Product Evaluation Report

PER-11044

This Document Published By: *Progressive Engineering Inc.*

Initial Listing	Re-Approved		
July, 2011	May, 2018	58640 State Road 15 Goshen, Indiana 46528	574-533-0337 www.p-e-i.com

Listed Product

Flat & Raised Panel Cabinet Doors
5.2mm Industrial Panel with MDF Core

Listed For

Middlebury Hardwood Products
101 Joan Drive
Middlebury, IN 46540

Approved Manufacturer

Middlebury Hardwood Products
101 Joan Drive
Middlebury, IN 46540

Progressive Engineering Inc. is an accredited Testing Laboratory and Third Party Quality Control Agency. This **Product Evaluation Report** represents a product that *Pei* has a follow-up service agreement with. This **Product Evaluation Report** in no way implies warranty for this product or relieves Middlebury Hardwood Products of their liabilities for this product. *Pei* is accredited to ISO Standard 17020 and 17025. This **PER** is an official document if it is within one year of the initial or renewal date.

Listing Details

The Cabinet Doors that are covered under this Listing are used for different size and style cabinets which are supplied to the Manufactured Housing, RV and Park Model markets.

These various cabinets have been tested and evaluated to ASTM E1333-96 for Formaldehyde Emissions per HUD 24 and ASTM E162-94 for Flame Spread for conformance to HUD 24 CFR Part 3280.204 and 3280.308. Along with this Evaluation Report is a quarterly ongoing Testing Program and Inspection Program of Middlebury Hardwood Products Quality Control Documentation.

Substrate Descriptions

Hardwood is of higher density and hardness than a softwood. Hardwood species are more varied than that of a softwood. Hardwoods are generally more resistant to decay when used for exterior applications. Middlebury Hardwood Products purchases "kiln dried" hardwood. Kiln drying allows for the wood to be dried to a relatively low moisture content. Based on this process Middlebury Hardwood Products specifies their hardwood products to be held at a 6 - 8 % moisture content. Flat panel and Raised Veneer doors are made with Hardwood rails with a hardwood veneer that is bonded to a composite insert. Raised Panel Doors are made entirely of Hardwood. These products are all ordered to be compliant with California Air Resources Board (CARB) 93120, Phase II.

Finished Products

The previously mentioned substrates have a finished stain applied by Middlebury Hardwood Products to alter the appearance of the substrate. The finishing process uses only tested and approved stains and finishes. The finishing process follows an approved Quality Control Program.

Tested To:

ASTM E162-94 - Standard Test Method for Surface Flammability of Materials Using a Radiant Heat Energy Source
ASTM E1333-96 - Standard Test Method for Determining Formaldehyde Concentrations in Air and Emission Rates from Wood Products Using a Large Chamber

Code Compliance

HUD 24 CFR Part 3280.204
HUD 24 CFR Part 3280.308
ASTM E 1333-96 Formaldehyde Emissions Level = .3ppm or less for Certified Industrial Panel
ASTM E84-01 and ASTM E162-94 Rating = 200 or less
FMVSS 302 Flame Spread Rating

Product Labeling

All Products that are to be covered by this **PER** must be labeled with at least the following:

1. ASTM E 1333-96 Formaldehyde Certified Industrial Panel (0.3 ppm or less)
2. ASTM E162-94 / ASTM E84-01 Flame Spread Rating 200 or less
3. The Customer Part Number
4. This **PER** Number & *Pei* Name or Logo

The following **Products** in Table 1 meet the requirements set forth by RVIA and HUD for Formaldehyde levels under .3 ppm for Meranti/Plywood:

Table 1 - Listed Products

Description	Substrate - Style	Stain	Sealant / Top Coat
HWPW-CC (MDF)	Cabinet Door	**Accessa (1-2 sides)**	--

The following **Products** in Table 2 meet the requirements set forth by RVIA and HUD for Flame Spread rating of 200 or less per ASTM E84-01 & ASTM E162-94 for Cabinet Doors:

Table 2 - Listed Products

Description	Substrate - Style	Stain	Sealant / Top Coat
Ash Cabinet Door (1/4" - 3/4")	Cabinet Door	**Accessa**	**AcromaPro**
Beech Cabinet Door (1/4" - 3/4"	Cabinet Door	**Accessa**	**AcromaPro**
Cherry Cabinet Door (1/4" - 3/4")	Cabinet Door	**Accessa**	**AcromaPro**
Hickory Cabinet Door (1/4" - 3/4")	Cabinet Door	**Accessa**	**AcromaPro**
Hard / Soft Maple Cabinet Door (3/4")	Cabinet Door	**Accessa**	**AcromaPro**
Oak Cabinet Door (1/4" - 3/4")	Cabinet Door	**Accessa**	**AcromaPro**

