

City Of Manassas Park Department of Building Inspections

Deck Plan Submittal Requirements

During the planning stages, If your proposed deck location is near or above any utility equipment (i.e. electric/gas meter etc.) it is recommended that you contact the utility companies to obtain the required clearances from their equipment. It is also recommended that you have underground utilities located and marked as well. Doing so may eliminate problems from deck posts clearances to underground utility equipment as well, again contact the utility companies for their requirements. Not following their requirements may result in a serious hazardous condition, the removal of part or all of your deck or the expense to have utility equipment relocated at your expense.

1. Zoning approval, Provide 2 copies of the house location survey with the proposed deck drawn on the survey to scale.
2. Provide 2 sets of plans on a minimum of 8.5" X 11" paper drawn to scale with the owners name, address, lot number and subdivision on the plan.
Plans need to include top, side and cross sectional elevations (views of the proposed deck).
3. Plans also need to show the minimum structural details a listed below and meet the attached guidelines.
 - Footing detail, size depth etc.
 - Floor Joist size, spacing and span, lumber species & grade
 - Beam size, span between supports , lumber species & grade
 - Guardrail details
 - Stairway details

The fee for a building permit for a deck is \$45.45 regardless of size. Once the permit is issued it must be displayed where it will be visible from the front of your property.

Inspection Requirements

1. ***Footing** inspection, prior to placement of concrete.
2. **Framing** inspection (required if the deck will be below 4' from grade)
3. **Final Inspection**

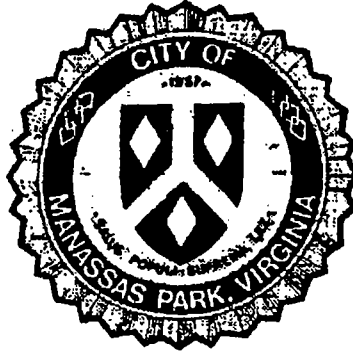
Inspection results will be left at the property for your review.

Inspections are performed Monday through Friday 9:00 AM to 4:00 PM. Call (703)-335-8815 or (703)-335-8818 to schedule an inspection. 24-hour notice is required; please have your permit number available when calling.

*Call "Miss utility" a minimum of 48 hours prior to excavating or digging to have your underground utilities marked. 1-800-257-7777.

If you should have any questions or require further information, Contact the Department of Building Inspections at (703)-335-8815 or (703)-335-8818.

City of Manassas Park
Typical deck details and requirements



Joist Refer to page 2 for joist span table for the maximum allowable lengths
Refer to page 3 for beam/joist connection requirements.

Ledger Board Refer to page 3 for wall connection requirements.
Refer to page 3 & 4 for beam/joist connection requirements.

Footings Refer to page 5 for anchoring, size and depth requirements.

Beams Refer to page 2 for span chart.
Refer to page 6 for post connection requirements
Refer to page 5 for joist connection requirements

Guardrails Refer to page 7 for requirements.

Stairs Refer to page 8 for requirements.

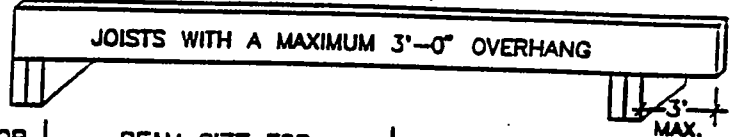
Bay windows &
Chimneys. Refer to page 9 for requirements.

revised 4\01\97

GENERAL NOTES

1. All lumber in contact with the ground shall be pressure treated .4 cca minimum. All other lumber shall be 0.4 cca minimum.
2. Field cuts, notches and drilled holes in pressure treated wood shall be retreated in the field.
3. All fasteners and nails shall be corrosion resistant.
4. Decks constructed according to this handout are not approved for future hot tub installations.
5. Deck benches should not be greater than 24" wide.
6. Decks less than 30" above grade are not required to have a guardrail (if one is installed it must meet structural requirements).
7. Contact Inspection Request Center, at 703- 335-8815 for inspection scheduling. A footing and final inspection will be required on all decks. A framing inspection will be required on decks less than 42" above grade prior to the installation of the decking.
8. DO NOT BUILD OVER UTILITY LINES OR ENCLOSED METERS. CALL MISS UTILITY, AT 1-800-257-7777, BEFORE YOU DIG.
9. DECKS ATTACHED TO A CANTILEVER MUST BE SUPPORTED INDEPENDENTLY OR PROVIDE A STAMPED & SIGNED DESIGN PROVIDED BY A VIRGINIA LICENSED ENGINEER OR ARCHITECT.

JOIST SPAN AND BEAM SIZE CHART
(JOIST SPAN IS THE LENGTH BETWEEN THE SUPPORTS)



JOIST SIZE	JOIST SPACING	JOIST SPAN FOR ALL CONDITIONS	BEAM SIZE FOR SIMPLE SPANS	BEAM SIZE FOR 2'-0" OVERHANGS	BEAM SIZE FOR 3'-0" OVERHANGS**
2X6	16"	9'-7"	2-2X8	3-2X8* or 2-2X10	3-2X8* or 2-2X10
2X6	24"	7'-10"	2-2X8	2-2X8	3-2X8* or 2-2X10
2X8	16"	12'-2"	2-2X8	3-2X8* or 2-2X10	3-2X8* or 2-2X10
2X8	24"	10'-1"	2-2X8	2-2X8	2-2X8
2X10	16"	14'-10"	2-2X10	2-2X10	3-2X10* or 2-2X12
2X10	24"	12'-1"	2-2X10	2-2X10	3-2X10* or 2-2X12
2X12	16"	18'-9"	2-2X12	2-2X12	3-2X12*
2X12	24"	15'-4"	2-2X12	2-2X12	3-2X12*

* 6X6 POSTS REQUIRED

** OVERHANGS GREATER THAN 2'-0" SHALL USE PROVISIONS FOR 3'-0" OVERHANGS.

BEAM SIZES BASED ON 8'-0" POST SPACING.

