



CITY OF LAKE FOREST PARK CITY COUNCIL WORK SESSION

Thursday, May 09, 2024 at 6:00 PM

Meeting Location: In Person and Virtual / Zoom
17425 Ballinger Way NE Lake Forest Park, WA 98155

INSTRUCTIONS FOR PARTICIPATING IN THIS MEETING VIRTUALLY:

Please note, this link works for both the Work Session (6:00 p.m.) and Regular Meeting (7:00 p.m.).

Join Zoom Webinar: <https://us06web.zoom.us/j/82939518103>
Call into Webinar: 253-215-8782 | Webinar ID: 829 3951 8103

Public Comment is not taken during the Work Session.

As allowed by law, the Council may add items not listed on the agenda.
For up-to-date information on agendas, please visit the City's website at www.cityoflfp.gov.

Meetings are shown on the city's website and on Comcast channel 21 for subscribers within the Lake Forest Park city limits.

AGENDA

1. **CALL TO ORDER: 6:00 PM**
2. **ADOPTION OF AGENDA**
3. **COUNCIL DISCUSSION TOPICS**

A. Ordinance 24-1292/Adopting the 2021 International Building Code and other construction related codes

4. **ADJOURN**

FUTURE SCHEDULE

--Thursday, May 16, 2024 City Council Budget & Finance Committee Meeting 6 pm - *hybrid meeting (Zoom and City Hall)*
--Monday, May 20, 2024 City Council Committee of the Whole Meeting 6 pm - *hybrid meeting (Zoom and City Hall)*
--Thursday, May 23, 2024 City Council Regular Meeting 7 pm - *hybrid meeting (Zoom and City Hall)*
--Monday, May 27, 2024 Memorial Day – *City Offices Closed*

Any person requiring a disability accommodation should contact city hall at 206-368-5440 by 4:00 p.m. on the day of the meeting for more information.

- Chapter 15.04 of the Lake Forest Park Municipal Code (LFPMC) would be amended to adopt the most recent versions of the codes and chapter 15.10 LFPMC would be amended to include the updated references to sections of the Fire Code where the City has adopted local amendments.

Fiscal & Policy Implications

The main fiscal impact is the cost of a new set of code books every three years. The estimated cost is \$2,000 and is included in the budget.

Staff Recommendation

Review the draft ordinance and the proposed amendments.

ORDINANCE NO. 24-1292

AN ORDINANCE OF THE CITY OF LAKE FOREST PARK, WASHINGTON, RELATING TO THE STATE BUILDING CODE AND LOCAL AMENDMENTS THERETO; AMENDING CHAPTER 15.04 AND 15.10 OF THE LAKE FOREST PARK MUNICIPAL CODE TO ADOPT THE 2021 STATE BUILDING CODE AND LOCAL AMENDMENTS THERETO; AND PROVIDING FOR SEVERABILITY, AN EFFECTIVE DATE, AND CORRECTIONS.

WHEREAS, the Washington State Building Code Council (SBCC) was created by the Legislature to establish the minimum building, mechanical, fire, plumbing, and energy code requirements necessary to promote the health, safety, and welfare of the State of Washington; and

WHEREAS, the SBCC reviews, develops, and adopts the state building code; and

WHEREAS, on May 24, 2023, the SBCC voted to delay the effective date of the 2021 codes for 120 days; and

WHEREAS, on September 15, 2023, the SBCC agreed to another delay on the effective date, setting a new effective date for all building codes of March 15, 2024; and

WHEREAS, on March 5, 2024, the Washington State Legislature passed Engrossed Senate Bill 6120 relating to the Wildland Urban Interface Code and postponed its inclusion in the state building code until completion of a statewide wildfire hazard map and a base-level wildfire risk map for each county of the state consistent with the International Wildland Urban Interface Code; and

WHEREAS, the City’s Community and Economic Development Department and the Shoreline Fire Department have recommended to the City Council amendments to Title 15 of the Lake Forest Park Municipal Code to adopt the 2021 State Building Code and Local Amendments thereto; and

WHEREAS, the City Council has determined that the proposed amendments are in the best interest of the public health, safety, and welfare.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF LAKE FOREST PARK, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. LFPMC Section 15.04.015 Amended. Section 15.04.015 of the Lake Forest Park Municipal Code is amended to read as follows:

15.04.015 Building Code Adopted.

A. The city of Lake Forest Park, pursuant to state law (chapters [19.27](#) and [19.27A](#) RCW) adopts as its building code the Washington State Building Code, as modified by chapters [15.06](#) and 15.10 LFPMC, as follows:

1. The 2021 Edition of the International Building Code (“IBC”), as adopted and amended by the State Building Code Council in Chapter [51-50](#) WAC.
2. The 2021 Edition of the International Residential Code (“IRC”), as adopted by the State Building Code Council in Chapter [51-51](#) WAC, as published by the International Code Council.
3. The 2021 Edition of the International Mechanical Code (“IMC”), as adopted by the State Building Code Council in Chapter [51-52](#) WAC.
4. The 2021 Edition of the International Fire Code (“IFC”), as adopted by the State Building Code Council in Chapter [51-54A](#) WAC, along with Appendix B thereto (Fire Flow).
5. The 2021 Edition of the Uniform Plumbing Code (“UPC”), as adopted by the State Building Code Council in Chapter [51-56](#) WAC, excluding Chapter 1, “Administration.”
6. The 2021 Edition of the National Fuel Gas Code (NFPA 54), as adopted by the State Building Code Council in Chapter [51-52](#) WAC.
7. The 2021 Edition of the International Fuel Gas Code, as adopted by the State Building Code Council in Chapter [51-52](#) WAC.
8. The 2021 Edition of the International Existing Building Code, together with amendments and/or additions thereto, as adopted by the State Building Code Council in Chapter [51-50](#) WAC.
9. The 2021 Edition of the National Electrical Code as adopted by the Department of Labor and Industries in Chapter 296-46B WAC and Chapter 19.28 RCW.
10. The 2021 Edition of the International Energy Conservation Code, Commercial and Residential, as adopted by the State Building Code Council in Chapters [51-11C](#) and [51-11R](#) WAC.
11. All current and future amendments, supplements, modifications, exclusions, exemptions and additions to the codes identified in subsections (A)(1) through (8) and (11) and (12) of this section adopted by the Washington State Building Code

Council and published in WAC Title [51](#), including, but not by way of limitation, Chapters [51-11](#), [51-50](#), [51-51](#), [51-52](#), [51-54A](#), and [51-56](#) WAC.

12. All appendices to any code referenced above and adopted by the Washington State Building Code Council as published in WAC Title [51](#) are hereby adopted, unless specifically excluded above.

B. The city shall at all times keep on file with the city clerk, for reference by the general public, a copy of the foregoing codes, as they may be amended from time to time. The copies of codes on file may be placed by the city clerk in the custody of the office of the building inspector in order to make them more readily available to inspection and use by the general public.

Section 2. LFPMC Chapter 15.10 Repealed and Reenacted. Chapter 15.10 of the Lake Forest Park Municipal Code, Fire Code, is amended to update IFC code sections and to read as shown in Exhibit A, attached hereto and incorporated herein by this reference.

Section 3. Severability. If any one or more section, subsection, or sentence of this ordinance is held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portion of this ordinance and the same shall remain in full force and effect.

Section 4. Corrections by Clerk or Code Reviser. Upon approval of the City Attorney, the City Clerk and the code reviser are authorized to make necessary corrections to this ordinance, including but not limited to the correction of clerical errors; references to other local, state or federal laws, codes, rules, or regulations; or ordinance numbering and section/subsection numbering.

Section 5. Effective Date. This ordinance shall take effect five (5) days after passage and publication.

APPROVED BY A MAJORITY the Lake Forest Park City Council this XXX day of XXX, 2024.

APPROVED:

Tom French
Mayor

ATTEST/AUTHENTICATED:

Matthew McLean
City Clerk

APPROVED AS TO FORM:

Kim Adams Pratt
City Attorney

Introduced:
Adopted:
Posted:
Published:
Effective:

DRAFT

EXHIBIT A
CHAPTER 15.10
FIRE CODE

15.10.020 IFC Section ~~105.6, Required operation permits, amended.~~ 105.5.32, Mobile food preparation vehicles.

Section 105.5 is revised to read as follows:

105.5.32 Mobile food preparation vehicles. A permit is required for mobile food preparation vehicles equipped with appliances that produce smoke or grease-laden vapors or that utilize flammable gases such as LP-gas or natural gas. The fire code official is authorized to develop policies that clarify the permit requirements and participate in a regional permitting program.

15.10.025 IFC Section 105.5.42, Required construction permits, amended.

Section 105.5 is amend by adding the following section:

105.5.44 Mechanical refrigeration. A construction permit is required to install, modify or expand any mechanical refrigeration system containing more than 220 pounds of a Group A1 refrigerant or more than 30 pounds of any other group refrigerant.

15.10.030 IFC SECTION 109.6, Overcrowding, amended.

Section 109.6, Overcrowding, is amended to read as follows:

109.6 Overcrowding. Overcrowding or admittance of any person beyond the approved capacity of a building or a portion thereof shall not be allowed. The fire code official, upon finding any overcrowding conditions or obstructions in aisles, passageways or other means of egress, or upon finding any condition which constitutes a life safety hazard, shall be authorized to direct actions to be taken to reduce the overcrowding or to cause the event to be stopped until such condition or obstruction is corrected.

15.10.035 IFC Section 111.1 Board of appeals.

Section 111.1 is deleted and replaced as follows:

Appeals of orders, decisions or determinations made by the fire code official shall be made to the hearing examiner pursuant to section 16.26.035, ministerial administrative decisions. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder has been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better solution is proposed. The hearing examiner shall have not authority relative to interpretation of the administrative provisions of this code nor shall the hearing examiner be empowered to waive requirements of either this code or the technical codes which are the codes, appendices and referenced code standards adopted by the city.

