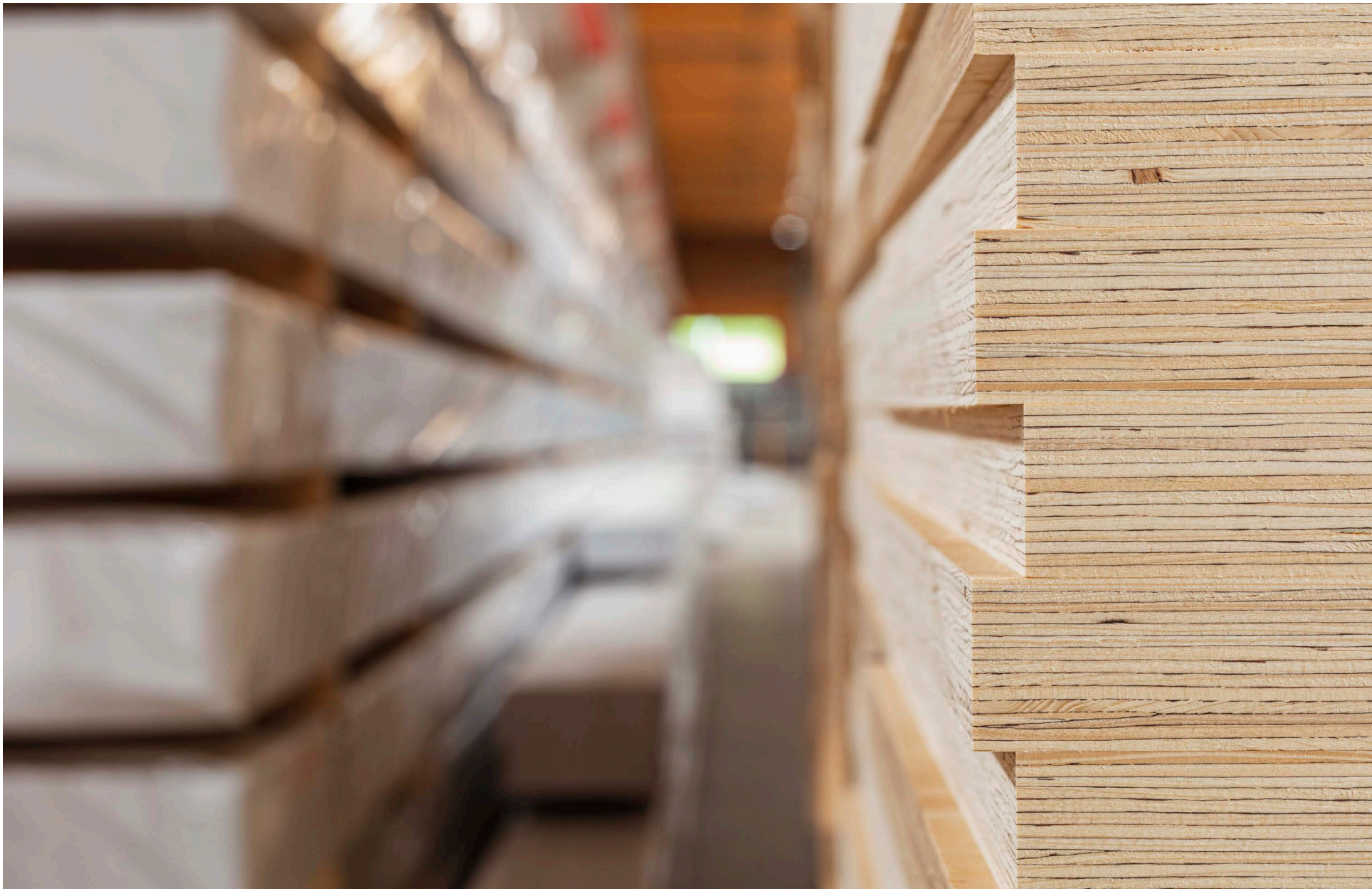
Pollmeier

Pollmeier™ LVL – 2.1E

Made in Germany

Design Guide



Pollmeier™ LVL – 2.1E
Design Guide

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Pollmeier™ LVL – 2.1E

Key Data

Basic information	Laminated Veneer Lumber (LVL) made from spruce. It is strong, solid, and straight, making it ideal for structural applications.
Use	Beams, headers, joists, rafters and studs according to ICC ESR-4618
Standard widths [a]	3½", 5½", 7¼", 9¼", 9½", 11¼", 11⅞", 14", 16", 18", 20" and 24"
Standard thicknesses [a]	1½", 1¾", 3½", 5¼" and 7"
Maximum length	48'
Wood species	Spruce (Picea abies)
Production	Pollmeier Spruce LVL is manufactured in accordance with ASTM D5456, with in-plant manufacturing processes approved by ICC-ES.
Moisture content	approx. 6 % +-2 % at time of dispatch at factory
Surface quality	LVL is delivered unsanded with clear glue line on the top face. Precision thickness sanding possible without surcharge.
Mean density	540 kg/m^3 ≈ 34 lb/ft^3 [b]

a) according to Pollmeier Broschure b) according to Declaration of Performance

Pollmeier™ LVL – 2.1E

Handling & Storage

Warning: Failure to follow proper procedures for handling, storage and installation could result in unsatisfactory performance, unsafe structures and possible collapse.

_ Keep Pollmeier™ LVL dry. These products are intended to resist the effects of moisture on structural performance from normal construction delays but are not intended for permanent exposure to the weather.

_ Unload products carefully, by lifting. Support the bundles to reduce excessive bowing. Individual products should be handled in a manner which prevents physical damage during measuring, cutting, erection, etc.

_ Keep products stored in wrapped and strapped bundles, stacked no more than 10' high. Support and separate bundles with 2 x 4 (or larger) stickers spaced no more than 10' apart. Keep stickers in line vertically.

_ Product must not be stored in contact with the ground, or have prolonged exposure to the weather.

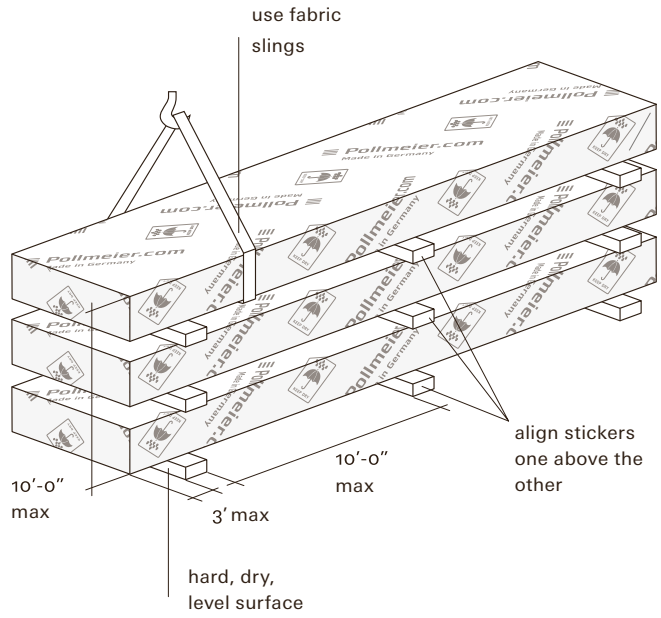
_ Use forklifts and cranes carefully to avoid damaging product.

_ Do not use a visually damaged product. Call your local Pollmeier™ LVL products distributor for assistance when damaged products are encountered.

_ For satisfactory performance, Pollmeier™ LVL must be used under dry, covered and well-ventilated environment.

_ For built-up members, Pollmeier™ LVL shall be dry before nailing or bolting to avoid trapping moisture.

_ Pollmeier™ LVL shall not be used for unintended purposes such as ramps and planks.



Pollmeier™ LVL – 2.1E
Design Values

Design stress (psi) [2]	Bending Stress F_b	Mod. of Elasticits E_{APP}	Mod. of Elasticits E_{TRUE} [8]	Shear Stress F_v	Tensile Stress F_t [6]	Compression Stress Parallel to Grain F_c	Compression Stress Perp. to Grain $F_{c\perp}$
Edgewise Orientation (Beam) [3]	3080 [4] [5]	2.0×10^6	2.1×10^6	320	2285 [3]	3080	600
Flatwise Orientation (Plank) [3]	3675			175			460

Table 1: Design Values [1] [7]

Notes

1. Reference design values are based on dry service conditions (in service aquilibrium moisture content will not exceed 16%).
2. 1 psi =6.89 kPa, 1 inch = 25.4 mm.
3. See Figure 1 and Figure 2 for load orientation diagrams.
4. Design value is for 12 inch depth. For depth ranging from 4 to 24 inches, edgewise bending strength must be adjusted by depth factor C_v of $(12/d)^{0.21}$, where d is the member depth in inches. Depth factors for common LVL depths are shown in Table 2.
5. The repetitive member factor must not exceed 4 percent.
6. Design value is for a 6-foot member length. For other lengths (minimum of 3 feet), adjust values by $(6/L)^{0.10}$, where L is the member length in feet.
7. The tabulated design stresses are based on a normal duration and may be adjusted in accordance with Section 2.3.2 of the NDS (2018 Edition).
8. Reference E value is the true MOE (shear free). When working with true MOE the deflection of uniformly loaded simple span beams is calculated as described:

$$\Delta = \frac{270wL^4}{Ebd^3} + \frac{28.8wL^2}{Ebd}$$

where: Δ = deflection in inches; w = uniform load in lbs./in.; L = span in inches; E = modulus of elasticity in psi; b = width of beam in inches; d = depth of beam in inches

Refer to ICC ES Evaluation Report ESR 4618 for additional information.

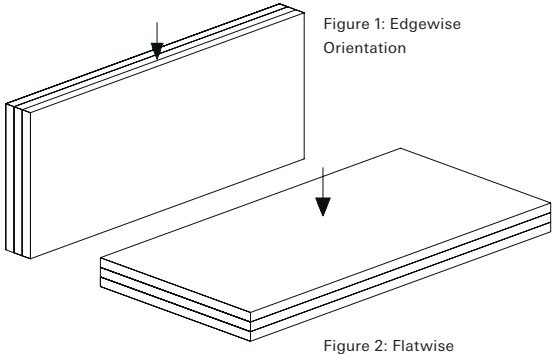


Figure 1: Edgewise Orientation

Figure 2: Flatwise Orientation

Volume C_v edgewise bending

Beam depth (inch)	4	5.5	9.25	12	14	16	20	24
Depth factor	1.26	1.18	1.06	1.00	0.97	0.94	0.90	0.86

Volume C_v axial tension

Member length (feet)	3	4.5	6	8	10	12	16	20
Depth factor	1.07	1.03	1.00	0.97	0.95	0.93	0.91	0.89

Table 2: Volume factors for Pollmeier spruce LVL 2.1E

Pollmeier™ LVL – 2.1E

General information about this guide and uniform load tables

1. Tables are for simple span beams (no cantilever) and uniformly distributed loads.
2. To prevent buckling continuous lateral restraint must be provided at the top edge of the beam.
3. To design other span, load and restraint conditions use iStruct® software or other competent analysis.
4. To prevent rotation of the beam lateral restraint is required at supports.
5. 100% for floor loads, 115% for roof loads (Snow) and 125% for roof constructions loads referring to the NDS 2.3.2.
6. Long term deflection has not been considerd.
7. Always calculate both the total load and the live or snow load in pounds per lineal foot and compare to the table. If live load is blank the total load governs the design.
8. The self weight of the beam has already been substracted from the values listed in the spantables and has been calculated with a density of 34 lb/ft^3.
9. Ensure that bearings are structurally adequate to carry the loads and are in compliance with buildings codes and regulations.
10. All values may be conservative specific analysis may produce a more economical cross section.
11. All data are to be understood as guide values and do not replace structural design!

		Allowable Moment (ft-lbs)					Allowable Shear (lbs)					Moment of Inertia (in^4)					Weight [a] (lbs/ft)				
	Width	1½"	1¾"	3½"	5¼"	7"	1½"	1¾"	3½"	5¼"	7"	1½"	1¾"	3½"	5¼"	7"	1½"	1¾"	3½"	5¼"	7"
Depth	3½"	786	917	1,834	2,751	3,668	1,120	1,306	2,613	3,920	5,226	5	6	13	19	25	1.24	1.45	2.89	4.34	5.78
	5½"	2,286	2,667	5,335	8,003	10,670	1,760	2,053	4,106	6,160	8,213	21	24	49	73	97	1.95	2.27	4.55	6.82	9.09
	7¼"	3,749	4,374	8,748	13,122	17,496	2,320	2,706	5,413	8,120	10,826	48	56	111	167	222	2.57	3.00	5.99	8.99	12.0
	9¼"	5,798	6,765	13,530	20,295	27,060	2,960	3,453	6,906	10,360	13,813	99	115	231	346	462	3.28	3.82	7.64	11.5	15.3
	9½"	6,082	7,095	14,191	21,287	28,383	3,040	3,546	7,093	10,640	14,186	107	125	250	375	500	3.36	3.93	7.85	11.8	15.7
	11¼"	8,231	9,603	19,207	28,811	38,415	3,600	4,200	8,400	12,600	16,800	178	208	415	623	831	3.98	4.65	9.30	13.9	18.6
	11⅞"	9,068	10,579	21,159	31,739	42,319	3,800	4,433	8,866	13,300	17,733	209	244	488	733	977	4.21	4.91	9.81	14.7	19.6
	14"	12,176	14,205	28,410	42,616	56,821	4,480	5,226	10,453	15,680	20,906	343	400	800	1,201	1,601	4.96	5.78	11.6	17.4	23.1
	16"	15,463	18,040	36,081	54,122	72,163	5,120	5,973	11,946	17,920	23,893	512	597	1,195	1,792	2,389	5.67	6.61	13.2	19.8	26.4
	18"	19,093	22,275	44,550	66,825	89,100	5,760	6,720	13,440	20,160	26,880	729	851	1,701	2,552	3,402	6.38	7.44	14.9	22.3	29.8
	20"	23,055	26,898	53,796	80,695	107,593	6,400	7,466	14,933	22,400	29,866	1,000	1,167	2,333	3,500	4,667	7.08	8.26	16.5	24.8	33.1
	24"	31,953	37,278	74,557	111,836	149,115	7,680	8,960	17,920	26,880	35,840	1,728	2,016	4,032	6,048	8,064	8.50	9.92	19.8	29.8	39.7

Table 3: Section Properties and allowable capacities a) Calculated with a mean density of 34 lb/ft^3

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Floor Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

1½“ Floor Load (PLF)

	1½" x 3½"				1½" x 5½"				1½" x 7¼"				1½" x 9¼"						1½"
Clear Span	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Clear Span	Depth	Reaction Capacity (lbs)
5'	87	116	175	1.5	298	398	598	3.0	635	848	881	3.0			1,098	4.5	5'	1½"	1,350
6'	51	68	103	1.5	192	257	386	1.5	395	528	739	3.0	724		925	4.5	6'	2"	1,800
7'	32	43	66	1.5	124	166	250	1.5	260	348	524	3.0	489	653	799	4.5	7'	2½	2,250
8'	-	-	44	1.5	84	113	170	1.5	180	241	363	3.0	344	460	658	4.5	8'	3"	2,700
9'	-	-	31	1.5	59	80	121	1.5	134	180	271	1.5	260	348	523	3.0	9'	3½"	3,150
9½'	-	-	-	-	50	68	103	1.5	114	154	232	1.5	223	299	451	3.0	9½'	4"	3,600
10'	-	-	-	-	43	58	88	1.5	98	132	200	1.5	193	259	391	3.0	10'	4½"	4,050
11'	-	-	-	-	32	43	66	1.5	74	100	151	1.5	147	198	299	3.0	11'	5"	4,500
12'	-	-	-	-	-	33	51	1.5	57	77	117	1.5	115	154	233	3.0	12'	5½"	4,950
13'	-	-	-	-	-	-	40	1.5	45	60	92	1.5	93	126	190	1.5	13'	6"	5,400
14'	-	-	-	-	-	-	31	1.5	35	48	74	1.5	75	101	153	1.5	14'	6½"	5,850
15'	-	-	-	-	-	-	-	-	-	39	60	1.5	60	82	125	1.5	15'	7"	6,300
16'	-	-	-	-	-	-	-	-	-	32	49	1.5	49	67	103	1.5	16'	7½"	6,750
16½'	-	-	-	-	-	-	-	-	-	-	44	1.5	45	61	93	1.5	16½'	8"	7,200
17'	-	-	-	-	-	-	-	-	-	-	40	1.5	41	56	85	1.5	17'	8½"	7,650
18'	-	-	-	-	-	-	-	-	-	-	34	1.5	34	47	72	1.5	18'	9"	8,100
19'	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	39	61	1.5	19'	9½"	8,550
20'	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	33	52	1.5	20'	10"	9,000
21'	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	-	44	1.5	21'	10½"	9,450
22'	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	-	38	1.5	22'	11"	9,900
23'	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	-	33	1.5	23'	11½"	10,350
24'	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	-	-	-	24'	12"	10,800

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/240 (no creep considered).

Table 4: Reaction capacities for width of 1½" in combination with different bearing lengths

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Floor Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

1½“ Floor Load (PLF)

	1½" x 9½"				1½" x 11¼"				1½" x 11⅞"				1½" x 14"						1½“
Clear Span	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Clear Span	Depth	Reaction Capacity (lbs)
5'			1,127	4.5			1,335	4.5			1,409	4.5			1,624	6.0	5'	1½"	1,350
6'	776		950	4.5			1,125	4.5			1,187	4.5			1,373	6.0	6'	2"	1,800
7'	526	702	821	4.5	825		972	4.5	950		1,026	4.5			1,189	6.0	7'	2½	2,250
8'	370	495	690	4.5	588	786	855	4.5	680		903	4.5	1,006		1,049	6.0	8'	3"	2,700
9'	280	375	564	3.0	432	578	745	4.5	501	670	806	4.5	752		938	6.0	9'	3½"	3,150
9½'	241	323	486	3.0	374	501	671	4.5	435	581	739	4.5	656	878	891	6.0	9½'	4"	3,600
10'	209	280	422	3.0	326	436	607	4.5	379	507	669	4.5	576	769	848	6.0	10'	4½"	4,050
11'	159	214	323	3.0	251	336	504	4.5	293	392	556	4.5	449	600	731	6.0	11'	5"	4,500
12'	124	167	252	3.0	203	272	410	3.0	230	308	465	4.5	366	490	631	4.5	12'	5½"	4,950
13'	98	132	200	3.0	161	217	327	3.0	189	253	382	3.0	294	394	539	4.5	13'	6"	5,400
14'	81	109	165	1.5	130	175	265	3.0	152	205	310	3.0	239	321	466	4.5	14'	6½"	5,850
15'	65	89	135	1.5	106	143	217	3.0	125	168	254	3.0	197	264	399	4.5	15'	7"	6,300
16'	54	73	111	1.5	88	118	180	3.0	103	139	211	3.0	164	220	333	4.5	16'	7½"	6,750
16½'	49	66	101	1.5	80	108	164	3.0	94	127	193	3.0	153	206	312	3.0	16½'	8"	7,200
17'	44	60	93	1.5	73	99	150	3.0	86	116	176	3.0	140	189	286	3.0	17'	8½"	7,650
18'	37	51	78	1.5	63	85	129	1.5	72	98	149	3.0	118	160	242	3.0	18'	9"	8,100
19'	31	43	66	1.5	53	72	110	1.5	62	85	129	1.5	101	136	207	3.0	19'	9½"	8,550
20'	-	36	56	1.5	45	61	94	1.5	53	72	111	1.5	86	117	178	3.0	20'	10"	9,000
21'	-	31	48	1.5	38	53	81	1.5	45	62	96	1.5	74	101	154	3.0	21'	10½"	9,450
22'	-	-	41	1.5	33	45	70	1.5	39	54	83	1.5	64	87	134	3.0	22'	11"	9,900
23'	-	-	36	1.5	-	39	61	1.5	34	47	72	1.5	56	76	117	3.0	23'	11½"	10,350
24'	-	-	31	1.5	-	34	53	1.5	-	41	63	1.5	50	68	105	1.5	24'	12"	10,800

Table 5: Reaction capacities for width of 1½“ in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/240 (no creep considered).

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Floor Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

1½“ Floor Load (PLF)

	1½" x 16"				1½" x 18"				1½" x 20"				1½" x 24"						1½"
Clear Span	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Clear Span	Depth	Reaction Capacity (lbs)
5'			1,856	6.0			2,041	7.5			2,268	7.5			2,662	9.0	5'	1½"	1,350
6'			1,569	6.0			1,732	7.5			1,924	7.5			2,267	9.0	6'	2"	1,800
7'			1,359	6.0			1,504	7.5			1,671	7.5			1,973	9.0	7'	2½	2,250
8'			1,199	6.0			1,329	7.5			1,476	7.5			1,746	9.0	8'	3"	2,700
9'	1,064		1,072	6.0			1,190	7.5			1,322	7.5			1,566	9.0	9'	3½"	3,150
9½'	932		1,018	6.0			1,131	7.5			1,257	7.5			1,490	9.0	9½'	4"	3,600
10'	821		969	6.0			1,077	7.5			1,197	7.5			1,420	9.0	10'	4½"	4,050
11'	645	862	884	6.0	855		984	7.5			1,093	7.5			1,298	9.0	11'	5"	4,500
12'	515	688	786	6.0	688		906	7.5	907		1,006	7.5			1,196	9.0	12'	5½"	4,950
13'	416	557	673	6.0	560	749	816	7.5	743		932	7.5			1,108	9.0	13'	6"	5,400
14'	341	456	582	6.0	472	632	720	6.0	614	822	855	7.5	971		1,032	9.0	14'	6½"	5,850
15'	288	387	517	4.5	392	526	629	6.0	513	687	748	7.5	818		966	9.0	15'	7"	6,300
16'	241	323	455	4.5	329	441	554	6.0	432	579	660	7.5	695		902	9.0	16'	7½"	6,750
16½'	221	296	428	4.5	302	405	522	6.0	398	533	621	7.5	642		850	9.0	16½'	8"	7,200
17'	203	272	404	4.5	278	373	492	6.0	375	502	595	6.0	594	795	802	9.0	17'	8½"	7,650
18'	172	231	350	4.5	237	318	439	6.0	320	429	531	6.0	512	685	718	9.0	18'	9"	8,100
19'	147	198	300	4.5	207	279	400	4.5	275	370	477	6.0	451	604	655	7.5	19'	9½"	8,550
20'	126	171	259	4.5	179	241	361	4.5	238	320	431	6.0	393	526	592	7.5	20'	10"	9,000
21'	111	150	229	3.0	155	209	317	4.5	207	279	391	6.0	343	461	538	7.5	21'	10½"	9,450
22'	97	131	199	3.0	135	183	277	4.5	181	244	357	6.0	302	405	490	7.5	22'	11"	9,900
23'	84	114	175	3.0	118	160	244	4.5	162	218	330	4.5	266	358	449	7.5	23'	11½"	10,350
24'	74	101	154	3.0	104	141	215	4.5	143	193	293	4.5	240	323	417	6.0	24'	12"	10,800

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/240 (no creep considered).

