



BlueLinX Engineered Products

AFL Product Guide Addendum - AFL 1.6E Uniform Load Tables

This is a supplement to the onCENTER AFL Product Guide (item OCAFLPG) dated May 2013 to include uniform tables for AFL 1.6E.

USING LOAD TABLES

1. Tabulated allowable uniform loads are for the more restrictive of single or continuous spans (measured center-to-center of bearings) and may be applied in addition to the weight of the beam. Dry use conditions are assumed (moisture content of less than 16%). For other load types (e.g. triangular, concentrated, non-uniform, etc.) or span configurations, use Doma Sizer™ design software or contact your BlueLinX representative.
2. To properly select a beam, capacities in the 'Live Load' and 'Total Load' rows must meet or exceed actual live and total loads respectively. When 'Live Load' is blank, 'Total Load' will control, unless a floor live load deflection limit other than L/360 is desired (see note 3).
3. For floor live load deflection limits of L/480 or L/600, multiply the allowable load value in the floor 'Live Load' row (or 'Total Load' when 'Live Load' is blank) by 0.75 or 0.60 respectively.
4. Check deflection limits against local building code requirements.
5. 1½" wide members with depths exceeding 14" must only be used as multiple members (i.e., 2, 3, or 4 plies).
6. Provide lateral support at all bearing locations and continuously along the top (or compression) edge of the beam.
7. To select an AFL beam for a span not shown, use values for the next longer span shown (e.g., for a 21' span, select product using values for a 22' span).
8. Bearing must be provided across the full width of the AFL beam.
9. Bearing length may be adjusted if an AFL beam is not fully loaded. For example, if an AFL beam requires 3.5" of bearing to support a maximum TL capacity of 1000 plf but the calculated design load

is only 800 plf, the bearing length indicated in the chart can be adjusted. Divide 800 plf by 1000 plf and multiply by 3.5" ($800/1000 \times 3.5 = 2.8$). Caution: Under no circumstances may end bearing be less than 1½" nor intermediate bearing less than 3".

10. Roof surface slope must be a minimum of 0.25/12 or as required for adequate drainage.

PRODUCT SELECTION EXAMPLE:

Choose an onCENTER 1.6E AFL beam to support 620 PLF live load + 160 PLF dead load. Loads are calculated from both floor and roof areas. The beam spans 9'-6".

If a beam supports floor and roof loads, use floor tables for product selection as these tables use stiffer deflection criterion. Find the tables titled Floor Load Table. Total load to be supported is 780 PLF (620 live + 160 dead). Enter the table at the left column and find 10' (next longest length above 9'-6"). The column to the right contains three rows, Live Load L/360, Total Load and End / Int. Bearing (minimum bearing requirements in inches at End and Intermediate supports). Follow the row marked Total Load across the chart until a number larger than 780 is located. Two pieces of 1½" x 16" deep AFL can support 874 PLF total load. Live load capacity must also be verified (if none is indicated, total load governs). Note the minimum bearing lengths of 3.6" (end) and 8.8" (int). To find a shallower beam requiring less bearing, continue moving across the table to the Three 1½" onCENTER AFL section. Again, find a total load value that meets or exceeds 780 PLF. Three 1½" x 11⅞" AFL can carry 822 PLF total load with no live load indicated (822 > 780). The required end bearing is 2.3" and in multiple span conditions, the intermediate bearing requirement is 5.6".

FLOOR LOAD TABLE (PLF)

