

COMPOSITE PANEL ASSOCIATION

ENVIRONMENTALLY PREFERABLE PRODUCT SPECIFICATION CPA 3-08



**Approved by CPA Board of Directors
October 23, 2007**

Effective Date April 1, 2008

**CPA GRADEMARK CERTIFICATION PROGRAM
ENVIRONMENTALLY PREFERABLE PRODUCT
SPECIFICATION CPA 3-08; APRIL 1, 2008**

BACKGROUND

Environmentally preferable product, as defined by Federal Executive Order 13101, are “products and services (that) have a lesser or reduced effect on human health and the environment when compared to other products and services that serve the same purpose”. Furthermore, various states have adopted policies promoting sustainability to “reduce adverse impacts on natural habitats and species”. The Composite Panel Association (CPA) adopted this voluntary Environmentally Preferable Product Specification (EPPS) to promote the fulfillment of these goals. CPA will certify products to this EPPS within its ANSI accredited third party Grademark Certification Program.

PURPOSE

This EPPS has been developed to provide assurance that products conforming to it have been independently certified to meet certain environmentally preferable characteristics, including fiber usage and formaldehyde emissions. Certification to these criteria assures the consumer that these products exhibit enhanced environmentally friendly characteristics.

SCOPE

This EPPS applies to all grades of particleboard, medium density fiberboard (MDF) and hardboard that have been engineered and produced for all applications. This EPPS defines particleboard, MDF and hardboard, classifies all acceptable fiber types used in the production of particleboard, MDF and hardboard , and establishes maximum formaldehyde emission limits.

DEFINITIONS

Particleboard

“A generic term for a composite panel primarily composed of cellulosic materials (usually wood), generally in a form of discrete pieces or particles, as distinguished from fibers, bonded together with a bonding system, and which may contain additives.” Reference: ANSI A208.1–1999.

Medium Density Fiberboard

"A composite panel products composed primarily of cellulosic fibers and a bonding system cured under heat and pressure. MDF density is typically between 500 kg/m³ (31 lbs/ft³) and 1000 kg/m³ (62 lbs/ft³)."
Reference: ANSI A208.2-2002.

Hardboard

"Hardboard is a panel manufactured primarily from inter-felted lignocellulosic fibers which are consolidated under heat and pressure in a hot press to a density of 500 kg/m³ (31 lbs/ft³) or greater. Others materials may be added to improve certain properties, such as stiffness, hardness, finishing properties, resistance to abrasion and moisture, as well as to increase strength, durability, and utility."
Reference: ANSI A135.4-2004, ANSI A135.5-2004, ANSI A135.6-2006.

FIBER CLASSIFICATION

This EPPS recognizes the environmental benefits of utilizing the variety of fiber source opportunities available today, which include both wood based and non-wood based cellulose fiber, and follows the U.S. Government guidelines on the classification of raw materials used in the manufacturing sector. Specifically, the Federal Trade Commission (FTC) has defined recycled materials as follows:

"Materials that have been recovered or otherwise diverted from the solid waste stream, either during the manufacturing process (pre-consumer), or after consumer use (post-consumer). To the extent the source of recycled content includes pre-consumer material, the manufacturer or advertiser must have substantiation for concluding that the pre-consumer material would otherwise have entered the solid waste stream. In asserting a recycled content claim, distinctions may be made between pre-consumer and post-consumer materials. Where such distinctions are asserted, any express or implied claim about the specific pre-consumer or post-consumer content of a product or package must be substantiated." Reference: Federal Register 16 CFR Part 260.

Further, the U.S. Environmental Protection Agency (EPA) defines recovered materials as follows:

"Waste materials and by-products which have been recovered or diverted from solid waste, but does not include those materials and

by-products generated from, and commonly reused within, an original manufacturing process." Reference: 42 U.S.C. 6903 (19).

Based on these definitions, the following fiber classifications represent the acceptable fiber types covered by this EPPS used in the manufacture of composite panel products:

Recycled Fiber

Pre-Consumer Recycled includes fiber generated as a waste from manufacturing and converting processes such as scrap, trimmings and cuttings that have been diverted from the solid waste stream following the manufacturing and converting process. This material must have undergone processing before becoming a waste to be included in this category. Examples of this category include planer shavings, plytrim, sawdust, fines, chips and bagasse.

