Qualified Structural Composite Lumber
With Low Formaldehyde Emissions
PR-E720
Revised March 7, 2022

Product: Structural Composite Lumber (SCL) Qualified for Low Formaldehyde Emissions

1. Basis of the product report:
   - APA Custom Product Specification E-720
   - ASTM D5456-18, D5456-14b, D5456-13, and D5456-09 recognized in the 2021 International Building Code (IBC) and International Residential Code (IRC), 2018 IBC and IRC, 2015 IBC and IRC, and 2012 IBC and IRC, respectively
   - APA Test Reports (see Table 2) and other qualification data

2. Product description:
   Structural composite lumber (SCL) defined in this report is any of laminated veneer lumber (LVL), laminated strand lumber (LSL), and oriented strand lumber (OSL). SCL is made with wood strands or veneers of various species oriented or laminated, respectively, with wood fibers primarily oriented along the longitudinal axis of the member in accordance with ASTM D5456 and the in-plant manufacturing standard approved by APA. SCL is available in a variety of grades, thicknesses, and depths.

3. Formaldehyde emission level:
   The G-5 rating is a formaldehyde emission level as defined in Table 1. SCL has been qualified for low formaldehyde emissions following the principles of ISO 12460-4 and AS/NZS 4357.4:2005, and the performance requirements of ASTM D 5456. SCL 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 4357.4:2005(a)
   | Average               | 0.20 mg per liter |
   | Individual specimen   | 0.30 mg per liter |

   (a) SCL products are outside the scope or exempt from CARB ATCM for formaldehyde from composite wood products, EPA’s TSCA Title VI Standard for formaldehyde from composite wood, HUD regulation for formaldehyde, and CAN/CSA-O160 for formaldehyde from composite wood products. The tabulated formaldehyde emission level in the G-5 standard is more stringent than the E0 of AS/NZS 4357.4:2005 and F★★★★ of JAS Standard 0701 for Laminated Veneer Lumber.

4. Limitations:
   a) SCL shall be designed and installed in accordance with the applicable provisions of the code and the recommendations provided by the manufacturers.
   b) SCL trademarked in North America is limited to dry service conditions that result in the average moisture content of sawn lumber of less than 16%.
   c) SCL 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:

SCL 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

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Location</th>
<th>Mill Number</th>
<th>Product Type</th>
<th>APA Test Report(a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boise Cascade Wood Products, LLC</td>
<td>Lena, LA</td>
<td>1106</td>
<td>LVL</td>
<td>T2015P-32</td>
</tr>
<tr>
<td>Boise Cascade Wood Products, LLC</td>
<td>White City, OR</td>
<td>1110</td>
<td>LVL</td>
<td>T2015P-32</td>
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<tr>
<td>Boise Cascade Wood Products, LLC</td>
<td>Thorsby, AL</td>
<td>1086</td>
<td>LVL</td>
<td>T2020P-07</td>
</tr>
<tr>
<td>Louisiana Pacific Corporation</td>
<td>Golden, BC</td>
<td>1066</td>
<td>LVL</td>
<td>T2020P-08</td>
</tr>
<tr>
<td>Louisiana Pacific Corporation</td>
<td>Wilmington, NC</td>
<td>1071</td>
<td>LVL</td>
<td>T2020P-08</td>
</tr>
<tr>
<td>Murphy Engineered Wood</td>
<td>Sutherlin, OR</td>
<td>1089</td>
<td>LVL</td>
<td>T2017P-22</td>
</tr>
<tr>
<td>Pacific Woodtech Corporation</td>
<td>Burlington, WA</td>
<td>1047</td>
<td>LVL</td>
<td>T2010Q-08</td>
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<tr>
<td>Roseburg Forest Products Co.</td>
<td>Chester, SC</td>
<td>1125</td>
<td>LVL</td>
<td>T2021P-27</td>
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<tr>
<td>Roseburg Forest Products Co.</td>
<td>Riddle, OR</td>
<td>1055</td>
<td>LVL</td>
<td>T2012Q-38</td>
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<tr>
<td>Tolko Industries Ltd.</td>
<td>Slave Lake, AB</td>
<td>1094</td>
<td>LSL</td>
<td>T2019P-11</td>
</tr>
</tbody>
</table>

(a) Reports for the required periodic confirmation tests are not listed.
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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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