

Deck Construction

For Single Family Residential Dwellings

When applying for a permit to construct a deck, there are items that must be documented to review for building code compliance. These items need to appear on the plans submitted with the application form for permit. They are related to requirements in the Residential Code of Ohio 2007.

1. A permit is required for any deck that is above grade level. This includes decks that have the bottom of the structure out of the ground. Plans must include two copies of deck construction drawings and lot plans with the deck shown to scale and the distance to property lines.
2. All wood in contact with earth or weather exposed must be pressure treated.
3. Joists must meet Span Tables on reverse side of sheet.
4. Ledger boards connected to house foundation to be 3/8" diameter bolts, 16" on center or 1/2" bolts, 24" on center. Ledger boards to be at least the same size as joists.
5. Deck surfaces located more than 30" above grade shall have guardrails not less than 36" in height. The guardrails cannot have an opening larger than 4" in diameter. Open sides of stairs with a total rise of 30" or more above grade shall have guardrails not less than 34" in height measured vertically from the nosing of the tread. Handrails having a minimum and maximum height of 34" and 38" respectively, measured vertically from the nosing of the treads, shall be provided on at least one side of stairways of four or more risers. All required handrails shall be continuous the full length of the stairs. Handrails must have a graspable shape of 1 1/4" to 2" diameter circular, 4" to 6 1/4" perimeter non-circular, or 2 1/4" maximum cross section dimension.
6. All stairs must have risers not greater than 8 1/4". Treads must be 9" minimum measured nose to nose. The variance in riser heights and tread depths must not be greater than 3/8".
7. All stairs must be provided with illumination located in the immediate vicinity of the top landing of the stairway.
8. Pier footings for decks shall be 32" below grade, 12" minimum diameter at bottom, with 6" minimum concrete in bottom below post.
9. Maximum spacing for piers for support of beams is 8'.
10. Beams must be constructed using at least the next largest framing member size above the floor joist size being used (i.e. floor joist size 2' x 8' beam size 2' 2"x10').
11. Anchoring for pressure treated wood shall be hot-dipped zinc-coated, galvanized, stainless steel, silicon bronze or copper. Connections between posts and beams must be bolted.

Span Table – Based on 40 lbs per square feet live load.

		Southern Pine #1	Southern Pine #2
2" x 6"	16" o.c.	9' 11"	9' 9"
	24" o.c.	8' 8"	8' 6"
2" x 8"	16" o.c.	13' 1"	12' 10"
	24" o.c.	11' 5"	11' 0"
2" x 10"	16" o.c.	16' 9"	16' 1"
	24" o.c.	14' 7"	13' 1"
2" x 12"	16" o.c.	20' 4"	18' 10"
	24" o.c.	17' 5"	15' 5"

Be sure to check **GRADE MARK** when purchasing lumber.

Call for required inspections: