CODE & ZONING ANALYSIS · FIRST PASS

Sample property, Longmont, CO

City of Longmont · Boulder County · Zone R-SF — Residential Single-Family

2026-09-02 · Addwell — Code Analyzer (first pass)

Live data read Aug 30, 2026, 10:46 PM MDT at the oldest of 3 sources — over a day old; run it again for a current read.

First-pass · advisory. First-pass only. Not a code or zoning determination. Accuracy not guaranteed — verify every item with the Authority Having Jurisdiction (AHJ) before relying on it. Codes, adopted editions, and local amendments change; this analysis is advisory and not legal or engineering advice.

What this is — and what it is not

What this is. An automated first pass. It reads your answers against this jurisdiction's adopted codes and returns the requirements it can identify, each one cited — a head start on what's doable, in a few minutes.

What this is NOT. This is NOT a code review. A code review is performed by a licensed designer and the project's engineers working from a complete drawing set, and it catches things no automated pass can see — your actual geometry, structure, systems, and site conditions. This tool has seen none of that. Treat everything here as a starting point to verify, never as a finding to rely on, and never as a substitute for the professionals who will stamp the work. The Authority Having Jurisdiction decides; nothing here binds them.

What we do not check. We do not check anything recorded against your title. Private covenants, HOA rules, easements, utility and drainage locations, and deed restrictions are not published in the zoning code and are not part of this analysis — any one of them can further limit what you build, and a title report is what reveals them. Note the reverse too: for an accessory dwelling unit, Colorado's HB24-1152 limits how far a covenant or HOA rule can restrict one in a subject jurisdiction, so a recorded prohibition is worth putting to an attorney rather than accepting outright.

Exactly which topics this pass reviewed, partly reviewed and did not review is listed at the end of this report.

OCCUPANCY	STATUS	SCALE	ZONE
Residential (Home)	**Addition**	**~600 SF · 1 unit**	**R-SF — Residential Single-Family**

Site plan

Green — buildable within the setbacks **Yellow** — front **Blue** — rear **White** — side

Lot lines and setbacks are the county's and are drawn to scale; the photograph is a separate survey and the two do not always register. First-pass — verify against a survey.

CODES APPLIED

- **I-Codes (IBC · IRC · IMC · IPC · IFGC · IFC · IEBC)** — 2024 for applications filed on/after 2026-07-01 — 2021 applied before that (City of Longmont)
- **IECC (energy)** — 2024 (City of Longmont)
- **NEC (electrical)** — 2023 — PINNED by Longmont Municipal Code §16.08.010. The CO State Electrical Board enforces the 2026 NEC; confirm which edition your inspector applies before rough-in (City of Longmont)
- **ICC A117.1 (accessibility)** — 2017 (City of Longmont)

SUMMARY · DRAFTED FROM THE CITED SET

This sample lot **is a single-family home in Longmont's R-SF zone — a ~600 SF addition appears feasible under these codes, but several items need AHJ confirmation before you commit.**

- Every foundation and structural floor slab requires a state-licensed engineer's design — Longmont deletes the standard prescriptive path entirely.
- Electric resistance heat is banned; any heating system must be a heat pump rated to work at 5°F — verify your HVAC plan meets this before design.
- If you install any gas appliance, code requires you to pre-wire for its future electric replacement (Appendix RK mandatory).
- The NEC edition your electrical inspector enforces is unresolved — city pins 2023 NEC, but the State Electrical Board enforces 2026 NEC; confirm before rough-in.
- Whether a Conservation Overlay applies to this parcel is unconfirmed — if it does, it could cap your addition size.

Confirm the lot's existing footprint, floor area, and parcel overlay status with Longmont Building Services before finalizing the design.

What could catch you

No blocking issue found in what we reviewed. This jurisdiction sets no lot-coverage or FAR limit — see what governs instead.

WHAT WE ASSUMED

• Lot area 7,579 SF (you entered).

[UNANSWERED] 2 items could not be auto-verified.

These are flagged CONFIRM in the body — treat them as leads to check, not as findings.

The rest of the cited detail — 79 items — follows below, grouped by area.

Dimensional Requirements — R-SF — Residential Single-Family

Front Setback 15 ft (a garage face must sit back 20 ft)

Side Setback 5 ft

Rear Setback 20 ft (6 ft where an alley runs behind the lot)

Maximum Building Height 35 ft

Accessory / ADU Setbacks 5 ft side · 5 ft rear (a detached garage, shed or ADU — most jurisdictions also require an ADU to sit behind the house)

Maximum Lot Coverage not stated for this district

Longmont LDC §15.03.020 (R-SF); accessory/ADU 5' side & rear (§15.02.080.E.3.d — verified 2026-07-28; the section states rear 5' and side 5' for both new detached and attached ADUs)

Lot coverage — this jurisdiction sets none

Longmont's residential district tables set no maximum lot coverage and no FAR, so there is no lot × % envelope to compute — setbacks and height do the work instead. One exception, and it is parcel-specific: inside a mapped Conservation Overlay (C-O) district, a new dwelling's coverage must fall between 50% and 125% of the average coverage of other dwellings on the same or facing block face (LDC §15.03.050.B.5.c). Most parcels are NOT in a C-O — check the overlay map before assuming it applies to yours.

Basis: Longmont LDC §15.03.020 (district dimensional tables); C-O overlay coverage rule at §15.03.050.B.5.c

Zoning & Site

CITED

Zoning district R-SF — Residential Single-Family — dimensional standards

The district's standards for this parcel, by topic:

Setbacks

- Setbacks — front 15' (garage 20'), side 5', rear 20' (6' w/ alley).

How big it can be — coverage, floor area & height

- Max building height 35 ft.

Accessory dwelling unit (ADU)

• Accessory dwelling unit — an ADU is accessory to a DWELLING. These rules reach a dwelling on this parcel, existing or proposed; they do not govern a commercial or industrial building here.
• A detached ADU is allowed by right.
• Max size is the GREATER of 800 SF or 50% of the finished, above-ground floor area of the principal dwelling — so 800 SF is a FLOOR, not a ceiling, and a larger house earns a larger ADU. Further limit: all accessory structures together may not exceed 75% of the dwelling — site-verify existing garages and sheds, which eat into the same allowance.
• ADU height: may not exceed the height of the principal structure — NOT the district maximum shown for the principal building. Measure the existing house the way the code does — to the top of its highest point, not the eave — because that is the figure the ADU has to come under. This applies to a DETACHED unit; an ADU inside or attached to the house is not governed by this clause. (Longmont LDC §15.02.080 (ADU standards, item i), height determined per §15.03.080.D; "Building height" defined at §15.10.020)
• An ADU may be between 500 and 800 sq ft regardless of the principal dwelling's size, and may exceed 800 sq ft only if it stays within 50% of the FINISHED, ABOVE-GROUND floor area of the principal dwelling (a finished basement does not count toward that). A basement ADU inside the principal dwelling has NO size restriction at all. LDC §15.02.080.E.3.b.
• Owner-occupancy is NOT required — you do not have to live on the property.
• No off-street parking space is required for the ADU.
• No off-street parking required (max 2 allowed). One space is required only where the lot has no existing off-street parking AND either has no public street frontage, takes vehicular access from an alley, or on-street parking is prohibited (e.g. for emergency access). Longmont ADU Guide (July 2025).
Source: Longmont LDC §15.04.040 (Table of Allowed Uses — accessory uses, by district) / §15.02.080.E (ADU standards, size at E.3.b); City of Longmont ADU Guide, updated December 2025; owner-occupancy + parking per Colorado HB24-1152 (eff. June 30, 2025)
• FULLY CITED (production finder + Longmont ADU Guide July 2025 + HB24-1152): permitted accessory use / by-right, the size rule, 5' side/rear + front->=-house setbacks, NO owner-occupancy requirement, and the conditional parking rule.

Before you rely on these figures

• Confirm against the parcel + any overlay; the measurement method (where a setback is measured from, how height is taken) varies by jurisdiction. Anything the tool couldn't extract is flagged — pull it from the zoning code.
• Source: Longmont LDC §15.03.020 (R-SF); accessory/ADU 5' side & rear (§15.02.080.E.3.d — verified 2026-07-28; the section states rear 5' and side 5' for both new detached and attached ADUs) · verified 2026-08-24.

Longmont LDC §15.03.020 (R-SF); accessory/ADU 5' side & rear (§15.02.080.E.3.d — verified 2026-07-28; the section states rear 5' and side 5' for both new detached and attached ADUs)

CITED

Egress window + well (EERO); smoke/CO; OWTS sizing if septic

IRC R310/R314/R315 (2024, City of Longmont)

CITED

Asbestos inspection + demo notification; decommission well/septic/propane

CDPHE Reg 8; county health

CITED

Historic review may apply — the building is old enough to trigger it

Exterior work on a building roughly 50+ years old can trigger a historic-preservation review.
• Either because the parcel sits in a designated historic district / landmark, or because the jurisdiction reviews demolition/exterior alterations of older structures.
• It can add a design-review step and constrain windows, siding, and massing.
We query the designation layer directly for the jurisdictions that publish one, and print the answer for your parcel. This jurisdiction does not publish one we hold — so check the historic-district map, and we are working through the remaining AHJs.

Local historic-preservation ordinance (per AHJ)

CITED

Drainage & grading — the thresholds that turn a permit on here

WHAT TURNS IT ON - On-site detention storage for the initial AND major storm:
required of ALL NEW SUBDIVISION. The exemption that governs a house-scale job is an ADDITION whose TOTAL impervious area — existing plus proposed — stays under 10,000 sq ft of paved and roof surfaces (LSDCM §303.5 Storm Runoff Detention (pp. 304–305)).
Does NOT count / does not apply:
- a subdivision of 1 acre or less AND an impervious density under 50% — BOTH conditions, not either
- fill areas
- an addition where total impervious (existing + proposed) is under 10,000 sq ft of paved and roof surfaces
- a subdivision outfall basin 1% or less of the basin area tributary to the nearest major drainageway, as defined by the City Engineer
- other situations the City Engineer determines to be in the City's best interest
EVERY exemption is subject to the City Engineer's approval and may require additional analysis to justify it — being under the threshold is a submittal to make, not a step to skip.

