Qualified Wood Structural Panels
With Low Formaldehyde Emissions

PR-E710
Revised December 15, 2021

Product: Wood Structural Panels Qualified for Low Formaldehyde Emissions

1. Basis of the product report:
   - APA Custom Product Specification E-710
   - ISO 12460-4, Wood-Based Panels -- Determination of Formaldehyde Release, Part 4: Desiccator Method
   - ANSI/APA PRP 210, Standard for Performance Rated Engineered Wood Siding
   - ANSI/APA PRR 410, Performance Standard for Engineered Wood Rim Boards
   - CAN/CSA O325, Construction Sheathing
   - DOC PS 1, Structural Plywood
   - DOC PS 2, Performance Standard for Wood Structural Panels
   - APA PRP-108, Performance Standards and Qualification Policy for Wood Structural Panels
   - APA PRR-401, Performance Standard for APA Rim Boards
   - APA Test Reports (see Table 2) and other qualification data

2. Product description:
   Wood structural panels are made with either veneers or strands of various species and classifications in accordance with the in-plant manufacturing standard approved by APA. Wood structural panels are available in a variety of thicknesses and sizes.

3. Formaldehyde emission level:
   The G5 rating is a formaldehyde emission level as defined in Table 1. Wood structural panels labeled as G5 have been qualified for low formaldehyde emissions based on ISO 12460-4 and the bond performance requirements of one of the following product standards: PS 2, PS 1, CAN/CSA O325, ANSI/APA PRP 210, APA PRR-401, ANSI/APA PRR 410, or APA PRP-108. Wood structural panels meeting the formaldehyde emission level specified in Table 1 in accordance with the APA Custom Product Specification E-710 are listed in Table 2.

   Table 1. Upper formaldehyde emission level for G5 rating based on ISO 12460-4(a)

<table>
<thead>
<tr>
<th></th>
<th>0.20 mg/per liter</th>
<th>0.30 mg/per liter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual specimen</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(a) Testing has shown that APA certified products that meet these G5 levels also met the level specified in the HUD regulation. Wood structural panels are outside the scope or exempt from CARB ATCM for formaldehyde from composite wood products and EPA's TSCA Title VI standard for formaldehyde from composite wood, and CAN/CSA-O160 for formaldehyde from composite wood products.

4. Limitations:
   a) Wood structural panels shall be designed and installed in accordance with the applicable provisions of the code and the recommendations provided by the manufacturers and APA Design/Construction Guide: Engineered Wood Construction Guide, Form E30 (www.apawood.org/resource-library).
   b) Wood structural panels trademarked as Exposure 1 are limited to dry service conditions that result in the average moisture content of sawn lumber of less than 16%.
   c) Wood structural panels 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-710.
d) This report is subject to re-examination in one year.

5. Identification:
Wood structural panels are identified by a label bearing the manufacturer's name and/or trademark, the APA assigned plant number, the product standard and thickness, the bond classification, the APA logo, the product report number PR-E710, and the formaldehyde emission rating G5.

Table 2. Qualified Manufacturing Facilities for Low Formaldehyde Emission

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Location</th>
<th>Mill Number</th>
<th>APA Test Report(^{(a)})</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardel Mutual Plywood Corporation</td>
<td>Chehalis, WA</td>
<td>79</td>
<td>T2018P-31</td>
</tr>
<tr>
<td>PotlatchDeltic Corporation</td>
<td>St. Maries, ID</td>
<td>215</td>
<td>Q09Q-1</td>
</tr>
<tr>
<td>Roseburg Forest Products</td>
<td>Coquille, OR</td>
<td>367</td>
<td>T2016P-37</td>
</tr>
<tr>
<td>Roseburg Forest Products</td>
<td>Dillard, OR</td>
<td>480</td>
<td>T2016P-26</td>
</tr>
<tr>
<td>Roseburg Forest Products</td>
<td>Riddle, OR</td>
<td>482</td>
<td>T2016P-18</td>
</tr>
<tr>
<td>Tolko Industries Ltd.</td>
<td>High Prairie, AB, Canada</td>
<td>450</td>
<td>T2018P-17</td>
</tr>
<tr>
<td>Tolko Industries Ltd.</td>
<td>Meadow Lake, SK, Canada</td>
<td>492</td>
<td>Q08Q-6</td>
</tr>
<tr>
<td>Tolko Industries Ltd.</td>
<td>Slave Lake, AB, Canada</td>
<td>514</td>
<td>Q08Q-5</td>
</tr>
</tbody>
</table>

\(^{(a)}\) Reports for the required periodic confirmation tests are not listed.
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