



CITY OF ALEDO
DECK PERMIT APPLICATION
 120 N. College Avenue
 Aledo, Illinois 61231
 (309) 582-7241 Office
 (309) 582-7242 Fax

Office Use Only	
File Number:	_____
Date Application Received:	_____
JULIE No:	_____
Permit Fee:	_____
Dig Bond:	_____
Total Amount Due:	_____
Zoning Officer:	_____
Building Official:	_____
Project Valuation:	_____
Date Permit Issued:	_____

PROJECT LOCATION

Project Address: _____
 Parcel Identification Number (PIN): _____
 Legal Description: (Required for all new structures): _____

PROJECT TYPE & INFORMATION REQUIRED

A Plat of Survey may be required if determined necessary by field inspection.
 Type of Deck: () Enclosed () Open
 Location of Deck/Porch: () Front of House () Side () Rear
 Deck Surface Material: _____
 Dimensions: _____ x _____
 Type of Footing/Foundation: () Post 42" depth in concrete () Engineered pier system
 () Concrete Footing/Foundation () Other: _____
 Joist Size: 2 x _____ at _____" on center
 Span between bearing points: _____
 Height of deck surface above grade: _____
 Distance to Side Lot Lines: _____ and _____
 Distance to Rear or Front Lot Line: _____
 Estimated Completion Date: _____
 Please provide short summary of project: _____

PROPERTY OWNER INFORMATION

Name: _____ Email: _____
 Address: (if different from project location): _____

 Home Telephone: _____ Other Phone: _____ Fax: _____

Please complete the reverse side of this application.

Location: _____ File No: _____

CONTRACTOR INFORMATION

All contractors involved in this project shall be listed on the application. Contractors shall be licensed as required by state law and city ordinance prior to the issuance of a permit.

To Be Completed by Applicant				To Be Completed by City Staff	
Trade	Contractor Name	Address	Telephone	Local	
General Contractor					
Carpenter					
Electrical					

PROJECT DETAILS

(Note: If there is more than one deck or porch, copy this form and submit one for each. Plans and drawings are encouraged, detailing framing, for complex structures that vary types of framing. Plans will be required for multiple story structures.)

Total Fair Market Value (use contract price if the work is contracted):

Labor _____ Materials: _____ Total Cost: _____

(Please note that owner labor has a market value)

If Homeowner is not contracting project out he/she shall call JULIE

PLEASE COMPLETE AND SUBMIT ATTACHED SPECIFICATION SHEET

The undersigned, by affixing his or her signature to this application, does hereby acknowledge and affirm the following: (1) That he or she is the project property owner or authorized agent; (2) that the issuance of the requested permit is conditioned upon the consent of the permit holder and his or her employees, contractors or other agents, to comply with the codes, rules, specifications and ordinances of the City of Aledo; (3) that the permit holder shall obtain all required inspections for the project; (5) that the permit does not grant any right or privilege to violate the codes and ordinances of the City of Aledo; (6) that a failure to commence work within 180 days of the issuance of this permit or a failure to complete such work within one year of permit issuance shall invalidate the permit and require an extension or new permit as allowed by the building official; (7) that inspections outside of normal business hours, missed inspections or those caused by modifications or noncompliance shall be assessed an additional \$50.00 per inspection; (8) that a failure to obtain the required inspections or a violation of codes, rules, specifications or ordinances of the City shall be cause to suspend or revoke the permit and shall further be cause for the city to seek compliance in a manner as provided by law.

Signature of Permit Applicant

Printed Name

Do Not Write Below This Line

Note: Guardrail and Handrail Requirements:

1. For residential stairs, a minimum of one handrail is required. Handrails shall be between 34 and 38 inches above stair landings and nosing of tread. Handrail is required when there are more than four or more risers.
2. All guardrails shall be a minimum of 36 inches in height and spacing between guards shall be so that 4" sphere cannot pass between same. A guardrail is required if the porch or deck surface is 30" or more above grade.

ADDRESS:

PROPOSED SITE PLAN

DESCRIPTION OF WORK:

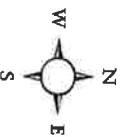
PLEASE SHOW:

- Dimensions of proposed structure
- Distances to property lines
- Existing structures & driveways
- Streets and alleys
- Property dimensions (if available)

CITY APPROVAL:

All improvements must comply with the Alameda Code of Ordinances. No changes without prior approval. The owner and/or contractor is responsible for verifying property lines, easements, and building/property dimensions.

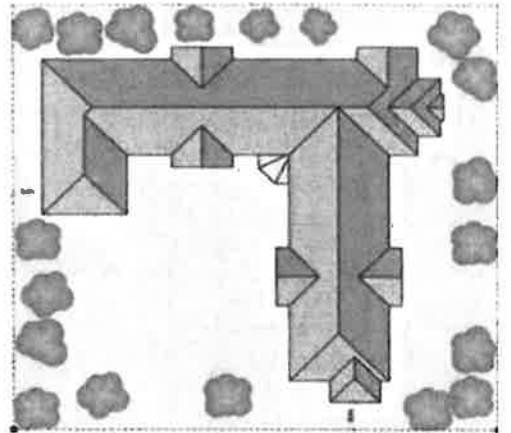
Zoning Official _____ Date _____





PREPARING AND SUBMITTING A SITE PLAN

A site plan is a drawing that shows proposed improvements to a property. A site plan shows the location of *existing* buildings and other improvements, adjacent streets or alleys, and other property features. A site plan also shows the size and location of *proposed improvements* to a property such as a new house, addition, deck, garage, storage shed, pool, sign, or parking lot.



