



Technical Service Bulletin 2020

This document pertains to **Decorative Panels International Premium Hardboard** products only. Our product has been manufactured virtually unchanged in its ingredients and the process employed for over sixty years. Our manufacturing practices at times are confused with those in other forms of engineered wood products such as MDF (medium density fiberboard) or PB (particleboard). This bulletin provides clarification on those questions that are often asked and documents our manufacturing process for distributors, converters and retailers.

DPI hardboard is made 100% in the United States with materials and wood harvested and sourced from the northern Lower Peninsula in the State of Michigan.

DPI premium hardboard both standard and tempered grades are FSC Certified to be sold as FSC 100%, FSC Mix. The assessment has been conducted by Scientific Certification Systems (SCS) in accordance with the rules of the Forest Stewardship Council and the corresponding FSC Standard: FSC-STD-40-004V2-1, FSC-STC-40-005V2-1. DPI's Certificate Code is SCS-COC-004821, Trademark License Code: FSC-C102950. Valid Dates: 20 February 2014 through 19 February 2019. This certificate is available upon request

DPI pulpwood used to manufacture its hardboard is from hardwood harvested within a one-hundred mile radius from our factory, using Aspen or Poplar (scientific name: *Populus*) and Mixed Hardwoods Birch, Beech, Maple, Oak (scientific name(s): *Betula*, *Fagus*, *Acer*, and *Quercus*).

DPI products are considered S2S or "smooth two sides". As a result of steam platen pressing, our tempered and standard premium grades are suitable for painting and laminating. Smoothness on the topside is achieved by highly refined fiber called "slush overlay" of 100% Aspen or Poplar furnish. The backside has a slightly larger fiber size and is generally noticeable to the eye. Most converters use our hardboard for the smoothness of the top side surface for finishing.

DPI hardboard does not have a screen back that is typical of most hardboard not produced in North America and therefore preferred for two sided work.

DPI premium hardboard will have color or shading differences from light brown to dark brown as a result of the species of wood used during manufacturing as all hardwoods do not react the same to heat and pressure. While the mechanical properties are always maintained, color will vary slightly from board to board, unit to unit or order to order.

DPI does not contain pre or post-consumer or industrial recycled fiber sources.

DPI hardboard is manufactured following the guidelines established within American National Standards Institute 135.4-2012 Basic Hardboard Standards. **DPI** hardboard is made using wet formed processing of mixed North American hardwoods, agricultural oil (linseed or flax seed) and bonded under the application of heat (400° F) and pressure (2700 psi) in a stationary press for over 60 seconds. As a result, **DPI**'s hardboard complies with ISPM 15 Standards. Panel weight is 0.7 lbs. to 0.9 lbs. per square foot depending on thickness.

DPI hardboard and prefinished hardboard panels are engineered for indoor vertical surfaces under controlled temperature and humidity environments only. **DPI** products cannot be used in exterior applications.

DPI hardboard discloses two byproducts as a result of California Proposition 65 reporting requirements: titanium dioxide and wood dust. Titanium Dioxide is a component of the coating pigments creating a white base. Wood dust results from sawing, cutting, shaping, perforating or sanding. These are the only known constituents that may require further testing for exposure as a result of airborne or unbound particles of a respirable size. Where applicable various forms of appropriate industrial hygiene are available along with the application of appropriate engineering controls can greatly minimize or eliminate risk of exposure. SDS (Safety Data Sheets) for all **DPI** products are available upon request.

All Export Packaging Wood is compliant with ISPM 15 - International Standards for Phytosanitary Measures No. **15 (ISPM 15)**. **DPI** only uses wood for packaging that is compliant with this standard.

DPI's premium grades of "Tempered Hardboard" are coated with a modified linseed oil post press and cured using the residual heat of the post press process. Tempered Premium Hardboard is flood tempered on both sides of each sheet. "Standard Premium Hardboard" does not receive oil treatment after pressing.

DPI wall paneling products are manufactured following the guidelines established within American National Standards Institute 135.5-2004 Prefinished Hardboard Paneling Standards. The hardboard is painted and all coatings are either acrylic latex or alkyd enamel depending on the class of panel requirements and desired performance levels.

