City of Louisville
COLORADO • SINCE 1878

# *Building Code Board of Appeals*

## *Agenda*

**May 12, 2025**
**City Hall, Council Chambers**
**749 Main Street**
**2:00 PM**

*Members of the public are welcome to attend and give comments remotely; however, the in-person meeting may continue even if technology issues prevent remote participation.*

*Join Zoom Meeting*
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*The Board will accommodate public comments during the meeting. Anyone may also email comments to the Board prior to the meeting at Building@LouisvilleCO.gov.*

1. Call to Order
2. Roll Call
3. Approval of Agenda
4. Public Comments on Items Not on the Agenda

Persons planning to attend the meeting who need sign language interpretation, translation services, assisted listening systems, Braille, taped material, or special transportation, should contact the City Clerk's Office at 303.335.4574 or ClerksOffice@LouisvilleCO.gov. A forty-eight-hour notice is requested.

Si requiere una copia en español de esta publicación o necesita un intérprete durante la reunión, por favor llame a la Ciudad al 303.335.4574.

5. First meeting of 2025:
    A. Approval of posting locations for agendas. All boards/commissions will post their agendas in the following locations. Vote by voice vote.
        i. City Hall, 749 Main Street
        ii. Library
        iii. PD/Court
        iv. Rec Center
        v. Website, www.LouisvilleCO.gov
    B. The Election of Officers for 2025
    C. The Board's 2025 Meeting Dates

6. Board recommendations for using the 2024 Cohort Energy Code for Residential and Commercial code or the 2024 IECC original version both with a few amendments

7. Discussion Items for Next Meeting

8. Adjourn

City of Louisville
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# DRAFT RESIDENTIAL AMENDMENTS FOR 2024 IECC ADOPTION

Version: Explanatory Version 1.2 DRAFT
Version Date: April 17, 2025

About This File: This document contains the regionally-aligned amendments to the 2024 International Energy Conservation Code – Residential Chapter. This is the "Explanatory" version which includes short notes and tags about each amendment as well as tracked changes (strikeouts and underlines) showing what changed from the base code.

Cohort Background and Goals: The 2024-2025 Metro Regional Building Policy Cohort (the "code cohort") is an extension and expansion of a previous successful cohort effort. Goals of the cohort are to collaboratively review and adopt the most recent energy code – the 2024 International Energy Conservation Code (IECC) – along with regionally-aligned and consistent supporting amendments. Primary outcomes include reducing energy use and climate emissions in the built environment while balancing affordability and equity; improving region-wide consistency for builders, developers, and contractors; emphasizing flexibility without sacrificing performance; streamlining workload for budget-constrained building departments; and allowing for adjustments in each community while maintaining overall general alignment. Primary participating communities include Boulder County, City of Boulder, Brighton, Broomfield, Berthoud, Edgewater, Erie, Golden, Lafayette, Longmont, Louisville, Northglenn, Superior, Thornton, and Westminster. The code cohort is expanding to the remainder of the Denver metro area communities in 2025. The code cohort is jointly led and supported by participating local governments, with facilitation and code expertise from Lotus Engineering and Sustainability, the Southwest Energy Efficiency Project (with support from the U.S. Department of Energy), and Shums Coda (with support from Xcel Energy). Funding is provided by participating local governments and by the federal government through a Climate Pollution Reduction Grant (CPRG) to the Denver Regional Council of Governments (DRCOG) for the Decarbonize DRCOG project.

Source Materials and Terminology: These amendments are for the 2024 International Energy Conservation Code, first printing, as published by the International Code Council. Most of the amendments are from the Low Energy and Carbon Code developed by the Colorado Energy Code Board (in draft form as of April 2025, and unofficially denoted here as "LECC"), unless otherwise noted. It also incorporates agreed-upon principles and frameworks from each of the participating cohort communities (denoted here as "Cohort"), and pulls several additional amendments from the previous 2021 IECC code cohort. Minor amendments are from the Model Green Code developed by the Colorado Energy Office (in draft form as of Feb 2025, and denoted here as "Green"). Other

resources consulted and considered include amendment packages from other states, other local governments in Colorado, and national stakeholder groups.

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## ADOPTING LANGUAGE

**Section xx.** The International Energy Conservation Code, 2024 Edition, (the "IECC"), as published by the International Code Council, 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001, a copy of which is on file and open for inspection in the office of the [city/town/county] clerk, is hereby adopted by reference subject to the additions, amendments, and appendices set forth herein. The subject matter of the IECC includes the design of energy-efficient and high-performance buildings and related energy uses including mechanical, lighting, power systems, and electric vehicle infrastructure for the purpose of protecting the public health, safety, and welfare. The IECC-Residential includes appendices RB, RE, RJ, and RK as amended. The 2024 IECC, as amended in this Article, shall apply to all property within the [Community]. The IECC is amended as follows.

## RESIDENTIAL AMENDMENTS

This adopts the solar-ready, EV-ready, and electric-ready appendices required by current state law. It also adds demand response control capability for water heaters, required by state law. (LECC)

*[Simplification from LECC] [Required by law]*

1. **Section R101.2.1 Appendices** is amended as follows:
   **R101.2.1 Appendices**. Provisions in the appendices shall not apply unless specifically adopted. Appendices RB, RE, RJ, and RK as amended are hereby adopted.

This adds definitions necessary for the amendments below. (All-electric building, combustion equipment, future electric equipment, mixed fuel buildings, and off-grid homes are from Cohort; emergency power system and standby power system are from 2024 IBC)

*[Clarification]*

2. **Section R202 GENERAL DEFINITIONS** is amended to add the following definitions in alphabetical order:

**ALL-ELECTRIC BUILDING.** A new *building* that contains no permanently-installed *combustion equipment* or plumbing for *combustion equipment,* or an *existing building* that contains no permanently-installed *combustion equipment.*

**COMBUSTION EQUIPMENT.** Equipment or appliances that use *fuel gas*, *fuel oil*, or any other hydrocarbon-derived fuel or fuel blend to perform functions such as space heating, space cooling, *service water heating* (including pools and spas), cooking, clothes drying, humidification, or lighting. The scope of this definition may be limited to combustion-based space and water heating equipment where specifically indicated. Combustion equipment does not include *emergency power systems* or *standby power systems*.

**EMERGENCY POWER SYSTEM.** A source of automatic electric power of a required capacity and duration to operate required life safety, fire alarm, detection, and ventilation systems in the event of a failure of the primary power. Emergency power systems are those required for electrical loads where interruption of the primary power could result in loss of human life or serious injuries.

**FUTURE ELECTRIC EQUIPMENT.** Electrically-powered equipment that could be installed in the future to replace *combustion equipment* to meet a similar end use or load.

**MIXED-FUEL BUILDING.** A new *building* that contains *combustion equipment* or piping for *combustion equipment*, or an *existing building* that contains *combustion equipment,* in addition to electric loads.

**OFF-GRID HOME.** A *residential building* that does not receive any site energy from a publicly or privately owned utility, including for electricity, *fuel gas,* or *fuel oil.*

**STANDBY POWER SYSTEM.** A source of automatic electric power of a required capacity and duration to operate required *building* or ventilation

systems in the event of a failure of the primary power. Standby power systems are those required for electrical loads where interruption of the primary power could create hazards or hamper rescue or fire-fighting operations.

These changes are part of adding the optional Passive House compliance pathway (Green), removing the Tropical Climate Region Option (LECC), requiring net zero-level efficiency for extra-large homes (modified from LECC), and exempting off-grid homes from demand response capability and EV-ready requirements (Cohort).

*[Flexibility] [Simplification from LECC] [Strengthening from base and LECC] [Limited cost reduction]*

3. **Section R401.2 Application** is amended as follows:

   **R401.2 Application.** Residential *buildings* with less than an average of 5,000 square feet (465 $m^2$) of *conditioned floor area* per *dwelling unit* shall comply with Section R401.2.1, R401.2.2, R401.2.3, ~~or R401.2.4,~~ or R401.2.5, as well as appendices RB, RE, RJ, and RK as amended. Residential *buildings* with an average of 5,000 square feet (465 $m^2$) or more of *conditioned floor area* per *dwelling unit* shall comply with Section R401.2.3 or R401.2.5 as well as appendices RB, RE, RJ, and RK as amended.

   **Exceptions:**
   1. *Additions, alterations*, *repairs,* and *changes of occupancy* to *existing buildings* complying with Chapter 5.
   2. *Off-grid homes* need not comply with Appendix RE or Appendix RJ.

4. **Section R401.2.4 Tropical Climate Region Option** is deleted in its entirety.

5. **Section R401.2.5 Passive House Option** is added as follows:

   **R401.2.5 Passive House Option.** The Passive House option requires compliance with Section R409.

This clears up ambiguity by saying Tiny Homes need to meet the IRC appendix that specifically pertains to Tiny Homes, instead of the IECC.

*[Clarification]*

6. **Section R402.1 General is amended by adding a new exception as follows:**
    3. Tiny homes, as defined in the International Residential Code, designed in accordance with Appendix BB of the International Residential Code.

This amendment allows slab insulation to be omitted in sunrooms and heated garages if full compliance with other insulation requirements are met. In retrofits in particular, slab insulation requirements could necessitate complete demolition of the slab floor.

*[Flexibility and cost reduction]*

7. **Section R402.5.1.1 Sunroom and heated garage insulation** is amended by adding a new exception as follows:
    3. Slab insulation shall be permitted to be omitted where the minimum ceiling insulation *R-values* and minimum wall insulation *R-values* are installed.

This amendment requires insulation installation to meet a standard for high quality, while exempting performance-based pathways that already account for insulation effectiveness through modeling. (LECC)

*[Clarification] [Minor strengthening from base] [Minor simplification from LECC]*

8. **Section R402.5.1.1 Installation** is amended to read as follows:

    **R402.5.1.1 Installation.** The components of the *building thermal envelope* as indicated in Table R402.5.1.1 shall be installed in accordance with the following:
    1. The manufacturer's instructions.
    2. The criteria indicated in Table R402.5.1.1, as applicable to the method of construction.
    3. For *dwelling units* complying with Section R401.2.1, the requirements of a Grade 1 insulation installation in accordance with Appendix A of ANSI/RESNET/ICC 301.

This reduces costs by clarifying this air-sealing detail is only necessary between conditioned and unconditioned space. (LECC)

*[Clarification] [Cost reduction]*

9. **Table R402.5.1.1 Air Barrier, Air Sealing, and Insulation Installation** is amended by changing the text in the cell of the "Walls" row and the "Air Barrier, Air Sealing Criteria" column as follows:

   The junction of the foundation and sill plate shall be sealed. The junction of the top plate and the top of *exterior walls* and interior walls that are adjacent to or abut unconditioned space shall be sealed. *Knee walls* shall be sealed.

This offers an alternative metric for measuring air leakage. The original metric, air changes per hour, is easier for large homes to meet and harder for smaller homes to meet. (Note: these rates are applicable to Climate Zone 5; see LECC for rates for other Climate Zones.) (LECC)

*[Flexibility] [Cost reduction]*

10. **Section R402.5.1.3 Maximum air leakage rate,** item #1, is amended to read as follows, with the rest of the section and exceptions to remain:

    1. Where complying with Section R401.2.1, the *building* or the *dwelling units* or *sleeping units* in the *building* shall have an *air leakage* rate not greater than 3.0 air changes per hour, or 0.17 cubic feet per minute per square foot [0.86 L/(s × $m^2$)] of the *building thermal envelope area* or the dwelling *testing unit enclosure area*.

The Department of Energy recommends setting the temperature for residential water heaters at 120 degrees, in order to be both low enough to save energy and high enough to kill bacteria and Legionella. The default setting for new residential water heaters is typically 140 degrees. That not only wastes energy but scalds human skin in less than a second, a safety risk especially for children, special needs adults, and seniors with dementia.

*[Strengthening]*

11. **Section R403.5.5 Water heater default temperature setting** is added as follows:

    **R403.5.5 Water heater default temperature setting.** Storage water heaters with a rated water storage volume of 40 gallons (150 L) to 120 gallons (450 L) and installed in new detached one- and two-family dwellings and townhouses shall have the default temperature setting set to 120 degrees F.

This clarifies when and how much electric resistance is allowed. (LECC)

*[Minor strengthening from base] [Possible cost reductions]*

12. **Section R403.7.1 Electric-resistance space heating** is amended to read as follows:

    **R403.7.1 Electric-resistance space heating.** Detached one- and two-family dwellings and townhouses ~~using~~ shall not use electric resistance space heating. ~~shall limit the total installed heating capacity of total electric resistance space heating serving the *dwelling unit* to not more than 2.0 kW or shall install a heat pump in the largest space that is not used as a bedroom.~~

    **Exceptions:**
    1. Electric resistance heating used for supplemental heat in accordance with Section R403.1.2.
    2. Electric resistance heating used for freeze protection.
    3. Electric-resistance heating where the criteria in Section R408.2.2.2 for evaporative cooling are met.

This clarifies that air source heat pumps for new homes need to meet certain cold climate specifications.

*[Clarification] [Strengthening from base and LECC]*

13. A new **Section R403.7.2 Electric heating cold temperature performance** is added as follows:

    **Section R403.7.2 Electric heating cold temperature performance.** Air source heat pumps installed in new detached one- and two-family dwellings and townhouses shall have a capability of maintaining no less than 70% of their rated heating capacity at 47°F (8.3°C) when tested at an outdoor temperature of 5°F (-15°C) per AHRI 210/240 or an equivalent testing standard, demonstrated by manufacturer documentation or third party certification.

    **Exception:** Air source heat pumps installed as part of an *addition*, *alteration*, or replacement in an *existing residential building*.

These requirements are in state law. Gas fireplaces that do not meet these added requirements are not allowed to be sold or leased in the state. (Cohort)

*[Clarification]*

14. **Section R403.13. Gas fireplaces** is amended as follows:

    **Section R403.13. Gas fireplaces.** Gas fireplaces must comply with <u>all of</u> the following requirements:

    1. Gas fireplace systems shall not be equipped with a *continuous pilot* and shall be equipped with an *on-demand pilot*, *intermittent ignition* or *interrupted ignition*, as defined by ANSI Z21.20.
    2. <u>Gas fireplaces must be capable of *automatically* extinguishing any pilot flame when the main gas burner flame is extinguished or must prevent any ignition source for the main gas burner flame from operating continuously for more than seven days from the last use of the main gas burner.</u>
    3. <u>Decorative gas fireplaces must have a direct vent or power vent configuration, unless the decorative gas fireplace is marked for replacement use only or outdoor use only or is a gas log set.</u>

    **Exception:** Gas-fired appliances using pilots within a listed combustion safety device.

This gives exterior lighting more flexibility by offering compliance with commercial lighting provisions, useful in particular for multifamily buildings. (LECC)

*[Flexibility]*

15. **Section R404.1.1 Exterior lighting** is amended by adding a new exception as follows:

    7. Exterior lighting that meets the requirements of Section C405 of this code.

This disallows gas-powered lighting. Gas lighting is rarely used anymore, but this adds assurance that it can't be.

*[Minor strengthening]*

16. **Section R404.1.5 Fuel gas lighting** is amended to read as follows:

    **Section R404.1.5. Fuel gas lighting.** Fuel gas lighting systems ~~shall not be equipped with a pilot and shall be equipped with an on-demand pilot, intermittent ignition, or interrupted ignition as defined by ANSI Z21.20~~ are prohibited.

This removes the renewable energy certification documentation since these are usually handled by other processes or departments, and since many of the RECs requirements are removed or amended later in this code amendment package. (LECC)

*[Simplification]*

17. **Section R404.4 Renewable energy certificate (REC) documentation** is deleted in its entirety.

This simplifies the application of the Simulated Building Performance pathway for R-2 buildings by not needing a separate commercial common areas reports from other areas in the building envelope. (LECC)

*[Simplification] [Cost reduction]*

18. **Section R405.1 Scope** is amended as follows:

**R405.1 Scope.** This section establishes criteria for compliance using *Simulated Building Performance* analysis. Such analysis shall include heating, cooling, mechanical *ventilation*, and *servce water heating* energy only. ~~Such analysis shall be limited to *dwelling units*. Spaces other than *dwelling units* in Group R-2, R-3 or R-4 buildings shall comply with Sections R402 through R404.~~

This pathway in the base code allows builders to model and compare the efficiency of their proposed design to a standard reference design. This amendment uses site energy as the modeling metric instead of fuel-specific energy cost (LECC), which shifts the focus to the actual energy demand and consumption instead of highly variable utility costs. Consistent with the other sections, the amendment also adds a differential between mixed fuel homes and all-electric homes, and adds a differential between regular homes and large homes.

*[Simplification from base and LECC] [Cost reduction]*

19. **Section R405.2 Simulated building performance compliance**, item #3, is replaced as follows:

    3. For each *dwelling unit*, the annual site energy use shall be less than or equal to the applicable percentage of the annual site energy use indicated in Table R405.2(1), as compared to the *standard reference design*.

**TABLE R405.2(1) SIMULATED BUILDING PERFORMANCE COMPLIANCE TARGET**

| BUILDING SIZE | MIXED FUEL | ALL-ELECTRIC |
|---|---|---|
| *Dwelling units* with an average of <3,500 square feet (325 $m^2$) or less of *conditioned floor area* | 80% | 85% |
| *Dwelling units* with an average of 3,500 square feet (325 $m^2$) to 4,999 square feet (464 $m^2$) of *conditioned floor area* | 70% | 75% |

a. Informative note: Site energy use should be expressed in either kBtu/year or kBtu/$ft^2$/year of *conditioned floor area*.
b. *Dwelling units* with greater than 5,000 square feet (325 $m^2$) of *conditioned floor area* must comply with the Energy Rating Index pathway in R401.2.3 or the Passive House pathway in R401.2.5.

20. **Table R405.2 Requirements for Simulated Building Performanc**e is renumbered as Table R405.2(2).

For the ERI pathway, this amendment removes the requirement that buildings choosing to install renewable energy must install a certain amount of that renewable energy.

*[Simplification from base and LECC] [Cost reduction]*

21. **Section R406.5 ERI-based compliance** is amended to read as follows:

**R406.5 ERI-based compliance.** Compliance based on an *ERI* analysis requires that the rated design and each confirmed as-built *dwelling unit* be shown to have an *ERI* less than or equal to the appropriate value indicated in Table R406.5 as compared to the *ERI reference design* ~~as follows:~~. The values in Table R406.5 shall be achieved prior to accounting for the installation of any on-site power production (OPP).

~~1. Where on-site renewables are not installed, the values under ENERGY RATING INDEX NOT INCLUDING OPP apply.~~

~~2. Where on-site renewables are installed, the values under ENERGY RATING INDEX WITH OPP apply.~~

**Exception:** For *buildings* with 20 or more *dwelling units*, where *approved* by the *code official*, compliance shall be permitted using the Average Dwelling Unit Energy Rating Index, as calculated in accordance with ANSI/RESNET/ICC 301.

~~1. Where the *ERI* analysis excludes on-site power production (OPP), the values under ENERGY RATING INDEX NOT INCLUDING OPP shall be permitted to be applied.~~

~~2. Where the *ERI* analysis excludes on-site power production (OPP), the values under ENERGY RATING INDEX NOT INCLUDING OPP shall be permitted to be applied.~~

This table adjusts the 2024 base code's ERI levels for our Climate Zone 5. It makes all-electric homes easier to meet than mixed fuel homes, and it makes regular sized homes easier to meet than large or extra-large homes.

