Miami-Dade County, Florida
Building Code Compliance Office
Suite 1603
140 West Flagler Street
Miami, Florida 33130-1563
(305) 375-2901
Fax (305) 375-2908

Laboratory Certificate

This certifies that PFS Corporation located at 2402 Daniels Street, Madison, WI 53704 is an approved Testing Laboratory in accordance with Miami-Dade County Building Code Compliance and Protocol TAS301-94, and is Certified to perform the following tests:

IAS, Inc. Certificate TL-109 (Renewed yearly)
National Voluntary Laboratory Accreditation Program
(NVLAP LAB CODE 100421-0) (Renewed yearly)

Results of the above mentioned test shall be properly submitted to the Miami-Dade County Building Code Compliance Office per TAS301-94, along with all other documentation required for the approval of products. Approved engineer(s) for this laboratory:

James A. Rothman, P.E.

This Certification and Registration Approved: **April 27, 2006**
This Certification and Registration Expires : **May 18, 2011**

Certification No. : **06-0222.03** *Renews: 04-0521.04*

Jaime D. Gascon, P.E.
Chief
Product Control Division

Jerry Hernandez
Senior Quality Assurance Inspector
Product Control Division

The Miami-Dade County Building Code Compliance Office reserves the right to remove this certification for non-compliance with rules and regulations as set by Protocol TAS301-94.

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International Accreditation Service, Inc.

CERTIFICATE OF ACCREDITATION

This is to signify that

PFS CORPORATION
2402 DANIELS STREET
MADISON, WISCONSIN 53718

Testing Laboratory TL-109

has demonstrated compliance with ISO/IEC Standard 17025, *General criteria for the competence of testing and calibration laboratories*, and has been accredited, commencing July 1, 2005, for the test methods listed in the approved scope of accreditation.

(see attached scope of accreditation for fields of testing and accredited test methods)

Patrick V. McCullen
Vice President

C. P. Ramani, P.E.
President

This accreditation certificate supersedes any IAS accreditation certificate bearing an earlier date. The certificate becomes invalid upon suspension, cancellation, revocation, or expiration of accreditation. See the IAS *Accreditation Listings* on the web at www.iasonline.org for current accreditation information, or contact IAS directly at (562) 699-0541. Print Date: 08/11/2005

International Accreditation Service, Inc.

SCOPE OF ACCREDITATION

Testing Laboratory TL-109

PFS Corporation
2402 Daniels Street
Madison, WI 53718

James A. Rothman, P.E.
Senior Vice President for QC
(608) 221-3361

FIELDS OF TESTING	ACCREDITED TEST METHODS
Physical	UBC Standard 15-5; ASTM Standards D 1761, D 2718, D 3043, D 3500, D 3501, E 8, E 72, E 489, E 529, E 564, E 695, E 767, E 1803 and F 1575
Wood and wood panel products	ANSI Standard ANSI A208.1; ANSI/AITC Standard A190.1; ANSI/TPI-95; ASTM Standards C 67, C 271, C 272, C 273, C 297, C 365, C 393, C 481, D 143, D 198, D 1037, D 2395, D 2555, D 2718, D 4442, D 5055, D 5456, D 6464, E 73, E 661and E 2322; U.S. Department of Commerce Product Standards HP-1, PS-1 and PS-2
Adhesives	ASTM Standards C 557, D 905, D 906, D 1002, D 2294, D 1101, D 1183, D 2559, D 3110, D 3498, D 4688 and D 6464; APA Standard AFG-01; AITC Standard 200; CSA Standard 0112-M Series 1977
Solid-fuel-burning appliances	UL Standards 127, 391, 737, 907 and 1482-96
Flat sheet, roofing and siding shingles, and clapboards	ASTM Standard C 1185
Rubber deterioration	ASTM Standard D 572
Water vapor transmission	ASTM Standard E 96
Water penetration	ASTM Standard E 514

July 1, 2005
Commencement Date

C. P. Ramani, P.E.
President

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International Accreditation Service, Inc.