DPI's liability in flooring shall be limited to replacement or refund of the material if found to be defective in its manufacture and **DPI** shall not be liable for other damage or loss. **DPI** reserves the right to validate any claim.

DPI Flame spread testing is accomplished according to the ASTM E-84 Test Method for Determining Surface Burning Characteristics of Building Materials. **All *DPI* Hardboard and Prefinished hardboard wall paneling products** are rated as Class C (or Class III) in this test.

Test Specimen	Flame Spread Index	Smoke Developed Index
Glass Reinforced Cement Board	0	0
Red Oak Flooring	100	100
1/8" Standard Hardboard	150	75
1/4" Tempered Hardboard	155	175

- The Flame Spread Index and Smoke Developed Index values obtained by the ASTM E84 test are frequently used by code officials and regulatory agencies in the acceptance of interior finish materials for various applications. The most widely accepted classification system is the National Fire Protection Association publication NFPA 101 Life Safety Code, where:

Class A	0 – 25 Flame Spread Index,	0 – 450 Smoke Developed Index
Class B	26 – 75 Flame Spread Index,	0 – 450 Smoke Developed Index
Class C	76 – 200 Flame Spread Index,	0 – 450 Smoke Developed Index

Class A, B, and C correspond to Type I, II, and III respectively in other codes such as BOCA and ICBO. They do not preclude a material being otherwise classified by the authority of jurisdiction. (CTC, Dalton, GA, ASTM E84-97a, August 1998).

DPI hardboard and prefinished hardboard wall paneling products are made entirely of wood fibers and contain no asbestos in any form.

DPI hardboard and prefinished hardboard wall paneling products are manufactured without the use of phthalates in any of its processes.

DPI hardboard and prefinished hardboard wall paneling products are bonded using heat and pressure. **DPI** hardboard and **DPI** hardboard wall paneling are naturally bonded by the lignin found in wood pulp fibers. Our hardboard is considered **NAUF** meaning: **DPI does not add urea formaldehyde binding agents to our family of products.** By nature of its formulation, its process and compliance with ANSI 135.4 and ANSI 135.5, **DPI** hardboard and prefinished wall paneling products are compliant and also exempt from all California Air Resource Board (CARB) ATCM for Urea Formaldehyde Emissions. All **DPI** hardboard products, Tempered and Standard meet or exceed CARB I and CARB II requirements. As a result **DPI's** hardboard is natural and has very low VOC (volatile organic compounds).

DPI hardboard and prefinished hardboard wall paneling products do not contain lead. Our coatings and finishes do not contain lead in any form nor is lead a part of any formulation used in our manufacturing processes.

LEED Credit Information

LEED CATEGORY	DESCRIPTION	POSSIBLE CREDITS	DPI PREMIUM HARDBOARD
Environmental Quality EQ 4.3 & 4.4	Low or reduced volatile organic compounds (VOCs) in commercial interiors	EQ 4.3 – One pt. EQ 4.4 – One pt.	Low VOC emissions, measuring at same levels as those inherent in the environment. Uses natural lignin in the wood as a binding agent – instead of urea formaldehyde binder found in traditional wood products.
Materials and	Local/Regional Manufacturing and Materials	MR 5.1 –	Contribution dependent on project

Resources MR 5.1	(20% of building materials must be manufactured within 500 miles of project)	One pt.	proximity to the premium hardboard manufacturing site in Alpena, MI.
Materials and Resources MR 5.2	Locally Harvested Building Materials (requires half of materials identified in MR 5.1 to be harvested locally)	MR 5.2 – One pt.	Due to local hardwood supply, credit for MR 5.2 may be achieved if MR 5.1 requirements are met.
Certified Wood MR 7	When using sustainable wood-based products and materials, use a minimum of 50% that are certified in accordance with the Forest Stewardship Council's principles and criteria	MR 7 – One pt.	DPI premium hardboard is FSC Certified



Timothy R. Boerst
Plant Operations Manager
Decorative Panels International (DPI)
An American Standard Brands Company
2900 Hill Avenue
Toledo, Ohio 43607-2929 USA
Phone: 1-800-521-4301 (Toll Free)