1	1102.1	R402.1	General	N	Some changes. N1102.1 (R402.1) General. The building thermal envelope shall comply with the requirements of <u>Sections N1102.1.1 through N1102.1.5, one of the following:</u> <u>1. Sections N1102.1.1 through N1102.1.4 and Section N1102.1.6.</u> <u>2. Sections N1102.1.1, N1102.1.5 and N1102.1.6.</u> <u>NEW EXCEPTION - Exception #2: Log homes designed in accordance with ICC 400.</u>			Adopt, but may want to look into ICC 400 to see if it addresses the thermal envelope.		Don will review ICC 400 to see if standard has any Energy requirements for Log homes.	
402-2 Skip	NA	1102.1.1	R402.1.1	Vapor retarder.	N	Provides a pointer to R702.7.	N	N	A - Adopt as written	AM		Add: An equivalent vapor retarder shall be provided on the warm-in-winter side of assemblies where part of the building thermal envelope.
402-3	R402.1.1	1102.1.2	R402.1.1	Insulation and fenestration criteria.	Y	In MN code, waterproofing is also addressed in this section due to statutory durability requirements. U-factor and SHGC are also noted with a reference to Table R402.1.2.			Move MN amended waterproofing content to basement walls N1102.2.9	AM	Adopt, may need amendment from durability research	Relocate amended language to foundation walls section and retain model code language here. Insert amended language into 402.2.8 and 402.2.10.
	R402.1.2	1102.1.2	R402.1.1	Insulation and fenestration criteria.		Minor changes by adding F-Factor to the section.			A - Adopt as written		Adopt as written	

402-4 (Code Change Submitted - RE-12) Skip	Table R402.1.3		Table R402.1.2	Maximum assembly U-factors and fenestration requirements.	N	U-factor table is now located earlier in the IECC, it is one section later in the MRE. Comparing the tables, the IECC is slightly more efficient and fenestration U-factor decreases from .32 to .30. Skylights are unchanged. Ceiling U-factor reduces from .026 to .024. Mass walls, floors, basement walls and crawl space walls did not change in zones 5-8. Suggest deleting zones 0-4, as well as climate zones marine 4 and 8. MN will now need Zone 5 for SE MN.	L	M	AM - Delete zones 0-4, as well as climate zones marine 4 and 8. Only leave zones 5-7. Footnotes: Delete references to zones other than 5-7 in b. Delete c, e, & f (highest point in MN is 2,301ft above sea level). Delete exception in d.	5 Yea, 8 Nay on CCP RE-12, so amend to remove irrelevant climate zones, otherwise maintain as written.		Revisit with submitted code change proposal. Topic tabled.
	R402.1.2	Table 1102.1.2		Maximum assembly U-factors and fenestration requirements.		The Table has changed dramatically. Need to review. NEW: Insulation above roof deck, Heated & Unheated Slab F-factor. More Efficient: Vertical fenestration .30 reduce to .28 & .27, Skylight .55 reduce to .50. Less Efficient: Ceiling .024 (R-41.66) increase to .026 (R-38.46) No change: Wood frame walls, Mass wall, Floor, Basement wall, Crawl space wall.			Amend: Delete: CZ 0-5 & 8 Change: Vertical fenestration to .27 in both CZ 6 & 7	Amend		Steve draft CCP to delete CZ's not in MN, and make windows same U-factor across MN.
402-5	NA		R402.1.3	R-value alternative.		The '21 IECC takes a slightly different angle in that it lists the U-factor approach and table before the R-value approach and table. This section simply allows the use of R-values and points the user to the R-value table (R402.1.3) in lieu of using U-factors. IECC Table R402.1.3 is Table R402.1.1 in the MRE.	N	N	A - Adopt as written			Table for review of code change proposal next meeting.
	N1102.1.3		N1102.1.3	R-value alternative.		Minor changes to section. Added F-Factor.			A - Adopt as written	Adopt		
402-6 (Code Change Submitted - RE-6.1) Skip	Table R402.1.3		Table R402.1.1	Insulation Minimum R-values and Fenestration Requirements by Component.	Y	Table has been retitled and updated with greater efficiencies for components. MN will need Zone 5 for SE MN. U-factors have been copied over from U-factor table, however there is a mistake in the SHGC. The intention is that the SHGC is not required in Zone 5, but the table states zone 5 is to meet 0.40, but states NR in Table 402.1.2. This will be fixed in the '24 IECC-R. We could consider removing the U-factor columns from the R-value table altogether and leaving U-factors in the Table 402.1.2. Regarding R-values, ceiling has increased from 49 to 60, wood frame walls increase and add additional CI options: 20 + 5ci, 13 + 10ci, or 0 + 20. 30 is added in the erratum. Note there are other Erratum to this section to consider.	L	H	AM - Delete exception to footnote b, and delete footnotes e, f, and i as it does not pertain to MN. Consider deleting U-factor content. Change SHGC in Zone 5 to NR.			Table for review of code change proposal next meeting. RE-6.1 was tabled by author. No action taken.
	Table R402.1.3	Table 1102.1.3	R402.1.1	Insulation Minimum R-values and Fenestration Requirements by Component.		The Table has changed. NEW: Insulation above roof deck, Heated Slab R-value. More Efficient: Vertical fenestration .30 reduce to .28 & .27, Skylight .55 reduce to .50. Less Efficient: Ceiling R60 decrease to R49. No change: Wood frame walls, Mass wall, Floor, Basement wall, Unheated slab, Crawl space wall.			Amend: Delete: CZ 0-5 & 8 Change: Vertical fenestration to .27 in both CZ 6 & 7	Amend		Steve draft CCP to delete CZ's not in MN, and make windows same U-factor across MN.

402-7 Skip	R402.1.2		R402.1.4	R-value computation.	N	This section exists in the MRE for the most part, but is expanded and clarified in the IECC. No changes between '21 & '24 codes. The point of the section is that the user cannot just add up the R values of multiple components. Rather, the components must be summed based on the relative location in the assembly.	L	L	A - Adopt as written	A		
402-8 (Code Change Submitted - CCP RE-21) Skip	R402.1.4		R402.1.4	Total UA alternative.	N	Expands on content in MRE. Adds instruction that calculation must be in accord with ASHRAE Handbook of Fundamentals.	L	L	A - Adopt as written	A		May need to readdress if U-value tables adjusted for fenestration. RE-21.1 voted down.
	R402.1.5	N1102.1.5	R402.1.4	Total UA-Component Performance Alternative	N	Section has been revised. '21 states "Total UA alternative", and '24 states "Component performance alternative".			Adopt as written.			John to submit CCP on UA backstop for prescriptive.
	R402.4.4	N1102.1.6	None	Rooms containing fuel-burning appliances.	N	Not in '15, minor changes between '21 & '24.			Amend or delete entirely. Chris R to draft a CCP.			Tabled. Forthcoming CCP from Chris R.
402-9 Skip	R402.2	1102.2	R402.2	Specific insulation requirements.	N	The word "(Prescriptive)" was removed in the '21. '24 expands to include one additional section with reference to 1102.2.3 Attic knee wall.	N	N	A - Adopt as written	A	Adopt	
402-10 (Code Change Submitted - CCP RE-23) Skip	R402.2.1		R402.2.1	Ceilings with attic spaces.	N	This section reads essentially the same as in the MRE, except the R values are increased to parallel those in Table R402.1.3. Allows a reduced insulation value where a uniform thickness of insulation can be accommodated due to an adequately tall energy heel. Suggest deleting first sentence, as R-49 only applies to Zone 3 and south. Zones 5-7 all require the same attic R-value. Leaving the first sentence leads to confusion as to what the actual attic requirements are, as users do not realize the MN edition stems from model code language.	L	M	AM - Delete first sentence.	AM		Amend to delete first sentence. Delete "with attics." RE-23 voted down.
	R402.2.1	N1102.2.1	R402.2.1	Ceilings with attics.	N	Same essence as '15 & '21, except attic insulation value has reduced from '21 based on Table N1102.1.3. Where Section N1102.1.3 requires R-38 insulation in the ceiling or attic, installing R-30 over 100 percent of the ceiling or attic area requiring insulation shall satisfy the requirement for R-38 insulation wherever the full height of uncompressed R-30 insulation extends over the wall top plate at the eaves. Where Section N1102.1.3 requires R-49 insulation in the ceiling or attic, installing R-38 insulation over 100 percent of the ceiling or attic area requiring insulation shall satisfy the requirement for R-49 insulation wherever the full height of uncompressed R-38 insulation extends over the wall top plate at the eaves. This reduction shall not apply to the insulation and fenestration criteria in Section N1102.1.2 and the component performance alternative in Section N1102.1.5.			Amend: Delete first sentence as R38 does not pertain to CZ 6&7. Staff to draft CCP.		Amend	Steve draft CCP to delete CZ's not in MN
402-11 Skip	R402.2.2		R402.2.2	Ceilings without attic spaces.	N	These sections are nearly identical in both codes. There are minor changes to the exact language in the IECC. The overall application is the same.	N	N	A - Adopt as written	AM		Amend to delete section.
	R402.2.2	N1102.2.2	R402.2.2	Ceilings without attics	N	No technical changes, just minor tweaks to sentence structure.			A - Adopt as written		Adopt	

