

TFL (Thermally Fused Laminate) ON VESTA PARTICLEBOARD OR MDF

Produced by ARAUCO North America

In Division 06, 10, & 12 Sections Including Architectural Woodwork, Casework, Wall Paneling, Compartments & Cubicles, Partitions, Storage Specialties, Lockers, Postal Specialties, Wardrobe & Closet Specialties, Manufactured Casework, Countertops, & Institutional Furniture.

SECTION 06 41 43 - THERMALLY FUSED LAMINATE

- Display hidden notes to specifier in Word 2003 by using "Tools"/"Options"/"View"/"Hidden Text"
- Display hidden notes to specifier in Word 2007 or later by clicking on the Show/Hide icon (¶)

PART 1 - GENERAL

1.01 Summary

- a. Section includes melamine-impregnated decorative paper, thermally fused laminate (TFL) to particleboard (PB) or medium-density fiberboard (MDF) for use in [casework][,] [furniture] [or] [cabinets].
- b. Related Requirements:
 1. Section 064023, Interior Architectural Woodwork
 2. Section 06410, Custom Casework
 3. Section 064600, Wood Trim
 4. Section 064113, Wood-Veneer-Faced Architectural Cabinets
 5. Section 105116, Wood Lockers
 6. Section 105123, Plastic-Laminate-Clad Lockers
 7. Section 115123, Library Stack Systems
 8. Section 12302, Wood Caseworks
 9. Section 123200, Manufactured Wood Casework
 10. Section 123213, Manufactured Wood-Veneer-Faced Casework
 11. Section 123216, Manufactured Plastic-Laminate-Faced Casework
 12. Section 123530, Residential Casework
 13. Section 12360, Library Shelving and Casework
 14. Section 123553, Plastic-Laminate-Clad Laboratory Casework

1.02 References

a. Abbreviations and Acronyms:

ANSI	: American National Standards Institute
ASTM	: American Society for Testing Materials
AWMAC	: Architectural Woodwork Manufacturers Association of Canada
CARB	: California Air Resources Board
CBDca	: Canadian Green Building Council
CPA	: Composite Panel Association
EN	: European Norms
EPPS	: Environmentally Preferable Product Specification
FSC®	: Forest Stewardship Council
HUD	: US Department of Housing and Urban Development
ISO	: International Organization for Standardization
LEED	: Leadership in Energy and Environmental Design
LPDL	: Low Pressure Decorative Laminate
LPM	: Low pressure melamine
NEMA	: National Electrical Manufacturers Association
TFL	: Thermally Fused Laminate
TFM	: Thermally Fused Melamine
ULC	: Underwriters Laboratories of Canada (Safety and performance in standards on fire, life safety and security)
ULEF	: Ultra-low emitting formaldehyde
USGBC	: US Green Building Council

b. Reference Standards:

1. [ANSI A208.1](#), American National Standard for Particleboard
2. ASTM E 1333-[96] Standard Test Method to determine the level of formaldehyde of wood products under specific conditions and using a large chamber
3. [CPA 3-08](#), Environmentally Preferable Product Specification
4. [European Standard EN 438-1](#), Decorative high-pressure laminates (HPL) sheets based on thermosetting resins. Specifications
5. [HUD 24 CFR Part 3280.308](#)
6. [NEMA LD 3](#), High-Pressure Decorative Laminates
7. USGBC, [LEED](#) Green Building Rating System
8. [Architectural Woodwork Standards](#) (AWS) published by the Architectural Woodwork Institute (AWI), Architectural Woodwork Manufacturers Association of Canada and the Woodwork Institute. (Currently calls product LPDL- Low Pressure Decorative Laminate)