WHEN MUST I SUBMIT A SITE PLAN?

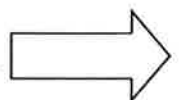
Prior to construction or development, a property owner or contractor must first apply for a building permit and submit a site plan to the City of Aledo for review. The City's Building Department (located at Aledo City Hall, 120 N College Ave.) will review the site plan to ensure that new structures and development comply with adopted land use codes and policies. Proposals will be reviewed, at minimum, to verify that construction will meet applicable setbacks, height, and size (bulk) standards. For larger projects other than single or two-family residential construction, additional site plans for landscaping and lighting may also be required.

HOW SHOULD I PREPARE A SITE PLAN?

For most residential projects a simple hand-drawn, not-to-scale site plan is sufficient. Larger residential projects and most non-residential projects may require scaled site plans prepared by a registered design professional. At minimum, a site plan should identify the following:

- Property lines and dimensions;
- Location and name of adjoining streets, avenues, alleys and other physical features;
- Locations and exterior dimensions of all existing structures;
- Location, height and exterior dimensions of all proposed buildings or improvements;
- Distances (setbacks) from front, side, and rear property lines to the wall or edge of each existing structure and also to each proposed structure or improvement;
- For detached buildings, distances from existing buildings to proposed buildings;
- Street address; and
- North arrow.

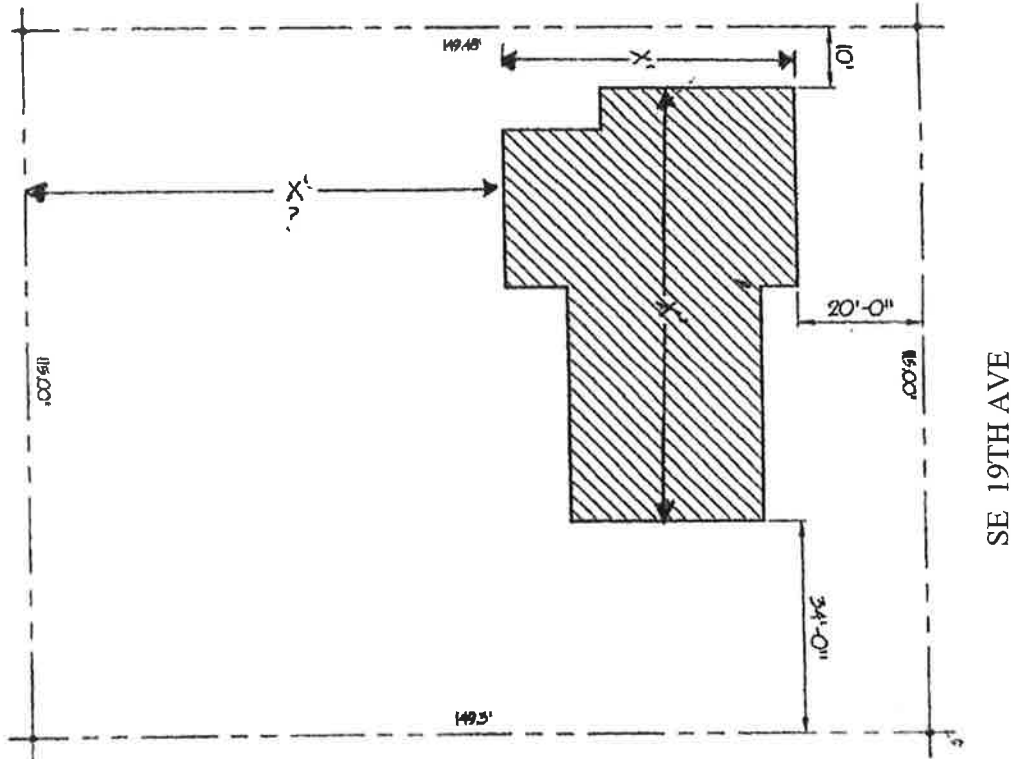
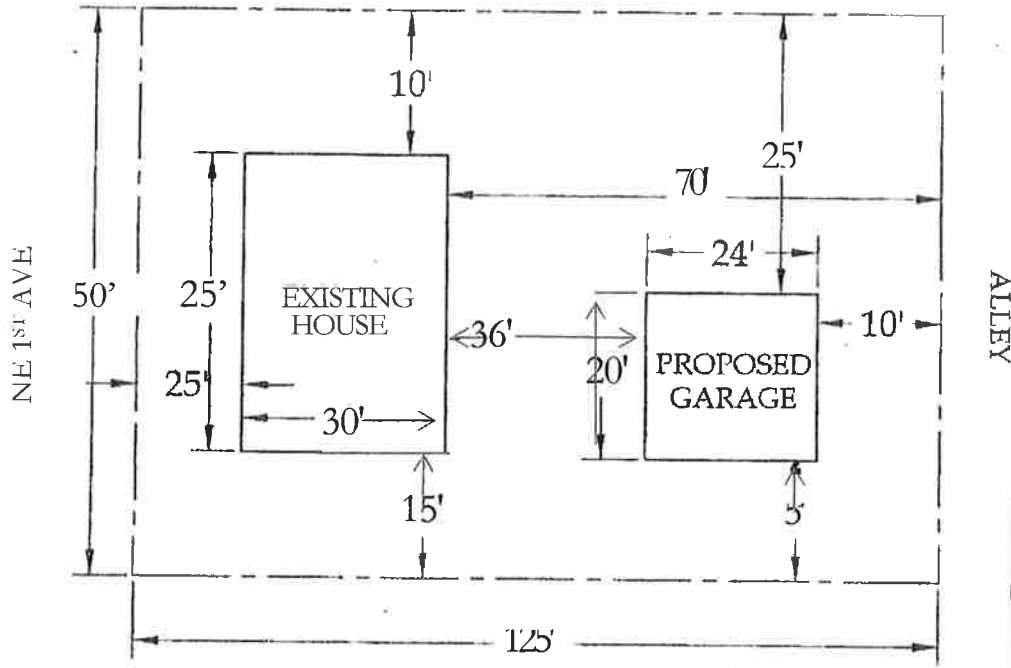
For site plan EXAMPLES and a BLANK TEMPLATE, see the following pages.



