

## Deck Handout

Campbell County & Municipal  
Planning & Zoning Commission  
1098 Monmouth Street, Suite 343  
Newport, Kentucky 41071

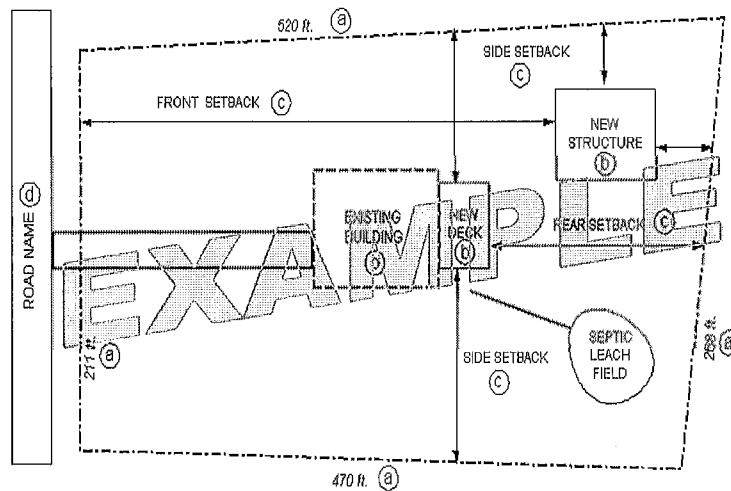
Phone: (859) 292-3880

Fax: (859) 547-1868

[www.campbellcountyky.org](http://www.campbellcountyky.org)

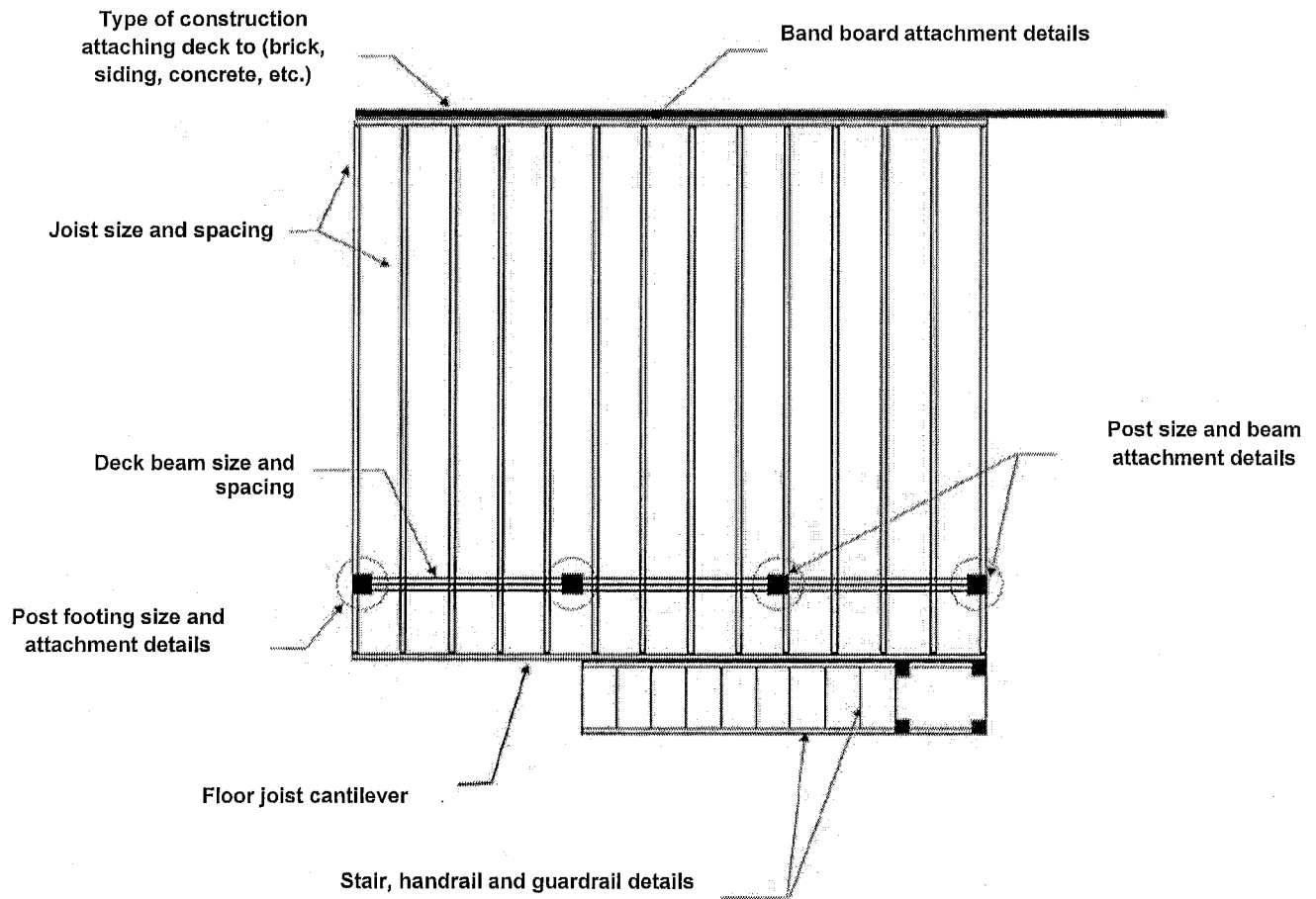
Complete a Miscellaneous Building Permit Application attaching the following items:

