



Town of Thomaston
Building Dept.
158 Main St.
Thomaston, CT 06787
(860) 283-2857

CONSTRUCTION OF A DECK

Zoning Information

A zoning application must be filled out along with a plot plan showing where the deck will be located.

- Show location of septic tank, leach fields, and well if applicable
(Separate approval will be required from Torrington Area Health District if you have well and or septic before zoning can be approved (TAHD permits can be obtained in the Land Use Office))
- Stake out where the proposed deck will be located on your property.

Building Information

2 sets of plans are required (one will be returned to you with any necessary corrections)

SOME OF THESE SPECIFICATIONS MAY NOT APPLY TO ABOVE GROUND POOL DECKS

The information below is required to be on your building plan;

- Size of deck
- Type and grade of lumber being used
- Piers and how far apart
- 10" piers must be 42" below grade, unless the deck is not attached to the house
- Floor joists size and how far apart - if floor joist is not supported on a beam or ledger, joist hangers are required at both ends
- Guard rail height on deck and stairs - 36" minimum
- Deck rail and stair rails - less than 4" of space between guards or balusters from top to bottom of rail and must maintain less than 4" throughout rail
- Stair handrail height on deck stairs - 34" minimum to 38" maximum
- Stair handrail must be graspable - 2" maximum to 1 1/4" minimum in size and terminate at wall or post
- Stairs - tread depth 9" minimum (R311.5.3.2) and riser height 8 1/4" maximum (R311.5.3.1)
- Stairs treads must be uniform 3/4" to 1 1/4" overhang for closed risers,
- Height of deck
- Lag bolt deck to house - fastener spacing for ledger board and deck attachment for lateral bands (see attached Sections 502.2.2.1 and 502.2.2.3)
- Flashing over ledger
- Landing at base of stairs - width of stairs 3'

INSPECTIONS REQUIRED:

- Piers must be inspected before concrete is poured
- Deck is inspected upon completion

SUGGESTED RECOMMENDATIONS FOR JOIST SIZE AND SPACING

• #2 SYP 1,600,000 E

Joist Size (inches)	Maximum Joist Spacing (inches)	
	16" O.C.	24" O.C.
2 x 6	9' 4"	7' 7"
2 x 8	12' 3"	9' 11"
2 x 10	15' 7"	12' 9"
2 x 12	19'	15' 5"

Height of deck from ground level	Minimum Post Size
Up to 5'	4 x 4 post
Over 5'	6 x 6 post

Maximum Beam Size Maximum Span	Distance between piers	
2 x 2 x 6	4 x 6	6'
2 x 2 x 8	4 x 8	7'
2 x 2 x 10	4 x 10	8'
2 x 2 x 12	4 x 12	9'

* Beams larger than 4 x 12 needs engineered design

Lag bolting schedule for decks band not including regular nailing schedule

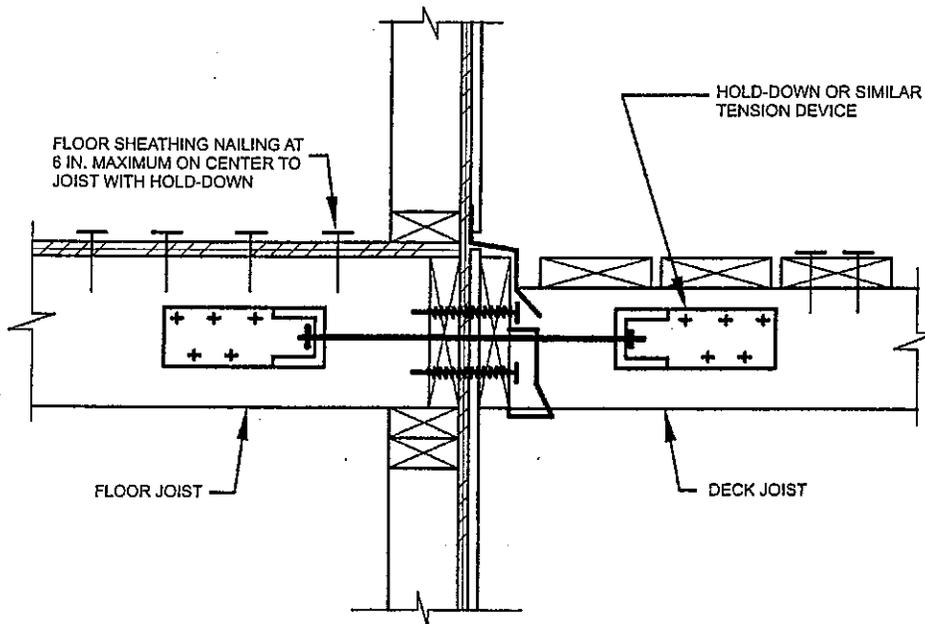
Joist Span	6'	7'	8'	9'	10'	11'	12'	13'	14'	15'	16'
Bolt Size	1/2"	1/2" 5/8"	5/8"	5/8"							
Bolt Spacing	24"	24"	18" 24"	18" 21"	16" 18"	12" 18"	12" 16"	12"	12" 16"	12"	12"

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^{c, f, g}
 (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 ^{d, e}						
1/2 inch diameter lag screw with 15/32 inch maximum sheathing ^a	30	23	18	15	13	11	10
1/2 inch diameter bolt with 15/32 inch maximum sheathing	36	36	34	29	24	21	19
1/2 inch diameter bolt with 15/32 inch maximum sheathing and 1/2 inch stacked washers ^{b, h}	36	36	29	24	21	18	16

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

- 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 1/2".
- 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 R502.2.2.1.1.
- 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 1/2 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.



For SI: 1 inch = 25.4 mm.

FIGURE R502.2.2.3
DECK ATTACHMENT FOR LATERAL LOADS