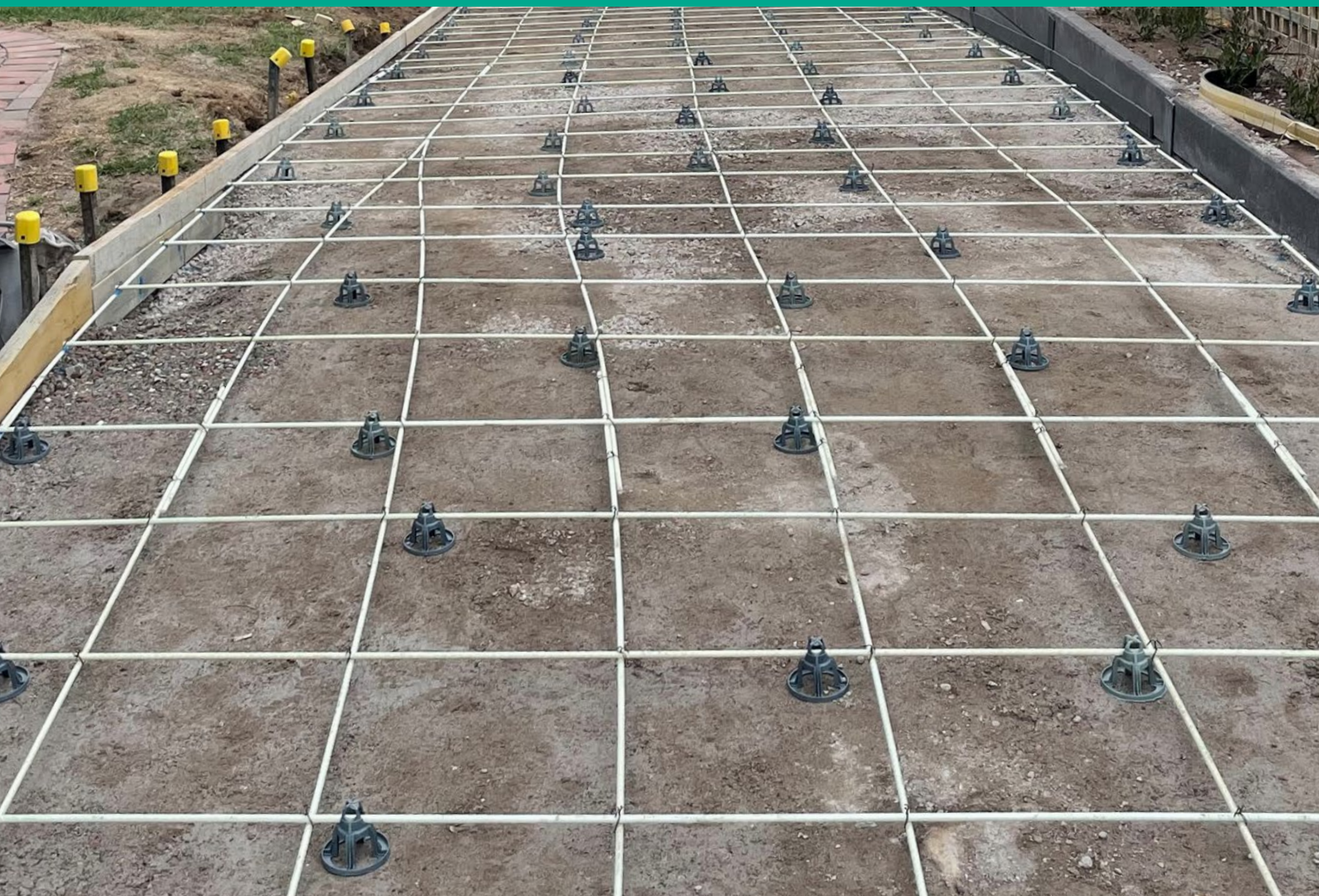


# Composite Fiberglass (GFRP) Rebar

*Ideal for Flat-work / Slab on grade*

**For Concrete Reinforcement - Substitution to Steel Rebar / Steel Mesh**  
Manufactured by Dextra Group



# About Us

Established in 1983, Dextra is a leading manufacturer and distributor of engineered construction products for the building and civil industries.

