

# PERRY JOHNSON LABORATORY ACCREDITATION, INC.

### Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

### PSILab, Inc.

117 South Sunset St. Suite I, Longmont, CO 80501

(Hereinafter called the Organization) and hereby declares that Organization is accredited in accordance with the recognized International Standard:

#### ISO/IEC 17025:2017

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

## Chemical, Environmental, Mechanical and Thermodynamic Testing (As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

President

Initial Accreditation Date:

Issue Date:

Expiration Date:

Decemeber 23, 2015

February 18, 2024

April 30, 2026

Accreditation No.:

Certificate No.:

Tracy Szerszen

86043

L24-143

Perry Johnson Laboratory Accreditation, Inc. (PJLA) 755 W. Big Beaver, Suite 1325 Troy, Michigan 48084

The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: <a href="www.pjlabs.com">www.pjlabs.com</a>



#### PSILab, Inc.

117 South Sunset St. Suite I, Longmont, CO 80501 Contact Name: Mr. Danny Villarreal Phone: (720) 204-1529

Accreditation is granted to the facility to perform the following testing:

FLEX CODE	FIELD OF TEST	ITEMS, MATERIALS, OR PRODUCTS TESTED	COMPONENT, CHARACTERISTIC, PARAMETER TESTED	SPECIFICATION OR STANDARD METHOD	TECHNOLOGY OR TECHNIQUE USED
F1, F2	Mechanical F	Polymers, Pipe	Izod Impact Resistance	ASTM D256	Impact tester
F1, F2		Materials, etc.	Pipe Stiffness and Flattening	ASTM D2412	Universal testing machine
F1, F2			Pipe Impact	ASTM D2444	Drop impact tower
F1, F2	1		PVC Cell Classification	ASTM D1784	2 Roll mill, Universal testing machine
F1, F2			PE Cell Classification	ASTM D3350	Compression molder, Universal testing machine, etc.
F1, F2	1		PVC Pipe and Fittings	ASTM D2665	Universal testing machine
F1, F2			Slow Crack Growth Resistance of PE Materials	ASTM F2136	Stress crack resistance tester
F1, F2			Stress Crack Resistance of PE Materials	ASTM F3181	
F1, F2			Slow Crack Growth Resistance of PE Materials	ASTM F1473	
F1, F2			Standard Test Method for Environmental Stress- Cracking of Ethylene Plastics	ASTM D1693	
F1, F2	1		Tensile Properties	ASTM D638	Universal testing
F1, F2	1		Flexural Properties	ASTM D790	machine
F1, F2	1		Flexural Properties	ISO178	<u>-</u>
F1, F2			Flexural Properties – Curved Hoop Samples	ISO11296	
F1, F2			Deflection Temperature Under Load	ASTM D648	
F1, F2			PE and PVC Molding for Test Specimen Preparation	ASTM D4703	Compression molder
F1, F2		Polymer and Composite Materials	Flexural Creep and Tensile Creep	ASTM D2990	Creep tester
F1, F2		Pipe	Sustained Pressure	ASTM D1598	Hydrostatic testing equipment
F1, F2			Sustained Pressure	ISO1167	Hydrostatic testing equipment



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F1, F2	Mechanical <sup>F</sup>	Thermoplastic Pipe	Hydrostatic Design Basis/Pressure Design Basis	ASTM D2837	Hydrostatic testing equipment
F1, F2			Long-term Hydrostatic Strength (e.g. HDB)	ISO9080	
F1, F2			Pressure Pipe Joints using Flexible Elastomeric Seals	ASTM D3139	
F1, F2			Drain and Sewer Pipe Joints using Flexible Elastomeric Seals	ASTM D3212	
F1, F2			Complete Specification	AASHTO M252	Universal testing
F1, F2				AASHTO M294	machine, etc.
F1, F2				AASHTO M304	-
F1, F2				AASHTO M330	-
F1, F2		Plastic Piping System Joints	Constant Tensile Load Joint Test	ASTM F1588	CTLJT tester
F1, F2		Plastic Mechanical Fittings	Longitudinal Tensile Strength, Hydrostatic Strength, etc.	ASTMF1924	Universal testing machine  Hydrostatic testing equipment  Dimensional, Universal testing machine, Hydrostatic testing equipment
F1, F2		Thermoplastic or Reinforced Plastic Pipe	Apparent Tensile Strength (Hoop Tensile Strength)	ASTM D2290	
F1, F2		Thermoplastic Piping Materials or Pipe	Hydrostatic Design Basis/Pressure Design Basis	PPI TR-3	
F1, F2		Fiberglass Pipe	Hydrostatic Design Basis/Pressure Design Basis (Static only)	ASTM D2992	
F1, F2	_	Pipe	Quick Burst Pressure	ASTM D1599	
F1, F2		PVC Pipe	Dimensions, Sustained Pressure, Burst Pressure, Flattening, Extrusion Quality, Ring-Tensile	AWWA C900	
F1, F2		Oriented PVC Pipe	Dimensions, Accelerated Regression, Sustained Pressure, Burst Pressure, Flattening, Extrusion Quality, Apparent Hoop Tensile	AWWA C909	
F1, F2		CIPP Thermosetting Resin Sewer Pipe	Wall Thickness, Flexural and Tensile Properties	ASTM D5813	Dimensional, Strain gage, Universal testing machine