QUESTIONS? Contact the Building Department at 309-582-7241 ext 205 or jblasert@aledoil.org

SITE PLAN EXAMPLES

NE 1ST STREET

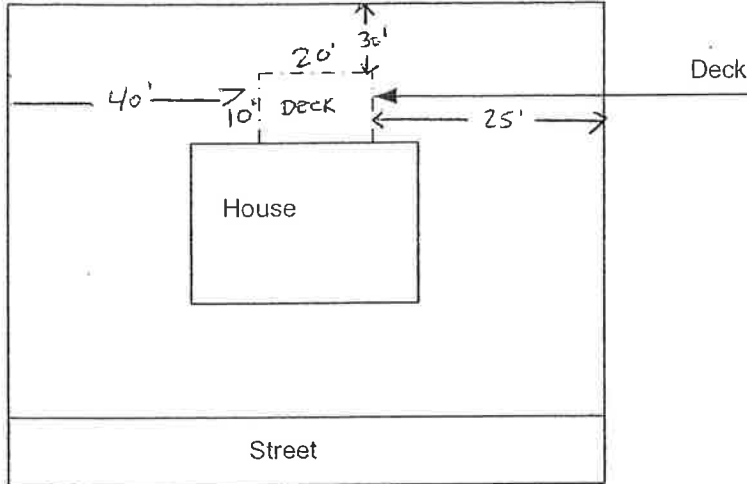


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City of Aledo
Code Administration Department
309-582-7241

Deck Requirements



Sample Site Plan

A site plan is required to be drawn on the permit application.

If the deck has a roof certain set back requirements will have to be maintained. Please inform staff if a roof is planned to be built. A sun-shade with or without lattice is considered a roof.

Certain areas are not allowed to be built on, such as easements. If you know of an easement or question the location please ask staff for assistance.

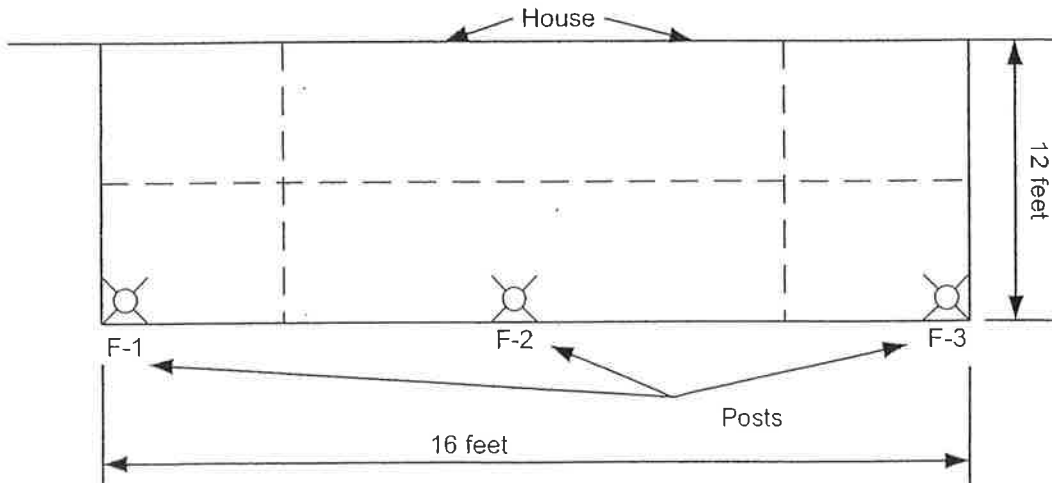
For Locates, Call JULIE
1-800-892-0123

Step 1

The size of your deck footings depend on the size of the deck. See chart below for details. Refer to drawing below chart to calculate the footing size for each post.

Pressure of footing	Minimum diameter of footing
500 lbs or less	8 inch
1000 lbs or less	10 inch
1500 lbs or less	12 inch
2000 lbs or less	14 inch
2500 lbs or less	16 inch

To calculate the amount of pressure on footings see the following example.





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Code Administration Department
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Deck Requirements

Example Footing Calculation.