The detention DESIGN section of Longmont's manual (Section 1200) is headed 'Boulder County Storm Drainage Criteria Manual' while being served as part of Longmont's own manual — Longmont appears to have adopted Boulder County's detention section. The POLICY above is Longmont's own; Section 300 is headed City of Longmont.
These figures come from the 1984 manual. Confirm against any later ordinance or the current Development Code before relying on them.
Do NOT take water-quality requirements from this manual — its §303.6 predates the MS4 permit era and cites the 1972 Water Pollution Control Act's goals. Water quality is governed by the current MS4 permit, which is not transcribed here.
Read 2026-08-19 from City of Longmont Storm Drainage Criteria Manual (LSDCM), Section 300 — Drainage Policy (July 1984 (Section 100 re-issued July 2026)).

LSDCM §303.5 Storm Runoff Detention (pp. 304–305)

CITED

Off-street parking — the count this jurisdiction publishes

PUBLISHED AS A MAXIMUM, NOT A MINIMUM: 3 garage or carport spaces per dwelling unit — but see the warning: Longmont's table is headed MAXIMUM Spaces.
Single-family ATTACHED: 2 garage or carport per dwelling unit. Multifamily: 2 per unit. Co-housing: 3 per dwelling unit.
Longmont's Table 15.05.080(1) states these under a heading of 'off-street parking ALLOWANCES', with every category column headed 'MAXIMUM Spaces:', and some rows reading 'No restriction'. A subheading immediately above it says 'Number of Parking Spaces REQUIRED'. The table therefore reads as a CAP in two places and a floor in one. Do not treat these as a minimum you must build to without confirming with the City — the two readings point in opposite directions.
The table does not apply in the GID zoning district, which is called out separately.
Colorado HB24-1152 bars a subject jurisdiction from requiring off-street parking for an ADU within a half mile of frequent transit, whatever the table says.
Parking, drives and any required drainage still have to FIT ON THE LOT beside the building — check it at site feasibility, not at permit.

Longmont Land Development Code Table 15.05.080(1) — Off-Street Parking Spaces

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CITED

Accessory structures — the setback depends on whether yours is over 120 sq ft

Longmont sets the accessory-structure setback in two bands (§15.02.080.B.2.c):
• **More than 120 sq ft** — at least **5 ft** from the property line.
• **Less than 120 sq ft** — at least **3 ft** from the property line, and it may not occupy more than **50% of the combined**

required rear and side setbacks, and must be placed to accommodate lot drainage.
The 5 ft figure shown elsewhere in this report is the LARGER band. If your shed, studio or garage is under 120 sq ft you may be able to sit two feet closer — check the 50% test before relying on it.
And no accessory structure may sit closer to the front property line than the house does (§15.02.080.B.2.d), whatever its size. On a corner lot that applies to both street frontages.
An ADU is governed separately (§15.02.080.E.3.d) and takes the 5 ft side and rear setback regardless of size.
Longmont LDC §15.02.080.B.2.c (size-banded accessory setback) and §B.2.d (not forward of the principal structure);

ADUs at §15.02.080.E.3.d

ASK THE AHJ

Conservation Overlay — if your parcel is in one, it sets your size

Longmont's residential district tables set no maximum lot coverage or FAR — setbacks and height govern. Inside a mapped **Conservation Overlay (C-O)** district, three extra standards OVERRIDE the base district:
• COVERAGE — a new dwelling's coverage must land **between 50% and 125% of the average coverage** of other dwellings on the same or facing block face.
• FRONT SETBACK — an **averaged front setback** replaces the base minimum where most of the block is already tighter than it.
• HEIGHT — a **contextual height** applies, between the base maximum and the height of adjacent buildings.
• C-O districts are zoned by council on a neighborhood petition, so **most parcels are not in one**. Longmont's are the **Historic Eastside** and **Historic Westside** neighborhoods.
• We do not yet hold the mapped boundary, so we cannot tell you whether THIS parcel is inside one. The boundaries are defined by the City of Longmont and we are working to get them — when we have them, this answers itself.
Longmont LDC §15.03.050.B.5 (Conservation Overlay — special development standards)

CITED

A foundation under-drain plan (or a variance) is required

Longmont residential submittals require a complete under-drain plan — connection details, sump pit, termination, and discharge.
• Or an under-drain variance with an engineer's design, where the subdivision has no under-drain.
ONE QUESTION DECIDES WHETHER THIS TOUCHES YOU: ask Building Services whether it applies to a slab-on-grade structure with no below-grade habitable space. A detached ADU on a slab is the common case, and we have not confirmed how Longmont scopes it.
• It's a Longmont-specific foundation-drainage requirement not in the model code; your engineer/designer prepares it.
City of Longmont residential submittal — under-drain plan requirement

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CITED

Zoning district R-SF — permitted uses

YOUR USE — "Home"
PERMITTED USE — Dwelling, single-family detached
Confirm the exact use classification with City of Longmont.

All key uses in R-SF (Longmont LDC §15.04.020 (Table of Allowed Uses)):
• Dwelling, single-family detached — permitted use — see §15.04.030.B.2
• Dwelling, multifamily — prohibited (blank cell in the source table) — see §15.04.030.B.4
• Accessory dwelling unit — accessory use — see §15.02.080.E
• Office — prohibited (blank cell in the source table) — see §15.04.030.D.17; 15.04.030.A.6
• Retail sales, generally — prohibited (blank cell in the source table) — see §15.04.030.D.19; 15.04.030.A.6
• Restaurant — prohibited (blank cell in the source table) — see §15.04.030.D.11; 15.04.030.A.6

• Vehicle repair and maintenance — prohibited (blank cell in the source table) — see §15.04.030.D.28; 15.04.030.A.6
• Light industrial — prohibited (blank cell in the source table) — see §15.04.030.E.2
• Contractor's shop — prohibited (blank cell in the source table) — see §15.04.030.E.7; 15.04.030.A.6

Status terms follow City of Longmont's own use-table legend.
Longmont LDC §15.04.020 (Table of Allowed Uses)

ENGINEER

Mapped soils — NRCS rates Ascalon somewhat limited for shallow excavations

Mapped soil unit: Ascalon sandy loam, 0 to 3 percent slopes (USDA NRCS Soil Survey (SSURGO)).

What the map unit is made of, and how NRCS rates each part for building:
• Ascalon — 85% of the unit — Dwellings with basements: Not limited · Shallow excavations: Somewhat limited (Dusty, Unstable excavation walls) · linear extensibility up to 3.1%

NRCS's most restrictive rating for this map unit: Ascalon — SOMEWHAT LIMITED for shallow excavations, limiting factors dusty and unstable excavation walls. Those are NRCS's own rating terms, not our assessment.

What these soils are, described by USDA (Official Series Descriptions):
• Ascalon — https://soilseries.sc.egov.usda.gov/OSD_Docs/A/ASCALON.html

This is regional soil-survey mapping (USDA NRCS), not a geotechnical investigation. It does not establish bearing capacity or foundation design, and a parcel can differ from its mapped unit — soils vary over short distances and the site may have been re-graded or filled. A site-specific soils report by a licensed engineer is what designs a foundation. What is above is the published mapping, gathered in one place — it is a starting point for that conversation, not a substitute for it.
USDA NRCS Soil Survey (SSURGO) — engineering interpretations

Building Type & Occupancy

CITED

One- or two-family dwelling -> the IRC governs

Detached one- & two-family dwellings and townhouses (<=3 stories) are designed to the IRC. **Three or more attached units**, or any mixed-use, shift to the IBC (Group R) — confirm the unit count and configuration early, because it changes the entire rulebook.
IRC R101.2 / IBC 310

CITED

Existing work — the alteration level sets what you must bring up to code

On an existing building, scope drives the requirements: cosmetic vs. reconfiguration vs. reconfiguration affecting egress/structure.
• Higher alteration levels (and any change of occupancy) pull in current egress, energy, and sometimes accessibility for the work area.
Resolve the level before pricing — it's the difference between a like-for-like swap and a code upgrade.
IEBC (alteration levels) / IRC R102.7.1

Building & Construction

CITED

Set IEBC path / alteration level

Classify the work: Level 1 (like-for-like finishes), Level 2 (reconfiguration / new systems / space added inside the shell), or Level 3 (work area >50% of the building) — plus addition / change of occupancy.
The level sets how much existing building must come up to current code: Level 1 is largely cosmetic; Level 2+ pulls in current egress, energy, and sometimes accessibility for the work area.
IEBC Ch.5-9 (2024, City of Longmont)

CITED

Scale sets the energy tier — and whether the IRC still governs

Enter the area of the WORK — for an addition the new floor area, for a remodel the affected/reconfigured area, for a new building the whole thing.
On a dwelling the IRC governs and there is no allowable-area table to test against: what the size actually drives is the energy compliance path for the new/altered area, and the point at which the project leaves the IRC altogether.
That exit is MORE THAN THREE STORIES ABOVE GRADE PLANE — and 'above grade plane' is a defined measurement, not a floor count: a basement is a story that is NOT above grade plane, and on a lot that slopes away the plane is taken from the lowest points rather than the average, which can add a story without moving a wall.
Attached units do NOT by themselves move you to the IBC: three or more attached units is the code's definition of a TOWNHOUSE, and townhouses are inside the IRC so long as each unit runs foundation to roof, has a yard or public way on at least two sides, and has its own means of egress.
Stack the units or lose those open sides and it becomes an IBC apartment building — at three units or at thirty.
2024 IRC §R101.2 (scope); §R202 'townhouse', 'townhouse unit', 'story above grade plane', 'grade plane' (2024, City of Longmont)

CITED

Fixtures + venting; range-hood exhaust; GFCI/AFCI + dedicated circuits

IPC/IRC, IMC M1505, NEC (2023, City of Longmont)

CITED

GFCI receptacle + circuit; exhaust to outdoors; safety glazing at tub/shower

NEC 210.8/210.11; IRC M1507/R308.4 (2023, City of Longmont)

CITED

Rise/run, headroom, handrails 34-38", guards <=4" sphere; egress

IRC R311 / IBC 1011-1015 (2024, City of Longmont)

CITED

Safety (tempered) glazing in hazardous locations

Tempered/safety glazing is required in hazardous locations: in and within 24" of a door, in tub/shower enclosures and within 60" of the standing surface there, adjacent to stairs & landings, and large panes near the floor. Spec it on the affected windows/doors/shower glass — a frequent miss on bath remodels.
IRC R308.4

ASK THE AHJ

What you see below is filtered — City of Longmont amends the model codes in 290 places

290 amendments in the adopted title. We have read 18, and we show you only the ones that change what can be BUILT, what it COSTS, or whether a plan is possible.
• The rest are administrative — permit expiry, fees, refunds, appeal boards, inspection sequencing, definitions. Real rules, and not ones that decide whether your project works.
That is a judgment, not a count. Do not read the absence of an amendment here as a finding that none applies — ask the building department, or have your designer read the adopted chapter.

