Item	21 ICC Code	24 ICC Code	15 MN Code	Code Section	Current MN		Safety & Health	Cost	Staff Recommendation:	21 TAG Recommend:	24 TAG Recommend:	
Number				Heading/ Code Topic	Amendment? Y or N	Description of change(s) to code language	Value? N - None	Impact?	Accept/Amend/Delete	Accept/Amend	Accept/Amend	Comments:
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.	IN - INOITE	, L - LOW	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.	Υ				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.	Υ				A - Adopt as written			
1322-06	MR 1322.0030 Subp 1			Generally.	Υ				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.	Υ				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	MR		1	Scono.		Change to:		1		
(Code	1322.0100			Scope.		"This code applies to residential buildings and associated				
Change	Subp 2					systems and equipment as defined in the Residential Provisions				
Submitted -	Subp 2					1 .				
RE-1)						of the (code year and code book??).				
KE-1)					V	Consider repealing this altogether in favor of language in IECC				
					Υ	"R401.1 Scope". Also could amend here to add reference to		AM -		
						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.				
1322-20	MR			Applicability.		changed per CCP RE-15, RE-1 is likely not necessary.				
1322-20	1322.0100			Applicability.	Υ	NA				
					Y	INA				
1322-21	Subp 3 MR			Additions		Costing and an electric light of Chapter F. Frieting Buildings in				
1322-21	1322.0100			Additions,		Section needs update in light of Chapter 5 Existing Buildings in				
				alterations, renovations, or	Υ	'21 IECC (R503).		AM - now addressed in R502.		
	Subp 3A			repairs.						
1322-22	MR			Change in		Section needs update in light of Chapter 5 Existing Buildings in				
1922-22	1322.0100			occupancy or	Υ	'21 IECC (R505). Might not be needed.		AM - now addressed in R502.		
	Subp 3B			use.	Ţ	21 IECC (K505). Wilght flot be fleeded.		AW - How addressed in R502.		
1322-23	MR			Change in space		Section needs update in light of Chapter 5 Existing Buildings in				
1322-23	1322.0100			conditioning.	Υ	'21 IECC (R502.2). Might not be needed.		AM - now addressed in R502.		
	Subp 3C			conditioning.	'	21 IECC (K502.2). Wilght not be fleeded.		AW - How addressed in K502.		
1322-24	MR			Mixed		See also Section C101.4.1 in 2021 IECC-C for similar model code				
1322-24	1322.0100			occupancy.	Υ	language. Might not be needed.		AM -		
	Subp 3D			occupancy.	•	language. Wilght hot be needed.		Alvi -		
1322-25	MR			Compliance.						
1322-23	1322.0100			Compliance.	Y			A - Adopt as written		
	Subp 4							A - Adopt as written		
1322-26	MR			Compliance						
1322 20	1322.0100			materials.	Υ			A - Adopt as written		
	Subp 4A			materials.				A Adopt as written		
1322-27	MR			Low energy		Contain is nearly the same language in the IECC-R under				
1022 27	1322.0100			buildings.	Υ	Section R402.1. Also see proposed CCP RE-34		Repeal MN amendment.		
	Subp 4B			Dananigo:		Section N 192121 7 1150 See proposed GG. N2 5 1		l leged with different leged to the leged to		
1322-28	MR		R103.2	Construction		This section is nearly the same as section R103.2 with slight				
	1322.0103		R103.2.1	documents.		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				
					Υ	wattage and control narrative". These two items have little to		Repeal MN amendment.		
						no application to Residential and are not needed.				
						The state of the s				
						Suggest using the unamended model code language of R103.2				
						& R103.2.1 rather than the amended MN language.				
						SECTION N1101		•		
	D404 2/22		1322.0100					A consideration to a second		
REVISIT	R101.2/R20	1101.1	Subp. 2	Scope.	Υ	Update scope to align with the '24 MCE.		Amend, using '24 MCE		
	1.1		AND					language in 2.6		
REVISIT	R101.3	1101.2	NA	Intent.	Υ	Need to amend model code for MN relevance.		Amend		
DEVICIT	D101 F 1	1101.2	1322.0100	Compliance	Υ	Vonesimilar to 115		Adopt		
REVISIT	R101.5.1	1101.3	Subp. 4A.	materials.	Y	Very similar to '15.		Adopt		
DEVICIT	D102 4 4	1101 4	NA	Above code		Adopt		Adopt		
REVISIT	R102.1.1	1101.4	IVA	programs.		Adopt		Adopt		
				Information on		45 deep not include USen material announce and a set of the				
REVISIT	R103.2	1101.5	1322.0103	construction	Υ	15 does not include "Fan motor horsepower and controls" or		Adopt		
				documents.		"Lighting fixture schedule with wattage and control narrative"				
							l.			