	None	N1102.2.3	None	Attic Knee Wall	N	New section			A - Adopt as written		Adopt	
	None	N1102.2.3.1	None	Roof Truss Framing Separating Conditioned and Unconditioned Space	N	New section			A - Adopt as written		Adopt	
402-12 (Code Change Submitted - CCP RE-20.1)	R402.2.3	N1102.2.4	R402.2.3	Eave baffle	N	Language update in the '24, the overall outcome is the same. CCP RE-20.1 needs to be updated. Use "wind wash" or "insulation dam" in lieu of "baffle"			Amend to address "wind wash". John Smith & Steve S to work together updating RE-20.1.	RE-20.1 approved by TAG - 11/28.		Tabled. John & Steve work together to update CCP.
402-13 (Code Change Submitted - CCP RE-16) Skip	R402.2.4		R402.2.4	Access hatches and doors.	N	Two exceptions are added in '21 and carry into '24. Recommend deleting the second exception as it does not pertain to MN climate zones. Need to update CCP RE-16 for '24 cycle.	N	N	Amend - Delete second exception.	AM		Amend to delete exceptions. DLI to write.
(Skip) (Code Change Submitted - CCP RE-16.1)	R402.2.4	1102.2.5	R402.2.4	Access hatches and doors.	N	Similar language. Need to update CCP RE-16 for '24 cycle.			Amend - Delete second exception. Steve S to update CCP for TAG review.			
402-14 Skip	N1102.2.5.1	1102.2.5.1	None	Access hatches and door insulation installation and retention.	N	Same effect as '21, minor changes to sentence structure.	N	N	Adopt as written.			Amend to delete exceptions. DLI to write.
402-15 Skip	R402.2.5	1102.2.6	R402.2.5	Mass walls.	N	Similar language to the '20 MRE with revisions. No change from '21 to '24. Added an empirical specification regarding walls with a heat capacity greater than or equal to 6 Btu/SF x degrees F in '21.	N	N	A - Adopt as written			
402-16 Skip	R402.2.6		R402.2.6	Steel-frame ceilings, walls and floors.	N	Same content in MRE, just updated the reference to Table R402.1.2 for U-factors.	N	N	A - Adopt as written			
	R402.2.6	N1102.2.7	R402.2.6	Steel-frame ceilings, walls and floors.	N	Section updated in '24 with new content. Low impact, MN does not build residential construction with steel framing.	L	L	Adopt as written.		Adopt	
402-17 Skip	Table R402.2.6		Table R402.2.6	Steel-frame ceiling, wall and floor insulation R-values.	N	Some of the R-values have been updated in the IECC. MN does not often frame houses in steel, so this content has little impact.	N	N	A - Adopt as written		Adopt	

402-18 Skip	R402.2.7		R402.2.7	Floors.	N	<p>This section has been updated to differentiate among 3 potential prescriptive ways to install the insulation: 1). It is in contact with the bottom of the subfloor.</p> <p>2). It is contact with top of the ceiling below, with airspace between the top of the insulation and the bottom of the subfloor. Requires the outer perimeter to have full depth insulation so the rim area is not left uninsulated.</p> <p>3). The third is like option #2, but incorporates continuous insulation.</p> <p>I see no problem with the outcome of this section, but suggest considering changing the language to make it more clear, or adding pictures as it is confusing to read.</p>	L	L	AM - Consider adjusting to make easier to understand.			
	R402.2.7	N1102.2.8	R402.2.7	Floors.		Heavily revised in '24.			A - Adopt as written		Adopt	
402-19	R402.2.8		R402.2.8	Basement walls.	Y	<p>For the prescriptive path, the MRE requires a minimum of R-10 to be on the exterior of the wall, whereas the IECC does not specify which side of the wall the insulation must be. The content in the MRE was based on building science research and may need to be evaluated again based on statute.</p> <p>The charging language in the IECC requires all basements to be insulated, then gives an exception where 6 items must be met. In the MRE, the requirements only apply to conditioned basements. The IECC is more restrictive in that the exceptions limit the ability to have an unconditioned basement. This is largely irrelevant in MN as we rarely see unconditioned basements.</p>	M	L	Comment: May be subject to building science research.			
	R402.2.8	N1102.2.9	R402.2.8	Basement walls.		Same as '24. This is subject to carrying forward the MN amended content from R402.2.8. Suggest moving waterproofing content to Building code.			Amend by adding '20 MRE language to '24 language. Need CCP. Subject to Building Science Research review.		Amend: Keep R15 basement wall, allow R-10 exterior. Staff draft CCP.	
402-20 Skip	R402.2.8		R402.2.8.1	Basement wall insulation installation.	Y	This section addresses how far the insulation must be installed down the wall. The IECC requires it to go to the top of the floor, whereas the MRE requires it to go to the top of the footing. Some if this depends if the insulation is installed on the interior or exterior of the wall. Given most foundation insulation is installed on the exterior in MN, the MRE is slightly more restrictive. The sections are very similar. The content may change based on building science research.	L	L	Amend - use language from '20 MRE. May be subject to building science research.			
	R402.2.8.1	N1102.2.9.1	R402.2.8	Basement wall insulation installation.		Minor changes from IECC-R			Amend - use language from '20 MRE. May be subject to building science research.		Align with 1102.2.9	
402-21 Skip	R402.2.9		R402.2.9	Slab-on-grade floors.	N	The IECC and MRE essentially have the same content, except that the IECC divides the content into two main sections like the basement insulation content: main requirement including an exception, then how it must be done.	N	N	A - Adopt as written			
	R402.2.9	N1102.2.10	R402.2.9	Slab-on-grade floors		Floor surface changes from being within 12" to grade to 24" to grade.	N	L	Adopt as written.		Adopt	
402-22 Skip	R402.2.9		R402.2.9.1	Slab-on-grade floor insulation installation.	N	Merely restructures same content that is in MRE.	N	N	A - Adopt as written			
	R402.2.9.1	N1102.2.10.1	None	Slab-on-grade floor insulation installation.	N	'24 similar to '21, but adds some content about full slab insulation and heated slabs.	L	L	Adopt as written.		Adopt	