1. **Building Plans:** Attach two (2) sets of building plans for the deck being constructed [**three (3) sets if located within the City of Alexandria**]. Plan sets can be hand drawn, but must be readable. Your plan must include any footer system, attachment to home, etc. Approved plans must be kept onsite during construction. Alexandria projects must also include an additional file copy not to exceed 11x17 size.
2. **Site Plans:** Attach two (2) copies of a site plan [**three (3) sets if located within the City of Alexandria**]. Alexandria projects must also include a file copy not to exceed 11x17 size. The site plan can be hand drawn, but must include: shape and dimensions of the lot; location and dimensions of existing buildings; setbacks (front, rear, side) from structure to each property line or right-of-way; proposed buildings and/or additions; sidewalk; driveway; retaining wall; location and names of public or private roads; access easements of record; location of all utilities and septic systems; and all applicable provisions for erosion control and surface water drainage.



3. **Affidavit of Assurance and Occupational Tax License:** A notarized Affidavit of Assurance to be completed by the person/entity performing the work with their contractor's Occupational Tax License number for Campbell County and the City where the project is located. If the work is to be constructed by the landowner, an occupational license is not required. However, a notarized Affidavit of Assurance is still required.
4. **Subcontractor List:** A complete list (name and addresses) of all contractors and subcontractors.

**Information to Include on Your Plans**



**All lumber exposed to weather must be pressure treated and all nails, bolts, screws and joist hangers must be approved for the type of lumber being used.**

**Deck Size:** \_\_\_\_\_ **Floor Joist Size:** \_\_\_\_\_ **Spans:** \_\_\_\_\_

**Spacing:** \_\_\_\_\_ **inches on center** **Floor Joist Cantilevers:** \_\_\_\_\_  
Extension Past Beam

**Beam Size:** \_\_\_\_\_ **Beam Span:** \_\_\_\_\_  
Number of members [ie: 2-2X10] Distance Between Posts

**Post Size:** \_\_\_\_\_ **Post Height:** \_\_\_\_\_

**Footing Size:** \_\_\_\_\_ **Footing Depth:** \_\_\_\_\_

**Band Board Size:** \_\_\_\_\_ **Band Board Bolt Size:** \_\_\_\_\_ **Bolt Spacing:** \_\_\_\_\_

**Band board must be THROUGH bolted to the primary structure!  
 Sleeve type anchors may only be used in concrete walls.**