*[Simplification from base and LECC] [Strengthening from base and LECC]*

22. **Table R406.5 Maximum Energy Rating Index** is replaced as follows:

**TABLE R406.5 MAXIMUM ENERGY RATING INDEX**

| BUILDING SIZE | MIXED FUEL | ALL-ELECTRIC |
|---|---|---|
| *Dwelling units* with an average of <3,500 square feet (325 $m^2$) or less of *conditioned floor area* | 50 | 54 |

| | | |
|---|---|---|
| *Dwelling units* with an average of 3,500 square feet (325 $m^2$) to 4,999 square feet (464 $m^2$) of *conditioned floor area* | 46 | 50 |
| *Dwelling units* with greater than 5,000 square feet (325 $m^2$) of *conditioned floor area* | 42 | 46 |

Consistent with the themes in the other sections, this adds an electric-preferred differential (Cohort) and a home size differential (modified from LECC). It also removes the requirement to get credits for two or more categories if the full credits can be met from either a really good thermal envelope or a ground source heat pump. (LECC)

*[Strengthening from base and LECC] [Flexibility]*

23. **Section R408.2 Additional energy efficiency credit requirements** is amended to read as follows:

**R408.2 Additional energy efficiency credit requirements.** *Residential buildings* shall earn not less than ~~10~~ the appropriate number of credits indicated in Table R408.2.1, from not less than two measures specified in Table R408.2.2. ~~Five additional credits shall be earned for *dwelling units* with more than 5,000 square feet (465 $m^2$) of *living space* located above *grade plane*.~~ To earn credit as specified in Table R408.2.2 for the applicable *climate zone*, each measure selected for compliance shall comply with the applicable subsections of Section R408. Each *dwelling unit* or *sleeping unit* shall comply with the selected measure to earn credit. Interpolation of credits between measures shall not be permitted.

**Exception:** *Residential buildings* shall not be required to achieve credits from two or more measures in Table R408.2.2 if sufficient credits can be achieved to meet the requirements of this section from one of the following single measures:

1. Achieving a 30% reduction in the total TC in accordance with Section R408.2.1.1.
2. Installation of a ground source heat pump in accordance with Section R408.2.2 item number 1.

**TABLE R408.2.1 ADDITIONAL ENERGY EFFICIENCY CREDIT REQUIREMENTS**

| BUILDING SIZE | MIXED FUEL CREDIT REQUIREMENT | ALL-ELECTRIC CREDIT REQUIREMENT |
|---|---|---|

| | S | S |
|---|---|---|
| *Dwelling units* with an average of <3,500 square feet (325 $m^2$) or less of *conditioned floor area* | 15 | 10 |
| *Dwelling units* with an average of 3,500 square feet (325 $m^2$) to 4,999 square feet (464 $m^2$) of *conditioned floor area* | 25 | 20 |

a. *Dwelling units* with greater than 5,000 square feet (325 $m^2$) of *conditioned floor area* must comply with the Energy Rating Index pathway in R401.2.3 or the Passive House pathway in R401.2.5.

This adds new options for credits from better windows, evaporative cooling, multifamily duct testing, ERV or HRV preheating limits, and refrigerants, as well as fuel neutrality credits (LECC). It also adds an electric-preferred differential. Note: These credit values are applicable to Climate Zone 5.

*[Strengthening from base and LECC] [Flexibility]*

24. **Table R408.2 Credits for Additional Energy Efficiency** is renumbered R408.2.2, and the following items and footnotes are amended to read as follows, with the other items and footnotes to remain:

**TABLE R408.2.2 CREDITS FOR ADDITIONAL ENERGY EFFICIENCY**

| MEASURE NUMBER | MEASURE DESCRIPTION | CREDIT VALUE: CZ 5 |
|---|---|---|
| R408.2.1.2(2) | Improved fenestration | 3 |
| R408.2.2(4) | High performance gas furnace (Option 1) | ~~6~~ 4 |
| R408.2.2(5) | High performance gas furnace (Option 2) | ~~5~~ 3 |
| R408.2.2(11) | High performance gas furnace and cooling (Option 3) | ~~6~~ 4 |
| R408.2.2(12) | High performance gas furnace and cooling (Option 4) | ~~7~~ 5 |
| R408.2.2(13) | High performance gas furnace and heat pump for combined heating and cooling (Option 2) | ~~11~~ 8 |

| | | |
|---|---|---|
| R408.2.2(14) | High performance heat pump <u>for combined heating and cooling</u>, with electric resistance backup (Option 2) | 12 |
| <u>R408.2.2(15)[b]</u> | <u>Space heating fuel neutrality credit</u> | <u>2</u> |
| <u>R408.2.2.2[b]</u> | <u>Evaporative cooling</u> | <u>2</u> |
| R408.2.3(1)(a)[d] | Gas-fired storage water heaters (Option 1) | ~~4~~ <u>2</u> |
| R408.2.3(1)(b)[d] | Gas-fired storage water heaters (Option 2) | ~~5~~ <u>3</u> |
| R408.2.3(2)(a)[d] | Gas-fired instantaneous water heaters (Option 1) | ~~5~~ <u>3</u> |
| R408.2.3(2)(b)[d] | Gas-fired instantaneous water heaters (Option 2) | ~~6~~ <u>4</u> |
| <u>R408.2.3(9)[d]</u> | <u>Water heating fuel neutrality credit</u> | <u>1</u> |
| R408.2.4(2)[c] | 100% of duct systems in conditioned space | ~~9~~ <u>7</u> |
| R408.2.4(3)[c] | ≥ 80% of ductwork inside conditioned space | ~~7~~ <u>5</u> |
| R408.2.4.1[c] | <u>Duct leakage testing in all multifamily units</u> | <u>2</u> |
| <u>R408.2.5.1</u> | <u>ERV or HRV preheating</u> | <u>1</u> |
| R408.2.7 | Onsite renewable energy measures | ~~9~~ <u>3</u> |
| R408.2.13 | <u>Refrigerants</u> | <u>1</u> |

This provides details on the new optional credits for better windows. (LECC)

*[Simplification from LECC] [Flexibility]*

25. **Section R408.2.1.2 Improved fenestration** is amended to read as follows:

**R408.2.1.2 Improved fenestration.** <u>Improved fenestration shall achieve credits for one of the following:</u>

1. The area weighted average *U-factor* and *SHGC* of all vertical fenestration shall be equal to or less than the values specified in Table R408.2.1.2.
2. The area weighted average *U-factor* and *SHGC* of all vertical fenestration shall be equal to or less than the values for the Northern Climate Zone in the latest version of the ENERGY STAR specification for residential windows, doors and skylights.

This provides details on the new optional credits for space heating fuel neutrality. (LECC)

*[Simplification from LECC] [Flexibility]*

26. **Section R408.2.2 More efficient HVAC equipment performance options** is amended to add a new item #15 as follows:

    15. Space heating fuel neutrality credit: Heat pump with greater than or equal to the federal minimum efficiency rating for the location where the heat pump is installed, and a capacity ratio ≥ 70 percent of heating capacity at 5°F (−15°C) versus rated heating capacity at 47°F (8.3°C). For new *buildings*, the credit value for this item may be added to the credit value for R408.2.2(14) when the requirements of both measures are met. For *alterations*, the credit value for this item may be added to the credit value for R408.2.2(13) or R408.2.2(14) when the requirements of both measures are met.

This provides details on the new optional credits for evaporative cooling. (LECC)

*[Flexibility]*

27. A new **Section R408.2.2.2** Evaporative cooling is added as follows:

    **R408.2.2.2 Evaporative cooling.** Evaporative cooling *equipment* used for space cooling shall achieve the credits allocated in Table R408.2 where it meets all of the following:
    1. Not less than 80 percent of the total HVAC space cooling capacity of the *dwelling unit* is provided by evaporative cooling.
    2. Evaporative cooling equipment is installed in accordance with Section 928.1 of the International Mechanical Code.

This and the next item provide details on the new optional credits for water heating fuel neutrality. (LECC)

*[Simplification from LECC] [Strengthening from base] [Flexibility]*

28. **Section R408.2.3 Reduced energy use in service water-heating options** is amended to read as follows:

> **R408.2.3 Reduced energy use in service water-heating options.** For measure numbers R408.2.3(1) through R408.2.3(7) and R408.2.3(9), the installed hot water system shall meet one of the Uniform Energy Factors (UEF) or Solar Uniform Energy Factors (SUEF) in Table R408.2.3. For measure number R408.2.3(8), the hot water distribution system shall comply with Section R408.2.3.1. The credit value for R408.2.3(9) may be added to the credit value for other electric water heater options when the requirements of both measures are met.

29. **Table R408.2.3 Service Water Heating Efficiencies** is amended to add the following row:

**TABLE R408.2.3 SERVICE WATER HEATING EFFICIENCIES**

| MEASURE NUMBER | WATER HEATER | SIZE AND DRAW PATTERN | TYPE | EFFICIENCY |
|---|---|---|---|---|
| R408.2.3(9) | Federal minimum efficiency HPWH | All storage volumes, all draw patterns | HPWH with or without hybrid electric resistance element | Equal to or greater than federal minimum efficiency standard |

This provides details on the new optional credits for duct testing in all multifamily units, instead of just a sampling of them. (LECC)

*[Flexibility]*

30. A new **Section R408.2.4.1** is added as follows:

> **R408.2.4.1 Testing duct leakage in all multifamily dwelling units.** *Buildings* with eight or more *dwelling units* or *sleeping units* shall test every *dwelling unit* or *sleeping unit* in accordance with the requirements of Section R403.3.7.

This provides details on the new optional credits for ERV and HRV preheating limits. (LECC)

*[Flexibility]*

31. A new **Section R408.2.5.1** is added as follows:

**R408.2.5.1 ERV and HRV preheating limits.** All systems that utilize energy recovery ventilation and utilize electric resistance to preheat outdoor air to defrost or temper air entering the energy recovery device shall comply with one of the following:

1. Where the space is mechanically humidified when the outdoor temperature is not greater than 25°F (-4°C) and the system recovers latent energy, the outdoor air shall not be preheated to greater than 25°F (-4°C).
2. For sensible-only heat recovery exchangers, outdoor air shall not be preheated to greater than 25°F (-4°C).
3. For all other systems, outdoor air shall not be preheated to greater than 5°F (-15°C).

This changes the optional credits for efficient appliances from a federal statute reference to the ENERGY STAR specification.

*[Clarification]*

32. **Table R408.2.6 Minimum Efficiency Requirements: Appliances** is replaced with the following:

**TABLE R408.2.3 SERVICE WATER HEATING EFFICIENCIES**

| APPLIANCE TYPES | EFFICIENCY IMPROVEMENT | TEST PROCEDURE |
|---|---|---|
| Refrigerator | Meets the energy performance metrics in the most recent version of the applicable consumer ENERGY STAR specification | Test procedure contained in the most recent version of the applicable consumer ENERGY STAR specification |
| Dishwasher | | |
| Clothes washer and clothes dryer | | |

This removes reference to a deleted section.

*[Simplification from base]*

33. **Section R408.2.7 Renewable energy** is amended as follows:

**R408.2.7 Renewable energy**. Renewable energy resources shall be permanently installed and have the rated capacity to produce not less than 1.0 watt of on-site renewable energy per square foot of *conditioned floor*

*area*. ~~To qualify for this option, renewable energy certificate (REC) documentation shall meet the requirements of Section R404.4.~~

This removes an efficiency-weakening tradeoff added to the base 2024. (RECA)

*[Strengthening from base and LECC]*

34. **Section R408.2.9 Opaque walls** is deleted.

This provides details on the new optional credits for low-GWP refrigerants. (LECC)

*[Flexibility]*

35. A new **Section R408.2.12 Refrigerants** and **Table R408.2.12** Credit Adjustment for Refrigerant GWP Level are added as follows:

**R408.2.12 Refrigerants.** Projects that select equipment for space heating and *service water heating* that utilize low global warming potential (GWP) or ultra-low GWP refrigerants shall utilize Equation 4-4 to determine available credits:

**Equation 4-4**

$$EC_{ach} = EC_{base} \times EC_{adj}$$

where:
$EC_{ach}$ = Refrigerant credit achieved for the project.
$EC_{base}$ = Base credit from Table R408.2.
$EC_{adj}$ = Credit adjustment factor from Table R408.2.14.

**TABLE R408.2.12 CREDIT ADJUSTMENT FOR REFRIGERANT GWP LEVEL**

| REFRIGERANT CATEGORY | GWP LIMIT ($KGCO_2E$) | $EC_{adj}$ |
|---|---|---|
| Ultra-low GWP | <10 | 100% |
| Low GWP | 10 to 150 | 50% |
| Other | >150 | 0% |

Along with the amendments above in R401, this adds the optional Passive House compliance path.

*[Flexibility]*

36. **Section R409 Passive House Compliance Option** is added as follows:

**R409.1 Scope.** This section establishes criteria for new *residential buildings* to comply using Passive House certification.

**R409.2 Passive House compliance.** Compliance based on the Passive House option requires certification in accordance with Section R409.3 or R409.4.

**409.3 Passive House Institute US (PHIUS) certification.** Achieve certification with the most recent PHIUS+ Passive Building Standard and provide documentation in accordance with Section 409.3.1.

**409.3.1 Documentation.** Documentation shall be provided to the *code official* demonstrating the following:

1. Prior to the issuance of a *building* permit, a PHIUS+ Design Certification Letter from PHIUS and a list of compliance features.
2. Prior to the issuance of a certificate of occupancy, a copy of the final certification submitted on a form that is *approved* by PHIUS to document compliance with the most recent PHIUS+ Standard.

**409.4 Passive House Institute (PHI) certification.** Achieve certification with the PHI Passive House Standard and provide documentation in accordance with Section 409.4.1.

**409.4.1 Documentation.** Documentation shall be provided to the *code official* demonstrating the following:

1. Prior to the issuance of a *building* permit, a signed Design Stage Conditional Assurance Letter from a PHI-accredited Passive House Certifier of intent to certify the *building* and list of compliance features.
2. Prior to the issuance of a certificate of occupancy, a copy of the final report submitted in a Certifiers Assurance Letter that is *approved* by PHI to document compliance with the Passive House Standard.

RESIDENTIAL EXISTING BUILDINGS

This adds a programmable thermostat anytime an HVAC system is replaced or expanded. (Mountain Cohort)

*[Minor strengthening]*

37. **Section R501.7 Programmable thermostat** is added as follows:

**Section R501.7 Programmable thermostat.** *Alterations*, *additions*, and changes of occupancy that involve replacing or expanding a heating or cooling system shall comply with section R403.1.1 Programmable thermostat.

This amendment allows existing slabs under new additions to remain as-in without insulation if full compliance with other insulation requirements is met. Otherwise, slab insulation requirements could necessitate complete demolition of the slab floor.

*[Flexibility] [Cost reductions]*

38. **Section R502.2.1 Building thermal envelope** is amended by adding a second exception as follows:

    2. For *additions* where there is an existing slab, slab insulation shall be permitted to be omitted when the minimum ceiling insulation *R-values* and minimum wall insulation *R-values* of Table R402.1.3 are installed.

This exempts small additions from the requirement for efficiency improvements, and on the other hand also adds additional efficiency requirements for very large additions. (LECC)

*[Strengthening from base and LECC] [Possible cost reductions]*

39. **Section R502.2.5 Additional energy efficiency credit requirements for additions** is amended to read as follows, with exception #1 deleted and the other exceptions to remain:

    **R502.2.5 Additional energy efficiency credit requirements for additions.** *Additions* that increase the *existing building's* total *conditioned floor area* by 1,000 square feet (93 $m^2$) to 3,500 square feet (325 $m^2$) or by more than 25 percent within any three-year period shall comply with sufficient measures from Table R408.2 to achieve not less than 5 credits. *Additions* that increase the *existing building's* total *conditioned floor area* by greater than 3,500 square feet (325 $m^2$) within any three-year period shall comply with sufficient measures from Table R408.2 to achieve not less than 10 credits. *Alterations* to *existing buildings* that are not part of the *addition* but are permitted with an *addition* shall be permitted to be used to achieve this requirement.

This adds an exception to where improvements to the thermal envelope would otherwise be required. (LECC)

*[Flexibility] [Cost reductions]*

40. **Section R503.1.1 Building thermal envelope** is amended by adding a new exception as follows:

    5. Existing windows or doors that are removed and filled in with a wall assembly.

This amendment allows existing slabs to remain as-in without insulation if full compliance with other insulation requirements is met. Otherwise, slab insulation requirements could necessitate complete demolition of the slab floor.

*[Flexibility] [Cost reductions]*

41. **Section R503.1.1.2 Roof, ceiling, and attic alterations** is amended by adding a new exception as follows:

    5. For *alterations* where there is an existing slab, slab insulation may be omitted when the minimum ceiling insulation *R-values* and minimum wall insulation *R-values* of Table R402.1.3 are installed.

This clarifies when a "substantial improvement" is substantial enough to warrant additional efficiency, by changing the terminology to "Alterations" and adding a threshold of 50% of the gross floor area affected. (LECC)

*[Clarification]*

42. **Section R503.1.3 Additional efficiency credit requirements for substantial improvements** is amended to read as follows:

    **R503.1.5 Additional efficiency credit requirements for substantial improvements.** ~~*Substantial improvements*~~ *Alterations* where the work area is 50 percent or more of the gross floor area of the *dwelling unit* shall comply with sufficient measures from Table R408.2 to achieve not less than three credits.

    **Exceptions:**
    1. *Alterations* that are permitted with an *addition* complying with Section R502.2.5.
    2. *Alterations* that comply with Section R405 or R406.

3. ~~*Substantial improvements*~~ *Alterations* that do not include the addition or replacement of equipment covered in either Section R403.5 or R403.7.

## RESIDENTIAL APPENDICES

The following provisions add the solar-ready code, required by state law.

*[Simplification from LECC]*

43. **Appendix RB** S**olar-Ready Provisions**–**Detached One- and Two-Family Dwellings and Townhouses** is renamed to **Appendix RB Solar-Ready Provisions–Residential Buildings.**

44. **Section RB103.1 General** is amended as follows:

**RB103.1 General.** New ~~detached one- and two-family dwellings and townhouses~~ residential *buildings* with not less than 600 square feet (55.7 m2) of roof area oriented between 110 degrees and 270 degrees of true north or that have a *low-slope* roof shall comply with Sections RB103.2 through RB103.8.

**Exceptions:**

1. New residential *buildings* with a permanently installed on-site renewable energy system that provides electricity to the *dwelling unit's* electrical system.
2. A *building* where all areas of the roof that would otherwise meet the requirements of RB103 are in full or partial shade for more than 70 percent of daylight hours annually.
3. Group *R*-2, R-3, or R-4 *buildings* shall meet the requirements of Appendix CB, as amended, instead of this Appendix RB.

45. **Section RB103.2 Construction document requirements for solar-ready zone** is amended as follows:

**RB103.2 Construction document requirements for solar-ready zone.** *Construction documents* shall indicate the location and size of the *solar-ready zone,* structural design loads for roof dead load and roof live load, and pathways for routing of conduit from the *solar-ready zone* to the electrical service panel.

The following provisions add the EV-ready code, required by state law.

*[Simplification from LECC] [Required by state law]*

46. In **Section RE101.1 Definitions**, the following definition is amended:

    **ELECTRIC VEHICLE (EV).** An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles and electric motorcycles, primarily powered by an electric motor that draws current from a *building* electrical service, electric vehicle supply equipment (EVSE), a rechargeable storage battery, a fuel cell, a photovoltaic array, or another source of electric current. Off-road, self-propelled electric mobile equipment, including but not limited to, industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, and boats are not considered electric vehicles.