BEAMS MUST RUN CONTINUOUS BETWEEN SUPPORTS AND BEAM SPLICES OVER POSTS ONLY.

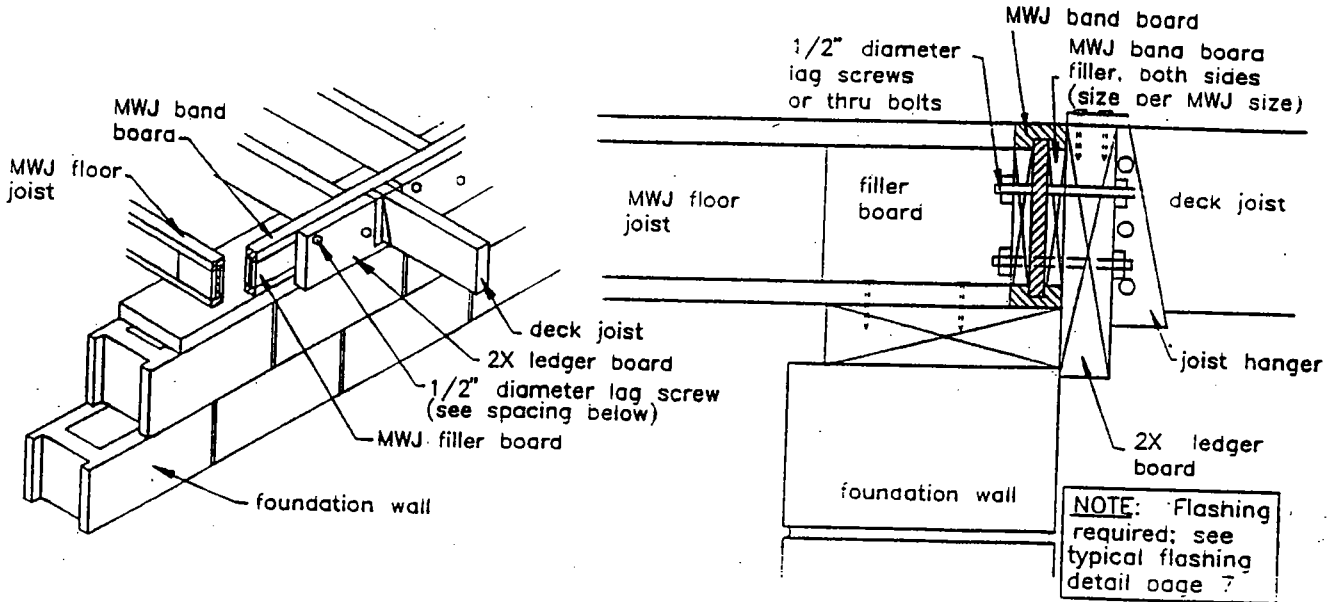
DECKS TO BE DESIGNED FOR A 40 PSF LIVE LOAD AND 10 PSF DEAD LOAD.

THE ABOVE SPAN TABLES ARE BASED ON SOUTHERN PINE #2, NORMAL LOADING DURATION AND WET SERVICE CONDITIONS.

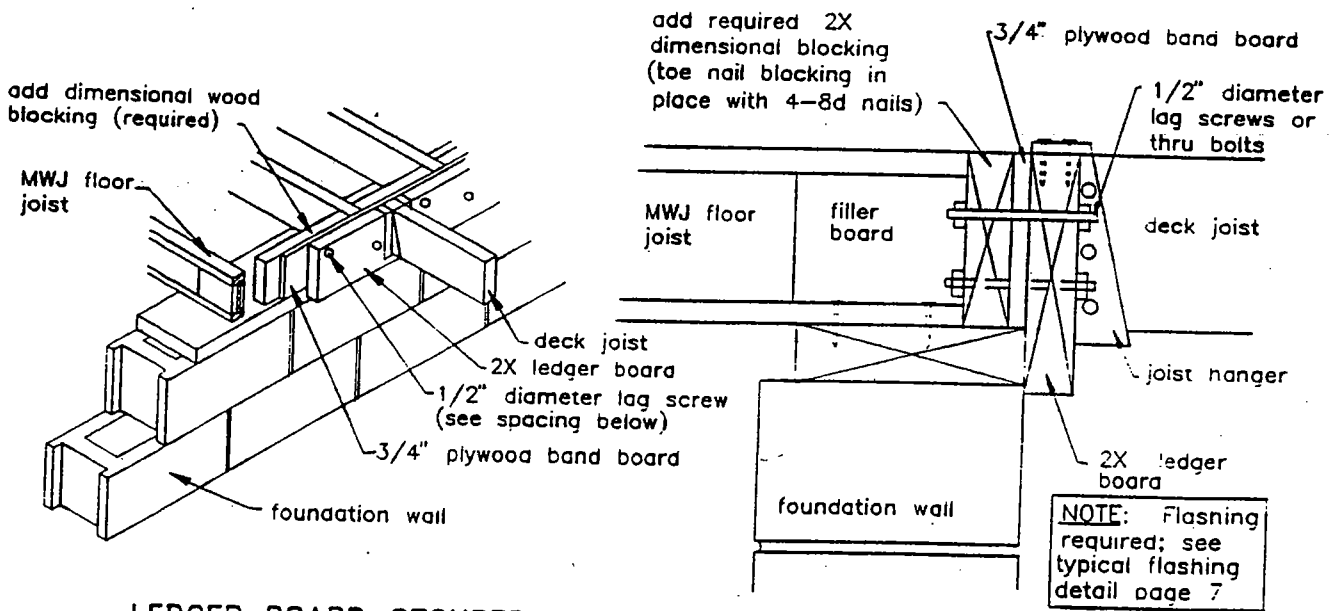
VARIATIONS OF THE SPAN TABLE MUST BE REVIEWED ON AN INDIVIDUAL BASIS AT THE TIME OF APPLICATION.

