



FSEC Energy Research Center

UNIVERSITY OF CENTRAL FLORIDA

RESIDENTIAL CODE REVIEW FOR THE 2023 FLORIDA BUILDING ENERGY CODE

Interim Report

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Submitted to

Department of Business and Professional Regulation
Office of Codes and Standards
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Tallahassee, FL 32399
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Appendix C: Residential 2021 IECC Changes Review Summary

Residential 2021 IECC changes with respect to the 2018 IECC and 2020 Florida Building Code, Energy Conservation (FBC-EC) are summarized in Table C. Table C contains six columns defined as follows:

2021 IECC Section and Title: The 2021 IECC code section number and title for the code change.

ICC Code Change No.: Proposed code change number in the ICC's *Complete Revision History to the 2021 I-Codes* document.

Change Summary b/t 2018 IECC and 2021 IECC: Brief description of the code change between the 2018 IECC and 2021 IECC.

Change Summary b/t 2020 FBC-EC and 2021 IECC: Brief description of the code change between the 2020 FBC-EC and 2021 IECC.

Anticipated Energy Impact on FBC-EC if Adopted: Anticipated energy use impact from the code change if it is adopted in the FBC-EC. "None" means the code change has no or negligible anticipated impact on energy use.

Anticipated Cost Impact on FBC-EC if Adopted: Anticipated construction cost impact from the code change if it is adopted in the FBC-EC. "None" means the code change has no or negligible anticipated impact on construction cost.

References:

2018 International Energy Conservation Code. (Fourth printing: 2020). International Code Council, Inc. <https://codes.iccsafe.org/content/IECC2018P4>

2020 Florida Building Code, Energy Conservation, 7th Edition. (2020). International Code Council, Inc. <https://codes.iccsafe.org/content/FLEC2020P1>

2021 International Energy Conservation Code. (2020). International Code Council, Inc. <https://codes.iccsafe.org/content/IECC2021P1>

Complete Revision History to the 2021 I-Codes. 2020. International Code Council, Inc. <https://shop.iccsafe.org/complete-revision-history-to-the-2021-i-codes-successful-changes-and-public-comments-pdf-download.html#:~:text=Complete%20Revision%20History%20to%20the%202021%20I-Codes:%20Successful,each%20change%20that%20occurred%20in%20the%202021%20IBC>

Table C. Residential Code Change Summary for 7th Edition (2020) Florida Energy Code vs. 2021 IECC

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
Chapter R1: Scope and Administration					
R102.1 General	CE9-19 Part II	Adds “energy conservation” to the compliance requirements for alternative materials, design or construction methods	The wording of the 2020 FBC-EC already implies that alternatives must be equivalent in energy efficiency	None	None
R102.1 General	CE10-19 Part II	Adds 1) that alternative materials, design or construction methods must be approved (by a code official), 2) that alternative applications must be in writing, and 3) that a code official’s reasons for approval are to be in writing.	The 2020 FBC-EC already includes approval requirement; the requirements for applications and code officials’ reasons for approval to be in writing would be the same as the change between 2018 IECC and 2021 IECC	None or slightly increased stringency in applicable cases	None or slightly increased cost in applicable cases
R102.1.1 Above Code Programs	CE42-19 Part II	Requirements change is part of a larger residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach to identifying mandatory provisions for each compliance method	Same as change between 2018 IECC and 2021 IECC	None	None
R102.1.1 Above Code Programs	CE12-19 Part II	Requires projects complying via an above code program to also meet the building thermal envelope and SHGC requirements in Tables R402.1.1 and 402.1.3 of the 2009 IECC	Same as change between 2018 IECC and 2021 IECC	None or slightly increased stringency in applicable cases	None or slightly increased cost in applicable cases
R103.1 General	ADM46-19 Part IV	Allows construction documents, technical reports and other supporting data to be submitted in a digital format where allowed by the code official	Same as change between 2018 IECC and 2021 IECC	None	None; Section R103.2 in both codes already allows construction documents to be submitted as electronic media

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
					documents where approved by the code official
R103.2 Information on Construction Documents	CE13-19 Part II	Adds energy compliance path to list of information required on construction documents	Same as change between 2018 IECC and 2021 IECC	None	None
Section 106 Notice of Approval, R106.1 Approval, R106.2 Revocation	ADM31-19 Part III	Editorial change moves Section R105.7 <i>Approval</i> and Section R105.7.1 <i>Revocation</i> to new Section R106 subsections R106.1 and R106.2	Same as change between 2018 IECC and 2021 IECC	None	None
Section R107 Validity	ADM31-19 Part III	Section renumbering due to creation of Section R106	Same as change between 2018 IECC and 2021 IECC	None	None
Section R108 Referenced Standards	ADM31-19 Part III	Section renumbering due to creation of Section R106	Same as change between 2018 IECC and 2021 IECC	None	None
Section R109 Stop Work Order	ADM31-19 Part III	Section renumbering due to creation of Section R106	Same as change between 2018 IECC and 2021 IECC	None	None
R109.1 Authority	ADM41-19 Part IV	Editorial changes to provide consistency between I-codes	Same as change between the 2018 IECC and 2021 IECC	None	None
R109.2 Issuance	ADM41-19 Part IV	Editorial changes to provide consistency between I-codes	Same as change between 2018 IECC and 2021 IECC	None	None
R109.4 Failure to Comply	ADM41-19 Part IV	Editorial changes to provide consistency between I-codes	Same as change between 2018 IECC and 2021 IECC	None	None
Section R110 Means of Appeals	ADM31-19 Part III	Section renumbering only due to creation of Section R106	Same as change between 2018 IECC and 2021 IECC	None	None
Section R110 Means of Appeals	ADM40-19 Part IV	Editorial change to section title to provide consistency between I-codes	Same as change between 2018 IECC and 2021 IECC	None	None
R110.1 General	ADM40-19 Part IV	Editorial changes to provide consistency between I-codes	Same as change between 2018 IECC and 2021 IECC	None	None
R110.2 Limitations on Authority	ADM40-19 Part IV	Editorial changes to provide consistency between I-codes	Same as change between 2018 IECC and 2021 IECC	None	None
R110.4 Administration	ADM40-19 Part IV	Editorial addition to provide consistency between I-codes	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
Chapter R2: Definitions					
[R202 Accessible]	CE29-19 Part II	“Accessible” term deleted in favor of new term “Access to”	Same as change between 2018 IECC and 2021 IECC	None	None
R202 Access (To)	CE29-19 Part II	New definition to replace “Accessible”	Same as change between 2018 IECC and 2021 IECC	None	None
[R202 Air Impermeable Insulation]	CE29-19 Part II	“Air impermeable insulation” term deleted; similar definition added to Chapter 3	Same as change between 2018 IECC and 2021 IECC	None	None
R202 Cavity Insulation	RE4-19	New definition to coordinate with commercial definitions	The 2020 FBC-EC already has this definition	None	None
R202 Continuously Burning Pilot Light	RE107-19	New definition to clarify what "continuous" means (shown as AMPC1 in monograph, but not included in code)	Same as change between 2018 IECC and 2021 IECC	None	None
R202 Demand Recirculation Water System	CE22-19 Part II	Revises definition to provide consistency with the IPC	The 2020 FBC-EC already has an almost identical definition	None	None
R202 Dimmer	RE145-19	New definition	Same as change between 2018 IECC and 2021 IECC	None	None
R202 Dwelling Unit Enclosure Area	RE88-19	New definition referred to in Section R402.4.1.2 changes (made via the same code change number).	Same as change between 2018 IECC and 2021 IECC	None	None
R202 Fenestration	RE6-19	Adds a list of products and components that are included as "skylights"	The 2020 FBC-EC already has an almost identical definition for skylights	None	None
R202 High-Efficacy Light Sources	RE7-19, RE145-19	Replaces “High-Efficiency Lamps” term with “High-Efficiency Light Sources,” removes lumens per watt differentiation based on lamp wattage and increases high efficacy requirement	The 2020 FBC-EC already includes the same efficacy requirements in Section R404.1	None or slightly increased stringency in applicable cases	None or slightly increased cost in applicable cases
R202 Occupant Sensor Control	RE145-19	New definition referred to in new Section R404.2 Lighting Controls	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
		(made via the same code change number).			
R202 On-site Renewable Energy	CE31-19 Part II	New definition to help distinguish between renewable energy sources and site use	Same as change between 2018 IECC and 2021 IECC	None	None
[R202 Readily Accessible]	CE29-19 Part II	“Readily Accessible” term deleted in favor of new term “Access to”	Same as change between 2018 IECC and 2021 IECC	None	None
R202 Ready Access (To)	CE29-19 Part II	New definition to replace “Readily Accessible”	Same as change between 2018 IECC and 2021 IECC	None	None
R202 Renewable Energy Certificate (REC)	RE204-19	New definition of an instrument that represents the environmental attributes of renewable energy	Same as change between 2018 IECC and 2021 IECC	None	None
R202 Renewable Energy Resources	CE31-19 Part II	New definition to help distinguish between renewable energy sources and site use	Same as change between 2018 IECC and 2021 IECC	None	None
R202 Roof Recover	RE9-19 Part I	Replaces “Roof Re-cover” term with “Roof Recover” and slightly revises language	2020 FBC-EC already includes new term; otherwise same as change between 2018 IECC and 2021 IECC	None	None
R202 Thermal Distribution Efficiency (TDE)	CE151-19 Part II	New definition regarding duct heat loss calculation	Same as change between 2018 IECC and 2021 IECC	None	None
Chapter R3: General Requirements					
Table R301.1	CE36-19 Part II	Changes Climate Zone (CZ) and moisture regime for a number of US counties to align with ASHRAE Std. 169-2013; only Florida change is moving Palm Beach County from CZ 2A to 1A	2020 FBC-EC already has Palm Beach County in CZ 1A; no other changes affect Florida; 2021 IECC still lists Collier, Hendry, and Lee counties as CZ 2A while FBC-EC has these three counties as 1A	None	None
R301.3 Climate Zone Definitions	CE36-19 Part II	Changes name of section from International climate zones to Climate zone definitions and revises language regarding how to	Not applicable to Florida	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
		determine CZs of locations that are not listed			
Table R301.3 Thermal Climate Zone Definitions	CE36-19 Part II	Changes table number and name from Table R301.3(2) International Climate Zone Definitions to Table R301.3 Thermal Climate Zone Definitions, changes thermal criteria for a number of CZs and adds new CZ "0."	Adds upper boundary to CZ 1 thermal criteria; otherwise no changes relative to Florida	None	None
[Table R301.3(1) International Climate Zone Definitions.]	CE36-19 Part II	Deletes Table R301.3(1) which is no longer needed to determine CZs per Section R301.3	Not applicable to Florida	None	None
R303.1.2 Insulation Mark Installation	CE40-19 Part II	Specifies when and where an insulation certificate is to be provided	Same as change between 2018 IECC and 2021 IECC	None or slightly increased stringency	None
R303.1.5 Air-Impermeable insulation	CE19-19 Part II	Moves definition of air-impermeable insulation from Chapter 2 to Section R303.1.5 and adds air permeance limit and testing standard; intended as clarification	Same as change between 2018 IECC and 2021 IECC	None	None
R303.3 Maintenance information	CE29-19 Part II	Changes "accessible" to "visible" to clarify intent	Same as change between 2018 IECC and 2021 IECC	None	None
Chapter R4: Residential Energy Efficiency					
R401.2 Application	CE42-19 Part II	Removes word "Mandatory" from Section R405 compliance path option as part of a larger residential IECC-wide formatting change that removes "mandatory" and "prescriptive" section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R401.2 Application	RE209-19	Adds that new Section R401.2.5 <i>Additional energy efficiency</i> be	Same as change between 2018 IECC and 2021 IECC	Increased stringency	Increased cost

