



Product Evaluation Report

PER-07022

This Document Published By:

Progressive Engineering Inc.

Initial Listing
December 14, 2007

Re-Approved
March-11

58640 State Road 15
Goshen, Indiana 46528

574-533-0337
www.p-e-i.com

Listed Product

Various Sheet Good Laminations

Listed For

Robert Weed Plywood Corporation

705 Maple Street
Bristol, IN 46507

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 **Robert Weed Plywood Corporation** 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.

Approved Laminator / Distributors

Robert Weed Plywood Corporation
705 Maple Street
Bristol, IN 46507

Robert Weed Plywood Corporation
462 River Dock Road
Weiser, ID 83672

Listing Details

The Various Sheet Good Laminations covered under this Product Evaluation Report is used for cabinets, side walls, decorative wall panels, and door skins, which are supplied to the Manufactured Housing, RV and Park Model markets.

These Various Sheet Good Laminations have been tested and evaluated for ASTM E84 Flame Spread and Formaldehyde Emissions per HUD 24 CFR Part 3280.308 for plywood and particleboard. Along with this Listing is a quarterly ongoing testing program and inspection program of Robert Weed Plywood's Quality Control Documentation

Substrate Descriptions

Hardwood Plywood (Meranti/Lauan) consists of layers of wood veneer that are stacked together usually oriented with the grains running at the right angle, having been bonded together using an adhesive with the assistance of heat and pressure. This product is purchased from a supplier.

Particle Board is an engineered wood product that is manufactured from wood particles such as wood chips, sawmill shavings or even saw dust that is binded together with a synthetic resin and then pressed or binded together. This product is purchased from a supplier.

Laminated Products

The previously mentioned Substrates are laminated by Robert Weed Plywood with vinyl, paper, Formica or wood veneers to alter the appearance of the Substrate. The lamination process uses only tested and approved adhesives and laminates. The lamination process follows an approved Q.C. Program.

Quality Assurance Documentation

All testing documentation is kept on file at Robert Weed Plywood facility in Bristol, Indiana and at PEI.

A Quality Control Manual for the Sheet Good Laminating - Dated 4/6/09

A follow-up Listing & Inspection agreement between Pei and **Robert Weed Plywood Corporation**

A MSDS sheet for Particle Board (Phenol-Formaldehyde Bonded) dated February, 2007

A MSDS sheet for MDF (Medium Density Fiberboard) dated June, 2006

A MSDS Sheet for all approved Gypsum Board suppliers.

A MSDS sheet from **RWP** for UF Bonded Wood Products

A MSDS sheet for Flakeboard Particleboard dated September, 2006

Test Report 08-002-147 (A) per CAN/ULC-S102 Surface Burning Characteristics of 5.2mm Laminated Meranti dated 3/5/2008.

Test Report FC-4399/F14385 - Formaldehyde Large Chamber Verification Test Report ASTM E1333 dated 3/27/08.

Test Report FC-4540/F14717 - Formaldehyde Large Chamber Verification Test Report ASTM E1333 dated 9/25/08.

Test Report T-12692 - Surface Burning Characteristics Determined by ASTM E-84 Twenty Five Foot Tunnel Surface Test Method dated 6/5/2008.

Test Report 87-83 - Flame Spread Test to ASTM E84 - Dated 12/29/87

Test Report FH-939 - Tested per ASTM E84 - Dated 12/29/87

Test Report 88-43 - Flame Spread Test to ASTM E84 - Dated 6/27/88

Test Report FH-955 - Tested per ASTM E84 - Dated 6/9/88

Test Report FH-1121 - Tested per ASTM E84 - Dated 9/12/96

Quality Assurance Documentation cont.

