

# REBARMAT

GFRP REBAR FOR  
FUTURE INFRASTRUCTURE



**Resilience Redefined:**  
Durable, Corrosion-Resistant &  
Cost-Effective Structures!





**REBARMAT** rebars are lightweight high-performance reinforcement bars offering superior strength, durability, and cost-effectiveness compared to traditional reinforcement bars. Specifically engineered for demanding applications, they provide exceptional mechanical stability and superior corrosion-resistance.

---

## **REBARMAT® PRO CHARACTERISTICS\***

Tensile Strength  
**≥ 1100 MPa**

Modulus of elasticity  
**≥ 50 GPa**

Compressive strength  
**≥ 550 MPa**

Rebar density  
**2,2 g/cm<sup>3</sup>**

Bond strength,  
Concrete C20/25  
**≥ 10 MPa**

Service Life  
**100 years**

\* Test reports available on request



---

## REBARMAT® PRO advantages



### Economy

Switching from traditional metal rebar to modern GFRP alternatives can cut overall costs by as much as 50%.



### Strength & Reliability

Tensile strength three times greater than that of traditional steel reinforcement bars.



### Sustainable & Durable

Superior resistance to chemicals and corrosion, providing a service life of up to 100 years—significantly outlasting metal reinforcement.



### Non conductive

Fiberglass rebar does not cause radio interference, magnetize, or conduct electricity.



### Easy shipping

The reduced weight of rebar allows for easy transportation, whether in a car trunk for residential use or in an HGV for larger-scale projects.



### Easy installation

The lighter weight and easy handling of rebar simplify and speed up the installation process for your projects.

## CO2 Neutral

REBARMAT GFRP rebars are produced with a CO2-neutral footprint, achieved through the integration of renewable energy in the manufacturing process. This sustainable innovation positions us as a leading choice for eco-conscious construction projects, reflecting our commitment to advancing environmentally responsible building solutions.



## Sustainable Manufacturing

REBARMAT GFRP rebars are manufactured using an energy-efficient process that substantially lowers the carbon footprint compared to traditional steel reinforcement production.

## Durability and Longevity

GFRP rebars provide exceptional corrosion resistance, significantly extending the lifespan of concrete structures while reducing the frequency of repairs or replacements. This durability minimizes material waste and energy use over time, reinforcing their importance in sustainable construction practices.





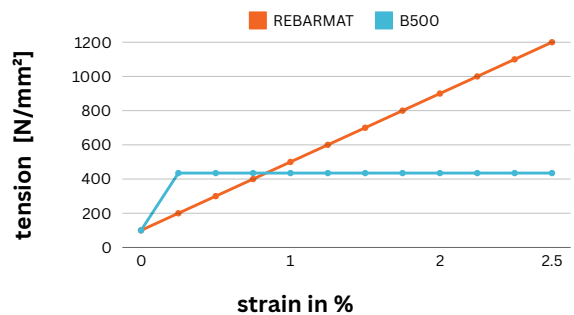
## COMPARISON WITH METAL REBARS **B500**

Steel rebar B500		REBARMAT® PRO	
Nominal diameter *	Tensile force	Nominal diameter *	Tensile force
9 mm	32kN	6 mm	<b>36kN</b>
12 mm	56kN	8 mm	<b>60kN</b>
14 mm	77kN	10 mm	<b>93kN</b>
18 mm	127kN	12 mm	<b>141kN</b>