	None	N1102.2.10.2	None	Alternative slab-on-grade insulation configurations	N	New section in '24. Refers to designs in 1105 Simulated Performance and 1106 ERI.	N	N	Adopt as written.		Adopt	
402-23	R402.2.10		R402.2.10	Crawl space walls.	N	The IECC and MRE essentially have the same content, except that the IECC divides the content into two main sections like the basement insulation content: main requirement including an exception, then how it must be done. The issue with this section in the MRE is that it was never amended to align with the basement provisions. A conditioned crawl space is essentially just a short basement. Therefore, it seems to make sense to parallel foundation insulation requirements for conditioned crawl spaces with those of conditioned basements.	N	N	AM - Amend to parallel language for conditioned basements. May be subject to building science research.			
	R402.2.10	N1102.2.11	R402.2.10	Crawl space walls.		Only change between '21 and '24 is to the references.			Amend to refer to basement wall section.		Staff draft CCP to refer to basement wall section.	
402-24 Skip	R402.2.10.1		R402.2.10	Crawl space wall insulation installations.	N	See comments for R402.2.10 directly above.	N	N	See comments for R402.2.10 directly above.			
	R402.2.10.1	N1102.2.11.1	None	Crawl space wall insulation installations.		24 allows insulation to be installed on inside or outside of wall. Consider amending to align with MN amended basement wall content to require insulation on exterior of wall. Subject to durability research.		L	Amend to require insulation on exterior of wall like a basement. Subject to durability research.		Staff draft CCP to refer to basement wall section.	
	N1102.2.11.2		N1102.2.11.2	Alternative crawl space wall insulation configurations	N	New section in '24. Refers to designs in 1105 Simulated Performance and 1106 ERI.			Adopt as written.		Adopt	
402-25 Skip	R402.2.11	N1102.2.12	R402.2.11	Masonry veneer.	N	No changes.	N	N	A - Adopt as written			
402-26 Skip	R402.2.12	N1102.2.13	R402.2.12	Sunroom and heated garage insulation.	N	Thermal envelope provisions for garages are now specifically addressed in the '21 energy code. The exceptions and R-values given for thermally isolated sunrooms are the same as in the MRE, and now also apply to garages. No change from '21 to '24.	N	N	Amend - delete content regarding CZ 0-5.		Amend to remove CZs not in MN	
	None	None	N1102.3	Radiant Barriers		New section.	N	N	Adopt as written.		Adopt	
402-27 Skip	R402.3	N1102.4	R402.3	Fenestration.	N	No technical changes from '21 to '24. The content is the same as the MRE, except that reference to R402.3.6 (Replacement fenestration) has been removed as the section is no longer located here.	N	N	A - Adopt as written		Adopt	
402-28 Skip	R402.3.1	N1102.4.1	R402.3.1	U-factor.	N	No changes.	N	N	A - Adopt as written			
402-29 Skip	R402.3.2	N1102.4.2	R402.3.2	Glazed fenestration SHGC.	N	21 & '24 same content. Same content in '20 & '21, but added section in '21 regarding dynamic glazing. Serves no purpose in MN as we do not regulate SHGC.	N	N	A - Adopt as written, could also be deleted.			
402-30 Skip	R402.3.3		R402.3.3	Glazed fenestration exemption.	N	The language is slightly different in the IECC, but the outcome is essentially the same. The SHGC content will not affect MN. Interesting use of the word "shall" vs. "may" in terms of applying the exemption.	N	N	Comment: Either adopt as written, or amend to use language in MRE.			

Skip	R402.3.3	N1102.4.3	R402.3.3	Glazed fenestration exemption.	N	Minor changes between '21 & '24, no substantive change. N1102.4.3 (R402.4.3) Glazed fenestration exemption. Not greater than 15 square feet (1.4 m ²) of glazed fenestration per dwelling unit shall be exempt from the U-factor and SHGC requirements in Section N1102.1.2. This exemption shall not apply to the Total UA component performance alternative in Section N1102.1.5.			Adopt as written.			
402-31 Skip	R402.3.4		R402.3.4	Opaque door exemption.	N	The language is slightly different in the IECC, but the outcome is essentially the same. Interesting use of the word "shall" vs. "may" in terms of applying the exemption.						
Skip	R402.3.4	N1102.4.4	R402.3.4	Opaque door exemption.		Minor changes between '21 & '24, no substantive change. Minor changes: Opaque door exemption. One side-hinged opaque door assembly not greater than 24 square feet (2.22 m ²) in area shall be exempt from the Ufactor requirement in Section N1102.1.2. This exemption shall not apply to the component performance Total UA alternative in Section N1102.1.5.			Adopt as written.			
402-32 Skip	R402.3.5	N1102.4.5	R402.3.5	Sunroom and heated garage fenestration.	N	No change from '21 to '24. Section clarifies its application to sunrooms as well as heated garages. Heated garages are presently not explicitly addressed in the MRE. The exception to allow reduced U-factor remains the same in MN climate zones. The section adds clarification for new fenestration separating sunrooms or heated garages.	N	N				A - Adopt as written
Skip		1111.1.1.1	R402.3.6	Replacement fenestration.	N	Content in '15 moved to 1111.1.1.1 in '24, no substantive change.	N	N	Moved section, see 1111.1.1.1			
402-33 Skip	R402.4		R402.4	Air leakage.	N	Same provision in the MRE, but now includes reference to the additional section of R402.4.5. The additional section stems from adding R402.4.4 "Rooms containing fuel-burning appliances".	N	N	A - Adopt as written			
	R402.4	N1102.5	R402.4	Air leakage.		Language is similar, but does not reference 1102.1.6 ('21 - R402.4.4) "Rooms containing fuel-burning appliances" as the '21 does.	N	N	Adopt as written, but fix typo in code. Last reference in paragraph should be 1102.5.5 not 1102.5.4		Adopt	
402-34 Skip	R402.4.1	N1102.5.1	R402.4.1	Building thermal envelope.	N	No substantive change from '21 to '24. Same provision in the MRE, but now includes reference to the additional section of R402.4.1.3 "Leakage rate".	N	N	A - Adopt as written			
402-35 Skip	R402.4.1.1	N1102.5.1.1	R402.4.1.1	Installation.	N	No change from '20 to '21 to '24.	N	N	A - Adopt as written			
402-36 Skip	Table R402.4.1.1		Table R402.4.1.1	Air barrier, air sealing and insulation installation.	N	The table is very similar to the MRE, with minor updates and clarifications.	L	L	A - Adopt as written			

	Table R402.4.1.1	Table N1102.5.1.1	Table R402.4.1.1	Air barrier, air sealing and insulation installation.		<p>Major changes to Table N1102.5.1.1</p> <ul style="list-style-type: none"> - General - Same as '21. - Ceiling/attic - Similar, no technical change. - Walls - Same as '21. - Knee wall - New section. - Windows, skylights, and doors - Changes, no longer requires sealing, but refers only to MFR instructions. If a window has vague installation or refers back to code, there is no requirement to seal. Suggest amending. - Rim joists - Similar, no technical change. - Floors/Cantilevered - Changes to section. - Basement, crawl space, slab - No technical changes. - Shafts/penetrations - Similar, no technical changes. - Narrow cavities - Same as '21 - Garage separation - No technical changes. - Recessed lighting - No technical changes. - Plumbing/wiring - No technical changes. - Showers/tubs - Similar, adds fireplaces. - Electrical boxes - Section added to. - HVAC registers - Insulation criteria added. - Concealed sprink - Same. - Common walls - All new section. Amend to remove reference to "attached single family" based on draft language to 13000.0070 Subp. 22a. <p>1300.0070 Sub 22a: Single-family dwelling. "Single-family dwelling" means a freestanding detached residential structure containing only one dwelling unit and may include a garage.</p>			Amend Windows portion and Common Walls, leave the rest unamended.		Chris to draft CCP to include air sealing for windows as was in the '21. See R703.4.1 Staff draft CCP to address Single Family Attached.	
402-37 Skip	R402.4.1.2		R402.4.1.2	Testing.	N	In the '21, more specific testing backstops were moved to R402.4.1.3 "Leakage rate". Additionally, an option is added to calculate the leakage based on CFM leakage per area of the enclosure. The latter change will help smaller dwellings pass the test due to challenges resulting from lower volumes of air. An exception is added for two situations whereby the requirement is reduced to .30 CUFT/Min per SF of enclosure area.	L	L	A - Adopt as written			
Start 3/24 meeting here. (Skip to N1103 for 3/24 meeting, revisit 1102.5.1.2 & .3 at 4/7 meeting.)	R402.4.1.2 REVISIT with CCP	N1102.5.1.2 REVISIT with CCP	R402.4.1.2	Air Leakage Testing.		Section has been revised from '21. Content has been broken into essentially <i>how</i> to test, and then .3 gets into the test <i>rate</i> .			Amend to change air leakage metric.		CEE & John Smith to draft CCP.	
402-38 (Code Change Submitted - RE-4.1) Skip	NA		R402.4.1.3	Leakage Rate.	N	This section provides the allowable leakage rate based on climate zone when following the prescriptive compliance option. Other compliance paths allow tradeoffs for leakage.			Amend to change air leakage metric.	RE-4.1 had 6 Yeas and 6 Nays.	CEE & John Smith to draft CCP.	