1.6E AFL 100%

Span	Condition	One 1½" onCENTER® AFL						Two 1½" onCENTER® AFL							
		5½"	7¼"	9¼"	9½"	11¼"	11¾"	5½"	7¼"	9¼"	9½"	11¼"	11¾"	14"	16"
4'	Live Load L/360														
	Total Load	378	540	760	791	1032	1131	756	1079	1520	1582	2064	2261	2991	2989
	End / Int. Bearing	1.5 / 3.1	1.8 / 4.4	2.5 / 6.1	2.6 / 6.4	3.3 / 8.3	3.7 / 9.1	1.5 / 3.1	1.8 / 4.4	2.5 / 6.1	2.6 / 6.4	3.3 / 8.3	3.7 / 9.1	4.8 / 12.0	4.8 / 12.0
5'	Live Load L/360														
	Total Load	285	398	546	566	718	778	569	796	1093	1133	1437	1556	2012	2390
	End / Int. Bearing	1.5 / 3.0	1.6 / 4.0	2.2 / 5.5	2.3 / 5.7	2.9 / 7.2	3.2 / 7.8	1.5 / 3.0	1.6 / 4.0	2.2 / 5.5	2.3 / 5.7	2.9 / 7.2	3.2 / 7.8	4.1 / 10.1	4.8 / 12.0
6'	Live Load L/360														
	Total Load	209						419							
	End / Int. Bearing	1.5 / 3.0	1.6 / 3.8	2.1 / 5.2	2.2 / 5.3	2.7 / 6.7	2.9 / 7.2	1.5 / 3.0	1.6 / 3.8	2.1 / 5.2	2.2 / 5.3	2.7 / 6.7	2.9 / 7.2	3.6 / 9.0	4.5 / 11.1
7'	Live Load L/360														
	Total Load	132						264							
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.5	2.0 / 5.0	2.1 / 5.1	2.6 / 6.3	2.7 / 6.8	1.5 / 3.0	1.5 / 3.5	2.0 / 5.0	2.1 / 5.1	2.6 / 6.3	2.7 / 6.8	3.4 / 8.4	4.1 / 10.2
8'	Live Load L/360														
	Total Load	88						177							
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.1	1.9 / 4.6	2.0 / 4.8	2.5 / 6.1	2.6 / 6.5	1.5 / 3.0	1.5 / 3.1	1.9 / 4.6	2.0 / 4.8	2.5 / 6.1	2.6 / 6.5	3.2 / 8.0	3.9 / 9.6
9'	Live Load L/360														
	Total Load	62	142					124	284						
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.7 / 4.1	1.7 / 4.3	2.3 / 5.7	2.5 / 6.2	1.5 / 3.0	1.5 / 3.0	1.7 / 4.1	1.7 / 4.3	2.3 / 5.7	2.5 / 6.2	3.1 / 7.7	3.7 / 9.2
10'	Live Load L/360														
	Total Load	45	103					90	207						
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.7	1.6 / 3.9	2.1 / 5.1	2.3 / 5.6	1.5 / 3.0	1.5 / 3.0	1.5 / 3.7	1.6 / 3.9	2.1 / 5.1	2.3 / 5.6	3.0 / 7.3	3.6 / 8.8
11'	Live Load L/360														
	Total Load		78					68	156						
	End / Int. Bearing		1.5 / 3.0	1.5 / 3.4	1.5 / 3.5	1.9 / 4.6	2.1 / 5.1	1.5 / 3.0	1.5 / 3.0	1.5 / 3.4	1.5 / 3.5	1.9 / 4.6	2.1 / 5.1	2.7 / 6.6	3.3 / 8.3
12'	Live Load L/360														
	Total Load		60					52	120						
	End / Int. Bearing		1.5 / 3.0	1.5 / 3.1	1.5 / 3.2	1.7 / 4.3	1.9 / 4.7	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	1.5 / 3.2	1.7 / 4.3	1.9 / 4.7	2.5 / 6.1	3.1 / 7.6
13'	Live Load L/360														
	Total Load		47	98	106			41	94	196	212				
	End / Int. Bearing		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.6 / 3.9	1.7 / 4.3	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.6 / 3.9	1.7 / 4.3	2.3 / 5.6	2.8 / 7.0
14'	Live Load L/360														
	Total Load			78	85				75	157	170				
	End / Int. Bearing			1.5 / 3.0	1.5 / 3.0	1.5 / 3.7	1.6 / 4.0		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.7	1.6 / 4.0	2.1 / 5.2	2.6 / 6.5
15'	Live Load L/360														
	Total Load			63	69				61	127	138				
	End / Int. Bearing			1.5 / 3.0	1.5 / 3.0	1.5 / 3.4	1.5 / 3.7		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.4	1.5 / 3.7	2.0 / 4.9	2.5 / 6.1
16'	Live Load L/360														
	Total Load			52	57	94			50	105	114	189			
	End / Int. Bearing			1.5 / 3.0	1.5 / 3.0	1.5 / 3.2	1.5 / 3.5		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.2	1.5 / 3.5	1.9 / 4.6	2.3 / 5.7
17'	Live Load L/360														
	Total Load			43	47	79			42	87	95	158			
	End / Int. Bearing			1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.8 / 4.3	2.2 / 5.4
18'	Live Load L/360														
	Total Load				40	66	78			73	80	133	156		
	End / Int. Bearing				1.5 / 3.0	1.5 / 3.0	1.5 / 3.1			1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	1.7 / 4.1	2.1 / 5.1
19'	Live Load L/360														
	Total Load					56	66			62	68	113	133		
	End / Int. Bearing					1.5 / 3.0	1.5 / 3.0			1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.6 / 3.9	2.0 / 4.8
20'	Live Load L/360														
	Total Load					48	57			53	58	97	114		
	End / Int. Bearing					1.5 / 3.0	1.5 / 3.0			1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.7	1.9 / 4.6

Live Load L/360 = Maximum live load (plf) with deflection limited to L/360

Total Load = Maximum total load (plf) with deflection limited to L/240

End / Int. Bearing = Minimum end and intermediate bearing length (inches) based on bearing stress of 425 psi, as provided by SPF plates. For other conditions, use Doma Sizer™ or contact your local onCENTER supplier for assistance.

Refer to page 1 for additional information regarding use of this table.