City of Longmont local amendments — coverage measured against the adopted title — source unverified

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CITED

City of Longmont amends the code here — Every foundation and structural floor slab must be designed by a state-registered professional engineer; not only on difficult soils.

That is an engineer on essentially any project with a foundation, including an addition or a detached ADU, and it is a line most people budget for only where a soils report forces it

Longmont Municipal Code §16.06.250, amending IRC R401.1

• Local to City of Longmont — the next town over may not have it.
• It applies when you do the work it governs.
• A cost and scope question first; a design question second.

IRC — Longmont Municipal Code §16.06.250, amending IRC R401.1

CITED

City of Longmont amends the code here — Foundations on expansive soils must likewise be engineer-designed; R403.1.8 is replaced outright, so the model code's prescriptive options are gone and there is no non-engineered path on swelling ground

Longmont Municipal Code §16.06.260, replacing IRC R403.1.8

• Local to City of Longmont — the next town over may not have it.
• It applies when you do the work it governs.
• A cost and scope question first; a design question second.

IRC — Longmont Municipal Code §16.06.260, replacing IRC R403.1.8

CITED

City of Longmont amends the code here — On an EXISTING roof — cumulative damage of 100 square feet or more on asphalt shingles requires the ENTIRE roof to be replaced; a hail patch on one plane becomes a whole-roof job, which on the Front Range is among the most common expensive surprises.

Bites when you re-roof, not when you build new — but it governs the existing house on any property where you are also adding

Longmont Municipal Code §16.06.300, amending IRC R908.1

• Local to City of Longmont — the next town over may not have it.
• It applies when you do the work it governs.
• A cost and scope question first; a design question second.

IRC — Longmont Municipal Code §16.06.300, amending IRC R908.1

CITED

City of Longmont amends the code here — On an EXISTING roof — no roof-overs. A recover is prohibited where the roof already carries one or more applications of any type of covering, so a re-roof means a full tear-off.

Re-roofing only; a new building has nothing to recover

Longmont Municipal Code §16.06.310, amending IRC R908.3.1.1 condition 3

• Local to City of Longmont — the next town over may not have it.
• It applies when you do the work it governs.
• A cost and scope question first; a design question second.

IRC — Longmont Municipal Code §16.06.310, amending IRC R908.3.1.1 condition 3

CITED

City of Longmont amends the code here — Residential fire sprinklers are NOT required; R313.2 is amended to say the section "shall be considered for future code adoption", which is the City declining to impose it for now.

Worth knowing because buyers commonly assume the opposite and price it in

Longmont Municipal Code §16.06.200, amending IRC R313.2

• Local to City of Longmont — the next town over may not have it.
• DOES NOT APPLY — this jurisdiction does not require residential fire sprinklers at all, on any project. NOT required — R313.2 is amended to say the section "shall be considered for future code adoption", which is the City declining to impose it for now.
• A cost and scope question first; a design question second.

IRC — Longmont Municipal Code §16.06.200, amending IRC R313.2

CITED

City of Longmont amends the code here — Foundation drainage has no exception here; the R405.1 exception is deleted and R405.2.3's "in other than Group I soils" allowance becomes "where allowed by the Longmont Municipal Code", so a perimeter drain is the default rather than a soils-dependent option

Longmont Municipal Code §§16.06.270–16.06.280, amending IRC R405.1 and R405.2.3

• Local to City of Longmont — the next town over may not have it.
• It applies when you do the work it governs.
• A cost and scope question first; a design question second.

IRC — Longmont Municipal Code §§16.06.270–16.06.280, amending IRC R405.1 and R405.2.3

Structural & Design Criteria

CITED

Foundation may use the IRC presumptive soil bearing without a soils report

Absent a geotechnical (soils) report, the structural engineer can design footings on the IRC's presumptive load-bearing values.

• **1,500 psf** is the conservative default (silty/clayey soils) in IRC Table R401.4.1; stiffer soils (sandy gravel, sand) allow 2,000–3,000 psf.
• Use 1,500 psf as the base for a first-pass footing size on a typical addition.
• A soils report can justify a higher value (smaller footings), or is required where expansive/soft soils or a geologic-hazard overlay are suspected.
Expansive/collapsible soils — common in many regions, notably the Colorado Front Range — often drive a required soils report regardless. Confirm the local requirement.

IRC Table R401.4.1 (presumptive load-bearing values)

CITED

Radon-resistant construction — this area has elevated radon potential

The parcel is in an EPA elevated-radon area, where many AHJs require passive radon-resistant new construction.
• A gas-permeable layer + sealed vapor retarder under the slab, sealed foundation penetrations, and a capped vent pipe run from the sub-slab up through the roof (wired for a future fan).
The rough-in must go in BEFORE the slab is poured — a retrofit is far costlier.
We have not recorded whether this jurisdiction adopted the radon appendix — it is NOT universal.
• We are working through adopted appendices AHJ by AHJ. Where a jurisdiction has its own radon rule, we print that rule instead of this note.
• Either way, passive radon control is **strongly advisable** in an elevated-radon area — and the rough-in is cheap now, expensive later.

IRC Appendix F (radon-resistant construction)

ENGINEER

Structural design criteria — this jurisdiction's adopted values

• Climate zone 5B
• ground snow 30 psf (no reductions)
• wind 110 mph nominal (ASD) / 142 mph ultimate (3-sec gust)
• Seismic Design Category B
• frost depth 30 inches
Ice-shield underlayment required; winter design temp -2°F; air freezing index 979; mean annual temp 48.8°F; flood FIRM reference January 1977 (check Boulder vs Weld for the parcel). The City adopted the 2024 I-Codes on 2026-07-01 but has NOT reissued this table — it is still titled for the 2021 codes. Values re-read and unchanged 2026-08-08; confirm with Building Services (303-651-8332) at submittal on anything load-governed.
These set footings, foundation depth, framing, and braced-wall design — confirm the current values on the jurisdiction's design-criteria sheet before sizing anything.

City of Longmont "Climatic & Geographic Design Criteria for IBC and IRC" — the published table, still headed "2021 IBC/IRC" as of 2026-08-08 (re-read in full)

ENGINEER

High wind — 110 mph nominal (ASD) / 142 mph ultimate (3-sec gust) here, and the continuous load path it drives

THIS JURISDICTION'S DESIGN WIND SPEED: 110 mph nominal (ASD) / 142 mph ultimate (3-sec gust).
The jurisdiction does not fix an exposure category, so it is determined per site (IRC R301.2.1.4) — terrain and upwind obstructions decide it, and it changes the load.
• Design for a continuous load path roof-to-foundation: rated roof-to-wall uplift connectors, the enhanced sheathing nailing/fastening schedule, and wall bracing for this speed.
A mapped SPECIAL WIND REGION is not covered by the IRC's basic wind tables even at the speed above — channeled and mountain winds are common on the Front Range. Where the site is in one, the load is site-specific: use the WFCM high-wind provisions or an engineered design.

Wind speed is stated on two different datums across towns — a NOMINAL/ASD figure and an ULTIMATE 3-second gust are the same wind expressed two ways (~115 nominal = 140 ultimate). The basis above is as the jurisdiction publishes it; do not compare it to a neighbor's number without checking which datum each uses.
City of Longmont "Climatic & Geographic Design Criteria for IBC and IRC" — the published table, still headed "2021 IBC/IRC" as of 2026-08-08 (re-read in full)

Egress, Light & Ventilation

CITED

Sleeping rooms & habitable basements need an emergency escape opening (EERO)

Every sleeping room and every habitable basement needs an operable emergency escape opening.
• **>=5.7 sq ft net clear** (5.0 sq ft at grade level), >=24" clear height, >=20" clear width, and a sill no higher than 44" above the floor.
Reconfiguring or adding a bedroom/finished basement triggers this — a common remodel miss when an egress window is undersized or the sill is too high.
IRC R310

CITED

At least one compliant egress door

The dwelling needs at least one side-hinged egress door — a **3'0" × 6'8" leaf** giving >=32" clear width and >=78" clear height — openable from inside without a key or special knowledge. Watch this when a remodel relocates the main entry or narrows an opening.
IRC R311.2

CITED

Habitable-room light & ventilation

Habitable rooms need glazing **>=8% of floor area** for light and openable area **>=4%** for ventilation — OR artificial light + mechanical ventilation in lieu. Bathrooms without an openable window need mechanical exhaust (see Mechanical). Relevant whenever a remodel reduces window area or creates interior rooms.
IRC R303.1

CITED

Minimum ceiling heights

Habitable rooms, hallways, and bathrooms need **>=7'0" ceilings** (bathrooms/laundry may go to 6'8" at fixtures; basements have specific beam/duct allowances). Check finished-basement and attic-conversion remodels against this before committing to a layout.
IRC R305.1

CITED

Stairways, handrails & guards

Stairs: **>=36" wide, max 7¾" riser, min 10" tread**, >=6'8" headroom, risers/treads within 3/8" of each other.
• A graspable handrail 34–38" above the nosings on at least one side.
• Guards >=36" wherever there's a >30" drop, with openings that won't pass a 4" sphere.
Watch this on any remodel that adds or rebuilds a stair (basement finishes especially).
IRC R311.7 / R312 (guards)

CITED

Continuous egress path to the outside

Every dwelling needs a continuous, unobstructed path of travel from all rooms to the required egress door and on to a public way (a **>=36" clear route**). A habitable room can't have its only exit pass through a garage. Relevant whenever a remodel reroutes circulation or adds rooms.