...

15.10.125 IFC Section 5604, Explosives storage.

Section 5604.2 is amended by adding the following:

The storage of blasting agents, detonators, explosives, explosive materials and special industrial explosive devices is prohibited within the city limits.

Exception:

1. Approved storage areas in law enforcement facilities and as otherwise provided in the municipal code.
2. When approved by the fire code official.

2021 Washington State Energy Code (WSEC) Residential Significant Changes: Space Heating

BEGINNING JULY 1, 2023



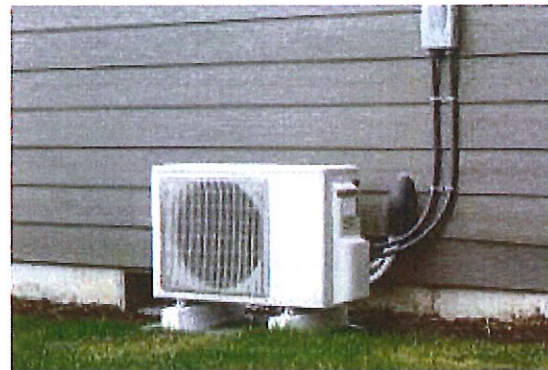
In new construction, primary heating must be provided by a heat pump system. Both ducted and ductless systems are acceptable.

Some exceptions apply, see 2021 WSEC Section R403.13

Supplementary heating may be provided by other system types.

Some control requirements apply, see 2021 WSEC Section R403.1.2.

In existing buildings (retrofits, replacements, and additions), new and replaced heating equipment must be a heat pump, except that existing heating equipment (such as a gas furnace) may be replaced like-in-kind so long as the size of the equipment is not greater than the existing.



Air conditioners may be added to existing systems so long as heating equipment is not being replaced.

For full code text, see 2021 WSEC Section R503.1.2



In new or existing buildings, this change does not prohibit gas supply from being provided to homes. This change does not ban the use of gas or propane for cooking appliances or decorative gas fireplaces.

This [handout](#) summarizes one significant change in the 2021 Washington State Energy Code (WSEC) for those buildings defined in the code as *Residential Buildings*. See complete code text for details.

2021 Washington State Energy Code (WSEC) Residential Significant Changes: Water Heating

BEGINNING JULY 1, 2023

In new construction, primary water heating must be provided by a heat pump system. Both unitary heat pump water heaters (HPWHs) and split systems are acceptable.

Some exceptions apply. For example, homes with less than 1,000 square feet of conditioned floor area may be served by other water heating system types.

Supplementary heating for heat pump water heating systems may be provided by other system types.

Also, water heaters must now be installed within the conditioned space of the home unless it has a system efficiency of 2.0 UEF or better.

For complete code text, exceptions, and control requirements, see 2021 WSEC Section R403.5.7

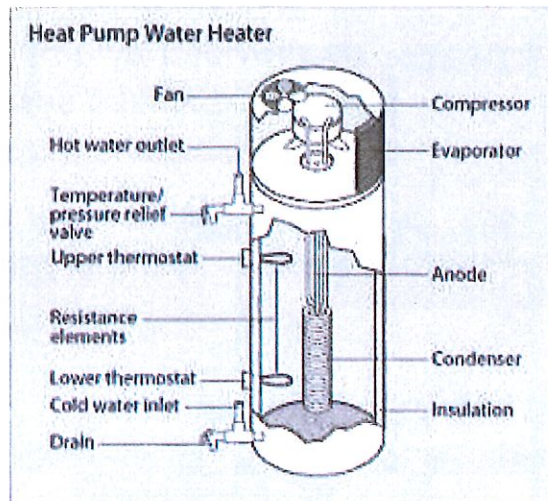
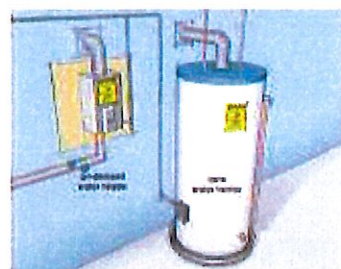


Figure 1 Heat pump water heater diagram. Source [Heat Pump Water Heaters | Department of Energy](#)



In existing buildings, other water heating system types may be replaced like-in-kind so long as the rated capacity of the equipment is not greater than the existing.

For full code text, see 2021 WSEC Section R503.1.3

Figure 2 Examples of water heater types that can be replaced like-in-kind. Source [Estimating Costs and Efficiency of Storage, Demand, and Heat Pump Water Heaters | Department of Energy](#)

In new or existing buildings, this change does not prohibit gas supply from being provided to homes. This change does not ban the use of gas or propane for cooking appliances or decorative gas fireplaces.