Table 6: Reaction capacities for width of 1½" in combination with different bearing lengths

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Single Span Load Tables - Floor Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

1¾" Floor Load (PLF)

	1¾" x 3½"				1¾" x 5½"				1¾" x 7¼"				1¾" x 9¼"						1¾"
	Live Load[a]		Total Load[b]	Brg.	Live Load[a]		Total Load[b]	Brg.	Live Load[a]		Total Load[b]	Brg.	Live Load[a]		Total Load[b]	Brg.			Reaction Capacity (lbs)
Clear Span	L/480	L/360			L/480	L/360			L/480	L/360			L/480	L/360			Clear Span	Depth	
5'	101	136	205	1.5	347	464	698	3.0	741	990	1,028	3.0			1,281	4.5	5'	1½"	1,575
6'	59	80	121	1.5	224	300	451	1.5	461	616	863	3.0	845		1,079	4.5	6'	2"	2,100
7'	37	50	77	1.5	144	193	292	1.5	304	406	611	3.0	571	762	932	4.5	7'	2½	2,625
8'	-	34	51	1.5	98	131	198	1.5	210	281	423	3.0	401	537	758	4.5	8'	3"	3,150
9'	-	-	36	1.5	69	93	141	1.5	156	210	316	1.5	303	406	611	3.0	9'	3½"	3,675
9½'	-	-	30	1.5	59	79	120	1.5	134	179	271	1.5	261	349	526	3.0	9½'	4"	4,200
10'	-	-	-	-	50	68	103	1.5	115	154	233	1.5	226	302	456	3.0	10'	4½"	4,725
11'	-	-	-	-	37	51	77	1.5	87	117	177	1.5	172	231	349	3.0	11'	5"	5,250
12'	-	-	-	-	-	39	59	1.5	67	90	137	1.5	134	180	272	3.0	12'	5½"	5,775
13'	-	-	-	-	-	30	46	1.5	52	71	108	1.5	109	147	222	1.5	13'	6"	6,300
14'	-	-	-	-	-	-	37	1.5	41	56	86	1.5	87	118	178	1.5	14'	6½"	6,825
15'	-	-	-	-	-	-	-	-	33	45	70	1.5	71	95	145	1.5	15'	7"	7,350
16'	-	-	-	-	-	-	-	-	-	37	57	1.5	58	78	120	1.5	16'	7½"	7,875
16½'	-	-	-	-	-	-	-	-	-	33	52	1.5	52	71	109	1.5	16½'	8"	8,400
17'	-	-	-	-	-	-	-	-	-	30	47	1.5	48	65	100	1.5	17'	8½"	8,925
18'	-	-	-	-	-	-	-	-	-	-	39	1.5	40	54	84	1.5	18'	9"	9,450
19'	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	33	1.5	33	46	71	1.5	19'	9½"	9,975
20'	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	39	60	1.5	20'	10"	10,500
21'	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	33	52	1.5	21'	10½"	11,025
22'	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	-	45	1.5	22'	11"	11,550
23'	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	-	39	1.5	23'	11½"	12,075
24'	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	-	33	1.5	24'	12"	12,600

Table 7: Reaction capacities for width of 1¾" in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/240 (no creep considered).

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Floor Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

1¾" Floor Load (PLF)

	1¾" x 9½"				1¾" x 11¼"				1¾" x 11⅞"				1¾" x 14"						
Clear Span	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Clear Span	Depth	1¾" Reaction Capacity (lbs)
5'			1,315	4.5			1,558	4.5			1,644	4.5			1,894	6.0	5'	1½"	1,575
6'	906		1,108	4.5			1,312	4.5			1,385	4.5			1,602	6.0	6'	2"	2,100
7'	614	820	957	4.5	963		1,134	4.5	1,108		1,197	4.5			1,387	6.0	7'	2½	2,625
8'	432	578	805	4.5	687	917	998	4.5	793		1,053	4.5	1,173		1,224	6.0	8'	3"	3,150
9'	327	437	658	3.0	505	674	869	4.5	585	782	940	4.5	878		1,094	6.0	9'	3½"	3,675
9½'	281	377	567	3.0	437	584	783	4.5	507	678	863	4.5	766	1,024	1,039	6.0	9½'	4"	4,200
10'	244	326	492	3.0	380	509	709	4.5	442	591	781	4.5	672	898	989	6.0	10'	4½"	4,725
11'	186	249	376	3.0	293	392	589	4.5	341	457	649	4.5	524	701	846	6.0	11'	5"	5,250
12'	145	194	294	3.0	237	317	478	3.0	268	360	542	4.5	427	572	730	4.5	12'	5½"	5,775
13'	114	154	233	3.0	188	253	382	3.0	220	295	446	3.0	343	460	624	4.5	13'	6"	6,300
14'	94	127	193	1.5	152	204	309	3.0	178	239	361	3.0	279	374	539	4.5	14'	6½"	6,825
15'	76	103	157	1.5	124	167	253	3.0	145	196	296	3.0	230	308	466	4.5	15'	7"	7,350
16'	63	85	130	1.5	102	138	210	3.0	120	162	246	3.0	191	257	388	4.5	16'	7½"	7,875
16½'	57	77	118	1.5	93	126	192	3.0	110	148	225	3.0	179	240	364	3.0	16½'	8"	8,400
17'	52	71	108	1.5	87	118	179	1.5	100	135	206	3.0	164	220	334	3.0	17'	8½"	8,925
18'	43	59	91	1.5	73	99	151	1.5	84	114	174	3.0	138	186	283	3.0	18'	9"	9,450
19'	36	50	77	1.5	62	84	128	1.5	73	99	151	1.5	118	159	242	3.0	19'	9½"	9,975
20'	31	42	65	1.5	52	72	110	1.5	62	84	129	1.5	101	136	208	3.0	20'	10"	10,500
21'	-	36	56	1.5	45	61	95	1.5	53	73	112	1.5	87	118	180	3.0	21'	10½"	11,025
22'	-	31	48	1.5	38	53	82	1.5	46	63	97	1.5	75	102	156	3.0	22'	11"	11,550
23'	-	-	42	1.5	33	46	71	1.5	39	54	84	1.5	65	89	137	3.0	23'	11½"	12,075
24'	-	-	36	1.5	-	40	62	1.5	34	47	74	1.5	58	79	122	1.5	24'	12"	12,600

Table 8: Reaction capacities for width of 1¾" in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/240 (no creep considered).

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Floor Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

1¾" Floor Load (PLF)

	1¾" x 16"				1¾" x 18"				1¾" x 20"				1¾" x 24"						1¾"
Clear Span	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Clear Span	Depth	Reaction Capacity (lbs)
5'			2,165	6.0			2,381	7.5			2,646	7.5			3,106	9.0	5'	1½"	1,575
6'			1,831	6.0			2,021	7.5			2,245	7.5			2,644	9.0	6'	2"	2,100
7'			1,586	6.0			1,755	7.5			1,950	7.5			2,302	9.0	7'	2½	2,625
8'			1,398	6.0			1,550	7.5			1,723	7.5			2,038	9.0	8'	3"	3,150
9'	1,241		1,250	6.0			1,388	7.5			1,543	7.5			1,828	9.0	9'	3½"	3,675
9½'	1,088		1,188	6.0			1,319	7.5			1,466	7.5			1,738	9.0	9½'	4"	4,200
10'	958		1,131	6.0			1,257	7.5			1,397	7.5			1,657	9.0	10'	4½"	4,725
11'	752	1,006	1,032	6.0	998		1,148	7.5			1,276	7.5			1,515	9.0	11'	5"	5,250
12'	600	803	917	6.0	803		1,057	7.5	1,058		1,174	7.5			1,395	9.0	12'	5½"	5,775
13'	486	650	785	6.0	654	874	952	7.5	866		1,087	7.5			1,293	9.0	13'	6"	6,300
14'	398	532	679	6.0	551	737	840	6.0	717	959	997	7.5	1,133		1,204	9.0	14'	6½"	6,825
15'	337	451	603	4.5	458	613	734	6.0	599	801	873	7.5	955		1,127	9.0	15'	7"	7,350
16'	281	377	531	4.5	384	515	647	6.0	504	676	770	7.5	811		1,050	9.0	16'	7½"	7,875
16½'	258	346	500	4.5	353	473	609	6.0	464	622	725	7.5	749		989	9.0	16½'	8"	8,400
17'	237	318	471	4.5	325	436	574	6.0	437	586	694	6.0	693	928	933	9.0	17'	8½"	8,925
18'	201	270	409	4.5	277	372	513	6.0	374	501	620	6.0	597	800	835	9.0	18'	9"	9,450
19'	172	231	350	4.5	242	325	467	4.5	321	431	557	6.0	526	705	762	7.5	19'	9½"	9,975
20'	147	199	302	4.5	209	281	421	4.5	278	374	503	6.0	458	614	689	7.5	20'	10"	10,500
21'	130	176	267	3.0	181	244	370	4.5	242	326	457	6.0	401	538	625	7.5	21'	10½"	11,025
22'	113	153	233	3.0	158	213	323	4.5	212	285	416	6.0	352	473	571	7.5	22'	11"	11,550
23'	98	134	204	3.0	138	187	284	4.5	189	255	385	4.5	311	418	522	7.5	23'	11½"	12,075
24'	86	117	180	3.0	122	165	251	4.5	167	225	342	4.5	280	376	485	6.0	24'	12"	12,600

Table 9 : Reaction capacities for width of 1¾" in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/240 (no creep considered).

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Floor Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

3½" Floor Load (PLF)

	3½" x 3½"				3½" x 5½"				3½" x 7¼"				3½" x 9¼"						3½"
Clear Span	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Clear Span	Depth	Reaction Capacity (lbs)
5'	203	272	410	1.5	695	929	1,396	3.0	1,483	1,980	2,056	3.0			2,562	4.5	5'	1½"	3,150
6'	119	160	242	1.5	449	600	902	1.5	923	1,233	1,726	3.0	1,690		2,159	4.5	6'	2"	4,200
7'	71	96	146	3.0	289	387	584	1.5	609	814	1,223	3.0	1,142	1,525	1,865	4.5	7'	2½	5,250
8'	50	68	103	1.5	196	263	397	1.5	421	563	847	3.0	803	1,074	1,535	4.5	8'	3"	6,300
9'	34	47	72	1.5	138	186	282	1.5	314	420	633	1.5	607	812	1,222	3.0	9'	3½"	7,350
9½'	-	40	61	1.5	118	159	240	1.5	268	360	542	1.5	522	699	1,052	3.0	9½'	4"	8,400
10'	-	34	52	1.5	101	136	206	1.5	231	310	467	1.5	452	605	912	3.0	10'	4½"	9,450
11'	-	-	39	1.5	75	102	155	1.5	174	234	354	1.5	345	462	698	3.0	11'	5"	10,500
12'	-	-	-	-	57	78	119	1.5	134	181	274	1.5	268	360	544	3.0	12'	5½"	11,550
13'	-	-	-	-	44	60	93	1.5	105	142	216	1.5	218	294	444	1.5	13'	6"	12,600
14'	-	-	-	-	34	48	74	1.5	84	113	173	1.5	175	236	357	1.5	14'	6½"	13,650
15'	-	-	-	-	-	38	59	1.5	67	92	140	1.5	142	191	291	1.5	15'	7"	14,700
16'	-	-	-	-	-	31	48	1.5	55	75	115	1.5	116	157	240	1.5	16'	7½"	15,750
16½'	-	-	-	-	-	-	44	1.5	49	68	104	1.5	105	143	219	1.5	16½'	8"	16,800
17'	-	-	-	-	-	-	40	1.5	45	62	95	1.5	96	131	200	1.5	17'	8½"	17,850
18'	-	-	-	-	-	-	33	1.5	37	51	79	1.5	80	109	168	1.5	18'	9"	18,900
19'	-	-	-	-	-	-	-	-	31	43	67	1.5	67	92	142	1.5	19'	9½"	19,950
20'	n.a.	n.a.	n.a.	-	-	-	-	-	-	36	56	1.5	56	78	121	1.5	20'	10"	21,000
21'	n.a.	n.a.	n.a.	-	-	-	-	-	-	30	48	1.5	48	67	104	1.5	21'	10½"	22,050
22'	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	41	1.5	41	57	90	1.5	22'	11"	23,100
23'	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	35	1.5	35	49	78	1.5	23'	11½"	24,150
24'	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	30	1.5	30	42	67	1.5	24'	12"	25,200

Table 10: Reaction capacities for width of 3½" in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/240 (no creep considered).