REVISIT	R103.2.1	1101.5.1	NA	Building thermal envelope depiction.	Υ	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 def	initions)	-				
301-1	R301.1	1101.7	R301.1	Climate zones, general.	N	Minor changes to text. Same net outcome.	N	N	Adopt	АМ		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	АМ		
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.			АМ	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	А		
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	АМ		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	АМ		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.	Υ	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		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. 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.	N	N	A - Adopt as written	А		May need reference to '24 IRC because Table 906.2 is referenced.
		N1101.10.1		Building thermal envelope insulation	N	Minor changes. 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. 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. 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.	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	А		
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. For insulation materials that are installed without an observable manufacturer's R-value mark, such as blown ordraped products, an insulation certificate complying with Section R303.1.1 shall be left immediately afterinstallation by the installer, in a conspicuous locationwithin the building, to certify the installed R-value of the insulation material.	L	L	A - Adopt as written	А		
	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. 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.			A - Adopt as written		Accept	

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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: Where required, garage door U-factors shall be determined in accordance with either NFRC 100 or ANSI/DASMA 105. U-facators 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 form Table 303.1.3(3).	L		A - Adopt as written	А		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	А	А		
303-7 Skip	R303.1.4.1	1101.10.4.1	R303.1.4.1	Insulated Siding.	N	New Section in'21, unchagned in '24: 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.	L	L	A - Adopt as written	А		
303-8 Skip	R303.1.5	1101.10.5	R303.1.5	Air- impermeable insulation.	N	New section in '21, unchanged in '24: 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.	N	N	A - Adopt as written	А		
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.	Ļ	L	АМ			DLI will study to see if still necessary.

			I									
		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			A Adopt as written		Table, waiting for	
						Chapter 7, and vented by veneer weep holes			A - Adopt as written		CCP to review.	
						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.						
303-10		1101.11	R303.2	Installation.		Updated section now includes reference to IRC.						Adjust to reference all of
Skip						Materials, systems and equipment shall be installed in						2024 IRC chapters.
					N	accordance with the manufacturer's installation instructions			A - Adopt as written	Α		, and the second
						and the International Building Code or the International						
						Residential Code, as applicable.						
303-11	R303.2.1	1101.11.1	R303.2.1	Protection of		Very minor changes to language. Same net effect.						
Skip				exposed								
				foundation	N		N	N	A - Adopt as written	А		
				insulation.								
		N1101.11.2		Radiant Barrier		New section: Where installed, radiant barriers shall comply						
					N	with the requirements of ASTM C1313/C1313M and shall be	N	N	A - Adopt as written		Table, waiting for	
						installed in accordance with ASTM C1743.					CCP to review.	
303-12	R303.3	1101.12	R303.3	Maintenance		One word changed: "accessible" label in MRE, "visible" label in						
Skip				information.	N	IECC.	N	N	A - Adopt as written	A		
401-1	R401.1		R401.1	Scope.		No "scope" section in N11. May need this if Energy is stand						This could replace language in
					N	alone book.	N	N	A - Adopt as written	Α		MR 1322.0100 Subp. 2
												"Scope".
401-2	R401.2	1101.13	R401.2	Application/		Different language in 2021 IECC. With the new paths in the '21,						
Skip				Compliance.	N	plus the "Existing Buildings" content, the language needs			A - Adopt as written	A		
						updating.						
401-3	NA	1101.13.1	R401.2.1	Prescriptive		This and the following sections provide guidance to understand						
Skip		1		option.		which subsequent sections must be used depending on the						
		1				compliance path chosen. This guides the user to N1101						
		1			N	General, N1102 Building Thermal Envelope, N1103 Systems,				А		
						N1104 Electrical Power, Lighting, and Renewable Energy						
						Systems.						
401-4	NA		R401.2.2	Total building		This path guides the user to R405 Total Building Performance.						
Skip				performance	N					Α		
				option.								
		N1101.13.2		Total Simulated		Modified section: The Total Simulated Building Performance						
				Building		Compliance Option requires compliance with Section N1105.						
		1		Performance	N	, , , , , , , , , , , , , , , , , , ,	N	N	A - Adopt as written		Accept	
		1		Option	**		• •					
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	1		1			1			1			

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.				А		
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.	А		
	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.	Υ	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 inlcuding changes 7 & 8. 7. The code edition under which the structure was permitted, the compliance path used and, where applicable, the additional efficiency measures selected for compliance with Section N1108. 8. The location and dimensions of a solar-ready zone where one is provided.			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 THERM	AL ENVELO	PE				
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.		М		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 Sections N1102.1.1 through N1102.1.5. one of the following: 1. Sections N1102.1.1 through N1102.1.4 and Section N1102.1.6. 2. Sections N1102.1.1, N1102.1.5 and N1102.1.6. NEW EXCEPTION - Exception #2: Log homes designed in accordance with ICC 400.			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.	Υ	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	М	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 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.	ι	н	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 402-8 (Code Change Submitted - CCP RE-21)	R402.1.2		R402.1.4	R-value computation. Total UA alternative.	N 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. 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 - Adopt as written	A A		May need to readdress if U- value tables adjusted for fenestration. RE-21.1 voted down.
Skip	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		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	А	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 requirments are, as users do not realize the MN edition stems from model code language.	L	М	AM - Delete first sentence.	АМ		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 caves. 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	АМ		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		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		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.		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.	АМ		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.		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.		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	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. 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. 3). The third is like option #2, but incorporates continuous insulation. 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.	ι	ι	AM - Consider adjusting to make easier to understand.		
402-19	R402.2.7 R402.2.8	N1102.2.8	R402.2.7 R402.2.8	Floors. Basement walls.	Y	Heavily revised in '24. 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. 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.	М	L	A - Adopt as written Comment: May be subject to building science research.	Adopt	
	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.	z	Ν	A - Adopt as written		
	R402.2.9	N1102.2.10	R402.2.9	Slab-on-grade		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	