SCOPE OF ACCREDITATION

Testing Laboratory TL-109

FIELDS OF TESTING	ACCREDITED TEST METHODS
Metal suspension systems	ASTM Standard C 635
Wood-plastic composites and plastic lumber	ICC-ES Acceptance Criteria AC174 (except sections 3.8 and 3.9) and ICC-ES Acceptance Criteria 109 (except sections 4.3 and 4.4); ASTM Standards D 790, D 6108, D 6109, D 6111, D 6112, D 6117, D 6341, D 6435 and D 6662; AAMA 2200

July 1, 2005
Commencement Date

C. P. Ramani, P.E.
President

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United States Department of Commerce
National Institute of Standards and Technology

NVLAP®

Certificate of Accreditation to ISO/IEC 17025:1999

NVLAP LAB CODE: 100421-0

PFS Corporation

Madison, WI

is recognized by the National Voluntary Laboratory Accreditation Program for conformance with criteria set forth in NIST Handbook 150:2001 and all requirements of ISO/IEC 17025:1999.
Accreditation is granted for specific services, listed on the Scope of Accreditation, for:

WOOD-BASED PRODUCTS

2006-01-01 through 2006-12-31

Effective dates

For the National Institute of Standards and Technology

National Voluntary
Laboratory Accreditation Program

SCOPE OF ACCREDITATION TO ISO/IEC 17025:1999

PFS Corporation
2402 Daniels Street
Madison, WI 53718-6798
Mr. James P. Van Schoyck
Phone: 608-224-5529 Fax: 608-223-5560
E-Mail: James@pfscorporation.com
URL: http://www.pfscorporation.com

WOOD-BASED PRODUCTS **NVLAP LAB CODE 100421-0**

NVLAP Code	*Designation / Description*
General Wood Products	
23/G01	ASTM D906 (CSA 0112.0-M Series 1977) Strength Properties of Adhesives in Plywood Type Construction in Shear by Tension Loading (CSA Standards for Wood Adhesives, Sec. 0112.0-M: Clause 3.2: Plywood Shear Test)
23/G02	ASTM D1037 (Part A, Sec. 11-20) Evaluating the Properties of Wood-Base Fiber and Particle Panel Materials-Part A, Sec. 11-20: Static Bending
23/G03	ASTM D1037 (Part A, Sec. 28-33) Evaluating the Properties of Wood-Base Fiber and Particle Panel Materials, Part A, Sec. 28-33: Tensile Strength Perpendicular to Surface
23/G04	ASTM D2395 (Method A) Specific Gravity of Wood and Wood-Base Materials, Method A: Volume by Measurement
23/G05	ASTM D2718 Structural Panels in Planar Shear (Rolling Shear)
23/G08	ASTM D4442 (Method A) Direct Moisture Content Measurement of Wood and Wood-Base Materials, Method A: Primary Oven-Drying
23/G09	ASTM D4442 (Method B) Direct Moisture Content Measurement of Wood and Wood-Base Materials, Method B: Secondary Oven-Drying

2006-01-01 through 2006-12-31
Effective dates

For the National Institute of Standards and Technology

WOOD-BASED PRODUCTS **NVLAP LAB CODE 100421-0**

NVLAP Code	*Designation / Description*
23/G10	ASTM E72 (Sec. 14) Strength Tests of Panels for Building Construction: Racking Load
23/G11	ASTM E72 (Sec. 15) Strength Tests of Panels for Building Construction: Racking Load (Wet)
23/G12	ASTM E564 Static Load Test for Shear Resistance of Framed Walls for Buildings
23/G13	ASTM E695 Measuring Relative Resistance of Wall, Floor, and Roof Construction to Impact Loading
23/G14	AFG-01-84 (Sec. 3.1) Adhesives for Field-Gluing Plywood to Wood Framing, Sec. 3.1: Shear Strength (APA)
23/G15	AFG-01-84 (Sec. 3.2) Adhesives for Field-Gluing Plywood to Wood Framing, Sec. 3.2: Durability (APA)
23/G16	ASTM E489 Tensile Strength Properties of Metal Connector Plates
23/G17	ASTM E767 Shear Strength Properties of Metal Connector Plates
23/G18	ASTM D1761 (Sec. 41-52) Mechanical Fasteners in Wood, Sec. 41-52: Joist Hanger Tests
23/G20	ASTM E72 (Sec. 11, 17, 20) Strength Tests of Panels for Building Construction: Transverse Load
23/G21	ASTM E72 (Sec. 13, 18, 21) Strength Tests of Panels for Building Construction: Concentrated Load
23/G22	ASTM D5764 Evaluating Dowel-Bearing Strength of Wood and Wood-Base Products
23/G23	ASTM E1803 Determining Structural Capacities of Insulated Panels