FLOOR LOAD TABLE (PLF)

1.6 = AFL 100%

Span	Condition	Three 1½" onCENTER® AFL								Four 1½" onCENTER® AFL							
		5½"	7¼"	9¼"	9½"	11¼"	11½"	14"	16"	5½"	7¼"	9¼"	9½"	11¼"	11½"	14"	16"
4'	Live Load L/360																
	Total Load	1134	1619	2280	2373	3096	3392	4486	4484	1512	2158	3041	3164	4128	4522	5981	5979
	End / Int. Bearing	1.5 / 3.1	1.8 / 4.4	2.5 / 6.1	2.6 / 6.4	3.3 / 8.3	3.7 / 9.1	4.8 / 12.0	4.8 / 12.0	1.5 / 3.1	1.8 / 4.4	2.5 / 6.1	2.6 / 6.4	3.3 / 8.3	3.7 / 9.1	4.8 / 12.0	4.8 / 12.0
5'	Live Load L/360																
	Total Load	854	1195	1639	1699	2155	2334	3019	3584	1139	1593	2185	2265	2873	3112	4025	4779
	End / Int. Bearing	1.5 / 3.0	1.6 / 4.0	2.2 / 5.5	2.3 / 5.7	2.9 / 7.2	3.2 / 7.8	4.1 / 10.1	4.8 / 12.0	1.5 / 3.0	1.6 / 4.0	2.2 / 5.5	2.3 / 5.7	2.9 / 7.2	3.2 / 7.8	4.1 / 10.1	4.8 / 12.0
6'	Live Load L/360																
	Total Load	629	946	1278	1322	1652	1778	2248	2757	839	1262	1704	1763	2202	2371	2997	3676
	End / Int. Bearing	1.5 / 3.0	1.6 / 3.8	2.1 / 5.2	2.2 / 5.3	2.7 / 6.7	2.9 / 7.2	3.6 / 9.0	4.5 / 11.1	1.5 / 3.0	1.6 / 3.8	2.1 / 5.2	2.2 / 5.3	2.7 / 6.7	2.9 / 7.2	3.6 / 9.0	4.5 / 11.1
7'	Live Load L/360																
	Total Load	396	742	1047	1082	1338	1435	1790	2163	528	625	990	1396	1443	1784	1913	2386
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.5	2.0 / 5.0	2.1 / 5.1	2.6 / 6.3	2.7 / 6.8	3.4 / 8.4	4.1 / 10.2	1.5 / 3.0	1.5 / 3.5	2.0 / 5.0	2.1 / 5.1	2.6 / 6.3	2.7 / 6.8	3.4 / 8.4	4.1 / 10.2
8'	Live Load L/360																
	Total Load	265	567	851	889	1124	1203	1486	1779	354	477	756	1134	1186	1499	1603	1981
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.1	1.9 / 4.6	2.0 / 4.8	2.5 / 6.1	2.6 / 6.5	3.2 / 8.0	3.9 / 9.6	1.5 / 3.0	1.5 / 3.1	1.9 / 4.6	2.0 / 4.8	2.5 / 6.1	2.6 / 6.5	3.2 / 8.0	3.9 / 9.6
9'	Live Load L/360																
	Total Load	186	427	670	701	929	1017	1270	1510	248	569	894	935	1239	1356	1693	2013
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.7 / 4.1	1.7 / 4.3	2.3 / 5.7	2.5 / 6.2	3.1 / 7.7	3.7 / 9.2	1.5 / 3.0	1.5 / 3.0	1.7 / 4.1	1.7 / 4.3	2.3 / 5.7	2.5 / 6.2	3.1 / 7.7	3.7 / 9.2
10'	Live Load L/360																
	Total Load	136	311	542	566	751	822	1081	1311	181	415	722	755	1001	1096	1442	1748
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.7	1.6 / 3.9	2.1 / 5.1	2.3 / 5.6	3.0 / 7.3	3.6 / 8.8	1.5 / 3.0	1.5 / 3.0	1.5 / 3.7	1.6 / 3.9	2.1 / 5.1	2.3 / 5.6	3.0 / 7.3	3.6 / 8.8
11'	Live Load L/360																
	Total Load	102	234	446	466	619	677	891	1114	136	312	595	622	825	903	1189	1485
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.4	1.5 / 3.5	1.9 / 4.6	2.1 / 5.1	2.7 / 6.6	3.3 / 8.3	1.5 / 3.0	1.5 / 3.0	1.5 / 3.4	1.5 / 3.5	1.9 / 4.6	2.1 / 5.1	2.7 / 6.6	3.3 / 8.3
12'	Live Load L/360																
	Total Load	78	180	374	391	518	567	747	934	104	240	498	521	691	757	996	1245
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	1.5 / 3.2	1.7 / 4.3	1.9 / 4.7	2.5 / 6.1	3.1 / 7.6	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	1.5 / 3.2	1.7 / 4.3	1.9 / 4.7	2.5 / 6.1	3.1 / 7.6
13'	Live Load L/360																
	Total Load	61	141	294	319	440	482	635	794	82	189	392	425	587	643	846	1058
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.6 / 3.9	1.7 / 4.3	2.3 / 5.6	2.8 / 7.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.6 / 3.9	1.7 / 4.3	2.3 / 5.6	2.8 / 7.0
14'	Live Load L/360																
	Total Load	49	113	235	255	378	414	546	682	66	151	314	340	504	552	728	910
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.7	1.6 / 4.0	2.1 / 5.2	2.6 / 6.5	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.7	1.6 / 4.0	2.1 / 5.2	2.6 / 6.5
15'	Live Load L/360																
	Total Load	40	92	191	207	328	359	474	593	53	123	255	277	438	479	632	790
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.4	1.5 / 3.7	2.0 / 4.9	2.5 / 6.1	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.4	1.5 / 3.7	2.0 / 4.9	2.5 / 6.1
16'	Live Load L/360																
	Total Load		76	158	171	284	315	415	519	44	101	210	228	379	419	553	692
	End / Int. Bearing		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.2	1.5 / 3.5	1.9 / 4.6	2.3 / 5.7	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.2	1.5 / 3.5	1.9 / 4.6	2.3 / 5.7
17'	Live Load L/360																
	Total Load		63	131	142	237	277	366	458		84	175	190	316	370	488	611
	End / Int. Bearing		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.8 / 4.3	2.2 / 5.4		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.8 / 4.3	2.2 / 5.4
18'	Live Load L/360																
	Total Load		53	110	120	199	234	325	407		71	147	160	266	313	434	543
	End / Int. Bearing		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	1.7 / 4.1	2.1 / 5.1		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	1.7 / 4.1	2.1 / 5.1
19'	Live Load L/360																
	Total Load		45	94	102	169	199	291	364		60	125	136	226	266	387	485
	End / Int. Bearing		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.6 / 3.9	2.0 / 4.8		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.6 / 3.9	2.0 / 4.8
20'	Live Load L/360																
	Total Load			80	87	145	171	261	327		51	107	116	194	228	348	436
	End / Int. Bearing			1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.7	1.9 / 4.6		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.7	1.9 / 4.6

Live Load L/360 = Maximum live load (plf) with deflection limited to L/360

Total Load = Maximum total load (plf) with deflection limited to L/240

End / Int. Bearing = Minimum end and intermediate bearing length (inches) based on bearing stress of 425 psi, as provided by SPF plates. For other conditions, use Doma Sizer™ or contact your local onCENTER supplier for assistance.

Refer to page 1 for additional information regarding use of this table.

ROOF LOAD TABLE (PLF)

1.6E AFL 115%

Span	Condition	One 1½" onCENTER® AFL						Two 1½" onCENTER® AFL								
		5½"	7¼"	9¼"	9½"	11¼"	11½"	5½"	7¼"	9¼"	9½"	11¼"	11½"	14"	16"	
4'	Live Load L/240															
	Total Load	435	621	875	910	1187	1301	870	1242	1749	1820	2375	2601	2991	2989	
	End / Int. Bearing	1.5 / 3.5	2.0 / 5.0	2.8 / 7.0	3.0 / 7.3	3.8 / 9.5	4.2 / 10.4	1.5 / 3.5	2.0 / 5.0	2.8 / 7.0	3.0 / 7.3	3.8 / 9.5	4.2 / 10.4	4.8 / 12.0	4.8 / 12.0	
5'	Live Load L/240															
	Total Load	328	458	629	652	827	895	655	917	1257	1303	1653	1790	2315	2390	
	End / Int. Bearing	1.5 / 3.3	1.9 / 4.6	2.6 / 6.3	2.7 / 6.6	3.4 / 8.3	3.6 / 9.0	1.5 / 3.3	1.9 / 4.6	2.6 / 6.3	2.7 / 6.6	3.4 / 8.3	3.6 / 9.0	4.7 / 11.6	4.8 / 12.0	
6'	Live Load L/240															
	Total Load	245	363	490	507	634	682	491	726	981	1015	1267	1364	1725	1990	
	End / Int. Bearing	1.5 / 3.0	1.8 / 4.4	2.4 / 5.9	2.5 / 6.1	3.1 / 7.7	3.3 / 8.2	1.5 / 3.0	1.8 / 4.4	2.4 / 5.9	2.5 / 6.1	3.1 / 7.7	3.3 / 8.2	4.2 / 10.4	4.8 / 12.0	
7'	Live Load L/240															
	Total Load	180	285	402	415	513	551	360	570	804	830	1027	1101	1373	1660	
	End / Int. Bearing	1.5 / 3.0	1.6 / 4.0	2.3 / 5.7	2.4 / 5.9	2.9 / 7.3	3.1 / 7.8	1.5 / 3.0	1.6 / 4.0	2.3 / 5.7	2.4 / 5.9	2.9 / 7.3	3.1 / 7.8	3.9 / 9.7	4.7 / 11.7	
8'	Live Load L/240															
	Total Load	132	218	327	341	431	462	265	435	653	683	863	923	1141	1365	
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.5	2.1 / 5.3	2.2 / 5.5	2.8 / 7.0	3.0 / 7.5	1.5 / 3.0	1.5 / 3.5	2.1 / 5.3	2.2 / 5.5	2.8 / 7.0	3.0 / 7.5	3.7 / 9.2	4.4 / 11.0	
9'	Live Load L/240															
	Total Load	93	171	257	269	357	390	186	343	515	538	713	781	975	1159	
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.2	1.9 / 4.7	2.0 / 4.9	2.6 / 6.5	2.9 / 7.1	1.5 / 3.0	1.5 / 3.2	1.9 / 4.7	2.0 / 4.9	2.6 / 6.5	2.9 / 7.1	3.6 / 8.9	4.2 / 10.5	
10'	Live Load L/240															
	Total Load	68	138	208	217	288	315	136	277	416	435	577	631	830	1007	
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.7 / 4.2	1.8 / 4.4	2.4 / 5.9	2.6 / 6.4	1.5 / 3.0	1.5 / 3.0	1.7 / 4.2	1.8 / 4.4	2.4 / 5.9	2.6 / 6.4	3.4 / 8.4	4.1 / 10.2	
11'	Live Load L/240															
	Total Load	51	114	171	179	238	260	102	228	343	358	475	520	685	855	
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.6 / 3.9	1.6 / 4.0	2.2 / 5.3	2.4 / 5.8	1.5 / 3.0	1.5 / 3.0	1.6 / 3.9	1.6 / 4.0	2.2 / 5.3	2.4 / 5.8	3.1 / 7.6	3.8 / 9.5	
12'	Live Load L/240															
	Total Load	39	90	144	150	199	218	78	191	287	300	398	436	574	717	
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.5	1.5 / 3.7	2.0 / 4.9	2.2 / 5.3	1.5 / 3.0	1.5 / 3.0	1.5 / 3.5	1.5 / 3.7	2.0 / 4.9	2.2 / 5.3	2.8 / 7.0	3.5 / 8.7	
13'	Live Load L/240															
	Total Load		70	81	122	127	169	185	61	141	244	255	338	371	488	610
	End / Int. Bearing		1.5 / 3.0	1.5 / 3.3	1.5 / 3.4	1.8 / 4.5	2.0 / 4.9	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.5 / 3.4	1.8 / 4.5	2.0 / 4.9	2.6 / 6.5	3.3 / 8.1	
14'	Live Load L/240															
	Total Load		56	69	105	109	145	159	49	113	210	219	291	319	420	525
	End / Int. Bearing		1.5 / 3.0	1.5 / 3.0	1.5 / 3.2	1.7 / 4.2	1.9 / 4.6	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.2	1.7 / 4.2	1.9 / 4.6	2.4 / 6.0	3.0 / 7.5	
15'	Live Load L/240															
	Total Load		46	59	91	95	126	138	40	92	182	190	253	277	364	456
	End / Int. Bearing		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.6 / 3.9	1.7 / 4.3	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.6 / 3.9	1.7 / 4.3	2.3 / 5.6	2.8 / 7.0	
16'	Live Load L/240															
	Total Load		38	48	79	83	110	121		76	158	166	221	242	319	399
	End / Int. Bearing		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.7	1.6 / 4.0		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.7	1.6 / 4.0	2.1 / 5.3	2.7 / 6.6	
17'	Live Load L/240															
	Total Load				65	71	97	107		63	131	142	195	214	282	353
	End / Int. Bearing				1.5 / 3.0	1.5 / 3.0	1.5 / 3.5	1.5 / 3.8		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.5	1.5 / 3.8	2.0 / 5.0	2.5 / 6.2
18'	Live Load L/240															
	Total Load				55	60	86	95		53	111	120	173	190	251	314
	End / Int. Bearing				1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.5 / 3.6		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.5 / 3.6	1.9 / 4.7	2.4 / 5.8
19'	Live Load L/240															
	Total Load				47	51	77	85		45	94	102	155	170	224	280
	End / Int. Bearing				1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	1.5 / 3.4		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	1.5 / 3.4	1.8 / 4.4	2.2 / 5.5
20'	Live Load L/240															
	Total Load				40	43	69	76		38	80	87	139	152	201	252
	End / Int. Bearing				1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.2		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.2	1.7 / 4.2	2.1 / 5.3

Live Load L/240 = Maximum live load (plf) with deflection limited to L/240

Total Load = Maximum total load (plf) with deflection limited to L/180

End / Int. Bearing = Minimum end and intermediate bearing length (inches) based on bearing stress of 425 psi, as provided by SPF plates. For other conditions, use Doma Sizer™ or contact your local onCENTER supplier for assistance.

Refer to page 1 for additional information regarding use of this table.

