Building Permit Guides

The City of Louisville Design Criteria, Prescriptive Energy Code, and items listed below shall take precedence over requirements listed in the Building Guides of the Colorado Chapter of International Code Council.

- The City of Louisville has adopted the 2018 International Code series.

- Please reference the city’s design criteria and prescriptive energy code available on the City of Louisville website located at www.louisvilleco.gov/government/departments/planning-building-safety/building-permit-guides.

- All decks are required to be designed by a structural engineer and shall include and engineer stamp and signature.

Sec. 15.05.130. - Section R507.1 amended—Decks.
https://library.municode.com/co/louisville/codes/code_of_ordinances
Section R507.1 of the 2018 International Residential Code is amended to read as follows:

**R507.1 Decks.** Wood-framed decks shall comply with the standards set forth in this section. For decks using materials and conditions not prescribed in this section, refer to Section R301. All decks that are structurally supported from an existing residential home shall be engineered by a structural engineer that is licensed with the State of Colorado.

- Flat roof and patio covers may be required to be designed by a registered design professional. Section R802.4.4 of the 2018 International Residential Code read as follows:

**R802.4.4 Rafter supports.** Where the roof pitch is less than 3:12 (25-percent slope), structural members that support rafters, such as ridges, hips and valleys, shall be designed as beams, and bearing shall be provided for rafters in accordance with section R802.6
How to Use this Guide

Provide three sets of plans, drawn to scale and complete the following (hint: use graph paper with 1/4” squares. Example: 1/4” = 1’): Check with your jurisdiction for additional requirements.

1 Complete this Building Guide by filling in the blanks on page two, and indicating which construction details will be used.

2 Provide 3 Plot Plans (site plan) showing dimensions of your project or addition and its relationship to existing buildings or structures on the property and the distance to existing property lines drawn to scale.

3 Fill out a building permit application.
The majority of permit applications are processed with little delay. The submitted documents will help determine if the project is in compliance with building safety codes, zoning ordinances and other applicable laws.

The Colorado Chapter of the International Code Council is a professional organization seeking to promote the public health, safety and welfare to building construction. We appreciate your feedback and suggestions. To obtain a master copy of this building guide, please write to the Colorado Chapter of the International Code Council, P.O. Box 961, Arvada, CO 80001. http://www.coloradochaptericc.org

This handout was developed by the Colorado Chapter of the International Code Council as a basic plan submittal under the 2012 International Residential Code. It is not intended to cover all circumstances. Check with your Department of Building Safety for additional requirements.
Single Family Residential Enclosing Existing Patio Covers

General Notes

1. This submittal would enclose an existing code compliant and previously permitted patio cover with new walls of glass, framing, or other approved materials, to create a new non-heated, non-habitable enclosed patio.
2. To be allowed any of the code exceptions listed under Appendix H of the 2012 IRC, Patio Cover enclosure walls may have any configuration, provided the open or glazed area of the longer wall and one additional wall is at least 65% of the area below a minimum of 6 feet 8 inches of each wall, measured from the floor.
3. Note that all existing house windows and doors must remain in place. Heated areas and habitable rooms shall be submitted as a residential addition. Check with your local building department for specific design and submittal requirements.
4. The new room shall not block required egress from any area and shall not reduce any required natural light and ventilation.
5. Garage walls, doors, and windows that previously had an exterior exposure but are now within the enclosure shall be modified to meet required fire rated separation requirements.
6. Smoke alarms and carbon monoxide alarms shall be installed throughout the residence in compliance with IRC R314 and R315. Wireless alarms are acceptable.
7. Various ICC-ES Patio Cover Reports prohibit enclosure.
8. Contact your local Building Department regarding electrical wiring requirements and applicable codes.
9. Provide gutters and downspouts with adequate drainage away from the structure.

Minimum Submittal Documents

- A completed permit application.
- 3 plot plans (site plan) showing the location of the structure to be enclosed, its relationship to existing buildings or structures on the property, and the distance to all property lines.
- 3 sets of complete construction documents, clearly indicating all components and how they are to be anchored to one another, to the slab / foundation, to the roof, and to the dwelling.
- A floor plan view of all room uses within the dwelling that are directly adjacent to the new patio enclosure. Include any existing windows wells (from the basement) that would now be within the enclosure. See sample drawing on page 3.
- Details regarding how the new walls / glazing shall be protected from any potential slab movement due to frost and expansive soils.

Submittal Documents that may be Required by Local Jurisdiction

- Engineered stamped construction drawings listing wind and snow loading.
- Engineered stamped foundation plans for the support of all walls / columns.
- Frost protected foundation systems, or protection of existing slabs.
- A current ICC-ES or other approved inspection / design report for proprietary wall component systems or assemblies.
- Provide an electrical plan indicating locations of outlets, lights and switches.
- Stamped engineering for any special construction details, including anchoring the new roof assembly to existing rafter tails, or alternate methods or materials.
- Clarification of the type and location of lateral (wind) bracing, wall to foundation bolting, etc.
Single Family Residential Enclosing Existing Patio Covers

Sample Floor Plan

36" long landing the width of the door and no more than 7 3/4" below top of threshold
New light and GFI receptacle

Door shall not swing over step

Existing window to remain

Tempered glass required when glass is less than 24" from either side of the door.

Openings or glazing area at least 65% of wall area

Minimum wall bracing requirements may apply - confer with building dept.

Existing door to remain

Maximum step down requirements apply

This handout was developed by the Colorado Chapter of the International Code Council as a basic plan submittal under the 2012 International Residential Code. It is not intended to cover all circumstances. Check with your Department of Building Safety for additional requirements.
Single Family Residential Enclosing Existing Patio Covers

**Detail A**

- Existing roof rafters or trusses
  - Galvanized metal joist or rafter hangers
  - Extend underlayment from new roof a minimum of 18" onto existing roof
- Cont. 2x ledger
  - Secure ledger to wall with lag bolts @ 16" O.C.
  - Locate lag bolts to penetrate top plate or studs
- Existing wall
  - Note: Remove brick veneer at top of wall before installing continuous 2x ledger
- Remove existing fascia

**Alternate Detail A**

- Lap underlayment a minimum of 18" under existing roofing felts
- Solid 2x blocking on 2x12 or greater
- Roof tie downs required
- Cont. 2x6 secured to existing roof with fasteners at each rafter or truss

**Existing Roof covering**

- (example: Class A 3 tab shingles)
- 2x rafters spaced 24" O.C.
  - (example: 2 x 8 rafters spaced 24" O.C.)

**Shed Roof**

- 12 pitch

**Sheathing**

- (example: 1/2" exterior plywood)

**Check one**

- (Clarity Existing Roof Attachment)
  - Detail A
  - Alternate A
  - Other
    - (attach detail drawing)

**Beam to post connection**

- (example: galvanized metal connection)

**Beam splices to occur over posts with 1 1/2" bearing.**

**Maximum rise**

- 7 3/4" at top of door threshold

**Slope**

**Concrete Slab**

**Identify Existing Foundation Components**

- Footings/ frost wall
- Slab with piers only at posts
- Frost protected foundation

---

This handout was developed by the Colorado Chapter of the International Code Council as a basic plan submittal under the 2012 International Residential Code. It is not intended to cover all circumstances. Check with your Department of Building Safety for additional requirements.