

**Table 1. "LP LVL" Specified Strengths<sup>(3)(4)</sup>**

Grade	Bending Strength, $F_b$		Tensile Strength Parallel to Grain, $F_t$	Compression Strength Parallel to Grain, $F_{c//}$	Compressive Strength Perpendicular to Grain, $F_{c\perp}$		Horizontal Shear Strength, $F_v$		Modulus of Elasticity	
	MPa (psi)				MPa (psi)	MPa (psi)	Beam	Plank	Beam	Plank
	Beam	Plank	Beam	Plank						
<b>"LP LVL" (a.k.a. "Gang-Lam LVL")</b>										
2250F <sub>b</sub> -1.5E	28.67 <sup>1</sup> (4 158 <sup>1</sup> )	28.03 (4 066)	13.93 <sup>2</sup> (2 021 <sup>2</sup> )	25.86 (3 751)	9.41 (1 365)	6.28 (910)	3.65 (530)	1.79 (260)	10 340 (1.50)	9 650 (1.40)
2950F <sub>b</sub> -2.0E	37.59 <sup>1</sup> (5 452 <sup>1</sup> )	37.59 (5 452)	18.58 <sup>2</sup> (2 694 <sup>2</sup> )	35.21 (5 107)	9.41 (1 365)	6.90 (1 001)	3.72 (540)	1.79 (260)	13 790 (2.00)	13 790 (2.00)

GENERAL NOTE: All specified strengths are based on CSA O86-01.

Notes to Table 1:

1. The specified bending strength,  $F_b$ , is assigned for a standard depth of 305 mm (12 in.). For depths greater than 305 mm (12 in.), multiply  $F_b$  by  $(305/\text{depth in mm})^{0.143}$  [(12/depth in in.)<sup>0.143</sup>]. For depths less than 305 mm (12 in.), multiply  $F_b$  by  $(305/\text{depth in mm})^{0.111}$  [(12/depth in in.)<sup>0.111</sup>]. For depths less than 89 mm (3 ½ in.), multiply  $F_b$  by 1.147.
2. The specified tension strength,  $F_t$ , is assigned for a standard length of 6 096 mm (20 ft.). For lengths other than 6 096 mm (20 ft.), multiply  $F_t$  by  $(6 096/\text{length in mm})^{0.111}$  [(20/length in ft.)<sup>0.111</sup>]. For lengths less than 914 mm (3 ft.), use the value adjusted for 914 mm (3 ft.).
3. Specified design stresses in the above table are for standard term load duration and may be adjusted (with the exception of modulus of elasticity) using load duration factors per the code.
4. Specified design stresses in the above table shall apply to product installation conditions of use that are dry, well ventilated and covered. Dry conditions are product installation conditions where ambient moisture content is 16% or less.

**Table 1. Specified Design Wind Pressures for use with LP LVL Stud and Column Tables (psf) <sup>1,2</sup>**

Exposure Category	1/50 year reference wind pressure, $q_{1/50}$ (psf)									
	8	9	10	11	12	14	15	16	17	18
open terrain	18.8	21.2	23.5	25.9	28.2	32.9	35.3	37.6	40.0	42.3
rough terrain <sup>3</sup>	13.2	14.8	16.5	18.1	19.7	23.0	24.7	26.3	28.0	29.6

Notes:

1. Design wind pressure =  $I_w q_{1/50} C_e (C_p C_g - C_{pi} C_{gi})$  in accordance with article 4.1.7.1 of the 2005 NBCC.
2. The following assumptions have been used in the calculation of design wind pressure:
  - An importance factor,  $I_w$ , of 1.0 for strength limit state. A factor of 0.75 for serviceability has been incorporated into the stud tables.
  - A mean roof height of 10m or less for open terrain ( $C_e = 1.0$ ) and a mean roof height of 12m or less for rough terrain ( $C_e = 0.7$ ).
  - An interior zone is assumed ( $C_p C_g = -1.75$  components and cladding load, Figure B-8 of the NBCC Supplement). For edge zone multiply by 1.15.
  - A closed building has been assumed ( $C_{pi} = 0.3$ ,  $C_{gi} = 2$ ).
3. Rough terrain includes urban, suburban and wooded areas extending upwind from the building uninterrupted for at least 1 km or 10 times the building height, whichever is greater.
4. Wind pressure calculations are in accordance with the 2004 Wood Frame Construction Guide published by the Canadian Wood Council.
5. These wind pressures are applicable to buildings falling under Part 9 of the 2005 National Building Code of Canada.

**Table 2. Stud-to-Plate Connections**

Connection	Nails	Factored lateral resistance (lb)
2 end or toe-nails	3-1/4" spiral	143
3 end or toe-nails	3-1/4" spiral	215
4 end or toe-nails	3-1/4" spiral	287
1 - Simpson Strong-Tie A34	8 - 8d x 1-1/2"	485
1 - USP Connectors RSC FA50	8 - 8d x 1-1/2"	530
1 - Simpson Strong-Tie A35	12 - 8d x 1-1/2"	595
1 - Simpson Strong-Tie A23	8 - 8d x 1-1/2"	720
1 - USP Connectors RSC FA100	14 - 8d x 1-1/2"	860
2 - Simpson Strong-Tie A34	8 - 8d x 1-1/2"	970
2 - USP Connectors RSC FA50	8 - 8d x 1-1/2"	1060
2 - Simpson Strong-Tie A35	12 - 8d x 1-1/2"	1190
2 - Simpson Strong-Tie A23	8 - 8d x 1-1/2"	1440
2 - USP Connectors RSC FA100	14 - 8d x 1-1/2"	1720
4 - Simpson Strong-Tie A34	8 - 8d x 1-1/2"	1940
4 - USP Connectors RSC FA50	8 - 8d x 1-1/2"	2120
4 - Simpson Strong-Tie A23	8 - 8d x 1-1/2"	2880

**Note:**

1. Multiple Simpson or USP connectors are for use with LVL columns only.
2. Custom connections may be required for some large column applications.
3. Factored stud reaction =  $1.4 \times \text{specified wind pressure} \times \text{stud spacing} \times \text{stud length}/2$
4. Values are for short term loading ( $K_D = 1.15$ )
5. Refer to Manufacturer's literature for any changes to specifications and values.

**LVL STUD DESIGN TABLE**

**2250Fb-1.5E**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Hole in end third of stud only<sup>4</sup>**

**LP LVL**

Wall Height (ft)	Load and Deflection	1-1/2" x 3-1/2" <sup>5</sup>				1-1/2" x 5-1/2" <sup>5</sup>					1-1/2" x 7-1/4" <sup>5</sup>					1-1/2" x 9-1/4" <sup>6</sup>							
		Specified lateral load (plf)				Specified lateral load (plf)					Specified lateral load (plf)					Specified lateral load (plf)							
		15	20	25	30	15	20	25	30	40	50	15	20	25	30	40	50	15	20	25	30	40	50
8	Vertical (lb) Defl. Ratio	2560 L/744	2560 L/558	2560 L/447	2560 L/372	4024 L/2888	4024 L/2166	4024 L/1733	4024 L/1444	4024 L/1083	4024 L/867	5304 L/6616	5304 L/4962	5304 L/3970	5304 L/3308	5304 L/2481	5304 L/1985	6767 L/13741	6767 L/10305	6767 L/8244	6767 L/6870	6767 L/5153	6767 L/4122
9	Vertical (lb) Defl. Ratio	2560 L/523	2560 L/392	2560 L/314	2560 L/261	4024 L/2029	4024 L/1521	4024 L/1217	4024 L/1014	4024 L/761	4024 L/609	5304 L/4647	5304 L/3485	5304 L/2788	5304 L/2323	5304 L/1742	5304 L/1394	6767 L/9650	6767 L/7238	6767 L/5790	6767 L/4825	6767 L/3619	6767 L/2895
10	Vertical (lb) Defl. Ratio	2238 L/381	2144 L/286	2058 L/229	1858 L/191	4024 L/1479	4024 L/1109	4024 L/887	4024 L/739	4024 L/555	4024 L/444	5304 L/3387	5304 L/2541	5304 L/2032	5304 L/1694	5304 L/1270	5304 L/1016	6767 L/7035	6767 L/5276	6767 L/4221	6767 L/3518	6767 L/2638	6767 L/2111
11	Vertical (lb) Defl. Ratio	1740 L/286	1657 L/215			4024 L/1111	4024 L/833	4024 L/667	4024 L/556	4024 L/417	4024 L/333	5304 L/2545	5304 L/1909	5304 L/1527	5304 L/1272	5304 L/954	5304 L/763	6767 L/5286	6767 L/3964	6767 L/3171	6767 L/2643	6767 L/1982	6767 L/1586
12	Vertical (lb) Defl. Ratio	1367 L/221				4024 L/856	4024 L/642	4024 L/514	4024 L/428	4024 L/321	4024 L/257	5304 L/1960	5304 L/1470	5304 L/1176	5304 L/980	5304 L/735	5304 L/588	6767 L/4071	6767 L/3053	6767 L/2443	6767 L/2036	6767 L/1527	6767 L/1221
13	Vertical (lb) Defl. Ratio					4024 L/673	4024 L/505	4024 L/404	4024 L/337	4024 L/252	4024 L/202	5304 L/1542	5304 L/1156	5304 L/925	5304 L/771	5304 L/578	5304 L/463	6767 L/3202	6767 L/2402	6767 L/1921	6767 L/1601	6767 L/1201	6767 L/961
14	Vertical (lb) Defl. Ratio					4024 L/539	4024 L/404	4024 L/323	4024 L/269	3405 L/202		5304 L/1234	5304 L/926	5304 L/741	5304 L/617	5304 L/463	5304 L/370	6767 L/2564	6767 L/1923	6767 L/1538	6767 L/1282	6767 L/961	6767 L/769
15	Vertical (lb) Defl. Ratio					3931 L/438	3770 L/329	3624 L/263	3354 L/219			5304 L/1004	5304 L/753	5304 L/602	5304 L/502	5304 L/376	5304 L/301	6767 L/2084	6767 L/1563	6767 L/1251	6767 L/1042	6767 L/782	6767 L/625
16	Vertical (lb) Defl. Ratio					3333 L/361	3185 L/271	3027 L/217	2594 L/181			5304 L/827	5304 L/620	5304 L/496	5304 L/413	5304 L/310	5304 L/248	6767 L/1718	6767 L/1288	6767 L/1031	6767 L/859	6767 L/644	6767 L/515
17	Vertical (lb) Defl. Ratio					2838 L/301	2701 L/226	2388 L/181				5304 L/689	5304 L/517	5304 L/414	5304 L/345	5304 L/259	4834 L/207	6767 L/1432	6767 L/1074	6767 L/859	6767 L/716	6767 L/537	6767 L/430
18	Vertical (lb) Defl. Ratio					2427 L/254	2282 L/190					5304 L/581	5304 L/436	5304 L/348	5304 L/290	4820 L/218		6767 L/1206	6767 L/905	6767 L/724	6767 L/603	6767 L/452	6767 L/362
19	Vertical (lb) Defl. Ratio					2084 L/216						5304 L/494	5304 L/370	5265 L/296	5009 L/247	3836 L/185		6767 L/1026	6767 L/769	6767 L/615	6767 L/513	6767 L/385	6767 L/308
20	Vertical (lb) Defl. Ratio					1797 L/185						5014 L/423	4802 L/318	4606 L/254	4124 L/212			6767 L/879	6767 L/660	6767 L/528	6767 L/440	6767 L/330	6767 L/264
21	Vertical (lb) Defl. Ratio											4424 L/366	4223 L/274	3963 L/219	3379 L/183			6767 L/760	6767 L/570	6767 L/456	6767 L/380	6767 L/285	6767 L/228
22	Vertical (lb) Defl. Ratio											3913 L/318	3723 L/239	3303 L/191				6767 L/661	6767 L/496	6767 L/396	6767 L/330	6767 L/248	5605 L/198
23	Vertical (lb) Defl. Ratio											3469 L/278	3290 L/209					6767 L/578	6767 L/434	6767 L/347	6767 L/289	5951 L/217	
24	Vertical (lb) Defl. Ratio											3083 L/245	2808 L/184					6767 L/509	6767 L/382	6767 L/305	6495 L/254	4960 L/191	
25	Vertical (lb) Defl. Ratio											2746 L/217						6711 L/450	6428 L/338	6169 L/270	5569 L/225		
26	Vertical (lb) Defl. Ratio											2452 L/193						6077 L/400	5806 L/300	5544 L/240	4761 L/200		
27	Vertical (lb) Defl. Ratio																	5511 L/357	5252 L/268	4805 L/214			
28	Vertical (lb) Defl. Ratio																	5004 L/320	4757 L/240	4156 L/192			
29	Vertical (lb) Defl. Ratio																	4551 L/288	4315 L/216				
30	Vertical (lb) Defl. Ratio																	4145 L/261	3803 L/195				

Notes:

- To calculate the specified lateral wind load, multiply the design wind pressure from Table 1 by the stud spacing (ft).
- Vertical load refers to the total specified load. The tabulated values are valid when the vertical live load is between 1 and 4 times the vertical dead load. For other conditions contact LP.
- This table has been prepared in accordance with the 2005 National Building Code of Canada and CSA Standard O86S1-05 for residential buildings within the scope of Part 9.
- This table is based on the following:
  - An effective length factor of 1.0 and a system factor in bending of 1.04.
  - Stud bearing on SPF plates with a specified compressive strength perpendicular to grain of 769 psi. Design of wall plates for moment, shear and deflection shall be by others.
  - The vertical load is applied at the centreline of the stud.
  - No drilling in the middle third of the stud height.** A hole is permitted at the lower or upper third of the stud only. The hole diameter must not exceed 1-1/8" for 3-1/2" studs, and 1-13/16" for 5-1/2" or larger studs. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the stud.
  - No notching is permitted.**
- 3-1/2" to 7-1/4" studs require wood-based panel sheathing on at least one side and full-depth blocking at 8' on centre.
- 9-1/4" studs require wood-based panel sheathing on one side, gypsum board or wood-based panel sheathing on the opposite side, and full-depth blocking at 8' on centre.

**LVL STUD DESIGN TABLE**

**2250F<sub>v</sub>-1.5E**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Hole anywhere<sup>4</sup>**

**LP LVL**

Wall Height (ft)	Load and Deflection	1-1/2" x 3-1/2" <sup>5</sup>				1-1/2" x 5-1/2" <sup>5</sup>						1-1/2" x 7-1/4" <sup>5</sup>						1-1/2" x 9-1/4" <sup>6</sup>					
		Specified lateral load (plf)				Specified lateral load (plf)						Specified lateral load (plf)						Specified lateral load (plf)					
		15	20	25	30	15	20	25	30	40	50	15	20	25	30	40	50	15	20	25	30	40	50
8	Vertical (lb) Defl. Ratio	2560 L/744	2560 L/558	2518 L/447	2454 L/372	4024 L/2888	4024 L/2166	4024 L/1733	4024 L/1444	4024 L/1083	4024 L/867	5304 L/6616	5304 L/4962	5304 L/3970	5304 L/3308	5304 L/2481	5304 L/1985	6767 L/13741	6767 L/10305	6767 L/8244	6767 L/6870	6767 L/5153	6767 L/4122
9	Vertical (lb) Defl. Ratio	2031 L/523	1966 L/392	1904 L/314	1843 L/261	4024 L/2029	4024 L/1521	4024 L/1217	4024 L/1014	4024 L/761	4024 L/609	5304 L/4647	5304 L/3485	5304 L/2788	5304 L/2323	5304 L/1742	5304 L/1394	6767 L/9650	6767 L/7238	6767 L/5790	6767 L/4825	6767 L/3619	6767 L/2895
10	Vertical (lb) Defl. Ratio	1563 L/381	1503 L/286	1436 L/229	1216 L/191	4024 L/1479	4024 L/1109	4024 L/887	4024 L/739	4024 L/555	4024 L/444	5304 L/3387	5304 L/2541	5304 L/2032	5304 L/1694	5304 L/1270	5304 L/1016	6767 L/7035	6767 L/5276	6767 L/4221	6767 L/3518	6767 L/2638	6767 L/2111
11	Vertical (lb) Defl. Ratio	1213 L/286	1158 L/215			4024 L/1111	4024 L/833	4024 L/667	4024 L/556	4024 L/417	4024 L/333	5304 L/2545	5304 L/1909	5304 L/1527	5304 L/1272	5304 L/954	5304 L/763	6767 L/5286	6767 L/3964	6767 L/3171	6767 L/2643	6767 L/1982	6767 L/1586
12	Vertical (lb) Defl. Ratio	950 L/221				4024 L/856	4024 L/642	4024 L/514	4024 L/428	3999 L/321	3263 L/257	5304 L/1960	5304 L/1470	5304 L/1176	5304 L/980	5304 L/735	5304 L/588	6767 L/4071	6767 L/3053	6767 L/2443	6767 L/2036	6767 L/1527	6767 L/1221
13	Vertical (lb) Defl. Ratio					3811 L/673	3701 L/505	3596 L/404	3495 L/337	2974 L/252	2273 L/202	5304 L/1542	5304 L/1156	5304 L/925	5304 L/771	5304 L/578	5304 L/463	6767 L/3202	6767 L/2402	6767 L/1921	6767 L/1601	6767 L/1201	6767 L/961
14	Vertical (lb) Defl. Ratio					3214 L/539	3108 L/404	3007 L/323	2882 L/269	2158 L/202		5304 L/1234	5304 L/926	5304 L/741	5304 L/617	5304 L/463	5304 L/370	6767 L/2564	6767 L/1923	6767 L/1538	6767 L/1282	6767 L/961	6767 L/769
15	Vertical (lb) Defl. Ratio					2716 L/438	2615 L/329	2519 L/263	2194 L/219			5304 L/1004	5304 L/753	5304 L/602	5304 L/502	5304 L/376	5304 L/301	6767 L/2084	6767 L/1563	6767 L/1251	6767 L/1042	6767 L/782	6767 L/625
16	Vertical (lb) Defl. Ratio					2301 L/361	2206 L/271	1993 L/217	1646 L/181			5304 L/827	5304 L/620	5304 L/496	5304 L/413	5304 L/310	4291 L/248	6767 L/1718	6767 L/1288	6767 L/1031	6767 L/859	6767 L/644	6767 L/515
17	Vertical (lb) Defl. Ratio					1957 L/301	1867 L/226	1533 L/181				5304 L/689	5304 L/517	5304 L/414	5153 L/345	4262 L/259	3226 L/207	6767 L/1432	6767 L/1074	6767 L/859	6767 L/716	6767 L/537	6767 L/430
18	Vertical (lb) Defl. Ratio					1670 L/254	1490 L/190					4965 L/581	4794 L/436	4632 L/348	4424 L/290	3331 L/218		6767 L/1206	6767 L/905	6767 L/724	6767 L/603	6767 L/452	6767 L/362
19	Vertical (lb) Defl. Ratio					1431 L/216						4362 L/494	4197 L/370	4041 L/296	3595 L/247	2558 L/185		6767 L/1026	6767 L/769	6767 L/615	6767 L/513	6767 L/385	6767 L/308
20	Vertical (lb) Defl. Ratio					1226 L/185						3838 L/423	3680 L/318	3440 L/254	2899 L/212			6767 L/879	6767 L/660	6767 L/528	6767 L/440	6767 L/330	6077 L/264
21	Vertical (lb) Defl. Ratio											3383 L/366	3232 L/274	2828 L/219	2314 L/183			6767 L/760	6767 L/570	6767 L/456	6767 L/380	6323 L/285	4868 L/228
22	Vertical (lb) Defl. Ratio											2988 L/318	2838 L/239	2311 L/191				6767 L/661	6767 L/496	6767 L/396	6701 L/330	5227 L/248	3830 L/198
23	Vertical (lb) Defl. Ratio											2645 L/278	2373 L/209					6698 L/578	6450 L/434	6217 L/347	5773 L/289	4279 L/217	
24	Vertical (lb) Defl. Ratio											2347 L/245	1978 L/184					6047 L/509	5807 L/382	5582 L/305	4892 L/254	3460 L/191	
25	Vertical (lb) Defl. Ratio											2086 L/217						5465 L/450	5234 L/338	4885 L/270	4126 L/225		
26	Vertical (lb) Defl. Ratio											1824 L/193						4945 L/400	4721 L/300	4186 L/240	3459 L/200		
27	Vertical (lb) Defl. Ratio																	4479 L/357	4264 L/268	3575 L/214			
28	Vertical (lb) Defl. Ratio																	4063 L/320	3766 L/240	3040 L/192			
29	Vertical (lb) Defl. Ratio																	3690 L/288	3268 L/216				
30	Vertical (lb) Defl. Ratio																	3356 L/261	2828 L/195				

