

JOIST SPAN TABLE								
Species	Joist	12" O.C.	16" O.C.	24" O.C.				
Southern pine	2X6	9-11	9-0	7-7				
	2X8	13-1	11-10	9-8				
	2X10	16-2	14-0	11-5				
	2X12	18-0	16-6	13-6				
Douglas fir-	2X6	9-6	8-4	6-10				
larch, hem-fir,	2X8	12-6	11-1	9-1				
spruce-pine-	2X10	15-8	13-7	11-1				
fir	2X12	18-0	15-9	12-10				

FOR ADDITIONAL DETAIL - TABLE R507.5,2012 VA CONSTRUCTION CODE

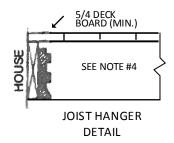
http://www.dhcd.virginia.gov/images/SBC/CodeBooks/2012%20Virginia% 20Construction%20Code.pdf#PAge=45

## NOTES:

- 1. CANTILEVER NOT TO EXCEED ¼ OF JOIST SPAN WITH 2' MAX.
- 2. ½" DIA. CARRIAGE OR LAG BOLTS 16" O.C.
- 3. LEDGER ATTACHMENT TO HOUSE MUST BE FIELD INSPECTED FOR SOLID ATTACHMENT.
- 4. THESE TYPICAL DETAILS SHALL NOT BE USED FOR DECKS SUPPORTING HOT TUBS, ROOFS, GAZEBOS, OR DECKS DETACHED FROM HOUSE.
- 5. ALL FASTENERS & NAILS SHALL BE CORROSION RESISTANT.
- 6. ILLUSTRATIVES NOT TO SCALE

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- 1. DIAGRAMS NOT TO SCALE
- 2. DIAGONAL BRACING REQUIRED UNDER JOISTS, MAY OMIT IF DECK BOARDS ARE INSTALLED DIAGONALLY
- 3. BAND BOARD ATTACHMENT TO CANTILEVERED FLOORS, BAY WINDOWS, CHIMNEYS OR BRICK VENEER NOT ALLOWED.
- 4. MAXIMUM BEAM CANTILEVER IS 24"
- 5. ONLY APPROVED FASTENERS CAN BE USED WITH JOIST HANGERS.
- 6. ALL BEAM SPLICES MUST BE OVER POSTS.
- 7. BEAMS MUST BE ATTACHED TO NOTCHED POSTS W/ (2)1/2" DIA BOLTS PER POST.
- 8. DECKS WHICH ARE LESS THAN 42" FROM GROUND LEVEL WILL REQUIRE A FRAMING INSPECTION PRIOR TO INSTALLING DECK FLOOR BOARDS.
- 9. DOUBLE JOIST BEAMS WHEN UP TO 3 JOISTS ARE CUT.TRIPLE JOIST BEAMS WHEN UP TO 5 JOISTS ARE CUT.



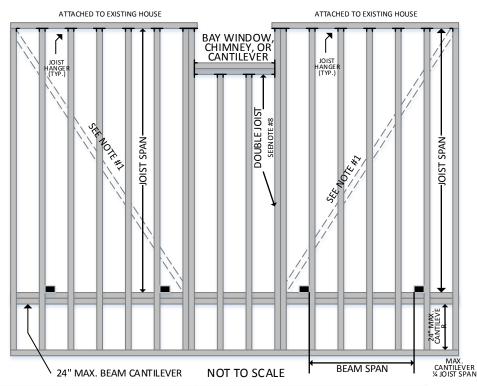
TO BE USED ONLY WITH DECKS ATTACHED TO EXISTING HOUSE.

## **USING THE "DECK BEAM SPAN TABLE"**

FIRST DETERMINE YOUR JOIST SPAN AS SHOWN ABOVE

## **NEXT SELECT THE BEAM SIZE**

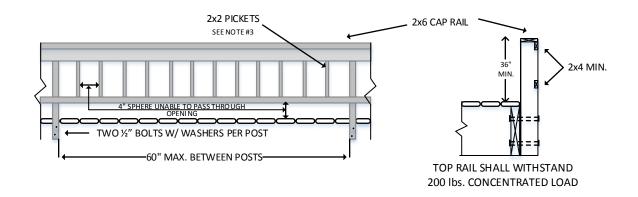
FOLLOW THE BEAM SIZE AND JOIST SPAN UNTIL THEY INTERSECT. THIS IS THE MAXIMUM SPACING YOU CAN HAVE BETWEEN POSTS.

