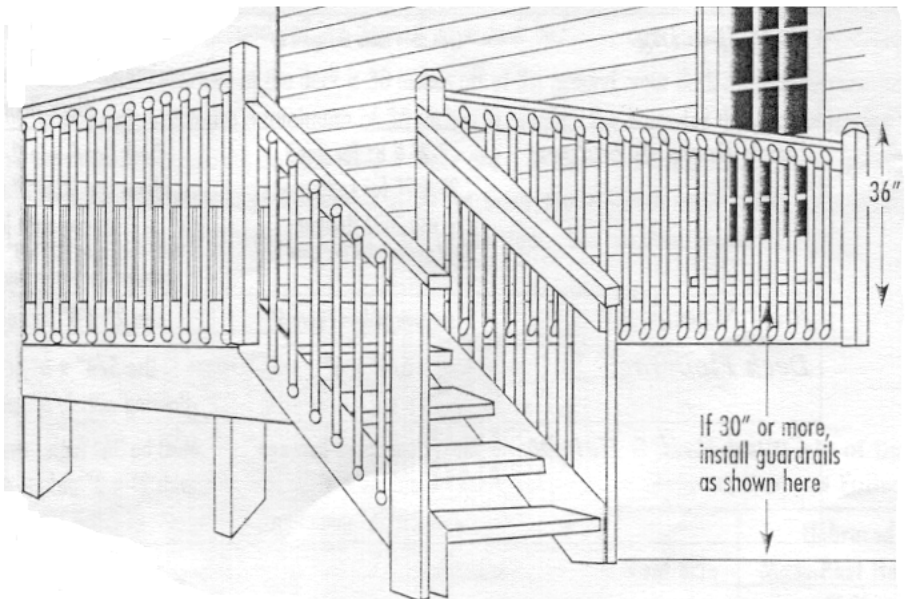


## Stairs

- All steps should be at least 36" in width. Step treads must be at least 9" deep and have a 3/4 in. to 1-1/4 in. nosing. The maximum riser height is 8-1/4 in., and all risers (except the bottom step) must be consistent to within 3/8".
- For steps that are higher than 30" above grade, the risers should be enclosed such that a 4" ball can not pass through.

## Handrails & Guardrails

- Handrails are located on stairs and are required when there are 4 or more steps. They should be installed between 30-38 inches above the nosing of the step.
- Guardrails are located along the edges of a deck and are required when the height is greater than 30 in. (measured from the ground to the top of the floor). Guardrails must be at least 36 in. high and have no more than 4 in. between pickets.



## Guidelines For Building a Deck



Randolph County  
Department of Building Inspections

## PERMITS

The first step in building a deck should be to obtain the proper zoning and building permits. The building inspector is then called out to look at the following items:

- Footing (Before any concrete is poured)
- Framing
- Final (The Framing and Final can normally be inspected at the same time, after the deck is completed).

## DECK ATTACHMENT AND FLASHING

Attached decks must be connected to the rim joist of the house with 5/8" galvanized through bolts (see table below). Any siding should be removed and non-aluminum flashing must be installed between the deck band and the rim joist of the house (see diagram below).

### All Structures except Brick Veneer

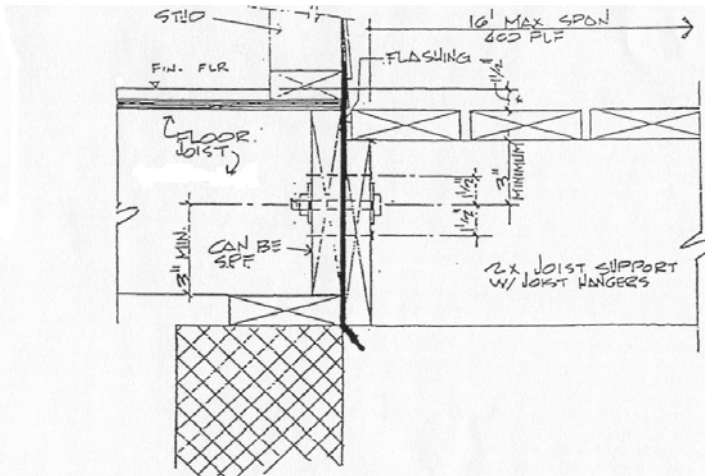
Fasteners	8' Max. Joist Span	16' Max. Joist Span
5/8" Hot Dipped Galv. Bolts with Washers* and 12d Common Hot Dipped Gal. Nails**	1 @ 3'6" o.c. and 2 @ 8" o.c.	1 @ 1'8" o.c. and 3 @ 6" o.c.

### Brick Veneer Structures

Fasteners	8' Max. Joist Span	16' Max. Joist Span
5/8" Hot Dipped Galv. Bolts with Washers*	1 @ 2'4" o.c.	1 @ 1'4" o.c.

\*Minimum edge distance for bolts is 2 1/2 inches

\*\*Nails must penetrate the supporting structure band a minimum of 1 1/2 inches.



## FOOTINGS

All deck posts must be supported by a footing, which is dug down at least 12" into undisturbed soil. The average footing size is 12" x 12" and 6" thick (A larger footing may be required if your deck has long girder spans).

## FRAMING

### -Deck Floor Joist

All lumber used to frame a deck is required to be pressure treated, and all nails and bolts are required to be galvanized. Deck joists must be sized to carry 40 lbs per sq ft of live load. The following table shows the maximum joist span of No. 2 grade Southern Yellow Pine (SYP).

Joist Size	Spaced @	Will Span	Joist Size	Spaced @	Will Span
2 x 6	12" OC	10' 9"	2 x 10	12" OC	18'
	16" OC	9' 9"		16" OC	16' 1"
	24" OC	8' 6"		24" OC	13' 1"
2 x 8	12" OC	14' 2"	2 x 12	12" OC	21' 9"
	16" OC	12' 10"		16" OC	18' 10"
	24" OC	11'		24" OC	15' 4"

### -Deck Beams and Girders

Deck girders are normally made up of doubled 2 x 8's or 2 x 10's. Exterior girders can typically span about 6 1/2 ft for (2) 2 x 8's and about 8 ft for (2) 2 x 10's. Interior girders generally carry more load and are limited to shorter spans. Girders should bear directly on posts or be connected to the side of posts with (2) 5/8 inch galvanized bolts.

### -Deck Bracing

Any deck which is over 4 ft (from top of footing to top of floor) requires bracing for lateral support. All freestanding decks need bracing. Bracing is normally done with 4 x 4 knee braces which are connected with 5/8" galvanized bolts (1/3 down post).