

# **CERTIFICATE OF ACCREDITATION**

This is to attest that

#### ADVANCED STRUCTURES AND COMPOSITES CENTER, UNIVERSITY OF MAINE

35 FLAGSTAFF ROAD ORONO, MAINE 04469, U.S.A.

**Testing Laboratory TL-255** 

has met the requirements of AC89, *IAS Accreditation Criteria for Testing Laboratories*, and has demonstrated compliance with ISO/IEC Standard 17025:2017, *General requirements for the competence of testing and calibration laboratories*. This organization is accredited to provide the services specified in the scope of accreditation.

Effective Date March 13, 2023



President

Visit www.iasonline.org for current accreditation information.

International Accreditation Service, Inc.

3060 Saturn Street, Suite 100, Brea, California 92821, U.S.A. | www.iasonline.org

#### ADVANCED STRUCTURES AND COMPOSITES CENTER, UNIVERSITY OF MAINE

www.composites.umaine.edu

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Accredited to ISO/IEC 17025:2017

Effective Date March 13, 2023

Fire	
ASTM D635	Standard test method for rate of burning and/or extent and time of burning of plastics in a horizontal position
ASTM D2584	Standard test method for ignition loss of cured reinforced resins
Physical	
ASTM D696	Standard test method for coefficient of linear thermal expansion of plastics between $-30^{\circ}$ C and $30^{\circ}$ C with a vitreous silica dilatometer
ASTM D792	Standard test methods for density and specific gravity (relative density) of plastics by displacement
ASTM D2395	Standard test methods for density and specific gravity (relative density) of wood and wood-based materials
ASTM D2765	Standard test methods for determination of gel content and swell ratio of crosslinked ethylene plastics (test methods A and C)
ASTM D4442	Standard test methods for direct moisture content measurement of wood and wood-based materials
ASTM D4933	Standard guide for moisture conditioning of wood and wood-based materials
ASTM E831	Standard Test Method for Linear Thermal Expansion of Solid Materials by Thermomechanical Analysis
ASTM F1679	Standard test method for using a variable incidence tribometer (VIT)
Structural	
AISI S904	Standard Test Methods for Determining the Tensile and Shear Strength of Screws
AITC Test T107	Shear Test
AITC Test T110	Cyclic Delamination Test
AITC Test T119	Full Size End Joint Tension Test
ANSI Standard A190.1	Standard for Wood Products- Structural Glued Laminated Timber

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ANSI/APA PRG 320	Standard for Performance-Rated Cross-Laminated Timber (Except Section 6.3)
ASTM C273/C273M	Standard test method for shear properties of sandwich core materials
ASTM C393/C393M	Standard test method for core shear properties of sandwich constructions by beam flexure
ASTM D143	Standard test methods for small clear specimens of timber (excluding sections 10 and 11)
ASTM D198	Standard test methods of static tests of lumber in structural sizes (excluding sections 21-28 and 37-44)
ASTM D245	Standard practice for establishing structural grades and related allowable properties for visually graded lumber
ASTM D256	Standard test methods for determining the izod pendulum impact resistance of plastics
ASTM D638	Standard test method for tensile properties of plastics
ASTM D695	Standard test method for compressive properties of rigid plastics
ASTM D790	Standard test methods for flexural properties of unreinforced and reinforced plastics and electrical insulating materials
ASTM D905	Standard test method for strength properties of adhesive bonds in shear by compression loading
ASTM D953	Standard test method for bearing strength of plastics
ASTM D1037	Standard test methods for evaluating properties of wood-base fiber and particle panel materials
ASTM D1101	Standard test methods for integrity of adhesive joints in structural laminated wood products for exterior use
ASTM D1761	Standard test methods for mechanical fasteners in wood
ASTM D1990	Standard practice for establishing allowable properties for visually-graded dimension lumber from in-grade tests of full-size specimens
ASTM D2339	Standard test method for strength properties of adhesives in two-ply wood construction in shear by tension loading
ASTM D2344/D2344M	Standard test method for short-beam strength of polymer matrix composite materials and their laminates
ASTM D2555	Standard practice for establishing clear wood strength value
ASTM D2559	Standard specification for adhesives for bonded structural wood products for use under exterior exposure conditions
ASTM D3039/D3039M	Standard test method for tensile properties of polymer matrix composite materials