Dextra is a leader of the composite industry for the past 25 years, manufacturing high quality FRP solutions supplied on large infrastructure projects.

The company excels in offering comprehensive solutions to its customer, with expertise in designing concrete structures reinforced with GFRP rebars.

All Durabar™ GFRP rebars are produced in Dextra ISO-9001 and ISO-14001 certified factory, following the company stringent quality assurance policy.



# Features of Durabar™



## Stronger & Lighter than steel

- 2x the tensile strength of steel
- 1/4 weight of a steel bar in same diameter



## Non-corrosive, non-conductive

- Material doesn't corrode and offer high resistance to chlorides and alkali.
- Particularly suitable for environments exposed to water, salt & humidity.
- Non-conductive. It's the perfect reinforcement solution for high voltage currents and magnetic fields.



## Design optimization

- Better bonding strength than steel, allowing shorter lapping length.
- Can substitute steel bar of larger diameter – or increase the rebar spacing.
- Further saving on the concrete cover = less volume of concrete.



## Simplified Installation

- Delivered in straight bars up to 11.8m or in coils.
- Labor required for installation reduced.

Offering huge benefits in terms of material, labor, transportation & maintenance saving as well as sustainability, Dextra is looking for partner to develop the technology of Fiberglass (GFRP rebar) to replace steel rebar in flatwork application. This would diversify the offer, optimize the resources, and provide new solutions to the end customers. Looking forward to Durabar™ contributing to the worldwide construction industry together with our partners.



# Why choose Durabar™



Stronger & lighter than steel, with 6x to 8x times less material needed than conventional steel rebars.



Material is safe & easy to handle, requiring much less labor for installation, generating both time & money saving.



Durable material, allowing to design for a longer lifetime of the structure. As no maintenance nor repair work is needed, Durabar™ generates savings during the whole project life.

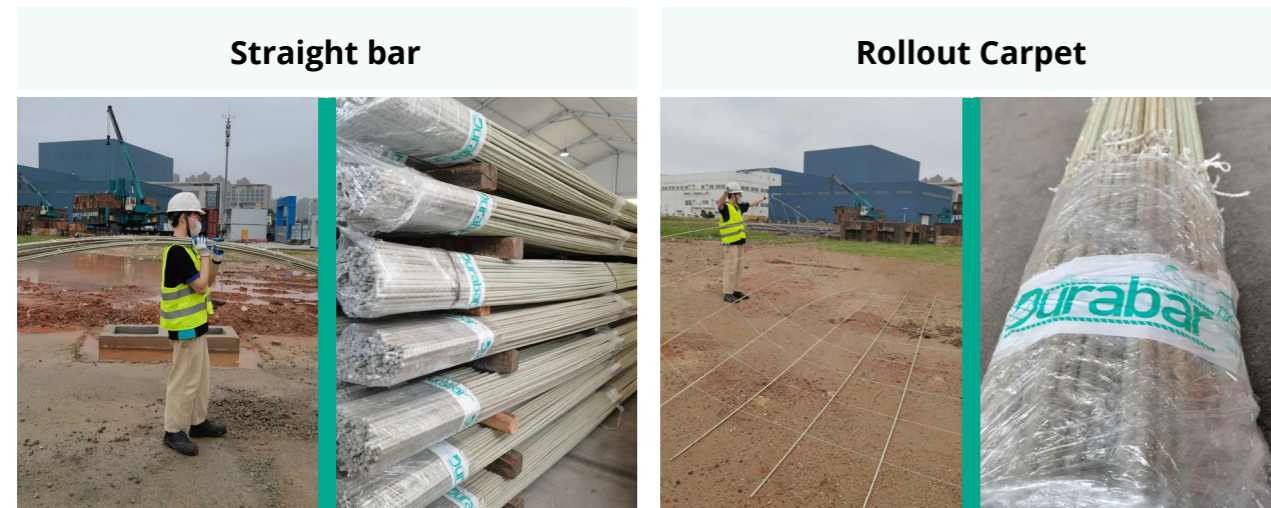


Sustainable material, with significantly less energy required & CO<sub>2</sub> emission, from production stage to transportation & installation.