Post-Consumer Recycled includes fiber from products that have completed their life as a consumer item and have been diverted or recovered from the solid waste stream after having been used and/or disposed of by the consumer following their intended use. Examples of this category include used pallets, recycled furniture and cabinet waste, construction waste and demolition waste.

Recovered Fiber

Fiber in this category has been recovered as a by-product of an agricultural crop or public/private tree maintenance program where the fiber generated is used on a secondary basis not related to the original agricultural or ornamental function. For definitional purposes, this fiber has been sub-categorized as wood and non-wood.

Wood Fiber is generated from the removal of woody biomass from both urban and non-urban sources as part of a management prescription, maintenance or hazard tree program, pre-commercial thinning or salvage operation where the removal of such fiber does not adversely affect soil nutrient or structure. Examples of this category include fruit tree pruning's, park tree removal, logging slash and culled timber.

Non-Wood Fiber is generated as a by-product of an agricultural crop where the cellulose is other than woody biomass. Removal of this fiber must not adversely affect soil nutrients or structure. Examples of

this category include straw from wheat, rice, barley or other cereal/grain operations.

Fiber omitted from this specification is fiber generated from the harvest of commercial timber for the sole purpose of converting that timber into chips, shavings or sawdust to then be used in the manufacture of composite panel products. Commercial timber is defined as timber that can be used to produce lumber or plywood. This restriction only applies to the main bole of the tree and does not include the slash or other recoverable by-product resulting from timber harvesting.

FIBER REQUIREMENT

100% of the fiber used in products certified, as conforming to this EPPS, must be either recycled fiber, recovered fiber or a combination of both, as described in this EPPS.

FORMALDEHYDE EMISSIONS REQUIREMENT

The formaldehyde emission requirements for this specification have been approved by the CPA Board of Directors and may change from time to time. The effective date for compliance to this new emission requirement is April 1, 2008. The emission levels are considered preferable because they reflect a lower level compared to the ANSI A208.1-1999 Table A and ANSI A208.2-2002 standards.

Unfinished Particleboard. Formaldehyde emissions from unfinished particleboard must be less than or equal to 0.18 ppm using the Large Chamber Test Method (ASTM E1333). Particleboard products will be evaluated at the typical loading rate for particleboard of 0.13 ft²/ft³. Particleboard that uses a bonding system other than Urea Formaldehyde, may qualify for "Exempted" status under section 6.3 of the EPP Grademark Manual. One exception to this requirement is for Grade LD of ANSI A208.1-1999 (Door Core) products. Grade LD is allowed a loading ratio of 0.04 ft²/ft³ as per section 3.4 of ANSI A208.1-1999.

Unfinished MDF. Formaldehyde emissions from unfinished MDF must be less than or equal to 0.21 ppm using the Large Chamber Test Method (ASTM E1333). MDF products will be evaluated at the typical loading rate for MDF of 0.08 ft²/ft³. Special arrangements will be made for MDF manufacturers who wish to have the MDF tested at the higher loading ratio of 0.13 ft²/ft³. MDF that uses a bonding system other than Urea Formaldehyde, may qualify for "Exempted" status under section 6.3 of the EPP Grademark Manual.

Hardboard. Formaldehyde emissions from unfinished hardboard must be less than or equal to 0.20 ppm using the Large Chamber Test Method (ASTM E1333). There are no specifications in the three relevant hardboard standards (ANSI A135.4, ANSI A135.5, ANSI A135.6) that require or recommend a loading ratio for hardboard products. Hardboard is most similar to MDF and will be tested with the loading ratio of MDF at 0.08 ft²/ft³. Hardboard that uses a bonding system other than Urea Formaldehyde, may qualify for "Exempted" status under section 6.3 of the EPP Grademark Manual.

The EPPS CPA 3-08 was approved by the CPA Board of Directors on October 23, 2007, has an effective date of April 1, 2008 and supersedes EPPS version CPA 2-06.