LEDGER BOARD ATTACHMENT DETAILS

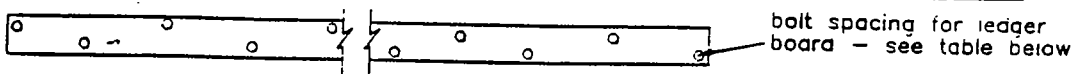
LEDGER BOARD ATTACHMENT MUST BE VERIFIED BY COUNTY INSPECTORS
(FOR DRAWINGS BELOW, THE ABBREVIATION "MWJ" DENOTES MANUFACTURED WOOD JOISTS)



LEDGER BOARD SECURED TO A MWJ BAND BOARD
(MWJ FILLER BOARD IS REQUIRED WHEN MWJ BAND BOARDS ARE PRESENT)



LEDGER BOARD SECURED TO DIMENSIONAL BLOCKING (REQUIRED)
NOTE THAT A PLYWOOD BAND BOARD IS PRESENT



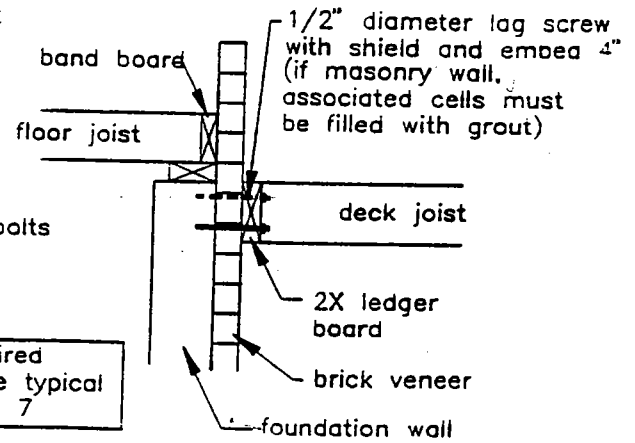
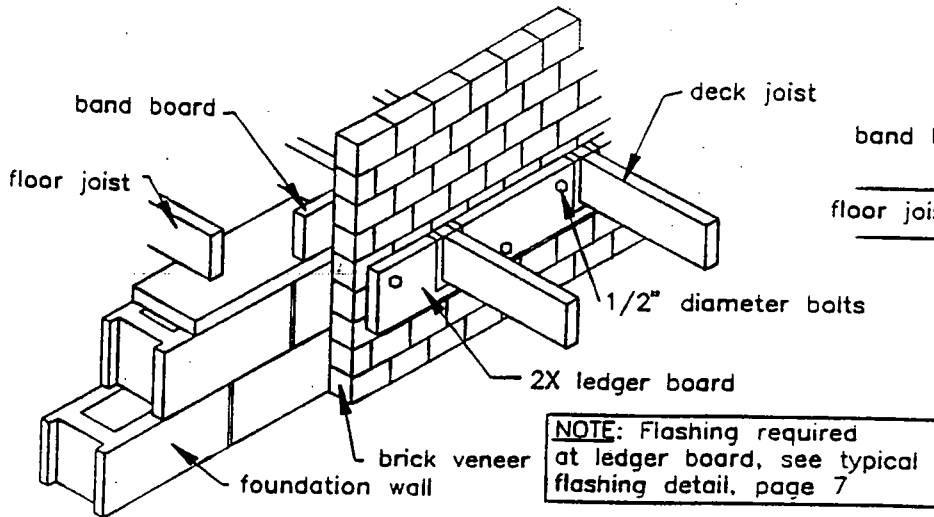
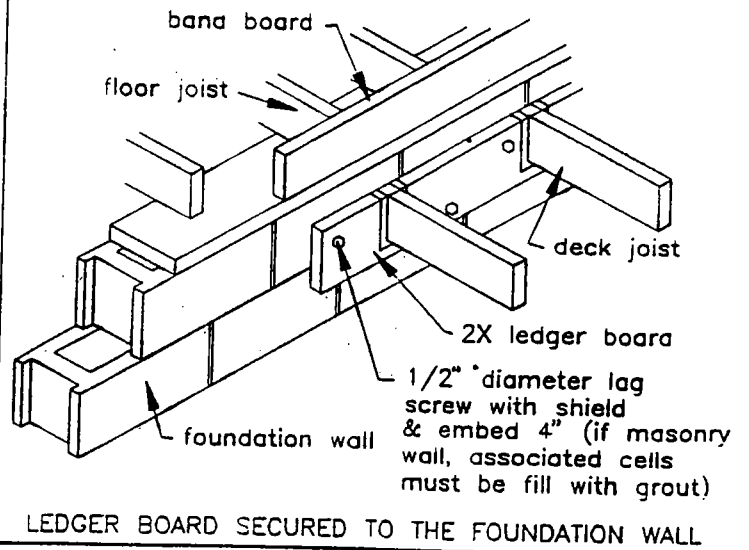
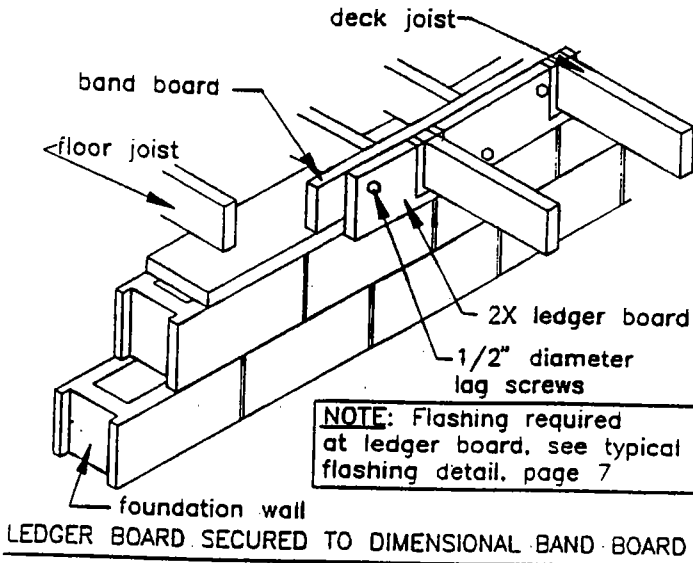
(USE LAG BOLTS ONLY WHEN CONNECTION MATERIAL HAS A 2" MINIMUM THICKNESS)