Based on a 12 foot by 16 foot deck the footing sizes would be as follows;

F-1 and F-3 = Take half the distance from edge of deck to the house (which is 6 feet) times half the distance to **each end footing** (which is 4 feet) times 50 lbs per square foot.

$6 \times 4 \times 50 = 1200$ Lbs. A 12 inch diameter footing would be required per the Chart at the beginning of step one.

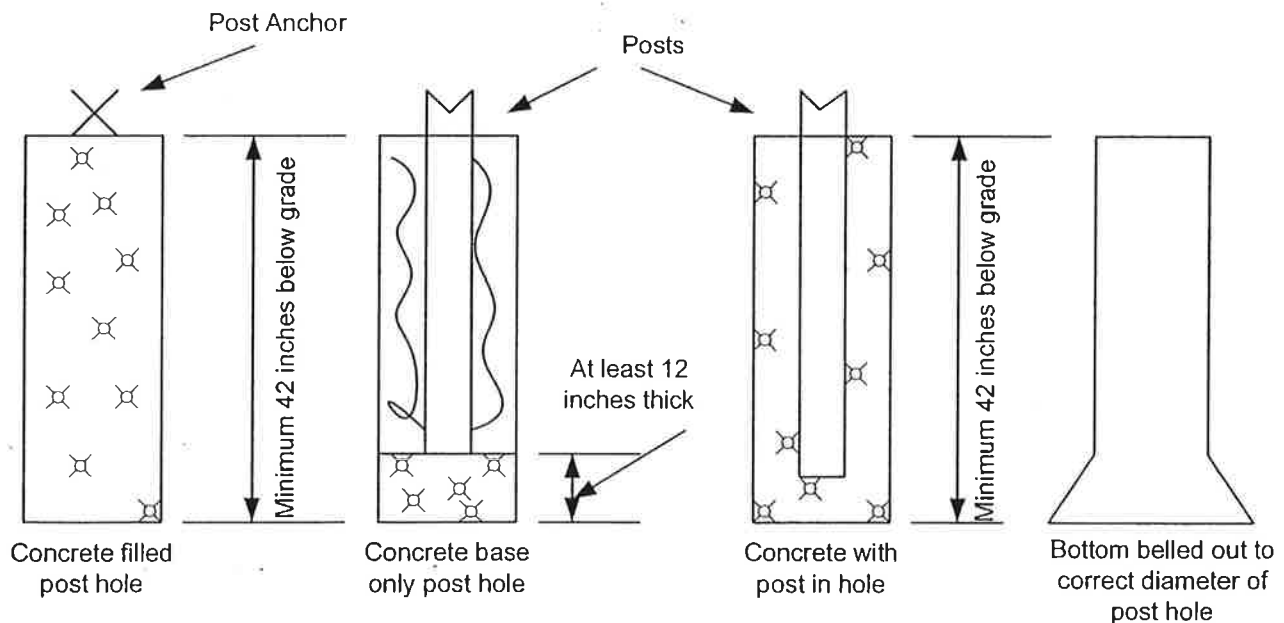
F-2 = Take half the distance from edge of deck to the house (which is 6 feet) times half the distance to the **middle footing** (F-1 and F-2 which is 8 foot total) time 50 lbs per square foot.

$6 \times 8 \times 50 = 2400$ Lbs. A 16 inch diameter footing would be required per the Chart at the beginning of step one.

Typically the two (2) end post will be the same size. The farther away the posts are apart from each other the bigger the footings will end up being. This process is very easy to do just by following the example provided in Step 1.

Step 2

Below are several acceptable ways in which footings can be constructed. Any one of these methods will meet the minimum requirements.



The footings are based on 2000 lbs soil bearing capacity and 50 lbs per square foot load. Footings must be a minimum of 42 inches into the ground. If a post is going to extend into the earth or concrete it must be a minimum of 60 percent treated. This can be verified by looking at the tag attached to the post.



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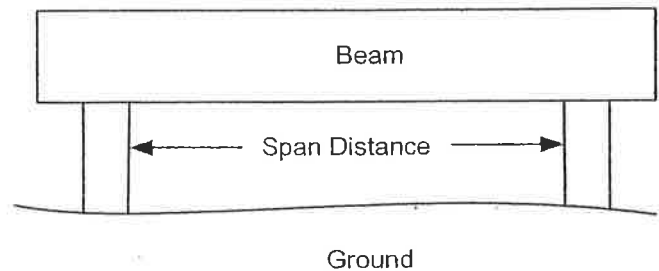
Deck Requirements