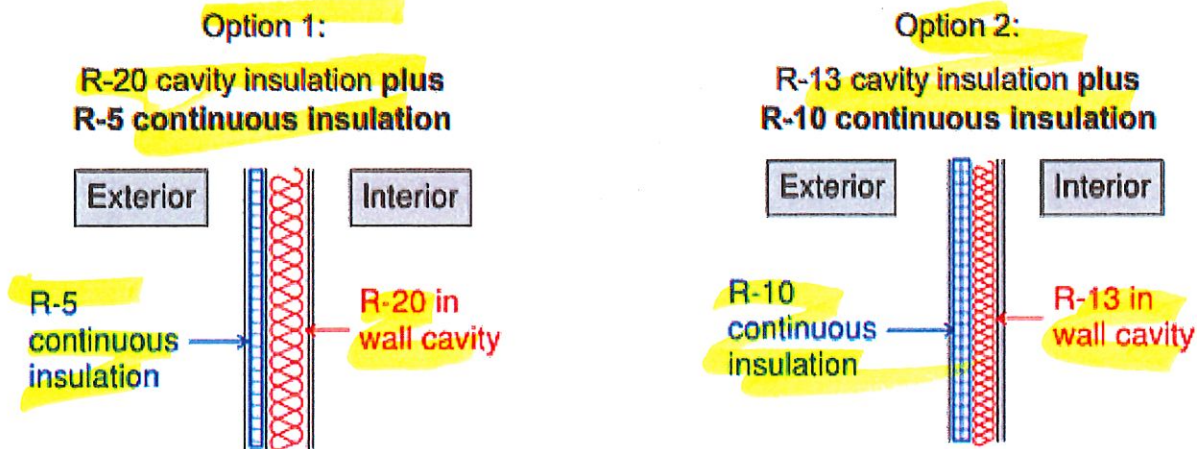


This handout summarizes one significant change in the 2021 Washington State Energy Code (WSEC) for those buildings defined in the code as *Residential Buildings*. See complete code text for details.

2021 Washington State Energy Code (WSEC) Residential Significant Changes: Wall Insulation

BEGINNING JULY 1, 2023

The previous edition of the energy code (the 2018 WSEC) required R-21 cavity insulation only in walls. In the 2021 WSEC, a typical wood framed wall assembly now requires continuous insulation in addition to cavity insulation. There are two prescriptive options:



Continuous insulation is often rigid foam but could be other materials such as mineral wool or cork. Intermediate framing remains required.

Why continuous insulation?

Wood is much more conductive than insulation, so the wood studs in a wall allow for a path of least resistance for heat transfer, called a "thermal bridge". Wood framing can make up close to 1/4 of the wall area, so this thermal bridging effect can be a major contributor to heat loss in the building, resulting in higher energy use required for space heating (and cooling) and lower occupant comfort. For full code text, see 2021 WSEC Table R402.1.3 & Section 402.2.1

Installation Considerations

- Continuous insulation must be installed in accordance with manufacturer's installation instructions
- The manufacturer's R-value mark must be readily observable for inspection. Depending on the project, an additional exterior insulation inspection may be required to achieve this.
- Installation of cladding over continuous insulation will required special care in selection and installation of fasteners.

This handout summarizes one significant change in the 2021 Washington State Energy Code (WSEC) for those buildings defined in the code as *Residential Buildings*. See complete code text for details.

2021 Washington State Energy Code (WSEC) Residential Significant Changes: Ceiling & Attic Insulation

BEGINNING JULY 1, 2023

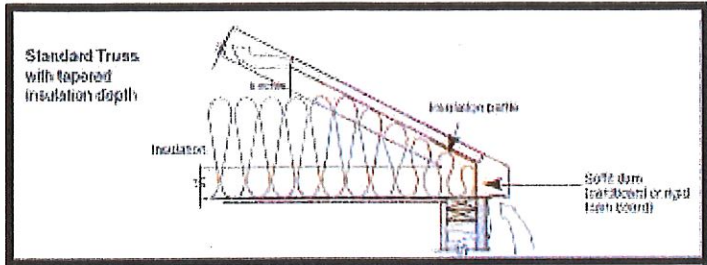


Figure 1 Standard truss with attic space. Source: [Attic Eave Minimum Insulation | Building America Solution Center \(bnrl.gov\)](#)

Ceilings with attic spaces

Insulation now needs to meet **R-60**, increased from R-49. This applies to standard trusses or standard rafter and top plate construction where insulation tapers over the eaves.

If raised-heel trusses are provided

Insulation now needs to meet **R-49**, increased from R-38. This applies to roofs with a raised heel that allows the insulation to extend uncompressed over the top plate of the exterior wall.