**Notes:**

- To calculate the specified lateral wind load, multiply the design wind pressure from Table 1 by the stud spacing (ft).
- Vertical load refers to the total specified load. The tabulated values are valid when the vertical live load is between 1 and 4 times the vertical dead load. For other conditions contact LP.
- This table has been prepared in accordance with the 2005 National Building Code of Canada and CSA Standard O86S1-05 for residential buildings within the scope of Part 9.
- This table is based on the following:
  - An effective length factor of 1.0 and a system factor in bending of 1.04.
  - Stud bearing on SPF plates with a specified compressive strength perpendicular to grain of 769 psi. Design of wall plates for moment, shear and deflection shall be by others.
  - The vertical load is applied at the centreline of the stud.
  - Drilling may occur anywhere along the stud. The hole diameter must not exceed 1-1/8" for 3-1/2" studs, and 1-13/16" for 5-1/2" or larger studs. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the stud.
  - No notching is permitted.**
- 3-1/2" to 7-1/4" studs require wood-based panel sheathing on at least one side and full-depth blocking at 8' on centre.
- 9-1/4" studs require wood-based panel sheathing on one side, gypsum board or wood-based panel sheathing on the opposite side, and full-depth blocking at 8' on centre.

**LVL STUD DESIGN TABLE**

**2250F<sub>b</sub>-1.5E**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Notch in end third of stud only<sup>4</sup>**

**LP LVL**

Wall Height (ft)	Load and Deflection	1-1/2" x 3-1/2" <sup>5</sup>				1-1/2" x 5-1/2" <sup>5</sup>						1-1/2" x 7-1/4" <sup>5</sup>					1-1/2" x 9-1/4" <sup>6</sup>						
		Specified lateral load (plf)				Specified lateral load (plf)						Specified lateral load (plf)					Specified lateral load (plf)						
		15	20	25	30	15	20	25	30	40	50	15	20	25	30	40	50	15	20	25	30	40	50
8	Vertical (lb) Defl. Ratio	2560 L/744	2560 L/558	2560 L/447	2560 L/372	4024 L/2888	4024 L/2166	4024 L/1733	4024 L/1444	4024 L/1083	4024 L/867	5304 L/6616	5304 L/4962	5304 L/3970	5304 L/3308	5304 L/2481	5304 L/1985	6767 L/13741	6767 L/10305	6767 L/8244	6767 L/6870	6767 L/5153	6767 L/4122
9	Vertical (lb) Defl. Ratio	2560 L/523	2560 L/392	2560 L/314	2250 L/261	4024 L/2029	4024 L/1521	4024 L/1217	4024 L/1014	4024 L/761	4024 L/609	5304 L/4647	5304 L/3485	5304 L/2788	5304 L/2323	5304 L/1742	5304 L/1394	6767 L/9650	6767 L/7238	6767 L/5790	6767 L/4825	6767 L/3619	6767 L/2895
10	Vertical (lb) Defl. Ratio	2238 L/381	2144 L/286	1788 L/229	1055 L/191	4024 L/1479	4024 L/1109	4024 L/887	4024 L/739	4024 L/555	4024 L/444	5304 L/3387	5304 L/2541	5304 L/2032	5304 L/1694	5304 L/1270	5304 L/1016	6767 L/7035	6767 L/5276	6767 L/4221	6767 L/3518	6767 L/2638	6767 L/2111
11	Vertical (lb) Defl. Ratio	1740 L/286	1611 L/215			4024 L/1111	4024 L/833	4024 L/667	4024 L/556	4024 L/417	4024 L/333	5304 L/2545	5304 L/1909	5304 L/1527	5304 L/1272	5304 L/954	5304 L/763	6767 L/5286	6767 L/3964	6767 L/3171	6767 L/2643	6767 L/1982	6767 L/1586
12	Vertical (lb) Defl. Ratio	1367 L/221				4024 L/856	4024 L/642	4024 L/514	4024 L/428	4024 L/321	2270 L/257	5304 L/1960	5304 L/1470	5304 L/1176	5304 L/980	5304 L/735	5304 L/588	6767 L/4071	6767 L/3053	6767 L/2443	6767 L/2036	6767 L/1527	6767 L/1221
13	Vertical (lb) Defl. Ratio					4024 L/673	4024 L/505	4024 L/404	3377 L/337	1118 L/252		5304 L/1542	5304 L/1156	5304 L/925	5304 L/771	5304 L/578	5304 L/463	6767 L/3202	6767 L/2402	6767 L/1921	6767 L/1601	6767 L/1201	6767 L/961
14	Vertical (lb) Defl. Ratio					4024 L/539	4024 L/404	4024 L/323	3377 L/269	1118 L/202		5304 L/1234	5304 L/926	5304 L/741	5304 L/617	5304 L/463	5304 L/370	6767 L/2564	6767 L/1923	6767 L/1538	6767 L/1282	6767 L/961	6767 L/769
15	Vertical (lb) Defl. Ratio					3931 L/438	3770 L/329	3311 L/263	2097 L/219			5304 L/1004	5304 L/753	5304 L/602	5304 L/502	5304 L/376	5304 L/301	6767 L/2084	6767 L/1563	6767 L/1251	6767 L/1042	6767 L/782	6767 L/625
16	Vertical (lb) Defl. Ratio					3333 L/361	3185 L/271	2209 L/217	1037 L/181			5304 L/827	5304 L/620	5304 L/496	5304 L/413	5304 L/310	4464 L/248	6767 L/1718	6767 L/1288	6767 L/1031	6767 L/859	6767 L/644	6767 L/515
17	Vertical (lb) Defl. Ratio					2838 L/301	2524 L/226	1294 L/181				5304 L/689	5304 L/517	5304 L/414	5304 L/345	5300 L/259	2601 L/207	6767 L/1432	6767 L/1074	6767 L/859	6767 L/716	6767 L/537	6767 L/430
18	Vertical (lb) Defl. Ratio					2427 L/254	1718 L/190					5304 L/581	5304 L/436	5304 L/348	5304 L/290	3644 L/218		6767 L/1206	6767 L/905	6767 L/724	6767 L/603	6767 L/452	6767 L/362
19	Vertical (lb) Defl. Ratio					2084 L/216						5304 L/494	5304 L/370	5265 L/296	5009 L/247	2207 L/185		6767 L/1026	6767 L/769	6767 L/615	6767 L/513	6767 L/385	6767 L/308
20	Vertical (lb) Defl. Ratio					1695 L/185						5014 L/423	4802 L/318	4606 L/254	3794 L/212			6767 L/879	6767 L/660	6767 L/528	6767 L/440	6767 L/330	6767 L/264
21	Vertical (lb) Defl. Ratio											4424 L/366	4223 L/274	3963 L/219	2655 L/183			6767 L/760	6767 L/570	6767 L/456	6767 L/380	6767 L/285	5940 L/228
22	Vertical (lb) Defl. Ratio											3913 L/318	3723 L/239	3149 L/191				6767 L/661	6767 L/496	6767 L/396	6767 L/330	6767 L/248	4090 L/198
23	Vertical (lb) Defl. Ratio											3469 L/278	3290 L/209					6767 L/578	6767 L/434	6767 L/347	6767 L/289	5799 L/217	
24	Vertical (lb) Defl. Ratio											3083 L/245	2808 L/184					6767 L/509	6767 L/382	6767 L/305	6495 L/254	4275 L/191	
25	Vertical (lb) Defl. Ratio											2746 L/217						6711 L/450	6428 L/338	6169 L/270	5569 L/225		
26	Vertical (lb) Defl. Ratio											2452 L/193						6077 L/400	5806 L/300	5544 L/240	4761 L/200		
27	Vertical (lb) Defl. Ratio																	5511 L/357	5252 L/268	4805 L/214			
28	Vertical (lb) Defl. Ratio																	5004 L/320	4757 L/240	4156 L/192			
29	Vertical (lb) Defl. Ratio																	4551 L/288	4315 L/216				
30	Vertical (lb) Defl. Ratio																	4145 L/261	3803 L/195				

**Notes:**

- To calculate the specified lateral wind load, multiply the design wind pressure from Table 1 by the stud spacing (ft). This table is only valid when used with the pressures given in Table 1.
- Vertical load refers to the total specified load. The tabulated values are valid when the vertical live load is between 1 and 4 times the vertical dead load. For other conditions contact LP.
- This table has been prepared in accordance with the 2005 National Building Code of Canada and CSA Standard O86S1-05 for residential buildings within the scope of Part 9.
- This table is based on the following:
  - An effective length factor of 1.0 and a system factor in bending of 1.04.
  - Stud bearing on SPF plates with a specified compressive strength perpendicular to grain of 769 psi. Design of wall plates for moment, shear and deflection shall be by others.
  - The vertical load is applied at the centreline of the stud.
  - No drilling in the middle third of the stud height. A hole is permitted at the lower or upper third of the stud only. The hole diameter must not exceed 1-1/8" for 3-1/2" studs, and 1-13/16" for 5-1/2" or larger studs. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the stud.
  - No notching is permitted in the middle third of the stud height. A notch is permitted at the lower or upper third of the stud only. The notch depth must not exceed 7/8" for 3-1/2" studs, and 1-3/8" for 5-1/2" or larger studs. Only one notch or one hole is permitted at each end of the stud.
- 3-1/2" to 7-1/4" studs require wood-based panel sheathing on at least one side and full-depth blocking at 8' on centre.
- 9-1/4" studs require wood-based panel sheathing on one side, gypsum board or wood-based panel sheathing on the opposite side, and full-depth blocking at 8' on centre.

**LVL STUD DESIGN TABLE**

**2950F<sub>b</sub>-2.0E**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Hole in end third of stud only<sup>4</sup>**

**LP LVL**

Wall Height (ft)	Load and Deflection	1-1/2" x 3-1/2" <sup>5</sup>				1-1/2" x 5-1/2" <sup>5</sup>						1-1/2" x 7-1/4" <sup>5</sup>						1-1/2" x 9-1/4" <sup>6</sup>					
		Specified lateral load (plf)				Specified lateral load (plf)						Specified lateral load (plf)						Specified lateral load (plf)					
		15	20	25	30	15	20	25	30	40	50	15	20	25	30	40	50	15	20	25	30	40	50
8	Vertical (lb) Defl. Ratio	2560 L/992	2560 L/744	2560 L/595	2560 L/496	4024 L/3851	4024 L/2888	4024 L/2311	4024 L/1926	4024 L/1444	4024 L/1155	5304 L/8821	5304 L/6616	5304 L/5293	5304 L/4411	5304 L/3308	5304 L/2646	6767 L/18321	6767 L/13741	6767 L/10992	6767 L/9160	6767 L/6870	6767 L/5496
9	Vertical (lb) Defl. Ratio	2560 L/697	2560 L/523	2560 L/418	2560 L/349	4024 L/2705	4024 L/2029	4024 L/1623	4024 L/1352	4024 L/1014	4024 L/811	5304 L/6195	5304 L/4647	5304 L/3717	5304 L/3098	5304 L/2323	5304 L/1859	6767 L/12867	6767 L/9650	6767 L/7720	6767 L/6434	6767 L/4825	6767 L/3860
10	Vertical (lb) Defl. Ratio	2560 L/508	2560 L/381	2560 L/305	2560 L/254	4024 L/1972	4024 L/1479	4024 L/1183	4024 L/986	4024 L/739	4024 L/592	5304 L/4516	5304 L/3387	5304 L/2710	5304 L/2258	5304 L/1694	5304 L/1355	6767 L/9380	6767 L/7035	6767 L/5628	6767 L/4690	6767 L/3518	6767 L/2814
11	Vertical (lb) Defl. Ratio	2412 L/382	2320 L/286	2235 L/229	2130 L/191	4024 L/1481	4024 L/1111	4024 L/889	4024 L/741	4024 L/556	4024 L/444	5304 L/3393	5304 L/2545	5304 L/2036	5304 L/1697	5304 L/1272	5304 L/1018	6767 L/7047	6767 L/5286	6767 L/4228	6767 L/3524	6767 L/2643	6767 L/2114
12	Vertical (lb) Defl. Ratio	1903 L/294	1821 L/221			4024 L/1141	4024 L/856	4024 L/685	4024 L/571	4024 L/428	4024 L/342	5304 L/2614	5304 L/1960	5304 L/1568	5304 L/1307	5304 L/980	5304 L/784	6767 L/5428	6767 L/4071	6767 L/3257	6767 L/2714	6767 L/2036	6767 L/1629
13	Vertical (lb) Defl. Ratio	1517 L/231				4024 L/898	4024 L/673	4024 L/539	4024 L/449	4024 L/337	4024 L/269	5304 L/2056	5304 L/1542	5304 L/1233	5304 L/1028	5304 L/771	5304 L/617	6767 L/4270	6767 L/3202	6767 L/2562	6767 L/2135	6767 L/1601	6767 L/1281
14	Vertical (lb) Defl. Ratio	1222 L/185				4024 L/719	4024 L/539	4024 L/431	4024 L/359	4024 L/269	4024 L/216	5304 L/1646	5304 L/1234	5304 L/988	5304 L/823	5304 L/617	5304 L/494	6767 L/3418	6767 L/2564	6767 L/2051	6767 L/1709	6767 L/1282	6767 L/1026
15	Vertical (lb) Defl. Ratio					4024 L/584	4024 L/438	4024 L/351	4024 L/292	4024 L/219		5304 L/1338	5304 L/1004	5304 L/803	5304 L/669	5304 L/502	5304 L/401	6767 L/2779	6767 L/2084	6767 L/1668	6767 L/1390	6767 L/1042	6767 L/834
16	Vertical (lb) Defl. Ratio					4024 L/481	4024 L/361	4024 L/289	4024 L/241	3412 L/181		5304 L/1103	5304 L/827	5304 L/662	5304 L/551	5304 L/413	5304 L/331	6767 L/2290	6767 L/1718	6767 L/1374	6767 L/1145	6767 L/859	6767 L/687
17	Vertical (lb) Defl. Ratio					3939 L/401	3786 L/301	3644 L/241	3434 L/201			5304 L/919	5304 L/689	5304 L/552	5304 L/460	5304 L/345	5304 L/276	6767 L/1909	6767 L/1432	6767 L/1146	6767 L/955	6767 L/716	6767 L/573
18	Vertical (lb) Defl. Ratio					3377 L/338	3235 L/254	3104 L/203				5304 L/774	5304 L/581	5304 L/465	5304 L/387	5304 L/290	5304 L/232	6767 L/1608	6767 L/1206	6767 L/965	6767 L/804	6767 L/603	6767 L/483
19	Vertical (lb) Defl. Ratio					2908 L/287	2777 L/216					5304 L/658	5304 L/494	5304 L/395	5304 L/329	5304 L/247	5304 L/198	6767 L/1368	6767 L/1026	6767 L/821	6767 L/684	6767 L/513	6767 L/410
20	Vertical (lb) Defl. Ratio					2514 L/246	2393 L/185					5304 L/565	5304 L/423	5304 L/339	5304 L/282	5304 L/212		6767 L/1173	6767 L/879	6767 L/704	6767 L/586	6767 L/440	6767 L/352
21	Vertical (lb) Defl. Ratio					2183 L/213						5304 L/488	5304 L/366	5304 L/293	5304 L/244	4442 L/183		6767 L/1013	6767 L/760	6767 L/608	6767 L/506	6767 L/380	6767 L/304
22	Vertical (lb) Defl. Ratio					1904 L/185						5304 L/424	5219 L/318	5024 L/254	4747 L/212			6767 L/881	6767 L/661	6767 L/529	6767 L/440	6767 L/330	6767 L/264
23	Vertical (lb) Defl. Ratio											4824 L/371	4625 L/278	4441 L/223	3980 L/186			6767 L/771	6767 L/578	6767 L/463	6767 L/385	6767 L/289	6767 L/231
24	Vertical (lb) Defl. Ratio											4296 L/327	4108 L/245	3894 L/196				6767 L/679	6767 L/509	6767 L/407	6767 L/339	6767 L/254	6767 L/204
25	Vertical (lb) Defl. Ratio											3835 L/289	3658 L/265					6767 L/600	6767 L/450	6767 L/360	6767 L/300	6767 L/225	5834 L/180
26	Vertical (lb) Defl. Ratio											3433 L/257	3265 L/193					6767 L/534	6767 L/400	6767 L/320	6767 L/267	6767 L/200	
27	Vertical (lb) Defl. Ratio											3079 L/229						6767 L/477	6767 L/357	6767 L/286	6767 L/238		
28	Vertical (lb) Defl. Ratio											2769 L/206						6767 L/427	6675 L/320	6421 L/256	5986 L/214		
29	Vertical (lb) Defl. Ratio											2496 L/185						6331 L/385	6068 L/288	5826 L/231	5205 L/192		
30	Vertical (lb) Defl. Ratio																	5776 L/347	5525 L/261	5272 L/208			