2006-01-01 through 2006-12-31

Effective dates

For the National Institute of Standards and Technology

WOOD-BASED PRODUCTS **NVLAP LAB CODE 100421-0**

NVLAP Code	*Designation / Description*
23/G24	ASTM D2394 (Sec. 33-37) Simulated Service Testing of Wood and Wood-Base Finish Flooring: Coefficient of Friction

Hardwood Plywood

23/H01	HP-1 (Sec. 4.3) Interim Voluntary Standard for Hardwood and Decorative Plywood, Sec. 4.3: Dry Shear
23/H02	HP-1 (Sec. 4.4) Interim Voluntary Standard for Hardwood and Decorative Plywood, Sec. 4.4: Cyclic- Boil Shear
23/H03	HP-1 (Sec. 4.6) Interim Voluntary Standard for Hardwood and Decorative Plywood, Sec. 4.6: Three-Cycle Soak
23/H04	ASTM E96 Water Vapor Transmission of Materials

Particleboard and Medium-Density Fiberboard

Formaldehyde

23/T01	ASTM E1333 Determining Formaldehyde Concentrations in Air and Emission Rates from Wood Products Using a Large Chamber
23/T02	FTM 1-83 Small Scale Method for Determining Formaldehyde Emissions from Wood Products: Two Hour Desiccator
23/T04	ASTM D5582 Determining Formaldehyde Levels from Wood Products Using a Desiccator

Physical/Mechanical Properties

23/P01	ASTM D1037 (Part A, Sec. 21-27) Evaluating the Properties of Wood-Base Fiber and Particle Panel Materials, Part A, Sec. 21-27: Tensile Strength Parallel to Surface

2006-01-01 through 2006-12-31

Effective dates

For the National Institute of Standards and Technology

WOOD-BASED PRODUCTS **NVLAP LAB CODE 100421-0**

NVLAP Code	*Designation / Description*
23/P02	ASTM D1037 (Part A, Sec. 61-67) Evaluating the Properties of Wood-Base Fiber and Particle Panel Materials, Part A, Sec. 61-67: Direct Screw Withdrawal Test
23/P03	ASTM D1037 (Part A, Sec. 68-73) Evaluating the Properties of Wood-Base Fiber and Particle Panel Materials, Part A, Sec. 68-73: Hardness Test
23/P04	ASTM D1037 (Part A, Sec. 81-86) Evaluating the Properties of Wood-Base Fiber and Particle Panel Materials, Part A, Sec. 81-86: Shear Strength in the Plane of the Board
23/P05	ASTM D1037 (Part A, Sec. 100-107) Evaluating the Properties of Wood-Base Fiber and Particle Panel Materials, Part A, Sec. 100-107: Water Absorption and Thickness Swelling
23/P06	ASTM D1037 (Part A, Sec. 108-111) Evaluating the Properties of Wood-Base Fiber and Particle Panel Materials, Part A, Sec. 108-111: Linear Variation with Change in Moisture Content
23/P07	ASTM D1037 (Part A, Sec. 112-118) Evaluating the Properties of Wood-Base Fiber and Particle Panel Materials, Part A, Sec. 112-118: Accelerated Aging
23/P08	ASTM D1037 (Part A, Sec. 120-121) Evaluating the Properties of Wood-Base Fiber and Particle Panel Materials, Part A, Sec. 120-121: Moisture Content and Specific Gravity
23/P09	ANSI A208.1 (Sec. 3.3.11) Particleboard, Sec. 3.3.11: Concentrated Loading

Sandwich Constructions

23/X01	ASTM C273 Shear Properties in Flatwise Plane of Flat Sandwich Constructions or Sandwich Cores
23/X02	ATSM C297 Tensile Strength of Flat Sandwich Constructions in Flatwise Plane