LAG SCREWS AND BOLT SPACING

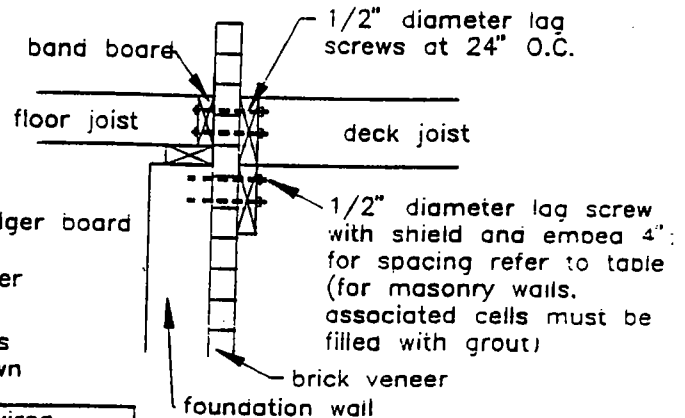
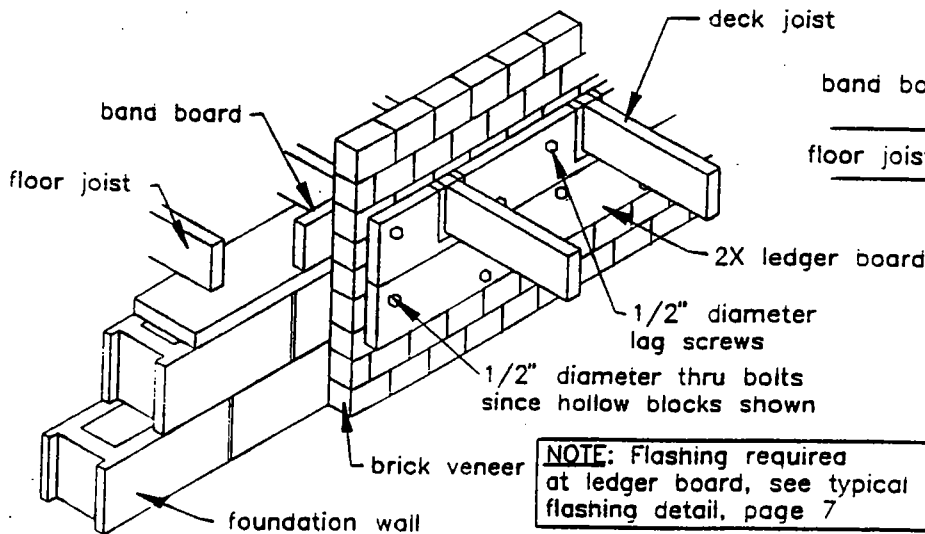
<u>JOIST SPAN</u>	<u>SPACING</u>
up to 10'-0"	14" O.C.
10'-1" to 14'-2"	10" O.C.
14'-3" to 18'-9"	3" O.C.

