



Lakewood

Residential Addition

This handout identifies the permit submittal requirements for additions to one- and two-family dwellings as defined by the International Resident Code, edition 2021.

Contractors and Homeowners as General Contractors:

Homeowners may obtain a building permit for construction of an addition to a single-family home intended as the owner's personal residence and performing the work themselves. *Permits will not be issued to corporations or LLC's.*

Any person hired to perform work must have the required City of Lakewood contractor registration to do work within the city limits.

Please note that drawings uploaded into eTRAKiT by a homeowner or contractor that do not show adequate knowledge of building codes or building systems may be required to provide drawings that are stamped and signed by a Colorado licensed design professional.

Mechanical, electrical, and plumbing systems work may be performed by MEP systems contractors registered with the City of Lakewood. After a permit has been issued, the "add contractor to existing permit" form must be filled out at

<https://www.lakewood.org/Government/Departments/Public-Works/Building-and-Construction-Permits>. Homeowners who wish to do the mechanical, electrical, and plumbing work on their own projects must add themselves into the permit using the add contractor to existing permit button and the link above for each of the building systems they will be working on.

Submittal Requirements:

Your project must comply with the required structure setbacks for zoning on your lot. Please check with the Planner-of-the-Day at 303-987-7571 or e-mail at POD@lakewood.org to verify your proposed structure meets all setback, location, and other zoning requirements.

Provide a fully completed permit application through eTRAKiT.

Plan review fee based on the valuation of your project will be collected via a link on your eTRAKiT dashboard after the intake completeness review is approved.

The State of Colorado requires renovations/remodels that are impacting greater than the trigger level of suspect asbestos-containing materials ("ACM") – you must have your project inspected for ACM by a Colorado-certified asbestos building inspector. Please provide the asbestos survey if you are exceeding the trigger levels per the State of Colorado Requirements. Refer to page 4 of this handout for the requirements for the State of Colorado.

Upload a complete set of the following documents into eTRAKiT:

Plot/site plan drawn to 1" = 30' or larger standard engineering scale.

A stamped copy of an engineered soils report for the specific building site may be required if the addition is larger than 50% of the floor area of the existing residence.

Specify method used to meet the energy code requirements: Prescriptive thermal envelope requirements, UA trade-off method (provide the REScheck analysis) or the performance path. Indicate the proposed method on the construction plans and provide all necessary supporting



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documents.

A completed Manual J analysis or engineered drawings for the proposed building to properly size the HVAC equipment and coordinate with the selected energy code provisions may be required.

Upload architectural designs as follows:

Indicate applicable codes and load design on the cover sheet of the set.

Provide thermal barrier depiction.

Provide air sealing details.

Floor plans for each floor including basement and roof plans. Show interior partitions and dimensions of each room or space. Identify all rooms, windows (size, type, safety), doors (size). Identify and locate all fixed appliances (furnace, water heater, washer, dryer, toilets, lavatories, tub/showers, sinks, etc.) and fixed or built-in counters.

Provide building elevations (front, rear, left and right sides). Provide the locations of tempered glass windows and egress windows on all elevations.

Provide details of construction including but not limited to typical exterior wall sections from foundation to roof that includes interior finishes, framing, insulation (note the R value), exterior sheathing and finish materials, roof sheathing, insulation, roof covering. Multiple wall details may be required if multiple materials are being used on the residence. Also provide stair details with guard and handrails where applicable, as well as applicable deck and patio cover attachment details. Where volume ceilings or ornate ceiling treatments occur, show framing details for tray, coffers, vaults, and coves in ceilings.

On the roof plan indicate the location, type, and area of all the attic roof vents. Provide attic ventilation calculations if applicable.

Where a crawl space is provided, indicate how the space is to be accessed and ventilated (natural ventilation or conditioned crawl space.) Provide crawlspace ventilation Calculations when using the Natural Ventilation method. Provide the location of any sump pit or ejector pit, an electrical outlet must be shown adjacent to sump pits for electrical for sump pumps.

If moving appliances or adding to the current load of the gas pipe. Provide a one-line gas isometric, starting from the location of the gas meter to the furthest outlet. Gas drawings shall provide the following information:

BTU demand of each appliance served by the piping system.

Type of piping material being used with in the piping system (e.g., polyethylene, schedule 40 steel, CSST, etc.).

Pipe diameter and length for each section of piping within the diagram.

Size and location of tracer wire as required by code (underground piping only).

Burial depth of all underground piping

FGC table being used, or CSST table from manufacture installation instructions

Conversion number from Btu to CFH is 824.



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Clarify the use of conventional or direct vent gas-fired furnaces and water heaters

Upload structural plans drawn to $\frac{1}{4}'' = 1'0''$ scale as follows:

Provide an engineered foundation plan that references the Lakewood design criteria and the site-specific engineered soil report. Include sections and other details as applicable. Plans must be stamped and signed by a registered Colorado Professional Engineer.

Provide floor and roof framing plans. Show how wall bracing requirements are being met. Note on the plans if engineered roof trusses are being used and include the stamped engineered drawings either with the submittal or to be provided before installation.

Provide general notes and specific construction details as necessary. Include the design loads used in the structural design.

Upload electrical plans drawn to $\frac{1}{4}'' = 1'0''$ scale as follows:

Show the approximate location of the electrical service entrance/meter along with the location of the required UFER ground on the 1st floor plan.

For each floor level, including the basement, indicate the general location of electrical receptacles and include GFCI and WP protection where applicable. Also show fixed lighting fixtures and fans with their switches. Indicate the location of all required interconnected, hard-wired smoke alarms and carbon monoxide alarms. Please note that ceiling fans must have fan rated junction boxes, and that all receptacles within 6 feet of a water source or servicing a counter must be GFCI rated.

Provide general notes and fixture schedules as necessary.

The location of any power panel must be shown on the drawing, if more than one electrical panel will be installed in a residence, a one-line electrical diagram must be provided.



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City of Lakewood Design Criteria

Ground snow load	Wind speed (mph)	Seismic design category	SUBJECT TO DAMAGE FROM					Ice barrier underlayment required	Flood hazards	Air freezing index	Mean annual temp
			weathering	Frost depth	termite	Accumulated snow	Weather design temp				
30 PSF	Exposure C	B	Severe	36 inches	Slight to moderate	12 inches	1 degree F	No	NFIP, July 21, 1972 FIRM June 17, 2003	532	51 degrees F

Footnote d is replaced with the following:

d. the City of Lakewood is located in a "Special Wind Region" Design wind speed for the city of Lakewood is established as 100 mph Vasd and 130 Vult, 3-second gust for all structures east of the 10,000 west block (Kipling) and 120 Vasd and 155 Vult for all other structures in all other locations.

Ground snow load is not reducible.

Applicable codes for additions for one- and two-family dwellings as defined by the International Resident Code, edition 2021.

International Residential Code 2021

International Energy Conservative Code 2021

International Fuel Gas Code International Fire code 2021

National Electrical Code 2023

Colorado Plumbing Code 2020

City of Lakewood Municipal Code CCR 3 720-1