IRC R311.1 / R311.4

CITED

Minimum habitable-room size

Habitable rooms need **>=70 sq ft of floor area** and no horizontal dimension under 7'-0" (kitchens are exempt from the 70 sq ft minimum). Combined with the 7'-0" ceiling rule, this constrains carving small rooms out of a remodel or attic/basement finish.

IRC R304 (with R305)

Fire & Life Safety

CITED

Wood/gas/electric; all-electric energy gate (some AHJs); CDPHE device rules

IRC/IMC; CoBECC; CDPHE Reg (2024, City of Longmont)

CITED

Sets the IEBC alteration level — and on some jurisdictions it decides sprinklers

Existing-building work routes through the IEBC even when the building is a house. Under the work-area method, work area over **50% of the building area** makes this an **Alterations Level 3** job (IEBC Ch.9), which pulls Level 1 + Level 2 requirements PLUS whole-building items the work never touched. Under 50% it stays Level 1/2 and the untouched house is generally left alone.

THE 50% IS MEASURED OVER THE RECONFIGURED AREA, NOT EVERYWHERE YOU WORK. Replacing finishes throughout a whole house is not a work area; taking out a wall, re-planning rooms or relocating a kitchen or bath is. That distinction decides which side of Level 3 an ordinary remodel lands on, and it is the single most commonly mis-estimated input on this page.

Some triggers apply at ANY level and catch remodels regularly: an **EERO** (emergency escape opening) is required wherever a new sleeping room is created (IRC R310), and **smoke + CO alarms** must be brought current in an altered dwelling unit (IRC R314/R315).

Where a jurisdiction requires residential sprinklers for new construction, this is the question that decides whether a remodel owes one — pin it before pricing.

IEBC Ch.7–9 (work-area method); IRC R310 / R314 / R315 (2024, City of Longmont)

CITED

Smoke + carbon-monoxide alarms (interconnected)

Smoke alarms in every sleeping room, outside each sleeping area, and on every story — interconnected, hardwired with battery backup in new work.

• CO alarms outside each separate sleeping area on stories with bedrooms, and on any level with fuel-fired equipment or an attached garage.

A permitted alteration/addition generally has to bring the dwelling's alarms up to this — a routine inspection catch.

IRC R314 (smoke) / R315 (CO)

CITED

Exterior-wall fire separation near lot lines

Exterior walls **closer than 5' to a lot line** need a **1-hour fire-resistance rating**.
• Openings (windows/doors) are limited — then prohibited — as the wall gets within ~3'. Eave/projection limits apply too.
This governs how close an addition can sit to a side/rear line and whether its windows are allowed. Coordinate it with the zoning setback.
IRC R302.1 (Tables R302.1(1)/(2))

CITED

Fire-apparatus access & fire flow

New buildings need fire-department apparatus access roads and adequate fire flow (IFC 503/507 + Appendices B/C/D).
• Access roads **within ~150 ft of all exterior walls**, with the width/turning/loading for the local rigs.
• Fire flow is hydrant spacing + available GPM, and is reducible with sprinklers.
On constrained or flag lots this can force a sprinkler system, a second access, or hydrant work. Check access + flow at site planning.
IFC 503 / 507 (Appx B/C/D)

CITED

Residential fire sprinklers — NOT required here (R313 amended out)

Longmont amends IRC R313.2 (§16.06.200) by prepending 'The provisions of this section shall be considered for future code adoption' — i.e. the 1- & 2-family sprinkler requirement is DEFERRED, not currently mandatory.
Townhouse (R313.1) not separately confirmed.
A new detached or attached ADU/house is not required to sprinkler on that basis.
Two triggers still apply even where R313 is deleted: 3+ attached units can shift the building to IBC Group R (sprinklered throughout, 903.2.8), and inadequate fire flow / apparatus access (IFC 503/507) can force a system on a constrained or flag lot.
Longmont Municipal Code §16.06.200 (Ord. O-2021-65, 11-30-2021)

Electrical

CITED

Kitchen counter receptacles + small-appliance circuits

Kitchens need **>=2 dedicated 20A small-appliance circuits**, and counter receptacles spaced so no point along the counter wall is >24" from one (any counter >=12" wide gets a receptacle). Plan circuiting before cabinets are set.
NEC 210.52(C), 210.11(C)(1)

CITED

Kitchen island / peninsula power — the rule changed by edition

The 2023 NEC (adopted statewide in Colorado) **NO LONGER REQUIRES** a receptacle in a kitchen island or peninsula — earlier editions (2017/2020) did.
• If you do install island power, the 2023 location rules apply (not below an overhang >6").
The edition that governs here is stated in Codes Applied at the front of this report — you do not need to go and look it up.
NEC 210.52(C)(2)–(3)

CITED

GFCI + AFCI protection

GFCI: kitchens, bathrooms, garages, outdoors, laundry, and any receptacle within **6' of a sink**. AFCI: branch circuits serving most habitable rooms. A remodel that opens walls or adds circuits generally has to bring the affected circuits up to current GFCI/AFCI.

NEC 210.8, 210.12

CITED

Bathroom receptacle + circuit

At least one 20A GFCI receptacle within **3' of the outside edge** of each lavatory basin, on a dedicated 20A circuit (that circuit may serve only bathroom receptacles, or all of one bathroom).

NEC 210.52(D), 210.11(C)(3)

Mechanical & HVAC

CITED

Range-hood exhaust over 400 CFM triggers makeup air

If the kitchen exhaust hood moves **more than 400 CFM**, code requires mechanical makeup (replacement) air, interlocked with the hood — a powered damper + supply path, not just a passive vent.
Big designer/chef ranges blow past 400 CFM easily. Size the hood and the makeup-air unit together or the install fails inspection.

IRC M1503.4 / IMC 505.2

CITED

Bathroom exhaust

A bathroom without an openable window needs mechanical exhaust to the outdoors — **>=50 CFM intermittent or 20 CFM continuous**. Don't terminate it in an attic or soffit; it has to reach outside air.

IRC M1507 / R303.3

CITED

Combustion air is sized from appliance input — under 0.40 ACH the easy method is off the table

Any fuel-burning appliance that draws its air from the room (an atmospherically-vented furnace, water heater or fireplace) has to have enough of it. The test is the appliance's **total input rating in Btu/h** against the volume of the space it sits in.
• STANDARD METHOD — **50 cubic feet per 1,000 Btu/h** of appliance input (G2407.5.1).
• Worked: a 100,000 Btu/h furnace beside a 40,000 Btu/h water heater is 140,000 Btu/h, so it needs **7,000 cubic feet** — about 875 sq ft of floor at an 8-ft ceiling.
That is a large room, not a utility closet, which is why most mechanical closets need combustion-air openings.
THE TRIGGER TO WATCH IS AIRTIGHTNESS, NOT THE APPLIANCE. Where the measured air infiltration rate is **below 0.40 ACH**, the Standard Method may not be used at all — size by the known-air-infiltration-rate method instead (G2407.5).
A blower-door result under **0.40 ACH** is ordinary on a tight new build or after an energy retrofit, so this fires on projects nobody thought were mechanical jobs. The calculation may not claim a rate **above 0.60 ACH** either (G2407.5.2).
• IF YOU BRING AIR FROM OUTDOORS, the openings are sized per Btu/h too, and the ratio depends on how the air gets there (G2407.6.1, G2407.6.2):
• Two openings, direct or through VERTICAL ducts — **1 sq in per 4,000 Btu/h** each.
• Two openings through HORIZONTAL ducts — **1 sq in per 2,000 Btu/h** each.

• A single opening — **1 sq in per 3,000 Btu/h**, and never less than the combined area of the vent connectors. No opening may be narrower than **3 inches**.
• COMBINING INDOOR SPACES instead: 1 sq in per 1,000 Btu/h and never below 100 sq in on the same story, two openings, one within 12 inches of the top and one within 12 inches of the bottom; 2 sq in per 1,000 Btu/h between stories (G2407.5.3.1, G2407.5.3.2).
THE USUAL WAY OUT IS THE APPLIANCE, NOT THE DUCTWORK: a sealed-combustion (direct-vent) unit takes its air from outside and removes the question entirely — and a direct-vent appliance is sized by the manufacturer's instructions, not by this section (G2407.1).
Air-sealing and insulating tightens the shell around an appliance that was fine before. A starved atmospheric appliance backdrafts combustion products into the room. Nothing about the appliance changed; its air supply did.
These figures are IDENTICAL in the 2018, 2021 and 2024 IRC — all three were read to confirm it, so they hold whichever edition your jurisdiction has adopted. Screening test only: it applies G2407.5.1 as published, with no infiltration credit or communicating-space allowance.
IRC G2407.5.1 / G2407.5 / G2407.5.3 / G2407.6 (IFGC 304.5, 304.6) — 2018, 2021 and 2024 IRC

CITED

Fireplace / hearth — fuel choice drives venting, clearances & the energy gate

Fuel choice drives the whole assembly.
• Solid-fuel (wood) — a listed appliance or masonry chimney with proper hearth extension and clearances to combustibles.
• Gas — IFGC-compliant gas piping + venting and combustion air.
• Electric insert — just a dedicated circuit.
Some jurisdictions restrict new wood-burning devices (CDPHE / local air-quality rules), and an all-electric energy code can push you toward gas-free. Pick the fuel early.
IRC R1001–R1006 / IFGC 304; CDPHE / local air-quality rules

Plumbing & Gas

CITED

Adding a gas appliance re-sizes the whole gas system, not just its own branch

Gas pipe is sized from the **total connected load in Btu/h** and the **developed length** to the furthest appliance — so adding one appliance can undersize pipe that was correct before, including runs you are not touching.
THE SIZING RULE IS UNFORGIVING BY DESIGN: the code sizes on the sum of **every appliance's maximum input**, assuming they could ALL run at full capacity at the same time (G2413.2).
You only get to size on less than that where a diversity of load can be established — an engineering demonstration, not an assumption you may make.
• WHAT THE COMMON TABLE CARRIES — Schedule 40 steel, natural gas, inlet under 2 psi, 0.5 in w.c. drop (Table G2413.4(1)):
• **1/2"** — 172 cu ft/hr at 10 ft, but only **81 at 40 ft** and **50 at 100 ft**.
• **3/4"** — 360 at 10 ft, 170 at 40 ft, 104 at 100 ft.
• **1"** — 678 at 10 ft, 320 at 40 ft, 195 at 100 ft.
Capacity falls with LENGTH, so the run matters as much as the diameter — and length is measured to the **most remote outlet**.
YOU ARE ABOVE 2,000 FEET, SO THIS ONE ALWAYS APPLIES HERE: gas flow must be adjusted for altitude wherever the installation is **above 2,000 ft** in elevation (G2413.2).
Every jurisdiction in this service area is well above that line, so the sea-level capacities above are a starting point that must be corrected.
Get the correction factor from your gas utility or the building department — we do not publish one, because inventing it would be worse than naming who holds it.