47. **Section RE101.2 Electric vehicle power transfer infrastructure** is amended as follows:

    **RE101.2 Electric vehicle power transfer infrastructure.** New residential *automobile parking spaces* for ~~residential *buildings*~~ new one- and two-family dwellings and townhouses shall be provided with *electric vehicle* power transfer infrastructure in accordance with Sections RE101.2.1 through ~~RE101.2.5~~ RE101.2.6. Group *R*-2, R-3, or R-4 *buildings* shall meet the requirements of Appendix CG instead of this Appendix RE.

48. **Section RE101.2.1 Quantity** is amended as follows, and both exceptions are deleted:

    **RE101.2.1 Quantity.** New one- and two-family dwellings and townhouses with a designated attached or detached garage or other on-site private parking provided adjacent to the *dwelling unit* shall be provided with one ~~*EV capable*~~, *EV ready* ~~or *EVSE*~~ space per *dwelling unit*. ~~R-2 occupancies or allocated parking for R-2 occupancies in mixed-use *buildings* shall be provided with an *EV capable space*, *EV ready space* or *EVSE* space for 40 percent of the *dwelling units* or *automobile parking spaces*, whichever is less.~~

49. **Section RE101.2.2 EV capable spaces** is deleted.

50. **Section RE101.2.3 EV ready spaces**, item #1, is amended as follows with the other items to remain:

    **RE101.2.3 EV ready spaces.** Each branch circuit serving *EV ready spaces* shall comply with all of the following:

1. Termination at an outlet or enclosure located within ~~6 feet (1828 mm)~~ 3 feet of each *EV ready space* it serves and marked "For electric vehicle supply equipment (EVSE).".
   **Exception:** An outlet or enclosure shall not be required if a hard-wired *EVSE* is installed.

51. **Section RE101.2.4 EVSE spaces** is deleted.

52. **Section RE101.2.5 Electrical distribution system capacity** is amended as follows, and item #2 is deleted:

    **RE101.2.5 Electrical distribution system capacity.** The branch circuits and electrical distribution system serving each ~~*EV capable space*~~, *EV ready space* ~~and *EVSE space*~~ used to comply with Section RE101.2.1 shall ~~comply with one of the following:~~ be sized for a calculated *EV* charging load of not less than ~~6.2~~ 8.3 kVA per ~~*EVSE*~~, *EV ready~~,~~ space*. Where a circuit is shared or managed, it shall be in accordance with NFPA 70.

53. **Section RE101.2.6 Identification** is added as follows:

    **RE101.2.6 Identification.** Construction documents shall designate all *EV ready spaces* and indicate the locations of raceway and/or conduit and termination points serving them.

This adds technical clarity to the demand response section. (LECC)

*[Clarification] [Simplification from LECC]*

54. **Section RJ10.1 Demand responsive water heating**, exception #1, is amended as follows:

    1. Water heaters that are required to provide a constant hot water delivery temperature of 180°F (82°C) or greater.

This adds demand response controls for heating and cooling systems. (Cohort)

*[Strengthening]*

55. **Section RJ103.1 Demand responsive controls for heating and cooling systems** is added as follows:

    **RJ103.1.1 Demand responsive controls for heating and cooling systems.** Electric heating and cooling systems for *residential buildings*

shall be provided with *demand responsive controls* that meet the requirements of Appendix CI Section 101.

The following appendix is the electric-ready code, required by state law (LECC). Note: the base code electric-ready appendix differs too substantially from the required state code to be referenced and amended. Note also: The addition of the last item is to ensure sufficient physical space and air volume for a future heat pump water heater (Cohort).

*[Required by law] [Strengthening] [Electric-preferred]*

56. **Appendix RK Electric Readiness** is adopted and replaced with the following:

**RK101.1 General.** The provisions of this section shall be applicable for all new *buildings*, and major renovations and *additions*.

**RK102.1 Additional electric infrastructure.** *Combustion equipment* in *residential buildings* must meet the requirements of this Appendix RK.

**Exceptions:**
1. Interior fireplaces that do not serve as a primary source of heating.
2. Exterior fireplaces and firepits.

**RK103.1 Combustion equipment.** *Combustion equipment* shall be provided with all of the following:
1. A dedicated, appropriately phased branch circuit sized to accommodate *future electric equipment* or appliances to serve a comparable capacity to meet the heating load.
   1.1. The branch circuits serving future electric clothes drying equipment and water heaters shall be sized with a rating not less than 240 volts and not less than 30 amperes. **Exception:** Water heaters serving multiple *dwelling units* in a R-2 occupancy.
   1.2. The branch circuits serving future cooking equipment shall be sized with a rating not less than 240 volts and not less than 40 amperes.
2. An electric receptacle or junction box that meets the requirements of Section RK106.1, and is connected to the electrical panel through the branch circuit. Each electrical receptacle or junction box shall have reasonable access to the *combustion equipment* or

dedicated physical space for *future electric equipment* with no obstructions other than the current *combustion equipment*.

3. Where *combustion equipment* is used for space or water heating, dedicated physical space shall be provided for *future electric equipment*, including an electric resistance backup coil for ducted systems, if applicable. Physical space occupied by existing *combustion equipment* or other equipment serving the same load shall be permitted to count towards satisfying the physical space requirement, subject to approval by the *code official*.

**RK104.1 Electrical panel space.** The electrical panel shall have a reserved space for a minimum two-pole circuit breaker for each branch circuit provided for *future electric equipment* or appliances. The electrical panel shall be sized for the electrical load necessary to meet an equivalent electrical load for any *combustion equipment*. Electrical loads shall be calculated in accordance with the National Electrical Code.

**RF105.1 Labeling.** The junction box or receptacle and the dedicated circuit breaker space serving *future electric equipment* or appliances in the electrical panel shall be labeled for their intended use.

**RK106.1 Adjacency.** The electrical receptacle or junction box must be provided within 3 feet of the *combustion equipment* or appliances, or within 3 feet of the dedicated physical space for *future electric equipment* or appliances.

> **Exception:** For *combustion equipment* dedicated to space or water heating, the electrical receptacle or junction box shall be located not more than 6 feet from the *combustion equipment* or the dedicated physical space for *future electric equipment*.

**RK107.1 Condensate drain.** Where *combustion equipment* for space heating and water heating is installed, a location shall be provided for condensate drainage and shall be noted on the construction drawings.

**RK108.1 Water heating equipment space and airflow access requirements.** Water heaters with *combustion equipment* shall be located in a space with the following characteristics:

1. Combustion air provided and sized in accordance with Section 2407 of the International Residential Code.
2. Minimum dimensions of 3 feet by 3 feet by 7 feet high.
3. Sufficient airflow access meeting one of the following options:

3.1. Minimum volume of 700 cubic feet (19.8 $m^3$). Volume may include adjacent spaces if air can freely circulate (e.g. without solid barriers or doors).

3.2. Louvered door(s) with a total minimum net free area of 100 square inches, split between high and low placement.

3.3. Transfer grille(s) or duct(s) to an adjacent space, sized to provide ≥ 100 CFM of airflow. Ducts and grills shall be sized to limit pressure drop and avoid excessive fan cycling.

3.4. Direct ducting to the exterior, sized in accordance with heat pump water heater manufacturers' requirements for intake and exhaust air for a similar-capacity system.

**Exception:** Water heaters with an input capacity of greater than or equal to 300,000 Btu/h that serve multiple *dwelling units* or *sleeping units.*

# DRAFT COMMERCIAL AMENDMENTS FOR 2024 IECC ADOPTION

**Version:** Explanatory Version 1.2 DRAFT
**Version Date:** April 27, 2025

**About This File:** This document contains the regionally-aligned amendments to the 2024 International Energy Conservation Code – Commercial Chapter. This is the "Explanatory" version which includes short notes about each amendment as well as tracked changes (strikeouts and underlines) showing what changed from the base code.

**Cohort Background and Goals:** The 2024-2025 Metro Regional Building Policy Cohort (the "code cohort") is an extension and expansion of a previous successful cohort effort. Goals of the cohort are to collaboratively review and adopt the most recent energy code – the 2024 International Energy Conservation Code (IECC) – along with regionally-aligned and consistent supporting amendments. Primary outcomes include reducing energy use and climate emissions in the built environment while balancing affordability and equity; improving region-wide consistency for builders, developers, and contractors; emphasizing flexibility without sacrificing performance; streamlining workload for budget-constrained building departments; and allowing for adjustments in each community while maintaining overall general alignment. Primary participating communities include Boulder County, City of Boulder, Brighton, Broomfield, Berthoud, Denver, Edgewater, Erie, Golden, Lafayette, Longmont, Louisville, Northglenn, Superior, Thornton, and Westminster. The code cohort is expanding to the remainder of the Denver metro area communities in 2025. The code cohort is jointly led and supported by participating local governments, with facilitation and code expertise from Lotus Engineering and Sustainability, the Southwest Energy Efficiency Project, and Shums Coda (with support from Xcel Energy). Funding is provided by participating local governments and by the federal government through a Climate Pollution Reduction Grant (CPRG) to the Denver Regional Council of Governments (DRCOG) for the Decarbonize DRCOG project.

**Source Materials and Terminology:** These amendments are for the 2024 International Energy Conservation Code, first printing, as published by the International Code Council. Most of the amendments are from the Low Energy and Carbon Code developed by the Colorado Energy Code Board (in draft form as of April 2025, and unofficially denoted here as "LECC"). It also incorporates agreed-upon principles and frameworks from each of the participating cohort communities (denoted here as "Cohort"), and pulls several additional amendments from the previous 2021 IECC code cohort. Minor amendments are

from the Model Green Code developed by the Colorado Energy Office (in draft form as of April 2025, and denoted here as “Green”).



## ADOPTING LANGUAGE

Section xx. The International Energy Conservation Code, 2024 Edition, (the "IECC"), as published by the International Code Council, 500 New Jersey Avenue, NW, 6th Floor, Washington, DC 20001, a copy of which is on file and open for inspection in the office of the [city/town/county] clerk, is hereby adopted by reference subject to the additions, amendments, and appendices set forth herein. The subject matter of the IECC includes the design of energy-efficient and high-performance buildings and related energy uses including mechanical, lighting, power systems, and electric vehicle infrastructure for the purpose of protecting the public health, safety, and welfare. The IECC-Commercial includes appendices CB, CG, CH, and CI. The 2024 IECC, as amended in this Article, shall apply to all property within the [Community]. The IECC is amended as follows.

## COMMERCIAL AMENDMENTS

This adopts the solar-ready, EV-ready, electric-ready, and demand response appendices to align with state law and best practices. (LECC but different format)

*[Simplification from LECC] [Minor strengthening]*

1. **Section C101.2.1 Appendices** is amended as follows:
   **C101.2.1 Appendices**. Provisions in the appendices shall not apply unless specifically adopted. Appendices CB, CG, CH, and CI are hereby adopted.

*This requires notification of intent to hire third-party air leakage testing agency and confirmation that third party understands the proper inspection sequence. (LECC)*

*[Better enforcement]*

2. **Section C107.2.2 Building thermal envelope is amended to read as follows:**

   **C107.2.2 Building thermal envelope.** Inspections shall verify the type of insulation, *R-values*, location of insulation, *thermal bridge* mitigation, *fenestration*, *U-factor*, *SHGC* and *VT*, and that *air leakage* controls are installed, as required by the code, *approved* plans and specifications. At the request of the *code official*, a letter or proof of intent to contract with an *approved* third-party testing agency describing the *air barrier* inspection sequencing shall be provided to the *code official* prior to completion of rough framing or insulation inspections, and shall be signed by the *building* owner or the *building* owner's representative.

This adds or modifies definitions necessary for these amendments. (LECC, Cohort)

*[Clarification]*

3. **Section C202 GENERAL DEFINITIONS** is amended to change or add the following definitions in alphabetical order:

   **ALL-ELECTRIC BUILDING.** A new *building* that contains no permanently-installed *combustion equipment* or plumbing for *combustion equipment,* or an existing *building* that contains no permanently-installed *combustion equipment.*

   **COMBUSTION EQUIPMENT.** Equipment or appliances that use *fuel gas*, *fuel oil*, or any other hydrocarbon-derived fuel or fuel blend to perform functions such as space heating, space cooling, *service water heating* (including pools and spas), cooking, clothes drying, humidification, or lighting. The scope of this definition may be limited to combustion-based space and water heating equipment where specifically indicated. Combustion equipment does not include *emergency power systems* or *standby power systems*.

   **CORE AND SHELL.** The first phase of a commercial project that has the outer *building* envelope constructed and may contain interior lighting and heating and has not received a permanent Certificate of Occupancy.

   **EMERGENCY POWER SYSTEM.** A source of automatic electric power of a required capacity and duration to operate required life safety, fire alarm, detection, and ventilation systems in the event of a failure of the primary power. Emergency power systems are those required for electrical loads

where interruption of the primary power could result in loss of human life or serious injuries.

**ENERGY USE INTENSITY (EUI).** The metric indicating the total amount of site energy consumed by a *building* in 1 year divided by the gross floor area of the *building*, and reported in kBtu per square foot.

**FIRST TENANT FINISH.** The first tenant finish(es) in a new structure or *core and shell building* that is credited towards meeting the requirements of the commercial provisions of the energy code.

**FUEL GAS.** A natural gas, manufactured gas, liquefied petroleum gas, or mixtures of these gases that is burned to produce heat or energy.

**Commented [1]:** considered adding "..gases that is burned to produce heat or energy"

**FUEL OIL.** Kerosene or any hydrocarbon oil having a flash point of not less than 100°F (38°C).

**FUTURE ELECTRIC EQUIPMENT.** Electrically-powered equipment that could be installed in the future to replace *combustion equipment* to meet a similar end use or load.

**MIXED-FUEL BUILDING.** A new *building* that contains *combustion equipment* or piping for *combustion equipment*, or an existing building that contains *combustion equipment*, in addition to electric loads.

**STANDBY POWER SYSTEM.** A source of automatic electric power of a required capacity and duration to operate required *building*, hazardous materials, or ventilation systems in the event of a failure of the primary power. Standby power systems are those required for electrical loads where interruption of the primary power could create hazards or hamper rescue or fire-fighting operations.

This specifies which appendices apply.

*[Simplification from LECC] [Minor strengthening]*

4. **Section C401.2 Application** is amended to read as follows:

**C401.2 Application.** *Commercial buildings* shall comply with Section C401.2.1 ~~or C401.2.2~~ and Appendix CB, CG, CH, and CI as amended.

This section lists the compliance pathway options. This amendment adds the optional All-Electric and Passive House pathways, and adds an appendix reference. (Cohort)

*[Strengthening from base and LECC] [Flexibility]*

5. **Section C401.2.1 International Energy Conservation Code** is amended to read as follows, with exception to remain:

   **C401.2.1 International Energy Conservation Code.** *Commercial buildings* shall comply with one of the following:
   1. **Prescriptive Compliance.** The Prescriptive Compliance option requires compliance with Sections C402 through C406 and Section C408. *Dwelling units* and *sleeping units* in Group R-2 buildings shall be deemed to be in compliance with this chapter, provided they comply with Sections R406 and Appendix RK as amended.
   2. ***Simulated Building Performance*.** The *Simulated Building Performance* option requires compliance with Section C407.
   3. ***All-Electric***. The *All-Electric* option requires compliance with Section C411.
   4. **Passive House.** The Passive House option requires compliance with Section C412.

*This flags that ASHRAE 90.1 is no longer a standalone pathway in this code, and is instead included within Section C407 with some further modifications there.*
*[Clarification from LECC]*

6. **Section C401.2.2 ASHRAE 90.1** is rewritten to read as follows:

   **C401.2.2 ASHRAE 90.1.** ANSI/ASHRAE/IES 90.1 shall not be used as a compliance path under this code except where specifically referenced in Section C407 for performance-based compliance. Where referenced in Section C407, the standard shall be applied as modified by that section.

This deletes a redundant provision already covered in the mechanical code. (LECC)

*[Clarification]*

7. **Section C402.1.2.1.8 Mechanical equipment penetrations** is deleted in its entirety.

This fixes a construction and maintenance challenge for ceilings above semi-heated spaces. (LECC)

*[Upfront cost reduction]*

8. **Section C402.1.3.3 Suspended ceilings** is amended to add exceptions as follows:

   **C402.1.3.3 Suspended ceilings.** Insulation installed on suspended ceilings having removable ceiling tiles shall not be considered part of the minimum thermal resistance (R-value) of roof insulation in roof/ceiling construction.

   **Exceptions:** Suspended ceilings with heated plenums over parking garages where access to mechanical systems is required and that meet the following criteria:
   1. Insulation is a minimum of R-19 and is supported in a permanent manner by a support no greater than 24 inches on center.
   2. The plenum above the parking garage is heated by a heating system whose output capacity does not exceed 12 Btu/H x $ft^2$.

This expands the cool roof requirement to Climate Zone 5 to mitigate the urban heat island effect. Note: This doesn't impact solar panels, skylights, mechanical equipment, rooftop amenities, vegetative roofs, etc. and it doesn't apply to roof repairs, recovering, or replacement. (Cohort 1)

*[Minor strengthening]*

9. **Section C402.4 Roof solar reflectance and thermal emittance**, first sentence, is amended as follows, with the exceptions and other parts of the section to remain:

   **C402.4 Roof solar reflectance and thermal emittance.** Low-slope roofs directly
   above cooled *conditioned spaces* ~~in Climate Zones 0 through 3~~ shall comply with one or more of the options in Table C402.4.

This clarifies that air barrier details need to be clearly marked on construction drawings for enforceability. (LECC)

*[Better enforcement]*

10. **Section C402.6.1.1 Air barrier design and documentation requirements** is amended to add a new item #6 to read as follows:

6. The *air barrier* boundary limits and size of the surface area of the *air barrier* (floor, wall, and ceiling or roof), and of the zone or zones to be tested for maximum *building* air infiltration or exfiltration, shall be clearly identified on the *approved construction drawings*.

This fixes a typo in the 2024 IECC. (LECC)

*[Clarification]*

11. **Section C402.6.1.2 Air barrier construction** item #1 is amended to read as follows:

    1. The *air barrier* shall be continuous for all assemblies that comprise the *building thermal envelope* and across the joints and assemblies.

This makes sure that the results of air barrier testing are delivered to the building owner and the code official at a point when corrections could still be made if necessary. (LECC)

*[Better enforcement]*

12. **Section C402.6.2.3 Building thermal envelope design and construction verification criteria** item #2 is amended to read as follows:

    2. Inspection of continuous *air barrier* components and assemblies shall be conducted during construction to verify compliance with the requirements of Section C402.6.2.3.1 and C402.6.2.3.2. If conducted by an *approved* third-party, the inspection shall comply with the protocols established in Section C402.6.1.1, and the *air barrier* and air sealing inspection report shall be provided to the *building* owner or owner's authorized agent and the *code official* at the time of rough framing or insulation inspection. The *air barrier* shall be provided with access for inspection and repair.

