Purpose of Guide

The purpose of this guide is to assist you in the permit process for your project. This handout is intended as a basic plan submittal under the 2015 International Residential Code. It is not intended to cover all circumstances. Depending on the scope and complexity of your project, additional and/or more detailed plans may be required.

This permitting process is not intended to take the place of any Homeowner Association (HOA) or Civic Association requirements; therefore, it is important for you to check with your HOA or CA for any additional requirements they may have.

How to Use this Guide

1. Complete this Building Guide:
   Fill in the blanks on page (2) and indicate which construction details will be used. It is important to print legibly to help staff review the information. At least (2) completed copies must be provided to apply for a building permit.

2. Provide Site Plans:
   Show the dimensions of your project and its relationship to existing setbacks, easements, structures on the property and the distance to property lines. Be sure to show the location of your utilities (i.e. gas, water, sewer and electric) and any existing meters. If the project will require moving any utilities or meters, show where those will be re-located.

   Notes:
   a. A survey from a registered land surveyor will be required if your project is located in a protected area.
   b. Structures shall not be located on easements.
   c. If you do not know the locations of your utilities, contact the Utility Notification Center of Colorado at 1-800-922-1987. Remember to ask them about the cost of this service.

3. Provide a Floor Plan:
   A simple floor plan is provided on page (4). Show the existing dimensions of the house, the dimensions of the new room, any new openings and items to be re-located.

   Notes:
   a. Special consideration will be given to any new openings that exceed 6’ in a bearing wall. A plan from a registered engineer may be required in these instances.
   b. Additions cannot enclose a bedroom or basement egress window/s.
   c. Heat is required in all habitable rooms. Show how the addition will be supplied with heat.
   d. Smoke detectors are required in homes. If the room requires the addition of a smoke detector, new regulations call for detectors to be powered by electricity (not battery-operated).

4. Submit a completed Permit Applications:
   Applications may be obtained at the City of Centennial or www.CentennialCO.gov. It is important that the permit is filled out completely to the best of your knowledge and that you provide any additional pertinent information.
Construction Details

- **Roof Sheathing**: 3/16" 24-16 CDX Ply
- **Roof Covering**: Class A Tab Shingles
- **Minimum 1x Ridge Board**: 1x12
- **Pitch**: 1/2
- **Underlayment**: 2 layers 15lb felt
- **Ceiling Insulation**: MIN R38
- **Double 2x Top Plate**: 2x4
- **2x Ceiling Joist**: 2x8 @ 24" oc
- **Wall Insulation**: MIN R19 or R13 with R5 insulated sheathing
- **Ceiling Height**: 8'
- **Siding**: Lap or T-111
- **Wall Sheathing**: 1/8" exterior plywood
- **Span**: 24'
- **2x Studs**: 2x4 @ 16" oc
- **Continuous 2x Sill Plate**: 2x4 pressure treated
- **Wall Width**: 8'
- **Footing Size**: 8" x 18"

Additional Notes:
- Diagonal wind bracing or plywood shear panels at corners and each 25' of wall. See section R602.10 of the 2009 IRC.
- MIN 15" form the interior grade level to the bottom of floor joist. Must use pressure treated or lumber of natural resistance to decay if less than 16".

A foundation designed by a CO licensed Engineer or Architect may be required.
Construction Detail Notes

1. Provide solid 2x blocking between rafters or trusses and roof tie downs.
2. Attic ventilation and access may be required.
3. For roofs with slopes less than 4:12 follow manufacturer’s instructions for low slope application of roofing material.
4. Pre-engineered floor systems may be used and should be installed according to the manufacturer’s installation instructions.
5. Where new roofs adjoin walls of an existing structure, flashing must be installed under the existing exterior finish material and over the new roof.
6. When constructing a new roof valley, use a continuous board under the bottom cut of the new rafters to provide a solid nailing surface. The board should be at least 1” thick and should be at least as wide as the base of the new rafter.
7. For all pre-engineered systems, the manufacturer’s installation instructions must be available to the inspector on site. Failure to provide these materials upon request will result in your project failing inspection.

Crawl Space Foundation Detail

(Additions over basements will require an engineer designed foundation)
We hope you find the information in this guide useful. If you have any questions, please feel free to contact us.

I am turning in this document as part of my submittal for a building permit. I have read this document in its entirety and understand its content. Upon reading this document, I understand that additional materials may be required of me prior to obtaining a permit. I will adhere to the building codes adopted by the City of Centennial in the construction of my project.

__________________________________________
Signature                                   Date