

TABLE R602.3.1
MAXIMUM ALLOWABLE LENGTH OF WOOD WALL STUDS EXPOSED TO WIND SPEEDS OF 110 mph
OR LESS IN SEISMIC DESIGN CATEGORIES A, B, C, D₁ and D_{2,b,c}

HEIGHT (feet)	ON-CENTER SPACING (inches)		
	24	16	8
Supporting a roof only			
>10	2 × 4	2 × 4	2 × 4
12	2 × 6	2 × 4	2 × 4
14	2 × 6	2 × 6	2 × 4
16	2 × 6	2 × 6	2 × 4
18	NA ^a	2 × 6	2 × 6
20	NA ^a	NA ^a	2 × 6
24	NA ^a	NA ^a	2 × 6
Supporting one floor and a roof			
>10	2 × 6	2 × 4	2 × 4
12	2 × 6	2 × 6	2 × 4
14	2 × 6	2 × 6	2 × 6
16	NA ^a	2 × 6	2 × 6
18	NA ^a	2 × 6	2 × 6
20	NA ^a	NA ^a	2 × 6
24	NA ^a	NA ^a	2 × 6
Supporting two floors and a roof			
>10	2 × 6	2 × 6	2 × 4
12	2 × 6	2 × 6	2 × 6
14	2 × 6	2 × 6	2 × 6
16	NA ^a	NA ^a	2 × 6
18	NA ^a	NA ^a	2 × 6
20	NA ^a	NA ^a	2 × 6
24	NA ^a	NA ^a	NA ^a
24	NA ^a	NA ^a	NA ^a

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa,
1 pound per square inch = 6.895 kPa, 1 mile per hour = 0.447 m/s.

a. Design required.

b. Applicability of this table assumes the following: Snow load not exceeding 25 psf, f_s not less than 1310 psi determined by multiplying the AF&PA NDS tabular base design value by the repetitive use factor, and by the size factor for all species except southern pine, E not less than 1.6×10^6 psi, tributary dimensions for floors and roofs not exceeding 6 feet, maximum span for floors and roof not exceeding 12 feet, eaves not over 2 feet in dimension and exterior sheathing. Where the conditions are not within these parameters, design is required.

c. Utility, standard, stud and No. 3 grade lumber of any species are not permitted.

(continued)