**Will this deck have a hot tub or any other special feature:** \_\_\_\_\_

DECK JOIST SPAN AND SPACING CHART					
Size	Spacing in inches on center	Pressure Treated Southern Yellow Pine Visually Graded			
		SS	No. 1	No. 2	No. 3
2 X 6	12	10-9	10-7	10-4	9-4
	16	9-9	9-7	9-5	8-1
	19.2	9-0	9-0	8-9	7-4
	24	8-7	8-5	7-10	6-7
2 X 8	12	14-2	13-11	13-8	11-11
	16	12-11	12-8	12-5	10-3
	19.2	12-2	11-11	11-4	9-5
	24	11-3	11-1	10-2	8-5
2 X 10	12	18-1	17-9	17-5	14-0
	16	16-5	16-2	15-10	12-2
	19.2	15-6	15-1	14-8	11-1
	24	14-4	13-6	13-1	9-11
2 X 12	12	22-0	21-7	21-2	16-8
	16	20-0	19-8	18-10	14-6
	19.2	18-10	17-11	17-2	13-2
	24	17-6	16-1	15-5	11-10

DECK BEAM SIZE AND SPAN CHART				
Beam Size	Joist Span			
	6'	8'	10'	12'
2-2X6	8'	7'	6'	5'
2-2X8	10'	9'	8'	7'
2-2X10	12'	11'	10'	9'
2-2X12	14'	13'	12'	11'

How to Use the Deck Beam Size and Span Chart:

1. Find the span of your deck joists.
2. Locate the size of beam you intend to use.
3. Locate the point on the chart where your joist span and beam size intersect. This will give you the maximum span allowed for your posts.

[Example: Using a 12' joist span and a 2 X 12 beam, your maximum space between posts would be 11' feet.]

RECOMMENDED POST SIZE							
Beam Size	Deck Height						
	4'	6'	8'	10'	12'	14'	16'
2-2X6	4 X 4	4 X 4	4 X 6	4 X 6	6 X 6	6 X 6	6 X 6
2-2X8	4 X 4	4 X 6	4 X 6	6 X 6	6 X 6	6 X 6	6 X 6
2-2X10	4 X 6	4 X 6	6 X 6	6 X 6	6 X 6	6 X 6	6 X 6

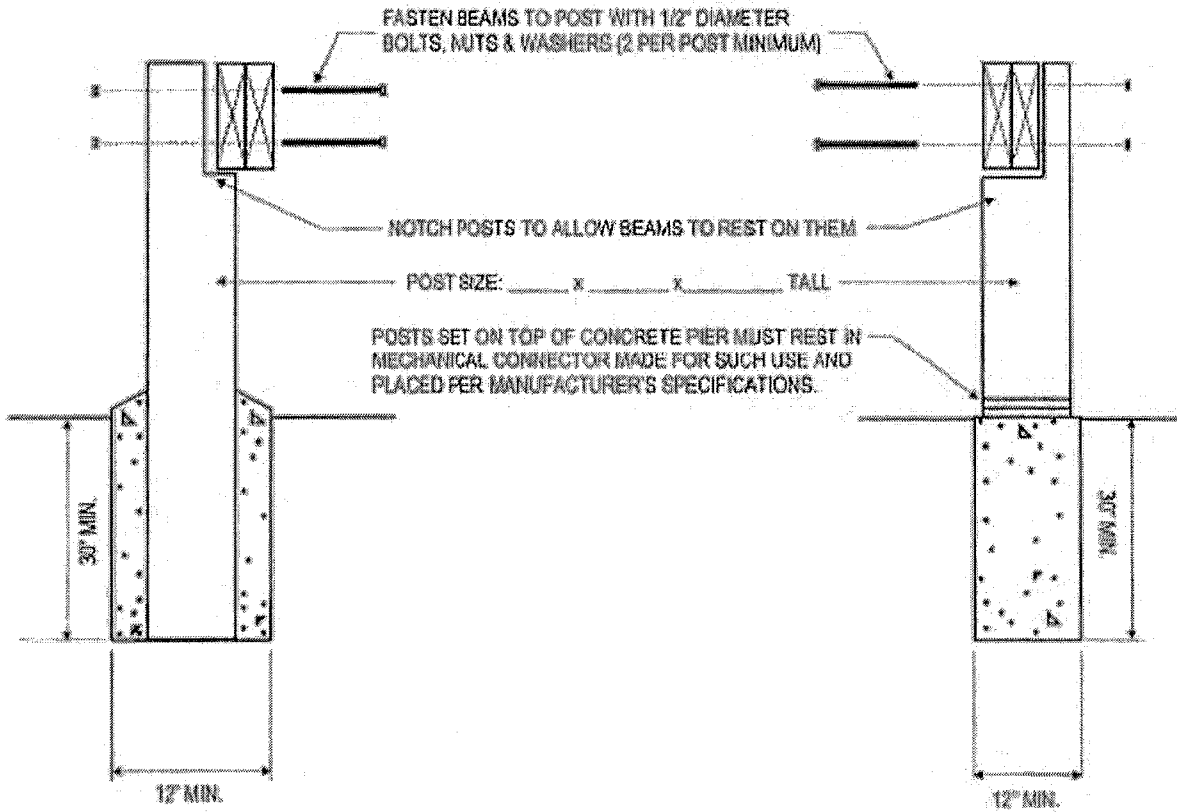
How to Use the Recommended Post Size Chart:

1. Find the size of your deck joists.
2. Locate the height of your deck.
3. Locate the point on the chart where your joist size and deck height intersect. This will give you the maximum size post you can use.

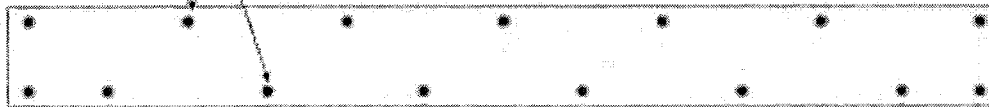
[Example: Using a 2 X 8 joist and a deck height of 10' feet, your minimum post size would be 6 X 6.]

NOTE: Fasteners (screws, nails, bolts, hangers, etc.) for pressure treated wood must be of the following: hot dipped galvanized steel, stainless steel, or as approved by the manufacturer's requirements.

# Post Beam and Footing Details



BEAMS MUST BE FASTENED TOGETHER WITH TWO ROWS OF 10D NAILS AT 32" ON CENTER. PLACE ONE ROW IN THE TOP 1/3RD OF THE BEAM AND THE OTHER IN THE BOTTOM 1/3RD AND STAGGER THE NAILS OF EACH ROW.



## Deck Band Board Attachments 2013 Kentucky Residential Code (KRC)

**R507.2.1 Placement of lag screws or bolts in deck ledgers.** The lag screws or bolts shall be placed 2 inches (51mm) in from the bottom or top of the deck ledgers and between 2 and 5 inches (51 and 127 mm) in from the ends. The lag screws or bolts shall be staggered from the top to the bottom along the horizontal run of the deck ledger.

**R507.2.2 Alternate deck ledger connections.** Deck ledger connections not conforming to Table R507.2 shall be designed in accordance with accepted engineering practice. Girders supporting deck joists shall not be supported on deck ledgers or band joists. Deck ledgers shall not be supported on stone or masonry veneer unless specifically designed by a design professional.

Table R507.2							
FASTENER SPACING FOR A SOUTHERN PINE OR HEM-FIR DECK LEDGER AND A 2-INCH-NOMINAL SOLID-SAWN SPRUCE-PINE-FIR BAND JOIST <sup>c,f,g</sup>							
(Deck live load = 40 psf, Deck dead load = 10 psf)							
Joist Span	6 and less	6.1 to 8	8.1 to 10	10.1 to 12	12.1 to 14	14.1 to 16	16.1 to 18
Connection Details	On-center spacing of fasteners <sup>d</sup>						
½-inch diameter lag screw with 15/32 inch maximum sheathing <sup>a</sup>	30	23	18	15	13	11	10
½-inch diameter bolt with 15/32 inch maximum sheathing	36	36	34	29	24	21	19
½-inch diameter bolt with 15/32 inch maximum sheathing with ½ inch stacked washers <sup>b</sup>	36	36	29	24	21	18	16