**Notes:**

- To calculate the specified lateral wind load, multiply the design wind pressure from Table 1 by the stud spacing (ft). This table is only valid when used with the pressures given in Table 1.
- Vertical load refers to the total specified load. The tabulated values are valid when the vertical live load is between 1 and 4 times the vertical dead load. For other conditions contact LP.
- This table has been prepared in accordance with the 2005 National Building Code of Canada and CSA Standard O86-05 for residential buildings within the scope of Part 9.
- This table is based on the following:
  - An effective length factor of 1.0 and a system factor in bending of 1.04.
  - Stud bearing on SPF plates with a specified compressive strength perpendicular to grain of 769 psi. Design of wall plates for moment, shear and deflection shall be by others.
  - The vertical load is applied at the centreline of the stud.
  - No drilling in the middle third of the stud height.** A hole is permitted at the lower or upper third of the stud only. The hole diameter must not exceed 1-1/8" for 3-1/2" studs, and 1-13/16" for 5-1/2" or larger studs. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the stud.
  - No notching is permitted.**
- 3-1/2" to 7-1/4" studs require wood-based panel sheathing on at least one side and full-depth blocking at 8' on centre.
- 9-1/4" studs require wood-based panel sheathing on one side, gypsum board or wood-based panel sheathing on the opposite side, and full-depth blocking at 8' on centre.

**LVL STUD DESIGN TABLE**

**2950F<sub>b</sub>-2.0E**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Hole anywhere<sup>4</sup>**

**LP LVL**

Wall Height (ft)	Load and Deflection	1-1/2" x 3-1/2" <sup>5</sup>				1-1/2" x 5-1/2" <sup>5</sup>						1-1/2" x 7-1/4" <sup>5</sup>						1-1/2" x 9-1/4" <sup>6</sup>					
		Specified lateral load (plf)				Specified lateral load (plf)						Specified lateral load (plf)						Specified lateral load (plf)					
		15	20	25	30	15	20	25	30	40	50	15	20	25	30	40	50	15	20	25	30	40	50
8	Vertical (lb) Defl. Ratio	2560 L/992	2560 L/744	2560 L/595	2560 L/496	4024 L/3851	4024 L/2888	4024 L/2311	4024 L/1926	4024 L/1444	4024 L/1155	5304 L/8821	5304 L/6616	5304 L/5293	5304 L/4411	5304 L/3308	5304 L/2646	6767 L/18321	6767 L/13741	6767 L/10992	6767 L/9160	6767 L/6870	6767 L/5496
9	Vertical (lb) Defl. Ratio	2560 L/697	2560 L/523	2560 L/418	2560 L/349	4024 L/2705	4024 L/2029	4024 L/1623	4024 L/1352	4024 L/1014	4024 L/811	5304 L/6195	5304 L/4647	5304 L/3717	5304 L/3098	5304 L/2323	5304 L/1859	6767 L/12867	6767 L/9650	6767 L/7720	6767 L/6434	6767 L/4825	6767 L/3860
10	Vertical (lb) Defl. Ratio	2153 L/508	2088 L/381	2026 L/305	1967 L/254	4024 L/1972	4024 L/1479	4024 L/1183	4024 L/986	4024 L/739	4024 L/592	5304 L/4516	5304 L/3387	5304 L/2710	5304 L/2258	5304 L/1694	5304 L/1355	6767 L/9380	6767 L/7035	6767 L/5628	6767 L/4690	6767 L/3518	6767 L/2814
11	Vertical (lb) Defl. Ratio	1677 L/382	1618 L/286	1562 L/229	1408 L/191	4024 L/1481	4024 L/1111	4024 L/889	4024 L/741	4024 L/556	4024 L/444	5304 L/3393	5304 L/2545	5304 L/2036	5304 L/1697	5304 L/1272	5304 L/1018	6767 L/7047	6767 L/5286	6767 L/4228	6767 L/3524	6767 L/2643	6767 L/2114
12	Vertical (lb) Defl. Ratio	1320 L/294	1266 L/221			4024 L/1141	4024 L/856	4024 L/685	4024 L/571	4024 L/428	4024 L/342	5304 L/2614	5304 L/1960	5304 L/1568	5304 L/1307	5304 L/980	5304 L/784	6767 L/5428	6767 L/4071	6767 L/3257	6767 L/2714	6767 L/2036	6767 L/1629
13	Vertical (lb) Defl. Ratio	1049 L/231				4024 L/898	4024 L/673	4024 L/539	4024 L/449	4024 L/337	4024 L/269	5304 L/2056	5304 L/1542	5304 L/1233	5304 L/1028	5304 L/771	5304 L/617	6767 L/4270	6767 L/3202	6767 L/2562	6767 L/2135	6767 L/1601	6767 L/1281
14	Vertical (lb) Defl. Ratio	842 L/185				4024 L/719	4024 L/539	4024 L/431	4024 L/359	3808 L/269	3063 L/216	5304 L/1646	5304 L/1234	5304 L/988	5304 L/823	5304 L/617	5304 L/494	6767 L/3418	6767 L/2564	6767 L/2051	6767 L/1709	6767 L/1282	6767 L/1026
15	Vertical (lb) Defl. Ratio					3737 L/584	3630 L/438	3526 L/351	3427 L/292	2888 L/219		5304 L/1338	5304 L/1004	5304 L/803	5304 L/669	5304 L/502	5304 L/401	6767 L/2779	6767 L/2084	6767 L/1668	6767 L/1390	6767 L/1042	6767 L/834
16	Vertical (lb) Defl. Ratio					3175 L/481	3073 L/361	2975 L/289	2872 L/241	2156 L/181		5304 L/1103	5304 L/827	5304 L/662	5304 L/551	5304 L/413	5304 L/331	6767 L/2290	6767 L/1718	6767 L/1374	6767 L/1145	6767 L/859	6767 L/687
17	Vertical (lb) Defl. Ratio					2707 L/401	2611 L/301	2519 L/241	2243 L/201			5304 L/919	5304 L/689	5304 L/552	5304 L/460	5304 L/345	5304 L/276	6767 L/1909	6767 L/1432	6767 L/1146	6767 L/955	6767 L/716	6767 L/573
18	Vertical (lb) Defl. Ratio					2318 L/338	2227 L/438	2077 L/203				5304 L/774	5304 L/581	5304 L/465	5304 L/387	5304 L/290	5304 L/232	6767 L/1608	6767 L/1206	6767 L/965	6767 L/804	6767 L/603	6767 L/483
19	Vertical (lb) Defl. Ratio					1992 L/287	1907 L/216					5304 L/658	5304 L/494	5304 L/395	5304 L/329	4737 L/247	3670 L/198	6767 L/1368	6767 L/1026	6767 L/821	6767 L/684	6767 L/513	6767 L/410
20	Vertical (lb) Defl. Ratio					1720 L/246	1616 L/185					5299 L/565	5128 L/423	4965 L/339	4810 L/282	3807 L/212		6767 L/1173	6767 L/879	6767 L/704	6767 L/586	6767 L/440	6767 L/352
21	Vertical (lb) Defl. Ratio					1490 L/213						4680 L/488	4517 L/366	4362 L/293	4089 L/244	3028 L/183		6767 L/1013	6767 L/760	6767 L/608	6767 L/506	6767 L/380	6767 L/304
22	Vertical (lb) Defl. Ratio					1297 L/185						4143 L/424	3987 L/318	3839 L/254	3381 L/212			6767 L/881	6767 L/661	6767 L/529	6767 L/440	6767 L/330	6767 L/264
23	Vertical (lb) Defl. Ratio											3676 L/371	3528 L/278	3304 L/223	2780 L/186			6767 L/771	6767 L/578	6767 L/463	6767 L/385	6767 L/289	6767 L/231
24	Vertical (lb) Defl. Ratio											3269 L/327	3128 L/245	2768 L/196				6767 L/679	6767 L/509	6767 L/407	6767 L/339	6767 L/254	6767 L/204
25	Vertical (lb) Defl. Ratio											2914 L/289	2780 L/217					6767 L/600	6767 L/450	6767 L/360	6767 L/300	6767 L/225	6767 L/180
26	Vertical (lb) Defl. Ratio											2604 L/257	2403 L/193					6767 L/534	6767 L/400	6767 L/320	6767 L/267	6767 L/200	
27	Vertical (lb) Defl. Ratio											2333 L/229						6213 L/477	5979 L/357	5757 L/286	5199 L/238		
28	Vertical (lb) Defl. Ratio											2094 L/206						5645 L/427	5420 L/320	5208 L/256	4465 L/214		
29	Vertical (lb) Defl. Ratio											1884 L/185						5137 L/385	4921 L/288	4551 L/231	3821 L/192		
30	Vertical (lb) Defl. Ratio																	4682 L/347	4474 L/261	3956 L/208			

**Notes:**

- To calculate the specified lateral wind load, multiply the design wind pressure from Table 1 by the stud spacing (ft). This table is only valid when used with the pressures given in Table 1.
- Vertical load refers to the total specified load. The tabulated values are valid when the vertical live load is between 1 and 4 times the vertical dead load. For other conditions contact LP.
- This table has been prepared in accordance with the 2005 National Building Code of Canada and CSA Standard O86-05 for residential buildings within the scope of Part 9.
- This table is based on the following:
  - An effective length factor of 1.0 and a system factor in bending of 1.04.
  - Stud bearing on SPF plates with a specified compressive strength perpendicular to grain of 769 psi. Design of wall plates for moment, shear and deflection shall be by others.
  - The vertical load is applied at the centreline of the stud.
  - Drilling may occur anywhere along the stud. The hole diameter must not exceed 1-1/8" for 3-1/2" studs, and 1-13/16" for 5-1/2" or larger studs. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the stud.
  - No notching is permitted.**
- 3-1/2" to 7-1/4" studs require wood-based panel sheathing on at least one side and full-depth blocking at 8' on centre.
- 9-1/4" studs require wood-based panel sheathing on one side, gypsum board or wood-based panel sheathing on the opposite side, and full-depth blocking at 8' on centre.



**LVL STUD DESIGN TABLE**

**2950F<sub>b</sub>-2.0E**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Notch in end third of stud only<sup>4</sup>**

**LP LVL**

Wall Height (ft)	Load and Deflection	1-1/2" x 3-1/2" <sup>5</sup>				1-1/2" x 5-1/2" <sup>5</sup>						1-1/2" x 7-1/4" <sup>5</sup>					1-1/2" x 9-1/4" <sup>6</sup>						
		Specified lateral load (plf)				Specified lateral load (plf)						Specified lateral load (plf)					Specified lateral load (plf)						
		15	20	25	30	15	20	25	30	40	50	15	20	25	30	40	50	15	20	25	30	40	50
8	Vertical (lb) Defl. Ratio	2560 L/992	2560 L/744	2560 L/595	2560 L/496	4024 L/3851	4024 L/2888	4024 L/2311	4024 L/1926	4024 L/1444	4024 L/1155	5304 L/8821	5304 L/6616	5304 L/5293	5304 L/4411	5304 L/3308	5304 L/2646	6767 L/18321	6767 L/13741	6767 L/10992	6767 L/9160	6767 L/6870	6767 L/5496
9	Vertical (lb) Defl. Ratio	2560 L/697	2560 L/523	2560 L/418	2560 L/349	4024 L/2705	4024 L/2029	4024 L/1623	4024 L/1352	4024 L/1014	4024 L/811	5304 L/6195	5304 L/4647	5304 L/3717	5304 L/3098	5304 L/2323	5304 L/1859	6767 L/12867	6767 L/9650	6767 L/7720	6767 L/6434	6767 L/4825	6767 L/3860
10	Vertical (lb) Defl. Ratio	2560 L/508	2560 L/381	2560 L/305	2560 L/254	4024 L/1972	4024 L/1479	4024 L/1183	4024 L/986	4024 L/739	4024 L/592	5304 L/4516	5304 L/3387	5304 L/2710	5304 L/2258	5304 L/1694	5304 L/1355	6767 L/9380	6767 L/7035	6767 L/5628	6767 L/4690	6767 L/3518	6767 L/2814
11	Vertical (lb) Defl. Ratio	2412 L/382	2320 L/286	2235 L/229	1568 L/191	4024 L/1481	4024 L/1111	4024 L/889	4024 L/741	4024 L/556	4024 L/444	5304 L/3393	5304 L/2545	5304 L/2036	5304 L/1697	5304 L/1272	5304 L/1018	6767 L/7047	6767 L/5286	6767 L/4228	6767 L/3524	6767 L/2643	6767 L/2114
12	Vertical (lb) Defl. Ratio	1903 L/294	1821 L/221			4024 L/1141	4024 L/856	4024 L/685	4024 L/571	4024 L/428	4024 L/342	5304 L/2614	5304 L/1960	5304 L/1568	5304 L/1307	5304 L/980	5304 L/784	6767 L/5428	6767 L/4071	6767 L/3257	6767 L/2714	6767 L/2036	6767 L/1629
13	Vertical (lb) Defl. Ratio	1517 L/231				4024 L/898	4024 L/673	4024 L/539	4024 L/449	4024 L/337	4024 L/269	5304 L/2056	5304 L/1542	5304 L/1233	5304 L/1028	5304 L/771	5304 L/617	6767 L/4270	6767 L/3202	6767 L/2562	6767 L/2135	6767 L/1601	6767 L/1281
14	Vertical (lb) Defl. Ratio	1222 L/185				4024 L/719	4024 L/539	4024 L/431	4024 L/359	4024 L/269	2043 L/216	5304 L/1646	5304 L/1234	5304 L/988	5304 L/823	5304 L/617	5304 L/494	6767 L/3418	6767 L/2564	6767 L/2051	6767 L/1709	6767 L/1282	6767 L/1026
15	Vertical (lb) Defl. Ratio					4024 L/584	4024 L/438	4024 L/351	4024 L/292	2658 L/219		5304 L/1338	5304 L/1004	5304 L/803	5304 L/669	5304 L/502	5304 L/401	6767 L/2779	6767 L/2084	6767 L/1668	6767 L/1390	6767 L/1042	6767 L/834
16	Vertical (lb) Defl. Ratio					4024 L/481	4024 L/361	4024 L/289	3673 L/241	1240 L/181		5304 L/1103	5304 L/827	5304 L/662	5304 L/551	5304 L/413	5304 L/331	6767 L/2290	6767 L/1718	6767 L/1374	6767 L/1145	6767 L/859	6767 L/687
17	Vertical (lb) Defl. Ratio					3939 L/401	3786 L/301	3644 L/241	2416 L/201			5304 L/919	5304 L/689	5304 L/552	5304 L/460	5304 L/345	5304 L/276	6767 L/1909	6767 L/1432	6767 L/1146	6767 L/955	6767 L/716	6767 L/573
18	Vertical (lb) Defl. Ratio					3377 L/338	3235 L/254	2616 L/203				5304 L/774	5304 L/581	5304 L/465	5304 L/387	5304 L/290	5304 L/232	6767 L/1608	6767 L/1206	6767 L/965	6767 L/804	6767 L/603	6767 L/483
19	Vertical (lb) Defl. Ratio					2908 L/287	2777 L/216					5304 L/658	5304 L/494	5304 L/395	5304 L/329	5304 L/247	3656 L/198	6767 L/1368	6767 L/1026	6767 L/821	6767 L/684	6767 L/513	6767 L/410
20	Vertical (lb) Defl. Ratio					2514 L/246	2183 L/185					5304 L/565	5304 L/423	5304 L/339	5304 L/282	4889 L/212		6767 L/1173	6767 L/879	6767 L/704	6767 L/586	6767 L/440	6767 L/352
21	Vertical (lb) Defl. Ratio					2183 L/213						5304 L/488	5304 L/366	5304 L/293	5304 L/244	3364 L/183		6767 L/1013	6767 L/760	6767 L/608	6767 L/506	6767 L/380	6767 L/304
22	Vertical (lb) Defl. Ratio					1904 L/185						5304 L/424	5219 L/318	5024 L/254	4747 L/212			6767 L/881	6767 L/661	6767 L/529	6767 L/440	6767 L/330	6767 L/264
23	Vertical (lb) Defl. Ratio											4824 L/371	4625 L/278	4441 L/223	3885 L/186			6767 L/771	6767 L/578	6767 L/463	6767 L/385	6767 L/289	6767 L/231
24	Vertical (lb) Defl. Ratio											4296 L/327	4108 L/245	3894 L/196				6767 L/679	6767 L/509	6767 L/407	6767 L/339	6767 L/254	6767 L/204
25	Vertical (lb) Defl. Ratio											3835 L/289	3658 L/217					6767 L/600	6767 L/450	6767 L/360	6767 L/300	6767 L/225	6767 L/180
26	Vertical (lb) Defl. Ratio											3433 L/257	3265 L/193					6767 L/534	6767 L/400	6767 L/320	6767 L/267	6265 L/200	
27	Vertical (lb) Defl. Ratio											3079 L/229						6767 L/477	6767 L/357	6767 L/286	6767 L/238		
28	Vertical (lb) Defl. Ratio											2769 L/206						6767 L/427	6675 L/320	6421 L/256	5986 L/214		
29	Vertical (lb) Defl. Ratio											2496 L/185						6331 L/385	6068 L/288	5826 L/231	5205 L/192		
30	Vertical (lb) Defl. Ratio																	5776 L/347	5525 L/261	5272 L/208			

**Notes:**

- To calculate the specified lateral wind load, multiply the design wind pressure from Table 1 by the stud spacing (ft). This table is only valid when used with the pressures given in Table 1.
- Vertical load refers to the total specified load. The tabulated values are valid when the vertical live load is between 1 and 4 times the vertical dead load. For other conditions contact LP.
- This table has been prepared in accordance with the 2005 National Building Code of Canada and CSA Standard O86-05 for residential buildings within the scope of Part 9.
- This table is based on the following:
  - An effective length factor of 1.0 and a system factor in bending of 1.04.
  - Stud bearing on SPF plates with a specified compressive strength perpendicular to grain of 769 psi. Design of wall plates for moment, shear and deflection shall be by others.
  - The vertical load is applied at the centreline of the stud.
  - No drilling in the middle third of the stud height. A hole is permitted at the lower or upper third of the stud only. The hole diameter must not exceed 1-1/8" for 3-1/2" studs, and 1-13/16" for 5-1/2" or larger studs. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the stud.
  - No notching is permitted in the middle third of the stud height. A notch is permitted at the lower or upper third of the stud only. The notch depth must not exceed 7/8" for 3-1/2" studs, and 1-3/8" for 5-1/2" or larger studs. Only one notch or one hole is permitted at each end of the stud.
- 3-1/2" to 7-1/4" studs require wood-based panel sheathing on at least one side and full-depth blocking at 8' on centre.
- 9-1/4" studs require wood-based panel sheathing on one side, gypsum board or wood-based panel sheathing on the opposite side, and full-depth blocking at 8' on centre.

