

Pacific Woodtech Laminated Veneer Lumber PR-L220
Pacific Woodtech Corporation Revised August 18, 2011

Products: 2.4E LVL Tension Lams
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1. Basis of the product report:
 - 2012 and 2009 International Building Code (IBC): Sections 104.11 Alternative Materials and 2303.1.9 Structural composite lumber
 - 2012 and 2009 International Residential Code (IRC): Section R104.11 Alternative Materials and 2012 IRC Sections R502.1.7, R602.1.4, and R802.1.6 Structural composite lumber
 - 2010 California Building Code (CBC): Section 2303.1.9 Structural composite lumber
 - 2010 California Residential Code (CRC): Section R104.11 Alternative Materials
 - ASTM D3737-08 and ANSI/AITC A190.1-07 recognized by the 2012 IBC and IRC.
 - ASTM D3737-07 and ANSI/AITC A190.1-07 recognized by the 2009 IBC and IRC, and 2010 CBC and CRC
 - ASTM D 5456-09 and ASTM D 5456-05a recognized by the 2012 IBC and IRC, and 2009 IBC and 2010 CBC, respectively
 - Glulam Layout Combinations, APA EWS Y117-SUP
 - APA Reports T99P-18, T99P-19, T99P-20, T99P-21, T2001M-9, T2002P-31, T2003P-50, and T2006P-58, and other qualification data
2. Product description:

Pacific Woodtech LVL Tension Lams are made with veneer sheets of various species and grades in accordance with the in-plant manufacturing standard approved by APA. Pacific Woodtech Tension Lams are available in thicknesses from 1-3/8 to 1-3/4 inches, various widths up to 48 inches and lengths up to 66-1/2 feet.
3. Design properties:

Table 1 lists the design properties and Table 2 lists the equivalent specific gravities for connection design for Pacific Woodtech 2.4E LVL Tension Lams, which are intended for use in glulam combination EWS 30F-E2M3/SP, as listed in EWS-Y117 SUP.
4. Limitations:
 - a) Pacific Woodtech 2.4E LVL Tension Lams shall be designed in accordance with the code using the design properties specified in this report.
 - b) Pacific Woodtech 2.4E LVL Tension Lams are limited to dry service conditions where the average moisture content of sawn lumber is less than 16 percent.
 - c) Pacific Woodtech 2.4E LVL Tension Lams are produced at Pacific Woodtech Corporation, Burlington, Washington, under a quality assurance program audited by APA.
 - d) This report is subject to re-examination in one year.
5. Identification:

The Pacific Woodtech 2.4E LVL Tension Lams described in this report are identified by a label bearing the manufacturer's name (Pacific Woodtech) and/or trademark, the APA assigned plant number (1047), the product type, the APA logo, the report number PR-L220, and a means of identifying the date of manufacture.

Table 1. Design Properties (Allowable Stress Design) for Pacific Woodtech PR-L220 LVL Tension Lams^(a)

Property	Design Stress (psi)
Tension parallel to grain (F_t)	3,050 ^(b,c)
Compression parallel ($F_{c }$)	2,750 ^(c)
Plank Longitudinal shear (F_v)	150 ^(c)
Plank Compression perpendicular to grain ($F_{c\perp}$)	650
Plank Modulus of Elasticity (E)	2,400,000

^(a) Load perpendicular to glueline is for plank application.

^(b) Tension (F_t) is based on a gauge length of 4 feet. For specimens longer than 4 feet, a length factor of $(4/L)^{1/10}$ shall be used to adjust F_t , where L is the actual length in feet.

^(c) Values may be adjusted for duration of load in accordance with the applicable code.

Table 2. Fastener Details for Pacific Woodtech PR-L220 LVL Tension Lams

Fastener Description		Equivalent Specific Gravity
Nail Withdrawal		
Face	Installed perpendicular to the wide face	0.50
Edge	Installed parallel to the wide face	0.50
Nail Dowel Bearing		
Face	Installed perpendicular to the wide face	0.50
Edge	Installed parallel to the wide face	0.50
Bolt Dowel Bearing		
Face	Installed perpendicular to the wide face	0.50
Edge	Installed parallel to the wide face	N.A.

APA – *The Engineered Wood Association* is an accredited certification body under ISO 65 by Standards Council of Canada (SCC) and an accredited inspection agency by the International Code Council (ICC) International Accreditation Service (IAS) under ISO/IEC 17020. APA is also an accredited testing organization recognized by IAS and SCC under ISO/IEC 17025. APA is a recognized testing laboratory by Miami-Dade County, and a Product Testing Laboratory, Product Quality Assurance Entity, and Product Validation Entity by the Florida Department of Community Affairs (DCA).

APA – THE ENGINEERED WOOD ASSOCIATION

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