THAT IS WHY A RANGE OR A FIRE PIT SOMETIMES TURNS INTO A METER OR SERVICE UPGRADE: the new load is fine, the existing pipe carrying it is not. Add the new appliance's input to everything already connected, then check the total against the capacity of the smallest pipe in the path at its developed length.
GOING ELECTRIC INSTEAD trades that question for a different one - panel capacity and a dedicated circuit - and a heat-pump water heater also needs condensate and enough air volume around it.
Decide the fuel before the layout. It drives the panel/service question, the venting and combustion-air question, and sometimes the meter.
The table slice above is identical in the 2018, 2021 and 2024 IRC — all three were read to confirm it.
It is one of **twenty-one** published tables, and holds only for natural gas, under 2 psi, at a 0.5 in w.c. drop and 0.60 specific gravity. Different pressure, different gas or a different allowed drop means a different table, and sizing is the mechanical designer's to certify.

IRC G2413.2 / G2413.3 / Table G2413.4(1) (IFGC 402.2, 402.3, Table 402.4(2)) — 2018, 2021 and 2024 IRC

Energy

CITED

Energy code applies (unconditioned = largely N/A) — own energy code, not the IECC

Conditioned (heated/cooled) space must meet Metro Cohort Model Code (2024) — this jurisdiction's own adopted energy code, NOT the IECC, so the IECC R402/C402 prescriptive tables do not govern.
Truly unconditioned space (a detached garage/shed) is largely exempt.
See the energy-code items below for the local compliance specifics.

Metro Cohort Model Code (2024) (local energy code)

CITED

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Metro Cohort Model Code (2024) (local energy code)

CITED

Energy code on a remodel — only what you touch

In an alteration, new and replaced components must meet current energy code, but existing assemblies you don't expose generally don't have to be upgraded.
• Practical triggers: replacement windows must meet the U-factor; exposed walls/ceilings get insulated to current R-value; new ductwork gets sealed/tested.
• Whole-house additions comply as new construction.

IECC R503 (alterations)

CITED

Insulation & fenestration targets — IECC climate zone 5B

WHAT HAS TO MEET THESE, on an addition: every NEW exterior assembly you build — the addition's own walls, ceiling, floor, and every new window, glazed door and skylight in it. The existing house is NOT dragged up to these values by the addition. An addition may alternatively be shown to comply as if it were new construction; ask which route the plan reviewer wants before you model it.
Prescriptive minimums for climate zone 5B — R-values are MINIMUMS, U-factors and SHGC are MAXIMUMS:
• Ceiling — **R-49**

• Wood-frame wall — **R-30 (or R-20+5ci / R-13+10ci / R-20ci)**
• Floor — **R-30 (or R-19+7.5ci / R-20ci)**
• Below-grade wall — **R-15ci or R-19 cavity (or R-13+5ci)**
• Slab edge — **R-10, 3 ft**
• Windows / glazed doors — **U-0.30**
• Skylights — **U-0.50**
Less common assemblies:
• Mass wall — **R-13/17**
• Insulation entirely above the roof deck — **R-30ci**
• Heated slab — **R-10ci, 3 ft + R-5 full slab**
• Crawl-space wall — **R-15ci or R-19 cavity (or R-13+5ci)**
Another way to comply: hit the MAXIMUM assembly U-factor instead of the R-value (Table R402.1.2) — ceiling U-0.026 · wall U-0.045 · floor U-0.033 · basement U-0.050 · crawl U-0.055 · unheated slab F-0.51.
And a third: the performance path (REScheck) lets a weaker assembly be traded against a better one, so long as the whole building models out.
Two exceptions to everything above. A THERMALLY ISOLATED SUNROOM gets its own reduced values (IECC §R402.2.13 / IRC Appendix AK) — open it to the house with no separating wall and door and it becomes ordinary conditioned space at the full numbers. And UNCONDITIONED space — a detached garage, an unheated shed, a vented crawl or attic outside the thermal envelope — is not required to meet these at all; what matters is where the insulated boundary is drawn.
Amended locally: window U-factor — the value shown is this jurisdiction's, not the base IECC's (Tables R402.1.2 and R402.1.3, 2024 Metro Cohort Model Code (2024 IECC Amended, eff. Nov 7 2025) — read from ICC Digital Codes 2026-08-24).
More assembly options exist than this table lists. **2024 IECC Appendix RF** sets out expanded R-value options for meeting the same U-factors — useful where a wall or roof build-up does not match a listed row. Appendices bind only where the adopting ordinance references them, so ask the AHJ whether RF is in force before relying on it.

IECC Table R402.1.3 (2024, climate zone 5B)

CITED

Energy compliance path — and the 3 ACH50 blower door every path has to pass

WHO HAS TO DO THIS, on an addition: an addition is shown to comply EITHER on its own (only the new construction is evaluated) OR by testing the whole house against these figures — IECC §R502 lets you choose, and which is cheaper depends on how leaky the existing house is. A whole-house blower-door result you cannot control is the risk in the second route; ask the rater before committing to it.
THE BLOWER DOOR IS THE TEST EVERY PATH HAS TO PASS: **3 ACH50** here in climate zone 5B (2024 IECC §R402.5.1.3 (Maximum air leakage rate)). That figure is the PRESCRIPTIVE path's. On the performance or ERI paths the limit is looser — 4.0 ACH, or 0.22 cfm per sq ft of thermal envelope area.
IF YOU TAKE THE ERI ROUTE, the ceiling in zone 5B is 54 — or 43 where on-site power production counts toward compliance, which is TIGHTER, not looser (2024 IECC Table R406.5 (Maximum Energy Rating Index)). Lower is better; it is an index, not a score.
AN ADDITION HAS **THREE** WAYS TO COMPLY, and you may pick the cheapest — (1) the addition ALONE complies with the code as new construction; (2) the existing building and the addition together comply as a single building; (3) the building with the addition does not use more energy than the existing building did. The third is the one most often missed: improving the EXISTING house can pay for the addition (2024 IECC Chapter 5 [RE], §§R501–R503 and §R202, read on ICC Digital Codes 2026-08-30).
AND ON THIS EDITION SIZE PULLS IN A SECOND REQUIREMENT. Once the addition increases **25% or more of the building's TOTAL CONDITIONED FLOOR AREA (existing + addition), not the addition alone and not gross floor area**: The addition must achieve NOT LESS THAN FIVE CREDITS from Table R408.2 (additional energy efficiency measures). Alterations to the existing building that are not part of the addition, but are permitted with it, MAY be counted toward those five — so work already planned elsewhere in the house can pay for this. (2024 IECC §R502.2.5 (Additional energy efficiency credit requirements for additions); Table R408.2).
ANY ONE of these releases it entirely — (1) the addition increases the building's total conditioned floor area by

LESS THAN 25 percent; (2) the addition does not include the addition or replacement of equipment covered by §R403.5 or §R403.7; (3) the addition does not increase conditioned space at all; (4) the addition alone, or the existing building and addition together, comply via §R405 (simulated performance) or §R406 (ERI).
The ERI table gained a second column: counting on-site power production toward compliance means meeting a LOWER index, not a higher one. In Climate Zone 5 that is 43 rather than 54.
The air-leakage limit depends on WHICH PATH you are on — the prescriptive path is tighter than the performance and ERI paths in this edition.
The three paths: PRESCRIPTIVE (hit every R-value and U-factor in the table), PERFORMANCE (REScheck — trade a weaker assembly against a better one), or ERI/HERS (model the whole house against the index above). The blower-door and duct tests apply whichever you pick.

2024 IECC §R402.5.1.3 (Maximum air leakage rate) · 2024 IECC Table R406.5 (Maximum Energy Rating Index)

CITED

U-factors are the criteria; the R-value table is the ALTERNATIVE

The 2024 edition inverts the hierarchy most people carry from the 2021. §R402.1.2 *"Insulation and fenestration criteria"* is the **assembly U-factor / F-factor table**, and §R402.1.3 is titled **"R-value alternative"** — its own words: *assemblies with an R-value equal to or greater than Table R402.1.3 shall be an alternative to the U-factor or F-factor in Table R402.1.2.* Either satisfies the envelope, but a plan reviewer citing "the criteria" means the U-factor table.

- A third route exists: **§R402.1.5 Component performance alternative** — proposed total thermal conductance <= the reference, computed per Equation 4-1 with U-factors from ASHRAE 90.1 Appendix A, **including thermal bridging from framing**. The SHGC and the §R402.6 maximum fenestration U-factors still have to be met on top.
- Both tables give the **same** vertical fenestration U-factor of **0.30**, so the amended window value applies whichever route is taken.