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
		complied with in addition to one of the existing compliance paths			
R401.2 Application	Unknown (RE15-19?)	Breaks out compliance options into separate subsections	Same as change between 2018 IECC and 2021 IECC	None	None
R401.2.1 Prescriptive Compliance Option	Unknown (RE15-19?)	Stipulates Prescriptive compliance option sections	Same as change between 2018 IECC and 2021 IECC	None	None
R401.2.2 Total Building Performance Option	Unknown (RE15-19?)	Stipulates Performance compliance option section	Same as change between 2018 IECC and 2021 IECC	None	None
R401.2.3 Energy Rating Index Option	Unknown (RE15-19?)	Stipulates Energy Rating Index (ERI) compliance option section	Same as change between 2018 IECC and 2021 IECC	None	None
R401.2.4 Tropical Climate Region Options	Unknown (RE15-19?)	Moves tropical climate region option to Section R407, but no change in stringency	Same as change between 2018 IECC and 2021 IECC	None	None
R401.2.5 Additional Energy Efficiency	RE209-19	New section establishes additional energy efficiency requirements applicable to each compliance approach	Same as change between 2018 IECC and 2021 IECC	Increased stringency	Increased cost
R401.3 Certificate	CE42-19 Part II	Removes “Mandatory” from section title as part of a larger residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R401.3 Certificate	RE18-19	Adds requirement to, where applicable, include on-site photovoltaic system information on the efficiency certificate	Same as change between 2018 IECC and 2021 IECC	None	None
R401.3 Certificate	RE20-19	Adds requirement to include code edition and compliance path on the efficiency certificate and restructures section into numbered bullet format	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
R401.3 Certificate	RE21-19	Adds requirement to, where applicable, include the Energy Rating Index score, with and without on-site generation, on the efficiency certificate and revises some text, including adding requirement to indicate equipment size	Same as change between 2018 IECC and 2021 IECC	None	None
R402.1 General	CE42-19 Part II	Removes “Prescriptive” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R402.1.2 Insulation and Fenestration Criteria	RE38-19	Clarifies <i>U</i> -factor and SHGC requirements	Same as change between 2018 IECC and 2021 IECC	None	None
R402.1.3 R-value Alternative	RE38-19	New section specifying insulation <i>R</i> -value alternatives to <i>U</i> -factor requirements (part of section reorganization; no stringency changes)	Same as change between 2018 IECC and 2021 IECC	None	None
[R402.1.4 <i>U</i> -factor alternative]	RE38-19	Subsection deleted; no longer needed due to overall section reorganization	Same as change between 2018 IECC and 2021 IECC	None	None
R402.1.4 <i>R</i> -value computation	RE38-19	Subsection renumbered due to overall section reorganization	Same as change between 2018 IECC and 2021 IECC	None	None
R402.1.4 <i>R</i> -value computation	RE38-19	Clarifies cavity and continuous insulation (corresponds with new cavity insulation definition in Ch. 2)	Same as change between 2018 IECC and 2021 IECC	None	None
R402.1.5 Total UA alternative	CE42-19 Part II	Adds SHGC clarification and that Total UA alternative compliance must also meet the maximum fenestration <i>U</i> -factors of Section R402.5	Same as change between 2018 IECC and 2021 IECC (FBC-EC does not have a Section R402.5, but this section in the IECC does not include maximum <i>U</i> -factors for Climate Zone 1 or 2)	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
Table R402.1.2 Maximum Assembly <i>U</i> -factors and Fenestration Requirements	RE33-19	Decreases the maximum ceiling <i>U</i> -factor in Climate Zones 2 and 3 from 0.030 to 0.026	Same as change between 2018 IECC and 2021 IECC	Increased stringency for Prescriptive and Performance compliance projects in Climate Zone 2	Increased cost for Prescriptive and Performance compliance projects in Climate Zone 2
Table R402.1.2 Maximum Assembly <i>U</i> -factors and Fenestration Requirements	RE35-19	Decreases the maximum fenestration <i>U</i> -factor in Climate Zones 3 and 4 (except marine) from 0.032 to 0.030	Same as change between 2018 IECC and 2021 IECC	None (does not affect Florida Climate Zones)	None (does not affect Florida Climate Zones)
Table R402.1.2 Maximum Assembly <i>U</i> -factors and Fenestration Requirements	RE36-19	Decreases the maximum ceiling <i>U</i> -factor in Climate Zones 4 through 8 from 0.026 to 0.024	Same as change between 2018 IECC and 2021 IECC	None (does not affect Florida Climate Zones)	None (does not affect Florida Climate Zones)
R402.2.1 Ceilings with attic spaces	RE36-19	Adds minimum insulation <i>R</i> -value allowance for insulation extending over eave wall top plates which would otherwise be required to meet new minimum of <i>R</i> -60	Same as change between 2018 IECC and 2021 IECC	None (does not affect Florida Climate Zones)	None (does not affect Florida Climate Zones)
Table R402.1.2 Maximum Assembly <i>U</i> -factors and Fenestration Requirements	RE38-19	Adds Glazed Fenestration SHGC column to table, with same maximum values and footnotes as Table R402.1.3 (no stringency changes)	Same as change between 2018 IECC and 2021 IECC	None	None
Table R402.1.2 Maximum Assembly <i>U</i> -factors and Fenestration Requirements	RE29-19	Reduces maximum wood frame wall <i>U</i> -factors in Climate Zones 4 and 5 from 0.60 to 0.45	Same as change between 2018 IECC and 2021 IECC	None (does not affect Florida Climate Zones)	None (does not affect Florida Climate Zones)
Table R402.1.2 Maximum Assembly <i>U</i> -factors and Fenestration Requirements	RE41-19	Adds maximum vertical fenestration <i>U</i> -factor exception for high elevation and windborne debris regions in Climate zones Marine 4 through 8	Same as change between 2018 IECC and 2021 IECC	None (does not affect Florida Climate Zones)	None (does not affect Florida Climate Zones)

