

**Maximum Wall Heights, Opening Size and Braced Wall Panel Width
in a Continuously Sheathed Wall**

Wall Height	Braced Wall Panel Width*	Opening Height	Opening Width
8 ft.	4 ft. 0 in.	8 ft. 0 in.	4 ft. 0 in.
8 ft.	2 ft. 8 in.	6 ft. 8 in.	3 ft. 4 in.
8 ft.	2 ft. 0 in.	5 ft. 2 in.	2 ft. 8 in.
9 ft.	4 ft. 6 in.	9 ft. 0 in.	4 ft. 6 in.
9 ft.	3ft. 0 in.	7 ft. 8 in.	3 ft. 10 in.
9ft.	2ft. 3 in.	5 ft. 10 in.	2 ft. 11 in.
10 ft.	6 ft.0 in.	10 ft. 0 in.	5 ft. 0 in.
10 ft.	3 ft. 4 in.	8 ft. 6 in.	4 ft. 3 in.
10 ft.	2 ft. 6 in.	6 ft. 6 in.	3 ft. 3 in.
11 ft.	3 ft. 8 in.	7 ft. 10 in.	3 ft. 11 in.
11 ft.	2 ft. 10 in.	6 ft. 6 in.	3 ft. 3 in.
12 ft.	4ft. 0 in.	8 ft. 4 in.	4 ft. 2 in.
12 ft.	3ft. 2 in.	7 ft. 2 in.	3 ft. 1 in.
13 ft.	4 ft. 4 in.	7 ft. 8 in.	3 ft. 10 in.
13 ft.	3 ft. 6 in.	6 ft. 6 in.	3 ft. 3 in.
14 ft.	4 ft. 8 in.	8 ft. 4 in.	4 ft. 2 in.
14 ft.	3 ft.10 in.	7 ft. 0 in.	3 ft. 6 in.
15 ft.	5 ft. 0 in.	9 ft. 0 in.	4 ft. 6 in.
15 ft.	4 ft. 2 in.	7 ft. 6 in.	3 ft. 9 in.
16 ft.	5 ft. 4 in.	9 ft. 6 in.	4 ft. 9 in.
16 ft.	4 ft. 6 in.	8 ft. 0 in.	4 ft. 0 in.
17 ft.	5 ft. 8 in.	8 ft. 6 in.	4 ft. 3 in.
17 ft.	4 ft. 10 in.	6 ft. 8 in.	3 ft. 4 in.
18 ft.	6 ft. 0 in.	9 ft. 0 in.	4 ft. 6 in.
18 ft.	5 ft. 2 in.	7 ft. 2 in.	3 ft. 7 in.
19 ft.	6 ft. 4 in.	5 ft. 7 in.	2 ft. 9 in.
19 ft.	5 ft. 6 in.	3 ft. 8 in.	1 ft. 10 in.
20 ft.	6 ft. 8 in.	6 ft. 0 in.	3 ft. 0 in.

20 ft.	5 ft. 10 in.	4 ft. 0 in.	2 ft. 0 in.
--------	--------------	-------------	-------------

Wall height over 20 ft. 0 in. and walls not in conformance with the above table will require a design of the wall framing, sheathing, fasteners, hold downs, anchor bolts etc. to be prepared and signed by a structural engineer.

This table is to be used in conjunction with attached table R602.3.1.

- Panel width is required on both sides of the opening and may or may not qualify as the end braced wall panel.

Openings over 32 in. in width must have two full height king studs on each side of the opening.

Openings over 48 in. in width must have three full height king studs on each side of the opening.

Solid full stud depth blocking shall be placed at all horizontal panel edges and sheathing nailed to the blocking. Blocking is also required to be placed at no more than 10 feet horizontally.

**TABLE R602.3.1
 MAXIMUM ALLOWABLE LENGTH OF WOOD WALL STUDS EXPOSED TO WIND
 SPEEDS OF 90 MPH OR LESS b, c, d, e, f, g, h, i**

Where conditions are not within the parameters of footnotes b, c, d, e, f, g, h and i, design is required.