ROOF LOAD TABLE (PLF)

1.6 = AFL 115%

Span	Condition	Three 1½" onCENTER® AFL								Four 1½" onCENTER® AFL							
		5½"	7¼"	9¼"	9½"	11¼"	11½"	14"	16"	5½"	7¼"	9¼"	9½"	11¼"	11½"	14"	16"
4'	Live Load L/240																
	Total Load	1305	1862	2624	2730	3562	3902	4486	4484	1740	2483	3498	3640	4750	5202	5981	5979
	End / Int. Bearing	1.5 / 3.5	2.0 / 5.0	2.8 / 7.0	3.0 / 7.3	3.8 / 9.5	4.2 / 10.4	4.8 / 12.0	4.8 / 12.0	1.5 / 3.5	2.0 / 5.0	2.8 / 7.0	3.0 / 7.3	3.8 / 9.5	4.2 / 10.4	4.8 / 12.0	4.8 / 12.0
5'	Live Load L/240																
	Total Load	983	1375	1886	1955	2480	2686	3473	3584	1310	1833	2514	2607	3306	3581	4631	4779
	End / Int. Bearing	1.5 / 3.3	1.9 / 4.6	2.6 / 6.3	2.7 / 6.6	3.4 / 8.3	3.6 / 9.0	4.7 / 11.6	4.8 / 12.0	1.5 / 3.3	1.9 / 4.6	2.6 / 6.3	2.7 / 6.6	3.4 / 8.3	3.6 / 9.0	4.7 / 11.6	4.8 / 12.0
6'	Live Load L/240																
	Total Load	736	1089	1471	1522	1901	2046	2587	2985	981	1452	1961	2029	2534	2728	3449	3980
	End / Int. Bearing	1.5 / 3.0	1.8 / 4.4	2.4 / 5.9	2.5 / 6.1	3.1 / 7.7	3.3 / 8.2	4.2 / 10.4	4.8 / 12.0	1.5 / 3.0	1.8 / 4.4	2.4 / 5.9	2.5 / 6.1	3.1 / 7.7	3.3 / 8.2	4.2 / 10.4	4.8 / 12.0
7'	Live Load L/240																
	Total Load	539	855	1205	1245	1540	1652	2060	2490	719	1139	1607	1661	2054	2203	2747	3320
	End / Int. Bearing	1.5 / 3.0	1.6 / 4.0	2.3 / 5.7	2.4 / 5.9	2.9 / 7.3	3.1 / 7.8	3.9 / 9.7	4.7 / 11.7	1.5 / 3.0	1.6 / 4.0	2.3 / 5.7	2.4 / 5.9	2.9 / 7.3	3.1 / 7.8	3.9 / 9.7	4.7 / 11.7
8'	Live Load L/240	398								531							
	Total Load	412	653	980	1024	1294	1385	1711	2048	549	870	1306	1365	1726	1846	2281	2731
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.5	2.1 / 5.3	2.2 / 5.5	2.8 / 7.0	3.0 / 7.5	3.7 / 9.2	4.4 / 11.0	1.5 / 3.0	1.5 / 3.5	2.1 / 5.3	2.2 / 5.5	2.8 / 7.0	3.0 / 7.5	3.7 / 9.2	4.4 / 11.0
9'	Live Load L/240	280								373							
	Total Load	324	514	772	807	1070	1171	1462	1739	433	686	1030	1076	1427	1561	1950	2318
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.2	1.9 / 4.7	2.0 / 4.9	2.6 / 6.5	2.9 / 7.1	3.6 / 8.9	4.2 / 10.5	1.5 / 3.0	1.5 / 3.2	1.9 / 4.7	2.0 / 4.9	2.6 / 6.5	2.9 / 7.1	3.6 / 8.9	4.2 / 10.5
10'	Live Load L/240	204								272							
	Total Load	262	415	624	652	865	946	1245	1510	349	554	832	870	1153	1262	1660	2013
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.7 / 4.2	1.8 / 4.4	2.4 / 5.9	2.6 / 6.4	3.4 / 8.4	4.1 / 10.2	1.5 / 3.0	1.5 / 3.0	1.7 / 4.2	1.8 / 4.4	2.4 / 5.9	2.6 / 6.4	3.4 / 8.4	4.1 / 10.2
11'	Live Load L/240	153								204							
	Total Load	199	342	514	538	713	780	1027	1283	266	456	686	717	951	1041	1369	1711
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.6 / 3.9	1.6 / 4.0	2.2 / 5.3	2.4 / 5.8	3.1 / 7.6	3.8 / 9.5	1.5 / 3.0	1.5 / 3.0	1.6 / 3.9	1.6 / 4.0	2.2 / 5.3	2.4 / 5.8	3.1 / 7.6	3.8 / 9.5
12'	Live Load L/240	118	270							157	360						