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
Table R402.1.3 Insulation Minimum <i>R</i> -values and Fenestration Requirements by Component	RE23-19	Clarifies basement and crawlspace wall <i>R</i> -value requirements for Climate Zones 3 through 8	Same as change between 2018 IECC and 2021 IECC	None (does not affect Florida Climate Zones)	None (does not affect Florida Climate Zones)
Table R402.1.3 Insulation Minimum <i>R</i> -values and Fenestration Requirements by Component	RE27-19	Adds wood frame wall minimum <i>R</i> -value options for all Climate Zones, including a new R-10 continuous insulation option (with no cavity insulation) for Climate Zones 1 and 2	Same as change between 2018 IECC and 2021 IECC	None; optional and intended to be of equivalent efficiency	None; optional
Table R402.1.3 Insulation Minimum <i>R</i> -values and Fenestration Requirements by Component	RE28-19	Clarifies cavity and continuous insulation use in the table (corresponds with new cavity insulation definition in Ch. 2)	Same as change between 2018 IECC and 2021 IECC	None	None
Table R402.1.3 Insulation Minimum <i>R</i> -values and Fenestration Requirements by Component	RE29-19	Increases minimum wood frame wall <i>R</i> -values in Climate Zones 4 and 5 from 20 or 13+5 to 20+5 or 13+10	Same as change between 2018 IECC and 2021 IECC	None (does not affect Florida Climate Zones)	None (does not affect Florida Climate Zones)
Table R402.1.3 Insulation Minimum <i>R</i> -values and Fenestration Requirements by Component	RE32-19	Increases slab insulation requirements in Climate Zones 3 through 5	Same as change between 2018 IECC and 2021 IECC	None (does not affect Florida Climate Zones)	None (does not affect Florida Climate Zones)
Table R402.1.3 Insulation Minimum <i>R</i> -values and Fenestration Requirements by Component	RE33-19	Increases the minimum ceiling <i>R</i> -value in Climate Zones 2 and 3 from R-38 to R-49	Same as change between 2018 IECC and 2021 IECC	Increased stringency for prescriptive projects in Climate Zone 2	Increased cost for prescriptive projects in Climate Zone 2

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
Table R402.1.3 Insulation Minimum <i>R</i> -values and Fenestration Requirements by Component	RE34-19	Removes floor insulation alternative that was applicable to Climate Zones Marine 4 through 8	Same as change between 2018 IECC and 2021 IECC	None (does not affect Florida Climate Zones)	None (does not affect Florida Climate Zones)
Table R402.1.3 Insulation Minimum <i>R</i> -values and Fenestration Requirements by Component	RE35-19	Decreases the maximum fenestration <i>U</i> -factor in Climate Zones 3 and 4 (except marine) from 0.032 to 0.030, and adds maximum vertical fenestration <i>U</i> -factor exception for high elevation and windborne debris regions in Climate zones 3 through 8	Same as change between 2018 IECC and 2021 IECC	None (does not affect Florida Climate Zones)	None (does not affect Florida Climate Zones)
Table R402.1.3 Insulation Minimum <i>R</i> -values and Fenestration Requirements by Component	RE36-19	Increases the minimum ceiling <i>R</i> -value in Climate Zones 4 through 8 from R-49 to R-60	Same as change between 2018 IECC and 2021 IECC	None (does not affect Florida Climate Zones)	None (does not affect Florida Climate Zones)
Table R402.1.3 Insulation Minimum <i>R</i> -values and Fenestration Requirements by Component	RE37-19	Changes glazed fenestration SHGC requirement in Climate Zones Marine 4 and 5 from “NR” to 0.40	Same as change between 2018 IECC and 2021 IECC	None (does not affect Florida Climate Zones)	None (does not affect Florida Climate Zones)
Table R402.1.3 Insulation Minimum <i>R</i> -values and Fenestration Requirements by Component	RE38-19	Renumbers table from Table R402.1.2 to Table R402.1.3 and adds “Minimum <i>R</i> -value” to table title	Same as change between 2018 IECC and 2021 IECC	None	None
R402.2 Specific Insulation Requirements	CE42-19 Part II	Removes “Prescriptive” from section title as part of residential IECC-wide formatting change that removes “mandatory” and	Same as change between 2018 IECC and 2021 IECC	None	None

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		“prescriptive” section labels in favor of a tabular approach			
R402.2.1 Ceilings with Attic Spaces	RE42-19	As a clarification, adds “or attic” to wherever “ceiling” is referred to in this section	Same as change between 2018 IECC and 2021 IECC	None	None
R402.2.2 Ceilings without attics	RE42-19	Clarifies applicability of section	Same as change between 2018 IECC and 2021 IECC	None	None
R402.2.3 Eave Baffle	RE44-19	Adds “net free area” to the baffle opening stipulation and adds baffle installation language to maximize space for attic insulation coverage and prevent ventilation air bypass	Same as change between 2018 IECC and 2021 IECC	Slightly increased stringency (depending on typical practice)	Slightly increased cost (depending on typical practice)
R402.2.3 Eave Baffle	RE45-19	Makes this section mandatory	Same as change between 2018 IECC and 2021 IECC	Slightly increased stringency for Performance and ERI compliance	Slightly increased cost for Performance and ERI compliance
R402.2.4 Access Hatches and Doors	RE46-19	Separates existing prescriptive Section R402.2.4 into mandatory and prescriptive sections; remaining Section R402.2.4 text regarding access hatch and door insulation levels continues to be prescriptive	Same as change between 2018 IECC and 2021 IECC	None	None
R402.2.4.1 Access Hatches and Door Insulation Installation and Retention	RE46-19	Separates existing prescriptive Section R402.2.4 into mandatory and prescriptive sections; new Section R402.2.4.1 regarding access hatch and door installation is now mandatory	Same as change between 2018 IECC and 2021 IECC	Slightly increased stringency for Performance and ERI compliance	Slightly increased cost for Performance and ERI compliance
R402.2.4 Access Hatches and Doors	RE47-19	Provides insulation level exceptions for horizontal pull-down stair type access hatches	Same as change between 2018 IECC and 2021 IECC	Slightly decreased stringency in applicable cases	Slightly decreased cost in applicable cases
R402.2.4.1 Access Hatches and Door Insulation	RE49-19	Expands requirements regarding retaining attic insulation to ensure that it performs as intended	Same as change between 2018 IECC and 2021 IECC	Slightly increased stringency	Slightly increased cost

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Installation and Retention					
R402.2.5 Mass Walls	RE50-19	Adds “mass timber” to listing of mass wall options	Same as change between 2018 IECC and 2021 IECC	None	None or slightly decreased cost in applicable cases
Table R402.2.6 Steel-Frame Ceiling, Wall and Floor Insulation R-Values	RE51-19	Coordinates Table R402.2.6 equivalent cold-formed steel-frame R-value options with Table R402.1.2 wood frame R-value options	Same as change between 2018 IECC and 2021 IECC	None (no changes that apply to Florida Climate Zones)	None (no changes that apply to Florida Climate Zones)
[R402.2.7 Walls with partial structural sheathing]	RE52-19	Removes section which had allowed reduced continuous wall insulation R-value than otherwise required by Table R402.1.3 for areas of walls covered by structural sheathing (for applicable projects)	Same as change between 2018 IECC and 2021 IECC	None (FBC-EC Table R402.1.2 does not include a continuous wall insulation option for Climate Zone 1 or 2)	None (FBC-EC Table R402.1.2 does not include a continuous wall insulation option for Climate Zone 1 or 2)
R402.2.7 Floors	RE52-19	Section renumbered due to removal of existing Section R402.2.7	Same as change between 2018 IECC and 2021 IECC	None	None
R402.2.7 Floors	RE53-19	Clarifies floor cavity insulation installation requirements	Same as change between 2018 IECC and 2021 IECC	None	None
R402.2.8 Basement Walls	Due to RE52-19	Section renumbered from R402.2.9 due to removal of existing Section R402.2.7	Same as change between 2018 IECC and 2021 IECC	None	None
R402.2.8 Basement Walls	RE59-19	Changes include 1) new language that clarifies basement walls are to be insulated according to Table R402.1.3, 2) rewording of requirement for basement wall insulation for unconditioned basements with insulated floor overhead as an exception, and 3) breaking out basement wall insulation installation requirements into new subsection	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
R402.2.8 Basement Walls	Unknown	Expands list of requirements that must be met to exempt unconditioned basements from basement wall insulation requirement	Same as change between 2018 IECC and 2021 IECC	Increased stringency for applicable prescriptive projects	Increased cost for applicable prescriptive projects
R402.2.8.1 Basement Wall Insulation Installation	RE59-19	Part of Section R402.2.8 rewording; new subsection now used to specify basement wall insulation installation requirements	Same as change between 2018 IECC and 2021 IECC	None	None
R402.2.9 Slab-on-grade Floors	Due to RE52-19	Section renumbered from R402.2.10 due to removal of existing Section R402.2.7	Same as change between 2018 IECC and 2021 IECC	None	None
R402.2.9 Slab-on-grade Floors	RE60-19	Reorganizes section and breaks out slab-on-grade floor insulation installation requirements into new subsection	Same as change between 2018 IECC and 2021 IECC	None	None
R402.2.9.1 Slab-on-Grade Insulation Installation	RE60-19	Part of Section R402.2.9 rewording; new subsection now used to specify slab-on-grade floor insulation installation requirements	Same as change between 2018 IECC and 2021 IECC	None	None
R402.2.10 Crawl Space Walls	Due to RE52-19	Section renumbered from R402.2.11 due to removal of existing Section R402.2.7	Same as change between 2018 IECC and 2021 IECC	None	None
R402.2.10 Crawl Space Walls	RE62-19	Breaks previously Prescriptive crawl space walls Section into Prescriptive insulation level and mandatory insulation installation sections	Same as change between 2018 IECC and 2021 IECC	Slightly increased stringency for Performance and ERI compliance	Slightly increased cost for Performance and ERI compliance
R402.2.10.1 Crawl Space Wall Insulation Installation	RE62-19	Part of Section R402.2.10 rewording; new subsection now used to specify crawl space wall insulation installation requirements; also now included as requirements for R405	Same as change between 2018 IECC and 2021 IECC	Slightly increased stringency for Performance and ERI compliance	Slightly increased cost for Performance and ERI compliance

