OHIO ENERGY COMPLIANCE FLOWCHART FOR NEW BUILDINGS (March 1, 2024) This chart is a non-enforceable tool developed by the BBS staff and intended to be a companion to, but not a substitute for reading the actual enforceable code language. **Department of** Commerce Ohio Board of Building Standards Occupancy? New detached 1, 2, and 3 family dwellings and their accessory structures All new buildings other than detached 1, 2, or 3 2019 Residential Code of Ohio (RCO) family dwellings and their *As defined in the ASHRAE 90.1 & IECC Chapter 11 accessory structures **Section 1101.2.1** RCO Sections 1101.14-1104 **RCO Section 1106:** OBC 310.2.2 Energy Rating Index (ERI) **Ohio Building Code (OBC)** Compliance Alternative Chapter 13 **RCO Section 1112** RCO Section 1105: **RCO Mandatory Provisions** Section 1301.1.1 **RCO Section** Simulated Performance RCO Section 1102.1: OHBA Alternative Code (Not permitted for OBC 1102.1.5: Alternative + RCO Simplified Prescriptive Total UA Alternative 310.4.5.1 alternative) **Mandatory Provisions Software tool:** A simulation program complying with No software needed RCO Section 1106.6.1 such **Commercial building** meaning: Software tool: Software tool: A simulation Table 1102.1.2 as Ekotrope, EnergyGauge **RCO Section 1112.1.2** program complying with REScheck 1. Groups A, B, E, F, H, I, M, S, and U Occupancy? USA, REM/Rate RCO Section 1105.4.1 such (select 2018 IECC as OHBA Alternative Code-2. Group R-1 as Ekotrope, REM/Rate, code) or other Compliance Path #1 3. Groups R-2, R-3 and R-4 > 3 stories $\mathcal{S}_{\mathcal{O}}^{\mathcal{O}}$ DOE-2, EnergyGuage. simulation program above grade plane OBC 310.4.5 Alternative No software needed compliance options for Group R-3 Yes Residential building* Table 1112.2.1 **RCO Mandatory Provisions =** meaning: Sections 1101.14, 1102.4, 1102.5, 1103.1, Group R-1 Transient Lodging Structure? Residential building* meaning: 1103.3.2, 1103.3.3, 1103.3.5, 1103.4, Groups R-2, R-3 and R-4 \leq 3 **RCO Section 1112.1.2** Group R-3 \leq 3 stories above grade 1103.6, 1103.7, 1103.8, 1103.9, and 1104 stories above grade plane OHBA Alternative Codeplane, exclusively dwelling units, No Compliance Path #2 each unit having independent exit 2018 IECC Chapters R1-R4 2019 ASHRAE 90.1 **2021 IECC** No software needed Section R401.2 **Section 4.2.1.1 Chapters C1-C4** Table 1112.2.1 Scope of standard includes all buildings except low-rise residential* Section C401.2 2021 IECC buildings meaning: 2021 IECC Chapters R1-R4 **Section C407 + C408** 1. Groups A, B, E, F, H, I, M, S, and U Section R401.2 1ECC C401.2.2 **Total Building 2018 IECC** 2. Group R-1 C401.2.1(2 Performance Section R406: 3. Multi-family structures (R-2, R-3, and R-4) > 3 stories above grade **2018 IECC** Energy Rating Index **2018 IECC Sections R401-R404:** Section R405: (ERI) Software tool: A simulation program Simplified Prescriptive Simulated Performance Compliance complying with C407.5 such as DOE-2, Alternative + 2018 Alternative EnergyPlus, or BLAST. **IECC Mandatory** No software needed **Provisions** 2018 IECC Mandatory Table R402.1 or **Provisions** Section R402.1.5 Total UA Software tool: 2019 ASHRAE 90.1 2019 ASHRAE 90.1 2019 ASHRAE 90.1 REScheck (select 2018 IECC as code) or other Section 5.5 Prescriptive Building Envelope Section 11: Energy Cost Normative Appendix G: Software tool: A simulation simulation program Option, or **Budget Method** Software tool: Performance Rating program complying with IECC Section 5.6 Building Envelope Tradeoff A simulation program (Allows trade-offs between Section R405.4.1 such as Method **2021 IECC 2021 IECC** complying with IECC Option (Allows trade-offs between 2021 IECC **2021 IECC** all building systems) Ekotrope, REM/Rate, DOE-2, **Sections C402 to C406 +** Section R406.6.1 such as **Sections R401.2.1,** envelope components only) Sections R401.2.2, **Sections R401.2.3,** EnergyGuage. Ekotrope, EnergyGauge R401-R404, + C408 Sections 6-10: Prescriptive HVAC, Water R405, + R401.2.5: R406, + R401.2.5: USA, REM/Rate. Prescriptive Compliance R401.2.5: Heating, Power, and Lighting requirements **Total Building Energy Rating Index** Software tool: A Software tool: A Prescriptive Performance Option (ERI) Option simulation program simulation program Compliance Option complying with No software needed No software needed **2018 IECC Mandatory Provisions =** complying with Section Normative Appendix Table C402.1.3 or Tables 5.5-4 or 5.5-5 **Software tool:** A simulation Sections R401.3, R402.4, R402.5, R403.1, R403.1.2, R403.3.2, R403.3.3, 11.4 such as DOE-2 or No software needed G2.2 such as DOE-2 or Section C402.1.5 Component Software tool: A simulation or Software tool: COMcheck (select 2019 program complying with R403.3.5, R403.4, R403.5.1, R403.6, R403.7, R403.8, R403.9, R403.10, EnergyPlus. Table R402.1.3 or program complying with EnergyPlus. **Performance Software tool:** ASHRAE 90.1 as code) or other simulation Section R406.7.1 such as Section R402.1.5 Total UA R403.11 and R404 Section R405.5 such as COMcheck (select 2021 IECC as program complying with Normative Appendix Ekotrope, EnergyGuage Software tool: REScheck (select Ekotrope, REM/Rate, DOE-2, code) or other simulation program C3 such as DOE-2 or EnergyPlus. USA, REM/Rate. 2021 IECC as code) or other such as DOE-2, EnergyPlus, or EnergyGuage. simulation program BLAST