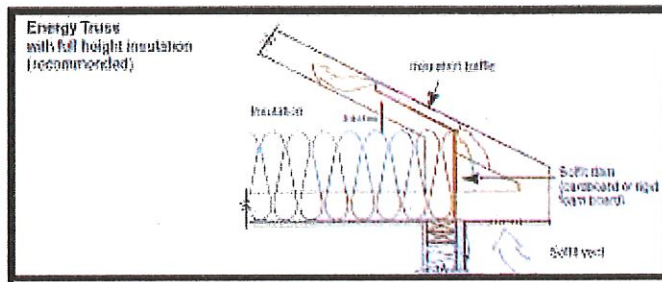


Figure 2 Raised heel (energy) truss with attic space. Source: [Attic Eave Minimum Insulation | Building America Solution Center \(bnrl.gov\)](#)

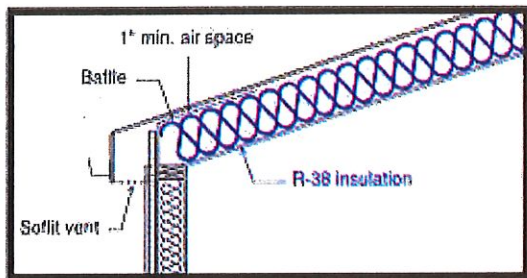


Figure 3 Single rafter-vaulted ceiling

For single rafter- joist-vaulted ceilings

Insulation requirement remains **R-38**, if the full insulation depth extends uncompressed over the top plate of the exterior wall.

For full code text regarding attic insulation requirements, see 2021 WSEC Table R402.1.3 & Section 402.2.1

Where an addition greater than 150 square feet adjoins existing ceilings with attic spaces, the existing attic spaces need to have insulation upgraded to meet the new requirements. For full code text regarding additions, see 2021 WSEC Section R502.3.1.1

Reminder: The required R-value is averaged over the entire attic. For blown or sprayed insulation an **insulation certificate** must be left on the job site immediately after insulation installation. The certificate must indicate the installed thickness, settled thickness, settled R-value, installed density, coverage area and number of bags installed.

This handout summarizes one significant change in the 2021 Washington State Energy Code (WSEC) for those buildings defined in the code as *Residential Buildings*. See complete code text for details.

2021 Washington State Energy Code (WSEC) Residential Significant Changes: Air Leakage

BEGINNING JULY 1, 2023



In new construction of single-family homes, duplexes, and townhouses the air leakage rate must be tested and be a maximum of 4.0 air changes per hour (ACH), reduced from 5.0 ACH in the previous code edition.

For full code text, including testing procedures, see 2021 WSEC Section R402.4

Figure 1 Blower door test (Source: [Technically Speaking: What the Blower Door Test Tells You](#) / Building Performance Institute, Inc. (bpihomeowner.org)).

Electrical and communication outlet boxes installed in the building thermal envelope must now be:

- Tested in accordance with NEMA OS 4, *Requirements for Air-Sealed Boxes for Electrical and Communication Applications*
- Have an air leakage rate of not greater than 2.0 cubic feet per minute

To demonstrate this, these boxes must be marked "NEMA OS 4" or "OS 4" and be installed per the manufacturer's instructions and with any supplied components required to achieve compliance with NEMA OS 4.

For full code text, see 2021 WSEC Section R402.4.6

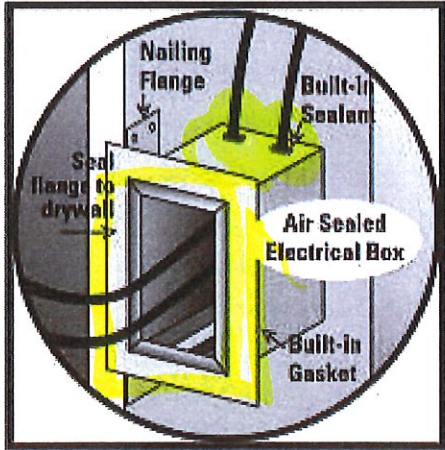
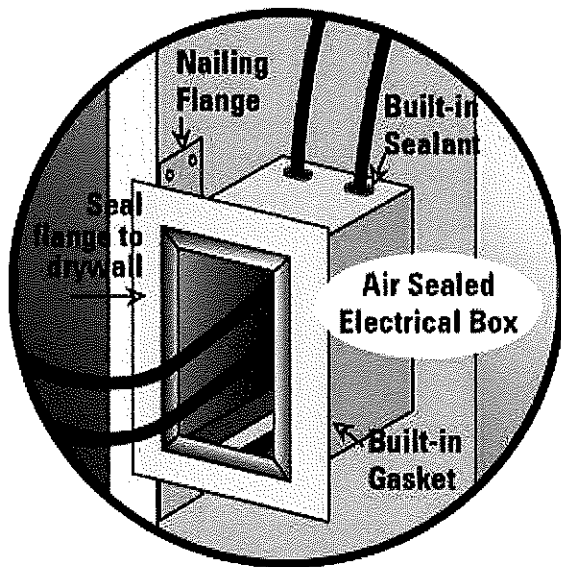


Figure 2 Air Sealed Electrical box (Source: [Air Sealing Electrical Wiring](#) / Building America Solution Center (pnnl.gov)).