This clarifies that heat pumps need controls that limit the supplemental heat to just the times and situations when the heat pump can't meet the heating need. (LECC)

*[Clarification] [Minor simplification from LECC]*

13. **Section C403.4.1.1 Heat pump supplementary heat** is amended as follows:

    **C403.4.1.1 Heat pump supplementary heat.**

Heat pumps having supplementary ~~electric resistance~~ heat shall have controls that limit supplemental heat operation to only those times when one of the following applies:

1. The vapor compression cycle cannot provide the necessary heating energy to satisfy the thermostat setting.
2. The heat pump is operating in defrost mode.
3. The vapor compression cycle malfunctions.
4. The thermostat malfunctions.

This more clearly defines which type of equipment is exempted. (LECC)

*[Clarification]*

14. **Section C403.5 Economizers** exception #7 is amended to read as follows:

    1. ~~Direct expansion~~ Fan coils or unitary equipment with a capacity less than 54,000 Btu/h (15.8 kW) and ~~multiple stages of compressor capacity~~ installed with a dedicated outdoor air system.

This disallows piping insulation protection that can easily degrade over time. (LECC)

*[Technical functionality]*

15. **Section C403.13.3.1 Protection of piping insulation** is amended to read as follows:

    **C403.13.3.1 Protection of piping insulation.** Piping insulation exposed to the weather shall be protected from physical damage, including that caused by sunlight, moisture, equipment maintenance, and wind. The protection shall provide shielding from solar radiation that can cause degradation of the material. The protection shall be removable and reusable for not less than 6 inches (150 mm) from the connection to the equipment piping for maintenance. Adhesive tape and paint products applied to HVAC system insulating materials, and similar applications that require maintenance shall not be permitted as a means of insulation protection, although such products and applications may still be used for other purposes where allowed or required by other codes.

This eases the requirements for daylight-responsive lighting controls, reducing upfront costs. (LECC)

*[Upfront cost reduction]*

16. **Section C405.2.4 Daylight responsive controls** is amended to read as follows, with exceptions to remain:

**C405.2.4 Daylight responsive controls.** *Daylight responsive controls* complying with Section C405.2.4.1 shall be provided to control the *general lighting* within *daylight zones* in the following spaces:

1. Spaces with a total of more than ~~75~~ 150 watts of *general lighting* within primary sidelit *daylight zones* complying with Section C405.2.4.2.
2. Spaces with a total of more than ~~150~~ 300 watts of *general lighting* within sidelit *daylight zones* complying with Section C405.2.4.2.
3. Spaces with a total of more than ~~75~~ 150 watts of *general lighting* within toplit *daylight zones* complying with Section C405.2.4.3.

This corrects an oversight by saying demand-responsive lighting controls have to be able to communicate with the utility. (LECC)

*[Clarification]*

17. **Section C405.2.8.1 Demand responsive lighting controls function** is amended to add a new item #5 as follows:

    5. Receiving and responding to a utility *demand response signal* from the specific utility providing electric power to the *building*.

This disallows gas-powered lighting. Gas lighting is rarely used anymore, but this adds assurance that it can't be. (Cohort 2021)

*[Minor strengthening]*

18. **Section C405.5.3 Gas lighting** is amended to read as follows:

    **C405.5.3. Gas lighting.** Gas fired lighting appliances ~~shall not be equipped with continuously burning pilot ignition systems.~~ are prohibited.

This removes the requirement for automatic receptacle controls (e.g. occupancy sensors), since their energy savings aren't high enough to justify their expense and complexity. (LECC)

*[Upfront cost reductions]*

19. **Sections C405.12 Automatic receptacle control** and **C405.12.1 Automatic receptacle control function** are deleted in their entirety.

This raises the building size threshold for energy monitoring capability from 10,000 to 25,000 sq ft, to reduce costs for new small businesses while improving alignment with benchmarking policies. (LECC)

*[Upfront cost reductions]*

20. **Section C405.13 Energy monitoring** is amended to read as follows, with the exceptions to remain:

    **C405.13 Energy monitoring.** New *buildings* with a gross *conditioned floor area* of not less than ~~10,000~~ 25,000 square feet (2,323.6 m²) shall be equipped to measure, monitor, record, and report energy consumption in accordance with Sections C405.13.1 through C405.13.6 for load categories indicated in Table C405.13.2 and Sections C405.13.7 through C405.13.11 for end-use categories indicated in Table C405.13.8.

This specifies separate submetering for EV charging, to help building owners more easily understand building loads and comply with benchmarking policies. (Cohort 2021)

*[Technical functionality]*

21. **Table C405.13.2 ENERGY USE CATEGORIES** is amended to add a new line at the end:

| | |
|---|---|
| *Electric vehicle* charging | *Electric vehicle* charging loads. |

This removes mandatory on-site renewable energy requirements which, given our highly renewable grid, are high-cost and low-benefit. It's more appropriate in Colorado to leave solar as an option for meeting the additional credits rather than a straight requirement. (LECC)

*[Cost reduction] [Simplification from base]*

22. **Section C405.15 Renewable energy systems** and all of **Sections C405.15.1** through **C405.15.4** are deleted in their entirety.

This combines the efficiency, renewable, and load management credits into one "bucket" and adds electric-preferred differentials. (LECC)

*[Simplification from base and LECC]*

23. **Section C406.1 Compliance** is amended as follows:

**Section C406.1 Compliance.** *Buildings* shall comply as follows:

1. *Buildings* with greater than 2,000 square feet (186 m²) of *conditioned floor area* shall comply with Section C406.1.1. ~~*Buildings* with greater than 5,000 square feet (465 m²) of *conditioned floor area* shall comply with Sections C406.1.1 and C406.1.2.~~
2. Build-out construction greater than 1,000 square feet (93 m²) of *conditioned floor area* that does not have final lighting or final HVAC systems installed under a prior building permit shall comply with Section ~~C406.1.1.2~~ C406.1.1.3.

**Exceptions:** Core and shell *buildings* where not less than 20 percent of the net floor area is without final lighting or final HVAC that comply with the following:

1. *Buildings* with greater than 5,000 square feet (465 m²) of *conditioned floor area* shall comply with Section ~~C406.1.2~~ C406.1.1.
2. Portions of the *building* where the net floor area is without final lighting or final HVAC shall comply with Section ~~C406.1.1.2~~ C406.1.1.3.
3. Portions of the *building* where the net floor area has final lighting and final HVAC systems shall comply with Section C406.1.1.

24. **Section C406.1.1 Additional energy efficiency credit requirements** is renamed **Additional energy credit requirements** and replaced as follows:

**C406.1.1 Additional energy credit requirements.** *Buildings* shall comply with measures from Sections C406.2 and C406.3 to achieve not less than the number of required ~~efficiency~~ energy credits in accordance with Sections C406.1.1.1 or C406.1.1.2 as applicable. Where a project contains multiple occupancies, the total required energy credits from each building occupancy shall be weighted by the gross *conditioned floor area* to determine the weighted-average project energy credits required. Accessory occupancies shall be included with the primary occupancy group for the purposes of Section C406.

**Exception~~s~~:**

~~1.~~ Portions of *buildings* devoted to manufacturing or industrial use.

~~2. Where a *building* achieves more renewable and load management credits in Section C406.3 than are required in Section C406.1.2, surplus credits shall be permitted to reduce the required energy efficiency credits as follows:~~

~~$EEC_{red} = EEC_{tbl} - \{\text{the lesser of: } [SRLM_{lim}, SRLM_{adj} \times (RLM_{ach} - RLM_{req})]\}$~~

~~**(Equation 4-12)**~~

~~where:~~

~~$EEC_{red}$ = Reduced required energy efficiency credits.~~

~~$EEC_{tbl}$ = Required energy efficiency credits from Table C406.1.1(1).~~

~~$SRLM_{lim}$ = Surplus renewable and load management credit limit from Table C406.1.1(2).~~

~~$SRLM_{adj}$ = 1.0 for all-electric or all-renewable buildings (excluding emergency generation); 0.7 for buildings with fossil fuel equipment (excluding emergency generation).~~

~~$RLM_{ach}$ = Achieved renewable and load management credits from Section C406.3.~~

~~$RLM_{req}$ = Required renewable and load management credits from Section C406.1.2.~~

**C406.1.1.1 Mixed fuel buildings.** *Buildings* that use *combustion equipment* for space heating or *service water heating,* other than for supplemental heating in accordance with Section C403.4.1.1, shall achieve the number of required energy credits in Table C406.1.1.1, based on building occupancy group and *conditioned floor area*. Credit ID R01 shall receive no more than the maximum credit value indicated in column #4 of the table.

**Exceptions:** *Buildings* that meet any of the following criteria shall achieve the number of required energy credits in accordance with Section C406.1.1.2:

1. *Buildings* that use *combustion equipment* only for specialized *service water heating* uses where determined by and approved by the *code official*, including but not limited to water heating for pools or spas.
2. Low-energy *buildings* complying with Section C402.1.1.1.
3. Portions of *buildings* in Group U, Group S, Group F, or Group H occupancies.

**TABLE C406.1.1.1 CREDIT REQUIREMENTS FOR MIXED FUEL BUILDINGS**

| BUILDING OCCUPANCY GROUP | CONDITIONED FLOOR AREA 2,000-4,999 FT$^2$ | CONDITIONED FLOOR AREA ≥ 5,000 FT2 | MAXIMUM CREDITS FROM ID R01 |
|---|---|---|---|
| R-2, R-4, and I-1 | 113 | 146 | 5 |
| I-2 | 54 | 82 | 26 |
| R-1 | 108 | 141 | 37 |

| | | | |
|---|---|---|---|
| B | 91 | 138 | 35 |
| A-2 | 90 | 100 | 5 |
| M | 78 | 126 | 5 |
| E | 84 | 132 | 32 |
| S-1 and S-2 | 82 | 172 | 35 |
| All Other | 45 | 89 | 6 |

**C406.1.1.2 All other buildings.** *Buildings* that do not use *combustion equipment* for space heating or *service water heating*, other than for supplemental heating in accordance with Section C403.4.1.1, shall achieve the number of required energy credits in Table C406.1.1.2, based on building occupancy group and *conditioned floor area*. Credit ID R01 shall receive no more than the maximum credit value indicated in column #4 of the table.

**TABLE C406.1.1.2 CREDIT REQUIREMENTS FOR ALL OTHER BUILDINGS**

| BUILDING OCCUPANCY GROUP | CONDITIONED FLOOR AREA 2,000-4,999 FT$^2$ | CONDITIONED FLOOR AREA ≥ 5,000 FT$^2$ | MAXIMUM CREDITS FROM ID R01 |
|---|---|---|---|
| R-2, R-4, and I-1 | 90 | 123 | 5 |
| I-2 | 43 | 71 | 26 |
| R-1 | 86 | 119 | 37 |
| B | 73 | 120 | 35 |
| A-2 | 72 | 82 | 5 |
| M | 62 | 110 | 5 |
| E | 67 | 115 | 32 |
| S-1 and S-2 | 82 | 172 | 35 |
| All Other | 36 | 80 | 6 |

25. **Section C406.1.1.2** is renumbered as **Section C406.1.1.3** and items #1 and #3 are amended as follows, with item #2 remaining unchanged:

**C406.1.1.3 Building core/shell and build-out construction.** Where separate permits are issued for *core and shell buildings* and build-out construction, compliance shall be ~~in accordance with the following requirements~~ as follows and summarized in Table C406.1.1.3:

1. *Core and shell buildings* or portions of *buildings* shall comply with one of the following:
    1.1. Where the permit includes a ~~central HVAC system or *service water heating* system with chillers, heat pumps, boilers, service water heating equipment, or loop pumping systems with heat rejection,~~ space heating or *service water heating* system that uses *combustion equipment*, the project shall achieve not less than 50 percent of the energy credits required by Section C406.1.1.1 ~~in accordance with~~ using measure in Sections C406.2 and C406.3.

1.2. Where the permit includes a space heating or *service water heating* system that does not use *combustion equipment*, or meets one of the exceptions in C406.1.1.1, the project shall achieve not less than 50 percent of the energy credits required by Section C406.1.1.2 using measures in Section C406.2 and C406.3.

1.3. ~~Alternatively,~~ Where neither a space heating nor a *service water heating* system is included in the permit, the project shall achieve not less than 33 percent of the energy credits required by Section C406.1.1.1.

2. For *core and shell buildings* or portions of *buildings*, the energy credits achieved shall be subject to the following adjustments:
   2.1. Lighting measure credits shall be determined only for areas with final lighting installed.
   2.2. Where HVAC or service water heating systems are designed to serve the entire building, full HVAC or service water heating measure credits shall be achieved.
   2.3. Where HVAC or service water heating systems are designed to serve individual areas, HVAC or service water heating measure credits achieved shall be reduced in proportion to the floor area with final HVAC systems or final service water heating systems installed.
3. Build-out construction shall be deemed to comply with Section C406.1 where one of the following applies:
   3.1. Where ~~heating and cooling generation~~ space heating or *service water heating* is provided by a previously installed central system that uses *combustion equipment*, the energy credits achieved in accordance with Section C406.2 and C406.3 under the build-out project are not less than 33 percent of the credits required by Section C406.1.1.1.
   3.2. Where space heating or *service water heating* is provided by a previously installed system that does not use *combustion equipment* or that meets one or more exceptions in C406.1.1.1, the energy credits achieved in accordance with Section C406.2 under the build-out project are not less than 33 percent of the credits required by Section C406.1.1.2.
   3.3. Where ~~heating and cooling generation is provided by an HVAC system installed in the build-out,~~ space heating or *service water heating* is provided in the build-out by a system that uses *combustion equipment*, the build-out project shall achieve not less than 66 percent of the credits required by Section C406.1.1.1 in accordance with Section C406.2 and C406.3.
   3.4. Where space heating or *service water heating* is provided in the build-out by a system that does not use *combustion equipment* or that meets one or more exceptions in

C406.1.1.1, the energy credits achieved in accordance with Section C406.2 and C406.3 under the build-out project are not less than 66 percent of the credits required by Section C406.1.1.2.

3.5. Where the *core and shell building* ~~is~~ was *approved* in accordance with Section C407 under the 2021 IECC ~~or later~~.

4. Where a *core and shell* or build-out project is required to achieve less than 100 percent of the energy credits required by Section C406.1.1.1 or C406.1.1.2, the maximum allowable credit value from Credit ID R01 shall be reduced in proportion to the percentage of total required energy credits.

**TABLE C406.1.1.3 BUILDING CORE/SHELL AND BUILD-OUT CONSTRUCTION SUMMARY**

| CATEGORY | CONDITION FOR SPACE AND WATER HEATING | ENERGY CREDIT REQUIREMENTS |
|---|---|---|
| Core and shell buildings | With combustion equipment | ≥ 50% of required credits (C406.1.1.1) |
| | Without combustion equipment or meeting exceptions | ≥ 50% of required credits (C406.1.1.2) |
| | No space heating or service water heating in permit | ≥ 33% of required credits (C406.1.1.1) |
| Build-out construction | Using a previously installed central system with combustion | ≥ 33% of required credits (C406.1.1.1) |
| | Using a previously installed system without combustion | ≥ 33% of required credits (C406.1.1.2) |
| | Build-out system uses combustion equipment | ≥66% of required credits (C406.1.1.1) |
| | Build-out system does not use combustion or meets exceptions | ≥ 66% of required credits (C406.1.1.2) |
| | Core and shell building previously *approved* | Must comply with C407 |

This was integrated into the other credits section, to reduce the number of tables and calculations. (LECC)

*[Simplification from base]*

26. **Section C406.1.2 Additional renewable and load management credit requirements** and Table C406.1.2 are deleted in their entirety.

This disallows extra credit for efficient commercial kitchen equipment since it is already required by Colorado's appliance standards law. (Cohort)

*[Clarification]*

27. **Section C406.2.6.2 Q02 Efficient commercial kitchen equipment** is deleted in its entirety, along with its references in Tables C406.2(1) through C406.2(9).

This changes the focus of the renewable energy credit to only onsite resources. (Cohort)

*[Simplification from base and LECC] [Minor strengthening]*

28. **Section C406.3.1 R01 Renewable energy** is amended as follows:

**C406.3.1 R01 Renewable Energy.** Projects installing on-site renewable energy systems with a capacity of at least 0.1 watts per gross square foot (1.08 W/m²) of building area ~~or securing off-site renewable energy~~ shall achieve energy credits for this measure calculated as follows:

$$EC_R = EC_{0.1} \times (R_t + R_{off} - R_{ex})/(0.1 \times PGFA)$$

**Equation 4-28**

where:

$EC_R$ = Section C406.3.1 R01 energy credits achieved for this project.

$EC_{0.1}$ = Section C406.3.1 R01 base credits from Tables C406.2(1) through C406.2(9).

$R_t$ = Actual total rating of on-site renewable energy systems (W).

~~$R_{off}$ = Actual total equivalent rating of off-site renewable energy contracts (W), calculated as follows:~~

~~$R_{off} = TRE/(REN \times 20)$~~

~~*Where:*~~

~~$TRE$ = Total off-site renewable electric energy in kilowatt-hours (kWh) that is procured in accordance with Section C406.2.8.1.~~

~~$REN$ = Annual off-site renewable electrical energy from Table C406.2.8.1.1, in units of kilowatt-hours per watt of array capacity.~~

$R_{ex}$ = Rating (W) of renewable energy resources capacity excluded from credit calculated as follows:

$R_{ex} = RR_x + RR_c$

where:

$RR_x$ = Rating of <u>on-site</u> renewable energy resources used to meet any exceptions of this code (W).

$RR_c$ = Rating of <u>on-site</u> renewable energy resources used to achieve other energy credits in Section C406 (W).

$PGFA$ = Project gross floor area ($ft^2$). Where renewable requirements, exceptions, or credits are expressed in annual kWh or Btu rather than W

of output capacity, they shall be converted as 3,413 Btu = 1 kWh and converted to W equivalent capacity.

This changes the Simulated Building Performance Path to use ASHRAE Appendix G. (LECC)

*[Simplification from LECC] [Partial strengthening from base and LECC]*

29. **Section C407 Simulated Building Performance** is replaced with the following:

**Section C407 SIMULATED BUILDING PERFORMANCE**

**C407.1 Scope.** This section establishes criteria for demonstrating compliance using simulated building performance in accordance with Section 4.2.1.1 of ANSI/ASHRAE/IES Standard 90.1, Normative Appendix G, as modified by Informative Appendix I for Site Energy and as further modified by this code.

This maintains the IECC table of mandatory items. (LECC)

*[Simplification from LECC]*

**Section C407.2 Mandatory requirements** is replaced with the following:

**C407.2 Mandatory requirements.** Compliance under the simulated building performance path of Section C407 requires compliance with the sections of this code identified in Table C407.2 as amended, superseding Section G1.2.1 of ANSI/ASHRAE/IES Standard 90.1, Normative Appendix G.

This syncs two items in the table with the LECC's version.

*[Simplification from LECC]*

**Table C407.2 Requirements for Simulated Building Performance** is amended to add a new line as follows, and to delete C406.1.2 Additional renewable and load management credit requirements:

| | |
|---|---|
| C403.4.6 | Demand Response |
| ~~C406.1.2~~ | ~~Additional renewable and load management credit requirements~~ |

This changes the metric for the Simulated Building Performance path to site energy since it is fuel-neutral and less variable over geographies and time. (LECC)

*[Simplification from LECC]*

**C407.3 Compliance based on site energy.** Buildings shall comply with either Section C407.3.1 Site energy reduction or C407.3.2 Fixed site *energy use intensity* target.

**C407.3.1 Site energy reduction.** Buildings shall comply with Section 4.2.1.1 of ANSI/ASHRAE/IES Standard 90.1, Normative Appendix G, as modified by Informative Appendix I for Site Energy and as further modified by this code.

