



Town of Hancock, New Hampshire

# TYPICAL DECK PLANS

BASED ON THE 2009 INTERNATIONAL RESIDENTIAL CODE (IRC)

A building permit is required before starting construction

Inform plan reviewer and provide drawings if the deck you propose to build is more than a simple rectangular deck. This design is not approved for hot tub installation.

Detached decks less than 200 square feet in size are exempt from the requirements below

- SPANS** – Pressure treated lumber is required for the load bearing lumber. The joist may overhang a beam up to 2 feet. The following are the allowable spans for floor joists. (o.c. = on center)

2" x 6" – 16" o.c.: May span 9'0"

2" x 10" – 16" o.c.: May span 14'0"

2" x 8" – 16" o.c.: May span 11' 10"

2" x 12" – 16" o.c.: May span 16'6"

- DECK LEDGER** – Must be a minimum of 2" x 8" PT and fastened to the building using the drawings and schedule below:

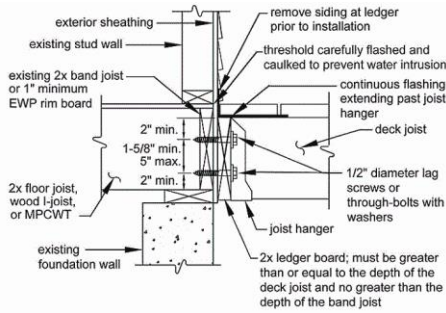
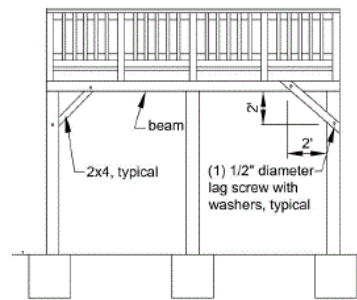
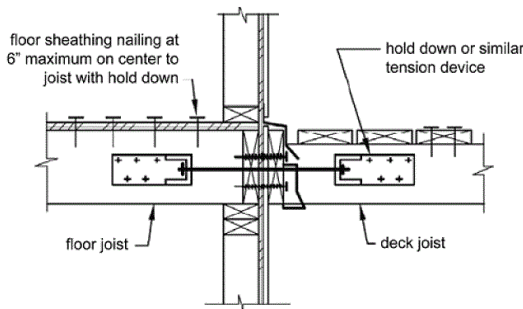


TABLE R502.2.2.1  
FASTENER SPACING FOR A SOUTHERN PINE OR HEM-FIR DECK LEDGER  
AND A 2-INCH NOMINAL SOLID-SAWN SPRUCE-PINE-FIR BAND JOIST<sup>c, f, g</sup>  
(Deck Live Load = 40 psf, Deck Dead Load = 10 psf)

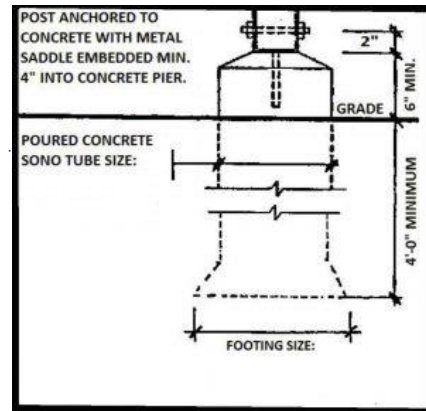
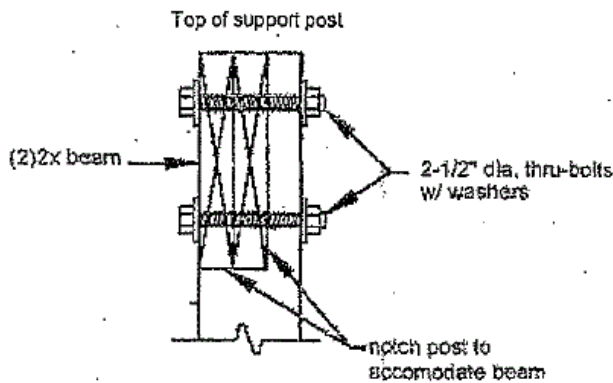
Joist Span	6'-0" and Less	6'-1" to 8'-0"	8'-1" to 10'-0"	10'-1" to 12'-0"	12'-1" to 14'-0"	14'-1" to 16'-0"	16'-1" to 18'-0"
<b>Connection Details</b>	<b>On-Center Spacing of Fasteners<sup>a, g</sup></b>						
1/2" diameter lag screw with 15/32" maximum sheathing <sup>a</sup>	30	23	18	15	13	11	10
1/2" diameter bolt with 15/32" maximum sheathing	36	36	34	29	24	21	19
1/2" diameter bolt with 15/32" maximum sheathing and 1/2" stacked washers <sup>b, h</sup>	36	36	29	24	21	18	16