	R402.4.1.3	N1102.5.1.3 REVISIT with CCP	R402.4.1.2	Makimum Air Leakage Rate		This section provides the allowable leakage rate based on climate zone when following the prescriptive compliance option. Other compliance paths allow tradeoffs for leakage. Air leakage decreased from 3 ACH to 2.5 under Prescriptive path, but allows 4 ACH under performance options. Adds specific criteria for R-2 apartments.			Discuss leak rate, and using CFM/SF enclosure area instead of ACH50. If amended, remove content that is not CZ 6&7.			
402-39 Skip	R402.4.2	N1102.5.2	R402.4.2	Fireplaces.	N	No change from '21 to '24 The first sentence is the same, but the '21 adds content regarding the doors for factory built fireplaces listed to UL 127.	L	L	A - Adopt as written	A		
402-40 Skip	R402.4.3	N1102.5.3	R402.4.3	Fenestration air leakage.	N	Same language in '15, '21 & '24.	L	L	A - Adopt as written	A		
402-41 Skip	R402.4.4	1102.1.6	None	Rooms containing fuel-burning appliances.	N	Relocated in '24, see 1102.1.6. New provision in '21.	L	M	Merits discussion	AM (Delete)		
402-42 Skip	R402.4.5	N1102.5.4	R402.4.4	Recessed lighting.	N	Minor changes in text, same net requirement and outcome. No change to '24.	L	L	A - Adopt as written	Accept		
402-43 Skip	NA		R402.4.6	Electrical and communication outlet boxes (air-sealed boxes).	N	Provides specifications for boxes installed in the thermal envelope. Air sealed boxes are required in the MRE in Table R402.4.1.1.	L	L	A - Adopt as written	Accept		
	R402.4.6	N1102.5.5	None	Air-sealed electrical and communication outlet boxes		'24 removes air leakage rate criteria (2 cfm at 75Pa). Similar net outcome.	N	N	Adopt as written		Adopt	
402-44 Skip	R402.5	N1102.6	R402.5	Maximum fenestration U-factor and SHGC.	N	'21 & '24 are same. Same net outcome as in MRE. Exception is added in '21 for storm shelters.	L	L	AM - Delete content not pertaining to MN Climate zones.	Accept		
SECTION 1103 SYSTEMS												
403-1 Skip	R403.1	N1103.1	R403.1	Controls.	N	Same net outcome across '20, '21 & '24.	L	L	A - Adopt as written	Accept	Accept	
403-2 Skip	R403.1.1	N1103.1.1	R403.1.1	Programmable thermostat.	N	No change from '21 to '24. Similar requirement, but instead of applying exclusively to forced air furnaces, it now applies to the primary heating or cooling system.	L	L	A - Adopt as written	Accept	Accept	
(Begin 3/24 meeting - adjusted, will revisit N1102 at 4/7 meeting) 403-3	R403.1.2		R403.1.2	Heat pump supplementary heat.	N	Identical provision.	L	L	A - Adopt as written	Accept	Accept	
	R403.1.2	N1103.1.2	R403.1.2	Heat pump supplementary heat.		Changes to Model 2024 Section 1103.1.2, appears to be a similar outcome.			Adopt as written		Accept	

403-4 Skip	NA		R403.2	Hot water boiler temperature reset.	N	New provision. 2021 IECC-R Commentary: "This section provides a requirement that gives each household with a hot water boiler an opportunity for energy savings by requiring a reset that will automatically adjust the temperature of the water based on ambient conditions. The exception for domestic hot water is included to allow the sale of boilers with integrated domestic hot water production. This section aligns the IECC with federal regulations CFR10 Part 430 Subpart C (e)(2), which were in effect at the time the 2021 IECC was being developed. All equipment manufactured for sale in the US is required to meet this standard. Federal appliance standards are subject to change."			A - Adopt as written	Accept	Accept	
	R403.2	N1103.2	None	Hot water boiler temperature reset.		Minor changes to Model 2024 Section N1103.2			Adopt as written		Accept	
403-5 Skip	R403.3		R403.2	Ducts.	N	Specifies sections for which ducts must comply.			A - Adopt as written	Accept	Accept	
	R403.3	N1103.3	R403.2	Duct Systems	N	24 has been modified and includes reference to the mechanical code.			Adopt as written		Accept	
	None	N1103.3.1	None	Duct System Design	N	New section in '24, includes reference to ANSI/ACCA Manual D.			Adopt as written		Accept	
Skip	R403.3.7	N1103.3.2	R403.2.3	Building cavities.	N	24 has same net outcome as '21. Relocated section from R403.3.7			A - Adopt as written		Accept	
403-6 Skip	R403.3.1	N1103.3.3	R403.3.1	Ducts located outside conditioned space.	Y	24 uses "ductwork" instead of "ducts". No substantive changes. Addresses insulation of ducts outside conditioned space. In the MRE, this was largely located within Table R403.2.1. A distinction has been drawn for insulation levels on ducts above or below 3" in diameter. Exhaust ducts are not addressed here as they are in the MRE. Section moves backwards from MRE. Need to review all of R403 against similar provisions of the MRE.			AM - Maintain backstops set in 2015 MRE, but using the IECC-R template as much as possible.	AM - Look at requirements in '15 MRE.	Accept	
403-7 Skip	R403.3.2	N1103.3.4	R403.3.2	Ducts located in conditioned space.	Y	'21 is a step backwards from a past code opinion given by the state on the topic by only requiring R19 between duct and unconditioned space. Installing a continuous air barrier below the duct could be problematic if a vapor barrier such as poly is installed on the cold side of the floor assembly to accomplish the requirement.			AM - Maintain backstops set in 2015 MRE, but using the IECC-R template as much as possible.	AM - Look at requirements in '15 MRE. Need to change.	Accept	
REVISIT	R403.3.2	N1103.3.4	R403.3.2	Duct systems located in conditioned space.		Section modified in '24 - discuss. #1 - '21 & '24 are essentially the same. #2 - Adds content about vapor diffusion ports. #2.1 - Similar requirement. #2.2 - Same net effect. #3 - Same net effect. #3.1 - Same net effect. #3.2 - Exception added. #3.3 - Insulation value changes from R-19 to R-10 or half the required insulation, whichever is greater. #3.4 - Clarification for performance paths is added.			Staff may have CCP to update and bring forward for this section.			