2006-01-01 through 2006-12-31

Effective dates

For the National Institute of Standards and Technology

WOOD-BASED PRODUCTS **NVLAP LAB CODE 100421-0**

NVLAP Code	*Designation / Description*
23/X03	ASTM C365 (Method A) Flatwise Compressive Strength of Sandwich Cores, Method A
23/X04	ASTM C393 Flexural Properties of Flat Sandwich Constructions
23/X05	ASTM C480 Flexure-Creep of Sandwich Constructions
23/X06	ASTM C481 Laboratory Aging of Sandwich Constructions
23/X07	ASTM D1183 Resistance of Adhesive to Cyclic Laboratory Aging Conditions

Structural Composite Lumber, Glulam, I-Joists, Laminated Veneer Lumber

23/J01	ASTM D143 (Sec. 8) Small Clear Specimens of Timber, Sec. 8: Static Bending
23/J02	ASTM D143 (Sec. 14) Small Clear Specimens of Timber, Sec. 14: Shear Parallel to Grain
23/J03	ASTM D143 (Sec. 16) Small Clear Specimens of Timber, Sec. 16: Tension Parallel to Grain
23/J04	ASTM D198 (Sec. 4-11) Static Tests of Timbers in Structural Sizes, Sec. 4-11: Flexure
23/J06	ASTM D905 (CSA 0112.0-M Series 1977) Strength Properties of Adhesive Bonds in Shear by Compression Loading (CSA Standards for Wood Adhesives, Sec. 0112.0-M: Clause 3.1: Shear Strength by Compression Loading)
23/J07	ASTM D1037 (Part A, Sec. 87-90) Evaluating the Properties of Wood-Base Fiber and Particle Panel Materials, Part A, Sec. 87-90: Glue-Line Shear (Block Type)
23/J08	ASTM D1101 Integrity of Glue Joints in Structural Laminated Wood Products for Exterior Use

2006-01-01 through 2006-12-31

Effective dates

For the National Institute of Standards and Technology

WOOD-BASED PRODUCTS **NVLAP LAB CODE 100421-0**

NVLAP Code	*Designation / Description*
23/J09	ASTM D1761 (Sec. 1-11) Mechanical Fasteners in Wood, Sec. 1-11: Nail, Staple, or Screw Withdrawal
23/J10	ASTM D2559 (Shear) Adhesives for Structural Laminated Wood Products for Use Under Exterior (Wet Use) Exposure Conditions: Resistance to Shear by Compression Loading
23/J11	ASTM D2559 (Delamination) (CSA 0112.0-M Series 1977) Adhesives for Structural Laminated Wood Products for Use Under Exterior (Wet Use) Exposure Conditions: Resistance to Delamination During Accelerated Exposure (CSA Standards for Wood Adhesives, Sec. 0112.0-M: Clause 3.3, Delamination Test)
23/J12	ASTM D4688 Evaluating Structural Adhesives for Fingerjointing Lumbers
23/J13	AITC 200 (T106) Inspection Manual for Structural Glued Laminated Timber, T106: Strip Tension Test for End Joints (Used in Lamination Repair) (except for "or at a load rate that is approved by the AITC Inspection Bureau," Sec. 7.5.8.1)
23/J14	AITC 200 (T107) Inspection Manual for Structural Glued Laminated Timber, T107: Shear Test
23/J15	AITC 200 (T110) Inspection Manual for Structural Glued Laminated Timber, T110: Cyclic Delamination
23/J16	AITC 200 (T114) Inspection Manual for Structural Glued Laminated Timber, T114: Bending Test for End Joints
23/J17	AITC 200 (T116) Inspection Manual for Structural Glued Laminated Timber, T116: Modulus of Elasticity of E-Rated Lumber by Static Loading
23/J21	ASTM D3535 (CSA 0112.0-M Series 1977) Resistance to Deformation Under Static Loading for Structural Wood Laminating Adhesives Used Under Exterior (Wet Use) Exposure Conditions (CSA Standards for Wood Adhesives, Sec. 0112.0-M: Clause 3.4: Creep Test)