LEDGER BOARD ATTACHMENT DETAILS (CONTINUED)

(FOR LEDGER BOLT SPACING, REFER TO THE TABLE ON THE BOTTOM OF PAGE 3)

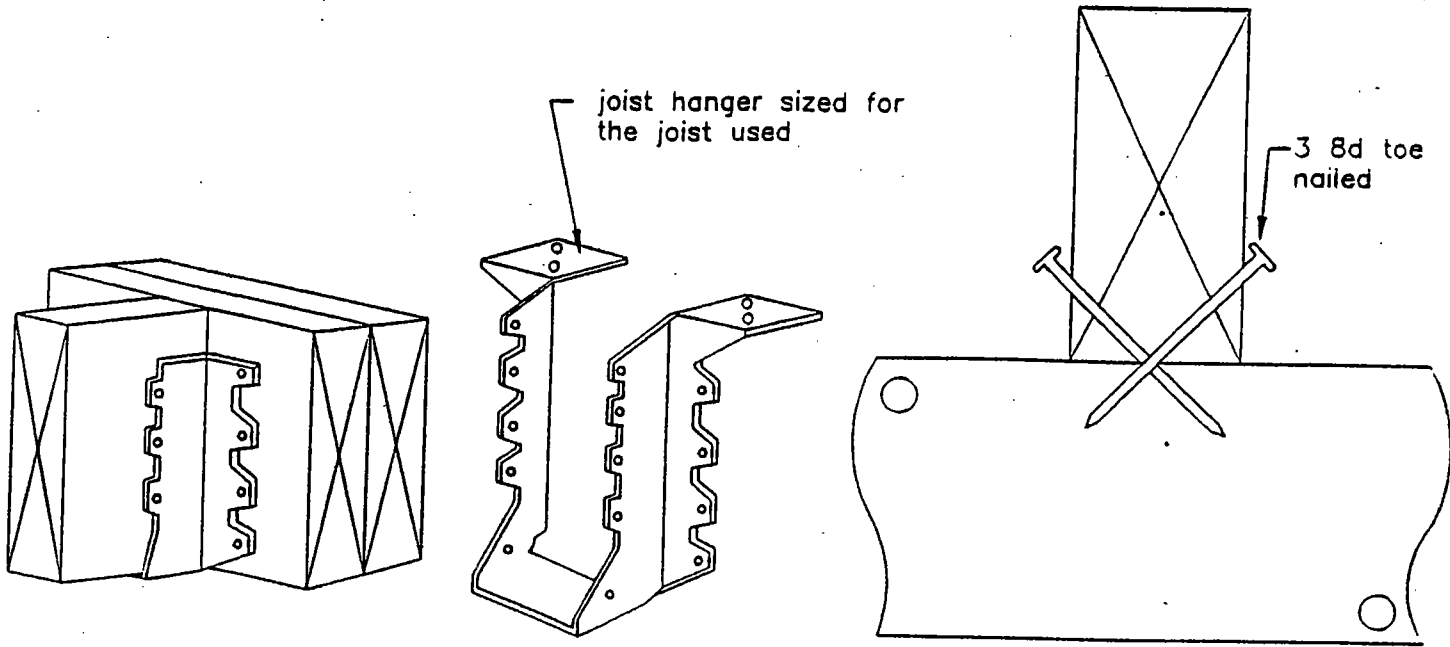


LEDGER BOARD SECURED BY LAG SCREWS THROUGH BRICK VENEER INTO FOUNDATION WALL

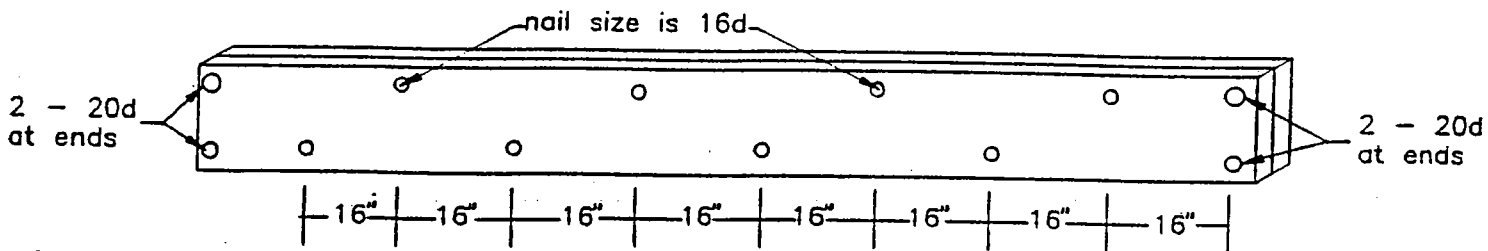