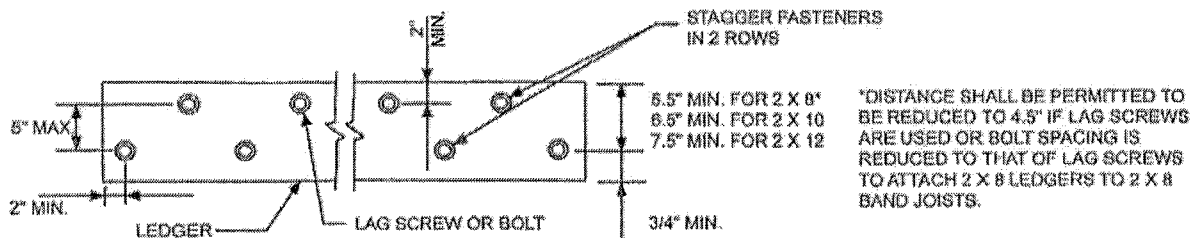
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm; 1 pound per square foot = 0.0479kPa.

- a. The tip of the lag screw shall fully extend beyond the inside face of the band joist.
- b. The maximum gap between the face of the ledger board and face of the wall sheathing shall be ½ inch.
- c. Ledgers shall be flashed to prevent water from contacting the house band joist.
- d. Lag screws and bolts shall be staggered in accordance with Section R507.2.1.
- e. Deck ledger shall be minimum 2 X 8 pressure-preservative-treated No. 2 grade lumber, or other approved materials as established by standard engineering practice.
- f. When solid-sawn pressure-preservative-treated deck ledgers are attached to a minimum 1-inch-thick engineered wood product (structural composite lumber, laminated veneer lumber or wood structural panel band joist), the ledger attachment shall be designed in accordance with accepted engineering practice.
- g. A minimum 1 X 9 ½ Douglas Fir laminated veneer lumber rimboard shall be permitted in lieu of the 2-inch nominal band joist.
- h. Wood structural panel sheathing, gypsum board sheathing or foam sheathing not exceeding 1 inch in thickness shall be permitted. The maximum distance between the face of the ledger board and the face of the band joist shall be 1 inch.

Table R507.2.1				
PLACEMENT OF LAG SCREWS AND BOLTS IN DECK LEDGERS AND BAND JOIST				
Minimum End and Edge Distances and Spacing Between Rows				
	Top Edge	Bottom Edge	Ends	Row Spacing
Ledger <sup>a</sup>	2 inches <sup>d</sup>	¼ inch	2 inches <sup>b</sup>	1 5/8 inches <sup>b</sup>
Band Joist <sup>c</sup>	1/4 inch	2 inches	2 inches <sup>b</sup>	1 5/8 inches <sup>b</sup>

For SI: 1 inch = 25.4 mm

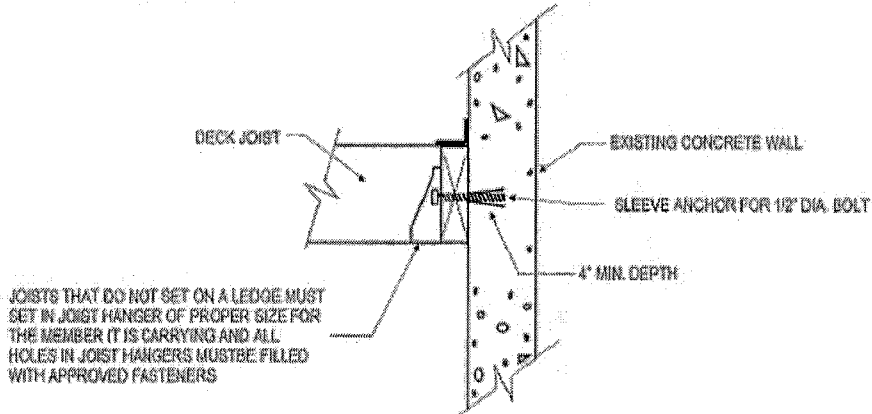
- a. Lag screws and bolts shall be staggered from the top to the bottom along the horizontal run of the deck ledger in accordance with Section R507.2.1(1).
- b. Maximum 5 inches.
- c. For engineered rim joists, the manufacturer's recommendations shall govern.
- d. The minimum distance from bottom row of lag screws or bolts to the top edge of the ledger shall be in accordance with Figure R507.2.1(1).