Test Report 96-50 - Flame Spread Test to ASTM E84-91a - Dated 10/1/96
 Test Report FS - 4620-4621, 4623-4624 - Flame Spread Test to ASTM E84 - Dated 7/6/2005
 Test Report FS - 4647, 4649-4651 - Flame Spread Test to ASTM E84 - Dated 8/4/2005
 Test Report FS - 4681-4684 - Flame Spread Test to ASTM E84 - Dated 9/1/2005
 Test Report FS - 4701, 4703-4704 - Flame Spread Test to ASTM E84 - Dated 10/5/2005
 Test Report FS - 4731-4735 - Flame Spread Test to ASTM E84 - Dated 11/4/2005
 Test Report FS - 4747 - 4748, 4767- Flame Spread Test to ASTM E84 - Dated 12/14/2005
 Test Report FS - 4768- Flame Spread Test to ASTM E84 - Dated 12/14/2005
 Test Report FS - 4790-4794 - Flame Spread Test to ASTM E84 - Dated 1/6/2006
 Test Report FS - 4820-4823 - Flame Spread Test to ASTM E84 - Dated 2/3/2006
 Test Report FS - 4853- Flame Spread Test to ASTM E84 - Dated 3/7/2006
 Test Report FS - 4854-4857 - Flame Spread Test to ASTM E84 - Dated 3/7/2006
 Test Report FS - 4862, 4864-4865 - Flame Spread Test to ASTM E84 - Dated 4/10/2006
 Test Report FS - 4907 - 4908, 4910- Flame Spread Test to ASTM E84 - Dated 5/10/2006
 Test Report FS - 4909- Flame Spread Test to ASTM E84 - Dated 5/10/2006
 Test Report FS - 4933-4934, 4936-4939 - Flame Spread Test to ASTM E84 - Dated 6/13/2006
 Test Report FS - 4959-4961 - Flame Spread Test to ASTM E84 - Dated 7/7/2006
 Test Report FS - 4971-4972, 4974-4975 - Flame Spread Test to ASTM E84 - Dated 8/2/2006
 Test Report 06-72 - Flame Spread Test to ASTM E84-06 - Dated 8/09/06
 Test Report FS - 4980-4982 - Flame Spread Test to ASTM E84 - Dated 9/5/2006
 Test Report FS - 5043 - Flame Spread Test to ASTM E84 - Dated 10/11/2006
 Test Report FS - 5044-5047 - Flame Spread Test to ASTM E84 - Dated 10/11/2006
 Test Report FS - 5127, 5129-5130 - Flame Spread Test to ASTM E84 - Dated 1/12/2007
 Test Report FS -5131 - 5133, 5184-5185, 5187 - 5192 - Flame Spread Test to ASTM E84 - Dated 4/27/2007
 Test Report FS -5265 - 5271 - Flame Spread Test to ASTM E84 - Dated 7/23/2007
 A *Pei* test report No. 2007-470 - FMVSS 302 Flammability Test - Dated 3/15/2007.
 A *Pei* test report No. 2007-605 - FMVSS 302 Flammability Test - Dated 4/09/2007.
 A *Pei* test report No. 2007-1850 - FMVSS 302 Flammability Test - Dated 12/12/2007.
 A *Pei* test report No. 2009-0180 - FMVSS 302 Flammability Test - Dated 1/08/2009.
 A *Pei* test report No. 2009-0180 (B) - FMVSS 302 Flammability Test - Dated 1/08/2009.
 Test Report FH - 2062- Flame Spread Test to ASTM E84 - Dated 4/19/2010
 Test Report FH - 2079 Flame Spread Test to ASTM E84 - Dated 5/25/2010
 Test Report FH - 2176 Flame Spread Test to ASTM E84 - Dated 3/11/2011.
 A *Pei* test report No. 2009-1101 - FMVSS 302 Flammability Test - Dated 9/10/2009.
 A *Pei* test report No. 2010-0382- FMVSS 302 Flammability Test - Dated 3/15/2010.
 A *Pei* test report No. 2010-0383- FMVSS 302 Flammability Test - Dated 3/15/2010.
 A *Pei* test report No. 2010-0385- FMVSS 302 Flammability Test - Dated 3/15/2010.
 A *Pei* test report No. 2010-0597- FMVSS 302 Flammability Test - Dated 5/10/2010.
 A *Pei* test report No. 2011-0284- FMVSS 302 Flammability Test - Dated 1/31/2011.
 Test Report 08-002-774 (A) - CAN/ULC-S102 Surface Burning Characteristics of "OE-GL" Laminated Gypsum Panel System - Dated 10/6/2008.
 Test Report 08-002-774 (B) - CAN/ULC-S102 Surface Burning Characteristics of "Design 4" Laminated Gypsum Panel System - Dated 10/6/2008.