LEDGER BOARD SECURED BY LAG SCREWS THROUGH BRICK VENEER INTO DIMENSIONAL BAND BOARD

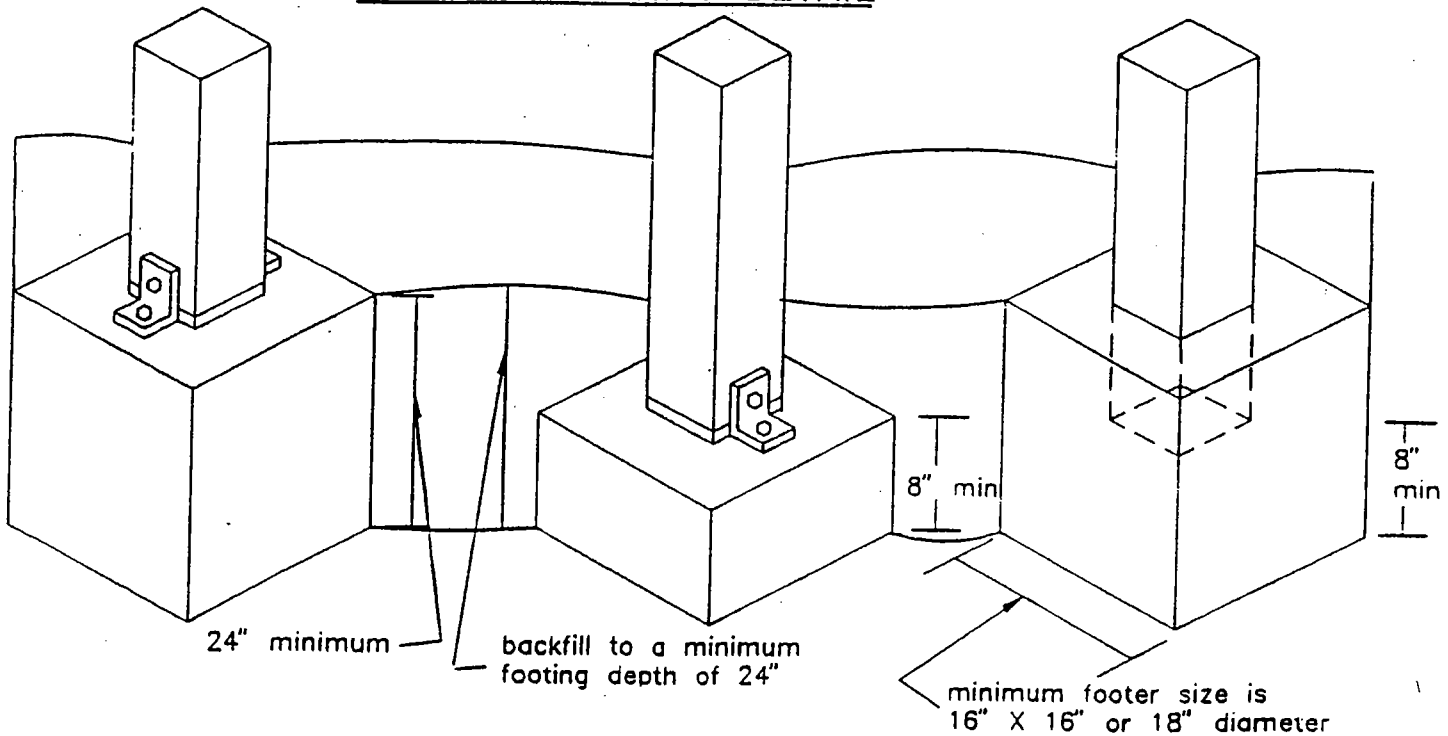
TYPICAL JOIST/BEAM ATTACHMENT DETAILS



NAILING PATTERN FOR BUILT UP BEAMS

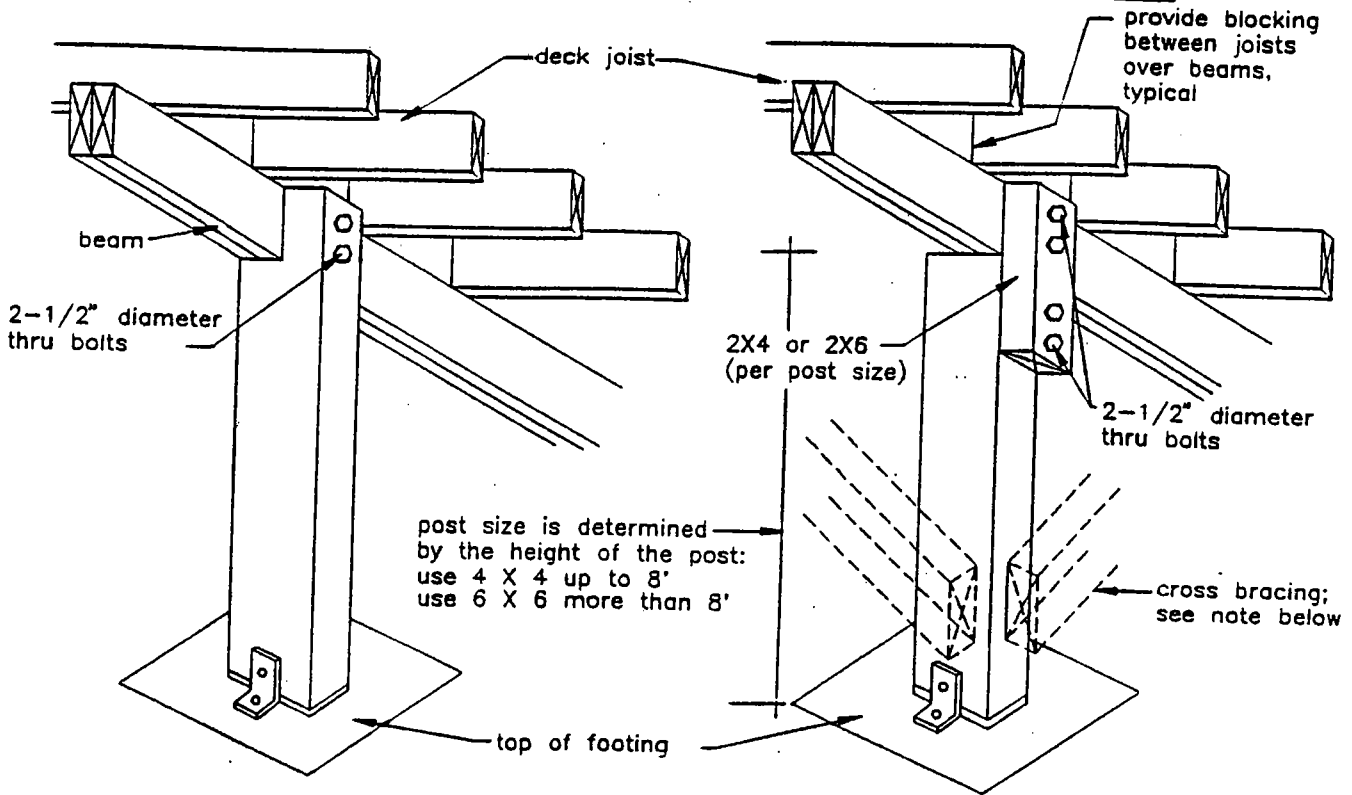