**LVL COLUMN DESIGN TABLE**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Hole anywhere<sup>4</sup>**

**2250F<sub>b</sub>-1.5E**

**LP LVL**

Wall Height (ft)	Load and Deflection	3-1/2" Wall Thickness									5-1/2" Wall Thickness								
		Dbl 1-1/2" x 3-1/2" <sup>5</sup>			3-1/2" x 3-1/2" <sup>5</sup>			5-1/2" x 3-1/2" Plank <sup>5</sup>			Dbl 1-1/2" x 5-1/2" <sup>5</sup>			3-1/2" x 5-1/2" <sup>5</sup>			5-1/4" x 5-1/2" <sup>5</sup>		
		Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)		
		40	80	120	40	80	120	40	80	120	60	120	180	60	120	180	60	120	180
8	Vertical (lb) Defl. Ratio	5121 L/558	4397 L/279	2627 L/186	5974 L/651	5563 L/326	3910 L/217	9359 L/955	8724 L/478	7927 L/318	8047 L/1444	8047 L/722	8047 L/481	9388 L/1685	9388 L/842	9388 L/562	14083 L/2527	14083 L/1264	14083 L/842
9	Vertical (lb) Defl. Ratio	3912 L/392	2681 L/196		4653 L/457	3725 L/229		7147 L/671	6550 L/335	4895 L/224	8047 L/1014	8047 L/507	8047 L/338	9388 L/1183	9388 L/592	9388 L/394	14083 L/1775	14083 L/888	14083 L/592
10	Vertical (lb) Defl. Ratio	2987 L/286			3567 L/333			5492 L/489	4716 L/245		8047 L/739	8047 L/370	6213 L/246	9388 L/863	9388 L/431	9227 L/288	14083 L/1294	14083 L/647	14083 L/431
11	Vertical (lb) Defl. Ratio	2286 L/215			2756 L/251			4260 L/367	3104 L/184		8047 L/556	7260 L/278	3300 L/185	9388 L/648	9388 L/324	5739 L/216	14083 L/972	14083 L/486	14083 L/324
12	Vertical (lb) Defl. Ratio				2123 L/193			3338 L/283			8047 L/428	4833 L/214		9388 L/499	7040 L/250		14083 L/749	14083 L/374	10561 L/250
13	Vertical (lb) Defl. Ratio							2643 L/223			6943 L/337			8308 L/393	4764 L/196		13119 L/589	11546 L/294	7147 L/196
14	Vertical (lb) Defl. Ratio										5582 L/269			6937 L/314			11037 L/472	8620 L/236	
15	Vertical (lb) Defl. Ratio										4217 L/219			5676 L/256			9303 L/383	6305 L/192	
16	Vertical (lb) Defl. Ratio										3132 L/181			4361 L/211			7863 L/316		
17	Vertical (lb) Defl. Ratio																6668 L/263		
18	Vertical (lb) Defl. Ratio																5675 L/222		
19	Vertical (lb) Defl. Ratio																4596 L/189		
20	Vertical (lb) Defl. Ratio																		
21	Vertical (lb) Defl. Ratio																		
22	Vertical (lb) Defl. Ratio																		
23	Vertical (lb) Defl. Ratio																		
24	Vertical (lb) Defl. Ratio																		
25	Vertical (lb) Defl. Ratio																		
26	Vertical (lb) Defl. Ratio																		
27	Vertical (lb) Defl. Ratio																		
28	Vertical (lb) Defl. Ratio																		
29	Vertical (lb) Defl. Ratio																		
30	Vertical (lb) Defl. Ratio																		

Notes:

- To calculate the specified (unfactored) lateral wind load, multiply the design wind pressure from Table 1 by the column tributary (ft). This table is only valid when used with the pressures given in Table 1.
- Vertical load refers to the total specified (unfactored) load. The tabulated values are valid when the vertical live load is between 1 and 4 times the vertical dead load. For other conditions contact LP.
- This table has been prepared in accordance with the 2005 National Building Code of Canada and CSA Standard O86-05 for residential buildings within the scope of Part 9.
- This table is based on the following:
  - An effective length factor of 1.0
  - Stud bearing on SPF plates with a specified compressive strength perpendicular to grain of 769 psi. Design of wall plates for moment, shear and deflection shall be by others.
  - The vertical load is applied at the centreline of the stud.
  - Drilling may occur anywhere along the column. The hole diameter must not exceed 1-1/8" for 3-1/2" thickness, and 1-13/16" for 5-1/2" thick or larger columns. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the column.
  - No notching is permitted.**
- The first dimension is parallel to the wall, the second dimension is perpendicular to the wall.
- Columns require wood-based panel sheathing on at least one side and solid blocking at 8' on centre between the column and an adjacent stud on at least one side.

**LVL COLUMN DESIGN TABLE**

**2250F<sub>b</sub>-1.5E**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Hole anywhere<sup>4</sup>**

**LP LVL**

Wall Height (ft)	Load and Deflection	7-1/4" Wall Thickness												9-1/4" Wall Thickness											
		Dbl 1-1/2" x 7-1/4" <sup>5</sup>			3-1/2" x 7-1/4" <sup>5</sup>			5-1/4" x 7-1/4" <sup>5</sup>			7" x 7-1/4" <sup>5</sup>			Dbl 1-1/2" x 9-1/4" <sup>5</sup>			3-1/2" x 9-1/4" <sup>5</sup>			5-1/4" x 9-1/4" <sup>5</sup>			7" x 9-1/4" <sup>5</sup>		
		Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)		
	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	
8	Vertical (lb) Defl. Ratio	10608 L/3308	10608 L/1654	10608 L/1103	12376 L/3859	12376 L/1930	12376 L/1286	18563 L/5789	18563 L/2894	18563 L/1930	24751 L/7719	24751 L/3859	24751 L/2573	13534 L/6870	13534 L/3435	13534 L/2290	15790 L/8015	15790 L/4008	15790 L/2672	23684 L/12023	23684 L/6011	23684 L/4008	31579 L/16031	31579 L/8015	31579 L/5344
9	Vertical (lb) Defl. Ratio	10608 L/2323	10608 L/1162	10608 L/774	12376 L/2711	12376 L/1355	12376 L/904	18563 L/4066	18563 L/2033	18563 L/1355	24751 L/5421	24751 L/2711	24751 L/1807	13534 L/4825	13534 L/2413	13534 L/1608	15790 L/5629	15790 L/2815	15790 L/1876	23684 L/8444	23684 L/4222	23684 L/2815	31579 L/11259	31579 L/5629	31579 L/3753
10	Vertical (lb) Defl. Ratio	10608 L/1694	10608 L/847	10608 L/565	12376 L/1976	12376 L/988	12376 L/659	18563 L/2964	18563 L/1482	18563 L/988	24751 L/3952	24751 L/1976	24751 L/1317	13534 L/3518	13534 L/1759	13534 L/1173	15790 L/4104	15790 L/2052	15790 L/1368	23684 L/6156	23684 L/3078	23684 L/2052	31579 L/8208	31579 L/4104	31579 L/2736
11	Vertical (lb) Defl. Ratio	10608 L/1272	10608 L/636	10608 L/424	12376 L/1485	12376 L/742	12376 L/495	18563 L/2227	18563 L/1113	18563 L/742	24751 L/2969	24751 L/1485	24751 L/990	13534 L/2643	13534 L/1321	13534 L/881	15790 L/3083	15790 L/1542	15790 L/1028	23684 L/4625	23684 L/2312	23684 L/1542	31579 L/6167	31579 L/3083	31579 L/2056
12	Vertical (lb) Defl. Ratio	10608 L/980	10608 L/490	10608 L/327	12376 L/1143	12376 L/572	12376 L/381	18563 L/1715	18563 L/858	18563 L/572	24751 L/2287	24751 L/1143	24751 L/762	13534 L/2036	13534 L/1018	13534 L/679	15790 L/2375	15790 L/1187	15790 L/792	23684 L/3562	23684 L/1781	23684 L/1187	31579 L/4750	31579 L/2375	31579 L/1583
13	Vertical (lb) Defl. Ratio	10608 L/771	10608 L/385	9032 L/257	12376 L/899	12376 L/450	12376 L/300	18563 L/1349	18563 L/675	18563 L/450	24751 L/1799	24751 L/899	24751 L/600	13534 L/1601	13534 L/801	13534 L/534	15790 L/1868	15790 L/934	15790 L/623	23684 L/2802	23684 L/1401	23684 L/934	31579 L/3736	31579 L/1868	31579 L/1245
14	Vertical (lb) Defl. Ratio	10608 L/617	10608 L/309	5656 L/206	12376 L/720	12376 L/360	9410 L/240	18563 L/1080	18563 L/540	18563 L/360	24751 L/1440	24751 L/720	24751 L/480	13534 L/1282	13534 L/641	13534 L/427	15790 L/1496	15790 L/748	15790 L/499	23684 L/2243	23684 L/1122	23684 L/748	31579 L/2991	31579 L/1496	31579 L/997
15	Vertical (lb) Defl. Ratio	10608 L/502	8580 L/251		12376 L/585	12141 L/293	6101 L/195	18563 L/878	18563 L/439	18212 L/293	24751 L/1171	24751 L/585	24751 L/390	13534 L/1042	13534 L/521	13534 L/347	15790 L/1216	15790 L/608	15790 L/405	23684 L/1824	23684 L/912	23684 L/608	31579 L/2432	31579 L/1216	31579 L/811
16	Vertical (lb) Defl. Ratio	10608 L/413	6124 L/207		12376 L/482	9179 L/241		18563 L/724	18563 L/362	13769 L/241	24751 L/965	24751 L/482	24751 L/322	13534 L/859	13534 L/429	13534 L/286	15790 L/1002	15790 L/501	15790 L/334	23684 L/1503	23684 L/751	23684 L/501	31579 L/2004	31579 L/1002	31579 L/668
17	Vertical (lb) Defl. Ratio	10231 L/345			12266 L/402	6735 L/201		18563 L/603	16607 L/302	10102 L/201	24751 L/804	24532 L/402	19832 L/268	13534 L/716	13534 L/358	9905 L/239	15790 L/835	15790 L/418	15492 L/278	23684 L/1253	23684 L/626	23684 L/418	31579 L/1671	31579 L/835	31579 L/557
18	Vertical (lb) Defl. Ratio	8572 L/290			10680 L/339			17036 L/508	13266 L/254		23442 L/678	21360 L/339	15492 L/226	13534 L/603	13534 L/302	6534 L/201	15790 L/704	15790 L/352	11431 L/235	23684 L/1056	23684 L/528	23684 L/352	31579 L/1407	31579 L/704	31579 L/469
19	Vertical (lb) Defl. Ratio	6927 L/247			9244 L/288			14938 L/432	10476 L/216		20619 L/576	18488 L/288	11885 L/192	13534 L/513	11425 L/256		15790 L/598	15790 L/299	7978 L/199	23684 L/897	23684 L/449	23684 L/299	31579 L/1197	31579 L/598	31579 L/399
20	Vertical (lb) Defl. Ratio	5548 L/212			7576 L/247			13116 L/370	8150 L/185		18162 L/494	15151 L/247		13534 L/440	8747 L/220		15790 L/513	13023 L/256		23684 L/769	23684 L/385	23684 L/256	31579 L/1026	31579 L/513	31579 L/342
21	Vertical (lb) Defl. Ratio	4393 L/183			6170 L/213			11538 L/320			16028 L/427	12341 L/213		13534 L/380	6463 L/190		15790 L/443	10247 L/222		23684 L/665	23684 L/332	15371 L/222	31579 L/886	31579 L/443	29428 L/295
22	Vertical (lb) Defl. Ratio				4986 L/186			10169 L/278			14174 L/371	9972 L/186		13172 L/330			15790 L/385	7870 L/193		23684 L/578	20579 L/289	11805 L/193	31579 L/771	31579 L/385	24313 L/257
23	Vertical (lb) Defl. Ratio							8982 L/244			12562 L/325			11166 L/289			14324 L/337			22944 L/506	17168 L/253		31579 L/675	28648 L/337	19892 L/225
24	Vertical (lb) Defl. Ratio							7693 L/214			11158 L/286			9421 L/254			12603 L/297			20684 L/445	14212 L/223		28603 L/594	25205 L/297	16076 L/198
25	Vertical (lb) Defl. Ratio							6473 L/190			9935 L/253			7904 L/225			10765 L/263			18663 L/394	11652 L/197		25875 L/525	21531 L/263	
26	Vertical (lb) Defl. Ratio										8865 L/225			6585 L/200			9161 L/233			16858 L/350			23432 L/467	18323 L/233	
27	Vertical (lb) Defl. Ratio										7929 L/201						7761 L/208			15245 L/313			21246 L/417	15521 L/208	
28	Vertical (lb) Defl. Ratio										6864 L/180						6537 L/187			13804 L/280			19290 L/374	13074 L/187	
29	Vertical (lb) Defl. Ratio																			12515 L/252			17538 L/337		
30	Vertical (lb) Defl. Ratio																			10987 L/228			15967 L/304		

Notes:

- To calculate the specified (unfactored) lateral wind load, multiply the design wind pressure from Table 1 by the column tributary (ft). This table is only valid when used with the pressures given in Table 1.
- Vertical load refers to the total specified (unfactored) load. The tabulated values are valid when the vertical live load is between 1 and 4 times the vertical dead load. For other conditions contact LP.
- This table has been prepared in accordance with the 2005 National Building Code of Canada and CSA Standard O86-05 for residential buildings within the scope of Part 9.
- This table is based on the following:
  - An effective length factor of 1.0
  - Stud bearing on SPF plates with a specified compressive strength perpendicular to grain of 769 psi. Design of wall plates for moment, shear and deflection shall be by others.
  - The vertical load is applied at the centreline of the stud.
  - Drilling may occur anywhere along the column. The hole diameter must not exceed 1-1/8" for 3-1/2" thickness, and 1-13/16" for 5-1/2" thick or larger columns. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the column.
  - No notching is permitted.**
- The first dimension is parallel to the wall, the second dimension is perpendicular to the wall.
- Columns require wood-based panel sheathing on at least one side and solid blocking at 8' on centre between the column and an adjacent stud on at least one side.