2006-01-01 through 2006-12-31

Effective dates

For the National Institute of Standards and Technology

WOOD-BASED PRODUCTS **NVLAP LAB CODE 100421-0**

NVLAP Code	*Designation / Description*
Structural Use Panels	
23/S01	ASTM D3044 Shear Modulus of Plywood
23/S03	ASTM D3501 (Method B) Plywood in Compression, Method B: Compression Test for Large Specimens
23/S04	ASTM E661 Performance of Wood and Wood-Based Floor and Roof Sheathing Under Concentrated Static and Impact Loads
23/S05	PS-1 (Sec. 6.1.5.2) Construction and Industrial Plywood, Sec. 6.1.5.2: Vacuum Pressure
23/S06	PS-1 (Sec. 6.1.5.3) (CAN/CSA-0325.1-88) Construction and Industrial Plywood, Sec. 6.1.5.3: Boiling (Test Methods for Construction Sheathing, Clauses 3.1.13: Boiling; 5.15: Plywood Shear)
23/S07	PS-2 (Sec. 6.4.1) (CAN/CSA-0325.1-88) Wood-Based Structural-Use Panels, Sec 6.4.1: Performance Under Concentrated Static and Impact Loads (Test Methods for Construction Sheathing, Clause 5.26: Concentrated Static and Impact Loads)
23/S08	PS-2 (Sec. 6.4.2) (CAN/CSA-0325.1-88) Wood-Based Structural-Use Panels, Sec. 6.4.2: Performance Under Uniform Loads (Test Methods for Construction Sheathing, Clause 5.27: Uniformly Distributed Loads)
23/S09	PS-2 (Sec. 6.4.4) (CAN/CSA-0325.1-88) Wood-Based Structural-Use Panels, Sec. 6.4.4: Fastener-Holding Performance, Lateral Loads, Direct Withdrawal Loads (Test Methods for Construction Sheathing, Clauses 5.23: Nail Lateral Resistance; 5.24: Nail Withdrawal Resistance)
23/S10	PS-2 (Sec. 6.4.7) (CAN/CSA-0325.1-88) Wood-Based Structural-Use Panels, Sec. 6.4.7: Linear Expansion and Thickness Swell Measured from Oven Dry to Vacuum-Pressure Soak (Test Methods for Construction Sheathing, Clause 5.8: Linear Expansion - Oven Dry to Vacuum Pressure Soak)

2006-01-01 through 2006-12-31

Effective dates

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WOOD-BASED PRODUCTS **NVLAP LAB CODE 100421-0**

NVLAP Code	*Designation / Description*
23/S11	PS-2 (Sec. 6.4.8) (CAN/CSA-0325.1-88) Wood-Based Structural-Use Panels, Sec. 6.4.8: Linear Expan. and Thick. Swell Measured after Wetting on One Side (Test Methods for Construct. Sheath. , Clauses 5.10: Linear Expan.-One Side Wett.; 5.11: Thick. Swell-One Side Wett.)
23/S12	PS-2 (Sec. 6.4.9) (CAN/CSA-0325.1-88) Wood-Based Structural-Use Panels, Sec. 6.4.9: Linear and Thickness Expansion Measured by Exposure to Relative Humidity (Test Methods for Construction Sheathing, Clause 5.9: Linear Expansion - 50 to 90% Relative Humidity)
23/S13	PS-2 (Sec. 6.4.17) (CAN/CSA-0325.1-88) Wood-Based Structural-Use Panels, Sec. 6.4.17: Moisture Cycle for Quality Assurance (Single Cycle Test) (Test Methods for Construction Sheathing, Clause 3.1.7: Single-Cycle Soak)
23/S14	PS-2 (Sec. 6.4.18) (CAN/CSA-0325.1-88) Wood-Based Structural-Use Panels, Sec. 6.4.18: Moisture Cycle for Delamination and Strength Retention (Six-Cycle Test) (Test Methods for Construction Sheathing, Clause 3.1.6: Six-Cycle Soak)
23/S15	PS-2 (Sec. 6.4.19) (Supplement No.1-92 to CAN/CSA-0325.1-88) Wood-Based Structural-Use Panels, Sec. 6.4.19: Bond Durability Associated with Knotholes (Test Methods for Construction Sheathing, Clause 5.32: Concentrated Static and Impact Loads at Location of Defect)
23/S16	PS-2 (Sec. 6.4.20) (Supplement No.1-92 to CAN/CSA-0325.1-88) Wood-Based Structural-Use Panels, Sec. 6.4.20: Radial Probe (Test Methods for Construction Sheathing, Clause 5.31: Radial Probe Test)

2006-01-01 through 2006-12-31

Effective dates

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