	1	1		1			1	1	1		
	None	N1102.2.10.	None	Alternative slab-		New section in '24. Refers to designs in 1105 Simulated					
		2		on-grade	N	Performance and 1106 ERI.	N	N	Adopt as written.	Adopt	
				insulation	IN		IN	IV	Adopt as written.	Adopt	
				configurations							
402-23	R402.2.10		R402.2.10	Crawl space		The IECC and MRE essentially have the same content, except					
				walls.		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.					
						an exception, then now it must be done.					
									AM - Amend to parallel		
					N	The issue with this section in the MRE is that it was never	N	N	language for conditioned		
					.,	amended to align with the basement provisions. A conditioned	.,		basements. May be subject to		
						crawl space is essentially just a short basement. Therefore, it			building science research.		
						seems to make sense to parallel foundation insulation					
						requirements for conditioned crawl spaces with those of					
						conditioned basements.					
	R402.2.10	N1102.2.11	R402 2 10	Crawl space		Only change between '21 and '24 is to the references.				Staff draft CCP to	
	11402.2.10	141102.2.11	11402.2.10	walls.		only change between 21 and 24 is to the references.			Amend to refer to basement	refer to basement	
				Walls.					wall section.		
100.01	54000404		5400040							wall section.	
402-24	R402.2.10.1		R402.2.10	Crawl space		See comments for R402.2.10 directly above.			See comments for R402.2.10		
Skip				wall insulation	N		N	N	directly above.		
				installations.							
	R402.2.10.1	N1102.2.11.	None	Crawl space		24 allows insulation to be installed on inside or outside of wall.			Amend to require insulation on	Staff draft CCP to	
		1		wall insulation		Consider amending to align with MN amended basement wall			exterior of wall like a	refer to basement	
				installations.		content to require insulation on exterior of wall. Subject to			basement. Subject to		
						durability research.			durability research.	wall section.	
	N1102.2.11.		N1102.2.11.	Alternative		New section in '24. Refers to designs in 1105 Simulated			Adopt as written.		
	2		2	crawl space wall		Performance and 1106 ERI.					
	-		_	insulation	N	refrontance and 1100 Em.				Adopt	
				configerations							
402.25	D402 2 44	N/4402 2 42	D402 2 44			March ages			A Adambas with a		
402-25	R402.2.11	N1102.2.12	R402.2.11	Masonry	N	No changes.	N	N	A - Adopt as written		
Skip	D 400 0 40			veneer.							
402-26	R402.2.12	N1102.2.13	R402.2.12	Sunroom and		Thermal envelope provisions for garages are now specifically					
Skip				heated garage		addressed in the '21 energy code. The exceptions and R-values					
				insulation.	N	given for thermally isolated sunrooms are the same as in the	N	N	Amend - delete content	Amend to remove	
						MRE, and now also apply to garages.	14	14	regarding CZ 0-5.	CZs not in MN	
						No change from '21 to '24.					
	None	None	N1102.3	Radiant Barriers		New section.					
							N	N	Adopt as written.	Adopt	
402-27	R402.3	N1102.4	R402.3	Fenestration.		No technical changes from '21 to '24.					
Skip						The content is the same as the MRE, except that reference to					
CAIP					N	R402.3.6 (Replacement fenestration) has been removed as the	N	N	A - Adopt as written	Adopt	
						section is no longer located here.					
100.00	2400.04		0.400.0.4			-					
402-28	R402.3.1	N1102.4.1	R402.3.1	U-factor.	N	No changes.	N	N	A - Adopt as written		
Skip											
402-29	R402.3.2	N1102.4.2	R402.3.2	Glazed		21 & '24 same content.					
Skip				fenestration	N	Same content in '20 & '21, but added section in '21 regarding	N	N	A - Adopt as written, could also		
				SHGC.	14	dynamic glazing. Serves no purpose in MN as we do not		1.4	be deleted.		
						regulate SHGC.					
402-30	R402.3.3		R402.3.3	Glazed		The language is slightly different in the IECC, but the outcome is			Comments Fithered and		
Skip			1	fenestration		essentially the same. The SHGC content will not affect MN.			Comment: Either adopt as		
				exemption.	N	Interesting use of the word "shall" vs. "may" in terms of	N	N	written, or amend to use		
			1			applying the exemption.			language in MRE.		
-	1	1	1	<u> </u>		Interview and another sur			1		

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	R402.3.4		R402.3.4	Opaque door		The language is slightly different in the IECC, but the outcome is					
Skip				exemption.	N	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 m2) 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	Table	Table	Air barrier, air		Major changes to Table N1102.5.1.1						
	R402.4.1.1	N1102.5.1.1		sealing and		- General - Same as '21.						
				insulation		- Ceiling/attic - Similar, no technical change.						
				installation.		- 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/Cantileverd - Changes to section.					Chris to draft CCP to	
						- Basement, crawl space, slab - No technical changes.					include air sealing for	
						- Shafts/penetrations - Similar, no technical changes.					windows as was in	
						- Narrow cavitites - Same as '21			Amend Windows portion and		the '21. See	
						- Garage separation - No technical changes.			Common Walls, leave the rest		R703.4.1	
						- Recessed lighting - No technical changes.			unamended.		Staff draft CCP to	
						- Plumbing/wiring - No technical changes.					address Single Family	
						- Showers/tubs - Similar, adds fireplaces.					Attached.	
						- Electrical boxes - Section added to.					c.derica.	
						- 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.						
						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						
402-37	R402.4.1.2		R402.4.1.2	T. ali a		garage						
	R4U2.4.1.2		K402.4.1.2	Testing.		In the '21, more specific testing backstops were moved to						
Skip						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						
					N	the test due to challenges resulting from lower volumes of air.	L	L	A - Adopt as written			
						An exception is added for two situations whereby the						
						requirement is reduced to .30 CUFT/Min per SF of enclosure						
						area.						
Start 3/24	R402.4.1.2	N1102.5.1.2	D402 4 1 2	Air Leakage		Section has been revised from '21. Content has been broken						CEE & John Smith to draft
meeting	REVISIT	REVISIT	N4U2.4.1.2	Testing.		into essentially <i>how</i> to test, and then .3 gets into the test <i>rate</i> .						CCP.
here.	with CCP	with CCP		resting.		into essentially now to test, and then is gets into the test rate.						
(Skip to												
N1103 for									Amend to change air leakage			
3/24									metric.			
meeting,												
revisit												
1102.5.1.2												
& .3 at 4/7												
meeting.)												
402-38	NA		R402.4.1.3	Leakage Rate.		This section provides the allowable leakage rate based on						CEE & John Smith to draft
(Code						climate zone when following the prescriptive compliance						CCP.
Change					N	option. Other compliance paths allow tradeoffs for leakage.			Amend to change air leakage	RE-4.1 had 6 Yeas		
Submitted -					IN				metric.	and 6 Nays.		
RE-4.1)												
Skip												