ROOF SPANS UP TO 22' SUPPORTING A ROOF ONLY					
MAXIMUM WALL HEIGHT (feet)	Exposure Category^{h,i}	ON-CENTER SPACING (inches)			
		24	16	12	8
10	B	2x6	2x4	2x4	2x4
	C	2x6	2x6	2x4	2x4
12	B	2x6	2x6	2x4	2x4
	C	2x6	2x6	2x6	2x4
14	B	2x6	2x6	2x6	2x4
	C	2x6	2x6	2x6	2x6
16	B	2x8	2x6	2x6	2x6
	C	2x8	2x6	2x6	2x6
18	B	2x8	2x8	2x6	2x6
	C	2x8	2x8	2x6	2x6
20	B	2x8	2x8	2x8	2x6
	C	NA ^a	2x8	2x8	2x6
24	B	NA ^a	2x8	2x8	2x8
	C	NA ^a	NA ^a	2x8	2x8
ROOF SPANS GREATER THAN 22' and up to 26' SUPPORTING A ROOF ONLY					
MAXIMUM WALL HEIGHT (feet)	Exposure Category^{h,i}	ON-CENTER SPACING (inches)			
		24	16	12	8
10	B	2x6	2x6	2x4	2x4
	C	2x6	2x6	2x6	2x4
12	B	2x6	2x6	2x6	2x4
	C	2x8	2x6	2x6	2x6
14	B	2x6	2x6	2x6	2x6
	C	2x8	2x8	2x6	2x6
16	B	2x8	2x6	2x6	2x6
	C	2x8	2x8	2x6	2x6
18	B	2x8	2x8	2x6	2x6
	C	NA ^a	2x8	2x8	2x6
20	B	NA ^a	2x8	2x8	2x6
	C	NA ^a	NA ^a	2x8	2x8
24	B	NA ^a	NA ^a	2x8	2x8
	C	NA ^a	NA ^a	NA ^a	2x8

ROOF SPANS GREATER THAN 26' and up to 30' SUPPORTING A ROOF ONLY

MAXIMUM WALL HEIGHT (feet)	Exposure Category ^{h,i}	ON-CENTER SPACING (inches)			
		24	16	12	8
10	B	2x6	2x6	2x4	2x4
	C	2x6	2x6	2x6	2x4
12	B	2x6	2x6	2x6	2x4
	C	2x8	2x6	2x6	2x6
14	B	2x8	2x6	2x6	2x6
	C	2x8	2x8	2x6	2x6
16	B	2x8	2x6	2x6	2x6
	C	2x8	2x8	2x8	2x6
18	B	2x8	2x8	2x6	2x6
	C	NA ^a	2x8	2x8	2x8
20	B	NA ^a	2x8	2x8	2x6
	C	NA ^a	NA ^a	2x8	2x8
24	B	NA ^a	NA ^a	2x8	2x8
	C	NA ^a	NA ^a	NA ^a	2x8

ROOF SPANS GREATER THAN 30' and up to 34' SUPPORTING A ROOF ONLY

MAXIMUM WALL HEIGHT (feet)	Exposure Category ^{h,i}	ON-CENTER SPACING (inches)			
		24	16	12	8
10	B	2x6	2x6	2x4	2x4
	C	2x6	2x6	2x6	2x4
12	B	2x6	2x6	2x6	2x4
	C	2x8	2x6	2x6	2x6
14	B	2x8	2x6	2x6	2x6
	C	2x8	2x8	2x6	2x6
16	B	2x8	2x8	2x6	2x6
	C	NA ^a	2x8	2x8	2x6
18	B	2x8	2x8	2x6	2x6
	C	NA ^a	NA ^a	2x8	2x8
20	B	NA ^a	2x8	2x8	2x6
	C	NA ^a	NA ^a	2x8	2x8
24	B	NA ^a	NA ^a	2x8	2x8
	C	NA ^a	NA ^a	NA ^a	2x8

- Design required.
- Applicability of these tables assumes the following: SPF#2 or better, Ground snow = 60 psf, Roof snow = 42 psf, Component and Cladding Zone 4 - 50 square feet (Exposure B = 14.3 psf, Exposure C = 18.4 psf), eaves not greater than 2.0 feet in dimension.
- The exterior of the wall shall be continuously sheathed in accordance with one of the methods (2-8) listed in Section R602.10.3.
- Studs shall be continuous full height.
- Full depth blocking is required at 10-foot spacing maximum.
- Utility, standard, stud and No. 3 grade lumber of any species are not permitted.
- This table is based on a maximum allowable deflection limit of L/120.
- Exposure B - Urban and suburban areas, wooded areas, or other terrain with numerous closely spaced obstructions having the size of single-family dwellings or larger. Exposure B shall be assumed unless the site meets the definition of another type exposure.
- Exposure C - Open terrain with scattered obstructions, including surface undulations or other irregularities, having heights generally less than 30 feet extending more than 1,500 feet from the building site in any quadrant. This category includes flat open country, grasslands and shorelines in hurricane prone regions. Exposure C shall also apply to any building located within Exposure B type terrain where the building is directly adjacent to open areas of Exposure C type terrain in any quadrant for a distance of more than 600 feet.