



Building Guide

Mills County
Building & Zoning Department
403 Railroad Avenue, Glenwood, IA 51534
712-527-4347

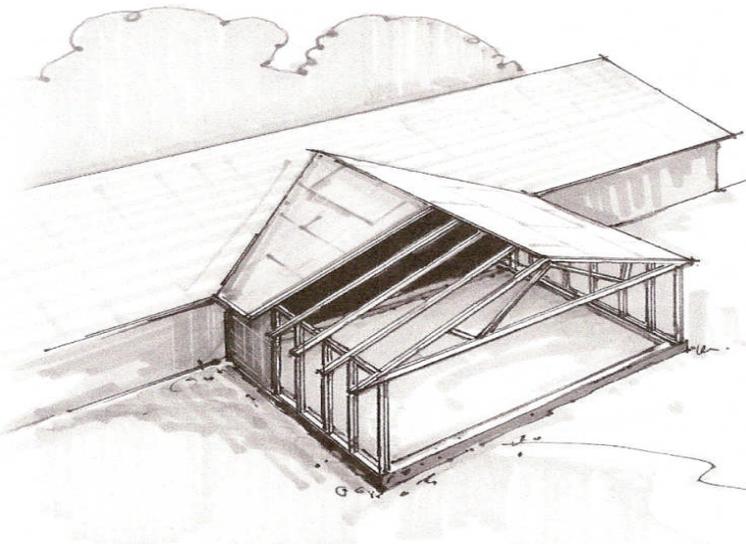
Single Family Residential Addition

How to Use This Guide:

- 1) Fill out a **Residential Building Permit Application**.
- 2) Provide two (2) sets of building/floor plans on minimum 11"x17" paper size. Plans must be drawn to scale.
- 3) **Complete this Building Guide** by filling out the blanks on page two (2) and indicating which construction details will be used, and the R value of the insulation used.

The majority of permit applications are processed with little delay, within 7 – 10 working days. The submitted documents will help determine if the project is in compliance with building safety codes, zoning ordinances and other applicable laws.

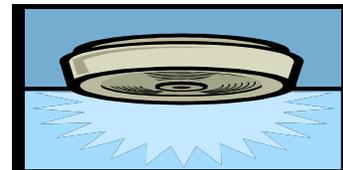
INCOMPLETE PLANS AND/OR APPLICATIONS WILL NOT BE ACCEPTED



IMPORTANT CODE NOTE:

Smoke Alarms:

Smoke alarms are required in all basements. If the finished basement contains a sleeping room, a smoke alarm must be installed on the ceiling or wall in the sleeping room and in the hallway or area immediately outside of the sleeping room. Smoke alarms added to satisfy the above requirements must be hard wired with the battery backup, and interconnected with existing smoke alarms. Smoke alarms are required to be hardwired and interconnected in new and existing bedrooms, halls and on each level unless removal of interior wall or ceiling finish would be required. In this case, battery operated devices are acceptable.



This handout was developed by the Mills County, Iowa, Building & Zoning Department as a basic Plan Submittal under the 2006 IRC to help in questions that may arise in the application process. It is not intended to cover all circumstances or Code related issues as they pertain to individual projects.

Single Family Residential Addition

2x _____ rafters spaced _____ " O.C. or
 Manufactured Trusses spaced _____ " O.C.
 (example: 2 x 12 Rafters Spaced 24" O.C.)

Sheathing _____
 (example: 1/2" exterior plywood)

Minimum 1x _____ ridge board
 (example: 1 x 12)

Roof covering _____
 (example: Class A 3 tab shingles)

Note: For roofs with slopes less than 4:12, follow manufacturer's instructions for low slope application of roofing material.

12
pitch

Underlayment _____
 (example: 1 layer 15# felt)

Building Section

Note: Attic ventilation and access may be required

Provide roof tie downs
 Solid 2x blocking between rafters that are 2x12 or greater

Ceiling Insulation _____
 (example: R-38)

Wall Insulation _____
 (example: R-19 Fiberglass Batts)

2x _____ ceiling joists @ _____ O.C.
 (example: 2 x 8 @ 24" O.C.)

Double 2x _____ top plate
 (example: 2 x 6)

Span _____
 (example: 23' 5")

Ceiling height _____
 (example: 8')

Note: Pre-engineered roof trusses w/truss clips may be used in lieu of roof structure shown.

Diagonal wind bracing or braced wall panels @ corners and each 25' of wall.

Note: Pre-engineered floor systems may be used and should be installed according to the manufacturers installation instructions.

Siding _____
 (example: lap or T-111)

Wall sheathing _____
 (example: 1/2" exterior plywood)

2x _____ studs @ _____ O.C.
 (example: 2 x 6 @ 24" O.C.)