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
		Performance and R406 ERI compliance			
R402.2.11 Masonry Veneer	Due to RE52-19	Section renumbered from R402.2.12 due to removal of existing Section R402.2.7	Same as change between 2018 IECC and 2021 IECC	None	None
R402.2.12 Sunroom and Heated Garage Insulation	Due to RE52-19	Section renumbered from R402.2.13 due to removal of existing Section R402.2.7	Same as change between 2018 IECC and 2021 IECC	None	None
R402.2.12 Sunroom and Heated Garage Insulation	RE100-19	Heated garages must now also meet this section's sunroom requirements and are also eligible for sunroom thermal isolation exception	Same as change between 2018 IECC and 2021 IECC	Slightly less stringency in applicable cases	Slightly less cost in applicable cases
R402.3 Fenestration	CE42-19 Part II	Removes "Prescriptive" from section title as part of residential IECC-wide formatting change that removes "mandatory" and "prescriptive" section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
402.3.5 Sunroom and Heated Garage Fenestration	RE100-19	Heated garages must now also meet this section's sunroom fenestration requirements and are also eligible for sunroom thermal isolation exception	Same as change between 2018 IECC and 2021 IECC	Slightly less stringency in applicable cases	Slightly less cost in applicable cases
R402.4 Air leakage	CE42-19 Part II	Removes "Mandatory" from section title as part of residential IECC-wide formatting change that removes "mandatory" and "prescriptive" section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
Table R402.4.1.1 Air Barrier, Air Sealing and Insulation Installation: General Requirements	RE58-19	Removes redundant General Requirements section air barrier language	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
Table R402.4.1.1 Air Barrier, Air Sealing and Insulation Installation: Plumbing, Wiring or Other Obstructions	RE68-19	Adds language to Plumbing and Wiring section title and air barrier criteria, and revises Insulation Installation Criteria language to clarify existing requirements	Same as change between 2018 IECC and 2021 IECC	None or slightly increased stringency depending on interpretation of existing language	None or slightly increased cost depending on interpretation of existing language
Table R402.4.1.1 Air Barrier, Air Sealing and Insulation Installation: Recessed Lighting	RE70-19	Revises Recessed Lighting section language, reinforcing that Section R402.4.5 <i>Recessed lighting</i> is also mandatory for R405 and R406 projects and clarifying recessed lighting insulation requirements	Same as change between 2018 IECC and 2021 IECC	None or slightly increased stringency depending on interpretation of existing language	None or slightly increased cost depending on interpretation of existing language
Table R402.4.1.1 Air Barrier, Air Sealing and Insulation Installation: Garage Separation	RE71-19	Adds language to the Garage Separation section's previously blank Insulation Installation Criteria to clarify that insulation is required here as for any other wall or floor component that separates conditioned space from unconditioned space	Same as change between 2018 IECC and 2021 IECC	None	None
Table R402.4.1.1 Air Barrier, Air Sealing and Insulation Installation: Narrow Cavities	RE72-19	Adds language to the Narrow Cavities section's previously blank Air Barrier Criteria to clarify that narrow cavities must be air sealed	Same as change between 2018 IECC and 2021 IECC	None	None
Table R402.4.1.1 Air Barrier, Air Sealing and Insulation Installation: Shafts, Penetrations	Unknown (closest is RE73-19)	Adds language to the Shafts, Penetrations section's previously blank Insulation Installation Criteria to clarify that insulation must be fitted tightly around utilities passing through thermal envelope shafts and penetrations	Same as change between 2018 IECC and 2021 IECC	None	None
Table R402.4.1.1 Air Barrier, Air	RE74-19, RE106-19	Revises section name to clarify foundation types that are	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
Sealing and Insulation Installation: Basement Crawl Space and Slab Foundations		included, and revises and adds to Air Barrier Criteria and Insulation Installation Criteria to clarify foundation related requirements			
Table R402.4.1.1 Air Barrier, Air Sealing and Insulation Installation: Rim Joists	RE82-19	Adds "Air Sealing" to table title, revises and adds language to Rim Joists section's Air Barrier Criteria and Insulation Installation Criteria, and adds footnote to clarify rim joist related requirements	Same as change between 2018 IECC and 2021 IECC	None	None
Table R402.4.1.1 Air Barrier, Air Sealing and Insulation Installation: Shafts, Penetrations	RE73-19, RE86-19	Adds language to the Shafts, Penetrations section's Air Barrier Criteria to clarify sealing requirements for utility penetrations	Same as change between 2018 IECC and 2021 IECC	None	None
R402.4.1.2 Testing	RE88-19	Adds square footage based air leakage rate testing alternative for attached single and multifamily building dwelling units and buildings or dwelling units that are 1500 square feet or smaller, and also clarifies mechanical ventilation requirements	Same as change between 2018 IECC and 2021 IECC	Unknown	Possibly decreased cost of construction
R402.4.1.2 Testing	RE100-19	Clarifies that air leakage testing is to be performed after building penetrations are sealed, and adds air leakage testing exception for certain heated, attached and detached private garages	Same as change between 2018 IECC and 2021 IECC	Slightly decreased stringency in applicable cases	Slightly decreased cost of construction in applicable cases
R402.4.1.2 Testing	RE96-19	Sets mandatory maximum building air leakage rate in all Climate Zones to 5 ACH50; also adds decimal place to ACH50	Same as change between 2018 IECC and 2021 IECC	Increased stringency if section is adopted since FBC-EC	Increased cost if section is adopted since FBC-EC

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
		values (“5” to “5.0”) to clarify intent		currently allows up to 7 ACH50	currently allows up to 7 ACH50
R402.4.1.3 Leakage Rate	RE96-19	New section allows the mandatory maximum leakage rate of 5.0 ACH50 to apply to Prescriptive compliance in Climate Zones 0 through 2 while continuing to require 3.0 ACH50 for Prescriptive compliance in Climate Zones 3 through 8	Same as change between 2018 IECC and 2021 IECC	Increased stringency (since FBC-EC currently allows up to 7 ACH50)	Increased cost (since FBC-EC currently allows up to 7 ACH50)
R402.4.6 Electrical and Communication Outlet Boxes (air-sealed boxes)	RE103-19	New section stipulates maximum air leakage requirements for electrical and communication boxes	Same as change between 2018 IECC and 2021 IECC	None (proponent states this is an alternative to already required sealing)	None (proponent states this is an alternative to already required sealing)
R402.5 Maximum fenestration U-factor and SHGC	CE42-19 Part II	Removes “Mandatory” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R402.5 Maximum fenestration U-factor and SHGC	RE-93-19	Adds a fenestration <i>U</i> -factor and SHGC exception for storm shelters in compliance with ICC 500	Same as change between 2018 IECC and 2021 IECC	Slightly decreased stringency in applicable cases	Slightly decreased cost of construction in applicable cases
R402.5 Maximum fenestration U-factor and SHGC	RE-105-19	Reduces the maximum area-weighted average fenestration SHGC permitted for Performance compliance in Climate Zones 0 through 3 from 0.50 to 0.40	Same as change between 2018 IECC and 2021 IECC (in FBC-EC, addressed in Section R405.5.3.4)	Increases stringency of Performance Compliance	Increases cost of Performance Compliance
R403.1 (IRC N1103.1) Controls	CE42-19 Part II	Removes “Mandatory” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
R403.1.1 Programmable Thermostat	Unknown	Adds that programmable thermostats must be able to maintain different set points for different days of the week	Same as change between 2018 IECC and 2021 IECC	None	None
R403.1.2 Heat Pump Supplementary Heat	CE42-19 Part II	Removes “Mandatory” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R403.2 Hot Water Boiler Temperature Reset	RE108-19	Revises section language for hot water boiler control schemes to match DOE standard	Same as change between 2018 IECC and 2021 IECC	None	None
R403.3.1 Ducts Located Outside Conditioned Space	RE109-19	Changes section title from “Insulation” to “Ducts Located Outside Conditioned Space” and revises section to require R-8 duct insulation for 3” diameter and larger ducts located in unconditioned space, which previously applied only to ducts located in attics	Same as change between 2018 IECC and 2021 IECC	Slightly increased stringency in some cases (homes with ducts in crawlspaces or other non-attic unconditioned space)	Slightly increased cost in some cases (homes with ducts in crawlspaces or other non-attic unconditioned space)
R403.3.1 Ducts Located Outside Conditioned Space	RE111-19	Changes section from Prescriptive to Mandatory (so combined with RE109-19, in part means ducts outside of conditioned space must be insulated to R-8 for all compliance options)	Same as change between 2018 IECC and 2021 IECC	Slightly increased stringency for Performance and ERI compliance	Slightly increased cost for Performance and ERI compliance
R403.3.1 Ducts Located Outside Conditioned Space	CE151-19 Part II	Adds insulation requirements for ducts buried beneath a building	Same as change between 2018 IECC and 2021 IECC	None or slightly decreased stringency (due to equivalent thermal distribution efficiency option) in applicable cases	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
R403.3.2 Ducts Located in Conditioned Space	RE109-19	Clarifies existing option that allows ductwork to be considered as being inside conditioned space, and adds two new options-- for ductwork in floor cavities and within exterior walls	Same as change between 2018 IECC and 2021 IECC, except current FBC-EC does not include this section at all, so additional language would be needed to create section	Slightly less stringent in some cases	None (optional)
R403.3.3.1 Effective R-value of Deeply Buried Ducts	Unknown	Clarifies that this section applies to Performance compliance	Same as change between 2018 IECC and 2021 IECC (FBC-EC does not include this section at all)	None	None
R403.3.4 Sealing	CE42-19 Part II	Removes “Mandatory” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R403.3.5 Duct Testing	CE42-19 Part II	Removes “Mandatory” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R403.3.5 Duct Testing	RE112-19	Removes exception that had exempted projects with ducts and air handlers located entirely within the building thermal envelope from the duct testing requirement	Same as change between 2018 IECC and 2021 IECC (except would not apply to FBC-EC Performance projects)	Increased stringency in applicable cases	Increased cost in applicable cases
R403.3.5 Duct Testing	RE114-19	Adds that duct testing is to be in accordance with ANSI/RESNET/ICC 380 or ASTM E1554	FBC-EC already requires testing in accordance with ANSI/RESNET/ICC 380; would add ASTM E1554 option	None	None
R403.3.5 Duct Testing	RE118-19	Clarifies types of ventilation systems noted in exception that are not required to have tested ducts	FBC-EC does not currently include any ventilation system duct testing exception language	Depends on understanding of FBC-EC not including this	Depends on understanding of FBC-EC not including this

