HIGH-MODULUS GLASS DESIGNED TO POWER LIGHTER, LONGER BLADES

Owens Corning® high-modulus glass family was co-created with blade designers and makers since day one — with a performance increase proven by the most reliable testing protocols[1] and an industry-leading specific modulus[2], it is here to enable longer, lighter, stronger blades cost-effectively.

MORE MODULUS. RELIABLE PERFORMANCE.

H-GLASS
87 – 89 GPa
Sonic Modulus

WINDSTRAND® 3000[3]

[3]H-glass performance vary (87-89 GPa) dependent upon source.

ULTRASPAR™
pultruded planks for spar caps

60 GPa+
Laminate modulus at 70% FVF

ULTRABLADE®
glass fabrics

48 GPa
Laminate modulus at 55% FVF

H² GLASS
91 GPa
Sonic Modulus

WINDSTRAND® 4000
[2]Industry-leading specific modulus

ULTRASPAR™ 2
pultruded planks for spar caps

63 GPa
Laminate modulus at 70% FVF

ULTRABLADE® 2
glass fabrics

51 GPa
Laminate modulus at 55% FVF

New

H³ GLASS
95 GPa
Sonic Modulus

WINDSTRAND® 5000
[2]Industry-leading specific modulus

ULTRASPAR™ 3
pultruded planks for spar caps

66 GPa+
Laminate modulus at 70% FVF

ULTRABLADE® 3
glass fabrics

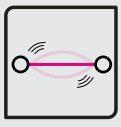
54 GPa[4]
Laminate modulus at 55% FVF

[4]theoretical performance

[1]Meet the Science behind Sonic Modulus

Sonic Modulus is a unique method that puts a single glass fiber into test, enabling the generation of performance data based on the glass fiber physics alone — this is the most reliable, accurate existing glass fiber modulus testing protocols:

A single glass fiber is produced



The glass fiber physics alone is put into test

Several data samples are collected and compared

Other testing protocols, such as ITS and Bulk Modulus, either add resin to the fiber before testing it, or measures a bulk glass (not glass fiber) elasticity modulus instead.

Certifications

Product performance verified by Owens Corning a DNV certified laboratories.

Product manufactured under the APQP4Wind protocols.

Owens Corning scored an A for CDP Climate Change in 2021 and is included in the CDP "A List" for Water Security.

Owens Corning was ranked among the top 1% of all companies rated by EcoVadis with a Platinum Certificate.

Availability

Owens Corning® High-modulus glass are globally available in a WINDSTRAND® single-end roving form factor. Please contact your Owens Corning representative for information on TEX (yield) ranges, and resin systems compatibility in your region.

HOW WE POWER NOW™

Americas

Owens Corning Composite Materials, LLC.
One Owens Corning Parkway
Toledo, OH 43659 USA
1-800-GET-PINK®

Europe

European Owens Corning Fiberglas Sprl.
166 Chaussée de la Hulpe
B-1170 Brussels
Belgium
+32 3 674 8211

Asia Pacific

Owens Corning Shanghai Regional Headquarters
40/F, Pudong Kerry Parkside,
115 Fang Dian Road, Pudong,
Shanghai, 201204, China
+86-21-6101 9666

https://www.owenscorning.com/wind | Composites@owenscorning.com

Pub. No. 10025379. Ultraspar_product data sheet. May 2022. English.