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Floor Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

3½" Floor Load (PLF)

	3½" x 9½"				3½" x 11¼"				3½" x 11⅞"						3½"
	Live Load[a]		Total Load[b]	Brg.	Live Load[a]		Total Load[b]	Brg.	Live Load[a]		Total Load[b]	Brg.			Reaction Capacity (lbs)
Clear Span	L/480	L/360			L/480	L/360			L/480	L/360			Clear Span	Depth	
5'			2,631	4.5			3,116	4.5			3,289	4.5	5'	1½"	3,150
6'	1,812		2,217	4.5			2,625	4.5			2,771	4.5	6'	2"	4,200
7'	1,228	1,639	1,915	4.5	1,926		2,268	4.5	2,216		2,394	4.5	7'	2½	5,250
8'	865	1,156	1,610	4.5	1,374	1,835	1,996	4.5	1,588		2,107	4.5	8'	3"	6,300
9'	654	875	1,317	3.0	1,010	1,349	1,739	4.5	1,171	1,565	1,881	4.5	9'	3½"	7,350
9½'	563	754	1,135	3.0	874	1,169	1,566	4.5	1,015	1,357	1,726	4.5	9½'	4"	8,400
10'	488	653	984	3.0	761	1,018	1,418	4.5	886	1,184	1,562	4.5	10'	4½"	9,450
11'	372	499	753	3.0	586	785	1,178	4.5	684	915	1,298	4.5	11'	5"	10,500
12'	290	389	588	3.0	474	635	957	3.0	538	720	1,085	4.5	12'	5½"	11,550
13'	229	309	467	3.0	377	506	764	3.0	441	592	892	3.0	13'	6"	12,600
14'	189	255	387	1.5	305	409	618	3.0	357	479	723	3.0	14'	6½"	13,650
15'	153	207	315	1.5	249	335	507	3.0	292	393	593	3.0	15'	7"	14,700
16'	126	171	260	1.5	206	277	420	3.0	241	325	492	3.0	16'	7½"	15,750
16½'	114	155	237	1.5	187	253	384	3.0	220	297	450	3.0	16½'	8"	16,800
17'	104	142	217	1.5	171	231	351	3.0	202	272	412	3.0	17'	8½"	17,850
18'	87	119	182	1.5	147	199	303	1.5	170	229	348	3.0	18'	9"	18,900
19'	73	100	154	1.5	124	169	258	1.5	147	199	303	1.5	19'	9½"	19,950
20'	62	85	131	1.5	106	144	221	1.5	125	170	259	1.5	20'	10"	21,000
21'	52	72	113	1.5	90	124	190	1.5	107	146	224	1.5	21'	10½"	22,050
22'	44	62	97	1.5	78	107	165	1.5	92	126	194	1.5	22'	11"	23,100
23'	38	53	84	1.5	67	93	144	1.5	80	110	169	1.5	23'	11½"	24,150
24'	33	46	73	1.5	58	81	126	1.5	69	96	148	1.5	24'	12"	25,200

Table 11: Reaction capacities for width of 3½" in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/240 (no creep considered).

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Floor Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

5¼“ Floor Load (PLF)

	5¼" x 5½"				5¼" x 7¼"				5¼" x 9¼"					
Clear Span	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Live Load[a] L/480	Live Load[a] L/360	Total Load[b]	Brg.	Clear Span	Depth	5¼" Reaction Capacity (lbs)
5'	1,043	1,394	2,094	3.0	2,224	2,970	3,084	3.0			3,843	4.5	5'	1½"	4,725
6'	673	900	1,354	1.5	1,384	1,848	2,589	3.0	2,535		3,238	4.5	6'	2"	6,300
7'	434	581	876	1.5	913	1,220	1,835	3.0	1,713	2,288	2,798	4.5	7'	2½	7,875
8'	295	395	596	1.5	631	844	1,271	3.0	1,205	1,611	2,303	4.5	8'	3"	9,450
9'	208	280	423	1.5	470	630	950	1.5	910	1,218	1,833	3.0	9'	3½"	11,025
9½'	177	238	361	1.5	402	539	813	1.5	783	1,048	1,579	3.0	9½'	4"	12,600
10'	151	204	310	1.5	346	464	701	1.5	678	908	1,369	3.0	10'	4½"	14,175
11'	113	153	233	1.5	261	351	531	1.5	517	694	1,047	3.0	11'	5"	15,750
12'	86	117	179	1.5	201	271	411	1.5	402	540	817	3.0	12'	5½"	17,325
13'	66	91	140	1.5	157	213	324	1.5	327	441	667	1.5	13'	6"	18,900
14'	52	72	111	1.5	125	170	259	1.5	262	354	536	1.5	14'	6½"	20,475
15'	41	57	89	1.5	100	137	210	1.5	213	287	437	1.5	15'	7"	22,050
16'	33	46	73	1.5	81	112	172	1.5	174	236	360	1.5	16'	7½"	23,625
16½'	-	41	66	1.5	73	101	156	1.5	158	215	328	1.5	16½'	8"	25,200
17'	-	37	60	1.5	67	92	143	1.5	144	196	300	1.5	17'	8½"	26,775
18'	-	30	49	1.5	55	76	119	1.5	120	164	252	1.5	18'	9"	28,350
19'	-	-	41	1.5	45	64	100	1.5	101	138	213	1.5	19'	9½"	29,925
20'	-	-	34	1.5	38	53	85	1.5	85	117	182	1.5	20'	10"	31,500
21'	-	-	-	-	31	45	72	1.5	72	100	156	1.5	21'	10½"	33,075
22'	-	-	-	-	-	38	62	1.5	61	86	135	1.5	22'	11"	34,650
23'	-	-	-	-	-	32	53	1.5	52	74	117	1.5	23'	11½"	36,225
24'	-	-	-	-	-	-	45	1.5	45	64	101	1.5	24'	12"	37,800

Table 12: Reaction capacities for width of 5¼" in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/240 (no creep considered).

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Floor Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

5¼“ Floor Load (PLF)

	5¼" x 9½"				5¼" x 11¼"				5¼" x 11⅞"						5¼"
	Live Load[a]		Total Load[b]	Brg.	Live Load[a]		Total Load[b]	Brg.	Live Load[a]		Total Load[b]	Brg.			Reaction Capacity (lbs)
Clear Span	L/480	L/360			L/480	L/360			L/480	L/360			Clear Span	Depth	
5'			3,947	4.5			4,674	4.5			4,896	5.0	5'	1½"	4,725
6'	2,719		3,326	4.5			3,938	4.5			4,130	5.0	6'	2"	6,300
7'	1,842	2,459	2,873	4.5	2,889		3,403	4.5	3,276		3,571	5.0	7'	2½	7,875
8'	1,298	1,735	2,416	4.5	2,061	2,752	2,995	4.5	2,350	3,138	3,145	5.0	8'	3"	9,450
9'	982	1,313	1,976	3.0	1,515	2,024	2,608	4.5	1,735	2,319	2,810	5.0	9'	3½"	11,025
9½'	845	1,131	1,703	3.0	1,311	1,753	2,349	4.5	1,523	2,035	2,589	4.5	9½'	4"	12,600
10'	732	980	1,477	3.0	1,142	1,528	2,127	4.5	1,328	1,775	2,344	4.5	10'	4½"	14,175
11'	559	749	1,130	3.0	880	1,178	1,767	4.5	1,025	1,372	1,947	4.5	11'	5"	15,750
12'	435	584	883	3.0	711	953	1,436	3.0	806	1,080	1,627	4.5	12'	5½"	17,325
13'	344	463	701	3.0	566	759	1,146	3.0	662	887	1,339	3.0	13'	6"	18,900
14'	284	383	580	1.5	457	614	928	3.0	535	718	1,085	3.0	14'	6½"	20,475
15'	230	311	473	1.5	373	502	760	3.0	437	588	890	3.0	15'	7"	22,050
16'	189	256	390	1.5	308	415	630	3.0	362	487	739	3.0	16'	7½"	23,625
16½'	172	233	356	1.5	281	379	576	3.0	330	445	675	3.0	16½'	8"	25,200
17'	156	213	325	1.5	256	347	527	3.0	302	407	619	3.0	17'	8½"	26,775
18'	131	178	273	1.5	220	298	454	1.5	254	344	523	3.0	18'	9"	28,350
19'	110	150	232	1.5	186	253	386	1.5	219	298	454	1.5	19'	9½"	29,925
20'	93	128	197	1.5	158	216	331	1.5	187	254	389	1.5	20'	10"	31,500
21'	79	109	169	1.5	135	185	285	1.5	160	219	336	1.5	21'	10½"	33,075
22'	67	93	146	1.5	116	160	247	1.5	138	189	291	1.5	22'	11"	34,650
23'	57	80	127	1.5	100	138	215	1.5	119	164	254	1.5	23'	11½"	36,225
24'	49	69	110	1.5	87	120	188	1.5	103	143	222	1.5	24'	12"	37,800

Table 13: Reaction capacities for width of 5¼" in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/240 (no creep considered).

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Floor Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

7" Floor Load (PLF)

	7" x 5½"				7" x 7¼"				7" x 9¼"						7"
	Live Load[a]		Total Load[b]	Brg.	Live Load[a]		Total Load[b]	Brg.	Live Load[a]		Total Load[b]	Brg.			Reaction Capacity (lbs)
Clear Span	L/480	L/360			L/480	L/360			L/480	L/360			Clear Span	Depth	
5'	1,391	1,858	2,792	3.0	2,966	3,959	4,112	3.0			5,124	4.5	5'	1½"	6,300
6'	898	1,200	1,805	1.5	1,845	2,465	3,452	3.0	3,380		4,318	4.5	6'	2"	8,400
7'	579	775	1,168	1.5	1,217	1,627	2,447	3.0	2,284	3,050	3,730	4.5	7'	2½	10,500
8'	393	527	795	1.5	841	1,125	1,694	3.0	1,607	2,148	3,071	4.5	8'	3"	12,600
9'	277	373	564	1.5	627	840	1,267	1.5	1,214	1,624	2,444	3.0	9'	3½"	14,700
9½'	236	318	481	1.5	536	719	1,085	1.5	1,045	1,398	2,105	3.0	9½'	4"	16,800
10'	202	272	413	1.5	461	619	935	1.5	905	1,211	1,825	3.0	10'	4½"	18,900
11'	151	204	311	1.5	348	468	708	1.5	690	925	1,396	3.0	11'	5"	21,000
12'	115	156	239	1.5	268	361	548	1.5	537	721	1,089	3.0	12'	5½"	23,100
13'	89	121	187	1.5	210	284	432	1.5	437	588	889	1.5	13'	6"	25,200
14'	69	96	149	1.5	167	226	346	1.5	350	472	715	1.5	14'	6½"	27,300
15'	55	76	119	1.5	134	183	280	1.5	284	383	583	1.5	15'	7"	29,400
16'	44	62	97	1.5	109	149	230	1.5	232	315	481	1.5	16'	7½"	31,500
16½'	39	55	88	1.5	98	135	209	1.5	211	287	438	1.5	16½'	8"	33,600
17'	35	50	80	1.5	89	123	190	1.5	192	262	400	1.5	17'	8½"	35,700
18'	-	41	66	1.5	73	102	159	1.5	160	219	336	1.5	18'	9"	37,800
19'	-	33	55	1.5	61	85	134	1.5	134	185	285	1.5	19'	9½"	39,900
20'	-	-	46	1.5	50	71	113	1.5	113	157	243	1.5	20'	10"	42,000
21'	-	-	39	1.5	42	60	96	1.5	96	134	208	1.5	21'	10½"	44,100
22'	-	-	32	1.5	35	51	82	1.5	82	114	180	1.5	22'	11"	46,200
23'	-	-	-	-	-	43	71	1.5	70	98	156	1.5	23'	11½"	48,300
24'	-	-	-	-	-	36	61	1.5	60	85	135	1.5	24'	12"	50,400

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/240 (no creep considered).