	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	А		
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	М	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 (airsealed 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 SYSTE	MS					
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 revist 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	NA		R403.2	Hot water boiler		New provision.				
Skip				temperature reset.	N	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 refernce 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.	Υ	'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 unecessary 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.	М	?	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		

						<u> </u>						
403-18	R403.5.1	N1103.5.1	None	Heated water		New content in '21, no substantive change in '24.						
Skip				circulation and								
				temperature	N				Adopt as written	Accept		
				maintenance								
				systems.								
403-19	R403.4.1		R403.5.1.1	Circulation		Expands on provisions in MRE.						
Skip				systems.	N					Accept		
REVISIT	R403.5.1	N1103.5.1.1	R403.4.1	Circulation		Changes to section, review.						
				systems.		Chris to review and write CCP to remove option to use cold			Adopt as written			
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		water line.						
403-20	R403 5 1 1 1	N1103.5.1.1	None	Demand		New content in '21 IECC.						
Skip	11403.3.1.1.1	1	TTOTIC	recirculation	N	New Content III 21 lecc.				Accept		
экір				water systems.	.,					лесере		
	P/03 5 1 1 1	N1103.5.1.1	None	Demand		Changes to section, review.						
	11403.3.1.1.1	1	None	recirculation	N	changes to section, review.			Adopt as written		Accept	
		.1		water systems.	IN				Adopt as written		Accept	
403-21	NA	N1103.5.1.2	D402 E 1 2	Heat trace		No substantive change to '24.						
Skip	INA	N1105.5.1.2	K4U5.5.1.2	systems.	N	New content in '21.			Adopt as written	Accept		
	R403.5.2		R403.4.2	+'		Slightly revised content. MRE Table R403.4.2 is removed from						
	K4U3.5.2		K4U3.4.2	Hot water pipe	N	- ·				Accept		
Skip	2400 5 0		2402 4 2	insulation.		IECC.						
Skip	R403.5.2	N1103.5.2	R403.4.2	Hot water pipe	N	Minor changes, same net effect.			Adopt as written			
				insulation.								
	No table	Table	Table	Minimum Pipe		Table is new in '24. Review.						
		N1103.5.2	R403.4.2	Insulation	N				Adopt as written		Accept	
				Thickness								
403-23	R403.5.3	N1103.5.3	NA	Drain water		No change in '24.				Chris R. review with		
Skip				heat recovery	N	New provision in '21.			Adopt as written	Plumbing content for		
				units.						regulations.		
	R403.6		R403.5	Mechanical		The IECC-R references the IRC or IMC for Mechancial						
Skip				ventilation.		Ventilation requirements.						
(Code										Polled RE17, 7, &		
Change					Υ					19.1. Consider zone		
Submitted -										6?		
RE-18 & RE-												
19.1)												
	R403.6	N1103.6	R403.5	Mechanical		Minor changes in text, same net requirement and outcome.			Adopt as written		Accept	
				ventilation.					Adopt as written		Accept	
403-25	R403.6.1		R403.5.5	Heat or energy		The IECC now requires HRV/ERV in CZ 7 & 8.						
Skip				recovery								
(Code				ventilation.						Polled RE-17, 7, &		
Change					Υ		L	L	A - Adopt as written	19.1. Consider zone		
Submitted -										6?		
RE-7 & RE-												
17)												
	R403.6.1	N1103.6.1	R403.5.5	Heat or energy		Changes to N1103.6.1 including adding climate zone 6						
				recovery		The state of the s			Adopt as written		Accept	
				ventilation.								
403-26	R403.6.2		NA	Whole-dwelling		Sets fan efficacy ratings.						
Skip	11-03.0.2		14/1	mechanical		octo full efficacy ratings.						
SKIP				ventilation						Polled RE-17, 7, &		
				system fan	N					19.1. Consider zone		
				efficacy.						6?		
				епісасу.								