For SI: 1 inch = 25.4 mm.

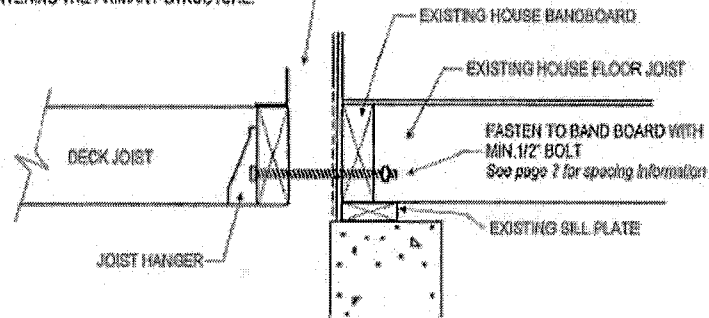
## ATTACHING BAND BOARD TO CONCRETE OR SOLID MASONRY WALL

INSTEAD OF BOLTING THROUGH CONC. WALL YOU MAY ATTACH BANDBOARD BY A SLEEVE ANCHOR MADE FOR A 1/2" DIA. BOLT AND SET A MIN. 4" INTO CONCRETE WALL.

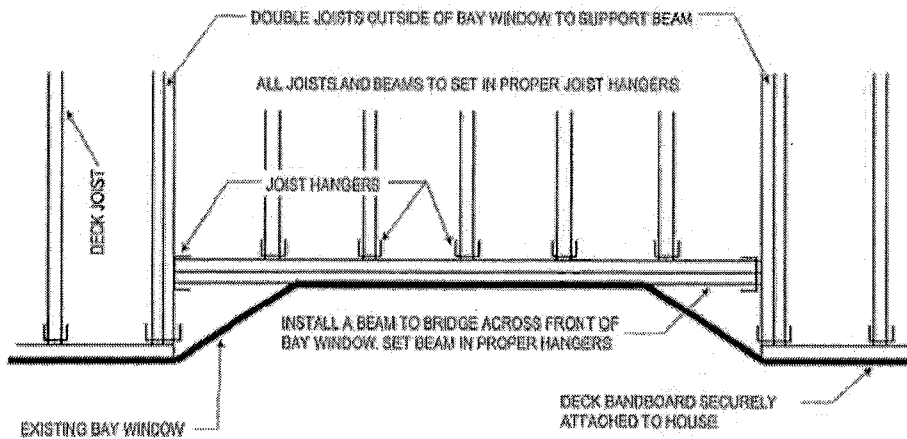


## ATTACHING BAND BOARD TO HOUSE WITH SIDING (VINYL OR OTHER)

REMOVE EXISTING SIDING TO POSITIVELY SECURE DECK BANDBOARD TO THE PRIMARY STRUCTURE.  
 PLACE FLASHING UNDER THE EXISTING SIDING AND OVER THE DECK BANDBOARD.  
 SEAL THE BANDBOARD CONNECTIONS TO PREVENT WATER FROM ENTERING THE PRIMARY STRUCTURE.