	Total Load	152	287	431	450	598	654	861	1076	203	382	574	601	797	872	1148	1435
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.5	1.5 / 3.7	2.0 / 4.9	2.2 / 5.3	2.8 / 7.0	3.5 / 8.7	1.5 / 3.0	1.5 / 3.0	1.5 / 3.5	1.5 / 3.7	2.0 / 4.9	2.2 / 5.3	2.8 / 7.0	3.5 / 8.7
13'	Live Load L/240	92	212							123	283						
	Total Load	119	243	366	383	508	556	732	915	158	324	488	510	677	741	976	1220
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.5 / 3.4	1.8 / 4.5	2.0 / 4.9	2.6 / 6.5	3.3 / 8.1	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.5 / 3.4	1.8 / 4.5	2.0 / 4.9	2.6 / 6.5	3.3 / 8.1
14'	Live Load L/240	74	170							99	227						
	Total Load	94	209	314	329	436	478	629	787	125	278	419	438	582	637	839	1049
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.2	1.7 / 4.2	1.9 / 4.6	2.4 / 6.0	3.0 / 7.5	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.2	1.7 / 4.2	1.9 / 4.6	2.4 / 6.0	3.0 / 7.5
15'	Live Load L/240	60	138							80	184						
	Total Load	75	178	273	285	379	415	547	684	101	237	364	380	505	553	729	911
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.6 / 3.9	1.7 / 4.3	2.3 / 5.6	2.8 / 7.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.6 / 3.9	1.7 / 4.3	2.3 / 5.6	2.8 / 7.0
16'	Live Load L/240	49	114	237						66	152	316					
	Total Load	61	145	239	250	332	363	479	599	82	194	318	333	442	484	639	799
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.7	1.6 / 4.0	2.1 / 5.3	2.7 / 6.6	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.7	1.6 / 4.0	2.1 / 5.3	2.7 / 6.6
17'	Live Load L/240	41	95	197	214					55	126	263	285				
	Total Load	50	120	211	220	293	321	423	529	67	160	281	294	390	428	564	705
	End / Int. Bearing	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.5	1.5 / 3.8	2.0 / 5.0	2.5 / 6.2	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.5	1.5 / 3.8	2.0 / 5.0	2.5 / 6.2
18'	Live Load L/240		80	166	180					46	106	222	240				
	Total Load		100	187	196	260	285	376	470	55	134	249	261	347	380	501	627
	End / Int. Bearing		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.5 / 3.6	1.9 / 4.7	2.4 / 5.8	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.3	1.5 / 3.6	1.9 / 4.7	2.4 / 5.8
19'	Live Load L/240		68	141	153					39	90	188	204				
	Total Load		84	167	175	232	255	336	421	46	112	223	233	310	339	448	561
	End / Int. Bearing		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	1.5 / 3.4	1.8 / 4.4	2.2 / 5.5	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.1	1.5 / 3.4	1.8 / 4.4	2.2 / 5.5
20'	Live Load L/240		58	121	131						77	161	175				
	Total Load		71	150	157	209	229	302	378		95	200	209	278	305	403	504
	End / Int. Bearing		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.2	1.7 / 4.2	2.1 / 5.3		1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.0	1.5 / 3.2	1.7 / 4.2	2.1 / 5.3