						<u> </u>					
	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		
SKIP	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 exhuast 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.	Υ	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 - requiremens for systems outside.		Adopt as written		Accept	
	None	N1103.9.1	None	Heating outside a building		New in '24 - requiremens for heat outside.		Adopt as written		Accept	

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403-31	R403.9	N1103.9.2	R403.8	Snow melt and	NI.	Minor changes to language, same net outcome.	L		A Adamt as	A		
Skip				ice system controls.	N		L	L	A - Adopt as written	Accept		
	None	N1103.9.3	None	Roof and gutter		New section.						
	None	11103.3.3	IVOITE	deicing controls		New Section.			Adopt as written		Accept	
									·		·	
	None	N1103.9.4	None	Freeze-		New section.						
				protection					Adopt as written		Accept	
				system controls					ridope do Writteri		лосерс	
400.00	240240	114400 40	D 400 0	-								
403-32 Skip	R403.10	N1103.10	R403.9	Energy consumption of		No substantive changes in '24. Similar section between codes, refers to subsections for						
экір				pools and spas.	N	additional stipulations.	L	L	A - Adopt as written	Accept	Accept	
				pools and spas.		additional stipulations.						
403-33	R403.9.1	N1103.10.1	R403.10.1	Heaters.		Expands on provisions in MRE to require switch to be within 3'						
					N	of heater.	L	L	A - Adopt as written	Accept	Accept	
403-34	R403.9.2		R403.10.2	Time switches.	N	Minor changes to language, same net outcome.	L	L	A - Adopt as written	Accept		
Skip					.,			_				
Skip	R403.9.2 R403.10.3	N1103.10.2 N1103.10.3	R403.10.2 R403.9.3	Time switches. Covers.		No substantive changes. No substantive change in '24.			A - Adopt as written			
403-35 Skip	N4U3.1U.3	N11U3.1U.3	N4U3.9.3	covers.		'21 moves exception for pool cover from 70% to 75% of energy						
экір					N	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.		No substantive changes in '24.						
					N	New criteria in '21, sets requirements for electric powered			Adopt as written	Accept	Accept	
						portable spas.						
403-37	NA	N1103.12	R403.12	Residential		No substantive changes in '24.						
				pools and		New criteria in '21, sets requirements for electric powered						
				permanent	N	permanent spas.			Adopt as written	Accept	Accept	
				residential spas.								
	None	N1103.13	None	Gas fireplaces	N	New section in '24			Adopt as written		Accept	
	None	N1103.13.1	None	Gas fireplace	N	New section in '24						
				efficiency	IN				Adopt as written		Accept	
				_		SECTION N1104 ELECTRICAL POWER AN	D LIGHTING	SYSTEMS			•	
404-1	R404.1		R404.1	Lighting	N	Now requires ALL lighting to be high efficacy, rather than 75%	L	L	A - Adopt as written	Accept		
Skip	R404.1	N1104.1	R404.1	equipment. Lighting		as in '15 MRE. 24 new criteria for lumens to watt for efficacy.			· ·			
	K404.1	N1104.1	N4U4.1	equipment.	N	24 new criteria for furneris to watt for efficacy.			Adopt as written		Accept	
		Table		Lighting Power		New Table in '24.						
		N1104.1		Allowance for					Advis a secondaria			
				Building					Adopt as written		Accept	
				Exteriors								
404-2	R404.1.1		None	Exterior lighting.		New regs for exterior lighting. Consider implications of						
					N	scoping, and whether we need to add accessory buildings (IRC-	L	L		Amend to ASHRAE		
						IV) to list if garages accessory to IRC-I - III are included in definition for Residential Building. Points user to IECC-C.				reference.		
	R404.1.1	N1104.1.1	None	Exterior lighting		Minor changes in '24						
				Exterior lighting		Third statiges in 24			Adopt as written		Accept	
	None	N1104.1.2	None	Exterior lighting		New section in '24						
				power					Adopt as written		Accept	
				requirements								
	None	N1104.1.3	N1104.1.3	Exterior lighting		New section in '24						
				power					Adopt as written		Accept	
	None	N1104.1.4	N1104.1.4	allowance Additional		New section in '24						
	None	111104.1.4	111104.1.4	exterior lighting		INCW SECTION III 24			Adopt as written		Accept	
				power							Посре	
-	_1		1	D. T. C.			1	1				

404-3	R404.1.1		R404.1.2	Fuel gas lighting		Same requirement.						
Skip	K404.1.1		N404.1.2	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)												
10.2)	<u> </u>	<u> </u>	<u> </u>			SECTION R1105 SIMULATED BUILDIN	IC DEDECIDI	MANCE				
405-1	R405.1		R405.1	Scope.		Minor changes to paragraph. Adds energy usage for	. C I LAFORI	AITCL		1		
Skip	R405.1	N1105.1	R405.1	Scope.	N	mechanical ventilation. 24 now indicates 1105 path for R-2,3,4 is limited to dwelling				Accept		
405-2	R405.2		R405.3	Performance-		units. Sets backstop at 2009 IECC.					Accept	
Skip				based compliance.	N					Accept		
END 3/24 MEETING, REVISIT TOPIC (Code Change Submitted - CCP RE-39)	R405.2	N1105.2	R405.3	Simulated building performace compliance	N	Changes to title and criteria.			Review with TAG.		Accept	

