OWENS CORNING® INFRASTRUCTURE SOLUTIONS

OCIS FIBERGLAS™ REBAR
STRONGER, LIGHTER, MORE DURABLE REBAR

Introducing Owens Corning's new and improved solution for concrete reinforcement: Owens Corning Infrastructure Solutions (OCIS) Fiberglas™ Rebar. This product is a significant improvement over our previous generation of product, Aslan 100 Fiberglass Rebar, and complies with ASTM D7957 and CSA S807 material standards.

Product Comparison

PRODUCT NAME	OCIS FIBERGLAS™ REBAR		ASLAN™ 100 FIBERGLASS REBAR
	STRAIGHT BARS	BENT BARS	
MEAN TENSILE MODULUS OF ELASTICITY	8.7 Msi (60.3 GPa)	7.5 Msi (51.7 GPa)	6.7 Msi (46 GPa)
GUARANTEED TENSILE STRENGTH[1]	129 ksi to 145 ksi (889 MPa to 1003 MPa)	102 ksi to 116 ksi (700 MPa to 800 MPa)	60 ksi to 130 ksi (413 MPa to 896 MPa)
STRAIN[1]	1.5% to 1.7%	1.4% to 1.5%	1.19% to 1.94%
GLASS FIBERS	Owens Corning Advantex®		
FIBER MASS CONTENT	≥ 80%	≥ 70%	
BOND-DEPENDENT COEFFICIENT K_b ($1/C_b$)	0.95	1.2	0.90
MOISTURE ABSORPTION IN 24 H AT 50°C [122°F]	≤ 0.1%	≤ 0.25%	
RESIN	Vinyl ester		
SURFACE TREATMENT FOR BONDING MECHANISM WITH CONCRETE	Helical machined surface	Helical deformed surface	Sand coating with helical wrap
COLOR	Greenish-Gray	Gray-Black	White-Translucent
MATERIAL STANDARD COMPLIANCE	ASTM D7957 and CSA S807		ASTM D7957
AVAILABILITY	Available in sizes #2 to #10 in lengths up to 80'	Available in sizes #2 to #8[2]	Not Available

1 Varies by diameter; refer respective product data sheet
2 Refer OCIS Fiberglas™ Rebar Bent Bar Detailing Guide

What Our Experts Say

The tensile modulus of elasticity has been significantly improved on straight and bent bars. For straight bars, the Mean Tensile Modulus of Elasticity has been increased from 6.5msi (45 GPa) to 8.7msi (60 GPa) and for bent bars, the Mean Tensile Modulus of Elasticity has been increased from 6.5msi (45 GPa) to 7.5msi (51 GPa). OCIS Fiberglas™ Rebar straight and bent bars already comply with ASTM D7957 and will comply with the future version of the same standard. Increased tensile modulus of elasticity now means less fiberglass rebar (also known as FRP, GFRP or composite rebar) will be needed than before in some applications like bridge decks leading to significant savings in material and workforce productivity.

OCIS Fiberglas™ Rebar straight bars have a helical machined surface which is more uniform and enhances bond performance with concrete. OCIS Fiberglas™ Rebar straight and bent bars demonstrate excellent bond performance and durability in accelerated aging durability testing. A complete suite of characterization testing data from independent labs is available. Production lot certifications are readily available and traceable to bars via bar markings or bundle tags.

With OCIS Fiberglas™ Rebar, owners and contractors are assured efficient and reliable supply from different facilities to keep projects on time and within budget.

Several large projects (references available) across North America have already successfully used OCIS Fiberglas™ Rebar.

Product Benefits

Extended Service Life of Structures

- OCIS Fiberglas™ Rebar is a proven corrosion resistant reinforcement designed to provide structures with longer service life compared with structures reinforced with steel.

Increased Productivity

- Four times lighter than steel, OCIS Fiberglas™ Rebar can be installed faster with less labor.*

Exceptional Strength

- Ultimate tensile strength of OCIS Fiberglas™ Rebar is twice the yield strength of steel.*

* Based on sample testing of #5 rebar, Fiberglass rebar exhibits linear-elastic behavior up to ultimate tensile strength.

Applications

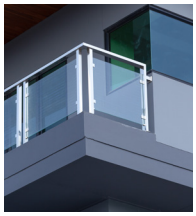
OCIS Fiberglas™ Rebar is designed to reinforce concrete in:

Transportation Structures

- Bridge decks
- Traffic barriers
- Civil roadways
- Soft-eye for tunnels

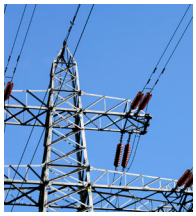
Marine

- Seawalls
- Piles



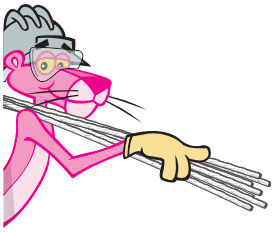
Buildings

- Balconies
- Wall panels
- Foundations



High Voltage & Electromagnetic Fields

- Light & heavy rail
- MRI rooms



HOW WE BUILD NOW™

OWENS CORNING INFRASTRUCTURE SOLUTIONS

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