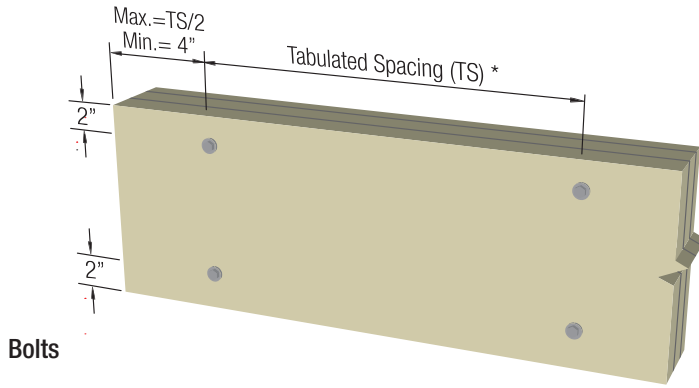
Live Load L/240 = Maximum live load (plf) with deflection limited to L/240

Total Load = Maximum total load (plf) with deflection limited to L/180

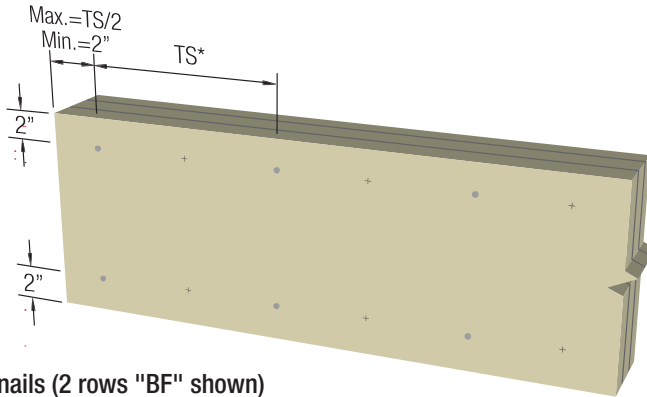
End / Int. Bearing = Minimum end and intermediate bearing length (inches) based on bearing stress of 425 psi, as provided by SPF plates. For other conditions, use Doma Sizer™ or contact your local onCENTER supplier for assistance.