105-3	Table			Requirements	N	Table provides prescriptive items that must be met instead of		<u> </u>				
kip	R405.2	'		for total building performance.		previously used headings "Mandatory" sprinkled throughout '15 MRE.		, 		Accept		
				Requirements for Simulated Building Performance		Title changed from "Total" to "Simulated". Changes made to table also.			Review with TAG.		Accept	
05-4 kip	R405.3			Documentation.	N	Essentially same in '21, changes to numbering of subsequent sections.				Accept		
	R405.3	N1105.3		Compliance documentation.		Section has been updated. Review.			Review with TAG.		Accept	
05-5 kip	R405.3.1	N1105.3.1	R405.4.1	Compliance software tools.	N	Deleted in '24. '15 & '21 Same.		i	Accept	Accept	Accept	
.05-6 kip	R405.3.2			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	Accept	
05-7 kip		N1105.3.2.1		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	Accept	
105-8 Skip		N1105.3.2.2		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	Accept	
05-9 kip	R405.4			Calculation procedure.	N	References slightly adjusted subsections.				Accept		
	R405.4	N1105.4	R405.5	Calculation procedure.		Section has been updated. Review.			Review with TAG.		Accept	
105-10 Skip	R405.4.1		R405.5.1	General.	N	Same language.		, I		Accept		
	R405.4.1		R405.5.1	General	N	Section has been updated. Review.	4		Review with TAG.		Accept	
105-11 Skip	R405.4.2		R405.5.2	Residence specifications.	N	Nearly the same except references different numbering of section.	1!	i	'	Accept		
	R405.4.2	N1105.4.2	R405.5.2	Residence specifications.		Section has been updated. Review.			Review with TAG.		Accept	
405-12 Skip	Table R405.4.2(1)		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)	R405.5.2(1)	Specification for the standard reference and proposed designs.		Section has been updated. Review.			Review with TAG.		Accept	
405-13 Skip	Table R405.4.2(2)		R405.5.2(2)	Default distribution system efficiencies for proposed designs.	N	Same tabular values.	N	N	A - Adopt as written	Accept		

	Table	Talala	Talala	Default		Castian has been undeted Davis						
	Table R405.4.2(2)	Table	Table R405.5.2(2)	Default distribution		Section has been updated. Review.						
	K405.4.2(2)	(2)	K405.5.2(2)	system								
		(2)		efficiencies for					Review with TAG.		Accept	
				proposed								
				designs.								
405-17	R405.5.3		R405.6.3	Input values.		Same content.						
Skip					N		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		Accept	
405-14	R405.5		R405.6	Calculation	N	Same statement, different section numbering referenced.	N	N	A - Adopt as written	Accept		
Skip				software tools.	.,		.,	.,	7. Flaope as Wileten	посере		
	R405.5	N1105.5	R405.6	Calculation		Section has been updated. Review.			Review with TAG.		Accept	
405-15	R405.5.1		R405.6.1	software tools. Minimum		Same content.						
Skip	K405.5.1		K4U3.0.1	capabilities.	N	Same content.	N	N	A - Adopt as written	Accept		
экір	R405.5.1	N1105.5.1	R405.6.1	Minimum		Section has been updated. Review.						
				capabilities.					Review with TAG.		Accept	
405-16	R405.6.2	R405.5.2	R405.6.2	Specific	N1	Same content.	N		A Adopt as writter	Accept		
Skip				approval.	N		IN	N	A - Adopt as written	Accept		
	R405.5.2	N1105.5.2	R405.6.2	Specific		Deleted in '24			Accept		Accept	
				approval.							посре	
		N1105.5.2		Testing required		Section deleted in '24 and replaces "Specific Approval" from						
				by software vendors		'21.			Accept		Accept	
				vendors								
		N1105.5.3		Algorithms not		New section in '24						
				tested					Accept		Accept	
		N1105.5.4		Compliance		New section in '24			A		A	
				reports					Accept		Accept	
		N1105.5.4.1		Compliance		New section in '24						
				reports for					Accept		Accept	
				permit					·		·	
		N1105.5.4.2		application		Nov. continuis 124						
		N1105.5.4.2		Compliance reports for		New section in '24						
				certificate of					Accept		Accept	
				occupancy								
						SECTION R1106 ENERGY RATING INDEX CO	MPLIANCE	ALTERNAT	IVE			
Discuss												
definitions:												
202-45 ERI												
Reference												
Design												
202-68 Rated												
design												
202-70												
Renewable												
Energy												
Certificate												
(REC)												
406-1	R406.1		NA	Scope.	N					Accept		
Skip	D406.6	N/440C 1		Comme		Continuity by the continuity of the continuity o			Decision White TAIC			
406-2	R406.1 R406.2	N1106.1	NA	Scope. ERI Compliance.	N	Section has been updated. Review.			Review with TAG.		Accept	
Skin	11400.2		1474	LAI COMpliance.	N					Accept		
-1110	R406.2	N1106.2		ERI Compliance.		Section has been updated. Review.						
				, , ,	N				Review with TAG.		Accept	
			•	•		•			•	_	•	

406-3 Table R406.2 NA Requirements for energy N rating index. Table R406.2 N1106.2 Requirements for energy N Review with TAG.	ot	
Table Table Requirements Section has been updated. Review. R406.2 N1106.2 for energy N Review with TAG.	ot	
Table Table Requirements Section has been updated. Review. R406.2 N1106.2 for energy N Review with TAG.		
Table Table Requirements Section has been updated. Review. R406.2 N1106.2 for energy N Review with TAG.		
R406.2 N1106.2 for energy N Review with TAG.		
	Accept	
	Ассерт	
rating index.		
406-4 R406.3 NA Building thermal		
Skip envelope. N Accept	ot	
R406.3 N1106.3 Building thermal Section has been updated. Review.		
	0.000	
envelope. N Review with TAG.	Accept	
406-5 R406.3.1 NA On-site		
Skip renewables are N Accept	ot	
not included.		
R406.3.1 N1106.3.1 NA On-site Deleted in '24		
	A	
renewables are N Review with TAG.	Accept	
not included.		
406-6 R406.3.2 NA On-site		
Skip renewables are N Accept	ot	
included.		
R406.3.2 N1106.3.2 NA On-site Deleted in '24		
	A	
renewables are N Review with TAG.	Accept	
included.		
406-7 R406.4 NA Energy Rating		
Skip Index.	rt	
RADE A N1106 A NA Fragry Pating Section has been undated Review		
Index. IN 100.4 IN 1	Accept	
406-8 R406.5 NA ERI-based N	ot	
Skip compliance.		
(Code R406.5 N1106.5 NA ERI-based Section has been updated. Review.		
Change		
Submitted - Review with TAG.	Accept	
CCP RE-40)		
406-9 Table NA Maximum		
Skip R406.5 energy rating N Accept)t	
index.		
Table Table NA Maximum Section has been updated. Review.		
R406.5 N1106.5 energy rating N Review with TAG.	Accept	
index.	riccept	
406-10 R406.6 NA Verification by		
Skip approved N Accept	it	
agency.		
R406.6 N1106.6 NA Verification by References have been updated. Review.		
approved N Adopt as written	Accept	
agency.		
Accent	o t	
2KID		
R406.7 N1106.7 NA Documentation. N Minor change in '24. Adopt as written	Accept	
August as written	Ассері	
406-12 R406.7.1 NA Compliance		
Skip software tools. N)t	
R406.7.1 N1106.7.1 NA Compliance N Section has been updated. Review. Review with TAG.	Accept	
software tools.		
406-13 R406.7.2 NA Compliance N		
	7.	
Skip Report. N		
Skip report. N Accept N Accept N Accept N Accept N Accept N N Accept N N N N N N N N N N N N N N N N N N N		
	Accept	