This handout summarizes one significant change in the 2021 Washington State Energy Code (WSEC) for those buildings defined in the code as *Residential Buildings*. See complete code text for details.

Air-tight electrical boxes have built-in gaskets and self-sealing wire holes



Reference: [Air Barriers - Airtight Drywall Approach, Info-401](https://www.buildingscience.com/documents/information-sheets/air-barriers-airtight-drywall-approach)

(<https://www.buildingscience.com/documents/information-sheets/air-barriers-airtight-drywall-approach>)

Author(s): Lstiburek

Organization(s): Building Science Corporation, BSC

Brochure about creating an air barrier by sealing drywall assemblies.

2021 Washington State Energy Code (WSEC) Residential Significant Changes: Lighting

BEGINNING JULY 1, 2023

In new construction, interior lighting in most spaces must now be controlled with either:

- a dimmer,
- an occupant sensor control, or
- other control that is installed or built into the fixture.

These controls are not required in bathrooms or hallways, or lighting that is specifically designed for safety or security.

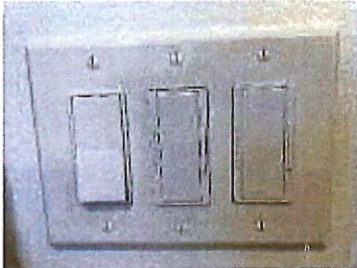


Figure 1 Dimmer capability for lighting on the middle and right switch (left switch controls a local exhaust fan).



Also, the requirement for *high-efficiency* interior lighting now applies to all lighting in the home, including kitchen appliance lighting fixtures, up from 90% of lighting in the last code edition.

Where more than 30 watts of exterior lighting is installed, it must now:

- have a manual on/off switch which permits automatic shut-off actions,
- be automatically shut off when sufficient daylight is present, and
- if controls can override automatic shut-off actions, the override must be capable of automatically resetting to its normal operation within 24 hours



Figure 2 Image of a home with exterior lighting that would need to have automatic lighting controls.

For full code text, see 2021 WSEC Section R404

In existing buildings (alterations and additions), new lighting must be *high-efficiency*, unless the alteration affects less than 10% of existing luminaries. The lighting controls specified above for new construction are not required.

For full code text, see 2021 WSEC Section R503.1.4

This handout summarizes one significant change in the 2021 Washington State Energy Code (WSEC) for those buildings defined in the code as *Residential Buildings*. See complete code text for details.

2021 Washington State Energy Code (WSEC) Residential Significant Changes: Additional Energy Efficiency Requirements

BEGINNING JULY 1, 2023

The Additional Energy Efficiency Requirements section of the energy code (WSEC Section R406) goes beyond the base (prescriptive) code requirements and sets a minimum number of credits projects must achieve based on the project size. This section of the code is not new, however multiple changes are made to this section in the 2021 WSEC.

Changes to required credit values (Section R406.3):

- Additions with a cumulative total of less than 150 square feet of conditioned floor area are now exempt from obtaining additional energy efficiency credits
- Minimum credit values required adjusted for most project types, based on adjustments made in the base code language



Once the required number of credits is determined for a project, the home's heating system type is given positive or negative credits in the Fuel Normalization Table (Table R06.2). Credits are awarded to create a base equalization between fuels used to define the equivalent carbon emissions of the heating system types.

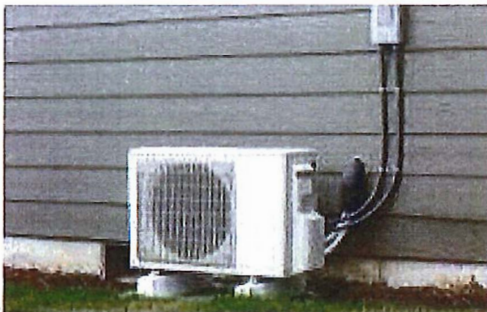


Figure 1 Ductless heat pump outside compressor. Image source: [Ductless \(Mini-Split\) Heat Pumps](#), Building America Solution Center ([bamf.gov](#))

Changes to heating system types (Table R406.2):

- Supplemental heating type is now considered
- Credits adjusted for most heating system types

After the heating system is evaluated, then the project must select options from a menu that includes seven categories and incorporate those energy efficient elements into the project design. The seven categories remain the same, though options within the categories are modified.