1.03 Action Submittals

- a. Submit the following in accordance with Section 01 33 00, Submittal Procedures:
 1. Product Data: Thermally Fused Melamine Particleboard
 2. Samples for Initial Selection: Color chart for initial selection: Manufacturer's full range of **[design/color] [texture]** TFL material, 2 by 2 inch (50 by 50 mm) minimum size
 3. Samples for Verification: Selected color(s), 8" by 10" inches (203 by 254mm) on particleboard substrate
 4. Sample of complementary products: Edge banding, moulding, cabinet door, HPL, 3DL
 5. Sustainable Design Submittals: Submit the following in compliance with Section 01 81 13 "Sustainable Design Requirements":
 - a. LEED Criteria Worksheet for each component material of the product or assembly used in the installation of Work of this Section.
 - a. Product Certificates: For regional materials, indicating location of material manufacturer and point of extraction, harvest, or recovery for each raw material. Include distance to Project and cost for each regional material.
 - b. Chain-of-Custody Certificates: For certified wood products. Include statement of costs.
 - c. Chain-of-Custody Qualification Data: For manufacturer and vendor.
 - d. Product Data: For composite wood products, indicating that product contains no urea formaldehyde.
 - e. Laboratory Test Reports: For composite wood products, indicating compliance with requirements for low-emitting materials.
 - f. Laboratory Test Reports: For installation adhesives, indicating compliance with requirements for low-emitting materials.

1.04 Closeout Submittals

- a. Refer to Section <INSERT SECTION NUMBER AND NAME> for installation and protection procedures.
- b. Products must be unloaded under shelter. If the unloading process is performed outdoor.
- c. Products must be stored under shelter as soon as possible. Avoid unloading when faced with inclement weather.
- d. Always inspect delivered goods upon reception and once unloaded. Verify if products were damaged, soiled or exposed to water.
- e. Never store the products outdoor. Avoid watering.
- f. Handle with care to avoid damages.
- g. Do not place panels directly on the floor.
- h. Avoid extreme temperature during the storage and at the time of use of panels,
- i. Allow time for panels to reach site temperature before use.

1.05 Quality Assurance

- a. Single-Source Responsibility: Obtain Thermally Fused Laminate from a qualified Manufacturer - acceptable to the Architect. Manufacturer shall have a minimum of **<INSERT NUMBER OF YEARS>** years successful experience in the production of melamine-impregnated decorative paper.
- b. Manufacturer Qualifications: A qualified manufacturer that is certified for chain of custody by an FSC-accredited certification body.
- c. Manufacturer Qualifications: Composite Wood Products: Products shall comply with the testing and product requirements of the California Department of Public Health's "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers.
- d. Quality Standard: Fabricate and install all architectural woodwork in accordance with the applicable requirements of AWS, Edition 2, 2014, unless more stringent requirements are specified or shown.

PART 2 - PRODUCTS

2.01 Materials

- a. TFL on standard particleboard or MDF:
 - 1. Melamine-Impregnated Decorative Paper: Comply with NEMA LD 3 Performance Standards except as follows:
 - a. Resistance to Surface Wear: NEMA LD 3, Test 3.1: 400 cycles minimum.
 - b. Scratch Resistance: EN438-1: 2.0-3.5 N.
 - c. Color: **<INSERT COLOR>**.
 - 2. Core: Particleboard or MDF as manufactured by ARAUCO
 - a. Comply with ANSI A208.1,
 - b. Certification: Meet CPA 3-08 EPPS including the following:
 - 1) Formaldehyde Emission Requirements: ANSI A208.1, Table A and HUD 24 CFR Part 3280.308.
 - 2) Recycled Content: 100 percent pre-consumer recycled/recovered wood content.
 - a. LEED Requirements:
 - 1) MR 4. Materials & Resources: 100% Recycle o/and recovered wood
 - 2) MR 5. Materials & Resources: Regional Materials. Use building materials or products that have been extracted, harvested or recovered, as well as manufactured, within 500miles IEQ 4.4 Indoor Environmental Quality: Low Emitting Materials. Composite panels manufactured with CARB ULEF or NAF resins

2.02 Fabrication (See LEED Interpretation LI10250 for details regarding pathway 2)

- a. Conform to requirements of AWS Section 4 for sheet products.

PART 3 - EXECUTION

For additional specification assistance or information contact your ARAUCO Specification Representative <INSERT ARAUCO SPECIFICATION REP NAME AND EMAIL>. or send an email to marketing@arauco-na.com

GENERAL NOTES

The following document is provided to assist design professionals with product specifications, general information and language standards for paneling, casework, countertops, cabinetry, interior closets, residential and office furniture, shop and job site application of millwork finishes and similar architectural woodwork.

Appropriate language standards should be formatted and copied from this document into the specification section(s) desired of the project plans and specifications.

Article and paragraph numbers are used herein for information purposes only and are not relating to any similar articles nor document.

END OF SECTION