406-14	R406.7.2.1		NA	Dunnand								
406-14 Skip	K406.7.2.1		NA	Proposed compliance								
ЗКІР				· ·						A		
				report for	N					Accept		
				permit								
	R406.7.2.1	N1110C 7 2 1	NA	application.		Minor shores in 124						
	K406.7.2.1	N1106.7.2.1	NA	Proposed		Minor changes in '24.						
				compliance								
				report for	N				Adopt as written		Accept	
				permit								
400 45	2406 7 2 2			application.								
406-15	R406.7.2.2		NA	Confirmed								
Skip				compliance						A		
				report for a	N					Accept		
				certificate of								
	D 406 7 0 0			occupancy.								
	R406.7.2.2	N1106.7.2.2	NA	Confirmed		Section has been updated. Review.						
				compliance	1				Design the TAG			
				report for a	ĺ				Review with TAG.		Accept	
				certificate of	1							
100.10	D406.7.3		N/A	occupancy.								
406-16	R406.7.3		NA	Renewable								
Skip				energy								
				certificate (REC)	N					Accept		
				documentation.								
	D406.7.2	N4406 7 2	la.	D h.l.		Carties has been undertail. But in						
	R406.7.3	N1106.7.3	NA	Renewable		Section has been updated. Review.						
				energy								
				certificate (REC)					Review with TAG.		Accept	
				documentation.								
406-17	R406.7.4	N1106.7.4	NA	Additional		No change in '24.						
400 17	11400.7.4	141100.7.4	1474	documentation.	N	Two change in 24.			Adopt as written	Accept	Accept	
				documentation.	.,				Adopt as written	лесере	лесере	
406-18	R406.7.5		NA	Specific		No change in '24.						
				approval.	N				Adopt as written	Accept	Accept	
406-19	R406.7.6		NA	Input values.								
Skip				'	N					Accept		
	R406.7.6	N1106.7.6	NA	Input values.		Minor change to '24.			Adopt as written		Accept	
						SECTION N1107 TROPICAL CLIMATE REGI	ON COMPL	IANCE PAT				
407-1	R407.1	N1107.1	NA	Scope.	,	Does not pertain to MN climate zones.				Delete	Delete	
Skip			<u> </u>		N			<u> </u>	AM - Delete	Delete	Delete	
407-2	R407.2	N1107.2	NA	Tropical climate	N.				AM Doloto	Doloto	Doloto	
Skip				region.	N				AM - Delete	Delete	Delete	
Skip		Table		Minimum Low							_	
		N1107.2		Slope Roof								
				Reflectance and	1				AM - Delete		Delete	
				Emmitance	1							
L			<u> </u>	Options	<u> </u>			<u> </u>				
						SECTION N1108 ADDITIONAL EFFICIEN	NCY REQUIR	EMENTS				
408-1	R408.1		None	Scope.	N				A - Adopt as written			
Skip					IN .							
	R408.1	N1108.1	None	Scope.		Minor changes.			Adopt as written		Accept	
408-2	R408.2		None	Additional	1							
Skip				efficiency	N							
				package	l 'N							
			<u> </u>	options.	<u> </u>							
				_								