Table 14: Reaction capacities for width of 7" in combination with different bearing lengths

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Floor Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

7" Floor Load (PLF)

	7" x 9½"				7" x 11¼5"				7" x 11⅞"						7"
	Live Load[a]		Total Load[b]	Brg.	Live Load[a]		Total Load[b]	Brg.	Live Load[a]		Total Load[b]	Brg.			Reaction Capacity (lbs)
Clear Span	L/480	L/360			L/480	L/360			L/480	L/360			Clear Span	Depth	
5'			5,263	4.5			6,232	4.5			6,578	4.5	5'	1½"	6,300
6'	3,625		4,435	4.5			5,251	4.5			5,543	4.5	6'	2"	8,400
7'	2,456	3,279	3,831	4.5	3,852		4,537	4.5	4,432		4,789	4.5	7'	2½	10,500
8'	1,731	2,313	3,221	4.5	2,748	3,670	3,993	4.5	3,175		4,215	4.5	8'	3"	12,600
9'	1,309	1,751	2,635	3.0	2,020	2,699	3,478	4.5	2,342	3,129	3,763	4.5	9'	3½"	14,700
9½'	1,127	1,508	2,270	3.0	1,749	2,338	3,132	4.5	2,030	2,714	3,452	4.5	9½'	4"	16,800
10'	976	1,307	1,969	3.0	1,523	2,037	2,836	4.5	1,771	2,367	3,125	4.5	10'	4½"	18,900
11'	745	999	1,507	3.0	1,173	1,571	2,356	4.5	1,367	1,830	2,596	4.5	11'	5"	21,000
12'	580	779	1,177	3.0	948	1,271	1,915	3.0	1,075	1,440	2,170	4.5	12'	5½"	23,100
13'	459	618	935	3.0	755	1,012	1,528	3.0	882	1,183	1,785	3.0	13'	6"	25,200
14'	379	511	774	1.5	609	818	1,237	3.0	713	958	1,447	3.0	14'	6½"	27,300
15'	307	415	631	1.5	497	670	1,014	3.0	583	785	1,187	3.0	15'	7"	29,400
16'	252	342	521	1.5	411	554	840	3.0	482	650	985	3.0	16'	7½"	31,500
16½'	229	311	475	1.5	374	506	768	3.0	440	594	901	3.0	16½'	8"	33,600
17'	209	284	434	1.5	342	462	703	3.0	403	543	825	3.0	17'	8½"	35,700
18'	174	238	365	1.5	294	398	606	1.5	339	458	697	3.0	18'	9"	37,800
19'	146	201	309	1.5	248	337	515	1.5	293	397	606	1.5	19'	9½"	39,900
20'	124	170	263	1.5	211	288	441	1.5	249	339	519	1.5	20'	10"	42,000
21'	105	145	226	1.5	180	247	380	1.5	214	292	448	1.5	21'	10½"	44,100
22'	89	125	195	1.5	155	213	329	1.5	184	252	388	1.5	22'	11"	46,200
23'	76	107	169	1.5	134	185	287	1.5	159	219	338	1.5	23'	11½"	48,300
24'	66	93	147	1.5	116	161	251	1.5	138	191	296	1.5	24'	12"	50,400

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/240 (no creep considered).

Table 15: Reaction capacities for width of 7" in combination with different bearing lengths

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Roof Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

1½" Roof Load (PLF)

	1½" x 3½"					1½" x 3½"					1½" x 3½"					1½" x 3½"							1½"
	Live Load[a]		Total Load[b]			Live Load[a]		Total Load[b]			Live Load[a]		Total Load[b]			Live Load[a]		Total Load[b]					
Clear Span	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	Clear Span	Depth	Reaction Capacity (lbs)
5'	116	175	234	234	1.5	398	598	761	798	3.0	796		990	1,076	4.5			1,263	1,373	4.5	5'	1½"	1,350
6'	68	103	139	139	1.5	242	365	487	487	3.0	500	751	834	907	4.5	966		1,064	1,157	4.5	6'	2"	1,800
7'	43	66	88	88	1.5	166	250	334	334	1.5	348	524	653	700	3.0	653	982	919	1,000	4.5	7'	2½	2,250
8'	-	44	59	59	1.5	113	170	228	228	1.5	241	363	485	485	3.0	460	692	757	823	4.5	8'	3"	2,700
9'	-	31	41	41	1.5	80	121	162	162	1.5	173	261	348	348	3.0	335	504	603	656	4.5	9'	3½"	3,150
9½'	-	-	35	35	1.5	68	103	138	138	1.5	148	223	299	299	3.0	288	435	543	581	4.5	9½'	4"	3,600
10'	-	-	30	30	1.5	58	88	118	118	1.5	128	193	258	258	3.0	259	391	504	522	3.0	10'	4½"	4,050
11'	-	-	-	-	-	43	66	89	89	1.5	100	151	203	203	1.5	198	299	399	399	3.0	11'	5"	4,500
12'	-	-	-	-	-	33	51	69	69	1.5	77	117	157	157	1.5	154	233	312	312	3.0	12'	5½"	4,950
13'	-	-	-	-	-	-	40	54	54	1.5	60	92	124	124	1.5	122	185	248	248	3.0	13'	6"	5,400
14'	-	-	-	-	-	-	31	43	43	1.5	48	74	99	99	1.5	98	149	200	200	3.0	14'	6½"	5,850
15'	-	-	-	-	-	-	-	34	34	1.5	39	60	81	81	1.5	82	125	167	167	1.5	15'	7"	6,300
16'	-	-	-	-	-	-	-	-	-	-	32	49	66	66	1.5	67	103	138	138	1.5	16'	7½"	6,750
16½'	-	-	-	-	-	-	-	-	-	-	-	44	60	60	1.5	61	93	126	126	1.5	16½'	8"	7,200
17'	-	-	-	-	-	-	-	-	-	-	-	40	55	55	1.5	56	85	115	115	1.5	17'	8½"	7,650
18'	-	-	-	-	-	-	-	-	-	-	-	34	46	46	1.5	47	72	97	97	1.5	18'	9"	8,100
19'	-	-	-	-	-	-	-	-	-	-	-	-	39	39	1.5	39	61	82	82	1.5	19'	9½"	8,550
20'	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	-	33	33	1.5	33	52	70	70	1.5	20'	10"	9,000
21'	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	-	-	44	60	60	1.5	21'	10½"	9,450
22'	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	-	-	38	52	52	1.5	22'	11"	9,900
23'	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	-	-	33	45	45	1.5	23'	11½"	10,350
24'	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	-	-	-	-	-	-	39	39	1.5	24'	12"	10,800

Table 16: Reaction capacities for width of 1½" in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/180 (no creep considered).

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Roof Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

1½" Roof Load (PLF)

	1½" x 9½"					1½" x 11¼"					1½" x 11⅞"					1½" x 14"							1½"
	Live Load[a]		Total Load[b]			Live Load[a]		Total Load[b]			Live Load[a]		Total Load[b]			Live Load[a]		Total Load[b]					
Clear Span	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	Clear Span	Depth	Reaction Capacity (lbs)
5'			1,297	1,410	4.5			1,501	1,632	6.0			1,584	1,723	6.0			1,826	1,986	7.5	5'	1½"	1,350
6'	1,037		1,093	1,188	4.5			1,269	1,380	6.0			1,340	1,457	6.0			1,550	1,685	7.5	6'	2"	1,800
7'	702		944	1,027	4.5	1,054		1,100	1,196	6.0	1,214		1,161	1,262	6.0			1,346	1,463	7.5	7'	2½	2,250
8'	495	745	794	863	4.5	755		970	1,054	6.0	873		1,024	1,113	6.0			1,189	1,293	7.5	8'	3"	2,700
9'	361	543	633	688	4.5	557	838	835	908	6.0	646	972	915	995	6.0	971		1,065	1,158	7.5	9'	3½"	3,150
9½'	311	469	570	620	4.5	483	727	753	819	6.0	561	844	830	902	6.0	848		1,012	1,101	7.5	9½'	4"	3,600
10'	270	407	516	544	4.5	436	656	699	760	4.5	490	738	752	818	6.0	745		964	1,049	7.5	10'	4½"	4,050
11'	214	323	431	431	3.0	336	507	581	632	4.5	392	590	640	696	4.5	600	904	842	915	6.0	11'	5"	4,500
12'	167	252	337	337	3.0	264	398	490	533	4.5	308	465	540	587	4.5	476	717	711	774	6.0	12'	5½"	4,950
13'	132	200	268	268	3.0	211	318	419	426	4.5	246	372	462	497	4.5	384	578	609	663	6.0	13'	6"	5,400
14'	106	161	216	216	3.0	175	265	354	354	3.0	200	302	399	404	4.5	313	472	527	574	6.0	14'	6½"	5,850
15'	86	132	177	177	3.0	143	217	291	291	3.0	168	254	340	340	3.0	264	399	468	510	4.5	15'	7"	6,300
16'	73	111	150	150	1.5	118	180	241	241	3.0	139	211	282	282	3.0	220	333	412	445	4.5	16'	7½"	6,750
16½'	66	101	136	136	1.5	108	164	220	220	3.0	127	193	258	258	3.0	201	305	388	408	4.5	16½'	8"	7,200
17'	60	93	125	125	1.5	99	150	202	202	3.0	116	176	237	237	3.0	185	280	366	375	4.5	17'	8½"	7,650
18'	51	78	105	105	1.5	83	127	171	171	3.0	98	149	200	200	3.0	157	237	318	318	4.5	18'	9"	8,100
19'	43	66	89	89	1.5	70	108	145	145	3.0	83	127	171	171	3.0	134	203	272	272	4.5	19'	9½"	8,550
20'	36	56	76	76	1.5	61	94	127	127	1.5	71	109	147	147	3.0	117	178	239	239	3.0	20'	10"	9,000
21'	31	48	65	65	1.5	53	81	110	110	1.5	61	94	127	127	3.0	101	154	207	207	3.0	21'	10½"	9,450
22'	-	41	57	57	1.5	45	70	95	95	1.5	54	83	112	112	1.5	87	134	180	180	3.0	22'	11"	9,900
23'	-	36	49	49	1.5	39	61	83	83	1.5	47	72	98	98	1.5	76	117	158	158	3.0	23'	11½"	10,350
24'	-	31	43	43	1.5	34	53	73	73	1.5	41	63	86	86	1.5	67	103	139	139	3.0	24'	12"	10,800

Table 17: Reaction capacities for width of 1½" in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/180 (no creep considered).