403-8 Skip	R403.2.1		R403.3.3	Ducts buried within ceiling insulation.	Y	Details are provided here when ducts are partly or completely buried in ceiling insulation. The section is a bit confusing when also reading R403.3.1. It could be read to indicate that ductwork in an attic area must be covered with insulation to R19...? Item #1 will be unnecessary if we maintain current backstop of R8, and item #3 has no relevance to MN.			AM - Review with the rest of R403 for possible changes.	AM - Look at requirements in '15 MRE. Need to change.		
REVISIT	R403.2.1	N1103.3.5	R403.3.3	Ductwork buried within ceiling insulation		Details are provided here when ducts are partly or completely buried in ceiling insulation.			Staff may have CCP to update and bring forward for this section. Delete #3 & 4 - not MN CZs			
403-9 Skip	NA		R403.3.3.1	Effective R-value of deeply buried ducts.	N	Gives effective duct insulation value in ceilings if using Total Building Performance Option.	L	L	A - Adopt as written	AM - Look at requirements in '15 MRE. Need to change.		
REVISIT	R403.3.3.1	N1103.3.5.1	None	Effective R-value of deeply buried ducts.		Similar net effect for Simulated Performance path.			Adopt as written			
403-10 Skip	R403.3.4		R403.2.2	Sealing.	N	Same beginning language in both codes, however MRE includes exceptions not located in the IECC. Discuss appropriateness of maintaining exceptions. Exception #2 seems out of place to include in Energy code.	L	L	Discuss	Accept - polled group, unanimously in favor of keeping this provision in code.		
	R403.3.4	N1103.3.6	R403.2.2	Sealing.	N	Minor changes to N1103.3.6. Duct sealing and testing has been revamped in '24. TAG opted to keep '15 language, but should be reevaluated given the updates to the section.			Adopt as written		Accept	
403-11 Skip	R403.3.4.1		R403.2.2.1	Sealed air handler.	N	Same language in both codes.	L	L	A - Adopt as written	Accept		
	N1103.3.6.1		N1103.3.6.1	Sealed air-handling unit	N	Minor changes to N1103.6.3.1			Adopt as written		Accept	
403-12 Skip	R403.3.5		R403.2.2	Duct testing.	N	Sets criteria for testing. Reference to ANSI/RESNET/ICC 380 or ASTM E1554 are not in the MRE.			A - Adopt as written	Accept		
REVISIT	R403.3.5	N1103.3.7	R403.2.2	Duct system testing	N	Section has been updated, review. Need to pull up national proposal to review intent			Adopt as written			
403-13 Skip	R403.3.6		R403.2.2	Duct leakage.	N	New requirement to test all ducts regardless of location inside or outside of thermal envelope.	M	?	Discuss	Accept		
	R403.3.8	N1103.3.8	R403.2.2	Duct system leakage	N	Section has been updated, some criteria moved to Table N1103.3.8.			Adopt as written		Accept	
	R403.3.6	Table N1103.3.8	R403.2.2	Maximum Total Duct System Leakage		New Table in '24, pulls items #1-3 from '21 R403.3.6.			Review with TAG.		Accept	
403-14 Skip	R403.2.3	1103.3.2	R403.3.7	Building cavities.	N	See N1103.3.2. Same requirement as MRE.				Accept		
403-15 Skip	R403.4	N1103.4	R403.3	Mechanical system piping insulation.	N	Same requirement across codes.	N	N	A - Adopt as written	Accept	Accept	
403-16	R403.4.1	N1103.4.1	R403.3.1	Protection of piping insulation.	N	Nearly identical to MRE, minor tweaks to wording.	N	N	A - Adopt as written	Accept		
	R403.4.1	N1103.4.1	R403.3.1	Protection of piping insulation.		Minor changes to N1103.4.1, adds an aspect of maintenance.			Adopt as written		Accept	
403-17 Skip	R403.5	N1103.5	R403.4	Service hot water systems.	N	Same content across codes. References have been updated.	N	N	Adopt as written	Accept		

403-18 Skip	R403.5.1	N1103.5.1	None	Heated water circulation and temperature maintenance systems.	N	New content in '21, no substantive change in '24.			Adopt as written	Accept		
403-19 Skip	R403.4.1		R403.5.1.1	Circulation systems.	N	Expands on provisions in MRE.				Accept		
REVISIT	R403.5.1	N1103.5.1.1	R403.4.1	Circulation systems.		Changes to section, review. Chris to review and write CCP to remove option to use cold water line.			Adopt as written			
403-20 Skip	R403.5.1.1.1	N1103.5.1.1.1	None	Demand recirculation water systems.	N	New content in '21 IECC.				Accept		
	R403.5.1.1.1	N1103.5.1.1.1	None	Demand recirculation water systems.	N	Changes to section, review.			Adopt as written		Accept	
403-21 Skip	NA	N1103.5.1.2	R403.5.1.2	Heat trace systems.	N	No substantive change to '24. New content in '21.			Adopt as written	Accept		
403-22 Skip	R403.5.2		R403.4.2	Hot water pipe insulation.	N	Slightly revised content. MRE Table R403.4.2 is removed from IECC.				Accept		
Skip	R403.5.2	N1103.5.2	R403.4.2	Hot water pipe insulation.	N	Minor changes, same net effect.			Adopt as written			
	No table	Table N1103.5.2	Table R403.4.2	Minimum Pipe Insulation Thickness	N	Table is new in '24. Review.			Adopt as written		Accept	
403-23 Skip	R403.5.3	N1103.5.3	NA	Drain water heat recovery units.	N	No change in '24. New provision in '21.			Adopt as written	Chris R. review with Plumbing content for regulations.		
403-24 Skip (Code Change Submitted - RE-18 & RE-19.1)	R403.6		R403.5	Mechanical ventilation.	Y	The IECC-R references the IRC or IMC for Mechanical Ventilation requirements.				Polled RE17, 7, & 19.1. Consider zone 6?		
	R403.6	N1103.6	R403.5	Mechanical ventilation.		Minor changes in text, same net requirement and outcome.			Adopt as written		Accept	
403-25 Skip (Code Change Submitted - RE-7 & RE-17)	R403.6.1		R403.5.5	Heat or energy recovery ventilation.	Y	The IECC now requires HRV/ERV in CZ 7 & 8.	L	L	A - Adopt as written	Polled RE-17, 7, & 19.1. Consider zone 6?		
	R403.6.1	N1103.6.1	R403.5.5	Heat or energy recovery ventilation.		Changes to N1103.6.1 including adding climate zone 6			Adopt as written		Accept	
403-26 Skip	R403.6.2		NA	Whole-dwelling mechanical ventilation system fan efficacy.	N	Sets fan efficacy ratings.				Polled RE-17, 7, & 19.1. Consider zone 6?		

	R403.6.2	N1103.6.2	R403.5.7	Fan efficacy for whole-house mechanical ventilation systems and outdoor ventilation	N	Change to title and minor changes to section N1103.6.2			Adopt as written		Accept	
403-27 Skip	Table R403.6.2		Table R403.5.1	Whole-dwelling mechanical ventilation system fan efficacy.	N	Sets fan efficacy ratings. Restructured table compared to MRE, some increases to fan efficacy requirements in '21.				Accept		
	Table R403.6.2	Table 1103.6.2	Table R403.5.1	Fan Efficacy for whole-house mechanical ventilation systems and outdoor air ventilation systems	N	Change to title and table			Review with TAG.		Accept	
403-28 Skip	R403.6.3		NA	Testing.	N	New requirement to test ventilation system.				Accept		
	R403.6.3	N1103.6.3	NA	Testing.		Major changes to Section 1103.6.3, review.			Review with TAG.		Accept	
	None	N1103.6.4	None	Intermittent exhaust control for bathrooms and toilet rooms		New section in '24.			Adopt as written		Accept	
403-29	R403.7	N1103.7	R403.5.17	Equipment sizing and efficiency rating.	Y	No change in '24. Similar requirement, but now sets a backstop for replacement equipment to meet minimums set by federal law.			Adopt as written	Accept		
	None	N1103.7.1	None	Electric-resistance space heating		New provision.			Adopt as written		Accept	
403-30 Skip	R403.8		R403.7	Systems serving multiple dwelling units.	N	Minor changes to language, same net outcome.				Amend to ASHRAE reference.		
REVISIT	R403.8	N1103.8	R403.7	Systems serving multiple dwelling units.		Minor changes to section, same net outcome. Will need to delete or amend, since we do not adopt the IECC-C provisions. Review for scoping for R-2,3,4 - scope to '24 MCE? Refer to 1323.			Adopt as written			
	None	N1103.9	None	Mechanical systems located outside the building thermal envelope		New in '24 - requirements for systems outside.			Adopt as written		Accept	
	None	N1103.9.1	None	Heating outside a building		New in '24 - requirements for heat outside.			Adopt as written		Accept	

403-31 Skip	R403.9	N1103.9.2	R403.8	Snow melt and ice system controls.	N	Minor changes to language, same net outcome.	L	L	A - Adopt as written	Accept		
	None	N1103.9.3	None	Roof and gutter deicing controls		New section.			Adopt as written		Accept	
	None	N1103.9.4	None	Freeze-protection system controls		New section.			Adopt as written		Accept	
403-32 Skip	R403.10	N1103.10	R403.9	Energy consumption of pools and spas.	N	No substantive changes in '24. Similar section between codes, refers to subsections for additional stipulations.	L	L	A - Adopt as written	Accept	Accept	
403-33	R403.9.1	N1103.10.1	R403.10.1	Heaters.	N	Expands on provisions in MRE to require switch to be within 3' of heater.	L	L	A - Adopt as written	Accept	Accept	
403-34 Skip	R403.9.2		R403.10.2	Time switches.	N	Minor changes to language, same net outcome.	L	L	A - Adopt as written	Accept		
403-35 Skip	R403.9.2	N1103.10.2	R403.10.2	Time switches.		No substantive changes.			A - Adopt as written			
403-35 Skip	R403.10.3	N1103.10.3	R403.9.3	Covers.	N	No substantive change in '24. '21 moves exception for pool cover from 70% to 75% of energy sourced from heat pump or on-site renewable energy.	L	L	A - Adopt as written	Accept		
403-36	NA	N1103.11	R403.11	Portable spas.	N	No substantive changes in '24. New criteria in '21, sets requirements for electric powered portable spas.			Adopt as written	Accept	Accept	
403-37	NA	N1103.12	R403.12	Residential pools and permanent residential spas.	N	No substantive changes in '24. New criteria in '21, sets requirements for electric powered permanent spas.			Adopt as written	Accept	Accept	
	None	N1103.13	None	Gas fireplaces	N	New section in '24			Adopt as written		Accept	
	None	N1103.13.1	None	Gas fireplace efficiency	N	New section in '24			Adopt as written		Accept	