		1	1	1				T	I	
	R408.2	N1108.2	None	Additional		Section has been updated. Review.				
				energy						
				efficiency credit			Review with TAG.		Accept	
				requirements						
	None	Table	None	Additional		New content. Review. Suggest deleting CZs other than 6&7,	Berlin What C. Amerika			
		N1108.2		Efficiency		footnote e, and ERV/HRV content - 1108.2.5(1)	Review with TAG. Amend to		Accept	
				Requirements			remove other CZs		·	
408-3	R408.2.1		None	Enhanced						
Skip				envelope						
SKIP				performance	N					
				option.						
	R408.2.1	N1108.2.1	None	Enhanced		Section has been updated. Review.				
	K408.2.1	N1108.2.1	None	building thermal		Section has been updated. Neview.				
							Decision (the TAG)			
				envelope			Review with TAG.		Accept	
				options						
		N1108.2.1.1	None	Enhanced		New content. Review.				
				building thermal						
				envelope			Review with TAG.		Accept	
				performance						
		N1108.2.1.2	None	Improved		New content. Review.	Review with TAG.		Accept	
				fenestration			Review with TAG.		Accept	
		Table	None	Improved		New content. Review. Consider deleting CZ other than 6 & 7.	Decision (the TAG)			
		N1108.2.1.2		Fenestration			Review with TAG.		Accept	
							Potentially amend.		·	
		N1108.2.1.3	None	Roof solar		CZ 0 thru 2Delete section.				
				reflectance			Delete.			
				index			Belete.			
		N1108.2.1.3		Aged solar		CZ 0 thru 2Delete section.				
		1		reflectance		CZ O tili d ZDelete Section.	Delete.			
		N1108.2.1.4	None	Reduced air		New content. Review.				
		N1106.2.1.4	None	leakage		New Content. Review.	Review with TAG.		Accept	
408-4	R408.2.2		None	More efficient						
	R408.2.2		None							
Skip				HVAC						
				equipment	N					
				performance						
				option.						
	R408.2.2	N1108.2.2	None	More efficient		Section has been updated. Review.				
	1			HVAC		Consider deleting items #6-14 - does not pertain to CZ 6&7.	Review with TAG.			
	1			equipment			Potentially amend.		Accept	
	1			performance			otentially afficilu.			
				option.						
		N	None	More Efficient		Does not pertain to MN climate zones.				
		1108.2.2.1		HVAC						
				Equipment for			Delete section			
				Climate Zone 4.						
408-5	R408.2.3		None	Reduced energy						
Skip	1			use in service						
	1			water-heating	N					
	1			option.						
	R408.2.3	N1108.2.3	None	Reduced enery		Section has been updated. Review.				
				use in service						
				water-heating			Review with TAG.		Accept	
				options.						

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		Table	None	Service Water		New content. Review.			
		N1108.2.3		Heater			Review with TAG.	Accept	
				Efficiencies					
		N1108.2.3.1	None	Compact hot		New content. Review.			
				water			Review with TAG.	Accept	
				distribution			neview with TAG.	Ассерт	
				system option					
		Table	None	Internal Volume		New content. Review.			
		N1108.2.3.1		of Various					
				Water			Review with TAG.	Accept	
				Distrbution				·	
				Tubing					
		N1108.2.3.1	None	Water volume		New content. Review.			
		1	None	determination		New Content. Neview.	Review with TAG.	Accept	
408-6	R408.2.4		None	More efficient					
	K406.2.4		None						
Skip				duct thermal	N				
				distribution					
				system option.					
	R408.2.4	N1108.2.4	None	More efficient		New content. Review.			
				thermal			Review with TAG.	Accept	
				distribution			neview with tries	Посерт	
				system options					
408-7	R408.2.5		None	Improved air					
Skip				sealing and					
				efficient	N				
				ventilation					
				system option.					
	R408.2.5	N1108.2.5	None	Improved air		Delete section since it also provides benefit from an ERV/HRV?			
				sealing and		Or, just delete #1?			
				efficient		ory just defect with	Amend?		
				ventilation			Ameria:		
				system options					
		N1108.2.6	None	Energy efficient		New content. Review.			
		N1108.2.0	None	appliances		New Content. Review.	Review with TAG.	Accept	
				appliances			Review With TAG.	Accept	
		T. I. I.	Maria	NAT-1		N			
		Table	None	Minimum		No credit in CZ 6&7, delete?			
		N1108.2.6		Efficiency			Delete?		
				Requirements:					
				Appliances					
		N1108.2.7	None	Renewable		New content. Review. Delete since we will not be recognizing	Amend?		
				Energy		OPP?			
		N1108.2.8	None	Demand		New content. Review.	Review with TAG.	Accept	
				response				Посре	
		N1108.2.8.1	None	Single-stage		New content. Review.	1		
				HVAC system			Review with TAG.	Accept	
				controls					
		N1108.2.8.2	None	Variable-		New content. Review.		 _	
				capacity and					
				two-stage HVAC			Review with TAG.	Accept	
				system conrols					
		N1108.2.9	None	Opaque walls		Does not pertain to MN climate zones, delete.	Delete		
		N1108.2.10		Whole-home		No credit in CZ 6&7.			
				lighting control			Review with TAG.	Accept	
		N1108.2.11	None	Higher efficacy		No credit in CZ 6&7.			
				lighting			Review with TAG.	Accept	
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(Code												
Change												
Submitted -												
RE-14)												
Review												
defintion:												
202-5												
Addition												
				1	T	SECTION N1109 EXISTING BUILDI	NGS - GENE	RAL			1	
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.	Υ	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.			
	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 ADDIT	IONS					
502-1 Skip	R502.1		MR 1322.0100 Subp. 3A	General.	Υ	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 condiditioned 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.	Υ	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.	Υ	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 ALTERA	TIONS		-	•	
503-1	R503.1		MR 1322.0100 Subp. 3A	General.	Υ	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		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		Above-grade wall alterations		New section in Model 2024 Chapter 11.		Adopt as written			
	None	N1111.1.1.4		Floor alterations		New section in Model 2024 Chapter 11.		Adopt as written			
	None	N1111.1.1.5 N1111.1.1.6		Below-grade wall alterations Air barrier		May need to consider an amendment if we require at least R10 exterior insulation under 1102.1. New section in Model 2024 Chapter 11.		Amend?			
503-4	None	N1111.1.1.b	R503.1.2	Heating and		Clarity for ductwork. Exempts ductwork extended from		Adopt as written			
Skip				cooling systems.		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		Systems sizing		New section in Model 2024 Chapter 11.		Adopt as written			
	None	N1111.1.2.3		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			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 REPAIR	RS				
504-1				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 OCCUP	PANCY OF	RUSE			
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		