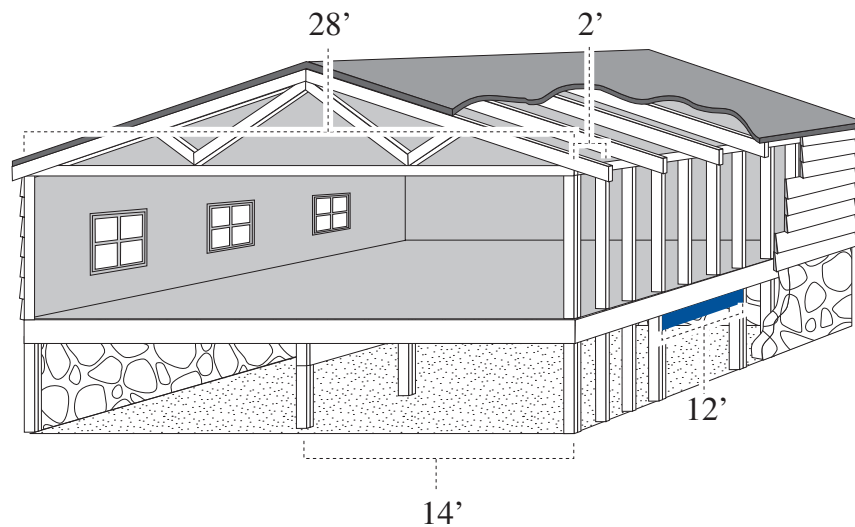


AFP 1.6E Short Span Header (1500F_b - 175F_v - 650F_{c⊥})

FEATURES AND ADVANTAGES

- Built-up Lumber Substitute
- Full 3 1/2" Width - No Shimming
- Limited Lifetime Warranty
- Surface Sealed for Stability
- Perfect fit for wall panel headers
- One Piece Installation - Save \$\$
- Appearance Grade - Framing Grade
- Consistent Quality & Uniformity



Allowable Design Stresses and Properties (100% Load Duration)

Standard Depths (in.)	4 1/8	5 1/2	7	7 1/4	9 1/2	11 1/4	11 7/8
Weight (lbs/lineal ft.)	3.6	4.8	6.1	6.3	8.3	9.8	10.4
I (in ⁴)	20	49	100	111	250	415	488
Moment Capacity (lbs-ft)	1241	2206	3573	3833	6581	9229	10282
Shear Capacity (lbs)	1684	2246	2858	2960	3879	4594	4849

Design Values 1.6E Header

COMBINATION	AFP 1.6 HEADER
MOE	1.6 x 10 ⁶ psi
F _b	1500 psi
F _v	175 psi
F _{c⊥}	650 psi

Notes:

1. Header weight based on 36 pcf.
2. Moment Capacities are based on span up to 16'.
3. Volume factor adjustment not required for these beam sizes and spans.
4. Allowable design properties and load capacities are based on dry use conditions.

Notes: (Header Comparison Tables - Page 30)

* 1.30 LSL design values based upon 1700F_v, 1.30E, and 425F_v

**1.55E LSL design values based upon 2325F_v, 1.55E, and 310F_v

1. Values shown are the maximum uniform loads in pounds per lineal foot (PLF) which can be applied to the header. Header weight has been subtracted from the allowable total load (TL).
2. When no live load (LL) is given, total load (TL) controls.
3. Headers are assumed to be loaded on the top edge with continuous lateral support.

4. Bearing length shall be provided based upon F_c (perp) of 650 psi for AFP 1.6E SSH. The deeper depths at short spans will require bearings over 3".
5. The design span is assumed to be the clear opening plus 1/2 the required bearing length at each end.
6. Headers can be built-up with multiple plies of nominal 2" - thick lumber nailed together. Follow American Wood Council's details and a 1/2" wood structural panel filler is often used to make up the 3-1/2" wall width.