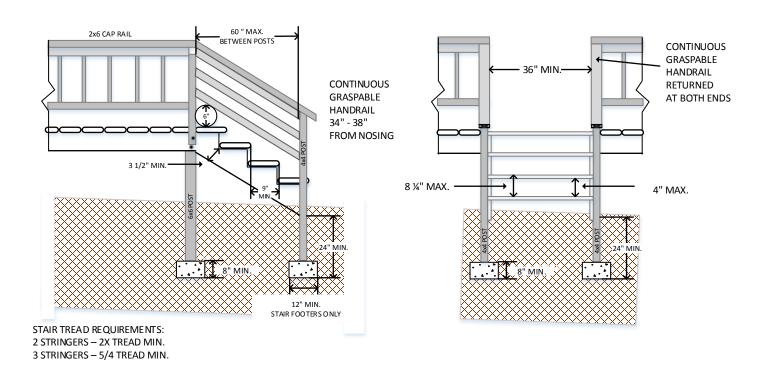


DECK BEAM SPAN TABLE								
SPECIES	SIZE	DECK JOIST SPAN (feet) LESS THAN OR EQUAL TO:						
		6	8	10	12	14	16	18
SOUTHERN PINE	2-2x6	6-11	5-11	5-4	4-10	4-6	4-3	4-0
	2-2x8	8-9	7-7	6-9	6-2	5-9	5-4	5-0
	2-2x10	10-4	9-0	8-0	7-4	6-9	6-4	6-0
	2-2x12	12-2	10-7	9-5	8-7	8-0	7-6	7-0
	3-2x6	8-2	7-5	6-8	6-1	5-8	5-3	5-0
	3-2x8	10-10	9-6	8-6	7-9	7-2	6-8	6-4
	3-2x10	13-0	11-3	10-0	9-2	8-6	7-11	7-6
	3-2x12	15-3	13-3	11-10	10-9	10-0	9-4	8-10
Douglas fir- larch, hem-fir, spruce-pine-fir, redwood, western cedars, ponderosa pine, red pine	3x6 or 2-2x6	5-5	4-8	4-2	3-10	3-6	3-1	2-9
	3x8 or 2-2x8	6-10	5-11	5-4	4-10	4-6	4-1	3-8
	3x10 or 2-2x10	8-4	7-3	6-6	5-11	5-6	5-1	4-8
	3x12 or 2-2x12	9-8	8-5	7-6	6-10	6-4	5-11	5-7
	4x6	6-5	5-6	4-11	4-6	4-2	3-11	3-8
	4x8	8-5	7-3	6-6	5-11	5-6	5-2	4-10
	4x10	9-11	8-7	7-8	7-0	6-6	6-1	5-8
	4x12	11-5	9-11	8-10	8-1	7-6	7-0	6-7
	3-2x6	7-4	6-8	6-0	5-6	5-1	4-9	4-6
	3-2x8	9-8	8-6	7-7	6-11	6-5	6-0	5-8
	3-2x10	12-0	10-5	9-4	8-6	7-10	7-4	6-11
	3-2x12	13-11	12-1	10-9	9-10	9-1	8-6	8-1

FOR ADDITIONAL DETAIL - TABLE R507.6, VA CONSTRUCTION CODE

http://www.dhcd.virginia.gov/images/SBC/CodeBooks/2012%20Virginia%20Construction%20Code.pdf#PAge=46





## NOTES:

- 1. GUARDRAILS ARE REQUIRED FOR DECKS AND PORCHES MORE THAN 30" ABOVE FINISHED GRADE. GUARD RAILS MUST BE EXTENDED 36" ABOVE DECK WALKING SURFACE AND 36" ABOVE FIXED BENCHES AND SEATS.
- 2. THE GREATEST RISER HEIGHT AND TREAD WIDTH SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8".
- 3. SECURE PICKETS AT TOP & BOTIOM W/ 1- #8 CORROSION RESISTANT SCREWS OR 2-8d GALV NAILS OR 2- 2" GALV. STAPLES.
- 4. STAIRS WITH 4 OR MORE RISERS REQUIRE FROST FOOTINGS & GRASPABLE HANDRAILS. ALL STRINGERS REQUIRE SUPPORT.
- 5. GRASPABLE HANDRAILS TO BE CONTINUOUS THE FULL LENGTH OF THE STAIRS ENDS TO BE RETURNED TO POST.
- 6. ANY EXISTING VENTS OR UTILITIES LOCATED UNDER OR NEAR THE FOOTPRINT OF THE PURPOSED DECK MAY BE REQUIRED TO BE MOVED OR MODIFIED (MAY REQUIRE MECHANICAL PERMIT.)
- 7. COMPOSITE MATERIAL MUST BE INSTALLED PER MANUFACTURER SPECIFICATIONS AND INSTALLATION INSRUCTIONS.
- 8. MANUFACTURERS SPECIFICATIONS AND INSTRUCTIONS MUST BE ON SITE FOR ALL INSPECTIONS.
- 9. DIAGRAMS NOT TO SCALE

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. This set of plans and specifications <b>MUST</b> be kept on this job at all times for inspections and it is unlawful to deviate from or nake any changes or alterations on these without written permission from the Division of Building Inspections. The issuing of the lan and specifications <b>SHALL NOT</b> be held to permit or to be an approval of the violation of any county ordinance or state law.						
ALL WORK SHALL COMPLY WITH VIRGINIA UNIFORM STATEWIDE BUILDING CODE.						
PLANS APPROVED FOR PERMIT SUBJECT TO APPROVAL OF CONSTRUCTION. ANY REVISION TO THIS DETAIL REQUIRES A SEPARATE PERMIT AND FEES.						
Waive the Loudoun County plans review for an attac	ched deck with no roof.					
Acknowledge responsibility for construction in full compliance with the Virginia Uniform Statewide Building Code.						
Acknowledge responsibility for corrections of any and	all violations discovered during the County inspection process.					
gnature of owner / agent	Date:					
ame of owner as appears on Building Permit Application:						
SKETCH DECK SHAPE INCUDIN	IG DIMENSIONS & LOCATION OF STAIRS					
	COLLABE FOOTAGE					
	SQUARE FOOTAGE ATTACHED DECK					
BUILDING PERMIT #:	INSPECTOR:					

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