MATEENBAR™ FIBERGLASS REBAR

STRONGER. LIGHTER. RUSTPROOF.

MATEENBAR Fiberglass Rebar is a stronger, lighter weight, rustproof concrete reinforcement designed to meet the codes and standards you trust, help you increase on-site productivity, and deliver more durable structures.

Product Advantages Compared to Steel

STRONGER
- 2x stronger in tensile strength compared to the same size diameter

LIGHTER
- 4x lighter compared to the same size diameter

RUSTPROOF
- More durable structures

ENHANCED PRO EXPERIENCE
- Heat-free handling
- Not electrically conductive
- Low-Thermal Conductivity
- No thermal cycling impact

Code-Approved and Proven Performance

MATERIAL STANDARDS
- MATEENBAR complies with ASTM D7957, CSA S807 material standards, and EAD 260023-00-030 (Pending CE marking approval).

RESIDENTIAL CONCRETE
- MATEENBAR can be used in residential concrete, including footings and foundation walls as designed using ACI 332 and ACI 440 design methodology.

STRUCTURAL CONCRETE
- MATEENBAR can be used in structural concrete using design codes such as ACI 440.11-22, AASHTO FRP Design Specifications 2018, AFGC 2023 guidelines and the CNR-DT 203/2006.

MASONRY
- MATEENBAR can be used with TMS 402/602-22 Appendix D as reinforcing for masonry walls.

Intended Applications

RESIDENTIAL	CONCRETE REPAIR	COMMERCIAL/ INDUSTRIAL	TRANSPORTATION	MARINE	HIGH VOLTAGE & ELECTROMAGNETIC FIELDS
• Driveways • Sidewalks • Pool Decks • Basement Floors • Basement Walls • Footings • Concrete Masonry • ICF Construction	•Balconies •Tunnel Linings •Replacement of Corroded Rebar	• Parking Slabs • Warehouse Floors • Agricultural Slabs • Loading Docks • Architectural and Structural Precast • Truck Aprons • Pour Back Slabs	• Bridge Decks • Traffic Barriers • Civil Roadways • Soft-Eye for Tunnels	•Seawalls •Piles •Piers	• Light & Heavy Rail • MRI Rooms

Physical & Mechanical Properties

NOMINAL REBAR DIAMETER	LINEAR WEIGHT/ LENGTH	MEASURED CROSS SECTIONAL AREA	CHARACTERISTIC SHORT-TERM TENSILE STRENGTH (f_{ftk0})	CHARACTERISTIC ULTIMATE TENSILE FAILURE LOAD (F)	ULTIMATE TENSILE STRAIN (ε_{ft})	MODULUS OF ELASTICITY (Ef)	FIBER MASS CONTENT
mm	kg/m	mm^2	MPa	kN	%	GPa	%
6	0, 0757	35	>1100	>39	>1, 5%	>50	>80
8	0, 096	44	>1100	>49			
10	0, 165	76	>1000	>83			
12	0, 225	104	>1000	>104			
16	0, 414	194	>1000	>206			
19	0, 593	274	>850	>245			
22	0, 776	362	>850	>313			
25	1, 03	481	>850	>410			
32	1, 603	758	>850	>663			

FIBER MASS CONTENT*	MOISTURE ABSORPTION IN 24 H at 50°C	MOISTURE ABSORPTION TO SATURATION AT 50°C	MEAN GLASS TRANSITION TEMPERATURE (DSC)*	MEAN APPARENT HORIZONTAL SHEAR*	MEAN TRANSVERSE SHEAR STRENGTH*	BOND STRENGTH
%	%	%	°C	MPa	MPa	MPa
≥80	≤0.2	<0,75	≥100	≥45	≥152	≥7,6

Handling & Placement

Handling and installation of MATEENBAR is the same as for steel bars, with a few notes and exceptions:

- Cutting: Do not shear fiberglass bars. Field-cut fiberglass bars using a fine-blade saw, grinder, and carborundum or diamond blade. Sealing the ends of fiberglass bars is not necessary.
- Chairing: Place chairs at a spacing that ensures adequate concrete cover.
- Tying: Use same tying methods as for steel rebar. Tie wire material based on contractor preference.
- Concrete cover should be in accordance with the design guide standard adopted for the region or project. Generally, cover is equal to or greater than two bar diameters to avoid thermal reflective cracking.
- Can easily be field-formed into large radius curves. See web pages for minimum field bend radius.

As with any reinforcement placement, be sure to follow best practices in all phases of your concrete project, from planning to construction, including pouring, curing, joint cutting, and maintenance for optimal performance.

Packaging

NOMINAL REBAR DIAMETER	LINEAR WEIGHT/ LENGTH	WEIGHT PER 6-METER BAR	NUMBER OF BARS PER MASTER BUNDLE	WEIGHT OF A MASTER BUNDLE	NUMBER OF BARS IN A FULL 40' CONTAINER
mm	kg/m	kg	#	kg	#
6	0, 0757	0,45	500	227, 1	55.000
8	0, 096	0,58	500	288, 0	43.000
10	0, 165	0,99	500	495, 0	25.000
12	0, 225	1,35	250	337, 5	18.500
16	0, 414	2,48	200	496, 0	10.000
19	0, 593	3,56	100	356, 0	7.000
22	0, 776	4,66	100	466, 0	5.300
25	1, 03	6,18	50	309, 0	4.000
32	1, 603	9,62	50	481, 0	2.550

Labeling & Certificates

Quality certificates are issued for each supply batch to ensure full traceability of the material. Production lot certificates, traceable by bar marks imprinted at intervals showing the bar diameter, stock order, and production date, are available upon request.

Storage

MATEENBAR is durable in outdoor environments with UV exposure for up to 3 months. Discoloration, fading, or chalking of the surface may occur due to oxidation or UV exposure. For extended outdoor exposure beyond 3 months, it is recommended to keep the bars in their packaging or cover them with a tarp.

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