## ATTACHING DECK TO A BAY WINDOW

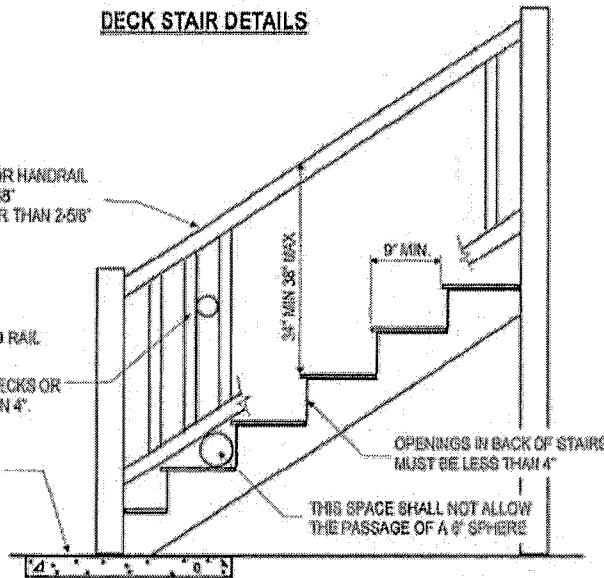


### DECK STAIR DETAILS

IF USING TOP OF GUARDRAIL FOR HANDRAIL THE HEIGHT CANNOT EXCEED 38"  
TOP OF RAIL CANNOT BE WIDER THAN 2-5/8"

ALL OPENINGS ON STAIR GUARD RAIL MUST BE LESS THAN 4 3/8"  
OPENINGS IN GUARD RAIL ON DECKS OR PLATFORMS MUST BE LESS THAN 4"

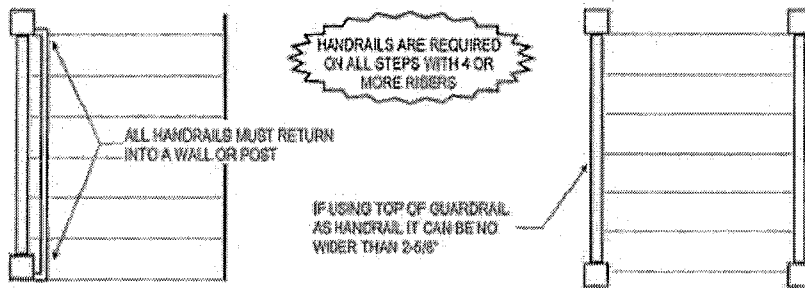
BOTTOM OF STAIR RISER MUST REST ON SOLID MATERIAL OR POST IN FOOTING



### STAIR AND HANDRAIL DETAILS

#### STAIR AND HANDRAIL NOTES

1. THE HANDRAIL MUST RUN FROM THE NOSE OF THE FIRST STEP TO THE NOSE OF THE LAST STEP.
2. THE HEIGHT OF THE HANDRAIL MUST BE WITHIN 34-38" MEASURED FROM THE END OF THE STEP.
3. THE STEPS MUST BE EQUAL IN SIZE AND HEIGHT AND NO TALLER THAN 8-1/4".
4. THE STEPS MUST BE A MINIMUM 9" DEEP AND NOSING MUST PROTRUDE OVER THE RISER A MINIMUM 3/4"



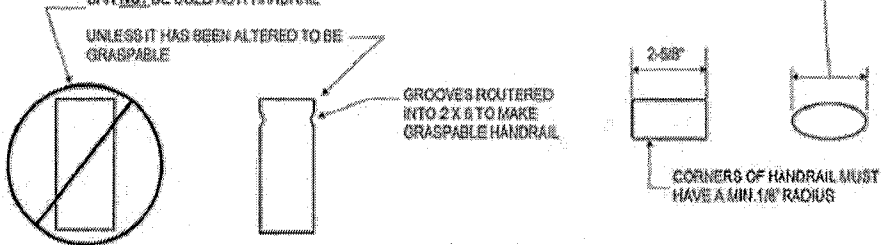
### GRASPABLE HANDRAILS

A 2x4, 2x6 OR 2x8 STOOD ON EDGE CAN NOT BE USED AS A HANDRAIL

UNLESS IT HAS BEEN ALTERED TO BE GRASPABLE

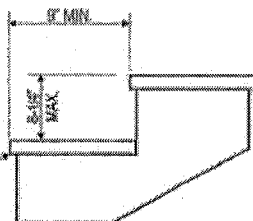
GROOVES ROUTED INTO 2x6 TO MAKE GRASPABLE HANDRAIL

MAX. HANDRAIL WIDTH FOR ANY STYLE RAIL IS 2-5/8"



### STAIR TREADS AND RISERS

ALL STAIRS MUST OVERHANG  
MIN. 3/4" MAX. 1-1/4"



THE OPENING AT THE BACK OF THE STEP MUST BE LESS THAN 4" OR MADE SOLID