TYPICAL FOOTING DETAIL



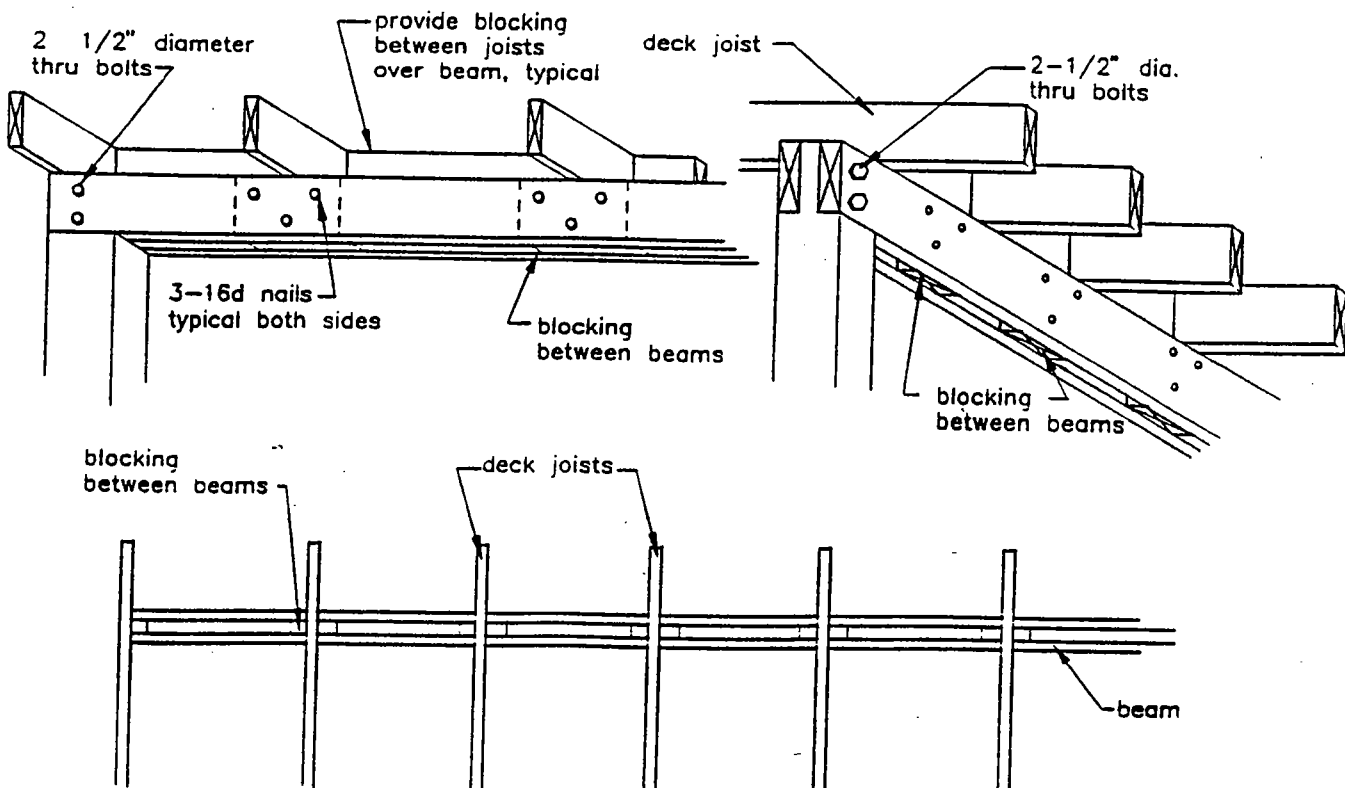
Note: Bottom of Footings is a minimum of 24" deep or deeper to solid bearing soil. Many new homes have foundations backfill up to 7' in depth making it necessary to dig footings below the fill to solid soil.