SECTION N1104 ELECTRICAL POWER AND LIGHTING SYSTEMS

404-1 Skip	R404.1		R404.1	Lighting equipment.	N	Now requires ALL lighting to be high efficacy, rather than 75% as in '15 MRE.	L	L	A - Adopt as written	Accept		
	R404.1	N1104.1	R404.1	Lighting equipment.	N	24 new criteria for lumens to watt for efficacy.			Adopt as written		Accept	
		Table N1104.1		Lighting Power Allowance for Building Exteriors		New Table in '24.			Adopt as written		Accept	
404-2	R404.1.1		None	Exterior lighting.	N	New regs for exterior lighting. Consider implications of scoping, and whether we need to add accessory buildings (IRC-IV) to list if garages accessory to IRC-I - III are included in definition for Residential Building. Points user to IECC-C.	L	L		Amend to ASHRAE reference.		
	R404.1.1	N1104.1.1	None	Exterior lighting		Minor changes in '24			Adopt as written		Accept	
	None	N1104.1.2	None	Exterior lighting power requirements		New section in '24			Adopt as written		Accept	
	None	N1104.1.3	N1104.1.3	Exterior lighting power allowance		New section in '24			Adopt as written		Accept	
	None	N1104.1.4	N1104.1.4	Additional exterior lighting power		New section in '24			Adopt as written		Accept	

404-3 Skip	R404.1.1		R404.1.2	Fuel gas lighting equipment.	N	Same requirement.	N	N	A - Adopt as written	Accept		
	R404.1.2	N1104.1.5	R404.1.1	Gas lighting	N	Minor change in '24 adding content about pilot light.			Adopt as written		Accept	
404-4 Skip	R404.2		NA	Interior lighting controls.	N	New req for dimmers, occupancy sensors, or other controls.				Accept		
	R404.2	N1104.2	NA	Interior lighting controls.		Restructuring of section in '24.			Adopt as written		Accept	
	None	N1104.2.1	None	Habitable spaces		New section in '24			Adopt as written		Accept	
	None	N1104.2.2	None	Specific locations		New section in '24			Adopt as written		Accept	
404-5 Skip	R404.3		None	Exterior lighting controls.	N	New req for exterior lighting.				Accept		
	R404.3	N1104.3	None	Exterior lighting controls		Restructuring of section in '24.			Adopt as written		Accept	
	R404.3	N1104.3.1	None	Controls for individual dwelling units		Minor changes to N1104.3.1 (exterior lighting controls)			Adopt as written		Accept	
Skip 404-6 (Code Change Submitted - RE-8,9,10,10.1,11,13)	NA		R404.4	NA		Proposed CCPs to be added in part under R404.4 pertaining to new electrical provisions.						
	None	N1104.4	None	Renewable energy certificate (REC) documentation.		New section in '24. We will not be using Site Sourced energy generation to offset envelope efficiency.			Delete		Delete	
(Code Change Submitted - CCP RE-10.2)												
SECTION R1105 SIMULATED BUILDING PERFORMANCE												
405-1 Skip	R405.1		R405.1	Scope.	N	Minor changes to paragraph. Adds energy usage for mechanical ventilation.				Accept		
	R405.1	N1105.1	R405.1	Scope.		24 now indicates 1105 path for R-2,3,4 is limited to dwelling units.					Accept	
405-2 Skip	R405.2		R405.3	Performance-based compliance.	N	Sets backstop at 2009 IECC.				Accept		
END 3/24 MEETING, REVISIT TOPIC (Code Change Submitted - CCP RE-39)	R405.2	N1105.2	R405.3	Simulated building performance compliance	N	Changes to title and criteria.			Review with TAG.			

405-3 Skip	Table R405.2		NA	Requirements for total building performance.	N	Table provides prescriptive items that must be met instead of previously used headings "Mandatory" sprinkled throughout '15 MRE.				Accept		
	Table R405.2	Table N1105.2	Table R405.5.2(1)	Requirements for Simulated Building Performance		Title changed from "Total" to "Simulated". Changes made to table also.			Review with TAG.			
405-4 Skip	R405.3		R405.4	Documentation.	N	Essentially same in '21, changes to numbering of subsequent sections.				Accept		
	R405.3	N1105.3	R405.4	Compliance documentation.		Section has been updated. Review.			Review with TAG.			
405-5 Skip	R405.3.1	N1105.3.1	R405.4.1	Compliance software tools.	N	Deleted in '24. '15 & '21 Same.			Accept	Accept		
405-6 Skip	R405.3.2	N1105.3.2	R405.4.2	Compliance report.	N	Deleted in '24. The report in the '21 is expanded and breaks it into the permit app report and that which is needed to obtain CoFO. Additional information is needed for the reports.			Accept	Accept		
405-7 Skip	R405.3.2.1	N1105.3.2.1	None	Compliance report for permit application.	N	Deleted in '24. The report in the '21 is expanded and breaks it into the permit app report and that which is needed to obtain CoFO.			Accept	Accept		
405-8 Skip	R405.3.2.2	N1105.3.2.2	None	Compliance report for certificate of occupancy.	N	Deleted in '24. The report in the '21 is expanded and breaks it into the permit app report and that which is needed to obtain CoFO.			Accept	Accept		
405-9 Skip	R405.4		R405.5	Calculation procedure.	N	References slightly adjusted subsections.				Accept		
	R405.4	N1105.4	R405.5	Calculation procedure.		Section has been updated. Review.			Review with TAG.			
405-10 Skip	R405.4.1		R405.5.1	General.	N	Same language.				Accept		
	R405.4.1	N1105.4.1	R405.5.1	General	N	Section has been updated. Review.			Review with TAG.			
405-11 Skip	R405.4.2		R405.5.2	Residence specifications.	N	Nearly the same except references different numbering of section.				Accept		
	R405.4.2	N1105.4.2	R405.5.2	Residence specifications.		Section has been updated. Review.			Review with TAG.			
405-12 Skip	Table R405.4.2(1)		Table R405.5.2(1)	Specification for the standard reference and proposed designs.	N	Some updates to table - values and references to more efficient U-values. N Dehumidistat is now included.				Accept		
	Table R405.4.2(1)	Table N1105.4.2(1)	Table R405.5.2(1)	Specification for the standard reference and proposed designs.		Section has been updated. Review.			Review with TAG.			
405-13 Skip	Table R405.4.2(2)		Table R405.5.2(2)	Default distribution system efficiencies for proposed designs.	N	Same tabular values.	N	N	A - Adopt as written	Accept		

	Table R405.4.2(2)	Table N1105.4.2(2)	Table R405.5.2(2)	Default distribution system efficiencies for proposed designs.		Section has been updated. Review.			Review with TAG.			
405-17 Skip	R405.5.3		R405.6.3	Input values.	N	Same content.	N	N	A - Adopt as written	Accept		
	R405.5.3	N1105.4.3	R405.6.3	Input values.		References have been updated.			Adopt as written			
405-14 Skip	R405.5		R405.6	Calculation software tools.	N	Same statement, different section numbering referenced.	N	N	A - Adopt as written	Accept		
	R405.5	N1105.5	R405.6	Calculation software tools.		Section has been updated. Review.			Review with TAG.			
405-15 Skip	R405.5.1		R405.6.1	Minimum capabilities.	N	Same content.	N	N	A - Adopt as written	Accept		
	R405.5.1	N1105.5.1	R405.6.1	Minimum capabilities.		Section has been updated. Review.			Review with TAG.			
405-16 Skip	R405.6.2	R405.5.2	R405.6.2	Specific approval.	N	Same content.	N	N	A - Adopt as written	Accept		
	R405.5.2	N1105.5.2	R405.6.2	Specific approval.		Deleted in '24			Accept			
		N1105.5.2		Testing required by software vendors		Section deleted in '24 and replaces "Specific Approval" from '21.			Accept			
		N1105.5.3		Algorithms not tested		New section in '24			Accept			
		N1105.5.4		Compliance reports		New section in '24			Accept			
		N1105.5.4.1		Compliance reports for permit application		New section in '24			Accept			
		N1105.5.4.2		Compliance reports for certificate of occupancy		New section in '24			Accept			
SECTION R1106 ENERGY RATING INDEX COMPLIANCE ALTERNATIVE												
Discuss definitions: 202-45 ERI Reference Design 202-68 Rated design 202-70 Renewable Energy Certificate (REC)												
406-1 Skip	R406.1		NA	Scope.	N					Accept		
	R406.1	N1106.1		Scope.	N	Section has been updated. Review.			Review with TAG.			
406-2 Skip	R406.2		NA	ERI Compliance.	N					Accept		
	R406.2	N1106.2		ERI Compliance.	N	Section has been updated. Review.			Review with TAG.			