2024 Metro Cohort Model Code §§R402.1.2, R402.1.3

CITED

Air leakage — 3.0 ACH50, and the limit depends on the path

- **Prescriptive path (§R401.2.1): 3.0 air changes per hour**, or 0.17 cfm per square foot of thermal envelope area.
- **Performance and ERI paths (§§R401.2.2 / R401.2.3): 4.0 ACH**, or 0.22 cfm per square foot.

2024 Metro Cohort Model Code §R402.5.1.3

CITED

If you install gas, you must wire for its electric replacement — Appendix RK

Appendix RK is cohort-authored end to end and it is MANDATORY here, not an optional appendix. **And it is not new-construction-only** — §RK101.1 applies it to *"all new buildings, and major renovations and additions."*

What triggers it: any **combustion equipment** in a residential building (§RK102.1). Exempt: interior fireplaces that are not a primary heat source, and exterior fireplaces and firepits.

What it costs you, in numbers a bidder can price:

- **A dedicated, correctly-phased branch circuit** for each future electric replacement, sized to a comparable capacity for the heating load (§RK103.1).
- **Future clothes dryer and water heater circuits — 240 V, minimum 30 amperes.** Exception: water heaters serving multiple dwelling units in an R-2.
- **Future cooking circuits — 240 V, minimum 40 amperes.**
- **A receptacle or junction box within 3 FEET** of the combustion equipment or of the reserved space (§RK106.1). For equipment dedicated to space or service water heating the allowance is **6 feet**.
- **Reserved panel space for a minimum two-pole breaker per future circuit**, and the panel **sized for the**

equivalent electric load of the combustion equipment, calculated per the NEC (§RK104.1). This is the line that drives a service upgrade — price the panel against it before the electrical bid.
- **Dedicated physical space** for the future electric equipment, **including an electric-resistance backup coil on ducted systems** (§RK103.1 item 3). Space currently occupied by the combustion equipment may count toward it, with the code official's approval.
- **A condensate drainage location** where combustion space *and* water heating are installed — and it must be **noted on the construction drawings** (§RK107.1).
- **Labelling** of the junction box or receptacle and the reserved breaker space, for their intended use (§RK105.1).

§RK108.1 — the water-heater closet, and it is a real plan constraint:

- Combustion air per **IRC §2407**.
- **Minimum dimensions 3 ft × 3 ft × 7 ft high.**
- Plus airflow access by **one** of: a **700 cubic foot** minimum volume (adjacent space counts where air circulates freely, so no solid barriers or doors); **louvered doors totalling 100 square inches** net free area, split high and low; **transfer grilles or ducts sized for at least 100 CFM**, sized to limit pressure drop and avoid excessive fan cycling; or **direct ducting to the exterior** per a heat-pump water heater manufacturer's intake and exhaust requirements for a similar-capacity unit.
- Exception: water heaters of **300,000 Btu/h or more** serving multiple dwelling or sleeping units.

Read together, RK is the cohort making the gas option carry the cost of its own future replacement. It pairs with the §R408 credit discount for going all-electric — **the all-electric route avoids both.**

2024 Metro Cohort Model Code Appendix RK (RK101–RK108), mandatory per §R401.2

CITED

Installing an ELECTRIC storage water heater 40–120 gal? It needs demand-responsive controls

WHEN THIS BITES: you are installing or replacing a water heater and the new one is an **ELECTRIC STORAGE** heater with a rated storage volume of **40 to 120 gallons** AND a nameplate input of **12 kW or less**. That heater must have demand responsive controls.

A GAS water heater is not caught by this appendix — RJ reaches electric storage heaters only. But a gas heater pulls in **Appendix RK** instead (the electric-ready circuit, the 3 ft junction box and the reserved panel space), so neither choice is free of an appendix. Nor is a tankless electric heater, which has no storage volume to test.

The control standard (Table RJ101.1):

- Manufactured **on or after 7/1/2025** — **AHRI 1430 (I-P)**.
- Manufactured **before 7/1/2025** — AHRI 1430 (I-P) **or** ANSI/CTA-2045-B Level 1, and capable of initiating water heating to meet the temperature set point in response to a demand response signal.

In practice this is a specification line, not a design constraint: **confirm the model you are specifying carries the certification** before it is ordered.

Three exemptions (§RJ101.1): heaters required to deliver a constant **180°F or hotter**; heaters complying with Section IV Part HLW or Section X of the ASME Boiler and Pressure Vessel Code; and heaters running on **three-phase power**.

Unlike RK and RE, Appendices RB and RJ are largely the base 2024 IECC text — the cohort's changes here are the low-slope solar trigger and the multifamily routing.

2024 Metro Cohort Model Code Appendix RJ (RJ101.1, Table RJ101.1), mandatory per §R401.2

CITED

Electric resistance is BANNED, and your heat pump must still work at 5°F

TWO MANDATES THAT TOGETHER DECIDE THE HEATING SYSTEM, and they are easy to miss because they sit in the mechanical section rather than with the compliance paths.

§R403.7.1 — electric-resistance space heating is prohibited outright, verbatim: *"Detached one- and two-family dwellings and townhouses shall not use electric-resistance space heating."* Three exceptions, and they are narrow:

1. Electric resistance used as **supplemental** heat under §R403.1.2 (i.e. behind a heat pump).
2. Electric resistance used for **freeze protection**.
3. Electric resistance where the **evaporative-cooling** criteria of §R408.2.2.2 are met.

So "all-electric" here does **not** mean baseboard or electric furnace. Straight resistance heat is not a compliance route in this cohort — it is barred.

§R403.7.2 — and the heat pump has to be a COLD-CLIMATE unit, by number. An air-source heat pump in a new detached one- or two-family dwelling or townhouse shall be **capable of maintaining not less than 70 percent of its rated 47°F heating capacity when tested at 5°F**, and shall achieve a **COP of not less than 1.75 at 5°F**, per **AHRI 210/240** or an equivalent standard.

- **Performance must be documented** — manufacturer documentation or third-party certification, at submittal.
- **This eliminates a large share of standard air-source equipment.** Specify the cold-climate line and confirm the 5°F ratings appear in the manufacturer's published data before pricing.
- **Exception — existing buildings.** Air-source heat pumps installed as part of an **addition, alteration or replacement in an existing residential building** are exempt from §R403.7.2. The prohibition in §R403.7.1 carries no such exception.

§R403.7 sizing, which applies either way: heating and cooling equipment shall be sized to **ACCA Manual S** on loads calculated to **ACCA Manual J** (or another approved methodology), and new or replacement equipment shall meet at least the federal minimum efficiency for the location. A rule-of-thumb tonnage is not a compliance document here.

Multi-unit buildings leave this section entirely. §R403.8: systems serving multiple dwelling units comply with **§§C403 and C404 of the commercial provisions** instead of §R403 — so an apartment building's mechanical requirements are the commercial ones, not these.

2024 Metro Cohort Model Code §§R403.7, R403.7.1, R403.7.2 (AHRI 210/240) — read from ICC Digital Codes 2026-08-25

CITED

Duct, water-heating and ventilation SPECIFICATIONS — required on every path

§R403 is mandatory on the prescriptive path (§R401.2.1 requires §§R401 through R404), and it is where the testable numbers live.

DUCTS — the ones that get tested (§R403.3):

- **Design to ANSI/ACCA Manual D** for one or two dwelling units. **Building framing cavities may not be used as ductwork or plenums.**
- **Ductwork outside conditioned space: R-8** for ducts 3 inches diameter and larger, **R-6** below 3 inches.
- **Leakage testing (§R403.3.7)** to ANSI/RESNET/ICC 380 or ASTM E1554 at **0.1 in. w.g.**, written report signed by the tester. **Two ways out:** no test where there is **not more than 10 feet** of total ductwork outside the equipment *and* the system is entirely within conditioned space *and* no cavity or gypsum plenums; and no test for ventilation-only ductwork not integrated with heating or cooling.

- **Table R403.3.8 — maximum total duct leakage**, and it depends on ducted-return count and whether the equipment is installed:

Configuration	> 1,000 ft², < 3 returns	> 1,000 ft², >= 3 returns	<= 1,000 ft²
Equipment **not** installed	**3** cfm/100 ft²	4	**30** cfm
All components installed	**4**	6	**40**
Equipment not installed, ducts entirely in conditioned space	6	8	60
All installed, entirely in conditioned space	8	12	80

- **Buried ducts (§R403.3.5)** need **R-8** on the duct plus ceiling insulation summing to **not less than R-19** above and below, excluding the duct's own R-value. Deeply buried ducts under §R403.3.5.1 (R-30+ blown-in, duct top at least 3.5 in. below the surface) count as an **effective R-25** on the §R405 path.
- **Sampling (§R403.3.9):** eight or more units -> test the greater of **seven units or 20 percent**, including a top, ground, middle and largest unit; a failure pulls in **three more**.

SERVICE HOT WATER (§R403.5):

- **§R403.5.4 — storage water heaters of 40 to 120 gallons in new detached one- and two-family dwellings and townhouses ship set to 120°F.** A default-setting requirement, not a design one, but it is inspected.
- **Pipe insulation (Table R403.5.2): 1.0 inch** on piping ¾ inch and larger inside conditioned space, all piping outside conditioned space, water-heater-to-manifold runs, under-slab and buried piping, and circulating supply and return.
- **Circulation systems** need a pump with automatic shutoff — **gravity and thermosyphon circulation are prohibited**. Demand recirculation controls cut out at a **10°F rise or 104°F**, cap the pump at **5 minutes**, and lock out for 5 minutes after.
- **Mechanical piping (§R403.4)** carrying fluids above **105°F** or below **55°F** is insulated to **R-3**.

