

Qualified Wood Structural Panels With Low Formaldehyde Emissions

PR-E710

Revised December 15, 2020

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
 - Voluntary Product Standard for Structural Plywood, PS 1
 - Performance Standard for Wood-Based Structural-Use Panels, PS 2
 - Construction Sheathing, CAN/CSA O325
 - Performance Standards and Qualification Policy for Structural-Use Panels, APA PRP-108
 - Performance Standard for APA EWS Rim Boards, APA PRR-401
 - Performance Standard for Engineered Wood Rim Boards, ANSI/APA PRR 410
 - Standard for Performance Rated Engineered Wood Siding, ANSI/APA PRP 210
 - 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)

Average	0.20 mg/per liter
Individual specimen	0.30 mg/per liter

^(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 percent.
 - 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

Manufacturer	Location	Mill Number	APA Test Report
Hardel Mutual Plywood Corporation	Chehalis, WA	79	T2018P-31
PotlatchDeltic Corporation	St. Maries, ID	215	Q09Q-1
Roseburg Forest Products	Coquille, OR	367	T2016P-37
Roseburg Forest Products	Dillard, OR	480	T2016P-26
Roseburg Forest Products	Riddle, OR	482	T2016P-18
Tolko Industries Ltd.	High Prairie, AB, Canada	450	T2018P-17
Tolko Industries Ltd.	Meadow Lake, SK, Canada	492	Q08Q-6
Tolko Industries Ltd.	Slave Lake, AB, Canada	514	Q08Q-5

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