Step 3

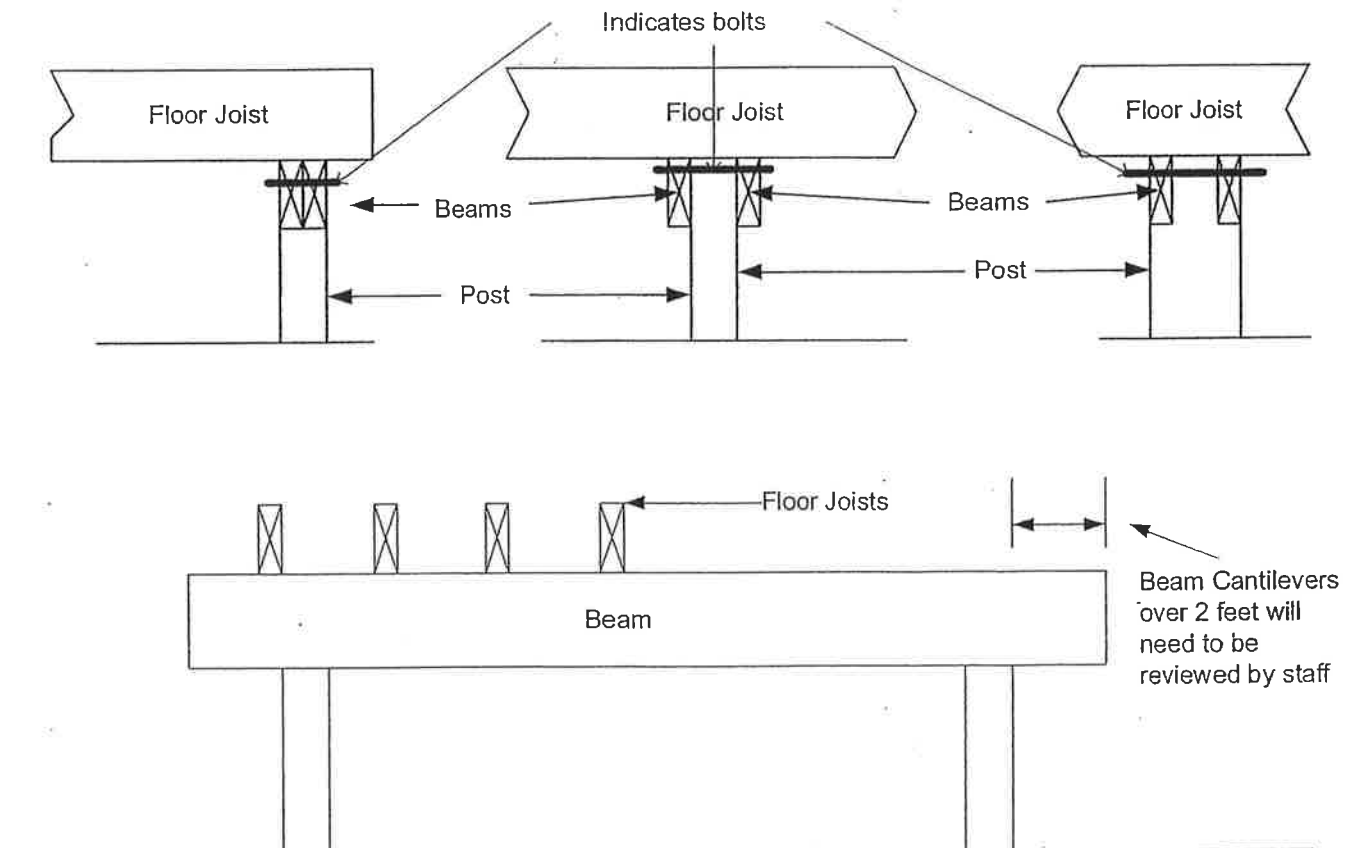
Having the correct beam size is critical in ensuring a safe supported deck. Listed below are allowable sizes of lumber for the beam based on the span distance from post to post.

If the distance between posts measure:

6 feet or less	2 2x6's can be used
8 feet or less	2 2x8's can be used
10 feet or less	2 2x10's can be used
12 feet or less	2 2x12's can be used



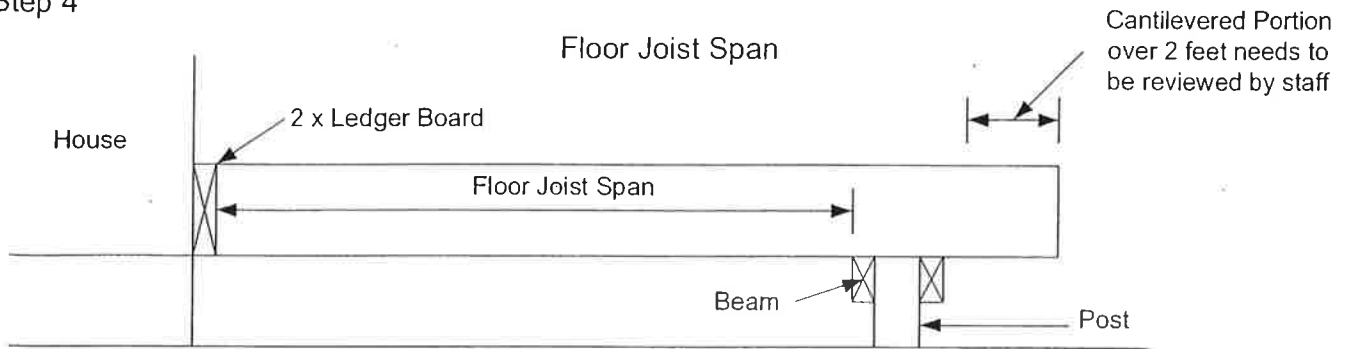
The connection of the beam to the post can be done several ways (see examples below). In all instances the beam can not be connected to the post by nails/screws alone. 1/2 inch diameter carriage bolts, lag screws or post beam connectors must be used. Check with your local hardware stores for proper types of post beam connectors, also with AC2 treated lumber, the connecting hardware has to be stainless steel or triple dipped galvanized.





Deck Requirements

Step 4



The maximum span for floor joists are listed below

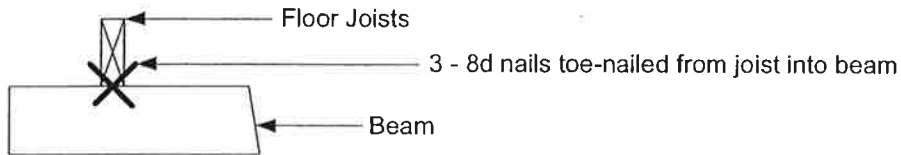
- 2x6 16 inches on center can span 10 feet
- 2x8 16 inches on center can span 12 feet
- 2x10 16 inches on center can span 16 feet

If there is no bearing load on the cantilevered portion of the joist then it may extend beyond the face of the beam three times the joist depth. This is the maximum cantilever, unless engineering documents are provided to this department for review.

Example - A 2x6 actual width is 5 ½ inches, 5 ½ x's 3 = 16 ½ inches. Therefore the joist can extend beyond the beam 16 ½ inches.

Depending on the type of lumber the floor joists may be able to span farther than noted above, without this information before hand, staff will not be able to answer any questions regarding this issue. Also if spacing the joists 24 inches on center than span distance will be less than noted above.

Step 5



The joists must be toe-nailed to the beam with 3-8d nails. This is to ensure that uplift and lateral movement does not occur. When purchasing fastening materials from the local lumberyard/hardware store you will want to ensure that they are corrosion resistant.

The deck can be attached to the structure or abutted to the house by providing a second beam to support the floor system where the deck and house meet. If choosing to have the deck supported by a beam rather than the house just follow the beam requirements as previously stated. (see picture below)

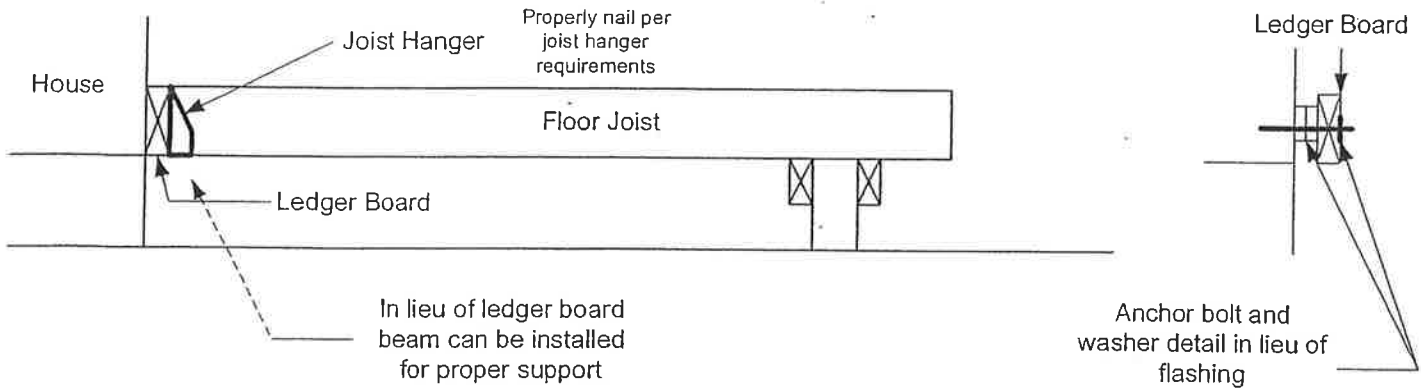
If connecting the deck to the house a ledger board must be installed. The ledger board is required to be lagged into the house by ½ diameter lags or bolts, four foot on center. When lagging or bolting it is necessary to penetrate the bolt or lag into actual structural wood material, relying on the sheathing installed on the side of the house is not sufficient.

If the siding is taken off for the placement of the ledger board flashing must be used to prevent water from penetrating the house. Flashing must be made of copper or material corrosion resistant to the treated lumber or a ¼ gap must be present between the lumber and flashing. Another option that can be used is attaching the ledger board directly to the house and placing several washers between the house siding and the back of the ledger board (see picture below). Inserting silicone into the bolt hole will seal it and prevent water from entering this location.



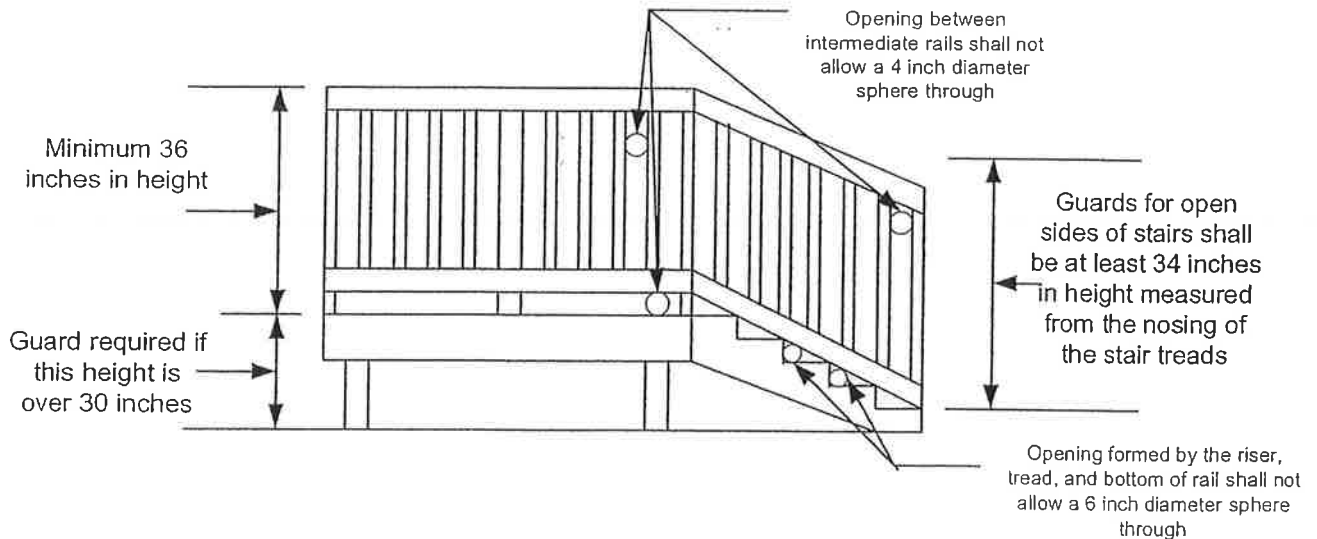
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Code Administration Department
309-582-7241

