

Anthony 30F POWER BEAM® Advantages

- ◆ Superior strength 3000F_b - 2.1E - 290F_v
- ◆ Competitively priced with LVL & PSL
- ◆ 3-1/2", 5-1/2" & 7" widths
- ◆ I - Joist compatible depths
- ◆ No nail laminating - saves time & money
- ◆ Individually wrapped
- ◆ Surface sealed for stability
- ◆ Lighter than steel, LVL, and PSL
- ◆ Renewable resource
- ◆ Precut lengths up to 60'
- ◆ Compatible sizes with Anthony Power Joist™

The Anthony POWER BEAM® LSL (Laminated Structural Lumber) is a superior glued laminated beam and header for use where reliable engineered wood applications are

required. It can be used as a substitute for LVL and PSL in typical structural applications.

The 3-1/2" and



5-1/2" widths readily match 2x4 and 2x6 wall framing. The POWER BEAM® depths also match all joist, truss, LVL, PSL, and I-joist floor or roof framing. The Anthony POWER BEAM® uses only readily-available Southern Pine lumber, recognized through extensive testing as the strongest lumber resource available.

To enhance Anthony POWER BEAM® quality further, all outer laminations have strict quality control procedures. Each beam has a specific lumber lay-up combination which optimizes POWER BEAM® performance. The highest strength lumber is placed in the tension and compression zones, efficiently and optimally using lumber resources. All lumber is machine evaluated at the grading line by a MSR or MEL machine for MOE to average 2.3×10^6 psi in the outer laminations.

The Anthony POWER BEAM® can be used for window, door and garage door headers, floor edge and center girder beams, roof ridge beams and commercial beams and purlins. The POWER BEAM® only uses small diameter fast-growth timber, therefore reducing pressure on our forest resources.

Features

Moisture Control: POWER BEAM® consistently averages 12% moisture, which is near equilibrium moisture content.

Code Evaluations/Standards: BOCA 97-37; SBCCI 9625B; ICBO 5263; LA City RR 25381; ANSI/AITC A190.1-2002; AITC 117-2001, NER 486.

AFP Power Sizer Software: An easy-to-use structural analysis program capable of sizing AFP Power Products.

Dimensional Stability: POWER BEAM® is a laminated composite product of high-strength lumber. This randomizes any natural defect so there is greater beam strength and a higher degree of reliability. There is also less likelihood of warping, twisting, checking, cupping or shrinking when surface sealed.

Quality Assurance: POWER BEAM® is manufactured in accordance with ANSI/AITC A190.1-2002 (Structural Glued Laminated Timber) with appropriate modifications. Plant implemented Total Quality Management, statistical process control procedures and AITC as our third party quality assurance program, ensure consistent quality and performance in every POWER BEAM®.

Performance Comparison Tables 3000 F_b- 2.1 E - 290F_v

POWER BEAM® Comparisons						
Clear Span	Allowable PLF Load (LL/TL)	Beam Application	Anthony 30F Power Beam®	Multiple Lumber #1 Southern Pine ¹	Multiple Lumber #1 Douglas Fir Larch ²	Timbers #1 Douglas Fir ³
8'	600/900	Floor	3-1/2 x 7-1/4	3 ply - 2 x 12	3 ply - 2 x 12	6 x 12, 8 x 10
16'	450/650	Floor	5-1/2 x 11-1/4	6 ply - 2 x 12	8 ply - 2 x 12	8 x 14, 12 x 12
24'	170/250	Floor	3-1/2 x 14	6 ply - 2 x 12	7 ply - 2 x 12	8 x 14, 10 x 12
6'	4425/4425	Roof (1.15)	5-1/2 x 9-1/4	7 ply - 2 x 12	7 ply - 2 x 12	10 x 16, 12 x 14
16'	530/700	Roof (1.15)	3-1/2 x 11-7/8	6 ply - 2 x 12	7 ply - 2 x 12	8 x 14, 10 x 12
18'	480/640	Roof (1.15)	5-1/2 x 11-1/4	7 ply - 2 x 12	8 ply - 2 x 12	8 x 14, 12 x 12
Clear Span	Allowable PLF Load (LL/TL)	Beam Application	Anthony 30F Power Beam®	LVL ⁴	Parallam® ⁵	Steel ⁶ 36 ksi
8'	600/900	Floor	3-1/2 x 7-1/4	2 ply - 1-3/4 x 7-1/4	3-1/2 x 7-1/4	W6 x 9, W8 x 10
16'	450/650	Floor	5-1/2 x 11-1/4	3 ply - 1-3/4 x 11-7/8	5-1/4 x 11-7/8	W10 x 12, W8 x 15
24'	170/250	Floor	3-1/2 x 14	2 ply - 1-3/4 x 16	3-1/2 x 16	W10 x 15, W12 x 14
6'	4425/4425	Roof (1.15)	5-1/2 x 9-1/4	2 ply - 1-3/4 x 9-1/2	5-1/4 x 9-1/2	W10 x 12, W8 x 15
16'	530/700	Roof (1.15)	3-1/2 x 11-7/8	2 ply - 1-3/4 x 14	3-1/2 x 14	W8 x 15, W12 x 14
18'	480/640	Roof (1.15)	5-1/2 x 11-1/4	3 ply - 1-3/4 x 11-7/8	5-1/4 x 11-7/8	W10x15, W12 x 14

Design values used for this table follow:

¹Southern Pine #1 from NDS Supplement Table 4B

²Douglas Fir Larch #1 from NDS Supplement Table 4A

³Douglas Fir Larch #1 from NDS Supplement Table 4D

⁴LVL Design Values: F_b=2925 psi, F_v=285 psi, MOE=2,000,000 psi

⁵Parallam® Design Values: F_b=2900 psi, F_v=290 psi, MOE=2,000,000 psi. Parallam is a registered trademark of Trus Joist, a Weyerhaeuser-Business.

⁶Steel Design Values are based on 36 ksi steel using the Seventh Edition of the Steel Construction Manual

Power Beam Substitution for PSL or LVL

Design Span	Convert from PSL or LVL 3-1/2" by						
	9-1/4"	9-1/2"	11-1/4"	11-7/8"	14"	16"	18"
Replace with 30F _b Power Beam 3-1/2" by							
4' to 30'	9-1/4"	9-1/2"	11-1/4"	11-7/8"	14"	16"	18"
Design Span	Convert from PSL or LVL 5-1/4" by						
	9-1/4"	9-1/2"	11-1/4"	11-7/8"	14"	16"	18"
Replace with 30F _b Power Beam 5-1/2" by							
4' to 30'	9-1/4"	9-1/2"	11-1/4"	11-7/8"	14"	16"	18"

Notes:

- Comparisons are based on uniform loads and the most restrictive of simple span and two-span continuous using equal spans. Beams are assumed to be loaded on the top edge with continuous lateral support along top edge.
- Allowable design values used for comparisons are as follows:

	F_b(psi)	F_v(psi)	E(psi)
Power Beam*	3000	290	2.1 x 10 ⁶
PSL or LVL	2925	290	2.0 x 10 ⁶
- PSL and LVL refer to Parallel Strand Lumber and Laminated Veneer Lumber respectively.
- Substitution table should be used only for comparing structural capacity of 30F Power Beam with LVL or PSL. **This table should not be used for size selection.** See Allowable PLF or Size Selection Tables for appropriate design criteria and member size.



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