Header Comparison Table

AFP 1.6E vs. LSL and 2 ply SYP Lumber Header

Allowable Floor Load (PLF) LDF = 1.00

Design Span =	3'		4'		5'		6'		8'		10'		12'	
Header Material	TL L/240	LL L/360	TL L/240	LL L/360	TL L/240	LL L/360	TL L/240	LL L/360	TL L/240	LL L/360	TL L/240	LL L/360	TL L/240	LL L/360
1.6E AFP 3-1/2"x4-1/8"	1099		617		393		272		151		96		65	
3-1/2" x 5-1/2"														
1.6E AFP	1956		1098		701		485		271	225	172	115	118	67
2-ply 2x6 #2	1116		607		440		272		152		96	86	66	50
1.30 E LSL*	2381		1337	1215	853	662	590	397	198	173	79			
3-1/2" x 7-1/4"														
1.6E AFP 3-1/2"x7"	3112		1780		1137		788		440		280	237	192	137
2-ply 2x8 #2	1795		958		697		435		245		156		107	
1.30E LSL	4036		2267		1448	1398	1003	857	443	384	182		85	
3-1/2" x 9-1/4"														
1.6E AFP	5172		3065		1988		1378		772		491		339	317
2-ply 2x10 #2	2158		1321		965		608		344		219		151	
1.30 E LSL*	6428		3611		2308		1599		895	759	569	407	353	241
1.55 E LSL**	6049		3859		2832		2190	1957	1227	906	718	485	422	288
3-1/2" x 9-1/2"														
1.6E AFP	5468		3202		2098		1454		814		518		357	343
1.55 E LSL**	6332		4012		2934		2305	2097	1292	974	775	523	456	311
3-1/2" x 11-1/4"														
1.6E AFP	8157		4314		2930		2041		1144		728		503	
2-ply 2x12 #2	2625		1782		1308		833		474		303		209	
1.30 E LSL*	7442		5249		3355		2326		1303	1290	830	704	573	423
1.55 E LSL**	8667		5195		3707		2881		1786	1538	1138	840	744	504
3-1/2" x 11-7/8"														
1.6E AFP	9137		4793		3202		2277		1276		813		561	
1.55 E LSL**	9432		5673		4009		3098		1981	1773	1263	974	868	587

Allowable Roof Load (PLF) - LDF = 1.15

Design Span =	3'		4'		5'		6'		8'		10'		12'	
Header Material	TL L/180	LL L/240	TL L/180	LL L/240	TL L/180	LL L/240	TL L/180	LL L/240	TL L/180	LL L/240	TL L/180	LL L/240	TL L/180	LL L/240
1.6E AFP 3-1/2"x4-1/8"	1265		710		453		313		175		111		76	
3-1/2" x 5-1/2"														
1.6E AFP	2250		1263		807		559		312		198	172	136	100
2-ply 2x6 #2	1284		695		504		313		176		111		75	
1.30 E LSL*	2739		1538		982		614	595	198		79			
3-1/2" x 7-1/4"														
1.6E AFP 3-1/2"x7"	3580		2048		1309		9907		507		323		222	206
2-ply 2x8 #2	2065		1094		797		499		282		179		123	
1.30E LSL	4643		2608		1666		1155		443		182		85	
3-1/2" x 9-1/4"														
1.6E AFP	5949		3526		2288		1586		889		566		391	
2-ply 2x10 #2	2481		1504		1100		696		395		252		174	
1.30 E LSL*	7393		4154		2655		1841		1031		656	611	453	362
1.55 E LSL**	6958		4439		3258		2521		1413	1359	901	728	566	432
3-1/2" x 9-1/2"														
1.6E AFP	6290		3684		2413		1673		938		597		412	
1.55 E LSL**	7284		4615		3376		2652		1487	1462	948	785	612	467
3-1/2" x 11-1/4"														
1.6E AFP	9382		4962		3371		2349		1317		839		580	
2-ply 2x12 #2	3018		2020		1487		953		545		349		242	
1.30 E LSL*	7442		5579		3860		2677		1500		956		660	634
1.55 E LSL**	9432		5976		4265		3315		2056		1311	1260	907	756
3-1/2" x 11-7/8"														
1.6E AFP	10509		5513		3684		2620		1469		936		647	
1.55 E LSL**	9432		6526		4612		3565		2280		1454		1006	881