**C407.3.1.1 Building performance factors.** Table 4.2.1.1 Building Performance Factor (BPF) of ANSI/ASHRAE/IES Standard 90.1 is replaced with Table C407.3.1.1. *Mixed fuel buildings* that use *combustion equipment* for space heating or *service water heating,* other than for supplemental heating in accordance with Section C403.4.1.1, shall use the appropriate building performance factor under BPF – Mixed Fuel. All other buildings shall use the appropriate building performance factor under BPF – All Others.

**Exceptions:** *Buildings* that meet any of the following criteria may use the building performance factors under BPF – All Others:

1. *Buildings* that use *combustion equipment* only for specialized *service water heating* uses where determined by and approved by the *code official*, including but not limited to water heating for pools or spas.
2. Low-energy *buildings* complying with Section C402.1.1.1.
3. Portions of *buildings* in Group U, Group S, Group F, or Group H occupancies.

**TABLE C407.3.1.1 BUILDING PERFORMANCE FACTOR (BPF), SITE ENERGY**

| BUILDING TYPE | BPF – MIXED FUEL | BPF – ALL OTHERS |
|---|---|---|
| Multifamily (R-2, R-4) | 0.47 | 0.63 |
| Healthcare/hospital | 0.47 | 0.63 |
| Hotel/motel | 0.50 | 0.66 |
| Office | 0.39 | 0.52 |
| Restaurant | 0.52 | 0.69 |
| Retail | 0.35 | 0.47 |
| School | 0.38 | 0.50 |
| Warehouse | 0.28 | 0.37 |

| | | |
|---|---|---|
| All others | 0.43 | 0.57 |

**C407.3.1.2 Energy conversion factors.** Table G2.1 of ANSI/ASHRAE/IES Standard 90.1 is replaced with Table C407.3.1.1.

**C407.2.1.2 ENERGY CONVERSION FACTORS**

| UNITS | SITE ENERGY, BTU/UNIT | BUILDING PROJECT ENERGY SOURCE |
|---|---|---|
| kWh | 3,412 | Electricity |
| Therm (GJ) | 100,000 | Natural Gas |
| Therm (GJ) | 100,000 | Propane |
| Gallon (L) | 137,600 | Distillate fuel oil |

This adds an option for certain common building types to hit one fixed number instead of a certain percentage reduced from a baseline. The EUI targets are based on cohort members with similar language, but adjusted to have an electric-preferred differential. (LECC)

*[Simplified from LECC] [Strengthened from base and LECC]*

**C407.3.2 Fixed performance target modeling procedure.** Eligible *building* types listed in Table C407.3.2 may demonstrate compliance by achieving the site EUI target identified in Table C407.3.2. The proposed design performance shall be demonstrated using the energy modeling procedures, schedules, and loads for the proposed design in ANSI/ASHRAE/IES Standard 90.1 Normative Appendix G as modified by Informative Appendix I for Site Energy and as further modified by this code. *Buildings* with multiple occupancy types listed in Table C407.3.2 shall develop a site EUI performance target based on an area-weighted average EUI calculated by the floor area of each occupancy type. *Mixed fuel buildings* that use *combustion equipment* for space heating or *service water heating,* other than for supplemental heating in accordance with Section C403.4.1.1, shall use the appropriate target in Mixed Fuel – Site EUI Target. All other buildings shall use the appropriate target in All Others – Site EUI Target.

**Exceptions:** *Buildings* that meet any of the following criteria may use the building performance factors under BPF – All Others:

1. *Buildings* that use *combustion equipment* only for specialized *service water heating* uses where determined by and approved by the *code official*, including but not limited to water heating for pools or spas.
2. Low-energy *buildings* complying with Section C402.1.1.1.
3. Portions of *buildings* in Group U, Group S, Group F, or Group H occupancies.

**C407.3.2.1 Excluded energy use.** Energy used for data centers, EV charging, swimming pools, or parking areas is permitted to be excluded from the total site EUI calculation of the building, provided that those sources of energy use are separately metered.

**C407.3.2.2 On-site renewable energy limit.** On-site renewable energy is permitted to offset not more than 5 percent of the building's site EUI.

**TABLE C407.3.2 FIXED EUI PERFORMANCE TARGETS**

| BUILDING AREA TYPE | MIXED FUEL – SITE EUI TARGET (KBTU/FT$^2$×YR) | ALL OTHERS – SITE EUI TARGET (KBTU/FT$^2$×YR) |
|---|---|---|
| Multifamily | 24 | 32 |
| Healthcare/hospital (General Medical & Surgical) | 116 | 155 |
| Healthcare (other) | 44 | 59 |
| Hotel/motel | 26 | 35 |
| Office | 30 | 40 |
| Restaurant | 150 | 200 |
| Retail | 30 | 40 |
| School | 25 | 34 |
| Non-refrigerated Warehouse | 8 | 11 |

This adds a backstop to the Simulated Building Performance pathway. (Cohort)

*[Potential strengthening from base and LECC]*

**C407.4 Performance backstop.** All elements of the *building* envelope and HVAC system must at a minimum meet the mandatory requirements of ASHRAE Standard 90.1-2016, Sections 5.5 and 6.8. No individual component tradeoffs below these prescriptive requirements will be allowed in the proposed *building* performance model. Exceptions to the 40 percent window-to-wall area in Section 5.5.4.2 of ASHRAE 90.1 2022 Appendix G may be approved by the *code official* provided that the project can still meet the required building energy performance requirements.

This adds a "reserved" (blank) section so that the numbering aligns with the LECC.

*[Clarification]*

30. **Section C410 Reserved** is added as follows:

**C410 Reserved.** This section is reserved for future use.

This adds an optional All-Electric compliance pathway. (Green)

*[Flexibility]*

31. **Section C411 All-electric compliance pathway** is added as follows:

**C411 ALL-ELECTRIC COMPLIANCE PATHWAY**

**C411.1 Application.** New *commercial buildings* shall be *all-electric buildings* and comply with Sections C402 through C405, Section C408, and Sections C411.2 through C411.6.

**Exceptions:**
1. *Fuel gas* or *fuel oil* shall be permitted where it has been demonstrated to the code official that use of *fuel gas* or *fuel oil* is required by an applicable law or regulation.
2. *Fuel gas* or *fuel oil* shall be permitted for an *emergency power system* or a *standby power system*.

**C411.2 Electric resistance heating equipment.** The sole use of electric resistance equipment and appliances for space and water heating shall be prohibited other than for *buildings* or portions of *buildings* that comply with one or more of Sections C411.2.1 through C411.2.8.

**C411.2.1 Low space heating capacity.** Electric resistance appliances or equipment shall be permitted in *buildings* or areas of *buildings* not served by a mechanical cooling system and with a total space heating capacity not greater than 4.0 Btu/h (1.2 watts) per square foot of *conditioned space*.

**C411.2.2 Small systems.** *Buildings* in which electric resistance appliances or equipment comprise less than 5 percent of the total system heating capacity or serve less than 5 percent of the *conditioned floor area*.

**C411.2.3 Kitchen makeup air.** Makeup air for commercial kitchen exhaust systems required to be tempered by Section 508.1.1 of the International Mechanical Code is permitted to be heated by electric resistance.

**C411.2.4 Freeze protection.** The use of electric resistance heat for freeze protection shall comply with the following:
1. Space heating systems sized for spaces with indoor design conditions of not greater than 40°F and intended for freeze protection, including temporary systems in unfinished

spaces, shall be permitted to use electric resistance. The *building thermal envelope* of any such space shall be insulated in accordance with Section C402.1 of the International Energy Conservation Code.

2. Freeze protection systems shall comply with Section C403.13.3 of the International Energy Conservation Code.

**C411.2.5 Preheating of outdoor air.** Hydronic systems without energy recovery *ventilation* and that do not use freeze protection fluids shall be permitted to utilize electric resistance to temper air to not more than 40°F. All systems with energy recovery *ventilation* shall be permitted to utilize electric resistance to preheat outdoor air to defrost or temper air entering the energy recovery device and shall comply with one of the following:

1. Where the space is mechanically humidified or has a process application that will maintain the space above 30 percent relative humidity when the outside temperature is not greater than 25°F and the system recovers latent energy, the outdoor air shall not be preheated to greater than 25°F.
2. For sensible-only heat recovery exchangers, outdoor air shall not be preheated to greater than 25°F.
3. For all other systems, outdoor air shall not be preheated to greater than 5°F.

**C411.2.6 Small *buildings*.** *Buildings* with a *conditioned floor area* of not more than 250 square feet and not served by a mechanical space cooling system shall be permitted to use electric resistance appliances or equipment for space heating.

**C411.2.7 Supplemental heat.** Electric resistance heat shall be permitted as supplemental heat where installed with heat pumps sized in accordance with Section C411.3 and provided with controls in accordance with Section C403.4.1.1.

**C411.2.8 Specific conditions.** Portions of *buildings* or specific equipment and appliances, subject to approval by the *code official*, that require electric resistance heating and cannot practicably be served by electric heat pumps.

**C411.3 Heat pump sizing for space heating.** Heat pump space heating systems shall be sized to meet the *building* heating load at the greater of 0°F or the 99 percent annual heating dry-bulb for the nearest weather station provided in the latest edition of the ASHRAE Handbook of Fundamentals. The heat pump space heating system shall not require the use of supplemental electric heat at or above this temperature other than for defrosting.

**C411.4 Heat pump sizing for water heating.** Heat pump *service water heating* systems shall be sized to meet not less than the *building service water heating* load at the greater of 15°F or the 99 percent annual heating dry-bulb for the nearest weather station provided in the latest edition of the ASHRAE Handbook of Fundamentals. Supplemental electric heat shall not be required at or above this temperature other than for temperature maintenance in recirculating systems and defrosting.

**C411.5 Heating outside a *building*.** Systems for heating outside a *building* shall comply with Section C403.13.1.

**C411.6 Low-capacity cooling equipment.** Air conditioners with capacities less than 240,000 Btu/h (70 kW) shall be electric heat pump equipment sized and configured to provide both space cooling and space heating.

This adds an optional Passive House compliance pathway. (Green)

*[Flexibility] [Possible strengthening from base and LECC]*

32. **Section C412 Passive House compliance pathway** is added as follows:

**C412 PASSIVE HOUSE COMPLIANCE PATHWAY**

**C412.1 Scope.** This section establishes criteria for compliance using Passive House Certification. New *commercial buildings* shall achieve Passive House certification in accordance with Sections C412.2 or C412.3.

**C412.2 Passive House Institute US (PHIUS) Certification.** New *commercial buildings* shall achieve certification with the PHIUS CORE COMM Passive Building Standard and provide documentation in accordance with Section C412.2.1.

**C412.2.1 Documentation.** Documentation shall be provided to the *code official* demonstrating the following:

1. Prior to the issuance of a *building* permit, documentation of a PHIUS CORE COMM Certification Contract from PHIUS and a list of compliance features.
2. Prior to the issuance of a certificate of occupancy, a copy of the final report submitted on a form that is *approved* by PHIUS to document compliance with the PHIUS CORE COMM Standard.

**C412.3 Passive House Institute (PHI) Certification.** New *commercial buildings* shall achieve certification with the PHI Passive House Standard and provide documentation in accordance with Section 412.3.1.

**C412.3.1 Documentation.** Documentation shall be provided to the *code official* demonstrating the following:

1. Prior to the issuance of a *building* permit, signed documentation from a PHI accredited Passive House Certifier of intent to certify the *building* and a list of compliance features.
2. Prior to the issuance of a certificate of occupancy, a copy of the final report submitted on a form that is *approved* by PHI to document compliance with the Passive House Standard.

This makes conforming amendments to this section so it aligns with the changes in C407. (Cohort)

*[Clarification]*

33. **Section C502.2 Change in space conditioning,** exception #2, is amended as follows:

2. Where the simulated building performance option in Section C407 is used to comply with this section, the annual ~~*energy cost*~~ site energy use of the *proposed design* shall be not greater than 110 percent of the annual ~~*energy cost*~~ site energy use otherwise permitted by Section ~~C407.2~~ C407.3

This clarifies that programmable thermostat controls are required anytime an HVAC system is replaced or expanded. (Mountain Cohort 1)

*[Clarification]*

34. **Section C502.3.3.1 Thermostatic controls** is added as follows:

**C502.3.3.1 Thermostatic controls.** *Additions* that involve replacing or expanding a heating or cooling system shall comply with section C403.4.1 Thermostatic controls.

This makes conforming amendments to this section so it aligns with the changes in C407. (Cohort)

*[Clarification]*

35. **Section C502.3.7 Additional energy efficiency credit requirements** is amended as follows, with the exceptions to remain:

**C502.3.7 Additional energy efficiency credit requirements.** *Additions* shall comply with sufficient measures from Sections C406.2 and C406.3 to achieve not less than 50 percent of the number of required efficiency credits from Table ~~C406.1.1(1)~~ C406.1.1.1 or Table C406.1.1.2 as applicable based on building occupancy group and ~~*climate zone*~~ combustion equipment. Where a project contains multiple occupancies, credits from Table ~~C406.1.1(1)~~ C406.1.1.1 or Table C406.1.1.2 as applicable for each building occupancy shall be weighted by the gross floor area to determine the project weighted average energy credits required. Accessory occupancies shall be included with the primary occupancy group for purposes of this section. *Alterations* to the existing building that are not part of the *addition*, but are permitted with an *addition*, shall be permitted to be used to achieve the required credits.

These makes conforming amendments to this section so it aligns with the changes in C407. (Cohort)

*[Clarification]*

36. **Section C503.2.2 Vertical fenestration** is amended as follows:

**C503.2.2 Vertical fenestration.** The addition of *vertical fenestration* that results in a total building *fenestration* area less than or equal to that specified in Section C402.5.1 shall comply with Section C402.1.4, C402.5.3 or C407. The addition of *vertical* fenestration that results in a total building *fenestration* area greater than Section C402.5.1 shall comply with Section C402.5.1.1 for the space adjacent to the new fenestration only. *Alterations* that result in a total building *vertical fenestration* area exceeding that specified in Section C402.5.1.1 shall comply with Section C402.1.4 or C407. Provided that the vertical fenestration area is not changed, using the same vertical fenestration area in the *standard reference design* as the *building* prior to *alteration* shall be an alternative to using: ~~the vertical fenestration area specified in Table C407.4.1(1).~~

1. The proposed vertical *fenestration* area, where the proposed vertical *fenestration* area is less than 40 percent of the *above-grade wall* area; or
2. Forty percent of the above-grade wall area, where the proposed vertical *fenestration* area is 40 percent or more of the *above-grade wall* area.

37. **Section C503.2.3 Skylight area** is amended as follows:

**C503.2.3 Skylight area.** New *skylight* area that results in a total building *skylight* area less than or equal to that specified in Section C402.5.1 shall comply with Section C402.1.4, C402.5 or C407. The addition of *skylight* area that results in a total building skylight area greater

than Section C402.5.1 shall comply with Section C402.5.1.2 for the space adjacent to the new skylights. *Alterations* that result in a total building skylight area exceeding that specified in Section C402.5.1.2 shall comply with Section C402.1.4 or C407. Provided that the skylight area is not changed, using the same skylight area in the *standard reference design* as the *building* prior to *alteration* shall be an alternative to using: ~~the skylight area specified in Table C407.4.1(1).~~

1. The proposed skylight area, where the proposed skylight area is less than that permitted by Section C402.1; or
2. The area permitted by Section C402.1; where the proposed skylight area exceeds that permitted by Section C402.1.

38. **Section C503.6 Additional energy efficiency credit requirements for alterations** is amended as follows with the exceptions to remain:

    **C503.6 Additional energy efficiency credit requirements for alterations**. *Alterations* that are *substantial improvements* shall comply with measures from Sections C406.2, C406.3 or both to earn the number of required credits specified in Table ~~C406.1.1(1)~~ C406.1.1.1 or Table C406.1.1.2 as applicable based on building occupancy group and ~~*climate zone*~~ combustion equipment.. Where a project contains multiple occupancies, credits specified in Table ~~C406.1.1(1)~~ C406.1.1.1 or Table C406.1.1.2 as applicable for each building occupancy shall be weighted by the gross *conditioned floor area* to determine the weighted average credits required. Accessory occupancies, other than Group F or H, shall be included with the primary occupancy group for the purposes of this section.

This clarifies that programmable thermostat controls are required anytime an HVAC system is replaced or expanded. (Mountain Cohort 1)

*[Clarification]*

39. **Section C503.7 Thermostatic controls** is added as follows:

    **C503.7 Thermostatic controls.** *Alterations* that involve replacing or expanding a heating or cooling system shall comply with section C403.4.1 Thermostatic controls.

These makes conforming amendments to this section so it aligns with the changes in C407. (Cohort)

*[Clarification]*

40. **Section C505.1 General,** exception, is amended as follows:

Where the simulated building performance option in Section C407 is used to comply with this section, the annual ~~*energy cost*~~ site energy use of the proposed design shall be not greater than 110 percent of the annual ~~*energy cost*~~ site energy use otherwise permitted by Section C407.3.

41. **Section C502.2 Change in space conditioning**, exception #2, is amended as follows:

    2. Where the simulated building performance option in Section C407 is used to comply with this section, the annual ~~*energy cost*~~ site energy use of the *proposed design* shall be not greater than 110 percent of the annual ~~*energy cost*~~ site energy use otherwise permitted by Section ~~C407.2~~ C407.3.

## SOLAR-READY CODE AMENDMENTS (Required by state law)

*[Simplification from LECC] [Required by state law]*

This amends the appendix to apply to all commercial buildings instead of just those with five or fewer stories. It also adds specificity to the exceptions for buildings with existing onsite solar.

*[Specificity] [Required by state law]*

42. **Section CB101.1 General** and exception #1 is amended as follows, with the other exceptions to remain:

    **CB103.1 General.** A solar-ready zone shall be located on the roof of ~~buildings that are five stories or less in height above grade plane, and~~ all new *commercial buildings* that are oriented between 110 degrees and 270 degrees of true north or have *low slope* roofs. Solar-ready zones shall comply with Sections CB103.2 through CB103.8.

    **Exceptions:**

    1. A *building* with a permanently installed, on-site renewable energy system that meets the following criteria:
        a. The system produces the energy output equivalent to covering 40 percent of the net roof area with solar photovoltaic calculated as the horizontally projected gross roof area less that area covered by skylights, occupied roof decks, vegetative roof areas, and mandatory access or setback areas as required by the International Fire Code.

b. The system is located on the roof or overhang of the *building* or the roof or overhang of another structure located within 250 feet of the *building*, on the *building site*, on covered parking, or another *approved* location installed with the *building* project and under the same property ownership.

This adds specificity to what's required to be shown on construction documents.

*[Specificity] [Simplification from LECC] [Required by state law]*

43. **Section CB103.2 Construction document requirements for solar-ready zone** is amended as follows:

**CB103.2 Construction document requirements for solar-ready zone.** *Construction documents* shall indicate the location and size of the *solar-ready zone,* structural design loads for roof dead load and roof live load, and pathways for routing of raceways from the *solar-ready zone* to the electrical service panel, with each raceway labeled on the *construction documents* as "Potential Pathway".

This adds specificity to where the solar-ready zone can be located and the minimum sizes of sub-zones.