Refer to page 1 for additional information regarding use of this table.

MULTIPLE-PLY AFL FASTENING GENERAL NOTES



Bolts

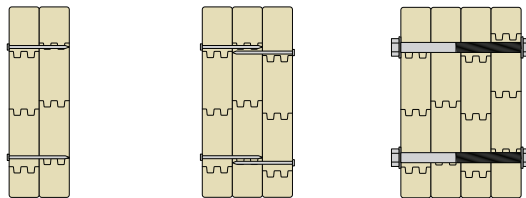


10d nails (2 rows "BF" shown)

* See Multiple-Ply AFL Fastening (Top-Loaded) below or Multiple-Ply AFL Fastening (Side-Loaded), page 7, depending on loading condition.

1. Tables below and on page 7 show required fastener spacings and number of rows. End distances and edge distances must comply with diagram on left. For offset fastening patterns, maximum end distance applies to all rows.
2. Fastening requirements for depths less than 5½" require special consideration. Contact BlueLinX.
3. All fasteners must have full embedment of the shank, but must not be over-driven, over-tightened, or countersunk.
4. Bolt holes must be ½" to ⅛" diameter larger than the bolt diameter. Bolts are to meet ASTM A307 or SAE J429 grades. Each bolt must extend through the full thickness of the member and at least ½" beyond. Use washers under the head and nut.
5. Carriage bolts (½" diameter) are acceptable to use for the ½" bolt fastener. Carriage bolt heads may be drawn into the face of the AFL beam such that the top of the heads are even with the exterior face of the outer ply of the AFL.
6. Spacings closer than those indicated may be acceptable, but require evaluation. Please contact BlueLinX.
7. If "BF" is shown, fastener schedule must be repeated on each face, with fasteners on back face offset one-half the indicated spacing of front face.
8. Multiple member beams greater than 6" wide are not permitted.

MULTIPLE-PLY AFL FASTENING (TOP-LOADED)



Fastener Type	AFL Depth	3" Wide	4½" Wide	6" Wide
		2-ply 1½"	3-ply 1½"	4-ply 1½"
10d Box Nails (0.128" x 3")	5½" ≤ d < 9¼"	2 rows @ 12" o.c.	2 rows @ 12" o.c. (BF)	-
	d ≥ 9¼"	3 rows @ 12" o.c.	3 rows @ 12" o.c. (BF)	-
10d Common Nails (0.148" x 3")	5½" ≤ d < 9¼"	2 rows @ 12" o.c.	2 rows @ 12" o.c. (BF)	-
	d ≥ 9¼"	3 rows @ 12" o.c.	3 rows @ 12" o.c. (BF)	-
½" Through Bolts	d ≥ 7¼"	2 rows @ 24" o.c.	2 rows @ 24" o.c.	2 rows @ 24" o.c.

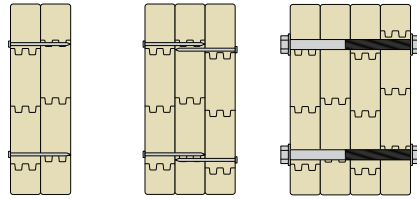
NOTES:

1. See General Notes at top of page.
2. These minimum requirements are adequate only when all loads are evenly applied to the top surface of all plies. If loads are applied to the side face(s) of the beam, see the following page.
3. For three rows of fasteners, the additional row is to be at beam mid-depth.

MULTIPLE-PLY AFL FASTENING (SIDE-LOADED)

onCENTER® AFL

Maximum Uniform Load Applied to Either or Both Outside Plies (PLF)



Fastener Type	Fastener Rows	Fastener Spacing	3" Wide	4½" Wide	6" Wide
			2-ply 1½"	3-ply 1½"	4-ply 1½"
10d Box Nails (0.128" x 3")	2	12"	329	246 (BF)	-
	3	12"	493	370 (BF)	-
10d Common Nails (0.148" x 3")	2	12"	417	313 (BF)	-
	3	12"	625	469 (BF)	-
½" Through Bolts	2	24"	332	249	221
		19.2"	414	311	276
		16"	497	373	332

NOTES:

1. See General Notes on previous page.
2. Uniform load capacity can be doubled if fastener spacing is halved for a particular application.
3. For three rows of fasteners, uniform load capacity can be increased 50% from that shown for two rows of fasteners.
4. Uniform load capacities shown are valid no matter what face the load is applied to in relation to what face the nail or bolt heads are located.
5. This table only shows the uniform load capacity for a given fastener pattern. The beam must be designed to ensure it can support the design load.
6. If the beam is supporting side loads from both faces, use the greater side load to determine the proper fastening.
7. Uniform loads shown are based on 100% LDF. Capacities can be increased for roof LDF of 115% and 125% if allowed by local building code.
8. Special consideration must be given for supporting large concentrated loads, such as from a beam, onto the side face of an AFL beam.