Change to the options menu (Table R406.3):

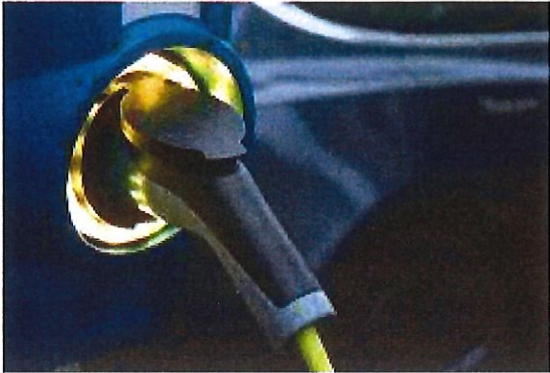
- Options extensively revised to reflect changes in base code
- Each 0.5 credit is equivalent to a 600 kWh energy savings
- Some options were eliminated due to the fact they are now a part of the base code requirements



2021 International Residential Code (IRC) Significant Changes: Electric Vehicle Charging

BEGINNING JULY 1, 2023

New construction projects which create dwelling units *and* include an attached garage or attached carport will now need to provide one 40-amp dedicated 208/240-volt branch circuit for each dwelling unit, intended for future electric vehicle charging. This circuit may terminate in electric vehicle charging equipment; however, a junction box or receptacle outlet is also acceptable.



For full code text, see 2021 IRC Section [R309.6](#) (WA Amendment)



Figure 1 Electrical panel image. Source: [How to Install a 240-Volt Circuit Breaker \(thespruce.com\)](#)

While electric vehicles can be charged by a standard household outlet (120-volt), this "Level 1 Charging" provides about 2-5 miles of range per hour, so a full charge can take up to 24 hours. The 240-volt circuit will allow for faster charging, known as "Level 2 Charging". Level 2 charging provides about 10-25 miles of range per hour, so a full charge can take as little as 3-10 hours. For the average driver, Level 2 charging will allow them to fully charge overnight.

Installing the capability for Level 2 charging at the time of initial construction is a cost-effective way to prepare a home to be ready for an electric vehicle. This type of circuit is the same type of wiring as an electric stove or clothes dryer and can easily be installed by a professional electrician.

This handout summarizes one significant change in the 2021 International Residential Code (IRC). See complete code text for details.

R404.2 – Interior lighting controls

- Code revision requires occupant sensors or dimmers – NCTCOG amendment deletes this requirement

R404.3 – Exterior lighting controls

- Requires daylight sensor plus a manual on/off switch



Table 508.4 – Required separation of occupancies

- Simplified table:

TABLE 508.4 REQUIRED SEPARATION OF OCCUPANCIES (HOURS)^f

OCCUPANCY	A, E		I-1 ^a , I-3, I-4		I-2		R ^a		F-2, S-2 ^b , U		B ^e , F-1, M, S-1		H-1		H-2		H-3, H-4	
	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS	S	NS
A, E	N	N	1	2	2	NP	1	2	N	1	1	2	NP	NP	3	4	2	3
I-1 ^a , I-3, I-4	1	2	N	N	2	NP	1	NP	1	2	1	2	NP	NP	3	NP	2	NP
I-2	2	NP	2	NP	N	N	2	NP	2	NP	2	NP	NP	NP	3	NP	2	NP
R ^a	1	2	1	NP	2	NP	N	N	1 ^c	2 ^c	1	2	NP	NP	3	NP	2	NP
F-2, S-2 ^b , U	N	1	1	2	2	NP	1 ^c	2 ^c	N	N	1	2	NP	NP	3	4	2	3
B ^e , F-1, M, S-1	1	2	1	2	2	NP	1	2	1	2	N	N	NP	NP	2	3	1	2
H-1	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	NP	N	NP	NP	NP	NP	NP
H-2	3	4	3	NP	3	NP	3	NP	3	4	2	3	NP	NP	N	NP	1	NP
H-3, H-4	2	3	2	NP	2	NP	2	NP	2	3	1	2	NP	NP	1	NP	1 ^d	NP
H-5	2	NP	2	NP	2	NP	2	NP	2	NP	1	NP	NP	NP	1	NP	1	NP

Significant Changes to the 2021 International Codes & Amendments



609.4.1 – Garage doors

- New section requires permanent label from manufacturer identifying the manufacturer, model or series number, positive and negative design wind pressure ratings, reference installation instructions, drawings, and applicable test standard.

Significant Changes to the 2021 International Codes & Amendments



2447.2 – Commercial cooking appliances

- Commercial cooking appliances are not allowed in residential (previous exception allowing engineer's design has been eliminated)

Significant Changes to the 2021 International Codes & Amendments



1502.3 – Dryer vent termina

- Minimum clearance between duct termination and building openings, including vented
- Per manufacturer's specs, in any direction if not spec