**LVL COLUMN DESIGN TABLE**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Hole in end third of column only<sup>4</sup>**

**2250F<sub>b</sub>-1.5E**

**LP LVL**

Wall Height (ft)	Load and Deflection	3-1/2" Wall Thickness									5-1/2" Wall Thickness								
		Dbl 1-1/2" x 3-1/2" <sup>5</sup>			3-1/2" x 3-1/2" <sup>5</sup>			5-1/2" x 3-1/2" Plank <sup>5</sup>			Dbl 1-1/2" x 5-1/2" <sup>5</sup>			3-1/2" x 5-1/2" <sup>5</sup>			5-1/4" x 5-1/2" <sup>5</sup>		
		Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)		
		40	80	120	40	80	120	40	80	120	60	120	180	60	120	180	60	120	180
8	Vertical (lb) Defl. Ratio	5121 L/558	5121 L/279	4395 L/186	5974 L/651	5974 L/326	5974 L/217	9388 L/955	9388 L/478	9388 L/318	8047 L/1444	8047 L/722	8047 L/481	9388 L/1685	9388 L/842	9388 L/562	14083 L/2527	14083 L/1264	14083 L/842
9	Vertical (lb) Defl. Ratio	5121 L/392	4202 L/196		5974 L/457	5635 L/229		9388 L/671	9282 L/335	7571 L/224	8047 L/1014	8047 L/507	8047 L/338	9388 L/1183	9388 L/592	9388 L/394	14083 L/1775	14083 L/888	14083 L/592
10	Vertical (lb) Defl. Ratio	4260 L/286			5095 L/333			7863 L/489	7028 L/245		8047 L/739	8047 L/370	8047 L/246	9388 L/863	9388 L/431	9388 L/288	14083 L/1294	14083 L/647	14083 L/431
11	Vertical (lb) Defl. Ratio	3289 L/215			3948 L/251			6112 L/367	4836 L/184		8047 L/556	8047 L/278	6531 L/185	9388 L/648	9388 L/324	9388 L/216	14083 L/972	14083 L/486	14083 L/324
12	Vertical (lb) Defl. Ratio				3091 L/193			4804 L/283			8047 L/428	7997 L/214		9388 L/499	9388 L/250		14083 L/749	14083 L/374	14083 L/250
13	Vertical (lb) Defl. Ratio							3817 L/223			8047 L/337			9388 L/393	7903 L/196		14083 L/589	14083 L/294	11855 L/196
14	Vertical (lb) Defl. Ratio										8047 L/269			9388 L/314			14083 L/472	13240 L/236	
15	Vertical (lb) Defl. Ratio										6495 L/219			8341 L/256			13434 L/383	10035 L/192	
16	Vertical (lb) Defl. Ratio										4990 L/181			6701 L/211			11366 L/316		
17	Vertical (lb) Defl. Ratio																9656 L/263		
18	Vertical (lb) Defl. Ratio																8237 L/222		
19	Vertical (lb) Defl. Ratio																7053 L/189		
20	Vertical (lb) Defl. Ratio																		
21	Vertical (lb) Defl. Ratio																		
22	Vertical (lb) Defl. Ratio																		
23	Vertical (lb) Defl. Ratio																		
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25	Vertical (lb) Defl. Ratio																		
26	Vertical (lb) Defl. Ratio																		
27	Vertical (lb) Defl. Ratio																		
28	Vertical (lb) Defl. Ratio																		
29	Vertical (lb) Defl. Ratio																		
30	Vertical (lb) Defl. Ratio																		

Notes:

1. To calculate the specified (unfactored) lateral wind load, multiply the design wind pressure from Table 1 by the column tributary (ft). This table is only valid when used with the pressures given in Table 1.
2. Vertical load refers to the total specified (unfactored) load. The tabulated values are valid when the vertical live load is between 1 and 4 times the vertical dead load. For other conditions contact LP.
3. This table has been prepared in accordance with the 2005 National Building Code of Canada and CSA Standard O86-05 for residential buildings within the scope of Part 9.
4. This table is based on the following:
  - An effective length factor of 1.0
  - Stud bearing on SPF plates with a specified compressive strength perpendicular to grain of 769 psi. Design of wall plates for moment, shear and deflection shall be by others.
  - The vertical load is applied at the centreline of the stud.
  - **No drilling in the middle third of the column height.** A hole is permitted at the lower or upper third of the column only. The hole diameter must not exceed 1-1/8" for 3-1/2" thickness, and 1-13/16" for 5-1/2" thick or larger columns. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the column.
  - **No notching is permitted.**
5. The first dimension is parallel to the wall, the second dimension is perpendicular to the wall.
6. Columns require wood-based panel sheathing on at least one side and solid blocking at 8" on centre between the column and an adjacent stud on at least one side.

**LVL COLUMN DESIGN TABLE**

**2250F<sub>b</sub>-1.5E**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Hole in end third of column only<sup>4</sup>**

**LP LVL**

Wall Height (ft)	Load and Deflection	7-1/4" Wall Thickness												9-1/4" Wall Thickness													
		Dbl 1-1/2" x 7-1/4" <sup>5</sup>			3-1/2" x 7-1/4" <sup>5</sup>			5-1/4" x 7-1/4" <sup>5</sup>			7" x 7-1/4" <sup>5</sup>			Dbl 1-1/2" x 9-1/4" <sup>5</sup>			3-1/2" x 9-1/4" <sup>5</sup>			5-1/4" x 9-1/4" <sup>5</sup>			7" x 9-1/4" <sup>5</sup>				
		Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)				
	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180
8	Vertical (lb) Defl. Ratio	10608 L/3308	10608 L/1654	10608 L/1103	12376 L/3859	12376 L/1930	12376 L/1286	18563 L/5789	18563 L/2894	18563 L/1930	24751 L/7719	24751 L/3859	24751 L/2573	13534 L/6870	13534 L/3435	13534 L/2290	15790 L/8015	15790 L/4008	15790 L/2672	23684 L/12023	23684 L/6011	23684 L/4008	31579 L/16031	31579 L/8015	31579 L/5344		
9	Vertical (lb) Defl. Ratio	10608 L/2323	10608 L/1162	10608 L/774	12376 L/2711	12376 L/1355	12376 L/904	18563 L/4066	18563 L/2033	18563 L/1355	24751 L/5421	24751 L/2711	24751 L/1807	13534 L/4825	13534 L/2413	13534 L/1608	15790 L/5629	15790 L/2815	15790 L/1876	23684 L/8444	23684 L/4222	23684 L/2815	31579 L/11259	31579 L/5629	31579 L/3753		
10	Vertical (lb) Defl. Ratio	10608 L/1694	10608 L/847	10608 L/565	12376 L/1976	12376 L/988	12376 L/659	18563 L/2964	18563 L/1482	18563 L/988	24751 L/3952	24751 L/1976	24751 L/1317	13534 L/3518	13534 L/1759	13534 L/1173	15790 L/4104	15790 L/2052	15790 L/1368	23684 L/6156	23684 L/3078	23684 L/2052	31579 L/8208	31579 L/4104	31579 L/2736		
11	Vertical (lb) Defl. Ratio	10608 L/1272	10608 L/636	10608 L/424	12376 L/1485	12376 L/742	12376 L/495	18563 L/2227	18563 L/1113	18563 L/742	24751 L/2969	24751 L/1485	24751 L/990	13534 L/2643	13534 L/1321	13534 L/881	15790 L/3083	15790 L/1542	15790 L/1028	23684 L/4625	23684 L/2312	23684 L/1542	31579 L/6167	31579 L/3083	31579 L/2056		
12	Vertical (lb) Defl. Ratio	10608 L/980	10608 L/490	10608 L/327	12376 L/1143	12376 L/572	12376 L/381	18563 L/1715	18563 L/858	18563 L/572	24751 L/2287	24751 L/1143	24751 L/762	13534 L/2036	13534 L/1018	13534 L/679	15790 L/2375	15790 L/1187	15790 L/792	23684 L/3562	23684 L/1781	23684 L/1187	31579 L/4750	31579 L/2375	31579 L/1583		
13	Vertical (lb) Defl. Ratio	10608 L/771	10608 L/385	10608 L/257	12376 L/899	12376 L/450	12376 L/300	18563 L/1349	18563 L/675	18563 L/450	24751 L/1799	24751 L/899	24751 L/600	13534 L/1601	13534 L/801	13534 L/534	15790 L/1868	15790 L/934	15790 L/623	23684 L/2802	23684 L/1401	23684 L/934	31579 L/3736	31579 L/1868	31579 L/1245		
14	Vertical (lb) Defl. Ratio	10608 L/617	10608 L/309	10608 L/206	12376 L/720	12376 L/360	12376 L/240	18563 L/1080	18563 L/540	18563 L/360	24751 L/1440	24751 L/720	24751 L/480	13534 L/1282	13534 L/641	13534 L/427	15790 L/1496	15790 L/748	15790 L/499	23684 L/2243	23684 L/1122	23684 L/748	31579 L/2991	31579 L/1496	31579 L/997		
15	Vertical (lb) Defl. Ratio	10608 L/502	10608 L/251		12376 L/585	12376 L/293	10484 L/195	18563 L/878	18563 L/439	18563 L/293	24751 L/1171	24751 L/585	24751 L/390	13534 L/1042	13534 L/521	13534 L/347	15790 L/1216	15790 L/608	15790 L/405	23684 L/1824	23684 L/912	23684 L/608	31579 L/2432	31579 L/1216	31579 L/811		
16	Vertical (lb) Defl. Ratio	10608 L/413	10608 L/207		12376 L/482	12376 L/241		18563 L/724	18563 L/362	18563 L/241	24751 L/965	24751 L/482	24751 L/322	13534 L/859	13534 L/429	13534 L/286	15790 L/1002	15790 L/501	15790 L/334	23684 L/1503	23684 L/751	23684 L/501	31579 L/2004	31579 L/1002	31579 L/668		
17	Vertical (lb) Defl. Ratio	10608 L/345			12376 L/402	10391 L/201		18563 L/603	18563 L/302	15586 L/201	24751 L/804	24751 L/402	24751 L/268	13534 L/716	13534 L/358	13534 L/239	15790 L/835	15790 L/418	15790 L/278	23684 L/1253	23684 L/626	23684 L/418	31579 L/1671	31579 L/835	31579 L/557		
18	Vertical (lb) Defl. Ratio	10608 L/290			12376 L/339			18563 L/508	18563 L/254		24751 L/678	24751 L/339	22433 L/226	13534 L/603	13534 L/302	11469 L/201	15790 L/704	15790 L/352	15790 L/235	23684 L/1056	23684 L/528	23684 L/352	31579 L/1407	31579 L/704	31579 L/469		
19	Vertical (lb) Defl. Ratio	9719 L/247			12125 L/288			18563 L/432	15143 L/216		24751 L/576	24250 L/288	17844 L/192	13534 L/513	13534 L/256		15790 L/598	15790 L/299	13254 L/199	23684 L/897	23684 L/449	23684 L/299	31579 L/1197	31579 L/598	31579 L/399		
20	Vertical (lb) Defl. Ratio	7965 L/212			10548 L/247			17120 L/370	12178 L/185		23746 L/494	21095 L/247		13534 L/440	13003 L/220		15790 L/513	15790 L/256		23684 L/769	23684 L/385	23684 L/256	31579 L/1026	31579 L/513	31579 L/342		
21	Vertical (lb) Defl. Ratio	6492 L/183			8758 L/213			15079 L/320			20973 L/427	17517 L/213		13534 L/380	10240 L/190		15790 L/443	14822 L/222		23684 L/665	23684 L/332	22233 L/222	31579 L/886	31579 L/443	31579 L/295		
22	Vertical (lb) Defl. Ratio				7246 L/186			13312 L/278			18568 L/371	14492 L/186		13534 L/330			15790 L/385	11944 L/193		23684 L/578	23684 L/289	17916 L/193	31579 L/771	31579 L/385	31579 L/257		
23	Vertical (lb) Defl. Ratio							11780 L/244			16479 L/325			13534 L/289			15790 L/337			23684 L/506	23179 L/253		31579 L/675	31579 L/337	27692 L/225		
24	Vertical (lb) Defl. Ratio							10449 L/214			14660 L/286			12599 L/254			15788 L/297			23684 L/445	19606 L/223		31579 L/594	31575 L/297	23071 L/198		
25	Vertical (lb) Defl. Ratio							9148 L/190			13075 L/253			10764 L/225			14195 L/263			22917 L/394	16504 L/197		31579 L/525	28390 L/263			
26	Vertical (lb) Defl. Ratio										11688 L/225			9165 L/200			12282 L/350			20723 L/350			28800 L/467	24564 L/233			
27	Vertical (lb) Defl. Ratio										10473 L/201						10585 L/208			18765 L/313			26137 L/417	21170 L/208			
28	Vertical (lb) Defl. Ratio										9406 L/180						9098 L/187			17016 L/280			23755 L/374	18196 L/187			
29	Vertical (lb) Defl. Ratio																			15452 L/252			21623 L/337				
30	Vertical (lb) Defl. Ratio																			14053 L/228			19711 L/304				

Notes:

- To calculate the specified (unfactored) lateral wind load, multiply the design wind pressure from Table 1 by the column tributary (ft). This table is only valid when used with the pressures given in Table 1.
- Vertical load refers to the total specified (unfactored) load. The tabulated values are valid when the vertical live load is between 1 and 4 times the vertical dead load. For other conditions contact LP.
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  - The vertical load is applied at the centreline of the stud.
  - No drilling in the middle third of the column height.** A hole is permitted at the lower or upper third of the column only. The hole diameter must not exceed 1-1/8" for 3-1/2" thickness, and 1-13/16" for 5-1/2" thick or larger columns. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the column.
  - No notching is permitted.**
- The first dimension is parallel to the wall, the second dimension is perpendicular to the wall.
- Columns require wood-based panel sheathing on at least one side and solid blocking at 8' on centre between the column and adjacent studs on at least one side.

**LVL COLUMN DESIGN TABLE**

**2250F<sub>b</sub>-1.5E**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Notch in end third of column only<sup>4</sup>**

**LP LVL**

Wall Height (ft)	Load and Deflection	3-1/2" Wall Thickness									5-1/2" Wall Thickness								
		Dbl 1-1/2" x 3-1/2" <sup>5</sup>			3-1/2" x 3-1/2" <sup>5</sup>			5-1/2" x 3-1/2" Plank <sup>5</sup>			Dbl 1-1/2" x 5-1/2" <sup>5</sup>			3-1/2" x 5-1/2" <sup>5</sup>			5-1/4" x 5-1/2" <sup>5</sup>		
		Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)		
		40	80	120	40	80	120	40	80	120	60	120	180	60	120	180	60	120	180
8	Vertical (lb) Defl. Ratio	5121 L/558	4360 L/279		5974 L/651	5974 L/326	1579 L/217	9388 L/955	9388 L/478	8497 L/318	8047 L/1444	8047 L/722	8047 L/481	9388 L/1685	9388 L/842	9388 L/562	14083 L/2527	14083 L/1264	14083 L/842
9	Vertical (lb) Defl. Ratio	5121 L/392	1309 L/196		5974 L/457	3377 L/229		9388 L/671	9282 L/335	3068 L/224	8047 L/1014	8047 L/507	4741 L/338	9388 L/1183	9388 L/592	9388 L/394	14083 L/1775	14083 L/888	14083 L/592
10	Vertical (lb) Defl. Ratio	4260 L/286			5095 L/333			7863 L/489	5422 L/245		8047 L/739	8047 L/370		9388 L/863	9388 L/431	3312 L/288	14083 L/1294	14083 L/647	14083 L/431
11	Vertical (lb) Defl. Ratio	2980 L/215			3948 L/251			6112 L/367	2213 L/184		8047 L/556	3984 L/278		9388 L/648	8593 L/324		14083 L/972	14083 L/486	12889 L/324
12	Vertical (lb) Defl. Ratio				2813 L/193			4804 L/283			8047 L/428			9388 L/499	3699 L/250		14083 L/749	14083 L/374	5549 L/250
13	Vertical (lb) Defl. Ratio							3817 L/223			8047 L/428			9388 L/393			14083 L/589	12513 L/294	
14	Vertical (lb) Defl. Ratio										6199 L/269			9388 L/314			14083 L/472	7256 L/236	
15	Vertical (lb) Defl. Ratio										3651 L/219			6732 L/256			13434 L/383	2904 L/192	
16	Vertical (lb) Defl. Ratio										1548 L/181			4192 L/211			11366 L/316		
17	Vertical (lb) Defl. Ratio																9656 L/263		
18	Vertical (lb) Defl. Ratio																7966 L/222		
19	Vertical (lb) Defl. Ratio																5533 L/189		
20	Vertical (lb) Defl. Ratio																		
21	Vertical (lb) Defl. Ratio																		
22	Vertical (lb) Defl. Ratio																		
23	Vertical (lb) Defl. Ratio																		
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28	Vertical (lb) Defl. Ratio																		
29	Vertical (lb) Defl. Ratio																		
30	Vertical (lb) Defl. Ratio																		

**Notes:**

- To calculate the specified (unfactored) lateral wind load, multiply the design wind pressure from Table 1 by the column tributary (ft). This table is only valid when used with the pressures given in Table 1.
- Vertical load refers to the total specified (unfactored) load. The tabulated values are valid when the vertical live load is between 1 and 4 times the vertical dead load. For other conditions contact LP.
- This table has been prepared in accordance with the 2005 National Building Code of Canada and CSA Standard O86-05 for residential buildings within the scope of Part 9.
- This table is based on the following:
  - An effective length factor of 1.0
  - Stud bearing on SPF plates with a specified compressive strength perpendicular to grain of 769 psi. Design of wall plates for moment, shear and deflection shall be by others.
  - The vertical load is applied at the centreline of the stud.
  - No drilling in the middle third of the column height. A hole is permitted at the lower or upper third of the column only. The hole diameter must not exceed 1-1/8" for 3-1/2" thickness, and 1-13/16" for 5-1/2" thick or larger columns. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the column.
  - No notching is permitted in the middle third of the column height. A notch is permitted at the lower or upper third of the column only. The notch depth must not exceed 7/8" for 3-1/2" thick, and 1-3/8" for 5-1/2" or thicker columns.
  - Only one notch or one hole is permitted at each end of the stud.
- The first dimension is parallel to the wall, the second dimension is perpendicular to the wall.
- Columns require wood-based panel sheathing on at least one side and solid blocking at 8' on centre between the column and an adjacent stud on at least one side.