The following **Products** in Table 3 meet the Flame Spread requirements for a Burn Rate of LESS than 4" per minute as tested per FMVSS 302:

Table 3 - Listed Products

Description	Substrate - Style	Stain	Sealant / Top Coat
Flat Panel Door with Ash (MDF) Rail and Beech Insert	Cabinet Door	**STN29**	**LQ1**
Raised Panel Door (Beech)	Cabinet Door	**STN22**	**LAQ1**
European Beech Hardwood	Panel	**N/A**	**N/A**
Hard Maple Wood	Panel	**STN56**	**LAQ1**
Hard Maple Wood	Panel	**STN96**	**LAQ1**

Quality Assurance Documentation

A Listing and Follow-up Service & Inspection Agreement between *Progressive Engineering Inc.* and Middlebury Hardwood Products.

All Testing Documentation is kept on file at Middlebury Hardwood Products facility in Middlebury, Indiana and at *Progressive Engineering Inc.*

A Quality Control Manual for Compliance with 24 CFR 3280.308 - Dated: March 23, 2018.

A list of SDS Sheets from Middlebury Hardwood Products of Incoming Materials.

Test Report FS - 4785 - 4789 - ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: January 6, 2006.

Test Report FS - 4815 - 4819 - ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: February 3, 2006.

Test Report FS - 4830 - 4834 - ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: February 28, 2006.

Test Report FS - 4882 - 4886 - ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: April 10, 2006.

Test Report FS - 4966 - 4970 - ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: August 2, 2006.

Test Report FS - 4984 - 4987 - ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: September 5, 2006.

Test Report FS - 4988 - ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: September 5, 2006.

Test Report FS - 5026 - 5041 - ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: October 5, 2006.

Test Report FS - 5048 - 5056 - ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: November 9, 2006.

Test Report FS - 5119- 5120 - ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: January 12, 2007.

Test Report FS - 5121- 5122 - ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: January 12, 2007.

Quality Assurance Documentation Continued

Test Report FS - 5151- 5154, 5174 - 5176, 5179 - 5183 - ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: April 27, 2007.

Test Report FS - 5203- 5204, 5244 - 5247 , 5250 - 5251 - ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: May 25, 2007.

Test Report FS - 5284- 5287 - ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: August 30, 2007.

Test Report FS - 5418, 5428- 5430 - ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: December 27, 2007.

Test Report FS - 5408- 5411 - ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials - Dated: November 29, 2007.

Test Report 3172631SAT-018 - ASTM 162-09, Standards Test Method for Surface Flammability of Materials Using Radiant Heat Energy Source. - Dated: March 16, 2009.

Test Report MHP042309-8 - ASTM E162-09, Standard Test Method for Surface Flammability of Materials Using Radiant Heat Energy Source. - Dated: June 11, 2009.

Test Report MHP072209-17 - ASTM E162-09, Standard Test Method for Surface Flammability of Materials Using Radiant Heat Energy Source. - Dated: October 19, 2009.

Test Report MHP072209-18 - ASTM E162-09, Standard Test Method for Surface Flammability of Materials Using Radiant Heat Energy Source. - Dated: October 19, 2009.

Test Report MHP082409-33 - ASTM E162-09, Standard Test Method for Surface Flammability of Materials Using Radiant Heat Energy Source. - Dated: December 10, 2009.

Test Report MHP020210-16 - ASTM E162-09, Standard Test Method for Surface Flammability of Materials Using Radiant Heat Energy Source. - Dated: May 10, 2010.

Test Report MHP020210-17 - ASTM E162-09, Standard Test Method for Surface Flammability of Materials Using Radiant Heat Energy Source. - Dated: June 7, 2010.

Test Report MHP051910-17 - ASTM E162-09, Standard Test Method for Surface Flammability of Materials Using Radiant Heat Energy Source. - Dated: August 9, 2010.

Test Report MHP100610-42 - ASTM E162-09, Standard Test Method for Surface Flammability of Materials Using Radiant Heat Energy Source. - Dated: October 7, 2010.