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Roof Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

1½" Roof Load (PLF)

	1½" x 16"					1½" x 18"					1½" x 20"					1½" x 24"							1½"
	Live Load[a]		Total Load[b]			Live Load[a]		Total Load[b]			Live Load[a]		Total Load[b]			Live Load[a]		Total Load[b]					
Clear Span	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	Clear Span	Depth	Reaction Capacity (lbs)
5'			2,087	2,269	7.5			2,297	2,497	9.0			2,552	2,775	9.0			2,935	3,191	7.5	5'	1½"	1,350
6'			1,771	1,926	7.5			1,956	2,126	9.0			2,173	2,363	9.0			2,514	2,734	7.5	6'	2"	1,800
7'			1,538	1,673	7.5			1,703	1,851	9.0			1,892	2,057	9.0			2,199	2,391	7.5	7'	2½	2,250
8'			1,359	1,478	7.5			1,507	1,639	9.0			1,675	1,821	9.0			1,954	2,124	7.5	8'	3"	2,700
9'			1,217	1,324	7.5			1,352	1,470	9.0			1,502	1,633	9.0			1,757	1,911	7.5	9'	3½"	3,150
9½'	1,206		1,157	1,258	7.5			1,286	1,398	9.0			1,429	1,553	9.0			1,673	1,820	7.5	9½'	4"	3,600
10'	1,063		1,102	1,199	7.5			1,225	1,333	9.0			1,362	1,481	9.0			1,597	1,736	7.5	10'	4½"	4,050
11'	837		1,007	1,095	7.5	1,112		1,121	1,219	9.0			1,245	1,354	9.0			1,463	1,591	6.0	11'	5"	4,500
12'	670		886	964	7.5	896		1,032	1,123	9.0	1,182		1,147	1,247	9.0			1,350	1,468	6.0	12'	5½"	4,950
13'	543	817	760	827	7.5	731		922	1,003	9.0	969		1,063	1,156	9.0			1,253	1,362	6.0	13'	6"	5,400
14'	456	687	670	729	6.0	617		814	886	7.5	803		967	1,052	9.0	1,243		1,169	1,271	6.0	14'	6½"	5,850
15'	378	570	586	637	6.0	514	774	713	775	7.5	672		847	922	9.0	1,049		1,095	1,191	4.5	15'	7"	6,300
16'	316	477	516	562	6.0	432	651	629	684	7.5	567		748	814	9.0	893		1,008	1,097	4.5	16'	7½"	6,750
16½'	290	438	486	529	6.0	397	599	592	644	7.5	533		716	779	7.5	843		965	1,049	4.5	16½'	8"	7,200
17'	267	403	458	499	6.0	366	552	559	608	7.5	492		675	735	7.5	780		911	991	4.5	17'	8½"	7,650
18'	227	343	410	446	6.0	318	481	506	551	6.0	421	636	604	657	7.5	673		816	888	4.5	18'	9"	8,100
19'	198	300	373	402	4.5	274	414	455	495	6.0	363	548	543	591	7.5	594		745	810	4.5	19'	9½"	8,550
20'	171	259	337	347	4.5	236	358	411	447	6.0	315	476	491	534	7.5	518		674	733	3.0	20'	10"	9,000
21'	148	225	302	302	4.5	205	312	373	406	6.0	279	422	451	491	6.0	453		612	666	3.0	21'	10½"	9,450
22'	129	196	264	264	4.5	180	273	340	366	6.0	244	370	411	448	6.0	399	603	559	608	3.0	22'	11"	9,900
23'	113	172	231	231	4.5	160	244	315	327	4.5	215	326	377	410	6.0	353	534	512	557	3.0	23'	11½"	10,350
24'	101	154	207	207	3.0	141	215	289	289	4.5	190	289	346	377	6.0	318	481	476	518	3.0	24'	12"	10,800

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/180 (no creep considered).

Table 18: Reaction capacities for width of 1½" in combination with different bearing lengths

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Roof Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

1¾" Roof Load (PLF)

	1¾" x 3½"					1¾" x 5½"					1¾" x 7¼"					1¾" x 9¼"							1¾"
	Live Load [a]		Total Load [b]			Live Load [a]		Total Load [b]			Live Load [a]		Total Load [b]			Live Load [a]		Total Load [b]					
Clear Span	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	Clear Span	Depth	Reaction Capacity (lbs)
5'	136	205	273	273	1.5	464	698	888	931	3.0	929		1,155	1,255	4.5			1,473	1,602	4.5	5'	1½"	1,575
6'	80	121	162	162	1.5	283	426	568	568	3.0	583	876	973	1,058	4.5	1,127		1,242	1,350	4.5	6'	2"	2,100
7'	50	77	103	103	1.5	193	292	390	390	1.5	406	611	762	816	3.0	762	1,146	1,073	1,166	4.5	7'	2½	2,625
8'	34	51	69	69	1.5	131	198	266	266	1.5	281	423	565	565	3.0	537	807	883	960	4.5	8'	3"	3,150
9'	-	36	48	48	1.5	93	141	189	189	1.5	202	304	407	407	3.0	390	588	704	765	4.5	9'	3½"	3,675
9½'	-	30	41	41	1.5	79	120	161	161	1.5	173	261	349	349	3.0	337	507	634	678	4.5	9½'	4"	4,200
10'	-	-	35	35	1.5	68	103	138	138	1.5	149	225	301	301	3.0	302	456	588	609	3.0	10'	4½"	4,725
11'	-	-	-	-	-	51	77	104	104	1.5	117	177	237	237	1.5	231	349	466	466	3.0	11'	5"	5,250
12'	-	-	-	-	-	39	59	80	80	1.5	90	137	183	183	1.5	180	272	364	364	3.0	12'	5½"	5,775
13'	-	-	-	-	-	30	46	63	63	1.5	71	108	145	145	1.5	142	216	289	289	3.0	13'	6"	6,300
14'	-	-	-	-	-	-	37	50	50	1.5	56	86	116	116	1.5	114	174	233	233	3.0	14'	6½"	6,825
15'	-	-	-	-	-	-	-	40	40	1.5	45	70	94	94	1.5	95	145	195	195	1.5	15'	7"	7,350
16'	-	-	-	-	-	-	-	33	33	1.5	37	57	77	77	1.5	78	120	161	161	1.5	16'	7½"	7,875
16½'	-	-	-	-	-	-	-	30	30	1.5	33	52	70	70	1.5	71	109	147	147	1.5	16½'	8"	8,400
17'	-	-	-	-	-	-	-	-	-	-	30	47	64	64	1.5	65	100	134	134	1.5	17'	8½"	8,925
18'	-	-	-	-	-	-	-	-	-	-	-	39	54	54	1.5	54	84	113	113	1.5	18'	9"	9,450
19'	-	-	-	-	-	-	-	-	-	-	-	33	45	45	1.5	46	71	96	96	1.5	19'	9½"	9,975
20'	-	-	-	-	-	-	-	-	-	-	-	-	38	38	1.5	39	60	82	82	1.5	20'	10"	10,500
21'	-	-	-	-	-	-	-	-	-	-	-	-	33	33	1.5	33	52	70	70	1.5	21'	10½"	11,025
22'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	45	61	61	1.5	22'	11"	11,550
23'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39	53	53	1.5	23'	11½"	12,075
24'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33	46	46	1.5	24'	12"	12,600

Table 19: Reaction capacities for width of 1¾" in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/180 (no creep considered).

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Roof Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

1¾“ Roof Load (PLF)

	1¾" x 9½"					1¾" x 11¼"					1¾" x 11⅞"					1¾" x 14"							1¾“
	Live Load[a]		Total Load[b]			Live Load[a]		Total Load[b]			Live Load[a]		Total Load[b]			Live Load[a]		Total Load[b]					Reaction
Clear Span	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	Clear Span	Depth	Capacity (lbs)
5'			1,513	1,645	4.5			1,751	1,904	6.0			1,849	2,010	6.0			2.131	2.317	7.5	5'	1½"	1,575
6'	1,209		1,275	1,386	4.5			1,481	1,610	6.0			1,563	1,700	6.0			1.808	1.966	7.5	6'	2"	2,100
7'	819		1,102	1,198	4.5	1,230		1,283	1,395	6.0	1,416		1,354	1,472	6.0			1.570	1.707	7.5	7'	2½	2,625
8'	578	869	926	1,007	4.5	881		1,131	1,230	6.0	1,019		1,194	1,299	6.0	1.509		1.387	1.509	7.5	8'	3"	3,150
9'	421	634	738	803	4.5	650	978	974	1,059	6.0	754	1,134	1,068	1,161	6.0	1.133		1.243	1.351	7.5	9'	3½"	3,675
9½'	363	547	665	723	4.5	564	849	878	955	6.0	655	985	968	1,053	6.0	990		1.181	1.284	7.5	9½'	4"	4,200
10'	315	475	602	635	4.5	509	766	816	887	4.5	572	861	877	954	6.0	869		1.125	1.224	7.5	10'	4½"	4,725
11'	249	376	503	503	3.0	392	591	678	737	4.5	457	688	747	812	4.5	701	1.054	982	1.068	6.0	11'	5"	5,250
12'	194	294	393	393	3.0	308	465	572	621	4.5	360	542	630	685	4.5	556	837	830	903	6.0	12'	5½"	5,775
13'	154	233	313	313	3.0	246	371	489	497	4.5	287	434	539	580	4.5	448	675	711	773	6.0	13'	6"	6,300
14'	124	188	252	252	3.0	204	309	414	414	3.0	233	352	466	471	4.5	365	551	615	669	6.0	14'	6½"	6,825
15'	101	154	206	206	3.0	167	253	339	339	3.0	196	296	397	397	3.0	308	466	547	595	4.5	15'	7"	7,350
16'	85	130	175	175	1.5	138	210	281	281	3.0	162	246	330	330	3.0	257	388	481	520	4.5	16'	7½"	7,875
16½'	77	118	159	159	1.5	126	192	257	257	3.0	148	225	301	301	3.0	235	356	453	476	4.5	16½'	8"	8,400
17'	71	108	146	146	1.5	115	175	236	236	3.0	135	206	276	276	3.0	216	327	427	438	4.5	17'	8½"	8,925
18'	59	91	123	123	1.5	97	148	199	199	3.0	114	174	234	234	3.0	183	277	372	372	4.5	18'	9"	9,450
19'	50	77	104	104	1.5	82	126	170	170	3.0	97	148	199	199	3.0	156	237	318	318	4.5	19'	9½"	9,975
20'	42	65	89	89	1.5	72	110	148	148	1.5	83	127	171	171	3.0	136	208	279	279	3.0	20'	10"	10,500
21'	36	56	76	76	1.5	61	95	128	128	1.5	71	110	148	148	3.0	118	180	242	242	3.0	21'	10½"	11,025
22'	31	48	66	66	1.5	53	82	111	111	1.5	63	97	131	131	1.5	102	156	211	211	3.0	22'	11"	11,550
23'	-	42	57	57	1.5	46	71	97	97	1.5	54	84	114	114	1.5	89	137	184	184	3.0	23'	11½"	12,075
24'	-	36	50	50	1.5	40	62	85	85	1.5	47	74	100	100	1.5	78	120	162	162	3.0	24'	12"	12,600

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/180 (no creep considered).

Table 20: Reaction capacities for width of 1¾" in combination with different bearing lengths

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Roof Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

1¾" Roof Load (PLF)