VENTILATION (§R403.6):

- **§R403.6.1 Heat or energy recovery ventilation — "This section is deleted."** The cohort removes it. An HRV/ERV is not required by this section; it earns credits under §R408 instead.
- **Fan efficacy (Table R403.6.2), tested and listed:** HRV/ERV and balanced systems **1.2 CFM/W**; range hood **2.8**; in-line supply or exhaust **3.8**; other exhaust fans **2.8** under 90 CFM, **3.5** from 90 to under 200, **4.0** at 200 and above.
- **Flow must be tested (§R403.6.3)** to ANSI/RESNET/ICC 380 with a signed written report. **Exempt:** a kitchen range hood ducted outside at **6 inches or larger, 10 feet or less, no more than two 90-degree elbows**; and systems with an integrated airflow-measuring diagnostic and a user interface reporting installed flow.
- **§R403.6.5 — intermittent bathroom exhaust needs a real control**, one of: a timer with a delay-off setpoint of **30 minutes or less**, an occupancy sensor with the same, an adjustable **humidity control between 50% and 80% RH**, or a contaminant sensor. *"Manual off functionality shall not be used in lieu of"* it — a plain wall switch does not comply.

CONTROLS AND THE REST:

- **§R403.1.1 — the thermostat ships preset:** manufacturer-programmed to a heating setpoint **not greater than 70°F** and a cooling setpoint **not less than 78°F**, with 7-day scheduling and a 55°F–85°F setback range.
- **§R403.1.2 — heat-pump supplementary heat must be locked out** whenever the compressor can meet the load; only four conditions release it (insufficient capacity, defrost, compressor fault, thermostat fault).
- **§R403.9 — anything heated outdoors is regulated:** exterior heating must be **radiant** and on an occupancy sensor or timer; snow-melt shuts off above **50°F pavement** with no precipitation and above **40°F** outdoor; roof and gutter deicing shuts off above **40°F** plus either a moisture sensor or a sunset-to-sunrise control; freeze protection shuts off above **40°F**.

- **§§R403.10–R403.12 pools and spas:** on-off switch within **3 feet** of the heater, time switches, **no continuously burning pilots**, and a vapor-retardant cover on outdoor heated pools and spas unless more than **75 percent** of seasonal heating energy is from a heat pump or on-site renewables.
- **§R403.13 gas fireplaces: no continuous pilot** — on-demand, intermittent or interrupted ignition only; automatic pilot extinguishing or a 7-day lockout; decorative units need **direct vent or power vent**. **§R403.13.1: vented gas fireplace heaters need a fireplace efficiency (FE) of not less than 50 percent** to CSA P.4.1. A builder-grade vented decorative unit will not always clear the FE-50 bar — check the listing.

2024 Metro Cohort Model Code §§R403.1–R403.6, Table R403.3.8, Table R403.6.2, Table R403.5.2, §§R403.9–R403.13 —

read from ICC Digital Codes 2026-08-25

CITED

Lighting and electrical — 45 lm/W, auto-shutoff, and NO gas lighting

§R404 is mandatory on the prescriptive path alongside §R403, and it reaches further than the usual "high-efficacy lamps" line.

- **§R404.1 — every permanently installed luminaire** operates at **not less than 45 lumens per watt**, or contains lamps capable of **65 lm/W**. Exempt: appliance lamps, antimicrobial disinfecting fixtures, DOE general service lamps, and luminaires rated at **3.0 watts or less**.
- **§R404.1.5 — fuel gas lighting systems are PROHIBITED.** No gas lanterns, indoors or out.
- **§R404.2 interior controls are required, and this is the provision most often missed.** Every permanently installed luminaire in a **habitable space** takes either a **manual dimmer** or an **automatic shutoff within 20 minutes** of the last occupant leaving, plus a manual on/off. And in **garages, unfinished basements, laundry rooms and utility rooms** the automatic 20-minute shutoff is mandatory — a dimmer is not an alternative there.
- **§R404.3.1 exterior controls** — where permanently installed exterior lighting exceeds **30 watts**: a manual on/off that permits automatic shutoff, **automatic daylight shutoff**, and any override must return to automatic **within 24 hours**.
- **§R404.4 REC documentation — "This section is deleted."**

Exterior lighting POWER is capped for multifamily (§§R404.1.1–R404.1.4). Detached one- and two-family dwellings, townhouses and Group R-3 buildings of no more than two dwelling units are **exempt** — as are motion-sensor-controlled luminaires and anything already meeting §R404.1. For Group R-2, R-3 and R-4 buildings that are not exempt, total connected exterior lighting power may not exceed the allowance from **Table R404.1**:

Area type	Allowance
Base site allowance	**280 W**
Uncovered parking areas and drives	0.026 W/ft²
Walkways and ramps	0.50 W/linear ft
Plaza areas	0.049 W/ft²
Dining areas	0.273 W/ft²
Stairways	**Exempt**
Pedestrian tunnels	0.110 W/ft²
Landscaping	0.025 W/ft²
Pedestrian and vehicular entrances and exits	**9.8 W/linear ft of opening**
Entry canopies	0.126 W/ft²

Façades buy more (§R404.1.4): an additional **0.075 W/ft² of gross above-grade wall area**, usable only on luminaires serving the façade. Ten categories are excluded from the count entirely — safety lighting, emergency lighting off during normal operation, exit signs, transportation signals, athletic playing areas, temporary lighting, art

and flag lighting, water features and pools, lighting controlled from within dwelling or sleeping units, and exterior means-of-egress lighting required by the IBC.

2024 Metro Cohort Model Code §§R404.1–R404.4 and Table R404.1 — read from ICC Digital Codes 2026-08-25

Demolition & Hazardous Materials

CITED

Asbestos testing before disturbing suspect materials

Colorado (CDPHE Reg 8) requires suspect materials to be tested before a renovation or demolition disturbs them above the regulation's trigger levels, and abated where the test comes back positive.
For a SINGLE-FAMILY RESIDENTIAL DWELLING the trigger quantities are **>32 sq ft, >50 lin ft, or >55 gal**. A commercial or public building is subject to the same requirement at a HIGHER quantity — these figures are the residential ones.
• Suspect materials: drywall joint compound, popcorn/textured ceilings, vinyl flooring & mastic, pipe/duct wrap, plaster.
Common in **pre-1990 buildings** — schedule testing before demo or you risk a stop-work + abatement.

CDPHE Air Quality Reg 8, Part B

CITED

Lead-safe work in pre-1978 housing (RRP)

Renovation that disturbs paint in housing built **before 1978** must use an EPA-certified (RRP) firm and lead-safe work practices (containment, HEPA cleanup, verification). Budget for the certified crew + setup when the home predates 1978.

EPA RRP Rule (40 CFR 745)

Wildfire / Ignition Resistance

CITED

Wildfire / ignition-resistant construction (if in a WUI / hazard area)

In a designated wildland-urban-interface or wildfire-hazard area — common in foothills + unincorporated Boulder County, and post-Marshall-Fire rebuilds — expect:
• Class A roof assembly; ember-resistant vents (<=1/8" mesh); ignition-resistant or noncombustible siding.
• Ignition-resistant/noncombustible decking & enclosed deck undersides; enclosed (boxed) eaves & soffits.
• A **0–5' noncombustible zone** at the foundation (Zone 0 — hardscape/gravel, no combustible mulch or shrubs within 5').
Which standard applies here is answered below — this jurisdiction has adopted a wildfire program, and that line names it, its edition and its ordinance. The expectations above are what that standard asks of the building.

IWUIC / local wildfire code (verify per AHJ)

CITED

City of Longmont has adopted a wildfire / ignition-resistance program

Longmont has adopted the Colorado Wildfire Resiliency Code (June 1, 2025 edition), excluding appendices A, B and C, with the Chief Building Official as code official. Whether a specific parcel is inside the regulated wildland-urban interface depends on a map the Chief Fire Marshal adopts and maintains under §303 — and that map is available only at the Longmont Department of Public Safety during business hours. It is not published in the City's GIS (checked 2026-07-26, no wildfire layer in any public service), so we cannot resolve WUI status

per parcel here. Confirm with Public Safety whether this address is in the mapped interface before pricing ignition-resistant construction.

The map of where it applies is NOT published online — ask Longmont Department of Public Safety — the Chief Fire Marshal maintains the map under §303, so whether this specific parcel is inside the regulated interface cannot be answered from here.

Adopted the state CWRC by Ord. O-2026-11 on 2026-03-24, ahead of the 2026-06-30 deadline. The regulated interface is defined by a Fire-Marshal-maintained map held at the Department of Public Safety and NOT published in the City's GIS, so parcel-level WUI status is unresolvable from here.

Statewide: 2025 Colorado Wildfire Resiliency Code — Local jurisdictions ("governing bodies") must either adopt and implement the State minimum code as-is, or go above and beyond the minimum as it suits their local context, by June 30, 2026. (SB23-166 (Wildfire Resilience Code Board)).

Ignition-resistant construction changes roof, siding, deck, vent and window choices, and defensible space affects landscaping — it is a cost and design driver, not a detail.

Longmont Municipal Code Ch. 16.54 — Colorado Wildfire Resiliency Code (Ord. O-2026-11 §1, adopted 2026-03-24),

§§16.54.010, .030, .040, .050

Other

CITED

The building's age pulls in three separate pre-demolition regimes

Why we asked: the year built decides three things, and each has its own trigger.
• **Built before 1978** — EPA's Renovation, Repair and Painting rule applies to any work that DISTURBS PAINT. A certified firm and lead-safe work practices, not a test you can skip. See the lead line in Demolition & Hazardous Materials.
• **Any age** — Colorado requires an asbestos inspection by a certified building inspector BEFORE demolition or renovation that disturbs suspect material, whatever the year. Age does not exempt you here; that is the common and expensive misreading. Thresholds and notice periods differ between a single-family home and a commercial building — see the asbestos line in Demolition & Hazardous Materials.
• **50 years or older** — historic review may apply. It is a review, not a prohibition, and it is decided by designation or district, not by age alone.