Code Compliance**ANSI A119.2/NFPA 1192 Standard
on Recreational Vehicles****HUD 24 CFR Part 3280.308
HUD 24 CFR Part 3280.406****ANSI A119.5 Recreational Park
Trailers****ASTM E 84 Rating = 200 or less****FMVSS 302 Flame Spread Rating****Formaldehyde Emissions Level = .2 ppm or less for Hardwood Plywood and .3ppm or less for Particleboard.****RVIA Phase 1 Formaldehyde Emissions Level = .08 ppm or less for Hardwood Plywood (VC/CC) and .18ppm or less for Particleboard and .21ppm or less for MDF.****CARB Phase 1 Formaldehyde Emissions Level = .08 ppm or less for Hardwood Plywood (CC) and .18ppm or less for Particleboard and .21ppm or less for MDF.****CARB Phase 2 Formaldehyde Emissions Level = .05 ppm or less for Hardwood Plywood (CC) and .09ppm or less for Particleboard and .11ppm or less for MDF.**

Product Labeling

All the Various Sheet Goods that are to be covered by this Product Evaluation Report must be labeled with at least the following information:

1. The ASTM E84 Flame Spread Rating
2. The thickness
3. The Mill number
4. This Product Evaluation Report number & Pei's name or Logo
5. The Formaldehyde Emissions Level per HUD

The following **Products** meet the requirements set forth by HUD for Formaldehyde levels under .2 ppm for HWPW (Meranti) and .3 ppm for Particleboard as well as RVIA/CARB Phase 2 requirements for Formaldehyde levels under .05 ppm for HWPW (VC/CC) and .09 ppm for Particleboard.

Listed Products (As of December 31, 2010)			
Description	Substrate	Overlay	Glue
Hardwood Plywood (Meranti)	3.4 to 18mm Meranti	30- 50gm Paper	White
	3.4 to 18mm Meranti	2-4 Mil Vinyl	White
	3.4 to 18mm Meranti	None	None
Particle Board*	1/2", 5/8", 3/4" & 1" PB	30 - 50gm Paper	White
	1/2", 5/8", 3/4" & 1" PB	2 - 4 Mil Vinyl	White
	1/2", 5/8", 3/4" & 1" PB	None	None

The following **Products** meet the Flame Spread requirements of 200 or less as tested per ASTM E84:

Listed Products (As of March 31, 2011)			
Description	Substrate	Overlay	Glue
Lauan Plywood	2.7 to 18mm Meranti	30- 50gm Paper	PPR Glue + White
	2.7 to 18mm Meranti	2-4 Mil Vinyl	White
Hardwood Plywood (Meranti)	2.7 to 18mm Meranti	30- 50gm Paper	White
	2.7 to 18mm Meranti	2-4 Mil Vinyl	White
	2.7 to 18mm Meranti	None	None
Hardwood Plywood (Phenolic Meranti)	5.2mm Meranti	30 - 50gm Paper	PPR Glue
	5.2mm Meranti	2 - 4 Mil Vinyl	White
Particle Board*	5.3mm Particleboard	30 - 50gm Paper	PPR Glue+ White
	5.3mm Particleboard	2-4 Mil Vinyl	White
	1/2", 5/8", 3/4" & 1" PB	30 - 50gm Paper	White
	1/2", 5/8", 3/4" & 1" PB	2 - 4 Mil Vinyl	White
	1/2", 5/8", 3/4" & 1" PB	None	None
MDF	1/8"	30 - 50gm Paper	PPR Glue + White
	1/8"	2-4 Mil Vinyl	White
Lumbercore	18mm	None	None
Gypsum	5/16"	30 - 50gm Paper	PPR Glue+ White
	5/16"	2 - 4 Mil Vinyl	White
	3/8"	2 - 4 Mil Vinyl	White

Product Labeling cont.

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

Listed Products (As of March 31, 2011)			
Description	Substrate	Overlay	Glue
Hardwood Plywood (Meranti)	2.7 to 18mm Meranti	30 - 50gm Paper	PPR + White
	2.7 to 18mm Meranti	2 - 6 Mil Vinyl	White + 302
	2.7 to 18mm Meranti	2 - 6 Mil Vinyl	PUR
	2.7 to 18mm Meranti	2 - 6 Mil Vinyl	White
Hardwood	1/10"	RAW	RAW
MDF	12.8MM	30 - 50gm Paper	PPR + White
Particleboard	1/2" (12.8MM)	30 - 50gm Paper	PPR + White

The following **Products** meet the Flame Spread requirements of 25 or less as tested per ASTM E84 and CAN/ULC-S102:

Listed Products (January 2011)			
ASTM E84			
Description	Substrate	Overlay	Glue
Gypsum	5/16"	30 - 50GM Paper	White
	5/16"	4 mil Vinyl	White
	5/16"	6 mil Vinyl	White
	3/8"	4 mil Vinyl	None
CAN/ULC-S102			
Gypsum	1/2"	4 mil Vinyl	White
	1/2"	5.5 mil Vinyl	White