



CERTIFICATE OF ACCREDITATION

The ANSI National Accreditation Board

Hereby attests that

Gateway Materials Test Center
2901 East Gate City Blvd., Suite G300
Greensboro, NC 27401

Fulfills the requirements of

ISO/IEC 17025:2017

In the fields of

CALIBRATION and TESTING

This certificate is valid only when accompanied by a current scope of accreditation document.
The current scope of accreditation can be verified at www.anab.org.

A handwritten signature in black ink, appearing to read 'R. Douglas Leonard Jr.', is positioned above a horizontal line.

R. Douglas Leonard Jr., VP, PILR SBU

Expiry Date: 22 December 2021

Certificate Number: ACT-2020



This laboratory 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 (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Gateway Materials Test Center

2901 East Gate City Blvd., Suite G300

Greensboro, NC 27401

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www.gatewaymaterialstestcenter.com

CALIBRATION AND TESTING

Valid to: **December 22, 2021**

Certificate Number: **ACT-2020**

Testing

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Standard Test Method for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials	ASTM D790	Composites	Instron Load Frame
Standard Test Method for Short-Beam Strength of Polymer Matrix Composite Materials and Their Laminates	ASTM D2344/D2344M GMTC-3011	Composites	Instron Load Frame
Standard Test Method for Tensile Properties of Polymer Matrix Composite Materials	ASTM D3039/D3039M GMTC-3008	Composites	Instron Load Frame
Standard Test Method for Constituent Content of Composite Materials	ASTM D3171 Procedures IA, IB and IG	Composites	Balance / Density Determination Kit
Standard Test Method for Tension-Tension Fatigue of Polymer Matrix Composite Materials	ASTM D3479/D3479M Procedure A	Composites	Instron Dynamic Load Frame
Standard Test Method for Shear Properties of Composite Materials by the V-Notched Beam Method	ASTM D5379/D5379M GMTC-3010	Composites	Instron Load Frame



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Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Standard Test Method for Measuring the Damage Resistance of a Fiber-Reinforced Polymer-Matrix Composite to a Concentrated Quasi-Static Indentation Force	ASTM D6264/D6264M	Composites	Instron Load Frame
Standard Test Method for Open-Hole Compressive Strength of Polymer Matrix Composite Laminates	ASTM D6484/D6484M GMTC-3012	Composites	Instron Load Frame
Standard Test Method for Compressive Properties of Polymer Matrix Composite Materials Using a Combined Loading compression (CLC) Test Fixture	ASTM D6641/D6641M GMTC-3009	Composites	Instron Load Frame
Standard Test Method for Measuring the Damage Resistance of a Fiber-Reinforced Polymer Matrix Composite to a Drop-Weight Impact Event	ASTM D7136/D7136M	Composites	Instron Dynatup Impact Tester
Standard Test Method for Flexural Properties of Polymer Matrix Composite Materials	ASTM D7264/D7264M GMTC-3013	Composites	Instron Load Frame
Standard Test Method for Through-Thickness Flatwise Tensile Strength and Elastic Modulus of a Fiber-Reinforced Polymer Matrix Composite Material	ASTM D7291/D7291M	Composites	Instron Load Frame
Standard Practice for Damage Resistance Testing of Sandwich Constructions	ASTM D7766/D7766M	Sandwich Composite	Instron Load Frame & Instron Dynatup Impact Tester
Standard Test Method for Climbing Drum Peel for Adhesives	ASTM D1781 GMTC-3104	Adhesives	Instron Load Frame



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Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Standard Test Method for Shear Properties of Sandwich core Materials	ASTM C273/C273M GMTC-3102	Sandwich Core	Instron Load Frame
Standard Test Method for Flatwise Tensile Strength of Sandwich Constructions	ASTM C297/C297M GMTC-3107	Sandwich Core	Instron Load Frame
Standard Test Method for Edgewise Compressive Strength of Sandwich Constructions	ASTM C364/C364M GMTC-3103	Sandwich Core	Instron Load Frame
Standard Test Method for Flatwise Compressive Properties of Sandwich Cores	ASTM C365/C365M GMTC-3108	Sandwich Core	Instron Load Frame
Standard Test Method for Core Shear Properties of Sandwich Constructions by Beam Flexure	ASTM C393/C393M GMTC-3105	Sandwich Core	Instron Load Frame
Standard Test Method for Density of Sandwich Core Materials	ASTM C271/C271M GMTC-3106	Sandwich Core	Balance Micrometer Height Gage
Standard Test Method for Breaking Strength and Elongation of Textile Webbing, Tape and Braided Material	ASTM D6775 GMTC-3306	Textiles	Instron Load Frame
Interlaminar Fracture Toughness by Double Cantilever Beam Method	Boeing BSS-7273 GMTC-3110	Composites	Instron Load Frame
Standard Test Method for Peel Adhesion of Pressure-Sensitive Tape-Test Methods A&F	ASTM D3330 GMTC-3202 (Method F) GMTC-3203 (Method A)	Adhesives	Instron Load Frame
Standard Test Method for Apparent Shear Strength of Single-Lap-Joint Adhesively Bonded Metal specimens by Tension Loading (Metal-to-Metal)	ASTM D1002 GMTC-3204	Metals	Instron Load Frame

Mechanical

Specific Tests and/or Properties Measured	Specification, Standard, Method, or Test Technique	Items, Materials or Product Tested	Key Equipment or Technology
Standard Test Method for Strength Properties of Adhesives in Shear by Tension Loading of Single-Lap-Joint Laminated Assemblies	ASTM D3165 GMTC-3201	Composites/Metals	Instron Load Frame
Standard Test Method for Tension Testing of Metallic Materials	ASTM E8/E8M GMTC-3205	Metals	Instron Load Frame
Standard Test Method for Rubber Property—Durometer Hardness	ASTM D2240 GMTC-3023	Plastic/Rubber	Durometer
Standard Test Method for Indentation Hardness of Rigid Plastics by Means of Barcol Impressor	ASTM D2583	Plastics	Barcol Impressor

Calibration

Mass and Mass Related

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Load Cells ¹	Up to 50 000 lbs	(0.118 + 0.000 7 RDG) lbs	Load Cells, Weights

Length – Dimensional Measurement

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Calipers ¹	Up to 12 in	(270 + 58L) μ in	Gage Blocks
Micrometers ¹	Up to 12 in	(62 + 32L) μ in	Gage Blocks
Height Gages ¹	Up to 24 in	(420 + 24L) μ in	Gage Blocks
Extensometers ¹	Up to 2 in	Gauge Length: (530 + 200L) μ in Extension: (24 + 80L) μ in	Gage Blocks



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Length – Dimensional Measurement

Parameter/Equipment	Range	Expanded Uncertainty of Measurement (+/-)	Reference Standard, Method, and/or Equipment
Universal Testing Machines ¹	Up to 24 in	(105 + 16L) μ in	Gage Blocks

Calibration and Measurement Capability (CMC) is expressed in terms of the measurement parameter, measurement range, expanded uncertainty of measurement and reference standard, method, and/or equipment. The expanded uncertainty of measurement is expressed as the standard uncertainty of the measurement multiplied by a coverage factor of 2 ($k=2$), corresponding to a confidence level of approximately 95%.

Note:

1. On-site calibration service is available for this parameter, since on-site conditions are typically more variable than those in the laboratory, larger measurement uncertainties are expected on-site than what is reported on the accredited scope.
2. This scope is formatted as part of a single document including Certificate of Accreditation No. ACT-2020.

R. Douglas Leonard Jr., VP, PILR SBU