EPA RRP (40 CFR 745) · CDPHE Air Quality Reg 8, Part B

Permitting & Submittal

CITED

Where to submit

the City of Longmont ACA permit portal at aca.longmontcolorado.gov. Building Services publishes a submittal checklist per project type — pull the current one

Longmont Building Services, longmontcolorado.gov/building-inspection

CITED

Your permit runs on an inspection clock, not a start-work clock

it expires if the work has not had a required inspection within 365 days of issue, and expires again if more than 180 days pass between inspections. Written extensions of up to 180 days each are available with justifiable cause. A job that is progressing but goes six months without calling an inspection still expires

Longmont Municipal Code §16.04.050 and §16.06.070

CITED

A City contractor licence is a hard gate on the permit

no permit issues for work by an unlicensed contractor, and a licensed general contractor is required on any project employing three or more licensed trades. Class C covers one- and two-family dwellings and townhouses three stories or less

Longmont Municipal Code §16.48.030

CITED

A new legal entity needs a new contractor licence

within 30 BUSINESS days — **business days exclude weekends and holidays, so that is roughly SIX CALENDAR WEEKS, not 30 days.** Even where its members already hold one. An LLC restructure mid-project can invalidate the entity pulling your permits

Longmont Municipal Code §16.48.050

CITED

Contractor insurance

at least $1,000,000 combined single limit and $1,000,000 general aggregate, plus workers' compensation where applicable

Longmont Municipal Code §16.48.070

CITED

Renting short-term does not push a dwelling out of the IRC

a dwelling otherwise within the IRC's scope may still be permitted under it when used as a short-term rental

Longmont Municipal Code §16.06.040

CITED

Permit-exempt detached shed

120 sq ft or less. Do not rely on the larger figure in recent IRC editions

Longmont Municipal Code §16.06.060

CITED

Certificate of partial completion

required on any project not intended for immediate use or occupancy pending further tenant-finish work

Longmont Municipal Code §16.04.100

CITED

Appeals and variances

the Master Board of Appeals holds final administrative authority over the building official's decisions and can grant variances from strict application of the codes

Longmont Municipal Code ch. 16.30

CITED

Permit fees

set by council resolution, not by the code, so any fee figure quoted from the code is out of date by construction. An 80 percent refund is available where no work has been done and the permit is forfeited

Longmont Municipal Code §16.04.070 and §16.04.080

On the Horizon — Scheduled & Pending

CITED

Energy code (now binding on a code update) — Model Low Energy and Carbon Code

In effect since 2026-07-01. On or after July 1, 2026, a jurisdiction that adopts or updates ANY building code must adopt an energy code achieving equivalent or better energy and carbon performance than the Energy Code Board's Model Low Energy and Carbon Code (MLECC).

Rural counties not awarded significant grant assistance for code training may instead adopt one of the three most recent editions of the IECC (HB22-1362). Confirm the jurisdiction's applicable path with the AHJ.

This is a forward-looking, statewide item — it applies WHEN the jurisdiction next adopts or updates its building code. Confirm the AHJ's current adopted energy code and any update timeline.

Colorado HB22-1362 (2022)

Jurisdiction-specific — be aware

St. Vrain Creek floodplain (SFHA)

Floodplain Development Permit required before any construction in a Special Flood Hazard Area; boundaries actively shifting (Resilient St. Vrain) so map vintage matters

Longmont Floodplain Development Permit

Old Town / Historic districts (East Side, West Side NRHP)

historic overlay/preservation review for designated structures/districts

Longmont historic districts

Overlay zoning districts

LDC §15.03.050 establishes overlays over base zoning — **Airport influence (AI-O)**, **Conservation (C-O)** and **Terry Lake (TL-O)** are the three §15.03.050 establishes, and all three are now recorded — TL-O added 2026-08-22 from the City's own Title 15 export after Josh asked whether we held it. AI-O is still NOT READ IN FULL (see below); TL-O is read but its governing DESIGN GUIDELINES are a separate document we do not hold. An overlay's standards GOVERN over the base district where they conflict; verify which apply per parcel — LDC §15.03.050 (https://library.municode.com/co/longmont/codes/code_of_ordinances?nodeId=PTIICOOR_TIT15LADECO_CH15.03ZODI_S15.03.050 {applies: residential} **THE OVERLAY BOUNDARY IS PUBLISHED** (found 2026-08-28): `PLANNING/Planning_Map_20260220/FeatureServer/22` — two polygons, fields `new_zone` / `Zone_Name`. Note the service is **Planning_Map_20260220**, NEWER than the `Planning_Map_2025` service most of these layers sit on **check which one our registered zoning source reads before assuming currency.**

Airport influence overlay (AI-O)

NOT YET READ IN FULL, but **THE MAPPED EXTENT IS PUBLISHED** (found 2026-08-28): `PLANNING/Planning_Map_2025/FeatureServer/7` — one polygon, field `TYPE`. So whether a parcel is inside the zone is answerable from the point rather than by asking; the Part 77 SURFACES themselves are still unread. §15.03.050.A limits structure height to the 14 CFR Part 77 surfaces for Vance Brand Airport, which can bite BELOW the base district's height limit, and requires site-plan review. We do not hold the surfaces or the mapped extent — confirm with the City where a parcel is near the airport

LDC §15.03.050.A

What we could answer with a little more from you

Each of these turns on something only a design can settle — and each one changes again every time the design does. That is why they sit outside a one-time report. The design workspace answers them against your actual footprint on this parcel, and re-answers them every time you move it.

- Setbacks + required parking + detention pond must fit the lot — site-fit is the feasibility test.
- County road = county Public Works; state highway = CDOT access permit.

- This district publishes more than one schedule and they have different setbacks and heights. Tell us which one you are building and we can draw the envelope; without it we can only list them all.
- Existing floor area sets how much you can still add under the FAR/floor cap — the assessor's finished area is a starting point to confirm.
- Existing footprint sets how much lot-coverage you have left for an addition or accessory structure.
- Without the proposed footprint we can show the lot-coverage cap but not whether your building fits inside it.
- Without the proposed floor area we can show the FAR cap but not whether your building fits inside it.
- Without a building height we can show the height limit but not whether your building is under it. Measure it the building code's way — from grade plane to the average height of the highest roof surface — which is usually NOT how the zoning height limit is measured.

What this pass reviewed

Below is what this pass did and did not look at. An item listed as not reviewed is not a finding that it's clear — it means this tool has no rules authored for it yet and your designer must cover it.

Reviewed

• **Zoning & Site** — reviewed. Recorded plats, easements, covenants/HOA rules, and any PUD or overlay plan are not read — those can be stricter than zoning and control the site.
• **Building Type & Occupancy** — reviewed
• **Egress, Light & Ventilation** — reviewed

Partly reviewed

• **Building & Construction** — partly reviewed. Construction type, fire-separation distance to property lines, and dwelling/garage separation are not evaluated against your actual geometry.

• **Structural & Design Criteria** — partly reviewed. The jurisdiction's design criteria (snow, wind, seismic, frost depth) are surfaced, but nothing is designed or checked — member sizing, the lateral system, and foundations require an engineer.

• **Fire & Life Safety** — partly reviewed. Sprinkler requirements (where locally amended) and rated-assembly details are not fully evaluated. Confirm with the fire district.

• **Electrical** — partly reviewed. Circuit-level design, service sizing, and load calculations are not evaluated — only the common NEC triggers.

• **Mechanical & HVAC** — partly reviewed. Equipment sizing, duct design, combustion air, and ventilation rates are not calculated.

• **Plumbing & Gas** — partly reviewed. Fixture counts, venting, and gas sizing are not evaluated.

• **Energy** — partly reviewed. The adopted energy code is identified, but no compliance path is run — REScheck/HERS or the prescriptive envelope must be demonstrated by your designer.

• **Demolition & Hazardous Materials** — partly reviewed. Asbestos/lead testing requirements are flagged generally; the state and local demolition permit process is not evaluated.

• **Wildfire / Ignition Resistance** — partly reviewed. Wildfire/ignition-resistance applies only where this jurisdiction has adopted a program or the parcel is mapped. Parcel-level mapping is not confirmed here.

• **Accessibility** — partly reviewed. Only the Fair Housing trigger for multifamily is flagged. Detached one/two-family dwellings are not regulated for accessibility; multifamily unit-type counts and clearances are not evaluated.

• **Permitting & Submittal** — partly reviewed. Permitting is only PARTLY reviewed — 9 of 21 jurisdictions have had their administrative chapter read, and where facts appear here they come from that chapter and are cited. An EMPTY section means nobody has read that AHJ's chapter, never that it has no rules. Fee amounts, review timelines and the full inspection sequence are not covered at all; get those from the AHJ before you build a schedule on them.

• **On the Horizon — Scheduled & Pending** — partly reviewed. Scheduled changes cover the statewide energy-code calendar plus any change this jurisdiction has announced and we have verified. A local ordinance in progress that nobody has published will not appear — ask the AHJ what is in the pipeline.

What this report covers — and where it stops

This is the DESIGN LEVEL answer: I have a project in mind — what does the code require of THIS design, and what changes if I change it?

It stops before drawing-board detailing and before engineering. It will tell you a requirement applies and what turns it on; it does not size a beam, lay out a stair, or certify a design. And where a threshold depends on measuring the ground — earthwork volume, cut and fill, disturbed area — we give you the number that makes the rule fire, not the measurement. The site plan places a footprint in two dimensions; it does not model the surface. Ground quantities come from a surveyor.

Designer and AHJ level picks it up from there: Who signs it, and who decides the calls that are genuinely judgment?

Nothing here is a code or zoning determination. Where a rule is discretionary, the AHJ decides, and this tool's job is to tell you the question exists and what it turns on — early enough to be useful.

Sources & citations

- **City of Longmont — adopted codes & design criteria**
- **IEBC**
- **longmontcolorado.gov**
- **Metro Cohort Model Code**
- **IRC**
- **IPC/IRC IMC**
- **IRC/IMC; CoBECC; CDPHE**

When this data was read

The zoning district, the assessor's parcel record and the mapped soils are read live from the published services below and stored briefly so we don't hammer them. These are the times those services actually answered — not the time this report was written. A read older than a day means you were served a stored copy; run the report again for a current read.

- **Mapped soils — USDA NRCS (SSURGO) — read Aug 30, 2026, 10:46 PM MDT (about 2 days before this report) · over a day old**
- **Zoning district — City of Longmont's published zoning map (GIS) — read Aug 30, 2026, 10:46 PM MDT (about 2 days before this report) · over a day old**
- **Parcel record — Boulder County Assessor — read Aug 30, 2026, 10:46 PM MDT (about 2 days before this report) · over a day old**