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ASTM D3165	Standard test method for strength properties of adhesives in shear by tension loading of single-lap-joint laminated assemblies
ASTM D3410/D3410M	Standard test method for compressive properties of polymer matrix composite materials with unsupported gage section by shear loading
ASTM D3479/D3479M	Standard test method for tension-tension fatigue of polymer matrix composite materials
ASTM D3518/D3518M	Standard test method for in-plane shear response of polymer matrix composite materials by tensile test of a $\pm45^\circ$ laminate
ASTM D3737	Standard practice for establishing allowable properties for structural glued laminated timber (glulam)
ASTM D3846	Standard test method for in-plane shear strength of reinforced plastics
ASTM D4065	Standard practice for plastics: dynamic mechanical properties: determination and report of procedures
ASTM D4255/D4255M	Standard test method for in-plane shear properties of polymer matrix composite materials by the rail shear method
ASTM D4761	Standard test methods for mechanical properties of lumber and wood-base structural material
ASTM D4812	Standard test method for unnotched cantilever beam impact resistance of plastics
ASTM D5379/D5379M	Standard test method for shear properties of composite materials by the V- notched beam method
ASTM D5456	Standard specification for evaluation of structural composite lumber products
ASTM D5528	Standard test method for mode I interlaminar fracture toughness of unidirectional fiber-reinforced polymer matrix composites
ASTM D5766/D5766M	Standard test method for open-hole tensile strength of polymer matrix composite laminates
ASTM D5868	Standard test method for lap shear adhesion for fiber reinforced plastic (FRP) bonding
ASTM D6109	Standard test methods for flexural properties of unreinforced and reinforced plastic lumber and related products
ASTM D6110	Standard test method for determining the Charpy impact resistance of notched specimens of plastics
ASTM D6115	Standard test method for mode I fatigue delamination growth onset of unidirectional fiber-reinforced polymer matrix composites
ASTM D6641/D6641M	Standard test method for compressive properties of polymer matrix composite materials using a combined loading compression (CLC) test fixture





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ASTM D7032	Standard specification for establishing performance ratings for wood-plastic composite and plastic lumber deck boards, stair treads, guards, and handrails (excluding sections 4.8 and 4.9)
ASTM D7078	Standard test method for shear properties of composite materials by V-notched rail shear method
ASTM D7147	Standard Specification for Testing and Establishing Allowable Loads of Joist Hangers, excluding Section 7.2.
ASTM D7247	Standard Test Method for Evaluating the Shear Strength of Adhesive Bonds in Laminated Wood Products at Elevated Temperature
ASTM D8019	Standard test methods for determining the full section flexural modulus and bending strength of fiber reinforced polymer crossarms assembled with center mount brackets
ASTM E8	Standard Test Methods for Tension Testing of Metallic Materials
ASTM E72	Standard test methods of conducting strength tests of panels for building construction (transverse load only)
ASTM E564	Standard practice for static load test for shear resistance of framed walls for buildings
ASTM E2126	Standard test methods for cyclic (reversed) load test for shear resistance of vertical elements of the lateral force resisting systems for buildings
ASTM F1575	Standard Test Method for Determining Bending Yield Moment of Nails
BS EN 408	Timber structures -structural timber and glued laminated timber - determination of some physical and mechanical properties
ICC ES AC273	Handrails and guards (test methods referenced in section 4.0, excluding section 4.2.8)
IEC TS 61400-23	Wind turbine generator systems – part 23: full-scale structural testing of rotor blades



