



City of El Cajon
Building and Fire Safety Division
 200 Civic Center Way
 El Cajon, CA 92020
 Phone: 441-1726

CBC NAILING SCHEDULE

Fastening Schedule (CBC Table 2304.9.1)

Fasteners listed below are for common nail applications. For staples or other nail types please see the full fastening schedule in table 2304.9.1

	CONNECTION	FASTENING ¹	LOCATION
1.	Joist to sill or girder	3-8d	toenail
2.	Bridging to joist	2-8d	toenail each end
3.	1" x 6" subfloor or less to each joist	2-8d	face nail
4.	Wider than 1" x 6" subfloor to each joist	3-8d	face nail
5.	2" subfloor to joist or girder, blind and face nail	2-16d	blind & face nail
6.	Sole plate to joist or blocking, typical face nail Sole plate to joist or blocking, at braced wall panels	16d at 16" o.c. 3-16d per 16"	typical face nail braced wall panels
7.	Top plate to stud	2-16d	end nail
8.	Stud to sole plate	4-8d, (or 2-16d)	toenail (end nail)
9.	Double studs	16d at 24" o.c.	face nail
10.	Doubled top plates Double top plates	16d at 16" o.c. 8-16d	typical face nail lap splice
11.	Blocking between joists or rafters to top plate	3-8d	toenail
12.	Rim joist to top plate	8d at 6" o.c.	toenail
13.	Top plates, laps and intersections,	2-16d	face nail
14.	Continuous header, two pieces	16d - 16" o.c.	along edge
15.	Ceiling joists to plate	3-8d	toenail
16.	Continuous header to stud	4-8d	toenail
17.	Ceiling joists, laps over partitions	3-16d	face nail
18.	Ceiling joists to parallel rafters	3-16d	face nail
19.	Rafter to plate	3-8d	toenail
20.	1" brace to each stud and plate	2-8d	face nail
21.	1" x 8" sheathing to each bearing	2-8d	face nail
22.	Wider than 1" x 8" sheathing to each bearing	3-8d	face nail
23.	Built-up corner studs	16d	24" o.c.
24.	Built-up girder and	20d at 32" o.c. 2-20d	face nail at top and bottom staggered on opposite sides face nail at ends and at each splice
25.	2" planks	16d	at each bearing
26.	Collar tie to rafter	3-10d	face nail
27.	Jack rafter to hip	3-10d 2-16d	toenail face nail
28.	Roof rafter to 2-by ridge beam	2-16d 2-16d	toenail face nail
29.	Joist to band joist	3-16d	face nail
30.	Ledger strip	3-16d common	face nail at each joist

		4 – 3” nails 4-3” 14 gage staples	
31.	Wood structural panels and particleboard ^b Subfloor and wall sheathing (to framing): Single floor (combination subfloor-underlayment (to framing):	1/2" and less 6d ^{c,i} 19/32"-3/4" 8d ^d or 6d ^e 7/8"-1" 8d ^c 1-1/8" to 1-1/4" 10d ^d or 8d ^d 3/4" and less 6d ^c 7/8"-1" 8d ^c 1-1/8" to 1-1/4" 10d ^d or 8d ^c	
32.	Panel siding (to framing)	1/2" or less 6d ^f 5/8" 8d ^f	
33.	Fiberboard sheathing ^g	1/2" No. 11 gage roofing nail 6d common nail No. 16 gage staple ⁱ 25/32" No.11 gage roof nail ^h 8d common nail No. 16 gage staple ⁱ	
34.	Interior paneling	1/4" 4d ^j 3/8" 6d ^k	

For SI: 1 inch = 25.4 mm.

a. Common or box nails are permitted to be used except where otherwise stated.

b. Nails spaced at 6 inches on center at edges, 12 inches at intermediate supports except 6 inches at supports where spans are 48 inches or more. For nailing of wood structural panel and particleboard diaphragms and shear walls, refer to Section 2305. Nails for wall sheathing are permitted to be common, box or casing.

c. Common or deformed shank (6d - 2" x 0.113"; 8d-2 1/2" x 0.131"; 10d-3" x 0.148").

d. Common (6d- 2" x 0.113"; 8d – 2-1/2" x 0.131"; 10d - 3" x 0.148").

e. Deformed shank (6d -2" x 0.113"; 8d – 2-1/2" x 0.131"; 10d - 3" x 0.148").

f. Corrosion-resistant siding (6d 1-7/8" x 0.106"; 8d – 2-3/8" x 0.128") or casing (6d - 2" x 0.099"; 8d – 2 1/2" x 0.113) nail.

g. Fasteners spaced 3 inches on center at exterior edges and 6 inches on center at intermediate supports, when used as structural sheathing. Spacing shall be 6 inches on center on the edges and 12 inches on center at intermediate supports for nonstructural applications.

h. Corrosion-resistant roofing nails with 7/8 inch diameter head and 1-1/8 inch length for 1/2 inch sheathing and 1-3/4 inch length for 25/32 inch sheathing.

i. Corrosion-resistant staples with nominal 7/16 inch crown, or 1" crown and 1-1/4 inch length for 1/2 inch sheathing and 1-1/2" inch length for 25/32 inch sheathing. Panel supports at 16 inches (20 inches if strength axis in the long direction of the panel, unless otherwise marked).

j. Casing (1-1/2" x 0.080") or finish (1-1/2" x 0.072") nails spaced 6 inches on panel edges 12 inches at intermediate supports.

k. Panel supports at 24 inches. Casing or finish nails spaced 6 inches on panel edges, 12 inches at intermediate supports.

l. For roof sheathing applications, 8d nails (2-1/2" x 0.113") are the minimum required for wood structural panels.

m. Staples shall have a minimum crown width of 7/16 inch.

n. For roof sheathing applications fasteners spaced 4 inches on center at edges, 8 inches at intermediate supports.

o. Fasteners spaced 4 inches on center at edges, 8 inches at intermediate supports for subfloor and wall sheathing and 3 inches on center at edges, 6 inches at intermediate supports for roof sheathing.

p. Fasteners spaced 4 inches on center at edges, 8 inches at intermediate supports.