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
				exception (would mean slightly increased stringency if FBC-EC interpreted as currently not requiring non-integrated ventilation system testing)	exception (would mean slightly increased cost if FBC-EC interpreted as currently not requiring non-integrated ventilation system testing)
R403.3.5 Duct Testing	Unknown	Adds heating and cooling to types of ducts in exception that are not required to be tested if not integrated with ducts serving heating or cooling systems	FBC-EC does not currently include any ventilation system duct testing exception language, so entire exception would be new	Unknown / not clear how new language should be understood	Unknown / not clear how new language should be understood
R403.3.6 Duct leakage	CE42-19 Part II	Removes “Prescriptive” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R403.3.6 Duct leakage	RE112-19	Adds Prescriptive compliance total duct leakage limit of 8 cfm/100 sq. ft. for cases in which all ducts and air handlers are located entirely within the building thermal envelope	Same as change between 2018 IECC and 2021 IECC	Increased stringency in applicable Prescriptive cases	Increased cost in applicable Prescriptive cases
R403.3.7 Building cavities	CE42-19 Part II	Removes “Mandatory” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
R403.4 Mechanical system piping insulation	CE42-19 Part II	Removes “Mandatory” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R403.5.1 Heated Water circulation and Temperature Maintenance Systems	CE42-19 Part II	Removes “Mandatory” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R403.5.1 Heated Water circulation and Temperature Maintenance Systems	CE29-19 Part II	“Readily Accessible” term deleted in favor of new term “in a location with ready access”	Same as change between 2018 IECC and 2021 IECC	None	None
R403.5.1.1 Circulation systems	CE159-19 Part II	Clarification removes some section text and moves the language that limits the temperature of water entering the cold-water piping for heated water recirculation systems from the Demand recirculation water systems section to this section	Same as change between 2018 IECC and 2021 IECC	None	None
R403.5.1.1.1 Demand recirculation water systems	CE159-19 Part II	Reorganizes section language due to CE159-19 Part II moving part of its text to another section	Same as change between 2018 IECC and 2021 IECC	None	None
R403.5.1.1.1 Demand recirculation water systems	RE125-19	Clarifies that the section only applies where a demand recirculation water system is installed, and makes the section mandatory	Same as change between 2018 IECC and 2021 IECC	Slightly increased stringency in applicable Performance and ERI compliance cases	Slightly increased cost in applicable Performance and ERI compliance cases
R403.5.2 Hot Water Pipe Insulation	CE42-19 Part II	Removes “Prescriptive” from section title as part of residential	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
		IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach			
R403.5.2 Hot Water Pipe Insulation	RE127-19	Clarifies hot water pipe insulation requirements	Same as change between 2018 IECC and 2021 IECC	None	None
R403.5.3 Drain Water Heat Recovery Units	RE129-19	Clarifies that the section only applies where a drain water heat recovery unit is installed, and makes the section mandatory	Same as change between 2018 IECC and 2021 IECC	Slightly increased stringency in applicable Performance and ERI compliance cases	Slightly increased cost in applicable Performance and ERI compliance cases
R403.6 Mechanical Ventilation	CE42-19 Part II	Removes “Mandatory” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R403.6 Mechanical Ventilation	RE132-19	Clarifies mechanical ventilation requirements	Same as change between 2018 IECC and 2021 IECC	None	None
R403.6.1 Heat or Energy Recovery Ventilation	RE139-19	New mandatory section requires a balanced heat recovery or energy recovery ventilation system in climate zones 7 and 8	Same as change between 2018 IECC and 2021 IECC	None (does not affect Florida Climate Zones)	None (does not affect Florida Climate Zones)
R403.6.2 Whole-Dwelling Mechanical Ventilation System Fan Efficacy	RE136-19	Clarifies how efficacy for fans used to provide whole-house mechanical ventilation must be determined and provides testing standard	Same as change between 2018 IECC and 2021 IECC	None	None
R403.6.2 Whole-Dwelling Mechanical Ventilation System Fan Efficacy	RE134-19	Removes efficacy exception for air handlers that are integral to HVAC equipment used to provide whole-house mechanical ventilation (efficacy requirement added for these systems is addressed in Table R403.6.1 changes, noted below); also	Same as change between 2018 IECC and 2021 IECC	Increased stringency in applicable cases	Increased cost in applicable cases

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
		changes “whole-house” to “whole-dwelling” in table title			
Table R403.6.2 Whole-Dwelling Mechanical Ventilation System Fan Efficacy	RE134-19	As part of RE134-19 changes, adds efficacy requirement to table for air handlers that are integral to HVAC equipment used to provide whole-house mechanical ventilation; also changes “whole-house” to “whole-dwelling” in table title	Same as change between 2018 IECC and 2021 IECC	Increased stringency in applicable cases	Increased cost in applicable cases
Table R403.6.2 Whole-Dwelling Mechanical Ventilation System Fan Efficacy	RE133-19	Increases the efficacy requirements for three of the fan locations listed in the table	Same as change between 2018 IECC and 2021 IECC	None (based on proponent’s research)	None (based on proponent’s research)
Table R403.6.2 Whole-Dwelling Mechanical Ventilation System Fan Efficacy	RE137-19	Clarifies table by changing fan types shown to broader categories and listing exhaust fans by minimum airflow rate	Same as change between 2018 IECC and 2021 IECC	None	None
R403.6.3 Testing	RE130-19	New section requiring testing of mechanical ventilation systems, with exception for certain kitchen range hoods	Same as change between 2018 IECC and 2021 IECC	Unknown	Slightly increased cost in applicable cases
R403.7 Equipment Sizing and Efficiency Rating	CE42-19 Part II	Removes “Mandatory” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R403.8 Systems Serving Multiple Dwelling Units	CE42-19 Part II	Removes “Mandatory” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
R403.9 Snow Melt and Ice System Controls	CE42-19 Part II	Removes “Mandatory” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R403.10 Energy Consumption of Pools and Spas	CE42-19 Part II	Removes “Mandatory” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R403.10 Energy Consumption of Pools and Spas	CE160-19 Part II	Revises section language slightly	Same as change between 2018 IECC and 2021 IECC	None	None
R403.10.1 Heaters	CE29-19 Part II	“Readily accessible” term deleted in favor of new term “in a location with ready access”	Same as change between 2018 IECC and 2021 IECC	None	None
R403.10.2 Time Switches	CE160-19 Part II	Clarifies that the equipment controlled by time switches in this section are heaters and pump motors	Same as change between 2018 IECC and 2021 IECC	None	None
R403.10.3 Covers	CE160-19 Part II	Revises section language slightly	Specific change would not apply to FBC-EC due to section wording differences	None	None
R403.11 Portable Spas	CE42-19 Part II	Removes “Mandatory” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R403.12 Residential Pools and Permanent Residential Spas	RE144-19	Makes section mandatory but clarifies that it only applies if these pools and/or spas are installed	Same as change between 2018 IECC and 2021 IECC	None (per proponent)	None (per proponent)
R403.12 Residential Pools and	CE160-19 Part II	Revises section language for consistency with the ISPSC	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
Permanent Residential Spas					
R404.1 Lighting equipment	CE42-19 Part II	Removes “Mandatory” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R404.1 Lighting equipment	RE7-19	Changes “lamps” to “lighting sources” to include high efficiency luminaries that do not include lamps, and excludes kitchen appliance lighting fixtures from lighting efficacy requirements	High efficiency luminaries that do not include lamps are already included in the FBC-EC; kitchen appliance lighting exclusion would be same as change between 2018 IECC and 2021 IECC	None or slightly decreased stringency	None or slightly decreased cost
R404.1 Lighting equipment	RE145-19	Changes permanent lighting high efficacy requirement from 90% of lighting to all lighting.	Same as change between 2018 IECC and 2021 IECC	Slightly increased stringency	Slightly increased cost
R404.1.1 Exterior Lighting	RE148-19	With several exceptions (including for detached one and two family dwellings and compliance with Section R404.1), this new section requires connected exterior lighting for residential buildings to comply with commercial exterior lighting Section C405.4	Same as change between 2018 IECC and 2021 IECC	None or slightly increased stringency	None or slightly increased cost
R404.1.2 Fuel Gas Lighting Equipment	CE42-19 Part II	Removes “Mandatory” from section title as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R404.2 Interior Lighting Controls	RE145-19	With several exceptions, new mandatory section requires either a dimmer, occupant sensor or other control built into the fixture	Same as change between 2018 IECC and 2021 IECC	Increased stringency	Increased cost