Cont. 2x _____ sill plate
 (example: 2 x 4)

Access required

18" minimum from the interior grade level to the bottom of the floor joists.

Engineered Design: Cassions may be required if your site has swelling soils.

2x _____ Joists @ _____ O.C.
 (example: 2x10 @24" O.C.)

Wall width _____ "
 (example: 8")

- ✓ **Check one**
- Foundation: Engineered Design
 - Foundation: Detail A (see page 3)

Footing size _____ " x _____ "
 (example: 8" X 16")

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NOTES

Site Plan

- **When drawing your plot plan** be sure to show the location of electric, gas, sewer and water service lines. If you don't know where they are, call **IOWA ONE CALL 1-800-292-8989**. They will come out and locate lines for you. Remember to ask them the cost.
- **Show where the existing** electric and gas meters are located on your home. These meters may have to be relocated and it is best to know this before you start construction.

Floor Plan

- **Smoke Alarms.** Smoke alarms are required to be hardwired and interconnected in new and existing bedrooms, halls and one on each level unless removal of interior walls or ceiling finish would be required. In this case, battery operated devices are acceptable.
- **Additions not to enclose** bedroom or basement egress windows.
- **Safety glass is required** at specific locations. When you draw in the location of the new windows on the floor plan, the plan reviewer can identify which ones require safety glass.
- **Heat is required** in all habitable rooms. Show how the addition will be heated on the plan.

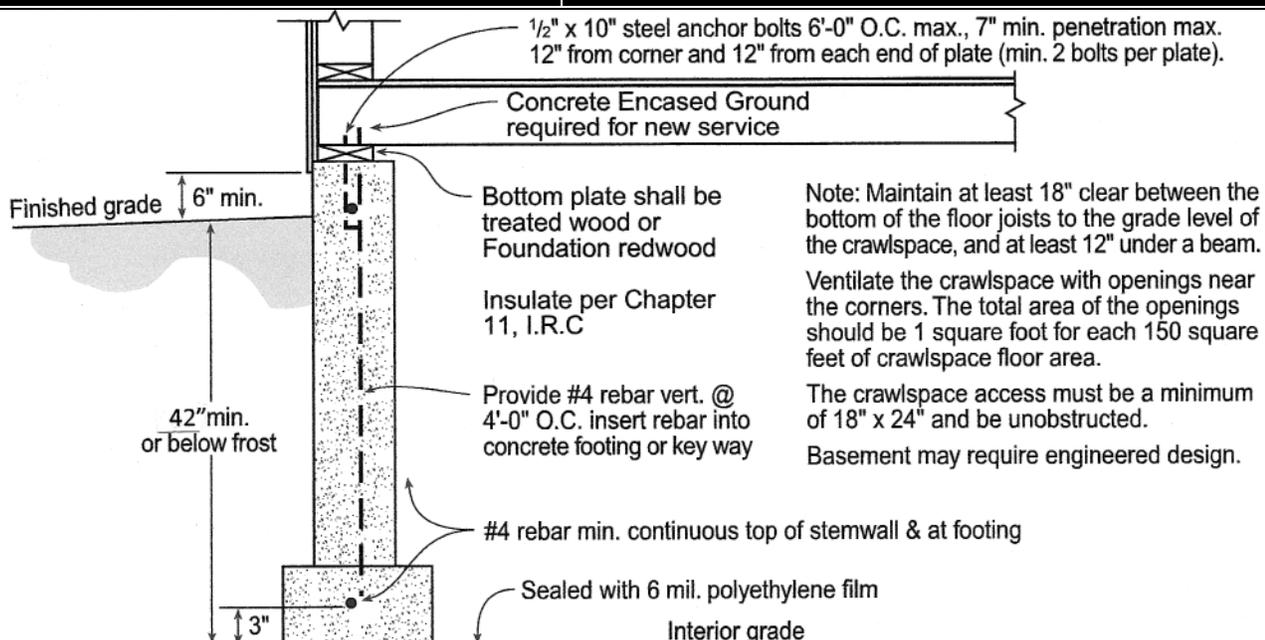
Electrical Code

- **Existing electric service** may require an upgrade or relocation. Indicate the size of your electric service (the number on the main breaker) on your plan. This can help the plan reviewer determine if an upgrade is needed before you start construction.

Roof Overframe

- **When constructing a new 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 2" thick, nominal and should be at least as wide as the base of the new rafter.

Crawlspace foundation Detail A



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Sample Floor Plan

NOTES:

- A. New 3'-0" x 6'-8" door in existing wall
- B. Existing door removed, opening covered with drywall both sides
- C. New 5'-0" x 4'-0" cased opening (replaces existing window)
- D. New patio door with tempered glass
- E. New 6'-4" wide 4'-8" casement windows

Example: (2) 2"x10" headers at new window and door openings

