How to Use this Guide
Provide two sets of plans, drawn to scale and complete the following (hint: use graph paper with ¼” squares. Example: ¼” = 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.
Directions
1. Fill in the blanks. Please print legibly.
2. Indicate in the check box which detail from page 4 will be used.

Size and Spacing of Lags
(example: Two 1/2" x 4 1/2" lags @ 16" O.C.)

Type of decking ___ x ___
(example: 1 x 4 or 2 x 6 - Trex)

Deck Section

Existing bldg.
Electrical outlet required on decks
Approved flashing required

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

Attach decking with non corrosive fasteners

2x____ joists spaced ____’” apart
(example: 2 x 10” spaced 24” apart)

(____)_______x______beam
(example: (2) 2 x 10 - see detail B)

2x____ rim joist
(example: 2 x 10 - see Alternate B1 & B2)

_____x_____ posts spaced _____ apart
(example: 4 x 4 posts spaced 8’ apart)

Span
(example: 13’ - 4”)

Type of siding ________
(existing)

Note: Emergency escape windows are allowed to be installed under decks and porches provided the location of the deck allows the emergency escape window to be fully opened and provides a path not less than 36” in height to a yard or court. 6’8” required for walk out basements or patios.

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.

Address:

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**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

**Alternate Detail B1**

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

**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
- Conditions such as attachment to cantilevers or veneers may require Engineer’s approval

**Alternate Detail B2**

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

**Detail C**

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

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Stair & Handrail Specifications

**New or existing light required**

Guardrail required if more than 30"

Guardrail required 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.

**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**
- 13/4" - 2 3/4" max.
- 3/4"" width
- 1 1/4" - 2" Gripable
- Wall or other surface
- 1 1/2" min.

**Type I**
- 1 1/2" min.
- 1-1/2" min.

**Unacceptable Handrails**

Open risers permitted if opening is less than 4".

- Composite materials (example: Trex) may require 4 or more strings

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 strings.

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.

Openings for required guards on the sides of stair treads shall not allow a 4 3/8" diameter sphere to pass through.

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