

**Exeter Township**  
**Minimum Recommended Design Criteria**  
**For Residential Wood Decks, Porches, Balconies, & Stoops.**

All wood decks, porches, balconies & stoops shall be designed for 60 lbs. per square foot live load and 10 lbs. per square foot dead load for a total of 70 lbs. per square foot. Joists and beams shall be Pressure Treated #2 Grade or better, Southern Yellow Pine or equivalent.

**CANTILEVER:** Maximum overhanging cantilever shall be two (2) feet.

**FOOTINGS:** Footings shall be a minimum of thirty-six (36) inches below finished grade. Excavations shall be smooth with straight edges. The diameter of the excavation should be at least three (3) times the diameter of the post used.

**GUARDRAILS:** Where the deck, porch or balcony surface is more than thirty (30) inches above finished grade or floor, a minimum thirty-six (36) inch high railing shall be provided. Balusters shall be vertical and be constructed such that a sphere with a diameter of four (4) inches cannot pass through any opening. Guardrail posts shall be a minimum of four by four (4 X 4) inches, spaced no more than four (4) feet on center.

**STAIRS:** Stairs shall be a minimum three (3) feet in width. Stair treads shall be no less than eleven (11) inches and have nosing or effective projection of not less than one (1) inch. Maximum riser height shall be a maximum of seven (7) inches and a minimum of four (4) inches. Handrails shall be provided on one side of all stairs having three (3) or more risers. If stairs have three (3) or more risers, or are thirty (30) inches or more above grade, guardrails shall be provided. Footings are required if three (3) or more steps are provided.

**LANDINGS:** Minimum landings shall be three by three (3 x 3) feet. If the landing is more than thirty (30) inches above finished grade, a guardrail system shall be required.

**MAXIMUM**

**JOIST SPANS:** Maximum spans for floor joists spaced at 16-inch-on-center shall be as listed below. All floor joists shall be supported by approved metal hangers of proper size or ledger of proper size.

**Maximum spans for floor joists:** 2'' X 6'' = 7'8''  
(pressure treated lumber) 2'' X 8'' = 10'2''  
2'' X 10'' = 13'0''  
2'' X 12 = 15'9''

**Support Post:** Where the deck surface height above grade is four (4) feet or less, four by four inch (4 X 4) posts are permitted. If the deck is more than forty-eight inches (48) above finished grade, a minimum post size shall be six by six inch (6 X 6).

**Maximum Post/Support Spacing with two foot (2) Cantilever:  
(Without Cantilever:)**

Joist Span	6	8	10	12	14	16
<b>Beam Size</b>						
Two 2" X 6"	5'0" (6'10")	4'3" (5'11")	3'8" (5'3")	3'3" (4'5")	— (3'9")	— (3'4")
Two 2" X 8"	6'7" (9'0")	5'7" (7'9")	4'10" (7'0")	4'3" (5'10")	3'10" (5'0")	3'5" (4'4")
Two 2" X 10"	8'5" (11'6")	7'2" (9'11")	6'3" (8'11")	5'6" (7'5")	4'11" (6'5")	4'5" (5'7")
Two 2" X 12"	10'3" (14')	8'9" (12'1")	7'7" (10'10")	6'8" (9'1")	6'0" (7'9")	5'4" (6'10")
Three 2" X 12"	12'10" (17'11")	11'10" (14'10")	11'0" (13'3")	10'0" (12'1")	8'11" (11'2")	8'1" (10'3")

Values Based on: Dead Load 10 psf / Live Load 60 psf = 70 psf Total  
Fb = 975 psi Southern Yellow Pine (moisture content 19%)  
Fv = 86 psi Southern Yellow Pine (moisture content 19%)

**Maximum Post/ Support Spacing Intermediate Beam:**

Joist Span	6	8	10	12	14	16
Two 2" X 6"	3'5"	2'11"	2'7"	—	—	—
Two 2" X 8"	4'6"	3'11"	3'6"	2'11"	—	—
Two 2" X 10"	5'9"	5'0"	4'5"	3'8"	3'2"	—
Two 2" X 12"	7'0"	6'0"	5'5"	4'6"	3'10"	3'5"

**Bridging:** Where floor joists are longer than 11'6", one row of solid bridging is required to be placed mid span every 11'6". Lateral bracing shall be provided.

**Ledger/Ban/Ribbon Board Attachment to Structure:** Ledger/ban/ribbon board shall be to same size as the floor joists. Ledger/ban/ribbon board shall be firmly attached to house using through bolts and placed on 16" o.c. Minimum size bolts shall be ½" X 4 ½" or ½" X 4 ½" Lag bolts or other approved anchors are permitted with approval from the Code Administration Officer prior to the installation.