**LVL COLUMN DESIGN TABLE**

**2250F<sub>b</sub>-1.5E**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Notch in end third of column only<sup>4</sup>**

**LP LVL**

Wall Height (ft)	Load and Deflection	7-1/4" Wall Thickness												9-1/4" Wall Thickness											
		Db1 1-1/2" x 7-1/4" <sup>5</sup>			3-1/2" x 7-1/4" <sup>5</sup>			5-1/4" x 7-1/4" <sup>5</sup>			7" x 7-1/4" <sup>5</sup>			Db1 1-1/2" x 9-1/4" <sup>5</sup>			3-1/2" x 9-1/4" <sup>5</sup>			5-1/4" x 9-1/4" <sup>5</sup>			7" x 9-1/4" <sup>5</sup>		
		Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)		
	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	
8	Vertical (lb) Defl. Ratio	10608 L/3308	10608 L/1654	10608 L/1103	12376 L/3859	12376 L/1930	12376 L/1286	18563 L/5789	18563 L/2894	18563 L/1930	24751 L/7719	24751 L/3859	24751 L/2573	13534 L/6870	13534 L/3435	13534 L/2290	15790 L/8015	15790 L/4008	15790 L/2672	23684 L/12023	23684 L/6011	23684 L/4008	31579 L/16031	31579 L/8015	31579 L/5344
9	Vertical (lb) Defl. Ratio	10608 L/2323	10608 L/1162	10608 L/774	12376 L/2711	12376 L/1355	12376 L/904	18563 L/4066	18563 L/2033	18563 L/1355	24751 L/5421	24751 L/2711	24751 L/1807	13534 L/4825	13534 L/2413	13534 L/1608	15790 L/5629	15790 L/2815	15790 L/1876	23684 L/8444	23684 L/4222	23684 L/2815	31579 L/11259	31579 L/5629	31579 L/3753
10	Vertical (lb) Defl. Ratio	10608 L/1694	10608 L/847	10608 L/565	12376 L/1976	12376 L/988	12376 L/659	18563 L/2964	18563 L/1482	18563 L/988	24751 L/3952	24751 L/1976	24751 L/1317	13534 L/3518	13534 L/1759	13534 L/1173	15790 L/4104	15790 L/2052	15790 L/1368	23684 L/6156	23684 L/3078	23684 L/2052	31579 L/8208	31579 L/4104	31579 L/2736
11	Vertical (lb) Defl. Ratio	10608 L/1272	10608 L/636	10608 L/424	12376 L/1485	12376 L/742	12376 L/495	18563 L/2227	18563 L/1113	18563 L/742	24751 L/2969	24751 L/1485	24751 L/990	13534 L/2643	13534 L/1321	13534 L/881	15790 L/3083	15790 L/1542	15790 L/1028	23684 L/4625	23684 L/2312	23684 L/1542	31579 L/6167	31579 L/3083	31579 L/2056
12	Vertical (lb) Defl. Ratio	10608 L/980	10608 L/490	10325 L/327	12376 L/1143	12376 L/572	12376 L/381	18563 L/1715	18563 L/858	18563 L/572	24751 L/2287	24751 L/1143	24751 L/762	13534 L/2036	13534 L/1018	13534 L/679	15790 L/2375	15790 L/1187	15790 L/792	23684 L/3562	23684 L/1781	23684 L/1187	31579 L/4750	31579 L/2375	31579 L/1583
13	Vertical (lb) Defl. Ratio	10608 L/771	10608 L/385	3888 L/257	12376 L/899	12376 L/450	10955 L/300	18563 L/1349	18563 L/675	18563 L/450	24751 L/1799	24751 L/899	24751 L/600	13534 L/1601	13534 L/801	13534 L/534	15790 L/1868	15790 L/934	15790 L/623	23684 L/2802	23684 L/1401	23684 L/934	31579 L/3736	31579 L/1868	31579 L/1245
14	Vertical (lb) Defl. Ratio	10608 L/617	10608 L/309		12376 L/720	12376 L/360	4433 L/240	18563 L/1080	18563 L/540	18563 L/360	24751 L/1440	24751 L/720	24751 L/480	13534 L/1282	13534 L/641	13534 L/427	15790 L/1496	15790 L/748	15790 L/499	23684 L/2243	23684 L/1122	23684 L/748	31579 L/2991	31579 L/1496	31579 L/997
15	Vertical (lb) Defl. Ratio	10608 L/502	7000 L/251		12376 L/585	12376 L/293		18563 L/878	18563 L/439	18563 L/293	24751 L/1171	24751 L/585	24751 L/390	13534 L/1042	13534 L/521	13534 L/347	15790 L/1216	15790 L/608	15790 L/405	23684 L/1824	23684 L/912	23684 L/608	31579 L/2432	31579 L/1216	31579 L/811
16	Vertical (lb) Defl. Ratio	10608 L/413	2764 L/207		12376 L/482	8326 L/241		18563 L/724	18563 L/362	12488 L/241	24751 L/965	24751 L/482	24751 L/322	13534 L/859	13534 L/429	12424 L/286	15790 L/501	15790 L/334	15790 L/222	23684 L/1503	23684 L/751	23684 L/501	31579 L/2004	31579 L/1002	31579 L/668
17	Vertical (lb) Defl. Ratio	10608 L/345			12376 L/402	4004 L/201		18563 L/603	18563 L/302	6006 L/201	24751 L/804	24751 L/402	24584 L/268	13534 L/716	13534 L/358	6132 L/239	15790 L/835	15790 L/418	15334 L/278	23684 L/1253	23684 L/626	23684 L/418	31579 L/1671	31579 L/835	31579 L/557
18	Vertical (lb) Defl. Ratio	10608 L/290			12376 L/339			18563 L/508	17097 L/254		24751 L/678	24751 L/339	16857 L/226	13534 L/603	13534 L/302	463 L/201	15790 L/704	15790 L/352	15790 L/235	23684 L/1056	23684 L/528	23684 L/352	31579 L/1407	31579 L/704	31579 L/469
19	Vertical (lb) Defl. Ratio	9473 L/247			12125 L/288			18563 L/432	11973 L/216		24751 L/576	24250 L/288	10154 L/192	13534 L/513	12707 L/256		15790 L/598	15790 L/299	2886 L/199	23684 L/897	23684 L/449	23684 L/299	31579 L/1197	31579 L/598	31579 L/399
20	Vertical (lb) Defl. Ratio	6870 L/212			10548 L/247			17120 L/370	7534 L/185		23746 L/494	21095 L/247		13534 L/440	8167 L/220		15790 L/513	15790 L/256		23684 L/769	23684 L/385	23684 L/256	31579 L/1026	31579 L/513	31579 L/342
21	Vertical (lb) Defl. Ratio	4612 L/183			8480 L/213			15079 L/320			20973 L/427	16959 L/213		13534 L/380	4107 L/190		15790 L/443	11221 L/222		23684 L/665	23684 L/332	16832 L/222	31579 L/886	31579 L/443	31579 L/295
22	Vertical (lb) Defl. Ratio				6112 L/186			13312 L/278			18568 L/371	12224 L/186		13534 L/330			15790 L/385	6936 L/193		23684 L/578	23684 L/289	10403 L/193	31579 L/771	31579 L/385	31579 L/257
23	Vertical (lb) Defl. Ratio							11780 L/244			16479 L/325			13534 L/289			15790 L/337			23684 L/506	23179 L/253		31579 L/675	31579 L/337	26876 L/225
24	Vertical (lb) Defl. Ratio							10449 L/214			14660 L/286			12599 L/254			15788 L/297			23684 L/445	19606 L/223		31579 L/594	31575 L/297	19765 L/198
25	Vertical (lb) Defl. Ratio							9148 L/190			13075 L/253			10764 L/225			14195 L/263			22917 L/394	15509 L/197		31579 L/525	28390 L/263	
26	Vertical (lb) Defl. Ratio										11688 L/225			9165 L/200			12282 L/233			20723 L/350			28800 L/467	24564 L/233	
27	Vertical (lb) Defl. Ratio										10473 L/201						10585 L/208			18765 L/313			26137 L/417	21170 L/208	
28	Vertical (lb) Defl. Ratio										9406 L/180						9098 L/187			17016 L/280			23755 L/374	18196 L/187	
29	Vertical (lb) Defl. Ratio																			15452 L/252			21623 L/337		
30	Vertical (lb) Defl. Ratio																			14053 L/228			19711 L/304		

**Notes:**

- To calculate the specified (unfactored) lateral wind load, multiply the design wind pressure from Table 1 by the column tributary (ft). This table is only valid when used with the pressures given in Table 1.
- Vertical load refers to the total specified (unfactored) load. The tabulated values are valid when the vertical live load is between 1 and 4 times the vertical dead load. For other conditions contact LP.
- This table has been prepared in accordance with the 2005 National Building Code of Canada and CSA Standard O86-05 for residential buildings within the scope of Part 9.
- This table is based on the following:
  - An effective length factor of 1.0
  - Stud bearing on SPF plates with a specified compressive strength perpendicular to grain of 769 psi. Design of wall plates for moment, shear and deflection shall be by others.
  - The vertical load is applied at the centreline of the stud.
  - No drilling in the middle third of the column height. A hole is permitted at the lower or upper third of the column only. The hole diameter must not exceed 1-1/8" for 3-1/2" thickness, and 1-13/16" for 5-1/2" thick or larger columns. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the column.
  - A notch is permitted at the lower or upper third of the column only. The notch depth must not exceed 7/8" for 3-1/2" thick, and 1-3/8" for 5-1/2" or thicker columns.
  - Only one notch or one hole is permitted at each end of the stud.
- The first dimension is parallel to the wall, the second dimension is perpendicular to the wall.
- Columns require wood-based panel sheathing on at least one side and solid blocking at 8' on centre between the column and an adjacent stud on at least one side.

**LVL COLUMN DESIGN TABLE**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Hole anywhere<sup>4</sup>**

**2950F<sub>b</sub>-2.0E**

**LP LVL**

Wall Height (ft)	Load and Deflection	3-1/2" Wall Thickness									5-1/2" Wall Thickness								
		Dbl 1-1/2" x 3-1/2" <sup>5</sup>			3-1/2" x 3-1/2" <sup>5</sup>			5-1/2" x 3-1/2" Plank <sup>5</sup>			Dbl 1-1/2" x 5-1/2" <sup>5</sup>			3-1/2" x 5-1/2" <sup>5</sup>			5-1/4" x 5-1/2" <sup>5</sup>		
		Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)		
		40	80	120	40	80	120	40	80	120	60	120	180	60	120	180	60	120	180
8	Vertical (lb) Defl. Ratio	5121 L/744	5121 L/372	5121 L/248	5974 L/868	5974 L/434	5974 L/289	9388 L/1365	9388 L/682	9388 L/455	8047 L/1926	8047 L/963	8047 L/642	9388 L/2247	9388 L/1123	9388 L/749	14083 L/3370	14083 L/1685	14083 L/1123
9	Vertical (lb) Defl. Ratio	5121 L/523	4753 L/261		5974 L/610	5868 L/305	4294 L/203	9388 L/958	9388 L/479	9070 L/319	8047 L/1352	8047 L/676	8047 L/451	9388 L/1578	9388 L/789	9388 L/526	14083 L/2367	14083 L/1183	14083 L/789
10	Vertical (lb) Defl. Ratio	4156 L/381	3058 L/191		4937 L/445	4175 L/222		7989 L/699	7385 L/349	6012 L/233	8047 L/986	8047 L/493	8047 L/329	9388 L/1150	9388 L/575	9388 L/383	14083 L/1725	14083 L/863	14083 L/575
11	Vertical (lb) Defl. Ratio	3218 L/286			3835 L/334			6238 L/525	5686 L/262		8047 L/741	8047 L/370	8047 L/247	9388 L/864	9388 L/432	9388 L/288	14083 L/1296	14083 L/648	14083 L/432
12	Vertical (lb) Defl. Ratio	2516 L/221			3008 L/257			4920 L/404	4054 L/202		8047 L/571	8047 L/285	4946 L/190	9388 L/666	9388 L/333	7809 L/222	14083 L/998	14083 L/499	14083 L/333
13	Vertical (lb) Defl. Ratio				2383 L/202			3920 L/318			8047 L/449	6528 L/224		9388 L/524	9117 L/262		14083 L/785	14083 L/393	13675 L/262
14	Vertical (lb) Defl. Ratio							3155 L/255			8047 L/359	4430 L/180		9388 L/419	6572 L/210		14083 L/629	13902 L/314	9858 L/210
15	Vertical (lb) Defl. Ratio										6806 L/292			8146 L/341			12866 L/511	11236 L/256	
16	Vertical (lb) Defl. Ratio										5564 L/241			6865 L/281			10909 L/421	8602 L/211	
17	Vertical (lb) Defl. Ratio										4318 L/201			5782 L/234			9283 L/351		
18	Vertical (lb) Defl. Ratio													4564 L/197			7931 L/296		
19	Vertical (lb) Defl. Ratio																6803 L/252		
20	Vertical (lb) Defl. Ratio																5858 L/216		
21	Vertical (lb) Defl. Ratio																5064 L/186		
22	Vertical (lb) Defl. Ratio																		
23	Vertical (lb) Defl. Ratio																		
24	Vertical (lb) Defl. Ratio																		
25	Vertical (lb) Defl. Ratio																		
26	Vertical (lb) Defl. Ratio																		
27	Vertical (lb) Defl. Ratio																		
28	Vertical (lb) Defl. Ratio																		
29	Vertical (lb) Defl. Ratio																		
30	Vertical (lb) Defl. Ratio																		

**Notes:**

- To calculate the specified (unfactored) lateral wind load, multiply the design wind pressure from Table 1 by the column tributary (ft). This table is only valid when used with the pressures given in Table 1.
- Vertical load refers to the total specified (unfactored) load. The tabulated values are valid when the vertical live load is between 1 and 4 times the vertical dead load. For other conditions contact LP.
- This table has been prepared in accordance with the 2005 National Building Code of Canada and CSA Standard O86-05 for residential buildings within the scope of Part 9.
- This table is based on the following:
  - An effective length factor of 1.0
  - Stud bearing on SPF plates with a specified compressive strength perpendicular to grain of 769 psi. Design of wall plates for moment, shear and deflection shall be by others.
  - The vertical load is applied at the centreline of the stud.
  - Drilling may occur anywhere along the column. The hole diameter must not exceed 1-1/8" for 3-1/2" thickness, and 1-13/16" for 5-1/2" thick or larger columns. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the column.
  - No notching is permitted.**
- The first dimension is parallel to the wall, the second dimension is perpendicular to the wall.
- Columns require wood-based panel sheathing on at least one side and solid blocking at 8' on centre between the column and an adjacent stud on at least one side.