*[Simplification from LECC] [Required by state law] [Specificity]*

44. **Section CB103.3 Solar-ready zone area** is amended as follows, with the other exceptions to remain:

**CB103.3 Solar-ready zone area.** The total *solar-ready zone* area shall not be less than 40 percent of the roof area calculated as the horizontally projected gross roof area less the area covered by skylights, occupied roof decks, *vegetative roof* areas, and mandatory access or set back areas as required by the International Fire Code. The *solar-ready zone* shall be a single area or smaller, separated sub-zone areas. ~~Each sub-zone area shall be not less than 5 feet (1524 mm) in width in the narrowest dimension.~~ For sloped roofs, each sub-zone area shall be not less than 200 square feet (18.6 $m^2$) and no side of any rectangular area shall be less than 11 feet in length. For low-sloped or flat roofs, each sub-zone area shall be not less than 330 square feet (30.7 $m^2$), with a minimum length running generally north to south of 15 feet and a minimum length running generally east to west of 22 feet and no side of any rectangular area shall be less than 11 feet in length. The *solar-ready zone* shall be located on the roof or overhang of the *building* or on the roof or overhang of another structure located within 250 feet of the *building*, on the *building*

*site*, on covered parking, or another *approved* location installed with the *building* project and under the same property ownership.

This specifies that the main electrical panel needs a minimum amperage of 200 amps.

*[Specificity][Required by state law]*

45. **Section CB103.7 Electrical service reserved space** is amended as follows:

    **CB103.7 Electrical service reserved space.** The main electrical service panel shall have a minimum bus bar rating of not less than 200 amps, and shall have a reserved space to allow installation of a dual-pole circuit breaker for future solar electric labeled "For Future Solar Electric." The reserved space shall be positioned at the end of the panel that is opposite from the panel supply conductor connection.

## EV-READY CODE AMENDMENTS (Required by state law)

This adjusts the IECC EV-ready Appendix CG to sync with the state model code. Due to the LECC addition of EV Capable Light and Level 1 EVSE, it is shorter to replace than amend. This version is in a more logical order puts the

*[Simplification from LECC]*

46. **Appendix CG** is replaced with the following:

    **Section CG101.1 Definitions.**

    **DIRECT CURRENT FAST CHARGER (DCFC) EVSE.** Equipment capable of fast charging on a 100A or higher 480VAC three-phase branch circuit. AC power is converted into a controlled DC voltage and current within the *EVSE* that will then directly charge an *EV*.

    **ELECTRIC VEHICLE (EV).** An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles and electric motorcycles, primarily powered by an electric motor that draws current from a building electrical service, *EVSE*, a rechargeable storage battery, a fuel cell, a photovoltaic array, or another source of electric current. Off-road, self-propelled electric mobile equipment, including but not limited to, industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, and

boats are not considered *EVs*.

**ELECTRIC VEHICLE CAPABLE SPACE (EV CAPABLE SPACE).** A designated *parking space* that is provided with electrical infrastructure such as, but not limited to, raceways, cables, electrical capacity, a panelboard, or other electrical distribution equipment space necessary for the future installation of an *EVSE*.

**ELECTRIC VEHICLE CAPABLE LIGHT SPACE (EV CAPABLE LIGHT SPACE).** A designated *parking space* that has a raceway and/or conduit installed to support future implementation of *EV* charging installation, and has sufficient physical space adjacent to existing electrical equipment for future electrical upgrades.

**ELECTRIC VEHICLE READY SPACE (EV READY SPACE).** A *parking space* that is provided with a branch circuit and an outlet, junction box, or receptacle that will support an installed *EVSE*.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE).** Equipment for plug-in power transfer, including ungrounded, grounded, and equipment grounding conductors; *EV* connectors; attached plugs; any personal protection system; and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the *EV*.

**ELECTRIC VEHICLE SUPPLY EQUIPMENT INSTALLED SPACE (EVSE SPACE).** A *parking space* that is provided with a dedicated *EVSE* connection.

**LEVEL 1 EVSE.** An *EV* charging system that uses a standard alternating current (AC) 120-volt outlet to deliver a low charging rate suitable for overnight or extended-duration charging.

**LEVEL 2 EVSE.** An *EV* charging system that uses a 208- or 240-volt alternating current (AC) power source to deliver a medium charging rate, typically used in residential, commercial, and public settings for faster charging than *Level 1 EVSE* systems.

**PARKING SPACE.** A space within a building or private or public parking lot, excluding driveways, ramps, columns, and work areas, for the parking of an automobile.

**PLUG-IN HYBRID ELECTRIC VEHICLE.** An electric vehicle having a second source of motive power.

**CG101.2 Electric vehicle power transfer infrastructure.**

Parking facilities for *commercial buildings,* major renovations, and *additions* shall be provided with *EV* power transfer infrastructure in accordance with Sections CG101.2.1 through CG101.2.8.

**CG101.2.1 Quantity.** The number of required *Level 2 EVSE installed spaces, EV ready spaces, EV capable spaces*, and *EV capable light spaces* shall be determined in accordance with this section and Table CG101.2.1 based on the total number of *parking spaces*, including all covered parking under carports or detached garages, and shall be rounded up to the nearest whole number. This includes all covered parking under carports or detached garages.

1. *Group R-2* occupancies shall use the total parking for the entire development to determine the EV power transfer infrastructure requirements of Table CG101.2.
2. For *Group R-2 buildings*, the requirements shall be based on the total number of *dwelling units* or the total number of *parking spaces*, whichever is more.
3. All attached garages with direct connection to a *dwelling unit* will be required to have one *EV ready space*.
4. Where more than one parking facility is provided on a *building site*, the number of required *parking spaces* required to have *EV* power transfer infrastructure shall be calculated separately for each parking facility.
5. Where one shared parking facility serves multiple building occupancies, the required number of spaces shall be determined proportionally based on the floor area of each *building* occupancy.
6. Requirements for a Group S-2 parking garage shall be determined by the occupancies served by that parking garage. Where new *parking spaces* do not serve specific occupancies, the values for Group S-2 parking garage in Table CG101.2.1 shall be used.

**TABLE CG101.2.1 REQUIRED EV POWER TRANSFER INFRASTRUCTURE**

| BUILDING TYPE/SPACE TYPE | LEVEL 2 EVSE SPACES | EV READY SPACES | EV CAPABLE SPACES | EV CAPABLE LIGHT SPACES |
|---|---|---|---|---|
| Group R-2 with ≤10 parking spaces | 0 | 15% of spaces | 10% of spaces | 10% of spaces |
| Group R-2 with >10 parking spaces | 5% of spaces | 15% of spaces | 10% of spaces | 30% of spaces |
| All other commercial occupancies with ≤15 parking spaces | 0 | 20% of spaces but ≥2 spaces | 0 | 0 |
| All other commercial occupancies with >15 parking spaces | 2% of spaces | 8% of spaces | 10% of spaces | 10% of spaces |

**CG101.2.2 Substitutions.** *EV* power transfer infrastructure types may be substituted in accordance with the following criteria, as summarized in Table CG101.2.2:

1. Each *DCFC EVSE* installed shall be permitted to be substituted for other space types as follows:
    1. *Group R-2* occupancies may substitute up to 5 spaces when the *building* provides a minimum of 60 percent of *parking spaces* as a combination of *Level 2 EVSE spaces, EV ready spaces, EV capable spaces, or EV capable light spaces.*
    2. *Commercial buildings* other than *Group R-2* occupancies may substitute up to 10 spaces when the *building* provides a minimum of 20 percent of *parking spaces* as a combination of *Level 2 EVSE spaces*, *EV ready spaces,* or *EV capable spaces.*
2. *Group R-2* occupancies with greater than 10 vehicle *parking spaces* shall be permitted to substitute three *Level 1 EVSE spaces* for every one *Level 2 EVSE space* or every one *EV ready space*, for up to 50 percent of required *Level 2 EVSE spaces* and *EV ready spaces*.
3. *Level 2 EVSE spaces* that exceed the minimum requirements of this section may be used to meet the minimum requirements for *EV ready spaces, EV capable spaces,* and *EV capable spaces*.
4. *EV ready spaces* that exceed the minimum requirements of this section may be used to meet the minimum requirements for *EV capable spaces* and *EV capable light spaces.*
5. *EV capable spaces* that exceed the minimum requirements of this section may be used to meet the minimum requirements for *EV capable light spaces.*

**TABLE CG101.2.2 EV POWER TRANSFER INFRASTRUCTURE SUBSTITUTIONS**

| EV INFRASTRUCTURE TYPE | ELIGIBLE SUBSTITUTIONS |
|---|---|
| DCFC for R-2 occupancies | Can replace up to 5 spaces of other types if building has at least 60% parking spaces of other types |
| DCFC for other commercial occupancies | Can replace up to 10 spaces of other types if building has at least 20% parking spaces of other types |
| Level 1 EVSE Spaces for R-2 occupancies | Every three Level 1 EVSE spaces can replace one Level 2 EVSE space or one Level 2 EV ready space, for up to 50% of EVSE space requirements |
| Level 1 EVSE spaces for other commercial occupancies | Not permitted for substitutions |
| Excess Level 2 EVSE spaces | Can count toward EV ready, EV capable, or EV capable light space requirements |

| | |
|---|---|
| Excess EV ready spaces | Can count toward EV capable and EV capable light space requirements |
| Excess EV capable spaces | Can count toward EV capable light space requirements |

**CG101.2.3 EV capable light spaces.** Each *EV capable light space* shall comply with the following:

1. A continuous raceway and/or conduit, sized and rated to supply a minimum of 208 volts and a minimum of 40-ampere rated circuits, shall be installed between an enclosure or outlet located within 3 feet (914 mm) of the space and electrical distribution panel, and shall be capped.
   **Exception:** Conduit installed with a pull string from the termination locations at parking spaces to a location of a future transformer or future electrical panel with electrical service size determined at the time of future permit.
2. Dedicated physical space shall be provided to accommodate all equipment necessary for electrical service to future *EVSE*.
3. The raceway and/or conduit shall be permanently and visibly marked “For electric vehicle supply equipment (EVSE)” at the load center and termination point locations.
4. *EV capable light* includes directly adjacent *parking spaces* if the raceway and/or conduit terminates next to and between both *parking spaces*.

**CG101.2.4 EV capable spaces.** Each *EV capable space* shall comply with the following:

1. A continuous raceway or cable assembly, sized and rated to supply a minimum of 208 volts and a minimum of 40-ampere rated circuits, shall be installed between an enclosure or outlet located within 3 feet (914 mm) of the space and electrical distribution panel, and shall be capped.
   **Exception:** Conduit installed with a pull string from the termination locations at *parking spaces* to a location of a future transformer or future electrical panel with electrical service size determined at the time of future permit.
2. The electrical distribution equipment to which the raceway or cable assembly connects shall have dedicated overcurrent protection device space and spare capacity to support at least 8.3 kVA (40A 208/240V) for each space.
3. The enclosure or outlet and panel directory shall be marked: “For electric vehicle supply equipment (EVSE).”
4. *EV capable* includes directly adjacent *parking spaces* if the raceway terminates next to and between both *parking spaces*.

**CG101.2.5 EV ready spaces.** Each *EV ready space* shall comply with the following:

1. A branch circuit shall have a minimum circuit capacity of 8.3 kVA (40A 208/240V) and shall terminate at a receptacle or junction box located within 3 feet of each space.
2. The electrical panel, electrical distribution equipment directory, and all outlets or enclosures shall be marked “For future electric vehicle supply equipment (EVS).”
3. *EV ready* includes directly adjacent *parking spaces* if the receptacle or junction box is adjacent to and between both *parking spaces*.

**CG101.2.6 Level 1 EVSE spaces.** Each *Level 1 EVSE space* shall comply with the following:

1. A branch circuit shall have a minimum circuit capacity of 1.8 kVA (15A 120V) and shall terminate at a receptacle located within 3 feet of each space.
2. The *EVSE,* electrical panel directory, and all receptacles or enclosures shall be marked “Level 1 Electric vehicle supply equipment (EVSE).”
3. The *EVSE* shall be installed in accordance with NFPA 70 and shall be listed and labeled in accordance with UL 2202 or UL 2594.

**CG101.2.7 Level 2 EVSE spaces.**

An installed *EVSE* with multiple output connections shall be permitted to serve multiple *Level 2 EVSE installed spaces*. An *EVSE* serving one or more *Level 2 EVSE spaces* shall comply with the following:

1. A branch circuit shall have a minimum circuit capacity of 8.3 kVA (40A 208/240V) and shall terminate at a receptacle located within 3 feet of the space.
2. The *EVSE* shall provide a minimum charging rate of 6.2 kVA (30A at 208/240V) or shall be an ENERGY STAR-certified inductive charging system for battery powered *EVs*.
   **Exception:** If serving three or more spaces and controlled by an energy management system, the minimum charging rate shall be 3.3 kVA per space.
3. The *EVSE* may be wall-mounted or pedestal style and may provide multiple cords to connect with *EVs*.
4. The *EVSE* must be capable of connecting to the internet.
5. The *EVSE,* electrical panel directory, and all receptacles or enclosures shall be marked “Level 2 Electric vehicle supply equipment (EVSE).”
6. The *EVSE* shall be installed in accordance with NFPA 70, including Article 625, and shall be listed and labeled in accordance with UL 2202 or UL 2594

**CG101.2.6 EVSE installation.** *EVSE* shall be installed in accordance with NFPA 70 and shall be *listed* and *labeled* in accordance with UL 2202 or UL 2594.

**CG101.2 7 Accessible EV Parking Spaces.** For Level 2 *EVSE installed spaces* required by Table CG101.2.1, a minimum of 5 percent (not less than one space) shall be van accessible spaces in accordance with Section 1107.2.2 of the International Building Code. In addition, another 5 percent (not less than one space) of the total *EV ready*, *EV capable*, or *EV capable light spaces* required by Table CG101.2.1 shall meet one of the following:

1. Be van accessible parking spaces in accordance with Section 1107.2.2 of the International Building Code.
2. Have the electrical infrastructure for *EV capable light, EV capable, or EV ready spaces* configured so that future *EVSE* shall be capable of serving van accessible *parking spaces*.

**CG101.2.8 Identification.** *Construction documents* shall designate all *DCFC, Level 2 EVSE spaces, Level 1 EVSE spaces, EV ready spaces, EV capable spaces,* and *EV capable light spaces,* and indicate the locations of raceway and/or conduit and termination points serving them. The circuits or spaces reserved for *DCFC, Level 2 EVSE spaces, EV ready spaces,* and *EV capable spaces* shall be clearly identified in the panel or subpanel directory. The raceway and/or conduit for *EV ready spaces, EV capable spaces* and *EV capable light spaces* shall be clearly identified at both the panel or subpanel and the termination point at the *parking space*.

ELECTRIC READY AMENDMENTS (Required by state law)

*[Simplification from LECC] [Required by state law]*

This ensures that "core and shell" buildings (unfinished interiors) align with energy standards once the first tenant completes their build-out. (LECC)

*[Clarification] [Required by state law]*

47. **Section CH101.2 Scope** is amended and section CH101.2.1 is added as follows:

**CH101.2 Scope.** The provisions in this appendix are applicable to new *commercial buildings*, additions, and first tenant finish permits. ~~New construction shall comply with Section CH103.~~

**CH101.2.1 First tenant finishes.** In the case that a *first tenant finish* to a commercial *core and shell building* or unfinished space is credited towards meeting the requirements of Appendix CH, the *code official* shall not issue a Certificate of Occupancy to the tenant until the requirements of Section CH103.1 are met.

*This exempts interior/exterior fireplaces and additions without new heating equipment from electric-ready mandates. (LECC)*

*[Clarification] [Upfront cost reduction] [Simplification from LECC] [Required by state law]*

48. **Section CH103.1** General is amended to add the following exceptions:

**Exceptions:**

1. Interior fireplaces that do not serve as a primary source of heating.
2. Exterior fireplaces and fire pits.
3. Additions to buildings that do not provide new space heating equipment.

This adds condensate drainage to the list of items shown on construction documents. (LECC)

*[Minor strengthening from base]*

49. **CH103.3 Construction documentation** is amended as follows:

**CH103.3 Construction documentation**. The *construction documents* shall provide details for additional electric infrastructure, including branch circuits, conduit, prewiring, panel capacity, ~~and~~ electrical service capacity, and condensate drainage, as well as interior and exterior spaces designated for future electric equipment.

This makes minor wording changes for technical clarity. (LECC)

*[Clarification] [Required by state law]*

50. **Section CI102.1 Demand responsive water heating,** exception #1, is amended as follows:

1. Water heaters that are required to provide a constant hot water delivery temperature of 180°F (82°C) or greater.

This adds flexibility if needed for unique circumstances. (LECC)

*[Clarification] [Required by state law]*

51. **Section CI103.1 Demand responsive lighting controls** is amended to include a new item #7 as follows:

    7. Spaces where the health, safety, or productivity of occupants would be compromised by light level reductions, as *approved* by the *code official*.

City of Louisville

# Open Government & Ethics Pamphlet 2025

This pamphlet is prepared pursuant to the Home Rule Charter of the City of Louisville. This is a compilation of Articles 4 and 5 of the Charter of the City of Louisville and is available at all times in the City Clerk's Office, 749 Main Street, Louisville, Colorado, and on the City's web site at www.LouisvilleCO.gov. This pamphlet is also provided to every member of a public body at that body's first meeting each year.

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# Citizen Participation in Government

The City of Louisville encourages citizen involvement and participation in its public policy process. There are many opportunities for citizens to be informed about and participate in City activities and decisions. All meetings of City Council, and of appointed Boards and Commissions, are open to the public and include an opportunity for public comments. No action or substantive discussion on an item may take place unless that item has been specifically listed as an agenda item for a regular or special meeting. Some opportunities for you to participate include:

**Reading and inquiring about City Council activities and agenda items, and attending and speaking on topics of interest at public meetings**

*City Council Meetings:*

- Regular meetings are generally held the first and third Tuesdays of each month at 6:00 PM in the City Council Chambers, located on the second floor of City Hall, 749 Main Street;
- Study sessions are generally held the second and fourth Tuesdays of each month at 6:00 PM in the Library Meeting Room, located on the first floor of the Library, 951 Spruce Street;
- Regular meetings include a remote participation option via Zoom, are broadcast live on Comcast Channel 8, and are available on demand on the City's website;
- Special meetings may be held occasionally on specific topics. Agendas are posted a minimum of 48 hours prior to the meeting.

*Meeting Agendas for City Council meetings, other than special meetings, are posted a minimum of 72 hours prior to the meeting at the following locations:*

- City Hall, 749 Main Street
- Police Department/Municipal Court, 992 West Via Appia
- Recreation/Senior Center, 900 West Via Appia
- Louisville Public Library, 951 Spruce Street
- City website at www.LouisvilleCO.gov

*Meeting packets with all agenda-related materials for regular meetings are available 72 hours prior to each meeting and may be found at these locations:*

- Louisville Public Library Reference Area,
- 951 Spruce Street,
- City Clerk's Office, City Hall, 749 Main Street,
- City website at www.LouisvilleCO.gov

You may receive eNotifications of City Council news as well as meeting agendas and summaries of City Council actions by registering for eNotifications on the City's web site at www.LouisvilleCO.gov. Meeting minutes of all regular and special meetings are available in the City Clerk's office and on the City's website (www.LouisvilleCO.gov) once they are approved.

Information about City activities and projects, as well as City Council decisions, is included in the quarterly *Lantern* newsletter, mailed to all City residents and businesses. Information is also often included in the monthly eNewsletter.

