2.1E PWLVL Columns

The properties that make PWLVL a superior beam material make it ideal for column use as well. In PWLVL columns, you'll find only quality construction, free of deep cracks, checks or twists. These columns are desirable enough to leave exposed, for a beautiful finish.

Allowable axial load (lb)

3½" x 3½" 2.1E PWLVL COLUMNS

Column Length	100%	115%	125%
6'- 0"	11000	11695	12095
7'- 0"	9185	9655	9925
8'- 0"	7710	8045	8240
9'- 0"	6535	6780	6925
10'- 0"	5595	5780	5890
12'- 0"	4215	4330	4395
14'- 0"	3280	3355	3400
> 14'- 0"	Not Allowed		

3½" x 5½" 2.1E PWLVL COLUMNS

Column Length	100%	115%	125%
6'- 0"	17285	18380	19005
7'- 0"	14435	15170	15595
8'- 0"	12115	12640	12950
9'- 0"	10270	10655	10880
10'- 0"	8790	9085	9255
12'- 0"	6625	6805	6905
14'- 0"	5155	5270	5345
> 14'- 0"	Not Allowed		

3½" x 7¼" 2.1E PWLVL COLUMNS

Column Length	100%	115%	125%
6'- 0"	22785	24225	25055
7'- 0"	19025	20000	20560
8'- 0"	15970	16665	17070
9'- 0"	13535	14045	14345
10'- 0"	11590	11975	12200
12'- 0"	8730	8970	9105
14'- 0"	6795	6950	7045
> 14'- 0"	Not Allowed		

5¼" x 5½" 2.1E PWLVL COLUMNS

Column Length	100%	115%	125%
6'- 0"	33650	37245	39450
7'- 0"	30650	33460	35135
8'- 0"	27570	29695	30945
9'- 0"	24590	26220	27160
10'- 0"	21900	23155	23895
12'- 0"	17445	18255	18725
14'- 0"	14105	14660	14975
16'- 0"	11585	11980	12205
18'- 0"	9670	9955	10115
20'- 0"	8175	8390	8510
22'- 0"	Not Allowed		
24'- 0"			

5¼" x 7¼" 2.1E PWLVL COLUMNS

Column Length	100%	115%	125%
6'- 0"	–	–	–
7'- 0"	–	–	–
8'- 0"	36340	39145	–
9'- 0"	32415	34565	35800
10'- 0"	28870	30525	31500
12'- 0"	22995	24065	24685
14'- 0"	18595	19325	19740
16'- 0"	15270	15790	16090
18'- 0"	12745	13125	13335
20'- 0"	10775	11060	11220
22'- 0"	Not Allowed		
24'- 0"			

7" x 7¼" 2.1E PWLVL COLUMNS

Column Length	100%	115%	125%
6'- 0"	–	–	–
7'- 0"	–	–	–
8'- 0"	–	–	–
9'- 0"	–	–	–
10'- 0"	–	–	–
12'- 0"	–	–	–
14'- 0"	35095	37075	38235
16'- 0"	29735	31180	32020
18'- 0"	25405	26495	27110
20'- 0"	21885	22715	23190
22'- 0"	19015	19665	20035
24'- 0"	16650	17165	17460

Notes:

1. Table values are based on:
   - Solid, one-piece column
   - Dry service conditions
   - Axial loads only
   - Load eccentricity of either 1/6 column width or thickness
   - Bracing in both directions at column ends
2. For all other conditions, such as side loads and multiple-ply columns, consult a registered, professional engineer.
3. Column capacity might be limited by the capacity of wood plates, the slab, column caps/bases, etc. *ANSI/AWC NDS-2015*
4. Column design requires calculating Emin in accordance with the NDS. When calculating Emin use Apparent MOE.

No drilling except for column cap or base installation. Follow hardware manufacturer's instructions.

2.1E PWLVL Reference Design Values(1)

True (Shear-Free) Modulus of Elasticity, E = 2,100,000 psi(2)(5)(6)
E_{min} = 1,036,825 psi(2)
Apparent Modulus of Elasticity, E = 2,000,000 psi(2)
Bending (beam), F_b = 3,100 psi(3)(4)
Horizontal Shear (beam), F_v = 285 psi
Compression Perpendicular to Grain (beam), $F_{c\perp}$ = 850 psi(2)

(1) Values apply to dry service conditions
(2) Do not adjust for load duration
(3) Adjust by $(12/d)^{1/5}$, where d is the depth of the member [inches]
(4) Adjust by 1.04 for repetitive members as defined in the *ANSI/AWC NDS*
(5) True or shear-free modulus of elasticity does not account for shear deformation
(6) See APA Product Report *PR-L233*.

Contact us for special-order column sizes at pacificwoodtech.com or call 888.707.2285.