Pickaway County Residential Deck Basics (based on the Residential Code of Ohio)

Here are the (basic) Residential Code of Ohio requirements needed for construction.

- First and foremost a Zoning approval and a Building permit are required before any work can be started. Always refer to your approved plans for the proper information needed before starting any project.
- 2) The builder should call the **Pickaway County Building Department** for proper procedure for obtaining a Building Permit.
- 3) Inspections will be required as progress proceeds from the basic footer or post holes, the framing, to the finished product.

Memorandum:

311.3.1 - The step from the dwelling onto the deck shall not exceed 8 1/4 inches when measured from the top of the (door threshold) to the deck surface provided the door does not swing out onto the deck.

311.7.4 – Stair treads and risers. Risers no more than 8 ¼ inches high, treads not less than 9 inches, open risers shall be permitted provided that the opening between the treads does not permit the passage of a 4 inch sphere.

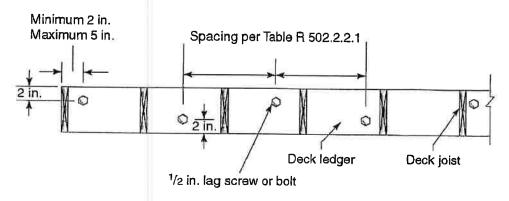
Requirements: The established additional criteria is listed in Table R301.2(1) (see below).

Memorandum:

TABLE R301.2(1)

01			Subject to Damage From					Ice Shield			
Ground Snow Load	Wind Speed (mph) (e)	Seismic Design Category (g)	Weathering (a)	Frost Line Depth (b)	Termite (c)	Decay (d)	Winter Design Temp (f)	Under- Layment Required (i)	Flood Hazards (h)	Air Freezing Index (j)	Mean Annual Temp (k)
20	90	В	Severe	32"	Moderate to Heavy	Slight to Moderate	0-10 Degrees	Yes	See Flood Insurance Rate Maps	1048	52.6

502.2.2 Decks attached to the structure shall be designed and installed to resist both vertical and horizontal movement. Such attachment shall not be accomplished by the use of toenails or nails subject to withdrawal.



Deck ledger connection

FLOORS

TABLE 502.2.2.1

FASTENER SPACING FOR A SOUTHERN PINE OR HEM-FIR DECK LEDGER
AND A 2-INCH NOMINAL SOLID-SAWN SPRUCE-PINE-FIR BAND JOIST**.9

(Deck live load = 40 psf. deck dead load = 10 psf)

(bear live load = 40 par, dear load = 10 par)										
JOIST SPAN	6 and less	61 to 8	81 to 10	10 1 to 12	121 to 14	14 1 to 16	161 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			
$^{\rm I}/_{\rm 2}$ inch diameter bolt with $^{\rm 15}/_{\rm 32}$ 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, b}	36	36	29	24	21	18	16			

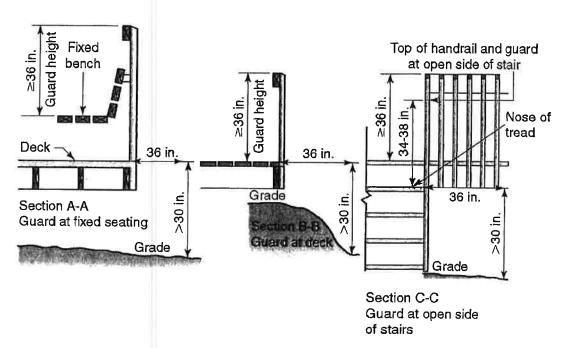
For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm. 1 pound per square foot = 0.0479kPa.

- 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 \\"."
- 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 502.2.2.1.1.
- e. Deck ledger shall be minimum 2 × 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 $1 \times 9^{1}/_{2}$ 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 I 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.

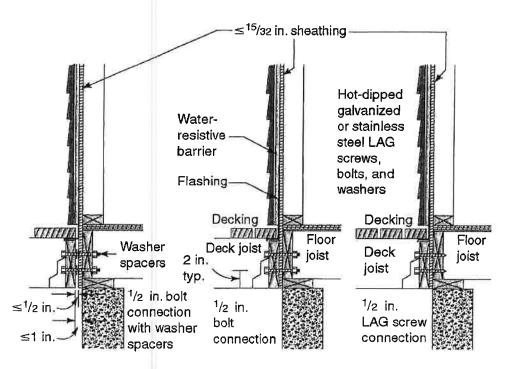
FIGURE 502.2.2.3 DECK ATTACHMENT FOR LATERAL LOADS. Deleted.

311.7 A 34-38 inch high handrail shall be provided on at least one side of the steps when there are 4 or more risers.

312.1 Requires a 36 inch high guardrail be provided on all decks where the grade is more than 30 inches to the deck surface when measured 3 feet out from the edge of the deck. The guardrail shall be provided along the edge of the deck surface and or perimeter fixed seating.



Determining required guard locations



703.8 Requires corrosion-resistive flashing be provided in the exterior wall envelope in such a manner as to prevent entry of water into the wall cavity or penetration of water to the building structural components where porches, decks or stairs are attached to a wall or floor assembly of wood-frame construction.