\*

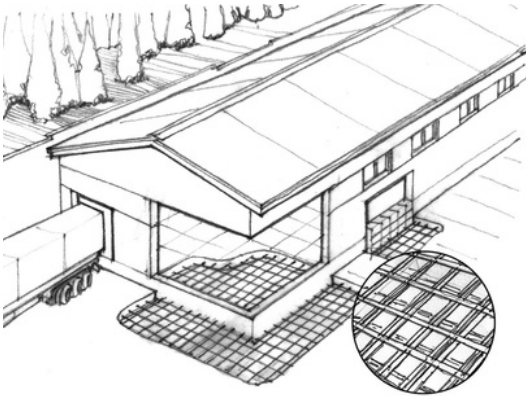


D1 - nominal diameter

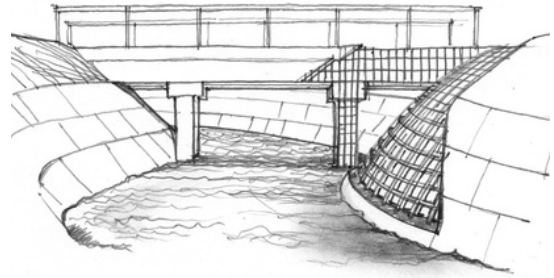


---

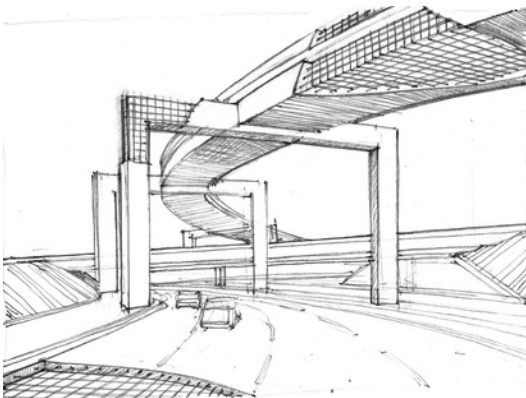
## REBARMAT® PRO USE CASES



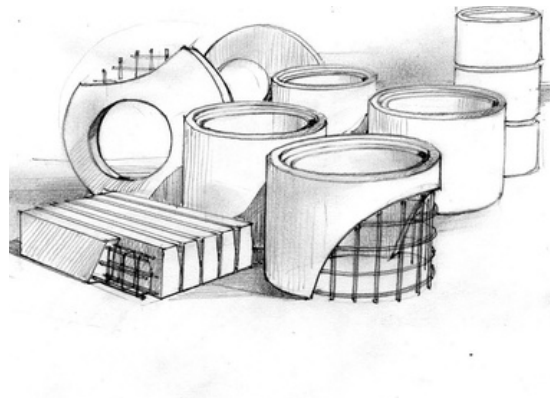
**Reinforcement of foundations and floors**



**Shore and water object reinforcement**



**Road and bridge construction**



**Precast technology**

Rebar's high tensile strength makes it suitable for diverse applications, such as ground-level construction, floor screeds, foundations, roads, sidewalks, and retaining structures.

**NOTE:** Rebar has a low melting point. Take it into consideration during planning phase of your project.

---

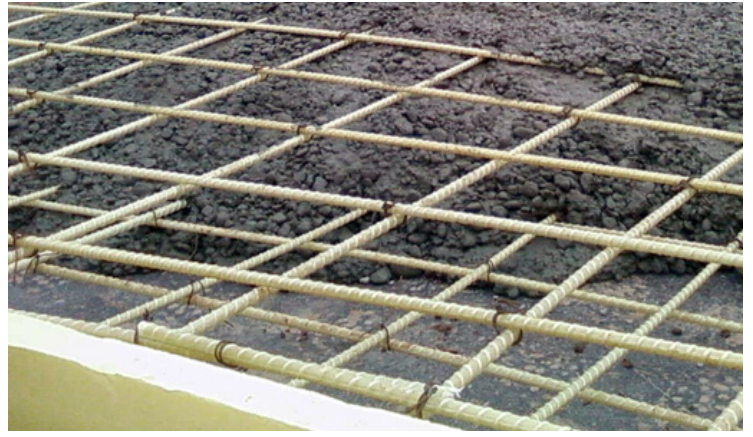


---

## PRODUCTION

Produced in our 2,000 m<sup>2</sup> facility in Latvia with 15 years of expertise, REBARMAT® manufactures CE-marked GFRP rebars certified under EAD 260023-00-0301—the first European standard for GFRP reinforcement. Our production process, powered by solar energy and utilizing high-quality European materials, ensures minimal environmental impact. The lightweight design of GFRP rebars further reduces transportation emissions and simplifies on-site handling, contributing to a significantly lower carbon footprint across their lifecycle.

Our strength lies in our independence from external disruptions, sustained through the exclusive use of European materials sourced from trusted partners. Combined with eco-friendly, solar-powered operations, our facility delivers a production capacity of 6,500,000 meters of composite rebar annually, ensuring reliable supply for diverse construction needs.



---

## USE CASES

**REBARMAT** is setting new standards in building driveways, patios, sidewalks, curbs, industrial floors, parking lots and many other concrete functions that surround us.