# Products

Durabar GFRP rebar is available in straight bar and coil packing. Straight bar is recommended to maximize the container load and to save transportation cost. Also, different sizes and length options can be customized and mixed into one container based on market request.

Durabar Rollout Carpet is the latest patented product made from Durabar GFRP rebar. This revolutionary product is designed for ultimate versatility in construction projects. Durabar Rollout Carpet can be tightly rolled for efficient packing. Thanks to the characteristics of GFRP rebar, it can be effortlessly cut in any direction, maximizing material saving.



- For non-structural application.
- Bar from Ø 6mm to Ø 16mm.
- Standard length in 5.8m & 11.8m.
- Coil and customized length is also available.

- Bar from Ø 6mm to Ø 13mm.
- Standard length in 5.8m.
- Customized length from 2m to 5.8m.
- Spacing is freely selectable from 100mm to 600mm.

# Applications

- Slab on grade
- Decorative Concrete
- Agricultural Projects
- Basement Floors
- Parking Slabs
- Architectural Precast
- Residential Foundations
- Pour Back Slabs
- Swimming Pools
- Industrial Slabs
- Driveways
- Sidewalks
- Pool Decks
- Agricultural Slabs
- Paving Projects
- ICF Construction
- Warehouse Floors
- Flatwork



# Datasheet

Physical & Mechanical Properties							
Reference	Bar Dia.	Nominal Cross Sectional Area	Ultimate Tensile		Ultimate Tensile Strain	Modulus of Elasticity	Weight
	mm	mm <sup>2</sup>	kN	MPa	%	GPa	kg/m
Durabar straight bar & rollout carpet	6	32	29.00	910	1.94	47	0.08
	8	45	41.00	910	1.94	47	0.11
	10	71	59.00	830	1.77	47	0.16
	13	129	96.00	760	1.62	47	0.27
	16	199	144.00	725	1.54	47	0.42

Specification for Durabar Rollout Carpet			
Description	Unit	Standard Size	Custom Size
Bar Diameter	mm	10	6, 8, 13, 16
Spacing	mm	500	100 - 600
Bar length	m	5.8	2.0 - 5.8
Quantity	piece	20	∞
Unit Weight	kg/roll	18.5	∞
Expanded Size	m <sup>2</sup>	10 x 5.8	∞ x 5.8

**ACI (American Concrete Institute) Design & Testing Guide**

[ACI 440.1R-15](#)  
Guide for the Design and Construction of Structural Concrete Reinforced with Fiber-Reinforced Polymer (FRP) Bars



[ACI 440.3R-12](#)  
Guide Test Methods For Fiber Reinforced Polymer (FR) Composites For Reinforcing Or Strengthening Concrete And Masonry Structures

[ACI 440.5R-08](#)  
Specification for Construction with Fiber-Reinforced Polymer Reinforcing Bars

[ACI / NEx guide = MNL-6 Year 2023](#)  
Recommended Practice Guidelines for FRP Bars in Pre-Engineered Project