- LATERAL LOAD CONNECTION** – The required lateral load connection shall be permitted to be in accordance with figure above. Hold down tension devices shall be installed in not less than two locations per deck, and each device shall have an allowable stress design capacity of not less than 1500 pounds. Diagonal bracing required at corner posts greater than 2'. Diagonal bracing is prohibited on center posts.

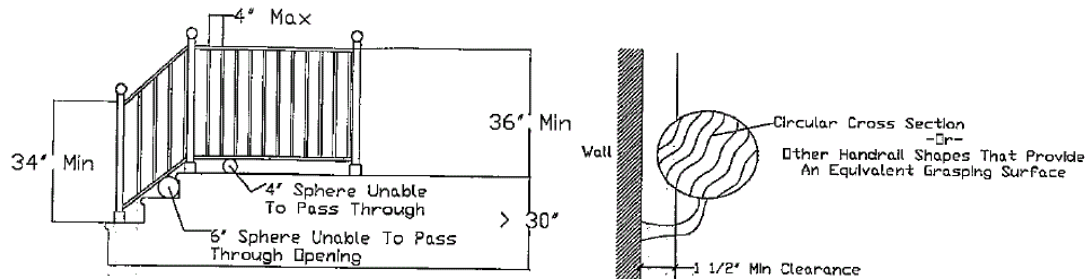


DIAGONAL BRACING PARALLEL TO BEAM  
Note: Diagonal Bracing is prohibited on center posts.

4. **FOOTINGS** – Must be large enough to prevent the soil from being loaded to more than 2,000 pounds per square foot, with the bottom 48" below finished grade. For example, a simple 12' x 16' deck would require three 12" sonotube footings. (See Section R403.1.4, Exception #4)
5. **SUPPORT POSTS** – Shall be 6" x 6" minimum and shall not exceed 14' height. Must be mechanically fastened to the footing and to the carrying beam. Galvanized metal fasteners can be used to accomplish this, for example:

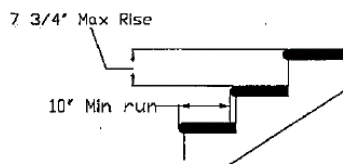


6. **GUARDRAILS** – Are required on walking surfaces that are more than 30" above grade. Guard posts to be 4" x 4" min with (2) 1/2" thru-bolts with washers and shall not exceed a 6' span.



7. **HANDRAILS** – Are required on stairs with 4 or more risers. Handrails with a circular cross section shall have an outside diameter of 1-1/4" to 2". If not circular, it shall have a perimeter of 4" to 6-1/4", with a maximum cross section of 2-1/4". Handrails must run the full length of the stair and terminate at newel posts or safety terminals and be located between 34" and 38" above the nose of the stair. Review the IRC for additional options.

8. **STAIRS** – The minimum tread width is 10" measured from nose to nose. The maximum riser height is 7-3/4". The maximum difference between any of the risers is 3/8". Stairs with a walking surface of more than 30" above grade must have risers with an opening of no more than 4".



9. **REQUIRED INSPECTIONS** –

- A. Footings prior to concrete being poured to verify the depth.
- B. At completion or prior to the decking being installed if the deck is low to the ground.