



City of Urbandale

3600 86th Street
Urbandale, IA 50322-4057

www.urbandale.org

Building Department (515) 278-3930
Fax No. (515) 278-3927



Sunroom on Columns with Glazing Plan Review & Inspection Schedule

Design

- Covered decks that have glazing (windows) should follow the requirements of this handout
- The design will be structurally reviewed by the Building Department so the deck plan should include dimensions, joist size & spacing, beam size & location, rafter size & location, number of support columns and size & location of footings. For additional design information a separate **Deck Design Handout** is available. R106.1
- All loads such as beams, headers, girder trusses are required to transfer to the foundation and be supported by framing members placed directly underneath them. R301.1
- Wood deck material must be treated wood or be a species with natural resistance to decay such as cedar and redwood. Due to the corrosive nature of some framing materials hangers and fasteners must be coated to be compatible with the framing materials. R317.1, R317.3.1

Footings

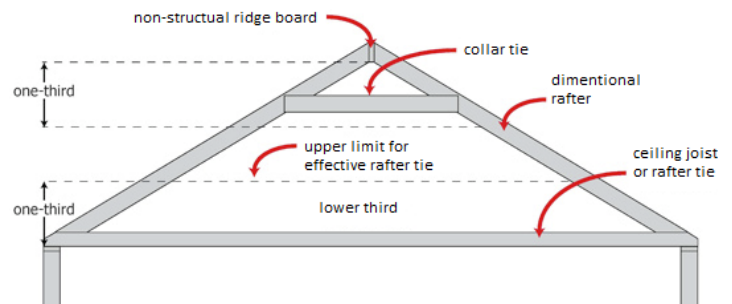
- The footings must extend a minimum 42" below grade. The size of the footings must be adequate to support the imposed loads but may not be less than 24X24 or 28" diameter unless a design and calculations are provided by a registered design professional. R301 & 403.1.4.1 & Urbandale Ordinance 150.03 (21)

Deck Framing

- Beam to post connection for roofs over decks must be secured at the top and bottom and by additional methods other than nailing.
- Columns should be a minimum 6X6. Urbandale Ordinance 150.03 (21)
- Each joist must bear on a minimum of 1 1/2" of wood or be supported by the use of a joist hanger. The manufacture directions for all hardware must be followed which may include the use of nails or listed screws at the joist hangers. R502.6

Roof Framing

- Rafter ties and collar ties are required at each rafter location when dimensional lumber framing is used unless a ridge beam design is utilized. The rafter ties must be located in the bottom 1/3 and the collar ties must be located in the top 1/3. R802.3
- Roof assemblies must be tied down to the supporting wall by an approved method. Commonly this is achieved through the use of a "hurricane clip" R802.11



Glazing

- Safety glazing is required in hazardous locations such as in doors, glazing within 24" of the side of doors, glazing next to a walking surface in fixed panels exceeding 9 sq. ft. and less than 18" above the walking surface, areas adjacent to any shower, tub, sauna & etc. where the glass is less than 5' above a standing surface, and glazing alongside stairs or within 5' of the top or bottom. R308.4
- Windows with an opening greater than 72" above grade must be more than 24" above finished floor or openings must be restricted to less than 4". If the window is required for emergency egress than the limiting device must comply with ANSI standard 2090-10. R312.2.1

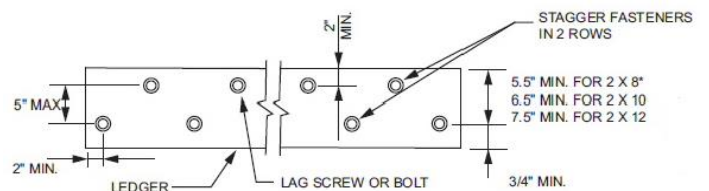
Stairs and Handrails

- If stairs are planned or if the deck floor surface is 30" or more above grade see separate **Stair, Handrail and Guard Handout**. R311 & R312

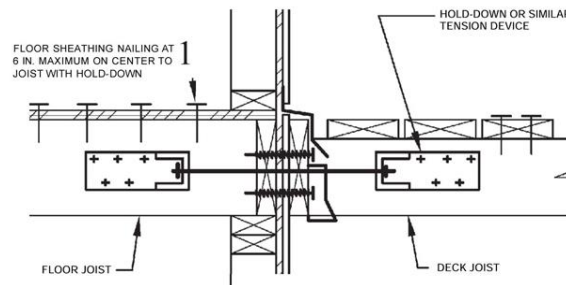
Ledger

- If the deck is attached to the house, the ledger board must be securely attached with lags, through bolts or other approved fasteners to the house, and diagonal bracing to prevent racking is needed. Connection fasteners must be positioned to minimize damage to the rim joist and must be staggered. Siding must be removed behind the ledger and flashing installed. R507 & R703.8

Connection Detail	JOIST SPAN						
	Up to 6'	6'-8'	8'-10'	10'-12'	12'-14'	14'-16'	16'-18'
	On-center spacing of fasteners						
1/2" dia lag screw 1/2" max sheathing	30	23	18	15	13	11	10



- Ledger boards cannot be attached to a cantilevered floor system unless a design from a registered design professional has been approved. R507.2
- Where the house rim board is not 2" nominal lumber (2) lateral load connections are required. R507.2



Smoke Detectors & Carbon monoxide Detectors

- Smoke and CO detectors should be installed even if the area is not affect by the work. R314.3.1 & 315.3
- The code requires dual sensing type **smoke detectors** in all bedrooms, on all floors/levels of the house, and outside each sleeping area in the immediate vicinity of the bedrooms. Detectors must be interconnected if the area of work provides access to these locations. R314.3 & IAC 661.210.1
- A **carbon monoxide** detector should be installed in the immediate vicinity of the bedrooms. R315.1

Zoning

- Sunrooms normally must be the same distance from the property lines (called "setback") that the house is required to be. For specific setback requirements for your property please contact the Zoning Administrator at 278-3935.

Before you dig

- Call "One Call" for utility locations before you dig at 811. Utility locations are typically completed within 48 hours of your request. Underground utility location prior to digging is required by state law. This service is free of charge.

Required Inspections

1. **Footings/Setback Inspection** before the footings are poured. Lot pins shall be located at this time to verify setbacks.
2. **Framing Inspection** before floor is installed if the deck is too close to the ground for framing to be observed at Final.
3. **Electrical Rough-in Inspection** – If applicable (separate electrical permit is required)
4. **Final Inspection**