Deck Requirements



Step 6

Guards/Guardrails. When the platform for balconies, porches, decks or raised floor surfaces is located more than 30 inches above the adjoining grade/surface (concrete slab, ground, etc.) a guard will need to be installed around the perimeter of the platform. Guards shall be installed to withstand a single concentrated load of 200 pounds in any direction along the top. **The intermediate rails shall not be constructed horizontally as to create a ladder effect.**



Step 7

Stairs. The maximum riser height shall not exceed 7 ¾ inches. The minimum run of a tread shall be at least 10 inches. The difference between the smallest to largest riser height and between the smallest and largest tread run shall not exceed 3/8 of an inch. The minimum stair width shall be at least 36 inches. The deck shall not be more than 8 inches in height from the top of the threshold of a door, provided that the door other than screen/storm door does not swing over the deck/landing

If the treads are less than 11 inches in depth, a nosing shall be on the tread. The nosing shall protrude at least ¼ of an inch but no more than 1 ¼ inch. The nosing shall not be beveled more than ½ inch, and have a radius curvature of no more than 9/16 of an inch. Open risers are permitted as long as the opening between treads does not allow a sphere of 4 inches in diameter to pass through (same requirement as the intermediate rails on guards). If the total rise of the stair does not exceed 30 inches in height, open risers are allowed.

By Redwood Kardon, Michael Casey & Douglas Hansen

Illustrations & Layout by Paddy Morrissey

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Code Check is a field inspection guide and not a formal code interpretation. The ones who decide what is "to code" are the authorities administering the building permit process in your area. Contact your building department early and often during the course of a construction project.

The current editions of the model codes have a 2003 cover date (2002 for electrical), though some jurisdictions take years to adopt these current codes. For the broadest geographical application of this book, notations to the significant changes between the current and former codes are summarized on the inside

Abbreviations

ABS	= acrylonitrile-butadiene-styrene plastic pipe
AHJ	= authority having jurisdiction
Appl	= appliance
ASTM	= American Society for Testing and Materials
AWG	= American Wire Gauge
B (vent)	= double-walled round gas appliance flue
Bldg	= building
BO	= building official
Btu	= British thermal unit
BUR	= built-up roofing
BW	= double-walled oval gas appliance flue
CPVC	= chlorinated polyvinyl chloride plastic pipe
CSST	= corrugated stainless-steel tubing (gas pipe)
Cu	= copper
CWV	= combination waste and vent
DFU	= drainage fixture unit(s)
Diam	= diameter

BUILDING

11

Stairs & Decks

General

03 IRC 97 UBC

- Illumination req'd for all stairways [303.6] {210.70A2⁵}
- Control for light req'd at top and bottom of stairs (if 6 or more risers) [303.6.1] {210.70A2⁵}
- Headroom min 6ft 8in F19 [311.5.2] {1003.3.3.4}
- Min stairway width above handrail 36in [311.5.1] {1003.3.3.2}
- Handrail may project into req'd width 4½in {3½in} F18 [311.5.1] {1003.3.3.2}
- Max riser height 7¾in {8in} F18 [311.5.3.1] {1003.3.3.3x}
- Min tread depth 10in {9in} F18 [311.5.3.2] {1003.3.3.3x}
- Max difference between tallest & shortest riser or largest & shortest tread run ¾in [311.5.3.1,2] {1003.3.3.3}
- Winder tread min 6in & develop req'd length at ≤12in from inside of winder F17 [311.5.3.2] {1003.3.3.8.2}
- Nosing min ¼in max 1½in req'd on stairs w/solid risers EXC F18 [311.5.3.3] {n/a}
- Nosing not req'd if tread depth ≥11in [311.5.3.3x] {n/a}

Fig. 17 • Winding Stairs

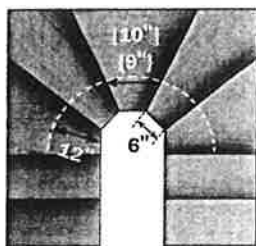
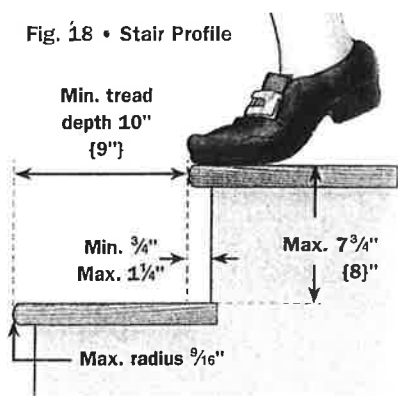


