



A/P # _____ Plan Examiner _____ Attached _____ Detached _____

Reference: **2018** International Residential Code as Amended
by NCC Chapter 6

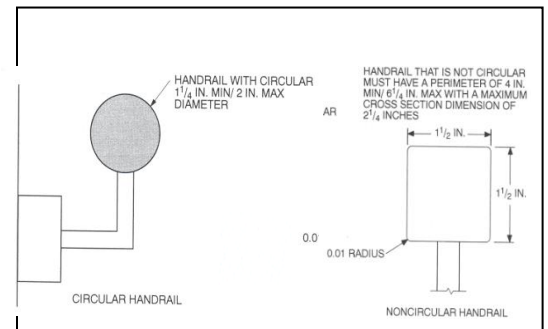
Footings

- _____ Footing locations & sizes shown on plans (Chapter 6, Section 06.03.013)
- _____ Footing sizes adequate for loads: (**403.1.1** & T403.1 per Ch. 6)
 - _____ 40 psf LL + 10 psf DL = 50 psf Total Load (301.4 & 301.5)
 - _____ Min. diameter of 12", except Min. 8" for stairs (403.1.1 per Ch.6)
 - _____ Min. depth below grade of 32" (403.1.4 & T301.2.1 per Ch. 6)
 - _____ 2000 psf allowable soil bearing pressure (T401.4.1; **soil per Ch.6**)
 - _____ Concrete to be 3000 psi minimum (T402.2 & **T301.2.1 Ch. 6**)
 - _____ Footings required under steps, if deck >30" above fin. grade

Structure (connecting decks to cantilevered floor joists is prohibited **502.3.3 (?)**)

- _____ Dimension from top of deck to finished grade (Chapter 6, Sec. 06.03.013)
- _____ Basement egress can be fully-open with path 36" in height to exit (310.5)
- _____ Post sizes & locations shown on plans (Chapter 6, Section. 06.03.013)
- _____ Post restraint against lateral displacement (407.3 per Ch.6)
- _____ Beam dimensions & locations on plans (Chapter 6, Section. 06.03.013)
- _____ Beams sized properly: (501.2, 502.2, 502.5, T502.5(2))
 - _____ Strucalc used to verify **or** T502.5(2)
 - _____ Adequate attachment to post (407.3, per Ch.6)
- _____ Floor joist size/span/ spacing shown on plans (501.2,502.3,507.4,507.5)
 - _____ Strucalc used to verify or T502.3.1(2 or Table 507.5)
- _____ Ledger attachments to primary structure - **507.9** (Table & Figures)
 - _____ Verify min. 1/2" size & spacing of bolts (**T507.9.1.3**)
 - _____ Lag screws or bolts shall be staggered top to bottom (**507.9.1.3**)
- _____ Ledgers shall not be fastened through veneer brick or stone (**507.9.2**)
- _____ Lateral load connections and hold-downs for deck joists (**507.9.2**)
- _____ Deck beams shall not be supported on ledgers or band joists (**507.9.1.1**)
- _____ Flashing depicted at ledger connection (**507.2.4 & 703.4**)
- _____ Wood/plastic composites – must bear a label for ASTM D 7032 (**507.2.2**)
- _____ Preservative-treated lumber (**507.2.1**)

BEARING CAPACITY OF ROUND FOOTERS		
DIAMETER	SQ. FT.	CAPACITY
12"	0.78	1570
13"	0.92	1840
14"	1.07	2137
15"	1.23	2460
16"	1.41	2800
17"	1.58	3160
18"	1.77	3540
19"	1.97	3940
20"	2.18	4360
21"	2.41	4800
22"	2.64	5380
23"	2.88	5760
24"	3.14	6280



Stairs

- _____ Location & dimensions shown on plans (Chapter 6, Section 06.03.013)
- _____ 36" wide stairs/landings & 3/8" max. variation for treads & risers (**311.7.5**)
- _____ Treads min. 10"+1" nosing and risers 7 3/4" (311.7.5.1 - per Ch.6)
- _____ 4" max. opening b/w treads for risers > 30" above grade (311.7.5.1)
- _____ Graspable handrails at 34"-38" ht. req'd on stairs with >3 risers (311.7.8)

Guardrails (deck)

- _____ 36" high min. when deck is > 30" above grade or surface (312.1)
- _____ **Insect screening shall not be considered as a guard (312.1.1)**
- _____ Shall not allow passage of a 4" diameter sphere (312.1.3)
- _____ **Composite plastic guards shall meet R317.4 & R507.2.2**

Guardrails (stairs)

- _____ Required when stairs have a total rise of > 30" above grade (**312.1.1**)
- _____ 34" height minimum measured from nosing to top of rail (**312.1.2**)
- _____ **Cannot allow passage of 4 3/8" dia. sphere (312.1.3.2)**
- _____ Triangular openings formed by the tread, riser & bottom rail of guardrail cannot allow the passage of a 6" dia. sphere (**312.1.3.1**)

Connection Detail	Residential Deck Joist Spacing (feet)						
	6	8	10	12	14	16	18
1/2" Lag Screws	30	23	18	15	13	11	10
1/2" Lag Bolts	36	36	34	29	24	21	19
1/2" Lag Bolts with 1/2" Stacked Washers	36	36	29	24	21	18	16

Ramps

- Admin** Footings min. 8" in diameter @ 32" below grade (403.1.1 per Ch.6)
- _____ Max. slope 1:12 (**egress**) or 1:8 (**others**) or if **tech. infeasible** (311.8.1)
- _____ Min. 3x3 landings at top, bottom, direction change & doors (311.8.2)
- _____ Handrails are required on one side for slopes >1:12 and shall be continuous & return into newel posts or safety terminals (311.8.3)

Exhaust Vents Near Decks & Ramps (fireplaces, heaters, dryers)

- _____ Deck, ramp, & landing locations shall not interfere with any exhaust vent operation, nor shall exhaust openings for fireplaces, heaters, or clothes dryers be located so as to create a hazardous or noxious situation (**303.5 & 2015 Mechanical or Fuel Gas code provisions**)
- _____ **Exhaust from dwelling unit toilet rooms, baths & kitchens shall not be considered hazardous or noxious (303.5.1)**
- _____ Exhaust air shall not be directed onto walkways (303.5.2)

Emergency Egress under Decks and Porches

- _____ Emergency escape & rescue permitted under deck, provided space allows egress door/window to be fully opened and a clear path not less than 36" in height is provided to a yard or court (310.2.4)

Glazed Openings alongside Stairs, Ramps, & Landings

- _____ Glazing adjacent to stairs, **mid**-landings, and ramps where the bottom exposed edge of glazing is < 36" above the plane of the adjacent walking surface of stairs, ramps, & landings shall be considered hazardous (308.4.6, with exceptions as noted below):
 - _____ Where a **railing** 34"-38" above walking surface is installed on accessible side of glazing and rail can withstand a horizontal load of 50# per lineal foot without contacting glass and have a cross-sectional height of at least 1 1/2" (Exception 1 to 308.4.6)
 - _____ Where the glazing is at least 36" away from walking surface, measured horizontally (Exception 2 to 308.4.6)
- _____ Glazing adjacent to the bottom stair landing where the glazing is <36" in height above the landing and within a 60" horizontal arc less than 180 degrees from the bottom tread nosing shall be considered hazardous (308.4.7, with exception as noted below):
 - _____ Where the glazing is protected by a guard complying with Table 301.5 & 312 and the pane of glass is >18" from guard (Exception to 308.4.7 per Figure 308.4.7)