406-3 Skip	Table R406.2		NA	Requirements for energy rating index.	N					Accept		
	Table R406.2	Table N1106.2		Requirements for energy rating index.	N	Section has been updated. Review.			Review with TAG.			
406-4 Skip	R406.3		NA	Building thermal envelope.	N					Accept		
	R406.3	N1106.3		Building thermal envelope.	N	Section has been updated. Review.			Review with TAG.			
406-5 Skip	R406.3.1		NA	On-site renewables are not included.	N					Accept		
	R406.3.1	N1106.3.1	NA	On-site renewables are not included.	N	Deleted in '24			Review with TAG.			
406-6 Skip	R406.3.2		NA	On-site renewables are included.	N					Accept		
	R406.3.2	N1106.3.2	NA	On-site renewables are included.	N	Deleted in '24			Review with TAG.			
406-7 Skip	R406.4		NA	Energy Rating Index.	N					Accept		
	R406.4	N1106.4	NA	Energy Rating Index.	N	Section has been updated. Review.			Review with TAG.			
406-8 Skip	R406.5		NA	ERI-based compliance.	N					Accept		
(Code Change Submitted - CCP RE-40)	R406.5	N1106.5	NA	ERI-based compliance.	N	Section has been updated. Review.			Review with TAG.			
406-9 Skip	Table R406.5		NA	Maximum energy rating index.	N					Accept		
	Table R406.5	Table N1106.5	NA	Maximum energy rating index.	N	Section has been updated. Review.			Review with TAG.			
406-10 Skip	R406.6		NA	Verification by approved agency.	N					Accept		
	R406.6	N1106.6	NA	Verification by approved agency.	N	References have been updated. Review.			Adopt as written			
406-11 Skip	R406.7		NA	Documentation.	N					Accept		
	R406.7	N1106.7	NA	Documentation.	N	Minor change in '24.			Adopt as written			
406-12 Skip	R406.7.1		NA	Compliance software tools.	N					Accept		
	R406.7.1	N1106.7.1	NA	Compliance software tools.	N	Section has been updated. Review.			Review with TAG.			
406-13 Skip	R406.7.2		NA	Compliance report.	N					Accept		
	R406.7.2	N1106.7.2	NA	Compliance report.	N	Minor changes in '24.			Adopt as written			

406-14 Skip	R406.7.2.1		NA	Proposed compliance report for permit application.	N					Accept		
	R406.7.2.1	N1106.7.2.1	NA	Proposed compliance report for permit application.	N	Minor changes in '24.			Adopt as written			
406-15 Skip	R406.7.2.2		NA	Confirmed compliance report for a certificate of occupancy.	N					Accept		
	R406.7.2.2	N1106.7.2.2	NA	Confirmed compliance report for a certificate of occupancy.		Section has been updated. Review.			Review with TAG.			
406-16 Skip	R406.7.3		NA	Renewable energy certificate (REC) documentation.	N					Accept		
	R406.7.3	N1106.7.3	NA	Renewable energy certificate (REC) documentation.		Section has been updated. Review.			Review with TAG.			
406-17	R406.7.4	N1106.7.4	NA	Additional documentation.	N	No change in '24.			Adopt as written	Accept		
406-18	R406.7.5		NA	Specific approval.	N	No change in '24.			Adopt as written	Accept		
406-19 Skip	R406.7.6		NA	Input values.	N					Accept		
	R406.7.6	N1106.7.6	NA	Input values.		Minor change to '24.			Adopt as written			
SECTION N1107 TROPICAL CLIMATE REGION COMPLIANCE PATH												
407-1 Skip	R407.1	N1107.1	NA	Scope.	N	Does not pertain to MN climate zones.			AM - Delete	Delete		
407-2 Skip	R407.2	N1107.2	NA	Tropical climate region.	N				AM - Delete	Delete		
Skip		Table N1107.2		Minimum Low Slope Roof Reflectance and Emittance Options					AM - Delete			
SECTION N1108 ADDITIONAL EFFICIENCY REQUIREMENTS												
408-1 Skip	R408.1		None	Scope.	N				A - Adopt as written			
	R408.1	N1108.1	None	Scope.		Minor changes.			Adopt as written			
408-2 Skip	R408.2		None	Additional efficiency package options.	N							

	R408.2	N1108.2	None	Additional energy efficiency credit requirements		Section has been updated. Review.			Review with TAG.			
	None	Table N1108.2	None	Additional Efficiency Requirements		New content. Review. Suggest deleting CZs other than 6&7, footnote e, and ERV/HRV content - 1108.2.5(1)			Review with TAG. Amend to remove other CZs			
408-3 Skip	R408.2.1		None	Enhanced envelope performance option.	N							
	R408.2.1	N1108.2.1	None	Enhanced building thermal envelope options		Section has been updated. Review.			Review with TAG.			
		N1108.2.1.1	None	Enhanced building thermal envelope performance		New content. Review.			Review with TAG.			
		N1108.2.1.2	None	Improved fenestration		New content. Review.			Review with TAG.			
		Table N1108.2.1.2	None	Improved Fenestration		New content. Review. Consider deleting CZ other than 6 & 7.			Review with TAG. Potentially amend.			
		N1108.2.1.3	None	Roof solar reflectance index		CZ 0 thru 2...Delete section.			Delete.			
		N1108.2.1.3.1		Aged solar reflectance		CZ 0 thru 2...Delete section.			Delete.			
		N1108.2.1.4	None	Reduced air leakage		New content. Review.			Review with TAG.			
408-4 Skip	R408.2.2		None	More efficient HVAC equipment performance option.	N							
	R408.2.2	N1108.2.2	None	More efficient HVAC equipment performance option.		Section has been updated. Review. Consider deleting items #6-14 - does not pertain to CZ 6&7.			Review with TAG. Potentially amend.			
		N 1108.2.2.1	None	More Efficient HVAC Equipment for Climate Zone 4.		Does not pertain to MN climate zones.			Delete section			
408-5 Skip	R408.2.3		None	Reduced energy use in service water-heating option.	N							
	R408.2.3	N1108.2.3	None	Reduced enery use in service water-heating options.		Section has been updated. Review.			Review with TAG.			