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
		for permanently installed lighting fixtures			
R404.3 Exterior Lighting Controls	RE149-19	New Prescriptive section requires specified automatic shut off controls where total permanent installed exterior lighting power is greater than 30 watts	Same as change between 2018 IECC and 2021 IECC	Slightly increased stringency in applicable Prescriptive cases	Slightly increased cost in applicable Prescriptive cases
Section R405 Total Building Performance	CE42-19 Part II	Changes section name from “Simulated Performance Alternative (Performance)”	Same as change between 2018 IECC and 2021 IECC	None	None
R405.2 Performance-Based Compliance	CE42-19 Part II	Changes section name from “Mandatory Requirements,” adds that the proposed design must meet the requirements of the sections indicated in new Table R405.2 (a consolidated listing of what were formerly identified as “Mandatory” requirements) and moves the Section R405.3 Performance based compliance requirements to this section	Same as change between 2018 IECC and 2021 IECC	None	None
R405.2 Performance-Based Compliance	RE111-19	Moves the Performance compliance duct insulation requirements from this section to Section R403.3.1	Same as change between 2018 IECC and 2021 IECC	None	None
R405.2 Performance-Based Compliance	RE151-19	Requires Performance compliance project envelope efficiency to meet or exceed residential 2009 IECC Table 402.1.1 or Table 402.1.3	Same as change between 2018 IECC and 2021 IECC	Increased stringency for Performance projects	Increased cost for Performance projects
Table R405.2 Requirements for Total Building Performance	CE42-19 Part II	New table providing the additional requirements for Performance compliance-- part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
[R405.3 Performance Based Compliance]	CE42-19 Part II	Deletes section and moves its Performance compliance requirements to Section R405.2	Same as change between 2018 IECC and 2021 IECC	None	None
R405.3 Documentation	Due to CE42-19 Part II	Section renumbered from R405.4 due to removal of existing Section R405.3	Same as change between 2018 IECC and 2021 IECC	None	None
R405.3.1 Compliance Software Tools	Due to CE42-19 Part II	Section renumbered from R405.4.1 due to removal of existing Section R405.3	Same as change between 2018 IECC and 2021 IECC	None	None
R405.3.2 Compliance Report	Due to CE42-19 Part II	Section renumbered from R405.4.2 due to removal of existing Section R405.3	Same as change between 2018 IECC and 2021 IECC	None	None
R405.3.2 Compliance Report	RE157-19	Removes language allowing batch sampling for stacked multi-family units	FBC-EC already prohibits batch sampling	None	None
R405.3.2 Compliance Report R405.3.2.1 Compliance Report for Permit Application R405.3.2.2 Compliance Report for Certificate of Occupancy	RE158-19	Revises and reorganizes section and subsections, and moves Section R405.3.3 content here; intended to clarify and improve usability, not add new requirements, but also adds requirement to show onsite renewable type and production size on the certificate of occupancy report	Same as change between 2018 IECC and 2021 IECC	None	None
R405.3.2.2 Compliance Report for Certificate of Occupancy	RE159-19	Adds requirement to declare the total building performance path on the title page of the energy report and building plans	Same as change between 2018 IECC and 2021 IECC	None	None
[R405.4.3 Additional documentation]	RE158-19	Deletes section for content in Section R405.3.2	Same as change between 2018 IECC and 2021 IECC	None	None
R405.4 Calculation Procedures	Due to CE42-19 Part II	Sections renumbered from R405.4, R405.4.1 and R405.4.2	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
R405.4.1 General R405.4.2 Residential Specifications		due to removal of existing Section R405.3			
Table R405.4.2(1) Specifications for the Standard Reference and Proposed Designs	Due to CE42-19 Part II	Table R405.5.2(1) renumbered due to removal of existing Section R405.3	Same as change between 2018 IECC and 2021 IECC	None	None
Table R405.4.2(1) Specifications for the Standard Reference and Proposed Designs: Air Exchange Rate	RE98-19	Adds decimal place to Air Exchange Rate section reference ACH50 values (“3” to “3.0” and “5” to “5.0”) to clarify intent	FBC-EC already provides ACH50 values to two decimal places	None	None
Table R405.4.2(1) Specifications for the Standard Reference and Proposed Designs: Service Water Heating	RE162-19	Reduces proposed design hot water use based on compactness of the hot water distribution system	Same as change between 2018 IECC and 2021 IECC	None or slightly reduced stringency for Performance projects	None or reduced cost for Performance projects
Table R405.4.2(1) Specifications for the Standard Reference and Proposed Designs: Service Water Heating	RE163-19	Reduces proposed design hot water use (original proposal reduced use for both standard reference and proposed design, but current 2021 IECC only shows reduction for proposed)	FBC-EC hot water use is currently determined in accordance with ANSI/RESNET/ICC 301 which reduces hot water use even further than this IECC change	2021 IECC does not appear to be written correctly here so difficult to assess	2021 IECC does not appear to be written correctly here so difficult to assess
Table R405.4.2(1) Specifications for the Standard Reference and Proposed Designs: Thermal Distribution	RE172-19	Stipulates the reference design duct location be the same as the proposed design	FBC-EC currently stipulates the reference design duct location to be entirely within the building thermal envelope	Somewhat decreased stringency in most Performance compliance cases	Somewhat decreased cost in most Performance compliance cases

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
Systems					
Table R405.4.2(1) Specifications for the Standard Reference and Proposed Designs: Air Exchange Rate	RE178-19	Clarifies that the reference design mechanical ventilation system type be the same as in the proposed design	Same as change between 2018 IECC and 2021 IECC	None or slightly changed (for Performance projects)	None or slightly changed (for Performance projects)
Table R405.4.2(1) Specifications for the Standard Reference and Proposed Designs: Mechanical Ventilation	RE178-19	Adds “system type” to definition of exhaust fan efficacy term used to calculate annual vent fan energy use as clarification	Same as change between 2018 IECC and 2021 IECC	None likely	None likely
Table R405.4.2(1) Specifications for the Standard Reference and Proposed Designs: Dehumidistat	RE173-19	Adds dehumidistat specifications for the reference and proposed design for proposed designs with mechanical ventilation systems with latent heat recovery	FBC-EC already includes dehumidistat specifications with same reference setpoint (differences include IECC section being specifically for mechanical ventilations systems, and FBC-EC has two dehumidifier reference efficiencies, depending on total capacity, vs. one reference efficiency in the IECC)	None or slightly changed (for applicable Performance projects)	None or slightly changed (for applicable Performance projects)
R405.5 Calculation Software Tools R405.5.1 Minimum Capabilities R405.5.2 Specific Approval R405.5.3 Input Values	Due to CE42-19 Part II	Sections renumbered from R405.6, R405.6.1, R405.6.2 and R405.6.3 due to removal of existing Section R405.3	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
R406.2 ERI Compliance	CE42-19 Part II	Revises existing section text as part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach, and also moves building thermal envelope efficiency requirements to later section	Same as change between 2018 IECC and 2021 IECC	None	None
R406.2 ERI Compliance	RE111-19	Moves the ERI compliance duct insulation requirements from this section to Section R403.3.1	Same as change between 2018 IECC and 2021 IECC	None	None
Table R406.2 Requirements for Total Building Performance	CE42-19 Part II	New table providing the additional requirements for ERI compliance-- part of residential IECC-wide formatting change that removes “mandatory” and “prescriptive” section labels in favor of a tabular approach	Same as change between 2018 IECC and 2021 IECC	None	None
R406.3 Building Thermal Envelope	CE42-19 Part II	New section (and related subsections discussed below) to stipulate building thermal envelope requirements	Same as change between 2018 IECC and 2021 IECC	None	None
R406.3.1 On-site Renewables are Not Included	CE42-19 Part II	New subsection to stipulate building thermal envelope requirements if on-site renewables are not included (note: CE42-19 changes maintain same requirements as previous version, but due to RE150-19, final Section R406.3.1 language does affect stringency)	Same as change between 2018 IECC and 2021 IECC	None	None
R406.3.1 On-site Renewables are Not Included	RE150-19	Replaces building thermal envelope requirements for cases in which on-site renewables are not included with a total building thermal envelope UA	Same as change between 2018 IECC and 2021 IECC	None or slightly changed in some cases (for ERI projects)	Flexibility would allow cost savings in some cases (for ERI projects)