TYPICAL POST - BEAM CONNECTIONS DETAILS



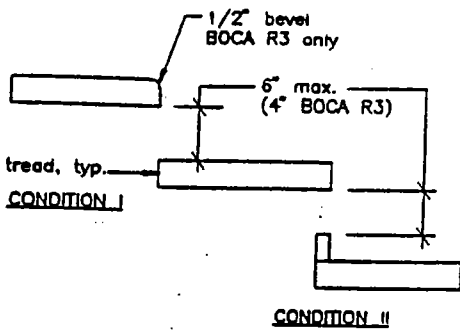
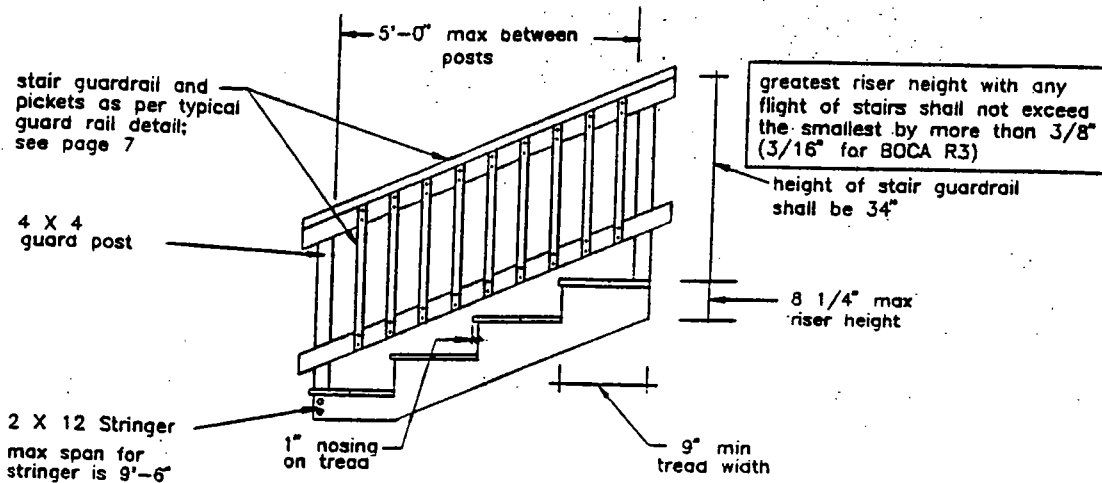
Free Standing Decks (decks not attached to house):
Provide free standing decks with cross bracing in 2 directions. The integrity of the deck's lateral stability relative to the cross bracing will be verified in the field.

TYPICAL BEAM-POST CONNECTION DETAIL WHEN BLOCKING IS REQUIRED BETWEEN BEAMS

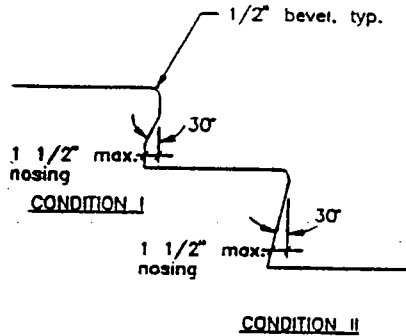


STAIR DETAILS

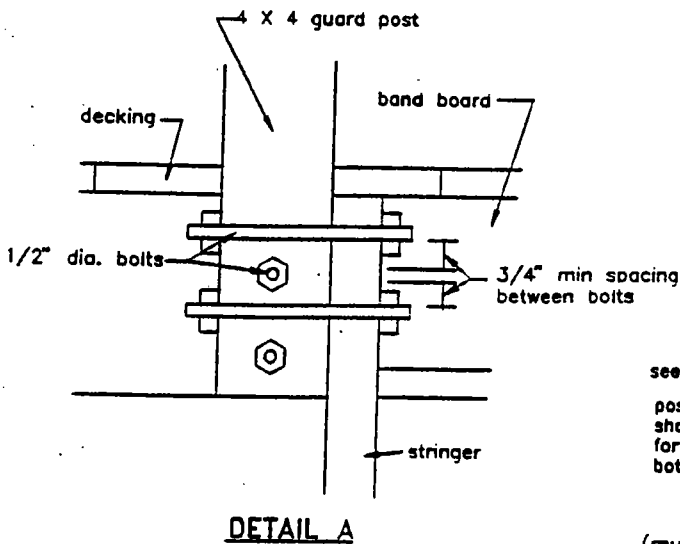
(certain items on the following drawings are deleted for clarity)



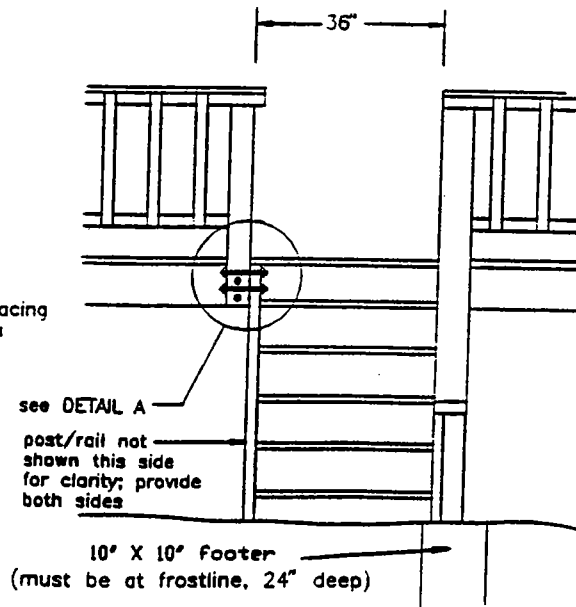
OPEN RISER PROFILE
(RESIDENTIAL USE ONLY)



SOLID RISER PROFILE
(COMMERCIAL USE ONLY)



DETAIL A



FRAMING AROUND A BAY WINDOW OR A CHIMNEY