**LVL COLUMN DESIGN TABLE**

**2950F<sub>b</sub>-2.0E**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Hole anywhere<sup>4</sup>**

**LP LVL**

Wall Height (ft)	Load and Deflection	7-1/4" Wall Thickness												9-1/4" Wall Thickness											
		Dbl 1-1/2" x 7-1/4" <sup>5</sup>			3-1/2" x 7-1/4" <sup>5</sup>			5-1/4" x 7-1/4" <sup>5</sup>			7" x 7-1/4" <sup>5</sup>			Dbl 1-1/2" x 9-1/4" <sup>5</sup>			3-1/2" x 9-1/4" <sup>5</sup>			5-1/4" x 9-1/4" <sup>5</sup>			7" x 9-1/4" <sup>5</sup>		
		Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)		
	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	
8	Vertical (lb) Defl. Ratio	10608 L/4411	10608 L/2205	10608 L/1470	12376 L/5146	12376 L/2573	12376 L/1715	18563 L/7719	18563 L/3859	18563 L/2573	24751 L/10291	24751 L/5146	24751 L/3430	13534 L/9160	13534 L/4580	13534 L/3053	15790 L/10687	15790 L/5344	15790 L/3562	23684 L/16031	23684 L/8015	23684 L/5344	31579 L/21374	31579 L/10687	31579 L/7125
9	Vertical (lb) Defl. Ratio	10608 L/3098	10608 L/1549	10608 L/1033	12376 L/3614	12376 L/1807	12376 L/1205	18563 L/5421	18563 L/2711	18563 L/1807	24751 L/7228	24751 L/3614	24751 L/2409	13534 L/6434	13534 L/3217	13534 L/2145	15790 L/7506	15790 L/3753	15790 L/2502	23684 L/11259	23684 L/5629	23684 L/3753	31579 L/15012	31579 L/7506	31579 L/5004
10	Vertical (lb) Defl. Ratio	10608 L/2258	10608 L/1129	10608 L/753	12376 L/2635	12376 L/1317	12376 L/878	18563 L/3952	18563 L/1976	18563 L/1317	24751 L/5269	24751 L/2635	24751 L/1756	13534 L/4690	13534 L/2345	13534 L/1563	15790 L/5472	15790 L/2736	15790 L/1824	23684 L/8208	23684 L/4104	23684 L/2736	31579 L/10944	31579 L/5472	31579 L/3648
11	Vertical (lb) Defl. Ratio	10608 L/1697	10608 L/848	10608 L/566	12376 L/1979	12376 L/990	12376 L/660	18563 L/2969	18563 L/1485	18563 L/990	24751 L/3959	24751 L/1979	24751 L/1320	13534 L/3524	13534 L/1762	13534 L/1175	15790 L/4111	15790 L/2056	15790 L/1370	23684 L/6167	23684 L/3083	23684 L/2056	31579 L/8222	31579 L/4111	31579 L/2741
12	Vertical (lb) Defl. Ratio	10608 L/1307	10608 L/653	10608 L/436	12376 L/1525	12376 L/762	12376 L/508	18563 L/2287	18563 L/1143	18563 L/762	24751 L/3049	24751 L/1525	24751 L/1016	13534 L/2714	13534 L/1357	13534 L/905	15790 L/3167	15790 L/1583	15790 L/1056	23684 L/4750	23684 L/2375	23684 L/1583	31579 L/6333	31579 L/3167	31579 L/2111
13	Vertical (lb) Defl. Ratio	10608 L/1028	10608 L/514	10608 L/343	12376 L/1199	12376 L/600	12376 L/400	18563 L/1799	18563 L/899	18563 L/600	24751 L/2398	24751 L/1199	24751 L/799	13534 L/2135	13534 L/1067	13534 L/712	15790 L/2491	15790 L/1245	15790 L/830	23684 L/3736	23684 L/1868	23684 L/1245	31579 L/4981	31579 L/2491	31579 L/1660
14	Vertical (lb) Defl. Ratio	10608 L/823	10608 L/411	10608 L/274	12376 L/960	12376 L/480	12376 L/320	18563 L/1440	18563 L/720	18563 L/480	24751 L/1920	24751 L/960	24751 L/640	13534 L/1709	13534 L/855	13534 L/570	15790 L/1994	15790 L/997	15790 L/665	23684 L/2991	23684 L/1496	23684 L/997	31579 L/3988	31579 L/1994	31579 L/1329
15	Vertical (lb) Defl. Ratio	10608 L/669	10608 L/335	10608 L/223	12376 L/781	12376 L/390	12376 L/260	18563 L/1171	18563 L/585	18563 L/390	24751 L/1561	24751 L/781	24751 L/520	13534 L/1390	13534 L/695	13534 L/463	15790 L/1621	15790 L/811	15790 L/540	23684 L/2432	23684 L/1216	23684 L/811	31579 L/3243	31579 L/1621	31579 L/1081
16	Vertical (lb) Defl. Ratio	10608 L/551	10608 L/276	10608 L/184	12376 L/643	12376 L/322	12376 L/214	18563 L/965	18563 L/482	18563 L/322	24751 L/1286	24751 L/643	24751 L/429	13534 L/1145	13534 L/573	13534 L/382	15790 L/1336	15790 L/668	15790 L/445	23684 L/2004	23684 L/1002	23684 L/668	31579 L/2672	31579 L/1336	31579 L/891
17	Vertical (lb) Defl. Ratio	10608 L/460	10608 L/230	9182 L/230	12376 L/536	12376 L/268		18563 L/804	18563 L/402	18563 L/268	24751 L/1073	24751 L/536	24751 L/358	13534 L/955	13534 L/477	13534 L/318	15790 L/1114	15790 L/557	15790 L/371	23684 L/1671	23684 L/835	23684 L/557	31579 L/2227	31579 L/1114	31579 L/742
18	Vertical (lb) Defl. Ratio	10608 L/387	10608 L/194	6900 L/194	12376 L/452	10154 L/226		18563 L/678	18563 L/339	15231 L/226	24751 L/904	24751 L/452	24751 L/301	13534 L/804	13534 L/402	13534 L/268	15790 L/938	15790 L/469	15790 L/313	23684 L/1407	23684 L/704	23684 L/469	31579 L/1876	31579 L/938	31579 L/625
19	Vertical (lb) Defl. Ratio	10608 L/329			12376 L/384	7747 L/192		18563 L/576	18316 L/288	11620 L/192	24751 L/768	24751 L/384	22045 L/256	13534 L/684	13534 L/342	12136 L/228	15790 L/798	15790 L/399	15790 L/266	23684 L/1197	23684 L/598	23684 L/399	31579 L/1596	31579 L/798	31579 L/532
20	Vertical (lb) Defl. Ratio	9547 L/282			11458 L/329			18204 L/494	14973 L/247		24751 L/659	22915 L/329	17711 L/220	13534 L/586	13534 L/293	8661 L/195	15790 L/684	15790 L/342	15790 L/228	23684 L/1026	23684 L/513	23684 L/342	31579 L/1368	31579 L/684	31579 L/456
21	Vertical (lb) Defl. Ratio	7911 L/244			10055 L/284			16055 L/427	12160 L/213		22099 L/569	20110 L/284	14078 L/190	13534 L/506	13534 L/253		15790 L/591	15790 L/295	15790 L/197	23684 L/886	23684 L/443	23684 L/295	31579 L/1182	31579 L/591	31579 L/394
22	Vertical (lb) Defl. Ratio	6507 L/212			8717 L/247			14189 L/371	9792 L/186		19580 L/495	17435 L/247		13534 L/440	11127 L/220		15790 L/514	15790 L/257		23684 L/771	23684 L/385	23684 L/257	31579 L/1028	31579 L/514	31579 L/343
23	Vertical (lb) Defl. Ratio	5320 L/186			7274 L/217			12569 L/325			17388 L/433	14547 L/217		13534 L/385	8703 L/193		15790 L/450	13019 L/225		23684 L/675	23684 L/337	19528 L/225	31579 L/899	31579 L/450	31579 L/300
24	Vertical (lb) Defl. Ratio				6045 L/191			11159 L/286			15479 L/381	12090 L/191		13534 L/339			15790 L/396	10473 L/198		23684 L/594	23684 L/297	15709 L/198	31579 L/792	31579 L/396	29992 L/264
25	Vertical (lb) Defl. Ratio							9931 L/253			13813 L/337			13534 L/300			15790 L/350			23684 L/525	21282 L/263		31579 L/700	31579 L/350	25221 L/233
26	Vertical (lb) Defl. Ratio							8858 L/225			12356 L/300			11691 L/267			14691 L/311			23475 L/467	18071 L/233		31579 L/623	29382 L/311	21073 L/208
27	Vertical (lb) Defl. Ratio							7897 L/201			11078 L/268			10033 L/238			13261 L/278			21275 L/417	15270 L/208		29364 L/556	26521 L/278	17465 L/185
28	Vertical (lb) Defl. Ratio							6775 L/180			9956 L/240			8581 L/214			11561 L/249			19307 L/374	12824 L/187		26702 L/499	23122 L/249	
29	Vertical (lb) Defl. Ratio										8968 L/216			7308 L/192			10012 L/224			17546 L/337			24317 L/449	20024 L/224	
30	Vertical (lb) Defl. Ratio										8095 L/195						8648 L/203			15968 L/304			22177 L/405	17295 L/203	

Notes:

- To calculate the specified (unfactored) lateral wind load, multiply the design wind pressure from Table 1 by the column tributary (ft). This table is only valid when used with the pressures given in Table 1.
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  - An effective length factor of 1.0
  - Stud bearing on SPF plates with a specified compressive strength perpendicular to grain of 769 psi. Design of wall plates for moment, shear and deflection shall be by others.
  - The vertical load is applied at the centreline of the stud.
  - Drilling may occur anywhere along the column. The hole diameter must not exceed 1-1/8" for 3-1/2" thickness, and 1-13/16" for 5-1/2" thick or larger columns. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the column.
  - No notching is permitted.**
- The first dimension is parallel to the wall, the second dimension is perpendicular to the wall.
- Columns require wood-based panel sheathing on at least one side and solid blocking at 8' on centre between the column and an adjacent stud on at least one side.

**LVL COLUMN DESIGN TABLE**

**2950F<sub>b</sub>-2.0E**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Hole in end third of column only<sup>4</sup>**

**LP LVL**

Wall Height (ft)	Load and Deflection	3-1/2" Wall Thickness									5-1/2" Wall Thickness								
		Dbl 1-1/2" x 3-1/2" <sup>5</sup>			3-1/2" x 3-1/2" <sup>5</sup>			5-1/2" x 3-1/2" Plank <sup>5</sup>			Dbl 1-1/2" x 5-1/2" <sup>5</sup>			3-1/2" x 5-1/2" <sup>5</sup>			5-1/4" x 5-1/2" <sup>5</sup>		
		Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)		
	40	80	120	40	80	120	40	80	120	60	120	180	60	120	180	60	120	180	
8	Vertical (lb) Defl. Ratio	5121 L/744	5121 L/372	5121 L/248	5974 L/868	5974 L/434	5974 L/289	9388 L/1365	9388 L/682	9388 L/455	8047 L/1926	8047 L/963	8047 L/642	9388 L/2247	9388 L/1123	9388 L/749	14083 L/3370	14083 L/1685	14083 L/1123
9	Vertical (lb) Defl. Ratio	5121 L/523	5121 L/261		5974 L/610	5974 L/305	5974 L/203	9388 L/958	9388 L/479	9388 L/319	8047 L/1352	8047 L/676	8047 L/451	9388 L/1578	9388 L/789	9388 L/526	14083 L/2367	14083 L/1183	14083 L/789
10	Vertical (lb) Defl. Ratio	5121 L/381	4729 L/191		5974 L/445	5974 L/222		9388 L/699	9388 L/349	9171 L/233	8047 L/986	8047 L/493	8047 L/329	9388 L/1150	9388 L/575	9388 L/383	14083 L/1725	14083 L/863	14083 L/575
11	Vertical (lb) Defl. Ratio	4612 L/286			5505 L/334			8987 L/525	8134 L/262		8047 L/741	8047 L/370	8047 L/247	9388 L/864	9388 L/432	9388 L/288	14083 L/1296	14083 L/648	14083 L/432
12	Vertical (lb) Defl. Ratio	3618 L/221			4330 L/257			7103 L/404	6195 L/202		8047 L/571	8047 L/285	8047 L/190	9388 L/666	9388 L/333	9388 L/222	14083 L/998	14083 L/499	14083 L/333
13	Vertical (lb) Defl. Ratio				3442 L/202			5674 L/318			8047 L/449	8047 L/224		9388 L/524	9388 L/262		14083 L/785	14083 L/393	14083 L/262
14	Vertical (lb) Defl. Ratio							4579 L/255			8047 L/359	7463 L/180		9388 L/419	9388 L/210		14083 L/629	14083 L/314	14083 L/210
15	Vertical (lb) Defl. Ratio										8047 L/292			9388 L/341			14083 L/511	14083 L/256	
16	Vertical (lb) Defl. Ratio										8047 L/241			9388 L/281			14083 L/421	14083 L/211	
17	Vertical (lb) Defl. Ratio										6657 L/201			8393 L/234			13477 L/351		
18	Vertical (lb) Defl. Ratio													7009 L/197			11533 L/296		
19	Vertical (lb) Defl. Ratio																9912 L/252		
20	Vertical (lb) Defl. Ratio																8555 L/216		
21	Vertical (lb) Defl. Ratio																7414 L/186		
22	Vertical (lb) Defl. Ratio																		
23	Vertical (lb) Defl. Ratio																		
24	Vertical (lb) Defl. Ratio																		
25	Vertical (lb) Defl. Ratio																		
26	Vertical (lb) Defl. Ratio																		
27	Vertical (lb) Defl. Ratio																		
28	Vertical (lb) Defl. Ratio																		
29	Vertical (lb) Defl. Ratio																		
30	Vertical (lb) Defl. Ratio																		

Notes:

- To calculate the specified (unfactored) lateral wind load, multiply the design wind pressure from Table 1 by the column tributary (ft). This table is only valid when used with the pressures given in Table 1.
- Vertical load refers to the total specified (unfactored) load. The tabulated values are valid when the vertical live load is between 1 and 4 times the vertical dead load. For other conditions contact LP.
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  - The vertical load is applied at the centreline of the stud.
  - No drilling in the middle third of the column height.** A hole is permitted at the lower or upper third of the column only. The hole diameter must not exceed 1-1/8" for 3-1/2" thickness, and 1-13/16" for 5-1/2" thick or larger columns. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the column.
  - No notching is permitted.**
- The first dimension is parallel to the wall, the second dimension is perpendicular to the wall.
- Columns require wood-based panel sheathing on at least one side and solid blocking at 8' on centre between the column and an adjacent stud on at least one side.

**LVL COLUMN DESIGN TABLE**

**2950F<sub>b</sub>-2.0E**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Hole in end third of column only<sup>4</sup>**

**LP LVL**

Wall Height (ft)	Load and Deflection	7-1/4" Wall Thickness												9-1/4" Wall Thickness											
		Dbl 1-1/2" x 7-1/4" <sup>5</sup>			3-1/2" x 7-1/4" <sup>5</sup>			5-1/4" x 7-1/4" <sup>5</sup>			7" x 7-1/4" <sup>5</sup>			Dbl 1-1/2" x 9-1/4" <sup>5</sup>			3-1/2" x 9-1/4" <sup>5</sup>			5-1/4" x 9-1/4" <sup>5</sup>			7" x 9-1/4" <sup>5</sup>		
		Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)		
	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	
8	Vertical (lb) Defl. Ratio	10608 L/4411	10608 L/2205	10608 L/1470	12376 L/5146	12376 L/2573	12376 L/1715	18563 L/7719	18563 L/3859	18563 L/2573	24751 L/10291	24751 L/5146	24751 L/3430	13534 L/9160	13534 L/4580	13534 L/3053	15790 L/10687	15790 L/5344	15790 L/3562	23684 L/16031	23684 L/8015	23684 L/5344	31579 L/21374	31579 L/10687	31579 L/7125
9	Vertical (lb) Defl. Ratio	10608 L/3098	10608 L/1549	10608 L/1033	12376 L/3614	12376 L/1807	12376 L/1205	18563 L/5421	18563 L/2711	18563 L/1807	24751 L/7228	24751 L/3614	24751 L/2409	13534 L/6434	13534 L/3217	13534 L/2145	15790 L/7506	15790 L/3753	15790 L/2502	23684 L/11259	23684 L/5629	23684 L/3753	31579 L/15012	31579 L/7506	31579 L/5004
10	Vertical (lb) Defl. Ratio	10608 L/2258	10608 L/1129	10608 L/753	12376 L/2635	12376 L/1317	12376 L/878	18563 L/3952	18563 L/1976	18563 L/1317	24751 L/5269	24751 L/2635	24751 L/1756	13534 L/4690	13534 L/2345	13534 L/1563	15790 L/5472	15790 L/2736	15790 L/1824	23684 L/8208	23684 L/4104	23684 L/2736	31579 L/10944	31579 L/5472	31579 L/3648
11	Vertical (lb) Defl. Ratio	10608 L/1697	10608 L/848	10608 L/566	12376 L/1979	12376 L/990	12376 L/660	18563 L/2969	18563 L/1485	18563 L/990	24751 L/3959	24751 L/1979	24751 L/1320	13534 L/3524	13534 L/1762	13534 L/1175	15790 L/4111	15790 L/2056	15790 L/1370	23684 L/6167	23684 L/3083	23684 L/2056	31579 L/8222	31579 L/4111	31579 L/2741
12	Vertical (lb) Defl. Ratio	10608 L/1307	10608 L/653	10608 L/436	12376 L/1525	12376 L/762	12376 L/508	18563 L/2287	18563 L/1143	18563 L/762	24751 L/3049	24751 L/1525	24751 L/1016	13534 L/2714	13534 L/1357	13534 L/905	15790 L/3167	15790 L/1583	15790 L/1056	23684 L/4750	23684 L/2375	23684 L/1583	31579 L/6333	31579 L/3167	31579 L/2111
13	Vertical (lb) Defl. Ratio	10608 L/1028	10608 L/514	10608 L/343	12376 L/1199	12376 L/600	12376 L/400	18563 L/1799	18563 L/899	18563 L/600	24751 L/2398	24751 L/1199	24751 L/799	13534 L/2135	13534 L/1067	13534 L/712	15790 L/2491	15790 L/1245	15790 L/830	23684 L/3736	23684 L/1868	23684 L/1245	31579 L/4981	31579 L/2491	31579 L/1660
14	Vertical (lb) Defl. Ratio	10608 L/823	10608 L/411	10608 L/274	12376 L/960	12376 L/480	12376 L/320	18563 L/1440	18563 L/720	18563 L/480	24751 L/1920	24751 L/960	24751 L/640	13534 L/1709	13534 L/855	13534 L/570	15790 L/1994	15790 L/997	15790 L/665	23684 L/2991	23684 L/1496	23684 L/997	31579 L/3988	31579 L/1994	31579 L/1329
15	Vertical (lb) Defl. Ratio	10608 L/669	10608 L/335	10608 L/223	12376 L/781	12376 L/390	12376 L/260	18563 L/1171	18563 L/585	18563 L/390	24751 L/1561	24751 L/781	24751 L/520	13534 L/1390	13534 L/695	13534 L/463	15790 L/1621	15790 L/811	15790 L/540	23684 L/2432	23684 L/1216	23684 L/811	31579 L/3243	31579 L/1621	31579 L/1081
16	Vertical (lb) Defl. Ratio	10608 L/551	10608 L/276	10608 L/184	12376 L/643	12376 L/322	12376 L/214	18563 L/965	18563 L/482	18563 L/322	24751 L/1286	24751 L/643	24751 L/429	13534 L/1145	13534 L/573	13534 L/382	15790 L/1336	15790 L/668	15790 L/445	23684 L/2004	23684 L/1002	23684 L/668	31579 L/2672	31579 L/1336	31579 L/891
17	Vertical (lb) Defl. Ratio	10608 L/460	10608 L/230		12376 L/536	12376 L/268		18563 L/804	18563 L/402	18563 L/268	24751 L/1073	24751 L/536	24751 L/358	13534 L/955	13534 L/477	13534 L/318	15790 L/1114	15790 L/557	15790 L/371	23684 L/1671	23684 L/835	23684 L/557	31579 L/2227	31579 L/1114	31579 L/742
18	Vertical (lb) Defl. Ratio	10608 L/387	10608 L/194		12376 L/452	12376 L/226		18563 L/678	18563 L/339	18563 L/226	24751 L/904	24751 L/452	24751 L/301	13534 L/804	13534 L/402	13534 L/268	15790 L/938	15790 L/469	15790 L/313	23684 L/1407	23684 L/704	23684 L/469	31579 L/1876	31579 L/938	31579 L/625
19	Vertical (lb) Defl. Ratio	10608 L/329			12376 L/384	11704 L/192		18563 L/576	18563 L/288	17556 L/192	24751 L/768	24751 L/384	24751 L/256	13534 L/684	13534 L/342	13534 L/228	15790 L/798	15790 L/399	15790 L/266	23684 L/1197	23684 L/598	23684 L/399	31579 L/1596	31579 L/798	31579 L/532
20	Vertical (lb) Defl. Ratio	10608 L/282			12376 L/329			18563 L/494	18563 L/247		24751 L/659	24751 L/329	24751 L/220	13534 L/586	13534 L/293	13534 L/195	15790 L/684	15790 L/342	15790 L/228	23684 L/1026	23684 L/513	23684 L/342	31579 L/1368	31579 L/684	31579 L/456
21	Vertical (lb) Defl. Ratio	10608 L/244			12376 L/284			18563 L/427	17315 L/213		24751 L/569	24751 L/284	20669 L/190	13534 L/506	13534 L/253		15790 L/591	15790 L/295	15790 L/197	23684 L/886	23684 L/443	23684 L/295	31579 L/1182	31579 L/591	31579 L/394
22	Vertical (lb) Defl. Ratio	9204 L/212			11572 L/247			18563 L/371	14292 L/186		24751 L/495	23144 L/247		13534 L/440	13534 L/220		15790 L/514	15790 L/257		23684 L/771	23684 L/385	23684 L/257	31579 L/1028	31579 L/514	31579 L/343
23	Vertical (lb) Defl. Ratio	7685 L/186			10186 L/217			16483 L/325			22833 L/433	20371 L/217		13534 L/385	12996 L/193		15790 L/450	15790 L/225		23684 L/675	23684 L/337	23684 L/225	31579 L/899	31579 L/450	31579 L/300
24	Vertical (lb) Defl. Ratio				8613 L/191			14658 L/286			20351 L/381	17226 L/191		13534 L/339			15790 L/396	15130 L/198		23684 L/594	23684 L/297	22694 L/198	31579 L/792	31579 L/396	31579 L/264
25	Vertical (lb) Defl. Ratio							13067 L/253			18184 L/337			13534 L/300			15790 L/350			23684 L/525	23684 L/263		31579 L/700	31579 L/350	31579 L/233
26	Vertical (lb) Defl. Ratio							11677 L/225			16288 L/300			13534 L/267			15790 L/311			23684 L/467	23684 L/233		31579 L/623	31579 L/311	29157 L/208
27	Vertical (lb) Defl. Ratio							10460 L/201			14625 L/268			13355 L/238			15790 L/278			23684 L/417	20907 L/208		31579 L/556	31579 L/278	24775 L/185
28	Vertical (lb) Defl. Ratio							9390 L/180			13163 L/240			11595 L/214			14785 L/249			23684 L/374	17935 L/187		31579 L/499	29570 L/249	
29	Vertical (lb) Defl. Ratio										11875 L/216			10048 L/192			13327 L/224			21629 L/337			29971 L/449	26653 L/224	
30	Vertical (lb) Defl. Ratio										10736 L/195						11670 L/203			19710 L/304			27361 L/405	23339 L/203	

Notes:

- To calculate the specified (unfactored) lateral wind load, multiply the design wind pressure from Table 1 by the column tributary (ft). This table is only valid when used with the pressures given in Table 1.
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  - The vertical load is applied at the centreline of the stud.
  - No drilling in the middle third of the column height.** A hole is permitted at the lower or upper third of the column only. The hole diameter must not exceed 1-1/8" for 3-1/2" thickness, and 1-13/16" for 5-1/2" thick or larger columns. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the column.
  - No notching is permitted.**
- The first dimension is parallel to the wall, the second dimension is perpendicular to the wall.
- Columns require wood-based panel sheathing on at least one side and solid blocking at 8' on centre between the column and an adjacent stud on at least one side.