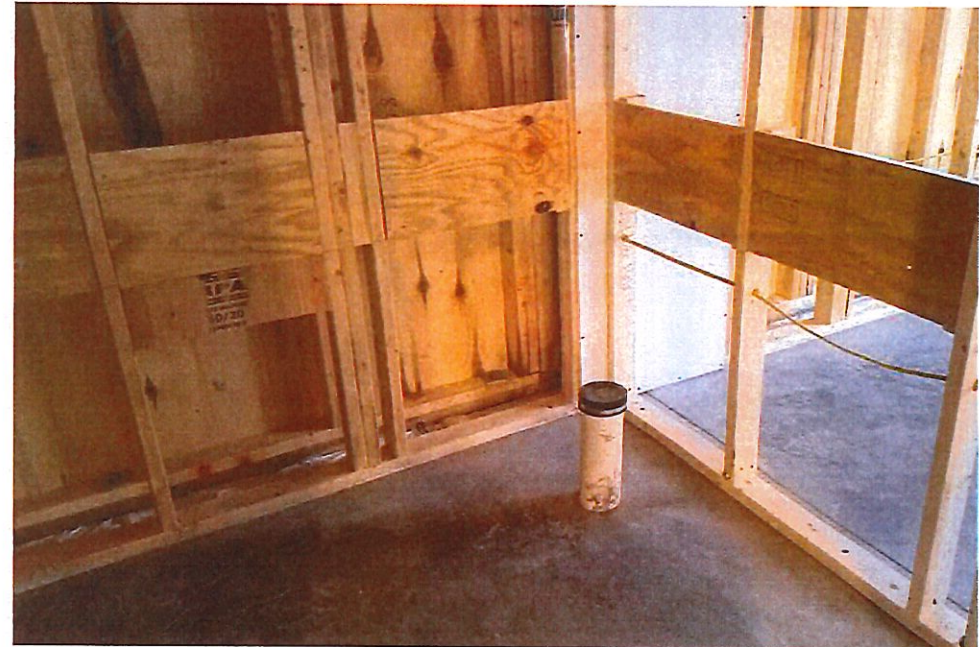
314.3 – Smoke alarm locations

- If the change in ceiling height between a hallway and an adjacent room is in. or more, a smoke detector is required on the higher ceiling

Significant Changes to the 2021 International Codes & Amendments

307.3 & 307.4 - Blocking

- Amended by NCTCOG
- Blocking for future handicap grab bars required around at least one ground floor toilet





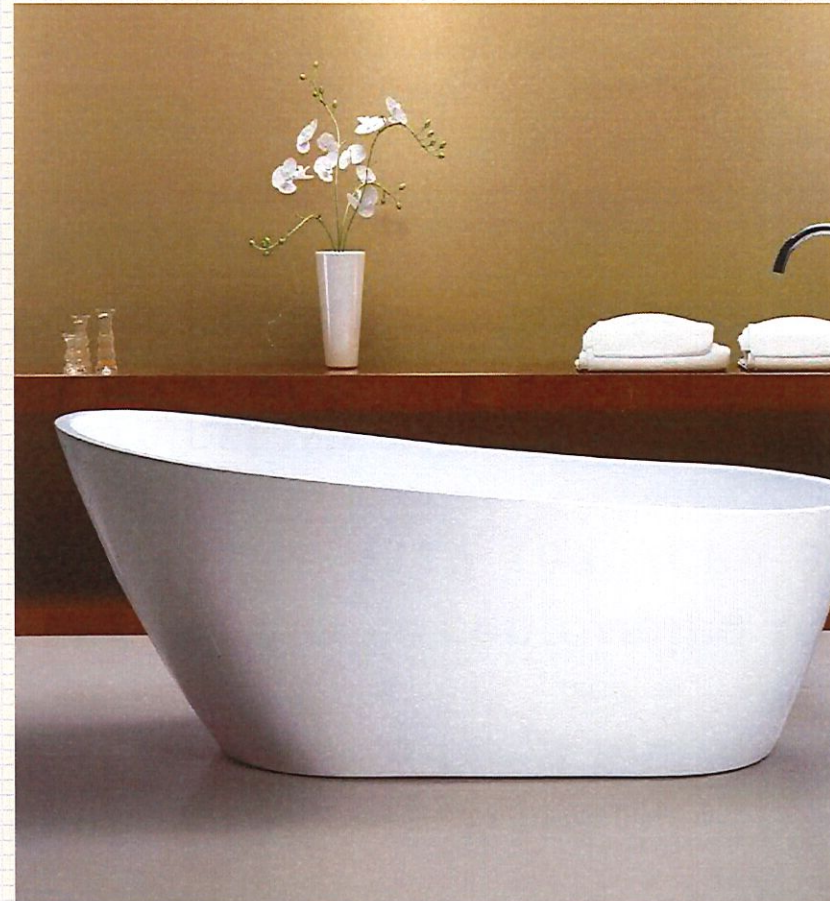
717/718 – Relining/rehabilitation of building sewers and building drains

- Addresses new technologies for relining sewer pipes as a means of repair, but must follow procedure

Significant Changes to the 2021 International Codes & Amendments

407.2 – Bathtub overflows

- **Overflow drains are no longer required on bathtubs; preventing the overflow is the user's responsibility**



Significant Changes to the 2021 International Codes & Amendments



Smoke & Carbon Monoxide Al

- 307 – Smoke alarms required retroactively for anything other than Level 1 work
- 308 – Carbon monoxide detectors required, with a few exceptions:
 - Level 1 work
 - Plumbing/mechanical work not involving gas appliances
 - Exterior surfaces only

Significant Changes to the 2021 International Codes & Amendments