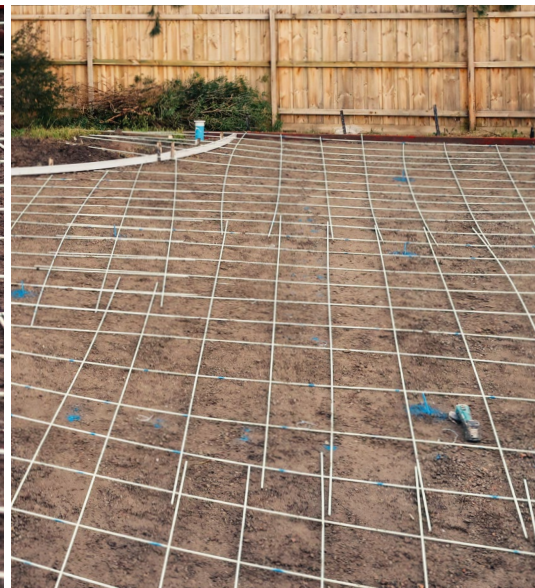
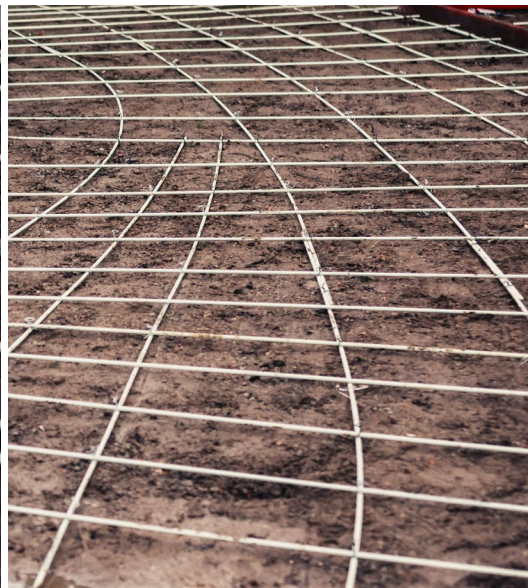
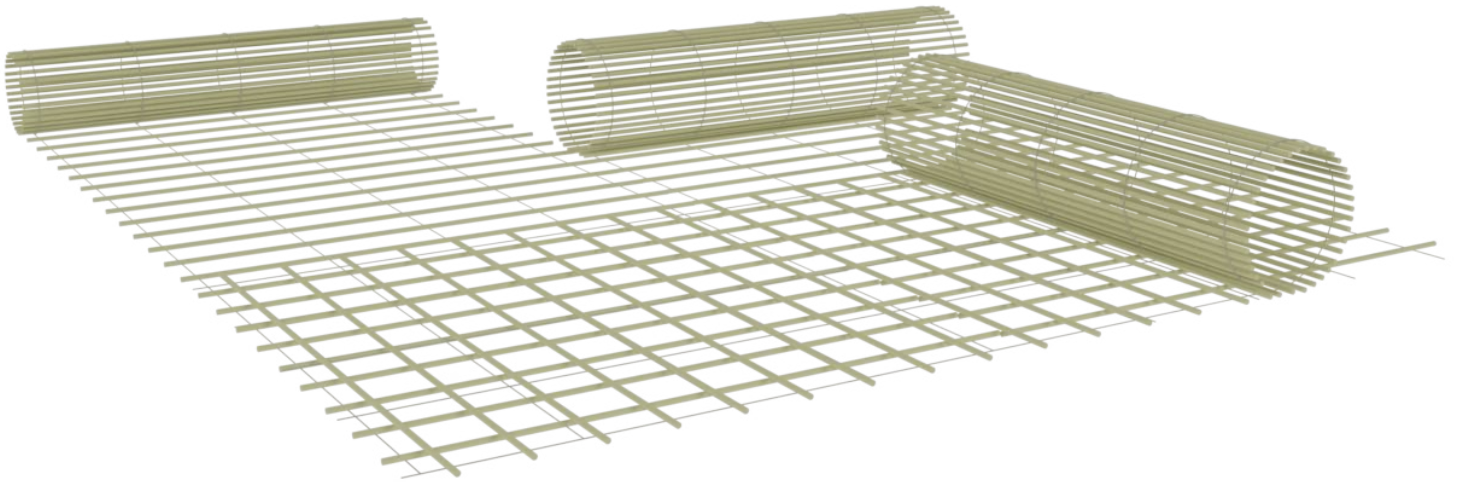
### Handling Placement and Store

- 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.
- DURABAR™ should remain covered and protected from UV exposure until ready for use and placement.
- 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.

Accessory	Availability for Bar Dia. (mm)			
	6	8	10	13
 Chair	✓	✓	✓	x
 Clip	✓	✓	✓	✓

# Worldwide patented technology

makes your installation faster than ever



The information in this catalogue is considered up to date at the time of publication. We reserve the right to make technical and design changes at any time. Dextra shall not accept liability for the accuracy of the information in this publication or for any printing errors.