

## DURABAR™ FEATURES



### STRONGER & LIGHTER THAN STEEL

- 2 times the tensile strength of steel
- 1/4 weight of a steel bar of same diameter
- 4 times more bars can be transported at once



### 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 by 2 to 3 times.
- Perfectly adapted to curved shape
- Easily cuttable with no risk of injury



## WHY CHOOSE DURABAR™?

EPDs underscore a manufacturer's commitment to environmental sustainability, providing transparent and independently verified insights into the lifecycle impacts of their products. Published in the International EPD System, they offer a credible, globally recognized benchmark of a product's environmental performance.



Stronger & lighter than steel, with 6 to 8 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 & CO2 emission, both at production stage and for its transportation & installation.



EPD®  
THE INTERNATIONAL EPD® SYSTEM

## ABOUT US

Established in 1983, Dextra is a leading manufacturer and distributor of engineered construction products for the building and civil industries. Dextra has been a leader of the composite industry for the past 25 years, manufacturing high quality FRP solutions supplied on large infrastructure projects globally. 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-1400 certified factories, following the company's stringent quality assurance policy.

The expansion of our global partnership network through the inclusion of Madewell Products as our supplier partner in Australia, New Zealand and abroad. This collaboration further solidifies our commitment to providing the highest quality construction solutions and innovative products to our clients in these regions. Together with Madewell Products, we look forward to setting new benchmarks in the industry and continuing to serve the needs of our customers with excellence and expertise.



## PHYSICAL AND 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	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

## AMERICAN CONCRETE INSTITUTE (ACI) DESIGN AND 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

## APPLICATIONS FOR DURABAR™

- Slab on grade
- Decorative Concrete
- Agricultural Projects
- Parking Slabs
- Architectural Precast
- Pour Back Slabs
- Industrial Slabs
- Driveways
- Shared User Paths
- Pool Decks
- Agricultural Slabs
- Paving Projects
- ICF Construction
- Warehouse Floors
- Flatwork

## PACKAGING

Reference	Bar Dia.	Straight Bar				Coil				
		Unit Length	Quantity	Unit Length	Quantity	Total Coil Qty in 20' Container	20' Container Total G.W. (kg)	Total Coil Qty in 40' Container	40' Container Total G.W. (kg)	Length per coil (m/coil)
		mm/Piece	Pieces/20'FCL	mm/Piece	Pieces/40'FCL					
Durabar	6	5,800	43,100	11,800	21,200	168	4,030	340	8,160	300
	8	5,800	31,400	11,800	15,500	168	4,070	340	8,228	220
	10	5,800	21,600	11,800	10,600	126	3,120	255	6,311	150
	13	5,800	12,600	11,800	6,200	52	1,240	106	3,023	90
	16	5,800	8,300	11,800	4,100	-	-	-	-	-



\* Unit Bar length can be customized upon specific request, max length for 20 ft container load =5,800mm, max length for 40 ft container load =11,800mm.

\* Each large coil is divided by 4x coils from large to small, inside each coil one by one.

## 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.

## FOR MORE INFORMATION

➤ <https://www.madewellproducts.com/pages/durabar>

➤ <https://www.madewellproducts.com/pages/grp-guide-australia>