**Communicating Directly with the Mayor and City Council Members**

Contact information for the Mayor and City Councilmembers is available at www.LouisvilleCO.gov, as well as at City Hall, the Louisville Public Library, and the Recreation/Senior Center. You may email the Mayor and City Council as a group at Council@LouisvilleCO.gov.

Mayor's Town Meetings and City Council Ward Meetings are scheduled periodically. These are informal meetings at which all residents, points of view, and issues are welcome. These meetings are advertised at City facilities and on the City's website (www.LouisvilleCO.gov).

**Mayor and City Council Elections**

City Council members are elected from three Wards within the City and serve staggered four-year terms. There are two Council representatives from each ward. The mayor is elected at-large and serves a four-year term. City Council elections are held in November of odd-numbered years. For information about City elections, including running for City Council, please contact the City Clerk's Office, at ClerksOffice@LouisvilleCO.gov or 303.335.4536.

**Serving as an Appointed Member on a City Board or Commission**

The City Council makes Board and Commission appointments annually. Some of the City's Boards and Commissions are advisory, others have some decision-making powers. The City Council refers questions and issues to these appointed officials for input and advice. (Please note the Youth Advisory Board has a separate appointment process.)

The City's Boards and Commissions are:

- Board of Adjustment
- Building Code Board of Appeals
- Cultural Advisory Board
- Historic Preservation Commission
- Historical Museum Advisory Board
- Library Board of Trustees
- Local Licensing Authority
- Open Space Advisory Board
- Parks & Public Landscaping Advisory Board
- Planning Commission
- Recreation Advisory Board
- Revitalization Commission
- Sustainability Advisory Board
- Youth Advisory Board

Board information, meeting agendas, and schedules are available on the City's website (www.LouisvilleCO.gov). Agendas for all Board and Commission meetings are posted a minimum of 72 hours prior to each meeting at these locations:

- City Hall, 749 Main Street
- Police Department/Municipal Court, 992 West Via Appia
- Recreation/Senior Center, 900 West Via Appia
- Louisville Public Library, 951 Spruce Street
- City web site at www.LouisvilleCO.gov

Copies of meeting packets containing agenda- related materials are available at least 72 hours prior to each meeting and may be found at the following locations:

- Louisville Public Library Reference Area, 951 Spruce Street;
- City Clerk's Office, City Hall, 749 Main Street
- City web site at www.LouisvilleCO.gov

**Planning Commission**

The Planning Commission evaluates land use proposals against zoning laws and holds public hearings as outlined in City codes. Following a public hearing, the Commission makes a recommendation of approval or denial to the City Council for all land use proposals.

- Regular Planning Commission meetings are held at 6:30 PM on the second Thursday of each month.
- Overflow meetings are scheduled for 6:30 PM on the 4th Thursday of the month as needed.
- Study Sessions are held occasionally as needed.
- Regular meetings include a remote participation option via Zoom, are broadcast live on Comcast Channel 8, and are available on demand on the City's website.

**Open Government Training**

All City Council members and members of a permanent Board or Commission are required to participate in at least one City-sponsored open government-related seminar, workshop, or other training program at least once every two years.

# Open Meetings

The City follows the Colorado Open Meetings Law ("Sunshine Law") as well as additional open meetings requirements found in the City's Home Rule Charter. These rules and practices apply to the City Council and appointed Boards and Commissions (referred to as a "public bodies" for ease of reference). Important open meetings rules and practices include the following:

**Regular Meetings**

All meetings of three or more members of a public body (or a quorum, whichever is fewer) are open to the public.

All meetings of public bodies must be held in public buildings and public facilities accessible to all members of the public. Meetings may be held electronically under specific circumstances.

All meetings must be preceded by proper notice. Agendas and agenda-related materials are posted at least 72 hours in advance of the meeting at the following locations:

- City Hall, 749 Main Street
- Police Department/Municipal Court, 992 West Via Appia
- Recreation/Senior Center, 900 West Via Appia
- Louisville Public Library, 951 Spruce Street
- On the City web site at www.LouisvilleCO.gov

**Study Sessions**

Study sessions are also open to the public however, study sessions have a limited purpose:

- Study sessions are to obtain information and discuss matters in a less formal atmosphere;
- No preliminary or final decision or action may be made or taken at any study session; further, full debate and deliberation of a matter is to be reserved for formal meetings. If a person believes in good faith that a study session is proceeding contrary to these limitations, they may submit a written objection. The presiding officer will then review the objection and determine how the study session should proceed.
- A written summary of each study session is prepared and is available on the City's website.

# Executive Sessions

The City Charter also sets out specific procedures and limitations on the use of executive sessions. These rules, found in Article 5 of the Charter, are intended to further the City policy that the activities of City government be conducted in public to the greatest extent feasible, in order to assure public participation and enhance public accountability. The City's rules regarding executive sessions include the following:

**Timing and Procedures**

The City Council and City Boards and Commissions may hold an executive session only at a regular or special meeting. No formal action of any type, and no informal or "straw" vote, may occur at any executive session. Rather, formal actions, such as the adoption of a proposed policy, position, rule or other action, may only occur in open session.

Prior to holding an executive session, there must be a public announcement of the request and the legal authority for convening in closed session. There must be a detailed and specific statement as to the topics to be discussed and the reasons for requesting the session.

The request must be approved by a supermajority (two-thirds of the full Council, Board, or Commission). Prior to voting on the request, the clerk reads a statement of the rules pertaining to executive sessions. Once in executive session, the limitations on the session must be discussed and the propriety of the session confirmed. If there are objections and/or concerns over the propriety of the session, those are to be resolved in open session.

Once the session is over, an announcement is made of any procedures that will follow from the session.

Executive sessions are recorded, with access to those tapes limited as provided by state law. Those state laws allow a judge to review the propriety of a session if in a court filing it is shown that there is a reasonable belief that the executive session went beyond its permitted scope. Executive session records are not available outside of a court proceeding.

**Authorized Topics**

For City Council, an executive session may be held only for discussion of the following topics:

- Matters where the information being discussed is required to be kept confidential by federal or state law;
- Certain personnel matters relating to employees directly appointed by the Council, and other personnel matters only upon request of the City Manager or Mayor for informational purposes only;
- Consideration of water rights and real property acquisitions and dispositions, but only as to appraisals and other value estimates and strategy for the acquisition or disposition; and
- Consultation with an attorney representing the City with respect to pending litigation. This includes cases that are actually filed as well as situations where the person requesting the executive session believes in good faith that a lawsuit may result, and allows for discussion of settlement strategies.

The City's Boards and Commissions may only hold an executive session for consultation with its attorney regarding pending litigation.

# Ethics

Ethics are the foundation of good government. Louisville has adopted its own Code of Ethics, which is found in the City Charter and which applies to elected officials, public body members, and employees. The Louisville Code of Ethics applies in addition to any higher standards in state law. Louisville's position on ethics is perhaps best summarized in the following statement taken from the City Charter:

*Those entrusted with positions in the City government must commit to adhering to the letter and spirit of the Code of Ethics. Only when the people are confident that those in positions of public responsibility are committed to high levels of ethical and moral conduct, will they have faith that their government is acting for the good of*

*the public. This faith in the motives of officers, public body members, and employees is critical for a harmonious and trusting relationship between the City government and the people it serves.*

The City's Code of Ethics (Sections 5-6 through 5-17 of the Charter) is summarized in the following paragraphs. While the focus is to provide a general overview of the rules, it is important to note that all persons subject to the Code of Ethics must strive to follow both the letter and the spirit of the Code, so as to avoid not only actual violations, but public perceptions of violations. Indeed, perceptions of violations can have the same negative impact on public trust as actual violations.

**Conflicts of Interest**

One of the most common ethical rules visited in the local government arena is the "conflict of interest rule." While some technical aspects of the rule are discussed below, the general rule under the Code of Ethics is that if a Council, Board, or Commission member has an "interest" that will be affected by his or her "official action," then there is a conflict of interest and the member must:

- Disclose the conflict, on the record and with particularity;
- Not participate in the discussion;
- Leave the room; and
- Not attempt to influence others.

An "interest" is a pecuniary, property, or commercial benefit, or any other benefit the primary significance of which is economic gain or the avoidance of economic loss. However, an "interest" does not include any matter conferring similar benefits on all property or persons similarly situated. (Therefore, a City Council member is not prohibited from voting on a sales tax increase or decrease if the member's only interest is that he or she, like other residents, will be subject to the higher or lower tax.) Additionally, an "interest" does not include a stock interest of less than one percent of the company's outstanding shares.

The Code of Ethics extends the concept of prohibited interest to persons or entities with whom the member is associated. In particular, an interest of the following persons and entities is also an interest of the member: relatives (including persons related by blood or marriage to certain degrees, and others); a business in which the member is an officer, director, employee, partner, principal, member, or owner; and a business in which member owns more than one percent of outstanding shares.

The concept of an interest in a business applies to profit and nonprofit corporations, and applies in situations in which the official action would affect a business competitor. Additionally, an interest is deemed to continue for one year after the interest has ceased. Finally, "official action" for purposes of the conflict of interest rule, includes not only legislative actions, but also administrative actions and "quasi-judicial" proceedings where the entity is acting like a judge in applying rules to the specific rights of individuals (such as a variance request or liquor license). Thus, the conflict rules apply essentially to all types of actions a member may take.

**Conflicts**

In addition to its purchasing policies and other rules intended to secure contracts that are in the best interest of the City, the Code of Ethics prohibits various actions regarding contracts. For example, no public body member who has decision-making authority or influence over a City contract can have an interest in the contract, unless the member has complied with the disclosure and recusal rules. Further, members are not to appear before the City on behalf of other entities that hold a City contract, nor are they to solicit or accept employment from a contracting entity if it is related to the member's action on a contract with that entity.

**Gifts and Nepotism**

The Code of Ethics, as well as state law, regulates the receipt of gifts. City officials and employees may not solicit or accept a present or future gift, favor, discount, service or other thing of value from a party to a City

contract, or from a person seeking to influence an official action. There is an exception for the "occasional nonpecuniary gift" of $15 or less, but this exception does not apply if the gift, no matter how small, may be associated with the official's or employee's official action, whether concerning a contract or some other matter. The gift ban also extends to independent contractors who may exercise official actions on behalf of the City.

The Code of Ethics also prohibits common forms of nepotism. For example, no officer, public body member, or employee shall be responsible for employment matters concerning a relative. Nor can they influence compensation paid to a relative, and a relative of a current officer, public body member or employee cannot be hired unless certain personnel rules are followed.

**Other Ethics Rules of Interest**

Like state law, Louisville's Code of Ethics prohibits the use of non-public information for personal or private gain. It also prohibits acts of advantage or favoritism and, in that regard, prohibits special considerations, use of employee time for personal or private reasons, and use of City vehicles or equipment, except in same manner as available to any other person (or in manner that will substantially benefit City). The City also has a "revolving door" rule that prohibits elected officials from becoming City employees either during their time in office or for two years after leaving office. These and other rules of conduct are found in Section 5-9 of the Code of Ethics.

**Disclosure, Enforcement, and Advisory Opinions**

The Code of Ethics requires that those holding or running for City Council file a financial disclosure statement with the City Clerk. The statement must include, among other information, the person's employer and occupation, sources of income, and a list of business and property holdings.

The Code of Ethics provides fair and certain procedures for its enforcement. Complaints of violations may be filed with the City prosecutor; the complaint must be a detailed written and verified statement. If the complaint is against an elected or appointed official, it is forwarded to an independent judge who appoints a special, independent prosecutor for purposes of investigation and appropriate action. If against an employee, the City prosecutor will investigate the complaint and take appropriate action. In all cases, the person who is subject to the complaint is given the opportunity to provide information concerning the complaint.

Finally, the Code allows persons who are subject to the Code to request an advisory opinion if they are uncertain as to applicability of the Code to a particular situation, or as to the definition of terms used in the Code. Such requests are handled by an advisory judge, selected from a panel of independent, disinterested judges who have agreed to provide their services. This device allows persons who are subject to the Code to resolve uncertainty before acting, so that a proper course of conduct may be identified. Any person who requests and acts in accordance with an advisory opinion issued by an advisory judge is not subject to City penalty, unless material facts were omitted or misstated in the request. Advisory opinions are posted for public inspection; the advisory judge may order a delay in posting if the judge determines the delay is in the City's best interest.

Citizens are encouraged to contact the City Clerk's Office with any questions about the City's Code of Ethics or to request a copy. A copy of the Code is also available at the City's website (www.LouisvilleCO.gov).

## Other Laws on Citizen Participation in Government

Preceding sections of this pamphlet describe Louisville's practices intended to further citizen participation in government. Those practices are intended to further dissemination of information and participation in the governing process. Some other laws of interest regarding citizen participation include:

**Initiative and Referendum**

The right to petition for municipal legislation is reserved to the citizens by the Colorado Constitution and the City Charter. An initiative is a petition for legislation brought directly by the citizens; a referendum is a petition

brought by the citizens to refer to the voters a piece of legislation that has been approved by the City Council. In addition to these two petitioning procedures, the City Council may refer matters directly to the voters in the absence of any petition. Initiative and referendum petitions must concern municipal legislation—as opposed to administrative or other non-legislative matters. By law the City Clerk is the official responsible for many of the activities related to a petition process, such as approval of the petition forms, review of the signed petitions, and consideration of protests and other matters. There are minimum signature requirements for petitions to be moved to the ballot; in Louisville, an initiative petition must be signed by at least five percent of the total number of registered electors. A referendum petition must be signed by at least two and one-half percent of the registered electors.

**Public Hearings**

In addition to the opportunity afforded at each regular City Council meeting to comment on items not on the agenda, most City Council actions provide opportunity for public comment through a public hearing process. For example, the City Charter provides that a public hearing shall be held on every ordinance before its adoption. This includes opportunities for public comment prior to initial City Council discussion of the ordinance, as well as after Council's initial discussion but before action. Many actions of the City are required to be taken by ordinance, and thus this device allows for citizen public hearing comments on matters ranging from zoning ordinances to ordinances establishing offenses that are subject to enforcement through the municipal court.

Additionally, federal, state, and/or local law requires a public hearing on a number of matters irrespective of whether an ordinance is involved. For example, a public hearing is held on the City budget, the City Comprehensive Plan and similar plans, and a variety of site-specific or person-specific activities, such as annexations of land into the city, rezonings, special use permits, variances, and new liquor licenses. Anyone may provide comments during these hearings.

**Public Records**

Access to public records is an important aspect of citizen participation in government. Louisville follows the Colorado Open Records Act (CORA) and the additional public records provisions in the City Charter. In particular, the Charter promotes the liberal construction of public records law, so as to promote the prompt disclosure of City records to citizens at no cost or no greater cost than the actual costs to the City.

The City Clerk is the custodian of the City's public records, except for police records which are handled by the Police Department. The City maintains a public policy on access to public records, which includes a records request form, a statement of fees, and other guidelines. No fee is charged for the inspection of records or for locating or making records available for copying, except in cases of voluminous requests or dated records, or when the time spent in locating records exceeds two hours. No fees are charged for the first 25 copies requested or for electronic records.

Many records, particularly those related to agenda items for City Council and current Board and Commission meetings, are available directly on the City's website (www.LouisvilleCO.gov). In addition to posting agenda-related material, the City maintains a communication file (email) for the City Council which is available on the City's website (www.LouisvilleCO.gov).

CORA lists the categories of public records that are not generally open to public inspection. These include, for example, certain personnel records and information, financial and other information about users of City facilities, privileged information, medical records, letters of reference, and other items listed in detail in CORA. When public records are not made available, the custodian will specifically advise the requestor of the reason.

Citizens are encouraged to review the City's website (www.LousivilleCo.gov) for information, and to contact the City with any questions regarding City records.

# Public Involvement Policy

Public participation is an essential element of the City's representative form of government. To promote effective public participation City officials, advisory board members, staff and participants should all observe the following guiding principles, roles and responsibilities:

**Guiding Principles for Public Involvement**

Inclusive not Exclusive - Everyone's participation is welcome. Anyone with a known interest in the issue will be identified, invited and encouraged to be involved early in the process.

- *Voluntary Participation* - The process will seek the support of those participants willing to invest the time necessary to make it work.
- *Purpose Driven* - The process will be clearly linked to when and how decisions are made. These links will be communicated to participants.
- *Time, Financial and Legal Constraints* - The process will operate within an appropriate time frame and budget and observe existing legal and regulatory requirements.
- *Communication* - The process and its progress will be communicated to participants and the community at-large using appropriate methods and technologies.
- *Adaptability* - The process will be adaptable so that the level of public involvement is reflective of the magnitude of the issue and the needs of the participants.
- *Access to Information* -The process will provide participants with timely access to all relevant information in an understandable and user-friendly way. Education and training requirements will be considered.
- *Access to Decision Making* - The process will give participants the opportunity to influence decision making.
- *Respect for Diverse Interests* - The process will foster respect for the diverse values, interests and knowledge of those involved.
- *Accountability* - The process will reflect that participants are accountable to both their constituents and to the success of the process.
- *Evaluation* - The success and results of the process will be measured and evaluated.

**Roles and Responsibilities - City Council**

City Council is ultimately responsible to all the citizens of Louisville and must weigh each of its decisions accordingly. Councilors are responsible to their local constituents under the ward system; however they must carefully consider the concerns expressed by all parties. Council must ultimately meet the needs of the entire community—including current and future generations—and act in the best interests of the City as a whole.

During its review and decision-making process, Council has an obligation to recognize the efforts and activities that have preceded its deliberations. Council should have regard for the public involvement processes that have been completed in support or opposition of projects.

**Roles and Responsibilities - City Staff and Advisory Boards**

The City should be designed and run to meet the needs and priorities of its citizens. Staff and advisory boards must ensure the Guiding Principles direct their work. In addition to the Guiding Principles, staff and advisory boards are responsible for:

- ensuring that decisions and recommendations reflect the needs and desires of the community as a whole;
- pursuing public involvement with a positive spirit because it helps clarify those needs and desires and also adds value to projects;
- fostering long-term relationships based on respect and trust in all public involvement activities;

- encouraging positive working partnerships;
- ensuring that no participant or group is marginalized or ignored;
- drawing out the silent majority, the voiceless and the disempowered; and being familiar with a variety of public involvement techniques and the strengths and weaknesses of various approaches.

**All Participants**

The public is also accountable for the public involvement process and for the results it produces. All parties (including Council, advisory boards, staff, proponents, opponents and the public) are responsible for:

- working within the process in a cooperative and civil manner;
- focusing on real issues and not on furthering personal agendas;
- balancing personal concerns with the needs of the community as a whole;
- having realistic expectations;
- participating openly, honestly and constructively,
- offering ideas, suggestions and alternatives;
- listening carefully and actively considering everyone's perspectives;
- identifying their concerns and issues early in the process;
- providing their names and contact information if they want direct feedback;
- remembering that no single voice is more important than all others, and that there are diverse opinions to be considered;
- making every effort to work within the project schedule and if this is not possible, discussing this with the proponent without delay;
- recognizing that process schedules may be constrained by external factors such as limited funding, broader project schedules or legislative requirements;
- accepting some responsibility for keeping themselves aware of current issues, making others aware of project activities and soliciting their involvement and input; and
- considering that the quality of the outcome and how that outcome is achieved are both important.