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F1, F2	Mechanical F	Pulled-in-Place CIPP	Wall Thickness,	ASTM F1743	Dimensional,
		Thermosetting Resin	Flexural and Tensile		Universal testing
	=	Pipe	Properties		machine
F1, F2		CIPP Thermosetting	Wall Thickness,	ASTM F1216	
		Resin Sewer Pipe	Flexural and Tensile		
F1, F2	-	Pulled-in-Place GRP-	Properties Complete	ASTM F2019	<u> </u>
$\Gamma 1, \Gamma 2$		CIPP	Specification	ASTW1 F2019	
F1, F2	-	Thermosetting Pipe and Fittings	Dimensions	ASTM D2122	Dimensional
F1, F2		Fiberglass Pipe	Dimensions	ASTM D3567	
F1, F2	1	Polymers	Complete	ASTM F876	Dimensional,
			Specification		Universal testing machine, Hydrostatic testing equipment
F1, F2		Polyethylene Pipe	Guided Side Bend	ASTM F3183	GSB tester
F1, F2		Polymers	Compression	ASTM D695	Universal testing machine
F1, F2			Durometer Hardness	ASTM D2240	A & D scales
F1, F2	Environmental <sup>F</sup>		Density by Gradient Column	ASTM D1505	Balance
F1, F2			Density by Ultrasound	ASTM D4883	DS 500 Sonic Transducer Instrument
F1, F2	_		Melt Flow Rate	ASTM D1238	MFR tester
F1, F2	-		Loss of Ignition	ASTM D2584	Muffle furnace
F1, F2	1		Ash Content	ASTM D5630	-
F1, F2	/		Flammability of Plastics	ASTM D635	
F1, F2		PVC Pipe	Heat Reversion	ASTM F1057	Oven
F1, F2	1	PVC Fittings	Heat Reversion	ASTM F610	1
F1, F2	1	PE Pipe and Materials	Carbon Black Content	ASTM D4218	Muffle furnace
F1, F2		Fiberglass Pipe	Strain Corrosion	ASTM D3681	Universal testing machine, Strain gage
F1, F2		PVC Pipe and Fittings	Acetone Immersion	ASTM D2152	Fume hood
F1, F2		Standard Practices for Evaluating the Resistance of Plastics to Chemical Reagents	Chemical exposure of Plastics	ASTM D543	





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		TESTED	PARAMETER TESTED	METHOD	
F1, F2	Thermodynamic F	Polyolefin Pipe and	Oxidative-Induction	ASTM D3895	Differential scanning
		Materials	Time by DSC		calorimeter
F1, F2			Transition Temperatures	ASTM D3418	
			and Enthalpies of Fusion		
			of Polymers by DSC		
F1, F2		Polymers, Pipe	Glass Transition	ASTM E1356	
		Materials, etc.	Temperatures by DSC		
F1, F2	Chemical F	Polymers,	Fourier-Transition	ASTM E334	FTIR bench
		Unknown	Infrared Spectroscopy		
		Materials, etc.			
F1, F2		Polymers	PEX Crosslinking	ASTM D2765	Fume hood
			Content		

1. The presence of a superscript F means that the laboratory performs testing of the indicated parameter at its fixed location.

#### 2. Flex Code:

- F1-Introduction of the testing of a new item, material, matrix, or product for an accredited test method
- F2-Introduction of a new version of an accredited standard method (with no modifications)
- F3-Introduction of a new parameter/component/analyte to an accredited test method
- F4- Introduction of a new version or modifications of an accredited non-standard method
- F5-Introduction of a new method that is equivalent to an accredited method (using same technology or technique)