

LABORATORY APPROVAL

Certificate No.:
LA-DNVGL-SE-0436-05776-0

Issued:
2020-03-18

Valid until:
2021-10-31

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:

DNVGL-SE-0436:2018-04 Shop approval in renewable energy

Applying:

DNVGL-SE-0441:2016-06 Type and component certification of wind turbines

Based on the document:

CR-LA-DNVGL-SE-0436-05776-0 Certification Report, dated 2020-03-18

This Laboratory Approval is valid for the test methods listed in Annex 1.

Heads of Laboratory

Kellen de Souza

Changes in the relevant processes (testing and quality) or in responsible personnel as named in this certificate are to be approved by DNV GL.

Hellerup, 2020-03-18

Hamburg, 2020-03-18

For DNV GL Renewables Certification
Bente Vestergaard
Service Line Leader

For DNV GL Renewables Certification
Caroline Cröpelin
Project Manager

LABORATORY APPROVAL – ANNEX 1

Certificate No.: LA-DNVGL-SE-0436-05776-0

Page 2 of 2

List of approved test methods

Mechanical and Technological

ISO 844	Rigid cellular plastics - Determination of compression properties
DIN 53421	Testing of Rigid cellular plastics-Compression test (withdrawn standard)
ASTM D 1621	Standard Test Method for Compressive Properties of Rigid
ISO 1922	Rigid cellular plastics - Determination of shear properties
ASTM C-273	Standard Test Method for Shear Properties of Sandwich Core
ISO 178	Plastics - Determination of flexural properties
ASTM D-790	Standard Test Methods for Flexural Properties of Unreinforced and
	Reinforced Plastics and Electrical Insulating Materials
ASTM D-1623	Standard Test Method for Tensile and Tensile Adhesion Properties of
	Rigid Cellular Plastics
ASTM C-393	Standard Test Method for Core Shear properties of Sandwich core
	constructions by Beam flexure
ASTM C-297	Standard Test Method for Flatwise Tensile Strength of Sandwich
	Constructions
ASTM C-365	Standard Test Method for Flatwise Compressive Properties of Sandwich
	Cores
FOR-0941	Impact resistance of sandwich panel, internal method
FOR-0934	Peel test of sandwich panel, internal method
ASTM D-2736	Practice for determination of Hydrostatic Compressive Strength of
	Syntactic Foam (withdrawn standard)

Analytical

ISO 2896	Rigid cellular plastics — Determination of water absorption
ASTM C-271	Standard Test Method for Density of Sandwich Core Materials
ISO 845	Cellular plastics and rubbers — Determination of apparent density
ASTM C-272	Standard Test Method for Water Absorption of Core Materials for
	Sandwich Constructions
FOR-0910	Water absorption under hydrostatic pressure, internal method
FOR-0952	Resin Uptake of Rigid cellular plastics, internal method
DIN 53424	Testing of Rigid Cellular Materials; Determination of Dimensional
	Stability at Elevated Temperatures with Flexural Load and with
	Compressive Load (withdrawn standard)

The authorized person who will sign the test report

- Kellen de Souza
- Denis Bisson