

PWC LVL Tension Lams
Pacific Woodtech Corporation

PR-L215

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Products: PWC LVL Tension Lams
Pacific Woodtech Corporation, 1850 Park Lane, Burlington, Washington 98233
(360) 707-2200
www.pacificwoodtech.com

1. Basis of the product report:
 - 2015 International Building Code (IBC): Sections 104.11 Alternative materials and 2303.1.10 Structural composite lumber
 - 2012 and 2009 IBC: Sections 104.11 Alternative Materials and 2303.1.9 Structural composite lumber
 - 2015 International Residential Code (IRC): Sections R104.11 Alternative materials, and R502.1.5, R602.1.5, and R802.1.4 Structural composite lumber
 - 2012 and 2009 IRC: Section R104.11 Alternative Materials and 2012 IRC Sections R502.1.7, R602.1.4, and R802.1.6 Structural composite lumber
 - ASTM D3737-12 and ANSI A190.1-12 recognized by the 2015 IBC and IRC
 - 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
 - ASTM D5456-14b, Standard Specification for Evaluation of Structural Composite Lumber Products
 - ASTM D5456-13, ASTM D5456-09, and ASTM D5456-05a recognized by the 2015 IBC and IRC, 2012 IBC and IRC, and 2009 IBC, respectively
 - Glulam Layout Combinations, APA EWS Y117-SUP
 - APA Reports T99P-20, T2006P-58, T2011P-47A, T2011P-48, T2014P-52, and T2015P-23, and other qualification data
2. Product description:

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

Table 1 lists the allowable stress design (ASD) reference design values and Table 2 lists the equivalent specific gravities for connection design for PWC LVL Tension Lams, which are intended for use in glulam combination EWS 30F-E2M3/SP, as listed in EWS-Y117 SUP.
4. Limitations:
 - a) PWC LVL Tension Lams shall be designed in accordance with the code using the design properties specified in this report.
 - b) PWC LVL Tension Lams are limited to dry service conditions where the average moisture content of sawn lumber is less than 16 percent.
 - c) PWC 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 PWC 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 grade (2.4E-2825Ft), the APA logo, the report number PR-L215, and a means of identifying the date of manufacture.

Table 1. ASD Design Values^(a)

Property	Allowable Design Value (psi)
Tension parallel to grain, F_t ^(b,c)	2,825
Compression parallel to grain, $F_{c }$ ^(c)	3,125
Plank Longitudinal shear, F_v ^(c)	150
Plank Compression perpendicular to grain, $F_{c\perp}$	650
Plank Modulus of Elasticity, E	2,400,000

^(a) Design values are applicable to dry conditions of use.

^(b) Tension (F_t) is based on a gauge length of 4 feet. For members 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. Equivalent Specific Gravity for Connection Design

Connection Type	In Face	In Edge
Nail – Withdrawal	0.50	0.50
Nail – Lateral	0.50	0.50
Bolt – Lateral	0.50	N. A.

Face: member faces showing the face of one veneer, typically the wide faces of the member

Edge: member faces showing the narrow edge of all veneers, typically the narrow faces of the member

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APA – THE ENGINEERED WOOD ASSOCIATION

HEADQUARTERS

7011 So. 19th St. • Tacoma, Washington 98466

Phone: (253) 565-6600 • Fax: (253) 565-7265 • Internet Address: www.apawood.org

PRODUCT SUPPORT HELP DESK

(253) 620-7400 • E-mail Address: help@apawood.org

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