

## Qualified Laminated Veneer Lumber With Low Formaldehyde Emissions

PR-E720

Revised June 22, 2011

Product: Laminated Veneer Lumber (LVL) Qualified for Low Formaldehyde Emissions

1. Basis of the product report:
  - APA Custom Product Specification E-720
  - Test method follows the principles of ISO 12460-4, Wood-Based Panels – Determination of Formaldehyde Release, Part 4: Desiccator Method, and AS/NZS 4357.4:2005, Structural Laminated Veneer Lumber, Part 4: Determination of Formaldehyde Emissions
  - ASTM D 5456 Standard Specification for Evaluation of Structural Composite Lumber Products
  - APA Report T2010Q-08 and other qualification data
2. Product description:  
LVL is made with wood veneers of various species laminated with grain parallel to the length of the member in accordance with the in-plant manufacturing standard approved by APA. LVL is available in a variety of thicknesses and sizes.
3. Formaldehyde emission level:  
The G-5 rating is a formaldehyde emission level as defined in Table 1. LVL has been qualified for low formaldehyde emissions following the principles of ISO 12460-4 and AS/NZS 4657.4:2005, and the performance requirements of ASTM D 5456. LVL products meeting the formaldehyde emission level specified in Table 1 in accordance with the APA Custom Product Specification E-720 are listed in Table 2.

Table 1. Upper formaldehyde emission level for G-5 rating following the principles of ISO 12460-4 and AS/NZS 4657.4:2005<sup>(a)</sup>

Average	0.20 mg/l
Individual specimen	0.30 mg/l

<sup>(a)</sup> LVL products meeting ASTM D 5456 are exempt from the CARB rule, and are not within the scope of HUD regulations. The tabulated formaldehyde emission level in the G-5 standard is more stringent than the E<sub>0</sub> of AS/NZS 4357.4:2005 and F☆☆☆☆ of JAS Standard for Laminated Veneer Lumber, MAFF Notification 701.

4. Limitations:
  - a) LVL shall be designed and installed in accordance with the applicable provisions of the code and the recommendations provided by the manufacturers.
  - b) LVL trademarked in North America is limited to dry service conditions that result in the average moisture content of sawn lumber of less than 16 percent.
  - c) LVL products are produced by the manufacturing facilities shown in Table 2 under a quality assurance program audited by APA in accordance with the APA Custom Product Specification E-720.
  - d) This report is subject to re-examination in one year.
5. Identification:  
LVL is identified by a label bearing the manufacturer's name and/or trademark, the APA assigned plant number, the product type, the APA logo, means of identifying the date of manufacture, the product report number PR-E720, and the formaldehyde emission rating G-5.

Table 2. Qualified Manufacturing Facilities for Low Formaldehyde Emission

Manufacturer	Location	Mill Number	APA Test Report
Pacific Woodtech Corporation	Burlington, WA	1047	T2010Q-08

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**

**HEADQUARTERS**

7011 So. 19<sup>th</sup> St. • Tacoma, Washington 98466

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

**PRODUCT SUPPORT HELP DESK**

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

**DISCLAIMER**

APA Product Report® is a trademark of APA – *The Engineered Wood Association*, Tacoma, Washington. The information contained herein is based on the product evaluation in accordance with the references noted in this report. Neither APA, nor its members make any warranty, expressed or implied, or assume any legal liability or responsibility for the use, application of, and/or reference to opinions, findings, conclusions, or recommendations included in this report. Consult your local jurisdiction or design professional to assure compliance with code, construction, and performance requirements. Because APA has no control over quality of workmanship or the conditions under which engineered wood products are used, it cannot accept responsibility of product performance or designs as actually constructed.