Test Report MHP100610-43 - ASTM E162-09, Standard Test Method for Surface Flammability of Materials Using Radiant Heat Energy Source. - Dated: October 25, 2010.

Test Report MHP062311-12 - ASTM E162-09, Standard Test Method for Surface Flammability of Materials Using Radiant Heat Energy Source. - Dated: July 27, 2011.

Test Report MHP112509-81 - ASTM E1333-96, Standard Test Method for Determining Formaldehyde Concentrations in Air and Emission Rates from Wood Products Using a Large Chamber. Dated: February 18, 2010.

Test Report MHP020210-15 - ASTM E1333-96, Standard Test Method for Determining Formaldehyde Concentrations in Air and Emission Rates from Wood Products Using a Large Chamber. Dated: May 25, 2010.

Test Report MHP051910-15 - ASTM E1333-96, Standard Test Method for Determining Formaldehyde Concentrations in Air and Emission Rates from Wood Products Using a Large Chamber. Dated: July 27, 2010.

Test Report MHP020108-24 - ASTM E1333-96, Standard Test Method for Determining Formaldehyde Concentrations in Air and Emission Rates from Wood Products Using a Large Chamber. Dated: August 9, 2010.

Test Report MHP100610-41 - ASTM E1333-96, Standard Test Method for Determining Formaldehyde Concentrations in Air and Emission Rates from Wood Products Using a Large Chamber. Dated: October 27, 2010.

Test Report MHP011311-23 - ASTM E1333-96, Standard Test Method for Determining Formaldehyde Concentrations in Air and Emission Rates from Wood Products Using a Large Chamber. Dated: February 23, 2011.

Test Report MHP032311-19 - ASTM E1333-96, Standard Test Method for Determining Formaldehyde Concentrations in Air and Emission Rates from Wood Products Using a Large Chamber. Dated: April 21, 2011.

Test Report MHP062311-10 - ASTM E1333-96, Standard Test Method for Determining Formaldehyde Concentrations in Air and Emission Rates from Wood Products Using a Large Chamber. Dated: August 23, 2011.

Pei Test Report 2010-0623 - FMVSS302/CMVSS 302 - Flammability of Interior Materials Test per Federal Motor Vehicles Safety Standard Number 302 & Canada Motor Vehicle Safety Standard Number 302 - Dated: April 29, 2010.

Quality Assurance Documentation Continued

Pei Test Report 2011-0348 - FMVSS302/CMVSS 302 - Flammability of Interior Materials Test per Federal Motor Vehicles Safety Standard Number 302 & Canada Motor Vehicle Safety Standard Number 302 - Dated: February 23, 2011.

Pei Test Report 2012-0651 - FMVSS302/CMVSS 302 - Flammability of Interior Materials Test per Federal Motor Vehicles Safety Standard Number 302 & Canada Motor Vehicle Safety Standard Number 302 - Dated: March 30, 2012.

Pei Test Report 2013-0347 - FMVSS302/CMVSS 302 - Flammability of Interior Materials Test per Federal Motor Vehicles Safety Standard Number 302 & Canada Motor Vehicle Safety Standard Number 302 - Dated: March 1, 2013.

Pei Test Report 2014-0993 - FMVSS302/CMVSS 302 - Flammability of Interior Materials Test per Federal Motor Vehicles Safety Standard Number 302 & Canada Motor Vehicle Safety Standard Number 302 - Dated: June 26, 2014.

Pei Test Report 2015-0919 - FMVSS302/CMVSS 302 - Flammability of Interior Materials Test per Federal Motor Vehicles Safety Standard Number 302 & Canada Motor Vehicle Safety Standard Number 302 - Dated: May 27, 2015.

Pei Test Report 2016-0858(B) - FMVSS302/CMVSS 302 - Flammability of Interior Materials Test per Federal Motor Vehicles Safety Standard Number 302 & Canada Motor Vehicle Safety Standard Number 302 - Dated: May 2, 2016.

Pei Test Report 2017-6001 - FMVSS302/CMVSS 302 - Flammability of Interior Materials Test per Federal Motor Vehicles Safety Standard Number 302 & Canada Motor Vehicle Safety Standard Number 302 - Dated: April 27, 2017.

Pei Test Report 2018-6185 - FMVSS302/CMVSS 302 - Flammability of Interior Materials Test per Federal Motor Vehicles Safety Standard Number 302 & Canada Motor Vehicle Safety Standard Number 302 - Dated: May 4, 2018.