---

## Packaging



### Standard bar length

1-12m, other - on request



### Bar diameter

6mm - 24mm



### Meters Per Pallet (coils)

Up to 6500m



### Standard Length Coils

50m, 100m, other - on request



### Standard Coil Size

800mm, 1000mm, 1300mm



### Bars Per Pack

Up to 500pcs

## Contacts

**REBARMAT**

composite rebar

### HMP GROUP LTD

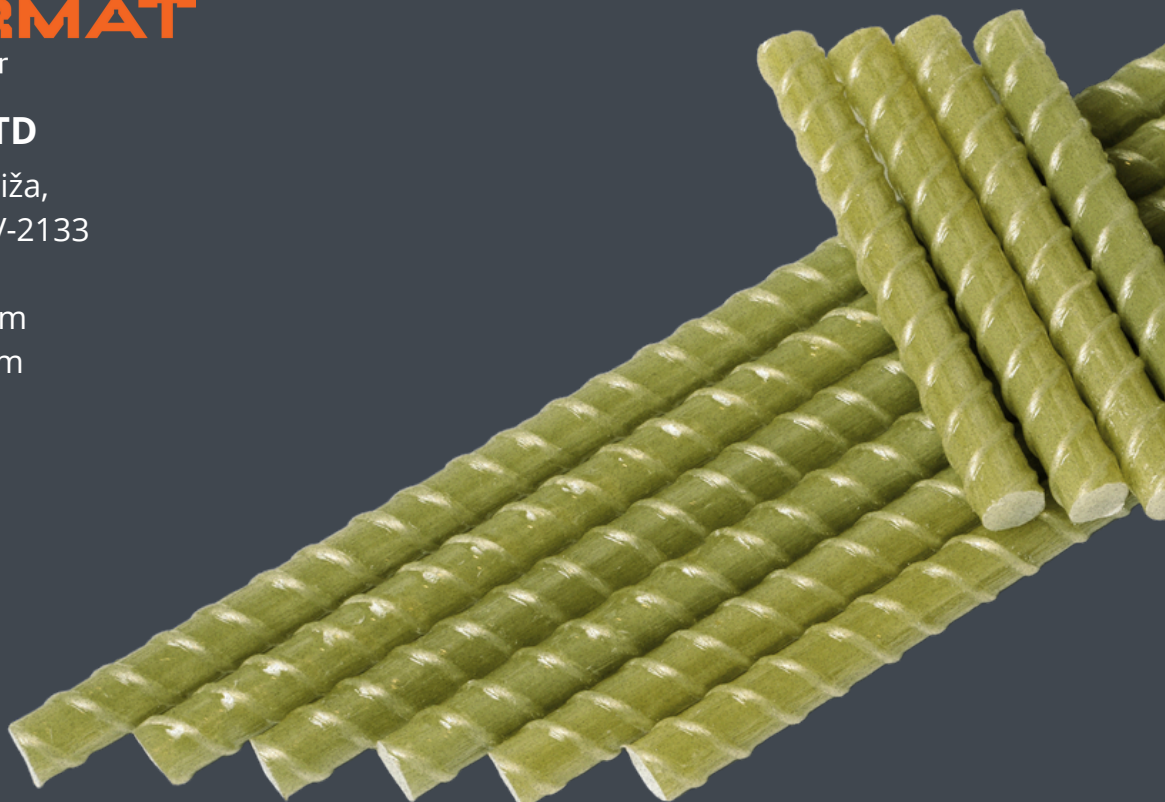
Vecozoli", Zaķumuiža,  
Ropažu novads, LV-2133

+371 29503700

info@rebarmat.com

www.rebarmat.com

---





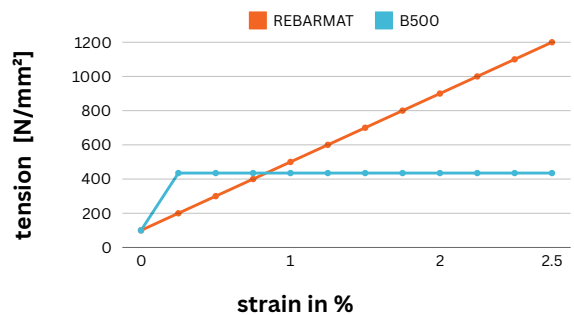
## COMPARISON WITH METAL REBARS **B500**

Steel rebar B500		REBARMAT® PRO	
Nominal diameter *	Tensile force	Nominal diameter *	Tensile force
8 - 10 mm	25kN - 39kN	6 mm	<b>36kN</b>
10 mm - 12 mm	39kN - 56kN	8 mm	<b>60kN</b>
12 mm - 16 mm	56kN - 100kN	10 mm	<b>93kN</b>
16 mm - 20 mm	100kN - 157kN	12 mm	<b>141kN</b>

\*



D1 - nominal diameter





## FRP REBARMAT® PRO REBARS AND STEEL REBARS

Parameters	REBARMAT® PRO	Other FRP rebar manufacturers	Steel rebar B500
Nominal diameter (Core diameter)	<b>8 mm</b>	<b>6,5 - 8 mm</b>	<b>8 mm</b>
Nominal cross sectional area	53,60 mm <sup>2</sup>	48-51 mm <sup>2</sup>	50 mm <sup>2</sup>
Weight	0,112 kg/m	0,086 - 0,110 kg/m	0,420 kg/m
Tensile Strength, MPa	<b>≥ 1100 MPa</b>	<b>800 - 1100 MPa</b>	<b>500 MPa</b>
Young's modulus (N/mm <sup>2</sup> )	≥50,000	45,000 - 50,000	200,000
Tensile force (kN)	<b>60,7 kN</b>	<b>48 - 55 kN</b>	<b>25,14 kN</b>