



City of Urbandale
3600 86th Street
Urbandale, IA 50322-4057
Building Department (515) 278-3930
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www.urbandale.org



Deck Plan Review and Inspection Schedule

Design

- For covered decks with glazing in the walls please refer to the ***Sunroom with Glazing on Columns 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. R106.1 For additional design information a separate ***Deck Design Handout*** is available.
- All loads such as beams, headers and girder trusses are required to transfer to the foundation and be supported by framing members placed directly underneath them. R301.1
- Wood deck materials must be a species with natural resistance to decay such as cedar, redwood or treated wood. Due to the corrosive nature of some framing the materials hangers and fasteners must be coated to be compatible with the framing materials. R317.1

Footings

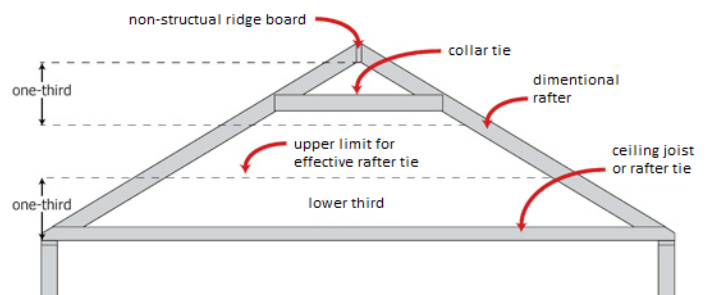
- The footings must extend a minimum 42" below grade. The diameter of the footings must be sized to adequately support the imposed loads. R301 & 403.1.4.1
- Helical piers- engineering reports are required to be submitted to the city.

Deck Framing

- Beam to post connections must be made with a minimum of (2) ½" through bolts or equivalent.
- Each joist must bear on a minimum of 1 ½" of wood or be supported by the use of a joist hanger. The manufactures 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 (if constructed)

- 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 shall be connected to the supporting wall assemblies by connections capable of resisting uplift forces. Commonly this is achieved through the use of a "hurricane clip". R802.11



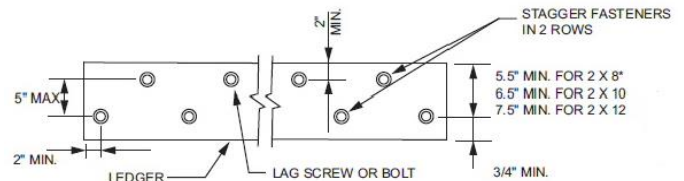
Stairs, handrails and guards

- If stairs are planned or deck floor surface is 30" or more above grade see separate **Stair, Handrail and Guard Handout**. R311 & 312

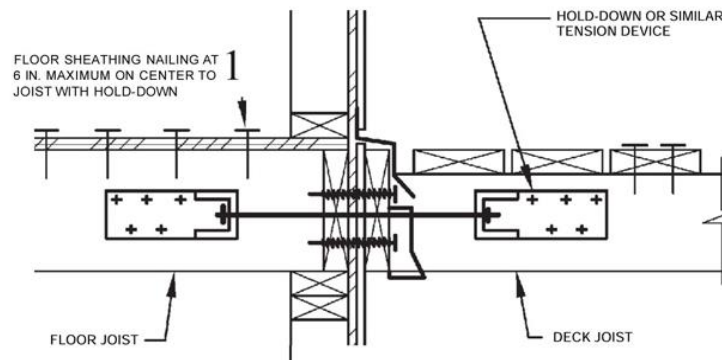
Ledger

- 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 & 703.8

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 structural design information is submitted. R507.2.2
- Where the house rim board is not 2" nominal lumber (2) lateral load connections are required. R507.2.3



Zoning

- Decks 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 (515) 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

Please note that inspections must be scheduled 24 hours in advance

- Footings/Setback Inspection** before the footings are poured. Lot pins should be located at this time to verify setbacks.
- Framing Inspection** before deck surface is installed if framing can't be observed at final due to height
- Electrical Rough-in Inspection** – If applicable (separate electrical permit is required)
- Final Inspection**