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
		requirement; intended to increase thermal “backstop” flexibility			
R406.3.2 On-site Renewables are Included	CE42-19 Part II	New subsection to stipulate building thermal envelope requirements if on-site renewables are included; requirements are same as previous version	Same as change between 2018 IECC and 2021 IECC	None	None
R406.4 Energy Rating Index	Due to CE42-19 Part II	Section renumbered from R406.3 due to addition of new Section R406.3	Same as change between 2018 IECC and 2021 IECC	None	None
R406.4 Energy Rating Index	RE184-19	Limits reduction in energy use of the rated design due to on-site renewable energy to 5 percent of the total energy use	Same as change between 2018 IECC and 2021 IECC	Increased stringency in applicable ERI project cases	Increased cost in applicable ERI project cases
R406.5 ERI-Based Compliance	Due to CE42-19 Part II	Section renumbered from R406.4 due to addition of new Section R406.3	Same as change between 2018 IECC and 2021 IECC	None	None
R406.5 ERI-based compliance	RE205-19	Added language specifies that both the proposed design and confirmed built dwelling unit be shown to meet ERI requirements	Same as change between 2018 IECC and 2021 IECC	None or slightly increased stringency for ERI projects depending on typical practice	None or slightly increased cost for ERI projects depending on typical practice
Table R406.5 Maximum Energy Rating Index	CE42-19 Part II	Moves footnote “a” regarding on-site renewable energy used for ERI compliance from this table to Section R406.3.2	FBC-EC already addresses on-site renewable energy use in a separate section (R406.2)	None	None
Table R406.5 Maximum Energy Rating Index	RE192-19	Reduces maximum ERI for all Climate Zones; in Florida Climate Zones 1 and 2, reduces maximum IECC ERI from 57 to 52	Would reduce maximum FBC-EC ERI for both Florida Climate Zones from 58 to 52	Increased stringency (for ERI projects)	Increased cost (for ERI projects)
R406.6 Verification by Approved Agency	Due to CE42-19 Part II	Section renumbered from R406.5 due to addition of new Section R406.3	Same as change between 2018 IECC and 2021 IECC	None	None
R406.6 Verification by Approved Agency	RE199-19	Clarifies that verification of the Energy Rating Index is determined by an approved third	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
		party and verification of ERI compliance (mandatory items and maximum ERI score) is completed by the AHJ or an approved third-party inspection agency			
R406.7 Documentation	Due to CE42-19 Part II	Section renumbered from R406.6 due to addition of new Section R406.3	Same as change between 2018 IECC and 2021 IECC	None	None
R406.7.1 Compliance Software Tools	Due to CE42-19 Part II	Section renumbered from R406.6.1 due to addition of new Section R406.3	Same as change between 2018 IECC and 2021 IECC	None	None
R406.7.2 Compliance Report	Due to CE42-19 Part II	Section renumbered from R406.6.2 due to addition of new Section R406.3	Same as change between 2018 IECC and 2021 IECC	None	None
R406.7.2 Compliance Report	RE205-19	Stipulates that compliance documentation be created and submitted for both the proposed design and confirmed built dwelling unit, and moves required information to proposed and confirmed subsections	Same as change between 2018 IECC and 2021 IECC	None or slightly increased stringency for ERI projects depending on typical practice	None or slightly increased cost for ERI projects depending on typical practice
R406.7.2.1 Proposed Compliance Report for Permit Application	RE205-19	RE205-19 breaks out ERI compliance reporting into permit application and certificate of occupancy sections similar to how R405 compliance reporting is organized; new Section R406.7.2.1 provides the ERI permit application reporting requirements	Same as change between 2018 IECC and 2021 IECC	None	None
R406.7.2.2 Confirmed Compliance Report for a Certificate of Occupancy	RE205-19	RE205-19 breaks out ERI compliance reporting into permit application and certificate of occupancy sections similar to how R405 compliance reporting is organized; new Section	Same as change between 2018 IECC and 2021 IECC	None or slightly increased stringency for ERI projects depending on typical practice	None or slightly increased cost for ERI projects depending on typical practice

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
		R406.7.2.2 provides the ERI certificate of occupancy reporting requirements			
R406.7.2.1 Proposed Compliance Report for Permit Application	RE202-19	Requires the ERI proposed compliance report to declare ERI on the title page and on building plans	Same as change between 2018 IECC and 2021 IECC	None	None
R406.7.2.2 Confirmed Compliance Report for a Certificate of Occupancy	RE202-19	Requires the ERI confirmed compliance report to declare ERI on the title page and on building plans	Same as change between 2018 IECC and 2021 IECC	None	None
R406.7.3 Renewable energy certificates (RECs) documentation	RE204-19	New section requires that where onsite renewable energy is included in the calculation of an ERI, the code official must be provided with either 1) substantiation that the associated RECs are owned by, or retired on behalf of, the homeowner, or 2) a contract that conveys the RECs associated with the onsite renewable energy to the homeowner, or conveys an equivalent quantity of RECs associated with other renewable energy to the homeowner	Same as change between 2018 IECC and 2021 IECC	Slight reduction in overall community energy use for applicable ERI projects as these RECs won't be used for offsetting others	Slight increase to cost of PV system for applicable ERI projects as utility or others cannot offset costs by buying RECs
R406.7.4 Additional Documentation	Due to CE42-19 Part II and RE204-19	Section renumbered from R406.6 due to addition of new Sections R406.3 and R406.7.3	Same as change between 2018 IECC and 2021 IECC	None	None
R406.7.5 Specific Approval	Due to CE42-19 Part II and RE204-19	Section renumbered from R406.6 due to addition of new Sections R406.3 and R406.7.3	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
R406.7.6 Input Values	Due to CE42-19 Part II and RE204-19	Section renumbered from R406.6 due to addition of new Sections R406.3 and R406.7.3	Same as change between 2018 IECC and 2021 IECC	None	None
R407 Tropical Climate Region Compliance Path	Unknown (RE15-19?)	New section title for tropical climate region option	Same as change between 2018 IECC and 2021 IECC	None	None
R407.1 Scope	Unknown (RE15-19?)	New scope section for tropical climate region option, but no change in stringency	Same as change between 2018 IECC and 2021 IECC	None	None
R407.2 Tropical Climate Region	Unknown (RE15-19?)	Moves main tropical climate region option language from 2018 IECC Section R401.2.1, but no change in stringency	Same as change between 2018 IECC and 2021 IECC	None	None
R408 Additional Efficiency Package Options	RE209-19	New section title for additional efficiency package options	Same as change between 2018 IECC and 2021 IECC	See Section R408.2	See Section R408.2
R408.1 Scope	RE209-19	New scope section for additional efficiency package options	Same as change between 2018 IECC and 2021 IECC	See Section R408.2	See Section R408.2
R408.2 Additional Efficiency Package Options	RE209-19	New section provides additional efficiency options in subsections listed, used to fulfil Section R401.2.5 additional efficiency requirements	Same as change between 2018 IECC and 2021 IECC	Increased stringency because used in conjunction with Section R401.2.5 additional energy efficiency requirements	Increased cost because used in conjunction with Section R401.2.5 additional energy efficiency requirements
R408.2.1 Enhanced Envelope Performance Option	RE209-19	New section provides enhanced envelope efficiency option that 1) reduces the allowed total building thermal envelope's UA to 95% of the total UA resulting from using Table R402.1.2 U-factors, and 2) reduces the allowed average SHGC of glazed fenestration to 95% of the maximum SHGC allowed in Table R402.1.2	Same as change between 2018 IECC and 2021 IECC	Increased stringency because used in conjunction with Section R401.2.5 additional energy efficiency requirements	Increased cost because used in conjunction with Section R401.2.5 additional energy efficiency requirements