		Table N1108.2.3	None	Service Water Heater Efficiencies		New content. Review.			Review with TAG.			
		N1108.2.3.1	None	Compact hot water distribution system option		New content. Review.			Review with TAG.			
		Table N1108.2.3.1	None	Internal Volume of Various Water Distribution Tubing		New content. Review.			Review with TAG.			
		N1108.2.3.1.1	None	Water volume determination		New content. Review.			Review with TAG.			
408-6 Skip	R408.2.4		None	More efficient duct thermal distribution system option.	N							
	R408.2.4	N1108.2.4	None	More efficient thermal distribution system options		New content. Review.			Review with TAG.			
408-7 Skip	R408.2.5		None	Improved air sealing and efficient ventilation system option.	N							
	R408.2.5	N1108.2.5	None	Improved air sealing and efficient ventilation system options		Delete section since it also provides benefit from an ERV/HRV? Or, just delete #1?			Amend?			
		N1108.2.6	None	Energy efficient appliances		New content. Review.			Review with TAG.			
		Table N1108.2.6	None	Minimum Efficiency Requirements: Appliances		No credit in CZ 6&7, delete?			Delete?			
		N1108.2.7	None	Renewable Energy		New content. Review. Delete since we will not be recognizing OPP?			Amend?			
		N1108.2.8	None	Demand response		New content. Review.			Review with TAG.			
		N1108.2.8.1	None	Single-stage HVAC system controls		New content. Review.			Review with TAG.			
		N1108.2.8.2	None	Variable-capacity and two-stage HVAC system controls		New content. Review.			Review with TAG.			
		N1108.2.9	None	Opaque walls		Does not pertain to MN climate zones, delete.			Delete			
		N1108.2.10	None	Whole-home lighting control		No credit in CZ 6&7.			Review with TAG.			
		N1108.2.11	None	Higher efficacy lighting		No credit in CZ 6&7.			Review with TAG.			

(Code Change Submitted - RE-14)												
Review definition: 202-5 Addition												
SECTION N1109 EXISTING BUILDINGS - GENERAL												
501-1	R501.1	N1109.1	None	Scope.		No changes.			Adopt as written	Accept as written		
501-2	R501.1.1	N1109.1.1	MR 1322.0100 Subp.3A	General.		Provides clarity as to the intent of the Energy code and Chapter 5 for Existing Buildings.			Adopt as written	Accept as written		
501-3 Skip	R501.2		None	Compliance.						Accept as written		
	R501.2	N1109.2	None	Compliance		Section has been updated. Change code references to MN State Building Code.			Amend			
501-4 Skip	R501.3	N1109.3	None	Maintenance.		No changes.			Adopt as written	Accept as written		
501-5 Skip	R501.4	N1109.4	MR 1322.0030 Subp. 1-11	Compliance.	Y	Section deleted, content moved to N1109.2.			Accept	Accept as written		
501-6 Skip	R501.5	N1109.4	None	New and replacement materials.		No changes.			Adopt as written	Accept as written		
501-7	R501.6	N1109.5	None	Historic buildings.		No changes. Review in conjunction with MR 1300.0070 Subp. 12a Historical Building.			Review in conjunction with MR 1300.0070 Subp. 12a Historical Building.	Accept as written		
	None	N1109.6	None	Change in space conditioning.		New section, review in conjunction with MR1322.0100 Subp. 3C & 4B.			Adopt as written, pull language out of 1322.			
SECTION N1110 ADDITIONS												
502-1 Skip	R502.1		MR 1322.0100 Subp. 3A	General.	Y	Very similar to MR 1322.0100 Subp. 3A, except that this section applies specifically to additions. It leaves the MN amendment below. This statement could be added as an amendment to R503 at R503.1.1.2 "Attic insulation shall not be installed unless accessible attic bypasses have been sealed. An attic bypass is any air passageway between a conditioned space and an unconditioned attic."				Accept as written		
	R502.1	N1110.1	MR 1322.0100 Subp. 3A	General		Section has been updated. No longer addresses the unaltered portion of the building, see N1109.1.1 for that content.			Adopt as written			
502-2	R502.2		MR 1322.0100 Subp. 3C	Change in space conditioning.	Y	Adds 3 exceptions not listed in the MRE that allow the added space to be viewed with the existing for total performance.				Accept as written		
	R502.2	N1110.2	MR 1322.0100 Subp. 3C	Change in space conditioning.	Y	Section deleted and moved to N1109.6.			Accept			
502-3 Skip	R502.3		MR 1322.0100 Subp. 3A	Prescriptive compliance.	Y	Specific to additions.				Accept as written		
	R502.3	N1110.2	MR 1322.0100 Subp. 3A	Prescriptive compliance.	Y	Minor changes.			Adopt as written			
502-4 Skip	R502.3.1		None	Building envelope.	N	Provides clarity for prescriptive compliance, including exemption for air leakage testing.				Accept as written		

	R502.3.1	N1110.2.1	None	Building thermal envelope	N	Minor changes.			Adopt as written			
502-5 Skip	R502.3.2		None	Heating and cooling systems.	N	Clarity for ductwork. Exempts ductwork extended from existing to an addition.				Accept as written		
	R502.3.2	N1110.2.2	None	Heating and cooling systems.	N	Minor changes.			Adopt as written			
502-6	R502.3.3	N1110.2.3	None	Service hot water systems.	N	Minor changes.			Adopt as written	Accept as written		
502-7	R502.3.4	N1110.2.4	None	Lighting.	N	No substantive change in '24.			Adopt as written	Accept as written		
	None	N1111.1.5	None	Additional efficiency credit requirements for substantial improvements		New content. Review.			Review with TAG.			

SECTION N1111 ALTERATIONS

503-1	R503.1		MR 1322.0100 Subp. 3A	General.	Y	Very similar to MR 1322.0100 Subp. 3A, except that this section applies specifically to alterations.				Accept as written		
503-2	R503.1.1		MR 1322.0100 Subp. 3A	Building envelope.	Y	Exceptions 1-3 are identical in the MRE. Siding is not specifically noted in the exception in the '21.			AM - Consider adding Exception #9 from MRE.	Accept as written		
		N1111.1.1	None	Building thermal envelope		Changes to title and major changes to N1111.1.1			Adopt as written			Consider writing piece about attic bypasses being sealed from '15 - 1322.0100 Subp. 3.
503-3 Skip	R503.1.1.1		R402.3.6	Replacement fenestration.		Clarity for replacement fenestration.				Accept as written		
		N1111.1.1.1	None	Fenestration alterations		Minor changes to section N1111.1.1.1			Adopt as written			
	None	N1111.1.1.2	None	Roof, ceiling and attic alterations		New section in Model 2024 Chapter 11.			Adopt as written			
	None	N1111.1.1.3	None	Above-grade wall alterations		New section in Model 2024 Chapter 11.			Adopt as written			
	None	N1111.1.1.4	None	Floor alterations		New section in Model 2024 Chapter 11.			Adopt as written			
	None	N1111.1.1.5	None	Below-grade wall alterations		May need to consider an amendment if we require at least R10 exterior insulation under 1102.1.			Amend?			
	None	N1111.1.1.6	None	Air barrier		New section in Model 2024 Chapter 11.			Adopt as written			
503-4 Skip			R503.1.2	Heating and cooling systems.		Clarity for ductwork. Exempts ductwork extended from existing to an addition.						
	None	N1111.1.2	None	Heating and cooling systems.		Major changes to section N1111.1.2			Adopt as written			
	None	N1111.1.2.1	None	Ductwork		New section in Model 2024 Chapter 11.			Adopt as written			
	None	N1111.1.2.2	None	Systems sizing		New section in Model 2024 Chapter 11.			Adopt as written			
	None	N1111.1.2.3	None	Duct system leakage		New section in Model 2024 Chapter 11.			Adopt as written			
	None	N1111.1.2.4	None	Controls		New section in Model 2024 Chapter 11.			Adopt as written			

503-5 Skip	R503.1.3			Service hot water systems.		Clarity for alterations.				Accept as written		
503-6 Skip	R503.1.4		MR 1322.0100 Subp. 3A, #7	Lighting.		Reduces requirement from 50% to 10%.				Accept as written		
	None	N1111.1.5	None	Additional efficiency credit requirements for substantial improvements		New section in Model 2024 Chapter 11.			Adopt as written			
SECTION N1112 REPAIRS												
504-1			R504.1	General.						Accept as written		
504-2 Skip	MR 1322.0100 Subp. 3A, #2 & #8.		R504.2	Application.		Item #1 for glass is the same in MRE (item #2). Item #2 is not located verbatim in the MRE. Item #3 is basically item #8 in the MRE.				Accept as written		
		N1112.1		General		No change in '24.			Adopt as written			
SECTION N1113 CHANGE OF OCCUPANCY OR USE												
505-1 Skip	MR 1322.0100 Subp. 3B		R505.1	General.		Clarity for a change of occupancy or use. No longer contingent on an increased demand for fossil fuel or electricity. Addresses all forms of consumption and allows an exception when viewing the building from a total performance perspective.				Accept as written		
		N1113.1		General		No technical change in '24.			Adopt as written			