



# LABORATORY APPROVAL

Certificate No.:  
LA-DNV-SE-0436-05776-2

Issued:  
2025-12-16

Valid until:  
2027-10-31

Issued for:

## Testing of Materials for Wind Turbines, Fibre Reinforced Plastics

Issued to:

### Material Testing Gurit Americas Inc.

555 Boul. Poirier, Magog, Quebec, J1X7L1, Canada

According to:

### DNV-SE-0436:2022-09 Shop approval in renewable energy

Applying:

### DNV-SE-0441:2021-10 Type and component certification of wind turbines

Based on the document:

CR-LA-DNV-SE-0436-05776-2

Certification Report, dated 2025-12-15

This laboratory approval is valid for the test methods listed in Annex 1.

Changes in the relevant processes (testing and quality) or in responsible personnel as named in this certificate are to be approved by DNV. See Annex 1 for listing of personnel.

Hellerup, 2025-12-16

For DNV Renewables Certification

Hamburg, 2025-12-16

For DNV Renewables Certification

Christopher Harrison

Service Line Leader Component Certification

Bernhard Krüger

Project Manager

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## Personnel

Head of Laboratory: Kellen de Souza  
Deputy Head of Laboratory Jonathan Roy

## List of approved test methods

### Mechanical and Technological

ASTM C-273 <sup>1</sup>	Standard Test Method for Shear Properties of Sandwich Core
ASTM C-297 <sup>2</sup>	Standard Test Method for Flatwise Tensile Strength of Sandwich Constructions
ASTM C-393	Standard Test Method for Core Shear properties of Sandwich core constructions by Beam flexure
ASTM D-1621	Standard Test Method for Compressive Properties of Rigid Cellular Plastics
ASTM D-1623 <sup>3</sup>	Standard Test Method for Tensile and Tensile Adhesion Properties of Rigid Cellular Plastics
ASTM D 2735 <sup>4, 5, 6</sup> (withdrawn standard)	Determination of Effect of Immersion of Syntactic Foam at Pressure
ASTM D-2736 <sup>4, 7</sup> (withdrawn standard)	Practice for determination of Hydrostatic Compressive Strength of Syntactic Foam
ASTM D 2926 <sup>3</sup> (withdrawn standard)	Bulk Modulus of Elasticity of Syntactic Foam (Piston-Cylinder Method)
FOR-0934	Peel test of sandwich panel, internal method
FOR-0941	Impact resistance of sandwich panel, internal method
ISO 844	Rigid cellular plastics - Determination of compression properties
ISO 1922	Rigid cellular plastics - Determination of shear properties

<sup>1</sup> Only in tension mode.

<sup>2</sup> Only pure foam specimens (no sandwich specimens),

<sup>3</sup> Limited to specimen type B.

<sup>4</sup> Specimen geometries are deviating from those specified in the standards.

<sup>5</sup> Compressive test after immersion of foam will be performed according to ASTM D 1621 instead of ASTM D 695.

<sup>6</sup> No cyclic loading, just static loading for a period of 72 h @ 565 PSI as described in FOR-910.6.

<sup>7</sup> Limited to Practice A.

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## Analytical

ASTM C-271	Standard Test Method for Density of Sandwich Core Materials
DIN 53424 (withdrawn standard)	Testing of Rigid Cellular Materials; Determination of Dimensional Stability at Elevated Temperatures with Flexural Load and with Compressive Load
FOR-0910	Water absorption under hydrostatic pressure, internal method
FOR-0952	Resin Uptake of Rigid cellular plastics, internal method
ISO 845	Cellular plastics and rubbers — Determination of apparent density
ISO 2896	Rigid cellular plastics — Determination of water absorption

## The authorized personnel who will sign the test reports:

- Kellen de Souza
- Dennis Bisson