**LVL COLUMN DESIGN TABLE**

**2950F<sub>b</sub>-2.0E**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Notch in end third of column only<sup>4</sup>**

**LP LVL**

Wall Height (ft)	Load and Deflection	3-1/2" Wall Thickness									5-1/2" Wall Thickness								
		Dbl 1-1/2" x 3-1/2" <sup>5</sup>			3-1/2" x 3-1/2" <sup>5</sup>			5-1/2" x 3-1/2" Plank <sup>5</sup>			Dbl 1-1/2" x 5-1/2" <sup>5</sup>			3-1/2" x 5-1/2" <sup>5</sup>			5-1/4" x 5-1/2" <sup>5</sup>		
		Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)		
		40	80	120	40	80	120	40	80	120	60	120	180	60	120	180	60	120	180
8	Vertical (lb) Defl. Ratio	5121 L/744	5121 L/372	3763 L/248	5974 L/868	5974 L/434	5974 L/289	9388 L/1365	9388 L/682	9388 L/455	8047 L/1926	8047 L/963	8047 L/642	9388 L/2247	9388 L/1123	9388 L/749	14083 L/3370	14083 L/1685	14083 L/1123
9	Vertical (lb) Defl. Ratio	5121 L/523	5121 L/261		5974 L/610	5974 L/305	2369 L/203	9388 L/958	9388 L/479	9388 L/319	8047 L/1352	8047 L/676	8047 L/451	9388 L/1578	9388 L/789	9388 L/526	14083 L/2367	14083 L/1183	14083 L/789
10	Vertical (lb) Defl. Ratio	5121 L/381	2187 L/191		5974 L/445	4570 L/222		9388 L/699	9388 L/349	5354 L/233	8047 L/986	8047 L/493	7819 L/329	9388 L/1150	9388 L/575	9388 L/383	14083 L/1725	14083 L/863	14083 L/575
11	Vertical (lb) Defl. Ratio	4612 L/286			5505 L/334			8987 L/525	8042 L/262		8047 L/741	8047 L/370	1009 L/247	9388 L/864	9388 L/432	6946 L/288	14083 L/1296	14083 L/648	14083 L/432
12	Vertical (lb) Defl. Ratio	3618 L/221			4330 L/257			7103 L/404	4404 L/202		8047 L/571	7433 L/285		9388 L/666	9388 L/333	353 L/222	14083 L/998	14083 L/499	14083 L/333
13	Vertical (lb) Defl. Ratio				3442 L/202			5674 L/318			8047 L/449	2700 L/224		9388 L/524	7615 L/262		14083 L/785	14083 L/393	11422 L/262
14	Vertical (lb) Defl. Ratio							4579 L/255			8047 L/359			9388 L/419	2980 L/210		14083 L/629	14083 L/314	4471 L/210
15	Vertical (lb) Defl. Ratio										8047 L/292			9388 L/341			14083 L/511	13006 L/256	
16	Vertical (lb) Defl. Ratio										6728 L/241			9388 L/281			14083 L/421	7907 L/211	
17	Vertical (lb) Defl. Ratio										4238 L/201			7579 L/234			13477 L/351		
18	Vertical (lb) Defl. Ratio													5068 L/197			11533 L/296		
19	Vertical (lb) Defl. Ratio																9912 L/252		
20	Vertical (lb) Defl. Ratio																8555 L/216		
21	Vertical (lb) Defl. Ratio																7176 L/186		
22	Vertical (lb) Defl. Ratio																		
23	Vertical (lb) Defl. Ratio																		
24	Vertical (lb) Defl. Ratio																		
25	Vertical (lb) Defl. Ratio																		
26	Vertical (lb) Defl. Ratio																		
27	Vertical (lb) Defl. Ratio																		
28	Vertical (lb) Defl. Ratio																		
29	Vertical (lb) Defl. Ratio																		
30	Vertical (lb) Defl. Ratio																		

**Notes:**

- To calculate the specified (unfactored) lateral wind load, multiply the design wind pressure from Table 1 by the column tributary (ft). This table is only valid when used with the pressures given in Table 1.
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  - The vertical load is applied at the centreline of the stud.
  - No drilling in the middle third of the column height. A hole is permitted at the lower or upper third of the column only. The hole diameter must not exceed 1-1/8" for 3-1/2" thickness, and 1-13/16" for 5-1/2" thick or larger columns. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the column.
  - No notching is permitted in the middle third of the column height. A notch is permitted at the lower or upper third of the column only. The notch depth must not exceed 7/8" for 3-1/2" thick, and 1-3/8" for 5-1/2" or thicker columns.
  - Only one notch or one hole is permitted at each end of the stud.
- The first dimension is parallel to the wall, the second dimension is perpendicular to the wall.
- Columns require wood-based panel sheathing on at least one side and solid blocking at 8' on centre between the column and an adjacent stud on at least one side.

**LVL COLUMN DESIGN TABLE**

**Maximum specified lateral wind<sup>1</sup> and vertical load<sup>2</sup>**

**Notch in end third of column only<sup>4</sup>**

**2950F<sub>b</sub>-2.0E**

**LP LVL**

Wall Height (ft)	Load and Deflection	7-1/4" Wall Thickness												9-1/4" Wall Thickness											
		Db1 1-1/2" x 7-1/4" <sup>5</sup>			3-1/2" x 7-1/4" <sup>5</sup>			5-1/4" x 7-1/4" <sup>5</sup>			7" x 7-1/4" <sup>5</sup>			Db1 1-1/2" x 9-1/4" <sup>5</sup>			3-1/2" x 9-1/4" <sup>5</sup>			5-1/4" x 9-1/4" <sup>5</sup>			7" x 9-1/4" <sup>5</sup>		
		Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)			Specified lateral load (plf)		
	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	60	120	180	
8	Vertical (lb) Defl. Ratio	10608 L/4411	10608 L/2205	10608 L/1470	12376 L/5146	12376 L/2573	12376 L/1715	18563 L/7719	18563 L/3859	18563 L/2573	24751 L/10291	24751 L/5146	24751 L/3430	13534 L/9160	13534 L/4580	13534 L/3053	15790 L/10687	15790 L/5344	15790 L/3562	23684 L/16031	23684 L/8015	23684 L/5344	31579 L/21374	31579 L/10687	31579 L/7125
9	Vertical (lb) Defl. Ratio	10608 L/3098	10608 L/1549	10608 L/1033	12376 L/3614	12376 L/1807	12376 L/1205	18563 L/5421	18563 L/2711	18563 L/1807	24751 L/7228	24751 L/3614	24751 L/2409	13534 L/6434	13534 L/3217	13534 L/2145	15790 L/7506	15790 L/3753	15790 L/2502	23684 L/11259	23684 L/5629	23684 L/3753	31579 L/15012	31579 L/7506	31579 L/5004
10	Vertical (lb) Defl. Ratio	10608 L/2258	10608 L/1129	10608 L/753	12376 L/2635	12376 L/1317	12376 L/878	18563 L/3952	18563 L/1976	18563 L/1317	24751 L/5269	24751 L/2635	24751 L/1756	13534 L/4690	13534 L/2345	13534 L/1563	15790 L/5472	15790 L/2736	15790 L/1824	23684 L/8208	23684 L/4104	23684 L/2736	31579 L/10944	31579 L/5472	31579 L/3648
11	Vertical (lb) Defl. Ratio	10608 L/1697	10608 L/848	10608 L/566	12376 L/1979	12376 L/990	12376 L/660	18563 L/1485	18563 L/742	18563 L/495	24751 L/3959	24751 L/1979	24751 L/1320	13534 L/3524	13534 L/1762	13534 L/1175	15790 L/4111	15790 L/2056	15790 L/1370	23684 L/6167	23684 L/3083	23684 L/2056	31579 L/8222	31579 L/4111	31579 L/2741
12	Vertical (lb) Defl. Ratio	10608 L/1307	10608 L/653	10608 L/436	12376 L/1525	12376 L/762	12376 L/508	18563 L/2287	18563 L/1143	18563 L/762	24751 L/3049	24751 L/1525	24751 L/1016	13534 L/2714	13534 L/1357	13534 L/905	15790 L/3167	15790 L/1583	15790 L/1056	23684 L/4750	23684 L/2375	23684 L/1583	31579 L/6333	31579 L/3167	31579 L/2111
13	Vertical (lb) Defl. Ratio	10608 L/1028	10608 L/514	10608 L/343	12376 L/1199	12376 L/600	12376 L/400	18563 L/1179	18563 L/899	18563 L/600	24751 L/2398	24751 L/1199	24751 L/799	13534 L/2135	13534 L/1067	13534 L/712	15790 L/2491	15790 L/1245	15790 L/830	23684 L/3736	23684 L/1868	23684 L/1245	31579 L/4981	31579 L/2491	31579 L/1660
14	Vertical (lb) Defl. Ratio	10608 L/823	10608 L/411	10374 L/274	12376 L/960	12376 L/480	12376 L/320	18563 L/1440	18563 L/720	18563 L/480	24751 L/1920	24751 L/960	24751 L/640	13534 L/1709	13534 L/855	13534 L/570	15790 L/1994	15790 L/997	15790 L/665	23684 L/2991	23684 L/1496	23684 L/997	31579 L/3988	31579 L/1994	31579 L/1329
15	Vertical (lb) Defl. Ratio	10608 L/669	10608 L/335	3807 L/223	12376 L/781	12376 L/390	11918 L/260	18563 L/1171	18563 L/585	18563 L/390	24751 L/1561	24751 L/781	24751 L/520	13534 L/1390	13534 L/695	13534 L/463	15790 L/1621	15790 L/811	15790 L/540	23684 L/2432	23684 L/1216	23684 L/811	31579 L/3243	31579 L/1621	31579 L/1081
16	Vertical (lb) Defl. Ratio	10608 L/551	10608 L/276		12376 L/643	12376 L/322	5249 L/214	18563 L/965	18563 L/482	18563 L/322	24751 L/1286	24751 L/643	24751 L/429	13534 L/1145	13534 L/573	13534 L/382	15790 L/1336	15790 L/668	15790 L/445	23684 L/2004	23684 L/1002	23684 L/668	31579 L/2672	31579 L/1336	31579 L/891
17	Vertical (lb) Defl. Ratio	10608 L/460	8687 L/230		12376 L/536	12376 L/268		18563 L/804	18563 L/402	18563 L/268	24751 L/1073	24751 L/536	24751 L/358	13534 L/955	13534 L/477	13534 L/318	15790 L/1114	15790 L/557	15790 L/371	23684 L/1671	23684 L/835	23684 L/557	31579 L/2227	31579 L/1114	31579 L/742
18	Vertical (lb) Defl. Ratio	10608 L/387	4323 L/194		12376 L/452	10741 L/226		18563 L/678	18563 L/339	16111 L/226	24751 L/904	24751 L/452	24751 L/301	13534 L/804	13534 L/402	13534 L/268	15790 L/938	15790 L/469	15790 L/313	23684 L/1407	23684 L/704	23684 L/469	31579 L/1876	31579 L/938	31579 L/625
19	Vertical (lb) Defl. Ratio	10608 L/329			12376 L/384	6244 L/192		18563 L/576	18563 L/288	9366 L/192	24751 L/768	24751 L/384	24751 L/256	13534 L/684	13534 L/342	9991 L/228	15790 L/798	15790 L/399	15790 L/266	23684 L/1197	23684 L/598	23684 L/399	31579 L/1596	31579 L/798	31579 L/532
20	Vertical (lb) Defl. Ratio	10608 L/282			12376 L/329			18563 L/494	18563 L/247		24751 L/659	24751 L/329	22653 L/220	13534 L/586	13534 L/293	3902 L/195	15790 L/684	15790 L/342	13983 L/228	23684 L/1026	23684 L/513	23684 L/342	31579 L/1368	31579 L/684	31579 L/456
21	Vertical (lb) Defl. Ratio	10608 L/244			12376 L/284			18563 L/427	16416 L/213		24751 L/569	24751 L/284	15538 L/190	13534 L/506	13534 L/253		15790 L/591	15790 L/295	7591 L/197	23684 L/886	23684 L/443	23684 L/295	31579 L/1182	31579 L/591	31579 L/394
22	Vertical (lb) Defl. Ratio	9204 L/212			11572 L/247			18563 L/371	11664 L/186		24751 L/495	23144 L/247		13534 L/440	13131 L/220		15790 L/514	15790 L/257		23684 L/771	23684 L/385	23684 L/257	31579 L/1028	31579 L/514	31579 L/343
23	Vertical (lb) Defl. Ratio	7015 L/186			10186 L/217			16483 L/325			22833 L/433	20371 L/217		13534 L/385	8655 L/193		15790 L/450	15790 L/225		23684 L/675	23684 L/337	23684 L/225	31579 L/899	31579 L/450	31579 L/300
24	Vertical (lb) Defl. Ratio				8613 L/191			14658 L/286			20351 L/381	17226 L/191		13534 L/339			15790 L/396	12542 L/198		23684 L/594	23684 L/297	18813 L/198	31579 L/792	31579 L/396	31579 L/264
25	Vertical (lb) Defl. Ratio							13067 L/253			18184 L/337			13534 L/300			15790 L/350			23684 L/525	23684 L/263		31579 L/700	31579 L/350	31579 L/233
26	Vertical (lb) Defl. Ratio							11677 L/225			16288 L/300			13534 L/267			15790 L/311			23684 L/467	23684 L/233		31579 L/623	31579 L/311	29157 L/208
27	Vertical (lb) Defl. Ratio							10460 L/201			14625 L/268			13355 L/238			15790 L/278			23684 L/417	20907 L/208		31579 L/556	31579 L/278	24272 L/185
28	Vertical (lb) Defl. Ratio							9390 L/180			13163 L/240			11595 L/214			14785 L/249			23684 L/374	17935 L/187		31579 L/499	29570 L/249	
29	Vertical (lb) Defl. Ratio										11875 L/216			10048 L/192			13327 L/224			21629 L/337			29971 L/449	26653 L/224	
30	Vertical (lb) Defl. Ratio										10736 L/195						11670 L/203			19710 L/304			27361 L/405	23339 L/203	

**Notes:**

- To calculate the specified (unfactored) lateral wind load, multiply the design wind pressure from Table 1 by the column tributary (ft). This table is only valid when used with the pressures given in Table 1.
- Vertical load refers to the total specified (unfactored) load. The tabulated values are valid when the vertical live load is between 1 and 4 times the vertical dead load. For other conditions contact LP.
- This table has been prepared in accordance with the 2005 National Building Code of Canada and CSA Standard O86-05 for residential buildings within the scope of Part 9.
- This table is based on the following:
  - An effective length factor of 1.0
  - Stud bearing on SPF plates with a specified compressive strength perpendicular to grain of 769 psi. Design of wall plates for moment, shear and deflection shall be by others.
  - The vertical load is applied at the centreline of the stud.
  - No drilling in the middle third of the column height. A hole is permitted at the lower or upper third of the column only. The hole diameter must not exceed 1-1/8" for 3-1/2" thickness, and 1-13/16" for 5-1/2" thick or larger columns. A minimum clear edge distance of 5/8" is required between the edge of the hole and the edge of the column.
  - A notch is permitted at the lower or upper third of the column only. The notch depth must not exceed 7/8" for 3-1/2" thick, and 1-3/8" for 5-1/2" or thicker columns.
  - Only one notch or one hole is permitted at each end of the stud.
- The first dimension is parallel to the wall, the second dimension is perpendicular to the wall.
- Columns require wood-based panel sheathing on at least one side and solid blocking at 8' on centre between the column and an adjacent stud on at least one side..