How to Use this Guide
Provide two sets of plans, drawn to scale and complete the following (hint: use graph paper with \( \frac{1}{4}'' \) squares. Example: \( \frac{1}{4}'' = 1' \)): 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 2 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. See page 3.

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.
Note: A plot plan (plan view) showing the dimensions of your project or additions and its relationships to existing buildings or structures on the property must be included. In addition to project dimensions, your plot plan must also show other details such as post locations and spacing, joist and beam spans, and any other pertinent information not shown on the section drawing.
Single Family Residential Uncovered Decks and Porches

Plan View Example

Tempered windows may be required
- Decking
- Light
- Door to interior
- Electrical outlet

36° Min.
- Stairs
- Joists
- Show post and pier size

Install diagonal brace to underside of deck joists

x = Show Dimension

1" = 1

Site Plan Example

131.0

Proposed Addition

Note: Dimensions are for reference purposes only

One Story Frame

40.0

Concrete Slab for Garage

26.0

Concrete Drive

25.5

Walkway

30.0

Hometown Street

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 Uncovered Decks and Porches**

**Detail A**
- Existing building
- Approved flashing required behind existing siding
- Attach to joists with non-corrosive fasteners
- Attach ledger to existing bldg. with non-corrosive fasteners. Locate fasteners to penetrate rim joist or wall studs.
- Non-corrosive metal joist hanger
- Approved flashing
- Conditions such as attachment to cantilevers or veneers may require Engineer’s approval

**Detail B**
- Beam splices to occur over posts with 1 1/2" bearing
- Secure posts to beam with through bolts
- Non-corrosive metal joist hanger
- Non-corrosive metal post/beam connector

**Alternate Detail B1**
- Secure posts to beam with through bolts
- Beam splices to occur over posts with 1 1/2" bearing
- Non-corrosive metal post/beam connector

**Alternate Detail B2**
- Full depth 2x solid blocking
- Secure posts to beam with through bolts
- Beam splices to occur over posts with 1 1/2" bearing
- Non-corrosive metal post/beam connector

**Detail C**
- 1/2" (min.) diameter anchor bolt embedded 7" min. into concrete pier or the equivalent
- Non-corrosive metal post anchor
- Finished grade
- 8" min. If less than 8", post must be decay resistant
- 8" (min.) diameter pier

---

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 Uncovered Decks and Porches

Stair & Handrail Specifications

New or existing light required

Guardrail

Open guardrails on decks more than 30 inches above grade or a floor below shall have members spaced so that a 4 inch diameter sphere cannot pass through.

Guardrail required if more than 30"

36" min. height

34-38” above nosings

10” min. run from nosing to nosing

Open risers less than 4”

7 3/4” max. rise

Handrail required if more than 30"

Less than 6” dia.

36” Min.

Handrail (see details below)

Landing same width as stairs

Finished grade

Stairway Notes:
1. Stairways shall be not less than 36” in width.
2. Stairway rises shall be not greater than 7 3/4”.
3. Stairway treads shall have a minimum run of 10”.
4. The length of Run and the height of Riser shall not vary more than 3/8” in the entire run of the stair.
5. Stairs are required to be illuminated.
6. Open risers permitted if opening is less than 4”.
7. A nosing not less than 3/4” but not more than 1 1/4” shall be provided on stairways with solid risers, and less than 11”.
8. Composite materials (example: Trex) may require 4 or more stringers.

Handrail Notes:
1. Handrails shall be continuous on at least one side of stairs with 4 or more risers.
2. Top of the handrails shall be placed not less than 34 inches nor more than 38 inches above stair nosings.
3. The handgrip portion of handrails shall be not less than 1-1/4 inches nor more than 2 1/4 inches in cross section for non-circular handrails.
4. Handrails shall be placed not less than 1-1/2 inches from any wall or other surface.
5. Handrails to be returned to wall, post or safety terminal (per 311.7.8.2 IRC)

Acceptable Handrail Details

Type II

1 1/4” - 2 3/4” max.

1 9/16” - 2 9/16” max.

1 1/4” - 2” Gripable

Wall or other surface

1 1/2” min.

Type I

1 1/2” min.

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.