	1¾" x 16"					1¾" x 18"					1¾" x 20"					1¾" x 24"							1¾"
	Live Load[a]		Total Load[b]			Live Load[a]		Total Load[b]			Live Load[a]		Total Load[b]			Live Load[a]		Total Load[b]					
Clear Span	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	Clear Span	Depth	Reaction Capacity (lbs)
5'			2,435	2,648	7.5			2,680	2,914	9.0			2,853	3,102	12.0			3,424	3,723	12.0	5'	1½"	1,575
6'			2,067	2,247	7.5			2,282	2,481	9.0			2,445	2,658	12.0			2,934	3,190	12.0	6'	2"	2,100
7'			1,795	1,951	7.5			1,986	2,160	9.0			2,172	2,362	10.5			2,566	2,790	12.0	7'	2½	2,625
8'			1,586	1,724	7.5			1,758	1,912	9.0			1,954	2,125	9.0			2,279	2,478	12.0	8'	3"	3,150
9'			1,420	1,544	7.5			1,577	1,715	9.0			1,753	1,906	9.0			2,076	2,258	10.5	9'	3½"	3,675
9½'	1,407		1,350	1,468	7.5			1,500	1,631	9.0			1,667	1,812	9.0			1,976	2,149	10.5	9½'	4"	4,200
10'	1,240		1,286	1,398	7.5			1,430	1,555	9.0			1,589	1,728	9.0			1,885	2,049	10.5	10'	4½"	4,725
11'	977		1,175	1,277	7.5	1,297		1,307	1,422	9.0			1,453	1,580	9.0			1,725	1,876	10.5	11'	5"	5,250
12'	781		1,034	1,125	7.5	1,045		1,204	1,310	9.0	1,379		1,338	1,455	9.0			1,590	1,729	10.5	12'	5½"	5,775
13'	633	954	887	965	7.5	853		1,076	1,170	9.0	1,130		1,240	1,349	9.0			1,475	1,604	10.5	13'	6"	6,300
14'	532	802	782	851	6.0	720		950	1,033	7.5	937		1,129	1,228	9.0	1,482		1,375	1,495	10.5	14'	6½"	6,825
15'	441	665	684	744	6.0	600	903	831	904	7.5	784		989	1,076	9.0	1,250		1,288	1,401	10.5	15'	7"	7,350
16'	369	557	603	656	6.0	504	760	734	798	7.5	662		873	950	9.0	1,063		1,194	1,299	10.5	16'	7½"	7,875
16½'	338	511	567	617	6.0	463	699	691	752	7.5	622		835	908	7.5	983		1,126	1,224	10.5	16½'	8"	8,400
17'	311	470	535	582	6.0	427	644	652	709	7.5	574		788	857	7.5	911		1,063	1,156	10.5	17'	8½"	8,925
18'	265	401	478	520	6.0	372	561	591	643	6.0	491	742	705	767	7.5	785		952	1,036	10.5	18'	9"	9,450
19'	231	350	435	469	4.5	319	483	531	578	6.0	424	640	634	690	7.5	693		869	945	9.0	19'	9½"	9,975
20'	199	302	393	405	4.5	276	418	480	522	6.0	367	555	573	624	7.5	604		786	855	9.0	20'	10"	10,500
21'	172	262	352	352	4.5	240	364	435	474	6.0	326	493	527	573	6.0	529		715	778	9.0	21'	10½"	11,025
22'	150	229	308	308	4.5	210	318	397	427	6.0	285	432	480	523	6.0	466	704	652	710	9.0	22'	11"	11,550
23'	131	201	270	270	4.5	187	284	367	382	4.5	251	381	439	478	6.0	418	632	604	657	7.5	23'	11½"	12,075
24'	117	180	242	242	3.0	165	251	337	337	4.5	222	337	404	439	6.0	371	562	555	604	7.5	24'	12"	12,600

Table 21: Reaction capacities for width of 1¾" in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/180 (no creep considered).

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Roof Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

3½" Roof Load (PLF)

	3½" x 3½"					3½" x 5½"					3½" x 7¼"					3½" x 9¼"							3½"
	Live Load [a]		Total Load [b]			Live Load [a]		Total Load [b]			Live Load [a]		Total Load [b]			Live Load [a]		Total Load [b]					
Clear Span	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	Clear Span	Depth	Reaction Capacity (lbs)
5'	237	357	476	476	4.5	929	1,396	1,776	1,863	3.0	1,858		2,310	2,511	4.5			2,947	3,204	4.5	5'	1½"	3,150
6'	142	215	288	288	4.5	566	852	1,137	1,137	3.0	1,166	1,753	1,947	2,116	4.5	2,255		2,484	2,700	4.5	6'	2"	4,200
7'	91	139	186	186	4.5	387	584	780	780	1.5	813	1,223	1,525	1,633	3.0	1,525	2,292	2,146	2,333	4.5	7'	2½	5,250
8'	62	94	127	127	4.5	263	397	532	532	1.5	562	847	1,131	1,131	3.0	1,074	1,615	1,767	1,921	4.5	8'	3"	6,300
9'	43	66	90	90	4.5	186	282	378	378	1.5	404	609	814	814	3.0	781	1,176	1,408	1,531	4.5	9'	3½"	7,350
9½'	36	56	76	76	4.5	159	240	322	322	1.5	346	522	698	698	3.0	674	1,015	1,268	1,356	4.5	9½'	4"	8,400
10'	31	48	65	65	4.5	136	206	277	277	1.5	298	451	603	603	3.0	605	912	1,177	1,219	3.0	10'	4½"	9,450
11'	-	37	51	51	3.0	102	155	209	209	1.5	234	354	474	474	1.5	462	698	933	933	3.0	11'	5"	10,500
12'	-	-	39	39	3.0	78	119	161	161	1.5	180	274	367	367	1.5	360	544	728	728	3.0	12'	5½"	11,550
13'	-	-	30	30	3.0	60	93	126	126	1.5	142	216	290	290	1.5	285	432	579	579	3.0	13'	6"	12,600
14'	-	-	-	-	-	48	74	100	100	1.5	113	173	232	232	1.5	229	348	467	467	3.0	14'	6½"	13,650
15'	-	-	-	-	-	38	59	81	81	1.5	91	140	189	189	1.5	191	291	391	391	1.5	15'	7"	14,700
16'	-	-	-	-	-	31	48	66	66	1.5	74	115	155	155	1.5	157	240	323	323	1.5	16'	7½"	15,750
16½'	-	-	-	-	-	-	44	60	60	1.5	67	104	141	141	1.5	143	219	294	294	1.5	16½'	8"	16,800
17'	-	-	-	-	-	-	40	54	54	1.5	61	95	129	129	1.5	131	200	269	269	1.5	17'	8½"	17,850
18'	-	-	-	-	-	-	33	45	45	1.5	51	79	108	108	1.5	109	168	227	227	1.5	18'	9"	18,900
19'	-	-	-	-	-	-	-	38	38	1.5	42	67	91	91	1.5	92	142	192	192	1.5	19'	9½"	19,950
20'	n.a.	n.a.	n.a.	n.a.	-	-	-	32	32	1.5	35	56	77	77	1.5	78	121	164	164	1.5	20'	10"	21,000
21'	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-	30	48	66	66	1.5	67	104	141	141	1.5	21'	10½"	22,050
22'	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	41	57	57	1.5	57	90	122	122	1.5	22'	11"	23,100
23'	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	35	49	49	1.5	49	78	106	106	1.5	23'	11½"	24,150
24'	n.a.	n.a.	n.a.	n.a.	-	-	-	-	-	-	-	30	42	42	1.5	42	67	93	93	1.5	24'	12"	25,200

Table 22: Reaction capacities for width of 3½" in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/180 (no creep considered).

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Roof Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

3½" Roof Load (PLF)

	3½" x 9½"					3½" x 11¼"					3½" x 11⅞"							3½"
	Live Load [a]		Total Load [b]			Live Load [a]		Total Load [b]			Live Load [a]		Total Load [b]					
Clear Span	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	Clear Span	Depth	Reaction Capacity (lbs)
5'			2,892	3,144	7.5			3,503	3,808	6.0			3,698	4,020	6.0	5'	1½"	3,150
6'	2,186		2,454	2,668	7.5			2,963	3,221	6.0			3,127	3,400	6.0	6'	2"	4,200
7'	1,498	2,251	2,131	2,317	7.5	2,460		2,566	2,790	6.0	2,832		2,709	2,945	6.0	7'	2½	5,250
8'	1,066	1,603	1,747	1,899	7.5	1,763		2,263	2,461	6.0	2,038		2,389	2,598	6.0	8'	3"	6,300
9'	783	1,178	1,401	1,524	7.5	1,301	1,956	1,948	2,118	6.0	1,509	2,269	2,136	2,323	6.0	9'	3½"	7,350
9½'	677	1,020	1,265	1,362	7.5	1,129	1,698	1,757	1,911	6.0	1,311	1,971	1,936	2,106	6.0	9½'	4"	8,400
10'	589	889	1,148	1,187	7.5	1,018	1,532	1,632	1,775	4.5	1,145	1,722	1,755	1,909	6.0	10'	4½"	9,450
11'	454	686	916	916	7.5	785	1,183	1,356	1,475	4.5	915	1,377	1,494	1,625	4.5	11'	5"	10,500
12'	356	539	721	721	7.5	617	930	1,144	1,243	4.5	720	1,085	1,261	1,371	4.5	12'	5½"	11,550
13'	284	430	576	576	7.5	492	743	978	994	4.5	575	868	1,078	1,161	4.5	13'	6"	12,600
14'	236	358	480	480	6.0	409	618	828	828	3.0	467	705	932	943	4.5	14'	6½"	13,650
15'	193	293	393	393	6.0	335	507	679	679	3.0	392	593	795	795	3.0	15'	7"	14,700
16'	159	243	326	326	6.0	277	420	563	563	3.0	325	492	660	660	3.0	16'	7½"	15,750
16½'	145	222	298	298	6.0	253	384	515	515	3.0	297	450	603	603	3.0	16½'	8"	16,800
17'	132	203	273	273	6.0	231	351	472	472	3.0	271	412	553	553	3.0	17'	8½"	17,850
18'	111	171	231	231	6.0	194	297	399	399	3.0	229	348	468	468	3.0	18'	9"	18,900
19'	96	148	200	200	4.5	165	252	340	340	3.0	194	297	399	399	3.0	19'	9½"	19,950
20'	82	126	171	171	4.5	144	220	297	297	1.5	166	254	343	343	3.0	20'	10"	21,000
21'	70	109	148	148	4.5	123	190	256	256	1.5	143	220	296	296	3.0	21'	10½"	22,050
22'	60	94	128	128	4.5	106	164	222	222	1.5	126	194	262	262	1.5	22'	11"	23,100
23'	52	81	111	111	4.5	92	143	194	194	1.5	109	169	229	229	1.5	23'	11½"	24,150
24'	45	72	99	99	3.0	80	125	170	170	1.5	95	148	201	201	1.5	24'	12"	25,200

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/180 (no creep considered).

Table 23: Reaction capacities for width of 3½" in combination with different bearing lengths

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Roof Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

5¼" Roof Load (PLF)

	5¼" x 5½"					5¼" x 7¼"					5¼" x 9¼"							5¼"
	Live Load [a]		Total Load [b]			Live Load [a]		Total Load [b]			Live Load [a]		Total Load [b]					
Clear Span	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	Clear Span	Depth	Reaction Capacity (lbs)
5'	1,394	2,094	2,664	2,795	3.0	2,788		3,465	3,767	4.5			4,421	4,807	4.5	5'	1½"	4,725
6'	849	1,278	1,706	1,706	3.0	1,750	2,629	2,920	3,175	4.5	3,383		3,726	4,051	4.5	6'	2"	6,300
7'	581	876	1,170	1,170	1.5	1,220	1,835	2,287	2,450	3.0	2,288	3,438	3,219	3,500	4.5	7'	2½	7,875
8'	395	596	798	798	1.5	844	1,271	1,697	1,697	3.0	1,611	2,422	2,650	2,882	4.5	8'	3"	9,450
9'	280	423	567	567	1.5	606	913	1,221	1,221	3.0	1,172	1,765	2,112	2,297	4.5	9'	3½"	11,025
9½'	238	361	484	484	1.5	519	783	1,047	1,047	3.0	1,011	1,522	1,903	2,034	4.5	9½'	4"	12,600
10'	204	310	416	416	1.5	448	676	905	905	3.0	908	1,369	1,765	1,829	3.0	10'	4½"	14,175
11'	153	233	313	313	1.5	351	531	711	711	1.5	694	1,047	1,399	1,399	3.0	11'	5"	15,750
12'	117	179	241	241	1.5	271	411	551	551	1.5	540	817	1,093	1,093	3.0	12'	5½"	17,325
13'	91	140	189	189	1.5	213	324	435	435	1.5	428	648	868	868	3.0	13'	6"	18,900
14'	72	111	151	151	1.5	170	259	349	349	1.5	344	522	701	701	3.0	14'	6½"	20,475
15'	57	89	122	122	1.5	137	210	283	283	1.5	287	437	587	587	1.5	15'	7"	22,050
16'	46	73	99	99	1.5	112	172	233	233	1.5	236	360	484	484	1.5	16'	7½"	23,625
16½'	41	66	90	90	1.5	101	156	212	212	1.5	215	328	442	442	1.5	16½'	8"	25,200
17'	37	60	82	82	1.5	92	143	193	193	1.5	196	300	404	404	1.5	17'	8½"	26,775
18'	30	49	68	68	1.5	76	119	162	162	1.5	164	252	340	340	1.5	18'	9"	28,350
19'	-	41	57	57	1.5	64	100	137	137	1.5	138	213	289	289	1.5	19'	9½"	29,925
20'	-	34	48	48	1.5	53	85	116	116	1.5	117	182	247	247	1.5	20'	10"	31,500
21'	-	-	40	40	1.5	45	72	99	99	1.5	100	156	212	212	1.5	21'	10½"	33,075
22'	-	-	34	34	1.5	38	62	85	85	1.5	86	135	183	183	1.5	22'	11"	34,650
23'	-	-	-	-	-	32	53	74	74	1.5	74	117	159	159	1.5	23'	11½"	36,225
24'	-	-	-	-	-	-	45	64	64	1.5	64	101	139	139	1.5	24'	12"	37,800

Table 24: Reaction capacities for width of 5¼" in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/180 (no creep considered).