*Updated December 2024*

City of Louisville
COLORADO • SINCE 1878

# BOARD & COMMISSION

# RULES OF PROCEDURE

*Adopted November 6, 2023 – by Resolution No. 66, Series 2023*

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# RULES OF PROCEDURE FOR THE BOARDS AND COMMISSIONS OF LOUISVILLE, COLORADO

## I. DEFINITIONS

"Advisory Board" means all of the following boards which are tasked with giving advice to the City Council as specified in their formation documents:

- Arts & Culture Advisory Board
- Historical Museum Advisory Board
- Library Board of Trustees
- Open Space Advisory Board
- Parks & Public Landscaping Advisory Board
- Recreation Advisory Board
- Revitalization Commission
- Sustainability Advisory Board
- Youth Advisory Board

"Charter" means the Home Rule Charter of the City of Louisville, Colorado.

"Chair" means the member of the Board who presides over a meeting subject to Rule VII.B below.

"City" means the City of Louisville, Colorado.

"Code" means the Louisville Municipal Code.

"Board" means any of the following bodies:

- Arts & Culture Advisory Board
- Board of Adjustment
- Building Code Board of Appeals
- Historic Preservation Commission
- Historical Museum Advisory Board
- Library Board of Trustees
- Local Licensing Authority
- Open Space Advisory Board
- Parks & Public Landscaping Advisory Board
- Planning Commission
- Recreation Advisory Board
- Revitalization Commission
- Sustainability Advisory Board
- Youth Advisory Board

"Board Member" means each member of a City board.

"Electronic Participation" means attendance at a meeting by computer, telephone, or other electronic means.

"Entire Board" means all current members of a board.

"Member of the Board" means each board member.

"Quasi-Judicial Board" means any of the following boards which have specific legal decision-making authority under the Charter or Code:

- Board of Adjustment
- Building Code Board of Appeals
- Historic Preservation Commission
- Local Licensing Authority
- Planning Commission

"Rules" means the Board & Commission Rules of Procedure.

"Staff Liaison" means the City staff member assigned by the City Manager to assist the board and to ensure all rules and regulations are met.

## II. AUTHORITY

The following Rules shall be in effect upon their adoption by the City Council until such time as they are amended or new Rules adopted.

In order to efficiently and effectively complete City business facing a Board, all meetings must be conducted in an orderly and respectful manner. These Rules are intended to provide guidelines for the procedures to be followed for the conduct of all Board meetings.

If any Rule, on its face or as applied, conflicts with applicable provisions of the Home Rule Charter of the City of Louisville or ordinances, those provisions shall apply and that Rule shall not. Nothing herein shall prevent a Board from adopting its own rules of procedure specific to its roles and responsibilities so long as they do not conflict with these Rules.

## III. MEETING CIVILITY

A. CIVILITY AMONG MEMBERS OF THE BOARD: The Board shall preserve reasonable order and decorum and confine members of the public to discussion of the questions under consideration.

During Board meetings, members shall preserve reasonable order and decorum and shall not delay or interrupt the proceedings or refuse to obey

the order of the Chair or the Rules. Every member of the Board desiring to speak shall address the Chair, and upon recognition by the Chair, shall confine themselves to the questions under debate. Once recognized, no member of the Board shall be interrupted while speaking unless called to order by the Chair or unless a point of order is raised by another member.

B. MEMBERS OF THE PUBLIC: Members of the public desiring to address the Board on any item on the agenda shall be recognized by the Chair, state their names, and are requested to state their place of residence (by city, town, or county of residence). Each member of the public shall speak in an audible tone for the record.

## IV. GENERAL RULES

A. LOCATION: All in-person Board meetings shall take place in a public building that is accessible to members of the public, with or without reasonable accommodation in accordance with applicable law.

B. OPEN TO THE PUBLIC: All meetings, including those conducted by Electronic Participation pursuant to Section V.F, shall be open to the public. A Board may conduct executive sessions only in accordance with the Charter, Code, and applicable provisions of the Colorado Open Meetings Law.

C. MEETING NOTICE: Notice for all meetings sessions shall be given as required by the Charter and as set by administrative rule. At the first regular meeting of every year, each Board shall designate the locations for posting of notices of its meetings.

D. MINUTES: Minutes of each regular and special meeting shall be taken and retained permanently in the records of the City.

E. QUORUM: A quorum is needed for the transaction of business at each meeting of a Board. A quorum shall be defined as a majority of the members of the Board holding office at the time of the meeting.

F. ABSENCES: No member of the Board shall miss more than twenty-five percent (25%) of regular Board meetings during any calendar year. Missing more than twenty-five percent (25%) of meetings shall be cause for removal.

G. APPLICABILITY OF THE OPEN GOVERNMENT POLICIES AND CODE OF ETHICS: Each member of the Board shall adhere to the City's Open

Government Rules and the Code of Ethics (Charter Section 5-6).

H. DISCLOSURE OF INTEREST AND RECUSAL: Any member of the Board who has an interest in, or whose interest would be affected by, any proposed official action before the Board shall immediately and publicly disclose the nature and extent of the interest; shall not participate in any discussion or decision concerning the proposed action; shall not attempt to publicly or privately influence the Board, any public body, or any employee in connection with the action; and shall leave the room where the discussion or decision is taking place during the time the proposed action is being discussed and the decision is being made.

I. CHAIR: The Chair is the member of the Board who presides over a Board meeting and shall do so according to these Rules and applicable law. The Chair serves as Chair of all Board meetings at which the Chair is present. In the Chair's absence, the Vice-Chair will serve as Chair. In the absence of the Chair and Vice-Chair, Board members will appoint one member to act as Chair for that meeting.

## V. MEETINGS

A. REGULAR MEETINGS: Each Board shall set a regular meeting schedule at the first meeting of each year identifying the date, time, and location of meetings.

B. COMMITTEE MEETINGS: A committee meeting may be called if it can be properly noticed a minimum of 72 hours in advance. Committee meetings must meet all the same rules as a regular meeting.

C. EXECUTIVE SESSIONS: A board may hold an executive session only for pending litigation and only with the City Attorney present.

D. RESCHEDULING: A Board may reschedule meetings for dates and times outside its annual meeting schedule to avoid holidays, elections, and other matters, to achieve a quorum, or to allow for additional time for a meeting. To reschedule such meetings, the Board first must provide notice and approve of the proposal to reschedule.

E. CANCELLATION: Any scheduled meeting may be cancelled by members or the Staff Liaison in the event there are no items for the board to discuss or in the event unforeseen emergent conditions exist which make conduct of the meeting impractical (for example, in the case of power outage) or travel to the meeting unduly hazardous (for example, in the case of blizzard conditions).

F. ELECTRONIC PARTICIPATION: When it is feasible, an electronic attendance option shall be available for Board members, applicants, and members of the public including for quasi-judicial hearings. If it is not feasible due to technological or other reasons, the in person meeting shall continue if a quorum is present.

1. All meetings that have a remote attendance option will note that on the agenda and include information on the agenda about how to join the meeting electronically.

2. Board members and members of the public attending electronically shall participate in the meeting under the same rules as those in the room.

3. Public hearings on quasi-judicial matters may be taken during a meeting with Electronic Participation.

G. FULLY REMOTE MEETINGS: The Staff Liaison with input from the board members may, in their discretion, change board meetings to a fully remote setting if needed. If a fully remote meeting is scheduled, it must be properly noticed as such and public access options must be provided on the meeting agenda.

## VI. CHAIR AND VICE-CHAIR

A. Each Board will elect a Chair and Vice-Chair at the first meeting of the year. The City recommends the Chair and Vice-Chair be rotated among Board members each year.

B. The Chair shall preside over meetings of the Board when present and able to perform these responsibilities. The Chair shall have the same voting powers as any Board member.

C. The Vice-Chair shall assume the duties of Chair when the Chair is absent or otherwise unable to perform the responsibilities of Chair.

D. In the absence of the Chair and Vice-Chair, Board members will appoint one member to act as Chair for that meeting.

## VII. MEETING PROCEDURE

A. PREAMBLE

1. A bedrock principle of a representative democracy is notice of impending governmental action and an opportunity for members of the public and their representatives to be heard. Principles of good government include deep respect for citizens; prudent stewardship of public resources, including the time of its citizens, staff members and appointed officials; direction that is clear and decisive; and decision making that is reasonably consistent, equitable, flexible, and transparent.

2. Through the application of these Rules, the City intends to ensure that it balances the principles described in the previous section in a way that ensures robust debate and accountability of City government to its residents. To that end, these procedures are not meant to be employed for the purpose of unreasonable rigidity, surprise, suppression of competing views, or needless prolonging of action.

B. CHAIR'S DISCRETION & RIGHT OF APPEAL The Chair shall have reasonable discretion in the application of these procedures subject to section XI.A.

C. AGENDAS: Each board will have a formal agenda for each meeting. The agenda will be set by staff for quasi-judicial boards and set by the chair in conjunction with the staff liaison for advisory boards. Each agenda will be posted as required prior to the meeting. Items cannot be added to the agenda at the meeting.

D. PUBLIC COMMENTS AT MEETINGS: All Board meetings, including Committee meetings, shall be open to the public. Members of the public shall have a reasonable opportunity to be heard at Board meetings.

The following provisions apply to any section of the agenda where public comments are allowed.

1. Members of the public desiring to address the Board on any item on the agenda shall be recognized by the Chair, state their name, and are requested to state their place of residence (by city, town, or county of residence).

2. Each board will have a section on its agenda for “Public Comments on Items Not on the Agenda.” Each speaker shall be limited to three (3) minutes.

3. Each Board will permit public comment on any item at the time such item is being discussed by the Board. Each speaker shall be limited to three (3) minutes.

4. Multiple citizens may designate someone to speak for them and aggregate their three-minute limit time up to a maximum of six (6) minutes of speaking time for their designated spokesperson. Those pooling their time must be physically present, identify themselves, and designate their spokesperson. A designated spokesperson may not speak for more than one group.

5. The Chair, the Staff Liaison, or a designated board member shall enforce compliance with the time limits, and time shall be kept on a public comment clock.

E. WRITTEN COMMUNICATIONS: Interested parties, or their authorized representatives, may address the Board by submitting written communication concerning any matter on the Board agenda. Such a written communication may be submitted by electronic mail or by addressing the communication to the Staff Liaison who will distribute copies to the Board. The communication will be entered into the record without the necessity of reading. A copy of the communication shall be posted at the meeting for the public to review. Anonymous written communications will not be accepted into the record.

F. VOTING: For a motion to pass it requires the affirmative vote of a majority of the members of the Board present.

## VIII. EXPECTATIONS OF STAFF LIAISON

A. COMMUNICATION:

1. The Staff Liaison will provide Board members with direct, open, and transparent communication about city priorities, projects, and budget.

2. The Staff Liaison will act as the conduit of information from the Board to City Council and from City Council to the board.

3. The Staff Liaison will respond to emails, phone calls, and text messages from Board members within two (2) business days and will

communicate with the Board members if a response will take more than two (2) business days.

B. ADVOCACY: The Staff Liaison will advocate ideas to City staff and leadership on the Board's behalf. The Staff Liaison will advocate for budget requests and CIP requests from the Board through the City's established budget process.

C. MEETINGS:

1. The Staff Liaison with input from the Board chair will create and publish meeting agendas and packets in accordance with bylaws, rules, and schedule established by the City Clerk's Office.

2. The Staff Liaison will work with the Chair to ensure meetings are concise and do not run exceedingly long and to ensure the discussion is limited to those items on the agenda.

3. The Staff Liaison will attend all meetings, to the best of their ability. If the Staff Liaison cannot attend a Board meeting, an alternate staff liaison will be appointed and the Chair will be notified in advance.

D. COLLABORATION:

1. The Staff Liaison will include Board members, when appropriate, in relevant projects and planning processes.

2. The Staff Liaison will include Board members on relevant communications, when appropriate, with outside organizations and individuals.

## IX. EXPECTATIONS OF BOARD MEMBERS

A. COMMUNICATION:

1. There will be open and consistent communication between Board members and the Staff Liaison.

2. Board members will not speak on behalf of the Board unless specifically appointed to do so by the Board. Board members will include the Staff Liaison on all communications with outside organizations.

3. The Staff Liaison is the point of contact for all City operations related to the Board. The Staff Liaison will bring in any additional City staff as necessary for Board projects.

4. The Staff Liaison or the City's Communications Division will create all memos, marketing, and outreach materials for the Board. Board members shall not use City logos or letterhead without City approval.

5. Board members shall not create social media accounts on behalf of the Board or speak on social media on behalf of the Board or City.

6. Board members will only contact their Staff Liaison through a dedicated City email address, office phone, or cell phone (including texting) and will not contact the Staff Liaison through their personal emails, social media, or personal cell phones.

B. ADVOCACY:

1. Board members will go through proper channels when advocating for Board projects.

2. Board members will adhere to all regulations of the Fair Campaign Practices Act as they relate to City elections.

C. MEETINGS:

1. Board members will attend all meetings, to the best of their ability. If a Board member cannot attend a meeting, the member will send communication via email to the Staff Liaison with as much advance notice as possible.

2. If a Board member would like an item on an agenda, the member will reach out in advance to the Staff Liaison and the Chair. Topics not included on the agenda may not be discussed at a meeting per the City Charter.

3. Board members will meet all packet deadlines as established by the Staff Liaison and the City Clerk's Office. Items that are late may be postponed to a later meeting.

## X. QUASI-JUDICIAL ACTIONS

A. PROCESS:

1. Quasi-judicial decisions are a determination of the rights, duties or obligations of a specific individual or entity. Board members making quasi-judicial decisions must do so based on the facts developed at a public hearing and through the application of presently existing legal standards of policy considerations of the facts.

2. Legally reversible decisions are almost always based on a lack of due process or procedural irregularities

B. DUE PROCESS: A quasi-judicial public hearing must include property public notice, a meaningful opportunity for interested parties to be heard, and basic fairness in procedure.

C. PREPARATION: Board members will review the meeting packet prepared by staff, understand the scope of the hearing, and be familiar with the relevant decision criteria in a case. Board members must act as impartial decision makers

D. EX PARTE CONVERSATIONS: Board members will not speak with one side or the other before or outside of the hearing process. This includes via email. Board members will disclose any unavoidable “ex parte” conversations and participate only if they are sure they can still make an unbiased decision.

E. CONDUCTING THE HEARING: Follow uniform/consistent steps for all hearings.

- Introduce Item
- Call for Disclosures
- Open Public Hearing
- Staff Report
- Applicant Presentation
- Public Comment
- Questions by Board members
- Close Public Hearing
- Deliberations
- Action

Once a hearing is closed the Board will not re-open it to hear only certain individuals, if a hearing is re-opened anyone who has not already spoken

may have the opportunity to speak.

If the Board holds and closes a hearing at one meeting and deliberates at the next, the Board cannot reopen the hearing without providing additional notice.

F. MAKING THE DECISION

1. Board members shall not make their decision on the basis of irrelevant criteria. Board members shall not base a decision on things a member "knows" but did not "learn" at the hearing. Board members will not participate in the decision if they cannot be fair and unbiased.

2. A Board members shall not participate in the decision if they did not participate in the entire hearing.

   If a public hearing is opened and then continued to a later meeting, a member who missed the first meeting may review the video and all materials from the first meeting and then participate in the next one. This should be disclosed at the hearing.

3. Board members should ask for staff advice if they are unsure of the decision they are being asked to make or if they are unsure of the applicable legal criteria.

4. If appropriate, a Board may make a tentative decision and direct staff to prepare a draft written decision.

## XI. PARLIAMENTARY PROCEDURE

A. POINTS OF ORDER: The Chair shall determine all points of order, subject to the rights of any member of the Board to appeal to the Board, in which case the point of order shall be resolved by vote of a majority of the members of Board present.

B. RIGHT OF THE FLOOR: Any member of the Board desiring to speak shall be recognized by the Chair.

C. MOTIONS: Motions may be made by any member of the Board, including the Chair, provided that before the Chair offers a motion, the opportunity for making a motion should be offered to other members of the Board. Any member of the Board, other than the person offering the motion, may second a motion.

D. PROCEDURES FOR MOTIONS: The following is the general procedure for making motions:

1. Before a motion can be considered or debated it must be seconded; however, no action taken shall be invalidated simply because a motion was not properly made, seconded or recorded.

2. Once the matter has been discussed and the Chair calls for a vote, no further discussion will be allowed; provided, however, that members of the Board may be allowed to explain their votes.

E. DISCUSSION: Board members shall confine themselves to the question under discussion. All discussion must be germane to the agenda item.

F. MOTION TO END DEBATE: Any member of the Board may make a motion to end debate (also known as "calling the question"). If such a motion is made and seconded, the Chair shall immediately call for a vote on the motion. If the motion is not approved by 2/3 of the members of the Board present and voting, the Chair shall allow for debate to continue. If the motion is approved, the Chair shall call for a motion on the matter under consideration.

G. ALL MEMBERS MAY SPEAK: Each member of the Board shall have the right to speak and ask questions prior to a vote.

H. AFTER VOTING: Once a vote has been taken on a motion, there shall be no further discussion on that motion unless a motion to reconsider is properly made, seconded, and adopted.

## XII. REMOVAL FROM BOARD

(City Council Resolutions No. 16, Series 2009 & No. 59, Series 2016)

A. The City Council greatly appreciates the contributions made by City residents who volunteer their time to serve on the City's various boards and commissions. In order to help encourage citizens to volunteer and to promote an environment in which participation is productive and rewarding, the Council expects all board and commission members to work in a cooperative, constructive and civil manner.

B. To help maintain this environment the City Council has established that, during the term of office, a board member shall be removed only for cause. Cause shall include but not be limited to:

1. Violation of city or state ethics laws;

2. Conviction of a felony or of any other crime involving moral turpitude;

3. Absence from more than 25 percent of the regular meetings in any 12-month period;

4. Inefficiency, neglect of duty or malfeasance in office;

5. Knowing violation of any statute, ordinance, resolution, rule, policy or bylaw applicable to the board or commission;

6. Physical or mental disability rendering the board or commission member unable to perform his or her duties;

7. Knowing disclosure of confidential information, which is defined to mean information which is not available to the general public under applicable laws, ordinances and regulations, and which is obtained by reason of the board or commission member's position with the City;

8. Failure to maintain the qualifications of a board or commission member for the board or commission on which the member serves;

9. Behaving in a harassing, hostile, threatening or otherwise inappropriate manner, or unreasonably disrupting or interfering with the conduct of any meeting of a board or commission; or

10. Other grounds constituting cause as established by law.

C. The procedure for removal of a member of a City board or commission shall be as follows:

1. Any person who believes that there is cause to remove a member of a City board or commission as provided above shall present the evidence of such cause to the City Manager.

2. The City Manager (or their designee) shall review the evidence presented and conduct additional investigations as the City Manager deems necessary. If the City Manager determines there is sufficient evidence supporting further action, the City Manager shall contact the board or commission member who is the subject of the allegation, outline the allegation against the member and provide the member with an opportunity to respond to the allegation. After considering all information received, the City Manager shall make a

determination as to whether removal or other action is warranted.

3. If the City Manager determines there are grounds for removal, the City Manager shall present a proposed resolution for removal to the City Council for its consideration and action. The member shall be provided written notice of the grounds for removal and the time and place of the City Council's consideration of the matter, at which time the member may address the City Council regarding the grounds for removal. Removal of a member shall require the affirmative vote of a majority of the entire City Council.

4. A member may resign from a board or commission at any time by providing a written resignation letter to the Mayor or City Manager. A resignation is effective upon submission or such later date as stated in the resignation letter, without requirement for acceptance thereof.