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
R408.2.2 More Efficient HVAC Performance Option	RE209-19	New section provides three increased HVAC equipment efficiency options that require increased heating and cooling efficiency	Same as change between 2018 IECC and 2021 IECC	Increased stringency because used in conjunction with Section R401.2.5 additional energy efficiency requirements	Increased cost because used in conjunction with Section R401.2.5 additional energy efficiency requirements
R408.2.3 Reduced Energy Use in Service Water-Heating Option	RE209-19	New section provides three increased service water-heating system efficiency options	Same as change between 2018 IECC and 2021 IECC	Increased stringency because used in conjunction with Section R401.2.5 additional energy efficiency requirements	Increased cost because used in conjunction with Section R401.2.5 additional energy efficiency requirements
R408.2.4 More Efficient Duct Thermal Distribution System Option	RE209-19	New section provides three increased duct system efficiency options (one ductless and two location based)	Same as change between 2018 IECC and 2021 IECC	Increased stringency because used in conjunction with Section R401.2.5 additional energy efficiency requirements	Increased cost because used in conjunction with Section R401.2.5 additional energy efficiency requirements
R408.2.5 Improved Air Sealing and Efficient Ventilation System Option	RE209-19	New section provides air sealing and ventilation efficiency option that includes a maximum air leakage rate of 3.0 ACH50 and ERV or HRV efficiency requirements	Same as change between 2018 IECC and 2021 IECC	Increased stringency because used in conjunction with Section R401.2.5 additional energy efficiency requirements	Increased cost because used in conjunction with Section R401.2.5 additional energy efficiency requirements
Chapter R5: Existing Buildings					
R501.1.1 General	Unknown	2018 IECC Section R501.2 <i>Existing buildings</i> text is moved up to this section	FBC-EC already has this text in this section	None	None
R501.2 Compliance	Unknown	2018 IECC Section R501.1.1 <i>Additions, alterations, or repairs: General</i> text is moved down to	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
		this section and additional compliance structure is provided			
R502.2 Change in Space Conditioning	Unknown	Moved from Section R503.2 in 2018 IECC, and two existing, related change in space conditioning compliance options (one Total UA and one Performance) are relocated to this section	Same as change between 2018 IECC and 2021 IECC	None	None
R502.3.1 Building Envelope	Unknown	Renumbered section exempts new envelope assemblies from the requirements of Section R402.4.1.2 (air leakage testing)	FBC-EC Section R402.4.1.2 does not require air leakage testing for “additions, alterations, renovations or repairs of the building thermal envelope of existing buildings in which the new construction is less than 85 percent of the building thermal envelope”	None or minor in applicable cases	None or minor in applicable cases
R502.3.2 Heating and Cooling Systems	Unknown	Renumbered Prescriptive compliance section now states “HVAC ducts newly installed as part of an addition...” must comply with Section R403 instead of “New heating, cooling and duct systems that are part of the addition...” must comply with Section R403	Same as change between 2018 IECC and 2021 IECC	Slightly increased stringency in applicable cases	Slightly increased cost in applicable cases
R502.3.2 Heating and Cooling Systems	Unknown	Prescriptive existing system duct testing exception formerly limited to ducts extending less than 40 linear feet in unconditioned spaces now does not include a duct length limit	Same as change between 2018 IECC and 2021 IECC	Slightly less stringency in applicable cases	Slightly less cost in applicable cases
R503.1 General	RE215-19	Removes redundant language regarding alterations and reorganizes section accordingly	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
R503.1.2 Heating and Cooling Systems	Unknown	Renumbered Prescriptive compliance section now states “HVAC ducts newly installed as part of an alteration...” must comply with Section R403 instead of “New heating, cooling and duct systems that are part of the alteration...” must comply with Section R403	Same as change between 2018 IECC and 2021 IECC	Slightly increased stringency in applicable cases	Slightly increased cost in applicable cases
R503.1.2 Heating and Cooling Systems	Unknown	Prescriptive existing system duct testing exception formerly limited to ducts extending less than 40 linear feet in unconditioned spaces now does not include a duct length limit	Same as change between 2018 IECC and 2021 IECC	Slightly less stringency in applicable cases	Slightly less cost in applicable cases
R503.1.4 Lighting	RE218-19	Reduces alteration lighting efficacy exception from alterations that replace less than 50 percent of the luminaires to those replacing less than 10 percent of the luminaires	Same as change between 2018 IECC and 2021 IECC	Slightly increased stringency in applicable cases	Slightly increased cost in applicable cases
R505.1 General	Unknown	Existing Sections R505.1 addressing change in occupancy is replaced with existing Section R505.2 addressing conversion to a dwelling unit from another use or occupancy	Same as change between 2018 IECC and 2021 IECC	None	None
Chapter R6: Referenced Standards					
ASTM E2178-13: Standard Test Method for Air Permeance of Building Materials	CE19-19 Part II	New air permeance test method standard	Same as change between 2018 IECC and 2021 IECC	None	None
E1827—2011(2017):	ADM47-IRC-19	Updates ASTM E1827-11 to (2017) edition	Would be new referenced standard in FBC-EC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
Standard Test Methods for Determining Airtightness of Building Using an Orifice Blower Door					
ANSI/APSP/ICC 14—2019: American National Standard for Portable Electric Spa Energy Efficiency	ADM47-IRC-19	Updates ANSI/APSP/ICC 14 to 2019 edition	Same as change between 2018 IECC and 2021 IECC	None	None
ANSI/APSP/ICC 15a—2020: American National Standard for Residential Swimming Pool and Spa Energy Efficiency	ADM47-IRC-19	Updates ANSI/APSP/ICC 14 to 2019 edition	Same as change between 2018 IECC and 2021 IECC	None	None
E1554/E1554M-13: Standard Test Methods for Determining Air Leakage of Air Distribution Systems by Fan Pressurization	RE114-19	New air distribution system air leakage test method	Same as change between 2018 IECC and 2021 IECC	None	None
ICC 500-2020: ICC/NSSA Standard for the Design and Construction of Storm Shelters	CE93-19 Part II	New storm shelter design and construction standard	Same as change between 2018 IECC and 2021 IECC	None	None
IEBC-21: International	Unknown	Updates IEBC from 2018 to 2021 edition	FBC-EC does not reference the IEBC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
Existing Building Code					
IFGC-21: International Fuel Gas Code	Unknown	Updates IFGC from 2018 to 2021 edition	FBC-EC does not reference the IFGC	None	None
IMC-21: International Mechanical Code	Unknown	Updates IMC from 2018 to 2021 edition	FBC-EC does not reference the IMC	None	None
IPC-21: International Plumbing Code	Unknown	Updates IPC from 2018 to 2021 edition	FBC-EC does not reference the IPC	None	None
IPMC-21: International Property Maintenance Code	Unknown	Updates IPMC from 2018 to 2021 edition	FBC-EC does not reference the IPMC	None	None
IPSDC-21: International Private Sewage Disposal Code	Unknown	Updates IPSDC from 2018 to 2021 edition	FBC-EC does not reference the IPSDC	None	None
IRC-21: International Residential Code	Unknown	Updates IRC from 2018 to 2021 edition	FBC-EC does not reference the IRC	None	None
NEMA OS 4-2016 Requirements for Air-Sealed Boxes for Electrical and Communication Applications	Unknown	New electrical and communications air-sealed boxes requirements standard	Same as change between 2018 IECC and 2021 IECC	None	None
NFPA 70-20 National Electric Code	Unknown	Updates NFPA 70 from 2017 to 2020 edition	Same as change between 2018 IECC and 2021 IECC	None	None
100—2020: Procedure for Determining Fenestration Products U-factors	ADM47- IPC-19	Updates NFRC 100 from 2017 to 2020 edition	Same as change between 2018 IECC and 2021 IECC	None	None

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
200—2020 Procedure for Determining Fenestration Product Solar Heat Gain Coefficients and Visible Transmittance at Normal Incidence	ADM47-IPC-19	Updates NFRC 200 from 2017 to 2020 edition	Same as change between 2018 IECC and 2021 IECC	None	None
400—2020 Procedure for Determining Fenestration Product Air Leakage	ADM47-IPC-19	Updates NFRC 400 from 2017 to 2020 edition	Same as change between 2018 IECC and 2021 IECC	None	None
ANSI/RESNET/ICC 301—2019 Standard for the Calculation and Labeling of the Energy Performance of Dwelling and Sleeping Units using an Energy Rating Index	ADM47-IRC-19	Updates ANSI/RESNET/ICC 301 from 2014 to 2019 edition	FBC-EC already references the 2019 edition	None	None
ANSI/RESNET/ICC 380—2019: Standard for Testing Airtightness of Building, Dwelling Unit and Sleeping Unit Enclosures, Airtightness of Heating and Cooling Air Distribution Systems, and Airflow of	ADM47-IRC-19	Updates ANSI/RESNET/ICC 380 from 2016 to 2019 edition	Same as change between 2018 IECC and 2021 IECC	Slightly improved	Proponent indicates none

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
Mechanical Ventilation Systems					
127—2011 Factory-built Fireplaces—with revisions through July 2016	ADM47-IECC-R-19	Updates UL 127 name and to include revisions through July 2016	Same as change between 2018 IECC and 2021 IECC	None	None
515—2015 Electrical Resistance Heat Tracing for Commercial Applications	ADM47-IECC-R-19	Updates UL 515 from 2011 to 2015 edition	Same as change between 2018 IECC and 2021 IECC	None	None
Appendices					
Appendix RA Board of Appeals	ADM43-19 Part IV	New appendix provides provisions for the establishment of a board of appeals within the jurisdiction to hear applications for modification of the requirements of the code	The Florida Building Commission has no authority to adopt such an appendix as part of the FBC-EC	None	None
Appendix RB Solar-Ready Provisions—Detached One- and Two-Family Dwellings and Townhouses	Due to ADM43-19 Part IV	Moves Solar Ready provisions appendix from “RA” to “RB”	Same as change between 2018 IECC and 2021 IECC	None	None
Appendix RB Solar-Ready Provisions—Detached One- and Two-Family Dwellings and Townhouses: RB103.1 General	RE222-19	Modifies shaded building exception language	Same as change between 2018 IECC and 2021 IECC	None (not mandatory unless adopted by ordinance)	None (not mandatory unless adopted by ordinance)
Appendix RB Solar-Ready Provisions—	RE222-19	New section requires solar-ready zone set back from existing or	Same as change between 2018 IECC and 2021 IECC	None (not mandatory unless	None (not mandatory unless

2021 IECC Section and Title*	ICC Code Change No.	Change Summary b/t 2018 IECC and 2021 IECC	Change Summary b/t 2020 FBC-EC and 2021 IECC	Anticipated Energy Impact on FBC-EC if Adopted	Anticipated Cost Impact on FBC-EC if Adopted
Detached One- and Two-Family Dwellings and Townhouses: RB103.5 Shading		new, permanently affixed objects on the building or site		adopted by ordinance)	adopted by ordinance)
Appendix RB Solar-Ready Provisions— Detached One- and Two-Family Dwellings and Townhouses: RB103.6 Capped Roof Penetration Sleeve	RE222-19	New section provides requirements for capped roof penetration sleeves	Same as change between 2018 IECC and 2021 IECC	None (not mandatory unless adopted by ordinance)	None (not mandatory unless adopted by ordinance)
Appendix RB Solar-Ready Provisions— Detached One- and Two-Family Dwellings and Townhouses: RB103.7, RB103.8, RB103.9 and RB103.10	Due to RE222-19	Sections renumbered due to new Sections RB103.5 and RB103.6	Same as change between 2018 IECC and 2021 IECC	None	None
Appendix RC Zero Energy Residential Building Provisions	RE223-19	New appendix provides provisions for zero energy residential buildings based on Energy Rating Index	Same as change between 2018 IECC and 2021 IECC	None (not mandatory unless adopted by ordinance)	None (not mandatory unless adopted by ordinance)

* Code section numbers in [brackets] are 2018 IECC residential sections that were reed in their entirety in the 2020 IECC.