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Roof Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

5¼" Roof Load (PLF)

	5¼" x 9½"					5¼" x 11¼"					5¼" x 11⅞"						5¼"
	Live Load [a]		Total Load [b]			Live Load [a]		Total Load [b]			Live Load [a]		Total Load [b]				
Clear Span	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	Clear Span	Depth	Reaction Capacity (lbs)
5'			4,541	4,937	4.5			5,255	5,713	6.0			5,547	6,030	6.0	5'	1½"	4,725
6'	3,630		3,826	4,160	4.5			4,444	4,832	6.0			4,691	5,100	6.0	6'	2"	6,300
7'	2,460		3,306	3,595	4.5	3,690		3,850	4,186	6.0	4,248		4,063	4,418	6.0	7'	2½	7,875
8'	1,735	2,608	2,780	3,023	4.5	2,644		3,395	3,691	6.0	3,057		3,584	3,897	6.0	8'	3"	9,450
9'	1,265	1,903	2,216	2,410	4.5	1,952	2,935	2,923	3,178	6.0	2,263	3,403	3,205	3,485	6.0	9'	3½"	11,025
9½'	1,091	1,643	1,996	2,171	4.5	1,693	2,547	2,636	2,867	6.0	1,966	2,957	2,905	3,159	6.0	9½'	4"	12,600
10'	947	1,427	1,807	1,906	4.5	1,528	2,298	2,448	2,662	4.5	1,717	2,584	2,633	2,864	6.0	10'	4½"	14,175
11'	749	1,131	1,511	1,511	3.0	1,178	1,774	2,034	2,212	4.5	1,372	2,066	2,242	2,438	4.5	11'	5"	15,750
12'	584	883	1,181	1,181	3.0	925	1,395	1,716	1,865	4.5	1,080	1,627	1,892	2,057	4.5	12'	5½"	17,325
13'	463	701	939	939	3.0	739	1,115	1,467	1,492	4.5	863	1,303	1,617	1,742	4.5	13'	6"	18,900
14'	373	565	758	758	3.0	598	904	1,210	1,210	4.5	700	1,058	1,398	1,415	4.5	14'	6½"	20,475
15'	304	462	620	620	3.0	490	742	994	994	4.5	588	890	1,192	1,192	3.0	15'	7"	22,050
16'	256	390	525	525	1.5	406	616	826	826	4.5	487	739	990	990	3.0	16'	7½"	23,625
16½'	233	356	479	479	1.5	371	563	756	756	4.5	445	675	905	905	3.0	16½'	8"	25,200
17'	213	325	438	438	1.5	339	516	693	693	4.5	407	619	830	830	3.0	17'	8½"	26,775
18'	178	273	369	369	1.5	286	436	586	586	4.5	344	523	702	702	3.0	18'	9"	28,350
19'	150	232	313	313	1.5	243	371	500	500	4.5	292	445	599	599	3.0	19'	9½"	29,925
20'	128	197	267	267	1.5	207	318	429	429	4.5	250	382	514	514	3.0	20'	10"	31,500
21'	109	169	230	230	1.5	178	275	371	371	4.5	215	330	445	445	3.0	21'	10½"	33,075
22'	93	146	199	199	1.5	154	238	322	322	4.5	189	291	393	393	1.5	22'	11"	34,650
23'	80	127	173	173	1.5	134	208	282	282	4.5	164	254	343	343	1.5	23'	11½"	36,225
24'	69	110	151	151	1.5	116	182	247	247	4.5	143	222	301	301	1.5	24'	12"	37,800

Table 25: Reaction capacities for width of 5¼" in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/180 (no creep considered).

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Roof Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

7" Roof Load (PLF)

	7" x 5½"					7" x 7¼"					7" x 9¼"							7"
	Live Load [a]		Total Load [b]			Live Load [a]		Total Load [b]			Live Load [a]		Total Load [b]					
Clear Span	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	Clear Span	Depth	Reaction Capacity (lbs)
5'	1,858	2,792	3,552	3,726	3.0	3,717		4,620	5,023	4.5			5,895	6,409	4.5	5'	1½"	6,300
6'	1,133	1,704	2,275	2,275	3.0	2,333	3,506	3,894	4,233	4.5	4,511		4,968	5,401	4.5	6'	2"	8,400
7'	775	1,168	1,560	1,560	1.5	1,627	2,447	3,050	3,267	3.0	3,050	4,584	4,292	4,667	4.5	7'	2½	10,500
8'	527	795	1,064	1,064	1.5	1,125	1,694	2,263	2,263	3.0	2,148	3,230	3,534	3,842	4.5	8'	3"	12,600
9'	373	564	756	756	1.5	808	1,218	1,628	1,628	3.0	1,563	2,353	2,817	3,063	4.5	9'	3½"	14,700
9½'	318	481	645	645	1.5	692	1,044	1,397	1,397	3.0	1,348	2,030	2,537	2,712	4.5	9½'	4"	16,800
10'	272	413	554	554	1.5	597	902	1,207	1,207	3.0	1,211	1,825	2,354	2,439	3.0	10'	4½"	18,900
11'	204	311	418	418	1.5	468	708	949	949	1.5	925	1,396	1,866	1,866	3.0	11'	5"	21,000
12'	156	239	322	322	1.5	361	548	735	735	1.5	721	1,089	1,457	1,457	3.0	12'	5½"	23,100
13'	121	187	253	253	1.5	284	432	580	580	1.5	571	865	1,158	1,158	3.0	13'	6"	25,200
14'	96	149	201	201	1.5	226	346	465	465	1.5	459	697	934	934	3.0	14'	6½"	27,300
15'	76	119	163	163	1.5	183	280	378	378	1.5	383	583	783	783	1.5	15'	7"	29,400
16'	62	97	133	133	1.5	149	230	310	310	1.5	315	481	646	646	1.5	16'	7½"	31,500
16½'	55	88	120	120	1.5	135	209	283	283	1.5	287	438	589	589	1.5	16½'	8"	33,600
17'	50	80	109	109	1.5	123	190	258	258	1.5	262	400	539	539	1.5	17'	8½"	35,700
18'	41	66	91	91	1.5	102	159	216	216	1.5	219	336	454	454	1.5	18'	9"	37,800
19'	33	55	76	76	1.5	85	134	182	182	1.5	185	285	385	385	1.5	19'	9½"	39,900
20'	-	46	64	64	1.5	71	113	155	155	1.5	157	243	329	329	1.5	20'	10"	42,000
21'	-	38	54	54	1.5	60	96	132	132	1.5	134	208	283	283	1.5	21'	10½"	44,100
22'	-	32	46	46	1.5	51	82	114	114	1.5	114	180	245	245	1.5	22'	11"	46,200
23'	-	-	39	39	1.5	43	71	98	98	1.5	98	156	213	213	1.5	23'	11½"	48,300
24'	-	-	33	33	1.5	36	61	86	85	1.5	85	135	186	186	1.5	24'	12"	50,400

Table 26: Reaction capacities for width of 7" in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/180 (no creep considered).

Pollmeier™ LVL – 2.1E

Single Span Load Tables - Roof Load

How to use maximum uniform load tables

1. Calculate live load: Choose a beam with a capacity that is equal or higher in the column for live load.
2. Calculate total load: Choose a beam with a capacity that is equal or higher in the column for total load.
3. The chosen cross section must have a capacity to satisfy both; the live load and the total load.
4. If live load is blank the total load governs the design.
5. The given bearing is measured in inch.

7" Roof Load (PLF)

	7" x 9½"					7" x 11¼"					7" x 11⅞"							7"
	Live Load [a]		Total Load [b]			Live Load [a]		Total Load [b]			Live Load [a]		Total Load [b]					
Clear Span	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	L/360	L/240	Snow 115 %	Non-Snow 125 %	Brg.	Clear Span	Depth	Reaction Capacity (lbs)
5'			6,054	6,582	4.5			7,006	7,617	6.0			7,396	8,040	6.0	5'	1½"	6,300
6'	4,839		5,102	5,547	4.5			5,926	6,442	6.0			6,255	6,800	6.0	6'	2"	8,400
7'	3,279		4,408	4,793	4.5	4,920		5,133	5,581	6.0	5,664		5,418	5,891	6.0	7'	2½	10,500
8'	2,313	3,477	3,707	4,030	4.5	3,526		4,527	4,922	6.0	4,076		4,778	5,196	6.0	8'	3"	12,600
9'	1,686	2,537	2,955	3,213	4.5	2,603	3,913	3,897	4,237	6.0	3,018	4,538	4,273	4,647	6.0	9'	3½"	14,700
9½'	1,454	2,190	2,662	2,894	4.5	2,258	3,396	3,515	3,822	6.0	2,622	3,942	3,873	4,212	6.0	9½'	4"	16,800
10'	1,263	1,902	2,410	2,542	4.5	2,037	3,065	3,264	3,550	4.5	2,290	3,445	3,511	3,818	6.0	10'	4½"	18,900
11'	999	1,507	2,015	2,015	3.0	1,571	2,366	2,712	2,950	4.5	1,830	2,755	2,989	3,251	4.5	11'	5"	21,000
12'	779	1,177	1,575	1,575	3.0	1,234	1,860	2,289	2,487	4.5	1,440	2,170	2,522	2,743	4.5	12'	5½"	23,100
13'	618	935	1,252	1,252	3.0	985	1,487	1,957	1,989	4.5	1,151	1,737	2,156	2,323	4.5	13'	6"	25,200
14'	497	754	1,011	1,011	3.0	818	1,237	1,656	1,656	3.0	934	1,410	1,864	1,887	4.5	14'	6½"	27,300
15'	405	616	826	826	3.0	670	1,014	1,358	1,358	3.0	785	1,187	1,590	1,590	3.0	15'	7"	29,400
16'	342	521	700	700	1.5	554	840	1,127	1,127	3.0	650	985	1,320	1,320	3.0	16'	7½"	31,500
16½'	311	475	638	638	1.5	506	768	1,030	1,030	3.0	594	901	1,207	1,207	3.0	16½'	8"	33,600
17'	284	434	584	584	1.5	462	703	944	944	3.0	543	825	1,107	1,107	3.0	17'	8½"	35,700
18'	238	365	492	492	1.5	389	594	798	798	3.0	458	697	937	937	3.0	18'	9"	37,800
19'	201	309	417	417	1.5	330	505	680	680	3.0	389	594	799	799	3.0	19'	9½"	39,900
20'	170	263	357	357	1.5	288	441	594	594	1.5	333	509	686	686	3.0	20'	10"	42,000
21'	145	226	307	307	1.5	247	380	513	513	1.5	286	440	593	593	3.0	21'	10½"	44,100
22'	125	195	266	266	1.5	213	329	445	445	1.5	252	388	524	524	1.5	22'	11"	46,200
23'	107	169	231	231	1.5	185	287	389	389	1.5	219	338	458	458	1.5	23'	11½"	48,300
24'	93	147	202	202	1.5	161	251	341	341	1.5	191	296	402	402	1.5	24'	12"	50,400

Table 27: Reaction capacities for width of 7" in combination with different bearing lengths

All data are to be understood as guide values and do not replace structural design!

a) Live Load deflection has been limited as noted in the table. b) Total Load deflection has been limited to L/180 (no creep considered).