Fig. 18 • Stair Profile



Handrails

- Grippable handrail req'd if 4 or more risers [311.5.6]¹⁵ {1003.3.3.6}
- Handrail height min 34in max 38in F19 [311.5.6.1] {1003.3.3.6}
- Grips min 1½in max 2in circular cross section F20 [311.5.6.3]¹⁶ {1003.3.3.6}
- Min 1½in between wall & handrail F20 [311.5.6.2] {1003.3.3.6}
- Ends req'd to return to wall or newel post [311.5.6.2] {1003.3.3.6}
- Handrail on open side of stairs must not allow 4in sphere to pass through [312.2] {509.3}
- Openings between treads of open risers <4in [311.5.3.3] {n/a}
- Triangular space between riser, tread & rail must not allow 6in sphere to pass through F19 [312.2X1] {509.3X2}

Fig. 19

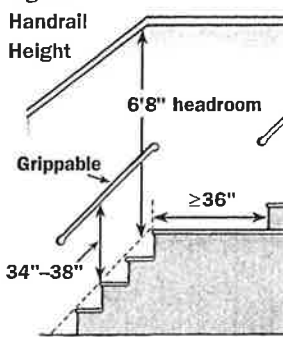
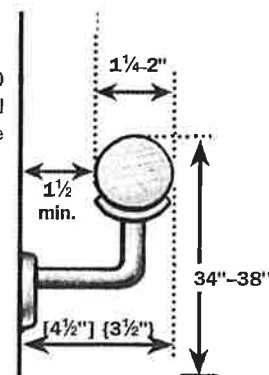


Fig. 20
Handrail
Size



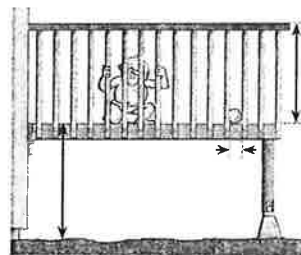
Guardrails

03 IRC 97 UBC

- Req'd for any walkoff >30in above floor or grade F21 [312.1] {509.1}
- Min height 36in (34in if guard is stair handrail) . . F21 [312.1] {509.2X1}
- Opening must not allow 4in sphere to pass through F21 [312.2] {509.3}
- Guards req'd on open sides of stairs if total rise above floor or grade >30in [312.1] {509.1}

Fig. 21
Guardrails

Guardrail req'd when deck surface to ground >30"



Min. height: 36" for 1- & 2-family dwellings

Max. opening such that a 4" sphere cannot pass through

Table 13 • Special Inspection Reports

S.I. reports due before final inspection	Required	Received
Concrete >2,500 psi		
Pilings, drilled piers & caissons		
Structural masonry		
Bolts in concrete		
Structural welding/steel moment frames		
Glu-Lam certificate		
Shear nailing <4" o.c.		
High-strength bolting		
Prestressed concrete: rebar & tendons		
EIFS		
Special case:		

10 IMPORTANT TIPS to remember for backyard safety



Pool & Deck Safety

- 1 Make sure all gates in the isolation fence for your pool are self-closing and self-latching.
- 2 Remove all chairs, tables, large toys or other objects that would allow a child to climb up to reach the gate latch or enable the child to climb over the pool isolation fence.
- 3 Reaching and throwing aids like poles should be kept on both sides of the pool. These items should remain stationary and not be misplaced through play activities.
- 4 All pool and hot tub drains (suction outlets) must have a cover or gate that meets industry standards for suction fittings marked with "VGB2008" indicating compliance with the latest codes.
- 5 Install a pool alarm to detect accidental or unauthorized entrance into the water. While the alarm provides an immediate warning, it does not substitute for the fences, door alarms and safety covers required by the code.
- 6 Install either an automatic or manually operated, approved safety cover to completely block access to water in the pool, spa or hot tub. Never allow anyone to stand or play on a pool cover.
- 7 Check for warning signs for an unsafe deck, including loose or wobbly railings or support beams, missing or loose screws that connect a deck to the house, corrosion, rot and cracks.

Grill Safety

- 8 Place the barbeque grill away from siding, deck railings and out from under eaves and overhanging branches. It is also unsafe to use grills in a garage, porch or enclosed area that could trap carbon monoxide. Never grill on top of anything that can catch on fire.
- 9 When grilling, have a fire extinguisher, a garden hose or at least 4 gallons of water close by in case of a fire.
- 10 Keep children away from fires and grills. Establish a safety zone around the grill and instruct the children to remain outside of the zone. A chalk line works great for this purpose. Never leave the grill unattended.

Source: ICC <http://www.iccsafe.org/safety/Pages/Backyard.aspx> , ABC Pool Safety (www.abcpoolsafety.org/), NYC Fire Dept. (www.nyc.gov/html/fdny/html/safety/barbeque.shtml), NFPA www.commerce.state.wi.us/SB/docs/SB-FirePreventionProgramSummerGrillArt.pdf